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# Harmonized Vehicle Headlamp Performance Requirements

## RATIONALE

The technical report covers technology, products, or processes which are mature and not likely to change in the foreseeable future.

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### 1. SCOPE

This SAE Recommended Practice provides headlamp beam pattern test points for harmonized low and high beam headlamp beam patterns that incorporate elements of European, Asian, and U.S. photometric tables. These photometric tables are optional to those found in SAE J1383.

## 2. REFERENCES

2.1 Applicable Publications

The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated the latest revision 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), <u>www.sae.org</u>.

- SAE J387 Terminology—Motor Vehicle Lighting
- SAE J575 Test Methods and Equipment for Lighting Devices and Components for Use on Vehicles Less than 2032 mm in Overall Width
- SAE J759 Lighting Identification Code
- SAE J1383 Performance Requirements for Replaceable Bulb Motor Vehicle Headlamps
- 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), <u>www.sae.org</u>.

- SAE J599 Lighting Inspection Code
- SAE J600 Headlamp Aim Test Machines
- SAE J602 Headlamp Aiming Device for Mechanically Aimable Headlamp Units
- SAE Paper 870238 The Potential Impact of Automotive Headlight Changes on the Visibility of Reflectorized Highway Signs, J. B. Arens, Office of Safety and Traffic Operations, Research and Development, Federal Highway Administration

#### 2.2.2 ECE Publications

Available from Commission of the European Communities, Rue de la Loi 200, B-1049 Brussels, Belgium, <u>www.europa.eu.int</u>.

- ECE Regulation R112 Headlamps Emitting an Asymmetrical Passing Beam
- ECE Regulation R98 Headlamps with Gas-Discharge Light Sources

#### 2.2.3 JIS Publication

Available from Japanese Standards Association, 4-1-24 Akasaka Minato-ku, Tokyo 107-8440, Japan, Tel: +81-3-3583-8005, <u>www.jsa.or.jp</u>.

JIS D 5500 Automobile Parts—Lighting and Light Signaling Devices

2.2.4 Other Publications

"Headlamp Beam Pattern Philosophy," Lidstrom, O., Minutes of the SAE Headlamp Beam Task Force, April 4, 1990

- "Obstacle Detection Rationale for Upper Beam Intensity," Kosmatka, W.J., Minutes of the SAE Headlamp Beam Task Force, February 26, 1992
- "Headlamp Beam Gradient Aim Study," Kosmatka, W.J., Minutes of the SAE Headlamp Beam Task Force, October 4, 1993
- "Partial Harmonization of International Standards for Low-Beam Headlighting Patterns," Sivak, M. and Flannagan, M., UMTRI-93-11, Univ. of Mich. Trans. Res. Institute, 1993

### 3. DEFINITIONS

3.1 Harmonized Beam Pattern

Optional low beam and high beam patterns that may be used in place of those specified in SAE J1383.