



SURFACE VEHICLE STANDARD	J131™	NOV2024
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Superseding J131 MAY2022		
Motorcycle Turn Signal Lamp		

RATIONALE

This document completes the second step of the process agreed by the task force. The content is changed to align test point locations with U.S. Federal standards as well as other countries and to increase the minimum photometric requirements in order to enhance safety. The test point locations of Figure 1FY are updated to reflect FMVSS 108, other SAE documents, and to promote harmonization with UN documents

Figures 2FY, 3FY, and 4FY were added to allow front turn signals to be closer to low beam, DRL, supplemental low beam, and adaptive driving beam (ADB) than the current distance defined in FMVSS 108. They represent an intensity multiplier factor that harmonizes photometric requirements with UN regulation. While this requirement is not accepted in FMVSS 108 today, the TF considers it important to set a technical precedent for potential future revisions of the federal requirement.

Figures 1RR and 2RR are merged into a single figure. The location and test point values are updated to match FMVSS 108. No harmonization with UN requirements is sought as the intensity values in such documents are lower to current standards in the United States.

Figures 1RY and 2RY are merged into a single figure. The location and test point values are updated to match FMVSS 108. No harmonization with UN requirements is sought as the intensity values in such documents are lower to current standards in the United States.

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1. SCOPE

This SAE Standard provides test procedures, requirements, and guidelines for motorcycle turn signal lamps. It does not apply to mopeds.

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 J213	Motorcycle Classifications
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	Chromaticity Requirements for Ground Vehicle Lamps and Lighting Equipment
SAE J759	Lighting Identification Code
SAE J1690	Flashers
SAE J1889	LED Signal and Marking Lighting Devices

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

SAE J387	Terminology - Motor Vehicle Lighting
SAE J1050	Describing and Measuring the Driver's Field of View
SAE J2999	Determination of the Effective Projected Luminous Lens Area (EPLLA) by Design Analysis

2.2.2 Federal Publications

Available from United States Government Publishing Office, 732 North Capitol Street, NW, Washington, DC 20401, Tel: 202-512-1800, www.gpo.gov.

CFR Title 49 Part 571.108 Lamps, Reflective Devices and Associated Equipment (FMVSS 108)

Available from Transport Canada, Multi-Modal and Road Safety Programs, 330 Sparks Street, Ottawa, Ontario K1A 0N5, Canada, Tel: +1-613-998-8616 or +1-800-333-0371, mvs-sa@tc.gc.ca, www.tc.gc.ca.

Canada Motor Vehicle Safety Standard 108 (CMVSS 108) Lighting Systems and Reflective Devices

2.2.3 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.

UN Regulation No. 53 Uniform Provisions Concerning the Approval of Category L3 Vehicles with Regard to the Installation of Lighting and Light-Signalling Devices

UN Regulation No. 148 Uniform Provisions Concerning the Approval of Light-Signalling Devices (Lamps) for Power-Driven Vehicles and their Trailers (LSD)

3. DEFINITIONS

3.1 TURN SIGNAL FUNCTION

A flashing light to the front and/or rear of a vehicle on the side toward which a change of direction is intended.

3.2 MOTORCYCLE TURN SIGNAL LAMP

A device mounted on a motorcycle providing the turn signal function.

3.3 SEQUENTIAL TURN SIGNAL

A turn signal function where adjacent illuminated areas activate or deactivate consecutively.

4. LIGHTING IDENTIFICATION CODE

Motorcycle turn signal lamps may be identified by the code D 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 Test

5.1.4 Corrosion Test

5.1.5 Photometry Test

5.1.5.1 Photometric measurements shall be made at least 3 m or ten times the maximum linear extent of the Effective Projected Luminous Lens Area (EPLLA) of the signal lamp, whichever is greater from the photometer.

5.1.5.2 The H-V axis shall be taken as parallel to the longitudinal axis of the vehicle.

5.1.5.3 The test methods and procedures of SAE J1889 shall also be applied if LED light sources are present in the turn signal lamp(s).