

CCS K 71



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

**GB/T 13259-2021**

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**High-pressure sodium vapour lamps. Performance  
requirements**

**Issued on: November 26, 2021**

**Implemented on: June 1, 2022**

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**Issued by: State Administration for Market Regulation, China National  
Standardization Administration**

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## Foreword

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

Drafting.

This document replaces GB/T 13259-2005 "High Pressure Sodium Lamps", compared with GB/T 13259-2005, except for structural adjustments and editorial changes

In addition, the main technical changes are as follows.

---Added the definition of rated value, initial value and initial luminous flux (see 3.1, 3.2, 3.4);

- Modified the definition of rated power (see 3.3, 2.1 in.2005 edition);
- The definition of coaxiality has been deleted (see 2.4 in the.2005 edition);
- Added general requirements, external dimensions and lamp cap requirements, lamp start-up and temperature rise characteristics, electrical characteristics, and light characteristics of the lamp
- Requirements, lamp life characteristics requirements (see Chapter 5);
- Added Chapter 6 "Test Methods" (see Chapter 6);
- Modified packaging requirements (see 8.2.2, 8.2.3, Appendix G of the.2005 edition);
- Modified the voltage pulse diagram of the lamp start-up test (see Appendix D, Appendix A of the.2005 edition);
- Added 250W high luminous efficiency, 400W high luminous efficiency, 600W and 600W high luminous efficiency specifications and their parameter tables (see A.3);
- Combined the parameter table of internal start and external start of ellipsoid 50W, 70W and 150W (see A.3, the 15th of the.2005 edition)
- chapter);
- Deleted the specifications and parameter tables of the medium color rendering type and high color rendering type that are not produced by major domestic enterprises (see the 15th edition of the.2005 edition)
- chapter).

This document is drafted with reference to IEC 60662.2011 "Performance Requirements for High Pressure Sodium Lamps", and the degree of consistency is non-equivalent.

## 1 Scope

This document specifies the classification and model, main dimensions, basic parameters, Technical requirements, test methods, inspection rules, signs, packaging, transportation and storage, etc.

This document also specifies the electrical characteristics of the lamp when it is started and working, as well as the design of ballasts, triggers and lamps used with it.

parameter.

Note. The "lamp" that appears in this document stands for "high pressure sodium lamp", unless it is specifically specified to be other types of lamps.

This document applies to single-ended high pressure sodium lamps with a power of 50W~1000W diffused powder-coated or transparent glass bulb.

## 2 Normative references

The content of the following documents constitutes an indispensable clause of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 191 Packaging, Storage and Transportation Graphic Mark (GB/T 191-2008, ISO 780.1997, MOD)

Types and dimensions of GB/T 1406.1 lamp caps Part 1.Screw-type lamp caps (GB/T 1406.1-2008, IEC 60061-1.

2005, MOD)

GB/T 1483.1 Lampholders and lampholders inspection gauges Part 1.Screw-type lampholders and lampholders gauges (GB/T 1483.1-2008, IEC 60061-3.2004, MOD)

GB/T 2828.1 Sampling Inspection Procedures by Attributes Part 1.Batch Inspection Sampling Plan Retrieved by Acceptance Quality Limit (AQL) (GB/T 2828.1-2012, ISO 2859-1.1999, IDT)

GB/T 2829 Periodic Inspection Attribute Sampling Procedure and Table (Applicable to the Inspection of Process Stability)

GB/T 2900.65 Electrical engineering term lighting (GB/T 2900.65-2004, IEC 60050(845).1987, MOD)

GB 7000.1 Lamps Part 1.General requirements and tests (GB 7000.1-2015, IEC 60598-1.2014, IDT)

GB/T 13434 Discharge lamp (except fluorescent lamp) characteristic measurement method (GB/T 13434-2008, ANSI C78.389, NEQ)

GB/T 15042 Lamp accessories discharge lamps (except tubular fluorescent lamps) performance requirements for ballasts (GB/T 15042-2008, IEC 60923.2006, IDT)

GB/T 15042-2008 Lamp accessories discharge lamps (except tubular fluorescent lamps) performance requirements for ballasts (IEC 60923. 2006, IDT)

GB 19510.2 Lamp control device Part 2.Special requirements for starting devices (except

glow starters) (GB 19510.2-2009,

IEC 61347-2-1..2006, IDT)

GB 19510.2-2009 Lamp control device Part 2.Special requirements for starting devices  
(except glow starters)

(IEC 61347-2-1.2006, IDT)

GB 19510.10 Lamp control device Part 10.Special requirements for ballasts for discharge  
lamps (except fluorescent lamps)

(GB 19510.10-2009, IEC 61347-2-9.2003, IDT)

GB 19652 discharge lamps (except fluorescent lamps) safety requirements (GB  
19652-2005, IEC 62035.1999, IDT)

GB 19652-2005 discharge lamps (except fluorescent lamps) safety requirements (IEC  
62035.1999, IDT)