BIG SHINE LED
BE BRILLIANT

Project:
Model Number: BSL-ALXXX-FNX
Notes:

Fornax

OUTDOOR POLE/ARM-MOUNTED AREA AND ROADWAY LUMINAIRES

FEATURES

- High Efficiency: Delivers up to 175lm/W
- Size Options: Available in six different sizes.
- Field-Adjustable Settings: Offers 3 CCT and 3 wattage options.
- Control: Selectable photocell for flexible operation available.
- Durable: IP66 and IK07 rated.
- Robust Construction: Features a durable die-cast aluminum housing for excellent heat dissipation and a long lifespan.
- Shatter-Resistant Lens: Tempered glass lens resists yellowing and cracking over time.
- Versatile Mounting: Available with knuckle mount, slipfitter mount, and yoke mount for flexible installations.

REGULATORY QUALIFICATIONS

- All variations are DLC-listed
- ETL-listed

APPLICATIONS

- Parking Lots
- Squares
- Advertising Boards
- Exhibition Centers
- Facades

Big Shine LED is an LED lighting manufacturer, a division of technology company Big Shine Worldwide, Inc. With global manufacturing centers for continuity of supply, Big Shine LED designs lighting fixtures with premium components that meet international certifications.

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FORNAX AREA LIGHT

TECHNICAL SPECIFICATIONS						
Type	FNX-30	FNX-60	FNX-100	FNX-150	FNX-200	FNX-300
Power Consumption (±10%)	30W, 20W, 15W (Selectable)	60W, 50W, 40W (Selectable)	100W, 80W, 60W (Selectable)	150W, 120W, 90W (Selectable)	200W, 160W, 120W (Selectable)	300W, 240W, 180W (Selectable)
Driver Type	Novbo	Lifud				
Input Voltage	120V-277V, 50/60Hz					
Power Factor	>0.92					
Control	0-10V dimmable, Selectable dusk-to-dawn photocell as standard, NEMA Photocell optional					

* The tolerance for power is ±10%.

OPTIC SPECIFICATIONS						
LED Type	LED 2835					
Luminous Flux (lm)	5250lm	10500lm	17500lm	26250lm	35000lm	52500lm
Efficacy (4000K Ra80)	175lm/W					
Correlated Color Temperature	3000K, 4000K, 5000K (Selectable)					
Color Rendering Index	Ra80 (Ra70 optional)					
Beam Angle	F00A64 (7H×7V)					

* The tolerance for luminious flux is ±10%.

FORNAX AREA LIGHT

MOUNTING AND PRODUCT DIMENSIONS

Product Dimension (mm/inch)	143×159×55 mm (5.63"×6.26"×2.17")	190×180×60 mm (7.48"×7.09"×2.36")	251×264×67 mm (9.88"×10.39"×2.64")	260×284×67 mm (10.24"×11.18"×2.64")	301×299×72 mm (11.85"×11.77"×2.83")	361×335×77 mm (14.21"×13.19"×3.03")
Luminaire Net Weight (kg/lbs)	1.11kg (2.45lbs)	1.5kg (3.44lbs)	3.09kg (6.81lbs)	3.6kg (8.11lbs)	4.05kg (8.93lbs)	5.25kg (11.57lbs)
Mounting Option	Knuckle, Trunion Mount		Slipfiltter, Trunion Mount			
Material	Aluminum alloy					
Fixture Color	Black (RAL9017) / Bronze (RAL8019)					
IK Rating	IK07					
IP Rating	IP66					

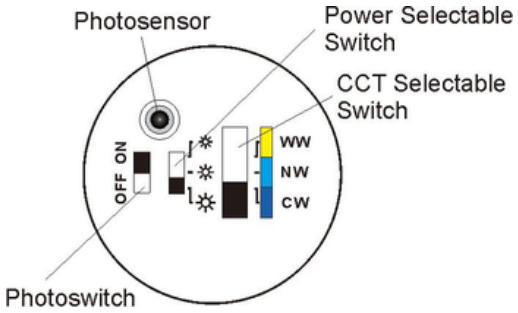
* The tolerance for weight is ±6%.

