

Catalog Number	
Notes	Type

## HMLED4

### LED High Mast Lighting



#### Mechanical

Rugged die cast, low copper content aluminum 380 alloy electrical and optical housing are polyester powder coated with super durable paint for durability and corrosion resistance. Rigorous pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5,000 hours exposure to salt fog chamber (per ASTM B117). Four bolt horizontal arm mount with +/- 5 degree vertical adjustment provides 3g vibration rating per ANSI C136. Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8"). Two captive bolts disengage top electrical cover for easy access to LED drivers, surge protection, and terminal block. IP66 rated LED modules, IP65 electrical assembly per IEC60068-2-3. Luminaire electrical and optical housing ship complete in one carton facilitating installation and minimizing carton disposal at jobsite.

#### Electrical

Quick disconnect connectors for ease of installation and maintenance. Extreme surge protection meets 20KV/10KA per ANSI/IEEE C62.41. Driver includes 0-10V dimming, meets maximum total harmonic distortion (THD) of 20%, and is ROHS compliant. A three stage terminal block is standard for ease of installation. Minimum operating temperature is -40°C. Electronic driver has an expected life of 100,000 hours at 25°C. XVOLT - Electrical option provides protection against dropped neutral in 277V input as derived from 480V Wye. XVOLT also provides greater immunity from six common power quality issues.

#### Optical

Chip on Board (COB) LED technology with color temperature options of 3000K, 4000K and 5000K with CRI of 70 minimum. Borosilicate prismatic glass optics ensure longevity and minimize dirt depreciation. Zero uplight optics reduce sky glow and meets Dark Sky requirements. Prismatic glass optics provide overlapping pattern on application space eliminating dark spots. Prismatic glass optics minimize direct view of LED, reducing glare. Rotatable optic assembly provides alignment of asymmetric distributions to roadway.

#### Controls (Optional)

Controls options include the PR3 and PR7 locking style photocontrol receptacles. The PR7 receptacle option is factory pre-wired to dimming leads of drivers. PCLL - Extreme long life solid state locking-style photocontrol (20 year rated life)

ICMNYX - Nyx Hemera module, an onboard device that can receive power line control signals and communicate commands

to the driver. Part of an overall Nyx Hemera control system and relies on components of the control system that are installed outside of the luminaire and provided separately.

**Field Adjustable Output (AO) module** — An onboard device that allows manual adjustment of the light output and input wattage to meet site specific requirements, allowing a single fixture configuration to be flexibly applied in many different applications. The AO module is pre-set at the factory to position 8 (100% output).

#### Testing Compliance

See HoloPhane HMA0-LED Validation Test Specification – Luminaire conforms to the following standards:

- ANSI/IEEE extreme surge protection per C136.2
- ANSI C82.77-2002 harmonic distortion
- Vibration tested to 3g level per ANSI C136.31-2018
- Scribe creepage rating of 8 (per ASTM D1654) after over 5,000 hours exposure to salt fog chamber (per ASTM B117)
- FCC Title 47 Part 15, subpart B
- Optical enclosure tested to IP66 ingress protection per IEC 60529:1999
- IEC 61000 – Electromagnetic Compatibility Testing (EMC)
- UL 1598, Wet Location – Safety Listing
- 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/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

#### Manufacturing

Manufactured in Crawfordsville, Indiana. ARRA compliant. Test 100% electrical of all luminaires before shipment. No less than five (5) years experience in manufacturing LED-based products.

#### Buy America

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to [www.acuitybrands.com/resources/buyamerican](http://www.acuitybrands.com/resources/buyamerican) for additional information.

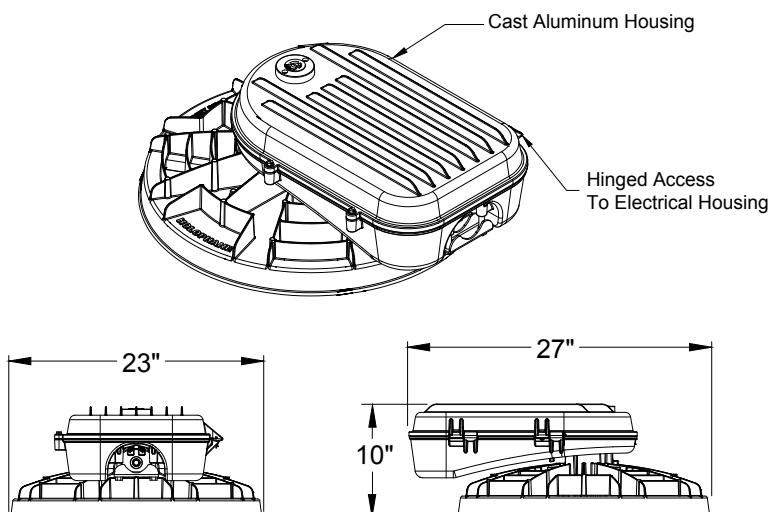
#### Warranty

5-year limited warranty. 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.



## DIMENSIONAL DATA



Weight = 68 lbs. max (See Table on Page 6 for Details)  
 EPA of Fixture = 1.30 sq. ft.  
 EPA of Fixture with Shield = 3.11 sq. ft.  
 UL1598, 50°C, Wet location P1, P2, P3, P4, P5  
 UL1598, 40°C, Wet location P6  
 UL1598, 30°C, Wet location P7

# HMLED4

LED High Mast Luminaire



## ORDERING INFORMATION

Example: HMLED4 P4 40K HVOLT HGR AW PR7

Series	Performance Package	Color temperature	Voltage	Housing Color	Optical	Options
HMLED4	P1 31,000 Lumens	30K 3000K CCT	MVOLT Auto-Sensing Voltage (120 - 277 V)	HAS As Specified	LN Long and Narrow	AO Field Adjustable Output
	P2 42,000 Lumens	40K 4000K CCT	HVOLT Auto-Sensing Voltage (347 - 480 V)	HGR Gray	MAS Medium, Asymmetric	SFD Single Fuse Disconnect
	P3 63,000 Lumens	50K 5000K CCT		HGH Graphite	MAW Medium, Asymmetric Wide	DFD Double Fuse Disconnect
	P4 85,000 Lumens		XVOLT Auto-Sensing Voltage (277 - 480 V)	HBK Black	NAS Narrow, Asymmetric	PR3 3 Pin NEMA Receptacle
	P5 105,000 Lumens			HBZ Bronze	FTA Forward Throw, Asymmetric	PR7 7 Pin NEMA Receptacle
	P6 112,000 Lumens			HWH White	AN Area Narrow	PCLL DTL DLL Photocontrol for 120-277V
	P7 120,000 Lumens				AW Area Wide	PCL3 DTL DLL Photocontrol for 347V
				AWS Area Wide Square	PCL4 DTL DLL Photocontrol for 480V	SH Shorting Cap
						ICMNYX Integrated Nyx Hemera Control
						DALI DALI driver option, consult factory

Accessories: Order as separate catalog number.	
HMLEDF1FUS10R	Single Fuse Accessory
HMLEDF2FUS10R	Double Fuse Accessory
HMLED4D90	90 Degree Shield
HMLED4D120	120 Degree Shield
HMLED4D180	180 Degree Shield

applied as needed to minimize light pollution on light sensitive properties

PERFORMANCE PACKAGE	DISTRIBUTION	SYSTEM WATTS	3000K		4000K		5000K	
			LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
P1	LN	199	32,484	163	33,085	166	33,686	169
	MAS		29,689	149	30,238	152	30,787	155
	MAW		29,772	149	30,323	152	30,873	154
	NAS		29,864	150	30,416	153	30,968	156
	FTA		28,052	141	28,571	144	29,090	146
	AN		33,014	166	33,625	169	34,235	172
	AW		30,655	154	31,222	157	31,788	160
	AWS		30,589	154	31,155	157	31,720	159
P2	LN	295	46,264	157	47,120	160	47,975	138
	MAS		42,284	143	43,066	146	43,848	149
	MAW		42,401	144	43,186	147	43,970	149
	NAS		42,532	144	43,319	147	44,105	150
	FTA		39,952	135	40,691	138	41,430	140
	AN		47,019	159	47,889	162	48,758	165
	AW		43,659	148	44,466	151	45,273	153
	AWS		43,565	148	44,371	150	45,176	153
P3	LN	429	66,995	156	68,234	159	69,473	162
	MAS		61,231	143	62,363	145	63,495	148
	MAW		61,401	143	62,536	146	63,672	149
	NAS		61,590	144	62,729	146	63,868	149
	FTA		57,856	135	58,926	137	59,995	140
	AN		68,087	159	69,346	162	70,605	165
	AW		63,221	147	64,390	150	65,559	153
	AWS		63,086	147	64,253	150	65,420	152
P4	LN	582	86,109	148	87,701	151	89,294	153
	MAS		78,700	135	80,155	138	81,611	140
	MAW		78,919	136	80,378	138	81,838	141
	NAS		79,162	136	80,626	139	82,090	141
	FTA		74,359	128	75,734	130	77,109	132
	AN		87,513	150	89,131	153	90,749	156
	AW		81,258	140	82,761	142	84,264	145
	AWS		81,086	139	82,585	142	84,084	144
P5	LN	703	107,758	153	109,751	156	111,744	159
	MAS		98,487	140	100,308	143	102,129	145
	MAW		98,762	140	100,588	143	102,414	146
	NAS		99,065	141	100,897	144	102,729	146
	FTA		93,054	132	94,775	135	96,496	137
	AN		109,516	156	111,542	159	113,567	162
	AW		101,689	145	103,569	147	105,449	150
	AWS		101,472	144	103,348	147	105,225	150
P6	LN	753	112,822	150	114,908	153	116,995	155
	MAS		103,115	137	105,022	139	106,929	142
	MAW		103,403	137	105,315	140	107,227	142
	NAS		103,721	138	105,639	140	107,557	143
	FTA		97,427	129	99,229	132	101,030	134
	AN		114,663	152	116,783	155	118,903	158
	AW		106,467	141	108,436	144	110,405	147
	AWS		106,241	141	108,205	144	110,169	146
P7	LN	838	121,877	145	124,130	148	126,384	151
	MAS		111,391	133	113,450	135	115,510	138
	MAW		111,701	133	113,767	136	115,832	138
	NAS		112,045	134	114,117	136	116,188	139
	FTA		105,246	126	107,192	128	109,138	130
	AN		123,865	148	126,156	151	128,446	153
	AW		115,012	137	117,139	140	119,265	142
	AWS		114,767	137	116,889	139	119,011	142

**OPTIONS MATRIX**

		Performance Package							Color Temperature			Voltage			Housing Color					
		P1	P2	P3	P4	P5	P6	P7	30K	40K	50K	MVOLT	HVOLT	XVOLT	HAS	HGR	HGY	HBK	HBZ	HWH
Performance Package	P1		N	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P2	N		N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P3	N	N		N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P4	N	N	N		N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P5	N	N	N	N		N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P6	N	N	N	N	N		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P7	N	N	N	N	N	N		Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Color Temperature	30K	Y	Y	Y	Y	Y	Y	Y		N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
	40K	Y	Y	Y	Y	Y	Y	Y	N		N	Y	Y	Y	Y	Y	Y	Y	Y	Y
	50K	Y	Y	Y	Y	Y	Y	Y	N	N		Y	Y	Y	Y	Y	Y	Y	Y	Y
Voltage	MVOLT	Y	Y	Y	Y	Y	Y	Y	Y	Y		N	N	Y	Y	Y	Y	Y	Y	Y
	HVOLT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		N	Y	Y	Y	Y	Y	Y	Y
	XVOLT	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N		Y	Y	Y	Y	Y	Y	Y
Housing Color	HAS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		N	N	N	N	N	N
	HGR	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N		N	N	N	N	N
	HGY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N		N	N	N	N
	HBK	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N		N	N	N
	HBZ	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N		N	N
	HWH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N		N
Optics	LN	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	MAS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	MAW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	NAS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	FTA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	AN	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	AW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	AWS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Options	AO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	DALI	RFD	RFD	RFD	RFD	RFD	RFD	N	RFD	RFD	RFD	RFD	N	N	RFD	RFD	RFD	RFD	RFD	RFD
	SFD	Y	Y	Y	Y	Y	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	DFD	Y	Y	Y	Y	Y	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	PR3	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	PR7	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	PCLL	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
	PCL3	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
	PCL4	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
	SH	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HSS	ICMNYX	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
	HMLEd4D90	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	HMLEd4D120	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	HMLEd4D180	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Note: Options designated "RFD" require additional information. Consult factory

## OPTIONS MATRIX (continued)

		Options											Shielding			
		AO	DALI	SFD	DFD	PR3	PR7	PCLL	PCL3	PCL4	SH	ICMNYX	HMLED4D90	HMLED4D120	HMLED4D180	
Performance Package	P1	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P2	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P3	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P4	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	P5	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
	P6	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
	P7	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Color Temperature	30K	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	40K	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	50K	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Voltage	MVOLT	Y	RFD	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
	HVOLT	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
	XVOLT	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Housing Color	HAS	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	HGR	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	HGY	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	HBK	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	HBZ	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	HWH	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Optics	LN	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	MAS	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	MAW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	NAS	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	FTA	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	AN	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	AW	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	AWS	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Options	AO	N	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
	DALI	N	N	RFD	RFD	RFD	RFD	RFD	RFD	RFD	RFD	N	RFD	RFD	RFD	RFD
	SFD	Y	RFD	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	DFD	Y	RFD	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	PR3	Y	RFD	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	Y
	PR7	Y	RFD	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	Y
	PCLL	Y	RFD	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y
	PCL3	Y	RFD	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y
	PCL4	Y	RFD	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y
	SH	Y	RFD	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y
HSS	ICMNYX	N	N	Y	Y	N	N	N	N	N	N	N	Y	Y	Y	Y
	HMLED4D90	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
	HMLED4D120	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N
	HMLED4D180	Y	RFD	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N

Note: Options designated "RFD" require additional information. Consult factory

Adjustable Output Reponse (AO)		
AO Position	% Lumen Output	% Wattage
1	21%	19%
2	33%	31%
3	46%	43%
4	58%	56%
5	70%	68%
6	82%	81%
7	94%	94%
8 (factory default)	100%	100%

Luminaire Ambient Temperature (LAT) Factor					
0C	15C	25C	35C	40C	50C
1.05	1.02	1.00	0.98	0.97	0.96

P1 thru P5 qualified to 50°C  
 P6 qualified to 40°C  
 P7 qualified to 30°C  
 ICMNYX option qualified to 40°C

use more conservative value

Lumen Package	LED Lumen Maintenance						DESIGN TOTAL LLF (at 60K Hrs)
	0 hours	25,000 hours	50,000 hours	60,000 hours	75,000 hours	100,000 hours	
P1 thru P4	100%	96%	92%	91%	89%	85%	0.88
P5	100%	96%	92%	90%	88%	84%	
P6	100%	95%	91%	89%	87%	82%	
P7	100%	94%	89%	87%	84%	79%	

The *italicized* data is extrapolated beyond the TM-21 standard

	Input Operating Amps					
	120V	208V	240V	277V	347V	480V
P1	1.69	0.97	0.84	0.73	0.58	0.42
P2	2.48	1.43	1.24	1.08	0.86	0.62
P3	3.59	2.07	1.80	1.56	1.24	0.90
P4	4.87	2.81	2.44	2.11	1.69	1.22
P5	5.85	3.38	2.93	2.53	2.02	1.46
P6	6.28	3.62	3.14	2.72	2.17	1.57
P7	6.97	4.02	3.48	3.02	2.65	1.92

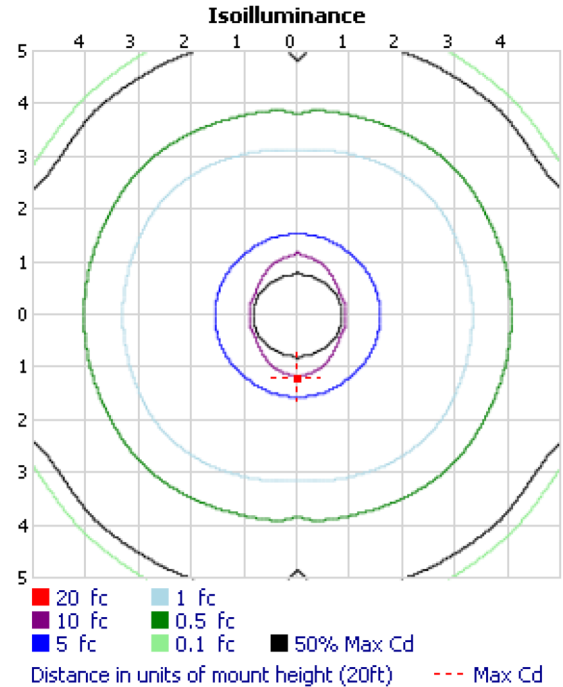
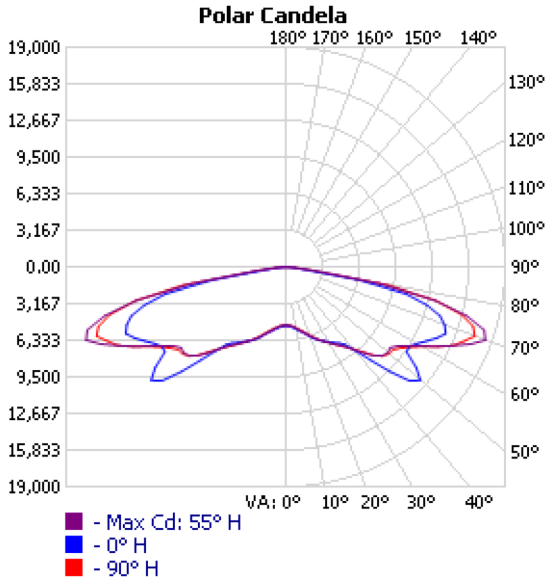
Operating Amps = 0.9 amps (use 1.125 amps to be conservative)

Fixture Weight	
P1 thru P2	47 lbs
P3 thru P4	53 lbs
P5 thru P7	59 lbs
P7 HVOLT	68 lbs

**OUTDOOR PHOTOMETRIC REPORT**

CATALOG: HMLED4 P3 30K XXXXX AW

Test #: ISF 201537HP2  
 Test Lab: SCALED PHOTOMETRY  
 Catalog: HMLED4 P3 30K XXXXX AW  
 Description: HMLED4 P3 Performance Package with 3000K CCT, 70CRI, AW Optic and no House Side Shield  
 Series: HMLED4 High-mast  
 Lamp Output: Total luminaire Lumens: 63224.4, **absolute photometry \***  
 Input Wattage: 429  
 Luminous Opening: Circular (Dia: 22.56")  
 Max Cd: 18,398.7 at Horizontal: 55°, Vertical: 70°  
 Roadway Class: Type VS



\*Test based on absolute photometry where lamp lumens=lumens total.  
 \*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

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**OUTDOOR PHOTOMETRIC REPORT**  
 CATALOG: HMLED4 P3 30K XXXXX AW



**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	5,401.0	8.5%
0-40	10,677.2	16.9%
0-60	30,566.9	48.3%
60-90	32,657.5	51.7%
70-100	17,331.4	27.4%
90-120	0.000	0%
0-90	63,224.4	100%
90-180	0.000	0%
0-180	63,224.4	100%

