



K445 SOL-LUX - LED

The King Luminaire Sol-Lux fixture is one of the many classic shapes extensively used in the streetlighting revolution of the early 1900's. Offered today in high performance LED, it makes for a beautifully historical, energy efficient streetlighting solution.



**King
Luminaire**

PRODUCT SPECIFICATIONS

TI LED ENGINE

The light engine shall be an array of Cree LEDs (light emitting diodes) mounted to a highly conductive aluminum extrusion. The aluminum extrusion shall be mechanically attached to a thermal heat sink at both the top and bottom of the aluminum extrusion. It shall remain in thermal contact to the heat sinks with the use of conductive silicone. There shall be an aluminum uplight reflector in both Type IV & Type V IESNA distribution patterns.

P5 LED ENGINE

Light engine shall include an array of Cree X-Series high power LEDs. The emitters shall be mounted to a metal core circuit board using SMT technology. The LEDs and circuit boards shall then be mounted to a high performance heat sink.

External light control shall consist of high precision refractive lenses mounted above the LED emitter arrays in such a way to achieve optimum uplight control. The lenses shall also control horizontal light distribution so that either Type IV or V IESNA distribution patterns are achieved.

REFRACTIVE GLASS GLOBE

The glass globe shall be made of 9018 clear borosilicate glass having a minimum thickness of 0.300" with an overall diameter of 13.5" and an over-all height of 19.25". It shall be designed for optimum optical efficiency and light control.

The glass globe shall be secured to the luminaire body by means of a split-clamping ring of durable cast aluminum, which allows easy, tool-less removal of the globe assembly from the luminaire body by means of King Luminaire's Rotolock™ system.

A minimum ingress protection against water or dust particles of IP66 for the LED optical chamber shall be provided by non-porous, closed-cell silicon rubber sponge gasketing which is highly efficient in sealing against particle ingress for a wide temperature range (-40°F to 310°F).

PRISMATIC GLASS GLOBE

The globe shall be made of durable, high optical clarity borosilicate glass, molded into precise micro-prisms to provide a curvaceous profile, with a minimum thickness

of 0.3", overall diameter of 13.5", and overall height of 19.25". It shall be designed for optimum efficiency and light control.

The glass globe shall be secured to the luminaire body by means of a clamping ring made of durable and weather resistant cast aluminum, which allows for straightforward removal through minimal loosening of stainless-steel screws.

A minimum ingress protection against water or dust particles of IP66 for the LED optical chamber shall be achieved through the application of non-porous, closed-cell silicon rubber sponge gasketing which is highly efficient in sealing against particle ingress for a wide temperature range (-40°F to 310°F).

LUMINAIRE CONSTRUCTION

All K445 Sol-Lux cast components shall consist of a heavy cast aluminum. The main body, or capital, shall act as an enclosure for the driver assembly and is to be of adequate thickness to give sufficient structural rigidity. The capital shall have an opening at the base tenon body to allow the luminaire to be mounted to a tenon of 3-1/2" maximum diameter x 3-1/2" maximum length. The luminaire shall be locked in place by means of heavy duty, stainless steel set-screws.

DRIVER

The LED universal dimmable driver shall be DALI-2 D4i and capable of 108 - 305V or 249 - 528V input voltage, greater than 0.9 power factor, and less than 20% total harmonic distortion. Each LED system shall come with built-in, high-capacity surge protection, in addition to a complementary SPD added by King Luminaire, designed to withstand up to 20kV/10kA of transient line surge as per IEEE C62.41.2 C High and ANSI C136.2 Extreme Level (20kV/10kA). An in-line ferrite choke shall be utilized to provide protection against EFT's. The driver assembly shall work with service feeds powered with one hot wire and a neutral or two hot wires. The case temperature of the driver shall range from -40°C up to 70°C. The driver assembly shall be mounted on a heavy duty fabricated aluminum mounting bracket.

PHOTOMETRICS

Fixtures shall be tested to IESNA

LM79 specifications. These reports are to be available upon request.

CHROMATICITY

High output COB LEDs shall come standard at 2700K, 3000K, & 4000K (+/- 300K) with a minimum nominal 70 CRI. Additional CCT emitters are to be available upon request.

LUMEN MAINTENANCE

Reported (TM21) and Calculated (L70) reports are to be available upon request with a minimum calculated value of 100,000 hrs.

WIRING

All internal wiring and connections shall be completed so that it will be necessary only to attach the incoming supply connectors to Mate-N-Lok connectors or to a terminal block. Mate-N-Lok shall be certified for 600V operation. Internal wire connectors shall be crimp connector only and rated at 1000V and 105°C. All wiring to be CSA certified and/or UL listed, type SFF-2, SEWF-2, or SEW-2 No. 14 gauge, 105°C, 600V.

THERMALS

Fixtures shall be tested to determine the maximum in-situ case temperature of the LED emitters as recommended by Cree. This report is to be available upon request.

