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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 13434-2026

Replacing GB/T 13434-2008

**Methods of measuring characteristics for discharge
lamps(excluding fluorescent lamps)**

放电灯（荧光灯除外）特性测量方法

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document supersedes GB/T 13434-2008 "Methods for Measuring Characteristics of

Discharge Lamps (excluding Fluorescent Lamps)" and is consistent with GB/T 13434-2008.

Aside from structural adjustments and editorial changes, the main technical changes are as follows.

---The scope of this document has been changed (see Chapter 1, Chapter 1 of the 2008 edition);

---Added the terms and definitions for "restart voltage spike" and "restart voltage" (see 3.6, 3.8);

---The general requirements for measuring restart voltage spikes have been changed (see 10.3.2.1, 2008 version);

---The general requirements for restart voltage measurement have been changed (see 10.3.3.1, 2008 version);

---The spectral reflectance coefficient $\rho_{0i}(\lambda)$ values for the experimental colors ($i=1\sim14$) have been changed (see Appendix G, Appendix G of the 2008 edition).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Lighting Appliances (SAC/TC224).

1 Scope

This document describes the measurement methods for the characteristics of discharge lamps (excluding fluorescent lamps).

This document applies to systems powered by a 50Hz AC power supply, with appropriate ballasts and triggers as needed, operating at the rated power supply voltage.

92%~106%, high-pressure mercury lamps conforming to GB/T 21093, self-ballasted fluorescent high-pressure mercury lamps conforming to QB/T 2050, and others conforming to...

High-pressure sodium lamps conforming to GB/T 13259, low-pressure sodium lamps conforming to GB/T 23126, and scandium-sodium series metal halide lamps conforming to GB/T 18661.

Rare earth metal halide lamps conforming to GB/T 24457, sodium-thallium-indium metal halide lamps conforming to GB/T 24333, and other products conforming to GB/T 24457.

Ceramic metal halide lamps (hereinafter referred to as "lamps") conforming to GB/T 24458.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 2900.65 Electrical Engineering Terminology - Lighting (GB/T 2900.65-2023, IEC 60050-845:2020, IDT) GB/T 3978 Standard Illuminating Bodies and Geometric Conditions GB/T 13259 Performance requirements for high-pressure sodium lamps (GB/T 13259-2021, IEC 60662:2011, NEQ) GB/T 15039 Standard light bulbs for luminous intensity and total luminous flux GB/T 15043-2008 Methods for measuring photoelectric parameters of incandescent light bulbs GB/T 18661-2020 Performance Requirements for Metal Halide Lamps (Scandium-Sodium Series) GB/T 21093 Performance requirements for high-pressure mercury lamps (GB/T 21093-2007, IEC 60188:2001, NEQ) GB/T 23126 Performance requirements for low-pressure sodium lamps (GB/T 23126-2008, IEC 60192:2001, MOD) GB/T 24333 Metal halide lamps (sodium thallium indium series) Performance requirements (GB/T 24333-2017, IEC 61167:2015) NEQ GB/T 24392 Method for measuring lamp holder temperature rise (GB/T 24392-2009, IEC 60360:1998, IDT) GB/T 24457 Metal halide lamps (rare earth series) Performance requirements (GB/T 24457-2009, IEC 61167:1998, NEQ) GB/T 24458 Performance requirements for ceramic metal halide lamps (GB/T 24458-2017, IEC 61167:2015, NEQ) GB/T 26180-2010 Methods for the expression and measurement of color rendering properties of light sources (CIE 13.3-1995, IDT) QB/T 2050 Self-ballasted fluorescent high-pressure mercury lamps

3 Terms and Definitions

The terms and definitions defined in GB/T 2900.65 and the following terms and definitions apply to this document.

initial value

The light, electrical, and color parameters of the lamp were measured after aging for 100 hours.

warm-up time

The time required for the lamp voltage to reach the value specified in the product standard after the lamp is connected to the specified power supply voltage.