



## PhuzionL™

Large LED High Bay



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 brings to the industrial environment LED lighting of unparalleled performance and reliability.

**Certain airborne contaminants can diminish integrity of acrylic.** [Click here for Acrylic Environmental 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.](#)

### Optics

- Prismatic borosilicate glass maintains highest levels of luminosity over time.
- Glass doesn't fade, discolor or otherwise degrade in harsh environments.
- Four distributions with glass; Focus, narrow, medium and wide. Two distributions in Acrylic; narrow and wide to maximize versatility.
- Highly engineered LED system ensures superior uniformity and maximizes spacing.

### Mechanical

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

### 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 - Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015.
- 70, 80 and 90 CRI available.
- 3000K, 3500K, 4000K, 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 149°F (65°C) with glass optics and 140°F (60°C) with acrylic optics (see chart on page 9).
- IK Rated. (see chart on page 9)
- IP66 rated.
- 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.  
Specifications subject to change without notice.

### Typical Applications

- Heavy industrial
- Lighting manufacturing
- Steel Mills
- Convention Center
- Foundries
- Pulp Paper Mills

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

Diameter: 28.49 in.

Height: 20.98 in.

Weight: 55 lbs.

### A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks marked by a shaded background\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

A+ Capable options indicated  
by this color background.

## ORDERING INFORMATION

Series	Lumens	Distribution	Voltage		Color temperature	Color Rendering Index	Mounting
PHZL	50000LM	50,000 Nominal lumens	FD Focus, glass	MVOLT Autosensing (120-277V,50/60Hz)	XVOLT Enhanced Power Protection (277-480V, 50/60Hz) ‡	30K 3000K	70CRI 70 CRI
	60000LM	60,000 Nominal lumens	FDFR Focus, frosted glass	120 120V, 50/60Hz	277X 277V XVOLT Driver, 50/60Hz ‡	35K 3500K	80CRI 80 CRI
	70000LM	70,000 Nominal lumens	FSGM Focus Smooth	208 208V, 50/60Hz	40K 4000K	90CRI 90 CRI	
	MD	Medium, glass	MDFR Medium, frosted glass	240 240V, 50/60Hz	50K 5000K		
	ND	Narrow, glass	ND	277 277V, 50/60Hz			
	NDA	Narrow, clear acrylic	HVOLT Autosensing (347-480V, 50/60Hz) ‡	347X 347V XVOLT Driver, 50/60Hz ‡			
	NDFR	Narrow, frosted glass	WD	480 480V XVOLT Driver, 50/60Hz			
90000LM	90,000 Nominal lumens ‡	WD	347 347V, 50/60Hz				
100000LM	100,000 Nominal lumens ‡	WDA	480 480V, 50/60Hz				
		WDFR					

