



Evolve™ by GE
Outdoor LED Fixtures



The GE Advantage™

Each Evolve™ by GE LED fixture comes complete with GE service and support, every step of the way.

- 1 Discovery & Design**
You receive a comprehensive, custom lighting solution from a team who truly listens to understand your specific goals.
- 2 Innovative Systems**
You can choose from a broad portfolio, including the latest lighting technologies.
- 3 Seamless Distribution**
You have easy and immediate access through our national network of distributors.
- 4 Integration Services**
You garner coordination services with a network of installers for your existing infrastructure or new construction projects.
- 5 ROI Optimization**
You see attractive financial benefits with a plan built to deliver – we even assist with utility rebate capture and propose financing options from GE Capital.



MAKING MORE HISTORY

The Evolve™ by GE family of products is one of the most awarded in GE history. Honors include the highly coveted Best-in-Class award, in two consecutive years, from the Next Generation Luminaires™ (NGL) Solid-State Lighting Design Competition, the LIGHTFAIR® International innovation award, and the Architectural SSL Product Innovation Award (PIA).

Our heritage and expertise burns bright in Evolve™ by GE.

Over 100 years ago, GE lit the first streetlight. Fifty years later, a GE scientist created the first visible LED. Today, we offer the best of both worlds in our multi-award winning Evolve™ by GE LED fixtures – a family of roadway, street and outdoor LED lighting fixtures that's taking "next generation" to a whole new level.



Reimagining the landscape of outdoor lighting.

Outdoor lighting is absolutely crucial to the security of our streets and public places. And today, it has a lot to live up to: new legislation, environmental challenges, requirements in energy reduction – just to name a few.

Nobody has more experience in outdoor lighting than GE. For more than a century, we've been imagining better for our roadways, parking lots, garages, residences and commercial areas. Better energy efficiency. Better aesthetics. Less maintenance. You get it all with Evolve™ by GE.





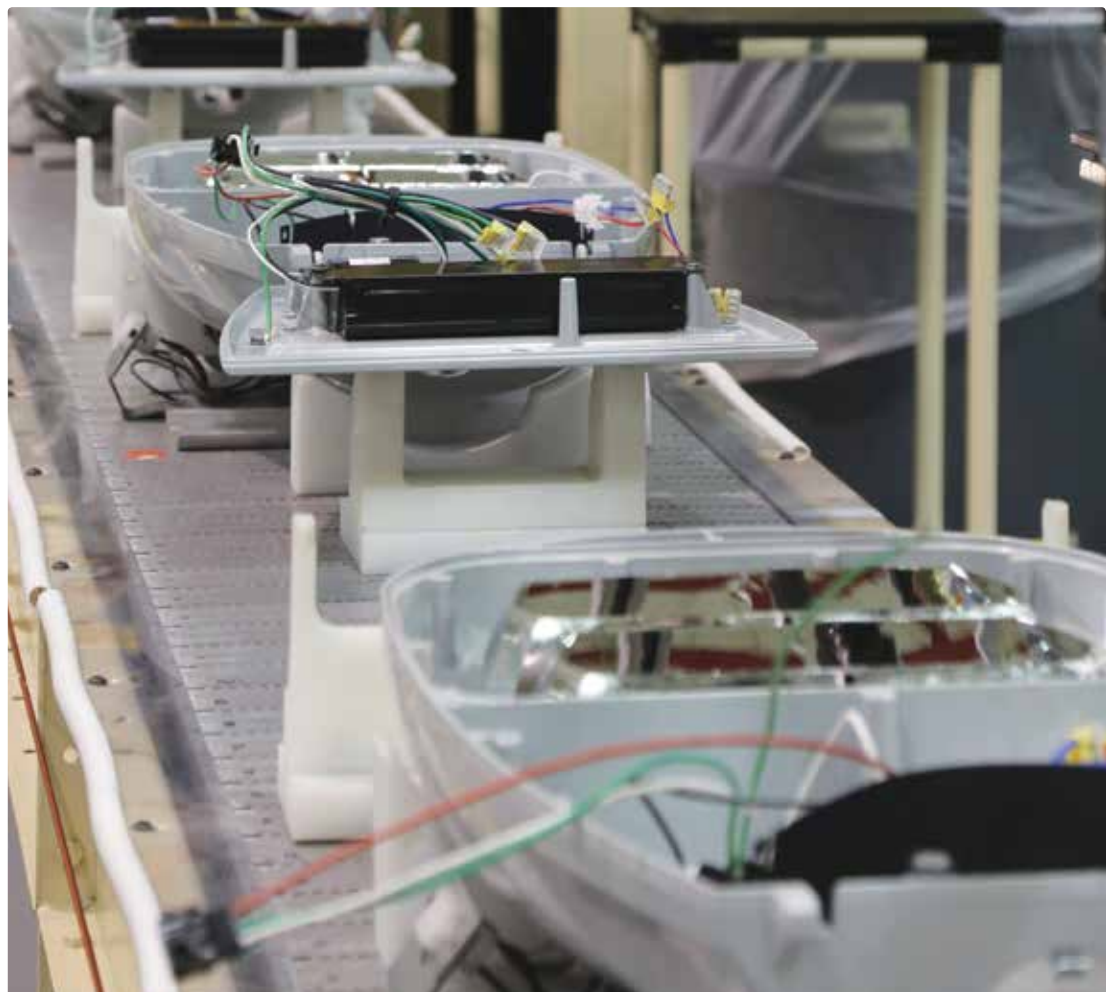
Building better solutions in Hendersonville.

Get what you want faster with responsive services.

We've all heard it before: You can have it fast, or you can have it right. At GE Lighting, we want our customers to have both. That's why we've integrated the highest standards of quality testing into our engineering process. And it's why we've transformed our Hendersonville, North Carolina, plant into a short-cycle manufacturing center. Now, we can move from order placement to product shipping in as little as 10 days. Combine this with our comprehensive distribution and installation network, and you'll have your custom outdoor solutions up, running and generating savings faster than ever before.

