



GE Evolve™

LED Roadway Lighting
High Mast Luminaire (ERHM)



Product Features

The Evolve™ LED High Mast is an LED solution for expressway, freeway interchanges and other large area applications. GE's unique reflective optics are designed to optimize application efficiency and minimize glare. This reliable unit has a 100,000-hour design life, significantly reducing maintenance needs and expense over the life of the fixture. The ERHM luminaire is an efficient solution lowering energy consumption as compared to traditional HID fixtures providing additional operating cost savings.

Applications

- Designed to meet recommended luminance and illuminance requirements for High Mast Applications such as Airport Lighting, Expressway and Freeway Interchanges, Port Facilities, Trailer/Container Yard and Rail Yard Operations.

Housing

- Cast aluminum optical and electrical housings.
- Meets 3G vibration standards per ANSI C136.31-2010

LED & Optical Assembly

- Field rotatable optics.
- Evolve™ light engine using reflective technology to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 3000K & 4000K CCT typical.
- LM-79 tests and reports in accordance with IESNA standards.

Lumen Maintenance

- Projected L90>60,000 hours per IES TM-21
- Projected Lxx per IES TM-21 at 25°C for reference:

SKU	LXX (10K)@HOURS		
	25,000 HR	50,000 HR	100,000 HR
ERHM	L95	L93	L88

NOTES: 1) Projected Lxx based on LM-80 (10,000 hour testing).
2) DOE Lighting Facts Verification Testing Tolerances apply to initial luminous flux and lumen maintenance measurements.

Lumen Ambient Temperature Factors:

LUMEN AMBIENT TEMPERATURE FACTORS:	
AMBIENT TEMPERATURE (°C)	INITIAL FLUX FACTOR
10	1.02
20	1.01
25	1.00
30	0.99
40	0.98
45	0.97

Ratings

- UL/cUL listed, suitable for wet locations per UL 1598.
- IP66 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at -40° to 45°C.
- Upward Light Output Ratio (ULOR) = 0
- Compliant with the material use restrictions of RoHS.

-  Please refer to the DLC QPL website for the latest and most complete information. www.designlights.org/QPL

Mounting

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

Finish

- Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
- Standard color: Gray.
- RAL & custom colors available.
- Coastal Finish option*
* Check with manufacturer for availability

Electrical

- 120-277 volt and 347-480 volt
- System power factor is >90% and THD<20%
- Class "A" sound rating
- Surge protection per ANSI C136.2-2015:
 - Standard: 6kV/3kA "Basic": (120 strikes)
 - Optional: 10kV/5kA "Enhanced": (40 Strikes)
- Photo electric sensors (PE) available
- ANSI C136.41 PE receptacle
- Analog 0-10V or optional DALI dimming
- Optional single and double fusing
- EMI: Title 47 CFR part 15 class A

Warranty

- 5 Year standard
- 10 Year option

Suggested HID Replacement Lumen Levels

- ~28,800 -42,700 lm to replace 400W HID luminaires.
- ~46,500 -53,400 lm to replace 750W HID luminaires.
- ~50,900 -58,300 lm to replace 1000W HID luminaires.