Options	Finish
<b>Damp Location Cord Sets:</b> ‡	
CPTL16W Cord with 15-amp twist lock plug, 16-gauge, 3 conductors, white, 6ft (120-277V only)	SBGR6 360° High Mount sensor, (15-30' mounting heights), on/off occupancy ( <a href="#">LINK</a> )
CPTL20A16W Cord with 20-amp twist lock plug, 16-gauge, 3 conductors, white, 6ft (347-480V only)	SBGR10 360° Low Mount Sensor, (8-15' mounting heights), on/off occupancy ( <a href="#">LINK</a> )
CPSB16W Cord with 15-amp straight blade plug, 16-gauge, 3 conductors, white, 6ft (120V only)	SBGR6 P 360° High Mount Sensor, (15-30' mounting heights), on/off photocell ( <a href="#">LINK</a> )
	SBGR10 P 360° Low Mount Sensor, (8-15' mounting heights), on/off photocell ( <a href="#">LINK</a> )
<b>Individual Dimming Sensors:</b> ‡	
	SBGR6 D 3V 360° High Mount sensor, (15-30' mounting heights), high/low occupancy dimming ( <a href="#">LINK</a> )
	SBGR10 D 3V 360° Low Mount sensor, (8-15' mounting heights), high/low occupancy dimming ( <a href="#">LINK</a> )
<b>Bluetooth® Sensors:</b> ‡	
	SBG6 OCC BTP 360° High Mount Sensor, (15-45' mounting heights), on/off occupancy, utilizes smart hub for Bluetooth® programmability ( <a href="#">LINK</a> )
	SBG10 OCC BTP 360° Low Mount Sensor, (7-15' mounting heights), on/off occupancy, utilizes smart hub for Bluetooth® programmability ( <a href="#">LINK</a> )
	SBG6 HL BTP 360° High Mount Sensor, (15-45' mounting heights), high/low/(off) occupancy dimming, utilizes smart hub for Bluetooth® programmability ( <a href="#">LINK</a> )
	SBG10 HL BTP 360° Low Mount Sensor, (7-15' mounting heights), high/low/(off) occupancy dimming, utilizes smart hub for Bluetooth® programmability ( <a href="#">LINK</a> )
	SBG6 ADC BTP 360° High Mount Sensor, (15-45' mounting heights), on/off occupancy with auto dimming photocell, utilizes smart hub for Bluetooth® programmability ( <a href="#">LINK</a> )
	SBG10 ADC BTP 360° Low Mount Sensor, (7-15' mounting heights), on/off occupancy with auto dimming photocell, utilizes smart hub for Bluetooth® programmability ( <a href="#">LINK</a> )
	SBG6 ANL BTP 360° High Mount Sensor, (15-45' mounting heights), high/low/(off) occupancy dimming with auto dimming photocell, utilizes smart hub for Bluetooth® programmability ( <a href="#">LINK</a> )
	SBG10 ANL BTP 360° Low Mount Sensor, (7-15' mounting heights), high/low/(off) occupancy dimming with auto dimming photocell, utilizes smart hub for Bluetooth® programmability ( <a href="#">LINK</a> )
<b>nLight® Wired:</b> ‡	
	NPP16 D nLight® wired power/relay pack (0-10VDC dimming output) ( <a href="#">LINK</a> )
	NPP16 D ER nLight® Wired power/relay pack, 0-10VDC dimming output, UL924 Emergency operation (not available with a battery pack) ( <a href="#">LINK</a> )
<b>nLight® Air Wireless:</b>	
	NLTAIR2 RPP20 D nLight® Air Generation 2 enabled, power/relay pack, 0-10V dimming output ( <a href="#">LINK</a> ) ‡
	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) ( <a href="#">LINK</a> ) ‡
	NLTAIR2 RSBG6 nLight® Air Generation 2 enabled, 360° high mount sensor, (15-30' mounting heights) ( <a href="#">LINK</a> ) ‡
	NLTAIR2 RSBG6 ER nLight® Air Generation 2 enabled, 360° high mount sensor, (15 to 30' mounting heights), UL 924 Emergency Operation utilizing Iota ETS (not available with battery pack) ( <a href="#">LINK</a> ) ‡
	NLTAIR2 RSBG10 nLight® Air Generation 2 enabled, 360° low mount sensor, (8-15' mounting heights) ( <a href="#">LINK</a> ) ‡
	NLTAIR2 RSBG10 ER nLight® Air Generation 2 enabled, 360° low mount sensor, (8-15' mounting heights), UL 924 Emergency Operation utilizing Iota ETS (not available with battery pack) ( <a href="#">LINK</a> ) ‡
	NLTAIR2 RSBG40 nLight® Air Generation 2 enabled, 360° high bay sensor, (40' mounting height) ( <a href="#">LINK</a> ) ‡
	NLTAIR2 RSBG40 ER nLight® Air Generation 2 enabled, 360° high bay sensor, (40' mounting height), UL 924 Emergency Operation utilizing Iota ETS (not available with battery pack) ( <a href="#">LINK</a> ) ‡
	NLTAIR2 RIO nLight® Air Generation 2 enabled, fixture embedded network interface, 0-10V dimming output ( <a href="#">LINK</a> ) ‡
	NLTAIR2 RIO ER nLight® Air Generation 2 fixture embedded network interface, 0-10V dimming output, includes ETS for UL 924 operation when using auxiliary generator or central inverter ( <a href="#">LINK</a> ) ‡
<b>Wet Location Cord Sets:</b> #	
CPTL16WWL Cord with 15-amp twist lock plug, 16-gauge, 3 conductors, white, 6ft (120-277V only)	
<b>Wet Locations Cords (no plug):</b> #	
CNP16WWL Cord only, 16-gauge, 3 conductors, white, 6ft	
<b>Modular Wiring:</b>	
OCS Reloc® One Pass® circuit selector system drop, 18-gauge, 3 conductors, 6ft (120-480V) ( <a href="#">LINK</a> ) ‡	
<b>Hooks:</b>	
HKMW 3/4" wet listed hook male, PF-291 ‡	
HKMD 3/4" damp listed hook male, PF-121-A ‡	
HKMAR 3/4" damp listed anti rotational hook male, PF-129-A ‡	
LPMD 3/4" damp listed loop male, PF-105-B ‡	
<b>UPH Hangers:</b> ‡	
UPH35 Thru-way powerhook for use with PHCB, surface mount	
UPH36 Thru-way powerhook for use with PHCB, pendant mount	
<b>Other Options:</b>	
A0 Field adjustable output ‡	
BAA Buy America(n) Act and/or Build America Buy America Qualified	
DIM Dimming terminal ‡	
DL Damp Location ‡	
NSG Non-silicone gasket (EPDM)	
SCKX X Inch stainless steel safety chain factory installed ‡	
WGX Wire guard, factory installed	

<b>Accessories: Order as separate catalog number.</b>					
UPH 35SM XXX DWHXD	Thru-way powerhook for 120V, 208V, 240V, 277V and 347V (120, 208, 240, 277, 277X, 347 or 347X only) ‡	HCRTLDW16WWL3FTL515R	Cord with Connector (Receptacle), Twist Lock, Daniel Woodhead, 16 Gauge, White, Wet Location, 3ft, NEMA L5-15R, (120V) ‡	HKFD	Safety hook, 3/4" female PF-122-A
UPH 35SM L8480 DWHXD	Thru-way powerhook for 480V (480 or 480X only) ‡	HCRTLDW16WWL3FTL615R	Cord with Connector (Receptacle), Twist Lock, Daniel Woodhead, 16 Gauge, White, Wet Location, 3ft, NEMA L6-15R (208V or 240V) ‡	LPFD	Loop, 3/4" female PF-116-A
UPH 36PM XXX DWHXD	Pendant powerhook for 120V, 208V, 240V, 277V and 347V (120, 208, 240, 277, 277X, 347 or 347X only) ‡	HCRTLDW16WWL3FTL715R	Cord with Connector (Receptacle), Twist Lock, Daniel Woodhead, 16 Gauge, White, Wet Location, 3ft, NEMA L7-15R (277V) ‡	PHZLCHAIN XIN	X Inch stainless steel safety chain kit ‡
UPH 36PM L8480 DWHXD	Pendant powerhook for 480V (480 or 480X only) ‡			WGAPHZL	Wire guard accessory

