



**GE Evolve™**

LED Roadway Lighting  
High Mast Luminaire (ERHM) Gen 02

**current**  
powered by GE



## 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: Asymmetric B3, C3, D3 only
- 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	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.

### Ratings

-  listed, suitable for wet locations per UL 1598.
- IP66 optical enclosure per ANSI C136.25-2009.
- Temperature rated at -40° to +40°C
- IK07
- Compliant with the material use restrictions of RoHS.
- IDA FSA Approved (3000K CCT only)



Please refer to the DLC QPL website for the latest and most complete information. [www.designlights.org/QPL](http://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

- 120-277V and 347-480V
- System power factor is >90% and THD<20%
- Class "A" sound rating
- Surge protection per ANSI C136.2-2015:
  - Standard: 10kV/5kA "Enhanced": (40 Strikes)
  - Optional: 20kV/10kA "Elevated": (40 Strikes)
- Photo electric sensors (PE) available
- ANSI C136.41 PE receptacle
- Analog 0-10V
- 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 -40,000 lm to replace 400W HID luminaires.
- ~47,000 -50,000 lm to replace 750W HID luminaires.
- >60,000 lm to replace 1000W HID luminaires.

# Ordering Number Logic

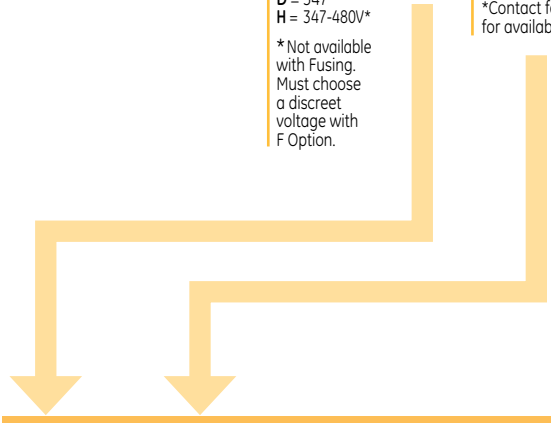
## Evolve LED High Mast Luminaire



ERHM 02

4B

PROD. ID	GENERATION	VOLTAGE	LUMEN OUTPUT	DISTRIBUTION	CRI	CCT	DIMMING	CONTROLS	MOUNTING	COLOR	OPTIONS
<b>E</b> = Evolve <b>R</b> = Roadway <b>H</b> = High <b>M</b> = Mast	02 = 2nd 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 70 80	B3 = Type II Wide* C3 = Type III D3 = Type IV* VW = Type V high angle  *Contact factory for availability	7 = 70* * 70 CRI Typical	30 = 3000K 40 = 4000K	<b>N</b> = No Dimming Control Wiring <b>D</b> = Dimming Control Wiring included*  *Dimming control wiring included to connect dimming control external to the fixture.  <b>Note:</b> Dimming controls wired for 0-10V standard unless DALI option "U" requested.	<b>1</b> = None <b>A</b> = ANSI C136.41 7-Pin Receptacle <b>D</b> = ANSI C136.41 7-Pin Receptacle with Shorting Cap  *PE Control Only available for 480V Discrete. Not available for 347-480V or 347V Discrete.  <b>Note:</b> Dimming controls wired for 0-10V standard unless DALI option "U" requested.  *Must Specify Discrete Voltage	4B = 4 Bolt (std)	<b>GRAY</b> = GRAY <b>BLCK</b> = BLACK	<b>F</b> = Fusing <b>R</b> = Secondary Enhanced Surge Protection (10kV/5kA) <b>T</b> = Secondary Elevated Surge (20kV/10kA) <b>Y</b> = Coastal Construction* <b>XXX</b> = Special Options  *Recommended for installations within 750 ft. from coastline.

