

ILX450 Series

LED High Temperature Lighting



Advantages of ILX450

- Ultra-reliable, high temperature rated LED Industrial Light
- 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 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

- Oil & Gas
- Mining
- Foundries
- Paper and Pulp Mills
- Power Generation
- Steel & Aluminum Mills

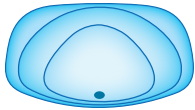
ILX450 Series

LED High Temperature Lighting

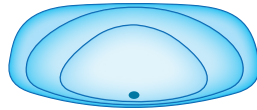
Optic Options

02 - Type II / wall mount & perimeter lighting applications

S - Short

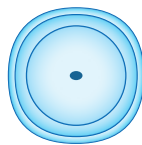


M - Medium



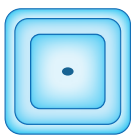
R5 - Type V Round / symmetric for low-mid-high bay, parking garages and flood applications

M - Medium



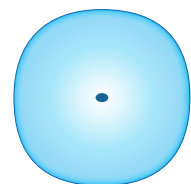
S5 - Type V Square / symmetric for high-bay, aisle, high-mast and flood applications

S - Short



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

L - Long



ILX450 Series

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Mounting Options



Snap & Turn Surface Mounting System

Part Number	Part Description
SST-ILX45-SS	Snap & Turn Surface Mount Bracket / Stainless Steel



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



Chain Chandelier Mounting System

Part Number	Part Description
CH4-ILX45-45SS	4 Link Chain Chandelier System / 18" (45cm) / Stainless Steel
CH4-ILX45-90SS	4 Link Chain Chandelier System / 36" (90cm) / Stainless Steel



Wall Mounting System

Part Number	Part Description
W90-ILX45-45B	90° Wall Mount Elbow Bracket / 18" (45cm) / Galvanized Steel Black
W90-ILX45-75B	90° Wall Mount Elbow Bracket / 30" (75cm) / Galvanized Steel Black



Tandem Mounting System

Part Number	Part Description
TMS-ILX45-45SS	Tandem Mounting System / 18" (45cm) / Stainless Steel
TMS-ILX45-90SS	Tandem Mounting System / 36" (90cm) / Stainless Steel

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LED High Temperature Lighting

Mounting Options



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 High Temperature Lighting

High Temperature Mounting Options



Snap & Turn High Heat Surface Mounting System

Part Number	Part Description
SST-ILX45-SS	Snap & Turn Surface Mount Bracket / Stainless Steel



Swivel High Heat Mounting System

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



Pendant High Heat Mounting System

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



Chain Chandelier High Heat Mounting System

Part Number	Part Description
CH4-ILX45-45SS	4 Link Chain Chandelier System / 18" (45cm) / Stainless Steel
CH4-ILX45-90SS	4 Link Chain Chandelier System / 36" (90cm) / Stainless Steel



Tandem High Heat Mounting System

Part Number	Part Description
TMS-ILX45-45SS	Tandem Mounting System / 18" (45cm) / Stainless Steel
TMS-ILX45-90SS	Tandem Mounting System / 36" (90cm) / Stainless Steel

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LED High Temperature Lighting

High Temperature Mounting Options



90° Stanchion High Heat Mounting System

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



25° Stanchion High Heat Mounting System

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



90° Stanchion High Heat Wall Mounting System

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



25° Stanchion High Heat Wall Mounting System

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



Ceiling High Heat Mounting System

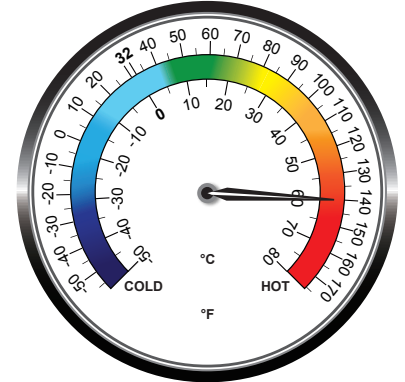
Part Number	Part Description
CMS-ILX45-HH	Ceiling Mounting System / Die-Cast Aluminum

ILX450 Series

LED High Temperature 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



Hazardous Area



High Temperature



ILX450 Series

LED High Temperature Lighting - 185Watt

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	O2 = 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	HN = High Temp. Non-Dimmable HD = High Temp. Dimmable HC = High Temp. + Smart Control	PDS = Pendant Mount SST = Snap & Turn Mount CH4 = 4 Chain Mount W90 = 90° Wall Mount SWL = Swivel Mount TMS = Tandem 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.

