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

GB/T 24392-2009

Standard method of measurement of lamp cap temperature rise

灯头温升的测量方法

(English Translation)

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Foreword

This standard is identical with IEC 60360:1998 "Measurement cap temperature rise" (in English).

This standard is equivalent translation IEC 60360:1998.

For ease of use, this standard made the following editorial changes.

- a) "The technical specifications" replaced by "this standard";
- b) Remove IEC 60360:1998 Foreword;
- c) For IEC 60360:1998 and other international standards have been cited as identical with our standard, our present standard reference these national standards or industry standards corresponding to international standards in place, the rest is not tantamount to the adoption of standard international standards, this standard are a direct reference (see 1.2 of this standard).

The standard proposed by China National Light Industry Council.

This standard by the National Standardization Technical Committee of electrical lighting (SAC/TC224) centralized.

This standard was drafted. Zhejiang Institute of Standardization, Beijing Institute of electric light.

Introduction

Cap temperature rise depends largely on the lamp assembly and lamp conditions. Accordingly, it is necessary to test the lamp holder according to the criteria used. Compared with bare measuring cap temperature rise, the temperature rise measured standard test lampholder, has the following advantages.

- Closest to the actual operating conditions;
- Improving the repeatability, due to the smaller cap material, surface roughness and surface conditions on (lamp material, surface roughness and surface the same conditions of actual operating conditions less affected);
- All parts of the lamp cap temperature equilibrium, given from a light fixture to a more complete overall heat transfer;
- Shorten the measurement time, because the thermocouple can be permanently fixed to the test holder.

GB/T 24392-2009/IEC 60360:1998 the method of measuring cap temperature rise

1.1 Scope

Standard measurement method described in this standard cap temperature rise, suitable for detecting tungsten and gas discharge lamps meets the temperature rise limit.

GB 14196 are listed lamp type temperature limit.

This standard relates to the technical requirements and test methods for test lamp base of the lamp, this type of lamp is equipped with different types of screw caps and bayonet lamp head. This method has been widely used to test the incandescent lamp, but its use is not limited to incandescent lamps.

1.2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 14196 (all parts) incandescent safety requirements (IEC 60432, IDT)

2 Definitions

This standard uses the following terms and definitions.

Under the conditions specified in this standard, the standard test lampholder fitted cap measured surface temperature rise.

After fully lighted lamp, a standard test lampholder reached steady-state temperature.

Note: The measurement accuracy should be $\pm 1^\circ\text{C}$.

3.1 Aging and stability

Before measurement, the lamp does not have to be old mill. When the equilibrium temperature test chamber, the lamp should reach full stability.

3.2 Supply Voltage

a) directly connected to the power supply of the lamp, when measured using the rated voltage, the power supply voltage should be stabilized in the range of $\pm 0.5\%$;

b) by the power supply is connected to the ballast lamp ballast should be measured using the rated voltage of the power supply voltage should be stable at $\pm 0.5\%$ in the range. This should be measured using a reference ballast or ballast finished, with a reference ballast impedance in current calibration Ballast error should be within $\pm 1\%$ range.

If the lamp voltage range marker should be used in the test procedures specified in GB 14196, other publications as otherwise provided by the program except.

3.3 Test chamber at ambient temperature and the reference temperature

Except provisions), namely. the test chamber temperature during the measurement should be kept within this range in order to ensure effective measurement results. Measurements taken 4.1 with a special chamber, wherein the chamber to ensure that the ambient temperature reaches substantially constant.

GB/T 24392-2009/IEC 60360:1998