

Petrolux® LED

Hazardous Locations



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.
- Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. [Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.](#)

Electrical

- Luminaire Surge Protection Level: Designed to withstand up to 10kV/5kA per ANSI C82.77-5-2015.
- 0-10V dimming driver is standard. Dims to 10%.
- 70CRI (nominal) is standard.
- 4000 K or 5000 K 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 (UNM) for ceiling/pendant or Universal mount (UNST) for wall/stanchion mountings available.
- Precise number of fins dissipate maximum amount of heat

Listings

- UL Listed to US and Canadian Standards
- Suitable for use in hazardous locations (UL844)
Class I, Division 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, and G
Class III
Simultaneous presence (Class I Division 2, Class II Division 1)
- Zone Equivalency Markings (See chart on page 5)
- -40°F (-40°C) to 131°F (55°C) (see chart on page 4)
- IP66 rated
- NEMA 4X rated

Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

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

All values are design or typical values, measured under laboratory conditions at 25 °C.

Typical Applications

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

Dimensions

Diameter: 14.76 in. (374.9 mm.)
Depth: 13.57 in. (344.68 mm.)
Weight: 38-45 lbs. (17.24-20.41 kg.)
EPA: 1.21 sq.ft.

ORDERING INFORMATION

Example: HPLED 70LED LNDP MVOLT 40K UNM 700MA 45C DGXD

Series	Number of LEDs		Distribution				Voltage				Color temperature	
HPLED	42LED	42 LEDs	LND	Long and Narrow, Glass ‡	LNDP	Long and Narrow, Polycarbonate	MVOLT	Auto Sensing (120-277V, 50/60Hz)	HVOLT	Auto Sensing (347-480V, 50/60Hz)	40K	4000K CCT +/- 250
	56LED	56 LEDs	L5	Type 5, low angle, Glass	L5P	Type 5, low angle, Polycarbonate	120	120V, 50/60Hz	347	347V, 50/60Hz	50K	5000K CCT +/- 250
	70LED	70 LEDs		L5H	Type 5, high angle, Glass	L5HP	Type 5, high angle, Polycarbonate	208	208V, 50/60Hz	480	480V, 50/60Hz	
	84LED	84 LEDs				240	240V, 50/60Hz					
						277	277V, 50/60Hz					

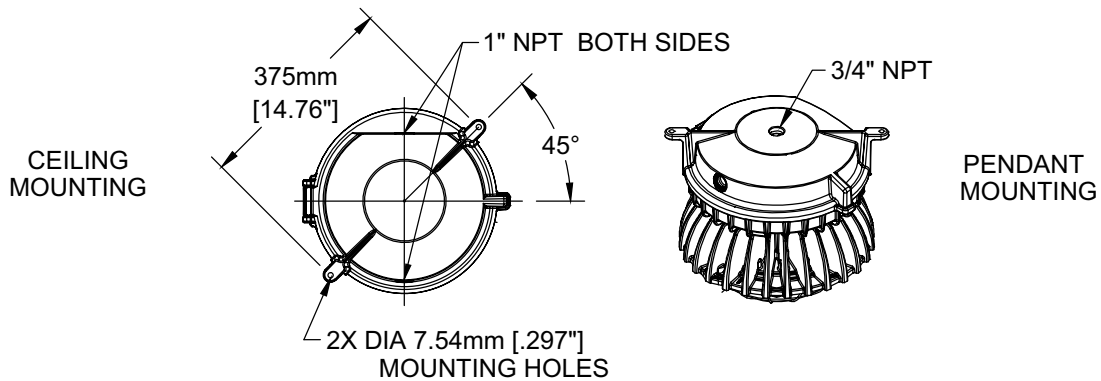
Mounting		Drive Current		Maximum ambient ‡		Options		Finish	
UNM	Universal (Ceiling and Pendant) ‡	350MA	350mA driver ‡	35C	Maximum 35C operating ambient temperature	EMD	Ingress/Egress Marker Decal	DGXD	Gray
UNST	Universal (Wall and Stanchion) ‡	530MA	530mA driver ‡	40C	Maximum 40C operating ambient temperature	SF	Single Fusing ‡		
		700MA	700mA driver	45C	Maximum 45C operating ambient temperature	DF	Double Fusing ‡		
				55C	Maximum 55C operating ambient temperature	WGX	Factory Installed Wire Guard		
						UPS	Factory Installed Uplight Shield ‡		

NOTE: ‡ indicates option chosen has ordering restrictions. Please reference ordering restrictions chart. Options are sorted alphanumerically.