The complete package. One provider.

When you choose GE, you'll enjoy the benefits of working with a single supplier for your full outdoor LED lighting system. In addition to convenience, you can be sure all parts and pieces were designed to work together for the highest performance.





Evolve™ by GE LED fixtures. Imagination runs in the family.

From roadways to parking lots, residential to retail, commercial properties to public places, you'll find your ideal lighting solution in the Evolve™ by GE portfolio. Efficiency and reliability come standard in each fixture, and that's just the beginning.





Long life span

Evolve™ by GE LED fixtures offer a 50,000-hour life rating, equaling more than 11 years of service life based on 12 hours of operation per day.

Minimal maintenance

Longer life span means less time switching out lamps. Couple that with easier installation and more reliable engineering, and your maintenance time is virtually eliminated.

Environmental responsibility

In addition to the built-in efficiency benefits of LEDs, all Evolve by GE LED fixtures are mercury- and lead-free.

Reduced glare

Revolutionary designs produce safer, non-pixelated light with low glare.

Outstanding performance – no matter the weather

Evolve by GE LED fixtures are built to endure extreme weather hazards and conditions. And, unlike other outdoor options, these fixtures perform even better in the cold.

Evolve™ by GE LED Roadway Lights

Combining the science of light and a historical knowledge of roadway fixtures, GE engineers have developed groundbreaking roadway lighting solutions that are changing the way we light our lanes. Advanced optical designs offer hundreds of photometric options to meet your precise lighting requirements, while delivering the built-in benefits of all Evolve™ by GE LED fixtures and more.

Maximized efficient utilization of light (CU) means less wasted light and more saved energy.

Increased control with stand-alone or wireless control system options.

Simplified installation and maintenance with easy-access doors for replacements or repairs, and tool-less or single-tool entry for quicker connects.

More consistent light distribution through a revolutionary optic design that focuses light on the road, not in the eyes of drivers.

Optimized thermal management due to a robust heat sink design, resulting in longer life, reduced lumen depreciation and exceptional performance.



Low Wattage Streetlight (ERL)

The ideal LED solution for basic local and collector roadway needs.



Scalable Project Grade Cobrahead (ERS1 & ERS2)

For local to major roadways, combine the aesthetic of traditional roadway fixtures, the technical capabilities of a sophisticated LED system, and the functional demands of extreme weather hazards.



Scalable Specification Grade Cobrahead (ERS1, ERS2, ERS3 & ERS4)

With hundreds of photometric options and lumen ranges from 2,400 to 25,400, expect exceptionally controlled light for any roadway.



Evolve LED Security Light (E2SA)

An energy-efficient, robust fixture designed for outdoor work yards, roadside commercial establishments, suburban developments and rural areas.



CASE IN POINT.

The city of Oakland, California, achieved 40% savings (over \$1.4 million annually) in energy and maintenance costs with Evolve by GE Scalable Cobrahead fixtures.



Evolve™ by GE LED Decorative Post Tops

For downtown spaces, commercial developments and residential communities, you'll find Evolve™ by GE LED Decorative Post Tops that offer more than their striking good looks. In addition to improved horizontal and vertical uniformity, you can say goodbye to the shadow circles commonly seen beneath other LED post top fixtures. And compared to HID, Evolve by GE LED Decorative Post Tops can significantly reduce system energy.

Avery™ StreetDreams™ (EPAS)

Classic nostalgia



Salem (EPST)

Traditional
utility carriage



Contemporary Twin Support (EPTC)

Distinct, trim styling





Evolve™ by GE LED Area Lights

Evolve™ by GE LED Area Lights provide reduced offsite visibility, as well as effective security light levels with symmetric and asymmetric distributions. They can yield a significant reduction in system energy compared with standard HID systems and virtually eliminate ongoing maintenance expenses.



Scalable Area Light (EAS)

Offers greater flexibility, style and scalability for applications like commercial and medical properties, strip malls and large malls, and small, large and big box retailers.



Scalable Wall Pack (EWS)

A scalable solution for wall-mounted site, area and general lighting applications. Can reduce energy consumption considerably compared to standard HID systems.



N Series Area Light (EANA)

Delivers superior site uniformity and vertical light distribution with mounting options for both square and round poles. Matching Wall Pack and Flood Light make it a cinch to match the look of parking lots, building façades, walkways and other areas.



N Series Wall Pack (EWNA)

Designed to efficiently illuminate walkways and general areas; balances need for scalability with workhorse performance.



Evolve™ by GE LED Canopy Lights



ECB

Built to meet technical, functional and weather demands, Evolve™ Canopy Lights are an ideal solution for canopy installations (such as gas stations), or drive-thrus. The sleek new ECBA fixture offers quick and easy installation – just four screws.



ECBR

Evolve by GE LED Parking Garage Lights



EGMS

Enjoy significant energy and maintenance reduction, effective security light levels, increased control and the instant-on capabilities needed to make the most of parking areas. Our unique light-up version eliminates the "cave effect" for a safer, more driver-friendly installation.



EG2R

Evolve by GE LED Flood Lights



Flood Light (EFNA)

Four mounting options fit virtually any flood application, including architectural wall washing and façade lighting, sports court area lighting, flagpoles and bulletin/billboard lighting. A unique photoelectric sensor receptacle can minimize control requirements in dusk-to-dawn applications.

Reimagine your outdoor lighting in three easy steps.



1. Request your FREE Lighting Audit from GE.



2. Receive your customized lighting solution.



3. Let GE coordinate the rest.

Backed by the GE Advantage™,
we will work with you to:



Learn how to
save energy
and cut
spending



Support
environmental
initiatives



Realize
a positive
return on
investment

To learn more about municipal lighting solutions from GE or schedule your complimentary Lighting Audit, visit gelighting.com/evolve.





