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

GB/T 7000.222-2023

Replacing GB 7000.2-2008

**Luminaires - Part 2-22: Particular requirements - Luminaires for
emergency lighting
(English Translation)**

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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 2-22 of GB (T)7000: GB (T)7000 has released the following parts:

- Lamps Part 1: General requirements and tests (GB/T 7000.1-2023);
- Lamps Part 2-1: Fixed universal lamps with special requirements (GB/T 7000.201-2023);
- Lamps Part 2-2: Special requirements for embedded lamps (GB/T 7000.202-2023);
- Lamps Part 2-3: Special requirements for road and street lighting fixtures (GB 7000.203-2013);
- Lamps Part 2-4: Movable general-purpose lamps with special requirements (GB/T 7000.204-2023);
- Lamps Part 2-5: Special requirements for floodlights (GB/T 7000.205-2023);
- Lamps Part 2-6: Special requirements for lamps with built-in tungsten filament lamp transformers or converters (GB 7000.6-2008);
- Lamps Part 2-8: Special requirements portable lamps (GB/T 7000.208-2023);
- Safety requirements for lighting fixtures for photography and film (non-professional use) (GB 7000.19-2005);
- Lamps Part 2-10: Special requirements for removable lamps for children (GB 7000.4-2007);
- Lamps Part 2-11: Special requirements for aquarium lamps (GB/T 7000.211-2023);
- Lamps Part 2-12: Night lights with special requirements for power socket installation (GB/T 7000.212-2023);
- Lamps Part 2-13: Special requirements for ground recessed lamps (GB/T 7000.213-2023);
- Lamps Part 2-14: Special requirements for lamps using cold cathode tubular discharge lamps (neon lamps) and similar equipment (GB 7000.214-2015);
- Lamps Part 2-17: Special requirements for stage lighting, television, film and photography venues (indoor and outdoor) (GB/T 7000.217-2023);
- Lamps Part 2-18: Special requirements for lamps for swimming pools and similar places (GB/T 7000.218-2023);
- Lamps Part 2-20: Special requirements for light strings (GB/T 7000.220-2023);

---Lamps Part 2-21: Special requirements for light strips (GB/T 7000.221-2023);

---Lamps Part 2-23: Special requirements for extra-low voltage (ELV) lighting systems for light sources (GB/T 7000.223-

2023);

---Lamps Part 2-24: Special requirements for surface temperature lamps (GB/T 7000.224-2023);

---Lamps Part 2-25: Special requirements for lamps used in hospitals and rehabilitation building clinics (GB 7000.225-2008):

This document replaces GB 7000.2-2008 "Lamps - Part 2-22: Special Requirements for Emergency Lighting Lamps" and is the same as GB 7000.2-Compared with:2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) Add terms such as internal lighting safety signs, power supply for safety services (ESSS), and electric double layer capacitor (EDLC): (See 3.22~ 3:32);
- b) Added the type of "device" according to whether it contains features such as replaceable light sources (see Chapter 5 and Appendix B);
- c) For emergency lighting fixtures installed on the guide rails, marking requirements for identification and marking requirements related to adjusting the lighting fixtures are added: (See 6.20) and locking structural requirements (see 7.23):

d) The following requirements are added to the structure of self-contained emergency lighting fixtures:

---Rechargeable batteries and batteries should comply with relevant regulations (see 7.20);

---The battery and charger should be combined in the lamp or a remote control box (see 7.21);

---The remote control box should meet the relevant requirements for emergency lighting (see 7.22);

e) Increased the discharge voltage limit of Category 4 batteries such as nickel metal hydride (see 13.4), and proposed surface temperature and other requirements for EDLC and these batteries:

Find (see Appendix A);

f) The conformity inspection after the durability test is changed from the rated luminous flux to the V_{min} value of 20 in IEC 61347-2-7 (see 13.7,:2008 version 12:1);

g) Modified the applicability of fire resistance tests under different circumstances (see

Chapter 16, Chapter 15 of the:2008 edition);

h) The original Chapter 16 is changed to Chapter 17, and the title is changed to "Photometric Data": The main changes are as follows:

---The time requirement for reaching 100% of the claimed rated luminous flux in high-risk areas is extended from 0:25s to 0:5s (see 17.1,:2008 edition of 16:1);

---Modify the power supply voltage for photometric measurement of centrally powered lamps (see 17.1,:2008 version of 16:1);

--- Adding emergency safety signs does not require the photometric distribution measurement of 17:1 (see 17.3):

i) The working time of high-temperature operation is modified to a fixed time of 30 minutes (see Chapter 19, Chapter 18 of the:2008 edition);

j) Modified the brightness contrast measurement method (see Appendix C, Appendix C of the:2008 version);

k) Added requirements for self-contained portable emergency lighting fixtures (see Appendix E):

This document is modified to adopt IEC 60598-2-22:2021 "Lamps Part 2-22: Special Requirements for Emergency Lighting Lamps":

The technical differences between this document and IEC 60598-2-22:2021 and their reasons are as follows:

---Changed the scope of Chapter 1 to comply with the writing requirements of our country's standards;

---Replaced IEC 60598-1 with normatively quoted GB/T 7000.1 to facilitate the application of the series of standards;

---Replaced IEC 60598-2 with the normatively cited GB/T 7000 Part 2 1) to facilitate the application of the series of standards:

1) GB/T 7000 Part 2 refers to Part 2-1~Part 2-25 of GB/T 7000:

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)7000 "Lamps" is intended to consist of the following parts:

---Part 1: General requirements and tests: The purpose is to specify the use of electric light sources and lamps with a power supply voltage not exceeding 1000V: