

PhuzionL™

Large LED High Bay



DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are qualified.



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.
- Pendant mount standard.
- Super Durable TGIC thermoset powder coat finish provides 1500 hours salt fog rating. CR (corrosion resistant) optional 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 (must specify the DIM option to enable dimming).
- Optional robust driver solution designed to assist with power quality and drop neutral conditions. XVOLT option supports 277-480V; 6kV surge rated.
- Luminaire Surge Protection - Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015.
- CRI 70, 80 and 90 (minimums).
- 3000K, 3500K, 4000K, 5000K CCT available.
- Aluminum core printed circuit board.

Listings

- CSA Certified for ambient temperatures up to 149°F (65°C). See "Ambient Temperature Ratings" chart.
- IP66 rated.
- Suitable for use in wet locations.

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

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

Dimensions: Inches (millimeters) unless otherwise noted.

Diameter: 28.49"
Height: 20.98"
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® 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



A+ Capable options indicated by this color background.

ORDERING INFORMATION

Example: PHZL 60LM W MVOLT 40K 80CRI PM DWHXD

Series	Lumens ¹	Optics	Voltage	Color temperature	Color Rendering Index	Mounting
PHZL	50LM 50,000 Nominal lumens	F Focus, glass	MVOLT Auto Sensing (120-277)	30K 3000K	70CRI 70 CRI	PM Pendant
	60LM 60,000 Nominal lumens	FFRG Focus, frosted glass	120 120V	35K 3500K	80CRI 80CRI	QD Quick disconnect
	70LM 70,000 Nominal lumens	FSMG Focus, smooth glass	208 208V	40K 4000K	90CRI 90CRI	NDT non-disconnect thru -wiring
	80LM 80,000 Nominal lumens	M medium, glass	240 240V	50K 5000K		QR Quick disconnect retrofit
	90LM 90,000 Nominal lumens ²	MFRG medium, frosted glass	277 277V			NR Non-disconnect thru -wiring retrofit
	100LM 100,000 Nominal lumens ²	N Narrow, glass	HVOLT Auto Sensing (347/480)			
		NA Narrow, clear acrylic	347 347V			
		NFRG Narrow, frosted glass	480 480V			
		W Wide, glass				
		WA Wide, clear acrylic				
		WFRG Wide, frosted glass				