Stars belong outside. And that's just where you'll find Evolve™ by GE LED fixtures. From roadways to residential neighborhoods, parking lots to public spaces, Evolve by GE outdoor LED lighting fixtures are redefining the limits of high-quality, low-maintenance, energy-efficient illumination. Welcome to the next evolution of outdoor lighting. Get ready to shine.

For more information or to get started,
contact your GE Lighting sales representative
or visit gelighting.com/evolve

GE
Lighting

Evolve™ LED Flood Light

N Series (EFNA)



imagination at work

Product Features

The next generation of the GE Evolve™ LED Flood Light is a bright solution to efficiently illuminate building façade, flag poles, billboard signage and many more traditional flood applications. The Evolve LED Flood Light has a diverse portfolio of optical patterns available to maximize efficiency, highlight effectively, and beautifully illuminate a range of diverse application spaces.

Applications

- General flood applications, including, but not limited to; billboard/bulletin, spot and flag poles, building facade, and general parking.

Housing

- Die-cast aluminum housing.
- Slim architectural design incorporates an integral heat sink and light engine, ensuring maximum heat transfer, long LED life, and a reduced Effective Projected Area (EPA).
- Meets 2G vibration level per ANSI C136.31-2010.



LED & Optical Assembly

- Photometric system utilizes GE's advanced reflective LED optical system providing high uniformity, and excellent light distribution.
- Utilizes high brightness LEDs, 70CRI at 4000K and 5000K.

Lumen Maintenance

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

Ratings

-   listed, suitable for wet locations.
- IP66 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at -40° to 50°C.
- Compliant with the material restriction requirements of RoHS.
- DLC Listed

Mounting

Option T

- Trunnion, pre-wired with 3ft #14/3 cable.

Option K

- Knuckle Slipfitter for 1.9" to 2.38" OD Tenon, pre-wired with 24-inch (610mm) leads.

Option S

- Knuckle Slipfitter mounting for 2.3-3" O.D. pipe, pre-wired with 24-inch (610mm) leads.

Option V

- Knuckle Wall Mount, pre-wired 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%.
- Photo electric sensors (PE) available for all voltages.
- GE dimmable PE socket is available making the unit "adaptive controls ready." Contact manufacturer for details.
- Dimming:
 - Wired 0-10V continuous dimming with "D" option code
- Surge Protection Options:
 - For 120-277VAC and 347-480VAC per IEEE/ANSI C136.2-2014.
 - 6kV/3kA "Basic" surge protection, standard.
 - 10kV/5kA "Enhanced" surge protection available with "R" option code.

Ordering Number Logic

Evolve LED Flood Light N Series (EFNA)



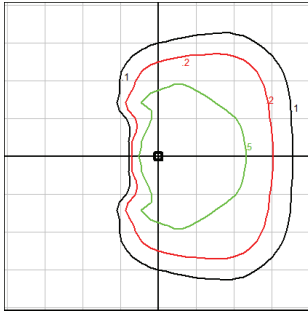
E F N A _ _ _ 5 _ _ _ _ _

PROD. ID	PHOTOMETRIC SERIES	VOLTAGE	OPTICAL CODE	DRIVE CURRENT	LED COLOR TEMP	PE FUNCTION	MOUNTING ARM	COLOR	OPTIONS
E = Evolve F = Flood Light N = Housing Series	A = Photometric Series "A"	0 = 120-277 1 = 120* 2 = 208* 3 = 240* 4 = 277* 5 = 480* H = 347-480V D = 347* * Specify single voltage only if fuse option is selected.		5 = 525mA	40 = 4000K 50 = 5000K	1 = None 2 = PE Rec. 4 = PE Rec. with Shorting cap 5 = PE Rec. with Control** A = ANSI C136.41 7-pin PE Receptacle †# D = ANSI C136.41 7-pin PE Receptacle with Shorting Cap †# ** PE control not available for 347-480V. Must be a discrete voltage (347V or 480V). † When ordering PE function socket A or D, a dimming driver must also be ordered under the "OPTIONS" column. # Order Dimming/Control PE as a separate item.	T = Trunnion, pre-wired with 3ft #14/3 cable, standard* K = Knuckle Slipfitter for 1.9 in to 2.38 in OD Tenon S = Knuckle Slipfitter for 1.9 in to 3 in OD Tenon V = Knuckle Wall Mount * When Dimming option is selected without Dimming PE, a #14-5 cable will be supplied at length above.	BLCK = Black DKBZ = Dark Bronze GRAY = Gray WHITE = White Contact manufacturer for other colors.	D = Dimming (0-10 Volt Input) † F = Fusing R = 10kV Enhanced Surge Protection P = Prewired with 6 FT #14/3 Cable* XXX = Special Options † Dimming leads will be provided through the back of the arm, unless specified with A or D PE Function. * When Dimming option is selected without Dimming PE, a #14-5 cable will be supplied at length above.

