

Translated English of Chinese Standard: GB20054-2015

www.ChineseStandard.net

Sales@ChineseStandard.net

GB

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

ICS 27.010

F 01

GB 20054-2015

Replacing GB 20054-2006

Minimum allowable values of energy efficiency and energy efficiency grades for metal-halide lamps

GB 20054-2015 How to BUY & immediately GET a full-copy of this standard?

1. www.ChineseStandard.net;
2. Search --> Add to Cart --> Checkout (3-steps);
3. No action is required - Full-copy of this standard will be automatically & immediately delivered to your EMAIL address in 0~25 minutes.
4. Support: Sales@ChineseStandard.net. Wayne, Sales manager

Issued on: December 10, 2015

Implemented on: January 1, 2017

**Issued by: General Administration of Quality Supervision, Inspection
and Quarantine;**

Standardization Administration Committee.

Table of Contents

Foreword.....	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Technical requirements	6
5 Test method.....	8
6 Inspection rules	9

Foreword

Sub-clause 4.3 of this Standard is mandatory; the rest are recommendatory.

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB 20054-2006 *The minimum allowable values of energy efficiency and energy efficiency grades for metal-halide lamps*. Compared with GB 20054-2006, in addition to editorial modifications, the main technical changes are as follows:

- added the scandium series of double-ended metal halide lamps and ceramic metal halide lamps in the scope;
- expanded the power range for scandium sodium series of single-ended metal halide lamp;
- specified the methods for initial values of each grade of lamps unlisted in the table;
- strengthened energy efficiency 1, 2 and 3 indicators.

This Standard was proposed by National Development and Reform Commission, Department of Resource Conservation and Environmental Protection, Ministry of Industry and Information Technology, Department of Energy Conservation and Comprehensive Utilization.

This Standard shall be under the jurisdiction of National Technical Committee on Energy Foundation and Management of Standardization Administration of China (SAC/TC 20).

The drafting organizations of this Standard: China Institute of Standardization, OSRAM (China) Lighting Co., Ltd., Shanghai times of the light lighting Electric Detection Co., Ltd., Philips Electronics Technology (Shanghai) Co., Ltd., Foshan Electric Lighting Co., Ltd., Shanghai Yaming Lighting Co., Ltd., National Electric Light Source Quality Supervision and Inspection Center (Shanghai), National Semiconductor Lighting Product Quality Supervision and Inspection Center (Jiangsu), Jiangsu Yaze Lighting Group, Heshan Guangmingyuan Lighting Appliance Co., Ltd.

Main drafters of this Standard: Liang Xiuying, Zhang Junbin, Qiu Jihong, Yu Yuejiao, Wei Bin, Zhang Gukang, Lin Jikang, Yang Jinghua, Yin Jinxing, Cheng Taisong, Zhao Yuejin.

Version of standard substituted by this Standard is:

Minimum allowable values of energy efficiency and energy efficiency grades for metal-halide lamps

1 Scope

This Standard specifies the energy efficiency rating, energy efficiency limits, energy efficiency evaluation values, test methods and inspection rules for metal halide lamps.

This Standard is applicable to transparent glass bulb scandium series metal halide lamp (single-ended 50W ~ 1500W, double-ended 70W ~ 250W), ceramic metal halide lamp (20W ~ 400W).

This Standard is not applicable to powder blister or explosion-proof metal halide lamp.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 2900.65, *Electrotechnical terminology - Lighting*

GB/T 13434, *Methods of measuring characteristics for discharge lamps (excluding fluorescent lamps)*

GB/T 18661, *Metal-halide lamps (ScI₃-NaI series)*

GB 19652, *Discharge lamps (excluding fluorescent lamps) - Safety specifications*

GB/T 24458, *Ceramic metal-halide lamps - Performance specifications*

3 Terms and definitions

For the purposes of this document, the terms and definitions specified in GB/T 2900.65 and the following ones apply.

3.1 initial luminous efficacy for metal-halide lamps

6 Inspection rules

6.1 Acceptance inspection

The manufacturer shall, in accordance with the requirements of the acceptance inspection, control the initial luminous efficiency of the metal halide lamps produced by its enterprise, so as to ensure that it meets the requirements of this Standard. During the acceptance inspection, the initial light efficiency sampling program, inspection level shall be carried out according to the provisions of GB/T 18661 or GB/T 24458.

6.2 Routine inspection

The manufacturer shall carry out the routine inspection on the luminous flux maintenance rate of the metal halide lamps produced by its enterprise. The luminous maintenance rate sampling program, inspection level shall be carried out according to the provisions of GB/T 18661 or GB/T 24458.

The routine inspection shall also be carried out in any of the following cases:

- a) for the product's trial stereotypes identification;
- b) when production is resumed after the production has been discontinued for more than three months;
- c) when the design, process or material has significant changes that may affect product performance;
- d) when quality supervision agencies require to carry out the routine inspection.

6.3 Quality supervision

The sampling shall be carried out according to relevant provisions.

The criteria is as follows:

Test the initial luminous efficiency of the three samples and calculate the average. If the average is not less than 3 or the product claims the energy efficiency rating limit, and no sample of the initial luminous efficiency below 90% of the limit, it shall be qualified.

_____ **END** _____

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----