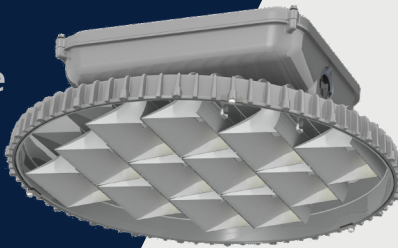


ERHM Gen 03

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

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

OPTICAL SYSTEM

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

ELECTRICAL

Input Voltage:	120-277V or 277-480V
Input Frequency:	50/60Hz
Power Factor:	≥ 0.9% at rated watts
Total Harmonic Distortion:	≤ 20% at rated watts
EMI:	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

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

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

*Contact Manufacturer for units ≥ 100K lm

CONTROLS

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



E R H M 03

7

4 B

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

¹ Not available with fusing. Fusing requires discrete voltage selection to ensure proper fusing wiring.

² Select 3000K CCT for IDA approved units.

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

⁴ Dimming control wiring included to connect dimming control external to the fixture.

⁵ 70 CRI Typical.

⁶ Contact manufacturing for availability.

⁷ Available only in VW distribution.

⁸ May not be available in some configurations.

⁹ 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

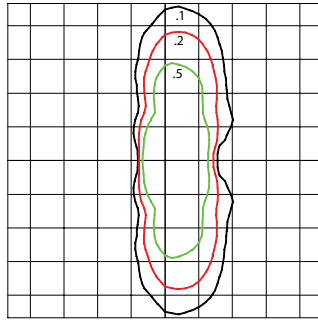
The information above is designed to provide a guideline to select the correct luminaire for a roadway application. The best and most accurate way to ensure the proper design is by doing a lighting layout.



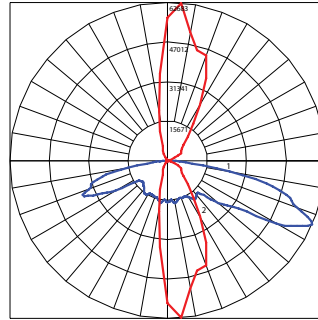
LUMEN OUTPUT	DIST.	INITIAL LUMENS		TYPICAL SYSTEM		PRELIMINARY BUG RATINGS	
		5000K/4000K	3000K	LPW (4000K)	WATTS	4000K	3000K
30	A6	30,000	28800	154	195	B3-U0-G3	B3-U0-G3
	B6	30,000	28800	154	195	B3-U0-G4	B3-U0-G4
	C6	30,000	28800	154	195	B3-U0-G5	B3-U0-G4
	D6	30,000	28800	154	195	B2-U0-G4	B2-U0-G4
	VW	31,500	30200	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	83,400	80000	137	611	B5-U0-G5	B4-U0-G5
	D6	83,400	80000	137	611	B5-U0-G5	B5-U0-G5
	VW	83,400	80000	159	525	B5-U0-G5	B5-U0-G5
90	A6	92,000	88300	133	692	B5-U0-G5	B5-U0-G5
	B6	92,000	88300	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

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

ERHM03
Type II Narrow
70,000 Lumens
4000K
ERHM3_70A6740__IES

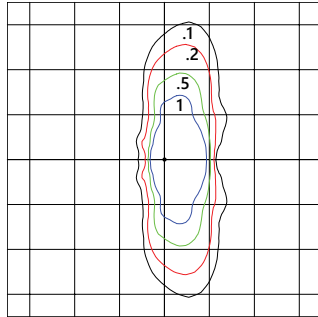


Grid Distance in Units
of Mounting Height at 60' Initial
Footcandle Values at Grade

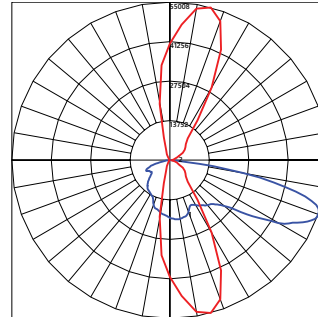


— Vertical plane through horizontal angle
of maximum candlepower at 85°
— Horizontal cone through vertical angle of 66°

ERHM03
Type II Wide
70,000 Lumens
4000K
ERHM3_70B6740__IES

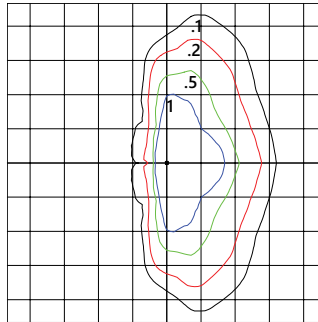


Grid Distance in Units
of Mounting Height at 60' Initial
Footcandle Values at Grade

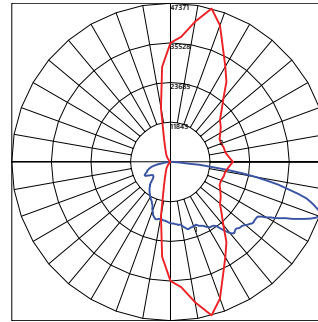


— Vertical plane through horizontal angle
of maximum candlepower at 75°
— Horizontal cone through vertical angle of 70°

ERHM03
Type III Wide
70,000 Lumens
4000K
ERHM3_70C6740__IES

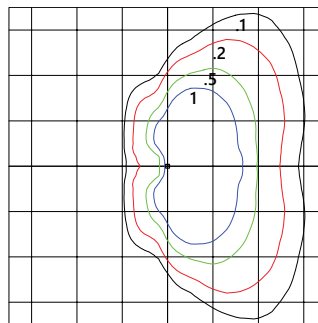


Grid Distance in Units
of Mounting Height at 60' Initial
Footcandle Values at Grade

