

Phuzion™

PHG LED High Bay



Catalog Number	
Notes	Type

Description

The PHG LED luminaire is designed for light industrial applications where environments are less extreme, but comfortable, uniform lighting and dependable performance are still highly desired. Typical applications include manufacturing, warehouses, automotive, retail, food storage and gymnasiums. 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.](#)

Optics

- One-piece prismatic borosilicate glass reflector and refractor offer the highest levels of uniformity and glare-free performance in its class. Refractor protects LEDs from unwanted dust, helping to maintain delivered lumens.
- Borosilicate glass won't fade and offer the highest levels of luminosity over time.
- IP65 rated refractor protects LEDs from unwanted dust helps maintain delivered lumens.
- Prismatic acrylic available for food storage areas or where glass is not preferred.
- PrismPack® optic: Prismatic borosilicate optic with sealed aluminum cover to minimize dirt accumulation and improve optical efficiency. Use when uplight is not desired or required.

Mechanical

- Hands free wiring design allows for quick and easy installations.
- Open ventilated design naturally pulls heat up and away from luminaire, extending the life of critical components.
- Robust cast aluminum heat sink (0.6% CU content) and offset aluminum electrical compartment maximize thermal performance.
- Ambient range -40°F (-40°C) up to 131°F (55°C) ambient rating.
- Super durable TGIC thermoset powder coat finish provides 1500 hours salt fog rating.

Electrical

- Standard 0-10volt dimming.
- Fault-tolerant LED light engine.
- Luminaire Surge Protection Level: Designed to withstand up to 6kV/3kA per ANSI C82.77-5-2015.
- CCT: 3000K, 3500K, 4000K, 5000K.
- CRI: 70CRI, 80CRI & 90CRI.
- Dynamic temperature sensing is standard to protect the electronic components in the event the maximum operating ambient temperature is exceeded.

Wireless Networking

nLight® AIR is the ideal solution for retrofit or new construction spaces where additional wiring can be labor intensive. It is available with or without an integral sensor. Integrated smart sensors or dimming and switching modules must be part of each luminaire in the nLight Air network, which can be grouped to control multiple luminaires. It pairs to other luminaires and wall switches through our mobile app. CLAIRITY PRO, which allows for simple sensor adjustment. The granularity of control with the digital PIR occupancy detection and daylight sensing makes this a great solution for any application.

Listings

- CSA Certified to UL and C-UL standards for ambient temperatures ranging from -40°F (-40°C) up to 131°F (55°C).
- NOM certified.
- 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 to confirm which versions are qualified.

Warranty

5-year limited warranty. Complete warranty terms located at: 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

- Light Manufacturing
- Warehousing
- Retail
- Food Storage
- Automotive
- Gymnasium

Dimensions: Inches (millimeters) unless otherwise noted.

- Diameter: 19.8"
- Height: 12.65"
- Weight: Glass 29 lbs., Acrylic 17 lbs.
- Emergency Internal: Add 10.5 lbs.

A+ Capable Luminaire

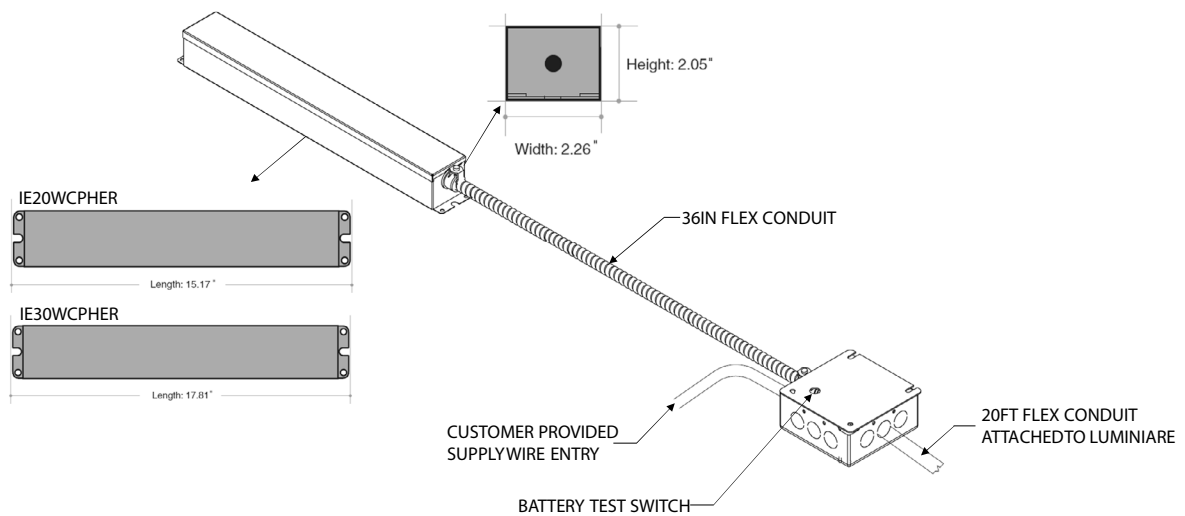
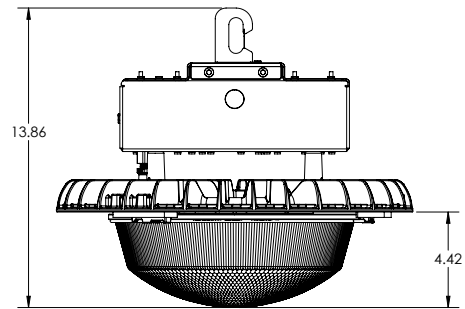
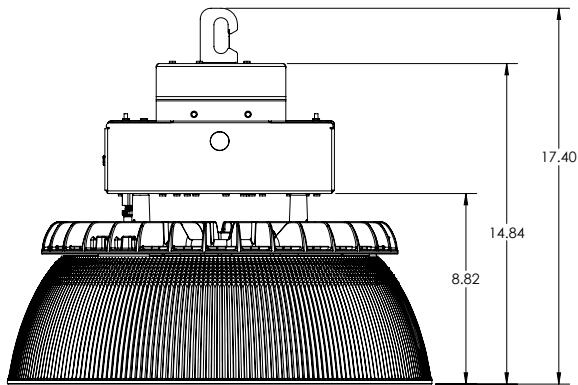
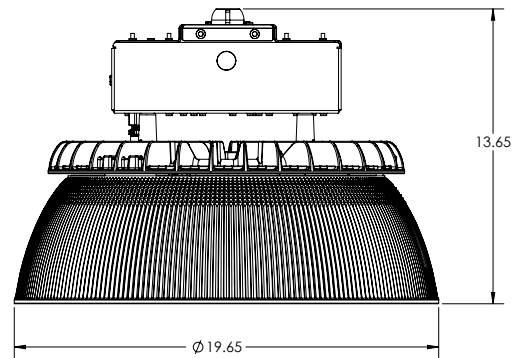
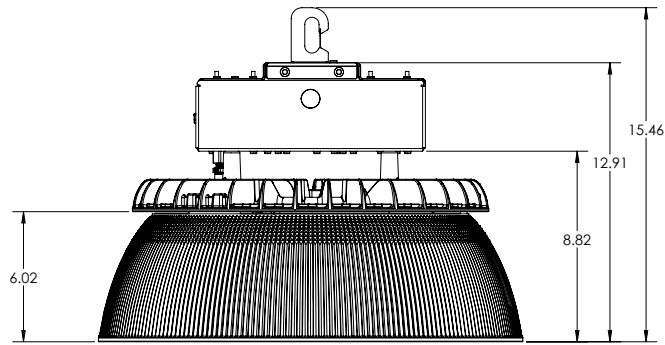
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

