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2013-2014 Northwest Residential Lighting Long-Term Market Tracking Study

Prepared by:
DNV GL – Energy
Oakland, California

Northwest Energy Efficiency Alliance

PHONE

503-688-5400

FAX

503-688-5447

EMAIL

info@neea.org

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E EXECUTIVE SUMMARY

E.1 PROJECT HISTORY

The Northwest Energy Efficiency Alliance (NEEA) launched its first residential lighting market initiative in 1997 to advance awareness and use of energy-efficient compact fluorescent lamps (CFLs) and compact fluorescent light fixtures among Northwest consumers. NEEA designed the project to address CFL market barriers including high first cost; lack of product availability; lack of consumer awareness; incompatibility of CFLs with existing fixtures, dimmers, timers and photocells; performance problems; poor aesthetics of energy-efficient lighting products; and consumer dislike of fluorescent technologies. The project provided financial incentives to manufacturers as well as retailer education, branding, marketing and mass advertising.

Over the next decade, NEEA's residential lighting market interventions evolved along with the changing market. At various times throughout its evolution, NEEA's consumer lighting project provided salesperson training, advertising and marketing support (including cooperative marketing), and upstream incentives to support sales of high-quality, low-priced CFLs. In 2006 and 2007, NEEA's upstream promotions excluded large do-it-yourself chains and wholesale clubs from participating and instead emphasized non-traditional CFL distribution channels (such as drug and grocery stores) and stores in rural areas.

In 2007 alone, participating retail chains sold approximately 1.8 million Energy Star CFLs through NEEA's promotions and total regional sales of Energy Star CFLs exceeded 18 million. NEEA concluded that additional support of the Northwest residential lighting market was no longer necessary and ceased its active market interventions in early 2008. Several other energy-efficiency program sponsors continued to offer CFL incentives in the region, and NEEA has continued its residential lighting market tracking efforts.

E.2 STUDY OVERVIEW

The 2013–2014 Residential Lighting Long-Term Market Tracking Study focused on two key goals:

1. To enable NEEA to continue monitoring Northwest residential lighting market progress by tracking market metrics that were included in NEEA's prior residential lighting market tracking studies; and
2. To incorporate additional research objectives based on input from NEEA staff.

To support these goals, the study has 11 objectives, including:

1. Characterize stocking (availability/diversity) and pricing for CFLs, light-emitting diode (LED) lamps and incandescent lamps in Northwest retail stores.
2. Explore the relationship between lamp sales and stocking practices.
3. Assess Northwest consumer awareness of CFLs; purchase, installation, and storage rates; perceptions of CFLs; and motivations for recent CFL purchases, as well as consumer familiarity with emerging lighting technologies and related regulations.

4. Understand attitudes and expectations of lamp supplier representatives (retailers/manufacturers) regarding future Northwest sales trends for CFLs, LED lamps, and incandescent lamps (particularly with regard to perceived effects of the Energy Independence and Security Act of 2007 [EISA]).
5. Evaluate current “price paid” methods and assumptions.
6. Evaluate key inputs to NEEA’s Alliance Cost Effectiveness (ACE) model and baseline assumptions.
7. Obtain a more complete picture of the Northwest residential lighting market (beyond CFLs).
8. Better understand stocking and sales of EISA-qualifying versus non-qualifying lamps.
9. Characterize lighting marketing materials in Northwest retail stores.
10. Better understand drivers of customer decision-making regarding lamp purchases and influences on those decisions.
11. Better understand NEEA partner activities for consumer research on lighting knowledge/preferences and purchasing motivations.

To address the objectives above, the 2013–2014 study included six core tasks. These tasks included:

1. An assessment of regional CFL sales (data for which CLEAResult gathers on behalf of NEEA)
2. A review and assessment of inputs to NEEA’s ACE Model
3. Shelf surveys in Northwest retail stores that sell replacement lamps
4. Computer-aided telephone interviews with Northwest consumers
5. In-depth telephone interviews with residential lighting program managers at utilities serving Northwest customers
6. In-depth telephone interviews with representatives of lighting suppliers (manufacturers’ representatives and representatives of retail stores)

E.3 CONCLUSIONS

Study results suggest the following conclusions:

1. Northwest residential Energy Star CFL sales declined slightly between 2012 and 2013, but it is unclear whether sales will continue to decrease.
2. Big box stores continue to dominate the region’s residential Energy Star CFL sales.
3. Consumers may be shifting some of their focus away from CFLs and toward other lamp technologies.
4. Incandescent lamps still dominate retail store inventories in terms of stock volume but their retail presence is declining, while halogen lamps and, to a lesser extent, LED lamps are on the rise.
5. EISA's effects are becoming increasingly prominent in the region's retail stores with most lamps meeting EISA standards in the two lumen categories first affected by EISA (1490–2600 lumens and 1050–1489 lumens), but consumer awareness of the legislation is only moderate.

6. Lamp model diversity declined for incandescent lamps and increased for halogen lamps between 2012 and 2013.
7. The presence of LED lamps increased in the Northwest between 2012 and 2013, and this trend is likely to continue.
8. The average price of general purpose CFLs increased slightly, while the average price of specialty CFLs declined slightly between 2012 and 2013.
9. Promotional materials for replacement lamps continue to focus mainly on CFLs, and promotional materials for LED lamps are becoming more common in Northwest retail stores.
10. Promotional messaging for replacement lamps in Northwest retail stores largely focuses on energy savings, money savings, and long lamp life.
11. Regional stakeholders have conducted little research on consumer lighting knowledge, preferences, and purchasing motivations, and such research may be necessary to continue pushing consumers toward energy-efficient lamp choices.

E.4 RECOMMENDATIONS

Based on the conclusions described above, we recommend the following:

1. **Continued residential replacement lamp market tracking.** NEEA should consider continuing its current market tracking efforts for residential replacement lamps. This is particularly important as the lighting market continues to evolve rapidly, and will help NEEA address one of its primary objectives in “[obtaining] a more complete picture of residential lighting market beyond CFLs” (study objective 6). Furthermore, NEEA has conducted one of the longest market tracking studies on residential lighting for any region in the U.S., which makes these research efforts valuable not only for regional stakeholders, but also a broader audience of stakeholders beyond the region.
2. **Consistent and concise regional messaging for energy-efficient lamps.** NEEA should consider working with energy-efficiency program sponsors in the region as well as lamp manufacturers and retailers to develop consistent and concise region-wide messaging to support CFL and LED replacement lamp sales. More than half of the utility program representatives who participated in the interviews said that it would be beneficial if NEEA could provide support with messaging and outreach for CFLs and/or LED lamps. NEEA is uniquely positioned to offer broad, regional support, by helping to reinforce the key messages of energy savings and long lamp life in a consistent manner.
3. **Educational efforts in rural areas.** Related to recommendation number two above, NEEA should consider resuming its focus on rural areas with regard to educational and promotional efforts for energy-efficient lighting. Rural consumers in the Northwest typically have few (if any) local big box stores where they can shop for energy-efficient lamps, and are therefore less likely to be exposed to promotional materials regarding these products. These efforts may be particularly important going forward as the presence of

LED lamps and EISA-qualifying incandescent lamps in retail stores increases, which will present consumers with more lamp choices and potentially more confusion regarding those choices. Utility representatives from rural utilities also mentioned the importance of expanding outreach efforts in rural stores as a means of influencing rural consumers to purchase CFLs and LED lamps.

4. **Further research regarding consumer knowledge, preferences, and purchasing motivations.** NEEA should consider conducting further and more extensive research to understand consumer knowledge, preferences, and purchasing motivations for replacement lamps. This will enable the development of more effective marketing messages to support energy-efficient lamp sales, and will enable NEEA to more effectively address objective 10 of its residential lighting market tracking efforts (“better understand drivers of customer decision-making regarding lamp purchases and influences on those decisions”).
5. **Expanded lamp sales tracking efforts.** NEEA should consider incorporating additional lamp types into its sales data tracking efforts. Given the uncertain future of CFL sales (including a possible leveling off or decline), the increasing impacts of EISA over time, and increasing market presence of LED lamps, expanding sales tracking efforts beyond CFLs would provide NEEA with a more complete picture of the Northwest market for replacement lamps. As the market share of LED lamps continues to grow, tracking sales of LED lamps will become more important. Furthermore, tracking sales of incandescent and halogen lamps, in addition to CFLs and LED lamps, would also enable NEEA to estimate the share of the Northwest lighting market comprised by more energy-efficient alternatives and gain a better understanding of the overall lighting market in the Northwest (again in support of study objective 6 referenced above).
6. **Tracking of key specialty lamp styles.** NEEA should consider supporting additional tracking and analysis of specialty CFL pricing at a finer level of detail for key specialty lamp styles, such as reflector, globe, and candelabra styles. As noted in Chapter 2, there are at least 9 different styles of specialty CFLs. Furthermore, lamp manufacturer and retailer representatives cited average prices for specialty CFLs ranging from \$0.75 to \$20.00 per lamp, which suggests a wide range of prices across a number specialty CFL styles. It is difficult to compare specialty lamps as a single category across lamp technologies, since specialty styles and lamp prices vary considerably by lamp technology. Disaggregating specialty CFL lamp styles would enable NEEA to make more analogous and accurate comparisons of various specialty lamp styles available to residential consumers in the Northwest across lamp technologies.
7. **Tracking CFL prices based on stock-weighted average pricing.** Because the CFL “price paid” assumptions used in prior long-term market tracking studies have not been supported empirically, NEEA should consider relying on stock-weighted CFL pricing data obtained from shelf survey research to determine average pricing for CFLs. Stock-weighted CFL prices are comprehensive and verifiable.

8. **Updating the list of stores that sell replacement lamps in the Northwest.** NEEA should consider supporting additional research to update its list of stores in the Northwest that sell replacement lamps. A contractor compiled this list for NEEA nearly 10 years ago, and it is likely that the number of retail stores that sell replacement lamps as well as the distribution of stores by store type has changed. An updated list of stores would yield more accurate storefront weights, and, in turn, more accurate shelf survey results.

1 INTRODUCTION

The Northwest Energy Efficiency Alliance (NEEA) residential lighting market initiative started in 1997 to advance awareness and use of energy-efficient compact fluorescent lamps (CFLs) and compact fluorescent light fixtures among Northwest consumers. Over the next decade, NEEA's residential lighting market interventions evolved along with the changing market. At various times throughout its evolution, NEEA's consumer lighting project provided salesperson training, advertising and marketing support (including cooperative marketing), and upstream incentives to support sales of high-quality, low-priced CFLs. In early 2008, NEEA concluded that additional support of the Northwest residential lighting market was no longer necessary and ceased its active market interventions. Several other energy-efficiency program sponsors continued to offer CFL incentives in the region, and NEEA has continued its residential lighting market tracking efforts.

This Long-Term Market Tracking (LTMT) report represents DNV GL's (formerly DNV KEMA and KEMA, Inc.) tenth assessment of the Northwest residential lighting market for NEEA. DNV GL has conducted residential lighting evaluations and market research studies for NEEA on roughly an annual basis since 2005—most recently the 2012–2013 Northwest Residential Lighting Tracking and Monitoring Study in June, 2013.¹

1.1 PROJECT OVERVIEW

NEEA launched its first residential lighting market initiative in 1997 to advance awareness and use of energy-efficient compact fluorescent lamps (CFLs) and compact fluorescent light fixtures among Northwest consumers. NEEA designed the project to address CFL market barriers including high first cost; lack of product availability; lack of consumer awareness; incompatibility of CFLs with existing fixtures, dimmers, timers and photocells; performance problems; poor aesthetics of energy-efficient lighting products; and consumer dislike of fluorescent technologies. The project provided financial incentives to manufacturers as well as retailer education, branding, marketing and mass advertising.

During the late 1990s, the number of lamps and fixtures that qualified for inclusion in NEEA's initiatives expanded. As a result, NEEA staff wanted to ensure adequate market support at the retail level, so the project strategy evolved from targeting manufacturers to retailers in 2000. The project provided retailers with salesperson training as well as advertising and marketing support to encourage Energy Star CFL promotion and marketplace acceptance.

In response to market data suggesting consumer dissatisfaction with CFL performance, the project shifted its focus in 2004 toward achieving improvements in CFL quality and consumer acceptance. The project provided cooperative marketing opportunities and field services to retailers to promote Energy Star products and coordinated financial incentive offerings for these products. The project also coordinated with national efforts such as Energy Star's Change a

¹ DNV KEMA 2013 and KEMA, Inc., 2005–2012. Please refer to Appendix A (References) for complete citations.

Light, Change the World campaign and the lighting quality research conducted by the Program for Evaluation and Analysis of Residential Lighting (PEARL). Finally, the project supported advancement of new lighting technologies (e.g., dimmable/reflector CFLs) and efforts to encourage proper disposal of broken or burned-out CFLs.

In 2005, the project coordinated a regional manufacturer buydown promotion to reduce the market price of CFLs in the region and to establish promotional distribution channels for moving high-quality, low-priced CFLs into the market. The promotion provided broad geographic sales coverage (including rural markets) and included numerous distribution channels (grocery, drug, small hardware, mass merchandise, and do-it-yourself (DIY) stores as well as wholesale clubs).

NEEA expanded upon the success of the project in 2005 by coordinating similar promotions in 2006 and 2007 with a focus on consumers who had had limited access to high-quality, low-priced CFLs as well as those who had never purchased CFLs. The 2006 and 2007 promotions emphasized non-traditional CFL distribution channels (such as drug and grocery stores) and rural areas, and excluded large do-it-yourself chains and wholesale clubs from participating.

In 2007 alone, participating retail chains sold approximately 1.8 million Energy Star CFLs through NEEA's promotions and total regional sales of Energy Star CFLs exceeded 18 million lamps. NEEA concluded that additional support of the Northwest lighting market was no longer necessary and ceased its active interventions in the market in early 2008. Several other energy-efficiency program sponsors continued to offer CFL incentives in the region, and NEEA has continued its residential lighting market tracking efforts.

1.2 STUDY OVERVIEW

To help NEEA understand long-term market trends, each residential lighting market tracking study assesses the state of the Northwest market and compares it to previous years' results. To support comparability of results from year to year—essential for a tracking study—many of the study's goals and objectives have remained similar over time.

Overall, there are 11 objectives for the 2013–2014 study—ten ongoing objectives, and a new objective for the current study:

1. Characterize stocking (availability/diversity) and pricing for CFLs, light-emitting diode (LED) lamps and incandescent lamps in Northwest retail stores.
2. Explore the relationship between actual sales and stocking practices (new objective for the 2013–2014 study period).
3. Assess Northwest consumer awareness of CFLs; purchase, installation, and storage rates; perceptions of CFLs; and motivations for recent CFL purchases, and consumer familiarity with emerging lighting technologies and related regulations.
4. Understand attitudes and expectations of lamp supplier representatives (retailers/manufacturers) regarding future Northwest sales trends for CFLs, LED lamps, and in-candescent lamps (particularly with regard to perceived effects of the Energy Independence and Security Act of 2007 [EISA]).

5. Evaluate current “price paid” methods and assumptions (note that NEEA also added this objective during the 2012–2013 study period).
6. Evaluate key inputs to NEEA’s Alliance Cost Effectiveness (ACE) model and baseline assumptions.
7. Obtain a more complete picture of residential lighting market (beyond CFLs).
8. Better understand stocking and sales of EISA-qualifying versus non-qualifying lamps.
9. Characterize lighting marketing materials in Northwest retail stores.
10. Better understand drivers of customer decision-making regarding lamp purchases and influences on those decisions.
11. Better understand NEEA partner activities for consumer research on lighting knowledge/preferences and purchasing motivations.

To address the objectives above, the 2013–2014 study included seven core tasks. These tasks include an assessment of regional CFL sales, a review and assessment of inputs to NEEA’s Alliance Cost Effectiveness (ACE) Model, an assessment of the current “price paid” methods and assumptions (including regression analyses to better understand the relationship between CFL sales and stock in the Northwest), and the four data collection activities shown below in Table 1.

Table 1
Data Collection Activities, 2013–2014 Northwest Residential Lighting Long-Term Market Tracking Study

Data Collection Activity	Method	Sample Frame Source	Sample Design Overview	Number of Completes	Data Collection Dates
Retail Store Shelf Surveys	In-store surveys	List of stores provided by Portland Energy Conservation Inc. (now CLEAResult)	Stratification across geographic regions, store categories (national chain, regional chain, independent), and store types	96 retail stores*	December 2013–January 2014
Consumer Surveys	Computer-aided telephone interviews	List of Northwest zip codes from U.S. Census Bureau	Stratification by state and geographic region (urban versus rural) as defined by the U.S. Department of Agriculture Economic Research Service’s Rural Urban Continuum Codes (RUCC); explicit inclusion of respondents taking survey from landlines and cell phones	1,007 consumers	March – April 2014
Utility Program Manager Interviews	In-depth telephone interviews	List of utility contacts provided by NEEA and updated by DNV GL staff	Attempted census of the 10 large and investor-owned utilities; even allocation of remaining sample points between medium-sized and small utilities	19 utility program managers	April–June 2014
Lighting Supplier Interviews	In-depth telephone interviews	List of manufacturers and retailers provided by CLEAResult	Attempted census of major lamp manufacturers and corporate representatives (lighting buyers) of national, regional, and local retail chains that serve the Northwest market	16 suppliers (11 manufacturer representatives; 5 retailer representatives)	April–June 2014

* Includes 76 shelf surveys conducted throughout the region under contract with NEEA and an additional 20 surveys conducted in Oregon under contract with Energy Trust of Oregon. This report includes results from all 96 surveys.

1.3 REPORT ORGANIZATION

The 2013–2014 Northwest Residential Lighting Long-Term Tracking Study is organized into eight chapters. Chapters two through six provide details on the methods employed in the research and data collection efforts conducted as part of the study and provide an overview of key results. The remaining chapters summarize the key findings and present conclusions and recommendations.

Report chapters include the following:

- Chapter 2 describes the approach to and results of DNV GL’s assessment of the residential CFL sales data that CLEAResult gathers for NEEA.
- Chapter 3 provides an overview of the method and results of shelf surveys conducted by field researchers in retail stores throughout the Northwest.
- Chapter 4 summarizes the methodology for and results of telephone surveys with consumers throughout the Northwest.
- Chapter 5 describes the approach to and results of interviews with residential lighting program managers at utilities serving Northwest customers.
- Chapter 6 reviews the approach to and results of interviews with representatives of lamp manufacturing firms and corporate representatives of retail stores that sell lamps to Northwest consumers.
- Chapter 7 highlights key findings across the previous chapters organized by the eleven study objectives.
- Chapter 8 summarizes the conclusions and recommendations based on study findings.

The report also includes six appendices:

- Appendix A includes the bibliography for this study.
- Appendix B provides the data collection instruments for the research efforts described in Table 1 above.
- Appendix C provides additional information regarding the methods utilized to conduct the lighting retail store shelf surveys as well as a more detailed discussion of findings from the shelf survey analyses.
- Appendix D provides additional information regarding the methods utilized to conduct the consumer telephone surveys as well as a more detailed discussion of findings from survey analyses.
- Appendix E is a memorandum describing DNV GL’s review and assessment of inputs to NEEA’s ACE model for residential lighting.
- Appendix F is a memorandum describing the consumer survey sampling methodology.
- Appendix G provides the consumer telephone survey banner tables.

2 CFL SALES ASSESSMENT

This chapter provides an overview of Northwest Energy Star CFL sales from 2001 through 2013. The chapter also presents more recent CFL sales information by lamp type (general purpose versus specialty CFLs)² as well as a review of regional sales of CFLs discounted by energy-efficiency program sponsors. Note that for the purposes of this report, the general purpose CFL category includes spiral CFLs and A-lamps and the specialty category includes all other CFL types. Also note that the CFL sales data do not support analyses by urban versus rural geographic classifications.

2.1 REGIONAL SALES

As described in prior Northwest residential lighting market tracking studies, NEEA's implementation contractors have tracked Energy Star CFL sales throughout the region for more than a decade.³ The current method relies upon reports of actual CFL sales through several major retail channels in the Northwest, reports from local utilities and other energy-efficiency program sponsors, and (to a limited extent) extrapolation of these data to retailers representing the Northwest region.⁴ In 2010, NEEA's contractor, Fluid Market Strategies (now CLEAResult), increased the proportion of tracked sales versus extrapolated sales in their sales database and also began tracking specialty CFL sales as a fraction of total CFL sales in the region. In 2011, Fluid Market Strategies further increased the proportion of tracked sales versus extrapolated sales in the region. In early 2012, Fluid Market Strategies also adjusted its regional Energy Star CFL sales estimates for 2010 downward from 19,025,888 to 18,248,040 CFLs.⁵

Figure 1 shows Energy Star CFL sales for the region broken down by CFLs sold with incentives provided by energy-efficiency program sponsors ("incentive sales") versus the portion comprised by non-incentive sales for each year. Total Energy Star CFL sales declined by approximately 2 percent between 2012 and 2013, with nearly 16.1 million CFLs sold in 2013 (16,096,979) compared to nearly 16.4 million CFLs sold in 2012 (16,369,341). CFLs sold with energy-efficiency program incentives represented 59% of total Energy Star CFL sales in the region in 2013 (compared to 51% in 2012). The total number of CFLs sold with energy-efficiency program incentives increased by 14% from 2012 to 2013, but the number sold without incentives declined by 18% during the same timeframe. This is a shift from the 4% *increase* in non-incentive sales between 2011 and 2012. Non-incentive CFL sales in the Northwest remain below 2006 levels.

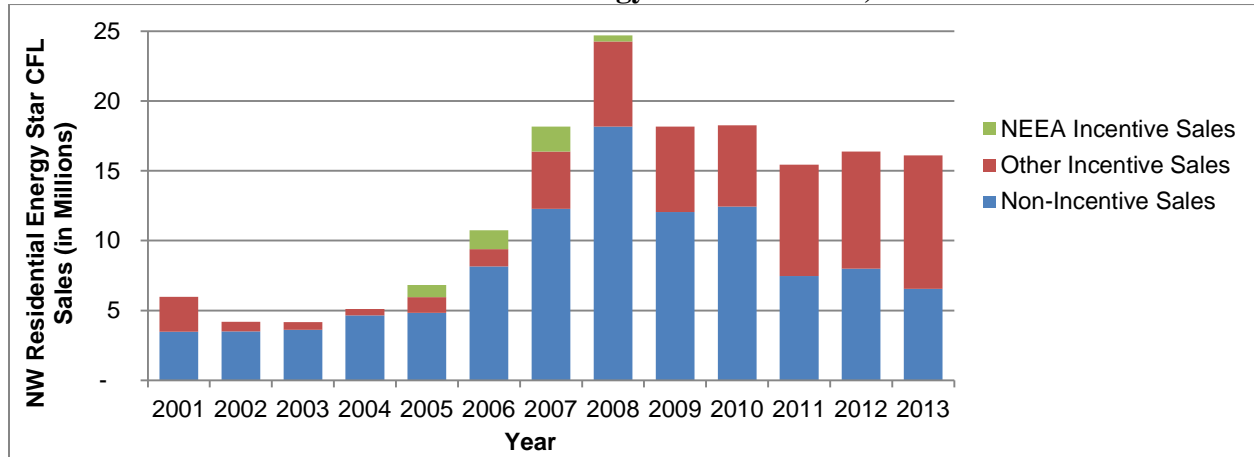
² General purpose CFLs include non-dimmable, single wattage spiral and A-lamp CFLs; specialty CFLs include dimmable and three-way spiral and A-lamp CFL as well as reflector, globe, and candelabra style CFLs. Other less common specialty CFL lamp styles include tube and circline styles.

³ Note that because tracking methods have improved over time, it is likely that annual estimates from earlier years tracked a smaller proportion of the overall Northwest CFL sales than estimates for later years.

⁴ In 2013, note that approximately 19 percent of total regional CFL sales (including Energy Star and non-Energy Star sales) were based on extrapolations rather than actual sales data.

⁵ The majority of adjustments to 2010 sales were in the mass merchandise channel with additional (negligible) changes in the small hardware channel.

Figure 1
Estimated Northwest Energy Star CFL Sales, 2001-2013



Sources: PECEI, 2006; Fluid Market Strategies, 2007–2013; CLEAResult, 2014.

Total annual Energy Star CFL sales are: 2001n=5,979,890; 2002n=4,195,880; 2003n=4,171,552; 2004n=5,097,690; 2005n=6,832,478; 2006n=10,751,906; 2007n=18,157,300; 2008n=24,710,098; 2009n=18,177,678; 2010n=18,248,040; 2011n=15,442,628; 2012n=16,369,341; 2013n=16,096,979.

2.2 SALES BY CFL TYPE

NEEA’s sales data collection contractor also tracked the proportion of total Energy Star CFL sales that were general purpose (spirals and A-lamps) versus specialty CFLs (all other CFL types). Between 2012 and 2013, regional sales of Energy Star general purpose CFLs declined by 6% overall, and regional sales of specialty Energy Star CFLs increased by 9% overall.⁶ The proportion of regional Energy Star CFL sales comprised by general purpose and specialty CFLs changed modestly between 2012 and 2013, with specialty CFLs comprising 28% of total Energy Star CFL sales in 2012 and 31% in 2013.

2.3 INCENTIVE CFL SALES

During 2013, there were numerous CFL incentive programs available to residential electric utility customers throughout the Northwest. The sections below provide an overview of the larger of these programs and summarize changes over time in incentive program sales.

2.3.1 Utility Programs

This section reviews the 2013 residential lighting incentive programs operated by the Bonneville Power Administration (BPA), Puget Sound Energy, Seattle City Light, NorthWestern Energy, and Snohomish County Public Utility District.

⁶ General purpose CFL sales decline from 11,819,518 lamps in 2012 to 11,157,560 lamps in 2013, and specialty CFLs increased from 4,549,823 in 2012 to 4,939,419 in 2013.

Simple Steps, Smart Savings Program (Bonneville Power Administration)

The BPA's Simple Steps, Smart Savings residential lighting incentive program started in 2010 and is targeted at all residential customers in the service territories of utilities participating in the Simple Steps program. As such, the 2013 program was far-reaching and included nearly 50 utility participants throughout the Northwest in 2013. In 2013, the BPA spent approximately \$2 million on the Simple Steps program (compared to approximately \$1 million in 2012).

Simple Steps is an upstream lighting program with incentives delivered to manufacturers (or in some cases, directly to lamp retailers⁷) that produce program-qualifying products. If participating utilities have enough residential lighting program budget available, they have the ability to completely fund their participation in Simple Steps without any financial assistance from the BPA. However, many of the participating utilities are small or medium-sized utilities and lack the ability to completely self-fund their participation in Simple Steps; in these cases, the BPA provides additional funding for a given program year.

The Simple Steps program is designed to incorporate any number of lighting products, and in 2013, the program included Energy Star CFLs, CFL fixtures, LED replacement lamps, and LED fixtures.⁸ Both general purpose and specialty CFLs and LED lamps were included in the program in 2013. Incentives for general purpose CFLs were capped at \$0.50 per lamp and for specialty CFLs, the cap was \$2.00 per lamp. The cap for LED replacement lamps was \$3.00 per lamp in 2013.

Puget Sound Energy Lighting Program

Puget Sound Energy's (PSE) residential lighting program began as an instant discount (upstream rebate) program in the mid-2000s and had a budget of \$14.5 million in 2013 (compared to 12.6 million in 2012). Like BPA's Simple Steps program, PSE's residential lighting program is an upstream program that offers instant discounts to consumers in retail partner stores. Depending on the agreement that PSE has with its retail partners, incentives may go to participating manufacturers or directly to retailers.

PSE's program includes general purpose and specialty Energy Star CFL replacement lamps.⁹ Since 2011, PSE has also provided incentives for Energy Star LED replacement lamps and fixtures. Among the LED styles included in the program are select reflectors, omni-directional and directional A-lamps, globe lamps, and candelabra lamps. PSE capped incentives for general purpose CFLs at \$2.25 per lamp and for specialty CFLs the cap was \$4 per lamp in 2013. The incentive caps for LED lamps were \$7 for A-lamps and \$8 for all other lamp styles. Each lamp type also had a base level incentive that was lower than these incentive caps (this applies to CFLs and LED lamps). To receive the maximum allowed incentive for a given lamp type, the

⁷ Depending on the agreement that BPA has with its retailers, incentives may also go directly to retailers rather than manufacturers. A few large retail chains have made this arrangement with BPA.

⁸ LED replacement lamps and fixtures were included in the Simple Steps program as of the second quarter of 2013.

⁹ PSE discontinued incentives for CFL fixtures at the end of 2013.

manufacturer or retail partner must also agree to promote the lamp (e.g., provide promotional signage and/or buy end-cap space).

Twist & Save! Lighting Program (Seattle City Light)

Seattle City Light's Twist & Save! Program is an instant discount (upstream) program that provides incentives participating manufacturers or large chain retailers. This program has been in place since 2007 and includes general purpose and specialty Energy Star CFL replacement lamps and Energy Star compact fluorescent fixtures. The projected lighting budget for Seattle City Light's Twist & Save! program is \$3.8 million for 2014 (the 2013 budget was \$2.6 million; 2012 program budget information was not available).

Since January of 2013, the program also included Energy Star LED replacement lamps and fixtures. Seattle City Light provides incentives for general purpose LED A-lamps as well as specialty LED lamps. Incentives averaged between \$1.45 and \$1.50 per lamp for general purpose CFLs and between \$2 and \$3 per lamp for specialty CFLs. For LED lamps, the incentives varied by wattage equivalencies for general purpose A-lamps (\$4 incentive for 40 watt equivalent A-lamps, \$5 for 60 watt equivalent A-lamps, and \$6 for A-lamps greater than 60 watt equivalent). Incentives for reflector LED lamps ranged from \$5 to \$10 during 2013, but Seattle City Light gradually decreased the incentive amounts during 2013 as the cost of these lamps dropped.

Other Programs

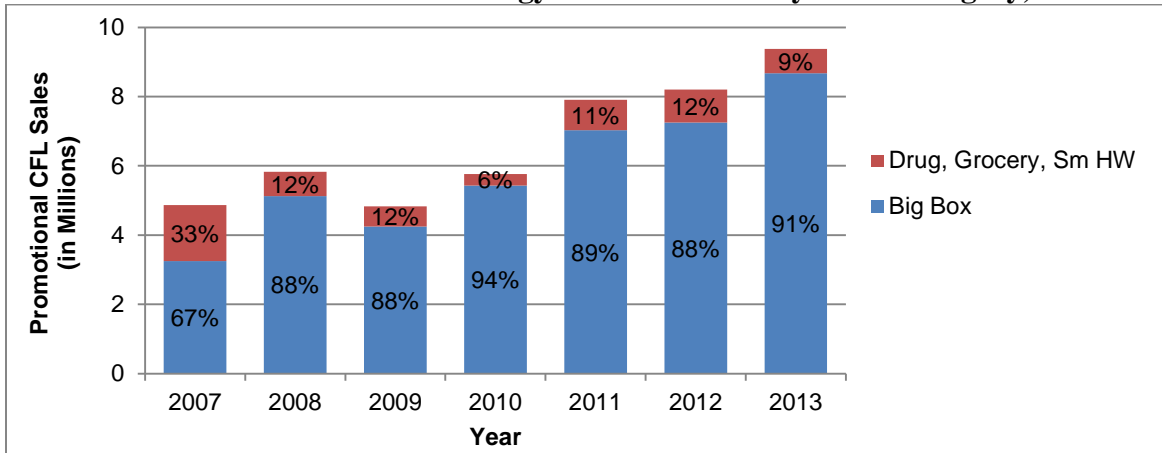
In addition to the major residential lighting programs mentioned above, there were some additional lighting programs run by some of the large utilities and IOUs during 2013. These include:

- **NorthWestern Energy:** NorthWestern Energy was a Simple Steps participant in 2013, but they also ran their own CFL coupon program. The utility worked with over 100 retail partners to target rural customers in Montana who are not served by Simple Steps. In most cases, customers served by the CFL coupon program live too far from Simple Steps retail partner stores to participate in the Simple Steps program. For these customers, NorthWestern Energy mailed coupons worth up to \$2 for any Energy Star CFL (although the coupon value cannot exceed the price for each package of lamps). Participating customers could then redeem the coupons at retail stores that do not participate in Simple Steps and received an instant rebate at the store.
- **Snohomish County Public Utility District (SnoPUD):** SnoPUD participates in the Simple Steps program but also partnered with a third party to provide additional residential lighting incentives through an upstream program. This program offered incentives on general purpose and specialty Energy Star CFLs (\$0.50-\$1.00 per lamp incentive for general purpose CFLs and \$0.50-\$2.00 for specialty CFLs). The program also offered incentives on Energy Star LED lamps (\$3.00-\$6.00 per lamp incentive).

2.3.2 Incentive Program Sales

The number of Energy Star CFLs sold with utility incentives in the Northwest increased from 8.2 million in 2012 to 9.4 million in 2013 (an increase of 14%; see Figure 2). During this timeframe, there was some change in the proportion of incentive sales comprised by big box stores versus non- big box stores.¹⁰ In 2013, big box stores accounted for approximately 91% of total regional incentive CFLs compared to 88% in 2012. In spite of this shift of incentive sales away from non-big box stores, 2010 continues to represent a low-point in terms of the proportion of sales through non- big box channels at only 6% of total regional sales.

Figure 2
Tracked Northwest Promotional Energy Star CFL Sales by Store Category, 2007-2013



Source: Fluid Market Strategies, 2007–2013; CLEAResult 2014.

Number of promotional CFLs tracked by store category: 2007 n=4,868,350; 2008 n=5,811,229; 2009 n=4,827,010; 2010 n=5,766,284; 2011 n=7,905,992, 2012 n=8,204,346, 2013 n=9,377,523.

Data excludes sales through Lighting Specialty stores (≤1% of promotional sales per year).

¹⁰ Throughout this report, the term “big box” refers to Do-It-Yourself (DIY), mass merchandise, and membership club stores, and “non- big box” refers to drug and grocery and hardware stores.

3 SHELF SURVEYS

This section of the report focuses on the lighting retailer shelf surveys and includes a brief description of the methodology and presentation of key findings from survey data analysis. It provides results for the most recent phase of shelf surveys (conducted in late 2013/early 2014¹¹) and, where possible, compares current findings to results from similar surveys conducted in 2006 and annually between 2008 and 2012. Appendix B provides the data collection instrument used for the 2013 shelf surveys, and Appendix C provides more detailed results including tables and (where possible) comparisons with prior years broken down by region and store category.

3.1 APPROACH

Field researchers visited 96 lighting retail stores in the Northwest region during December 2013 and January 2014. Researchers performed a comprehensive inventory of all CFLs, incandescent lamps, halogen lamps, LED lamps, and 4-foot T-8 and T-12 fluorescent tube lamps available to consumers in each store.

The 96 completed shelf surveys include 76 conducted throughout the region for NEEA and an additional 20 conducted in Oregon for Energy Trust of Oregon during the same timeframe. As shown in Table 2, researchers stratified the sample stores by store type and geographic sector (urban versus rural) and sampled proportionally to the distribution of stores in the Northwest region. Note that there are no stores in the sample in the rural wholesale club category, as there are no stores in this category in the sample frame (population of approximately 2,500 stores).¹²

Table 2
Lighting Retailer Shelf Survey Completes by Store Type and Geographic Sector, 2013-14

Store Type	Number of Stores			Percentage of Stores		
	Urban	Rural	Overall	Urban	Rural	Overall
Wholesale Club	6	0	6	100%	0%	6%
Do-It-Yourself	11	2	13	85%	15%	14%
Drug and Grocery	25	3	28	89%	11%	29%
Mass Merchandise	18	4	22	82%	18%	23%
Small Hardware	23	4	27	85%	15%	28%
Overall	83	13	96	86%	14%	100%

Analysts calculated sample expansion weights by strata and applied them to each sample retailer such that findings presented in this section represent the population of lighting retailers in the region that sell residential replacement lamps (as approximated by a 2006 database compiled by

¹¹ For consistency with prior study periods, we refer to the shelf surveys conducted in late 2013/early 2014 as the “2013 shelf surveys” throughout the report.

¹² Analysts used the same sample frame for the 2013-14 study as used in previous years, which is a list of retail stores in the Northwest compiled for NEEA by PECCI, Inc. in the mid-2000s.

PECI).¹³ For results on CFL prices throughout the region, we also applied shelf stocking weights based on the absolute counts of lamps in retail stores for 2013 and 2014 results only.

3.2 RESULTS

The shelf surveys collect data on lamp availability, diversity and pricing as well as on the various types of promotional materials for replacement lamps on display in Northwest retail stores.

3.2.1 Lamp Availability

The shelf surveys enable assessment of CFL availability over time (between 2006 and 2013) in terms of the percentage of Northwest stores carrying different lamp technologies and the percentage of total lamp stock comprised by each technology.

Percent of Stores

Since 2006, shelf survey researchers have collected data regarding the presence or absence of CFLs in Northwest retail stores. As in previous years, nearly all of the stores visited by shelf survey researchers stocked CFLs in 2013 (99%). There was a decline in the percentage of stores stocking specialty CFLs between 2012 and 2013 (from 96% to 91% of stores). There was little change in the percentage of stores carrying general purpose CFLs (97% of stores in 2013 and 96% in 2012).

In addition to collecting data on CFLs, the 2012 and 2013 shelf surveys collected data on incandescent, halogen, and LED lamps. Results suggest that:

- In 2013, 99% of stores stocked incandescent lamps. As described above for general purpose CFLs, there was little change between years in the percentage of stores incandescent lamps between 2012 and 2013.
- The percentage of stores carrying specialty CFLs declined from 96% in 2012 to 91% in 2013.
- The percentage of stores stocking halogen lamps increased slightly from 91% in 2012 to 94% in 2013.
- The percentage of Northwest retail stores stocking LED lamps increased by more than a third between 2012 and 2013—from 62% to 83% of stores. In this same timeframe:
 - The percentage of big box stores stocking LED lamps decreased slightly (from 71% to 68% of stores).
 - Among non-big box stores, the percentage of stores carrying LED lamps increased from 59% to 88% of stores.
- Geographically, the largest change in both rural and urban areas was in the percentage of stores stocking specialty LED lamps. In rural areas, this percentage increased from 48% to 75% between 2012 and 2013 and was driven largely by stores in the non- big box category. In urban areas, the percentage of stores stocking LED lamps increased from 64% to 85%. and was also driven by an increase in non- big box stores.

¹³ See Table 15 in Appendix C for the retail shelf survey sample expansion weights.

Percent of Lamps Stocked

The percentage of total lamps observed in retail stores is an indicator of the relative availability of different lamp types (general purpose and specialty CFLs as well as incandescent, halogen, and LED lamps). Based on these data, results suggest that:

- Incandescent lamps continue to dominate retail store inventories overall, although their share of total lamp stock has declined overall between 2012 and 2013 (from 61% of all lamps stocked in the region's retail stores to 50%).
- The proportion of halogen lamp stock grew from 12% of all lamps stocked in 2012 to 21% of lamps stocked in 2013.
- The share of LED lamp stock doubled from 2% of all lamps in 2012 to 4% of lamps stocked in 2013.
- The proportion of CFLs stocked remained the same in both 2012 and 2013 (CFLs accounted for 24% of all lamps stocked in both years). The proportion of general purpose and specialty CFLs was also the same in both years at 18% and 6%, respectively.
- Changes in rural and urban areas were similar for incandescent and halogen lamps. The proportion of CFL stock declined slightly in urban stores from 25% to 24% and grew in rural stores from 21% to 27%. LED lamp stock more than doubled in urban stores from 2% of all lamps stocked to 5% of lamps stocked, but remained the same in both years in rural stores at 2% of lamps stocked.
- Rural big box stores and non- big box stores displayed the largest changes in lamp stocking patterns between 2012 and 2013. In particular, rural non- big box stores experienced a decline in incandescent and halogen lamp share (combined) from 78% of all lamps stocked in 2012 to 72% in 2013. In rural big box stores incandescent and halogen lamp share dropped from 74% to 70%. CFL share increased during the same timeframe from 21% to 26% in rural non- big box stores and 26% to 30% in rural big box stores.

Availability of EISA-Qualified Lamps

The U.S. Congress passed the Energy Independence and Security Act (EISA) in 2007. EISA requires that general purpose incandescent lamps meet minimum efficacy standards that traditional general purpose incandescent lamps¹⁴ cannot meet, effectively pushing the most inefficient lamps out of the market. As shown in Table 3, the EISA standards phased in gradually; on January 1, 2012, the legislation prohibited the manufacture and importation of general purpose incandescent lamps above 72 watts with light output in the 1490 to 2600 lumen range (referred to as “high brightness” throughout this report), beginning the phase-out of many traditional 100 watt incandescent lamps. After this date, it was illegal to manufacture or import

¹⁴ The sections of this report referring to general purpose incandescent lamps (or “MSB incandescent a-lamps”) utilize the EISA definition of a general purpose incandescent lamp, which states that this term refers to “a standard incandescent or halogen type lamp that – 1) is intended for general service applications; 2) has a medium screw base; has a lumen range of not less than 310 lumens and not more than 2,600 lumens; and 3) is capable of being operated at a voltage range at least partially within 110 and 130 volts” (H.R. 6--110th Congress, 2007). EISA also includes separate efficiency standards for reflector and modified spectrum lamps as well as a list of lamp types that are excluded from regulation. This report focuses on general purpose lamps only, excluding reflector, modified spectrum, and other EISA exemptions.

lamps that did not meet the standard, but retailers are allowed to sell through their existing stock. As of January 1, 2014, standards for all four wattage and lumen categories were in effect.

Table 3
Summary of EISA Efficiency Standards

EISA Effective Dates	Incandescent Lamp Wattage (Watts)	Typical Incandescent Light Output (Lumens)	Typical Incandescent Efficacy (Lumens/Watt)	EISA Replacement Wattage (Watts)	EISA Light Output Ranges (Lumens)	EISA Minimum Efficacy Ranges (Lumens/Watt)
1/1/2012	100 W	1690 lm	17 lm/W	72 W	1490-2600 lm	21-36 lm/W
1/1/2013	75 W	1170 lm	16 lm/W	53 W	1050-1489 lm	20-28 lm/W
1/1/2014	60 W	840 lm	14 lm/W	43 W	750-1049 lm	17-24 lm/W
1/1/2014	40 W	490 lm	12 lm/W	29 W	310-749 lm	11-26 lm/W

Source: U.S. EPA, 2011.

The percentages in this section of the report focus only on MSB incandescent A-lamps (including halogen technologies). This section excludes non-incandescent technologies from the analyses so as not to skew the overall results (because nearly all general purpose CFLs and LED lamps meet EISA standards). The report classifies lamps that meet the EISA efficiency standards at the times field staff conducted shelf surveys as “Meets EISA Standard.” All other MSB incandescent A-lamps within these lumen ranges fall into the “Does Not Meet EISA” category. This report section categorizes the lumen ranges presented in Table 3 above as follows:

- **High Brightness.** This incandescent/halogen lamp category refers to medium screw-base (MSB) incandescent A-lamps with light output between 1490 and 2600 lumens, equivalent to the light output of many traditional 100 watt incandescent lamps. Lamps in this lumen range that meet the EISA standard have wattages of 72 or below. Lamps in this lumen range that do not meet the standard exceed 72 watts. The phase-out for lamps in this brightness category began on January 1, 2012.
- **Medium High Brightness.** This lamp category refers to MSB incandescent A-lamps with light output between 1050 and 1489 lumens, equivalent to the light output of many traditional 75 watt incandescent lamps. Lamps in this lumen range that meet the EISA standard have wattages of 53 or below. Lamps in this lumen range that do not meet the standard exceed 53 watts. The phase-out for lamps in this brightness category began on January 1, 2013.
- **Medium Low Brightness.** This category refers to MSB incandescent A-lamps with light output between 750 and 1049 lumens, equivalent to the light output of many traditional 60 watt incandescent lamps. Lamps in this lumen range that meet the EISA standard have wattages of 43 or below. Lamps in this lumen range that do not meet the standard exceed 43 watts. The phase-out for lamps in this brightness category began on January 1, 2014.
- **Low Brightness.** This lamp category refers to MSB incandescent A-lamps with light output between 310 and 749 lumens, equivalent to the light output of many traditional 40 watt incandescent lamps. Lamps in this lumen range that meet the EISA standard wattages of 29 or below. Lamps in this lumen range that do not meet the standard exceed

29 watts. The phase-out for lamps in this brightness category began at the same time as for lamps in the Medium Low Brightness category (on January 1, 2014).

Note that the standards for medium low brightness MSB A-lamps (750 to 1049 lumens) and low brightness MSB A-lamps (310 to 749 lumens) did not go into effect until January 1 2014—thus, field researchers were in retail stores before and after this standard went into effect.

High Brightness MSB Incandescent A-Lamps (1490-2600 lumens). During the lighting retailer shelf surveys, field researchers gathered information that enables classification of all MSB incandescent A-lamps as either meeting or not meeting the EISA standard relevant to their lumen output. This report presents results for lamps at all four lumen bins affected by EISA, starting with those affected by the first phase (as of January 1, 2012). For lamps in this lumen range, results suggest that:

- While more than a third of these lamps did not meet the relevant EISA standard at the time field staff conducted the 2012 shelf surveys (late 2012/early 2013), 98% of the lamps in this category met the standard at the time of the 2013 shelf surveys (late 2013/early 2014). Thus, the number of lamps meeting the standard increased to nearly all affected lamps between 2012 and 2013.
- All high brightness MSB incandescent A-lamps met the standard in urban and rural big box stores in 2013. The percentage of these lamps that met the standard in rural non- big box stores increased from 23% in 2012 to 99% in 2013.

Medium High Brightness MSB Incandescent A-Lamps (1050-1489 lumens). The standard for medium high brightness (1050–1489 lumens) MSB incandescent A-lamps went into effect on January 1, 2013. The light output of lamps in this range is typically considered to be equivalent to that of a traditional 75 watt incandescent lamp. Results suggest that:

- While only 12% of lamps in this category in Northwest retail stores met the relevant EISA standard at the time of the 2012 shelf surveys, 62% of these lamps met the standard at the time of the 2013 shelf surveys.
- The percentage of lamps that met the relevant EISA standard was highest in rural big box stores (98% of medium high brightness MSB incandescent A-lamps stocked in these stores) and lowest in urban big box stores (47% of lamps).

Medium Low Brightness and Low Brightness MSB Incandescent A-Lamps. For lamps in both lumen bins affected by EISA as of January 1, 2014—medium low brightness (750-1049 lumens) and low brightness (310-749 lumens) MSB incandescent A-lamps—20% of all medium low brightness lamps and 22% of all low brightness lamps stocked in Northwest retail stores met the EISA standard in 2013 .

3.2.2 Lamp Diversity

The analysis team examined lamp diversity in terms of the average number of lamp models¹⁵ available per store.¹⁶ These data are available for general purpose and specialty CFL models available by store category over time (2006 through 2013). Within the 2012 and 2013 results, data are also available on the average number of lamp models by technology (general purpose CFLs, specialty CFLs, incandescent, halogen, and LED lamps) and geography (urban versus rural stores).

Average Number of CFL Models over Time

Results on lamp diversity over time suggest that:

- The average number of CFL models per store remained roughly the same between years (37 models per store in 2012 and 38 models per store in 2013).
 - The average number of general purpose and specialty CFL models per store remained the same between 2012 and 2013 at 21 and 17 models per store, respectively.¹⁷
- The average number of CFL models stocked per big box store declined slightly from 42 models per store in 2012 to 39 in 2013, while the average number of CFL models stocked per non- big box store increased slightly from 37 to 38 per store.
 - There were minimal noteworthy changes between 2012 and 2013 in terms of model number diversity when analyzing the average number of general purpose and specialty CFL model numbers per store in big box and non- big box stores. Only specialty CFLs had an increase in the number of models per store in non- big box stores from 14 in 2012 to 16 in 2013
 - The average number of specialty CFL models stocked per big box store has dropped annually since 2009 (from 27 in 2009 down to 22 models in 2013).
 - The average number of specialty CFL models stocked per non- big box store has increased annually since 2011 (from 12 in 2011 to 16 in 2013).

Average Number of Lamp Models per Store by Technology

Results on changes in lamp diversity between 2012 and 2013 by technology suggest the following:

- The average number of LED, general purpose, and specialty CFL lamp models per store remained the same between 2012 and 2013.

¹⁵ The number of lamp models in a given store refers to the number of unique lamp packages in that store. See Section C3 in Appendix C for further details.

¹⁶ See Section C3 in Appendix C in for a detailed description of the methodology used to calculate unique lamp models.

¹⁷ There was an almost negligible increase in average number of CFL models per store (among all CFLs) from 37 to 38 models per store. The average number of general purpose and specialty CFL models per store increased by less than 0.5 models per store (remaining effectively the same between years), but when these categories are combined together to include all CFLs, there is an increase from 37 to 38 models per store due to rounding.

- With respect to incandescent and halogen lamp model diversity, the average number of incandescent lamp models declined from 65 to 59 per store and the average number of halogen lamp models increased from 20 to 27 per store.
- Big box stores had the greatest change incandescent and halogen lamp model diversity with incandescent lamp models declining from 70 to 60 per store and halogen lamp models increasing from 17 to 27 per store (these changes may be due to the effects of EISA). There were minimal changes in lamp model diversity for LED, general purpose, and specialty CFLs in both big box and non- big box stores.
- Rural stores had the greatest changes in model number diversity for all lamp technologies, while urban stores experienced minimal changes except for a decline in the number of incandescent lamp models per store and an increase in the number of halogen lamp models per store (as was the trend in the overall market). While specialty CFL lamp models increased from 17 to 21 per rural store, the number of LED lamps models per rural store declined from 8 to 4.
- The average number of incandescent lamp models declined and the average number of halogen lamp models increased in urban and rural big box stores as well as urban and rural non- big box stores. The average number incandescent lamp models in urban big box stores declined from 73 per store in 2012 to 64 per store in 2013, and from 41 per store in rural big box stores in 2012 to 33 per store in 2013. As for non- big box stores, the average number of incandescent lamps models per store declined from 60 in urban stores in 2012 to 57 in 2013, and from 81 in rural stores in 2012 to 70 in 2013. With respect to halogen lamp models, the average increased from 19 per urban big box store in 2012 to 30 in 2013, and from 6 per rural big box store in 2012 to 9 in 2013. Halogen lamp model diversity increased from 18 per urban non- big box store in 2012 to 25 in 2013, and from 31 per rural non- big box store in 2012 to 33 in 2013.
- With respect to LED lamp model diversity, the average number of models in urban non- big box stores grew from 2 to 5 while the average number of models in rural non- big box stores decline from 9 to 5.
- Specialty CFL lamp model diversity increased in rural non- big box stores from 18 models per store to 24.

3.2.3 Average Shelf Price per CFL

Results on the average shelf price per CFL in 2012 and 2013 suggest the following:

- The average shelf price per CFL increased by 2%, overall, between 2012 and 2013 to \$4.44 per lamp.
- There was a 5% increase in the average shelf price of general purpose CFLs overall (increasing to \$3.60 per lamp, overall, in 2013), but a 2% decline in the average price per specialty CFL (decreasing to \$6.75 per lamp in 2013).
- When analyzing CFL prices by store category (big box versus non- big box stores), the biggest change between 2012 and 2013 occurred among specialty CFLs in big box stores, which declined 4% to \$5.12 per lamp in 2013.

- The average shelf price for a CFL (across both CFL types) increased by 3% in urban stores between years (to \$4.33 per lamp in 2013, but declined in rural stores by 2% (to \$5.25 in 2013). The increase in average CFL prices in urban stores was largely driven by an increase in the average price of a general purpose CFL, which rose 6% to \$3.55 per lamp in urban stores in 2013. The decline in average CFL prices in rural stores was driven primarily by a decrease in the average price of a general purpose CFL, which declined 4% to \$4.03 in rural stores in 2013.

3.2.4 Fluorescent Tube Lamps

Since the 2012 shelf surveys, field researchers gathered data on 4-foot fluorescent tube lamps—including both T8 and T12 technologies—during the lighting retail store shelf surveys.

Fluorescent Tube Lamp Availability

Analysts examined fluorescent tube lamp availability in terms of the percentage of Northwest retail stores that stock these lamps as well as the percentage of total fluorescent tube lamps stocked by lamp type (T8 or T12). Results suggest that:

- There was a decline in the percent of stores stocking both lamp types; T12 lamps were stocked in 50% of stores in 2012 and T8 lamps were stocked in 41% of stores.
- T12 lamps are available in a greater proportion of Northwest retail stores than the more energy-efficient T8 lamps (47% of stores versus 32%, respectively).
- A higher percentage of big box stores carried T12 and T8 lamps than non- big box stores in both 2013 and 2012. While there was an decline in the percent of stores stocking T12 and T8 lamps overall, the percentage of big box stores stocking T12 and T8 lamps increased between 2012 and 2013, growing from 70% to 75% for T12 lamps and from 47 to 53% for T8 lamps.
- The percentage of non- big box stores stocking T12 lamps declined from 44 to 37%, and the percentage stocking of T8 lamps declined from 39 to 26%.
- A greater percentage of rural stores stocked fluorescent T12 and T8 tube lamps in 2012 and 2013 than urban stores.
- Rural stores experienced a decline in T12 lamp stocking (from 82% to 56% of stores carrying T12 lamps), and also saw a decline in T8 lamp stocking (from 74% to 47% of stores).
- The percent of urban stores carrying T12 lamps remained the same at 45% in 2012 and 2013, while the percent of urban stores stocking T8 lamps declined slightly from 35% to 30% during the same during the same timeframe.
- The presence of T12 lamps in urban stores was largely driven by the big box category, while the presence of T12 lamps in rural stores was largely driven by the non- big box category. The same pattern is apparent for T8 lamps. These trends were also the same in 2012.
- Urban big box stores had greatest proportion of stores carrying T12 and T8 lamps in 2013 (see Figure 41 below).

- There was an overall 27% decline in the total number of T12 and T8 lamps stocked between 2012 and 2013 (28% decline in the number of T12 lamps stocked and 25% drop in T8 lamps stocked).
- Non- big box stores experienced a decline in the total number of T12 and T8 lamps stocked of 40% (32% decline in T12 lamps stocked and 53% decline in T8 lamps stocked).
- Rural stores experienced a 44% drop in the number of T12 and T8 lamps stocked (33% decline in T12 lamps stocked and 62% decline in T8 lamps stocked).

Fluorescent Tube Lamp Diversity

Analysts examined the diversity of fluorescent tube lamp offerings among Northwest retail stores in terms of the average number of T12 and T8 lamp models stocked per store. Results suggest that:

- On average, Northwest stores stocked 1.7 T12 lamp models and 0.8 T8 lamp models per store in 2013 compared to 2.6 T12 lamp models and 1.4 T8 lamp models per store in 2012.
- This decline in lamp model diversity for T12 and T8 lamps occurred in big box and non-big box stores. The average number of models per store for T12 lamps went from 3.8 in 2013 to 2.7 in 2012 in big box stores and from 2.2 to 1.4 lamps per store in non- big box stores. As for T8 lamps, the average number of models per big box store went from 2.1 to 1.2 and from 1.2 to 0.6 per non- big box store.
- Results based on geography (urban versus rural stores) suggest very little difference in 2013 in terms of the average number of T12 and T8 lamps stocked per store. In 2012, there was greater diversity in T12 and T8 lamp offerings in rural stores (3.6 T12 models and 2.3 T8 models, on average) than in urban stores (2.4 T12 and 1.3 T8 models).
- Urban big box stores had the greatest number of T12 and T8 lamps per store in 2013 at 2.9 and 1.3 lamps per store, respectively. In 2012, it was rural non- big box stores that had the greatest T12 and T8 lamp model diversity at 4.1 and 2.7 models per store, respectively.

3.2.5 Promotional Materials

During the 2013 shelf survey visits (conducted in late 2013/early 2014), field researchers gathered details on promotional materials or displays regarding replacement lamps. These data enable summarization of promotional materials by the type of lamp promoted, store category, geographic sector (urban versus rural). Key findings include:

- Sixty-nine percent of stores had one or more promotional materials in the store related to replacement lamps, which is an increase from 2012 in which 50% of stores had one or more promotional materials. Among the stores that had promotional materials in 2013, all included one or more signs placed on shelving or on a wall in the store (which represented 69% of stores in the region). Four percent of stores had signs about replacement lamps hanging from the ceiling and 1% of stores had freestanding lighting displays.
- The most common technology described or promoted on these materials was the CFL, with 67% of all stores displaying one or more promotional materials regarding CFLs in

2013 (compared to 47% of stores promoting CFLs in 2012). Thirty-five percent of stores had promotional materials related to LED lamps in 2013 (compared to 20% in 2012). As was the case with LED displays, 35% of stores displayed materials regarding EISA-qualifying incandescent lamps in 2013 (compared to 19% in 2012). Twenty-nine percent of stores displayed materials regarding traditional incandescent lamps in 2013 (compared to 14% in 2012). Three percent of stores in 2013 had displays that dealt with multiple technologies.

- A higher proportion of big box stores displayed lighting promotional materials in 2013 than non- big box stores (79% versus 66%, respectively). Stores surveyed as part of the 2012 shelf surveys showed the same trend. More than three-fourths of the big box stores and nearly two-thirds of the non-big box stores displayed promotional materials about CFLs in 2013. More than half (53%) of Northwest big box stores in 2013 had materials regarding LED lamps compared to less than a third of non- big box stores (29%). Forty-six percent of big box stores and just under a third of non- big box stores had promotional materials related to EISA-qualifying incandescent lamps in 2013. A slightly greater percentage of non- big box stores had promotional materials regarding traditional incandescent lamps (29% of stores in 2013), compared to 27% of big box stores.
- Promotional materials were concentrated in urban stores in 2013—74% of urban stores displayed one or more materials compared to 41% of rural stores (the same trend occurred in 2012 with 63% of urban stores and 8% of rural stores displaying promotional materials). Most of the materials displayed in urban and rural stores focused on promoting CFLs in 2013.
- Nearly all of the stores that displayed promotional materials in 2013 did so in the lighting aisle (this was also the case in 2012). Eight percent of stores in 2013 had promotional materials regarding replacement lamps positioned on end-caps, 5% had materials displayed in the front of the store or near the store entrance, and 1% had promotional materials near the cash registers in the store.
- Messaging on the promotional materials was varied. The most common message on the promotional materials in 2013 related to specific utility programs. Messaging concerning utility programs was present in approximately 35% of stores in the 2013 (compared to 10% of stores in 2012). Another common message was energy and/or money savings, which was found in 28% of the stores. Other messages were present in less than 15% of Northwest retail stores at the time of the 2013 shelf surveys.

4 CONSUMER TELEPHONE SURVEYS

This chapter presents key findings from 1,007 telephone surveys conducted with Northwest consumers in early 2014. These consumer survey efforts build upon Northwest residential lighting survey efforts sponsored by NEEA since 2001. Appendix B provides the data collection instrument used for the 2014 consumer surveys, Appendix F details the consumer survey sampling approach, and Appendix G provides cross-tabulations of each survey question in banner table format.

4.1 APPROACH

DNV GL conducted the 2014 consumer surveys with a stratified random sample of households in Idaho, Montana, Oregon and Washington between March and April, 2014. We designed the 2014 consumer survey sample to meet the following criteria within survey budget constraints:

- Accurately represent urban and rural populations and facilitate comparisons between the two;
- Provide reasonable estimates at the state level and ensure that results can be compared between and among the states; and
- Include both landline and cell phone respondents to account for an ever growing population of wireless-only households.

The 2014 consumer telephone survey represents the first survey phase in which the sampling approach included quotas for respondents taking the survey from cell phones versus landlines.¹⁸ Analysts allocated sample points based on the U.S. Census Bureau's 2013 estimates of population by county (U.S. Census Bureau, 2013). We merged these county-level population estimates for each of the four states with the Rural-Urban Continuum Code (RUCC) data.¹⁹ We then stratified the Northwest population into eight strata defined by the combinations of the four Northwest states and two geographic sectors (rural and urban).

Table 4 below illustrates the number of completed surveys by geographic sector and state. Ten percent of the 2013 Northwest residential population was in the rural sector, and 90% was in the urban sector. However, to ensure comparability between the urban and the rural sectors (per RUCC designations) and similar statistical precision for each sector's survey estimates, NEEA

¹⁸ To ensure that any differences in results between 2013 and 2014 were attributable to changes in the market rather than changes in the sampling approach (i.e., incorporating cell phone –only households), we compared results between landline and cell phone respondents for key variables and determined that this change in approach did not affect the overall study results. For more details regarding how we incorporated cell phone-only households into the sampling approach, please refer to Appendix F.

¹⁹ The U.S. Department of Agriculture's Economic Research Service developed Rural-Urban Continuum Codes to distinguish metropolitan (metro) counties by the population size of their metro area, and non-metropolitan (non-metro) counties by degree of urbanization and adjacency to a metro area. Based on these RUCC codes, analysts stratified the population into two geographic sectors—urban and rural.

opted for a sample design that allocates approximately 32% of the sample points to the rural sector and the balance to the urban sector.²⁰

Table 4
2014 Consumer Survey Population and Sample Sizes by State and RUCC Designation

State	Population*				Sample Size			
	N		%		n		%	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Idaho	395,210	1,216,926	3%	9%	91	83	9%	8%
Montana	368,823	646,342	2%	5%	82	53	8%	5%
Oregon	255,375	3,674,690	2%	27%	66	197	7%	20%
Washington	334,440	6,636,966	3%	49%	87	348	9%	35%
Subtotal	1,353,848	12,174,924	10%	90%	326	681	32%	68%
Total	13,528,772		100%		1,007		100%	

* Source for population counts: U.S. Census Bureau, 2013 (see Appendix A for full citation).

Analysts created and applied sample expansion weights to the data such that the results are representative of the Northwest residential population.²¹ We analyzed the 2014 survey data using both time series and cross-sectional comparisons to understand changes in the market as well their underlying causes. We also analyzed results by geographic region (urban versus rural per the RUCC designations). Note that NEEA shifted its geographic classifications from metro/non-metro to urban/rural in 2012, so time series comparisons for urban/rural designations are only possible since 2012. Within the results, analysts looked for meaningful and statistically significant differences. The report provides tests of statistical significance at the 90% level of confidence throughout.

4.2 RESULTS

Below we provide results from the consumer surveys beginning with consumer awareness and purchases of different lamp technologies (CFLs, LED lamps, and incandescent lamps that comply with the minimum efficacy standards prescribed in the Energy Independence and Security Act of 2007 [EISA]²² (also known as “EISA-qualifying incandescent lamps”). We then focus on CFLs, specifically, and close with a discussion regarding consumer familiarity and purchasing behaviors with regard to EISA and EISA-qualifying lamps.

²⁰ For more details regarding the overall sampling approach, please refer to Appendix F.

²¹ Please refer to Table 15 in Appendix D for consumer survey population weights.

²² See Section 3.2.1 and Table 3 for further details.

4.2.1 CFL, LED, and EISA-Qualifying Lamp Technologies

As described above, the 2014 consumer telephone survey included questions to gauge consumer awareness and purchase rates of CFLs, LED lamps and EISA-qualifying incandescent lamps. The 2013 survey also included similar questions. Results suggest that:

- Awareness of CFLs declined significantly between 2013 and 2014 (from 90% to 86% of the population) while awareness of LED lamps increased significantly within the same timeframe (from 85% to 93% of the population). There are a number of possibilities driving this shift, including possible confusion among consumers regarding the range of newer lamp technologies, declining market attention toward CFLs, shifts in the share of shelf space allocated to different lighting technologies (see section 3.2.1 above), and increased utility focus on LED lamp incentives (see section 2.3.1 above).
- Awareness of EISA-qualifying incandescent lamps is lower and did not change between 2013 and 2014 (approximately 55-56% of consumers are aware of these lamps).
- CFLs still dominate among lamp purchases, with 60% of Northwest consumers reporting that they have purchased one or more CFLs at any time, and only 25% reporting that they have purchased LED lamps. Roughly 22% reported having purchased EISA-qualifying incandescent lamps.
- The 2013 and 2014 surveys asked consumers to estimate the number of traditional incandescent lamps, general purpose CFLs, specialty CFLs, LED lamps, and EISA-qualifying incandescent lamps they purchased in the year prior to the survey (i.e., 2012 purchases in the 2013 survey and 2013 purchases in the 2014 survey). We averaged results across all Northwest consumers, who purchased approximately 10 to 11 lamps, on average, in 2013 and 2014. In both years, approximately half of these were comprised by traditional incandescent lamps (averaging roughly 5 per respondent) and one-quarter by general purpose CFLs (averaging roughly 3). Northwest consumers purchased approximately 1.7 LED lamps per respondent, about 1 EISA-qualifying incandescent lamp (0.6 to 1.4), and a very small quantity of specialty CFLs in both years (0.1).

4.2.2 CFLs

This section reviews results for CFLs in particular, beginning with awareness and purchase rates, then discussing CFL disposition among Northwest households, awareness and use of specialty CFLs, CFL purchase locations, satisfaction with CFLs, the likelihood of future CFL purchases, and CFL-to-CFL replacement.

CFL Awareness and Purchases

Since 2005, the surveys have included questions regarding consumer awareness and purchases of CFLs. Results suggest that:

- As of early 2014, 86% of consumers were aware of CFLs and 60% had purchased them, a significant decrease from the 90% awareness and 70% purchase rates in 2013. This decline is likely caused by many of the same reasons as described in section 4.2.1 above. The data suggest no geographic differences in CFL awareness or purchase rates.
- In 2014, 60% of consumers were aware of specialty CFLs compared to 41% in 2013, which is a significant difference.

CFL Disposition

The consumer telephone surveys also gauge the total number of CFLs installed, removed, and in storage across the population of Northwest consumers. Results suggest that:

- The total number of CFLs ever acquired declined from roughly 10 lamps among 2013 survey respondents, on average, to approximately 8 lamps among 2014 respondents. This decline may again reflect the confusion or shift toward other lighting technologies described in section 4.2.1 above.
- When results are examined according to the proportion of CFLs installed, the proportion of CFLs in storage, and the proportion of CFLs ever removed (rather than the absolute number of lamps). Findings suggest these proportions changed little between 2011 and 2014—4 out of 5 CFLs ever acquired are installed, roughly one-quarter to one-third are in storage, and a small fraction (5 to 8% of all CFLs ever acquired) were installed and then later removed. There were no statistically significant differences in CFL installations between respondents in rural versus urban areas.
- As of 2014, the vast majority of all CFLs acquired by Northwest consumers were general purpose lamps (95%). Nearly all of the specialty lamps acquired by Northwest consumers over time were installed at the time of the 2014 surveys (rather than placed in storage or installed and then removed).

CFL Purchase Locations

For the past several years, the consumer telephone survey has included questions to gauge the types of stores in which CFL purchasers acquired CFLs most recently. Results suggest that:

- The 2014 survey respondents' recent purchases were mostly concentrated in the DIY and mass merchandise channels (approximately one-third and one-quarter of respondents mentioned these channels, respectively). This represents a statistically significant decrease in the proportion of consumers citing DIY stores as their most recent purchase locations during the 2013 survey (50%) but no change between years in the percentage of respondents mentioning the mass merchandise channel.
- The percentage of purchasers reporting purchases in wholesale clubs increased by a significant margin between the 2013 and 2014 surveys (from 11% to 18%).
- A significantly greater proportion of rural consumers reported purchasing CFLs most recently at small hardware stores than urban consumers (27% versus 10%, respectively). These results are not surprising given that rural consumers have less access to DIY stores than urban consumers.

Satisfaction with CFLs

The consumer telephone surveys address consumer satisfaction with CFLs from a number of perspectives: overall satisfaction, consumer impressions of the best and worst features of CFLs, and consumer agreement or disagreement with statements regarding CFL attributes. Results suggest that:

- Approximately two-thirds of CFL purchasers who responded to the 2014 survey were either “satisfied” or “very satisfied” with CFLs. While there were no statistically significant changes in consumer satisfaction with CFLs between 2013 and 2014, results

suggest a longer-term trend of declining satisfaction between 2006 (when nearly 9 out of 10 purchasers were “satisfied” or “very satisfied” with CFLs) and 2014.

- In the 2011 and 2012 surveys, CFL purchasers mentioned length life as the best feature of CFLs. In the 2013 and 2014 surveys, energy savings was cited by purchasers as the best feature of CFLs (length of life remained close behind as the second best feature).
- Starting in 2011, the consumer surveys included questions to gauge CFL purchaser impressions of the *worst* features of CFLs. In 2013, a plurality of Northwest CFL purchasers (34%) said start-up time (i.e., taking too long to light up) was the worst feature of CFLs. In 2014, only 20% mentioned start-time as one of the worst features of CFLs (a statistically significant change). The second most cited feature was that CFLs were not bright enough, and these results were steady between 2011 and 2014 at roughly one-fourth of respondents. The only other significant change between 2013 and 2014 was a decrease in Northwest consumers mentioning the color of CFLs as the worst feature (15% in 2013 and only 10% in 2014).
- The 2013 and 2014 surveys asked respondents to agree or disagree with seven statements regarding CFLs. The level of agreement was strongest with the statement “CFLs are not suitable for use in all of the rooms in my home” in both years, with more than half of CFL purchasers agreeing with this statement (55% in 2013 and 56% in 2014). Roughly two out of five CFL purchasers agreed that “CFLs take too long to light up,” “CFLs are not bright enough,” “CFLs don’t look good in my fixtures” and/or “CFLs don’t come in the shapes that I need.”
- When interviewers asked CFL purchasers about the main factors preventing additional CFL installations there was a significant increase in the percentage of respondents who said that they “do not need any more bulbs at this time” (increasing from 14% of respondents in 2013 compared to 24% of respondents in 2014). There was also a significant decline in the percentage of respondents who reported that they were “waiting for [their] incandescent bulbs to burn out” (decreasing from 21% in 2013 compared to 8% in 2014).
- On a scale of 1 to 5 (where 1 means “not at all likely” and 5 means “very likely,” three out of five CFL purchasers who had CFLs installed reported that they are “very likely” to replace a CFL with another CFL upon burnout in response to the 2014 survey (60%). While there were no statistically significant differences in the percentage of purchasers who provided each rating between 2013 and 2014, results between 2010 and 2014 suggest an overall decline in CFL-to-CFL replacement likelihood.

4.2.3 Energy Independence and Security Act

The 2010—2014 consumer telephone surveys included questions to gauge consumer awareness of EISA and the types of lamps they plan to purchase when traditional incandescent lamps are no longer available. Results suggest that:

- Approximately 45% of respondents in 2013 and 2014 were aware “of legislation that will affect lamp availability,” and roughly 60% aware “of legislation that will phase out most traditional incandescent lamps by 2014.” Awareness of both elements has held steady since 2012 after increasing significantly between 2011 and 2012.

- In the 2014 surveys, three out of five respondents reported that they will switch to a new type of light bulb when traditional incandescent lamps are no longer available, and roughly one in five reported that they will keep using incandescent lamps but switch to a lower wattage. (The remaining respondents were unsure or had other plans.)
- Of 2014 respondents who reported that they will switch to another type of light bulb, 36% said they would switch to CFLs, 22% to LED lamps, 11% to EISA-qualifying incandescent lamps; 2% to halogen; and 4% to something else (the remainder were unsure).

4.2.4 Key Driver Analysis

Analysts refined the 2014 consumer survey to enable a key driver analysis²³ to understand the impact of various factors that may influence consumer purchase decisions. The number of CFLs purchased by respondents and respondent satisfaction with CFLs were the measurable outcomes of a CFL purchase decision for the key driver analysis. Respondents rated 11 lamp attributes on a scale of 1–10 in terms of importance (a 1 rating was not at all important and a 10 rating was very important). These lamp attributes served as explanatory variables in the key driver analysis. The analysts then analyzed whether or not the lamp attribute ratings served as key drivers for CFL purchases and CFL satisfaction. Results suggest that:

- The relationship between lamp attributes and the number of CFLs purchased is weak. The reasons for this weak relationship may be due to a variety of external factors, including lamp price, lack of a need for new lamps, and lamp placement in retail stores.
- There is a positive relationship between satisfaction with CFLs and the number of CFLs purchased. As the level of satisfaction with CFLs increases, the likelihood that respondents have purchased a higher number of CFLs also increases.
- Analysts divided CFL purchasers into two groups—those who were very satisfied with CFLs (respondents who rated their satisfaction with CFLs with a 9 or 10) and those who were very dissatisfied with CFLs (respondents who rated their satisfaction with CFLs with a 1 or 2). We excluded respondents who gave CFL satisfaction ratings of 3 through 8 to gain a clearer understanding of which explanatory variables were key drivers of CFL satisfaction.
- Analysts developed a predictive model that correctly classified respondents as very satisfied or very dissatisfied with CFLs for 79% of the CFL purchaser observations. We then developed odds ratios for each of the 11 explanatory lamp attributes that either positively or negatively correlated with CFL satisfaction. There were 4 attributes that correlated positively with CFL satisfaction—energy savings of a lamp, environmental friendliness of a lamp, lamp fit in a fixture, and long lamp life, and there were 2 attributes that correlated negatively with CFL satisfaction—lamp price and quality of light.

²³ A key driver analysis is an exploratory analytic technique that attempts to explain the behavior of an outcome variable as a function of multiple explanatory variables. For the key driver analysis, the outcome variable is the consumer purchase decision, and the explanatory variables include factors consumers might consider when purchasing a lamp, such as energy savings, price, quality of light, bulb life, and other factors. These explanatory variables serve as independent variables in the key driver analysis. For further details on methodology and results of this analysis, please see Appendix D.5. below.

- A high importance rating cited for a lamp's energy savings, in particular, had a strong positive impact on CFL satisfaction, while a high importance rating for the quality of a lamp's light had a negative impact on CFL satisfaction.
- Since a higher CFL satisfaction rating increases the likelihood that a CFL purchaser has purchased a greater number of CFLs, there is an indirect relationship between the explanatory lamp attributes and the number of CFLs purchased.

5 UTILITY PROGRAM MANAGER INTERVIEWS

This section provides an overview of the approach to and key findings from interviews with residential lighting program managers at utilities throughout the Northwest. The objectives of this research were to:

- Obtain an overview of current residential lighting programs among the utilities in the sample;
- Review marketing, outreach and promotional activities for residential replacement lamps among Northwest utilities;
- Obtain a summary of current, recent, and planned research on residential lighting; and
- Better understand Northwest utilities' needs with respect to desired customer lighting preference research
- Discuss of the current needs of Northwest utilities related to residential lighting.

5.1 APPROACH

Staff interviewed residential lighting program managers from 19 distinct organizations in the Northwest.²⁴ Table 5 provides an overview of the number of utility representatives interviewed by utility type (size) as well as the number of states represented among the utilities interviewed in each stratum. The interviewers attempted a census of all ten of the large utilities and investor-owned utilities (IOUs) in Washington, Oregon, Idaho, and Montana and conducted interviews with representatives of all but one of these organizations. Staff also completed interviews with six residential lighting program representatives from medium-sized utilities and four representatives from small utilities.

Table 5
Disposition of 2013 Utility Program Manager Interviews

Utility Type	Number of Utility PMs Interviewed
IOU	4
Large	5
Medium	6
Small	4
Total	19

5.2 RESULTS

The main topics discussed in this section include an overview of current residential lighting programs among the utilities in the sample; highlights and key messages of education and marketing campaigns for residential lighting programs; a summary of current, recent, and

²⁴ For the sake of convenience, this section refers to each of these organizations as “utilities” although some serve somewhat different functions in the region.

planned research on residential lighting; and a discussion of the current needs of the utilities in the sample.

5.2.1 Overview of Northwest Residential Lighting Incentive Programs

Section 2.3.1 in Chapter 2 (CFL Sales Analysis) provides an overview of the major residential lighting incentive programs operated in the Northwest during 2013. The Bonneville Power Administration (BPA) plays a major role in the region with numerous utilities participating in BPA's Simple Steps, Smart Savings residential lighting program. Several utilities participate in Simple Steps and offer their own programs in addition, while others have only their own programs.

Table 6 below provides details on which utilities participate in Simple Steps and which utilities run their own residential lighting programs among the ten utility program interview participants.²⁵ Twelve out of the 19 utility program representatives reported that their utilities are active in the Simple Steps program. Furthermore, nine of the utilities in the sample run their own program; for some utilities, these programs are in addition to and in parallel with Simple Steps.

Table 6
2013 Utility Programs Overview

Utility Size	Simple Steps Participant	Has Own Program	State
IOU	Yes	No	OR
IOU	Yes	Yes	WA
IOU	Yes	Yes	MT
IOU	Yes	No	OR
Large	Yes	No	WA
Large	No	Yes	WA
Large	Yes	Yes	WA
Large	Yes	Yes	WA
Large	Yes	Yes	WA, OR, ID, MT
Medium	Yes	Yes	OR
Medium	No	No	WA
Medium	No	No	WA
Medium	Yes	No	WA
Medium	No	No	OR
Medium	Yes	Yes	OR
Small	No	Yes	OR
Small	Yes	No	MT
Small	No	No	OR
Small	No	No	OR

²⁵ Note that utility names are excluded to protect respondent confidentiality and avoid disclosing which utility representatives participated in the in-depth interviews.

5.2.2 Residential Lighting Marketing, Outreach and Promotional Activities

This section details the types of marketing and outreach efforts undertaken by utilities in the Northwest in support of residential lighting programs. The section first discusses the types of outreach undertaken, then provides an overview of the key messages, and, lastly, details any gaps in existing messaging perceived by the residential lighting program managers who participated in the interviews.

Promotional Activities

Fifteen of the utility representatives reported disseminating residential lighting program marketing and outreach information in a variety of ways during 2013. Most of the utility representatives with active marketing and outreach campaigns mentioned using in-store signage (10 of 15 representatives) and advertising on the utility website (11 representatives; see Table 7). Slightly less than half said that their organization used newsletters (9 representatives), and bill inserts as part of their campaigns (8 utility representatives). Six utility representatives mentioned promotional activity at community events; four said they made use of print ads, radio, and/or social media. Two representatives mentioned brochures or flyers, while three mentioned the use of TV ads. Three representatives said that they had in-store events as part of their marketing and outreach campaign.

Interviewees also mentioned other efforts less frequently. These include the following (each mentioned by only one utility representative):

- Coupons
- In-office lighting display

Table 7
Promotional Activities Among Residential Lighting Utility Program Representatives, 2013

Promotional Activity	Number of Mentions*
Utility website	11
In-store signage	10
Newsletters	9
Bill inserts	8
Community events	6
Print ads	5
Social media	4
In-store events	3
Radio	3
TV ads	3
Brochures/flyers	2
Free CFLs at utility offices	2
Total Utilities With 2013 Outreach Efforts	15

* Number of mentions exceeds number of utilities with 2013 outreach efforts as many utilities conducted multiple promotional activities.

Technologies Promoted

Table 8 shows the types of technologies promoted among the 15 utilities with active marketing and outreach campaigns. All 15 respondents with active marketing campaigns in 2013 said that their organizations promoted CFLs. Furthermore, thirteen of the respondents said that their organizations promoted CFLs and LED lamps, while two of the respondents said their organizations promoted only CFLs. This is a notable increase in the number of utilities promoting LED lamps compared to 2012 when only four utilities reported promotions of LED lamps.

Table 8
Technologies Promoted by Northwest Utilities, 2013

Technology Promoted	Number of Utilities*
CFLs Only	2
CFLs and LED Lamp	13
Neither CFL nor LED Lamp	4
Total Utilities with 2013 Outreach Efforts	15

* Number of utilities exceeds the total number of utilities with 2013 outreach efforts as several utilities included more than one technology in their outreach efforts.

Key Messages

The 2013 utility program manager interviews included questions to elicit details on the key messages used in promoting energy-efficient lighting products by the region's utilities. By far, the most common messages included on these materials related to the energy savings associated with CFL or LED lamps (see Table 9 below). Eight utility program managers said that their 2013 outreach efforts included messages to highlight the long product life of CFLs and LED lamps. Seven of the utility program managers reported that their marketing materials included messages to raise awareness and help consumers understand lumens or to compare lumens to watts. Five of the utility program managers reported that their 2013 promotional materials included messaging related to low prices, and three utility representatives said that their promotions explained the Lighting Facts label and color temperature or color rendering to consumers. Other messages cited by more than one respondent include the connection between lighting choices and space, lamp shape, Energy Star, and recycling/environmental messages.

In addition to the messages shown in Table 9, each of the following topics received one mention from interview participants:

- Creating emotional connections with CFLs and LEDs
- Dispelling CFL Myths
- LEDs are instant-on, dimmable, and have no mercury
- Product safety information
- Using CFLs in high use locations.

Table 9
Key Messages for Northwest Residential Lighting Promotional Activities Among Residential Lighting Utility Program Representatives, 2013

Key Message	Number of Mentions*
Energy savings	14
Product life	8
Lighting Quality	7
Raise awareness	7
Understanding lumens/wattage	6
Low prices	5
Color temperature/rendering	3
Understanding the Lighting Facts label	3
CFL recycling	2
CFL shapes	2
Connect lighting choices with consumers' lighting spaces	2
Energy Star	2
Environmental	2
Total Utilities With 2013 Outreach Efforts	15

* Number of mentions exceeds number of respondents as many utilities included multiple messages on their promotional materials.

Gaps in Messaging

Several of the utility program representatives interviewed mentioned one or more gaps in the messaging used among those who promote lighting (including utilities, manufacturers, and retailers). In other words, these messages are either not conveyed effectively or are not conveyed at all when promoting lighting. The gaps mentioned by more than one respondent include:

- Understanding lumens (mentioned by 5 utility representatives)
- Confusing and contradictory information (mentioned by 4 representatives)
- General information about LED lamps (2 mentions); and
- Price as a barrier (2 mentions).

Respondents mentioned other messages only once each; these include:

- Location of CFLs in consumers' homes (i.e., high-use versus low use locations)
- Safety issues with CFLs related to buying the wrong lamp style for the wrong socket and having the lamp overheat
- Lowering consumer concern about mercury in CFLs
- Dispelling myth that LEDs are always a superior product

5.2.3 Lighting Consumer Research Activities

One of the key objectives in speaking with utility program representatives in the Northwest was to determine the extent to which Northwest utilities are conducting research on consumer lighting knowledge, preferences, and purchasing motivations. Based on conversations with the utility program representatives, none of the utilities has conducted or has concrete plans to conduct formal research on these topics (there was also no active research in this area among Northwest utilities in 2013). Interviewers asked utility representatives what kind of lighting consumer research they would like to see if they had no budget constraints and had the ability to conduct this research. There was a wide variety of answers to this question including the following (1 mention each):

- Research on consumer satisfaction with energy-efficient lighting products
- More research on LED purchasers
- Research on consumer purchasing motivations – specifically, the extent to which price is a key driver
- More research on how well consumers understand EISA
- Understanding what influences consumers to purchase lighting products – especially understanding the influence of product placement in stores
- Research on what consumers needs are in terms of lamp type and style
- Research on why consumers are still buying incandescent lamps in high numbers

5.2.4 Current Northwest Utility Needs and Concerns

Interviewers asked utility program representatives whether their organizations had any specific needs with regard to consumer lighting products, and how an organization like NEEA might be able to help them with these needs (if any). Respondents mentioned the following needs:

- Assistance with marketing and messaging for energy-efficient lighting products (mentioned by 13 respondents)
- Developing a regional consensus and common regional messaging for energy-efficient lighting products (3 mentions)
- Assistance with marketing and messaging for energy-efficient lighting products targeted specifically at rural customers (3 mentions)
- Ensuring high quality for energy-efficient lighting products—especially LED lamps and fixtures (2 mentions)
- Better marketing materials for LED lamps (1 mention)
- Research on retailer lighting sales (1 mention)
- Research on consumer preferences and motivations related to purchasing lighting products (1 mention)

When asked whether or not an organization like NEEA should get back into the residential lighting market, nearly half of the respondents (9) said that NEEA should not do so. Two of these respondents also said that they think BPA's Simple Steps program is working as-is. Three respondents expressed a desire for NEEA to get back into the residential lighting market by funding an initiative to provide support for LED marketing and outreach efforts. Two respondents said that they wanted help from NEEA with messaging for energy-efficient lighting products in general. Three respondents said that NEEA could help by influencing the lighting market at a higher level by working with manufacturers to develop high quality energy-efficient lighting products.

6 LIGHTING SUPPLIER INTERVIEWS

This section provides an overview of the approach to and key findings from interviews with lighting supplier representatives.

6.1 APPROACH

In May and June 2014, DNV GL staff conducted sixteen interviews with representatives of replacement lamp suppliers. Interview participants included eleven representatives from lighting manufacturers and five representatives from retail chains and independent stores that sell CFL, incandescent, and LED lamps in the Northwest. Table 10 provides an overview of respondent types as well as the types of lighting products that they sell in the Northwest market. Appendix B provides the interview guide.

Table 10
2014 Supplier Profile

Respondent Type	Lamp Type Manufactured or Sold		
	CFLs	Incandescent Lamps	LED Lamps
Manufacturer	11	5	11
Regional Retailer	3	3	3
National Retailer	2	2	2
Total	16	10	16

6.2 RESULTS

The sections below summarize findings from the interviews for the national and Northwest residential CFL markets. The section also provides findings regarding sales and pricing of other technologies in the Northwest markets including traditional incandescent lamps, incandescent lamps that meet the EISA standards (referred to herein as “EISA-qualifying”)²⁶, and LED lamps. The chapter closes with a summary of supplier perceptions of EISA’s effects, details of a relationship between the stocking and sales of lighting products, and a review of the types of marketing and promotional materials suppliers provide to Northwest retail stores. The sections below emphasize results regarding the 2013 lighting market and compare results to previous study findings where possible.

6.2.1 Residential Market for CFLs – National

Interviewers asked lighting supplier representatives to provide their perspectives on changes in national CFL sales between 2012 and 2013. Results suggest little consensus among interview participants (11 total suppliers):

²⁶ Note that this term includes halogen lamps that meet the EISA standards.

- 4 suppliers reported that national CFL sales increased (mentioned by 3 manufacturer representatives and 1 retailer representatives)
- 2 suppliers reported that national CFL sales decreased (2 manufacturers)
- 5 supplier reported that national CFL sales remained the same (5 manufacturers)

Among the eleven suppliers who provided information on national residential CFL sales, four said that there was an increase in CFL sales between 2012 and 2013, another two said that there was a decline in CFL sales, and the remaining five suppliers, said that CFL sales did not change between years. The estimated increase in sales ranged from 6% to 50% among suppliers. The one supplier who cited a decrease in sales and was able to estimate a percentage decrease in sales said that his company's CFL sales dropped 50%. Among the suppliers interviewed in support of last year's study, there was a similar lack of consensus regarding changes in national CFL sales between 2011 and 2012 (sales increases ranged from 2% to 25% and declines in sales ranged from 6% to 75%).

Among the four suppliers who reported an increase in national residential CFL sales between 2012 and 2013, three cited increased utility promotions as the main driver. The other supplier mentioned impacts from EISA regulations as a possible factor contributing to increased CFL sales because the phase-out of incandescent lamps helped drive CFL sales higher. Both of the suppliers who cited a decrease in national residential CFL sales between 2012 and 2013 cited greater success with LED sales as a key reason for CFL sales declines.

6.2.2 Residential Market for CFLs – Northwest

Supplier representatives also described sales trends for the Northwest residential CFL market and offered their perspectives on what might happen to CFL sales in the future. Interviewers also asked supplier representatives to provide their best estimates on CFL pricing in the Northwest in 2013. The results below include comparisons among interview responses for the past two to three years where possible.

2012–2013 Northwest CFL Sales Trends

During the 2014 interviews, interviewers asked suppliers to describe any differences in Northwest residential CFL sales between 2012 and 2013. As reported above for national CFL sales, views differed among suppliers (9 total respondents):

- 4 suppliers reported that Northwest CFL sales increased (mentioned by 2 manufacturer representatives and 2 retailer representatives)
- 4 suppliers reported that Northwest CFL sales decreased (3 manufacturers; 1 retailers)
- 1 suppliers reported that Northwest CFL sales remained the same (1 retailer)

Two retail representatives reported that CFL sales increased in the Northwest during this timeframe (estimating increases of 10% and 15%), and one retailer reported a decline in Northwest CFL sales between 2012 and 2013 of 0.5%. One retailer said that there were no changes in CFL sales in the Northwest from 2012 to 2013. As for manufacturers, two reported an

increase in Northwest CFL residential sales in 2013 ranging from 5 to 20% and three reported a decline in 2013 sales ranging from 5 to 50%.

When asked to describe the reasons for this sales increase, suppliers cited increased utility promotions of CFLs, frequent replacements for burnt out lamps, and the phasing-out of incandescent lamps. The suppliers who mentioned declines in Northwest CFL sales cited similar reasons to those mentioned above for declining national CFL sales—namely, the impacts of EISA, which caused consumers to buy less expensive traditional incandescent lamps still remaining on shelves or less expensive EISA-qualifying halogens. Three suppliers mentioned increased consumer demand for LED lamps or a general shift in focus toward LED lamps that took away from CFL sales. One supplier mentioned that Northwest utility programs are targeting the same customers who have purchased CFLs again and again, and that these customers have plenty of CFLs in storage with no reason to buy any more CFLs.

Future Northwest CFL Sales Trends

Interviewers asked suppliers whether they thought their general purpose CFL sales and specialty CFL sales would each increase or decrease in the Northwest over the next five years. Opinions differed among those suppliers willing and able to forecast their future general purpose CFL sales (14 total suppliers), but a majority (8) predicted that CFL sales in the Northwest would decline:

- 4 suppliers reported that sales will increase (mentioned by 2 manufacturer representatives and 2 retailer representatives)
- 8 suppliers reported that sales will decrease (7 manufacturers; 1 retailer)
- 2 suppliers reported that sales will remain the same (2 retailers)

For the eight suppliers who said that general purpose CFL sales would decline over the next five years in the Northwest, their projected declines ranging from 10 to 100%. Six of the suppliers who forecasted a decline in general purpose CFL sales said that increased market share of general purpose LED lamps would lead to a decrease in general purpose CFL sales, while two of the suppliers stated that lower utility incentives for general purpose CFLs would lead to a decline in general purpose CFL sales.

Four suppliers predicted that general purpose CFL sales would increase over the next five years, with projected increases ranging from 5 to 15%. Two suppliers said that their general purpose Northwest CFL sales would remain about the same over the next five years. Opinion was divided in terms of the reasons for general purpose CFL sales increases among suppliers who predicted increased sales. Some suppliers said that EISA legislation and the presence of more expensive halogens would drive CFL sales up, while another supplier said that a stronger desire to save energy and money among consumers in the Northwest would lead to an increase in general purpose CFL sales.

Responses regarding the future sales of specialty CFLs in the Northwest showed similar trends to those for general purpose CFL sales. Suppliers who said that specialty CFL sales would decrease over the next five years outnumbered those who said that specialty CFL sales would increase or stay the same by a two to one margin (12 total suppliers):

- 2 suppliers reported that Northwest specialty CFL sales will increase (mentioned by 1 manufacturer representative and 1 retailer representative)
- 8 suppliers reported that sales will decrease (6 manufacturers; 2 retailers)
- 2 suppliers reported that sales will remain the same (2 retailers)

Among those who said that sales would decrease (eight supplier representatives), the forecasted decline in specialty CFL sales ranged from 15 to 100%. Only two supplier representatives predicted that sales would increase, and the forecasted increase in specialty CFL sales was 7 and 10%, respectively. Two suppliers said that specialty CFL sales would remain the same. Almost all of the suppliers who forecasted a decline in specialty CFL sales said that increased specialty LED lamp market share would be responsible for this decline. The two suppliers who forecasted an increase in specialty CFL sales said that this was likely to occur due to ongoing decreases in price points and increased consumer familiarity with CFLs.

Northwest CFL Prices

Interviewers asked supplier representatives to estimate promotional prices (i.e., discounted by utilities, manufacturers, or retailers) and non-promotional prices for general purpose CFLs in the Northwest for 2013, and 12 of the 16 suppliers were able to provide estimates. Table 11 shows a comparison of price ranges provided by supplier representatives interviewed in 2012, 2013, and 2014 regarding lamps sold during the year prior to each interview. Representatives reported higher price ranges for non-promotional general purpose CFLs during 2012 and 2011 compared to 2013. However, promotional general purpose CFL price ranges were lower in 2012 and 2011 compared to 2013. Comparing results across all suppliers yields an average promotional price of \$1.05 per lamp for general purpose CFLs in 2013 and an average non-promotional price of \$2.21 per lamp in 2013. These results suggest an average discount of \$1.16 for general purpose CFLs with promotional pricing in 2013.

Table 11
Range of Reported Promotional and Non-Promotional Prices
for General Purpose CFLs in the Northwest, 2011–2013

Description	Range of Reported Prices		
	2011	2012	2013
Promotional twister CFL	\$0.99 – \$1.63	\$0.50 – \$1.75	\$0.50 – \$2.00
Non-promotional twister CFL	\$1.75 – \$5.00	\$1.40 – \$5.00	\$1.10 – \$4.00

Eight of the supplier representatives also provided price estimates for promotional and non-promotional specialty CFLs in the Northwest during the 2014 interviews for lamps sold in 2013. This is the third year that the study has tracked specialty CFL pricing estimates among suppliers. Table 12 shows a comparison of price ranges for promotional and non-promotional specialty CFLs in 2011, 2012 and 2013. With respect to 2013 specialty CFL prices, suppliers cited a much wider range of prices for both promotional and non-promotional specialty CFLs compared to 2011 or 2012. Promotional specialty CFL prices in 2013 ranged from a low of \$0.75 to \$15.97

and non-promotional specialty CFL prices ranged from \$5.65 to \$15.00. Across all suppliers, the average promotional price was \$5.56 per lamp in 2013, and the average non-promotional price was \$7.86 per lamp.

Table 12
Range of Reported Northwest Prices for Specialty CFLs
by Promotion Availability, 2012–2013

Description	Range of Reported Prices		
	2011	2012	2013
Promotional Specialty CFL	\$1.90 – \$6.50	\$2.50 – \$6.00	\$0.75 – \$15.97
Non-promotional Specialty CFL	\$3.00 – \$9.99	\$5.98 – \$15.00	\$4.65 – \$20.00

6.2.3 Residential Market for Incandescent Lamps – Northwest

This year’s supplier interviews included detailed questions on traditional incandescent lamps sales, EISA-qualifying incandescent lamp sales, and pricing for traditional and EISA-qualifying incandescent lamps.

2012–2013 Northwest Incandescent Lamp Sales Trends

Four suppliers were able to provide an answer to whether or not sales of traditional incandescent lamps increased, decreased or stayed the same from 2012 to 2013. All four said that sales declined and three were able to provide a percentage decrease in the drop in sales ranging from a 5% drop to 20% drop in traditional incandescent sales. Two representatives (both retailers) said that the decline in traditional incandescent lamps was due to EISA regulations. One representative cited an increase in halogen and CFL sales, which took away from traditional incandescent sales as the main reason for a decline in traditional incandescent sales. Another representative said that an inability to renew an agreement with a major retailer led to a drop in incandescent sales in the Northwest.

As for EISA-qualifying incandescent lamp sales, six suppliers were able to provide answers for this question. Three suppliers reported that their EISA-qualifying incandescent lamps sales increased from 2012 to 2013, ranging from a 5% increase to a 20% increase. Three retailers’ reported that their EISA-qualifying incandescent lamp sales stayed constant from 2012 to 2013. Five respondents were able to give estimates of the proportion of all incandescent lamps sales that were EISA-qualifying in 2013. Answers ranged from 20% of all general purpose incandescent lamp sales to 90%. Among those suppliers who cited increases in EISA-qualifying incandescent lamp sales, all said that increased sales of these lamps were due to the impacts of EISA legislation.

Future Northwest EISA-Qualifying Lamp Sales Trends

With respect to future sales of EISA-qualifying incandescent lamps over the next five years, five suppliers were able to provide answers to this question. Four out of the five suppliers expected

increased sales in EISA-qualifying lamps. Only one supplier was able to quantify the increased sales in terms of a percentage increase and predicted a 45% increase in sales over five years. One supplier expected a 5% decline in EISA-qualifying sales due to increased competition from CFLs and LED lamps.

2013 Northwest Incandescent Lamp Prices

Interviewers asked suppliers for their best estimate for an average price of a traditional incandescent lamp and an EISA-qualifying incandescent lamp in Northwest stores in 2013. For traditional incandescent lamps, the seven suppliers who could provide estimates cited an average price ranging from \$0.25 per lamp to \$1.50 per lamp. Averaging all responses given by suppliers yields an average price of \$0.92 per traditional incandescent lamp in 2013. For EISA-qualifying incandescent lamps, the nine suppliers who could provide estimates cited an average price ranging from \$0.75 per lamp to \$3.00 per lamp yielding an average price of \$1.56 per EISA-qualifying incandescent lamp. This suggests that the difference in price between a traditional incandescent lamp and EISA-qualifying incandescent lamp was about \$0.64 in Northwest stores in 2013.

6.2.4 Residential Market for LED Lamps – Northwest

This section gives details on supplier perspectives of the LED lamp market, including LED lamp sales trends, expected future LED lamp sales, and LED lamp prices. When asked for their perspectives on the residential lighting market in general, most suppliers said that the continued growth in consumer demand for LED lamps and a drop in prices for LED replacement lamps were the most notable changes in the 2013 lighting market. Findings below on LED lamp sales trends and prices help explain the growth of LED lamps in the lighting market.

2012–2013 Northwest LED Sales Trends

All 16 of the suppliers who participated in the interviews reported that they sold LED lamps in the U.S. during 2013. When asked how their 2012 LED lamp sales in the Northwest compared with 2013 LED lamp sales, the nine suppliers who were able to answer the question said that their Northwest LED sales had increased. Estimated increases ranged from 35% to 200%. The average percentage increase in Northwest LED lamp sales across suppliers who answered this question was 78%. All of the suppliers who cited increased LED lamp sales said that lower prices and increased consumer demand for LED lamp sales were the main reasons for increased sales in Northwest stores. Several suppliers noted that utility incentives in 2013 also helped LED lamps sales. Some suppliers cited the emergence of higher quality LED lamps, brighter light output, better light quality, and increased LED lamp model diversity ultimately helped push sales higher. One retailer said that 2013 was the first year that the store offered LED replacement lamps to consumers.

Interviewers asked suppliers to identify their best-selling LED lamp style in 2013, and a majority of suppliers mentioned LED A-lamps (8 suppliers), followed by reflector lamps (3 suppliers), and flame tipped candelabra lamps (1 supplier). Suppliers were also asked what proportion LED A-lamps represented out of all of their 2013 Northwest LED lamp sales. The ten responses ranged

from 10 percent to 75 percent of total Northwest LED lamp sales. The average proportion of total 2013 Northwest LED lamp sales attributed to A-lamps across all suppliers in the sample was 40%.

Future Northwest LED Lamp Sales Trends

With respect to future LED sales, interviewers asked suppliers if they expected total LED lamp sales in the Northwest to increase, decrease, or stay the same over the next five years. Of the nine supplier representatives who could answer the question, all of them said that they expected sales to grow. Expected increases ranged from 10% to 400%.

2013 Northwest LED A-Lamp Prices

Interviewers asked representatives of retailers and manufacturers who sell LED lamps in Northwest retail stores for their best estimate of the average price for an LED A-lamp in Northwest stores in 2013. Responses for LED A-lamps ranged from \$5.99 to \$20.00 per lamp. Averaging all twelve estimates provided by suppliers yields an average price of \$12.13 for LED A-lamps in 2013 in Northwest retail stores (nearly half the average price of \$23.39 for LED A-lamps in 2012 cited by suppliers in the prior study).

Interviewers also asked supplier representatives to project the average prices for LED A-lamps in Northwest retail stores in 2015 and in 2017, and ten suppliers were able to provide estimates. Responses ranged from a forecasted price of \$3.75 to \$15.00 per lamp in 2015, and \$1.99 to \$12.00 in 2017. The average 2015 forecasted price for an LED A-lamp was \$9.29 across all suppliers who answered the question and the average forecasted 2017 price was \$6.89.

6.2.5 Effects of EISA

Interviewers asked supplier representatives their opinions on the short-term (2014-2015) and long-term (beyond 2015) effects of EISA legislation. There were varying opinions on the short-term effects of EISA, but a frequently cited EISA effect was a shift to alternative technologies such as EISA-qualifying incandescent lamps, CFL, and LED lamps (mentioned by 7 suppliers). Four of these suppliers reported that they specifically expect to see a short-term shift among consumers toward EISA-qualifying incandescent lamps, but three suppliers expected to see a shift to CFLs and another supplier predicted a shift directly to LED lamps. Another frequently cited short-term effect was consumer hoarding of traditional incandescent lamps (mentioned by 5 suppliers). Interestingly, four suppliers predicted that there would not be any major effect of EISA in the short term, either because they understood that customers have known for quite some time about the incandescent phase-out, or because consumers have been primarily interested in saving energy and money with lamp technologies already available in the market.

Regarding the long-term effects of EISA legislation, nine of the sixteen supplier representatives said that they expect to see a shift to an alternative lamp technology. A third of the suppliers reported that they expect a shift away from traditional incandescent lamps and toward EISA-qualifying incandescent lamps (5 suppliers). Seven supplier representatives said that they expect

customers to move to LED lamps over the long-term. One supplier noted that there will likely be a decline in utility savings over the long-term.

6.2.6 Stock and Sales Relationship

This year's supplier interviews included questions on whether or not suppliers think there is a relationship between sales volume of replacement lamps and stocking volume of replacement lamps. Results include characterizations of that relationship (if any) and whether or not the relationship differs by lamp technology.

Relationship between Stock and Sales

Ten of the 16 interview participants said that there is a relationship between the sales volume of replacement lamps and the stocking of those lamps. Eight of these 10 suppliers noted that more stock of a lighting product in stores usually means more sales, often reasoning that customers are more likely to notice a larger stock of lighting products. Two suppliers noted that in addition to stocking volume, other factors can influence lamp sales, such as positioning in stores (e.g., stocking lamps on end-caps or other high traffic or high visibility areas in a store) and messaging near the lighting products. One supplier noted that the relationship was mainly seasonal, with an increased stock and sales in the fall and winter months when it is darker. Four suppliers said that they don't think there is a relationship between sales and stocking of lamps and two suppliers were not sure if there is or isn't a relationship.

Relationship between Stock and Sales by Technology

All ten interview suppliers that reported a relationship between the sale of replacement lamps and the stocking of those lamps said that this relationship does not vary by lamp technology.

6.2.7 Residential Lighting Marketing, Outreach and Promotional Activities

This section details the types of marketing and promotional efforts undertaken by suppliers in the Northwest to promote lighting products. Results include the types marketing materials used, who provided the materials, and an overview of the key messages in these materials.

Promotional Activities

Thirteen of the 16 interview participants reported having active residential lighting promotional campaigns in Northwest stores during 2013. As shown in Table 13, ten of the 13 suppliers that had active CFL, LED, or cross-technology promotions in Northwest stores had some in-store signage to promote their lighting products in 2013. In some cases, signage was comprehensive and designed to educate consumers on topics such as energy savings, understanding lumens and watts, color rendering, and available lamp technologies and styles. Six of the supplier representatives also mentioned in-store lighting demonstrations for CFL or LED lamps and five of the supplier representatives mentioned that they had educational information on the lighting products that they promoted in brochures and pamphlets.

Some of the supplier representatives reported other means of promoting lighting products that took place outside of stores. Three suppliers reported the use of print or newspaper ads and one supplier reported out-of-store promotions on the supplier website.

Table 13
Northwest Residential Lighting Promotional Activities
Among Lighting Supplier Representatives, 2013

Promotional Activity	Number of Mentions*
In-store signage	10
Lighting demonstrations/displays	6
Brochures/flyers	5
Print ads	3
Website	1
Total Suppliers with 2013 Outreach Efforts	13

* Number of mentions exceeds number of suppliers with 2013 outreach efforts as many suppliers conducted more than one promotional activity.

There were no noteworthy differences in terms of the manner in which suppliers promoted CFL, LED, and incandescent lamps in 2013. Some of the supplier representatives mentioned that they had in-store displays for CFL and LED lamps. Efforts to explain the impacts of EISA tended to be more comprehensive with educational information on lumens and watts across technologies. For one retailer, its key EISA-related message was simply general replacement options in the form of a shelf brochure.

Technologies Promoted

Among these 13 suppliers who reported having active promotional campaigns, a large majority promoted CFLs (11 suppliers) and more than one-half promoted LED lamps (8 suppliers). All five retailer representatives reported that their stores promoted CFLs, but two retailer representatives mentioned that signage in their stores dealt with CFL, LED, incandescent, and halogen lamps simultaneously in an effort to explain the differences among the technologies. Six of the manufacturers also promoted CFLs. One manufacturer representative mentioned that its retail partner is responsible for all of its promotions.

Key Messages

Table 14 provides an overview of the key messages conveyed by the suppliers in the sample to promote their lighting products in the Northwest during 2013. All of the representatives with active promotional activities in the Northwest during 2013 mentioned the long life of CFL/LED lamps. Energy savings was another popular message, mentioned by almost all of the suppliers (12 representatives). Helping consumers understand lumens and differences in wattage among different lamp technologies was another common message (mentioned by 9 representatives) followed by education on color temperature (7 mentions), low lamp prices (6 mentions), and

education on EISA legislation (2 mentions). Suppliers mentioned other messages only once each, including:

- Buy Energy Star qualified lamps
- Light quality
- Special features of lamps
- Size of lamps

Table 14
Key Messages for Northwest Residential Lighting Promotional
Activities Among Lighting Supplier Representatives, 2013

Message	Number of Mentions*
Long life	13
Energy savings	12
Understanding lumens	9
Color temperature/rendering	7
Low prices	6
Education on EISA	2
Total Suppliers with 2013 Promotional Activities	13

* Number of mentions exceeds number of suppliers with 2013 promotional activities as many suppliers included multiple messages on their promotional materials.

7 SUMMARY OF FINDINGS

As described in Chapter 1 (Introduction), Section 1.2, the 2013–2014 Northwest Residential Lighting Long-Term Market Tracking Study has 11 objectives. The sections below summarize findings relevant to each study objective from the CFL sales analyses, retail lighting store shelf surveys, consumer telephone surveys, and interviews with lighting supplier representatives, and residential lighting program managers at Northwest utilities.

7.1 OBJECTIVE 1

Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, light-emitting diode (LED) lamps and incandescent lamps in Northwest retail stores.

Availability. Shelf survey results from 2012 and 2013 suggest that CFLs, halogen, and incandescent lamps are available in at least nine out of ten retail stores that sold replacement lamps in the Northwest; the percentage of stores stocking LED lamps also increased during this timeframe. Nearly all stores had CFLs in stock at the time of the 2013 lighting retail store shelf surveys (late 2013/early 2014). While nearly all stores stocked general purpose CFLs in 2013, the percentage of stores stocking specialty CFLs declined to 91% of stores (compared to 96% of stores in 2012). The percentage of stores stocking LED lamps increased by more than a third between 2012 and 2013 to 83% of stores. Nearly all stores stocked incandescent lamps and 94% of stores stocked halogen lamps in 2013.

With respect the share of lamp stock by technology, incandescent lamps continue to dominate retail store lamp inventories. However, their share of total lamp stock declined from 61% in 2012 to 50% in 2013. Halogen lamp share grew to 21% in 2013 (from 12% of stock in 2012). The proportion of CFLs stocked was the same in 2013 and 2012 at 24% of total lamp stock. While the share of LED lamps stock doubled between 2012 and 2013, their share remained below 5%.

Diversity. Lamp model diversity is measured in terms of the average number of lamps models available in stores for a given lamp type. Lamp model diversity for incandescent and halogen lamps changed between 2012 and 2013, while diversity for CFLs and LED lamps remained unchanged. Across all stores, the average number of incandescent lamp models declined between years from 65 to 59 per store, while halogen lamp model diversity increased from 20 models per store in 2012 to 27 in 2013. The average number of CFL models per store remained essentially the same at 37 models per store in 2012 and 38 models per store in 2013. The average number of general purpose and specialty CFLs remained roughly the same between years at roughly 21 and 17 models per store, respectively. Regarding LED lamp model diversity, the average number of lamp models per store remained the same between 2012 and 2013 at 6 models per store.

CFL Shelf Pricing. The overall average shelf price for a CFL increased by 2% between 2012 and 2013 (from \$4.35 to \$4.44 per lamp) in the Northwest. When broken down by CFL type, the average shelf price for general purpose CFLs increased by 5% from \$3.45 in 2012 to \$3.60 per

lamp in 2013, on average; the average shelf price of specialty CFLs declined by 2% from \$6.87 per lamp in 2012 to \$6.75 per lamp in 2013. The average shelf price per CFL in 2013 was \$2.22 lower in big box stores (\$3.36 per lamp), on average, than in non- big box stores (\$5.58 per lamp). There were minimal changes in the average shelf price of general purpose and specialty CFLs by store category between 2012 and 2013. When analyzed by geography (urban versus rural stores), the average shelf price for a CFL was \$0.92 higher per lamp, on average, in rural stores (\$4.33 per lamp) compared to urban stores (\$5.25 per lamp) in 2013. However, this gap in average prices narrowed between years with the average shelf price of a CFL increasing 3% in urban stores (from \$4.22 per lamp in 2012) and declining and rural stores (from \$5.37 per lamp in 2012).

7.2 OBJECTIVE 2

Objective 2: Explore the relationship between actual sales and stocking practices.

Researchers interviewed 16 lamp suppliers (including manufacturer and retailer representatives active in the Northwest), and asked whether there is a relationship between sales volume and stocking volume of replacement lamps. Nearly two-thirds of the suppliers said that there is a relationship between the sales and stocking of lamps, noting that a larger volume of stock for a particular lamp modal usually means more sales volume for that model.

Analysts also examined the relationship between CFL sales and CFL stock over a three year period (2011–2013) by conducting regression analyses.²⁷ The team established a non-linear relationship between sales and stock whereby a percentage increase in stock yielded:

- A 1.37% increase in sales volumes for general purpose CFLs in big box stores
- A 0.57% increase in sales volumes for specialty lamps in big box stores
- A 0.92% increase in sales volumes for general purpose lamps sold in drug stores

This model was particularly effective in estimating sales volumes based on changes in stock for general purpose and specialty CFLs in big box stores.

7.3 OBJECTIVE 3

Objective 3: Assess Northwest consumer awareness of CFLs; purchase, installation, and storage rates; perceptions of CFLs; and motivations for recent CFL purchases, as well as consumer familiarity with emerging lighting technologies and related regulations.

CFL awareness, purchase, installation, and storage. There were notable changes in consumer awareness and purchase rates of CFLs between 2013 and 2014. As of early 2014, 86% of consumers were aware of CFLs and 60% had purchased them, a significant decrease from the 90% awareness and 70% purchase rates in 2013. The percentage of the Northwest population

²⁷ DNV GL delivered a confidential memorandum to NEEA in July 2014 detailing the results of these analyses. Given the confidentiality of this memo, we have not included it in the appendices of this report.

aware of specialty CFLs increased significantly from roughly two out of five consumers in 2013 to three out of five consumers in 2014. Eighty-five percent of CFL purchasers in the 2014 survey reported that they had CFLs installed in their homes, a significant decline from the 2013 survey where 91% of CFL purchasers reported that they had CFLs installed in their homes. The percentage of CFL purchasers who reported that they were storing one or more CFLs for future use declined slightly in 2014 to 63% from 66% in 2013.

Purchase motivations and satisfaction. Forty-four percent of CFL purchasers cite energy savings and 39% cite length of life as the best features of CFLs. As for the worst features of CFLs, 20% of CFL purchasers in 2014 mentioned that they take too long to long to light up (start-up time); this was significantly lower than the 34% of CFL purchasers in 2013 who mentioned this as one of the worst features of CFLs. Twenty-two percent of CFL purchasers in 2014 also mentioned that CFLs were “not bright enough” and considered this as one of the worst features of CFLs; these results were essentially unchanged from earlier surveys (2011–2013). There were no statistically significant changes between 2013 and 2014 in consumer satisfaction. However, results suggest a longer-term trend of declining satisfaction with CFLs between 2006 (when nearly 9 out of 10 suppliers gave satisfaction ratings of 6 or higher) and 2014 (when only two-thirds of suppliers gave ratings of 6 or higher).

Main factors preventing additional CFL installations. There was a significant increase in the percentage of respondents who said that they “do not need any more bulbs at this time” in 2014 (24% of respondents) compared to 2013 (14% of respondents). The percentage of consumers who reported that they were “waiting for [their] incandescent bulbs to burn out” declined significantly between years (21% in 2013 compared to 8% in 2014). This decline may be due to the effects of EISA and the overall lack of availability of traditional incandescent lamps in stores. There was also a significant decline in the percentage of respondents who reported that CFL price was a main factor in preventing additional CFL installations (from 15% in 2013 to 9% in 2014).

Familiarity with emerging lighting technologies. Consumer survey results suggest that 93% of Northwest consumers were aware of LED lamps as of early 2014 (a significant increase from 85% of consumers in 2013) and that 55% were aware of EISA-qualifying incandescent lamps. Only 25% of the Northwest consumers said they had purchased LED lamps (a small, but significant decline from 30% of consumers in 2013), and only 22% had purchased EISA-qualifying incandescent lamps (roughly the same as in 2013). Among Northwest consumers interviewed in early 2014, LED lamps represented 16% of the lamps purchased in 2013 compared to 14% in 2012 (among consumers interviewed in early 2013) and EISA-qualifying incandescent lamps represented 13% of all lamps purchased in 2013 (a significant increase from 6% of all lamps purchased in 2012).

Familiarity with new lighting regulations. In 2010, the consumer surveys began including questions to gauge consumer awareness of EISA legislation in general well as the various stages of EISA. After small increases between 2010 and 2012, the percentage of consumers aware of “legislation that will affect lamp availability” held steady between 2013 and 2014 at just under half of the Northwest population. Roughly three out of five respondents to the 2013 survey

reported that they were aware of legislation that will phase out most traditional incandescent lamps by 2014, again unchanged from 2012 results.

7.4 OBJECTIVE 4

Objective 4: Understand attitudes and expectations of lamp supplier representatives (retailers/manufacturers) regarding future Northwest sales trends for CFLs, LED lamps, and incandescent lamps (particularly with regard to perceived effects of EISA).

