



Evolve®

LED Flood Lights for Hazardous Applications (EFMH/EFHH)



GE current
a Daintree company

Evolve®

LED Flood Lights

for Hazardous Applications

(EFMH/EFHH)



Project name _____
Date _____
Type _____

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.
- LM-79 tests and reports in accordance with IESNA standards
- 70CRI at 3000K, 4000K, 5000K

Electrical

- 120-277 VAC and 347-480 VAC available.
- System power factor is $\geq 90\%$ and THD $\leq 20\%$.*
- ANSI 136.2-2015 6kV/3kA "Basic" Surge Protection

* System PF and THD specified at rated watts

Ratings

- **Safety:** UL/cUL Listed, suitable for wet locations.
- **UL1598:** Suitable for wet locations
- **UL1598A:** Outside Type (Saltwater)
- **UL844** Listed
 - Class I Div 2, Group A, B, C, and D (Zone 2)
 - Class II Div 2, Group F & G (Zone 22)
 - Class III Div 1 & 2
 - For Indoor and Outdoor Applications
- IP66 optical enclosure per ANSI C136.25-2009
- **Temperature Rated:** -40°C to +50°C
- Complies with the material restrictions of RoHS
- **EMI:** Title 47 CFR15 Class A

LUMINAIRE	OPERATING TEMPERATURE CODE		
	CLASS 1, DIV. 2 GROUP A, B, C, & D ZONE 2 GROUP IIA, IIB, IIC, & IIB PLUS HYDROGEN	CLASS II, DIV. 2 GROUP F & G ZONE 22	CLASS 1, DIV. 2 & CLASS II, DIV. 2 SIMULTANEOUS
EFMH	T3A	T3A	T3A
EFHH	T3A	T3A	T3A

Lumen Maintenance Tables

Projected Lxx per IES TM-21 at 25°C:

EFMH01 OPTICAL CODES	DISTRIBUTIONS	LXX (10K) @ HOURS		
		25,000 HR	50,000 HR	60,000 HR
AA, BB, CC	T3 & S2	L89	L80	L76
AA, BB, CC, DD	65, 66, 76 & 77	L95	L92	L91
EE, FF	65, 66, 76 & 77	L93	L88	L86

EFHH01 OPTICAL CODES	DISTRIBUTIONS	LXX (10K) @ HOURS		
		25,000 HR	50,000 HR	60,000 HR
AA, BB, CC, DD, EE	65, 66, 76 & 77	L95	L91	L90

Note: Projected Lxx based on LM80 (10,000 hour testing). Accepted industry tolerances apply to initial luminous flux and lumen maintenance measurements.

Lumen Ambient Temperature Factors:

Ambient Temp (°C)	Initial Flux Factor
10	1.02
20	1.01
25	1.00
30	0.99
40	0.98

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
 - Housing and hardware construction comply with UL 1598A Outside Type (Saltwater)
- **Paint:** Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
 - Standard Colors: Dark Bronze, Black, White & Gray
 - RAL & custom colors available
- **Weight:**
 - EFMH 25 lbs. (11.3kg)
 - EFHH 35 lbs. (15.9kg)

Mounting

- **Option T2** = Stainless Steel Trunnion, with conduit entry

Warranty

- **System Warranty:** 5 Year Standard

Evolve®

LED Flood Lights

for Hazardous Applications

(EFMH)



Project name _____
Date _____
Type _____

EFMH 01

PROD. ID	GEN.	VOLTAGE	OPTIC CODE	DISTRIBUTION*	CRI	CCT	DIMMING	CONTROLS	MOUNTING ARM	FINISH	OPTIONS
E = Evolve FM = Flood Medium H = Hazardous	01 = 1st Gen	0 = 120-277V H = 347-480V			7 = 70 (min)	30 = 3000K 40 = 4000K 50 = 5000K	N = No PE receptacle & non-dimmable	A = No Control	T2 = Trunnion with conduit entry.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze WHITE = White	L = Tool-Less Entry XXX = Special Options



