IL450 Series



Advantages of IL450

- Technologically advanced LED high mast light fixture
- Available in 100 ~ 220 Watt configurations with various optics
- Ultra-bright industry leading high efficacy up to 170 lm / W
- Proprietary reflector optics enabling glare-free uniform lighting for all working environments, eliminating the need for costly and fragile plastic lenses
- Advanced thermal technology enables low LED junction temperatures (Tj) for maintenance free long life
- IP68 rated tri-proof (dust, vapor & water-proof) luminaire
- Optional wireless smart control system with daylight sensor enabling greater savings and flexibility
- Available with tandem mounting option for various high mast applications
- Titanium rated high efficiency LED driver with smart
- L70 ≥ 150,000 hours with an exceptional 10-year limited warranty
- Designed and engineered in the USA







Wet Location



Impact Resistance

Applications

- Manufacturing Plants
- Shipping Ports
- Rail Yards
- Airplane Hangars
- Parking Lots
- Lock and Dams
- Correctional Facilities
- High Speed Interchanges
- Ski Lifts

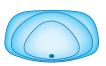
IL450 Series

LED High Mast 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



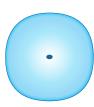
S5 - Type V Square / symmetric for high-bay, aisle, high-mast and flood applications

S - Short



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

L - Long



LED High Mast Lighting

Mounting Options



Pendant Mounting System

| Part Number | Part Description |
|-------------|---|
| PDS-IL45 | Pendant Mounting Interface / 3/4" Pipe Not Included |



Snap & Turn Surface Mounting System

| Part Number | Part Description |
|-------------|---|
| SST-IL45-B | Snap & Turn Surface Mount Bracket / Steel Black |



Chain Mounting System

| Part Number | Part Description |
|--------------|--|
| CH4-IL45-45C | 4 Link Chain Chandelier System / 18" (45cm) / Chrome Steel |
| CH4-IL45-90C | 4 Link Chain Chandelier System / 36" (90cm) / Chrome Steel |



Wall Mounting System

| Part Number | Part Description |
|--------------|--|
| W90-IL45-45B | 90° Wall Mount Elbow Bracket / 18" (45cm) / Galvanized Steel Black |
| W90-IL45-75B | 90° Wall Mount Elbow Bracket / 30" (75cm) / Galvanized Steel Black |



Swivel Mounting System

| Part Number | Part Description |
|-------------|--|
| SWL-IL45-SS | Variable Angle Swivel Mounting Bracket / Stainless Steel |



Tandem Mounting System

| Part Number | Part Description |
|---------------|---|
| TMS-IL45-45SS | Tandem Mounting System / 18" (45cm) / Stainless Steel |
| TMS-IL45-90SS | Tandem Mounting System / 36" (90cm) / Stainless Steel |



Ordering Information

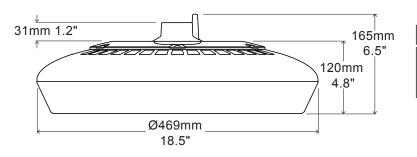
| IL45 | Wattage | Voltage | _ | Optics | Pitch | _ | CCT | Driver & Control * | - | Mounting ** |
|------|------------|---|---|--|----------|---|-----|--------------------|---|---|
| | 125 = 125W | UV = 100-277VAC HV = 200-480VAC DV = 127-390VDC | | 02 = Type II R5 = Type V Round S5 = Type V Square F5 = Type V Frosted | L = Long | | | | | PDS = Pendant Mount SST = Snap & Turn Mount CH4 = 4 Chain Mount W90 = 90° Wall Mount SWL = Swivel Mount TMS = Tandem Mount |

NOTE: Gray is the standard exterior color.

Example

| Part Number | Part Description |
|------------------------|--|
| IL45125UV-S5S-50MD-TMS | LED High Mast Light / 125Watt / 100-277VAC / Type V Square / Short Pitch / 5000K Cool White / Non-Dimmable / Tandem 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 |























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

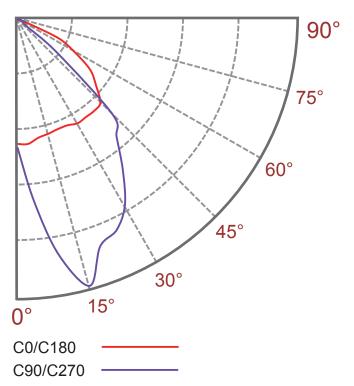
^{**} PDS is the standard mounting system, with 1" NPT threaded hole.

