

PART 1 - GENERAL

1.1 REFERENCE

- .1 American National Standards Institute (ANSI):
  - .1 ANSI C82.1-97, Electric Lamp Ballasts-Line Frequency Fluorescent Lamp Ballast.
  - .2 ANSI C82.4-92, Ballasts for High-Intensity-Discharge and Low-Pressure Sodium Lamps.
- .2 American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE).
  - .1 ANSI/IEEE C62.41-1991, Surge Voltages in Low-Voltage AC Power Circuits.
- .3 American Society for Testing and Materials (ASTM)
  - .1 ASTM F1137-88(1983), Specification for Phosphate/Oil and Phosphate/Organic Corrosion Protective Coatings for Fasteners.
- .4 United States of America, Federal Communications Commission (FCC).
  - .1 FCC (CFR47) EM and RF Interference Suppression.

1.2 SHOP DRAWINGS  
AND PRODUCT DATA

- .1 Submit shop drawings in accordance with Section 26 05 00.
- .2 Submit shop drawings for ballasts and lamps.

PART 2 - PRODUCTS

2.1 LAMPS

- .1 High Pressure Sodium:

Bulb Wattage	Base	Initial	Life	CRI	Des
			Lumens	(h)	
150 W	Stand	Per Dwgs	20,000	70	Coated Lamp

- .2 Lamp Standard of Acceptance CGE, Phillips, OSRAM.

## 2.2 BALLASTS

- .1 High Pressure Sodium:
- .1 Rating: voltage as indicated, for use with, wattage as indicated, highpressure sodium lamp.
  - .2 Totally encased and designed for 40o C ambient temperature.
  - .3 Power factor: minimum 95% with 95% of rated lamp lumens.
  - .4 Type: reactor with matching ignitor as recommended by manufacturer.
  - .5 Input voltage range: plus or minus 10% of nominal.
  - .6 Minimum starting temperature: minus 29o C at 90% line voltage.
  - .7 Mounting: integral with luminaire.
  - .8 Crest factor: 1.8 maximum current, 2.0 maximum voltage.
  - .9 Ballast warranty: five (5) years including labour replacement.
  - .10 Standard of acceptance: advanced transformer, Osram Sylvanis, or approved equal.

## 2.3 FEATURES

- .1 120 V, 60 Hz, 150 watts HPS.
- .2 Tempered polycarbonite.
- .3 Hot restrike.
- .4 Manufacturers stainless steel brackets for wood pole.
- .5 Reflector.
- .6 For use in corrosive hosedown, marine, shipboard and hazardous environments.
- .7 Integrally ballasted luminaire.
- .8 SFMM series for marine applications.

- .9 "Quick release" lens latches for ease of entry. No screws.
- .10 Luminaire, lens frame, lens latches - 16 gauge 316SS.
- .11 Mounting yoke, safety lens door chains, cord grip (SFMM).
- .12 Mounting accessories - hot dipped galvanized steel.
- .13 UL1598 and 1598A marine outdoor.
- .14 NEMA 4X; IP66/67.
- .15 Type approval American Bureau of Shipping (ABS).
- .16 SFM2 listings.
- .17 ExnR, AxnR Restricted Breathing.

2.4 LIGHT CONTROL DEVICES

- .1 Refer detail located on drawings.

2.5 LUMINARIES

- .1 Refer details as shown on the electrical drawings.
- .2 Luminaries to have nameplate affixed to each luminaries indicating CUL or CSA certification, complete product number, date of manufacturer, voltage, number of lamps and ballast type.

2.6 SPARES

- .1 Provide the following spare materials, turn over to Departmental Representative prior to completion:
  - .1 Four (4) spare high pressure sodium lamps.
  - .2 Three (3) ballasts of each type used on the project.

2.7 STANDARD OF ACCEPTANCE

- .1 As per electrical drawings.

PART 3 - EXECUTION

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- 3.1 INSTALLATION      .1    Locate and install luminaires as indicated on wooden poles.  
                                 .2    Provide all mounting hardware as required by manufacturer for mounting fixture to a wooden pole. All mounting hardware shall be stainless steel.
- 3.2 WIRING              .1    Connect luminaires to lighting circuits.
- 3.3 LUMINAIRE            .1    Align luminaires for optimum lighting  
ALIGNMENT              performance and minimum glare.