SAE International™

SURFACE VEHICLE RECOMMENDED PRACTICE

SAE J852 MAR2009

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Superseding J852 APR2001

Front Cornering Lamps for Use on Motor Vehicles

RATIONALE

This document was revised to incorporate changes to the new more user-friendly photometry format balloted and approved in June 2006. There are no photometry requirements changes to this document. The current Table 1, Photometry Requirements is replaced with Figure 1, Photometry Requirements and current Figure 1, Test Point Orientation is changed to Figure 2. Corresponding references to them in paragraph 6.1.5 are also changed.

In the new Figure 1 the area defined by: 10U to 90U—45L to 45R is now identified as Zone 1 and the Note 2 scan is shown as "A scan shall be performed in 1-degree increments both horizontally and vertically. If any point exceeds 125 cd during the scan, a maximum of 500 cd is permissible if contained within a ±2 degree conical angle." which is the same procedure as currently in SAE J583 Front Fog Lamp. Also, the 4U, 2U, 1U and H—45L to 85R are identified as Lines 1, 2, 3 and 4 respectively and Note 3 states: "All-line scans are to be performed on lines 1, 2, 3 and 4 for maximum cd," which is also the same note as used in SAE J583.

1. SCOPE

This SAE Recommended Practice provides test procedures, performance requirements, and guidelines for front cornering lamps intended for use on motor vehicles.

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

3. DEFINITIONS

3.1 Front Cornering Lamps

Steady burning lamps used in conjunction with the turn signal system to supplement the headlamps by providing additional illumination in the direction of turn. They may be used independent of the turn signal to ease maneuvering at very low speeds.

4. IDENTIFICATION CODE DESIGNATION

Front cornering lamps meeting the performance requirements of this document may be identified by the code K in accordance with SAE J759.

5. TESTS

5.1 SAE J575 is a part of this document. The following tests are applicable with the modifications as indicated.

5.1.1 Vibration Test

5.1.2 Moisture Test

5.1.3 Dust Exposure Test

5.1.4 Corrosion Test

5.1.5 Photometry Test

In addition to the test procedures in SAE J575, the following apply:

5.1.5.1 Photometry measurements shall be made with the light source of the lamp at least 3 m from the photometer. The H-V axis shall be taken as the horizontal line through the light source and perpendicular to the longitudinal axis of the vehicle.

5.1.6 Warpage Test on Device with Plastic Components

5.2 Color Test

SAE J578 is a part of this document.

5.3 Plastic Materials

SAE J576 is a part of this document.

6. REQUIREMENTS

6.1 Performance Requirements

A device tested in accordance with the test procedure specified in Section 5 shall meet the following requirements:

6.1.1 Vibration

SAE J575.

6.1.2 Moisture

SAE J575.

6.1.3 Dust Exposure

SAE J575.

6.1.4 Corrosion

SAE J575.

6.1.5 Photometry

SAE J575. The lamp shall be designed to conform to the photometry requirements contained in Figure 1.

NOTE: Test points shown are for a lamp mounted on the left side of the vehicle – L and R designations in Figure 1 should be reversed for a lamp mounted on the right side of the vehicle. Refer to Figure 2 for Test Point Orientation.

6.1.6 Warpage

SAE J575.

6.1.7 Color Requirements

The color of the light from a front cornering lamp shall be white to yellow as specified in SAE J578.

6.2 Material Requirements

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

7. GUIDELINES

The following guidelines apply to front cornering lamps as used on motor vehicles and should not be considered part of the requirements.

7.1 The front cornering lamps are intended for use only when the headlamps are operational.

7.2 Cornering lamp activation should coincide with turn signal activation to provide illumination in the direction of the intended turn.