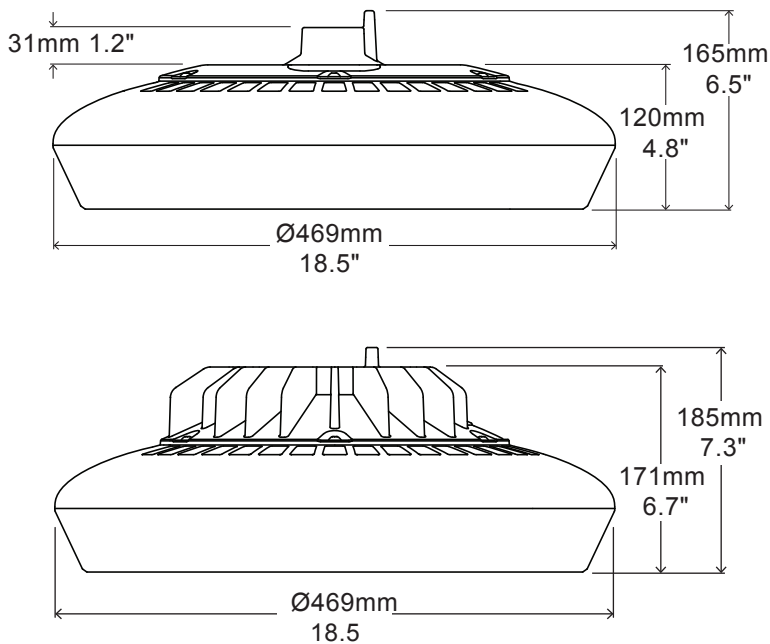
* Smart control available with ZHAGA standard receptacle module.

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

Example

Part Number	Part Description
ILX45185UV-R5M-50HD-PDS	LED High Temperature Light / 185Watt / 100-277VAC / Type V Round / Medium Pitch / 5000K Cool White / High Temperature 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

Quantity	Dimensions (LxWxH)	Weight
1	50 x 50 x 25.0 cm 19.7 x 19.7 x 9.8 in	15.0 kg 33.0 lbs



ILX450 Series

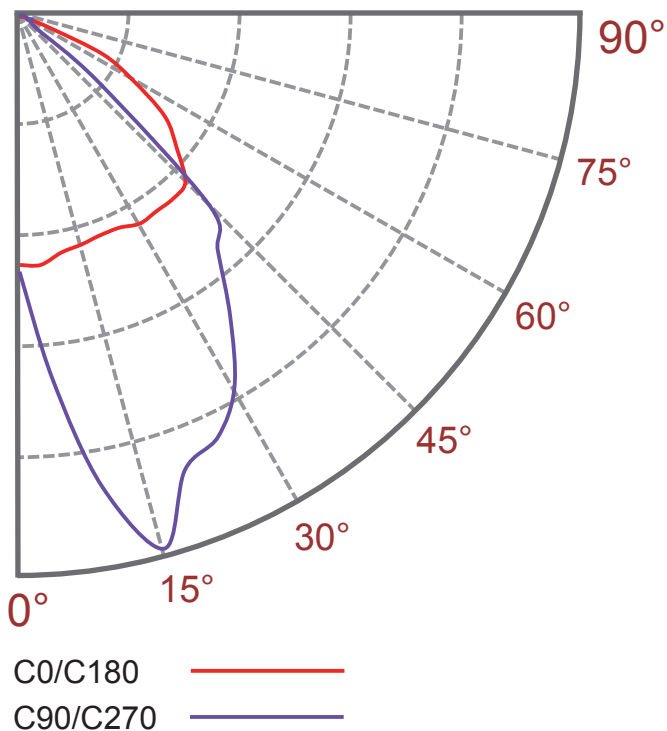
LED High Temperature Lighting - 185Watt

Specification - Type II Short

Fixture Watts	185 W
Lumens (Total)*	25,160 lm
Efficacy *	136 lm / W
Number of LEDs & Driving Current	96@625mA
T _s - Solder Point Temp *	64°C / 147°F
L70 Rating @ T _a 25°C	>160K 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
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	10,215	40.6%
0-40	16,102	64.0%
0-60	24,229	96.3%
0-90	25,135	99.9%
0-180	25,160	100.0%