OPTICAL CODE	DIST. CODE	OPTICAL DIST./NEMA CLASS	TYPICAL INITIAL LUMENS		TYPICAL SYSTEM WATTAGE 120-277V	TYPICAL SYSTEM WATTAGE 347-480V	IES FILE NUMBER					
			4000K/3000K	5000K/5000K			3000K		4000K		5000K	
			3000K	5000K			120-277V	347-480V	120-277V	347-480V	120-277V	347-480V
AA	77	7X7	4900	5000	30	32	EFMH01_AA77730_-120-277V.IES	EFMH01_AA77730_-347-480V.IES	EFMH01_AA77740_-120-277V.IES	EFMH01_AA77740_-347-480V.IES	EFMH01_AA77750_-120-277V.IES	EFMH01_AA77750_-347-480V.IES
BB	77	7X7	9800	10000	64		EFMH01_BB77730_-120-277V.IES		EFMH01_BB77740_-120-277V.IES		EFMH01_BB77750_-120-277V.IES	
CC	77	7X7	14700	15000	96		EFMH01_CC77730_-120-277V.IES		EFMH01_CC77740_-120-277V.IES		EFMH01_CC77750_-120-277V.IES	
DD	77	7X7	20400	20900	146		EFMH01_DD77730_-120-277V.IES		EFMH01_DD77740_-120-277V.IES		EFMH01_DD77750_-120-277V.IES	
EE	77	7X7	23400	24000	175		EFMH01_EE77730_-120-277V.IES		EFMH01_EE77740_-120-277V.IES		EFMH01_EE77750_-120-277V.IES	
FF	77	7X7	26200	27000	196		EFMH01_FF77730_-120-277V.IES		EFMH01_FF77740_-120-277V.IES		EFMH01_FF77750_-120-277V.IES	
AA	76	7X6	4700	4800	30	32	EFMH01_AA76730_-120-277V.IES	EFMH01_AA76730_-347-480V.IES	EFMH01_AA76740_-120-277V.IES	EFMH01_AA76740_-347-480V.IES	EFMH01_AA76750_-120-277V.IES	EFMH01_AA76750_-347-480V.IES
BB	76	7X6	9500	9700	64		EFMH01_BB76730_-120-277V.IES		EFMH01_BB76740_-120-277V.IES		EFMH01_BB76750_-120-277V.IES	
CC	76	7X6	14300	14600	96		EFMH01_CC76730_-120-277V.IES		EFMH01_CC76740_-120-277V.IES		EFMH01_CC76750_-120-277V.IES	
DD	76	7X6	19900	20400	146		EFMH01_DD76730_-120-277V.IES		EFMH01_DD76740_-120-277V.IES		EFMH01_DD76750_-120-277V.IES	
EE	76	7X6	23300	23900	175		EFMH01_EE76730_-120-277V.IES		EFMH01_EE76740_-120-277V.IES		EFMH01_EE76750_-120-277V.IES	
FF	76	7X6	25600	26300	196		EFMH01_FF76730_-120-277V.IES		EFMH01_FF76740_-120-277V.IES		EFMH01_FF76750_-120-277V.IES	
AA	66	6X6	4700	4800	30	32	EFMH01_AA66730_-120-277V.IES	EFMH01_AA66730_-347-480V.IES	EFMH01_AA66740_-120-277V.IES	EFMH01_AA66740_-347-480V.IES	EFMH01_AA66750_-120-277V.IES	EFMH01_AA66750_-347-480V.IES
BB	66	6X6	9400	9600	64		EFMH01_BB66730_-120-277V.IES		EFMH01_BB66740_-120-277V.IES		EFMH01_BB66750_-120-277V.IES	
CC	66	6X6	14200	14500	96		EFMH01_CC66730_-120-277V.IES		EFMH01_CC66740_-120-277V.IES		EFMH01_CC66750_-120-277V.IES	
DD	66	6X6	19700	20200	146		EFMH01_DD66730_-120-277V.IES		EFMH01_DD66740_-120-277V.IES		EFMH01_DD66750_-120-277V.IES	
EE	66	6X6	22900	23500	175		EFMH01_EE66730_-120-277V.IES		EFMH01_EE66740_-120-277V.IES		EFMH01_EE66750_-120-277V.IES	
FF	66	6X6	25200	25900	196		EFMH01_FF66730_-120-277V.IES		EFMH01_FF66740_-120-277V.IES		EFMH01_FF66750_-120-277V.IES	
AA	65	6X5	4400	4500	30	32	EFMH01_AA65730_-120-277V.IES	EFMH01_AA65730_-347-480V.IES	EFMH01_AA65740_-120-277V.IES	EFMH01_AA65740_-347-480V.IES	EFMH01_AA65750_-120-277V.IES	EFMH01_AA65750_-347-480V.IES
BB	65	6X5	8900	9100	64		EFMH01_BB65730_-120-277V.IES		EFMH01_BB65740_-120-277V.IES		EFMH01_BB65750_-120-277V.IES	
CC	65	6X5	13400	13700	96		EFMH01_CC65730_-120-277V.IES		EFMH01_CC65740_-120-277V.IES		EFMH01_CC65750_-120-277V.IES	
DD	65	6X5	18700	19100	146		EFMH01_DD65730_-120-277V.IES		EFMH01_DD65740_-120-277V.IES		EFMH01_DD65750_-120-277V.IES	
EE	65	6X5	21600	22200	175		EFMH01_EE65730_-120-277V.IES		EFMH01_EE65740_-120-277V.IES		EFMH01_EE65750_-120-277V.IES	
FF	65	6X5	23800	24400	196		EFMH01_FF65730_-120-277V.IES		EFMH01_FF65740_-120-277V.IES		EFMH01_FF65750_-120-277V.IES	
AA*	T3	Type 3	6400	6600	50		EFMH01_AAT3730_-120-277V.IES		EFMH01_AAT3740_-120-277V.IES		EFMH01_AAT3750_-120-277V.IES	
BB	T3	Type 3	10200	10500	88		EFMH01_BBT3730_-120-277V.IES		EFMH01_BBT3740_-120-277V.IES		EFMH01_BBT3750_-120-277V.IES	
CC	T3	Type 3	14700	15000	141		EFMH01_CCT3730_-120-277V.IES		EFMH01_CCT3740_-120-277V.IES		EFMH01_CCT3750_-120-277V.IES	
AA*	S2	20° Spot	7100	7300	50		EFMH01_AAS2730_-120-277V.IES		EFMH01_AAS2740_-120-277V.IES		EFMH01_AAS2750_-120-277V.IES	
BB	S2	20° Spot	11300	11600	88		EFMH01_BBS2730_-120-277V.IES		EFMH01_BBS2740_-120-277V.IES		EFMH01_BBS2750_-120-277V.IES	
CC	S2	20° Spot	16300	16700	141		EFMH01_CCS2730_-120-277V.IES		EFMH01_CCS2740_-120-277V.IES		EFMH01_CCS2750_-120-277V.IES	