LIFESPAN AND WARRANTY

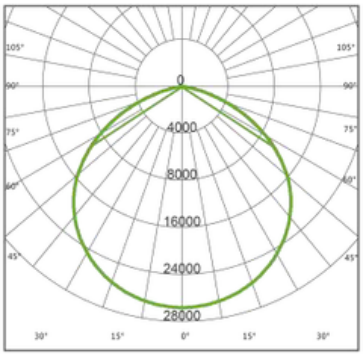
Operating Temperature	-40°C to +50°C (-40°F to +122°F)
Warranty	5 Years

NEW FEATURES

- 3 CCT options.
- 3 wattage options.
- Easily select via integrated switch.



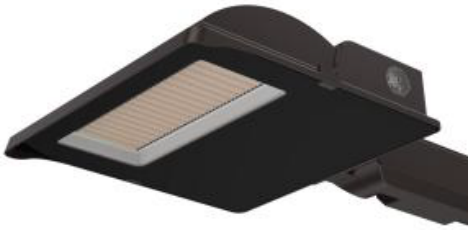
PHOTOMETRIC DATA



F00A64 (7H×7V)
30W-300W Beam Angle

MOUNTING OPTIONS

Knuckle Mount
(30W/60W)

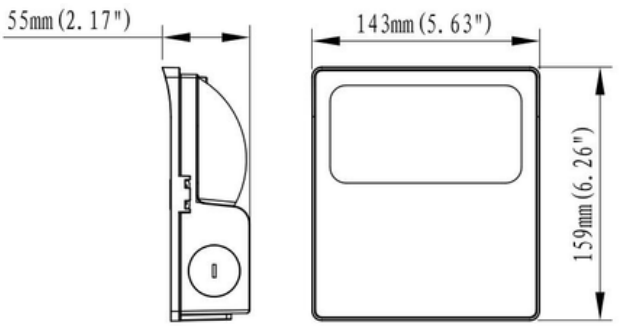


Slipfitter Mount
(100W/150W/200W/300W)

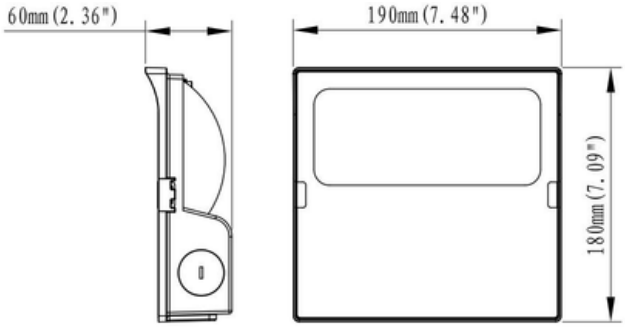
Trunion Mount
(30W/60W/100W/150W/200W/300W)