Options					
Damp Cordsets: ^{4,5}		Mounting:		nLight Controls:	
CDP-L5-15-X	X-ft. 120V cord and twist lock plug, 3 conductor, white (120 only)	HKMW	3/4" wet listed hook male, PF-291	NPP16D	nLight wired Power/relay pack (0-10VDC dimming output) ¹⁵
CDP-L6-15-X	X-ft. 208V/240V cord and twist lock plug, 3 conductor, white (208 or 240 only)	HKMD	3/4" hook male, PF-121-A	NPP16DER	nLight wired power/relay pack (0-10VDC dimming output) UL924 Emergency operation (not available with battery pack) ¹⁵
CDP-L7-15-X	X-ft. 277V cord and twist lock plug, 3 conductor, white (277 or 277X only)	HKMAR	3/4" anti rotational hook male, PF-129-A	NLTAIR2 rPP20D	nLight air Generation 2 dimming and switching module ¹⁶
CDP-L24-20-X	X-ft. 347V cord and twist lock plug, 3 conductor, white (347 or 347X only)	LPMD	3/4" loop male, PF-105-B	NLTAIR2 rPP20DER	nLight air Generation 2 dimming and switching module, UL924 Emergency Operation via power sense leads (not available with battery pack) ¹⁶
CDP-L8-20-X	X-ft. 480V cord and twist lock plug, 3 conductor, white (480 or 480X only)	Non-dimming sensors: ¹²		NLTAIR2 RSBG6	nLight AIR Generation 2 enabled 360° high mount (15-30ft) motion sensor ¹⁷
CDP-S-15-X	X-ft., 120V plug and straight blade cord, 3 conductor, white (120 only)	MSE6NWL	360° motion sensor embedded, high bay 15-45 ft., on/off	NLTAIR2 RSBG40	nLight AIR Generation 2 enabled 360° high bay (40ft) motion sensor ¹⁷
PHCB	PF-105-B loop with 120-277/347V cord and plug for use with Universal Power Hook (UPH) accessory (120, 208, 240, 277, 277X, 347 or 347X only) ⁶	Dimming sensors: ¹²		NLTAIR2 RIO	nLight AIR (wireless) gen 2 control device (dimming & switching) ¹⁷
PHCB L8-480	PF-105-B loop with 480V cord and plug for use with Universal Power Hook (UPH) accessory (480 or 480X only) ⁶	MSE62L3VWL	360° motion sensor embedded, high bay 15-45 ft., on/off with second time-out period, goes to a dimmed state before turning off max./ 3volt min. dim setting	Battery Packs:	
Wet Cordsets: ^{5,7}		MSE6NDL DSCNWL	High bay 15-45ft., photocell with two selectable modes of operation. Defaults to on/off mode. Photocell has full control during periods of occupancy	E15WCPCFMC	EM Self-diagnostics battery pack, 5°C min., 15W, Constant Power, Certified in CA Title 20 MAEDBS, external ¹⁸
CDPW-L5-15-X	X-ft. 120V cord and straight blade plug, 3 conductor, wet location, white (120 only)	XPoint Wireless Controls: ¹³		BSL722	EM battery pack 0°C min., 23W, CA title 20 non-compliant, internal ¹⁹
CDPW-L615-X	X-ft. 208V/240V cord and twist lock plug, 3 conductor, wet location, white (208 or 240 only)	MSE6XAWL DSCXA	XPoint™ Wireless enabled with photocell sensor & occupancy sensor ¹³	BSL722C	EM battery pack -20°C min., 23W, CA title 20 non-compliant, internal ¹⁹
CDPW-L7-15-X	X-ft. 277V cord and twist lock plug, 3 conductor, wet location, white (277 or 277X only)	XAD	XPoint™ Wireless 0-10V relay, internal, lower max ambient	BSL722R	EM battery pack 0°C min., 23W, CA title 20 non-compliant, external ²⁰
CDPW-L24-20-X	X-ft. 347V cord and twist lock plug, 3 conductor, wet location, white (347 or 347X only)	XAD924	XPoint™ Wireless 0-10V relay, internal, lower max ambient, meets UL924 (not available with battery pack or BGTD options)	BSL722RC	EM battery pack -20° min., 23W, CA title 20 non-compliant, external ²⁰
Holoflex Cordsets: ⁸		Bluetooth Sensors: ¹⁴			
A	Holoflex I, 6ft cord, must specify voltage, dry listed only	SBGR6BTP	360° High Mount Occ Sensor, pre-wired; Bluetooth®		
S	Holoflex II, 6ft cord, must specify voltage, dry listed only	SBGR6BTP HL	360° High Mount Occ Sensor w/HL Default, pre-wired; Bluetooth®		
Cords (No Plug): ⁵		SBGR6BTP ADC	360° High Mount Occ Sensor w/ADC Default, pre-wired; Bluetooth®		
CD-3	3ft cord only, 3 conductors, white ⁹	SBGR6BTP ANL	360° High Mount Occ Sensor w/ANL Default, pre-wired; Bluetooth®		
CD-6	6ft cord only, 3 conductors, white ⁹				
CD-X	Xft cord only, 3 conductors, white ⁹				
CDW-3	3ft cord only, 3 conductors, white (includes HKMW) ¹⁰				
CDW-6	6ft cord only, 3 conductors, white (includes HKMW) ¹⁰				
CDW-X	Xft cord only, 3 conductors, white (includes HKMW) ¹⁰				
CD-5-K-X	Xft cord only, 5 conductors, black (for use with external dimming controls) ¹¹				
CD-5-W-X	Xft cord only, 5 conductors, black (for use with external dimming controls) ¹¹				