Lamp Sales Trends Predicted for the Northwest. The supplier interviews investigated predicted sales trends by technology:

- *CFLs.* Supplier predictions of future CFL sales in the Northwest were somewhat inconsistent, though a majority of suppliers (8 out of 14 representatives) predicted a decline in sales. Four of the other supplier representatives predicted increased sales, and two predicted that CFL sales will remain the same. Most of those who predicted declining CFL sales cited increasing LED sales as the main reason for the decline. Some of the suppliers who predicted increasing CFL sales said that EISA legislation would drive this change with more expensive halogens helping drive CFL sales up.
- *LED lamps.* All 9 of the supplier representatives who were willing to predict future sales of LED replacement lamps said that sales would increase over the next 5 years in the Northwest, and by as much as 400% over 2013 sales volumes.
- *EISA-qualifying incandescent lamps.* Most of the suppliers (4 out of 5) who were willing to predict future sales of EISA-qualifying incandescent lamps said that sales of these lamps will increase over the next five years.

Effects of EISA. Lamp supplier representatives expressed varying opinions regarding the short-term effects of EISA, but nearly half of the 16 suppliers predicted a shift toward alternative technologies (such as CFLs, LED lamps, and EISA-qualifying incandescent lamps). Nearly a third of supplier representatives expect consumers to continue hoarding traditional incandescent lamps in the short-term as a result of the EISA regulations.

There was general agreement among suppliers regarding the long-term effects of EISA: most of the suppliers who answered the question said that they expected consumers to shift to alternative technologies. Nearly half of supplier representatives expect a shift away from traditional incandescent lamps and toward LED lamps over the long-term, while nearly a third of representatives expect a shift toward EISA-qualifying incandescent lamps over the long term.

7.5 OBJECTIVE 5

Objective 5: Evaluate current “price paid” methods and assumptions.

Analysts evaluated the CFL “price paid” methods and assumptions that have been used to calculate average prices paid by consumers in the Northwest in prior long-term market tracking

studies.²⁸ Currently, there is no reliable method to link CFL sales data to CFL prices obtained during retail shelf survey research. Because the CFL “price paid” assumptions used in prior long-term market tracking studies have not been supported empirically, DNV GL believes that NEEA may be better served by relying on different CFL price estimates based on alternative methods. DNV GL recommends that NEEA rely on stock-weighted CFL pricing data obtained from shelf survey research to determine average pricing for CFLs, since these data are comprehensive and verifiable.

7.6 OBJECTIVE 6

Objective 6: Evaluate key inputs to NEEA’s Alliance Cost Effectiveness (ACE) model and baseline assumptions.

Appendix E provides a detailed review of NEEA’s Alliance Cost Effectiveness (ACE) model for residential lighting as well as inputs to the baseline assumptions.

7.7 OBJECTIVE 7

Objective 7: Obtain a more complete picture of residential lighting market (beyond CFLs).

This study included several research efforts designed to address several lamp technologies. The consumer surveys have elicited details regarding consumer awareness and purchase rates for CFLs over time, but for the second consecutive year, the survey also included questions regarding traditional incandescent lamps, EISA-qualifying incandescent lamps, and LED lamps. The supplier and utility program manager interviews also explored these technologies. The shelf surveys included complete inventories of all CFLs, traditional and EISA-qualifying incandescent lamps, and LED lamps in retail stores starting in 2011, and added 4-foot T8 and T12 linear fluorescent tube lamps to the inventories in 2013. Below, we summarize availability, diversity, and pricing for these technologies.

Awareness and purchase rates. As described earlier in this section, consumer survey results suggest that 86% of Northwest consumers were aware of CFLs as of early 2014, 93% were aware of LED lamps, and 55% were aware of EISA-qualifying incandescent lamps. While 60% of Northwest consumers reported having purchased one or more CFLs before or during 2013, only 25% had purchased LED lamps by that time and only 22% had purchased EISA-qualifying incandescent lamps.

According to consumer survey results, Northwest consumers purchased roughly 5 traditional incandescent lamps in 2013, on average, compared to between 2 and 3 general purpose CFLs, between 1 and 2 LED lamps, between 1 and 2 EISA-qualifying incandescent lamps, and nearly 0 specialty CFLs. Of all the lamps purchased among all Northwest consumers in 2013, traditional

²⁸ DNV GL delivered a confidential memorandum to NEEA with more details on this topic in March 2014. Given the confidentiality of this memo, we have not included it in the appendices of this report.

incandescent lamps represented less than half (46%) of the lamps purchased and general purpose CFLs represented roughly one-quarter (24%) of all lamps purchased. LED lamps represented 16%, EISA-qualifying incandescent lamps represented 13%, and specialty CFLs represented only 1% of all lamps purchased by Northwest consumers in 2013.

Availability. Shelf survey results from 2012 and 2013 suggest that general purpose CFLs, specialty CFLs, halogen, and incandescent lamps are available in at least nine out of ten retail stores that sold any of these lamp technologies in the Northwest, while the presence of LED lamps increased during this timeframe. In 2012, 62% of the region's stores stocked LEDs, and this increased to 83% of the region's stores in 2013.

Incandescent lamps have declined as a proportion of total lamps stocked in Northwest retail stores from 61% of lamps in 2012 to 50% in 2013. While incandescent lamp share declined between 2012 and 2013, halogen lamp share increased from 12% of all lamp stock to 21% between years. The share of LED lamps doubled from 2 to 4% of stock in this same timeframe. The share of general purpose and specialty CFLs remained unchanged between years at 18 and 6%, respectively.

Shelf survey results also suggest that 4-foot linear fluorescent tube lamps were available in roughly half of Northwest retail stores that sold replacement lamps in 2013—47% of stores had T12 lamps in stock (a slight decline from 50% of stores in 2012) and 32% had T8 lamps in stock (a decline from 41% in 2012). T12 lamps comprised roughly 60% of 4-foot linear fluorescent lamps stocked by Northwest retailers and T8s comprised the remaining 40% (this proportion was about the same in 2012).

Diversity. In terms of the average number of lamp models available per store, the diversity of CFLs, LED lamps, halogen, and incandescent lamps changed as follows between 2012 and 2013 in the Northwest:

- *CFLs.* The average number of CFL models per store remained fairly stable between years at 37 models in 2012 and 38 models in 2013.
 - The average number of general purpose and specialty CFL models per store also remained unchanged between years at 21 and 17 models, respectively
 - The average number of specialty CFL models stocked per big box store has dropped annually since 2009 (down to 22 models in 2013), while the average number of specialty CFL models stocked per non- big box store has increased annually since 2011 (up to 16 in 2013).
- *LED lamps:* Overall, the average number of LED lamp models stocked per store across all stores in the Northwest remained the same between 2012 and 2013 at 6 models per store. The average number of LED lamp models per big box store changed little between years with 11 models per store in 2012 and 10 models per store in 2013; there was also little change in non- big box stores with 4 models per store in 2012 and 5 models per store in 2013. While the average number of LED lamp models in urban stores remained fairly constant between years (at 5 models per store in 2012 and 6 models per store in 2013),

LED lamp model diversity declined by half in rural stores from 8 models per store in 2012 to 4 models per store in 2013.

- *Halogen lamps:* Diversity of halogen lamps increased by more a third between 2012 and 2013 from an average of 20 models per store to 27 models per store across all stores. The increase in lamp model diversity of halogen lamps occurred in big box and non- big box stores as well as urban and rural stores.
- *Incandescent lamps:* Diversity of incandescent lamps declined by 9% between 2012 and 2013 from 65 models per store, on average, down to an average of 59 models per store across all stores. The decline in incandescent lamp model diversity lamps occurred in big box and non- big box stores as well as urban and rural stores.

Pricing. As described earlier in this section shelf survey results suggest that the overall average shelf price for a CFL in the Northwest in 2013 was up 2% between 2012 and 2013 (from \$4.35 to \$4.44 per lamp). The average shelf price for general purpose CFLs increased by 5% from \$3.45 in 2012 to \$3.60 per lamp in 2013, while the average price of specialty CFLs declined by 2% from \$6.87 per lamp in 2012 to \$6.75 per lamp in 2013.

The supplier interviews included several questions to obtain estimates of pricing for various lamp types in the Northwest during 2013.

- *CFLs.* Twelve of the supplier representatives were able to estimate average prices for spiral CFLs in the Northwest during 2013. Promotional prices (discounted by utilities, manufacturers, and/or retailers) for spiral CFLs ranged from \$0.50 to \$2.00 per lamp and averaged \$1.05 per lamp among suppliers. Non-promotional price estimates for spiral CFLs ranged from \$1.10 to \$4.00 and averaged \$2.21 among suppliers. Half of the supplier representatives were also able to estimate average Northwest prices for specialty CFLs in 2013. Promotional prices ranged from \$0.75 to \$15.97 among suppliers and averaged \$5.56 per lamp in 2013. Non-promotional prices for specialty lamps ranged from \$4.65 to \$20.00 an averaged \$7.86 per lamp.
- *LED lamps.* The supplier interviews asked respondents to estimate the average price for LED A-lamps in Northwest retail stores in 2013, and 12 representatives were able to provide estimates. Responses ranged from \$5.99 to \$20.00 per lamp and averaged \$12.13 (nearly half the average price of \$23.39 per lamp cited by suppliers in 2012). Interviewers also asked supplier representatives to project the average prices for LED A-lamps in Northwest retail stores in 2015 and in 2017, and ten suppliers were able to provide predictions. Responses ranged from a forecasted price of \$3.75 to \$15.00 per lamp in 2015 (averaging \$9.29), and \$1.99 to \$12.00 in 2017 (averaging \$6.89).
- *Incandescent lamps.* Seven supplier representatives were able to provide estimates for traditional incandescent lamp prices in the Northwest in 2013 and nine were able to do so for EISA-qualifying) incandescent lamps. Estimates for traditional incandescent lamps ranged from \$0.25 to \$1.50 per lamp and averaged \$0.92 per lamp among suppliers. For EISA-qualifying incandescent lamps, estimates ranged from \$0.75 to \$3.00 per lamp and averaged \$1.56 per lamp among suppliers. This suggests that the difference in price between traditional and EISA-qualifying incandescent lamps was about \$0.64 per lamp in Northwest stores in 2013.

7.8 OBJECTIVE 8

Objective 8: Better understand stocking and sales of EISA-qualifying versus non-qualifying lamps.

Stocking. The first phase of EISA affected medium screw-base (MSB) incandescent A-lamps in the 1490-2600 lumen range and went into effect on January 1, 2012 (after this date, it was illegal to manufacture or import traditional incandescent lamps that do not meet EISA standards, but retailers are allowed to sell through their existing stock of these lamps.). While roughly two-thirds of lamps in this category met this EISA standard during the 2012 shelf surveys, 98% of lamps met the standard during the 2013 shelf surveys (conducted in late 2012/early 2013). All lamps in this category met the standard in urban and rural big box store in 2013, while more than 95% of lamps in this category met the standard in urban and rural non- big box stores in 2013.

The second phase of EISA affected MSB incandescent A-lamps in the range of 1050-1489 lumens and went into effect on January 1, 2013. While only 12% of lamps in this category in Northwest retail stores met the EISA standard at the time of the 2012 shelf surveys, 62 of lamps in this category met the standard at the time of the 2013 shelf surveys. The percentage of lamps that met the standard was highest in rural big box stores (98% of lamps) and lowest in urban big box stores (47% of lamps).

The third phase of EISA affected MSB incandescent A-lamps in the ranges of 750-1049 lumens (medium low brightness) and 310-749 lumens (low brightness) and went into effect on January 1, 2014, just after the 2013 shelf surveys commenced. Only 20% of all medium low brightness lamps and 22% of all low brightness lamps stocked in Northwest retail stores met the EISA standard in 2013.

Sales. Only a third of the lamp suppliers who participated in the in-depth interviews were able to provide estimates of changes in traditional or EISA-qualifying incandescent lamp sales in the Northwest from 2012 to 2013. Of these, results were split; 3 out of 6 reported that sales of their EISA-qualifying incandescent lamps increased from 2012 to 2013, while the other three representatives said that their sales of these lamps remained unchanged between years. All of the suppliers who cited an increase in EISA-qualifying incandescent lamp sales cited EISA regulations as the main reason for these increased sales. Only four suppliers were able to provide details on changes in sales of traditional incandescent lamps between 2012 and 2013, and all four said that their sales of these lamps declined between years.

7.9 OBJECTIVE 9

Objective 9: Characterize lighting marketing materials in Northwest retail stores.

During the lighting retailer shelf surveys, field staff recorded information about the marketing and promotional materials present in Northwest retail stores that sold replacement lamps. The

utility program manager and supplier interviews also elicited information from respondents regarding the types of marketing and promotional activities undertaken in the Northwest in 2013 as well as the technologies promoted and key messages included in these efforts.

Promotional Activities. According to shelf survey results, promotional materials related to replacement lamps were present in 69% of Northwest retail stores that sold these products in 2013. Shelf or wall signs comprised the majority of these materials. Fifteen of the 19 utility program managers reported that they undertook promotional activities for replacement lamps in 2013 and 10 reported use of in-store signage. Thirteen of the 16 supplier representatives who participated in the interviews reported that they undertook promotional efforts in 2013 and 10 of these used in-store signage.

Technologies Promoted. By far, marketing efforts focused on CFLs more than any other technology in 2013. Roughly two-thirds of Northwest retail stores that sell replacement lamps had CFL signage present in 2013 (per shelf survey results), 35% of stores displayed promotional materials regarding LED lamps, and 35% of stores displayed promotional materials regarding EISA-qualifying incandescent lamps. Materials were concentrated in urban stores, with nearly three-quarters of urban stores displaying promotional materials compared to only two-fifths of rural stores. Promotional materials had a slightly greater presence in big box stores (79%) than non- big box stores (66%) in 2013. Materials focusing on LED lamps were present in more than half of big box stores compared to less than a third of non- big box stores (53% versus 32%).

All 15 of the utility lighting program managers who reported active lighting marketing campaigns in 2013 promoted CFLs. Thirteen program managers mentioned that their outreach efforts also included LED lamps in addition to CFLs (compared to only 4 program managers who mentioned LED lamps as part of their campaigns in 2012).

Messaging. The most common messages in 2013 replacement lamp promotional activities related to saving energy or money (present in 28% of Northwest retail stores at the time of the shelf survey visits) or to specific utility programs such as the “Simple Steps, Simple Savings” program (present in 35% of stores). Utility representatives also mentioned energy or money savings as a key theme in their messaging (mentioned by 14 of 15 utility representatives who had promotional activities in 2013), and three-quarters of suppliers mentioned energy savings in their messaging as well (12 out of 13 respondents with active promotional campaigns). All 13 supplier representatives actively promoting their lamps mentioned promotional materials with messaging regarding length of lamp life in 2013.

A handful of utility program managers mentioned some gaps in messaging regarding energy-efficient lamps in the Northwest market, including messages to help consumers understand lumens (mentioned by 5 of the 19 utility representatives) and general information about LEDs (2 mentions). Four program managers also reported that messaging regarding lighting can be confusing to consumers or contradictory, and two said that there was a general failure in messaging to acknowledge price as a potential barrier to consumers. More than two-thirds of utility program managers suggested that a possible role for NEEA might be to help provide

consistent marketing and outreach materials for energy-efficient lighting throughout the region (13 of 19 utility representatives).

7.10 OBJECTIVE 10

Objective 10: Better understand drivers of customer decision-making regarding lamp purchases and influences on those decisions.

The 2014 consumer telephone survey included questions that enabled a key driver analysis to better understand the impact of various factors that may influence consumers' lamp purchasing decisions. Consumer survey respondents rated 11 lamp attributes on a scale of 1–10 in terms of importance (a 1 rating was not at all important and a 10 rating was very important). These lamp attributes served as explanatory variables in the key driver analysis. There were 4 attributes that correlated positively with CFL satisfaction—energy savings of a lamp, environmental friendliness of a lamp, lamp fit in a fixture, and long lamp life, and there were 2 attributes that correlated negatively with CFL satisfaction—lamp price and quality of light (the other 5 attributes correlated neither positively nor negatively with CFL satisfaction). We were, thus, able to determine that if respondents gave lamp energy savings, environmental friendliness, fit in fixture, or long lamp life a high rating, they were more likely to be very satisfied with CFLs.

Results of this analysis also suggested that there is a positive relationship between satisfaction with CFLs and the number of CFLs purchased. In other words, as the level of satisfaction with CFLs increases, the likelihood that respondents have purchased a higher number of CFLs also increases. Thus, there is an indirect relationship between lamp attributes that correlate positively (or negatively) with CFL satisfaction and the number of CFLs that consumers purchase.

7.11 OBJECTIVE 11

Objective 11: Better understand NEEA partner activities for consumer research on lighting knowledge, preferences and purchasing motivations.

One of the objectives of the utility program manager interviews was to determine the extent to which Northwest utilities are conducting research on consumer lighting knowledge, preferences, and purchasing motivations. Results from these interviews suggest that none of the utilities have recently conducted formal research on these topics or have concrete plans to do so.

8 CONCLUSIONS AND RECOMMENDATIONS

Based on the findings described throughout the report and summarized in Chapter 7 above, we developed the conclusions and recommendations described below.

8.1 CONCLUSIONS

Study results suggest the following conclusions:

1. **Northwest residential Energy Star CFL sales declined slightly between 2012 and 2013, but it is unclear whether sales will continue to decrease.** Residential Energy Star CFL sales in the Northwest decreased by 2% between 2012 and 2013. A majority of suppliers expect CFL sales to decline over the next five years, but some suppliers expect CFLs to increase or remain flat. Universally, suppliers expect increased sales of LED lamps, and most suppliers expect increased sales of EISA-qualifying incandescent lamps over the next five years. Consumer demand for CFLs will likely compete with increasing consumer demand for LED lamps, and may also compete with demand for EISA-qualifying incandescent lamps. It is not clear how this dynamic will impact future CFL sales in the Northwest.
2. **Big box stores continue to dominate the region's residential Energy Star CFL sales, but the share of sales by big box store category has changed somewhat in the Northwest.** CFL sales in big box stores represented nearly 90% of the region's total CFL sales in 2013, a slight increase over 2012 (when big box stores comprised 86% of the region's sales).
3. **Consumers may be shifting some of their focus away from CFLs and toward other lamp technologies.** Northwest consumers are purchasing other lamp technologies in addition to CFLs—although to a lesser extent. In early 2014, three out of five Northwest consumers said that they purchased one or more CFLs during or after 2013, while just a quarter had purchased LED lamps by that time and less than a quarter had purchased EISA-qualifying incandescent lamps. Purchase rates for CFLs and LED lamps both declined significantly between 2013 and 2014 (CFLs by 10 percentage points and LED lamps by 5 percentage points), while purchase rates for EISA-qualifying incandescent lamps held steady between years. The decline in CFL and LED lamp purchase rates may be related to the longer lifetimes for these technologies (i.e., consumers need to replace them less frequently). Survey results also suggested a small, but statistically significant decline in consumer awareness of CFLs between the 2013 and 2014 surveys from 90% to 86%. The reason for this decline may be that consumers have shifted some of their focus away from CFLs and toward other lamp technologies given the high level of awareness of LED lamps and moderate awareness of EISA-qualifying incandescent lamps.

4. Incandescent lamps still dominate retail store inventories but their retail presence is declining, while halogen lamps and, to a lesser extent, LED lamps are on the rise.

Between 2012 and 2013, there was a decline in the proportion of total lamps stocked in Northwest retail stores comprised by incandescent lamps of all types (from 61% to 50%). During the same timeframe, there was an increase in the share of lamps comprised by halogens (from 12% to 21%), and the share of LED lamps doubled from 2 to 4%. These trends are likely related to the effects of EISA.

5. EISA's effects are becoming increasingly prominent in the region's retail stores with most lamps meeting EISA standards in the two lumen categories first affected by EISA (1490-2600 lumens and 1050-1489 lumens), but consumer awareness of the legislation is only moderate.

- In late 2013/early 2014, nearly all of the MSB incandescent A-lamps stocked in the highest lumen category affected by EISA (1490-2600 lumens) met the standards that took effect on January 1, 2012, while more than 60% of the MSB incandescent A-lamps stocked in the second highest lumen category affected by EISA (1050-1489 lumens) met the standards that took effect on January 1, 2013. These proportions of lamps that met the standards for both categories were up substantially from the share of lamps that met the standard in late 2012/early 2013.
- For MSB incandescent A-lamps in the two lowest lumen categories affected by EISA as of January 1, 2014 (750-1049 lumens and 310-749 lumens) only one-fifth of lamps stocked in these categories met the standard in late 2013/early 2014 in Northwest retail stores.
- Less than half of the Northwest population reported awareness of "legislation that will affect lamp availability" in early 2014, and this level of awareness has remained steady since the 2012 survey. More than half of consumers reported awareness of "energy-efficient incandescent lamps." Roughly three out of five respondents taking part in the 2014 survey reported that they were aware of "legislation that will phase out most traditional incandescent lamps by 2014," again unchanged from 2012 and 2013 results.

6. Lamp model diversity declined for incandescent lamps and increased for halogen lamps between 2012 and 2013. The decline in incandescent lamp model diversity and increase in halogen lamp model diversity are likely due to the effects of EISA. Lamp model diversity for CFLs and LED lamps remained essentially unchanged between years.

7. The presence of LED lamps increased in the Northwest between 2012 and 2013, and this trend is likely to continue. The proportion of stores stocking LED lamps increased from just over three out of five retail stores in 2012 to more than four out of five retail stores in 2013. More than 9 out of 10 Northwest consumers were aware of LED lamps as of early 2014, and a quarter of consumers had already purchased one or more LED lamps

by that time. Lamp suppliers (manufacturers and retailers) predict increased LED lamp sales in the future.

- 8. The average price of general purpose CFLs increased slightly, while the average price of specialty CFLs declined slightly between 2012 and 2013.** The average shelf price of a general purpose CFL in the Northwest increased 5% from \$3.45 per lamp in 2012 to \$3.60 per lamp in 2013, while the average shelf price of a specialty CFL declined by 2% from \$6.87 to \$6.75 between years.
- 9. Promotional materials for replacement lamps continue to focus mainly on CFLs, and promotional materials for LED lamps are becoming more common in Northwest retail stores.** Two-thirds of retail stores that sold replacement lamps in the Northwest promoted CFLs, while more than one-third of stores promoted LED lamps. Thirteen out of 15 utility lighting program managers mentioned that their outreach efforts also included LED lamps in addition to CFLs, compared to only 4 program managers who mentioned LED lamps as part of their campaigns in 2012.
- 10. Promotional messaging for replacement lamps in Northwest retail stores largely focuses on energy savings, money savings, and long lamp life.**
 - Interviews with residential lighting program managers at the region's utilities, lamp manufacturer and retailer representatives, and shelf survey results suggest that saving energy or money is one of the most common messages highlighted in promotional materials for residential replacement lamps. Long lamp life (of CFLs or LED lamps) was another common message cited by supplier representatives and utility representatives, and was a common message observed in store signage observed during shelf surveys.
 - In 2014 consumer surveys, more CFL purchasers mentioned saving or conserving energy as the best feature of a CFL than any other feature. Consumers also mentioned long lamp life frequently. Further analysis of the consumer survey data (the key driver analysis) reveals that consumers who place high importance on saving energy and long lamp life when making a lamp purchasing decision are more likely to be satisfied with CFLs. These results suggest that the most common messages promoted by utilities and lamp suppliers appear to be resonating with CFL purchasers.
- 11. Regional stakeholders have conducted little research on consumer lighting knowledge, preferences, and purchasing motivations, and such research may be necessary to continue pushing consumers toward energy-efficient lamp choices.** Sixteen out of the 19 utility representatives who participated in the study suggested that this research would be valuable and would be interested in conducting this type of research if they had no budget constraints.

8.2 RECOMMENDATIONS

Based on the conclusions described above, we recommend the following:

1. **Continued residential replacement lamp market tracking.** NEEA should consider continuing its current market tracking efforts for residential replacement lamps. This is particularly important as the lighting market continues to evolve rapidly, and will help NEEA address one of its primary objectives in “[obtaining] a more complete picture of residential lighting market beyond CFLs” (study objective 6). Furthermore, NEEA has conducted one of the longest market tracking studies on residential lighting for any region in the U.S., which makes these research efforts valuable not only for regional stakeholders, but also a broader audience of stakeholders beyond the region.
2. **Consistent and concise regional messaging for energy-efficient lamps.** NEEA should consider working with energy-efficiency program sponsors in the region as well as lamp manufacturers and retailers to develop consistent and concise region-wide messaging to support CFL and LED replacement lamp sales. More than half of the utility program representatives who participated in the interviews said that it would be beneficial if NEEA could provide support with messaging and outreach for CFLs and/or LED lamps. More than a fifth of utility program representatives said that they would like to see messaging that is consistent, simplified, and able to reach the entire region. More than two-thirds of the region’s stores are already displaying materials promoting replacement lamps—and the concepts of energy or money savings and long lamp life for CFLs and LED lamps dominate these messages. While these key messages were observed in a number of retail stores, they come from a variety of lamp manufacturers, retailers, and energy-efficiency program sponsors, are presented to consumers in different ways, and sometimes include additional messages regarding replacement lamps that may overwhelm or confuse consumers. NEEA is uniquely positioned to offer broad, regional support, by helping to reinforce the key messages of energy savings and long lamp life in a consistent manner.
3. **Educational efforts in rural areas.** Related to recommendation number two above, NEEA should consider resuming its focus on rural areas with regard to educational and promotional efforts for energy-efficient lighting. Rural consumers in the Northwest typically have few (if any) local big box stores where they can shop for energy-efficient lamps, and are therefore less likely to be exposed to promotional materials regarding these products. Nearly three-quarters of urban stores visited during the late 2013/early 2014 shelf surveys displayed promotional materials for replacement lamps compared to only two-fifths of rural stores. These efforts may be particularly important going forward as the presence of LED lamps and EISA-qualifying incandescent lamps in retail stores increases, which will present consumers with more lamp choices and potentially more confusion regarding those choices. Utility representatives from rural utilities also mentioned the importance of expanding outreach efforts in rural stores as a means of influencing rural consumers to purchase CFLs and LED lamps.

4. **Further research regarding consumer knowledge, preferences, and purchasing motivations.** NEEA should consider conducting further and more extensive research to understand consumer knowledge, preferences, and purchasing motivations for replacement lamps. This will enable the development of more effective marketing messages to support energy-efficient lamp sales, and will enable NEEA to more effectively address objective 10 of its residential lighting market tracking efforts (“better understand drivers of customer decision-making regarding lamp purchases and influences on those decisions”).
5. **Expanded lamp sales tracking efforts.** NEEA should consider incorporating additional lamp types into its sales data tracking efforts. Given the uncertain future of CFL sales (including a possible leveling off or decline), the increasing impacts of EISA over time, and increasing market presence of LED lamps, expanding sales tracking efforts beyond CFLs would provide NEEA with a more complete picture of the Northwest market for replacement lamps. As the market share of LED lamps continues to grow, tracking sales of LED lamps will become more important. Furthermore, tracking sales of incandescent and halogen lamps, in addition to CFLs and LED lamps, would also enable NEEA to estimate the share of the Northwest lighting market comprised by more energy-efficient alternatives and gain a better understanding of the overall lighting market in the Northwest (again in support of study objective 6 referenced above).
6. **Tracking of key specialty lamp styles.** NEEA should consider supporting additional tracking and analysis of specialty CFL pricing at a finer level of detail for key specialty lamp styles, such as reflector, globe, and candelabra styles. As noted in Chapter 2, there are at least 9 different styles of specialty CFLs. Furthermore, lamp manufacturer and retailer representatives cited average prices for specialty CFLs ranging from \$0.75 to \$20.00 per lamp, which suggests a wide range of prices across a number of specialty CFL styles. Moreover, specialty styles and lamp prices vary considerably by lamp technology, so it is difficult to compare specialty lamps as a single category across lamp technologies. Disaggregating specialty CFL lamp styles would enable NEEA to make more analogous and accurate comparisons of various specialty lamp styles available to residential consumers in the Northwest across lamp technologies.
7. **Tracking CFL prices based on stock-weighted average pricing.** Because the CFL “price paid” assumptions used in prior long-term market tracking studies have not been supported empirically, NEEA should consider relying on stock-weighted CFL pricing data obtained from shelf survey research to determine average pricing for CFLs, since these data are comprehensive and verifiable.
8. **Updating the list of stores that sell replacement lamps in the Northwest.** NEEA should consider supporting additional research to update its list of stores in the Northwest that sell replacement lamps. A contractor compiled this list for NEEA nearly 10 years ago, and it is likely that the number of retail stores that sell replacement lamps as well as the distribution of stores by store type has changed. An updated list of stores from a

reputable business data research firm combined with additional research on which stores sell lamps would yield more accurate storefront weights, and, in turn, more accurate shelf survey results.

APPENDIX A - REFERENCES

CLEAResult, 2014. *Full CFL Data*. Prepared for NEEA. April 14, 2014.

DNV KEMA Energy & Sustainability, 2013. 2012–2013 Northwest Residential Lighting Long-Term Market Tracking Study. Prepared for the Northwest Energy Efficiency Alliance. June 10, 2013.

Fluid Market Strategies, 2013. *2012 Full CFL Data*. Prepared for NEEA. March 13, 2013.

_____, 2012. *2011 Full CFL Data*. Prepared for NEEA. March 8, 2012.

_____, 2011. *2010 Basic Widget Data Report*. Prepared for NEEA. n.d.

_____, 2010. *2009 Widget Data Final Report*. Prepared for NEEA. April 13, 2010.

_____, 2009. *2008 Widget Data Final Report*. Prepared for NEEA. March 6, 2009.

_____, 2008. *2007 Widget Data Final Report*. Prepared for NEEA. n.d.

_____, 2007. *2006 Widget Data Final Report*. Prepared for NEEA. n.d.

H.R. 6--110th Congress: Energy Independence and Security Act of 2007. (2007). Online at GovTrack.us (database of federal legislation). Accessed at <http://www.govtrack.us/congress/bills/110/hr6>.

KEMA, Inc., 2012. 2011-2012 *Northwest Residential Lighting Tracking and Monitoring Study*. Prepared for NEEA. May 21, 2012.

_____, 2011. *Long-Term Northwest Residential Lighting Tracking and Monitoring Study*. Prepared for NEEA. Supported by Evergreen Economics. August 2, 2011.

_____, 2010. 2009-10 Residential Lighting Market Research Study. Prepared for NEEA. Supported by ECONorthwest. May 18, 2010.

_____, 2009. *2008-09 CFL Tracking Study: Energy Star Consumer Products Lighting Project*. Prepared for NEEA. July 1, 2009.

_____, 2008. *Consumer Products Market Progress Evaluation Report 4 (MPER4): Final Report*. Prepared for NEEA. July 22, 2008.

_____, 2007. *Consumer Products Market Progress Evaluation Report 3 (MPER3): Final Report*. Prepared for NEEA. July 24, 2007.

_____, 2006. *Market Progress Evaluation Report (MPER2) for the Northwest Energy Efficiency Alliance's Energy Star® Consumer Products Program*. Prepared for NEEA. June 9, 2006.

_____, 2005. *Market Progress Evaluation Report (MPER1) for the Northwest Energy Efficiency Alliance's Energy Star® Consumer Products Program*. Prepared for NEEA. October 21, 2005.

Portland Energy Conservation Inc. (PECI), 2006. *Compact Fluorescent Product Sales Data Report for October – December 2005*. [Includes data for 2001–2005.] Prepared for NEEA. n.d.

U.S. Environmental Protection Agency (EPA), 2011. *Next Generation Lighting Programs: Opportunities to Advance Efficient Lighting for a Cleaner Environment*. With assistance from ECOS and ICF. 2011.

U.S. Census Bureau, 2013. Population estimates for Idaho, Montana, Oregon, and Washington (updated annually). Population Estimates Program, 2013. Accessed at <http://quickfacts.census.gov/qfd/index.html>.

Wal-Mart, 2007. “Wal-Mart Surpasses Goal to Sell 100 Million Compact Fluorescent Light Bulbs Three Months Early.” Press Release. Bentonville, AK, Oct. 2, 2007. Accessed at <http://news.walmart.com/news-archive/2007/10/02/wal-mart-surpasses-goal-to-sell-100-million-compact-fluorescent-light-bulbs-three-months-early>.

APPENDIX B - DATA COLLECTION INSTRUMENTS

NORTHWEST ENERGY EFFICIENCY ALLIANCE LIGHTING TRACKING STUDY: LIGHTING SHELF INVENTORY

CONTACT INFORMATION

PLEASE FILL IN THIS SECTION USING THE INFORMATION CONTAINED IN THE SAMPLE DATABASE

Field researcher name:	Store address:
Date:	Store city:
Store name:	Store state:
Store type:	Store zip code:

LIGHTING SIGNAGE & PROMOTIONAL MATERIALS

- A1. Are there any materials present promoting lighting? **[DO NOT INCLUDE MESSAGES ON LIGHTING PACKAGES OR SIMPLE PRICING INFORMATION ON SHELVES].**
- 1 Yes
 - 2 No

[REPEAT A2 THROUGH A3E FOR EACH PROMOTIONAL SIGN OR DISPLAY IN STORE]

- A2. **[IF PROMOTIONAL MATERIALS PRESENT]** Which lighting technologies are being promoted? **[MARK ALL THAT APPLY].**
- 1 CFLs
 - 2 LEDs
 - 3 Energy Efficient Incandescents (e.g., EISA-compliant halogens)
 - 4 Traditional Incandescents (e.g., incandescent not compliant with EISA regulations)
 - 5 Other lighting technology **[PLEASE SPECIFY]:** _____

- A3a. **[IF PROMOTIONAL MATERIALS PRESENT]** What type of sign is present?
- 1 Sign on shelf/wall
 - 2 Sign hung from ceiling
 - 3 Brochures
 - 4 Floor sticker/cling
 - 5 Other **[PLEASE SPECIFY]:** _____

- A3b. **[IF PROMOTIONAL MATERIALS PRESENT]** Where is the promotional material located?
- 1 In the lighting aisle(s)
 - 2 Near the cash register
 - 3 In front of the store/near store entrance
 - 4 On an endcap
 - 5 Other location **[PLEASE SPECIFY]:** _____

A3c. **[IF PROMOTIONAL MATERIALS PRESENT] Does the sign or display refer to a specific bulb model or models?**

- 1 Yes
- 2 No

A3d. **[IF A3C=YES] Please list the manufacturer, model number(s), base type, and style of the bulb.**

A3e. **[IF PROMOTIONAL MATERIALS PRESENT] Summary of Key Messages in Sign or Display:**

A4a. **Are there dimmer switches in the same aisle/location as the light bulbs?**

- 1 Yes
- 2 No

A4b. **[IF DIMMER SWITCHES PRESENT] Please describe any signage and key messages associated with the dimmer switches:**

A5a. **Are there any LED bulbs present that can be controlled wirelessly? These may or may not have wireless controllers or remote controls in the package with the bulbs. Examples include HUE (Philips), Connected (TCP), and Insteon LED bulbs.**



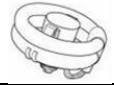







- 1 Yes
- 2 No

A5b. **[IF WIRELESS LEDS PRESENT] Please list product manufacturer, brand name, bulb style (e.g., A-lamp, Spotlight, Globe, etc.):**

BULB CODES (TECHNOLOGY TYPE, BASE TYPE, AND STYLE CODES)

Technology Type Codes		Base Type Codes	
Technology Type	Code	Base Type Codes	Code

CFL	CF	Medium Screw	M
Incandescent	I	Pin	P
Halogen	H	GU-Type	G
LED	L	Candelabra/Intermediate	C
Cold Cathode	CC	Large Screw Base	L
Fluorescent Tube	FL	Candelabra with Medium Screw Adaptor	C/M
Other	OT	Other	OT

Bulb Style Codes*					
Bulb Style	Code	Image	Bulb Style	Code	Image
Spiral/Twister	TW		Spotlight/Reflector/Flood	See below	See spotlight/reflector/flood codes in table below.
Globe (e.g., for bathroom vanity fixtures)	GL		Circline	CI	
A-lamp (shaped like standard incandescent)	AL		Tube Style	TU	
Torpedo/Bullet	TO		Night Light	NL	
Linear 4 ft. T8 Fluorescent Tube	T8		Linear 4 ft. T12 Fluorescent Tube	T12	
Bug Light	BU		Other/Unknown	OT	Record style code, if indicated on package.

*See LED Style Code Table below for further details and information on LED bulb styles.

Spotlight/Reflector/Flood Bulb Style Codes					
Bulb Style	Code	Image	Bulb Style	Code	Image

BR25	B25		PAR16	P16	
BR30	B30		PAR20	P20	
BR40	B40		PAR30	P30	
R20	R20		PAR38	P38	
R30	R30		MR16	M16	
R40	R40		Other	OT	

LED Style Codes			
Bulb Style	Code	Bulb Style	Code
A15, A19, A21, A23	AL	G16½, G25, G40, P25, PS35	GL
B10½, B13, BA9, BA9½, F10, F15, F20	TO	T 4½, T5, T6, T8, T10	TU
C7, C9	NL	C7	NL
BR25, BR30, BR40, R20, R30, R40, PAR15, PAR20, PAR30S, PAR30L, PAR38	See spot-light codes table above	Other LED Bulb Style (record style code on package, if known)	OT

Bulb Inventory

Inventory all replacement CFLs, incandescents, halogens, LEDs, 4 ft. T8 and T12 fluorescent tubes, and cold cathodes.

Use as many pages as necessary.

For 3-way, dimmable, ENERGY STAR, and rough service incandescent columns: X if applicable.

IF ONLY ONE PRICE SHOWN: Try to determine whether it's a discounted price/sale price or if it's a full-priced bulb. If sale price, record value in "Discounted price." If full price, record value in "Original Price."

Manufacturer/Brand	Technology Type (See Technology Codes table above)	Base Type (See Base Codes table above)	Bulb Style (See Style Codes table above)	Barcode	Quantity in Pack	# of Packages	Package Location [Aisle=A; Endcap=E; Pallet=P; Fence/line=F; Other=OT]	Full/Original Price (If discounted, record price before discount. If not discounted, record product price here)	Discounted Price (If on sale/discounted)	Discount Provider (if discounted) [R=Retailer; U=Utility; M=Manufacturer; O=Other; DK= don't know]	Color Name [Soft White=SW; Warm White=WW; Cool White=CW; Bright White=BW; Daylight=D; Enhanced Spectrum=ES; Colored= CR; Other=OT]	Lumens	Wattage	3-way?	Dimmable?	Energy Star?	Rough service incandescent?
														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2014 Northwest Energy Efficiency Alliance Consumer Lighting Survey
 ----- FINAL 03/10/2014 -----

[RED BRACKETS DENOTE SURVEY QUESTIONS THAT HAVE BEEN
 ADDED, MODIFIED, OR MOVED FOR THE 2014 SURVEY]

0 INTRODUCTION

Hello, my name is _____ calling on behalf of the Northwest Energy Efficiency Alliance. We're conducting a study on home lighting preferences.

S0. May I please speak to the person who does most of the shopping for your household?
[MAKE SURE RESPONDENT IS 18 YEARS OLD OR OLDER]

[CONTINUE OR ARRANGE FOR CALLBACK]

IF NECESSARY: I want to assure you that this is NOT a sales call and that the information that you provide will be kept strictly confidential. This will only take about 10 minutes of your time.

IF NECESSARY: The Northwest Energy Efficiency Alliance, or NEEA, is a non-profit organization that funds projects to encourage energy efficiency in the Northwest. Its Board of Directors has representatives from utilities, environmental groups, regulatory agencies, and energy-related private businesses. For more information you can visit NEEA's website at www.neea.org.

S1. Are you taking this call on a cell phone or a landline?
[NEW] 1 Cell phone
 2 Landline → **SKIP TO S4**
 88 (Don't Know) → **TERMINATE CALL**
 99 (Refused) → **TERMINATE CALL**

S2. Are you taking this call while driving a car or doing something that requires your attention?
[NEW] 1 Yes → **ARRANGE FOR CALLBACK**
[Due to safety reasons we will need to call you back at a more convenient time. Thank you very much.]
 2 No
 88 (Don't Know)
 99 (Refused)

S3. Do you live in a household that also has a landline? [IF NECESSARY: "This is for classification purposes. We would like to know what percent of households have both types of phones."
[NEW] 1 Yes
 2 No
 88 (Don't Know)
 99 (Refused)

S4. For classification purposes, may I please have the zip code where you reside at least six months out of the year?
[D7] ENTER 5-DIGIT ZIP CODE: _____
[IF S1 = 1, CHECK ZIP CODE FOR SURVEY ELIGIBILITY; IF NOT ELIGIBLE, TERMINATE CALL]
 88 (Don't Know) → **TERMINATE CALL**

99 (Refused) → TERMINATE CALL

1 KEY DRIVERS

K1 Great. I'd like to start off by asking some general questions about light bulbs. I'm going to read you a list of statements about things that you might consider when purchasing any type of light bulb. On a scale of 1-10 where 1 means "not at all important" and 10 means "very important," how important are each of the following in your decision to purchase light bulbs?

[RANDOMIZE STATEMENTS]

___ (Numeric response, 1-10)

88 (Don't know)

99 (Refused)

- K1_1 The bulb helps save energy.
- K1_2 The price of the bulb
- K1_3 The bulb helps lower energy bills.
- K1_4 The bulb lasts a long time before burning out
- K1_5 The quality of the bulb
- K1_6 The bulb is environmentally friendly
- K1_7 Having prior experience with the type of bulb I purchase
- K1_8 The bulb is dimmable
- K1_9 The quality of the light from the bulb
- K1_10 The bulb is fits well in my light fixture
- K1_11 My friends or family recommend the bulb I purchase

2 COMPACT FLUORESCENT LAMPS

CFL AWARENESS

A1 Have you ever heard of compact fluorescent light bulbs or CFLs?

1 Yes → **SKIP TO P0**

2 No

88 (Don't Know)

99 (Refused)

A2 Compact fluorescent light bulbs, or CFLs, are small fluorescent bulbs that fit in regular light bulb sockets. The most common CFLs look different than standard bulbs. They are often made out of thin tubes of glass bent into loops. Have you ever heard of them?

1 Yes

2 No → **SKIP TO V1**

88 (Don't Know) → **SKIP TO V1**

99 (Refused) → **SKIP TO V1**

CFL PURCHASES

P0 Have you ever purchased any CFLs?

1 Yes

2 No → **SKIP TO V1**

- 88 (Don't Know) → SKIP TO V1
- 99 (Refused) → SKIP TO V1

P3a Do you currently have any CFLs installed in your home?

- 1 Yes
- 2 No → SKIP TO P4
- 88 (Don't know) → SKIP TO P4
- 99 (Refused) → SKIP TO P4

P3b How many CFLs are installed?

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 88 (Don't know) → SKIP TO P4
- 99 (Refused) → SKIP TO P4

P3c [IF 1 < P3b < 8888, READ]: Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

[IF P3b = 1, READ]: "Is it a spiral or twisty shape?" [Enter "1" if YES or "0" if NO]

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 8888 (Don't know)
- 9999 (Refused)

P3d [IF P3c = P3b, SKIP TO P3f] How many are shaped like regular light bulbs?

[PROMPT IF NECESSARY: How many of the [P3b] CFLs you have installed are shaped like regular light bulbs?]

[IF P3b = 1 AND P3c = 0, READ: "Is it shaped like a regular light bulb?" and [Enter "1" if YES OR Enter "0" if NO]

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 8888 (Don't know)
- 9999 (Refused)

P3e [IF P3c + P3d = P3b, SKIP TO P3f] What other types of CFLs do you have installed?

[DO NOT READ LIST; ACCEPT MULTIPLE RESPONSES]

- 1 Shaped like regular light bulbs / incandescent bulbs
- 2 Globe / sphere / vanity
- 3 U-shaped / Tube shaped
- 4 Reflector / flood / spotlight
- 5 Candelabra / flame shape (for chandelier)
- 6 Bug light
- 7 Colored CFL
- 8 Pin or plug-in base
- 9 Small screw base
- 77 Other (specify) _____
- 88 (Don't know)
- 99 (Refused)

P3f [IF P3c+P3d = P3b or P3c = P3b] Why aren't you using other types of CFLs?

[IF NECESSARY: Why aren't you using CFLs that aren't shaped like spirals or regular light bulbs?]

[PROMPT: Anything else?]

[DO NOT READ LIST; ACCEPT MULTIPLE RESPONSES]

- 0 Not aware of them
- 1 Price / expensive
- 2 Can't find them

- 3 How they fit in fixtures
- 4 How they look in fixtures
- 5 Mercury / hazardous contents
- 6 They take too long to light up
- 7 Don't need any bulbs
- 77 Other (specify) _____
- 88 (Don't know)
- 99 (Refused)

P4 Are you storing any CFLs for use as spares or to be installed at a later date?

- 1 Yes
- 2 No → **SKIP TO P5a**
- 88 (Don't know) → **SKIP TO P5a**
- 99 (Refused) → **SKIP TO P5a**

P4b How many CFLs are you storing?

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 88 (Don't know)
- 99 (Refused)

P4d **[IF 1 < P4b < 8888, READ]:** How many of the CFLs in storage are the spiral or twisty shape?

[IF P4b = 1, READ]: "Is it a spiral or twisty shape?" [Enter "1" if YES or "0" if NO]

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 8888 (Don't know)
- 9999 (Refused)

P4e **[IF P4d < P4b]** How many of the CFLs in storage are shaped like a regular light bulb?

[IF P4b = 1 AND P4c = 0, READ]: "Is it shaped like a regular light bulb?" [Enter "1" if YES or "0" if NO]

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 8888 (Don't know)
- 9999 (Refused)

P5a Have you had any CFLs that you installed but later removed and did not use elsewhere in your home?

- 1 Yes
- 2 No → **SKIP TO P6**
- 88 (Don't know) → **SKIP TO P6**
- 99 (Refused) → **SKIP TO P6**

P5b How many CFLs did you remove?

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 8888 (Don't know) → **SKIP TO P6**
- 9999 (Refused) → **SKIP TO P6**

P5c **[IF 1 < P5b < 8888, READ]:** How many of the CFLs you removed were spiral or twisty shaped?

[IF P5b = 1, READ]: "Was it a spiral or twisty shape?" [Enter "1" if YES or "0" if NO]

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 8888 (Don't know)
- 9999 (Refused)

P5e [IF P5c = P5b, SKIP TO P6] How many of the CFLs you removed were shaped like regular light bulbs?
 [IF P5b = 1 AND P5c = 0, READ]: "Was it shaped like a regular light bulb?" [Enter "1" if YES or "0" if NO]
 ENTER # _____ [PROBE FOR BEST ESTIMATE]
 8888 (Don't know)
 9999 (Refused)

P6 [IF P3a = 1, ELSE SKIP TO M1]
 [IF P3b = 1] When the CFL you now have installed burns out, how likely are you to replace it with another CFL? Use a scale of 1 to 5 where 1 means you're "not at all likely" and 5 means you're "very likely."
 [ELSE IF 1 < P3b < 8888] When one of the CFLs you have installed burns out, how likely are you to replace it with other CFL? Use a scale of 1 to 5, where 1 means you are "not at all likely" and 5 means you are "very likely."
 ENTER # _____ [1 = not at all likely; 5 = very likely]
 88 (Don't know)
 99 (Refused)

2013 CFL PURCHASES

M1 Did you purchase any CFLs in 2013?
 1 Yes
 2 No → SKIP TO S1
 88 (Don't know) → SKIP TO S1
 99 (Refused) → SKIP TO S1

M2 How many CFLs did you purchase in 2013? If a package contained more than one bulb, please count each one separately.
 ENTER # _____ [PROBE FOR BEST ESTIMATE]
 8888 (Don't know) → SKIP TO M6
 9999 (Refused) → SKIP TO M6

M2a How many of the CFLs you bought in 2013 were the spiral or twisty shape?
 ENTER # _____ [PROBE FOR BEST ESTIMATE]
 0 (None)
 8888 (Don't know)
 9999 (Refused)

M2b [IF M2a < M2] How many were shaped like regular light bulbs?
 ENTER # _____ [PROBE FOR BEST ESTIMATE]
 0 (None)
 8888 (Don't know)
 9999 (Refused)

M3a Of all the CFLs you bought in 2013, how many did you install in your home?
 ENTER # _____ [PROBE FOR BEST ESTIMATE]
 0 (None)
 8888 (Don't know)
 9999 (Refused)

M4 [IF M3a < M2] Thinking about all the CFLs that you bought in 2013, how many did you store to install later?

ENTER # _____ [PROBE FOR BEST ESTIMATE]

- 0 (None)
- 8888 (Don't know)
- 9999 (Refused)

M6 Where did you purchase CFLs most recently? _____

[DO NOT READ LIST; ACCEPT MULTIPLE RESPONSES]

- 1 Home center (Home Depot, Lowe's, D & B Supply, Lumbermen's)
- 2 Discount or mass merchandise store (Wal-Mart, K-Mart, Target, Fred Meyer, M.H. King, Shopko, Swains)
- 3 Buying clubs (Costco or Sam's Club)
- 4 Hardware stores (ACE, True Value, Do it Best, Do it Center)
- [PROBE FOR STORE NAME: IF STORE IS HOME CENTER STORE AS LISTED IN RESPONSE 1 (HOME DEPOT, LOWE'S, D&B SUPPLY, ETC., RECODE AS 1)]**
- 5 Supermarket, food store (Albertson's, Winco Foods)
- 6 Drug store (Bartell, Bi-Mart, Hi-School Pharmacy, Longs, Osco Drug, Rite Aid, Walgreens)
- 7 Lighting supply store, lighting showroom
- 8 Mail Order Catalog
- 9 Over the Internet
- 10 Home Energy Show
- 77 Other (specify) _____
- 88 (Don't know)
- 99 (Refused)

SATISFACTION

S1 Thinking about all of the CFLs you recently purchased, how satisfied are you with them? Use a scale of 1 to 10, where 1 means you are "not at all satisfied" and 10 means you are "very satisfied".

ENTER # _____ [1 = not at all satisfied; 10 = very satisfied]

- 88 (Don't know)
- 99 (Refused)

S4 In general, what are the best features of CFLs?

[DO NOT READ LIST; ACCEPT MULTIPLE RESPONSES]

- 1 Last longer before burning out
- 2 Save money / reduce electricity bill
- 3 Save/conserves energy/electricity
- 4 Resource conservation benefits / better for environment / "green"
- 5 Work better / higher quality
- 6 Quality of light
- 7 Brightness
- 77 Other (specify) _____
- 88 (Don't know)
- 99 (Refused)

S5 In general, what are the worst features of CFLs? [IF RESPONSE = "brightness," CLARIFY WHETHER TOO BRIGHT OR NOT BRIGHT ENOUGH.]

[DO NOT READ LIST; ACCEPT MULTIPLE RESPONSES]

- 1 Price / expensive

- 2 Too bright
- 3 Not bright enough
- 4 Color of light
- 5 How they fit in fixtures
- 6 How they look in fixtures
- 7 Mercury / hazardous contents
- 8 Take too long to light up
- 9 Don't last long enough
- 10 Difficult to dispose
- 77 Other (specify) _____
- 88 (Don't know)
- 99 (Refused)

TURE

S10 Now I'm going to read you a list of statements about CFLs, and would like you to tell me if you agree or disagree with each statement. You may have already mentioned something similar to these statements earlier, but I'd still like you to tell me whether you agree or disagree with each statement. **[RANDOMIZE STATEMENTS]**

Response options will include:

- 1 Agree
- 2 Disagree
- 88 (Don't know)
- 99 (Refused)

- S10_1 CFLs are not bright enough.
- S10_2 The light from CFLs is too harsh.
- S10_3 CFLs don't fit well in my fixtures.
- S10_4 CFLs don't look good in my fixtures.
- S10_5 CFLs take too long to light up.
- S11_6 CFLs don't come in the shapes that I need.
- S10_7 CFLs are not suitable for use in all of the rooms in my home.

3 EXPANDING CFL INSTALLATIONS – ALL AWARE

E3a What is the main reason preventing you from increasing the number of CFLs you currently have installed in your home?

[DO NOT READ LIST; ACCEPT ONLY ONE RESPONSE]

- 1 Waiting for incandescent bulbs to burn out
- 2 Storing incandescent bulbs
- 3 Operating hours -- don't use the other bulbs/lamps enough
- 4 CFLs are too expensive/cost too much
- 5 Need dimmable bulbs / can't get dimmable CFLs / can't use CFLs with dimmer switches
- 6 Need 3-way bulbs / can't get 3-way CFLs / can't use CFLs in my 3-way fixtures / when I use regular CFLs in my 3-way fixtures they don't work
- 7 Don't like the way CFLs look in fixtures
- 8 Don't like the way CFLs fit in fixtures
- 9 CFLs aren't bright enough
- 10 CFL light color isn't what I want/isn't right

- 11 CFLs take too long to light up
- 12 Mercury / concerns about disposal
- 13 Do not need any more bulbs at this time
- 14 All of the bulbs in my home are CFLs → SKIP TO V1
- 15 Prefer LEDs
- 77 Other (specify) _____
- 88 (Don't know) → SKIP TO V1
- 99 (Refused) → SKIP TO V1

E3b [IF E3a = 14, 88, 99 SKIP TO F1] Anything else?
 [DO NOT READ LIST; ACCEPT MULTIPLE RESPONSES]

- 0 No / nothing
- 1 Waiting for incandescent bulbs to burn out
- 2 Storing incandescent bulbs
- 3 Operating hours -- don't use the other bulbs/lamps enough
- 4 CFLs are too expensive/cost too much
- 5 Need dimmable bulbs / can't get dimmable CFLs / can't use CFLs with dimmer switches
- 6 Need 3-way bulbs / can't get 3-way CFLs / can't use CFLs in my 3-way fixtures / when I use regular CFLs in my 3-way fixtures they don't work
- 7 Don't like the way CFLs look in fixtures
- 8 Don't like the way CFLs fit in fixtures
- 9 CFLs aren't bright enough
- 10 CFL light color isn't what I want/isn't right
- 11 CFLs take too long to light up
- 12 Mercury / concerns about disposal
- 13 Do not need any more bulbs at this time
- 15 Prefer LEDs
- 77 Other
- 88 (Don't know)
- 99 (Refused)

4 ENERGY INDEPENDENCE AND SECURITY ACT OF 2007 (EISA)

V1 Are you aware of any legislation in the United States that may affect the availability of certain types of light bulbs?

- 1 Yes
- 2 No
- 88 (Don't know)
- 99 (Refused)

V2 In 2007, Congress passed legislation that will phase out most traditional incandescent light bulbs by 2014. Before today, were you aware of this legislation?

- 1 Yes
- 2 No
- 88 (Don't know)
- 99 (Refused)

V3 As part of the legislation, retailers began phasing traditional 100-Watt, 75-Watt, 60-Watt, **[NEW]** and 40-Watt light bulbs out of stores at the beginning of 2012. Before today, were you aware that these light bulbs are being phased out?

- 1 Yes
- 2 No
- 88 (Don't know)
- 99 (Refused)

V4 Did you shop for any traditional incandescent light bulbs in 2013?

- [NEW]**
- 1 Yes
 - 2 No → **SKIP TO V9**
 - 88 (Don't know) → **SKIP TO V9**
 - 99 (Refused) → **SKIP TO V9**

V4a Which types of traditional incandescent bulbs did you shop for [in 2013]? Were they ...

- [NEW]**
- V4a_1** ... 100-Watt incandescent bulbs?
 - V4a_2** ... 75-Watt incandescent bulbs?
 - V4a_3** ... 60- or 40-Watt incandescent bulbs?
 - 1 Yes
 - 2 No
 - 88 (Don't know)
 - 99 (Refused)

[IF V4a_1, V4a_2, OR V4a_3 = 1, ELSE SKIP TO V9]

V4b During 2013, how many traditional incandescent bulbs did you purchase?

- [IN2] [IF NECESSARY: If a package contained more than one bulb, count each bulb separately.]**
- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 0 (None)
 - 8888 (Don't know)
 - 9999 (Refused)

V5 Were you able to purchase all of the types of traditional incandescent bulbs you were shopping for?

- [NEW] [IF NECESSARY: "...when you went shopping for them in 2013?"]**
- 1 Yes → **SKIP TO V9**
 - 2 No
 - 88 (Don't know) → **SKIP TO V9**
 - 99 (Refused) → **SKIP TO V9**

V7 What type of light bulb did you end up purchasing instead?

- [ACCEPT MULTIPLE RESPONSES]**
- 0 Did not purchase any light bulbs
 - 1 Incandescent
 - 2 CFL
 - 3 LED
 - 4 Halogen
 - 5 Energy Efficient incandescent/halogen bulbs
 - 77 Other (specify) _____
 - 88 (Don't know)
 - 99 (Refused)

V9 When traditional incandescent light bulbs are no longer available, which one of the following things are you most likely to do: switch to a new type of light bulb, keep using traditional light bulbs but switch to a lower wattage, or something else?

- [ACCEPT MULTIPLE RESPONSES]**
- 1 Switch to a new type of light bulb

- 2 Keep using traditional light bulbs but switch to a lower wattage → SKIP TO EE1a
- 3 Something else (specify) _____ → SKIP TO EE1a
- 88 (Don't know) → SKIP TO EE1a
- 99 (Refused) → SKIP TO EE1a

V10 Which type of light bulb are you most likely to switch to?
[ACCEPT ONLY ONE RESPONSE. DO NOT READ LIST]

- 1 LED
- 2 Halogen
- 3 CFL
- 4 Energy Efficient incandescent / halogen
- 77 Other (specify) _____
- 88 (Don't know)
- 99 (Refused)

5 ENERGY-EFFICIENT INCANDESCENT LAMPS

EE1a Have you ever heard of energy-efficient incandescent light bulbs?

- 1 Yes → SKIP TO EE2
- 2 No
- 88 (Don't Know)
- 99 (Refused)

EE1b Energy-efficient incandescent light bulbs look like traditional incandescent bulbs and give off the same amount of light using less energy. They come in wattages like 43, 53, or 72 Watts instead of 60, 75 or 100 Watts like traditional incandescent bulbs. Have you ever heard of these more efficient incandescent bulbs?

- 1 Yes
- 2 No → SKIP TO LE1a
- 88 (Don't Know) → SKIP TO LE1a
- 99 (Refused) → SKIP TO LE1a

EE2 Have you ever purchased any energy-efficient incandescent light bulbs?

- 1 Yes
- 2 No → SKIP TO LE1a
- 88 (Don't Know) → SKIP TO LE1a
- 99 (Refused) → SKIP TO LE1a

EE3 During 2013, how many energy-efficient incandescent bulbs did you purchase?

[IF NECESSARY: If a package contained more than one bulb, count each bulb separately.]

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 0 (None)
 - 8888 (Don't know)
 - 9999 (Refused)

EE4 Of all the energy-efficient incandescent bulbs you have ever bought, how many have you installed in your home?

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 0 (None)
 - 8888 (Don't know)

9999 (Refused)

6 LED LAMPS

LE1a Have you heard of LED light bulbs?

- 1 Yes → **SKIP TO LE3**
- 2 No
- 88 (Don't know)
- 99 (Refused)

LE1b LED light bulbs can be used in the same types of fixtures as regular incandescent bulbs but are shaped somewhat differently and produce light using semiconductor chips. They use a lot less energy than regular incandescent bulbs. Have you heard of LED light bulbs?

- 1 Yes
- 2 No → **SKIP TO LE9**
- 88 (Don't know) → **SKIP TO LE9**
- 99 (Refused) → **SKIP TO LE9**

LE3 Have you ever purchased any LED bulbs other than LED nightlights or holiday light strings?

[NEW]

- 1 Yes
- 2 No → **SKIP TO LE7**
- 88 (Don't Know) → **SKIP TO LE7**
- 99 (Refused) → **SKIP TO LE7**

LE4 During 2013, how many LED bulbs did you purchase?

[IF NECESSARY: If a package contained more than one bulb, count each bulb separately.]

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 0 (None) → **SKIP TO LE6**
- 8888 (Don't know) → **SKIP TO LE6**
- 9999 (Refused) → **SKIP TO LE6**

LE5 **[IF LE4 = 0, 88, 99, SKIP TO LE6]** Of all the LED bulbs you bought in 2013, how many did you install in your home?

- ENTER # _____ [PROBE FOR BEST ESTIMATE]
- 0 (None)
- 8888 (Don't know)
- 9999 (Refused)

LE6 Thinking about all of the LED bulbs you recently purchased, how satisfied are you with them? Use a scale of 1 to 10, where 1 means you are "not at all satisfied" and 10 means you are "very satisfied".

- ENTER # _____ [1 = not at all satisfied; 10 = very satisfied]
- 88 (Don't know)
- 99 (Refused)

LE7 **[IF LE3 = 1, SKIP TO LE9]** Why haven't you purchased any LED bulbs?

[ACCEPT MULTIPLE RESPONSES]

- 0 Not familiar with them
- 1 Too expensive
- 2 Don't know where to buy them

- 3 Can't find them
- 4 Can't find the shape/size I need
- 5 Satisfied with my current light bulbs
- 6 Don't need any bulbs
- 77 Other (specify)_____
- 88 (Don't know)
- 99 (Refused)

LE9 Now I'd like you to think about how quickly you, personally, adopt new technology. Which of the following do you think best describes you?

[NEW] [READ LIST; ACCEPT ONLY ONE ANSWER]

- 1 I am the first among my friends to purchase new technology
- 2 I purchase new technology sooner than most of my friends
- 3 I am typically in the middle of the group when purchasing new technology
- 4 I purchase new technology after most of my friends have purchased it
- 5 I am one of the last people to purchase new technology
- 88 (Don't know)
- 99 (Refused)

7 DEMOGRAPHICS - ALL

D0 Before we finish, I have just a few more questions about your household to make sure we're getting a representative sample of residents.

D1 What type of home do you live in? [READ LIST]

- 1 Mobile home
- 2 Single-family (attached or detached)
- 3 Apartment
- 4 Condo
- 77 (Other) _____
- 88 (Don't know)
- 99 (Refused)

D1a What year was your home built?

[NEW] ENTER HOMEYEAR: _____

If not sure, would you say:

- 1 2006 or later
- 2 2000 - 2005
- 3 1990 - 1999
- 4 1980 - 1989
- 5 1970 - 1979
- 6 1960 - 1969
- 7 earlier than 1960
- 88 (Refused)
- 99 (Don't know)

D2 Do you own your home or do you rent?

- 1 Own
- 2 Rent
- 88 (Don't know)

99 (Refused)

D3 Including yourself, how many people live in your home?

[DO NOT READ LIST]

- 1 One
- 2 Two
- 3 Three
- 4 Four
- 5 Five
- 6 Six
- 7 Seven or more
- 88 (Don't know)
- 99 (Refused)

D4 Which of the following best describes your educational background? **[READ LIST]**

- 1 Less than high school
- 2 High school or GED
- 3 Some college
- 4 Technical College (2 year degree)
- 5 4 Year college
- 6 Graduate degree
- 88 (Refused)
- 99 (Don't know)

D5 Could you please tell me which of the following categories includes your age? **[READ LIST]**

[NEW]

- 1 18 to 24
- 2 25 to 34
- 3 35 to 44
- 4 45 to 54
- 5 55 to 64
- 6 65 and over
- 88 (Refused)
- 99 (Don't know)

D6 Which of the following categories contains your annual household income from all sources in 2013 before taxes? **[READ LIST]**

- 1 Less than \$20,000 per year
- 2 \$20,000 to \$49,000
- 3 \$50,000 to \$74,000
- 4 \$75,000 to \$99,000
- 5 \$100,000 or more
- 88 (Don't know)
- 99 (Refused)

D7 Which of the following ethnicities would you say describe you? Please tell me all that apply.

[NEW] [READ ALL; ACCEPT MULTIPLE RESPONSES]

- 1 White
- 2 Black or African American
- 3 American Indian or Alaska Native
- 4 Asian
- 5 Native Hawaiian or Other Pacific Islander
- 6 Hispanic or Latino

- 77 Other (specify) _____
- 88 (Refused)
- 99 (Don't know)

8 WRAP UP

W0 Those are all the questions I have for you. Thank you very much for your time and opinions.

RECORD GENDER [DO NOT ASK RESPONDENT]

- 1 Male
- 2 Female

Utility Program Manager Interview Guide
2013-2014 Northwest Residential Lighting Long-Term Market Tracking Study
FINAL – April 16, 2014

Interview Objectives:

- To better understand NEEA partner activities for consumer research on lighting knowledge/preferences and purchasing motivations (study objective 11);
- To obtain details regarding the lighting marketing materials utilized in Northwest retail stores (study objective 9) in support of partners' residential lighting programs and promotional activities; and
- Obtain a more complete picture of residential lighting market (beyond CFLs) (study objective 7)
- Gauge utility program managers' current needs and concerns regarding the Northwest lighting market (to help NEEA ensure that its ongoing efforts are appropriately targeted) (not an explicit study objective)

INTRODUCTION

Hello, my name is _____ and I am calling from DNV GL. We're conducting a residential lighting market tracking study for the Northwest Energy Efficiency Alliance (NEEA). Right now we're interviewing a small number of utility contacts to gather feedback and insights on the Northwest lighting market. I would like to hear your perspectives and will keep our interview to 30 minutes or less. Your perspectives and opinions are confidential and will be presented to NEEA only in aggregate with other interview results. Your name will not be used in any reports or documents.

Prior to Interview

- Review each utility's website for information on residential lighting programs. If available, populate as many of the details below prior to the interview and confirm details with the respondent during the call. If information is not available online, request information from respondent.

RESIDENTIAL LIGHTING INCENTIVE PROGRAMS

Study Objective 7: Obtain a more complete picture of the residential market beyond CFLs.

1. First, can you tell me a little bit about your residential current lighting incentive programs?
[NOTE: Education/information programs addressed in next section]
[Probe for details on the topics below for each program]
 - Program name
 - When program began (how long it's been running)
 - Target participants (all residential? specific groups? etc.)
 - Technologies included

- Lamp types (general purpose, specialty, what specialty types, holiday lights, etc.) [PROBE: EISA Compliant]
 - How is program delivered? (If via retail stores, who are the retail partners?)
 - Program/discount type (upstream, rebates, direct install, etc.)
 - Product discounts
 - Program budget (if available)
 - Whether 2014 program differs from 2013 (and if so, how)
2. What are the specific goals for your residential lighting program[s]?
- Do you have any specific end-points in mind? In other words, have you determined when you will discontinue incentives for a particular product type (e.g., when the non-discounted price reaches a certain point or when saturation reaches a certain level)? [If YES, describe]
3. [If relevant:] How do your programs define “general purpose CFLs” – what lamp styles are included?
- [Clarify whether GP includes spiral only, a-lamps, wattage ranges/limits, etc.]
 - Inform respondent that NEEA defines GP CFLs **as non-dimmable, single wattage spiral AND A-lamp CFLs**
4. [If not mentioned] Do your programs provide any incentives or other support for energy-efficient incandescent or halogen lamps that are compliant with the Energy Independence and Security Act of 2007 (EISA)? [**ONLY IF YES**] Why?
5. Do you foresee a role for general purpose CFL programs in the future? Can you explain?
- [If current GP CFL program:] Do you have plans to discontinue your general purpose CFL program[s] at some point in the future?
 - [IF YES] When?

- [IF YES AND IF NOT MENTIONED] Will you continue to provide incentives for A-lamp CFLs?
- [If NO current GP CFL program:] Have you ever offered incentives for general purpose CFLs?
 - [IF YES:] When did the program end? Why did you decide to discontinue it?
 - [IF NOT MENTIONED] Do you currently provide incentives for A-lamp CFLs?

RESIDENTIAL LIGHTING EDUCATION/INFORMATION/MARKETING CAMPAIGNS

Study Objective 9: Obtain details regarding lighting marketing materials utilized in Northwest retail stores.

6. Do you have any current or planned education, information or marketing campaigns for residential lighting? [If YES:]
 - What are the key messages of the campaign?
 - Who is the target audience?
 - What types of products are included in the campaign?
 - How is information disseminated? (If via retail stores, who are the retail partners?)
 - What are your motivations for conducting the campaign?
 - Could you possibly email me copies of the educational materials?
7. How well do you think residential customers understand the range of lamp technologies available?
 - [Probe for details on general purpose vs. specialty CFLs, EE incandescent lamps, LED lamps]
8. Do you perceive any gaps in existing messaging related to consumer lighting products – whether it's related to product type, specific types of information, or something else? [If YES, describe]

OTHER RESIDENTIAL LIGHTING MARKET ACTIVITIES

Study Objective 11: Better understand NEEA partner activities for consumer research on lighting knowledge/preferences and purchasing motivations. Note: SOW states additional objective of obtaining a broader perspective on partner activities beyond this specific research focus.

9. Are you planning or currently conducting any research on the residential lighting market? [If YES:]

- What is the objective of the research?
- Is there a focus on any specific products, customer groups, etc.?
- What is your motivation for conducting the research?
- Is the research complete? [If YES:]
 - Are the results publically available? (Where?)
 - What were some of the key study findings/conclusions?

10. [If not addressed] Are you planning or currently conducting any research specifically regarding consumer purchasing motivations or preferences? [If YES:]

- What is the objective of the research?
- Is there a focus on any specific products, customer groups, etc.?
- What is your motivation for conducting the research?
- Is the research complete? [If YES:]
 - Are the results publically available? (Where? Or request via email)
 - What were some of the key study findings/conclusions?

11. [ALL RESPONDENTS (if not addressed above)] If funding were not an issue, what lighting consumer research would you like to see?

[PROBE: Ask why they would like to see this research (or their motivations). Ask if they are interested in specific consumer groups or would like to see specific lighting products targeted]

MARKET BARRIERS

Study Objective 7: Obtain a more complete picture of the residential market beyond CFLs.

12. Are there any significant barriers to CFL sales to consumers in your service territory, in terms of availability, product diversity, affordability, or consumer satisfaction? [Probe details regarding general purpose and specialty CFLs]
 - What can be done to overcome these barriers, and by whom?
[PROBE to see if there is a perceived role for NEEA here]

13. What about barriers to LED replacement lamp sales to consumers in your service territory – again in terms of availability, product diversity, affordability, or consumer satisfaction?
 - What can be done to overcome these barriers, and by whom?
[PROBE to see if there is a perceived role for NEEA here]

14. Do you perceive any other market barriers to energy-efficient lamp sales to residential customers in your service territory? [If yes, describe]

NEEA’S ROLE

SOW states the additional study objective of “Gauge utility program managers’ current needs and concerns regarding the Northwest lighting market (to help NEEA ensure that its ongoing efforts are appropriately targeted).”

15. What specific needs do you have with regard to consumer lighting products – whether it’s general purpose CFLs, specialty CFLs, LED lamps, or other products?
 - [If any] How might an organization like NEEA be able to support you in this regard?

16. Do you see a need for a regional entity like NEEA to get back into the residential lighting market in some way? [If YES:]
 - What role do you perceive for them?
 - Why?

WRAP-UP

- Thank respondent for his/her time and input.
- Ask if you can call back with brief clarifying questions if necessary.
- Obtain details regarding transmittal of specific studies/marketing materials/etc.

2014 NEEA LIGHTING SUPPLIER INTERVIEW GUIDE - FINAL
04/14/2014

Objectives:

- Identify recent and anticipated sales and pricing trends in national and Northwest residential lighting markets, as well as the reasons for these trends – explore these trends for CFLs, LED lamps, traditional incandescent lamps, and EISA compliant halogen lamps (study objective 1)
- Explore relationship between actual sales and stocking practices (study objective 2)
- Understand attitudes and expectations of lamp supplier representatives (retailers/manufacturers) regarding future Northwest sales trends for CFLs, LED, and incandescent lamps (particularly with regard to perceived effects of EISA) (study objective 4)
- Obtain a more complete picture of the residential lighting market – including 4 lamp types (CFLs [general purpose and specialty], LED replacement lamps, traditional incandescent lamps, and EISA-compliant halogen lamps) (study objective 7)
- Better understand stocking and sales of EISA compliant vs. EISA non-compliant (study objective 8)
- Characterize lighting marketing materials in Northwest retail stores (study objective 9)

Interviewer Instructions:

- Explain purposes of interview.
- Provide assurances of confidentiality.
- NOTE: “general purpose” CFLs = spiral/twister and a-lamps. Specialty CFLs = everything else.
- If necessary: explain that “Northwest” includes Washington, Oregon, Idaho, and Montana.

[FOR MANUFACTURERS: Before call, review prior years’ interviews and/or company information (online, etc.) to determine whether manufacturer produces incandescent lamps, CFLs and LED lamps – THIS INFORMATION WILL BE NEEDED TO COMPLETE THE INTERVIEW.]

Introduction

I’m calling from DNV GL on behalf of the Northwest Energy Efficiency Alliance (NEEA). In the past you have provided us with useful information regarding your company’s participation in NEEA’s regional CFL promotions and on the CFL market in general. I’d like to talk with you about any changes you may have seen in the lighting market since 2013 and about federal legislation that governs the phase-out of inefficient lighting including many incandescent bulbs that are currently on the market (the 2007 Energy Independence and Security Act).

[SKIP TO Q2 IF SUPPLIER ONLY OPERATES IN THE NW AND NOT NATIONALLY]

Q0. Let’s start off by talking about the lighting market in general. Can you tell me what types of changes you’ve seen (if any) in the national market for residential lighting in 2013?

[PROMPT IF NECESSARY: These could be changes in product types, availability, price, the types of retailers carrying particular products, regional differences, etc.] [IF CHANGES MENTIONED] Were changes in the lighting market that you mentioned different for the Northwest than what you observed nationally? [IF YES] How so?

CFLs – SALES

Study Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, LED lamps, and incandescent lamps in Northwest retail stores.

[SKIP TO Q2 IF SUPPLIER ONLY OPERATES IN THE NORTHWEST AND NOT NATIONALLY]

Q1. How did your national sales of CFLs in 2013 compare with your sales in 2012?

[PROBE FOR PERCENT INCREASE OR DECREASE.]

[IF NEEDED] Your best guess is fine.

- % change in National CFL sales 2012-2013: _____

Q1b. [IF CHANGE MENTIONED IN Q1]

What do you think caused this change in sales?

Q1c. What proportion of 2013 CFL sales were specialty CFLs?

Q1d. How has the proportion of sales that are general purpose CFLs versus specialty CFLs changed between 2012 and 2013? [Remind respondent that NEEA considers “general purpose CFLs” to include spirals/twisters and a-lamps and “specialty CFLs” to include everything else.]

Q1e. [IF CHANGE MENTIONED IN Q1d]

What do you think caused that shift [in the proportion of general purpose versus specialty CFL sales]?

Q2. How did your sales of CFLs in 2013 compare with your sales in 2012 in the Northwest – that is, in Oregon, Washington, Idaho and Montana? What about 2012 sales?

[OBTAIN % CHANGE BETWEEN YEARS.]

[IF NEEDED] Your best guess is fine.

- % change in NW CFL sales 2012-2013: _____

Q2b. [IF CHANGES MENTIONED IN Q2]

What do you think caused the change in sales between 2012 and 2013?

[IF MORE THAN ONE REASON CITED, TRY TO OBTAIN WHICH REASON IS MAIN OR MOST IMPORTANT REASON]

Q2c. Approximately what proportion of your 2013 CFL sales in the Northwest were general purpose CFLs versus specialty CFLs? [IF NECESSARY: general purpose CFLs are spirals, twisters, and a-lamps.] What about in 2012?

- % of 2013 CFL sales that were specialty CFLs: _____
- % of 2012 CFL sales that were specialty CFLs: _____

Q2d. [IF DIFFERENT %S MENTIONED IN Q2c]

What do you think caused that shift [in the proportion of general purpose versus specialty CFL sales]?

- Q4. Did you see any major changes in 2013 as far as the percentage of your Northwest CFL sales that were promotional versus non-promotional sales? By “promotional sales” I mean those for which you received incentives from a utility or other energy-efficiency body.
[PROBE RE PROMOTIONS IN WHICH THEY PARTICIPATED – WHO SPONSORED, ETC.]
- Q6. Do you think sales of general purpose CFLs will increase, decrease, or stay the same in the Northwest over the next five years?
- Q6a. [IF CHANGE MENTIONED] By what percentage do you think [general purpose CFL] sales will change?
- Q6b. [IF CHANGE MENTIONED] What factors do you think are driving this change? [IF NEEDED: For example, market conditions such as general purpose CFL saturation, increased or lack of consumer awareness, weaker/stronger economy, etc.]
- Q7. Do you think sales of specialty CFLs will increase, decrease, or stay the same in the Northwest over the next five years?
- Q7a. [IF CHANGE MENTIONED] By what percentage do you think [specialty CFL] sales will change?
- Q7b. [IF CHANGE MENTIONED] What factors do you think are driving this change? [IF NEEDED: Market conditions such as general purpose CFL saturation, increased or lack of consumer awareness, weaker/stronger economy, etc.]

CFLs - PRICES

Study Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, LED lamps, and incandescent lamps in Northwest retail stores.

- Q8. What would you say was the average price for a general purpose CFL in the Northwest during 2013? [PROBE FOR DIFFERENCES BY STORE TYPE, STATE, ETC.]
[IF NECESSARY: General purpose CFLs= twister/spiral and a-lamps.]
- Q7a. Does this average price differ from the national average? If so, how?
- Q9. What do you think the average price will be for a general purpose CFL in the Northwest next year (in 2015)? What about in 2017?
- 2015 average price – general purpose CFL: _____
 - 2017 average price – general purpose CFL: _____
- Q10. What would you say was the average price across all types of specialty CFLs in the Northwest during 2013? [PROBE FOR DIFFERENCES BY STORE TYPE, STATE, ETC.]
- Q9a. Does this differ from the national average? If so, how?
- Q11. What do you think the average price will be across all types of specialty CFLs in the Northwest next year (in 2015)? What about in 2017?

- 2015 average price – specialty CFL: _____
- 2017 average price – specialty CFL: _____

CFL SUPPLY

Study Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, LED lamps, and incandescent lamps in Northwest retail stores.

[SKIP TO S2 IF SUPPLIER ONLY OPERATES IN THE NW AND NOT NATIONALLY]

S1. Have you experienced any difficulties supplying the market or meeting the demand for CFLs in the U.S. [national market] over the past few years, or do you anticipate any such difficulties in the next few years?

[IF YES, PROBE FOR DIFFERENCES BY PRODUCT STYLE/WATTAGE, STORE TYPE, ETC.]

S2. Have you experienced any difficulties supplying the market or meeting the demand for CFLs in the Northwest over the past few years, or do you anticipate any such difficulties in the next few years?

[IF YES, PROBE FOR DIFFERENCES BY PRODUCT STYLE/WATTAGE, STORE TYPE, STATE, ETC.]

ENERGY INDEPENDENCE AND SECURITY ACT OF 2007

Study Objective 4: Understand attitudes and expectations of lamp supplier representatives regarding future Northwest sales trends for CFLs, LED lamps, and incandescent lamps (particularly with regard to perceived effects of EISA).

[INCANDESCENT LAMP MANUFACTURERS AND RETAILERS ONLY (E1—E5)]

E1. In December 2007 Congress passed a new Energy Bill. One component of the bill calls for a gradual phase-out of inefficient lamps over time starting in 2012. [IF NECESSARY: The phase-out began for 100 Watt general service lamps on January 1, 2012, for 75-Watt lamps on January 1, 2013, and 60 and 40 Watt lamps starting in 2014.] Are you familiar with this legislation? [IF NO, SKIP TO E7]

E3. What do you expect will be the short term effects of this act (2014-2015)?

E4. What do you expect will be the long term effects of this act (beyond 2015)?

E7. [ASK IF NECESSARY – I.E., IF PRODUCT TYPES NOT DESCRIBED IN PRIOR YEAR’S INTERVIEW OR ONLINE]

Does your company manufacture/sell traditional incandescent lamps? That is, incandescent lamps that do not meet the current requirements of the Energy Independence and Security Act of 2007 (EISA)?

1. Yes
2. No → If no, skip to I1

Traditional Incandescent Lamps - SALES

Study Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, LED lamps, and incandescent lamps in Northwest retail stores.

Study Objective 7: Obtain a more complete picture of residential lighting market (beyond CFLs).

[MANUFACTURERS/RETAILERS WHO CURRENTLY SELL INCANDESCENTS (I1-I2)]
 [SKIP TO I2 IF SUPPLIER ONLY OPERATES IN THE NORTHWEST AND NOT NATIONALLY]

I1. [IF RELEVANT]

How did your national sales of traditional incandescent lamps in 2012 compare with your sales in 2013?

[PROBE FOR PERCENT INCREASE OR DECREASE]

[IF NEEDED] Your best guess is fine.

- % change in National traditional incandescent sales 2012-2013: _____

I1a. [IF CHANGES MENTIONED IN I1]

What do you think caused these changes in national sales of traditional incandescent lamps?

[PROBE FOR DIFFERENCES IN REASONS FOR CHANGES IN CFL SALES VS. INCANDESCENT SALES]

I2. How did your 2013 sales of traditional incandescent lamps in the Northwest compare with your traditional incandescent sales in 2012?

[IF NEEDED] Your best guess is fine.

- % change in NW traditional incandescent sales 2012-2013: _____

I2a. [IF CHANGES MENTIONED IN I2]

What do you think caused these changes in traditional incandescent lamp sales?

[IF MORE THAN ONE REASON CITED, TRY TO GET MAIN REASON]

[RETAILERS WHO DO NOT CURRENTLY SELL INCANDESCENTS (I3)]

I3. Did your stores ever sell incandescent lamps?

I3a. [IF I3 = YES] When did you stop selling them? Why? [PROBE: Did the EISA legislation have any influence on the decision to stop selling them?]

I3b. [IF I3 = NO] Why not?

EISA-Compliant Incandescent Lamps - SALES

Study Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, LED lamps, and incandescent lamps in Northwest retail stores.

Study Objective 7: Obtain a more complete picture of residential lighting market (beyond CFLs).

[MANUFACTURERS AND RETAILERS WHO CURRENTLY SELL INCANDESCENTS AND ARE AWARE OF EISEA (ES1-ES4)]

ES1. Does your company manufacture/sell incandescent lamps that meet the current requirements of the Energy Independence and Security Act of 2007 (EISA)?

1. Yes
2. No → If no, skip to Incandescent Lamp Pricing section

ES1a. [IF MANUFACTURE/SELL TRADITIONAL & EISA-COMPLIANT INCANDESCENTS]

Approximately what proportion of your 2013 incandescent lamp sales in the Northwest were EISA-compliant versus traditional incandescent lamps? What about in 2012?

- % of 2013 incandescent sales that were EISA-compliant: _____
- % of 2012 incandescent sales that were EISA-compliant: _____

[SKIP TO ES3 IF SUPPLIER ONLY OPERATES IN THE NW AND NOT NATIONALLY]

ES2. How did your national sales of EISA-compliant incandescent lamps in 2012 compare with your sales in 2013?

[PROBE FOR PERCENT INCREASE OR DECREASE]

[IF NEEDED] Your best guess is fine.

ES2a. [IF CHANGES MENTIONED IN ES2]

What do you think caused these changes in national sales of EISA-compliant incandescent lamps?

ES3. How did your 2013 sales of EISA-compliant incandescent lamps in the Northwest compare with your 2012 sales of EISA-compliant incandescent lamps?

[IF NEEDED] Your best guess is fine.

- % change in NW EISA-compliant incandescent sales 2012-2013: _____

ES4. Do you think sales of EISA-compliant incandescent lamps will increase, decrease, or stay the same in the Northwest over the next five years?

ES4a. [IF CHANGE MENTIONED] By what percentage do you think [EISA-compliant incandescent lamp] sales will change?

Traditional & EISA-Compliant Incandescent Lamps - PRICES

Study Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, LED lamps, and incandescent lamps in Northwest retail stores.

Study Objective 7: Obtain a more complete picture of residential lighting market (beyond CFLs).

[SKIP THIS SECTION IF RESPONDENT DOES NOT MANUFACTURE/SELL INCANDESCENT LAMPS (I5)]

I5. What would you say was the average price for a traditional general purpose incandescent lamp in the Northwest during 2013? [PROBE FOR DIFFERENCES BY STORE TYPE, STATE, ETC.]
[IF NECESSARY: General purpose incandescents = standard a-lamp incandescents.]

I5a. Does this average price differ from the national average? If so, how?

[IF RESPONDENT MANUFACTURERS/SELLS INCANDESCENT LAMPS AND IS AWARE OF EISA (I6-I7)]

I6. What would you say was the average price across all types of EISA-compliant incandescent/halogen bulbs in the Northwest during 2013? [PROBE FOR DIFFERENCES BY STORE TYPE, STATE, ETC.]

I6a. Does this differ from the national average? If so, how?

I7. What do you think the average price will be across all types of EISA-compliant incandescents in the Northwest next year (in 2015)? What about in 2017?

- 2015 average price – EISA-compliant incandescent: _____
- 2017 average price – EISA-compliant incandescent: _____

LED Replacement Lamps – SALES

Study Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, LED lamps, and incandescent lamps in Northwest retail stores.

Study Objective 7: Obtain a more complete picture of residential lighting market (beyond CFLs).

L1. [ASK IF NECESSARY – I.E., IF PRODUCT TYPES NOT DESCRIBED IN PRIOR YEAR’S INTERVIEW OR ONLINE] Does your company manufacture/sell LED replacement lamps (for the residential market)?

1. Yes
2. No [SKIP TO L5]

L2. [IF L1=YES] How did your total 2013 LED replacement lamp sales in the Northwest compare with your 2012 LED replacement lamp sales?

[IF NEEDED] Your best guess is fine.

- % change in NW LED sales 2012-2013: _____

L2a. [IF CHANGES MENTIONED IN L2] What do you think caused these changes in replacement LED lamp sales?

[IF MORE THAN ONE REASON CITED, TRY TO GET MAIN REASON]

L3. What percentage of your total LED replacement bulb sales in 2013 were A-lamps? What about in 2012? [IF NECESSARY: LED A-lamp = shaped like a standard general purpose incandescent]

[IF NEEDED] Your best guess is fine.

- 2013 NW sales – LED A-lamps: _____
- 2012 NW sales – LED A-lamps: _____

L3a. [IF NECESSARY] What style or type of LED replacement lamp represented the greatest percentage of your 2013 NW LED lamp sales? What percentage did sales of this lamp type comprise of your overall Northwest LED lamp sales in 2013?

- Best-selling LED replacement lamp type in 2013:
- % of total LED lamp sales comprised by best-selling LED replacement lamp in 2013:

L4. Do you think sales of LED replacement lamps will increase, decrease, or stay the same in the Northwest over the next five years?

L4a. [IF CHANGE MENTIONED] By what percentage do you think [LED replacement lamp] sales will change? How do you think this will differ by lamp type?

L5. What are the most important factors that are limiting customer demand for LED products? Please explain. [PROBE FOR APPLICABILITY, DESIGN, COST, AWARENESS, QUALITY ISSUES.]

L5a. [IF NOT MENTIONED] To what degree have these demand barriers varied with the type of LED product?

[IF RESPONDENT DOES NOT MANUFACTURE/SELL LED BULBS (L6)]

L6. [IF L1=NO] Do you plan to sell LED lamps in the near future?

L6a. [IF L6 = YES] Which lamps? When do you plan on selling them?

L6b. [IF L6 = NO] Why not?

LED Replacement Lamps – PRICES

Study Objective 1: Characterize stocking (availability/diversity) and pricing for CFLs, LED lamps, and incandescent lamps in Northwest retail stores.

Study Objective 7: Obtain a more complete picture of residential lighting market (beyond CFLs).

[IF RESPONDENT MANUFACTURES/SELLS LED BULBS (L7-L9) – ELSE SKIP TO R1]

L7. What would you say was the average price for a general purpose LED A-lamp in the Northwest during 2013? [PROBE FOR DIFFERENCES BY STORE TYPE, STATE, ETC.]

L7a. Does this average price differ from the national average? If so, how?

L8. What do you think the average price will be for a general purpose LED A-lamps in the Northwest next year (in 2015)? What about in 2017?

- 2015 average price – general purpose LED A-lamp: _____
- 2017 average price – general purpose LED A-lamp: _____

STOCK AND SALES RELATIONSHIP [NEW]

Study Objective 2: Explore the relationship between actual sales and stocking practices.

R1. Do you see a relationship between your sales of replacement lamps and the stocking of those lamps in stores?

[IF YES] How would you describe that relationship?

[PROBE] Does this relationship differ by lamp technology (e.g., CFLs, LEDs, incandescents, halogens)?

MARKETING AND EDUCATIONAL MATERIALS

Study Objective 9: Characterize lighting marketing materials in Northwest retail stores.

[RETAILERS ONLY (M1-M3) – MANUFACTURERS SKIP TO M4]

M1. [IF RETAILER SELLS CFLS] What types marketing and educational materials do you have in your [Northwest] store(s) for CFLs?

M1a. [IF NOT MENTIONED] What type of signage do you have in your store(s) for CFLs? Do you have other displays? [IF YES] What other types of displays do you have?

M1b. [IF NOT MENTIONED] Who provides the CFL marketing materials that you have in your store(s)? [IF NEEDED] Do you provide the materials? Do you get materials from manufacturers? From utilities? From other organizations?

M1c. What are the key messages of the marketing and educational materials that you have in your store(s) for CFLs?

M2. [IF RETAILER SELLS LEDS] What types marketing and educational materials do you have in your [Northwest] store(s) for LED replacement lamps?

M2a. [IF NOT MENTIONED] What type of signage do you have in your store(s) for LED lamps? Do you have other displays? [IF YES] What other types of displays do you have?

M2b. [IF NOT MENTIONED] Who provides the LED marketing materials that you have in your store(s)? [IF NEEDED] Do you provide the materials? Do you get materials from manufacturers? From utilities? From other organizations?

M2c. What are the key messages of the marketing and educational materials that you have in your stores for LED lamps?

M3. Do you provide any other types of market and educational materials related to lighting in your [Northwest] stores? [IF YES] What types of lighting products are mentioned in the materials?

M3a. What other types of marketing and educational materials do you provide? [IF NOT MENTIONED] Do you supply signage or other displays?

M3b. [IF NOT MENTIONED] Who provides these other materials? [IF NEEDED] Do you provide the materials? Do you get materials from manufacturers? From utilities? From other organizations?

M3c. What are the key messages of these other materials?

[MANUFACTURER ONLY (M4-M6) – RETAILERS SKIP TO CLOSE]

M4. [IF MANUFACTURER SELLS CFLS] Do you supply any CFL marketing or educational materials to stores in the Northwest?

M4a. [IF NOT MENTIONED] What type of materials do you supply for CFLs? [IF NEEDED] Do you supply signage or other displays?

M4b. What are the key messages of these materials for CFLs?

M5. [IF MANUFACTURER SELLS LEDS] Do you supply any marketing or educational materials to stores in the Northwest related to LED lamps?

M5a. [IF NOT MENTIONED] What types of materials do you supply for LED lamps? [IF NEEDED] Do you supply signage or other displays?

M5b. What are the key messages of these materials for LED lamps?

M6. Do you supply any other types of lighting marketing and educational materials to stores in the Northwest?

M6a. [IF NOT MENTIONED] What types of marketing materials do you supply? [IF NEEDED] Do you supply signage or other displays?

M6b. What are the key messages of these other materials?

CLOSE

Those are all of the questions I have for you today. Thank you so much for your time and your valuable comments.

APPENDIX C - Detailed Shelf Survey Results

C.1 Sample Expansion Weights

Below is a table showing the shelf survey sample expansion weights used to weight the shelf survey data presented in tables and figures below.

Table 15
Lighting Retailer Shelf Survey Sample Expansion Weights, 2013-14

Store Type	Urban	Rural
Wholesale Club	5.50	-
Do-It-Yourself	13.27	4.50
Drug and Grocery	38.84	20.67
Mass Merchandise	21.28	17.50
Small Hardware	26.52	66.00

Note: This table represents a simplified version of the sample expansion weights developed for the lighting retailer shelf survey. The dataset includes a complete set of weights.

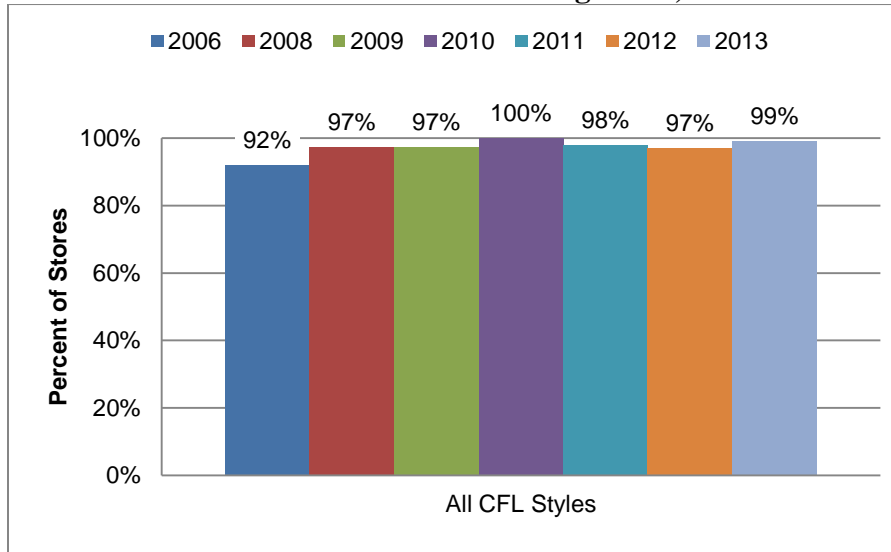
C.2 Lamp Availability

The shelf surveys examine lamp availability in terms of the percentage of stores carrying a specific lamp technology as well as the percentage of total lamp stock represented by a particular lamp technology. For the latter, field researchers count the total number of packages present for each lamp model on the shelf as well as the number of lamps per package, and analysts multiply these two estimates together to yield the total number of lamps for each lamp model present in each retail store visited as part of the shelf surveys.

C.2.1 Percent of Stores Carrying CFLs over Time

Figure 3 shows the percentage of stores visited during the 2006, 2008, 2009, 2010, 2011, 2012 and 2013 shelf surveys that stocked general purpose CFLs and/or specialty CFLs. As shown, the percentage of stores carrying CFLs was 99% in 2013. This represents an increase of 2% from 2012 and 1% from 2011.

Figure 3
Percent of Northwest Stores Stocking CFLs, 2006–2013



Unlike in 2011 and 2012 when there was near parity in the percentage of stores stocking general purpose and specialty CFLs, there was a difference between the percentage of stores that stocked general purpose and specialty CFL bulbs in 2013. Figure 4 shows that in 2013, 97% of stores carried general purpose CFLs, up 1 percentage point from 2012 and unchanged from 2011. In 2013, the percentage of stores stocking specialty CFLs was 91%, which is down from 96% in 2011 and 2012.

Figure 4
Percent of Northwest Stores Stocking CFLs by CFL Type, 2006–2013

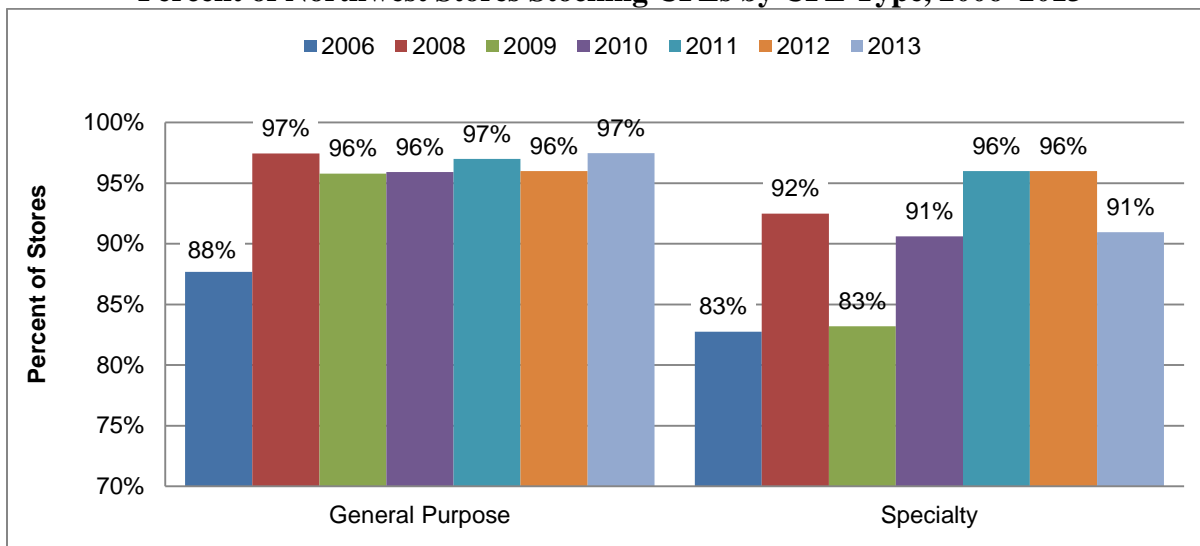


Figure 5 shows the percentage of CFLs stocked by store category, divided into “big box” stores (mass merchandise, DIY, and wholesale clubs) and non- big box stores (including drug, grocery and small hardware stores). The percentage of big box stores that carried CFLs increased from 92% in 2012 to 97% in 2013. Likewise, the percentage of drug, grocery and small hardware stores that carried CFLs increased from 98% in 2012 to 100% in 2013.

Figure 5
Percent of Northwest Stores Stocking CFLs by Store Category, 2006–2013

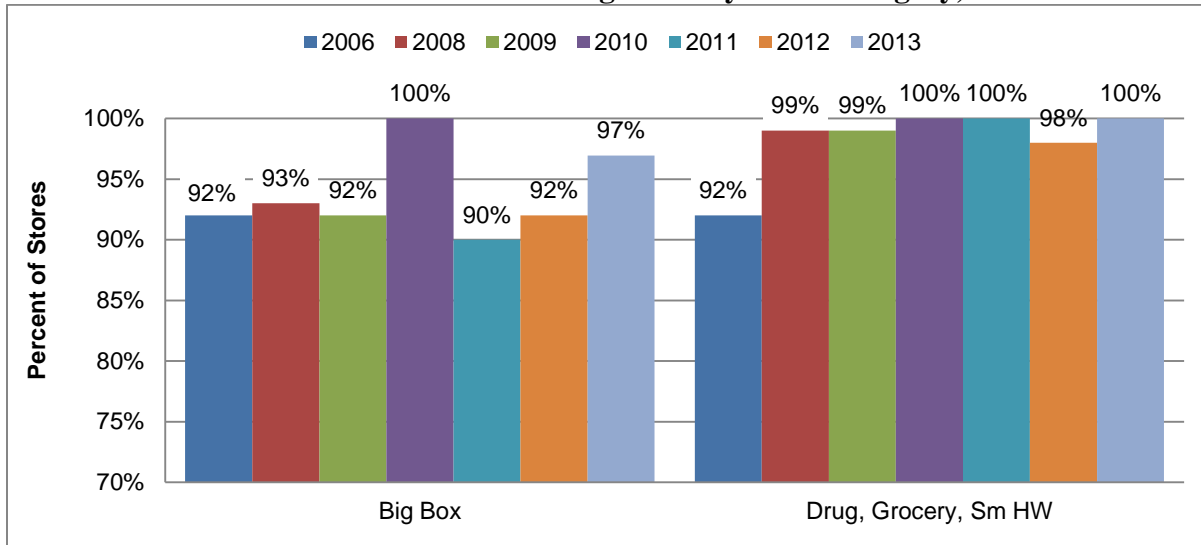
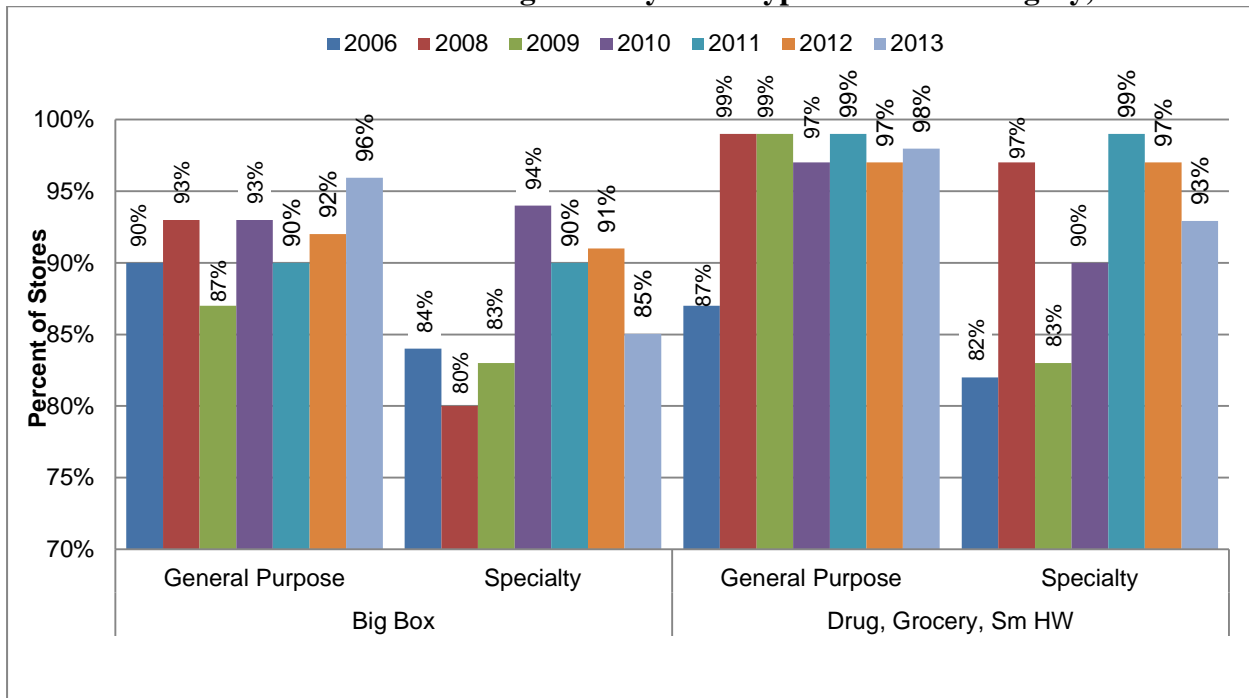


Figure 6 shows the stocking percentage by store category and CFL type. The percentage of big box stores stocking general purpose CFLs increased by 4 percentage points (from 92% to 96%) from 2012 to 2013. However, big box stores appear to be driving down the overall percentage of stores carrying specialty CFLs with the percentage of big box stores carrying specialty CFLs decreasing by 6 percentage points between 2012 and 2013 (from 91% to 85%). The percentage of non- big box stores stocking general purpose CFLs increased slightly between 2012 and 2013 from 97% to 98%, while the percentage of non- big box stores stocking specialty CFLs decreased during the same timeframe from 97% to 93%.

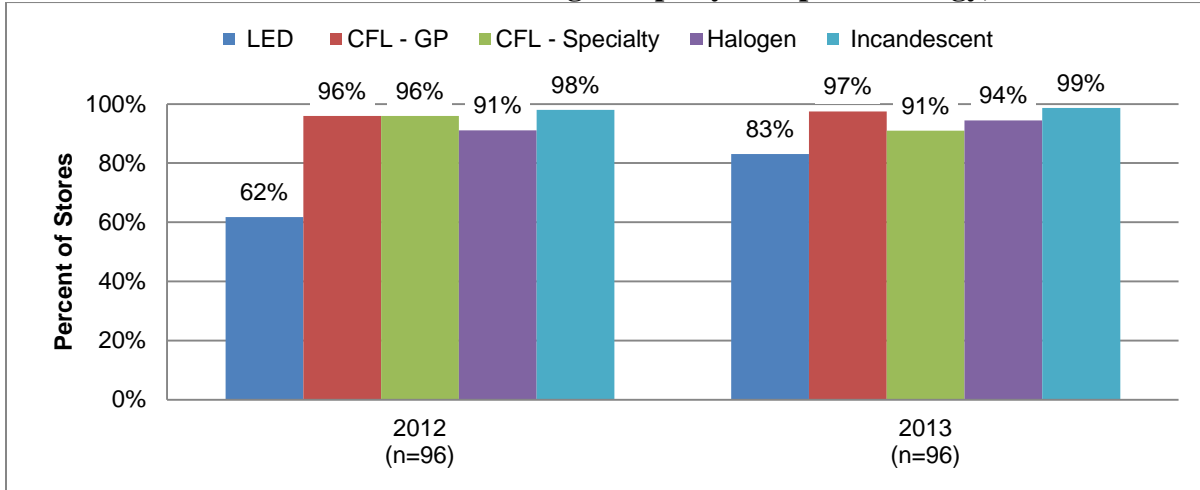
Figure 6
Percent of Northwest Stores Stocking CFLs by CFL Type and Store Category, 2006–2013



Percent of Stores Carrying Lamps by Technology, Store Category, and Geography (2012 and 2013)

Figure 7 shows the percent of stores stocking different lamp technologies—including LED lamps, general purpose CFLs, specialty CFLs, and incandescent lamps—in 2012 and 2013. Both general purpose CFLs and incandescent lamps show little or no change between years. Nearly all Northwest stores stocked general purpose CFLs and incandescent lamps in 2012 and 2013. There was a decrease in the percentage of stores that stocked specialty CFLs from 96% of stores stocking these lamps in 2012 to 91% of stores in 2013. Halogen lamp stock increased slightly from 91% of stores carrying these lamps in 2012 to 94% in 2013. With respect to the stocking of LED lamps, there was a notable increase in the percentage of stores stocking this lamp technology, with 62% of Northwest stores stocking LED lamps in 2012 and 83% of stores stocking them in 2013.

Figure 7
Percent of Northwest Stores Stocking Lamps by Lamp Technology, 2012–2013



When examined by store category and lamp type in 2012 and 2013 (Figure 8), there is little change in the stocking of incandescent lamps in big box and non-big box stores in both years. The percentage of big box stores stocking specialty CFLs decreased from 91% in 2012 to 85% in 2013, and the stocking of specialty CFLs decreased in non- big box stores as well from 97% in 2012 to 93% in 2013. The percentage of big box stores stocking LED lamps also decreased slightly from 71% in 2012 to 68% in 2013, while the percentage of non- big box stores stocking LED lamps grew by nearly a half, from 59% of stores in 2012 to 88% in 2013. The stocking of incandescent lamps remained stable between 2012 and 2013 in both big box and non- big box stores. The percentage of big box stores stocking halogens also remained the same in 2012 and 2013 with 85% of big box stores stocking halogens. The percentage of non- big box stores stocking halogens grew from 93% in 2012 to 97% in 2013.

Figure 8
Percent of Northwest Stores Stocking Lamps by Lamp Technology and Store Category, 2012–2013

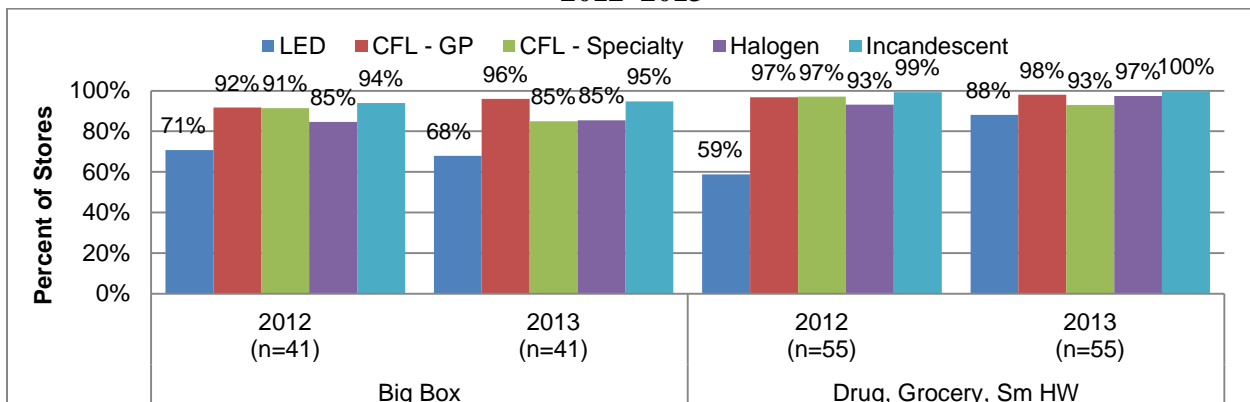


Figure 9 illustrates differences in stocking patterns between rural and urban stores for the five different lamp technologies in 2012 and 2013. While the percentage of rural stores stocking general purpose CFLs, incandescent, and halogen lamps remained unchanged between 2012 and 2013, the proportion that stocked specialty CFLs decreased from 95% in 2012 to 86% in 2013. Over that same timeframe, the proportion of rural stores that stocked LED lamps increased by more than half from 48% in 2012 to 75% in 2013. Urban stores saw slight increases in the proportion that stocked general purpose CFLs and slight decreases in the proportion that stocked specialty CFLs. There was more than a 20% increase in the proportion of urban stores stocking LED lamps from 64% in 2012 to 85% in 2013. The percentage of urban stores stocking halogen lamps increased slightly from 89% in 2012 to 93% in 2013. The percentage of urban stores stocking incandescent lamps increased slightly from 98% in 2012 to 98% in 2013.

Figure 9
Percent of Northwest Stores Stocking Lamps by Lamp Technology and Geography, 2012–2013

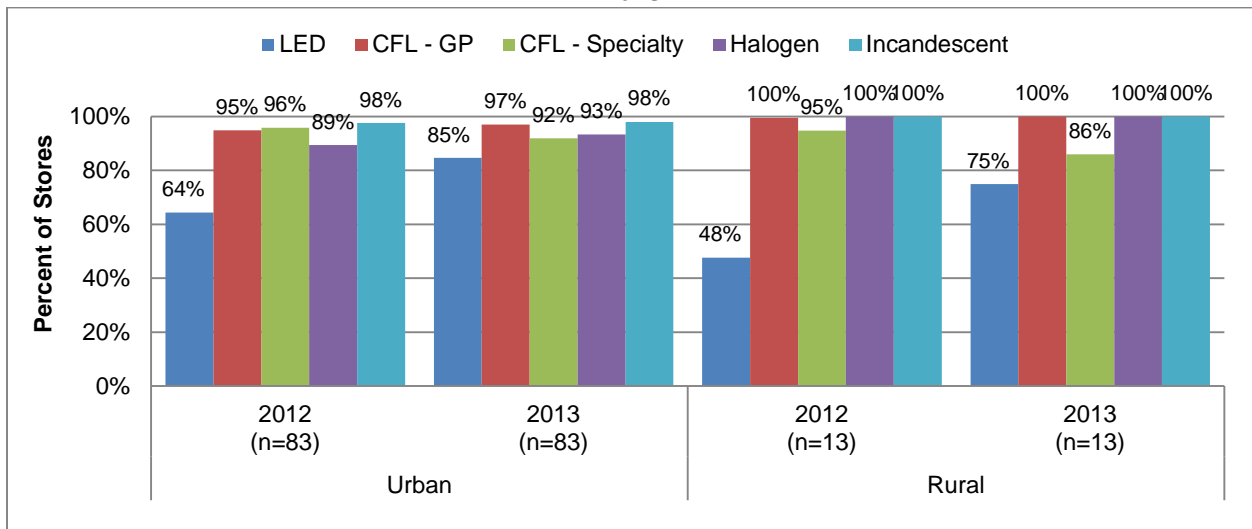
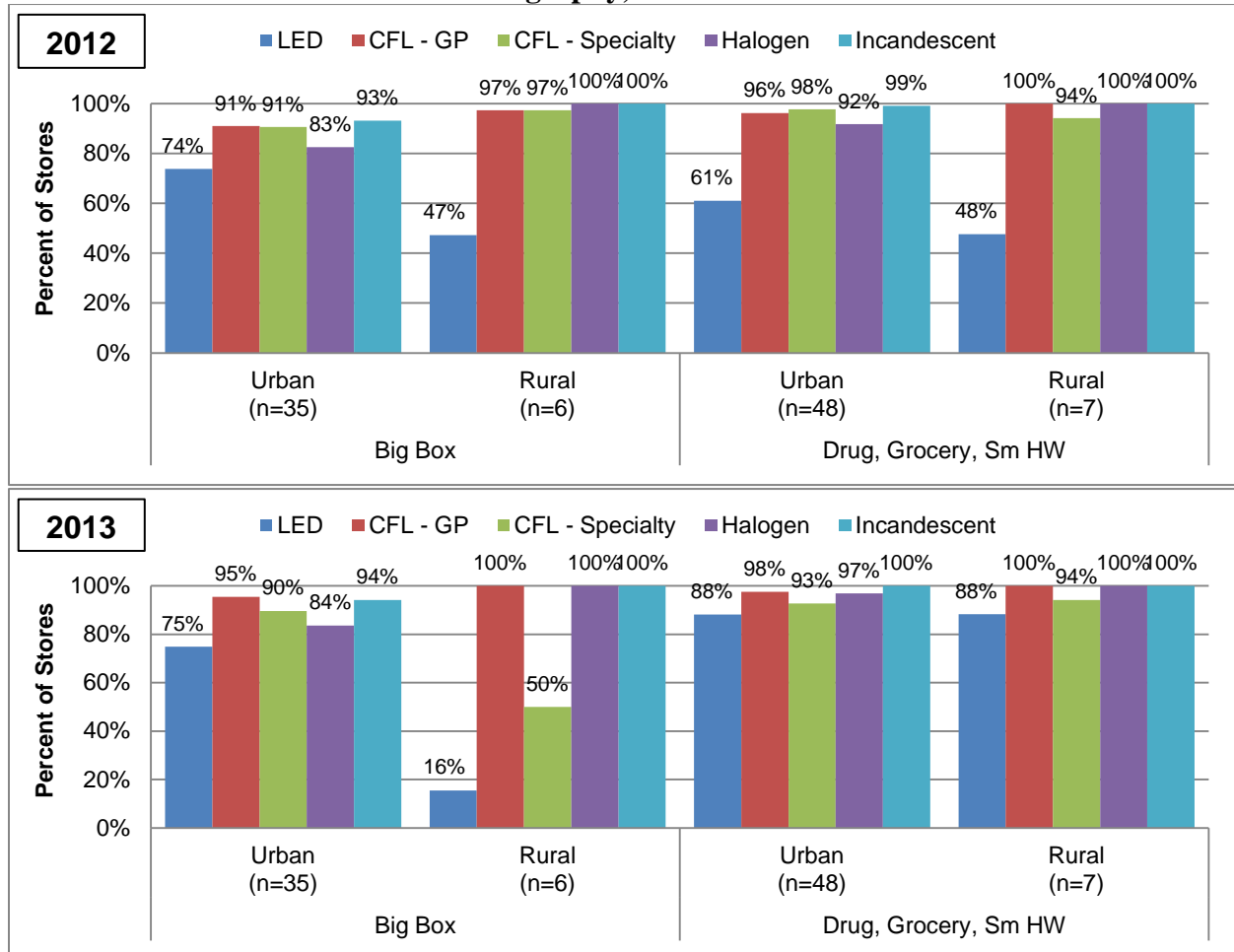


Figure 10 shows a complete breakdown of the data presented in the previous three figures, allowing for comparison by geography (urban versus rural), store category (big box versus non-big box) and the five lamp technologies in 2012 and 2013. The data suggest that:

- The proportion of rural big box stores stocking incandescent and halogen lamps did not change from 2012 to 2013, but there was an increase in the proportion of rural big box stores stocking general purpose CFLs from 97% in 2012 to 100% in 2013. The proportion of rural big box stores that stocked specialty CFLs decreased from 97% in 2012 to 50% in 2013, while the proportion that stocked LEDs also decreased from 47% in 2012 to 16% in 2013. The proportion of rural big box stores stocking specialty CFLs and LED lamps was notably lower when compared to urban big box stores in 2013 (75% of urban big box stores stocked LED lamps and 90% stocked specialty CFLs compared to 16% of rural big box stores that stocked LED lamps and 50% that stocked specialty CFLs).