ILX450 Series

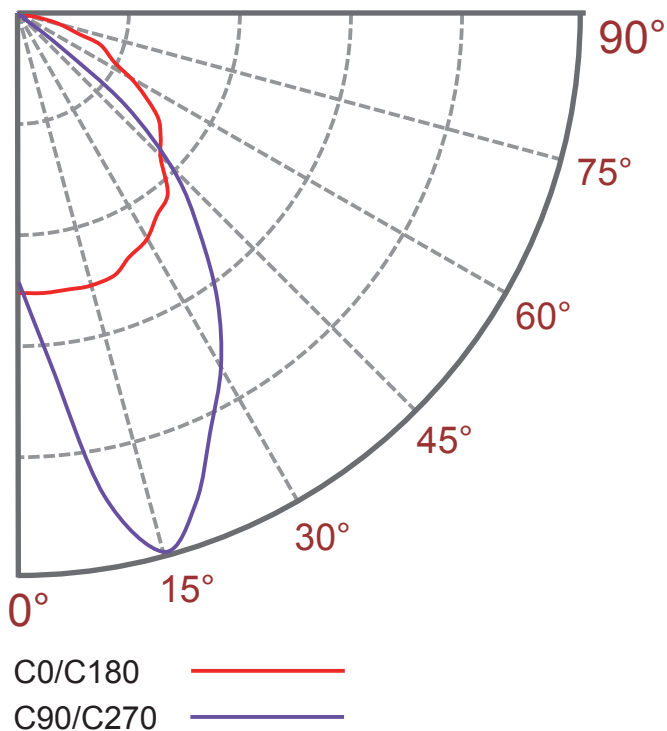
LED High Temperature Lighting - 185Watt

Specification - Type II Medium

Fixture Watts	185 W
Lumens (Total)*	24,235 lm
Efficacy *	131 lm / W
Number of LEDs & Driving Current	96@625mA
T _s - Solder Point Temp *	64°C / 147°F
L70 Rating @ T _a 25°C	>160K 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
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	8,143	33.6%
0-40	12,893	53.2%
0-60	20,697	85.4%
0-90	24,162	99.7%
0-180	24,235	100.0%

ILX450 Series

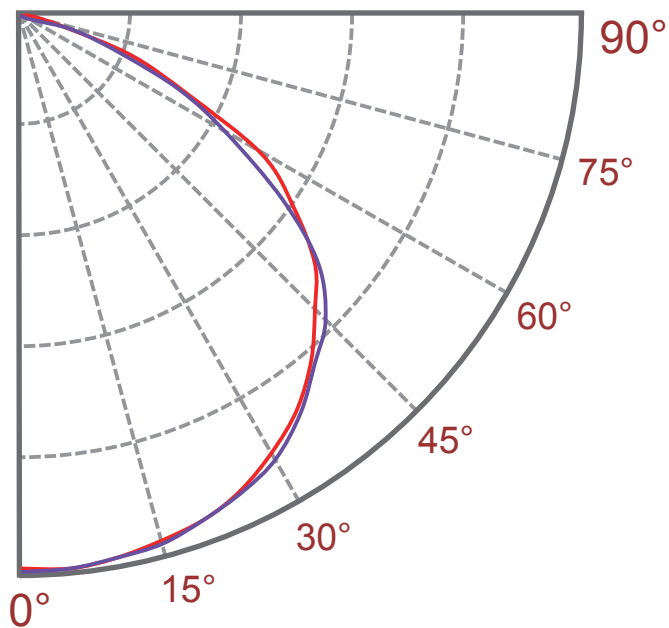
LED High Temperature Lighting - 185Watt

Specification - Type V Round Medium

Fixture Watts	185 W
Lumens (Total)*	27,750 lm
Efficacy *	150 lm / W
Number of LEDs & Driving Current	112@535mA
T _s - Solder Point Temp *	61°C / 142°F
L70 Rating @ T _a 25°C	>160K 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
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	7,659	27.6%
0-40	12,848	46.3%
0-60	23,504	84.7%
0-90	27,750	100.0%
0-180	27,750	100.0%