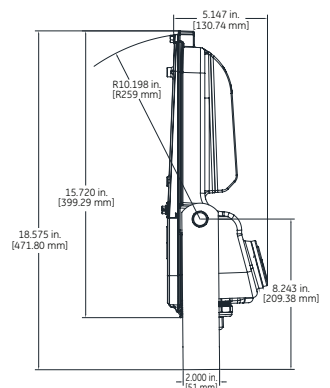
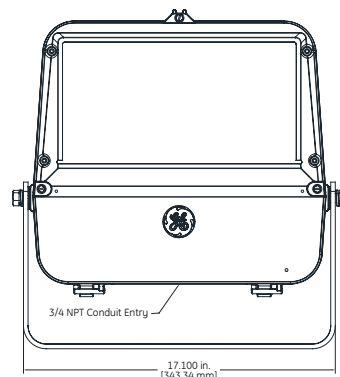
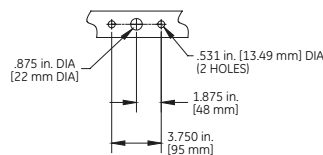
*Dimming not available

TRUNNION MOUNT (EFMH):

DATA

- Approximate net weight: 25 lbs (11.34 kgs)
- 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.

Mounting Drill Template



Evolve®

LED Flood Lights

for Hazardous Applications

(EFHH)



Project name _____
Date _____
Type _____

EFHH 01

PROD. ID	GEN.	VOLTAGE	OPTIC CODE	DISTRIBUTION	CRI	CCT	DIMMING	CONTROLS	MOUNTING ARM	FINISH	OPTIONS
E = Evolve FH = Flood H-Series H = Hazardous	01 = 1st Gen	0 = 120-277V H = 347-480V			7 = 70 (min)	30 = 3000K 40 = 4000K 50 = 5000K	N = No PE receptacle & non-dimmable	A = No Control	T2 = Trunnion with conduit entry.	GRAY = Gray BLCK = Black DKBZ = Dark Bronze WHITE = White	L = Tool-Less Entry XXX = Special Options

