Next Generation Luminaires Indoor & Outdoor Winners Showcase 2015

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Pacific Northwest National Laboratory
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LIGHTFAIR International 2015

Next Generation LUMINAIRES

Competition Partners

Partnerships to link energy efficiency, lighting quality & performance

INTERNATIONAL ASSOCIATION OF LIGHTING DESIGNERS | IALD

IES Illuminating ENGINEERING SOCIETY

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

BUILDING TECHNOLOGIES OFFICE

What NGL Is All About

- Inclusive rather than exclusive
- Performance evaluation with extensive documentation
  - More time and resources than most designers can afford
- Judged in characteristic applications and “hands on”
- Diverse, professional judging panel

We've Seen Lots of Products

2008 - 2015	
Judged	961
% of intents judged	53%
Awards	346
% of judged awarded	36%

Judging Approach

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

Judging Criteria

In-person evaluation:

- Color
- Illuminance
- Light distribution
- Glare control
- Serviceability
- Controllability
- Value
- Aesthetic appearance
- Bonus

Documentation analysis:

- Luminaire Efficacy
- Lumen maintenance

2015 Judging Panels

INDOOR

Marty Salzberg

Halley Fitzpatrick

Denise Fong

Jeff Brown

Melanie Taylor

Dan Blitzer

John Delany

Avi Mor

Craig A. Bernecker

John D’Angelo

Naomi Miller

OUTDOOR

Nancy Clanton

Craig Bernecker

Mary Matteson Bryan

Mike Lambert

Aram Ebben

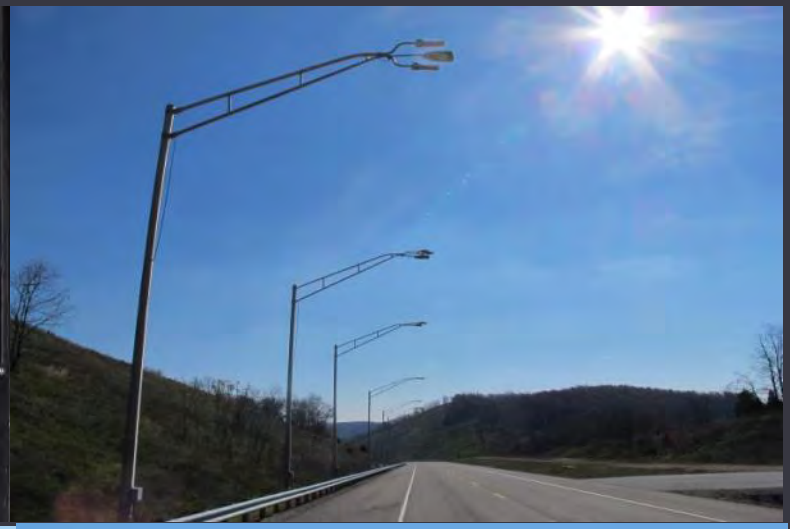
Glenn Heinmiller

Nate Mitten

Charles Thompson

Dan Blitzer

Outdoor Judging Setup



Indoor Judging Setup

Documentation is Key

General

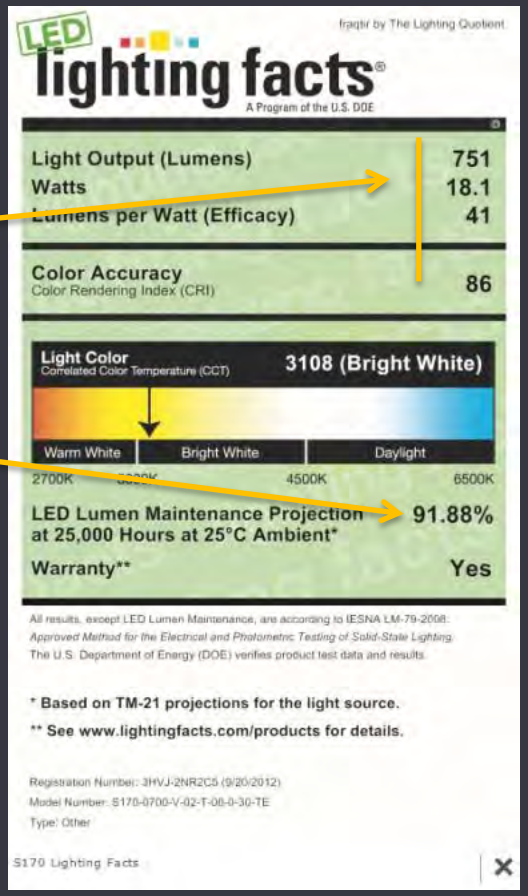
- Luminaire specification sheet
- Product photos/marketing materials

