

Philips Lighting

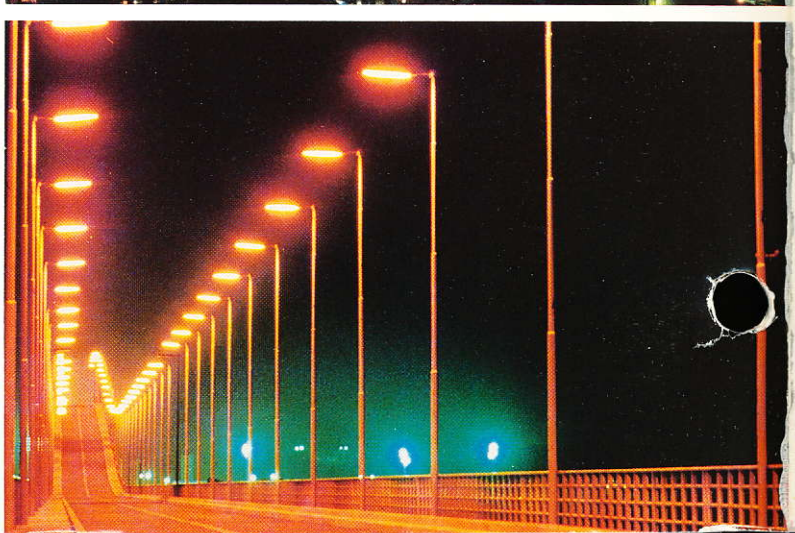
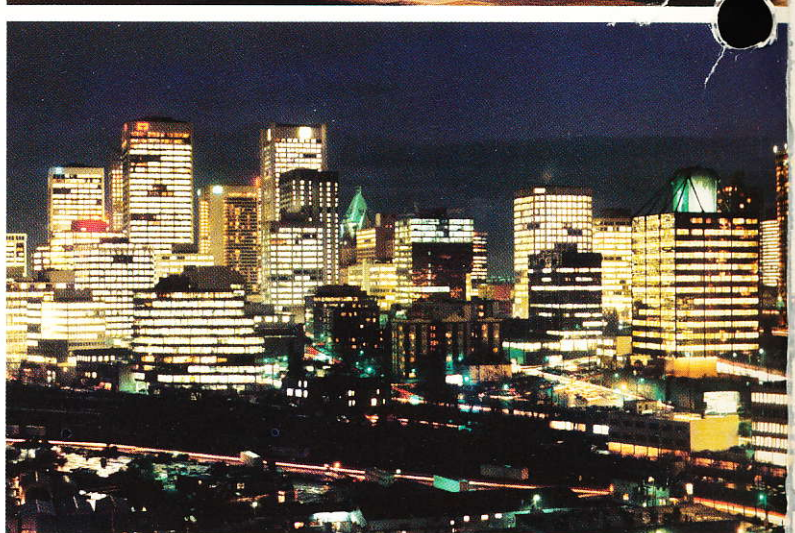
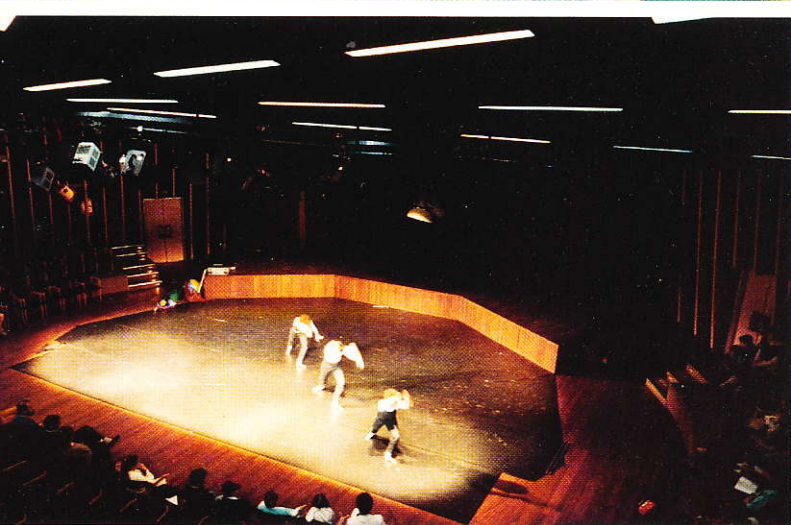
Lamp Specification Guide • SG-100



Philips Lighting



PHILIPS



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Look for the \$\$\$ and Save Energy.
To identify those lamps which can
save lighting dollars by saving
energy, we've placed this symbol
\$\$\$
in the column to the left of the
Ordering Code. Look for it and Save!



Saving energy
can be as
simple as
changing
light bulbs.



**Philips lamp
substitution guide
— to big lighting
savings.** You could save up
to \$328 per socket per year simply by
switching to our energy-saving lamps.