- The percentage of urban big box stores stocking general purpose CFLs increased from 91% in 2012 to 95% in 2013, while the stocking of specialty CFLs decreased by 1% from 91% in 2012 to 90% in 2013. The percentage of urban big box stores stocking incandescent lamps increased by 1% from 93% in 2012 to 94% in 2013. The percentage of urban big box stores stocking halogen lamps also increased by 1% from 2012 to 2013 (83% to 84% of stores). The proportion of these stores stocking LED lamps increased 1% from 74% in 2012 to 75% in 2013.
- There was no change in the percentage of rural non-big box stores stocking general purpose CFLs, specialty CFLs, halogen, and incandescent between 2012 and 2013, while the percentage of rural non-big box stores stocking LED lamps increased by 40 percentage points from 48% in 2012 to 88% in 2013.
- Urban non- big box stores showed small increases in the proportion carrying general purpose CFLs and incandescent lamps between 2012 and 2013, while the percentage of urban non- big box stores that stocked specialty CFLs decreased from 98% in 2012 to 93% in 2013. The proportion stocking LED lamps, however, increased by more than 25 percentage points from 61% in 2012 to 88% in 2013. The proportion of urban non- big box stores carrying halogen lamps increased from 92% in 2012 to 97% in 2013.

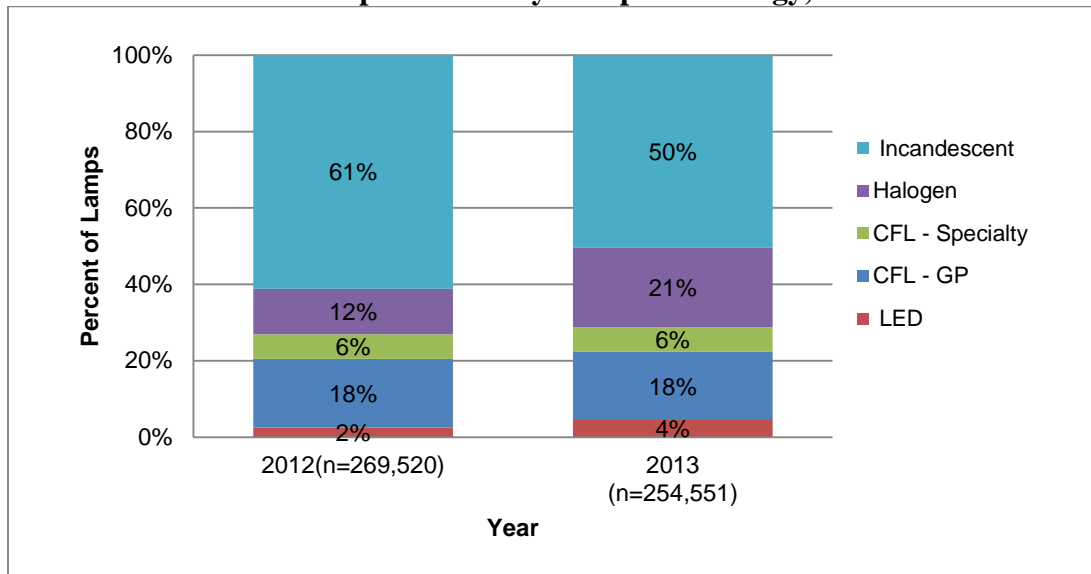
Figure 10
Percent of Northwest Stores Stocking Lamps by Lamp Technology, Store Category and Geography, 2012–2013



C.2.2. Percent of Lamps Stocked by Technology, Store Category, and Geography (2012 and 2013)

Figure 11 shows the number of lamps stocked across all retail stores by technology from 2012 to 2013. These data represent the percentage of total lamps (not lamp models or lamp packages) stocked across the stores. As shown, incandescent lamps still dominate store stock, but share of incandescent lamps stocked across all stores has decreased by from 61% of all lamps in 2012 to 50% of all lamps in 2013. The percentage of CFLs stocked has remained the same between 2012 and 2013 at 24% of total lamps stocked. The share of halogen lamps grew from 12% of all lamps in 2012 to 21% in 2013. The percentage of total lamps comprised by LED lamps also grew—from 2 to 4% of all lamps stocked between 2012 and 2013.

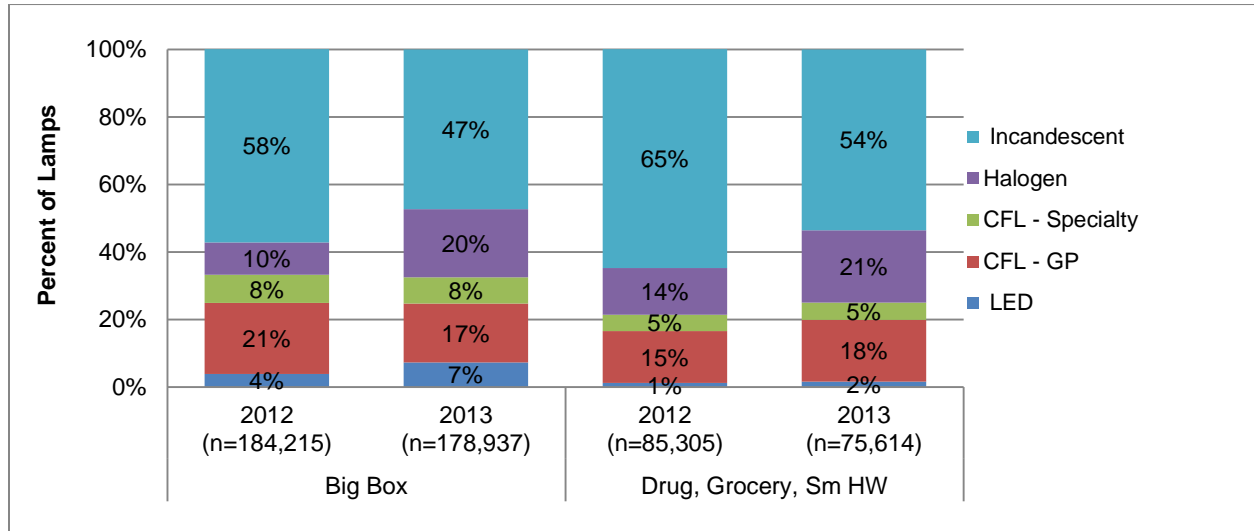
Figure 11
Percent of Lamps Stocked by Lamp Technology, 2012–2013



Note: Percentages may not total 100% due to rounding.

Figure 12 illustrates changes in the number of lamps stocked in 2012 and 2013 for big box and non- big box stores. The proportion of total lamps in big box stores comprised by general purpose CFLs decreased from 21% of all lamps in 2012 to 17% of total lamps in 2013, while the proportion of specialty CFLs in big box stores remained the same in both years. The share of incandescent lamps stocked in big box stores decreased from 58% in 2012 to 47% in 2013, while the share of halogen lamps doubled in big box stores during the same time frame. The proportion of LED lamps in big box stores nearly doubled from 4% in 2012 to 7% in 2013. There were some similar trends in in non- big box stores in 2012 and 2013. Specialty CFLs share remained the same in 2012 and 2013 non- big box stores at 5%. General purpose CFLs in non- big box stores increased from 15% of total lamps in 2012 to 18% in 2013 (in contrast with big box stores where general purpose CFLs lost lamp share between years). Although the share of LED lamps remained relatively small in non-big box stores across all lamps in 2013 at 2%, their share nearly doubled from 2012. As in big box stores, the share of incandescent lamps in non- big box stores declined between 2012 and 2013 (from 65% in 2012 of all lamps to 54% of all lamps in 2013). The share of halogen lamps in non- big box stores increased from 14% in 2012 to 21% in 2013. Together, incandescent and halogen lamps represented roughly two-thirds of all lamps stocked in big box stores in 2012 and 2013. The share of incandescent and halogen lamps in non- big box stores declined slightly between 2012 (79%) and 2013 (75%).

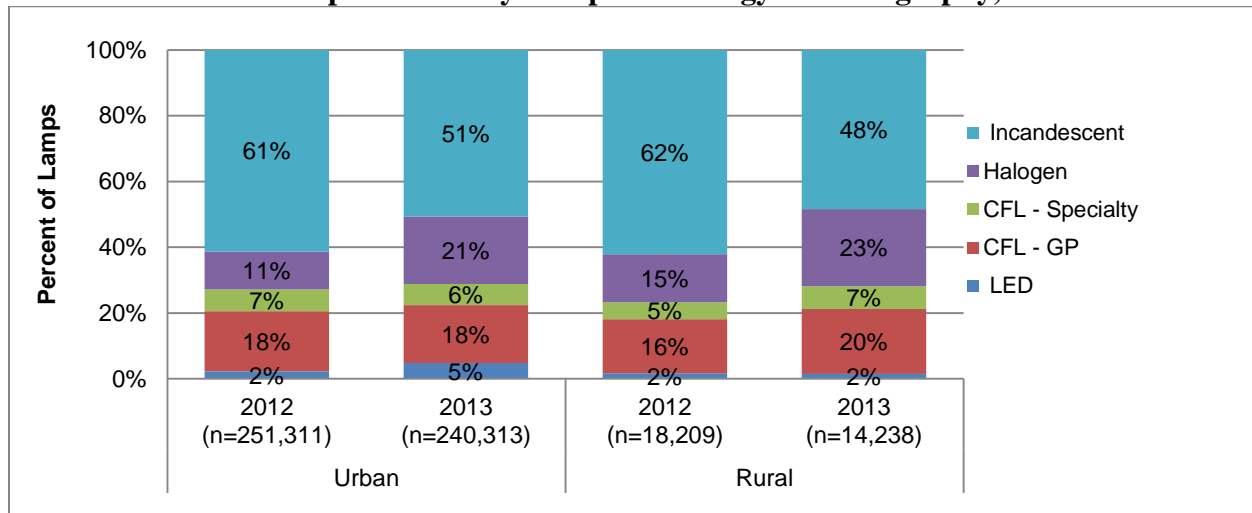
Figure 12
Percent of Lamps Stocked by Lamp Technology and Store Category, 2012–2013



Note: Percentages may not total 100% due to rounding.

Figure 13 demonstrates the differences in the share of total lamps comprised by urban and rural stores in 2012 and 2013. The proportion of CFLs remained about the same in urban stores in 2012 and 2013 (25% and 24% respectively), while the share of CFLs increased in rural stores from 21% in 2012 to 27% in 2013. In urban stores, the share of incandescent and halogen lamps together remained the same in 2012 and 2013 at just under three-quarters of all lamps stocked. In rural stores, the share of incandescent and halogen lamps combined dropped from 77% of all lamps in 2012 to 71% in 2013. In both urban and rural stores, the share of incandescent lamps decreased while the share of halogen lamps increased. The share of LED lamps more than doubled in urban stores from 2% in 2012 to 5% in 2013, while the proportion of LED lamps stocked in rural stores remained the same in both years at 2%.

Figure 13
Percent of Lamps Stocked by Lamp Technology and Geography, 2012–2013

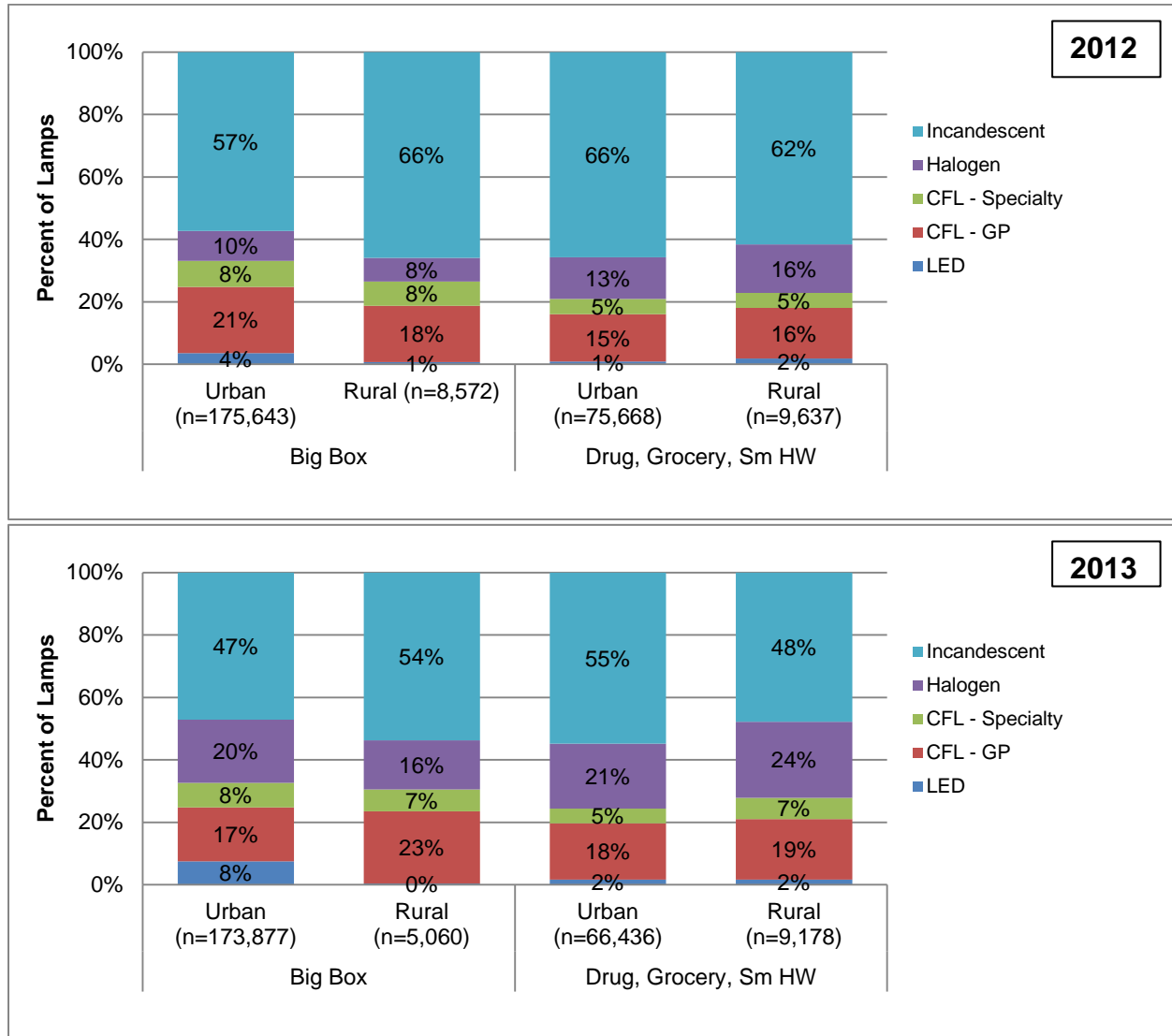


Note: Percentages may not total 100% due to rounding.

Figure 14 summarizes the percentage of lamps stocked by lamp technology, store category, geography in 2012 and 2013. Results suggest that:

- Rural big box and non- big box stores displayed the greatest changes between years.
- Rural big box stores saw a decline in the share of incandescent and halogen lamps (combined) from 74% of total lamps in 2012 to 70% in 2013; the share of incandescent and halogen lamps in rural non- big box stores dropped from 78% of total lamps in 2012 to 72% in 2013.
- Rural big box and non- big box stores experienced an increase in the proportion of CFLs stock (general purpose and specialty CFLs combined). The share of CFLs in rural big box stores increased from 26% of total lamps in 2012 to 30% of total lamps in 2013, while the proportion of CFLs in rural non- big box stores increased from 21% of total lamps in 2012 to 26% of total lamps in 2013.
- Urban big box stores had a decrease in the stock comprised by CFL lamps from 29% of all lamps in 2012 to 25% in 2013, while urban non- big box stores experienced an increase of 3 percentage points in the share of CFL lamps during the same time (from 20% of lamps in 2012 to 23% of lamps).
- LED lamp share remained relatively stable between 2012 and 2013, except for urban big box stores where stocking increased from 4% of total lamps to 8%.
- Incandescent lamp share declined, while halogen lamp share increased from 2012 to 2013 in urban and rural big box stores as well as urban and rural non- big box stores.

Figure 14
Percent of Lamps Stocked by Lamp Technology, Store Category and Geography, 2012–2013



Note: Percentages may not total 100% due to rounding.

C.2.3. Availability of EISA-Qualified Lamps

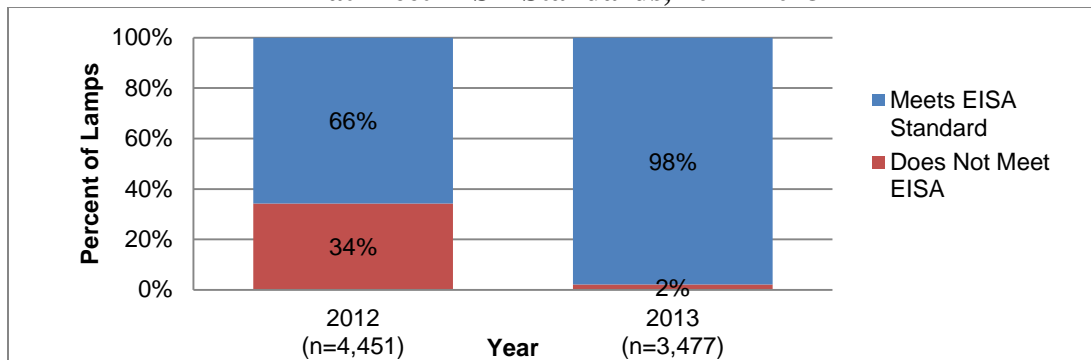
Analysts assessed the availability of EISA-qualifying lamps in each of the four lumen ranges identified in the legislation in terms of the percentage of total medium screw-base (MSB) incandescent lamps in each lumen bin that met or did not meet the relevant standard at the time of each store visit. Section 3.2.1 of the report provides more detail on the EISA legislation.

High Brightness MSB Incandescent A-Lamps (1490–2600 lumens)

The phase of EISA that affects high brightness (1490–2600 lumens) MSB incandescent A-lamps went into effect on January 1, 2012. As such, the regulation affecting these lamps had been in place for roughly two years at the time of the 2013 shelf survey visits. During the 2013 shelf survey visits, 77% of the region’s stores stocked EISA-qualifying MSB incandescent A-lamps in this lumen bin (compared to 61% of stores in 2012).

Figure 15 shows the percentage of high brightness (1490–2600 lumens) MSB incandescent A-lamps that met or did not meet the EISA standard in 2012 and 2013. As shown, the percentage of high brightness MSB incandescent A-lamps that met the standard increased from two-thirds of these lamps in 2012 (66%) to nearly all lamps in 2013 (98%). Also noteworthy is that the quantity of high brightness MSB incandescent A-lamps on retail shelves dropped by more than 20% between 2012 and 2013, suggesting a general phase-out of these types of lamps in Northwest retail stores in general.

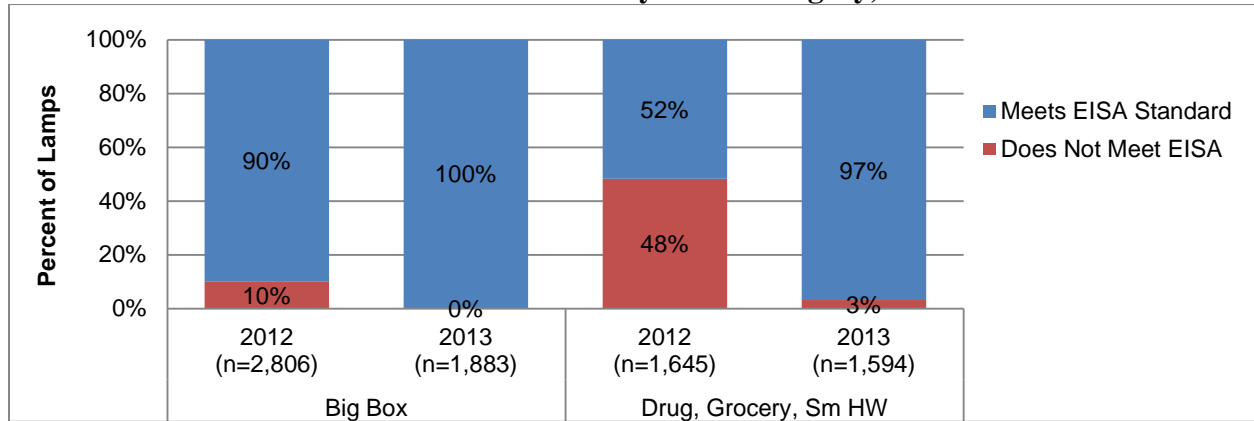
Figure 15
Percentage of High Brightness MSB Incandescent A-Lamps (1490–2600 lumens) That Meet EISA Standards, 2012–2013



Note: Percentages may not total 100% due to rounding.

When examined by store category (Figure 16), results suggest that the shift in stocking patterns to high brightness incandescent A-lamps that meet the standard between 2012 and 2013 was nearly complete for both big box and non-big box stores. Between 2012 and 2013, the percentage of high brightness MSB incandescent A-lamps that met the standard in big box stores increased from 90% to nearly 100%, while the percentage in non- big box stores increased from 52% to 97% in the same timeframe.

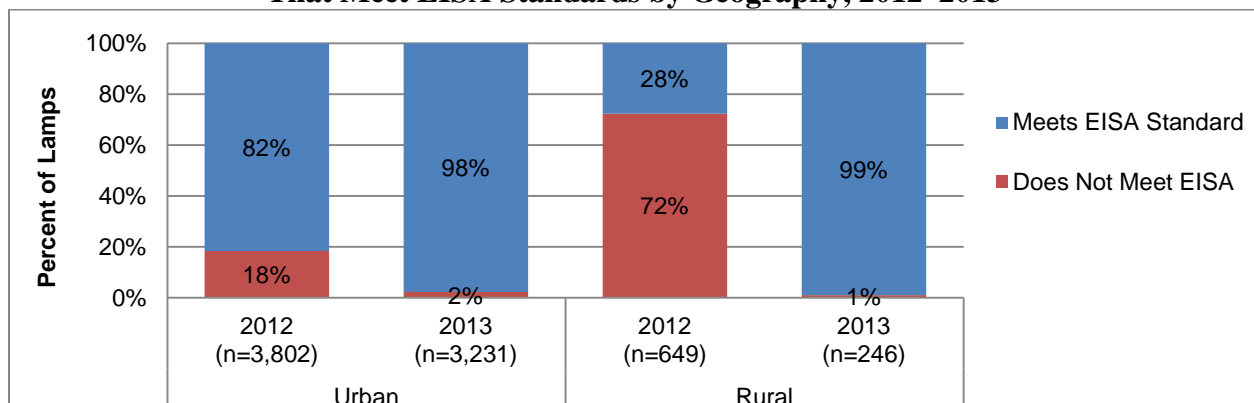
Figure 16
Percentage of High Brightness MSB Incandescent A-Lamps (1490–2600 lumens)
That Meet EISA Standards by Store Category, 2012–2013



Note: Percentages may not total 100% due to rounding.

Figure 17 suggests that nearly all high brightness MSB A-lamps in urban and rural stores throughout the Northwest met the EISA standard in 2013. The percentage of high brightness MSB incandescent A-lamps that met the standard in urban stores increased from 82% in 2012 to 98% in 2013, while the percentage of high brightness MSB incandescent A-lamps stocked in rural stores increased more dramatically from 28% in 2012 to 99% in 2013.

Figure 17
Percentage of High Brightness MSB Incandescent A-Lamps (1490–2600 lumens)
That Meet EISA Standards by Geography, 2012–2013

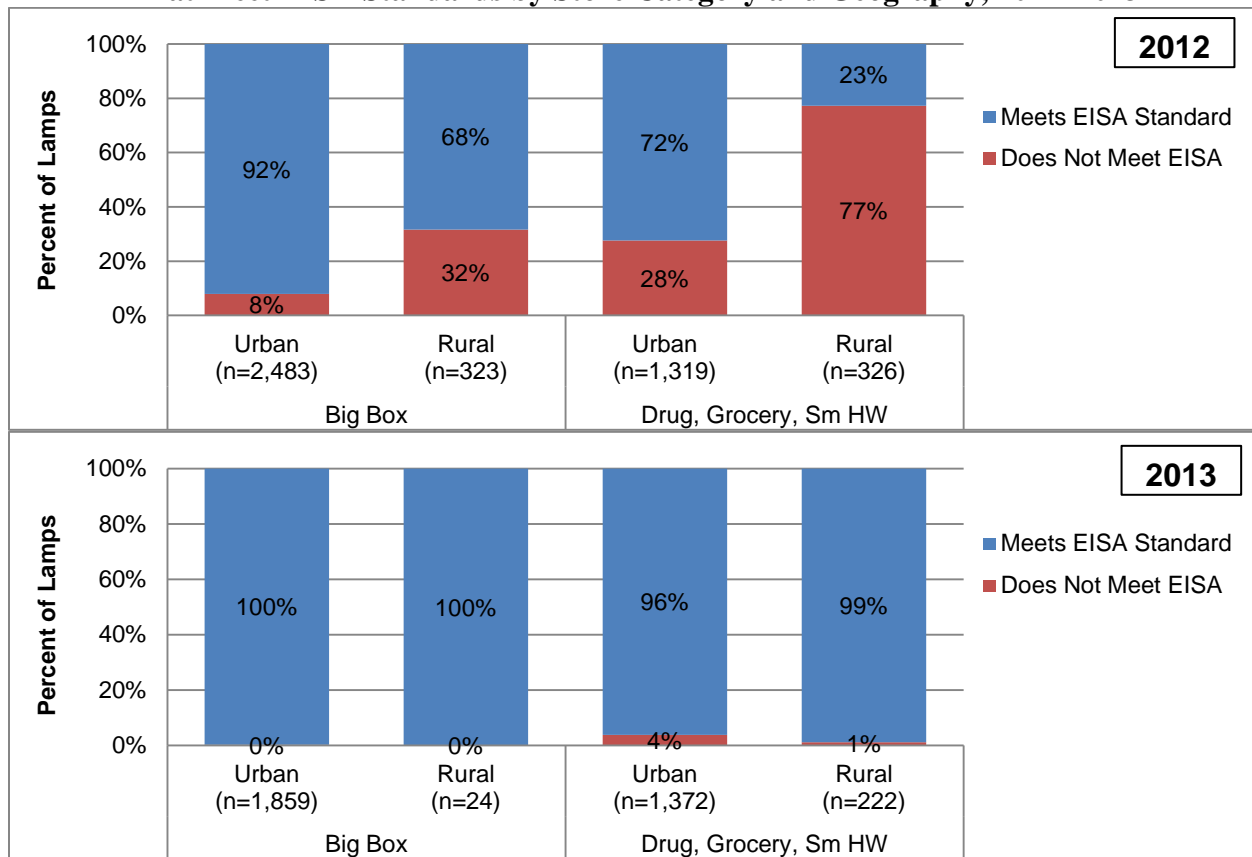


Note: Percentages may not total 100% due to rounding.

Figure 18 below shows the percentage of high brightness MSB incandescent A-lamps stocked in Northwest retail stores in 2012 and 2013 that met or did not meet the relevant EISA standard by store category and geographic sector (urban versus rural). Results from 2013 were similar across store categories and geographies, with all store categories and geographic sectors stocking a high percentage of high brightness MSB incandescent A-lamps that met the EISA standard.

However, results suggest some dramatic shifts between 2012 and 2013, particularly for rural stores. Notably, only 23% of high brightness MSB A-lamps met the EISA standard in rural non-big box stores in 2013, but nearly all (99%) of these stores stocked high brightness MSB A-lamps that met the EISA standard in 2013. Moreover, nearly 100% of high brightness MSB incandescent A-lamps in rural big box stores met the EISA standard in 2013, which is more than 30 percentage points higher than the percentage of lamps from that same category that met the standard in 2012. The percentage of lamps that met the standard was lowest in urban non-big box stores with 96% of high brightness MSB incandescent A-lamps stocked in those stores meeting the EISA standard at the time of the 2013 shelf surveys.

Figure 18
Percentage of High Brightness MSB Incandescent A-Lamps (1490–2600 lumens)
That Meet EISA Standards by Store Category and Geography, 2012–2013



Note: Percentages may not total 100% due to rounding.

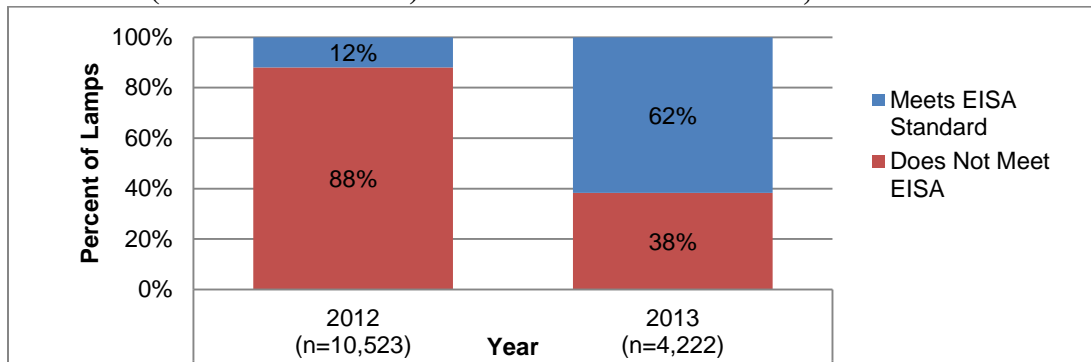
Medium High Brightness MSB Incandescent A-Lamps (1050–1489 lumens)

Figure 19 below shows the percentage of medium high brightness (1050–1489 lumens) MSB incandescent A-lamps that met the EISA standard that went into effect on January 1, 2013 and

those that did not. During the 2013 shelf survey visits, 66% of the region’s stores stocked EISA-qualifying MSB incandescent A-lamps in this lumen bin (compared to 39% in 2012).

As shown in the figure, 62% of medium high brightness MSB incandescent A-lamps in Northwest retail stores met the EISA standard for this lumen category at the time of the 2013 shelf surveys (up from 12% in 2012). This is lower than the percentage of EISA-qualifying high brightness (1490–2600 lumens) MSB incandescent A-lamps in stock in Northwest retail stores at the time of the 2013 shelf surveys (late 2013/early 2014) (98%; see Figure 15 above). This lower percentage can be explained by the timing of the EISA standard, which went into effect for high brightness MSB incandescent A-lamps in January 2012 and January 2013 for medium high brightness MSB A-lamps.

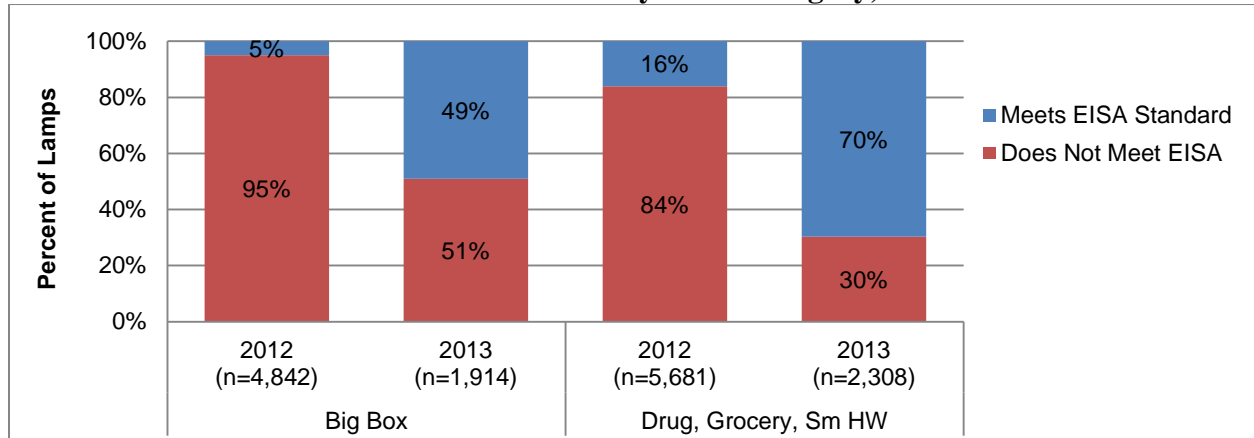
Figure 19
Percentage of Medium High Brightness MSB Incandescent A-Lamps
(1050–1489 lumens) That Meet EISA Standards, 2012–2013



Note: Percentages may not total 100% due to rounding.

When examined by store category, results suggest that the greatest proportion of lamps that met the EISA standard in 2013 for medium high brightness MSB incandescent A-lamps was in non-big box stores (70%) compared to those in big box stores (49%; see Figure 20). In 2012, the percent of lamps meeting the standard for medium high brightness MSB incandescent A-lamps was only 5% in big box stores and 16% in non-big box stores.

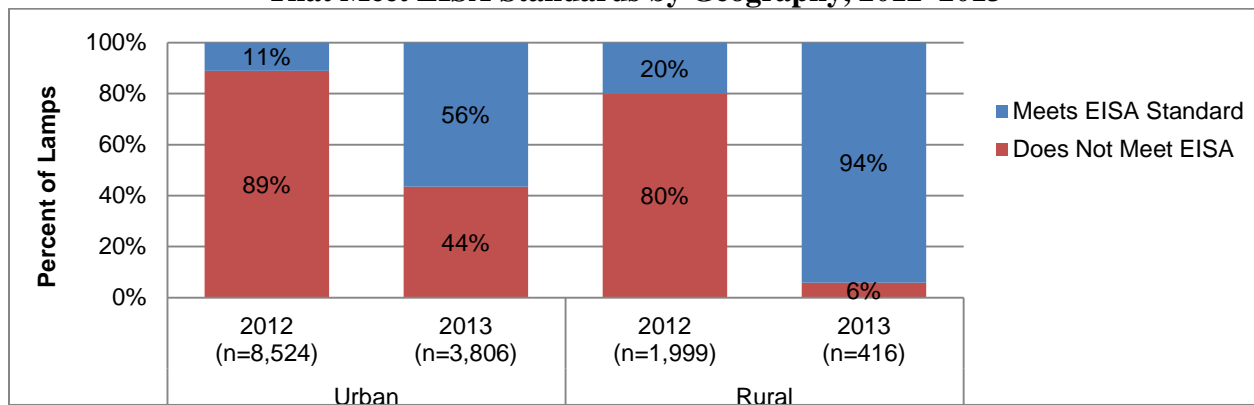
Figure 20
Percentage of Medium High Brightness MSB Incandescent A-Lamps (1050–1489 lumens)
That Meet EISA Standards by Store Category, 2012–2013



Note: Percentages may not total 100% due to rounding.

By geographic sector (Figure 21), results for medium high brightness MSB incandescent A-lamps suggest that a very high percentage of lamps stocked in rural stores met the standard (94%) compared to more than half of lamps stocked in urban stores (56%). A much smaller percentage of these lamps met the standard in 2012 (11% of lamps in urban stores and 20% in rural stores).

Figure 21
Percentage of Medium High Brightness MSB Incandescent A-Lamps (1050–1489 lumens)
That Meet EISA Standards by Geography, 2012–2013

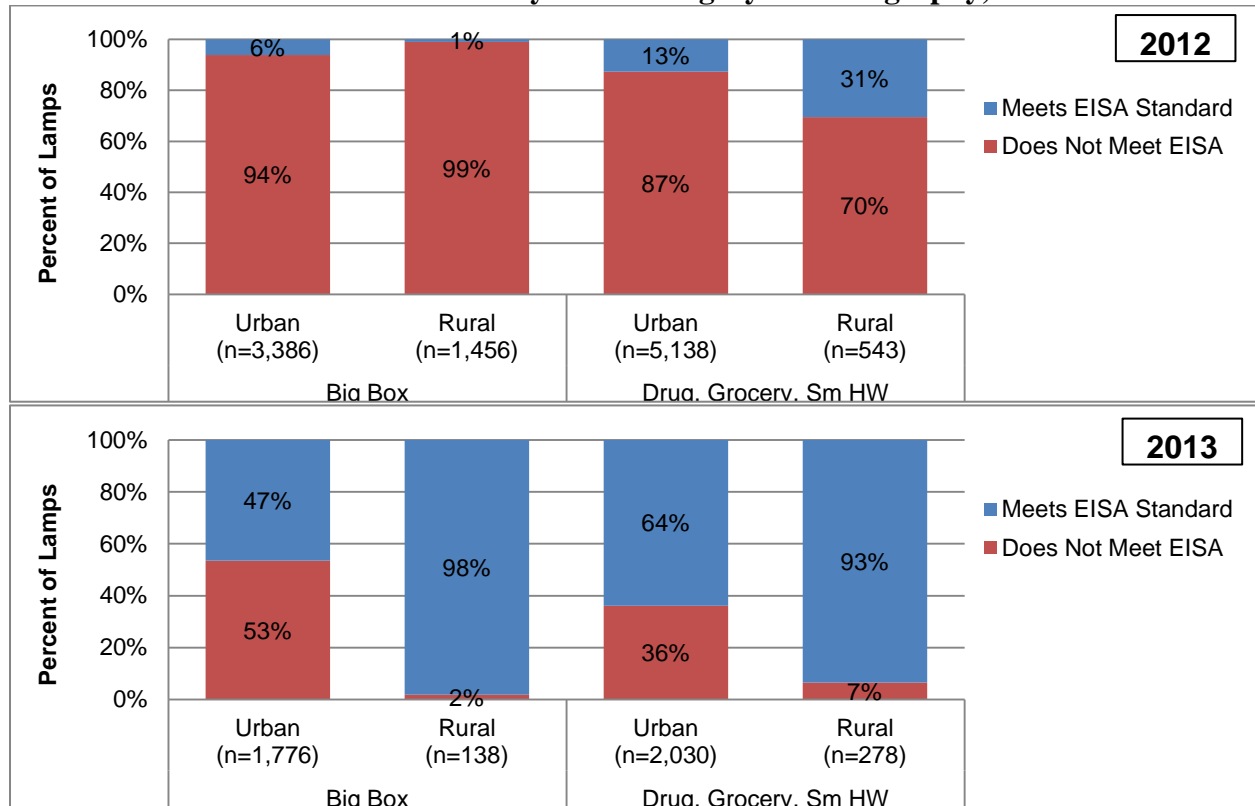


Note: Percentages may not total 100% due to rounding.

Figure 22 presents results for medium high brightness MSB incandescent A-lamps by store category and geographic sector (urban versus rural) for Northwest stores in 2012 and 2013. As shown, more than 98% of the relevant lamps stocked in rural big box stores and 93% in rural non-big box stores met the standard in 2013, compared to less than half (47%) in urban big box

stores and 64% in urban non-big box stores. In 2012, only 1% of medium high brightness MSB incandescent A-lamps stocked in rural big box stores met the EISA standard.

Figure 22
Percentage of Medium High Brightness MSB Incandescent A-Lamps (1050–1489 lumens) That Meet EISA Standards by Store Category and Geography, 2012–2013



Note: Percentages may not total 100% due to rounding.

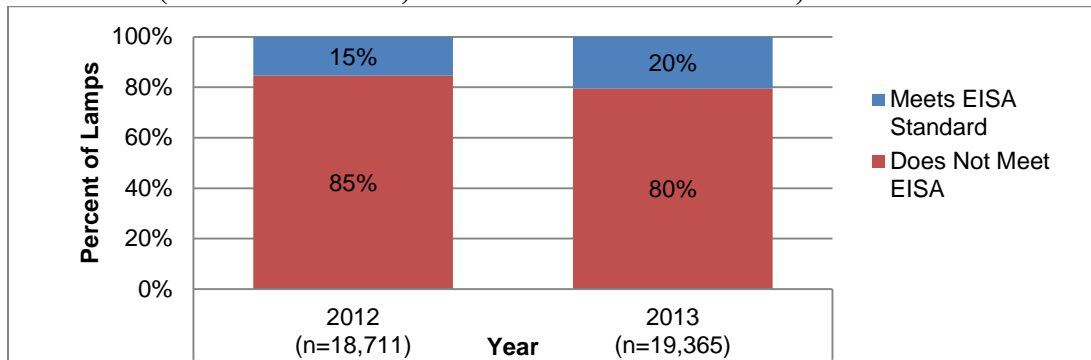
Medium Low Brightness MSB Incandescent A-lamps (750–1049 lumens)

At the time of the 2013 shelf survey visits (in late 2013/early 2014), 62% of the region’s stores stocked EISA-qualifying MSB incandescent A-lamps in the medium low brightness category (750–1049 lumens; 54% of stores stocked EISA-qualifying A-lamps in this lumen bin in 2012). The standard affecting these lamps went into effect on January 1, 2014. Field researchers conducted the 2013 shelf surveys in late 2013/early 2014, so the standard was still coming into effect as researchers were completing the shelf surveys.

Figure 23 below shows the percentage of MSB incandescent A-lamps in this lumen range that met the EISA standard affecting these lamps and those that did not. As shown, the percentage of lamps that met the standard increased by 5 percentage points between 2012 and 2013 (from 15% to 20%). More detailed results suggest minimal differences by store category and geographic sector (urban versus rural) in the Northwest. These results suggest that retail stores have not yet

fully ramped up to stock a large proportion of lamps that meet the EISA standard that went into effect on January 1, 2014 impacting medium low brightness MSB incandescent lamps.

Figure 23
Percentage of Medium Low Brightness MSB Incandescent A-Lamps (750–1049 lumens) That Meet EISA Standards, 2012–2013



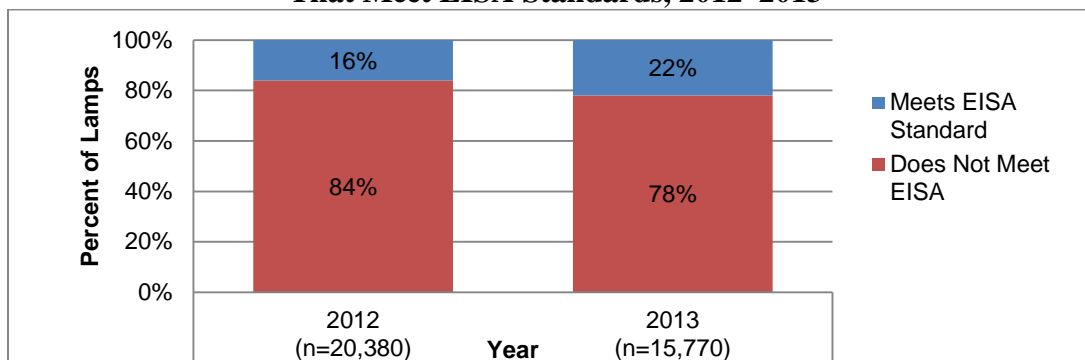
Note: Percentages may not total 100% due to rounding.

Low Brightness MSB Incandescent A-lamps (310–749 lumens)

When field staff conducted the 2013 shelf surveys, 69% of the region’s stores stocked EISA-qualifying MSB incandescent A-lamps in the low brightness category (310–749 lumens; 54% of stores stocked EISA-qualifying A-lamps in this lumen bin in 2012). The standard affecting these lamps went into effect on January 1, 2014. Field researchers conducted the 2013 shelf surveys in late 2013/early 2014, so the standard was still coming into effect as researchers were completing the shelf surveys.

Figure 24 below shows the percentage of low brightness MSB incandescent A-lamps that met the EISA standard and those that did not. As shown, results are nearly the same at the regional level for low brightness incandescent A-lamps as those shown for medium low brightness incandescent A-lamps above (see Figure 23); the percentage of low brightness lamps meeting the standard increased from 16% in 2012 to 22% in 2013. More detailed results suggest minimal differences by store category and geographic sector (urban versus rural) in the Northwest. Again, these results suggest that retail stores have not yet fully ramped up to stock a large proportion of lamps that meet the EISA standard that went into effect on January 1, 2014 impacting low brightness MSB incandescent lamps.

Figure 24
Percentage of Low Brightness MSB Incandescent A-Lamps (310–749 lumens)
That Meet EISA Standards, 2012–2013



Note: Percentages may not total 100% due to rounding.

C.3 Lamp Diversity

The sections below discuss diversity in terms of the average number of general purpose and specialty CFL models available by store category over time (2006 through 2013). Within the 2012 and 2013 results, the report also presents data on the average number of lamp models by technology (general purpose CFLs, specialty CFLs, incandescent lamps, and LED lamps) and geography (urban versus rural stores).

It should be noted that we have modified our methodology for determining what constitutes a unique model number in light of the fact that shelf survey data have been collected electronically on tablet computers since the 2012–2013 shelf survey research phase (i.e., two consecutive study periods). Field researchers now use a barcode scanner to scan each unique package that they encounter in a given store. The unique barcode is then mapped to a reference database that includes previously encountered shelf survey data, including barcodes, model number, lamp technology type, base type style, wattage, lumens, etc. If a scanned barcode matches a barcode in the reference database, key lamp specifications auto-populate into the tablet data collection tool. The field researchers must verify these lamp specifications (including the model number) to ensure that all the information is correct.

Prior to the 2012–2013 shelf survey phase, data were recorded on paper forms and later entered into a database. During these earlier phases of shelf survey research, model numbers were recorded, but barcodes were not. Establishing what constituted a unique model number proved to be a difficult challenge in analyzing shelf survey data. Field researchers sometimes recorded model number information in different ways, depending on how model number information was presented on different parts of a given lamp package. For instance, one side of a package might have a model number listed as BPCEC/CFL/RP/2PK, and another side of a package might

present the model number in an abbreviated form such as BPCEC/CFL/RP or simply BPCEC/CFL. To further complicate matters, some manufacturers list numeric codes for unique lamp models, which are not barcodes. Moreover, there were points during the data collection process where human error could occur. For instance, a field researcher might transpose letters or numbers in collecting data on paper or an analyst doing data entry might misinterpret the handwriting of a field researcher and record a model number incorrectly. We have had processes in place to correct these errors, but even if human errors could be fully corrected, there might still be variation for a given model number, depending on a given manufacturer's package labeling practices. We believe that this methodology for determining unique lamp models has resulted in a small over-representation in the actual number of unique lamp models encountered in the field.

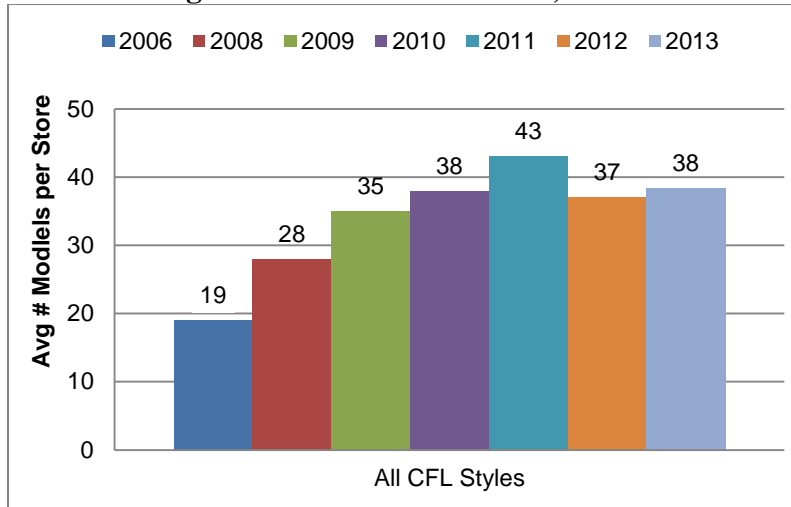
Using barcodes instead of model numbers to determine the number of unique lamp models is a more accurate method for determining actual lamp model diversity. Since barcodes are scanned into the tablet data collections instrument, the opportunity for human error is virtually eliminated. Furthermore, with electronic data collection, data entry takes place in the field on site by the field researcher rather than several weeks later by a different analyst. Barcodes vary predictably by manufacturer, consist of a fixed set of numeric digits, and are therefore much easier to analyze.

This report will be the first to use barcodes for determining lamp model diversity, since this is the first time that there have been two consecutive years of electronic data collection. The figures below will rely on barcodes to determine lamp model diversity for the 2012 and 2013 shelf survey phases. For figures that contain model number data from the years prior to 2012, model numbers will continue to be used due to the absence of barcode information.

C.3.1 Average Number of CFL Models Over Time

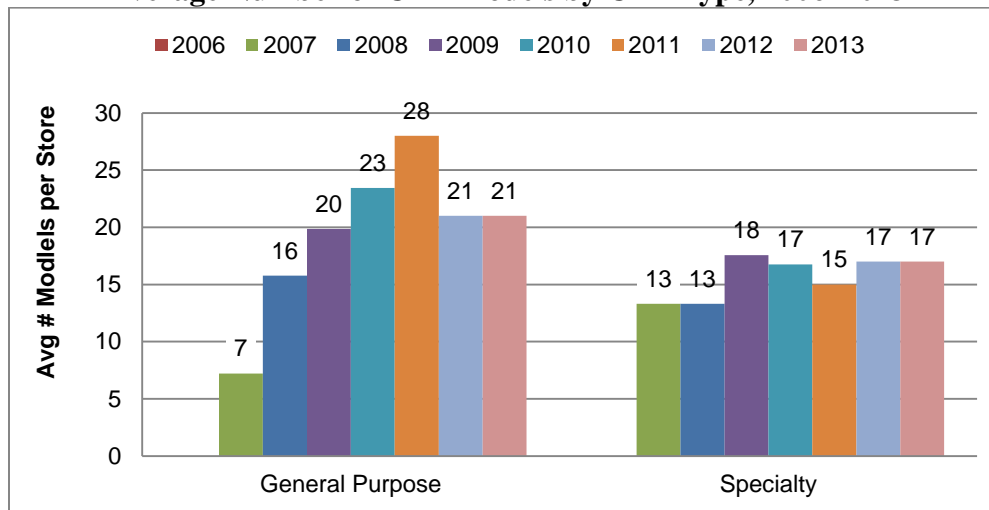
Figure 25 shows the average number of CFL models stocked per store across all CFL types and stores in 2006, 2008, 2009, 2010, 2011, 2012 and 2013. As shown, the average number of models per store had increased over time to 43 models per store in 2011 before decreasing for the first time in 2012 to approximately 37 models per store. CFL model diversity rose slightly in 2013 to 38 models per store.

Figure 25
Average Number of CFL Models, 2006–2013



The results shown in Figure 26 divide CFLs into general purpose lamps and specialty lamps. Results suggest no growth in the average number of general purpose and specialty CFLs with an average of 21 models and 17 models per store respectively between 2012 and 2013. Furthermore, whereas model diversity increased for general purpose CFLs from 2006 to 2011 before declining in 2012, the same pattern did not emerge for specialty CFLs. Model diversity peaked in 2009 for specialty CFLs at 18 models per store and then declined in 2010 and 2011. Diversity for specialty CFLs increased again in 2012 and 2013 to 17 models per store in both years.

Figure 26
Average Number of CFL Models by CFL Type, 2006–2013



When examined by store category (Figure 27), results suggest that the drop in the overall number of CFL models is largely driven by big box stores. The average number of CFL models stocked per store in big box stores decreased dramatically from 64 models per store in 2011 to 42 models per store in 2012, and then decreased again to 39 models per store in 2013. These results represent the lowest CFL model diversity among big box stores since 2008. While big box stores still have slightly higher CFL model diversity than non- big box stores, the average number of CFL models per store in non-big box stores continued its slow increase over time. Between 2012 and 2013, the average number of CFL models per non- big box store increased from 36 to 38 models.

Figure 27
Average Number of CFL Models by Store Category, 2006–2013

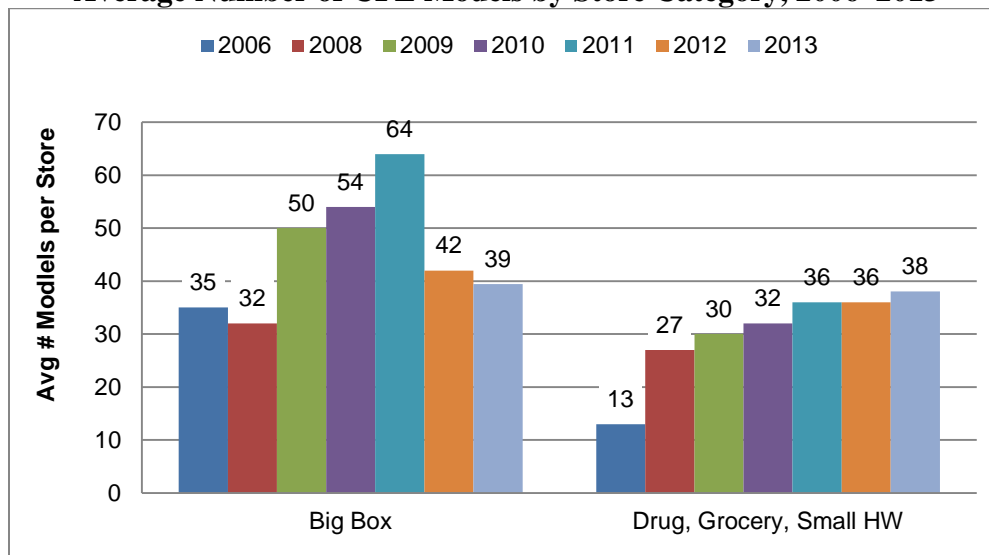
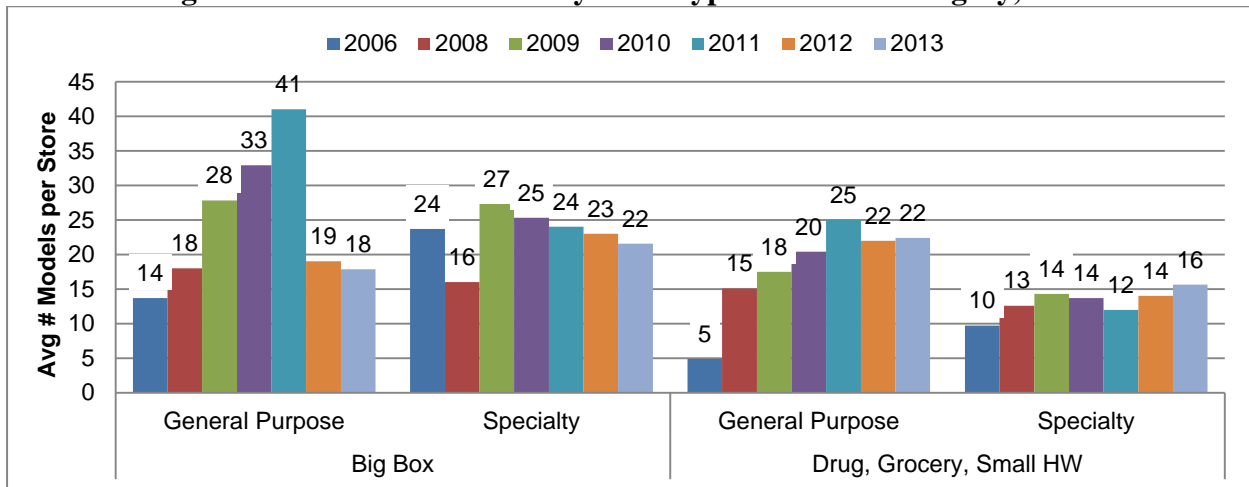


Figure 28 shows the average number of general purpose and specialty CFL models within each store category from 2006 through 2013. While the average number of general purpose CFL models stocked in big box stores increased by a few models per year between 2006 and 2011, this trend ended in 2012 with a sharp decrease from 41 to 19 general purpose CFLs per big box store in 2012 and then declined again by an average of one model per store in 2013 to 18. The average number of specialty CFL models stocked per big box store has dropped annually since 2009 down to 23 models per store in 2012, and then down to 22 models per store in 2013.

The average number of general purpose CFL models stocked per non-big box store stayed the same from 2012 to 2013 at 22. The average number of specialty CFLs among Northwest non-big box store continued its rise 12 models per store in 2011, to 14 models per store in 2012, and 16 models per store in 2013.

Figure 28
Average Number of CFL Models by CFL Type and Store Category, 2006–2013



C.3.2 Average Number of Lamp Models per Store by Technology, Store Category, and Geography (2012 and 2013)

In recent years, the Northwest lighting retailer shelf surveys gathered data not only on the average number of CFL models per store, but also on the average number of incandescent, halogen, and LED lamp models per store. As shown in Figure 29, the average number of lamp models per store stayed constant between 2012 and 2013 for general purpose and specialty CFLs as well as LED lamps. There was a decline in the number of incandescent lamp models per store from 65 models per store in 2012 to 59 models per store in 2013. The average number of halogen lamp models per store, increased from 20 in 2012 to 27 in 2013.

Figure 29
Average Number of Lamp Models by Lamp Technology, 2012–2013

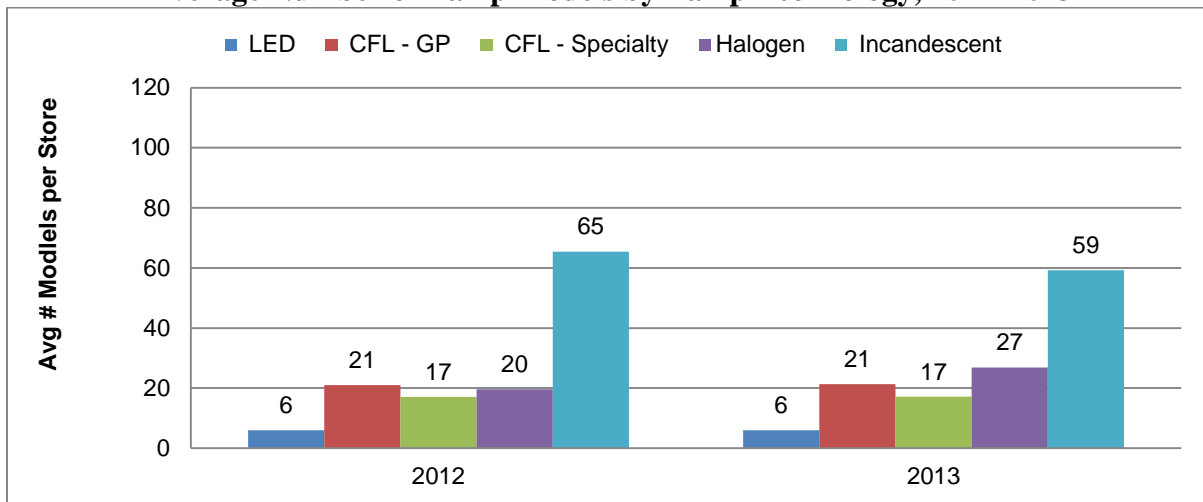


Figure 30 provides further detail on the average number of lamp models per store in 2012 and 2013 by store category. The average number of lamp models per store slightly declined among general purpose and specialty CFLs as well as LED lamp technologies in big box stores from 2012 to 2013. There was a small increase in the average number of specialty CFLs and LED lamp models per non- big box store from 2012 to 2013. For general purpose CFLs in non- big box stores, the average number of models per store remained the same at 22. As seen in Figure 29 above, the average number of incandescent lamp models per store declined from 2012 to 2013 and the average number of halogen lamp models increased during the same timeframe for both big box and non- big box stores. Big box stores experience the greatest decline in incandescent lamp model diversity (from 70 models per store in 2012 to 60 in 2013) and also had the largest increase in halogen lamp model diversity (from 17 models per store in 2012 to 27 in 2013).

Figure 30
Average Number of Lamp Models by Lamp Technology and Store Category, 2012–2013

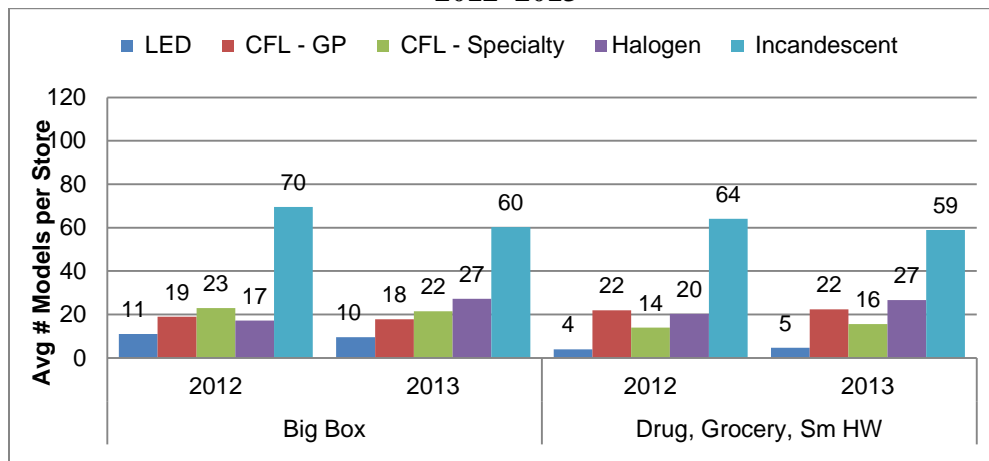


Figure 31 shows the average number of lamp models per store by technology and geography for 2012 and 2013. As shown, in urban stores, the average number of lamp models per store fell slightly for specialty CFLs from an average of 17 models per store in 2012 to an average of 16 models per store in 2013. The average number of LED lamp models slightly increased from an average of 5 LED lamp models per urban store in 2012 to 6 LED lamp models per store in 2013. Incandescent lamp model diversity decreased in urban stores from 2012 to 2013 from an average of 64 models per store to 59 models per store. Halogen lamp model diversity increased during the same period from 18 lamp models per urban store to 27.

While rural stores experienced a decline in general purpose CFL lamp model diversity, lamp model diversity for all CFLs (general purpose and specialty CFLs combined) increased from 2012 to 2013 from an average of 44 models per store to 47. Rural stores had an average of 11 more CFL lamp models per store than urban stores. Interestingly, the average number of LED

lamp models per rural store declined from 2012 to 2013, down 4 models per store, on average. The average number of specialty CFL model numbers in rural stores increased from 17 in 2012 to 21 in 2013. As with urban stores, rural stores saw a decline in incandescent lamp model diversity and a rise in halogen lamp model diversity between 2012 and 2013. However, considering incandescent and halogen lamp models together, lamp model diversity increased in urban stores from 82 incandescent/halogen lamp models in 2012 to 86 incandescent/halogen lamp models per store in 2013. Rural stores experienced a decline in this combined category from 100 incandescent/halogen lamps per store in 2012 to 92 in 2013.

Figure 31
Average Number of Lamp Models by Lamp Technology and Geography, 2012–2013

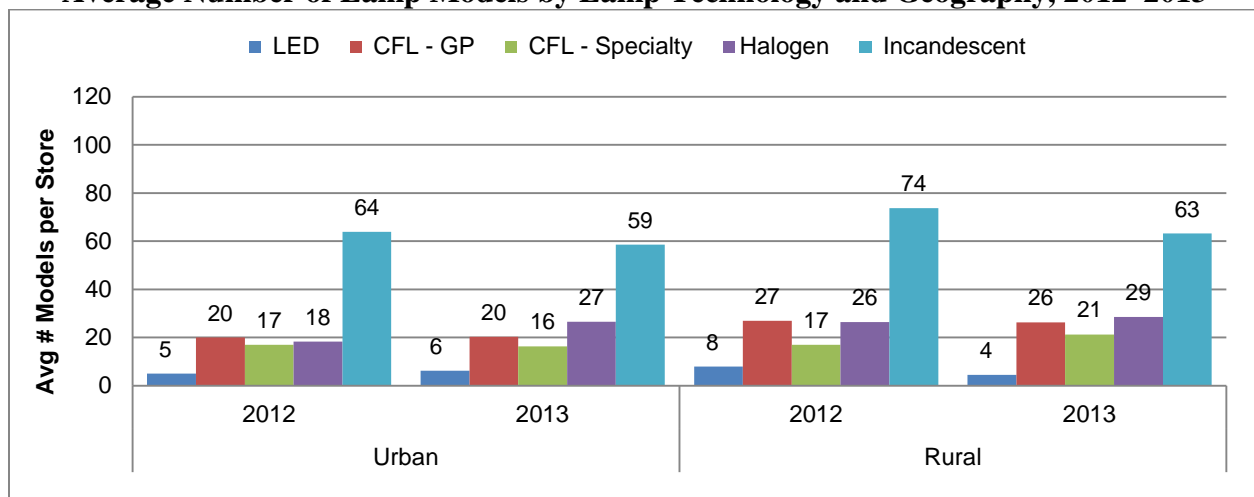
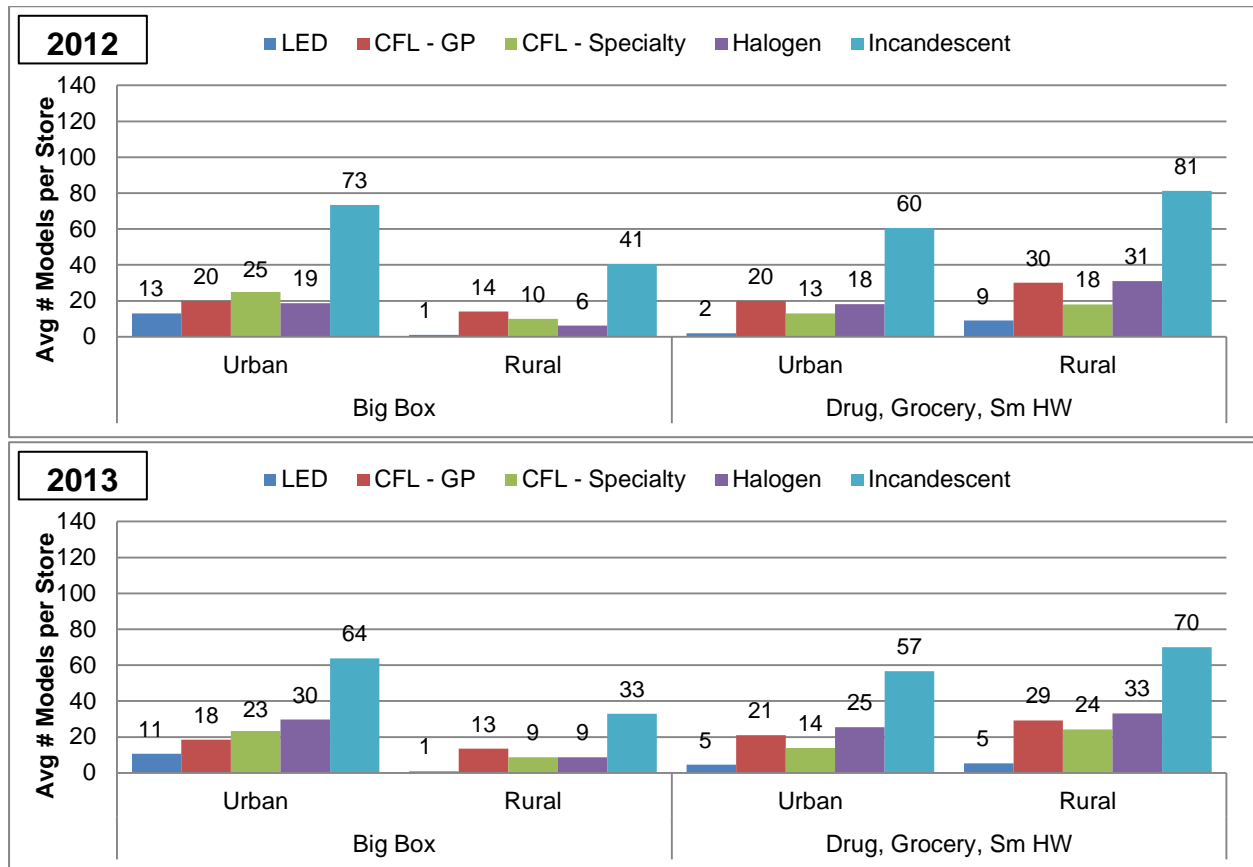


Figure 32 breaks out the average number of lamp models by technology, store category, and geography for both 2012 and 2013. Model number diversity for CFLs (general purpose and specialty CFL models combined) decreased from 2012 to 2013 in urban and rural big box stores, but increased in urban and rural non- big box stores. The average number of incandescent lamp models per store declined, while the average number of halogen lamp models per store increased in all four store/geography categories from 2012 to 2013 (i.e., urban and rural big box stores and urban and rural non- big box stores). When considering incandescent and halogen lamp models together, the trend is mixed in terms of lamp model diversity. Urban big box and non- big box stores experienced increases in incandescent/halogen lamp model diversity from 2012 to 2013; urban big box stores had an increase in 2 incandescent/halogen lamp models per store and urban non- big box stores had an increase of 4 lamp models per store. Rural big box and non- big box stores, on the other hand, experienced declines in incandescent/halogen lamp model diversity from 2012 to 2013; rural big box stores had 5 fewer incandescent/halogen lamp models per store and rural non- big box stores had 9 fewer models per store. The trend was also mixed for LED lamp model diversity. In urban non- big box stores, the number of LED lamp models per store more than doubled between 2012 and 2013 (2 models per store in 2012 to 5 in 2013), while the average number of LED lamp models per rural non-big box store nearly declined by half (9 in 2012 to 5 in 2013). Urban big box stores saw a small decline in the number of LED lamp models

per store (from 13 in 2012 to 11 in 2013), while rural big box stores had an average of 1 LED lamp model per store in both years.

Figure 32
Average Number of Lamp Models by Lamp Technology, Store Category and Geography, 2012–2013



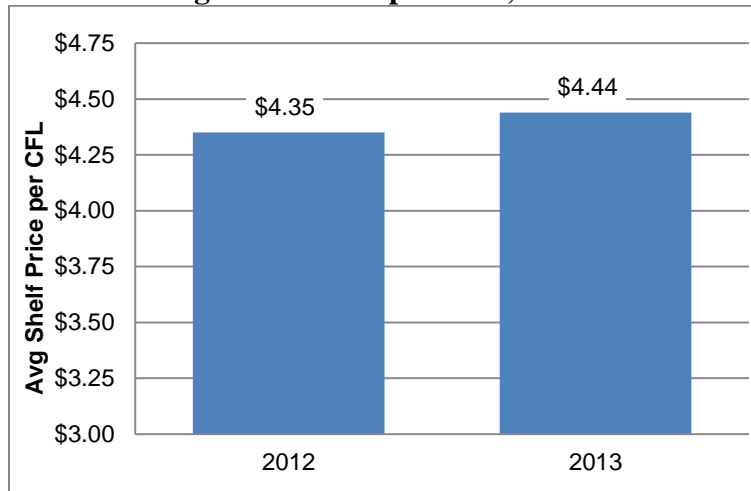
C.4 Average CFL Shelf Price

Field staff collected detailed pricing information for every lamp observed on retail store shelves, including price (before and after utility program discounts or other discounts, when applicable) and number of lamps per package. To determine the average price per CFL, analysts calculated the price per CFL for each lamp model observed in each store and then multiplied the price by the total number of lamps observed for each CFL model. Analysts then applied sample expansion weights to the results for each store in which field staff observed a given CFL model. The summed prices for each CFL record were then aggregated together by CFL type (general purpose, specialty, and all CFLs) and split into different store categories (i.e., big box, non-big box, and overall) and geography (urban and rural) and divided by the total weighted lamp count in each of the three CFL categories. The results of these calculations are the weighted average shelf price per CFL for retail stores in the Northwest by store category and CFL type.

C.4.1 Average Shelf Price per Lamp by CFL Type and Store Category, 2012–2013

This section provides details on the average shelf price for CFLs by CFL type and store category. As shown in Figure 33 below, the average shelf price per CFL (general purpose and specialty CFLs combined) increased by 2% (\$0.09 increase) between 2012 and 2013 overall.

Figure 33
Average Shelf Price per CFL, 2012–2013



When CFL prices paid are further examined by type (general purpose versus specialty; Figure 34), there was a 5% increase in the average shelf price for general purpose CFLs, overall, between 2012 and 2013 (an increase of \$0.15 per lamp), and a 2% decline in the average shelf price for specialty CFLs (a decrease of \$0.12 per lamp).

Figure 34
Average Shelf Price per CFL by CFL Type, 2012–2013

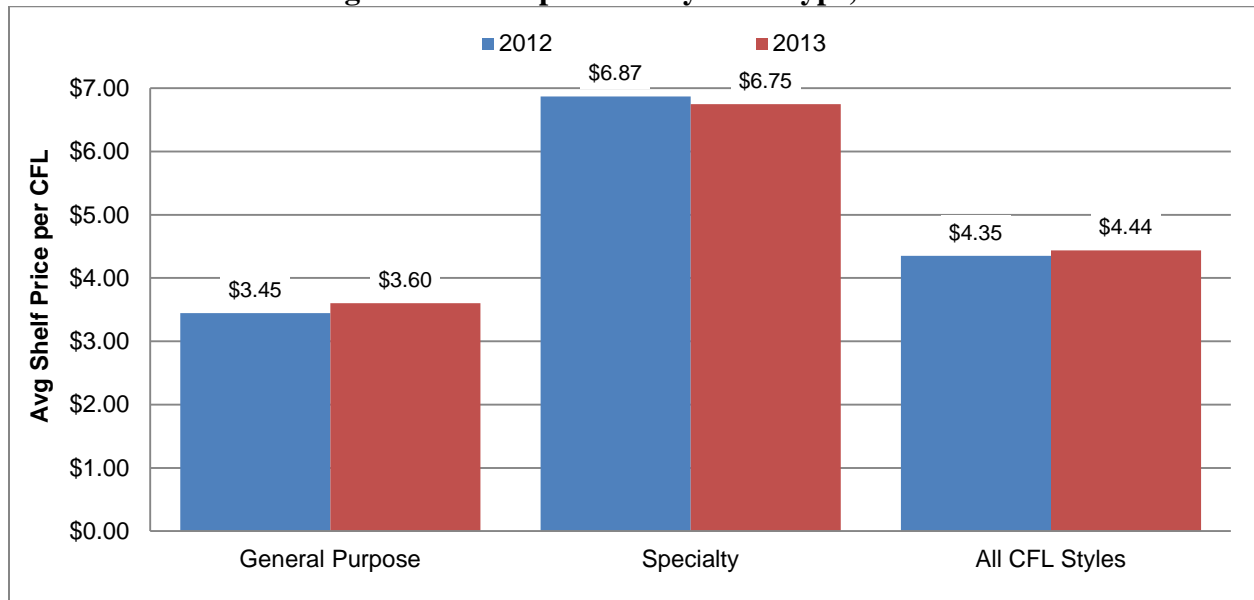
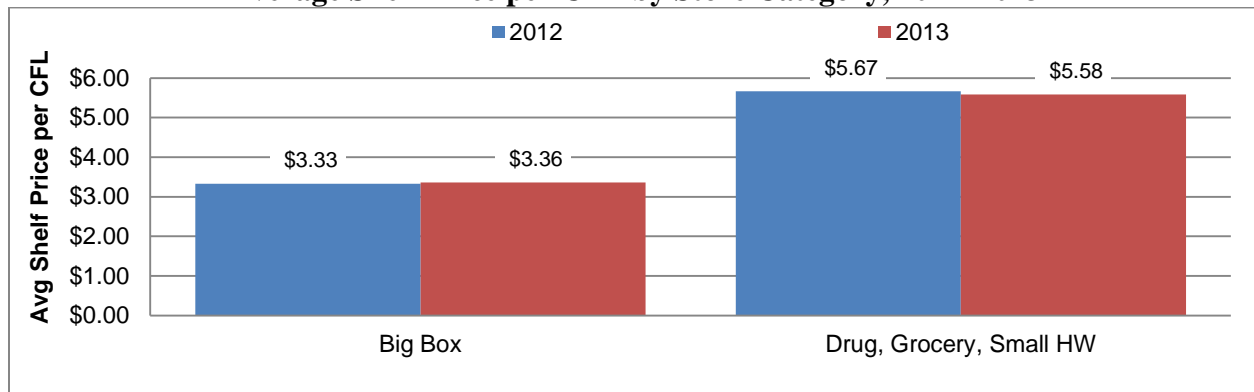


Figure 35 shows the average shelf price per CFL (across general purpose and specialty CFL types). The average shelf price in Northwest big box stores was \$3.36 per CFL in 2013, which was an increase of 1% from the 2012 average shelf price. In non- big box stores, the average price per CFL declined between years by 2% to \$5.58 per CFL in 2013.

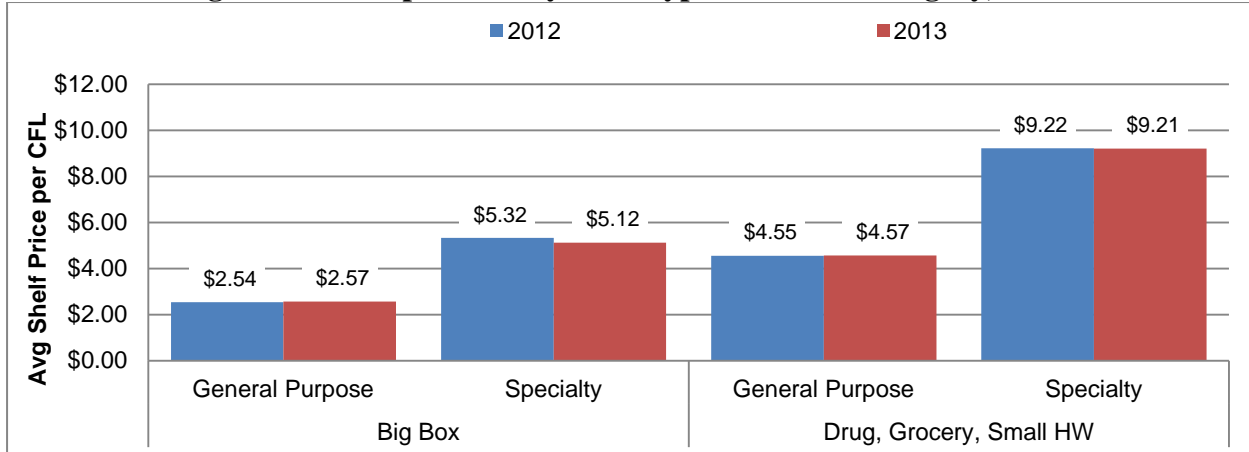
Figure 35
Average Shelf Price per CFL by Store Category, 2012–2013



When results are examined more closely by CFL type and store category, the greatest changes in average shelf price per CFL between 2012 and 2013 occurred in big box stores. The average shelf price for specialty CFLs in big box stores decreased by 4% (from \$5.32 to \$5.12 per lamp) in this timeframe, while the average shelf price for general purpose CFLs in big box stores increased by 1% per lamp (from \$2.54 to \$2.57).

The average shelf price for general purpose and specialty CFLs changed very little between 2012 and 2013 in non- big box stores. In non- big box stores, the average price for a general purpose CFL increased by \$0.02 between 2012 and 2013 (from \$4.55 to \$4.57), while the average price for a specialty CFL, declined by \$0.01 (from \$9.22 to \$9.21, on average).

Figure 36
Average Shelf Price per CFL by CFL Type and Store Category, 2012–2013



C.4.2. Average Shelf Price per Lamp by CFL Type, Store Category, and Geography, 2012 and 2013

Figure 39 shows the average shelf price for general purpose and specialty CFLs (and across all CFL types) in urban and rural stores for 2012 and 2013. The average price for a CFL (across all types) increased by 3% in urban stores (an increase of \$0.11) between 2012 and 2013, while the average price for a CFL declined by 2% in rural stores (a decrease of \$0.12) during the same timeframe. When analyzing price by CFL type, the average price for a general purpose CFL increased in urban stores by 6% (an increase of \$0.20), while the average price per general purpose CFL declined in rural stores by 4% (a \$0.16 decline). There was a decline in the average price of specialty CFLs in both urban and rural stores between years, though the decline was more pronounced in rural stores, which experienced a 4% decrease in the price per specialty CFL (a \$0.39 decrease per lamp).

Figure 37
Average Shelf Price per CFL by CFL Type and Geography, 2012 and 2013

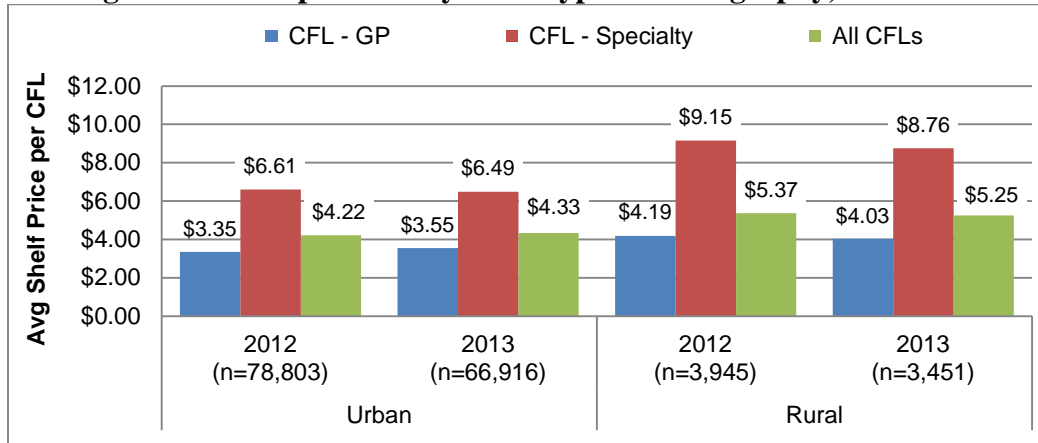
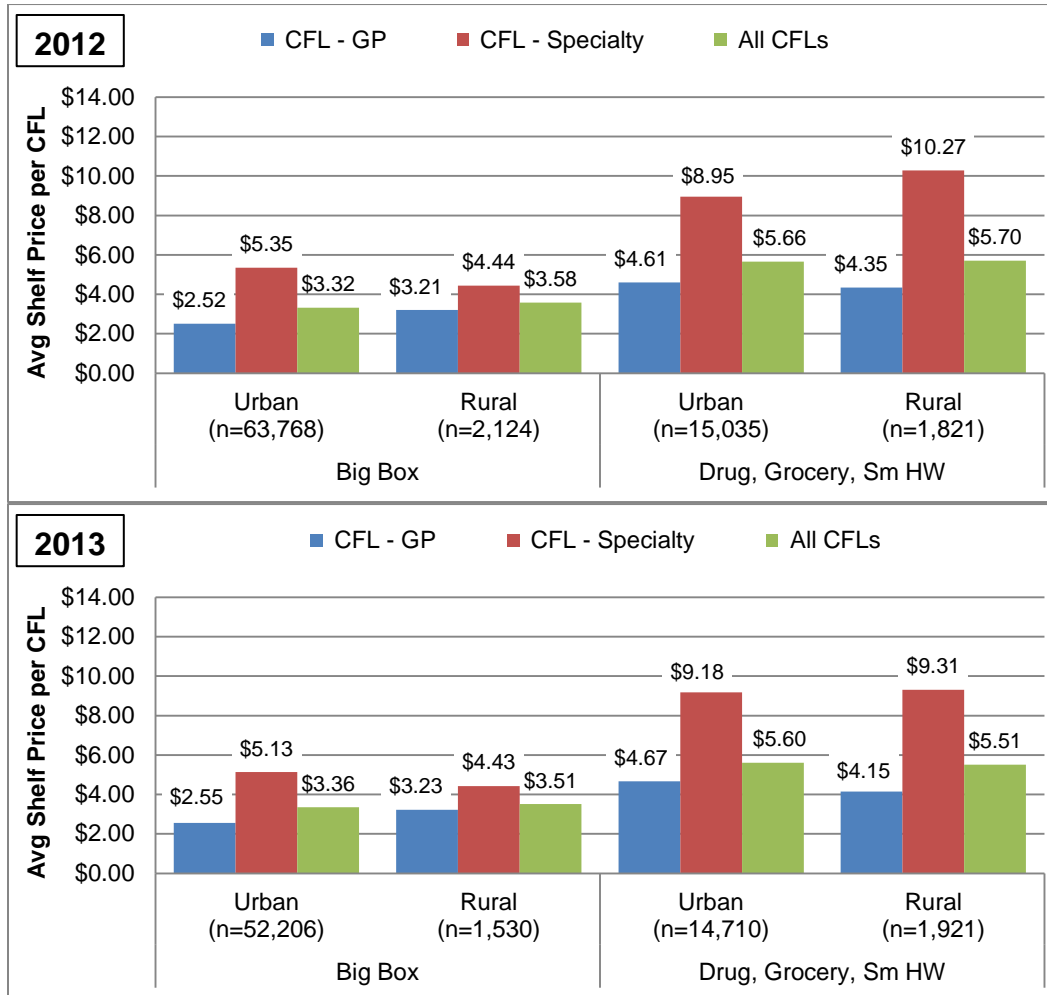


Figure 38 shows the average shelf price per CFL by CFL type, geography, and store category in 2012 and 2013. Between 2012 and 2013, the largest change in average shelf price per CFL was among specialty lamps in rural non- big box stores, which saw a decline of 9% per lamp (a decrease of \$0.96 per specialty CFL). The average price for general purpose CFLs also declined in rural non- big box stores by 5% (a \$0.20 decrease per lamp, on average) between years. There were minimal changes in average CFL prices in big box stores between 2012 and 2013, with the exception of the average price of specialty CFLs in urban big box stores, which decreased by 4% (a \$0.22 decline).

Figure 38
Average Shelf Price per CFL by CFL Type Category, Store Category and Geography, 2012 and 2013



C.5 Fluorescent Tube Lamps

For the second consecutive year, field researchers gathered data on 4-foot fluorescent tube lamps—including both T8 and T12 technologies—during the lighting retail store shelf surveys. T12 lamps are one and a half inches in diameter and T8 lamps are one inch in diameter, and are among the most commonly used tube fluorescent lamps in residential applications (particularly in multi-family settings). The sections below present results on fluorescent tube lamp availability (in terms of the percentage of Northwest stores carrying these lamps and the percentage of total fluorescent tube lamps comprised by T8 and T12 lamps) and diversity (in terms of the average number of fluorescent tube lamps stocked per Northwest store).

C.5.1 Fluorescent Tube Lamp Availability

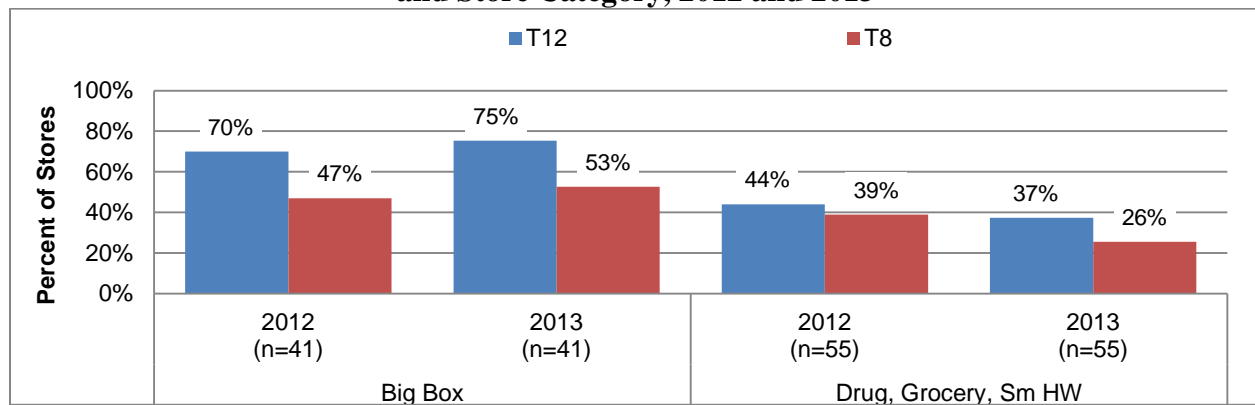
Analysts examined fluorescent tube lamp availability from the perspectives of the percentage of Northwest lighting retailers that stock these lamps as well as the percentage of total fluorescent tube lamps stocked by lamp type (T8 or T12).

Percentage of Stores Carrying Fluorescent Tube Lamps

During the 2013/2014 lighting retail store shelf surveys, field staff found T12 fluorescent tubes in nearly half of the stores visited (47% in 2013, compared to 50% in 2012) and T8 fluorescent tubes in 32% of the stores (compared to 41% in 2012).

When results are examined by store category (Figure 39), the data indicate that a greater proportion of big box stores stocked fluorescent tube lamps (75% stocked T12 lamps and 53% stocked T8 lamps) than non- big box stores (only 37% stocked T12 lamps and 26% stocked T8 lamps) in 2013. The data also indicate that there was a modest increase in the percent of big box stores carrying T8 and T12 fluorescent tube lamp, with a 5 percentage point increase in the number of big box stores carrying T12 lamps from 2012 to 2013 and a 6 percentage point increase in the number of big box stores carrying T8 lamps during the same period. The stocking of T12 and T8 lamps in non- big box stores went down between 2012 and 2013 (by 7 percentage points for T12 lamps and 13 percentage points for T8 lamps).

Figure 39
Percent of Northwest Stores Stocking Fluorescent Tubes by Lamp Type and Store Category, 2012 and 2013



Overall, a greater percentage of rural stores stocked fluorescent T8 and T12 tube lamps in 2013 than urban stores (see Figure 40). With respect to changes over time, 82% of rural stores stocked T12 lamps in 2012, compared to only 56% of rural stores in 2013. T12 lamp stocking in urban stores was 45% for both years. For T8 lamps, 47% of rural stores had these lamps in stock at the time of the late 2013/early 2014 shelf survey visits, which was down from 74% in 2012. The percentage of T8 lamps stocked in urban stores also declined from 35% in 2012 to 30% in 2013.

Figure 40
Percent of Northwest Stores Stocking Fluorescent Tubes by Lamp Type
and Geography, 2012 and 2013

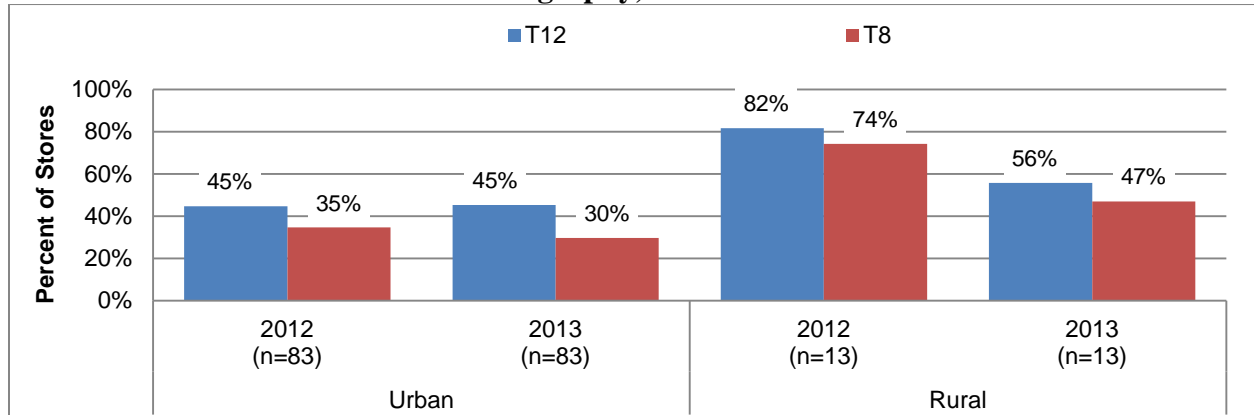
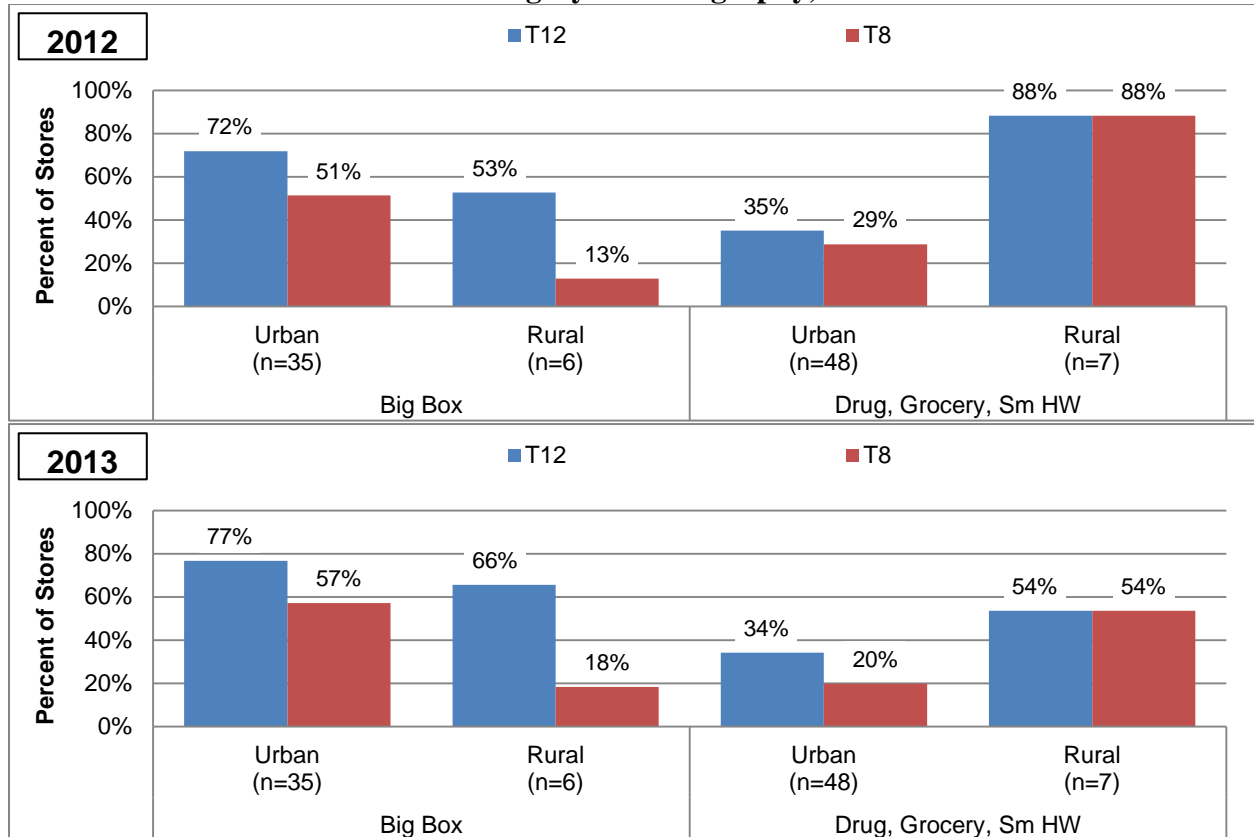


Figure 41 shows the percentage of stores stocking T8 and T12 fluorescent tube lamps in 2012 and 2013 by store category and geography combined. As shown in the figure, a higher proportion of urban big box stores stocked T12 lamps in both 2012 and 2013 than urban non- big box stores. The pattern is the same for T8 lamps in urban stores during both study periods. In contrast, there was a higher percentage of stores stocking T8 lamps in rural non- big box stores than big box stores in both 2012 and 2013.

Figure 41
Percent of Northwest Stores Stocking Fluorescent Tubes by Lamp Type,
Store Category and Geography, 2013

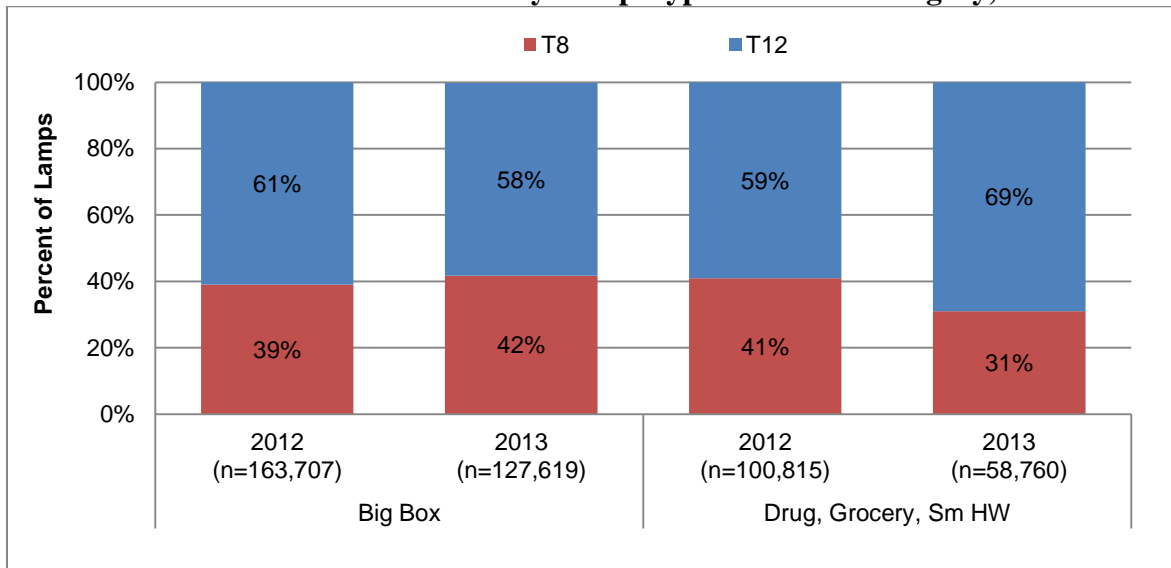


Percentage of Fluorescent Tube Lamps Stocked

Across all of the stores visited for the 2013 shelf surveys, T12 lamps comprised 62% of the 4-foot fluorescent tube lamps stocked (up from 57% in 2012) and T8 lamps comprised the remaining 38%.

Figure 42 shows that the percentage of fluorescent tube lamp stock comprised by T12 in non-big box stores was 69% in 2013, which was an increase of 10 percentage points from 2012. In 2013, fluorescent tube stock comprised by T12 in big box stores was 58%, a decrease from 61% in 2012.

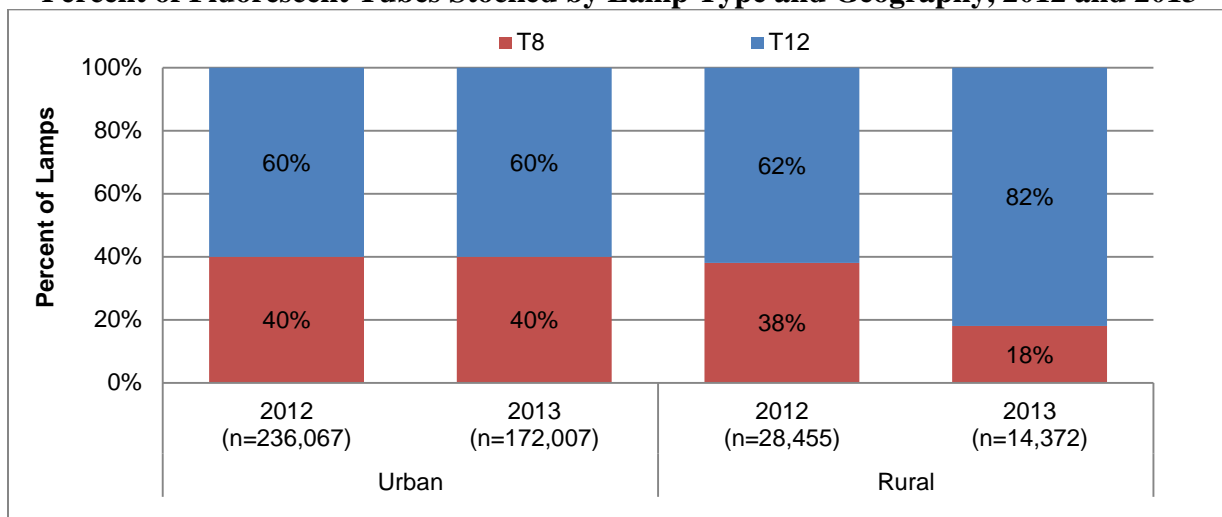
Figure 42
Percent of Fluorescent Tubes Stocked by Lamp Type and Store Category, 2012 and 2013



Percentages may not total 100% due to rounding.

Figure 43 demonstrates small differences in fluorescent tube lamp stock in urban and rural stores in 2012 and 2013. T8s and T12s comprised the same percent of stock in urban stores 2012 and 2013 (40% and 60%, respectively, for both years). There was some change in the composition of stock in rural stores between years with T12 lamps increasing from 62% of fluorescent tube lamps stocked in 2012 to 82% of fluorescent tube lamps stocked in 2013 (T8's saw a corresponding decline in lamp share).

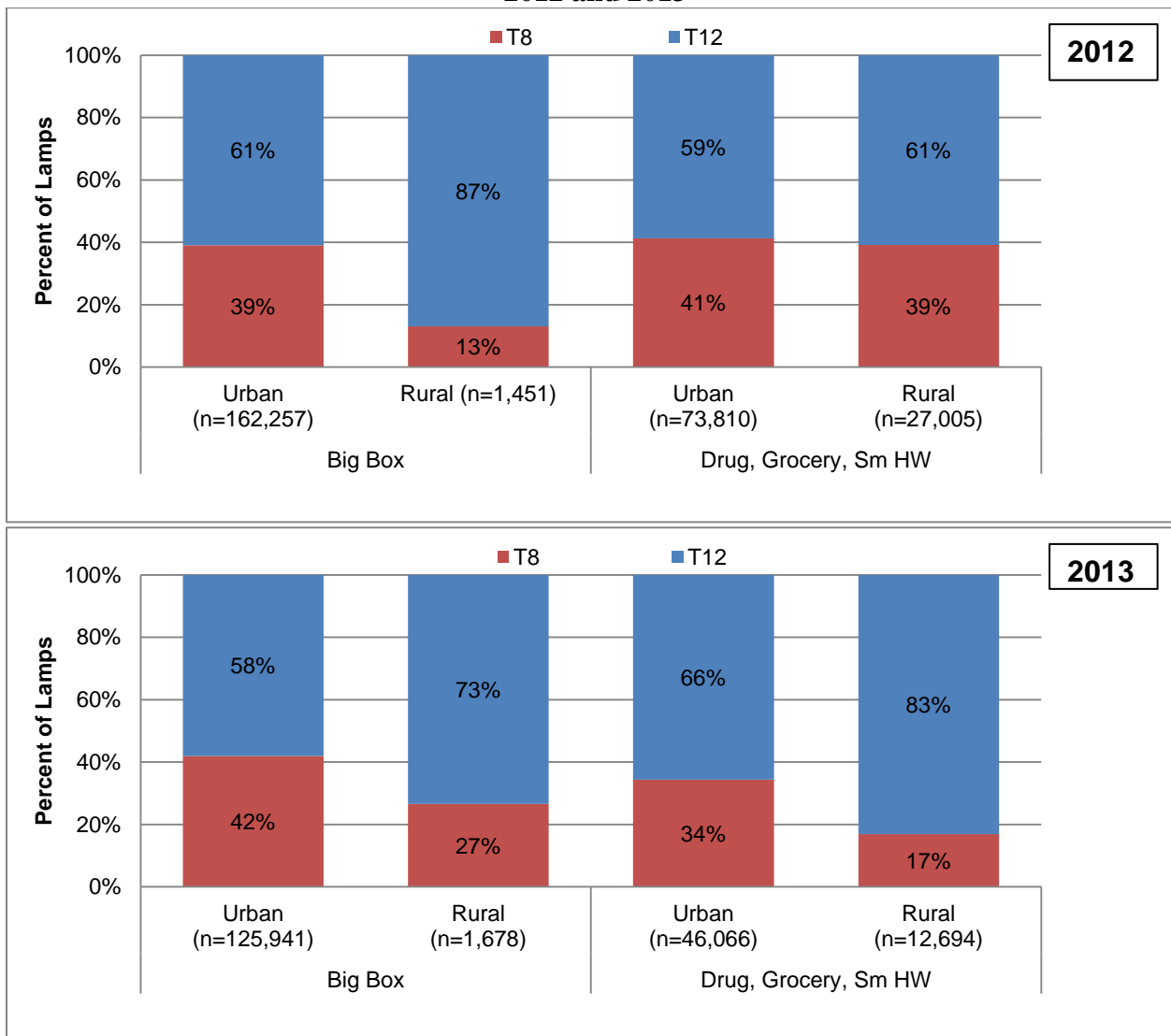
Figure 43
Percent of Fluorescent Tubes Stocked by Lamp Type and Geography, 2012 and 2013



Percentages may not total 100% due to rounding.

Figure 44 shows the share of fluorescent tube lamp stock comprised by T8s and T12s by store category and geography. In urban big box stores, T12 lamps comprise 58% of the fluorescent tube stock in 2013, which was a small change compared to 2012 (61%). In rural big box stores, T12 lamps comprised 73% of the fluorescent tube stock in 2013, a decline of 14 percentage points from 2012. In rural non- big box stores, the share of fluorescent tube lamps comprised by T8s declined from 29% in 2012 to 17% in 2013.

Figure 44
Percent of Fluorescent Tubes Stocked by Lamp Type, Store Category and Geography, 2012 and 2013



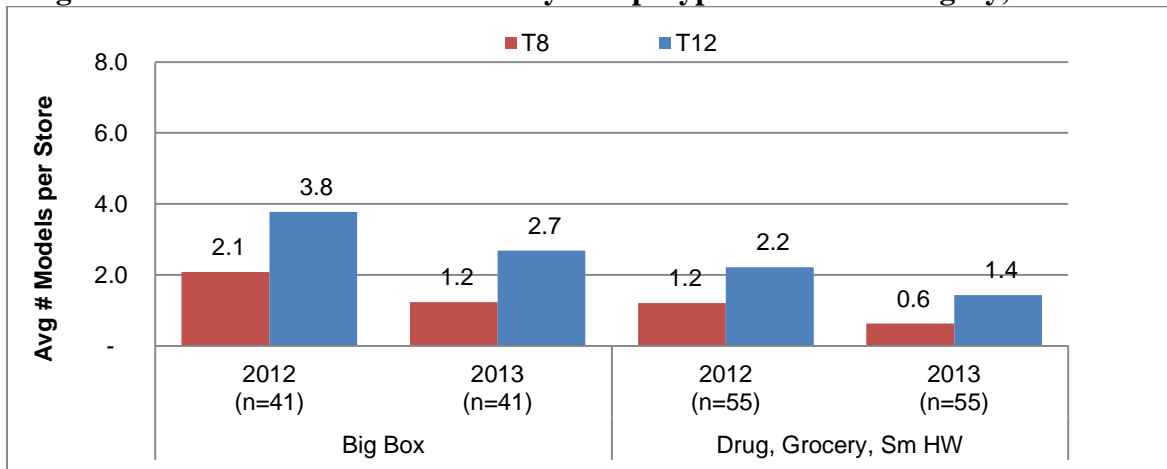
Percentages may not total 100% due to rounding.

C.5.2. Fluorescent Tube Lamp Diversity

The tables below present details on fluorescent tube lamp diversity in terms of the average number of lamp models stocked per store in 2013. Overall, on average, Northwest stores stocked 1.7 T12 lamp models and 0.8 T8 lamp models per store in 2013 (down from 2.6 T12 and 1.4 T8 lamp models per store in 2012).

When examined by store category, results suggest that there was nearly double the number of T12 lamps available in big box compared to non-big box stores in 2013 (2.7 and 1.4 models, respectively; see Figure 45). Big box stores also carried a slightly broader variety of T8 lamp models than non-big box stores, averaging approximately 1.2 models per store in big box stores compared to only 0.6 models, on average, in non-big box stores. From 2012 to 2013 in both big box and non-big box stores, the average amount of both T8 and T12 fluorescent lamp model numbers decreased.

Figure 45
Average Number of Fluorescent Models by Lamp Type and Store Category, 2012 and 2013



When examined by geography (urban stores versus rural stores), results suggest nearly identical diversity in 2013 with respect to the average number of T8 and T12 lamp models in urban and rural stores (1.7 T12 models and 0.8 T8 models, on average, in urban stores compared to 1.7 T12 and 0.9 T8 models per rural store). In 2012, there was a higher average number of T8 and T12 lamp models per store in rural stores than in urban stores. Figure 46 presents these results in graphic form.

Figure 46
Average Number of Fluorescent Models by Lamp Type and Geography, 2012 and 2013

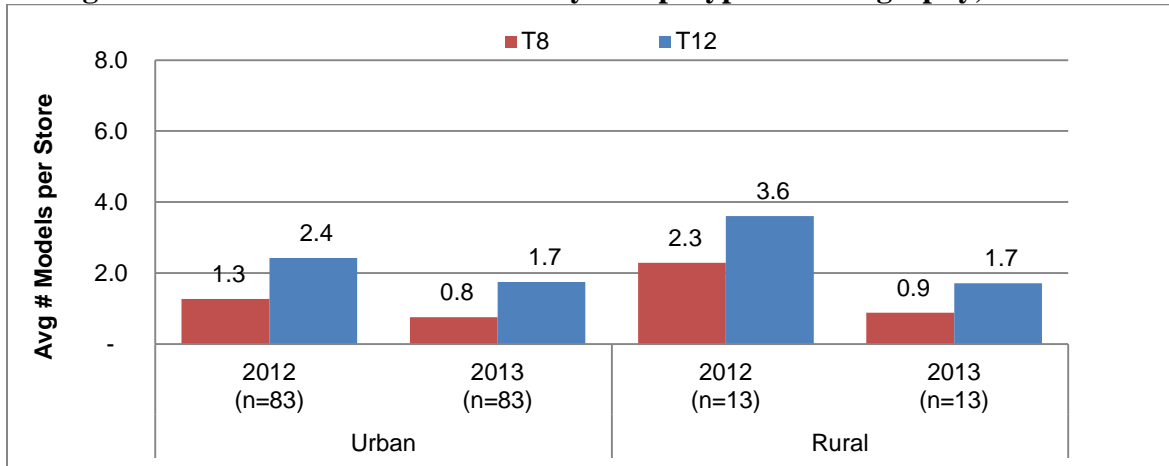
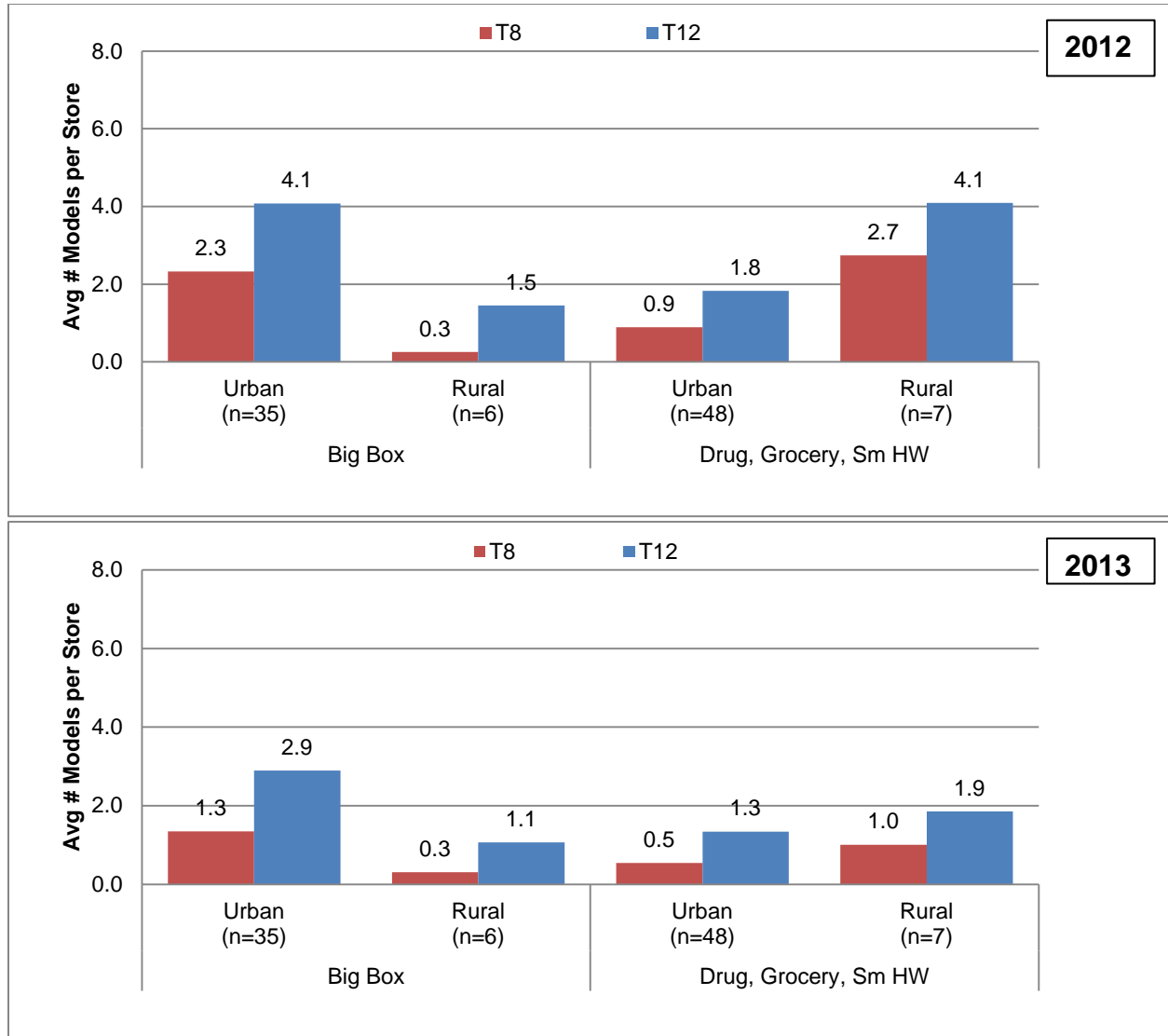


Figure 47 presents diversity results (in terms of the average number of lamp models per store) by both store category and geography for T12 and T8 lamps in 2012 and 2013. As shown, urban big box stores had the highest average number of T12 models per store, at 4.1 models per store in 2012 and 2.9 models per store in 2013. Rural non- big box stores carried the highest average number of T8 lamp models per store (2.7) in 2012, whereas urban big box stores carried the highest average number of T8 lamp models per store (1.3) in 2013.