**Lumens Per Zone**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	498.0	0.8%	90-100	0.000	0%
10-20	1,672.0	2.6%	100-110	0.000	0%
20-30	3,231.0	5.1%	110-120	0.000	0%
30-40	5,276.2	8.3%	120-130	0.000	0%
40-50	8,788.5	13.9%	130-140	0.000	0%
50-60	11,101.2	17.6%	140-150	0.000	0%
60-70	15,326.1	24.2%	150-160	0.000	0%
70-80	15,194.1	24.0%	160-170	0.000	0%
80-90	2,137.4	3.4%	170-180	0.000	0%

**Roadway Summary**

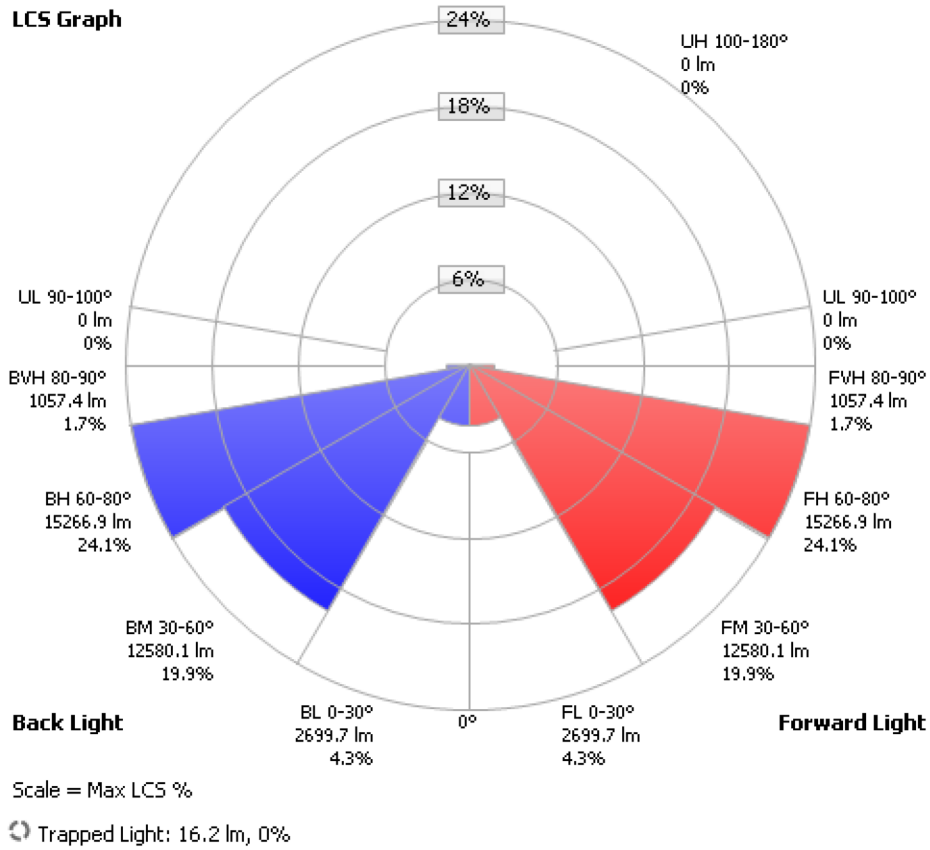
Distribution:	Type VS
Max Cd, 90 Deg Vert:	0.000
Max Cd, 80 to <90 Deg:	8,996.8
	Lumens % Lamp
Downward Street Side:	31,604.1 50%
Downward House Side:	31,604.1 50%
Downward Total:	63,208.2 100%
Upward Street Side:	0.000 0%
Upward House Side:	0.000 0%
Upward Total:	0.000 0%
<b>Total Lumens:</b>	<b>63,208.2 100%</b>

**LCS Table**

BUG Rating	B5 - U0 - G5	
Forward Light	Lumens	Lumens %
Low(0-30):	2,699.7	4.3%
Medium(30-60):	12,580.1	19.9%
High(60-80):	15,266.9	24.1%
Very High(80-90):	1,057.4	1.7%
Back Light		
Low(0-30):	2,699.7	4.3%
Medium(30-60):	12,580.1	19.9%
High(60-80):	15,266.9	24.1%
Very High(80-90):	1,057.4	1.7%
Uplight		
Low(90-100):	0.000	0%
High(100-180):	0.000	0%
<b>Trapped Light:</b>	<b>16.2</b>	<b>0%</b>



**OUTDOOR PHOTOMETRIC REPORT**  
CATALOG: HMLED4 P3 30K XXXXX AW



**OUTDOOR PHOTOMETRIC REPORT**  
 CATALOG: HMLED4 P3 30K XXXXX AW



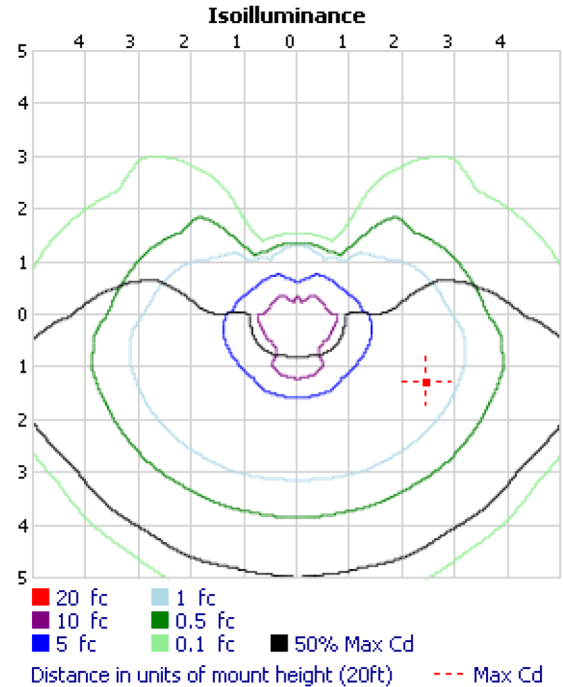
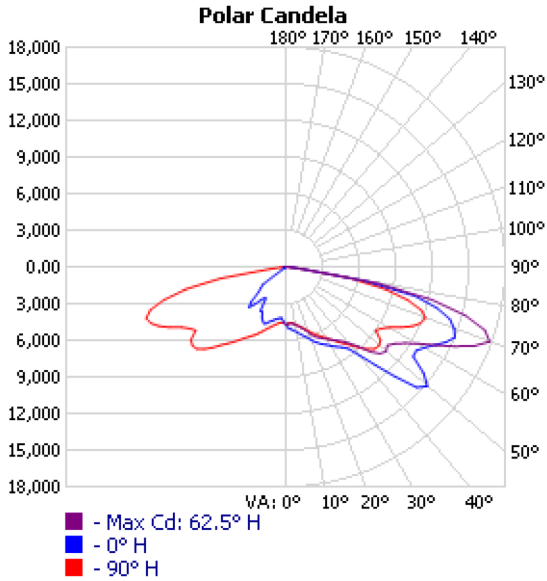
**Candela Table - Type C**

	0	5	15	25	35	45	55	60	65	75	85	90
0	5036	5036	5036	5036	5036	5036	5036	5036	5036	5036	5036	5036
5	5172	5153	5135	5142	5128	5127	5103	5090	5108	5094	5089	5087
10	5460	5436	5422	5432	5423	5404	5390	5358	5368	5342	5334	5340
15	5852	5844	5840	5859	5863	5852	5848	5809	5794	5772	5739	5746
20	6434	6375	6382	6389	6393	6418	6383	6365	6351	6299	6289	6309
25	6967	6930	6930	6955	6950	7012	6967	6967	6956	6912	6909	6937
30	7446	7442	7446	7488	7521	7574	7557	7533	7534	7523	7519	7528
35	8004	8199	8246	8228	8273	8222	8272	8235	8219	8218	8258	8288
40	9461	10302	10207	9892	9650	9487	9355	9269	9263	9223	9226	9292
45	12777	13371	12902	12196	11531	11090	10804	10699	10685	10716	10757	10775
50	15209	13612	13370	12773	12137	11724	11509	11471	11554	11689	11676	11643
55	12761	12233	12145	11998	11824	11780	11870	11940	11998	12007	12183	12175
60	13169	13103	13071	13226	13230	13495	13639	13645	13595	13772	13706	13690
65	14465	14302	14464	14954	15421	15913	16040	16154	16189	16164	16034	16006
70	14645	14882	15653	16752	17701	18185	18399	18357	18062	17668	17436	17416
75	12679	13681	13977	14693	15498	16262	16234	15936	15780	15624	15653	15732
80	6432	8029	8401	8505	8471	8576	8351	8493	8972	8764	8873	8997
85	349	611	644	756	774	722	826	885	830	831	790	837
90	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0	0	0	0

**OUTDOOR PHOTOMETRIC REPORT**

CATALOG: HMLE4D P3 30K XXXXX AW HMLE4D180

Test #: ISF 201535HP10  
 Test Lab: SCALED PHOTOMETRY  
 Catalog: HMLE4D P3 30K XXXXX AW HMLE4D180  
 Description: HMLE4D P3 Performance Package with 3000K CCT, 70CRI, AW Optic and 180deg House Side Shield  
 Series: HMLE4D High-mast  
 Lamp Output: Total luminaire Lumens: 40873.4, absolute photometry \*  
 Input Wattage: 428.52  
 Luminous Opening: Circular (Dia: 21.96")  
 Max Cd: 17,805.8 at Horizontal: 62.5°, Vertical: 70°  
 Roadway Class: MEDIUM, TYPE IV



\*Test based on absolute photometry where lamp lumens=lumens total.  
 \*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

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**OUTDOOR PHOTOMETRIC REPORT**  
 CATALOG: HMLEd4 P3 30K XXXXX AW HMLEd4D180



**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	4,676.9	11.4%
0-40	8,842.7	21.6%
0-60	21,719.4	53.1%
60-90	18,956.2	46.4%
70-100	9,997.5	24.5%
90-120	165.3	0.4%
0-90	40,675.5	99.5%
90-180	197.8	0.5%
0-180	40,873.4	100%

**Lumens Per Zone**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	448.6	1.1%	90-100	121.8	0.3%
10-20	1,485.5	3.6%	100-110	28.6	0.1%
20-30	2,742.8	6.7%	110-120	14.9	0%
30-40	4,165.8	10.2%	120-130	10.7	0%
40-50	6,088.1	14.9%	130-140	8.2	0%
50-60	6,788.5	16.6%	140-150	6.0	0%
60-70	9,080.4	22.2%	150-160	4.2	0%
70-80	8,739.5	21.4%	160-170	2.5	0%
80-90	1,136.2	2.8%	170-180	0.9	0%

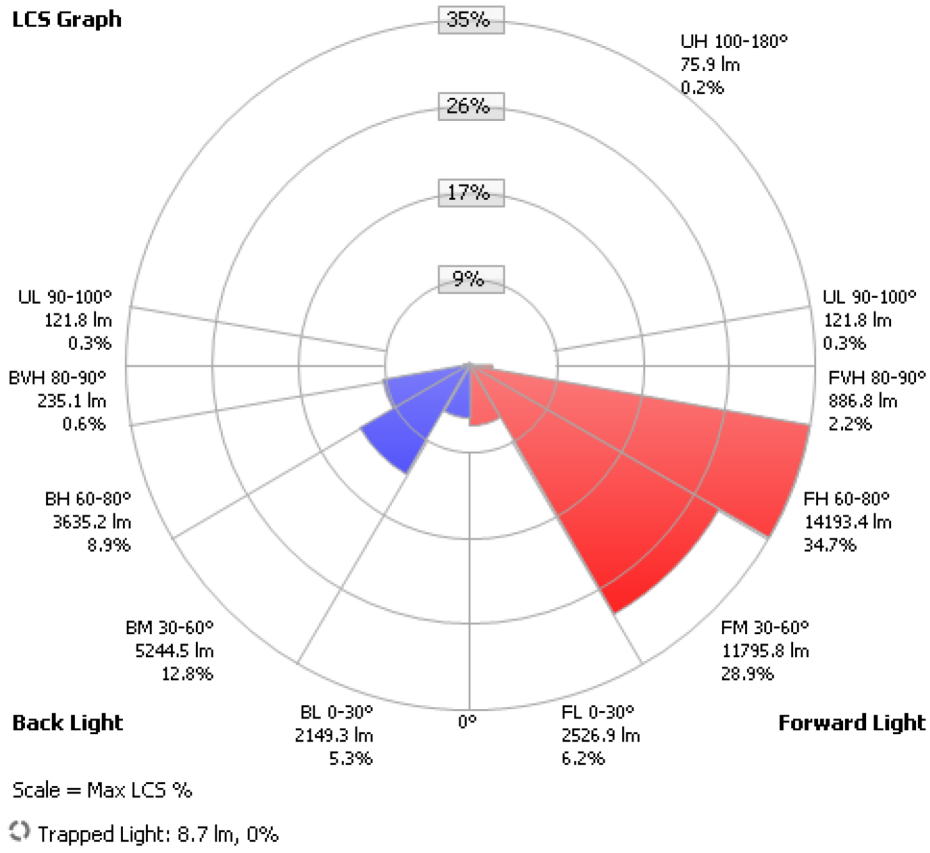
**Roadway Summary**

Distribution:	TYPE IV, MEDIUM	
Max Cd, 90 Deg Vert:	316.6	
Max Cd, 80 to <90 Deg:	8,756.2	
	Lumens	% Lamp
Downward Street Side:	29,402.9	71.9%
Downward House Side:	11,264.0	27.6%
Downward Total:	40,667.0	99.5%
Upward Street Side:	150.1	0.4%
Upward House Side:	47.6	0.1%
Upward Total:	197.7	0.5%
Total Lumens:	40,864.7	100%

**LCS Table**

BUG Rating	B4 - U3 - G5	
Forward Light	Lumens	Lumens %
Low(0-30):	2,526.9	6.2%
Medium(30-60):	11,795.8	28.9%
High(60-80):	14,193.4	34.7%
Very High(80-90):	886.8	2.2%
Back Light		
Low(0-30):	2,149.3	5.3%
Medium(30-60):	5,244.5	12.8%
High(60-80):	3,635.2	8.9%
Very High(80-90):	235.1	0.6%
Uplight		
Low(90-100):	121.8	0.3%
High(100-180):	75.9	0.2%
<b>Trapped Light:</b>	8.7	0%

**OUTDOOR PHOTOMETRIC REPORT**  
CATALOG: HMLEd4 P3 30K XXXXX AW HMLEd4D180



**OUTDOOR PHOTOMETRIC REPORT**  
CATALOG: HMLED4 P3 30K XXXXX AW HMLED4D180



**Candela Table - Type C**

	0	15	25	35	45	55	65	75	85	90	105	115	125	135	145	155	165	175	180	
0	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716	4716
5	5111	5071	4988	4815	4687	4609	4603	4544	4552	4550	4546	4548	4542	4550	4515	4398	4311	4193	4162	
10	5413	5390	5199	4896	4864	4842	4826	4757	4759	4761	4777	4793	4806	4800	4765	4491	4328	4297	4307	
15	5839	5817	5787	5426	5246	5219	5176	5118	5103	5112	5178	5203	5221	5212	5049	4625	4440	4563	4559	
20	6414	6339	6335	6020	5893	5860	5749	5619	5565	5589	5646	5665	5665	5662	5250	4559	4395	4712	4939	
25	6947	6877	6894	6575	6376	6354	6357	6366	6153	6146	5547	5552	5520	5620	5177	4706	4689	4619	4583	
30	7435	7415	7419	6996	6840	6813	6791	6832	6819	6693	6021	6019	5978	5684	4882	4296	4212	4133	4127	
35	8005	8027	7983	7460	7300	7395	7338	7381	7579	7481	6584	6564	6556	5711	5289	4707	4115	3075	3089	
40	9417	9382	9188	8343	8108	8126	8163	8298	8384	8359	7524	7131	6739	6389	5261	4594	3849	3923	3958	
45	12670	12346	11630	10342	9928	9897	9736	9687	9722	9486	8061	6081	4952	5018	3138	2960	3518	3905	3975	
50	15155	14658	13654	11724	11031	10834	10663	10628	10512	9982	7085	5223	4923	4640	1976	1460	2094	2659	2628	
55	12765	12701	12366	10983	10803	10864	10906	10807	9989	9009	6400	4609	3705	2728	883	456	746	431	348	
60	13160	13239	13262	12133	12309	12479	12494	12481	11025	9829	6576	4893	3629	3088	907	164	175	115	112	
65	14520	14680	14913	14206	14685	15028	15301	15258	13229	11435	7948	6048	4335	3849	1189	73	50	61	61	
70	14705	15496	16272	16327	17045	17570	17779	17260	14629	12174	8716	6782	4936	4630	1904	199	45	57	55	
75	12812	12962	13494	13854	14851	15194	15268	15326	13085	10356	7300	5378	3769	3919	1775	272	37	104	94	
80	6618	6864	7101	6607	6888	6782	7884	8756	6954	5450	4060	2829	1589	1712	804	301	31	47	54	
85	599	646	742	796	726	738	886	901	550	434	326	377	166	129	72	33	29	40	43	
90	275	287	304	317	312	275	257	189	67	40	33	37	37	30	27	20	18	17	19	
95	289	301	313	309	281	237	191	85	28	23	23	22	20	19	18	17	17	16	15	
100	143	143	131	120	101	81	56	28	24	23	22	22	20	19	18	18	17	16	16	
105	29	30	29	25	22	22	22	22	22	22	22	20	20	19	18	18	17	16	16	
110	10	12	12	12	14	16	17	19	20	21	20	20	19	19	18	19	19	17	17	
115	4	6	7	9	12	14	16	18	20	20	20	19	19	18	17	17	17	16	16	
120	2	4	6	8	11	12	15	17	18	19	19	18	17	16	14	14	14	12	12	
125	2	3	5	8	10	12	14	16	17	17	17	17	16	16	12	11	11	9	9	
130	2	3	6	8	11	12	14	16	16	16	16	16	15	14	12	9	9	8	7	
135	2	4	6	8	11	12	14	15	16	16	16	14	14	12	11	8	7	5	5	
140	2	4	6	9	11	12	13	14	15	15	14	13	12	12	10	8	5	4	4	
145	2	4	6	9	11	12	12	14	14	14	13	12	12	11	9	7	5	3	2	
150	2	4	6	9	11	12	12	14	14	14	12	12	11	11	9	6	4	2	2	
155	2	4	6	9	11	12	12	13	14	14	12	12	11	10	9	6	3	2	1	
160	2	4	6	9	11	12	12	13	14	14	12	11	11	10	8	5	3	1	0	
165	2	5	6	9	11	12	12	14	14	14	12	12	11	10	8	5	3	1	0	
170	2	5	6	9	11	12	13	14	14	14	12	12	11	11	9	6	3	2	1	
175	2	5	7	9	12	12	14	14	14	14	12	12	11	11	9	6	3	2	1	
180	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	

Catalog Number	
Notes	Type

## Wallpack® LED



LVG - Vandal guard



LWG - Wire guard

### Description

Perimeter and security lighting requires excellent control and uniformity while minimizing light trespass and glare. The W4GLED/W4PLED Wallpack LED luminaires excel at this, requiring fewer luminaires to achieve required light levels in infrastructure, industrial and municipal applications. With energy cost reductions up to 77% and expected service life of over 20 years, Wallpack LED provides the latest lighting technology from the company that introduced the very first Wallpack to the market.