That may sound too good to be true
in today's energy-starved world, but,
it's a fact. The Econ-o-watt family of
incandescent, fluorescent and H.I.D.
lamps is engineered to reduce power
consumption yet still maintain lighting
levels adequate to your needs.

And best of all, you can achieve
big savings right now by directly
substituting Econ-o-watt incandescents
and fluorescents for many of the
incandescent and fluorescent lamps
you're presently using.

How much savings? The easy-to-follow
charts in the Lamp Substitution Guide
will tell you. First, survey your lighting
system. Determine what type lamps —
and how many — you're presently
using. Then look up the energy-saving
substitute on the chart and pinpoint
your annual savings. You'll be
delighted with the results!

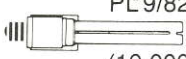
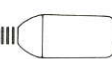
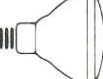
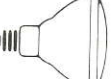
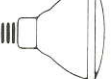
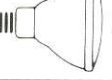
**QUICK REFERENCE TABLE
LAMP ENERGY-SAVING SUBSTITUTIONS**

Present Lamp	Suggested Substitute	Approx. Light Levels	Watts Saved Per Socket	Annual Energy Cost Savings Per Socket†
Incandescent Lamps				
60A (1000 HR.)	\$\$\$ PL9/82/SYS (10,000 HR.)	67%	48	\$ 19.20
60A (1000 HR.)	30R20 (2000 HR.)	100%	30	12.00
60A (1000 HR.)	50R20 (2000 HR.)	200%	10	4.00
60A (1000 HR.)	\$\$\$ 60A-52A/EW (1000 HR.)	90%	8	3.20
60A/99 (2500 HR.)	50R20 (2000 HR.)	200 + %	10	4.00
60A/99 (2500 HR.)	\$\$\$ 55PAR/FL (3000 HR.)	200 + %	5	2.00
60A/99 (2500 HR.)	\$\$\$ 60A-52A/99/EW (2500 HR.)	95%	8	3.20
75A (750 HR.)	50R20 (2000 HR.)	175%	25	10.00
75A (750 HR.)	60A (1000 HR.)	75%	15	6.00
75A (750 HR.)	\$\$\$ 75A-67A/EW (750 HR.)	93%	8	3.20
75A (750 HR.)	\$\$\$ SL*18 (7500 HR.)	90%	57	22.80
75PAR/FL	\$\$\$ 45PAR38/CAP/FL	100%	30	12.00
75PAR/FL (2000 HR.)	\$\$\$ 65PAR/FL/EP (2000 HR.)	100%	10	4.00
75R30FL (2000 HR.)	\$\$\$ 55PAR/FL/EP (3000 HR.)	150%	20	8.00
100A (750 HR.)	75R30/FL (2000 HR.)	125%	25	10.00
100A (750 HR.)	75PAR/FL (2000 HR.)	200 + %	25	10.00
100A (750 HR.)	\$\$\$ 75ER30 (2000 HR.)	200%	25	10.00
100A (750 HR.)	\$\$\$ 100A-90A/EW (750 HR.)	95%	10	4.00
100A/99 (2500 HR.)	75PAR/FL (2000 HR.)	200 + %	25	10.00
100A/99 (2500 HR.)	75A (750 HR.)	82%	25	10.00
100A/99 (2500 HR.)	\$\$\$ 100A-90A/99/EW (2500 HR.)	93%	10	4.00
150PAR/FL (2000 HR.)	\$\$\$ 120PAR/FL/EP (2000 HR.)	100%	30	12.00
150R/FL (2000 HR.)	\$\$\$ 75ER30 (2000 HR.)	100%	75	30.00
150PAR/FL (2000 HR.)	\$\$\$ 90PAR38/CAP/FL (2000 HR.)	100%	60	24.00
200A (750 HR.)	150PAR/FL (2000 HR.)	200 + %	50	20.00
Tungsten Halogen Lamps				
500T3Q/CL	\$\$\$ 400T3Q/CL	88%	100	40.00
1500T3Q/CL	\$\$\$ 1200T3Q/CL	88%	100	120.00
Fluorescent Lamps				
F30T12/RS	\$\$\$ F30T12/RS/EW-II	87%	5	2.00
F40	\$\$\$ F40/RS/EW-II	88%	6	2.40
F96T12	\$\$\$ F96T12/EW	89%	15	6.00
F96T12/HO	\$\$\$ F96T12/HO/EW	90%	15	6.00
F96T12/VHO	\$\$\$ F96T12/VHO/EW	90%	30	12.00
FB40/6	\$\$\$ FB40/6/EW-II	88%	6	2.40
High Intensity Discharge (H.I.D.) Lamps				
H39KC175/DX	\$\$\$ C100S54 *	104%	75	30.00
H33GL400/DX	\$\$\$ C200S66 *	96%	200	80.00
300M	\$\$\$ C150S56 *	250%	120	48.00
750	\$\$\$ C150S56 *	104%	570	228.00
1000	\$\$\$ C150S56 *	87%	820	328.00
NH400/4	\$\$\$ MH300/4	70%	100	40.00
MH400/C	\$\$\$ MH30/C	70%	100	40.00