Figure 47
Average Number of Fluorescent Models by Lamp Type, Store Category and Geography, 2012 and 2013



C.6 Promotional Materials

During the 2013 shelf survey visits (conducted in late 2013/early 2014), field researchers gathered details on promotional materials or displays regarding replacement lamps. These data enable summarization of promotional materials by the type of lamp promoted, store category, and geographic sector (urban versus rural). The shelf survey also provides information regarding the types and positioning of promotional materials in Northwest retail store as well as the types of messages included on the materials. The report provides more details on these topics below.

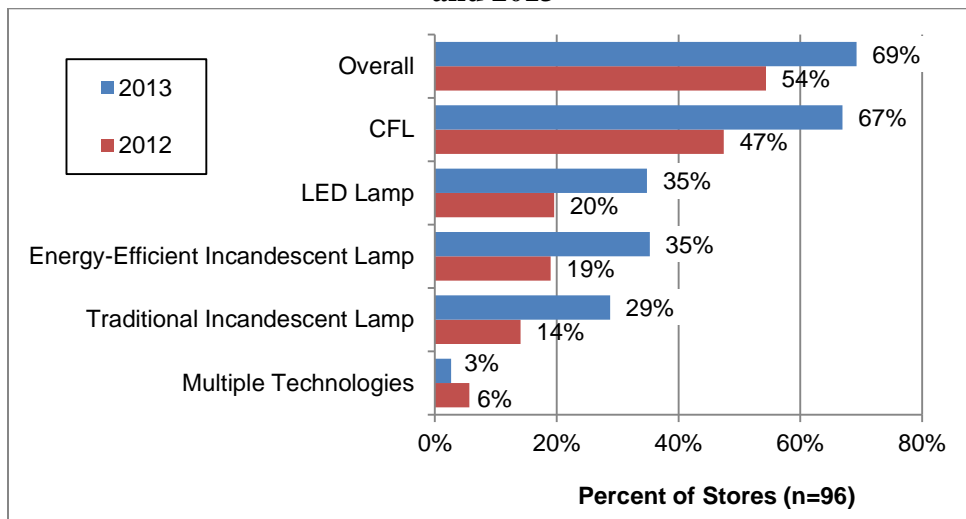
C.6.1 Promotional Material Types

During the 2013 shelf survey visits, 69% of stores had one or more materials in the store related to replacement lamps, which is an increase from 2012 in which 50% of stores had one or more promotional materials. In 69% of the stores, these materials included signs placed on shelving or on a wall in the store (compared to 50% of stores in 2012). Four percent of stores had signs about replacement lamps hanging from the ceiling (compared to 1% of stores in 2012), 1% of stores had free standing displays during 2013 shelf survey (no stores had free standing displays during 2012 shelf survey visits).

C.6.2 Technologies Promoted

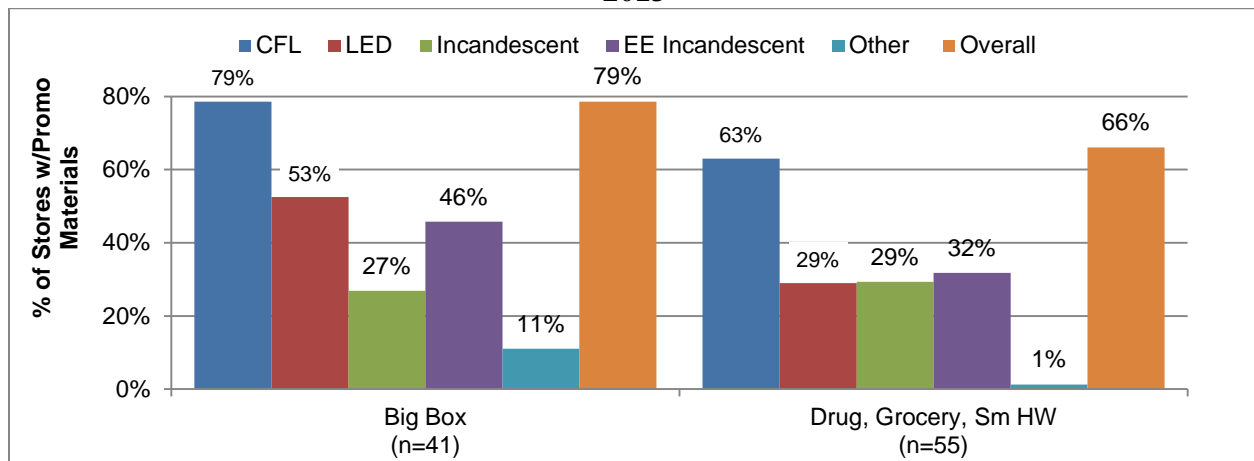
As mentioned above, 69% of the stores visited in 2013 were displaying promotional materials regarding replacement lamps (compared to 54% during 2012 shelf survey visits; see Figure 48 below). Materials focused on various types of replacement lamps—but most stores’ materials were focused on CFLs, with roughly two-thirds of all stores displaying one or more promotional materials regarding CFLs in 2013 (compared to 47% in 2012). Thirty-five percent of stores displayed materials on LED lamps in 2013 (compared to 20% in 2012). The same percentage of stores displayed materials regarding EISA-qualifying incandescent lamps as LED lamps (35% in 2013 compared to 19% in 2012). In 2013, 29% of stores had promotional materials focusing on traditional incandescent lamps (compared to 14% in 2012). Three percent of stores in 2013 had displays regarding multiple lamp technologies (compared to 3% in 2012).

Figure 48
Percent of Stores with Lighting Promotional Materials by Type of Lamp Promoted, 2012 and 2013



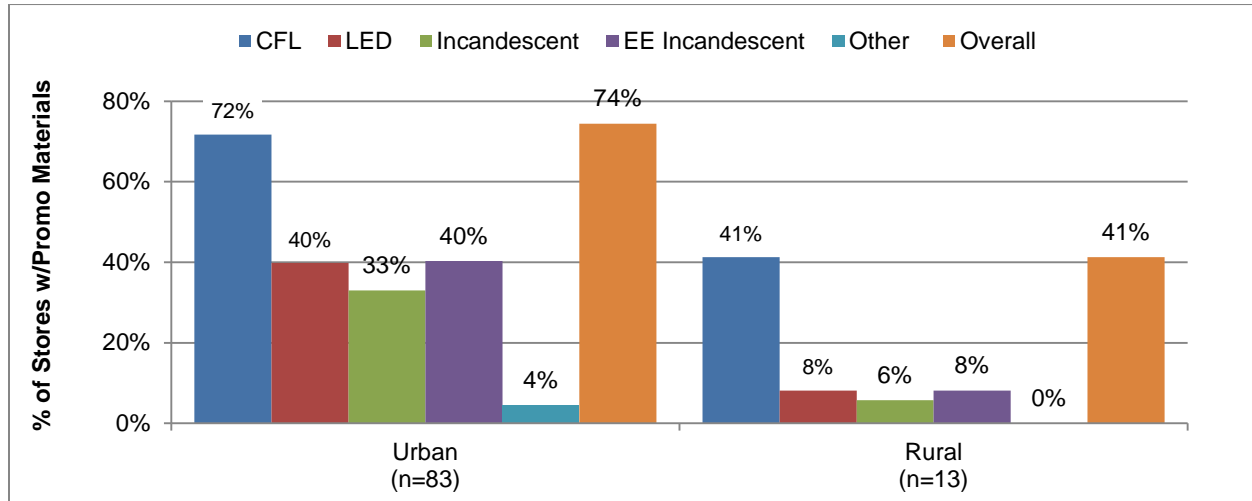
A higher proportion of big box stores displayed lighting promotional materials in 2013 than non-big box stores (79% versus 66%, respectively; see Figure 49; there was also a higher proportion of big box stores displaying lighting promotional materials in 2012). More than three-fourths of the big box stores and nearly two-thirds of the non-big box stores displayed promotional materials about CFLs. More than half of Northwest big box stores had materials regarding LED lamps compared to less than a third of non-big box stores. Less than half of big box stores had promotional materials regarding EISA-qualifying incandescent lamps (46%), compared to less than a third of non-big box stores.

Figure 49
Percent of Stores with Lighting Promotional Materials by Lamp Type and Store Category, 2013



Between the urban and rural sectors in the Northwest, lighting promotional materials were pervasive in urban stores—74% of urban stores displayed one or more lighting promotional materials compared to only 41% of rural stores (see Figure 50; in 2012, 63% of urban stores and 8% of rural stores had lighting promotional materials). Most of the rural stores that had any materials on display focused on promoting CFLs (compared to less than 10% of rural stores that focused on promoting other lamp technologies). The promotional materials in urban stores also focused primarily on CFLs (72% of urban stores), but 40% of urban stores had promotional materials on LED and EISA-qualifying incandescent lamps.

Figure 50
Percent of Stores with Lighting Promotional Materials by Lamp Type and Geography, 2013



C.6.3 Positioning of Materials in Stores

Nearly all of the stores that displayed promotional materials in 2013 had materials displayed in the lighting aisle (63% of stores). Eight percent of stores also had promotional materials regarding replacement lamps positioned on end-caps, 5% had promotional materials for lighting displayed in the front of the store or near the store entrance, and 1% had promotional materials near the cash registers in the store. Materials positioned near the cash registers were exclusive to LED lamps, while end-caps focused slightly more on CFLs and/or LED lamps (4% and 6% of stores respectively) than EISA-qualifying incandescent lamps and traditional incandescent lamps (in 3% of stores for both technologies). Promotional materials at the front of the store or near the store entrance were mostly focused on CFLs (4% of stores), though 1% of stores also had displays for EISA-qualifying incandescent lamps or traditional incandescent lamps at the front of the store/near the store entrance. Field researchers observed promotional materials in at least some urban stores in all four locations mentioned above (lighting aisle, end-caps, near the front of the store/store entrance, and near the cash register). The same was true for rural stores, except there were no promotional materials observed near the cash register in rural stores.

C.6.4 Key Messages

The most common message on the promotional materials present in Northwest lighting retailers at the time of the 2013 retail shelf surveys related to specific utility programs (such as the “Simple Steps, Simple Savings” program). Materials with this message were present in approximately 35% of stores in the 2013 (compared to 10% of stores that displayed utility program-related messages in 2012). Another common message was energy and/or money savings; in 28% of the stores, promotional materials emphasized energy savings or saving money (compared to 16% of stores that emphasized this message in 2012).

Many promotional displays included multiple messages (e.g., a display on LED lamps describing them as efficient, cost-effective, long-lasting, and dimmable). Additional messages related to the following topics or themes (each present in less than 15% of retail stores in 2013 shelf):

- Low price or sale
- Light color
- Lamp shape(s) – e.g., reflector lamps
- Comparing lumens to watts
- Technology comparison (e.g., CFLs to LED lamps)
- Length of life
- Specific lamp manufacturer
- EISA (including details on the legislation and/or replacement options for 100 watt, 75 watt, 60 watt, and 40 watt incandescent lamps)
- Dimmable lamps
- Energy Star
- Mercury free (related to LED lamps and halogen lamps)
- Brightness
- Instant-on (related to LED lamps)
- Light quality

APPENDIX D – DETAILED CONSUMER TELEPHONE SURVEY RESULTS

Below, we provide additional detail on results from the consumer telephone surveys conducted in March and April of 2014, and (where applicable) in prior study phases.

D.1 Sample Expansion Weights

Table 16 below shows the sample expansion weights used for the 2014 consumer surveys.

Table 16
2014 Consumer Survey Sample Expansion Weights

State	Rural	Urban
Idaho	4,739.93	23,735.12
Montana	4,677.03	24,362.77
Oregon	4,758.04	24,424.80
Washington	4,659.01	24,601.05

D.2 CFL, LED, and EISA-Qualifying Lamp Technologies

In this section, we review consumer awareness and purchase rates for CFLs, LED lamps, and EISA-qualifying incandescent lamps (i.e., those that comply with the minimum efficacy standards set forth in EISA) as well as the quantity of lamps purchased. We conclude with the results of a key driver analysis, which helps explain consumer lamp purchasing decisions.

D.2.1 Lamp Awareness and Purchases

Figure 51 compares results from the 2013 and 2014 consumer telephone surveys regarding the percentage of respondents who were aware and unaware of each of the three lamp technologies described above (CFLs, LED lamps, and EISA-qualifying incandescent lamps). The figure further segments consumers who were aware of CFLs into purchasers and aware non-purchasers for each lamp technology.

As shown in the figure, results suggest that awareness of CFLs declined by a statistically significant margin between 2013 and 2014 (from 90% to 86% of the population) while awareness of LED lamps increased significantly within the same timeframe (from 85% to 93% of the population) while awareness of EISA-qualifying incandescent lamps held steady (at roughly 55% of the population). Although the reasons for declining awareness of CFLs and increasing awareness of LED lamps are unclear, there are several theories:

- As newer energy-efficient lamp technologies, such as LED lamps, compete for wallet-share, they also compete for mind-share. As a result, CFLs may no longer be top-of-mind

for some consumers, which could result in declining awareness of CFLs and increased awareness of LED lamps.

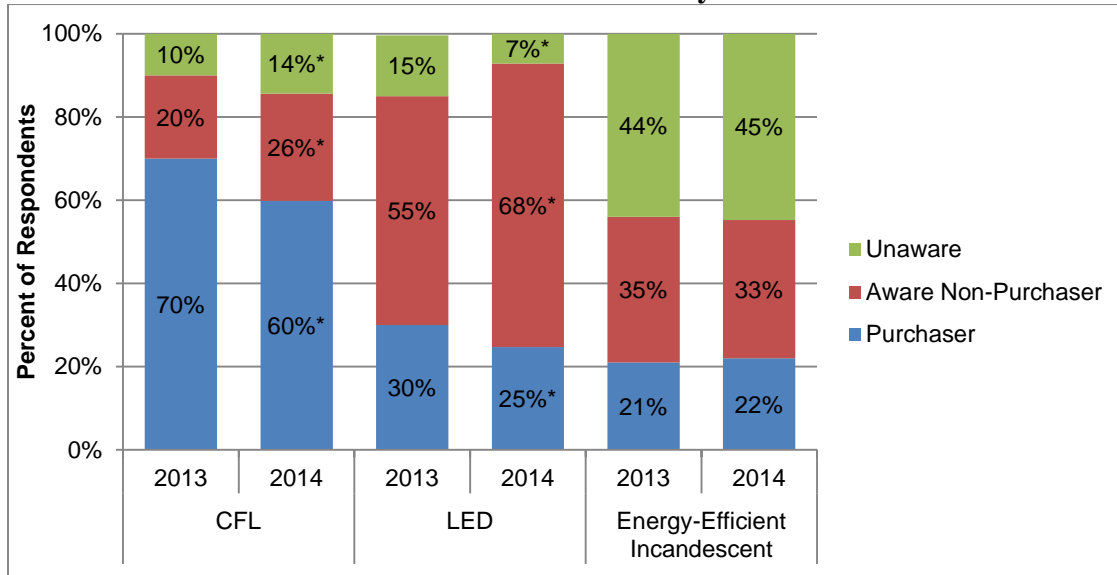
- Related to the point above, the expanding range of lamp technologies may be causing confusion among purchasers, particularly given that many CFL shapes increasingly resemble incandescent lamps (i.e., with the spiral shape “hidden” inside a reflector or globe cover). This confusion could also result in declining awareness for CFLs and/or increased awareness of LED lamps.
- The heightened market attention to CFLs in previous years—such as Wal-Mart’s goal of selling 100 million CFLs in 2007²⁹— has waned, which could contribute to declining awareness of CFLs.
- Many energy-efficiency programs in the region have begun incorporating LED lamps or have shifted their focus toward LED lamps, which may be contributing to increased awareness of the technology (see section 2.3.1 above).
- As the range of lamp options expands, there is less retail shelf space available for each lamp technology. This decline in visibility of CFLs at the retail level (concurrent with increased visibility of LED lamps and EISA-qualifying incandescent lamps) may also be contributing to changes in awareness of CFLs and LED lamps.

Purchase rates for CFLs and LED lamps both declined significantly between 2013 and 2014 (CFLs by 10 percentage points and LED lamps by 5 percentage points), while purchase rates for EISA-qualifying incandescent lamps held steady between years. The declining purchase rates for CFLs and LED lamps may be related to their longer lifetimes than other lamp technologies—in other words, consumers may purchase fewer over time because they need to replace them less often.

Awareness of EISA-qualifying incandescent lamps in rural areas was significantly higher than urban regions of the Northwest in 2014. The data suggest no other statistically significant differences in awareness or purchase rates across technologies by geographic sector (urban versus rural) or state.

²⁹ Wal-Mart, 2007.

Figure 51
Awareness and Purchase of CFLs, LEDs, and EISA-qualifying Incandescent Lamps,
2013 and 2014 Surveys



2013 n=667; 2014 n=1,007.

Note: Percentages may not total 100% due to rounding.

* Difference from prior study period is statistically significant.

D.2.2 Purchase Quantities

The 2013 and 2014 surveys addressed purchases of each of the three lamp types included above (CFLs, LED lamps, and EISA-qualifying incandescent lamps) as well as traditional incandescent lamps that do not comply with EISA standards (or, depending on their wattage and lumen output, will not comply once the relevant standard takes effect). Each survey asked about purchases that occurred during the previous year—so the 2013 survey asked respondents about purchases made in 2012 and the 2014 survey asked respondents about purchases made in 2013. Table 17 shows the average number of lamps purchased by survey respondents in 2012 and 2013 by technology averaged across all the population (purchasers and non-purchasers). The table also includes details by CFL type (general purpose and specialty lamps).

Across all technologies, the data suggest that Northwest consumers purchased approximately 10 to 11 lamps, on average, in 2012 and 2013, with approximately half of these comprised by traditional incandescent lamps in each year. CFLs follow at approximately 3 lamps per consumer (with the vast majority of these being general purpose lamps). LED lamp purchases per consumer increased between 2012 and 2013 from 1.4 to 1.7, on average. Northwest consumers each purchased more than twice as many EISA-qualifying incandescent lamps during 2013, on average, as in 2012 (1.4 versus 0.6, a significant difference), possibly reflecting increasing availability of these lamps as EISA continues to phase in over time.

In 2013, Northwest customers in urban areas bought more than twice as many LED lamps, on average, as consumers in rural areas (1.9 versus 0.8 lamps, respectively, a statistically significant difference). Consumers in Washington also purchased five times as many LED lamps, on average, as consumers in Idaho and three times as many LED lamps, on average as consumers in Montana (2.6 lamps in Washington versus 0.5 in Idaho and 0.8 in Montana). The data suggest no other significant differences in 2013 lamp purchase rates by state or geographic sector (urban versus rural). Worthy of note, however, is that CFL purchasers bought significantly more LED lamps, on average, in 2013 (approximately 2.2 lamps) than consumers who have never purchased CFLs (approximately 1.6 lamps).

Table 17
Average Number and Percent of Total Lamps Purchased in 2012 and 2013 by Lamp Type
Among All Respondents, 2013 and 2014 Surveys

Lamp Type	2012 Purchases		2013 Purchases	
	Average Number of Lamps (n=776)	Percent of Lamps	Average Number of Lamps (n=1,007)	Percent of Lamps
Traditional Incandescent Lamps	5.4	52%	4.9	46%
General Purpose CFLs	2.8	27%	2.6	24%
Specialty CFLs	0.1	1%	0.1	1%
LED Lamps	1.4	14%	1.7	16%
EISA-qualifying incandescent Lamps	0.6	6%	1.4*	13%
All Lamps	10.4	100%	10.7	100%

* Difference from prior study period is statistically significant.

D.3 CFLs

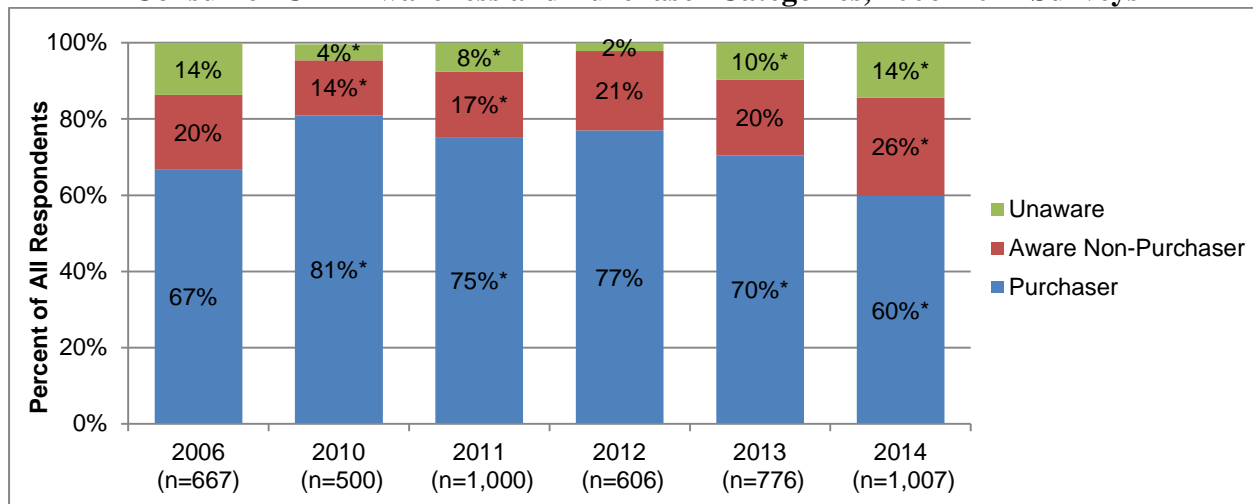
This section reviews results for CFLs in particular, beginning with awareness and purchase rates, then discusses CFL disposition among Northwest households, awareness and use of specialty CFLs, CFL purchase locations, satisfaction with CFLs, the likelihood of future CFL purchases, and CFL-to-CFL replacement.

D.3.1 CFL Awareness and Purchases

The consumer surveys have included questions regarding awareness and purchase of CFLs since 2006. Figure 52 below shows the percentage of survey respondents in each of the six survey years who were unaware of CFLs and aware of CFLs, with the latter split into consumers who were aware but had not purchased CFLs at the time of the survey and those who had purchased CFLs at the time of the survey. As shown, 2014 survey results suggest that 86% of consumers were aware of CFLs and 60% had purchased them, a significant decrease from 2013 results (as shown in Figure 51 and Table 17 above). The data suggest no geographic differences in CFL awareness or purchase rates within the 2014 survey results.

Since 2011, the survey has asked questions to gauge awareness of specialty CFLs among Northwest CFL purchasers. In 2013, results suggested that 41% of CFL purchasers were aware of specialty CFLs compared to 37% in both 2012 and 2011. These results also suggested no statistically significant change in awareness of specialty CFLs between the 2012 and 2013 surveys. However, in 2014, results suggested that 60% of CFL purchasers were aware of specialty CFLs compared to 41% in 2013 which is a significant difference.

Figure 52
Consumer CFL Awareness and Purchaser Categories, 2006–2014 Surveys



Note: Percentages may not total 100% due to rounding.

* Difference from prior study period is statistically significant.

D.3.2 CFL Disposition

Among 2014 survey respondents, 85% of CFL purchasers reported that they had CFLs installed in their homes at the time of the survey, a significant decrease from 91% in 2013 respondents, and 63% reported that they were storing one or more CFLs for future use compared to 66% from the previous year. Twenty-four percent of CFL purchasers in the 2014 survey reported that they had one or more CFLs that they installed and later removed. This is a significant difference from the 2013 survey where 17% of respondents mentioned that they had one or more CFLs that they installed but later removed.

After identifying consumers who installed, stored, and/or removed CFLs, the telephone surveys asked questions regarding the quantities of CFLs installed, removed, and in storage across the population of Northwest consumers. Table 19 shows that the total number of CFLs ever acquired declined from approximately 11.5 lamps among 2011 survey respondents, on average, to approximately 8.2 lamps among 2014 respondents. In the past two years, the main difference can be seen in the number of CFLs currently installed, which declined from 6.9 lamps in 2013, on average, to 5.0 lamps in 2014, a significant decrease. These reductions may be explained by the fact that CFLs tend to have longer lifespans than incandescent and halogen lamps, hence reducing the rate of installation. The decline may also reflect increasing consumer confusion regarding the

various lamp technologies available and/or increased availability and purchases of LED lamps and/or other lamp technologies. The data suggest little difference between survey years in the proportion of CFLs installed, removed, and stored from 2011 through 2014—in each year, roughly two-thirds of all CFLs ever acquired by purchasers were installed at the time of the surveys.

In terms of geography, there were no statistically significant differences in CFL disposition between respondents in rural versus urban areas in the 2014 survey results, but respondents in Washington had a significantly greater number of CFLs removed, on average, than consumers in the other states (1.0 in Washington versus 0.2 in Idaho, 0.4 in Oregon, and 0.6 in Montana). Similarly, respondents in Montana had a significantly greater number of CFLs removed, on average, than consumers in Idaho.

Table 18
Disposition of All CFLs Ever Acquired Among All Respondents, 2011–2014 Surveys

CFL Disposition	2011 Respondents (n=1,000)		2012 Respondents (n=606)		2013 Respondents (n=776)		2014 Respondents (n=1,007)	
	Mean # CFLs	% of CFLs	Mean # CFLs	% of CFLs	Mean # CFLs	% of CFLs	Mean # CFLs	% of CFLs
CFLs currently installed	7.5	65%	7.0	64%	6.9	69%	5.0*	61%
CFLs ever removed	0.6	6%	0.6	6%	0.5	5%	0.7	8%
CFLs currently stored	3.3	29%	3.3	30%	2.7	26%	2.5	31%
All CFLs Ever Acquired	11.5	100%	10.9	100%	10.1	100%	8.2	100%

n = 1,007.

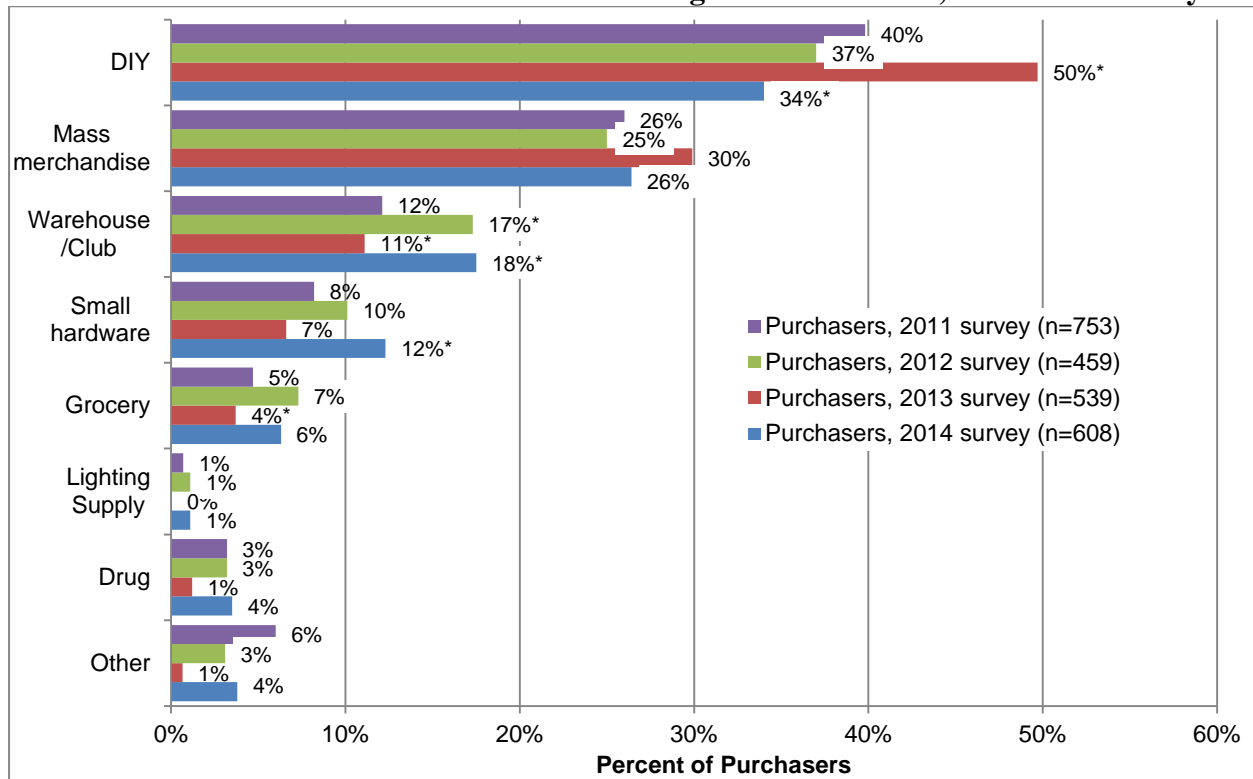
* Difference from prior study period is statistically significant.

D.3.3 CFL Purchase Locations

For the past several years, the consumer telephone survey has included questions to gauge where CFL purchasers have purchased CFLs most recently. Results suggest that CFLs purchased by 2014 survey respondents were mostly concentrated in the DIY and mass merchandise channels, with three out of five purchasers having reportedly purchased CFLs in these channels most recently (Figure 53). In 2014, 34% of CFL purchasers reported having purchased CFLs most recently in DIY stores alone, a significant decrease from 2013 (when approximately 50% of CFL purchasers reported purchasing them in DIY stores). While the percentage reporting purchases in wholesale clubs dropped significantly between the 2012 and 2013 surveys (from 17% to 11%), wholesale clubs recovered this lost ground between 2013 and 2014 (increasing from 11% to 18%, a statistically significant change). Consumers reported a similar change in CFL purchases in grocery stores, which increased from 7% of recent purchasers in 2013 to 12% in 2014.

A significantly greater proportion of rural consumers reported purchasing CFLs most recently at small hardware stores than urban consumers (27% versus 10%, respectively). These results are not surprising given that rural consumers have less access to DIY stores than urban consumers.

Figure 53
Location of Most Recent CFL Purchase Among CFL Purchasers, 2011–2014 Surveys



Note: Percentages may not total 100%, since respondents were allowed to cite more than one recent purchase location.

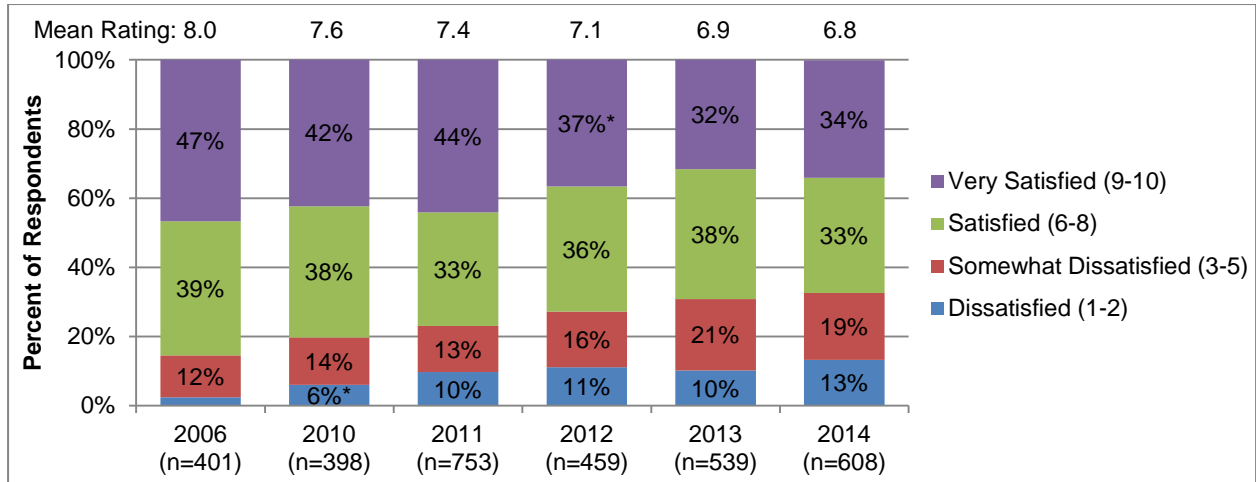
* Difference from prior study period is statistically significant.

D.3.4 Satisfaction with CFLs

The consumer telephone surveys address consumer satisfaction with CFLs from a number of perspectives: overall satisfaction, consumer impressions of the best and worst features of CFLs, and consumer agreement or disagreement with statements regarding CFL attributes. The following subsections provide details regarding these results.

Overall Satisfaction. The consumer telephone surveys ask respondents to rate their satisfaction with CFLs on a scale of 1 to 10 where 1 means, “not at all satisfied” and 10 means, “very satisfied.” Figure 54 shows the results grouped into four categories: respondents who are very satisfied (ratings of 9 or 10), respondents who are satisfied (ratings of 6 to 8), those who are somewhat dissatisfied (ratings of 3 to 5), and those who are dissatisfied (ratings of 1 or 2). As shown, approximately two-thirds of CFL purchasers who responded to the 2014 survey were either “satisfied” or “very satisfied” with CFLs. While there were no statistically significant changes in consumer satisfaction with CFLs between 2013 and 2014, results suggest a longer-term trend declining satisfaction between 2006 and 2014.

Figure 54
Satisfaction with CFLs Among CFL Purchasers, 2006–2014 Surveys

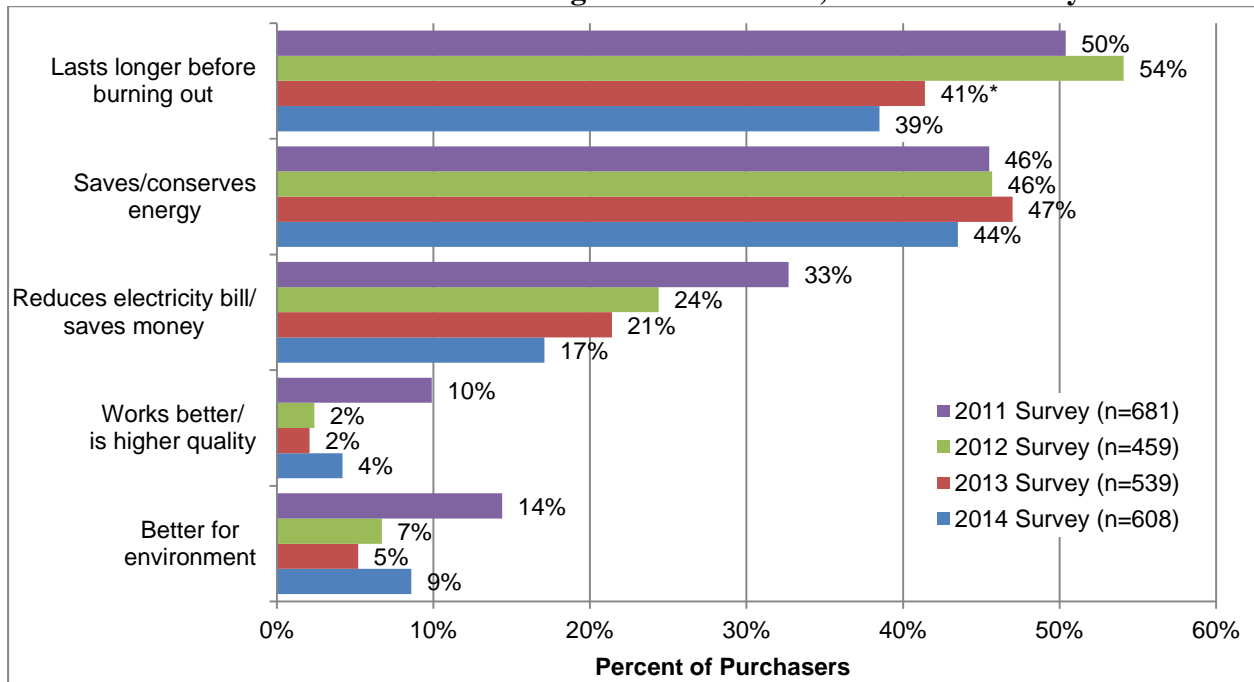


Note: Percentages may not total 100% due to rounding.

* Difference from prior study period is statistically significant.

Best Features of CFLs. Since 2011, the consumer telephone surveys have asked respondents to describe the best features of CFLs. In 2011 and 2012, a greater percentage of consumers mentioned length of life than other CFL features—however in response to the 2013 survey, a greater proportion of consumers mentioned the energy saving features of CFLs than any other feature (although length of life remained close behind). In 2014, consumers mentioned the energy savings associated with CFLs more than any other feature, again with length of life close behind. These results may reflect that one of the key marketing messages regarding LED lamps is their long life—even longer than those of CFLs (see Table 14 in Chapter 6 above). There were no statistically significant differences in geography with respect to best features of CFLs except in Idaho where, on average, a higher proportion of respondents mentioned that CFLs work better than alternative technologies compared to respondents Oregon (7% versus 2%, respectively).

Figure 55
Best Features of CFLs Among CFL Purchasers, 2011–2014 Surveys

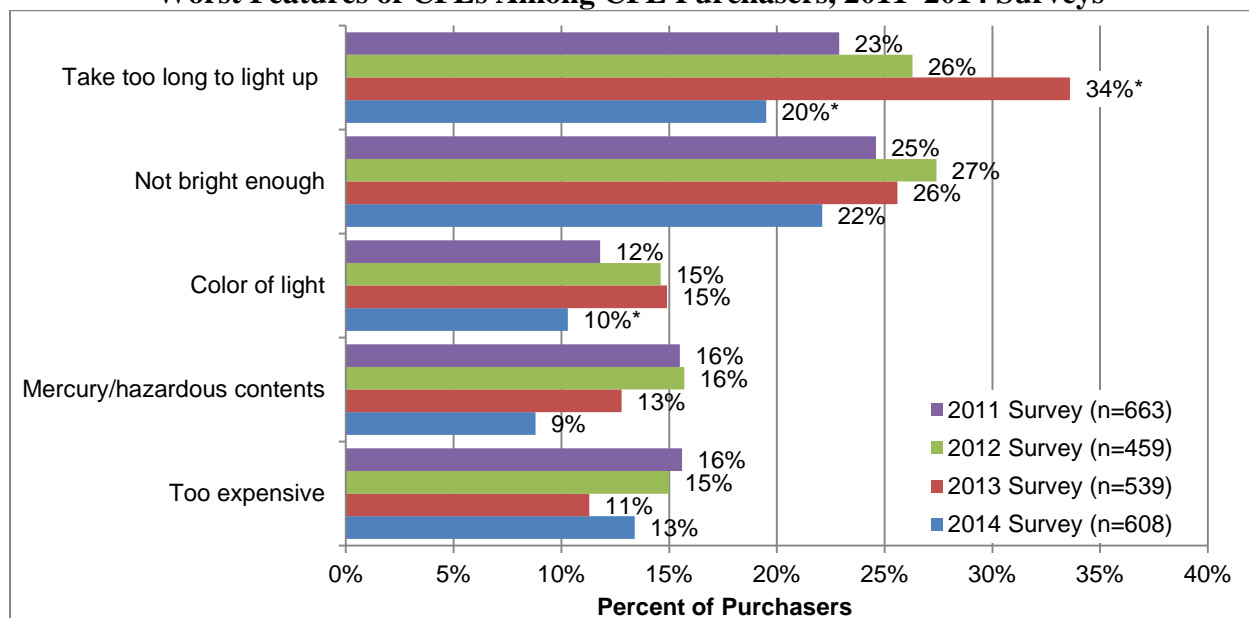


Note: Multiple responses allowed; percentages may not total 100%.

* Difference from prior study period is statistically significant.

Worst Features of CFLs. Starting in 2011, the consumer surveys included questions to gauge CFL purchaser impressions of the *worst* features of CFLs. In 2013, most Northwest consumers (34%) cited CFLs taking too long to light up (start-up time), however the 2014 survey results show that only 20% mentioned this as one of the worst features of CFLs (a statistically significant change; see Figure 56). The second most cited feature was that CFLs were not bright enough, and these results were steady between 2011 and 2014 at roughly one-fourth of respondents. Other results also remained fairly steady, with approximately 10 to 15% of respondents mentioning the color of the light from CFLs, mercury or hazardous contents, or the price of CFLs as the worst features. The only exception between 2013 and 2014 was a significant decrease in Northwest consumers mentioning the color of CFLs as the worst feature (15% in 2013 to 10% in 2014).

Figure 56
Worst Features of CFLs Among CFL Purchasers, 2011–2014 Surveys[†]



Note: Multiple responses allowed; percentages may not total 100%.

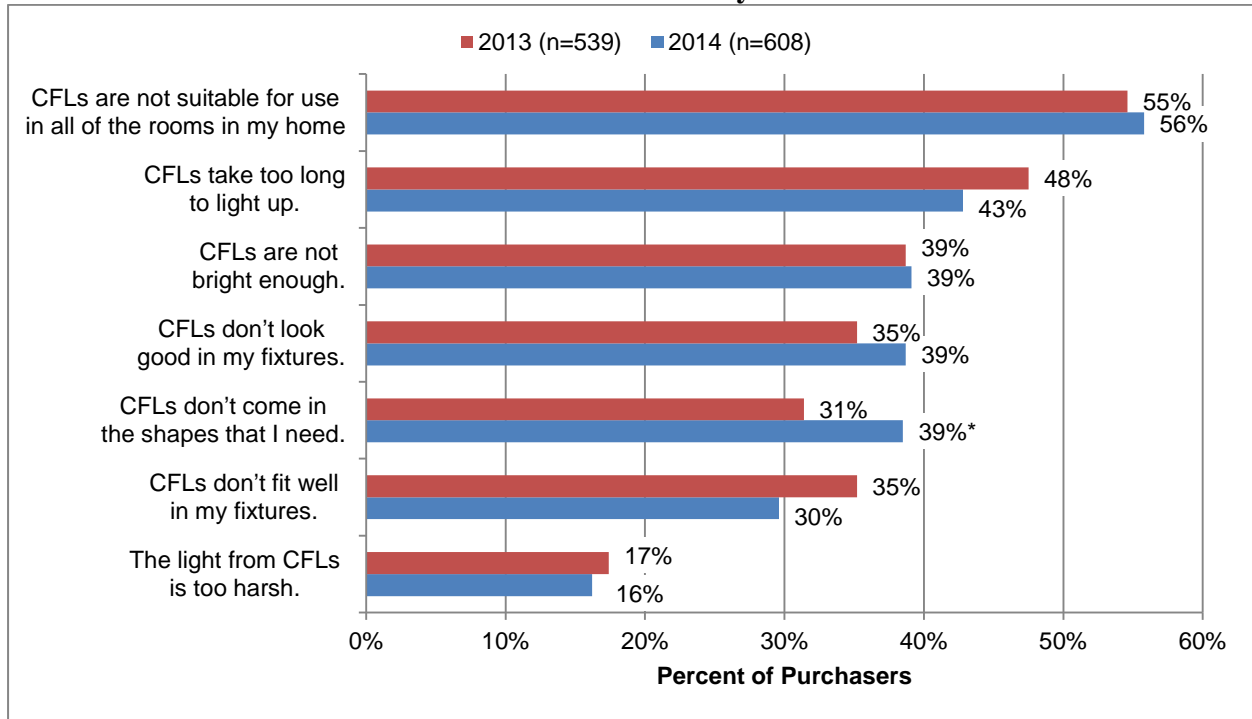
[†] Question asked for the first time in 2011 surveys.

* Difference from prior study period is statistically significant.

Level of Agreement with Statements Regarding CFLs. Finally, to gauge CFL purchaser perspectives on specific CFL features, the 2013 and 2014 surveys included seven statements regarding CFLs with which interviewers asked respondents to either agree or disagree. As shown below, consumers' level of agreement was strongest with the statement "CFLs are not suitable for use in all of the rooms in my home," with about 55% of CFL purchasers in 2013 and 2014 agreeing with this statement (Figure 57). Nearly half of CFL purchasers also agreed that "CFLs take too long to light up" in both years. Most of the other statements shared similar responses between 2013 and 2014 except for the statement, "CFLs don't come in the shapes I need," which was the only feature for which there was a significant change in agreement between 2013 to 2014 (from 31% to 39%, respectively). Of all seven statements included in the survey, the level of consumer agreement was lowest in both years with the statement that "the light from CFLs is too harsh" at about 17% of CFL purchasers.

There were some regional differences within survey results for these questions. For example, a significantly greater percentage of rural CFL purchasers agreed with the statement that "CFLs don't fit well in my fixtures" in 2014 than urban purchasers (41% versus 28%, respectively). Interestingly, a greater proportion of 2014 respondents in Washington agreed with the statement that "CFLs don't look good in my fixtures" than respondents in Oregon (44% versus 27%, respectively). Similarly, in 2014, more respondents from Montana agreed with the statement that "CFLs take too long to light up" than respondents in Idaho or Oregon (56% in Montana versus 29% in Idaho and 35% in Oregon).

Figure 57
Level of Agreement with Statements Regarding CFLs Among CFL Purchasers,
2013–2014 Surveys



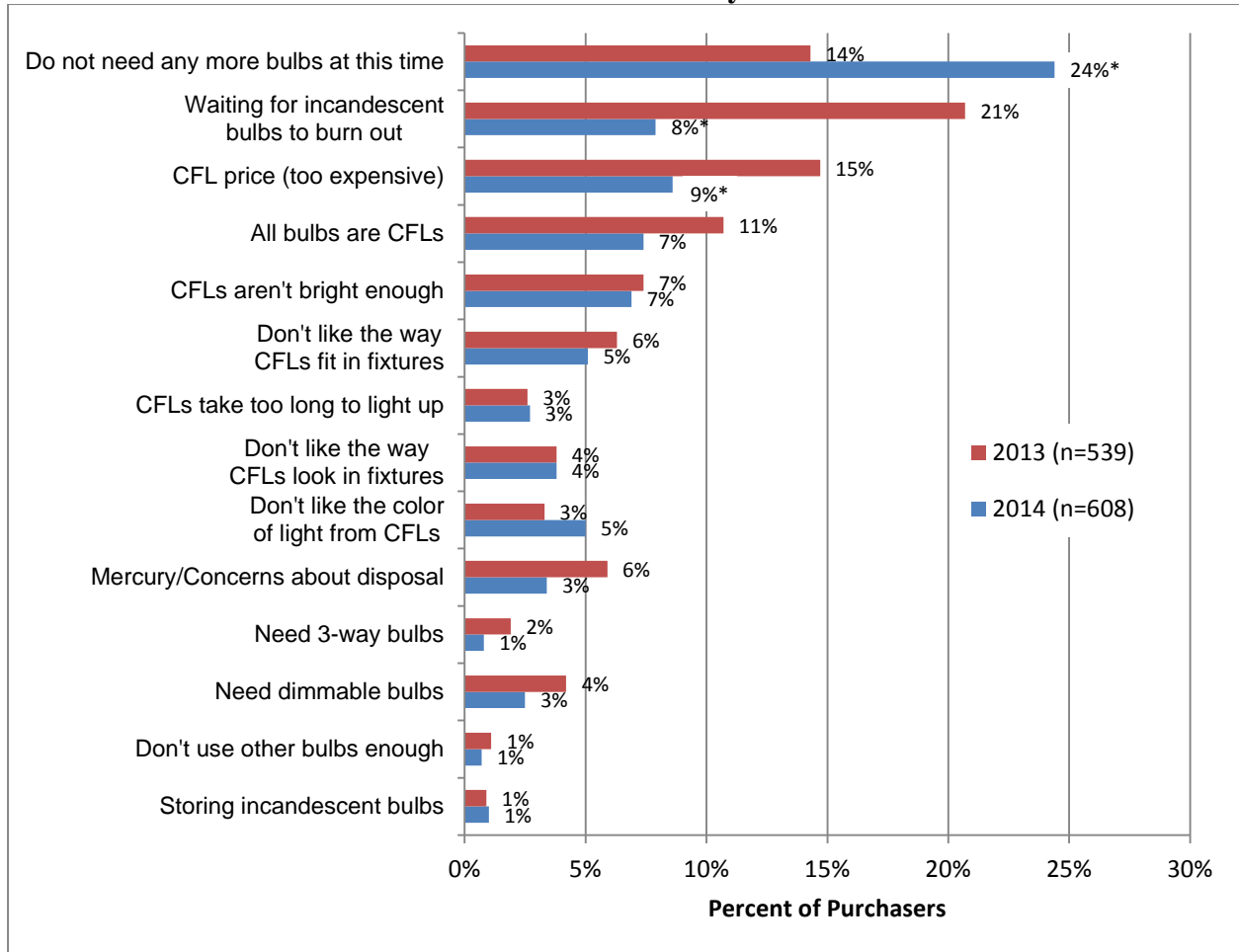
Note: Multiple responses allowed; percentages may not total 100%.

* Difference from prior study period is statistically significant.

D.3.5 Factors Preventing Additional CFL Installations

For the past several years, the consumer surveys have included questions regarding the main factors preventing additional CFL installations among CFL purchasers. There was a significant increase in the percentage of respondents who said that they “do not need any more bulbs at this time” in 2014 (24% of respondents) compared to 2013 (14% of respondents). As for the percentage of respondents who reported that they were “waiting for [their] incandescent bulbs to burn out,” there was a significant decline between years (21% in 2013 compared to 8% in 2014). The percentage of respondents who reported that CFL price was a main factor in preventing additional CFL installations also declined significantly between years (from 15% in 2013 to 9% in 2014).

Figure 58
Main Factors Preventing Additional CFL Installations Among CFL Purchasers,
2013–2014 Surveys



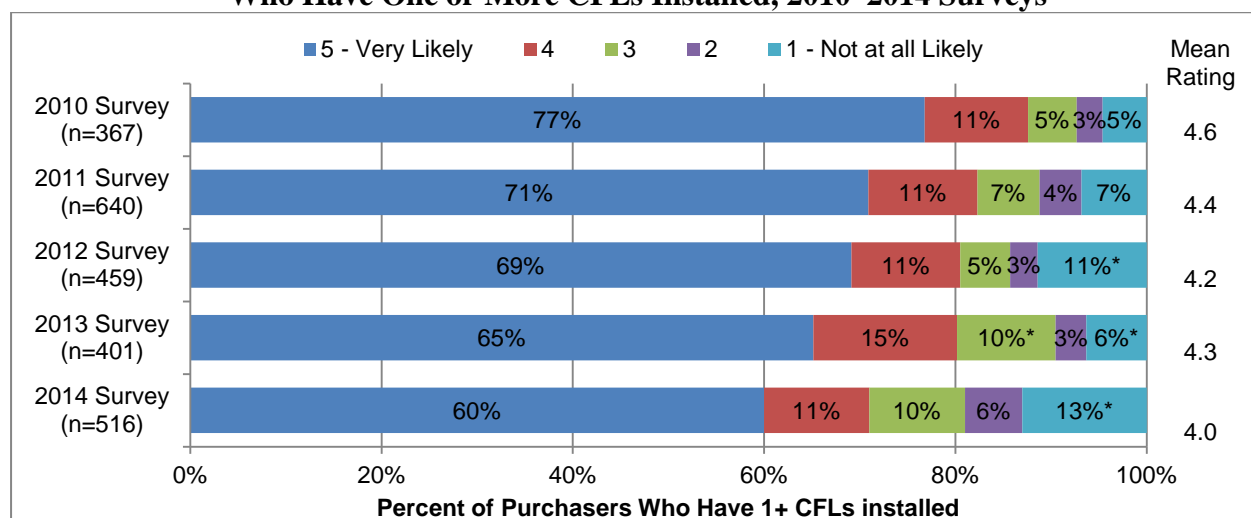
* Difference from prior study period is statistically significant.

D.3.7 CFL to CFL Replacement Likelihood

For the past several years, the consumer surveys have asked CFL purchasers who currently have CFLs installed to rate how likely they are to replace an installed CFL with another CFL upon burnout. Interviewers ask respondents to use a scale of 1 to 5 where 1 means “not at all likely” to purchase CFLs within the next year and 5 means “very likely.” As shown in Figure 59, there were no statistically significant differences in the percentage of respondents who provided a rating of 2 to 5 between 2013 and 2014. There was, however, a significant increase in 2014 respondents (13%) who mentioned that they were “not at all likely” to replace a CFL with another CFL upon burnout compared to 2013 respondents (6%). In 2014, three out of five CFL purchasers who currently use CFLs reported that they are “very likely” to replace a CFL with another CFL upon burnout (60%). Within the 2014 results, there were also no statistically significant differences in likelihood of CFL purchasers of replacing an installed CFL with

another CFL upon burnout among respondents by state or among urban versus rural respondents. However, results from 2010 through 2014 suggest a gradual decline in CFL-to-CFL replacement likelihood over time.

Figure 59
Likelihood of CFL to CFL Replacement Among CFL Purchasers
Who Have One or More CFLs Installed, 2010–2014 Surveys



Note: Percentages may not total 100% due to rounding.
 * Difference from prior study period is statistically significant.

D.4 Energy Independence and Security Act

The 2010–2014 consumer telephone surveys included questions to gauge consumer awareness of EISA and consumer perspectives regarding the types of lamps they plan to purchase when traditional incandescent lamps are no longer available. The sections below provide these results.

D.4.1 Awareness

The surveys included the following three questions to gauge Northwest consumers’ awareness of various elements of EISA:

- Are you aware of any legislation in the United States that may affect the availability of certain types of light bulbs?
- In 2007, Congress passed legislation that will phase out most traditional incandescent light bulbs by 2014. Before today, were you aware of this legislation?
- As part of the legislation, retailers began phasing 100-watt, 75-watt, 60-watt, and 40-watt light bulbs out of stores at the beginning of 2012. Before today, were you aware that these light bulbs are being phased out?

The survey included unprompted and prompted awareness question listed above (the first two on the list) in each phase between 2010 and 2014, but as shown in Table 19 below, the other survey questions related to EISA changed as the legislation’s efficacy standards were phased in over time. The 2010–2013 surveys asked consumers whether they were aware that traditional 100-

watt incandescent lamps were being phased out (as the phase-out for these lamps began on January 1, 2012), the 2013 surveys asked consumers whether they were aware that traditional 75-watt incandescent lamps were being phased out (beginning on January 1, 2013), and the 2014 survey asked consumers whether they were aware that 100-watt, 75-watt, 60-watt, and 40-watt incandescent lamps were being phased out (with the 60 and 40-watt phase-out beginning on January 1, 2014).

In both 2013 and 2014, roughly 40% of consumers were aware of legislation that may affect lamp availability (46% in 2013 and 44% in 2014). Nearly 60% in both years were aware that Congress passed legislation that will phase out most traditional incandescent light bulbs by 2014 (59%), and a similar proportion of 2014 respondents reported awareness that traditional 60- and 40-watt incandescent lamps were being phased out (57%).

Table 19
Awareness of EISA and its Implications, 2010—2014 Surveys

Aware...	Percent Aware				
	2010 (n=500)	2011 (n=1,000)	2012 (n=606)	2013 (n=776)	2014 (n=1,007)
...of legislation that will affect lamp availability?	16%	26%*	46%*	46%	44%
...of legislation that will phase out most traditional incandescent lamps by 2014? ³⁰	23%	33%*	58%	59%	59%
...that traditional 100-watt incandescent lamps are being phased out? ³¹	11%	18%*	41%*	43%	†
...that traditional 75-watt incandescent lamps are being phased out?	†	†	†	30%	†
...that traditional 100-watt, 75-watt, 60-watt and 40-watt incandescent lamps are being phased out?	†	†	†	†	57%

* Difference from prior study period is statistically significant.

† Question not included in this study period.

D.4.2 Planned Lamp Purchasing Activities

As described above, the consumer telephone surveys began asking questions about consumer familiarity with EISA in 2010, and the survey questions evolved between 2010 and 2014 as EISA was phased in over time. Between 2010 and 2012, survey questions focused on whether they had shopped for traditional 100-watt incandescent lamps in the previous year and if so, whether they

³⁰ The 2011 and 2010 surveys used the word “ban” instead of “phase out” for this question to match the wording of a survey question fielded on behalf of OSRAM Sylvania in a national study. The word “ban” is somewhat misleading, however, so DNV GL and NEEA staff agreed to modify the question wording for the 2012 survey.

³¹ In the 2011 and 2010 surveys, this question was phrased as follows: “As part of the legislation, traditional 100-watt light bulbs will no longer be sold by 2012. Before today, were you aware that 100-watt light bulbs will no longer be available by 2012?” Evaluators modified the phrasing for the 2012 and 2013 surveys so the question was phrased as follows: “As part of the legislation, retailers began phasing traditional 100-watt light bulbs out of stores at the beginning of 2012. Before today, were you aware that 100-watt light bulbs are being phased out?” The legislation does not prevent retailers from selling through their existing stock of 100-watt incandescent lamps, and the legislation had gone into effect before interviewers conducted the 2012 and 2013 surveys.

were able to purchase them. In 2013, the survey asked whether consumers had shopped for and/or purchased traditional 75-watt incandescent lamps in 2012, and the 2014 survey asked consumers whether they had shopped for and/or purchased traditional incandescent lamps of any wattage in 2013. The 2014 survey results suggested that 46% of consumers shopped for traditional incandescent lamps in 2013, 85% of these reported that they were ultimately able to purchase the lamps that they were shopping for. These results suggest that traditional incandescent lamps were still widely available in Northwest retail stores in 2013, which aligns with shelf survey results from 2013 and 2014 (See Figure 23 and Figure 24 above).

The 2014 survey followed with another question asking consumers what type of light bulbs they plan to use when traditional incandescent lamps are no longer available. As shown in Table 20, approximately 60% of respondents reported that they will switch to a new type of light bulb when traditional incandescent lamps are no longer available. Approximately 22% reported that they will keep using incandescent lamps but switch to a lower wattage. There were no statistically significant geographic differences in the 2014 survey results.

Table 20
Planned Action When Traditional Incandescent Lamps Are No Longer Available,
2014 Survey

Planned Action	Percent of Respondents (n=1,007)
Switch to a new type of light bulb	61%
Keep using traditional light bulbs but switch to a lower wattage	22%
Other	10%
Don't know / Refused	9%
Overall	100%

Note: Multiple responses allowed; percentages may not total 100%.

Of 2014 respondents who reported that they will switch to another type of light bulb (61% of respondents), 36% said they would switch to CFLs and 22% to LED lamps. Approximately 11% reported that they will switch to EISA-qualifying incandescent lamps and 2% to halogen lamps, and 4% to some other lamp type (the remainder were unsure). A significantly greater percentage of respondents in Oregon reported that they would switch to CFLs (71% of respondents who plan to switch to another type of light bulb) than respondents in Montana, Idaho, or Washington (37%, 47%, and 58%, respectively).

D.5 Key Driver Analysis

One of the objectives of the 2013–2014 Northwest Residential Lighting Long-Term Market Tracking Study is to “better understand drivers of customer decision-making regarding lamp purchases and influences on those decisions” (study objective 10). Analysts refined the 2014

consumer survey to enable a key driver analysis to understand the impact of various factors that may influence consumer purchase decisions.

D.5.1 Background

A key driver analysis is an exploratory analytic technique that attempts to explain the behavior of an outcome variable as a function of multiple explanatory variables. For the key driver analysis, the outcome variable is the consumer purchase decision, and the explanatory variables include factors consumers might consider when purchasing a lamp, such as energy savings, price, quality of light, bulb life, and other factors. These explanatory variables serve as independent variables in the key driver analysis.

Analysts modified the 2014 NEEA consumer lighting telephone survey instrument to include a battery of attributes (which serve as the explanatory variables in the key driver analysis) that respondents were asked to rate on a 1–10 scale on the importance of that attribute when making a light bulb purchase (see Table 21 below). Specifically, respondents were asked: “On a scale of 1–10 where 1 means ‘not at all important’ and 10 means ‘very important,’ how important are each of the following in your decision to purchase light bulbs?” (see question K1 in consumer lighting telephone survey instrument in Appendix B). Analysts derived these attributes from answers from respondents in prior consumer telephone surveys conducted for NEEA in previous residential lighting market tracking studies as well as in-store shopper intercepts surveys conducted in California in 2012 and 2013. Analysts used respondent ratings of these attributes to determine whether or not they could serve as predictors of consumer purchasing decisions.

Table 21
Replacement Lamp Attributes Rated by Respondents, 2014 Consumer Survey

Attributes	
1	The bulb helps save energy
2	The price of the bulb
3	The bulb helps lower energy bills
4	The bulb lasts a long time before burning out
5	The quality of the bulb
6	The bulb is environmentally friendly
7	Having prior experience with the type of bulb I purchase
8	The bulb is dimmable
9	The quality of the light from the bulb
10	The bulb fits well in my light fixture
11	My friends or family recommend the bulb I purchase

The 2014 NEEA consumer lighting survey also included questions asking respondents whether they have ever purchased a CFL or LED lamp as well as the number of CFL and LED lamps they

purchased in 2013 (Table 22 below). Respondents were also asked whether or not they were satisfied with the CFL or LED lamps they purchased on a scale of 1–10. Respondents’ answers to lamp purchasing questions as well as the satisfaction questions represent the set of dependent outcome variables that the key driver model attempts to explain through analysis of the eleven independent explanatory variables in Table 21.

Table 22
Outcome Variables Examined for Key Driver Analysis, 2014 Consumer Survey

Question #	Question Topic
P0, M1, M2	CFLs: ever purchased and number purchased in 2013
S1	Satisfaction with CFLs purchased
LE3, LE4	LED lamps: ever purchased and number purchased in 2013
LED6	Satisfaction with LED lamps purchased

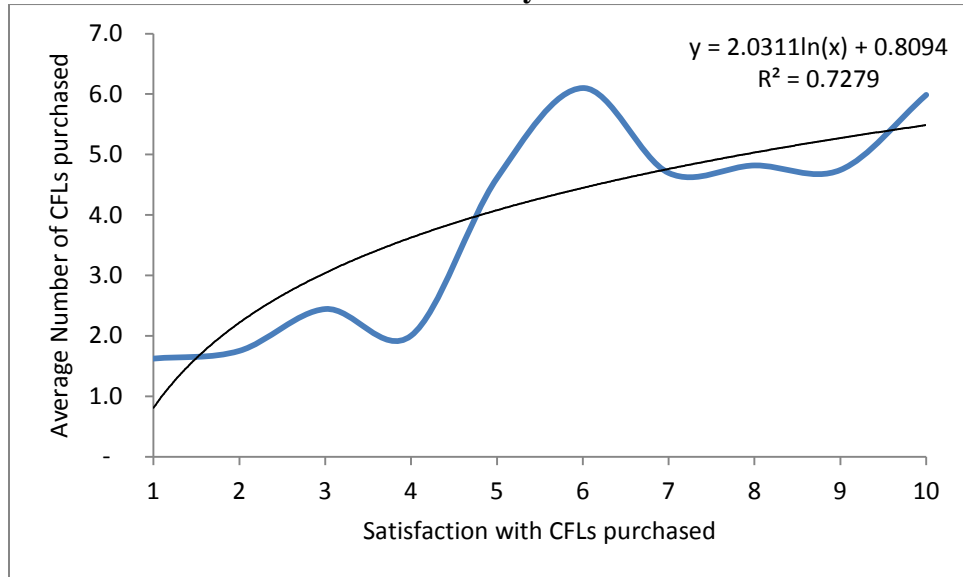
D.5.2 Results

We first examined whether or not there is a direct relationship between the number of CFLs and LED lamps purchased and the explanatory variables. Results of this analysis, which included simple regression models, suggest that the relationship between the explanatory variables and the number of CFLs and LED lamps purchased is weak. The reasons for this weak relationship may be due to a variety of factors outside of the scope of the key driver analysis, including lamp price, lack of need for new lamps, lamp placement in retail stores, and other external factors.

Given this weak relationship between the explanatory variables and the number of lamps purchased, we then explored whether or not there might be a positive relationship between satisfaction with CFLs and LED lamps and the number of CFLs and LED lamps purchased. Figure 60 shows the average number of CFLs purchased by level of satisfaction with CFLs. As the level of satisfaction with CFLs increases, the likelihood that respondents have purchased a higher number of CFLs also increases. Respondents who rated their satisfaction with CFLs as a “1” bought 1.6 CFLs on average, while respondents who rated their satisfaction with CFLs as a “10” bought 6.0 CFLs on average.³² The smoothed curved line drawn through the ten satisfaction levels visually demonstrates this positive correlation between CFL satisfaction level and the number of CFLs purchased.

³² Results for the average number of CFLs purchased for the remaining eight satisfaction levels are as follows: 2—1.8 CFLs purchased; 3—2.4 CFLs purchased; 4—2.0 CFLs purchased; 5—4.6 CFLs purchased; 6—6.1 CFLs purchased; 7—4.7 CFLs purchased; 8—4.8 CFLs purchased; 9—4.7 CFLs purchased.

Figure 60
Average Number of CFLs Purchased by Satisfaction Level with CFLs, 2014 Consumer Survey



After exploring the relationship between CFL satisfaction and the average number of CFLs purchased, we next explored the relationship between LED lamp satisfaction and the average number of LED lamps purchased. While we were able to observe a similar positive correlation between LED lamp satisfaction and LED lamp purchases (as observed with CFLs), there were far fewer sample points for LED lamp purchasers than there were for CFL purchasers.³³ As such, we decided to continue with the key driver analysis for CFL purchasers only.

The next step in the key driver analysis involved the construction of a binary variable that indicates very high satisfaction with CFL purchases versus very low satisfaction with CFL purchases. Respondents who reported satisfaction levels of 9 or 10 were classified as very satisfied and those who report satisfaction levels of 1 or 2 as very dissatisfied (Table 3). We excluded respondents in the middle satisfaction levels (304 respondents citing satisfaction levels from 3 to 8) in order to gain a clearer understanding of which explanatory variables are key drivers of CFL satisfaction.

³³ Among LED lamp purchasers there were some LED satisfaction levels that had only a single observation. For CFL purchasers, observations for each satisfaction level ranged from 21 to 158.

Table 23
Outcome Variables Examined for Key Driver Analysis, 2014 Consumer Survey

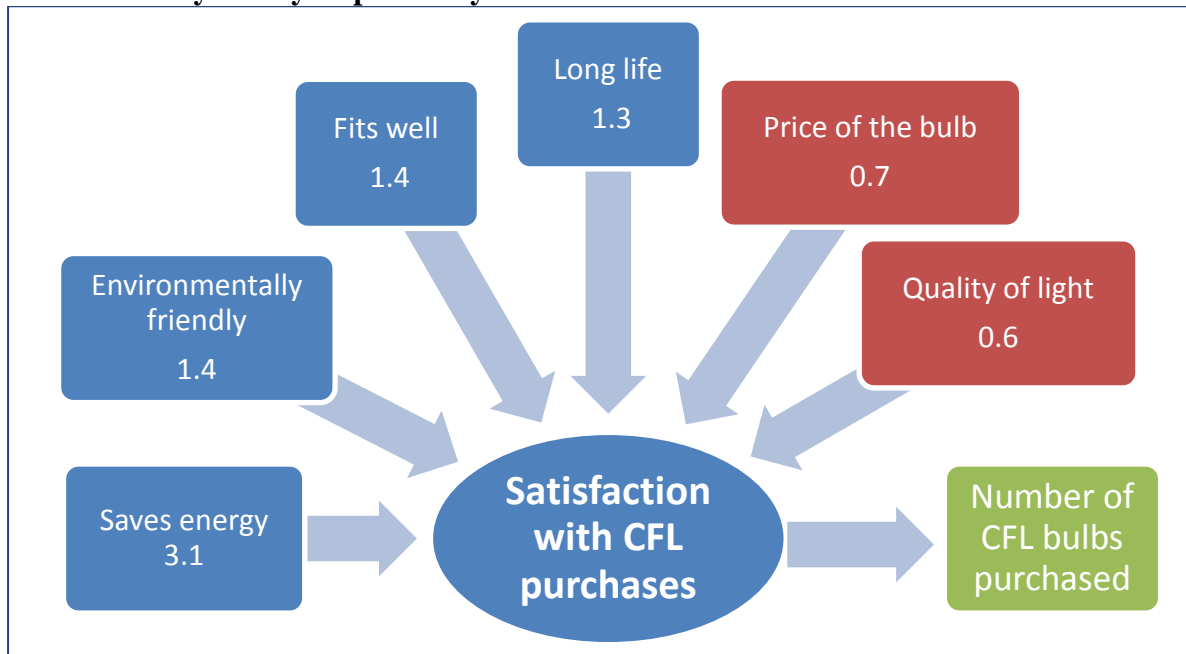
Satisfaction Level	Satisfaction Category	Total Frequency
1 and 2	Very Dissatisfied	80
9 and 10	Very Satisfied	215

The next step in the analysis was to develop a predictive model that would be able to correctly classify respondents as very satisfied and very dissatisfied with CFLs based on the explanatory attributes that were rated by respondents (as shown in Table 1 above). The model correctly classifies respondents as very satisfied or very dissatisfied with CFLs for 79% of the observations. From this, we developed odds ratios for each of the 11 explanatory attributes that either positively correlated with satisfaction or dissatisfaction (see Figure 61). The numerical value next to the explanatory attributes below represents an odds ratio. An attribute with an odds ratio greater than 1 means that the attribute correlates positively with satisfaction, and an attribute with an odds ratio lower than 1 means that the attribute correlates negatively with satisfaction. An attribute with an odds ratio of 1 is not a significant predictor of satisfaction. There were four explanatory attributes that correlated positively with satisfaction and two explanatory attributes that positively correlated with dissatisfaction (the other five attributes correlated neither positively nor negatively with satisfaction). Results are as follows:

- A unit increase in the importance rating of a bulb helping to save energy increases the odds of a respondent being very satisfied with CFLs (a rating of 1 or 2) by a multiplicative factor of 3.1.
- A unit increase in the importance rating of a bulb being environmentally friendly increases the odds of a respondent being very satisfied with CFLs by a multiplicative factor of 1.4.
- A unit increase in the importance rating of a bulb fitting well in a fixture increases the odds of a respondent being very satisfied with CFLs by a multiplicative factor of 1.4.
- A unit increase in the importance rating of a bulb lasting a long time before burning out (long bulb life) increases the odds of a respondent being very satisfied with CFLs by a multiplicative factor of 1.3.
- A unit increase in the importance rating of the price of a bulb *decreases* the odds of a respondent being very satisfied with CFLs by a multiplicative factor of 0.7.
- A unit increase in the importance rating of the quality of light from a bulb *decreases* the odds of a respondent being very satisfied with CFLs by a multiplicative factor of 0.6.

The results suggest that a high importance rating of a bulb helping to save energy has a strong positive impact on CFL satisfaction. On the other hand, a high importance rating of a bulb's price or quality of light has a negative impact on satisfaction.

Figure 61
Summary of Key Explanatory Attributes on CFL Satisfaction and CFL Purchases



The six explanatory attributes in the figure above are key drivers of satisfaction or dissatisfaction with CFLs. Furthermore, we have established that CFL satisfaction has a positive correlation with the number of CFLs purchased (as shown above in Figure 60 above). For example, if respondents consider a bulb’s energy savings to be extremely important, they are likely to be very satisfied with CFLs. And if respondents are very satisfied with CFLs, they are more likely to have purchased more CFLs. Thus, the explanatory attributes, which serve as key drivers of CFL satisfaction, have an indirect relationship to the number of CFLs purchased.

APPENDIX E – ACE MODEL REVIEW MEMORANDUM

Memo to:
Praveen Chalise and Anu Teja
Northwest Energy Efficiency Alliance (NEEA)

From: Geoff Barker, Jenna Canseco,
DNV GL - Energy

Date:
August 27, 2014

Subject:
2013-2014 Northwest Residential Lighting Market Tracking Study: Review of 2014 ACE Model Inputs

1. Introduction

On February 12, 2014, Jenna Canseco and Geoff Barker of DNV GL had a call with Christine Jerko-Holland and Praveen Chalise of the Northwest Energy Efficiency Alliance (NEEA) to discuss DNV GL's recommended approaches to assessing key inputs to the 2013 ACE model for residential lighting. This memorandum briefly reviews those recommendations and describes the results. Appendix 1 provides a complete list of references cited in the memo.

Below, the DNV GL team provides perspectives on forward-looking market share for residential lamp types of to support NEEA's forecast. The team also reviews each of the key ACE model inputs identified during the February 2014 call, reviews the recommended approach for assessing each input in the 2013 ACE model, and the presents the results of the assessment for each model input.

2. Forecast

During the above-mentioned call, Christine Jerko-Holland of NEEA requested that the DNV GL team include estimated projections of general purpose (GP)¹ and specialty CFL market share from 2014 through 2025 in the assessment of 2013 ACE Model Inputs to support NEEA's forecasts for residential lighting.

For the 2013 review of ACE Model Inputs, DNV GL's project manager suggested reviewing U.S. Energy Information Administration (EIA) forecasts of residential general service medium screw-base (MSB) lamp purchases between 2010 and 2035 (Comstock, O. [U.S. EIA], 2014). There were two challenges associated with this source as far as informing NEEA's forecast:

- (1) data were not available for the Northwest region (only for the U.S. as a whole); and
- (2) the data only include projections for general purpose CFLs, incandescent, and LED lamps, with no projections for specialty lamps for any of the three lamp technologies.

¹ NEEA defines "general purpose CFLs" as medium screw base basic bare spiral CFLs and A-lamps that are single-wattage lamps (i.e., not dimmable lamps or 3-way lamps). All other CFL types (including dimmable and 3-way lamps) are considered "specialty CFLs."

Given that the DNV GL team was not aware of other similar data sources that could be leveraged to support NEEA’s projections, DNV GL and NEEA decided that providing the U.S. market share projections would be sufficient to address the first of the challenges described above. To address the second challenge, DNV GL reviewed 2010 through 2013 CFL sales data from Fluid Market Strategies/CLEAResult—all years which show the percentage of GP and specialty CFL sales—and projected the sales of specialty CFLs forward based on these data. The DNV GL team also assumed additional specialty lamp sales projections for incandescent and LED lamps (beyond the general purpose projections provided by EIA for these two lamp technologies) that are based on the percentage of GP and specialty CFL sales provided by CLEAResult.

- **Status:** The DNV GL team completed these analyses in August, 2014.
- **Results:** To address the fact that the U.S. EIA projections do not include details regarding specialty lamp market share for CFLs, LED, and incandescent lamps, the DNV GL team reviewed the annual CFL sales data provided to NEEA by Fluid/CLEAResult for 2010 through 2013. Table 1 below provides details on the GP and specialty CFL sales split for these four years as well as the average across these years. As shown in the table, GP CFLs comprised approximately 69.6 percent of CFL sales, on average, across the 4 years, with specialty CFLs comprising an average of 30.4 percent of sales over the same time period.

Table 1
Annual and Averaged Percentage of Northwest Residential CFL Sales
by General Purpose and Specialty Lamp Categories, 2010—2013

Year	Percent of Sales		Data Source
	GP CFLs	Specialty CFLs	
2010	69.6%	30.4%	Fluid Market Strategies, 2011
2011	71.5%	28.5%	Fluid Market Strategies, 2012
2012	70.1%	29.9%	Fluid Market Strategies, 2013a
2013	67.3%	32.7%	CLEAResult, 2014
4-Year Average	69.6%	30.4%	(Average of estimates above)

As shown in Table 1 above, the share of GP and specialty CFLs of total annual regional CFL sales was similar between 2010 and 2013. As such, the DNV GL team took the 4-year average share of specialty CFL sales to extrapolate and project the annual share of national lamp sales attributed to specialty CFLs in the U.S. EIA data.² Based on these data, the DNV GL team was able to produce the projected

² DNV GL calculated the total projected CFL sales (GP and specialty combined) by dividing the projected sales of GP CFLs for a given year by 30.4 percent. To calculate the projected specialty CFL sales, DNV GL multiplied the total projected CFL sales by 69.6 percent.

market share for GP CFLs, specialty CFLs, LED lamps (general purpose and specialty LED lamps combined), and incandescent lamps (general purpose and specialty incandescent lamps combined) for 2013, 2014, 2015, 2016, 2020, and 2025 to support NEEA's forecasts for residential lighting (see Figure 1 below).³

As shown in Figure 1, the U.S. EIA predicts that manufacturers will discontinue large-scale production of incandescent lamps and consumers will stop purchasing these products by approximately 2020. According to a U.S. EIA representative, earlier projections (e.g., from 2011) included the assumption "that manufacturers would be able to produce incandescent bulbs that would meet future standards." However, the U.S. EIA reports that, "since then, manufacturers have largely abandoned this goal and instead focused on development of more efficient lighting types beyond incandescent bulbs." As such, in their Annual Energy Outlook for 2013 (on which the data in Figure 1 are based), the U.S. EIA limits all post-2020 purchases to CFLs and LED replacement lamps.

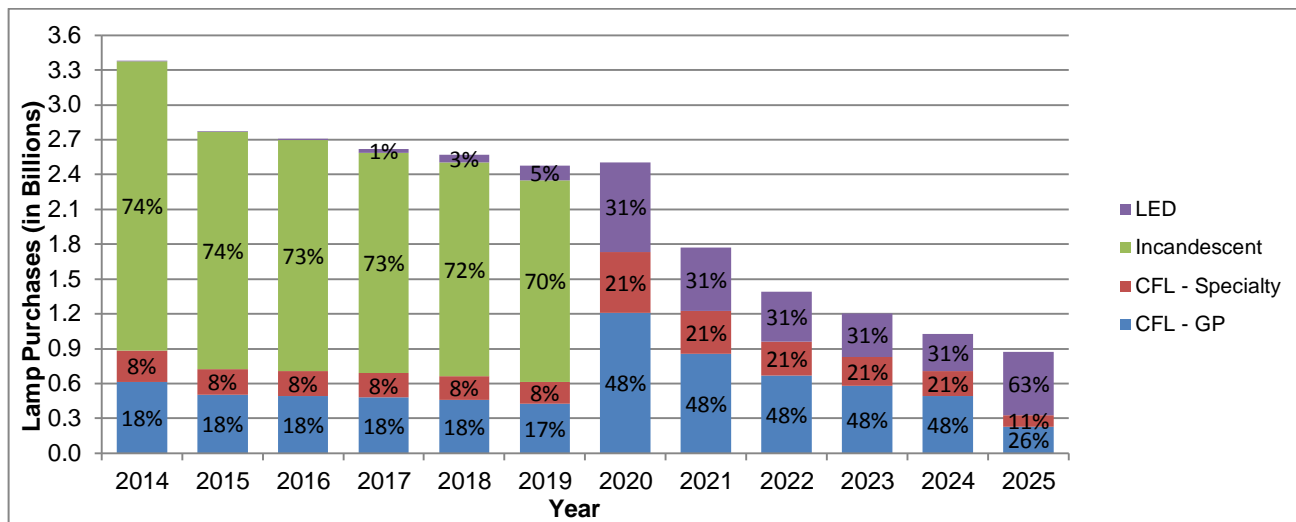
Note that the large increase in general purpose CFL sales and LED lamp sales in 2020 may be attributable to the following:

- Federal law (EISA 2007) set new efficiency standards for general service light bulbs
- EISA Tier 1, which took effect between Jan 2012 and Jan 2014, requires 25 to 30 percent more efficient than traditional incandescent bulbs
- EISA Tier 2 will take effect in 2020 and require 45 percent greater efficiency than traditional incandescent lamps⁴

³ DNV GL assumed the same proportion of GP and specialty sales for LED and incandescent lamps as GP and specialty sales for CFLs.

⁴ See Dimascio and Loiter (2010) for further details.

Figure 1
Total Projected Lamp Purchases and Share of Lamp Purchases⁵ in the U.S. by Lamp Type and Year, 2014—2025



Sources: U.S. EIA, 2014; Fluid Market Strategies/CLEARResult, 2011—2014.

Table 2 below provides more detailed estimates of market share by technology for the years in which NEEA is particularly interested for its forecast -- 2014, 2015, 2016, 2020, and 2025.

Table 2
Share of Lamp Purchases by Lamp Type and Year, 2014, 2015, 2016, 2020, and 2025

Lamp Type	Year				
	2014	2015	2016	2020	2025
General Purpose CFLs	18%	18%	18%	48%	26%
Specialty CFLs	8%	8%	8%	21%	11%
Incandescent Lamps	74%	74%	73%	0%	0%
LED Lamps	0%	0%	0%	31%	63%
Overall	100%	100%	100%	100%	100%

3. ACE Model Inputs

NEEA’s ACE model inputs are grouped into five categories:

⁵ With general purpose incandescent lamp sales effectively going to zero by 2020, DNV GL was not able to project specialty incandescent lamp sales for 2020 through 2025. Thus, Figure 1 and Table 2 do not include any projections for incandescent lamp sales from 2020 through 2025.

1. Total market sales of GP and specialty bulbs (all technologies; in millions);
2. GP CFL market share;
3. GP CFL savings rate;
4. Specialty CFL market share; and
5. Specialty CFL savings rate.

Categories two through five above are each comprised by several inputs. The sections below describe each input and the accompanying assessment in additional detail.

3.1 Total Market Sales of GP and Specialty CFLs

In DNV GL's review of the 2012 ACE Model inputs, DNV GL staff compared the average number of general purpose CFLs, specialty CFLs, traditional incandescent lamps, EISA-compliant incandescent lamps, and LED lamps reportedly purchased by telephone respondents with the sales data provided to NEEA by Fluid Market Strategies (now CLEAResult). Ultimately, we recommended that NEEA rely on the sales data. Below we provide 2013 data from CLEAResult.

- **Status:** NEEA provided final 2013 CFL sales data generated by CLEAResult to DNV GL on April 14, 2014.
- **Results:** According to data from CLEAResult, the total number of general purpose CFLs sold in the Northwest in 2013 was 11,352,341 (67% of total 2013 Northwest CFL sales) and the total number of specialty CFLs sold was 5,514,785 (33%), for a total of 16,867,126 CFLs (CLEAResult, 2014).⁶

3.2 GP CFL Market Share

NEEA's ACE model includes five elements related to GP CFL market share. To support the 2013 ACE model assessment, NEEA asked us to update these two elements:

1. Total tracked units; and
2. Tracked unit retirements.

3.2.1 Tracked Units: Total GP CFLs

In DNV GL's review of the 2012 Residential Lighting ACE Model inputs, we recommended that NEEA rely on Fluid Market Strategies' sales estimates for 2012 for this input to the ACE model. For 2013, we also recommend that NEEA rely on the CLEAResult (formerly Fluid) data.

- **Status:** NEEA provided final 2013 CFL sales data generated by CLEAResult to DNV GL on April 14, 2014.

⁶ These estimates include both Energy Star and non- Energy Star CFL sales.

- **Results:** DNV GL’s project manager found no issues of concern with the sales data tracking approach taken by CLEAResult in estimating 2013 GP CFL sales for NEEA. However, it is worth noting that we have some concerns regarding CLEAResult’s/Fluid’s calculation of the GP versus specialty CFL sales split (see DNV GL memo “2012 CFL Pricing Analysis and Recommendations: 2012-2013 Northwest Residential Lighting Market Tracking Study” dated March 31, 2014). Based on CLEAResult’s estimates, regional GP CFL sales in 2013 totaled 11,352,341 lamps (98% of which were Energy Star lamps).

3.2.4 Tracked Units: GP Unit Retirements

NEEA has a retirement model, which estimates the proportion of GP CFLs that are retired annually. The majority of GP CFLs retire within 6 years. To assess this input to the 2012 model, DNV GL staff recommended a review the CFL Lab Test study from the California Public Utilities Commission (CPUC) Energy Division which was due to be published in mid-2014. This study was designed to determine the average CFL lifetime. The team expected results from this study in June 2014, but these results have been delayed until late 2014.

- **Status:** In late June, 2014, Energy Division reported that the study will be delayed to allow for an extended lamp testing period. This period has been extended several times, and results are now expected in late 2014.
- **Results:** DNV GL will provide an update for the 2015 ACE model input assessment when results for this input are expected to be available.

3.3 GP CFL Savings Rate

NEEA’s ACE model includes six inputs related to the savings rate for GP CFLs. For the 2013 ACE model assessment, NEEA asked the DNV GL team to update three of these inputs:

1. Removal rate
2. Daily hours of use
3. Measure life

3.3.1 GP CFL Removal Rate

The original GP CFL removal rate is based on results from consumer telephone surveys included in NEEA’s 2005 residential lighting study.⁷ To assess this input for 2013, DNV GL recommended including the same question on this topic in the 2014 consumer telephone surveys as used in previous study years. DNV GL recommends using 2014 consumer survey results to support the 2013 assessment of NEEA’s ACE model for residential lighting.

- **Status:** Surveys completed as of April 23, 2014 (n = 1,007).

⁷ The 2005 survey included a question that asked, “Have you had any CFLs that you installed, but later removed and did not use elsewhere in your home?”

- Results:** According to the results from consumer survey question P5A (“Have you had any CFLs that you installed, but later removed and did not use elsewhere in your home?”), 23.6 percent of CFL purchasers (14.1% of the population) have installed and later removed at least one CFL. Follow-up questions were aimed at determining the number of CFLs removed overall, the number that were spiral CFLs, and the number that were A-lamp CFLs (so that the number of general purpose and specialty CFLs could be calculated). Table 5 provides the results to these survey questions based on CFL purchasers and based on all respondents (including CFL purchasers and non-purchasers) in terms of the disposition of all CFLs ever acquired by each household. Based on these estimates, approximately 23 percent of all CFLs ever acquired by purchasers have been removed; across the population (which includes CFL purchasers and non-purchasers) 8 percent of all CFLs ever acquired have been removed. General purpose CFL removals, in particular, represent approximately 21 percent of all CFLs ever acquired by purchasers and 8 percent of CFLs ever acquired across the population.

Based on these results, the DNV GL team recommends a removal rate of 8 percent for GP CFLs.

Table 5
Average CFL Disposition among CFL Purchasers and All Respondents

CFL Disposition	Mean Number of CFLs			
	Among CFL Purchasers (n=608)		Among All Respondents (n=1,007)	
CFLs currently installed	10.1	46%	5.04	61%
CFLs ever removed	4.95	24%	0.68	8%
<i>General Purpose CFLs removed</i>	4.47	21%	0.62	7.6%
<i>Specialty CFLs removed</i>	0.48	2%	0.06	<1%
CFLs currently stored	6.8	31%	2.52	31%
All CFLs Ever Acquired	21.8	100%	8.2	100%

Source: DNV GL 2014 Northwest consumer lighting surveys.

3.3.4 GP CFL Daily Hours of Use (HOU)

NEEA bases GP CFL HOU on results from site visits conducted in 2009 as part of the California Residential Lighting Metering Study with adjustments based on data presented to the Regional Technical Forum by SBW Consulting. As part of the 2012 input review, DNV GL recommended reviewing results from an impact evaluation of California’s investor-owned utilities’ (IOU) 2010-2012 residential, advanced, and upstream lighting programs (which includes updated estimates of average daily HOU for four CFL styles) and the 2012 California Lighting and Appliance Saturation Study (CLASS, which includes updated information on the distribution of lamps by installation location, which affects hours of use).

- **Status:** The DNV GL team completed the analyses on average daily HOU in early April, 2013.
- **Results:** The final 2010-2012 Residential/Advanced/Upstream Lighting Programs Impact Evaluation report (also known as CPUC Evaluation, Measurement, and Verification [EM&V] Work Order [WO] 28) includes updated estimates of average daily HOU for four CFL styles – spiral, A-lamp, reflector, and globe. Of interest to NEEA regarding the GP HOU estimates are spiral CFLs and A-lamp CFLs.

During 2009, DNV GL researchers conducted a detailed lighting inventory of California households, and also conducted a metering study to statistically model average daily HOU for residential lighting, including breakdowns for CFLs by type (KEMA, Inc., 2010). To update these estimates for 2013, the DNV GL team obtained an updated lighting inventory of California households during site visits conducted as part of the CLASS study in 2012. The team then applied the updated data on disposition of CFLs by type to the 2010 HOU models to estimate the 2012 HOU estimates for spiral, A-lamp, reflector, and globe CFLs.

Table 8 below provides the estimated average daily HOU for spiral CFLs and A-lamps as well as a weighted average estimate for all GP CFLs based on these two estimates using California data. As shown, the estimated average daily HOU for spiral CFLs declined by 0.08 hours between the final 2010 results and 2012 results, while average daily HOU for A-lamp CFLs declined by 0.22 hours during the same timeframe. Overall, the average daily HOU for GP CFLs declined by 0.10 between the final 2010 and 2012 results to 1.72.

Table 8
Estimated Average Daily Hours of Use in California
by CFL Type and Overall for General Purpose CFLs, 2012

Lamp Type	Final 2012 Results	Change from Final 2010 Results	Number of Lamps in Sample	Number of Lamps in California Households
Spiral	1.73	-0.08	14,475	107,998,735
A-Lamp	1.61	-0.22	634	4,770,805
Overall - GP CFLs	1.72	-0.10	15,109	112,769,540

We should note that we also reviewed the 2014 Residential Building Stock Assessment (RBSA; see Ecotope, Inc. 2014) to determine whether NEEA could update its HOU estimates based on data from the Northwest. However, that source does not include hours of use by technology or lamp style. For HOU that are specific to the Northwest, DNV GL recommends that NEEA ask Ecotope whether they can produce current HOU estimates by lamp technology and style (i.e., HOU for GP and specialty CFLs) using the Northwest RBSA data.

3.3.6 GP CFL Measure Life

NEEA relies on a 2010 value from a Regional Technical Forum report for this input. As mentioned above for “Tracked Units: GP CFL Replacements,” DNV GL staff recommend reviewing the forthcoming CFL Lab Test study from California to determine the average lifetime of GP CFLs. The DNV GL team expected results from this study to be available in June 2014, but these results have been delayed until late 2014.

- **Status:** As described above, the CPUC Energy Division announced in June, 2014 that publication of the CFL Lab Testing report would be delayed until late 2014.
- **Results:** DNV GL will provide an update for the 2015 ACE model input assessment when results for this input are expected to be available.

3.4 Specialty CFL Market Share

NEEA’s ACE model includes the same elements related to specialty CFL market share as related to GP CFL market share. To support the 2013 ACE model assessment, NEEA asked us to review these two elements:

1. Total tracked units; and
2. Tracked unit retirements.

3.4.1 Tracked Units: Total Specialty CFLs

As described above under Tracked Units: GP CFLs (section 3.2.1), DNV GL recommended that NEEA rely on Fluid Market Strategies’ sales estimates for 2012 for this input to the ACE model. For 2013, we also recommend that NEEA rely on the Fluid/CLEAResult data.

- **Status:** NEEA provided final 2013 CFL sales data generated by CLEAResult to DNV GL on April 14, 2014.
- **Results:** As described above for “Tracked Units: Total GP CFLs,” DNV GL’s project manager found no issues of concern with the sales data tracking approach taken by Fluid Market Strategies in estimating 2013 specialty CFL sales for NEEA. However, as mentioned above, it is worth noting that we have some concerns regarding Fluid’s calculation of the GP versus specialty CFL sales split (see DNV GL memo “2012 CFL Pricing Analysis and Recommendations: 2012-2013 Northwest Residential Lighting Market Tracking Study” dated March 31, 2014). Based on CLEAResult’s estimates, regional specialty CFL sales in 2013 totaled 5,514,785 lamps (90% of which were Energy Star lamps).

3.4.4 Tracked Units: Specialty Unit Retirements

NEEA has a retirement model which estimates the proportion of specialty CFLs that are retired annually. The majority of specialty CFLs retires within 10 years. DNV GL recommends the same as above for GP CFLs (California CFL Lab Test study results), which was expected to be available in June, 2014.

- **Status:** As described above, the CPUC Energy Division announced in late June, 2014 that publication of the CFL Lab Testing report would be delayed until late 2014.
- **Results:** DNV GL will provide an update for the 2015 ACE model input assessment when results for this input are expected to be available.

3.5 Specialty CFL Savings Rate

NEEA's ACE model includes the same six inputs related to the savings rate for Specialty CFLs as included for estimating the specialty CFL savings rate. To support the 2013 ACE model assessment, NEEA asked us to update these 3 inputs:

1. Removal rate;
2. Daily hours of use; and
3. Measure life.

3.5.1 Specialty CFL Removal Rate

NEEA assumes a zero percent removal rate for specialty CFLs. DNV GL staff recommended including questions on CFL removals in the 2014 consumer survey.

- **Status:** Consumer telephone surveys completed as of April 23, 2014 (n = 1,007).
Results: As shown in Table 5 above (in Section 3.3.1 – GP CFL Removal Rate), specialty CFL removals represent less than two percent of all CFLs ever acquired by CFL purchasers and less than 0.1 percent of all CFLs ever acquired across the population (purchasers and non-purchasers). Based on these results, the DNV GL team recommends a removal rate of 0.1 percent for specialty CFLs.

3.5.4 Specialty CFL Daily Hours of Use (HOU)

NEEA bases specialty CFL HOU on results from site visits conducted in 2009 as part of the California Residential Lighting Metering Study with adjustments based on data presented to the Regional Technical Forum by SBW Consulting. As part of the 2012 input review, DNV GL recommended reviewing results from the aforementioned CLASS and CPUC EM&V WO28 interim results for updated estimates of specialty CFL HOU.

- **Status:** The DNV GL team completed the analyses on average daily HOU in early April, 2013.

- **Results:** The final 2010-2012 Residential/Advanced/Upstream Lighting Programs Impact Evaluation report (CPUC EM&V WO28) includes updated estimates of average daily HOU for four CFL styles – spiral, A-lamp, reflector, and globe. Of interest to NEEA regarding the specialty HOU estimates are reflector CFLs and globe CFLs.

Using the same approach described above in Section 3.3.4 (GP CFL HOU), the DNV GL team prepared updated estimates of average daily HOU for CFLs in 2012. Table 10 below provides the estimated average daily HOU for reflector, globe and all other specialty CFLs as well as a weighted average estimate for all specialty CFLs based on these three estimates using California data. As shown, the estimated average daily HOU for reflector CFLs declined by 0.06 between the final 2010 2012 results, while average daily HOU for globe CFLs declined by 0.14 hours during the same timeframe. Overall, the average daily HOU for specialty CFLs in 2012 declined by 0.07 between the final 2010 2012 results to 1.68.

Table 10
Estimated Average Daily Hours of Use in California
by CFL Type and Overall for Specialty CFLs, 2012

Lamp Type	Preliminary 2012 Results	Change from Final 2010 Results	Number of Lamps in Sample	Number of Lamps in California Households
Reflector	1.72	-0.06	1,440	12,971,791
Globe	1.33	-0.14	301	4,129,983
Other	1.74	-0.06	1,581	11,981,527
Overall – Specialty CFLs	1.68	-0.07	3,322	29,083,302

As mentioned above, we reviewed the 2014 RBSA to determine whether NEEA could update its HOU estimates based on data from the Northwest. However, that source does not include hours of use by technology or lamp style. For HOU that are specific to the Northwest, DNV GL recommends that NEEA ask Ecotope whether they can produce current HOU estimates by lamp technology and style (i.e., HOU for GP and specialty CFLs) using the Northwest RBSA data.

3.5.6 Specialty CFL Measure Life

NEEA relies on a 2010 value from a Regional Technical Forum report for this input. As mentioned above for “GP CFL Measure Life,” DNV GL staff recommend reviewing the forthcoming CFL Lab Test study from California to determine the average lifetime of specialty CFLs. The DNV GL team expected results from this study to be available in June 2014.



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- **Status:** As described above, the CPUC Energy Division announced in late June, 2014 that publication of the CFL Lab Testing report would be delayed until late 2014.
- **Results:** DNV GL will provide an update for the 2015 ACE model input assessment when results for this input are expected to be available.

APPENDIX 1 – References

- CLEAResult, 2014. *2013 Full CFL Data*. Prepared for NEEA. April 14, 2014.
- Comstock, O. (U. S. Energy Information Administration), 2014. *Annual Energy Outlook 2014 Early Release*. Personal communication (email) with Jennifer Canseco (DNV GL). May 20, 2014.
- DiMascio, Marianne and Loiter, Jeff, 2010. “Impending EISA Lighting Standards: Impacts on Consumers and Energy Efficiency Impacts on Consumers and Energy Efficiency Lighting Programs.” NARUC Presentation. November 14, 2010
- DNV GL, 2014a. “2012 CFL Pricing Analysis and Recommendations: 2012-2013 Northwest Residential Lighting Market Tracking Study.” Memorandum. March 31, 2014
- _____, 2014b. *WO21: Residential On-Site Study: California Lighting and Appliance Saturation Study (CLASS 2012) – Draft Final Report*. Prepared for the California Public Utilities Commission, Energy Division. Final report expected Q3 2014.
- _____, 2014c. *WO28: California Upstream and Residential Lighting Impact Evaluation – Final Report*. Prepared for the California Public Utilities Commission, Energy Division. Final report August 2014.
- Ecotope Inc., 2014. *Residential Building Stock Assessment: Metering Study*. Prepared for the Northwest Energy Efficiency Alliance. April 28, 2014.
- Fluid Market Strategies, 2013a. *2012 Full CFL Data*. Prepared for NEEA. March 13, 2013.
- _____, 2013b. *2012 Full CFL Data Spreadsheet Guide: CFL Data Collection, Tracking, and Analysis Report*. Prepared for NEEA. March 13, 2013.
- _____, 2012. *2011 Full CFL Data*. Prepared for NEEA. March 8, 2012.
- _____, 2011. *2010 Basic Widget Data Report*. Prepared for NEEA. n.d.
- KEMA, Inc., 2010. *Final Evaluation Report: Upstream Lighting Program: Volumes 1 and 2*. Supported by The Cadmus Group, Inc.; Itron, Inc.; PA Consulting Group; and Jai J. Mitchell Analytics. Prepared for the California Public Utilities Commission, Energy Division. February 8, 2010.
- U.S. Census Bureau, 2013. *Population Estimates Program, 2013*. Population estimates for Idaho, Montana, Oregon, and Washington (updated annually). Accessed at <http://quickfacts.census.gov/qfd/index.html>. 2013.

APPENDIX F – CONSUMER SURVEY SAMPLING MEMORANDUM

Memo to: Praveen Chalise
Northwest Energy Efficiency Alliance (NEEA)

From: DNV GL - Energy

Date: January 17, 2014

Copy:

Prepared by: Geoff Barker, Jenna Canseco,
Paula Ham-Su

Subject: Consumer Telephone Survey Sample:
2013-2014 Northwest Residential Lighting Long-Term Market Tracking Study

1. Purpose and Background

This memorandum presents DNV GL's suggestion to improve NEEA's Consumer Telephone Survey Sample by including a cell phone-only data collection effort.

DNV GL (formerly DNV KEMA and KEMA Inc.) has conducted consumer surveys nearly every year for the Northwest Residential Lighting Long-Term Market Tracking (LTMT) Study dating back to 2005. In prior years, DNV GL has conducted consumer surveys with a stratified random sample of households in Idaho, Montana, Oregon and Washington. The samples have been designed to meet the following criteria within survey budget constraints:

- Accurately represent urban and rural populations and facilitate comparisons between the two
- Provide reasonable estimates at the state level and ensure that results can be compared between and among the states.

Since 2005, these surveys have been conducted via random digit dialing (RDD) to landline numbers only, and have not included cell phone numbers.

2. Overview of the Sample Methodology Used in 2013 Consumer Survey

To accurately represent urban and rural populations and to provide reasonable population estimates at the state level, DNV GL's sampling expert allocated sample points based on the U.S. Census Bureau's most current estimates of population by county (e.g., the U.S. Census Bureau, 2012, for the 2013 consumer survey). DNV GL staff merged these county-level population estimates for each of the four Northwest states with the U.S. Department of Agriculture Economic Research Service's Rural Urban Continuum Codes (RUCC) data. We then stratified the population of the four states into 8 strata defined by the combinations of the states and two geographic sectors (rural and urban).

Table 1 below illustrates the number of completed surveys by geographic sector and state in the 2013 consumer survey. Ten percent of the population across the four Northwest states was in the rural sector, and 90 percent was in the urban sector. However, to ensure comparability between the urban and the rural sectors (per RUCC designations) and similar statistical precision for each sector's survey estimates, NEEA opted for a sample design that allocated approximately 37 percent of the sample points to the rural sector and the balance to the urban sector. Within each geographic sector, the sample was proportional to the 2012 population estimates of the Census with the exception of

rural Montana, in which the sample size was increased to a minimum of 35 sample points (from 24). Nine sample points were reallocated to the stratum for rural Montana from the urban Washington stratum as the latter had the largest sample allocation as a result of its population.

Table 1
2013 Consumer Survey Population and Sample Sizes by State and RUCC Designation¹

State	Population*				Sample Size			
	N		%		n		%	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Idaho	398,154	1,186,756	3%	9%	84	50	11%	6%
Montana	364,808	633,432	2%	5%	78	26	10%	3%
Oregon	256,934	3,614,870	2%	27%	54	148	7%	19%
Washington	335,449	6,494,677	3%	49%	72	264	9%	34%
Subtotal	1,355,345	11,929,735	10%	90%	288	488	37%	63%
Total	13,285,080		100%		776		100%	

* Source for population counts: U.S. Census Bureau, 2012.

DNV GL's sampling expert then created and applied sample expansion weights to the data such that the results are representative of the Northwest residential population. We analyzed the 2013 survey data using both time series and cross-sectional comparisons to understand changes in the market as well their underlying causes. We also analyzed results by geographic region (urban versus rural per the RUCC designations). NEEA shifted its geographic classifications from metro/non-metro to urban/rural in 2011, so time series comparisons for urban/rural designations are possible for the 2012 and 2013 surveys (and will also be possible for the 2014 survey and future surveys beyond 2014).

3. Importance of Cell Phone Respondents

In recent years, researchers have become increasingly concerned about the impact of cell phones on surveys. The National Center for Health Statistics' (NCHS) landmark Wireless Substitution study found that in 2006, about 16 percent of all U.S. households had wireless phones (also known as cell phones) only.² By 2013, this percentage was almost 40 percent.³ Moreover, the number of wireless-only households exceeds the number of landline-only households, and the proportion of wireless-only households is expected to continue to rise. The ongoing monitoring of the country's cell phone usage and tracking of cell phone-only households NCHS's efforts to address the impact of cell phone-only households on the phone-based health research that this agency conducts.

¹ 2012-2013 Northwest Residential Lighting Market Tracking Study. Prepared by DNV KEMA Energy & Sustainability for the Northwest Energy Efficiency Alliance. June 10, 2013.

² Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, January-June 2008. National Center for Health Statistics. December 17, 2008.

³ Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, January-June 2013. National Center for Health Statistics. December 2013.
<http://www.cdc.gov/nchs/nhis.htm>

In spite of the growing number of cell phone-only households in recent years, the inclusion of cell phones on phone-based research is relatively recent. This is in part because cell phones pose many challenges to researchers. Among others:

- Response rates from cell phone calls are significantly lower than from landlines, resulting in substantially higher implementation costs.
- Cell phones do not provide reliable geographical indicators. Because they are portable, the area code and phone exchange (the first digits after the area code) are not an indication of the place of residence.
- It is more difficult to determine if a cell phone is in residential or non-residential service based on the phone's exchange.
- A cell phone survey CATI call may reach a minor or another person who is not qualified to answer the survey questions – moreover, it is not always possible to ask respondents under the age of 18 to be transferred to the person who can answer survey questions.
- From a sample design perspective, cell phones increase the difficulty of computing the probability of selection. While most household with landlines have only one landline, it is common to have a cell phone for each adult member of the household.

It is, nevertheless, increasingly necessary to address the issue of wireless-only households. While telephone studies that sample based on landlines only may have been fundamentally sound a few years ago, such studies no longer yield representative, unbiased results.

A 2013 National Health Statistics Report examined the number of people in the U.S. who live in wireless-only households by state to support NHS telephone survey research efforts. This study is widely regarded as an authoritative and up-to-date work on cell phone usage in this country. Of particular relevance for the Northwest Residential Lighting LTMT study are the percentages of adults living in cell phone-only households in the Northwest. As shown in Table 2 below, the proportion of cell phone-only households in the Northwest is higher than the national average.

Table 2
Estimates of the Percentage of Persons 18 and Older Living in Wireless-Only Households, 2012⁴

State	Estimated % of Adults Aged 18 and Over
Idaho	52.3%
Montana	39.9%
Oregon	36.8%
Washington	39.4%
U.S.A.	36.5%

While continuing to focus exclusively on landlines only will allow for comparisons to Northwest Residential LTMT Study consumer surveys in prior years, landline-only samples are becoming less

⁴ National Health Statistics Reports: Wireless Substitution: State-level Estimates from the National Health Interview Survey, 2012. Number 70: December 18, 2013. <http://www.cdc.gov/nchs/data/nhsr/nhsr070.pdf>

and less representative of the population. Cell phone-only households are not only increasing in number, but their demographics are also different. The older the adults living in the household, the more likely they are to have a landline.⁵ Nationwide, the percentages of adults by age group living in cell phone-only households are the following:

- Ages 18–24: 53.2%
- Ages 25–29: 62.1%.
- Ages 30–34: 56.7%
- Ages 35–44: 43.5%
- Ages 45–64: 28.4%, and
- 65 and over: 11.6%.

4. Proposed Scope of Work to Update of the 2014 Consumer Survey to Include Cell Phone Respondents

To ensure consistency of the 2014 consumer survey results with prior years, we recommend using the sampling approach detailed above in Section 2 so that 776 landline respondents are included in the sample. For the results to represent the Northwest population's substantial presence of wireless-only households, we also recommend adding 223 cell phone respondents to this study.

Wireless respondents will be screened to verify that they live in Idaho, Montana, Oregon, or Washington for at least 6 months out of the year. It will not be possible to set cell phone respondent quotas by each of the targeted zip codes in the sample in the same way that we will for landline respondents, because of the potential for very low response rates for some zip codes, which, in turn, would make such zip code-level quotas very expensive to meet. We will collect self-reported zip codes from respondents and classify them as either urban or rural based on their responses. Interviewers will ask cell phone respondents if they have a landline and landline respondents if they have cell phones.

Given the nature of cell phones and the obstacles they pose to researchers (see Section 3 above), the cell phone sample will be conducted independently of the landline sample. This:

- a) Is necessary because the cell phone sample will be screened only for whether respondents live in NEEA's service territory most of the year, whereas the landline sample will be specified at the zip code level; and
- b) serves as a safety net should unexpected problems with the cell phone sample occur. While we do not anticipate any problems with the cell phone sample, the landline sample will provide the basis for estimates and preserve the continuity of the consumer survey with the ability to track and compare responses from earlier residential lighting LTMT studies.

⁵ Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July–December 2012. National Center for Health Statistics. June 2013.



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DNV GL's sampling experts will conduct a thorough review of the data obtained through the cell phone sample and design a plan for the integration of the two samples. This plan will include a compatible weighting strategy that will be discussed with NEEA prior to implementation. Geographic differences between the two samples will be analyzed with data visualization software. DNV GL will discuss the resulting maps with NEEA, and any issues discovered will be addressed during the weights estimation process and the subsequent analysis.

DNV GL's sampling experts will analyze survey results for the integrated sample and the landline and cell phone samples separately. We will closely examine and explain major changes in key estimates derived from combining the two samples.

APPENDIX G – CONSUMER SURVEY BANNER TABLES

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Table SC2 Page 6.....SC2. Are you taking this call while driving a car or doing something that requires your attention?

Table SC3 Page 7.....SC3. Do you live in a household that also has a landline?

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Table S11_2 Page 10.....QS11_2. Importance in decision to purchase light bulbs - The price of the bulb

Table QS11_3 Page 12.....QS11_3. Importance in decision to purchase light bulbs - The bulb helps lower energy bills

Table QS11_4 Page 14.....QS11_4. Importance in decision to purchase light bulbs - The bulb lasts a long time before burning out

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Table QS11_6 Page 18.....QS11_6. Importance in decision to purchase light bulbs - The bulb is environmentally friendly

Table QS11_7 Page 20.....QS11_7. Importance in decision to purchase light bulbs - Having prior experience with the type of bulb I purchase

Table QS11_8 Page 22.....QS11_8. Importance in decision to purchase light bulbs - The bulb is dimmable

Table QS11_9 Page 24.....QS11_9. Importance in decision to purchase light bulbs - The quality of the light from the bulb

Table QS11_10 Page 26.....QS11_10. Importance in decision to purchase light bulbs - The bulb fits well in my light fixture

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Table QS11_1Mean Page 30...Summary of Means: S11_1 to S11_11 Importance in decision to purchase light bulbs?

Table QS11_1Top Page 31...Summary of Frequencies: QS11_1 to QS11_11 Top 2 - Importance in decision to purchase light bulbs?

Table QS11_1Btm Page 32...Summary of Frequencies: QS11_1 to QS11_11 Bottom 2 - Importance in decision to purchase light bulbs?

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Table A2 Page 34.....A2. Compact fluorescent light bulbs, or CFLs, are small fluorescent bulbs that fit in regular light bulb sockets. The most common CFLs look different than standard bulbs. They are often made out of thin tubes of glass bent into loops. Have you ever heard of them?

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Table P3B-RB Page 42.....P3B-Rebase. How many CFLs are installed?

Table P3C Page 45.....P3C. Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

Table P3C-RB Page 48.....P3C-Rebase. Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

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Table P4B Page 58.....P4B. How many CFLs are you storing?
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Table P5B-RB Page 71.....P5B-Rebase. How many CFLs did you remove?
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Table M2-RB Page 83.....M2-Rebase. How many CFLs did you purchase in 2013? If a package contained more than one bulb, please count each one separately.
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Table V1	Page 116.....V1. Are you aware of any legislation in the United States that may affect the availability of certain types of light bulbs?
Table V2	Page 117.....V2. In 2007, Congress passed legislation that will phase out most traditional incandescent light bulbs by 2014. Before today, were you aware of this legislation?
Table V3	Page 118.....V3. As part of the legislation, retailers began phasing traditional 100-Watt, 75-Watt, 60-Watt, and 40-Watt light bulbs out of stores at the beginning of 2012. Before today, were you aware that these light bulbs are being phased out?
Table V4	Page 119.....V4. Did you shop for any traditional incandescent light bulbs in 2013?
Table V4A_1	Page 120.....V4A_1. Did you shop for 100-Watt incandescent bulbs in 2013?
Table V4A_2	Page 121.....V4A_2. Did you shop for 75-Watt incandescent bulbs in 2013?
Table V4A_3	Page 122.....V4A_3. Did you shop for 60 or 40-Watt incandescent bulbs in 2013?
Table V4B	Page 123.....V4B. During 2013, how many traditional incandescent bulbs did you purchase?
Table V4B-RB	Page 125....V4B-Rebased. During 2013, how many traditional incandescent bulbs did you purchase?
Table V5	Page 127.....V5. Were you able to purchase all of the types of traditional incandescent bulbs you were shopping for?
Table V7	Page 128.....V7. What type of light bulb did you end up purchasing instead?
Table V9	Page 129.....V9. When traditional incandescent light bulbs are no longer available, which one of the following things are you most likely to do: switch to a new type of light bulb, keep using traditional light bulbs but switch to a lower wattage, or something else?
Table V10	Page 130.....V10. Which type of light bulb are you most likely to switch to?
Table EE1A	Page 131.....EE1A. Have you ever heard of energy-efficient incandescent light bulbs?
Table EE1B	Page 132.....EE1B. Energy-efficient incandescent light bulbs look like traditional incandescent bulbs and give off the same amount of light using less energy. Have you heard of these more efficient incandescent bulbs?
Table EE2	Page 133.....EE2. Have you ever purchased any energy-efficient incandescent light bulbs?
Table EE2-RB	Page 134...EE2-Rebase. Have you ever purchased any energy-efficient incandescent light bulbs?
Table EE1aware	Page 135...EE1-EEI2. Aware of or purchase energy-efficient incandescent light bulbs?
Table EE3	Page 136.....EE3. During 2013, how many energy-efficient incandescent bulbs did you purchase?

NEEA 2014 Consumer Lighting Survey

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Table EE3-RB Page 138.....EE3-Rebase. During 2013, how many energy-efficient incandescent bulbs did you purchase?

Table EE4 Page 140.....EE4. Of all the energy-efficient incandescent bulbs you have ever bought, how many have you installed in your home?

Table LE1A Page 142.....LE1A. Have you heard of LED light bulbs?

Table LE1B Page 143.....LE1B. LED light bulbs can be used in the same types of fixtures as regular incandescent bulbs but are shaped somewhat differently and produce light using semiconductor chips. They use a lot less energy than regular incandescent bulbs. Have you heard of LED light bulbs?

Table LEDaware Page 144...LE1A-LE1B. Aware of or purchase LED light bulbs?

Table LE3 Page 145.....LE3. Have you ever purchased any LED bulbs other than LED nightlights or holiday light strings?

Table LE3_RB Page 146....LE3-Rebase. Have you ever purchased any LED bulbs other than LED nightlights or holiday light strings?

Table LE4 Page 147.....LE4. During 2013, how many LED bulbs did you purchase?

Table LE4-RB Page 149....LE4-Rebase. During 2013, how many LED bulbs did you purchase?

Table LE5 Page 151.....LE5. Of all the LED bulbs you bought in 2013, how many did you install in your home?

Table LE6 Page 153.....LE6. Thinking about all of the LED bulbs you recently purchased, how satisfied are you with them?

Table LE7 Page 155.....LE7. Why haven't you purchased any LED bulbs?

Table LE9 Page 156.....LE9. Now I'd like you to think about how quickly you, personally, adopt new technology. Which of the following do you think best describes you?

Table D1 Page 157.....D1. What type of home do you live in?

Table D1A1 Page 158.....D1A1. What year was your home built?

Table D2 Page 159.....D2. Do you own your home or rent?

Table D3 Page 160.....D3. Including yourself, how many people live in your home?

Table D4 Page 161.....D4. Which of the following best describes your educational background?

Table D5 Page 162.....D5. Could you please tell me which of the following categories includes your age?

Table D6 Page 163.....D6. Which of the following categories contains your annual household income from all sources in 2013 before taxes?

Table D701 Page 164.....D701. Which of the following ethnicities would you say describe you? Please tell me all that apply.

