

# Petrolux® LED

Hazardous Locations



DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org](http://www.designlights.org) to confirm which versions are qualified.

Catalog Number	
Notes	Type

### Description

For hazardous locations where dust, dirt and moisture are a concern.

### Optics

- Prismatic borosilicate glass directs light where needed and reduces harsh glare.
- Polycarbonate lens available for those applications requiring non-glass options.
- Three distributions (Type 5 low angle, Type 5 high angle, and Type 1 long and narrow) available to maximize versatility.
- Highly engineered LED system ensures superior uniformity and maximizes spacing.

### Electrical

- 10kV/10kA surge protection is standard.
- 0-10V dimming driver is standard.
- CRI > 70 (nominal) is standard.
- 4000K or 5000K CCT available.
- Fault-tolerant LED light engine continues to provide light even in the failure of one LED.

### Mechanical

- Robust cast aluminum housing with low copper content (0.6% CU content) withstands harsh or hostile

environments.

- Universal mount (UN) for ceiling/pendant or Universal mount (US) for wall/stanchion mountings available.
- Precise number of fins dissipate maximum amount of heat and achieve up to 131°F (55°C) ambient rating.

### Listings

- UL844 listed (see matrix on page 4):  
Class 1, Division 2 Groups A, B, C, D  
Class 2, Division 1&2 Groups E, F, G  
Class 3  
Simultaneous presence, Class 1 Division2,  
Class 2 Division 1
- IP66 rated
- NEMA 4X
- UL1598 - Wet Locations

### Warranty

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/CustomerResources/Terms\\_and\\_Conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_Conditions.aspx)

Actual performance may differ as a result of end-user environment and application.

Actual wattage may differ by +/- 5% when operating between 120-277V +/- 10%.

### Typical Applications

- Petroleum refineries
- Ethanol facilities
- Chemical plants
- Power plants
- Textile mills
- Water and wastewater treatment facilities
- Parking garages
- Tunnels

### Dimensions: Inches (millimeters) unless otherwise noted.

Diameter: 14.76 (375)  
Depth: 13.57 (345)  
Weight: 38-45 lbs. (17-20 kg)

## ORDERING INFORMATION

**Example:** HPLED 70 700 5K AS UN G P1 45C GD

Series	Number of LEDs	Drive current	Color temperature	Voltage	Mounting
HPLED	42 42 LEDs	350 350 mA <sup>1</sup>	4K 4000K CCT	AS Auto sensing (120-277)	UN Universal (ceiling & pendant)
	56 56 LEDs	530 530 mA <sup>1</sup>	5K 5000K CCT	AH Auto sensing (347/480)	US Universal (wall & stanchion) <sup>2</sup>
	70 70 LEDs	700 700 mA		12 120V	
	84 84 LEDs			20 208V	
				24 240V	
				27 277V	
				34 347V	
				48 480V	
Finish	Optics	Maximum ambient <sup>4</sup>	Options		
G Gray	L5 Type 5, low angle, glass	35C 35°C (95°F)	F1 Single fusing <sup>5</sup>		
	L5H Type 5, high angle, glass	40C 40°C (104°F)	F2 Double fusing <sup>6</sup>		
	L1 Type 1, long and narrow, glass <sup>3</sup>	45C 45°C (113°F)	EG Ingress/egress marker decal		
	P5 Type 5, low angle, polycarbonate	55C 55°C (131°F)	GD Optic guard		
	P5H Type 5, high angle, polycarbonate		SH Uplight shield <sup>7</sup>		
	P1 Type 1, long and narrow, polycarbonate <sup>3</sup>				

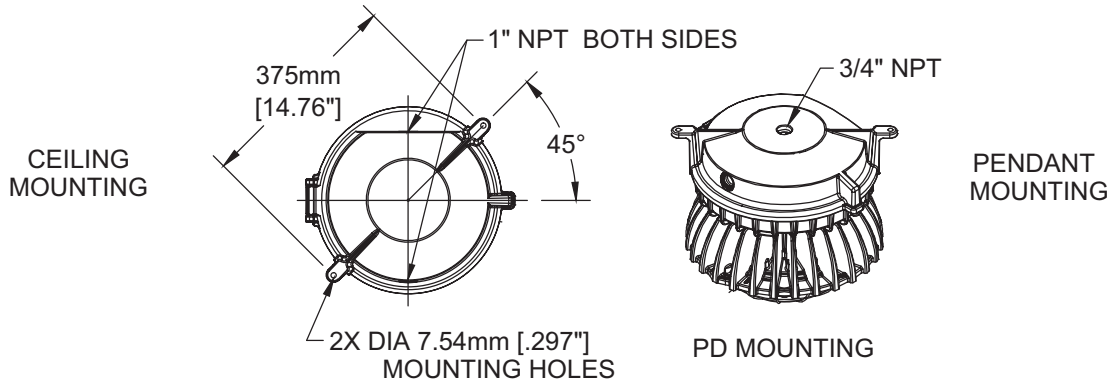
### Accessories: Order as separate catalog number.