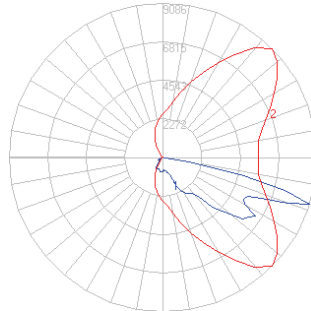
OPTICAL CODE	TYPE	TYPICAL INITIAL LUMENS		TYPICAL SYSTEM WATTAGE		IES FILE NUMBER	
		4000K	5000K	120-277V	347-480V	4000K	5000K
A4	Asymmetric Forward	3,730	3,750	46	46	EFNA_A4540_-120-277V.IES	EFNA_A4550_-120-277V.IES
B4	Asymmetric Forward	5,510	5,540	65	65	EFNA_B4540_-120-277V.IES	EFNA_B4550_-120-277V.IES
C4	Asymmetric Forward	7,180	7,210	85	85	EFNA_C4540_.IES	EFNA_C4550_.IES
D4	Asymmetric Forward	8,810	8,850	104	104	EFNA_D4540_.IES	EFNA_D4550_.IES
E4	Asymmetric Forward	10,370	10,410	123	123	EFNA_E4540_.IES	EFNA_E4550_.IES
F4	Asymmetric Forward	12,320	12,380	148	148	EFNA_F4540_.IES	EFNA_F4550_.IES
A3	Asymmetric Wide	4,070	4,090	46	46	EFNA_A3540_-120-277V.IES	EFNA_A3550_-120-277V.IES
B3	Asymmetric Wide	6,010	6,040	65	65	EFNA_B3540_-120-277V.IES	EFNA_B3550_-120-277V.IES
C3	Asymmetric Wide	7,830	7,860	85	85	EFNA_C3540_.IES	EFNA_C3550_.IES
D3	Asymmetric Wide	9,620	9,650	104	104	EFNA_D3540_.IES	EFNA_D3550_.IES
E3	Asymmetric Wide	11,320	11,360	123	123	EFNA_E3540_.IES	EFNA_E3550_.IES
F3	Asymmetric Wide	13,450	13,500	148	148	EFNA_F3540_.IES	EFNA_F3550_.IES
A2	Asymmetric Narrow	3,940	3,960	46	46	EFNA_A2540_-120-277V.IES	EFNA_A2550_-120-277V.IES
B2	Asymmetric Narrow	5,820	5,850	65	65	EFNA_B2540_-120-277V.IES	EFNA_B2550_-120-277V.IES
C2	Asymmetric Narrow	7,580	7,620	85	85	EFNA_C2540_.IES	EFNA_C2550_.IES
D2	Asymmetric Narrow	9,310	9,350	104	104	EFNA_D2540_.IES	EFNA_D2550_.IES
E2	Asymmetric Narrow	10,960	11,010	123	123	EFNA_E2540_.IES	EFNA_E2550_.IES
F2	Asymmetric Narrow	13,020	13,080	148	148	EFNA_F2540_.IES	EFNA_F2550_.IES
AS	20° Spot	4,340	4,360	46	46	EFNA_AS540_-120-277V.IES	EFNA_AS550_-120-277V.IES
BS	20° Spot	6,410	6,440	65	65	EFNA_BS540_-120-277V.IES	EFNA_BS550_-120-277V.IES
CS	20° Spot	8,350	8,380	85	85	EFNA_CS540_.IES	EFNA_CS550_.IES
DS	20° Spot	10,250	10,290	104	104	EFNA_DS540_.IES	EFNA_DS550_.IES
ES	20° Spot	12,060	12,100	123	123	EFNA_ES540_.IES	EFNA_ES550_.IES
FS	20° Spot	14,330	14,390	148	148	EFNA_FS540_.IES	EFNA_FS550_.IES
AW	80° Wide Flood	4,360	4,380	46	46	EFNA_AW540_-120-277V.IES	EFNA_AW550_-120-277V.IES
BW	80° Wide Flood	6,440	6,480	65	65	EFNA_BW540_-120-277V.IES	EFNA_BW550_-120-277V.IES
CW	80° Wide Flood	8,390	8,430	85	85	EFNA_CW540_.IES	EFNA_CW550_.IES
DW	80° Wide Flood	10,300	10,350	104	104	EFNA_DW540_.IES	EFNA_DW550_.IES
EW	80° Wide Flood	12,130	12,180	123	123	EFNA_EW540_.IES	EFNA_EW550_.IES
FW	80° Wide Flood	14,400	14,470	148	148	EFNA_FW540_.IES	EFNA_FW550_.IES
AE	100° Extra Wide Flood	4,260	4,290	46	46	EFNA_AE540_-120-277V.IES	EFNA_AE550_-120-277V.IES
BE	100° Extra Wide Flood	6,300	6,330	65	65	EFNA_BE540_-120-277V.IES	EFNA_BE550_-120-277V.IES
CE	100° Extra Wide Flood	8,200	8,240	85	85	EFNA_CE540_.IES	EFNA_CE550_.IES
DE	100° Extra Wide Flood	10,070	10,120	104	104	EFNA_DE540_.IES	EFNA_DE550_.IES
EE	100° Extra Wide Flood	11,860	11,910	123	123	EFNA_EE540_.IES	EFNA_EE550_.IES
FE	100° Extra Wide Flood	14,090	14,150	148	148	EFNA_FE540_.IES	EFNA_FE550_.IES

Photometrics

EFNA Type IV - Asymmetric Forward (F4)
12,380 Lumens, 5000K (EFNA_F4550__.IES)
Fixture mounted at 0° Horizontal

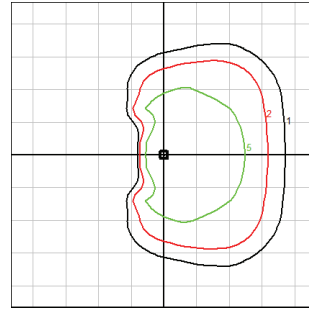


Grid Distance in Units
of Mounting Height at 30' Initial
Footcandle Values at Grade

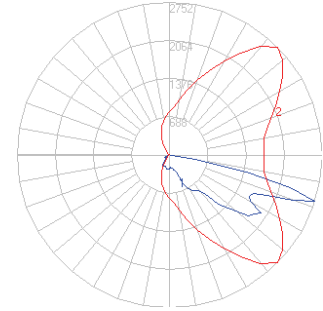


— Vertical plane through horizontal angle
of maximum candlepower at 45°
— Vertical plane through horizontal angle of 72.5°

