SAE Aerospace
An SAE International Group

# 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

i. 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.

4. NOTES

4.1 The change bar ( l ) located in the left margin is for the convenience of the user in locating areas where technical revisions, not editorial changes, have been made to the previous issue of this document. An (R) symbol to the left of the document title indicates a complete revision of the document.

## TABLE 1A - SERVICE APPLICATION - AIRCRAFT LAMPS INTERIORS

| Design Volts | Trade Number | Amps or Watts | MSCP MSCd | Bulb | Base | Filament | Light Center Length in | Light Center Length mm | Maximum Overall Length in | Maximum Overall Length mm | Amps at Design Volts | Rated Average Lab Life (h) | Approx. Weight lb | Approx. Weight g | National Stock Number 6240-00 | Military Standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.0 | 2059 | 10.0 W | 10.7 | T-2-1/4 T2 3/4 | BA9 MIN BAY SPL | C-8 | .59 | 15.0 | 1-1/4 | 31.8 | .83 | 4000 | 0.012 | 6 | | |
| 12.0 12.80 | 2059X (a) | 10.0 W | 8.6 11.56 | T-2-1/4 T3 | BA9 MIN BAYSPL | CC-6- C-8 | .59 | 15.0 | 1-1/4 | 31.8 | .83 .780 | 4000 | 0.012 | 6 | | |
| 12.8 | 1141 | 1.44 A | 21 | S-8 | BA15s SC BAY | C-6 | 1-1/4 | 31.8 | 2 | 50.8 | 1.44 | 500 | 0.021 | 10 | 155-7799 | MS35478-1141 M6363/12-3 (g) |
| 13 | 89 | .58 A | 6 | G-6 | BA15s SC BAY | C-2R | 3/4 | 19.0 | 1-7/16 | 36.5 | .58 | 750 | 0.012 | 6 | 143-3159 | MS15570-89 M6363/11-1(g) |
| 28 | 1308 | .56 A | 16 | B-6 | BA15s SC BAY | CC-8 | 1-1/16 | 27.0 | 1-3/4 | 44.5 | .56 | 2000 | 0.016 | 7 | | |
| 28 | 456 | .17 A | 2 | G-4-1/2 | B9A BA9 MIN BAY Min. Bay | C-2F | 9/16 | 27.0 | 1-1/16 | 27.0 | .17 | 5000 | 0.012 | 6 | 941-8479 | |
| 28 | 301 | .17 A | 3 | G-5 | BA15s SC BAY | C-2F | 11/16 | 17.3 | 1-3/8 | 34.9 | .17 | 500 | 0.012 | 6 | 155-7947 | MS25238-301 M6363/10-1 (g) |
| 28 | 303 | .30 A | 6 | G-6 | BA15s SC BAY | C-2F | 3/4 | 19.0 | 1-7/16 | 36.5 | .30 | 500 | 0.012 | 6 | 155-7848 | MS15570-303 M6363/11-2 (g) |
| 28 | 9204 (a) | 10.0 W | 6.6 | T-2-1/4 | BA9 Min. Bay SPL | C-8 CC-6 | .59 | 15.0 | 1-1/4 | 31.8 | .36 | 4000 | 0.012 | 6 | | |
| 28 | 9204X | 10.0 W | 8.2 | T-2-1/4 | BA9 Min. Bay SPL | C-8 CC-6 | .59 | 15.0 | 1-1/4 | 31.8 | .36 | 4000 | 0.012 | 6 | | |
| 28 | 1309 | .52 A | 15 | B-6 | S.C. Bay BA15s SC BAY | 2XC-2F OR 2XC-2R OR 2XCC6 | 1-1/16 | 27.0 | 1-3/4 | 44.5 | .52 | 500 ANSI- 300 | 0.016 | 7 | 060-4707 | |
| 28 | 305 | .51 A | 15 | S-8 | S.C. Bay BA15s SC BAY | C-2V | 1-1/8 | 28.6 28.0 | 2 | 50.8 | .51 | 300 | 0.021 | 10 | 155-7791 | MS35478-305 M6363/12-6(g) |
| 28 | 1691 | .61 A | 15 | S-8 | S.C. Bay BA15s SC BAY | 2C-2R | 1-1/8 | 28.6 28.0 | 2 | 50.8 | .61 | 1000 | 0.021 | 10 | 295-2668 | MS354787-1691 M6363/12-7(g) |
| 28 | 305 (b) 305 IF | .51 A | 15 | S-8 IF | S.C. Bay BA15s SC BAY | C-2V | | 28.0 | 2 | 50.8 | .51 | 300 | 0.021 | 10 | 295-1680 | |
| 28 | 1691 (b) 1691 IF | .61 A | 15 | S-8 IF | S.C. Bay BAY15s SC BAY | 2C-2R | | 28.0 | 2 | 50.8 | .61 | 1000 | 0.021 | 10 | 441-2708 | |
| 28 | 2232 | .643 A | 18 | S-8 | S.C. Bay BA15s SC BAY | CC-8 | 1-3/16 | 30.6 | 2 | 50.8 | .643 | 2000 | 0.021 | 10 | | MS35478-2232 M6363/12-8 (g) |
| 28 | 307 | .67 A | 21 | S-8 | S.C. Bay BAY15s SC BAY | C-2V | 1-1/8 | 28.6 | 2 | 50.8 | .67 | 300 | 0.021 | 10 | 155-7784 | MS35478-307 M6363/12-4 (g) |
| 28 | 307 (b) 307 IF | .67 A | 21 | S-8 IF | S.C.Bay BA15s SC BAY | C-2V | | | 2 | 50.8 | .67 | 300 | 0.021 | 0 | 122-0264 | |

