

Fog Tail Lamp (Rear Fog Light) Systems**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 fog tail lamp systems.

1.1 Rationale

The above changes were made as a result of a five-year review of the document. The inclusion of the ECE Reg 38 photometry as an optional alternative has been added in the interest of harmonization.

Section 2.1.1 has had the reference to ECE Reg 38 added due to this being included as an optional alternative to Table 1.

Tables 1 and 2 for guidelines and requirements have been replaced by Requirements of Table 1, to be consistent with other SAE standard criteria set by the Lighting Coordinating Committee (LCC) and also allowing the lamp manufacturers to determine their own guiding values.

Added footnote 3 to Table 1 to show COP photometric performance requirements of ECE Reg 38 are an acceptable alternative to values of Table 1, when tested in accordance with ECE Reg. 38.

Section 7.1 has been removed due to referencing a table (table 2) that had been removed.

Section 7.2, Fog Tail Lamp Switching, has been added as a wiring guideline for installation of Fog Tail Lamps.

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2. References

2.1 Applicable Publications

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.

2.1.1 SAE PUBLICATIONS

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

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 Materials for Use in Optical Parts Such as Lenses and 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 Commission of the European Communities, 200, Rue de la Loi, B-1049 Brussels, Belgium.

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

3. Definitions

3.1 Fog Tail 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 Fog Tail Lamp System

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

4. Lighting Identification Code

Fog tail lamps may 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 Table 1 and its footnotes. The summation of the luminous intensities at the test points specified for each zone in column 2 of Table 1 shall be at least the value shown for that zone in column 4.

TABLE 1—PHOTOMETRIC REQUIREMENTS

Zone	Test Points ⁽¹⁾ (deg)	Minimum Luminous Intensity (candela)	Minimum Luminous Zonal Intensity (candela)
1	10U-5L	16	52
	5U-20L	10	
	5D-20L	10	
	10D-5L	16	
2	5U-10L	30	100
	H-10L	40	
	5D-10L	30	
3	5U-V	70	380
	H-5L	80	
	H-V	80	
	H-5R	80	
	5D-V	70	
4	5U-10R	30	100
	H-10R	40	
	5D-10R	30	
5	10U-5R	16	52
	5U-20R	10	
	5D-20R	10	
	10D-5R	16	
Maximum Luminous Intensity (candela ⁽²⁾)			300

1. To pass zonal the measured values of each test point shall not be less than 60% of the minimum point value in Table 1.
2. The listed maximum at any test point shall not be exceeded over any area larger than that generated by a 0.5 degree radius with the solid angle defined by the test points in Table 1.
3. The COP photometric performance requirements of ECE Reg 38 are an acceptable alternative to Table 1, tested in accordance with ECE Reg. 38.

6.1.6 WARPAGE

SAE J575.

6.1.7 COLOR

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