GE Lighting Solutions

# Evolve<sup>™</sup> LED Area Light

Modular Fixture - Small & Medium (EASM & EAMM)







# **Product Features**

The next evolution of the GE Evolve™ LED Area Light continues to deliver the same outstanding features associated with the original Evolve product, while now adding greater flexibility and style. The European styling offers a sleek, modern look, and balances the needs for photometric scalability with reliable workhorse performance. The new modular design provides 34 photometric combinations, available in two color temperatures, to meet a wide range of area lighting needs.

GE's exclusive optical ring design produces superior vertical illuminance and efficiently directs the light without wasteful and unwelcomed light spill into neighboring properties. Additionally, reduced energy consumption, combined with a long rated life that virtually eliminates ongoing maintenance expenses, enables the Evolve LED Area Light to provide significant operating cost benefits over the life of each fixture.

### **Applications**

- Single and double modules for site, area, and general lighting utilizing advanced LED optical system providing high uniformity, excellent vertical light distribution, reduced offsite visibility, reduced on-site glare and effective security light levels.
- Scalable design makes this product ideal for small to medium retailers, commercial to medical properties, strip malls to large malls, and big box retailers.

### Housing

- Die-cast aluminum housing.
- Slim architectural design incorporates modular heat sink light engine directly into the unit ensuring maximum heat transfer, long LED life and a reduced Effective Projected Area (EPA).
- Meets 2G vibration per ANSI C136.31-2001. For 3G rating contact manufacturer.

### LED & Optical Assembly

- Structured LED arrays for optimized area light photometric distribution.
- Evolve modular light engine utilizing nested concentric directional reflectors designed to optimize application efficiency and minimize glare.
- Utilizes high brightness LEDs, 70 CRI at 4000K and 5700K typical.
- LM-79 tests and reports are performed in accordance with IESNA standards.

### Lumen Maintenance

• System rating is L85 at 50,000 hours. Contact manufacturer for Lxx rating (Lumen Depreciation) beyond 50,000 hours.

### Ratings

- (1)/c(1) listed, suitable for wet locations.
- IP 65 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at –40° to 45°C.
- Upward Light Output Ratio (ULOR) = 0.

### Mounting

### Option A

• 10-inch (254mm) mounting arm for square pole.

### Option B

• 10-inch (254mm) mounting arm for round pole.

### Option C

• Slipfitter mounting for 2 3/8-inch (60mm) O.D. pipe prewired with 24-inch (610mm) leads.

### Finish

- Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
- Standard colors: Black & Dark Bronze.
- RAL & custom colors available.

### Electrical

- 120-277 volt and 347-480 volt available.
- System power factor is >90% and THD <20%.\*
- Class "A" audible sound rating.
- Integral surge protection non-dimming:
   For 120-277VAC per IEEE/ANSI C62.41.-1991, 4kV/2kA Location Category B2 (120 Events)
  - For 347-480VAC per IEEE/ANSI C62.41.-1991, 6kV/3kA Location Category B3 (120 Events)
- Integral surge protection GE dimming:
  - For 120-480VAC per IEEE/ANSI C62.41.2-2002, 6kV/3kA Location Category B (120 Events)
- Optional high capability surge protection per IEEE/ ANSI C62.41.2-2002.
  - Rating 1 10kV/5kA Location Category (120 events)
  - Rating 2 6kV/3kA Location Category C-Low (5000 events)
- EMI: Title 47 CFR Part 15 Class A
- Photo electric sensors (PE) available for all voltages.
  - \* System power factor and THD is tested and specified at 120V input and maximum load conditions.

### Warranty

• 5-year limited system warranty standard.

