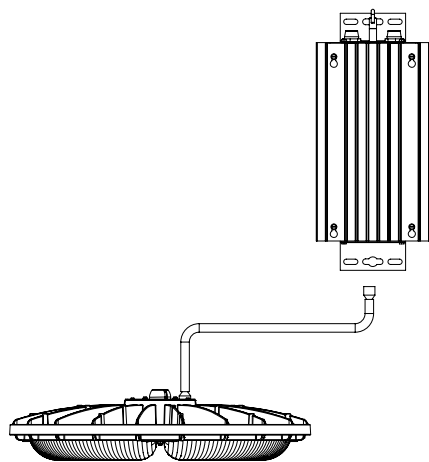


# Phuzion™ Remote

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 delivers unparalleled performance and reliability. Phuzion is highly versatile and can be installed with the optics facing down or inverted for maximum uplight.

### Optics

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

### Mechanical

- Robust cast aluminum housing with low copper content (0.6% CU content) withstands hot and dirty environments.
- Super durable TGIC thermoset powder coat finish provides 1500 hours salt fog rating. The optional CR (corrosion resistant) finish is a five-stage pre-treating and painting process that yields over 5,000 hours salt rating per ASTM B117.
- Optical mount comes in standard and inverted. Standard mount has options of no flex and 10, 30 and 50 ft lengths. Inverted mount also comes with options of no flex and 10, 30 and 50 ft lengths.
- Optional stem and canopy assemblies available in 18, 48, 60, 96 inch lengths.
- Stainless steel screws ship standard with the fixture.

### Electrical

- 0-10V dimming driver is standard, dims to 10%. Knockouts included on electrical housing for low voltage wiring entry.
  - XVOLT is an optional robust driver solution designed to assist with power quality issues and a dropped neutral in 277V input as derived from 480V Wye. Supports 277-480V; 6kV surge rated.
  - Luminaire Surge Protection Level: Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015.
  - 70, 80, 90 CRI available.
  - 3000K, 3500K, 4000K or 5000K CCT available.
  - Aluminum core printed circuit board.
- ### Listings
- CSA Certified to meet US and Canadian standards.
  - Suitable for use in damp locations.
  - -40°F (-40°C) to 158°F (70°C) (see chart on page 10).
  - IK rated (see chart on page 10).
  - 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.

### 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
- Manufacturing
- Warehousing
- Large indoor

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

Diameter: 21.22 (538.99)  
 Height: 19.02-23.46 (483.11-595.88)  
 Weight: Optical: 20 lbs., Electrical: 20lbs.

