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

GB/T 39008-2020

**Double-capped integrated LED lamps - Performance
requirements**

双端集成式LED灯 性能要求

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard was proposed by the China National Light Industry Council. This standard is under the jurisdiction of the National Lighting Standardization Technical Committee (SAC/TC224). Drafting organizations of this standard. Hengdian Group Debang Lighting Co., Ltd., National Electric Light Source Quality Supervision and Inspection Center (Beijing), Xiamen Tong Shida Lighting Co., Ltd., Foshan Electric Lighting Co., Ltd., Foshan Huaquan Electric Lighting Co., Ltd. The main drafters of this standard. Wu Yixin, Zhang Debao, Xin Hongzheng, Chen Guolin, Wei Bin, Zeng Haisheng, Nie Lixun. Performance requirements for double-ended integrated LED lights

1 Scope

China's national performance requirements for double-capped integrated LED lamps. It specifies the terms and definitions, the product classification and models, and the technical requirements. These are the LED tubes that contain their own driver and connect directly to the mains, as distinct from the retrofit types that work with an existing fluorescent ballast. Integrated means the fitting is rewired or supplied new for the lamp, which removes the compatibility problem that dogs retrofit tubes and lets the lamp be designed properly rather than around the electrical behaviour of a ballast it cannot control. The performance requirements are the ordinary ones for a light source and are worth stating because they are where cheap products fail: the luminous flux actually delivered against what is claimed, the efficacy, the colour temperature and its consistency between lamps, the colour rendering, and the maintenance of flux over life, which is the specification consumers cannot check and manufacturers most often overstate.

This standard specifies double-ended integrated LEDs for lamps with G5 or G13 lamp holders and for lamps with G5 or G13 lamp holders without ballasts Lamp terms and

definitions, specification classification and naming, technical requirements, test methods and inspection rules. This standard applies to rated power of 60W and below, frequency of 50Hz, rated voltage of AC220V, and nominal length of 1500mm Double-ended integrated LED lights with a beam angle of 120° and above. This standard also applies to retrofitted double-ended integrated LED lamps that modify the lamps and disconnect the ballast. Note

1. Unless there are other types of lights, the "lights" that appear in this standard represent "double-ended integrated LED lights". Note

2. The rated voltage is the power supply voltage of the lamp.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 1406.2 Types and dimensions of lamp holders Part

3 Terms and definitions

The following terms and definitions defined in GB/T 24826-2016 apply to this document.

3.1 Double-capped integrated LEDlamp Contains G5 or G13 lamp holder, LED light source and the necessary components to maintain its stable ignition and make it into a whole, without damaging its structure The structure is not detachable, and it is designed as a double-ended LED light that can be directly connected to the power supply for normal operation.

3.2 Initialvalue The luminosity, chromaticity and electrical characteristics of the lamp after the parameters have stabilized. Note