Table W0 Page 165.....W0. GENDER

NEEA 2014 Consumer Lighting Survey

STATE

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
ID	177	42	135	177	-	-	-	84	93	94	55	28	53	38	-	1	16	46	15	23	142	12
	17.5%	32.5%	15.3%	100%				15.2%	20.3%	15.6%	21.3%	19.0%	15.0%	16.3%		7.9%	15.3%	17.8%	12.8%	9.3%	20.6%	16.4%
MT	135	49	87	-	135	-	-	76	60	91	24	20	54	33	-	2	23	25	22	26	99	11
	13.4%	37.8%	9.9%		100%			13.8%	13.0%	15.2%	9.2%	13.6%	15.4%	14.3%		15.8%	22.0%	9.7%	19.0%	10.3%	14.4%	14.7%
OR	259	17	242	-	-	259	-	136	124	142	78	39	85	54	-	7	20	78	24	66	177	16
	25.8%	13.4%	27.6%			100%		24.7%	27.0%	23.6%	30.1%	26.8%	24.1%	22.9%		49.9%	19.2%	30.2%	20.6%	26.6%	25.8%	22.5%
WA	436	21	415	-	-	-	436	254	182	274	102	59	160	109	-	4	46	110	56	134	268	34
	43.3%	16.2%	47.2%				100%	46.3%	39.7%	45.6%	39.4%	40.7%	45.4%	46.6%		26.5%	43.4%	42.4%	47.6%	53.8%	39.1%	46.3%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

RUCC from data

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
1	380	-	380	3	3	129	246	203	178	212	107	61	122	85	-	1	29	105	36	121	223	35
	37.7%		43.3%	1.7%	2.2%	49.6%	56.3%	36.9%	38.8%	35.3%	41.2%	41.7%	34.7%	36.3%		9.8%	27.4%	40.7%	30.6%	48.9%	32.6%	48.2%
						DE	DE										P	PQs	P	U		U
2	151	-	151	60	0	50	41	74	77	90	32	29	57	31	-	4	22	36	17	29	117	5
	15.0%		17.2%	33.8%	0.4%	19.4%	9.3%	13.5%	16.8%	15.0%	12.2%	19.8%	16.1%	13.2%		31.6%	20.8%	14.1%	14.4%	11.5%	17.1%	6.8%
				EFG		EG	E					k									tV	
3	197	-	197	32	51	27	86	125	72	145	41	11	83	59	-	3	24	56	36	48	140	9
	19.5%		22.4%	18.3%	37.9%	10.4%	19.7%	22.8%	15.6%	24.0%	15.7%	7.6%	23.7%	25.3%		19.2%	22.7%	21.6%	30.7%	19.2%	20.4%	12.7%
				DFG		F		I		KL	L											
4	61	-	61	9	-	16	35	37	24	35	20	6	25	9	-	1	5	16	5	14	42	5
	6.0%		6.9%	5.3%		6.3%	8.1%	6.7%	5.3%	5.8%	7.8%	3.9%	7.2%	3.8%		7.7%	4.8%	6.0%	4.3%	5.5%	6.2%	6.5%
5	90	-	90	30	32	20	8	38	51	44	22	23	22	19	-	1	7	21	10	17	63	10
	8.9%		10.2%	17.2%	23.6%	7.6%	1.7%	7.0%	11.2%	7.4%	8.6%	15.8%	6.2%	8.0%		4.0%	6.5%	8.3%	8.2%	6.8%	9.1%	13.8%
				FG	FG	G		h			Jk										t	
6	61	61	-	24	11	11	16	34	27	31	23	7	16	15	-	2	6	11	7	12	44	5
	6.1%	47.7%		13.3%	8.1%	4.1%	3.7%	6.2%	6.0%	5.2%	9.0%	4.7%	4.6%	6.2%		17.6%	5.7%	4.4%	6.1%	5.0%	6.5%	6.3%
				fg																		
7	38	38	-	16	15	5	2	23	15	22	10	6	14	8	-	1	4	9	5	4	32	2
	3.8%	29.4%		8.9%	10.9%	1.9%	0.6%	4.1%	3.3%	3.7%	3.7%	4.3%	4.1%	3.2%		9.2%	4.2%	3.5%	3.8%	1.7%	4.6%	2.8%
				G	fg																	
8	7	7	-	1	4	-	1	7	0	4	1	1	3	1	-	0	1	1	1	2	5	1
	0.7%	5.4%		0.8%	3.1%		0.3%	1.2%	*	0.7%	0.5%	1.0%	0.7%	0.5%		0.9%	1.3%	0.4%	0.9%	0.7%	0.7%	0.9%
9	23	23	-	1	19	2	1	9	14	18	3	2	10	8	-	-	7	3	1	2	19	1
	2.2%	17.5%		0.7%	13.9%	0.6%	0.2%	1.6%	3.0%	2.9%	1.3%	1.1%	2.7%	3.4%			6.7%	1.0%	1.0%	0.7%	2.8%	1.9%
				DFG																		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

Stratum from data

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Stratum 1	42	42	-	42	-	-	-	21	21	19	15	8	12	7	-	0	2	10	5	7	33	1
	4.2%	32.5%		23.7%				3.9%	4.5%	3.2%	5.6%	5.4%	3.4%	3.1%		3.1%	2.3%	3.7%	4.4%	2.9%	4.9%	1.6%
Stratum 2	135	-	135	135	-	-	-	62	72	74	41	20	41	31	-	1	14	37	10	16	108	11
	13.4%		15.3%	76.3%				11.4%	15.8%	12.3%	15.6%	13.6%	11.6%	13.2%		4.8%	13.1%	14.1%	8.5%	6.3%	15.8%	14.8%
								h													T	t
Stratum 3	49	49	-	-	49	-	-	29	20	31	15	3	17	14	-	2	11	8	3	5	39	5
	4.8%	37.8%			36.0%			5.3%	4.3%	5.1%	5.8%	1.8%	4.8%	6.0%		15.8%	10.1%	3.0%	2.9%	1.9%	5.8%	6.2%
																					t	t
Stratum 4	87	-	87	-	87	-	-	47	40	60	9	17	37	19	-	-	13	17	19	21	59	6
	8.6%		9.9%		64.0%			8.5%	8.7%	10.1%	3.4%	11.8%	10.6%	8.3%			11.9%	6.7%	16.0%	8.4%	8.7%	8.5%
										K		K							R			
Stratum 5	17	17	-	-	-	17	-	10	7	12	3	3	6	5	-	1	2	4	3	4	12	1
	1.7%	13.4%				6.7%		1.8%	1.6%	1.9%	1.2%	1.8%	1.8%	2.0%		8.9%	1.9%	1.4%	2.6%	1.6%	1.7%	2.0%
Stratum 6	242	-	242	-	-	242	-	126	116	131	75	36	79	49	-	6	18	74	21	62	165	15
	24.1%		27.6%			93.3%		22.9%	25.4%	21.7%	28.9%	24.9%	22.3%	20.9%		41.0%	17.4%	28.8%	18.0%	25.0%	24.1%	20.5%
																qs		QS				
Stratum 7	21	21	-	-	-	-	21	12	9	13	5	3	8	5	-	-	4	3	2	4	15	1
	2.1%	16.2%					4.8%	2.2%	1.9%	2.1%	1.9%	2.1%	2.1%	2.3%			3.6%	1.3%	1.8%	1.7%	2.2%	2.0%
Stratum 8	415	-	415	-	-	-	415	242	173	261	97	56	152	104	-	4	42	106	54	129	253	32
	41.2%		47.2%				95.2%	44.0%	37.8%	43.5%	37.4%	38.5%	43.3%	44.3%		26.5%	39.8%	41.0%	45.8%	52.1%	36.9%	44.3%
																			p	U		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

Rural_Urban from data

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Rural	129	129	-	42	49	17	21	73	56	75	38	16	43	31	-	4	19	24	14	20	100	9
	12.8%	100%		23.7%	36.0%	6.7%	4.8%	13.2%	12.3%	12.4%	14.6%	11.1%	12.1%	13.4%		27.7%	17.9%	9.3%	11.7%	8.1%	14.6%	11.9%
				FG	FG																	
Urban	878	-	878	135	87	242	415	477	402	527	222	129	310	203	-	10	87	235	104	228	586	64
	87.2%		100%	76.3%	64.0%	93.3%	95.2%	86.8%	87.7%	87.6%	85.4%	88.9%	87.9%	86.6%		72.3%	82.1%	90.7%	88.3%	91.9%	85.4%	88.1%
					DE	DE																

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

SC1. Are you taking this call on a cell phone or a landline?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Cell phone	458	56	402	93	60	124	182	-	458	262	135	61	157	103	-	3	55	108	44	92	344	22
	45.5%	43.6%	45.7%	52.6%	44.1%	47.6%	41.7%		100.0%	43.5%	51.7%	42.2%	44.5%	43.9%		20.2%	51.7%	41.9%	37.8%	37.1%	50.2%	29.5%
				G							j						Ps	P	p		TV	
Landline	549	73	477	84	76	136	254	549	-	340	126	84	196	132	-	11	51	150	73	156	342	51
	54.5%	56.4%	54.3%	47.4%	55.9%	52.4%	58.3%	100.0%		56.5%	48.3%	57.8%	55.5%	56.1%		79.8%	48.3%	58.1%	62.2%	62.9%	49.8%	70.5%
							D			k						QRs			q	U		U

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

SC2. Are you taking this call while driving a car or doing something that requires your attention?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	458	56	402	93	60	124	182	-	458	262	135	61	157	103	-	3	55	108	44	92	344	22
	100%	100%	100%	100%	100%	100%	100%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	233	55	178	40	31	62	100	-	233	134	65	34	79	53	-	3	28	50	27	51	169	13
No	458	56	402	93	60	124	182	-	458	262	135	61	157	103	-	3	55	108	44	92	344	22
	100%	100%	100%	100%	100%	100%	100%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

SC3. Do you live in a household that also has a landline?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	458	56	402	93	60	124	182	-	458	262	135	61	157	103	-	3	55	108	44	92	344	22
	100%	100%	100%	100%	100%	100%	100%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	233	55	178	40	31	62	100	-	233	134	65	34	79	53	-	3	28	50	27	51	169	13
Yes	82	7	75	10	14	25	33	-	82	54	16	12	31	21	-	0	13	17	14	25	48	10
	17.9%	12.5%	18.7%	10.3%	24.0%	20.4%	18.1%		17.9%	20.7%	11.6%	19.9%	19.9%	20.3%		7.6%	23.5%	15.4%	30.6%	26.9%	13.9%	44.7%
No	376	49	326	83	45	98	149	-	376	208	119	49	125	82	-	3	42	92	31	67	296	12
	82.1%	87.5%	81.3%	89.7%	76.0%	79.6%	81.9%		82.1%	79.3%	88.4%	80.1%	80.1%	79.7%		92.4%	76.5%	84.6%	69.4%	73.1%	86.1%	55.3%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_1. Importance in decision to purchase light bulbs - The bulb helps save energy

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
TOP 2 NET	526	62	464	89	75	131	231	284	242	317	134	76	181	126	-	5	45	143	64	140	352	34
*****	52.3%	48.5%	52.8%	50.5%	55.6%	50.5%	53.0%	51.8%	52.9%	52.7%	51.5%	52.1%	51.4%	53.8%		37.1%	42.1%	55.4%	54.4%	56.4%	51.4%	46.6%
10 - Very important	418	48	370	74	58	104	182	230	188	246	110	62	145	95	-	5	39	103	55	123	267	28
	41.5%	36.9%	42.2%	41.7%	43.2%	40.1%	41.8%	41.8%	41.1%	40.8%	42.3%	42.9%	41.1%	40.3%		37.1%	36.7%	40.0%	46.4%	49.7%	38.9%	38.3%
9	108	15	94	16	17	27	49	55	54	71	24	13	36	32	-	-	6	40	9	17	86	6
	10.8%	11.6%	10.7%	8.8%	12.3%	10.4%	11.3%	9.9%	11.8%	11.9%	9.1%	9.2%	10.2%	13.5%			5.4%	15.4%	8.0%	6.7%	12.5%	8.3%
8	138	12	126	29	12	28	69	78	60	88	29	20	60	26	-	2	16	39	17	38	93	7
	13.7%	9.6%	14.3%	16.4%	9.2%	10.8%	15.7%	14.2%	13.1%	14.7%	11.3%	14.1%	16.9%	11.1%		15.4%	15.5%	15.0%	14.6%	15.2%	13.6%	9.7%
7	96	12	85	13	12	25	46	37	59	69	24	3	48	20	-	0	9	33	23	28	65	3
	9.6%	9.1%	9.6%	7.2%	8.9%	9.8%	10.6%	6.7%	12.9%	11.5%	9.1%	2.3%	13.5%	8.7%		2.2%	8.6%	12.6%	19.4%	11.2%	9.5%	4.5%
6	50	7	43	12	5	20	13	23	27	30	14	6	22	8	-	1	11	9	4	8	39	2
	5.0%	5.6%	4.9%	7.0%	3.6%	7.5%	3.0%	4.2%	5.9%	5.0%	5.3%	4.3%	6.2%	3.4%		5.5%	10.7%	3.6%	3.7%	3.4%	5.7%	2.9%
5	87	18	69	13	22	17	36	54	33	43	23	21	24	19	-	2	11	18	3	19	60	7
	8.6%	13.8%	7.9%	7.2%	15.9%	6.5%	8.2%	9.8%	7.2%	7.1%	8.9%	14.3%	6.8%	8.1%		11.9%	10.5%	7.1%	2.3%	7.7%	8.8%	10.2%
4	14	2	12	3	0	4	7	9	5	6	6	2	3	3	-	-	2	0	1	1	6	8
	1.4%	1.6%	1.4%	1.7%	0.2%	1.5%	1.6%	1.6%	1.2%	0.9%	2.4%	1.5%	0.9%	1.1%			1.8%	0.1%	1.2%	0.2%	0.8%	10.9%
3	14	4	10	3	2	0	9	8	6	6	6	2	3	3	-	2	0	2	1	3	10	0
	1.4%	3.0%	1.1%	1.5%	1.2%	0.1%	2.1%	1.4%	1.3%	1.0%	2.3%	1.3%	0.9%	1.1%		14.4%	0.1%	0.6%	1.2%	1.3%	1.5%	0.3%
BOTTOM 2 NET	79	10	68	14	7	33	24	54	25	43	24	12	12	30	-	2	11	14	4	12	58	9
*****	7.8%	8.0%	7.8%	8.2%	5.3%	12.7%	5.5%	9.8%	5.4%	7.1%	9.2%	8.3%	3.4%	12.6%		13.6%	10.6%	5.5%	3.2%	4.6%	8.4%	12.9%
2	26	3	23	3	3	9	11	20	6	15	8	3	3	11	-	1	7	1	1	5	17	4
	2.5%	2.4%	2.6%	1.7%	2.5%	3.3%	2.4%	3.6%	1.2%	2.5%	3.2%	1.7%	0.8%	4.7%		6.3%	6.3%	0.5%	1.0%	1.9%	2.5%	4.9%
1 - Not at all important	53	7	46	11	4	24	13	34	19	28	16	9	9	19	-	1	5	13	3	7	40	6
	5.3%	5.6%	5.2%	6.5%	2.8%	9.4%	3.1%	6.2%	4.2%	4.6%	6.0%	6.5%	2.6%	8.0%		7.2%	4.3%	5.0%	2.2%	2.7%	5.9%	8.0%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_1. Importance in decision to purchase light bulbs - The bulb helps save energy

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	2 0.2%	1 0.8%	1 0.2%	-	-	2 0.7%	1 0.2%	2 0.4%	1 0.1%	0 0.1%	-	2 1.4%	-	0 0.1%	-	-	-	0 0.2%	-	-	1 0.1%	1 2.0%
Refused	1 0.1%	-	1 0.1%	1 0.4%	-	-	-	1 0.1%	-	-	-	1 0.5%	-	-	-	-	-	-	-	-	1 0.1%	-
Mean	7.84	7.48	7.89	7.80	7.93	7.54	8.00	7.70	8.00	7.95	7.65	7.72	8.15	7.61	-	6.64	7.41	8.13	8.35	8.27	7.76	7.12
Standard Deviation	2.63	2.76	2.60	2.68	2.49	2.94	2.44	2.79	2.41	2.50	2.80	2.79	2.16	2.94		3.34	2.72	2.34	2.08	2.31	2.66	3.13
Standard Error	0.11	0.28	0.12	0.29	0.30	0.25	0.15	0.13	0.19	0.14	0.24	0.32	0.15	0.26		0.90	0.38	0.19	0.23	0.18	0.14	0.45

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_2. Importance in decision to purchase light bulbs - The price of the bulb

	RUCC							State			Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)			
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73			
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86			
TOP 2 NET	379	51	328	70	55	105	149	214	165	199	117	63	102	91	-	7	44	73	41	72	276	30			
=====	37.6%	39.5%	37.3%	39.6%	40.9%	40.4%	34.1%	39.0%	36.0%	33.0%	44.9%	43.7%	28.9%	38.6%		46.1%	41.0%	28.0%	35.1%	29.0%	40.3%	41.7%			
										J	J	J	m			r	r		T	T	T				
10 - Very important	293	38	254	42	46	86	119	161	132	148	91	53	77	66	-	6	27	53	34	63	208	22			
	29.0%	29.9%	28.9%	23.9%	33.8%	33.0%	27.3%	29.3%	28.8%	24.7%	35.0%	36.6%	21.9%	28.3%		42.3%	25.0%	20.5%	28.5%	25.3%	30.3%	29.9%			
										J	J	J													
9	86	12	74	28	10	19	30	53	33	50	26	10	25	24	-	1	17	20	8	9	68	9			
	8.6%	9.6%	8.4%	15.7%	7.1%	7.3%	6.8%	9.7%	7.2%	8.3%	9.9%	7.0%	7.0%	10.4%		3.8%	16.0%	7.6%	6.6%	3.8%	10.0%	11.8%			
				fg												rs				T	t				
8	204	16	189	30	24	53	96	101	103	134	51	19	93	39	-	4	28	49	33	65	131	8			
	20.3%	12.1%	21.5%	17.2%	18.0%	20.6%	22.1%	18.5%	22.5%	22.3%	19.8%	12.8%	26.5%	16.4%		25.8%	26.3%	19.0%	28.1%	26.4%	19.0%	11.5%			
				B						L			N							uV					
7	131	18	114	25	18	26	63	59	73	80	36	15	50	30	-	2	8	35	16	28	98	5			
	13.1%	13.8%	12.9%	14.1%	13.0%	9.9%	14.5%	10.7%	15.9%	13.4%	14.0%	10.1%	14.2%	12.7%		16.6%	7.6%	13.7%	13.8%	11.3%	14.3%	6.8%			
									h											v					
6	49	8	41	2	9	15	23	29	20	35	11	3	19	16	-	0	3	23	3	18	26	4			
	4.9%	6.2%	4.7%	1.0%	6.7%	5.8%	5.3%	5.3%	4.3%	5.8%	4.3%	1.9%	5.3%	6.9%		1.6%	3.1%	8.9%	3.0%	7.4%	3.8%	5.6%			
						d	D			l								s							
5	145	23	122	34	15	38	58	84	61	97	24	24	55	41	-	0	12	50	15	47	86	12			
	14.4%	18.2%	13.9%	19.2%	11.1%	14.8%	13.3%	15.3%	13.4%	16.1%	9.4%	16.7%	15.6%	17.5%		2.7%	11.1%	19.4%	12.5%	19.0%	12.6%	16.6%			
										K								P		u					
4	25	3	22	5	3	5	11	17	7	15	6	3	10	5	-	-	4	6	2	5	19	0			
	2.5%	2.3%	2.5%	2.8%	2.4%	1.9%	2.6%	3.2%	1.6%	2.5%	2.5%	2.2%	2.7%	2.0%			4.2%	2.3%	1.5%	2.0%	2.8%	0.4%			
3	30	4	26	5	5	6	14	10	20	22	5	2	16	4	-	-	1	16	4	8	19	2			
	3.0%	3.3%	2.9%	3.0%	3.8%	2.3%	3.1%	1.9%	4.3%	3.7%	2.0%	1.5%	4.7%	1.6%			1.0%	6.4%	3.6%	3.4%	2.8%	3.1%			
													n					Q							
BOTTOM 2 NET	39	6	34	5	5	9	20	30	9	18	8	13	6	10	-	1	6	6	2	3	27	9			
=====	3.9%	4.3%	3.8%	2.9%	4.0%	3.4%	4.6%	5.5%	1.9%	3.0%	3.2%	9.0%	1.7%	4.2%		7.2%	5.8%	2.2%	1.5%	1.2%	3.9%	12.7%			
								I				j								t	TU				
2	13	0	12	0	-	4	9	10	3	10	3	-	3	5	-	1	2	3	1	2	6	4			
	1.2%	0.1%	1.4%	0.1%		1.4%	2.0%	1.8%	0.6%	1.6%	1.1%		0.9%	2.2%		7.2%	2.3%	1.1%	0.5%	0.9%	0.9%	5.9%			
																					TU				
1 - Not at all important	27	5	21	5	5	5	11	21	6	8	5	13	3	5	-	-	4	3	1	1	21	5			
	2.7%	4.2%	2.4%	2.8%	4.0%	2.0%	2.6%	3.8%	1.3%	1.4%	2.1%	9.0%	0.8%	2.0%			3.4%	1.2%	1.0%	0.3%	3.1%	6.8%			
								i				Jk								T	T	t			

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_2. Importance in decision to purchase light bulbs - The price of the bulb

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	4	0	4	-	-	3	1	4	-	1	-	3	1	-	-	-	-	-	1	0	2	1
	0.4%	0.1%	0.4%			1.0%	0.2%	0.7%		0.2%		1.7%	0.3%						0.9%	*%	0.4%	1.5%
Refused	0	0	-	0	-	-	-	0	-	-	-	0	-	-	-	-	-	-	-	0	-	-
	*%	0.3%		0.2%				0.1%				0.3%								0.1%		
Mean	7.50	7.33	7.52	7.43	7.58	7.66	7.40	7.42	7.59	7.36	7.88	7.35	7.33	7.45	-	8.17	7.59	7.03	7.72	7.38	7.59	7.02
Standard Deviation	2.35	2.50	2.33	2.31	2.45	2.31	2.36	2.48	2.19	2.25	2.23	2.86	2.15	2.33		2.27	2.38	2.27	2.10	2.11	2.36	2.95
Standard Error	0.10	0.25	0.11	0.25	0.30	0.20	0.14	0.11	0.17	0.12	0.19	0.32	0.15	0.20		0.61	0.33	0.19	0.24	0.17	0.13	0.42

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_3. Importance in decision to purchase light bulbs - The bulb helps lower energy bills

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
TOP 2 NET	550	61	489	109	72	139	230	284	267	321	150	79	191	122	-	5	53	144	67	146	370	35				
=====	54.6%	47.7%	55.7%	61.7%	53.1%	53.6%	52.9%	51.6%	58.2%	53.4%	57.8%	54.2%	54.2%	52.0%	-	35.7%	49.6%	55.6%	57.1%	58.8%	53.9%	47.5%				
10 - Very important	440	50	389	86	58	117	179	230	210	253	120	66	151	97	-	5	38	114	53	122	291	27				
	43.7%	39.1%	44.3%	48.7%	42.7%	45.0%	41.1%	41.9%	45.8%	42.1%	46.2%	45.6%	42.8%	41.2%	-	34.1%	36.2%	44.2%	45.4%	49.0%	42.4%	37.3%				
9	111	11	99	23	14	22	51	53	57	68	30	12	40	25	-	0	14	29	14	24	79	7				
	11.0%	8.6%	11.3%	13.0%	10.4%	8.6%	11.8%	9.7%	12.5%	11.3%	11.6%	8.6%	11.5%	10.8%	-	1.6%	13.4%	11.3%	11.7%	9.8%	11.5%	10.1%				
8	127	16	111	16	19	32	60	81	46	93	20	14	49	40	-	2	14	44	15	37	87	3				
	12.6%	12.4%	12.7%	9.2%	14.3%	12.2%	13.8%	14.7%	10.1%	15.4%	7.8%	9.7%	14.0%	16.8%	-	14.8%	12.9%	16.8%	12.4%	15.0%	12.6%	4.4%				
								i		K									V		V					
7	97	19	78	14	20	20	44	43	54	68	18	12	51	15	-	1	15	27	18	22	71	4				
	9.6%	14.7%	8.9%	7.9%	14.5%	7.7%	10.0%	7.9%	11.7%	11.2%	6.7%	8.2%	14.5%	6.4%	-	10.5%	14.5%	10.6%	15.3%	8.7%	10.4%	5.5%				
								c		N																
6	29	7	22	4	5	5	16	17	12	13	8	7	8	5	-	0	3	7	2	9	18	2				
	2.9%	5.7%	2.5%	2.1%	3.5%	1.9%	3.6%	3.0%	2.7%	2.2%	3.2%	4.9%	2.4%	2.1%	-	1.6%	2.5%	2.7%	1.5%	3.5%	2.6%	2.8%				
5	92	8	84	12	10	31	40	52	40	50	26	17	26	22	-	1	12	18	9	17	55	20				
	9.1%	6.5%	9.5%	6.6%	7.1%	11.9%	9.1%	9.5%	8.7%	8.3%	9.8%	11.7%	7.5%	9.6%	-	5.5%	11.7%	7.0%	7.9%	6.9%	8.1%	27.0%				
																					TU					
4	14	2	12	5	0	4	5	6	8	3	10	1	2	1	-	-	1	0	1	4	10	0				
	1.4%	1.6%	1.4%	2.9%	0.4%	1.5%	1.1%	1.1%	1.8%	0.5%	3.7%	0.9%	0.6%	0.5%	-	-	0.5%	0.1%	1.1%	1.5%	1.5%	0.4%				
											j															
3	24	3	21	4	2	8	11	15	9	14	9	1	8	6	-	-	2	8	1	5	17	1				
	2.4%	2.1%	2.4%	2.1%	1.6%	2.9%	2.4%	2.8%	1.9%	2.4%	3.4%	0.4%	2.3%	2.7%	-	-	2.2%	3.0%	0.5%	2.2%	2.5%	1.9%				
BOTTOM 2 NET	67	10	57	13	5	21	28	46	21	38	18	11	16	21	-	3	6	11	5	8	52	7				
=====	6.6%	7.6%	6.5%	7.3%	3.7%	7.9%	6.5%	8.3%	4.6%	6.3%	6.9%	7.4%	4.6%	9.2%	-	21.7%	6.0%	4.1%	4.2%	3.4%	7.6%	9.0%				
								i								rs				t						
2	15	4	12	5	1	3	6	12	3	5	9	1	2	3	-	0	0	2	1	0	15	-				
	1.5%	2.8%	1.3%	3.1%	0.9%	1.2%	1.3%	2.2%	0.8%	0.9%	3.4%	0.8%	0.7%	1.4%	-	0.9%	0.2%	0.8%	0.7%	0.2%	2.2%	-				
																				T						
1 - Not at all important	51	6	45	8	4	18	22	34	18	33	9	10	14	18	-	3	6	9	4	8	37	7				
	5.1%	4.7%	5.1%	4.3%	2.9%	6.8%	5.1%	6.1%	3.8%	5.4%	3.5%	6.5%	3.9%	7.8%	-	20.8%	5.8%	3.3%	3.5%	3.2%	5.4%	9.0%				
																qRS										
Don't know	7	2	5	0	3	1	3	5	2	1	2	4	-	1	-	1	-	-	-	-	6	1				
	0.7%	1.7%	0.5%	0.1%	1.9%	0.4%	0.7%	0.9%	0.4%	0.2%	0.6%	2.6%	-	0.6%	-	10.3%	-	-	-	-	0.8%	1.5%				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_3. Importance in decision to purchase light bulbs - The bulb helps lower energy bills

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Mean	7.93	7.74	7.96	8.08	8.19	7.76	7.89	7.76	8.13	7.98	7.84	7.90	8.10	7.75	-	6.76	7.76	8.19	8.25	8.31	7.87	7.17
Standard Deviation	2.61	2.61	2.61	2.66	2.24	2.80	2.58	2.74	2.43	2.54	2.73	2.69	2.36	2.80		3.68	2.54	2.32	2.25	2.29	2.66	2.95
Standard Error	0.11	0.26	0.12	0.29	0.28	0.24	0.16	0.12	0.19	0.14	0.24	0.30	0.17	0.25		1.02	0.35	0.19	0.25	0.18	0.14	0.42

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_4. Importance in decision to purchase light bulbs - The bulb lasts a long time before burning out

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
TOP 2 NET	606	87	519	117	86	132	271	326	279	359	160	87	211	136	-	4	53	160	73	156	409	41
*****	60.2%	67.5%	59.1%	66.2%	63.8%	50.8%	62.1%	59.4%	61.0%	59.7%	61.4%	59.9%	59.9%	58.0%	-	28.9%	49.8%	61.7%	61.7%	62.9%	59.6%	55.8%
				F		f		F										P	P			
10 - Very important	456	61	395	81	65	97	213	256	201	270	122	65	153	105	-	4	44	114	53	122	305	30
	45.3%	47.5%	45.0%	45.8%	48.2%	37.5%	48.9%	46.6%	43.8%	44.8%	46.8%	44.7%	43.6%	44.8%	-	27.3%	41.7%	44.0%	45.0%	49.0%	44.4%	41.2%
							F															
9	149	26	124	36	21	35	58	71	79	89	38	22	58	31	-	0	9	46	20	34	104	11
	14.8%	20.0%	14.1%	20.4%	15.6%	13.3%	13.3%	12.9%	17.2%	14.9%	14.6%	15.2%	16.4%	13.2%	-	1.6%	8.1%	17.6%	16.7%	13.9%	15.2%	14.6%
																		Pq	P			
8	160	14	146	21	24	41	74	101	59	99	37	24	64	35	-	5	21	41	21	41	108	11
	15.9%	10.8%	16.7%	11.9%	17.4%	16.0%	17.0%	18.4%	12.9%	16.4%	14.3%	16.8%	18.1%	14.7%	-	34.2%	19.8%	15.7%	18.2%	16.5%	15.7%	15.6%
								i														
7	88	8	80	10	12	24	43	38	49	57	23	8	36	20	-	1	12	22	15	22	58	8
	8.7%	5.9%	9.1%	5.4%	8.5%	9.2%	9.8%	7.0%	10.8%	9.5%	8.7%	5.5%	10.2%	8.5%	-	6.3%	11.2%	8.6%	12.7%	8.7%	8.5%	10.8%
6	28	3	25	9	1	10	7	13	16	14	13	2	11	3	-	-	-	8	2	8	20	0
	2.8%	2.6%	2.9%	5.3%	1.0%	4.0%	1.7%	2.3%	3.4%	2.3%	4.8%	1.6%	3.0%	1.3%	-	-	-	3.3%	1.5%	3.2%	2.9%	0.5%
				e																		
5	64	8	55	12	7	20	25	33	31	40	12	12	18	21	-	1	16	14	2	15	43	6
	6.3%	6.3%	6.3%	6.6%	5.0%	7.6%	5.8%	6.0%	6.7%	6.7%	4.5%	8.1%	5.2%	8.9%	-	4.0%	14.8%	5.3%	1.5%	6.0%	6.3%	7.7%
																	RS					
4	9	1	8	4	-	1	4	5	4	6	3	0	2	4	-	0	4	-	2	-	7	2
	0.9%	0.9%	0.9%	2.2%		0.4%	1.0%	1.0%	0.9%	1.0%	1.1%	0.3%	0.6%	1.7%	-	0.9%	3.5%		1.6%		1.1%	2.6%
3	25	1	24	-	-	19	6	12	13	18	6	0	7	11	-	1	1	10	2	4	20	1
	2.4%	0.5%	2.7%			7.2%	1.4%	2.2%	2.7%	3.0%	2.4%	0.2%	1.9%	4.9%	-	6.3%	1.0%	3.8%	2.1%	1.5%	2.9%	1.9%
				b			G			L	1			m								
BOTTOM 2 NET	23	7	16	2	6	9	5	16	7	8	5	9	3	4	-	3	-	4	1	2	19	2
*****	2.3%	5.2%	1.8%	1.4%	4.3%	3.6%	1.2%	2.8%	1.6%	1.4%	2.0%	6.4%	0.9%	1.9%	-	19.3%		1.4%	0.7%	0.8%	2.7%	3.0%
																rs						
2	3	2	1	0	1	1	1	3	1	2	-	1	-	1	-	-	-	1	1	1	3	-
	0.3%	1.3%	0.2%	0.2%	0.6%	0.6%	0.1%	0.5%	0.1%	0.3%		0.8%		0.6%	-	-	-	0.2%	0.7%	0.2%	0.4%	
1 - Not at all important	20	5	15	2	5	8	5	13	7	6	5	8	3	3	-	3	-	3	-	1	16	2
	1.9%	3.9%	1.7%	1.2%	3.7%	3.0%	1.1%	2.4%	1.4%	1.0%	2.0%	5.6%	0.9%	1.3%	-	19.3%		1.2%		0.6%	2.3%	3.0%
																r						

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_4. Importance in decision to purchase light bulbs - The bulb lasts a long time before burning out

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	3 0.3%	0 0.1%	3 0.4%	1 0.4%	-	3 1.0%	0 *	3 0.6%	-	1 0.1%	2 0.6%	1 0.8%	1 0.2%	-	-	-	-	1 0.3%	-	1 0.3%	2 0.2%	1 1.5%
Refused	1 0.1%	0 0.3%	1 0.1%	1 0.6%	-	0 0.1%	-	1 0.3%	-	-	1 0.3%	1 0.5%	-	-	-	-	-	-	-	0 0.1%	1 0.1%	0 0.5%
Mean	8.41	8.44	8.41	8.59 F	8.57 F	7.86	8.61 F	8.42	8.39	8.42	8.46	8.26	8.54	8.21	-	6.67	8.17	8.46	8.65 P	8.66 u	8.34	8.22
Standard Deviation	2.10	2.31	2.07	1.90	2.09	2.49	1.87	2.14	2.05	2.02	2.08	2.44	1.82	2.28		3.44	2.00	2.01	1.70 PQ	1.78	2.18	2.26
Standard Error	0.09	0.23	0.10	0.21	0.26	0.22	0.11	0.10	0.16	0.11	0.18	0.27	0.13	0.20		0.93	0.28	0.17	0.19	0.14	0.12	0.32

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_5. Importance in decision to purchase light bulbs - The quality of the bulb

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
TOP 2 NET	500	68	431	89	64	115	231	288	211	302	120	77	167	125	-	7	56	124	64	133	334	33				
=====	49.6%	53.0%	49.1%	50.1%	47.7%	44.4%	53.1%	52.5%	46.2%	50.2%	46.2%	53.1%	47.5%	53.5%	49.4%	53.0%	47.9%	54.3%	53.4%	48.7%	44.9%					
10 - Very important	369	50	319	62	54	94	159	223	147	218	92	59	114	98	-	6	37	84	47	96	252	22				
	36.7%	38.8%	36.4%	35.2%	39.6%	36.3%	36.6%	40.6%	32.0%	36.2%	35.5%	40.5%	32.4%	41.6%	43.7%	34.7%	32.3%	40.3%	38.6%	36.7%	29.5%					
9	130	18	112	26	11	21	72	66	65	84	28	18	53	28	-	1	19	40	17	37	82	11				
	12.9%	14.1%	12.8%	14.9%	8.1%	8.1%	16.5%	11.9%	14.2%	14.0%	10.7%	12.6%	15.1%	11.9%	5.8%	18.3%	15.6%	14.1%	14.8%	12.0%	15.4%					
8	201	27	174	29	36	50	87	107	95	117	69	15	82	32	-	1	15	61	25	55	129	17				
	20.0%	21.2%	19.8%	16.6%	26.4%	19.2%	19.9%	19.4%	20.7%	19.5%	26.5%	10.6%	23.3%	13.6%	10.1%	14.3%	23.5%	20.9%	22.2%	18.8%	23.5%					
7	81	8	73	14	11	27	29	34	47	69	8	4	45	22	-	2	16	27	13	19	60	2				
	8.0%	6.4%	8.3%	7.8%	8.1%	10.3%	6.8%	6.1%	10.4%	11.5%	3.0%	2.8%	12.8%	9.5%	16.6%	14.8%	10.6%	11.2%	7.5%	8.8%	2.7%					
6	36	2	34	9	5	12	11	22	14	19	14	3	13	6	-	0	1	7	2	7	25	5				
	3.6%	1.9%	3.8%	5.0%	3.6%	4.5%	2.4%	4.1%	3.0%	3.1%	5.6%	1.7%	3.6%	2.6%	2.2%	0.5%	2.7%	1.7%	2.7%	3.6%	6.4%					
5	104	10	93	17	13	27	47	55	49	59	20	24	27	31	-	2	11	22	9	22	77	5				
	10.3%	7.9%	10.6%	9.7%	9.7%	10.2%	10.7%	10.0%	10.6%	9.8%	7.8%	16.9%	7.8%	13.2%	14.4%	10.7%	8.3%	7.6%	8.8%	11.2%	6.5%					
4	12	5	8	7	1	0	5	3	9	3	9	1	1	1	-	-	1	-	-	1	11	0				
	1.2%	3.6%	0.9%	3.9%	0.6%	0.1%	1.0%	0.5%	2.1%	0.4%	3.5%	0.4%	0.4%	0.5%	1.3%				0.6%	1.6%	0.4%					
3	23	2	21	5	3	7	9	11	12	15	4	4	9	5	-	0	6	5	3	2	17	4				
	2.3%	1.4%	2.4%	2.7%	2.0%	2.7%	2.0%	2.0%	2.6%	2.5%	1.7%	2.7%	2.7%	2.3%	0.9%	5.4%	1.9%	2.3%	0.7%	2.5%	5.9%					
BOTTOM 2 NET	33	6	28	4	2	14	13	20	13	10	8	16	3	7	-	1	-	6	2	4	24	6				
=====	3.3%	4.3%	3.2%	2.0%	1.8%	5.5%	3.0%	3.6%	2.9%	1.6%	3.1%	10.7%	0.9%	2.8%	6.3%		2.1%	1.7%	1.5%	3.5%	7.6%					
2	13	2	11	1	2	7	4	9	4	4	2	7	2	2	-	-	-	1	2	0	10	3				
	1.3%	1.6%	1.2%	0.4%	1.1%	2.6%	0.9%	1.6%	0.9%	0.6%	0.7%	5.0%	0.6%	0.7%				0.5%	1.7%	0.2%	1.4%	3.7%				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_5. Importance in decision to purchase light bulbs - The quality of the bulb

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not-Purc	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not-Purc	Not Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
1 - Not at all important	21 2.0%	4 2.7%	17 1.9%	3 1.6%	1 0.7%	7 2.9%	9 2.2%	11 2.0%	10 2.1%	6 1.0%	6 2.3%	8 5.8%	1 0.3%	5 2.2%	-	1 6.3%	-	4 1.6%	-	3 1.3%	14 2.1%	3 3.9%
Don't know	16 1.5%	1 0.4%	15 1.7%	4 2.1%	0 0.2%	7 2.7%	5 1.1%	8 1.5%	7 1.6%	7 1.2%	7 2.6%	2 1.1%	3 0.7%	5 2.0%	-	-	-	7 2.6%	0 0.3%	5 2.2%	9 1.3%	1 2.0%
Refused	1 0.1%	-	1 0.1%	-	-	1 0.3%	-	1 0.2%	-	1 0.1%	-	-	1 0.3%	-	-	-	-	1 0.3%	-	1 0.4%	-	-
Mean	8.02	8.08	8.01	7.95	8.19	7.80	8.12	8.13	7.89	8.15	8.01	7.51	8.16	8.08	-	7.80	8.08	8.16	8.36	8.37	7.94	7.58
Standard Deviation	2.25	2.33	2.24	2.26	2.02	2.44	2.20	2.26	2.24	2.04	2.24	2.94	1.88	2.29	-	2.67	2.07	1.99	1.92	1.90	2.31	2.66
Standard Error	0.10	0.23	0.11	0.25	0.25	0.21	0.13	0.10	0.17	0.11	0.20	0.33	0.13	0.20	-	0.72	0.29	0.17	0.21	0.15	0.12	0.38

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_6. Importance in decision to purchase light bulbs - The bulb is environmentally friendly

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
TOP 2 NET	446	48	398	66	60	129	191	240	206	257	112	77	152	98	-	4	42	125	48	103	313	30				
=====	44.3%	36.9%	45.3%	37.2%	44.1%	49.7%	43.9%	43.7%	45.0%	42.7%	43.0%	53.0%	43.1%	42.0%	-	27.3%	39.5%	48.3%	40.4%	41.5%	45.6%	40.7%				
						d						j														
10 - Very important	338	37	301	53	48	89	148	187	151	192	83	63	114	72	-	4	30	93	36	81	233	24				
	33.6%	28.8%	34.3%	30.2%	35.3%	34.3%	34.0%	34.0%	33.1%	31.9%	32.0%	43.6%	32.4%	30.9%	-	27.3%	27.9%	36.0%	30.2%	32.7%	34.0%	32.5%				
											jk															
9	107	10	97	12	12	40	43	53	54	65	29	14	38	26	-	-	12	32	12	22	80	6				
	10.7%	8.1%	11.0%	7.0%	8.8%	15.4%	9.9%	9.6%	11.9%	10.8%	11.0%	9.4%	10.7%	11.1%	-	-	11.6%	12.3%	10.2%	8.8%	11.6%	8.2%				
						Dg																				
8	124	15	108	30	10	33	50	73	51	82	32	10	51	28	-	1	16	33	17	31	85	8				
	12.3%	11.8%	12.3%	16.9%	7.7%	12.7%	11.6%	13.2%	11.2%	13.5%	12.3%	7.1%	14.4%	12.1%	-	4.3%	15.4%	12.8%	14.7%	12.3%	12.4%	10.9%				
				e						l																
7	90	8	82	9	12	22	47	38	52	62	18	10	43	18	-	-	5	34	16	22	64	3				
	8.9%	6.1%	9.3%	4.9%	9.1%	8.5%	10.7%	6.9%	11.3%	10.3%	6.7%	7.2%	12.2%	7.9%	-	-	4.7%	13.3%	13.4%	9.1%	9.4%	4.0%				
						D											q	q	q							
6	49	4	45	13	2	9	25	25	24	37	11	2	23	13	-	1	9	10	9	19	29	1				
	4.9%	3.4%	5.1%	7.1%	1.7%	3.4%	5.8%	4.6%	5.2%	6.1%	4.1%	1.3%	6.7%	5.7%	-	10.5%	8.1%	4.0%	7.6%	7.5%	4.3%	1.9%				
				e			e			L									v							
5	120	28	92	23	30	18	49	72	47	72	34	14	37	34	-	3	21	24	6	34	76	10				
	11.9%	21.8%	10.4%	12.8%	22.1%	7.1%	11.2%	13.2%	10.4%	12.0%	13.0%	9.4%	10.6%	14.3%	-	19.6%	20.2%	9.4%	5.2%	13.6%	11.0%	14.2%				
					FG												rS									
4	26	2	24	5	1	9	10	11	14	16	9	1	10	6	-	-	-	6	6	5	14	6				
	2.5%	1.6%	2.7%	3.1%	1.0%	3.3%	2.4%	2.0%	3.2%	2.7%	3.3%	0.6%	3.0%	2.4%	-	-	-	2.5%	5.1%	2.2%	2.1%	8.4%				
																						tu				
3	40	7	33	8	7	10	15	18	22	18	13	8	10	8	-	2	2	9	2	11	29	-				
	3.9%	5.2%	3.8%	4.6%	4.8%	3.8%	3.5%	3.2%	4.8%	3.0%	5.1%	5.7%	2.7%	3.6%	-	14.4%	2.2%	3.4%	2.0%	4.3%	4.2%	-				
																qrs										
BOTTOM 2 NET	105	17	88	23	13	27	43	65	40	57	31	18	25	28	-	3	10	15	14	22	71	13				
=====	10.5%	13.1%	10.1%	12.9%	9.5%	10.3%	9.8%	11.9%	8.7%	9.4%	11.7%	12.4%	7.0%	12.1%	-	23.9%	9.9%	5.7%	11.5%	8.8%	10.3%	17.6%				
																r						t				
2	24	5	19	6	6	6	6	15	9	14	5	5	4	9	-	2	5	3	1	5	18	1				
	2.4%	4.2%	2.1%	3.5%	4.3%	2.4%	1.3%	2.8%	1.9%	2.3%	2.1%	3.4%	1.2%	3.8%	-	16.6%	4.6%	1.1%	1.3%	2.0%	2.6%	1.8%				
																rs										

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_6. Importance in decision to purchase light bulbs - The bulb is environmentally friendly

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
1 - Not at all important	81	11	70	17	7	20	37	50	31	43	25	13	21	19	-	1	6	12	12	17	53	12
	8.1%	8.9%	7.9%	9.4%	5.2%	7.9%	8.5%	9.1%	6.8%	7.2%	9.7%	9.0%	5.8%	8.3%		7.2%	5.3%	4.6%	10.3%	6.8%	7.7%	15.8%
																			r			tu
Don't know	7	-	7	-	-	3	5	6	1	1	2	4	1	-	-	-	-	1	-	1	4	1
	0.7%		0.8%			1.0%	1.0%	1.1%	0.2%	0.2%	0.7%	2.8%	0.4%					0.5%		0.6%	0.6%	2.0%
Refused	1	0	1	1	0	1	-	1	-	-	1	1	-	-	-	-	-	-	-	1	1	0
	0.1%	0.2%	0.1%	0.4%	0.2%	0.2%		0.3%			0.2%	0.6%								0.2%	0.1%	0.3%
Mean	7.22	6.67	7.30	6.87	7.11	7.45	7.27	7.17	7.29	7.26	7.02	7.42	7.44	7.02	-	5.52	7.10	7.69	7.17	7.19	7.29	6.64
			B			d											P	Ps	p		v	
Standard Deviation	2.91	3.02	2.89	3.02	2.89	2.90	2.88	2.99	2.82	2.79	3.04	3.17	2.63	2.96		3.33	2.73	2.56	2.90	2.82	2.90	3.34
Standard Error	0.12	0.30	0.14	0.33	0.36	0.25	0.18	0.13	0.22	0.15	0.27	0.36	0.19	0.26		0.90	0.38	0.21	0.32	0.22	0.16	0.48

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_7. Importance in decision to purchase light bulbs - Having prior experience with the type of bulb I purchase

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
TOP 2 NET	264	35	228	53	38	74	98	173	91	134	87	42	65	65	-	2	22	56	25	63	172	29
*****	26.2%	27.5%	26.0%	30.2%	28.0%	28.6%	22.5%	31.5%	19.8%	22.3%	33.6%	29.0%	18.4%	27.5%	-	15.4%	20.8%	21.6%	21.1%	25.2%	25.0%	40.1%
								I		J				m							tU	
10 - Very important	201	24	178	38	32	55	76	140	62	96	67	38	46	46	-	2	14	37	18	52	128	21
	20.0%	18.3%	20.2%	21.5%	23.4%	21.3%	17.5%	25.4%	13.5%	16.0%	25.7%	26.3%	12.9%	19.6%	-	15.4%	13.4%	14.2%	14.9%	20.9%	18.7%	28.9%
								I		J		j										
9	62	12	50	15	6	19	22	33	29	38	21	4	19	19	-	-	8	19	7	11	43	8
	6.2%	9.2%	5.7%	8.7%	4.7%	7.3%	5.0%	6.1%	6.3%	6.3%	7.9%	2.7%	5.5%	8.0%	-	-	7.5%	7.4%	6.2%	4.4%	6.3%	11.2%
8	173	18	155	42	13	41	76	102	70	102	47	24	63	37	-	4	17	52	23	47	116	9
	17.1%	13.9%	17.6%	23.7%	9.8%	16.0%	17.5%	18.6%	15.4%	17.0%	18.0%	16.2%	18.0%	15.6%	-	25.3%	16.2%	19.9%	19.5%	19.1%	16.9%	12.6%
								E														
7	91	18	72	9	20	27	36	36	54	65	21	5	34	29	-	1	5	27	11	18	70	2
	9.0%	14.2%	8.2%	4.9%	14.6%	10.2%	8.2%	6.6%	11.9%	10.8%	8.0%	3.3%	9.8%	12.6%	-	10.3%	4.7%	10.5%	9.3%	7.4%	10.2%	3.2%
									H	L											V	
6	46	4	42	8	5	11	22	34	13	34	5	7	16	18	-	1	3	13	6	16	28	2
	4.6%	3.1%	4.8%	4.7%	3.4%	4.4%	5.1%	6.1%	2.8%	5.7%	2.0%	4.9%	4.6%	7.6%	-	6.4%	2.7%	5.0%	4.7%	6.5%	4.1%	2.8%
								I		K												
5	184	29	155	30	28	39	87	87	97	118	42	24	85	30	-	1	18	60	19	52	124	7
	18.3%	22.5%	17.7%	17.3%	20.5%	14.9%	20.0%	15.8%	21.3%	19.6%	16.1%	16.7%	24.2%	12.8%	-	7.9%	16.6%	23.2%	16.0%	21.1%	18.1%	10.2%
													N								V	
4	35	1	34	8	5	12	10	13	22	21	5	9	16	5	-	-	12	5	5	7	27	1
	3.5%	1.0%	3.8%	4.6%	3.6%	4.6%	2.3%	2.3%	4.8%	3.5%	1.9%	6.1%	4.7%	2.1%	-	-	11.0%	1.7%	3.9%	2.7%	3.9%	2.0%
3	49	4	45	9	1	16	22	16	33	26	15	8	16	10	-	1	5	10	3	15	31	4
	4.9%	2.8%	5.2%	5.3%	0.9%	6.3%	5.1%	3.0%	7.1%	4.3%	5.9%	5.4%	4.6%	4.2%	-	7.2%	4.7%	3.8%	2.9%	5.9%	4.5%	4.9%
									H													
BOTTOM 2 NET	146	16	130	17	21	32	76	77	70	90	33	24	51	35	-	4	23	28	27	26	105	15
*****	14.5%	12.4%	14.8%	9.4%	15.5%	12.5%	17.5%	13.9%	15.2%	15.0%	12.6%	16.2%	14.6%	14.8%	-	27.5%	21.5%	10.8%	22.6%	10.4%	15.4%	20.7%
																						t
2	45	5	40	8	2	11	23	18	27	35	9	1	25	9	-	-	9	12	12	11	31	3
	4.5%	4.2%	4.5%	4.6%	1.8%	4.4%	5.3%	3.3%	5.9%	5.8%	3.3%	0.7%	7.1%	4.0%	-	-	8.9%	4.6%	10.2%	4.4%	4.5%	4.0%
										L												
1 - Not at all important	101	11	91	9	18	21	53	58	43	55	24	22	26	25	-	4	13	16	14	15	74	12
	10.1%	8.2%	10.3%	4.8%	13.6%	8.1%	12.2%	10.6%	9.4%	9.1%	9.2%	15.5%	7.4%	10.8%	-	27.5%	12.6%	6.1%	12.3%	6.0%	10.8%	16.7%
																						T
																						t

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_7. Importance in decision to purchase light bulbs - Having prior experience with the type of bulb I purchase

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	17 1.7%	3 2.5%	14 1.6%	-	5 3.7%	6 2.4%	6 1.3%	9 1.7%	8 1.7%	9 1.5%	5 1.9%	3 2.3%	3 0.9%	6 2.4%	-	-	2 1.8%	7 2.6%	-	4 1.7%	11 1.5%	2 3.3%
Refused	3 0.3%	0 0.2%	2 0.3%	-	-	0 0.1%	2 0.5%	3 0.5%	-	2 0.4%	0 0.1%	-	1 0.4%	1 0.4%	-	-	-	2 0.9%	-	-	3 0.4%	-
Mean	6.34	6.54	6.32	6.79 G	6.37	6.49 g	6.06	6.69 I	5.93	6.19	6.75 J	6.24	6.01	6.47 m	-	5.55	5.61	6.43 qs	5.92	6.51	6.27	6.51
Standard Deviation	2.93	2.77	2.95	2.72	3.02	2.91	2.98	2.98	2.82	2.82	2.98	3.20	2.71	2.93		3.44	3.03	2.62	3.03	2.74	2.94	3.45
Standard Error	0.13	0.28	0.14	0.30	0.38	0.25	0.18	0.13	0.22	0.15	0.26	0.36	0.19	0.26		0.93	0.43	0.22	0.34	0.22	0.16	0.50

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_8. Importance in decision to purchase light bulbs - The bulb is dimmable

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
TOP 2 NET	130	17	113	20	19	45	46	81	49	63	38	29	29	34	-	0	17	23	13	38	83	9
=====	12.9%	13.2%	12.9%	11.3%	14.2%	17.3%	10.6%	14.8%	10.7%	10.5%	14.6%	19.8%	8.3%	14.6%		2.7%	16.1%	9.0%	11.3%	15.2%	12.2%	12.1%
						g						j					p					
10 - Very important	98	13	86	18	15	25	40	66	32	47	25	27	24	23	-	0	10	18	10	25	65	8
	9.8%	9.7%	9.8%	10.3%	11.0%	9.7%	9.2%	12.0%	7.1%	7.8%	9.5%	18.3%	6.8%	9.9%		2.7%	9.7%	6.9%	8.6%	10.0%	9.5%	10.9%
								i				Jk										
9	32	5	27	2	4	20	6	16	16	16	13	2	5	11	-	-	7	6	3	13	18	1
	3.2%	3.5%	3.1%	1.0%	3.2%	7.6%	1.4%	2.8%	3.6%	2.7%	5.1%	1.5%	1.5%	4.7%			6.4%	2.2%	2.7%	5.2%	2.6%	1.1%
						DG																
8	67	8	58	8	8	19	32	48	19	34	20	13	21	11	-	-	7	11	12	20	35	12
	6.6%	6.5%	6.6%	4.3%	5.9%	7.2%	7.4%	8.7%	4.1%	5.6%	7.5%	9.1%	6.1%	4.7%			7.0%	4.4%	10.2%	8.0%	5.0%	16.7%
								I														U
7	75	4	71	1	10	24	40	41	33	45	24	5	32	13	-	1	7	22	7	20	51	3
	7.4%	2.9%	8.1%	0.5%	7.2%	9.2%	9.2%	7.5%	7.2%	7.5%	9.3%	3.7%	9.1%	5.5%		6.3%	6.6%	8.4%	5.9%	8.1%	7.4%	4.6%
			B		d	D	D				l											
6	44	5	39	13	5	7	19	30	14	29	10	6	19	8	-	-	6	12	5	19	23	2
	4.4%	4.1%	4.4%	7.4%	3.9%	2.7%	4.3%	5.4%	3.1%	4.8%	3.7%	4.0%	5.5%	3.3%			5.4%	4.6%	4.4%	7.6%	3.4%	2.7%
																				u		
5	178	24	154	28	32	43	75	95	83	111	45	22	55	53	-	3	24	37	27	43	121	14
	17.7%	18.5%	17.6%	15.9%	23.4%	16.6%	17.3%	17.3%	18.2%	18.4%	17.5%	15.1%	15.6%	22.7%		18.1%	22.5%	14.2%	22.6%	17.4%	17.7%	19.3%
4	53	5	48	12	2	11	28	25	28	35	9	9	24	11	-	1	4	16	2	16	34	4
	5.3%	3.9%	5.4%	6.8%	1.7%	4.1%	6.4%	4.5%	6.2%	5.8%	3.5%	6.3%	6.7%	4.7%		4.3%	3.7%	6.1%	2.1%	6.4%	4.9%	4.8%
				e			E															
3	99	8	91	25	1	27	45	36	63	60	28	11	38	22	-	-	8	32	11	26	72	1
	9.8%	5.9%	10.4%	14.1%	1.0%	10.6%	10.3%	6.6%	13.7%	10.0%	10.6%	7.6%	10.8%	9.4%			8.0%	12.2%	9.2%	10.4%	10.5%	1.1%
				E		E	E		H											V	V	
BOTTOM 2 NET	346	54	292	67	57	79	143	181	165	216	85	45	125	81	-	9	32	100	40	61	259	26
=====	34.4%	42.1%	33.3%	38.0%	42.3%	30.5%	32.8%	32.9%	36.1%	35.9%	32.6%	31.2%	35.5%	34.7%		62.2%	30.5%	38.8%	34.0%	24.7%	37.8%	35.0%
				c												QrS				T		
2	84	12	72	25	11	14	35	42	42	45	33	5	25	16	-	1	5	27	3	16	61	7
	8.3%	9.2%	8.2%	13.9%	7.9%	5.4%	7.9%	7.6%	9.2%	7.5%	12.8%	3.7%	7.0%	6.9%		6.3%	4.3%	10.4%	2.7%	6.3%	8.9%	9.9%
				F							jL							S				
1 - Not at all important	262	42	220	43	47	65	108	139	124	171	52	40	100	65	-	8	28	74	37	46	198	18
	26.1%	32.9%	25.1%	24.1%	34.4%	25.0%	24.9%	25.3%	27.0%	28.4%	19.8%	27.5%	28.5%	27.8%		55.9%	26.2%	28.4%	31.3%	18.4%	28.9%	25.1%
										k						QRs				T		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_8. Importance in decision to purchase light bulbs - The bulb is dimmable

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	14	3	11	3	0	4	7	11	3	9	1	4	8	1	-	1	-	6	0	5	6	3
	1.4%	2.7%	1.2%	1.8%	0.3%	1.4%	1.5%	2.0%	0.7%	1.5%	0.5%	2.7%	2.3%	0.3%	-	6.3%	-	2.3%	0.3%	2.0%	0.9%	3.7%
Refused	2	0	2	-	0	1	0	2	-	0	1	1	0	-	-	-	0	-	-	1	1	-
	0.2%	0.1%	0.2%	-	0.1%	0.4%	0.1%	0.3%	-	0%	0.2%	0.6%	0%	-	-	-	0.2%	-	-	0.3%	0.1%	-
Mean	4.45	4.15	4.50	4.02	4.39	4.79	4.45	4.76	4.10	4.24	4.70	4.93	4.17	4.41	-	2.64	4.76	4.00	4.47	4.99	4.22	4.83
Standard Deviation	3.02	3.12	3.00	2.86	3.18	3.13	2.94	3.13	2.84	2.91	3.01	3.37	2.85	3.02	-	2.47	3.06	2.85	3.04	2.95	3.00	3.18
Standard Error	0.13	0.32	0.14	0.32	0.39	0.27	0.18	0.14	0.22	0.16	0.26	0.39	0.21	0.27	-	0.69	0.42	0.24	0.34	0.24	0.16	0.46

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_9. Importance in decision to purchase light bulbs - The quality of the light from the bulb

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
TOP 2 NET	597	88	509	96	88	151	262	343	254	362	168	67	213	138	-	7	59	151	71	155	393	50
*****	59.3%	68.1%	58.0%	54.3%	65.3%	58.4%	60.0%	62.4%	55.5%	60.2%	64.4%	46.4%	60.5%	58.7%	-	51.2%	55.3%	58.5%	60.0%	62.3%	57.3%	68.2%
10 - Very important	445	63	382	59	65	114	208	273	172	270	118	58	156	105	-	5	46	113	51	130	279	36
	44.2%	49.1%	43.5%	33.6%	48.0%	43.8%	47.6%	49.8%	37.6%	44.8%	45.3%	39.9%	44.3%	44.9%	-	32.2%	43.5%	43.6%	43.4%	52.3%	40.7%	49.8%
9	152	25	127	36	23	38	54	70	82	92	50	9	57	33	-	3	13	38	19	25	113	13
	15.1%	19.0%	14.5%	20.7%	17.2%	14.6%	12.4%	12.7%	17.9%	15.4%	19.2%	6.5%	16.2%	13.9%	-	19.1%	11.8%	14.8%	16.6%	10.0%	16.5%	18.4%
8	176	12	164	36	18	37	85	94	83	109	41	27	73	36	-	3	16	63	18	52	113	12
	17.5%	9.5%	18.7%	20.5%	13.4%	14.2%	19.6%	17.0%	18.1%	18.1%	15.6%	18.4%	20.7%	15.3%	-	23.1%	15.0%	24.2%	15.7%	20.8%	16.5%	16.2%
7	74	8	66	7	7	29	31	30	44	53	10	10	36	16	-	-	12	19	14	18	54	2
	7.3%	6.1%	7.5%	3.7%	4.9%	11.2%	7.2%	5.4%	9.5%	8.8%	4.0%	7.1%	10.1%	6.8%	-	-	11.3%	7.3%	11.5%	7.2%	7.8%	2.8%
6	32	4	28	10	6	6	10	17	15	16	7	9	12	4	-	-	6	5	4	5	27	1
	3.2%	3.0%	3.2%	5.5%	4.4%	2.4%	2.4%	3.1%	3.4%	2.7%	2.6%	6.5%	3.5%	1.7%	-	-	5.6%	2.0%	3.6%	1.8%	3.9%	1.5%
5	66	8	58	16	12	11	28	43	24	40	12	15	16	22	-	3	10	10	8	11	52	3
	6.6%	6.2%	6.7%	9.1%	8.6%	4.3%	6.3%	7.8%	5.1%	6.6%	4.7%	10.0%	4.4%	9.5%	-	18.4%	9.1%	3.9%	6.4%	4.6%	7.6%	3.8%
4	18	1	17	4	-	9	5	5	13	4	9	5	0	4	-	-	0	1	1	2	14	2
	1.8%	0.5%	2.0%	2.5%		3.4%	1.1%	0.9%	2.8%	0.7%	3.4%	3.4%	*%	1.8%	-	-	0.1%	0.4%	1.2%	0.7%	2.1%	2.7%
3	15	1	14	0	0	6	9	4	11	9	2	4	0	9	-	0	4	3	1	5	10	-
	1.5%	0.9%	1.6%	0.1%	0.1%	2.2%	2.1%	0.6%	2.5%	1.4%	0.9%	2.7%	*%	3.7%	-	0.9%	3.7%	1.1%	0.9%	2.1%	1.4%	-
BOTTOM 2 NET	23	7	16	4	5	9	6	13	10	9	8	6	3	6	-	1	-	7	1	1	20	2
*****	2.3%	5.5%	1.8%	2.2%	3.4%	3.3%	1.3%	2.3%	2.3%	1.4%	3.1%	4.4%	0.7%	2.6%	-	6.3%	-	2.5%	0.7%	0.4%	2.9%	2.8%
2	7	3	4	2	2	1	3	3	4	1	3	3	-	1	-	-	-	-	1	-	7	-
	0.7%	2.5%	0.5%	1.0%	1.1%	0.4%	0.7%	0.5%	0.9%	0.1%	1.3%	2.2%	-	0.3%	-	-	-	-	0.7%	-	1.1%	-
1 - Not at all important	16	4	12	2	3	8	3	10	6	8	5	3	3	5	-	1	-	7	-	1	13	2
	1.6%	3.0%	1.3%	1.3%	2.2%	2.9%	0.7%	1.8%	1.3%	1.3%	1.8%	2.2%	0.7%	2.2%	-	6.3%	-	2.5%	-	0.4%	1.8%	2.8%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_9. Importance in decision to purchase light bulbs - The quality of the light from the bulb

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	5	0	5	4	-	2	0	2	4	0	4	2	-	-	-	-	-	0	-	0	4	1
	0.5%	0.2%	0.6%	2.1%		0.7%	*%	0.3%	0.8%	*%	1.4%	1.1%						0.1%		*%	0.6%	2.0%
				G							J											
Mean	8.41	8.44	8.40	8.21	8.51	8.26	8.54	8.55	8.23	8.51	8.49	7.80	8.69	8.22	-	7.79	8.30	8.54	8.52	8.73	8.25	8.72
								I		L	L		N					P		U		u
Standard Deviation	2.06	2.33	2.02	2.02	2.10	2.27	1.93	2.02	2.10	1.91	2.12	2.46	1.57	2.30		2.63	1.98	1.92	1.78	1.76	2.16	2.00
Standard Error	0.09	0.23	0.09	0.22	0.26	0.20	0.12	0.09	0.16	0.10	0.18	0.28	0.11	0.20		0.71	0.27	0.16	0.20	0.14	0.12	0.29

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QS11_10. Importance in decision to purchase light bulbs - The bulb fits well in my light fixture

	RUCC							State			Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)			
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73			
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86			
TOP 2 NET	681	80	601	109	86	179	307	372	309	400	184	96	225	162	-	9	68	175	80	167	468	46			
=====	67.6%	61.9%	68.4%	61.9%	63.4%	68.8%	70.5%	67.7%	67.5%	66.5%	70.9%	66.3%	63.9%	69.2%	-	66.7%	64.5%	67.6%	67.6%	67.1%	68.3%	62.9%			
10 - Very important	571	55	515	94	65	155	256	319	252	324	158	89	183	130	-	7	56	141	66	138	394	38			
=====	56.7%	42.9%	58.7%	53.2%	48.0%	59.9%	58.8%	58.0%	55.1%	53.8%	60.7%	61.4%	51.8%	55.5%	-	48.5%	53.0%	54.4%	56.5%	55.8%	57.5%	52.3%			
9	110	24	86	15	21	23	51	53	57	76	27	7	42	32	-	3	12	34	13	28	74	8			
=====	10.9%	19.0%	9.7%	8.7%	15.4%	8.9%	11.6%	9.7%	12.4%	12.7%	10.2%	4.9%	12.0%	13.7%	-	18.3%	11.5%	13.3%	11.1%	11.3%	10.8%	10.6%			
8	101	12	89	23	17	20	41	60	41	69	24	7	50	18	-	-	9	29	15	46	51	4			
=====	10.0%	9.5%	10.1%	12.9%	12.5%	7.7%	9.5%	10.9%	9.0%	11.5%	9.4%	5.0%	14.2%	7.7%	-	-	8.5%	11.1%	12.4%	18.6%	7.4%	6.0%			
7	51	2	49	14	4	20	13	20	31	24	20	8	17	6	-	1	4	15	3	7	37	7			
=====	5.1%	1.8%	5.6%	8.1%	2.8%	7.8%	3.0%	3.7%	6.8%	3.9%	7.7%	5.3%	4.9%	2.6%	-	6.3%	3.5%	5.6%	2.3%	3.0%	5.4%	9.0%			
6	22	2	20	4	0	2	15	14	8	17	4	1	15	2	-	-	2	5	6	5	16	1			
=====	2.2%	1.2%	2.3%	2.5%	0.1%	0.9%	3.5%	2.5%	1.8%	2.9%	1.4%	0.8%	4.4%	0.8%	-	-	1.8%	2.0%	4.8%	1.9%	2.4%	1.1%			
5	70	17	52	12	18	12	28	41	29	46	11	13	24	21	-	3	15	18	5	12	53	5			
=====	6.9%	13.5%	6.0%	6.9%	13.1%	4.7%	6.3%	7.5%	6.3%	7.6%	4.1%	9.3%	6.8%	9.0%	-	19.1%	14.1%	7.0%	4.3%	4.7%	7.7%	7.4%			
4	8	1	8	-	0	4	4	2	6	7	2	0	4	3	-	-	-	4	-	-	7	2			
=====	0.8%	0.5%	0.9%	-	0.3%	1.6%	0.9%	0.4%	1.3%	1.1%	0.6%	0.1%	1.1%	1.1%	-	-	-	1.5%	-	-	1.0%	2.3%			
3	21	4	18	4	2	6	9	10	11	10	4	7	3	7	-	-	5	2	1	4	15	2			
=====	2.1%	2.8%	2.0%	2.1%	1.8%	2.3%	2.1%	1.8%	2.5%	1.7%	1.5%	5.1%	1.0%	2.9%	-	-	5.0%	0.9%	0.8%	1.6%	2.2%	3.2%			
BOTTOM 2 NET	47	10	38	9	7	15	17	25	22	26	11	11	12	14	-	1	2	10	8	6	36	6			
=====	4.7%	7.5%	4.3%	5.3%	5.2%	5.6%	3.8%	4.6%	4.9%	4.4%	4.1%	7.4%	3.5%	5.9%	-	7.8%	1.6%	3.9%	7.0%	2.6%	5.2%	7.6%			
2	18	2	16	3	2	5	8	10	7	10	4	4	4	6	-	-	1	4	2	3	14	1			
=====	1.8%	1.5%	1.8%	1.6%	1.6%	2.0%	1.7%	1.9%	1.6%	1.7%	1.4%	2.6%	1.1%	2.6%	-	-	1.4%	1.5%	1.7%	1.0%	2.0%	1.9%			
1 - Not at all important	30	8	22	6	5	9	9	15	15	16	7	7	9	8	-	1	0	6	6	4	22	4			
=====	3.0%	6.1%	2.5%	3.7%	3.7%	3.6%	2.1%	2.7%	3.3%	2.7%	2.6%	4.8%	2.4%	3.2%	-	7.8%	0.3%	2.3%	5.3%	1.5%	3.2%	5.7%			

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_10. Importance in decision to purchase light bulbs - The bulb fits well in my light fixture

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	5	2	3	1	1	1	2	5	-	3	1	1	1	2	-	-	1	1	1	1	3	0
	0.5%	1.3%	0.4%	0.4%	0.7%	0.6%	0.4%	0.9%		0.5%	0.4%	0.8%	0.3%	0.8%			0.9%	0.4%	0.8%	0.5%	0.5%	0.5%
Mean	8.49	7.93	8.57	8.36	8.24	8.50	8.62	8.54	8.43	8.47	8.72	8.18	8.49	8.37	-	7.97	8.33	8.55	8.48	8.77	8.44	8.05
Standard Deviation	2.38	2.76	2.31	2.42	2.49	2.48	2.27	2.35	2.42	2.33	2.20	2.84	2.20	2.57		2.89	2.34	2.23	2.50	1.96	2.47	2.79
Standard Error	0.10	0.28	0.11	0.26	0.31	0.21	0.14	0.11	0.19	0.13	0.19	0.32	0.16	0.23		0.78	0.33	0.19	0.28	0.16	0.13	0.39

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_11. Importance in decision to purchase light bulbs - My friends or family recommend the bulb I purchase

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
TOP 2 NET	80	14	66	12	11	21	36	52	27	30	25	25	17	11	-	0	4	13	6	21	53	6
*****	7.9%	10.8%	7.5%	6.7%	8.3%	7.9%	8.2%	9.5%	6.0%	5.1%	9.5%	16.9%	4.8%	4.6%		2.7%	3.7%	5.0%	5.4%	8.3%	7.7%	8.0%
10 - Very important	64	11	54	10	8	15	31	43	21	22	19	23	12	8	-	0	3	8	5	15	46	4
	6.4%	8.3%	6.1%	5.8%	6.3%	5.8%	7.0%	7.9%	4.5%	3.7%	7.2%	16.0%	3.4%	3.4%		2.7%	2.9%	3.2%	4.3%	6.0%	6.7%	5.0%
9	15	3	12	2	3	6	5	9	7	8	6	1	5	3	-	-	1	4	1	6	7	2
	1.5%	2.5%	1.4%	1.0%	2.1%	2.2%	1.2%	1.6%	1.4%	1.3%	2.3%	1.0%	1.4%	1.3%			0.7%	1.7%	1.1%	2.3%	1.1%	3.0%
8	74	4	71	24	10	9	31	37	37	43	15	17	32	9	-	1	3	15	14	21	49	4
	7.4%	2.8%	8.1%	13.7%	7.7%	3.6%	7.0%	6.8%	8.1%	7.1%	5.8%	11.6%	9.2%	3.7%		4.8%	3.1%	5.9%	12.2%	8.6%	7.1%	6.0%
7	52	6	46	8	7	16	22	30	23	30	13	9	16	12	-	1	6	13	6	11	35	6
	5.2%	4.7%	5.3%	4.4%	4.9%	6.0%	5.1%	5.4%	4.9%	4.9%	5.2%	6.4%	4.6%	5.3%		4.0%	5.6%	5.0%	5.3%	4.4%	5.1%	8.5%
6	50	9	41	19	7	8	16	20	30	37	10	4	22	15	-	-	13	15	2	5	39	6
	5.0%	6.6%	4.7%	10.7%	5.5%	3.1%	3.6%	3.6%	6.6%	6.1%	3.7%	2.7%	6.2%	6.2%			12.1%	5.7%	1.8%	2.1%	5.6%	8.4%
5	169	25	145	22	23	43	81	84	85	91	44	34	53	37	-	2	16	43	15	38	121	11
	16.8%	19.2%	16.5%	12.4%	17.2%	16.7%	18.6%	15.4%	18.6%	15.2%	17.1%	23.1%	15.0%	15.8%		16.8%	14.9%	16.7%	13.1%	15.5%	17.6%	14.4%
4	43	4	39	5	2	8	29	22	22	30	12	1	22	6	-	0	3	17	5	15	27	2
	4.3%	3.4%	4.5%	2.8%	1.6%	3.0%	6.6%	4.0%	4.7%	5.0%	4.8%	0.6%	6.2%	2.6%		1.6%	2.7%	6.4%	4.5%	5.9%	3.9%	2.4%
3	63	10	53	7	11	14	32	21	42	55	8	-	33	21	-	-	6	20	13	15	44	4
	6.3%	7.9%	6.0%	3.7%	7.9%	5.3%	7.4%	3.9%	9.1%	9.1%	3.2%		9.3%	9.1%			6.0%	7.9%	11.3%	6.0%	6.4%	6.1%
BOTTOM 2 NET	461	55	405	79	63	136	183	269	192	280	131	49	152	123	-	10	54	120	54	118	313	29
*****	45.8%	43.0%	46.2%	44.6%	46.8%	52.4%	41.9%	48.9%	42.0%	46.6%	50.4%	34.0%	43.2%	52.3%		70.1%	50.9%	46.2%	45.9%	47.5%	45.7%	40.4%
2	118	12	107	25	21	32	41	60	58	82	30	6	50	30	-	2	13	41	10	34	77	7
	11.7%	9.0%	12.1%	14.4%	15.2%	12.1%	9.3%	10.9%	12.7%	13.6%	11.6%	4.3%	14.3%	12.8%		16.7%	12.1%	15.8%	8.6%	13.8%	11.2%	9.4%
1 - Not at all important	343	44	299	53	43	104	142	209	134	199	101	43	102	93	-	8	41	79	44	84	237	23
	34.0%	34.0%	34.0%	30.3%	31.6%	40.3%	32.6%	38.0%	29.3%	33.0%	38.8%	29.7%	29.0%	39.6%		53.4%	38.8%	30.4%	37.3%	33.7%	34.5%	31.0%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

QS11_11. Importance in decision to purchase light bulbs - My friends or family recommend the bulb I purchase

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	10 1.0%	2 1.6%	8 0.9%	1 0.6%	0 0.2%	3 1.2%	5 1.2%	10 1.8%	-	4 0.7%	1 0.6%	4 2.6%	4 1.1%	1 0.3%	-	-	-	3 1.3%	0 0.3%	3 1.4%	4 0.5%	2 3.4%
Refused	4 0.4%	-	4 0.5%	1 0.4%	-	2 0.8%	1 0.3%	4 0.8%	-	1 0.2%	-	3 2.1%	1 0.3%	-	-	-	1 1.0%	-	-	1 0.4%	1 0.2%	2 2.4%
Mean	3.86	3.92	3.85	4.18	3.88	3.49	3.93	3.81	3.91	3.64	3.75	5.02	3.81	3.32	-	2.71	3.42	3.63	3.73	3.80	3.86	4.08
Standard Deviation	2.90	2.94	2.89	2.98	2.90	2.85	2.88	3.04	2.72	2.68	2.98	3.35	2.69	2.60		2.56	2.59	2.61	2.88	2.92	2.89	2.93
Standard Error	0.12	0.30	0.14	0.33	0.36	0.25	0.18	0.14	0.21	0.15	0.26	0.39	0.19	0.23		0.69	0.36	0.22	0.32	0.23	0.16	0.43

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

Summary of Means: S11_1 to S11_11 Importance in decision to purchase light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
QS11_10. The bulb fits well in my light fixture	8.49	7.93	8.57 B	8.36	8.24	8.50	8.62	8.54	8.43	8.47	8.72	8.18	8.49	8.37	-	7.97	8.33	8.55	8.48	8.77	8.44	8.05
QS11_4. The bulb lasts a long time before burning out	8.41	8.44	8.41	8.59 F	8.57 F	7.86	8.61 F	8.42	8.39	8.42	8.46	8.26	8.54	8.21	-	6.67	8.17	8.46 p	8.65 PQ	8.66 u	8.34	8.22
QS11_9. The quality of the light from the bulb	8.41	8.44	8.40	8.21	8.51	8.26	8.54	8.55 I	8.23	8.51 L	8.49 L	7.80	8.69 N	8.22	-	7.79	8.30	8.54 p	8.52	8.73 U	8.25	8.72
QS11_5. The quality of the Bulb	8.02	8.08	8.01	7.95	8.19	7.80	8.12	8.13	7.89	8.15 l	8.01	7.51	8.16	8.08	-	7.80	8.08	8.16	8.36	8.37 Uv	7.94	7.58
QS11_3. The bulb helps lower energy bills	7.93	7.74	7.96	8.08	8.19	7.76	7.89	7.76	8.13	7.98	7.84	7.90	8.10	7.75	-	6.76	7.76	8.19 P	8.25	8.31 uV	7.87	7.17
QS11_1. The bulb helps save energy	7.84	7.48	7.89 B	7.80	7.93	7.54	8.00	7.70	8.00	7.95	7.65	7.72	8.15 n	7.61	-	6.64	7.41	8.13 Pq	8.35 pQ	8.27 UV	7.76	7.12
QS11_2. The price of the bulb	7.50	7.33	7.52	7.43	7.58	7.66	7.40	7.42	7.59	7.36	7.88 J	7.35	7.33	7.45	-	8.17 R	7.59 R	7.03	7.72 R	7.38	7.59	7.02
QS11_6. The bulb is environmentally friendly	7.22	6.67	7.30 B	6.87	7.11	7.45 d	7.27	7.17	7.29	7.26	7.02	7.42	7.44	7.02	-	5.52	7.10 P	7.69 Ps	7.17 p	7.19	7.29	6.64
QS11_7. Having prior experience with the type of bulb I purchase	6.34	6.54	6.32	6.79 G	6.37	6.49 g	6.06	6.69 I	5.93	6.19	6.75 J	6.24	6.01	6.47 m	-	5.55	5.61	6.43 qs	5.92	6.51	6.27	6.51
QS11_8. The bulb is dimmable	4.45	4.15	4.50 b	4.02	4.39	4.79 D	4.45	4.76 I	4.10	4.24	4.70 J	4.93 J	4.17	4.41	-	2.64	4.76 PR	4.00 P	4.47 P	4.99 U	4.22	4.83 u
QS11_11. My friends or family recommend the bulb I purchase	3.86	3.92	3.85	4.18 F	3.88	3.49	3.93 f	3.81	3.91	3.64	3.75	5.02 JK	3.81 N	3.32	-	2.71	3.42	3.63	3.73	3.80	3.86	4.08

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

Summary of Frequencies: QS11_1 to QS11_11 Top 2 - Importance in decision to purchase light bulbs?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
QS11_10. The bulb fits well in my light fixture	681	80	601	109	86	179	307	372	309	400	184	96	225	162	-	9	68	175	80	167	468	46				
	67.6%	61.9%	68.4%	61.9%	63.4%	68.8%	70.5%	67.7%	67.5%	66.5%	70.9%	66.3%	63.9%	69.2%	-	66.7%	64.5%	67.6%	67.6%	67.1%	68.3%	62.9%				
QS11_4. The bulb lasts a long time before burning out	606	87	519	117	86	132	271	326	279	359	160	87	211	136	-	4	53	160	73	156	409	41				
	60.2%	67.5%	59.1%	66.2%	63.8%	50.8%	62.1%	59.4%	61.0%	59.7%	61.4%	59.9%	59.9%	58.0%	-	28.9%	49.8%	61.7%	61.7%	62.9%	59.6%	55.8%				
QS11_9. The quality of the light from the bulb	597	88	509	96	88	151	262	343	254	362	168	67	213	138	-	7	59	151	71	155	393	50				
	59.3%	68.1%	58.0%	54.3%	65.3%	58.4%	60.0%	62.4%	55.5%	60.2%	64.4%	46.4%	60.5%	58.7%	-	51.2%	55.3%	58.5%	60.0%	62.3%	57.3%	68.2%				
QS11_3. The bulb helps lower energy bills	550	61	489	109	72	139	230	284	267	321	150	79	191	122	-	5	53	144	67	146	370	35				
	54.6%	47.7%	55.7%	61.7%	53.1%	53.6%	52.9%	51.6%	58.2%	53.4%	57.8%	54.2%	54.2%	52.0%	-	35.7%	49.6%	55.6%	57.1%	58.8%	53.9%	47.5%				
QS11_1. The bulb helps save energy	526	62	464	89	75	131	231	284	242	317	134	76	181	126	-	5	45	143	64	140	352	34				
	52.3%	48.5%	52.8%	50.5%	55.6%	50.5%	53.0%	51.8%	52.9%	52.7%	51.5%	52.1%	51.4%	53.8%	-	37.1%	42.1%	55.4%	54.4%	56.4%	51.4%	46.6%				
QS11_5. The quality of the bulb	500	68	431	89	64	115	231	288	211	302	120	77	167	125	-	7	56	124	64	133	334	33				
	49.6%	53.0%	49.1%	50.1%	47.7%	44.4%	53.1%	52.5%	46.2%	50.2%	46.2%	53.1%	47.5%	53.5%	-	49.4%	53.0%	47.9%	54.3%	53.4%	48.7%	44.9%				
QS11_6. The bulb is environmentally friendly	446	48	398	66	60	129	191	240	206	257	112	77	152	98	-	4	42	125	48	103	313	30				
	44.3%	36.9%	45.3%	37.2%	44.1%	49.7%	43.9%	43.7%	45.0%	42.7%	43.0%	53.0%	43.1%	42.0%	-	27.3%	39.5%	48.3%	40.4%	41.5%	45.6%	40.7%				
QS11_2. The price of the bulb	379	51	328	70	55	105	149	214	165	199	117	63	102	91	-	7	44	73	41	72	276	30				
	37.6%	39.5%	37.3%	39.6%	40.9%	40.4%	34.1%	39.0%	36.0%	33.0%	44.9%	43.7%	28.9%	38.6%	-	46.1%	41.0%	28.0%	35.1%	29.0%	40.3%	41.7%				
QS11_7. Having prior experience with the type of bulb I purchase	264	35	228	53	38	74	98	173	91	134	87	42	65	65	-	2	22	56	25	63	172	29				
	26.2%	27.5%	26.0%	30.2%	28.0%	28.6%	22.5%	31.5%	19.8%	22.3%	33.6%	29.0%	18.4%	27.5%	-	15.4%	20.8%	21.6%	21.1%	25.2%	25.0%	40.1%				
QS11_8. The bulb is dimmable	130	17	113	20	19	45	46	81	49	63	38	29	29	34	-	0	17	23	13	38	83	9				
	12.9%	13.2%	12.9%	11.3%	14.2%	17.3%	10.6%	14.8%	10.7%	10.5%	14.6%	19.8%	8.3%	14.6%	-	2.7%	16.1%	9.0%	11.3%	15.2%	12.2%	12.1%				
QS11_11. My friends or family recommend the bulb I purchase	80	14	66	12	11	21	36	52	27	30	25	25	17	11	-	0	4	13	6	21	53	6				
	7.9%	10.8%	7.5%	6.7%	8.3%	7.9%	8.2%	9.5%	6.0%	5.1%	9.5%	16.9%	4.8%	4.6%	-	2.7%	3.7%	5.0%	5.4%	8.3%	7.7%	8.0%				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

Summary of Frequencies: QS11_1 to QS11_11 Bottom 2 - Importance in decision to purchase light bulbs?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
QS11_11. My friends or family recommend the bulb I purchase	461	55	405	79	63	136	183	269	192	280	131	49	152	123	-	10	54	120	54	118	313	29				
	45.8%	43.0%	46.2%	44.6%	46.8%	52.4%	41.9%	48.9%	42.0%	46.6%	50.4%	34.0%	43.2%	52.3%		70.1%	50.9%	46.2%	45.9%	47.5%	45.7%	40.4%				
										L	L					rs										
QS11_8. The bulb is dimmable	346	54	292	67	57	79	143	181	165	216	85	45	125	81	-	9	32	100	40	61	259	26				
	34.4%	42.1%	33.3%	38.0%	42.3%	30.5%	32.8%	32.9%	36.1%	35.9%	32.6%	31.2%	35.5%	34.7%		62.2%	30.5%	38.8%	34.0%	24.7%	37.8%	35.0%				
																QrS					T					
QS11_7. Having prior experience with the type of bulb I purchase	146	16	130	17	21	32	76	77	70	90	33	24	51	35	-	4	23	28	27	26	105	15				
	14.5%	12.4%	14.8%	9.4%	15.5%	12.5%	17.5%	13.9%	15.2%	15.0%	12.6%	16.2%	14.6%	14.8%		27.5%	21.5%	10.8%	22.6%	10.4%	15.4%	20.7%				
																r			R			t				
QS11_6. The bulb is environmentally friendly	105	17	88	23	13	27	43	65	40	57	31	18	25	28	-	3	10	15	14	22	71	13				
	10.5%	13.1%	10.1%	12.9%	9.5%	10.3%	9.8%	11.9%	8.7%	9.4%	11.7%	12.4%	7.0%	12.1%		23.9%	9.9%	5.7%	11.5%	8.8%	10.3%	17.6%				
																r						t				
QS11_1. The bulb helps save energy	79	10	68	14	7	33	24	54	25	43	24	12	12	30	-	2	11	14	4	12	58	9				
	7.8%	8.0%	7.8%	8.2%	5.3%	12.7%	5.5%	9.8%	5.4%	7.1%	9.2%	8.3%	3.4%	12.6%		13.6%	10.6%	5.5%	3.2%	4.6%	8.4%	12.9%				
																s										
QS11_3. The bulb helps lower energy bills	67	10	57	13	5	21	28	46	21	38	18	11	16	21	-	3	6	11	5	8	52	7				
	6.6%	7.6%	6.5%	7.3%	3.7%	7.9%	6.5%	8.3%	4.6%	6.3%	6.9%	7.4%	4.6%	9.2%		21.7%	6.0%	4.1%	4.2%	3.4%	7.6%	9.0%				
																rs					t					
QS11_10. The bulb fits well in my light fixture	47	10	38	9	7	15	17	25	22	26	11	11	12	14	-	1	2	10	8	6	36	6				
	4.7%	7.5%	4.3%	5.3%	5.2%	5.6%	3.8%	4.6%	4.9%	4.4%	4.1%	7.4%	3.5%	5.9%		7.8%	1.6%	3.9%	7.0%	2.6%	5.2%	7.6%				
QS11_2. The price of the bulb	39	6	34	5	5	9	20	30	9	18	8	13	6	10	-	1	6	6	2	3	27	9				
	3.9%	4.3%	3.8%	2.9%	4.0%	3.4%	4.6%	5.5%	1.9%	3.0%	3.2%	9.0%	1.7%	4.2%		7.2%	5.8%	2.2%	1.5%	1.2%	3.9%	12.7%				
																					t	TU				
QS11_5. The quality of the bulb	33	6	28	4	2	14	13	20	13	10	8	16	3	7	-	1	-	6	2	4	24	6				
	3.3%	4.3%	3.2%	2.0%	1.8%	5.5%	3.0%	3.6%	2.9%	1.6%	3.1%	10.7%	0.9%	2.8%		6.3%		2.1%	1.7%	1.5%	3.5%	7.6%				
QS11_9. The quality of the light from the bulb	23	7	16	4	5	9	6	13	10	9	8	6	3	6	-	1	-	7	1	1	20	2				
	2.3%	5.5%	1.8%	2.2%	3.4%	3.3%	1.3%	2.3%	2.3%	1.4%	3.1%	4.4%	0.7%	2.6%		6.3%		2.5%	0.7%	0.4%	2.9%	2.8%				
																					T					
QS11_4. The bulb lasts a long time before burning out	23	7	16	2	6	9	5	16	7	8	5	9	3	4	-	3	-	4	1	2	19	2				
	2.3%	5.2%	1.8%	1.4%	4.3%	3.6%	1.2%	2.8%	1.6%	1.4%	2.0%	6.4%	0.9%	1.9%		19.3%		1.4%	0.7%	0.8%	2.7%	3.0%				
																rs										

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

A1. Have you ever heard of compact fluorescent light bulbs or CFLs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	688	83	605	118	85	172	313	377	311	485	203	-	284	190	-	11	81	214	99	214	445	29
	68.3%	64.4%	68.9%	67.1%	62.7%	66.4%	71.8%	68.7%	67.9%	80.7%	78.0%		80.6%	80.8%		77.1%	76.7%	82.9%	83.7%	86.2%	64.9%	39.8%
																				UV	V	
No	298	42	256	57	50	80	111	164	134	104	53	140	60	42	-	3	23	36	19	30	226	42
	29.6%	32.8%	29.1%	32.2%	36.7%	30.9%	25.6%	29.8%	29.4%	17.4%	20.5%	96.6%	17.0%	17.7%		22.9%	22.0%	14.1%	15.9%	12.1%	33.0%	57.4%
					g							JK								T	TU	
Don't know	21	4	17	1	1	7	12	8	12	12	4	5	8	4	-	-	1	8	0	4	14	2
	2.0%	2.8%	1.9%	0.7%	0.6%	2.7%	2.7%	1.5%	2.7%	2.0%	1.5%	3.4%	2.3%	1.5%			1.3%	3.1%	0.3%	1.7%	2.1%	2.8%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

A2. Compact fluorescent light bulbs, or CFLs, are small fluorescent bulbs that fit in regular light bulb sockets. The most common CFLs look different than standard bulbs. They are often made out of thin tubes of glass bent into loops. Have you ever heard of them?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Not Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	319	46	273	58	50	87	123	172	147	116	57	145	68	45	-	3	25	44	19	34	241	44
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	324	115	209	63	44	89	128	246	78	117	54	153	66	48	-	5	28	45	23	40	229	55
Yes	174	30	144	31	31	48	64	88	85	116	57	-	68	45	-	3	25	44	19	22	136	16
	54.5%	64.8%	52.7%	52.6%	60.8%	55.4%	52.1%	51.2%	58.2%	100.0%	100.0%		100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	65.0%	56.4%	35.8%
No	135	15	119	27	20	35	54	77	57	-	-	135	-	-	-	-	-	-	-	12	96	27
	42.3%	33.8%	43.7%	45.7%	39.2%	39.9%	43.7%	45.0%	39.2%			92.9%								34.1%	40.1%	60.8%
Don't know	10	1	10	1	-	4	5	7	4	-	-	10	-	-	-	-	-	-	-	0	9	1
	3.3%	1.5%	3.6%	1.7%		4.7%	4.3%	3.8%	2.6%			7.1%								0.9%	3.6%	3.4%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

A1-A2. Aware of or purchase compact fluorescent light bulbs or CFLs?

	RUCC							State		Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase																				
	Rural			Urban				ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware																
	(A)	(B)	(C)	(D)	(E)	(F)	(G)																				(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%					
Unaided Aware	688	83	605	118	85	172	313	377	311	485	203	-	284	190	-	11	81	214	99	214	445	29	68.3%	64.4%	68.9%	67.1%	62.7%	66.4%	71.8%	68.7%	67.9%	80.7%	78.0%	80.6%	80.8%	77.1%	76.7%	82.9%	83.7%	86.2%	64.9%	39.8%
Aided Aware	174	30	144	31	31	48	64	88	85	116	57	-	68	45	-	3	25	44	19	22	136	16	17.2%	23.0%	16.4%	17.3%	22.6%	18.6%	14.7%	16.0%	18.7%	19.3%	22.0%	19.4%	19.2%	22.9%	23.3%	17.1%	16.3%	9.0%	19.8%	21.6%
Not Aware	145	16	129	28	20	39	59	84	61	-	-	145	-	-	-	-	-	-	-	12	105	28	14.4%	12.5%	14.7%	15.6%	14.6%	15.0%	13.5%	15.3%	13.4%	-	100.0%	-	-	-	-	4.8%	15.3%	38.6%	T	TU
Purchaser	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26	59.8%	58.1%	60.0%	53.1%	67.6%	54.8%	63.0%	61.9%	57.2%	100.0%	-	-	-	-	-	77.7%	55.9%	35.2%	UV	V
Aware Non-Purchaser	260	38	222	55	24	78	102	126	135	-	260	-	-	-	-	-	-	-	-	43	198	19	25.8%	29.4%	25.3%	31.3%	17.8%	30.2%	23.5%	22.9%	29.4%	-	-	-	-	-	17.5%	28.8%	26.1%	e	e	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P0. Have you ever purchased any CFLs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	862	113	749	149	115	221	377	465	396	602	260	-	352	235	-	14	106	259	118	236	581	45
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	854	270	584	142	116	217	379	655	199	608	246	-	359	232	-	20	107	251	138	241	557	56
Yes	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	69.8%	66.4%	70.3%	62.9%	79.2%	64.5%	72.8%	73.0%	66.1%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	81.6%	66.0%	57.4%
					DF															UV		
No	229	32	198	46	21	70	92	114	115	-	229	-	-	-	-	-	-	-	-	39	173	18
	26.6%	28.1%	26.4%	31.0%	18.5%	31.5%	24.5%	24.5%	29.0%		88.2%									16.3%	29.8%	39.9%
					e															T	T	
Don't know	31	6	25	9	3	9	10	11	19	-	31	-	-	-	-	-	-	-	-	5	25	1
	3.6%	5.6%	3.3%	6.1%	2.3%	4.0%	2.7%	2.4%	4.9%		11.8%									2.0%	4.3%	2.7%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P0-Rebase. Have you ever purchased any CFLs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	59.8%	58.1%	60.0%	53.1%	67.6%	54.8%	63.0%	61.9%	57.2%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	77.7%	55.9%	35.2%
				df																UV	V	
No	374	48	327	74	41	108	151	198	176	-	229	145	-	-	-	-	-	-	-	51	278	46
	37.2%	37.1%	37.2%	41.8%	30.4%	41.8%	34.7%	36.1%	38.5%		88.2%	100.0%								20.4%	40.5%	63.1%
												K								T	TU	
Don't know	31	6	25	9	3	9	10	11	19	-	31	-	-	-	-	-	-	-	-	5	25	1
	3.1%	4.9%	2.8%	5.1%	2.0%	3.4%	2.4%	2.1%	4.3%		11.8%									1.9%	3.6%	1.7%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P3A. Do you currently have any CFLs installed in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Yes	511	62	450	79	73	132	228	297	214	511	-	-	330	169	-	14	106	259	118	169	324	18
	85.0%	82.2%	85.3%	83.9%	79.7%	92.5%	83.1%	87.4%	81.7%	85.0%			93.6%	72.2%		100.0%	100.0%	100.0%	100.0%	87.4%	84.7%	70.9%
						EG							N							V	v	
No	84	12	72	15	16	9	45	40	45	84	-	-	21	62	-	-	-	-	-	22	55	7
	14.0%	16.4%	13.7%	15.6%	17.5%	6.4%	16.3%	11.7%	17.0%	14.0%			5.9%	26.5%						11.4%	14.3%	29.1%
					F		F						M									Tu
Don't know	6	1	5	0	3	1	2	2	3	6	-	-	1	3	-	-	-	-	-	2	3	-
	0.9%	1.2%	0.9%	0.3%	2.8%	0.8%	0.6%	0.7%	1.3%	0.9%			0.4%	1.3%						1.1%	0.9%	
Refused	1	0	0	0	-	0	-	1	-	1	-	-	0	-	-	-	-	-	-	0	0	-
	0.1%	0.2%	0.1%	0.1%		0.3%		0.2%		0.1%			0.1%							0.1%	0.1%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P3B. How many CFLs are installed?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	511	62	450	79	73	132	228	297	214	511	-	-	330	169	-	14	106	259	118	169	324	18				
Unweighted Total	531	164	367	80	72	137	242	421	110	531	-	-	340	177	-	20	107	251	138	184	315	32				
1	14	4	10	1	2	7	4	11	3	14	-	-	3	11	-	14	-	-	-	3	11	0				
	2.8%	6.4%	2.3%	1.4%	3.1%	5.4%	1.6%	3.8%	1.3%	2.8%			0.8%	6.5%	100.0%					1.9%	3.3%	1.2%				
														M												
2	26	3	23	4	2	5	15	11	15	26	-	-	7	19	-	-	26	-	-	10	14	2				
	5.1%	5.6%	5.0%	5.4%	2.3%	3.8%	6.6%	3.8%	6.9%	5.1%			2.2%	11.1%			24.5%			6.0%	4.3%	9.7%				
														M												
3	33	4	29	5	6	9	13	18	15	33	-	-	16	17	-	-	33	-	-	6	27	-				
	6.4%	6.7%	6.4%	6.0%	8.8%	7.0%	5.5%	6.1%	6.9%	6.4%			4.8%	10.1%			31.0%			3.6%	8.3%					
														m								t				
4	47	11	36	7	15	6	19	22	25	47	-	-	29	16	-	-	47	-	-	15	31	1				
	9.2%	18.6%	8.0%	9.2%	20.9%	4.7%	8.1%	7.4%	11.8%	9.2%			8.8%	9.7%			44.5%			9.0%	9.5%	8.0%				
														FG												
5	42	5	37	9	1	16	16	24	18	42	-	-	29	13	-	-	-	42	-	16	21	5				
	8.2%	7.9%	8.3%	10.9%	1.7%	12.4%	7.1%	8.0%	8.6%	8.2%			8.9%	7.6%				16.3%		9.5%	6.5%	27.7%				
														E								TU				
6	48	3	45	7	5	16	19	27	21	48	-	-	33	14	-	-	-	48	-	17	30	0				
	9.3%	4.6%	10.0%	8.8%	7.3%	12.2%	8.5%	9.0%	9.8%	9.3%			10.1%	8.5%				18.5%		10.3%	9.3%	1.2%				
														v								v				
7	19	1	19	4	4	3	8	14	5	19	-	-	13	3	-	-	-	19	-	9	10	1				
	3.7%	1.0%	4.1%	5.0%	6.0%	2.5%	3.3%	4.7%	2.5%	3.7%			4.1%	2.0%				7.4%		5.3%	3.0%	3.7%				
8	36	3	33	4	3	11	18	19	17	36	-	-	21	15	-	-	-	36	-	9	26	1				
	7.0%	4.7%	7.3%	4.6%	4.2%	8.2%	8.0%	6.3%	8.0%	7.0%			6.3%	8.6%				13.8%		5.6%	7.9%	3.7%				
9	1	-	1	-	-	1	-	1	-	1	-	-	-	1	-	-	-	1	-	-	1	-				
	0.2%		0.2%			0.8%		0.4%		0.2%				0.6%				0.4%			0.3%					
10	68	7	61	14	2	25	27	39	30	68	-	-	54	13	-	-	-	68	-	21	43	4				
	13.3%	11.5%	13.6%	18.1%	2.4%	18.9%	12.0%	13.0%	13.9%	13.3%			16.2%	7.7%				26.4%		12.6%	13.1%	23.9%				
														N												
11	3	-	3	1	-	2	0	3	-	3	-	-	3	-	-	-	-	3	-	1	2	-				
	0.6%		0.6%	0.9%		1.4%	0.2%	1.0%		0.6%			0.9%					1.1%		0.7%	0.6%					
12	42	6	36	8	9	4	20	25	17	42	-	-	28	12	-	-	-	42	-	13	27	1				
	8.1%	9.6%	7.9%	10.4%	12.7%	2.8%	9.0%	8.4%	7.8%	8.1%			8.5%	7.3%				16.1%		8.0%	8.4%	5.0%				
														f								f				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P3B. How many CFLs are installed?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
13	2	0	2	-	-	-	2	0	2	2	-	-	2	0	-	-	-	-	2	0	2	-
	0.4%	0.1%	0.5%				0.9%	*%	1.0%	0.4%			0.6%	*%					1.8%	*%	0.6%	
14	4	1	4	0	-	0	4	4	-	4	-	-	2	2	-	-	-	-	4	1	3	-
	0.8%	0.9%	0.8%	0.4%		0.2%	1.6%	1.4%		0.8%			0.7%	1.1%					3.5%	0.5%	1.0%	
15	37	5	32	6	6	10	15	25	13	37	-	-	27	7	-	-	-	-	37	14	22	1
	7.2%	8.2%	7.1%	7.8%	8.2%	7.5%	6.6%	8.3%	5.9%	7.2%			8.1%	4.3%					31.5%	8.3%	6.8%	5.0%
16	1	-	1	1	-	-	-	1	-	1	-	-	1	-	-	-	-	-	1	-	1	-
	0.1%		0.2%	0.9%				0.2%		0.1%			0.2%						0.6%		0.2%	
17	0	-	0	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	-	0	-
	0.1%		0.1%				0.2%	0.2%		0.1%			0.1%						0.4%		0.2%	
18	3	0	3	-	1	1	1	1	2	3	-	-	3	0	-	-	-	-	3	1	2	-
	0.6%	0.1%	0.7%		1.5%	0.9%	0.4%	0.3%	1.0%	0.6%			1.0%	*%					2.8%	0.7%	0.6%	
20	37	3	34	2	7	11	16	23	14	37	-	-	26	11	-	-	-	-	37	12	25	-
	7.2%	5.1%	7.5%	3.1%	9.4%	8.7%	7.1%	7.7%	6.6%	7.2%			8.0%	6.3%					31.4%	7.1%	7.7%	
21	0	0	-	-	-	0	-	0	-	0	-	-	-	0	-	-	-	-	0	0	-	-
	*%	0.4%				0.2%		0.1%		*%				0.1%					0.2%	0.1%		
22	1	0	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	-	1	1	0	-
	0.2%	0.1%	0.2%				0.4%	0.3%		0.2%			0.3%						0.9%	0.6%	*%	
23	1	0	0	-	-	-	1	1	-	1	-	-	0	0	-	-	-	-	1	-	1	-
	0.1%	0.4%	0.1%				0.3%	0.2%		0.1%			0.1%	0.2%					0.5%		0.2%	
24	3	1	2	0	-	0	3	3	-	3	-	-	2	1	-	-	-	-	3	2	1	-
	0.6%	1.4%	0.5%	0.4%		0.2%	1.2%	1.1%		0.6%			0.7%	0.6%					2.7%	1.3%	0.3%	
25	7	1	7	1	3	1	2	4	3	7	-	-	6	1	-	-	-	-	7	1	6	0
	1.5%	1.1%	1.5%	1.3%	4.5%	0.8%	0.9%	1.4%	1.5%	1.5%			1.8%	0.9%					6.3%	0.9%	1.8%	1.5%
28	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	-	0	-
	*%	0.1%					*%	*%		*%			*%						0.1%		*%	
30	12	2	10	1	5	-	5	6	6	12	-	-	8	3	-	-	-	-	12	7	5	-
	2.3%	2.8%	2.2%	1.8%	6.6%		2.3%	2.0%	2.6%	2.3%			2.6%	1.9%					9.8%	4.2%	1.4%	
32	0	-	0	-	-	-	0	-	0	0	-	-	0	-	-	-	-	-	0	0	-	-
	0.1%		0.1%				0.2%		0.2%	0.1%			0.1%						0.4%	0.3%		
35	0	0	-	0	-	-	-	0	-	0	-	-	0	-	-	-	-	-	0	0	-	-
	0.1%	0.5%		0.4%				0.1%		0.1%			0.1%						0.3%	0.2%		
38	2	-	2	-	-	-	2	-	2	2	-	-	-	2	-	-	-	-	2	-	2	-
	0.4%		0.5%				0.9%		1.0%	0.4%				1.2%					1.7%		0.6%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P3B. How many CFLs are installed?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
40	3 0.5%	1 1.0%	2 0.5%	3 3.3%	-	-	0 0.1%	3 0.9%	-	3 0.5%	-	-	3 0.9%	-	-	-	-	-	3 2.4%	0 0.1%	3 0.8%	-
45	0 *%	0 0.3%	-	-	0 0.2%	-	-	0 0.1%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.1%	-	0 0.1%	-
50	2 0.4%	-	2 0.5%	-	-	-	2 0.9%	-	2 1.0%	2 0.4%	-	-	2 0.6%	-	-	-	-	-	2 1.7%	-	2 0.6%	-
67	1 0.2%	-	1 0.2%	-	-	-	1 0.4%	1 0.3%	-	1 0.2%	-	-	-	1 0.6%	-	-	-	-	1 0.8%	1 0.6%	-	-
Don't know	14 2.8%	1 1.1%	14 3.1%	-	-	2 1.4%	13 5.6%	11 3.7%	3 1.6%	14 2.8%	-	-	9 2.6%	5 2.9%	-	-	-	-	-	5 2.8%	8 2.5%	2 9.4%
Mean	10.06	9.40	10.15	9.99	10.84	8.63	10.69	10.29	9.75	10.06	-	-	10.85	8.56	-	1.00	3.20	8.28	21.27	10.49	9.98	7.35
Standard Deviation	8.00	8.00	8.01	8.07	8.41	5.48	9.00	7.93	8.11	8.00			7.75	8.47		0.00	0.81	2.44	8.49	8.46	7.89	4.35
Standard Error	0.47	1.16	0.51	1.26	1.38	0.67	0.74	0.48	0.91	0.47			0.57	0.86		0.00	0.11	0.20	0.94	0.81	0.61	0.99

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P3B-Rebase. How many CFLs are installed?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
1	14	4	10	1	2	7	4	11	3	14	-	-	3	11	-	14	-	-	-	3	11	0
	1.4%	3.1%	1.2%	0.6%	1.7%	2.7%	0.9%	2.1%	0.6%	2.4%			0.7%	4.7%	100.0%					1.3%	1.6%	0.3%
														m								
2	26	3	23	4	2	5	15	11	15	26	-	-	7	19	-	-	26	-	-	10	14	2
	2.6%	2.7%	2.6%	2.4%	1.2%	1.9%	3.4%	2.0%	3.2%	4.3%			2.0%	8.0%			24.5%			4.1%	2.0%	2.4%
														M								
3	33	4	29	5	6	9	13	18	15	33	-	-	16	17	-	-	33	-	-	6	27	-
	3.3%	3.2%	3.3%	2.7%	4.8%	3.5%	2.9%	3.3%	3.2%	5.5%			4.5%	7.3%			31.0%			2.5%	3.9%	
4	47	11	36	7	15	6	19	22	25	47	-	-	29	16	-	-	47	-	-	15	31	1
	4.7%	8.9%	4.1%	4.1%	11.3%	2.4%	4.3%	4.0%	5.5%	7.9%			8.3%	7.0%			44.5%			6.1%	4.5%	2.0%
					dFG																	
5	42	5	37	9	1	16	16	24	18	42	-	-	29	13	-	-	-	42	-	16	21	5
	4.2%	3.8%	4.2%	4.8%	0.9%	6.3%	3.7%	4.3%	4.0%	7.0%			8.3%	5.5%				16.3%		6.5%	3.1%	6.9%
					e															u		
6	48	3	45	7	5	16	19	27	21	48	-	-	33	14	-	-	-	48	-	17	30	0
	4.7%	2.2%	5.1%	3.9%	3.9%	6.2%	4.5%	4.9%	4.6%	7.9%			9.4%	6.1%				18.5%		7.0%	4.4%	0.3%
																				v	v	
7	19	1	19	4	4	3	8	14	5	19	-	-	13	3	-	-	-	19	-	9	10	1
	1.9%	0.5%	2.1%	2.2%	3.2%	1.3%	1.7%	2.5%	1.1%	3.2%			3.8%	1.5%				7.4%		3.6%	1.4%	0.9%
8	36	3	33	4	3	11	18	19	17	36	-	-	21	15	-	-	-	36	-	9	26	1
	3.6%	2.2%	3.7%	2.1%	2.2%	4.2%	4.2%	3.4%	3.8%	5.9%			5.9%	6.2%				13.8%		3.8%	3.7%	0.9%
9	1	-	1	-	-	1	-	1	-	1	-	-	-	1	-	-	-	1	-	-	1	-
	0.1%		0.1%			0.4%		0.2%		0.2%				0.5%				0.4%			0.2%	
10	68	7	61	14	2	25	27	39	30	68	-	-	54	13	-	-	-	68	-	21	43	4
	6.8%	5.5%	7.0%	8.0%	1.3%	9.6%	6.3%	7.0%	6.5%	11.3%			15.2%	5.6%				26.4%		8.6%	6.2%	6.0%
				E		E	E						N									
11	3	-	3	1	-	2	0	3	-	3	-	-	3	-	-	-	-	3	-	1	2	-
	0.3%		0.3%	0.4%		0.7%	0.1%	0.5%		0.5%			0.8%					1.1%		0.4%	0.3%	
12	42	6	36	8	9	4	20	25	17	42	-	-	28	12	-	-	-	42	-	13	27	1
	4.1%	4.6%	4.1%	4.6%	6.8%	1.4%	4.7%	4.5%	3.7%	6.9%			7.9%	5.2%				16.1%		5.4%	4.0%	1.2%
					f		f															
13	2	0	2	-	-	-	2	0	2	2	-	-	2	0	-	-	-	-	2	0	2	-
	0.2%	0.1%	0.2%				0.5%	0%	0.4%	0.4%			0.6%	0%					1.8%	0%	0.3%	
								*					*							*		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
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NEEA 2014 Consumer Lighting Survey

P3B-Rebase. How many CFLs are installed?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
14	4 0.4%	1 0.4%	4 0.4%	0 0.2%	-	0 0.1%	4 0.8%	4 0.7%	-	4 0.7%	-	-	2 0.6%	2 0.8%	-	-	-	-	4 3.5%	1 0.3%	3 0.5%	-
15	37 3.7%	5 3.9%	32 3.6%	6 3.5%	6 4.4%	10 3.8%	15 3.5%	25 4.5%	13 2.7%	37 6.2%	-	-	27 7.6%	7 3.1%	-	-	-	-	37 31.5%	14 5.7%	22 3.2%	1 1.3%
16	1 0.1%	-	1 0.1%	1 0.4%	-	-	-	1 0.1%	-	1 0.1%	-	-	1 0.2%	-	-	-	-	-	1 0.6%	-	1 0.1%	-
17	0 *%	-	0 0.1%	-	-	-	0 0.1%	0 0.1%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	-	0 0.1%	-
18	3 0.3%	0 0.1%	3 0.4%	-	1 0.8%	1 0.4%	1 0.2%	1 0.2%	2 0.5%	3 0.5%	-	-	3 0.9%	0 *%	-	-	-	-	3 2.8%	1 0.5%	2 0.3%	-
20	37 3.7%	3 2.4%	34 3.8%	2 1.4%	7 5.1%	11 4.4%	16 3.7%	23 4.2%	14 3.1%	37 6.1%	-	-	26 7.5%	11 4.5%	-	-	-	-	37 31.4%	12 4.8%	25 3.6%	-
21	0 *%	0 0.2%	-	-	-	0 0.1%	-	0 *%	-	0 *%	-	-	-	0 0.1%	-	-	-	-	0 0.2%	0 0.1%	-	-
22	1 0.1%	0 0.1%	1 0.1%	-	-	-	1 0.2%	1 0.2%	-	1 0.2%	-	-	1 0.3%	-	-	-	-	-	1 0.9%	1 0.4%	0 *%	-
23	1 0.1%	0 0.2%	0 *%	-	-	-	1 0.1%	1 0.1%	-	1 0.1%	-	-	0 0.1%	0 0.2%	-	-	-	-	1 0.5%	-	1 0.1%	-
24	3 0.3%	1 0.6%	2 0.3%	0 0.2%	-	0 0.1%	3 0.6%	3 0.6%	-	3 0.5%	-	-	2 0.6%	1 0.4%	-	-	-	-	3 2.7%	2 0.9%	1 0.1%	-
25	7 0.7%	1 0.5%	7 0.8%	1 0.6%	3 2.4%	1 0.4%	2 0.5%	4 0.8%	3 0.7%	7 1.2%	-	-	6 1.7%	1 0.6%	-	-	-	-	7 6.3%	1 0.6%	6 0.8%	0 0.4%
28	0 *%	0 0.1%	-	-	-	-	0 *%	0 *%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.1%	-	0 *%	-
30	12 1.1%	2 1.3%	10 1.1%	1 0.8%	5 3.6%	-	5 1.2%	6 1.1%	6 1.2%	12 1.9%	-	-	8 2.4%	3 1.3%	-	-	-	-	12 9.8%	7 2.8%	5 0.7%	-
32	0 *%	-	0 0.1%	-	-	-	0 0.1%	-	0 0.1%	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.2%	-	-
35	0 *%	0 0.2%	-	0 0.2%	-	-	-	0 0.1%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.3%	0 0.1%	-	-
38	2 0.2%	-	2 0.2%	-	-	-	2 0.5%	-	2 0.4%	2 0.3%	-	-	-	2 0.9%	-	-	-	-	2 1.7%	-	2 0.3%	-

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
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NEEA 2014 Consumer Lighting Survey

P3B-Rebase. How many CFLs are installed?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
40	3 0.3%	1 0.5%	2 0.3%	3 1.5%	-	-	0 0.1%	3 0.5%	-	3 0.5%	-	-	3 0.8%	-	-	-	-	-	3 2.4%	0 0.1%	3 0.4%	-
45	0 *%	0 0.1%	-	-	0 0.1%	-	-	0 *%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.1%	-	0 *%	-
50	2 0.2%	-	2 0.2%	-	-	-	2 0.5%	-	2 0.4%	2 0.3%	-	-	2 0.6%	-	-	-	-	-	2 1.7%	-	2 0.3%	-
67	1 0.1%	-	1 0.1%	-	-	-	1 0.2%	1 0.2%	-	1 0.2%	-	-	-	1 0.4%	-	-	-	-	1 0.8%	1 0.4%	-	-
None	496 49.2%	67 52.2%	429 48.8%	98 55.5%	62 46.1%	128 49.3%	208 47.7%	252 45.9%	244 53.2%	91 15.0%	260 100.0%	145 100.0%	23 6.4%	65 27.8%	-	-	-	-	-	80 32.1%	361 52.7%	55 75.0%
Don't know	14 1.4%	1 0.5%	14 1.6%	-	-	2 0.7%	13 2.9%	11 2.0%	3 0.8%	14 2.4%	-	-	9 2.4%	5 2.1%	-	-	-	-	-	5 1.9%	8 1.2%	2 2.3%
Mean	5.04	4.46	5.12	4.45	5.84	4.35	5.44	5.47	4.52	8.51	0.00	0.00	10.14	6.12	-	1.00	3.20	8.28	21.27	7.06	4.66	1.70
Standard Deviation	7.57	7.23	7.62	7.32	8.21	5.81	8.35	7.73	7.36	KL 8.21	0.00	0.00	7.96	8.14	-	0.00	0.81	PQ 2.44	PQR 8.49	UV 8.51	V 7.34	3.73
Standard Error	0.33	0.73	0.36	0.80	1.01	0.50	0.52	0.35	0.57	0.45	0.00	0.00	0.57	0.72	-	0.00	0.11	0.20	0.94	0.68	0.40	0.53

