

Issued 1973-05
Revised 2007-01

Superseding J95 MAR1986

Headlamps for Industrial Equipment**1. Scope**

This SAE Standard provides performance and general design requirements and related test procedures for headlamps for use on industrial wheeled equipment that may be operated on public roads.

1.1 Rationale

The document was rewritten to conform with the latest SAE format. In an attempt to eliminate design restrictiveness, the requirements are now performance-based rather than approved-device citation. Certain specifications were deleted due to their having been cancelled during the period of time since the document's last revision.

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 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 J572—Dimensional Specifications for Sealed Lighting Unit for Construction and Industrial Machinery
SAE J575—Tests for Motor Vehicle Lighting Devices and Components
SAE J579—Sealed Beam Headlamp Units for Motor Vehicles
SAE J598—Sealed Lighting Units for Construction and Industrial Machinery
SAE J760—Dimensional Specifications for General Service Sealed Lighting Units
SAE J1029—Lighting and Marking of Construction, Earthmoving Machinery
SAE J2121—Requirements for Composite Lighting Assemblies Used on Construction and Industrial Machinery

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 © 2007 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: CustomerService@sae.org
SAE WEB ADDRESS: <http://www.sae.org>

3. Definitions

3.1 Industrial Wheeled Equipment

That class of tractors, machines, and associated equipment used in operations such as landscaping, construction services, loading, digging, grounds keeping, and highway maintenance.

3.2 Headlamp for Industrial Equipment

A lighting device used to provide general illumination ahead of the vehicle and to provide visual forewarning to others. These lamps may be used during off-road use and shall be used during on-road travel.

4. General Requirements

The following sections from SAE J575 are part of this standard:

Section B - Samples for Test

Section D - Laboratory Facilities

Section I - Color Tests - The color of the light from the lighting device shall be white.

Section J - Photometry - The photometric test shall be made with the photometer at a distance of at least 60 ft (18.3 m) from the lamp.

5. Dimensional Requirements

The lamps shall have dimensional conformance requirements agreed upon by the OEM and the device supplier.

6. Electrical and Life Requirements

The lamps shall conform to electrical and life requirements agreed upon between the OEM and the lamp supplier.

7. Beam Aim On Machine

The headlamps shall be aimed so that the area of highest intensity intercepts the ground surface below the horizon.

8. Photometric Requirements

8.1 Headlamp

The headlamp deployed shall have light candela levels high enough to provide adequate illumination over the distance required to stop the machine when traveling at its maximum level surface speed. The lower limit candela requirement can be calculated by multiplying the square of the stopping distance (meters) times 2.77 (lux). Reference Table 1 in SAE J1029. Where more than one headlamp is used and aimed in the same manner, the effective candela will be considered the total of all the headlamps. The upper limit candela requirement of the lamps can be agreed upon between the machine OEM and the lamp device provider.