| Design Volts | | Trade Number | Amps or Watts | MSCP MSCd | Bulb | Base | Filament | Light Center Length in | Light Center Length mm | Maximum Overall Length in | Maximum Overall Length mm | Amps at Design Volts | Rated Average Lab Life (h) | Approx. Weight lb | Approx. Weight g | National Stock Number 6240-00 | Military Standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | | 1665 | .80 A | 21 | S-8 | S.C. Bay BA15s SC BAY | C-2V | 1-1/8 | 28.6 | 2 | 50.8 | .80 | 1000 | 0.021 | 10 | 241-9703 | |
| 28 | | 1665 (b) 1665 IF | .80 A | 21 | S-8 IF | S.C. Bay BA15s SC BAY | C-2V | | | 2 | 50.8 | .80 | 1000 | 0.021 | 10 | 941-2709 | MS35478-1665 IF |
| 28 | | 2233 | .766 A | 21 | S-8 | S.C. Bay BA15s SC BAY | CC-8 | 1-3/16 | 30.0 | 2 | 50.8 | .766 | 2000 | 0.021 | 10 | | MS35478-2233 M6363/12-9 (g) |
| 28 | | 3011 | 1.29 A | 44 | S-11 | S.C. Bay BA15s SC BAY | C-2V | 1-1/4 | 31.8 | 2-3/8 | 60.3 | 1.29 | 1000 | 0.021 | 10 | 353-5753 | MS25235-3011 M6363/13-2 (g) |
| 28 | | 705 | .51 A | 15 | S-8 | S.C. Bay BA15s SC BAY | CC-6 | 1.12 | 28.4 | 2 | 50.8 | .51 | 900 | 0.021 | 10 | | |
| (c) | * | 5004WW (c) | 4 W | | T-5 | Min. Pinless | | | | 6 (d) | 152 | | 7500 (e) | 0.045 | 20 | 053-8273 | |
| (c) | * | 5008WW (c) | 8 W | | T-5 | Min. Pinless | | | | 12 (d) | 305 | | 7500 (e) | 0.075 | 34 | 955-9174 | |
| (c) | * | 5013WW (c) | 13 W | | T-5 | Min. Pinless | | | | 21 (d) | 533 | | 7500 (e) | 0.125 | 57 | 880-7800 | |
| (c) | * | 5104WW (c) | 4 W | | T-5 | Min. Bi Pin | | | | 6 (d) | 152 | | 7500 (e) | 0.045 | 20 | 916-8196 | |
| (c) | * | 5106WW (c) | 6 W | | T-5 | Min. Bi Pin | | | | 9 (d) | 228 | | 7500 (e) | 0.06 | 27 | 691-1397 | |
| (c) | * | 5108WW (c) | 8 W | | T-5 | Min. Bi Pin | | | | 12.0 (d) | 305 | | 7500 (e) | 0.075 | 34 | 955-9173 | |
| (c) | * | 5113WW (c) | 13 W | | T-5 | Min. Bi Pin | | | | 21.0 (d) | 533 | | 7500 (e) | 0.125 | 57 | 955-9164 | |
| (c) | * | F14T12WW (c) | 14 W | | T-12 | Med. Bi Pin | | | | 15 (d) | 381 | | 9000 (b) | 0.200 | 91 | | |
| (c) | * | F15T12WW (c) | 15 W | | T-12 | Med. Bi Pin | | | | 18 (d) | 457 | | 9000 (b) | 0.247 | 112 | | |
| (c) | * | F20T12WW (c) | 20 W | | T-12 | Med. Bi Pin | | | | 24 (d) | 610 | | 9000 (b) | 0.320 | 145 | | |
| (c) | * | F30T12WW RS (c) | 30 W | | T-12 | Med. Bi Pin | | | | 36 (d) | 914 | | 13000 (b) | 0.478 | 217 | | |
| 28 | | 311 | 1.29A | 50 | S-11 | BA15S SC BAY | C-2V | 1-1/4 | 31.8 | 2-3/8 | 60.3 | 1.29 | 300 | 0.021 | 10 | | MS25235-311 M6363/13-2 (g) |