LED Lighting Facts documentation

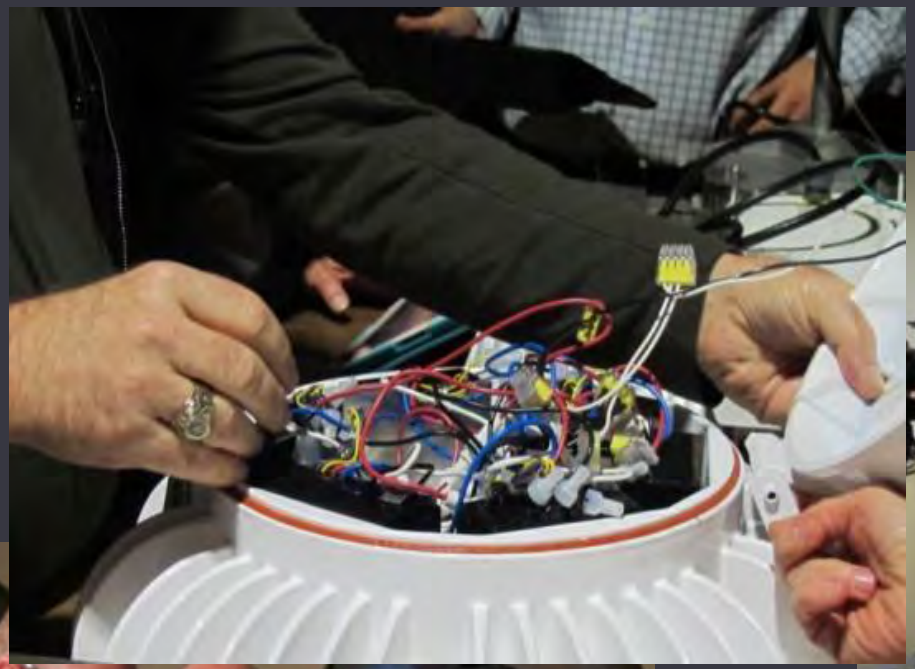
- LM-79 test report (including sphere data)
- LM-80 test report on LED package/module/array
- LED package/module/array specification sheet
- ISTMT on submitted model
- ENERGY STAR TM-21 Calculation

Other

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



We Love to Take Things Apart!



- How much time to install?
- What can be replaced?
- Can it be serviced?

Judging in Action - Video

Lots of Changes in 2015

- Higher efficacy requirements
- Limited categories
- Digital controls
- More in-depth serviceability evaluation
- Main performance criteria stayed the same
- In-depth evaluation of color tuning (indoor) and pedestrian scale (outdoor)

Why all the Changes?

- Push the envelope – higher efficacy minimums
- Focus on key issues
  - Controls
  - Serviceability
- Fewer entries for more focused evaluations
- More realistic installations for more accurate evaluations

Indoor Control Requirements (All Indoor Entries)

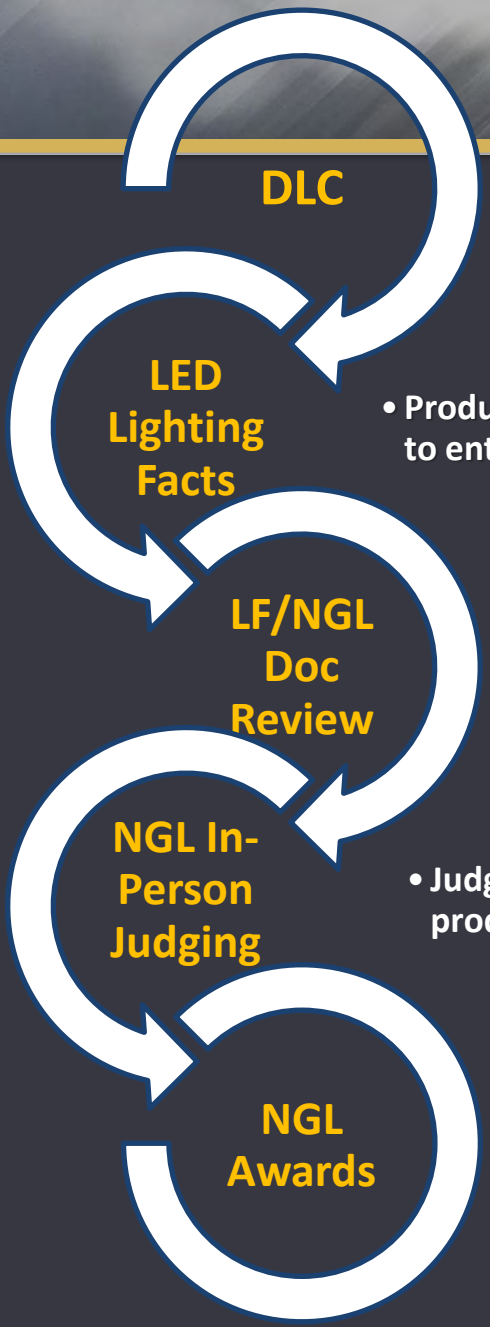
- **DMX512:** Entries must be shipped to the judging location wired with DMX-In & DMX-Out connectors. Connector should be XLR-5, male for input, female for output. Pinout will be as follows:
    - Pin 1 Signal Common
    - Pin 2 DMX Data –
    - Pin 3 DMX Data +
    - Pin 4 None
    - Pin 5 None