<b>‡ Option Value Ordering Restrictions &amp; Notes</b>	
<b>Option value</b>	<b>Restriction</b>
277X, 347X, 480X	Not available with 90000LM or 100000LM.
90000LM, 100000LM	Not available with HVOLT, XVOLT, 277X, 347X or 480X. When ordered with either 347 or 480 voltage options, an MVOLT (120-177V) driver and step down transformer will be included.
A0	Not available with DIM, dimming controls or dimming occupancy sensors. See chart on page 10 for output levels available.
Bluetooth® Sensors	Not available with A0, DIM, 90000LM, 100000LM, XVOLT, 277X, 347X, 480X, dimming controls or other occupancy sensors. For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". Ex: SBG6 OCC BTP
BSL722	Available with PM, MVOLT, 120, 208, 240, 277, 277X, 50000LM, 60000LM or 70000LM. Not available with any cord that includes a plug. Not available with NPP16 D ER or RPP20 D ER. Customer to connect to unswitched power in fixture. Please note the fixture will be required to be on 24/7 unless controls are used to turn the fixture off.
BSL722R, BSL722RC	DL (damp location) option required. Available with PM, MVOLT, 120, 208, 240, 277 or 277X. Not available with any cord that includes a plug. Not available with NPP16 D ER or RPP20 D ER. Customer to connect to unswitched power in fixture. Please note the fixture will be required to be on 24/7 unless controls are used to turn the fixture off.
CNP165CD, CNP165CDW	DL (damp location) option required. Available with PM or NDT only. Not available with dimming controls, dimming sensors or HKMW. 6' is standard, but other lengths are available. Must specify length in nomenclature. Example: CNP165CD3FT
CNP16W	DL (damp location) option required. Available with PM, NDT or QD. 6' is standard, but other lengths are available. Must specify length in the nomenclature. Example: CNP16W10FT. Damp Listed.
Damp Location Cord Sets	DL (damp location) option required. Available with PM, NDT or QD. Must specify hook. 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.
DBXD, DGXD, DNXD, DWHXD	Corrosion resistant finish is standard.
DIM	DL (damp location) option required. Not available with A0, dimming controls or dimming occupancy sensors. Screw used to attached to fixture will not be stainless steel.
DL	Required when damp location options are chosen. Luminaire is wet location listed only when ordered with wet location options. If luminaire is ordered with wet and additional damp location options, luminaire is damp location listed only. If luminaire is ordered with damp and additional dry location options, luminaire is dry location listed.
E15WCPR	DL (damp location) option required. Available with PM, 120, 277, 277X only. Not available with any cord that includes a plug. Available with 4 conductor cord by special order, but not required. Customer to connect to switched & unswitched power in fixture. Customer must install test switch in remote junction box (not included).
ETS	Available with PM, NDT, NR, MVOLT, 120, 208, 240, 277, HKMAR, LPMD, HKMD, NLIGHTAIR2: RSBG6, RSBG40, RIO only. Not available with HKMW, 347, 480, HVOLT, 347X, 480X, XVOLT, QD, QR, any cords or emergency driver options.
HCRTLDW16WWL3FTL515R	Connector (Receptacle) and cord for CPTL16WWLXFT cordset. 3ft. is standard. 120V only. Ships Separately.
HCRTLDW16WWL3FTL615R	Connector (Receptacle) and cord for CPTL16WWLXFT cordset. 3ft. is standard. 208/240V only. Ships Separately.
HCRTLDW16WWL3FTL715R	Connector (Receptacle) and cord for CPTL16WWLXFT cordset. 3ft. is standard. 277V only. Ships Separately.
HKMAR, HKMD, LPMD	DL (damp location) option required. Available with PM, NDT, or QD only.
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.
HVOLT	Not available with 90000LM or 100000LM.
IE30WCPHER	DL (damp location) option required. Available with PM mount and 347, 480 and HVOLT only. Not available with any cord that includes a plug. Available with 4 conductor cord by special order, but not required.
Individual Dimming Sensors	Not available with A0, DIM, XVOLT, dimming controls or other occupancy sensors. For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". Ex: SBG10 D 3V
Individual Non-Dimming Sensors	Not available with XVOLT or other occupancy sensors. For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". Ex: SBG10
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.
nLight® Wired	DL (damp location) option required. Available with 120, 277, 277X, 347, 347X only. Not available with A0, DIM, dimming controls or other occupancy sensors.
NLTAIR2 RPP20D	DL (damp location) option required. Not available with A0, DIM or other occupancy sensors. 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 RPP20DER	DL (damp location) option required. Not available with A0, DIM or other occupancy sensors.
NLTAIR2 RSBG6, NLTAIR2 RSBG10, NLTAIR2 RSBG40, NLTAIR2 RIO	Not available with XVOLT, 277X, 347X, 480V, AO, DIM or other occupancy sensors. If 90000LM or 100000LM is chosen, not available with HVOLT, 347, 480, XVOLT, 277X, 347X or 480X.
NLTAIR2 RSBG6 ER, NLTAIR2 RSBG10 ER, NLTAIR2 RSBG40 ER, NLTAIR2 RIO ER	Not available with HVOLT, 347, 480, XVOLT, 347X, 480X, AO, DIM, HKMW or other occupancy sensors. 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
NR	DL (damp location) option required. Fixture is shipped without the top hanger to match existing in the field. Ordering this option assumes the top hanger is already installed. This is a for retrofit applications only.
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

Option Value Ordering Restrictions continue next page.