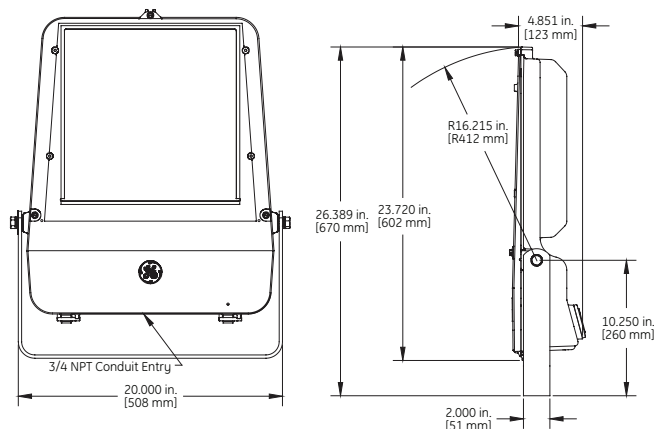
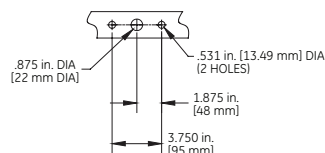
OPTICAL CODE	DISTRIBUTION CODE	NEMA CLASSIFICATION	TYPICAL INITIAL LUMENS			TYPICAL SYSTEM WATTAGE		IES FILE NUMBER		
			3000K	4000K	5000K	120-277V	347-480V	3000K	4000K	5000K
AA	77	7 X 7	18900	19300	19500	150		EFHH01_AA77730 .IES	EFHH01_AA77740 .IES	EFHH01_AA77750 .IES
BB	77	7 X 7	26300	26800	27100	194		EFHH01_BB77730 .IES	EFHH01_BB77740 .IES	EFHH01_BB77750 .IES
CC	77	7 X 7	29100	29700	30000	218		EFHH01_CC77730 .IES	EFHH01_CC77740 .IES	EFHH01_CC77750 .IES
DD	77	7 X 7	34000	34700	35000	266		EFHH01_DD77730 .IES	EFHH01_DD77740 .IES	EFHH01_DD77750 .IES
EE	77	7 X 7	37900	38700	39000	297		EFHH01_EE77730 .IES	EFHH01_EE77740 .IES	EFHH01_EE77750 .IES
AA	76	7 X 6	18500	18800	19000	150		EFHH01_AA76730 .IES	EFHH01_AA76740 .IES	EFHH01_AA76750 .IES
BB	76	7 X 6	25700	26200	26500	194		EFHH01_BB76730 .IES	EFHH01_BB76740 .IES	EFHH01_BB76750 .IES
CC	76	7 X 6	28400	29000	29300	218		EFHH01_CC76730 .IES	EFHH01_CC76740 .IES	EFHH01_CC76750 .IES
DD	76	7 X 6	33200	33900	34200	266		EFHH01_DD76730 .IES	EFHH01_DD76740 .IES	EFHH01_DD76750 .IES
EE	76	7 X 6	37100	37800	38100	297		EFHH01_EE76730 .IES	EFHH01_EE76740 .IES	EFHH01_EE76750 .IES
AA	66	6 X 6	18200	18600	18800	150		EFHH01_AA66730 .IES	EFHH01_AA66740 .IES	EFHH01_AA66750 .IES
BB	66	6 X 6	25400	25900	26200	194		EFHH01_BB66730 .IES	EFHH01_BB66740 .IES	EFHH01_BB66750 .IES
CC	66	6 X 6	28100	28700	29000	218		EFHH01_CC66730 .IES	EFHH01_CC66740 .IES	EFHH01_CC66750 .IES
DD	66	6 X 6	32800	33500	33800	266		EFHH01_DD66730 .IES	EFHH01_DD66740 .IES	EFHH01_DD66750 .IES
EE	66	6 X 6	36600	37400	37700	297		EFHH01_EE66730 .IES	EFHH01_EE66740 .IES	EFHH01_EE66750 .IES
AA	65	6 X 5	17300	17700	17900	150		EFHH01_AA65730 .IES	EFHH01_AA65740 .IES	EFHH01_AA65750 .IES
BB	65	6 X 5	24100	24600	24800	194		EFHH01_BB65730 .IES	EFHH01_BB65740 .IES	EFHH01_BB65750 .IES
CC	65	6 X 5	26700	27200	27500	218		EFHH01_CC65730 .IES	EFHH01_CC65740 .IES	EFHH01_CC65750 .IES
DD	65	6 X 5	31200	31800	32100	266		EFHH01_DD65730 .IES	EFHH01_DD65740 .IES	EFHH01_DD65750 .IES
EE	65	6 X 5	34800	35500	35800	297		EFHH01_EE65730 .IES	EFHH01_EE65740 .IES	EFHH01_EE65750 .IES

TRUNNION MOUNT (EFHH):

DATA

- Approximate net weight: 35 lbs (15.9 kgs)
- Effective Projected Area:
 - Vertical 3.51 sq. ft. (0.33 sq. M) (aimed at horizon)
 - Tilted 1.79 sq. ft. (0.17 sq. M) (aimed down 45° degrees)

Mounting Drill Template



GE current
a Daintree company

GE and the GE Monogram are trademarks of the General Electric Company and are used under license. Information provided is subject to change without notice. All values are design or typical values when measured under laboratory conditions, and GE current, a Daintree company makes no warranty or guarantee, express or implied, that such performance will be obtained under end-use conditions. © 2019 GE current, a Daintree company.