Specification - Type II Short

| Fixture Watts | 125 W | |
|----------------------------------|---|--|
| Lumens (Total)* | 18,625 lm | |
| Efficacy * | 149 lm / W | |
| Number of LEDs & Driving Current | 96@440mA | |
| Ts - Solder Point Temp * | 55°C / 131°F | |
| L70 Rating @ T₂25°C | >180K hours | |
| Operational Temperature (Ta) | -40° ~ 55°C / -40° ~ 131°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 Sensor | |
| Warranty | 10-Year Limited | |
| Storage Temp. / Humidity | -50° ~ 80°C / -58° ~ 176°F / IP68 Rated Fixture | |
| Transient Surge Protection | 10kV / 5kA (L-L, L-G) Optional 20kV / 10kA | |

 $^{^{\}star}$ Test data @ Ta: 25°C. All lumen values have ±7% tolerance NOTE: Light intensities measured directly below fixture

Light Distribution Curve



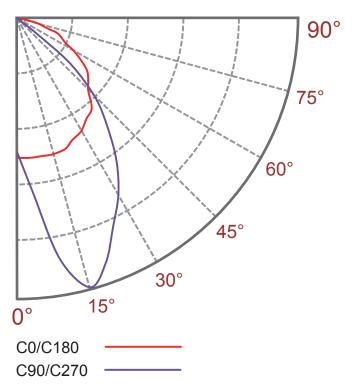
| Zone (°) | Lumens | % Fixture |
|----------|--------|-----------|
| 0-30 | 7,562 | 40.6% |
| 0-40 | 11,920 | 64.0% |
| 0-60 | 17,936 | 96.3% |
| 0-90 | 18,606 | 99.9% |
| 0-180 | 18,625 | 100.0% |

Specification - Type II Medium

| Fixture Watts | 125 W | |
|----------------------------------|---|--|
| Lumens (Total)* | 17,875 lm | |
| Efficacy * | 143 lm / W | |
| Number of LEDs & Driving Current | 96@440mA | |
| Ts - Solder Point Temp * | 55°C / 131°F | |
| L70 Rating @ T _a 25°C | >180K hours | |
| Operational Temperature (Ta) | -40° ~ 55°C / -40° ~ 131°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 Sensor | |
| Warranty | 10-Year Limited | |
| Storage Temp. / Humidity | -50° ~ 80°C / -58° ~ 176°F / IP68 Rated Fixture | |
| Transient Surge Protection | 10kV / 5kA (L-L, L-G) Optional 20kV / 10kA | |

 $^{^*}$ Test data @ Ta: 25°C. All lumen values have $\pm 7\%$ tolerance NOTE: Light intensities measured directly below fixture

Light Distribution Curve



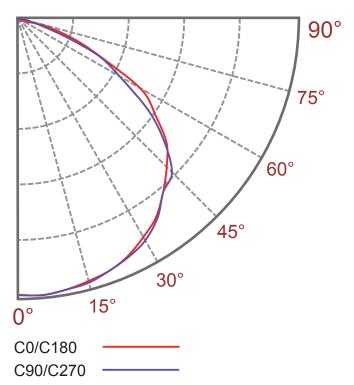
| Zone (°) | Lumens | % Fixture |
|----------|--------|-----------|
| 0-30 | 6,006 | 33.6% |
| 0-40 | 9,510 | 53.2% |
| 0-60 | 15,265 | 85.4% |
| 0-90 | 17,821 | 99.7% |
| 0-180 | 17,875 | 100.0% |

Specification - Type V Round Medium

| Fixture Watts | 125 W | |
|----------------------------------|---|--|
| Lumens (Total)* | 19,625 lm | |
| Efficacy * | 157 lm / W | |
| Number of LEDs & Driving Current | 112@375mA | |
| Ts - Solder Point Temp * | 53°C / 127°F | |
| L70 Rating @ T _a 25°C | >180K hours | |
| Operational Temperature (Ta) | -40° ~ 55°C / -40° ~ 131°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 Sensor | |
| Warranty | 10-Year Limited | |
| Storage Temp. / Humidity | -50° ~ 80°C / -58° ~ 176°F / IP68 Rated Fixture | |
| Transient Surge Protection | 10kV / 5kA (L-L, L-G) Optional 20kV / 10kA | |

