

ILX450 Series

LED Hazardous Area Lighting



Advantages of ILX450

- Technologically advanced LED hazardous area light fixture
- Available in 100 ~ 220 watt configurations with various optics
- Ultra-bright industry leading high efficacy up to 170 lm / W
- Proprietary optics enabling glare-free, uniform lighting for most applications
- Advanced thermal technology enables low LED junction temperatures (Tj) for maintenance free long life
- Hazardous location and high temperature rated with an operational temperature of -40 ~ +65°C (-40 ~ +149°F)
- IP69K-rated tri-proof (dust, vapor & water-proof) & high pressure washable luminaire
- Industrial grade three layer powder coating on copper-free aluminium housing build for complete corrosion resistance
- Marine-rated stainless steel fasteners and trimmings
- Optional wireless smart control system with motion & daylight sensor enabling greater savings and flexibility
- Available with versatile mounting options for various hazardous area locations
- Titanium rated high efficiency LED driver with smart circuitry
- L70 ≥ 150,000 hours with an exceptional 10-year limited warranty
- Designed and engineered in the USA

Applications

- Offshore Oil Platforms
- Refineries
- Gas-to-Liquid (GTL) Plants
- Terminals & Tank Farms
- Sub-Surface Mineshafts
- Chemical Plants
- Ball / Tube Mill Facilities
- Tunnel Boring

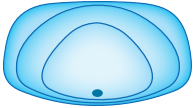
ILX450 Series

LED Hazardous Area Lighting

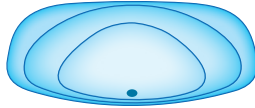
Optic Options

02 - Type II / wall mount & perimeter lighting applications

S - Short

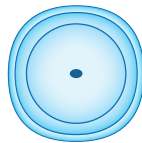


M - Medium



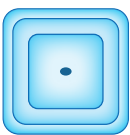
R5 - Type V Round / symmetric for low-mid-high bay, parking garages and flood applications

M - Medium



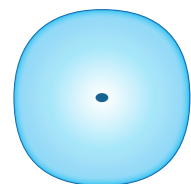
S5 - Type V Square / symmetric for high-bay, aisle, high-mast and flood applications

S - Short



F5 - Type V Opaque - Frosted / symmetric for ultra uniform & low glare applications

L - Long



ILX450 Series

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Mounting Options



Swivel Mounting System

Part Number	Part Description
SWL-ILX45-SS	Variable Angle Swivel Mounting Bracket / Stainless Steel



Pendant Mounting System

Part Number	Part Description
PDS-ILX45	Pendant Mounting Interface / 3/4" Pipe Not Included



90° Stanchion Mounting System

Part Number	Part Description
S90-ILX45	90° Stanchion Mounting System / Die-Cast Aluminum



25° Stanchion Mounting System

Part Number	Part Description
S25-ILX45	25° Stanchion Mounting System / Die-Cast Aluminum



90° Stanchion Wall Mounting System

Part Number	Part Description
WS9-ILX45	90° Stanchion Wall Mounting System / Die-Cast Aluminum



25° Stanchion Wall Mounting System

Part Number	Part Description
WS2-ILX45	25° Stanchion Wall Mounting System / Die-Cast Aluminum



Ceiling Mounting System

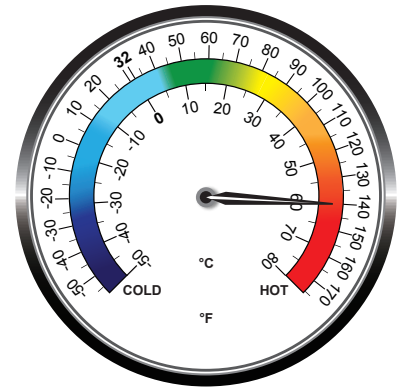
Part Number	Part Description
CMS-ILX45	Ceiling Mounting System / Die-Cast Aluminum

ILX450 Series

LED Hazardous Area Lighting

Thermal Management

The new ILX450 LED drivers are designed specifically for extreme application lighting that requires high ambient operating temperatures. It utilizes the latest topology in electronic circuitry design with state of the art military and industrial grade components. The LED driver is encapsulated with thermal potting into a dedicated heat sink for better thermal performance and greater flexibility for service and maintenance. The ILX450 LED driver module delivers an outstanding 95% efficiency and is designed to last over 60,000 hours in harsh environments with high operating ambient temperatures.