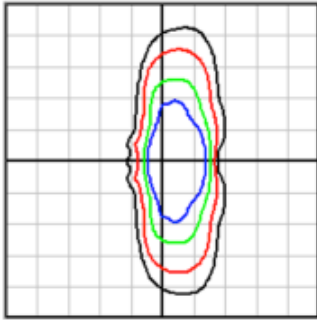


LUMEN OUTPUT	DISTRIBUTION	TYPICAL LUMENS		TYPICAL WATTS	BUG RATINGS		IES FILE NUMBER	
		4000K	3000K	120-277V 347-480V	4000K B-U-G	3000K B-U-G	4000K	3000K
30	B3 - Type II Wide	30000	28200	240			ERHM02_30B3740_____IES	ERHM02_30B3730_____IES
	C3 - Type III	30000	28200	240	B3-U0-G4	B3-U0-G4	ERHM02_30C3740_____IES	ERHM02_30C3730_____IES
	D3 - Type IV	30000	28200	240			ERHM02_30D3740_____IES	ERHM02_30D3730_____IES
	VW - Type V High Angle	30000	28200	210	B5-U0-G3	B5-U0-G3	ERHM02_30VW740_____IES	ERHM02_30VW730_____IES
40	B3 - Type II Wide	40000	37600	305			ERHM02_40B3740_____IES	ERHM02_40B3730_____IES
	C3 - Type III	40000	37600	305	B3-U0-G5	B3-U0-G5	ERHM02_40C3740_____IES	ERHM02_40C3730_____IES
	D3 - Type IV	40000	37600	305			ERHM02_40D3740_____IES	ERHM02_40D3730_____IES
	VW - Type V High Angle	40000	37600	280	B5-U0-G4	B5-U0-G4	ERHM02_40VW740_____IES	ERHM02_40VW730_____IES
50	B3 - Type II Wide	50000	47000	380			ERHM02_50B3740_____IES	ERHM02_50B3730_____IES
	C3 - Type III	50000	47000	380	B4-U0-G5	B4-U0-G5	ERHM02_50C3740_____IES	ERHM02_50C3730_____IES
	D3 - Type IV	50000	47000	380			ERHM02_50D3740_____IES	ERHM02_50D3730_____IES
	VW - Type V High Angle	50000	47000	365	B5-U0-G4	B5-U0-G4	ERHM02_50VW740_____IES	ERHM02_50VW730_____IES
60	B3 - Type II Wide	65000	61100	495			ERHM02_60B3740_____IES	ERHM02_60B3730_____IES
	C3 - Type III	65000	61100	495	B4-U0-G5	B4-U0-G5	ERHM02_60C3740_____IES	ERHM02_60C3730_____IES
	D3 - Type IV	65000	61100	495			ERHM02_60D3740_____IES	ERHM02_60D3730_____IES
	VW - Type V High Angle	65000	61100	468	B5-U0-G5	B5-U0-G5	ERHM02_60VW740_____IES	ERHM02_60VW730_____IES
70	B3 - Type II Wide	74000	69560	565			ERHM02_70B3740_____IES	ERHM02_70B3730_____IES
	C3 - Type III	74000	69560	565	B4-U0-G5	B4-U0-G5	ERHM02_70C3740_____IES	ERHM02_70C3730_____IES
	D3 - Type IV	74000	69560	565			ERHM02_70D3740_____IES	ERHM02_70D3730_____IES
	VW - Type V High Angle	74000	69560	570	B5-U0-G5	B5-U0-G5	ERHM02_70VW740_____IES	ERHM02_70VW730_____IES
80	VW - Type V High Angle	84000	78960	650	B5-U0-G5	B5-U0-G5	ERHM02_80VW740_____IES	ERHM02_80VW730_____IES

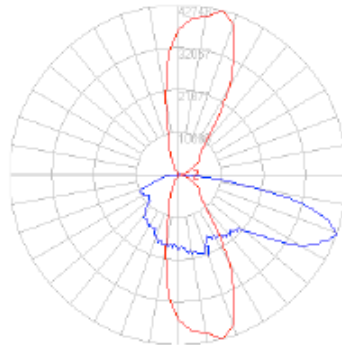
\* Roadway number based on C3  
 \* IES files for B3 and D3 pending (Target date Feb '19)

