NEMA Standards Publication


ANSI C136.35-2020

# American National Standard for Roadway and Area Lighting Equipment — Locking-Type Power Taps (LTPT)

National Electrical Manufacturers Association

National Electrical Manufacturers Association
1300 North 17th Street, Suite 900 • Rosslyn. VA 22209
www.NEMA.org

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# *American National Standard for Roadway and Area Lighting Equipment— Locking-Type Power Taps (LTPT)*

Secretariat:

**National Electrical Manufacturers Association**

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**American National Standards Institute, Inc.**

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## Foreword

At the time this Standard was approved the ANSI C136 committee was composed of the following Members:

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American Electric Power
Amphenol Canada Corp.
Atlas Lighting Products, Inc.
California Lighting Technology Center, UC Davis
Caltrans
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Westire Technology Limited
Xcel Energy.

# 1 Scope

This Standard covers the electrical and mechanical compatibility of electrical devices mounted into a locking-type photocontrol receptacle for the purpose of providing ancillary power to an external device. This Standard does not cover the device being powered.

# 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).

UL 773, *Plug-In Locking Type Photocontrols for Use with Area Lighting*

UL773A, *Nonindustrial Photoelectric Switches for Lighting Control*

ANSI C136.2 *American National Standard for Roadway and Area Lighting Equipment—Dielectric Withstand and Electrical Transient Immunity Requirements*

ANSI C136.10 *American National Standard for Roadway and Area Lighting Equipment—Locking-type Photocontrol Devices and Mating Receptacles—Physical and Electrical Interchangeability*

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

ANSI C136.41 *American National Standard for Roadway and Area Lighting Equipment—Dimming Control Between an External Locking Type Photocontrol and Ballast or Driver*

FCC Regulations, Title 47 C.F.R., Part 15 and Part 18

# 3 Definitions

## 3.1 Device

Any equipment that connects to the luminaire mechanically and/or electrically.

## 3.2 Ancillary Electrical Device

Any additional device electrically connected to the luminaire, such as communication devices, cameras, etc., that may or may not be used for the operation of the luminaire.

## 3.3 Effective Projected Area (EPA)

A calculated value based on the cross-sectional area of an object and its drag coefficient used in determining loads on surfaces induced by winds. The coefficient is a function of the wind-facing surface contour for the object. The EPA can be calculated from the object's dimensions and applying an approximate drag coefficient based on its shape, or it can be calculated from the load measurements made in a wind tunnel on the object.