American National Standard

Approved: April 08, 2013 Secretariat: American National Standard Lighting Group

for electric lamps:

Single-Ended Metal Halide Lamps

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Printed in the United States of America

Foreword (This foreword is not part of American National Standard C78.43-20XX).

Suggestions for improvement of this standard should be submitted to the Secretariat C78 American National Standard Lighting Group, 1300 North 17th Street, Suite 1752, Rosslyn, VA 22209.

This standard was processed and approved by the Accredited Standards Committee on Electric Lamps, C78, and its Work Group C78WG04. Work Group approval of the standard does not necessarily imply that all Work Group members voted for that approval.

The reader should note that changes to this standard are colorized in <u>red</u>. Additionally, Part III Data Sheet Paragraphs have been renumbered and Sections 3 and 4 are new to the Standard and not shown in red.

Amendment / Change	CDV	RV
Revision	CDV 78_4321	RV 78_4322

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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

It is possible that some of the elements of this document may be the subject of patent rights. When this document was approved for publication, ANSLG did not know of any patent applications, patents pending, or existing patents. ANSLG shall not be held responsible for identifying any or all such patent rights.

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, Procedure for Use in Preparation of Lamp Space Drawings

ANSI C78.379-2006, Classification of Beam Patterns of Reflector Lamps

ANSI C78.380-2007, Electric Lamps - High-intensity Discharge Lamps - Method of Designation

ANSI C78.389-2004, Electric Lamps – HID lamps - Methods of Measuring Characteristics

ANSI C79.1-2002, Nomenclature for Glass Bulbs Intended for Use with Electric Lamps

ANSI ANSLG C81.61-2009, Electric Lamp Bases

ANSI_ANSLG C81.62-2009, Lampholders for Electric Lamps

ANSI_ANSLG C81.63-2009, Gauges for Electric Lamp Bases and Lampholders

ANSI C81.64-2005, Guidelines and General Information for Electric Lamp Bases, Lampholders, and Gauges

ANSI C82.4-2002, Ballasts for High-intensity Discharge and Low-pressure Sodium Lamps (multiple supply type)

ANSI C82.5-1990, Reference Ballasts for High-intensity Discharge Lamps

ANSI C82.6-2005, Ballasts for High-intensity Discharge Lamps - Methods of Measurement

ANSI C82.9-1996, Definitions for High-intensity Discharge and Low-pressure Sodium Lamps, Ballasts, and Transformers

ANSI/UL1598-2008, Standard for Safety - Luminaires