### Optics

- The W4G uses a tempered glass lens and the W4P uses a protective polycarbonate lens that covers the light engine's precision-molded proprietary acrylic lenses.
- Type 3 medium
- Type 3 short (IP66 rated light engine)

### Mechanical

- The housing is constructed of die-cast aluminum and is fully gasketed for ease of maintenance
- The LED driver is mounted to the front casting to thermally isolate it from the light engine for low operating temperature and long life
- Housing is completely sealed against moisture and environmental contaminants, IP55
- Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering.
- A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

### Electrical

- Light engine(s) consist of 10-30 high-efficacy LEDs mounted to a metal-core circuit board and integral aluminum heat sink to maximize heat dissipation and promote long life
- The dimmable electronic driver has a power factor of >90%, THD <20%
- SPD: 20kV/10kA standard
- CCT: 3000K, 4000K, 5000K
- CRI: 70CRI
- Integrated emergency backup on W4GLED with T3M option

### Installation

- Top 3/4" threaded wiring access
- Back access through removable 3/4" knockout
- Feed-thru wiring can be achieved by using a conduit tee

### Certification and Standards

- UL listed for wet locations. Rated for -40°C to 40°C ambient, refer to page 4 for details
- LM-79 compliant
- The projected LED Lumen Maintenance shall be based only on IES LM-80-08 and TM-21

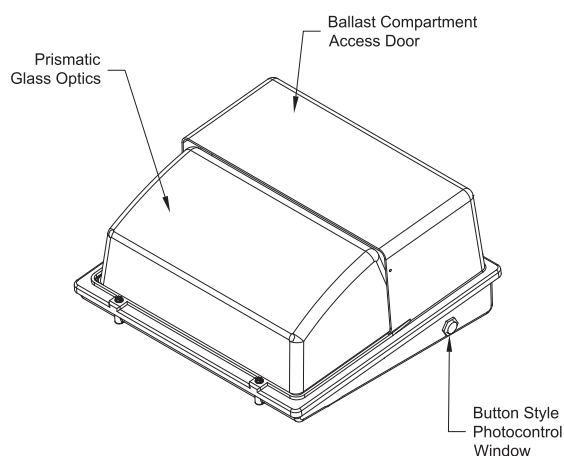
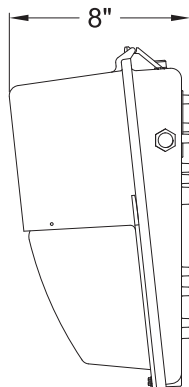
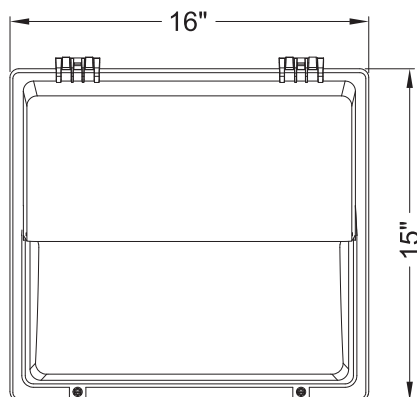
### Warranty

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.



## DIMENSIONAL DATA



## ORDERING INFORMATION *Italicized and Blue INDICATES OPTIONS ONLY AVAILABLE WITH W4GLED*

**Example:** W4GLED 30C1000 40K T3S MVOLT SPD PR7 BZSDP

Series	Performance Package	Color Temperature	Distribution	Voltage	Surge Protection
<i>W4GLED</i> Wallpack IV Glass LED	<i>10C1000</i> 10 LED	30K 3000 series CCT	T3M Type III Medium	MVOLT Multi-volt: 120-277 volt	SPD 20kV/10kA (Standard)
W4PLED Wallpack IV Plastic LED	<i>20C1000</i> 20 LED	40K 4000 series CCT	<i>T3S</i> Type III Short	120 120 Volt	
	<i>30C1000</i> 30 LED	50K 5000 series CCT		208 208 Volt	
	10C700 10 LED			240 240 Volt	
	20C700 20 LED			277 277 Volt	
	30C700 30 LED			347 <sup>1</sup> 347 Volt	
				480 <sup>1</sup> 480 Volt	

Control Options	Options	Super Durable Paint
PCB <sup>2</sup> Button Style Photoelectric Cell	AO <sup>4</sup> <i>Field Adjustable Output</i>	BKSDP Black Super Durable Paint
PR3 <sup>3</sup> <i>N.E.M.A. Twistlock 3-pin Receptacle - Control not included</i>	SF Single Fusing	BZSDP Bronze Super Durable Paint
PR7 <sup>3</sup> <i>N.E.M.A. Twistlock 7-pin Receptacle - Control not included</i>	DF Double Fusing	GYS DP Grey Super Durable Paint
	TPS Tamper resistant screws	WHSDP White Super Durable Paint
	NOM <sup>5</sup> NOM Certified	
	ELSW <sup>6</sup> <i>Emergency Battery Backup (Standard 0°C)</i>	
	ELCW <sup>6</sup> <i>Emergency Battery Backup (Cold Weather -20°C)</i>	
	LWG <sup>7</sup> <i>Wire Guard</i>	
	LVG <sup>8</sup> <i>Vandal Guard</i>	

Accessories: Order as separate catalog number.	
DLL127F 1.5 JU <sup>9</sup>	Photocell - SSL Twist-Lock (120-277V)
DLL347 1.5 CUL JU <sup>9</sup>	Photocell - SSL Twist-Lock (347V)
DLL480 1.5 CUL JU <sup>9</sup>	Photocell - SSL Twist-Lock (480V)
SH U <sup>10</sup>	Shorting Cap
W4GVGU	Vandal Guard
W4GWGU	Wire Guard

### Notes

- 1 Not available with 10C1000
- 2 Not available with 480V
- 3 Available Only with W4G
- 4 Not available with 10C1000
- 5 Available with T3M only
- 6 Not Available 30C Performance Package. Not Available 347, 480 Voltage. Not Available PE, P3, P7 Control.
- 7 Not available with LVG option. Casting is pre-drilled for guard. Vandal guard ships separately.
- 8 Not available with LWG option. Casting is pre-drilled for guard. Vandal guard ships separately.
- 9 Only available with PR3 control option (ships separately)
- 10 Not available with PCB option



OPTIONS MATRIX

Parameters		Voltage Options by LED Package			SELECTED OPTION											
		10Cxxxx	20Cxxxx	30Cxxxx	A0	PCB	PR3	PR7	SF	DF	TPS	NOM	ELSW	ELCW	LWG	LVG
LED Package	10Cxxxx				N	Y	W4G	W4G	Y	Y	Y	T3M	W4GM	W4GM	Y	W4G
	20Cxxxx				Y	Y	W4G	W4G	Y	Y	Y	T3M	W4GM	W4GM	Y	W4G
	30Cxxxx				Y	Y	W4G	W4G	Y	Y	Y	T3M	N	N	Y	W4G
Voltage	MVOLT	Y	Y	Y	Y	Y	W4G	W4G	Y	N	Y	T3M	W4GM	W4GM	Y	W4G
	120	Y	Y	Y	Y	Y	W4G	W4G	Y	Y	Y	T3M	W4GM	W4GM	Y	W4G
	208	Y	Y	Y	Y	Y	W4G	W4G	Y	Y	Y	T3M	W4GM	W4GM	Y	W4G
	240	Y	Y	Y	Y	Y	W4G	W4G	Y	Y	Y	T3M	W4GM	W4GM	Y	W4G
	277	Y	Y	Y	Y	Y	W4G	W4G	Y	Y	Y	T3M	W4GM	W4GM	Y	W4G
	347	N	Y	Y	Y	Y	W4G	W4G	Y	Y	Y	T3M	N	N	Y	W4G
	480	N	Y	Y	Y	N	W4G	W4G	Y	Y	Y	T3M	N	N	Y	W4G
Optic	T3M				Y	Y	W4G	W4G	Y	Y	Y	T3M	W4GM	W4GM	Y	W4G
	T3S				W4G	Y	W4G	W4G	Y	Y	Y	N	N	N	Y	W4G
Controls	A0					Y	W4G	W4G	Y	Y	Y	T3M	W4GM	W4GM	Y	W4G
	PCB				Y		N	N	Y	N	Y	T3M	N	N	Y	W4G
	PR3				W4G	N		N	W4G	W4G	W4G	W4GM	N	N	W4G	W4G
	PR7				W4G	N	N		W4G	W4G	W4G	W4GM	N	N	W4G	W4G
Options	SF				Y	Y	W4G	W4G		N	Y	T3M	W4GM	W4GM	Y	W4G
	DF				Y	Y	W4G	W4G	N		Y	T3M	W4GM	W4GM	Y	W4G
	TPS				Y	Y	W4G	W4G	Y	Y		T3M	W4GM	W4GM	Y	W4G
	NOM				Y	W4G	W4G	W4G	Y	Y	Y		W4GM	W4GM	N	W4G
	ELSW				Y	N	N	N	W4G	W4G	W4G	T3M			W4G	W4G
	ELCW				Y	N	N	N	W4G	W4G	W4G	T3M			W4G	W4G
	LWG				Y	Y	Y	Y	Y	Y	Y	T3M	W4GM	W4GM		N
	LVG				W4G	W4G	W4G	W4G	W4G	W4G	W4G	W4GM	W4GM	W4GM	N	

LEGEND

- N = Not available with W4GLED & W4PLED
- Y = Valid combination with W4GLED & W4PLED
- T3M = Only available on W4GLED & W4PLED with T3M distribution
- W4G = Only available with W4GLED
- W4GM = Only available on W4GLED with T3M distribution

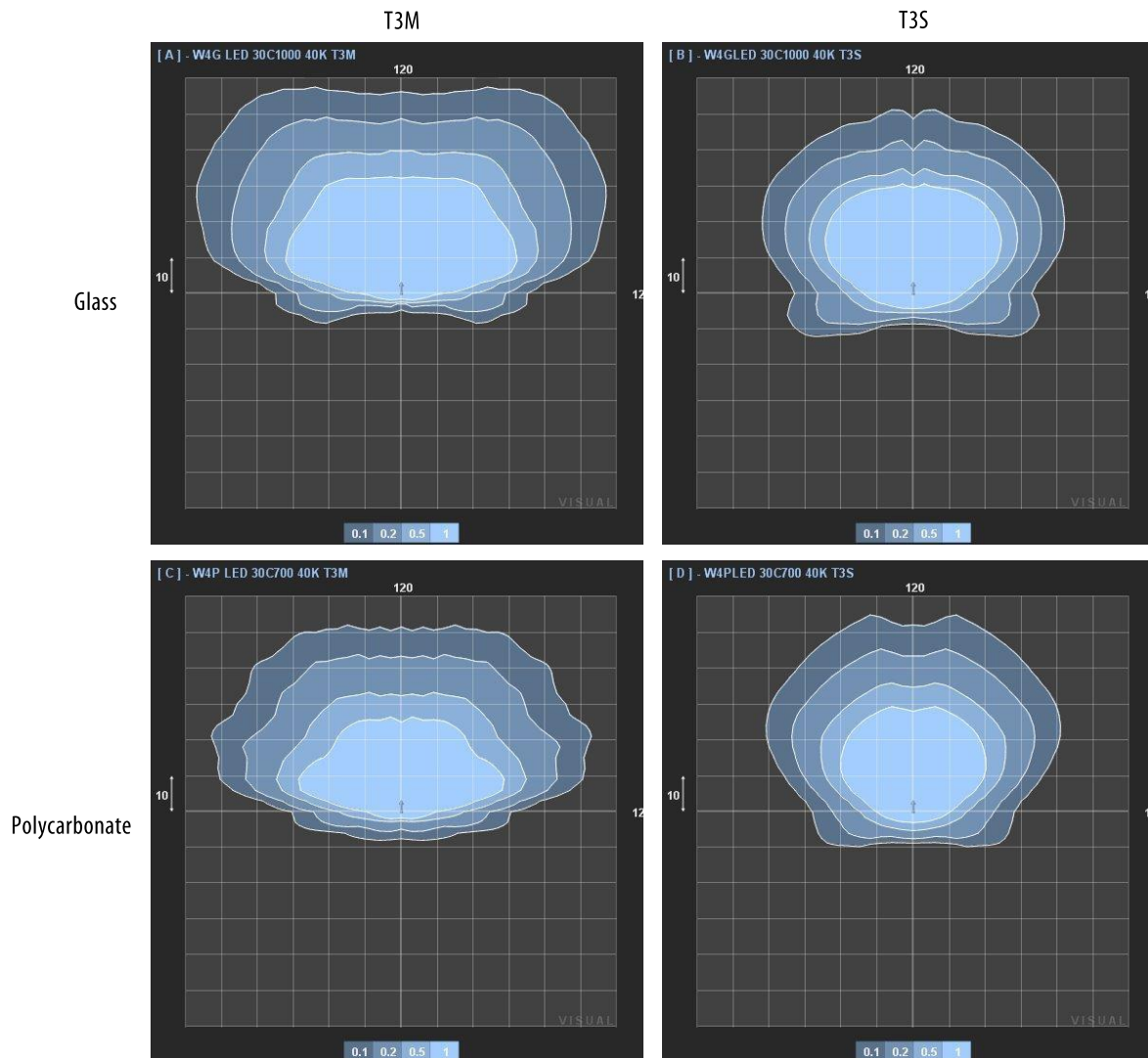
## OPERATIONAL DATA

### Operating Characteristics

Series	LED Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)					
				Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	
W4G	10C1000	39	T3M	3140	81	0	3	3	3377	87	0	3	3	3398	87	0	3	3	
	20C1000	72		6495	90	1	3	4	6983	97	1	3	4	7027	98	1	3	4	
	30C1000	104		7789	75	1	3	4	8375	81	1	3	5	8427	81	1	3	5	
W4P	10C700	26		2030	78	0	3	2	2183	84	0	3	2	2197	85	0	3	2	
	20C700	45		3912	87	0	3	3	4207	93	1	3	3	4233	94	1	3	3	
	30C700	67		4813	72	1	3	3	5176	77	1	3	4	5208	78	1	3	4	
W4G	10C1000	28		T3S	3206	115	0	3	2	3485	124	0	3	2	3485	124	0	3	2
	20C1000	57			6507	114	1	3	2	7073	124	1	3	3	7073	124	1	3	3
	30C1000	77			8477	110	1	3	3	9214	120	1	3	3	9214	120	1	3	3
W4P	10C700	27	2709		100	0	3	2	2944	109	0	3	3	2944	109	0	3	3	
	20C700	38	3299		87	0	3	3	4017	106	1	3	3	4017	106	1	3	3	
	30C700	49	4203		86	1	3	3	5173	106	1	3	3	5173	106	1	3	3	

Operating Amps = 28/480 = 0.06 amps  
 (Use 67/480\*1.25=0.17 amps to be conservative)

## PHOTOMETRIC DISTRIBUTIONS



## OPERATIONAL DATA

### Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25° C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

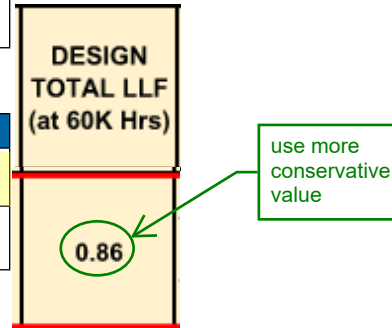
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

### Lumen Maintenance Factor with TM3 Optic Option

Operating Hours	0	25,000	50,000	100,000
Glass Lumen Maintenance Factor	1.00	0.969	0.935	0.870
Polycarbonate Lumen Maintenance Factor	1.00	0.998	0.993	0.982

### Lumen Maintenance Factor with T3S Optic Option

Operating Hours	0	25,000	50,000	100,000
Glass Lumen Maintenance Factor	1.00	1.00	0.977	0.925
Polycarbonate Lumen Maintenance Factor	1.00	1.00	0.977	0.925



The italicized is extrapolated beyond the TM-21 standard.

$$E = (LM) \times (LAT) \times (LLD)$$

### Lumen Ambient Temperature (LAT) Multipliers

Use this factors to determine relative lumen output for average ambient temperatures from 0-40° C (32-104°F)

Ambient		Lumen Temperature	
		LEDs with T3M	LEDs with T3S
0° C	32° F	1.02	1.05
10° C	50° F	1.01	1.03
20° C	68° F	1.00	1.01
25° C	77° F	1.00	1.00
30° C	86° F	1.00	0.99
40° C	104° F	0.98	0.97

### Ambient Temperature Ratings

Distribution	LED Package	Temperature
T3M	10C1000	40° C
	20C1000	35° C
	30C1000	35° C
	ELSW Option	30° C
	ELCW Option	30° C

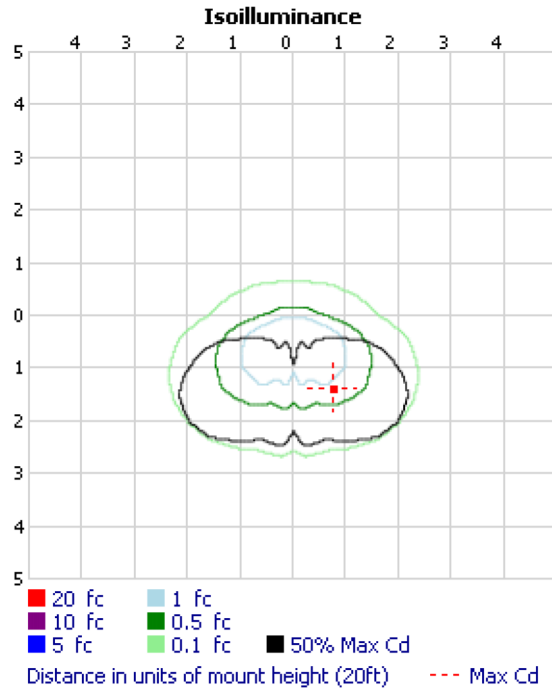
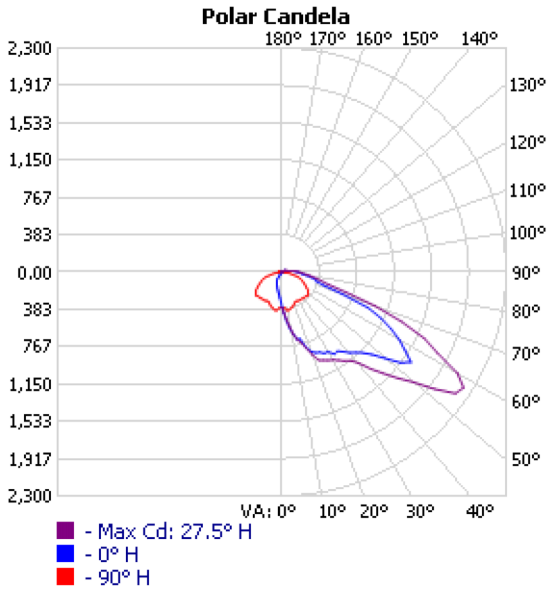
Distribution	LED Package	Temperature
T3M	10C700	40° C
	20C700	40° C
	30C700	40° C

Distribution	LED Package	Temperature
T3S	10C700	40° C
	20C700	40° C
	30C700	40° C
	10C1000	40° C
	20C1000	40° C
	30C1000	40° C

**OUTDOOR PHOTOMETRIC REPORT**

CATALOG: W4GLED 10C1000 30K T3S

Test #: ISF 36664HP1  
 Test Lab: SCALED PHOTOMETRY  
 Catalog: W4GLED 10C1000 30K T3S  
 Description: W4GLED, 10 LED, 10C PERFORMANCE PACKAGE, 3000K CCT, TYPE 3 SHORT  
 Series: W4GLED & W4PLED  
 Lamp Output: Total luminaire Lumens: 3206, **absolute photometry \***  
 Input Wattage: 27  
 Luminous Opening: Rectangle w/Luminous Sides (L: 4.56", W: 13.56", H: 6.24")  
 Max Cd: 2,208.1 at Horizontal: 27.5°, Vertical: 57.5°  
 Roadway Class: VERY SHORT, TYPE III



\*Test based on absolute photometry where lamp lumens=lumens total.  
 \*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

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 This Photometric report has been generated using methods recommended by the IESNA. Calculations are based on Photometric data provided by the manufacturer, and the accuracy of this Photometric report is dependent on the accuracy of the data provided. End-user environment and application (including, but not limited to, voltage variation and dirt accumulation) can cause actual Photometric performance to differ from the performance calculated using the data provided by the manufacturer. This report is provided without warranty as to accuracy, completeness, reliability or otherwise. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of this report.



