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

GB 15235-2007

**Photometric characteristics of reversing lamps for
power-driven vehicles
(English Translation)**

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Foreword

All technical content of this Standard is compulsory.

This Standard is corresponding to the United Nations Economic Commission for Europe ECE R23-2002, Uniform Provisions Concerning the Approval of Reversing Lamps for Power-driven Vehicles and Their Trailers. The degree of consistency is non-equivalent, with the major differences as follows.

- the administrative articles are deleted;
- the annex "Minimum requirements for conformity of production control procedures" is deleted;
- the annex "Minimum requirements for sampling by an inspector" is deleted;
- the inspection rules are added.

The main specifications, including general specifications, photometric performance, light colour and test methods, are consistent with the above-mentioned Regulation.

This Standard replaces GB 15235-1994, Photometric Characteristics of Reversing Lamps for Motor Vehicles and Their Trailers; and compared with the previous edition, the major changes of this Standard are as follows.

- the standard name is changed from the previous edition Photometric Characteristics of Reversing Lamps for Motor Vehicles and Their Trailers into the

current edition Photometric Characteristics of Reversing Lamps for Power-driven Vehicles and Their Trailers.

-- the Normative References and Terms of Article 2 of the previous edition are modified.

-- "Prescriptions on lamps of the same type" of Article 4 of the previous edition is modified into "Lamps of different types" of Article 4 of this Standard.

-- "Requirements for the lamps used in reversing lamps" of Article 6 of the previous edition is deleted, and "Requirements for the lamps used in reversing lamps" is modified and included in 5.3 of the new edition.

-- Article 7 of the previous edition is modified, adding the content as follows.

- 1) In the case where the reversing lamp is intended to be installed on a vehicle exclusively, the photometric intensity may be verified only up to an angle of 30° inwards (the position of a photometric value of 25 cd in Figure 1);
- 2) In directions below the horizontal plane, the intensity of light emitted shall not exceed 8 000 candelas below 5° D;
- 3) the requirements for lamps equipped with several light sources and lamps equipped with non-replaceable light sources are added.

-- "Measurement Methods" of Article 8 and "Inspection Rules" of Article 9 of the previous edition are modified.

-- the content concerning light source module(s) is added.

From the date of implementation of this Standard, GB 15235-1994 is abolished. The reversing lamps of power-driven vehicles and their trailers submitted for new application of type approval shall conform to this Standard.

The transitional requirements for the implementation of this Standard. for the reversing lamps of power-driven lamps and their trailers which have passed the type approval before the implementation of this Standard, a transitional period of 24 months is given. This Standard was proposed by the National Development and Reform Commission. This Standard shall be under the jurisdiction of the National Technical Committee of

Auto Standardization.

This Standard was drafted by Shanghai Research Institute of Auto Lamps.

1 Application Scope

This Standard specifies the photometric characteristics, test methods and inspection rules of reversing lamps for power-driven vehicles and their trailers.

This Standard applies to all types of reversing lamps for vehicles of categories M, N and O.

2 Normative References

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB 4599, Motor Vehicle Headlamps Equipped with Filament Lamps

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

3 Terms and Definitions

For the purposes of this Standard, the terms and definitions defined in GB 4599, GB

4 Reversing Lamps of Different Types

Reversing lamps which differ in such essential respects as.

5.1 General specifications. Reversing lamps shall be so designed and constructed

that in normal use, despite the vibration to which they may then be subjected, they continue to function satisfactorily and retain the characteristics prescribed by this Standard.

1 shall be white and its colorimetric characteristics shall be as prescribed in GB 4785.

Outside this field no sharp variation of colour shall be observed.

5.4.1 The design of the light source module(s) shall be such that even in darkness

the light source module(s) can be fitted in no other position, but the correct one.

5.5.1 The minimum light intensity of reversing lamps in different directions on and

outside their reference axis shall not be less than the value (expressed in cd) shown in Figure 1.

5.5.2 In the case where the reversing lamp is intended to be installed on a vehicle exclusively, the photometric intensity may be verified only up to an angle of 30° inwards (the position of a photometric value of 25 cd in Figure 1).

5.5.4 In the field shown in Figure 1, there is no substantial local variations of light intensity, i.e. no intensity measured between two of the directions of measurement is below 50% of the lower minimum intensity of the two prescribed for these directions of measurement.

6.2 The photometric performance measurement shall be conducted using the standard filament lamps of corresponding types and the measurement shall be conducted under the prescribed test luminous flux. If results of the test described do not meet the requirements, tests on lamps shall be repeated using another standard filament lamp.

28.0 V respectively, for the reversing lamps equipped with non-replaceable light sources.