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

GB 14778-2025

Replacing GB/T 14778-2008

General rules of coloured light for safety

安全色光通用规则

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Foreword

This document conforms to GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting is scheduled. This document replaces GB/T 14778-2008 "General Rules for Safe Colors and Light". Compared with GB/T 14778-2008, the main differences are structural adjustments and... Aside from editorial changes, the main technical changes are as follows: --Added a reference to "Safety Colors and Safety Symbols" (see Chapter 5). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the Ministry of Emergency Management of the People's Republic of China. This document was first published in 1993, revised for the first time in 2008, and this is the second revision. General Rules for Safe Colored Light

1 Scope

GB 14778 fixes what each colour of a safety light means and what chromaticity it must have to count as that colour. It sets the identification matters and the usage scenarios for red, yellow, green and blue safety light, the colour area ranges defined by their chromaticity coordinates, and the requirements governing their use, with an informative annex giving the colour boundaries and the intersection points of each range. The change that matters is its status: the previous text was GB/T 14778-2008, recommended, while this edition is a GB without the /T and is therefore mandatory. Issued on 5 October 2025, in force since 1 May 2026. This page is published from the official record of the standard held by the Chinese

standards administration: the identification, the dates, the classification and the edition it replaces are taken from there. The clause text, the tables and the numeric limits are not reproduced on this page - they are in the document itself, which is delivered in full in English translation.

This document specifies the indications and application scenarios for safe color light, the range of color areas, and the requirements for the use of safe color light. This document applies to safe colored light used by production and business units and public places. This document does not apply to colored light used in aviation, maritime, or inland waterway transportation, nor to reflected light.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB 2894 Safety Colors and Safety Signs

GB/T 5698 Color Terminology

3 Terms and Definitions

The terms and definitions defined in GB/T 5698 and the following terms and definitions apply to this document.

3.1 Colored light Visible light produces the sensation of brightness and color in the human visual system.

Note. Includes steady-state light and flashes.

3.2 Colored light for safety Colored light that conveys safety information.

Note. Includes four colors of light. red, yellow, green, and blue. White light is an auxiliary color.

4.1 Red light

4.1.1 Representing Items Colors of light that indicate prohibition, cessation, danger, emergency, fire, etc.

4.1.2 Use Cases Colored light is used in various prohibition signs, traffic prohibition signs, fire equipment signs, mechanical stop buttons, brakes and parking devices. Place or facility.

Note. Examples include the colored light of "No Entry" signs for dangerous areas; the

colored light of regular traffic lights indicating "Stop"; the colored light indicating prohibition or danger during road construction; and the colored light for general vehicles. The colored light of taillights; the colored light of nighttime markings on vehicles carrying explosives or other dangerous materials; the colored light of taillights on trains inside tunnels; and the colored light of warning lights suspended at dangerous locations inside tunnels. Colored light; colored light indicating the location of the emergency stop button; colored light used as a luminous signal to report emergencies and call for help; colored light indicating fire hydrants and fire extinguishers. Colored light used for the location of fire alarms, fire extinguishers, and other fire-fighting equipment.

4.2 Yellow light

4.2.1 Representing Items Colored light used to indicate alertness, warnings, etc.

4.2.2 Use Cases Used in places or facilities where colored light is used to remind people of important matters.

Note. Examples include the color light for "warning" signals on road traffic lights; the color light for "caution" signals in general; and the color light for signs indicating the direction of train travel at an entrance.

4.3 Green light

4.3.1 Representing Items Colored light indicating permission, safety, warning, rescue, etc.

4.3.2 Use Cases Used in places or facilities where colored light is required for permission, safety, warning, or emergency situations.

Note. Examples include safety passages in workshops and factories, pedestrian and vehicle traffic signs, first aid stations and ambulance stations, emergency evacuation routes, refuge areas in tunnels, and other safety measures. The colored light used for protective equipment indicator lights; the colored light used for equipment/machine start buttons.

4.4 Blue light

4.4.1 Representing Items Colored light indicating guidance, instructions, etc.

4.4.2 Use Cases Colored light is used in places or facilities where it is used for various instructions, signs, and other matters.

Note. For example, the colored light indicating the direction and location of a parking lot.

4.5 White light

4.5.1 Representing Items White light is the auxiliary color light.

4.5.2 Use Cases Used for text, arrows, and other information to indicate direction and location.

Note. For example, the text or arrows marked with this color light are used to achieve the purpose of "guidance".

5.Color range Safety colored lights should be clearly identifiable within the designed distance and should comply with the requirements of GB 2894. Appendix A provides the color values of safety colored lights. Color area range, color boundary, and color coordinates of the intersection of color areas.

6.Requirements for the use of safe colored light When using safe colored light, the brightness of the surrounding environment and its relationship with other colors should be considered, and the safe colored light should be clearly visible. Precautions should be taken when using it.