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American National Standard for Roadway and Area Lighting Equipment— Ingress Protection (Resistance to Dust, Solid Objects, and Moisture) for Luminaire Enclosures and Devices

Secretariat:

National Electrical Manufacturers Association

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American National Standards Institute, Inc.

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Foreword

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1 Scope

This Standard details the requirements for ingress protection of luminaires in roadway and area lighting equipment, installed for their intended use and specified by end-user. While these requirements are suitable for most types of lighting equipment, it should not be assumed that all the listed degrees of protection apply to a particular type of equipment. The manufacturer of the equipment should be consulted to determine the degrees of protection available.

The adoption of this Standard should promote uniform methods of describing the protection provided by the lighting equipment (luminaire) enclosure.

> Note—The basis for this Standard is IEC 60529, *Degrees of protection provided by enclosures (IP Code)*; and IEC 60598-1, *Luminaires—Part 1: General requirements and tests,* Section 9, Resistance to dust, solid objects, and moisture. Tables 1, 2, and 3, in particular, are based on IEC 60529.

The types of protection covered by this Standard are as follows:

a. Protection of persons against contact with, or approach to, energized electrical components inside the light fixture (luminaire) enclosure, and protection of the equipment against ingress of solid foreign bodies; and
b. Protection of the equipment inside an enclosure against harmful ingress of water, solid foreign objects, or dust

It should be noted that the IP rating of a luminaire has no bearing on its dirt depreciation characteristics. Testing is performed on new luminaires and is not an indicator of the life or reliability of the luminaire during its service life. Some components, such as seals and gaskets, deteriorate over time with exposure to heat and the environment and should be evaluated separately.