# NEMA Standards Publication LE 4-2012 (R2018)

Recessed Luminaires, Ceiling Compatibility

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### Foreword

The purpose of this Standards publication is to establish standardized dimensions for recessed luminaires that, if adhered to, will ensure compatibility with conventional generic ceiling suspension systems. Compatibility, as referred to in this Standards publication, means that luminaires will be designed to fit into ceiling systems without causing distortion or misalignment of ceiling members and in such a manner as to ensure their proper support within the ceiling in accordance with the *National Electrical Code*<sup>®</sup>. Compatibility further means that a luminaire will be placed in support systems in a symmetrical manner without oversized gaps existing between the luminaire and ceiling tiles or ceiling suspension members.

It is not the intent of this Standards publication to inhibit luminaire design or to impose arbitrary tolerances on any luminaire manufacturer.

This Standards publication does not attempt to establish comprehensive ceiling grid system Standards; other sizes and designs of ceiling systems may be used. However, NEMA-type luminaires may not be compatible with these non-defined systems.

In the preparation of this Standards publication input of users and other interested parties has been sought and evaluated. Inquiries, comments, and proposed or recommended revisions should be submitted to the Indoor Lighting Equipment Subdivision of NEMA by contacting:

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This Standard was developed by the Luminaire Section to supersede and replace the original NEMA LE 1-1974 and later NEMA LE 4-1987. Section approval of the Standard does not necessarily imply that all section members voted for its approval or participated in its development. At the time it was approved, the Luminaire Section was comprised of the following members:

ABB Acuity Brands, Inc. Atlas Lighting Products, Incorporated Cree, Inc. Current Powered by GE Dialight Eaton Lighting Solutions EiKO, Ltd. Emerson EYE Lighting International of N.A., Incorporated Halco Lighting Technologies Hubbell Lighting, Incorporated Legrand, North America Leviton Manufacturing Co. Inc. Lutron Electronics Company, Inc. MaxLite RAB Lighting Satco Products, Incorporated Signify North America Corporation Southwire Corporation TCP International Holdings Ltd. Universal Lighting Technologies Westgate MFG, Inc. <This page is intentionally left blank.>

# Section 1 General

#### 1.1 Scope

This Standards publication contains definitions, dimensions, and tolerances for recessed luminaires designed to use fluorescent, high-intensity discharge, and incandescent light sources.

Drawing examples show fluorescent lamps. However, these drawings also apply to high-intensity discharge, compact fluorescent, incandescent, and other lamp sources.

This Standard does not apply to hard metric dimensioned products. However, soft metric dimensions or direct metric conversions may be applied throughout this Standard as one inch equals 25.4 millimeters.