SAE International™

SURFACE VEHICLE RECOMMENDED PRACTICE

SAE J1319 AUG2010

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(R) Rear Fog Lamp Systems

RATIONALE

Revisions to this document were made to harmonize several requirements for rear fog lamps with E.C.E. Regulation 38 - Rear Fog Lamps for Motor Driven Vehicles. Specific changes are detailed below:

a. Title of document changed to “Rear Fog Lamp Systems” from “Fog Tail Lamp (Rear Fog Light) Systems”.

b. The term “Rear Fog Lamp” replaced the term “Rear Fog Tail Lamp” throughout the document.

c. Revised photometric requirements in section 6.1.5.1 to graphical form similar to the photometric test pattern found in ECE Regulation 38.

d. Conversion factor has been applied to the photometric values of Figure 1 and its footnotes to reflect a light source design voltage of 12.8 volts versus the E.C.E. test voltage of 13.5 volts typically specified for light sources.

e. Section 2.2 Related Publications added.

f. Revised paragraph 7.2 to clarify rear fog lamp(s) operation and switching requirements.

g. Contact information to obtain ECE Publications updated in paragraph 2.1.2.

FOREWORD

ECE Regulation 38, Rear Fog Lamps is the European equivalent to this Recommended Practice.

1. SCOPE

This SAE Recommended Practice provides test procedures, requirements, and guidelines for rear fog lamp systems.

2. REFERENCES

2.1 Applicable Documents

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications and the latest revision of ECE Regulation 38 shall apply.

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
SAE WEB ADDRESS: http://www.sae.org

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 Light Source Retention System

SAE J575 Test Methods and Equipment for Lighting Devices 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 J585 Tail Lamps (Rear Position Lamps) for Use on Motor Vehicles Less than 2032 mm in Overall Width

SAE J759 Lighting Identification Code

2.1.2 ECE Publication

Available from UN Economic Commission for Europe Information Service, Palais des Nations, CH – 1211 Geneva 10, Switzerland, Phone: +41 (0) 22 917 44 44, Fax: +41 (0) 22 917 05 05, e-mail: info.ece@unece.org.

ECE Reg 38 Uniform Provisions Concerning the Approval of Rear Fog Lamps for Power-Driven Vehicles and Their Trailers

2.2 Related Publications

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

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

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

3. DEFINITIONS

3.1 REAR FOG LAMP

A lighting device providing a continuous red light of higher intensity than a tail lamp (SAE J585) for the purpose of marking the rear of a vehicle during fog or similar conditions of reduced visibility.

3.2 REAR FOG LAMP SYSTEM

One or two rear fog lamps with their respective wiring, connectors, switch, and a function indicator.

4. LIGHTING IDENTIFICATION CODE

Rear Fog lamps shall be identified by the code F2 in accordance with SAE J759.

5. TESTS

5.1 SAE J575 is a part of this report. The following tests are applicable:

5.1.1 Vibration Test

5.1.2 Moisture Test

5.1.3 Dust Test

5.1.4 Corrosion Test

5.1.5 Photometry Test

5.1.5.1 Photometric measurements shall be made with light source of the lamp at least 3 m from the photometer. The H-V axis shall be taken as parallel to the axis of reference of the lamp as mounted on the vehicle.

5.1.6 Warpage Test for Devices With Plastic Components

5.2 Color Test

SAE J578 is a part of this report.

6. REQUIREMENTS

6.1 Performance Requirements

A device, when tested in accordance with the test procedures specified in Section 5, shall meet the following requirements with the modifications indicated:

6.1.1 Vibration

SAE J575.

6.1.2 Moisture

SAE J575.

6.1.3 Dust

SAE J575.

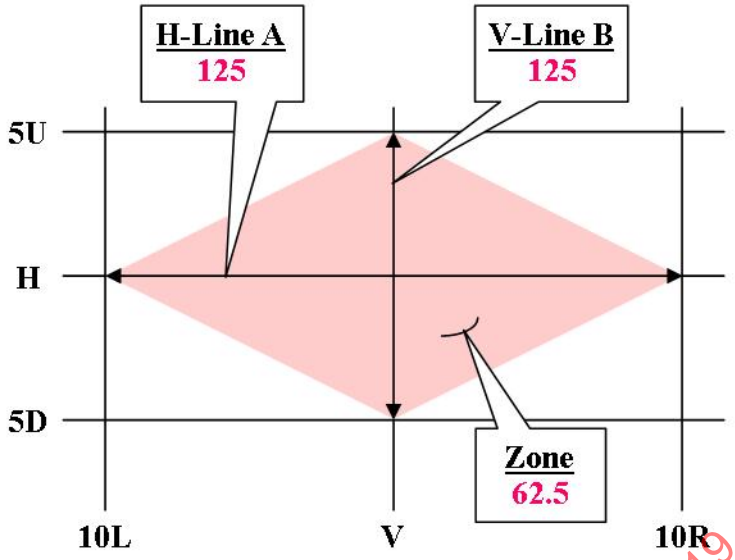
6.1.4 Corrosion

SAE J575.

6.1.5 Photometry

SAE J575.

6.1.5.1 The lamp shall meet the photometric performance requirements contained in Figure 1 and its footnotes.



1. The maximum luminous intensity in all directions in which the lamp(s) can be observed is 250 cd per lamp.
2. The minimum luminous intensity of 125 cd shown is required along the entire lengths of H-Line A and V-Line B (expressed in degrees of angle with the H-V axis of reference).
3. The minimum luminous intensity of 62.5 cd is required in the entire shaded zone (rhombus defined by the end points of H-Line A and V-Line B).

FIGURE 1 - PHOTOMETRIC REQUIREMENTS
Minimum Luminous Intensity (cd)

6.1.6 Warpage

SAE J575.

6.1.7 Color

The color of light from a rear fog lamp shall be red as specified in SAE J578.

6.2 Materials Requirements

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

6.3 Design Requirements

6.3.1 A rear fog lamp shall not be optically combined with any lamp other than a tail lamp.

7. GUIDELINES

The following guidelines are intended to provide optimal performance of the system and uniformity in use but shall not be considered part of the requirements.

7.1 Installation Guidelines

The user is cautioned that the mounting and use of rear fog lamps are specified by various regulatory agencies.