

# Phuzion™

LED High Bay  
Wet location listed



|                |      |
|----------------|------|
| Catalog Number |      |
| Notes          | Type |

## Description

The Phuzion LED luminaire takes high-bay lighting to new levels of lumen output and temperature tolerance. By marrying the latest in LED technology with the legendary illuminating dynamics of HoloPhane's prismatic glass, the Phuzion high bay delivers unparalleled performance and reliability. Phuzion is highly versatile and can be installed with the optics facing down or inverted for maximum uplight.

## Optics

- Prismatic borosilicate glass maintains highest levels of luminosity over time.
- Glass doesn't fade, discolor or otherwise degrade in harsh environments.
- Six distributions available to achieve results from any mounting height.
- Prismatic optics combined with high efficiency LED's achieve maximum spacing and superior uniformity.
- IP65 rated optics.
- Injection molded acrylic lens available.
- Optional non-silicone gaskets, ideal for automotive production.
- Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. [Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)
- Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. [Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.](#)

## Mechanical

- Robust cast aluminum housing with low copper content (0.6% CU content) withstands hot and dirty environments.
- Super durable TGIC thermoset powder coat finish provides 1500 hours salt fog rating. The optional CR (corrosion resistant) finish is a five-stage pre-treating and painting process that yields over 5,000 hours salt rating per ASTM B117.
- Pendant mount standard.
- Stainless steel screws ship standard when ordered with the PM mounting option.

## Electrical

- 0-10V Dimming driver is standard, dims to 10%.
- XVOLT is an optional robust driver solution designed to assist with power quality issues and a dropped neutral in 277V input as derived from 480V Wye. Supports 277-480V; 6kV surge rated.
- Luminaire Surge Protection Level: Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015.
- 70, 80, 90 CRI available.
- 3000K, 3500K, 4000K or 5000K CCT available.
- Aluminum core printed circuit board.

## Listings

- CSA Certified to meet US and Canadian standards.
- Suitable for use in wet locations.
- -40°F (-40°C) to 158°F (70°C) (see chart on page 5).
- .5G vibration rated.
- IK rated (see chart on page 5).
- DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

## Government Procurement

**BAA** – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.

**BABA** – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to [www.acuitybrands.com/resources/buy-american](http://www.acuitybrands.com/resources/buy-american) for additional information.

## Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**NOTE:** Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

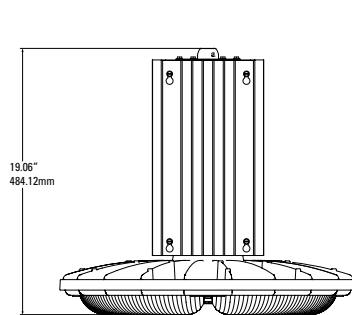
## Typical Applications

- Heavy industrial
- Manufacturing
- Warehousing
- Large indoor
- Natatorium

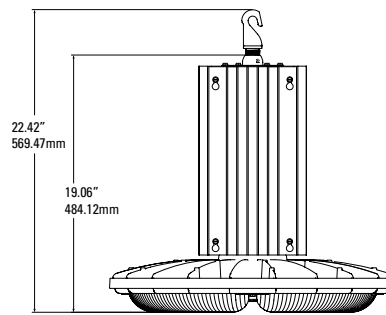
## Dimensions: Inches (millimeters) unless otherwise noted.

Diameter: 21.22 (538.99)  
Height: 19.02-23.46 (483.11-595.88)  
Weight: 33-38 lbs. (15.0-17.2 kg)

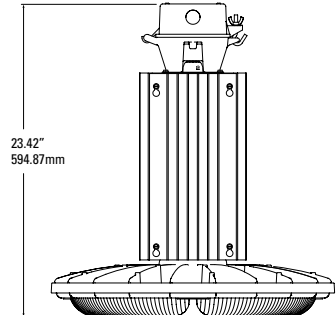
## DIMENSIONAL DATA



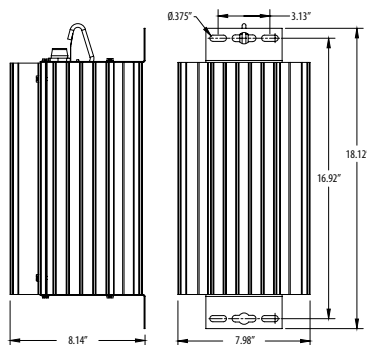
Pendant (PM)



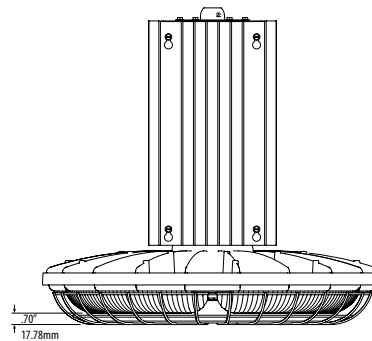
HKMAR Hook (PF-129)



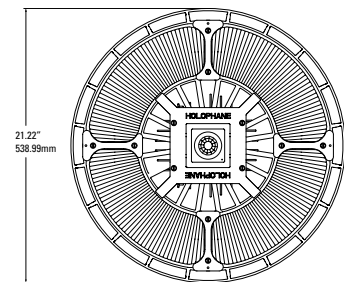
Quick Disconnect (QD) or  
Non-Disconnect Thru-Wiring (NDT)



BSL722CR Remote Emergency Battery

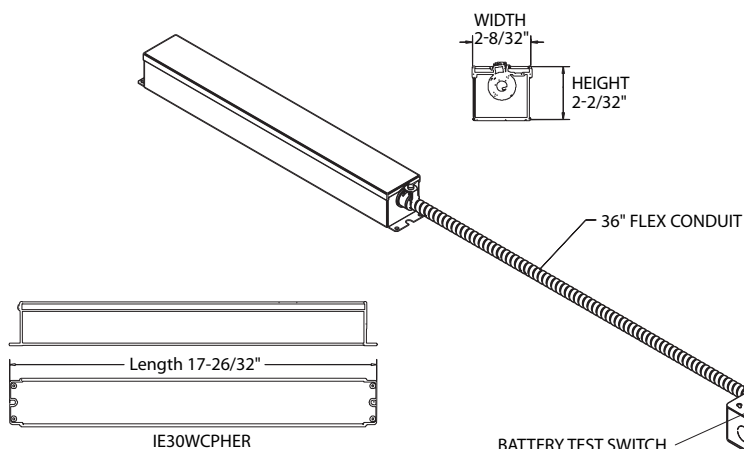


Wire Guard (WGX)

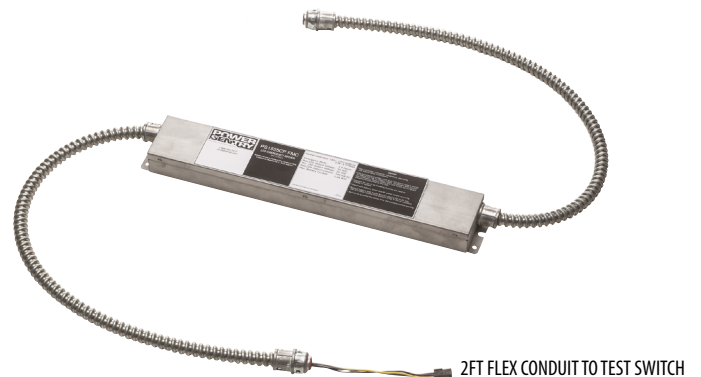


Diameter

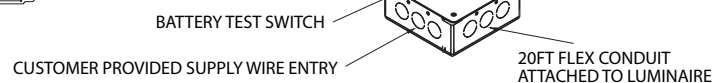
2FT FLEX CONDUIT ATTACHED TO LUMINAIRE



IE30WCPHER



**E15WCPR REMOTE EMERGENCY BATTERY**  
(self-diagnostic test switch can be mounted up to  
25' from battery, junction box not supplied)



**IE30WCPHER REMOTE EMERGENCY BATTERY**

## ORDERING INFORMATION

Example: PHZ 45000LM ND MVOLT 40K 70CRI PM DBXD

| Series | Lumens  |                         | Distribution       |                      | Voltage |                                  |       |                                                 | Color Temperature |           | Color Rendering Index |        | Mounting |                                       |
|--------|---------|-------------------------|--------------------|----------------------|---------|----------------------------------|-------|-------------------------------------------------|-------------------|-----------|-----------------------|--------|----------|---------------------------------------|
| PHZ    | 12000LM | 12,000 nominal lumens   | FD                 | Focus Glass          | MVOLT   | Auto sensing (120-277V, 50/60Hz) | XVOLT | Enhanced Power Protection (277-480V, 50/60Hz) ⚡ | 30K               | 3000K CCT | 70CRI                 | 70 CRI | PM       | 3/4" NPT Pendant ⚡                    |
|        | 18000LM | 18,000 nominal lumens   | FDFR               | Focus Frosted Glass  |         |                                  |       |                                                 | 35K               | 3500K CCT | 80CRI                 | 80 CRI | QD       | Quick disconnect ⚡                    |
|        | 24000LM | 24,000 nominal lumens   | FSMG               | Focus Smooth Glass   |         |                                  |       |                                                 | 40K               | 4000K CCT | 90CRI                 | 90 CRI | NDT      | Non-disconnect thru-wiring ⚡          |
|        | 30000LM | 30,000 nominal lumens   | MD                 | Medium Glass         | 120     | 120V, 50/60Hz                    |       |                                                 | 50K               | 5000K CCT |                       |        | QR       | Quick disconnect retrofit ⚡           |
|        | 35000LM | 35,000 nominal lumens   | MDFR               | Medium Frosted Glass | 208     | 208V, 50/60Hz                    | 277X  | 277V XVOLT driver, 50/60Hz ⚡                    |                   |           |                       |        | NR       | Non-disconnect thru-wiring retrofit ⚡ |
|        | 40000LM | 40,000 nominal lumens   | ND                 | Narrow Glass         | 240     | 240V, 50/60Hz                    |       |                                                 |                   |           |                       |        |          |                                       |
|        | 45000LM | 45,000 nominal lumens   | NDA                | Narrow Acrylic       |         |                                  | 347X  | 347V XVOLT Driver, 50/60Hz ⚡                    |                   |           |                       |        |          |                                       |
|        | 50000LM | 50,000 nominal lumens   | NDFR               | Narrow Frosted Glass | 277     | 277V, 50/60Hz                    |       |                                                 |                   |           |                       |        |          |                                       |
|        | 60000LM | 60,000 nominal lumens ⚡ | WD                 | Wide Glass           |         |                                  | 480X  | 480V XVOLT Driver, 50/60Hz ⚡                    |                   |           |                       |        |          |                                       |
|        |         |                         | WDA                | Wide Acrylic         | HVOLT   | Auto sensing (347-480V, 50/60Hz) |       |                                                 |                   |           |                       |        |          |                                       |
|        |         | WDFR                    | Wide Frosted Glass |                      |         |                                  |       |                                                 |                   |           |                       |        |          |                                       |
|        |         |                         |                    |                      | 347     | 347V, 50/60Hz                    |       |                                                 |                   |           |                       |        |          |                                       |
|        |         |                         |                    |                      | 480     | 480V, 50/60Hz                    |       |                                                 |                   |           |                       |        |          |                                       |