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NEEA 2014 Consumer Lighting Survey

P3C. Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

	RUCC							State			Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)			
Weighted Total	497	61	436	79	73	130	215	286	211	497	-	-	321	164	-	14	106	259	118	164	316	17			
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Unweighted Total	516	161	355	80	72	135	229	408	108	516	-	-	331	172	-	20	107	251	138	178	308	30			
0	17	3	14	0	3	6	8	9	8	17	-	-	6	11	-	1	12	1	3	10	7	-			
	3.4%	4.3%	3.3%	0.5%	3.6%	5.0%	3.5%	3.2%	3.8%	3.4%			1.8%	6.9%		6.9%	11.0%	0.6%	2.5%	6.0%	2.3%				
														M			RS			u					
1	13	3	10	1	2	6	4	11	2	13	-	-	2	11	-	13	-	-	0	3	10	0			
	2.7%	5.6%	2.3%	1.4%	3.1%	4.7%	1.8%	3.8%	1.1%	2.7%			0.7%	6.4%		93.1%			0.1%	1.7%	3.2%	1.3%			
														M		S									
2	41	5	36	4	7	8	22	23	18	41	-	-	21	20	-	-	29	12	0	12	27	2			
	8.2%	7.4%	8.3%	5.4%	9.1%	6.2%	10.1%	7.9%	8.6%	8.2%			6.4%	12.2%			26.9%	4.6%	0.2%	7.4%	8.5%	10.7%			
																	RS	S							
3	40	9	30	6	9	9	15	20	20	40	-	-	22	17	-	-	33	7	-	11	29	-			
	8.0%	15.4%	7.0%	7.9%	12.3%	7.1%	7.2%	6.9%	9.6%	8.0%			7.0%	10.4%			31.0%	2.7%		6.6%	9.2%				
																	R								
4	47	5	42	8	6	10	23	27	20	47	-	-	22	24	-	-	33	12	2	17	28	2			
	9.4%	8.3%	9.6%	10.1%	8.5%	7.3%	10.8%	9.5%	9.4%	9.4%			6.7%	14.4%			30.9%	4.6%	1.8%	10.5%	8.7%	12.9%			
														m			RS								
5	49	5	44	8	1	17	23	31	18	49	-	-	34	15	-	-	-	48	1	20	24	6			
	9.9%	8.0%	10.1%	10.0%	1.7%	13.3%	10.5%	10.7%	8.8%	9.9%			10.6%	9.2%				18.6%	0.8%	11.9%	7.6%	33.5%			
																		S			TU				
6	47	3	44	6	10	12	18	25	22	47	-	-	37	9	-	-	-	46	0	14	32	0			
	9.4%	4.2%	10.1%	8.0%	13.3%	9.5%	8.5%	8.6%	10.4%	9.4%			11.6%	5.6%				17.8%	0.4%	8.5%	10.2%	1.3%			
																		S			v				
7	19	1	18	4	4	4	7	14	5	19	-	-	14	3	-	-	-	19	0	9	9	1			
	3.9%	1.3%	4.2%	5.0%	6.0%	3.0%	3.3%	4.9%	2.5%	3.9%			4.2%	2.1%				7.3%	0.3%	5.7%	2.9%	4.1%			
																		S							
8	36	4	32	9	1	12	15	17	19	36	-	-	19	17	-	-	-	34	1	10	25	1			
	7.2%	6.0%	7.4%	10.9%	1.2%	9.0%	6.8%	6.0%	8.9%	7.2%			5.9%	10.2%				13.2%	1.2%	6.1%	7.8%	6.0%			
																		S							
9	3	0	3	-	1	1	1	2	1	3	-	-	2	1	-	-	-	2	2	2	2	-			
	0.7%	0.5%	0.7%		1.8%	1.1%	0.3%	0.8%	0.5%	0.7%			0.6%	0.8%				0.7%	1.4%	1.0%	0.6%				
10	57	7	50	13	2	21	21	27	30	57	-	-	46	10	-	-	-	53	4	14	40	3			
	11.4%	11.7%	11.4%	16.7%	2.1%	16.1%	9.9%	9.5%	14.1%	11.4%			14.2%	5.8%				20.5%	3.2%	8.4%	12.6%	19.3%			
																		S							
11	3	0	3	1	-	1	1	3	-	3	-	-	3	-	-	-	-	2	2	0	3	-			
	0.7%	0.4%	0.7%	0.9%		1.1%	0.6%	1.2%		0.7%			1.1%					0.7%	1.3%	0.2%	0.9%				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P3C. Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
12	21 4.3%	5 8.5%	16 3.7%	4 5.3%	7 9.4%	2 1.7%	8 3.8%	18 6.2% i	4 1.8%	21 4.3%	-	-	16 4.9%	4 2.6%	-	-	-	21 8.1% S	0 0.4%	8 4.7%	13 4.1%	1 5.5%
13	3 0.7%	0 0.1%	3 0.7%	-	1 1.5%	-	2 1.0%	1 0.4%	2 1.0%	3 0.7%	-	-	3 1.0%	0 *%	-	-	-	-	3 2.8%	0 *%	3 1.0%	-
14	5 1.0%	0 0.4%	5 1.1%	-	-	0 0.2%	5 2.2%	5 1.7%	-	5 1.0%	-	-	3 1.0%	2 1.0%	-	-	-	-	5 4.2%	2 1.2%	3 1.0%	-
15	35 7.1%	4 6.1%	31 7.2%	6 7.4%	6 8.3%	9 6.6%	15 6.8%	19 6.6%	16 7.6%	35 7.1%	-	-	26 8.1%	6 3.8%	-	-	-	-	35 29.8%	14 8.4%	21 6.6%	1 3.7%
16	3 0.6%	-	3 0.7%	1 0.9%	-	-	2 1.1%	2 0.6%	1 0.7%	3 0.6%	-	-	3 0.9%	-	-	-	-	-	3 2.6%	2 1.4%	1 0.2%	-
17	0 *%	0 0.4%	-	-	-	0 0.2%	-	0 0.1%	-	0 *%	-	-	0 0.1%	-	-	-	-	-	0 0.2%	0 0.1%	-	-
18	4 0.9%	1 1.8%	3 0.7%	-	2 2.6%	1 0.9%	1 0.5%	3 1.1%	1 0.5%	4 0.9%	-	-	4 1.3%	0 *%	-	-	-	-	4 3.6%	1 0.9%	3 0.9%	-
19	2 0.5%	-	2 0.5%	-	1 1.5%	-	1 0.6%	2 0.8%	-	2 0.5%	-	-	1 0.4%	1 0.6%	-	-	-	-	2 2.0%	-	2 0.8%	-
20	24 4.9%	3 4.5%	22 5.0%	2 3.1%	4 4.9%	9 7.0%	9 4.3%	14 4.9%	10 4.9%	24 4.9%	-	-	18 5.5%	7 4.0%	-	-	-	-	24 20.7%	6 3.4%	19 5.9%	-
22	0 *%	0 0.1%	-	-	-	-	0 *%	0 *%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.1%	-	0 *%	-
23	1 0.1%	0 0.4%	0 0.1%	-	-	-	1 0.3%	1 0.2%	-	1 0.1%	-	-	0 0.1%	0 0.2%	-	-	-	-	1 0.5%	-	1 0.2%	-
24	1 0.3%	0 0.5%	1 0.2%	0 0.4%	-	-	1 0.4%	1 0.4%	-	1 0.3%	-	-	1 0.4%	-	-	-	-	-	1 1.1%	1 0.6%	0 0.1%	-
25	12 2.3%	1 1.1%	11 2.5%	1 1.3%	5 7.0%	-	5 2.6%	4 1.5%	7 3.4%	12 2.3%	-	-	9 2.7%	3 1.7%	-	-	-	-	12 9.8%	5 2.8%	7 2.1%	0 1.7%
28	0 *%	0 0.1%	-	-	-	-	0 *%	0 *%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.1%	-	0 *%	-
30	5 1.0%	1 1.0%	4 1.0%	1 1.3%	1 1.5%	-	3 1.2%	2 0.7%	3 1.3%	5 1.0%	-	-	4 1.4%	0 0.2%	-	-	-	-	5 4.0%	1 0.8%	3 1.1%	-
32	0 0.1%	-	0 0.1%	-	-	-	0 0.2%	-	0 0.2%	0 0.1%	-	-	0 0.2%	-	-	-	-	-	0 0.4%	0 0.3%	-	-

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
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NEEA 2014 Consumer Lighting Survey

P3C. Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
35	1 0.1%	1 0.9%	-	0 0.4%	-	-	0 0.1%	1 0.2%	-	1 0.1%	-	-	1 0.2%	-	-	-	-	-	1 0.5%	1 0.3%	-	-
38	2 0.4%	-	2 0.5%	-	-	-	2 1.0%	-	2 1.0%	2 0.4%	-	-	-	2 1.2%	-	-	-	-	2 1.7%	-	2 0.6%	-
40	3 0.5%	0 0.6%	2 0.5%	3 3.3%	-	-	-	3 0.9%	-	3 0.5%	-	-	3 0.8%	-	-	-	-	-	3 2.2%	-	3 0.8%	-
42	0 *	0 0.3%	-	-	0 0.2%	-	-	0 0.1%	-	0 *	-	-	0 0.1%	-	-	-	-	-	0 0.1%	-	0 0.1%	-
Don't know	2 0.3%	0 0.3%	2 0.3%	-	0 0.2%	-	2 0.7%	2 0.6%	-	2 0.3%	-	-	0 0.1%	1 0.6%	-	-	0 0.2%	2 0.6%	-	2 1.0%	-	-
Mean	8.57	8.26	8.61	9.48	9.35	7.48	8.62	8.55	8.59	8.57	-	-	9.53 N	6.62	-	0.93	2.71 P	7.13 PQ	17.90 PQR	8.19	8.85	6.82
Standard Deviation	6.96	7.43	6.90	8.01	7.70	5.25	7.15	6.89	7.08	6.96			7.00	6.62		0.26	1.23	2.72	7.55	6.55	7.27	4.20
Standard Error	0.41	1.08	0.44	1.25	1.26	0.64	0.59	0.42	0.79	0.41			0.52	0.67		0.07	0.17	0.23	0.84	0.63	0.56	0.96

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P3C-Rebase. Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0/None	527	71	457	98	65	136	228	272	255	122	260	145	37	82	-	1	12	1	3	94	377	56
	52.4%	54.8%	52.0%	55.7%	48.0%	52.5%	52.3%	49.6%	55.7%	20.3%	100.0%	100.0%	10.5%	34.7%		6.9%	11.0%	0.6%	2.5%	37.9%	54.9%	77.4%
											J	J		M			RS			T	TU	
1	13	3	10	1	2	6	4	11	2	13	-	-	2	11	-	13	-	-	0	3	10	0
	1.3%	2.7%	1.1%	0.6%	1.7%	2.3%	0.9%	2.0%	0.5%	2.2%			0.6%	4.5%		93.1%			0.1%	1.1%	1.5%	0.3%
														m		S						
2	41	5	36	4	7	8	22	23	18	41	-	-	21	20	-	-	29	12	0	12	27	2
	4.0%	3.5%	4.1%	2.4%	4.9%	3.1%	5.0%	4.1%	4.0%	6.8%			5.9%	8.5%			26.9%	4.6%	0.2%	4.9%	3.9%	2.4%
																	RS	S				
3	40	9	30	6	9	9	15	20	20	40	-	-	22	17	-	-	33	7	-	11	29	-
	4.0%	7.3%	3.5%	3.5%	6.6%	3.6%	3.5%	3.6%	4.4%	6.6%			6.4%	7.3%			31.0%	2.7%		4.4%	4.2%	
																	R					
4	47	5	42	8	6	10	23	27	20	47	-	-	22	24	-	-	33	12	2	17	28	2
	4.7%	3.9%	4.8%	4.5%	4.6%	3.7%	5.3%	4.9%	4.3%	7.8%			6.1%	10.1%			30.9%	4.6%	1.8%	6.9%	4.0%	2.9%
																	RS					
5	49	5	44	8	1	17	23	31	18	49	-	-	34	15	-	-	-	48	1	20	24	6
	4.9%	3.8%	5.0%	4.5%	0.9%	6.7%	5.2%	5.6%	4.0%	8.2%			9.6%	6.5%				18.6%	0.8%	7.9%	3.5%	7.6%
																		S		U		
6	47	3	44	6	10	12	18	25	22	47	-	-	37	9	-	-	-	46	0	14	32	0
	4.6%	2.0%	5.0%	3.5%	7.2%	4.8%	4.2%	4.5%	4.8%	7.7%			10.6%	3.9%				17.8%	0.4%	5.6%	4.7%	0.3%
																		S		V	V	
7	19	1	18	4	4	4	7	14	5	19	-	-	14	3	-	-	-	19	0	9	9	1
	1.9%	0.6%	2.1%	2.2%	3.2%	1.5%	1.6%	2.6%	1.1%	3.2%			3.9%	1.5%				7.3%	0.3%	3.8%	1.3%	0.9%
																		S				
8	36	4	32	9	1	12	15	17	19	36	-	-	19	17	-	-	-	34	1	10	25	1
	3.6%	2.8%	3.7%	4.8%	0.6%	4.5%	3.4%	3.1%	4.1%	5.9%			5.4%	7.2%				13.2%	1.2%	4.0%	3.6%	1.4%
																		S				
9	3	0	3	-	1	1	1	2	1	3	-	-	2	1	-	-	-	2	2	2	2	-
	0.3%	0.2%	0.4%		1.0%	0.6%	0.1%	0.4%	0.2%	0.6%			0.6%	0.6%				0.7%	1.4%	0.7%	0.3%	
10	57	7	50	13	2	21	21	27	30	57	-	-	46	10	-	-	-	53	4	14	40	3
	5.6%	5.5%	5.7%	7.4%	1.1%	8.1%	4.9%	4.9%	6.5%	9.4%			13.0%	4.1%				20.5%	3.2%	5.6%	5.8%	4.4%
																		S				
11	3	0	3	1	-	1	1	3	-	3	-	-	3	-	-	-	-	2	2	0	3	-
	0.3%	0.2%	0.4%	0.4%		0.5%	0.3%	0.6%		0.6%			1.0%					0.7%	1.3%	0.2%	0.4%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P3C-Rebase. Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
12	21 2.1%	5 4.0%	16 1.8%	4 2.4%	7 5.1%	2 0.9%	8 1.9%	18 3.2% I	4 0.8%	21 3.6%	-	-	16 4.4%	4 1.8%	-	-	-	21 8.1% S	0 0.4%	8 3.1%	13 1.9%	1 1.2%
13	3 0.3%	0 0.1%	3 0.4%	-	1 0.8%	-	2 0.5%	1 0.2%	2 0.4%	3 0.5%	-	-	3 0.9%	0 *%	-	-	-	-	3 2.8%	0 *%	3 0.5%	-
14	5 0.5%	0 0.2%	5 0.5%	-	-	0 0.1%	5 1.1%	5 0.9%	-	5 0.8%	-	-	3 0.9%	2 0.7%	-	-	-	-	5 4.2%	2 0.8%	3 0.4%	-
15	35 3.5%	4 2.9%	31 3.6%	6 3.3%	6 4.5%	9 3.3%	15 3.4%	19 3.5%	16 3.5%	35 5.8%	-	-	26 7.4% N	6 2.6%	-	-	-	-	35 29.8%	14 5.5% V	21 3.0%	1 0.8%
16	3 0.3%	-	3 0.3%	1 0.4%	-	-	2 0.5%	2 0.3%	1 0.3%	3 0.5%	-	-	3 0.9%	-	-	-	-	-	3 2.6%	2 0.9%	1 0.1%	-
17	0 *%	0 0.2%	-	-	-	0 0.1%	-	0 *%	-	0 *%	-	-	0 0.1%	-	-	-	-	-	0 0.2%	0 0.1%	-	-
18	4 0.4%	1 0.8%	3 0.4%	-	2 1.4%	1 0.4%	1 0.3%	3 0.6%	1 0.2%	4 0.7%	-	-	4 1.2%	0 *%	-	-	-	-	4 3.6%	1 0.6%	3 0.4%	-
19	2 0.2%	-	2 0.3%	-	1 0.8%	-	1 0.3%	2 0.4%	-	2 0.4%	-	-	1 0.4%	1 0.4%	-	-	-	-	2 2.0%	-	2 0.3%	-
20	24 2.4%	3 2.1%	22 2.5%	2 1.4%	4 2.6%	9 3.5%	9 2.1%	14 2.6%	10 2.2%	24 4.0%	-	-	18 5.0%	7 2.8%	-	-	-	-	24 20.7%	6 2.2%	19 2.7%	-
22	0 *%	0 0.1%	-	-	-	-	0 *%	0 *%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.1%	-	0 *%	-
23	1 0.1%	0 0.2%	0 *%	-	-	-	1 0.1%	1 0.1%	-	1 0.1%	-	-	0 0.1%	0 0.2%	-	-	-	-	1 0.5%	-	1 0.1%	-
24	1 0.1%	0 0.2%	1 0.1%	0 0.2%	-	-	1 0.2%	1 0.2%	-	1 0.2%	-	-	1 0.4%	-	-	-	-	-	1 1.1%	1 0.4%	0 *%	-
25	12 1.1%	1 0.5%	11 1.2%	1 0.6%	5 3.8% d	-	5 1.3%	4 0.8%	7 1.6%	12 1.9%	-	-	9 2.5%	3 1.2%	-	-	-	-	12 9.8%	5 1.9%	7 1.0%	0 0.4%
28	0 *%	0 0.1%	-	-	-	-	0 *%	0 *%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.1%	-	0 *%	-
30	5 0.5%	1 0.5%	4 0.5%	1 0.6%	1 0.8%	-	3 0.6%	2 0.4%	3 0.6%	5 0.8%	-	-	4 1.2%	0 0.2%	-	-	-	-	5 4.0%	1 0.5%	3 0.5%	-
32	0 *%	-	0 0.1%	-	-	-	0 0.1%	-	0 0.1%	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.2%	-	-

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P3C-Rebase. Of the [P3b] CFLs you have installed, how many are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
35	1 0.1%	1 0.4%	-	0 0.2%	-	-	0 0.1%	1 0.1%	-	1 0.1%	-	-	1 0.2%	-	-	-	-	-	1 0.5%	1 0.2%	-	-
38	2 0.2%	-	2 0.2%	-	-	-	2 0.5%	-	2 0.4%	2 0.3%	-	-	-	2 0.9%	-	-	-	-	2 1.7%	-	2 0.3%	-
40	3 0.3%	0 0.3%	2 0.3%	3 1.5%	-	-	-	3 0.5%	-	3 0.4%	-	-	3 0.7%	-	-	-	-	-	3 2.2%	-	3 0.4%	-
42	0 *% 0.1%	0 *% 0.1%	-	-	0 0.1%	-	-	0 *% 0.1%	-	0 *% 0.1%	-	-	0 *% 0.1%	-	-	-	-	-	0 0.1%	-	0 *% 0.1%	-
Don't know	2 0.2%	0 0.1%	2 0.2%	-	0 0.1%	-	2 0.3%	2 0.3%	-	2 0.3%	-	-	0 *% 0.4%	1 0.4%	-	-	0 0.2%	2 0.6%	-	2 0.7%	-	-
Mean	4.22	3.90	4.26	4.22	5.03	3.74	4.25	4.44	3.95	7.07 KL	0.00	0.00	8.68 N	4.63	-	0.93	2.71 P	7.13 PQ	17.90 PQR	5.39 UV	4.08 V	1.54
Standard Deviation	6.50	6.55	6.49	7.12	7.32	5.27	6.62	6.55	6.43	7.11	0.00	0.00	7.21	6.31	0.26	1.23	2.72	7.55	6.59	6.62	3.48	
Standard Error	0.28	0.66	0.30	0.78	0.90	0.45	0.40	0.29	0.49	0.39	0.00	0.00	0.51	0.56	0.07	0.17	0.23	0.84	0.53	0.35	0.49	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P3D. How many of the [P3b] CFLs you have installed are shaped like regular light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	134	19	116	10	31	25	68	81	53	134	-	-	86	48	-	1	28	67	39	63	70	1
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	139	41	98	15	24	33	67	115	24	139	-	-	97	40	-	2	20	67	50	71	65	3
0	28	10	18	4	11	5	9	16	13	28	-	-	16	12	-	1	8	11	8	7	20	0
	21.1%	55.0%	15.6%	38.9%	34.2%	19.1%	13.2%	19.2%	24.0%	21.1%			18.4%	26.3%		100.0%	30.1%	16.5%	20.4%	11.8%	29.1%	33.3%
				c	g	g										QRS					t	
1	11	1	10	1	4	1	4	10	1	11	-	-	7	3	-	-	5	3	3	3	8	-
	7.9%	3.5%	8.6%	13.9%	12.4%	5.2%	5.9%	11.8%	1.8%	7.9%			8.7%	6.5%			16.3%	4.0%	8.6%	4.2%	11.3%	
								i														
2	31	3	28	2	7	8	14	17	14	31	-	-	22	9	-	-	12	15	3	18	13	-
	23.0%	15.6%	24.2%	18.9%	21.3%	32.5%	20.9%	20.4%	27.0%	23.0%			25.2%	19.5%			43.9%	22.8%	9.0%	28.0%	19.0%	
																	S					
3	11	0	11	-	-	2	10	7	4	11	-	-	6	6	-	-	1	7	3	11	0	-
	8.4%	1.2%	9.6%			6.2%	14.4%	8.8%	7.9%	8.4%			6.5%	11.7%			5.0%	10.1%	8.2%	17.5%	0.6%	
																				U		
4	9	0	8	-	1	1	6	6	3	9	-	-	3	5	-	-	1	6	1	2	6	-
	6.4%	1.2%	7.3%		3.6%	4.4%	9.4%	7.1%	5.5%	6.4%			4.0%	11.0%			4.1%	9.5%	3.0%	4.0%	8.8%	
5	12	1	11	0	3	3	6	7	5	12	-	-	10	2	-	-	-	5	7	8	5	-
	9.1%	6.9%	9.4%	3.8%	10.5%	11.6%	8.2%	8.3%	10.2%	9.1%			11.9%	4.0%				7.6%	18.4%	12.0%	6.6%	
6	12	1	11	1	2	-	8	5	6	12	-	-	7	5	-	-	-	12	0	5	6	1
	8.9%	4.0%	9.7%	14.5%	7.0%		12.3%	6.7%	12.2%	8.9%			7.7%	11.2%				17.4%	0.8%	8.4%	8.5%	46.0%
																		S				
7	3	1	2	0	1	1	-	3	-	3	-	-	3	-	-	-	-	1	2	2	-	0
	2.0%	2.8%	1.9%	3.1%	4.3%	4.4%		3.4%		2.0%			3.2%					1.6%	4.3%	3.9%		20.7%
8	4	-	4	-	-	-	4	1	3	4	-	-	4	-	-	-	-	4	-	1	3	-
	2.9%		3.3%				5.7%	1.2%	5.5%	2.9%			4.5%					5.8%		1.5%	4.2%	
9	1	-	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	1	-	-	1	-
	1.0%		1.2%				2.0%	1.7%		1.0%			1.6%					2.1%			2.0%	
10	5	1	4	0	1	2	1	5	-	5	-	-	2	2	-	-	-	1	4	2	3	-
	3.7%	7.3%	3.1%	3.8%	2.5%	9.6%	2.0%	6.1%		3.7%			2.9%	5.2%				1.6%	9.9%	2.8%	4.6%	
12	0	-	0	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	-	0	-
	0.4%		0.4%				0.7%	0.6%		0.4%			0.6%						1.3%		0.7%	
15	1	-	1	-	-	1	-	1	-	1	-	-	-	1	-	-	-	-	1	1	-	-
	0.7%		0.8%			3.6%		1.1%		0.7%				1.9%					2.3%	1.4%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P3D. How many of the [P3b] CFLs you have installed are shaped like regular light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
16	1 0.7%	-	1 0.8%	-	-	-	1 1.4%	1 1.2%	-	1 0.7%	-	-	-	1 2.0%	-	-	-	-	1 2.5%	1 1.5%	-	-
20	1 0.7%	-	1 0.8%	-	-	1 3.6%	-	1 1.1%	-	1 0.7%	-	-	1 1.0%	-	-	-	-	-	1 2.3%	-	1 1.3%	-
25	2 1.5%	-	2 1.8%	-	-	-	2 3.0%	-	2 3.9%	2 1.5%	-	-	2 2.4%	-	-	-	-	-	2 5.3%	-	2 2.9%	-
Don't know	2 1.4%	0 0.9%	2 1.5%	-	1 4.1%	-	1 0.8%	1 0.9%	1 2.1%	2 1.4%	-	-	1 1.5%	-	-	-	0 0.6%	1 0.8%	1 2.9%	2 3.0%	-	-
REFUSED	0 0.2%	0 1.7%	-	0 3.1%	-	-	-	0 0.4%	-	0 0.2%	-	-	-	0 0.6%	-	-	-	-	0 0.8%	-	0 0.4%	-
Mean	3.70	1.99	3.97	2.24	2.28	4.15	4.37	3.68	3.74	3.70	-	-	3.95	3.27	-	0.00	1.36	3.56	5.79	3.63	3.76	4.21
Standard Deviation	4.31	3.12	4.42	2.94	2.60	4.81	4.74	3.87	4.96	4.31			4.67	3.61		0.00	1.11	2.64	6.70	3.14	5.17	5.28
Standard Error	0.50	1.17	0.54	1.27	0.78	1.09	0.73	0.44	1.19	0.50			0.66	0.73		0.00	0.36	0.42	1.21	0.48	0.90	3.19

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
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 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P3D-Rebase. How many of the [P3b] CFLs you have installed are shaped like regular light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0/None	900	120	780	171	115	239	376	483	417	495	260	145	282	199	-	14	87	203	86	192	636	72
	89.4%	93.5%	88.8%	96.6%	84.8%	92.1%	86.2%	87.9%	91.2%	82.2%	100.0%	100.0%	80.1%	84.6%	-	100.0%	81.8%	78.4%	73.0%	77.3%	92.8%	98.6%
				EG		g				J		J				QRS				T		TU
1	11	1	10	1	4	1	4	10	1	11	-	-	7	3	-	-	5	3	3	3	8	-
	1.0%	0.5%	1.1%	0.8%	2.9%	0.5%	0.9%	1.8%	0.2%	1.8%			2.1%	1.3%			4.3%	1.0%	2.8%	1.1%	1.2%	
								I														
2	31	3	28	2	7	8	14	17	14	31	-	-	22	9	-	-	12	15	3	18	13	-
	3.1%	2.2%	3.2%	1.0%	4.9%	3.2%	3.3%	3.0%	3.1%	5.1%			6.1%	4.0%			11.5%	5.9%	2.9%	7.1%	1.9%	
																	S			U		
3	11	0	11	-	-	2	10	7	4	11	-	-	6	6	-	-	1	7	3	11	0	-
	1.1%	0.2%	1.3%			0.6%	2.2%	1.3%	0.9%	1.9%			1.6%	2.4%			1.3%	2.6%	2.7%	4.4%	0.1%	
																				U		
4	9	0	8	-	1	1	6	6	3	9	-	-	3	5	-	-	1	6	1	2	6	-
	0.9%	0.2%	1.0%		0.8%	0.4%	1.5%	1.0%	0.6%	1.4%			1.0%	2.2%			1.1%	2.5%	1.0%	1.0%	0.9%	
5	12	1	11	0	3	3	6	7	5	12	-	-	10	2	-	-	-	5	7	8	5	-
	1.2%	1.0%	1.2%	0.2%	2.4%	1.1%	1.3%	1.2%	1.2%	2.0%			2.9%	0.8%				2.0%	6.0%	3.0%	0.7%	
6	12	1	11	1	2	-	8	5	6	12	-	-	7	5	-	-	-	12	0	5	6	1
	1.2%	0.6%	1.3%	0.8%	1.6%		1.9%	1.0%	1.4%	2.0%			1.9%	2.3%				4.5%	0.3%	2.1%	0.9%	0.9%
																		S				
7	3	1	2	0	1	1	-	3	-	3	-	-	3	-	-	-	-	1	2	2	-	0
	0.3%	0.4%	0.3%	0.2%	1.0%	0.4%		0.5%		0.5%			0.8%					0.4%	1.4%	1.0%		0.4%
8	4	-	4	-	-	-	4	1	3	4	-	-	4	-	-	-	-	4	-	1	3	-
	0.4%		0.4%				0.9%	0.2%	0.6%	0.6%			1.1%					1.5%		0.4%	0.4%	
9	1	-	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	1	-	-	1	-
	0.1%		0.2%				0.3%	0.3%		0.2%			0.4%					0.5%			0.2%	
10	5	1	4	0	1	2	1	5	-	5	-	-	2	2	-	-	-	1	4	2	3	-
	0.5%	1.1%	0.4%	0.2%	0.6%	0.9%	0.3%	0.9%		0.8%			0.7%	1.1%				0.4%	3.3%	0.7%	0.5%	
12	0	-	0	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	-	0	-
	*%		0.1%				0.1%	0.1%		0.1%			0.1%						0.4%		0.1%	
15	1	-	1	-	-	1	-	1	-	1	-	-	-	1	-	-	-	-	1	1	-	-
	0.1%		0.1%			0.3%		0.2%		0.1%				0.4%					0.8%	0.4%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P3D-Rebase. How many of the [P3b] CFLs you have installed are shaped like regular light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
16	1 0.1%	-	1 0.1%	-	-	-	1 0.2%	1 0.2%	-	1 0.2%	-	-	1 0.4%	-	-	-	-	-	1 0.8%	1 0.4%	-	-
20	1 0.1%	-	1 0.1%	-	-	1 0.3%	-	1 0.2%	-	1 0.1%	-	-	1 0.3%	-	-	-	-	-	1 0.8%	-	1 0.1%	-
25	2 0.2%	-	2 0.2%	-	-	-	2 0.5%	-	2 0.4%	2 0.3%	-	-	2 0.6%	-	-	-	-	-	2 1.7%	-	2 0.3%	-
62	1 0.1%	-	1 0.1%	-	-	-	1 0.2%	1 0.2%	-	1 0.2%	-	-	1 0.4%	-	-	-	-	-	1 0.8%	1 0.4%	-	-
Don't know	2 0.2%	0 0.1%	2 0.2%	-	1 1.0%	-	1 0.1%	1 0.1%	1 0.2%	2 0.3%	-	-	1 0.4%	-	-	-	0 0.2%	1 0.2%	1 1.0%	2 0.7%	-	-
REFUSED	0 *%	0 0.2%	-	0 0.2%	-	-	-	0 0.1%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.3%	-	0 *%	-
Mean	0.55	0.28	0.58	0.12	0.51	0.40	0.81	0.65	0.43	0.91	0.00	0.00	0.95	0.91	-	0.00	0.35	0.92	2.36	1.13	0.38	0.09
Standard Deviation	2.75	1.34	2.90	0.82	1.55	1.92	3.76	3.23	2.04	3.52	0.00	0.00	2.84	4.42	-	0.00	0.82	2.05	7.14	4.39	1.99	0.74
Standard Error	0.12	0.13	0.14	0.09	0.19	0.16	0.23	0.14	0.16	0.19	0.00	0.00	0.20	0.39	-	0.00	0.11	0.17	0.80	0.35	0.11	0.10

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P3E. What other types of CFLs do you have installed?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	42	12	30	5	12	8	17	24	18	42	-	-	27	14	-	1	10	17	15	17	25	0
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	48	17	31	5	8	14	21	41	7	48	-	-	32	15	-	2	6	20	20	26	21	1
U-shaped / Tube shaped	12	7	4	0	6	2	3	5	7	12	-	-	11	1	-	1	6	3	2	3	8	0
	28.2%	63.0%	14.5%	2.3%	52.3%	25.9%	19.5%	20.8%	37.8%	28.2%			39.3%	8.2%		100.0%	65.3%	17.8%	10.8%	17.5%	34.1%	100.0%
																RS	S					TU
Globe / sphere / vanity	9	1	8	4	2	0	2	2	7	9	-	-	5	4	-	-	-	4	5	2	7	0
	22.3%	9.5%	27.4%	84.4%	17.7%	5.9%	14.1%	8.9%	39.9%	22.3%			18.0%	31.5%				24.9%	35.7%	9.6%	29.5%	100.0%
				eFg																		TU
Reflector / flood / spotlight	7	0	7	-	-	2	4	7	-	7	-	-	4	3	-	-	-	2	5	5	2	-
	16.1%	1.9%	21.7%			31.8%	25.7%	28.4%		16.1%			13.8%	21.0%				12.5%	32.0%	27.7%	8.5%	
Shaped like regular light bulbs / incandescent bulbs	3	0	3	-	0	1	2	3	-	3	-	-	3	-	-	-	1	2	-	3	-	-
	7.5%	1.4%	9.9%		1.3%	14.4%	11.2%	13.3%		7.5%			11.6%				11.4%	12.2%		18.7%		
Pin or plug-in base	3	-	3	-	-	-	3	-	3	3	-	-	3	-	-	-	-	3	-	-	3	-
	7.0%		9.7%				17.4%		16.1%	7.0%			10.8%					17.4%			11.9%	
Candelabra / flame shape (for chandelier)	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	0	-	-	-	0	-
	0.5%	1.9%					1.4%	1.0%		0.5%			0.8%				2.4%				0.9%	
Other (SPECIFY)	1	0	0	-	-	1	-	1	-	1	-	-	1	-	-	-	-	0	0	0	0	-
	1.5%	1.9%	1.3%			8.0%		2.6%		1.5%			2.3%					2.3%	1.5%	1.3%	1.6%	
Don't know	9	3	6	1	4	2	3	8	1	9	-	-	3	6	-	-	2	4	4	5	4	-
	21.9%	24.1%	21.0%	13.2%	28.6%	19.8%	20.6%	33.9%	6.2%	21.9%			9.3%	42.8%			20.9%	21.7%	24.2%	31.7%	15.6%	
													m									
Refused	0	-	0	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	0	-	-
	0.8%		1.1%				1.9%	1.3%		0.8%			1.2%						2.2%	1.9%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P3F. Why aren't you using other types of CFLs?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	-	-	100.0%	100.0%	-	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	455	49	406	73	61	122	199	262	192	455	-	-	294	150	-	13	97	242	103	147	292	16				
Unweighted Total	468	144	324	75	64	121	208	367	101	468	-	-	299	157	-	18	101	231	118	152	287	29				
Don't need any bulbs	112	12	100	18	11	29	54	73	39	112	-	-	58	46	-	2	26	63	21	30	79	3				
	24.7%	24.0%	24.7%	24.1%	18.4%	23.8%	27.3%	28.0%	20.2%	24.7%			19.7%	30.3%		15.9%	27.0%	26.2%	20.0%	20.4%	27.1%	19.8%				
Not aware of them	84	10	75	17	10	21	37	49	36	84	-	-	64	20	-	1	16	49	18	17	63	5				
	18.6%	19.9%	18.4%	22.9%	16.5%	17.1%	18.5%	18.5%	18.7%	18.6%			21.7%	13.5%		9.1%	16.3%	20.4%	17.6%	11.8%	21.4%	28.3%				
Price / expensive	46	2	44	7	5	17	16	19	27	46	-	-	32	13	-	1	7	16	21	16	30	1				
	10.1%	4.7%	10.8%	10.0%	8.3%	14.2%	8.2%	7.2%	14.1%	10.1%			10.9%	8.8%		10.4%	7.6%	6.5%	20.8%	10.6%	10.2%	4.6%				
How they fit in fixtures	41	4	36	3	6	16	16	21	20	41	-	-	29	11	-	0	6	22	12	12	27	2				
	9.0%	9.2%	8.9%	4.6%	9.8%	12.8%	7.9%	7.9%	10.5%	9.0%			9.7%	7.6%		1.7%	6.2%	9.1%	12.0%	8.0%	9.3%	11.5%				
Can't find them	26	2	24	2	5	4	16	18	8	26	-	-	24	2	-	-	2	15	9	8	17	2				
	5.7%	4.4%	5.9%	2.6%	7.5%	2.9%	8.0%	6.9%	4.1%	5.7%			8.1%	1.3%			2.1%	6.3%	8.5%	5.3%	5.7%	10.5%				
Mercury / hazardous contents	12	1	11	3	2	4	3	8	4	12	-	-	1	11	-	0	7	4	1	3	7	1				
	2.6%	1.1%	2.8%	3.9%	3.6%	3.2%	1.5%	2.9%	2.3%	2.6%			0.3%	7.3%		2.9%	7.2%	1.6%	0.9%	2.2%	2.6%	8.3%				
How they look in fixtures	11	0	11	1	3	5	2	4	6	11	-	-	6	5	-	0	4	3	4	5	5	1				
	2.4%	0.7%	2.6%	1.1%	4.8%	4.4%	0.9%	1.7%	3.3%	2.4%			1.9%	3.5%		1.0%	4.1%	1.1%	4.0%	3.4%	1.6%	6.7%				
They take too long to light up	11	1	10	1	1	2	6	9	1	11	-	-	6	5	-	2	3	4	2	4	6	1				
	2.3%	1.5%	2.4%	1.2%	2.1%	1.7%	3.1%	3.5%	0.7%	2.3%			1.9%	3.3%		12.2%	2.7%	1.9%	1.7%	2.4%	1.9%	8.7%				
Other (SPECIFY)	87	16	71	17	15	22	33	49	37	87	-	-	45	42	-	6	19	48	13	38	46	3				
	19.0%	32.5%	17.4%	22.5%	25.3%	17.6%	16.7%	18.8%	19.3%	19.0%			15.2%	27.9%		47.7%	19.9%	19.8%	12.7%	25.6%	15.7%	19.4%				
Don't know	49	4	45	7	6	16	21	27	23	49	-	-	43	5	-	-	17	26	7	19	31	0				
	10.8%	8.9%	11.1%	9.9%	9.5%	12.9%	10.3%	10.1%	11.9%	10.8%			14.7%	3.7%			17.8%	10.6%	6.4%	12.7%	10.5%	0.9%				
Refused	0	0	-	0	-	-	-	0	-	0	-	-	0	-	-	-	-	0	-	0	-	-				
	0.1%	0.7%		0.5%				0.1%		0.1%			0.1%					0.2%		0.2%						

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P4. Are you storing any CFLs for use as spares or to be installed at a later date?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38				
Yes	380	38	342	62	54	92	172	223	157	380	-	-	262	105	-	3	55	191	96	114	253	13				
	63.1%	51.0%	64.8%	66.1%	59.0%	64.6%	62.7%	65.5%	60.0%	63.1%			74.5%	44.7%		20.4%	52.3%	73.8%	81.2%	59.2%	65.9%	50.2%				
				b									N				P	PQ	PQ							
No	218	35	183	30	38	50	100	113	105	218	-	-	89	127	-	11	49	67	21	76	129	12				
	36.2%	47.3%	34.6%	32.3%	41.0%	35.4%	36.4%	33.3%	40.0%	36.2%			25.4%	54.1%		79.6%	46.3%	26.1%	17.7%	39.6%	33.7%	48.5%				
				c									M			QRS	RS									
Don't know	4	1	2	1	-	-	2	4	-	4	-	-	1	3	-	-	1	0	1	2	1	-				
	0.6%	1.5%	0.5%	1.4%			0.8%	1.0%		0.6%			0.2%	1.1%			1.4%	0.1%	1.1%	1.1%	0.4%					
Refused	0	0	0	0	-	-	0	0	-	0	-	-	-	0	-	-	-	-	-	0	-	0				
	0.1%	0.2%	0.1%	0.1%			0.1%	0.1%		0.1%			0.1%							0.1%		1.2%				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P4B. How many CFLs are you storing?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	380	38	342	62	54	92	172	223	157	380	-	-	262	105	-	3	55	191	96	114	253	13
Unweighted Total	402	123	279	63	55	99	185	322	80	402	-	-	277	112	-	5	64	187	115	136	244	22
1	10	2	8	0	3	5	2	7	3	10	-	-	6	5	-	0	2	5	3	0	10	-
	2.7%	5.1%	2.5%	0.5%	4.9%	5.4%	1.4%	3.1%	2.2%	2.7%			2.2%	4.3%		10.6%	3.1%	2.7%	2.8%	0.4%	3.9%	
2	56	6	51	10	10	11	26	32	24	56	-	-	41	15	-	1	16	28	4	14	40	3
	14.8%	15.3%	14.8%	15.5%	17.7%	11.9%	15.3%	14.5%	15.4%	14.8%			15.5%	14.0%		23.5%	29.2%	14.5%	3.7%	12.2%	15.8%	19.9%
3	24	6	18	2	1	9	12	17	8	24	-	-	14	10	-	1	6	11	4	8	16	0
	6.3%	15.8%	5.3%	3.5%	1.8%	9.7%	7.0%	7.4%	4.8%	6.3%			5.4%	9.3%		48.0%	10.0%	5.6%	4.3%	6.9%	6.3%	0.9%
4	73	8	65	13	15	21	25	46	27	73	-	-	51	20	-	0	10	41	18	25	46	2
	19.3%	21.0%	19.2%	21.1%	27.1%	22.5%	14.6%	20.9%	17.2%	19.3%			19.4%	18.9%		13.4%	18.9%	21.3%	19.1%	21.9%	18.4%	16.3%
5	36	2	34	2	6	10	18	18	18	36	-	-	26	10	-	-	2	16	16	15	19	2
	9.4%	5.6%	9.8%	2.9%	10.7%	10.9%	10.5%	7.9%	11.5%	9.4%			9.9%	9.3%			3.0%	8.5%	16.7%	13.0%	7.6%	11.8%
6	54	6	48	10	3	10	31	33	22	54	-	-	42	8	-	-	10	27	12	13	40	1
	14.3%	15.8%	14.2%	16.4%	5.6%	10.7%	18.2%	14.6%	13.9%	14.3%			15.9%	7.3%			18.5%	14.0%	13.0%	11.6%	15.9%	7.8%
7	2	-	2	-	-	1	1	2	-	2	-	-	2	-	-	-	1	1	-	2	-	-
	0.7%		0.7%			1.2%	0.8%	1.1%		0.7%			0.9%				2.0%	0.7%		2.2%		
8	27	4	23	11	2	3	10	19	8	27	-	-	19	7	-	-	4	16	4	8	19	0
	7.1%	9.6%	6.9%	17.6%	4.4%	3.6%	6.1%	8.4%	5.4%	7.1%			7.1%	6.7%			7.5%	8.3%	4.6%	6.8%	7.5%	2.4%
9	1	-	1	-	-	1	-	1	-	1	-	-	1	-	-	-	-	1	-	1	-	-
	0.3%		0.3%			1.2%		0.5%		0.3%			0.4%					0.6%		1.0%		
10	40	2	37	2	7	12	19	22	18	40	-	-	26	13	-	-	2	21	15	14	24	2
	10.5%	6.2%	10.9%	3.7%	12.2%	12.6%	11.3%	9.7%	11.6%	10.5%			10.0%	12.6%			3.6%	10.7%	15.9%	12.6%	9.3%	13.8%
12	9	1	8	1	-	2	6	8	1	9	-	-	8	1	-	-	1	5	3	3	5	1
	2.4%	2.0%	2.4%	2.2%		2.3%	3.2%	3.4%	0.9%	2.4%			3.0%	1.0%			2.5%	2.5%	2.7%	2.6%	2.1%	5.8%
14	1	-	1	-	-	1	-	-	1	1	-	-	1	-	-	-	-	-	1	-	1	-
	0.3%		0.3%			1.2%			0.7%	0.3%			0.4%						1.2%		0.4%	
15	6	0	5	1	-	4	1	1	5	6	-	-	5	1	-	-	-	4	1	1	5	-
	1.5%	0.6%	1.6%	1.1%		4.3%	0.6%	0.5%	3.0%	1.5%			1.7%	1.1%				2.3%	1.3%	0.6%	2.0%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P4B. How many CFLs are you storing?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	
16	3	-	3	-	3	-	1	1	3	3	-	-	1	3	-	-	-	-	1	1	-	3	
	0.9%		1.0%		4.7%		0.6%	0.4%	1.6%	0.9%			0.4%	2.4%					1.0%	0.8%		19.6%	
					g																	T	
20	21	1	21	7	3	0	12	5	16	21	-	-	12	10	-	-	-	8	10	2	20	-	
	5.6%	1.6%	6.0%	10.6%	4.7%	0.4%	6.8%	2.4%	10.2%	5.6%			4.4%	9.3%				4.4%	10.2%	1.4%	7.8%		
					F		F		H					m					r		T		
24	0	0	0	0	-	-	-	0	-	0	-	-	0	-	-	0	-	-	-	0	0	0	-
	0.1%	0.3%	0.1%	0.2%			0.2%	0.2%		0.1%			0.2%			4.6%			0.3%	0.3%	0.1%		
25	1	-	1	-	-	-	1	1	-	1	-	-	1	0	-	-	-	-	1	0	1	-	
	0.3%		0.4%				0.8%	0.6%		0.3%			0.4%	0.4%					1.4%	0.3%	0.4%		
28	0	-	0	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	0	-	-	
	0.1%		0.1%				0.3%	0.2%		0.1%			0.2%						0.5%	0.4%			
40	2	-	2	-	2	-	-	-	2	2	-	-	-	2	-	-	-	2	-	-	2	-	
	0.6%		0.6%		4.0%				1.4%	0.6%			2.1%					1.1%			0.9%		
50	1	-	1	-	-	-	1	0	0	1	-	-	1	-	-	-	-	-	1	1	-	-	
	0.2%		0.2%				0.5%	0.1%	0.3%	0.2%			0.3%						0.8%	0.7%			
Don't know	9	0	9	3	1	2	3	9	-	9	-	-	6	1	-	-	1	5	0	5	4	0	
	2.4%	1.2%	2.6%	4.7%	2.1%	2.0%	2.0%	4.1%		2.4%			2.5%	1.2%			1.7%	2.8%	0.5%	4.2%	1.7%	1.7%	
Mean	6.77	5.07	6.97	7.10	7.46	5.70	7.02	6.01	7.81	6.77	-	-	6.50	7.61	-	3.65	4.41	6.61	8.48	6.44	6.88	7.67	
Standard Deviation	5.83	3.53	6.01	5.38	8.31	3.70	5.96	4.57	7.08	5.83			5.22	7.29		5.60	2.58	5.64	6.97	5.51	6.00	5.29	
Standard Error	0.39	0.49	0.44	0.98	1.48	0.55	0.55	0.32	0.90	0.39			0.42	0.94		3.15	0.46	0.55	0.86	0.62	0.52	1.63	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P4B-Rebase. How many CFLs are you storing?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not Aware	Purch	No-Purch	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73	
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86	
1	10	2	8	0	3	5	2	7	3	10	-	-	6	5	-	0	2	5	3	0	10	-	
	1.0%	1.5%	1.0%	0.2%	1.9%	1.9%	0.6%	1.3%	0.8%	1.7%			1.6%	1.9%		2.2%	1.6%	2.0%	2.3%	0.2%	1.5%		
2	56	6	51	10	10	11	26	32	24	56	-	-	41	15	-	1	16	28	4	14	40	3	
	5.6%	4.5%	5.8%	5.5%	7.1%	4.2%	6.0%	5.9%	5.3%	9.4%			11.5%	6.3%		4.8%	15.3%	10.7%	3.0%	5.6%	5.8%	3.5%	
													n				S	S					
3	24	6	18	2	1	9	12	17	8	24	-	-	14	10	-	1	6	11	4	8	16	0	
	2.4%	4.7%	2.1%	1.2%	0.7%	3.4%	2.7%	3.0%	1.6%	4.0%			4.0%	4.2%		9.8%	5.2%	4.1%	3.5%	3.2%	2.3%	0.2%	
4	73	8	65	13	15	21	25	46	27	73	-	-	51	20	-	0	10	41	18	25	46	2	
	7.3%	6.2%	7.5%	7.4%	10.8%	8.0%	5.8%	8.5%	5.9%	12.2%			14.5%	8.4%		2.7%	9.9%	15.7%	15.5%	10.1%	6.8%	2.9%	
													n				P	P					
5	36	2	34	2	6	10	18	18	18	36	-	-	26	10	-	-	2	16	16	15	19	2	
	3.5%	1.6%	3.8%	1.0%	4.3%	3.9%	4.1%	3.2%	3.9%	5.9%			7.4%	4.2%			1.5%	6.3%	13.6%	6.0%	2.8%	2.1%	
																		Qr					
6	54	6	48	10	3	10	31	33	22	54	-	-	42	8	-	-	10	27	12	13	40	1	
	5.4%	4.7%	5.5%	5.8%	2.2%	3.8%	7.2%	5.9%	4.8%	9.0%			11.8%	3.3%			9.7%	10.4%	10.6%	5.3%	5.9%	1.4%	
													N										
7	2	-	2	-	-	1	1	2	-	2	-	-	2	-	-	-	1	1	-	2	-	-	
	0.2%		0.3%			0.4%	0.3%	0.5%		0.4%			0.7%				1.0%	0.5%		1.0%			
8	27	4	23	11	2	3	10	19	8	27	-	-	19	7	-	-	4	16	4	8	19	0	
	2.7%	2.8%	2.7%	6.2%	1.8%	1.3%	2.4%	3.4%	1.9%	4.5%			5.3%	3.0%			3.9%	6.1%	3.7%	3.1%	2.8%	0.4%	
9	1	-	1	-	-	1	-	1	-	1	-	-	1	-	-	-	-	1	-	1	-	-	
	0.1%		0.1%			0.4%		0.2%		0.2%			0.3%					0.4%		0.4%			
10	40	2	37	2	7	12	19	22	18	40	-	-	26	13	-	-	2	21	15	14	24	2	
	3.9%	1.8%	4.3%	1.3%	4.8%	4.5%	4.4%	3.9%	4.0%	6.6%			7.4%	5.6%			1.9%	7.9%	12.9%	5.8%	3.4%	2.4%	
12	9	1	8	1	-	2	6	8	1	9	-	-	8	1	-	-	1	5	3	3	5	1	
	0.9%	0.6%	0.9%	0.8%		0.8%	1.3%	1.4%	0.3%	1.5%			2.2%	0.5%			1.3%	1.8%	2.2%	1.2%	0.8%	1.0%	
14	1	-	1	-	-	1	-	-	1	1	-	-	1	-	-	-	-	-	1	-	1	-	
	0.1%		0.1%			0.4%			0.2%	0.2%			0.3%						0.9%		0.2%		
15	6	0	5	1	-	4	1	1	5	6	-	-	5	1	-	-	-	4	1	1	5	-	
	0.6%	0.2%	0.6%	0.4%		1.5%	0.2%	0.2%	1.0%	0.9%			1.3%	0.5%				1.7%	1.0%	0.3%	0.7%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P4B-Rebase. How many CFLs are you storing?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
16	3	-	3	-	3	-	1	1	3	3	-	-	1	3	-	-	-	-	1	1	-	3
	0.3%		0.4%		1.9%		0.2%	0.2%	0.6%	0.6%			0.3%	1.1%					0.8%	0.4%		3.5%
20	21	1	21	7	3	0	12	5	16	21	-	-	12	10	-	-	-	8	10	2	20	
	2.1%	0.5%	2.4%	3.7%	1.9%	0.1%	2.7%	1.0%	3.5%	3.5%			3.3%	4.1%				3.2%	8.3%	0.7%	2.9%	
24	0	0	0	0	-	-	0	0	-	0	-	-	0	-	-	0	-	-	0	0	0	
	*%	0.1%	*%	0.1%			0.1%	0.1%		0.1%			0.1%			0.9%			0.3%	0.1%	*%	
25	1	-	1	-	-	-	1	1	-	1	-	-	1	0	-	-	-	-	1	0	1	
	0.1%		0.2%				0.3%	0.2%		0.2%			0.3%	0.2%					1.1%	0.1%	0.1%	
28	0	-	0	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	0	-	
	*%		0.1%				0.1%	0.1%		0.1%			0.1%						0.4%	0.2%		
40	2	-	2	-	2	-	-	-	2	2	-	-	-	2	-	-	-	2	-	-	2	
	0.2%		0.2%		1.6%				0.5%	0.4%				0.9%				0.8%			0.3%	
50	1	-	1	-	-	-	1	0	0	1	-	-	1	-	-	-	-	-	1	1	-	
	0.1%		0.1%				0.2%	0.1%	0.1%	0.1%			0.2%						0.7%	0.3%		
None	627	91	537	115	81	168	264	327	301	222	260	145	90	130	-	11	51	68	22	134	433	
	62.3%	70.4%	61.1%	64.9%	60.1%	64.6%	60.5%	59.5%	65.7%	36.9%	100.0%	100.0%	25.5%	55.3%		79.6%	47.7%	26.2%	18.8%	54.0%	63.2%	
Don't know	9	0	9	3	1	2	3	9	-	9	-	-	6	1	-	-	1	5	0	5	4	
	0.9%	0.4%	1.0%	1.6%	0.8%	0.7%	0.8%	1.7%		1.5%			1.8%	0.5%			0.9%	2.0%	0.4%	1.9%	0.6%	
Mean	2.52	1.49	2.67	2.41	2.94	1.99	2.74	2.37	2.68	4.24	0.00	0.00	4.81	3.38	-	0.74	2.28	4.84	6.88	2.89	2.51	
										KL			N					PQ	PQR	V	V	
Standard Deviation	4.83	2.99	5.03	4.59	6.34	3.49	5.05	4.11	5.56	5.66	0.00	0.00	5.32	6.15		2.61	2.88	5.64	7.11	4.88	4.91	
Standard Error	0.21	0.30	0.24	0.51	0.78	0.30	0.31	0.19	0.43	0.31	0.00	0.00	0.38	0.54		0.71	0.40	0.47	0.79	0.39	0.26	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P4D.How many of the CFLs in storage are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	371	38	333	59	53	90	169	213	157	371	-	-	256	104	-	3	55	186	95	109	248	13
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	391	121	270	61	54	97	179	311	80	391	-	-	270	110	-	5	63	181	113	131	239	21
0	24	1	23	-	5	5	13	15	8	24	-	-	19	4	-	-	8	10	3	10	13	-
	6.4%	1.6%	6.9%		9.5%	5.7%	7.9%	7.1%	5.3%	6.4%			7.5%	4.3%			15.0%	5.4%	3.4%	9.4%	5.3%	
																	rs					
1	7	2	5	1	2	2	3	7	0	7	-	-	5	2	-	0	1	3	3	1	6	-
	2.0%	6.1%	1.5%	1.1%	2.9%	2.6%	1.6%	3.3%	0.1%	2.0%			2.0%	1.9%		10.6%	1.1%	1.8%	2.8%	0.7%	2.6%	
2	63	6	58	10	8	16	30	31	33	63	-	-	47	16	-	1	14	32	6	18	43	3
	17.1%	15.1%	17.4%	16.8%	15.4%	17.3%	17.7%	14.4%	20.9%	17.1%			18.3%	15.1%		23.5%	25.1%	17.0%	6.1%	16.3%	17.3%	20.2%
																	S	S				
3	28	7	21	3	1	10	15	22	6	28	-	-	14	14	-	1	7	13	3	11	17	0
	7.6%	18.0%	6.4%	4.3%	1.9%	10.9%	8.8%	10.2%	4.1%	7.6%			5.6%	13.1%		48.0%	12.2%	7.2%	3.6%	10.4%	6.7%	1.0%
																rs						
4	61	8	54	13	13	15	21	41	21	61	-	-	41	18	-	0	9	33	19	18	41	2
	16.6%	20.9%	16.1%	21.5%	25.1%	16.1%	12.5%	19.2%	13.1%	16.6%			16.1%	16.9%		13.4%	17.2%	17.7%	19.5%	16.7%	16.4%	19.0%
5	34	2	32	1	7	10	16	14	20	34	-	-	26	7	-	-	1	19	13	13	19	2
	9.1%	4.3%	9.7%	2.4%	13.0%	10.6%	9.4%	6.4%	12.7%	9.1%			10.3%	7.2%			1.0%	10.0%	13.9%	11.7%	7.8%	12.0%
																	Q	Q				
6	46	5	41	10	3	10	24	32	14	46	-	-	34	7	-	-	8	20	13	10	35	1
	12.5%	13.6%	12.4%	16.6%	5.7%	10.7%	14.1%	14.9%	9.1%	12.5%			13.5%	6.5%			15.1%	10.8%	13.8%	9.5%	14.0%	7.9%
8	29	4	26	11	2	4	12	17	12	29	-	-	18	10	-	-	5	19	3	7	21	1
	7.9%	9.5%	7.7%	17.9%	4.5%	4.2%	7.4%	7.8%	8.0%	7.9%			7.0%	9.6%			9.6%	10.1%	3.6%	6.2%	8.6%	8.7%
																		S				
9	2	-	2	-	1	1	-	2	-	2	-	-	2	-	-	-	-	1	1	1	1	-
	0.6%		0.7%		2.1%	1.2%		1.0%		0.6%			0.9%					0.6%	1.2%	1.0%	0.5%	
10	32	2	30	2	3	8	19	16	16	32	-	-	23	9	-	-	1	16	12	10	21	1
	8.6%	4.9%	9.0%	3.9%	6.1%	8.7%	11.0%	7.6%	10.1%	8.6%			9.0%	8.2%			1.2%	8.8%	12.7%	9.6%	8.4%	5.3%
																		Q				
11	1	-	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	1	-	-	1	-
	0.3%		0.3%				0.6%	0.4%		0.3%			0.4%					0.5%			0.4%	
12	10	1	10	5	-	1	4	5	5	10	-	-	6	5	-	-	1	6	2	3	7	1
	2.8%	2.0%	2.9%	8.5%		1.1%	2.6%	2.5%	3.2%	2.8%			2.2%	4.6%			2.6%	3.4%	2.5%	2.8%	2.7%	5.9%
14	1	-	1	-	-	1	-	-	1	1	-	-	1	-	-	-	-	-	1	-	1	-
	0.3%		0.3%			1.2%			0.7%	0.3%			0.4%						1.2%		0.4%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P4D.How many of the CFLs in storage are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
15	5	0	5	1	-	4	1	1	5	5	-	-	4	1	-	-	-	4	1	1	5	-
	1.5%	0.6%	1.5%	1.2%		4.4%	0.4%	0.3%	3.0%	1.5%			1.6%	1.1%				2.4%	1.0%	0.7%	1.9%	
16	3	-	3	-	3	-	1	1	3	3	-	-	1	3	-	-	-	-	1	1	-	3
	0.9%		1.0%		4.8%		0.6%	0.4%	1.6%	0.9%			0.4%	2.4%					1.0%	0.9%		20.0%
20	13	1	12	3	3	0	7	6	6	13	-	-	9	3	-	-	-	2	11	2	10	-
	3.4%	1.6%	3.6%	4.9%	4.9%	0.4%	4.0%	2.9%	4.1%	3.4%			3.7%	3.0%				1.0%	11.1%	2.2%	4.1%	
24	0	0	0	0	-	-	0	0	-	0	-	-	0	-	-	0	-	-	0	0	0	-
	0.1%	0.4%	0.1%	0.2%			0.2%	0.2%		0.1%			0.2%			4.6%			0.3%	0.3%	0.1%	
25	1	-	1	-	-	-	1	1	-	1	-	-	1	0	-	-	-	-	1	0	1	-
	0.4%		0.4%				0.8%	0.6%		0.4%			0.4%	0.4%					1.4%	0.3%	0.4%	
40	2	-	2	-	2	-	-	-	2	2	-	-	-	2	-	-	-	2	-	-	2	-
	0.6%		0.7%		4.1%				1.4%	0.6%			2.1%					1.2%			0.9%	
50	0	-	0	-	-	-	0	-	0	0	-	-	0	-	-	-	-	-	0	0	-	-
	0.1%		0.1%				0.3%		0.3%	0.1%			0.2%						0.5%	0.4%		
Don't know	5	1	4	0	-	4	0	1	3	5	-	-	1	4	-	-	-	4	0	1	4	-
	1.3%	1.6%	1.3%	0.6%		4.8%	0.2%	0.7%	2.2%	1.3%			0.5%	3.6%				2.2%	0.4%	0.9%	1.6%	
Mean	5.96	4.83	6.09	6.54	6.95	5.13	5.87	5.37	6.77	5.96	-	-	5.73	6.62	-	3.65	3.72	5.78	7.94	5.45	6.11	7.40
Standard Deviation	5.50	3.58	5.67	4.48	8.47	3.82	5.35	4.37	6.69	5.50			5.00	6.81		5.60	2.81	5.28	6.68	5.25	5.62	5.27
Standard Error	0.37	0.50	0.42	0.82	1.51	0.57	0.49	0.31	0.85	0.37			0.41	0.88		3.15	0.50	0.52	0.82	0.59	0.49	1.62

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P4D-Rebase.How many of the CFLs in storage are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0/None	660	92	568	118	87	175	281	351	309	255	260	145	115	136	-	11	60	83	26	149	451	60
	65.5%	71.2%	64.7%	66.6%	64.7%	67.3%	64.4%	63.9%	67.5%	42.3%	100.0%	100.0%	32.8%	57.8%		79.6%	56.3%	32.1%	21.9%	60.1%	65.7%	82.6%
											J	J		M		gRS	RS	s				TU
1	7	2	5	1	2	2	3	7	0	7	-	-	5	2	-	0	1	3	3	1	6	-
	0.7%	1.8%	0.6%	0.4%	1.1%	0.9%	0.6%	1.3%	*	1.2%			1.5%	0.8%		2.2%	0.6%	1.3%	2.3%	0.3%	0.9%	
2	63	6	58	10	8	16	30	31	33	63	-	-	47	16	-	1	14	32	6	18	43	3
	6.3%	4.4%	6.6%	5.6%	6.0%	6.0%	6.8%	5.6%	7.2%	10.5%			13.3%	6.7%		4.8%	12.9%	12.2%	4.9%	7.2%	6.3%	3.5%
													N					S				
3	28	7	21	3	1	10	15	22	6	28	-	-	14	14	-	1	7	13	3	11	17	0
	2.8%	5.3%	2.4%	1.4%	0.7%	3.8%	3.4%	4.0%	1.4%	4.7%			4.1%	5.8%		9.8%	6.2%	5.1%	2.9%	4.6%	2.4%	0.2%
								i												v		
4	61	8	54	13	13	15	21	41	21	61	-	-	41	18	-	0	9	33	19	18	41	2
	6.1%	6.1%	6.1%	7.2%	9.8%	5.6%	4.8%	7.4%	4.5%	10.2%			11.7%	7.5%		2.7%	8.8%	12.7%	15.7%	7.4%	6.0%	3.3%
																			p			
5	34	2	32	1	7	10	16	14	20	34	-	-	26	7	-	-	1	19	13	13	19	2
	3.4%	1.2%	3.7%	0.8%	5.1%	3.7%	3.7%	2.5%	4.4%	5.6%			7.5%	3.2%			0.5%	7.2%	11.3%	5.2%	2.8%	2.1%
													n					Q	Q			
6	46	5	41	10	3	10	24	32	14	46	-	-	34	7	-	-	8	20	13	10	35	1
	4.6%	4.0%	4.7%	5.6%	2.2%	3.7%	5.4%	5.8%	3.1%	7.7%			9.8%	2.9%			7.8%	7.8%	11.1%	4.2%	5.1%	1.4%
								i					N									
8	29	4	26	11	2	4	12	17	12	29	-	-	18	10	-	-	5	19	3	7	21	1
	2.9%	2.8%	2.9%	6.0%	1.8%	1.5%	2.9%	3.0%	2.7%	4.8%			5.1%	4.2%			5.0%	7.2%	2.9%	2.7%	3.1%	1.5%
																			F			
9	2	-	2	-	1	1	-	2	-	2	-	-	2	-	-	-	-	1	1	1	1	-
	0.2%		0.3%		0.8%	0.4%		0.4%		0.4%			0.6%					0.4%	1.0%	0.4%	0.2%	
10	32	2	30	2	3	8	19	16	16	32	-	-	23	9	-	-	1	16	12	10	21	1
	3.2%	1.4%	3.4%	1.3%	2.4%	3.0%	4.3%	2.9%	3.5%	5.3%			6.6%	3.6%			0.6%	6.3%	10.3%	4.2%	3.0%	0.9%
																		q	Q			
11	1	-	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	1	-	-	1	-
	0.1%		0.1%				0.2%	0.2%		0.2%			0.3%					0.4%			0.1%	
12	10	1	10	5	-	1	4	5	5	10	-	-	6	5	-	-	1	6	2	3	7	1
	1.0%	0.6%	1.1%	2.8%		0.4%	1.0%	1.0%	1.1%	1.7%			1.6%	2.0%			1.3%	2.5%	2.1%	1.2%	1.0%	1.0%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P4D-Rebase.How many of the CFLs in storage are the spiral or twisty shape?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
14	1 0.1%	-	1 0.1%	-	-	1 0.4%	-	-	1 0.2%	1 0.2%	-	-	1 0.3%	-	-	-	-	-	1 0.9%	-	1 0.2%	-
15	5 0.5%	0 0.2%	5 0.6%	1 0.4%	-	4 1.5%	1 0.2%	1 0.1%	5 1.0%	5 0.9%	-	-	4 1.2%	1 0.5%	-	-	-	4 1.7%	1 0.8%	1 0.3%	5 0.7%	-
16	3 0.3%	-	3 0.4%	-	3 1.9%	-	1 0.2%	1 0.2%	3 0.6%	3 0.6%	-	-	1 0.3%	3 1.1%	-	-	-	-	1 0.8%	1 0.4%	-	3 3.5%
20	13 1.2%	1 0.5%	12 1.4%	3 1.6%	3 1.9%	0 0.1%	7 1.5%	6 1.1%	6 1.4%	13 2.1%	-	-	9 2.7%	3 1.3%	-	-	-	2 0.7%	11 9.0%	2 1.0%	10 1.5%	-
24	0 *%	0 0.1%	0 *%	0 0.1%	-	-	0 0.1%	0 0.1%	-	0 0.1%	-	-	0 0.1%	-	-	0 0.9%	-	-	0 0.3%	0 0.1%	0 *%	-
25	1 0.1%	-	1 0.2%	-	-	-	1 0.3%	1 0.2%	-	1 0.2%	-	-	1 0.3%	0 0.2%	-	-	-	-	1 1.1%	0 0.1%	1 0.1%	-
40	2 0.2%	-	2 0.2%	-	2 1.6%	-	-	-	2 0.5%	2 0.4%	-	-	-	2 0.9%	-	-	-	2 0.8%	-	-	2 0.3%	-
50	0 *%	-	0 0.1%	-	-	-	0 0.1%	-	0 0.1%	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.2%	-	-
Don't know	5 0.5%	1 0.5%	4 0.5%	0 0.2%	-	4 1.7%	0 0.1%	1 0.3%	3 0.8%	5 0.8%	-	-	1 0.4%	4 1.6%	-	-	-	4 1.6%	0 0.3%	1 0.4%	4 0.6%	-
Mean	2.17	1.40	2.29	2.18	2.71	1.72	2.27	2.08	2.29	3.65	0.00	0.00	4.16	2.86	-	0.74	1.91	4.13	6.41	2.39	2.19	1.29
Standard Deviation	4.39	2.91	4.56	4.02	6.27	3.28	4.38	3.77	5.04	5.19	0.00	0.00	4.97	5.54	-	2.61	2.74	5.17	6.77	4.40	4.46	3.53
Standard Error	0.19	0.29	0.21	0.44	0.77	0.28	0.27	0.17	0.39	0.28	0.00	0.00	0.35	0.49	-	0.71	0.38	0.43	0.76	0.35	0.24	0.50

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P4E. How many of the CFLs in storage are shaped like a regular light bulb?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	64	3	61	5	9	18	32	34	31	64	-	-	47	17	-	-	11	34	10	25	38	1
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	60	14	46	5	7	18	30	45	15	60	-	-	46	14	-	-	9	29	17	28	30	2
0	12	1	12	4	-	5	4	8	5	12	-	-	5	7	-	-	1	8	3	5	7	-
	19.3%	24.7%	19.0%	68.1% g		26.0%	13.0%	23.5%	14.7%	19.3%			11.2%	41.4% m			12.5%	23.3%	33.0%	21.9%	18.3%	
1	7	1	6	0	2	3	1	5	1	7	-	-	5	2	-	-	1	3	2	2	4	-
	10.2%	21.8%	9.6%	6.8%	23.9%	16.5%	3.2%	16.3%	3.6%	10.2%			10.0%	10.5%			10.7%	8.9%	24.6%	8.8%	11.5%	
2	14	0	14	1	3	7	4	6	8	14	-	-	12	2	-	-	5	5	-	7	6	1
	21.9%	7.5%	22.6%	12.6% g	26.8%	38.4%	12.8%	19.0%	25.0%	21.9%			26.1%	10.3%			44.7%	14.6%		27.1%	16.4%	78.2%
3	6	1	5	0	1	0	4	5	1	6	-	-	5	1	-	-	-	3	2	2	3	-
	9.0%	21.5%	8.4%	6.8%	11.9%	1.6%	12.7%	14.0%	3.6%	9.0%			10.3%	5.5%				9.6%	16.7%	9.5%	9.1%	
4	4	1	3	0	1	1	1	4	-	4	-	-	4	-	-	-	1	2	0	1	2	0
	5.7%	17.0%	5.2%	5.7%	14.2%	6.2%	3.0%	11.0%		5.7%			7.8%				10.7%	6.7%	3.1%	5.3%	5.4%	21.8%
5	3	-	3	-	2	-	1	1	2	3	-	-	3	0	-	-	-	3	0	3	0	-
	4.7%		5.0%		23.1%		2.7%	2.6%	7.1%	4.7%			5.7%	2.2%				8.0%	3.7%	10.8%	1.0%	
6	9	-	9	-	-	1	8	3	6	9	-	-	9	-	-	-	2	7	0	3	6	-
	14.5%		15.2%			6.2%	25.8% f	8.9%	20.5%	14.5%			19.7%				19.3%	20.2%	4.9%	13.8%	15.4%	
7	2	-	2	-	-	-	2	-	2	2	-	-	-	2	-	-	-	-	-	-	2	-
	3.2%		3.3%				6.4%		6.6%	3.2%				11.9%							5.4%	
8	2	0	1	-	-	1	1	2	-	2	-	-	1	0	-	-	0	-	1	1	1	-
	2.5%	7.5%	2.3%			5.1%	2.3%	4.8%		2.5%			2.9%	1.3%			2.2%		13.9%	2.9%	2.3%	
10	3	-	3	-	-	-	3	-	3	3	-	-	3	-	-	-	-	-	-	-	3	-
	4.5%		4.7%				9.1%		9.4%	4.5%			6.2%								7.6%	
12	3	-	3	-	-	-	3	-	3	3	-	-	-	3	-	-	-	3	-	-	3	-
	4.5%		4.7%				9.1%		9.4%	4.5%			16.9%					8.7%			7.6%	
Mean	3.56	2.29	3.62	0.75	2.86	2.01	5.10	2.45	4.77	3.56	-	-	3.56	3.55	-	-	2.76	3.59	2.47	2.72	4.15	2.44
Standard Deviation	3.28	2.64	3.32	1.37	1.59	2.13	3.65	2.24	3.81	3.28			2.71	4.60			2.19	3.44	2.94	2.27	3.76	1.54
Standard Error	0.55	0.77	0.58	0.96	0.68	0.63	0.87	0.40	1.10	0.55			0.51	1.59			0.85	0.82	0.86	0.54	0.88	1.25

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P4E-Rebase. How many of the CFLs in storage are shaped like a regular light bulb?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0/None	955	127	828	175	126	246	408	524	431	550	260	145	310	225	-	14	97	233	111	229	655	72
	94.8%	98.2%	94.3%	99.0%	93.0%	95.0%	93.6%	95.3%	94.2%	91.3%	100.0%	100.0%	88.1%	95.7%	-	100.0%	91.3%	90.0%	94.3%	92.2%	95.4%	98.1%
				efg							J	J		M		QRs						T
1	7	1	6	0	2	3	1	5	1	7	-	-	5	2	-	-	1	3	2	2	4	-
	0.7%	0.5%	0.7%	0.2%	1.7%	1.1%	0.2%	1.0%	0.2%	1.1%			1.3%	0.8%			1.1%	1.2%	2.1%	0.9%	0.6%	
2	14	0	14	1	3	7	4	6	8	14	-	-	12	2	-	-	5	5	-	7	6	1
	1.4%	0.2%	1.6%	0.4%	1.9%	2.6%	0.9%	1.2%	1.7%	2.3%			3.5%	0.8%			4.5%	1.9%		2.7%	0.9%	1.5%
				b			d						N									
3	6	1	5	0	1	0	4	5	1	6	-	-	5	1	-	-	-	3	2	2	3	-
	0.6%	0.5%	0.6%	0.2%	0.8%	0.1%	0.9%	0.9%	0.2%	1.0%			1.4%	0.4%				1.2%	1.4%	1.0%	0.5%	
4	4	1	3	0	1	1	1	4	-	4	-	-	4	-	-	-	1	2	0	1	2	0
	0.4%	0.4%	0.4%	0.2%	1.0%	0.4%	0.2%	0.7%		0.6%			1.0%				1.1%	0.9%	0.3%	0.5%	0.3%	0.4%
5	3	-	3	-	2	-	1	1	2	3	-	-	3	0	-	-	-	3	0	3	0	-
	0.3%		0.3%		1.6%		0.2%	0.2%	0.5%	0.5%			0.8%	0.2%				1.0%	0.3%	1.1%	0.1%	
6	9	-	9	-	-	1	8	3	6	9	-	-	9	-	-	-	2	7	0	3	6	-
	0.9%		1.1%			0.4%	1.9%	0.5%	1.4%	1.6%			2.6%				1.9%	2.6%	0.4%	1.4%	0.9%	
				f																		
7	2	-	2	-	-	-	2	-	2	2	-	-	-	2	-	-	-	-	-	-	2	-
	0.2%		0.2%				0.5%		0.4%	0.3%				0.9%							0.3%	
8	2	0	1	-	-	1	1	2	-	2	-	-	1	0	-	-	0	-	1	1	1	-
	0.2%	0.2%	0.2%			0.3%	0.2%	0.3%		0.3%			0.4%	0.1%			0.2%		1.2%	0.3%	0.1%	
10	3	-	3	-	-	-	3	-	3	3	-	-	3	-	-	-	-	-	-	-	3	-
	0.3%		0.3%				0.7%		0.6%	0.5%			0.8%								0.4%	
12	3	-	3	-	-	-	3	-	3	3	-	-	-	3	-	-	-	3	-	-	3	-
	0.3%		0.3%				0.7%		0.6%	0.5%			1.2%				1.1%				0.4%	
Mean	0.23	0.05	0.25	0.02	0.20	0.14	0.37	0.15	0.32	0.38	0.00	0.00	0.48	0.26	-	0.00	0.28	0.47	0.21	0.27	0.23	0.05
Standard Deviation	1.20	0.48	1.27	0.25	0.83	0.74	1.65	0.80	1.54	1.53	0.00	0.00	1.56	1.53		0.00	1.06	1.72	1.07	1.08	1.29	0.36
Standard Error	0.05	0.05	0.06	0.03	0.10	0.06	0.10	0.04	0.12	0.08	0.00	0.00	0.11	0.13		0.00	0.15	0.14	0.12	0.09	0.07	0.05
				B	d		DF			KL							P		V	V		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P5A. Have you had any CFLs that you installed but later removed and did not use elsewhere in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Yes	142	19	123	12	26	26	78	96	46	142	-	-	61	80	-	2	24	50	16	60	78	5
	23.6%	25.1%	23.4%	12.3%	28.9%	18.3%	28.4%	28.1%	17.7%	23.6%			17.3%	33.9%		17.1%	23.0%	19.4%	13.2%	30.9%	20.3%	18.2%
					d		Df	I					M							U		
No	455	55	400	82	63	116	194	242	213	455	-	-	289	154	-	12	82	208	99	132	303	21
	75.7%	74.1%	75.9%	87.4%	68.7%	81.7%	70.8%	71.2%	81.5%	75.7%			81.9%	65.4%		82.9%	76.9%	80.2%	84.2%	68.3%	79.0%	81.3%
				EG		g		H					N							T		
Don't know	4	0	4	0	2	-	2	2	2	4	-	-	3	1	-	-	0	1	3	1	3	0
	0.7%	0.5%	0.7%	0.1%	2.4%		0.7%	0.6%	0.8%	0.7%			0.8%	0.6%			0.1%	0.3%	2.7%	0.7%	0.7%	0.5%
Refused	0	0	-	0	-	-	0	0	-	0	-	-	0	-	-	-	-	0	-	0	0	-
	0%	0.3%		0.1%			0%	0.1%		0%			0%					0%		0.1%	0%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P5B. How many CFLs did you remove?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	142	19	123	12	26	26	78	96	46	142	-	-	61	80	-	2	24	50	16	60	78	5
Unweighted Total	151	46	105	17	20	36	78	127	24	151	-	-	71	77	-	5	26	50	28	65	77	9
1	14	2	13	1	2	3	8	10	4	14	-	-	10	4	-	0	2	8	1	5	8	1
	9.9%	8.3%	10.2%	12.9%	7.2%	11.3%	9.9%	10.2%	9.3%	9.9%			16.0%	5.5%		9.3%	6.8%	15.0%	8.0%	8.0%	10.3%	28.6%
2	28	1	26	3	5	3	16	27	0	28	-	-	15	12	-	0	5	9	3	12	15	1
	19.4%	5.8%	21.5%	27.0%	20.2%	13.1%	20.1%	28.6%	0.5%	19.4%			25.2%	15.3%		9.0%	21.3%	17.1%	18.3%	19.5%	19.2%	22.4%
								I														
3	31	10	21	2	12	8	9	15	16	31	-	-	7	24	-	1	10	7	4	8	23	0
	22.1%	54.4%	17.2%	20.6%	44.7%	30.2%	12.0%	15.7%	35.5%	22.1%			11.0%	30.5%		44.7%	39.1%	13.3%	24.4%	13.1%	29.9%	8.3%
		C			G				h				M				R			T		
4	23	1	22	0	6	0	16	16	7	23	-	-	11	11	-	-	2	9	3	8	13	1
	15.9%	4.1%	17.8%	4.2%	22.1%	1.7%	20.3%	16.3%	15.1%	15.9%			18.7%	14.1%			6.3%	18.7%	18.8%	14.0%	16.9%	24.2%
							F															
5	13	-	13	2	-	5	5	5	8	13	-	-	4	8	-	-	-	9	-	4	9	-
	9.1%		10.4%	19.2%		21.0%	6.6%	4.8%	17.9%	9.1%			7.2%	10.0%				17.8%		7.0%	11.2%	
						g																
6	6	2	4	1	1	1	3	4	2	6	-	-	3	3	-	-	2	2	1	3	3	-
	4.3%	10.1%	3.4%	5.9%	2.9%	5.1%	4.2%	4.6%	3.7%	4.3%			5.0%	3.8%			9.4%	3.8%	7.9%	5.8%	3.4%	
7	3	0	2	-	-	1	1	3	-	3	-	-	1	1	-	-	-	1	1	3	-	-
	1.8%	0.4%	2.0%			4.5%	1.8%	2.7%		1.8%			1.8%	1.8%				2.8%	7.5%	4.3%		
8	2	0	2	0	-	1	1	2	-	2	-	-	2	-	-	-	1	0	1	2	-	-
	1.5%	0.6%	1.7%	1.0%		4.2%	1.2%	2.3%		1.5%			3.6%				4.5%	0.2%	6.1%	3.6%		
10	7	1	7	1	-	0	7	6	2	7	-	-	3	5	-	-	-	4	-	4	3	-
	5.3%	4.9%	5.3%	5.9%		0.9%	8.4%	5.8%	4.2%	5.3%			4.6%	5.9%				8.9%		7.0%	4.3%	
12	4	1	3	-	1	-	3	2	2	4	-	-	1	3	-	-	3	1	0	3	1	1
	3.0%	6.6%	2.5%		2.9%		4.5%	2.3%	4.4%	3.0%			2.0%	3.2%			10.4%	1.5%	1.5%	4.6%	0.9%	16.6%
15	1	0	1	-	-	0	1	0	1	1	-	-	-	1	-	-	-	-	-	0	1	-
	0.8%	1.2%	0.8%			0.9%	1.2%	0.2%	2.1%	0.8%				1.5%						0.4%	1.2%	
20	4	-	4	-	-	1	3	1	3	4	-	-	-	4	-	-	-	-	-	4	-	-
	2.7%		3.1%			3.4%	3.7%	0.9%	6.3%	2.7%			4.8%							6.4%		
21	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	-	-	0	-
	0.1%	0.4%					0.1%	0.1%		0.1%			0.1%								0.1%	
32	0	-	0	-	-	-	0	-	0	0	-	-	0	-	-	-	-	-	0	0	-	-
	0.3%		0.4%				0.6%		1.1%	0.3%			0.8%						3.2%	0.8%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P5B. How many CFLs did you remove?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
40	1	-	1	-	-	-	1	1	-	1	-	-	-	1	-	-	-	-	-	1	-	-
	1.0%		1.1%				1.8%	1.5%		1.0%				1.7%						2.3%		
Don't know	4	1	3	0	-	1	3	4	-	4	-	-	2	1	-	1	1	0	1	2	2	-
	2.7%	3.2%	2.7%	3.2%		3.4%	3.4%	4.1%		2.7%			4.0%	1.8%		37.0%	2.2%	0.7%	4.4%	3.0%	2.7%	
																r						
Mean	4.95	4.36	5.03	3.56	3.23	4.42	5.93	4.54	5.75	4.95	-	-	3.96	5.65	-	2.56	4.18	4.08	4.82	6.71	3.66	3.94
							dE													U		
Standard Deviation	5.48	3.39	5.73	2.38	1.85	3.79	6.80	5.44	5.52	5.48			3.74	6.42		1.25	3.20	2.68	5.69	7.58	2.50	4.25
Standard Error	0.61	1.26	0.67	0.82	0.59	0.99	0.95	0.61	1.38	0.61			0.60	1.01		0.73	0.82	0.49	1.41	1.20	0.41	1.68

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P5B-Rebase. How many CFLs did you remove?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
1	14	2	13	1	2	3	8	10	4	14	-	-	10	4	-	0	2	8	1	5	8	1
	1.4%	1.2%	1.4%	0.8%	1.4%	1.1%	1.8%	1.8%	0.9%	2.3%			2.8%	1.9%		1.6%	1.6%	2.9%	1.1%	1.9%	1.2%	1.8%
2	28	1	26	3	5	3	16	27	0	28	-	-	15	12	-	0	5	9	3	12	15	1
	2.7%	0.9%	3.0%	1.8%	3.9%	1.3%	3.6%	5.0%	0%	4.6%			4.4%	5.2%		1.5%	4.9%	3.3%	2.4%	4.7%	2.2%	1.4%
								I														
3	31	10	21	2	12	8	9	15	16	31	-	-	7	24	-	1	10	7	4	8	23	0
	3.1%	7.9%	2.4%	1.3%	8.7%	3.0%	2.1%	2.7%	3.6%	5.2%			1.9%	10.4%		7.6%	9.0%	2.6%	3.2%	3.2%	3.4%	0.5%
					DFG									M			r				v	
4	23	1	22	0	6	0	16	16	7	23	-	-	11	11	-	-	2	9	3	8	13	1
	2.2%	0.6%	2.5%	0.3%	4.3%	0.2%	3.6%	2.8%	1.5%	3.8%			3.2%	4.8%			1.4%	3.6%	2.5%	3.4%	1.9%	1.5%
					dF		DF															
5	13	-	13	2	-	5	5	5	8	13	-	-	4	8	-	-	-	9	-	4	9	-
	1.3%		1.5%	1.3%		2.1%	1.2%	0.8%	1.8%	2.1%			1.2%	3.4%				3.5%		1.7%	1.3%	
6	6	2	4	1	1	1	3	4	2	6	-	-	3	3	-	-	2	2	1	3	3	-
	0.6%	1.5%	0.5%	0.4%	0.6%	0.5%	0.8%	0.8%	0.4%	1.0%			0.9%	1.3%			2.2%	0.7%	1.0%	1.4%	0.4%	
7	3	0	2	-	-	1	1	3	-	3	-	-	1	1	-	-	-	1	1	3	-	-
	0.3%	0.1%	0.3%			0.4%	0.3%	0.5%		0.4%			0.3%	0.6%				0.5%	1.0%	1.0%		
8	2	0	2	0	-	1	1	2	-	2	-	-	2	-	-	-	1	0	1	2	-	-
	0.2%	0.1%	0.2%	0.1%		0.4%	0.2%	0.4%		0.4%			0.6%				1.0%	0%	0.8%	0.9%		
10	7	1	7	1	-	0	7	6	2	7	-	-	3	5	-	-	-	4	-	4	3	-
	0.7%	0.7%	0.7%	0.4%		0.1%	1.5%	1.0%	0.4%	1.2%			0.8%	2.0%				1.7%		1.7%	0.5%	
12	4	1	3	-	1	-	3	2	2	4	-	-	1	3	-	-	3	1	0	3	1	1
	0.4%	1.0%	0.3%		0.6%		0.8%	0.4%	0.4%	0.7%			0.3%	1.1%			2.4%	0.3%	0.2%	1.1%	0.1%	1.1%
15	1	0	1	-	-	0	1	0	1	1	-	-	-	1	-	-	-	-	-	0	1	-
	0.1%	0.2%	0.1%			0.1%	0.2%	0%	0.2%	0.2%			0.5%							0.1%	0.1%	
20	4	-	4	-	-	1	3	1	3	4	-	-	-	4	-	-	-	-	-	4	-	-
	0.4%		0.4%			0.3%	0.7%	0.2%	0.6%	0.6%			1.6%							1.5%		
21	0	0	-	-	-	0	0	0	-	0	-	-	0	-	-	-	-	-	-	-	0	-
	0%	0.1%				0%	0%	0%		0%			0%								0%	
32	0	-	0	-	-	-	0	-	0	0	-	-	0	-	-	-	-	-	0	0	-	-
	0%		0.1%				0.1%	0.1%	0.1%	0.1%			0.1%						0.4%	0.2%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P5B-Rebase. How many CFLs did you remove?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
40	1	-	1	-	-	-	1	1	-	1	-	-	-	1	-	-	-	-	-	1	-	-
	0.1%		0.2%				0.3%	0.3%		0.2%				0.6%						0.6%		
None	865	110	755	165	109	234	358	454	411	460	260	145	291	155	-	12	82	209	102	189	608	68
	85.9%	85.4%	86.0%	93.5%	80.4%	90.0%	82.1%	82.6%	89.9%	76.4%	100.0%	100.0%	82.7%	66.1%		82.9%	77.0%	80.6%	86.8%	76.0%	88.7%	93.6%
				EG		eG			H		J	J	N							T	T	
Don't know	4	1	3	0	-	1	3	4	-	4	-	-	2	1	-	1	1	0	1	2	2	-
	0.4%	0.5%	0.4%	0.2%		0.3%	0.6%	0.7%		0.6%			0.7%	0.6%		6.3%	0.5%	0.1%	0.6%	0.7%	0.3%	
Mean	0.68	0.62	0.69	0.23	0.63	0.43	1.03	0.76	0.58	1.14	0.00	0.00	0.66	1.89	-	0.29	0.95	0.79	0.61	1.57	0.40	0.25
				D		DF				KL			M						UV			
Standard Deviation	2.65	1.97	2.73	1.04	1.52	1.75	3.61	2.80	2.45	3.35	0.00	0.00	2.12	4.57		0.89	2.31	1.99	2.54	4.63	1.42	1.36
Standard Error	0.11	0.20	0.13	0.11	0.19	0.15	0.22	0.13	0.19	0.18	0.00	0.00	0.15	0.40		0.25	0.32	0.17	0.28	0.37	0.08	0.19

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P5C. How many of the CFLs you removed were spiral or twisty shaped?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	138	18	120	11	26	25	76	92	46	138	-	-	58	78	-	2	24	50	15	58	76	5
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	145	44	101	16	20	35	74	121	24	145	-	-	67	75	-	4	25	49	26	61	75	9
0	8	-	8	-	-	-	8	5	3	8	-	-	4	4	-	-	-	6	3	5	3	0
	6.1%		7.0%				11.1%	6.0%	6.3%	6.1%			7.2%	5.4%				11.5%	17.9%	8.6%	3.8%	10.5%
1	8	2	7	1	2	3	2	7	1	8	-	-	5	3	-	0	2	4	0	2	5	1
	6.1%	8.6%	5.7%	13.4%	7.2%	10.2%	3.3%	7.7%	3.0%	6.1%			9.3%	3.8%		14.7%	6.9%	8.5%	2.0%	3.5%	6.7%	28.6%
2	28	1	27	3	5	3	16	27	0	28	-	-	15	13	-	0	5	9	3	11	16	1
	20.0%	6.0%	22.1%	27.9%	20.2%	13.6%	20.9%	29.9%	0.5%	20.0%			25.7%	16.2%		14.3%	21.5%	18.2%	17.0%	19.6%	20.9%	11.8%
3	31	11	20	3	11	8	9	14	16	31	-	-	6	25	-	1	8	7	4	8	22	0
	22.1%	58.2%	16.7%	24.6%	40.4%	31.3%	12.4%	15.4%	35.5%	22.1%			9.6%	31.4%		71.0%	34.8%	13.4%	25.5%	13.6%	29.5%	8.3%
4	20	1	20	0	6	0	14	13	7	20	-	-	11	9	-	-	2	8	2	7	12	1
	14.7%	4.2%	16.2%	4.4%	22.1%	1.8%	17.8%	14.4%	15.1%	14.7%			19.5%	11.4%			6.3%	17.0%	10.2%	12.1%	16.1%	24.2%
5	13	-	13	2	-	5	5	5	8	13	-	-	4	8	-	-	-	9	-	4	9	-
	9.3%		10.7%	19.9%		21.8%	6.9%	5.0%	17.9%	9.3%			7.5%	10.1%				17.9%		7.2%	11.5%	
6	6	2	3	0	2	1	2	4	2	6	-	-	4	2	-	-	2	2	1	3	2	1
	4.0%	12.6%	2.7%	2.7%	5.9%	5.3%	3.1%	4.2%	3.7%	4.0%			6.6%	2.2%			9.4%	3.5%	8.2%	4.3%	3.0%	16.6%
7	1	0	1	-	-	1	-	1	-	1	-	-	1	0	-	-	-	-	1	1	-	-
	0.8%	0.4%	0.9%			4.6%		1.3%		0.8%			1.9%	0.1%					7.9%	2.0%		
8	2	0	2	0	-	1	1	2	-	2	-	-	2	-	-	-	1	0	1	2	-	-
	1.6%	0.7%	1.7%	1.1%		4.4%	1.3%	2.4%		1.6%			3.7%				4.5%	0.2%	6.4%	3.8%		
10	8	1	7	1	-	0	7	6	2	8	-	-	3	5	-	-	-	4	-	4	4	-
	5.8%	5.1%	5.9%	6.1%		0.9%	9.3%	6.5%	4.2%	5.8%			4.8%	6.6%				9.0%		7.2%	5.0%	
12	4	0	4	-	-	-	4	2	2	4	-	-	0	3	-	-	3	-	0	4	0	-
	3.2%	2.5%	3.3%				5.8%	2.5%	4.4%	3.2%			0.8%	4.4%			10.5%		1.5%	7.2%	0.3%	
15	1	0	1	-	-	0	1	0	1	1	-	-	-	1	-	-	-	-	-	0	1	-
	0.8%	1.2%	0.8%			0.9%	1.3%	0.2%	2.1%	0.8%				1.5%						0.4%	1.3%	
20	4	-	4	-	-	1	3	1	3	4	-	-	-	4	-	-	-	-	-	4	-	-
	2.8%		3.2%			3.6%	3.9%	1.0%	6.3%	2.8%				4.9%						6.6%		
21	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	-	-	0	-
	0.1%	0.4%					0.1%	0.1%		0.1%			0.1%								0.1%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P5C. How many of the CFLs you removed were spiral or twisty shaped?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
32	0	-	0	-	-	-	0	-	0	0	-	-	0	-	-	-	-	-	0	0	-	-
	0.4%		0.4%				0.6%		1.1%	0.4%			0.8%						3.3%	0.9%		
Don't know	3	-	3	-	1	0	2	3	-	3	-	-	2	2	-	-	1	0	-	2	1	-
	2.3%		2.7%		4.3%	1.5%	2.3%	3.5%		2.3%			2.6%	2.2%			6.0%	0.8%		3.1%	1.9%	
Mean	4.47	4.04	4.53	3.46	3.05	4.48	5.10	3.83	5.68	4.47	-	-	3.84	4.89	-	2.56	4.24	3.58	4.34	5.79	3.58	2.73
Standard Deviation	4.31	2.98	4.49	2.33	1.16	3.80	5.20	3.34	5.58	4.31			3.74	4.66		1.25	3.27	2.66	5.94	5.78	2.53	2.22
Standard Error	0.49	1.11	0.53	0.80	0.38	1.00	0.73	0.38	1.40	0.49			0.61	0.74		0.73	0.86	0.49	1.47	0.93	0.42	0.88

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P5C-Rebase. How many of the CFLs you removed were spiral or twisty shaped?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0/None	877	111	766	165	109	234	368	463	414	472	260	145	298	160	-	13	82	215	105	196	613	69
	87.1%	85.9%	87.3%	93.7%	80.4%	90.3%	84.6%	84.2%	90.5%	78.4%	100.0%	100.0%	84.6%	68.4%		89.3%	77.2%	83.0%	89.7%	78.7%	89.4%	94.3%
				EG		e			H		J	J	N						q	T	T	T
1	8	2	7	1	2	3	2	7	1	8	-	-	5	3	-	0	2	4	0	2	5	1
	0.8%	1.2%	0.8%	0.8%	1.4%	1.0%	0.6%	1.3%	0.3%	1.4%			1.5%	1.3%		1.6%	1.6%	1.6%	0.2%	0.8%	0.7%	1.8%
2	28	1	27	3	5	3	16	27	0	28	-	-	15	13	-	0	5	9	3	11	16	1
	2.8%	0.9%	3.0%	1.8%	3.9%	1.3%	3.6%	5.0%	*%	4.6%			4.3%	5.4%		1.5%	4.9%	3.5%	2.1%	4.6%	2.3%	0.8%
								I														
3	31	11	20	3	11	8	9	14	16	31	-	-	6	25	-	1	8	7	4	8	22	0
	3.0%	8.2%	2.3%	1.6%	7.9%	3.0%	2.1%	2.6%	3.6%	5.1%			1.6%	10.5%		7.6%	7.9%	2.6%	3.2%	3.2%	3.3%	0.5%
					DFG									M								
4	20	1	20	0	6	0	14	13	7	20	-	-	11	9	-	-	2	8	2	7	12	1
	2.0%	0.6%	2.2%	0.3%	4.3%	0.2%	3.1%	2.4%	1.5%	3.4%			3.2%	3.8%			1.4%	3.3%	1.3%	2.8%	1.8%	1.5%
					dF																	
5	13	-	13	2	-	5	5	5	8	13	-	-	4	8	-	-	-	9	-	4	9	-
	1.3%		1.5%	1.3%		2.1%	1.2%	0.8%	1.8%	2.1%			1.2%	3.4%				3.5%		1.7%	1.3%	
6	6	2	3	0	2	1	2	4	2	6	-	-	4	2	-	-	2	2	1	3	2	1
	0.5%	1.8%	0.4%	0.2%	1.1%	0.5%	0.5%	0.7%	0.4%	0.9%			1.1%	0.7%			2.2%	0.7%	1.0%	1.0%	0.3%	1.1%
7	1	0	1	-	-	1	-	1	-	1	-	-	1	0	-	-	-	-	1	1	-	-
	0.1%	0.1%	0.1%			0.4%		0.2%		0.2%			0.3%	*%					1.0%	0.5%		
8	2	0	2	0	-	1	1	2	-	2	-	-	2	-	-	-	1	0	1	2	-	-
	0.2%	0.1%	0.2%	0.1%		0.4%	0.2%	0.4%		0.4%			0.6%				1.0%	*%	0.8%	0.9%		
10	8	1	7	1	-	0	7	6	2	8	-	-	3	5	-	-	-	4	-	4	4	-
	0.8%	0.7%	0.8%	0.4%		0.1%	1.6%	1.1%	0.4%	1.3%			0.8%	2.2%				1.7%		1.7%	0.6%	
12	4	0	4	-	-	-	4	2	2	4	-	-	0	3	-	-	3	-	0	4	0	-
	0.4%	0.4%	0.4%				1.0%	0.4%	0.4%	0.7%			0.1%	1.5%			2.4%		0.2%	1.7%	*%	
15	1	0	1	-	-	0	1	0	1	1	-	-	-	1	-	-	-	-	-	0	1	-
	0.1%	0.2%	0.1%			0.1%	0.2%	*%	0.2%	0.2%				0.5%						0.1%	0.1%	
20	4	-	4	-	-	1	3	1	3	4	-	-	-	4	-	-	-	-	-	4	-	-
	0.4%		0.4%			0.3%	0.7%	0.2%	0.6%	0.6%				1.6%						1.5%		
21	0	0	-	-	-	0	0	0	-	0	-	-	0	-	-	-	-	-	-	-	0	-
	*%	0.1%					*%	*%		*%			*%								*%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

P5C-Rebase. How many of the CFLs you removed were spiral or twisty shaped?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
32	0	-	0	-	-	-	0	-	0	0	-	-	0	-	-	-	-	-	0	0	-	-
	*%						0.1%		0.1%	0.1%			0.1%						0.4%	0.2%		
Don't know	3	-	3	-	1	0	2	3	-	3	-	-	2	2	-	-	1	0	-	2	1	-
	0.3%		0.4%		0.8%	0.1%	0.4%	0.6%		0.5%			0.4%	0.7%			1.4%	0.1%		0.7%	0.2%	
Mean	0.60	0.57	0.61	0.22	0.58	0.43	0.87	0.62	0.57	1.01	0.00	0.00	0.62	1.61	-	0.28	0.92	0.69	0.55	1.32	0.39	0.18
Standard Deviation	2.19	1.79	2.25	1.01	1.30	1.75	2.87	1.95	2.45	2.77	0.00	0.00	2.06	3.52		0.86	2.31	1.82	2.50	3.66	1.39	0.84
Standard Error	0.09	0.18	0.11	0.11	0.16	0.15	0.17	0.09	0.19	0.15	0.00	0.00	0.15	0.31		0.23	0.32	0.15	0.28	0.29	0.07	0.12

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P5E. How many of the CFLs you removed were shaped like regular light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	12 100%	1 100%	11 100%	0 100%	1 100%	-	11 100%	9 100.0%	3 100.0%	12 100.0%	-	-	5 100.0%	7 100.0%	-	-	-	7 100.0%	3 100.0%	6 100.0%	5 100.0%	1 100.0%
Unweighted Total	12	2	10	1	1	-	10	11	1	12	-	-	4	8	-	-	-	6	3	6	4	2
0	6 48.1%	1 67.8%	5 46.0%	-	1 100% G	-	5 46.0%	6 62.9%	-	6 48.1%	-	-	2 34.8%	4 56.9%	-	-	-	4 48.3%	2 88.1%	5 73.3%	-	1 100.0%
1	3 23.5%	-	3 25.9%	-	-	-	3 25.9%	-	3 100.0%	3 23.5%	-	-	3 58.8%	-	-	-	-	3 39.0%	-	-	3 61.7%	-
2	2 14.2%	-	2 15.6%	-	-	-	2 15.6%	2 18.6%	-	2 14.2%	-	-	0 6.4%	1 19.4%	-	-	-	1 12.7%	0 11.9%	0 4.9%	1 30.5%	-
3	0 3.0%	0 32.2%	-	0 100%	-	-	-	0 3.9%	-	0 3.0%	-	-	-	0 4.9%	-	-	-	-	-	-	0 7.8%	-
6	1 11.2%	-	1 12.4%	-	-	-	1 12.4%	1 14.7%	-	1 11.2%	-	-	-	1 18.7%	-	-	-	-	-	1 21.8%	-	-
Mean	1.28	0.96	1.31	3.00	0.00	-	1.31	1.37	1.00	1.28	-	-	0.72	1.66	-	-	-	0.64	0.24	1.41	1.46	0.00
Standard Deviation	1.94	3.97	1.99	0.00	0.00		1.99	2.24	0.00	1.94			0.64	2.45				0.75	0.82	2.68	0.72	0.00
Standard Error	0.67	2.98	0.74	0.00	0.00		0.74	0.74	0.00	0.67			0.41	0.95				0.36	0.53	1.16	0.47	0.00

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P5E-Rebase. How many of the CFLs you removed were shaped like regular light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0/None	1001	128	872	176	135	259	430	546	455	595	260	145	349	231	-	14	106	255	117	247	681	73
	99.4%	99.7%	99.3%	99.8%	100%	100%	98.6%	99.4%	99.4%	98.9%	100.0%	100.0%	99.1%	98.6%		100.0%	100.0%	98.5%	99.7%	99.3%	99.3%	100.0%
						G	G				J	J				R	R					u
1	3	-	3	-	-	-	3	-	3	3	-	-	3	-	-	-	-	3	-	-	3	-
	0.3%		0.3%				0.7%		0.6%	0.5%			0.8%					1.1%			0.4%	
2	2	-	2	-	-	-	2	2	-	2	-	-	0	1	-	-	-	1	0	0	1	-
	0.2%		0.2%				0.4%	0.3%		0.3%			0.1%	0.6%				0.4%	0.3%	0.1%	0.2%	
3	0	0	-	0	-	-	-	0	-	0	-	-	-	0	-	-	-	-	-	-	0	-
	*% 0.3%			0.2%				0.1%		0.1%				0.2%							0.1%	
6	1	-	1	-	-	-	1	1	-	1	-	-	-	1	-	-	-	-	-	1	-	-
	0.1%		0.2%				0.3%	0.3%		0.2%				0.6%						0.6%		
Mean	0.02	0.01	0.02	0.01	0.00	0.00	0.03	0.02	0.01	0.03	0.00	0.00	0.01	0.05	-	0.00	0.00	0.02	0.01	0.04	0.01	0.00
Standard Deviation	0.25	0.16	0.26	0.14	0.00	0.00	0.37	0.33	0.08	0.32	0.00	0.00	0.11	0.50		0.00	0.00	0.16	0.10	0.45	0.13	0.00
Standard Error	0.01	0.02	0.01	0.01	0.00	0.00	0.02	0.01	0.01	0.02	0.00	0.00	0.01	0.04		0.00	0.00	0.01	0.01	0.04	0.01	0.00

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

P6. When one of the CFLs you have installed burns out, how likely are you to replace it with another CFL?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	-	-	100.0%	100.0%	-	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	497	61	436	79	73	130	215	286	211	497	-	-	321	164	-	14	106	259	118	164	316	17
Unweighted Total	516	161	355	80	72	135	229	408	108	516	-	-	331	172	-	20	107	251	138	178	308	30
TOP 2 NET	353	39	313	61	48	98	145	206	147	353	-	-	257	85	-	4	57	195	97	104	237	12
*****	71.0%	64.7%	71.9%	77.9%	65.8%	75.7%	67.4%	71.9%	69.8%	71.0%	-	-	80.1%	51.6%	-	24.9%	53.7%	75.3%	82.7%	63.4%	74.9%	72.1%
													N				p	PQ	PQ		T	
5 - Very likely	298	36	262	52	43	78	125	182	116	298	-	-	215	74	-	3	42	170	83	85	204	9
	60.1%	59.4%	60.2%	66.7%	58.6%	59.9%	58.2%	63.6%	55.3%	60.1%	-	-	67.1%	45.3%	-	22.7%	39.9%	65.5%	70.7%	52.0%	64.5%	54.1%
													N				PQ	PQ		T		
4	54	3	51	9	5	21	20	24	31	54	-	-	42	10	-	0	15	25	14	19	33	3
	10.9%	5.2%	11.7%	11.2%	7.2%	15.8%	9.2%	8.3%	14.5%	10.9%	-	-	13.1%	6.3%	-	2.2%	13.7%	9.8%	12.0%	11.4%	10.3%	18.0%
													N									
3	51	11	40	8	14	4	25	21	30	51	-	-	40	10	-	-	17	26	7	15	34	2
	10.2%	17.7%	9.1%	9.7%	19.1%	3.2%	11.6%	7.3%	14.0%	10.2%	-	-	12.6%	6.1%	-	-	16.2%	10.1%	6.1%	9.3%	10.7%	9.2%
													n				s					
BOTTOM 2 NET	93	11	83	10	11	27	45	60	34	93	-	-	23	70	-	11	32	38	13	45	46	3
*****	18.8%	17.6%	19.0%	12.4%	15.2%	21.2%	21.0%	20.8%	16.1%	18.8%	-	-	7.3%	42.3%	-	75.1%	30.1%	14.6%	11.1%	27.3%	14.4%	18.7%
													M			QRS	RS			U		
2	30	2	29	2	1	9	18	13	17	30	-	-	11	19	-	4	12	9	5	15	16	-
	6.1%	2.6%	6.6%	2.8%	1.0%	7.2%	8.5%	4.6%	8.2%	6.1%	-	-	3.4%	11.6%	-	28.0%	11.7%	3.5%	4.2%	9.0%	5.0%	-
													M			RS	rs					
1 - Not at all likely	63	9	54	8	10	18	27	46	17	63	-	-	13	51	-	7	20	29	8	30	30	3
	12.7%	15.0%	12.4%	9.6%	14.2%	14.0%	12.5%	16.2%	8.0%	12.7%	-	-	3.9%	30.7%	-	47.1%	18.4%	11.1%	6.9%	18.2%	9.5%	18.7%
								I					M			QRS	s		U			
Mean	4.00	3.92	4.01	4.23	3.95	4.00	3.92	3.98	4.01	4.00	-	-	4.36	3.24	-	2.25	3.45	4.15	4.35	3.70	4.15	3.89
													N				P	PQ	PQ		T	
Standard Deviation	1.45	1.50	1.44	1.31	1.46	1.48	1.47	1.54	1.32	1.45			1.08	1.78		1.65	1.55	1.37	1.20	1.59	1.34	1.57
Standard Error	0.09	0.22	0.09	0.20	0.24	0.18	0.12	0.09	0.15	0.09			0.08	0.18		0.45	0.21	0.11	0.13	0.15	0.10	0.36

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

M1. Did you purchase any CFLs in 2013?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Yes	352	43	310	53	54	85	160	196	157	352	-	-	352	-	-	3	52	181	85	111	229	12
	58.5%	57.1%	58.7%	56.4%	59.4%	59.8%	58.3%	57.5%	59.8%	58.5%			100.0%			17.9%	49.0%	69.9%	72.7%	57.8%	59.7%	46.6%
																	P	PQ	PQ			
No	235	31	203	38	33	54	109	132	103	235	-	-	-	235	-	11	52	72	29	78	143	13
	39.0%	41.9%	38.6%	40.9%	36.6%	37.7%	39.8%	38.7%	39.3%	39.0%			100.0%			78.1%	49.3%	27.7%	24.9%	40.6%	37.3%	51.4%
																QRS	RS					
Don't know	15	1	14	2	4	4	5	13	2	15	-	-	-	-	-	1	2	6	3	3	11	1
	2.4%	0.8%	2.7%	2.5%	4.0%	2.5%	1.9%	3.7%	0.8%	2.4%						4.0%	1.6%	2.3%	2.5%	1.5%	2.9%	2.0%
								i														
Refused	0	0	-	0	-	-	-	0	-	0	-	-	-	-	-	-	-	-	-	0	-	-
	*%	0.2%		0.1%				*%		*%										0.1%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

M2. How many CFLs did you purchase in 2013? If a package contained more than one bulb, please count each one separately.

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	352	43	310	53	54	85	160	196	157	352	-	-	352	-	-	3	52	181	85	111	229	12
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	359	115	244	56	53	88	162	280	79	359	-	-	359	-	-	5	51	173	102	121	219	19
1	9	1	8	1	-	5	3	7	2	9	-	-	9	-	-	1	2	6	-	1	8	-
	2.6%	2.0%	2.7%	2.6%		6.0%	1.7%	3.8%	1.1%	2.6%			2.6%			44.2%	3.7%	3.4%		1.2%	3.4%	
2	33	2	31	-	4	9	21	19	14	33	-	-	33	-	-	1	9	19	0	16	15	2
	9.4%	4.0%	10.1%		6.9%	10.2%	12.9%	9.8%	8.8%	9.4%			9.4%			35.3%	17.0%	10.7%	0.3%	14.2%	6.6%	16.5%
3	10	3	8	2	0	1	7	6	4	10	-	-	10	-	-	0	3	6	0	3	6	1
	3.0%	6.1%	2.5%	4.7%	0.3%	0.9%	4.4%	3.1%	2.8%	3.0%			3.0%			15.3%	5.2%	3.4%	0.4%	2.6%	2.7%	11.6%
4	57	14	44	9	13	10	26	33	24	57	-	-	57	-	-	-	16	23	10	19	37	1
	16.3%	32.1%	14.1%	16.9%	23.3%	11.2%	16.3%	17.1%	15.3%	16.3%			16.3%				31.3%	12.5%	11.6%	17.3%	16.1%	10.3%
5	34	3	31	6	6	12	10	15	19	34	-	-	34	-	-	-	8	16	8	4	28	2
	9.6%	7.3%	9.9%	11.1%	11.0%	13.8%	6.4%	7.7%	12.0%	9.6%			9.6%				15.5%	9.0%	9.4%	3.4%	12.3%	15.4%
6	54	7	47	15	4	16	19	31	23	54	-	-	54	-	-	-	7	36	10	17	37	-
	15.3%	15.9%	15.3%	29.1%	7.0%	18.3%	12.1%	16.0%	14.5%	15.3%			15.3%				12.5%	19.9%	11.2%	15.4%	16.1%	
7	1	-	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	1	-	1	-	-
	0.4%		0.4%				0.9%	0.7%		0.4%			0.4%					0.8%		1.2%		
8	34	6	28	3	10	2	18	19	15	34	-	-	34	-	-	-	2	22	8	13	20	1
	9.6%	12.9%	9.2%	6.4%	18.2%	2.7%	11.5%	9.5%	9.8%	9.6%			9.6%				3.9%	12.0%	9.7%	11.7%	8.8%	6.7%
9	1	-	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	-	1	-	1	-
	0.3%		0.3%				0.6%	0.5%		0.3%			0.3%						1.1%		0.4%	
10	37	3	34	7	9	8	13	17	19	37	-	-	37	-	-	-	4	15	14	12	24	1
	10.4%	5.9%	11.1%	12.8%	16.7%	9.0%	8.3%	8.8%	12.4%	10.4%			10.4%				7.9%	8.1%	16.9%	10.4%	10.6%	7.5%
12	35	1	34	6	8	7	14	21	14	35	-	-	35	-	-	-	0	21	9	12	22	1
	9.9%	1.9%	11.0%	10.9%	13.8%	8.3%	9.0%	10.5%	9.0%	9.9%			9.9%				0.4%	11.7%	10.1%	11.0%	9.5%	5.7%
14	0	0	-	-	0	0	0	0	-	0	-	-	0	-	-	-	0	-	0	0	0	-
	0.1%	0.9%			0.3%	0.1%	0.2%			0.1%			0.1%				0.3%		0.3%	0.2%	0.1%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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NEEA 2014 Consumer Lighting Survey

M2. How many CFLs did you purchase in 2013? If a package contained more than one bulb, please count each one separately.

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not-Purc	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not-Purc	Not Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
15	8 2.2%	1 1.2%	7 2.4%	-	1 2.4%	2 1.8%	5 3.1%	5 2.5%	3 1.9%	8 2.2%	-	-	8 2.2%	-	-	-	-	1 0.5%	7 8.0% R	3 2.7%	5 2.1%	-
16	3 0.9%	0 0.7%	3 1.0%	-	-	1 1.1%	2 1.4%	1 0.6%	2 1.3%	3 0.9%	-	-	3 0.9%	-	-	-	1 1.7%	0 0.2%	2 2.4%	1 0.8%	2 1.0%	-
20	9 2.5%	1 1.5%	8 2.6%	0 0.2%	0 0.4%	5 5.9%	3 2.1%	3 1.4%	6 3.8%	9 2.5%	-	-	9 2.5%	-	-	-	-	2 1.1%	7 7.8% R	1 0.9%	8 3.4%	-
24	2 0.5%	0 1.0%	1 0.5%	0 0.2%	-	1 1.6%	0 0.2%	1 0.4%	1 0.7%	2 0.5%	-	-	2 0.5%	-	-	0 5.2%	-	-	2 1.9%	0 0.3%	1 0.6%	0 1.9%
29	0 *% 0.3%	0 0.3%	-	-	-	-	0 0.1%	0 0.1%	-	0 *% 0.1%	-	-	0 *% 0.1%	-	-	-	-	-	0 0.2%	-	-	0 1.2%
30	1 0.3%	0 0.5%	1 0.2%	1 1.3%	-	-	0 0.1%	1 0.5%	-	1 0.3%	-	-	1 0.3%	-	-	-	-	-	1 1.1%	0 0.2%	1 0.3%	-
32	0 0.1%	-	0 0.2%	-	-	-	0 0.3%	-	0 0.3%	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.6%	0 0.4%	-	-
40	0 0.1%	0 0.7%	-	0 0.6%	-	-	-	0 0.2%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.3%	-	-
50	6 1.7%	0 0.9%	6 1.8%	0 0.7%	-	3 4.1%	2 1.3%	0 0.2%	6 3.5%	6 1.7%	-	-	6 1.7%	-	-	-	-	3 1.9%	2 2.8%	-	6 2.6%	-
61	0 0.1%	-	0 0.1%	-	-	-	0 0.2%	0 0.2%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.3%	-	-
Don't know	17 4.7%	2 4.2%	15 4.8%	1 2.6%	-	4 4.8%	11 6.9%	13 6.4%	4 2.6%	17 4.7%	-	-	17 4.7%	-	-	-	0 0.4%	9 4.8%	3 3.5%	6 5.4%	8 3.4%	3 23.2% tU
Mean	7.95	6.96	8.09	7.50	7.27	9.17	7.69	7.08	9.00	7.95	-	-	7.95	-	-	2.86	4.80	7.37	11.79	7.24	8.38	6.01
Standard Deviation	7.49	6.74	7.59	6.02	3.44	10.19	7.29	5.50	9.25	7.49			7.49			6.44	2.78	7.11	9.53	5.65	8.28	5.40
Standard Error	0.55	1.31	0.60	1.15	0.68	1.65	0.72	0.42	1.22	0.55			0.55			3.43	0.59	0.72	1.29	0.70	0.77	1.65

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M2-Rebase. How many CFLs did you purchase in 2013? If a package contained more than one bulb, please count each one separately.