†Based on 4000 hours/year and \$0.10/KWH

*New Fixtures or Ballast Required

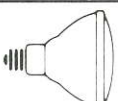
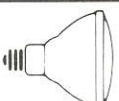
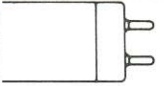
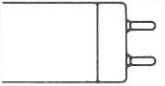
Lamp Substitution Guide

Present Lamp	Substitute Lamp	Light Level (1)	Watts Saved	Annual Cost Savings Per Socket (2)
Incandescent Lamps				
 60A (1000 HR.)	 PL*9/82/SYS (10,000 HR.)	67%	48	\$19.20
 60A (1000 HR.)	 30R20 (2000 HR.)	100%	30	\$12.00
 60A (1000 HR.)	 50R20 (2000 HR.)	200%	10	\$4.00
 60A (1000 HR.)	 60A- 52A/EW (1000 HR.)	90%	8	\$3.20
 60A/99 (2500 HR.)	 50R20 (2000 HR.)	200 + %	10	\$4.00
 60A/99 (2500 HR.)	 55 PAR/FL/EP (3000 HR.)	200 + %	5	\$2.00
 60A/99 (2500 HR.)	 60A- 52A/99/EW (2500 HR.)	95%	8	\$3.20
 75A (750 HR.)	 50R20 (2000 HR.)	175%	25	\$10.00
 75A (750 HR.)	 60A (1000 HR.)	75%	15	\$6.00
 75A (750 HR.)	 75A- 67A/EW (750 HR.)	93%	8	\$3.20
 75A (750 HR.)	 SL*18 (7500 HR.)	90%	57	\$22.80
 75PAR/FL	 45PAR38/ CAP/FL	100%	30	\$12.00
 75PAR (2000 HR.)	 65PAR/EP (2000 HR.)	100%	10	\$4.00
 75R30/FL (2000 HR.)	 55 PAR/FL/EP (3000 HR.)	150%	20	\$8.00
 100A (750 HR.)	 75R30/FL (2000 HR.)	125%	25	\$10.00

(1) Light level is illumination, or footcandles, not the lumen output of the lamp, and is expressed as % of present level.

(2) Based on 4,000 hours/year and \$0.10/KWH.

Lamp Substitution Guide

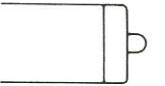
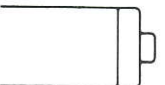
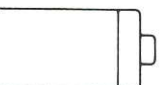
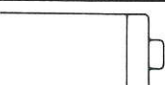
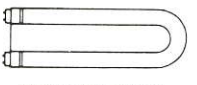
Present Lamp	Substitute Lamp	Light Level (1)	Watts Saved	Annual Cost Savings Per Socket (2)
Incandescent Lamps				
 100A (750 HR.)	 75PAR/FL (2000 HR.)	200 + %	25	\$10.00
 100A (750 HR.)	 75ER30 (2000 HR.)	200%	25	\$10.00
 100A (750 HR.)	 100A- 90A/EW (750 HR.)	95%	10	\$4.00
 100A/99 (2500 HR.)	 75PAR/FL (2000 HR.)	200 + %	25	\$10.00
 100A/99 (2500 HR.)	 75A (750 HR.)	82%	25	\$10.00
 100A/99 (2500 HR.)	 100A- 90A/99/EW (2500 HR.)	93%	10	\$4.00
 150PAR/FL (2000 HR.)	 120 PAR/FL/EP (2000 HR.)	100%	30	\$12.00
 150R/FL (2000 HR.)	 75ER30 (2000 HR.)	100%	75	\$30.00
 150PAR/FL (2000 HR.)	 90PAR38/ CAP/FL (2000 HR.)	100%	60	\$24.00
 200A (750 HR.)	 150PAR/FL (2000 HR.)	200 + %	50	\$20.00
Tungsten Halogen Lamps				
 500T3Q/CL	 400T3Q/CL	88%	100	\$40.00
 1500T3Q/CL	 1200T3Q/CL	88%	300	\$120.00
Fluorescent Lamps				
 F30T12/RS	 F30T12/RS/EW-II	87%	5	\$2.00
 F40	 F40/RS/EW-II	88%⁽³⁾	6	\$2.40

(1) Light level is illumination, or footcandles, not the lumen output of the lamp, and is expressed as % of present level.

(2) Based on 4,000 hours/year and \$.10/KWH.

(3) By substituting Lite White lamps, the light levels will be 93% for the F40/RS/EW-II, 95% for the F96T12/EW, and 96% for the F96T12/HO/EW and F96T12/VHO/EW; watts saved will be the same.