EFNA Type IV - Asymmetric Forward (A4)
3,750 Lumens, 5000K (EFNA_A4550__-120-277V.IES)
Fixture mounted at 0° Horizontal

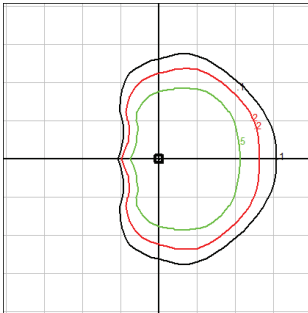


Grid Distance in Units
of Mounting Height at 15' Initial
Footcandle Values at Grade

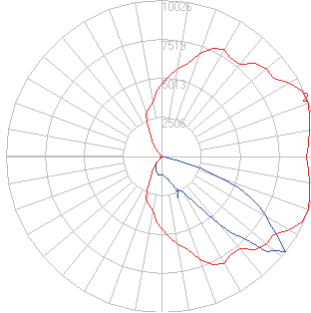


— Vertical plane through horizontal angle
of maximum candlepower at 45°
— Vertical plane through horizontal angle of 72.5°

EFNA Type III - Asymmetric Wide (F3)
13,500 Lumens, 5000K (EFNA_F3550__.IES)
Fixture mounted at 0° Horizontal

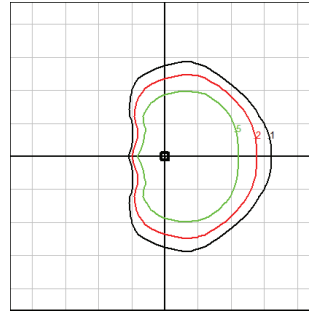


Grid Distance in Units
of Mounting Height at 30' Initial
Footcandle Values at Grade

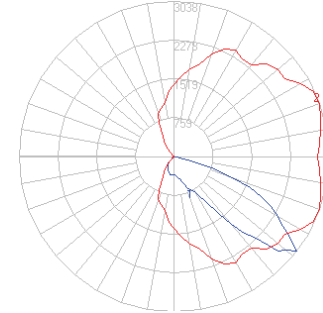


— Vertical plane through horizontal angle
of maximum candlepower at 20°
— Vertical plane through horizontal angle of 52.5°

EFNA Type III - Asymmetric Wide (A3)
4,090 Lumens, 5000K (EFNA_A3550__-120-277V.IES)
Fixture mounted at 0° Horizontal

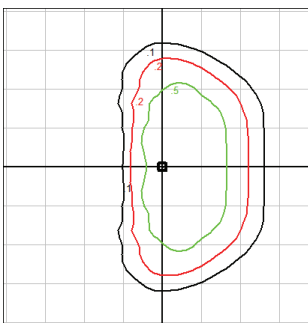


Grid Distance in Units
of Mounting Height at 15' Initial
Footcandle Values at Grade

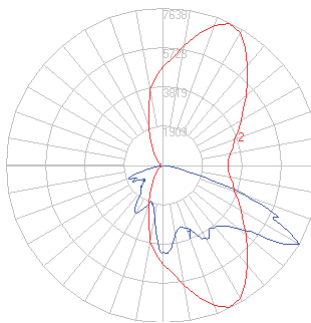


— Vertical plane through horizontal angle
of maximum candlepower at 20°
— Vertical plane through horizontal angle of 52.5°

EFNA Type II - Asymmetric Narrow (F2)
13,080 Lumens, 5000K (EFNA_F2550__.IES)
Fixture mounted at 0° Horizontal

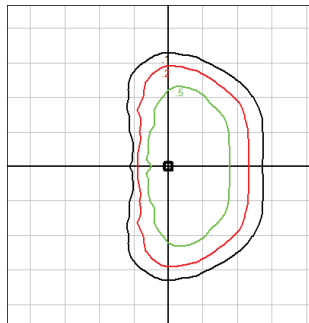


Distance in Units
of Mounting Height at 30' Initial
Footcandle Values at Grade

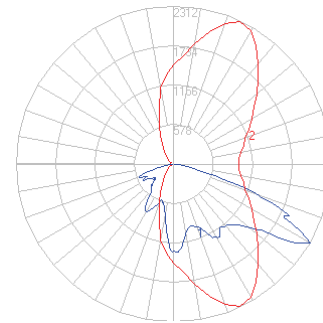


— Vertical plane through horizontal angle
of maximum candlepower at 65°
— Vertical plane through horizontal angle of 60°

EFNA Type II - Asymmetric Narrow (A2)
3,960 Lumens, 5000K (EFNA_A2550__-120-277V.IES)
Fixture mounted at 0° Horizontal



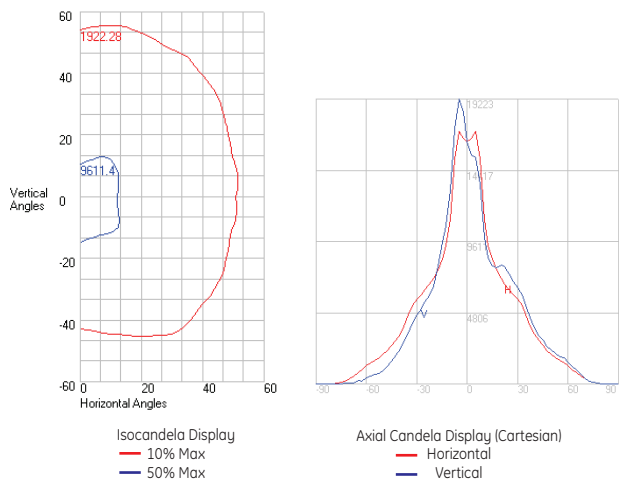
Grid Distance in Units
of Mounting Height at 15' Initial
Footcandle Values at Grade