FINISH

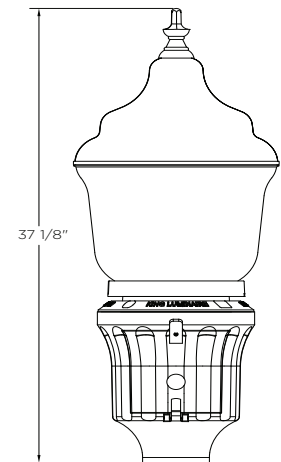
Housing shall be finished with a 13 step KingCoat™ super durable polyester TGIC powder coat. Standard colors shall include strobe white, brown metal, marina blue, gate gray, Chicago bronze, standard gold, standard black, federal green, and rain forest. Please see our website for a complete list of colors. Additional RAL or custom color matches are to be available.

MISCELLANEOUS

All exterior hardware and fasteners, wholly or partly exposed, shall be stainless steel alloy. All internal fasteners shall be stainless steel or zinc coated steel. All remaining internal hardware shall be stainless steel, aluminum alloy, or zinc coated steel.

WARRANTY

The K445 Sol-Lux LED luminaire shall come with a 7 year limited warranty.



CERTIFICATION:

Suitable for wet locations
ISO 9001
IP66
ARRA Compliant
LM79 / LM80 Compliant

DRIVER INFO:

>0.9 Power Factor
<20% Total Harmonic Distortion
120V - 277V or 347 - 480V
-40°C Min. Case Temperature
60°C Max. Case Temperature
Surge Protection: ANSI C136.2
extreme level 20kV/10kA
Dimming Capable

EPA:

1.16 sq. ft.

FIXTURE WEIGHT:

51 lbs

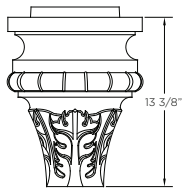


Not all product variations listed on this page are DLC qualified.
Visit www.designlights.org/search to confirm qualification.
05-16-2025

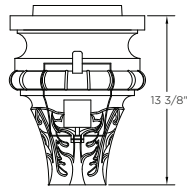
FIXTURE OPTIONS

K445 SOL-LUX - LED

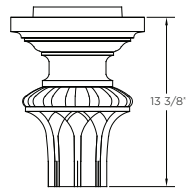
Capital Options



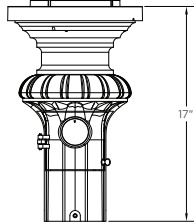
K13



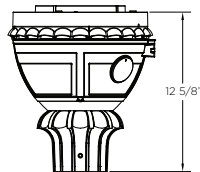
K14 C/W PR



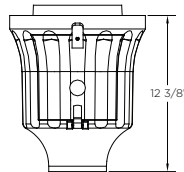
K16



K18 C/W PR



K26 C/W PR

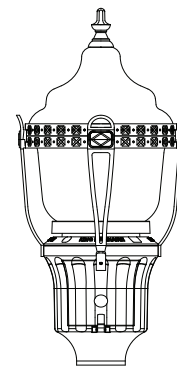


K24 C/W PR

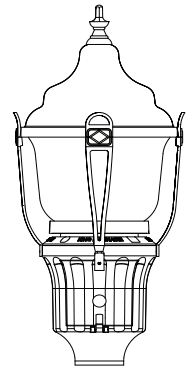
Decorative Options



SOLID SPUN
ALUMINUM TOP



SAVANNAH
RING & STRUTS



CONTEMPORARY
RING & STRUTS

Finial Options



#1



#2



#3

HOW TO ORDER

IES LIGHTING CLASSIFICATION IV - Type 4 (T1, P5) V - Type 5 (T1, P5)	WATTAGE 25, 40, 60, 75, 100 SOURCE SSL - Solid State	LINE VOLTAGE 120V-277V 347V-480V *Can accommodate a specific voltage within either of these ranges.	CAPITAL K5/K9, K6/K9, K13, K14, K16, K18, K24, K26	CCT 27K - 2700K 30K - 3000K 40K - 4000K	SOLID SPUN TOP SST - Solid Spun Top * leave blank if not required.	WATTAGE SELECTOR WS - Wattage Selector * leave blank if not required. Reset to full output prior to utilizing smart Controls.	PAINT COLOR GN - Federal Green BE - Blue GY - Gray BN - Brown BK - Black BZ - Bronze *Additional options available on website. BK will be provided if blank.
LUMINAIRE STYLE K445R - Sol-Lux (T1) K445S - Sol-Lux (P5)	OPTICAL OPTIONS T1 - T1 Optic (Tower Array) P5 - P5 Optic (Flat Array)	LENS OPTIONS GR - Glass Refractor (T1) GP - Glass Prism (P5)	PHOTO CONTROL OPTION NR - Not Required (K5/K9, K13, K16) PR7 - Photo Receptacle (located within K6/K9, K14, K18, K24, or K26 capital, otherwise on lid) PE7 - Photo Receptacle and Photo Eye (located within K6/K9, K14, K18, K24, or K26 capital, otherwise on lid) PBC - Photo Buttoncell (K5/K9, K13, K16)	FINIAL OPTIONS #1, #2, #3 *Additional options available on website. Leave blank if not required.	CONNECTION Quick Disconnect is standard. If terminal block is required, please specify TB.	LIGHT SHAPING HSS - Post Top House Side Shield * leave blank if not required.	SLIP FITTER 3DT - 3" Ø Tenon * leave blank for 3 1/2" Ø standard tenon.
DECORATIVE OPTIONS CRS - Contemporary Ring and Struts SRS - Savannah Ring and Struts * leave blank if not required.							