| Options                                  |                                                                                                   |  |                          |                                                                                                                                                                                 |  |                       | Finish                                                                                                                                                                                 |       |                            |
|------------------------------------------|---------------------------------------------------------------------------------------------------|--|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------------|
| <b>Individual Non-Dimming Sensors:</b> ‡ |                                                                                                   |  | <b>nLight® Wired:</b> ‡  |                                                                                                                                                                                 |  | <b>Hooks:</b>         |                                                                                                                                                                                        | DBXD  | Black super durable        |
| SBGR6                                    | 360° High Mount sensor, (15-30' mounting heights), on/off occupancy (LINK)                        |  | NPP16 D                  | Power/relay pack, 0-10VDC dimming output (LINK)                                                                                                                                 |  | HKMAR                 | Anti-rotational hook, 3/4" male (PF-129) ‡                                                                                                                                             | DGRXD | Graphite super durable     |
| SBGR10                                   | 360° Low Mount Sensor, (8-15' mounting heights), on/off occupancy (LINK)                          |  | NPP16 D ER               | Power/relay pack, 0-10VDC dimming output, UL924 Emergency operation (not available with a battery pack) (LINK)                                                                  |  | LPMD<br>HKMD          | Loop, 3/4" male (PF-105) ‡<br>Safety hook, 3/4" male (PF121-A) ‡                                                                                                                       | DGXD  | Gray super durable         |
| SBGR6 P                                  | 360° High Mount Sensor, (15-30' mounting heights), on/off photocell (LINK)                        |  |                          |                                                                                                                                                                                 |  | HKMW                  | Gasketed hook, 3/4" male (PF-291) ‡                                                                                                                                                    | DNXD  | Satin nickel super durable |
| SBGR10 P                                 | 360° Low Mount Sensor, (8-15' mounting heights), on/off photocell (LINK)                          |  |                          |                                                                                                                                                                                 |  | HK646                 | Wet location solid hook, 3/4" male (PF646), zinc plated iron ‡                                                                                                                         | DWHXD | White super durable        |
|                                          |                                                                                                   |  |                          |                                                                                                                                                                                 |  | HK646SS               | Wet location solid hook, 3/4" male (PF646SS), 316 stainless steel ‡                                                                                                                    |       |                            |
| <b>Individual Dimming Sensors:</b> ‡     |                                                                                                   |  | <b>nLight® Wireless:</b> |                                                                                                                                                                                 |  | <b>Emergency:</b>     |                                                                                                                                                                                        |       |                            |
| SBGR6 D 3V                               | 360° High Mount sensor, (15-30' mounting heights), high/low occupancy dimming (LINK)              |  | NLTAIR2 RPP20 D          | nLight® Air Generation 2 enabled, power/relay pack, 0-10V dimming output (LINK) ‡                                                                                               |  | E10WCP                | Power Sentry® 10 watt internal constant power emergency driver, self-diagnostic test switch/pilot light, 5°C min, UL924 Compliant, Certified in CA Title 20 MAEDBS (120-277V) (LINK) ‡ |       |                            |
| SBGR10 D 3V                              | 360° Low Mount sensor, (8-15' mounting heights), high/low occupancy dimming (LINK)                |  | NLTAIR2 RPP20 D ER       | nLight® Air Generation 2 enabled, power/relay pack, 0-10V dimming output, UL924 EM operation via power sense leads (not available with battery pack) (LINK) ‡                   |  | E15WCP                | Power Sentry® 15 watt remote constant power emergency LED driver, 5°C min, self-diagnostic test switch/pilot light, Certified in CA Title 20 MAEDBS (120-277V) (LINK) ‡                |       |                            |
|                                          |                                                                                                   |  | NLTAIR2 RSBG6            | nLight® Air Generation 2 enabled, 360° high mount sensor, (15-30' mounting heights), IP66 rated (LINK) ‡                                                                        |  | IE30WCPHER            | IOTA® 30 watt remote constant power emergency driver, 0° C min, self-diagnostic test switch/pilot light, Certified in CA Title 20 MAEDBS (120-480V) (LINK) ‡                           |       |                            |
|                                          |                                                                                                   |  | NLTAIR2 RSBG6 ER         | nLight® Air Generation 2 enabled, 360° high mount sensor, (15 to 30' mounting heights), UL924 Emergency Operation utilizing Iota ETS (not available with battery pack) (LINK) ‡ |  | BSL722CR              | 23.1 watt remote emergency LED driver, low voltage test switch, cold rated -20°C min, UL924 Compliant, CA title 20 non-compliant (120-277V) ‡                                          |       |                            |
|                                          |                                                                                                   |  | NLTAIR2 RSBG10           | nLight® Air Generation 2 enabled, 360° low mount sensor, (8-15' mounting heights) (LINK) ‡                                                                                      |  | ETS                   | IOTA® ETS DR, automatic load control relay device (ALCR) for UL924 operation when using auxiliary generator or central inverter (LINK) ‡                                               |       |                            |
|                                          |                                                                                                   |  | NLTAIR2 RSBG10 ER        | nLight® Air Generation 2 enabled, 360° low mount sensor, (8-15' mounting heights), UL924 Emergency Operation utilizing Iota ETS (not available with battery pack) (LINK) ‡      |  |                       |                                                                                                                                                                                        |       |                            |
|                                          |                                                                                                   |  | NLTAIR2 RSBG40           | nLight® Air Generation 2 enabled, 360° high bay sensor, (40' mounting heights) (LINK) ‡                                                                                         |  |                       |                                                                                                                                                                                        |       |                            |
|                                          |                                                                                                   |  | NLTAIR2 RSBG40 ER        | nLight® Air Generation 2 enabled, 360° high bay sensor, (40' mounting heights), UL924 Emergency Operation utilizing Iota ETS (not available with battery pack) (LINK) ‡         |  |                       |                                                                                                                                                                                        |       |                            |
|                                          |                                                                                                   |  | NLTAIR2 RIO              | nLight® Air Generation 2 fixture embedded network interface, 0-10V dimming output (LINK) ‡                                                                                      |  |                       |                                                                                                                                                                                        |       |                            |
|                                          |                                                                                                   |  | NLTAIR2 RIO ER           | nLight® Air Generation 2 fixture embedded network interface, 0-10V dimming output, includes ETS for UL924 operation when using auxiliary generator or central inverter (LINK) ‡ |  |                       |                                                                                                                                                                                        |       |                            |
| <b>Damp Location Cords (no plug):</b> ‡  |                                                                                                   |  | <b>UPH Cord Sets:</b> ‡  |                                                                                                                                                                                 |  | <b>UPH Hangers:</b> ‡ |                                                                                                                                                                                        |       |                            |
| CNP16W                                   | Cord only, 16-gauge, 3 conductors, white, 6ft                                                     |  | PHCB                     | Cord with locking plug for use with power hook (UPH) only, 16-gauge, 3 conductors, white, 2ft (120-347V only), includes LPMD loop                                               |  | UPH35                 | Thru-way powerhook for use with PHCB, surface mount                                                                                                                                    |       |                            |
| CNP16SCD                                 | Cord only, 16-gauge, 5 conductors, includes 0-10V dimming leads, black, 6ft ‡                     |  | PHCBL8480                | Cord with locking plug for use with power hook (UPH) only, 16-gauge, 3 conductors, white, 2ft (480V only), includes LPMD loop                                                   |  | UPH36                 | Thru-way powerhook for use with PHCB, pendant mount                                                                                                                                    |       |                            |
| CNP16SCDW                                | Cord only, 16-gauge, 5 conductors, includes 0-10V dimming leads, white, 6ft ‡                     |  |                          |                                                                                                                                                                                 |  |                       |                                                                                                                                                                                        |       |                            |
| <b>Damp Location Cord Sets:</b> ‡        |                                                                                                   |  | <b>Modular Wiring:</b>   |                                                                                                                                                                                 |  | <b>Other Options:</b> |                                                                                                                                                                                        |       |                            |
| CPSB16W                                  | Cord with 15-amp straight blade plug, 16-gauge, 3 conductors, white, 6ft (120V only)              |  | OCS                      | Reloc® One Pass® circuit selector system drop, 18-gauge, 3 conductors, 6ft (120-480V) (LINK) ‡                                                                                  |  | AO                    | Field adjustable output dimming ‡                                                                                                                                                      |       |                            |
| CPTL16W                                  | Cord with 15-amp twist lock plug, 16-gauge, 3 conductors, white, 6ft (120, 208, 240 or 277V only) |  |                          |                                                                                                                                                                                 |  | BAA                   | Buy America(n) Act and/or Build America Buy America Qualified                                                                                                                          |       |                            |
| CPTL20A16W                               | Cord with 20-amp twist lock plug, 16-gauge, 3 conductors, white, 6ft (347 or 480V only)           |  |                          |                                                                                                                                                                                 |  | CR                    | Corrosion resistant paint                                                                                                                                                              |       |                            |
|                                          |                                                                                                   |  |                          |                                                                                                                                                                                 |  | DIM                   | External dimming terminal ‡                                                                                                                                                            |       |                            |
|                                          |                                                                                                   |  |                          |                                                                                                                                                                                 |  | IVO                   | Inverted optical assembly ‡                                                                                                                                                            |       |                            |
|                                          |                                                                                                   |  |                          |                                                                                                                                                                                 |  | NSG                   | Non-silicone gasket (EPDM)                                                                                                                                                             |       |                            |
|                                          |                                                                                                   |  |                          |                                                                                                                                                                                 |  | SCKX                  | X Inch stainless steel safety chain factory installed ‡                                                                                                                                |       |                            |
|                                          |                                                                                                   |  |                          |                                                                                                                                                                                 |  | WGX                   | Wire guard factory installed                                                                                                                                                           |       |                            |
|                                          |                                                                                                   |  |                          |                                                                                                                                                                                 |  |                       |                                                                                                                                                                                        |       |                            |

SEE NEXT PAGE FOR ACCESSORIES AND NOTES

**Accessories: Order as separate catalog number.**

|                      |                                                                                            |                      |                                                                               |      |                               |
|----------------------|--------------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------|------|-------------------------------|
| PHZCHAIN XIN         | X Inch stainless steel safety chain kit ‡                                                  | UPH 36PM XXX DWHXD   | Universal power hook for use with PHCB accessory, pendant mount. (120-347V) ‡ | LPFD | Loop, 3/4" female, (PF-116-A) |
| WGPHZ                | Wire guard accessory                                                                       | UPH 36PM L8480 DWHXD | Universal power hook for use with PHCB accessory, pendant mount. (480V) ‡     | LPMD | Loop, 3/4" male, (PF-105-B)   |
| UPH 35SM XXX DWHXD   | Universal power hook for use with PHCB accessory, thru-wire/surface mounting. (120-347V) ‡ | HKFD                 | Safety hook, 3/4" female, (PF-122-A)                                          |      |                               |
| UPH 35SM L8480 DWHXD | Universal power hook for use with PHCB accessory, thru-wire/surface mounting. (480V) ‡     | HKMAR                | Anti-rotational hook, 3/4" male, (PF-129-A)                                   |      |                               |
|                      |                                                                                            | HKMD                 | Safety hook, 3/4" male, (PF-121-A)                                            |      |                               |

