

Project:

Catalog Number:

Notes:

# PT7

## OUTDOOR POLE ARM-MOUNTED AREA & ROADWAY LUMINAIRE

### FEATURES

- Flexible Mounting: Supports various options, including single strut, twin strut, post top, and side entry.
- High Efficiency: Delivers up to 150 lm/W.
- Durable Construction: Housing made from 100% aluminum alloy.
- Enhanced Anti-Corrosion: Coated with Akzo Outdoor Powder for superior protection.
- Maintenance: Designed for easy, tool-free servicing.
- Smart Control Ready: Compatible with NEMA socket for advanced controls.
- Power Selectable: Offers 30%, 50%, 75%, and 100% power output options.

### REGULATORY QUALIFICATIONS

- All variations are DLC-listed
- ETL-listed



### APPLICATIONS

- Roadways
- Parks
- Residential Areas
- Walkways
- Parking Garages

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.

## PT7 AREA LIGHT

### TECHNICAL SPECIFICATIONS

Model No.	PT7-30	PT7-50	PT7-60	PT7-75	PT7-150
<b>Power Consumption (±10%)</b>	30W	50W	60W	75W	150W
<b>Wattage Selectable</b>	100% , 75% , 50% , 30% (Selectable)				100%, 80%, 60% (Selectable)
<b>Power Supply</b>	Becky				
<b>Input Voltage</b>	120V-277V, 120V-347V, 50/60Hz				
<b>Power Factor</b>	>0.9				
<b>Control</b>	Dimmable, Photocell				

### OPTIC SPECIFICATIONS

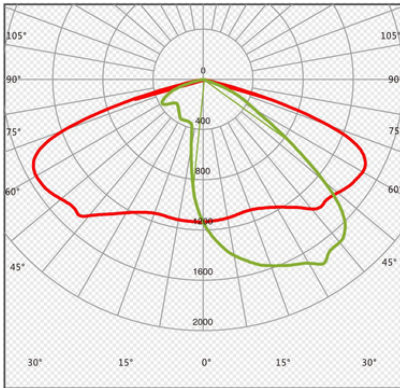
<b>LED Type</b>	LED 3030				
<b>Luminous Flux (±10%) (4000K)</b>	4500lm	7500lm	9000lm	11250lm	22500lm
<b>Efficacy (lm/W)</b>	150 lm/W				
<b>Correlated Color Temperature</b>	3000K, 4000K, 5000K (Selectable)			4000K, 5000K (Selectable)	3000K, 4000K, 5000K (Selectable)
<b>Color Rendering Index</b>	Ra70 (Ra80 optional)				
<b>Beam Angle</b>	R01603, R01604, R01605				

## PT7 AREA LIGHT

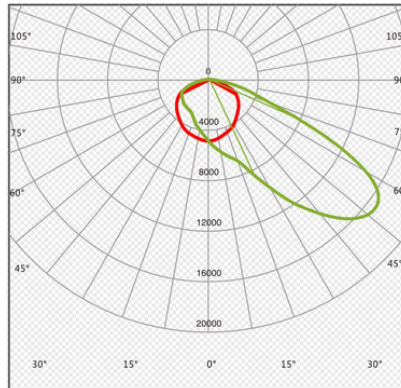
MOUNTING AND PRODUCT DIMENSIONS		
<b>Product Dimension (mm/inch)</b>	400x81(15.75"x3.19")	400x92 (15.75"x3.62")
<b>Luminaire Net Weight (kg/lbs)</b>	5.3/11.68	6.1/13.45
<b>Mounting Option</b>	Single strut, Twin strut, Straight-arm, Post top, Side entry, Gooseneck, Surface, Conduit mount	
<b>Material</b>	Aluminum alloy	
<b>Lens</b>	Polycarbonate lens	
<b>Fixture Color</b>	Black(RAL9005)	
<b>IK Rating</b>	IK08	
<b>IP Rating</b>	IP66	

LIFESPAN AND WARRANTY	
<b>Operating Temperature</b>	-30°C to +50°C (-22°F to +122°F)
<b>Warranty</b>	5 Years

