

Evolve® LED Roadway Lighting

High Mast Luminaire (ERHM) Gen 2



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 additional operating cost savings.

CONSTRUCTION

Housing:	Cast aluminum optical and electrical housings.
Lens:	Impact resistant tempered glass Corrosion resistant powder paint, ≥ 2.0 mil thickness
Paint:	(RAL & custom colors available) Standard = Gray & Black Optional = Coastal Finish
Weight:	54 lbs. (24.5 kgs.)

OPTICAL SYSTEM

Lumens:	27,900 - 84,000
Distribution:	Type II Wide Type III Type III/IV Type V High Angle
Efficacy:	113-143 LPW
CCT:	3000K & 4000K
CRI:	≥ 70

ELECTRICAL

Input Voltage:	120-277V or 347-480V
Input Frequency:	50/60Hz
Power Factor:	≥ 90% at rated watts
Total Harmonic Distortion:	≤ 20% at rated watts

SURGE PROTECTION*

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

*Per ANSI C136.2-2018

LUMEN MAINTENANCE

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

SKU	Distributions	LXX(10K) @ Hours		
		25,000 HR	50,000 HR	100,000 HR
ERHM	B3, C3, D3, VW	L95	L93	L85

NOTES: 1) Projected Lxx based on LM-80 (6,000 hour testing). 2) DOE Lighting Facts Verification Testing 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 C136.31-2018
LM-79:	Testing in accordance with IES Standards

CONTROLS

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

WARRANTY

5 Year (Standard)

10 Year (Optional)

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Catalog Logic

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Notes _____

ERHM 02

7

4 B

PROD. ID	GEN	VOLTAGE	LUMENS	DISTRIBUTION	CRI	CCT	DIMMING	CONTROLS PER ANSI C136.41	MOUNTING	COLOR	OPTIONS
E = Evolve	02	0 = 120-277 ¹	30	B3 = Type II Wide	7 = 70 ⁵	30 = 3000K ²	N = No Dimming Control Wiring	1 = None	4B = 4 Bolt (std)	BLCK = Black	F = Fusing
R = Roadway		1 = 120	40	C3 = Type III		40 = 4000K	D = Dimming Control Wiring Included ⁴	A = 7-Pin Receptacle		GRAY = Gray	R = Secondary 10kV/5kA SPD
H = High		2 = 208	50	D3 = Type III/IV				D = 7-Pin Receptacle with Shorting Cap			T = Secondary 20kV/10kA SPD
M = Mast		3 = 240	60	VW = Type V High Angle				E = 7-Pin Receptacle with Long Life non-Dimming PE Control			Y = Coastal Finish ³
		4 = 277	70								XXX = Special Options
		5 = 480	80								
		D = 347									
		H = 347-480V ¹									

¹ Not Available with Fusing

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

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	B3	Type II Wide
G1	Type III Extra Wide	C3	Type III
F1	Type IV Wide	D3	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.

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Spec Tables

Project Name _____

Date _____ Type _____

Notes _____

LUMEN OUTPUT	DIST.	INITIAL LUMENS		WATTAGE 120-277V 347-480V	BUG RATINGS	
		4000K	3000K		4000K	3000K
30	B3	30600	28800	240	B3-U0-G4	B3-U0-G3
	C3	30000	28200	240	B3-U0-G4	B3-U0-G4
	D3	29400	27900	245	B2-U0-G4	B2-U0-G4
	VW	30000	28200	210	B5-U0-G3	B5-U0-G3
40	B3	40800	38400	305	B4-U0-G4	B4-U0-G4
	C3	40000	37600	305	B3-U0-G5	B3-U0-G5
	D3	39200	37200	310	B3-U0-G4	B3-U0-G4
	VW	40000	37600	280	B5-U0-G4	B5-U0-G4
50	B3	51000	48000	380	B4-U0-G5	B4-U0-G4
	C3	50000	47000	380	B4-U0-G5	B4-U0-G5
	D3	48500	46000	385	B3-U0-G5	B3-U0-G5
	VW	50000	47000	365	B5-U0-G4	B5-U0-G4
60	B3	66300	62400	495	B4-U0-G5	B4-U0-G5
	C3	65000	61100	495	B4-U0-G5	B4-U0-G5
	D3	63200	60000	500	B3-U0-G5	B3-U0-G5
	VW	65000	61100	468	B5-U0-G5	B5-U0-G5
70	B3	75500	71000	565	B5-U0-G5	B5-U0-G5
	C3	74000	69560	565	B4-U0-G5	B4-U0-G5
	VW	74000	69560	570	B5-U0-G5	B5-U0-G5
80	VW	84000	78960	650	B5-U0-G5	B5-U0-G5

