

1ST-PAL

1st Source Lighting Premium Area Light



Applications

- Parking Lots
- Outdoor Tennis
- Outdoor Pickleball
- Outdoor Sports

OVERVIEW

| | |
|----------------------|---|
| Lumen Package (lm) | 10000 - 40000 |
| Wattage Range (W) | 70 - 290 |
| Efficacy Range (LPW) | 135 - 155 |
| Features | Optic Swap, Power Select, Color Select, Tool Free Lens Change |



RoHS
Compliant



10 YEAR
LIMITED WARRANTY

Features and Specifications

- Selectable Wattage (see Performance Specifications for details)
- Selectable CCT (3000/4000/5000K)
- Quick, tool-free optics lens change
- Two lenses in the box: Type III installed, Type V included
- Type II and Type IV lenses sold separately (see Accessories for details)
- Heavy-duty, die-cast aluminum housing with ample heat sinking
- Low-profile design delivers high-performance illumination and improves application site aesthetics
- True U0 design that eliminates undesirable sky glow
- Integrated NEMA/ANSI C136.10 7-pin twist-lock receptacle with shorting cap. Compatible with KT-TLP-UV-3PN, 120-277V photocell
- Five contractor-friendly mounting options available: universal slipfitter, trunnion, adjustable pole mount, fixed pole mount, and wall adaptor. Sold separately (see Accessories for details)
- 0-10V dimming driver with 6kV surge protection. Additional 10kV included
- Ambient operating temperature: $-40^{\circ}\text{C}/-40^{\circ}\text{F}$ to $50^{\circ}\text{C}/122^{\circ}\text{F}$
- UL Certified; IP65 rated
- Power factor: > 0.95
- THD: $< 20\%$
- LED chip lifetime: $L70 > 100,000$ hrs @ $25^{\circ}\text{C}/77^{\circ}\text{F}$ ambient fixture temperature
- Meets FCC Part 15, Part B, Class A standards for conducted and radiated emissions



Ordering Information

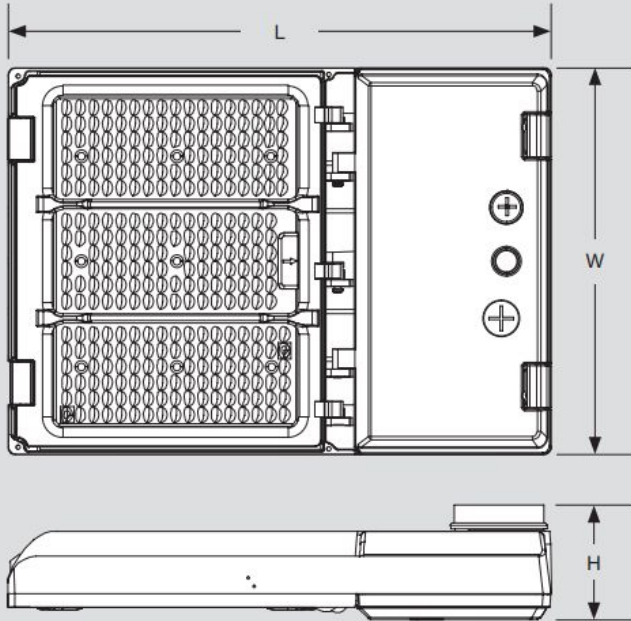
| Series | Wattage Select | CCT Select | Lens | Voltage | Housing Color |
|--|----------------------|--|---|---|---------------|
| 1ST-PAL-140PSCS-OS-U-BRZ | 140W 100W 70W | 35K 40K 50K | Type III Installed, Type V Included | U - Universal 120-277v 3 - 347v 4 - 480v | BRZ - Bronze |
| 1ST-PAL-290PSCS-OS-U-BRZ | 290W 210W 185W | | | | |
| | | | | 140GS (140W Glare Shield) 290GS (290W Glare Shield) | |
| Mounting Options | | Dimming & Controls | | Glare Shields | |
| USF = Universal Slipfitter Mount PMA = Adjustable Pole Mount PM = Fixed Pole Mount WM = Wall mount TM = Trunnion Mount | | 3PN = Twist Lock Photocell MW3 = Microwave Occupancy Sensor FC3 = Bluetooth Mesh Wireless Controller PIR Sensor SmartLoop System FC4 = Bluetooth Mesh Wireless Screw-In Low Voltage Controller SmartLoop System | | 140/290GS = 140/290W Fixture Glare Shield (Reversible) 140/290GSL = 140W Fixture Glare Shield Left Side Mount 140/290GSR = 140W Fixture Glare Shield Right Side Mount | |



