American National Standard for Electric Lamps—Specifications for Performance of Self-Ballasted Compact Fluorescent Lamps

Secretariat:

National Electrical Manufacturers Association

Approved: December 21, 2017

American National Standards Institute, Inc.
NOTICE AND DISCLAIMER

The information in this publication was considered technically sound by the consensus of persons engaged in the development and approval of the document at the time it was developed. Consensus does not necessarily mean that there is unanimous agreement among every person participating in the development of this document.

ANSI standards and guideline publications, of which the document contained herein is one, are developed through a voluntary consensus standards development process. This process brings together volunteers and/or seeks out the views of persons who have an interest in the topic covered by this publication. While NEMA administers the process to promote fairness in the development of consensus, it does not write the document and it does not independently test, evaluate, or verify the accuracy or completeness of any information or the soundness of any judgments contained in its standards and guideline publications.

NEMA disclaims liability for any personal injury, property, or other damages of any nature whatsoever, whether special, indirect, consequential, or compensatory, directly or indirectly resulting from the publication, use of, application, or reliance on this document. NEMA disclaims and makes no guaranty or warranty, expressed or implied, as to the accuracy or completeness of any information published herein, and disclaims and makes no warranty that the information in this document will fulfill any of your particular purposes or needs. NEMA does not undertake to guarantee the performance of any individual manufacturer or seller's products or services by virtue of this standard or guide.

In publishing and making this document available, NEMA is not undertaking to render professional or other services for or on behalf of any person or entity, nor is NEMA undertaking to perform any duty owed by any person or entity to someone else. Anyone using this document should rely on his or her own independent judgment or, as appropriate, seek the advice of a competent professional in determining the exercise of reasonable care in any given circumstances. Information and other standards on the topic covered by this publication may be available from other sources, which the user may wish to consult for additional views or information not covered by this publication.

NEMA has no power, nor does it undertake to police or enforce compliance with the contents of this document. NEMA does not certify, test, or inspect products, designs, or installations for safety or health purposes. Any certification or other statement of compliance with any health- or safety-related information in this document shall not be attributable to NEMA and is solely the responsibility of the certifier or maker of the statement.
AMERICAN NATIONAL STANDARD

Approval of an American National Standard requires verification by the American National Standards Institute, Inc. (ANSI) that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer. An American National Standard implies a consensus of those substantially concerned with its scope and provisions. Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly, and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

The existence of an American National Standard does not in any respect preclude anyone, whether s/he has approved the standard or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards. It is intended as a guide to aid the manufacturer, the consumer, and the general public.

ANSI does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the ANSI. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on this title page.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of ANSI require that action be taken periodically to reaffirm, revise, or withdraw this standard. Purchasers of American National Standards may receive current information on all standards by calling or writing ANSI.
Foreword (This foreword is not part of American National Standard C78.5-2017)

Suggestions for improvement of this standard should be submitted to:

Secretariat C78
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 that approval.
CONTENTS

Foreword ........................................................................................................................................... ii

1 Scope ................................................................................................................................................. 1

2 Normative References ......................................................................................................................... 1

3 Definitions ........................................................................................................................................... 2

3.1 General ........................................................................................................................................... 2

3.2 Minimum Starting Temperature ...................................................................................................... 2

4 Requirements .................................................................................................................................... 2

4.1 General ........................................................................................................................................... 2

4.2 Marking .......................................................................................................................................... 2

4.3 Other Markings ............................................................................................................................... 2

4.4 Electro-magnetic interference ........................................................................................................ 2

4.5 Performance ................................................................................................................................... 2

4.6 Life test ......................................................................................................................................... 3

4.7 Power Quality ............................................................................................................................... 3

4.8 Lamp current operating frequency ............................................................................................... 3

4.9 Line transient requirements ........................................................................................................ 3

5 Selection of Test Samples .................................................................................................................. 3

6 Tests .................................................................................................................................................. 3

6.1 General ........................................................................................................................................... 3

6.2 Power Supply ................................................................................................................................... 3

6.3 Electrical Instruments .................................................................................................................... 3

6.4 Life test .......................................................................................................................................... 4

Annex A (Informative) Bibliography ....................................................................................................... 5
1 Scope

This standard specifies the performance requirements together with the test methods and conditions required to show compliance of self-ballasted compact fluorescent lamps up to 60 watts which are intended for domestic and similar general lighting purposes. Such lamps shall have a rated input voltage of 120 or 277 volts at 60 Hz and an Edison screw base. Globe and reflector types are excluded.