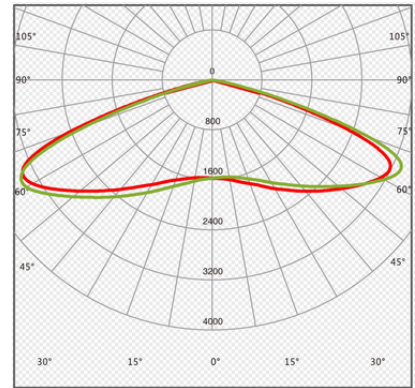
## PHOTOMETRIC DATA



**R01603 (Type II)**



**R01604 (Type III)**



**R01605 (Type V)**

## MOUNTING OPTIONS



**Single Strut  
Mount**



**Twin Strut  
Mount**



**Straight-Arm  
Mount**



**Post Top  
Mount**

## MOUNTING OPTIONS



**Side Entry  
Mount**



**Gooseneck  
Mount**



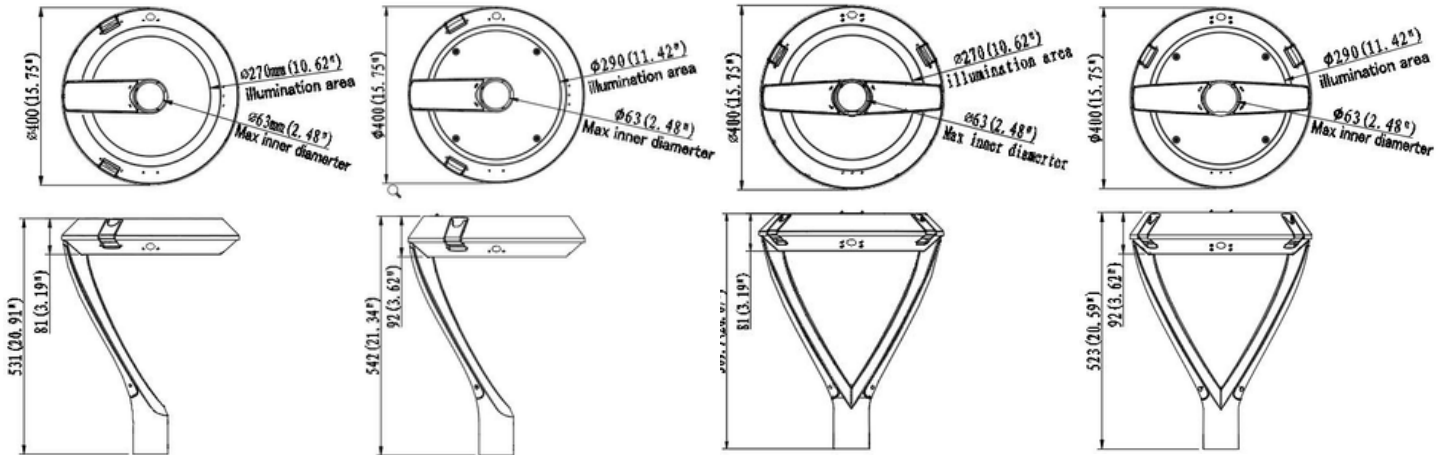
**Surface  
Mount**



**Conduit  
Mount**

## DIMENSIONAL DATA

Unit:mm



**Single Strut  
Mount**

30W, 50W, 60W, 75W

**Single Strut  
Mount**

150W

**Twin Strut  
Mount**

30W, 50W, 60W, 75W

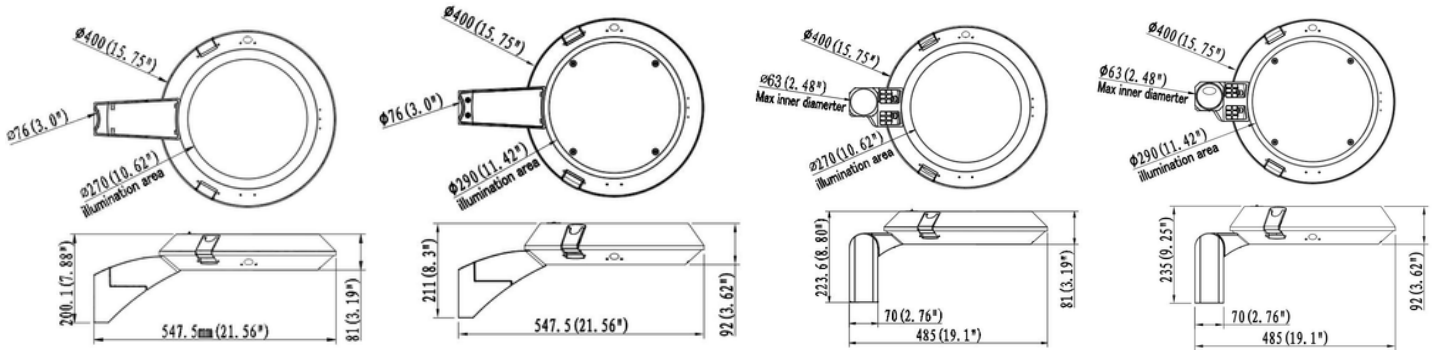
**Twin Strut  
Mount**

150W

\*Images not to scale.