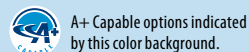
- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® or XPoint™ Wireless control networks marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

DIMENSIONAL DATA





ORDERING INFORMATION †

Example: PHG 24000LM SEF NGG MVOLT 40K 80CRI WHK DWHXD

Series	Lumens †	Performance package	Optical Assembly	Voltage
PHG	9000LM 9,000 nominal lumens	SEF Standard efficiency	NGG Narrow glass refractor and glass reflector	MVOLT Auto sensing (120-277)
	12000LM 12,000 nominal lumens	HEF High efficiency	MGG Medium glass refractor and glass reflector	HVOLT Auto sensing (347/480) †
	15000LM 15,000 nominal lumens		WGG Wide glass refractor and glass reflector	XVOLT Auto sensing (277-480V) †
	18000LM 18,000 nominal lumens		NGGFR Frosted narrow glass refractor and glass reflector	120 120V
	24000LM 24,000 nominal lumens		MGGFR Frosted medium glass refractor and glass reflector	208 208V
	30000LM 30,000 nominal lumens		WGGFR Frosted wide glass refractor and glass reflector	240 240V
	36000LM 36,000 nominal lumens		NAA Narrow acrylic refractor and acrylic reflector	277 277V
			WAA Wide acrylic refractor and acrylic reflector	347 347V
			NGA Narrow glass refractor and acrylic reflector	480 480V
			MGA Medium glass refractor and acrylic reflector	277X 277V †
			WGA Wide glass refractor and acrylic reflector	347X 347V †
			NGAFR Frosted narrow glass refractor and acrylic reflector	480X 480V †
			MGAFR Frosted medium glass refractor and acrylic reflector	
			WGAFR Frosted wide glass refractor and acrylic reflector	

