



# K309 SATELLITE - LED

The K309 Satellite is a post top version of one of King Luminaire's most successful pendant luminaires- the K829 Aurora Sr. The soft, clean lines of this luminaire allow the K309 Satellite to complement harbor side, park and streetscape settings.



PROJECT: \_\_\_\_\_

PREPARED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

## PRODUCT SPECIFICATIONS

### LED ENGINE

Light engine shall include an array of 60 or 84 solid state 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 which is vented to the outside ambient air to provide dynamic airflow for cooling the system.

### OPTICS

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 Type II, III, IV or V IESNA distribution patterns are achieved.

### LENS

The K309 Satellite is available with or without a lens. Lens options include; sag glass or shallow glass lens. The glass lens shall be made of #9000 clear borosilicate glass (fully annealed). It shall maintain a minimum thickness of 0.3". The lens is secured by means of a cast A319 aluminum holding ring that is sealed to provide an IP66 Ingress rating. Additionally, a continuous circular gasket rated for 270°F must hold the lens into place within the cast ring assembly and assist in sealing the fixture.

### DECORATIVE BODY

The luminaire shall consist of a heavy Grade A319 cast aluminum housing that acts as the enclosure for the engine and is of adequate thickness to give structural rigidity. The engine must be affixed to the inside of the housing with stainless steel screws.

The K309 Satellite fixture is comprised of a one-piece spun aluminum alloy spinning with a minimum thickness of 0.09" which is permanently affixed to the cast aluminum housing with the use of stainless steel hardware. The spinning is attached to the cast aluminum capital with two aluminum struts.

The capital shall have an opening at the base tenon body to allow the luminaire to be mounted to a tenon

of 3" maximum diameter. The luminaire shall be locked in place by means of heavy duty, stainless steel set-screws.

### DRIVER

The LED universal dimmable driver will be class 2 and capable of 120 - 277V or 347 - 480V input voltage, greater than 0.9 power factor, less than 20% total harmonic distortion. The case temperature of the driver can range from -40°C up to 70°C. Each LED system comes with a standard surge protection designed to withstand up to 20kV/10kA of transient line surge as per IEEE C62.41.2 C High. An in-line ferrite choke is utilized to provide protection against EFT's. The driver assembly will be mounted on a heavy duty fabricated galvanized steel bracket to allow complete tool-less maintenance.

### PHOTOMETRICS

Fixtures are tested to IESNA LM79 specifications. These reports are available upon request.

### CHROMATICITY

High output LED come standard at 3000K & 4000K (+/- 300K) with a minimum nominal 70 CRI. Additional CCT emitters are available upon request.

### LUMEN MAINTENANCE

Reported (TM21) and Calculated (L70) reports are 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 150°C. All wiring to be CSA certified and/or UL listed, type SFF-2, SEWF-2, or SEW-2 No. 14 gauge, 150°C, 600V, and color coded for the required voltage.

### THERMALS

Fixtures tested to DOE sanctioned standards to determine the maximum in-situ solder-point or junction-point temperatures of the LED

emitters. This report is available upon request.

### FINISH

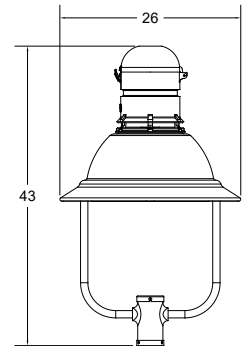
Housing is finished with a 13 step KingCoat™ SuperDurable polyester TGIC powder coat. Standard colors include strobe white, brown metal, marina blue, gate gray, Chicago bronze, standard gold, standard black, federal green and rain forest. Please see our website for a complete list of colors. RAL and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

### MISCELLANEOUS

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

### WARRANTY

The K309 Satellite LED luminaire comes with a 7 year limited warranty.



### CERTIFICATION:

CSA US Listed  
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 136.2  
extreme level 20 kV/10 kA

### EPA:

Flat Lens: 2.07 sq. ft.  
Sag Lens: 2.20 sq. ft.  
Shallow Lens: 2.51 sq. ft.

