# K705 CHICAGO JR. - LED

A 3/4 scaled version of the K805, the K705 Chicago Jr. offers a traditional, shrouded pendant designed to be used on its own in a street or area lighting system, or in combination with its matching K800 luminaire. This allows both roadway and pedestrian concerns to be individually met without any compromise.



# PRODUCT SPECIFICATIONS

#### LED ENGINE

Light engine shall include an array of 30 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 K705 Chicago Jr. pendant is available with or without a lens. Lens options include; sag glass lens; shallow glass lens; rippled acrylic shallow lens; or rippled acrylic deep dish lens. The glass lens shall be made of #9000 clear borosilicate glass (fully annealed). It shall maintain a minimum thickness of 0.16". The acrylic lens shall be moulded of rippled acrylic Acrylite Plus Acrylic Polymer, or equivalent, having a minimum thickness of 0.15". 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.

## LUMINAIRE CONSTRUCTION

The luminaire shall consist of a heavy 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.

### PLUMBIZER

The K705 Chicago Jr. comes with multiple mounting options including the KPL10, KPL11, KPL20,

KPL21, KPL30, KPL31 and KPL40. Please contact King Luminaire for more details and specifications.

#### 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 fabricated aluminum bracket to allow complete tool-less maintenance. Dimming capable using 1-10vdc (10% to 100%), 10v PWM, or resistance

### PHOTOMETRICS

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

### CHROMATICITY

High output LEDs come standard at 3000 & 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 sanc-

tioned standards to determine the maximum in-situ solder-point or junction-point temperatures of the LED emitters. This report is available upon request.

#### **FINISH**

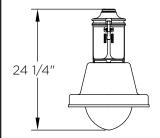
Housing is finished with a 13 step KingCoat™ SuperDurable polyester TGIC powder coat. Standard colors include strobe white, brown metal, marina blue, gate gray, Chicago bronze, standard gold, standard black, federal green and rain forest. Please see our website for a complete list of colors. RAL and 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 K705 Chicago Jr. 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 C136.2 extreme level 20kV/10kA Dimming Capable: 1-10vdc

#### EPA:

Flat: 0.58 sq.ft.
Sag Lens: 0.61 sq. ft.
Shallow Lens: 0.69 sq. ft.
Deep Dish Lens: 0.79 sq. ft.

#### FIXTURE WEIGHT:

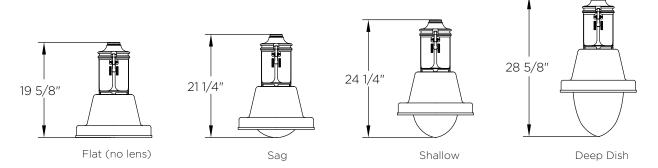
Flat: 19 lbs Sag Lens: 22 lbs Shallow Lens: 23 lbs Deep Dish Lens: 25 lbs



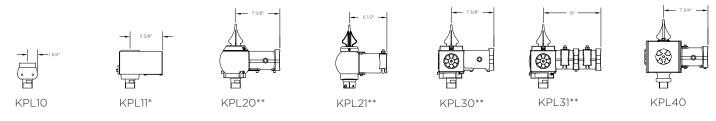


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# **Lens Options**



# **Plumbizer/Mounting Options**



<sup>\*</sup>Available with PR7
\*\*Available with PR7 or finial

# HOW TO ORDER

