



Commercial and Residential Lighting Breakout Session: Part 1

A Spotlight on Lighting Market Data and
Technical Specifications

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Boston, MA

Today's Overall Agenda

▼ Market and Evaluation Data

- Review current resources
- Identify data needs

▼ Technical Specifications

- Review ENERGY STAR and CEE specifications
- Identify big picture needs
- Discuss specific improvements

▼ Consumer Educating and Marketing

- Review national efforts
- Presentations on CEE member resources
- Discuss the potential for other opportunities

Session 1


Session 2

Market Data - Current Resources

◀ Handout

◀ Website: <http://www.cee1.org/eval/lighting-reports.php3>

The screenshot shows a web browser window with the address bar containing the URL <http://www.cee1.org/eval/lighting-reports.php3>. The page content includes the CEE logo, the title "Evaluation/Research Commercial & Residential Lighting Reports", and a navigation bar with "Consortium For Energy Efficiency" and "Home / Contact". A left sidebar lists various categories: About CEE, EE Program, Industry, Residential, Commercial, Industrial, Gas Programs, Multifamily, Government, Evaluation (with sub-items: Clearinghouse, Training, 2009 ENERGY STAR Survey, CEE Evaluations, Evaluation Webinar), Resource Library, and Consumer information. The main content area is titled "Commercial and Residential Lighting Reports" and contains a paragraph about the reports, a note on PDF format, and a list of reports from various organizations with their dates.

CEE 

Evaluation/Research
Commercial & Residential Lighting Reports

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Evaluation
• Clearinghouse
• Training
• 2009 ENERGY STAR Survey
• CEE Evaluations
• Evaluation Webinar
[Resource Library](#)
[Consumer information](#)

Commercial and Residential Lighting Reports

CEE has compiled lighting market and evaluation reports completed in the last two years by energy efficiency program administrators to help CEE members have a better understanding of how the market is changing.

Reports are in PDF format unless otherwise noted.


California Public Utilities Commission
[Compact Fluorescent Lamps Market Effects Final Report](#) - 4/12/10
[Compact Fluorescent Lamps Market Effects Final Report Appendices](#)
[California Compact Fluorescent Lamp \(CFL\) Market Overview](#) - 2/25/09

Commonwealth Edison Company
[Evaluation Report: Residential Energy Star® Lighting](#) [doc] - 12/10/09

Energy Trust of Oregon
[Oregon Lighting Market Assessment](#) - 3/12/10

Massachusetts Energy Efficiency Programs
[Results of the Multistate CFL Modeling Effort](#) [doc] - 2/4/10

Northwest Energy Efficiency Alliance
[Northwest Commercial Building Stock Assessment](#) - 12/23/09
[2008-09 CFL Tracking Study](#) - 7/1/09

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Market Data – Identify data needs

▶ NEMA Market Data

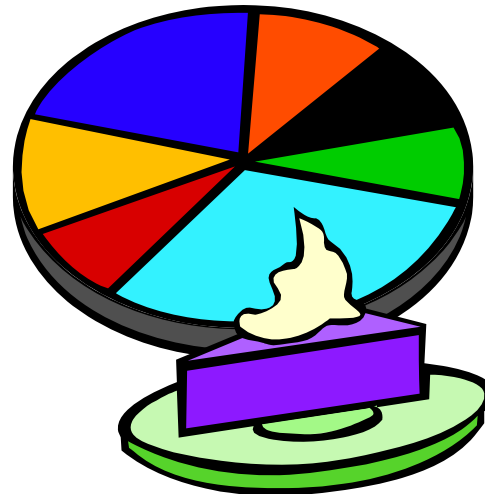
- Lighting market data and forecasts (brainstorm)
- Lighting Controls Study



NEMA Market Data

Brainstorm

- Given what we know about NEMA, what type of market information would be useful to your programs?