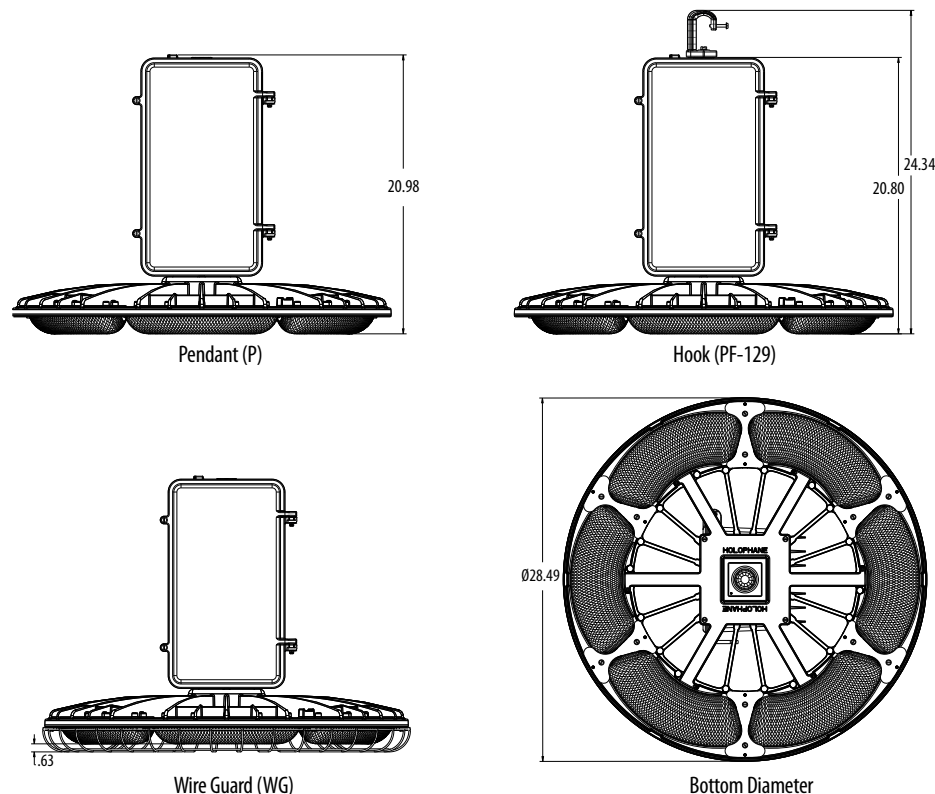
Ordering Information, Accessories and Notes continued next page.

Finish		Accessories: Order as separate catalog number.					
DGXD	Gray, super durable	PHZCHAIN3	3 ft. safety chain	CDCW-L5-15-3	120V white cord and Daniel Woodhead watertite connector (wet locations, 120 only) ²⁷	HKMD	Safety hook, 3/4" male PF-121-A
DWHXD	White, super durable	PHZCHAIN6	6 ft. safety chain			HKFD	Safety hook, 3/4" female PF-122-A
DNXD	Satin nickel, super durable	PHZCHAINX	X ft. safety chain ⁵	CDCW-L6-15-3	208/240V white cord and Daniel Woodhead watertite connector (wet locations, 208 or 240 only) ²⁸	HKMAR	Anti-rotational hook, 3/4" male PF-129-A
DBLXD	Black, super durable	UPH-35-***-WH	Thru-way powerhook for 120V, 208V, 240V, 277V and 347V (120, 208, 240, 277, 277X, 347 or 347X only) ²⁵	CDCW-L7-15-3	277V white cord and Daniel Woodhead watertite connector (wet locations, 277 only) ²⁹	LPMD	Loop, 3/4" male PF-105-B
		UPH-35-L8-480-WH	Thru-way powerhook for 480V (480 or 480X only) ²⁶			LPFD	Loop, 3/4" female PF-116-A
		UPH-36-***-WH	Powerhook for 120V, 208V, 240V, 277V and 347V (120, 208, 240, 277, 277X, 347 or 347X only) ²⁵	PHZLWGA	Wire guard		
		UPH-36-L8-480-WH	Pendant powerhook for 480V (480 or 480X only) ²⁶				

