ANSI C136.41-2013

American National Standard

For Roadway and Area Lighting Equipment— Dimming Control Between an External Locking Type Photocontrol and Ballast or Driver

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
American Electric Lighting
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Ceravision
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City of Los Angeles, Bureau of Street Lighting
Duke Energy
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SouthConn Technologies, Inc.
StressCrete Ltd/King Luminaire Co., Inc.
Sunrise Technologies, Inc./FP Outdoor Lighting Controls
TE Connectivity
Toshiba International Corporation
Utility Metals Division of Fabricated Metals, LLC
Valmont Structures
Vamas Engineering and Consultants
Xcel Energy

1 SCOPE

This standard describes methods of light level control between an external locking type photocontrol (or similar device) and a dimmable ballast or driver for street and area lighting equipment. Mechanical, electrical, and marking requirements are established for dimming, locking type photocontrols, and mating receptacles. All requirements of ANSI C136.10-2010 for photocontrols and receptacles shall apply except where specifically superseded by this standard.

2 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).

ANSI C136.10-2010 *American National Standard for Roadway and Area Lighting Equipment – Locking-type Photocontrol Devices and Mating Receptacle – Physical and Electrical Interchangeability and Testing*

ANSI C136.31-2010 *American National Standard for Roadway and Area Lighting Equipment – Luminaire Vibration*

IEC 60929, Annex E Control Interface for Controllable Ballasts

IEC 62386 *Digital Addressable Lighting Interface*

ASTM B488-11 *Standard Specification for Electrodeposited Coatings of Gold for Engineering Uses*

NOTE ANSI Standards are available from IHS, 15 Inverness Way East, Englewood, CO 80112-5776 Phone: 303/397-7956, Fax: 303/397-2740, E-mail: global@his.com or www.global.his.com.

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).

IESNA DG-28 (formally DG-13) *Guide for the Selection of Outdoor Lighting Controls*

IESNA TM-23-11 *Lighting Controls Protocols*

ANSI C136.2-2004 (R2009) *American National Standard for Roadway and Area Lighting Equipment – Luminaire Voltage Classification*

ANSI/IEEE C62.41-1991 *IEEE Recommended Practice on Surge Voltages in Low-voltage Power Circuits*

Journal of the Illuminating Engineering Society, Vol. 21, No. 2, Summer 1992, pp 54-56.

UL 94-1996 *Test for Flammability of Plastic Materials*

UL 773, Plug-In, *Locking Type Photocontrols*

4 DEFINITIONS

Ballast: Stabilizes the current through an electrical load. Generally refers to High Intensity Discharge (HID) luminaires such as High Pressure Sodium (HPS) and Metal Halide.