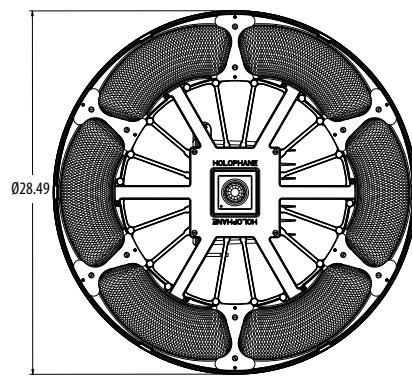
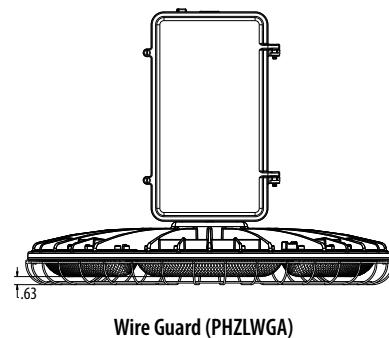
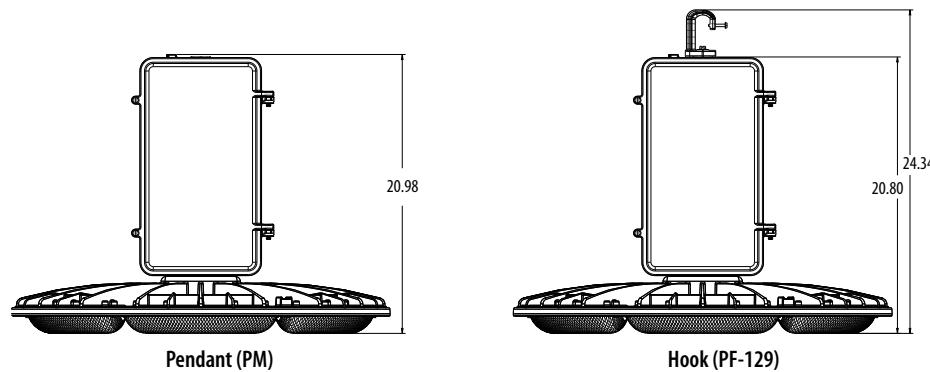
<b>‡ Option Value Ordering Restrictions &amp; Notes – continued</b>	
<b>Option value</b>	<b>Restriction</b>
PHCB, PHCBL8480	DL (damp location) option required. For new installations, order matching UPH accessory. For existing installations with UPH accessory, match PHCB voltage to existing UPH.
PHZLCHAIN XIN	X denotes length. Chain shipped separately as an accessory. Available in multiple sizes. Replace X with size in inches. Example: PHZLCHAIN 120IN = 120 inches or 10 feet.
PM	When ordered without a hook or loop, luminaire will be wet location listed. Customer will be responsible to ensure fixture is mounted appropriately to retain wet listing.
QD	DL (damp location) option required. Not available with E15WCPR, BSL722, BSL722R, BSL722RC or ETS. 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 on the fixture. The 2 part quick disconnect will include components to allow voltage to pass between the top and bottom portions.
QR	DL (damp location) option required. Shipped without top hanger (QDH). to match existing QDH in the field. Ordering this option assumes the top portion of the QD option (QDH) is already installed. This is for retrofit applications only.
SCKX	X denotes length. 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 480 or 480X voltage only. PHCBL8480 option required on luminaire.
UPH 35SM XXX DWHXD, UPH 36PM XXX DWHXD	Must specify voltage. Not available MVOLT, HVOLT or XVOLT. XXX denotes voltage. PHCB option required on luminaire.
UPH Hangers	Must specify voltage. Damp Listed. Shipped separately from luminaire, requires PHCB.
Wet Location Cord Sets	Must specify voltage. Available with PM only. Must specify, HKMW hook required for wet location listing. 6' is standard, but other lengths are available. Must specify length in the nomenclature. Example: CPTL16WWL10FT. 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 90000LM or 100000LM.

## 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

## Number of LED Boards and Drivers Used

Lumen Package	Number of LED Boards	Number of Drivers
50000LM	6	3
60000LM	6	3
70000LM	6	3
80000LM	6	3
90000LM	6	3
100000LM	6	3