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
1	9	1	8	1	-	5	3	7	2	9	-	-	9	-	-	1	2	6	-	1	8	-
	0.9%	0.6%	1.0%	0.8%		2.0%	0.6%	1.4%	0.4%	1.5%			2.6%			7.9%	1.8%	2.4%		0.6%	1.1%	
2	33	2	31	-	4	9	21	19	14	33	-	-	33	-	-	1	9	19	0	16	15	2
	3.3%	1.3%	3.6%		2.8%	3.3%	4.7%	3.5%	3.0%	5.5%			9.4%			6.3%	8.3%	7.5%	0.2%	6.4%	2.2%	2.7%
3	10	3	8	2	0	1	7	6	4	10	-	-	10	-	-	0	3	6	0	3	6	1
	1.0%	2.0%	0.9%	1.4%	0.1%	0.3%	1.6%	1.1%	1.0%	1.7%			3.6%			2.7%	2.6%	2.4%	0.3%	1.1%	0.9%	1.9%
4	57	14	44	9	13	10	26	33	24	57	-	-	57	-	-	-	16	23	10	19	37	1
	5.7%	10.6%	5.0%	5.1%	9.4%	3.7%	6.0%	6.1%	5.2%	9.5%			16.3%				15.3%	8.7%	8.4%	7.8%	5.4%	1.7%
5	34	3	31	6	6	12	10	15	19	34	-	-	34	-	-	-	8	16	8	4	28	2
	3.4%	2.4%	3.5%	3.3%	4.4%	4.5%	2.3%	2.7%	4.1%	5.6%			9.6%				7.6%	6.3%	6.8%	1.5%	4.1%	2.5%
6	54	7	47	15	4	16	19	31	23	54	-	-	54	-	-	-	7	36	10	17	37	-
	5.4%	5.3%	5.4%	8.7%	2.8%	6.0%	4.4%	5.7%	5.0%	9.0%			15.3%				6.1%	13.9%	8.1%	6.9%	5.4%	
7	1	-	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	1	-	1	-	-
	0.1%		0.2%				0.3%	0.3%		0.2%			0.4%					0.5%		0.6%		
8	34	6	28	3	10	2	18	19	15	34	-	-	34	-	-	-	2	22	8	13	20	1
	3.4%	4.3%	3.2%	1.9%	7.3%	0.9%	4.2%	3.4%	3.4%	5.6%			9.6%				1.9%	8.4%	7.1%	5.2%	2.9%	1.1%
9	1	-	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	-	1	-	1	-
	0.1%		0.1%				0.2%	0.2%		0.2%			0.3%						0.8%		0.1%	
10	37	3	34	7	9	8	13	17	19	37	-	-	37	-	-	-	4	15	14	12	24	1
	3.7%	1.9%	3.9%	3.8%	6.7%	3.0%	3.0%	3.1%	4.3%	6.1%			10.4%				3.9%	5.7%	12.3%	4.7%	3.5%	1.2%
12	35	1	34	6	8	7	14	21	14	35	-	-	35	-	-	-	0	21	9	12	22	1
	3.4%	0.6%	3.9%	3.3%	5.6%	2.7%	3.3%	3.8%	3.1%	5.8%			9.9%				0.2%	8.2%	7.4%	5.0%	3.2%	0.9%
14	0	0	-	-	-	0	0	0	-	0	-	-	0	-	-	-	0	-	0	0	0	-
	*%	0.3%				0.1%	*%	0.1%		0.1%			0.1%				0.1%		0.2%	0.1%	*%	
15	8	1	7	-	1	2	5	5	3	8	-	-	8	-	-	-	-	1	7	3	5	-
	0.8%	0.4%	0.8%		1.0%	0.6%	1.1%	0.9%	0.7%	1.3%			2.2%					0.4%	5.8%	1.2%	0.7%	

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M2-Rebase. How many CFLs did you purchase in 2013? If a package contained more than one bulb, please count each one separately.

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
16	3	0	3	-	-	1	2	1	2	3	-	-	3	-	-	-	1	0	2	1	2	-
	0.3%	0.2%	0.3%			0.4%	0.5%	0.2%	0.4%	0.5%			0.9%				0.8%	0.1%	1.7%	0.4%	0.3%	
20	9	1	8	0	0	5	3	3	6	9	-	-	9	-	-	-	2	7	1	8	-	
	0.9%	0.5%	0.9%	0.1%	0.2%	1.9%	0.8%	0.5%	1.3%	1.4%			2.5%				0.8%	5.6%	0.4%	1.1%		
24	2	0	1	0	-	1	0	1	1	2	-	-	2	-	-	0	-	-	2	0	1	0
	0.2%	0.3%	0.2%	0.1%		0.5%	0.1%	0.1%	0.2%	0.3%			0.5%			0.9%			1.4%	0.1%	0.2%	0.3%
29	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	-	-	0
	*%	0.1%					*%	*%		*%			*%						0.1%			0.2%
30	1	0	1	1	-	-	0	1	-	1	-	-	1	-	-	-	-	-	1	0	1	-
	0.1%	0.2%	0.1%	0.4%			0.1%	0.2%		0.2%			0.3%						0.8%	0.1%	0.1%	
32	0	-	0	-	-	-	0	-	0	0	-	-	0	-	-	-	-	-	0	0	-	-
	*%		0.1%				0.1%		0.1%	0.1%			0.1%						0.4%	0.2%		
40	0	0	-	0	-	-	-	0	-	0	-	-	0	-	-	-	-	-	0	0	-	-
	*%	0.2%		0.2%				0.1%		0.1%			0.1%						0.3%	0.1%		
50	6	0	6	0	-	3	2	0	6	6	-	-	6	-	-	-	3	2	-	6	-	
	0.6%	0.3%	0.6%	0.2%		1.3%	0.5%	0.1%	1.2%	1.0%			1.7%				1.4%	2.1%		0.9%		
61	0	-	0	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	0	-	-
	*%		*%				0.1%	0.1%		0.1%			0.1%						0.3%	0.1%		
None	655	86	569	124	81	174	276	354	301	249	260	145	-	235	-	12	54	78	32	137	457	61
	65.0%	66.8%	64.8%	70.0%	59.8%	67.2%	63.3%	64.4%	65.8%	41.5%	100.0%	100.0%		100.0%		82.1%	51.0%	30.1%	27.3%	55.1%	66.6%	83.6%
										J	J					QRS	RS		T	T	TU	
Don't know	17	2	15	1	-	4	11	13	4	17	-	-	17	-	-	-	0	9	3	6	8	3
	1.6%	1.4%	1.7%	0.8%		1.6%	2.5%	2.3%	0.9%	2.7%			4.7%				0.2%	3.3%	2.6%	2.4%	1.1%	3.8%
Mean	2.70	2.24	2.76	2.21	2.92	2.91	2.70	2.41	3.03	4.56	0.00	0.00	7.95	0.00	-	0.51	2.35	5.08	8.48	3.15	2.73	0.79
Standard Deviation	5.76	5.00	5.86	4.72	4.19	7.13	5.66	4.64	6.84	6.90	0.00	0.00	7.49	0.00		2.47	3.09	6.82	9.66	5.17	6.14	2.76
Standard Error	0.25	0.51	0.28	0.52	0.51	0.62	0.35	0.21	0.53	0.38	0.00	0.00	0.55	0.00		0.67	0.43	0.57	1.09	0.42	0.33	0.40

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QM2A. How many of the CFLs you bought in 2013 were the spiral or twisty shape?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware					
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
Weighted Total	336	41	295	52	54	81	149	183	153	336	-	-	336	-	-	3	52	172	82	105	221	9				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	-	-	100.0%	-	-	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Unweighted Total	339	108	231	53	53	82	151	262	77	339	-	-	339	-	-	5	50	165	96	112	210	17				
0	26	1	25	1	4	6	15	16	11	26	-	-	26	-	-	-	3	16	4	13	14	-				
	7.8%	2.7%	8.5%	2.0%	6.5%	7.7%	10.2%	8.5%	6.9%	7.8%	-	-	7.8%	-	-	-	6.6%	9.3%	4.3%	11.9%	6.1%	-				
1	8	1	7	1	-	5	2	7	1	8	-	-	8	-	-	2	2	4	-	1	7	-				
	2.5%	2.4%	2.5%	2.6%	-	6.3%	1.2%	4.1%	0.6%	2.5%	-	-	2.5%	-	-	79.5%	4.0%	2.4%	-	1.3%	3.1%	-				
2	37	2	35	-	5	12	20	19	17	37	-	-	37	-	-	-	9	19	2	16	19	2				
	10.9%	3.8%	11.9%	-	8.6%	14.4%	13.7%	10.6%	11.4%	10.9%	-	-	10.9%	-	-	-	17.1%	11.2%	2.0%	14.9%	8.6%	21.5%				
3	15	3	13	2	3	2	8	11	4	15	-	-	15	-	-	0	5	7	2	5	9	1				
	4.6%	6.9%	4.3%	4.8%	5.0%	2.6%	5.5%	6.0%	2.9%	4.6%	-	-	4.6%	-	-	15.3%	9.7%	4.3%	2.2%	4.6%	4.1%	15.1%				
4	55	13	43	9	14	7	25	29	26	55	-	-	55	-	-	-	15	21	11	17	37	1				
	16.5%	31.5%	14.4%	18.0%	25.2%	8.8%	17.1%	16.0%	17.1%	16.5%	-	-	16.5%	-	-	-	29.0%	12.0%	13.6%	16.1%	16.9%	13.4%				
5	28	3	26	5	3	11	9	10	19	28	-	-	28	-	-	-	6	15	6	3	23	2				
	8.5%	7.1%	8.7%	10.0%	6.3%	13.2%	6.2%	5.3%	12.3%	8.5%	-	-	8.5%	-	-	-	10.7%	8.8%	7.7%	3.0%	10.6%	20.0%				
6	55	7	48	15	4	15	21	29	26	55	-	-	55	-	-	-	7	37	8	19	36	-				
	16.3%	17.1%	16.2%	28.5%	7.0%	18.6%	14.2%	15.9%	16.8%	16.3%	-	-	16.3%	-	-	-	13.0%	21.6%	9.7%	17.9%	16.2%	-				
7	4	0	3	-	-	0	3	4	-	4	-	-	4	-	-	-	-	3	0	1	2	-				
	1.0%	0.5%	1.1%	-	-	0.3%	2.2%	1.9%	-	1.0%	-	-	1.0%	-	-	-	-	1.9%	0.3%	1.1%	1.1%	-				
8	29	5	24	3	9	2	15	17	13	29	-	-	29	-	-	-	-	17	11	10	19	1				
	8.7%	12.9%	8.2%	6.6%	16.3%	2.1%	10.3%	9.1%	8.2%	8.7%	-	-	8.7%	-	-	-	-	9.7%	13.4%	9.4%	8.4%	8.7%				
10	23	3	21	7	6	4	6	14	9	23	-	-	23	-	-	-	4	10	10	5	17	1				
	7.0%	6.4%	7.1%	13.2%	11.0%	5.2%	4.4%	7.6%	6.2%	7.0%	-	-	7.0%	-	-	-	7.9%	5.6%	11.9%	5.2%	7.7%	9.8%				
12	25	1	24	6	6	5	8	15	10	25	-	-	25	-	-	-	-	17	8	10	14	1				
	7.3%	1.5%	8.2%	11.2%	11.8%	5.7%	5.3%	8.0%	6.6%	7.3%	-	-	7.3%	-	-	-	-	9.7%	9.7%	9.8%	6.2%	7.4%				
14	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	0	-	-	-	0	-				
	*%	0.3%	-	-	-	-	0.1%	0.1%	-	*%	-	-	*%	-	-	-	0.3%	-	-	-	0.1%	-				

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	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
15	6 1.8%	1 1.3%	5 1.8%	-	1 2.4%	2 1.9%	3 2.1%	4 2.4%	2 1.1%	6 1.8%	-	-	6 1.8%	-	-	-	-	0 0.3%	5 6.6% r	2 1.5%	4 1.9%	-
16	3 1.0%	0 0.7%	3 1.0%	-	-	1 1.2%	2 1.5%	1 0.6%	2 1.3%	3 1.0%	-	-	3 1.0%	-	-	-	1 1.7%	0 0.2%	2 2.5%	1 0.8%	2 1.1%	-
20	8 2.5%	0 1.0%	8 2.7%	0 0.2%	-	5 6.1%	3 2.3%	2 1.3%	6 3.9%	8 2.5%	-	-	8 2.5%	-	-	-	-	2 1.1%	7 8.1% R	1 0.8%	8 3.5%	-
24	2 0.6%	0 1.1%	1 0.5%	0 0.3%	-	1 1.6%	0 0.3%	1 0.4%	1 0.7%	2 0.6%	-	-	2 0.6%	-	-	0 5.2%	-	-	2 2.0%	0 0.3%	1 0.6%	0 2.4%
25	2 0.6%	-	2 0.7%	-	-	-	2 1.4%	-	2 1.3%	2 0.6%	-	-	2 0.6%	-	-	-	-	-	2 2.5%	-	2 0.9%	-
27	0 0.1%	-	0 0.1%	-	-	-	0 0.2%	0 0.2%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.3%	-	-
29	0 *%	0 0.3%	-	-	-	-	0 0.1%	0 0.1%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.2%	-	-	0 1.5%
30	1 0.3%	0 0.6%	1 0.2%	1 1.3%	-	-	0 0.2%	1 0.5%	-	1 0.3%	-	-	1 0.3%	-	-	-	-	-	1 1.1%	0 0.2%	1 0.3%	-
32	0 0.1%	-	0 0.2%	-	-	-	0 0.3%	-	0 0.3%	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.6%	0 0.5%	-	-
35	0 0.1%	0 0.9%	-	0 0.7%	-	-	-	0 0.2%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	-	0 0.2%	-
40	0 0.1%	0 0.7%	-	0 0.6%	-	-	-	0 0.2%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.3%	-	-
50	3 1.0%	-	3 1.2%	-	-	3 4.3%	-	-	3 2.3%	3 1.0%	-	-	3 1.0%	-	-	-	-	3 2.0%	-	-	3 1.6%	-
Don't know	2 0.6%	-	2 0.6%	-	-	-	2 1.3%	2 1.0%	-	2 0.6%	-	-	2 0.6%	-	-	-	-	-	0 0.6%	-	2 0.9%	-
Mean	6.81	6.54	6.85	7.27	6.24	8.20	6.09	6.13	7.62	6.81	-	-	6.81	-	-	2.51	4.26	6.52	10.19	5.85	7.31	6.01
Standard Deviation	6.85	5.95	6.97	5.45	3.74	10.51	5.40	5.11	8.41	6.85	-	-	6.85	-	-	6.55	2.92	7.30	7.22	5.17	7.54	5.40
Standard Error	0.50	1.15	0.55	1.04	0.74	1.70	0.54	0.39	1.11	0.50	-	-	0.50	-	-	3.49	0.62	0.73	0.98	0.64	0.71	1.65

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QM2A-Rebase. How many of the CFLs you bought in 2013 were the spiral or twisty shape?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
0/None	697	89	608	126	84	185	302	382	316	292	260	145	43	235	-	12	58	102	39	155	478	64				
	69.3%	69.1%	69.3%	71.4%	62.4%	71.2%	69.3%	69.5%	68.9%	48.5%	100.0%	100.0%	12.1%	100.0%		82.1%	54.4%	39.6%	32.9%	62.6%	69.7%	87.4%				
										J	J			M		QRS	rs					TU				
1	8	1	7	1	-	5	2	7	1	8	-	-	8	-	-	2	2	4	-	1	7	-				
	0.8%	0.8%	0.8%	0.8%		2.0%	0.4%	1.3%	0.2%	1.4%			2.4%			14.2%	2.0%	1.6%		0.6%	1.0%					
2	37	2	35	-	5	12	20	19	17	37	-	-	37	-	-	-	9	19	2	16	19	2				
	3.6%	1.2%	4.0%		3.4%	4.5%	4.7%	3.5%	3.8%	6.1%			10.4%				8.3%	7.4%	1.4%	6.3%	2.8%	2.7%				
										b							s	S		u						
3	15	3	13	2	3	2	8	11	4	15	-	-	15	-	-	0	5	7	2	5	9	1				
	1.5%	2.2%	1.4%	1.4%	2.0%	0.8%	1.9%	2.0%	1.0%	2.6%			4.4%			2.7%	4.7%	2.9%	1.5%	2.0%	1.3%	1.9%				
4	55	13	43	9	14	7	25	29	26	55	-	-	55	-	-	-	15	21	11	17	37	1				
	5.5%	10.0%	4.8%	5.3%	10.1%	2.7%	5.8%	5.3%	5.7%	9.2%			15.8%				14.2%	8.0%	9.5%	6.8%	5.4%	1.7%				
										c																
5	28	3	26	5	3	11	9	10	19	28	-	-	28	-	-	-	6	15	6	3	23	2				
	2.8%	2.3%	2.9%	2.9%	2.5%	4.1%	2.1%	1.8%	4.1%	4.7%			8.1%				5.2%	5.8%	5.4%	1.3%	3.4%	2.5%				
6	55	7	48	15	4	15	21	29	26	55	-	-	55	-	-	-	7	37	8	19	36	-				
	5.4%	5.4%	5.4%	8.3%	2.8%	5.8%	4.9%	5.3%	5.6%	9.1%			15.5%				6.4%	14.4%	6.8%	7.6%	5.2%					
																		qs								
7	4	0	3	-	-	0	3	4	-	4	-	-	4	-	-	-	-	3	0	1	2	-				
	0.3%	0.2%	0.4%			0.1%	0.8%	0.6%		0.6%			1.0%					1.3%	0.2%	0.5%	0.3%					
8	29	5	24	3	9	2	15	17	13	29	-	-	29	-	-	-	-	17	11	10	19	1				
	2.9%	4.1%	2.7%	1.9%	6.5%	0.7%	3.5%	3.0%	2.8%	4.9%			8.3%					6.5%	9.4%	4.0%	2.7%	1.1%				
										f																
10	23	3	21	7	6	4	6	14	9	23	-	-	23	-	-	-	4	10	10	5	17	1				
	2.3%	2.0%	2.4%	3.8%	4.4%	1.6%	1.5%	2.5%	2.1%	3.9%			6.7%				3.9%	3.7%	8.3%	2.2%	2.5%	1.2%				
12	25	1	24	6	6	5	8	15	10	25	-	-	25	-	-	-	-	17	8	10	14	1				
	2.4%	0.5%	2.7%	3.3%	4.7%	1.8%	1.8%	2.7%	2.2%	4.1%			7.0%					6.5%	6.8%	4.2%	2.0%	0.9%				
										b										v						
14	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	0	-	-	-	0	-				
	0%	0.1%					0%	0%		0%			0%				0.1%				0%					
15	6	1	5	-	1	2	3	4	2	6	-	-	6	-	-	-	-	0	5	2	4	-				
	0.6%	0.4%	0.6%		1.0%	0.6%	0.7%	0.8%	0.4%	1.0%			1.7%					0.2%	4.7%	0.7%	0.6%					
																			r							

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

QM2A-Rebase. How many of the CFLs you bought in 2013 were the spiral or twisty shape?

	RUCC			State			Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
16	3 0.3%	0 0.2%	3 0.3%	-	-	1 0.4%	2 0.5%	1 0.2%	2 0.4%	3 0.5%	-	-	3 0.9%	-	-	-	1 0.8%	0 0.1%	2 1.7%	1 0.4%	2 0.3%	-
20	8 0.8%	0 0.3%	8 0.9%	0 0.1%	-	5 1.9%	3 0.8%	2 0.4%	6 1.3%	8 1.4%	-	-	8 2.4%	-	-	-	-	2 0.7%	7 5.6%	1 0.3%	8 1.1%	-
24	2 0.2%	0 0.3%	1 0.2%	0 0.1%	-	1 0.5%	0 0.1%	1 0.1%	1 0.2%	2 0.3%	-	-	2 0.5%	-	-	0 0.9%	-	-	2 1.4%	0 0.1%	1 0.2%	0 0.3%
25	2 0.2%	-	2 0.2%	-	-	-	2 0.5%	-	2 0.4%	2 0.3%	-	-	2 0.6%	-	-	-	-	-	2 1.7%	-	2 0.3%	-
27	0 *%	-	0 *%	-	-	-	0 0.1%	0 0.1%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.3%	0 0.1%	-	-
29	0 *%	0 0.1%	-	-	-	-	0 *%	0 *%	-	0 *%	-	-	0 *%	-	-	-	-	-	0 0.1%	-	-	0 0.2%
30	1 0.1%	0 0.2%	1 0.1%	1 0.4%	-	-	0 0.1%	1 0.2%	-	1 0.2%	-	-	1 0.3%	-	-	-	-	-	1 0.8%	0 0.1%	1 0.1%	-
32	0 *%	-	0 0.1%	-	-	-	0 0.1%	-	0 0.1%	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.2%	-	-
35	0 *%	0 0.3%	-	0 0.2%	-	-	-	0 0.1%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.3%	-	0 0.1%	-
40	0 *%	0 0.2%	-	0 0.2%	-	-	-	0 0.1%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.3%	0 0.1%	-	-
50	3 0.3%	-	3 0.4%	-	-	3 1.3%	-	-	3 0.8%	3 0.6%	-	-	3 1.0%	-	-	-	-	3 1.4%	-	-	3 0.5%	-
Don't know	2 0.2%	-	2 0.2%	-	-	-	2 0.4%	2 0.3%	-	2 0.3%	-	-	2 0.5%	-	-	-	-	-	0 0.4%	-	2 0.3%	-
Mean	2.26	2.08	2.29	2.12	2.51	2.56	2.06	2.03	2.54	3.79	0.00	0.00	6.49	0.00	-	0.45	2.08	4.34	7.13	2.48	2.34	0.76
Standard Deviation	5.08	4.52	5.16	4.42	3.87	6.98	4.26	4.11	6.03	6.12	0.00	0.00	6.84	0.00	-	2.44	2.95	6.70	7.64	4.43	5.46	2.71
Standard Error	0.22	0.45	0.24	0.48	0.47	0.60	0.26	0.18	0.46	0.33	0.00	0.00	0.49	0.00	-	0.66	0.41	0.55	0.85	0.35	0.29	0.38

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
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NEEA 2014 Consumer Lighting Survey

QM2B. How many were shaped like regular light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	62	3	59	2	12	15	34	37	25	62	-	-	62	-	-	1	6	29	19	27	35	-
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Unweighted Total	64	14	50	4	9	17	34	51	13	64	-	-	64	-	-	1	6	31	21	28	36	-
0	9	1	9	-	2	0	7	6	4	9	-	-	9	-	-	-	0	2	7	2	7	-
	15.2%	29.5%	14.5%		20.2%	3.1%	19.6%	15.9%	14.2%	15.2%			15.2%				3.6%	7.8%	35.9%	9.1%	19.7%	
1	3	-	3	-	-	2	2	3	1	3	-	-	3	-	-	1	-	3	-	-	3	-
	5.6%		5.9%			12.3%	5.1%	7.0%	3.6%	5.6%			5.6%			100.0%		9.1%			9.9%	
2	10	0	10	1	4	3	2	10	-	10	-	-	10	-	-	-	3	5	2	6	4	-
	15.7%	7.5%	16.1%	32.4%	30.9%	20.5%	7.2%	26.4%		15.7%			15.7%				40.2%	17.9%	8.9%	23.2%	10.2%	
3	5	0	5	-	1	0	4	4	1	5	-	-	5	-	-	-	0	2	3	3	3	-
	8.4%	12.1%	8.2%		9.5%	1.5%	11.5%	10.4%	5.5%	8.4%			8.4%				2.2%	8.1%	14.6%	9.7%	7.5%	
4	8	1	7	0	1	1	5	5	3	8	-	-	8	-	-	-	1	6	1	3	5	-
	12.8%	21.9%	12.3%	17.6%	9.5%	6.6%	16.3%	13.6%	11.6%	12.8%			12.8%				17.9%	20.6%	4.8%	12.1%	13.3%	
5	3	-	3	1	-	2	-	2	1	3	-	-	3	-	-	-	-	1	2	1	2	-
	4.6%		4.9%	32.4%		15.2%		4.8%	4.4%	4.6%			4.6%					2.4%	11.7%	2.6%	6.2%	
6	2	0	2	-	-	0	2	2	-	2	-	-	2	-	-	-	0	1	1	1	1	-
	3.9%	7.2%	3.8%			1.5%	6.6%	6.6%		3.9%			3.9%				3.5%	3.3%	5.1%	3.6%	4.2%	
7	3	0	3	0	1	-	1	2	1	3	-	-	3	-	-	-	-	1	1	3	0	-
	4.7%	12.2%	4.3%	17.6%	9.5%		4.1%	4.8%	4.5%	4.7%			4.7%					4.8%	8.0%	9.5%	1.0%	
8	10	0	10	-	2	5	4	3	8	10	-	-	10	-	-	-	2	5	-	7	4	-
	16.6%	2.5%	17.3%		18.4%	31.7%	10.5%	7.0%	30.8%	16.6%			16.6%				32.5%	16.5%		25.3%	10.1%	
10	0	0	-	-	0	-	-	0	-	0	-	-	0	-	-	-	-	0	-	0	-	-
	0.3%	7.1%			1.8%			0.6%		0.3%			0.3%					0.7%		0.8%		
12	5	-	5	-	-	1	4	1	4	5	-	-	5	-	-	-	-	2	-	1	4	-
	8.7%		9.2%			7.6%	12.8%	3.0%	17.2%	8.7%			8.7%					8.7%		4.1%	12.1%	
25	2	-	2	-	-	-	2	-	2	2	-	-	2	-	-	-	-	-	2	-	2	-
	3.3%		3.5%				6.1%		8.2%	3.3%			3.3%						10.9%		5.8%	
Mean	5.17	3.58	5.25	4.20	3.61	5.14	5.79	3.40	7.77	5.17	-	-	5.17	-	-	1.00	4.40	4.61	4.99	4.85	5.40	-
Standard Deviation	5.13	3.73	5.20	2.46	3.11	3.48	6.28	2.86	6.52	5.13			5.13			0.00	2.97	3.46	7.59	3.19	6.23	
Standard Error	0.81	1.07	0.86	1.28	1.21	1.13	1.33	0.48	1.95	0.81			0.81			0.00	1.63	0.74	1.96	0.74	1.33	

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QM2B-Rebase. How many were shaped like regular light bulbs?

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	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
0/None	954	127	828	174	126	245	409	518	436	549	260	145	300	235	-	13	100	232	106	224	657	73				
	94.8%	98.3%	94.3%	98.8%	93.0%	94.6%	93.8%	94.3%	95.3%	91.3%	100.0%	100.0%	85.1%	100.0%	M	93.7%	94.3%	89.8%	89.8%	90.3%	95.9%	100.0%				
				eG							J	J								T	TU					
1	3	-	3	-	-	2	2	3	1	3	-	-	3	-	-	1	-	3	-	-	3	-				
	0.3%		0.4%			0.7%	0.4%	0.5%	0.2%	0.6%			1.0%			6.3%		1.0%			0.5%					
2	10	0	10	1	4	3	2	10	-	10	-	-	10	-	-	-	3	5	2	6	4	-				
	1.0%	0.2%	1.1%	0.4%	2.7%	1.1%	0.6%	1.8%		1.6%			2.8%				2.4%	2.0%	1.4%	2.5%	0.5%					
3	5	0	5	-	1	0	4	4	1	5	-	-	5	-	-	-	0	2	3	3	3	-				
	0.5%	0.3%	0.6%		0.8%	0.1%	0.9%	0.7%	0.3%	0.9%			1.5%				0.1%	0.9%	2.3%	1.0%	1.5%					
4	8	1	7	0	1	1	5	5	3	8	-	-	8	-	-	-	1	6	1	3	5	-				
	0.8%	0.5%	0.8%	0.2%	0.8%	0.4%	1.3%	0.9%	0.6%	1.3%			2.3%				1.1%	2.3%	0.8%	1.3%	0.7%					
5	3	-	3	1	-	2	-	2	1	3	-	-	3	-	-	-	-	1	2	1	2	-				
	0.3%		0.3%	0.4%		0.8%		0.3%	0.2%	0.5%			0.8%					0.3%	1.9%	0.3%	0.8%					
6	2	0	2	-	-	0	2	2	-	2	-	-	2	-	-	-	0	1	1	1	1	-				
	0.2%	0.2%	0.3%			0.1%	0.5%	0.4%		0.4%			0.7%				0.2%	0.4%	0.8%	0.4%	0.2%					
7	3	0	3	0	1	-	1	2	1	3	-	-	3	-	-	-	-	1	1	3	0	-				
	0.3%	0.3%	0.3%	0.2%	0.8%		0.3%	0.3%	0.2%	0.5%			0.8%					0.5%	1.3%	1.0%	0.1%					
8	10	0	10	-	2	5	4	3	8	10	-	-	10	-	-	-	2	5	-	7	4	-				
	1.0%	0.1%	1.2%		1.6%	1.8%	0.8%	0.5%	1.7%	1.7%			2.9%				1.9%	1.8%		2.7%	0.5%					
																				U						
10	0	0	-	-	0	-	-	0	-	0	-	-	0	-	-	-	-	0	-	0	-	-				
	*%	0.2%			0.2%			*%		*%			0.1%					0.1%		0.1%						
12	5	-	5	-	-	1	4	1	4	5	-	-	5	-	-	-	-	2	-	1	4	-				
	0.5%		0.6%			0.4%	1.0%	0.2%	0.9%	0.9%			1.5%					1.0%		0.4%	0.6%					
25	2	-	2	-	-	-	2	-	2	2	-	-	2	-	-	-	-	-	-	-	2	-				
	0.2%		0.2%				0.5%		0.4%	0.3%			0.6%							1.7%		0.3%				
Mean	0.32	0.08	0.35	0.05	0.32	0.29	0.45	0.23	0.43	0.53	0.00	0.00	0.91	0.00	-	0.06	0.26	0.51	0.79	0.52	0.28	0.00				
			B		d	D				KL			N					P	V	V						
Standard Deviation	1.77	0.72	1.87	0.50	1.35	1.42	2.31	1.12	2.32	2.27	0.00	0.00	2.91	0.00		0.25	1.24	1.84	3.48	1.82	1.84	0.00				
Standard Error	0.08	0.07	0.09	0.05	0.17	0.12	0.14	0.05	0.18	0.12	0.00	0.00	0.21	0.00		0.07	0.17	0.15	0.39	0.14	0.10	0.00				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

M3A. Of all the CFLs you bought in 2013, how many did you install in your home?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	-	-	100.0%	-	-	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	336	41	295	52	54	81	149	183	153	336	-	-	336	-	-	3	52	172	82	105	221	9				
Unweighted Total	339	108	231	53	53	82	151	262	77	339	-	-	339	-	-	5	50	165	96	112	210	17				
0	18	2	16	3	2	6	7	11	7	18	-	-	18	-	-	-	3	11	1	4	14	-				
	5.3%	3.7%	5.5%	6.3%	3.8%	7.0%	4.5%	5.9%	4.5%	5.3%			5.3%				4.8%	6.3%	1.6%	3.7%	6.2%					
1	20	2	18	6	1	6	6	17	3	20	-	-	20	-	-	2	3	9	4	3	14	2				
	5.8%	3.9%	6.1%	12.1%	2.1%	7.5%	4.1%	9.2%	1.8%	5.8%			5.8%			84.7%	6.1%	5.4%	5.4%	3.3%	6.3%	22.5%				
								I								QRS						t				
2	68	6	62	5	8	18	36	36	32	68	-	-	68	-	-	0	16	35	6	30	37	1				
	20.1%	14.5%	20.9%	9.5%	14.4%	22.7%	24.4%	19.6%	20.7%	20.1%			20.1%			15.3%	30.2%	20.3%	6.7%	28.3%	16.8%	6.4%				
								D								S	S			uV						
3	34	10	24	3	8	6	16	14	20	34	-	-	34	-	-	-	16	12	4	6	27	1				
	10.1%	24.3%	8.1%	6.3%	15.4%	7.2%	11.0%	7.5%	13.2%	10.1%			10.1%				30.6%	6.8%	5.2%	5.5%	12.1%	15.1%				
								C								RS										
4	40	9	31	11	4	8	17	28	12	40	-	-	40	-	-	-	9	19	9	14	24	2				
	11.9%	22.7%	10.4%	20.6%	6.7%	10.4%	11.5%	15.1%	8.0%	11.9%			11.9%				17.0%	11.1%	10.8%	13.2%	10.7%	24.2%				
5	34	3	32	3	10	8	14	19	15	34	-	-	34	-	-	-	4	20	11	11	21	2				
	10.2%	6.7%	10.7%	5.7%	18.7%	9.4%	9.2%	10.4%	10.1%	10.2%			10.2%				7.0%	11.4%	13.0%	10.8%	9.6%	20.0%				
6	40	4	37	9	9	8	14	20	20	40	-	-	40	-	-	-	1	28	10	12	28	-				
	11.9%	8.8%	12.4%	18.0%	16.1%	10.0%	9.4%	10.8%	13.3%	11.9%			11.9%				1.5%	16.3%	11.8%	11.2%	12.8%					
																	Q									
7	3	-	3	-	1	-	2	3	-	3	-	-	3	-	-	-	-	1	3	1	3	-				
	1.0%		1.2%		2.1%		1.6%	1.9%		1.0%			1.0%					0.6%	3.1%	0.9%	1.1%					
8	17	4	14	5	0	0	12	10	7	17	-	-	17	-	-	-	-	15	2	5	12	0				
	5.2%	9.0%	4.6%	8.9%	0.8%	0.4%	8.1%	5.5%	4.7%	5.2%			5.2%					8.8%	2.6%	4.7%	5.4%	5.4%				
								F																		
9	3	-	3	-	2	0	-	0	2	3	-	-	3	-	-	-	-	3	-	2	0	-				
	0.8%		0.9%		4.0%	0.5%		0.2%	1.4%	0.8%			0.8%					1.5%		2.1%	0.2%					
10	12	1	11	-	3	4	5	9	3	12	-	-	12	-	-	-	0	5	7	1	10	0				
	3.6%	1.8%	3.9%		6.1%	5.0%	3.3%	4.9%	2.2%	3.6%			3.6%				0.4%	2.7%	8.9%	1.3%	4.7%	4.9%				
																				q						
12	15	-	15	3	4	4	4	5	10	15	-	-	15	-	-	-	-	8	5	7	9	-				
	4.5%		5.1%	5.6%	7.4%	4.6%	3.0%	2.7%	6.6%	4.5%			4.5%					4.8%	6.2%	6.2%	3.9%					
13	2	-	2	-	-	-	2	-	2	2	-	-	2	-	-	-	-	-	2	-	2	-				
	0.6%		0.7%				1.4%		1.3%	0.6%			0.6%						2.5%		0.9%					

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

M3A. Of all the CFLs you bought in 2013, how many did you install in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
15	6 1.8%	1 1.7%	5 1.8%	-	1 2.4%	-	5 3.2%	3 1.6%	3 2.0%	6 1.8%	-	-	6 1.8%	-	-	-	-	-	6 7.3%	3 3.1%	3 1.2%	-
16	2 0.5%	-	2 0.6%	-	-	1 1.1%	1 0.6%	2 1.0%	-	2 0.5%	-	-	2 0.5%	-	-	-	1 1.7%	1 0.6%	-	1 0.8%	1 0.4%	-
18	0 0.1%	-	0 0.1%	-	-	-	0 0.2%	0 0.2%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	-	0 0.1%	-
20	7 2.0%	0 0.7%	6 2.2%	-	-	5 5.7%	2 1.4%	1 0.4%	6 3.9%	7 2.0%	-	-	7 2.0%	-	-	-	-	0 0.2%	6 7.7%	1 0.7%	6 2.7%	-
21	0 *% 0.2%	0	-	-	-	-	0 0.1%	0	-	0 *% 0.1%	-	-	0 *% 0.1%	-	-	-	-	-	-	-	0 *% 0.1%	-
25	3 0.9%	0 0.3%	3 0.9%	1 1.3%	-	-	2 1.5%	1 0.4%	2 1.3%	3 0.9%	-	-	3 0.9%	-	-	-	-	-	3 3.5%	-	3 1.2%	0 1.5%
32	1 0.2%	-	1 0.3%	-	-	-	1 0.5%	0 0.2%	0 0.3%	1 0.2%	-	-	1 0.2%	-	-	-	-	-	1 1.0%	1 0.8%	-	-
35	0 0.1%	0 0.7%	-	0 0.6%	-	-	-	0 0.2%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	-	0 0.4%	0 0.3%	-	-
50	4 1.2%	0 0.9%	3 1.2%	0 0.7%	-	3 4.3%	-	0 0.2%	3 2.3%	4 1.2%	-	-	4 1.2%	-	-	-	-	3 2.0%	0 0.4%	-	4 1.7%	-
Don't know	7 2.2%	-	7 2.5%	2 4.3%	-	3 4.3%	2 1.1%	4 2.1%	3 2.3%	7 2.2%	-	-	7 2.2%	-	-	-	0	2 0.6%	1 1.3%	3 1.5%	4 3.3%	-
Mean	5.80	4.96	5.92	5.19	5.37	7.12	5.47	4.83	6.97	5.80	-	-	5.80	-	-	1.15	3.04	5.59	8.89	5.24	6.14	4.07
Standard Deviation	6.77	6.03	6.86	5.98	3.44	10.61	5.13	4.65	8.52	6.77	-	-	6.77	-	-	0.46	2.19	7.19	7.40	4.83	7.58	3.65
Standard Error	0.50	1.17	0.55	1.17	0.68	1.73	0.51	0.36	1.13	0.50	-	-	0.50	-	-	0.25	0.47	0.73	1.01	0.61	0.71	1.12

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

M4. Thinking about all the CFLs that you bought in 2013, how many did you store to install later?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	165	26	139	23	33	38	70	90	75	165	-	-	165	-	-	1	30	76	43	55	106	3
Unweighted Total	170	59	111	25	30	41	74	135	35	170	-	-	170	-	-	3	25	81	49	63	101	6
0	11	1	10	2	2	1	6	8	3	11	-	-	11	-	-	1	0	3	6	2	10	-
	6.8%	3.4%	7.4%	10.0%	4.7%	3.0%	8.8%	8.6%	4.6%	6.8%			6.8%			63.3%	1.2%	3.9%	12.8%	2.8%	9.1%	
1	15	7	8	1	7	1	6	6	9	15	-	-	15	-	-	0	9	3	2	10	2	
	9.0%	26.3%	5.8%	2.9%	22.3%	3.1%	7.9%	7.0%	11.4%	9.0%			9.0%			27.4%	29.7%	3.9%	5.2%	4.5%	9.5%	64.6%
2	54	7	46	6	9	15	24	23	30	54	-	-	54	-	-	9	32	5	22	32	-	
	32.6%	28.7%	33.3%	26.1%	27.3%	39.6%	33.5%	25.9%	40.7%	32.6%			32.6%			29.6%	42.6%	11.6%	40.1%	29.8%		
3	20	1	19	2	6	8	5	11	9	20	-	-	20	-	-	2	14	4	10	10	-	
	12.4%	4.9%	13.7%	7.9%	17.0%	20.9%	7.1%	12.4%	12.3%	12.4%			12.4%			5.7%	18.5%	9.7%	18.8%	9.5%		
4	13	3	10	3	2	1	6	12	1	13	-	-	13	-	-	1	6	6	3	9	0	
	7.8%	12.1%	7.0%	12.3%	7.5%	2.8%	9.2%	13.7%	0.8%	7.8%			7.8%			4.4%	7.6%	12.8%	5.6%	8.9%	9.0%	
5	13	1	12	2	5	1	5	10	4	13	-	-	13	-	-	-	5	9	6	8	-	
	8.0%	5.9%	8.4%	7.6%	15.7%	3.1%	7.0%	10.6%	4.8%	8.0%			8.0%			-	6.1%	19.7%	10.1%	7.1%		
6	19	1	18	4	0	5	9	7	12	19	-	-	19	-	-	8	6	5	4	14	1	
	11.6%	2.4%	13.3%	18.5%	1.1%	14.6%	12.5%	8.1%	15.7%	11.6%			11.6%			27.2%	8.0%	11.3%	7.8%	13.3%	19.9%	
7	2	-	2	-	-	2	-	2	-	2	-	-	2	-	-	-	2	-	-	2	-	
	1.0%		1.1%			4.2%		1.8%		1.0%			1.0%				2.1%			1.5%		
8	5	1	5	-	1	1	3	4	1	5	-	-	5	-	-	0	3	2	3	3	-	
	3.3%	2.0%	3.5%		3.4%	3.1%	4.3%	4.7%	1.5%	3.3%			3.3%			0.8%	3.7%	5.3%	4.6%	2.7%		
9	1	-	1	1	-	-	-	1	-	1	-	-	1	-	-	-	-	1	-	1	-	
	0.4%		0.5%	2.9%				0.8%		0.4%			0.4%					1.6%		0.6%		
10	1	0	0	0	-	0	0	1	-	1	-	-	1	-	-	0	1	-	0	1	-	
	0.4%	1.0%	0.3%	0.5%		1.0%	0.2%	0.7%		0.4%			0.4%			0.5%	0.7%		0.2%	0.5%		
11	0	-	0	-	-	0	-	0	-	0	-	-	0	-	-	-	0	-	-	0	-	
	0.2%		0.3%			1.0%		0.4%		0.2%			0.2%				0.5%			0.4%		
12	6	0	5	-	-	1	4	2	4	6	-	-	6	-	-	-	1	1	-	5	0	
	3.4%	0.9%	3.9%			3.5%	6.1%	1.8%	5.4%	3.4%			3.4%				1.8%	3.1%		5.1%	6.6%	
15	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	-	0	0	0	-	
	0.1%	0.9%					0.3%	0.3%		0.1%			0.1%					0.5%	0.4%			
23	0	0	-	0	-	-	-	0	-	0	-	-	0	-	-	0	-	-	-	0	-	
	0.1%	0.5%		0.6%				0.4%		0.1%			0.4%			9.3%				0.1%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means

Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

M4. Thinking about all the CFLs that you bought in 2013, how many did you store to install later?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
25	0	-	0	-	-	-	0	0	-	0	-	-	0	-	-	-	-	-	0	0	-	-
	0.2%		0.2%				0.4%	0.4%		0.2%			0.2%						0.7%	0.6%		
Don't know	4	2	2	2	0	-	2	2	2	4	-	-	4	-	-	-	0	-	2	2	2	-
	2.5%	9.7%	1.2%	9.1%	1.0%		2.4%	2.3%	2.9%	2.5%			2.5%				1.1%		5.7%	4.5%	1.6%	
REFUSED	0	0	-	0	-	-	-	0	-	0	-	-	0	-	-	-	-	0	-	-	0	-
	0.2%	1.4%		1.6%				0.4%		0.2%			0.2%					0.5%			0.3%	
Mean	3.54	2.84	3.66	3.60	2.73	3.78	3.79	3.69	3.37	3.54	-	-	3.54	-	-	2.42	3.01	3.34	4.18	3.35	3.66	2.98
Standard Deviation	2.90	2.92	2.89	2.79	1.82	2.71	3.40	2.99	2.79	2.90			2.90			12.24	2.17	2.31	3.42	2.64	3.02	3.72
Standard Error	0.31	0.91	0.33	0.87	0.49	0.64	0.49	0.33	0.56	0.31			0.31			8.52	0.70	0.35	0.60	0.45	0.43	1.89

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

M6. Where did you purchase CFLs most recently?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware	Not	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	-	-	100.0%	-	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Weighted Total	352	43	310	53	54	85	160	196	157	352	-	-	352	-	-	3	52	181	85	111	229	12				
Unweighted Total	359	115	244	56	53	88	162	280	79	359	-	-	359	-	-	5	51	173	102	121	219	19				
Home center (Home Depot, Lowe's, D & B Supply, Lumbermen's)	120	11	109	19	15	29	57	69	51	120	-	-	120	-	-	1	5	60	37	49	66	5				
	34.0%	25.4%	35.2%	35.4%	28.1%	33.8%	35.7%	35.4%	32.4%	34.0%			34.0%			20.5%	10.4%	33.3%	43.2%	44.3%	28.7%	39.7%				
																			Q	Q	U					
Discount or mass merchandise store (Wal-Mart, K-Mart, Target, etc.)	93	16	77	18	14	25	36	49	44	93	-	-	93	-	-	-	17	43	24	12	78	3				
	26.4%	37.6%	24.9%	33.5%	26.4%	29.9%	22.3%	25.2%	28.0%	26.4%			26.4%				33.0%	23.8%	28.3%	11.1%	34.2%	21.3%				
																					T					
Buying clubs (Costco or Sam's Club)	62	4	58	9	10	10	32	37	25	62	-	-	62	-	-	-	7	32	21	19	43	0				
	17.5%	9.4%	18.7%	17.6%	17.7%	12.3%	20.3%	19.0%	15.7%	17.5%			17.5%				12.8%	17.8%	24.0%	17.0%	18.6%	1.9%				
																				v	v					
Hardware stores (ACE, True Value, Do it Best, Do it Center)	43	11	32	3	12	10	18	20	23	43	-	-	43	-	-	-	7	28	9	19	23	1				
	12.3%	26.8%	10.2%	6.4%	21.6%	12.2%	11.1%	10.2%	14.8%	12.3%			12.3%				12.7%	15.4%	10.3%	16.9%	10.0%	11.3%				
																				c						
Supermarket, food store (Albertson's, Winco Foods)	22	4	19	3	2	5	13	13	9	22	-	-	22	-	-	1	3	14	2	6	15	2				
	6.3%	8.3%	6.0%	4.7%	3.5%	5.9%	7.9%	6.6%	5.9%	6.3%			6.3%			44.2%	6.1%	7.6%	2.7%	5.2%	6.4%	13.4%				
Drug store (Bartell, Bi-Mart, Hi-School Pharmacy, Longs, etc.)	12	1	12	0	2	1	9	7	5	12	-	-	12	-	-	-	0	9	3	8	4	-				
	3.5%	1.7%	3.7%	0.6%	4.0%	1.6%	5.3%	3.7%	3.3%	3.5%			3.5%				0.4%	4.9%	3.9%	7.2%	1.9%	-				
																				u						
Lighting supply store, lighting showroom	4	-	4	2	-	1	1	3	1	4	-	-	4	-	-	-	1	0	3	0	3	1				
	1.1%		1.3%	4.2%		1.3%	0.4%	1.5%	0.7%	1.1%			1.1%				2.1%	0.2%	3.0%	0.3%	1.1%	9.2%				
Over the Internet	0	-	0	-	-	0	-	0	-	0	-	-	0	-	-	-	-	0	-	0	-	-				
	0.1%		0.1%			0.5%		0.2%		0.1%			0.1%					0.2%		0.3%						
Other (SPECIFY)	13	0	13	-	4	7	3	5	8	13	-	-	13	-	-	-	1	12	0	9	5	-				
	3.8%	1.1%	4.2%		6.7%	8.5%	1.6%	2.7%	5.2%	3.8%			3.8%				2.2%	6.6%	0.5%	7.7%	2.1%					
						G												S		U						
Don't know	20	0	20	2	3	7	8	14	6	20	-	-	20	-	-	1	11	3	3	5	13	2				
	5.7%	0.8%	6.4%	3.9%	5.3%	8.3%	5.1%	7.0%	4.1%	5.7%			5.7%			35.3%	20.9%	1.8%	3.2%	4.6%	5.7%	17.3%				
						b												RS								

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

S1. Thinking about all of the CFLs you recently purchased, how satisfied are you with them?

	RUCC			State			Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
TOP 2 NET	204	22	183	32	27	51	94	111	94	204	-	-	132	66	-	2	25	106	46	45	153	7
=====	33.9%	28.9%	34.7%	34.2%	29.7%	35.6%	34.4%	32.5%	35.8%	33.9%			37.5%	28.3%		16.9%	23.4%	40.9%	39.3%	23.3%	39.8%	26.2%
													n					pQ	pq	T		T
10 - Very important	162	17	145	24	19	38	81	84	78	162	-	-	101	59	-	2	23	85	35	31	124	6
	26.9%	23.2%	27.4%	25.9%	20.5%	26.6%	29.5%	24.7%	29.8%	26.9%			28.7%	25.1%		10.6%	21.9%	32.8%	30.0%	16.2%	32.4%	24.8%
																		p			T	
9	42	4	38	8	8	13	13	27	16	42	-	-	31	8	-	1	2	21	11	14	28	0
	7.0%	5.8%	7.2%	8.3%	9.2%	9.0%	4.9%	7.9%	6.0%	7.0%			8.8%	3.2%		6.3%	1.5%	8.2%	9.3%	7.1%	7.4%	1.4%
													N						q			
8	98	11	87	18	15	33	32	55	43	98	-	-	70	21	-	0	16	46	25	38	55	5
	16.3%	14.7%	16.5%	19.2%	16.3%	23.5%	11.5%	16.1%	16.4%	16.3%			19.9%	8.8%		1.6%	15.0%	18.0%	21.5%	19.7%	14.2%	20.9%
													N				p	P	P			
7	62	8	54	14	10	9	29	30	33	62	-	-	46	16	-	1	12	26	13	23	39	0
	10.4%	10.9%	10.3%	14.7%	10.8%	6.6%	10.7%	8.8%	12.4%	10.4%			13.0%	7.0%		4.2%	11.2%	9.9%	10.7%	11.7%	10.3%	1.5%
													n						V	V		
6	45	3	42	9	6	11	19	22	23	45	-	-	36	9	-	-	14	19	9	12	30	2
	7.4%	3.4%	8.0%	9.5%	6.8%	7.5%	6.9%	6.4%	8.7%	7.4%			10.2%	3.7%			13.0%	7.4%	7.5%	6.4%	7.8%	9.2%
													N									
5	57	4	52	6	4	11	35	41	16	57	-	-	29	27	-	1	9	25	14	31	21	5
	9.4%	5.9%	9.9%	6.5%	4.6%	7.8%	12.9%	12.0%	6.1%	9.4%			8.2%	11.6%		6.2%	8.9%	9.6%	12.2%	15.9%	5.6%	17.9%
								i												U		
4	29	11	18	0	9	9	11	13	16	29	-	-	10	19	-	-	7	8	3	9	18	3
	4.8%	15.0%	3.4%	0.4%	9.7%	6.2%	4.1%	3.9%	6.1%	4.8%			3.0%	8.0%			6.7%	3.0%	2.5%	4.5%	4.6%	10.8%
													M									
3	22	8	15	3	9	1	10	15	8	22	-	-	10	13	-	-	8	5	3	10	12	-
	3.7%	10.4%	2.8%	3.5%	9.6%	0.4%	3.5%	4.3%	2.9%	3.7%			2.7%	5.4%			7.4%	1.9%	2.7%	5.3%	3.2%	
																	r					
BOTTOM 2 NET	78	7	72	11	11	17	40	51	27	78	-	-	16	62	-	10	14	23	4	24	51	3
=====	13.0%	9.1%	13.6%	11.2%	11.5%	12.3%	14.5%	15.1%	10.4%	13.0%			4.6%	26.3%		71.1%	13.6%	9.0%	3.1%	12.6%	13.3%	13.4%
													M			QRS	S	S				
2	23	1	22	1	2	4	15	13	10	23	-	-	6	17	-	2	5	10	2	12	12	-
	3.9%	1.6%	4.2%	1.4%	2.4%	3.0%	5.6%	3.9%	3.8%	3.9%			1.7%	7.1%		14.2%	5.0%	4.0%	1.4%	6.0%	3.1%	
													M									

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

S1. Thinking about all of the CFLs you recently purchased, how satisfied are you with them?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
1 - Not at all important	55 9.2%	6 7.5%	50 9.4%	9 9.8%	8 9.1%	13 9.3%	24 8.9%	38 11.2%	17 6.6%	55 9.2%	-	-	10 2.9%	45 19.2%	-	8 56.9%	9 8.6%	13 4.9%	2 1.6%	13 6.6%	39 10.2%	3 13.4%
Don't know	5 0.9%	1 1.6%	4 0.8%	1 0.7%	1 0.8%	0 0.2%	4 1.4%	2 0.7%	3 1.2%	5 0.9%	-	-	4 1.0%	2 0.9%	-	-	1 0.7%	1 0.3%	0 0.2%	1 0.4%	5 1.3%	-
Refused	1 0.1%	0 0.2%	0 0.1%	0 0.1%	-	-	0 0.1%	1 0.1%	-	1 0.1%	-	-	-	0 0.2%	-	-	-	-	0 0.3%	1 0.3%	-	-
Mean	6.81	6.40	6.87	7.10	6.45	7.08	6.69	6.60	7.09	6.81	-	-	7.52	5.66	-	3.21	6.26	7.40	7.63	6.40	7.05	6.40
Standard Deviation	2.95	2.96	2.94	2.80	2.97	2.86	3.03	3.04	2.80	2.95			2.35	3.41		3.46	2.90	2.68	2.26	2.74	3.02	3.02
Standard Error	0.16	0.44	0.17	0.41	0.47	0.33	0.23	0.17	0.29	0.16			0.17	0.30		0.94	0.40	0.22	0.25	0.25	0.22	0.62

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

S4. In general, what are the best features of CFLs?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not Aware	Purch	No-Purch	Purch	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%																
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26				
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38				
Save / conserve energy / electricity	262	31	231	42	39	57	124	133	129	262	-	-	169	90	-	4	38	107	68	84	165	13				
	43.5%	40.9%	43.9%	44.5%	42.6%	40.3%	45.1%	39.2%	49.1%	43.5%			48.1%	38.4%		26.7%	35.4%	41.2%	57.8%	43.7%	43.0%	50.0%				
									h				n						PQR							
Last longer before burning out	231	29	203	41	25	53	113	140	91	231	-	-	157	66	-	3	38	108	45	71	148	12				
	38.5%	38.3%	38.5%	43.3%	27.2%	37.4%	41.1%	41.2%	34.9%	38.5%			44.5%	28.0%		22.6%	35.5%	41.8%	38.6%	37.0%	38.6%	46.3%				
													N													
Save money / reduce electricity bill	103	8	94	16	11	20	55	69	34	103	-	-	57	40	-	1	14	46	18	32	70	1				
	17.1%	11.3%	17.9%	17.1%	11.9%	14.3%	20.2%	20.3%	12.8%	17.1%			16.2%	17.1%		4.0%	13.6%	17.6%	15.5%	16.7%	18.2%	3.2%				
								i										P	V	V						
Quality of light	74	7	67	10	8	21	36	39	36	74	-	-	50	22	-	1	17	44	9	22	52	0				
	12.3%	9.8%	12.7%	10.5%	8.5%	14.5%	13.0%	11.3%	13.6%	12.3%			14.2%	9.5%		7.8%	16.1%	16.9%	7.4%	11.4%	13.5%	1.4%				
																		S	v	v						
Brightness	55	4	51	7	13	17	19	16	40	55	-	-	34	21	-	1	6	15	19	9	43	3				
	9.2%	5.1%	9.7%	7.7%	13.8%	11.7%	6.8%	4.6%	15.1%	9.2%			9.6%	9.0%		6.9%	5.3%	5.8%	16.0%	4.7%	11.3%	11.4%				
									H										QR	T						
Resource conservation benefits / better for environment / "green"	52	4	48	12	5	17	18	25	27	52	-	-	35	14	-	0	9	20	15	11	39	1				
	8.6%	4.9%	9.1%	12.8%	5.5%	11.9%	6.5%	7.4%	10.2%	8.6%			9.9%	6.1%		1.6%	8.7%	7.7%	13.1%	5.8%	10.3%	4.3%				
																			p							
Work better / higher quality	25	3	23	7	4	2	12	13	12	25	-	-	15	10	-	-	6	12	5	10	15	0				
	4.2%	3.5%	4.3%	7.1%	4.9%	1.6%	4.4%	3.9%	4.6%	4.2%			4.4%	4.2%			5.7%	4.8%	4.0%	5.1%	4.0%	0.5%				
				f																						
Other (SPECIFY)	40	8	32	4	7	9	20	29	11	40	-	-	19	19	-	3	9	12	9	16	24	1				
	6.7%	11.1%	6.1%	4.2%	8.0%	6.2%	7.4%	8.5%	4.3%	6.7%			5.3%	8.2%		24.1%	8.8%	4.8%	7.2%	8.1%	6.2%	4.4%				
																r										
Don't know	54	11	43	6	13	9	25	26	28	54	-	-	25	28	-	4	14	17	3	15	36	4				
	9.0%	14.4%	8.2%	6.9%	14.3%	6.5%	9.3%	7.8%	10.6%	9.0%			7.1%	12.0%		26.2%	13.5%	6.6%	2.2%	7.6%	9.3%	15.4%				
																RS	S									
Refused	5	1	4	2	-	2	1	4	1	5	-	-	-	5	-	1	-	1	-	1	4	-				
	0.8%	1.5%	0.7%	2.4%		1.4%	0.2%	1.2%	0.3%	0.8%				2.1%		6.3%		0.5%		0.6%	1.0%					

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

S5. In general, what are the worst features of CFLs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Refused	0	0	-	-	-	0	-	0	-	0	-	-	0	-	-	-	-	-	0	0	-	0
	0.1%	0.6%				0.3%		0.1%		0.1%			0.1%						0.4%	0.1%		0.9%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

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S10_1. CFLs are not bright enough

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Agree	235	35	200	30	39	50	117	145	90	235	-	-	124	104	-	11	47	92	35	81	144	10
	39.1%	47.4%	37.9%	32.0%	42.8%	34.9%	42.5%	42.8%	34.3%	39.1%			35.3%	44.5%		75.8%	44.5%	35.7%	29.6%	42.1%	37.5%	40.5%
														m		QRS	s					
Disagree	353	38	315	59	52	90	152	184	168	353	-	-	223	122	-	3	59	157	81	107	231	15
	58.6%	50.7%	59.7%	63.0%	56.5%	63.2%	55.4%	54.3%	64.3%	58.6%			63.3%	51.8%		17.9%	55.1%	60.5%	69.2%	55.2%	60.2%	59.5%
									h				N			P	P	P				
Don't know	14	1	12	5	1	3	6	10	4	14	-	-	5	9	-	1	0	10	1	5	8	-
	2.3%	1.9%	2.3%	5.0%	0.6%	1.9%	2.1%	2.9%	1.4%	2.3%			1.4%	3.7%		6.3%	0.4%	3.8%	1.2%	2.7%	2.2%	
Refused	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	-	0	-	-	0	-
	0%	0.1%					0%	0%		0%			0%					0%			0%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
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S10_2. The light from CFLs is too harsh

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Agree	97	7	91	12	16	25	45	64	34	97	-	-	49	48	-	2	24	33	19	33	59	6
	16.2%	9.0%	17.2%	12.5%	17.6%	17.6%	16.2%	18.7%	12.8%	16.2%			13.9%	20.5%		12.6%	22.6%	12.6%	15.8%	16.9%	15.3%	22.9%
Disagree	499	67	432	80	75	117	227	271	228	499	-	-	301	184	-	12	82	224	99	158	323	19
	83.0%	89.8%	82.0%	85.7%	82.4%	82.3%	82.6%	79.8%	87.2%	83.0%			85.6%	78.5%		87.4%	76.9%	86.5%	83.8%	81.8%	84.2%	74.5%
Don't know	5	1	4	2	-	0	3	5	-	5	-	-	2	2	-	-	0	2	0	2	2	1
	0.8%	1.1%	0.8%	1.8%		0.2%	1.1%	1.5%		0.8%			0.5%	1.0%			0.4%	0.8%	0.4%	1.3%	0.5%	2.6%
Refused	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	-	0	-	-	0	-
	*%	0.1%					*%	*%		*%			*%					*%			*%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

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S10_3. CFLs don't fit well in my fixtures

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Agree	178	30	147	28	30	34	85	98	80	178	-	-	98	79	-	7	26	79	32	72	100	5
	29.6%	40.6%	28.0%	29.7%	33.2%	24.2%	31.0%	28.8%	30.6%	29.6%			27.8%	33.8%		46.7%	24.9%	30.7%	27.5%	37.3%	26.2%	21.2%
			c																	U		
Disagree	409	43	366	65	58	100	186	236	174	409	-	-	244	152	-	8	77	171	84	117	273	19
	68.0%	57.9%	69.4%	69.5%	63.6%	70.6%	67.6%	69.3%	66.3%	68.0%			69.2%	64.9%		53.3%	72.2%	66.0%	71.5%	60.6%	71.4%	73.4%
																				T		
Don't know	13	1	12	1	3	7	2	5	8	13	-	-	9	3	-	-	3	7	1	4	9	-
	2.2%	1.4%	2.3%	0.7%	3.2%	5.2%	0.8%	1.5%	3.1%	2.2%			2.6%	1.3%			3.0%	2.7%	1.0%	2.1%	2.4%	
						dg																
Refused	1	0	1	-	-	-	1	1	-	1	-	-	1	-	-	-	-	1	-	-	0	1
	0.2%	0.1%	0.3%				0.5%	0.4%		0.2%			0.4%					0.6%			*	5.4%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

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S10_4. CFLs don't look good in my fixtures

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Agree	233	26	207	37	38	38	121	128	104	233	-	-	110	119	-	6	42	96	38	92	136	5
	38.7%	35.3%	39.2%	39.0%	41.3%	26.7%	43.9%	37.8%	39.9%	38.7%			31.2%	50.8%		41.4%	39.3%	37.0%	32.3%	47.7%	35.4%	20.8%
							F							M						UV		
Disagree	357	47	310	54	53	101	148	201	156	357	-	-	236	110	-	7	61	159	78	93	245	19
	59.4%	63.4%	58.8%	57.7%	58.4%	71.1%	54.1%	59.2%	59.6%	59.4%			67.1%	46.8%		52.2%	57.7%	61.3%	66.1%	48.3%	64.0%	73.8%
						G							N							T		T
Don't know	10	1	9	3	-	2	5	9	1	10	-	-	6	4	-	1	3	4	1	7	2	1
	1.7%	1.1%	1.8%	3.2%		1.4%	1.8%	2.6%	0.5%	1.7%			1.7%	1.8%		6.3%	3.0%	1.6%	0.6%	3.4%	0.5%	5.4%
Refused	2	0	1	-	0	1	0	2	-	2	-	-	0	1	-	-	-	0	1	1	1	-
	0.3%	0.3%	0.3%		0.2%	0.8%	0.1%	0.5%		0.3%			0.1%	0.6%				0.1%	0.9%	0.6%	0.1%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
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S10_5. CFLs take too long to light up

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Agree	257	30	228	27	51	50	130	149	108	257	-	-	137	116	-	9	46	101	50	105	145	7
	42.8%	39.9%	43.2%	28.6%	55.7%	34.9%	47.4%	43.9%	41.4%	42.8%			39.0%	49.6%		60.4%	43.2%	38.9%	42.8%	54.5%	37.9%	27.4%
					DF		Df							m						UV		
Disagree	331	44	286	67	38	92	134	184	146	331	-	-	208	112	-	6	59	153	65	85	229	17
	54.9%	59.1%	54.3%	71.4%	41.5%	64.5%	48.9%	54.2%	55.8%	54.9%			59.0%	47.6%		39.6%	55.6%	59.3%	55.4%	43.9%	59.7%	67.2%
				EG		EG							N							T	T	
Don't know	13	1	13	-	3	1	10	6	7	13	-	-	7	6	-	-	1	5	2	3	9	1
	2.2%	0.9%	2.4%		2.8%	0.7%	3.6%	1.8%	2.8%	2.2%			2.0%	2.7%			1.2%	1.8%	1.7%	1.6%	2.3%	5.4%
Refused	0	0	0	-	-	-	0	0	-	0	-	-	0	0	-	-	-	0	-	-	0	-
	0.1%	0.1%	0.1%				0.1%	0.1%		0.1%			*%	0.1%				*%			0.1%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

S10_6. CFLs don't come in the shapes that I need

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
Agree	232	35	196	42	40	45	105	128	104	232	-	-	129	96	-	5	44	102	38	79	141	12
	38.5%	47.4%	37.2%	44.5%	44.0%	31.5%	38.2%	37.6%	39.7%	38.5%			36.8%	41.1%		34.4%	41.8%	39.3%	32.3%	40.9%	36.7%	47.8%
Disagree	354	35	318	51	48	94	161	199	154	354	-	-	216	128	-	6	61	152	78	106	236	12
	58.8%	47.4%	60.4%	54.0%	52.5%	66.3%	58.6%	58.6%	59.0%	58.8%			61.5%	54.6%		43.5%	57.1%	58.6%	66.3%	54.8%	61.6%	46.8%
Don't know	16	4	12	1	3	3	8	13	3	16	-	-	6	10	-	3	1	5	2	8	6	1
	2.7%	5.1%	2.3%	1.4%	3.5%	2.2%	3.0%	3.7%	1.3%	2.7%			1.8%	4.2%		22.1%	1.1%	2.0%	1.4%	4.3%	1.6%	5.4%
																QRS						
Refused	0	0	0	-	-	-	0	0	-	0	-	-	0	0	-	-	-	0	-	-	0	-
	0.1%	0.1%	0.1%				0.1%	0.1%		0.1%			*%	0.1%				*%			0.1%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

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S10_7. CFLs are not suitable for use in all of the rooms in my home

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Rural			Urban				ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38				
Agree	335	48	287	57	47	78	154	195	141	335	-	-	180	148	-	10	71	133	51	129	193	13				
	55.8%	64.8%	54.5%	60.4%	51.8%	54.5%	56.1%	57.3%	53.7%	55.8%			51.2%	62.9%		73.8%	67.1%	51.5%	43.5%	66.9%	50.5%	51.1%				
														M		rS	RS			U						
Disagree	258	25	233	35	43	64	116	139	120	258	-	-	168	83	-	4	32	121	66	60	187	11				
	42.9%	33.6%	44.3%	37.9%	47.3%	44.7%	42.3%	40.8%	45.7%	42.9%			47.7%	35.3%		26.2%	30.2%	46.8%	56.5%	31.1%	48.9%	43.5%				
													N				pQ	PQ		T						
Don't know	8	1	7	2	1	1	4	6	1	8	-	-	4	4	-	-	3	4	-	4	3	1				
	1.3%	1.4%	1.3%	1.8%	0.8%	0.8%	1.5%	1.9%	0.5%	1.3%			1.0%	1.8%			2.7%	1.6%		2.0%	0.7%	5.4%				
Refused	0	0	-	-	-	-	0	0	-	0	-	-	0	-	-	-	-	0	-	-	0	-				
	*%	0.1%					*%	*%		*%			*%					*%			*%					

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

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Summary of Frequencies: S10_1 to S10_7 Agree - Do you agree or disagree with this statement?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38
S10_7. CFLs are not suitable for use in all of the rooms in my home	335	48	287	57	47	78	154	195	141	335	-	-	180	148	-	10	71	133	51	129	193	13
	55.8%	64.8%	54.5%	60.4%	51.8%	54.5%	56.1%	57.3%	53.7%	55.8%			51.2%	62.9%		73.8%	67.1%	51.5%	43.5%	66.9%	50.5%	51.1%
														M		rs	RS			U		
S10_5. CFLs take too long to light up	257	30	228	27	51	50	130	149	108	257	-	-	137	116	-	9	46	101	50	105	145	7
	42.8%	39.9%	43.2%	28.6%	55.7%	34.9%	47.4%	43.9%	41.4%	42.8%			39.0%	49.6%		60.4%	43.2%	38.9%	42.8%	54.5%	37.9%	27.4%
					DF		Df							m						UV		
S10_1. CFLs are not bright enough	235	35	200	30	39	50	117	145	90	235	-	-	124	104	-	11	47	92	35	81	144	10
	39.1%	47.4%	37.9%	32.0%	42.8%	34.9%	42.5%	42.8%	34.3%	39.1%			35.3%	44.5%		75.8%	44.5%	35.7%	29.6%	42.1%	37.5%	40.5%
														m		QRS	s					
S10_4. CFLs don't look good in my fixtures	233	26	207	37	38	38	121	128	104	233	-	-	110	119	-	6	42	96	38	92	136	5
	38.7%	35.3%	39.2%	39.0%	41.3%	26.7%	43.9%	37.8%	39.9%	38.7%			31.2%	50.8%		41.4%	39.3%	37.0%	32.3%	47.7%	35.4%	20.8%
							F							M						UV		
S10_6. CFLs don't come in the shapes that I need	232	35	196	42	40	45	105	128	104	232	-	-	129	96	-	5	44	102	38	79	141	12
	38.5%	47.4%	37.2%	44.5%	44.0%	31.5%	38.2%	37.6%	39.7%	38.5%			36.8%	41.1%		34.4%	41.8%	39.3%	32.3%	40.9%	36.7%	47.8%
S10_3. CFLs don't fit well in my fixtures	178	30	147	28	30	34	85	98	80	178	-	-	98	79	-	7	26	79	32	72	100	5
	29.6%	40.6%	28.0%	29.7%	33.2%	24.2%	31.0%	28.8%	30.6%	29.6%			27.8%	33.8%		46.7%	24.9%	30.7%	27.5%	37.3%	26.2%	21.2%
																				U		
S10_2. The light from CFLs is too harsh	97	7	91	12	16	25	45	64	34	97	-	-	49	48	-	2	24	33	19	33	59	6
	16.2%	9.0%	17.2%	12.5%	17.6%	17.6%	16.2%	18.7%	12.8%	16.2%			13.9%	20.5%		12.6%	22.6%	12.6%	15.8%	16.9%	15.3%	22.9%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

Summary of Frequencies: S10_1 to S10_7 Disagree - Do you agree or disagree with this statement?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26				
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38				
S10_2. The light from CFLs is too harsh	499	67	432	80	75	117	227	271	228	499	-	-	301	184	-	12	82	224	99	158	323	19				
	83.0%	89.8%	82.0%	85.7%	82.4%	82.3%	82.6%	79.8%	87.2%	83.0%			85.6%	78.5%		87.4%	76.9%	86.5%	83.8%	81.8%	84.2%	74.5%				
S10_3. CFLs don't fit well in my fixtures	409	43	366	65	58	100	186	236	174	409	-	-	244	152	-	8	77	171	84	117	273	19				
	68.0%	57.9%	69.4%	69.5%	63.6%	70.6%	67.6%	69.3%	66.3%	68.0%			69.2%	64.9%		53.3%	72.2%	66.0%	71.5%	60.6%	71.4%	73.4%				
S10_4. CFLs don't look good in my fixtures	357	47	310	54	53	101	148	201	156	357	-	-	236	110	-	7	61	159	78	93	245	19				
	59.4%	63.4%	58.8%	57.7%	58.4%	71.1%	54.1%	59.2%	59.6%	59.4%			67.1%	46.8%		52.2%	57.7%	61.3%	66.1%	48.3%	64.0%	73.8%				
S10_6. CFLs don't come in the shapes that I need	354	35	318	51	48	94	161	199	154	354	-	-	216	128	-	6	61	152	78	106	236	12				
	58.8%	47.4%	60.4%	54.0%	52.5%	66.3%	58.6%	58.6%	59.0%	58.8%			61.5%	54.6%		43.5%	57.1%	58.6%	66.3%	54.8%	61.6%	46.8%				
S10_1. CFLs are not bright enough	353	38	315	59	52	90	152	184	168	353	-	-	223	122	-	3	59	157	81	107	231	15				
	58.6%	50.7%	59.7%	63.0%	56.5%	63.2%	55.4%	54.3%	64.3%	58.6%			63.3%	51.8%		17.9%	55.1%	60.5%	69.2%	55.2%	60.2%	59.5%				
S10_5. CFLs take too long to light up	331	44	286	67	38	92	134	184	146	331	-	-	208	112	-	6	59	153	65	85	229	17				
	54.9%	59.1%	54.3%	71.4%	41.5%	64.5%	48.9%	54.2%	55.8%	54.9%			59.0%	47.6%		39.6%	55.6%	59.3%	55.4%	43.9%	59.7%	67.2%				
S10_7. CFLs are not suitable for use in all of the rooms in my home	258	25	233	35	43	64	116	139	120	258	-	-	168	83	-	4	32	121	66	60	187	11				
	42.9%	33.6%	44.3%	37.9%	47.3%	44.7%	42.3%	40.8%	45.7%	42.9%			47.7%	35.3%		26.2%	30.2%	46.8%	56.5%	31.1%	48.9%	43.5%				

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 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

E3A. What is the main reason preventing you from increasing the number of CFLs you currently have installed in your home?

	RUCC							State		Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)		
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26		
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38		
Do not need any more bulbs at this time	147	16	131	32	16	30	68	88	59	147	-	-	80	61	-	3	19	70	39	30	112	4		
	24.4%	21.4%	24.9%	34.5%	17.7%	21.1%	25.0%	26.0%	22.4%	24.4%			22.6%	25.8%		18.3%	18.1%	27.2%	33.2%	15.8%	29.3%	16.4%		
CFLs are too expensive / cost too much	52	13	38	7	13	12	20	28	24	52	-	-	39	12	-	2	13	23	8	13	39	0		
	8.6%	17.9%	7.3%	7.8%	14.0%	8.5%	7.2%	8.3%	9.1%	8.6%			11.0%	5.3%		14.5%	12.1%	9.0%	6.7%	6.5%	10.2%	0.9%		
Waiting for incandescent bulbs to burn out	47	3	44	5	13	15	14	22	26	47	-	-	45	3	-	1	10	27	7	15	31	1		
	7.9%	4.2%	8.4%	4.9%	14.4%	10.6%	5.3%	6.4%	9.8%	7.9%			12.7%	1.1%		8.5%	9.4%	10.5%	6.1%	7.7%	8.2%	4.4%		
All of the bulbs in my home are CFLs	44	6	38	9	6	9	21	24	20	44	-	-	36	8	-	-	4	20	17	11	30	3		
	7.4%	8.3%	7.2%	9.3%	6.7%	6.2%	7.6%	7.1%	7.8%	7.4%			10.1%	3.3%			3.7%	7.9%	14.3%	5.7%	7.9%	11.7%		
CFLs aren't bright enough	42	8	34	3	9	17	13	16	26	42	-	-	19	23	-	4	3	16	4	5	34	2		
	6.9%	10.4%	6.5%	3.0%	10.3%	11.9%	4.6%	4.7%	9.9%	6.9%			5.5%	9.6%		26.2%	2.8%	6.2%	3.3%	2.8%	9.0%	8.0%		
Prefer LEDs	40	4	36	4	3	7	25	24	16	40	-	-	14	26	-	-	11	13	11	39	1	-		
	6.7%	5.9%	6.8%	4.5%	3.4%	5.2%	9.3%	7.1%	6.1%	6.7%			3.9%	11.0%			10.8%	5.0%	9.7%	20.2%	0.3%			
Don't like the way CFLs fit in fixtures	31	5	26	3	6	9	13	19	12	31	-	-	19	9	-	2	2	12	9	11	19	1		
	5.1%	6.8%	4.9%	3.4%	6.1%	6.2%	4.8%	5.6%	4.4%	5.1%			5.5%	3.7%		17.5%	2.2%	4.7%	7.3%	5.6%	5.0%	2.3%		
CFL light color isn't what I want / isn't right	30	2	28	5	3	6	17	21	9	30	-	-	16	12	-	1	6	9	5	12	16	1		
	5.0%	2.8%	5.4%	5.1%	3.2%	3.9%	6.2%	6.2%	3.5%	5.0%			4.5%	5.2%		6.3%	5.3%	3.4%	3.9%	6.4%	4.3%	5.8%		
Don't like the way CFLs look in fixtures	23	4	19	8	0	5	10	14	9	23	-	-	15	7	-	0	3	11	2	10	9	3		
	3.8%	4.9%	3.6%	8.1%	0.2%	3.3%	3.8%	4.2%	3.3%	3.8%			4.4%	3.0%		2.7%	2.4%	4.4%	1.4%	5.4%	2.4%	12.3%		
Mercury / concerns about disposal	20	1	19	5	3	5	7	12	8	20	-	-	3	17	-	-	9	7	0	6	12	3		
	3.4%	1.4%	3.6%	5.1%	3.6%	3.5%	2.6%	3.6%	3.1%	3.4%			0.9%	7.3%			8.5%	2.8%	0.2%	3.2%	3.0%	10.1%		
CFLs take too long to light up	16	1	16	1	5	1	9	11	5	16	-	-	8	9	-	-	2	5	3	3	11	1		
	2.7%	0.8%	3.0%	1.5%	5.4%	0.5%	3.3%	3.3%	1.9%	2.7%			2.2%	3.6%			2.1%	2.0%	2.1%	1.7%	3.0%	5.4%		
Need dimmable bulbs / can't get dimmable CFLs / can't use CFLs with dimmer switches	15	0	15	4	-	4	7	4	11	15	-	-	8	7	-	-	4	4	3	7	7	-		
	2.5%	0.3%	2.8%	3.9%		2.7%	2.7%	1.2%	4.2%	2.5%			2.4%	2.8%			3.5%	1.6%	2.3%	3.9%	1.9%			

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 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

E3A. What is the main reason preventing you from increasing the number of CFLs you currently have installed in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Storing incandescent bulbs	6	1	5	0	-	0	5	3	3	6	-	-	5	1	-	-	1	2	-	3	3	-
	1.0%	0.9%	1.0%	0.5%		0.2%	1.9%	0.9%	1.1%	1.0%			1.3%	0.4%			1.2%	0.7%		1.4%	0.8%	
Need 3-way bulbs / can't get 3-way CFLs / can't use CFLs in my 3-way fixtures	5	1	4	1	1	0	3	5	-	5	-	-	3	2	-	-	1	0	3	2	2	-
	0.8%	1.3%	0.7%	0.7%	0.8%	0.3%	1.1%	1.4%		0.8%			0.9%	0.8%			1.1%	0.1%	2.6%	1.3%	0.6%	
Operating hours -- don't use the other bulbs / lamps enough	4	0	4	0	-	3	1	3	1	4	-	-	1	3	-	-	1	-	3	-	4	0
	0.7%	0.2%	0.8%	0.1%		1.9%	0.5%	0.9%	0.4%	0.7%			0.3%	1.2%			1.0%		2.3%		0.9%	1.7%
Other (SPECIFY)	44	6	38	4	6	17	17	24	20	44	-	-	23	21	-	1	12	24	2	12	30	1
	7.3%	7.9%	7.2%	4.3%	6.4%	11.9%	6.2%	7.0%	7.7%	7.3%			6.4%	9.0%		5.8%	11.7%	9.1%	1.3%	6.2%	7.9%	5.8%
																	S	S				
Don't know	30	3	28	3	7	2	19	16	14	30	-	-	16	14	-	-	3	12	4	9	17	4
	5.1%	3.9%	5.2%	3.1%	7.6%	1.4%	6.8%	4.8%	5.4%	5.1%			4.6%	6.1%			3.0%	4.7%	3.2%	4.8%	4.5%	15.3%
							F															TU
Refused	5	0	5	0	0	1	4	5	-	5	-	-	4	1	-	-	1	2	-	3	2	-
	0.8%	0.5%	0.9%	0.1%	0.2%	0.6%	1.4%	1.5%		0.8%			1.0%	0.6%			1.1%	0.7%		1.4%	0.6%	

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NEEA 2014 Consumer Lighting Survey

E3B01. Anything else? (What is the main reason preventing you from increasing the number of CFLs you currently have installed in your home?)

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	522	65	457	82	78	131	231	295	227	522	-	-	297	211	-	14	98	224	97	170	333	19
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	521	160	361	80	70	131	240	404	117	521	-	-	302	204	-	20	99	216	109	174	316	31
No / nothing	381	41	340	63	54	98	166	218	163	381	-	-	215	157	-	12	68	171	69	121	249	11
	73.0%	63.3%	74.4%	77.4%	69.3%	75.1%	71.6%	74.0%	71.8%	73.0%			72.5%	74.3%		87.4%	69.5%	76.2%	71.6%	71.4%	74.6%	59.4%
Mercury / concerns about disposal	13	7	6	1	6	1	5	5	9	13	-	-	3	10	-	-	-	6	-	3	10	-
	2.5%	10.3%	1.4%	1.7%	8.0%	0.6%	2.0%	1.6%	3.8%	2.5%			1.2%	4.6%				2.9%		2.0%	2.9%	
CFLs are too expensive / cost too much	11	0	11	3	-	4	4	6	6	11	-	-	3	8	-	1	2	5	1	2	8	1
	2.2%	0.7%	2.4%	3.5%		3.4%	1.7%	1.9%	2.5%	2.2%			1.0%	3.9%		6.3%	2.5%	2.0%	0.9%	1.2%	2.4%	5.9%
Don't like the way CFLs fit in fixtures	11	7	4	2	6	-	3	4	7	11	-	-	10	1	-	-	9	1	1	0	10	1
	2.1%	10.1%	0.9%	2.0%	8.0%		1.3%	1.5%	2.9%	2.1%			3.5%	0.3%			8.8%	0.6%	0.7%	0.2%	3.0%	3.6%
CFL light color isn't what I want / isn't right	10	0	10	3	-	2	6	9	1	10	-	-	5	5	-	1	0	5	-	4	5	1
	2.0%	0.1%	2.2%	3.5%		1.4%	2.4%	3.0%	0.6%	2.0%			1.7%	2.5%		6.3%	0.1%	2.3%		2.2%	1.6%	7.4%
CFLs take too long to light up	10	1	9	0	0	2	8	6	4	10	-	-	5	5	-	-	2	2	1	4	6	0
	2.0%	1.2%	2.1%	0.4%	0.3%	1.2%	3.5%	2.0%	1.9%	2.0%			1.8%	2.3%			1.7%	0.7%	1.0%	2.5%	1.7%	1.1%
Don't like the way CFLs look in fixtures	8	1	7	3	2	1	2	6	2	8	-	-	4	4	-	-	4	3	1	5	3	-
	1.6%	1.2%	1.6%	3.2%	2.8%	1.0%	1.0%	2.0%	1.1%	1.6%			1.3%	2.0%			3.7%	1.2%	0.9%	2.8%	1.0%	
Need dimmable bulbs / can't get dimmable CFLs / can't use CFLs with dimmer switches	8	2	6	1	2	3	2	1	7	8	-	-	3	5	-	-	5	2	1	0	8	-
	1.5%	2.5%	1.4%	0.8%	2.1%	2.7%	1.0%	0.5%	2.9%	1.5%			0.9%	2.5%			5.0%	0.8%	1.4%	0.1%	2.4%	
CFLs aren't bright enough	4	0	4	1	-	0	3	2	3	4	-	-	2	1	-	-	0	1	2	2	2	-
	0.8%	0.6%	0.9%	1.2%		0.3%	1.3%	0.6%	1.2%	0.8%			0.8%	0.6%			0.1%	0.4%	2.1%	1.4%	0.8%	
Waiting for incandescent bulbs to burn out	4	0	4	-	-	0	4	4	0	4	-	-	3	1	-	-	0	3	1	-	4	-
	0.8%	0.3%	0.8%			0.2%	1.6%	1.2%	0.2%	0.8%			0.9%	0.7%			0.2%	1.3%	1.0%		1.2%	
Need 3-way bulbs / can't get 3-way CFLs / can't use CFLs in my 3-way fixtures	3	0	2	0	-	1	1	2	1	3	-	-	1	1	-	-	1	0	-	1	0	1
	0.5%	0.6%	0.5%	0.4%		0.8%	0.6%	0.6%	0.5%	0.5%			0.5%	0.7%			1.1%	0.2%		0.8%	0.1%	5.9%
Do not need any more bulbs at this time	2	0	2	1	0	-	1	2	-	2	-	-	2	-	-	-	-	1	1	1	1	-
	0.4%	0.3%	0.4%	0.8%	0.3%		0.4%	0.6%		0.4%			0.6%					0.5%	0.7%	0.6%	0.3%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

E3B01. Anything else? (What is the main reason preventing you from increasing the number of CFLs you currently have installed in your home?)

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Prefer LEDs	1 0.2%	0 0.1%	1 0.2%	-	-	1 0.9%	-	1 0.4%	-	1 0.2%	-	-	1 0.4%	0 *	-	-	-	1 0.5%	0 0.1%	1 0.7%	-	-
Operating hours -- don't use the other bulbs / lamps enough	1 0.2%	-	1 0.2%	-	-	1 0.8%	-	1 0.4%	-	1 0.2%	-	-	-	1 0.5%	-	-	-	-	1 1.1%	-	1 0.3%	-
Storing incandescent bulbs	1 0.1%	1 0.9%	-	-	-	-	1 0.2%	-	1 0.2%	1 0.1%	-	-	-	1 0.3%	-	-	1 0.6%	-	-	1 0.3%	-	-
Other (SPECIFY)	21 3.9%	1 1.9%	19 4.2%	-	4 4.7%	8 6.5%	8 3.6%	16 5.4%	5 2.1%	21 3.9%	-	-	14 4.6%	4 2.1%	-	-	4 3.7%	7 3.1%	9 8.9%	5 2.7%	15 4.4%	1 7.4%
Don't know	22 4.2%	4 6.0%	18 4.0%	2 2.3%	0 0.3%	7 5.2%	13 5.7%	13 4.3%	9 4.1%	22 4.2%	-	-	12 4.2%	8 3.8%	-	-	3 3.1%	12 5.6%	3 2.7%	10 5.8%	10 3.1%	2 8.7%
Refused	16 3.0%	1 1.8%	15 3.2%	4 5.0%	3 4.2%	2 1.4%	7 2.8%	5 1.6%	11 4.9%	16 3.0%	-	-	14 4.6%	2 1.0%	-	1 6.3%	0 0.5%	6 2.6%	8 8.4%	10 6.0%	5 1.6%	0 0.7%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

E3A&E3B Combined. What is the main reason(Anything else?)preventing you from increasing the number of CFLs you currently have installed in your home?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Weighted Total	602	75	527	94	91	142	274	340	262	602	-	-	352	235	-	14	106	259	118	193	383	26				
Unweighted Total	608	188	420	95	82	152	279	474	134	608	-	-	359	232	-	20	107	251	138	202	368	38				
Do not need any more bulbs at this time	149	16	133	33	16	30	69	90	59	149	-	-	81	61	-	3	19	71	40	31	113	4				
	24.7%	21.7%	25.2%	35.2%	17.9%	21.1%	25.3%	26.6%	22.4%	24.7%			23.1%	25.8%		18.3%	18.1%	27.6%	33.8%	16.3%	29.6%	16.4%				
				ef														Q		T						
CFLs are too expensive / cost too much	63	14	49	10	13	17	24	34	29	63	-	-	42	21	-	3	15	28	9	15	47	1				
	10.5%	18.5%	9.3%	10.8%	14.0%	11.7%	8.6%	9.9%	11.2%	10.5%			11.8%	8.8%		20.8%	14.4%	10.8%	7.4%	7.6%	12.3%	5.1%				
				c																						
Waiting for incandescent bulbs to burn out	51	3	48	5	13	15	18	25	26	51	-	-	47	4	-	1	10	30	8	15	35	1				
	8.5%	4.5%	9.1%	4.9%	14.4%	10.7%	6.7%	7.4%	10.0%	8.5%			13.4%	1.7%		8.5%	9.6%	11.6%	6.9%	7.7%	9.2%	4.4%				
													N													
CFLs aren't bright enough	46	8	38	4	9	17	15	18	29	46	-	-	22	24	-	4	3	17	6	8	36	2				
	7.7%	10.9%	7.2%	4.1%	10.3%	12.2%	5.6%	5.2%	10.9%	7.7%			6.2%	10.2%		26.2%	2.8%	6.6%	5.1%	4.0%	9.5%	8.0%				
					dg				h							QRS					T					
All of the bulbs in my home are CFLs	44	6	38	9	6	9	21	24	20	44	-	-	36	8	-	-	4	20	17	11	30	3				
	7.4%	8.3%	7.2%	9.3%	6.7%	6.2%	7.6%	7.1%	7.8%	7.4%			10.1%	3.3%			3.7%	7.9%	14.3%	5.7%	7.9%	11.7%				
													N						Q							
Don't like the way CFLs fit in fixtures	42	12	30	5	12	9	16	23	18	42	-	-	30	9	-	2	11	14	9	11	29	1				
	6.9%	15.6%	5.7%	5.2%	12.9%	6.2%	5.8%	6.9%	6.9%	6.9%			8.4%	4.0%		17.5%	10.3%	5.2%	7.9%	5.8%	7.6%	4.9%				
					g																					
Prefer LEDs	41	5	37	4	3	9	25	25	16	41	-	-	15	26	-	-	11	14	11	40	1	-				
	6.9%	6.0%	7.0%	4.5%	3.4%	6.0%	9.3%	7.5%	6.1%	6.9%			4.2%	11.1%			10.8%	5.4%	9.7%	20.9%	0.3%	-				
							e						M							U						
CFL light color isn't what I want / isn't right	41	2	38	8	3	7	23	30	11	41	-	-	21	17	-	2	6	14	5	16	22	3				
	6.8%	2.9%	7.3%	8.2%	3.2%	5.2%	8.3%	8.9%	4.0%	6.8%			5.9%	7.4%		12.6%	5.3%	5.4%	3.9%	8.4%	5.7%	11.2%				
								i																		
Mercury / concerns about disposal	33	8	26	6	10	6	12	17	17	33	-	-	7	27	-	-	9	14	0	10	21	3				
	5.6%	10.4%	4.9%	6.5%	10.5%	4.1%	4.3%	4.9%	6.4%	5.6%			1.9%	11.4%			8.5%	5.3%	0.2%	4.9%	5.6%	10.1%				
					g								M				S	S								
Don't like the way CFLs look in fixtures	31	4	27	10	2	6	12	20	11	31	-	-	19	11	-	0	6	14	3	15	13	3				
	5.2%	5.9%	5.1%	10.9%	2.6%	4.2%	4.6%	5.9%	4.2%	5.2%			5.5%	4.8%		2.7%	5.8%	5.5%	2.2%	7.9%	3.3%	12.3%				
				e																u						
CFLs take too long to light up	26	1	25	2	5	2	17	17	9	26	-	-	13	13	-	-	4	7	3	8	17	2				
	4.4%	1.9%	4.8%	1.9%	5.7%	1.7%	6.3%	5.0%	3.6%	4.4%			3.7%	5.7%			3.7%	2.6%	2.9%	4.0%	4.5%	6.2%				
							F																			

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

E3A&E3B Combined. What is the main reason(Anything else?)preventing you from increasing the number of CFLs you currently have installed in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Need dimmable bulbs / can't get dimmable CFLs / can't use CFLs with dimmer switches	23 3.8%	2 2.5%	21 4.0%	4 4.6%	2 1.8%	7 5.1%	10 3.5%	6 1.6%	17 6.6%	23 3.8%	-	-	11 3.2%	12 5.0%	-	-	9 8.1%	6 2.2%	4 3.4%	8 3.9%	15 4.0%	-
Need 3-way bulbs / can't get 3-way CFLs / can't use CFLs in my 3-way fixtures	8 1.3%	1 1.8%	6 1.2%	1 1.1%	1 0.8%	1 1.0%	4 1.6%	7 2.0%	1 0.4%	8 1.3%	-	-	4 1.3%	3 1.4%	-	-	2 2.1%	1 0.3%	3 2.6%	4 2.0%	3 0.7%	1 4.3%
Storing incandescent bulbs	6 1.1%	1 1.6%	5 1.0%	0 0.5%	-	0 0.2%	6 2.1%	3 0.9%	3 1.3%	6 1.1%	-	-	5 1.3%	2 0.6%	-	-	2 1.7%	2 0.7%	-	3 1.7%	3 0.8%	-
Operating hours -- don't use the other bulbs / lamps enough	5 0.9%	0 0.2%	5 1.0%	0 0.1%	-	4 2.7%	1 0.5%	4 1.2%	1 0.4%	5 0.9%	-	-	1 0.3%	4 1.7%	-	-	1 1.0%	-	4 3.2%	-	5 1.2%	0 1.7%
Other (SPECIFY)	62 10.3%	7 9.5%	55 10.4%	4 4.3%	10 10.4%	24 17.1%	24 8.8%	37 10.9%	25 9.5%	62 10.3%	-	-	34 9.6%	26 10.9%	-	1 5.8%	15 13.8%	29 11.4%	10 8.6%	16 8.1%	43 11.3%	3 11.2%
Don't know	30 5.1%	3 3.9%	28 5.2%	3 3.1%	7 7.6%	2 1.4%	19 6.8%	16 4.8%	14 5.4%	30 5.1%	-	-	16 4.6%	14 6.1%	-	-	3 3.0%	12 4.7%	4 3.2%	9 4.8%	17 4.5%	4 15.3%
Refused	5 0.8%	0 0.5%	5 0.9%	0 0.1%	0 0.2%	1 0.6%	4 1.4%	5 1.5%	-	5 0.8%	-	-	4 1.0%	1 0.6%	-	-	1 1.1%	2 0.7%	-	3 1.4%	2 0.6%	-

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

VI. Are you aware of any legislation in the United States that may affect the availability of certain types of light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware	Not	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	-	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	438	44	394	76	42	117	202	285	153	305	109	24	167	130	-	8	43	144	63	141	281	16
	43.5%	34.0%	44.9%	43.1%	31.2%	45.3%	46.4%	51.9%	33.4%	50.6%	42.1%	16.6%	47.4%	55.4%	-	54.0%	40.1%	55.8%	53.7%	57.0%	40.9%	22.1%
			B			e	E	I		kL	L						q		UV	V		
No	558	83	475	97	91	140	230	259	299	294	144	120	184	103	-	7	63	113	54	104	397	56
	55.4%	64.3%	54.1%	54.7%	67.2%	54.0%	52.8%	47.2%	65.2%	48.9%	55.3%	82.4%	52.1%	44.0%	-	46.0%	59.0%	43.5%	46.3%	41.9%	57.9%	77.0%
		c		fg				H			JK					r			T	TU		
Don't know	11	2	9	4	2	2	3	5	6	3	7	2	2	1	-	-	1	2	-	3	8	1
	1.1%	1.5%	1.1%	2.3%	1.6%	0.7%	0.7%	0.9%	1.4%	0.5%	2.6%	1.0%	0.5%	0.5%	-	-	0.9%	0.7%	-	1.1%	1.1%	1.0%
Refused	0	0	-	-	-	-	0	0	-	0	-	-	-	0	-	-	-	0	-	-	0	-
	*%	0.2%					0.1%	*%		*%				0.1%				0.1%			*%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V2. In 2007, Congress passed legislation that will phase out most traditional incandescent light bulbs by 2014. Before today, were you aware of this legislation?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware	Not	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	590	76	515	111	81	148	250	352	238	401	143	47	229	161	-	10	64	180	90	178	387	26
	58.6%	58.8%	58.6%	62.7%	59.9%	57.2%	57.4%	64.1%	52.1%	66.6%	54.9%	32.3%	64.9%	68.5%		67.7%	60.2%	69.5%	76.7%	71.5%	56.5%	35.2%
								I		KL	L							Q	UV	V		
No	413	53	360	65	54	110	184	194	219	199	117	97	122	73	-	5	42	78	26	70	297	45
	41.0%	40.9%	41.0%	36.7%	40.1%	42.4%	42.2%	35.2%	47.9%	33.0%	45.0%	67.0%	34.8%	31.2%		32.3%	39.3%	30.1%	22.5%	28.3%	43.4%	62.2%
								H		J	JK					S				T	TU	
Don't know	4	0	3	1	-	1	1	4	-	2	0	1	1	1	-	-	0	1	1	0	1	2
	0.4%	0.3%	0.4%	0.6%		0.4%	0.3%	0.7%		0.4%	0.1%	0.8%	0.3%	0.3%			0.5%	0.3%	0.8%	0.2%	0.2%	2.6%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

V3. As part of the legislation, retailers began phasing traditional 100-Watt, 75-Watt, 60-Watt, and 40-Watt light bulbs out of stores at the beginning of 2012. Before today, were you aware that these light bulbs are being phased out?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware	Not	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	572	68	504	111	67	141	252	351	221	366	156	49	203	151	-	10	59	169	80	167	372	33
	56.8%	52.7%	57.4%	63.0%	49.7%	54.4%	57.9%	63.8%	48.3%	60.9%	60.0%	34.0%	57.6%	64.3%		71.4%	55.7%	65.2%	68.1%	67.1%	54.2%	45.7%
				e				I		L	L								UV			
No	433	61	373	65	68	118	182	197	237	234	104	96	149	82	-	4	47	89	38	81	313	40
	43.0%	47.3%	42.4%	37.0%	50.3%	45.5%	41.8%	35.8%	51.7%	38.8%	40.0%	66.0%	42.4%	35.1%		28.6%	43.8%	34.3%	31.9%	32.7%	45.6%	54.3%
				d				H		JK									T	T		
Don't know	2	-	2	-	-	0	1	2	-	2	-	-	-	1	-	-	0	1	-	0	1	-
	0.2%		0.2%			0.1%	0.3%	0.3%		0.3%				0.6%			0.5%	0.5%		0.2%	0.2%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V4. Did you shop for any traditional incandescent light bulbs in 2013?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	458	71	388	85	73	113	187	271	188	277	128	53	160	111	-	8	56	117	43	113	315	30
	45.5%	54.8%	44.2%	48.4%	54.1%	43.5%	42.8%	49.3%	41.0%	46.0%	49.3%	36.7%	45.4%	47.2%	-	56.6%	52.7%	45.1%	36.5%	45.5%	45.9%	41.5%
No	517	53	465	87	62	131	237	264	254	314	124	79	188	118	-	6	46	141	72	127	353	38
	51.4%	40.9%	52.9%	49.3%	45.9%	50.5%	54.4%	48.0%	55.5%	52.2%	47.6%	54.5%	53.3%	50.2%	-	43.4%	43.3%	54.4%	60.8%	51.1%	51.5%	51.5%
Don't know	31	5	26	4	-	15	12	15	16	10	8	13	5	6	-	-	4	1	3	9	17	5
	3.1%	4.0%	2.9%	2.3%	-	5.8%	2.7%	2.7%	3.5%	1.7%	3.1%	8.8%	1.3%	2.4%	-	-	3.9%	0.5%	2.8%	3.4%	2.5%	7.0%
Refused	0	0	-	-	-	0	-	0	0	0	-	-	-	0	-	-	-	-	-	-	0	-
	0%	0.3%				0.2%		0%	0%	0.1%				0.2%							0.1%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V4A_1. Did you shop for 100-Watt incandescent bulbs in 2013?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	458	71	388	85	73	113	187	271	188	277	128	53	160	111	-	8	56	117	43	113	315	30
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	490	173	317	90	72	126	202	393	97	294	136	60	176	113	-	9	58	120	57	124	331	35
Yes	193	31	162	33	32	41	87	120	73	125	51	16	66	55	-	3	22	52	16	53	129	11
	42.1%	43.8%	41.8%	38.8%	44.4%	35.9%	46.5%	44.3%	39.0%	45.3%	40.1%	30.5%	41.3%	50.1%		39.4%	38.7%	44.3%	37.6%	47.3%	40.9%	35.6%
No	246	38	208	50	41	66	89	141	104	144	67	34	91	52	-	4	33	62	25	56	173	17
	53.6%	53.8%	53.6%	58.2%	55.4%	58.3%	47.9%	52.3%	55.5%	52.2%	52.6%	63.3%	56.7%	46.5%		49.5%	58.6%	53.4%	58.2%	49.2%	54.8%	57.1%
Don't know	20	2	18	3	0	6	10	9	10	7	9	3	3	4	-	1	2	3	2	4	13	2
	4.3%	2.4%	4.6%	2.9%	0.2%	5.8%	5.6%	3.5%	5.4%	2.5%	7.3%	6.2%	2.0%	3.4%		11.1%	2.7%	2.3%	4.3%	3.5%	4.3%	7.3%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V4A_2. Did you shop for 75-Watt incandescent bulbs in 2013?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	458	71	388	85	73	113	187	271	188	277	128	53	160	111	-	8	56	117	43	113	315	30
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	490	173	317	90	72	126	202	393	97	294	136	60	176	113	-	9	58	120	57	124	331	35
Yes	206	37	169	29	41	51	84	110	96	137	44	25	88	49	-	3	27	60	18	58	135	13
	44.9%	52.0%	43.6%	34.5%	55.6%	45.4%	45.3%	40.6%	51.2%	49.4%	34.6%	46.8%	55.0%	43.9%		32.4%	48.5%	51.6%	41.5%	50.9%	43.0%	42.9%
					d					K												
No	233	32	200	55	31	54	92	151	82	128	77	27	67	56	-	5	27	51	23	51	164	17
	50.8%	45.9%	51.7%	64.3%	42.4%	48.1%	49.5%	55.6%	43.8%	46.3%	60.1%	51.5%	42.0%	50.8%		56.5%	48.8%	43.4%	54.7%	45.4%	52.1%	57.1%
				eg				i			j											
Don't know	20	1	18	1	2	7	10	10	9	12	7	1	5	6	-	1	2	6	2	4	15	-
	4.3%	2.1%	4.7%	1.2%	2.1%	6.5%	5.2%	3.8%	5.0%	4.3%	5.3%	1.7%	3.1%	5.3%		11.1%	2.7%	5.0%	3.8%	3.7%	4.9%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V4A_3. Did you shop for 60 or 40-Watt incandescent bulbs in 2013?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	458	71	388	85	73	113	187	271	188	277	128	53	160	111	-	8	56	117	43	113	315	30
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	490	173	317	90	72	126	202	393	97	294	136	60	176	113	-	9	58	120	57	124	331	35
Yes	345	56	289	59	61	82	143	205	140	208	92	45	118	87	-	7	38	83	34	92	227	26
	75.3%	79.1%	74.6%	68.9%	83.0%	72.7%	76.8%	75.7%	74.7%	75.1%	72.1%	84.1%	73.6%	78.8%	-	88.9%	68.0%	71.2%	78.8%	81.7%	72.1%	84.5%
No	103	14	89	26	12	24	41	60	43	66	29	8	42	22	-	-	17	34	8	20	78	4
	22.4%	19.9%	22.9%	29.9%	16.7%	21.3%	21.9%	22.2%	22.8%	24.0%	22.3%	14.2%	26.0%	19.5%	-	-	30.3%	28.8%	19.6%	17.9%	24.8%	14.7%
Don't know	10	1	10	1	0	7	3	6	5	3	7	1	1	2	-	1	1	-	1	0	10	0
	2.3%	1.0%	2.5%	1.2%	0.2%	6.0%	1.4%	2.1%	2.5%	0.9%	5.5%	1.7%	0.4%	1.7%	-	11.1%	1.7%	-	1.6%	0.3%	3.1%	0.8%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V4B. During 2013, how many traditional incandescent bulbs did you purchase?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not Aware	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
Weighted Total	434	66	368	80	73	105	176	255	179	263	120	51	154	106	-	7	53	112	39	111	295	29				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Unweighted Total	458	160	298	83	70	119	186	368	90	273	127	58	162	107	-	8	53	110	53	118	309	31				
0	10	2	8	-	3	2	4	7	3	10	-	-	7	3	-	-	1	4	3	4	5	1				
	2.2%	2.4%	2.2%		4.5%	1.8%	2.4%	2.7%	1.5%	3.6%			4.5%	2.5%			2.2%	3.6%	8.7%	3.7%	1.5%	3.3%				
1	6	2	4	2	1	0	3	6	-	5	1	-	2	3	-	-	-	2	0	5	0	-				
	1.3%	2.4%	1.1%	2.3%	1.4%	0.2%	1.5%	2.3%		1.9%	0.6%		1.5%	2.5%				2.1%	4.5%	0.3%	1.8%					
2	25	1	24	7	3	5	11	8	17	21	1	3	13	8	-	-	12	4	1	4	19	2				
	5.8%	1.2%	6.6%	8.3%	3.8%	5.0%	6.0%	3.3%	9.4%	8.0%	0.7%	6.2%	8.5%	7.7%			22.0%	4.0%	2.4%	3.2%	6.5%	8.5%				
				b					h				K				RS									
3	8	0	7	2	0	2	4	7	1	3	5	0	-	3	-	-	1	1	-	3	5	-				
	1.8%	0.7%	2.0%	2.1%	0.2%	2.1%	2.1%	2.6%	0.6%	1.0%	4.1%	0.6%		2.5%			2.1%	1.2%		2.7%	1.6%					
4	45	6	39	9	5	10	22	24	21	18	17	10	12	6	-	1	1	9	3	5	34	6				
	10.4%	9.5%	10.5%	11.2%	6.3%	9.3%	12.3%	9.4%	11.7%	6.8%	14.1%	20.1%	7.5%	6.0%		14.4%	1.7%	8.3%	7.4%	4.4%	11.6%	20.2%				
									J											t	t					
5	12	3	9	3	1	2	6	8	4	9	3	-	7	2	-	-	0	7	2	5	6	0				
	2.7%	4.0%	2.5%	3.4%	1.5%	2.3%	3.1%	3.2%	2.0%	3.5%	2.1%		4.7%	2.0%			0.6%	6.4%	4.6%	4.8%	2.1%	1.1%				
6	37	4	33	7	4	12	14	21	16	24	8	5	14	10	-	1	5	12	4	14	23	-				
	8.5%	6.7%	8.8%	8.8%	5.8%	11.1%	7.9%	8.2%	9.0%	9.3%	6.6%	9.0%	9.3%	9.6%		20.8%	9.9%	10.8%	9.9%	12.6%	7.8%					
7	6	2	4	-	2	-	4	2	3	1	2	2	-	1	-	-	-	-	-	2	4	-				
	1.3%	2.8%	1.0%		2.5%		2.1%	0.9%	1.8%	0.5%	1.5%	4.6%		1.3%						1.6%	1.3%					
8	34	4	30	8	5	6	15	20	14	21	11	2	13	8	-	-	4	8	6	4	28	2				
	7.8%	6.2%	8.1%	9.8%	6.3%	5.9%	8.8%	7.8%	7.9%	8.0%	9.3%	3.4%	8.4%	7.8%			6.7%	7.5%	14.5%	3.7%	9.6%	5.8%				
																				t	t					
9	2	-	2	-	-	-	2	2	-	1	1	-	-	1	-	-	-	1	-	1	1	-				
	0.4%		0.5%				1.1%	0.7%		0.4%	0.8%			0.9%				0.8%		0.9%	0.3%					
10	54	6	48	14	8	14	18	32	22	28	21	5	12	16	-	2	6	11	3	8	40	6				
	12.4%	8.5%	13.1%	16.9%	10.9%	13.6%	10.3%	12.7%	12.0%	10.8%	17.2%	9.6%	7.7%	14.7%		28.7%	12.1%	9.7%	7.9%	7.1%	13.5%	21.6%				
12	57	7	50	9	8	16	24	27	29	42	14	1	31	11	-	2	5	28	4	15	38	4				
	13.1%	10.4%	13.5%	10.7%	10.9%	15.5%	13.6%	10.8%	16.4%	16.0%	11.6%	1.2%	20.2%	10.5%		23.5%	8.8%	25.1%	11.0%	13.3%	13.0%	13.4%				
										L	1		n				Qs									
13	0	0	-	-	0	-	-	0	-	-	-	0	-	-	-	-	-	-	-	-	0	-				
	*%	0.3%			0.3%			0.1%				0.4%									0.1%					
15	5	1	4	1	0	0	4	1	4	4	1	-	1	4	-	-	1	0	0	3	2	0				
	1.2%	2.1%	1.0%	0.8%	0.2%	0.2%	2.4%	0.5%	2.2%	1.7%	0.6%		0.4%	3.7%			2.2%	0.1%	0.6%	2.6%	0.7%	1.3%				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V4B. During 2013, how many traditional incandescent bulbs did you purchase?

