Evaluation of Illinois Energy Now Lights for Learning® Program

June 2013 through May 2014

Prepared for:
Illinois Department of Commerce and Economic Opportunity

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Executive Summary

This report presents the results of the measurement and verification efforts (M&V) for the Illinois Department of Commerce and Economic Opportunity (DCEO) Lights for Learning® Program implemented in Illinois during electric program year six (EPY6), from June 2013 through May 2014. The Lights for Learning® Program is an educational and fundraising opportunity for Illinois's K-12 schools that promotes the sale of ENERGY STAR qualified compact fluorescent lamps (CFLs), ENERGY STAR qualified LED's, and other energy efficient products. In the fundraising process, students, teachers, and their communities are introduced to CFLs, other lighting applications, and energy concepts generally. The program increases awareness of energy efficient products available to consumers, with students functioning as a source of education for their families and communities.

The Lights for Learning Program® primarily achieves energy savings through the sale of energy efficient products, with a small portion of products being distributed free of charge as a promotional tool. In total, the program sold and distributed 12,616 energy efficient bulbs and products during EPY6. Table ES-1 shows the breakdown of lighting products sold and distributed.

Table ES-1 Breakdown of Measures Sold and Distributed

Program	*Total Number of Measures Sold*	*Total Number of Measures Distributed*	*Total Measures Sold and Distributed Through Program*
Lights for Learning® Program	12,558	58	12,616

The gross and net ex post electric savings for the Lights for Learning® Program during EPY6 are summarized in Table ES-2. The gross ex post electric energy savings totaled 446,138 kWh. Net ex post electric energy savings totaled 410,448 kWh. The net-to gross ratio is 92%.

Table ES-2 Summary of Gross and Net kWh Savings for Lights for Learning® Program

Utility	*Ex Ante kWh Savings*	*Gross Ex Post kWh Savings*	*Gross Realization Rate*	*Net Ex Post kWh Savings*	*Net-to-Gross Ratio*
Ameren	72,839	71,694	98%	65,959	92%.
ComEd	380,585	374,444	98%	344,489	92%.
Total	453,424	446,138	98%	410,448	92%

Gross and net ex post peak kW savings are displayed in Table ES-3. The net ex post peak electric savings for EPY6 are 40.54 kW.

Table ES-3 Summary of Gross and Net Peak kW Savings for Lights for Learning® Program

Utility	*Ex Ante kW Savings*	*Gross Ex Post kW Savings*	*Gross Realization Rate*	*Net Ex Post kW Savings*	*Net-to-Gross Ratio*
Ameren	-	7.04	-	6.48	92%
ComEd	-	37.02	-	34.06	92%
Total	-	44.06	-	40.54	92%

Variances between ex ante and ex post gross savings estimates are attributable to revised lifetime hours, lifetime years, and annual hours of use for LED nightlights, LED holiday strands, and LED bulbs. Installation rates of energy efficient measures installed were calculated based on information obtained from EPY4 participants[1] who responded to a telephone survey. ADM surveyed EPY6 participants and found slightly lower installation rates than the previous year, but due to the fact that only 21 participants were contacted versus the 64 from the EPY4 evaluation, ADM believed it was more appropriate to use the installation rates from EPY4. Participating respondents were asked about where they had installed the CFLs and LEDs and ADM used that response data, along with information from the Illinois Statewide Technical Reference Manual (TRM) for Version 2.0, to estimate hours of use by room type.

In addition to measuring gross and net energy savings, ADM examined the program's operations and delivery as part of a process evaluation.

The following presents a selection of key findings from EPY6:

- **Decrease in Gross and Net Ex Post Savings:** Funding for the Lights for Learning Program decreased in EPY6. As a result, there was a decrease of approximately one-third of gross and net ex post kWh savings as compared to EPY5. The lower level of activity corresponded with a decrease in the number of organizations that participated in the fundraising activity. EPY6 was the second consecutive year that program fundraising activity decreased.
- **Program Educational Component has been Successful:** The program increased the number of presentations given during the year by 12%. These educational activities occurred at a diverse set of organizations including schools, park districts, public libraries, and community centers.
- **New Organizations Participated in Program Fundraising:** Thirty percent of the organizations that participated in fundraising during EPY6 were new participants to the program. This growth is likely a reflection of the outreach efforts made by program staff to recruit new organizations.

[1] ADM was unable to administer a participant survey to EPY5 program participants because contact information was not available.

- **Product Purchasers were Satisfied:** Twenty-one product purchasers were surveyed about their experience with the program. Overall, they reported satisfaction with the program and the products they received. None noted any problems with the participation process. In their response to open-ended questions, some participants noted the value of the program and the associated assemblies for educating students about energy efficiency and its importance.
- **Program Tracking Data:** Program staff made efforts to improve tracking data for customer contact information; products sold, and associated savings. Improvements to the tracking of products sold through the program have facilitated reporting and improved the accuracy of savings estimates. However, challenges remain with the collection of end user contact information. Although the number of contacts provided this year increased from the prior year, the number of contacts remains a fraction of the total number of product purchasers. Lack of customer contact information hampers the evaluation of the program by creating challenges to the collection of data on installation rate, customer decision making, customer experience with the program process, and any behavioral changes that may have resulted from the program.

The following recommendations are offered in the interest of the continued development of the Lights for Learning® Program.

- **Continue Focus on Outreach:** Program staff should continue their focus on gaining participation in the fundraiser. This outreach effort is necessary to sustain savings attributable to the program. Increased outreach may be particularly useful in the Ameren service territory. EPY6 kWh savings were less than the savings goal for the Ameren service territory for the current program cycle (EPY7-EPY9), while EPY6 ComEd savings exceeded the goal for the current program cycle.
- **Continue Efforts to Acquire Customer Contact Information:** As mentioned above, the program has made improvements in collecting product purchaser contact information. Staff should continue to focus their efforts because this information is critical to the evaluation effort.
- **Consider Limiting Items to Biggest Sellers:** As noted, in Figure 2-1, out of the 25 items that were sold through the program, eight products accounted for at least five percent of program sales each, and in total combined, accounted for 72% of the program sales. Staff should consider decreasing the number of available items and focusing on selling the most popular items, if this will reduce program administration costs. However, staff should also consider the value of offering less frequently sold products and whether or not offering those products is consistent with the program's market transformation goals.

1. Introduction

This report presents the results of the impact and process evaluation of Illinois's Lights for Learning® Program offered by the Illinois Department of Commerce and Economic Opportunity (DCEO). This report presents results for Lights for Learning® Program activity during electric program year six (EPY6), the period from June 2013 to May 2014.

1.1 Description of Program

Lights for Learning® is a unique, youth-oriented program that raises money for K-12 schools through the sale of energy efficient products including ENERGY STAR qualified CFLs, LEDs, LED strands and nightlights, power strips, and Belkin Conserve Sockets™. The program is designed to provide basic energy and energy efficiency literacy to young people at public and private schools - with eligibility extended to related organizations - while providing the opportunity for these organizations to raise funds and promote energy efficiency in their communities. This goal is achieved by encouraging students and other participants to participate in a fun, ecologically friendly fundraising effort.

Each year, the Lights for Learning® program strives to replace traditional fundraisers with an ecologically friendly fundraising effort, while also providing education about energy efficiency in local communities. Children sell energy efficiency products (rather than traditional school fundraising items such as candy and gift wrap) by utilizing take-home order forms and organized booth sales at school or community events. (Products are also sold through permanent sales kiosks.) Each student participating in the fundraiser, regardless of the number of products sold, received a L4L branded reusable water bottle. Students who sold $25 or more in fundraiser products received a L4L drawstring backpack along with the water bottle. For students selling $45 or more in energy efficient products, a LED bike light was awarded in addition to the water bottle and the backpack. Finally, as a token of appreciation, the book *212: The Extra Degree* was awarded to all schools and organizations participating in the fundraiser at the conclusion of the program year.

Participating schools and other organizations receive 50% of the sales from products sold. The program supports free educational assemblies or classroom presentations to demonstrate to students, parents, and the educational community the environmental, economic, and energy efficiency benefits of energy efficiency products and behaviors. Periodic contests encourage students to apply their creativity toward creating videos and posters that promote energy efficiency.

The Lights for Learning® Program is funded by the Illinois Department of Commerce and Economic Opportunity (DCEO) and is administered by the Midwest Energy Efficiency Alliance (MEEA), with assistance from its implementation partner, Applied Proactive Technologies, Inc. Order fulfillment was provided by Energy Federation, Inc.

A summary of program activities performed during the course of the program year is shown in Table 1-1. During the June 2013 through May 2014 period, 172 organizations participated in the Lights for Learning® Program. Although the majority of the participating organizations were

schools, a few other types of organizations such as public libraries and Boy Scouts of America troops also participated. In this period, 335[2] presentations were given, with attendance totaling 25,689 students and other target audiences.

Table 1-1 Summary of Activities Performed During Program Year

Program Activities	*Quantity Performed*
Participating schools and organization	172
Student's fundraising	948
Energy efficiency products sold	12,558
Fundraisers	100
Presentations	335+[3]
Attendance	25,689

Table 1-2 shows a breakdown of all 12,558 products that were sold during the EPY6 program year. Fifty-eight samples of measures were distributed during the program year. They are not included in the 12,558 products sold.

[2] 335 formal in-school presentations; plus an additional 100 (+) events and untallied mini-presentations were completed throughout the 2013-2014 school year.

[3] 335 formal in-school presentations; plus an additional 100 (+) events and untallied mini-presentations were completed throughout the 2013-2014 school year.

Table 1-2 Total Number of Products Sold By Style

Style	*Total Number of Products*
14 Watt	476
14 Watt Spiral CFL Bulb (4 pack)	3,448
19 Watt Spiral CFL Bulb	623
19 Watt (3 pack)	1,326
23 Watt Spiral CFL Bulb	717
Sample Pack CFL Bulbs (14 Watt, 19Watt, 23 Watt)	765
14 Watt R-30 Reflector	651
14 Watt Globe CFL	512
33 Watt 3 – Way	349
Desk Lamp	42
14 Watt A -Lamp (2 Pack)	798
5 Watt Mini Candelabra	59
7 Watt Mini Candelabra	378
13 Watt LED	229
14 Watt Par 30 LED	92
13 Watt R-30 LED	78
Philips Endura LED A19	6
9 Watt LED Par 20	196
.25 Watt LED Nightlight	458
.25 Watt LED Nightlight (3 Pack)	192
3.4 Watt LED Holiday Lights (Warm White)	230
3.4 Watt LED Holiday Lights (Multicolor)	730
Belkin Conserve Socket	55
Tricklestar 7 Outlet Power Strip	115
BITS Smart Power Strip	33
TOTAL	12,558

Overall, proceeds from the sale of Compact Fluorescent Lights bulbs, LED bulbs, LED holiday light strands, and energy efficient products totaled $21,297.75 for the EPY6 program year. These proceeds assisted children in raising much needed funds for their classroom or organization while providing a platform to educate others in their communities on the values and benefits of energy efficient products. The utility sponsors for the Lights for Learning® Program are displayed in Figure 1-1 below.

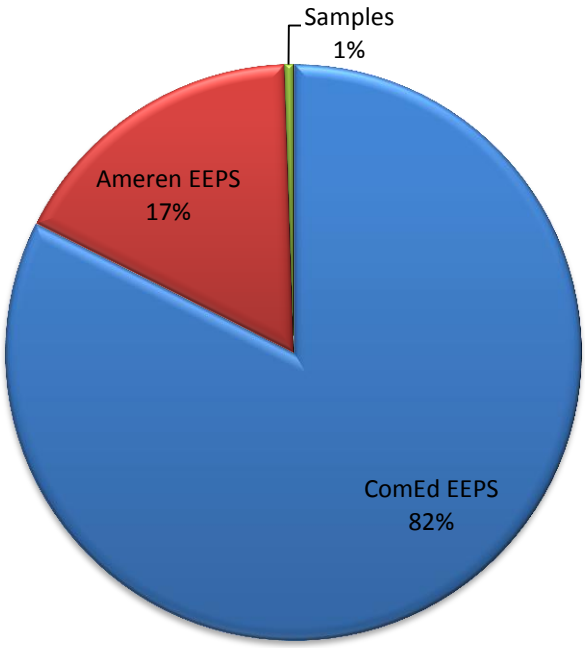

Figure 1-1 Percent of Utility Area

1.2 Overview of Evaluation Approach

The overall objective for the impact evaluation of the Lights for Learning® Program was to determine the gross and net ex post energy (kWh) savings and peak demand (kW) reductions resulting from the energy efficient products sold and distributed during the program year.

The approach for the impact evaluation was based upon the following features:

- Available documentation (e.g., program reports, savings calculation work papers, etc.) were reviewed, with particular attention given to the calculation procedures and documentation for savings estimates;
- Gross savings were verified via analytical desk review; and
- A participant survey was conducted from a sample of program participants to gather information on their decision making, their likes and dislikes of the program, and other factors which play a role in determining net-to-gross savings ratios for the program.

