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

GB/T 14196.3-2023

Replacing GB 14196.3-2008

**Incandescent lamps - Safety specifications - Part 3:
Tungsten-halogen lamps (non-vehicle)**

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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 3 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 14196:3-2008 "Safety Requirements for Incandescent Lamps Part 3: Tungsten Halogen Lamps (For Non-Motor Vehicles)" and is consistent with

Compared with GB 14196:3-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- Added "fault" terms and definitions (see 3:26);
- Added requirements for cold air pressure and testing technical regulations for lamps with

built-in protective covers (see 4:5, Appendix B);

---Added description of requirements for photobiological safety in compliance with IEC 62471 (see D:13):

This document is modified to adopt IEC 60432-3:2012 "Safety Specifications for Incandescent Lamps Part 3: Tungsten Halogen Lamps (For Non-Motor Vehicles)":

Compared with IEC 60432-3:2012, this document has made the following structural adjustments:

- Chapter 1 corresponds to 1:1 in IEC 60432-3:2012;
- Chapter 2 corresponds to 1:2 in IEC 60432-3:2012;
- Chapter 3 corresponds to 1:3 in IEC 60432-3:2012;
- Chapter 4 corresponds to Chapter 2 in IEC 60432-3:2012;
- Chapter 5 corresponds to Chapter 3 in IEC 60432-3:2012;
- Appendix D corresponds to Appendix C in IEC 60432-3:2012;
- Appendix E corresponds to Appendix D in IEC 60432-3:2012;
- Appendix F corresponds to Appendix E in IEC 60432-3:2012;
- Appendix C corresponds to Appendix F in IEC 60432-3:2012:

The technical differences between this document and IEC 60432-3:2012 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);

---Replaced IEC 60050-845 with GB/T 2900:65 for more harmonious standard use (see Chapter 3);

---Replaced IEC 60357 with GB/T 14094-2016 for more harmonious standard use (see 4:1);

---Replaced IEC 60061-4 with GB/T 21098 for more harmonious standard use (see 4:3:2);

---Replaced IEC 60432-1 with GB/T 14196:1-2023 for more coordinated use of the standard (see 4:6):

The following editorial changes have been made to this document:

---Replaced the informative reference of IEC 60432-1 with GB/T 14196:2, and there are no technical differences in the cited content (see Section 1

Chapter, 3:6, 4:2:2);

---Replaced the informative reference of IEC 60127-2 with GB/T 9364:2, and there are no technical differences in the cited content (see

Table D:1);

---Replaced the informative reference of IEC 60269-3 with GB/T 13539:3, and there are no technical differences in the cited content (see

Table D:2);

---Replaced the informative reference of IEC 60682 with GB/T 20152, and there are no technical differences in the cited content (see D:9, F:2):

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 regulations

Part 3: Tungsten halogen lamps (for non-motor vehicles)

1 Scope

This document specifies the safety requirements for single-ended and double-ended tungsten halogen lamps with a rated voltage not exceeding 250V for the following purposes:

- Projection (including movie projection and still projection);
- Photography (including studio);
- Flood lighting;
- Special purpose lighting;
- General purpose lighting;
- Stage lighting;

This document specifies the photobiological safety requirements in accordance with IEC 62471: Risk of failure of lamps as specified in this document as shown below

Category Flag Risk Level:

- a) Flood lighting;
- b) General lighting shaded lamps;
- c) General lighting reflector lamps;

This document does not apply to single-ended tungsten halogen lamps for general lighting used to replace traditional tungsten filament lamps as specified in GB/T 14196:2:

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 2900:65 Electrical terminology lighting (GB/T 2900:65-2023, IEC 60050-845:2020, IDT)

GB/T 14094-2016 Performance requirements for tungsten halogen lamps (for non-motor vehicles) (IEC 60357:2011, NEQ)