



AEROSPACE RECOMMENDED PRACTICE

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ARP 881A

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LAMPS FOR AIRCRAFT LIGHTING

1. PURPOSE AND SCOPE

This Aerospace Recommended Practice (ARP) lists the lamps 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. It does, however, reflect current practice.

2. DEFINITIONS

- 2.1 Trade No.: The trade number is recorded with the American National Standards Institute and is uniform throughout the industry. It completely identifies a lamp and is sufficient identification for ordering.
- 2.2 Design Volts: "Design Volts" shows the voltage at which a lamp is designed for the tabulated ampere, candlepower, and rated laboratory life characteristics.
- 2.3 Rated Average Laboratory Life: "Rated average laboratory life" is the average life obtained in closely controlled laboratory life testing of groups of lamps at their design voltage. It is not necessarily the same as service life, where conditions such as shock, vibration, voltage fluctuations, and environment may result in a shorter average attained life.
- 2.4 Bulb, Base, Filament, and Light Center Length: Refer to SAE standard, J573 (published in the SAE Handbook).

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Service	Design Volts	Trade Number	Amps Or Watts	Mean Spherical Candelas	Base	Fila- ment	Light Center		Maximum Overall		Amp(a) At Design Volts	Rated Average Lab. Life. (hr.)	Approx.		National Stock Number	Military Standard	
							In.	mm	In.	mm			Lb.	g			
Landing	13.0	4509(b)	100W		PAR-36	C-6		2-3/4	69.8	7.69	25	0.52	236	237-7867	MS25243-4509		
	13.0	4537(b)	100W		PAR-46	C-6		3-1/8	79.4	7.69	25	0.92	417	946-9636			
	13.0	4313(b)	250W		PAR-36	C-6		2-3/4	69.8	19.23	25	0.52	236	946-4807			
	13.0	4522(b)	250W		PAR-46	C-2		3-1/8	79.4	19.23	25	0.92	417	155-7920	MS25241-4522		
	28.0	4553(b)	250W		PAR-46	CC-8		3-1/8	79.4	8.92	25	0.92	47	725-4683	MS25241-4553		
	28.0	Q4559(b)	600W		PAR-64	CC-8		3-3/4	95.2	21.41	25	2.00	907	145-1110	MS25242-Q4559		
	28.0	4581(b)(c)	450W		PAR-46	CC-8		3-1/8	79.4	16.08	10	0.92	417	557-3065	MS25241-4581		
Taxiing	28.0	4551(b)	250W		PAR-46	CC-6		3-3/4	95.2	8.92	25	0.92	417	583-3334	MS24517-4551		
	28.0	4570(b)	150W		PAR-46	CC-6		3-3/4	95.2	5.36	300	0.92	417	132-5328	MS28926-4570		
Navigation	6.0	1680	4.1A	32	S-8	C-6	1-1/4	31.8	2	50.8	4.1	300	0.021	10	870-7778	MS35478-1680	
	6.2	600(d)	26W		GG-10	C-2R		2-3/16	55.6	4.19	300	0.019	9		MS25309-600		
	6.2	1163(d)	40W		GG-12	C-6		2-1/2	63.5	6.45	300	0.025	11		MS24513-1163		
	6.2	1687(d)	40W		GG-12	C-6		2-1/2	13.5	6.45	150	0.025	11		870-0799	MS25338-1687	
	10	1978X	100W	130	T-3	C-8		2.025	51.43	10.0	2000	0.016	7				
	12.8	1777	1.52A	26	S-8	C-2R	1-1/8	28.57	2	50.8	1.52	400	0.021	10	941-2701		
	13.0	7512-12(d)	26W		GG-10	C-2R		2-3/16	55.6	2.0	300	0.019	9				
	14.0	4174-12(d)	40W		GG-12	C-6		2-1/2	63.5	3.08	150	0.025	11				
	14	7079B-12(d)	40W		GG-12	C-6		2-1/2	63.5	3.08	150	0.025	11				
	28	7079(d)	40W		GG-12	CC-6		2-3/16	55.6	1.43	150	0.025	11	789-2260	MS25338-7079		
Wing Inspec.	28	7512(d)	26W		GG-10	CC-6		2-3/16	55.6	.93	300	0.019	9	504-2090	MS25309-7512		
	28	4174(d)	40W		GG-12	CC-6		2-1/2	63.5	1.43	300	0.025	11	519-0854	MS24513-4174		
	28	1683	1.02A	32	S-8	CC-6	1-1/4	31.8	2	50.8	1.02	500	0.021	10	044-6914	MS35478-1683	
	28	1970X	100W	140	T-3	CC-8		2-1/4	57.2	3.57	1000	0.016	7				
	28	1967	150W	210	T-3	CC-8		2-1/4	57.2	5.36	1000	0.016	7	045-7173			
	13	Q4631(b)	250W		PAR-36	C-6		2-3/4	69.8	19.23	500	0.52	236				
	28	4502(b)	50W		PAR-36	CC-6		2-3/4	69.8	1.78	400	0.52	236	196-4518	MS25243-4502		
	Interior	12.8	1141	1.44A	21	S-8	C-6	1-1/4	31.8	2	50.8	1.44	500	0.021	10	155-7799	MS35478-1141
		13.0	89	.58A	6	C-6	C-2R	3/4	19.0	1-7/16	36.5	.58	750	0.012	6	143-3159	MS15570-89
		28	456	.17A	2	C-4 1/2	C-2F	9/16	14.3	1-1/16	27.0	.17	5000	0.012	6	941-8479	
28		301	.17A	3	C-5	C-2F	11/16	17.3	1-3/8	34.9	.17	500	0.012	6	155-7947	MS25238-301	
28		303	.30A	6	C-6	C-2F	3/4	19.0	1-7/16	36.5	.30	500	0.012	6	155-7848	MS15570-303	
28		1309	.52A	15	B-6	C-2F	1-1/16	27.0	1-3/4	44.5	.52	500	0.016	7	060-4707		
28		305	.51A	15	S-8	C-2F	1-1/8	28.6	2	50.8	.51	300	0.021	10	155-7791	MS35478-305	
28		1691	.61A	15	S-8	C-2F	1-1/8	28.6	2	50.8	.61	1000	0.021	10	295-2668	MS35478-1691	
28		3051F(e)	.51A	15	S-8IF	C-2V		50.8	.51	300	0.021	10	295-1680				
28		16911F(e)	.61A	15	S-8IF	CC-2R		50.8	.61	1000	0.021	10	441-2708				
Standard	28	2232	.643A	18	S-8	CC-8	1-3/16	30.6	2	50.8	.643	2000	0.021	10	155-7784	MS35478-307	
	28	307	.67A	21	S-8	C-2V	1-1/8	28.6	2	50.8	.67	300	0.021	10	122-0264		
	28	3071F(e)	.67A	21	S-8IF	C-2V		50.8	.67	300	0.021	10	241-9703				
	28	1665	.80A	21	S-8	C-2V	1-1/8	28.6	2	50.8	.80	1000	0.021	10	941-2709	MS35478-1665F	
	28	16651F(e)	.80A	21	S-8IF	C-2V		50.8	.80	1000	0.021	10					

