

## SECTION 26 56 00 EXTERIOR LIGHTING



### PART 1 GENERAL

#### 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

##### AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

AASHTO LTS (2013; 6th Edition; Rev 2022) Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals

##### AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C136.3 (2014; 2020) Roadway and Area Lighting Equipment Luminaire Attachments

ANSI C136.21 (2024; R2019; 2014) Roadway Lighting Equipment - Vertical Tenons Used with Post-Top-Mounted Luminaires

##### ASTM INTERNATIONAL (ASTM)

ASTM A123/A123M (2017) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products

ASTM A153/A 153M (2016a) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

##### ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)

IESNA HB-10-11 (2011; ERRATA 1 AND 2:2015) Lighting Handbook, 10<sup>th</sup> Edition

##### INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)

IEEE C2 (2023) National Electrical Safety Code

##### NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA IA 10030 (2024) Standard for Industrial Controls and Systems Enclosures

##### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (2020) National Electrical Code

##### UNDERWRITERS LABORATORIES INC. (UL)

UL 1598 (2021) Luminaires

#### 1.2 RELATED REQUIREMENTS

Section 26 00 00, "Basic Electrical Materials and Methods," applies to this section, with the additions and modifications specified herein.

#### 1.3 DEFINITIONS

- A. Average Life: Time after which 50 percent will have failed and 50 percent will have survived under normal conditions.

#### 1.4 SUBMITTALS

Joe Webb Memorial Branch Library  
Haynesville, Louisiana  
Coco & Company  
Project #0524  
8.8.25

Submit the following:

A. Manufacturer's Catalog Data.

1. Luminaires
2. Steel poles

B. Drawings

1. Luminaire drawings
2. Poles

- a. Luminaire Drawings: Include dimensions, effective projected area (EPA), accessories, and installation and construction details. Photometric data, including zonal lumen data, average and minimum ratio, aiming diagram, and candlepower distribution data shall accompany shop drawings.
- b. Poles: Include dimensions, wind load determined in accordance with AASHTO LTS, pole deflection, pole class, and other applicable information.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Steel Poles: Do not store poles on ground. Support poles so they are at least one foot above ground level and growing vegetation. Do not remove factory-applied pole wrappings until just before installing pole.

## PART 2 PRODUCTS

### 2.1 PRODUCT COORDINATION

Products and materials not considered to be lighting equipment or lighting fixture accessories are specified in Section 26 20 00, "Interior Distribution System". Lighting fixtures and accessories mounted on exterior surfaces of buildings are specified in Section 26 51 00, "Interior Lighting."

### 2.2 LUMINAIRES

UL 1598. Provide luminaires as indicated. Provide luminaires complete with lamps of number, type, and wattage indicated. Details, shapes, and dimensions are indicative of the general type desired, but are not intended to restrict selection to luminaires of a particular manufacturer. Luminaires of similar designs, light distribution, and brightness characteristics, and of equal finish and quality will be acceptable as approved.

### 2.3 POLES

Provide poles designed for wind loading of 100 miles per hour determined in accordance with AASHTO LTS while supporting luminaires having effective projected areas indicated. Poles shall be anchor-base type designed for use with underground supply conductors. Poles shall have oval-shaped handhole having a minimum clear opening of by 5 inches. Handhole cover shall be secured by stainless steel captive screws.

- A. Steel Poles: AASHTO LTS. Provide steel poles having minimum 11-gage steel with minimum yield/strength of 48,000 psi and factory finish. Provide a pole grounding connection designed to prevent electrolysis when used with copper ground wire.

### 2.4 POLE FOUNDATIONS

Anchor bolts shall be steel rod having a minimum yield strength of 50,000 psi; the top 12 inches of the rod shall be galvanized in accordance with ASTM A 153/A 153M. Concrete shall be as specified in Section 03 30 00, "Cast-In-Place Concrete."

## PART 3 EXECUTION

### 3.1 INSTALLATION OF POLES

IEEE C2, NFPA 70, and to the requirements specified herein.

- A. Steel: Provide pole foundations with galvanized steel anchor bolts, threaded at the top end and bent 90 degrees at the bottom end. Provide galvanized nuts, washers, and ornamental covers for anchor bolts. Thoroughly compact backfill with compacting arranged to prevent pressure between conductor, jacket, or sheath and the end of conduit ell. Adjust poles as necessary to provide a permanent vertical position with the bracket arm in proper position for luminaire location.

### 3.2 GROUNDING

Ground noncurrent-carrying parts of equipment including metal poles, luminaires, mounting arms, brackets, and metallic enclosures as specified in Section 26 20 00, "Interior Distribution System." Where copper grounding conductor is connected to a metal other than copper, provide specially treated or lined connectors suitable for this purpose.

### 3.3 FIELD QUALITY CONTROL

Upon completion of installation, conduct an operating test to show that the equipment operates in accordance with the requirements of this section.

END OF SECTION 26 56 00