System Watts	T6 Temperature Code Ambient Temperature Range		T5 Temperature Code Ambient Temperature Range		T4a Temperature Code Ambient Temperature Range	
	°F	°C	°F	°C	°F	°C
100 W	-40°F ~ 140°F	-40°C ~ 60°C	-40°F ~ 149°F	-40°C ~ 65°C		
120 W	-40°F ~ 131°F	-40°C ~ 55°C	-40°F ~ 149°F	-40°C ~ 65°C		
150 W	-40°F ~ 122°F	-40°C ~ 50°C	-40°F ~ 149°F	-40°C ~ 65°C		
185 W	-40°F ~ 113°F	-40°C ~ 45°C	-40°F ~ 131°F	-40°C ~ 55°C	-40°F ~ 149°F	-40°C ~ 65°C
220 W	-40°F ~ 113°F	-40°C ~ 45°C	-40°F ~ 131°F	-40°C ~ 55°C	-40°F ~ 149°F	-40°C ~ 65°C



Years Warranty



Smart Control



Wet Location



Pressure Washable



Impact Resistance



High Temperature



Hazardous Area



ILX450 Series

LED Hazardous Area Lighting - 220Watt

Ordering Information

ILX45	Wattage	Voltage	Optics	Pitch	CCT	Driver & Control *	Mounting **
	100 = 100W 125 = 125W 150 = 150W 185 = 185W 220 = 220W	UV = 100-277VAC HV = 200-480VAC DV = 127-390VDC	02 = Type II R5 = Type V Round S5 = Type V Square F5 = Type V Frosted	S = Short M = Medium L = Long	30 = 3000K 40 = 4000K 50 = 5000K	ND = Non-Dimmable DM = Dimmable DS = Daylight Sensor MS = Motion Sensor SC = Smart Control	PDS = Pendant Mount SWL = Swivel Mount S90 = 90° Stanchion Mount S25 = 25° Stanchion Mount WS9 = 90° Stanchion Wall Mount WS2 = 25° Stanchion Wall Mount CMS = Ceiling Mount

NOTE: Gray is the standard exterior color.

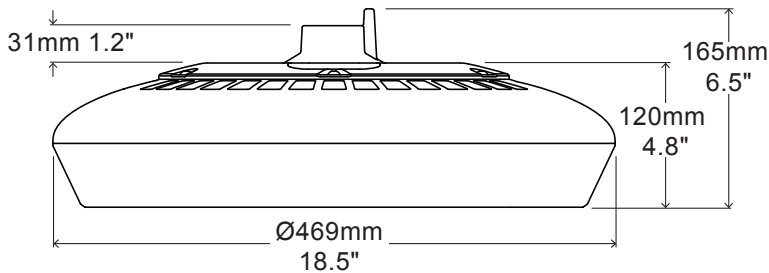
* Smart control & daylight sensor available with ZHAGA standard receptacle module.

** PDS is the standard mounting system, with 1" NPT threaded hole.

Example

Part Number	Part Description
ILX45220UV-R5M-50DM-PDS	LED Hazardous Area Light / 220Watt / 100-277VAC / Type V Round / Medium Pitch / 5000K Cool White / Dimmable / Pendant Mount

External Dimensions



Packaging Information

Quantity	Dimensions (LxWxH)	Weight
1	50 x 50 x 23 cm 19.7x 19.7 x 9 in	12.5 kg 27.5 lbs



