



# **Next Generation Luminaires 2013**

## **Highlights, Discoveries, and Trends**

**LIGHTFAIR 2013**

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# Competition Partners

Partnerships to link energy efficiency & lighting quality

International Association of Lighting Designers

IALD



**Illuminating**  
ENGINEERING SOCIETY

U.S. DEPARTMENT OF  
**ENERGY**

Energy Efficiency &  
Renewable Energy

BUILDING TECHNOLOGIES OFFICE



# What Makes NGL Different?

- Inclusive rather than exclusive
- Performance evaluation with extensive documentation
- Judged in characteristic applications and “hands on”
- Diverse, professional judging panel
- DOE channels of promotion



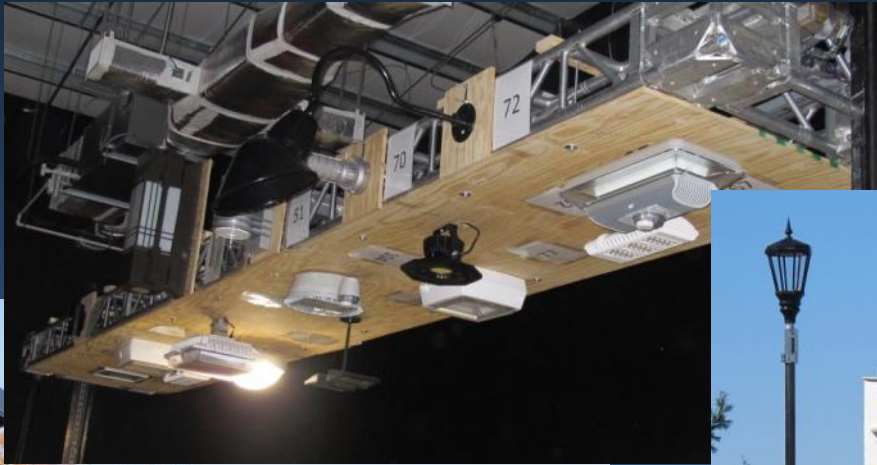
- For the design community:
  - In-depth peer review of 600 + products
  - High visibility and communication
  - Catalog/website to use as a reference
- For manufacturers:
  - Professional evaluation and feedback
  - Enhanced credibility for recognized products
  - Exposure through DOE's marketing channels



	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2012</b>	<b>2013 (indoor)</b>	<b>All</b>
<b>Intents</b>	188	265	328	338	156	1275
<b>Judged</b>	61	126	138	234	99	658
<b>% of intents judged</b>	32%	48%	42%	69%	63%	52%
<b>Awards (rec + BIC)</b>	22	47	37	90	32	228
<b>% of judged awarded</b>	36%	37%	27%	38%	32%	35%



# 2012 Outdoor Competition



Judging Event - November 2012  
Virginia Tech Transportation Institute  
Winners' Announcement - February 2013



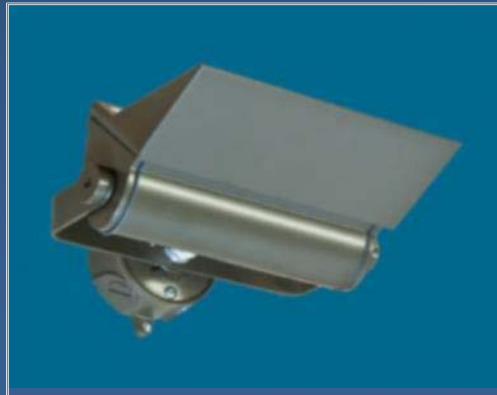
# 2012 Outdoor BLC Winners



"Evolve™ LED Scalable Cobrahead" by  
GE Lighting



"OXFORD" by Relume  
Technologies, Inc.



"fracfir™ Outdoor-Style S170" by  
The Lighting Quotient



"TV and Dial LED" by  
Edge Lighting





# 2013 Indoor Judging Panel



Jeff Brown  
Melanie Taylor  
Charles Thompson  
Mary Matteson-Bryan  
Avi Mor

Scott Shellberg  
Dan Blitzer (support)  
Daniel Rogers  
Samantha LaFleur  
Jim Baney  
Aram Ebben  
Craig Bernecker  
Ruth Taylor (support)



- Organized by application
- Product Evaluation
  - Installed and lighted
  - Table top (2<sup>nd</sup> fixture)
  - Documentation
- Process
  - Independent, blind judging
  - *Preliminary* scoring
  - Discussion and decision
  - Post judging analysis & verification





# Making it Work





# The Setup







# 2013 Indoor Products Judged

	Judged	Awarded
Linear (pendant, recessed, surface)	18	9
Accent (track, multi-unit, recessed)	17	7
Downlights – recessed	12	0
Industrial /Utility	11	6
Color changing	9	4
Decorative	8	0
Personal undercabinet, task	8	3
Grid Ceiling	8	1
Wall washers	6	2
Cove	2	0



## In-person evaluation:

- Color quality
- Illuminance
- Light distribution
- Glare control
- Serviceability
- Value
- Aesthetic appearance

## Documentation analysis:

- Energy efficiency
- Power quality
- Lumen maintenance

## Bonus points:

- Adjustability/Flexibility
- Innovation
- Dimming performance



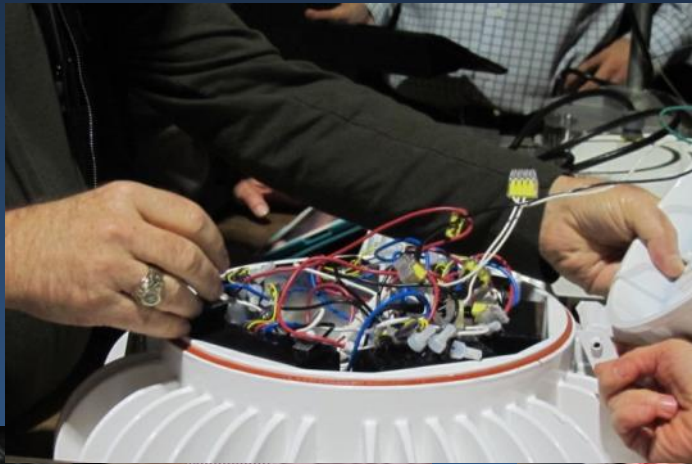


# Evaluating Lighting Quality



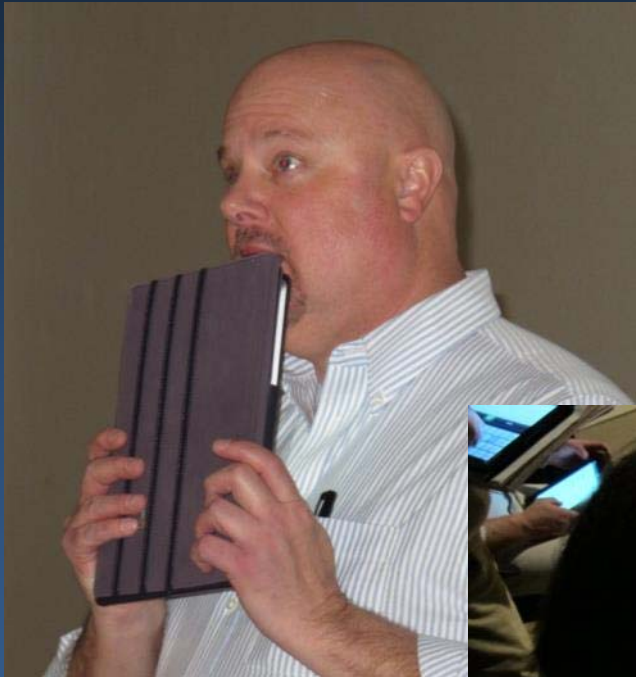


# Evaluating Serviceability





# How the Scoring Works



iPad 11:07 AM 90%

Judge Name (#1)

Entry # 6 LytePRO16 Wall packs

Information Scoring

Color Quality  
0

Appropriate Illuminance  
0

Light Distribution  
0

Glare Control

Previous Entry Next Entry



# Required Documentation

## General

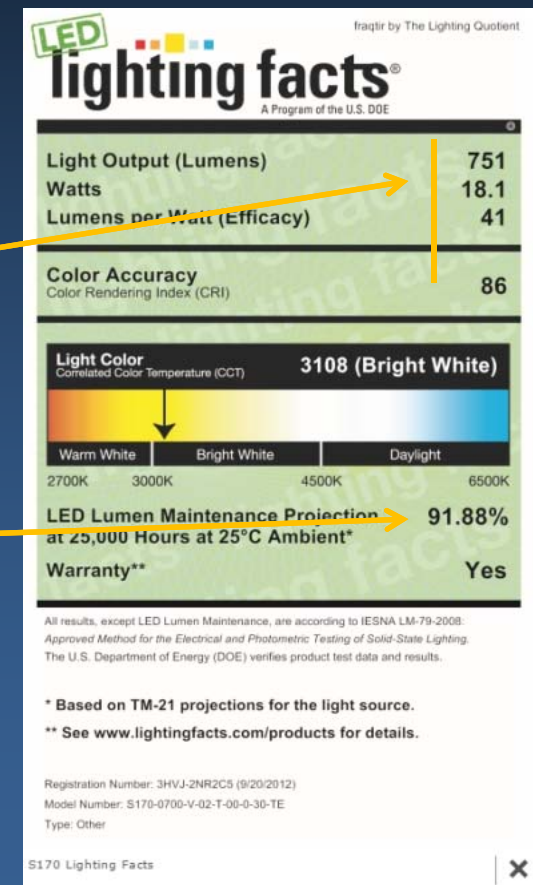
- Luminaire specification sheet
- Product photos/marketing materials

## LED Lighting Facts documentation

- LM-79 test report (including sphere data)
- Product specification sheet
- LM-80 test report on LED package/module/array
- LED package/module/array specification sheet
- ISTMT on submitted model
- ENERGY STAR TM-21 Calculation

## Other

- Installation/serviceability statement
- Driver specification sheet/dimming interface spec sheet
- Product warranty/end-of-life statement



- Recognized means 'suitable for specification'
- Best in Class must stand out overall and in category
  - Relatively few products meet this dual standard





# Indoor 2013 Best in Class



XLE-3-10 Xpress  
by Digital Lumens



Trac-Master T254L  
Cylindra by Juno  
Lighting Group



W Series LED by Acuity  
Brands/Lithonia Lighting



## Highlights from Indoor 2013

- Documentation through LED Lighting Facts Program
- Impressive in-situ installation for judging
- Higher efficacies
- Significant color improvements
- Increased dimming submissions
- Top categories: linear pendants and track luminaires
- A few new design approaches
- Still waiting on emerging/innovative products



## All recognized products

2008 - 37 lm/W

2009 - 52 lm/W

2010 - 45 lm/W

2012 - 65 lm/W

2013 – 75 lm/W (indoor)

# Thanks! Questions?

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