## DIMENSIONAL DATA

Unit:mm



Straight-Arm  
Mount

30W, 50W, 60W, 75W

Straight-Arm  
Mount

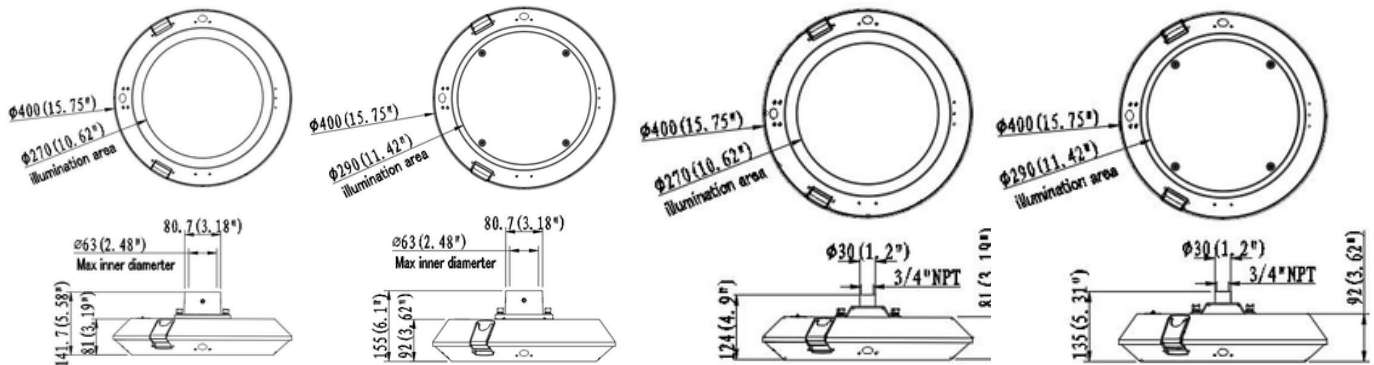
150W

Post Top  
Mount

30W, 50W, 60W, 75W

Post Top  
Mount

150W



Gooseneck  
Mount

30W, 50W, 60W, 75W

Gooseneck  
Mount

150W

Conduit  
Mount

30W, 50W, 60W, 75W

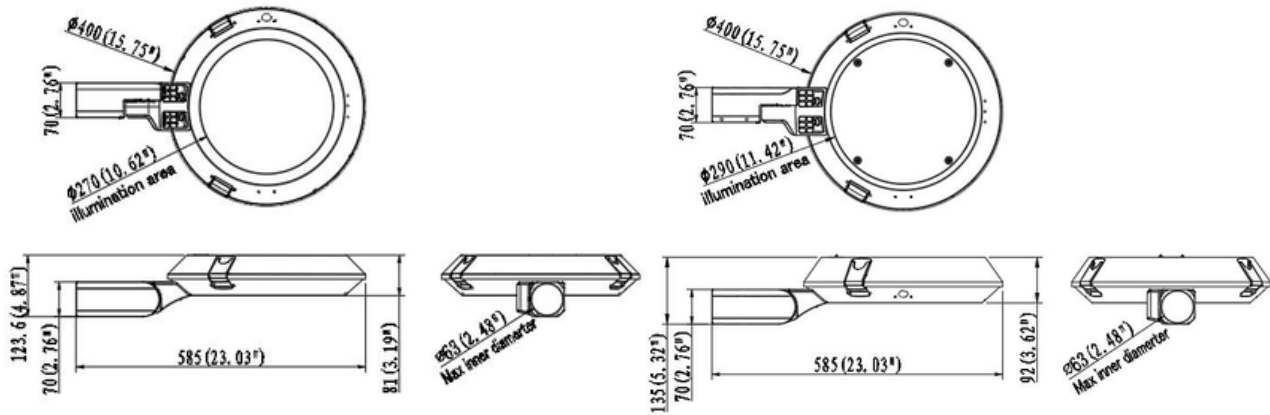
Conduit  
Mount

150W

\*Images not to scale.