10 YEAR
LIMITED WARRANTY

Physical Specifications

LED AREA LIGHT FIXTURE



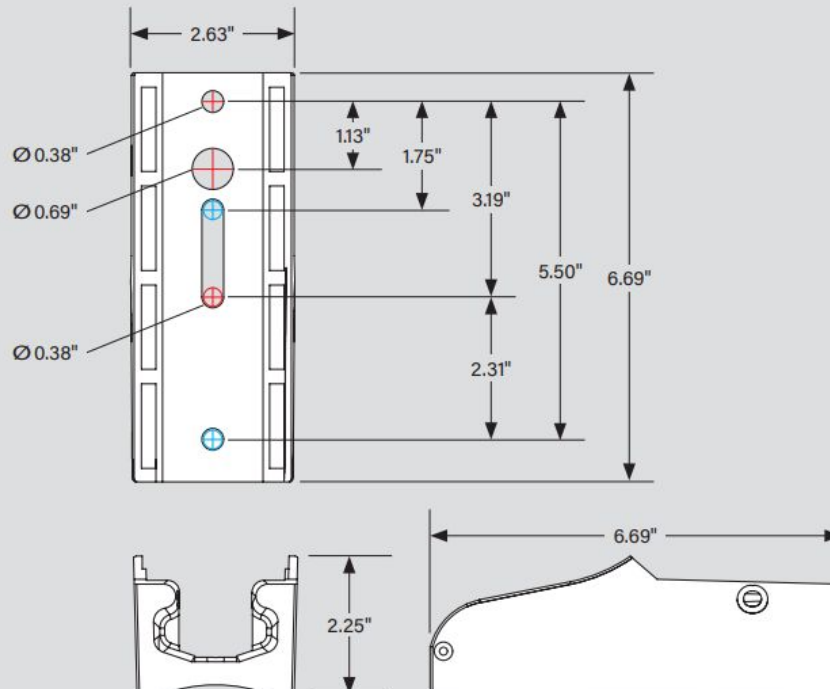
FIXTURE DIMENSIONS

| Catalog Number | L (Length) | W (Width) | H (Height) |
|-----------------------------|------------|-----------|------------|
| 1ST-PAL-140PSCS-OS-U-D0-BRZ | 15.90" | 11.40" | 3.50" |
| 1ST-PAL-290PSCS-OS-U-D0-BRZ | 19.90" | 14.20" | 3.40" |

PACKAGING DIMENSIONS

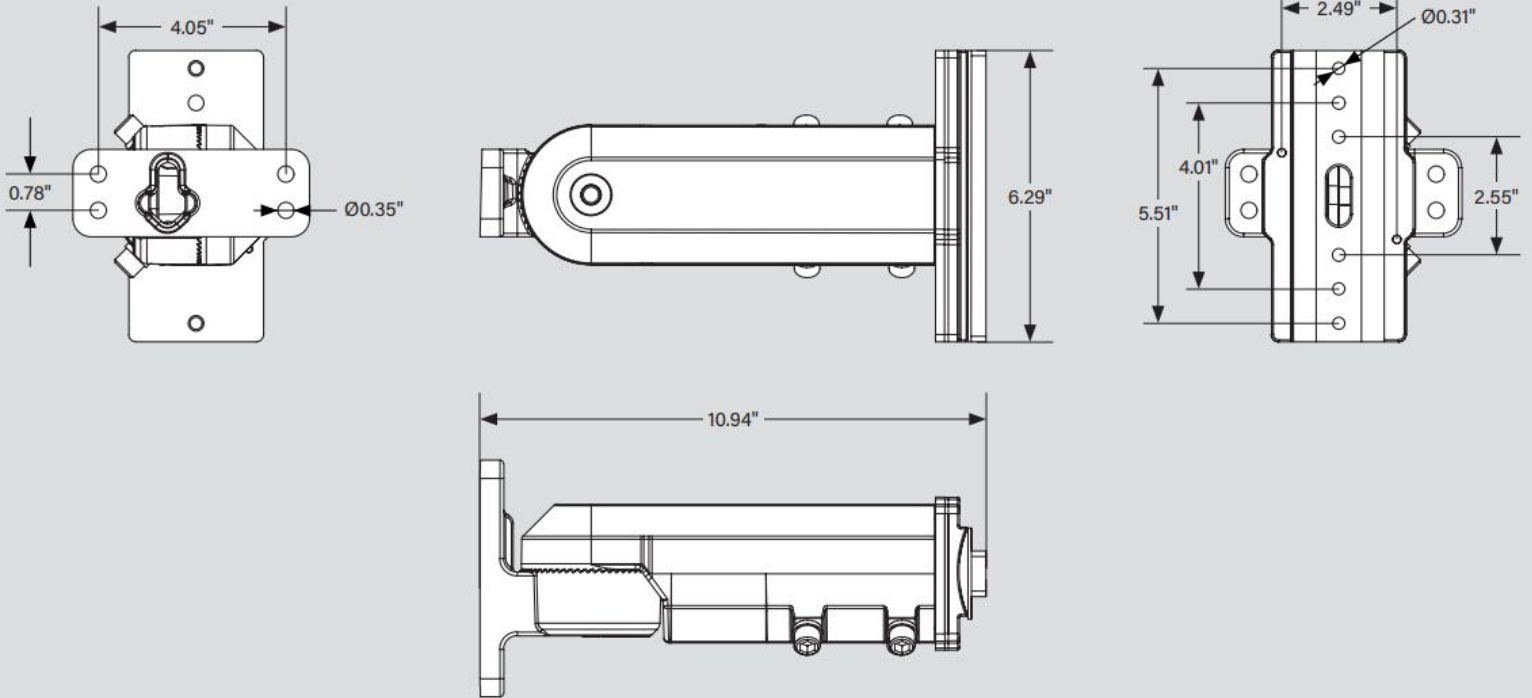
| Catalog Number | Carton Dimensions | Carton Weight |
|-----------------------------|-------------------------|---------------|
| 1ST-PAL-140PSCS-OS-U-D0-BRZ | 5.63" x 13.15" x 21.65" | 10.87 lbs |
| 1ST-PAL-290PSCS-OS-U-D0-BRZ | 5.63" x 15.95" x 26.18" | 16.58 lbs |