1.3 Organization of Report

This report on the impact and process evaluation of the Lights for Learning® Program for the period June 2013 through May 2014 is organized as follows:

- Chapter 2 presents and discusses the analytical methods and results of estimating gross savings for measures installed under the program.

- Chapter 3 presents and discusses the analytical methods and results of estimating net savings of the program.
- Chapter 4 presents and discusses the analytical methods and results of the process evaluation of the program.
- Appendix A provides a copy of the questionnaire used for the survey of EPY6 participants in the program.
- Appendix B provides the results of the EPY6 survey of program participants.[4]

[4] Installation rates used to calculate savings for EPY6 were taken from the EPY4 questionnaire results. For the EPY6 program year, ADM only managed to speak to 21 participants. Because EPY4 spoke to 64 participants, ADM believed that the installation rates found from that year were much more reliable and realistic.

2. Estimation of Gross Savings

This chapter addresses the estimation of gross ex post kWh savings and peak kW reductions resulting from measures installed in homes of participants that purchased the items under the Lights for Learning® Program during electric program year six (EPY6), the period from June 2013 through May 2014. Section 2.1 describes the methodology used for estimating gross savings. Section 2.2 presents the results from the calculation of savings for products sold and distributed through the program.

2.1 Methodology for Estimating Gross Savings

The M&V approach for the Lights for Learning® Program is aimed at the following:

- Verifying the number of CFLs, LEDs, LED strands and nightlights, conserve sockets, and power strips purchased and distributed as a result of the program;
- Determining the percentage of purchased CFLs and LEDs (bulbs, strands, sockets, power strips, and nightlights) that are actually installed; and
- Estimating the extent to which installed CFLs and LEDs (bulbs, strands and nightlights) are used.

Table 2-1 below summarizes the inputs needed for gross savings calculations and the source of each input.

Table 2-1 Sources for Gross Impact Parameters

Parameter	*Source*
Quantities & Specifications	Program tracking data
Location of Installation	Telephone follow-up surveys with energy efficient lighting/product purchasers
Hours of Use Per Day	Illinois Statewide TRM
Installation Rate	Telephone follow-up surveys with lighting/product purchasers
Baseline Wattage	Manufacturer's specifications for lumen equivalence by CFL size & configuration

2.1.1 Review of Documentation

DCEO's program implementation contractor, Midwest Energy Efficiency Alliance (MEEA), provided in-depth documentation pertaining to all measures offered through the program. The first step in the evaluation effort was to review this documentation and other relevant program materials.

For each energy efficient measure sold or distributed, the available documentation (e.g., quarterly reports, savings calculation work papers, etc.) was reviewed, with particular attention given to the calculation procedures and documentation for savings estimates.

Each report was reviewed to determine whether the following types of information had been provided:

- Documentation for the measures distributed as samples;
- Documentation for the measures sold; and
- Information about the savings calculation methodology, including (1) what methodology was used, (2) specifications of assumptions and sources for these specifications, and (3) accuracy of calculations.

2.1.2 Analytic Desk Review

ADM evaluation staff reviewed the energy savings algorithms to verify that the assumptions were reasonable and the algorithms were correct for assigning ex ante gross kWh and kW savings per measure. The measure algorithms components were verified with the savings assumptions provided by the Midwest Energy Efficiency Alliance. The calculations were checked to ensure that the reported results could be replicated. Once the calculation methods were verified, the reasonableness of the calculation was assessed. The assessment of reasonableness of the savings estimates was based on the Illinois Statewide Technical Reference Manual (TRM) for Version 2.0 and the Pennsylvania Technical Reference Manual (TRM) methodologies.

2.1.3 Data Collection

Telephone surveying of a select number of participants from the program was performed for this evaluation. The telephone survey provided useful information, including:

- The types of measures purchased;
- Rooms in which newly purchased CFL and LED bulbs were installed;
- The extent to which the newly purchased CFL and LED bulbs are used;
- Participants' decision-making considerations for participating in the program;
- Changes in participant behavior after participating in the program; and
- Participant feedback on the program generally.

2.1.4 Procedures for Estimating Savings from Measures Installed through the Lights for Learning® Program

Gross savings estimates for the Lights for Learning® Program require the following parameters:

- Baseline wattage;

- Installation rate; and
- Hours of use.

These parameters were determined through the telephone survey administered to program participants and the Illinois TRM. EPY4 participant survey results were used to determine installation rates while the Illinois Technical Reference Manual and the Pennsylvania Technical Reference Manual was used to determine hours of use and baseline wattages.

The equations used to determine savings for all lighting measures purchased through the program are listed below.

Equation used to calculate gross annual kWh savings: [{Delta watts × # of Bulbs × Installation Rate × Number of Hours × HVAC Energy Interactive Affect}/1000].

Equation used to calculate gross annual kW savings: [kW saved/fixture (Delta Watts) × Number of Hours × Installation Rate × HVAC Energy Interactive Affect) × Mean Load Coincidence Factor].

Equation used to calculate lifetime kWh savings: annual gross kWh savings × Years of life of bulb

Equation used to calculate lifetime kW savings: annual gross kW savings × Years of life of bulb

Savings for the Trickstar and BITS powerstrip were taken from the Illinois Technical Reference Manual.

As the implementation contractor did not calculate savings for the Belkin Conserve Socket™, ADM did not take these measures into account when calculating annual gross savings.

Impact evaluation efforts are detailed in the following subsections.

2.1.5 Database Review

The EPY6 Lights for Learning® Program Year End Report indicated that 12,558 energy efficient measures were sold through the program. ADM first examined program tracking data for systemic entry errors for each channel, i.e., duplicate entries and/or erroneous entries (such as data entered into improper columns). ADM then verified measure sales and distribution by reviewing quarterly reports from MEEA: the two EEPS grants and non-EEPS trust fund grant. These invoices were cross-checked with program tracking data in order to ensure that final claimed sales/distributions and associated savings matched sales data provided by MEEA. Figure 2-1 below presents a summary of measures sold and distributed through the Lights for Learning® Program during EPY6.

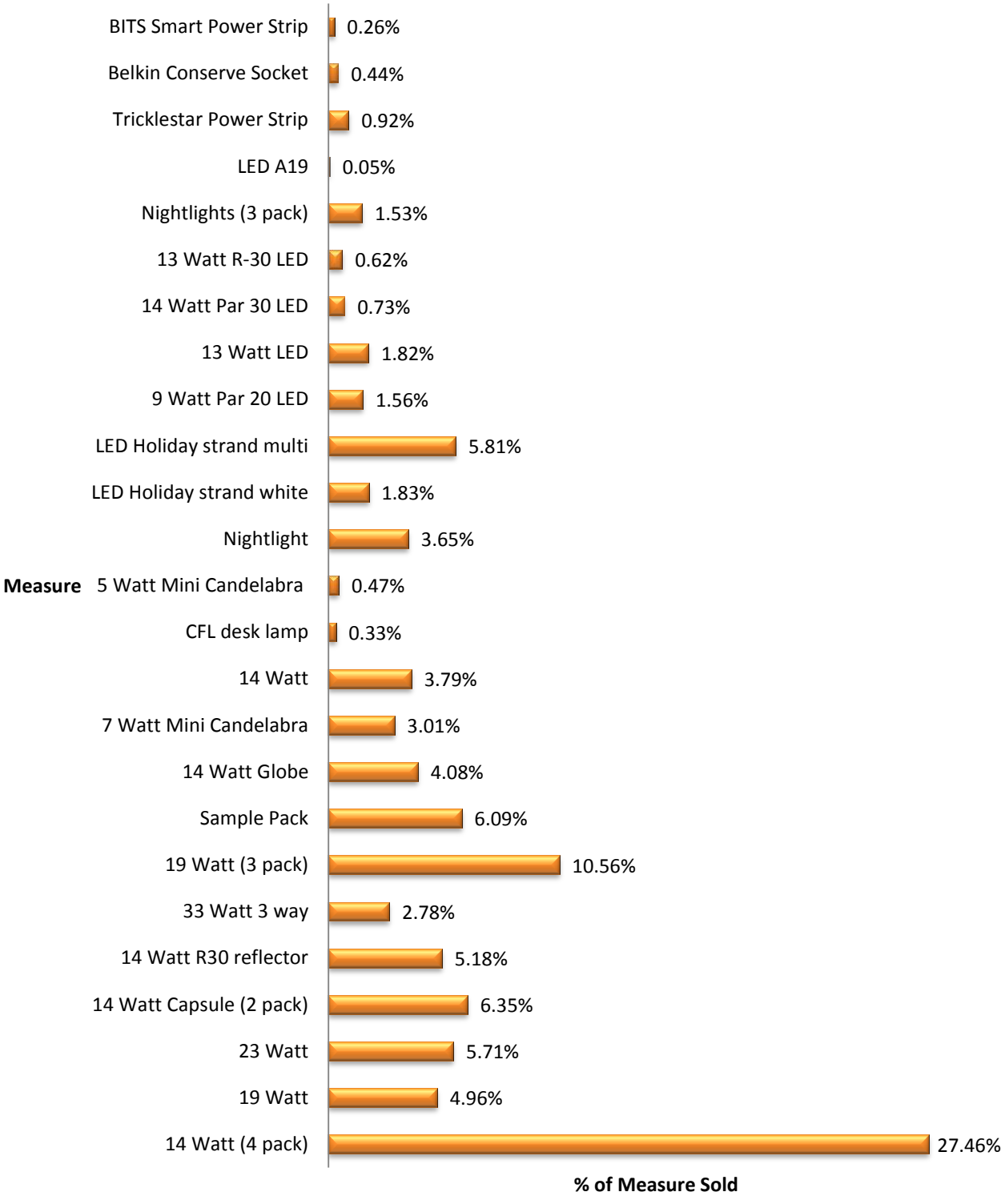

Figure 2-1 Distribution by Measure Type

2.1.6 Gross Annual kWh Savings and Peak kW Reduction Estimates

The program implementation contractor did not calculate savings for the Belkin Conserve Socket™. ADM did not calculate annual ex post savings for these measures because these measures accounted for a very small amount of overall program activity, and there is relatively high uncertainty associated with savings estimates for these measures..

For the Tricklestar and BITS power strip, ADM used the Illinois Technical Reference Manual and the installation rate from the survey administered to calculate savings.

Gross savings estimates for residential CFLs, LEDs, LED nightlights, and LED holiday strands require the following parameters:

- Baseline wattage;
- Installation rate; and
- Hours of use.

2.1.6.1. Baseline Wattage

Baseline wattage is dependent upon the CFL and LED wattage and configuration, i.e., spiral, flood, globe, or candelabra. ADM researched the SKU numbers of lighting that was sold and distributed in order to find the appropriate baseline for the model. These results are presented in Table 2-2 below.

Table 2-2 Baseline Wattage Table

Bulb Wattage	*Type of Bulb*	*Configuration*	*Ex Ante Baseline Wattage*	*Ex Post Baseline Wattage*
5	CFL	Candelabra	40	40
7	CFL	Candelabra	40	40
14	CFL	Spiral	60	60
14	CFL	Reflector	60	60
14	CFL	Globe	60	60
14	CFL	A-lamp	60	60
14	CFL	Spiral-Desk Lamp	60	60
19	CFL	Spiral	53	53
23	CFL	Spiral	72	72
33	CFL	Spiral	100	100
0.25	LED nightlight	-	3.2	3.2
3.4	LED Holiday Lights (Warm White)	-	89.6	89.6
3.4	LED Holiday Lights (Multicolor)	-	89.6	89.6
9	Par 20 LED	-	46	46
13	LED A19	-	60	60
13	LED		60	60
13	R-30 LED		65	65
14	Par 30 LED	-	67	67

2.1.6.2. Installation Rate

Installation rates of the purchased CFLs and LEDs were determined by surveying participants who purchased these measures. Surveyed participants were asked how many bulbs had been installed, and how many participants intended install in the coming month. The values were summed and then divided by total lighting purchased in the respective category (ADM divided CFLs, LED nightlights, and LED holiday strands into separate categories.) From the 21 surveys completed during the EPY6 evaluation, ADM found an overall installation rate of 70% for CFLs and LED bulbs, 100% for LED holiday strands, and 60% for LED nightlights.

From the 64 surveys completed during the EPY4 evaluation, ADM found an overall installation rate of 79% for CFLs and LED bulbs, 100% for LED holiday strands, and 78% for LED nightlights.

Because a larger number of survey respondents completed the survey administered for the EPY4 evaluation, ADM concluded that these results were a better indicator of installation rates than the EPY6 findings.