**DIMENSIONAL DATA**

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



**IE30WCPR Remote Battery**  
(self-diagnostic test switch will be  
installed on fixture)

**OPERATIONAL DATA****Operating Characteristics**

Lumen Package	Distribution	Input Watts	3000K			3500K			4000K			5000K			
			70CRI	80CRI	90CRI										
50000LM	FD	322	43196	40373	31903	43196	41502	33314	47148	42914	36138	48560	43478	39526	Lumens
			134	125	99	134	129	103	146	133	112	151	135	123	LPW
	FDFR	322	39419	36843	29113	39419	37873	30402	43026	39161	32978	44314	39677	36070	Lumens
			122	114	90	122	118	94	134	122	102	138	123	112	LPW
	FSMG	322	43729	40871	43729	42014	33726	47730	43443	36584	49160	44015	40014	32297	Lumens
			136	127	136	130	105	148	135	114	153	137	124	100	LPW
	MD	322	46128	43113	34068	46128	44319	35576	50348	45826	38590	51856	46429	42208	Lumens
			143	134	106	143	138	110	156	142	120	161	144	131	LPW
	MDFR	322	42627	39841	31483	42627	40956	32876	46528	42349	35662	47921	42906	39005	Lumens
			132	124	98	132	127	102	144	132	111	149	133	121	LPW
	ND	322	46469	43432	34320	46469	44647	35839	50721	46165	38876	52240	46773	42521	Lumens
			144	135	107	144	139	111	158	143	121	162	145	132	LPW
	NDA	322	46881	43817	34625	46881	45043	36157	51171	46575	39221	52703	47188	42898	Lumens
			146	136	108	146	140	112	159	145	122	164	147	133	LPW
	NDFR	322	42651	39863	31500	42651	40978	32894	46554	42372	35682	47948	42930	39027	Lumens
			132	124	98	132	127	102	145	132	111	149	133	121	LPW
	WD	322	46153	43136	34087	46153	44343	35595	50376	45851	38611	51884	46454	42231	Lumens
			143	134	106	143	138	111	156	142	120	161	144	131	LPW
	WDA	322	47055	43980	34753	47055	45210	36291	51361	46748	39367	52899	47363	43057	Lumens
			146	137	108	146	140	113	160	145	122	164	147	134	LPW
	WDFR	322	40064	37445	29590	40064	38493	30899	43730	39802	33518	45039	40326	36660	Lumens
			124	116	92	124	120	96	136	124	104	140	125	114	LPW

Lumen Package	Distribution	Input Watts	3000K			3500K			4000K			5000K			
			70CRI	80CRI	90CRI										
60000LM	FD	390	51311	47957	37896	51311	49299	39573	56006	50976	42927	57683	51646	46951	Lumens
			132	123	97	132	126	101	144	131	110	148	132	120	LPW
	FDFR	390	46824	43764	34583	46824	44988	36113	51109	46518	39173	52639	47131	42846	Lumens
			120	112	89	120	115	93	131	119	100	135	121	110	LPW
	FSMG	390	51944	48549	38364	51944	49907	40062	56697	51605	43457	58395	52284	47531	Lumens
			133	124	98	133	128	103	145	132	111	150	134	122	LPW
	MD	390	54793	51212	40468	54793	52645	42259	59807	54435	45840	61598	55152	50138	Lumens
			140	131	104	140	135	108	153	140	118	158	141	129	LPW
	MDFR	390	50636	47326	37398	50636	48650	39052	55269	50305	42362	56924	50967	46333	Lumens
			130	121	96	130	125	100	142	129	109	146	131	119	LPW
	ND	390	55199	51591	40768	55199	53034	42572	60250	54838	46179	62054	55560	50509	Lumens
			142	132	105	142	136	109	154	141	118	159	142	130	LPW
	NDA	390	55689	52049	41130	55689	53505	42949	60784	55325	46589	62604	56053	50957	Lumens
			143	133	105	143	137	110	156	142	119	161	144	131	LPW
	NDFR	390	50664	47352	37418	50664	48677	39074	55300	50333	42385	56955	50995	46359	Lumens
			130	121	96	130	125	100	142	129	109	146	131	119	LPW
	WD	390	54823	51240	40490	54823	52673	42282	59840	54465	45865	61631	55182	50165	Lumens
			141	131	104	141	135	108	153	140	118	158	141	129	LPW
	WDA	390	55895	52242	41282	55895	53703	43109	61010	55530	46762	62837	56261	51146	Lumens
			143	134	106	143	138	111	156	142	120	161	144	131	LPW
	WDFR	390	47591	44480	35149	47591	45724	36704	51945	47280	39814	53501	47902	43547	Lumens
			122	114	90	122	117	94	133	121	102	137	123	112	LPW

**OPERATIONAL DATA****Operating Characteristics**

Lumen Package	Distribution	Input Watts	3000K			3500K			4000K			5000K			
			70CRI	80CRI	90CRI										
70000LM	FD	477	61142	57146	45157	61142	58744	47155	66737	60743	51152	68735	61542	55947	Lumens
			128	120	95	128	123	99	140	127	107	144	129	117	LPW
	FDFR	477	55796	52149	41209	55796	53608	43032	60902	55431	46679	62725	56161	51055	Lumens
			117	109	86	117	112	90	128	116	98	131	118	107	LPW
	FSMG	477	61897	57851	45715	61897	59470	47738	67561	61492	51783	69584	62302	56638	Lumens
			130	121	96	130	125	100	142	129	109	146	131	119	LPW
	MD	477	65292	61025	48222	65292	62732	50356	71266	64865	54623	73400	65719	59744	Lumens
			137	128	101	137	132	106	149	136	115	154	138	125	LPW
	MDFR	477	60337	56394	44563	60337	57971	46535	65858	59943	50478	67830	60732	55211	Lumens
			126	118	93	126	122	98	138	126	106	142	127	116	LPW
	ND	477	65775	61476	48579	65775	63196	50728	71794	65345	55028	73943	66205	60186	Lumens
			138	129	102	138	132	106	151	137	115	155	139	126	LPW
	NDA	477	66359	62022	49010	66359	63756	51179	72431	65925	55516	74599	66792	60720	Lumens
			139	130	103	139	134	107	152	138	116	156	140	127	LPW
	NDFR	477	60371	56425	44588	60371	58004	46561	65895	59977	50507	67868	60766	55242	Lumens
			127	118	93	127	122	98	138	126	106	142	127	116	LPW
	WD	477	65327	61058	48248	65327	62766	50383	71305	64901	54653	73440	65754	59777	Lumens
			137	128	101	137	132	106	149	136	115	154	138	125	LPW
	WDA	477	66605	62252	49192	66605	63993	51369	72700	66170	55722	74876	67040	60946	Lumens
			140	131	103	140	134	108	152	139	117	157	141	128	LPW
	WDFR	477	56709	53003	41883	56709	54485	43736	61898	56338	47443	63751	57080	51891	Lumens
			119	111	88	119	114	92	130	118	99	134	120	109	LPW