Notes

- See Ambient Temperature Rating Chart.
- Utilizes a step down transformer when ordered with 347 or 480 volt. Not available with HVOLT, XVOLT, 277X, 347X or 480X.
- Utilizes XVOLT transformer.
- Must Specify voltage and order with hook. Available with PM or NDT mount only. Damp Listed.
- X denotes length.
- For new installations, order matching UPH accessory. For existing installations with UPH accessory, match PHCB voltage to existing UPH.
- Must specify voltage. Available with PM mount only. Includes HKMW hook.
- Must specify voltage. Available with PM and NDT mount only. Dry Listed.
- Damp Listed.
- Available with PM mount only.
- Available with P and N mount only. Not available with HKMW or dimming controls. Requires HKMD, HKMAR or LPMD.
- Not available with XVOLT, X-point devices or other occupancy sensors. For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". Ex: MSE10NWL
- Not available with HVOLT, XVOLT, 347X, 480X AO, DIM, controls or other occupancy sensors in any lumen package. Not available in 277X, 347 or 480 for 90LM and 100LM.
- Not available with XVOLT, 277X, 347X, 480X AO, DIM, 90LM, 100LM, controls or other occupancy sensors. For 360° integral Low Mount sensors, replace "6" in nomenclature with "10". Ex: SBGR10BTP.
- Available with 120, 277, 347, 277X, 347X only. Not available with AO, DIM or other occupancy sensors. Damp listed only.
- Available with MVOLT, 120, 208, 240, 277, HVOLT 347, 480, XVOLT, 277X, 347X and 480X only. Not available with AO, DIM, controls or other occupancy sensors. Damp Listed.
- Not available with XVOLT, 277X, 347X, 480X, AO, DIM, 90LM, 100LM, controls or other occupancy sensors. When ER option is required, add ER to end of nomenclature. ER version includes the ETS option. Ex: NLTAIR2 RSBG6 ER
- Available with 120, 277, 277X voltages and P mount only. Not available with XAD924, NLIGHT AIR2 rPP20DER, NPP16DER, or any cord that includes a plug. Customer to connect switched & unswitched power in fixture. Customer to install test switch in remote junction box (not included). Available with 4 conductor cord by special order. Damp listed.
- Available with MVOLT, 120, 208, 240, 277, 277X, 50LM, 60LM or 70LM. Not available with AO, XAD924, NLIGHT AIR2 rPP20DER, NPP16DER, or any cord that includes a plug. Customer to connect to unswitched power in fixture.
- Available with MVOLT, 120, 208, 240, 277 or 277X. Not available with XAD924, NLIGHT AIR2 rPP20DER, NPP16DER, or any cord that includes a plug. Customer to connect to unswitched power. Damp listed.
- If ordered with DIM option, dimming terminal will not use a stainless steel screw.
- Not available with DIM, NLIGHT controls, XPOINT controls, or any other dimming sensor.
- Not available with AO, NLIGHT controls, XPOINT controls, or any other dimming sensor. Damp listed.
- Available with MVOLT, 120, 208, 240, 277, and 277X. Not available with QD, QR, cords, A, S, ER sensor options, or battery pack options. Not available with PHCB options or HKMW option. NDT and NR will bear damp location label.
- Must specify voltage. Not available MVOLT, HVOLT or XVOLT. *** denotes voltage. PHCB option required on luminaire.
- Must Specify voltage. Available with 480 or 480X voltage only. PHCB-L8-480 option required on luminaire.
- Must order matching CDPW- L5-15-X.
- Must order matching CDPW-L6-15-X.
- Must order matching CDPW-L7-15-X.