	RUCC			State			Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
16	6	2	4	-	2	1	3	4	2	2	2	2	-	2	-	-	-	1	0	2	1	4
	1.3%	3.4%	1.0%		2.5%	1.0%	1.7%	1.6%	1.0%	0.6%	2.0%	3.6%		1.5%				1.2%	0.6%	1.4%	0.2%	12.6%
20	41	17	24	4	16	9	12	22	19	33	4	4	22	11	-	-	9	8	6	10	31	-
	9.5%	25.7%	6.6%	5.3%	22.4%	8.7%	6.5%	8.7%	10.7%	12.4%	3.7%	8.1%	14.1%	10.4%			16.5%	6.7%	15.5%	9.4%	10.4%	
24	9	1	8	1	-	2	6	8	1	6	2	0	2	4	-	-	2	1	0	4	4	1
	2.1%	1.0%	2.3%	0.8%		2.2%	3.4%	3.0%	0.8%	2.4%	2.0%	0.4%	1.5%	3.8%			3.3%	0.9%	0.6%	4.1%	1.2%	3.5%
25	0	0	-	0	-	-	-	0	-	-	0	-	-	-	-	-	-	-	-	-	0	-
	0.1%	0.6%		0.5%				0.1%			0.3%										0.1%	
30	17	1	16	1	4	4	8	10	7	8	4	5	7	2	-	-	1	4	1	5	11	1
	3.9%	1.4%	4.4%	1.3%	6.1%	3.5%	4.5%	4.1%	3.8%	3.2%	3.2%	9.7%	4.2%	1.7%			2.1%	3.5%	3.6%	4.1%	3.9%	3.9%
36	0	0	-	0	-	-	-	0	-	0	-	-	0	-	-	-	-	0	-	0	-	-
	0.1%	0.4%		0.3%				0.1%		0.1%			0.2%					0.2%		0.2%		
40	8	1	7	5	-	1	2	4	4	4	0	4	3	1	-	-	1	2	0	2	5	1
	1.8%	0.8%	2.0%	5.8%		1.4%	0.9%	1.6%	2.0%	1.4%	0.3%	7.2%	1.7%	1.0%			2.1%	2.2%	0.6%	1.6%	1.8%	2.4%
50	10	2	9	1	1	5	3	5	5	3	6	1	0	3	-	-	0	1	-	4	6	-
	2.4%	2.4%	2.4%	1.3%	1.8%	4.4%	1.8%	2.0%	2.9%	1.1%	5.0%	2.6%	0.3%	2.4%			0.4%	0.7%		3.8%	2.1%	
60	1	-	1	-	-	1	-	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-
	0.1%		0.2%			0.5%		0.2%			0.5%									0.5%		
Don't know/No Answer	39	4	35	7	9	12	11	32	7	19	16	5	8	8	-	1	4	5	3	14	25	1
	9.1%	6.2%	9.6%	9.4%	12.4%	11.1%	6.4%	12.6%	4.1%	7.1%	13.4%	9.1%	5.4%	7.5%		12.5%	7.2%	4.8%	7.7%	12.5%	8.4%	2.4%
Refused	3	1	2	1	-	-	2	2	1	0	1	2	-	-	-	-	-	-	-	2	1	-
	0.6%	1.0%	0.6%	1.0%			1.1%	0.9%	0.3%	0.1%	0.5%	4.1%								1.4%	0.4%	
Mean	11.97	13.26	11.73	11.30	13.20	13.09	11.14	11.97	11.96	11.26	12.53	14.57	11.14	11.45	-	8.60	10.89	10.73	9.98	13.65	11.50	10.70
Standard Deviation	10.48	9.69	10.62	10.76	9.69	12.11	9.61	10.51	10.48	9.12	11.92	13.35	8.74	9.76		3.25	9.20	8.62	7.97	12.17	10.00	8.33
Standard Error	0.72	1.68	0.80	1.83	1.89	1.77	0.91	0.74	1.35	0.80	1.56	2.77	0.99	1.37		1.50	2.03	1.12	1.36	1.54	0.86	1.91

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

V4B-Rebased. During 2013, how many traditional incandescent bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0	10	2	8	-	3	2	4	7	3	10	-	-	7	3	-	-	1	4	3	4	5	1
	0.9%	1.2%	0.9%		2.4%	0.7%	1.0%	1.3%	0.6%	1.6%			1.9%	1.1%			1.1%	1.5%	2.9%	1.6%	0.7%	1.3%
1	6	2	4	2	1	0	3	6	-	5	1	-	2	3	-	-	-	2	0	0	5	-
	0.6%	1.2%	0.5%	1.1%	0.7%	0.1%	0.6%	1.1%		0.8%	0.3%		0.7%	1.1%				0.9%	1.5%	0.1%	0.8%	
2	25	1	24	7	3	5	11	8	17	21	1	3	13	8	-	-	12	4	1	4	19	2
	2.5%	0.6%	2.8%	3.8%	2.1%	2.0%	2.4%	1.5%	3.7%	3.5%	0.3%	2.2%	3.7%	3.5%			10.9%	1.7%	0.8%	1.4%	2.8%	3.3%
				b						K							RS					
3	8	0	7	2	0	2	4	7	1	3	5	0	-	3	-	-	1	1	-	3	5	-
	0.8%	0.4%	0.8%	0.9%	0.1%	0.8%	0.9%	1.2%	0.2%	0.4%	1.9%	0.2%		1.1%			1.0%	0.5%		1.2%	0.7%	
4	45	6	39	9	5	10	22	24	21	18	17	10	12	6	-	1	1	9	3	5	34	6
	4.5%	4.9%	4.4%	5.1%	3.4%	3.8%	5.0%	4.4%	4.6%	3.0%	6.5%	7.0%	3.3%	2.7%		7.2%	0.8%	3.6%	2.5%	2.0%	5.0%	7.9%
											j										t	t
5	12	3	9	3	1	2	6	8	4	9	3	-	7	2	-	-	0	7	2	5	6	0
	1.2%	2.0%	1.0%	1.6%	0.8%	0.9%	1.3%	1.5%	0.8%	1.5%	1.0%		2.1%	0.9%			0.3%	2.8%	1.5%	2.2%	0.9%	0.4%
6	37	4	33	7	4	12	14	21	16	24	8	5	14	10	-	1	5	12	4	14	23	-
	3.7%	3.5%	3.7%	4.0%	3.1%	4.5%	3.2%	3.8%	3.5%	4.1%	3.1%	3.2%	4.0%	4.3%		10.5%	4.9%	4.7%	3.3%	5.6%	3.4%	
7	6	2	4	-	2	-	4	2	3	1	2	2	-	1	-	-	-	-	-	2	4	-
	0.6%	1.4%	0.4%		1.3%		0.9%	0.4%	0.7%	0.2%	0.7%	1.6%		0.6%						0.7%	0.5%	
8	34	4	30	8	5	6	15	20	14	21	11	2	13	8	-	-	4	8	6	4	28	2
	3.4%	3.2%	3.4%	4.4%	3.4%	2.4%	3.5%	3.6%	3.1%	3.5%	4.3%	1.2%	3.7%	3.5%			3.3%	3.2%	4.8%	1.6%	4.1%	2.3%
9	2	-	2	-	-	-	2	2	-	1	1	-	-	1	-	-	-	1	-	1	1	-
	0.2%		0.2%				0.4%	0.3%		0.2%	0.4%		0.4%					0.4%		0.4%	0.1%	
10	54	6	48	14	8	14	18	32	22	28	21	5	12	16	-	2	6	11	3	8	40	6
	5.4%	4.3%	5.5%	7.7%	5.9%	5.5%	4.2%	5.9%	4.7%	4.7%	7.9%	3.4%	3.3%	6.6%		14.4%	6.0%	4.2%	2.6%	3.2%	5.8%	8.5%
																rs						
12	57	7	50	9	8	16	24	27	29	42	14	1	31	11	-	2	5	28	4	15	38	4
	5.6%	5.4%	5.7%	4.9%	5.9%	6.3%	5.5%	5.0%	6.4%	7.0%	5.4%	0.4%	8.8%	4.7%		11.8%	4.4%	10.9%	3.7%	5.9%	5.6%	5.3%
										L	1							qs				
13	0	0	-	-	0	-	-	0	-	-	-	0	-	-	-	-	-	-	-	-	0	-
	*%	0.2%			0.2%			*%				0.1%									*%	
15	5	1	4	1	0	0	4	1	4	4	1	-	1	4	-	-	1	0	0	3	2	0
	0.5%	1.1%	0.4%	0.4%	0.1%	0.1%	1.0%	0.2%	0.8%	0.7%	0.3%		0.2%	1.6%			1.1%	0.1%	0.2%	1.2%	0.3%	0.5%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V4B-Rebased. During 2013, how many traditional incandescent bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
16	6	2	4	-	2	1	3	4	2	2	2	2	-	2	-	-	-	1	0	2	1	4
	0.6%	1.7%	0.4%		1.3%	0.4%	0.7%	0.7%	0.4%	0.3%	0.9%	1.3%		0.7%				0.5%	0.2%	0.6%	0.1%	4.9%
20	41	17	24	4	16	9	12	22	19	33	4	4	22	11	-	-	9	8	6	10	31	-
	4.1%	13.2%	2.8%	2.4%	12.1%	3.5%	2.6%	4.0%	4.2%	5.4%	1.7%	2.8%	6.2%	4.7%			8.2%	2.9%	5.2%	4.2%	4.5%	
24	9	1	8	1	-	2	6	8	1	6	2	0	2	4	-	-	2	1	0	4	4	1
	0.9%	0.5%	0.9%	0.4%		0.9%	1.4%	1.4%	0.3%	1.0%	0.9%	0.2%	0.6%	1.7%			1.7%	0.4%	0.2%	1.8%	0.5%	1.4%
25	0	0	-	0	-	-	-	0	-	-	0	-	-	-	-	-	-	-	-	-	0	-
	*%	0.3%		0.2%				0.1%			0.1%										0.1%	
30	17	1	16	1	4	4	8	10	7	8	4	5	7	2	-	-	1	4	1	5	11	1
	1.7%	0.7%	1.8%	0.6%	3.3%	1.4%	1.8%	1.9%	1.5%	1.4%	1.5%	3.4%	1.8%	0.8%			1.1%	1.5%	1.2%	1.8%	1.7%	1.5%
36	0	0	-	0	-	-	-	0	-	0	-	-	0	-	-	-	-	0	-	0	-	-
	*%	0.2%		0.1%				*%		*%			0.1%					0.1%		0.1%		
40	8	1	7	5	-	1	2	4	4	4	0	4	3	1	-	-	1	2	0	2	5	1
	0.8%	0.4%	0.8%	2.6%		0.6%	0.4%	0.7%	0.8%	0.6%	0.1%	2.5%	0.8%	0.5%			1.0%	0.9%	0.2%	0.7%	0.8%	0.9%
50	10	2	9	1	1	5	3	5	5	3	6	1	0	3	-	-	0	1	-	4	6	-
	1.0%	1.2%	1.0%	0.6%	1.0%	1.8%	0.7%	0.9%	1.1%	0.5%	2.3%	0.9%	0.1%	1.1%			0.2%	0.3%		1.7%	0.9%	
60	1	-	1	-	-	1	-	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-
	0.1%		0.1%			0.2%		0.1%			0.2%									0.2%		
None	573	63	510	96	62	154	259	294	278	338	140	94	198	129	-	7	53	146	78	138	391	44
	56.9%	48.6%	58.1%	54.6%	46.1%	59.5%	59.5%	53.6%	60.8%	56.2%	53.8%	64.9%	56.3%	55.0%		49.7%	50.3%	56.6%	66.7%	55.5%	57.0%	60.8%
Don't know/No Answer	39	4	35	7	9	12	11	32	7	19	16	5	8	8	-	1	4	5	3	14	25	1
	3.9%	3.2%	4.0%	4.2%	6.7%	4.5%	2.6%	5.8%	1.6%	3.1%	6.2%	3.2%	2.3%	3.4%		6.3%	3.6%	2.1%	2.6%	5.6%	3.6%	0.9%
Refused	3	1	2	1	-	-	2	2	1	0	1	2	-	-	-	-	-	-	-	2	1	-
	0.3%	0.5%	0.2%	0.5%			0.4%	0.4%	0.1%	*%	0.2%	1.4%								0.6%	0.2%	
Mean	4.87	6.56	4.61	4.82	6.67	4.93	4.31	5.13	4.56	4.72	5.32	4.66	4.71	4.94	-	4.04	5.21	4.53	3.15	5.58	4.69	4.13
Standard Deviation	8.90	9.51	8.78	8.97	9.54	9.76	8.06	9.08	8.69	8.11	9.93	10.13	7.91	8.55		4.94	8.36	7.71	6.43	10.27	8.53	7.33
Standard Error	0.39	0.98	0.42	1.01	1.21	0.87	0.50	0.42	0.67	0.45	0.90	1.17	0.57	0.77		1.38	1.18	0.65	0.72	0.85	0.47	1.04

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V5. Were you able to purchase all of the types of traditional incandescent bulbs you were shopping for?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	434	66	368	80	73	105	176	255	179	263	120	51	154	106	-	7	53	112	39	111	295	29
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	458	160	298	83	70	119	186	368	90	273	127	58	162	107	-	8	53	110	53	118	309	31
Yes	371	56	315	72	60	95	144	209	161	224	101	46	127	92	-	5	48	92	30	96	253	21
	85.3%	84.1%	85.5%	90.0%	81.9%	90.4%	81.6%	82.1%	89.9%	84.9%	84.0%	90.6%	82.9%	87.5%		71.3%	91.3%	81.5%	76.2%	87.3%	85.8%	73.1%
No	59	7	52	8	10	10	30	40	18	39	16	3	26	13	-	2	5	20	9	12	38	8
	13.5%	10.7%	14.0%	9.7%	14.1%	9.6%	17.3%	15.9%	10.1%	14.8%	13.6%	6.7%	16.7%	12.5%		28.7%	8.7%	18.1%	23.2%	11.2%	13.0%	26.9%
Don't know	5	3	2	0	3	-	2	5	-	1	3	1	1	-	-	-	-	0	0	2	4	-
	1.2%	4.9%	0.5%	0.2%	4.0%		1.1%	2.0%		0.3%	2.4%	2.7%	0.5%					0.4%	0.6%	1.4%	1.2%	
Refused	0	0	-	0	-	-	-	0	-	0	-	-	-	-	-	-	-	-	-	0	-	-
	*%	0.2%		0.2%				0.1%		0.1%										0.1%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V7. What type of light bulb did you end up purchasing instead?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	59	7	52	8	10	10	30	40	18	39	16	3	26	13	-	2	5	20	9	12	38	8
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	72	24	48	13	10	14	35	60	12	41	22	9	24	17	-	1	6	17	12	15	51	6
Incandescent	19	3	16	2	1	4	13	11	7	11	6	1	7	4	-	2	1	4	3	3	11	4
	32.0%	37.0%	31.4%	22.2%	9.6%	34.8%	41.2%	28.3%	40.3%	29.4%	39.0%	29.0%	28.2%	31.6%	100.0%	16.9%	18.0%	28.1%	25.8%	29.3%	56.0%	
CFL	17	3	14	1	4	2	10	11	6	14	1	1	13	1	-	-	-	8	5	5	11	0
	28.7%	36.7%	27.6%	13.5%	36.3%	21.1%	32.6%	26.6%	33.5%	36.4%	8.1%	40.5%	51.4%	7.2%				41.7%	51.7%	43.1%	29.2%	2.8%
LED	6	-	6	-	2	-	4	2	4	5	0	-	1	4	-	-	-	4	2	4	2	-
	9.8%		11.2%		21.2%		11.8%	5.4%	19.7%	14.0%	1.9%		5.4%	30.7%				17.6%	20.7%	28.9%	5.7%	
Did not purchase any light bulbs	5	1	5	1	1	1	2	5	-	2	3	0	2	0	-	-	2	0	-	1	3	1
	9.0%	9.5%	9.0%	8.7%	11.0%	13.0%	7.1%	13.1%		4.9%	19.4%	6.7%	6.1%	2.4%			34.4%	1.6%		8.8%	7.3%	18.1%
Halogen	2	0	2	0	1	1	-	2	-	0	2	-	0	-	-	-	-	0	-	-	2	-
	3.5%	5.2%	3.3%	4.7%	11.0%	5.6%		5.1%		0.9%	10.4%		1.4%					4.0%			5.4%	
Energy Efficient incandescent / halogen bulbs	1	0	0	0	-	-	0	0	0	0	0	-	-	0	-	-	-	-	-	-	1	-
	1.1%	4.3%	0.6%	3.9%			1.0%	0.8%	1.7%	0.8%	1.9%			2.3%							1.6%	
Other (SPECIFY)	2	-	2	-	-	1	0	2	-	1	0	-	-	1	-	-	-	1	-	0	1	-
	2.7%		3.1%			10.9%	1.6%	3.9%		2.8%	3.0%			8.3%				5.4%		4.0%	2.9%	
Don't know	10	1	9	3	1	1	4	8	2	7	3	0	5	2	-	-	2	3	1	0	8	2
	17.1%	12.4%	17.7%	42.9%	11.0%	14.7%	13.4%	19.1%	12.5%	17.8%	18.2%	3.9%	18.0%	17.5%			48.7%	15.8%	14.7%	3.1%	20.4%	23.1%
Refused	1	-	1	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1	-
	1.2%		1.3%	8.7%				1.7%					19.9%								1.8%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

V9. When traditional incandescent light bulbs are no longer available, which one of the following things are you most likely to do: switch to a new type of light bulb, keep using traditional light bulbs but switch to a lower wattage, or something else?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Switch to a new type of light bulb	611	69	543	117	75	157	262	304	307	405	127	80	262	130	-	7	68	187	80	173	409	29
	60.7%	53.3%	61.8%	66.4%	55.6%	60.4%	60.2%	55.4%	67.1%	67.2%	48.7%	55.2%	74.4%	55.5%		46.4%	64.0%	72.2%	67.7%	69.7%	59.7%	39.6%
									H	KL			N					p	UV	V		
Keep using traditional light bulbs but switch to a lower ...	217	30	187	35	23	60	99	123	94	100	84	33	54	45	-	4	16	39	18	45	146	27
	21.6%	23.6%	21.3%	19.7%	16.9%	23.3%	22.7%	22.5%	20.5%	16.6%	32.2%	23.1%	15.4%	19.2%		26.3%	15.3%	15.2%	15.0%	18.0%	21.3%	36.5%
											J										TU	
Something else (SPECIFY)	103	19	84	13	20	25	46	60	43	69	22	12	31	38	-	2	12	26	18	20	73	10
	10.2%	14.9%	9.5%	7.3%	14.4%	9.5%	10.6%	10.9%	9.4%	11.5%	8.3%	8.2%	8.8%	16.1%		11.8%	11.4%	10.2%	15.4%	7.9%	10.7%	13.5%
														M								
Don't know	85	10	74	13	15	21	36	64	21	33	31	21	10	22	-	2	8	13	3	16	58	11
	8.4%	8.0%	8.5%	7.2%	11.1%	8.2%	8.2%	11.7%	4.5%	5.5%	11.9%	14.2%	2.8%	9.4%		15.4%	7.4%	5.1%	2.3%	6.3%	8.5%	14.8%
								I			J	j		M								
Refused	8	2	7	-	3	2	4	6	2	5	2	1	3	2	-	-	2	1	2	3	4	1
	0.8%	1.3%	0.8%		1.9%	0.8%	0.8%	1.1%	0.4%	0.9%	0.7%	0.8%	1.0%	0.9%			1.9%	0.4%	1.9%	1.3%	0.6%	1.5%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

V10. Which type of light bulb are you most likely to switch to?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	611	69	543	117	75	157	262	304	307	405	127	80	262	130	-	7	68	187	80	173	409	29
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	576	180	396	101	78	153	244	428	148	384	119	73	249	123	-	10	67	175	86	170	376	30
CFL / Fluorescent	225	25	200	38	33	53	101	118	107	187	20	18	150	29	-	3	24	95	45	49	164	12
	36.8%	36.2%	36.9%	32.7%	43.2%	34.0%	38.5%	38.7%	34.9%	46.3%	15.5%	22.5%	57.3%	22.5%		51.7%	34.8%	51.0%	56.8%	28.2%	40.2%	40.9%
										KL			N				q	Q		T		
LED	134	15	119	24	10	27	74	77	57	108	20	6	40	67	-	1	21	49	21	95	36	3
	21.9%	22.3%	21.9%	20.3%	13.1%	17.1%	28.1%	25.4%	18.5%	26.7%	15.8%	7.5%	15.3%	51.7%		13.6%	30.7%	26.5%	26.0%	54.9%	8.8%	10.1%
										kL			M						UV			
Energy Efficient incandescent / halogen	66	8	58	15	6	24	21	25	41	32	25	9	28	3	-	-	10	14	4	9	54	4
	10.8%	11.2%	10.8%	12.5%	8.3%	15.2%	8.2%	8.2%	13.4%	7.8%	20.0%	11.2%	10.8%	2.6%			14.3%	7.3%	4.9%	5.0%	13.1%	13.2%
										J			N				s			T		
Halogen	11	1	10	1	1	5	5	7	5	2	4	5	2	0	-	-	-	2	-	3	8	-
	1.8%	1.1%	1.9%	0.6%	1.7%	2.9%	1.8%	2.2%	1.5%	0.5%	3.4%	6.2%	0.6%	0.2%			1.0%		1.8%	2.0%		
Other (SPECIFY)	23	1	22	2	0	11	9	16	7	8	6	10	4	3	-	-	1	1	4	2	21	-
	3.8%	1.7%	4.1%	1.8%	0.6%	7.2%	3.5%	5.3%	2.2%	1.9%	4.6%	12.2%	1.6%	2.5%			0.8%	0.4%	4.7%	1.1%	5.2%	
								i				J								T		
Don't know	150	19	131	38	25	37	51	60	90	67	51	32	37	26	-	2	13	25	6	16	124	10
	24.5%	27.3%	24.2%	32.1%	32.8%	23.3%	19.5%	19.6%	29.5%	16.5%	40.3%	40.1%	14.0%	20.2%		34.7%	19.4%	13.4%	7.7%	9.1%	30.4%	34.0%
				g	g				H		J	J				s				T	T	
Refused	2	0	2	-	0	0	1	2	-	1	0	0	1	0	-	-	-	1	-	-	1	1
	0.3%	0.3%	0.3%		0.3%	0.2%	0.5%	0.6%		0.3%	0.3%	0.3%	0.4%	0.2%				0.5%			0.3%	1.8%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

EE1A. Have you ever heard of energy-efficient incandescent light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Rural	Urban		ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	459	70	389	90	53	118	198	248	211	256	145	57	151	102	-	5	57	106	43	106	331	22
	45.6%	54.6%	44.3%	50.9%	39.4%	45.5%	45.4%	45.1%	46.2%	42.6%	55.9%	39.4%	43.0%	43.5%		36.5%	54.1%	41.0%	36.9%	42.7%	48.2%	30.8%
			c								JL						s				V	
No	490	54	437	72	72	130	216	273	217	312	93	86	180	124	-	9	44	135	67	131	317	42
	48.7%	41.7%	49.7%	41.0%	53.1%	50.2%	49.6%	49.7%	47.5%	51.8%	35.7%	59.2%	51.1%	52.9%		63.5%	41.3%	52.1%	57.4%	52.8%	46.2%	57.8%
										K		K							q			
Don't know	58	5	53	14	10	11	22	29	29	34	22	2	21	9	-	-	5	18	7	11	38	8
	5.7%	3.7%	6.0%	8.1%	7.5%	4.3%	5.1%	5.2%	6.4%	5.6%	8.4%	1.4%	5.9%	3.6%			4.6%	6.9%	5.7%	4.6%	5.5%	11.5%
											L											

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

EE1B. Energy-efficient incandescent light bulbs look like traditional incandescent bulbs and give off the same amount of light using less energy. Have you heard of these more efficient incandescent bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware	Not	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	548	58	490	87	82	141	238	302	246	345	115	88	201	133	-	9	49	153	74	142	355	51
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	542	168	374	86	72	145	239	420	122	344	107	91	211	119	-	12	52	148	82	142	344	56
Yes	97	15	82	21	19	23	34	38	59	59	26	11	32	25	-	3	5	32	3	22	71	4
	17.7%	25.3%	16.7%	23.9%	23.4%	16.3%	14.2%	12.5%	24.0%	17.1%	23.1%	12.9%	16.1%	18.7%		36.1%	10.7%	21.0%	4.6%	15.8%	19.9%	7.3%
				g						H						S		S			V	
No	434	42	392	66	62	113	194	252	182	277	82	75	162	105	-	6	42	117	69	117	273	44
	79.3%	72.1%	80.1%	75.7%	75.4%	79.9%	81.6%	83.6%	74.0%	80.2%	71.8%	85.3%	80.7%	79.4%		63.9%	85.5%	76.8%	93.2%	81.9%	77.0%	87.8%
								I			k							PR			u	
Don't know	13	2	11	0	1	1	10	12	1	9	2	2	6	2	-	-	2	3	2	3	7	2
	2.3%	2.6%	2.3%	0.4%	1.2%	0.9%	4.3%	3.9%	0.4%	2.7%	1.6%	1.8%	3.2%	1.9%			3.9%	2.3%	2.2%	2.3%	2.0%	4.9%
				d				I														
Refused	4	-	4	-	-	4	-	-	4	-	4	-	-	-	-	-	-	-	-	-	4	-
	0.7%		0.8%			2.8%			1.6%		3.5%										1.1%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

EE2. Have you ever purchased any energy-efficient incandescent light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	556	85	471	111	72	141	231	285	270	315	172	69	184	127	-	8	63	138	47	128	401	26
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	546	184	362	99	76	142	229	411	135	313	158	75	177	131	-	11	63	129	60	132	378	36
Yes	221	34	188	42	35	59	85	111	110	128	60	33	95	30	-	4	28	59	18	47	162	12
	39.8%	39.5%	39.8%	37.6%	48.4%	41.9%	36.8%	38.9%	40.7%	40.6%	35.0%	48.2%	51.8%	23.4%		43.2%	44.2%	42.5%	39.4%	36.6%	40.3%	47.8%
													N									
No	273	42	231	51	30	70	122	155	118	153	89	31	73	78	-	5	29	69	22	62	199	12
	49.2%	49.3%	49.2%	46.2%	42.0%	49.4%	52.8%	54.4%	43.7%	48.6%	51.8%	45.6%	39.8%	61.8%		56.8%	46.7%	50.3%	46.3%	48.6%	49.6%	45.8%
								i					M									
Don't know	61	9	52	18	7	12	24	19	42	34	23	4	15	19	-	-	6	10	7	19	41	2
	11.0%	11.1%	11.0%	16.2%	9.7%	8.6%	10.4%	6.6%	15.6%	10.8%	13.2%	6.2%	8.4%	14.8%			9.1%	7.2%	14.3%	14.7%	10.1%	6.4%
									H													

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

EE2-Rebase. Have you ever purchased any energy-efficient incandescent light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	221	34	188	42	35	59	85	111	110	128	60	33	95	30	-	4	28	59	18	47	162	12
	22.0%	26.1%	21.4%	23.6%	25.9%	22.8%	19.6%	20.2%	24.1%	21.3%	23.1%	22.7%	27.0%	12.7%		25.7%	26.1%	22.7%	15.7%	18.9%	23.6%	17.1%
													N									
No	725	86	639	117	93	188	326	419	305	440	177	108	242	186	-	11	73	190	93	182	484	59
	72.0%	66.5%	72.8%	66.3%	68.9%	72.5%	74.9%	76.3%	66.7%	73.0%	68.2%	74.3%	68.6%	79.3%		74.3%	68.5%	73.5%	78.6%	73.4%	70.5%	80.6%
								I					M									
Don't know	61	9	52	18	7	12	24	19	42	34	23	4	15	19	-	-	6	10	7	19	41	2
	6.1%	7.4%	5.9%	10.1%	5.2%	4.7%	5.5%	3.5%	9.2%	5.7%	8.7%	3.0%	4.4%	8.0%			5.4%	3.8%	5.7%	7.6%	5.9%	2.3%
								H					1							v		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

EEL-EEI2. Aware of or purchase energy-efficient incandescent light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Unaided Aware	459	70	389	90	53	118	198	248	211	256	145	57	151	102	-	5	57	106	43	106	331	22
	45.6%	54.6%	44.3%	50.9%	39.4%	45.5%	45.4%	45.1%	46.2%	42.6%	55.9%	39.4%	43.0%	43.5%		36.5%	54.1%	41.0%	36.9%	42.7%	48.2%	30.8%
			c								JL						s				V	
Aided Aware	97	15	82	21	19	23	34	38	59	59	26	11	32	25	-	3	5	32	3	22	71	4
	9.6%	11.5%	9.3%	11.7%	14.2%	8.9%	7.7%	6.8%	12.9%	9.8%	10.2%	7.8%	9.2%	10.6%		22.9%	4.9%	12.4%	2.9%	9.0%	10.3%	5.1%
									H							qS		qS				
Not Aware	451	44	408	66	63	118	204	264	187	286	88	77	168	108	-	6	44	121	71	120	284	47
	44.8%	33.9%	46.4%	37.4%	46.4%	45.6%	46.9%	48.1%	40.9%	47.6%	33.9%	52.8%	47.8%	45.9%		40.6%	41.0%	46.6%	60.2%	48.3%	41.5%	64.2%
			B							K		K							QR		TU	
Purchaser	221	34	188	42	35	59	85	111	110	128	60	33	95	30	-	4	28	59	18	47	162	12
	22.0%	26.1%	21.4%	23.6%	25.9%	22.8%	19.6%	20.2%	24.1%	21.3%	23.1%	22.7%	27.0%	12.7%		25.7%	26.1%	22.7%	15.7%	18.9%	23.6%	17.1%
													N									
Aware Non-Purchaser	335	51	283	69	37	82	146	174	160	187	112	36	89	97	-	5	35	79	28	81	240	14
	33.2%	40.0%	32.2%	39.1%	27.7%	31.6%	33.5%	31.7%	35.0%	31.1%	42.9%	24.5%	25.1%	41.4%		33.7%	32.9%	30.7%	24.1%	32.8%	34.9%	18.7%
										JL			M							V	V	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

EE3. During 2013, how many energy-efficient incandescent bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not Aware	Purch	No-Purch	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware	Not Aware	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	
Weighted Total	221	34	188	42	35	59	85	111	110	128	60	33	95	30	-	4	28	59	18	47	162	12	
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Unweighted Total	214	71	143	37	34	57	86	158	56	124	59	31	82	39	-	4	30	48	23	52	146	16	
0	29	3	26	1	5	6	17	22	8	23	6	0	11	11	-	-	5	8	6	10	18	2	
	13.3%	8.7%	14.1%	3.5%	14.1%	10.8%	19.4%	19.6%	6.9%	17.7%	10.6%	0.9%	11.7%	36.7%			16.9%	14.3%	33.0%	20.7%	11.1%	13.3%	
								I		L			M										
1	9	1	8	1	1	0	6	6	2	6	2	1	5	1	-	-	1	3	1	1	7	-	
	4.0%	1.6%	4.4%	2.5%	3.7%	0.7%	7.1%	5.8%	2.1%	4.6%	2.5%	4.2%	5.2%	3.2%			2.4%	4.9%	7.5%	3.1%	4.5%		
2	34	3	31	7	5	11	11	10	24	25	5	4	21	3	-	-	4	15	4	7	25	1	
	15.2%	8.3%	16.4%	17.4%	12.9%	18.7%	12.6%	8.7%	21.7%	19.3%	7.8%	12.4%	22.4%	11.4%			13.3%	25.0%	19.9%	15.4%	15.4%	11.1%	
								h															
3	6	1	5	3	0	3	-	6	-	1	3	2	1	-	-	-	0	1	-	0	6	-	
	2.7%	3.2%	2.6%	7.1%	0.9%	4.5%		5.4%		0.8%	4.2%	7.2%	1.1%				0.6%	1.5%		0.3%	3.6%		
4	29	6	23	5	9	7	9	16	13	17	12	1	13	3	-	1	4	5	1	7	21	1	
	13.2%	18.6%	12.3%	11.8%	24.8%	11.2%	10.5%	14.5%	11.9%	12.9%	19.7%	2.7%	13.5%	8.7%		40.2%	15.9%	7.8%	5.2%	15.7%	12.7%	10.7%	
											1												
5	16	3	13	2	4	4	5	8	9	2	9	5	2	-	-	-	-	-	-	2	2	10	4
	7.4%	9.6%	7.1%	5.9%	12.7%	7.5%	6.0%	6.9%	8.0%	1.4%	15.6%	16.1%	1.8%							9.5%	3.8%	6.5%	33.9%
											J	j										TU	
6	24	2	22	5	2	5	12	12	12	10	11	3	6	2	-	1	3	5	-	2	20	2	
	10.7%	6.0%	11.5%	13.2%	5.4%	8.1%	13.5%	10.8%	10.6%	7.8%	18.1%	8.5%	6.5%	8.1%		24.6%	11.8%	8.9%		4.5%	12.3%	13.0%	
7	2	-	2	-	-	1	1	2	-	2	-	-	1	1	-	-	1	-	-	1	1	-	
	1.1%		1.3%			1.9%	1.6%	2.2%		1.9%			1.2%	4.7%			4.0%			2.3%	0.9%		
8	12	7	5	-	7	2	3	4	8	11	1	1	9	1	-	-	8	2	1	3	9	-	
	5.4%	21.4%	2.5%		19.3%	3.5%	3.7%	3.9%	6.9%	8.2%	1.5%	1.7%	9.6%	4.8%			27.7%	3.1%	5.2%	5.8%	5.7%		
											C						RS						
10	8	1	7	4	0	3	0	3	4	1	1	6	0	0	-	-	1	-	-	1	6	-	
	3.4%	2.9%	3.5%	10.3%	1.1%	4.3%	0.4%	3.0%	3.8%	0.5%	1.8%	17.6%	0.3%	1.1%			2.2%			2.3%	4.0%		
											Jk												
12	6	2	4	4	-	0	2	5	1	5	0	1	4	1	-	0	-	5	-	0	6	-	
	2.7%	5.4%	2.2%	9.5%		0.8%	1.9%	4.2%	1.3%	3.9%	0.5%	2.3%	3.8%	4.5%		10.6%		7.8%		0.8%	3.5%		
15	3	0	3	-	-	1	2	3	0	3	0	-	2	1	-	-	-	1	1	1	2	-	
	1.5%	0.7%	1.6%			1.9%	2.5%	2.7%	0.2%	2.1%	0.8%		1.7%	3.7%				2.4%	7.2%	1.5%	1.5%		
16	1	-	1	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-	
	0.6%		0.7%				1.6%	1.3%			2.3%									3.0%			

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

EE3. During 2013, how many energy-efficient incandescent bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	
20	15 6.6%	1 3.7%	13 7.1%	4 8.8%	-	5 8.3%	6 7.0%	2 1.9%	12 11.3%	6 4.4%	5 7.8%	4 13.0%	4 4.4%	1 4.7%	-	-	1 2.1%	-	1 3.8%	1 3.1%	13 7.7%	1 4.7%	
24	4 1.8%	-	4 2.1%	-	-	4 6.7%	-	-	4 3.6%	4 3.1%	-	-	4 4.2%	-	-	-	-	4 6.8%	-	-	4 2.5%	-	
30	1 0.6%	1 4.1%	-	1 3.3%	-	-	-	-	1 1.3%	-	-	1 4.2%	-	-	-	-	-	-	-	-	1 0.9%	-	
36	0 0.1%	0 0.6%	-	-	0 0.6%	-	-	0 0.2%	-	0 0.2%	-	-	0 0.2%	-	-	-	-	-	0 1.2%	0 0.5%	-	-	
40	0 0.1%	0 0.6%	-	-	0 0.6%	-	-	0 0.2%	-	0 0.2%	-	-	0 0.2%	-	-	-	-	0 0.4%	-	0 0.5%	-	-	
50	3 1.3%	-	3 1.6%	-	-	-	3 3.4%	-	3 2.6%	-	3 4.8%	-	-	-	-	-	-	-	-	3 6.2%	-	-	
Don't know	18 8.0%	2 4.6%	16 8.6%	2 5.1%	1 3.8%	7 11.3%	8 8.8%	9 8.1%	9 7.8%	14 11.0%	1 1.9%	2 7.2%	12 12.2%	3 8.5%	-	1 24.6%	1 3.0%	10 17.1%	1 7.5%	5 10.4%	12 7.3%	1 7.8%	
Refused	1 0.3%	-	1 0.4%	1 1.6%	-	-	-	1 0.6%	-	-	-	-	1 2.1%	-	-	-	-	-	-	-	-	-	1 5.4%
Mean	6.69	7.43	6.55	7.59	4.57	7.11	6.87	4.78	8.58	5.49	7.94	8.77	5.92	4.31	-	5.78	4.94	5.73	4.15	8.00	6.46	4.69	
Standard Deviation	8.24	7.50	8.39	7.04	4.72	7.39	10.27	5.04	10.19	6.44	10.96	7.60	6.77	5.61	-	3.36	3.89	7.18	6.62	13.02	6.57	4.38	
Standard Error	0.82	1.83	0.91	1.77	1.26	1.48	1.43	0.53	1.71	0.84	1.99	2.07	1.11	1.15	-	2.15	1.16	1.40	1.95	2.44	0.79	1.57	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

EE3-Rebase. During 2013, how many energy-efficient incandescent bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0/None	815	98	717	136	105	207	367	460	355	496	206	112	268	216	-	11	83	208	105	211	542	62
	80.9%	76.1%	81.7%	77.3%	77.8%	79.6%	84.2%	83.7%	77.6%	82.5%	79.3%	77.5%	76.1%	92.0%		74.3%	78.3%	80.6%	89.5%	85.0%	79.0%	85.2%
1	9	1	8	1	1	0	6	6	2	6	2	1	5	1	-	-	1	3	1	1	7	-
	0.9%	0.4%	0.9%	0.6%	1.0%	0.1%	1.4%	1.2%	0.5%	1.0%	0.6%	1.0%	1.4%	0.4%			0.6%	1.1%	1.2%	0.6%	1.1%	
2	34	3	31	7	5	11	11	10	24	25	5	4	21	3	-	-	4	15	4	7	25	1
	3.3%	2.2%	3.5%	4.1%	3.3%	4.3%	2.5%	1.8%	5.2%	4.1%	1.8%	2.8%	6.1%	1.4%			3.5%	5.7%	3.1%	2.9%	3.6%	1.9%
3	6	1	5	3	0	3	-	6	-	1	3	2	1	-	-	-	0	1	-	0	6	-
	0.6%	0.8%	0.6%	1.7%	0.2%	1.0%		1.1%		0.2%	1.0%	1.6%	0.3%				0.2%	0.3%		0.1%	0.8%	
4	29	6	23	5	9	7	9	16	13	17	12	1	13	3	-	1	4	5	1	7	21	1
	2.9%	4.9%	2.6%	2.8%	6.4%	2.6%	2.1%	2.9%	2.9%	2.7%	4.5%	0.6%	3.6%	1.1%		10.3%	4.2%	1.8%	0.8%	3.0%	3.0%	1.8%
5	16	3	13	2	4	4	5	8	9	2	9	5	2	-	-	-	-	-	2	2	10	4
	1.6%	2.5%	1.5%	1.4%	3.3%	1.7%	1.2%	1.4%	1.9%	0.3%	3.6%	3.7%	0.5%						1.5%	0.7%	1.5%	5.8%
6	24	2	22	5	2	5	12	12	12	10	11	3	6	2	-	1	3	5	-	2	20	2
	2.4%	1.6%	2.5%	3.1%	1.4%	1.8%	2.6%	2.2%	2.5%	1.7%	4.2%	1.9%	1.8%	1.0%		6.3%	3.1%	2.0%		0.9%	2.9%	2.2%
7	2	-	2	-	-	1	1	2	-	2	-	-	1	1	-	-	1	-	-	1	1	-
	0.2%		0.3%			0.4%	0.3%	0.5%		0.4%			0.3%	0.6%			1.0%			0.4%	0.2%	
8	12	7	5	-	7	2	3	4	8	11	1	1	9	1	-	-	8	2	1	3	9	-
	1.2%	5.6%	0.5%		5.0%	0.8%	0.7%	0.8%	1.7%	1.7%	0.3%	0.4%	2.6%	0.6%			7.2%	0.7%	0.8%	1.1%	1.3%	
10	8	1	7	4	0	3	0	3	4	1	1	6	0	0	-	-	1	-	-	1	6	-
	0.7%	0.8%	0.7%	2.4%	0.3%	1.0%	0.1%	0.6%	0.9%	0.1%	0.4%	4.0%	0.1%	0.1%			0.6%			0.4%	0.9%	
12	6	2	4	4	-	0	2	5	1	5	0	1	4	1	-	0	-	5	-	0	6	-
	0.6%	1.4%	0.5%	2.2%		0.2%	0.4%	0.8%	0.3%	0.8%	0.1%	0.5%	1.0%	0.6%		2.7%		1.8%		0.2%	0.8%	
15	3	0	3	-	-	1	2	3	0	3	0	-	2	1	-	-	-	1	1	1	2	-
	0.3%	0.2%	0.3%			0.4%	0.5%	0.5%	*	0.5%	0.2%		0.5%	0.5%				0.5%	1.1%	0.3%	0.4%	
16	1	-	1	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	1	-	-
	0.1%		0.2%				0.3%	0.3%			0.5%									0.6%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

EE3-Rebase. During 2013, how many energy-efficient incandescent bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
20	15 1.4%	1 1.0%	13 1.5%	4 2.1%	-	5 1.9%	6 1.4%	2 0.4%	12 2.7%	6 0.9%	5 1.8%	4 2.9%	4 1.2%	1 0.6%	-	-	1 0.6%	-	1 0.6%	1 0.6%	13 1.8%	1 0.8%
24	4 0.4%	-	4 0.5%	-	-	4 1.5%	-	-	4 0.9%	4 0.7%	-	-	4 1.1%	-	-	-	-	4 1.5%	-	-	4 0.6%	-
30	1 0.1%	1 1.1%	-	1 0.8%	-	-	-	-	1 0.3%	-	-	1 1.0%	-	-	-	-	-	-	-	-	1 0.2%	-
36	0 *%	0 0.2%	-	-	0 0.2%	-	-	0 *%	-	0 *%	-	-	0 0.1%	-	-	-	-	-	0 0.2%	0 0.1%	-	-
40	0 *%	0 0.2%	-	-	0 0.2%	-	-	0 *%	-	0 *%	-	-	0 0.1%	-	-	-	-	0 0.1%	-	0 0.1%	-	-
50	3 0.3%	-	3 0.3%	-	-	-	3 0.7%	-	3 0.6%	-	3 1.1%	-	-	-	-	-	-	-	-	3 1.2%	-	-
Don't know	18 1.8%	2 1.2%	16 1.8%	2 1.2%	1 1.0%	7 2.6%	8 1.7%	9 1.6%	9 1.9%	14 2.3%	1 0.4%	2 1.6%	12 3.3%	3 1.1%	-	1 6.3%	1 0.8%	10 3.9%	1 1.2%	5 2.0%	12 1.7%	1 1.3%
Refused	1 0.1%	-	1 0.1%	1 0.4%	-	-	-	1 0.1%	-	-	-	1 0.5%	-	-	-	-	-	-	-	-	-	1 0.9%
Mean	1.37	1.88	1.30	1.70	1.15	1.48	1.25	0.90	1.94	1.06	1.81	1.85	1.45	0.50	-	1.19	1.26	1.12	0.61	1.38	1.44	0.71
Standard Deviation	4.60	4.94	4.55	4.57	3.07	4.42	5.10	2.87	6.02	3.56	6.18	4.97	4.20	2.34	-	2.74	2.91	3.89	2.88	6.16	4.10	2.36
Standard Error	0.20	0.50	0.21	0.51	0.38	0.38	0.31	0.13	0.47	0.20	0.54	0.56	0.30	0.21	-	0.77	0.40	0.32	0.32	0.50	0.22	0.34

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

EE4. Of all the energy-efficient incandescent bulbs you have ever bought, how many have you installed in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	221	34	188	42	35	59	85	111	110	128	60	33	95	30	-	4	28	59	18	47	162	12
Unweighted Total	214	71	143	37	34	57	86	158	56	124	59	31	82	39	-	4	30	48	23	52	146	16
0	13	1	12	-	0	5	7	4	9	7	2	4	5	2	-	-	2	5	0	4	8	-
	5.8%	2.0%	6.5%		1.1%	8.4%	8.7%	3.3%	8.3%	5.6%	3.2%	11.1%	5.4%	7.0%			6.2%	8.1%	1.7%	9.4%	5.2%	
1	13	1	12	1	4	2	6	9	4	9	3	2	7	2	-	-	2	4	1	1	11	-
	5.8%	3.8%	6.2%	2.5%	10.6%	2.9%	7.5%	7.9%	3.7%	6.7%	4.5%	4.7%	6.8%	7.0%			8.1%	6.8%	7.5%	3.1%	7.0%	
2	32	3	30	7	7	7	11	15	18	26	6	1	22	4	-	-	3	15	5	10	21	1
	14.6%	7.6%	15.9%	17.7%	19.4%	11.9%	13.0%	13.1%	16.1%	19.9%	10.0%	2.2%	23.0%	12.0%			11.1%	24.8%	27.7%	20.5%	13.1%	11.1%
3	13	2	11	4	2	1	7	9	4	9	2	3	9	-	-	-	6	2	0	4	8	2
	6.0%	6.8%	5.9%	8.6%	4.6%	2.2%	8.1%	8.3%	3.7%	7.0%	3.0%	7.9%	9.4%				22.8%	3.9%	1.7%	7.7%	5.0%	13.6%
4	24	4	20	12	2	3	6	10	14	14	9	-	11	1	-	-	4	6	0	3	20	2
	10.7%	12.4%	10.4%	29.0%	5.9%	5.7%	7.3%	9.2%	12.3%	11.3%	15.4%		11.9%	4.7%			16.2%	9.9%	2.7%	5.6%	12.1%	12.3%
5	15	2	13	2	4	3	5	8	7	2	9	4	1	1	-	-	-	1	1	3	9	3
	6.7%	5.4%	6.9%	4.1%	12.7%	5.9%	6.0%	7.3%	6.1%	1.4%	14.5%	12.8%	1.2%	2.3%				1.2%	6.1%	7.4%	5.4%	20.3%
6	16	2	14	3	0	5	7	10	5	6	8	2	4	2	-	1	1	3	-	2	13	1
	7.1%	4.7%	7.5%	7.4%	1.4%	9.0%	8.0%	9.2%	5.0%	4.6%	13.2%	5.7%	4.2%	6.5%		35.2%	3.7%	5.1%		4.2%	8.0%	6.8%
7	1	-	1	-	-	-	1	1	-	1	-	-	-	1	-	-	-	-	-	-	1	-
	0.6%		0.7%				1.3%	1.3%		1.1%				4.7%							0.9%	
8	16	7	8	-	7	3	6	6	10	14	1	1	11	2	-	-	7	5	1	2	13	-
	7.1%	21.4%	4.5%		21.1%	4.4%	6.6%	5.0%	9.1%	10.6%	2.4%	1.7%	11.8%	8.0%			26.6%	8.9%	5.2%	5.2%	8.1%	
9	0	0	-	-	0	-	-	0	-	-	-	0	-	-	-	-	-	-	-	-	0	-
	0.1%	0.5%			0.5%			0.1%				0.5%									0.1%	
10	10	1	10	4	0	3	3	3	7	1	1	8	0	1	-	-	0	-	-	1	9	-
	4.7%	2.2%	5.1%	9.6%	0.6%	5.3%	3.5%	2.8%	6.6%	1.0%	1.9%	24.0%	0.3%	3.2%			1.1%			2.3%	5.7%	
12	5	3	2	1	1	2	1	4	1	3	2	0	3	0	-	-	-	2	1	1	3	1
	2.3%	7.7%	1.3%	3.3%	2.8%	2.6%	1.3%	3.3%	1.3%	2.4%	3.2%	0.2%	2.6%	1.7%				3.7%	4.6%	2.5%	1.8%	7.3%
14	6	-	6	-	3	3	0	3	3	3	4	-	-	3	-	-	-	-	-	-	6	-
	2.9%		3.4%		7.2%	5.9%	0.4%	2.6%	3.2%	2.0%	6.3%			8.5%							3.9%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

EE4. Of all the energy-efficient incandescent bulbs you have ever bought, how many have you installed in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
15	4 1.9%	0 1.3%	4 2.0%	-	-	1 2.2%	3 3.4%	4 3.6%	0 0.2%	4 3.0%	0 0.5%	-	2 1.7%	2 7.7%	-	-	-	1 2.4%	2 12.3%	0 1.0%	4 2.3%	-
18	5 2.4%	-	5 2.9%	-	-	4 6.7%	1 1.6%	1 1.3%	4 3.6%	5 4.2%	-	-	5 5.6%	-	-	-	-	5 9.2%	-	1 3.0%	4 2.5%	-
20	7 3.1%	0 1.3%	6 3.4%	-	-	6 10.0%	1 1.1%	1 1.2%	5 5.0%	2 1.2%	5 8.2%	0 1.2%	0 0.5%	1 3.7%	-	-	0 0.8%	1 1.9%	0 1.2%	2 4.4%	5 3.0%	-
25	1 0.6%	-	1 0.7%	-	-	-	1 1.6%	-	1 1.3%	1 1.1%	-	-	-	1 4.7%	-	-	-	-	-	-	1 0.9%	-
30	3 1.4%	2 4.8%	1 0.7%	1 3.3%	-	0 0.4%	1 1.6%	2 1.5%	1 1.3%	0 0.2%	1 2.3%	1 4.2%	-	0 0.8%	-	-	-	-	0 1.2%	2 3.4%	1 0.9%	-
36	0 0.1%	0 0.4%	-	0 0.3%	-	-	-	0 0.1%	-	0 0.1%	-	-	0 0.1%	-	-	-	-	0 0.2%	-	-	-	0 1.1%
50	3 1.4%	0 0.7%	3 1.6%	-	-	-	3 3.7%	0 0.2%	3 2.6%	-	3 5.2%	-	-	-	-	-	-	-	-	3 6.2%	0 0.1%	-
200	4 1.7%	-	4 2.0%	4 8.8%	-	-	-	-	4 3.3%	-	-	4 11.1%	-	-	-	-	-	-	-	-	4 2.3%	-
Don't know	28 12.8%	6 17.0%	23 12.1%	2 3.7%	4 12.1%	10 16.6%	13 15.0%	20 18.1%	8 7.5%	21 16.6%	4 6.0%	4 10.6%	15 15.4%	5 17.7%	-	2 64.8%	1 3.3%	8 14.1%	5 28.1%	7 14.2%	19 11.7%	3 22.0%
Refused	1 0.3%	-	1 0.4%	1 1.6%	-	-	-	1 0.6%	-	-	-	1 2.1%	-	-	-	-	-	-	-	-	-	1 5.4%
Mean	10.86	8.09	11.33	23.83	5.38	8.47	7.77	6.16	15.02	5.84	9.74	31.65	5.08	8.46	-	6.00	4.40	5.88	6.27	9.50	11.60	5.25
Standard Deviation	27.71	8.08	29.78	57.48	3.94	6.99	10.97	6.16	37.20	5.76	11.79	65.75	5.02	7.39	0.00	3.12	6.15	6.53	13.52	31.31	4.89	
Standard Error	2.85	2.17	3.32	14.26	1.12	1.46	1.60	0.68	6.23	0.79	2.19	18.38	0.85	1.59	0.00	0.93	1.21	2.30	2.63	3.90	1.94	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

LE1A. Have you heard of LED light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	907	116	791	161	119	233	395	487	420	566	235	107	334	217	-	14	101	243	113	240	667	-
	90.1%	90.3%	90.1%	91.1%	88.1%	89.7%	90.6%	88.7%	91.8%	94.1%	90.2%	73.4%	94.9%	92.7%		98.5%	94.7%	94.1%	95.8%	96.7%	97.3%	
No	92	11	80	13	14	25	40	56	35	33	24	35	15	17	-	0	3	15	5	8	17	67
	9.1%	8.8%	9.1%	7.2%	10.4%	9.6%	9.2%	10.2%	7.7%	5.5%	9.2%	23.9%	4.4%	7.3%		1.5%	3.1%	5.9%	4.2%	3.2%	2.4%	91.7%
												JK										TU
Don't know	7	1	6	2	2	2	1	5	2	2	2	3	2	-	-	-	2	-	-	0	2	5
	0.7%	0.9%	0.7%	1.3%	1.5%	0.8%	0.3%	1.0%	0.5%	0.4%	0.7%	2.3%	0.7%				2.3%			0.1%	0.3%	7.4%
																						TU
Refused	1	-	1	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	1
	0.1%		0.1%	0.4%				0.1%				0.5%										0.9%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

LE1B. LED light bulbs can be used in the same types of fixtures as regular incandescent bulbs but are shaped somewhat differently and produce light using semiconductor chips. They use a lot less energy than regular incandescent bulbs. Have you heard of LED light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	100	13	87	16	16	27	41	62	38	35	26	39	18	17	-	0	6	15	5	8	19	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	109	35	74	16	19	32	42	89	20	48	24	37	24	22	-	1	9	20	9	8	15	86
Yes	27	4	23	4	5	10	7	11	16	10	6	10	6	4	-	-	2	3	4	8	19	-
	26.8%	30.4%	26.3%	23.5%	33.4%	38.8%	17.7%	17.1%	42.9%	27.6%	25.4%	27.1%	32.7%	23.1%			42.9%	22.3%	75.8%	100.0%	100.0%	
						g						h										R
No	67	8	59	8	11	16	32	46	22	24	19	24	12	12	-	0	3	11	1	-	-	67
	67.4%	66.0%	67.6%	53.7%	66.6%	60.4%	77.5%	73.7%	57.1%	69.0%	74.6%	61.2%	66.0%	71.1%		100.0%	57.1%	73.3%	19.6%			92.1%
																QRS		S				
Don't know	5	0	5	3	-	0	2	5	-	1	-	4	0	1	-	-	-	1	0	-	-	5
	5.1%	3.6%	5.3%	18.5%		0.8%	4.7%	8.1%		3.4%		9.9%	1.3%	5.8%			4.4%	4.5%				6.9%
Refused	1	-	1	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	1
	0.7%		0.8%	4.3%				1.1%				1.8%										0.9%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

LE1A-LE1B. Aware of or purchase LED light bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Unaided Aware	907	116	791	161	119	233	395	487	420	566	235	107	334	217	-	14	101	243	113	240	667	-
	90.1%	90.3%	90.1%	91.1%	88.1%	89.7%	90.6%	88.7%	91.8%	94.1%	90.2%	73.4%	94.9%	92.7%		98.5%	94.7%	94.1%	95.8%	96.7%	97.3%	
										L	L											
Aided Aware	27	4	23	4	5	10	7	11	16	10	6	10	6	4	-	-	2	3	4	8	19	-
	2.7%	3.0%	2.6%	2.1%	4.0%	4.0%	1.7%	1.9%	3.5%	1.6%	2.5%	7.2%	1.7%	1.7%			2.3%	1.3%	3.2%	3.3%	2.7%	
												Jk										
Not Aware	73	9	64	12	11	16	34	51	22	26	19	28	12	13	-	0	3	12	1	-	-	73
	7.2%	6.8%	7.3%	6.8%	7.9%	6.3%	7.8%	9.4%	4.7%	4.3%	7.3%	19.4%	3.4%	5.6%		1.5%	3.0%	4.6%	1.0%			100.0%
								I				Jk										
Purchaser	248	20	228	23	26	66	134	156	92	193	43	12	111	78	-	3	31	87	42	248	-	-
	24.7%	15.6%	26.0%	13.0%	18.9%	25.5%	30.7%	28.4%	20.1%	32.1%	16.7%	8.3%	31.6%	33.4%		22.1%	29.6%	33.8%	35.7%	100.0%		
			B			D	DE	I		KL	l											
Aware Non-Purchaser	686	100	586	142	99	177	268	342	344	383	198	105	229	143	-	11	72	159	74	-	686	-
	68.1%	77.7%	66.7%	80.2%	73.1%	68.2%	61.6%	62.2%	75.2%	63.7%	76.0%	72.3%	65.0%	61.0%		76.4%	67.4%	61.6%	63.3%		100.0%	
		C		FG	g			H		J												

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

LE3. Have you ever purchased any LED bulbs other than LED nightlights or holiday light strings?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	934 100%	120 100%	814 100%	165 100%	124 100%	243 100%	402 100%	498 100.0%	436 100.0%	576 100.0%	241 100.0%	117 100.0%	340 100.0%	221 100.0%	-	14 100.0%	103 100.0%	247 100.0%	116 100.0%	248 100.0%	686 100.0%	-
Unweighted Total	921	299	622	159	123	239	400	701	220	570	228	123	340	215	-	19	101	233	133	257	664	-
Yes	248 26.6%	20 16.7%	228 28.0%	23 14.0%	26 20.6%	66 27.2%	134 33.2%	156 31.4%	92 21.1%	193 33.5%	43 18.0%	12 10.3%	111 32.8%	78 35.4%	-	3 22.4%	31 30.5%	87 35.4%	42 36.0%	248 100.0%	-	-
No	661 70.7%	97 80.9%	564 69.2%	140 85.4%	94 75.5%	171 70.5%	255 63.4%	327 65.7%	334 76.5%	370 64.2%	191 79.3%	100 85.3%	219 64.4%	140 63.0%	-	11 77.6%	71 68.6%	151 61.3%	74 64.0%	-	661 96.3%	-
Don't know	25 2.7%	3 2.5%	22 2.7%	1 0.6%	5 4.0%	6 2.3%	14 3.4%	15 2.9%	11 2.4%	13 2.3%	7 2.7%	5 4.4%	10 2.9%	4 1.6%	-	-	1 0.9%	8 3.3%	-	-	25 3.7%	-

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

LE3-Rebase. Have you ever purchased any LED bulbs other than LED nightlights or holiday light strings?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Yes	248	20	228	23	26	66	134	156	92	193	43	12	111	78	-	3	31	87	42	248	-	-
	24.7%	15.6%	26.0%	13.0%	18.9%	25.5%	30.7%	28.4%	20.1%	32.1%	16.7%	8.3%	31.6%	33.4%	22.1%	29.6%	33.8%	35.7%	100.0%			
				B		D	DE	I		KL	l											
No	734	106	628	152	105	188	289	379	355	395	210	128	231	153	-	11	74	163	76	-	661	73
	72.9%	82.1%	71.5%	86.4%	77.4%	72.4%	66.2%	68.9%	77.6%	65.7%	80.8%	88.2%	65.6%	65.1%	77.9%	69.6%	63.1%	64.3%		96.3%	100.0%	U
		C		FG	g			H		J	J											
Don't know	25	3	22	1	5	6	14	15	11	13	7	5	10	4	-	-	1	8	-	-	25	-
	2.5%	2.3%	2.5%	0.6%	3.6%	2.1%	3.1%	2.6%	2.3%	2.2%	2.5%	3.5%	2.8%	1.5%			0.8%	3.1%			3.7%	

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

LE4. During 2013, how many LED bulbs did you purchase?

	RUCC							State			Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)			
Weighted Total	248	20	228	23	26	66	134	156	92	193	43	12	111	78	-	3	31	87	42	248	-	-			
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			
Unweighted Total	257	64	193	28	25	74	130	206	51	202	39	16	121	75	-	5	31	88	54	257	-	-			
0	37	3	34	4	1	13	18	26	11	31	6	0	17	13	-	1	1	19	2	37	-	-			
	14.9%	15.7%	14.9%	17.9%	4.5%	20.3%	13.8%	16.8%	11.7%	15.8%	14.3%	2.5%	15.1%	16.1%	-	30.4%	4.3%	22.0%	4.2%	14.9%	-	-			
										1															
1	19	2	17	1	1	8	9	12	8	19	0	0	10	8	-	2	4	7	6	19	-	-			
	7.7%	11.4%	7.4%	4.5%	5.0%	11.5%	6.9%	7.4%	8.2%	9.7%	0.9%	0.5%	9.4%	10.4%	-	57.2%	12.4%	8.5%	13.2%	7.7%	-	-			
										K															
2	40	4	36	3	12	11	14	16	24	31	7	1	24	7	-	-	4	14	8	40	-	-			
	16.2%	19.4%	15.9%	12.6%	46.4%	17.4%	10.4%	10.0%	26.6%	16.2%	17.0%	12.2%	21.9%	8.8%	-	-	13.8%	16.6%	18.7%	16.2%	-	-			
										H															
3	23	1	22	2	1	5	15	13	11	20	2	1	10	10	-	-	5	6	4	23	-	-			
	9.4%	6.7%	9.6%	8.0%	4.4%	8.2%	11.1%	8.1%	11.5%	10.3%	4.8%	11.8%	8.6%	13.0%	-	-	15.4%	7.1%	10.7%	9.4%	-	-			
4	17	1	16	1	1	6	9	15	2	14	4	-	10	2	-	0	4	8	2	17	-	-			
	7.0%	6.3%	7.0%	4.5%	4.4%	9.0%	6.9%	9.5%	2.7%	7.1%	8.4%	-	8.9%	2.7%	-	12.4%	12.3%	8.8%	4.0%	7.0%	-	-			
										i															
5	12	1	10	0	0	3	8	5	6	4	7	0	4	0	-	-	-	2	2	12	-	-			
	4.7%	6.0%	4.6%	1.6%	0.6%	4.3%	6.1%	3.3%	7.0%	2.1%	16.4%	3.1%	3.5%	0.3%	-	-	-	2.3%	4.4%	4.7%	-	-			
										J															
6	26	2	24	4	6	3	13	19	6	18	7	-	13	5	-	-	5	9	4	26	-	-			
	10.3%	10.6%	10.3%	18.6%	23.5%	3.9%	9.6%	12.5%	6.7%	9.5%	17.1%	-	11.8%	6.6%	-	-	15.8%	10.7%	9.5%	10.3%	-	-			
										f															
7	3	0	3	-	-	0	3	3	-	3	-	-	1	1	-	-	-	1	1	3	-	-			
	1.1%	0.3%	1.2%	-	-	0.1%	2.1%	1.8%	-	1.5%	-	-	1.2%	1.9%	-	-	-	1.6%	3.5%	1.1%	-	-			
8	13	3	11	2	1	0	9	7	6	13	0	0	5	8	-	-	1	6	4	13	-	-			
	5.4%	13.4%	4.7%	10.6%	5.0%	0.6%	6.9%	4.8%	6.3%	6.6%	1.1%	0.6%	4.5%	9.9%	-	-	2.1%	7.4%	8.5%	5.4%	-	-			
										c															
9	0	0	-	-	0	-	-	0	-	0	-	-	0	-	-	-	-	0	-	0	-	-			
	0.1%	1.1%	-	-	0.8%	-	-	0.1%	-	0.1%	-	-	0.2%	-	-	-	-	0.2%	-	0.1%	-	-			
10	13	0	13	1	-	6	7	8	5	10	-	4	1	9	-	-	5	3	0	13	-	-			
	5.4%	1.1%	5.7%	2.9%	-	8.4%	5.3%	5.3%	5.5%	5.0%	-	29.9%	0.7%	11.1%	-	-	16.2%	3.9%	0.8%	5.4%	-	-			
12	8	-	8	-	1	1	6	8	0	4	3	1	3	2	-	-	1	-	2	8	-	-			
	3.3%	-	3.6%	-	4.4%	1.7%	4.5%	4.9%	0.5%	2.2%	6.4%	9.4%	2.4%	2.0%	-	-	3.5%	-	4.3%	3.3%	-	-			

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

LE4. During 2013, how many LED bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase		Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
15	2 0.9%	0 0.4%	2 0.9%	-	-	1 1.7%	1 0.8%	2 1.4%	-	2 1.1%	-	-	2 1.8%	0 0.1%	-	-	1 3.5%	-	1 2.4%	2 0.9%	-	-
16	1 0.6%	-	1 0.6%	-	-	-	1 1.0%	-	1 1.5%	1 0.7%	-	-	1 1.2%	-	-	-	1 1.6%	-	1 0.6%	-	-	
20	5 1.9%	0 0.7%	5 2.0%	0 0.6%	-	1 0.9%	4 3.0%	5 3.0%	-	4 2.2%	1 1.3%	-	-	4 5.3%	-	-	-	2 2.0%	1 3.3%	5 1.9%	-	-
24	4 1.7%	0 1.8%	4 1.7%	0 1.6%	-	2 3.3%	2 1.3%	3 2.0%	1 1.2%	1 0.7%	1 3.4%	1 11.6%	1 1.3%	-	-	-	1 1.3%	0 0.8%	4 1.7%	-	-	
30	4 1.5%	-	4 1.6%	-	-	-	4 2.8%	2 1.5%	1 1.5%	4 1.9%	-	-	1 0.9%	3 3.5%	-	-	-	1 1.6%	-	4 1.5%	-	-
36	0 0.1%	0 1.1%	-	-	0 0.8%	-	-	0 0.1%	-	0 0.1%	-	-	0 0.2%	-	-	-	-	-	0 0.5%	0 0.1%	-	-
40	1 0.6%	-	1 0.6%	-	-	-	1 1.0%	1 0.9%	-	1 0.7%	-	-	-	1 1.8%	-	-	-	-	-	1 0.6%	-	-
50	5 2.2%	0 1.1%	5 2.3%	-	-	-	5 4.1%	3 1.6%	3 3.2%	3 1.3%	3 6.7%	-	-	3 3.3%	-	-	0 0.7%	-	-	5 2.2%	-	-
60	1 0.4%	-	1 0.4%	-	-	-	1 0.7%	1 0.6%	-	-	1 2.2%	-	-	-	-	-	-	-	-	1 0.4%	-	-
150	1 0.4%	-	1 0.4%	-	-	1 1.4%	-	1 0.6%	-	1 0.5%	-	-	1 0.8%	-	-	-	-	1 1.0%	-	1 0.4%	-	-
Don't know	11 4.4%	0 2.2%	10 4.6%	4 15.9%	-	5 7.5%	2 1.8%	6 3.6%	5 5.7%	9 4.5%	-	2 18.5%	6 5.6%	2 3.2%	-	-	-	3 3.4%	5 11.4%	11 4.4%	-	-
REFUSED	0 0.1%	0 0.7%	-	0 0.6%	-	-	-	0 0.1%	-	0 0.1%	-	-	-	-	-	-	-	-	-	0 0.1%	-	-
Mean	7.18	4.92	7.38	4.26	4.04	6.33	8.61	7.95	5.84	6.56	9.28	9.43	5.47	8.22	-	1.07	5.39	6.02	5.28	7.18	-	-
Standard Deviation	13.25	7.47	13.64	4.38	4.14	18.47	12.22	14.88	9.74	13.15	14.59	7.40	14.38	11.40	1.44	5.49	16.04	5.50	13.25			
Standard Error	1.07	1.47	1.18	1.16	1.09	2.87	1.33	1.27	1.60	1.19	3.01	2.51	1.72	1.62	0.69	1.27	2.15	0.98	1.07			

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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NEEA 2014 Consumer Lighting Survey

LE4-Rebase. During 2013, how many LED bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
0/None	796	112	684	158	111	207	320	419	376	439	223	133	258	169	-	12	76	191	77	37	686	73
	79.0%	86.9%	77.9%	89.3%	81.9%	79.7%	73.6%	76.3%	82.2%	73.0%	85.7%	91.9%	73.1%	72.0%	-	84.6%	71.7%	73.6%	65.8%	14.9%	100.0%	100.0%
				fg					h		J	J			s					T	T	
1	19	2	17	1	1	8	9	12	8	19	0	0	10	8	-	2	4	7	6	19	-	-
	1.9%	1.8%	1.9%	0.6%	1.0%	2.9%	2.1%	2.1%	1.7%	3.1%	0.1%	*	3.0%	3.5%	-	12.6%	3.7%	2.9%	4.7%	7.7%		
										KL												
2	40	4	36	3	12	11	14	16	24	31	7	1	24	7	-	-	4	14	8	40	-	-
	4.0%	3.0%	4.1%	1.6%	8.8%	4.4%	3.2%	2.9%	5.3%	5.2%	2.8%	1.0%	6.9%	3.0%	-	-	4.1%	5.6%	6.7%	16.2%		
					Dg					L												
3	23	1	22	2	1	5	15	13	11	20	2	1	10	10	-	-	5	6	4	23	-	-
	2.3%	1.0%	2.5%	1.0%	0.8%	2.1%	3.4%	2.3%	2.3%	3.3%	0.8%	1.0%	2.7%	4.3%	-	-	4.5%	2.4%	3.8%	9.4%		
							e			K												
4	17	1	16	1	1	6	9	15	2	14	4	-	10	2	-	0	4	8	2	17	-	-
	1.7%	1.0%	1.8%	0.6%	0.8%	2.3%	2.1%	2.7%	0.5%	2.3%	1.4%	-	2.8%	0.9%	-	2.7%	3.7%	3.0%	1.4%	7.0%		
								I														
5	12	1	10	0	0	3	8	5	6	4	7	0	4	0	-	-	-	2	2	12	-	-
	1.2%	0.9%	1.2%	0.2%	0.1%	1.1%	1.9%	0.9%	1.4%	0.7%	2.7%	0.3%	1.1%	0.1%	-	-	-	0.8%	1.6%	4.7%		
6	26	2	24	4	6	3	13	19	6	18	7	-	13	5	-	-	5	9	4	26	-	-
	2.6%	1.6%	2.7%	2.4%	4.4%	1.0%	2.9%	3.5%	1.4%	3.0%	2.8%	-	3.7%	2.2%	-	-	4.7%	3.6%	3.4%	10.3%		
								i														
7	3	0	3	-	-	0	3	3	-	3	-	-	1	1	-	-	-	1	1	3	-	-
	0.3%	0.1%	0.3%			*	0.6%	0.5%		0.5%			0.4%	0.6%	-	-	-	0.5%	1.2%	1.1%		
8	13	3	11	2	1	0	9	7	6	13	0	0	5	8	-	-	1	6	4	13	-	-
	1.3%	2.1%	1.2%	1.4%	1.0%	0.1%	2.1%	1.4%	1.3%	2.1%	0.2%	0.1%	1.4%	3.3%	-	-	0.6%	2.5%	3.0%	5.4%		
							f			KL												
9	0	0	-	-	0	-	-	0	-	0	-	-	0	-	-	-	-	0	-	0	-	-
	*	0.2%			0.2%			*		*			0.1%		-	-	-	0.1%		0.1%		
10	13	0	13	1	-	6	7	8	5	10	-	4	1	9	-	-	5	3	0	13	-	-
	1.3%	0.2%	1.5%	0.4%		2.1%	1.6%	1.5%	1.1%	1.6%		2.5%	0.2%	3.7%	-	-	4.8%	1.3%	0.3%	5.4%		
													M				S					
12	8	-	8	-	1	1	6	8	0	4	3	1	3	2	-	-	1	-	2	8	-	-
	0.8%		0.9%		0.8%	0.4%	1.4%	1.4%	0.1%	0.7%	1.1%	0.8%	0.8%	0.7%	-	-	1.0%		1.5%	3.3%		
								i														

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

LE4-Rebase. During 2013, how many LED bulbs did you purchase?

	RUCC			State				Respondent Type		CFL Awareness/Purchase		Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase			
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
15	2 0.2%	0 0.1%	2 0.2%	-	-	1 0.4%	1 0.2%	2 0.4%	-	2 0.4%	-	-	2 0.6%	0 *%	-	-	1 1.0%	-	1 0.9%	2 0.9%	-	-
16	1 0.1%	-	1 0.2%	-	-	-	1 0.3%	-	1 0.3%	1 0.2%	-	-	1 0.4%	-	-	-	-	1 0.5%	-	1 0.6%	-	-
20	5 0.5%	0 0.1%	5 0.5%	0 0.1%	-	1 0.2%	4 0.9%	5 0.9%	-	4 0.7%	1 0.2%	-	-	4 1.8%	-	-	-	2 0.7%	1 1.2%	5 1.9%	-	-
24	4 0.4%	0 0.3%	4 0.4%	0 0.2%	-	2 0.8%	2 0.4%	3 0.6%	1 0.2%	1 0.2%	1 0.6%	1 1.0%	1 0.4%	-	-	-	-	1 0.4%	0 0.3%	4 1.7%	-	-
30	4 0.4%	-	4 0.4%	-	-	-	4 0.9%	2 0.4%	1 0.3%	4 0.6%	-	-	1 0.3%	3 1.2%	-	-	-	1 0.5%	-	4 1.5%	-	-
36	0 *%	0 0.2%	-	-	0 0.2%	-	-	0 *%	-	0 *%	-	-	0 0.1%	-	-	-	-	-	0 0.2%	0 0.1%	-	-
40	1 0.1%	-	1 0.2%	-	-	-	1 0.3%	1 0.3%	-	1 0.2%	-	-	-	1 0.6%	-	-	-	-	-	1 0.6%	-	-
50	5 0.5%	0 0.2%	5 0.6%	-	-	-	5 1.3%	3 0.5%	3 0.6%	3 0.4%	3 1.1%	-	-	3 1.1%	-	-	0 0.2%	-	-	5 2.2%	-	-
60	1 0.1%	-	1 0.1%	-	-	-	1 0.2%	1 0.2%	-	-	1 0.4%	-	-	-	-	-	-	-	-	1 0.4%	-	-
150	1 0.1%	-	1 0.1%	-	-	1 0.3%	-	1 0.2%	-	1 0.1%	-	-	1 0.3%	-	-	-	-	1 0.3%	-	1 0.4%	-	-
Don't know	11 1.1%	0 0.3%	10 1.2%	4 2.1% g	-	5 1.9%	2 0.5%	6 1.0%	5 1.1%	9 1.4%	-	2 1.5%	6 1.8%	2 1.1%	-	-	-	3 1.2%	5 4.1%	11 4.4%	-	-
REFUSED	0 *%	0 0.1%	-	0 0.1%	-	-	-	0 *%	-	0 *%	-	-	-	-	-	-	-	-	-	0 0.1%	-	-
Mean	1.71	0.75	1.85	0.47	0.76	1.52	2.61	2.20	1.12	2.04	1.55	0.65	1.66	2.69	-	0.24	1.60	1.99	1.74	7.18	0.00	0.00
Standard Deviation	7.15	3.35	7.54	1.96	2.38	9.39	7.79	8.58	4.83	7.92	6.84	3.02	8.29	7.55	-	0.74	3.85	9.61	4.00	13.25	0.00	0.00
Standard Error	0.31	0.34	0.35	0.21	0.29	0.82	0.47	0.39	0.37	0.43	0.59	0.34	0.59	0.67	-	0.20	0.53	0.80	0.44	1.07	0.00	0.00

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
Uppercase letters indicate significance at the 95% level.
Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

LE5. Of all the LED bulbs you bought in 2013, how many did you install in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Not Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	200	16	184	15	24	48	113	124	76	154	37	9	88	63	-	2	30	65	35	200	-	-
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%		
Unweighted Total	205	48	157	20	22	55	108	162	43	158	35	12	94	61	-	3	27	66	44	205	-	-
0	29	2	27	1	9	4	15	18	11	24	4	1	17	7	-	-	5	10	3	29	-	-
	14.7%	13.8%	14.8%	9.4%	35.5%	8.8%	13.4%	14.7%	14.7%	15.5%	11.3%	14.6%	19.1%	10.7%			17.6%	15.5%	8.0%	14.7%		
					fg																	
1	24	2	22	1	0	13	10	11	13	21	3	0	13	8	-	2	4	10	6	24	-	-
	12.2%	13.1%	12.1%	6.9%	0.7%	27.0%	9.1%	8.8%	17.6%	13.9%	7.8%	0.7%	15.1%	11.9%		82.2%	12.5%	14.9%	16.6%	12.2%		
					dEG											QRS						
2	31	3	28	3	7	9	12	20	11	25	6	0	19	6	-	-	3	12	5	31	-	-
	15.4%	18.1%	15.1%	19.1%	29.0%	18.8%	10.5%	16.0%	14.4%	16.3%	15.1%	0.8%	21.0%	10.3%			11.1%	18.9%	14.9%	15.4%		
3	31	2	29	2	1	6	22	15	17	21	8	3	10	11	-	-	4	6	6	31	-	-
	15.6%	11.7%	16.0%	12.2%	4.6%	12.9%	19.6%	11.9%	21.8%	13.4%	22.2%	26.5%	10.8%	17.4%			14.9%	9.0%	16.6%	15.6%		
					E																	
4	15	1	14	1	4	3	7	11	3	8	6	1	6	0	-	0	1	5	2	15	-	-
	7.4%	5.5%	7.5%	4.5%	18.2%	5.6%	6.2%	9.3%	4.3%	5.1%	15.7%	11.9%	7.2%	0.6%		17.8%	3.7%	7.1%	4.7%	7.4%		
5	12	1	10	0	1	4	6	6	5	10	1	0	4	6	-	-	4	4	2	12	-	-
	5.7%	7.4%	5.6%	2.4%	5.3%	8.3%	5.2%	5.2%	6.7%	6.4%	3.4%	3.9%	4.1%	9.9%			13.2%	6.3%	4.5%	5.7%		
6	15	2	14	4	0	2	10	12	3	12	3	-	6	6	-	-	4	5	3	15	-	-
	7.5%	9.5%	7.3%	23.9%	0.7%	3.5%	8.5%	9.4%	4.5%	8.1%	7.0%		7.2%	9.7%			14.6%	8.0%	8.1%	7.5%		
					EF																	
7	4	0	4	-	0	0	4	4	-	4	-	-	1	3	-	-	0	3	1	4	-	-
	2.2%	1.4%	2.3%		0.7%	0.1%	3.7%	3.5%		2.9%			1.6%	4.8%			0.5%	4.3%	4.1%	2.2%		
8	8	3	5	2	1	-	4	4	4	7	0	0	5	2	-	-	-	4	4	8	-	-
	3.9%	15.5%	2.9%	16.2%	4.6%		3.8%	3.3%	5.0%	4.8%	1.3%	0.8%	5.6%	3.7%				5.7%	10.1%	3.9%		
					C																	
10	6	-	6	1	-	2	3	5	1	4	-	2	2	2	-	-	1	1	1	6	-	-
	3.0%		3.3%	4.5%		4.6%	2.8%	4.0%	1.4%	2.3%		26.2%	2.0%	2.8%			3.7%	1.8%	3.6%	3.0%		
												j										
12	6	0	5	-	0	1	4	5	0	3	1	1	1	2	-	-	1	-	2	6	-	-
	2.8%	1.3%	2.9%		0.9%	2.3%	3.8%	4.1%	0.6%	1.8%	3.7%	14.6%	1.4%	2.5%			3.7%		4.8%	2.8%		
15	1	0	1	-	-	1	0	1	-	1	-	-	1	0	-	-	1	-	0	1	-	-
	0.6%	0.5%	0.6%			2.3%	0.1%	0.9%		0.8%			1.2%	0.1%			3.7%		0.2%	0.6%		
16	1	-	1	-	-	-	1	-	1	1	-	-	1	-	-	-	-	1	-	1	-	-
	0.7%		0.8%				1.2%		1.8%	0.9%			1.6%					2.1%		0.7%		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

LE5. Of all the LED bulbs you bought in 2013, how many did you install in your home?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
20	4 1.9%	0 0.8%	4 2.0%	0 0.9%	-	1 1.2%	3 2.7%	4 3.1%	-	3 2.1%	1 1.5%	-	-	3 5.1%	-	-	-	2 2.6%	1 3.9%	4 1.9%	-	-
24	2 1.1%	-	2 1.2%	-	-	2 4.6%	-	1 0.9%	1 1.4%	1 0.7%	1 3.0%	-	1 1.2%	-	-	-	-	1 1.7%	-	2 1.1%	-	-
25	2 0.8%	0 1.4%	1 0.8%	-	-	-	2 1.4%	0 0.2%	1 1.8%	2 1.1%	-	-	-	2 2.6%	-	-	0 0.8%	-	-	2 0.8%	-	-
30	2 1.2%	-	2 1.3%	-	-	-	2 2.1%	2 1.9%	-	2 1.5%	-	-	1 1.1%	1 2.2%	-	-	-	1 2.1%	-	2 1.2%	-	-
40	1 0.7%	-	1 0.8%	-	-	-	1 1.2%	1 1.1%	-	1 0.9%	-	-	-	1 2.2%	-	-	-	-	-	1 0.7%	-	-
50	5 2.6%	-	5 2.9%	-	-	-	5 4.7%	2 1.9%	3 3.8%	2 1.5%	3 7.8%	-	-	2 3.7%	-	-	-	-	-	5 2.6%	-	-
Mean	6.02	4.08	6.19	4.47 _e	2.28	4.31	7.76 _{dEF}	6.32	5.53	5.60	7.76	5.93	3.79	8.22 _M	-	1.53	4.06	4.72	4.70	6.02	-	-
Standard Deviation	9.57	4.25	9.89	3.31	2.38	5.74	11.79	9.22	10.17	8.67	13.36	4.48	4.95	11.74	-	1.56	4.16	6.16	4.54	9.57	-	-
Standard Error	0.84	0.96	0.92	0.98	0.65	0.99	1.38	0.86	1.75	0.86	2.89	1.56	0.65	1.81	-	0.95	1.00	0.95	0.85	0.84	-	-

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

LE6. Thinking about all of the LED bulbs you recently purchased, how satisfied are you with them?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	248	20	228	23	26	66	134	156	92	193	43	12	111	78	-	3	31	87	42	248	-	-
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	257	64	193	28	25	74	130	206	51	202	39	16	121	75	-	5	31	88	54	257	-	-
TOP 2 NET	155	16	139	18	9	36	93	98	57	128	21	7	69	57	-	0	23	57	29	155	-	-
=====	62.5%	79.2%	61.0%	77.0%	34.5%	53.9%	69.6%	62.6%	62.3%	66.2%	47.7%	56.5%	61.5%	73.1%	-	12.4%	73.7%	64.9%	69.7%	62.5%	-	-
		c		E			Ef			k						P	P	P	P			
10 - Very important	123	13	110	16	8	32	68	77	46	101	17	6	52	47	-	0	18	45	20	123	-	-
	49.7%	64.9%	48.4%	69.1%	29.4%	48.9%	50.6%	49.3%	50.4%	52.2%	38.2%	51.4%	46.7%	60.4%	-	12.4%	57.1%	52.0%	47.9%	49.7%	-	-
				E			p									P	P	P	p			
9	32	3	29	2	1	3	25	21	11	27	4	1	17	10	-	-	5	11	9	32	-	-
	12.8%	14.3%	12.7%	7.9%	5.0%	5.0%	19.0%	13.3%	11.9%	14.0%	9.5%	5.2%	14.8%	12.7%	-	-	16.6%	12.9%	21.8%	12.8%	-	-
							eF															
8	28	1	27	3	9	9	8	22	6	24	2	1	17	7	-	1	0	15	5	28	-	-
	11.2%	5.4%	11.7%	12.0%	33.8%	13.2%	5.8%	13.9%	6.7%	12.6%	5.6%	9.1%	15.6%	8.8%	-	28.6%	0.5%	16.8%	12.7%	11.2%	-	-
							G											Q				
7	11	0	10	-	-	3	8	5	6	6	4	-	2	4	-	-	-	2	1	11	-	-
	4.3%	1.5%	4.5%	-	-	4.2%	5.9%	3.0%	6.3%	3.2%	10.0%	-	1.8%	5.4%	-	-	-	2.7%	2.3%	4.3%	-	-
6	6	0	6	0	1	1	4	3	3	4	1	1	4	-	-	-	-	3	1	6	-	-
	2.5%	2.2%	2.6%	1.6%	4.4%	1.5%	2.9%	2.2%	3.2%	2.2%	2.1%	9.9%	3.8%	-	-	-	-	3.8%	2.3%	2.5%	-	-
5	15	1	14	-	1	5	9	12	3	13	2	-	8	5	-	1	6	3	2	15	-	-
	6.1%	4.9%	6.3%	-	4.4%	7.2%	7.0%	7.6%	3.7%	6.9%	4.3%	-	6.8%	6.0%	-	18.1%	19.2%	3.1%	4.9%	6.1%	-	-
																	r					
4	2	0	2	1	-	-	1	2	-	2	-	0	-	2	-	-	1	-	-	2	-	-
	0.7%	0.4%	0.7%	2.9%	-	-	0.8%	1.1%	-	0.8%	-	0.6%	-	2.1%	-	-	2.2%	-	-	0.7%	-	-
3	8	0	8	0	2	3	3	2	6	3	5	-	1	1	-	-	1	1	-	8	-	-
	3.3%	1.0%	3.5%	0.6%	8.5%	4.5%	2.1%	1.0%	7.0%	1.5%	11.8%	-	1.3%	1.8%	-	-	4.4%	1.7%	-	3.3%	-	-
											J											
BOTTOM 2 NET	18	0	18	1	3	8	6	8	10	9	6	3	7	2	-	1	-	3	3	18	-	-
=====	7.3%	1.1%	7.8%	2.9%	11.4%	12.5%	4.7%	5.3%	10.8%	4.9%	13.7%	23.1%	6.4%	2.9%	-	28.6%	-	4.0%	8.1%	7.3%	-	-
				B			g					j										
2	1	-	1	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	1	-	-
	0.6%	-	0.6%	-	-	-	1.0%	0.9%	-	-	-	11.6%	-	-	-	-	-	-	-	0.6%	-	-
1 - Not at all important	17	0	17	1	3	8	5	7	10	9	6	1	7	2	-	1	-	3	3	17	-	-
	6.7%	1.1%	7.2%	2.9%	11.4%	12.5%	3.7%	4.4%	10.8%	4.9%	13.7%	11.6%	6.4%	2.9%	-	28.6%	-	4.0%	8.1%	6.7%	-	-
				B			G															

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

LE6. Thinking about all of the LED bulbs you recently purchased, how satisfied are you with them?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Don't know	5 2.1%	1 3.9%	4 1.9%	1 2.9%	1 3.0%	2 3.0%	2 1.3%	5 3.3%	-	3 1.6%	2 4.8%	-	3 2.8%	-	-	0 12.4%	-	3 3.1%	-	5 2.1%	-	-
Refused	0 *%	0 0.4%	-	-	-	-	0 0.1%	0 *%	-	-	-	0 0.6%	-	-	-	-	-	-	-	0 *%	-	-
Mean	8.15	9.14 C	8.07	9.11 EF	7.17	7.63	8.43 Ef	8.37	7.79	8.45 K	6.99	7.35	8.28	8.72	-	5.38	8.42 P	8.63	8.39 P	8.15	-	-
Standard Deviation	2.72	1.79	2.77	2.02	3.08	3.22	2.40	2.43	3.12	2.41 K	3.42	3.63	2.53	2.21	-	4.26	2.37 P	2.20	2.58 P	2.72	-	-
Standard Error	0.22	0.35	0.24	0.56	0.84	0.48	0.26	0.21	0.50	0.22	0.73	1.10	0.31	0.31	-	2.24	0.55	0.30	0.47	0.22	-	-

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

LE7. Why haven't you purchased any LED bulbs?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	686	100	586	142	99	177	268	342	344	383	198	105	229	143	-	11	72	159	74	-	686	-
Unweighted Total	664	235	429	131	98	165	270	495	169	368	189	107	219	140	-	14	70	145	79	-	664	-
Don't need any bulbs	200	37	163	49	16	51	84	110	90	111	61	27	68	41	-	7	22	48	17	-	200	-
	29.1%	36.7%	27.8%	34.4%	16.5%	28.6%	31.4%	32.2%	26.0%	29.0%	31.0%	25.9%	29.8%	28.4%		64.5%	30.2%	30.0%	23.1%		29.1%	
				U												gRS						
Too expensive	145	22	123	41	16	36	52	67	78	89	36	20	61	24	-	1	15	38	28	-	145	-
	21.1%	21.8%	21.0%	28.7%	16.4%	20.5%	19.3%	19.6%	22.7%	23.1%	18.1%	19.5%	26.9%	17.0%		8.4%	20.8%	23.5%	37.3%		21.1%	
				e															Pqr			
Not familiar with them	90	16	74	14	18	20	38	45	45	55	19	17	28	22	-	1	15	18	8	-	90	-
	13.1%	15.8%	12.6%	9.7%	17.9%	11.5%	14.1%	13.2%	13.0%	14.3%	9.4%	15.8%	12.1%	15.5%		8.3%	21.1%	11.1%	10.2%		13.1%	
Satisfied with my current light bulbs	44	6	38	3	5	13	22	24	21	22	18	5	16	6	-	1	2	6	9	-	44	-
	6.5%	6.3%	6.5%	2.4%	5.5%	7.4%	8.3%	6.9%	6.0%	5.6%	8.9%	5.0%	6.8%	4.1%		13.5%	2.2%	3.8%	11.5%		6.5%	
				d															qr			
Don't know where to buy them	21	4	17	2	5	5	10	9	12	10	6	6	6	3	-	-	1	4	4	-	21	-
	3.1%	4.2%	2.9%	1.4%	4.6%	2.7%	3.7%	2.6%	3.6%	2.5%	2.9%	5.5%	2.8%	2.3%			1.3%	2.3%	5.6%		3.1%	
Can't find them	21	3	19	12	3	1	6	8	13	9	8	4	8	1	-	-	1	0	3	-	21	-
	3.1%	2.5%	3.2%	8.2%	2.7%	0.6%	2.2%	2.4%	3.8%	2.3%	4.1%	4.1%	3.4%	0.7%			1.8%	0.2%	3.8%		3.1%	
				Fg																		
Can't find the shape / size I need	6	2	5	0	2	1	3	4	2	6	-	0	1	5	-	0	2	3	0	-	6	-
	0.9%	1.5%	0.8%	0.2%	2.2%	0.4%	1.1%	1.1%	0.6%	1.5%		0.1%	0.5%	3.3%		1.2%	2.4%	1.6%	0.3%		0.9%	
Other (SPECIFY)	76	5	72	8	10	26	32	38	39	50	15	11	22	28	-	0	8	25	10	-	76	-
	11.1%	4.6%	12.2%	5.7%	9.8%	14.9%	11.9%	11.0%	11.2%	13.1%	7.6%	10.3%	9.5%	19.9%		2.1%	11.2%	15.4%	13.0%		11.1%	
				b			d							M								
Don't know	109	14	95	18	28	32	30	54	56	49	44	16	32	15	-	0	9	23	5	-	109	-
	15.9%	13.8%	16.3%	12.7%	28.7%	18.2%	11.4%	15.7%	16.1%	12.8%	22.1%	15.7%	14.2%	10.8%		2.1%	11.9%	14.5%	6.4%		15.9%	
				DG							J							s				
Refused	8	-	8	1	-	3	4	1	7	3	4	1	-	3	-	-	-	3	-	-	8	-
	1.2%		1.4%	0.5%		2.0%	1.6%	0.3%	2.1%	0.9%	2.1%	0.6%		2.4%				2.2%			1.2%	
									h													

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

LE9. Now I'd like you to think about how quickly you, personally, adopt new technology. Which of the following do you think best describes you?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
I am the first among my friends to purchase new technology	89	4	85	7	11	15	56	39	50	56	23	10	32	24	-	-	13	19	11	40	45	4
	8.8%	3.2%	9.7%	4.2%	8.1%	5.8%	12.8%	7.0%	11.0%	9.4%	8.8%	6.7%	9.1%	10.2%			12.3%	7.2%	9.7%	16.3%	6.5%	5.5%
			B				DF													UV		
I purchase new technology sooner than most of my friends	133	16	117	24	15	33	61	68	65	96	17	20	68	25	-	1	14	52	16	51	76	5
	13.2%	12.3%	13.3%	13.5%	11.3%	12.6%	14.0%	12.3%	14.2%	15.9%	6.4%	14.0%	19.3%	10.7%		9.8%	13.1%	20.3%	13.6%	20.6%	11.1%	7.1%
										K		k	N							UV		
I am typically in the middle of the group when purchasing...	371	47	324	82	51	86	153	197	174	237	90	45	135	99	-	5	38	90	53	81	267	23
	36.9%	36.5%	36.9%	46.4%	37.5%	33.2%	35.0%	35.8%	38.1%	39.4%	34.4%	30.8%	38.4%	42.2%		38.0%	35.5%	34.8%	45.0%	32.8%	38.9%	32.0%
				fg																		
I purchase new technology after most of my friends have p...	150	17	134	34	14	44	58	74	77	77	46	27	51	23	-	4	11	32	19	38	104	8
	14.9%	12.9%	15.2%	19.4%	10.0%	17.1%	13.4%	13.4%	16.8%	12.8%	17.6%	18.9%	14.5%	9.7%		27.9%	10.8%	12.3%	16.1%	15.4%	15.2%	10.7%
				e																		
I am one of the last people to purchase new technology	229	43	186	25	40	69	94	141	87	118	78	33	60	53	-	3	27	58	18	29	172	28
	22.7%	33.3%	21.2%	14.2%	29.9%	26.7%	21.6%	25.7%	19.1%	19.6%	30.0%	22.4%	16.9%	22.5%		24.4%	25.5%	22.5%	15.6%	11.7%	25.1%	37.8%
			C		D		D	i			J										T	Tu
Don't know	27	1	26	3	3	11	10	23	3	16	4	7	6	10	-	-	3	7	-	4	18	4
	2.6%	0.5%	2.9%	1.6%	2.0%	4.1%	2.3%	4.2%	0.8%	2.7%	1.4%	4.6%	1.8%	4.2%			2.8%	2.8%		1.7%	2.7%	5.5%
			b					I														
Refused	8	2	6	1	2	1	4	8	-	1	4	4	-	1	-	-	-	0	-	4	3	1
	0.8%	1.3%	0.7%	0.8%	1.2%	0.6%	0.8%	1.5%		0.1%	1.4%	2.4%		0.4%				0.1%		1.6%	0.5%	1.5%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

D1. What type of home do you live in?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Mobile home	86	18	68	12	17	26	31	62	24	54	22	10	31	22	-	3	4	26	6	20	57	9
	8.6%	14.3%	7.7%	6.9%	12.3%	10.0%	7.2%	11.3%	5.2%	8.9%	8.5%	7.2%	8.9%	9.5%		18.9%	3.7%	10.1%	4.8%	8.0%	8.4%	12.3%
			c					I														
Single-family (attached or detached)	739	96	643	141	98	181	319	408	330	467	178	93	272	181	-	10	75	203	107	198	494	46
	73.4%	74.6%	73.2%	79.6%	72.7%	69.8%	73.1%	74.3%	72.2%	77.7%	68.5%	64.0%	77.3%	77.3%		67.5%	71.0%	78.6%	91.4%	79.8%	72.1%	63.3%
				f						KL									pQR	UV		
Apartment	128	11	118	16	11	39	62	46	82	53	47	28	34	18	-	2	21	13	2	11	103	15
	12.8%	8.4%	13.4%	8.9%	8.1%	15.2%	14.3%	8.4%	18.0%	8.8%	18.1%	19.5%	9.7%	7.7%		12.7%	19.6%	5.2%	1.4%	4.3%	15.0%	20.1%
			b			de	de		H		J	J					RS	s		T	T	
Condo	23	1	23	4	2	2	15	13	10	17	3	4	11	6	-	0	4	10	2	9	12	2
	2.3%	0.5%	2.6%	2.2%	1.6%	0.9%	3.4%	2.4%	2.2%	2.8%	1.1%	2.6%	3.0%	2.6%		0.9%	4.2%	3.8%	1.4%	3.7%	1.8%	2.5%
				f																		
Other (SPECIFY)	17	1	16	3	3	8	3	9	8	5	6	6	2	3	-	-	-	4	1	2	15	-
	1.7%	1.1%	1.8%	1.8%	2.0%	3.2%	0.7%	1.7%	1.8%	0.9%	2.4%	3.8%	0.5%	1.5%				1.7%	0.8%	0.9%	2.2%	
						G																
Don't know	3	1	2	0	1	-	2	3	1	1	2	1	1	-	-	-	-	1	-	-	3	-
	0.3%	0.8%	0.3%	0.2%	0.6%		0.5%	0.5%	0.2%	0.2%	0.7%	0.5%	0.3%					0.4%			0.5%	
Refused	10	0	9	1	4	2	3	8	2	5	2	4	1	3	-	-	2	1	0	8	0	1
	1.0%	0.3%	1.1%	0.4%	2.6%	0.9%	0.8%	1.4%	0.5%	0.8%	0.6%	2.4%	0.2%	1.4%			1.5%	0.2%	0.2%	3.3%	0	1
																				U	*	1.8%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

D1A1. What year was your home built?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
2006 or later	107	9	98	24	7	29	47	55	51	65	32	10	48	16	-	-	10	28	12	18	83	6
	10.6%	6.7%	11.2%	13.3%	5.3%	11.2%	10.8%	10.1%	11.2%	10.8%	12.4%	6.7%	13.7%	6.6%			9.5%	10.9%	9.9%	7.2%	12.1%	8.3%
				e									N							t		
2000 - 2005	98	13	85	23	14	12	49	59	39	56	30	13	29	27	-	1	8	20	17	27	59	12
	9.8%	10.3%	9.7%	13.2%	10.0%	4.8%	11.3%	10.8%	8.6%	9.3%	11.4%	8.8%	8.3%	11.5%		4.8%	7.5%	7.6%	14.4%	10.9%	8.6%	16.9%
				F			F												r		u	
1990 - 1999	156	21	134	34	16	36	69	79	77	100	43	13	56	41	-	3	24	42	17	46	103	6
	15.5%	16.6%	15.3%	19.2%	12.0%	14.0%	15.9%	14.4%	16.7%	16.6%	16.4%	9.0%	16.0%	17.6%		18.3%	22.9%	16.3%	14.8%	18.6%	15.1%	8.7%
								l												v		
1980 - 1989	108	20	87	14	21	25	48	63	45	66	17	25	40	24	-	0	12	30	10	22	76	9
	10.7%	15.9%	10.0%	7.7%	15.9%	9.6%	11.0%	11.5%	9.8%	11.0%	6.5%	17.3%	11.3%	10.3%		2.5%	11.4%	11.5%	8.6%	9.0%	11.1%	12.8%
												K										
1970 - 1979	162	18	144	28	26	46	62	116	46	101	34	27	60	40	-	2	19	44	23	40	102	19
	16.1%	13.6%	16.4%	15.9%	19.3%	17.7%	14.1%	21.1%	10.0%	16.8%	13.2%	18.3%	17.2%	16.9%		16.9%	17.6%	16.9%	19.7%	16.3%	14.9%	26.3%
								I													u	
1960 - 1969	92	18	74	12	17	29	34	36	56	56	18	18	33	23	-	2	6	26	5	12	76	4
	9.1%	13.7%	8.4%	6.8%	12.4%	11.0%	7.9%	6.6%	12.1%	9.3%	7.0%	12.2%	9.3%	9.9%		15.4%	5.5%	10.0%	3.9%	4.9%	11.1%	5.1%
				c					H									s		TV		
earlier than 1960	247	27	220	40	28	70	109	119	128	150	71	26	84	58	-	5	25	67	33	68	169	10
	24.5%	20.9%	25.0%	22.9%	20.5%	26.8%	25.0%	21.7%	27.9%	24.9%	27.4%	17.8%	23.7%	24.7%		35.9%	23.6%	25.8%	28.0%	27.4%	24.6%	13.7%
																				V	v	
Don't know	17	2	15	0	0	7	9	9	8	4	12	1	1	2	-	-	1	2	1	5	10	1
	1.7%	1.6%	1.7%	0.3%	0.2%	2.7%	2.0%	1.6%	1.8%	0.6%	4.8%	0.4%	0.3%	0.9%			0.5%	0.9%	0.6%	2.2%	1.4%	1.9%
											JL											
Refused	21	1	20	1	6	6	9	13	8	5	3	14	1	4	-	1	2	-	-	9	8	5
	2.1%	0.7%	2.3%	0.7%	4.3%	2.2%	2.0%	2.3%	1.8%	0.8%	1.0%	9.6%	0.3%	1.6%		6.3%	1.5%			3.6%	1.1%	6.4%
												JK								u		
MEAN	1973	1976	1973	1977	1974	1970	1973	1975	1970	1973	1973	1973	1974	1972	-	1958	1973	1972	1976	1971	1973	1978
				F				I									P	P	p			

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

D2. Do you own your home or rent?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Own	707	93	614	131	106	168	301	436	270	444	174	89	261	170	-	11	61	200	97	188	466	53
	70.2%	72.0%	69.9%	74.2%	78.6%	64.7%	69.2%	79.4%	59.1%	73.7%	67.1%	61.0%	74.0%	72.6%		80.6%	57.4%	77.1%	82.4%	75.7%	67.9%	72.6%
					F			I		L						q		Q	Q	U		
Rent	283	33	250	43	24	86	130	101	181	153	83	47	90	60	-	3	44	58	20	51	215	17
	28.1%	25.7%	28.4%	24.4%	17.5%	33.2%	29.8%	18.4%	39.6%	25.4%	32.0%	32.2%	25.7%	25.4%		19.4%	41.0%	22.4%	17.2%	20.4%	31.4%	23.4%
					E		E	H								RS				T		
Don't know	5	3	3	2	1	1	2	4	1	2	1	3	0	1	-	-	1	1	0	1	4	1
	0.5%	2.2%	0.3%	1.0%	0.4%	0.4%	0.4%	0.7%	0.3%	0.3%	0.3%	2.1%	0.1%	0.5%			0.6%	0.2%	0.3%	0.3%	0.6%	1.1%
Refused	12	0	12	1	5	4	3	8	4	4	2	7	1	3	-	-	1	1	-	9	1	2
	1.2%	0.2%	1.4%	0.4%	3.4%	1.6%	0.6%	1.4%	1.0%	0.6%	0.6%	4.7%	0.2%	1.4%			1.1%	0.2%		3.6%	0.2%	3.0%
												jk								U		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

D3. Including yourself, how many people live in your home?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Rural			Urban				ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	Total	Rural	Urban	ID	MT	OR	WA																			
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
One	210	31	179	34	25	60	90	136	74	115	61	34	51	61	-	6	30	50	12	35	153	21				
	20.8%	24.0%	20.4%	19.4%	18.6%	23.1%	20.7%	24.7%	16.1%	19.2%	23.3%	23.3%	14.3%	26.1%		44.0%	28.1%	19.1%	10.6%	14.0%	22.4%	29.5%				
								I					M			rS	S	s		T	T					
Two	394	57	337	81	60	95	158	226	168	234	106	54	134	94	-	6	35	103	39	118	244	33				
	39.2%	44.5%	38.4%	46.0%	44.7%	36.5%	36.2%	41.2%	36.8%	38.9%	40.9%	37.2%	37.9%	40.2%		42.6%	33.3%	39.7%	33.2%	47.4%	35.6%	44.9%				
																				U						
Three	159	19	140	24	23	47	66	70	89	104	39	16	72	29	-	1	21	45	22	38	118	3				
	15.8%	14.7%	16.0%	13.4%	17.1%	18.1%	15.0%	12.7%	19.5%	17.4%	15.0%	11.0%	20.6%	12.5%		7.7%	20.1%	17.3%	18.5%	15.4%	17.2%	4.1%				
								H					n							V	V					
Four	98	11	88	20	6	16	56	50	49	65	20	14	41	22	-	-	8	27	19	22	72	5				
	9.8%	8.2%	10.0%	11.4%	4.5%	6.2%	12.9%	9.0%	10.7%	10.7%	7.7%	9.5%	11.7%	9.4%			7.8%	10.3%	16.6%	8.7%	10.5%	6.8%				
																				EF						
Five	65	6	59	6	10	20	29	36	29	40	20	5	30	11	-	0	6	18	12	16	43	6				
	6.4%	4.5%	6.7%	3.4%	7.0%	7.9%	6.6%	6.5%	6.3%	6.7%	7.5%	3.3%	8.4%	4.5%		1.5%	5.6%	7.0%	10.5%	6.4%	6.2%	8.4%				
Six	36	1	35	6	1	10	18	8	27	18	6	11	8	10	-	1	3	10	4	8	26	2				
	3.5%	0.8%	3.9%	3.3%	1.0%	3.9%	4.2%	1.5%	6.0%	3.0%	2.5%	7.5%	2.4%	4.2%		4.2%	2.8%	3.7%	3.1%	3.3%	3.8%	2.1%				
																				B	e	jK				
Seven or more	23	2	21	4	3	6	10	10	13	15	3	5	10	3	-	-	1	4	6	2	21	-				
	2.3%	1.4%	2.4%	2.5%	1.9%	2.2%	2.4%	1.9%	2.8%	2.4%	1.2%	3.7%	3.0%	1.2%			1.2%	1.5%	5.5%	0.7%	3.1%	-				
																				R	T					
Don't know	1	-	1	-	-	1	0	1	-	-	0	1	-	-	-	-	-	-	-	1	0	-				
	0.1%		0.2%			0.3%	0.1%	0.3%			0.2%	0.6%								0.4%	0.1%					
Refused	20	2	18	1	7	4	8	12	8	10	4	6	6	4	-	-	1	3	2	9	8	3				
	2.0%	1.8%	2.1%	0.6%	5.3%	1.6%	1.8%	2.2%	1.8%	1.7%	1.7%	4.0%	1.7%	1.8%			1.1%	1.3%	2.0%	3.7%	1.2%	4.3%				
																				d						

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

D4. Which of the following best describes your educational background?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase				
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not Aware	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)		
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73		
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86		
Less than high school	14	1	14	-	1	7	6	10	5	3	5	6	2	1	-	-	-	3	-	5	7	2		
	1.4%	0.5%	1.6%		1.0%	2.8%	1.3%	1.8%	1.0%	0.5%	1.9%	4.4%	0.6%	0.4%				1.3%		2.1%	1.1%	2.4%		
High school or GED	193	33	160	24	26	65	78	99	94	106	61	27	52	51	-	6	20	42	11	29	149	15		
	19.2%	25.8%	18.2%	13.7%	19.6%	24.9%	17.8%	18.0%	20.6%	17.5%	23.4%	18.3%	14.7%	21.7%		39.5%	19.0%	16.1%	9.7%	11.5%	21.8%	20.7%		
						d										rs					T			
Some college	247	36	211	62	37	46	103	130	117	143	66	38	91	53	-	6	37	56	24	55	176	17		
	24.6%	28.0%	24.1%	35.0%	27.0%	17.8%	23.6%	23.7%	25.7%	23.8%	25.4%	26.4%	25.7%	22.4%		39.3%	34.7%	21.8%	20.5%	22.0%	25.6%	23.6%		
						FG										rs								
Technical College (2 year degree)	129	21	108	23	18	39	50	74	55	70	40	19	38	27	-	2	10	36	18	29	88	13		
	12.9%	16.5%	12.3%	13.0%	13.4%	14.9%	11.4%	13.5%	12.1%	11.7%	15.3%	13.4%	10.7%	11.7%		11.8%	9.3%	13.7%	14.9%	11.5%	12.8%	17.6%		
4 Year college	221	21	200	38	25	54	104	123	98	149	46	26	98	51	-	0	24	65	36	68	142	12		
	21.9%	16.0%	22.8%	21.5%	18.8%	20.7%	23.8%	22.3%	21.5%	24.7%	17.6%	18.2%	27.7%	21.6%		1.6%	22.9%	25.1%	31.0%	27.4%	20.6%	15.8%		
						b				k						p	p	p	p	uv				
Graduate degree	188	16	172	28	24	44	92	103	84	126	41	21	71	48	-	1	14	56	28	54	122	12		
	18.6%	12.1%	19.6%	15.9%	17.7%	16.8%	21.1%	18.8%	18.4%	20.9%	15.6%	14.5%	20.2%	20.6%		7.8%	13.0%	21.6%	23.4%	21.7%	17.8%	15.8%		
						b													p					
Don't know	1	0	1	0	-	1	-	1	-	0	-	1	0	-	-	-	-	-	0	0	1	-		
	0.1%	0.2%	0.1%	0.2%		0.3%		0.2%		0.1%		0.6%	0.1%						0.3%	0.1%	0.1%			
Refused	13	1	12	1	4	4	4	10	3	5	2	6	1	4	-	-	1	1	0	9	1	3		
	1.3%	0.9%	1.4%	0.7%	2.6%	1.7%	0.9%	1.8%	0.7%	0.8%	0.9%	4.4%	0.2%	1.6%			1.1%	0.4%	0.2%	3.7%	0.2%	4.1%		
																				U				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
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 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

D5. Could you please tell me which of the following categories includes your age?

	RUCC							State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Purch	No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware				
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)				
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73				
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86				
18 to 24	79	5	74	15	10	14	40	12	67	34	25	20	22	12	-	-	13	9	1	6	72	0				
	7.9%	4.1%	8.4%	8.7%	7.4%	5.3%	9.2%	2.1%	14.7%	5.6%	9.6%	14.0%	6.2%	5.1%	-	-	12.7%	3.6%	0.5%	2.6%	10.6%	0.3%				
			B				f		H		j	J					RS				TV					
25 to 34	141	10	132	36	5	41	59	22	119	87	31	23	56	30	-	2	21	38	14	34	106	2				
	14.0%	7.4%	15.0%	20.1%	3.9%	15.8%	13.6%	4.0%	26.0%	14.5%	11.8%	16.2%	16.0%	12.9%	-	11.3%	20.1%	14.7%	11.8%	13.6%	15.4%	2.4%				
			B	Eg		E	E		H											V	V					
35 to 44	111	10	100	10	19	29	52	54	57	69	30	11	45	24	-	-	12	27	19	33	69	8				
	11.0%	8.1%	11.4%	5.8%	14.4%	11.3%	11.9%	9.8%	12.4%	11.5%	11.7%	7.6%	12.9%	10.1%	-	-	11.4%	10.4%	16.5%	13.4%	10.1%	11.2%				
					d		d																			
45 to 54	173	39	134	31	36	28	78	95	78	124	39	10	83	38	-	2	18	54	32	48	117	7				
	17.2%	30.0%	15.3%	17.6%	26.4%	10.8%	17.9%	17.3%	17.0%	20.6%	14.9%	7.1%	23.6%	16.2%	-	15.4%	16.9%	20.8%	27.4%	19.5%	17.1%	9.9%				
		C		F		f				L	l		n							v						
55 to 64	218	24	193	32	29	59	98	151	66	141	55	22	78	56	-	5	17	67	29	58	146	14				
	21.6%	19.0%	22.0%	18.1%	21.6%	22.7%	22.4%	27.6%	14.5%	23.4%	21.2%	15.1%	22.1%	23.8%	-	34.0%	15.8%	26.0%	24.6%	23.3%	21.3%	18.7%				
								I		l																
65 and over	262	40	223	50	30	81	101	201	62	138	78	46	64	70	-	6	23	61	20	57	166	39				
	26.0%	30.7%	25.3%	28.6%	22.0%	31.2%	23.2%	36.5%	13.5%	22.9%	30.1%	31.7%	18.1%	29.7%	-	39.4%	22.0%	23.7%	17.3%	23.1%	24.2%	52.8%				
								I					M			s					TU					
Don't know	1	-	1	1	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1	-				
	0.1%		0.1%	0.4%				0.1%				0.5%									0.1%					
Refused	23	1	22	1	6	8	8	14	9	9	2	11	4	5	-	-	1	2	2	11	8	3				
	2.2%	0.7%	2.5%	0.7%	4.2%	3.0%	1.8%	2.5%	2.0%	1.6%	0.8%	7.7%	1.2%	2.2%	-	-	1.1%	0.8%	1.9%	4.5%	1.2%	4.7%				
											JK									U						
Mean	51.42	54.88	50.91	50.68	52.39	53.10	50.45	58.30	43.22	51.39	52.13	50.21	49.55	53.62	-	59.51	47.23	52.44	51.74	52.37	49.99	62.16				
		C				G		I						M		QRs	Q			TU						
Standard Deviation	16.96	14.84	17.20	17.98	15.05	17.19	16.90	13.62	16.91	15.97	17.53	19.93	15.62	16.36		13.85	17.99	15.46	13.42	15.26	17.48	12.90				
Standard Error	0.73	1.50	0.81	1.98	1.89	1.50	1.04	0.62	1.31	0.88	1.53	2.32	1.12	1.46		3.74	2.51	1.29	1.50	1.24	0.94	1.88				

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

D6. Which of the following categories contains your annual household income from all sources in 2013 before taxes?

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not No-Purch	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Less than \$20,000 per year	141	17	124	17	19	52	53	80	60	64	53	24	33	30	-	3	14	29	8	17	108	16
	14.0%	13.2%	14.1%	9.5%	13.9%	19.9%	12.2%	14.6%	13.2%	10.7%	20.3%	16.3%	9.3%	12.7%		20.8%	12.8%	11.4%	6.9%	6.8%	15.7%	21.6%
						Dg					J									T	T	
\$20,000 to \$49,000	271	46	225	76	26	68	102	135	137	137	82	52	77	58	-	1	34	57	23	51	201	20
	27.0%	35.9%	25.6%	43.2%	19.1%	26.1%	23.3%	24.5%	29.9%	22.9%	31.6%	35.6%	22.0%	24.6%		8.9%	32.1%	22.0%	19.7%	20.6%	29.3%	26.9%
		C		EFG						j	J						p			T	T	
\$50,000 to \$74,000	195	26	169	32	26	45	92	92	103	131	36	27	88	41	-	2	23	68	17	45	139	10
	19.4%	20.0%	19.3%	18.3%	19.5%	17.2%	21.1%	16.8%	22.5%	21.8%	14.0%	18.8%	25.1%	17.7%		14.4%	21.6%	26.2%	14.3%	18.3%	20.3%	14.1%
										K			n					pS				
\$75,000 to \$99,000	104	11	93	11	18	24	50	55	49	83	19	2	54	30	-	-	17	31	27	44	59	1
	10.3%	8.4%	10.6%	6.2%	13.6%	9.3%	11.6%	10.0%	10.7%	13.8%	7.3%	1.4%	15.2%	12.6%			15.8%	11.8%	23.1%	17.6%	8.6%	1.5%
							d			KL	L								R	UV	V	
\$100,000 or more	123	9	115	11	21	25	66	69	54	91	25	7	55	35	-	2	6	42	27	47	67	9
	12.2%	6.7%	13.0%	6.3%	15.3%	9.8%	15.1%	12.6%	11.9%	15.2%	9.4%	5.1%	15.7%	14.8%		12.6%	5.8%	16.2%	23.1%	19.0%	9.7%	12.7%
			B		d		D			kL								Q	Q	U		
Don't know	27	1	25	0	3	9	14	14	12	7	12	7	3	4	-	1	1	2	1	3	22	1
	2.6%	1.2%	2.9%	0.3%	2.2%	3.5%	3.2%	2.6%	2.7%	1.2%	4.6%	5.1%	0.9%	1.8%		6.3%	1.3%	0.7%	1.0%	1.2%	3.3%	1.9%
					d	D				j	j											
Refused	146	19	127	28	22	37	59	104	42	87	33	26	42	37	-	5	11	30	14	41	89	15
	14.5%	14.5%	14.5%	16.1%	16.3%	14.2%	13.4%	18.9%	9.2%	14.4%	12.8%	17.7%	11.8%	16.0%		36.8%	10.8%	11.7%	11.9%	16.6%	13.0%	21.1%
								I								QRs						
Mean	56817	50039	57831	48692	62599	51642	61410	57139.67	56472.12	63126.4	48741.9	43731.4	64842.15	60781.20	-	53324.2	53429.5	63064.5	74112.9	69936.8	52886.4	49262.5
			B		DF		DF			KL								Q	QR	UV		
Standard Deviation	34168	29408	34728	27787	36108	33813	35159	35272.75	32986.07	34537.6	33170.7	26857.8	33697.53	35642.09		42742.3	29406.7	34450.3	35643.0	34999.2	32471.3	36280.9
Standard Error	1617	3299	1797	3364	5025	3171	2379	1765.37	2705.17	2077.51	3184.82	3404.25	2590.46	3518.43		15127.4	4447.67	3079.21	4214.45	3135.05	1908.15	6014.43

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.
 Pacific Market Research - May 2014

NEEA 2014 Consumer Lighting Survey

D701. Which of the following ethnicities would you say describe you? Please tell me all that apply.

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware	Not	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Purch	No-Purch	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
White	887	118	769	151	122	231	383	476	411	549	227	111	320	216	-	13	94	241	105	220	617	51
	88.1%	91.7%	87.5%	85.4%	90.4%	88.8%	88.0%	86.6%	89.8%	91.2%	87.3%	76.5%	90.7%	91.8%		93.7%	88.6%	93.3%	89.5%	88.4%	89.9%	69.5%
American Indian or Alaska Native	34	6	28	5	6	14	9	21	13	18	10	6	10	7	-	-	3	10	2	7	24	3
	3.4%	4.6%	3.2%	3.1%	4.1%	5.6%	2.0%	3.9%	2.8%	2.9%	3.9%	4.3%	2.9%	3.1%			2.5%	4.0%	2.1%	3.0%	3.5%	3.5%
Black or African American	27	1	26	3	-	8	16	12	15	7	10	11	5	2	-	-	4	2	1	1	16	11
	2.7%	1.0%	3.0%	1.9%		2.9%	3.7%	2.2%	3.3%	1.2%	3.8%	7.2%	1.4%	0.8%			4.1%	0.7%	0.6%	0.2%	2.3%	14.8%
Hispanic or Latino	25	2	23	7	0	6	13	15	11	13	8	5	11	2	-	-	3	5	4	4	15	6
	2.5%	1.6%	2.6%	3.7%	0.2%	2.1%	3.0%	2.7%	2.3%	2.1%	3.0%	3.3%	3.0%	0.9%			2.7%	2.0%	3.3%	1.8%	2.2%	7.9%
Asian	9	0	8	1	1	-	7	8	1	7	-	1	6	1	-	-	-	4	3	3	5	0
	0.9%	0.2%	0.9%	0.5%	0.8%		1.5%	1.4%	0.2%	1.2%		1.0%	1.8%	0.3%				1.4%	2.9%	1.2%	0.8%	0.2%
Native Hawaiian or Other Pacific Islander	8	0	8	-	0	2	6	3	5	4	4	-	4	-	-	-	1	1	2	3	5	-
	0.8%	0.2%	0.9%		0.2%	0.8%	1.4%	0.5%	1.1%	0.7%	1.6%		1.2%				1.0%	0.3%	1.6%	1.4%	0.7%	
Other (SPECIFY)	0	0	-	-	-	0	-	0	-	-	0	-	-	-	-	-	-	-	-	-	0	-
	*%	0.2%				0.1%		*%			0.1%										*%	
Don't know	5	0	5	-	3	1	1	5	-	1	-	4	-	1	-	1	-	0	-	1	3	1
	0.5%	0.2%	0.5%		1.9%	0.4%	0.3%	0.9%		0.2%		2.7%		0.4%		6.3%		0.1%		0.4%	0.4%	1.9%
Refused	52	5	47	11	6	15	20	36	17	25	13	14	10	14	-	-	4	7	5	21	24	6
	5.2%	4.0%	5.4%	6.4%	4.1%	5.9%	4.6%	6.5%	3.6%	4.1%	5.2%	9.7%	2.9%	5.8%			3.9%	2.7%	4.1%	8.6%	3.6%	8.5%

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.

NEEA 2014 Consumer Lighting Survey

W0. GENDER

	RUCC			State				Respondent Type		CFL Awareness/Purchase			Date Most Recent CFL Purchase		Number of CFLs Installed					LED Awareness/Purchase		
	Total	Rural	Urban	ID	MT	OR	WA	Landline	Cell	Aware Purch	Not Purc	Aware	Past Yr	2+ Yrs	0	1	2-4	5-12	13+	Aware Purch	Not Purc	Aware
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)
Weighted Total	1007	129	878	177	135	259	436	549	458	602	260	145	352	235	-	14	106	259	118	248	686	73
	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Unweighted Total	1007	327	680	174	135	263	435	774	233	608	246	153	359	232	-	20	107	251	138	257	664	86
Male	405	59	346	57	64	105	179	190	215	279	77	49	161	111	-	8	64	110	58	130	258	17
	40.2%	45.5%	39.5%	32.4%	47.0%	40.4%	41.2%	34.6%	47.0%	46.4%	29.6%	33.7%	45.6%	47.2%		56.9%	60.5%	42.5%	49.7%	52.4%	37.6%	23.9%
				d					H	KL						R			UV	V		
Female	602	70	532	119	72	155	256	359	243	322	183	96	191	124	-	6	42	149	59	118	428	55
	59.8%	54.5%	60.5%	67.6%	53.0%	59.6%	58.8%	65.4%	53.0%	53.6%	70.4%	66.3%	54.4%	52.8%		43.1%	39.5%	57.5%	50.3%	47.6%	62.4%	76.1%
				e				I		J	J					Q			T	TU		

Comparison Groups: BC/DEFG/HI/JKL/MN/OPQRS/TUV
 Independent T-Test for Means, Independent Z-Test for Percentages (unpooled proportions)
 Uppercase letters indicate significance at the 95% level.
 Lowercase letters indicate significance at the 90% level.