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

GB 19152-2025

Road illumination devices for motorcycles and mopeds

摩托车和轻便摩托车道路照明装置

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12.2 V or

13.2 V, or at the voltage specified by the manufacturer, with a tolerance of $\pm$

13.5 V $\pm$

1 Scope

GB 19152-2025 is the Chinese national standard on road illumination devices for motorcycles and mopeds, in the field of road vehicles engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 30 May 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 January 2026. Classification: ICS 43.040.20, CCS T38. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the classification and type determination, technical requirements and inspection rules for road illumination devices for motorcycles and mopeds. It describes the corresponding test methods. This document applies to road illumination devices such as low-beam headlights, high- beam headlights and adaptive high beam (ADB) used in L1~L5 motor vehicles.

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 4785, Prescription for installation of the external lighting and light-signaling devices for motor vehicles and their trailers

GB 18100, Provisions for the installation of lighting and light-signaling devices for motorcycles and mopeds UN R37, Uniform provisions concerning the approval of filament lamps for use in approved lamp units of power-driven vehicles and of their trailers UN R99, Uniform provisions concerning the approval of gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles UN 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

For the purposes of this document, the terms and definitions defined in GB 4785 and GB 18100 as well as the followings apply.

3.1 road illumination device A unit or group of units used to illuminate the road and objects in the direction of the vehicle's travel to achieve one or more functions. NOTE. Road illumination devices include low-beam headlights, high-beam headlights and adaptive high beam (ADB), as well as additional lighting units.

3.2 additional lighting unit A component of road illumination devices, mainly providing cornering lighting for motorcycles. NOTE. Additional lighting units usually consist of optical, mechanical and electrical components.

3.3 secondary driving-beam A high beam that works together with the low beam to achieve the high beam lighting effect.

4.1 Headlight classification

4.1.1 For headlights emitting symmetrical low beam and/or high beam, the low beam level shall be BS, CS or DS, and the high beam level shall be BS, CS secondary driving-beam or DS secondary driving-beam. The use of A or B class high beam is also permitted.

4.1.2 For headlights emitting asymmetrical low beam and/or high beam, the low beam level shall be V or C, and the high beam level shall be A or B.

4.2 Determination of the same type of headlights Devices that do not differ in the following main features are considered to be of the same type. - Manufacturer; - The number, type, lighting principle, and module structure of replaceable or non-replaceable light sources used; - The number and structure of major optical components (e.g., reflectors, light distribution mirrors, light guides, etc.); - External light distribution mirrors and coating materials; - Class.

5.1 General requirements

5.1.1 General provisions The headlights shall be designed and manufactured so that they can meet the use requirements and comply with the provisions of this document under normal use conditions even if they are subject to vibration.

5.1.2 Beam adjustment device Both low-beam and high-beam headlights shall be equipped with beam adjustment devices. When low-beam and high-beam headlights are combined to form a combination lamp, the adjustment device shall be capable of adjusting them separately, unless they cannot be adjusted separately due to a shared adjustment mechanism or an integral reflector. For symmetrical low-beam headlights, horizontal adjustment may be omitted if good horizontal aiming can be maintained after vertical adjustment. If the above adjustments are achieved on the vehicle by other means, it is permitted not to install this device.

5.1.3 Beam switching device For headlight systems designed to emit high beam and low beam alternately, or containing additional light sources and/or additional lighting units that produce bending lighting, any mechanical, electromechanical or other device used to switch the light beam in the headlight shall meet the following requirements.

- a) Using common tools, users cannot change the shape and position of movable parts;
- b) When using a mechanical device to switch between high and low beams, the vehicle shall be able to switch between low and high beams at any time. The mechanical device shall not stop in the middle or other uncertain positions;
- c) For headlights emitting symmetrical low beams, except for additional light sources/additional lighting units providing cornering lighting, if a fault occurs, they shall automatically be in the low beam position, or their light distribution performance shall be such that the luminous intensity in Zone 1 is not greater than 1.2×10^3 cd, and the luminous intensity at point V-0.86D is not less than 2.4×10^3 cd by means of shutting down, reducing luminous intensity, tilting downward, and/or replacing functions;
- d) For headlights emitting asymmetrical low beams, if a fault occurs, the luminous intensity above the H-H line shall meet the requirements of 5.7.3. In addition, for headlights designed to provide low beam and/or high beam lighting for bends, the minimum luminous intensity at the 25 V point shall reach 2.5×10^3 cd.

5.1.4 Marking and reference center

5.1.4.1 Marking 5.1.4.1.1 For headlights using filament light sources, LED light sources and/or gas discharge light sources, the light source type and rated voltage shall be marked on the lamp body. 5.1.4.1.2 For headlights using LED modules, the rated voltage shall be marked on the lamp body. 5.1.4.1.3 There must be a marking on the lamp body to identify the headlight class. 5.1.4.1.4 Markings shall be as shown in Annex A.

5.1.4.2 Reference center A reference center mark may be marked on the lens and shall comply with the requirements of Annex B.

5.2 Light color and chromaticity The light color of headlights shall be white. Its chromaticity characteristics shall comply with the requirements of GB 4785.

5.3.1 Replaceable light source

5.3.1.1 For replaceable light sources, they shall be able to be installed in the correct position even in darkness.

5.3.1.2 For filament light sources, gas discharge light sources and light-emitting diode (LED) light sources used in headlights, their types and photoelectric performance requirements shall comply with the provisions of UN R37, UN R99 and UN R128.