- **DALI:** Luminaires must be provided with 3'-0" leads of Purple (DALI+) and Gray (DALI-) THHN wire connected to the luminaire. Luminaires will be addressed in the field.

- **Proprietary systems:** (System using proprietary control protocols to control a light source. Individual addressing and control of each luminaire is required. 0-10v, forward phase, reverse phase, or 3-wire line voltage are not considered proprietary and will not be reviewed. Wall box dimming will also not be considered proprietary.)

All products must include detailed installation instructions. All connectors must be included; power will be via 5-15P Plug. System must be able to individually control each luminaire. Controller for judges must be provided on a 50' whip.

Listings and NGL



- NGL Minimum efficacy requirements typically match DLC (20% above in 2015)
- Products are submitted through LF to enter the competition
- Documentation is reviewed by LF and NGL technical staff
- Judges evaluate products in-situ
- Additional testing or review is conducted as needed before awards are announced

Outstanding Awards

- User Interface
- Dimming
- Serviceability
- High Efficacy

Indoor

- Innovation
- Versatility
- Form Factor

Outdoor

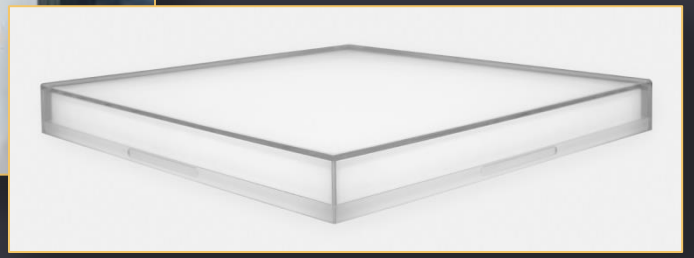
OUTSTANDING 2015

Finelite, Inc.
FineTune™ System

OUTSTANDING

User Interface

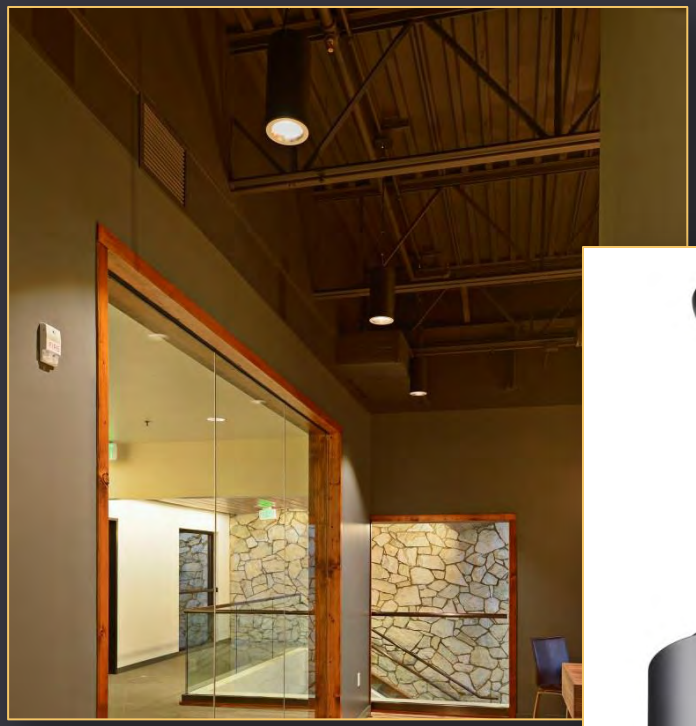
Selux Corporation
Kju



OUTSTANDING

Dimming

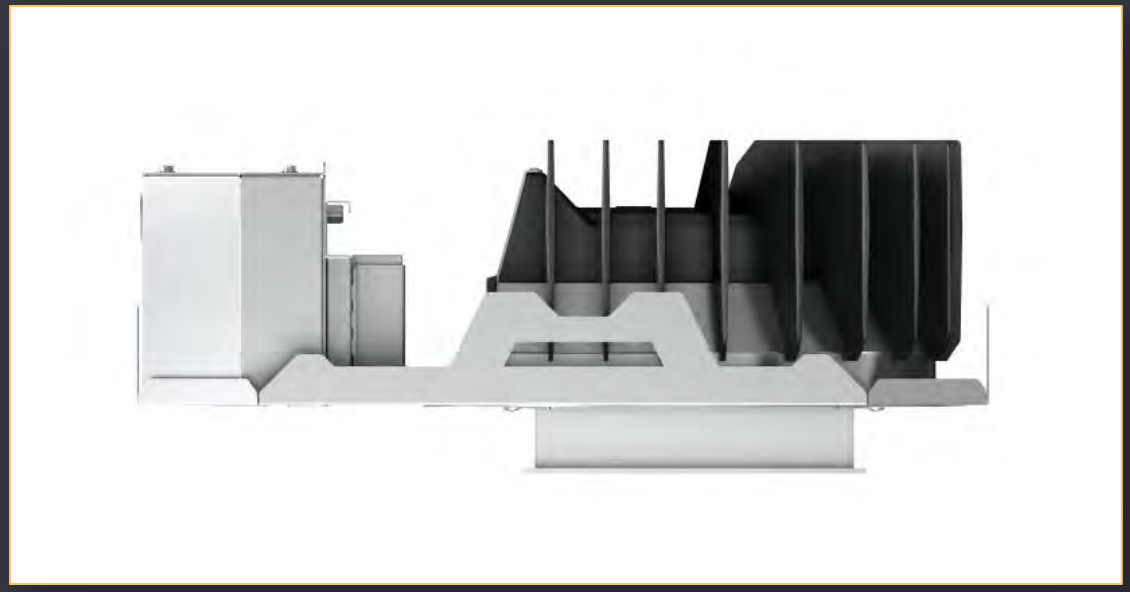
Juno Lighting Group
Indy L-Series LED Cylinder



OUTSTANDING

Dimming

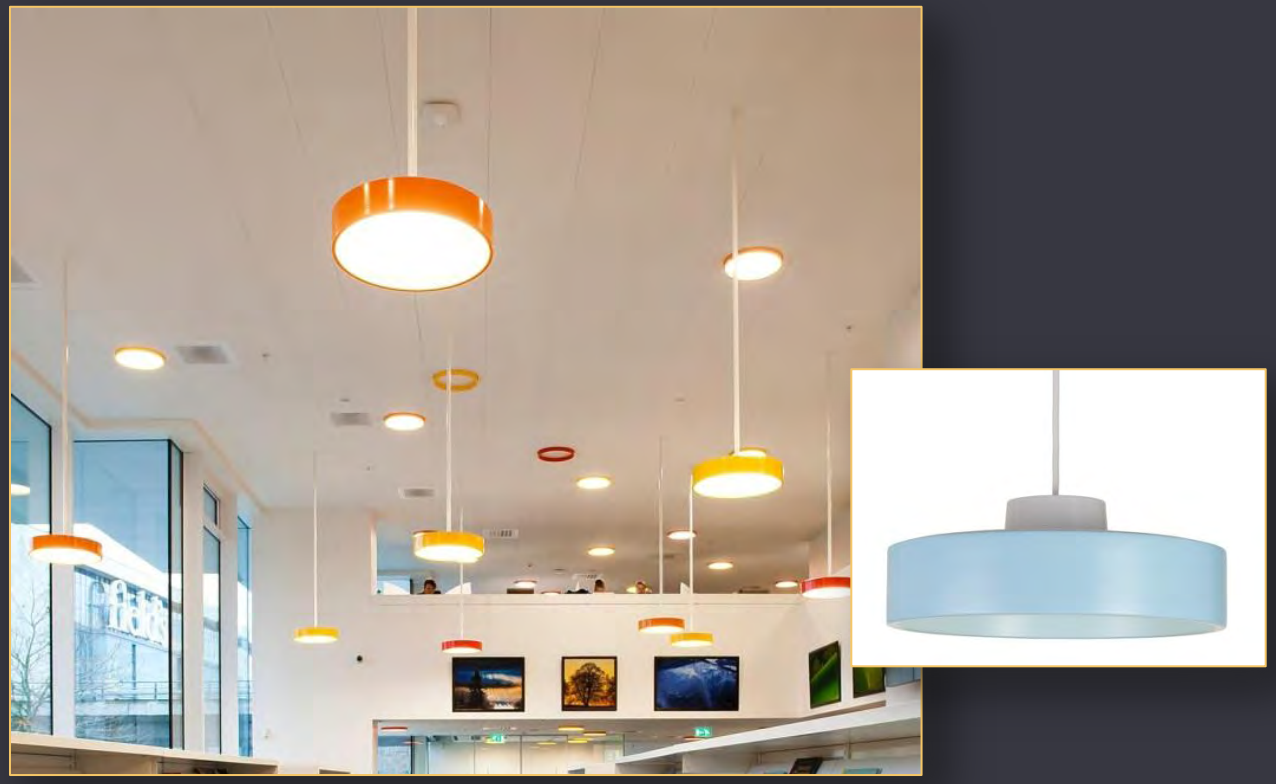
USAI Lighting
MAX Output Warm Glow Dimming