For additional information on ERHM IES files, please click one of the following links:

[Non-Shielded](#)

[Shielded](#)

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Photometric Plots

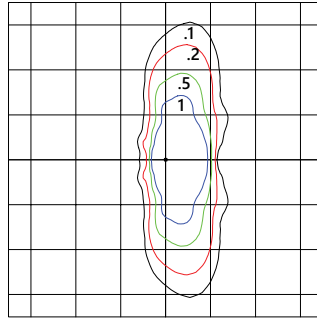
Project Name _____

Date _____ Type _____

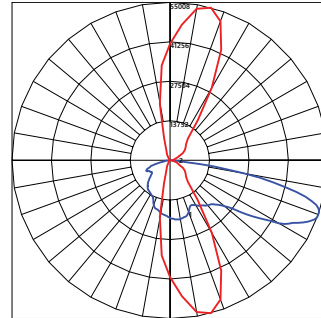
Notes _____

ERHM02
Type II Wide

75,500 Lumens
4000K
ERHM02_70B3740__IES



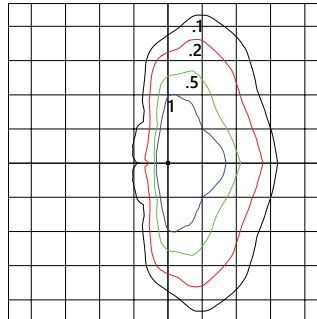
Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade



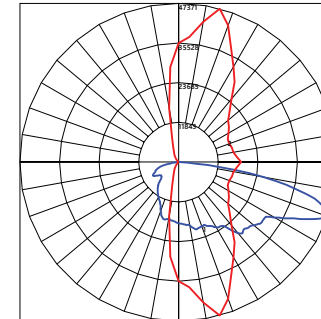
— Vertical plane through horizontal angle of maximum candlepower at 75°
— Horizontal cone through vertical angle of 70°

ERHM02
Type III Wide

74,000 Lumens
4000K
ERHM02_70C3740__IES



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

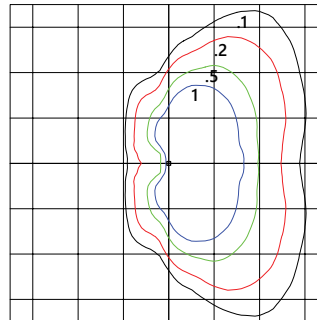


— Vertical plane through horizontal angle of maximum candlepower at 75°
— Horizontal cone through vertical angle of 70°

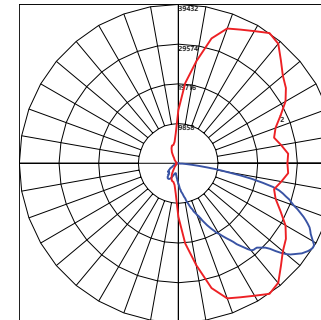
³ This optic is designed to address a Roadway Photometric Application and may classify as Type II or III.