Color temperature	Color rendering index	Mounting	Options
30K 3000K CCT	70CRI	WHK Wire hook	<u>Individual Sensors:</u> † LSXR50 Passive infrared indoor occupancy sensor, high bay aisleway, default time delay 10 minutes (with minimum 15 minutes on time LINK) †
35K 3500K CCT	80CRI	PM Pendant 3/4" female	LSXR50 HL Passive infrared indoor occupancy sensor, high mount aisleway, minimum dim level of driver, default time delay 10 minutes (with minimum 15 minutes on time LINK)
40K 4000K CCT	90CRI	QD Quick disconnect †	LSXR50 P Passive infrared indoor occupancy sensor, high bay aisleway, switching photocell on/off LINK †
50K 5000K CCT		NDT Non-disconnect thru-wire	LSXR6 Passive infrared indoor occupancy sensor, high mount 360°, default time delay 10. minutes (with minimum 15 minutes on time LINK) †
		QR Quick disconnect retrofit †	LSXR6 HL Passive infrared indoor occupancy sensor, high mount 360°, minimum dim level of driver, default time delay 10 minutes (with minimum 15 minutes on time LINK) †
		QN Non-disconnect retrofit †	LSXR6 P Passive infrared indoor occupancy sensor, high mount 360°, switching photocell (on/off) default time delay 10 minutes (with minimum 15 minutes on time LINK) †
		AC10 10' aircraft cables (ships as pair)	LSXR10 Passive infrared indoor occupancy sensor, low mount 360°, default time delay 10. minutes (with minimum 15 minutes on time LINK) †
		AC20 20' aircraft cables (ships as pair)	LSXR10 HL Passive infrared indoor occupancy sensor, low mount 360°, minimum dim level of driver, default time delay 10 minutes (with minimum 15 minutes on time LINK) †
			LSXR10 P Passive infrared indoor occupancy sensor, low mount 360°, switching photocell (on/off) default time delay 10 minutes (with minimum 15 minutes on time LINK) †
			LSX45 OCC BTP LT 360° High mount occ. sensor, pre-wired, Bluetooth LINK †
			LSX45 HL BTP LT 360° High mount sensor w/HL default, pre-wired, Bluetooth LINK †
			LSX45 ADC BTP LT 360° High mount sensor w/ADC default, pre-wired, Bluetooth LINK †
			LSX45 ANL BTP LT 360° High mount sensor w/ANL default, pre-wired, Bluetooth LINK †
			<u>nLight Wired:</u> † nPP16 D nLight dimming & switching module LINK †
			<u>nLight Wireless:</u> † NLTAIR2 RLSXR6 nLight AIR Generation 2 enabled 360° high mount sensor LINK † NLTAIR2 RLSXR6 EM nLight AIR Generation 2 enabled 360° high mount sensor with emergency relay (not available with battery pack LINK) † NLTAIR2 RLSXR10 nLight AIR Generation 2 enabled 360° low mount sensor LINK † NLTAIR2 RLSXR10 EM nLight AIR Generation 2 enabled 360° low mount sensor with emergency relay (not available with battery pack LINK) † NLTAIR2 rPP20 D nLight AIR Generation 2 enabled dimming and switching module LINK † NLTAIR2 rPP20 D ER nLight AIR Generation 2 enabled dimming and switching module with emergency relay (not available with battery pack LINK) † NLTAIR2 rPP20 D EM nLight Generation 2 enabled dimming and switching module with emergency relay (not available with battery pack LINK) † NLTAIR2 RIO nLight AIR (wireless) gen 2 control device (dimming & switching LINK) †
			<u>X-point Wireless:</u> † XAD XPoint™ wireless enabled LINK † XAD924 XPoint™ Wireless 0-10V relay, internal, lower max ambient, meets UL924 LINK † XPA CMRB6 XPoint™ wireless enabled with photocell sensor & occupancy sensor LINK †
			<u>Other Controls:</u> † AO Field adjustable output dimming †

NOTE: † indicates option chosen has ordering restrictions. Please reference ordering restrictions chart. Options are sorted alphanumerically.

Options continued on page 4.
For accessories and footnotes, see page 4.

ORDERING INFORMATION (cont'd.) ‡

Options (continued)		Finish
Cordsets: ‡		
CPTL16W	6ft white cord with NEMA twist lock plug, 15 amp, 16 gauge, 3 conductor	DGXD Gray, super durable
CPTL20A16W	6ft white cord with NEMA twist lock plug, 20 amp, 16 gauge, 3 conductor	DWHXD White, super durable
CPSB16W	6ft white cord with NEMA straight blade plug, 15 amp, 16 gauge, 3 conductor	DNXD Satin nickel, super durable
CNP16W	6ft white cord no plug, 16 gauge, 3 conductor	DBXD Black, super durable
CNP164CW	6ft white cord no plug, 16 gauge, 4 conductor	DGRXD Graphite, super durable
CNP165CDW	6ft white cord no plug, 16 gauge, 5 conductors that include low voltage dimming wires	
PHCB	Powerhook cord for 120-277, 347V	
PHCBL8480	Powerhook cord for 480V	
OCS	RELOC® OnePass® selectable cable 6', 3 conductor, factory installed	
UPH35	Thru wire power hook, must specify voltage	
UPH36	Pendant power hook, must specify voltage	
	Other options:	
	HKMAR Anti-rotational hook, 3/4" male (PF-129) ‡	
	LPMD Loop, 3/4" male (PF-105) ‡	
	HKMD Safety hook, 3/4" male (PF-121-A) ‡	
	HK455 Safety hook aluminum, 3/4" male ‡	
	WGX Wireguard	
	SCK36 36" safety chain	
	SCK72 72" safety chain	
	SCK120 120" safety chain	
	E10WMCP 10W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	
	E15WMCP 15W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	
	IE20WCPHE 20W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	
	IE30WCPHE 30W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	
	IE20WCPHER Remote lota 20W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	
	IE30WCPHER Remote lota 30W emergency battery pack, Certified in CA Title 20 MAEDBS ‡	
	IE18WCPHECW lota 18W emergency battery pack, cold weather, Certified in CA Title 20 MAEDBS ‡	
	ETS Generator transfer device ‡	
	GRR Rod and ring optic assembly ‡	
	NSG Non-silicone gaskets	
	SPD Secondary surge device, 10kV ‡	
	USPOM Assembled in USA	