09189-X	Safety chain kit <sup>8</sup>
PLEDGD	Optic guard
PLEDSH-GA	Uplight shield, gray
HPLEDMI3688	Thread lubricant (1 tube is enough for 20 luminaires)

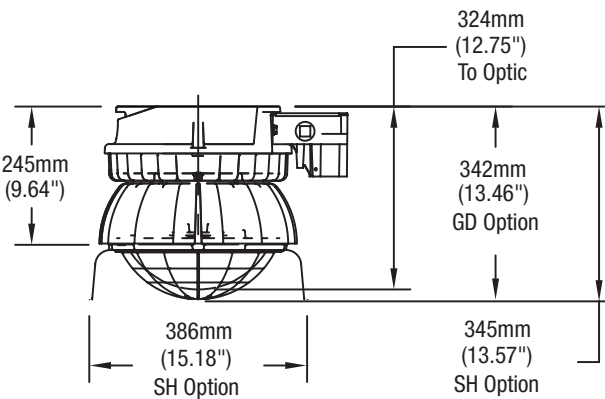
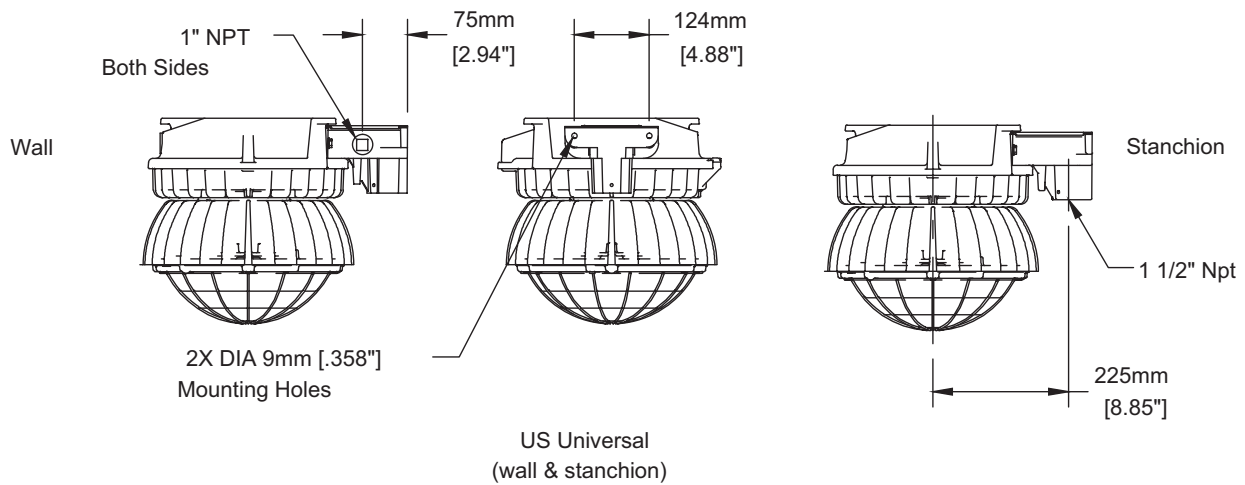
### Notes

- 1 Only available with 42 leds.
- 2 P3US-ARM-GR is factory installed.
- 3 N/A with 84 leds.
- 4 See matrix on page 3.
- 5 Specify voltage 12, 27, 34.
- 6 Specify voltage 20, 24, 48.
- 7 Available with L5, P5 optic only.
- 8 X signifies feet of chain.