2.1.6.3. Hours of Use

The hours of use stipulated in the Illinois Statewide Technical Reference Manual (TRM) for Version 2.0 and Pennsylvania Statewide TRM were used to estimate savings. The annual hours provided in the TRM by measure are as follows:

Table 2-3 Hours of Use By Measure

Measure	*TRM Used*	*Hours of Use*
Spiral CFLs	Illinois	938
Capsule CFL	Illinois	1,328
3 Way CFL	Illinois	897
Globe CFL	Illinois	1,240
Candelabra CFL	Illinois	1,328
LED Nightlight	Pennsylvania	4,380
LED Holiday Strands	Pennsylvania	150
LED	Illinois	1,010
PAR 30 LED	Illinois	1,010
R-30 LED	Illinois	1,010
A19 LED	Illinois	1,010
PAR 20 LED	Illinois	1,010

2.2 Results of Gross Savings Estimation

Table 2-4 displays the gross ex post electricity savings for the period June 2013 through May 2014. Overall, the achieved gross savings of 446,138 kWh were equal to 98% of the expected savings.

Table 2-4 Ex Ante and Gross Ex Post kWh Savings for Lights for Learning® Program

Utility	*Ex Ante kWh Savings*	*Gross Ex Post kWh Savings*	*Gross Realization Rate*
Ameren	72,839	71,694	98%
ComEd	380,585	374,444	98%
Total	453,424	446,138	98%

The gross ex post peak kW reductions of the Lights for Learning® Program for the period June 2013 through May 2014 are shown in Table 2-5. The achieved gross peak demand savings for the program are 44.06 kW.

Table 2-5 Ex Ante and Gross Ex Post Peak kW Savings for Lights for Learning® Program

Utility	*Ex Ante kW Savings*	*Gross Ex Post kW Savings*
Ameren	-	7.04
ComEd	-	37.02
Total	-	44.06

2.2.1 Lifetime Savings

The Illinois TRM and the Pennsylvania Technical Reference Manual California were referenced to determine EUL for measures purchased. Lifetime savings for EPY6 were 2,702,774 kWh.

3. Estimation of Net Savings

This chapter reports the results of estimates for the net impacts of the Lights for Learning® Program during the period June 2013 through May 2014, where net savings represents the portion of gross savings achieved by program that can be attributed to the effects of the program.

3.1 Procedures Used To Estimate Net Savings

Net savings may be calculated as less than gross savings because of free ridership impacts. Free-riders for a program are defined as those participants who would have installed the same energy efficiency measures without the program.

The goal of free ridership analysis is to estimate the impacts of energy efficiency measures attributable to the program that are net of free ridership. Energy savings realized by free-riders are not induced by the program, and as a result these savings should not be included in the estimates of the program's actual impacts. Without adjustment for free ridership, some savings that would have occurred naturally will be attributed to the program. The measurement of the net impact of the program requires estimation of the marginal effect of the program over and above the "naturally occurring" patterns for installation and use of energy efficient equipment.

Evaluation of net savings from the Lights for Learning® Program required identifying free ridership through participant surveying. ADM applies a methodology that separates free ridership into three component parts. The three factors are:

- Plans and intentions of participant to install a measure even without support from the program;
- Influence that the program had on the participants decision to purchase and install a measure; and
- A participant's previous experience with similar energy efficient measures.

3.1.1 Plans and Intentions of Participant to Install Measures without Program

Participants were asked about their prior plans to purchase any of the energy efficient products, and whether they had planned on purchasing fewer of the energy efficient products than they purchased through the program. Two binary variables were constructed to account for participants' plans and intentions to install the energy efficient products. One, based on a more restrictive set of criteria indicates a higher likelihood of free ridership, and a second, based on less restrictive criteria indicates a relatively lower likelihood of free ridership.

The first, more restrictive criteria indicating participant plans and intentions to purchase the energy efficient products are as follows:

- If the respondent answered "yes" to the following two questions: "Did you have plans to purchase the energy efficient products prior to purchasing them through the Lights for

Learning® Program?" and "Would you have gone ahead with this planned purchase even if you had not participated in the Lights for Learning® Program?"

- If the respondent answers "definitely would have purchased" to the following question: "If the energy efficient products had not been offered through the Lights for Learning® Program, how likely is it that you would have purchased them anyway?"
- If the respondent answers "no, did not purchase more products" to the question "Did you purchase more of the energy efficient products because they were sold through the Lights for Learning® Program than you otherwise would have?"

The second, less restrictive criteria accounting for participants' plans and intentions are as follows:

- If the respondent answers "yes" to the following two questions: "Did you have plans to purchase the energy efficient products prior to purchasing them through the Lights for Learning® Program?" and "Would you have gone ahead with this planned purchase even if you had not participated in the Lights for Learning® Program?"
- Either the respondent answers "definitely would have purchased" or "probably would have purchased" to the following question: "If the energy efficient products had not been offered through the Lights for Learning® Program, how likely is it that you would have purchased them anyway?"
- If the respondent answers "no, did not purchase more products" to the question "Did you purchase more of the energy efficient products because they were sold through the Lights for Learning® Program than you otherwise would have?"

3.1.2 Influence That Program Had On Participant Decision to Purchase and Install Measure

The second factor involves determining if experience with the program and the importance of supporting schools or students selling the product through the program influenced participants' decision to purchase the energy efficient products.

The criterion indicating program influence that may signify a lower level of free ridership is as follows:

- If the respondent answers "very important" to the following question: "How important was supporting schools of supporting the student selling the products to your decision to purchase the energy efficient products?"

3.1.3 Participant's Previous Experience with Similar Energy Efficient Measures

The third factor requires determining if a participant in the program indicated that he or she had previous experience with similar energy efficiency products. A participant indicating that he or she had purchased and installed a similar measure is considered to have a higher likelihood of free ridership.

The criteria indicating that previous experience may signify a higher likelihood of free ridership are as follows:

- If the respondent answers "yes" to the following question: "Had you purchased similar energy efficient products in the last three years?"
- If the respondent answers "yes" to the following question: "Have you previously used energy efficient products similar to the ones you purchased through the Lights for Learning® Program?"

The three sets of rules just described were used to construct four different indicator variables that address free ridership behavior. For each participant, a free ridership value was assigned based on the combination of variables. With the four indicator variables, there were 11 applicable combinations for assigning free ridership scores for each respondent, depending on the combination of answers to the questions creating the indicator variables. Table 3-1 shows these values.

Table 3-1 Free Ridership Scores for Combinations of Indicator Variable Responses

Indicator Variables				*Free Ridership Score*
Had Plans and Intentions to Install Measure without the program? (Definition 1)	*Had Plans and Intentions to Install Measure without the program? (Definition 2)*	*Program had influence on Decision to Install Measure?*	*Had Previous Experience with Measure?*	
Y	N/A	Y	Y	100%
Y	N/A	N	N	100%
Y	N/A	N	Y	100%
Y	N/A	Y	N	67%
N	Y	N	Y	67%
N	N	N	Y	33%
N	Y	N	N	33%
N	Y	Y	N	0%
N	N	N	N	0%
N	N	Y	N	0%
N	N	Y	Y	0%

3.2 Results of Net Savings Estimation

The procedures described in the preceding section were used to estimate free ridership rates and net-to-gross ratios (NTGR) for the Lights for Learning® Program for EPY6.

3.2.1 Net Ex Post kWh Savings

The data used to assign free ridership scores were taken from the EPY6 evaluation which surveyed 21 participants who purchased lighting measures through the program during the period June 2013 through May 2014.

Free ridership rates were estimated for the CFL portion and the LED portion of the program as one. No NTGR was calculated for the conserve socket and power strip due to gross savings not being calculated.

The ex post energy savings of the Lights for Learning® Program during the period June 2013 through May 2014 are summarized in Table 3-2. During this period, ex post net energy savings totaled 410,448 kWh. The net to gross ratio was 92%.

Table 3-2 Summary of Net kWh Savings

Utility	*Ex Ante kWh Savings*	*Gross Ex Post kWh Savings*	*Gross Realization Rate*	*Net Ex Post kWh Savings*	*Net-to-Gross Ratio*
Ameren	72,839	71,694	98%	65,959	92%.
ComEd	380,585	374,444	98%	344,489	92%.
Total	453,424	446,138	98%	410,448	92%

3.2.2 Net Ex Post Peak kW Savings

The net ex post peak kW reductions of the Lights for Learning® Program during the period June 2013 through May 2014 is summarized in Table 3-3. The achieved net peak demand savings are 40.54 kW.

Table 3-3 Summary of Net Peak kW Savings

Utility	*Ex Ante kW Savings*	*Gross Ex Post kW Savings*	*Gross Realization Rate*	*Net Ex Post kW Savings*	*Net-to-Gross Ratio*
Ameren	-	7.04	-	6.48	92%
ComEd	-	37.02	-	34.06	92%
Total	-	44.06	-	40.54	92%

4. Process Evaluation

This chapter presents the results of the process evaluation for the Lights for Learning® Program. Process evaluation focuses on the effectiveness of program policies and organization, as well as the program delivery framework. The purpose of the process evaluation is to assess the design and recent results of the program in order to determine how effectively it is achieving its intended outcomes. This evaluation is based upon analysis of program structure and interviews of program staff and program participants.

The chapter begins with a discussion of the overall progress of the program. This is followed by an examination of certain issues relevant to the future success of the program. This chapter also presents strategic planning and process recommendations, and highlights key findings from the interviews of program staff and participants. The information in this chapter provides insight into participant decision making behaviors, and identifies any key issues that may be addressed for future program years. Conclusions, recommendations, and other findings from the process evaluation may be useful in comparing program years over time, and in conducting planning efforts for future program years.

4.1 Evaluation Objectives

The purpose of process evaluation is to examine program operations and results throughout the program operating year, and to identify potential program improvements that may prospectively increase program efficiency or effectiveness in terms of levels of participation and program satisfaction. This process evaluation was designed to document the operations and delivery of the Lights for Learning® Program during the period of June 2013 to May 2014 (EPY6).

Key research questions to be addressed by this evaluation of (EPY6) activity include:

- Were changes made to the design or delivery of the Lights for Learning® Program?
- Did the Lights for Learning® Program promote the benefits of energy efficiency?
- Were program participants satisfied with the products purchased and their experience with the program?

During the evaluation, data and information from numerous sources are analyzed to achieve the stated research objectives. Insight into the participant experience with the Lights for Learning® Program is developed from a telephone survey of program participants.

4.2 Summary of Primary Data Collection

- **Participant Surveys:** Surveys of participants who purchased products through the program are the primary data source for many components of this process evaluation, and serve as the foundation for understanding the participants' perspective. The participant surveys provide feedback and insight regarding their experiences with the Lights for Learning® Program. Respondents report on their satisfaction with the program, detail their motivations and the

factors affecting their decision making process, and provide recommendations related to improving the program. In total, 21 EPY6 product purchasers completed the survey.

- **Program Staff Interviews:** Interviews with program staff provide an understanding of how the program operates, challenges the program has faced, the level of interest in the program, and changes planned for the program.
- **Program Documentation:** Review of program documents including the program website, reporting developed by program staff, and savings calculation spreadsheets provide additional insight into program operations.

4.3 Summary of Conclusions and Recommendations

The following presents a selection of key findings from EPY6:

- **Decrease in Gross and Net Ex Post Savings:** Funding for the Lights for Learning Program decreased in EPY6. As a result, there was a decrease of approximately one-third of gross and net ex post kWh savings as compared to EPY5. The lower level of activity corresponded with a decrease in the number of organizations that participated in the fundraising activity. EPY6 was the second consecutive year that program fundraising activity decreased.
- **Program Educational Component has been Successful:** The program increased the number of presentations given during the year by 12%. These educational activities occurred at a diverse set of organizations including schools, park districts, public libraries, and community centers.
- **New Organizations Participated in Program Fundraising:** Thirty percent of the organizations that participated in fundraising during EPY6 were new participants to the program. This growth is likely a reflection of the outreach efforts made by program staff to recruit new organizations.
- **Product Purchasers were Satisfied:** Twenty-one product purchasers were surveyed about their experience with the program. Overall, they reported satisfaction with the program and the products they received. None noted any problems with the participation process. In their response to open-ended questions, some participants noted the value of the program and the associated assemblies for educating students about energy efficiency and its impotence.
- **Program Tracking Data:** Program staff made efforts to improve tracking data for customer contact information; products sold, and associated savings. Improvements to the tracking of products sold through the program have facilitated reporting and improved the accuracy of savings estimates. However, challenges remain with the collection of end user contact information. Although the number of contacts provided this year increased from the prior year, the number of contacts remains a fraction of the total number of product purchasers. Lack of customer contact information hampers the evaluation of the program by creating challenges to the collection of data on installation rate, customer decision making, customer experience with the program process, and any behavioral changes that may have resulted from the program.

The following recommendations are offered in the interest of the continued development of the Lights for Learning® Program.