DIMENSIONAL DATA

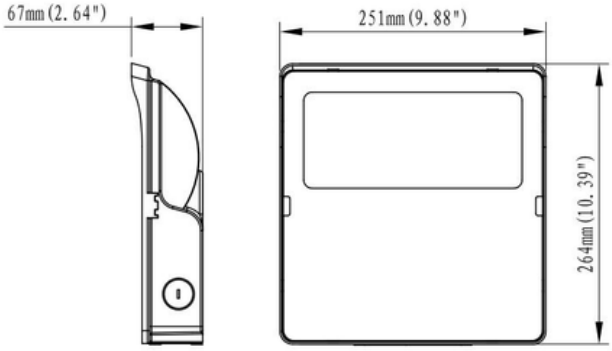
Unit:mm



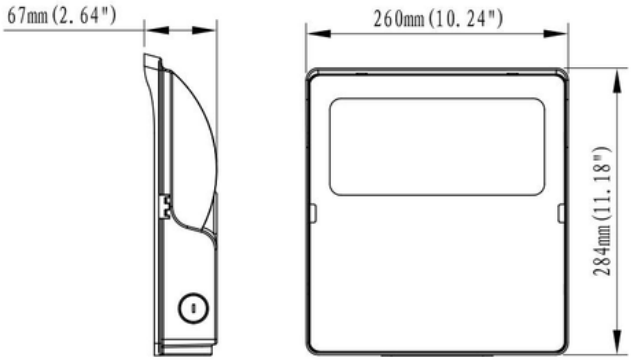
30W



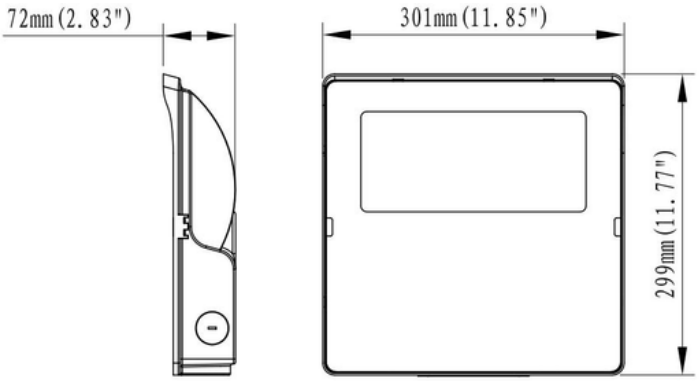
60W



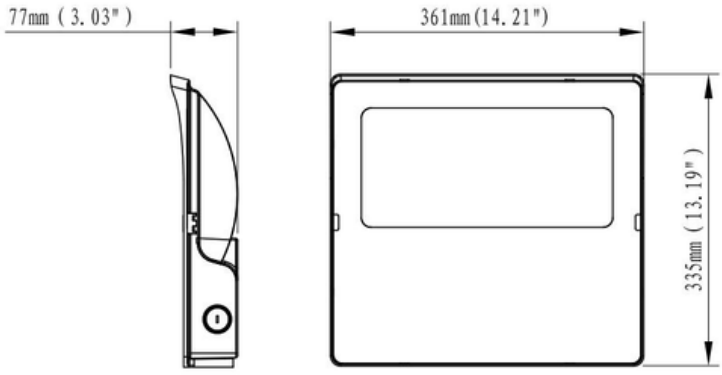
100W



150W



200W

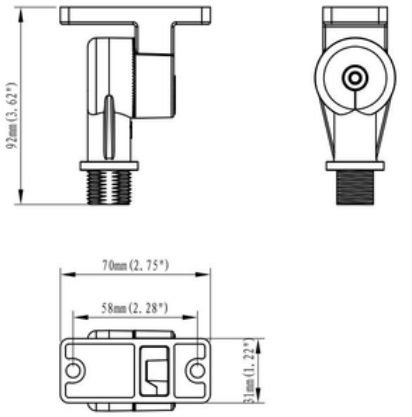


300W

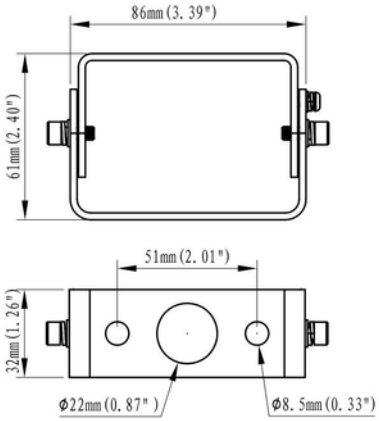
*Images not to scale.

DIMENSIONAL DATA

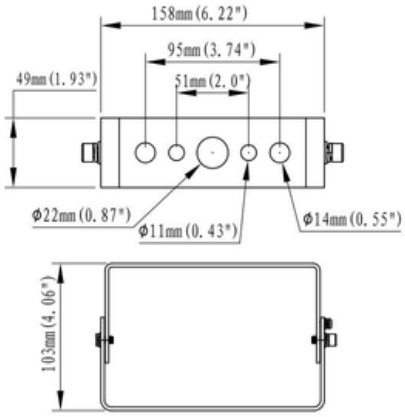
Unit:mm



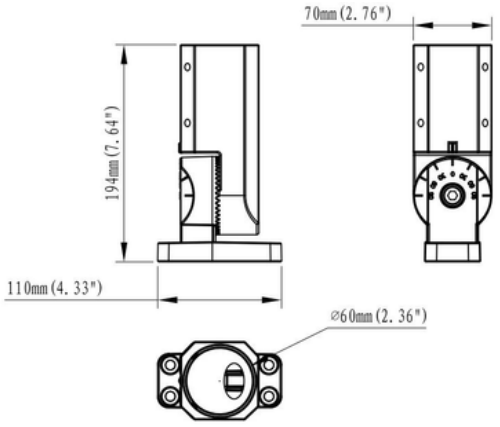
Knuckle Mount
(30W/60W)



