SAE International	SURFACE VEHICLE STANDARD	J222	REV. DEC2006
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Parking Lamps (Front Position Lamps)

RATIONALE

Added Table of Contents.

Removed Foreword as it no longer applies to this version of the document.

Updated SAE contact information to agree with new template in 2.1.1 and 2.2.1.

Added 2.1.2, European Community/United Nations Publication—Available from: www.itu.ch/itudoc/un/editrans/wp29.html. ECE Regulation 7 - Uniform Provisions Concerning the Approval of Front and Rear Position (Side) Lamps, Stop-Lamps and End-Outline Marker Lamps for Motor Vehicles (Except Motor Cycles) and Their Trailers.

Changed 2.2.1 by removing SAE J1395 and SAE J1398, replacing with SAE J2261. SAE J2261 replaced both of those standards.

Changed 2.2.2 to read Federal Motor Vehicle Standard 49CFR Part 571.108, and updated web information.

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 - PHOTOMETRIC REQUIREMENTS is replaced with the new format FIGURE 1 - PHOTOMETRIC REQUIREMENTS. Reference to Table 1 will be replaced with Figure 1 in paragraphs: 6.1.5.1 and 6.5.1.

Added Max values to Note 1 of Figure 1. This provides for a specification that is in harmony with FMVSS 108.

Corrected numbering for Color Test Requirements to be 6.2.

Paragraph 6.5.2.1 reference to Figure 1 will be changed to Figure 2. Paragraph 6.5.2.2 reference to Figure 2 will be changed to Figure 3.

Current FIGURE 1 - GEOMETRIC VISIBILITY - DESIGN METHOD will be changed to FIGURE 2; current FIGURE 2 - GEOMETRIC VISIBILITY - PHOTOMETRIC METHOD will be changed to FIGURE 3.

Changed 6.5.2.1 “outboard to 20 to 45 degrees inboard”. This provides for a specification that is in harmony with FMVSS 108. Changed Figure 2 to match 6.5.2.1.

Added the following note, 8.1 ECE Front Position Lamps—Lamps designed to ECE Reg7 Front Position lamps will meet the Photometric and Color requirements of this standard.

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TABLE OF CONTENTS

1. SCOPE

This SAE Standard provides test procedures, requirements, and guidelines of parking lamps (front position lamps).

2. REFERENCES

2.1 Applicable Publications

The following publications form a part of this specification to the extent specified herein. Unless otherwise specified, the latest issue of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE, 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 Tests for Motor Vehicle Lighting Devices and Components

SAE J576 Plastic Materials for Use in Optical Parts Such as Lenses and Reflectors of Motor Vehicle Lighting Devices

SAE J578 Color Specification

SAE J759 Lighting Identification Code

2.1.2 European Community/United Nations Publication

Available from: www.itu.ch/itudoc/un/editrans/wp29.html.

ECE Regulation 7 Uniform Provisions Concerning the Approval of Front and Rear Position (Side) Lamps, Stop-Lamps and End-Outline Marker Lamps for Motor Vehicles (Except Motor Cycles) and Their Trailers

2.2 Related Publications

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

2.2.1 SAE Publications

Available from SAE, 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 J592 Clearance, Side Marker, and Identification Lamps

SAE J585 Tail Lamps (Rear Position Lamps) for Use on Motor Vehicles Less Than 2032 mm in Overall Width

SAE J586 Stop Lamps for Use on Motor Vehicles Less Than 2032 mm in Overall Width

SAE J588 Turn Signal Lamps for Use on Motor Vehicles Less Than 2032 mm in Overall Width

SAE J594 Reflex Reflectors

SAE J1957 Center High Mounted Stop Lamp Standard for Use on Vehicles Less than 2032 mm Overall Width

SAE J2261 Stop lamps and Front and Rear Turn Signal Lamps for Use on Motor Vehicles 2032 mm or More in Overall Width

2.2.2 Federal Publication

Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, http://www.access.gpo.gov/nara/cfr-table-search.html#page1.

Federal Motor Vehicle Standard 49CFR Part 571.108

3. DEFINITIONS

3.1 Parking Lamps

Whether separate or in combination with other lamps, parking lamps are located on both the front left and right of the vehicle which show to the front and are intended to mark the vehicle when parked. In addition, these front lamps serve as a reserve front position indicating system in the event of headlamp failure.

4. LIGHTING IDENTIFICATION CODE

Parking lamps may be identified by the code “P” in accordance with SAE J759.