NOTES:
(a) Opaque tipped lamp.
(b) Inside frosted.
(c) Fluorescent lamp to be used with auxiliary of proper design.
(d) Nominal length.
(e) Based on three burning hours per start.
(g) These part numbers are listed with M6363/xx-xx series, but are not approved or qualified to MIL-L-6363. Industry version may be procured with ANSI trade numbers.

* These are not listed in SR25d-1997.

# TABLE 1B - SERVICE APPLICATION - AIRCRAFT LAMPS
## INDICATOR/INSTRUMENTS

| Design Volts | Trade Number | Amps or Watts | MSCP MSCd | Bulb | Base | Filament | Light Center Length in | Light Center Length mm | Maximum Overall Length in | Maximum Overall Length mm | Amps at Design Volts | Rated Average Lab Life (h) | Approx. Weight lb | Approx. Weight g | National Stock Number 6240-00 | Military Standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 60 680 | .06 (a) | .03 | T-1 | Wire Term. | C-2R | | | 1/4 | 6.35 | .06 | (b) | 0.0004 | .2 | 878-1965 | MS24367-680 |
| 5 | 682-*(0) | .06 (a) | .03 | T-1 | Sub-Mid Fl. SX4 SUB MIN FLANGE | C-2R | 3/16 | 4.7 | 3/8 | 9.14 | .06 | (b) | 0.0006 | .3 | 879-4980 | MS24515-682 M6363/6-1 (g) |
| 5 | 683 | .06 (a) | .05 | T-1 | Wire Term. | C-2R | | | 1/4 | 6.35 | .06 | (c) | 0.0004 | .2 | 060-2941 | MS24367-683 |
| 5 | 685-*(0) | .06 (a) | .05 | T-1 | Sub-Mid Fl. SX4 SUB MIN FLANGE | C-2R | 3/16 | 4.7 | 3/8 | 9.14 | .06 | (c) | 0.0006 | .3 | 752-2581 | MS24515-685 M6363/6-2 (g) |
| 5 | 715 | .115 (a) | .15 | T-1 | Wire Term. | C-2R | | | 1/4 | 6.35 | .115 | (c) | 0.0004 | .2 | 080-4508 | MS24367-715 |
| 5 | 718-*(0) | .115 (a) | .15 | T-1 | Sub-Mid Fl. SX4 SUB MIN FLANGE | C-2R | 3/16 | 4.7 | 3/8 | 9.14 | .115 | (c) | 0.0006 | .3 | 764-8237 | MS24515-718 M6363/6-4 (g) |
| 6 | 316 | .7 (a) | 3.4 | T-3-1/4 | Min. Bay BA9 MIN BAY | C-26 C-2R | 5/8 | 15.8 | 1-3/16 | 30.0 | .7 | 500 | 0.006 | 3 | 817-9803 | MS25231-316 M6363/9-1 (g) |
| 6 | 328-*(0) | .2 (a) | .34 (d) | T-1-3/4 | Mid. Flange SX6 MID FLANGE | C-6 | 3/8 | 9.5 | 5/8 | 15.8 | .2 | 1000 (e) | 0.0012 | .5 | 155-7857 | MS25237-328 M6363/8-2 (f) |
| 13 | 89 | .58 (a) | 6 | 6-6 G6 | S.C. Bay BA15s SC BAY | C-2R | 3/4 | 19.0 | 1-7/16 | 36.5 | .58 | 750 | 0.012 | 5 | 143-3159 | MS15570-39 M6363/11-1 (g) |
| 13 | 1816 | .33 (a) | 3 | T-3-1/4 | Min. Bay BA9 MIN BAY | C-2R C-2V | 5/8 | 15.8 | 1-3/16 | 30.0 | .33 | 1000 | 0.006 | 3 | 155-7949 | |
| 14 | 330-*(0) | .08 (a) | 0.5 | T-1-3/4 | Mid. Flange SX6 MID FLANGE | C-2F | 3/8 | 9.5 | 5/8 | 15.8 | .08 | 750 1500 | 0.0012 | .5 | 196-4491 | |
| 28 | 310 301 | .17 (a) | 3 | 6-5 G5 | S.C. Bay BAY15d DC BAY | C-2F | 11/16 | 17.3 | 1-3/8 | 34.9 | .17 | 500 | 0.012 | 5 | 155-7947 | MS25238-301 M6363/10-1 (g) |
| 28 | 303 | .30 A | 6 | 6-6 G6 | S.C. Bay BAY15d DC BAY | C-2F | 3/4 | 19.0 | 1-7/16 | 36.5 | .30 | 500 | 0.012 | 5 | 155-7848 | MS15570-303 M6363/11-2 (g) |
| 28 | 313 | .17 A | 3.5 | T-3-1/4 | Min. Bay BA9 MIN BAY | C-2F | 5/8 | 15.8 | 1-3/16 | 30.0 | .17 | 500 | 0.006 | 3 | 155-8714 | MS25231-313 M6363/9-2 (g) |
| 28 | 1864 | .17 A | 3.0 | T-3-1/4 | Min. Bay BA9 MIN BAY | C-2F | 5/8 | 15.8 | 1-3/16 | 30.0 | .17 | 1500 | 0.006 | 3 | 765-8443 | |
| 28 | 387-*(0) | .04 A | 0.3 | T-1-3/4 | Mid. Flange SX6 MID FLANGE | C-2F | 3/8 | 9.5 | 5/8 | 15.8 | .04 | 7000 | 0.0012 | .5 | 763-7744 | MS25237-387 M6363/8-7 (f) |
| 28 | 327-*(0) | .04 A | .34 | T-1-3/4 | Mid. Flange SX6 MID FLANGE | C-2F | 3/8 | 9.5 | 5/8 | 15.8 | .04 | 4000 | 0.0012 | .5 | 155-7836 | MS25237-327 M6363/8-5 (f) |