ILX450 Series

LED Hazardous Area Lighting - 220Watt

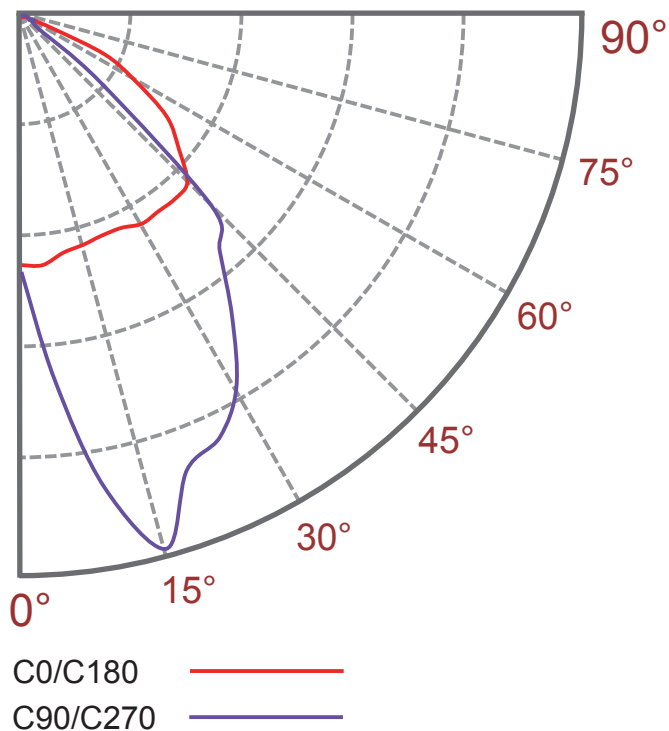
Specification - Type II Short

Fixture Watts	220 W
Lumens (Total)*	28,600 lm
Efficacy *	130 lm / W
Number of LEDs & Driving Current	96@730mA
T _s - Solder Point Temp *	68°C / 154°F
L70 Rating @ T _a 25°C	>150K hours
Operational Temperature (T _a)	-40° ~ 65°C / -40° ~ 149°F
Input Voltage	100~277VAC 47~63Hz Optional 200~480VAC / 127~390VDC
LED Model	Lumileds / Nichia / Cree
CRI	>75
Lighting Control	Dimmable (0-10V, PWM) / Smart Control / Daylight & Motion Sensor
Warranty	10-Year Limited
Storage Temp. / Humidity	-50° ~ 80°C / -58° ~ 176°F / IP69K Rated Fixture
Transient Surge Protection	10kV / 5kA (L-L, L-G) Optional 20kV / 10kA

* Test data @ T_a: 25°C. All lumen values have ±7% tolerance

NOTE: Light intensities measured directly below fixture

Light Distribution Curve



Zonal Lumen Summary

Zone (°)	Lumens	% Fixture
0-30	11,612	40.6%
0-40	18,304	64.0%
0-60	27,542	96.3%
0-90	28,571	99.9%
0-180	28,600	100.0%

ILX450 Series

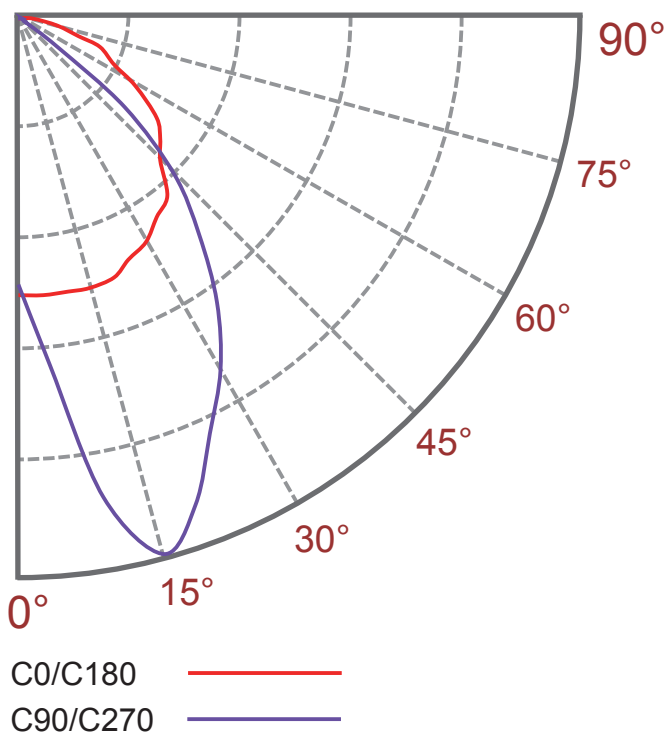
LED Hazardous Area Lighting - 220Watt

Specification - Type II Medium

Fixture Watts	220 W
Lumens (Total)*	27,500 lm
Efficacy *	125 lm / W
Number of LEDs & Driving Current	96@730mA
T _s - Solder Point Temp *	68°C / 154°F
L70 Rating @ T _a 25°C	>150K hours
Operational Temperature (T _a)	-40° ~ 65°C / -40° ~ 149°F
Input Voltage	100~277VAC 47~63Hz Optional 200~480VAC / 127~390VDC
LED Model	Lumileds / Nichia / Cree
CRI	>75
Lighting Control	Dimmable (0-10V, PWM) / Smart Control / Daylight & Motion Sensor
Warranty	10-Year Limited
Storage Temp. / Humidity	-50° ~ 80°C / -58° ~ 176°F / IP69K Rated Fixture
Transient Surge Protection	10kV / 5kA (L-L, L-G) Optional 20kV / 10kA