Market Data

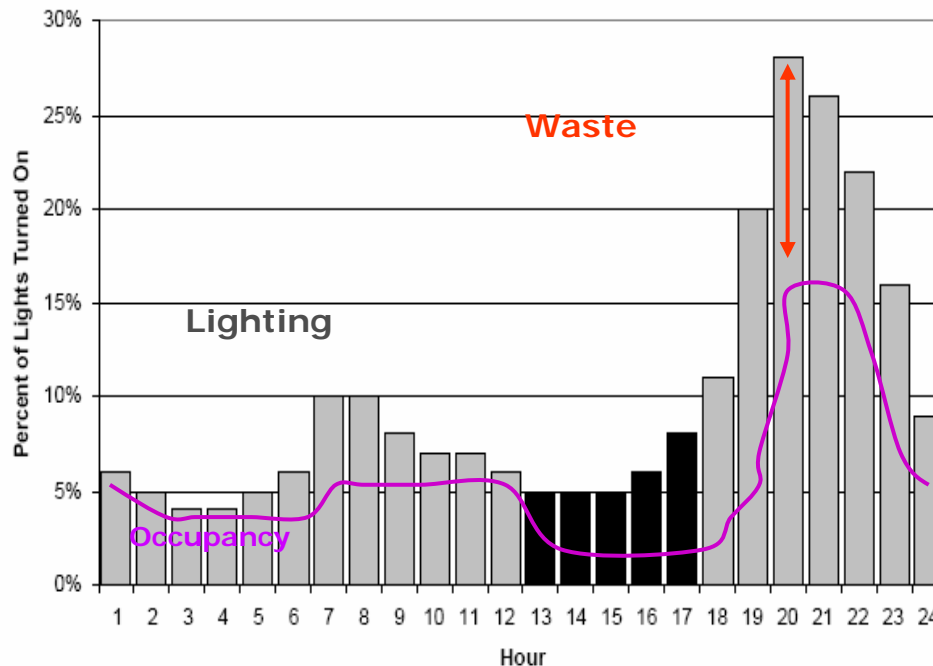
- ▼ Residential Lighting Controls
 - Current Data Gaps
 - Study Proposal

Gaps in Existing Data

- ▶ No comprehensive estimates exist that reliably quantify energy savings potential from using lighting controls in residences.
 - Eley estimates 20% savings in bathrooms
 - CLTC estimates 40% savings in bathrooms
 - LRC estimates savings between 20% and 40% in residential spaces

Lighting Controls Study

- ▶ Joint Research Study Proposal
- ▶ Characterize Lighting and Occupancy Use Patterns in Residences



Lighting Controls Study

- ▶ This study could
 - Quantify the potential for energy savings using lighting controls for common household spaces
 - Quantify the amount of lighting energy use and waste in each space (Hours of use, percentages, etc.)
 - Provide occupancy and lighting usage profiles for each room type averaged across the sample

Lighting Controls Study - Discussion

- ▶ Would this type of data provide value to energy efficiency programs?



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ENERGY STAR and CEE Specifications

▼ ENERGY STAR

Current

- Compact Fluorescent Lamps
- Integral LED Lamps
- Residential Light Fixtures
- Solid-State Lighting

Future (Committed)

- Luminaires (Draft 1 released)
- Replacement Lamps (Later 2010)

Future (Exploration)

- Commercial/Industrial Light Fixtures – Including Outdoor (Q4 2010)
- Lighting Controls (2011)

▼ CEE

- High Performance T8 lamps and ballasts
- Reduced Wattage T8 lamps and ballasts

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Residential Directional under-cabinet, downlight (recessed, surface, and pendants), cove mount, surface mount with directional heads, outdoor post or arm-mounted luminaires, and inseparable luminaires

Residential Non-directional (includes ceiling mount with diffusers, portables, outdoor porch, step and pathway)

Directional Commercial: downlights (recessed, surface, and pendants), under-cabinet, and portable desk task lights

Discussion – Identify Needs

- ▶ Given the current areas of coverage, do you see any remaining big picture needs for specifications?

Small Group Work – Spec Development and Improvements

◀ Residential

- ENERGY STAR Replacement Lamp Criteria

◀ Commercial

- CEE High Performance and Reduced Wattage Specification

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