Ordering Number Logic

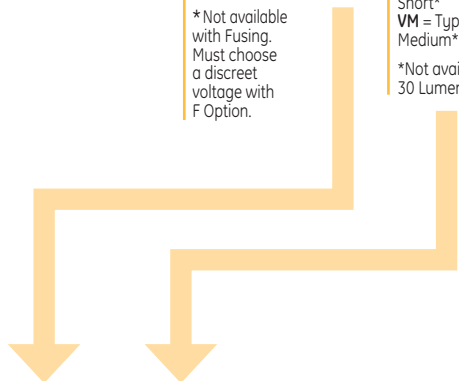
Evolve LED High Mast Luminaire



ERHM 01

4B

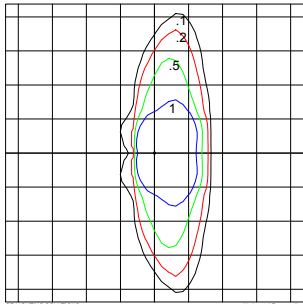
PROD. ID	GENERATION	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION	CRI	CCT	DIMMING	CONTROLS	MOUNTING	COLOR	OPTIONS
E = Evolve R = Roadway H = High M = Mast	01 = 1st Gen	0 = 120-277* 1 = 120 2 = 208 3 = 240 4 = 277 5 = 480 D = 347 H = 347-480V* *Not available with Fusing. Must choose a discreet voltage with F Option.	30 40 50 60 See Data Table for more information.	E1 = Type II Asym Med F1 = Type IV Asym Wide G1 = Type III Asym Extra Wide VS = Type V Short* VM = Type V Medium* *Not available for 30 Lumen output	7 = 70* *70 CRI Typical	30 = 3000K<> 40 = 4000K <> Select 3000 CCT for IDA approved units	N = No Dimming Control Wiring D = Dimming Control Wiring Included* *Dimming control wiring included to connect dimming control external to the fixture. Note: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	1 = None A = ANSI C136.41 7-Pin Receptacle D = ANSI C136.41 7-Pin Receptacle with Shorting Cap E = ANSI C136.41 7-Pin Receptacle with Non-Dimming PE control.* *PE Control Only available for 480V Discrete. Not available for 347-480V or 347V Discrete. Note: Dimming controls wired for 0-10V standard unless DALI option "U" requested.	4B = 4 Bolt (std)	GRAY = GRAY BLCK = BLACK	F = Fusing R = Secondary Enhanced Surge Protection (10kV/5kA) U = DALI Programmable* Y = Coastal Construction* XXX = Special Options ° Not available in 347V, 480V or 347-480V. *Recommended for installations within 1 mile from the coast. Contact Manufacturer for Availability.



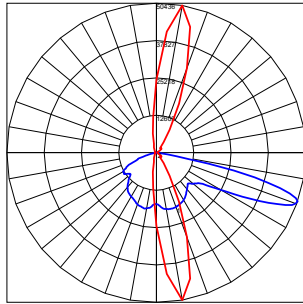
LUMEN OUTPUT	DISTRIBUTION	TYPICAL INITIAL LUMENS		TYPICAL SYSTEM WATTAGE	BUG RATINGS		IES FILE NUMBER	
		3000K	4000K		3000K	4000K	3000K	4000K
30	E1	28,800	30,000	253	B4-U0-G3	B4-U0-G3	ERHM01_30E1730__IES	ERHM01_30E1740__IES
	F1	28,800	30,000	253	B4-U0-G4	B4-U0-G4	ERHM01_30F1730__IES	ERHM01_30F1740__IES
	G1	28,800	30,000	253	B4-U0-G4	B4-U0-G4	ERHM01_30G1730__IES	ERHM01_30G1740__IES
40	E1	37,500	39,000	320	B4-U0-G3	B4-U0-G3	ERHM01_40E1730__IES	ERHM01_40E1740__IES
	F1	37,500	39,000	320	B4-U0-G4	B4-U0-G4	ERHM01_40F1730__IES	ERHM01_40F1740__IES
	G1	37,500	39,000	320	B4-U0-G4	B4-U0-G4	ERHM01_40G1730__IES	ERHM01_40G1740__IES
	VS	41,000	42,700	350	B5-U0-G3	B5-U0-G3	ERHM01_40VS1730__IES	ERHM01_40VS1740__IES
	VM	38,400	40,000	350	B5-U0-G4	B5-U0-G4	ERHM01_40VM1730__IES	ERHM01_40VM1740__IES
50	E1	46,500	48,400	402	B4-U0-G4	B5-U0-G4	ERHM01_50E1730__IES	ERHM01_50E1740__IES
	F1	46,500	48,400	402	B4-U0-G5	B5-U0-G5	ERHM01_50F1730__IES	ERHM01_50F1740__IES
	G1	46,500	48,400	402	B4-U0-G5	B5-U0-G5	ERHM01_50G1730__IES	ERHM01_50G1740__IES
	VS	51,300	53,400	445	B5-U0-G3	B5-U0-G3	ERHM01_50VS1730__IES	ERHM01_50VS1740__IES
	VM	48,100	50,000	445	B5-U0-G4	B5-U0-G4	ERHM01_50VM1730__IES	ERHM01_50VM1740__IES
60	E1	56,000	58,300	501	B5-U0-G4	B5-U0-G4	ERHM01_60E1730__IES	ERHM01_60E1740__IES
	F1	56,000	58,300	501	B5-U0-G5	B5-U0-G5	ERHM01_60F1730__IES	ERHM01_60F1740__IES
	G1	56,000	58,300	501	B5-U0-G5	B5-U0-G5	ERHM01_60G1730__IES	ERHM01_60G1740__IES
	VS	54,400	56,600	475	B5-U0-G4	B5-U0-G4	ERHM01_60VS1730__IES	ERHM01_60VS1740__IES
	VM	50,900	53,000	475	B5-U0-G4	B5-U0-G4	ERHM01_60VM1730__IES	ERHM01_60VM1740__IES