**‡ Option Value Ordering Restrictions & Notes**

| Option value                                                           | Restriction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 277X, 347X, 480X                                                       | Not available with 60000LM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 60000LM                                                                | Not available with XVOLT, 277X, 347X, 480X, Bluetooth® Sensors (SBG BTP) or select nLight® air wireless sensors or controls (NLTAIR2 RSBG, NLTAIR2 RIO).                                                                                                                                                                                                                                                                                                                                                              |
| AO                                                                     | Not available with DIM, any other controls or dimming sensor options.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Bluetooth® Sensors                                                     | Not available with 60000LM, AO, DIM, XVOLT, 277X, 347X, 480X, any other controls or sensors.                                                                                                                                                                                                                                                                                                                                                                                                                          |
| BSL722CR                                                               | Bodine®BSL722CR emergency driver. DL (damp location) option required. Available with MVOLT, 120, 208, 240, 277 or 277X voltages, requires PM mount and only suitable for 30000LM-60000LM lumen packages. Caution, customer to connect to unswitched power only and the fixture cannot be switched off without integral controls.                                                                                                                                                                                      |
| CNP165CD, CNP165CDW                                                    | DL (damp location) option required. Not available with HKMW (PF-291) hook.                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Damp Location Cord Sets                                                | DL (damp location) option required. Available with PM, QD or NDT. Must specify voltage and hook option. 6' is standard, but other lengths are available. Must specify length in the nomenclature. Example: CPTL16W3FT. NEMA plug configurations: CPTL style with 120V = L5-15P, 208V or 240V = L6-15P, 277V = L7-15P, CPTL20A style with 347V = L24-20P, 480V = L8-20P, CPSB style with 120V = 5-15P.                                                                                                                 |
| Damp Location Cords (no plug)                                          | DL (damp location) option required. Available with PM, QD or NDT. 6' is standard, but other lengths are available. Must specify length in the nomenclature. Example: CNP16W3FT.                                                                                                                                                                                                                                                                                                                                       |
| DIM                                                                    | DL (damp location) option required. Not available with AO, any other controls or dimming sensor options. Screw used to attached terminal to fixture will not be stainless steel. Low voltage terminal located on top of the fixture for 0-10V dimming wiring.                                                                                                                                                                                                                                                         |
| E10WCP                                                                 | Power Sentry® PS1055CP emergency driver. Available with MVOLT, 120, 208, 240, 277 or 277X voltages, requires PM mounting and only suitable for 12000LM-24000LM lumen packages. Available with AO, DIM, NPP16 and RPP20 power packs, SBGR sensors and nLight Air RSBG or RIO controls. Not available with HVOLT, 347, 347X, XVOLT, 347X, 480X, ETS or ER controls. Available with 4 conductor cord by special order. Customer to connect switched and unswitched power.                                                |
| E15WCPR                                                                | Power Sentry® PS1555CP FMC emergency driver. DL (damp location) option required. Available with MVOLT, 120, 208, 240, 277 or 277X voltages. Available with AO, DIM, NPP16 and RPP20 power packs, SBGR sensors and nLight Air RSBG or RIO controls. Not available with HVOLT, 347, 347X, XVOLT, 347X, 480X, ETS or ER controls. Available with 4 conductor cord by special order. Customer to connect switched and unswitched power in fixture. Customer to install test switch in remote junction box (not included). |
| ETS                                                                    | Available with MVOLT, 120, 208, 240, 277, PM NR or NDT only. Available with NLTAIR2 RSBG sensors or RIO only. Not available with wet or damp cords (no plug), cord sets, UPH cords sets, modular wiring or HKMW.                                                                                                                                                                                                                                                                                                      |
| HK646, HK646SS                                                         | Not available with NR, QR and QD. DL (damp location) option will be required. Cannot be field installed, requires special top plate.                                                                                                                                                                                                                                                                                                                                                                                  |
| HKMAR, LPMD, HKMD                                                      | DL (damp location) option required. Available with PM, NDT or QD.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| HKMW                                                                   | Available with PM only. Gasketed hook for use in wet locations. If combined with damp listed options, DL (damp location) option will be required.                                                                                                                                                                                                                                                                                                                                                                     |
| IE30WCPHER                                                             | IOTA® ILBLP CP30 HE SD HV S (120-277V) or ILBHI CP30 HE SD HV S (347-480) emergency driver depending upon voltage selected. DL (damp location) option required. Not available with XVOLT, ETS or ER controls. Utilizes 2 SPD surge protection devices. Available with 4 conductor cord by special order. Customer to connect switched and unswitched power.                                                                                                                                                           |
| Individual Dimming Sensors                                             | Not available with AO, DIM, XVOLT, any other controls or sensors.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Individual Non-Dimming Sensors                                         | Available with AO, DIM. Not available with XVOLT, any other controls or sensors.                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| IVO                                                                    | Available with 12000-24000LM and PM mounting only. Not available with NDA or WDA (acrylic) lenses, E10WCP or E15WCPR or BSL722CR batteries, ETS load control relay, individual sensors, bluetooth sensors, and nLight wired or wireless controllers/sensors. DL (damp location) option will be required.                                                                                                                                                                                                              |
| NDT                                                                    | DL (damp location) option required. The NDT (non-disconnect thru-wiring) system is made up of 2 parts. The top portion is removable and is meant to be installed in the ceiling. The bottom portion is factory installed to the fixture. The 2 part junction box used on top of the fixture will be empty. Not available with stainless steel screws.                                                                                                                                                                 |
| QR, NR                                                                 | DL (damp location) option required. Ordering this option assumes the top portion of the QD option (QDH) or the top portion of the NDT option is already installed. This is a for retrofit applications only. Not available with stainless steel screws.                                                                                                                                                                                                                                                               |
| nLight® Wired                                                          | DL (damp location) option required. Available with PM, 120, 277, 277X, 347 or 347X. Not available with AO, DIM, any other controls or sensors. Damp listed.                                                                                                                                                                                                                                                                                                                                                           |
| NLTAIR2 RPP20 D                                                        | DL (damp location) option required. Available with PM and all voltage options. Not available with AO, DIM any other controls or sensor options. Damp Listed. Normal luminaires (non-emergency) can be used as a normal power sensing device for nearby nLight AIR devices and luminaires with EM emergency options.                                                                                                                                                                                                   |
| NLTAIR2 RPP20 D ER                                                     | DL (damp location) option required. Available with PM and all voltage options. Not available with AO, DIM any other controls or sensor options. Damp Listed.                                                                                                                                                                                                                                                                                                                                                          |
| NLTAIR2 RSBG6, NLTAIR2 RSBG10, NLTAIR2 RSBG40, NLTAIR2 RIO             | Not available with AO, DIM, XVOLT, 277X, 347X, 480X, 60000LM, any other controls or sensor options.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| NLTAIR2 RSBG6 ER, NLTAIR2 RSBG10 ER, NLTAIR2 RSBG40 ER, NLTAIR2 RIO ER | Not available with AO, DIM, HVOLT, 347, 480, XVOLT, 277X, 347X, 480X, 60000LM, any other controls or sensor options. Utilizes ETS ALCR device to bypass controls when fixture is connected to a auxiliary generator or central inverter. Available with 5 conductor dual voltage by special order.                                                                                                                                                                                                                    |
| OCS                                                                    | Please note all modular wiring options are dry listed and fixture will have a dry listed label. Available with PM or NDT only. Must specify voltage. Actual Reloc® System Drop Cable used depends upon voltage chosen in the fixture nomenclature. Example: 277V = OCS 277. 6 foot is standard. Not available with HKMW.                                                                                                                                                                                              |
| PHZCHAIN XIN                                                           | X denotes length. Chain shipped separately as an accessory. Available in multiple sizes. Replace X with size in feet. Example: PHZCHAIN 120IN = 120 inches or 10 feet.                                                                                                                                                                                                                                                                                                                                                |
| PM                                                                     | When the fixture is ordered with a wet location cord (CNP16WWL), a hook or loop is not required to retain the wet location listing, but the customer is responsible to ensure the fixture is sealed properly to maintain the fixture's wet listing. When the fixture is ordered with a cord and plug (CPTL16W or CPTL16WWL), a hook or loop is required. Ships standard with stainless steel screws.                                                                                                                  |
| QD                                                                     | DL (damp location) option required. Not available with PS30250, E10WCP, E15WCPR or BSL722C. The QD (quick disconnect) system is made up of 2 parts. The top portion "QDH" ships separately to be installed in the ceiling. The Bottom portion is factory installed to the fixture. The 2 part quick disconnect will include components to allow voltage to pass between the top and bottom portions. Not available with stainless steel screws.                                                                       |
| SCKX                                                                   | X denotes length. Safety Chain is available in multiple sizes. Replace X with size in inches. Example: SCK120 = 120 inches or 10 feet.                                                                                                                                                                                                                                                                                                                                                                                |
| UPH 35SM L8480 DWHXD, UPH 36PM L8480 DWHXD                             | Available with PHCBL8480 option only.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| UPH 35SM XXX DWHXD, UPH 36PM XXX DWHXD                                 | Available with PHCB option only.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| UPH Cord Sets                                                          | DL (damp location) option required. Available with PM, QD or NDT. Must specify voltage. For new installation, order matching UPH accessory. For existing installation, match PHCB voltage to existing UPH.                                                                                                                                                                                                                                                                                                            |
| UPH Hangers                                                            | Must specify voltage. Not available MVOLT, HVOLT or XVOLT. PHCB or PHCBL8480 option required on luminaire.                                                                                                                                                                                                                                                                                                                                                                                                            |
| Wet Location Cord Sets                                                 | Available with PM only. Must specify voltage and hook option. 6' is standard, but other lengths are available. Must specify length in the nomenclature. Example: CPTLWWL10FT. If combined with damp listed options, DL (damp location) option will be required. NEMA plug configurations: 120V = L5-15P, 208V or 240V = L6-15P, 277V = L7-15P. If combined with damp listed options, DL (damp location) option will be required.                                                                                      |
| Wet Location Cords (no plug)                                           | Available with PM only. 6' is standard, but other lengths are available. Must specify length in the nomenclature. Example: CNP16WWL3FT. If combined with damp listed options, DL (damp location) option will be required.                                                                                                                                                                                                                                                                                             |
| XVOLT                                                                  | Not available with 60000LM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## OPERATIONAL DATA