Lamp Substitution Guide

Present Lamp	Substitute Lamp	Light Level (1)	Watts Saved	Annual Cost Savings Per Socket (2)
Fluorescent Lamps				
 F96T12	 F96T12/EW	89%₍₃₎	15	\$6.00
 F96T12/HO	 F96T12/HO/EW	90%₍₃₎	15	\$6.00
 F96T12/VHO	 F96T12/VHO/EW	90%	30	\$12.00
 FB40/6	 FB40/6/EW-II	88%	6	\$2.40
High Intensity Discharge (H.I.D.) Lamps				
 H39KC175/DX	 C100S54(4)	104%	75₍₅₎	\$30.00
 H33GL400/DX	 C200S66(4)	96%	200₍₅₎	\$80.00
 300M	 C150S56(4)	250%	120₍₅₎	\$48.00
 750	 C150S56(4)	104%	570₍₅₎	\$228.00
 1000	 C150S56(4)	87%	820₍₅₎	\$328.00
 MH400/4	 MH300/4	70%	100₍₅₎	\$40.00
 MH400/C	 MH300/C	70%	100₍₅₎	\$40.00

(1) Light level is illumination, or footcandles, not the lumen output of the lamp, and is expressed as % of present level.

(2) Based on 4,000 hours/year and \$0.10/KWH.

(3) By substituting Lite White lamps, the light levels will be 93% for the F40/RS/EW-II, 95% for the F96T12/EW, and 96% for the F96T12/HO/EW and F96T12/VHO/EW; watts saved will be the same.

(4) New fixture or ballast required for all lamp conversions.

(5) Includes ballast watts.

Lamp Catalog — Specification Guide

This catalog lists Philips Lighting Company Incandescent, Fluorescent and High Intensity Discharge lamps, Miniature and Sealed Beam, Photo, Projection, Sound Reproducer and Film Viewer Lamps, Stage, Studio and TV Lamps, and Specialty Lamps. They are listed in wattage sequence except for special groupings such as Street Lighting, Quartz Infrared, Tungsten Halogen, High Intensity and Silicone Coated lamps.

Ordering Code

The complete information shown in the ordering code column together with the voltage, if applicable, should be used when placing orders.

In a number of instances a lamp type may be available in different kinds of packaging such as 2 or 4 lamp wrappers. Some small lamp types which are generally multiple packed on a platform with an overwrap are also packaged as a blister carded item for the retail market. Each of these items is shown as a separate listing. To identify them, additional information is included with the ordering code. The following examples illustrate this:

Ordering Code	Pkg. Qty.	Explanation
BC-777/W 12/2	120cbs	Carded pack-2 lps per card. The number shown in the "Pkg. Qty." column is the number of cards per minimum shipping case.
60T/SW 12/4	48	12-4 lp wrappers = 48 lps per minimum shipping case.
50/150T/WL /TP 96/1	96	96-1 lp wrappers = 96 lps per minimum shipping case.

- Quantity shown is minimum shipping container. Refer to Net Price Schedules for number of lamps required for qualification as a standard case.

Exclusive Product

Lamps exclusively manufactured by Philips are designated by a ☐ to the left of the NAED Number.

High Volume Types

Lamps that move in relatively high volume are highlighted by a tinted area.

Lamp Life and Lumens

Approximate hours life and approximate initial lumen ratings represent average performance under specified test conditions.

Burning Position

Lamps may be burned in any position unless otherwise noted.

Voltage

Lamps listed are available only in the voltages shown.

Lamps listed in range voltages such as 115-125 or 230-250 are intended for use on circuits normally varying within these voltage limits and are designed for an average voltage suitable for operation on such circuits. Lamps intended for operation in range voltages have a design volt center as follows, unless otherwise noted by a footnote:

Range Voltage	Design Voltage
115-125	120
120-125	120
120-130	125
125-130	130
230-250	240

Class of Lamp

Incandescent lamps are classified as type B or type C. The type B lamp is one in which the filament operates in a vacuum. The type C lamp is one in which the filament operates in an atmosphere of inert gas. For gas-filled lamps which can be burned in any position the lumen maintenance is best when lamps are burned base up. For the vacuum type lamps which have no restrictions on burning position the lumen maintenance is the same in all burning positions.

Lamp Dimensions

Bulb Designations consist of a letter or letters to indicate shape and a number to indicate the approximate diameter in eighths of an inch.

Maximum Overall Length is measured from the top of the bulb to bottom of the base.

Nominal lamp length for fluorescent lamps includes the proper allowance for standard lamp holders.

Light center length is the distance from the center of the filament or center of the arc for high intensity discharge lamps to the point shown below for the base indicated.

