

1.0 Scope

- 1.1** This specification covers the requirements for furnishing and delivering 100 watt 120 volt high pressure sodium luminaires to be used for private area lighting.
- 1.2** The luminaires shall be pre-assembled, pre-wired and ready for pole mounting. Each luminaire shall be assembled as a complete unit including photoelectric control receptacle and reflector/refractor assembly attached to the arm. Mounting hardware shall be included.
- 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 C136.10** Roadway Lighting Equipment -- Locking-Type Photocontrol Devices and Mating Receptacles -- Physical and Electrical Interchangeability and Testing
ASTM A153 Zinc Coating (Hot-Dip) on Iron and Steel Hardware
IES Lighting Handbook

3.0 Luminaire Construction

- 3.1** The luminaire housing shall consist of a die cast aluminum head and arm assembly joined together into one integral unit. This assembly shall be a minimum of 36" and a maximum of 48" in overall length.
- 3.2** The luminaire shall be pre-wired for a two wire supply with a 120 volt ballast and a 120 volt photoelectric control. The wiring shall be supported or routed to minimize contact with parts having sharp edges that may cause abrasion of the conductor insulation.
- 3.3** The luminaire shall be provided with a locking type photoelectric control mounting receptacle in accordance with the latest revision of ANSI Standard C136.10 and shall be pre-wired to the terminal board. The receptacle shall be mounted on the upper side of the arm.
- 3.4** The Reflector-Refractor assembly shall provide an IES type V lighting distribution pattern.
- 3.4.1** The 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.)
- 3.4.2** The reflector shall be equipped with two toggle latches for attachment to the luminaire housing.
- 3.4.3** The reflector shall be equipped with a chain for attaching to the luminaire housing to prevent falling in the event of a toggle latch failure.
- 3.4.4** The refractor shall be an open bottom pendant type made of polycarbonate.

3.5 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.

3.6 A 3" X 3" waterproof decal shall be placed on the bottom of each luminaire to indicate the wattage of the unit. These decals shall be UV inhibited, yellow with black numbers and numbered 10.

3.7 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 pre-wired to the lamp socket and terminal board, requiring only connection of the power supply leads to the terminal.

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

4.3 Power requirements shall not exceed the following maximums:

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

5.0 Identification

5.1 Manufacturer shall permanently attach the following information to the inside door of the housing:

1. Manufacturer name
2. Manufacturer catalog number and type
3. Date of manufacture (codes are not acceptable)
4. Lamp wattage
5. Lamp IES designation and type
6. Primary voltage
7. Primary current
8. Wiring diagram corresponding to the components and with the manufacturer's ballast installed

6.0 Warranty

The fixture and all of its components shall carry a minimum non-prorated 5-year warranty from the date of installation. Any fixture that fails during the warranty period, regardless of which component may have failed, will be returned to the factory for exchange. The replacement unit will carry its own new 5-year warranty from the date of installation.

7.0 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. Luminaires shall be shipped with the reflector/refractor/arm assembled as one unit. Luminaires shall be shipped one per box.

8.0 Evaluation of Bids

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

- A. Luminaire price and escalation
- B. Replacement refractor/reflector price and escalation
- C. Delivery schedule
- D. Warranty
- E. Past performance of Bidder and product
- F. Adherence to Material Standard
- G. Product quality
- H. Convenience of maintenance

9.0 General Bidding Conditions

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