## Ambient Temperature Ratings

| Mounting | Occ Sensor | SBGR BTP | Emergency Battery |        |         |            | Voltage   | Max Ambient |         |         |         |         |         |         |         | Min. Supply Wire Temp. |         |
|----------|------------|----------|-------------------|--------|---------|------------|-----------|-------------|---------|---------|---------|---------|---------|---------|---------|------------------------|---------|
|          |            |          | BSL722CR          | E10WCP | E15WCPR | IE30WCPHER |           | 12000LM     | 18000LM | 24000LM | 30000LM | 35000LM | 40000LM | 45000LM | 50000LM |                        | 60000LM |
| All      | No         | No       | No                | No     | No      | No         | All       | 70°C        | 70°C    | 70°C    | 65°C    | 65°C    | 60°C    | 60°C    | 60°C    | 55°C                   | 90°C    |
| All      | Yes        | No       | No                | No     | No      | No         | All       | 55°C        | 55°C    | 55°C    | 45°C    | 45°C    | 40°C    | 40°C    | 40°C    | 40°C                   | 90°C    |
| All      | Yes        | Yes      | No                | No     | No      | No         | 120V-277V | 55°C        | 55°C    | 55°C    | 45°C    | 45°C    | 40°C    | 40°C    | 40°C    | 40°C                   | 90°C    |
| All      | Yes        | Yes      | No                | No     | No      | No         | 347V-480V | 55°C        | 55°C    | 55°C    | NA      | NA      | NA      | NA      | NA      | NA                     | 90°C    |
| Pendant  | No         | No       | Yes               | No     | No      | No         | 120V-277V | 50°C        | 50°C    | 50°C    | 50°C    | 50°C    | 50°C    | 50°C    | 50°C    | 50°C                   | 90°C    |
| Pendant  | No         | No       | No                | Yes    | No      | No         | 120V-277V | 50°C        | 50°C    | 50°C    | NA      | NA      | NA      | NA      | NA      | NA                     | 90°C    |
| Pendant  | No         | No       | No                | No     | Yes     | No         | 120V-277V | 55°C        | 55°C    | 55°C    | 50°C    | 50°C    | 50°C    | 50°C    | 50°C    | 50°C                   | 90°C    |
| Pendant  | Yes        | No       | Yes               | No     | No      | No         | 120V-277V | 50°C        | 50°C    | 50°C    | 45°C    | 45°C    | 40°C    | 40°C    | 40°C    | 40°C                   | 90°C    |
| Pendant  | Yes        | No       | No                | Yes    | No      | No         | 120V-277V | 50°C        | 50°C    | 50°C    | NA      | NA      | NA      | NA      | NA      | NA                     | 90°C    |
| Pendant  | Yes        | No       | No                | No     | Yes     | No         | 120V-277V | 55°C        | 55°C    | 55°C    | 45°C    | 45°C    | 40°C    | 40°C    | 40°C    | 40°C                   | 90°C    |
| Pendant  | Yes        | Yes      | Yes               | No     | No      | No         | 120V-277V | 50°C        | 50°C    | 50°C    | 45°C    | 45°C    | 40°C    | 40°C    | 40°C    | 40°C                   | 90°C    |
| Pendant  | Yes        | Yes      | No                | Yes    | No      | No         | 120V-277V | 50°C        | 50°C    | 50°C    | NA      | NA      | NA      | NA      | NA      | NA                     | 90°C    |
| Pendant  | Yes        | Yes      | No                | No     | Yes     | No         | 120V-277V | 55°C        | 55°C    | 55°C    | 45°C    | 45°C    | 40°C    | 40°C    | 40°C    | 40°C                   | 90°C    |
| Pendant  | No         | No       | No                | No     | No      | Yes        | All       | 55°C        | 55°C    | 55°C    | 55°C    | 55°C    | 55°C    | 55°C    | 55°C    | 55°C                   | 90°C    |
| Pendant  | Yes        | No       | No                | No     | No      | Yes        | All       | 55°C        | 55°C    | 55°C    | 45°C    | 45°C    | 40°C    | 40°C    | 40°C    | 40°C                   | 90°C    |
| Pendant  | Yes        | Yes      | No                | No     | No      | Yes        | All       | 55°C        | 55°C    | 55°C    | 45°C    | 45°C    | 40°C    | 40°C    | 40°C    | 40°C                   | 90°C    |

## Impact Resistance (IK Ratings)

| Lens Material | Rating |
|---------------|--------|
| Glass         | IK06   |
| Acrylic       | IK07   |

## Operating Characteristics ‡

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |        |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |        |
| 12000LM       | FD ‡         | 89            | 11921 | 11142 | 8804  | 11921 | 11453 | 9194  | 13011 | 11843 | 9973  | 13401 | 11999 | 10908 | Lumens |
|               |              |               | 134   | 125   | 99    | 134   | 129   | 103   | 146   | 133   | 112   | 151   | 135   | 123   | LPW    |
|               | FDFR ‡       | 89            | 10878 | 10167 | 8034  | 10878 | 10452 | 8390  | 11874 | 10807 | 9101  | 12229 | 10949 | 9954  | Lumens |
|               |              |               | 122   | 114   | 90    | 122   | 117   | 94    | 133   | 121   | 102   | 137   | 123   | 112   | LPW    |
|               | FSMG ‡       | 89            | 12068 | 11279 | 8913  | 12068 | 11594 | 9307  | 13172 | 11989 | 10096 | 13566 | 12147 | 11042 | Lumens |
|               |              |               | 136   | 127   | 100   | 136   | 130   | 105   | 148   | 135   | 113   | 152   | 136   | 124   | LPW    |
|               | MD           | 81            | 12832 | 11261 | 9843  | 13085 | 11717 | 10054 | 12983 | 11852 | 10172 | 12848 | 12097 | 10924 | Lumens |
|               |              |               | 158   | 139   | 122   | 162   | 145   | 124   | 160   | 146   | 126   | 159   | 149   | 135   | LPW    |
|               | MDFR         | 81            | 11858 | 10407 | 9096  | 12092 | 10828 | 9291  | 11998 | 10953 | 9400  | 11873 | 11179 | 10095 | Lumens |
|               |              |               | 146   | 128   | 112   | 149   | 134   | 115   | 148   | 135   | 116   | 147   | 138   | 125   | LPW    |
|               | ND           | 81            | 12927 | 11345 | 9916  | 13182 | 11804 | 10129 | 13080 | 11940 | 10248 | 12944 | 12187 | 11005 | Lumens |
|               |              |               | 160   | 140   | 122   | 163   | 146   | 125   | 161   | 147   | 127   | 160   | 150   | 136   | LPW    |
|               | NDA          | 81            | 13041 | 11445 | 10004 | 13299 | 11909 | 10129 | 13196 | 12046 | 10339 | 13058 | 12295 | 11102 | Lumens |
|               |              |               | 161   | 141   | 124   | 164   | 147   | 125   | 163   | 149   | 128   | 161   | 152   | 137   | LPW    |
|               | NDFR         | 81            | 11864 | 10413 | 9101  | 12099 | 10834 | 9296  | 12005 | 10959 | 9406  | 11880 | 11185 | 10100 | Lumens |
|               |              |               | 146   | 129   | 112   | 149   | 134   | 115   | 148   | 135   | 116   | 147   | 138   | 125   | LPW    |
|               | WD           | 81            | 12839 | 11267 | 9848  | 13092 | 11724 | 10060 | 12991 | 11859 | 10178 | 12855 | 12104 | 10930 | Lumens |
|               |              |               | 159   | 139   | 122   | 162   | 145   | 124   | 160   | 146   | 126   | 159   | 149   | 135   | LPW    |
|               | WDA          | 81            | 13090 | 11488 | 10041 | 13348 | 11953 | 10256 | 13245 | 12091 | 10377 | 13107 | 12340 | 11143 | Lumens |
|               |              |               | 162   | 142   | 124   | 165   | 148   | 127   | 164   | 149   | 128   | 162   | 152   | 138   | LPW    |
|               | WDFR         | 81            | 11145 | 9781  | 8549  | 11365 | 10177 | 8733  | 11277 | 10294 | 8835  | 11159 | 10507 | 9488  | Lumens |
|               |              |               | 138   | 121   | 106   | 140   | 126   | 108   | 139   | 127   | 109   | 138   | 130   | 117   | LPW    |

## ‡ Notes

|                           |                                                                                                                                       |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| FD, FDFR, FSMG            | Focus optics utilize a different light engine from the narrow, medium, and wide distributions for the 12000LM-24000LM lumen packages. |
| Input Watts               | @ 120 volts.                                                                                                                          |
| Operating Characteristics | Absolute photometry calculated in accordance with IESNA LM-79-08 @ 25°C                                                               |

## OPERATIONAL DATA

## Operating Characteristics ‡

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |        |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |        |
| 18000LM       | FD ‡         | 132           | 17256 | 16128 | 12745 | 17256 | 16579 | 13308 | 18835 | 17143 | 14436 | 19399 | 17369 | 15790 | Lumens |
|               |              |               | 131   | 122   | 97    | 131   | 126   | 101   | 143   | 130   | 109   | 147   | 132   | 120   | LPW    |
|               | FDFR ‡       | 132           | 15747 | 14718 | 11630 | 15747 | 15129 | 12145 | 17188 | 15644 | 13174 | 17703 | 15850 | 14409 | Lumens |
|               |              |               | 119   | 112   | 88    | 119   | 115   | 92    | 130   | 119   | 100   | 134   | 120   | 109   | LPW    |
|               | FSMG ‡       | 132           | 17469 | 16327 | 12902 | 17469 | 16784 | 13473 | 19067 | 17355 | 14614 | 19638 | 17583 | 15984 | Lumens |
|               |              |               | 132   | 124   | 98    | 132   | 127   | 102   | 144   | 131   | 111   | 149   | 133   | 121   | LPW    |
|               | MD           | 130           | 20350 | 17860 | 15611 | 20752 | 18583 | 15945 | 20591 | 18797 | 16133 | 20377 | 19185 | 17324 | Lumens |
|               |              |               | 157   | 137   | 120   | 160   | 143   | 123   | 158   | 145   | 124   | 157   | 148   | 133   | LPW    |
|               | MDFR         | 130           | 18806 | 16505 | 14426 | 19177 | 17173 | 14735 | 19029 | 17371 | 14909 | 18831 | 17730 | 16010 | Lumens |
|               |              |               | 145   | 127   | 111   | 148   | 132   | 113   | 146   | 134   | 115   | 145   | 136   | 123   | LPW    |
|               | ND           | 130           | 20501 | 17992 | 15726 | 20905 | 18721 | 16063 | 20744 | 18936 | 16252 | 20528 | 19327 | 17453 | Lumens |
|               |              |               | 158   | 138   | 121   | 161   | 144   | 124   | 160   | 146   | 125   | 158   | 149   | 134   | LPW    |
|               | NDA          | 130           | 20683 | 18152 | 15866 | 21091 | 18887 | 16206 | 20928 | 19104 | 16397 | 20710 | 19499 | 17608 | Lumens |
|               |              |               | 159   | 140   | 122   | 162   | 145   | 125   | 161   | 147   | 126   | 159   | 150   | 135   | LPW    |
|               | NDFR         | 130           | 18816 | 16514 | 14434 | 19188 | 17182 | 14744 | 19039 | 17380 | 14917 | 18841 | 17739 | 16019 | Lumens |
|               |              |               | 145   | 127   | 111   | 148   | 132   | 113   | 146   | 134   | 115   | 145   | 136   | 123   | LPW    |
|               | WD           | 130           | 20361 | 17870 | 15619 | 20763 | 18593 | 15954 | 20602 | 18807 | 16142 | 20388 | 19196 | 17334 | Lumens |
|               |              |               | 157   | 137   | 120   | 160   | 143   | 123   | 158   | 145   | 124   | 157   | 148   | 133   | LPW    |
|               | WDA          | 130           | 20760 | 18219 | 15925 | 21169 | 18957 | 16266 | 21005 | 19175 | 16457 | 20787 | 19571 | 17673 | Lumens |
|               |              |               | 160   | 140   | 123   | 163   | 146   | 125   | 162   | 148   | 127   | 160   | 151   | 136   | LPW    |
|               | WDFR         | 130           | 17675 | 15512 | 13559 | 18024 | 16140 | 13849 | 17884 | 16326 | 14012 | 17698 | 16663 | 15047 | Lumens |
|               |              |               | 136   | 119   | 104   | 139   | 124   | 107   | 138   | 126   | 108   | 136   | 128   | 116   | LPW    |