- **Continue Focus on Outreach:** Program staff should continue their focus on gaining participation in the fundraiser. This outreach effort is necessary to sustain savings attributable to the program. Increased outreach may be particularly useful in the Ameren service territory. EPY6 kWh savings were less than the savings goal for the Ameren service territory for the current program cycle (EPY7-EPY9), while EPY6 ComEd savings exceeded the goal for the current program cycle.
- **Continue Efforts to Acquire Customer Contact Information:** As mentioned above, the program has made improvements in collecting product purchaser contact information. Staff should continue to focus their efforts because this information is critical to the evaluation effort.
- **Consider Limiting Items to Biggest Sellers:** As noted, in Figure 2-1, out of the 25 items that were sold through the program, eight products accounted for at least five percent of program sales, and in total, accounted for 72% of the program sales. Staff should consider decreasing the number of available items and focusing on selling the most popular items, if this will reduce program administration costs. However, staff should also consider the value of offering less frequently sold products and whether or not offering those products is consistent with the program's market transformation goals.

4.4 Lights for Learning® Program Activities

The 2013-2014 program year was the tenth year the Lights for Learning® Program had operated. The intent of the program is to increase energy efficiency through education and increased awareness of energy efficiency among students and their families who attend participating schools or are members of other participating organizations. The Lights for Learning® Program is funded by DCEO and administered by the Midwest Energy Efficiency Alliance (MEEA) with assistance from their implementation partner Applied Proactive Technologies, Inc. Order fulfillment was provided by Energy Federation, Inc.

The educational component of the program targets students on the theory that young people are responsive to the energy conservation message and that they will modify their behavior accordingly. Moreover, it is also assumed that students have an influence on their parents and can encourage energy efficient choices and behaviors in their households. The educational approach is multi-faceted and includes school assemblies and presentations, lesson plans that incorporate energy efficiency, and classroom or take home activities centered on energy efficiency. The program also seeks to strengthen student engagement in energy efficiency through a variety of student contests.

The fundraising component provides an inducement to schools to allow for the program's delivery of the educational activities. It also creates a means for the program to more directly generate energy savings through the distribution of energy efficient technologies. Students sell energy efficient product with the assumption that purchasers will use these technologies in place

of less efficient options. The price of the products is bought down with EEPS funds, which allows students to sell them at market value and generate a 50% profit for the school.

Most of the fundraiser participants during EPY6 were elementary and middle schools, but a three Boy Scouts of America Troops, a church affiliated children's home, and a home schooling association also participated.

A summary of the key activities that occurred during the program year are as follows:

- 172 schools and organizations participated in the program;
- 100 fundraisers were held;
- 948 students participated in fundraising activities;
- 335 school presentations with a total attendance of 25,689; and
- 12,558 products were sold or distributed.

Additional detail on these key program activities is discussed below.

4.4.1 Changes to Program Materials

Program staff made a number of changes to the program materials. These changes include:

- Updates to the products offered;
- Material describing the Savings Through Efficient Products direct install program;
- Updates to the program tool kit to include testimonials and DCEO and MEEA logos;
- Reformatting of the order form.

4.4.2 Contests

The program holds a variety of contests to increase interest in the Lights for Learning® Program and to engage youths in energy efficiency and environmental issues. One of these activities was a poster contest where nearly 300 students from across the state submitted posters and the winning submission was used to promote the program's fundraising activities. A poetry contest was also sponsored by the program and in held in conjunction with Brookfield Zoo's *Language of Conservation* initiative. For a third contest, students submitted video demonstrations of ways to save energy.

4.4.3 Educational Presentations and Assemblies

The Lights for Learning® Program hosts educational presentations on energy conservation for participating schools. These presentations are tailored to the number of students involved and their grade level. The presentations include a Power point slide show presentation given by an in person energy efficiency educational presenter on environmental concerns and demonstrations of the power requirement of different types of light bulbs using an energy bike.

4.4.4 Outreach Efforts

The Lights for Learning® Program sought participation from new schools and other organizations. Much of this outreach involved one-on-one marketing directly to educators. This outreach provides potential participants the opportunity to learn about the fundraiser and educational materials. In addition to this outreach, program staff attended the following outreach and marketing events:

- June 18-19 Illinois Association of Vocational Agricultural Teachers, Bloomington
- August 7 Will County Teachers Exposition, Joliet
- August 9-17 Illinois State Fair, Springfield
- August 30–September 2 African Festival for the Arts, Chicago
- September 7 Southwestern Electric Company Shareholders Meeting, Greenville
- September 21 Teach for Tomorrow, Thornton
- October 18-19 Illinois Education Association Core Conference, O'Fallon
- October 20 Illinois Principals Association Conference, Peoria
- October 24-26 Illinois Science Teacher Association, Tinley Park
- November 8-9 Illinois Council for Exceptional Children, Lisle
- January 30-31 Association for the Education of Young Children, Chicago
- January 31 Science in the South, Carbondale
- February 25 Conversations with Lee Presser, Edwardsville
- February 25 PTO Today, Oakbrook Terrace
- March 13-14 Illinois Reading Council, Springfield
- April 5 Illinois Healthy Living Expo, Palatine
- April 5-11 Museum of Science and Industry, Chicago
- April 10-11 IEA/RA, Chicago
- April 12 Illinois Sustainable Wellness Expo, Bloomington
- April 18 Illinois Healthy and High Performing Schools, Lincolnshire
- April 25 Science Update Conference, Macomb
- April 27 Brookfield Zoo Party for the Planet, Brookfield

The program has also participated in other conferences, workshops and other events around the state.

In terms of activity in the fundraiser, 30% of the EPY6 participants were new organizations that had not previously participated in the program, and the remainder were previous participants.

4.4.5 Energy Efficient Products Sold or Distributed

During EPY6, the number of fundraisers held declined from 158 fundraisers to 100. Similarly, the number of products sold declined from 18,233 to 12,558.

The numbers of products sold or distributed through the program are shown in Table 4-1. As shown, the bulk of the products sold through the fundraiser were CFL lamps. Fewer LED lamps were sold, likely due to their higher cost.

Table 4-1 Products Sold or Distributed Through Lights for Learning® Program

Product	*Type*	*Number Sold*	*Percent Sold*
14 W 4 pack	CFL	3,448	27.5%
19W 3 pack	CFL	1,326	10.6%
14 W Capsule 2 pack	CFL	798	6.4%
Sample Pack 13W, 20W, 23W	CFL	765	6.1%
23 W	CFL	717	5.7%
14 W R30 reflector	CFL	651	5.2%
19 W	CFL	623	5.0%
14 W Globe	CFL	512	4.1%
14 W	CFL	476	3.8%
33W 3-way	CFL	349	2.8%
CFL Desk lamp	CFL	42	0.3%
7W Mini Candelabra	CFL - Candelabra	378	3.0%
5W Mini Candelabra	CFL - Candelabra	59	0.5%
Tricklestar 7 Outlet Power Strip	Control	115	0.9%
Belkin Conserve Socket	Control	55	0.4%
BITS Smart Power Strip	Control	33	0.3%
13W LED	LED	229	1.8%
9W Par 20 LED	LED	196	1.6%
14W Par 30 LED	LED	92	0.7%
13W R-30 LED	LED	78	0.6%
Philips Endura LED A19	LED	6	0.0%
LED Holiday strand multi	LED - Holiday Strand	730	5.8%
LED Holiday strand white	LED - Holiday Strand	230	1.8%
Nightlight	LED - Nightlight	458	3.6%
Nightlight 3 pack	LED - Nightlight	192	1.5%
Total		12,558	100%

4.5 Participant Outcomes

A telephone survey was conducted to collect information about the decision-making, preferences, and opinions of the Lights for Learning® Program participants who purchased energy efficient products through the fundraising activity. Respondents purchased a variety of

equipment through the program including CFL light bulbs, LED light bulbs, and LED nightlights.

Information in this section is intended to characterize participant decision making behaviors and identify notable trends within participant responses. Some of the comments and issues raised by participants are anecdotal in nature and may reflect individual participant opinions. The Conclusions and Recommendations section of the Process Evaluation chapter provides an overall distillation of key findings from the process evaluation activities that were performed for the Lights for Learning® Program.

4.5.1 How Participants Learn about the Program

Participants who purchased products through the Lights for Learning® Program were asked how they heard about the program. Their responses are shown in Table 4-2. The majority of participants (86%) learned of the program through a student selling the products. Five percent reported that they received a brochure or flyer. Approximately 14% reported that they became aware from the school participating in the program.

Table 4-2 How Participants Learned of the Lights for Learning® Program

	Response	*Percent of Respondents* (n=21)*
How did you hear about the Lights for Learning® Program?	From the student who sold the products	86%
	Received a brochure or flyer	5%
	From the school participating in the program	14%
	From a neighbor or friend	-
	The Lights for Learning website	-
	A news story about the program	-
	An advertisement for the program	-
	Don't know	-
	Other	-

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

All of the participants who responded to the survey reported that they knew the student who sold the product to them. The participant's relationship to the student selling the product is shown in Table 4-3. The majority of participants (81%) reported that the student was a family member. Additionally, 5% of respondents stated that the student was the child of a friend. Fourteen percent of respondents stated that the student had a relationship to them that was not included in the response options. Two of these three respondents elaborated that the student selling the products was a friend. The third respondent did not provide any additional information.

Table 4-3 Participant Relationship to Student Selling Product to Participants

	Response	*Percent of Respondents (n=21)*
What is the student's relationship to you?	The student is a family member	81%
	The student is the child of a friend	5%
	The student is a neighbor	-
	Don't know	-
	Other	14%

4.5.2 Products Purchased through Program

Table 4-4 displays the types of products survey respondents purchased through the program. The relative share of products purchased through the program was similar to the shares of products sold through the program. CFL light bulbs (48%) and LED nightlights (43%) were the most frequently purchased products as reported by survey respondents. The power strips were purchased by 5% of respondents.

Table 4-4 Type of Product Participants Purchased

	Response	*Percent of Respondents* (n=21)*
Which energy efficient products did you purchase through the program?	CFL Light Bulb	48%
	LED Light Bulb, not including night lights	-
	LED Nightlight	43%
	Tricklestar or Blitz Powerstrip	5%
	Don't know	14%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

4.5.3 Product Purchasing Decisions

Survey respondents provided information on their reasons for purchasing the energy efficient products through the Lights for Learning® Program. Their responses are displayed in Table 4-5. The most frequently stated motivations to purchase the products were to support the student who sold the products (43%), to support schools (38%) and to save energy (38%). A relatively small share of participants (5%) reported that they purchased the products to replace broken products already owned.

Table 4-5 Reasons for Purchasing Products

	Response	*Percent of Respondents (n=21)*
Why did you purchase these products?	To support schools	38%
	To support the student who sold the products	43%
	To save energy	38%
	To replace broken products already owned	5%
	Other	19%
	Don't Know	5%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

A number of participants stated that they purchased the bulbs for reasons not listed. These participants most frequently stated that they purchased the products because they needed, or were interested in trying new light bulbs.

Overall these responses demonstrate that the program is influencing the participants to purchase products that they might not otherwise have purchased by appealing to their altruistic motivations. Two of the three most frequently mentioned reasons participants purchased the products were to support schools or the student selling the product.

Participants were asked about the influence of the program on their decision to purchase energy efficient products. These questions addressed whether the participant had prior plans to purchase the product, whether they purchased more products through the program than they otherwise would have, and how the importance of supporting schools affected their purchasing decisions.

Nine of the respondents stated that they had prior plans to purchase the product and three of these respondents stated that they would have purchased the products elsewhere in the next month had they not participated in the program. In addition, to gauging participants' preexisting plans and intentions, it is important to consider how the program affected the quantity of products purchased and the role that other considerations may have played in the purchase decision. Chapter 3 outlines the full net-to-gross estimation methodology that is applied to survey results for this evaluation.

In cases where decision makers reported that they had prior plans for the projects, the number of products purchased may have been influenced by the Lights for Learning® Program. Table 4-6 cross-tabulates the respondents who indicated that the quantity of products purchased was increased because of the program with whether the participant had plans to purchase the equipment before participating. Forty-seven percent of respondents who had plans to purchase the products prior to purchasing them through the Lights for Learning® Program indicated that they purchased more products because of their participation in the program.

Table 4-6 Reported Program Influences on Quantity of Products Purchased by Whether There Were Plans to Install Equipment

Program Influence on Projects	*Number of Responses*	*Had Plans to Purchase Products*
Yes, purchased more products because they were sold through the program	17	47%

Table 4-7 displays participants' ratings of the importance of supporting schools to their decision to purchase the energy efficient products sold through the program. Ninety-five percent of participants indicated that supporting schools was very important to the decision to purchase the products through the program.

