

AEROSPACE RECOMMENDED PRACTICE

SAE ARP881

REV. F

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Superseding ARP881E

Lamps for Aircraft Lighting

RATIONALE

This document is basically a duplication of ANSI SR 25d -1997 (Assigned Miniature Lamp Codes). Because this document only contains old lamp part numbers. The American National Standards Lighting Group is no longer going to update ANSI SR 25d -1997.

STABILIZED NOTICE

This document has been declared "Stabilized" by the SAE A-20A Crew Station Lighting C Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

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1. SCOPE

This SAE Aerospace Recommended Practice (ARP) lists the lamps in Table 1 that are recommended for the type of service indicated. This list is not intended as a catalog and does not include many types that are now in use. This specification is not applicable to Solid State Lighting Lamp Assemblies (Based LED lamps). It does, however, reflect current practice.

2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 SAE Publications

Available from SAE International, 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 J573 Miniature Lamp Bulbs

2.2 ANSI Publications

Available from American National Standards Institute, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

ANSI C79.1 Nomenclature for Glass Bulbs Intended for Use with Electric Lamps

ANSI_IEC C81.61 Electric Lamp Bases

ANSI_IEC C81.63 Gauges for Electric Lamp Bases and Lamp holders

ANSI C78.390 Method of Designation for Electric Lamps - Miniature and Sealed Beam Incandescent Lamps

ANSI SR-25 Assigned Miniature Lamp Codes

3. DEFINITIONS

3.1 TRADE NUMBER

The trade number is recorded with the American National Standards Institute and is a description of the lamp including the following parameters:

- a. Design volts
- b. Design amperes/watts
- c. Candlepower/Mean Spherical Candela
- d. Filament type
- e. Light center length
- f. Maximum overall length
- g. Rated average laboratory life
- h. Base type
- Bulb type

This (Trade Number) is not a specification, but is an ordering abbreviation.

3.2 DESIGN VOLTS

Design volts show the voltage at which a lamp is designed for the tabulated ampere, candlepower mean spherical candela (MSCd), and rated laboratory life characteristics.

3.3 RATED AVERAGE LABORATORY LIFE

Rated average laboratory life is the average life obtained when 50% of a statistically large group of the same lamps still survive in closely controlled laboratory life testing at their design voltage. Lamps are typically tested using 60 Hz AC voltage. DC operation of lamps may reduce lamp life on some lower current lamps. Contact the lamp supplier for individual lamp details. Rated average laboratory life is not necessarily the same as service life. Conditions such as mechanical shock, vibration, voltage fluctuations, and environmental extremes may result in shorter average attained life.

3.4 BULB, BASE, FILAMENT, AND LIGHT CENTER LENGTH

Refer to SAE J573.

3.5 SERVICE

Service identifies the primary type of aircraft lighting for which the lamp was designed. However, lamps may be and are used in other service applications where their designs will permit.