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American National Standard for Reference Ballasts for Fluorescent Lamps

National Electrical Manufacturers Association

ANSI C82.3-2016

American National Standard for Electric Lamps—Reference Ballasts for Fluorescent Lamps

Secretariat:

National Electrical Manufacturers Association

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American National Standards Institute, Inc.

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Foreword (This foreword is not part of ANSI C82.3-2016)

Suggestions for improvement of this standard should be submitted to:

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This standard was processed and approved by Accredited Standards Committee (ASC) on Electric Lamps, C82, and its work group, C82-1. Committee approval of the standard does not necessarily imply that all committee members voted for that approval.

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1 Scope

This standard describes the essential design features and operating characteristics of reference ballasts for fluorescent lamps. The items specified are those that have been found necessary to ensure accurate and reproducible results when either lamps or ballasts are being tested. It includes requirements for both line frequency and high-frequency circuits. The specific values of rated input voltage and impedance for each size of lamp are listed in the applicable ANSI C78 lamp standard.

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 C78.81 *Double-Capped Fluorescent Lamps—Dimensional and Electrical Characteristics*

ANSI C78.375 *Fluorescent Lamps—Guide for Electrical Measurements*

ANSI C78.901 *Single Base Fluorescent Lamps—Dimensional and Electrical Characteristics*

ANSI C82.1 *Line Frequency Fluorescent Lamp Ballast*

ANSI C82.11 *High-Frequency Fluorescent Lamp Ballasts (Consolidated)*

ANSI C82.13 *Definitions—for Fluorescent Lamps and Ballasts*

IES LM-9 *IESNA Approved Method for the Electrical and Photometric Measurements of Fluorescent Lamps*

3 Definitions

See ANSI C82.13 for related definitions.

4 Marking

The reference ballast shall be provided with durable legible marking as follows:

Fixed-impedance type

a) the words “reference ballast” or “HF (high frequency) reference ballast” as applicable, in full;
b) manufacturer’s name and model number;
c) manufacturer’s serial number;
d) lamp type, wattage, and current;
e) rated supply voltage and frequency; and
f) impedance.

Adjustable-impedance type

a) the words “reference ballast” or “HF reference ballast” or “HF Power Supply” as applicable, in full;
b) manufacturer’s name and model number;
c) manufacturer’s serial number;
d) impedance range at rated frequency (or frequencies);
e) maximum voltage per element and maximum across unit;
f) maximum current;
g) frequency; and
h) connection diagram.