Accessories: Order as separate catalog number.		
PHGCHAIN3	3ft safety chain	LPFD Safety loop 3/4" female (PF-116-A)
PHGCHAIN6	6ft safety chain	HKFD Safety hook 3/4" female (PF-122-A)
PHGCHAIN10	10ft safety chain	HKMAR Safety anti-rotational hook, 3/4" male (PF-129-A)
PHGWGA	Wireguard	LPMD Safety loop 3/4" male (PF-105-B)
UPH 35 SM *** WH	Thru-wire, must specify voltage. Available with 120, 208, 240, 277, 348V. Need PHCB option on luminaire	HKMD Safety hook, 3/4" male (PF-121-A)
UPH 36 PM *** WH	Pendant, must specify voltage. Available with 120, 208, 240, 277, 348V. Need PHCB option on luminaire	HK455 Safety hook aluminum, 3/4" male
UPH 35 SM L8480 WH	Thru-wire. Available with 480 voltage only. Need PHCBL8480 option on luminaire	HAC10 10' aircraft cables (ships as pair)
UPH 36 PM L8480 WH	Pendant. Available with 480 voltage only. Need PHCBL8480 option on luminaire	HAC20 20' aircraft cables (ships as pair)

NOTE: ‡ indicates option chosen has ordering restrictions. Please reference ordering restrictions chart, page 5. Options are sorted alphanumerically.

Option Value Ordering Restrictions	
Option value	Restriction
277X	Utilizes Xvolt Driver. Ships standard with 10kV surge protection. Not available with rIO or LSX BTP controls.
347X	Utilizes Xvolt Driver. Ships standard with 10kV surge protection. Not available with rIO or LSX BTP controls.
480X	Utilizes Xvolt Driver. Ships standard with 10kV surge protection. Not available with rIO or LSX BTP controls.
Cordsets	Nomenclature shown is for white 6' cords. Cords are also available in black and in 3,10,12,15,20, and 25 foot lengths. To order black remove the W from the nomenclature. EX. CPTLW10FT. CP5B and CPTL option are not available with MVOLT, HVOLT, or XVOLT. Cords with plugs are not available with battery packs. Order CNP164CW (4 conductor) cord set when unswitched hot is required for charging emergency battery pack.
E10WMCP	Available with MVOLT, 120, 208, 240, 277, 277X. Ships standard with SPD. Not available with ETS or ER controls. When ordered with cord set, order 4C option if unswitched hot is required for battery pack. When ordered with 36000LM package, fixture will utilize top battery box.
E15WMCP	Available with MVOLT, 120, 208, 240, 277, 277X. Ships standard with SPD. Not available with ETS or ER controls. When ordered with cord set, order 4C option if unswitched hot is required for battery pack. When ordered with 36000LM package, fixture will utilize top battery box.
ETS	MVOLT, 120, 208, 240, 277, 277X only. Ships standard with SPD. Not available with control options.
GRR	Not available with NGLR, MGLR, WGLR, or MALR less reflector options.
HK455	Not available with PM option.
HKMAR	Not available with PM option.
HKMD	Not available with PM option.
HVOLT	Ships standard with 10kV surge protection.
IE18WPCPW	Available with MVOLT, 120, 208, 240, 277, 277X. Ships standard with SPD. Not available with ETS or ER controls. When ordered with cord set, order CNP164CW option if unswitched hot is required for charging battery pack. When ordered with 36000LM package, fixture will utilize top battery box.
IE20WCPHE	Available with HVOLT, 347, 480, 347X, 480X. Ships standard with SPD. Not available with ETS or ER controls. When ordered with cord set, order CNP164CW option if unswitched hot is required for charging battery pack.
IE20WCPHER	Available with MVOLT, 120, 208, 240, 277, 277X. Ships standard with SPD. Not available with ETS or ER controls. When ordered with cord set, order CNP164CW option if unswitched hot is required for charging battery pack. When ordered with 36000LM package, fixture will utilize top battery box.
IE30WCPHE	Available with HVOLT, 347, 480, 347X, 480X. Ships standard with SPD. Not available with ETS or ER controls. When ordered with cord set, order CNP164CW option if unswitched hot is required for charging battery pack.
IE30WCPHER	Available with MVOLT, 120, 208, 240, 277, 277X. Ships standard with SPD. Not available with ETS or ER controls. When ordered with cord set, order CNP164CW option if unswitched hot is required for charging battery pack. When ordered with 36000LM package, fixture will utilize top battery box.
Individual sensors	Not available with any other control option. Ships standard with SPD option.
LPMD	Requires PM mounting option.
LSX45 ACD BTP LT	Not available with XVOLT, 277X, 347X, 480X. ER versions that ship standard with the ETS are also available. EX LSX ACD BTP LT ER
LSX45 ANL BTP LT	Not available with XVOLT, 277X, 347X, 480X. ER versions that ship standard with the ETS are also available. EX LSX ANL BTP LT ER
LSX45 HL BTP LT	Not available with XVOLT, 277X, 347X, 480X. ER versions that ship standard with the ETS are also available. EX LSX HL BTP LT ER
LSX45 OCC BTP LT	Not available with XVOLT, 277X, 347X, 480X. ER versions that ship standard with the ETS are also available. EX LSX OCC BTP LT ER
LSXR10	Ships standard with SPD. If ER option is required add ER to nomenclature. EX LSXR10 ER version utilizes IOTA ETS device, not available with emergency battery options or cord set options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LSXR10 HL	Ships standard with SPD. Available with 3 wire cord options only when cord set option is required. If ER option is required add ER to nomenclature. EX LSXR10 HL ER version utilizes IOTA ETS device, not available with emergency battery options or cord sets options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LSXR10 P	Ships standard with SPD. Available with 3 wire cord options only when cord set option is required. If ER option is required add ER to nomenclature. EX LSXR10 P ER version utilizes IOTA ETS device, not available with emergency battery options or cord sets options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LSXR50	Ships standard with SPD. If ER option is required add ER to nomenclature. EX LSXR50 ER version utilizes IOTA ETS device, not available with emergency battery options or cord set options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LSXR50 HL	Ships standard with SPD. Available with 3 wire cord options only when cord set option is required. If ER option is required add ER to nomenclature. EX LSXR50 HL ER version utilizes IOTA ETS device, not available with emergency battery options or cord sets options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LSXR50 P	Ships standard with SPD. Available with 3 wire cord options only when cord set option is required. If ER option is required add ER to nomenclature. EX LSXR50 P ER version utilizes IOTA ETS device, not available with emergency battery options or cord sets options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LSXR6	Ships standard with SPD. If ER option is required add ER to nomenclature. EX LSXR6 ER version utilizes IOTA ETS device, not available with emergency battery options or cord set options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LSXR6 HL	Ships standard with SPD. Available with 3 wire cord options only when cord set option is required. If ER option is required add ER to nomenclature. EX LSXR6 HL ER version utilizes IOTA ETS device, not available with emergency battery options or cord sets options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LSXR6 P	Ships standard with SPD. Available with 3 wire cord options only when cord set option is required. If ER option is required add ER to nomenclature. EX LSXR6 P ER version utilizes IOTA ETS device, not available with emergency battery options or cord sets options. ER version is available with MVOLT, 120, 208, 240, 277, 277X.
LUMENS	See Ambient chart for ambient ratings.
NDT	Not available with emergency battery pack options.
nLight Wired	Not available with any other control option. Ships standard with SPD option.
nLight Wireless	Not available with any other control option. Ships standard with SPD option.
NLTAIR2 rIO	Not available with XVOLT, 277X, 347X, 480X.
NLTAIR2 rIO ER	Not available with HVOLT, 347, 480, XVOLT, 347X, or 480X. Ships standard with SPD. Utilizes Iota ETS device. Not available with battery pack options.
NLTAIR2 RLSXR10 ER	Not available with HVOLT, 347, 480, XVOLT, 347X, or 480X. Ships standard with SPD. Utilizes Iota ETS device. Not available with battery pack options.
NLTAIR2 RLSXR6 ER	Not available with HVOLT, 347, 480, XVOLT, 347X, or 480X. Ships standard with SPD. Utilizes Iota ETS device. Not available with battery pack options.
nPP16 D	Available with 120, 277, or 347 volt only. Ships standard with SPD.
Other controls	Not available with any other control option.
QD	Not available with emergency battery pack options.
QN	Shipped without top hanger. Not available with emergency battery packs. For existing product only (retrofit).
QR	Shipped without top hanger. Not available with emergency battery pack options. For existing product only (retrofit).
SPD	Not available with HVOLT or XVOLT. Not available with LSXR, RLSXR, NPP16D, RPP20D, E10WMCP, E15WMCP, IE20WCPHE, IE30WCPHE, IE20WCPHER, IE30WCPHER, IE18WCPHECW.
XAD	Not available with HVOLT, XVOLT. 347, 480, 347X, 480X Utilizes Transformer. Ships standard with SPD.
XAD924	Not available with HVOLT, XVOLT. 347, 480, 347X, 480X Utilizes Transformer. Ships standard with SPD.
XPA CMRB6	Not available with HVOLT, XVOLT. 347, 480, 347X, 480X Utilizes Transformer. Ships standard with SPD.
X-point Wireless	Not available with any other control option. Ships standard with SPD option.
XVOLT	Utilizes Xvolt Driver. Ships standard with 10kV surge protection. Not available with rIO or LSX BTP controls.