## A+ Capable Luminaire

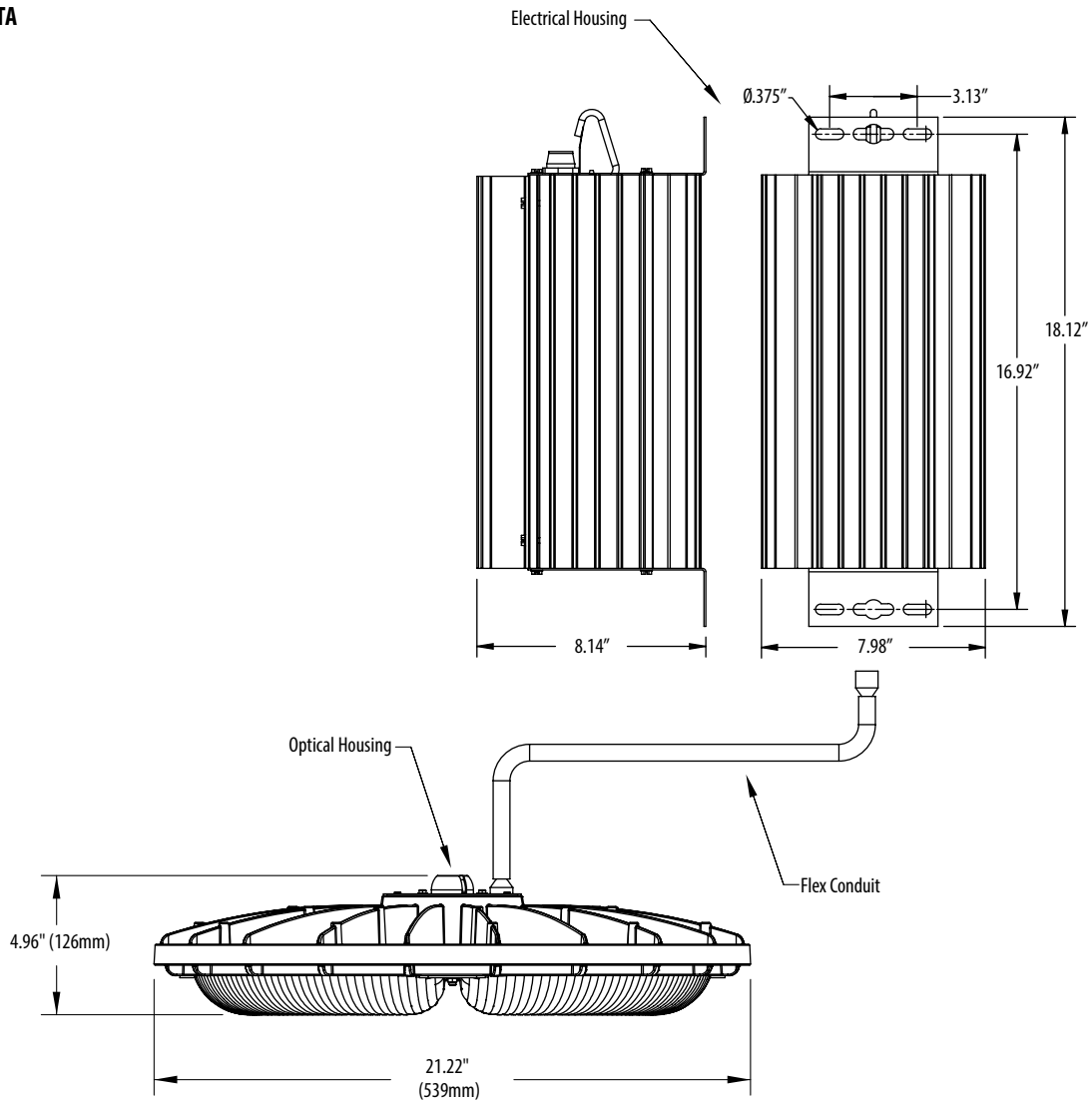
This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

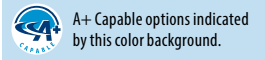
- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks marked by a **shaded background\***

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

\*See ordering tree for details

## DIMENSIONAL DATA





## ORDERING INFORMATION

**Example:** RPHZ 45000LM ND 277 4000K 80CRI F00 PM MISC DWHXD

Series	Lumens	Distribution	Voltage	Color temperature	CRI	Remote Cable
RPHZ	12000LM 12000 Lumens	FD Focus Glass	MVOLT Auto Sensing (120-277V, 50/60Hz)	30K 3000K CCT	70CRI 70CRI	<u>Standard Optic</u>
	18000LM 18000 Lumens	FDFR Focus Frosted Glass		35K 3500K CCT	80CRI 80CRI	F00 Pendant with no flex ‡
	24000LM 24000 Lumens	FSMG Focus Smooth Glass	120 120V, 50/60Hz	40K 4000K CCT	90CRI 90CRI	F10 Pendant with 10ft flex
	30000LM 30000 Lumens	MD Medium Glass	208 208V, 50/60Hz	50K 5000K CCT		F30 Pendant with 30ft flex
	35000LM 35000 Lumens	MDFR Medium Frosted Glass	240 240V, 50/60Hz			F50 Pendant with 50ft flex
	40000LM 40000 Lumens	ND Narrow Glass	277 277V, 50/60Hz			<u>Inverted Optic</u>
	45000LM 45000 Lumens	NDA Narrow Acrylic	HVOLT Auto Sensing (347-480V, 50/60Hz)			I00 Inverted Pendant mount with no flex ‡
	50000LM 50000 Lumens	NDFR Narrow Frosted Glass				I10 Inverted Pendant mount with 10ft flex conduit
	60000LM 60000 Lumens ‡	WD Wide Glass	347 347V, 50/60Hz			I30 Inverted Pendant mount with 30ft flex conduit
		WDA Wide Acrylic	480 480V, 50/60Hz			I50 Inverted Pendant mount with 50ft flex conduit
		WDFR Wide Frosted Glass	XVOLT Enhanced Power Protection (277-480V, 50/60Hz) ‡			
			277X 277V XVOLT driver, 50/60Hz ‡			
			347X 347V XVOLT Driver, 50/60Hz ‡			
			480X 480V XVOLT Driver, 50/60Hz ‡			