POLE MOUNT (ADJUSTABLE OR FIXED) DRILLING HOLES



Physical Specifications

UNIVERSAL SLIPFITTER MOUNT



RoHS
Compliant



10 YEAR
LIMITED WARRANTY

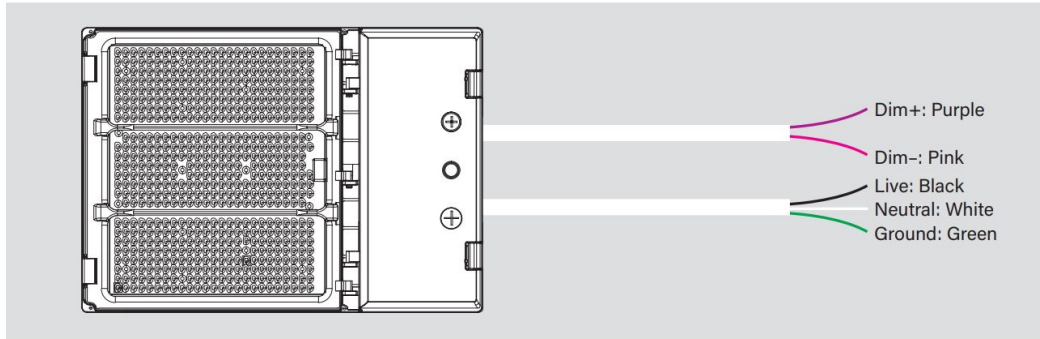
Performance Information

| SKU | Wattage | CCT | Delivered Lumens | LPW |
|-----------------|---------|-------|------------------|-----|
| 1ST-PAL-140PSCS | 70 | 3000K | 10220 | 146 |
| 1ST-PAL-140PSCS | 70 | 4000K | 10880 | 155 |
| 1ST-PAL-140PSCS | 70 | 5000K | 10730 | 153 |
| 1ST-PAL-140PSCS | 100 | 3000K | 14060 | 141 |
| 1ST-PAL-140PSCS | 100 | 4000K | 15170 | 152 |
| 1ST-PAL-140PSCS | 100 | 5000K | 14790 | 148 |
| 1ST-PAL-140PSCS | 140 | 3000K | 19000 | 136 |
| 1ST-PAL-140PSCS | 140 | 4000K | 19910 | 142 |
| 1ST-PAL-140PSCS | 140 | 5000K | 19600 | 140 |
| 1ST-PAL-290PSCS | 185 | 3000K | 27030 | 146 |
| 1ST-PAL-290PSCS | 185 | 4000K | 27620 | 149 |
| 1ST-PAL-290PSCS | 185 | 5000K | 27620 | 149 |
| 1ST-PAL-290PSCS | 210 | 3000K | 30450 | 145 |
| 1ST-PAL-290PSCS | 210 | 4000K | 31050 | 148 |
| 1ST-PAL-290PSCS | 210 | 5000K | 30860 | 147 |
| 1ST-PAL-290PSCS | 290 | 3000K | 39270 | 135 |
| 1ST-PAL-290PSCS | 290 | 4000K | 40650 | 140 |
| 1ST-PAL-290PSCS | 290 | 5000K | 39960 | 138 |



Performance and Product Information

WIRING DIAGRAM



- Make input connections as needed and ensure connections are protected from exposure to the elements.
- **Input voltage rating: 120-277V**
- Ensure that input voltage on site matches the fixture you intend to install.

KEY FEATURES

This fixture is equipped with field-adjustable Power Select and Color Select technology.

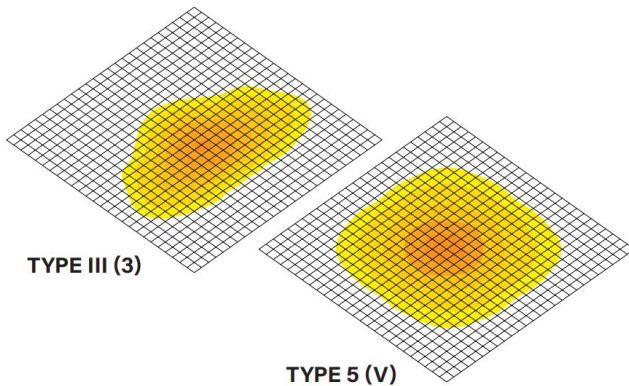
1. Turn off power to the fixture.
2. Remove the knockout (KO) on the left side of the fixture.
3. Adjust the wattage and CCT dip switches to desired settings.
4. Add the KO back to the fixture, and restore power.



