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SAE J1306 JUN89

Motorcycle Auxiliary Front Lamps

SAE Recommended Practice
Revised June 1989

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Ø MOTORCYCLE AUXILIARY FRONT LAMPS

1. SCOPE:

This engineering design specification provides parameters and general requirements for auxiliary front lamps to be used on motorcycles. It may be supplemented by a service performance requirement.

2. DEFINITION:

An auxiliary lamp as covered by this specification is a unit, including sealed beam, intended to supplement either the upper or the lower beam from motorcycle headlamps.

3. LABORATORY REQUIREMENTS:

3.1 The following sections of SAE J575 are a part of this recommended practice:

- Section 2 - Samples for Tests
- Section 2.2 - Bulbs
- Section 3 - Laboratory Facilities
- Section 4.1 - Vibration Test
- Section 4.2 - Moisture Test
- Section 4.3 - Dust Test
- Section 4.4 - Corrosion Test
- Section 4.6 - Photometry Test
- Section 4.8 - Warpage Test on Devices with Plastic Components

3.2 Sealed beam units need to comply only with Sections 2, 3, and 4.6 of SAE J575.

3.3 Color Test: The color of the light from a motorcycle auxiliary front lamp shall be white. (See SAE J578).

3.4 Plastic Materials: Any plastic materials used in exterior optical parts shall comply with the requirements set forth in SAE J576.

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3.5 Photometric Tests: These shall be made with the photometer at a distance of at least 60 ft (18.3 m) from the lamp.

3.5.1 At-Focus Tests: The light source shall be located in the designed position as specified by the manufacturer.

The beam from the lamp shall be aimed with the left edge of the high intensity zone at a vertical line straight ahead of the lamp center and with the top edge of the high intensity zone at the level of the lamp center at a distance of 25 ft (7.6 m) from the lens.

The beam from the lamp shall meet the photometric specifications listed in Table 1 when it is aimed as specified.

TABLE 1 - Test Positions and Luminous Intensity Requirements

Position, deg ^a	Max Intensity (cd)
1U-1L to left and above	400
1/2U-1L to left	500
1/2D-1L to left	1000
1-1/2D-1L to left	3000
2U-1R to right and above	1000
1U-1R to right	3000
H-1R to right	7000
1-1/2D-2R to 4R	10 000 min

^aAn aiming tolerance of $\pm 1/4$ deg should be allowed on individual points.

3.5.2 Out-of-Focus Tests on Unsealed Units: Similar tests shall be made for each of four out-of-focus filament positions, except that the completed distribution may be omitted. Where conventional bulbs with two-pin bayonet bases are used, intensity tests shall be made with the light source 0.060 in (1.5 mm) above, below, ahead, and behind the designed position. If prefocused bulbs are used, the limiting positions at which tests are made shall be 0.020 in (0.5 mm) above, below, ahead, and behind the designed position.

The beam from the lamp may be reaimed as specified in 3.5.1 for each of the out-of-focus positions of light source.

3.5.3 The lamp shall be designed to comply with the photometric requirements shown in Table 1 for the design filament position and the required out-of-focus filament position. An aiming tolerance of ± 0.25 deg shall be allowed at each test point.

4. INSTALLATION AND USAGE REQUIREMENTS:

The following items apply to the device as used on the motorcycle and are not a part of the laboratory test requirements and procedures.

For greatest visibility, with reasonable limitation of glare to approaching drivers, the beam from the lamp shall be aimed in accordance with 3.5.1. The unit should be turned off when traveling in congested areas in cities. It may be wired so that it can be turned on or off with either beam of the regular headlamps.

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The phi (\emptyset) symbol is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. If the symbol is next to the report title, it indicates a complete revision of the report.

APPENDIX A

- A.1 As a matter of information, attention is called to SAE J567 for requirements and gages to be used in socket design for unsealed units.

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RATIONALE:

Not applicable.

RELATIONSHIP OF SAE STANDARD TO ISO STANDARD:

Not applicable.

REFERENCE SECTION:

SAE J567 NOV87, Lamp Bulb Retention System

SAE J575 DEC88, Tests for Motor Vehicle Lighting Devices and Components

SAE J576 SEP86, Plastic Materials for Use in Optical Parts Such as Lenses and Reflectors of Motor Vehicle Lighting Devices

SAE J578 MAY88, Color Specification

APPLICATION:

This engineering design specification provides parameters and general requirements for auxiliary front lamps to be used on motorcycles. It may be supplemented by a service performance requirement.

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