



LIGHTING
for
tomorrow

Plans for 2007

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Pacific Northwest National Laboratory

DOE SSL Workshop

2 Feb 2007

Organizers

- American Lighting Association
- Consortium for Energy Efficiency
- U.S. Department of Energy
– Represented by PNNL

american
lighting
association



*Working Together,
Advancing Efficiency*

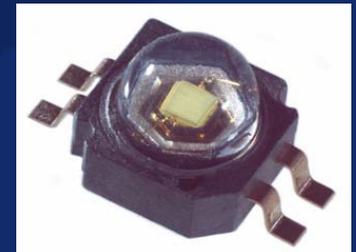
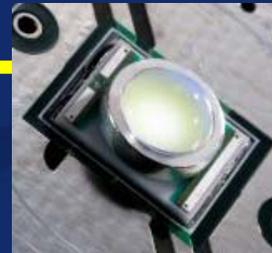


One competition, two categories

- CFL fixture families
 - Indoor and outdoor
 - Meet ENERGY STAR



- LED-based fixtures
 - Niche applications
 - Cutting edge design category



What are the objectives?

- Encourage energy efficiency and quality
- Recognize design innovation
- Evaluate fixtures employing LEDs
- Facilitate learning by lighting fixture industry
 - Identify common problems and solutions
 - Raise awareness of LED technical attributes



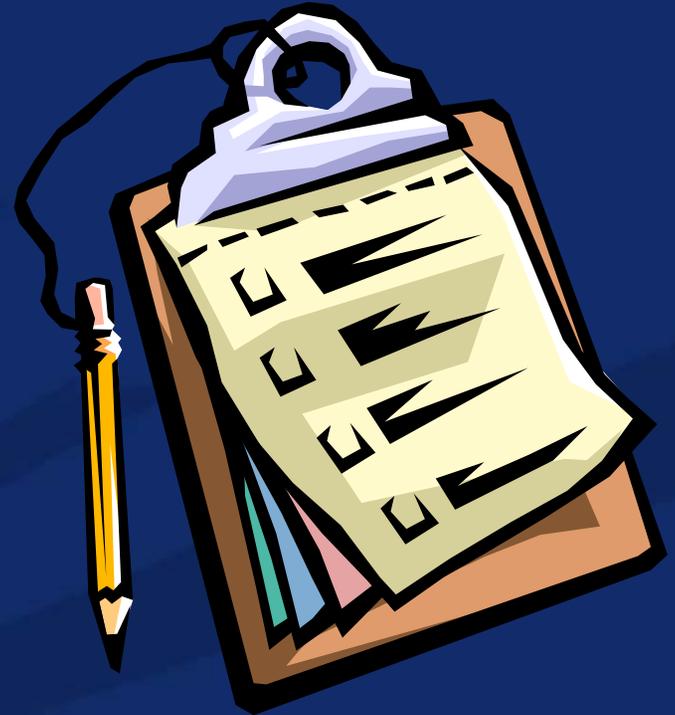
What fixture types are eligible?

- Niche applications
 - Undercabinet and in-cabinet
 - Portable desk/task
 - Outdoor porch, path, step
 - Recessed downlights
- Cutting edge design category
 - Not restricted to niche applications
 - Think outside traditional fixture types



What are the minimum requirements?

- No screw-based fixtures
- LED luminous efficacy
 - 40 lm/W for < 5000K
 - 50 lm/W for 5000K +
- Driver efficiency
 - 85% minimum
- LED life
 - 35,000 hours to 70%



What are the judging criteria?

- Lighting quality
 - Color appearance
 - Color rendering
 - Illuminance levels and distribution
- Application efficiency
- Thermal management
- Aesthetic appearance



Bonus points for:

- Innovation
 - Designs that take advantage of unique LED attributes
- No off-state power consumption



Who can participate?

- Niche applications
 - Manufacturers
 - Independent designers and students ONLY if partnered with a manufacturer
- Cutting edge design category
 - Manufacturers
 - Independent designers
 - Students



What to submit?

- Niche applications
 - Prototype or production luminaire
 - Cutting edge design category
 - Prototype or production luminaire
- OR
- Working model



What's the timeline?

- Mar 31 – Intents to submit due
- May 31 – Entries due
- June/July – Judging
- Sep 9 – Announce winners
 - ALA conference in San Antonio



Then what happens?

- Publicity
 - Brochure similar to 2006
 - Press
- Show and tell
 - LED conferences
 - Dallas Market
 - Light Fair
 - Energy efficiency organizations & utilities

Diode 28 by American Fluorescent, Waukegan, IL
<http://www.americanfluorescent.com>
Wattage: 5 watts (adjustable to two light levels)
Availability: January 2007

The Diode 28 undercabinet lighting fixture was designed by Stephen Blackman to have a unique ultra-thin appearance and provide superior light distribution with low glare. The easy-to-install design features a high-low lighting option with an illuminated switch. The fixture provides good color, high efficacy, and ability to adjust the light level.

Linear by Lucere Lighting, Huntington Woods, MI
<http://www.lucereighting.com>
Wattage: 18 watts
Availability: Currently available. Visit website for local sales representatives.

Capitalizing on the benefits of LEDs, this fixture was designed for undercabinet, cove, and display lighting. The 120 degree beam pattern provides uniform illumination for small- to medium-depth applications.

Halley by Lucresco, Palo Alto, CA
<http://www.lucresco.com>
Wattage: 20 watts (fully dimmable)
Availability: Currently available. Visit website for local dealers.

Halley, the first truly functional LED desk lamp, is a perfectly counterbalanced, sculptural statement designed by Richard Sapper for Lucresco. The sophisticated counterbalance system allows the head to be positioned easily and precisely to provide light where it is needed.

Lakeland by Progress Lighting, Spartanburg, SC
<http://www.progresslighting.com>
Wattage: 3.5 watts
Availability: January 2007

Lakeland brings the benefits of residential LED lighting to the outdoors. With warm-white, 3,000K color temperature light output, this collection features straightforward styling in a brushed nickel finish with etched glass.

Winners These fixtures were selected as winners of the first Lighting for Tomorrow SSL competition.



Diode 28 Linear Halley Lakeland



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