

LED Flood & Spot Lighting

EFM1









LED Flood & Spot Lighting

The GE Evolve™ LED Medium Output Flood Light is our mid-lumen solution to efficiently illuminate building façade, flag poles, billboard signage and many more traditional flood applications. Designed to replace up to 250W HPS and 250-400W Metal Halide flood lights, the EFM1 provides significant operating cost benefits over the life of each fixture with reduced energy consumption and a long rated life that virtually eliminates ongoing maintenance expenses.



Features:

- 70 CRI at 3000K, 4000K and 5000K
- Up to L89@100K hrs per IES TM-21 (see LM chart on page 3)
- Distributions: 6x5, 6x6, 7x6, 7x7, Type III, 20° Spot
- 120-277 VAC and 347-480 VAC available
- DALI compatible
- Mounting options: Trunnion, Knuckle Slipfitter, & Knuckle Wall Mount
- UL/cUL listed, suitable for wet locations
- Complies with the material restrictions of RoHS

Applications:

 Building façade, flag poles, utility and industrial spaces, billboard signage, roadways, general site lighting, and many more traditional flood applications.

NOTE: The Type III distribution is ideal for building facade and billboard signage.



Compatible with **LightGrid™** Outdoor Wireless Control System

Also available in 20° Spot optical distribution as pictured here



To learn more about **GE Evolve LED Flood Lighting**, go to: www.currentbyge.com

LED Flood & Spot Lighting



Project name
Date
Туре

Typical Specifications:

LED & Optical

- Evolve[™] light engine consisting of reflective technology designed to optimize application efficiency.
- Impact resistant tempered flat glass protects the optics and minimizes dirt accumulation.
- Efficacu: Rated LPW 104-167 (See Table)
- LM-79 tests and reports in accordance with IESNA standards
- 70CRI at 3000K, 4000K, 5000K
- Distributions: 6x5, 6x6, 7x6, 7x7, Type III, 20° Spot

Electrical

- 120-277 VAC and 347-480 VAC available.
- System power factor is >90% and THD <20%.
- ANSI C136.41 7-pin dimming receptacle, standard.
- Photo electric sensors (PE) available for all voltages and ordered seperately.
- Light Grid compatible
- Dimming:
 - 0-10V continuous dimming
 - DALI digital dimming (120-277V)
- Surge Protection per ANSI C136.2-2015.
 - 6kV/3kA Standard
 - 10kV/5kA Optional
 - 20kV/10kA Optional (contact manufacturer for availability)
- Daintree compatible Motion Sensor (K1, S1 Mount Option)

Ratings

- **(II)**/6**(II)** UL cUL listed, suitable for wet locations.
- IP66 otical enclosure per ANSI C136.25-2013
- Temperature Rated -40°C to +50°C
- Complies with the material restrictions of RoHS



DLC Premium qualified models available. Please refer to http://www.designlights.org/QPL for complete information.

Note: Optical code EE and FF are not DLC listed.

Construction & Finish

- Housing:
 - Die cast aluminum housing with slim design.
 - Integral heat sink and light engine, ensuring maximum heat transfer and prolonged LED life.
 - 3G vibration level per ANSI C136.31-2010.
- Paint: Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
 - Standard Colors: Dark Bronze, Black, White & Gray
 - RAL & custom colors available
- Weight: 25 lbs. (11.34kg)

Lumen Maintenance EFM101

• Projected Lxx per IES TM-21 at 25°C for reference:

OPTICAL	DISTRIBUTION	LXX(10K)@HOURS				
CODES	DISTRIBUTION					
AA, BB, CC	T3 & S2	L93	L87	L75		
AA, BB, CC, DD	65, 66, 76, & 77	L96	L93	L89		
EE, FF	65, 66, 76, & 77	L94	L90	L82		

Note: Projected Lxx based on LM80 (10,000 hour testing). DOE Lighting Facts Verification Testing Tolerances apply to initial luminous flux and lumen maintenance many tempers.

