

ICS 29.140.20
CCS K71



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

GB/T 14196.1-2023

**Incandescent lamps - Safety specifications - Part 1: Tungsten
filament lamps for domestic and similar general lighting
purposes**

白炽灯 安全规范 第1部分：家庭和类似场合普通照明用钨丝灯

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Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and Definitions	2
4 Requirements	3
36 Reference	38

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 is Part 1 of GB/T 14196 "Safety Specifications for Incandescent Lamps": GB/T 14196 has released the following parts:

---Part 1: Tungsten filament lamps for general lighting in homes and similar situations;

---Part 2: Tungsten halogen lamps for general lighting in homes and similar occasions;

---Part 3: Tungsten halogen lamps (for non-motor vehicles): This document replaces GB/T 14196:1-2008 "Safety Requirements for Incandescent Lamps Part 1: Tungsten Filament for General Lighting in Households and Similar Occasions "Lamps", compared with GB/T 14196:1-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

---Added photobiological safety requirements (see Chapter 1);

---Corrected the application error of the minimum outer diameter gauge of the E14 lamp cap thread (see 4:10): This document is modified to adopt IEC 60432-1:2011 "Safety Specifications for Incandescent Lamps Part 1: Tungsten for general lighting in households and similar occasions" Silk Lamp": Compared with IEC 60432-1:2011, this document has made the following structural adjustments:

---Chapter 1, Chapter 2, Chapter 3, Chapter 4, and Chapter 5 respectively correspond to 1:1, 1:2, 1:3, Chapter 2, and Chapter 3;

---Appendix D corresponds to Appendix K in IEC 60432-1:2011;

---Appendix E corresponds to Appendix D in IEC 60432-1:2011;

---Appendix F corresponds to Appendix E in IEC 60432-1:2011;

---G:2, G:3, G:4, G:5, and G:6 correspond to H:1, H:2, H:3, H:4, and H:5 in IEC 60432-1:2011 ;

---Appendix H corresponds to Appendix F in IEC 60432-1:2011;

---Appendix I corresponds to Appendix G in IEC 60432-1:2011: The technical differences between this document and IEC 60432-1:2011 and their reasons are as follows:

---The normative reference of IEC 62471-2 has been deleted: The referenced technical content is included in IEC 62471 and there is no substantive technology: Differences (see Chapter 1);

1 Scope

GB/T 14196.1-2023 covers the safety of ordinary tungsten filament lamps. They are being phased out of general lighting, but they have not gone: they remain in service in enormous numbers, they are still sold for applications where the alternatives do not suit, and they present hazards that LED lamps do not - a filament at incandescence in a glass envelope, a bulb surface hot enough to ignite what touches it, and a cap carrying mains voltage into a holder that must not become live at the fingers. The interchangeability requirements matter for the same reason: a lamp is fitted by an untrained person into a holder chosen decades earlier, and the cap dimensions are what keep the two compatible and safe. This part specifies the safety and related interchangeability requirements for incandescent tungsten filament lamps for general lighting service, and specifies the method manufacturers are to use for indicating the required information on products. Its implementation date is 1 January 2026. Under ICS 29.140.20 and CCS K71, it is written for lamp manufacturers, for luminaire designers, and for the certification bodies and market surveillance authorities.

This document specifies the safety and related interchangeability requirements for incandescent tungsten lamps for general lighting: This document also specifies the manufacturer's instructions for indicating The method that should be used for products that comply with this document is based on the evaluation of all products and is related to the test records of the finished lamps: This method Methods can also be used for authentication: This document also specifies inspection procedures for limited evaluation of batch products: This document only stipulates the safety requirements of the product, but does not cover its performance requirements, such as luminous flux, life, power consumption, etc: For general For the requirements in these aspects for common types of tungsten filament lamps used for general lighting, see IEC 60064: This document specifies the photobiological safety requirements in accordance with IEC 62471: Lamps specified in this document do not meet the required risk category markings Risk level: This document applies to lamps with the following characteristics:

---Rated power is below:200W (including:200W);

---The rated voltage is between 50V~250V (including 50V and 250V);

---The shape of the glass bulb is A, B, C, G, M, P, PS, PAR, R, or other shapes with the same purpose;

---Various glass bulbs with surface treatment;

---The lamp head is B15d, B22d, E12, E14, E17, E26, E26d, E25/50x39, E27 or E27/51x39: Within the limits of reasonable application, this document also applies to lamps with the same purpose and using other shapes of glass bulbs and lamp caps:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB/T 14196:2-2023 Safety specifications for incandescent lamps Part 2: Tungsten halogen lamps for general lighting in households and similar occasions (IEC 60432-2:2012, MOD) IEC 60061-

1 Lampcaps, lampholders and gauges for testing their interchangeability and safety - Part 1: Lampcaps and

GB/T 1406 (all parts) Type and size of lamp holder (IEC 60061-1) IEC 60061-

3 Lampcaps, lampholders and gauges for testing their interchangeability and safety - Part 3: Gauges (Lampcaps and

GB/T 1483 (all parts) Inspection gauge for lamp holders and lamp holders (IEC 60061-3) IEC 60061-

4 Lamp caps, lampholders and test standards for interchangeability and safety - Part 4: Guidance and general information (Lamp

GB/T 21098-2022 Lamp caps, lamp holders and gauges for testing their safety and interchangeability Part 4: Guidelines and general information (IEC 60061-4: 2018,IDT)