| Design Volts | Trade Number | Amps or Watts | MSCP MSCd | Bulb | Base | Filament | Light Center Length in | Light Center Length mm | Maximum Overall Length in | Maximum Overall Length mm | Amps at Design Volts | Rated Average Lab Life (h) | Approx. Weight lb | Approx. Weight g | National Stock Number 6240-00 | Military Standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | 1495 | .30 A | 6 | T-4-1/2 | Min. Bay BA9 MIN BAY | C-2F | 5/8 | 15.8 | 1-3/8 | 34.9 | .30 | 500 | 0.006 | 3 | 299-4742 | MS25069-1495 |
| 28 | 1495X | .30 A | 6 | T-4-1/2 | Min. Bay BA9 MIN BAY | C-2F | 5/8 | 15.8 | 1-3/8 | 34.9 | .30 | 500 | 0.006 | 3 | | M6363/14-1X (g) |

NOTES:
(a) For purposes of wiring design maximum amperes at design volts may be approximately 10% greater than design amperes.
(b) Actual life depends on use and environmental extremes. Theoretical design average life is 100,000 + hours.
(c) Actual life depends on use and environmental extremes. Theoretical design average life is 40,000 + hours.
(d) At 5.0 V.
(e) When operated at 5 V, average laboratory life will be approximately 8000 h.
(f) These are Military Qualified Product Listing (QPL) parts per MIL-L-6363 .
(g) These part numbers are listed with M6363/xx-xx, but are not approved or qualified to MIL-L-6363. Industry version may be procured with ANSI trade numbers.

None of the following are listed in SR25d-1997.