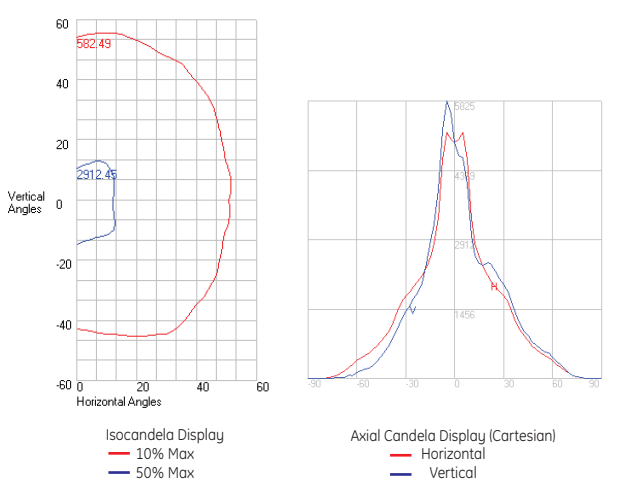
— Vertical plane through horizontal angle
of maximum candlepower at 65°
— Vertical plane through horizontal angle of 60°

Photometrics

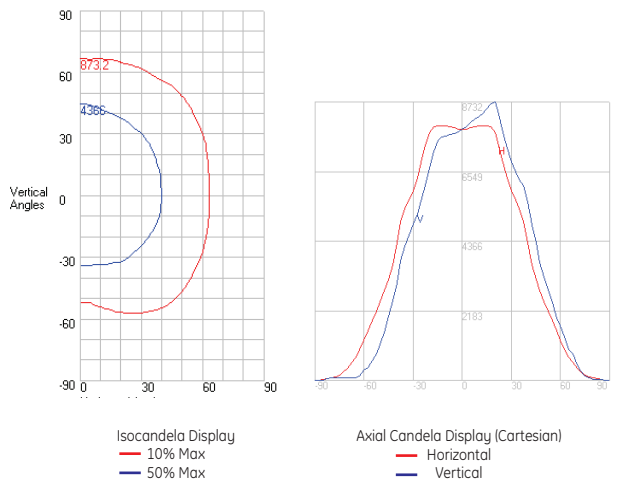
EFNA – 20° Spot (FS)
14,390 Lumens, 5000K (EFNA_FS550__IES)



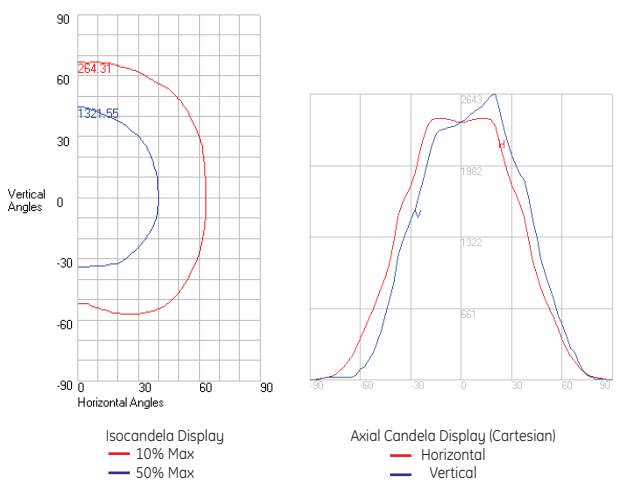
EFNA – 20° Spot (AS)
4,360 Lumens, 5000K (EFNA_AS550__-120-277V.IES)



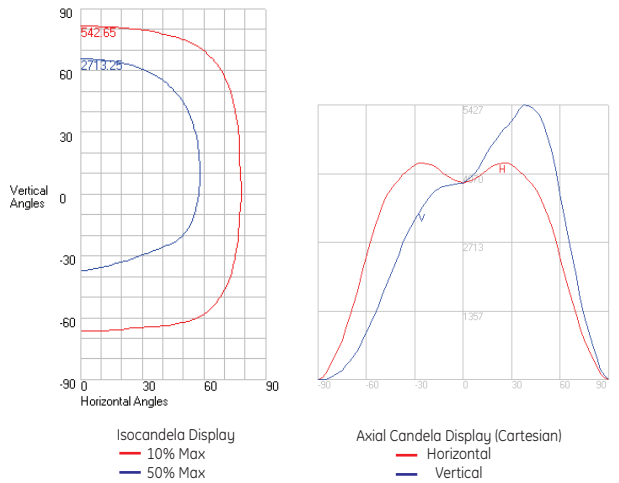
EFNA – 80° Wide Flood (FW)
14,470 Lumens, 5000K (EFNA_FW550__IES)



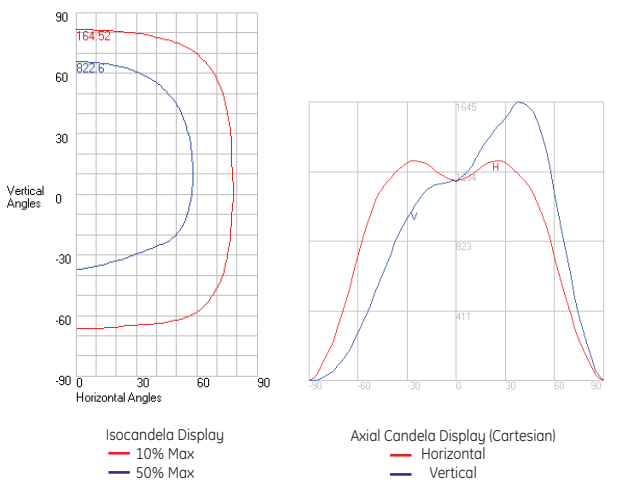
EFNA – 80° Wide Flood (AW)
4,380 Lumens, 5000K (EFNA_AW550__-120-277V.IES)