Light Distribution Pattern

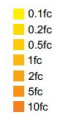
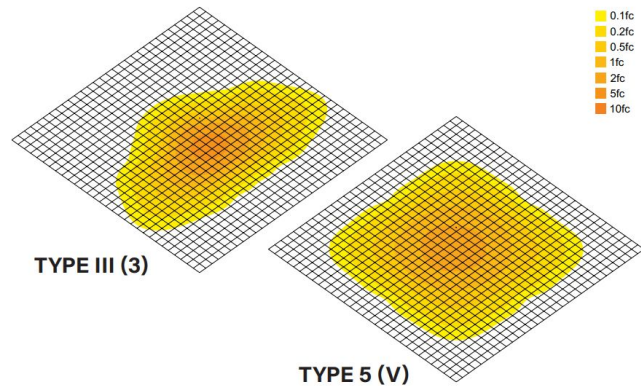
1ST-PAL-140PSCS-OS-U-BRZ

Pole mounted at 30 ft



1ST-PAL-290PSCS-OS-U-BRZ

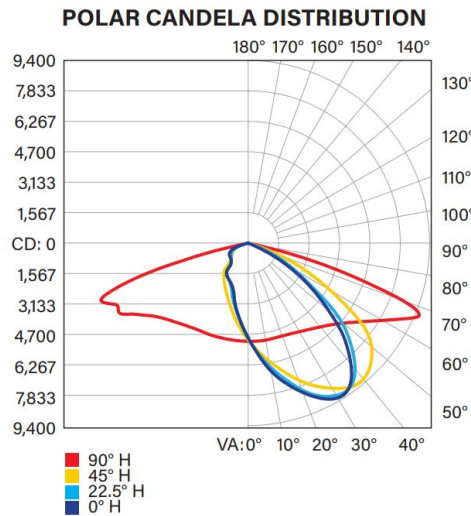
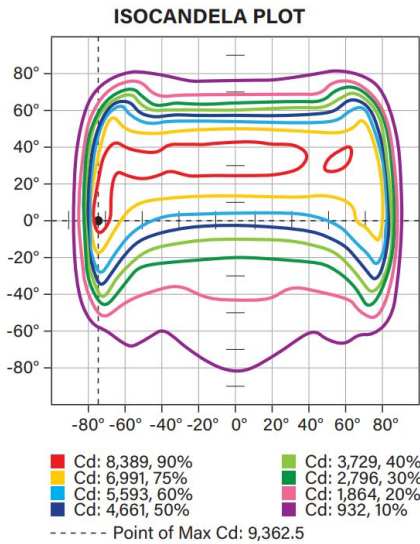
Pole mounted at 35 ft



10 YEAR LIMITED WARRANTY

Photometric Information

PHOTOMETRIC SPECIFICATIONS 1ST-PAL-140PSCS-OS-U-BRZ Type 2 Lens



ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|----------------------|--------------------|--------------|
| Forward Light | 14,601.5 lm | 71.2% |
| 0°-30° | 2,934.7 lm | 14.3% |
| 30°-60° | 8,207.8 lm | 40.1% |
| 60°-80° | 3,329.0 lm | 16.2% |
| 80°-90° | 130.0 lm | 0.6% |
| Back Light | 5,890.1 lm | 28.8% |
| 0°-30° | 1,444.7 lm | 7.1% |
| 30°-60° | 2,718.1 lm | 13.3% |
| 60°-80° | 1,623.5 lm | 7.9% |
| 80°-90° | 103.8 lm | 0.5% |
| Up Light | 0.0 lm | 0.0% |
| 90°-180° | 0.0 lm | 0.0% |
| 100°-180° | 0.0 lm | 0.0% |

BUG* Rating

Asymmetrical Luminaire Types

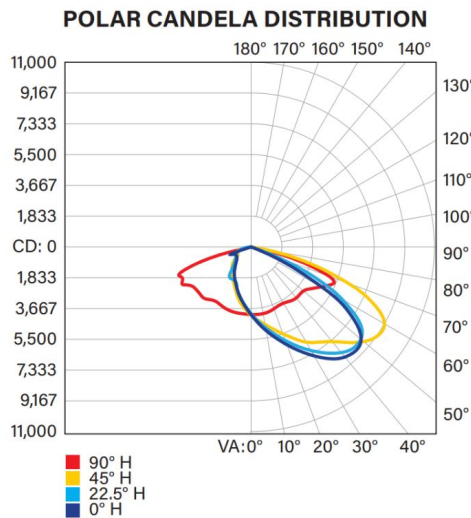
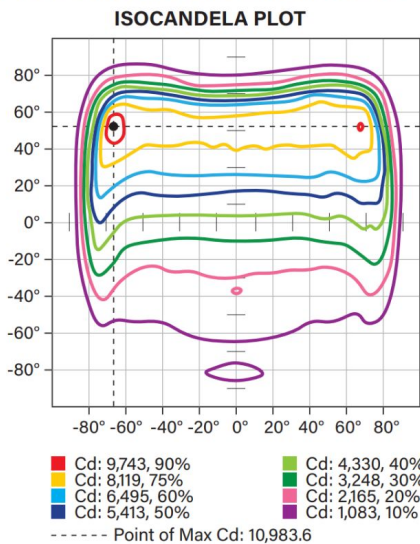
Type I, II, III, IV B3-U0-G3

Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B3-U0-G3

* Backlight, Uplight, Glare

PHOTOMETRIC SPECIFICATIONS 1ST-PAL-140PSCS-OS-U-BRZ Type 3 Lens



ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|----------------------|--------------------|--------------|
| Forward Light | 15,584.9 lm | 76.3% |
| 0°-30° | 2,208.6 lm | 10.8% |
| 30°-60° | 8,224.9 lm | 40.3% |
| 60°-80° | 4,921.9 lm | 24.1% |
| 80°-90° | 229.5 lm | 1.1% |
| Back Light | 4,848.1 lm | 23.7% |
| 0°-30° | 1,229.1 lm | 6.0% |
| 30°-60° | 2,265.2 lm | 11.1% |
| 60°-80° | 1,236.0 lm | 6.0% |
| 80°-90° | 117.8 lm | 0.6% |
| Up Light | 0.0 lm | 0.0% |
| 90°-180° | 0.0 lm | 0.0% |
| 100°-180° | 0.0 lm | 0.0% |

BUG* Rating

Asymmetrical Luminaire Types

Type I, II, III, IV B3-U0-G3

Quadrilateral Symmetrical Luminaire Types

Type V, Area Light B3-U0-G3

* Backlight, Uplight, Glare

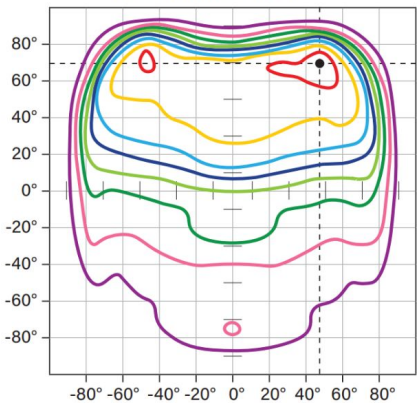


10 YEAR LIMITED WARRANTY

Photometric Information

PHOTOMETRIC SPECIFICATIONS 1ST-PAL-140PSCS-OS-U-BRZ Type 4 Lens

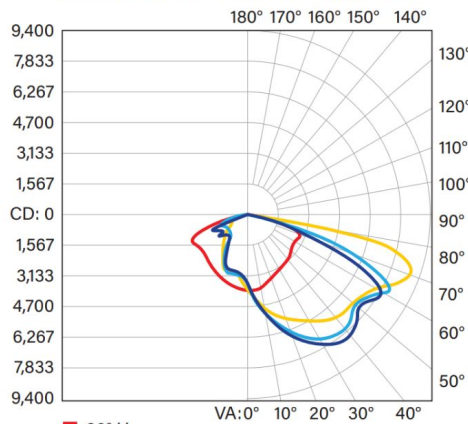
ISOCANDELA PLOT



- Cd: 8,315, 90%
- Cd: 6,929, 75%
- Cd: 5,544, 60%
- Cd: 4,620, 50%
- Cd: 3,696, 40%
- Cd: 2,772, 30%
- Cd: 1,848, 20%
- Cd: 924, 10%

----- Point of Max Cd: 9,346.7

POLAR CANDELA DISTRIBUTION



- 90° H
- 45° H
- 22.5° H
- 0° H

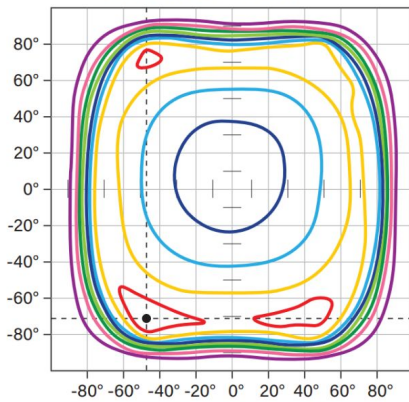
ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|--|--------------------|--------------|
| Forward Light | 15,829.0 lm | 77.3% |
| 0°-30° | 2,224.9 lm | 10.9% |
| 30°-60° | 7,370.9 lm | 36.0% |
| 60°-80° | 5,828.9 lm | 28.4% |
| 80°-90° | 404.3 lm | 2.0% |
| Back Light | 4,661.5 lm | 22.7% |
| 0°-30° | 1,254.8 lm | 6.1% |
| 30°-60° | 2,149.4 lm | 10.5% |
| 60°-80° | 1,171.6 lm | 5.7% |
| 80°-90° | 85.7 lm | 0.4% |
| Up Light | 0.0 lm | 0.0% |
| 90°-180° | 0.0 lm | 0.0% |
| 100°-180° | 0.0 lm | 0.0% |
| BUG* Rating | | |
| Asymmetrical Luminaire Types | | |
| Type I, II, III, IV | B3-U0-G3 | |
| Quadrilateral Symmetrical Luminaire Types | | |
| Type V, Area Light | B3-U0-G3 | |