**OUTDOOR PHOTOMETRIC REPORT**  
 CATALOG: W4GLED 10C1000 30K T3S



**Zonal Lumen Summary**

Zone	Lumens	% Luminaire
0-30	393.6	12.3%
0-40	747.5	23.3%
0-60	1,985.3	61.9%
60-90	1,068.9	33.3%
70-100	495.7	15.5%
90-120	123.1	3.8%
0-90	3,054.2	95.3%
90-180	151.8	4.7%
0-180	3,206.0	100%

**Lumens Per Zone**

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	37.4	1.2%	90-100	67.4	2.1%
10-20	126.7	4.0%	100-110	34.3	1.1%
20-30	229.5	7.2%	110-120	21.4	0.7%
30-40	353.9	11.0%	120-130	13.8	0.4%
40-50	514.2	16.0%	130-140	7.9	0.2%
50-60	723.6	22.6%	140-150	4.4	0.1%
60-70	640.6	20.0%	150-160	1.9	0.1%
70-80	298.3	9.3%	160-170	0.7	0%
80-90	130.0	4.1%	170-180	0.2	0%

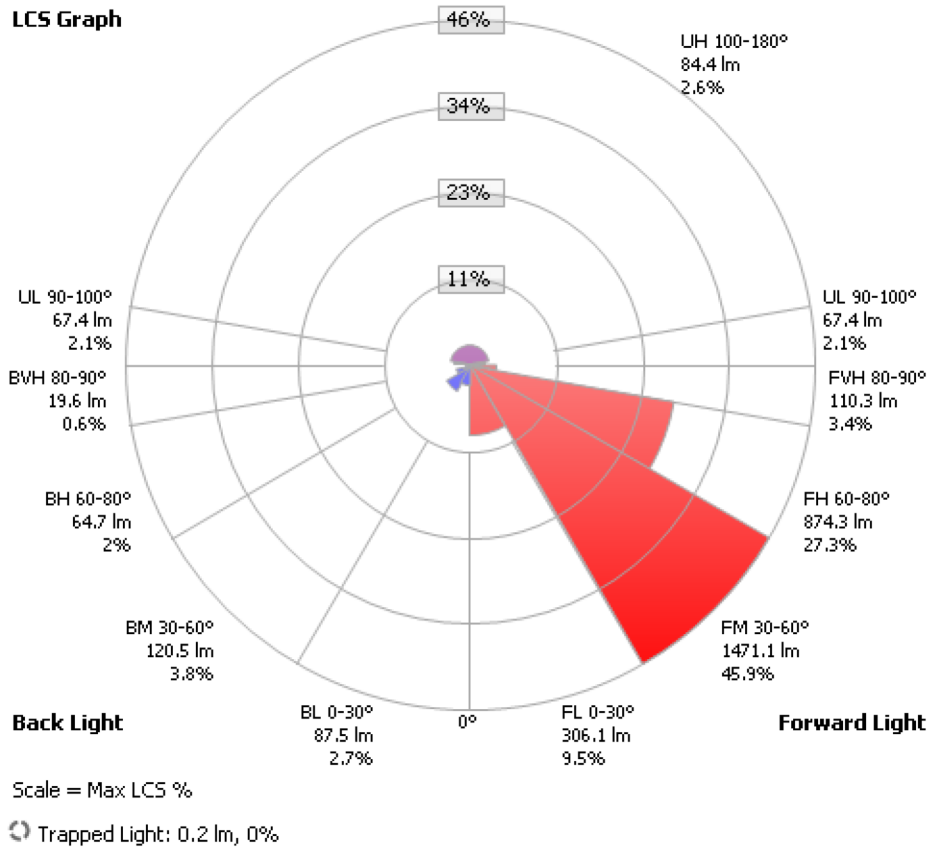
**Roadway Summary**

Distribution:	TYPE III, VERY SHORT	
Max Cd, 90 Deg Vert:	206.0	
Max Cd, 80 to <90 Deg:	370.8	
	Lumens	% Lamp
Downward Street Side:	2,761.8	86.1%
Downward House Side:	292.3	9.1%
Downward Total:	3,054.0	95.3%
Upward Street Side:	116.3	3.6%
Upward House Side:	35.5	1.1%
Upward Total:	151.8	4.7%
Total Lumens:	3,205.8	100%

**LCS Table**

BUG Rating	B0 - U3 - G2	
	Lumens	Lumens %
<b>Forward Light</b>		
Low(0-30):	306.1	9.5%
Medium(30-60):	1,471.1	45.9%
High(60-80):	874.3	27.3%
Very High(80-90):	110.3	3.4%
<b>Back Light</b>		
Low(0-30):	87.5	2.7%
Medium(30-60):	120.5	3.8%
High(60-80):	64.7	2%
Very High(80-90):	19.6	0.6%
<b>Uplight</b>		
Low(90-100):	67.4	2.1%
High(100-180):	84.4	2.6%
<b>Trapped Light:</b>	0.2	0%

**OUTDOOR PHOTOMETRIC REPORT**  
CATALOG: W4GLED 10C1000 30K T3S



**OUTDOOR PHOTOMETRIC REPORT**  
CATALOG: W4GLED 10C1000 30K T3S



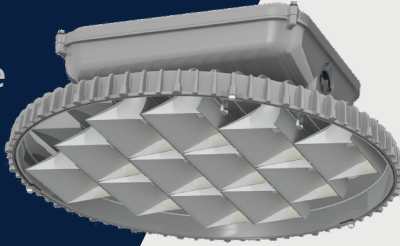
**Candela Table - Type C**

	0	15	25	35	45	55	65	75	85	90	105	115	125	135	145	155	165	175	180	
0	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359	359
5	499	494	486	476	459	438	425	408	385	373	334	315	299	284	272	266	262	260	260	260
10	641	636	639	629	626	599	540	474	420	398	323	289	266	249	233	219	215	212	211	211
15	711	702	733	802	744	691	598	502	414	377	290	256	235	220	203	188	178	173	173	173
20	866	875	912	849	766	758	636	509	392	354	262	228	202	183	171	162	150	146	145	145
25	907	1030	1027	954	915	802	688	529	386	332	239	204	175	156	145	136	126	119	119	119
30	944	1204	1072	1060	1057	921	756	597	409	338	231	186	151	131	120	113	112	101	102	102
35	991	1253	1106	1197	1176	1065	904	671	423	340	220	170	136	113	99	84	70	59	58	58
40	1082	1315	1191	1306	1285	1259	1026	744	447	347	218	157	122	98	68	46	33	27	26	26
45	1171	1376	1397	1525	1479	1407	1151	828	469	346	208	142	111	74	43	27	21	18	16	16
50	1375	1545	1699	1793	1756	1507	1232	875	494	348	187	131	93	58	31	19	12	10	10	10
55	1614	1773	2152	2042	2033	1708	1371	919	478	325	161	124	82	45	22	10	6	4	4	4
60	1390	1489	2041	2173	2100	1710	1333	884	415	278	144	117	88	37	14	4	0	0	0	0
65	1123	1242	1598	1715	1765	1499	1098	730	355	239	146	131	79	32	10	0	0	0	0	0
70	653	781	976	1139	1152	1035	816	542	287	200	181	168	65	27	6	0	0	0	0	0
75	368	418	506	591	612	597	491	352	204	144	181	142	54	23	6	0	0	0	0	0
80	298	323	360	367	340	341	286	209	122	84	132	116	50	25	8	0	0	0	0	0
85	208	226	245	246	216	204	170	122	66	47	92	91	45	27	8	1	0	0	0	0
90	167	181	183	178	152	132	105	73	41	33	71	75	41	25	9	2	0	0	0	0
95	116	126	132	124	105	93	76	51	33	31	56	56	37	25	9	2	0	0	0	0
100	76	80	85	80	70	64	54	40	33	32	41	41	32	22	9	4	1	0	0	0
105	55	56	60	56	50	43	37	30	27	27	32	29	27	19	8	4	1	0	1	1
110	44	45	46	44	41	35	28	25	24	23	25	24	21	14	7	3	1	0	1	1
115	40	41	41	38	35	29	24	23	22	21	21	19	14	10	6	3	1	0	0	0
120	34	35	35	34	29	25	21	20	21	20	16	14	11	8	6	3	2	0	1	1
125	28	29	30	29	25	21	16	16	19	18	13	11	10	8	5	2	1	0	1	1
130	22	23	24	23	20	16	12	12	14	14	10	9	8	6	4	2	1	0	0	0
135	16	19	19	19	16	12	10	10	10	10	10	9	8	5	3	2	1	0	0	0
140	11	13	13	12	12	9	8	8	9	9	10	8	6	4	3	1	0	0	0	0
145	8	10	10	10	9	8	8	8	8	9	10	8	6	4	3	2	1	0	0	0
150	4	6	6	6	6	6	6	7	8	8	8	7	6	4	2	2	0	0	0	0
155	2	2	3	4	4	5	6	6	7	6	6	6	4	4	2	1	1	0	0	0
160	0	2	2	3	4	5	5	5	5	5	5	4	4	2	2	1	1	0	0	0
165	0	1	2	2	2	3	4	4	4	4	4	3	2	2	2	1	0	0	0	0
170	0	1	2	2	2	2	3	3	3	3	2	2	2	2	2	2	0	0	0	0
175	0	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	0	0	0	0
180	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

# EVOLVE

## ERHM Gen 03

High Mast LED  
Roadway Luminaire



Project Name \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_

Notes \_\_\_\_\_

The Evolve® LED High Mast is an LED solution for expressway, freeway interchanges and other large area applications. Current's unique reflective optics are designed to optimize application efficiency and minimize glare. The ERHM luminaire is an efficient solution lowering energy consumption as compared to traditional HID fixtures providing operating cost savings.

### CONSTRUCTION

<b>Housing:</b>	Cast aluminum optical and electrical housings.
<b>Lens:</b>	Impact resistant tempered glass
<b>Paint:</b>	Corrosion resistant powder paint, ≥ 2.0 mil thickness Standard = Gray (RAL & custom colors available) Optional = Coastal Finish
<b>Weight:</b>	~50 lbs. (~23 kgs.)

### OPTICAL SYSTEM

<b>Lumens:</b>	28,800-110,000
<b>Distribution:</b>	Type II Narrow/Wide Type III Type III/IV Type V High Angle
<b>Efficacy:</b>	129 - 177 LPW
<b>CCT:</b>	3000K, 4000K & 5000K
<b>CRI:</b>	≥ 70

### ELECTRICAL

<b>Input Voltage:</b>	120-277V or 277-480V
<b>Input Frequency:</b>	50/60Hz
<b>Power Factor:</b>	≥ 0.9% at rated watts
<b>Total Harmonic Distortion:</b>	≤ 20% at rated watts
<b>EMI:</b>	FCC 47 CFR Part 15 Class A

### SURGE PROTECTION\*

Standard	Optional
10kV/5kA	Secondary 10kV/5kA (R Option) or Secondary 20kV/10kA (T Option)

\*Per ANSI C136.2-2018

### WARRANTY

5 Year (Standard)

10 Year (Optional)

### LUMEN MAINTENANCE

Projected Lxx per IES TM-21-11 at 25°C

SKU	Lumens	Distribution	LXX @ Hours		
			25,000 HR	50,000 HR	60,000 HR
ERHM	30-70	VW	99	99	98
	80,90	VW	98	95	94
	100	VW	96	92	90
	30-40	A6, B6, C6, D6	99	99	98
	50	A6, B6, C6, D6	94	87	84
	60	A6, B6, C6, D6	97	95	94
	70	A6, B6, C6, D6	93	86	83
	80	A6, B6, C6, D6	96	93	91
	90	A6, B6, C6, D6	90	80	76
	100	A6, B6, C6, D6	84	70	65

DESIGN TOTAL (at 60K) **0.85**

NOTES: Projected Lxx based on LM-80 (≥12,000 hour testing). Accepted Industry tolerances apply to initial luminous flux and lumen maintenance measurements.

### AMBIENT TEMPERATURE FACTOR

Ambient Temp (°C)	Initial Flux Factor	Ambient Temp (°C)	Initial Flux Factor
10	1.02	30	0.99
20	1.01	40	0.98
25	1		

### RATINGS

<b>Operating Temperature:</b>	-40°C to 40°C*
<b>Vibration:</b>	3G per ANSI C136.31
<b>LM-79:</b>	Tested in accordance with IES Standards
<b>RoHS:</b>	Complies with the material restrictions of RoHS

\*Contact Manufacturer for units ≥ 100K lm

### CONTROLS

<b>Dimming:</b>	Standard - 0-10V Optional - DALI (Option U)
<b>Sensors:</b>	Photo Electric Sensors (PE) available LightGrid+™ Compatible



## ERHM 03

## 7

## 4 B

PROD. ID	GEN	VOLTAGE	LUMENS	DISTRIBUTION	CRI	CCT	DIMMING	CONTROLS PER ANSI C136.41	MOUNTING	COLOR	OPTIONS
<b>E = Evolve</b>	03	0 = 120-277 <sup>1</sup>	30	A6 = Type II Narrow	7 = 70 <sup>5</sup>	30 = 3000K <sup>2</sup>	N = No Dimming Control Wiring	1 = None	4B = 4 Bolt (std)	GRAY = Gray	F = Fusing
<b>R = Roadway</b>		1 = 120	40	B6 = Type II Wide		40 = 4000K	D = Dimming Control Wiring Included <sup>4</sup>	A = 7-Pin Receptacle		BLCK = Black	G = Internal Bubble Level
<b>H = High</b>		2 = 208	50	C6 = Type III		50 = 5000K		D = 7-Pin Receptacle with Shorting Cap			R = Secondary 10kV/5kA SPD
<b>M = Mast</b>		3 = 240	60	D6 <sup>6</sup> = Type III/IV				E = 7-Pin Receptacle with Long Life non-Dimming PE Control			T = Secondary 20kV/10kA SPD <sup>8</sup>
		4 = 277	70	VW = Type V High Angle							U = DALI <sup>6,8,9</sup>
		5 = 480 <sup>8</sup>	80								V1 = Field Adjustable drive current feature (FAM) <sup>1</sup>
		D = 347 <sup>8</sup>	90								Y = Coastal Finish <sup>3</sup>
		E = 277-480V <sup>1,8</sup>	10								XXX = Special Options
			11 <sup>6,7</sup>								

<sup>1</sup> Not available with fusing. Fusing requires discrete voltage selection to ensure proper fusing wiring.

<sup>2</sup> Select 3000K CCT for IDA approved units.

<sup>3</sup> Recommended for installations within 750 feet from coast. Lead time varies, check with factory.

<sup>4</sup> Dimming control wiring included to connect dimming control external to the fixture.

<sup>5</sup> 70 CRI Typical.

<sup>6</sup> Contact manufacturing for availability.

<sup>7</sup> Available only in VW distribution.

<sup>8</sup> May not be available in some configurations.

<sup>9</sup> U Option may add ~1% on power Consumption.

### SUGGESTED HID REPLACEMENT

- 28,800 - 40,000 lm to replace 400W HID & MH High Mast luminaires.
- 47,000 - 60,000 lm to replace 750W HID & MH High Mast luminaires.
- >60,000 lm to replace 1000W HID & MH High Mast luminaires.

Note: actual replacement lumens may vary based upon mounting height, pole spacing, design criteria, etc.

