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

GB 4541-2008

Replacing GB/T 4541-2008, GB/T 30488-2014

Position-indicating lights for life-saving appliances of marine

救生圈自亮浮灯

(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 replaces GB/T 4541-2008 "Self-illuminating floating lights for lifebuoys" and GB/T 30488-2014 "Lights for survival craft and rescue boats" and is consistent with Compared with GB/T 4541-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) Incorporated the technical content of GB/T 30488-2014 "Survival Crafts and Rescue Boat Lights";
- b) Added terms and definitions (see Chapter 3);
- c) Delete the size and weight requirements for self-illuminating buoy lights of lifebuoys (see 3.1:3 of the:2008 edition);
- d) Changed the energy source and lighting type used by the position indicator lights (see 4.1:2, 2:1 of the:2008 edition);
- e) Delete the requirements for water spray conditions in deluge and watertightness (see 4.5 of the:2008 edition);
- f) The spectral energy distribution requirement is deleted (see 4.14 of the:2008 version);
- g) Added the requirements for immersion in fresh water for the high and low temperature cycle performance of the lifebuoy self-illuminating floating light (see 5.3:1 and 5.3:2);
- h) Add requirements for water-activated battery position indicators (see 5.3:4);
- i) Added requirements for the arrangement of light switches on boats that are activated by pulling the light body when the life raft expands (see 5.12:2);
- j) Add requirements for positioning devices (see 5.13);
- k) The number of high and low temperature cycle tests for the self-illuminating floating light

of the lifebuoy has been increased, as well as the test method for immersion in fresh water (see 6.2:3);

l) The formula for luminous intensity has been changed (see 6.3:2:2, 4:4 of the:2008 edition);

m) The factory inspection requirements for the appearance of ring lights have been changed (see 7.3:1, 5:3:2 of the:2008 edition):

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

1 Scope

This document specifies the classification and marking, technical requirements, test methods, inspection rules, standards and Logging, packaging and storage:

This document applies to the design, manufacture and acceptance of position indicating lights configured on marine life-saving equipment:

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 5869-2010 Life jacket light IEC 60945:2002 General requirements for test methods and required test results for marine and radiocommunication equipment and systems (Mari-

3 Terms and definitions

The following terms and definitions apply to this document:

Lamps that indicate the location of survival craft and rescue boats to search and rescue personnel and provide lighting inside the survival craft and rescue boats:

Note: It usually consists of main components such as batteries, circuit boards, plastic casings, external lights, internal lights and connecting wires:

A lamp with the ability to float on its own to indicate to rescuers the position of a person who fell into the water using a lifebuoy at night:

Note: It usually consists of main components such as lampshade, lamp holder, luminous body, circuit board, battery and connectors:

lifejacket lights A light used to indicate to rescuers the position of a drowning person

wearing a life jacket at night:

Note: It usually consists of main components such as lampshade, lamp holder, luminous body, circuit board, battery and connectors:

4 Classification and tagging

4.1

Classification

4.1.1

Position indicating lights are divided into the following three categories according to the equipment they are equipped with:

- a) TF --- survival craft and rescue boat lights (referred to as raft lights): position indicating lights used on lifeboats, life rafts or rescue boats;
- b) Q---life buoy self-illuminating floating light (referred to as ring light): used as a position indicator light on the life buoy;