Lumen Package	Distribution	Input Watts	3000K			3500K			4000K			5000K			
			70CRI	80CRI	90CRI										
80000LM	FD	549	68754	64261	50779	68754	66058	53026	75046	68305	57520	77293	69204	62913	Lumens
			125	117	92	125	120	97	137	124	105	141	126	115	LPW
	FDFR	549	62743	58642	46339	62743	60282	48390	68484	62333	52491	70534	63153	57412	Lumens
			114	107	84	114	110	88	125	114	96	128	115	105	LPW
	FSMG	549	69603	65054	51406	69603	66874	53681	75972	69148	58230	78247	70058	63689	Lumens
			127	118	94	127	122	98	138	126	106	143	128	116	LPW
	MD	549	73421	68622	54226	73421	70542	56625	80139	72941	61424	82538	73901	67182	Lumens
			134	125	99	134	128	103	146	133	112	150	135	122	LPW
	MDFR	549	67849	63415	50111	67849	65189	52328	74058	67406	56763	76275	68293	62084	Lumens
			124	116	91	124	119	95	135	123	103	139	124	113	LPW
	ND	549	73964	69130	54627	73964	71063	57044	80732	73481	61878	83149	74447	67680	Lumens
			135	126	100	135	129	104	147	134	113	151	136	123	LPW
	NDA	549	74620	69743	55112	74620	71694	57550	81448	74133	62427	83887	75108	68280	Lumens
			136	127	100	136	131	105	148	135	114	153	137	124	LPW
	NDFR	549	67887	63450	50139	67887	65225	52357	74099	67444	56795	76318	68331	62119	Lumens
			124	116	91	124	119	95	135	123	103	139	124	113	LPW
	WD	549	73461	68659	54255	73461	70580	56656	80183	72981	61457	82583	73941	67219	Lumens
			134	125	99	134	129	103	146	133	112	150	135	122	LPW
	WDA	549	74897	70002	55316	74897	71960	57764	81751	74408	62659	84198	75387	68534	Lumens
			136	128	101	136	131	105	149	136	114	153	137	125	LPW
	WDFR	549	63769	59601	47098	63769	61269	49182	69604	63352	53349	71688	64186	58351	Lumens
			116	109	86	116	112	90	127	115	97	131	117	106	LPW

**OPERATIONAL DATA****Operating Characteristics**

Lumen Package	Distribution	Input Watts	3000K			3500K			4000K			5000K			
			70CRI	80CRI	90CRI										
90000LM	FD	624	75297	70376	55612	75297	72344	58072	82187	74805	62994	84648	75789	68899	Lumens
			121	113	89	121	116	93	132	120	101	136	121	110	LPW
	FDFR	624	68713	64222	50749	68713	66019	52995	75001	68264	57486	77246	69162	62875	Lumens
			110	103	81	110	106	85	120	109	92	124	111	101	LPW
	FSMG	624	76227	71244	56298	76227	73237	58789	83202	75728	63771	85693	76725	69750	Lumens
			122	114	90	122	117	94	133	121	102	137	123	112	LPW
	MD	624	80408	75152	59386	80408	77254	62014	87765	79882	67269	90393	80933	73576	Lumens
			129	120	95	129	124	99	141	128	108	145	130	118	LPW
	MDFR	624	74306	69449	54880	74306	71392	57308	81105	73820	62165	83534	74792	67992	Lumens
			119	111	88	119	114	92	130	118	100	134	120	109	LPW
	ND	624	81003	75708	59825	81003	77826	62473	88415	80473	67767	91062	81532	74120	Lumens
			130	121	96	130	125	100	142	129	109	146	131	119	LPW
	NDA	624	81721	76380	60356	81721	78516	63027	89199	81187	68368	91870	82255	74778	Lumens
			131	122	97	131	126	101	143	130	110	147	132	120	LPW
	NDFR	624	74347	69488	54910	74347	71432	57340	81150	73862	62199	83580	74833	68030	Lumens
			119	111	88	119	114	92	130	118	100	134	120	109	LPW
	WD	624	80451	75193	59418	80451	77296	62047	87813	79925	67306	90442	80977	73616	Lumens
			129	121	95	129	124	99	141	128	108	145	130	118	LPW
	WDA	624	82025	76664	60580	82025	78808	63261	89530	81489	68622	92211	82561	75055	Lumens
			131	123	97	131	126	101	143	131	110	148	132	120	LPW
	WDFR	624	69838	65273	51579	69838	67099	53862	76228	69381	58426	78510	70294	70722	Lumens
			112	105	83	112	108	86	122	111	94	126	113	113	LPW