Previous	Optical Pattern	Latest	New Optical Pattern
E1	Type II Med	B6	Type II Wide
G1	Type III Extra Wide	C6	Type III
F1	Type IV Wide	D6	Type III/IV
VS	Type V Short	VW	Type V High Angle
VM	Type V Med	VW	Type V High Angle

The information above is designed to provide a guideline to select the correct luminaire for a roadway application. The best and most accurate way to ensure the proper design is by doing a lighting layout.



option with 180 degree shield:  
**FAILS** with Type V w/ 180 degree shields for asymmetric luminaires, **PASSES** with type 3 for asymmetric luminaires (acceptable distribution per ODOT TEM 1140-4.3.5)

## ERHM Gen 03

### High Mast LED Roadway Luminaire

#### Spec Tables

Project Name \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_

Notes \_\_\_\_\_

LUMEN OUTPUT	DIST.	INITIAL LUMENS		TYPICAL SYSTEM		PRELIMINARY BUG RATINGS	
		5000K/4000K	3000K	LPW (4000K)	WATTS	4000K	3000K
30	A6			154	195	B3-U0-G3	B3-U0-G3
	B6			154	195	B3-U0-G4	B3-U0-G4
	C6			154	195	B3-U0-G5	B3-U0-G4
	D6			154	195	B2-U0-G4	B2-U0-G4
	VW			177	178	B5-U0-G4	B5-U0-G4
40	A6	41,900	40200	144	291	B4-U0-G4	B4-U0-G4
	B6	41,900	40200	144	291	B4-U0-G5	B4-U0-G5
	C6	41,900	40200	144	291	B4-U0-G5	B3-U0-G5
	D6	41,900	40200	144	291	B3-U0-G4	B3-U0-G4
	VW	42,000	40300	172	244	B5-U0-G5	B5-U0-G5
50	A6	53,000	49900	136	382	B4-U0-G5	B4-U0-G5
	B6	53,000	49900	136	381	B4-U0-G5	B4-U0-G5
	C6	53,000	49900	136	381	B4-U0-G5	B4-U0-G5
	D6	53,000	49900	136	381	B3-U0-G5	B3-U0-G5
	VW	52,400	50300	170	308	B5-U0-G5	B5-U0-G5
60	A6	62,500	60000	140	447	B4-U0-G5	B4-U0-G5
	B6	62,500	60000	140	447	B4-U0-G5	B4-U0-G5
	C6	62,500	60000	140	447	B4-U0-G5	B4-U0-G5
	D6	62,500	60000	140	447	B3-U0-G5	B3-U0-G5
	VW	61,800	59300	168	368	B5-U0-G5	B5-U0-G5
70	A6	71,800	68900	136	529	B5-U0-G5	B5-U0-G5
	B6	71,800	68900	136	529	B4-U0-G5	B4-U0-G5
	C6	71,800	68900	136	529	B4-U0-G5	B4-U0-G5
	D6	71,800	68900	136	529	B5-U0-G5	B5-U0-G5
	VW	72,000	69100	161	447	B5-U0-G5	B5-U0-G5
80	A6	83,400	80000	137	611	B5-U0-G5	B5-U0-G5
	B6	83,400	80000	137	611	B5-U0-G5	B5-U0-G5
	C6			137	611	B5-U0-G5	B4-U0-G5
	D6			137	611	B5-U0-G5	B5-U0-G5
	VW			159	525	B5-U0-G5	B5-U0-G5
90	A6			133	692	B5-U0-G5	B5-U0-G5
	B6			133	692	B5-U0-G5	B5-U0-G5
	C6	92,000	88300	133	692	B5-U0-G5	B5-U0-G5
	D6	92,000	88300	133	692	B5-U0-G5	B5-U0-G5
	VW	94,000	90200	156	603	B5-U0-G5	B5-U0-G5
10	A6	102,000	96900	129	782	B5-U0-G5	B5-U0-G5
	B6	102,000	96900	129	782	B5-U0-G5	B5-U0-G5
	C6	102,000	96900	129	782	B5-U0-G5	B5-U0-G5
	D6	102,000	96900	129	782	B5-U0-G5	B5-U0-G5
	VW	104,000	99800	154	675	B5-U0-G5	B5-U0-G5
11	VW	110,000	105600	152	724	B5-U0-G5	B5-U0-G5

ASYMMETRICAL:  
Operating Amps = 291/480  
= 0.61 amps  
(use 1.125 amps to be conservative)

SYMMETRICAL:  
Operating Amps = 447/480  
= 0.93 amps  
(use 1.125 amps to be conservative)

For additional information on ERHM IES files, please refer to LED.com

## ERHM Gen 03

### High Mast LED Roadway Luminaire

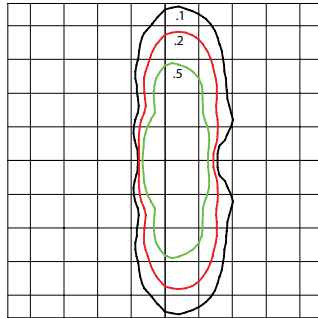
#### Photometric Plots

Project Name \_\_\_\_\_

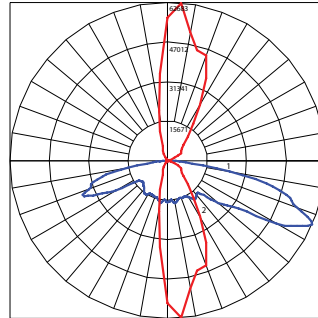
Date \_\_\_\_\_ Type \_\_\_\_\_

Notes \_\_\_\_\_

**ERHM03**  
**Type II Narrow**  
 70,000 Lumens  
 4000K  
 ERHM3\_70A6740\_\_IES

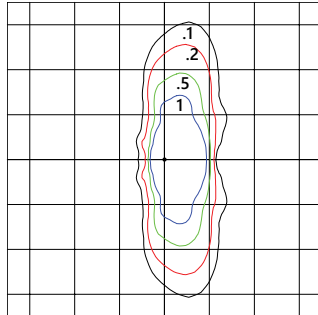


Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade

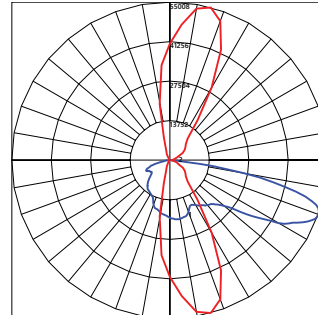


— Vertical plane through horizontal angle of maximum candlepower at 85°  
 — Horizontal cone through vertical angle of 66°

**ERHM03**  
**Type II Wide**  
 70,000 Lumens  
 4000K  
 ERHM3\_70B6740\_\_IES

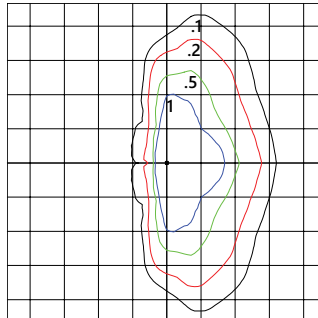


Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade

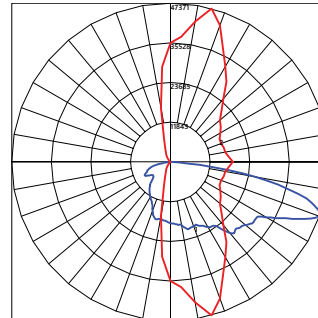


— Vertical plane through horizontal angle of maximum candlepower at 75°  
 — Horizontal cone through vertical angle of 70°

**ERHM03**  
**Type III Wide**  
 70,000 Lumens  
 4000K  
 ERHM3\_70C6740\_\_IES



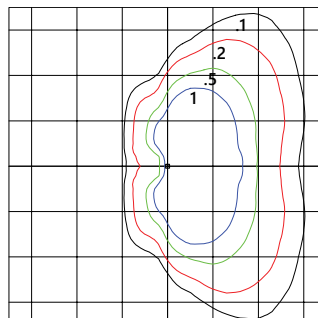
Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade



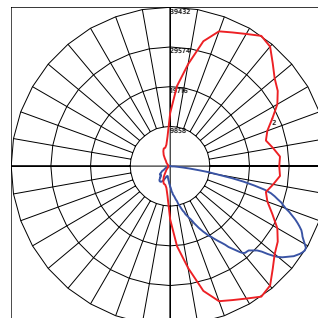
— Vertical plane through horizontal angle of maximum candlepower at 75°  
 — Horizontal cone through vertical angle of 70°

<sup>3</sup> This optic is designed to address a Roadway Photometric Application and may classify as Type II or III.

**ERHM03**  
**Type III/IV**  
 60,000 Lumens  
 4000K  
 ERHM3\_60D6740\_\_IES

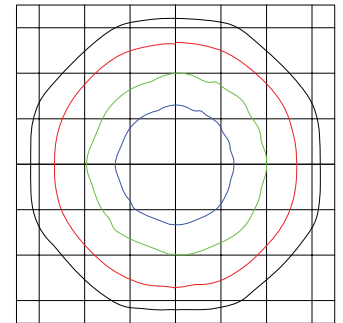


Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade

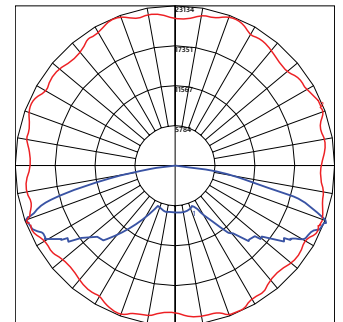


— Vertical plane through horizontal angle of maximum candlepower at 55°  
 — Horizontal cone through vertical angle of 58°

**ERHM03**  
**Type V**  
 80,000 Lumens  
 4000K  
 ERHM3\_80VW740\_\_IES

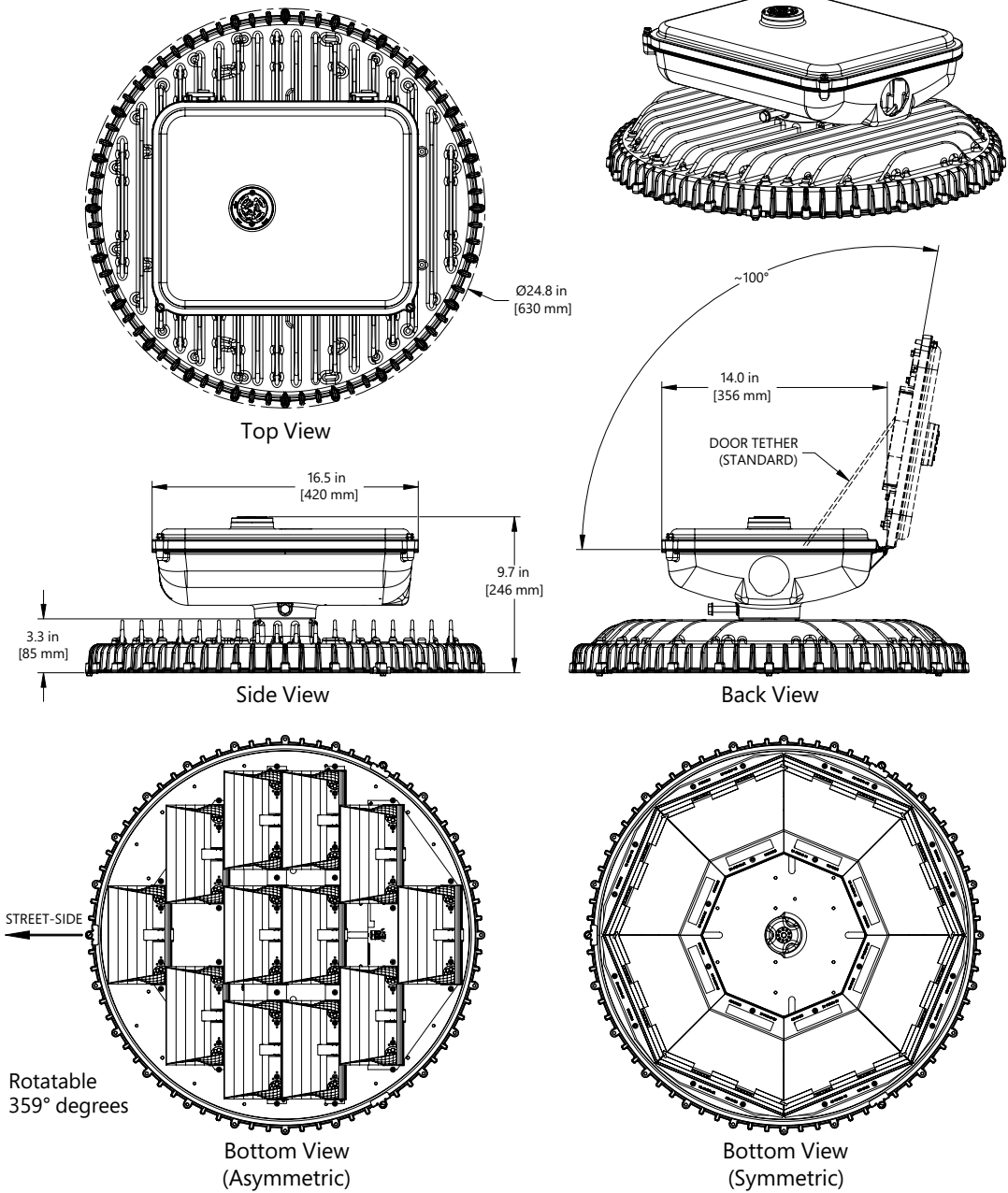


Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of maximum candlepower at 65°  
 — Horizontal cone through vertical angle of 67°

ERHM03



**MOUNTING**

- 4 Bolt Slipfitter with +/-5 degree of adjustment
- Integral mounting pipe stop
- 2 in. (2.375" OD, 60 mm OD) mounting pipe

**EFFECTIVE PROJECTED AREA**

- Effective Projected Area: 1.3 ft.<sup>2</sup> (0.12m<sup>2</sup>) (Max, no shield)

**WEIGHT**

- Weight: ~50Lbs (~23kg)

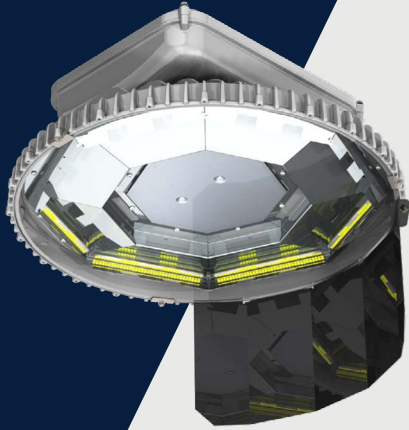
**NETWORKED LIGHTING CONTROL**



Current's **LightGrid+**™ Outdoor Lighting Control System is designed for Street and Roadway Applications. It enables remote monitoring, control, and asset management of a single fixture or a group of fixtures through a web enabled Central Management System.

## ERHM03

### High Mast Light Fixture Shields



Project Name \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_

Notes \_\_\_\_\_

The Current Evolve® LED High Mast reflective optical designs deliver high efficacy and competitive application performance. Regardless, application conditions such as adjacent properties, close roadway ROW (right-of-way) boundaries, or restrictive ordinances can create the need to shield high mast installations to meet light control and trespass limits. Current offers a range of field-installable shielding options that are easily mounted and support flexibility in orientation with respect to the photometric distribution aiming.

#### ERHM03 SHIELD SAP PN

Description
SHIELD ELSHS-ERHM03-09-090
SHIELD ELSHS-ERHM03-09-120
SHIELD ELSHS-ERHM03-09-180

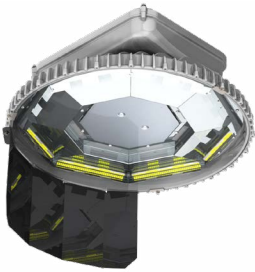
#### ERHM03 9" LIGHT SHIELD EPA AND WEIGHT

Description	EPA(ft^2) of shield*	Painted Shield weight (LBS)*
9" x 90°	1.67	1.3
9" x 120°	1.97	1.7
9" x 180°	2.17	2.4

\* These values need to be added to Luminaire EPA and Weight

#### SYMMETRIC DISTRIBUTIONS

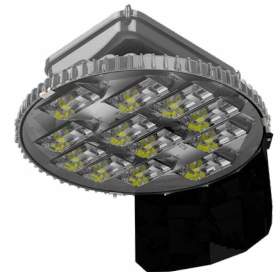
#### ASYMMETRIC DISTRIBUTIONS



ELSHS-ERHM03-9-090-BLCK | Area Back Light Shield - 9"/90°

For Distribution Types: VW, A6, B6, C6 & D6

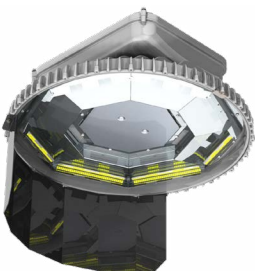
See Page 2 for IES files



ELSHS-ERHM03-9-120-BLCK | Area Back Light Shield - 9"/120°

For Distribution Types: VW, A6, B6, C6 & D6

See Page 3 for IES files

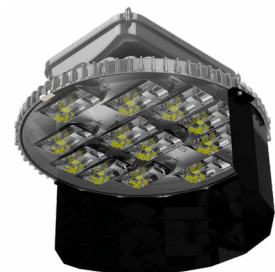
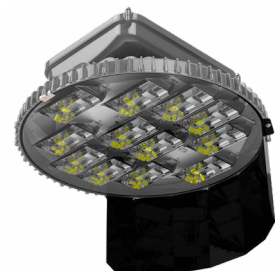


ELSHS-ERHM03-9-180-BLCK | Area Back Light Shield - 9"/180°

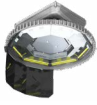
For Distribution Types: VW, A6, B6, C6 & D6

See Page 4 for IES files

IES files are available for 90, 120, and 180 degree shields in a typical backlight shielding orientation.

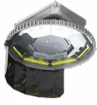


For additional information on ERMH03 Shielded IES files, please refer to LED.com



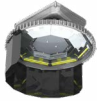
## Area Back Light Shields - ERHM03-HS1 - 9"/90°

LUMEN OUTPUT	CCT	VW	A6	B6	C6	D6
30	3000	ERHM03-30VW730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30A6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30B6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30C6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30D6730_ELSHS_ERHM03-09-090-BLCK.IES
30	4000	ERHM03-30VW740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30A6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30B6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30C6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30D6740_ELSHS_ERHM03-09-090-BLCK.IES
30	5000	ERHM03-30VW750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30A6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30B6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30C6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-30D6750_ELSHS_ERHM03-09-090-BLCK.IES
40	3000	ERHM03-40VW730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40A6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40B6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40C6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40D6730_ELSHS_ERHM03-09-090-BLCK.IES
40	4000	ERHM03-40VW740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40A6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40B6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40C6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40D6740_ELSHS_ERHM03-09-090-BLCK.IES
40	5000	ERHM03-40VW750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40A6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40B6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40C6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-40D6750_ELSHS_ERHM03-09-090-BLCK.IES
50	3000	ERHM03-50VW730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50A6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50B6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50C6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50D6730_ELSHS_ERHM03-09-090-BLCK.IES
50	4000	ERHM03-50VW740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50A6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50B6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50C6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50D6740_ELSHS_ERHM03-09-090-BLCK.IES
50	5000	ERHM03-50VW750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50A6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50B6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50C6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-50D6750_ELSHS_ERHM03-09-090-BLCK.IES
60	3000	ERHM03-60VW730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60A6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60B6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60C6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60D6730_ELSHS_ERHM03-09-090-BLCK.IES
60	4000	ERHM03-60VW740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60A6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60B6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60C6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60D6740_ELSHS_ERHM03-09-090-BLCK.IES
60	5000	ERHM03-60VW750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60A6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60B6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60C6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-60D6750_ELSHS_ERHM03-09-090-BLCK.IES
70	3000	ERHM03-70VW730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70A6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70B6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70C6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70D6730_ELSHS_ERHM03-09-090-BLCK.IES
70	4000	ERHM03-70VW740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70A6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70B6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70C6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70D6740_ELSHS_ERHM03-09-090-BLCK.IES
70	5000	ERHM03-70VW750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70A6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70B6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70C6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-70D6750_ELSHS_ERHM03-09-090-BLCK.IES
80	3000	ERHM03-80VW730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80A6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80B6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80C6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80D6730_ELSHS_ERHM03-09-090-BLCK.IES
80	4000	ERHM03-80VW740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80A6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80B6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80C6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80D6740_ELSHS_ERHM03-09-090-BLCK.IES
80	5000	ERHM03-80VW750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80A6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80B6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80C6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-80D6750_ELSHS_ERHM03-09-090-BLCK.IES
90	3000	ERHM03-90VW730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90A6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90B6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90C6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90D6730_ELSHS_ERHM03-09-090-BLCK.IES
90	4000	ERHM03-90VW740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90A6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90B6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90C6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90D6740_ELSHS_ERHM03-09-090-BLCK.IES
90	5000	ERHM03-90VW750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90A6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90B6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90C6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-90D6750_ELSHS_ERHM03-09-090-BLCK.IES
10	3000	ERHM03-10VW730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10A6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10B6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10C6730_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10D6730_ELSHS_ERHM03-09-090-BLCK.IES
10	4000	ERHM03-10VW740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10A6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10B6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10C6740_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10D6740_ELSHS_ERHM03-09-090-BLCK.IES
10	5000	ERHM03-10VW750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10A6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10B6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10C6750_ELSHS_ERHM03-09-090-BLCK.IES	ERHM03-10D6750_ELSHS_ERHM03-09-090-BLCK.IES
11	3000	ERHM03-11VW730_ELSHS_ERHM03-09-090-BLCK.IES				
11	4000	ERHM03-11VW740_ELSHS_ERHM03-09-090-BLCK.IES				
11	5000	ERHM03-11VW750_ELSHS_ERHM03-09-090-BLCK.IES				