EFNA – 100° Extra Wide Flood (FE)
14,150 Lumens, 5000K (EFNA_FE550__IES)



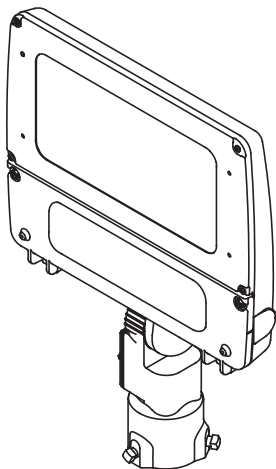
Extra Wide Flood (AE)
4,290 Lumens, 5000K (EFNA_AE550__-120-277V.IES)



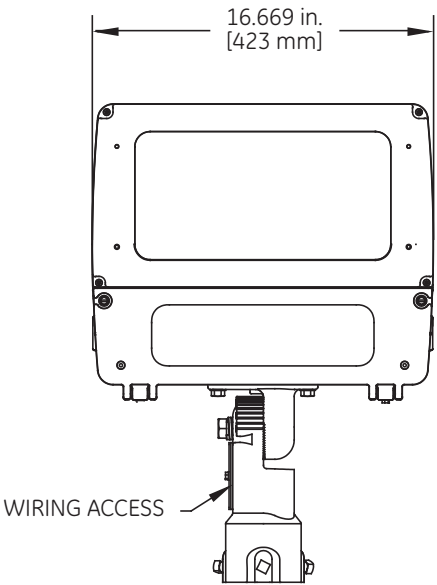
Product Dimensions

Flood Light Slipfitter Mount

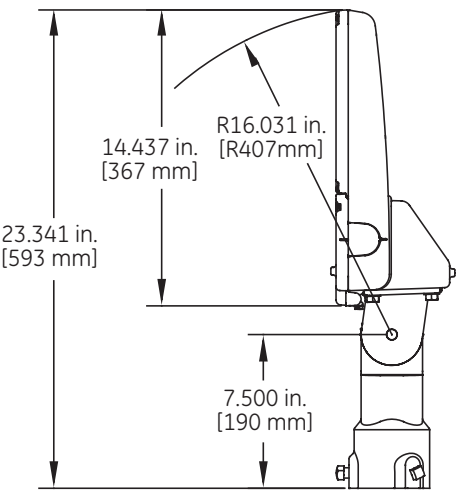
ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW



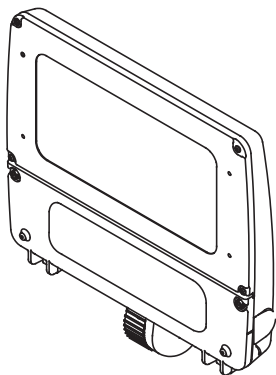
DATA

- Approximate Net Weight: 21 lbs (9.52 kgs)
- Effective Projected Area (EPA) with Knuckle Mount: 0.56 sq ft max (0.05 sq. m)

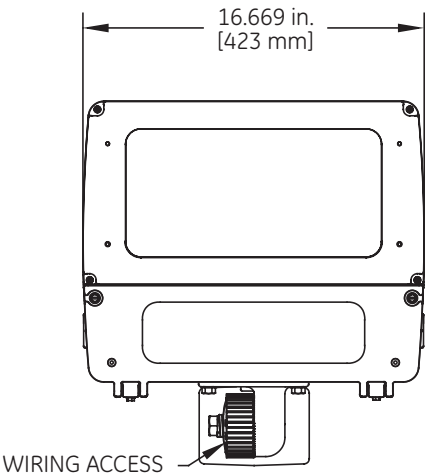
Product Dimensions

Flood Light Wall Mount

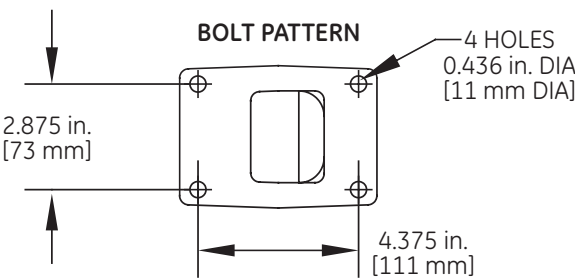
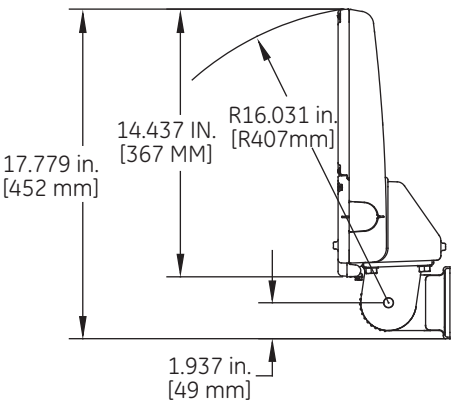
ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW



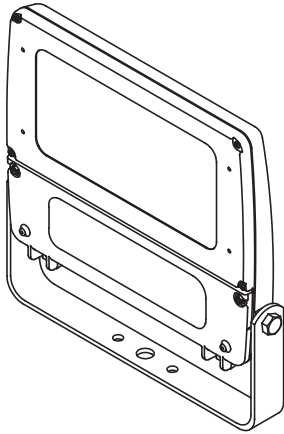
DATA

- Approximate Net Weight: 21 lbs (9.52 kgs)
- Effective Projected Area (EPA) with Knuckle Mount: 0.43 sq ft max (0.04 sq. m)

