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

GB/T 32482-2024

Replacing GB/T 32482.1-2016

Colour binning of white LED packages for automotive vehicles

机动车用白光LED封装的颜色分选

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 32482.1-2016 "LED sorting Part 1: General requirements and white light grid" and GB/T 32482.1-Compared with 2016, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Added a chapter on "Sorting Test Procedure" (see Chapter 5);

--- Added "Measurement Accuracy" (see Appendix C).

This document is modified to adopt IEC 62707-1:2018 "LED sorting - Part 1: General requirements and white light grids for motor vehicles".

The technical differences between this document and IEC 62707-1:2018 and their reasons are as follows.

--- IEC/T S62504 is replaced by the normative reference GB/T 24826 to facilitate the coordinated use of standards (see Chapter 3);

--- Appendix C is changed from an informative appendix to a normative appendix to make this document more accurate in application (see Appendix C);

--- Replaced ISO/IEC Guide 98-3:2008 with the normative reference GB/T 27418 to facilitate inter-standard collaboration (See C.1).

The following editorial changes were made to this document.

- Change the file name to "Color sorting of white light LED packages for motor vehicles";
- Added formula serial number;
- Deleted the description of other parts of the plan in the scope (see Chapter 1);
- Added the sources of terms and definitions (see 3.1).

1 Scope

This document specifies the grid, corresponding chromaticity code and sorting for the color sorting of white light LED packages emitting incoherent light and visible light radiation.

Testing procedure requirements.

This document is applicable to the color sorting of LED packages for motor vehicles and can be used as a reference for the color sorting of other LED packages.

Note 1: This document is not applicable to LED modules, LED lamps and LED luminaires.

Note 2: This document specifies a color sorting grid and corresponding codes for white light LED packages that emit radiation. The area covered by the grid is different from other the range of white light specified by standards or regulations.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 24826 Terms and definitions for LED products and related equipment for general lighting (GB/T 24826-2016, IEC 62504.

2014, IDT)

GB/T 27418 Evaluation and Expression of Uncertainty in Measurement (GB/T 27418-2017, ISO/IEC Guide 98-3:2008, MOD)

3 Terms and definitions

The terms and definitions defined in GB/T 24826 and the following apply to this document.

Group Bin

A defined range of LED performance characteristics consisting of LEDs with similar

nominal performance such as chromaticity, photometric performance, radiation characteristics, and/or electrical performance it is defined by a group of LED chips or LED packages.

[Source. GB/T 24826-2016, 3.5] 3.2 grid an area defined by a series of grid points and represented by color coordinates.

Gridpoint

The color coordinates in u', v' color space (or equivalently x, y color space) are determined by two independent indices. The first index p is the number of steps counted along the Planck locus and its extension toward the blue line crossing the high temperature boundary; the second index j is counted along the Judd isotherm Count the number of steps.

Note: The u', v' color space is specified in ISO/CIE11664-5, and the x, y color space is specified in ISO/CIE11664-1.

white groupwhitecolourbin A quadrilateral region defined by 4 grid points.