## DIMENSIONAL DATA

Unit:mm

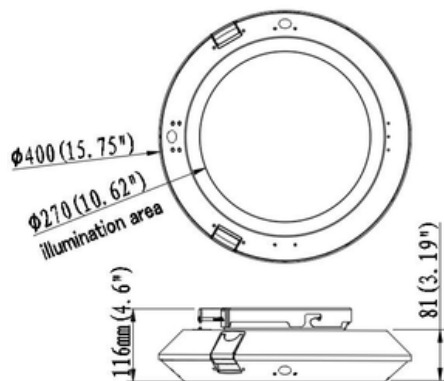


Side Entry  
Mount

30W, 50W, 60W, 75W

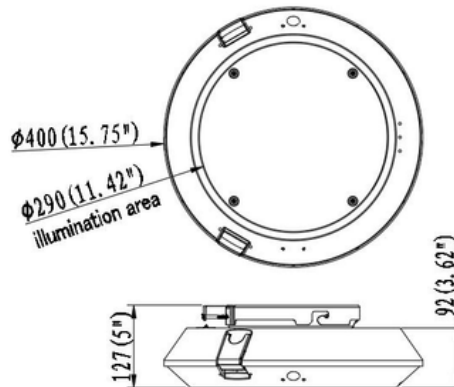
Side Entry  
Mount

150W



Surface  
Mount

30W, 50W, 60W, 75W



Surface  
Mount

150W

\*Images not to scale.

## ACCESSORIES

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### NEMA Dimming Receptacles

- ANSI C136.41-2013 compliant twist-lock receptacles.
- Enables advanced dimming control integration.
- Available in 3-pin, 5-pin, and 7-pin options.



### Shorting Cap

- Protective cap for unused NEMA sockets.
- Ensures safety and maintains fixture integrity



### Photocell

- ANSI C136.10-1996 compliant twist-lock photocell.
- Provides automatic dusk-to-dawn ON/OFF functionality.



### Single Strut Mount

- Constructed from ADC12 materials with outdoor powder coating.
- Compatible with 60mm poles for versatile installation.



### Twin Strut Mount

- Crafted from ADC12 materials with outdoor powder coating.
- Designed for secure attachment to 60mm poles.



### Straight-Arm Bracket

- Made from ADC12 materials with outdoor powder coating.
- Suitable for 60mm round poles and 74mm square poles.

\*Images not to scale.



## ACCESSORIES

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### Slip Fitter Bracket

- Made from ADC12 materials with outdoor powder coating.
- Designed for secure installation on  $\phi 60\text{mm}$  poles.



### Gooseneck Bracket

- Constructed from ADC12 materials with outdoor powder coating.
- Designed for mounting on  $\phi 60\text{mm}$  poles.



### Surface Mount

- Made from SPCC materials with outdoor powder coating.
- Enables direct attachment to flat surfaces.



### Conduit Mounting

- Specialized conduit mounting accessory.
- Made from SPCC materials with outdoor powder coating.
- For seamless integration with electrical conduit systems.

\*Images not to scale.

## ORDERING INFORMATION

**ORDERING EXAMPLE: BSL-PT7-50-MV-40K-R01603-SS-BL**

SERIES	WATTAGE & LUMEN OUTPUT	VOLTAGE	CORELATED COLOR TEMPERATURE (CCT)	BEAM ANGLE	CONTROL OPTIONS	MOUNTING OPTIONS	FINISH COLOR
PT7	30W (4500lm)	MV (100-277V)	30K (3000K)	R01603 (Type II)		SS (Single Strut Mounting)	BL (Black)
	50W (7500lm)	HV (277-480V)	40K (4000K)	R01604 (Type III)		TS (Twin Strut Mounting)	
	60W (9000lm)		50K (5000K)	R01605 (Type V)		SA (Straight-Arm Mounting)	
	75W (11250lm)					PT (Post Top Mounting)	
	150W (22500lm)					SE (Side Entry Mounting)	
						GM (Gooseneck Mounting)	
						SM (Surface Mounting)	
						CM (Conduit Mounting)	

### OPTIONAL ACCESSORIES AVAILABLE\*

- Photocell (Dusk-to-Dawn Sensor): Automates lighting to turn on at dusk and off at dawn, optimizing energy use.
- Surge Protection Devices (SPDs): Protects the fixture from power surges and lightning strikes.

\*Accessories sold separately.

## WARRANTY

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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](https://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](https://bigshineled.com/resources).

### **How to Submit a Warranty Claim:**

To submit a warranty claim, visit our website at [bswpartnerhub.com](https://bswpartnerhub.com) or contact us at (845) 219-5548.

## LED PREVENTATIVE MAINTENANCE

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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](https://bigshineled.com/resources).

## DEFINITIONS

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### 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](mailto: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 based 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](http://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](http://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.