* Test data @ T_a: 25°C. All lumen values have ±7% tolerance
 NOTE: Light intensities measured directly below fixture

Light Distribution Curve



Zonal Lumen Summary

Zone (°)	Lumens	% Fixture
0-30	9,240	33.6%
0-40	14,630	53.2%
0-60	23,485	85.4%
0-90	27,418	99.7%
0-180	27,500	100.0%

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LED Hazardous Area Lighting - 220Watt

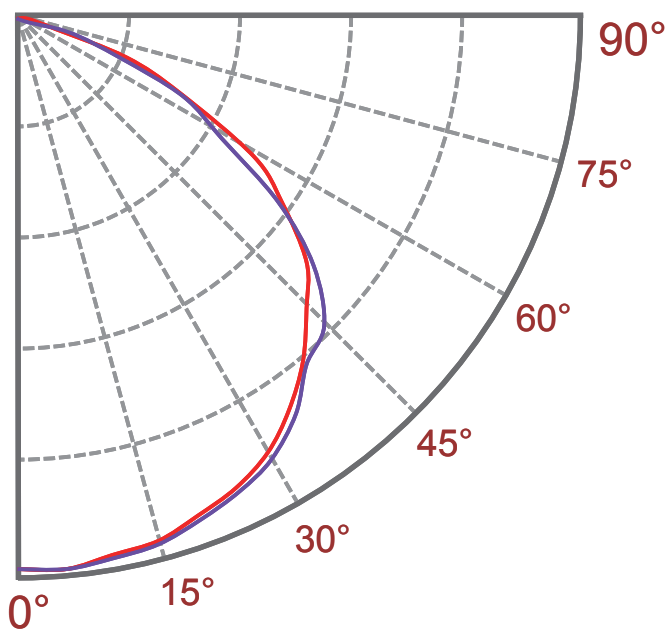
Specification - Type V Round Medium

Fixture Watts	220 W
Lumens (Total)*	32,340 lm
Efficacy *	147 lm / W
Number of LEDs & Driving Current	112@625mA
T _s - Solder Point Temp *	66°C / 151°F
L70 Rating @ T _a 25°C	>150K hours
Operational Temperature (T _a)	-40° ~ 65°C / -40° ~ 149°F
Input Voltage	100~277VAC 47~63Hz Optional 200~480VAC / 127~390VDC
LED Model	Lumileds / Nichia / Cree
CRI	>75
Lighting Control	Dimmable (0-10V, PWM) / Smart Control / Daylight & Motion Sensor
Warranty	10-Year Limited
Storage Temp. / Humidity	-50° ~ 80°C / -58° ~ 176°F / IP69K Rated Fixture
Transient Surge Protection	10kV / 5kA (L-L, L-G) Optional 20kV / 10kA

* Test data @ T_a: 25°C. All lumen values have ±7% tolerance

NOTE: Light intensities measured directly below fixture

Light Distribution Curve



C0/C180 —
 C90/C270 —

Zonal Lumen Summary

Zone (°)	Lumens	% Fixture
0-30	8,958	27.7%
0-40	15,006	46.4%
0-60	27,424	84.8%
0-90	32,340	100.0%
0-180	32,340	100.0%

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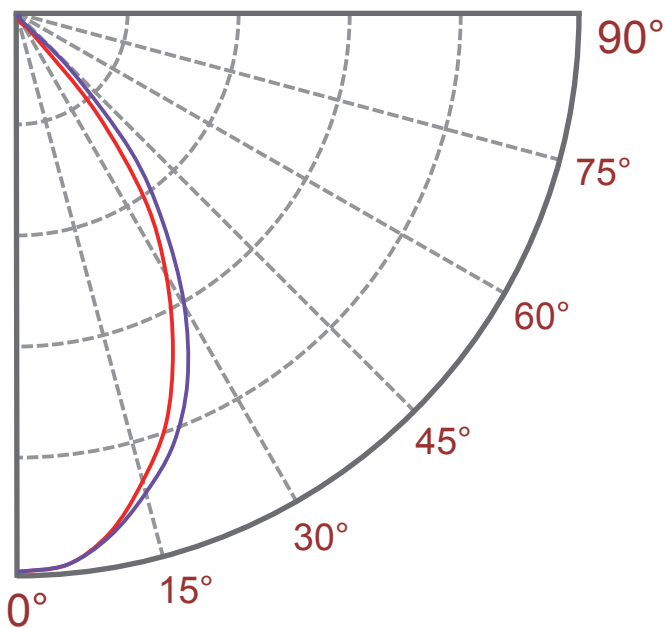
LED Hazardous Area Lighting - 220Watt

