

1.0 Scope

1.1 This specification covers the requirements for furnishing and delivering 100 watt, 120 volt high pressure sodium post top luminaires for special lighting conditions as pictured.

1.2 The luminaires shall be pre-assembled, pre-wired and ready for pole top mounting. Each luminaire shall be provided as a complete unit including photoelectric control receptacle, polycarbonate refractor assembly, and attachment hardware.

1.3 Lamps and photoelectric controls shall not be furnished as part of the luminaire assembly described by this specification.



2.0 Standards

Unless otherwise stated in this specification, the luminaires shall comply with the latest revision of the following:

ANSI Z55.1 Gray Finishes for Industrial Apparatus and Equipment.

ANSI C136.3 Standard for Roadway Lighting Equipment -- Guide for Selection

ANSI C136.10 Roadway Lighting Equipment -- Locking-type Photocontrol Devices and Mating Receptacles --Physical and Electrical Interchangeability and Testing.s

3.0 Luminaire Construction

3.1 The luminaire housing shall be of cast aluminum, with a spun aluminum hood.

3.2 The terminal board shall be pre-wired for two-wire supply to serve the ballast and the photoelectric control.

3.3 The luminaire shall be provided with a locking type of photoelectric control receptacle in accordance with the latest revision of ANSI standard C136.10 and shall be pre-wired to the terminal board.

3.4 The circular refractor shall be made of heat-resistant polycarbonate for maximum resistance to thermal shock and impact. The lens shall be held in place with a positive mechanical connection.

3.5 Reflector shall be constructed from aluminum and have a specular finish of the Alzak* process or District approved equivalent (*Alzak finish a process of ALCOA). Reflectors shall be designed to provide IES Type III photometric pattern with adjustable lamp socket.

3.6 The reflector and lens shall be gasketed to provide a seal between the reflector and lens.

3.7 The lamp socket shall be porcelain and adjustable to properly position the high-pressure sodium lamp.

3.8 The lamp socket shall have a filter gasket and be positioned in such a manner as to allow circulation of air through the optical assembly and effectively filter external contaminants. The lamp socket shall be factory set to provide photometric pattern Type III.

3.9 Slipfitter clamps shall be capable of securing the luminaire to 2-3/8" - 3" OD tenon pipe on pole top without the use of adapters or rearrangement of mounting components. The ANSI C136.3 clamping and leveling adjustment hardware shall be of galvanized steel, stainless steel or other non-corrosive metal.

3.10 A 3" X 3" waterproof decal shall be placed on the side of each luminaire to indicate the wattage of the unit.

These decals shall be UV inhibited, yellow with black number 10. (See Construction Standard No. 4-14-3.0)

3.11 Wattage and Voltage Requirements

Lamp Wattage	Lamp Voltage	Supply Voltage	Cat. ID Number
100	55	120	703307

4.0 Ballast

4.1 The ballast shall be a high power factor Constant Wattage Auto (CWA Auto-Regulator or Regulated) type designated for a ± 10 percent line voltage variation

4.2 The ballast shall be pre-wired to the lamp socket and terminal board, requiring only connection of the power supply leads to the terminal. In the case of the 2-piece unit, the leads shall connect to the mount.

4.3 The wiring shall be color coded or otherwise labeled to indicate the supply lead connections.

4.4 A multi-volt ballast shall be furnished; The ballast shall come set on the 240 V tap.

4.5 All ballasts shall be labeled and easily identifiable. Terminals shall be push-on type connections.

4.6 Power requirements shall not exceed the following maximums:

Luminaire	Starting Amps	Operating Amps	Watts
100W-120V	1.8	1.3	145

5.0 Packaging

The luminaire shall be packaged in accordance with the manufacturer's commercial practice to ensure safe delivery without damage. The package shall be marked with the luminaire's date of manufacture.

6.0 Evaluation of Bids

The following factors will be considered in the analysis and evaluation of bids and subsequent bid award:

- A. Price and escalation.
- B. Published/Submitted Ballast Losses (watts). Submitted is preferred.
- C. Maximum Fixture Consumption (watts).
- D. Delivery schedule.

- E. Warranty.
- F. Previous experience with BIDDER.
- G. Adherence to Material Standard.
- H. Product quality.
- I. Convenience of maintenance.

7.0 General Bidding Conditions

The attached General Bidding Conditions are made a part of this Material Standard.