### **Ordering Number Logic** Medium / Double Module Fixture (EAMM)

L4

M4

F3

G3

H3

J3

K3

L3

M3

TYPE III

Asymmetric Forward

Asymmetric Forward

Asymmetric Wide



### EAMM Α

F, L, R

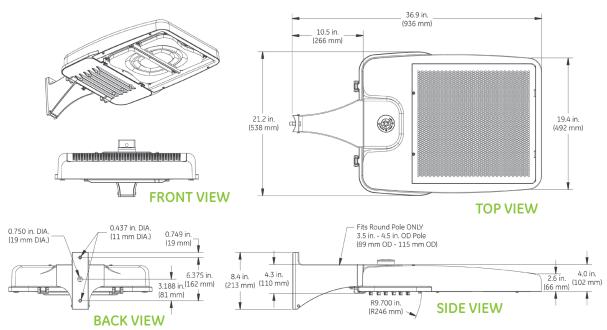
PROD. ID	VOLTAGE OPTICAL CODE	DISTRIBUTION ORIENTATION	LED COLOR TEMP	LENS TYPE	PE FUNCTION		NTING RM			COLO	R		OPTION	IS
E = Evolve A = Area M = Medium M = Modular	<b>5</b> = 480*	F = Front L = Left R = Right N = Not Applicable Front (F)	40 = 4000K 57 = 5700K	A = Acrylic Pole	<ul> <li>1 = None</li> <li>2 = PE Rec. With Shorting Cap</li> <li>5 = PE Rec. with Control</li> <li>7 = Dimming PE Receptacle *<sup>1</sup></li> <li>9 = Dimming PE Receptacle with Shorting Cap †</li> <li>PE control not available for 347-480. Must be discrete voltage.</li> <li>* Order dimming contr PE as a separate item † When ordering PE function socket 7 or 9, a dimming option "D2" must also be ordered under the "OPTIONS" column</li> </ul>	e a ol	r Round er 2" PIF ID) supp	Pole E lied	DKBZ Conto	: = Black : = Dark E act man :her colo	Bronze ufacture	r <b>F</b> <b>XX</b> * Fu	= Fusing = Extra S Protec X = Specio uture availabi nufacturer fo	/olt Input) Surge tion* Il Options ility. Contact
		Right (R)	(N) Not Applic	able	OPTIONS COlUMN									
		Light pattern thro specified in relati												
								BUG RATINGS				IES FILE NUMBER*		
OPTICAL	TVDE				CAL SYSTEM			40001		ATINGS			IES FILE I	NUMBER*
OPTICAL CODE	ТҮРЕ		L INITIAL 1ENS 5700K		VATTAGE	DISTRIBUTION ORIENTATION AVAILABLE		4000K U		ATINGS B	5700K U		IES FILE I 4000K	NUMBER* 5700K
	TYPE Symmetric Medium	LUN	1ENS		VATTAGE	ORIENTATION	В 3				5700K	<b>G</b> 2		
CODE	TYPE	LUN 4000K	1ENS 5700K	۷ ۱20-277۱	VATTAGE / 347-480V	ORIENTATION AVAILABLE		U	G	в	5700K U		4000K	5700K
CODE A5	Symmetric Medium	LUN 4000K 6260	1ENS 5700K 6800	V 120-277 100	VATTAGE V 347-480V 105	ORIENTATION AVAILABLE N	3	U 1	G 1	B 3	5700K U 2	2	4000K 454457	<b>5700K</b> 454487
CODE A5 B5	Symmetric Medium	LUN 4000K 6260 8100	1ENS 5700K 6800 8800	V 120-277 100 126	VATTAGE / 347-480V 105 133	ORIENTATION AVAILABLE N N	3 3	U 1 2	G 1 2	B 3 3	5700K U 2 2	2 2	<b>4000K</b> 454457 454458	<b>5700K</b> 454487 454488
CODE A5 B5 C5	Symmetric Medium Symmetric Medium Symmetric Medium	LUN 4000K 6260 8100 9940	1ENS 5700K 6800 8800 10800	120-2777 100 126 152	VATTAGE / 347-480V 105 133 160	ORIENTATION AVAILABLE N N N	3 3 4	U 1 2 2	G 1 2 2	B 3 3 4	5700K U 2 2 2	2 2 2	4000K 454457 454458 454459	5700K 454487 454488 454489
CODE A5 B5 C5 D5	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium	LUN 4000K 6260 8100 9940 11780	1ENS 5700K 6800 8800 10800 12800	V 120-277V 100 126 152 178	VATTAGE / 347-480V 105 133 160 187	N N N N N N N	3 3 4 4	U 1 2 2 2 2	G 1 2 2 2	B 3 3 4 4	5700K U 2 2 2 3	2 2 2 2	4000K 454457 454458 454459 454460	5700K 454487 454488 454489 454490
CODE A5 B5 C5 D5 E5	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium	4000K 4000K 6260 8100 9940 11780 13620	4ENS 5700K 6800 8800 10800 12800 14800	V 120-277V 100 126 152 178 202 100 126	VATTAGE / 347-480V 105 133 160 187 213	N N N N N N N N N N	3 3 4 4 4 3 3	U 1 2 2 3 1 1	G 1 2 2 2 2 2 1 1	B 3 4 4 4 4 3 3 3	5700K U 2 2 2 3 3 3	2 2 2 2 2 2	4000K 454457 454458 454459 454460 454461	<b>5700K</b> 454487 454488 454489 454490 454491