All Screw Bases — Bottom base contact

Medium and Mogul Prefocus — Top of base fin

Medium Bipost — Bottom of bulb

Bayonet Candelabra and Medium

Bayonet — Top of base pins

SC or DC Prefocus — Plane of locating bosses of prefocusing collar

Mini-Can — Intersection of 45° taper with maximum diameter of base

Base Pin Position for Bayonet

Candelabra Based Lamps

When lamps are based with a bayonet candelabra base, the plane of the base pins will be approximately at right angles to the plane of the filament, unless otherwise indicated.

SC or DC Prefocus Based Lamps

The plane containing the base axis and the major locking eyelet which is the eyelet equidistant from the other two eyelets, will be at right angles to the plane of the filament or lead wires unless otherwise indicated.

The letter (A) shown in the Base column after SC or DC Pref. based lamps indicates that the distance from the bottom of base contact or contacts to the bottom of the collar is .406". In the case of DC Pref. based lamps, the letter (A) also indicates that the plane containing the base axis and contacts is at right angles to the plane containing the base axis and the major locking eyelet.

Metric Equivalents

Lamp Length English (Inches)	Metric (Millimeters)
6	152.4
9	228.6
12	304.8
15	381.0
18	457.2
21	533.4
24	609.6
33	838.2
36	914.4
42	1066.8
48	1219.2
60	1524.0
64	1625.6
72	1828.8
84	2133.6
96	2438.4

Bulb Diameter

Diameter	Millimeters
T-5	15.9
T-6	19.1
T-8	25.4
T-9	28.6
T-10	31.8
T-12	38.1

The following are Trade-Marks of Philips Lighting Company:

Advantage X
Agro-Lite
Beauty Tone®
Brooder-Lite
Bug-A-Way®
Ceramalux
Colortone®
Econo-Miser
Econ-o-Par
Econ-o-watt®
HalogenA
Heat-Ray
Lifeguard®
Luma-Circle
Luma-Stick
Octolume
Philinea
Rough House
Sterilamp®
Style-Tone
SureSpot
Tough Bulb
Ultralume
Watt Watcher®
Weather Duty®

