SWEEP Ninth Annual Southwest Regional Energy Efficiency Workshop

November 15-16, 2012
La Fonda on the Plaza
Santa Fe, NM

Jon Linn, PE, LC
NEEP, Commercial Programs Manager
AGENDA

- About NEEP and DLC
- LED Lighting: Opportunity and Risks
- Market Adoption—Critical partnerships
- DesignLights Consortium
- DLC Resources
- DLC Processes
- Participation
Northeast Energy Efficiency Partnerships

MISSION
Accelerate energy efficiency in homes, buildings & industry in the Northeast - Mid-Atlantic region

GOAL
Keep the region a national leader in accelerating energy efficiency

STRATEGIES
- Reduce Building Energy Use
- Speed High Efficiency Products
- Make Efficiency Visible
- Advance Knowledge - Best Practices

Regional energy efficiency collaborations since 1996
- 1998: knowhow series
- 2006: HP T8 Project
- 2008: DLC QPL
THE LED LIGHTING MARKET

LEDs for general illumination hit the market in 2008

... and quickly became the new NEXT BIG THING!

• Before - High Pressure Sodium
• After - LED
“Energy Savings Potential of Solid State Lighting in General Illumination Applications”
US DOE, January 2012
Savings 2010-2030 tWh
- Res 1,009 38%
- C&I 1.663 62%

Figure 7.1 Total U.S. Lighting Energy Consumption Forecast, 2010 to 2030
LED LIGHTING MARKET POTENTIAL

2030: Lumen-Hours
- LED
  - 74% Sales
  - 50% Base Service
Compact Fluorescent Lighting in America: Lessons Learned on the Way to Market
US DOE June 2006
• Quality & Performance sacrificed in rush to market
• CFL’s Poor Reputation
• Loss of several years of savings
• Don’t repeat this with SSL
THE LED PROMISE

- Better Lighting
- Energy Savings
- Longer Lifetimes
- Less Maintenance
- Control Options
- Design Flexibility
- ... and more

Are these promises true?

How can efficiency programs distinguish quality products from the rest to assure market adoption?
The DesignLights™ Consortium (DLC) is the premier resource for high-quality, energy-efficient, commercial lighting design and information!

**2012 STAKEHOLDER MEETING**  
OCT. 28-31, 2012 | ATLANTA, GA

**CLICK HERE TO REGISTER!**

The DLC — a collaboration of utility companies and regional energy efficiency organizations — is committed to raising awareness of the benefits of efficient lighting in commercial buildings.

**OUR SPONSORS** support and enable the efforts of the DLC, and through their participation they demonstrate their commitment to quality and performance in energy efficiency.

**OUR MISSION** is to help — builders, architects, designers, and commercial property owners to implement improved design practices in all areas of the commercial lighting market.

**OUR GOAL** is to ensure that high-quality, energy-efficient lighting design becomes commonplace in all lighting installations.

**NEWS**

Upcoming Events!

October 28-31: DLC Annual Stakeholder Meeting  
For more information, please visit the DLC Stakeholder Meeting website.

Update: 10/26/2012

To view the Qualified Products List as of 10/26/2012 click here.

An updated application tracking sheet has been posted to the Member's section.

Update: 9/12/2012

DLC hosted a webinar on 9/12 to explain the new Specifications added to the Technical
THE DLC QPL

- A resource for member energy efficiency programs to screen products eligible for their incentives
- Specifications for 30 product categories, reviewed and updated annually

QPL Stats:
- 12/22/2010: 663 products, 7 cats, 27 mfrs
- 12/21/2011: 7,910 products, 19 cats, 103 mfrs
- 10/26/2012: 16,164 products, 30 cats, 196 mfrs
GROWTH OF QPL

