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

GB/T 14196.2-2023

Replacing GB 14196.2-2008

**Incandescent lamps - Safety specifications - Part 2: Tungsten
halogen lamps for domestic and similar general lighting
purposes**

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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 is Part 2 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 14196:2-2008 "Safety Requirements for Incandescent Lamps
Part 2: Tungsten Halogen for General Lighting in Households and Similar Occasions

"Lamps", compared with GB 14196:2-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- Added photobiological safety requirements (see Chapter 1, 4:11):

This document is modified to adopt IEC 60432-2:2012 "Safety Specifications for
Incandescent Lamps Part 2: Halogen for general lighting in households and similar
occasions"

Tungsten Lamp":

Compared with IEC 60432-2:2012, this document has made the following structural adjustments:

- Chapter 1 corresponds to 1:1 in IEC 60432-2:2012;
- Chapter 2 corresponds to 1:2 in IEC 60432-2:2012;
- Chapter 3 corresponds to 1:3 in IEC 60432-2:2012;
- Chapter 4 corresponds to Chapter 2 in IEC 60432-2:2012;
- Chapter 5 corresponds to Chapter 3 in IEC 60432-2:2012;
- Appendix A corresponds to Appendix B in IEC 60432-2:2012;
- Appendix B corresponds to Appendix A in IEC 60432-2:2012;

The technical differences between this document and IEC 60432-2:2012 and their reasons are as follows:

- Replaced IEC 60432-1 with GB/T 14196:1-2023 to make the use of standards more coordinated (see Chapter 1, Chapter 3, Chapter 4

Chapter, Chapter 5, Appendix B);

- 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:

Difference (see Chapter 1 of IEC 60432-2:2012):

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

Introduction

GB/T 14196 "Safety Specifications for Incandescent Lamps" aims to stipulate the safety requirements for incandescent lamps and is intended to be composed of three parts:

- Part 1: Tungsten filament lamps for general lighting in homes and similar occasions: The purpose is to specify the incandescent tungsten filament lamps used for general lighting:

Safety and related interchangeability requirements:

- Part 2: Tungsten halogen lamps for general lighting in homes and similar occasions: The purpose is to specify the safety and interaction of tungsten halogen lamps for general lighting:

Exchange requirements: It includes tungsten halogen lamps that directly replace traditional tungsten lamps and new types that are not specified in GB/T 14196:1

Tungsten halogen lamp:

---Part 3: Tungsten halogen lamps (for non-motor vehicles): The purpose is to stipulate that the rated voltage is below 250V for projection, photography, general purpose

Safety requirements for single-ended and double-ended tungsten halogen lamps used in lighting, stage lighting, special purpose lighting and general purpose lighting:

GB/T 14196 is published as a series of standards divided into several parts, with specific provisions for various types of incandescent lamps: The purpose is to facilitate the standardization

use and maintenance:

Incandescent Lamp Safety Code Part 2: Home and

Tungsten halogen lamps for general lighting in similar situations

1 Scope

This document specifies the safety and interchangeability requirements for tungsten halogen lamps used for general lighting, including tungsten halogen lamps that directly replace traditional tungsten filament lamps and

There are no corresponding new tungsten halogen lamps specified in GB/T 14196:1-2023: The safety and interchangeability requirements of these tungsten halogen lamps specified in this document are

It is required to be used in conjunction with the provisions of GB/T 14196:1-2023:

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 tungsten halogen lamps with the following characteristics:

---Rated power is below 250W (including 250W);

---Rated voltage is between 50V~250V (including 50V, 250V);

---The lamp head is B15d, B22d, E12, E14, E17, E26, E26d, E25/50x39, E27 or E27/51x39:

Lamps that comply with the requirements of this document are self-shielding but do not need to be marked with a special symbol: Since they directly replace traditional tungsten wire

lamps, and therefore do not have corresponding lamp markings:

Note 1: This does not mean that those tungsten halogen lamps used to replace incandescent tungsten lamps use the same shape of the glass envelope as the

incandescent tungsten lamp:

Note 2: There are 2 types of E26, which are not fully compatible: E26/24 for North America and E26/25 for Japan:

Note 3: Self-shielding lamps refer to lamps that do not require a lamp to provide a protective screen:

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 14196:1-2023 Safety specifications for incandescent lamps Part 1: Tungsten filament lamps for general lighting in households and similar occasions

(IEC 60432-1:2011, IDT)

3 Terms and definitions

The terms and definitions defined in GB/T 14196:1-2023 and the following apply to this document:

3:1

The UV radiation effective power of a lamp relative to its luminous flux:

Note 1: The unit is milliwatts per thousand lumens (mW/klm):

For reflective lamps, the specific effective UV radiation power refers to the effective irradiance of UV radiation relative to the illuminance:

Note 2: The unit is milliwatts per square meter, kilolux [mW/(m².klx)]:

Note 3: The effective power of ultraviolet radiation is calculated by weighting the spectral energy distribution of the lamp according to the UV hazard assessment spectral weighting function $S_{UV}(\lambda)$:

For information related to ultraviolet hazard effect functions, see GB/T 20145-2006: This standard does not cover the effects of optical radiation on materials, such as mechanical