

ICS 29.140.30

CCS K 71



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

GB/T 16843-2023

Replacing GB 16843-2008

Single-capped fluorescent lamps - Safety specifications

Issued on: December 28, 2023

Implemented on: January 1, 2026

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

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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 replaces GB 16843-2008 "Safety Requirements for Single-ended Fluorescent Lamps": Compared with GB 16843-2008, except for structural adjustments and compilation

In addition to editorial changes, the main technical changes are as follows:

--- Added "This document also specifies photobiological safety requirements based on IEC 62471" (see Chapter 1);

---Added Table 1 (see Chapter 1);

---Added terms such as "nominal value", "rated value", "SoS value" and "effective ultraviolet radiation power ratio" (see Chapter 3);

- Added Figure 1 (see 4:9);
 - Added "ultraviolet radiation" (see 4:11);
 - Added "Lamp Holder Design Information" (see 4:14);
 - Added tests for GU10q, GZ10q and 2GX13 lamp holders in the test to evaluate the structure and assembly of the lamp holder (see Appendix A);
 - Changed the bending moment applied to the lamp tube or lamp holder when conducting lamp holder structure and assembly assessment tests on unused lamps (A:2:1,;2008 version A:2:1);
 - Added requirements for the bending moment that the lamp head should be able to withstand (see A:2:2);
 - Added "lamp head maximum temperature rise test" (see B:1:3);
 - Deleted the requirement that "the lamp should be a specially prepared deactivated finished lamp, that is, without cathode emitting material" (see the:2008 version B:1:2);
 - Added the maximum temperature rise of the lamp holder and special tests for lamp holders 2G8, 2GX11, GR14q, and GZ24 in the test methods (see B:2);
 - Added regulations on the maximum temperature of lamp holders for lamps with built-in or external starters and lamps without starters in the lamp design information:
(See C:2);
 - Added regulations for lamp holder temperature (see C:3:2);
 - Added 2GX11, GY10q, GZ24q, 2GX13, 2G8, GU10q, GZ10q and GR14q lamp holder cathode connection methods
(See Appendix E);
 - Added a description of the maximum current of lamps with built-in or external starters and lamps without starters (see F:1);
 - Added "non-interchangeability requirements for lamps" (see F:2);
 - Added "discharge current safety limit", "SoS safety limit" and "maximum rated power of the lamp" in Table F:1 (see Appendix F):
- This document is equivalent to IEC 61199:2014 "Safety Specification for Single-ended Fluorescent Lamps":
- This document has made the following minimal editorial changes:
- Added notes to Table F:1 and Figure G:1:

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

1 Scope

This document specifies the safety requirements for single-ended fluorescent lamps for general lighting using the lamp bases listed in Table 1:

This document specifies the manufacturer's overall product evaluation results, based on inspection records of finished lamps, demonstrating that his product complies with this document:

specific methods required: This method is also used for product certification: This document establishes in detail the batch inspection procedures, which make limited

Evaluate:

This document also specifies the photobiological safety requirements according to IEC 62471:

Blue light and infrared hazards are below the levels required for labeling:

Note: The qualification conditions of this document only involve safety indicators and do not consider the performance of single-ended fluorescent lamps for general lighting, such as luminous flux, color, start-up and operating characteristics:

Information on the performance of single-ended fluorescent lamps for general lighting is found in IEC 60901:

Table 1 Data pages referencing IEC 60061

Lamp Type

Data page number

IEC 60061-1

Lamp holder

IEC 60061-3

Lamp gauge

2G7

2GX7

2G8

GR8

G10q

GR10q

GX10q

GY10q

GZ10q

2G10

2G11

2GX13

G23

GX23

G24, GX24

GZ24q

GX32

7004-102

7004-103

7004-141

7004-68

7004-54

7004-77

7004-123

7004-84

7004-85

7004-124

7004-118

7004-82

7004-82A

7004-125

7004-69

7004-86