CODE A5 B5 C5 D5 E5 K5	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Short	4000K 6260 8100 9940 11780 13620 6260	1ENS 5700K 6800 8800 10800 12800 14800 6800	V 120-277 100 126 152 178 202 100	VATTAGE / 347-480V 105 133 160 187 213 105	N N N N N N N N N N N N N	3 3 4 4 4 3	U 1 2 2 2 3 1	G 1 2 2 2 2 2 1	B 3 3 4 4 4 4 3	5700K U 2 2 2 3 3 3 1	2 2 2 2 2 2 1	4000K 454457 454458 454459 454460 454461 454471	5700K 454487 454488 454489 454490 454491 454513
CODE A5 B5 C5 D5 E5 K5 L5	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Short Symmetric Short	4000K 4000K 6260 8100 9940 11780 13620 6260 8100	STOOK           6800           8800           10800           12800           14800           6800           8800	V 120-277V 100 126 152 178 202 100 126	VATTAGE / 347-480V 105 133 160 187 213 105 133	N N N N N N N N N N N N N N N N	3 3 4 4 4 3 3	U 1 2 2 3 1 1	G 1 2 2 2 2 2 1 1	B 3 4 4 4 4 3 3 3	5700K U 2 2 2 3 3 3 1 1	2 2 2 2 2 1 1	4000K           454457           454458           454459           454460           454461           454471           454472	5700K 454487 454488 454489 454490 454491 454513 454514
CODE A5 B5 C5 D5 E5 K5 L5 K5 L5	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Short Symmetric Short Symmetric Short	4000K 4000K 6260 8100 9940 11780 13620 6260 8100 9940	XENS           5700K           6800           8800           10800           12800           14800           6800           8800           10800           10800	V 120-277V 100 126 152 178 202 100 126 152	VATTAGE / 347-480V 105 133 160 187 213 105 133 160	N N N N N N N N N N N N N N N N N N N	3 3 4 4 4 3 3 3 3	U 1 2 2 2 3 1 1 1 1	G 1 2 2 2 2 2 2 1 1 1 2	B 3 3 4 4 4 4 3 3 3 3 3	5700K U 2 2 3 3 3 1 1 1 1	2 2 2 2 2 1 1 2	4000K 454457 454458 454459 454460 454461 454471 454472 454473	5700K 454487 454488 454489 454490 454491 454513 454514 454515
CODE A5 B5 C5 D5 E5 K5 L5 K5 S5 N5	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Short Symmetric Short Symmetric Short Symmetric Short	LUN           4000K           6260           8100           9940           11780           3620           6260           8100           9940           11780           13620           9940           11780	XENS           5700K           6800           8800           10800           12800           14800           6800           8800           10800           12800           12800           12800           12800           12800           12800           12800	V 120-277V 100 126 152 178 202 100 126 152 178	VATTAGE / 347-480V 105 133 160 187 213 105 133 160 187	N N N N N N N N N N N N N N N N N N N	3 3 4 4 3 3 3 3 3	U 1 2 2 3 1 1 1 1 1 1 3	G 1 2 2 2 2 2 1 1 1 2 2 2 2 2 2 2 2 2 2	B 3 4 4 4 4 3 3 3 3 3 4	5700K U 2 2 3 3 3 1 1 1 1 1 1 1	2 2 2 2 1 1 2 2 2 2 2 2 2 2	4000K 454457 454458 454459 454460 454461 454471 454472 454473 454474	5700K           454487           454488           454489           454490           454491           454513           454514           454515           454516
