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

GB/T 43626-2023

**LED lamps for general lighting services with supply voltages
not exceeding 50 V a. c. r. m. s. or 120 V ripple free d. c. - Safety
specifications**

普通照明用电源电压不大于交流有效值50V或无纹波直流120V的半集成式LED灯
安全规范

(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 is equivalent to IEC 62838:2015 "The power supply voltage for general lighting is not greater than the AC effective value 50V or ripple-free DC Safety Specifications for 120V Semi-Integrated LED Lamps":

This document has made the following minimal editorial changes:

---Incorporated the errata content of IEC 62838:2015/COR1.2017, the outer margins of the clauses involved are marked with vertical Double lines (||) are marked:

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 LED lamps that integrate stable ignition components for general lighting in homes and similar situations: this document Specifies the safety and interchangeability requirements for lamps, as well as test methods and conditions for checking their eligibility:

The scope of application is as follows:

---Rated power 60W and below;

---The rated voltage is not greater than the AC effective value 50V or ripple-free DC 120V;

---Lamp holder meets the requirements of Table 1:

Note 1: Rated power 60W is under study: Thermal management may require lower power:

This document applies to products connected to extra-low voltage (ELV) lighting fixtures:

According to IEC 60364-7-715, only safety extra low voltage (SELV) sources are suitable in ELV lighting installations: If bare wires are used, it is best to the headlight voltage is AC 25V or DC 60V:

The requirements of this document relate only to type testing:

For all product inspection or batch inspection recommendations for lamps greater than AC 25V or DC 60V, please refer to GB/T 7000.1-2023

Table Q:1, Class III lamps column, 4 or column 5:

Note 2: The term "lamp" is used in this document to represent semi-integrated LED lamps complying with the supply voltage specified in the above range, unless otherwise stated for other categories:

type lamp:

An overview of a system consisting of LED modules, lamps and control devices is given in IEC 62504: The power supply voltage is not limited to the grid voltage (for example such as 220V/50Hz): When the power supply voltage is AC or DC 12V, the semi-integrated LED light can also be started: Light control unit control sheet the element converts AC or DC 12V to a specific current and voltage to supply the LED in the lamp: Figure 1 shows a non-integrated LED lamp and a semi-Schematic diagram of two types of integrated LED lights:

In the picture:

(1) The converter is not dedicated to LED, but to incandescent lamp or tungsten halogen

lamp design;

Note: This type is not applicable to this document:

(2) Non-integrated LED light sources, such as modules: it can have an LED Dedicated and non-replaceable lamp head according to IEC 60061-1:

In the picture:

(1) The converter is not dedicated to LED, but to incandescent lamp or tungsten halogen lamp design;

(2) LED control unit;

(3) Semi-integrated LED lamps defined in 3:1 of IEC 62504:

a) Example of non-integrated LED lamp with power supply voltage not exceeding 50V

b) The power supply voltage within the scope of this document does not exceed 50V
Semi-integrated LED light example

Figure 1 Types of LED lamps with power supply voltage not exceeding 50V