5. TESTS

5.1 SAE J575 is a part of this report. 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 In addition to the test procedures in SAE J575, the following apply:

Photometric 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 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. PERFORMANCE REQUIREMENTS

6.1 A device, when tested in accordance with the test procedures 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

SAE J575.

6.1.4 Corrosion

SAE J575.

6.1.5 Photometry

6.1.5.1 In addition to the photometric requirements in SAE J575, the following apply:

The lamp shall be designed to conform to the zone total photometric requirements of Figure 1 and its footnotes. The summation of the luminous intensity measurements at the test points in a zone shall be at least the value shown.

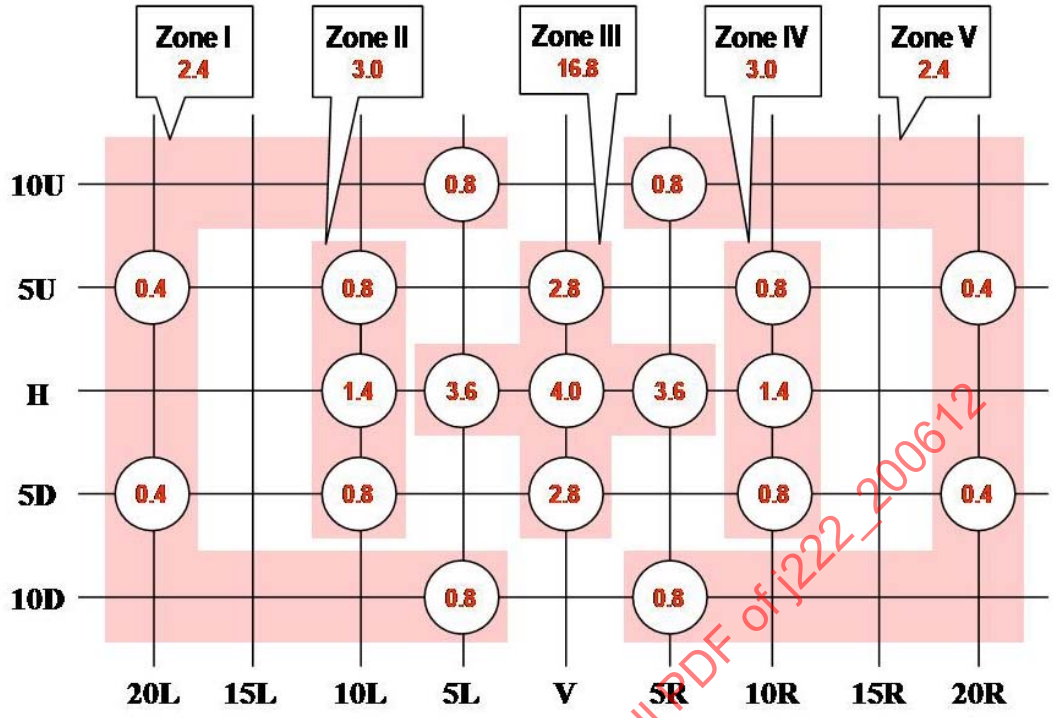

FIGURE 1-PHOTOMETRIC REQUIREMENTS
Minimum Luminous Intensity (cd)

1. The maximum luminous intensity is 125 cd on or above horizontal and 250 cd below horizontal.
2. The Measured value at each test point shall not be less than 60% of the required minimum value for that individual test point location.
3. The sum of the luminous intensity measurements at each test point within a zone shall not be less than the zone total shown. The luminous intensity measurements at each discrete test point shown within the corresponding zone are the values used to calculate the specified zone total
4. The listed maximum shall not be exceeded over any area larger than that generated by a 0.5 degree radius within the solid angle defined by the test points.
5. Ratio requirements of 6.1.5.2 apply.

FIGURE 1 - PHOTOMETRIC REQUIRMENTS

6.1.5.2 When a parking lamp is combined with the turn signal lamp, the signal lamp shall not be less than three times the luminous intensity of the parking lamp at any test point on or above horizontal; except that at H-V, H-5L, H-5R, and 5U-V, the (turn signal) lamp shall not be less than five times the luminous intensity of the parking lamp.

6.1.6 Warpage

SAE J575.

6.2 Color

The color of the light from a parking lamp shall be white or yellow as specified in SAE J578.

6.3 Materials Requirements

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