Lumen Package	Distribution	Input Watts	3000K			3500K			4000K			5000K			
			70CRI	80CRI	90CRI	70CRI	80CRI	90CRI	70CRI	80CRI	90CRI	70CRI	80CRI	90CRI	
100000LM	FD	762	86855	81178	64148	86855	83449	66986	94803	86287	72663	97641	87423	79475	Lumens
			114	107	84	114	110	88	124	113	95	128	115	104	LPW
	FDFR	762	79261	74080	58539	79261	76153	61129	86513	78743	66310	89104	79779	72526	Lumens
			104	97	77	104	100	80	114	103	87	117	105	95	LPW
	FSMG	762	87927	82180	64940	87927	84479	67813	95973	87353	73560	98846	88502	80456	Lumens
			115	108	85	115	111	89	126	115	97	130	116	106	LPW
	MD	762	92750	86688	68502	92750	89113	71533	101237	92144	77595	104268	93356	84869	Lumens
			122	114	90	122	117	94	133	121	102	137	123	111	LPW
	MDFR	762	85712	80110	63304	88027	82351	66105	93555	85152	71707	96356	86272	78429	Lumens
			112	105	83	116	108	87	123	112	94	126	113	103	LPW
	ND	762	93436	87329	69008	93436	89772	72062	101986	92826	78169	105039	94047	85497	Lumens
			123	115	91	123	118	95	134	122	103	138	123	112	LPW
	NDA	762	94265	88104	69621	94265	90569	72701	102891	93649	78862	105971	94881	86256	Lumens
			124	116	91	124	119	95	135	123	103	139	125	113	LPW
	NDFR	762	85760	80154	63339	85760	82397	66141	93607	85199	71747	96410	86320	78473	Lumens
			113	105	83	113	108	87	123	112	94	127	113	103	LPW
	WD	762	92800	86735	68539	92800	89161	71572	101292	92194	77637	104325	93407	84915	Lumens
			122	114	90	122	117	94	133	121	102	137	123	111	LPW
	WDA	762	94615	88431	69879	94615	90905	72971	103273	93997	79155	106365	95234	86576	Lumens
			124	116	92	124	119	96	136	123	104	140	125	114	LPW
	WDFR	762	80558	75292	59497	80558	77398	62129	87929	80031	67395	90561	81084	73713	Lumens
			106	99	78	106	102	82	115	105	88	119	106	97	LPW

## OPERATIONAL DATA CONTINUED

How to Estimate Delivered Lumens in Emergency Mode						
Use the formula below to estimate the delivered lumens in emergency mode						
<b>Delivered Lumens = P x LPW</b>						
P = Output power of emergency driver.						
LPW = Lumen per watt rating of the luminaire. (See charts on Page 6)						
The LPW rating is also available at <a href="#">Designdlight Consortium</a> .						
P = 15W for E15WCPR						
P = 23.1W for BSL722						
P = 23.1W for BSL722R						
P = 23.1W for BSL722RC						
P = 30W for IE30WCPR						

## EMERGENCY LUMEN OUTPUT EXAMPLE - 15 WATT BATTERY

Approximate Luminaire Efficacy	Approximate lumens at 1 Minute	Approximate lumens at 45 Minute	Approximate lumens at 90 Minutes
100 LPW	1500	1500	<b>1500</b>
110 LPW	1650	1650	<b>1650</b>
120 LPW	1800	1800	<b>1800</b>
130 LPW	1950	1950	<b>1950</b>
140 LPW	2100	2100	<b>2100</b>
150 LPW	2250	2250	<b>2250</b>

## LAT Factors

Ambient	50000LM	60000LM	70000LM	80000LM	90000LM	100000LM
25	100%	100%	100%	100%	100%	100%
30	99%	99%	99%	99%	99%	99%
35	98%	98%	98%	98%	98%	98%
40	97%	97%	97%	97%	97%	97%
45	97%	96%	96%	96%	NA	NA
50	96%	96%	95%	95%	NA	NA
55	95%	95%	94%	NA	NA	NA
60	94%	94%	NA	NA	NA	NA
65	93%	NA	NA	NA	NA	NA

## Impact Resistance (IK Ratings)

Lens	Ratings
Glass	IK06
Acrylic	IK07

## Ambient Temperature Limit Chart ‡

PHZL	Lumen Package	Voltage ‡	Base Fixture	OCC Sensor	Field Adjustable Output	nLight	BSL722/BSL722C	BSL722R/BSL722RC	E15WCPR	ETS	IE30WCPR
Ceiling Pendant	50000LM	120-277V	65 ‡	55	55	40	35	45	40	55	NA
		347-480V	65 ‡	55	55	40	NA	NA	NA	NA	45
	60000LM	120-277V	60	55	55	40	35	45	40	55	NA
		347-480V	60	55	55	40	NA	NA	NA	NA	45
	70000LM	120-277V	55	50	55	40	30	45	40	50	NA
		347-480V	55	50	55	40	NA	NA	NA	NA	45
	80000LM	120-277V	50	50	55	40	NA	45	35	50	NA
		347-480V	50	50	55	40	NA	NA	NA	NA	45
	90000LM	120-277V	40	40	40	25	NA	40	NA	NA	NA
		347-480V	40	40	30	NA	NA	NA	NA	NA	40
	100000LM	120-277V	40	40	40	25	NA	40	NA	NA	NA
		347-480V	40	40	30	NA	NA	NA	NA	NA	40

‡ Notes	
65	149°F (65°C) max ambient with glass optics and 140°F (60°C) max ambient with acrylic optics.
Ambient Temperature Limit Chart	-40°F (-40°C) min ambient.
Voltage	Voltage shown includes MVOLT (120-277V), HVOLT (347-480V) and XVOLT (277-480V).