Stem Kit	Options	Finish
H18 18 inch stem	<u>nLight® Wired:</u> ‡	DBXD Black super durable
H48 48 inch stem	NPP16 D nLight® wired power/relay pack, 0-10VDC dimming output ( <a href="#">LINK</a> )	DGXD Gray super durable
H60 60 inch stem	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> )	DGRXD Graphite Super Durable
H96 96 inch stem	<u>nLight® Air Wireless:</u> ‡	DNXD Satin Nickel super durable
	NLTAIR2 RSBG6 nLight® Air Generation 2 enabled, 360° high mount sensor, (15-30' mounting heights), IP66 rated ( <a href="#">LINK</a> )	DWHXD White super durable
	NLTAIR2 RSBG10 nLight® Air Generation 2 enabled, 360° low mount sensor, (8-15' mounting heights), IP66 rated ( <a href="#">LINK</a> )	
	NLTAIR2 RSBG40 nLight® Air Generation 2 enabled, 360° high bay sensor, (40' mounting heights) IP66 rated ( <a href="#">LINK</a> )	
	NLTAIR2 RIO nLight® Air Generation 2 enabled, fixture embedded, 0-10V dimming output ( <a href="#">LINK</a> )	
	<u>Damp Location Cord Sets:</u> ‡	
	CPSB16W Cord with 15-amp straight blade plug, 16-gauge, 3 conductors, white, 6ft (120V only)	
	CPTL16W Cord with 15-amp twist lock plug, 16-gauge, 3 conductors, white, 6ft (120, 208, 240 or 277V only)	
	CPTL20A16W Cord with 20-amp twist lock plug, 16-gauge, 3 conductors, white, 6ft (347 or 480V only)	
	<u>Damp Location Cords (no plug):</u> ‡	
	CNP16W Cord only, 16-gauge, 3 conductors, white, 6ft	
	CNP165CD Cord only, 16-gauge, 5 conductors, includes 0-10V dimming leads, black, 6ft	
	CNP165CDW Cord only, 16-gauge, 5 conductors, includes 0-10V dimming leads, white, 6ft	
	<u>Other Options:</u>	
	AO Field adjustable output dimming ‡	
	CR Corrosion resistant paint	
	NSG Non-silicone gasket (EPDM)	
	SCKX X Inch stainless steel safety chain ‡	
	WGX Wire guard	
	<u>Hooks:</u> ‡	
	HKMD ¾" male safety hook (PF-121-A)	
	HKMAR ¾" male anti-rotational hook (PF-129)	
	LPMD ¾" male loop (PF-105-B)	
	MISC Mex	

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

Accessories: Order as separate catalog number.			
PHZCHAIN XIN	X Inch stainless steel safety chain kit ‡	HKMAR	¾" male anti-rotational hook (PF-129)
WGPZH	Wire Guard	LPMD	¾" male loop (PF-105-B)
LPGD	¾" female loop (PF-116)	HKMD	¾" male safety hook (PF-121-A)
HKFD	¾" female safety hook (PF-122-A)		