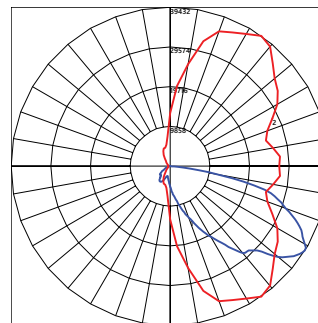


— Vertical plane through horizontal angle
of maximum candlepower at 75°
— Horizontal cone through vertical angle of 70°

ERHM03
Type III/IV
60,000 Lumens
4000K
ERHM3_60D6740__IES

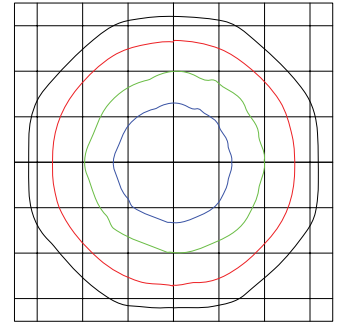


Grid Distance in Units
of Mounting Height at 60' Initial
Footcandle Values at Grade

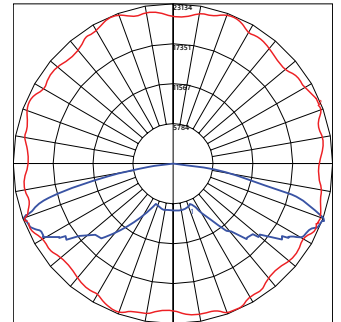


— Vertical plane through horizontal angle
of maximum candlepower at 55°
— Horizontal cone through vertical angle of 58°

ERHM03
Type V
80,000 Lumens
4000K
ERHM3_80VW740__IES



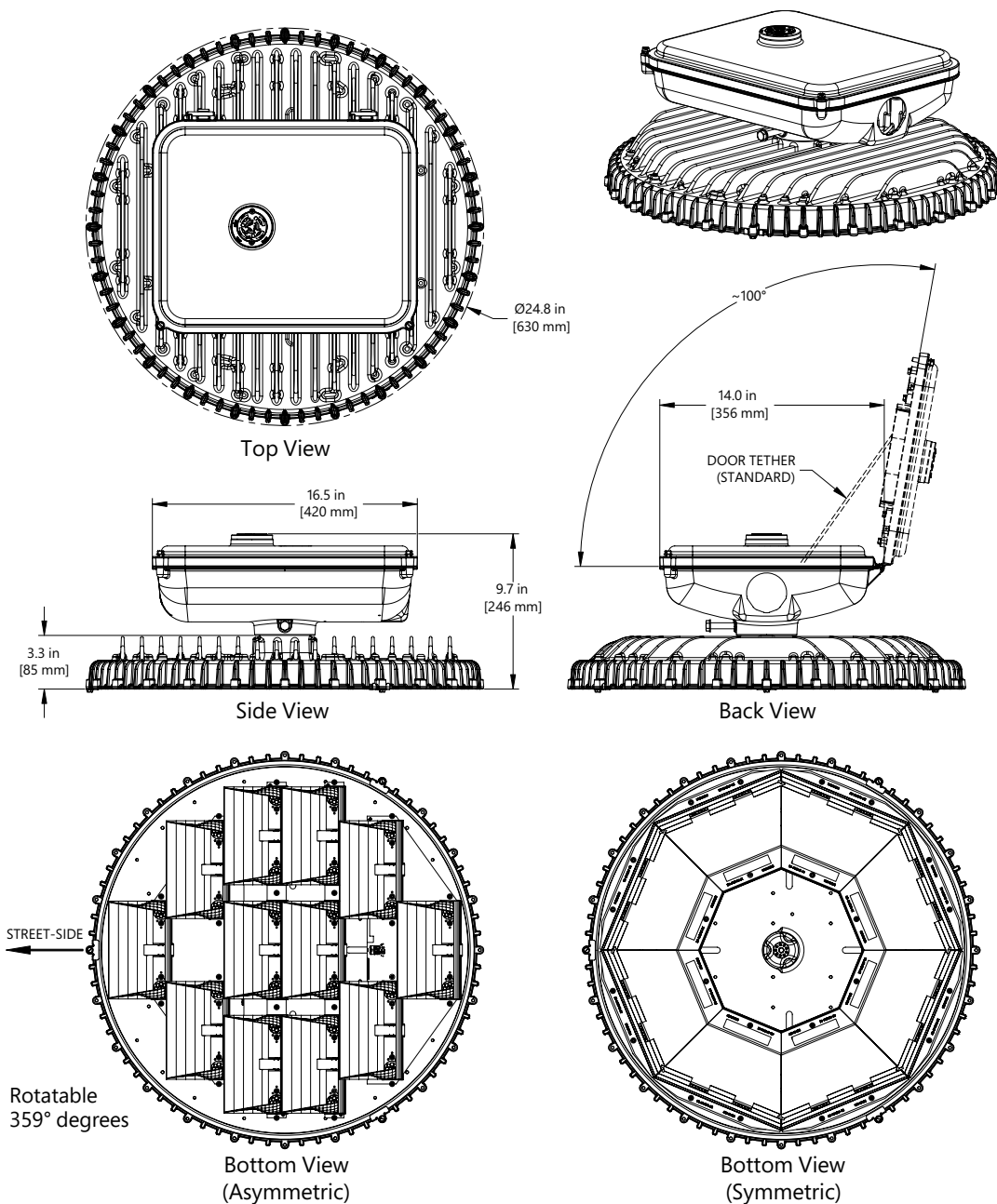
Grid Distance in Units
of Mounting Height at 60' Initial
Footcandle Values at Grade



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

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

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.² (0.12m²) (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.