# Photometrics

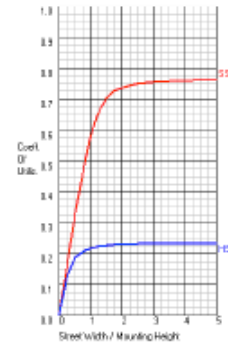
## ERHM B3 Type II Wide 74,000lm



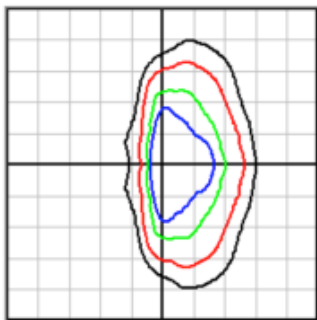
Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade



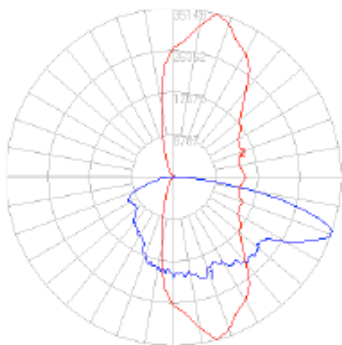
— Vertical plane through horizontal angle of maximum candlepower at 75°  
— Horizontal cone through vertical angle of 69°



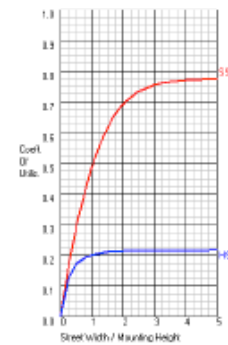
## ERHM C3 Type III Wide 74,000lm



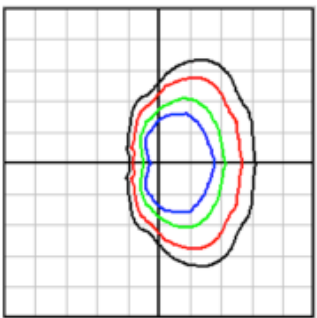
Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade



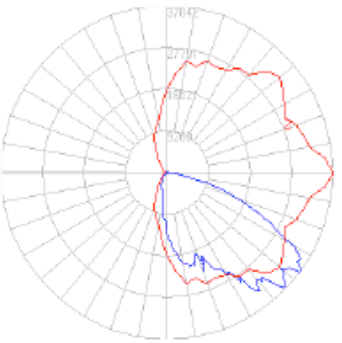
— Vertical plane through horizontal angle of maximum candlepower at 75°  
— Horizontal cone through vertical angle of 70°



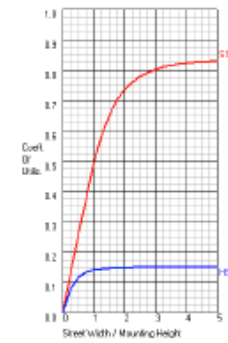
## ERHM D3 Type IV 74,000lm



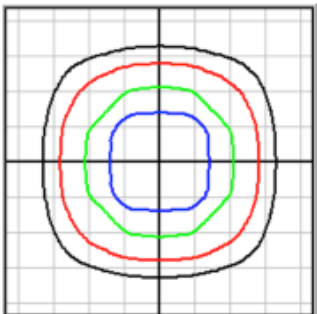
Grid Distance in Units of Mounting Height at 60' Initial Footcandle Values at Grade



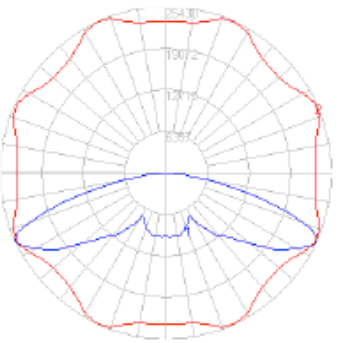
— Vertical plane through horizontal angle of maximum candlepower at 0°  
— Horizontal cone through vertical angle of 54°