Table 4-7 Reported Importance of Supporting Schools to Product Purchase Decision

	Response	*Percent of Respondents (n=21)*
How important was supporting schools or supporting the student selling the products to your decision to purchase the energy efficient products?	Very important	95%
	Somewhat important	-
	Only slightly important	5%
	Not at all important	-
	Don't Know	-

4.5.4 Program Participation Process

Participants were asked about their experience with ordering and receiving the energy efficient products purchased through the Lights for Learning® Program. Table 4-8 displays survey respondents' answers to these questions. None of the respondents reported that there were problems with ordering the products through the program. Nearly all of the respondents (95%) reported that the products arrived in working condition. One respondent did not know if the products arrived in working condition. Overall, the process of ordering and delivering the products appears to be working well.

Table 4-8 Experience with Purchase and Receipt of Products

Question	*Percent of Respondents Saying Yes*	*n*
Did you have any problems ordering the energy efficient products through the program?	-	21
Did the products you ordered arrive in working condition?	95%	21

4.5.5 Program Influence on Use and Awareness of Efficient Products

Survey respondents were asked about their previous experience with the energy efficient products sold through the program. As shown in Table 4-9, 62% of the survey respondents reported that they had previously purchased similar energy efficient products in the last three years.

Table 4-9 Prior Purchases of Similar Energy Efficient Products

	Response	*Percent of Respondents (n=21)*
Had you purchased similar energy efficient products in the last three years?	Yes	62%
	No	33%
	Don't know	5%

Table 4-10 displays participants' responses to whether or not they had previously purchased or used products similar to those purchased through the program for participants who reported purchasing CFL light bulbs, LED light bulbs, and LED nightlights. Most of the survey respondents reported previously using the products purchased or used.

Table 4-10 Participants who Previously Purchased or Used Product by Product Type

Product Purchased	*Had Previously Purchased or Used*
CFL light bulb (n = 10)	80%
LED light bulb (n = 8)	88%
LED nightlight (n = 9)	56%

Survey respondents were asked whether or not the program increased their awareness of energy efficiency benefits of the three products most frequently purchased through the program. Table 4-11 displays their responses. The responses indicate that survey respondents were more likely to have learned about the efficiency of LED products than CFLs.

Table 4-11 Program Effect on Awareness of Energy Efficiency

Energy Efficient Product	*Participants Made Aware of Energy Efficiency by Program*	
	Among Product Purchasers	*Among all Respondents*
CFL light bulb	20%	24%
LED light bulb	50%	52%
LED nightlights	78%	71%

4.5.6 Participant Satisfaction

Respondents rated their levels of satisfaction with selected aspects of the program on a scale of 1 to 5 where 1 was very dissatisfied and 5 was very satisfied. Table 4-12 displays the results. Overall, satisfaction ratings were high, with few respondents indicating dissatisfaction. Respondents' satisfaction was consistent across the different aspects of the program with no one aspect receiving particularly high or low satisfaction ratings. Eighty-one percent of respondents stated they were "very satisfied" with their overall experience and another 19% reported being "satisfied".

Table 4-12 Participant Satisfaction with Selected Aspects of Program Experience

Element of Program Experience	*Very Satisfied*	*Somewhat Satisfied*	*Neither Satisfied nor Dissatisfied*	*Somewhat Dissatisfied*	*Very Dissatisfied*	*Don't Know*	*n*
The time it took to receive the products	76%	14%	5%	-	-	5%	21
The price of the products	35%	40%	15%	5%	-	5%	20
The performance of the products	57%	19%	5%	10%	-	10%	21
Overall experience with the Lights for Learning® Program	81%	19%	-	-	-	-	21

Although few participants reported dissatisfaction with the program, those participants who were dissatisfied with some aspect of the program or their overall experience were asked to elaborate on their reasons for dissatisfaction. The reasons for dissatisfaction given by participants included that the bulbs were not as bright as they were expecting, the products were expensive, and the products were not dimmable. Because few participants raised these concerns, these responses appear to reflect isolated incidents rather than systematic problems with the program delivery.

Table 4-13 presents the average level of satisfaction with the performance of the product by the type of product purchased. Satisfaction levels only differed slightly by the type of product purchased. Specifically, respondents were slightly more satisfied with the performance of the LED nightlights than the CFL light bulbs and LED light bulbs.

Table 4-13 Satisfaction with Product Performance by Product Purchased

Energy Efficient Product Purchased	*Average Satisfaction with Performance of Product*
CFL light bulb (n=10)	4.3
LED light bulb (n=8)	4.4
LED nightlight (n=9)	4.9

4.5.7 Participant Recommendations and Overall Impressions

Participants were asked to respond to open-ended questions and provide recommendations for the program and discuss their experiences with the program. The most frequently made remarks made about the program were positive and indicated the participant's satisfaction with the program or products purchased. Some examples include:

> *It's a good program. We usually purchase these products from Walmart or Costco but this way we got to support the school and save energy so it was a double win for us.*
>
> *My son loves the assembly. He came home talking about energy efficiently. I spent years talking to him about saving energy and now it has all come to be important and make sense to him as well so this program is great for the children as well.*
>
> *My daughter had really great things to say after attending the assembly so it had a big impact on her so we supported that.*
>
> *I'm glad that we are doing something with energy efficiency. The fact that my grandson got really elated about the program was very surprising and important as well because they have the kids involved in conserving energy. We are already serious about saving energy and being aware of our usage so that also made us participate in the program. We like the Lights for Learning Program and we feel that it's a good move.*
>
> *I thought that it was a clever program. Getting the kids involved with energy efficiency was a good idea. My son presented a valid issue and he had a good sales pitch, which got me interested as well. I don't usually pay attention to these things.*

These comments suggest that the program is valuable for engaging students in energy conservation.

4.6 Program Operations Perspective

This section summarizes the core findings of interviews that were conducted with program staff of the Midwest Energy Efficiency Alliance (MEEA), DCEO's implementation partner.

In order to gather information regarding the operational efficiency and program delivery process for the Lights for Learning® Program, telephone interviews were conducted with key members of MEEA. These interviews were focused on overall process effectiveness and identifying potential improvements for future program activities. MEEA interview participants included the program manager and program associates.

Respondents shared their perspectives on how the program has taken shape since inception and specific performance of program during EPY6. Interview questions related to the respondents' individual program roles as well as their perceptions of overall program strengths, weaknesses, and opportunities for the future.

Key program features and trends addressed by respondents include:

- **The Educational Component of the Program is Successful:** The educational component of the Lights for Learning Program was successful. The program reached a hundred more students than in previous years, totaling 25,689 students. There was a 12% increase in presentations this year, totaling approximately 5,000 presentations.
- **LEDs Selling Well:** One of the primary changes made to the types of measures offered this program year was the inclusion of several new LED bulbs. LEDs were included because the program staff wanted to help develop the Illinois LED market, and include emerging technologies in the program. CFL sales have decreased over the past few program years, influencing program staff to choose a different direction.
- **New Approaches to Target Issue of Decline in Fundraising:** As in previous program years, there continues to be a decline in fundraising sales in comparison to presentations. The decrease in savings this program year resulted from the decrease in fundraising sales. In an attempt to address this issue, the program staff chose a new implementer for PY7 that has demonstrated success in fundraising, and a clearly designed fundraising model.
- **Implemented Changes to Improve Customer Tracking Data:** In previous program years, the program staff had issues acquiring customer-tracking data. This year, program staff has attempted to acquire the information by requesting it in a more accessible way. They have provided space on order forms to collect customer contact information. They have also incentivized customers to provide their contact information by entering them into a drawing for a $100 American Express gift card.
- **Shifts in Improving Ordering Process:** The request for proposal for a new implementer emphasized improvements to the ordering process. The order forms were updated to highlight usability and to improve aesthetics. For example, the order forms now use photos of the products instead of line drawings, which were used in previous years. In the upcoming program year's request for proposal, there will be requirements to implement an online ordering form.
- **Program Materials Redesigned to Target Differing Age Levels:** In program year seven, there will be a change in how age groups are targeted. The program distinguishes between four age groups: primary school, elementary school, middle school, and high school. The new implementers have designed all new program activities, take-home activities, handouts, and teacher packets that emphasize age appropriate science, technology, engineering, and mathematics (STEM) skills. In addition, presentations are being tailored for the different age groups to increase student interest.
- **EEPS Tracker Much Improved Over Previous Years:** Program staff worked alongside ADM to update their EEPS tracker. The tracker was redesigned to align with the Illinois

TRM. Improvements were made to the dashboard, labeling and formatting, and ease of use. Program staff found the tracker to be easier to read and useful for reporting. The tracker allows for easy access to quarterly report data, and end of the year report data by territory. Event samples and prizes can be now be tracked, which was not an option in the previous tracker.

- **Broad Range of Marketing Activities Conducted by Implementer Staff:** As in previous years, the Lights for Learning implementation contractor staff continue to promote the Lights for Learning program extensively. The implementer staff conducts cold calls to teachers and administrators to promote the program. There is a strong emphasis on face to face marketing. The energy bike has been particularly popular with students. MEEA staff also partakes in a large amount of face to face promotion. For example, they attend trade ally meetings and rallies to spread the word about the program. They also attend various DCEO events and other location-specific events. The program has been more aggressively promoted in the far south regions of the state.

5. Conclusions and Recommendations

This chapter summarizes the key conclusions and recommendations for the Lights for Learning® Program.

5.1 Key Conclusions

The following presents a selection of key findings from EPY6:

- **Decrease in Gross and Net Ex Post Savings:** Funding for the Lights for Learning Program decreased in EPY6. As a result, there was a decrease of approximately one-third of gross and net ex post kWh savings as compared to EPY5. The lower level of activity corresponded with a decrease in the number of organizations that participated in the fundraising activity. EPY6 was the second consecutive year that program fundraising activity decreased.
- **Program Educational Component has been Successful:** The program increased the number of presentations given during the year by 12%. These educational activities occurred at a diverse set of organizations including schools, park districts, public libraries, and community centers.
- **New Organizations Participated in Program Fundraising:** Thirty percent of the organizations that participated in fundraising during EPY6 were new participants to the program. This growth is likely a reflection of the outreach efforts made by program staff to recruit new organizations.
- **Product Purchasers were Satisfied:** Twenty-one product purchasers were surveyed about their experience with the program. Overall, they reported satisfaction with the program and the products they received. None noted any problems with the participation process. In their response to open-ended questions, some participants noted the value of the program and the associated assemblies for educating students about energy efficiency and its impotence.
- **Program Tracking Data:** Program staff made efforts to improve tracking data for customer contact information; products sold, and associated savings. Improvements to the tracking of products sold through the program have facilitated reporting and improved the accuracy of savings estimates. However, challenges remain with the collection of participant contact information. Although the number of contacts provided this year increased from the prior year, the number of contacts remains a fraction of the total number of product purchasers. Lack of customer contact information hampers the evaluation of the program by creating challenges to the collection of data on installation rate, customer decision making, customer experience with the program process, and any behavioral changes that may have resulted from the program.

5.2 Recommendations

The following recommendations are offered in the interest of the continued development of the Lights for Learning® Program.

- **Continue Focus on Outreach:** Program staff should continue their focus on gaining participation in the fundraiser. This outreach effort is necessary to sustain savings attributable to the program. Increased outreach may be particularly useful in the Ameren service territory. EPY6 kWh savings were less than the savings goal for the Ameren service territory for the current program cycle (EPY7-EPY9), while EPY6 ComEd savings exceeded the goal for the current program cycle.
- **Continue Efforts to Acquire Customer Contact Information:** As mentioned above, the program has made improvements in collecting product purchaser contact information. Staff should continue to focus their efforts because this information is critical to the evaluation effort.
- **Consider Limiting Items to Biggest Sellers:** As noted, in Figure 2-1, out of the 25 items that were sold through the program, eight products accounted for at least five percent of program sales, and in total, accounted for 72% of the program sales. Staff should consider decreasing the number of available items and focusing on selling the most popular items, if this will reduce program administration costs. However, staff should also consider the value of offering less frequently sold products and whether or not offering those products is consistent with the program's market transformation goals.