OUTSTANDING

Dimming

Louis Poulsen
LP Circle Pendant



OUTSTANDING

Serviceability

Selux Corporation
M36 LED My White

OUTSTANDING

Serviceability

Finelite, Inc.
HPR-LED 2x2

OUTSTANDING

Serviceability

Intense Lighting
Gravity Cylinder

OUTSTANDING

Efficacy

amerlux
MURRO LED Wall Wash

OUTSTANDING

Efficacy

Cree
IG Series

OUTSTANDING

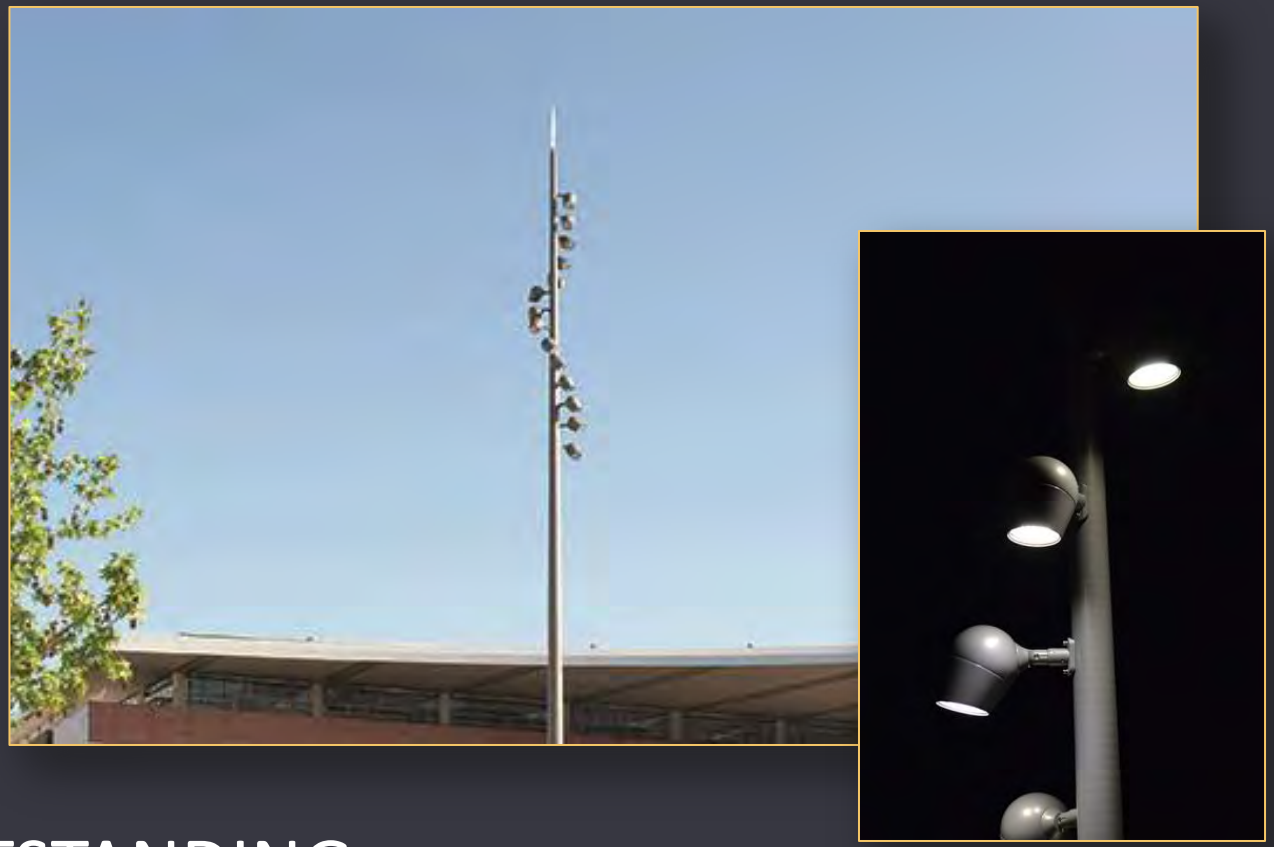
Innovation

Landscape Forms, Inc.
MultipliCITY LED

OUTSTANDING

Form Factor

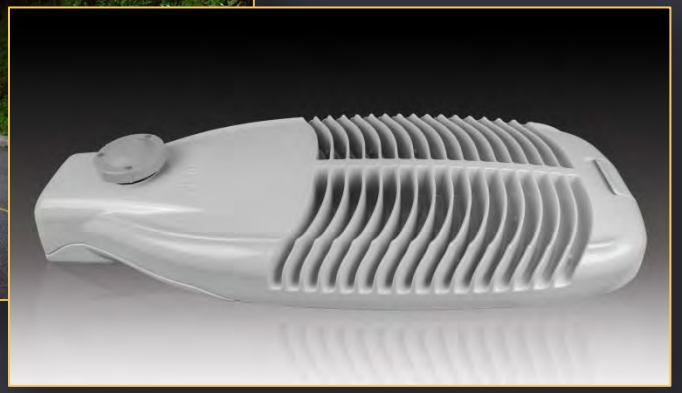