## TABLE 1C - SERVICE APPLICATION - AIRCRAFT LAMPS LANDING

| Design Volts | Trade Number | Amps or Watts | MSCP MSCd | Bulb | Base | Filament | Light Center Length in | Light Center Length mm | Maximum Overall Length in | Maximum Overall Length mm | Amps at Design Volts | Rated Average Lab Life (h) | Approx. Weight lb | Approx. Weight g | National Stock Number 6240-00 | Military Standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 4509 (a) | 100 W | | PAR-36 | Scr. Term. | C-6 | | | 2-3/4 | 69.8 | 7.69 | 25 | 0.52 | 236 | 237-7867 | MS25243-4509 |
| 13 | 4537 (a) | 100 W | | PAR-46 | Scr. Term. | C-6 | | | 3-1/8 | 79.4 | 7.69 | 25 | 0.92 | 417 | 946-9636 | |
| 13 | 4313 (a) | 250 W | | PAR-36 | Scr. Term. | C-6 | | | 2-3/4 | 69.8 | 19.23 | 25 | 0.52 | 236 | 946-4807 | |
| 13 | 4522 (a) | 250 W | | PAR-46 | Scr. Term. | C-2 | | | 3-1/8 | 79.4 | 19.23 | 25 | 0.92 | 417 | 155-7920 | MS25241-4522 |
| 28 | 4553 (a) | 250 W | | PAR-46 | Scr. Term. | CC-8 | | | 3-1/8 | 79.4 | 8.92 | 25 | 0.92 | 417 | 725-4683 | MS25241-4553 |
| 28 | 4557 (a)(b) | 1000 W/ 400 W | | PAR-64 | Scr. Term. | CC-8/ C6 | | | 3-3/4 | 95.2 | 35.70 | 25/100 | 2.00 | 907 | 519-2131 | |
| 28 | 5557 (a)(b) | 1000 W/ 400 W | | PAR-64 | Scr. Term. | CC-8/ C6 | | | 3-3/4 | 95.2 | 35.70 | 50/100 | 2.00 | 907 | | MS25242-Q4559 |
| 28 | Q4559 (a) | 600 W | | PAR-64 | Scr. Term. | CC-8 | | | 3-3/4 | 95.2 | 21.41 | 25 | 2.00 | 907 | 145-1110 | |
| 28 | Q4559X (a) | 600 W | | PAR-64 | Scr. Term. | C-6 | | | 3-3/4 | 95.2 | 21.41 | 100 | 2.00 | 907 | | |
| 28 | 4581 (a)(c) | 450 W | | PAR-46 | Scr. Term. | CC-8 | | | 3-1/8 | 79.4 | 16.08 | 10 | 0.92 | 417 | 557-3065 | MS25241-4581 |
| 28 | 4596 (a) | 250 W | | PAR-36 | Scr. Term. | CC-8 | | | 2-3/4 | 69.8 | 8.92 | 25 | 0.52 | 236 | 577-8450 | |
| 28 | Q4681 (a) | 450 W | | PAR-46 | Scr. Term. | C-6 | | | 2-5/8 | 67.0 | 16.07 | 50 | 0.92 | 417 | | |

NOTES:
(a) Beam data for PAR lamps.
(b) None of the following is listed in SR25D-1997.

| Lamp No. | Type Cover Glass | Approx. Initial Max. Peak CP Cd CP | Approx. Beam Spread (deg) to 10% Horiz. | Max. (deg) Vertical |
|---|---|---|---|---|
| 4313 | Clear | 150,000 | 15 | 8 |
| 4502 | Prism | 10,000 | 40 | 7 |
| 4509 | Clear | 110,000 | 11 | 6 |
| 4522 | Clear | 290,000 | 12 | 10 |
| 4537 | Clear | 200,000 | 11 | 6 |
| 4551 | Prism | 75,000 | 50 | 10 |
| 4553 | Clear | 300,000 | 11 | 12 |
| 4557 | Clear | 540,000/100,000 | 11/25 | 15/11 |
| Q4559 | Clear | 600,000 | 12 | 9 |
| Q4559X | Clear | 765,000 | 11 | 7.5 |
| Q4566 | Clear | 150,000 | 16 | 12 |
| 4570 | Prism | 32,000 | 50 | 9 |
| 4581 | Clear | 400,000 | 13 | 14 |
| 4596 | Clear | 150,000 | 11 | 12 |
| Q4597 | Prism | 16,000 | 60 | 35 |
| Q4629 | Prism | 20,000 | 55 | 35 |
| Q4631 | Clear | 90,000 | 13 | 11 |
| Q4632 | Clear | 75,000 | 14 | 12 |
| Q4681 | Clear | 310,000 | 15 | 9 |
| 5557 | Clear | 540,000/100,000 | 11/25 | 15/11 |

(b) Dual filament lamp (1000 W-landing, 400 W-taxiing).
(c) Consult lamp manufacturer before using.