Mounting

Option K

- K1=Knuckle Slipfitter for 1.9 in-2.3 in OD Tenon with wires exiting tenon.
- K2=Knuckle Slipfitter for 1.9 in-2.3 in OD Tenon, external 3ft #14/3 power cable

Option S

- S1 = Knuckle Slipfitter for 1.9 in 3.0 in. OD Tenon with wires exiting tenon.
- S2 = Knuckle Slipfitter for 1.9 in 3.0 in. OD Tenon, with external 3ft #14/3 power cable

Option V

• V1=Knuckle Wall Mount with wires exiting tenon.

Option 1

• T1=Trunnion, with external 3ft #14/3 power cable.

Warranty

System Warranty: 5 Year Standard

Accessories

- Top & Side Visor
- Vandal Shield
- Wire Guard
- Barn Door Assembly



Project name	
Date	
Type	

Ordering Number Logic

EFM1 01

PROD. ID	GEN.	VOLTAGE	OPTIC CODE	DISTRIBUTION*	CRI	ССТ	DIMMING	CONTROLS	MOUNTING	FINISH	OPTIONS
E = Evolve FM = Flood Medium 1 = Standard	11 = 1st Gen	0 = 120-277V* 1 = 120V 2 = 208V 3 = 240V 4 = 277V 5 = 480V D = 347V H = 347-480V* *Not available with fusing	AA = 5,000lm BB = 10,000lm CC = 15,000lm DD = 20,000lm EE = 24,000lm FF = 27,000lm	65 = NEMA 6x5 76 66 = NEMA 6x6 76 = NEMA 7x6 77 = NEMA 7x7 (80° Wide Flood) 73 = Type 3/ Facade/ Billboard* S2 = 20° Spot* *Not available witl optical code DD, EE or FF		40 = 4000K	A = ANSI C1 36.41 7-Pin Receptacle ⁺⁺ D = No Receptacle, with external dimming 18/2 3ft coble ⁺⁺ N = No PE receptacle & non-dimmable ⁺ P = ANSI 7-pin receptacle with external dimming 18/2 3ft cable ⁺⁺ Unrestricted aiming angle ++All units with option A and P have Restricted Aiming Angle. See page 8.	D = Shorting Cap* See below ordering logic for dimming PE and standard PE control options. Light Grid also available. Must order separately.	K1 = Knuckle Slipfitter for 1.9 in-2.3 in. OD Tenon* S1 = Knuckle Slipfitter for 1.9 in-3.0 in. OD Tenon* K2 = Knuckle Slipfitter for 1.9 in-2.3 in OD Tenon with external 3ft #14/3 power cable S2 = Knuckle Slipfitter for 1.9 in-3.0 in. OD Tenon with external 3ft #14/3 power cable V1 = Knuckle Wall Mount* T1 = Trunnion with external 3ft #14/3 power cable. *Supplied with leads	WHTE = White	F = Fusing H = Dointree enabled motion sensor# ^ L = Tool-Less Entry P = Prewired with 6 FT #14/3 cable R = 10kV/5kA Enhanced Surge Protection T = 20kV/10kA Surge Protection U = DALI Dimming +# V = 3-Position Terminal Block XXX = Special Options * When Dimming option is selected without Dimming potion is selected without Dimming PE, a #14-5 cab will be supplied at length above + Compatible with LightGrid 2.0 nodes. # Not available in 347V-480V, optic code EE and FF ^ Only available in mount K1 or S1 S Dimming and Fusing not ovailable with Optical Code AA for distributions "T3" and "S2" Check manufacturer for availabilit, NOTE: Options F, R, T, and V not ovailable with optical code AA with voltage 347 - 480 and distributions 65, 66, 76, and 77.