Selux Corporation
Olivio Sistema 2 LED



OUTSTANDING

Versatility

LED Roadway Lighting
NXT-M



RECOGNIZED

Roadway Collectors

Philips Lumec
RoadFocus LED Cobra Head

RECOGNIZED

Roadway Collectors

Hubbell Lighting
Beacon Products Viper with Beaconnect

RECOGNIZED

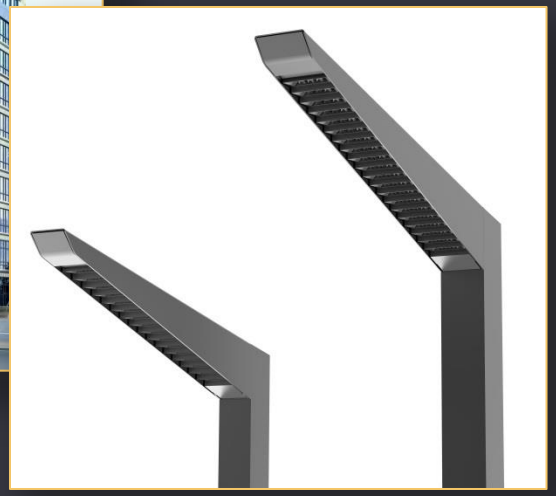
Parking Lot

Landscape Forms, Inc.
SIGNAL

RECOGNIZED

Pedestrian Scale

Hubbell Lighting
Architectural Area Lighting KicK™



RECOGNIZED

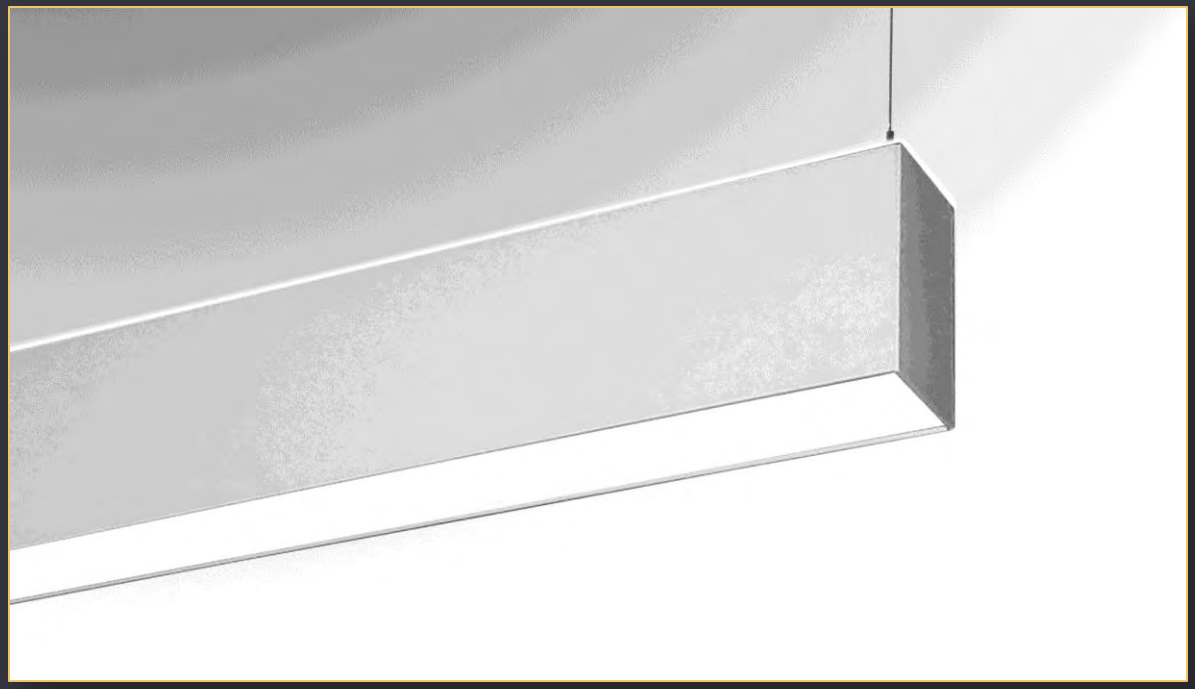
Pedestrian Scale

USAI Lighting