# TABLE 1D - SERVICE APPLICATION - AIRCRAFT LAMPS
## TAXIING

| Design Volts | Trade Number | Amps or Watts | MSCD MSCd | Bulb | Base | Filament | Light Center Length in | Light Center Length mm | Maximum Overall Length in | Maximum Overall Length mm | Amps at Design Volts | Rated Average Lab Life (h) | Approx. Weight lb | Approx. Weight g | National Stock Number 6240-00 | Military Standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28 | 1986 | 250 W | 600 | T-4 | Wire. Term SPECIAL | CC-6 | | | 2 | 50.0 | 8.92 | 100 | 0.031 | 14 | | |
| 28 | 4551 (a) * | 250 W | | PAR-46 | Scr. Term. | CC-6 | | | 3-3/4 | 95.2 | 8.92 | 25 | 0.92 | 417 | 583-3334 | MS24517-4551 |
| 28 | 4570 (a) * | 150 W | | PAR-46 | Scr. Term. | CC-6 | | | 3-3/4 | 95.2 | 5.36 | 300 | 0.92 | 417 | 132-5328 | MS28926-4570 |
| 36 | HLX64663 * (EVD) | 400 | 1273 | | G6.35-20 | | 1.417 | 36 | 2.362 | 60 | 11.11 | 50 | 0.014 | 6.4 | | |
| 36 | HLX64664 * | 400 | 1154 | | G6.35-20 | CC-6 | 1.417 | 36 | 2.244 | 57 | 11.11 | 150 | 0.014 | 6.4 | | |

*Not listed in SR25d-1997

NOTES:
(a) Beam data for PAR lamps.

None of the following is listed in SR25d-1997.

| Lamp No. | Type Cover Glass | Approx. Initial Max. Peak CP Cd | Approx. Beam Spread (deg) to 10% Horiz. | Max. (deg) Vertical |
|---|---|---|---|---|
| 4313 | Clear | 150,000 | 15 | 8 |
| 4502 | Prism | 10,000 | 40 | 7 |
| 4509 | Clear | 110,000 | 11 | 6 |
| 4522 | Clear | 290,000 | 12 | 10 |
| 4537 | Clear | 200,000 | 11 | 6 |
| 4551 | Prism | 75,000 | 50 | 10 |
| 4553 | Clear | 300,000 | 11 | 12 |
| 4557 | Clear | 540,000/100,000 | 11/25 | 15/11 |
| Q4559 | Clear | 600,000 | 12 | 9 |
| Q4559X | Clear | 765,000 | 11 | 7.5 |
| Q4566 | Clear | 150,000 | 16 | 12 |
| 4570 | Prism | 32,000 | 50 | 9 |
| 4581 | Clear | 400,000 | 13 | 14 |
| 4596 | Clear | 150,000 | 11 | 12 |
| Q4597 | Prism | 16,000 | 60 | 35 |
| Q4629 | Prism | 20,000 | 55 | 35 |
| Q4631 | Clear | 90,000 | 13 | 11 |
| Q4632 | Clear | 75,000 | 14 | 12 |
| Q4681 | Clear | 310,000 | 15 | 9 |
| 5557 | Clear | 540,000/100,000 | 11/25 | 15/11 |

TABLE 1E - SERVICE APPLICATION - AIRCRAFT LAMPS
EXTERIOR EMERGENCY LIGHTING

| Design Volts | Trade Number | Amps or Watts | MSCD MSCd | Bulb | Base | Filament | Light Center Length in | Light Center Length mm | Maximum Overall Length in | Maximum Overall Length mm | Amps at Design Volts | Rated Average Lab Life (h) | Approx. Weight lb | Approx. Weight g | National Stock Number 6240-00 | Military Standard |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.0 | 767 | 2.0 A | 19 | T2-1/4 | Min. Bay BA9 MIN BAY | C-6 | .56 | 14.2 | 1.13 | 28.7 | 2.0 | 50 | .006 | 3 | | |
| 6.0 | 1317 | .51 A | 3.4 | B-6 | S.C. Bay BA15s SC BAY | C-6 | 1.12 | 28.4 | 1.75 | 44.4 | .51 | 100 | .012 | 5 | | |
| 6.0 | 784 | 1.0 A | 9 | T2-1/4 | G-4 Two Pin | C-6 | .77 | 19.6 | 1.0 | 25.4 | 1.0 | 50 | .004 | 2 | | |
| 6.0 | 786 | 2.0 A | 19 | T2-1/4 | G-4 Two Pin | C-6 | .77 | 19.6 | 1.0 | 25.4 | 2.0 | 50 | .004 | 2 | | |