Appendix A: Questionnaire for Decision Maker Survey

1. Do you recall purchasing energy efficient products through the Lights for Learning Program?
   ( ) Yes *(If checked, skip to 2)*
   ( ) No *(If checked, go to 1A)*

   1A. The products sold under the program included energy efficient light bulbs, nightlights, and a power strip. A student would have sold them to you as part of a school fund raiser. Do you recall participating in the program now?
   ( ) Yes *(If checked, go to 2)*
   ( ) No *(Thank and terminate interview)*

2. Which energy efficient products did you purchase through the program *(Don't read list, use as possible prompts):*
   ( ) CFL Light Bulb *(If checked, go to 2A)*
   ( ) LED Light Bulb, not including LED nightlights *(if checked, go to 2B)*
   ( ) LED Nightlight
   ( ) Tricklestar or Blitz Powerstrip *(no follow up questions)*
   ( ) Don't know
   ( ) Other *(please specify)*

   2A. Do you know the type and wattage of the CFL bulbs that you purchased through the program? *(Don't read list, use as possible prompts)*
   ( ) 13 Watt Spiral CFL Bulb 4 Pack – 60 Watt Equivalent
   ( ) 20 Watt Spiral CFL Bulb – 75 Watt Equivalent
   ( ) 19 Watt Spiral CFL Bulb 3 Pack – 75 Watt Equivalent
   ( ) 23 Watt Spiral CFL Bulb – 100 Watt Equivalent
   ( ) 14 Watt Capsule CFL – 2 Pack – 60 Watt Equivalents
   ( ) 14 Watt Globe Bulb
   ( ) 14 Watt R30 CFL Indoor Reflector
   ( ) 33 Watt 3-Way CFL Spiral
   ( ) Sample CFL Pack (a 13 Watt, a 20 Watt, and 23 Watt bulb) - 60W, 75W, 100W equivalents
   ( ) 7 Watt Mini Candelabra Base
   ( ) Don't remember

   2B. Do you know the type and wattage of the LED bulbs that you purchased through the program? (Don't read list, use as possible prompts)
   ( ) 9 Watt PAR 20LED
   ( ) 13 Watt LED
   ( ) 14 Watt PAR 30 LED
   ( ) 13 Watt R 30 LED
   ( ) Don't remember

[ASK RELEVANT FOLLOW UP QUESTIONS FOR EACH TYPE OF PRODUCT SELECTED]

3. How did you hear about the Lights for Learning Program?
   ( ) From the student who sold the product
   ( ) From the school participating in the program
   ( ) From a neighbor or friend
   ( ) The Lights for Learning website
   ( ) A news story about the program
   ( ) An advertisement for the program
   ( ) Received a brochure or flyer
   ( ) Other _____
   ( ) Don't know
4. Did you know the student who sold you the energy efficient products?
   ( ) Yes *(If selected, go to 4A)*
   ( ) No
   ( ) Don't know *(Do not read)*

   4A. What is the students relationship to you? *(Do not read list)*
   ( ) The student is a family member
   ( ) The student is the child of a friend
   ( ) The student is a neighbor
   ( ) Other _____

5. Did you have any problems ordering the energy efficient product(s) through the program?
   ( ) Yes *(If selected, go to 5A)*
   ( ) No
   ( ) Don't know *(Do not know)*

   5A. What problems did you experience ordering the products?

6. Did the products you ordered arrive in working condition?
   ( ) Yes
   ( ) No *(If selected, go to 6A)*
   ( ) Don't know

   6A. What was wrong with the products?

7. Why did you purchase these products*? (Select all that apply) (Do not read list)*
   ( ) To support schools
   ( ) To support the student who sold the product
   ( ) To reduce energy consumption
   ( ) To replace broken product(s) already owned
   ( ) Other _____
   ( ) Don't know

8. Did you already have plans to purchase these energy efficiency products before purchasing them through the Lights for Learning Program?
   ( ) Yes *(If checked, ask 8A)*
   ( ) No
   ( ) Don't know *(Do not read)*

   8A. Would you have purchased these energy efficiency products elsewhere in the next month if you had not participated in the Lights for Learning Program?
   ( ) Yes
   ( ) No
   ( ) Don't know (Do not read)

9. If the energy efficient products had not been offered through the Lights for Learning Program, how likely is it that you would have purchased them anyway?
   ( ) Definitely would have purchased
   ( ) Probably would have purchased
   ( ) Probably would not have purchased
   ( ) Definitely would not have purchased
   ( ) Don't know

10. Did you purchase more of the energy efficient products because they were sold through the Lights for Learning Program than you otherwise would have?
   ( ) Yes, purchased more products than otherwise would have *(if checked, go to 10A).*
   ( ) No, did not purchase more products
   ( ) Don't know *(Do not read)*

   10A. How many more products did you purchase?

11. How important was supporting schools or supporting the student selling the products to your decision to purchase the energy efficient products?
   ( ) Very important
   ( ) Somewhat important
   ( ) Only slightly important
   ( ) Not at all important
   ( ) Don't know *(Do not read)*

12. Had you purchased similar energy efficient products in the last three years?
   ( ) Yes
   ( ) No *(If checked, go to 12A)*

   12A. Have you previously used energy efficient products similar to the ones you purchased through the Lights for Learning program?
   ( ) Yes

( ) No *(If no, what energy efficient products have you purchased?)*
( ) Don't know (*Do not read)*

13. For each of the following products, please identify if the program made you aware of their energy efficiency, or if you knew about their energy efficiency benefits beforehand?

	Program made me aware of efficiency	**Previously aware of efficiency**	**Don't know**
Compact fluorescent light bulbs	( )	( )	( )
LED light bulbs	( )	( )	( )
LED nightlights	( )	( )	( )

14. Now I would like to ask you how satisfied you were with different aspects of the program and the products you purchased. How satisfied were you with:

	Very Satisfied	**Satisfied**	**Neutral**	**Dissatisfied**	**Very Dissatisfied**	**Don't Know**
The time it took to receive the product(s)	( )	( )	( )	( )	( )	( )
The price of the product(s)	( )	( )	( )	( )	( )	( )
The performance of the product(s)	( )	( )	( )	( )	( )	( )
Overall experience with the Lights for Learning Program	( )	( )	( )	( )	( )	( )

14B. [For any items scored 1 or 2], What are the reasons for your dissatisfaction?

Now I would like to ask you some questions about the specific products you purchased through the program.
<Ask the following sets of questions based on the products they said they purchased.>

13 Watt Spiral CFL Bulb 4 PACK

CFL13W1. How many of the 13 watt (60 Watt Equivalent) Spiral CFL 4 Pack Bulbs did you purchase?

CFL13W2. How many of the 13 watt (60 Watt Equivalent) Spiral CFL bulbs that you purchased in the 4 Pack Bulbs did you install? *(Interviewer, please record the total number of bulbs installed, not the total number of packs)*

CFL13W3. *[If some are not installed]* How many do you plan to install in the next month?

CFL13W4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs

Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

CFL13W5. What type of bulb did the CFL replace?

( ) Replaced incandescent bulbs (If checked, go to CFL14W5A)
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

CFL13W5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

20 Watt Spiral CFL Bulb

CFL20W1. How many of the 20 watt (75 Watt Equivalent) Spiral CFL Bulbs did you purchase?
CFL20W2. How many of the 20 watt (75 Watt Equivalent) Spiral CFL Bulbs did you install?
CFL20W3. *[If some are not installed]* How many do you plan to install in the next month?

CFL20W4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

CFL20W5. What type of bulb did the CFL replace?

( ) Replaced incandescent bulbs (If checked, go to CFL20W5A)
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

CFL20W5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

19 Watt Spiral CFL Bulb 3 PACK

CFL19W1. How many of the 19 watt (75Watt Equivalent) Spiral CFL 3 Pack Bulbs did you purchase?

CFL19W2. How many of the 19 watt (75 Watt Equivalent) Spiral CFL bulbs that you purchased in the 3 Pack Bulbs did you install? *(Interviewer, please record the total number of bulbs installed, not the total number of packs)*

CFL19W3. *[If some are not installed]* How many do you plan to install in the next month?

CFL19W4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

CFL19W5. What type of bulb did the CFL replace?

( ) Replaced incandescent bulbs (If checked, go to CFL14W5A)
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

CFL19W5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

23 Watt Spiral CFL Bulb

CFL23W1. How many of the 23 watt (100 Watt Equivalent) Spiral CFL Bulbs did you purchase?
CFL23W2. How many of the 23 watt (100 Watt Equivalent) Spiral CFL Bulbs did you install?
CFL23W3. *[If some are not installed]* How many do you plan to install in the next month?
CFL23W4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

CFL23W5. What type of bulb did the CFL replace?

( ) Replaced incandescent bulbs (If checked, go to CFL23W5A)
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

CFL23W5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

14 Watt Capsule CFL Bulb 2 PACK

CFL14W1. How many of the 14 watt (60 Watt Equivalent) Capsule CFL 2 Pack Bulbs did you purchase?
CFL14W2. How many of the 14 watt (60 Watt Equivalent) Capsule CFL bulbs that you purchased in the 2 Pack Bulbs did you install? *(Interviewer, please record the total number of bulbs installed, not the total number of packs)*
CFL14W3. *[If some are not installed]* How many do you plan to install in the next month?
CFL14W4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	

Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

CFL14W5. What type of bulb did the CFL replace?

( ) Replaced incandescent bulbs (If checked, go to CFL14W5A)
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

CFL14W5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

33 Watt 3-Way CFL Spiral

3WAYCFL1. How many of the 3-Way CFL bulbs did you purchase?
3WAYCFL2. How many of the 3-Way CFL bulbs did you install?
3WAYCFL3. [If some are not installed] How many do you plan to install in the next month?
3WAYCFL4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

3WAYCFL5. What type of bulb did the CFL replace?

( ) Replaced incandescent bulbs *(If checked, go to 3WAYCFL5A)*
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

3WAYCFL5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

7 Watt Mini Candelabra

7WATTCFL1. How many of the 7 watt mini candelabra bulbs did you purchase?
7WATTCFL2. How many of the 7 watt mini candelabra bulbs did you install?
7WATTCFL3. *[If some are not installed]* How many do you plan to install in the next month?
7WATTCFL4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

7WATTCFL5. What type of bulb did the CFL replace?
( ) Replaced incandescent bulbs *(If checked, go to 5WATTCFL5A)*
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

7WATTCFL5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?
( ) Still operating
( ) Burnt out
( ) Don't know

14 Watt R30 CFL Indoor Reflector OR GLOBE

REFLCFL1. You stated that you purchased 14 watt indoor reflector or globe bulbs, or possibly both types. How many of these types of 14 watt bulbs did you purchase?
REFLCFL2. How many of the bulbs did you install?
REFLCFL3. *[If some are not installed]* How many do you plan to install in the next month?
REFLCFL4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	

Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

REFLCFL 5. What type of bulb did the CFL replace?

( ) Replaced incandescent bulbs *(If checked, go to SAMPCFL5A)*
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

REFLCFL 5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

Can't Recall CFL Type

CFL1. How many of the CFL bulbs did you purchase?
CFL2. How many of the bulbs did you install?
CFL3. *[If some are not installed]* How many do you plan to install in the next month?
CFL4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

CFL5. What type of bulb did the CFL replace?

( ) Replaced incandescent bulbs (If checked, go to CFL5A)
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

CFL5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

LED Nightlight

NGHTLGHT1. How many nightlights did you purchase?
NGHTLGHT2. How many nightlights are in use?
NGHTLGHT3. Did the nightlights replace other nightlights?

( ) Yes *(If checked, go to NGHTLGHT3A)*
( ) No
( ) Don't know

NGHTLGHT3A. What kind of nightlights were they?

( ) Incandescent nightlight
( ) LED nightlight
( ) Other _____
( ) Don't know

Conserve Socket

SOCKET1. How many conserve sockets did you purchase?
SOCKET2. How many conserve sockets are in use?
SOCKET3. What is connected to the socket?
SOCKET4. Before you purchased the socket, how many hours a day was the device now connected to the socket plugged in / turned on?
SOCKET5. Now that the device is plugged into the socket, how many hours a day is the socket supplying power to the device?

Can't Recall LED Wattage

LED1. How many of the LED Bulbs did you purchase?
LED2. How many of the bulbs did you install?
LED3. *[If some are not installed]* How many do you plan to install in the next month?

LED4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	

Office	
Other	

LED5. What type of bulb did the halogen bulb replace?

( ) Replaced incandescent bulbs *(If checked, go to HALOGEN5A)*
( ) Replaced other Halogens
( ) Replaced CFLs
( ) Other: _____
( ) Don't know

LEDA. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

9 Watt Par 20 LED

LED9W1. How many of the 9 watt) LED Bulbs did you purchase?
LED9W2. How many of the bulbs did you install?
LED9W3. *[If some are not installed]* How many do you plan to install in the next month?

LED9W4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

LED9W5. What type of bulb did the LED bulb replace?

( ) Replaced incandescent bulbs *(If checked, go to LED9W5A)*
( ) Replaced other LEDs
( ) Replaced CFLs
( ) Other: _____
( ) Don't know

LED9WA. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating

( ) Burnt out
( ) Don't know

13 Watt LED

LED13W1. How many of the 13 watt LED Bulbs did you purchase?
LED13W2. How many of the bulbs did you install?
LED13W3. *[If some are not installed]* How many do you plan to install in the next month?

LED13W4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

LED13W5. What type of bulb did the LED bulb replace?
( ) Replaced incandescent bulbs (If checked, go to LED13W5A)
( ) Replaced other LEDs
( ) Replaced CFLs
( ) Other: _____
( ) Don't know

LED13WA. Were the incandescent bulbs still operating when you removed them or were they burnt out?
( ) Still operating
( ) Burnt out
( ) Don't know

14 Watt Par 30 LED

14WLED1. How many of the 14 Watt Par 30 LED Bulbs did you purchase?
14WLED2. How many of the bulbs did you install?
14WLED3. *[If some are not installed]* How many do you plan to install in the next month?