CODE A5 B5 C5 D5 E5 K5 L5 K5 N5 P5	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Short Symmetric Short Symmetric Short Symmetric Short Symmetric Short	LUN           4000K           6260           8100           9940           11780           3620           6260           8100           9940           11780           11780           13620           13620           13620           13620	XENS           5700K           6800           8800           10800           12800           14800           6800           10800           12800           12800           10800           12800           10800           12800           14800	V 120-277V 100 126 152 178 202 100 126 152 178 202	VATTAGE / 347-480V 105 133 160 187 213 105 133 160 187 213	N N N N N N N N N N N N N N N N N N N	3 3 4 4 3 3 3 3 3 4	U 1 2 2 3 1 1 1 1 1 1 1 1	G 1 2 2 2 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2	B 3 4 4 4 4 3 3 3 3 4 4 4	5700K U 2 2 3 3 1 1 1 1 1 1 1 1 1	2 2 2 2 1 1 2 2 2 2 2 2	4000K 454457 454458 454459 454460 454461 454471 454472 454473 454474 454474	<b>5700K</b> 454487 454488 454490 454491 454513 454513 454514 454515 454516 454517
CODE A5 B5 C5 D5 E5 K5 L5 K5 N5 N5 P5 F4	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Short Symmetric Short Symmetric Short Symmetric Short Symmetric Short Asymmetric Forward	LUN           4000K           6260           8100           9940           11780           6260           8100           9940           13620           6260           11780           11780           11780           8100           9940           11780           8100	XENS           5700K           6800           8800           10800           12800           14800           6800           10800           12800           10800           12800           10800           12800           14800           8800           18800	V 120-277V 100 126 152 178 202 100 126 152 178 202 178 202 126	VATTAGE / 347-480V 105 133 160 187 213 105 133 160 187 213 133 160 187 213 133	ORIENTATION AVAILABLE N N N N N N N N N N N N N N F, L, R	3 3 4 4 3 3 3 3 3 4 2	U 1 2 2 3 1 1 1 1 1 1 3	G 1 2 2 2 2 2 2 1 1 1 2 2 2 2 2 2 2 2 2	B 3 4 4 4 4 3 3 3 3 4 4 4 2	U 2 2 2 3 3 1 1 1 1 1 1 1 1 3 3	2 2 2 2 1 1 2 2 2 2 2 2 2 2	4000K 454457 454458 454459 454460 454461 454471 454471 454472 454473 454474 454475 45449	<b>5700K</b> 454487 454488 454490 454491 454513 454513 454514 454515 454516 454517 454396
CODE A5 B5 C5 D5 E5 K5 L5 K5 L5 N5 P5 F4 G4	Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Medium Symmetric Short Symmetric Short Symmetric Short Symmetric Short Symmetric Forward Asymmetric Forward	4000K 4000K 6260 8100 9940 11780 13620 6260 6260 8100 9940 11780 13620 8100 9920	XENS           5700K           6800           8800           10800           12800           14800           6800           10800           12800           14800           10800           12800           10800           12800           14800           8800           9800	V 120-277V 100 126 152 178 202 100 126 152 178 202 126 139	VATTAGE / 347-480V 105 133 160 213 105 213 105 133 160 187 213 133 160 187 213 133 146	N N N N N N N N N N N N N N N S N C N C	3 3 4 4 3 3 3 3 3 4 2 2 2	U 1 2 2 3 1 1 1 1 1 1 3 3 3	G 1 2 2 2 2 2 2 1 1 1 2 2 2 2 2 2 2 2 2	B 3 4 4 4 4 3 3 3 3 4 4 4 2 2 2	5700K U 2 2 3 3 3 1 1 1 1 1 1 1 1 1 3 3 3 3	2 2 2 2 1 1 2 2 2 2 2 2 2 2 2	4000K 454457 454458 454459 454460 454461 454471 454472 454473 454474 454475 454475 45448	5700K 454487 454488 454490 454491 454513 454513 454515 454516 454516 454517 454396 454476