## Area Back Light Shields - ERHM03-HS1 - 9"/120°

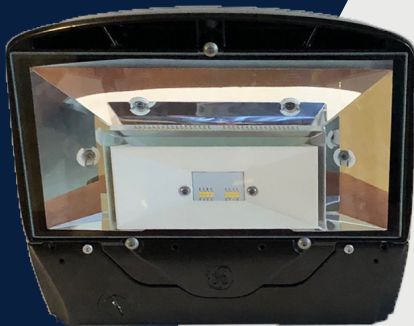
LUMEN OUTPUT	CCT	VW	A6	B6	C6	D6
30	3000	ERHM03-30VW730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30A6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30B6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30C6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30D6730_ELSHS_ERHM03-09-120-BLCK.IES
30	4000	ERHM03-30VW740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30A6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30B6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30C6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30D6740_ELSHS_ERHM03-09-120-BLCK.IES
30	5000	ERHM03-30VW750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30A6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30B6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30C6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-30D6750_ELSHS_ERHM03-09-120-BLCK.IES
40	3000	ERHM03-40VW730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40A6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40B6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40C6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40D6730_ELSHS_ERHM03-09-120-BLCK.IES
40	4000	ERHM03-40VW740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40A6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40B6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40C6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40D6740_ELSHS_ERHM03-09-120-BLCK.IES
40	5000	ERHM03-40VW750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40A6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40B6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40C6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-40D6750_ELSHS_ERHM03-09-120-BLCK.IES
50	3000	ERHM03-50VW730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50A6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50B6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50C6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50D6730_ELSHS_ERHM03-09-120-BLCK.IES
50	4000	ERHM03-50VW740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50A6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50B6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50C6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50D6740_ELSHS_ERHM03-09-120-BLCK.IES
50	5000	ERHM03-50VW750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50A6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50B6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50C6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-50D6750_ELSHS_ERHM03-09-120-BLCK.IES
60	3000	ERHM03-60VW730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60A6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60B6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60C6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60D6730_ELSHS_ERHM03-09-120-BLCK.IES
60	4000	ERHM03-60VW740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60A6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60B6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60C6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60D6740_ELSHS_ERHM03-09-120-BLCK.IES
60	5000	ERHM03-60VW750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60A6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60B6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60C6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-60D6750_ELSHS_ERHM03-09-120-BLCK.IES
70	3000	ERHM03-70VW730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70A6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70B6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70C6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70D6730_ELSHS_ERHM03-09-120-BLCK.IES
70	4000	ERHM03-70VW740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70A6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70B6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70C6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70D6740_ELSHS_ERHM03-09-120-BLCK.IES
70	5000	ERHM03-70VW750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70A6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70B6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70C6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-70D6750_ELSHS_ERHM03-09-120-BLCK.IES
80	3000	ERHM03-80VW730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80A6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80B6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80C6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80D6730_ELSHS_ERHM03-09-120-BLCK.IES
80	4000	ERHM03-80VW740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80A6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80B6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80C6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80D6740_ELSHS_ERHM03-09-120-BLCK.IES
80	5000	ERHM03-80VW750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80A6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80B6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80C6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-80D6750_ELSHS_ERHM03-09-120-BLCK.IES
90	3000	ERHM03-90VW730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90A6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90B6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90C6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90D6730_ELSHS_ERHM03-09-120-BLCK.IES
90	4000	ERHM03-90VW740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90A6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90B6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90C6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90D6740_ELSHS_ERHM03-09-120-BLCK.IES
90	5000	ERHM03-90VW750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90A6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90B6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90C6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-90D6750_ELSHS_ERHM03-09-120-BLCK.IES
10	3000	ERHM03-10VW730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10A6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10B6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10C6730_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10D6730_ELSHS_ERHM03-09-120-BLCK.IES
10	4000	ERHM03-10VW740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10A6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10B6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10C6740_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10D6740_ELSHS_ERHM03-09-120-BLCK.IES
10	5000	ERHM03-10VW750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10A6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10B6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10C6750_ELSHS_ERHM03-09-120-BLCK.IES	ERHM03-10D6750_ELSHS_ERHM03-09-120-BLCK.IES
11	3000	ERHM03-11VW730_ELSHS_ERHM03-09-120-BLCK.IES				
11	4000	ERHM03-11VW740_ELSHS_ERHM03-09-120-BLCK.IES				
11	5000	ERHM03-11VW750_ELSHS_ERHM03-09-120-BLCK.IES				



## Area Back Light Shields - ERHM03-HS1 - 9"/180°

LUMEN OUTPUT	CCT	VW	A6	B6	C6	D6
30	3000	ERHM03-30VW730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30A6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30B6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30C6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30D6730_ELSHS_ERHM03-09-180-BLCK.IES
30	4000	ERHM03-30VW740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30A6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30B6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30C6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30D6740_ELSHS_ERHM03-09-180-BLCK.IES
30	5000	ERHM03-30VW750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30A6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30B6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30C6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-30D6750_ELSHS_ERHM03-09-180-BLCK.IES
40	3000	ERHM03-40VW730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40A6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40B6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40C6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40D6730_ELSHS_ERHM03-09-180-BLCK.IES
40	4000	ERHM03-40VW740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40A6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40B6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40C6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40D6740_ELSHS_ERHM03-09-180-BLCK.IES
40	5000	ERHM03-40VW750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40A6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40B6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40C6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-40D6750_ELSHS_ERHM03-09-180-BLCK.IES
50	3000	ERHM03-50VW730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50A6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50B6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50C6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50D6730_ELSHS_ERHM03-09-180-BLCK.IES
50	4000	ERHM03-50VW740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50A6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50B6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50C6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50D6740_ELSHS_ERHM03-09-180-BLCK.IES
50	5000	ERHM03-50VW750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50A6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50B6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50C6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-50D6750_ELSHS_ERHM03-09-180-BLCK.IES
60	3000	ERHM03-60VW730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60A6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60B6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60C6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60D6730_ELSHS_ERHM03-09-180-BLCK.IES
60	4000	ERHM03-60VW740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60A6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60B6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60C6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60D6740_ELSHS_ERHM03-09-180-BLCK.IES
60	5000	ERHM03-60VW750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60A6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60B6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60C6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-60D6750_ELSHS_ERHM03-09-180-BLCK.IES
70	3000	ERHM03-70VW730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70A6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70B6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70C6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70D6730_ELSHS_ERHM03-09-180-BLCK.IES
70	4000	ERHM03-70VW740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70A6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70B6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70C6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70D6740_ELSHS_ERHM03-09-180-BLCK.IES
70	5000	ERHM03-70VW750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70A6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70B6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70C6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-70D6750_ELSHS_ERHM03-09-180-BLCK.IES
80	3000	ERHM03-80VW730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80A6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80B6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80C6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80D6730_ELSHS_ERHM03-09-180-BLCK.IES
80	4000	ERHM03-80VW740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80A6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80B6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80C6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80D6740_ELSHS_ERHM03-09-180-BLCK.IES
80	5000	ERHM03-80VW750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80A6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80B6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80C6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-80D6750_ELSHS_ERHM03-09-180-BLCK.IES
90	3000	ERHM03-90VW730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90A6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90B6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90C6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90D6730_ELSHS_ERHM03-09-180-BLCK.IES
90	4000	ERHM03-90VW740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90A6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90B6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90C6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90D6740_ELSHS_ERHM03-09-180-BLCK.IES
90	5000	ERHM03-90VW750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90A6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90B6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90C6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-90D6750_ELSHS_ERHM03-09-180-BLCK.IES
10	3000	ERHM03-10VW730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10A6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10B6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10C6730_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10D6730_ELSHS_ERHM03-09-180-BLCK.IES
10	4000	ERHM03-10VW740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10A6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10B6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10C6740_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10D6740_ELSHS_ERHM03-09-180-BLCK.IES
10	5000	ERHM03-10VW750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10A6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10B6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10C6750_ELSHS_ERHM03-09-180-BLCK.IES	ERHM03-10D6750_ELSHS_ERHM03-09-180-BLCK.IES
11	3000	ERHM03-11VW730_ELSHS_ERHM03-09-180-BLCK.IES				
11	4000	ERHM03-11VW740_ELSHS_ERHM03-09-180-BLCK.IES				
11	5000	ERHM03-11VW750_ELSHS_ERHM03-09-180-BLCK.IES				





## EWAS A Series LED Wall Pack

The **Evolve**® LED A Series Wall Pack (EWAS), offers Type II, III and IV optical patterns with lumen levels ranging from 3,000 to 17,000 lumens, and is a designed replacement for 50W to 400W HID including an optional Emergency Battery Backup.



### Construction

<b>Housing:</b>	Aluminum die cast enclosure. Integral heat sink for maximum heat transfer
<b>Lens:</b>	Impact resistant tempered glass
<b>Paint:</b>	Corrosion resistant polyester powder paint, minimum 2.0 mil thickness Standard = Black, Dark Bronze, Gray & White (RAL & custom colors available)
<b>Weight:</b>	8 - 10 lbs.

### Optical System

<b>Lumens:</b>	3,000 - 17,000
<b>Distribution:</b>	Type II, III, IV
<b>CCT:</b>	3000K, 4000K, 5000K
<b>CRI:</b>	≥70

### Electrical

<b>Input Voltage:</b>	120-277V & 347-480V
<b>Input Frequency:</b>	50/60Hz
<b>Power Factor:</b>	> 90% at rated watts
<b>Total Harmonic Distortion:</b>	< 20% at rated watts

### Surge Protection

TYPICAL (120 STRIKES)	ENHANCED (40 STRIKES)	EXTREME (40 STRIKES)
6kV/3kA*	10kV/5kA*	20kV/10kA*

\*Per ANSI C136.2-2015

### Warranty

5 Year (Standard)

### Lumen Maintenance

#### Projected Lxx per IES TM-21-11 at 25°C

DISTRIBUTION	LXX(10K) @ HOURS		
	25,000 HR	50,000 HR	60,000 HR
A2, A3, A4, B2, B3, B4, C2, C3, C4, D2, D3, D4	L95	L93	L92
E2, E3, E4, F2, F3, F4, G2, G3, G4	L96	L94	L94

Note: Projected Lxx based on LM80 (≥ 10,000 hour testing). Accepted industry tolerances apply to initial luminous flux and lumen maintenance measurements.

#### Luminaire Ambient Temperature Factor

AMBIENT TEMP (°C)	INITIAL FLUX FACTOR	AMBIENT TEMP (°C)	INITIAL FLUX FACTOR
10	1.02	30	0.99
20	1.01	40	0.98
25	1.00	50	0.97

### Ratings

<b>Operating Temperature:</b>	-40°C to 40°C
<b>Vibration:</b>	3G per ANSI C136.31-2010
<b>LM-79:</b>	Testing in accordance with IESNA Standards

### Controls

<b>Dimming:</b>	Standard - 0-10V Optional - DALI (Option U)
<b>Sensors:</b>	Photo Electric Sensors (PE) available LightGrid+™ and Daintree Compatible

### Emergency Battery Backup

Provides reliable emergency operations when there is a loss to normal power, supported by Independent Secondary Battery and LED Board.

Powers luminaire for a minimum of 90 minutes @ 1,000 lumens.

Available on A\* and B\* Optical Code Packages only

Operating Temperature (for EMBB models) -20° to 40°C

3kV/1.5kA surge protection for EMBB models.

Not all product variations listed on this page are DLC qualified.  
Visit [www.designlights.org/search](http://www.designlights.org/search) to confirm qualifications.



### Ordering Information

**EWAS 01**

**7**

**FM**

PROD. ID	GEN	VOLTAGE	OPTIC CODE	DISTRIBUTION	CRI (MIN)	CCT	DIMMING	PE FUNCTION	MOUNTING	COLOR	OPTIONS
E = Evolve	01	0 = 120-277V	Ax = 3000 lm	AF = Asymmetric Forward	7 = 70 CRI	30 = 3000K <sup>11</sup>	D = External Dimming leads	1 = None	FM = Surface Mount/Feed Through	BLCK = Black	EMBB = Emergency Batter Backup <sup>4,13</sup>
W = Wallpack		H = 347-480V	Bx = 5000 lm	AN = Asymmetric Narrow		40 = 4000K	N = No external Dimming Leads	3 = Button PE <sup>12,3</sup>		DKBZ = Dark Bronze	
AS = A-Series			Cx = 7500 lm	AW = Asymmetric Wide		50 = 5000K		A = ANSI C136.41 7-Pin Receptacle		GRAY = Gray	R = Enhanced Surge Protection (10kV/5kA)
		1 = 120V	Dx = 10000 lm					D = ANSI C136.417-Pin Receptacle with Shorting Cap		WHITE = White	T = Extreme Surge Protection (20kV/10kA)
		2 = 208V	Ex = 12200 lm					E = ANSI C136.41 7-Pin with Non-Dimming PE Control <sup>12</sup>			H = Motion Sensor <sup>5,6</sup>
		3 = 240V	Fx = 14400 lm								H2 = Daintree Motion Sensor <sup>7,8,9</sup>
		4 = 277V	Gx = 17000 lm								Y = Coastal Finish <sup>10</sup>
		D = 347V									XXX = Special Options
		5 = 480V									F = Double Fusing

<sup>1</sup> Button PE not available with motion sensor option.

<sup>2</sup> Only available with discreet voltages.

<sup>3</sup> Not available with voltage options 0, H, or 5.

<sup>4</sup> Available with A and B Optical Codes Only

<sup>5</sup> H Motion Sensor Bottom mount available with A, B, C, D, & E Optical Codes Only

<sup>6</sup> H Motion Sensor Side Mount available with F & G Optical Codes Only

<sup>7</sup> H2 Daintree Motion Sensor Bottom mount available with A, B, C, D, & E Optical Codes Only

<sup>8</sup> H2 Not Available with F & G Optical Codes

<sup>9</sup> Not available in 347V, 480V or 347-480V

<sup>10</sup> Recommended for installations within 750 feet from coast. Lead time varies, check with factory.

<sup>11</sup> Select 3000K CCT for IDA approved fixtures.

<sup>12</sup> PE Control only available for 120-277V, 347V or 480V Discrete Voltage.

<sup>13</sup> EMBB is not available with surge protection, fuses or sensors

CUSTOMER NAME \_\_\_\_\_

PROJECT NAME \_\_\_\_\_

DATE \_\_\_\_\_ TYPE \_\_\_\_\_

CATALOG NUMBER \_\_\_\_\_

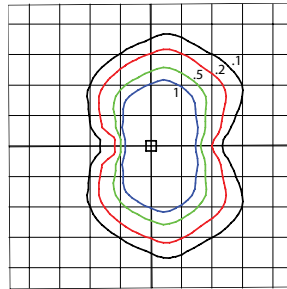
TYPE	OPTIC CODE	DISTRIBUTION	TYPICAL INITIAL LUMENS		TYPICAL SYSTEM WATTAGE		BUG RATINGS	
			3000K	4000K & 5000K	120-277V	347-480V	3000K	4000K & 5000K
							B-U-G	B-U-G
Type IV	A4	Asymmetric Forward (AF)	2900	3000	21	23	B1-U0-G1	B1-U0-G1
	B4		4900	5000	36	38	B1-U0-G1	B1-U0-G1
	C4		7300	7500	56		B1-U0-G2	B1-U0-G2
	D4		9800	10000	77		B2-U0-G2	B2-U0-G2
	E4		11500	12200	89		B2-U0-G2	B2-U0-G2
	F4		13600	14400	109		B2-U0-G2	B2-U0-G2
	G4		16100	17000	130		B3-U0-G3	B3-U0-G3
Type III	A3	Asymmetric Wide (AW)	2900	3000	21	23	B1-U0-G1	B1-U0-G1
	B3		4900	5100	36	38	B1-U0-G1	B1-U0-G1
	C3		7400	7600	56		B2-U0-G1	B2-U0-G1
	D3		9900	10200	77		B2-U0-G2	B2-U0-G2
	E3		11700	12400	89		B2-U0-G2	B2-U0-G2
	F3		13900	14700	109		B2-U0-G2	B2-U0-G2
	G3		16400	17300	130		B2-U0-G2	B3-U0-G2
Type II	A2	Asymmetric Narrow/ Auto (AN)	2900	3000	21	23	B1-U0-G1	B1-U0-G1
	B2		4900	5000	36	38	B1-U0-G1	B1-U0-G1
	C2		7300	7500	56		B2-U0-G1	B2-U0-G2
	D2		9800	10100	77		B2-U0-G2	B2-U0-G2
	E2		11600	12300	89		B2-U0-G2	B2-U0-G2
	F2		13700	14500	109		B3-U0-G3	B3-U0-G3
	G2		16200	17100	130		B3-U0-G3	B3-U0-G3

For additional information on EWAS IES files, please refer to LED.com

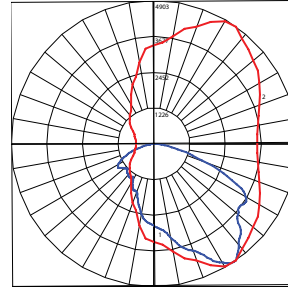
Operating Amps =  $38/480 = 0.08$  amps  
 (Use  $67/480 * 1.25 = 0.17$  amps to be conservative)

**EWAS**  
ASYMMETRIC NARROW  
(D2AN750)

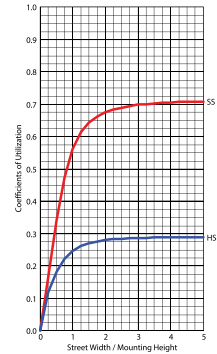
10,100 Lumens  
5000K  
EWAS01\_D2AN750\_IES



- Mounting Height at 15'
- Initial Footcandle at Grade

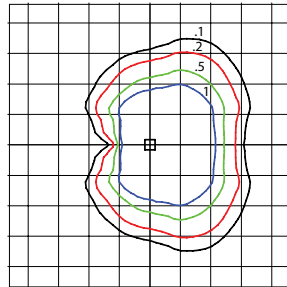


- Vertical plane through horizontal angle of Max. Cd at 55°
- Horizontal cone through vertical angle of Max. Cd at 34°

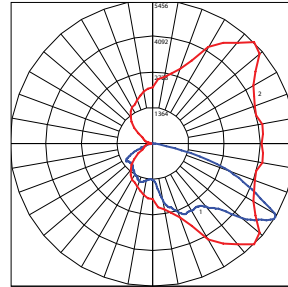


**EWAS**  
ASYMMETRIC WIDE  
(D3AW750)

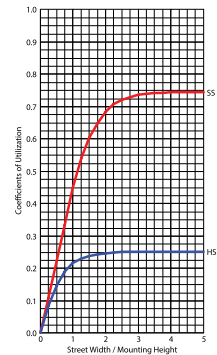
10,200 Lumens  
5000K  
EWAS01\_D3AW750\_IES



- Mounting Height at 15'
- Initial Footcandle at Grade

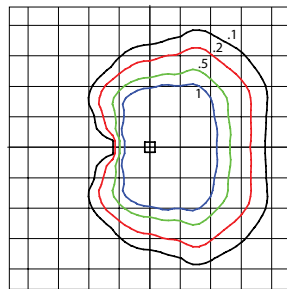


- Vertical plane through horizontal angle of Max. Cd at 45°
- Horizontal cone through vertical angle of Max. Cd at 59°