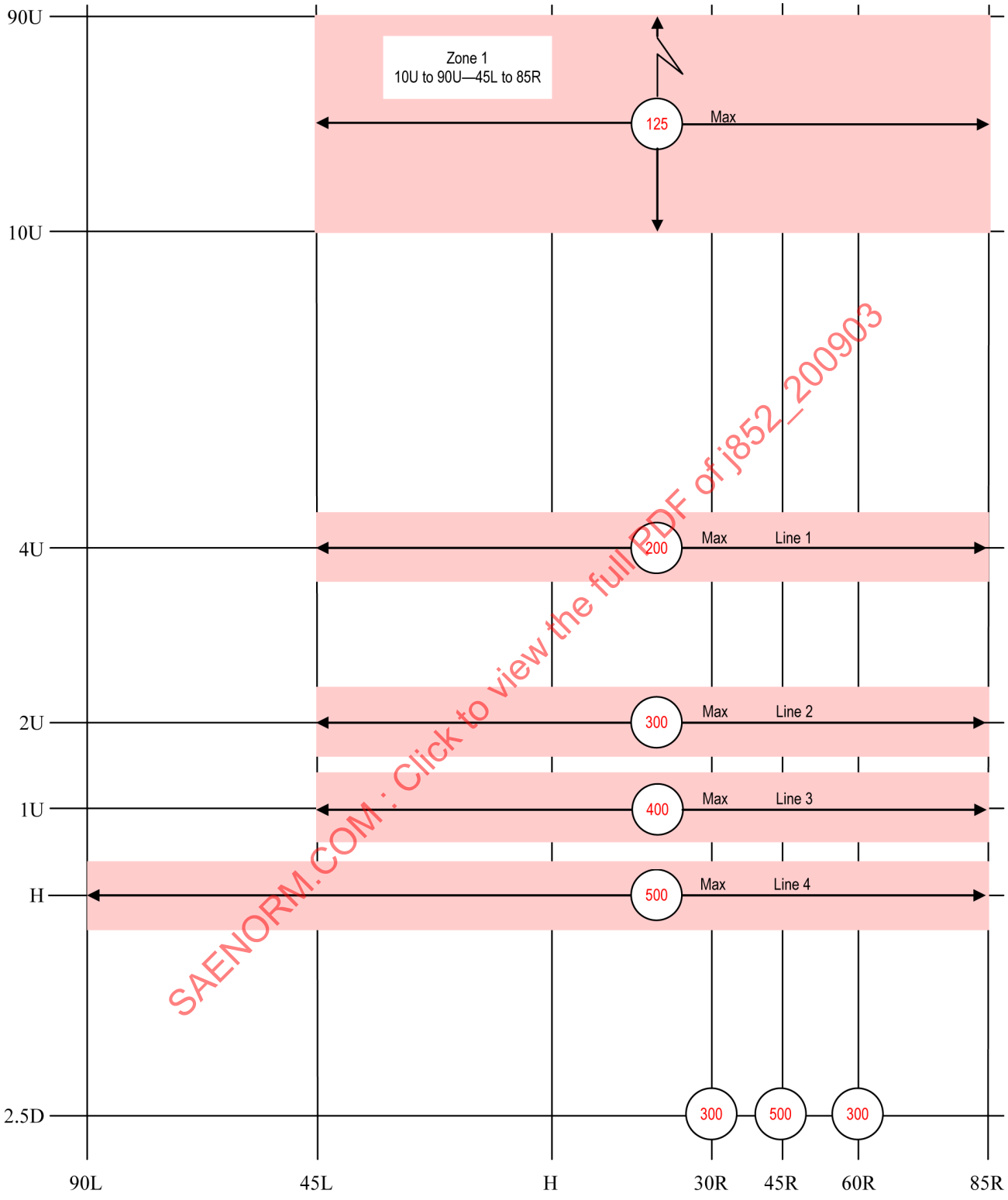
7.3 Cornering lamps may be deactivated at high vehicle speed (lane change maneuver) or while stopped, to avoid discomfort to other road users.

7.4 Cornering lamp may be activated by steering angle.

7.5 Location Requirements

The mounting height of the front cornering lamps shall be from 305 mm to 760 mm above the ground as measured from the optical center of the lamp on an unloaded vehicle.

7.6 For requirements and gauges to be used in socket designs, refer to SAE J567.



1. A tolerance of ±0.25 degrees in location is allowed at any test points or lines.
2. A scan shall be performed in Zone 1 in 1-degree increments both horizontally and vertically. If any point exceeds 125 cd during the scan, a maximum of 500 cd is permissible if contained within a ±2–degree conical angle.
3. All-line scans are to be performed on lines 1, 2, 3 and 4 for maximum cd.

FIGURE 1 - PHOTOMETRIC REQUIREMENTS
LUMINOUS INTENSITY (cd)