ERHM02
Type III/IV

63,200 Lumens
4000K
ERHM02_60D3740__IES



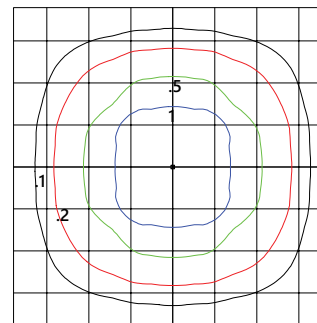
Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade



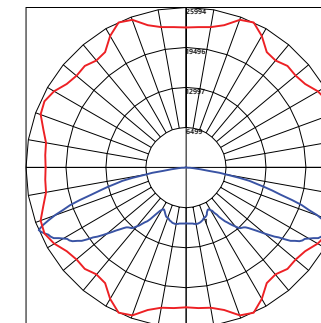
— Vertical plane through horizontal angle of maximum candlepower at 55°
— Horizontal cone through vertical angle of 58°

ERHM02
Type V

84,000 Lumens
4000K
ERHM02_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°

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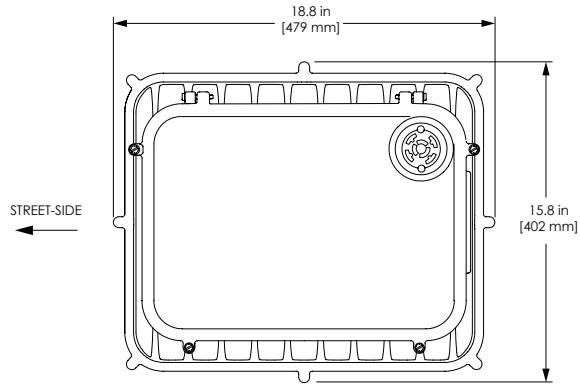
Mounting & Accessories

Project Name _____

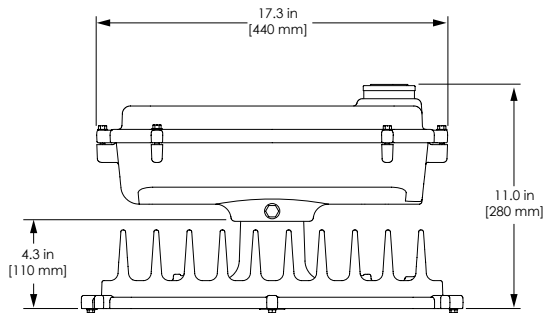
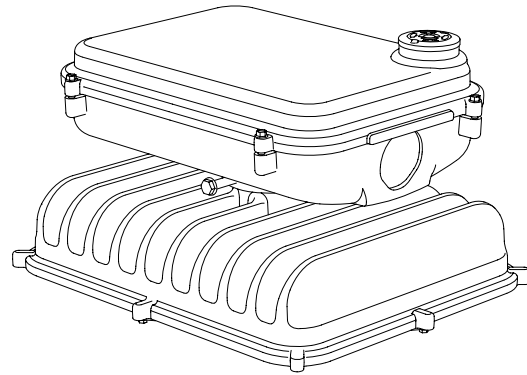
Date _____ Type _____

Notes _____

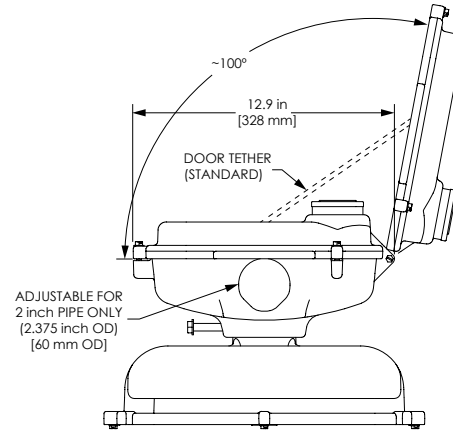
ERHM (For Distribution VW)



