



SURFACE VEHICLE STANDARD

J583™

MAY2020

Issued 1937-05
Revised 2020-05

Superseding J583 SEP2016

(R) Front Fog Lamp

RATIONALE

Table of contents: Updated.

3.7: Updated the harmonized front fog lamp definition to identify the UNECE regulation that this standard harmonizes with and removed the redundant text describing a front fog lamp's function.

Section 5: Section renumbered.

5.1.1: Removed the test voltage requirement and instead reference SAE J575. The test voltage specification was redundant to what is contained in SAE J575.

5.1.6.1.1: Updated requirement to reference 2.5 degrees in place of 1 degree to match the requirement in 6.2.5.1.3.

Section 6: Section renumbered.

6.1.6.1.2: Updated the gradient measurement location clarifying that it is to be measured at 2.5 degrees left and right.

6.1.6.2.1, 6.1.6.2.2, 6.1.6.2.2.1, and 6.1.6.2.2.2: Updated to reference that the average of the test points is greater than or equal to the requirement versus of the sum of the test points is equal to or great than twice the requirement to make the requirement easier to understand.

7.4: The SAE J583 AUG 2004 revision moved all the updated requirements from SAE J2510 to SAE J583. SAE J2510 was subsequently cancelled. The rationale of SAE J583 AUG 2004 stated, "In this version of SAE J583, all environmental tests and requirements as well as operational recommendations proposed by the J2510 (Harmonized Front Fog Lamp) Task Force have been added." However, the clarification update to 7.4 contained in SAE J2510 were missed in the text transfer. Specifically, it was clarified that the adjustment range for front fog lamps designed for a specific vehicle must be greater than the full range of vehicle suspension pitch and front fog lamps integral with headlamps do not need separate aim adjustment capability. These clarifications are included in this document revision.

7.6: Reworded for clarity.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2020 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

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
http://www.sae.org

SAE WEB ADDRESS:

Full document details: SAE J583_202005

For more information on this standard, visit
https://www.sae.org/standards/content/J583_202005

Documents

Document Sharing Hub

TABLE OF CONTENTS

1.	SCOPE.....	3
2.	REFERENCES.....	3
2.1	Applicable Documents	3
2.1.1	SAE Publications.....	3
2.1.2	Federal Publications.....	3
2.1.3	United Nations Publications	3
3.	DEFINITIONS	4
4.	LIGHTING IDENTIFICATION CODE, MARKINGS, AND NOTICES.....	4
5.	TESTS.....	4
6.	REQUIREMENTS	6
7.	GUIDELINES	9
8.	NOTES.....	11
8.1	Revision Indicator.....	11
Figure 1	Photometric requirements for front fog lamps luminous intensity (cd).....	7
Figure 2	Photometric requirements for harmonized front fog lamp luminous intensity (cd).....	8

1. SCOPE

This SAE Standard provides test procedures, performance requirements, design guidelines, and installation guidelines for front fog lamps.

2. REFERENCES

2.1 Applicable Documents

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 +1 724-776-4970 (outside USA), www.sae.org.

SAE J387	Terminology - Motor Vehicle Lighting
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 J588	Turn Signal Lamps for Use on Motor Vehicles Less than 2032 mm in Overall Width
SAE J599	Lighting Inspection Code
SAE J759	Lighting Identification Code
SAE J1383	Performance Requirements for Motor Vehicle Headlamps
SAE J2139	Tests for Signal and Marking Devices Used on Vehicles 2032 mm or More in Overall Width
SAE J2442	Harmonized Provisions for Installation of Exterior Lamps and Retro-Reflecting Devices on Road Vehicles Except Motorcycles
SAE J2650	Performance Requirements for Light Emitting Diode (LED) Road Illumination Devices

2.1.2 Federal Publications

Available from Transport Canada, Road Safety and Motor Vehicle Regulation Directorate, P.O. Box 8880, Ottawa Post Terminal, Ottawa, Ontario, K1G 3J2, www.tc.gc.ca.

CMVSS 108	Canadian Motor Vehicle Safety Standard for Exterior Lighting
-----------	--

2.1.3 United Nations Publications

Available from United Nations Economic Commission for Europe, Palais des Nations, CH-1211, Geneva 10, Switzerland, Tel: +41-0-22-917-12-34, www.unece.org.

UNECE R19	Uniform Provisions Concerning the Approval of Motor Vehicle Front Fog Lamps
UNECE R149	Uniform provisions concerning the approval of road illumination devices (lamps) and systems for power-driven vehicles

3. DEFINITIONS

3.1 FRONT FOG LAMP

A lighting device designed to provide illumination forward of the vehicle under conditions of fog, rain, snow, or dust.

3.2 GRADIENT

A measure of the change in light level over a change in location within the beam. It is an objective means to measure cutoff sharpness and determine cutoff location.

3.3 CUTOFF

A generally horizontal, visual/optical aiming cue in the beam that marks a separation between areas of higher and lower luminance.

3.4 CUTOFF LINE

The line where the maximum vertical photometric gradient is located.

3.5 ASYMMETRICAL LAMPS

Specifically designed lamps intended to be used together on a vehicle having beam patterns that are not symmetrical with respect to the vertical axis through H-V.

3.6 SYMMETRICALLY OPPOSITE LAMPS

Lamps with beam patterns that are mirror images of each other with respect to the vertical axis through H-V.

3.7 HARMONIZED FRONT FOG LAMP

A front fog lamp for use with or without headlamps designed to harmonize with the requirements of UNECE R19 for class F3 front fog lamps.

4. LIGHTING IDENTIFICATION CODE, MARKINGS, AND NOTICES

Front fog lamps meeting the requirements of photometry Figure 1 of this document may be identified by the code "F" in accordance with SAE J759. Front fog lamps meeting the requirements of photometry Figure 2 of this document may be identified by the code "F3" in accordance with SAE J759.

5. TESTS

5.1 The following test procedures of SAE J575 apply to this document; however, front fog lamps designed for universal mounting applications or for vehicles 2032 mm or more in overall width shall be tested according to test procedures of SAE J2139.

5.1.1 Test Voltage

5.1.2 Vibration Test

5.1.3 Moisture Test

5.1.4 Dust Test

5.1.5 Corrosion Test