

Drop-in LED Replacement for Sealed-Beam Incandescent Lamps 60PAR/2/R – Up to 90% Energy Savings

Display Lighting – Stage Lighting – Low-Power Headlights – Railcars – Trains – Carts – Alarms

FEATURES

- **Lamp Warranty:** 3 Years
- **Very Low Power Consumption:** Only 4.7 Watts
- **Solid-State:** High-Shock & High-Vibration Resistant
- **Long LED Life:** Colored LEDs Last up to 100,000 Hours, White LEDs up to 50,000 Hours of Continuous Operation
- **Wide Voltage Input Range:** 10-85VDC
- **Industry Standard-Compliant:** Meets or Exceeds SAE Specifications in Voltage Ranges 25V to 38V
- **Instant-On Light:** No Delay in Re-Strike
- **Super Intensity:** Up to 847 Footcandles – Exceeds 60PAR/2/R Intensity
- **Weatherproof:** Rubber Gasket-Sealed, Moisture/Dust-Resistant
- **Solid Construction:** High-Impact-Strength Polycarbonate Lens



APPLICATIONS

- Rail Car Marker Lights (with Optional Voltages and Colors)
- Architectural Accent Lighting and Wall Washing
- Headlights for Fork Lifts, Industrial Vehicles, Golf Carts
- Low-Heat Medical Spot Lighting
- Loading-Dock Signal Lights



BENEFITS

- **Major Energy Savings:** Over 90% Compared to Incandescents
- **Higher Efficacy:** LEDs Are 10 Times More Efficient than Incandescents
- **Low Maintenance:** Lowers Costs by Reducing Re-lamp Frequency
- **Eco-Friendly:** No Mercury Content, Recyclable
- **No Hazardous Emissions:** No UV or IR Radiation
- **Even Lighting:** High Intensity / No Halation
- **Cool Operation:** Generates Only a Negligible Amount of Heat Compared to Incandescents
- **Safe Low-Wattage Operation:** Low Power Draw Puts Less Load on the Electrical System

Meets or Exceeds **SAE** Specifications

CUSTOM OPTIONS

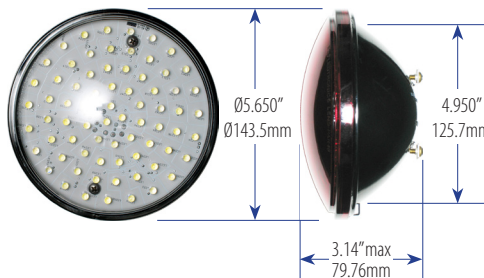
[For qualified applications & large-quantity OEM orders]

- **Other Voltages:** 24/28V, 120VAC, 240VAC
- **Other Colors:** Yellow, Orange, Green, Blue
- **Other LED Beam Angles** for Different Effects
- Available in **Ultra-Violet** LEDs in 395nm or 405nm

SPECIFICATIONS

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

PART NUMBER	PAR46-72-xxx-001
Input Voltage	10-85VDC [Tested @ 37.5VDC]
Dimensions	Dia 05.65" x Depth 3.14" [Ø143.5 x 79.8mm]
Weight	0.5125 lb / 8.2 oz / 232.46 g



- Available in **Infra-Red** LEDs in 850nm, 880nm, 940nm
- Available as **Replacement Kits**

Ideal for Use with Alternate or Renewable Energy Resources – Solar & Wind Power

PART NUMBER	INPUT CURRENT	ENERGY USED	EFFICACY	TOTAL LUMENS	MAXIMUM CANDELA	COLOR TEMP.	PEAK WAVE λp	EMITTED COLOR	BEAM ANGLE
PAR46-72-TPW-001	127 mA	4.8 Watts	69.0 lm/W	331 lm	852 cd	5250K	–	True White	25°
PAR46-72-XCW-001	124 mA	4.7 Watts	41.5 lm/W	195 lm	847 cd	8000K	–	Cool White	20°
PAR46-72-OER-001	115 mA	4.3 Watts	20.5 lm/W	88 lm	216 cd	–	633 nm	Super Red	30°

