

ICS 29.140.40
CCS K 72



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

GB 7000.1-2015

**Luminaires -- Part 1: General requirements and tests
(English Translation)**

Issued on: December 31, 2015

Implemented on: January 1, 2017

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the PRC**

Table of Contents

Foreword...	8
0 General introduction...	15
0.1 Scope...	15
0.2 Normative references...	16
0.3 General requirements...	20
0.4 General test requirements and verification...	20
0.5 Components of luminaires...	22
0.6 List of parts of IEC 60598-2 (parts for particular requirements of GB 7000)...	23
1 Terms and definitions...	24
1.1 General...	24
1.2 Terms and definitions...	24
2 Classification of luminaires...	45
2.1 General...	45
2.2 Classification according to type of protection against electric shock...	45

Foreword

All technical content of this Standard is mandatory.

There are 23 parts of national standard GB 7000 for luminaires. As of the date of publication of this Part, the published parts of GB 7000 standard are as follows.

- Luminaires - Part 1.General requirements and tests (GB 7000.1-2015);
- Luminaires - Part 2-1.Particular requirements - Fixed general purpose luminaires (GB 7000.201-2008);
- Luminaires - Part 2-2.Particular requirements - Recessed luminaires (GB 7000.202-2008);
- Luminaires - Part 2-3.Particular requirements - Luminaires for road and street lighting (GB 7000.203-2013);
- Luminaires - Part 2-4.Particular requirements - Portable general purpose

luminaires (GB 7000.204-2008);

- Safety requirements for floodlights (GB 7000.7-2005);

- Luminaires - Part 2-6.Particular requirements - Safety requirements of luminaires with built-in trans-formers for filaments lamps (GB 7000.6-2008);

- Luminaires - Part 2-7.Particular requirements. Portable luminaries for garden use (GB 7000.207-2008);

- Luminaires - Part 2-8.Particular requirements - Handlamps (GB 7000.208-2008);

- Safety requirements for photo and film luminaires (non-professional) (GB 7000.19-2005);

- Luminaires - Part 2-10.Particular requirements - Portable luminaires for children (GB 7000.4-2007);

- Luminaires - Part 2-11.Particular requirements - Aquarium luminaires (GB 7000.211-2008);

- Luminaires - Part 2-12.Particular requirements - Mains socket-outlet mounted nightlights (GB 7000.212-2008);

- Luminaires - Part 2-13.Particular requirements - Ground recessed luminaires (GB 7000.213-2008);

- Luminaires - Part 2-14.Particular requirements - Luminaires for cold cathode tubular discharge lamps (neon tubes) and similar equipment (GB 7000.214-2015);

- Luminaires - Part 2-17.Particular Requirements - Luminaires for stage lighting, television, film and photographic studios (outdoor and indoor) (GB 7000.217-2008);

- Luminaires - Part 2-18.Particular requirements - Luminaries for swimming pools and similar application (GB 7000.218-2008);

- Luminaires - Part 2-19.Particular requirements - Air-handling luminaires (GB 7000.219-2008);

- Luminaires - Part 2-20.Particular requirements - Lighting chains (GB 7000.9-2008);
- Luminaires - Part 2-22.Particular requirements - Luminaires for emergency lighting (GB 7000.2-2008);
- Safety requirements for extra low voltage lighting systems for filament lamps (GB 7000.18-2003);
- Safety requirements for luminaires with limited surface temperatures (GB 7000.17-2003);
- Luminaires - Part 2-25.Particular requirements - Luminaires used in clinical areas of hospitals and health care buildings (GB 7000.225-2008).

This Part is Part 1 of GB 7000.

This Part is drafted in accordance with the rules given in GB/T 1.1-2009.

"Part 2 of GB 7000" appears many times in the text of this Part. Its connotation is the specific luminaire standards in GB 7000 other than GB 7000.1.

This Part replaces GB 7000.1-2007 "Luminaires - Part 1.General requirements and tests".

The main technical differences between this Part and GB 7000.1-2007 are as follows.

1) ADD multiple reference standards (0.2).

2) Definitions

- ADD 16 definitions such as "impact withstand category" (1.2.76~1.2.91);
- ADD the requirement to state the protective conductor current (3.3.19);
- ADD information requirements for luminaires not mounted within arm's reach (3.3.20);
- ADD the requirements for instruction sheet of luminaires with non-replaceable and non-user replaceable light source (3.3.21);
- ADD a requirement describing the classification of insulation between the power supply of the controllable luminaires and the control

conductors (3.3.22).

5) Construction

- Modify and supplement the test bending moment value and compliance check requirements of Edison screw lampholders (4.4.4);
- ADD the requirement of connection mode of luminaires designed to be connected by a standard lampholder or connector (4.4.10);
- Modify the application regulations for self-tapping screws (4.11.2);
- SUPPLEMENT the provisions of the lampholder torque test (4.12.4);
- Modify the test method of screwed glands and add specifications (4.12.5);
- ADD the requirements for the means of adjustment of luminaires installed within arm's reach [4.14.3 b), 4.14.3 c)];
- Revise the title of Article 4.16 to "Luminaires for mounting on normally flammable surfaces"; indicate the corresponding symbols and warnings in Annex N (4.16, Annex N);
- Regarding the protective shield, add metal halide lamps to applicable products; modify the specific requirements (4.21.1);
- Regarding the UV radiation of luminaires, add tungsten halogen lamps to the applicable products; GIVE the function of the protective shield and the applicable conditions of Annex P. In Annex P, give the calculation formula according to the maximum exposure time of 8 h per day (4.24.1, Annex P);
- ADD requirements for the assessment of retinal blue light hazard (4.24.2);
- Regarding terminal blocks with integrated screwless earthing contacts, add the mounting requirements (4.27);
- ADD the fixing requirements for thermal sensing controls (4.28);

11) Creepage distances and clearances

- Reduce some of the creepage distances and clearances specified in Table 11.1;