Cylinders Series Pendant

RECOGNIZED

Decorative Pendants

Finelite, Inc.
HP-2 INDIRECT / DIRECT



RECOGNIZED

Linear Pendants

amerlux

LINEA 1.5 LINEAR DIRECT / INDIRECT LED

RECOGNIZED

Linear Pendants

LumenWerx
Cava Curve

RECOGNIZED

Linear Pendants

Gotham by Acuity Brands Lighting ICO 4

RECOGNIZED

Downlights

Amerlux
FINO CEILING LED

RECOGNIZED

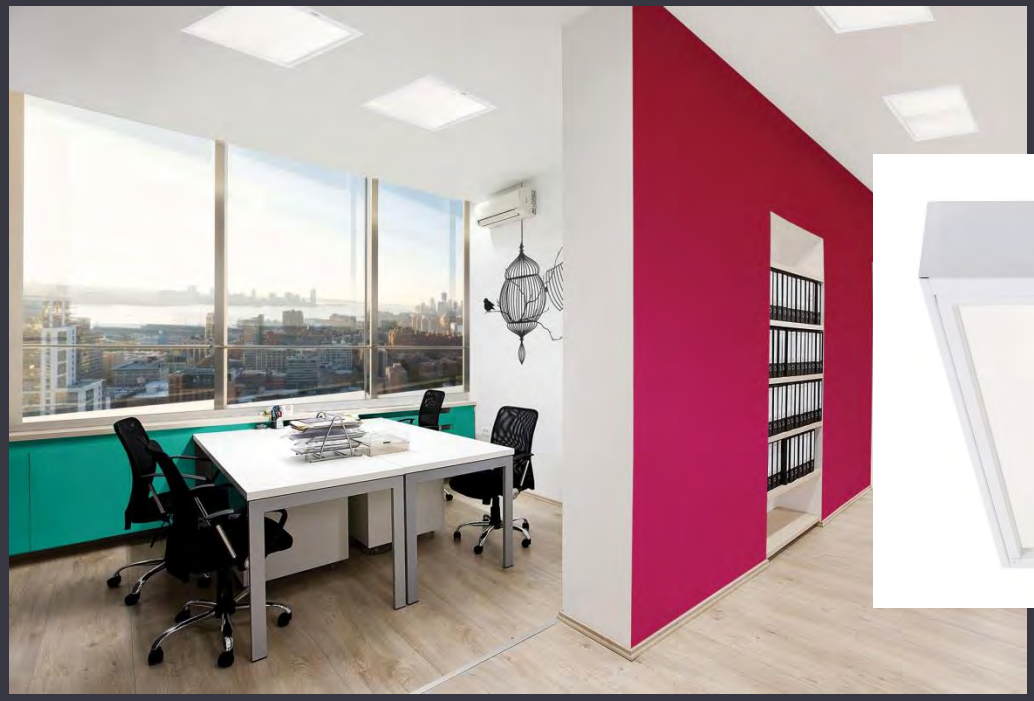
Wall Wash Luminaires

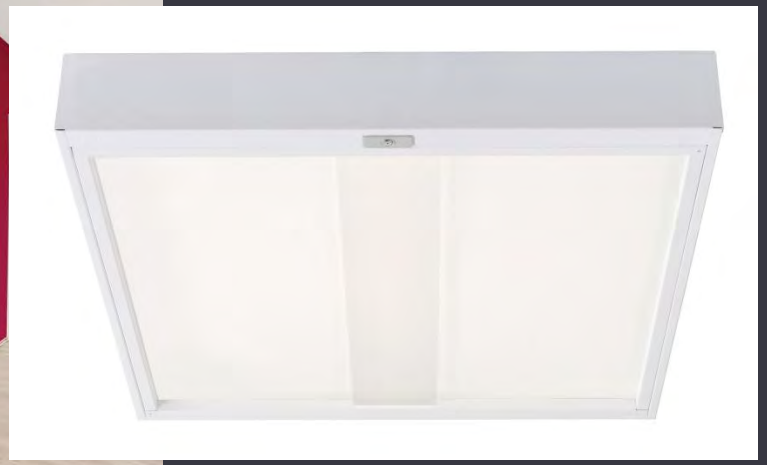
Juno Lighting Group
Indy L-Series LED Downlight