DIMENSIONAL DATA



OPERATIONAL DATA

Operating Characteristics

Lumen Package	Distribution	Delivered Lumens 3000K 70CRI @25°C	Delivered Lumens 3500K 70CRI @25°C	Delivered Lumens 4000K 70CRI @25°C	Delivered Lumens 5000K 70CRI @25°C	Delivered Lumens 3000K 80CRI @25°C	Delivered Lumens 3500K 80CRI @25°C	Delivered Lumens 4000K 80CRI @25°C	Delivered Lumens 5000K 80CRI @25°C	Delivered Lumens 3000K 90CRI @25°C	Delivered Lumens 3500K 90CRI @25°C	Delivered Lumens 4000K 90CRI @25°C	Delivered Lumens 5000K 90CRI @25°C	Watts @ 120V	LPW @ 5000K, 70CRI
50LM	F	43196	43196	47179	48561	40374	41503	42915	43479	31904	33315	36139	39527	322	151
	FFRG	39420	39420	43027	44316	36844	37874	39163	39678	29114	30403	32979	36071	322	138
	FSMG	43729	43729	47730	49160	40871	42014	43443	44015	32297	33726	36584	40014	322	153
	M	46129	46129	50351	51858	43114	44320	45828	46431	34069	35577	38592	42210	322	161
	MFRG	42629	42629	46530	47923	39843	40957	42350	42908	31484	32877	35663	39007	322	149
	N	46471	46471	50723	52242	43434	44649	46167	46775	34322	35840	38878	42522	322	162
	NFRG	42653	42653	46555	47949	39865	40980	42374	42931	31502	32895	35683	39029	322	149
	NA	46884	46884	51173	52705	43819	45045	46577	47190	34626	36158	39223	42900	322	164
	W	46155	46155	50378	51887	43138	44345	45853	46457	34088	35597	38613	42233	322	161
	WFRG	40066	40066	43732	45041	37447	38495	39804	40328	29591	30900	33519	36662	322	140
60LM	WA	47058	47058	51364	52901	43982	45212	46750	47365	34755	36293	39369	43059	322	164
	F	51312	51312	56007	57684	47958	49300	50977	51647	37897	39574	42928	46952	390	148
	FFRG	46826	46826	51111	52641	43765	44990	46520	47132	34584	36114	39175	42847	390	135
	FSMG	51944	51944	56697	58395	48549	49907	51605	52284	38364	40062	43457	47531	390	149
	M	54796	54796	59810	61600	51214	52647	54438	55154	40470	42261	45842	50140	390	158
	MFRG	50638	50638	55271	56926	47328	48652	50307	50969	37399	39054	42363	46335	390	146
	N	55201	55201	60252	62056	51593	53037	54841	55562	40770	42574	46181	50511	390	159
	NFRG	50666	50666	55302	56957	47354	48679	50334	50997	37420	39075	42387	46361	390	146
	NA	55691	55691	60787	62607	52051	53507	55327	56055	41131	42951	46591	50959	390	161
	W	54826	54826	59843	61634	51242	52676	54468	55184	40492	42284	45867	50167	390	158
70LM	WFRG	47593	47593	51948	53503	44482	45726	47282	47904	35150	36706	39816	43549	390	137
	WA	55898	55898	61013	62840	52245	53706	55533	56264	41284	43111	46765	51149	390	161
	F	61144	61144	66738	68737	57147	58746	60744	61543	45158	47156	51153	55948	477	144
	FFRG	55798	55798	60904	62727	52151	53610	55433	56163	41210	43034	46681	51057	477	132
	FSMG	61897	61897	67561	70287	57851	59470	61492	62302	45715	47738	51783	56638	477	147
	M	65295	65295	71269	73403	61027	62734	64868	65721	48224	50358	54626	59747	477	154
	MFRG	60340	60340	65861	67833	56396	57974	59945	60734	44565	46537	50480	55213	477	142
	N	65778	65778	71797	73947	61479	63198	65348	66208	48581	50731	55030	60189	477	155
	NFRG	60373	60373	65898	67871	56427	58006	59979	60768	44589	46562	50508	55243	477	142
	NA	66362	66362	72434	74603	62024	63759	65928	66795	49012	51181	55518	60723	477	156
