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

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Motor vehicle front fog lamps equipped with filament lamps

机动车用前雾灯配光性能

(English Translation)

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1 Scope

This standard specifies the photometric performance, test methods, inspection rules, for the front fog lamps for motor vehicles.

This standard applies to various types of front fog lamps, which are used in categories L3, L4, L5, M, N motor vehicles.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document;

for the undated documents, only the latest version (including all the amendments) 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 15766.1 Lamps for road vehicles - Dimensional, electrical and luminous requirements

IEC 60061 Lamp caps and holders together with gauges for the control of interchangeability and safety

ECE R37 Uniform provisions concerning the approval of filament lamps for use in approved lamp units of power-driven vehicles and of their trailers

ECE R99 Uniform provisions concerning the approval of gas-discharge light sources for

use in approved gas discharge lamp units of power-driven vehicles

3 Terms and definitions

Terms and definitions, which are defined in GB 4599, GB 4785 and GB 15766.1, apply to this document.

4 Different types of front fog lamps

Front fog lamps that differ in the following main areas.

5.1 General requirements

The design and manufacture of front fog lamps shall ensure that, under normal use conditions, even if they are subjected to vibration, they still meet the use requirements and photometric requirements. On the front fog lamp, it shall clearly indicate the correct position of the photometric mirror.

5.2 Chromaticity requirements

The light color of the front fog lamps shall be white or yellow; its chromaticity characteristics shall comply with the provisions of GB 4785.

5.3 Requirements for the stability test of photometric performance of front fog lamps

The front fog lamps shall meet the requirements of Appendix A.

5.4 "Requirements for front fog lamps of plastic light-distribution mirror -

Requirements for light-distribution mirror or material specimen and whole lamp test"

5.5.2 Requirements for front fog lamps using LED modules and light source generators

5.6 Sharpness and linearity requirements for cut-off lines

When there is an objection to the sighting, for the grade-F3 front fog lamps, it shall be tested for the sharpness and linearity of the cut-off line, in accordance with the provisions of Appendix D.

5.7 Electromagnetic compatibility requirements

Front fog lamps and their ballasts OR electric light source controllers shall comply with electromagnetic compatibility requirements. The consistency of electromagnetic

compatibility requirements is related to the specific vehicle type.

5.9.1 Dazzling requirements

The design of the front fog lamps shall ensure sufficient illumination, without dazzling.

6.1 Laboratory requirements

The test darkroom, devices, equipment shall comply with the provisions of GB 4599.

6.2 Photometric screen requirements for measuring the photometric performance

of front fog lamps

6.3 Measurement of photometric performance of grade-B front fog lamps

6.3.1

It shall use the colorless standard bulbs, which meet the requirements of GB

15766.1 or ECE R37. The type of bulbs, which is specified by the manufacturer, can be provided by the manufacturer or the applicant. Front fog lamps are considered qualified, if at least one standard bulb is assembled to meet the photometric performance requirements.

6.4.2 Sighting method of grade-F3 front fog lamp

6.4.2.1

The sighting screen for visual calibration, as shown in Figure 3, shall be placed

10 m or 25 m in front of the front fog lamps.

6.4.2.2

According to the provisions of D.2, the light and dark cut-off line of the front fog lamps shall be adjusted to a position 1° below the H line.

7.1.2 Materials of grade-B front fog lamps

7.1.2.1

A technical description, including the type of filament bulb used. Even if the filament bulb is not replaceable, it shall be approved in the GB 15766.1 or R37

Regulations and their amendments, which are valid at the time of application for type approval.

7.1.3 Materials of grade-F3 front fog lamps

7.1.3.1

A simple technical description including the type of light source used, even if the light source is not replaceable, it shall be approved in the GB 15766.1 and R37

Regulations or R99 Regulations and their amendments, which are valid at the time of application for type approval.

7.1.3.6

If the front fog lamp uses a gas discharge light source, it shall provide.

7.1.4 Type test of front fog lamps

7.1.4.1

The front fog lamps shall comply with the provisions of 5.1, 5.5, 5.7, 5.8.

7.1.4.2

Carry out the test according to the provisions of Chapter 6; each sample lamp shall meet the provisions of 5.2 and 5.9; it shall also meet the provisions of 5.6 for the grade-F3 front fog lamps.

7.1.4.3

The photometric stability of the front fog lamps shall also meet the requirements of 5.3.

7.2 Production consistency inspection

7.2.1

For products that have passed the type inspection, the sample lamps randomly selected from batches of products are used to determine the consistency of their production; those with obvious defects will not be considered.

7.2.2

The randomly selected sample lamps shall meet the requirements of 5.1, 5.5, 5.7, 5.8.

7.2.3

The test shall be carried out according to the provisions of Chapter 6. It shall meet the provisions of 5.2 and Appendix E.

If the photometric test results do not meet the requirements, the front fog light axis shall be adjusted, which has a left and right deviation of not more than 0.5° and an up and down deviation of not more than 0.2° ; its photometric shall meet all photometric requirements.