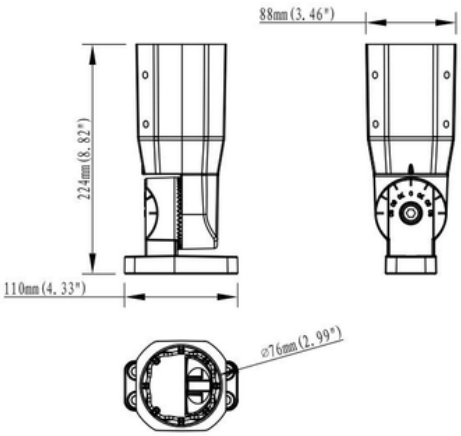
Trunion Mount
(30W/60W)



Trunion Mount
(100W/150W/200W/300W)



60mm Slipfitter
(100W/150W/200W/300W)



76mm Slipfitter
(100W/150W/200W/300W)

*Images not to scale.

ACCESSORIES

NEMA Socket

- ANSI C136.41-2013 dimming receptacle (3-pin).
- Compatible with 100W, 150W, 200W, and 300W fixtures.

Photocell

- ANSI C136.10-1996 twist-lock for on/off function only.
- Compatible with 100W, 150W, 200W, and 300W fixtures.

Shorting Cap

- Covers the NEMA socket when a photocell is not in use.
- Compatible with 100W, 150W, 200W, and 300W fixtures.

Slipfitter Mount (60mm)

- Adjustable angle mounting bracket with a 60mm sleeve.
- Compatible with 100W, 150W, 200W, and 300W fixtures.

Slipfitter Mount (76mm)

- Adjustable angle mounting bracket with a 76mm sleeve.
- Compatible with 100W, 150W, 200W, and 300W fixtures.

Trunion Mount (Small)

- SPCC wall mounting bracket with adjustable installation angle.
- Compatible with 30W and 60W fixtures.

Trunion Mount (Large)

- SPCC wall mounting bracket with adjustable installation angle.
- Compatible with 100W, 150W, 200W, and 300W fixtures.

Knuckle Mount

- Adjustable angle mounting bracket with 1/2" threaded junction box.
- Compatible with 30W and 60W fixtures.

*Images not to scale.

ORDERING INFORMATION

ORDERING EXAMPLE: BSL-FNX-30-MV-40K-F00A6-SF-BL

SERIES	WATTAGE & LUMEN OUTPUT	VOLTAGE	CORELATED COLOR TEMPERATURE (CCT)	BEAM ANGLE	CONTROL OPTIONS	MOUNTING OPTIONS	FINISH COLOR
FNX	30W (5250)	MV (100-277V)	30K (3000K)	F00A6 (7H×7V)	0-10V	SF (Slipfitter Mount)	BL (Black)
	60W (10500)	HV (277-480V)	40K (4000K)		Photocell	TR (Trunion)	BZ (Bronze)
	100W (17500)		50K (5000K)		NEMA Photocell	KN (Knuckle)	
	150W (26250)						
	200W (35000)						
	300W (52500)						

OPTIONAL ACCESSORIES AVAILABLE*

- Photocell (Dusk-to-Dawn Sensor): Automates lighting to turn on at dusk and off at dawn, optimizing energy use.
- Advanced Control Options: Includes intelligent control modules for comprehensive energy management, advanced dimming, and scheduling.
- Conduit Adapters: For seamless integration with various electrical conduit systems.
- Mounting Hardware: Includes anchor bolts, nuts, washers, and J-hooks for secure installation.
- Surge Protection Devices (SPDs): Protects the fixture from power surges and lightning strikes.

*Accessories sold separately.

WARRANTY

Big Shine LED products are covered by a five-year limited warranty against defects in materials. A fixture is considered defective if 10% or more of the LED fixture's components have failed. Visit our website to learn more about our product warranty: bigshineled.com/resources.

Covered Under Warranty:
Warranty Length: 5 years from purchase date (or installed date in some cases)
Coverage: Manufacturer defects in materials
Repair or Replacement: Big Shine LED may determine to repair or replace the product.

Not Covered Under Warranty:

- Damage caused by misuse, accidents, weather, improper installation, or unauthorized repairs.
- Using the product for something other than its intended purpose.

Visit our website to read the terms and conditions of our product warranty at bigshineled.com/resources.