Incandescent Lamps

INCANDESCENT

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Initial Lumens	
3	S-6	Cand. ▲	21002-1	3S6/5	120	120	Clear	B, C-7A		1 7/8	3000	12	
			21009-6	3S6/5	125-130	120	Clear	B, C-7A		1 7/8	3000	12	
4	C-7	Cand. ▲	20094-9	BC-4C7	12/2	115-125	Clear, Night Light	B, C-7A		2 1/8	3000	16	
			20074-1	BC-4C7/W	12/2	115-125	Soft White, Night Light	B, C-7A		2 1/8	3000	14	
5	S-14	Med. ▲	24006-9	5S14	12	120	Clear	B, C-6	2 1/2	3 1/2	1500	45	
			24013-5	5S14	34	120	Clear	B, C-6		3 1/2	1000	40	
			32221-4	5S14/G	60	120	Green	B, C-6		3 1/2	1500		
			30027-7	5S14/R	60	120	Red	B, C-6		3 1/2	1500		
6	S-6	Cand. ▲	24021-8	6S6	6	120	Clear	B, C-2R		1 7/8	1500	54	
		D.C. Bay □	24068-9	6S6DC	6	120	Clear	B, C-2R	1 1/16	1 13/16	1500	54	
		Cand. ▲	24023-4	6S6	12	120	Clear	B, C-2V		1 7/8	1500	54	
		D.C. Bay □	24069-7	6S6DC	12	120	Clear	B, C-2V	1 1/16	1 13/16	1500	54	
		Cand. ▲	24030-9	6S6	18	120	Clear	B, C-2V		1 7/8	1500	54	
			24034-1	6S6	24	120	Clear	B, C-2V		1 7/8	1500	54	
		D.C. Bay	24071-3	6S6DC	24	120	Clear	B, C-2V	1 1/16	1 13/16	1500	54	
		Cand. ▲	24038-2	6S6	30	120	Train, Clear	B, C-2V		1 7/8	1500	50	
		D.C. Bay	24075-4	6S6DC	30	120	Clear	B, C-2V	1 1/16	1 13/16	1500	50	
		Cand. ▲	24046-5	6S6	32	120	Clear	B, C-2V		1 7/8	1500	50	
		S.C. Bay □	24095-2	6S6SC	40	120	Clear	B, C-9		1 13/16	1500	46	
		Cand. ▲	24059-8	6S6	60	120	Clear	B, C-9		1 7/8	1500	46	
		D.C. Bay	24087-9	6S6DC	75	120	Clear	B, C-9		1 13/16	1500	46	
		Cand. ▲	21020-3	6S6	120	120	Clear	B, C-9		1 7/8	1500	40	
			21045-0	6S6	125-130	120	Clear	B, C-9		1 7/8	1500	40	
			21033-6	6S6/R	115-125	120	Red	B, C-9		1 7/8	1500		
			21024-5	6S6/3	120	120	Vibration, Clear	B, C-17		1 7/8	1500	20	
			21048-4	6S6/3	125-130	120	Vibration, Clear	B, C-17		1 7/8	1500	20	
		D.C. Bay	21066-6	6S6DC	120	120	Clear	B, C-7A	1 1/16	1 13/16	1500	40	
			21085-6	6S6DC	125-130	120	Clear	B, C-7A	1 1/16	1 13/16	1500	40	
		Cand. ▲	21051-8	6S6	135	120	Clear	B, C-7A		1 7/8	1500	38	
			21055-9	6S6	145	120	Clear	B, C-7A		1 7/8	1500	38	
			21059-1	6S6	155	120	Clear	B, C-7A		1 7/8	1500	38	
		D.C. Bay	21098-9	6S6DC	145	120	Clear	B, C-7A	1 1/16	1 13/16	1500	38	
			21104-5	6S6DC	155	120	Clear	B, C-7A	1 1/16	1 13/16	1500	38	
			21068-2	6S6/1DC	120	120	Vibration, Clear	B, C-17	1 1/16	1 13/16	1500	20	
		S.C. Bay □	21113-6	6S6SC	120	120	Clear	B, C-7A	1 1/16	1 13/16	1500	44	
		† □	32908-6	6S6SC	155	120	Clear	B, C-7A	1 1/16	1 13/16	1500		
		Inter.	21106-0	6S6/7	120	120	Clear	B, C-9		1 13/16	1500	44	
			21110-2	6S6/7	130	120	Clear	B, C-9		1 13/16	1500	44	
		S-14	21127-6	6S14/IF	115-125	120	Inside Frosted	B, C-9		3 1/2	1500	42	
			21126-8	6S14	115-125	120	Clear	B, C-9	2 1/2	3 1/2	1500	43	
		T-4 1/2	21139-1	6T4 1/2/1	115-125	60	Indicator, Clear	B, C-9		1 7/8	1500	40	
			21143-3	6T4 1/2/1	130	60	Indicator, Clear	B, C-9		1 7/8	1500	40	
7	C-7	Cand. ▲	23503-6	7C7	115-125	240	Clear	B, C-9		2 1/8	3000	45	
			23617-4	7C7	24 Pk. 130	24	Clear	B, C-9		2 1/8	3000	45	
			23512-7	7C7/W	115-125	240	Night Light White	B, C-9		2 1/8	3000	35	
			20640-9	BC-7C7/W	12/2	115-125	Soft White, Night Light	B, C-7A		2 1/8	3000	35	
			23621-6	7C7/W	24 Pk. 130	24	Night Light White	B, C-9		2 1/8	3000	35	
			23516-8	7C7/B	24 Pk. 115-125	24	Blue	B, C-9		2 1/8	3000		
			23522-6	7C7/G	24 Pk. 115-125	24	Green	B, C-9		2 1/8	3000		
			23549-9	7C7/O	24 Pk. 115-125	24	Orange	B, C-9		2 1/8	3000		
			23912-9	7C7/R	24 Pk. 115-125	24	Red	B, C-9		2 1/8	3000		
			29365-4	7C7/Y	24 Pk. 115-125	24	Yellow	B, C-9		2 1/8	3000		
			□	35976-0	BC-7C7/TB	12/2	115-125	Transparent Blue	B, C-9		2 1/8	3000	
			□	35978-6	BC-7C7/TG	12/2	115-125	Transparent Green	B, C-9		2 1/8	3000	
			□	35980-2	BC-7C7/TR	12/2	115-125	Transparent Red	B, C-9		2 1/8	3000	
			□	35981-0	BC-7C7/TY	12/2	115-125	Transparent Yellow	B, C-9		2 1/8	3000	
		D.C. Bay.	25096-9	7C7/DC	24 Pk. 115-125	24	Clear	B, C-7A		2 3/16	3000	45	