PAR46-72-TPW-001

Luminaire Photometric Report

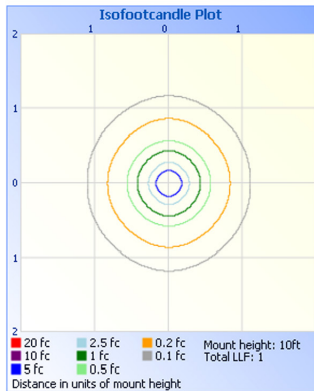
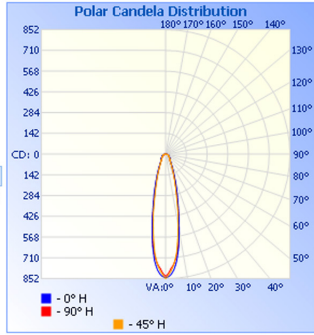
Filename: PAR46-72-TPW-001
 Manufacturer: LEDTRONICS -
 Luminaire: CLEAR LENS, 37.5VDC, 4.8W
 Luminaire Cat: PAR46-72-TPW-001
 Lamp: LUMEN RATING: 331.4Lms.
 Lamp Output: 1 lamp(s), rated lamp lumens: 331.4
 Max Candela: 852.0 at Horizontal: 45, Vertical: 0
 Luminous Opening: Point
 Test: 9-9-10

Flood Summary				
Efficiency	Lumens	Horizontal Spread	Vertical Spread	
Field (10%):	58%	192.2	56.8	57.9
Beam (50%):	24.6%	81.7	24.2	24.6
Total:	100%	331.4		

Zonal Lumen Summary				
Zone	Lumens	% Lamp	% Luminaire	
0-30	198.5	59.9%	59.9%	
0-40	233.2	70.4%	70.4%	
0-60	287.9	86.9%	86.9%	
60-90	43.4	13.1%	13.1%	
0-90	331.3	100%	100%	
0-180	331.3	100%	100%	
Total Efficiency:	100%			

Illuminance at a Distance				
Center Beam FC	Beam Width			
1.7R	303.84 fc	0.7ft	0.7ft	
3.3R	75.96 fc	1.5ft	1.4ft	
5.0R	33.76 fc	2.2ft	2.1ft	
6.7R	18.99 fc	2.9ft	2.9ft	
8.3R	12.15 fc	3.6ft	3.6ft	
10.0R	8.44 fc	4.4ft	4.3ft	

Vert. Spread: 24.6° Horiz. Spread: 24.2°



PAR46-72-XCW-001

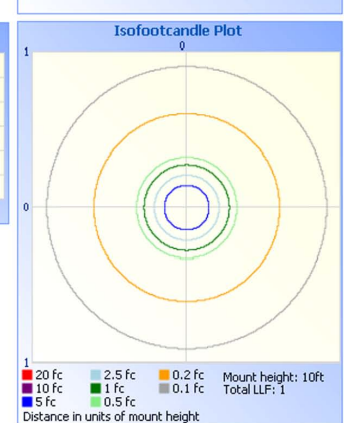
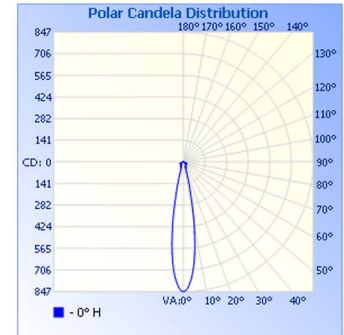
Luminaire Photometric Report