\*Shielded options available. Contact manufacturer for IES files.

# **Product Dimensions**

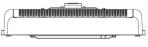
Medium / Double Module Fixture (EAMM)

### 10" Arm for Round Pole Mount (Option B)



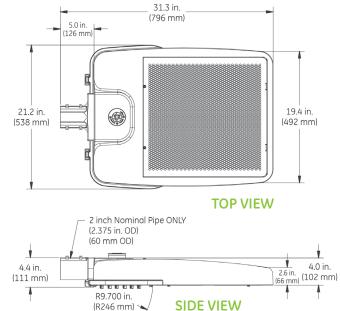
### Slipfitter Arm Mount (Option C)





**FRONT VIEW** 

DATA



Approximate Net Weight: 46-49 lbs (21-22 kgs)
Effective Projected Area (EPA) with 10" Mounting Arm: 1.35 sq ft max (0.13 sq m)

• Effective Projected Area (EPA) with Slipfitter: 0.86 sq ft max (0.08 sq m)

# Ordering Number Logic Small / Single Module Fixture (EASM)

TYPE III



### EASM - \_ \_ F **A** \_

PR	ROD. ID	VOLTAGE	OPTICA CODE		RIBUTION	LED COLOR TEMP	LENS TYPE	PE FUNCTION		NTING RM			COLC	)R		OPTION	s
A = / S = 5	Evolve Area Small Modular	0 = 120 - 277 1 = 120* 2 = 208* 3 = 240* 4 = 277* 5 = 480* D = 347* *Specify single voltage if fuse option is selecte	d.	F = Fr	ont	40 = 4000K 57 = 5700K Front Light potte		<ul> <li>1 = None</li> <li>2 = PE Rec. With Shorting Cap</li> <li>5 = PE Rec. with Control</li> <li>7 = Dimming PE Receptacle *†</li> <li>9 = Dimming PE Receptacle *th Shorting Cap †</li> <li>PE control not availab for 347-480V. Must b a discrete voltage.</li> <li>* Order dimming cont PE as a separate item † When ordering PE function socket 7 or 9, a dimming option "02" must also be ordered under the "OPTIONS" column</li> </ul>	e rol	r Róundi er 2° HI D) supp (dimmin	Pole E lied g cable	DKB Con	K = Blac Z = Dark tact fact er colors	Bronze tory for	<b>F</b> = <b>T</b> = <b>XXX</b> = * Futu	Protection Special O re availability facturer for o	Input) ge n* ptions y. Contact
	OPTICAL TYPE				L INITIAL 1ENS		CAL SYSTEM VATTAGE	DISTRIBUTION		4000K			5700K		IES FILE N	NUMBER*	
					4000K	5700K	120-277	V 347-480V	AVAILABLE	В	U	G	В	U	G	4000K	5700K
	A4	Asymmetri	c Forward	d	3130	3400	50	53	F	1	2	1	1	2	1	454394	454395
	B4	Asymmetri	: Forward	d	4050	4400	63	66	F	1	2	2	1	2	2	434397	454398
	C4	Asymmetri	c Forward	d	4970	5400	76	80	F	1	2	2	1	2	2	454400	454401