* Backlight, Uplight, Glare

PHOTOMETRIC SPECIFICATIONS 1ST-PAL-140PSCS-OS-U-BRZ Type 5 Lens

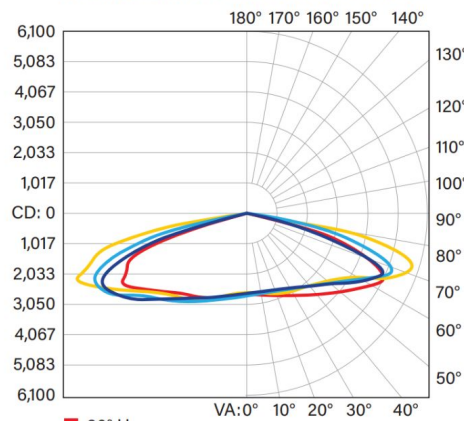
ISOCANDELA PLOT



- Cd: 5,420, 90%
- Cd: 4,517, 75%
- Cd: 3,613, 60%
- Cd: 3,011, 50%
- Cd: 2,409, 40%
- Cd: 1,807, 30%
- Cd: 1,204, 20%
- Cd: 602, 10%

----- Point of Max Cd: 6,054.2

POLAR CANDELA DISTRIBUTION



- 90° H
- 45° H
- 22.5° H
- 0° H

ZONAL LUMEN SUMMARY

| Zone | Lumens | % Luminaire |
|--|--------------------|--------------|
| Forward Light | 9,819.6 lm | 48.0% |
| 0°-30° | 1,178.4 lm | 5.8% |
| 30°-60° | 4,073.5 lm | 19.9% |
| 60°-80° | 4,259.7 lm | 20.8% |
| 80°-90° | 308.0 lm | 1.5% |
| Back Light | 10,670.4 lm | 52.0% |
| 0°-30° | 1,250.2 lm | 6.1% |
| 30°-60° | 4,598.3 lm | 22.4% |
| 60°-80° | 4,516.5 lm | 22.0% |
| 80°-90° | 305.4 lm | 1.5% |
| Up Light | 0.0 lm | 0.0% |
| 90°-180° | 0.0 lm | 0.0% |
| 100°-180° | 0.0 lm | 0.0% |
| BUG* Rating | | |
| Asymmetrical Luminaire Types | | |
| Type I, II, III, IV | B4-U0-G3 | |
| Quadrilateral Symmetrical Luminaire Types | | |
| Type V, Area Light | B4-U0-G3 | |

* Backlight, Uplight, Glare



10 YEAR LIMITED WARRANTY

EPA Specifications

MEDIUM AND LARGE-SIZE FIXTURE HOUSING

- Conditions: Horizontal winds only for calculations. Worst case total projected area used for calculations.
- All drag coefficients are set as worst case 1.2

EPA Calcs (1.2*ft² | View)

| Mounting Application | Fixture Position (Size) | Single Fixture | 2 Fixtures at 90° | 2 Fixtures at 180° | 3 Fixtures at 90° | 3 Fixtures at 120° | 4 Fixtures at 90° | 2 Fixtures Side-by-Side | 3 Fixtures Side-by-Side | 4 Fixtures Side-by-Side |
|----------------------|-------------------------|----------------|-------------------|--------------------|-------------------|--------------------|-------------------|-------------------------|-------------------------|-------------------------|
| | | | | | | | | | | |
| | Horizontal (M) | 0.50 sq. ft. | 0.78 sq. ft. | 1.01 sq. ft. | 1.19 sq. ft. | 1.28 sq. ft. | 1.19 sq. ft. | 0.74 sq. ft. | 1.11 sq. ft. | 1.48 sq. ft. |
| | Horizontal (L) | 0.62 sq. ft. | 0.90 sq. ft. | 1.24 sq. ft. | 1.42 sq. ft. | 1.48 sq. ft. | 1.42 sq. ft. | 0.74 sq. ft. | 1.11 sq. ft. | 1.48 sq. ft. |
| | 45° (M) | 1.27 sq. ft. | 1.73 sq. ft. | 1.27 sq. ft. | 2.20 sq. ft. | 3.10 sq. ft. | 2.20 sq. ft. | 2.53 sq. ft. | 3.80 sq. ft. | 5.07 sq. ft. |
| | 45° (L) | 1.85 sq. ft. | 2.43 sq. ft. | 1.85 sq. ft. | 3.01 sq. ft. | 4.42 sq. ft. | 3.01 sq. ft. | 3.70 sq. ft. | 5.55 sq. ft. | 7.40 sq. ft. |
| | Horizontal (M) | 0.48 sq. ft. | 0.87 sq. ft. | 0.97 sq. ft. | 1.30 sq. ft. | 1.37 sq. ft. | 1.30 sq. ft. | 0.86 sq. ft. | 1.30 sq. ft. | 1.73 sq. ft. |
| | Horizontal (L) | 0.60 sq. ft. | 0.98 sq. ft. | 1.20 sq. ft. | 1.53 sq. ft. | 1.57 sq. ft. | 1.53 sq. ft. | 0.86 sq. ft. | 1.30 sq. ft. | 1.73 sq. ft. |
| | 45° (M) | 1.34 sq. ft. | 1.80 sq. ft. | 1.34 sq. ft. | 2.28 sq. ft. | 3.06 sq. ft. | 2.28 sq. ft. | 2.67 sq. ft. | 4.01 sq. ft. | 5.35 sq. ft. |
| | 45° (L) | 1.92 sq. ft. | 2.51 sq. ft. | 1.92 sq. ft. | 3.09 sq. ft. | 4.39 sq. ft. | 3.09 sq. ft. | 3.84 sq. ft. | 5.76 sq. ft. | 7.68 sq. ft. |
| | Vertical (M) | 1.76 sq. ft. | 2.25 sq. ft. | 1.76 sq. ft. | 2.73 sq. ft. | 2.94 sq. ft. | 2.73 sq. ft. | 3.53 sq. ft. | 5.29 sq. ft. | 7.06 sq. ft. |
| | Vertical (L) | 2.59 sq. ft. | 3.19 sq. ft. | 2.59 sq. ft. | 3.80 sq. ft. | 4.07 sq. ft. | 3.80 sq. ft. | 5.18 sq. ft. | 7.77 sq. ft. | 10.35 sq. ft. |