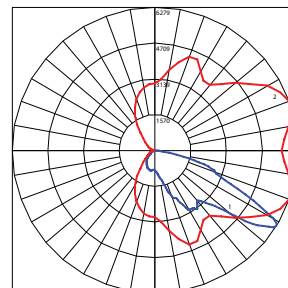


**EWAS**  
ASYMMETRIC FORWARD  
(D4AF750)

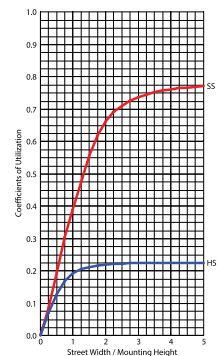
10,000 Lumens  
5000K  
EWAS01\_D4AF750\_IES



- Mounting Height at 15'
- Initial Footcandle at Grade

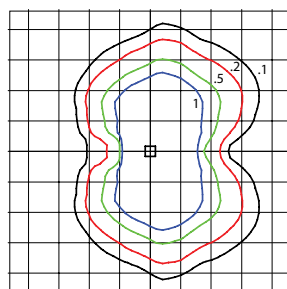


- Vertical plane through horizontal angle of Max. Cd at 20°
- Horizontal cone through vertical angle of Max. Cd at 58°

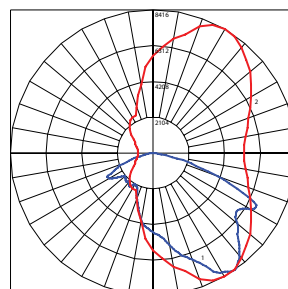


**EWAS**  
ASYMMETRIC NARROW  
(G2AN750)

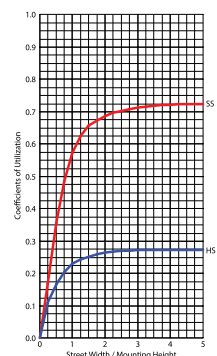
17,100 Lumens  
5000K  
EWAS01\_G2AN750\_IES



- Mounting Height at 15'
- Initial Footcandle at Grade

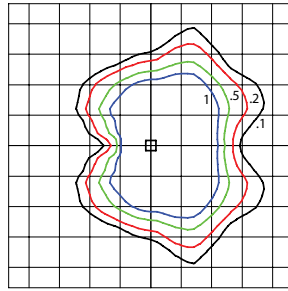


- Vertical plane through horizontal angle of Max. Cd at 60°
- Horizontal cone through vertical angle of Max. Cd at 35°

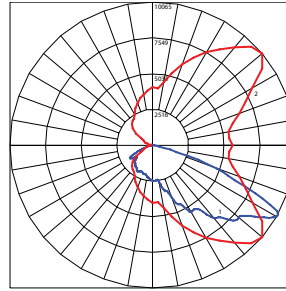


**EWAS**  
ASYMMETRIC WIDE  
(G3AW750)

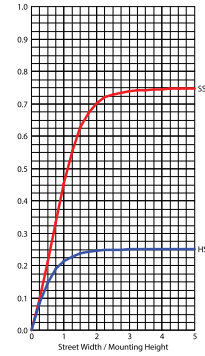
17,300 Lumens  
5000K  
EWAS01\_G3AW750\_IES



- Mounting Height at 15'
- Initial Footcandle at Grade

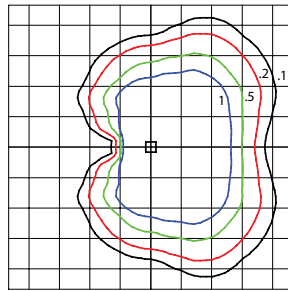


- Vertical plane through horizontal angle of Max. Cd at 40°
- Horizontal cone through vertical angle of Max. Cd at 61°

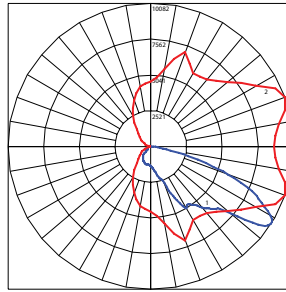


**EWAS**  
ASYMMETRIC FORWARD  
(G4AF750)

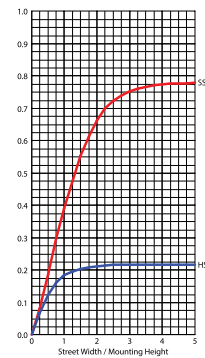
17,000 Lumens  
5000K  
EWAS01\_G4AF750\_IES



- Mounting Height at 15'
- Initial Footcandle at Grade

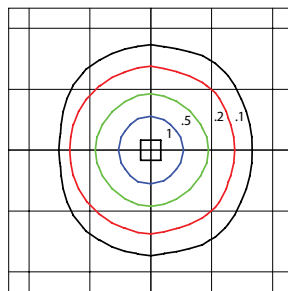


- Vertical plane through horizontal angle of Max. Cd at 20°
- Horizontal cone through vertical angle of Max. Cd at 57°

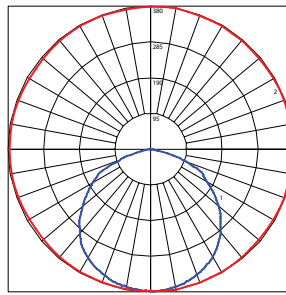


**EWAS**  
(With Emergency Battery  
Backup in Operation)

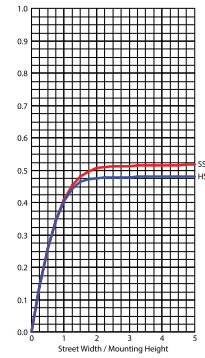
1,000 Lumens  
3000K, 4000K, 5000K  
EWAS01\_With Emergency  
Battery Backup On\_IES



- Mounting Height at 15'
- Initial Footcandle at Grade

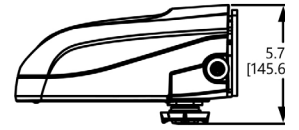
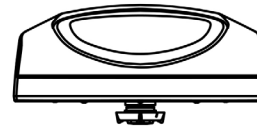


- Vertical plane through horizontal angle of Max. Cd at 80°
- Horizontal cone through vertical angle of Max. Cd at 1°

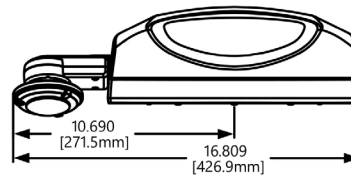


### H - Motion Sensing Option

<b>Recommended Mounting Height:</b>	8-25ft
<b>Coverage Radius:</b>	25-30 ft
<b>Lateral Coverage</b>	Provides 180° coverage (180° blocked by wall)
<b>Default Settings</b>	
<b>Output:</b>	Occupied - 100% Unoccupied - 50%
<b>PE Sensor:</b>	Enabled
<b>Ramp/Fade:</b>	10% dimming after 5 minutes with no occupancy
<b>Adds:</b>	Adds < 1W to fixture power rating
<b>Field:</b>	Field programmable using FSIR-100 hand held programmer



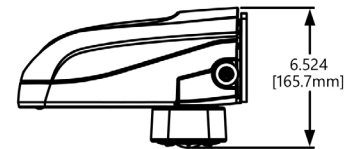
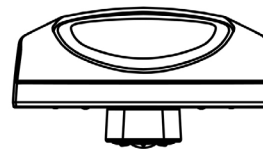
**H Option - Wattstopper Motion Sensor**  
Bottom mount available with A, B, C, D, & E Optical Codes Only



**H Option - Wattstopper® Motion Sensor**  
Side mount available with F & G Optical Codes Only

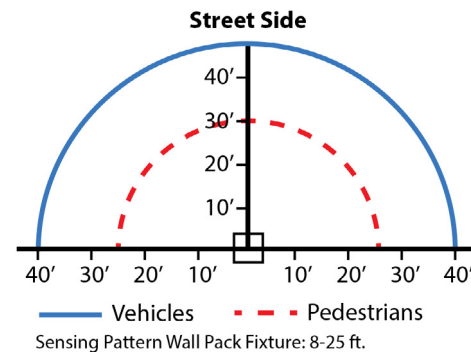
### H2 - Daintree Enabled Motion Sensing Option

<b>Recommended Mounting Height:</b>	8-25ft
<b>Coverage Radius:</b>	15-30 ft
<b>Lateral Coverage</b>	Provides 180° coverage (180° blocked by wall)
<b>Default Settings:</b>	
<b>Output:</b>	Occupied - 100% Unoccupied - 50%
<b>PE Sensor:</b>	Enabled
<b>Ramp/Fade:</b>	5 Minutes/5 Minutes
	Adds < 1W to fixture power rating
	Requires Daintree Enterprise and wide area control (WAC)

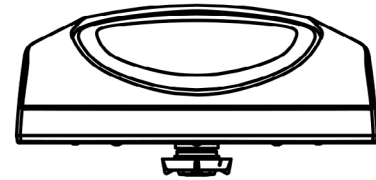
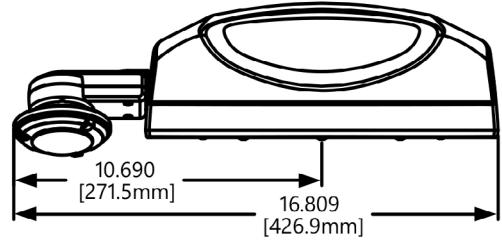
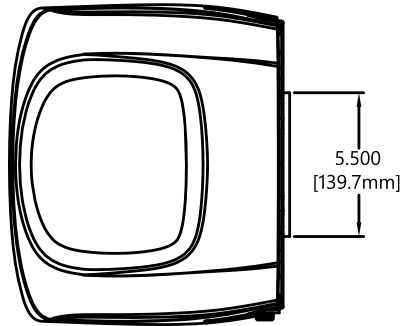


**H2 Option - Daintree Motion Sensor**  
Bottom mount available with A, B, C, D, & E Optical Codes Only

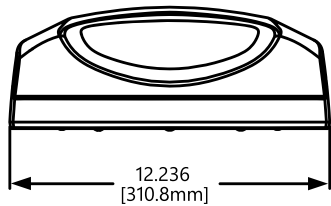
### SENSOR PATTERN



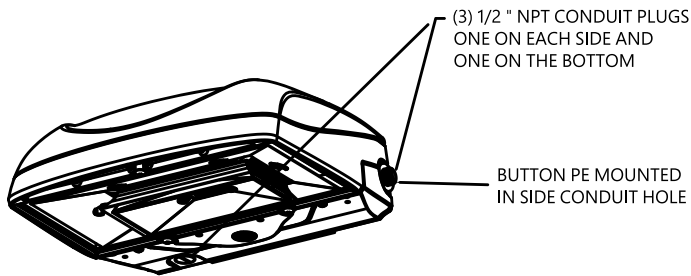
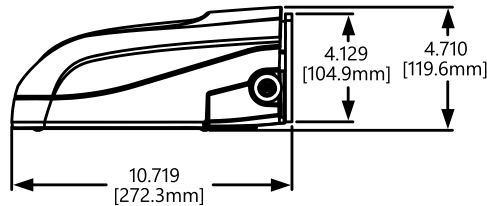
TOP VIEW



FRONT VIEW



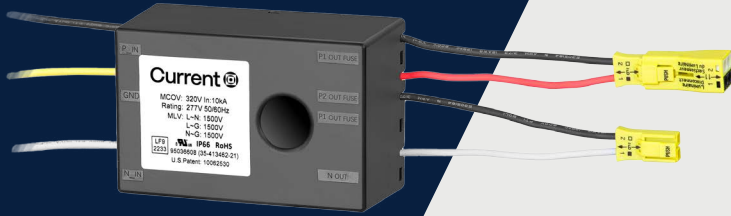
SIDE VIEW



### Mounting

- Flush Mount: Mounts directly to customer supplied junction box
- Surface Mount: Mounts to walls via separate mounting holes.
- Adjustable for 1.25 to 1 in. nominal mounting pipe
- Integral diecast mounting pipe stop

## Surge Protection Device



Project Name \_\_\_\_\_

Date \_\_\_\_\_ Type \_\_\_\_\_

Notes \_\_\_\_\_

Surge Protection is more important than ever for electronic power supplies and LED system longevity. Studies show an increasing trend in lightning strike activity in the US over the past 20 years **and projected into the future.\*** - How confident are you that your Surge Protection Device is tested and rated for **MULTIPLE** strikes?

\*Rombs, D.M., Seely, J.T., Vollaro D., Molinari, J.: SCIENCE, 14 Nov 2014, Vol 346, Issue 6211 pp. 851-854

## Did You Know?

A Surge Protection Device (SPD) may survive one C62.41.2 "High" level surge, but does it meet the repetitive surge and multi-strike requirements of ANSI C136.2's luminaire testing protocol.

There are major differences between a performance claim using C62.41.2 and comprehensive luminaire testing using C136.2.

### C136.2-2018 Test & Protocol

#### Defines Exact Test Procedure

- Defines a power source impedance representative of outdoor power distribution networks. **(Very Important)**
- Defines number of strikes, coupling modes, surge polarity, and surge phase vs AC cycle.
- Defines pre-test requirements to verify surge generator is working as intended.
- Defines pre and post test electrical measurements to verify luminaire is undamaged.
- Defines which C62.41.2 waveforms to use for testing luminaires.

**Source:** American National Standard for Roadway & Area Lighting Equipment - Dielectric Withstand and Electrical Transient Immunity Requirements.

### C62.41.2-2002 Waveforms & Categories

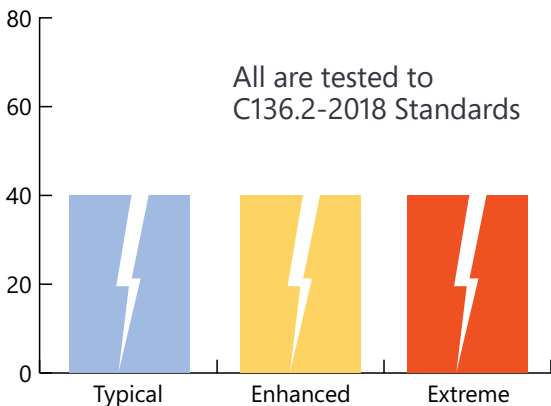
#### Defines the Surge Test Waveform

- Defines test waveforms and electrical conditions for various types of potential surge events.
- Defines recommended peak voltage and current levels for product locations and exposure conditions.
- Surge pulse levels for C62.41.2 category C, Low, Medium, and High equate to C136.2 Typical, Enhanced, and Extreme.

**Source:** IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000 V and Less) AC Power Circuits.

Current offers 3 levels of protection to make sure you are covered:

- **"TYPICAL"** (40 Strikes) = ANSI C136.2-2018 rated 6kV/3kA
- **"ENHANCED"** (40 Strikes) = ANSI C136.2-2018 rated 10kV/5kA **(Option R)**
- **"EXTREME"** (40 Strikes) = ANSI C136.2-2018 rated 20kV/10kA **(Option T)**





Project		Catalog #		Type	
Prepared by		Notes		Date	



# Streetworks

## CST CELESTEON

Solid State LED  
Area / Roadway Luminaire

### Product Features



### Interactive Menu

- Order Information [page 2](#)
- Product Specifications [page 2](#)
- Energy & Performance data [page 3](#)

### Product Certifications

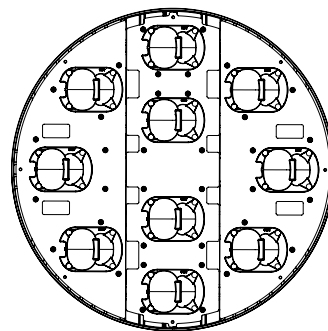
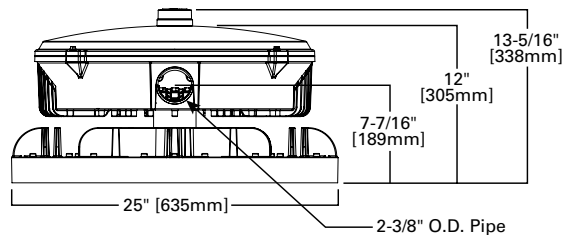


### Quick Facts

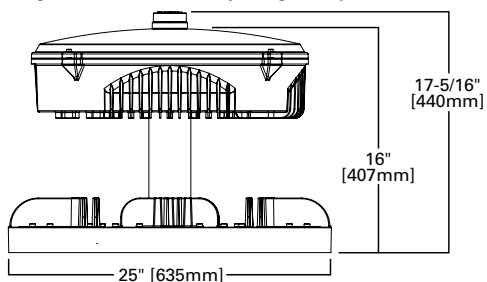
- Up to 175 lumens per watt
- 7 optical distributions: Type I, II, III, IV, V, V narrow and V round
- 10 lumen packages ranging up to 116,100 delivered lumens
- Offered in 70CRI 2200K, 2700K, 3000K, 4000K, 5000K, 5700K CCTs
- 10kV, 20kV, 10MSP, or 20MSP surge protection options