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |        |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |        |
| 24000LM       | FD ‡         | 178           | 22374 | 20912 | 16525 | 22374 | 21497 | 17256 | 24422 | 22228 | 18718 | 25153 | 22521 | 20473 | Lumens |
|               |              |               | 126   | 117   | 93    | 126   | 121   | 97    | 137   | 125   | 105   | 141   | 127   | 115   | LPW    |
|               | FDFR ‡       | 178           | 20418 | 19084 | 15080 | 20418 | 19617 | 15747 | 22286 | 20285 | 17082 | 22954 | 20551 | 18683 | Lumens |
|               |              |               | 115   | 107   | 85    | 115   | 110   | 88    | 125   | 114   | 96    | 129   | 115   | 105   | LPW    |
|               | FSMG ‡       | 178           | 22650 | 21170 | 16729 | 22650 | 21762 | 17469 | 24723 | 22502 | 18949 | 25463 | 22799 | 20726 | Lumens |
|               |              |               | 127   | 119   | 94    | 127   | 122   | 98    | 139   | 126   | 106   | 143   | 128   | 116   | LPW    |
|               | MD           | 170           | 25585 | 22454 | 19626 | 26090 | 23363 | 20047 | 25888 | 23632 | 20283 | 25619 | 24121 | 21781 | Lumens |
|               |              |               | 151   | 132   | 115   | 153   | 137   | 118   | 152   | 139   | 119   | 151   | 142   | 128   | LPW    |
|               | MDFR         | 170           | 23643 | 20750 | 18137 | 24110 | 21590 | 18526 | 23923 | 21839 | 18744 | 23675 | 22290 | 20128 | Lumens |
|               |              |               | 139   | 122   | 107   | 142   | 127   | 109   | 141   | 128   | 110   | 139   | 131   | 118   | LPW    |
|               | ND           | 170           | 25774 | 22620 | 19772 | 26283 | 23536 | 20196 | 26080 | 23807 | 20433 | 25808 | 24299 | 21942 | Lumens |
|               |              |               | 152   | 133   | 116   | 155   | 138   | 119   | 153   | 140   | 120   | 152   | 143   | 129   | LPW    |
|               | NDA          | 170           | 26003 | 22821 | 19947 | 26516 | 23745 | 20375 | 26311 | 24019 | 20614 | 26037 | 24515 | 22137 | Lumens |
|               |              |               | 153   | 134   | 117   | 156   | 140   | 120   | 155   | 141   | 121   | 153   | 144   | 130   | LPW    |
|               | NDFR         | 170           | 23657 | 20762 | 18147 | 24123 | 21602 | 18536 | 23937 | 21851 | 18754 | 23688 | 22302 | 20139 | Lumens |
|               |              |               | 139   | 122   | 107   | 142   | 127   | 109   | 141   | 129   | 110   | 139   | 131   | 118   | LPW    |
|               | WD           | 170           | 25599 | 22466 | 19637 | 26104 | 23376 | 20058 | 25902 | 23645 | 20294 | 25633 | 24134 | 21793 | Lumens |
|               |              |               | 151   | 132   | 116   | 154   | 138   | 118   | 152   | 139   | 119   | 151   | 142   | 128   | LPW    |
|               | WDA          | 170           | 26100 | 22906 | 20021 | 26615 | 23833 | 20450 | 26409 | 24108 | 20691 | 26134 | 24606 | 22219 | Lumens |
|               |              |               | 154   | 135   | 118   | 157   | 140   | 120   | 155   | 142   | 122   | 154   | 145   | 131   | LPW    |
|               | WDFR         | 170           | 22222 | 19503 | 17046 | 22660 | 20292 | 17412 | 22485 | 20526 | 17617 | 22251 | 20950 | 18918 | Lumens |
|               |              |               | 131   | 115   | 100   | 133   | 119   | 102   | 132   | 121   | 104   | 131   | 123   | 111   | LPW    |

## ‡ Notes

|                           |                                                                                                                                       |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| FD, FDFR, FSMG            | Focus optics utilize a different light engine from the narrow, medium, and wide distributions for the 12000LM-24000LM lumen packages. |
| Input Watts               | @ 120 volts.                                                                                                                          |
| Operating Characteristics | Absolute photometry calculated in accordance with IESNA LM-79-08 @ 25°C                                                               |

## OPERATIONAL DATA

## Operating Characteristics ‡

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |        |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |        |
| 30000LM       | FD           | 218           | 25560 | 23889 | 18877 | 25560 | 24557 | 19713 | 27899 | 25393 | 21383 | 28734 | 25727 | 23388 | Lumens |
|               |              |               | 117   | 110   | 87    | 117   | 113   | 90    | 128   | 116   | 98    | 132   | 118   | 107   | LPW    |
|               | FDFR         | 218           | 23325 | 21800 | 17227 | 23325 | 22410 | 17989 | 25459 | 23172 | 19514 | 26221 | 23477 | 21343 | Lumens |
|               |              |               | 107   | 100   | 79    | 107   | 103   | 83    | 117   | 106   | 90    | 120   | 108   | 98    | LPW    |
|               | FSMG         | 218           | 25875 | 24184 | 19110 | 25875 | 24860 | 19956 | 28243 | 25706 | 21647 | 29088 | 26044 | 23677 | Lumens |
|               |              |               | 119   | 111   | 88    | 119   | 114   | 92    | 130   | 118   | 99    | 133   | 119   | 109   | LPW    |
|               | MD           | 218           | 27294 | 25510 | 20159 | 27294 | 26224 | 21050 | 29792 | 27116 | 22834 | 30684 | 27473 | 24975 | Lumens |
|               |              |               | 125   | 117   | 92    | 125   | 120   | 97    | 137   | 124   | 105   | 141   | 126   | 115   | LPW    |
|               | MDFR         | 218           | 25223 | 23575 | 18629 | 25223 | 24234 | 19453 | 27531 | 25058 | 21102 | 28355 | 25388 | 23080 | Lumens |
|               |              |               | 116   | 108   | 85    | 116   | 111   | 89    | 126   | 115   | 97    | 130   | 116   | 106   | LPW    |
|               | ND           | 218           | 27496 | 25699 | 20308 | 27496 | 26418 | 21206 | 30012 | 27317 | 23003 | 30911 | 27676 | 25160 | Lumens |
|               |              |               | 126   | 118   | 93    | 126   | 121   | 97    | 138   | 125   | 106   | 142   | 127   | 115   | LPW    |
|               | NDA          | 218           | 27740 | 25927 | 20488 | 27740 | 26653 | 21395 | 30279 | 27559 | 23208 | 31185 | 27922 | 25383 | Lumens |
|               |              |               | 127   | 119   | 94    | 127   | 122   | 98    | 139   | 126   | 106   | 143   | 128   | 116   | LPW    |
|               | NDFR         | 218           | 25237 | 23588 | 18639 | 25237 | 24247 | 19464 | 27546 | 25072 | 21113 | 28371 | 25402 | 23093 | Lumens |
|               |              |               | 116   | 108   | 86    | 116   | 111   | 89    | 126   | 115   | 97    | 130   | 117   | 106   | LPW    |
|               | WD           | 218           | 27309 | 25524 | 20170 | 27309 | 26238 | 21062 | 29808 | 27131 | 22847 | 30700 | 27488 | 24989 | Lumens |
|               |              |               | 125   | 117   | 93    | 125   | 120   | 97    | 137   | 124   | 105   | 141   | 126   | 115   | LPW    |
|               | WDA          | 218           | 27843 | 26023 | 20564 | 27843 | 26751 | 21474 | 30391 | 27661 | 23294 | 31301 | 28025 | 25478 | Lumens |
|               |              |               | 128   | 119   | 94    | 128   | 123   | 99    | 139   | 127   | 107   | 144   | 129   | 117   | LPW    |
|               | WDFR         | 218           | 23706 | 22157 | 17509 | 23706 | 22777 | 18283 | 25876 | 23551 | 19833 | 26650 | 23861 | 21692 | Lumens |
|               |              |               | 109   | 102   | 80    | 109   | 104   | 84    | 119   | 108   | 91    | 122   | 109   | 100   | LPW    |

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |        |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |        |
| 35000LM       | FD           | 254           | 28779 | 26898 | 21255 | 28779 | 27650 | 22195 | 31412 | 28591 | 24076 | 32352 | 28967 | 26333 | Lumens |
|               |              |               | 113   | 106   | 84    | 113   | 109   | 87    | 124   | 113   | 95    | 127   | 114   | 104   | LPW    |
|               | FDFR         | 254           | 26262 | 24546 | 19396 | 26262 | 25232 | 20255 | 28665 | 26091 | 21971 | 29524 | 26434 | 24031 | Lumens |
|               |              |               | 103   | 97    | 76    | 103   | 99    | 80    | 113   | 103   | 87    | 116   | 104   | 95    | LPW    |
|               | FSMG         | 254           | 29134 | 27229 | 21517 | 29134 | 27991 | 22469 | 31799 | 28943 | 24373 | 32752 | 29324 | 26658 | Lumens |
|               |              |               | 115   | 107   | 85    | 115   | 110   | 88    | 125   | 114   | 96    | 129   | 115   | 105   | LPW    |
|               | MD           | 254           | 30732 | 28723 | 22697 | 30732 | 29526 | 23702 | 33544 | 30531 | 25710 | 34548 | 30932 | 28120 | Lumens |
|               |              |               | 121   | 113   | 89    | 121   | 116   | 93    | 132   | 120   | 101   | 136   | 122   | 111   | LPW    |
|               | MDFR         | 254           | 28400 | 26543 | 20975 | 28400 | 27286 | 21903 | 30998 | 28214 | 23759 | 31926 | 28585 | 25987 | Lumens |
|               |              |               | 112   | 105   | 83    | 112   | 107   | 86    | 122   | 111   | 94    | 126   | 113   | 102   | LPW    |
|               | ND           | 254           | 30959 | 28936 | 22865 | 30959 | 29745 | 23877 | 33792 | 30757 | 25900 | 34804 | 31161 | 28329 | Lumens |
|               |              |               | 122   | 114   | 90    | 122   | 117   | 94    | 133   | 121   | 102   | 137   | 123   | 112   | LPW    |
|               | NDA          | 254           | 31234 | 29193 | 23068 | 31234 | 30009 | 24089 | 34092 | 31030 | 26130 | 35113 | 31438 | 28580 | Lumens |
|               |              |               | 123   | 115   | 91    | 123   | 118   | 95    | 134   | 122   | 103   | 138   | 124   | 113   | LPW    |
|               | NDFR         | 254           | 28415 | 26558 | 20986 | 28415 | 27301 | 21915 | 31015 | 28230 | 23772 | 31944 | 28601 | 26001 | Lumens |
|               |              |               | 112   | 105   | 83    | 112   | 107   | 86    | 122   | 111   | 94    | 126   | 113   | 102   | LPW    |
|               | WD           | 254           | 30748 | 28739 | 22710 | 30748 | 29543 | 23714 | 33562 | 30547 | 25724 | 34567 | 30949 | 28136 | Lumens |
|               |              |               | 121   | 113   | 89    | 121   | 116   | 93    | 132   | 120   | 101   | 136   | 122   | 111   | LPW    |
|               | WDA          | 254           | 31350 | 29301 | 23154 | 31350 | 30120 | 24178 | 34218 | 31145 | 26227 | 35243 | 31555 | 28686 | Lumens |
|               |              |               | 123   | 115   | 91    | 123   | 119   | 95    | 135   | 123   | 103   | 139   | 124   | 113   | LPW    |
|               | WDFR         | 254           | 26692 | 24947 | 19714 | 26692 | 25645 | 20586 | 29134 | 26517 | 22330 | 30007 | 26866 | 24424 | Lumens |
|               |              |               | 105   | 98    | 78    | 105   | 101   | 81    | 115   | 104   | 88    | 118   | 106   | 96    | LPW    |

