

**Division 26 Electrical**  
**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, latest edition; 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 SCOPE OF WORK

- A. The contractor shall furnish and install all necessary labor, materials, equipment, services, tools and any other incidentals necessary for the following:
1. Ceiling-mounted LED surface-mounted fixtures.
  2. Ceiling-mounted LED recessed fixtures.
  3. Emergency lighting units.
  4. Lamps.
  5. LED drivers.

1.03 REGULATORY REQUIREMENTS

- A. New York City Electrical Code.
- B. New York City Building Code.
- C. Conform to requirements of ANSI/NFPA 70.
- D. Conform to requirements of NFPA 101.
- E. Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purpose specified and shown.
- F. Lighting fixtures, components, and installation shall be made in accordance with the American National Standards Institute, the latest revision of the National Electrical Code, New York State Energy Conservation Construction Code, and any applicable Federal and State regulations.
- G. All lighting fixtures, ballasts, transformer, and other electrical components shall be manufactured in strict accordance with the appropriate and current requirements of the Underwriters Laboratories Inc. "Standard for Safety," and any others as they may be applicable. The Underwriters Laboratories, Inc. labels shall be affixed to all lighting fixtures.

H. The Contractor is responsible for coordinating the characteristics and the appropriate U.L. labeling of all fixtures and their components with the ambient conditions which will exist when the lighting fixtures are installed. Coordination shall include, but not be limited to, wet location labels, damp location labels, explosion proof applications, dust ignition proof applications, insulated ceilings, and other conditions which may compromise the validity of the U.L. label.

#### 1.04 RELATED WORK

A. Section 26 00 00 Basic Electrical Requirements.

B. Section 26 05 37 – Boxes for Electrical Systems

C. Section 26 27 26 – Wiring Devices

#### 1.05 REFERENCE STANDARD

A. NECA 1-Standard for Good Workmanship in Electrical Construction.

B. NEMA 410 –Performance Testing for Lighting Control and Switching Devices with Electronic Drivers and Discharge Ballasts: 2015

C. NFPA 70- National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

D. UL 8750- Light Emitting Diode (LED) Equipment for Use in Lighting Products; Current Edition, Including All Revisions.

#### 1.04 SUBMITTALS

A. Shop Drawings

1. Installation details for all luminaires. Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.

2. Provide photometric calculations for all luminaires.

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. Lamps: Include rated life, color temperature, color rendering index (CRI), and initial and mean lumen output.

a. Include estimated useful life.

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

#### 1.05 WARRANTY

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

## PART 2 - PRODUCTS

### A. LUMINAIRE TYPES

1. Furnish products as indicated in luminaire schedule included on the drawings or Architect approved equal.
2. Manufacturer Limitations: Where possible, provide ballasts/drivers produced by a single manufacturer.

### B. LUMINAIRES

#### 1. Manufacturers:

a **WILL VARY ON A PER JOB BASIS**

2. Provide products that comply with requirements of NFPA 70.
3. Provide products listed, classified, and labeled as suitable for the purpose intended.
4. 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.
5. 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.
6. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.

### C. 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.

#### 2.04 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).

**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.
- F. Coordinate location of fixtures with mechanical or structural obstructions. Note any existing obstructions which prevent installation of the fixtures as shown on the drawings to the Architect prior to installation. Any field changes made by the Contractor without prior approval of the Architect will be changed at the discretion of the Architect at no cost to the Owner.

**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.
- D. Install products in accordance with manufacturer's instructions.
- E. Install luminaires securely, in a neat and workmanlike manner.
- F. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.
- G. Install accessories furnished with each luminaire.
- H. 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**