PRODUCT DATA

LAT

Ambient Temp	25C	30C	35C	40C	45C	50C	55C	100%
LAT Multiplier	1.00	0.99	0.99	0.98	0.97	0.97	0.96	99%

FAO

FAO Position	% Lumen Output	% Wattage
1	37%	37%
2	47%	46%
3	62%	61%
4	74%	73%
5	86%	85%
6	100%	100%
7	100%	100%
8	100%	100%

OPERATING AMBIENT CHART

Lumen	Standard	LSXR, rLSXR, LSX BTP, SBOR, rSBOR	rIO	NPP16 D	RPP20 D	ETS	XAD	XPA CMRB
9000	55 C	55 C	55 C	35 C	45 C	35 C	45 C	45 C
12000	55 C	55 C	55 C	35 C	45 C	35 C	45 C	45 C
15000	55 C	55 C	55 C	35 C	45 C	35 C	45 C	45 C
18000	55 C	55 C	55 C	35 C	45 C	35 C	45 C	45 C
24000	55 C	55 C	55 C	35 C	45 C	35 C	30 C	45C
30000	55 C	55 C	55 C	35 C	45 C	35 C	30 C	45C
36000	50 C	50 C	50 C	35 C	45 C	35 C	30 C	45C

Lumen	E10WMCP E15WMCP	IE18WCPHECW	IE20WCPHE IE30WCPHE	IE20WCPHER IE30WCPHER
9000	25 C	30 C	30 C	55 C (remote mount)
12000	25 C	30 C	30 C	55 C (remote mount)
15000	25 C	30 C	30 C	55 C (remote mount)
18000	25 C	30 C	30 C	55 C (remote mount)
24000	25 C	30 C	30 C	55 C (remote mount)
30000	25 C	30 C	30 C	55 C (remote mount)
36000	25 C	30 C	30 C	50 C (remote mount)