## ‡ Notes

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Input Watts               | @ 120 volts.                                                            |
| Operating Characteristics | Absolute photometry calculated in accordance with IESNA LM-79-08 @ 25°C |

## OPERATIONAL DATA

## Operating Characteristics ‡

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |        |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |        |
| 40000LM       | FD           | 288           | 34151 | 31919 | 25223 | 34151 | 32812 | 26339 | 37276 | 33928 | 28571 | 38392 | 34374 | 31249 | Lumens |
|               |              |               | 119   | 111   | 88    | 119   | 114   | 91    | 129   | 118   | 99    | 133   | 119   | 109   | LPW    |
|               | FDFR         | 288           | 31165 | 29128 | 23017 | 31165 | 29943 | 24036 | 34016 | 30961 | 26072 | 35035 | 31368 | 28517 | Lumens |
|               |              |               | 108   | 101   | 80    | 108   | 104   | 83    | 118   | 108   | 91    | 122   | 109   | 99    | LPW    |
|               | FSMG         | 288           | 34572 | 32313 | 25534 | 34572 | 33216 | 26664 | 37736 | 34346 | 28923 | 38865 | 34798 | 31635 | Lumens |
|               |              |               | 120   | 112   | 89    | 120   | 115   | 93    | 131   | 119   | 100   | 135   | 121   | 110   | LPW    |
|               | MD           | 288           | 36468 | 34085 | 26934 | 36468 | 35038 | 28126 | 39805 | 36230 | 30510 | 40997 | 36707 | 33370 | Lumens |
|               |              |               | 127   | 118   | 94    | 127   | 122   | 98    | 138   | 126   | 106   | 142   | 127   | 116   | LPW    |
|               | MDFR         | 288           | 33701 | 31498 | 24890 | 33701 | 32379 | 25992 | 36785 | 33481 | 28194 | 37886 | 33921 | 30838 | Lumens |
|               |              |               | 117   | 109   | 86    | 117   | 112   | 90    | 128   | 116   | 98    | 132   | 118   | 107   | LPW    |
|               | ND           | 288           | 36738 | 34337 | 27134 | 36738 | 35298 | 28334 | 40100 | 36498 | 30735 | 41301 | 36979 | 33617 | Lumens |
|               |              |               | 128   | 119   | 94    | 128   | 123   | 98    | 139   | 127   | 107   | 143   | 128   | 117   | LPW    |
|               | NDA          | 288           | 37065 | 34642 | 27374 | 37065 | 35611 | 28586 | 40456 | 36822 | 31008 | 41667 | 37307 | 33915 | Lumens |
|               |              |               | 129   | 120   | 95    | 129   | 124   | 99    | 140   | 128   | 108   | 145   | 130   | 118   | LPW    |
|               | NDFR         | 288           | 33720 | 31516 | 24904 | 33720 | 32397 | 26006 | 36805 | 33499 | 28210 | 37907 | 33940 | 30855 | Lumens |
|               |              |               | 117   | 109   | 86    | 1159  | 112   | 90    | 128   | 116   | 98    | 132   | 118   | 107   | LPW    |
|               | WD           | 288           | 36488 | 34103 | 26949 | 36488 | 35057 | 28141 | 39827 | 36250 | 30526 | 41020 | 36727 | 33388 | Lumens |
|               |              |               | 127   | 118   | 94    | 127   | 122   | 98    | 138   | 126   | 106   | 142   | 128   | 116   | LPW    |
|               | WDA          | 288           | 37202 | 34770 | 27476 | 37202 | 35743 | 28692 | 40606 | 36959 | 31123 | 41822 | 37445 | 34041 | Lumens |
|               |              |               | 129   | 121   | 95    | 129   | 124   | 100   | 141   | 128   | 108   | 145   | 130   | 118   | LPW    |
|               | WDFR         | 288           | 31675 | 29604 | 23394 | 31675 | 30432 | 24429 | 34573 | 31468 | 26499 | 35608 | 31882 | 28983 | Lumens |
|               |              |               | 110   | 103   | 81    | 110   | 106   | 85    | 120   | 109   | 92    | 124   | 111   | 101   | LPW    |

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |        |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |        |
| 45000LM       | FD           | 323           | 37292 | 34854 | 27542 | 37292 | 35829 | 28761 | 40704 | 37048 | 31198 | 41923 | 37535 | 34123 | Lumens |
|               |              |               | 115   | 108   | 85    | 115   | 111   | 89    | 126   | 115   | 97    | 130   | 116   | 106   | LPW    |
|               | FDFR         | 323           | 34031 | 31807 | 25134 | 34031 | 32696 | 26246 | 37145 | 33808 | 28470 | 38257 | 34253 | 31139 | Lumens |
|               |              |               | 105   | 98    | 78    | 105   | 101   | 81    | 115   | 105   | 88    | 118   | 106   | 96    | LPW    |
|               | FSMG         | 323           | 37752 | 35284 | 27882 | 37752 | 36271 | 29116 | 41206 | 37505 | 31583 | 42440 | 37998 | 34544 | Lumens |
|               |              |               | 117   | 109   | 86    | 117   | 112   | 90    | 128   | 116   | 98    | 131   | 118   | 107   | LPW    |
|               | MD           | 323           | 39822 | 37220 | 29411 | 39822 | 38261 | 30713 | 43466 | 39562 | 33315 | 44768 | 40083 | 36439 | Lumens |
|               |              |               | 123   | 115   | 91    | 123   | 118   | 95    | 135   | 122   | 103   | 139   | 124   | 113   | LPW    |
|               | MDFR         | 323           | 36800 | 34395 | 27179 | 36800 | 35357 | 28382 | 40168 | 36560 | 30787 | 41370 | 37041 | 33674 | Lumens |
|               |              |               | 114   | 106   | 84    | 114   | 109   | 88    | 124   | 113   | 95    | 128   | 115   | 104   | LPW    |
|               | ND           | 323           | 40117 | 37495 | 29629 | 40117 | 38544 | 30940 | 43788 | 39855 | 33562 | 45099 | 40379 | 36709 | Lumens |
|               |              |               | 124   | 116   | 92    | 124   | 119   | 96    | 136   | 123   | 104   | 140   | 125   | 114   | LPW    |
|               | NDA          | 323           | 40473 | 37828 | 29892 | 40473 | 38886 | 31215 | 44177 | 40209 | 33860 | 45499 | 40738 | 37034 | Lumens |
|               |              |               | 125   | 117   | 93    | 125   | 120   | 97    | 137   | 124   | 105   | 141   | 126   | 115   | LPW    |
|               | NDFR         | 323           | 36821 | 34414 | 27194 | 36821 | 35377 | 28398 | 50290 | 36580 | 30804 | 41393 | 37061 | 33692 | Lumens |
|               |              |               | 114   | 107   | 84    | 114   | 110   | 88    | 156   | 113   | 95    | 128   | 115   | 104   | LPW    |
|               | WD           | 323           | 39844 | 37240 | 29427 | 39844 | 38282 | 30729 | 43490 | 39584 | 33334 | 44792 | 40104 | 36459 | Lumens |
|               |              |               | 123   | 115   | 91    | 123   | 119   | 95    | 135   | 123   | 103   | 139   | 124   | 113   | LPW    |
|               | WDA          | 323           | 40623 | 37968 | 30003 | 40623 | 39030 | 31330 | 44341 | 40358 | 33986 | 45668 | 40889 | 37172 | Lumens |
|               |              |               | 126   | 118   | 93    | 126   | 121   | 97    | 137   | 125   | 105   | 141   | 127   | 115   | LPW    |
|               | WDFR         | 323           | 34588 | 32327 | 25545 | 34588 | 33231 | 26675 | 37752 | 34362 | 28936 | 38883 | 34814 | 31649 | Lumens |
|               |              |               | 107   | 100   | 79    | 107   | 103   | 83    | 117   | 106   | 90    | 120   | 108   | 98    | LPW    |

## ‡ Notes

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Input Watts               | @ 120 volts.                                                            |
| Operating Characteristics | Absolute photometry calculated in accordance with IESNA LM-79-08 @ 25°C |