Option Value Ordering Restrictions & Notes	
Option value	Restriction
277X, 347X, 480X	Not available with 60000LM.
60000LM	Not available with nLight® Air Wireless options, XVOLT, 277X, 347X or 480X.
AO	Not available with other dimming controls or sensors.
Damp Location Cord Sets	6' is standard, but other lengths are available. Must specify length in the nomenclature. Example: CPTL16WL10FT. NEMA plug configurations: CPTL style with 120V = L5-15P, 208V or 240V = L6-15P, 277V = L7-15P, CPTL20A style with 347V = L24-20P, 480V = L8-20P, CPSB style with 120V = 5-15P.
Damp Location Cords (no plug)	6' is standard, but other lengths are available. Must specify length in the nomenclature. Example: CNP16W3FT.
FOO, 100	Customer to provide 3/8" metal flex between optical and electrical assemblies. See chart on page 9 for distances. If ordering with PS30250R, limited to 50' max.
Hooks	Hooks are to be used on remote optical assembly. Electrical assembly includes hook or can be surface mounted.
nLight® Air Wireless	Not available with AO, XVOLT, 277X, 347X, 480X or 60000LM.
nLight® Wired	Available with 120, 277 or 347 only.
PHZCHAIN XIN	X denotes length. Chain shipped separately as an accessory. Available in multiple sizes. Replace X with size in feet. Example: PHZCHAIN 120IN = 120 inches or 10 feet.
SCKX	X denotes length. Safety Chain is available in multiple sizes. Replace X with size in inches. Example: SCK120 = 120 inches or 10 feet
XVOLT	Not available with 60000LM.

## OPERATIONAL DATA

### Operating Characteristics ‡

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

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

**OPERATIONAL DATA**

Operating Characteristics ‡

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

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

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

**OPERATIONAL DATA**

Operating Characteristics ‡

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

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

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

**OPERATIONAL DATA**

Operating Characteristics ‡

Lumen Package	Distribution	Input Watts ‡	3000K			3500K			4000K			5000K			
			70CRI	80CRI	90CRI	70CRI	80CRI	90CRI	70CRI	80CRI	90CRI	70CRI	80CRI	90CRI	
40000LM	FD	288	34151	31919	25223	34151	32812	26339	37276	33928	28571	38392	34374	31249	Lumens
			119	111	88	119	114	91	129	118	99	133	119	109	LPW
	FDFR	288	31165	29128	23017	31165	29943	24036	34016	30961	26072	35035	31368	28517	Lumens
			108	101	80	108	104	83	118	108	91	122	109	99	LPW
	FSMG	288	34572	32313	25534	34572	33216	26664	37736	34346	28923	38865	34798	31635	Lumens
			120	112	89	120	115	93	131	119	100	135	121	110	LPW
	MD	288	36468	34085	26934	36468	35038	28126	39805	36230	30510	40997	36707	33370	Lumens
			127	118	94	127	122	98	138	126	106	142	127	116	LPW
	MDFR	288	33701	31498	24890	33701	32379	25992	36785	33481	28194	37886	33921	30838	Lumens
			117	109	86	117	112	90	128	116	98	132	118	107	LPW
	ND	288	36738	34337	27134	36738	35298	28334	40100	36498	30735	41301	36979	33617	Lumens
			128	119	94	128	123	98	139	127	107	143	128	117	LPW
	NDA	288	37065	34642	27374	37065	35611	28586	40456	36822	31008	41667	37307	33915	Lumens
			129	120	95	129	124	99	140	128	108	145	130	118	LPW
	NDFR	288	33720	31516	24904	333720	32397	26006	36805	33499	28210	37907	33940	30855	Lumens
			117	109	86	1159	112	90	128	116	98	132	118	107	LPW
	WD	288	36488	34103	26949	36488	35057	28141	39827	36250	30526	41020	36727	33388	Lumens
			127	118	94	127	122	98	138	126	106	142	128	116	LPW
	WDA	288	37202	34770	27476	37202	35743	28692	40606	36959	31123	41822	37445	34041	Lumens
			129	121	95	129	124	100	141	128	108	145	130	118	LPW
WDFR	288	31675	29604	23394	31675	30432	24429	34573	31468	26499	35608	31882	28983	Lumens	
		110	103	81	110	106	85	120	109	92	124	111	101	LPW	

