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American National Standard for Electric Lamps—Single-Ended Metal Halide Lamps

National Electrical Manufacturers Association

National Electrical Manufacturers Association
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ANSI C78.43-2017

American National Standard for Electric Lamps—
Single-Ended Metal Halide Lamps

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Foreword (This foreword is not part of American National Standard C78.43-2017).

Suggestions for improvement of this standard should be submitted to the Secretariat, C78 Committee, National Electrical Manufacturers Association, 1300 North 17th Street, Suite 900, Rosslyn, Virginia 22209.

This standard was processed and approved by Accredited Standards Committee on Electric Lamps, C78. Committee approval of the standard does not necessarily imply that all committee members voted for its approval.

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Organization of this Standard

This standard has been arranged in three parts:

Part I covers general requirements and information. It provides normative references and offers brief explanations of the meaning or the application of some of the numerical data given on the individual lamp data sheets in Part III of this standard. It also provides requirements that are common to all metal halide lamp types.

Part II contains the maximum outline drawings of each lamp size.

Part III contains individual single-ended lamp data sheets that provide the specific lamp, ballast, and luminaire requirements of each of the standardized single-ended metal halide lamp types.

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1 Scope

This standard sets forth the physical and electrical requirements for single-ended metal halide lamps operated on 60 Hz ballasts to ensure interchangeability and safety. The data given also provides the basis for the electrical requirements for ballasts and ignitors, as well as the lamp-related requirements for luminaires. This standard includes lamps whose arc tubes are made of quartz or ceramic materials. Luminous flux and lamp color are not part of this standard.

1.1 Important Patent Disclaimer

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2 Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ANSI C78.30-1997 (R2011) *Procedure for Use in Preparation of Lamp Space Drawings*
ANSI C78.379-2006 (R2015) C*lassification of Beam Patterns of Reflector Lamps*
ANSI C78.380-2007 (R2010) *Electric Lamps—High-intensity Discharge Lamps—Method of Designation*
ANSI C78.389-2004 (R2009) *Electric Lamps—HID lamps—Methods of Measuring Characteristics*
ANSI C78.62035-2016 *Discharge Lamps (Excluding Fluorescent Lamps)—Safety Specifications*
ANSI C78.79-2014 *Nomenclature for Envelope Shapes Intended for Use with Electric Lamps*
ANSI C81.61-2017 *Electric Lamp Bases*
ANSI C81.62-2017 *Lampholders for Electric Lamps*
ANSI C81.63-2017 *Gauges for Electric Lamp Bases and Lampholders*
ANSI C81.64-2005 (R2014) *Guidelines and General Information for Electric Lamp Bases, Lampholders, and Gauges*
ANSI C82.4-2002 (R2010) *Ballasts for High-intensity Discharge and Low-pressure Sodium Lamps (multiple supply type)*
ANSI C82.5-2016 *Reference Ballasts for High-intensity Discharge Lamps*
ANSI C82.6-2015 *Ballasts for High-intensity Discharge Lamps—Methods of Measurement*
ANSI C82.9-2016 *Definitions for High-intensity Discharge and Low-pressure Sodium Lamps, Ballasts, and Transformers*
ANSI C82.14-2016 *Low-Frequency Square Wave Electronic Ballasts—for Metal Halide Lamps*
ANSI/UL1598-2010 *Standard for Safety—Luminaires*