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Revision of C136.36B-2008

## **American National Standard**

### ***For Roadway and Area Lighting Equipment— Concrete 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:

Alabama Power	LITES
American Electric Lighting	National Grid
Caltrans	OSRAM SYLVANIA Inc.
Ceravision	Philips HADCO
City of Kansas City, Missouri	Philips Lumec
City of Los Angeles, Bureau of Street Lighting	PNNL
Duke Energy	ROAM/DTL
Duke Energy - Florida	SELCLighting
Eaton's Cooper Lighting	Shakespeare Composite Structures
Edison Electric Institute	South Carolina Electric & Gas
EPRI	SouthConn Technologies, Inc.
EYE Lighting International of N.A., Inc.	StressCrete Ltd/King Luminaire Co., Inc.
Florida Power and Light	Sunrise Technologies, Inc./FP Outdoor Lighting Controls
FRE Composites (2005) Inc.	TE Connectivity
GE Lighting	Toshiba International Corporation
Georgia Power Company	Utility Metals Division of Fabricated Metals, LLC
Gulf Power Company	Valmont Structures
Hapco Aluminum Pole Products	Vamas Engineering and Consultants
Holophane An Acuity Brands Company	Vandal Shields
Hubbell Lighting, Inc.	Xcel Energy
Inovus Solar	
Intelligent Illuminations Inc.	
Kauffman Consulting, LLC	
LED Roadway Lighting	

## 1 SCOPE

This standard applies to concrete lighting poles used in roadway and area lighting equipment and includes nomenclature, performance criteria, marking and recordkeeping requirements, and certain minimal material needs. It does not cover concrete poles manufactured with any modified concrete mix incorporating the use of polymers or other modifiers.

## 2 NORMATIVE REFERENCES

This standard incorporates by 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).

ASTM A416	<i>Pre-stressing Steel Reinforcement</i>
ASTM C-150	<i>Cement</i>
ASTM C-494	<i>Admixtures</i>

## 3 INFORMATIVE REFERENCES

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

AASHTO LTS	<i>Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals</i>
ANSI C136.3	<i>American National Standard for Roadway and Area Lighting Equipment— Luminaire Attachments</i>
ANSI C136.21	<i>American National Standard for Roadway and Area Lighting Equipment—Vertical Tenons Used with Post-Top Mounted Luminaires</i>
CSA A14	<i>Concrete Poles</i>
ASTM A82-97a	<i>Standard Specification for Steel Wire, Plain, for Concrete Reinforcement</i>

## 4 DEFINITIONS

**Anchor Base:** A base plate attached to the butt of a pole by approved means to accommodate anchor bolts connected to a foundation.

**Aperture:** Any opening in a pole more than 2 in (50 mm) across the width, or more than 4 in (100 mm) along the length of the pole.

**Arm:** A structural member attached approximately perpendicularly to a pole to which a luminaire may be attached.

**Bolt Circle:** The diameter of a circle that intersects the anchor bolts that are spaced an equal distance from each other.

**Static Cast Pole:** A pole in which the concrete is compacted by means of vibration.

**Classification Test:** The bending test described in sections 11.1 and 11.2 to verify the designed performance of a pole.

**Cracking Load:** The load applied to a pole to create a bending moment that causes the pole to form a crack, while under load attaining a width of 0.004 in (0.1 mm), which usually occurs on the tension face of the pole.