SAE International™

SURFACE VEHICLE STANDARD

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Superseding J592 AUG2005

Sidemarker Lamps for Use on Road Vehicles Less than 2032 mm in Overall Width

RATIONALE

- Photometric tables were removed and Figure1 and Figure 2 added.
- Section 2.2.2 revised.
- Section 6.1.5.1 revised.
- Section 6.5.1 revised.

1. SCOPE

This SAE Standard provides test procedures, requirements, and guidelines for sidemarker lamps for vehicles less than 2032 mm in overall width.

2. REFERENCES

2.1 Applicable Publications

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

SAE J567 Lamp Bulb Retention System

SAE J575 Test Methods and Equipment for Lighting Devices and Components for Use on Vehicles Less than 2032 mm in Overall Width

SAE J576 Plastic Material or Materials for Use in Optical Parts Such as Lenses and Reflex Reflectors of Motor Vehicle Lighting Devices

SAE J578 Color Specification

SAE J759 Lighting Identification Code

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: http://www.sae.org

SAE J1889 L.E.D. Signal and Marking Lighting Devices

SAE J2042 Clearance, Sidemarker, and Identification Lamps for Use on Motor Vehicles 2032 mm or More in Overall Width

SAE J2139 Tests for Signal and Marking Devices Used on Vehicles 2032 mm or More in Overall Width

2.2 Related Publications

The following publications are provided for information purposes only and are not a required part of this document.

2.2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

SAE J387 Terminology—Motor Vehicle Lighting

2.2.2 Federal Publications

Available from the Superintendent of Documents, U. S. Government Printing Office, Mail Stop: SSOP, Washington, DC 20402-9320, http://www.gpoaccess.gov/cfr/index/html.

CFR Title 49 Part 571.108 Lamps, Reflective Devices and Associated Equipment (FMVSS108)

3. DEFINITIONS

3.1 Sidemarker Lamps

Lighting devices used to indicate the presence and length of the vehicle when viewed from the side.

4. LIGHTING IDENTIFICATION CODE

Sidemarker lamps which meet the requirements of this document may be identified by the code “P2” in accordance with SAE J759.

5. TESTS

5.1 SAE J575 and SAE J1889 are a part of this document. The following tests are applicable with the modifications as indicated. Alternatively, sidemarker lamps may be tested according to SAE J2139.

5.1.1 Vibration

5.1.2 Moisture

5.1.3 Dust

5.1.4 Corrosion

5.1.5 Photometry

5.1.5.1 The photometric tests shall be made at a distance of at least 3 m between the lighting device and the photometer.

5.1.5.2 The H-V axis of a sidemarker lamp in a position as it will be mounted on a vehicle shall be taken as perpendicular to a vertical plane passing through the longitudinal axis of the vehicle.

5.1.6 Warpage

5.2 Color

SAE J578 is a part of this document.

5.3 Plastic Materials

SAE J576 is part of this document.

6. REQUIREMENTS

6.1 Performance Requirements

The device when tested in accordance with the test procedures of this document shall meet the requirements of SAE J575 and, if applicable, SAE J1889. Alternatively, if tested according to SAE J2139, sidemarker lamps shall meet the requirements of SAE J2139.

NOTE: Sidemarkers conforming to requirements of SAE J2042 meet requirements of SAE J592.

6.1.1 Vibration

6.1.2 Moisture

6.1.3 Dust

6.1.4 Corrosion

6.1.5 Photometry

6.1.5.1 The lamp shall be designed to conform to the zone total photometric requirements of Figures 1 and 2. The summation of the luminous intensity measurements at the test points in a zone shall be at least the value shown.

6.1.5.2 The inboard angle requirements for sidemarkers may be met alternatively for inboard test points at a distance of 4.6 m from the vehicle on a vertical plane that is perpendicular to the longitudinal axis of the vehicle and located midway between the front and rear sidemarker lamps.

