



# SURFACE VEHICLE RECOMMENDED PRACTICE

J1424™

SEP2025

Issued 1991-08  
Revised 2025-09

Superseding J1424 MAR2014

(R) Cargo Lamp for Use on Vehicles Under 5443 kg (12000 pounds) GVWR

## RATIONALE

Section 1: Added meaning of GVWR for clarity.

Modified reference section to match latest format of J-documents.

Previous 3.1 REAR-FACING CARGO LAMP is now 3.3 REAR-FACING CARGO LAMP with a modified definition updated to align with other J-documents.

Removed weight reference from definition of cargo function as it is implied in the scope of the standard.

Previous 3.2 SIDE-FACING CARGO LAMP renamed IN-BOX CARGO LAMP. Definition updated to remove the requirement that it is facing toward the centerline of the vehicle and to align with other J-documents. Some vehicles have cargo lamps that are not rear-facing or side-facing; by removing the requirement of facing toward the centerline of the vehicle, these cargo lamps that are mounted in the box are included in this document. Modified 3.2: Moved side facing cargo lamp to 3.3, in-box cargo lamp.

Modified 4.2: Side-facing cargo lamp renamed in-box cargo lamp.

Section 4: Reordered alphabetically to match Section 3.

Added 5.1.5.2 to reference J1889.

Modified content of 5.2 to align with other J-documents.

Modified 6.1.5.2: Side-facing replaced with in-box cargo lamp.

Edited footnote 3 of Figure 1 and Figure 2 to clarify maximum intensity requirement.

Figure 2: Side-facing replaced with in-box cargo lamp.

7.1.1.1 reworded for clarity of intended guidance.

7.1.1.2 changed “shall” to “may.” This section is under design guidelines and is not a requirement.

7.1.1.3 removed reference to white light in the design guidelines. This is a requirement covered by 5.2.

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Documents



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Added Figure 3 to clarify rear facing and in-box mounting.

Eliminated Appendix A to make J1424 more technology-independent.

## 1. SCOPE

This SAE Recommended Practice provides test procedures, performance requirements, and guidelines for cargo lamps intended for use on vehicles under 5443 kg (12000 pounds) Gross Vehicle Weight Rating (GVWR).

## 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](http://www.sae.org).

|           |                                                                                                                               |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| 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 J1889 | LED Signal and Marking Lighting Devices                                                                                       |
| SAE J2139 | Tests for Signal and Marking Devices Used on Vehicles 2032 mm or More in Overall Width                                        |

### 2.2 Related Publications

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

#### 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](http://www.sae.org).

|          |                                      |
|----------|--------------------------------------|
| SAE J387 | Terminology - Motor Vehicle Lighting |
|----------|--------------------------------------|

#### 2.2.2 Code of Federal Regulations (CFR) Publications

Copies of these documents are available online at <https://www.ecfr.gov/>.

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

#### 2.2.3 Transport Canada Publications

Available from Transport Canada, Tower C, Place de Ville, 330 Sparks Street Ottawa, Ontario K1A 0N5, Tel: 1-800-305-2059, [www.tc.gc.ca](http://www.tc.gc.ca).

|           |                                         |
|-----------|-----------------------------------------|
| CMVSS 108 | Lighting Systems and Reflective Devices |
|-----------|-----------------------------------------|

### 3. DEFINITIONS

#### 3.1 CARGO LIGHT FUNCTION

A light providing illumination to facilitate the loading and unloading of cargo.

#### 3.2 IN-BOX CARGO LAMP

A device or devices, mounted in the exterior cargo area of a vehicle, providing the cargo light function.

#### 3.3 REAR-FACING CARGO LAMP

A device or devices, mounted facing rearward on the exterior of a vehicle, providing the cargo light function.

### 4. LIGHTING IDENTIFICATION CODE

4.1 In-box cargo lamps may be identified with the code “G2” in accordance with SAE J759.

4.2 Rear-facing cargo lamps may be identified with the code “G” in accordance with SAE J759.

### 5. TESTS

5.1 SAE J575 or SAE J2139 are 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

In addition to the test procedures in SAE J575 or SAE J2139, the following apply:

5.1.5.1 Photometric measurements shall be made with the light source of the lamp at a distance of at least 3 m from the photometer.

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

#### 5.1.6 Warpage Test on Devices with Plastic Components

The device shall be operated with the light source burning steadily during the test period.

#### 5.2 Color Test

The color of the cargo light function shall be tested according to SAE J578.

#### 5.3 Materials Test

Plastic material used in the optical parts shall be tested according to SAE J576.