Accessories

SENSORS/CONTROLLERS

Factory-Installable OR Field-Installable (field-installable purchased separately)

| ✓ | SUFFIX* | CATALOG NUMBER | DESCRIPTION | UPC | EASY CODE |
|---|---------|----------------------|---|--------------|-----------|
| | /3PN | KT-TLP-UV-3PN | NEMA Type Twist-Lock 3-Pin Photocell 120-277V 1800VA Max Blue | 843654131825 | NQT-46 |
| | /MW3 | KTS-MW3-12V-PKO | 12V Microwave Occupancy Sensor | 843654130637 | TRM-32 |
| | /FC3** | KTSL-FC3-12V-PKO-PIR | Bluetooth mesh wireless screw-in LED controller for SmartLoop system Integrated daylight sensor PIR motion sensor | 843654138862 | OCW-60 |
| | /FC4 | KTSL-FC4-12V-PKO | Bluetooth mesh wireless screw-in low voltage fixture controller for SmartLoop system | 843654149066 | RUN-10 |



Twist-Lock Photocell
KT-TLP-UV-3PN

Microwave Occupancy Sensor
KTS-MW3-12V-PKO

SmartLoop PIR Motion Sensor**
KTSL-FC3-12V-PKO-PIR

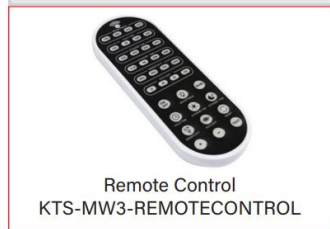
SmartLoop Controller
KTSL-FC4-12V-PKO

* For factory installation of accessory, add suffix to fixture part number (see ordering examples and instructions on last page of spec sheet).

** When installing on area lights, use small thin gasket provided with the sensor to ensure proper electrical connection and a water-tight seal. Hand tighten only. (Do NOT use the larger thick gasket. Sensor will not make electrical contact with thick gasket.) PIR sensors may not always perform reliably in typical outdoor environments. Ensure sensors are used and commissioned with this in mind. When using KTSL-FC3-12V-PKO-PIR in applications with photosensor control for dusk to dawn, use 3-pin twistlock photocells (KT-TLP-UV-3PN) for optimal functionality

Field-Installable / Field-Use ONLY (purchased separately)

| CATALOG NUMBER | DESCRIPTION | UPC | EASY CODE |
|-----------------------|---|--------------|-----------|
| KTS-MW3-REMOTECONTROL | Remote control for KTS-MW3-12V-XX and KTS-PIR3-12V-XX sensors | 843654132020 | XSR-61 |



Remote Control
KTS-MW3-REMOTECONTROL



Accessories

MOUNTS/BRACKETS

Field-Installable / Field-Use ONLY (purchased separately)

