



**ANSI C78.45-2016 (R2022)**

*American National Standard for Electric Lamps—  
Self-Balasted Mercury Lamps*

Secretaria

**National Electrical Manufacturers Association**

Approved: April 12, 2022

**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not part of American National Standard C78.45-2016 (R2022).)

Suggestions for improvement of this standard should be submitted to the Secretariat C78, NEMA, 1300 North 17<sup>th</sup> Street, Suite 900, Rosslyn, Virginia 22209.

This standard was processed and approved by the C78 Committee. Committee approval of the standard does not necessarily imply that all committee members voted for that approval.

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### **Organization of this standard**

This standard has been arranged in two 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 II of this standard. It also provides requirements that are common to all self-ballasted mercury lamp types.

**Part II** contains individual lamp data sheets that provide the specific physical and electrical requirements for each of the standardized self-ballasted mercury lamp types.

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## Part I General requirements and information

### 1 Scope

This standard sets forth the physical and electrical requirements for self-ballasted mercury lamps operated on 60 Hz supply lines to ensure interchangeability and safety. The data given also provides the lamp-related requirements for luminaires. Luminous flux and lamp color are not part of this standard.

### 2 Normative references

The following standards contain provisions that, through reference in this text, constitute provisions of this American National Standard. 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	<i>American National Standard for Electric Lamps—Procedure for Use in Preparation of Lamp Space Drawings</i>
ANSI C78.379	<i>American National Standard for Electric Lamps—Classification of the Beam Patterns of Reflector Lamps</i>
ANSI C78.380	<i>American National Standard for Electric Lamps—High-Intensity Discharge (HID)—Method of Designation</i>
ANSI C78.389	<i>American National Standard for Electric Lamps—High-Intensity Discharge (HID)—Methods of Measuring Characteristics</i>
ANSI C78.79	<i>American National Standard for Electric Lamps—Nomenclature for Envelope Shapes Intended for Use with Electric Lamps</i>
ANSI C81.61	<i>American National Standard for Electrical Lamp Bases—Specifications for Bases (Caps) for Electric Lamps</i>
ANSI C81.62	<i>American National Standard for Electric Lampholders</i>
ANSI C81.63	<i>American National Standard for Gauges for Electric Lamp Bases and Lampholders</i>
ANSI C81.64	<i>American National Standard—Guidelines and General Information for Electrical Lamp Bases, Lampholders and Gauges</i>
ANSI C82.1	<i>American National Standard for Lamp Ballasts—High-Intensity Discharge (HID) and Low-Pressure Sodium (LPS) Lamps—Definitions</i>
ANSI C82.2	<i>Luminaires</i>
ANSI C78.62035	<i>Electric Lamps—Discharge Lamps (Excluding Fluorescent Lamps)—Safety Specification</i>