Photometrics

ERHM Type II - Asymmetric Medium (E1)
58,300 Lumens, 5000K (ERHM_60E1740___.IES)

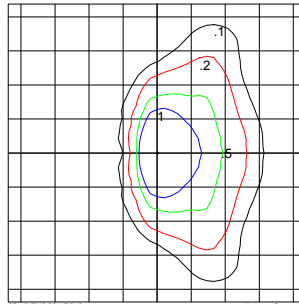


Grid Distance in Units of Mounting Height at 60° Initial Footcandle Values at Grade

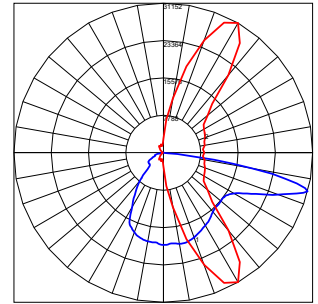


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Horizontal cone through vertical angle of 72.5°

ERHM Type IV - Asymmetric Wide (F1)
58,300 Lumens, 5000K (ERHM_60F1740___.IES)

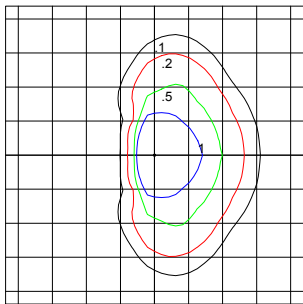


Grid Distance in Units of Mounting Height at 60° Initial Footcandle Values at Grade

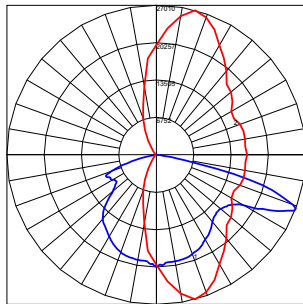


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Horizontal cone through vertical angle of 72.5°

ERHM Type III - Asymmetric Extra Wide (G1)
58,300 Lumens, 5000K (ERHM_60G1740___.IES)

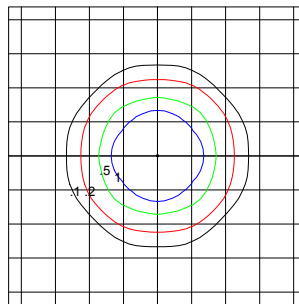


Grid Distance in Units of Mounting Height at 60° Initial Footcandle Values at Grade

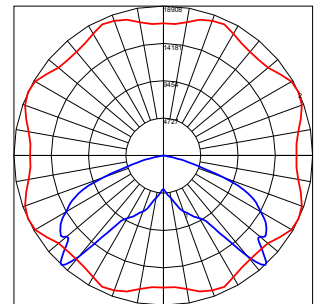


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Horizontal cone through vertical angle of 72.5°

ERHM Type V - Short (VS)
56,600 Lumens, 5000K (ERHM_60VS740___.IES)

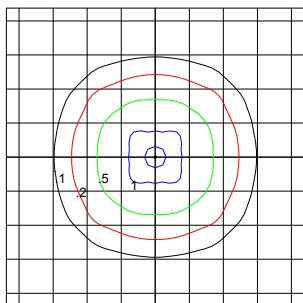


Grid Distance in Units of Mounting Height at 60° Initial Footcandle Values at Grade

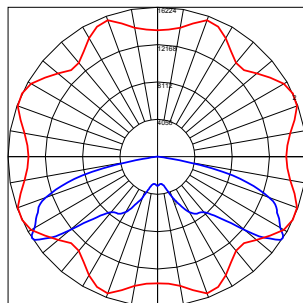


— Vertical plane through horizontal angle of maximum candlepower at 45°
— Horizontal cone through vertical angle of 72.5°