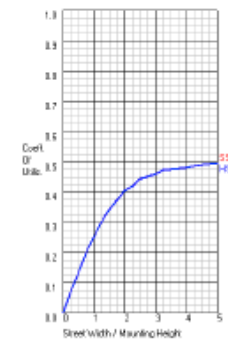
## ERHM D3 Type V 84,000lm



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

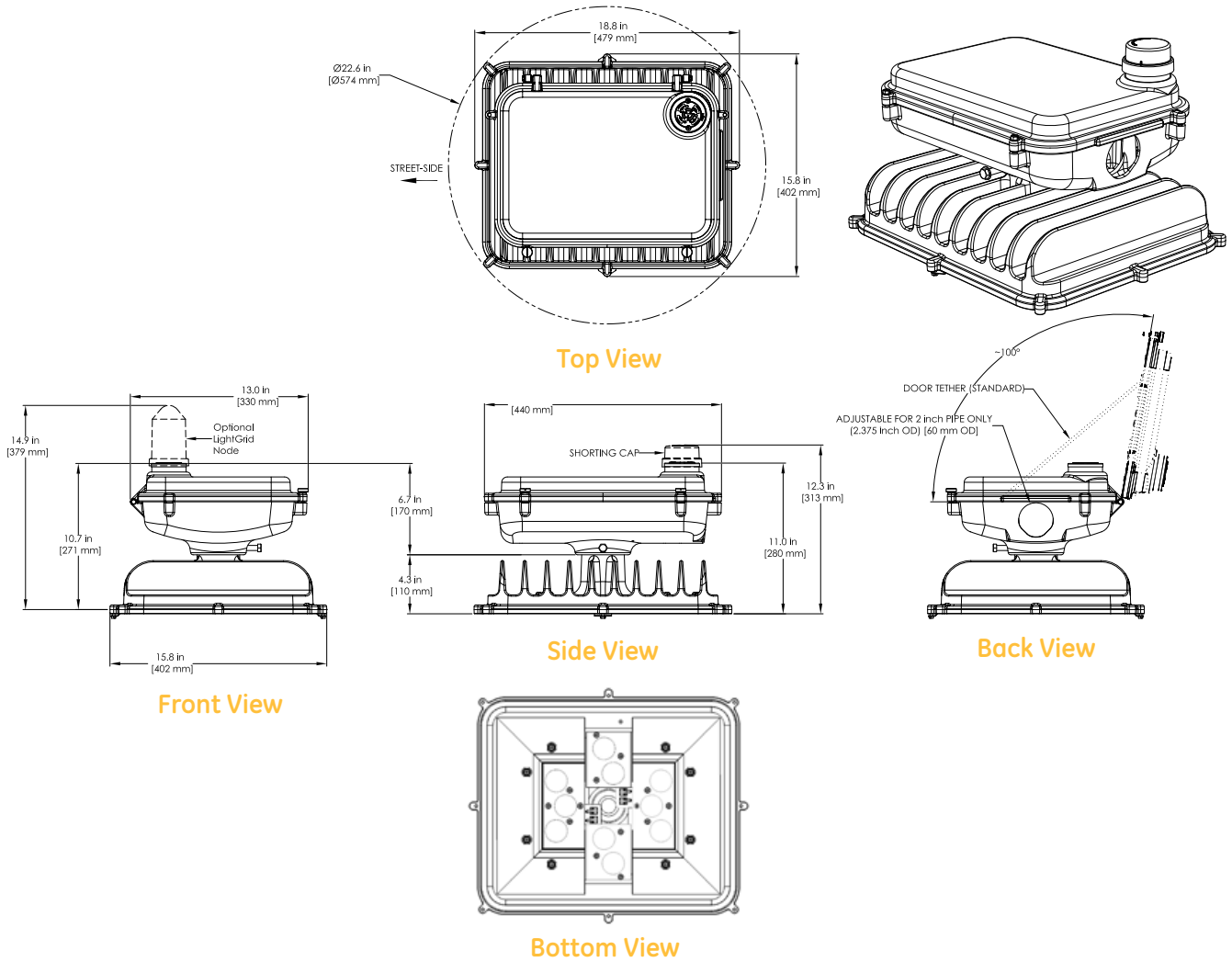


— Vertical plane through horizontal angle of maximum candlepower at 70°  
— Horizontal cone through vertical angle of 65°