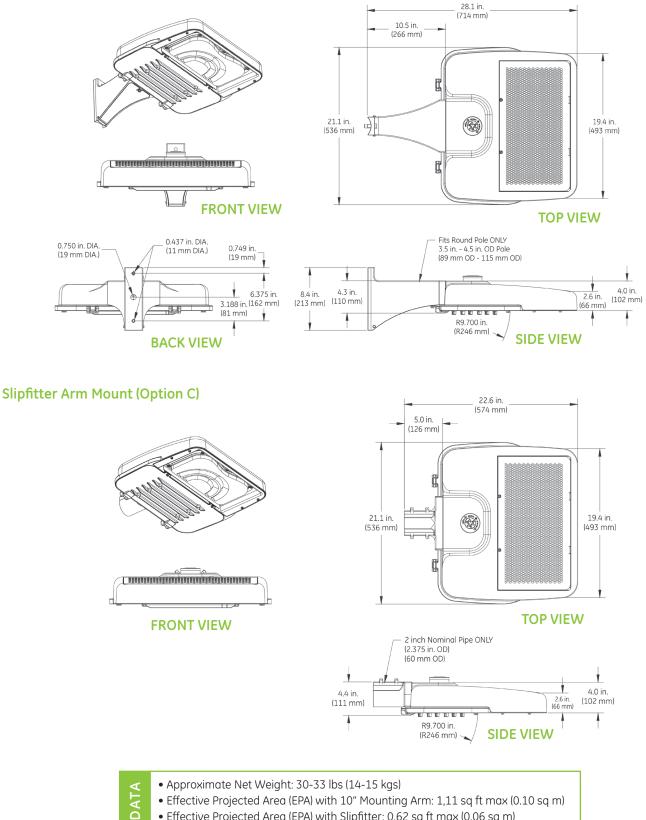
04	Asymmetric rorward	4030	4400	05	00	1	1	2	۷.	1	2	2	434337	434330
C4	Asymmetric Forward	4970	5400	76	80	F	1	2	2	1	2	2	454400	454401
D4	Asymmetric Forward	5890	6400	89	94	F	1	2	2	1	3	2	454403	454404
E4	Asymmetric Forward	6810	7400	101	106	F	1	3	2	2	3	2	454406	454407
A3	Asymmetric Wide	3130	3400	50	53	F	1	1	1	1	1	1	454421	454422
B3	Asymmetric Wide	4050	4400	63	66	F	1	1	1	1	1	1	454424	454425
C3	Asymmetric Wide	4970	5400	76	80	F	1	1	1	1	1	2	454427	454428
D3	Asymmetric Wide	5890	6400	89	94	F	1	1	2	1	1	2	454430	454431
E3	Asymmetric Wide	6810	7400	101	106	F	1	1	2	1	1	2	454433	454434

\*Shielded options available. Contact manufacturer for IES files.

## **Product Dimensions**

Small / Single Module Fixture (EASM)

### 10" Arm for Round Pole Mount (Option B)



• Effective Projected Area (EPA) with Slipfitter: 0.62 sq ft max (0.06 sq m)

## **Mounting Information**

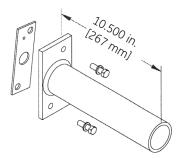
### Mounting Arms for Slipfitter

Order separately with Mounting Option C (External Slipfitter)

### Drilling Templates for Slipfitter Arms & Arm Mount

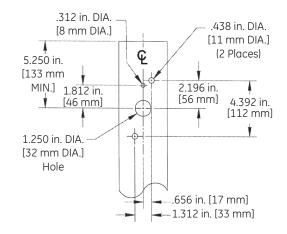
### SQUARE POLE MOUNTING ARM

3.5 TO 4.5-inch (89 to 114mm) SQUARE (WILL ALLOW 4 FIXTURES PER POLE @ 90 DEGREES.)



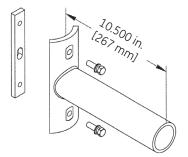
ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER SPA-EAMT10BLCK "Black" SPA-EAMT10DKBZ "Dark Bronze"

### SQUARE POLE MOUNTING



### **ROUND POLE MOUNTING ARM**

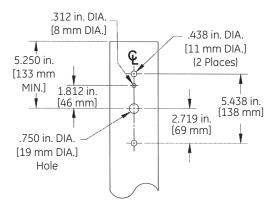
3.5 TO 4.5-inch (89 to 114mm) OD (WILL ALLOW 4 FIXTURES PER POLE @ 90 DEGREES.)



ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER RPA-EAMT10BLCK "Black" RPA-EAMT10DKBZ "Dark Bronze"

### **ROUND POLE MOUNTING**

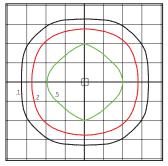
3.5 TO 4.5-inch (89 to 114mm) OD round pole mounting arm

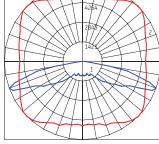


FOR RETROFITS INSTALLATIONS OTHER MOUNTING PATTERNS ARE AVAILABLE. CONTACT FACTORY FOR OTHER AVAILABLE MOUNTING PATTERNS

### **Photometrics** Medium / Double Module Fixture (EAMM)

### EAMM Type V – Symmetric Medium (E5) 14,800 Lumens, 5700K (GE454491.ies)



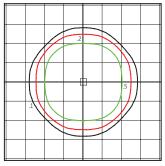


Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

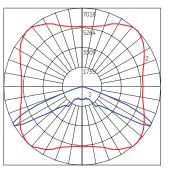
Polar Trace Vertical and Horizontal Plane through Horizontal Angle of Maximum Candlepower

### EAMM Type V - Symmetric Short (P5) 14,800 Lumens, 5700K (GE454517.ies)

EAMM Type III - Asymmetric Wide (M3)

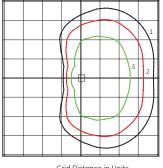


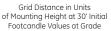
Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

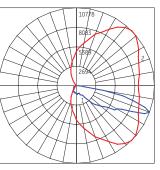


Polar Trace Vertical and Horizontal Plane through Horizontal Angle of Maximum Candlepower

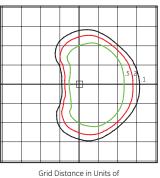
### EAMM Type IV - Asymmetric Forward (M4) 14.800 Lumens, 5700K (GE454435.ies)



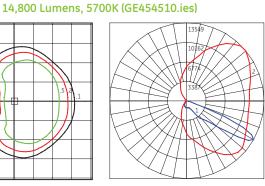




Polar Trace Vertical and Horizontal Plane through Horizontal Anale of Maximum Candlepower



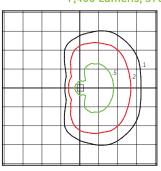
Mounting Height at 30' Initial Footcandle Values at Grade



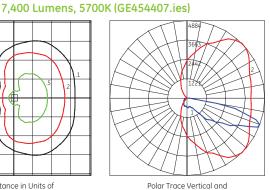
Polar Trace Vertical and Horizontal Plane through Horizontal Anale of Maximum Candlepower

### Small / Single Module Fixture (EASM)

EASM Type IV - Asymmetric Forward (E4)

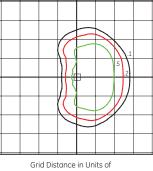


Grid Distance in Units of Mounting Height at 30' Initial Footcandle Values at Grade

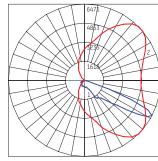


Horizontal Plane through Horizontal Anale of Maximum Candlepower

EASM Type III - Asymmetric Wide (E3) 7,400 Lumens, 5700K (GE454434.ies)



Mounting Height at 30' Initial Footcandle Values at Grade





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### Polar Trace Vertical and Horizontal Plane through Horizontal Anale of Maximum Candlepower