

**Spot Lamps****1. Scope**

This SAE Standard provides test procedures and performance requirements for spot 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.

SAE J575—Test Methods and Equipment for Lighting Devices and Components for Use on Vehicles

Less than 2032 mm in Overall Width

SAE J578—Color Specification

SAE J759—Lighting Identification Code

**3. Definitions****3.1 Spot Lamps**

Lamps which are designed to be installed on a motor vehicle or marine pleasure craft and which provide a substantially collimated beam of light that is capable of being readily aimed as desired by the user for non-driving purposes.

**4. Lighting Definition Code**

Spot light for vehicles may be identified with "0" in accordance with SAE J759.

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 reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2003 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: 724-776-4970 (outside USA)  
Fax: 724-776-0790  
Email: [custsvc@sae.org](mailto:custsvc@sae.org)  
SAE WEB ADDRESS: <http://www.sae.org>

**5. Tests**

**5.1 SAE J575**

The following test procedures in SAE J575 tests for motor vehicle lighting devices and components are part of this document with modifications as indicated.

5.1.1 VIBRATION TEST

5.1.2 MOISTURE TEST

5.1.3 DUST TEST

The dust test shall not be required for sealed units.

5.1.4 CORROSION TEST

5.1.5 WARPAGE

5.1.6 PHOTOMETRY

**5.2 Color Test**

SAE J578 is part of this document.

**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 indicated in SAE J575:

6.1.1 VIBRATION

6.1.2 MOISTURE

6.1.3 DUST

6.1.4 CORROSION

6.1.5 WARPAGE

6.1.6 PHOTOMETRY

The peak intensity of the beam shall be no less than 30 000 candela.

**6.2 Color**

The color of the emitted light shall be white as defined in SAE J578.

### 6.3 Beam Pattern

The spot lamp beam pattern shall be well defined and generally round or oval in shape, without voids or dark areas. The size of the pattern shall be approximately 5 X 5 degrees or if oval, 5 X 7 degrees as measured photo-electrically out to 10% of its maximum intensity.

## 7. Guidelines

### 7.1 Installation Guidelines

The following guidelines apply to spot lamps as used on the vehicle and should not be considered part of the requirements.

- 7.1.1 If not hand held, the spot light shall be securely mounted to a surface that has a minimum of vibration so as not to allow the spot light beam to oscillate on its target.
- 7.1.2 After aiming the spot light beam it shall remain secured from unintentional movement.
- 7.1.3 If practical, the user should consider the location of the spot light to avoid having to look through the beam at the intended target.

## 8. Notes

### 8.1 Marginal Indicia

The change bar (I) located in the left margin is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. An (R) symbol to the left of the document title indicates a complete revision of the report.

PREPARED BY THE SAE SIGNALING & MARKING DEVICES STANDARDS COMMITTEE