ERHM Type V - Medium (VM)
53,000 Lumens, 5000K (ERHM_60VM740___.IES)



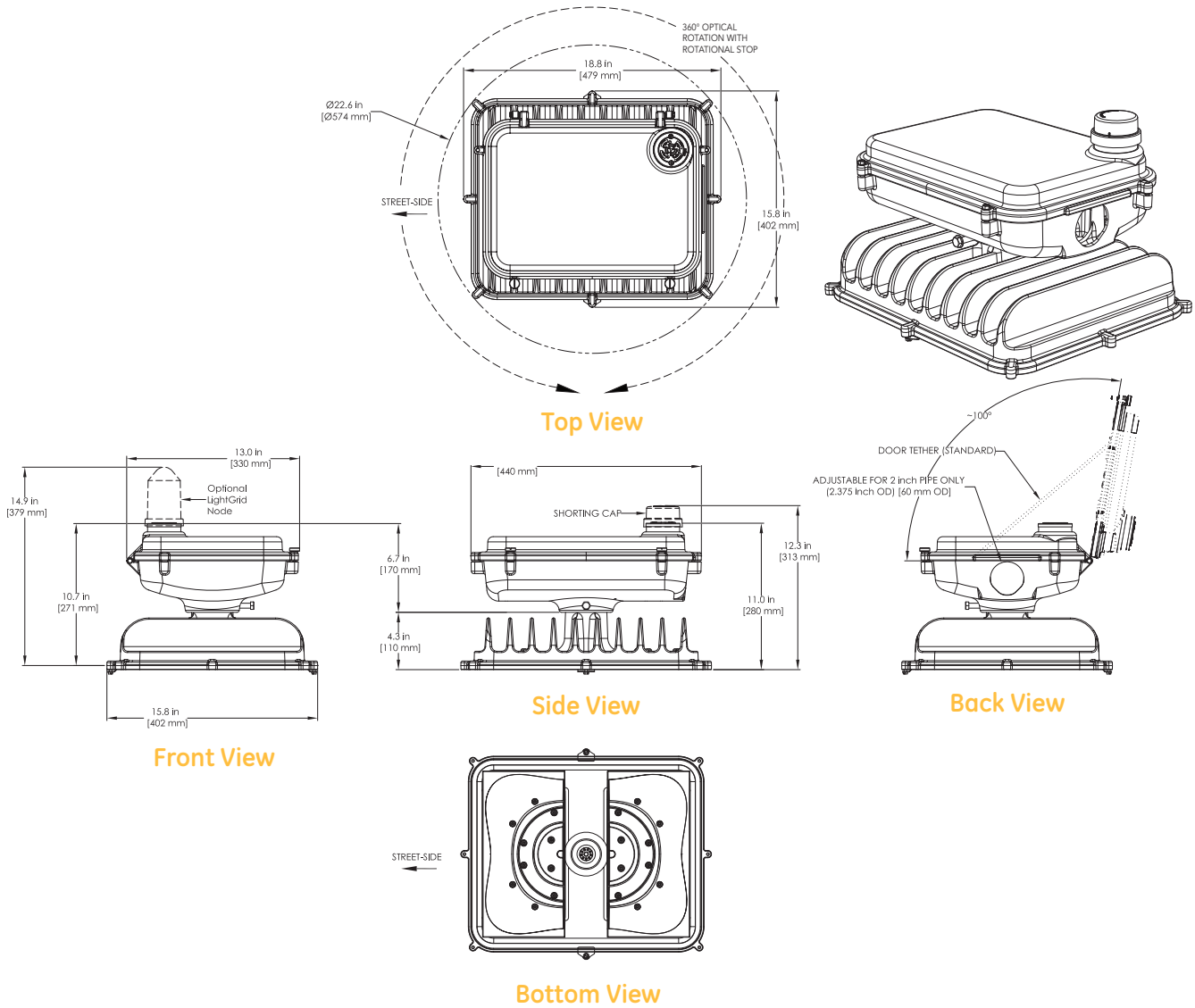
Grid Distance in Units of Mounting Height at 60° Initial Footcandle Values at Grade



— Vertical plane through horizontal angle of maximum candlepower at 45°
— Horizontal cone through vertical angle of 72.5°