6.1.6 Warpage

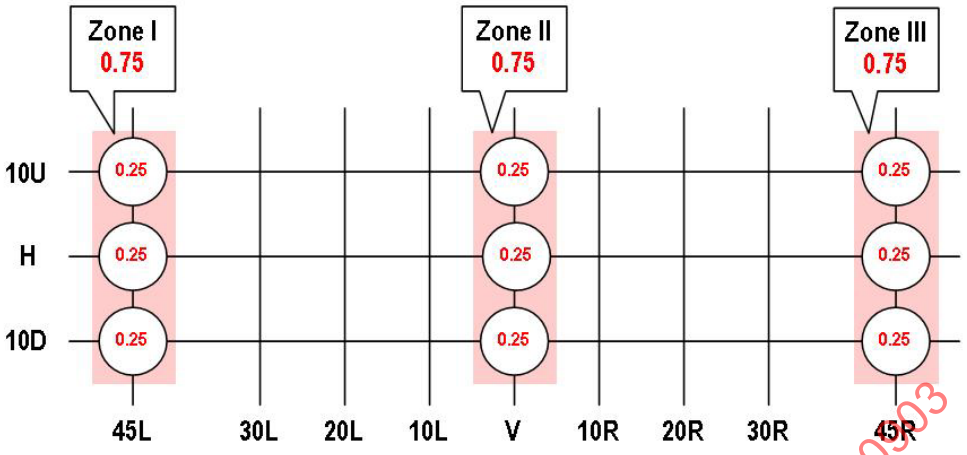
6.2 Color

6.2.1 The color of light from front and intermediate sidemarker lamps shall be yellow per SAE J578.

6.2.2 The color of light from rear sidemarker lamps shall be red per SAE J578.

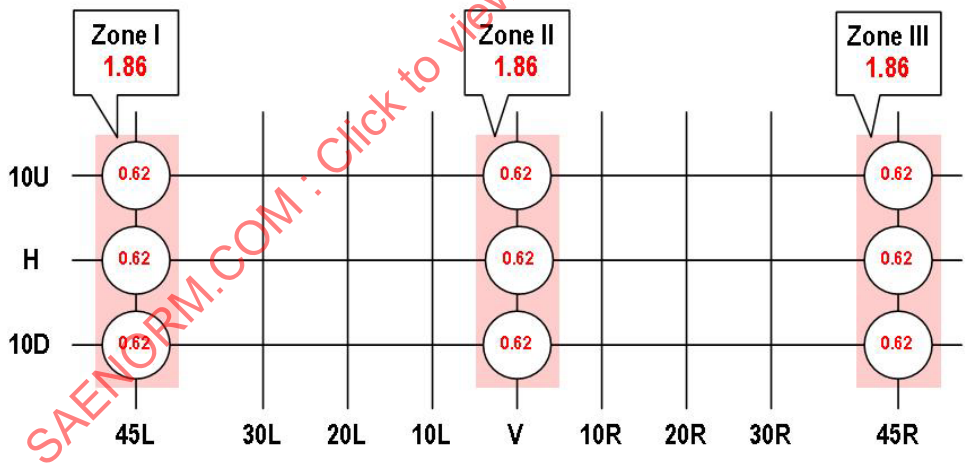
6.3 Plastic Materials Requirements

Plastic materials used in optical parts shall meet the requirements of SAE J576.



1. Reduced inboard angle requirements of 6.1.5.2 apply.
2. The measured values at each test point shall not be less than 60% of the required minimum value shown for that individual test point location.
3. The sum of the luminous intensity measurements at each test point within a zone shall not be less than the zone total shown. The luminous intensity measurements at each discrete test point shown within the corresponding zone are the values used to calculate the specified zone total.

FIGURE 1 - PHOTOMETRIC REQUIREMENTS (RED)
Minimum Luminous Intensity (cd)



1. Reduced inboard angle requirements of 6.1.5.2 apply.
2. The measured values at each test point shall not be less than 60% of the required minimum value shown for that individual test point location.
3. The sum of the luminous intensity measurements at each test point within a zone shall not be less than the zone total shown. The luminous intensity measurements at each discrete test point shown within the corresponding zone are the values used to calculate the specified zone total.

FIGURE 2 - PHOTOMETRIC REQUIREMENTS (YELLOW)
Minimum Luminous Intensity (cd)