# Product Dimensions

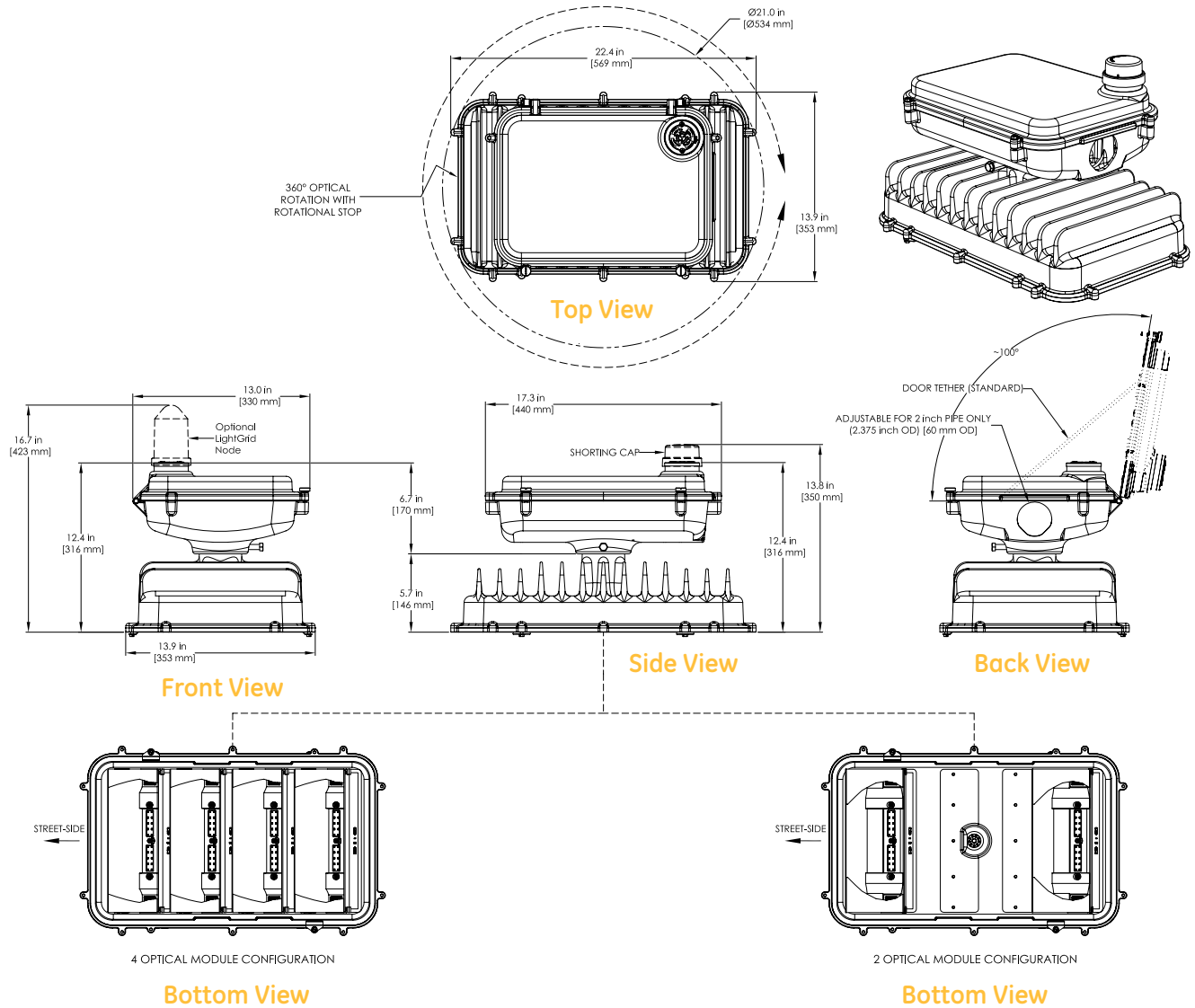
Evolve LED High Mast Luminaire • ERHM (For Distribution VW)



DATA	
	• Weight: 52 lbs (max.)
	• Effective Projected Area: 2 ft <sup>2</sup> (max.)

# Product Dimensions

Evolve LED High Mast Luminaire • ERHM (For Distributions B3, C3, and D3)



**DATA**

- Weight: 54 lbs (max.)
- Effective Projected Area: 2 ft<sup>2</sup> (max.)



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