## OPERATIONAL DATA

## Operating Characteristics ‡

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |
| 50000LM       | FD           | 374           | 41690 | 38965 | 30791 | 41690 | 40055 | 32153 | 45505 | 41418 | 34878 | 46867 | 41963 | 38148 |
|               |              |               | 111   | 104   | 82    | 111   | 107   | 86    | 122   | 111   | 93    | 125   | 112   | 102   |
|               | FDFR         | 374           | 38045 | 35558 | 28098 | 38045 | 36553 | 29342 | 41526 | 37796 | 31828 | 42769 | 38293 | 34812 |
|               |              |               | 102   | 95    | 75    | 102   | 98    | 78    | 111   | 101   | 85    | 114   | 102   | 93    |
|               | FSMG         | 374           | 42204 | 39446 | 31171 | 42204 | 40549 | 32550 | 46066 | 41929 | 35308 | 47446 | 42480 | 38618 |
|               |              |               | 113   | 105   | 83    | 113   | 108   | 87    | 123   | 112   | 94    | 127   | 114   | 103   |
|               | MD           | 374           | 44519 | 41310 | 32880 | 45519 | 42774 | 34335 | 48593 | 44228 | 37245 | 50048 | 44810 | 40737 |
|               |              |               | 119   | 110   | 88    | 122   | 114   | 92    | 130   | 118   | 100   | 134   | 120   | 109   |
|               | MDFR         | 374           | 41141 | 38452 | 30385 | 41141 | 39528 | 31730 | 44906 | 40872 | 34419 | 46250 | 41410 | 37645 |
|               |              |               | 110   | 103   | 81    | 110   | 106   | 85    | 120   | 109   | 92    | 124   | 111   | 101   |
|               | ND           | 374           | 44849 | 41918 | 33124 | 44849 | 43090 | 34589 | 48953 | 44556 | 37521 | 50418 | 45142 | 41038 |
|               |              |               | 120   | 112   | 89    | 120   | 115   | 92    | 131   | 119   | 100   | 135   | 121   | 110   |
|               | NDA          | 374           | 45247 | 42290 | 33418 | 45247 | 43473 | 34896 | 49387 | 44951 | 37854 | 50866 | 45543 | 41403 |
|               |              |               | 121   | 113   | 89    | 121   | 116   | 93    | 132   | 120   | 101   | 136   | 122   | 111   |
|               | NDFR         | 374           | 41164 | 38473 | 30402 | 41164 | 39549 | 31747 | 44930 | 40895 | 34438 | 46276 | 41433 | 37666 |
|               |              |               | 110   | 103   | 81    | 110   | 106   | 85    | 120   | 109   | 92    | 124   | 111   | 101   |
|               | WD           | 374           | 44544 | 41632 | 32898 | 44544 | 42797 | 34354 | 48620 | 44253 | 37265 | 50075 | 44835 | 40759 |
|               |              |               | 119   | 111   | 88    | 119   | 114   | 92    | 130   | 118   | 100   | 134   | 120   | 109   |
|               | WDA          | 374           | 45415 | 42447 | 33542 | 45415 | 43634 | 35026 | 49570 | 45118 | 37994 | 51055 | 45712 | 41556 |
|               |              |               | 121   | 113   | 90    | 121   | 117   | 94    | 133   | 121   | 102   | 137   | 122   | 111   |
|               | WDFR         | 374           | 38667 | 36140 | 28558 | 38667 | 37151 | 29822 | 42205 | 38414 | 32349 | 43469 | 38920 | 35382 |
|               |              |               | 103   | 97    | 76    | 103   | 99    | 80    | 113   | 103   | 86    | 116   | 104   | 95    |

| Lumen Package | Distribution | Input Watts ‡ | 3000K |       |       | 3500K |       |       | 4000K |       |       | 5000K |       |       |
|---------------|--------------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|               |              |               | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI | 70CRI | 80CRI | 90CRI |
| 60000LM       | FD           | 437           | 49862 | 46603 | 36826 | 49862 | 47906 | 38455 | 54424 | 49536 | 41714 | 56054 | 50188 | 45625 |
|               |              |               | 114   | 107   | 84    | 114   | 110   | 88    | 125   | 113   | 95    | 128   | 115   | 104   |
|               | FDFR         | 437           | 45502 | 42528 | 33606 | 45502 | 43717 | 35093 | 49665 | 45204 | 38067 | 51152 | 45799 | 41636 |
|               |              |               | 104   | 97    | 77    | 104   | 100   | 80    | 114   | 103   | 87    | 117   | 105   | 95    |
|               | FSMG         | 437           | 50477 | 47178 | 39325 | 50477 | 48497 | 38930 | 58118 | 52898 | 42229 | 56745 | 50807 | 46188 |
|               |              |               | 116   | 108   | 90    | 116   | 111   | 89    | 133   | 121   | 97    | 130   | 116   | 106   |
|               | MD           | 437           | 53246 | 49765 | 36341 | 53246 | 51157 | 41065 | 53707 | 48883 | 44545 | 59858 | 53594 | 48721 |
|               |              |               | 122   | 114   | 83    | 122   | 117   | 94    | 123   | 112   | 102   | 137   | 123   | 111   |
|               | MDFR         | 437           | 49205 | 45989 | 36341 | 49205 | 47275 | 37949 | 53707 | 48883 | 41165 | 55315 | 49527 | 45024 |
|               |              |               | 113   | 105   | 83    | 113   | 108   | 87    | 123   | 112   | 94    | 127   | 113   | 103   |
|               | ND           | 437           | 53640 | 50134 | 39616 | 53640 | 51536 | 41369 | 58548 | 53289 | 44875 | 60301 | 53990 | 49082 |
|               |              |               | 123   | 115   | 91    | 123   | 118   | 95    | 134   | 122   | 103   | 138   | 124   | 112   |
|               | NDA          | 437           | 54116 | 50579 | 39968 | 54116 | 51994 | 41736 | 59068 | 53762 | 45273 | 60836 | 54470 | 49518 |
|               |              |               | 124   | 116   | 91    | 124   | 119   | 96    | 135   | 123   | 104   | 139   | 125   | 113   |
|               | NDFR         | 437           | 49232 | 46014 | 36361 | 49232 | 47302 | 37970 | 53737 | 48910 | 41188 | 55346 | 49554 | 45049 |
|               |              |               | 113   | 105   | 83    | 113   | 108   | 87    | 123   | 112   | 94    | 127   | 113   | 103   |
|               | WD           | 437           | 53275 | 49793 | 39347 | 53275 | 51185 | 41088 | 58149 | 52926 | 44570 | 59890 | 53623 | 48748 |
|               |              |               | 122   | 114   | 90    | 122   | 117   | 94    | 133   | 121   | 102   | 137   | 123   | 112   |
|               | WDA          | 437           | 54317 | 50766 | 40116 | 54317 | 52186 | 41891 | 59287 | 53962 | 45441 | 61062 | 54672 | 49701 |
|               |              |               | 124   | 116   | 92    | 124   | 119   | 96    | 136   | 123   | 104   | 140   | 125   | 114   |
|               | WDFR         | 437           | 46246 | 43224 | 34156 | 46246 | 44433 | 35667 | 50478 | 45944 | 38690 | 51989 | 46549 | 42317 |
|               |              |               | 106   | 99    | 78    | 106   | 102   | 82    | 116   | 105   | 89    | 119   | 107   | 97    |

## ‡ Notes

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Input Watts               | @ 120 volts.                                                            |
| Operating Characteristics | Absolute photometry calculated in accordance with IESNA LM-79-08 @ 25°C |

## OPERATIONAL DATA CONTINUED

### Emergency Lumen Output

#### How to Estimate Delivered Lumens in Emergency Mode

Use the formula below to estimate the delivered lumens in emergency mode

$$\text{Delivered Lumens} = P \times \text{LPW}$$

P = Output power of emergency driver

LPW = Lumen per watt rating of the luminaire. (See charts on pages 6 and 7)

The LPW rating is also available at [Designlight Consortium](#)

P = 10 watts for E10WCP

P = 15 watts for E15WCPR

P = 23.1 watts for BSL722CR

P = 30 watts for IE30WCPHER

### Emergency Lumen Output Example - 15 Watt Battery

| Approximate Luminaire Efficacy | Approximate Lumens at 1 Minute | Approximate Lumens at 45 Minutes | Approximate Lumens at 90 Minutes |
|--------------------------------|--------------------------------|----------------------------------|----------------------------------|
| 100 LPW                        | 1500                           | 1500                             | 1500                             |
| 110 LPW                        | 1,650                          | 1,650                            | 1,650                            |
| 120 LPW                        | 1,800                          | 1,800                            | 1,800                            |
| 130 LPW                        | 1,950                          | 1,950                            | 1,950                            |
| 140 LPW                        | 2,100                          | 2,100                            | 2,100                            |
| 150 LPW                        | 2,250                          | 2,250                            | 2,250                            |

### Lumen Maintenance 12000LM Package

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.98        | 0.97        | 0.96        | 0.96        | 0.95        | 0.92         |
| 30         | 1.00    | 0.98        | 0.97        | 0.96        | 0.96        | 0.95        | 0.92         |
| 35         | 1.00    | 0.98        | 0.97        | 0.96        | 0.96        | 0.95        | 0.92         |
| 40         | 1.00    | 0.98        | 0.97        | 0.96        | 0.96        | 0.95        | 0.92         |
| 45         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.91         |
| 50         | 1.00    | 0.97        | 0.96        | 0.95        | 0.95        | 0.93        | 0.90         |
| 55         | 1.00    | 0.97        | 0.95        | 0.95        | 0.94        | 0.93        | 0.89         |
| 60         | 1.00    | 0.97        | 0.95        | 0.94        | 0.93        | 0.92        | 0.88         |
| 65         | 1.00    | 0.96        | 0.95        | 0.94        | 0.93        | 0.91        | 0.87         |
| 70         | 1.00    | 0.96        | 0.94        | 0.93        | 0.92        | 0.9         | 0.85         |

### Lumen Maintenance 18000LM Package

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.98        | 0.97        | 0.96        | 0.96        | 0.95        | 0.92         |
| 30         | 1.00    | 0.98        | 0.97        | 0.96        | 0.96        | 0.95        | 0.92         |
| 35         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.91         |
| 40         | 1.00    | 0.97        | 0.96        | 0.95        | 0.95        | 0.93        | 0.90         |
| 45         | 1.00    | 0.97        | 0.95        | 0.95        | 0.94        | 0.93        | 0.89         |
| 50         | 1.00    | 0.97        | 0.95        | 0.94        | 0.94        | 0.92        | 0.88         |
| 55         | 1.00    | 0.96        | 0.95        | 0.94        | 0.93        | 0.91        | 0.87         |
| 60         | 1.00    | 0.96        | 0.94        | 0.93        | 0.92        | 0.90        | 0.85         |
| 65         | 1.00    | 0.95        | 0.92        | 0.91        | 0.90        | 0.88        | 0.83         |
| 70         | 1.00    | 0.94        | 0.91        | 0.9         | 0.88        | 0.85        | 0.78         |

### Lumen Maintenance 24000LM Package

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.98        | 0.97        | 0.96        | 0.96        | 0.95        | 0.92         |
| 30         | 1.00    | 0.98        | 0.97        | 0.96        | 0.96        | 0.95        | 0.92         |
| 35         | 1.00    | 0.97        | 0.96        | 0.95        | 0.95        | 0.94        | 0.91         |
| 40         | 1.00    | 0.97        | 0.96        | 0.95        | 0.94        | 0.93        | 0.90         |
| 45         | 1.00    | 0.97        | 0.95        | 0.95        | 0.94        | 0.92        | 0.88         |
| 50         | 1.00    | 0.96        | 0.95        | 0.94        | 0.93        | 0.91        | 0.87         |
| 55         | 1.00    | 0.96        | 0.94        | 0.94        | 0.92        | 0.91        | 0.86         |
| 60         | 1.00    | 0.96        | 0.94        | 0.93        | 0.92        | 0.90        | 0.84         |
| 65         | 1.00    | 0.94        | 0.92        | 0.90        | 0.89        | 0.86        | 0.80         |
| 70         | 1.00    | 0.93        | 0.9         | 0.89        | 0.87        | 0.83        | 0.76         |