Count of Products

### Qualified Products List

<table>
<thead>
<tr>
<th>Manufacturer Name</th>
<th>Brand Name</th>
<th>Model Number</th>
<th>Family Model</th>
<th>Category A (Watts)</th>
<th>Product Category</th>
<th>Measured Luminous Efficacy</th>
<th>Measured Wattage (W)</th>
<th>Measured Lumen (lm)</th>
<th>Rated Life (hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acuity Brands</td>
<td>Halogen</td>
<td>LDE-5522-12</td>
<td>D012-8008000</td>
<td>300</td>
<td>12V</td>
<td>84.7</td>
<td>70.7</td>
<td>5080</td>
<td>5000</td>
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<td>Acuity Brands</td>
<td>Halogen</td>
<td>LDE-5522-12</td>
<td>D012-8008000</td>
<td>400</td>
<td>12V</td>
<td>74.3</td>
<td>74.3</td>
<td>5080</td>
<td>5000</td>
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<td>Halogen</td>
<td>LDE-5522-12</td>
<td>D012-8008000</td>
<td>500</td>
<td>12V</td>
<td>64.0</td>
<td>64.0</td>
<td>5080</td>
<td>5000</td>
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<td>Acuity Brands</td>
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<td>12V</td>
<td>55.8</td>
<td>55.8</td>
<td>5080</td>
<td>5000</td>
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<td>12V</td>
<td>47.5</td>
<td>47.5</td>
<td>5080</td>
<td>5000</td>
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<tr>
<td>Acuity Brands</td>
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<td>D012-8008000</td>
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<td>12V</td>
<td>39.0</td>
<td>39.0</td>
<td>5080</td>
<td>5000</td>
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</table>

*Note: The above table is a sample and may not represent the complete list.*
### Technical Requirements Table

<table>
<thead>
<tr>
<th>Application</th>
<th>Minimum Light Output</th>
<th>Zonal Lumen Requirements</th>
<th>Minimum Light Efficacy</th>
<th>Allowable CCT: (K, 0.95, 0.8)</th>
<th>Minimum CRI</th>
<th>L70 Lumen Maintenance</th>
<th>Minimum Luminaire Warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Outdoor Pole/Arm-Mounted Area and roadway luminaires</td>
<td>1,000 lm</td>
<td>0.53K: 0-50</td>
<td>60 lm/w</td>
<td>62700K</td>
<td>60</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>2. Outdoor Pole/Arm-Mounted Delineator Luminaires</td>
<td>1,000 lm</td>
<td>0.53K: 0-50</td>
<td>40 lm/w</td>
<td>62700K</td>
<td>60</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>3. Outdoor Wall-Mounted Area Luminaires</td>
<td>600 lm</td>
<td>0.53K: 0-50</td>
<td>60 lm/w</td>
<td>62700K</td>
<td>60</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>4. Bollards</td>
<td>600 lm</td>
<td>0.53K: 0-50</td>
<td>35 lm/w</td>
<td>62700K</td>
<td>60</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>5. Wall-wash Luminaires</td>
<td>576 lm</td>
<td>0.53K: 0-20</td>
<td>40 lm/w</td>
<td>62700K</td>
<td>60</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>6. Parking Garage Luminaires</td>
<td>3,000 lm</td>
<td>0.53K: 0-20</td>
<td>60 lm/w</td>
<td>62700K</td>
<td>50</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>7. Fuel Pump Canopy</td>
<td>1,000 lm</td>
<td>0.53K: 0-40</td>
<td>70 lm/w</td>
<td>62700K</td>
<td>50</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>8. Landscape/Accent Flood and spot Lighting</td>
<td>250 lm (+1000 lm)</td>
<td>0.53K: 0-20</td>
<td>60 lm/w</td>
<td>62700K</td>
<td>65</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>9. Architectural Flood and spot Lighting</td>
<td>1000 lm</td>
<td>0.53K: 0-20</td>
<td>60 lm/w</td>
<td>62700K</td>
<td>65</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>10. Stairwell and passageway Lighting</td>
<td>750 lm</td>
<td>0.53K: 0-20</td>
<td>70 lm/w</td>
<td>62700K</td>
<td>65</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>11. Track or monopoint directional lighting fixtures</td>
<td>150 lm</td>
<td>0.53K: 0-20</td>
<td>40 lm/w</td>
<td>62700K</td>
<td>80</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>12. Vertical/refrigerated case lighting</td>
<td>150 lm</td>
<td>0.53K: 0-20</td>
<td>40 lm/w</td>
<td>62700K</td>
<td>80</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
<tr>
<td>13. Horizontal/refrigerated case lighting</td>
<td>150 lm</td>
<td>0.53K: 0-20</td>
<td>40 lm/w</td>
<td>62700K</td>
<td>80</td>
<td>50,000 hrs</td>
<td>5 years</td>
</tr>
</tbody>
</table>

- **30 Categories**
- **Seven Parameters**
  1. Minimum Light Output
  2. Zonal Lumens
  3. Minimum Efficacy
  4. CCT
  5. CRI
  6. $L_{70}$ Lumen Maintenance
  7. Warranty
2013 PLANNING: BUDGET AND PLAN

DLC 2013 Planning and Commitment Drive
• November-December Outreach
THANK YOU!

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