 $^{^{\}star}$ Test data @ Ta: 25°C. All lumen values have ±7% tolerance NOTE: Light intensities measured directly below fixture

Light Distribution Curve



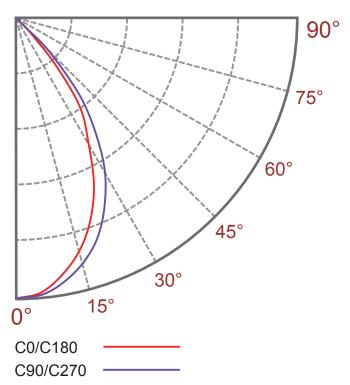
| Zone (°) | Lumens | % Fixture |
|----------|--------|-----------|
| 0-30 | 5,397 | 27.5% |
| 0-40 | 9,047 | 46.1% |
| 0-60 | 16,603 | 84.6% |
| 0-90 | 19,625 | 100.0% |
| 0-180 | 19,625 | 100.0% |

Specification - Type V Square Short

| Fixture Watts | 125 W | |
|----------------------------------|---|--|
| Lumens (Total)* | 18,500 lm | |
| Efficacy * | 148 lm / W | |
| Number of LEDs & Driving Current | 112@375mA | |
| Ts - Solder Point Temp * | 54°C / 129°F | |
| L70 Rating @ T _a 25°C | >180K hours | |
| Operational Temperature (Ta) | -40° ~ 55°C / -40° ~ 131°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 Sensor | |
| Warranty | 10-Year Limited | |
| Storage Temp. / Humidity | -50° ~ 80°C / -58° ~ 176°F / IP68 Rated Fixture | |
| Transient Surge Protection | 10kV / 5kA (L-L, L-G) Optional 20kV / 10kA | |

 $^{^{\}star}$ Test data @ Ta: 25°C. All lumen values have ±7% tolerance NOTE: Light intensities measured directly below fixture

Light Distribution Curve



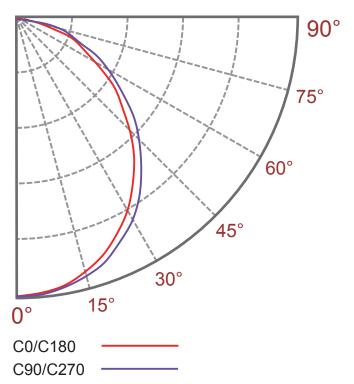
| Zone (°) | Lumens | % Fixture |
|----------|--------|-----------|
| 0-30 | 11,082 | 59.9% |
| 0-40 | 15,855 | 85.7% |
| 0-60 | 18,482 | 99.9% |
| 0-90 | 18,500 | 100.0% |
| 0-180 | 18,500 | 100.0% |

Specification - Type V Frosted Long

| Fixture Watts | 125 W | |
|----------------------------------|---|--|
| Lumens (Total)* | 16,750 lm | |
| Efficacy * | 134 lm / W | |
| Number of LEDs & Driving Current | 112@375mA | |
| Ts - Solder Point Temp * | 54°C / 129°F | |
| L70 Rating @ T _a 25°C | >180K hours | |
| Operational Temperature (Ta) | -40° ~ 55°C / -40° ~ 131°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 Sensor | |
| Warranty | 10-Year Limited | |
| Storage Temp. / Humidity | -50° ~ 80°C / -58° ~ 176°F / IP68 Rated Fixture | |
| Transient Surge Protection | 10kV / 5kA (L-L, L-G) Optional 20kV / 10kA | |

 $^{^*}$ Test data @ Ta: 25°C. All lumen values have $\pm 7\%$ tolerance NOTE: Light intensities measured directly below fixture

Light Distribution Curve



| Zone (°) | Lumens | % Fixture |
|----------|--------|-----------|
| 0-30 | 4,925 | 29.4% |
| 0-40 | 7,940 | 47.4% |
| 0-60 | 13,517 | 80.7% |
| 0-90 | 16,700 | 99.7% |
| 0-180 | 16,750 | 100.0% |