80LM	W	65331	65331	71309	73444	61061	62769	64904	65758	48251	50386	54656	59780	477	154
	WFRG	56712	56712	61901	63754	53005	54488	56341	57082	41885	43738	47445	51893	477	134
	WA	66609	66609	72703	74880	62255	63996	66173	67044	49195	51371	55725	60949	477	157
	F	68756	68756	75047	77294	64262	66060	68307	69205	50781	53027	57521	62914	549	141
	FFRG	62745	62745	68486	70537	58644	60284	62335	63155	46341	48391	52492	57413	549	128
	FSMG	69603	69603	75972	78247	65054	66878	69148	70058	51406	53681	58230	63689	549	143
	M	73424	73424	80142	82542	68625	70544	72944	73904	54228	56627	61426	67185	549	150
	MFRG	67852	67852	74061	76278	63417	65191	67409	68296	50113	52330	56765	62087	549	139
	N	73967	73967	80736	83153	69133	71067	73484	74451	54629	57047	61881	67683	549	151
	NFRG	67890	67890	74102	76320	63452	65227	67446	68333	50141	52359	56797	62121	549	139
90LM	NA	74624	74624	81452	83891	69746	71697	74136	75111	55114	57553	62430	68283	549	153
	W	73464	73464	80186	82587	68663	70583	72984	73944	54258	56659	61460	67222	549	150
	WFRG	63772	63772	69608	71692	59604	61271	63355	64189	47100	49184	53352	58354	549	131
	WA	74901	74901	81755	84203	70006	71964	74412	75391	55319	57767	62662	68537	549	153
	F	75299	75299	82189	84650	70377	72346	74807	75791	55613	58074	62995	68901	624	136
	FFRG	68716	68716	75003	77249	64224	66021	68266	69165	50751	52996	57488	62877	624	124
	FSMG	76227	76227	83202	85693	71244	73237	75728	76725	56298	58789	63771	69750	624	137
	M	80411	80411	87769	90396	75155	77257	79885	80936	59388	62016	67272	73579	624	145
	MFRG	74309	74309	81108	83537	69452	71395	73823	74795	54882	57310	62167	67995	624	134
	N	81006	81006	88418	91066	75712	77829	80477	81536	59828	62475	67770	74123	624	146
100LM	NFRG	74350	74350	81153	83583	69491	71434	73864	74836	54912	57342	62201	68033	624	134
	NA	81725	81725	89203	91874	76383	78520	81191	82259	60359	63030	68371	74781	624	147
	W	80455	80455	87817	90446	75197	77300	79929	80981	59421	62050	67309	73619	624	145
	WFRG	69841	69841	76232	78514	65276	67102	69384	70297	51582	53864	58429	70725	624	126
	WA	82029	82029	89535	92215	76668	78812	81493	82565	60583	63264	68625	75059	624	148
	F	86857	86857	94805	97643	81180	83451	86289	87425	64149	66988	72664	79477	762	128
	FFRG	79263	79263	86516	89106	74083	76155	78745	79781	58541	61131	66311	72529	762	117
	FSMG	87927	87927	95973	98846	82180	84479	87353	88502	64940	67813	73560	80456	762	130
	M	92754	92754	101241	104272	86691	89116	92147	93360	68504	71536	77597	84873	762	137
	MFRG	85715	85715	93558	96360	80113	82354	85155	86275	63306	66107	71709	78432	762	126
100LM	N	93440	93440	101991	105044	87333	89776	92830	94051	69012	72065	78172	85501	762	138
	NFRG	85763	85763	93610	96413	80157	82399	85202	86323	63341	66144	71749	78476	762	127
	NA	94270	94270	102896	105976	88108	90573	93653	94886	69624	72705	78866	86260	762	139
	W	92805	92805	101297	104330	86739	89165	92198	93411	68542	71575	77640	84919	762	137
	WFRG	80561	80561	87933	90566	75296	77402	80035	81088	59500	62132	67397	73716	762	119
	WA	94620	94620	103278	106370	88436	90910	94002	95239	69883	72975	79159	86581	762	140