Product Dimensions

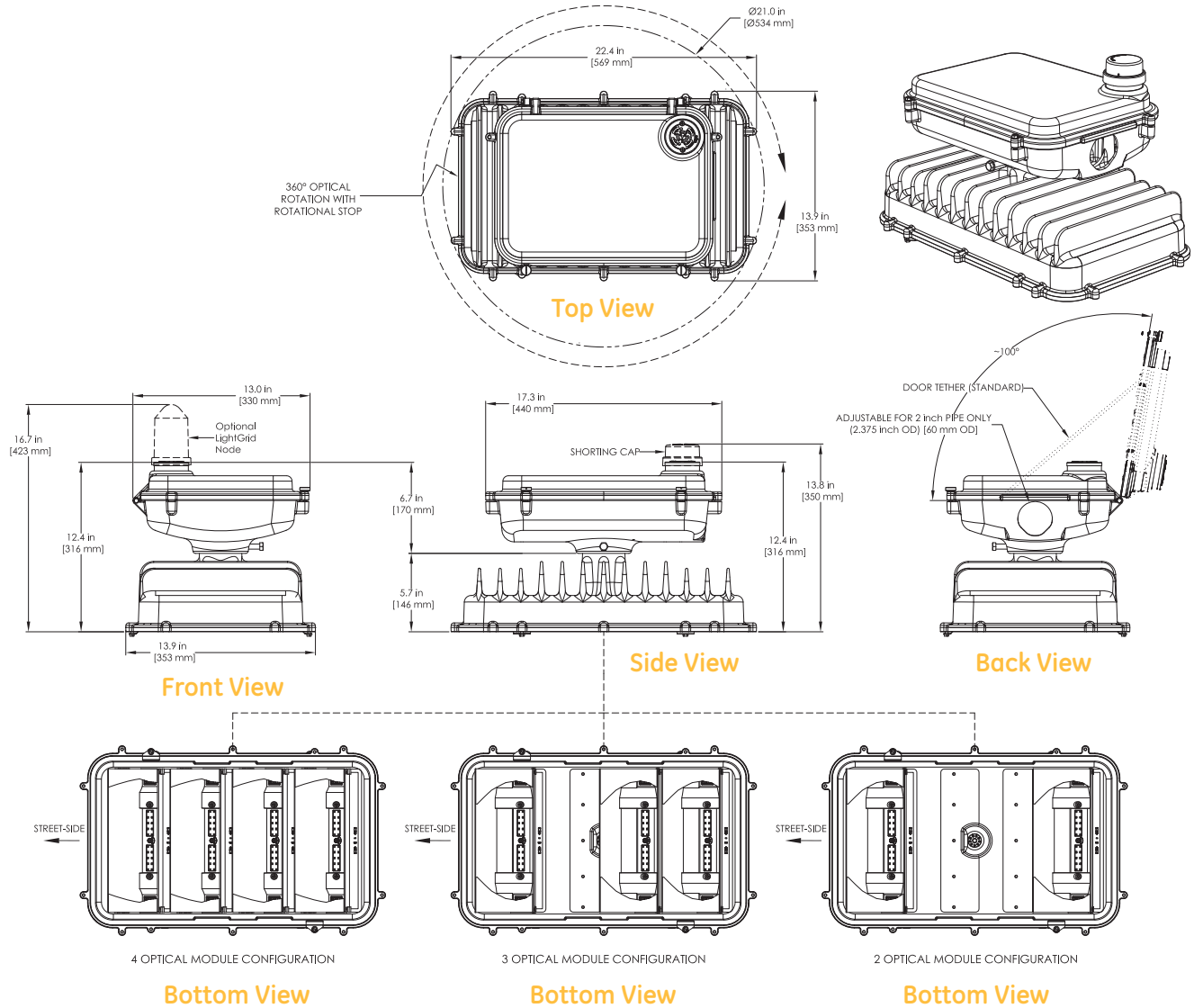
Evolve LED High Mast Luminaire • ERHM (For Distributions VS & VM)



DATA	<ul style="list-style-type: none"> • Weight: 54 lbs (max.) • Effective Projected Area: 2 ft² (max.)
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Product Dimensions

Evolve LED High Mast Luminaire • ERHM (For Distributions E1, F1 & G1)



DATA

- Weight: 54 lbs (max.)
- Effective Projected Area: 2 ft² (max.)