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

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



**OPERATIONAL DATA**

Operating Characteristics ‡

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

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

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



## OPERATIONAL DATA CONTINUED

### Lumen Maintenance 12000L Package

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

### Lumen Maintenance 18000L Package

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

### Lumen Maintenance 24000L Package

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

**OPERATIONAL DATA CONTINUED**

Lumen Maintenance 30000L Package

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

Lumen Maintenance 35000L Package

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

Lumen Maintenance 40000L Package

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

## OPERATIONAL DATA CONTINUED

### Lumen Maintenance 45000L Package

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

### Lumen Maintenance 50000L Package

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

### Lumen Maintenance 60000L Package

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

### Number of LED Boards and Drivers Used

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

## OPERATIONAL DATA CONTINUED

### LAT Factors

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

### Performance with AO\* Field Adjustable Output

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

**Note**  
Same for all configurations.

### Remote Wire Lengths

AWG Wire Size (solid)	18	16	14
Number of Feet	70	120	150

### Impact Resistance (IK Ratings)

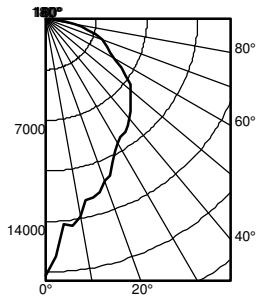
Lens Material	Rating
Glass	IK06
Acrylic	IK07

### Ambient Temperature Ratings

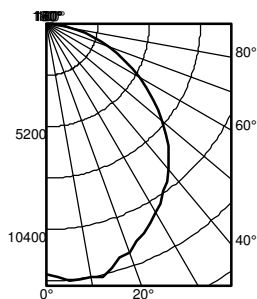
Mounting	nLight	Voltage	Max Ambient									Min. Supply Wire Temp.
			12000LM	18000LM	24000LM	30000LM	35000LM	40000LM	45000LM	50000LM	60000LM	
Standard Optic	No	All	70°C	70°C	70°C	65°C	65°C	60°C	60°C	60°C	55°C	90°C
Standard Optic	Yes	120V-277V	50°C	50°C	50°C	50°C	50°C	50°C	50°C	50°C	50°C	90°C
Inverted Optic	No	120V-277V	70°C	70°C	70°C	65°C	65°C	65°C	65°C	65°C	55°C	90°C
Inverted Optic	No	347V-480V	70°C	70°C	70°C	65°C	65°C	60°C	60°C	60°C	55°C	90°C
Inverted Optic	Yes	120V-277V	50°C	50°C	50°C	50°C	50°C	50°C	50°C	50°C	50°C	90°C

## DISTRIBUTION DATA

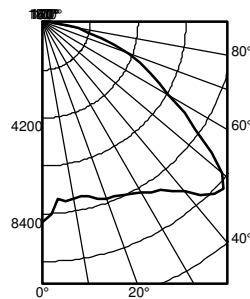
Narrow



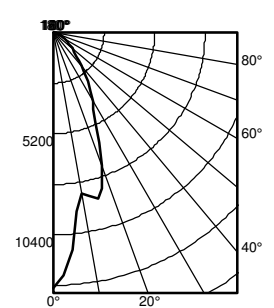
Medium



Wide



Focus



## COMPONENTS & OPTIONS DATA



**A0**  
Field adjustable output dimming.



**Dimming drivers**  
Drivers use 0-10V protocol with dimming down to 10% output.



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



**Wire Guard**  
Steel wire guard available to further protect fixture from impact.



**nLight Wired NPP16 D Power Pack**



**nLight Wired NPP16 D ER**



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



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



**LPFD (PF-116) Loop**



**nLight Air RSBG Sensor**



**nLight AIR RIO Control Module**