14WLED4. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	

Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

14WLED5. What type of bulb did the LED bulb replace?

( ) Replaced incandescent bulbs *(If checked, go to HAL72W5A)*
( ) Replaced other LEDs
( ) Replaced CFLs
( ) Other: _____
( ) Don't know

14WLEDA. Were the incandescent bulbs still operating when you removed them or were they burnt out?

( ) Still operating
( ) Burnt out
( ) Don't know

13 Watt R-30 LED

13WLED301. How many of the 13 watt LED Bulbs did you purchase?
13WLED302. How many of the bulbs did you install?
13WLED303. *[If some are not installed]* How many do you plan to install in the next month?

13WLED304. For the bulbs that you have installed, where did you install these bulbs?

Room	# Bulbs
Living room	
Kitchen	
Family Room / Den	
Dining Room	
Entry/Hallway	
Bedroom	
Bathroom	
Garage	
Outdoors	
Closet	
Office	
Other	

13WLED305. What type of bulb did the LED bulb replace?

( ) Replaced incandescent bulbs *(If checked, go to 13WLED30A)*
( ) Replaced other LEDs

( ) Replaced CFLs
( ) Other: _____
( ) Don't know

13WLED30A. Were the incandescent bulbs still operating when you removed them or were they burnt out?
( ) Still operating
( ) Burnt out
( ) Don't know

Sample CFL Pack (a 13 Watt, 20 Watt, and 23 Watt bulb)
SAMPCFL1. How many of the sample packs did you purchase?
SAMPCFL2. How many of the bulbs did you install?
Number of 13Watt bulbs _____
Number of 20 Watt bulbs _____
Number of 23 Watt bulbs _____
SAMPCFL3. *[If some are not installed*] How many do you plan to install in the next month?
SAMPCFL4. For the bulbs that you have installed, where did you install these bulbs?

Room	# 13 Watt Bulbs	# 20Watt Bulbs	# 23 Watt Bulbs
Living room			
Kitchen			
Family Room / Den			
Dining Room			
Entry/Hallway			
Bedroom			
Bathroom			
Garage			
Outdoors			
Closet			
Office			
Other			

SAMPCFL5. What type of bulb did the CFL replace?
( ) Replaced incandescent bulbs *(If checked, go to SAMPCFL5A)*
( ) Replaced other CFLs
( ) Other: _____
( ) Don't know

SAMPCFL5A. Were the incandescent bulbs still operating when you removed them or were they burnt out?
( ) Still operating
( ) Burnt out
( ) Don't know

15. Do you have any other comments that you would like to make regarding the Lights for Learning program or energy efficient products?

Thank you for taking the time to complete this survey.

Appendix B: Questionnaire for Decision Maker Survey

The following tabulations summarize program participant survey responses for electric program year six (EPY6) The first column presents the number of survey respondents (*n)*. The second column presents the percentage of survey respondents (*n)*.

1. Do you recall purchasing energy efficient products through the Lights for Learning Program?	*Response*	*(n=21)*	*Percent of Respondents*
	Yes	21	100%
	No	0	0%

1a. The products sold under the program included energy efficient light bulbs, nightlights, and holiday lights. A student would have sold them to you as part of a school fund raiser. Do you recall participating in the program now?	*Response*	*(n=0)*	*Percent of Respondents*
	Yes	0	0%
	No	0	0%

2. Which energy efficient products did you purchase through the program (Don't read list, use as possible prompts):	*Response*	*(n=21)*	*Percent of Respondents**
	CFL Light Bulb	10	48%
	LED Light Bulb, not including night lights	0	0%
	LED Nightlight	9	43%
	Tricklestar or Blitz Powerstrip	1	5%
	Don't know	3	14%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

2a. Do you know the type and wattage of the CFL bulbs that you purchased through the program?	*Response*	*(n=10)*	*Percent of Respondents**
	13 Watt Spiral CFL Bulb 4 pack -60 watt equivalent	2	20%
	20 Watt Spiral CFL Bulb- 75 Watt Equivalent	1	10%
	19 Watt Spiral CFL Bulb 3 Pack- 75 Watt Equivalent	0	0%
	23 Watt Spiral CFL Bulb- 100 Watt Equivalent	0	0%
	14 Watt Capsule CFL- 2 Pack- 60 Watt Equivalents	3	30%
	14 Watt Globe Bulb	0	0%
	14 Watt R30 CFL Indoor Reflector	1	10%
	33 Watt 3-Way CFL Spiral	0	0%
	Sample CFL Pack (a 13 Watt, 20 Watt, and 23 Watt bulb)- 60W, 75W, 100W equivalents	2	20%
	7 Watt Mini Candelabra Base	0	0%
	Don't remember	5	50%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=8)*	*Percent of Respondents**
2b. Do you know the type and wattage of the LED bulbs that you purchased through the program?	9 Watt Par 20 LED	2	25%
	13 Watt LED	1	13%
	14 Watt Par 30 LED	1	13%
	13 Watt R 30 LED	0	0%
	Don't remember	5	63%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=21)*	*Percent of Respondents**
3. How did you hear about the Lights for Learning Program? (Select all that apply. Don't read list)	From the student who sold the products	18	86%
	From the school participating in the program	3	14%
	From a neighbor or friend	0	0%
	The Lights for Learning website	0	0%
	A news story about the program	0	0%
	An advertisement for the program	0	0%
	Received a brochure or flyer	1	5%
	Don't know	0	0%
	Other	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=21)*	*Percent of Respondents*
4. Did you know the student who sold you the energy efficient products?	Yes	21	100%
	No	0	0%
	Don't know	0	0%

	Response	*(n=21)*	*Percent of Respondents*
4a. What is the student's relationship to you? (Do not read list)	The student is a family member	17	81%
	The student is the child of a friend	1	5%
	The student is a neighbor	0	0%
	The student is a coworkers child	0	0%
	Don't know	0	0%
	Other (please specify)	3	14%

	Response	*(n=21)*	*Percent of Respondents*
5. Did you have any problems ordering the energy efficient products through the program?	Yes	0	0%
	No	21	100%
	Don't know	0	0%

6. Did the products you ordered arrive in working condition?	*Response*	*(n=21)*	*Percent of Respondents*
	Yes	20	95%
	No	0	0%
	Don't know	1	5%

7. Why did you purchase these products?	*Response*	*(n=21)*	*Percent of Respondents**
	To support schools	8	38%
	To support the student who sold the products	9	43%
	To save energy	8	38%
	To replace broken products already owned	1	5%
	Other	4	19%
	Don't know	1	5%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

8. Did you already have plans to purchase these energy efficient products before purchasing them through the Lights for Learning Program?	*Response*	*(n=21)*	*Percent of Respondents*
	Yes	9	43%
	No	12	57%
	Don't know	0	0%

8a. Would you have purchased these energy efficient products elsewhere in the next month if you had not participated in the Lights for Learning Program?	*Response*	*(n=9)*	*Percent of Respondents*
	Yes	3	33%
	No	2	22%
	Don't know	4	44%

9. If the energy efficient products had not been offered through the Lights for Learning Program, how likely is it that you would have purchased them elsewhere?	*Response*	*(n=21)*	*Percent of Respondents*
	Definitely would have purchased elsewhere	3	14%
	Probably would have purchased elsewhere	6	29%
	Probably would not have purchased elsewhere	7	33%
	Definitely would not have purchased elsewhere	4	19%
	Don't know	1	5%

10. Did you purchase more of the energy efficient products because they were sold through the Lights for Learning Program than you otherwise would have?	*Response*	*(n=21)*	*Percent of Respondents*
	Yes, purchased more products than otherwise would have	17	81%
	No, did not purchase more products	2	10%
	Don't know	2	10%

10a. How many more products did you purchase?	*Response*	*(n=16)*	*Percent of Respondents*
	1	0	0%
	2	4	25%
	3	1	6%
	4	3	19%
	5	1	6%
	6	1	6%
	7	0	0%
	8	0	0%
	9	1	6%
	10	2	13%
	Don't know	3	19%

11. How important was supporting schools or supporting the student selling the products to your decision to purchase the energy efficient products?	*Response*	*(n=21)*	*Percent of Respondents*
	Very important	20	95%
	Somewhat important	0	0%
	Only slightly important	1	5%
	Not at all important	0	0%
	Don't know	0	0%

12. Had you purchased similar energy efficient products in the last three years?	*Response*	*(n=21)*	*Percent of Respondents*
	Yes	13	62%
	No	7	33%
	Don't know	1	5%

12a. Have you previously used energy efficient products similar to the ones you purchased through the Lights for Learning program?	*Response*	*(n=7)*	*Percent of Respondents*
	Yes	2	29%
	No	5	71%
	Don't know	0	0%

13a. For compact flourescent light bulbs (CFL's), please identify if the program made you aware of their energy efficiency, or if you knew about their energy efficiency benefits beforehand?	*Response*	*(n=21)*	*Percent of Respondents*
	Previously aware of efficiency	15	71%
	Program made me aware of efficiency	5	24%
	Don't know	1	5%

13b. For LED light bulbs, please identify if the program made you aware of their energy efficiency, or if you knew about their energy efficiency benefits beforehand?	*Response*	*(n=21)*	*Percent of Respondents*
	Previously aware of efficiency	9	43%
	Program made me aware of efficiency	11	52%
	Don't know	1	5%

13d. For LED night lights, please identify if the program made you aware of their energy efficiency, or if you knew about their energy efficiency benefits beforehand?	*Response*	*(n=21)*	*Percent of Respondents*
	Previously aware of efficiency	2	10%
	Program made me aware of efficiency	15	71%
	Don't know	4	19%

14a. Now I would like to ask you how satisfied or dissatisfied you were with different aspects of the program and the product(s) you purchased. How satisfied or dissatisfied were you with the time it took to receive the products?	*Response*	*(n=21)*	*Percent of Respondents**
	Very Satisfied	16	76%
	Satisfied	3	14%
	Neither Satisfied nor Dissatisfied	1	5%
	Dissatisfied	0	0%
	Very Dissatisfied	0	0%
	Don't know	1	5%
	Average		4.8

**Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)*

14b. Now I would like to ask you how satisfied or dissatisfied you were with different aspects of the program and the product(s) you purchased. How satisfied or dissatisfied were you with the price of the products?	*Response*	*(n=20)*	*Percent of Respondents**
	Very Satisfied	7	35%
	Satisfied	8	40%
	Neither Satisfied nor Dissatisfied	3	15%
	Dissatisfied	1	5%
	Very Dissatisfied	0	0%
	Don't know	1	5%
	Average		4.1

**Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)*

	Response	*(n=21)*	*Percent of Respondents**
14c. Now I would like to ask you how satisfied or dissatisfied you were with different aspects of the program and the product(s) you purchased. How satisfied or dissatisfied were you with the performance of the products?	Very Satisfied	12	57%
	Satisfied	4	19%
	Neither Satisfied nor Dissatisfied	1	5%
	Dissatisfied	2	10%
	Very Dissatisfied	0	0%
	Don't know	2	10%
	Average		4.4

**Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)*

	Response	*(n=21)*	*Percent of Respondents**
14d. Now I would like to ask you how satisfied or dissatisfied you were with different aspects of the program and the product(s) you purchased. How satisfied or dissatisfied were you with your overall experience with the Lights for Learning Program?	Very Satisfied	17	81%
	Satisfied	4	19%
	Neither Satisfied nor Dissatisfied	0	0%
	Dissatisfied	0	0%
	Very Dissatisfied	0	0%
	Don't know	0	0%
	Average		4.8

**Each response was assigned a numerical value from one to five (5=Very Satisfied, 4=Satisfied, 3=Neither Satisfied nor Dissatisfied, 2=Dissatisfied, 1=Very Dissatisfied)*

	Total Count
CFL13W4PK1.How many of the 13 watt (60 Watt Equivalent) Spiral CFL 4 Pack bulbs did you purchase?	5
CFL13W4PK2. How many of the 13 watt (60 Watt Equivalent) Spiral CFL bulbs that you purchased in the 4 Pack Bulbs did you install?	7
CFL13W4PK. How many do you expect to install during the next month?	4

	Location	*Total Count*
CFL13W4PK4. For the bulbs that you have installed, where did you install these bulbs? 13 watt (60 Watt Equivalent) Spiral CFL 4 Pack bulbs	Living room	0
	Kitchen	2
	Family room / den	2
	Dining room	0
	Entry / hallway	0
	Bedroom	2
	Bathroom	0
	Garage	0
	Outdoors	1
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=2)*	*Percent of Respondents*
CFL13W4PK5. What type of bulb did the CFL replace? 13 watt (60 Watt Equivalent) Spiral CFL 4 Pack bulbs	Replaced incandescent bulbs	1	50%
	Replaced other CFLs	1	50%
	Don't know	0	0%
	Other	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=1)*	*Percent of Respondents*
CFL13W4PK5a. Were the incandescent bulbs still operating when you removed them or where they burnt out? 13 watt (60 Watt Equivalent) Spiral CFL 4 Pack bulbs	Still operating	1	100%
	Burnt out	0	0%
	Don't know	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Total Count
CFL20W1. How many of the 20 watt (75 Watt Equivalent) Spiral CFL bulbs did you purchase?	1
CFL20W2. How many of the 20 watt (75 Watt Equivalent) Spiral CFL bulbs did you install?	1
CFL20W3. How many do you expect to install in the next month?	0