How to Submit a Warranty Claim:
To submit a warranty claim, visit our website at bswpartnerhub.com or contact us at (845) 219-5548.

LED PREVENTATIVE MAINTENANCE

Implementing a preventative maintenance plan helps ensure optimal performance and longevity of LED lighting systems through regular inspections and upkeep. Here are some steps to take to keep LED lighting systems in good working condition, prevent malfunction, and extend their lifespan.

I. Maintenance schedule: The frequency of maintenance tasks will depend on the specific lighting system, its environment, and usage. As a general rule, LED fixtures should be inspected and cleaned at least once every six months. Tasks should be performed more frequently in high-traffic areas or in environments with excessive dust and debris.

II. Record keeping: It is also important to keep accurate records of all maintenance tasks performed on the lighting system. This information can be used to track the performance of the system, identify any trends or patterns, and schedule future maintenance tasks.

For a more detailed preventative maintenance plan, visit the Resource Center in our website at bigshineled.com/resources.

DEFINITIONS

LM-80 Testing
The LM-80 test method that measures the lumen maintenance, or long-term light output, of an LED light source over a period of time. Big Shine LED fixtures are tested at three different temperatures for at least 6,000 hours and up to 10,000 hours. By measuring the LED's light output at regular intervals during this extended period, the LM-80 test can determine how the performance of the LED degrades over its lifespan. To obtain test results for individual Big Shine LED fixtures, visit our website or contact us at info@bigshineled.com.

TM-21 Method
TM-21 is a method for projecting the lumen maintenance and lifespan of an LED light source based on data collected from LM-80 testing. The data collected during the LM-80 testing must show a stable trend in lumen maintenance. The TM-21 calculates a decay rate based on the data, which shows how quickly the LED's brightness is diminishing over time. The TM-21 sets a limit on how far the projected lifespan can be estimated base on the LM-80 data. The lifespan cannot exceed six times the duration of the LM-80 testing. The extrapolation limit ensures that predictions made by the TM-21 are based on solid data and do not exceed too far beyond the actual testing period.

L70 Rating
The L70 is a measure of an LED's longevity. It represents the time it takes for the LED's brightness or lumen output to drop to 70% of its original level. In other words, it estimates how long the LED will last before it dims significantly.

L90 Rating
The L90 rating is similar to the L70 rating, but it measures a different level of light output maintenance in LEDs. This measures the time it takes for an LED light source to decrease to 90% of its original brightness or lumen output. It's a stricter standard compared to the L70 because it represents a higher level of light output maintenance. This rating is important for applications where higher light levels must be maintained for a longer period of time.

Total Harmonic Distortion (THD)
The Total Harmonic Distortion is a measure of the distortion in the electrical current caused by non-linear loads. THD is expressed as a percentage and represents the deviation of the current waveform from a perfect sinusoidal wave. Lower THD percentages in LED improve energy efficiency as the fixture has less wasted energy. It also extends the life of the LED fixture and other connected devices in a building's electrical system as less heat is generated in the electrical wiring and components, reducing the risk of overheating. Lower THD also improves power quality, causes less interference and enhances the reliability of the entire electrical system. To better understand the benefits of lower THD in LED fixtures, visit our website at bigshineled.com.

Power Factor
A higher power factor in LED fixtures means the fixture uses electrical power more efficiently. Less power is wasted in the form of reactive power, so the lighting system consumes less electricity overall. A higher power factor also improves the overall power quality of the electrical system, resulting in a more stable and consistent power supply, which benefits other devices connected to the same electrical network. Other benefits include reducing the load on the electrical grid, reducing heat generation, and enhancing the lifespan of all equipment on the system. For more details on power factor, visit our website at bigshineled.com.

Efficacy
The efficacy in an LED fixture refers to how efficiently the light converts electrical power into visible light. It's typically measured in lumens per watt, indicating how much light is produced for each watt of electricity used.

Luminous Flux
Luminous flux is the total amount of visible light emitted by a light source, measured in lumens. It represents the overall brightness of the light produced.

Dominant Peak Wavelength
It represents the wavelength that contributes most to the perceived color of the light source.

Full Width at Half Maximum (FWHM)
It is a measure of the spectral bandwidth of a light source. Specifically, it is the width of the spectral curve at half of its maximum intensity. A narrower FWHM indicates a more focused spectral distribution, while a wider FWHM suggests a broader spectral distribution.