Specification - Type V Square Short

Fixture Watts	220 W
Lumens (Total)*	30,360 lm
Efficacy *	138 lm / W
Number of LEDs & Driving Current	112@625mA
T _s - Solder Point Temp *	68°C / 154°F
L70 Rating @ T _a 25°C	>150K hours
Operational Temperature (T _a)	-40° ~ 65°C / -40° ~ 149°F
Input Voltage	100~277VAC 47~63Hz Optional 200~480VAC / 127~390VDC
LED Model	Lumileds / Nichia / Cree
CRI	>75
Lighting Control	Dimmable (0-10V, PWM) / Smart Control / Daylight & Motion Sensor
Warranty	10-Year Limited
Storage Temp. / Humidity	-50° ~ 80°C / -58° ~ 176°F / IP69K Rated Fixture
Transient Surge Protection	10kV / 5kA (L-L, L-G) Optional 20kV / 10kA

* Test data @ T_a: 25°C. All lumen values have ±7% tolerance
 NOTE: Light intensities measured directly below fixture

Light Distribution Curve



C0/C180 —
 C90/C270 —

Zonal Lumen Summary

Zone (°)	Lumens	% Fixture
0-30	18,307	60.3%
0-40	26,140	86.1%
0-60	30,299	99.8%
0-90	30,330	99.9%
0-180	30,360	100.0%

ILX450 Series

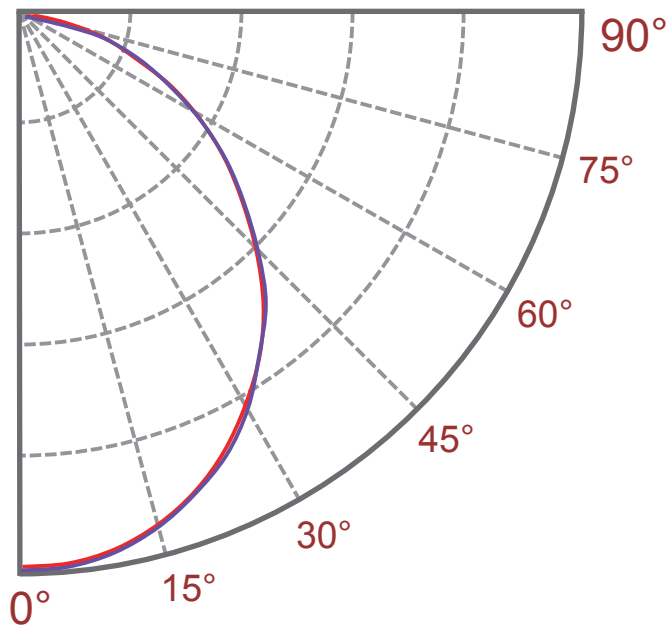
LED Hazardous Area Lighting - 220Watt

Specification - Type V Frosted Long

Fixture Watts	220 W
Lumens (Total)*	27,500 lm
Efficacy *	125 lm / W
Number of LEDs & Driving Current	112@625mA
T _s - Solder Point Temp *	67°C / 153°F
L70 Rating @ T _a 25°C	>150K hours
Operational Temperature (T _a)	-40° ~ 65°C / -40° ~ 149°F
Input Voltage	100~277VAC 47~63Hz Optional 200~480VAC / 127~390VDC
LED Model	Lumileds / Nichia / Cree
CRI	>75
Lighting Control	Dimmable (0-10V, PWM) / Smart Control / Daylight & Motion Sensor
Warranty	10-Year Limited
Storage Temp. / Humidity	-50° ~ 80°C / -58° ~ 176°F / IP69K Rated Fixture
Transient Surge Protection	10kV / 5kA (L-L, L-G) Optional 20kV / 10kA

* Test data @ T_a: 25°C. All lumen values have ±7% tolerance
NOTE: Light intensities measured directly below fixture

Light Distribution Curve



C0/C180 —
C90/C270 —

Zonal Lumen Summary

Zone (°)	Lumens	% Fixture
0-30	8,058	29.3%
0-40	13,008	47.3%
0-60	22,138	80.5%
0-90	27,445	99.8%
0-180	27,500	100.0%