ILX450 Series

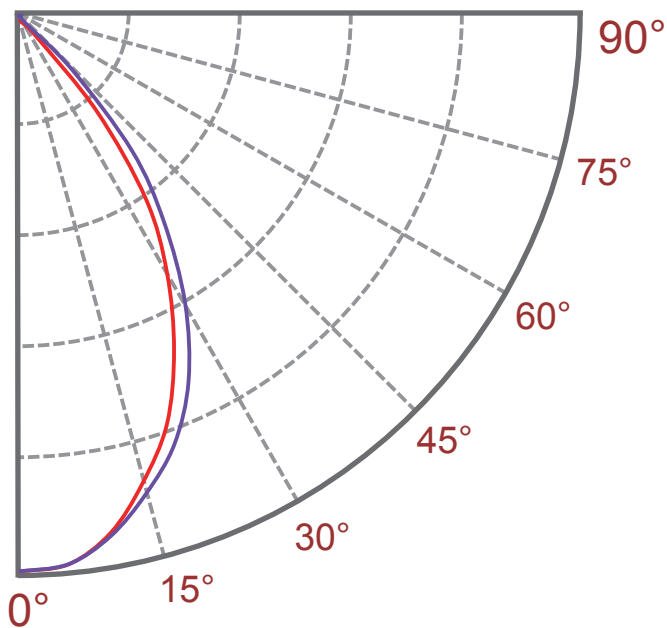
LED High Temperature Lighting - 185Watt

Specification - Type V Square Short

Fixture Watts	185 W
Lumens (Total)*	26,085 lm
Efficacy *	141 lm / W
Number of LEDs & Driving Current	112@535mA
T _s - Solder Point Temp *	62°C / 144°F
L70 Rating @ T _a 25°C	>160K 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
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	15,729	60.3%
0-40	22,459	86.1%
0-60	26,033	99.8%
0-90	26,059	99.9%
0-180	26,085	100.0%

ILX450 Series

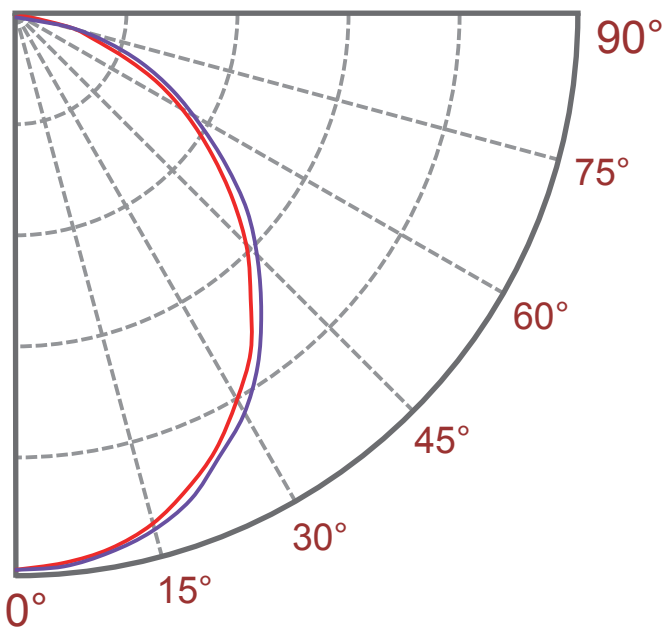
LED High Temperature Lighting - 185Watt

Specification - Type V Frosted Long

Fixture Watts	185 W
Lumens (Total)*	23,680 lm
Efficacy *	128 lm / W
Number of LEDs & Driving Current	112@535mA
T _s - Solder Point Temp *	61°C / 142°F
L70 Rating @ T _a 25°C	>160K 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
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	6,962	29.4%
0-40	11,248	47.5%
0-60	19,110	80.7%
0-90	23,656	99.9%
0-180	23,680	100.0%