| CATALOG NUMBER | DESCRIPTION | HOUSING COLOR | UPC | EASY CODE |
|---------------------|---|---------------|--------------|-----------|
| KT-ALED-GS-M2-KIT | Reversible glare shield Medium size | Bronze | 843654153797 | HEM-55 |
| KT-ALED-GS-L2-KIT | Reversible glare shield Large size | Bronze | 843654153810 | RDW-18 |
| KT-ALED-GS-M2-R-KIT | Right-side mounted glare shield Medium size | Bronze | 843654163895 | OYO-78 |
| KT-ALED-GS-M2-L-KIT | Left-side mounted glare shield Medium size | Bronze | 843654163901 | GLB-48 |
| KT-ALED-GS-L2-R-KIT | Right-side mounted glare shield Large size | Bronze | 843654163871 | KAV-10 |
| KT-ALED-GS-L2-L-KIT | Left-side mounted glare shield Large size | Bronze | 843654163888 | PND-07 |
| KT-ALED-USF-1-KIT | Universal slipfitter mount Fits 2 3/8" tenon, or round or square pole | Bronze | 843654173740 | PAS-59 |
| KT-ALED-PMA-1-KIT | Adjustable pole mount For round or square pole | Bronze | 843654131634 | DAQ-87 |
| KT-ALED-PM-1-KIT | Fixed pole mount For round or square pole | Bronze | 843654131627 | QVG-29 |
| KT-ALED-TM-1-KIT | Trunnion mount | Bronze | 843654131658 | GTH-37 |
| KT-ALED-WM-1-KIT | Wall mount | Bronze | 843654158952 | QCV-37 |



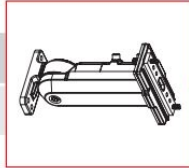
10 YEAR
LIMITED WARRANTY

Accessories

Universal Slipfitter Mount

Fits 2 3/8" tenon OR square pole OR round pole

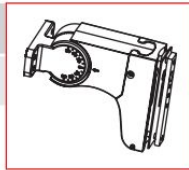
| Catalog Number | UPC | Easy Code |
|-------------------|--------------|-----------|
| KT-ALED-USF-1-KIT | 843654173740 | PAS-59 |



Adjustable Pole Mount

For round OR square pole

| Catalog Number | UPC | Easy Code |
|-------------------|--------------|-----------|
| KT-ALED-PMA-1-KIT | 843654131634 | DAQ-87 |



Fixed Pole Mount

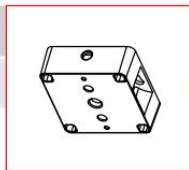
For round OR square pole

| Catalog Number | UPC | Easy Code |
|------------------|--------------|-----------|
| KT-ALED-PM-1-KIT | 843654131627 | QVG-29 |



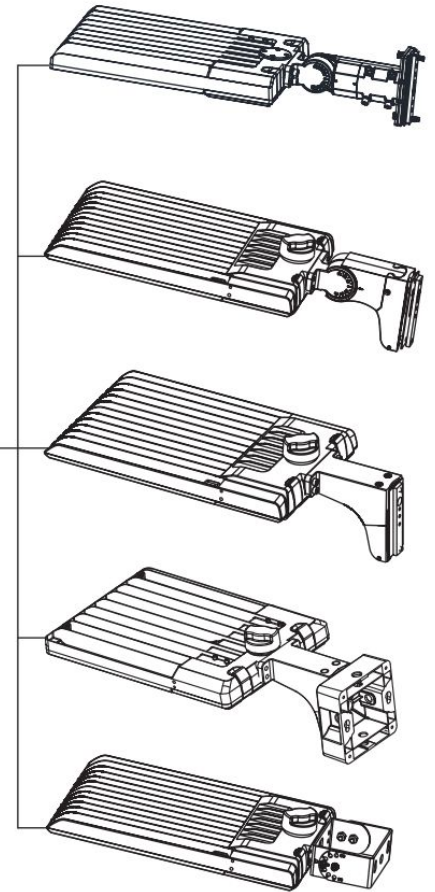
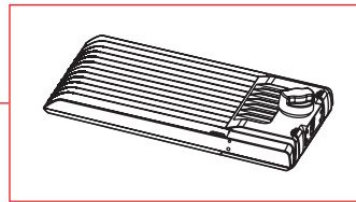
Wall Mount

| Catalog Number | UPC | Easy Code |
|------------------|--------------|-----------|
| KT-ALED-WM-1-KIT | 843654158952 | QCV-37 |



Trunnion Mount

| Catalog Number | UPC | Easy Code |
|------------------|--------------|-----------|
| KT-ALED-TM-1-KIT | 843654131658 | GTH-37 |



Note: Wall mount adaptor must be used with adjustable or fixed pole mounts



10 YEAR LIMITED WARRANTY

Accessories

LENSES/REFLECTORS

Field-Installable / Field-Use ONLY (purchased separately)

| CATALOG NUMBER | DESCRIPTION | UPC | EASY CODE |
|-----------------------|-----------------------------------|--------------|-----------|
| KT-ALED-LENS-M2-2-KIT | Type II optics lens Medium size | 843654153926 | UDR-71 |
| KT-ALED-LENS-M2-4-KIT | Type IV optics lens Medium size | 843654153964 | PNA-91 |
| KT-ALED-LENS-L2-2-KIT | Type II optics lens Large size | 843654153841 | NFU-40 |
| KT-ALED-LENS-L2-4-KIT | Type IV optics lens Large size | 843654153889 | BSU-72 |



Lenses
KT-ALED-LENS-M2-X-KIT



Lenses
KT-ALED-LENS-L2-X-KIT



RoHS
Compliant



10 YEAR
LIMITED WARRANTY