



## K423 ALLENTOWN - LED

The King Luminaire Allentown luminaire offers a new vertical prism lens and has a similar style to the K137 Yarmouth. Available with high performance LED engines, it makes for a perfect solution for city streets, parks, schools, and commercial areas.



**King  
Luminaire**

## PRODUCT SPECIFICATIONS

### B3 LED ENGINE

Light engine shall be an array of solid state Cree X-Series high power LEDs (light emitting diodes) mounted to a multi-sided, vertical heat sink of highly conductive aluminum. The LED emitters shall be mounted to removable circuit boards such that they are in full thermal contact with the vertical heat sink. The vertical heat sink shall be open at the bottom and vented at the top to provide appropriate dynamic airflow cooling for the LED array. The emitters shall be arranged in various patterns on each face of the vertical heat sink to provide the required light distribution.

The LED arrays shall include optical baffles constructed of optical grade ABS plastic with a vacuum metallized reflective surface or clear acrylic precision refractors over each diode. Optical options are designed to efficiently control light distribution to produce IESNA Type IV & V.

### P4 LED ENGINE

Light engine shall include an array of Cree X-Series high power LEDs (light emitting diodes). 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 II, III, IV, or V IESNA distribution patterns are achieved.

### LUMINAIRE CONSTRUCTION

All K423 Allentown cast components shall consist of a heavy grade cast aluminum. The main body, or capital, shall act as an enclosure for the ballast assembly and shall 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.

### GLOBE ASSEMBLY

The protective globe shall be made from impact modified acrylic molded with vertical prisms, having a minimum thickness of 0.125".

The globe assembly shall be a self-contained unit consisting of the globe, rugged cast locking ring, and the LED light engine and optical control. The LED light engine shall be of a modular design, and shall be able to be quickly removed from the globe assembly. The globe assembly shall be secured to the main housing by means of a spring-tensioned, twist-locking Rotolock™ unit to allow tool-less removal of the globe, while maintaining a secure seal between the globe assembly and the main body of the luminaire, making the K423 Allentown suitable for an outdoor environment.

### 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 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 by a DOE sanctioned test facility to determine the maximum in-situ solder-point or junction-point temperatures of the LED emitters. This report is to be available upon request.

### FINISH

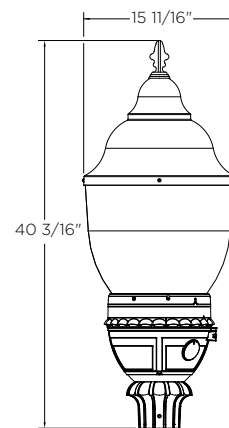
Housing shall be finished with a 13 step KingCoat™ SuperDurable polyester TGIC powder coat. Standard colors shall include strobe white, brown metal, marina blue, gate gray, Chicago bronze, standard gold, standard black, federal green, and rain forest. Please see our website for a complete list of colors. RAL and 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 K423 Allentown 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  
120 - 277V & 347 - 480V  
-40°C Min. Case Temperature  
70°C Max. Case Temperature  
Surge Protection: ANSI C136.2  
extreme level 20kV/10kA  
Dimming Capable

### EPA:

1.29 sq. ft.

### FIXTURE WEIGHT:

35 lbs

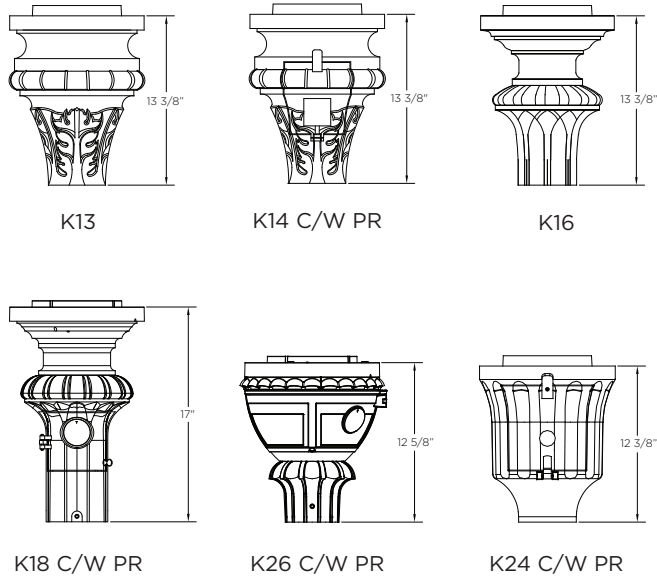


05-28-2025

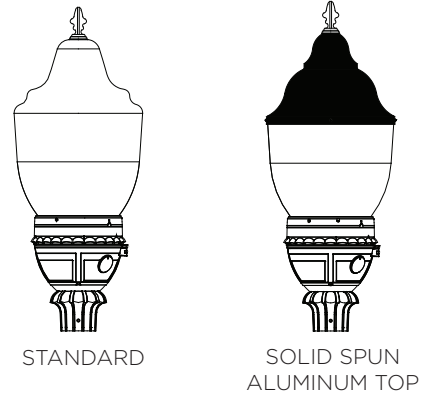
# FIXTURE OPTIONS

K423 ALLENTOWN - LED

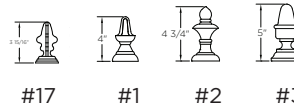
## Capital Options



## Decorative Options:



## Finial Options



# HOW TO ORDER