	Location	*Total Count*
CFL20W4. For the bulbs that you have installed, where did you install these bulbs? 20 watt (75 Watt Equivalent) Spiral CFL bulbs	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	1

	Response	*(n=1)*	*Percent of Respondents**
CFL20W5. What type of bulb did the CFL replace? 20 watt (75 Watt Equivalent) Spiral CFL bulbs	Replaced incandescent bulbs	1	100%
	Replaced other CFLs	0	0%
	Don't know	0	0%
	Other	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=1)*	*Percent of Respondents**
CFL20W5a. Were the incandescent bulbs still operating when you removed them or where they burnt out? 20 watt (75 Watt Equivalent) Spiral CFL bulbs	Sill operating	1	100%
	Burnt out	0	0%
	Don't know	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Total Count
CFL19W3PK1. How many of the 19 watt (75 Watt Equivalent) 3 pack Spiral CFL bulbs did you purchase?	0
CFL19W3PK2. How many of the 19 watt (75 Watt Equivalent) 3 pack Spiral CFL bulbs did you install?"	0
CFL19W3PK3. How many do you expect to install in the next month?	0

	Location	*Total Count*
CFL19W3PK4. For the bulbs that you have installed, where did you install these bulbs? 19 watt (75 Watt Equivalent) 3 pack Spiral CFL bulbs	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=0)*	*Percent of Respondents*
CFL19W3PK5. What type of bulb did the CFL replace? 19 watt (75 Watt Equivalent) 3 pack Spiral CFL bulbs	Replaced incandescent bulbs	0	0%
	Replaced other CFLs	0	0%
	Don't know	0	0%
	Other	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=0)*	*Percent of Respondents*
CFL19W3PK5a. Were the incandescent bulbs still operating when you removed them or where they burnt out? 19 watt (75 Watt Equivalent) 3 pack Spiral CFL bulbs	Sill operating	0	0%
	Burnt out	0	0%
	Don't know	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Total Count
CFL23W1. How many of the 23 watt (100 Watt Equivalent) Spiral CFL bulbs did you purchase?	0
CFL23W2. How many of the 23 watt (100 Watt Equivalent) Spiral CFL bulbs did you install?	0
CFL23W3. How many do you expect to install in the next month?	0

	Location	*Total Count*
CFL23W4. For the bulbs that you have installed, where did you install these bulbs? 23 watt (100 Watt Equivalent) Spiral CFL bulbs	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=0)*	*Percent of Respondents*
CFL23W5. What type of bulb did the CFL replace? 23 watt (100 Watt Equivalent) Spiral CFL bulbs	Replaced incandescent bulbs	0	0%
	Replaced other CFLs	0	0%
	Don't know	0	0%
	Other	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=0)*	*Percent of Respondents*
CFL23W5a. Were the incandescent bulbs still operating when you removed them or where they burnt out? 23 watt (100 Watt Equivalent) Spiral CFL bulbs	Sill operating	0	0%
	Burnt out	0	0%
	Don't know	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Total Count
CFL14WAL2PK1. How many of the 14 watt (60 Watt Equivalent) A Lamp CFL 2 Pack bulbs did you purchase?	5
CFL14WAL2PK2. How many of the 14 watt (60 Watt Equivalent) A Lamp CFL 2 Pack bulbs did you install?	3
CFL14WAL2PK3. How many do you expect to install in the next month?	0

	Location	*Total Count*
CFL14WAL2PK4. For the bulbs that you have installed, where did you install these bulbs? 14 watt (60 Watt Equivalent) A Lamp CFL 2 Pack bulbs	Living room	2
	Kitchen	0
	Family room / den	0
	Dining room	1
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	1
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=2)*	*Percent of Respondents**
CFL14WAL2PK5. What type of bulb did the CFL replace? 14 watt (60 Watt Equivalent) A Lamp CFL 2 Pack bulbs	Replaced incandescent bulbs	2	100%
	Replaced other CFLs	0	0%
	Don't know	0	0%
	Other	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

CFL14WAL2PK5a. Were the incandescent bulbs still operating when you removed them or where they burnt out? 14 watt (60 Watt Equivalent) A Lamp CFL 2 Pack bulbs	*Response*	*(n=2)*	*Percent of Respondents**
	Sill operating	2	100%
	Burnt out	1	50%
	Don't know	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Total Count
SOCKET1. How many Tricklestar or Blitz Powerstrips did you purchase?	2
SOCKET2. How many of the conserve sockets are in use?"	1

SOCKET4. Before you purchased the socket, how many hours a day was the device that is now connected to the socket plugged in / turned on?	*Average Number of Hours (n=1)*
	4.0

SOCKET5. Now that the device is plugged into the socket, how many hours a day is the socket supplying power to the device?	*Average Number of Hours (n=1)*
	4.0

	Total Count
NGHTLGHT1. How many of the LED nightlights did you purchase?"	15
NGHTLGHT2. How many of the LED nightlights are in use?"	9

	Response	*(n=8)*	*Percent of Respondents*
NGHTLGHT3. Did the LED nightlights replace other nightlights?	Yes	6	75%
	No	2	25%
	Don't know	0	0%

	Response	*(n=6)*	*Percent of Respondents**
NGHTLGHT3a. What kind of night lights did they replace?	Incandescent nightlight	3	50%
	LED nightlight	0	0%
	Don't know	2	33%
	Other	2	33%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Location	*Total Count*
NGHTLGHT4. For the nightlight that you have installed, where did you install these nightlights?	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	2
	Bedroom	0
	Bathroom	7
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Total Count
CFL14WINDOORGLOBE1. How many of the 14 watt indoor reflector or globe bulbs did you purchase?	1
CFL14WINDOORGLOBE2. How many of the bulbs did you install?	0
CFL14WINDOORGLOBE3. How many do you expect to install in the next month?	0

	Location	*Total Count*
CFL14WINDOORGLOBE4. For the bulbs that you have installed, where did you install these bulbs? 14 Watt indoor reflector or globe bulbs	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=1)*	*Percent of Respondents*
CFL14WINDOORGLOBE5. What type of bulb did the CFL replace? 14 Watt indoor reflector or globe bulbs	Replaced incandescent bulbs	0	0%
	Replaced other CFLs	1	100%
	Don't know	0	0%
	Other	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=0)*	*Percent of Respondents*
CFL14WINDOORGLOBE5.5a. Were the incandescent bulbs still operating when you removed them or where they burnt out? 14 Watt indoor reflector or globe bulbs	Sill operating	0	0%
	Burnt out	0	0%
	Don't know	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Total Count
CFL1. How many CFL bulbs did you purchase?	24
CFL2. How many CFL bulbs did you install?	19
CFL3. How many do you expect to install in the next month?	4

	Location	*Total Count*
CFL4. For the bulbs that you have installed, where did you install these bulbs?	Living room	2
	Kitchen	0
	Family room / den	1
	Dining room	0
	Entry / hallway	0
	Bedroom	12
	Bathroom	2
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	2

	Response	*(n=5)*	*Percent of Respondents*
CFL5. What type of bulb did the CFL replace?	Replaced incandescent bulbs	2	40%
	Replaced other CFLs	2	40%
	Don't know	0	0%
	Other	1	20%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=2)*	*Percent of Respondents*
CFL5a. Were the incandescent bulbs still operating when you removed them or where they burnt out?	Still operating	2	100%
	Burnt out	1	50%
	Don't know	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Total Count
LED1. How many LED bulbs did you purchase?	42
LED2. How many LED bulbs did you install?	23
LED3. How many do you expect to install in the next month?	5

	Location	*Total Count*
LED4. For the bulbs that you have installed, where did you install these bulbs?	Living room	0
	Kitchen	3
	Family room / den	2
	Dining room	0
	Entry / hallway	0
	Bedroom	4
	Bathroom	7
	Garage	0
	Outdoors	1
	Closet	0
	Office	0
	Other / Don't know location	6

	Response	*(n=5)*	*Percent of Respondents**
LED5. What type of bulb did the LED replace?	Replaced incandescent bulbs	3	60%
	Replaced other LEDs	0	0%
	Replaced CFLs	1	20%
	Don't know	0	0%
	Other	1	20%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Response	*(n=3)*	*Percent of Respondents**
LED5a. Were the incandescent bulbs still operating when you removed them or where they burnt out?	Sill operating	3	100%
	Burnt out	0	0%
	Don't know	0	0%

	Total Count
LED9WATT1. How many of the 9 watt LED Bulbs did you purchase?	3
LED9WATT2. How many of the bulbs did you install?	0
LED9WATT3. How many do you expect to install in the next month?	1

	Location	*Total Count*
LED9WATT4. For the bulbs that you have installed, where did you install these bulbs?	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=2)*	*Percent of Respondents*
LED9WATT5. What type of bulb did the CFL replace?	Replaced incandescent bulbs	0	0%
	Replaced other CFLs	0	0%
	Don't know	1	50%
	Other	1	50%

	Response	*(n=0)*	*Percent of Respondents*
LED9WATT5A. Were the incandescent bulbs still operating when you removed them or where they burnt out?	Still operating	0	0%
	Burnt out	0	0%
	Don't know	0	0%

**Since respondents were able to select more than one response, the sum of the percentages in the table above can exceed 100%.*

	Total Count
LED13WATT1. How many 13 watt LED bulbs did you purchase?	4
LED13WATT2. How many 13 watt LED bulbs did you install?	4
LED13WATT3. How many do you expect to install in the next month?	0

	Location	*Total Count*
LED13WATT4. For the bulbs that you have installed, where did you install these bulbs?	Living room	0
	Kitchen	4
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=1)*	*Percent of Respondents**
LED13WATT5. What type of bulb did the LED replace?	Replaced incandescent bulbs	1	100%
	Replaced other LEDs	0	0%
	Replaced CFLs	0	0%
	Don't know	0	0%
	Other	0	0%

	Response	*(n=1)*	*Percent of Respondents**
LED13WATT5a. Were the incandescent bulbs still operating when you removed them or where they burnt out?	Sill operating	0	0%
	Burnt out	1	100%
	Don't know	0	0%

	Total Count
14WATTPAR30LED1. How many of the 14 Watt Par 30 LED Bulbs did you purchase?	8
14WATTPAR30LED2. How many of the bulbs did you install?	8
14WATTPAR30LED3. How many do you expect to install in the next month?	0

	Location	*Total Count*
14WATTPAR30LED4. For the bulbs that you have installed, where did you install these bulbs?	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	8
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=1)*	*Percent of Respondents**
14WATTPAR30LED5. What type of bulb did the LED replace?	Replaced incandescent bulbs	1	100%
	Replaced other LEDs	0	0%
	Replaced CFLs	0	0%
	Don't know	0	0%
	Other	0	0%

	Response	*(n=1)*	*Percent of Respondents**
14WATTPAR30LED5a. Were the incandescent bulbs still operating when you removed them or where they burnt out?	Sill operating	1	100%
	Burnt out	0	0%
	Don't know	0	0%

	Total Count
SAMPLEPKS1. How many of the sample packs did you purchase?	1
SAMPLEPKS1A. How many of the 13 watt bulbs did you install?	0
SAMPLEPKS1B. How many of the 20 watt bulbs did you install?	0
SAMPLEPKS1C. How many of the 23 watt bulbs did you install?	0
SAMPLEPKS2. How many do you expect to install in the next month?	0

	Location	*Total Count*
SAMPLEPKS4a. For 13 watt bulbs that you have installed, where did you install these bulbs?	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Location	*Total Count*
SAMPLEPKS4b. For 20 watt bulbs that you have installed, where did you install these bulbs?	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Location	*Total Count*
SAMPLEPKS4c.For 23 watt bulbs that you have installed, where did you install these bulbs?	Living room	0
	Kitchen	0
	Family room / den	0
	Dining room	0
	Entry / hallway	0
	Bedroom	0
	Bathroom	0
	Garage	0
	Outdoors	0
	Closet	0
	Office	0
	Other / Don't know location	0

	Response	*(n=0)*	*Percent of Respondents**
SAMPLEPKS5. What type of bulb did the CFL replace?	Replaced incandescent bulbs	0	0%
	Replaced CFLs	0	0%
	Don't know	1	100%
	Other	0	0%

	Response	*(n=0)*	*Percent of Respondents**
SAMPLEPKS5A. Were the incandescent bulbs still operating when you removed them or where they burnt out?	Sill operating	0	0%
	Burnt out	0	0%
	Don't know	0	0%