



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

GB 23255-2019

**Photometric Characteristics of Daytime Running Lamps for
Power Driven Vehicles**

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Foreword

All content in this Standard is compulsory.

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

This Standard serves as a replacement of GB 23255-2009 Photometric Characteristics of Daytime Running Lamps for Motor Vehicles. In comparison with GB 23255-2009, apart from editorial modifications, the main technical changes are as follows.

---The title of the Standard is modified from Photometric Characteristics of Daytime Running Lamps for Motor Vehicles in the previous version into Photometric Characteristics of Daytime Running Lamps for Power Driven Vehicles in this version;

---Category-L is added to the scope of application of this Standard;

---Requirements towards light source module are added;

---Requirements towards interlocking lamp are added;

---Requirements towards visual surface area are changed;

---Requirements towards the maximum luminous intensity are modified;

---H-H line photometric requirements are modified;

---The range of photometric angle is added.

The amendment of this Standard takes ECE R87 Rev3 Uniform Provisions Concerning the Approval of Daytime Running Lamps for Power-driven Vehicles by the United Nations Economic Commission for Europe, including the corresponding amendment (ECE R87 Rev3 Amendment-1) as a reference.

This Standard was proposed by and shall be under the jurisdiction of Ministry of Industry and Information Technology of the People's Republic of China.

The drafting organizations of this Standard. Shanghai Motor Vehicle Inspection Certification & Tech Innovation Center Co., Ltd., (SMVIC), Changchun HELLA Co., Ltd., SAIC MOTOR Group Technology Center.

1 Scope

This Standard stipulates the photometric characteristics, test methods and inspection rules of daytime running lamps for power driven vehicles.

This Standard is applicable to various types of daytime running lamps used by Category-L, Category-M and Category-N power driven vehicles.

2 Normative References

The following documents are indispensable to the application of this Standard. In terms of references with a specified date, only versions with a specified date are applicable to this Standard. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this Standard.

GB 4599 Motor Vehicle Headlamps Equipped with Filament Lamps

GB 4785 Prescription for Installation of the External Lighting and Light-signaling Devices for Motor Vehicles and Their Trailers

GB/T 15766.1 Lamps for Road Vehicles - Dimensional, Electrical and Luminous Requirements

ECE R37 Uniform Provisions Concerning the Approval of Filament Lamps for Use in Approved Lamp Units on Power-driven Vehicles and of Their Trailers

ECE R128 Uniform Provisions Concerning the Approval of Light Emitting Diode (LED) Light Sources for Use in Approved Lamp Units on Power-driven Vehicles

and Their Trailers

3 Terms and Definitions

Terms and definitions defined in GB 4599, GB 4785 and GB/T 15766.1 are applicable to this document.

4 Different Types of Daytime Running Lamps

Daytime running lamps including interlocking lamp system, have differences in the following main aspects.

5.1.1 The design and fabrication of daytime running lamps shall guarantee that under

normal operating conditions, even if they are under vibration, they could still comply with the operating requirements and the stipulations in this Standard.

5.2.1 Light source module shall be designed to be merely installed on the right position.

Light source modules, other than 5.3.1, shall only be dismantled through tools.

5.3.1 Daytime running lamps shall use light sources that comply with the stipulations

in GB/T 15766.1, ECE R37 or ECE R128.

5.4 Visual Surface Area

Visual surface area of the reference axis direction shall be not less than 25 cm², and not more than 200 cm².

5.5 Chromaticity

The light color of daytime running lamps shall be white. Its chromatic characteristics shall comply with the stipulations in GB 4785.

5.6.1 The luminous intensity of daytime running lamps on the reference axis shall be

not less than 400 cd.

5.6.4 Multiple-light-source daytime running lamps shall comply with the following requirements.

5.7.1 After receiving heat resistance test and reaching stability at ambient temperature,

daytime running lamps shall not manifest phenomena like distortion, deformation, cracks or color changes.

5.7.2 If necessary, photometric characteristics shall be re-determined. The result of the

determination shall at least reach 90% of the result obtained before the heat resistance test.

6.1 Requirements of Darkroom, Device and Equipment

Test darkroom, device and equipment shall comply with the stipulations in GB 4599.

6.2 Requirements of Visual Surface

Visual surface boundary in the reference axis direction of daytime running lamps shall be determined.

6.3.1 If electric light source controller is not used, colorless or colored standard light

sources of categories stipulated by daytime running lamps shall be adopted. In addition, the following voltages shall be provided.

6.3.2 In terms of systems which use electric light source controller, and act as a part

of daytime running lamps, the voltage of the supply lamp input terminal shall respectively be 6.75 V, 13.5 V or 28.0 V.

6.3.3 In terms of systems which use electric light source controller, but do not belong

to a constituent component of daytime running lamps, the voltage released by the manufacturer shall be input to the input terminal.