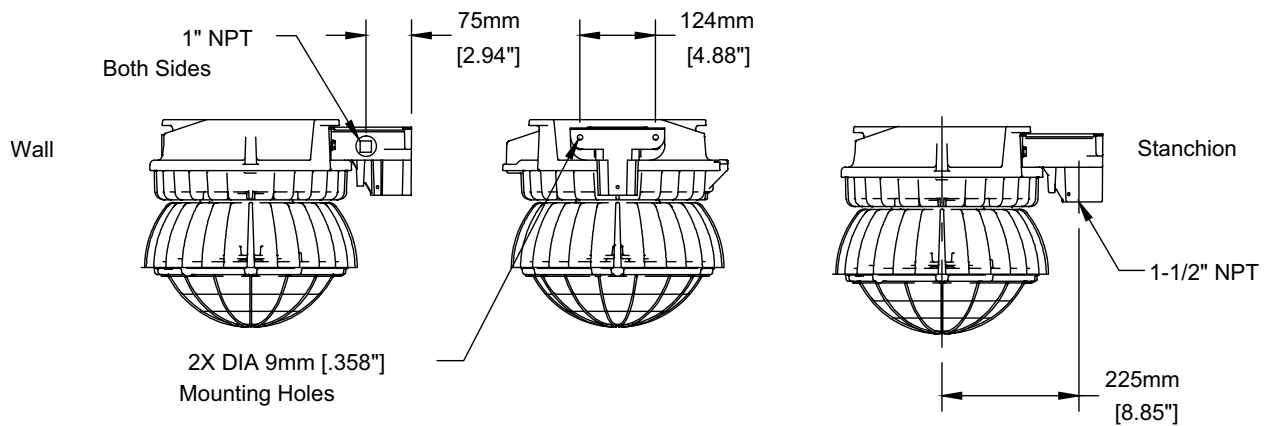
Accessories: Order as separate catalog number.	
HSCCKX	X Inch Safety Chain Kit ‡
PLEDGD	Wire Guard
PLEDUPS DGXD	Uplight Shield Gray Finish ‡
MI3688 THREAD SEAL	Thread lubricant (1 tube is enough for 20 luminaires)

‡ Option Value Ordering Restrictions & Notes	
Option value	Restriction
350MA, 530MA	Available with 42LED option only.
DF	Must specify voltage. 208, 240 or 480 only.
HSCCKX	X denotes length. Available in multiple sizes. Replace X with size in inches. Example: HSCCK120 = 120 inches or 10 feet.
LND	Available with 42LED, 56LED and 70LED options only.
Maximum Ambient	See chart on page 4.
SF	Must specify voltage. 120, 277, or 347 only.
UNM	P3US arm is not certified for field installation with UNM mounting. Ceiling or pendant mounting only.
UNST	P3US arm is factory installed. Wall or stanchion mounting only.
UPS, PLEDUPS DGXD	Available with L5 or L5P distribution only.

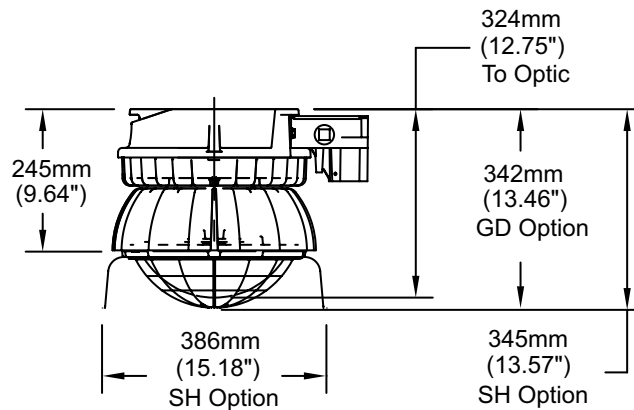
DIMENSIONAL DATA



UNM Universal (ceiling & pendant)



UNST Universal (wall & stanchion)
(includes P3US arm, cannot be field installed)