### FIXTURE WEIGHT:

Flat Lens: 49.64 lbs  
Sag Lens: 57.89 lbs  
Shallow Lens: 58.18 lbs





**Test Voltage:** 120V  
**Nominal Color Temperature:** 3000K & 4000K<sup>1</sup>  
**8060 Engine Series:** 60 Emitters (40 - 120W Max)  
**8084 Engine Series:** 84 Emitters (150W)  
**LED Engine + Driver Rated Life =** 100,000 hrs<sup>2</sup>

To learn more about the P4 Optic, please see the P4 Optic Information Sheet

	Photometric Test Report Number	Decorative Option	Color Temperature	IES Distribution	Nominal Watts	Engine Series	Delivered Lumens <sup>2</sup>	Efficacy (LM/W) <sup>3</sup>	mA @ Emitter	Driver Output Current	BUG Rating	HID Equivalent <sup>4</sup>
Flat Lens	In Testing	Flat Lens	4000	Type III	60	8060	N/A	N/A	300	3000	N/A	70 - 100
	In Testing	Flat Lens	4000	Type V	60	8060	N/A	N/A	300	3000	N/A	70 - 100
	In Testing	Flat Lens	4000	Type III	75	8060	N/A	N/A	400	4000	N/A	100 - 150
	In Testing	Flat Lens	4000	Type V	75	8060	N/A	N/A	400	4000	N/A	100 - 150
	In Testing	Flat Lens	4000	Type III	100	8060	N/A	N/A	480	4800	N/A	150 - 175
	In Testing	Flat Lens	4000	Type V	100	8060	N/A	N/A	480	4800	N/A	150 - 175
	In Testing	Flat Lens	4000	Type III	120	8060	N/A	N/A	600	6000	N/A	150 - 200
	In Testing	Flat Lens	4000	Type V	120	8060	N/A	N/A	600	6000	N/A	150 - 200
	In Testing	Flat Lens	4000	Type III	150	8084	N/A	N/A	500	7500	N/A	200 - 250
	In Testing	Flat Lens	4000	Type V	150	8084	N/A	N/A	500	7500	N/A	200 - 250
Sag Lens	In Testing	Sag Lens	4000	Type III	60	8060	N/A	N/A	300	3000	N/A	70 - 100
	In Testing	Sag Lens	4000	Type V	60	8060	N/A	N/A	300	3000	N/A	70 - 100
	In Testing	Sag Lens	4000	Type III	75	8060	N/A	N/A	400	4000	N/A	100 - 150
	In Testing	Sag Lens	4000	Type V	75	8060	N/A	N/A	400	4000	N/A	100 - 150
	In Testing	Sag Lens	4000	Type III	100	8060	N/A	N/A	480	4800	N/A	150 - 175
	In Testing	Sag Lens	4000	Type V	100	8060	N/A	N/A	480	4800	N/A	150 - 175
	In Testing	Sag Lens	4000	Type III	120	8060	N/A	N/A	600	6000	N/A	150 - 200
	In Testing	Sag Lens	4000	Type V	120	8060	N/A	N/A	600	6000	N/A	150 - 200
	In Testing	Sag Lens	4000	Type III	150	8084	N/A	N/A	500	7500	N/A	200 - 250
	In Testing	Sag Lens	4000	Type V	150	8084	N/A	N/A	500	7500	N/A	200 - 250
Shallow Lens	In Testing	Shallow Lens	4000	Type III	60	8060	N/A	N/A	300	3000	N/A	70 - 100
	In Testing	Shallow Lens	4000	Type V	60	8060	N/A	N/A	300	3000	N/A	70 - 100
	In Testing	Shallow Lens	4000	Type III	75	8060	N/A	N/A	400	4000	N/A	100 - 150
	In Testing	Shallow Lens	4000	Type V	75	8060	N/A	N/A	400	4000	N/A	100 - 150
	In Testing	Shallow Lens	4000	Type III	100	8060	N/A	N/A	480	4800	N/A	150 - 175
	In Testing	Shallow Lens	4000	Type V	100	8060	N/A	N/A	480	4800	N/A	150 - 175
	In Testing	Shallow Lens	4000	Type III	120	8060	N/A	N/A	600	6000	N/A	150 - 200
	In Testing	Shallow Lens	4000	Type V	120	8060	N/A	N/A	600	6000	N/A	150 - 200
	In Testing	Shallow Lens	4000	Type III	150	8084	N/A	N/A	500	7500	N/A	200 - 250
	In Testing	Shallow Lens	4000	Type V	150	8084	N/A	N/A	500	7500	N/A	200 - 250

<sup>1</sup>Color temperature is nominal, please see test report for specific chromaticity information

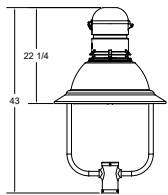
<sup>2</sup>Contact factory for TM21 information

<sup>3</sup>Due to the continuous advancements in LED technology, luminaire delivered lumen and efficacy is subject to change without notice at the discretion of King Luminaire

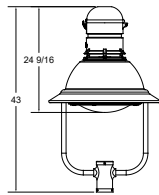
<sup>4</sup>Equivalence should always be confirmed by performing a photometric layout, due to the variability of performance requirements and application criteria

## FIXTURE OPTIONS

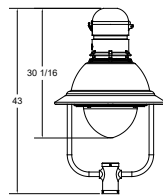
### Lens Options



Flat



Sag



Shallow

