

LUMINAIRE, 100W HPS, 480V
(RECTANGULAR)

I. Quantity

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

II. Material

- a. Luminaire - The luminaire shall be suitable for attachment by means of a slip-fitter connection to a 2" IPS bracket. The slip-fitter shall include means for securely attaching the luminaire and shall also provide for adjustment of approximately 5 degrees above or below horizontal.

Each luminaire shall be furnished with an internally mounted 480 volt ballast. The ballasts shall be a high power factor, three winding type with isolation between the two secondary windings and the primary winding. The ballast must provide a maximum of 14% wattage variation (measured along the left side of the lamp trapezoid) to a normal lamp when nominal input voltage varies within a range of + 10%.

The starting circuit must provide a minimum starting pulse repetition rate of one pulse per half-cycle (symmetrical). The spike position must occur within a maximum of +20 degrees of the center of the open-circuit voltage waveform. The pulse peak voltage should be maximum of 3000 volts. Pulses must be provided in the same polarity as the open circuit voltage.

The starting circuit and ballast must be capable of starting and maintaining lamp burning in ambient temperatures as low as -20 degrees. Ballast, starting circuit, and lamp socket shall be pre-wired and ready for installation; all of which shall be readily accessible for maintenance purposes. Each luminaire starting circuit and ballast shall be factory tested and matched to assure proper component tolerances and pulse parameters.

Optical Assembly shall consist of a reflector having a multi-faceted surface finished with a highly specular coating and a polycarbonate refractor.

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Luminaire housings both upper and lower, shall be die-cast aluminum, joined by an integrally cast hinged pin at the mounting end. A one hand latch for the refractor door shall be provided. Luminaire finish shall be baked on Statuary Bronze acrylic enamel.

Hardware shall be of corrosion-resistant materials.

Slip-fitter shall be adaptable to 1-1/4" or 2" mast arms.

Power pad shall be provided for quick, easy field servicing, Electrical components shall be mounted to the power pad.

Gasket shall be high temperature dacron polyester "breathing seal" to filter contaminates from the optical system.

The luminaire shall be ITT Catalog Number 54-56612-6S or approved equal.

- b. Lamp - The high pressure sodium lamps shall be 100 watt, with a rated life of 24,000 hours equal in quality, design and performance to General Electric Co. LU100.

III. Installation

The 100w HPS luminaires shall be installed as shown on the DWGS. and as indicated in the field by the engineer.

IV. Quotation

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