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Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Initial Lumens
7 	R-12	Inter	☐	27113-0 7R12N	120	100	Mini-Reflector, Frost	B, C-9		2 ⁷ / ₁₆	3000	
			☐	25821-0 7R12N/TB	BULK 120	500	Mini-Reflector, Transparent Blue	B, C-9		2 ⁷ / ₁₆	3000	
			☐	25322-9 7R12N/TD	BULK 120	500	Mini-Reflector, Transparent Daylight	B, C-9		2 ⁷ / ₁₆	3000	
			☐	26080-2 7R12N/TG	BULK 120	500	Mini-Reflector, Transparent Green	B, C-9		2 ⁷ / ₁₆	3000	
			☐	25323-7 7R12N/TR	BULK 120	500	Mini-Reflector, Transparent Red	B, C-9		2 ⁷ / ₁₆	3000	
7 1/2 	S-11	Med.▲		23622-4 7 1/2S	120	240	Clear	B, C-9		2 1/4	1400	50
				23506-9 7 1/2S	130	240	Clear	B, C-9		2 1/4	1400	50
				23626-5 7 1/2S/W	115-125	240	Night Light White	B, C-9		2 1/4	1400	42
				20311-7 BC-7 1/2S/W	12/1 120	240	Night Light White	B, C-9		2 1/4	1400	42
				23661-2 7 1/2S/W	130	240	Night Light White	B, C-9		2 1/4	1400	42
				23665-3 7 1/2S/B	24 Pk. 115-125	24	Blue	B, C-9		2 1/4	1400	
				23675-2 7 1/2S/G	24 Pk. 115-125	24	Green	B, C-9		2 1/4	1400	
				23677-8 7 1/2S/O	24 Pk. 115-125	24	Orange	B, C-9		2 1/4	1400	
				23681-0 7 1/2S/O	24 Pk. 130	24	Orange	B, C-9		2 1/4	1400	
				23662-0 7 1/2S/R	115-125	240	Red	B, C-9		2 1/4	1400	
				23664-6 7 1/2S/R	130	240	Red	B, C-9		2 1/4	1400	
				23692-7 7 1/2S/Y	24 Pk. 115-125	24	Yellow	B, C-9		2 1/4	1400	
			☐	36015-6 BC-7 1/2S/TB	12/1 120	240	Transparent Blue	B, C-9		2 1/4	1400	
			☐	36021-4 BC-7 1/2S/TG	12/1 120	240	Transparent Green	B, C-9		2 1/4	1400	
			☐	36027-1 BC-7 1/2S/TR	12/1 120	240	Transparent Red	B, C-9		2 1/4	1400	
			☐	36037-0 BC-7 1/2S/TY	12/1 120	240	Transparent Yellow	B, C-9		2 1/4	1400	
9	S-11	S.C.Bay.	☐	29447-0 9S11/SC	12	120	Rwy. Lt. Signal(72)	C, C-2V	1 1/4	2 9/16	1500	
10 	C-7	Cand.▲		21209-2 10C7	115-125	120	Clear	B, C-9		2 1/8	(3)	56
				36519-7 10C7	130	120	Clear	B, C-9		2 1/8	(3)	56
				21220-9 10C7DC	115-125	120	Clear	B, C-7A		2 3/16	(3)	56
	S-11	Inter.▲		25094-4 10S11N/IF	24 Pk. 120	24	Frosted	B, C-9		2 5/16	1500	80
				23707-3 10S11N	120	240	Clear	B, C-9	1 5/8	2 5/16	1500	80
				23709-9 10S11N	130	240	Clear	B, C-9	1 5/8	2 5/16	1500	80
				23765-1 10S11N/B	24 Pk. 120	24	Blue	B, C-9		2 5/16	1500	
				23805-5 10S11N/G	24 Pk. 120	24	Green	B, C-9		2 5/16	1500	
				23852-7 10S11N/O	24 Pk. 120	24	Orange	B, C-9		2 5/16	1500	
				23833-7 10S11N/R	24 Pk. 120	24	Red	B, C-9		2 5/16	1500	
				23726-3 10S11N/W	24 Pk. 120	24	White	B, C-9		2 5/16	1500	62
				23854-3 10S11N/Y	24 Pk. 120	24	Yellow	B, C-9		2 5/16	1500	
				23855-0 10S11N/Y	24 Pk. 130	24	Yellow	B, C-9		2 5/16	1500	
				23857-6 10S11N/TB	130	24	Transparent Blue	B, C-9		2 5/16	1500	
				23865-9 10S11N/TG	130	24	Transparent Green	B, C-9		2 5/16	1500	
				23866-7 10S11N/TR	130	24	Transparent Red	B, C-9		2 5/16	1500	
				23897-2 10S11N/TY	130	24	Transparent Yellow	B, C-9		2 5/16	1500	
				21232-4 10S11/79	120	120	Clear	B, C-9	1 5/8	2 1/4	1500	80
	S-14	Med.		21294-4 10S14/IF	120	120	Inside Frosted	B, C-9		3 1/2	1500	82
				21308-2 10S14/IF	130	120	Inside Frosted	B, C-9		3 1/2	1500	82
				21291-0 10S14	120	120	Clear	B, C-9	2 1/2	3 1/2	1500	82
				21304-1 10S14	130	120	Clear	B, C-9	2 1/2	3 1/2	1500	82
				21267-0 10S14/B	115-125	60	Blue	B, C-9		3 1/2	1500	
				21272-0 10S14/G	115-125	60	Green	B, C-9		3 1/2	1500	
				21265-4 10S14/O	115-125	60	Orange	B, C-9		3 1/2	1500	
				21276-1 10S14/R	115-125	60	Red	B, C-9		3 1/2	1500	
				21278-7 10S14/R2	115-125	60	Rose	B, C-9		3 1/2	1500	
				21279-5 10S14/W	115-125	60	White	B, C-9		3 1/2	1500	64
				21282-9 10S14/Y	115-125	60	Yellow	B, C-9		3 1/2	1500	
	S-6	Cand.▲		24429-3 10S6/10	230	120	Clear	B, CC-9		1 7/8	1500	69
				24436-8 10S6/10	250	120	Clear	B, CC-9		1 7/8	1500	69
				24456-6 10S6/13	250	120	Clear	B, CC-9		1 13/16	1500	69