**OPERATIONAL DATA CONTINUED****PERFORMANCE WITH AO\* Field Adjustable Output**

Lumens	FAO Position	Light Output	Power Consumption
50000LM	1	22%	18%
	2	35%	31%
	3	47%	43%
	4	60%	55%
	5	71%	68%
	6	83%	80%
	7	94%	93%
	8	100%	100%
60000LM	1	21%	18%
	2	35%	30%
	3	47%	42%
	4	60%	54%
	5	72%	67%
	6	83%	80%
	7	95%	93%
	8	100%	100%
70000LM	1	22%	17%
	2	35%	30%
	3	48%	41%
	4	61%	54%
	5	73%	67%
	6	84%	80%
	7	95%	93%
	8	100%	100%
80000LM	1	22%	17%
	2	36%	29%
	3	49%	41%
	4	61%	54%
	5	73%	67%
	6	84%	80%
	7	95%	93%
	8	100%	100%
90000LM	1	22%	16%
	2	36%	29%
	3	50%	41%
	4	62%	54%
	5	74%	67%
	6	85%	80%
	7	95%	93%
	8	100%	100%
100000LM	1	23%	16%
	2	37%	28%
	3	51%	40%
	4	64%	53%
	5	76%	66%
	6	86%	80%
	7	96%	93%
	8	100%	100%

**OPERATIONAL DATA CONTINUED****Lumen Maintenance - PHZL 50000LM**

Ambient	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1.00	0.97	0.96	0.96	0.95	0.93
30	1.00	0.97	0.96	0.96	0.95	0.93
35	1.00	0.97	0.96	0.95	0.95	0.93
40	1.00	0.97	0.96	0.95	0.94	0.92
45	1.00	0.97	0.96	0.95	0.94	0.92
50	1.00	0.96	0.95	0.95	0.94	0.91
55	1.00	0.96	0.95	0.94	0.93	0.91
60	1.00	0.96	0.95	0.94	0.93	0.90
65	1.00	0.96	0.95	0.94	0.93	0.90

**Lumen Maintenance - PHZL 80000LM**

Ambient	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1.00	0.97	0.96	0.95	0.94	0.92
30	1.00	0.97	0.96	0.95	0.94	0.92
35	1.00	0.96	0.95	0.94	0.93	0.91
40	1.00	0.96	0.95	0.94	0.93	0.90
45	1.00	0.96	0.95	0.94	0.93	0.90
50	1.00	0.96	0.95	0.94	0.93	0.89

**Lumen Maintenance - PHZL 60000LM**

Ambient	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1.00	0.97	0.96	0.95	0.95	0.93
30	1.00	0.97	0.96	0.95	0.95	0.92
35	1.00	0.97	0.96	0.95	0.94	0.92
40	1.00	0.97	0.96	0.95	0.94	0.92
45	1.00	0.96	0.95	0.94	0.93	0.91
50	1.00	0.96	0.95	0.94	0.93	0.90
55	1.00	0.96	0.95	0.94	0.93	0.90
60	1.00	0.96	0.95	0.94	0.92	0.89

**Lumen Maintenance - PHZL 90000LM**

Ambient	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1.00	0.97	0.96	0.95	0.94	0.92
30	1.00	0.96	0.95	0.94	0.93	0.91
35	1.00	0.96	0.95	0.94	0.93	0.90
40	1.00	0.96	0.95	0.95	0.94	0.90

**Lumen Maintenance - PHZL 70000LM**

Ambient	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1.00	0.97	0.96	0.95	0.95	0.93
30	1.00	0.97	0.96	0.95	0.94	0.92
35	1.00	0.97	0.96	0.95	0.94	0.92
40	1.00	0.96	0.95	0.94	0.93	0.91
45	1.00	0.96	0.95	0.94	0.93	0.90
50	1.00	0.96	0.95	0.94	0.93	0.90
55	1.00	0.96	0.95	0.94	0.92	0.90

**Lumen Maintenance - PHZL 100000LM**

Ambient	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
25	1.00	0.96	0.95	0.94	0.93	0.90
30	1.00	0.96	0.95	0.94	0.93	0.90
35	1.00	0.96	0.94	0.93	0.92	0.89
40	1.00	0.95	0.93	0.91	0.89	0.84

**COMPONENTS & OPTIONS DATA****LPFD (PF-116) Loop****HKFD (PF-122-A) Hook****HKMAR (PF-129-A) Hook****HKMW (PF-291) Hook****OCS Reloc® One Pass® Drop Cable****SBGR Sensor****SBG BTP Sensor with SMHB Smarthub BTP Control Module****nLight Wired NPP16 D Power Pack****nLight Wired NPP16 D ER Power Pack****nLight Air RPP20 D Power Pack****nLight Air RPP20 D ER Power Pack****nLight Air RSBG Sensor****nLight Air RIO Control Module****AO Adjustable Output Module**