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American National Standard

For Roadway and Area Lighting Equipment—Fiber-Reinforced Composite (FRC) Lighting Poles

Secretariat:

National Electrical Manufacturers Association

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FOREWORD

At the time this standard was approved, the ANSI C136 committee was composed of the following members:

Acuity Brands Lighting
Alabama Power
American Electric Lighting
Ceravision
City of Kansas City, Missouri
City of Los Angeles, Bureau of Street Lighting
Cooper Lighting
Duke Energy
Edison Electric Institute
EPRI
Florida Power and Light
FRE Composites Inc.
GE Lighting
Georgia Power Company
Gulf Power Company
Hapco Aluminum Pole Products
Holophane An Acuity Brands Company
Hubbell Lighting, Inc.
Intelligent Illuminations Inc.
Kauffman Consulting, LLC
LITES
National Grid
Pacific Northwest National Laboratory
Philips HADCO
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PNNL
Progress Energy
SELC Lighting
Shakespeare Composite Structures
South Carolina Electric & Gas Co.
SouthConn Technologies, Inc.
StressCrete Ltd/King Luminaire Co., Inc.
Sunrise Technologies, Inc./FP Outdoor Lighting Controls
TE Connectivity
Utility Metals Division of Fabricated Metals, LLC
Valmont Industries, Inc.
Vamas Engineering and Consultants
Vandal Shields
Xcel Energy

1 SCOPE

This standard applies to fiber-reinforced composite (FRC) lighting poles used for roadway and area lighting. This standard includes nomenclature, dimensional data, performance criteria, and some interchangeability features for standard poles as well as those that must meet breakaway requirements for poles as described in AASHTO LTS *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*.

2 REFERENCES

2.1 Normative References

This standard incorporates by undated reference provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed below. For undated references, the latest edition of the publication referred to applies (including amendments).

AASHTO LTS *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*

ANSI C136.3 *American National Standard for Roadway and Area Lighting Equipment—Luminaire Attachments*

ANSI C136.13 *American National Standard for Roadway and Area Lighting Equipment—Metal Brackets of Wood Poles Used in Roadway Lighting*

ANSI C136.21 *American National Standard for Roadway and Area Lighting Equipment—Vertical Tenons Used with Post Top-Mounted Luminaires*

ASTM G154 *Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials*

2.2 Informative References

This standard is intended to be used in conjunction with the following publications. The latest edition of the publication applies (including amendments).

ASTM A153 *Specifications for Zinc Coating (Hot-Dip) on Iron and Steel Hardware*

3 DEFINITIONS

Anchor Base: A feature attached to the bottom end of a pole designed to be mounted on an accommodating platform.

Anti-Rotational Device: A device attached to the pole at a point below ground level to ensure the pole does not twist after installed and in service.

Arm: A structural member approximately perpendicular to a pole, which supports a luminaire.

Bolt Circle: The diameter of a circle that will intersect the centerline of the anchor bolts that are spaced equal distance to each other.

Direct Burial: A term used to refer to a pole designed to be supported by surrounding earth or other material.