Filename: PAR46-72-XCW-001
 Manufacturer: LEDTRONICS -
 Luminaire: WITH CLEAR LENS, 37.5VDC, 4.7W
 Luminaire Cat: PAR46-72-XCW-001
 Lamp: LUMEN RATING: 195.0Lms.
 Lamp Output: 1 lamp(s), rated lamp lumens: 195
 Max Candela: 847.0 at Horizontal: 0, Vertical: 0
 Luminous Opening: Point
 Test: 7-9-09

Zonal Lumen Summary				
Zone	Lumens	% Lamp	% Luminaire	
0-30	113.6	58.2%	58.2%	
0-40	132.0	67.7%	67.7%	
0-60	164.4	84.3%	84.3%	
60-90	30.7	15.7%	15.7%	
0-90	195.0	100%	100%	
0-180	195.0	100%	100%	
Total Efficiency:	100%			

Illuminance at a Distance				
Center Beam FC	Beam Width			
1.7R	304.92 fc	0.6ft		
3.3R	76.23 fc	1.1ft		
5.0R	33.88 fc	1.7ft		
6.7R	19.06 fc	2.3ft		
8.3R	12.20 fc	2.8ft		
10.0R	8.47 fc	3.4ft		

Beam Spread: 19.2°



PAR46-72-0ER-001

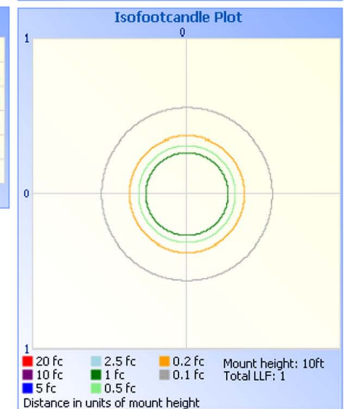
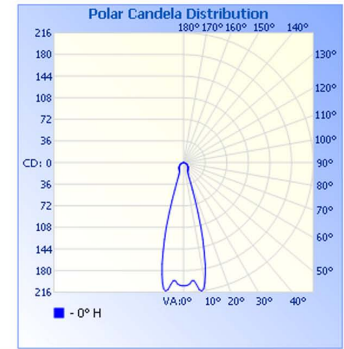
Luminaire Photometric Report

Filename: PAR46-72-0ER-001
 Manufacturer: LEDTRONICS -
 Luminaire: WITH RED LENS, 37.5VDC, 4.3W
 Luminaire Cat: PAR46-72-0ER-001
 Lamp: LUMEN RATING: 88.0Lms.
 Lamp Output: 1 lamp(s), rated lamp lumens: 88
 Max Candela: 216.0 at Horizontal: 0, Vertical: 8
 Luminous Opening: Point
 Test: 7-9-09

Zonal Lumen Summary				
Zone	Lumens	% Lamp	% Luminaire	
0-30	56.2	63.9%	63.9%	
0-40	64.3	73.1%	73.1%	
0-60	79.4	90.2%	90.3%	
60-90	8.6	9.7%	9.7%	
0-90	88.0	100%	100%	
0-180	88.0	100%	100%	
Total Efficiency:	100%			

Illuminance at a Distance				
Center Beam FC	Beam Width			
1.7R	73.80 fc	0.8ft	0.9ft	
3.3R	18.45 fc	1.6ft	1.8ft	
5.0R	8.20 fc	2.4ft	2.7ft	
6.7R	4.61 fc	3.2ft	3.5ft	
8.3R	2.95 fc	4.0ft	4.4ft	
10.0R	2.05 fc	4.8ft	5.3ft	

Vert. Spread: 27.0° Horiz. Spread: 29.7°



Zone	SAE Requirements	LEDTRONICS Results
1	50	322
2	100	531
3	380	1409
4	100	391
5	50	284

Requirements and results are the cumulative sums of zone regions

Photometric Characteristics
SAE J586 Specifications

	20L	10L	5L	V	5R	10R	20R
10UP			179		156		
5UP	18	199		285		143	17
H	1	2	3	3	3	4	5
	196	283	290	283	155		
5DN	17	136		268		93	17
10DN			108		94		
		1		5			