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

GB/T 15040-2021

Replacing GB/T 15040-1994

Working standard lamps for the measurement of luminous flux

工作测光标准灯泡

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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 of Standardization Documents" Drafting. This document replaces GB/T 15040-1994 "Standard Light Bulbs for Ordinary Metering". Compared with GB/T 15040-1994, except for structural adjustment and compilation In addition to the editorial changes, the main technical changes are as follows:

---Modified the scope of application of the standard, stipulating that standard lamps include incandescent lamps, tungsten halogen lamps and LED lamps (see Chapter 1, 1994 Chapter 1 of the Year Edition);

---Modified the product classification (see Chapter 4, Chapter 4 of the 1994 edition);

---The general requirements for working test lights have been added (see Chapter 5);

---Added specific requirements for power supply and test equipment for testing (see 7.2).

Please note that some of the contents of this document may involve patents. The issuing agency of this document is not responsible for identifying patents. This document was

proposed by the China National Light Industry Council. This document is under the jurisdiction of the National Lighting Standardization Technical Committee (SAC/TC224).

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Chen Cong, Zhang Junbin, Zhao Weiqiang, Wang Shunbao, Xie Runqing. The previous releases of this document and the documents it replaced are as follows:

--- First published in 1981 as GB 155-1981 "Standard Light Bulb for Common Metering", and first revised in 1994 as GB/T 15040-1994 "Standard Light Bulb for Ordinary Metering";

--- This is the second revision. Working metering standard bulb

1 Scope

GB/T 15040-2021 is the Chinese national standard on working standard lamps for the measurement of luminous flux, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 26 November 2021 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 June 2022. Classification: ICS 29.140.99, CCS K71. 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 issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document stipulates the classification, general requirements, Technical requirements and test methods, and provides information about common models of incandescent lamps and tungsten halogen lamps for working light metering standard lamps. This document is applicable to incandescent lamps, tungsten halogen lamps and LED standard lamps used as standard light sources when measuring luminous flux. If necessary, standard lamps can also refer to this document.

2 Normative references

The content of the following documents constitutes an indispensable clause of this document through normative references in the text. Among them, dated quotations Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to This document.

GB/T 2900.65 Electrical engineering terminology lighting

GB/T 10681-2009 Performance requirements for tungsten filament lamps for general lighting in households and similar occasions

GB/T 14094-2016 Tungsten halogen lamps (for non-motor vehicles) performance requirements

GB 14196.1 Safety requirements for incandescent lamps Part

3 Terms and definitions

The following terms and definitions defined in GB/T 2900.65 apply to this document.

3.1 Lumen maintenance rate The percentage value of the luminous flux when the lamp burns to 70% of the rated life and the initial luminous flux.

4 Product Classification

Divided according to the working principle of the lamp, it can be divided into incandescent lamps, halogen tungsten lamps and LED lamps.

5 General requirements

5.1 Safety requirements Each type of lamp should meet the safety requirements corresponding to its type in Table 1.