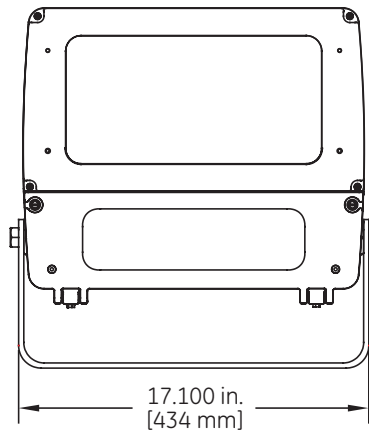
Product Dimensions

Flood Light Trunnion

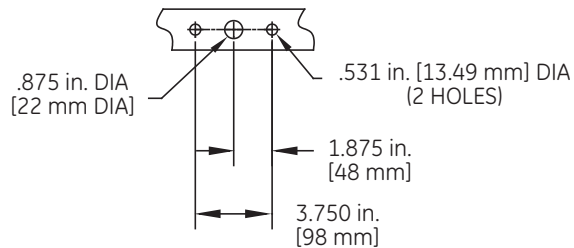
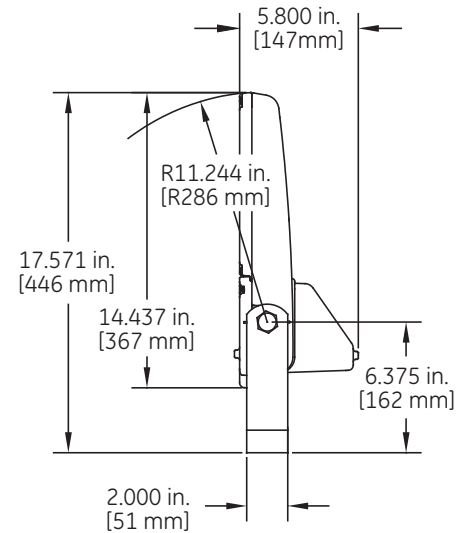
ISOMETRIC VIEW



FRONT VIEW



SIDE VIEW



DATA

- Approximate Net Weight: 22 lbs (9.97 kgs)
- Effective Projected Area (EPA) with Trunnion Mount: 0.39 sq ft max (0.03 sq. m)



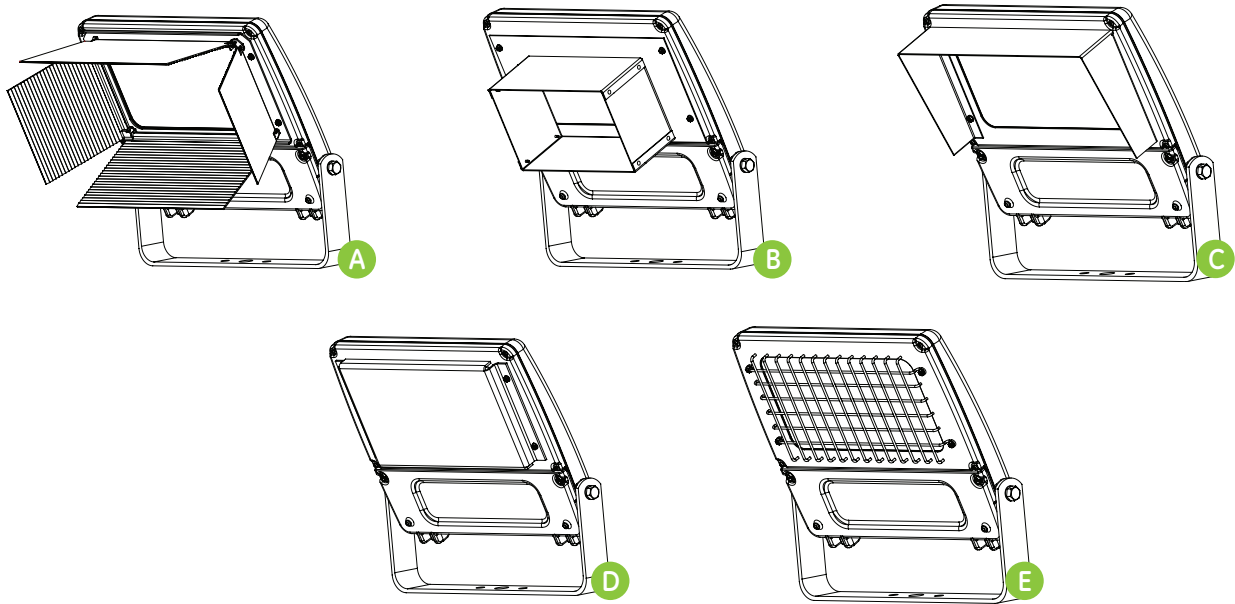
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Evolve™ N Series Accessories

(EFN, EAN, & EWN)



Accessory products above are shown with the Evolve EFN Food luminaire.

Product Name:	Ordering Logic:	Description:
A. Barn Door Assembly	BDABLCK-EFN	Easily customize your EFN photometric distributions with the adjustable doors of the barn door assembly. Standard color: Black. Recommended for use with EFN Flood.
B. Snoot	SNBLCK-EFN	Further aid in directing light to specific locations with the EFN designed snoot. Standard color: Black. Recommended for use with EFN flood.
C. Top and Side Visor	TSVBLCK-EFN	Shield light from escaping with this top and side visor. Standard color: Black. Recommended for use with EFN Flood. Also compatible with EAN Area Light & EWN Wall Pack.
D. Lexan Vandal Shield	LVS-EFN	Made from durable lexan material, this shield protects the luminaire's glass from shattering due to impact of debris. Compatible with EFN Flood, EAN Area Light, and EWN Wall Pack.
E. Wire Guard	WG-EFN	Protect the luminaire lens against foreign objects of up to 1" in volume with this 1/8" diameter stainless steel wire guard. Compatible with EFN Flood, EAN Area Light, and EWN Wall Pack.

All accessory product ordered and shipped separate from the luminaire.
Contact Manufacturer for more information.



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OLP3097 (Rev 03/31/15)