Nominal Emergency Lumens

SEF	E10WMCP	E15WMCP	IE18WCPHECW	IE20WCPHE/R	IE30WCPHE/R
9000	1808	2622	3077	3689	5385
12000	1812	2627	3083	3696	5394
15000	1775	2587	3044	3611	5289
18000	1773	2583	3040	3606	5282
24000	1800	2630	3099	3752	5436
30000	1834	2680	3159	3824	5541
36000	1861	2724	3213	3872	5617
HEF	E10WMCP	E15WMCP	IE18WCPHECW	IE20WCPHE/R	IE30WCPHE/R
9000	1915	2777	3258	3910	5708
12000	1876	2734	3217	3818	5594
15000	1860	2713	3194	3793	5570
18000	1967	2873	3386	3995	5866
24000	1960	2864	3375	4087	5922
30000	2022	2959	3491	4208	6105
36000	1959	2870	3387	4068	5908

PRODUCT DATA

OPERATIONAL DATA

PHG SEF	Lumen Package	Wattage (120V)	Lumen Output	LPW
SEF 5000K, 80CRI MGG	9000 LM	59	9257	157
	12000 LM	81	12252	152
	15000 LM	101	15173	150
	18000 LM	123	17944	145
	24000 LM	158	24306	154
	30000 LM	201	30539	152
	36000 LM	237	36453	154

PHG HEF	Lumen Package	Wattage (120V)	Lumen Output	LPW
HEF 5000K, 80CRI MGG	9000 LM	55	9232	169
	12000 LM	75	12310	165
	15000 LM	94	15069	161
	18000 LM	108	18254	170
	24000 LM	144	24471	170
	30000 LM	178	31068	174
	36000 LM	219	36538	167

SCALING FACTOR TABLES

CCT/CRI Multipliers			
SEF	70 CRI	80 CRI	90 CRI
5000K	1.06	1.00	0.88
4000K	1.05	0.98	0.86
3500K	1.03	0.96	0.81
3000K	1.02	0.94	0.78

CCT/CRI Multipliers			
HEF	70 CRI	80 CRI	90 CRI
5000K	1.00	1.00	0.83
4000K	0.99	0.98	0.82
3500K	0.97	0.93	0.80
3000K	0.96	0.92	0.77

LUMEN MAINTENANCE

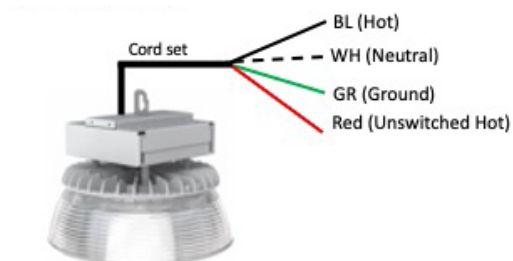
Projected Lumen Maintenance - PHG 24L SEF						
Ambient	0	15,000	30,000	45,000	60,000	100,000
25° C	1.00	0.97	0.94	0.91	0.89	0.82

Projected Lumen Maintenance - PHG 24L HEF						
Ambient	0	15,000	30,000	45,000	60,000	100,000
25° C	1.00	0.97	0.95	0.93	0.9	0.85

Optic	Multiplier
NA	1.06
WAA	1.05
NAA	1.04
MG	1.03
WG	1.03
NG	1.03
WGA	1.02
MGA	1.02
WGG	1.00
MGG	1.00
NGA	1.00
NGG	0.98
NGAFR	0.91
WGGAL	0.90
MGAFR	0.89
MGGAL	0.89
NGGFR	0.87
NGGAL	0.86
MGGFR	0.86
WGAFR	0.84
WGGFR	0.81

CORD SETS WITH EMERGENCY WIRING DETAILS

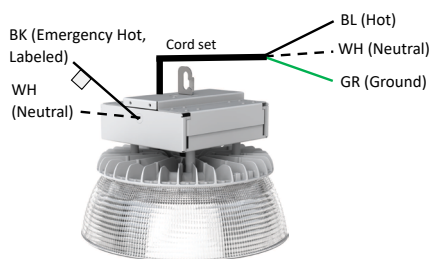
When battery is ordered with a 4-conductor cord set or Reloc® cord (OCS4C):



The 4 conductor cord set will include the hot (BL), neutral (WH), and ground (GR) conductors AND the unswitched hot will be a separate conductor (RED).

Note: To get IBG wired from the factory for 24/7 operation, with on/off controlled by sensor rather than switch, contact your factory representative to request the normal hot and unswitched hot wired together in the fixture. Consult local codes to determine if this is allowable.

When ETS is used (individually or on ER sensor) with a 3-conductor cord set or Reloc® cord (OCS):



The 3 conductor cord set will include the hot (BL), neutral (WH), and ground (GR) conductors but not the dedicated hot and neutral for emergency function

- The emergency hot (BK) and neutral (WH) will exit the fixture out of the KO of the end plate.
- If KO-mounted sensor is included, the emergency hot and neutral will come out of opposite end plate KO.

