# <u>King Luminiare K124-EAR-II-GR-K4 MOD-150W-MH-120(MT -LAMP External Optical Globe</u>



# **General Construction**

The globe assembly shall consist of a Rotolok cast aluminum A319 grade aluminum decorative base firmly and permanently attached to the globe. The globe assembly must be constructed on UV stabilized acrylic for both the prismatic refractive bottom and formed upper body and lid. The decorative finial must be mounted to an integrally mounted stainless steel bolt that ensures the final stays in place and cannot vibrate off over time. A General Electric globe ring attached via (4) nylon set screws, shall also be included. The color shall be King Luminaire Standard Gloss Black



The K4 cast transition ring shall have installed a Rotolok pressure ring rated IP-66 that is firmly held into place by stainless steel screws and pressure springs. This pressure ring assembly in conjunction with the mating cast globe rings creates a tool-less Rotolok feature for globe attachment and removal. This feature must be completely tool less and ensure with a 120 degree rotation that the globe is firmly set in place. The cast ring must have the house side cast into the globe ring for easy permanent reference.

# **Optical System**

The optical system shall be a highly efficient external prismatic refractor designed to attain a type II - IES classification. The refractor shall be made of clear acrylic or and shall maintain a minimum thickness of ½". The globe utilizing this external prismatic refractor must be manufactured with an internal reflector that helps attain a minimum downward efficiency of 64.8%.

### **Ballast**

C.S.A certified and or U.L listed, manufactured by "Advance Transformer Co." or "Magnetek" skeleton type, class H (180 degrees Celsius) minimum with ballast gear rated capacitor and igniter to a 90 degrees Celsius minimum and bench top coil rise of 100 degrees Celsius or lower. The ballast shall be mounted entirely within the Luminaire housing. The ballast shall have the lamp wattage and circuit voltage clearly identified and shall meet the current ANSI specification. The ballast assembly must be mounted on an A319 cast aluminum plate to allow complete tool-less installation and removal. Affixed to the ballast must be a decorative spun aluminum cone shaped spinning that acts as an enclosure for the socket and extender.

# Lamp/Lamp Holder

Lamps shall be 150 watt Metal Halide positioned vertically, base up. The lamp holder socket assembly shall be of rigid construction so that correct lamp position can be retained during service. C.S.A. certified or U.L recognized for outdoor use, rated for 1500w, 600v and 4 KV pulse rated. Nickel plated copper alloy screw shell with porcelain body. Integral #16 AWG SWE-2 wire leads.





# Wiring

All internal wiring and connection shall be completed so that it will be necessary only to attach incoming supply conductors to Mate-N-Loc connectors or to a terminal block. Terminal block shall be certified 250v, 70A with three pairs of terminals. Shall be rated at 250 volts and meet NEMA *Specifications for Wiring Terminals*. Mate-N-Loc shall be certified for 600v operation. Internal wire connectors shall be crimp connector only rated at 1000v and 150 degrees Celsius, All wiring to be .C.S.A certified or U.L. listed type SFF-2, SEWF-2 No. 14 gauge, 150 degrees Celsius, 600v color coded for the required voltage.

All exterior hardware and fasteners, wholly or partly exposed, shall be stainless steel aluminum 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.

# **FINISH:**

Specification King coat Powder Coating (minimum Requirements)

# **POWDURA TGIC**

Polyester Powder Coating

Performance Tests (for smooth films only)

Testing performed on Bonderite 1000 panels electrostatically applied and properly cured in an electric convention oven

Gloss Hatch Adhesion

ASTM D3359.....Excellent

Salt Spray Test

ASTM B117......1,000 hours +

Humidity

ASTM D2247, 100 degrees Fahrenheit, 100%

RII......1,000 hours +

Conical Mandrel

ASTM D1737.....to 180 degrees, 1/8" mandrel

Impact Resistance, Direct

ASTM D2794......up to 160 in lb

Pencil Hardness

ASTM D3363.....II Plus

## Characteristics

**Gloss:** 50 to 100 units

King Standard: 50 gloss units

Specific Gravity: (ASTM D792)

1.2 to 1.8

Recommended film thickness:

Mils 1.5 to 4.0

### Step 1

Consists of immersing the part(s) in a cleaner/phosphotize bath. The bath is continually agitated and heated to 120 to 160F. This cleans and ensures both inside and outside surfaces are free of grease and other contaminants.

Step 2

Fresh water spray rinse

## Step 3

Immersing part(s) in an agitated rinse tank to ensure elimination of wash solutions. A sealer is also applied at this stage helping to ensure the part is sealed for prevention of flash rusting and provides a good tooth for adhesion when applying powder coat finish.

#### Step 4

Forced dry off of chemical treatment bringing metal to a minimum temperature of 250F.

# Step 5

Electrostatically apply the polyester powder to a minimum of 4 mils to exterior exposed surfaces.

## Step 6

After application of polyester powder coating, the finish is baked at 365-392F for a period of 12-14 minutes after reaching the designated temperature. Batch oven is cooled and parts are removed for further cooling prior to testing and packaging.

All metal parts shall be factory cleaned and painted with the king coat process—detailing available on request. (K124R Specification Document 1 of 1)