



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

GB/T 20132-2019

**Ships and marine technology - Low-location lighting (LLL) on
passenger ships - Arrangement**

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Foreword

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 20132-2006, Ships and marine technology - Low-location lighting on passenger ships - Arrangement. Compared with GB/T 20132-2006, the

major changes are as follows.

-- Add terms and definitions for excitation, luminance, etc. (see Clause 3; Clause

3 of the 2006 edition);

-- Add requirements for the phosphorescent lighting system in the performance requirements, and remove the requirements for the fluorescent lighting system (see 4.2; 4.2 of the 2006 edition);

-- Revise the requirements for point light sources in electrically powered systems (see 4.3.6 and 4.3.8; 4.3.3 of the 2006 edition);

-- Revise the requirements for technical product documentation (see Clause 5; Clause 5 of the 2006 edition);

-- Revise the installation requirements for low-location lighting strips in the general guidelines for installation on board (see 6.1; 6.1 of the 2006 edition);

-- Revise the requirements for signs and directional indicators (see 6.5; 6.5 of the 2006 edition);

-- Add requirements for phosphorescent lighting system in the approval of the installation, and remove the requirements for fluorescent lighting systems (see 7.2; 7.2 of the 2006 edition);

-- Add requirements for phosphorescent lighting system in the maintenance, and remove the requirements for fluorescent lighting systems (see 8.3; 8.3 of the

2006 edition);

-- Add material testing of phosphorescent low-location lighting systems in Annex A, and remove the material testing of fluorescent lighting systems (see Annex A; Annex A of the 2006 edition);

-- Revise the calculations for width and luminance in Annex D (see Annex D; Annex D of the 2006 edition);

-- Remove the point light source installation example in the annex (Annex E of the 2006 edition);

-- Add LLL installation and arrangement examples to the annex (see Annex G).

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1 Scope

This Standard specifies the requirements for the approval, installation and maintenance of low-location lighting systems as defined in Chapter II-2, Regulation 13.3.2.5.1 of the International Convention for the Safety of Life at Sea, 1974 (SOLAS 74), as amended in 2000, and the IMO International Code for Fire Safety Systems.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3864-1.2002, Graphical symbols - Safety colours and safety signs - Part 1.

Design principles for safety signs in workplaces and public areas

ISO 16069.2004, Graphical symbols - Safety signs - Safety way guidance systems (SWGS)

IEC 60092-101, Electrical installations in ships - Part 101. Definitions and general requirements

IEC 60529, Degrees of protection provided by enclosures (IP Code)

IEC 60598-2-22, Luminaires - Part 2-22. Particular requirements - Luminaires for emergency lighting

IEC 60945, Marine navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results

IMO International Convention for the Safety of Life at Sea, 1974 (SOLAS 1974), as amended in 2000

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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