

**SECTION 26 51 00  
INTERIOR LIGHTING**

**PART 1 - GENERAL**

**1.01 GENERAL REQUIREMENTS**

- A. The Contractor is referred to the Instructions to Bidders and General Conditions, NYCHA Contracts; the Special Notice to Contractors; the Form of Proposal; the Form of Bid Bond; Division 01 - General Requirements of the Contract Specifications; the Contract Drawings and all Amendments and Addenda thereto; all of which govern the Work of this Section.

**1.02 SECTION INCLUDES**

- A. Interior Luminaires.
- B. Exit signs.
- C. LED Drivers.
- D. Luminaire accessories.

**1.03 RELATED REQUIREMENTS**

- A. Section 26 05 33.16 – Boxes for Electrical Systems
- B. Section 26 09 23 – Lighting Control Devices: Automatic controls for lighting including occupancy sensors.
- C. Section 26 27 26 – Wiring Devices: Manual wall switch and wall dimmers.

**1.04 REFERENCE STANDARDS**

- A. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2023.
- B. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- C. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- D. UL 924 - Emergency Lighting and Power Equipment; Current Edition, Including All Revisions.
- E. UL 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products; Current Edition, Including All Revisions.

**1.05 SUBMITTALS**

- A. Shop Drawings:
  - 1. Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.
  - 2. Provide photometric calculations where luminaires are proposed for substitution upon request.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets including detailed information on luminaire construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, photometric performance, installed accessories, and ceiling compatibility; include model number nomenclature clearly marked with all proposed features.
  - 1. LED Luminaire
    - a. Include estimated useful life.
    - b. Lamps: Include rated life, color temperature, color rendering index (CRI), and initial and mean lumen output.

- C. Project Record Documents: Record actual connections and locations of luminaires and any associated remote component.

## 1.06 WARRANTY

- A. Provide five (5) year manufacturer warranty for all LED luminaires, including drivers.

## PART 2 - PRODUCTS

### 2.01 LUMINAIRE TYPES

- A. Furnish products as indicated in luminaire schedule included on the Drawings or equal.
- B. Dimming Drivers:
  - 1. Manufacturer Limitations: Where possible, provide ballasts/drivers produced by a single manufacturer.

### 2.02 LUMINAIRES

- A. Manufacturers:
  - 1. TBD
  - 2. Or equal.
- B. Provide products that comply with requirements of NFPA 70.
- C. Provide products listed, classified, and labeled as suitable for the purpose intended.
- D. Unless otherwise indicated, provide complete luminaires including lamp(s) and all drivers, reflectors, lenses, housings and other components required to position, energize and protect the lamp and distribute the light.
- E. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, supports, trims, accessories, etc. as necessary for a complete operating system.
- F. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.
- G. LED Luminaires:
  - 1. Components: UL 8750 recognized or listed as applicable.
  - 2. LED Estimated Useful Life: Minimum projected life of 50,000 hours at 70 percent lumen maintenance.

### 2.03 DRIVERS

- A. Manufacturers:
  - 1. General Electric Company/GE Lighting: [www.gelighting.com](http://www.gelighting.com).
  - 2. Lutron Electronics Company, Inc.: [www.lutron.com/sle](http://www.lutron.com/sle).
  - 3. Philips Lighting North America Corporation: [www.usa.lighting.philips.com/#lse](http://www.usa.lighting.philips.com/#lse).
  - 4. Or equal.
- B. Dimmable LED Drivers:
  - 1. Dimming Range: Continuous dimming from 100 percent to five percent relative light output unless dimming capability to lower level is indicated, without flicker.
  - 2. Control Compatibility: Fully compatible with the dimming controls to be installed.
    - a. Wall Dimmers: See Section 26 27 26.
- C. Provide thermal fold-back protection by automatically reducing power output (dimming) to protect LED driver and LED light engine/fixture from damage due to over-temperature conditions that approach or exceed the LED driver's maximum operating temperature at calibration point.

- D. Provide integral recording of operating hours and maximum operating temperature to aid in troubleshooting and warranty claims.
- E. Dimmable LED Transformer/Drivers:
  - 1. Electronic, 0-10V dimming standard
  - 2. Control Compatibility: Fully compatible with the dimming controls to be installed.

#### **2.04 EXIT SIGNS**

- A. Description: Internally illuminated exit signs with LEDs unless otherwise indicated; complying with NFPA 101 and all applicable state and local codes, and listed and labeled as complying with UL 924.
  - 1. Number of Faces: Single or double as indicated or as required for the installed location.
  - 2. Directional Arrows: As indicated or as required for the installed location.

#### **2.05 ACCESSORIES**

- A. Stems for Suspended Luminaires: Steel tubing, minimum 1/2" size, factory finished to match luminaire or field-painted as directed.
- B. Threaded Rods for Suspended Luminaires: Zinc-plated steel, minimum 1/4" size, field-painted as directed.

### **PART 3 - EXECUTION**

#### **3.01 EXAMINATION**

- A. Verify that field measurements are as shown on the drawings
- B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate conductors in accordance with NFPA 70.
- C. Verify that suitable support frames are installed where required.
- D. Verify that branch circuit wiring installation is completed, tested, and ready for connection to luminaires.
- E. Verify that conditions are satisfactory for installation prior to starting work.

#### **3.02 INSTALLATION**

- A. Coordinate locations of outlet boxes provided under Section 26 05 37 as required for installation of luminaires provided under this section.
- B. Perform work in accordance with NECA 1.
- C. Install products in accordance with manufacturer's instructions.
- D. Install luminaires securely, in a neat and workmanlike manner.
- E. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.
- F. Install accessories furnished with each luminaire.
- G. Bond products and metal accessories to branch circuit equipment grounding conductor.

#### **3.03 FIELD QUALITY CONTROL**

- A. Operate each luminaire after installation and connection. Inspect for proper connection and operation.
- B. Test emergency power supply units to verify proper operation upon loss of normal power supply.

### **3.04 PROTECTION**

- A. Protect installed luminaires from subsequent construction operations.

**END OF SECTION 26 51 00**