### Dimensional and Mounting Details

Short Extrusion: All lumen packages except 760 watts



Long Extrusion: 760 watts packages only



## Ordering Information

SAMPLE NUMBER: **CST-CA8-230-740-U-T5-AP-10K-PR7**

Product Family	Configuration	Wattage Bucket	Color Temperature	Voltage	Distribution	Color
<b>CST=Celestion High Mast</b> <b>BAA-CST=Celestion High Mast, Buy American Act Compliant</b> <sup>20</sup> <b>TAA-CST=Celestion High Mast, Trade Agreements Act Compliant</b> <sup>20</sup>	CA6=6 COB Light Engine	230=230W	740=70CRI, 4000K 727=70CRI, 2700K 722=70CRI, 2200K 730=70CRI, 3000K	U=Universal 120-277V 1=120V 2=208V 3=240V 4=277V 8=480V <sup>14</sup> 9=347V DC=277-480V DuraVolt Drivers <sup>22,23</sup>	T1=Type I T2=Type II T3=Type III T4=Type IV T5=Type V T5N=Type V Narrow T5R=Type V Round	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
	CA8=8 COB Light Engine	230=230W 330=330W 400=400W 430=430W 480=480W	750=70CRI, 5000K 760=70CRI, 5700K			
	CA10=10 COB Light Engine	210=210W 310=310W 630=630W 760=760W				
Options (Add as Suffix)			Controls		Accessories (Order Separately) <sup>21</sup>	
<b>F</b> =Single Fused (120, 277 or 347V. Must Specify Voltage) <b>FF</b> =Double Fused (208, 240 or 480V. Must Specify Voltage) <b>10MSP</b> =Parallel 10kV MOV Surge Protection Device <b>20MSP</b> =Parallel 20kV MOV Surge Protection Device <b>10K</b> =Series 10kV UL 1449 Surge Protective Device <b>20K</b> =Series 20kV UL 1449 Surge Protective Device <sup>2</sup> <b>20KI</b> =Series 20kV UL 1449 Surge Protective Device with light indicator <sup>2</sup> <b>K</b> =Level Indicator <b>HSS</b> =Factory Installed House Side Shield (One per LED) <sup>5</sup> <b>NG-HM</b> =Factory Installed Nature Guard <b>TH</b> =Tool-less Door Hardware (Wingnut) <sup>6,7</sup> <b>SS</b> =Stainless Steel External Hardware <sup>6</sup> <b>DH</b> =Door Hinge <b>HA</b> =50°C High Ambient <sup>3,4</sup> <b>IP66</b> =IP66 Rated Housing <b>5LTD</b> =DALI <sup>1</sup> <b>CC</b> =Coastal Construction <sup>7,8</sup> <b>TS</b> =Tool-less Surge Protector Mounting Bracket (10K Only) <sup>9,10</sup> <b>CE</b> =CE Marking <sup>11</sup> <b>CXXXX</b> =Cord Type <sup>18</sup> <b>DXXXXX</b> =Department of Transportation - Customer specific details <sup>19</sup> <b>UXXXXX</b> =Utility - Customer specific details <sup>19</sup>			<b>PSC</b> =Photocontrol Shorting Cap <b>NPC</b> =NEMA Photocontrol - Multi-Tap <b>LLPC</b> =Longlife Photocontrol Included <b>PR</b> =NEMA 3-PIN Twistlock Photocontrol Receptacle <b>PR7</b> =NEMA 7-PIN Twistlock Photocontrol Receptacle		<b>OA/RA1013</b> =Photocontrol Shorting Cap <b>OA/RA1016</b> =NEMA Photocontrol - Multi-Tap 105-285V <b>OA/RA1201</b> =NEMA Photocontrol - 347V <b>OA/RA1027</b> =NEMA Photocontrol - 480V <b>OA1223</b> =10kV Surge Module Replacement <b>FSP3-277-20kA</b> =20kA Surge Module Replacement (120-277V Input Voltage) <b>FSP3-480-20kA</b> =20kA Surge Module Replacement (480V Input Voltage) <b>HSS-HM</b> =Field Installed House Side Shield - Black (One per LED) <sup>5</sup> <b>HSS-HM-EX90</b> =External Field Installed 90° Shield - Black <b>HSS-HM-EX120</b> =External Field Installed 120° Shield - Black <b>HSS-HM-EX180</b> =External Field Installed 180° Shield - Black <b>NG-HM-FLD-SHORT</b> =Field Installed Nature Guard <sup>12</sup> <b>NG-HM-FLD-LONG</b> =Field Installed Nature Guard <sup>13</sup>	
<b>NOTES:</b> 1. 5LTD not available with 347V or 480V. 2. 20kV surge protection available with 347V as PDR with extended lead time. 3. HA not available with CA10-630 lumen packages that has HSS or NG. 4. HA not available with CA10-760 lumen package. 5. HSS not compatible with T1, T5 or T5N distributions 6. TH and SS are mutually exclusive options. Only one can be selected. 7. TH wingnuts and CC are mutually exclusive options. Only one can be selected. 8. CC includes casting pretreatment and stainless steel external hardware. 9. TS is a bracket only and surge module should be ordered if needed. 10. TS not available with 20kV or 10MSP surge protection device. 11. CE only available with 5LTD. 12. Compatible with all but CA10-760 lumen packages. 13. Only compatible with CA10-760 lumen packages. 14. Only for use with 480V Wye systems. 18. 3-conductor cord available in 12, 14, and 16 gauge with lengths of 5, 8, 10, 15, 20, and 25 feet. Specify cord gauge with the first 2 digits and cord length with the last 2 digits (ex: C1605 = 16-gauge, 5 feet length cord). Standard cord is 16-gauge with length of 3.5 ft if not specified. 19. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc. 20. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to <a href="#">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 21. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 22. 480V not to be used with ungrounded or impedance grounded systems. 23. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit <a href="http://www.signify.com/duravolt">www.signify.com/duravolt</a> for more information. Not available in 70W or below. Not available with any control option except SPB.					option with 180 degree shield: FAILS with Type V w/ 180 degree shields for asymmetric luminaires, PASSES with type 3 for asymmetric luminaires (acceptable distribution per ODOT TEM 1140-4.3.5)	

## Product Specifications

### Construction

- Heavy-duty, die-cast aluminum housing and door
- Optional toolless entry, hinged removable door for additional easy maintenance
- 3G vibration rated

### Optics

- Customers can choose from six high efficiency optics available in Type I, II, III, IV, V, Type V narrow and Type V round
- Each distribution is designed to maximize efficiency and application spacing
- Offered in 70CRI 2200K, 2700K, 3000K, 4000K, 5000K, and 5700K CCTs
- For the ultimate level of spill light control, an optional factory installed house side shield accessory is available
- IDA certified for 3000K CCT and below
- Optics are IP66 enclosure rated

### Electrical

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- Standard 0-10V dimming with parallel and series (10kV, 20kV, 10MSP, 20MSP) surge protection available
- Thermal management transfers heat away from the LED source for optimal efficiency, light output and lumen maintenance
- Ambient operating temperature from -40°C to 40°C; 50°C HA, high ambient, capability available
- Greater than 83% lumen maintenance expected at 60,000 hours

### Mounting

- Four-bolt/two bracket slipfitter with cast-in pipe stop and 2.5" leveling steps
- Fixed-in-place bird guard seals around 2" (2-3/8" O.D.) mounting arms

### Finish

- Housing and cast parts finished in five-stage super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117.
- Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors

### Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)

ASYMMETRIC LUMINAIRES  
 Operating Amps = 332/480 = 0.69 amps  
 (use 1.125 amps to be conservative)

SYMMETRIC LUMINAIRES  
 Operating Amps = 434/480 = 0.90 amps  
 (use 1.125 amps to be conservative)

## Energy and Performance Data

[View CST CELESTION IES files](#)

### Power and Lumens

Light Engine	CA6	CA8	CA8	CA8	CA8	CA8	CA8	CA10	CA10	CA10	CA10
Wattage Bucket	230	230	330	400	430	480	210	310	630	760	
Nominal Power (Watts)	228	228	332	401	434	481	213	312	631	762	
Current @ 120V (A)	1.93	1.93	2.81	3.34	3.62	4.09	1.79	2.64	5.43	6.52	
Current @ 277V (A)	0.85	0.86	1.28	1.45	1.57	1.85	0.80	1.22	2.38	--	
Current @ 347V (A)	0.67	0.67	0.99	1.16	1.25	1.45	0.63	0.93	1.90	--	
Current @ 480V (A)	0.49	0.49	0.72	0.84	0.90	1.03	0.46	0.68	1.35	--	

### Optics

		CA6	CA8	CA8	CA8	CA8	CA8	CA10	CA10	CA10	CA10
T1	5000K	36,458	37,930	51,795	64,271	69,004	75,200	36,931	51,270	97,635	112,724
	BUG Rating	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	35,802	37,247	50,862	63,114	67,760	73,845	36,266	50,346	95,877	110,695
	BUG Rating	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	35,153	36,573	49,941	61,971	66,534	72,508	35,609	49,435	94,141	108,690
	BUG Rating	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
T2	5000K	34,828	36,234	49,479	61,398	65,918	71,837	35,280	48,977	93,270	107,685
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	34,201	35,582	48,588	60,292	64,731	70,544	34,645	48,095	91,590	105,745
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	33,582	34,938	47,708	59,200	63,559	69,267	34,017	47,225	89,932	103,831
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G4	B5-U0-G5	B5-U0-G5
T3	5000K	35,158	36,577	49,947	61,978	66,543	72,518	35,614	49,441	94,153	108,704
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	34,525	35,919	49,048	60,863	65,344	71,212	34,973	48,551	92,457	106,747
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	33,900	35,268	48,160	59,760	64,161	69,922	34,339	47,672	90,783	104,814
	BUG Rating	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G4	B4-U0-G5	B5-U0-G5	B5-U0-G5
T4	5000K	34,620	36,017	49,183	61,030	65,524	71,407	35,069	48,684	92,711	107,040
	BUG Rating	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B5-U0-G5	B3-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	33,996	35,369	48,297	59,931	64,343	70,121	32,237	47,807	91,042	105,112
	BUG Rating	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	33,381	34,728	47,423	58,846	63,179	68,852	33,814	46,942	89,393	103,209
	BUG Rating	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B3-U0-G5	B4-U0-G5	B5-U0-G5	B5-U0-G5
T5	5000K	36,196	37,657	51,422	63,809	68,507	74,658	36,665	50,901	96,933	111,913
	BUG Rating	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	35,544	36,979	50,496	62,660	67,272	73,314	36,005	49,984	95,187	109,898
	BUG Rating	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	34,900	36,309	49,582	61,524	66,055	71,987	35,353	49,079	93,464	107,908
	BUG Rating	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5

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## Power and Lumens

Light Engine		CA6	CA8	CA8	CA8	CA8	CA8	CA10	CA10	CA10	CA10
<b>Wattage Bucket</b>		230	230	330	400	430	480	210	310	630	760
<b>Nominal Power (Watts)</b>		228	228	332	401	434	481	213	312	631	762
<b>Current @ 120V (A)</b>		1.93	1.93	2.81	3.34	3.62	4.09	1.79	2.64	5.43	6.52
<b>Current @ 277V (A)</b>		0.85	0.86	1.28	1.45	1.57	1.85	0.80	1.22	2.38	--
<b>Current @ 347V (A)</b>		0.67	0.67	0.99	1.16	1.25	1.45	0.63	0.93	1.90	--
<b>Current @ 480V (A)</b>		0.49	0.49	0.72	0.84	0.90	1.03	0.46	0.68	1.35	--
Optics											
<b>T5N</b>	5000K	37,394	38,903	53,124	65,920	70,774	77,129	37,879	52,585	100,140	115,617
	BUG Rating	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5
	4000K	36,720	38,203	52,167	64,732	69,499	75,740	37,196	51,638	98,337	113,535
	BUG Rating	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5
	3000K	36,055	37,511	51,222	63,560	68,241	74,369	36,523	50,703	96,556	111,479
	BUG Rating	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G3	B5-U0-G4	B5-U0-G5	B5-U0-G5
<b>T5R</b>	5000K	37,550	39,066	53,346	66,195	71,069	77,451	38,037	52,805	100,559	116,100
	BUG Rating	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	4000K	36,874	38,362	52,385	65,004	69,790	76,057	37,352	51,854	98,748	114,009
	BUG Rating	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	3000K	36,206	37,668	51,437	63,827	68,526	74,680	36,676	50,915	96,960	111,945
	BUG Rating	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5

## Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 40°C	> 83%	125,000

## Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

## Highmast Weights

Catalog Logic	Weight (lbs)	Weight (kgs)
CA4-230W	58	26.11
CA8-230W	58	26.31
CA8-330W	57	25.89
CA8-400W	61	27.49
CA8-430W	61	27.49
CA8-480W	61	27.49
CA10-210W	61	27.69
CA10-310W	61	27.49
CA10-630W	65	29.48
CA10-760W	66	30.06

## Energy Data

Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 and 60Hz,
347V/60Hz, 480V/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

## Shipping Data

Approximate Net Weight: See Highmast Weights chart	<b>DESIGN TOTAL LLF (at 60K Hrs)</b>
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## EPA Data

Configuration	Accessory	EPA
Short Extrusion	None	1.13
Short Extrusion	Nature Guard	1.20
Short Extrusion	HSS-HM-EX90	2.82
Short Extrusion	HSS-HM-EX120	3.21
Short Extrusion	HSS-HM-EX180	3.57
Long Extrusion	None	1.25
Long Extrusion	Nature Guard	1.44
Long Extrusion	HSS-HM-EX90	2.87
Long Extrusion	HSS-HM-EX120	3.26
Long Extrusion	HSS-HM-EX180	3.62

0.86

use more concrete value

## DESCRIPTION

The Streetworks Wal-Pak Series of wall luminaires provides traditional architectural style with high performance energy efficient illumination. Rugged die-cast aluminum construction, stainless steel hardware along with a sealed and gasketed optical compartment make the Wal-Pak virtually impenetrable to contaminants. IP66 Rated. UL and cUL wet location listed. The Wal-Pak wall luminaire is ideal for pathway illumination, building entrances, vehicle ramps, schools, tunnels, stairways and loading docks.

<b>Catalog #</b>		<b>Type</b>	
<b>Project</b>			
<b>Comments</b>		<b>Date</b>	
<b>Prepared by</b>			

## SPECIFICATION FEATURES

### Housing

Rugged one-piece die-cast aluminum housing and hinged, removable die-cast aluminum door. One-piece silicone gasket seals the optical chamber. UL 1598 wet location listed and IP66 ingress protection rated. Not recommended for car wash applications.

### Electrical

LED driver and related electrical components are hard mounted to the die-cast housing for optimal heat sinking and operating efficiency. Wiring is extended through a silicone gasket at the back of the housing. Three 1/2" threaded conduit entry points allow for thru-branch wiring. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from LED source. Integral LED electronic driver incorporates internal fusing designed to

withstand a 6kV surge test and is Class 2 rated for 120-277V with an operating temperature of -40° to 55°C. Wal-Pak LED systems maintain greater than 93% of the initial light output after 72,000 hours of operation.

### Optical

Highly reflective anodized aluminum reflectors provide high efficiency illumination. Optical assemblies include impact resistant borosilicate refractive glass, and full cutoff IESNA compliant configurations. Patented, solid state LED luminaires are thermally optimized with three lumen packages.

### Door Assembly

Single point, captive stainless steel hardware secures the removable hinged door allowing for ease of installation and maintenance. Door assembly is hinged at the bottom for easy removal and installation.

### Finish

Finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard color is bronze. Additional colors available in white, grey, bronze, black, dark platinum and graphite metallic. Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors. Options to meet Buy American and other domestic preference requirements.

### Efficiency Standards Notice

Select luminaires are manufactured to USA and California efficiency regulations.



## WKP WAL-PAK

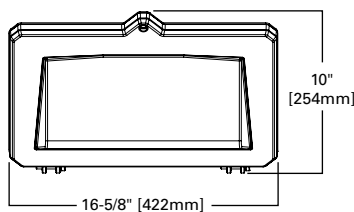
27, 32 and 46W

LED

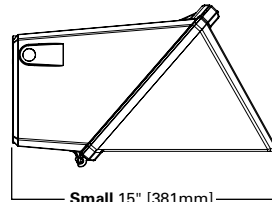
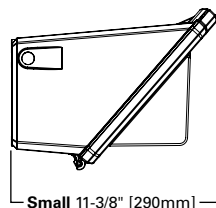
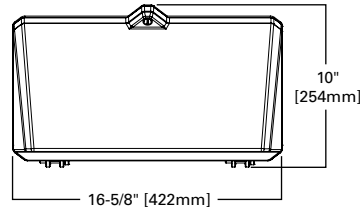
WALL MOUNT LUMINAIRE

## DIMENSIONS

### BOROSILICATE GLASS DOOR



### FULL CUTOFF DOOR



### CERTIFICATION DATA

UL and cUL Wet Location Listed  
IP66 Rated  
40°C Maximum Ambient Temperature  
External Supply Wiring 90°C Minimum  
Title 20 Compliant  
LM79 / LM80 Compliant

### ENERGY DATA

120-277V 50/60Hz

### SHIPPING DATA

Approximate Net Weight:  
32-42 lbs. (15-19 kgs.)

**POWER AND LUMENS**

Catalog Number	Lumens	Power Consumption (Watts)	B.U.G. Rating	Correlated Color Temperature CCT (Kelvin)	Color Rendering Index (CRI)
<b>Borosilicate Glass Door (GL)</b>					
WKP3BLEDEDGL-7040	3,270	27W	B1-U3-G1	4000K	73
WKP4BLEDEDGL-7040	4,160	32W	B1-U3-G2	4000K	73
WKP6BLEDEDGL-7040	5,828	46W	B1-U4-G4	4000K	73
WKP3BLEDEDGL	3,333	27W	B1-U3-G1	5000K	72
WKP4BLEDEDGL	4,199	32W	B1-U3-G3	5000K	73
WKP6BLEDEDGL	5,883	46W	B1-U4-G4	5000K	73
<b>Full Cutoff Door (FC)</b>					
WKP3BLEDEDFC-7040	1,884	27W	B1-U0-G1	4000K	72
WKP4BLEDEDFC-7040	2,239	32W	B1-U0-G1	4000K	73
WKP6BLEDEDFC-7040	3,137	47W	B1-U0-G1	4000K	73
WKP3BLEDEDFC	1,912	27W	B1-U0-G1	5000K	72
WKP4BLEDEDFC		32W	B1-U0-G1	5000K	73
WKP6BLEDEDFC		46W	B1-U0-G1	5000K	73

Operating Amps = 46/480 = 0.10 amps  
 (Use 67/480\*1.25=0.17 amps to be conservative)

**CURRENT DRAW**

Light Engine	3B	4B	6B
Nominal Power (Watts)	27W	32W	46W
Input Current @ 120V (A)	0.24	0.28	0.40
Input Current @ 208V (A)	0.14	0.18	0.23
Input Current @ 240V (A)	0.13	0.15	0.20
Input Current @ 277V (A)	0.11	0.13	0.18
Input Current @ 347V (A)	0.09	0.11	0.15
Input Current @ 480V (A)	0.10	0.12	0.14

**LUMEN MAINTENANCE**

Ambient Temperature	TM-21 Lumen Maintenance (72,000 Hours)*	Theoretical L70 (Hours)
25°C>	93%	>340,000
40°C>	92%	>316,000

\*Per TM-21 data.

DESIGN TOTAL LLF (at 60K Hrs)  
 0.85

**LUMEN MULTIPLIER**

Ambient Temperature	Lumen Multiplier
10°C	1.07
15°C	1.04
25°C1	1.00
40°C0	0.94

use more conservative value

**ORDERING INFORMATION**

Sample Number: WKP3BLEDEUGL

Product Family	Lamp Wattage <sup>1</sup>	Lamp Type	Driver Type	Voltage <sup>2</sup>	Door/Lens Type	Color
WKP=Wal-Pak BAA-WKP=Wal-Pak Buy American Act Compliant <sup>4</sup> TAA-WKP=Wal-Pak Trade Agreements Act Compliant <sup>4</sup>	LED 3B=(3 Package), 27W 4B=(4 Package), 32W 6B=(6 Package), 46W	LED=Solid State Light Emitting Diodes	E=Electronic LED Dimming (0-10V) Driver	9=347V <sup>3</sup> 8=480V <sup>3</sup> U=Universal (120-277V)	GL=Borosilicate Glass Door FC=Full Cutoff Door	AP=Grey BZ=Bronze BK=Black WH=White
Options (Add as Suffix)				Accessories (Order Separately) <sup>5</sup>		
7030=70 CRI / 3000K CCT 7040=70 CRI / 4000K CCT 5=Non NEMA Photocontrol (Must Specify Voltage) B=Two-Position Terminal Block				WG/WPGL=Wire Guard Borosilicate Glass Lens Door WG/WPFC=Wire Guard Full Cutoff Door TR/WP=Tamper-resistant Screw and Bit VS/WPGL=Polycarbonate Vandal Shield for Borosilicate Glass Lens Door		

**NOTES:**

- LED packages based on 70 CRI / 5000K package at 25°C ambient.
- 105°C Rated wire required for thru-branch wiring. Thru-branch wiring is rated for 40°C. Higher wattage thru-branch wiring is rated for use in 25°C ambient operating environments.
- Not available with thru-branch wiring. LED will be supported with integral step down transformer.
- Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
- Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.



Cooper Lighting Solutions  
 1121 Highway 74 South  
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 P: 770-486-4800  
 www.cooperlighting.com  
 Specifications and dimensions subject to change without notice.