RECOGNIZED

Downlights

Philips Ledalite
VersaForm Recessed LED





RECOGNIZED

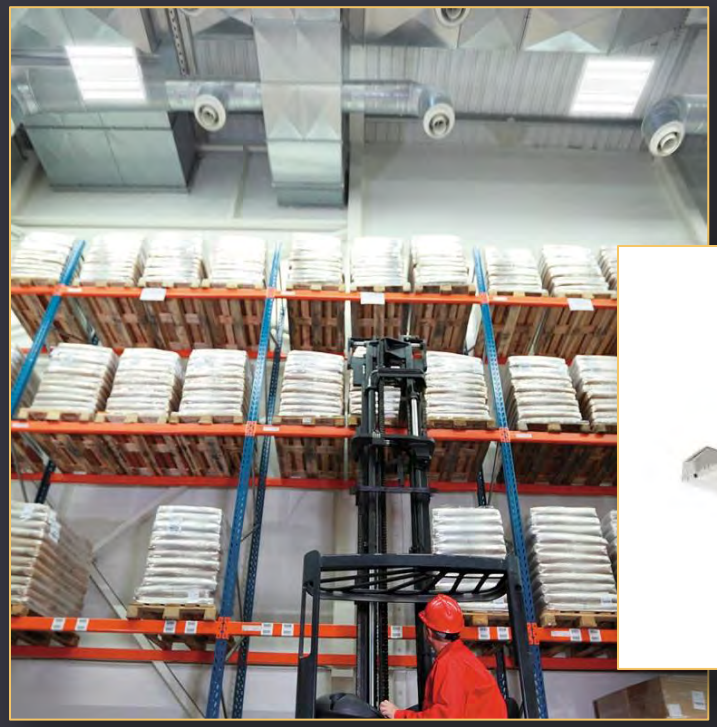
Troffers

LumenWerx
Primo

RECOGNIZED

Troffers

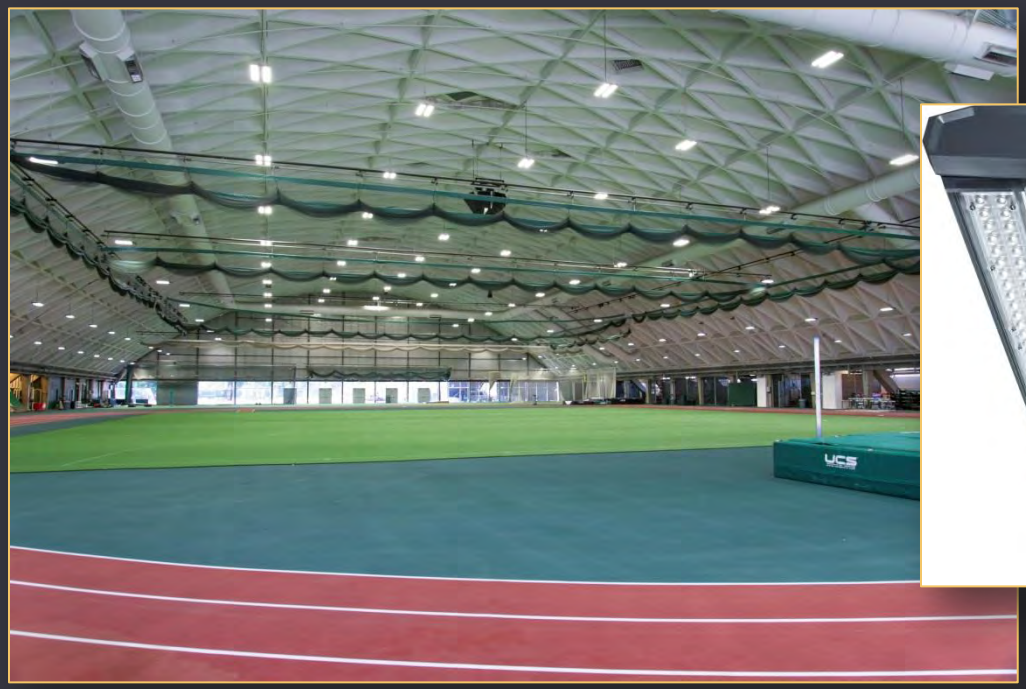
Philips Day-Brite
FBX



RECOGNIZED

High Bays

Digital Lumens
DLE-48 Intelligent LED



RECOGNIZED

High Bays

Congratulations!