EMERGENCY OPERATION SCENARIOS

	Standard Sensor or Control Device (commonly used with Battery Pack Option)	EM Solution (Used when switching single incoming hot to generator power)	ER Solution (Used when switching to generator power via a 2nd hot lead)
Emergency Lighting Strategy	*Luminaire-integral battery pack and emergency driver *Generator transfer device	*Diesel genset emergency backup supply *Slow transfer inverter (>30ms) emergency backup supply	*Fast Transfer (FT) inverter emergency backup supply *Uninterruptible Power System (UPS) emergency
Recommended Control Device Option	*Not specifically listed for emergency use. *Wired such that a separately listed emergency device provides emergency lighting power and/or control during loss of normal power scenarios.	*UL924 listed *Utilizes Power Interruption Detection to initiate lighting control override during loss of normal power scenarios. *Requires power interruption > 30 ms to luminaire during transfer to emergency backup supply.	*UL924 listed *Utilizes dedicated Normal Power sensing leads to initiate lighting control override during loss of normal power scenarios. *Requires connections to both emergency and normal power circuits.

Function	Sequence of Operations	Standard Sensor or Control Device	EM Solution (Generator 1 Hot)	ER Solution* (Generator 2 Hots)	IBG Standard Sensor Settings					
					Vacancy Time Out	Dim to Off Time Delay	High Trim	Low Trim	Photocell Set Point	
Standalone Sensors (Individual control per fixture)	On/Off	Lights turn on when motion detected; Upon vacancy, Lights turn off after timeout.	LSXR6	RLSXR6 OEX EM	LSXR6 ER	10 min	-	-	-	-
	High/Low (Off)	"Lights turn on to high trim when presence is detected; Upon vacancy, the lights dim to low trim after timeout and turn off after "Dim To Off" Time Delay. For High/Low (Never Off) function, bypass the relay by bringing power directly into driver rather than wiring hot through LSXR device."	LSXR6 HL	-	LSXR6 HL ER	10 min	2.5 min	100%	"10% (Driver Low)"	-
	Photocell	Lights turn on unless ambient light level is above set point; If ambient light levels in the space exceed the photocell set point, lights will turn off even during occupancy.	LSXR6 P	-	LSXR6 P ER	-	-	-	-	4 fc
	Dimming + Photocell	Lights turn on when presence is detected unless ambient light level is above set point; Upon vacancy, the lights dim to low trim, then turn off after timeout; During occupancy, automatically raise and lower electric light level to maintain set point and turn off, depending on ambient light.	LSXR6 ADC	RLSXR6 ODP EM	LSXR6 ADC ER	10 min	2.5	-	-	4 fc
	Dimming + Photocell + High/Low	Lights turn on when presence is detected unless ambient light level is above set point; Upon vacancy, lights dim to low trim after timeout and remain at low trim until presence is detected; Automatically raise and lower electric light level to maintain set point during occupancy and during vacancy keeps lights at low trim if ambient light is not sufficient.	LSXR6 ANL	-	LSXR6 ANL ER	10 min	-	100%	10%	4 fc
Note: For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". Ex. LSXR10 P.										

Bluetooth Sensors (Configurable via mobile Bluetooth app)	On/Off	Lights turn on when motion detected; Upon vacancy, Lights turn off after timeout.	LSX45 OCC	-	LSX45 OCC BTP ER	10 min	-	-	-	-
	High/Low (Off)	Lights turn on to high trim when presence is detected; Upon vacancy, the lights dim to low trim after timeout and turn off after "Dim To Off" Time Delay.	LSX45 HL	-	LSX45 HL BTP ER	10 min	2.5 min	100%	10%	-
	Dimming + Photocell	Lights turn on when presence is detected unless ambient light level is above set point; Upon vacancy, the lights dim to low trim during timeout; During occupancy, automatically raise and lower electric light level to maintain set point and turn off, depending on ambient light.	LSX45 ADC	-	LSX45 ADC BTP ER	10 min	-	-	10%	50 fc
	Dimming + Photocell + High/Low (Never Off)	Lights turn on when presence is detected unless ambient light level is above set point; Upon vacancy, lights dim to low trim after timeout and remain at low trim until presence is detected; Automatically raise and lower electric light level to maintain set point during occupancy and during vacancy keeps lights at low trim if ambient light is not sufficient.	LSX45 ANL	-	LSX45 ANL BTP ER	10 min	-	100%	10%	50 fc

nLight wired Networked Controls	Dimming	Programmable On/Off control only with dimming - no sensor (device externally mounted to fixture access plate)	NPP16 D	-	NPP16 DER	-	-	100%	1%	-
	Note: For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". Ex. RLSXR10									

nLight AIR Wireless Sensors	Dimming + Photocell + Occupancy	Wirelessly programmable network sensor - On/Off control with dimming, occupancy detection, and daylight harvesting (Sensor embedded in fixture)	NLTAIR2 RLSXR45	NLTAIR2 RLSXR6 EM	NLTAIR2 RLSXR45 ER	7.5 min	-	100%	10%	50 fc
	Dimming	Wirelessly programmable On/Off control with dimming - no sensor (Device embedded in fixture)	NLTAIR2 RIO	NLTAIR2 RPP20 D EM	NLTAIR2 RIO ER	-	-	100%	10% (driver low)	-

***All ER solutions except nLight wired, include standard sensor or control device with a factory-installed --+lota ETS##-DR (UL924 bypass device). This device is integral to the fixture and will include a hot and neutral lead for the dedicated emergency circuit.**

Integrated Occupancy Sensor with Bluetooth® Programmability

- Programmable sensor settings over Bluetooth® with Acuity VLP smartphone app.
- Default programming options to service various application spaces - occupancy detection, 0-10V dimming and daylight harvesting.
- 360° High Mount and High Mount Aiseway lens detection options for mounting heights up to 40 ft.
- Integrated retractable lens mask included to block unwanted detection.
- Sensor ambient temperature rating of -40°F (-40°C) to 158°F (70°C).