OPTICAL CODE	DIST.	DIST./NEMA		IENS 4000K/	TYPICAL SYSTEM WATTAGE 120-277V		3000K 120-277V 347-480V	IES FILE NUMBI 4000K	ER 5000K
AA	77	7X7	4900	5000	30	32	EFM101_AA77730120-277V.IES		
BB	77	7X7	9800	10000	64	64	EFM101_BB77730IES	EFM101_BB77740IES	EFM101_BB77750,IES
CC	77	7X7	14700	15000	96	96	EFM101_CC77730IES	EFM101_CC77740IES	EFM101_CC77750IES
DD	77	7X7	20400	20900	146	146	EFM101_DD77730IES	EFM101_DD77740IES	EFM101_DD77750IES
EE	77	7X7	23400	24000	175	175	EFM101_EE77730IES	EFM101_EE77740IES	EFM101_EE77750IES
FF	77	7X7	26200	27000	196	196	EFM101_FF77730IES	EFM101_FF77740IES	EFM101_FF77750IES
AA	76	7X6	4700	4800	30	32	EFM101_AA76730120-277V.IES	EFM101_AA76740120-277V.IES	EFM101_AA76750120-277V.IES
BB	76	7X6	9500	9700	64	64	EFM101_BB76730IES	EFM101_BB76740IES	EFM101_BB76750IES
CC	76	7X6	14300	14600	96	96	EFM101_CC76730IES	EFM101_CC76740IES	EFM101_CC76750IES
DD	76	7X6	19900	20400	146	146	EFM101_DD76730IES	EFM101_DD76740IES	EFM101_DD76750IES
EE	76	7X6	23300	23900	175	175	EFM101_EE76730IES	EFM101_EE76740IES	EFM101_EE76750IES
FF	76	7X6	25600	26300	196	196	EFM101_FF76730IES	EFM101_FF76740IES	EFM101_FF76750IES
AA	66	6X6	4700	4800	30	32	EFM101_AA66730120-277V.IES	EFM101_AA66740120-277V.IES	EFM101_AA66750120-277V.IES
BB	66	6X6	9400	9600	64	64	EFM101_BB66730IES	EFM101_BB66740IES	EFM101_BB66750IES
CC	66	6X6	14200	14500	96	96	EFM101_CC66730IES	EFM101_CC66740IES	EFM101_CC66750IES
DD	66	6X6	19700	20200	146	146	EFM101_DD66730IES	EFM101_DD66740IES	EFM101_DD66750IES
EE	66	6X6	22900	23500	175	175	EFM101_EE66730IES	EFM101_EE66740IES	EFM101_EE66750IES
FF	66	6X6	25200	25900	196	196	EFM101_FF66730IES	EFM101_FF66740IES	EFM101_FF66750IES
AA	65	6X5	4400	4500	30	32	EFM101_AA65730120-277V.IES	EFM101_AA65740120-277V.IES	EFM101_AA65750120-277V.IES
BB	65	6X5	8900	9100	64	64	EFM101 BB65730 .IES	EFM101 BB65740 .IES	EFM101 BB65750 .IES
CC	65	6X5	13400	13700	96	96	EFM101 CC65730 .IES	EFM101 CC65740 .IES	EFM101 CC65750 .IES
DD	65	6X5	18700	19100	146	146	EFM101 DD65730 .IES	EFM101 DD65740 .IES	EFM101 DD65750 .IES
EE	65	6X5	21600	22200	175	175	EFM101 EE65730 .IES	EFM101 EE65740 .IES	EFM101_EE65750IES
FF	65	6X5	23800	24400	196	196	EFM101 FF65730 .IES	EFM101 FF65740 JES	EFM101 FF65750 .IES
AA*	T3	Type 3	6400	6600	50	50	EFM101 AAT3730 .IES	EFM101 AAT3740 JES	EFM101 AAT3750 .IES
BB	T3	Type 3	10200	10500	88	88	EFM101 BBT3730 .IES	EFM101 BBT3740 .IES	EFM101 BBT3750 .IES
CC	T3	Type 3	14700	15000	141	141	EFM101_CCT3730IES	EFM101 CCT3740 .IES	EFM101 CCT3750 .IES
AA*	S2	20° Spot	7100	7300	50	50	EFM101 AAS2730 .IES	EFM101 AAS2740 JES	EFM101 AAS2750 .IES
BB	S2	20° Spot	11300	11600	88	88	EFM101_BBS2730IES	EFM101_BBS2740,IES	EFM101_BBS2750IES
CC	S2	20° Spot	16300	16700	141	141	EFM101 CCS2730 .IES	EFM101 CCS2740 JES	EFM101 CCS2750 .IES

^{*}Dimming not available

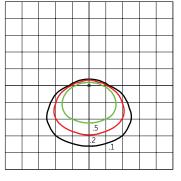
LED Flood & Spot Lighting

Photometrics:

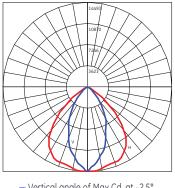
Evolve™ LED Flood Light (EFM1)

EFM1NEMA 6x5

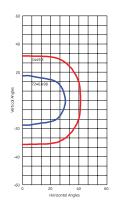
19,100 Lumens 4000K EFM101_DD65740_-



Grid Distance in Units of Mounting Height at 35' Tilt is 45°. Initial Footcandle Values at Grade

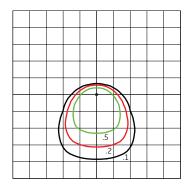


Vertical angle of Max Cd. at -2.5°Horizontal angle of Max Cd. at 2.5°

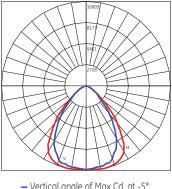


EFM1 NEMA 6x6

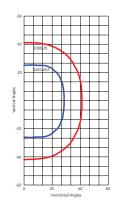
20,200 Lumens 4000K EFM101_DD66740_-



Grid Distance in Units of Mounting Height at 35' Tilt is 45°. Initial Footcandle Values at Grade

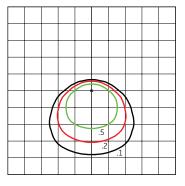


Vertical angle of Max Cd. at -5°Horizontal angle of Max Cd. at 2.5°

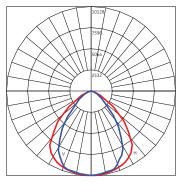


EFM1NEMA 7x6

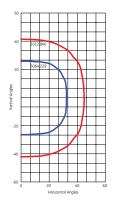
20,400 Lumens 4000K EFM101_DD76740_-



Grid Distance in Units of Mounting Height at 35' Tilt is 45°. Initial Footcandle Values at Grade



Vertical angle of Max Cd. at -2.5°Horizontal angle of Max Cd. at 2.5°



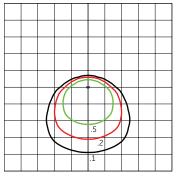
LED Flood & Spot Lighting

Photometrics:

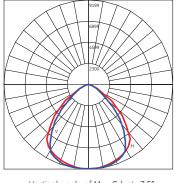
Evolve™ LED Flood Light (EFM1)

EFM1NEMA 7×7

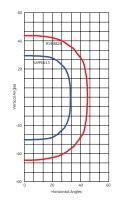
20,900 Lumens 4000K EFM101_DD77740_-



Grid Distance in Units of Mounting Height at 35' Tilt is 45°. Initial Footcandle Values at Grade

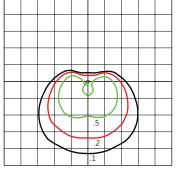


Vertical angle of Max Cd. at -7.5°Horizontal angle of Max Cd. at 5°

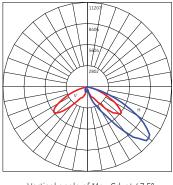


EFM1TYPE III
FACADE/BILLBOARD

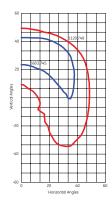
15,000 Lumens 4000K EFM101_CCT3740_-



Grid Distance in Units of Mounting Height at 35' Tilt is 25°. Initial Footcandle Values at Grade

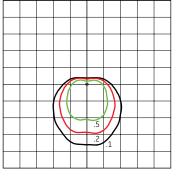


Vertical angle of Max Cd. at 47.5°Horizontal angle of Max Cd. at 15°

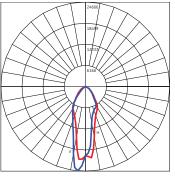


EFM1 20° SPOT

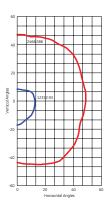
16,700 Lumens 4000K EFM101_CCS2740_-



Grid Distance in Units of Mounting Height at 35' Tilt is 45°. Initial Footcandle Values at Grade



Vertical angle of Max Cd. at -5°Horizontal angle of Max Cd. at 0°

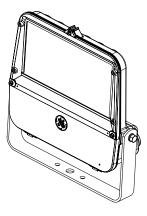


LED Flood & Spot Lighting

Product Dimensions:

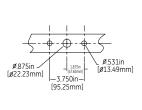
Evolve™ LED Flood Light (EFM1)

TRUNNION MOUNT





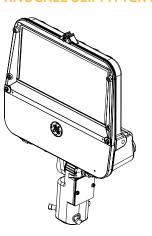
18.5720in [399.29mm] 18.575in [471.80mm] - 2000in 50.80mm

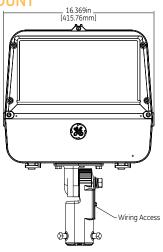


FRONT VIEW

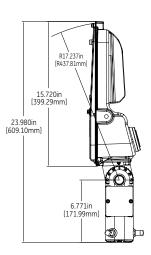
SIDE VIEW







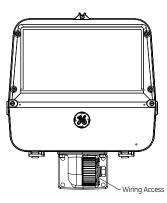
FRONT VIEW



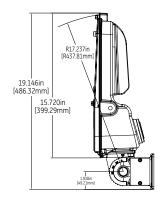
SIDE VIEW

KNUCKLE WALL MOUNT

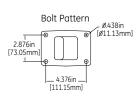




FRONT VIEW



SIDE VIEW

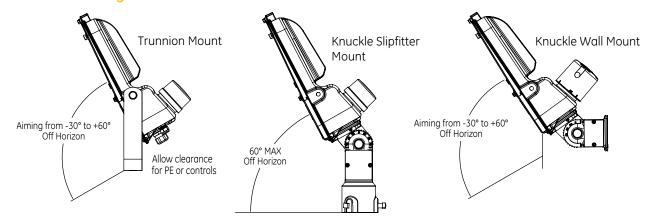


LED Flood & Spot Lighting

Product Dimensions:

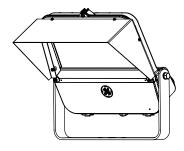
Evolve™ LED Flood Light (EFM1)

EFM1 - PE Aiming Restrictions



- ATA
- Approximate Weight: 25 lbs. (11.34 kg)
- Effective Projected Area:
 - 0° aim (vertical glass) 1.96 sq. ft.
 - 45° aim 1.22 sq. ft.
 - Side profile (all aims) 0.73 sq. ft.
 - 90° (downward) aim 0.79 sq. ft.

EFM1 - Accessories

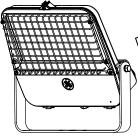


Top And Side Visor

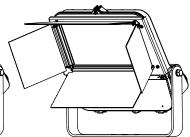
Ordering Logic: TSVGRAY-EFM TSVBLCK-EFM TSVDKBZ-EFM TSVWHTE-EFM



Vandal Shield Ordering Logic: VAN-EFM



Wire Guard
Ordering Logic:
WG-EFM



Barn Doors
Ordering Logic:
BDAGRAY-EFM
BDABLCK-EFM
BDADKBZ-EFM
BDAWHTE-EFM

LED Flood & Spot Lighting

Accessories

Evolve™ LED Flood Light (EFM1)

PE Accessories (to be ordered separately)

SAP Number		
93029237	PED-MV-LED-7	ANSI C136.41 Dimming PE, 120-277V
93029238	PED-347-LED-7	ANSI C136.41 Dimming PE, 347V
93029239	PED-480-LED-7	ANSI C136.41 Dimming PE, 480V

SAP Number		
28299	PEC0TL	STANDARD 120-277V
28294	PEC5TL	STANDARD 480V
80436	PECDTL	STANDARD 347V
73251	SCCL-PECTL	Shorting cap

H-Motion Sensing Option

- Intended for applications, between 15-30 ft. mounting height. (4.57-9.14m). For mounting heights exceeding 30 ft., remote mounted sensors are recommended.
- Provides a coverage area radius for walking motion of 15-20 ft. (4.57-6.10m).
- Provides 300° of coverage (~60° is blocked by the knuckle).
- Standard factory settings:
 - 10% output when unoccupied, 100% output occupied.
 - Knuckle mounted PE Sensor.
 - 10 minute post-occupancy time delay, 5 minute dimming ramp-down.
- Fixture power increase of 1W expected with sensor use.



Note: Standard options may be reprogrammed in the field. Reprogramming instructions included in product shipment.

