

ICS 27.010
CCS F 01



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

GB 19043-2013

**Minimum allowable values of energy efficiency and the energy
efficiency grades of double-capped fluorescent lamps for
general lighting service
(English Translation)**

Issued on: June 9, 2013

Implemented on: October 1, 2013

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

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Foreword

The provisions in 4.3 of the Standard are mandatory; the rest are recommended.

This Standard is drafted according to the rules specified in GB/T 1.1-2009.

This Standard replaces GB 19043-2013 Minimum Allowable Values of Energy Efficiency and the

Energy Efficiency Grades of Double-capped Fluorescent Lamps for General Lighting Service. In

addition to editorial modification, the main technical changes are as follows, compared with GB

19043-2013.

- Modify the scope of the Standard;
- Delete the technical requirements for minimum allowable values of energy efficiency for double-capped fluorescent lamps;
- Increase the initial luminous efficacy values of each energy efficiency grade of double-capped fluorescent lamps;
- Delete the inspection rules.

This Standard was proposed by Resource Conservation and Environmental Protection Division of

National Development and Reform Commission, and Energy Saving and Comprehensive Utilization

Division of Ministry of Industry and Information Technology.

This Standard shall be centralized by National Energy Basis and Management Standardization

Technical Committee (SAC/TC 20).

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The previous version of the Standard is as follows.

- GB 19043-2013.

Minimum allowable values of energy efficiency and the energy efficiency grades of double-capped fluorescent lamps for general lighting service

1 Scope

This Standard specifies the energy efficiency grades, energy efficiency limits, evaluation values of

energy conservation, and test methods of double-capped fluorescent lamps for general lighting

service (Hereinafter referred to as. double-capped fluorescent lamps).

This Standard applies to the following two operating types of lamps. preheating cathode lamp that

can work in AC power supply frequency lines with starter, and can work in high frequency lines; and

preheating cathode lamp that can work in high frequency lines.

2 Normative references

The articles contained in the following documents have become part of this Standard when they are

quoted herein. For the dated documents so quoted, all the modifications (Including all corrections) or

revisions made thereafter shall be applicable to this Standard.

GB/T 10682 Double-capped fluorescent lamps - Performance specifications

GB 18774 Double-capped fluorescent lamps - Safety specifications

3 Terms and definitions

For the purpose of this Standard, those defined in GB/T 10682 AND the following terms and

definitions apply to this document.

3.1

Initial luminous efficacy for double-capped fluorescent lamps

Under the standard test conditions, the ratio of measured initial luminous flux of double-capped

fluorescent lamps AND the power, in the units of lm/W.

3.2

Minimum allowable values of energy efficiency for double-capped fluorescent lamps

Under the standard test conditions, the minimum standard value to which the initial luminous efficacy

of the double-capped fluorescent lamps shall reach.

3.3

Evaluating values of energy conservation for double-capped fluorescent lamps

80 High luminous flux series 6850 72 69 63 77 73 67

7220 81 75 66 87 80 75

23 7222 84 77 76 89 86 85

32 7420 97 89 78 104 95 84

45 7422 101 93 85 108 99 90

4.3 Minimum allowable values of energy efficiency and lumen maintenance of double-capped

fluorescent lamps

The minimum allowable values of energy efficiency for double-capped fluorescent lamps is Grade 3

in Table 1. When it is ignited and lighted for 2000h, its lumen maintenance shall comply with the

relevant provisions of GB/T 10682.

4.4 The energy conservation evaluation value and lumen maintenance of double-capped

fluorescent lamps

The energy conservation evaluation value of double-capped fluorescent lamps is Grade 2 in Table 1.

When it is ignited and lighted for 2000h, its lumen maintenance shall comply with the relevant

provisions of GB/T 10682.

5 Test methods

The initial luminous efficiency, chromaticity coordinates, and lumen maintenance shall be tested in

accordance with the test methods specified in GB/T 10682.

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