

## SECTION 265113 – LAMPS AND BALLASTS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. This Section specifies the lamps and ballasts for light fixtures for buildings and structures.
  - 2. Provide all labor, materials, and equipment as necessary to complete all work as indicated on the drawings, and as specified herein.
- B. Related Sections include the following:
  - 1. Applicable sections of Division 26 – Electrical

#### 1.3 SUBMITTALS

- A. Shop Drawings:
  - 1. Lamps
  - 2. Ballasts

### PART 2 - PRODUCTS

#### 2.1 LAMPS

Select only those lamps that are applicable to the project. Only use T8 lamps and electronic ballasts in new buildings or in a room(s) when all the fixtures are being changed to new fixtures.

- A. Fluorescent Lamps
  - 1. Fluorescent lamps shall be low mercury type Environmental Protection Agency TCLP (Toxic Characteristic Leaching Procedure) compliant.

2. Fluorescent lamps, unless otherwise indicated, shall be F32, 32 watt, rapid start T8, 4100 degree Kelvin.
  - a. GE F32T8/XL/SPX41/HL/ECO
  - b. Osram/Sylvania FO32/841/XPS/ECO
  - c. Philips F32T8/ADV841/ALTO
3. Fluorescent lamps, unless otherwise indicated, shall be F40, 34 watt, rapid start T-12 cool white. Fluorescent lamps shall be General Electric Ecolux, Osram Sylvania Ecologic, or Philips Alto.

## 2.2 HID LAMPS

- A. 100 Watt high pressure sodium lamps for 25 foot street light luminaires shall be General Electric Company catalog no. LU100/MED, or equal Philips or Sylvania.
- B. 150 Watt high pressure sodium lamps for 25 foot street light luminaires shall be General Electric Company catalog no. LU150/55, or equal Philips or Sylvania.
- C. 250 Watt high pressure sodium lamps for 25 foot street light luminaires shall be General Electric Company catalog no. LU250, or equal Philips or Sylvania.
- D. 100 Watt mercury vapor lamps for bollard lights shall be General Electric Company Bonus Line catalog no. H100DX38-4 or equal Philips or Sylvania.
- E. 175 Watt mercury vapor lamps for 25 foot street light luminaires, mushroom walk and parking lights and concourse lights shall be General Electric Company BonusLine catalog no. H175DX39-22 or equal Philips or Sylvania.
- F. 250 Watt mercury vapor lamps for 25 foot street light luminaires shall be General Electric Company Bonus Line catalog no. H250DX37-5 or equal Philips or Sylvania.

## 2.3 INCANDESCENT LAMPS

- A. Incandescent lamps shall be 125 Volts, inside frosted, size as indicated.

## 2.4 BALLASTS

Select only the ballasts that are applicable to the project.  
Fluorescent fixtures.

- A. Electronic ballasts for fluorescent lamps shall be instant start, high efficiency, high power factor, parallel wired lamps, internally protected, ETL certified, UL labeled, Class P with "A" sound rating, ANSI Standard C82.11 compliant; withstand line transients as defined in ANSI/IEEE C62.41, Category A; comply with FCC Rules and Regulations CFR Title 47, Part 18, Subpart C.

1. Operating at 20kHz or higher with no detectable lamp flicker,
  2. Crest Factor of 1.7 or less,
  3. Total harmonic distortion at 10% or less,
  4. Power Factor of 98% or higher,
  5. Normal Ballast factor of .approx 0.86.
- B. Ballasts shall either be single voltage or multi-voltage.
- C. Approved ballasts are:
1. Advance Optanium IOP series, cat no. IOPA2P32N35M
  2. General Electric GE-MAX-N/Ultra series, cat no. GE232MAXPNULTRA
  3. Universal Lighting Technologies HE B232I series, cat no. B232IUNVHEN0001
- D. Dimming electronic ballasts for use with wall box dimmers shall be Advance Mark X.
- E. Electromagnetic ballast for fluorescent lamps shall be rapid start, high power factor, ETL, CBM certified, Type P with "A" sound rating, internally protected, with thermal cut-out plus fusing, such as General Electric Watt-Miser, or equal Jefferson, Advance, or Magnetic/Universal.

High pressure sodium fixtures.

- F. High pressure sodium light fixtures shall have a Payne Sparkman catalog number ULI-050S-NB Ultrasonic HPS Ignitor/No Blink ignitor for lamp ratings up to and including 150 watts.
- G. High pressure sodium light fixtures with lamp wattages above 150 watts to 400 watts shall use the Payne Sparkman catalog number ULI-100S ignitor. 1000 watt lamp fixtures shall use the Payne Sparkman catalog number ULI-250S ignitor.

PART 3 - EXECUTION

Not used.

END OF SECTION 265113