Uplight Shield (UPS) & Optic Guard (WGX) Options

OPERATIONAL DATA

Operating Characteristics

Package	Ambient Rating (120V - 277V)	Ambient Rating (347V / 480V)	Distribution	Delivered Lumens 5000K CCT @25°C¹	Delivered Lumens 4000K CCT @25°C¹	Wattage	LPW @ 5000K
HPLED 42LED 350MA	-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
			LDN	5,066	5,035	50	101
			L5P	4,493	4,493	50	90
			L5HP	3,852	3,852	50	77
			LNDP	3,772	3,772	50	75
HPLED 42LED 530MA	-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
			LDN	7,308	7,263	74	99
			L5P	6,522	6,481	74	88
			L5HP	5,592	5,557	74	75
			LNDP	5,476	5,442	74	74
HPLED 42LED 700MA	-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
			LDN	9,263	9,205	98	94
			L5P	8,266	N/A	98	84
			L5HP	7,087	N/A	98	72
			LNDP	6,940	N/A	98	71
HPLED 56LED 700MA	-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
			LDN	12,183	12,107	129	94
			L5P	10,872	10,804	129	84
			L5HP	9,321	9,263	129	72
			LNDP	9,128	9,071	129	71
HPLED 70LED 700MA	-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
			LDN	14,988	14,895	165	91
			L5P	13,375	13,292	165	81
			L5HP	11,468	11,396	165	69
			LNDP	11,230	11,160	165	68
HPLED 84LED 700MA	-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
			L5P	13,375	15,663	195	68
			L5HP	11,468	13,429	195	69

Projected Lumen Maintenance (TM-21)²

Package³	0 Hours	15,000 Hours	30,000 Hours	45,000 Hours	60,000 Hours	100,000 Hours
HPLED 42LED 350MA	1.0	0.96	0.94	0.93	0.91	0.88
HPLED 42LED 530MA	1.0	0.96	0.94	0.93	0.91	0.88
HPLED 42LED 700MA	1.0	0.96	0.94	0.93	0.91	0.88
HPLED 56LED 700MA	1.0	0.95	0.93	0.91	0.90	0.85
HPLED 70LED 700MA	1.0	0.95	0.93	0.91	0.90	0.85
HPLED 84LED 700MA	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.

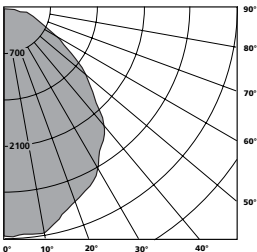
Operating Temperature Codes for Hazardous Locations:

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

DISTRIBUTION DATA

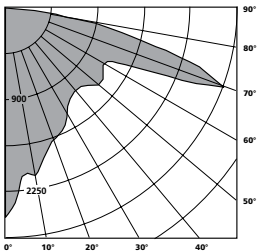
L5/L5P

Petrolux LED Type 5 Low Angle



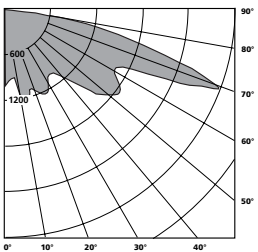
L5H/L5HP

Petrolux LED Type 5 High Angle



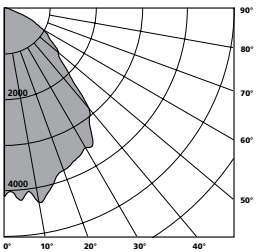
LND/LNDP

Petrolux LED Type 1



UPS

Petrolux LED Type 5-0% Uplight



Zone Equivalency Markings

CLASS I, DIV 2, GROUP D	CLASS I, ZONE 2 GROUP IIA
CLASS I, DIV 2, GROUP C	CLASS I, ZONE 2 GROUP IIB
CLASS I, DIV 2, GROUP B	CLASS I, ZONE 1 GROUP IIB PLUS HYDROGEN
CLASS I, DIV 2, GROUP A & CLASS I, DIV 2, GROUP B	CLASS I, ZONE 2 GROUP IIC
CLASS II, DIV 1 GROUP E, F, OR G	CLASS II, ZONE 20 AND ZONE 21
CLASS III	N/A

Number of LED Boards and Drivers Used

Lumen Package	Number of LED boards per fixture	Number of drivers per fixture
42LED	2	1
56LED	2	1
70LED	2	2
84LED	2	2