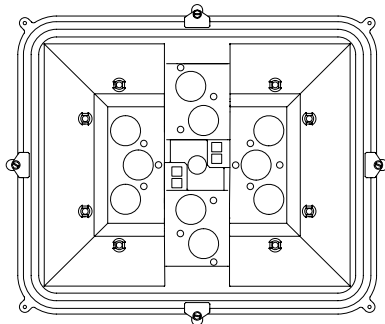
Top View



Side View



Back View



Bottom View

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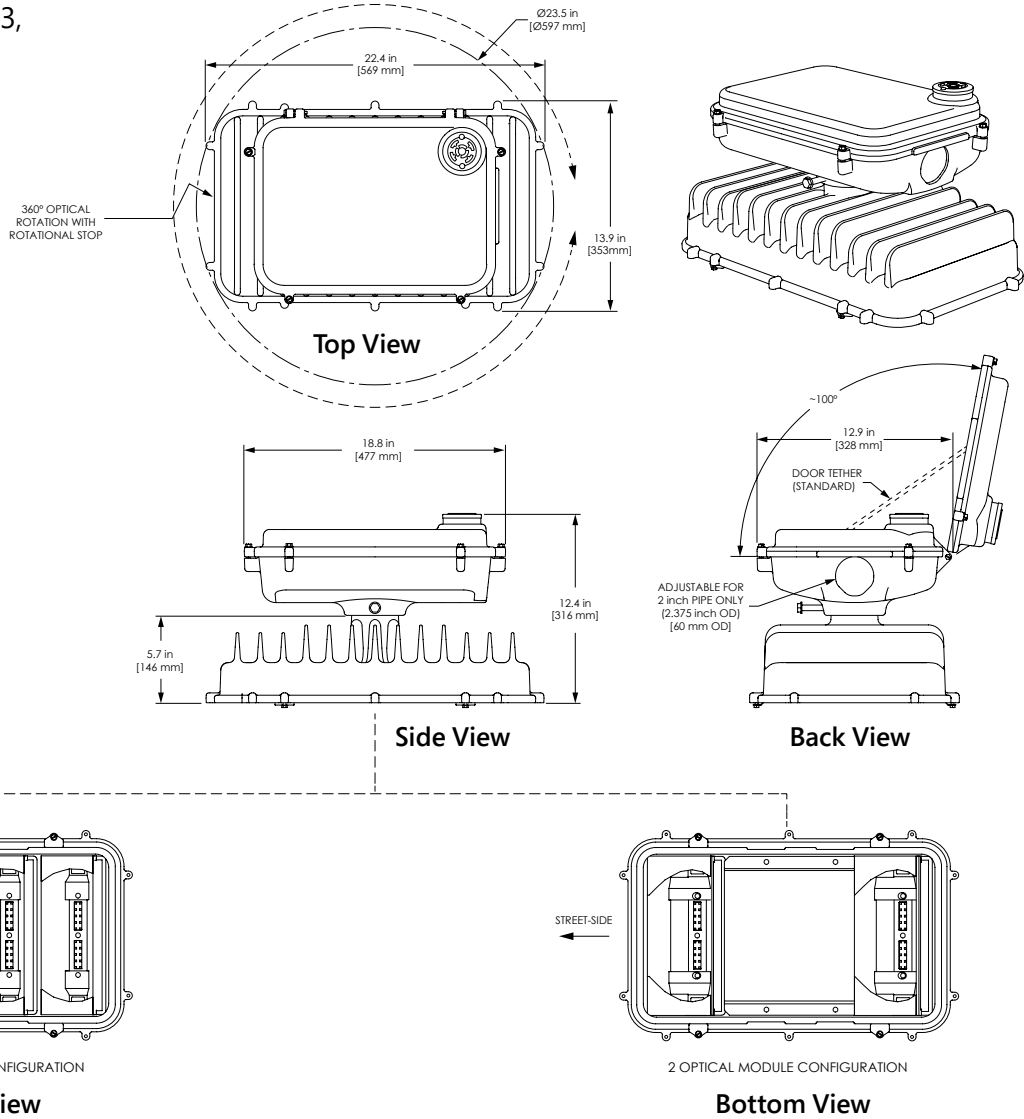
Mounting & Accessories

Project Name _____

Date _____ Type _____

Notes _____

ERHM (For Distribution B3, C3 and D3)



MOUNTING

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

EFFECTIVE PROJECTED AREA

- Effective Projected Area: 2 ft² (max.)

WEIGHT

- Weight: 54 lbs. (24.5 kgs.)

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.