

**LUMINAIRE, 100W HPS, 480 VOLT**  
**TEAR DROP (BLACK)**

I. Quantity

The base bid shall include the indicated number of 100 watt HPS luminaires to be furnished and installed as hereinafter specified.

II. Material

a. Luminaire

The luminaire shall have a wiring chamber at the top with 1-1/2 inch NPT threaded entry for pendant mounting. Stainless steel set screws shall be provided to lock the unit in position on the fitter. The chamber shall have a terminal block prewired with a plug that connects to the electrical module.

The cast aluminum electrical/reflector assembly shall be hinged to the wiring chamber for access to the terminal block and the electrical module. The assembly shall be latched in place by a captive stainless steel screw. The electrical module shall consist of the ballast, a street lighting grade socket, two (2) metal oxide varistors, and other electrical components prewired with a plug for attachment to the terminal block plug, mounted to a removable cast aluminum plate. The anodized reflector shall be formed to control voltage rise in the lamp and work with the refractor to provide a type III distribution of light. The ballast shall be a lead type 100W HPS/480 Volt with a protected starter board. The varistors shall be installed between incoming leads and fixture ground. The varistors shall comply with the ANSI-IEEE standard

C62.11-1987 and shall be capable of operation in an outdoor environment with a temperature range of -40 degrees C to 40 degrees C. The metal oxide shall have the following electrical ratings and characteristics:

1. Rating of 650 volts RMS with MCOV of 540 volts RMS.
2. An 8/20 micro seconds current wave of 5 KA shall have a maximum discharge voltage of 2.7 KV crest

The refractor/door assembly shall have a cast aluminum door to cradle the teardrop shaped glass refractor. The refractor shall provide an I.E.S. type II cut off distribution. The refractor assembly shall be hinged from the electrical reflector assembly and secured in place with a stainless steel, captive wing nut latch assembly.

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The luminaire shall be finished with polyester powder paint black.

The luminaire shall be U.L. listed suitable for wet locations at 40 degrees C.

The luminaire shall be Holophane Catalog #PH100HP48N2Q120396-PS, King #K84-EGD-III-100HPS-480V-KPL30-BLK & Lumec #100HPS-RN30-THB3GL-480-BKTX-LMS16340 or approved equal.

b. Fitter

The decorative arm fitter shall be designed to match the luminaire. The fitter body shall be heavy wall cast aluminum with top cover and threaded male connector for attachment to the luminaire. The fitter shall be supplied with two (2) stainless steel set screws that lock the fitter to the 2" bracket. The unit shall allow minimum adjustments of +-5 degrees horizontal and +-4 degrees vertical. The cast top cover shall be removable to allow access to the wire connections. All mounting and locking hardware shall be stainless steel.

The fitter shall be finished with polyester powder paint, black to match the luminaire. The fitter shall be Holophane Unique Solutions Catalog #BHLF200CADG or King #KPL30-BLK and Lumec #SMA-BKTX-LMS16340 or approved equal.

c. The 100 watt HPS lamp shall have a rated life of 24,000 hours and be equal in quality, design and performance to General Electric Co. LU100.

III. Installation

The 100 watt HPS luminaire fitter and lamp shall be assembled and be installed as shown on the drawings and indicated in the field by the engineer.

IV. Quotation

The 100 watt HPS luminaire shall be quoted as a unit price each in the appropriate place of this document.