OPERATIONAL DATA CONTINUED

Emergency Lumens

Battery Pack	Optic									
	M	N	W	NA	WA	NFR	MFR	WFR	F	FFR
BSL722	3193	3217	3195	3245	3257	2952	2951	2773	2990	2729
E15WCPFMC	3381	3406	3382	3436	3449	3126	3124	2936	3166	2889

LAT Factors

Ambient	50L	60L	70L	80L	90L	100L
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%		
50	96%	96%	95%	95%		
55	95%	95%	94%			
60	94%	94%				
65	93%					

Ambient Temperature Limit Chart

PHZL	Lumen Package	Voltage	Base Fixture	Xpoint	OCC Sensor	Field Adjustable Output	Nlight	BSL722/ BSL722C	BSL722R/ BSL722RC	E15WPFMC
Ceiling Pendant	50L	AS	65	45	55	55	40	35	45	40
		AH	65	45	55	55	40	-	-	-
	60L	AS	60	45	55	55	40	35	45	40
		AH	60	45	55	55	40	-	-	-
	70L	AS	55	40	50	55	40	30	45	40
		AH	55	40	50	55	40	-	-	-
	80L	AS	50	40	50	55	40	-	45	35
		AH	50	40	50	55	40	-	-	-
	90L	AS	40	-	40	40	25	-	40	-
		AH	40	-	40	30	-	-	-	-
	100L	AS	40	-	40	40	25	-	40	-
		AH	40	-	40	30	-	-	-	-

*Minimum Ambient is -40°C unless noted

OPERATIONAL DATA CONTINUED

PERFORMANCE WITH AO* Field Adjustable Output

Lumens	FAO Position	Light Output	Power Consumption
50L	1	22%	18%
	2	35%	31%
	3	47%	43%
	4	60%	55%
	5	71%	68%
	6	83%	80%
	7	94%	93%
	8	100%	100%
60L	1	21%	18%
	2	35%	30%
	3	47%	42%
	4	60%	54%
	5	72%	67%
	6	83%	80%
	7	95%	93%
	8	100%	100%
70L	1	22%	17%
	2	35%	30%
	3	48%	41%
	4	61%	54%
	5	73%	67%
	6	84%	80%
	7	95%	93%
	8	100%	100%
80L	1	22%	17%
	2	36%	29%
	3	49%	41%
	4	61%	54%
	5	73%	67%
	6	84%	80%
	7	95%	93%
	8	100%	100%
90L	1	22%	16%
	2	36%	29%
	3	50%	41%
	4	62%	54%
	5	74%	67%
	6	85%	80%
	7	95%	93%
	8	100%	100%
100L	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 50L

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 80L

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	0.92	0.89
55						
60						
65						

Lumen Maintenance - PHZL 60L

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
65						

Lumen Maintenance - PHZL 90L

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	0.94	0.93	0.90
45						
50						
55						
60						
65						

Lumen Maintenance - PHZL 70L

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
60						
65						

Lumen Maintenance - PHZL 100L

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
45						
50						
55						
60						
65						