Service	Design	Trade	Amps	Mean	Light	Maximum	Rated	Approx.	National
	Volts	Number	Watts	Spherical	Center	Overall	Average	Weight	Stock
				Candelas	Length	Length	Lab. Life	Lb.	Number
					In.	In.	(hr.)	g	6240-00
	28	2233	.76A	21	1-3/16	30.0	2	.766	10
	28	3011	1.29A	44	1-1/4	31.8	2-3/8	1.29	10
	(g)	5004WW(g)	4W	T-5	Min. Pinless	152	7500(1)	0.045	20
	(g)	5008WW(g)	8W	T-5	Min. Pinless	305	7500(1)	0.075	34
	(g)	5013WW(g)	13W	T-5	Min. Pinless	533	7500(1)	0.125	57
	(g)	5104WW(g)	4W	T-5	Min. Bi Pin	152	7500(1)	0.045	20
	(g)	5106WW(g)	6W	T-5	Min. Bi Pin	228	7500(1)	0.06	27
	(g)	5108WW(g)	8W	T-5	Min. Bi Pin	305	7500(1)	0.075	34
	(g)	5113WW(g)	13W	T-5	Min. Bi Pin	533	7500(1)	0.125	57
Indicator	5.0	680	.06A	.03	Wire Term.	1/4	6.35	.06	.2
	5.0	682	.06A	.03	Sub-Mid Fl.	3/8	9.14	.06	.3
	5.0	683	.06A	.05	Wire Term.	1/4	6.35	.06	.2
	5.0	685	.06A	.05	Sub-Mid Fl.	3/8	9.14	.06	.3
	5.0	715	.115A	.15	Wire Term.	1/4	6.35	.115	.2
	5.0	718	.115A	.15	Sub-Mid Fl.	3/8	9.14	.115	.3
Or	6	316	.7A	3.4	Min. Bay.	1-3/16	30.0	.7	500
	6	328	.2A	.34(h)	Mid. Flange	5/8	15.8	.2	1000(n)
	13	89	.58A	6	S.C. Bay.	1-7/16	36.5	.58	750
	13	1816	.33A	3	Min. Bay.	1-3/16	30.0	.33	1000
	14	330	.08A	0.5	Mid. Flange	5/8	15.8	.08	750
	28	301	.17A	3	S.C. Bay.	1-3/8	34.9	.17	500
Instrument	28	303	.30A	6	Min. Bay.	1-7/16	36.5	.30	500
	28	313	.17A	3.5	Min. Bay.	1-3/16	30.0	.17	500
	28	1864	.17A	3.0	Min. Bay.	1-3/16	30.0	.17	1500
	28	387	.04A	0.3	Mid. Flange	5/8	15.8	.04	7000
	28	327	.04A	.34	Mid. Flange	5/8	15.8	.04	4000
	28	1495	.30A	6	Min. Bay.	1-3/8	34.9	.30	500