**DIMENSIONAL DATA**



UN Universal



**UPLIGHT SHIELD (SH) & OPTIC GUARD (GD) OPTIONS**

**OPERATIONAL DATA**

Operating Characteristics

Package	Ambient Rating (120V - 277V)	Ambient Rating (347V / 480V)	Distribution	Delivered Lumens 5000K CCT @25°C <sup>1</sup>	Delivered Lumens 4000K CCT @25°C <sup>1</sup>	Wattage	LPW @ 5000K
HPLED 42 350	-40°F to 131°F (-40°C to 55°C)	-40°F to 104°F (-40°C to 40°C)	L5	6,189	6,150	50	124
			L5H	5,234	5,201	50	105
			L1	5,066	5,035	50	101
			P5	4,493	4,493	50	90
			P5H	3,852	3,852	50	77
			P1	3,772	3,772	50	75
HPLED 42 530	-40°F to 131°F (-40°C to 55°C)	-40°F to 104°F (-40°C to 40°C)	L5	8,927	8,872	74	121
			L5H	7,550	7,503	74	102
			L1	7,308	7,263	74	99
			P5	6,522	6,481	74	88
			P5H	5,592	5,557	74	75
			P1	5,476	5,442	74	74
HPLED 42 700	-40°F to 131°F (-40°C to 55°C)	-40°F to 104°F (-40°C to 40°C)	L5	11,315	11,245	98	115
			L5H	9,569	9,510	98	97
			L1	9,263	9,205	98	94
			P5	8,266	N/A	98	84
			P5H	7,087	N/A	98	72
			P1	6,940	N/A	98	71
HPLED 56 700	-40°F to 122°F (-40°C to 45°C)	-40°F to 95°F (-40°C to 35°C)	L5	14,822	14,790	129	115
			L5H	12,586	12,508	129	97
			L1	12,183	12,107	129	94
			P5	10,872	10,804	129	84
			P5H	9,321	9,263	129	72
			P1	9,128	9,071	129	71
HPLED 70 700	-40°F to 113°F (-40°C to 45°C)	-40°F to 95°F (-40°C to 35°C)	L5	18,309	18,195	165	111
			L5H	15,484	15,837	165	94
			L1	14,988	14,895	165	91
			P5	13,375	13,292	165	81
			P5H	11,468	11,396	165	69
			P1	11,230	11,160	165	68
HPLED 84 700	-40°F to 104°F (-40°C to 40°C)	-40°F to 86°F (-40°C to 35°C)	L5	21,575	21,441	195	110
			L5H	18,246	18,133	195	93
			P5	13,375	15,663	195	68
			P5H	11,468	13,429	195	69

Projected Lumen Maintenance (TM-21)<sup>2</sup>

Package <sup>3</sup>	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
HPLED 42 350	1.0	0.96	0.94	0.93	0.91	0.88
HPLED 42 530	1.0	0.96	0.94	0.93	0.91	0.88
HPLED 42 700	1.0	0.96	0.94	0.93	0.91	0.88
HPLED 56 700	1.0	0.95	0.93	0.91	0.90	0.85
HPLED 70 700	1.0	0.95	0.93	0.91	0.90	0.85
HPLED 84 700	1.0	0.95	0.93	0.91	0.90	0.85

**Notes**

- 1 Absolute photometry calculated in accordance with IESNA LM-79-08
- 2 Calculated using data collected according to LM-80 and represents lumen maintenance of the LED package.
- 3 Project lumen maintenance factors at max. ambient temperature per lumen package.

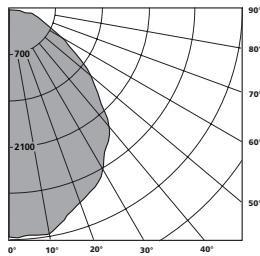
Operating Temperature Codes for Hazardous Locations:

Package	Voltage Range	Max Ambient Rating	Class 1 Division 2, Groups A, B, C, D	Class 2, Division 1 & 2, Groups E, F, G	Class 3	Simultaneous Presence: Class 1 Division 2 & Class 2 Division 1
HPLED 42 350	120-277 347 / 480	55°C 40°C	T4 T4A	T5 T5	T5 T5	T3C T3C
HPLED 42 530	120-277 347 / 480	55°C 40°C	T4 T4A	T5 T5	T5 T5	T3C T3C
HPLED 42 700	120-277 347 / 480	55°C 40°C	T4 T4A	T5 T5	T5 T5	T3C T3C
HPLED 56 700	120-277 347 / 480	45°C 35°C	T4 T4	T5 T5	T5 T5	T3C T3C
HPLED 70 700	120-277 347 / 480	45°C 35°C	T4 T4	T5 T5	T5 T5	T3C T3C
HPLED 84 700	120-277 347 / 480	40°C 35°C	T4 T4	T5 T5	T5 T5	T3C T3C

DISTRIBUTION DATA

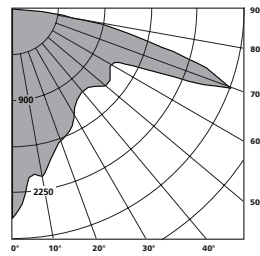
**L5/P5**

Petrolux LED Type 5 Low Angle



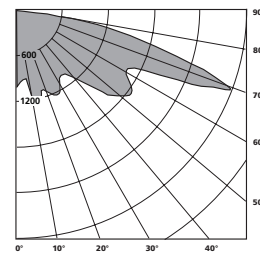
**L5H/P5H**

Petrolux LED Type 5 High Angle



**L1/P1**

Petrolux LED Type 1



**SH**

Petrolux LED Type 5-0% Uplight