Bluetooth Default Programming

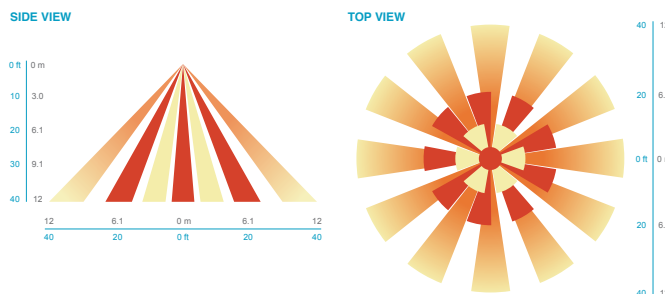
Model	Default Operation	LSXR Equivalent	Occupancy Time Delay	Photocell Mode	Photocell Set-point	Low Trim	High Trim	Dim to Off Time Delay
LSXxxx	On/Off Occupancy Only	LSXR6 LT or LAOOSTU	10 minutes	Disabled	n/a	n/a	100%	Disabled
LSXxxx HL	Occupancy w/ 0-10V Dimming (High/Low/Off)	LSXR6 HL LT or LAHOSTU	10 minutes	Disabled	n/a	10%	100%	2.5 minutes
LSXxxx ADC	Occupancy w/ Dim & Switch Photocell	LSXR6 ADC LT or LAMOSTU	10 minutes	On/Off & Auto Dim	50 fc	10%	100%	0 seconds
LSXxxx ANL	Dim & Switch Photocell with High/Low Occupancy Operation	LSXR6 ANL LT or LAGOSTU	10 minutes	On/Off & Auto Dim	50 fc	10%	100%	Stay Dim/ Never Off

Note: Lens detection noted in place of 'xxx'

LSX45 COVERAGE PATTERNS

45- HIGH MOUNT 360°

- Optimized full coverage pattern for 10 – 40 ft. (3.1 – 12 m)
- Reliable detection of large motion (e.g. pedestrian walking traffic) up to 30 ft. (9.1 m) mounting height
- Reliable detection of extra-large motion (e.g. forklift traffic) up to 40 ft. (12 m) mounting height
- Stow-able rotating lens shield can be utilized to mask areas in which detection is not desired

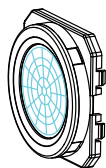


LSXR – Fixture Mount Occupancy Sensor (see www.AcuityControls.com for additional information)

- Three interchangeable lens options to satisfy multiple mounting heights and coverage pattern requirements.
- Integrated mounting bracket drops lens down 3" from chase nipple.
- Single or dual relay versions — designed with robust protection from the harsh switching requirements of T5 and LED loads.
- Photocell and 0-10VDC dimming options.
- No PIR field calibration or sensitivity adjustments required.
- Sensor ambient temperature rating of 14°F (-10°C) to 131°F (55°C).

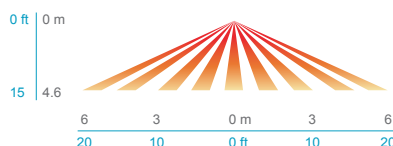
LSXR COVERAGE PATTERNS

HIGH MOUNT 360° LENS (#6)

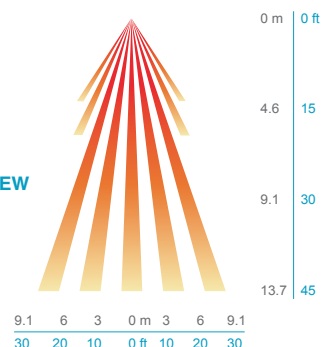


- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g. walking) up to a 35 ft (10.76 m) mounting height
- Excellent detection of extra large motion (e.g. forklifts) up to a 45 ft (13.72 m) mounting height

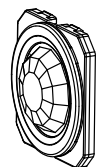
LOW VIEW



HIGH VIEW

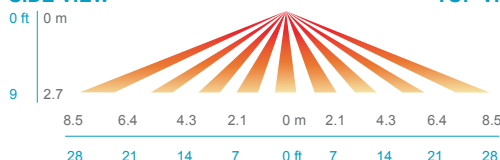


LOW MOUNT 360° LENS (#10)

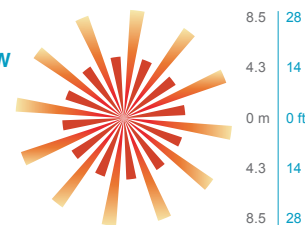


- Best choice for large motion detection (e.g. walking)
- 360° conical shaped pattern
- Provides ~24 ft (7.32 m) radial coverage (~2000 ft²) when mounted at 9 ft (2.74 m)
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage
- Detection range improves when walking across beams compared to into beams

SIDE VIEW



TOP VIEW



COMPONENTS & OPTIONS DATA



XPoint wireless
Integrated wireless control technology connecting fixtures, sensors, and other modules together.



A0
Field adjustable output dimming.



nPP16D
nLight on/off, dim control.



nPP16D ER
nLight UL924 Emergency operation.