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SURFACE VEHICLE RECOMMENDED PRACTICE

SAE J387

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Submitted for recognition as an American National Standard

(R) TERMINOLOGY—MOTOR VEHICLE LIGHTING

***Foreword*—**This Document has not changed other than to put it into the new SAE Technical Standards Board Format.

***1. Scope*—**This SAE Recommended Practice provides definitions of common terms used in SAE Technical Reports pertaining to motor vehicle lighting. It covers not only basic lighting terms but also terms which identify major segments of technical reports.

***2. References*—**There are no referenced publications specified herein.

3. Definitions

3.1 Light—Visible radiant energy.

3.2 Light Source—An emitter of visible radiant energy.

3.2.1 LIGHT SOURCE UNIT, BULB—A functionally indivisible assembly which contains a light source and which is normally used in a lamp. An example is an incandescent bulb or a light-emitting diode.

3.2.2 FILAMENT BULB—FILAMENT LAMP—Device in which light is produced by means of one or more filaments heated to incandescence by the passage of an electric current.

3.2.3 DISCHARGE BULB—DISCHARGE LAMP—Device in which light is produced by an electric discharge through a gas, a metal vapor, or a mixture of gases and vapors.

3.2.4 LIGHT-EMITTING DIODE—An indivisible, discrete light source unit containing a semiconductor junction in which visible light is non-thermally produced when a forward current flows as a result of an applied voltage.

3.2.5 SEASONED LIGHT SOURCE UNIT, BULB—A light source unit energized at design voltage for 1% of its average rated lab life or 10 h maximum, whichever is shorter.

3.2.6 ACCURATE RATED LIGHT SOURCE UNIT, BULB—A seasoned light source unit operated at design mean spherical luminous intensity and having its light source(s) positioned within strict tolerances as specified in the applicable standard.

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3.3 Lamp—A divisible assembly which contains a light source unit(s) and generally an optical system such as a lens, a reflector, or both and which provides a lighting function.

3.3.1 MULTIPLE COMPARTMENT LAMP—A lamp which provides its lighting function using two or more separately lighted areas which are joined by one or more common parts, such as a housing or lens.

3.3.2 MULTIPLE LAMP ARRANGEMENT—An array of two or more separate lamps on each side of the vehicle which operate together for a particular lighting function.

3.3.3 OPTICALLY COMBINED—A lamp shall be deemed to be "optically combined" if both of the following conditions exist:

a. It has a single or two filament light source or two or more separate light sources that operate in different ways.
b. Its optically functional lens area is wholly or partially common on two or more lamp functions.

3.3.4 LIGHT-EMITTING SURFACE—"Light-Emitting Surface" means all or part of the exterior surface of the transparent or translucent lens that encloses the light source or signaling device and allows conformance with photometric and colorimetric requirements.

3.3.5 EFFECTIVE PROJECTED LUMINOUS AREA—"Effective Projected Luminous Area" is that area of the light-emitting surface projected on a plane at right angles to the axis of a lamp, excluding reflex reflectors (but including congruent reflexes), which is not obstructed by opaque objects such as mounting screws, mounting rings, bezel or trim, or similar ornamental feature areas. Areas of optical or other configurations, for example, molded optical rings or markings, shall be considered part of the total "effective projected luminous area". The axis of the lamp corresponds to the H-V axis used for photometric requirements.

3.3.6 CENTROID OF A LENS AREA—The geometric centroid of a plane area which is perpendicular to the axis of reference of the vehicle and upon which the projection of the light-emitting lens area falls. An example: The axis of reference for lamps mounted on the front and rear of a vehicle is the longitudinal axis of the vehicle.

3.4 Device—Any piece of equipment or mechanism designed to serve a specific purpose or perform a specific function.

3.5 Unit—An indivisible assembly which provides a mechanical, electrical, or lighting function, for example, sealed beam unit or flasher.

4. Technical Report Content

4.1 Guidelines—Advisory, informational, or instructional statements to assist designers, installers, laboratory personnel, or manufacturers in meeting the requirements in the evaluation and use of a device or component.

4.2 Requirements—Objectives to be attained in the evaluation and use of new and unused devices, manufactured using production tooling and assembled by production processes.

4.2.1 PERFORMANCE REQUIREMENTS—Characteristics of a device which are essential for its proper functioning, for example: color, luminous intensity, and ability to withstand vibration.

4.2.2 DESIGN REQUIREMENTS—Dimensional or physical characteristics to be attained.

5. Notes

5.1 Marginal Indicia—The change bar (l) 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 AND MARKING DEVICES STANDARDS COMMITTEE
AND THE SAE LIGHTING COORDINATING COMMITTEE