**OPERATIONAL DATA CONTINUED**

## Lumen Maintenance 30000LM Package

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.98        | 0.97        | 0.97        | 0.96        | 0.96        | 0.94         |
| 30         | 1.00    | 0.97        | 0.96        | 0.96        | 0.96        | 0.95        | 0.93         |
| 35         | 1.00    | 0.97        | 0.96        | 0.96        | 0.96        | 0.95        | 0.93         |
| 40         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.95        | 0.93         |
| 45         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 50         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 55         | 1.00    | 0.97        | 0.96        | 0.95        | 0.95        | 0.94        | 0.92         |
| 60         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.91         |
| 65         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.90         |

## Lumen Maintenance 35000LM Package

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.97        | 0.96        | 0.96        | 0.96        | 0.95        | 0.93         |
| 30         | 1.00    | 0.97        | 0.96        | 0.96        | 0.96        | 0.95        | 0.93         |
| 35         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.95        | 0.93         |
| 40         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 45         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 50         | 1.00    | 0.97        | 0.96        | 0.95        | 0.95        | 0.94        | 0.92         |
| 55         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.91         |
| 60         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.90         |
| 65         | 1.00    | 0.96        | 0.95        | 0.94        | 0.94        | 0.93        | 0.90         |

## Lumen Maintenance 40000LM Package

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.97        | 0.96        | 0.96        | 0.96        | 0.95        | 0.93         |
| 30         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.95        | 0.93         |
| 35         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 40         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 45         | 1.00    | 0.97        | 0.96        | 0.95        | 0.95        | 0.94        | 0.92         |
| 50         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.91         |
| 55         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.90         |
| 60         | 1.00    | 0.96        | 0.95        | 0.94        | 0.94        | 0.93        | 0.90         |

**OPERATIONAL DATA CONTINUED****Lumen Maintenance 45000LM Package**

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.95        | 0.93         |
| 30         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 35         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 40         | 1.00    | 0.97        | 0.96        | 0.95        | 0.95        | 0.94        | 0.92         |
| 45         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.91         |
| 50         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.90         |
| 55         | 1.00    | 0.96        | 0.95        | 0.94        | 0.94        | 0.93        | 0.90         |
| 60         | 1.00    | 0.96        | 0.95        | 0.94        | 0.93        | 0.92        | 0.89         |

**Lumen Maintenance 50000LM Package**

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 30         | 1.00    | 0.97        | 0.96        | 0.96        | 0.95        | 0.94        | 0.92         |
| 35         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.91         |
| 40         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.90         |
| 45         | 1.00    | 0.96        | 0.95        | 0.94        | 0.94        | 0.93        | 0.90         |
| 50         | 1.00    | 0.96        | 0.95        | 0.94        | 0.94        | 0.92        | 0.89         |
| 55         | 1.00    | 0.96        | 0.95        | 0.94        | 0.93        | 0.92        | 0.89         |
| 60         | 1.00    | <0.96       | <0.95       | <0.94       | <0.93       | <0.92       | <0.89        |

**Lumen Maintenance 60000LM Package**

| Ambient °C | 0 Hours | 15000 Hours | 30000 Hours | 36000 Hours | 45000 Hours | 60000 Hours | 100000 Hours |
|------------|---------|-------------|-------------|-------------|-------------|-------------|--------------|
| 25         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.91         |
| 30         | 1.00    | 0.96        | 0.95        | 0.95        | 0.94        | 0.93        | 0.90         |
| 35         | 1.00    | 0.96        | 0.95        | 0.94        | 0.94        | 0.93        | 0.90         |
| 40         | 1.00    | 0.96        | 0.95        | 0.94        | 0.94        | 0.92        | 0.90         |
| 45         | 1.00    | 0.96        | 0.94        | 0.94        | 0.93        | 0.92        | 0.89         |
| 50         | 1.00    | 0.96        | 0.94        | 0.94        | 0.93        | 0.92        | 0.89         |
| 55         | 1.00    | 0.96        | 0.94        | 0.94        | 0.93        | 0.92        | 0.89         |

**Number of LED Boards and Drivers Used**

| Lumen package | Number of LED boards per fixture | Number of drivers per fixture |
|---------------|----------------------------------|-------------------------------|
| 12000LM       | 4                                | 1                             |
| 18000LM       | 4                                | 1                             |
| 24000LM       | 4                                | 1                             |
| 30000LM       | 4                                | 2                             |
| 35000LM       | 4                                | 2                             |
| 40000LM       | 4                                | 2                             |
| 45000LM       | 4                                | 2                             |
| 50000LM       | 4                                | 2                             |
| 60000LM       | 4                                | 2                             |

**Performance with AO\* Field Adjustable Output**

| FAO Position | % Light Output | % Power Consumption |
|--------------|----------------|---------------------|
| 8            | 100%           | 100%                |
| 7            | 89%            | 86%                 |
| 6            | 78%            | 75%                 |
| 5            | 67%            | 62%                 |
| 4            | 54%            | 49%                 |
| 3            | 41%            | 36%                 |
| 2            | 28%            | 24%                 |
| 1            | 14%            | 11%                 |

**Note**

Same for all configurations.

## OPERATIONAL DATA CONTINUED

### LAT Factors

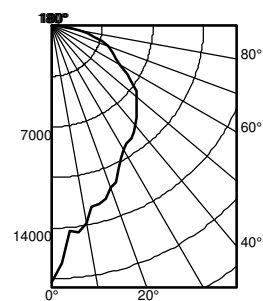
| Ambient °C | 12000LM | 18000LM | 24000LM | 30000LM | 35000LM | 40000LM | 45000LM | 50000LM | 60000LM |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 25         | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    | 1.00    |
| 30         | 0.99    | 0.99    | 0.99    | 0.99    | 0.99    | 0.99    | 0.99    | 0.99    | 0.99    |
| 35         | 0.99    | 0.99    | 0.99    | 0.98    | 0.98    | 0.98    | 0.98    | 0.98    | 0.98    |
| 40         | 0.98    | 0.98    | 0.98    | 0.98    | 0.97    | 0.97    | 0.97    | 0.97    | 0.97    |
| 45         | 0.98    | 0.97    | 0.97    | 0.97    | 0.97    | 0.96    | 0.96    | 0.96    | 0.96    |
| 50         | 0.97    | 0.96    | 0.96    | 0.96    | 0.96    | 0.96    | 0.95    | 0.95    | 0.95    |
| 55         | 0.96    | 0.96    | 0.95    | 0.95    | 0.95    | 0.95    | 0.94    | 0.94    | 0.94    |
| 60         | 0.95    | 0.95    | 0.95    | 0.94    | 0.94    | 0.94    | 0.93    | 0.93    | NA      |
| 65         | 0.95    | 0.94    | 0.94    | 0.93    | 0.93    | NA      | NA      | NA      | NA      |
| 70         | 0.94    | 0.93    | 0.93    | NA      | NA      | NA      | NA      | NA      | NA      |

### BTP Default Settings

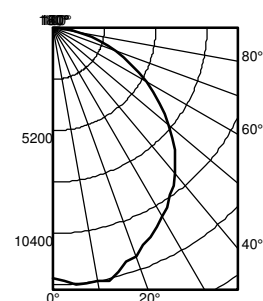
| Model            | Default Operation                                        | Occupancy Time Delay | Photocell Mode    | Photocell Set-point | Low Trim | High Trim | Dim to Off Time Delay |
|------------------|----------------------------------------------------------|----------------------|-------------------|---------------------|----------|-----------|-----------------------|
| SBG6 OCC BTP LT  | On/Off Occupancy Only Disabled                           | 10 minutes           | Disabled          | n/a                 | n/a      | 100%      | Disabled              |
| SBG10 OCC BTP LT | On/Off Occupancy Only Disabled                           | 10 minutes           | Disabled          | n/a                 | n/a      | 100%      | Disabled              |
| SBG6 HL BTP LT   | Occupancy w/ 0-10V Dimming (High/Low/Off)                | 10 minutes           | Disabled          | n/a                 | 10%      | 100%      | 2.5 minutes           |
| SBG10 HL BTP LT  | Occupancy w/ 0-10V Dimming (High/Low/Off)                | 10 minutes           | Disabled          | n/a                 | 10%      | 100%      | 2.5 minutes           |
| SBG6 ADC BTP LT  | Occupancy w/ Dim & Switch Photocell                      | 10 minutes           | On/Off & Auto Dim | 50 fc               | 10%      | 100%      | 0 seconds             |
| SBG10 ADC BTP LT | Occupancy w/ Dim & Switch Photocell                      | 10 minutes           | On/Off & Auto Dim | 50 fc               | 10%      | 100%      | 0 seconds             |
| SBG6 ANL BTP LT  | Dim & Switch Photocell with High/Low Occupancy Operation | 10 minutes           | On/Off & Auto Dim | 50 fc               | 10%      | 100%      | Stay Dim/Never Off    |
| SBG10 ANL BTP LT | Dim & Switch Photocell with High/Low Occupancy Operation | 10 minutes           | On/Off & Auto Dim | 50 fc               | 10%      | 100%      | Stay Dim/Never Off    |

## DISTRIBUTION DATA

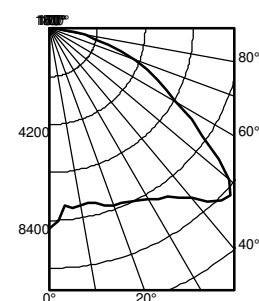
Narrow



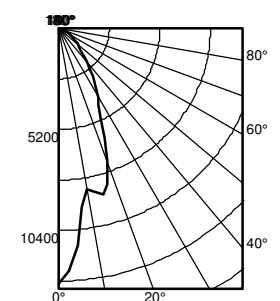
Medium



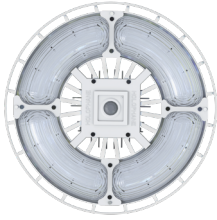
Wide



Focus



## COMPONENTS & OPTIONS DATA



### Sensors

Occupancy-only mode that controls on/off and dimming of the fixture. Photocell option reads daylight levels to dim lights or prevent start-up.



### Dimming drivers

Drivers use 0-10V protocol with dimming down to 10% lumen output.



### AO

Field adjustable output dimming.



### Optics

Standard prismatic, borosilicate glass that doesn't fade or degrade. Optional frosted optics provide even greater visual comfort. Injection molded acrylic lens available in wide and narrow.



### Wire Guard

Steel wire guard available to further protect fixture from impact.



### Hook and cord

3/4" hub standard. Multiple hooks and other mountings available. Cord sets can be specified with or without plug.



**nLight Wired NPP16 D  
Power Pack**



**nLight Wired NPP16 D  
ER Power Pack**



**HKMW (PF-291) Hook**



**HKMAR (PF-129-A) Hook**



**OCS Reloc® One Pass®  
Drop Cable**



**SBGR Sensor**



**SBG BTP sensor with Smart Hub BTP Control Module**



**HKFD (PF-122-A) Hook**



**LPFD (PF-116) Loop**



**nLight Air RPP20 D  
Power Pack**



**nLight Air RPP20 D ER  
Power Pack**



**nLight Air RSBG  
Sensor**



**nLight Air RIO Control  
Module**