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Incandescent Lamps

INCANDESCENT

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Initial Lumens
10	S-6	D.C. Bay.	24444-2	10S6/15	230	120	Clear	B, C-7A		1 13/16	1500	60
			24450-9	10S6/15	250	120	Clear	B, C-7A		1 13/16	1500	60
	S-14	Med.	24460-8	10S14	230-250	120	Clear	B, C-9		3 1/2	1000	60
			24464-0	10S14/R	230-250	120	Red	B, C-9		3 1/2	1000	
11	S-11	S.C. Bay.	24138-0	11S11SC	11	120	Rwy. Lt. Signal(72)	C, C-2V	1 1/4	2 3/8	2500	
	S-14	Med.	21340-5	11S14/IF	115-125	120	Inside Frosted	B, C-9		3 1/2	3000	82
			21349-6	11S14/IF	130	120	Inside Frosted	B, C-9		3 1/2	3000	82
			37551-9	11S14/IF Handy Pack	130	120	I.F., Handy Pack	B, C-9		3 1/2	3000	82
			21339-7	11S14	115-125	120	Clear	B, C-9	2 1/2	3 1/2	3000	82
			21347-0	11S14	130	120	Clear	B, C-9	2 1/2	3 1/2	3000	82
			37550-1	11S14 Handy Pack	130	120	Clear, Handy Pack	B, C-9	2 1/2	3 1/2	3000	82
			21351-2	11S14/B	130	120	Blue	B, C-9		3 1/2	3000	
			21352-0	11S14/G	130	120	Green	B, C-9		3 1/2	3000	
			21350-4	11S14/O	130	120	Orange	B, C-9		3 1/2	3000	
			21344-7	11S14/R	115-125	120	Red	B, C-9		3 1/2	3000	
			21353-8	11S14/R	130	120	Red	B, C-9		3 1/2	3000	
			21354-6	11S14/W	130	120	White	B, C-9		3 1/2	3000	64
			21346-2	11S14/Y	115-125	120	Yellow	B, C-9		3 1/2	3000	
			21355-3	11S14/Y	130	120	Yellow	B, C-9		3 1/2	3000	
			39089-8	11S14/TB	115-125	120	Transparent Blue	B, C-9		3 1/2	3000	
			39007-0	11S14/TB	130	120	Transparent Blue	B, C-9		3 1/2	3000	
			39090-6	11S14/TG	115-125	120	Transparent Green	B, C-9		3 1/2	3000	
			39093-0	11S14/TG	130	120	Transparent Green	B, C-9		3 1/2	3000	
			38842-1	11S14/TO	115-125	120	Transparent Orange	B, C-9		3 1/2	3000	
			39091-4	11S14/TR	115-125	120	Transparent Red	B, C-9		3 1/2	3000	
			39006-2	11S14/TR	130	120	Transparent Red	B, C-9		3 1/2	3000	
			39092-2	11S14/TY	115-125	120	Transparent Yellow	B, C-9		3 1/2	3000	
			39095-5	11S14/TY	130	120	Transparent Yellow	B, C-9		3 1/2	3000	
13	S-11	S.C. Bay.	24140-6	13/3 1/2 S11/95	10	120	Rwy. Lt. Signal(72)(73)	C, C-2V C-12	1 1/4	2 3/8	1000	
15	A-19	Med. ▲	32743-7	15A	6	120	Inside Frosted	C, C-6		4 1/4	1000	190
	A-15	Med. ▲	35337-5	15A15	12	120	Inside Frosted	C, C-6		3 1/2	1000	187
	A-19	Med. ▲	32740-3	15A	12	120	Inside Frosted	C, C-6		4 1/4	1000	187
	A-19	Med. ▲	32708-0	15A	34	120	Inside Frosted	C, C-6		4 1/4	1000	179
	S-14	Med. ▲	24179-4	15S14/IF	34	120	Train, I.F.	B, C-6		3 1/2	1000	141
			24180-2	15S14/IF/1	34	120	Train, I.F. Insulated Lead	B, C-6		3 1/2	1000	141
	T-6	Cand. ▲	24186-9	15T6	60	60	Switchboard	B, C-7A		3 1/16	2000	120
	A-15	Med. ▲	33367-4	15A	75	120	Inside Frosted	B, C-9	2 3/8	3 1/2	1000	147
	S-11	D.C. Bay.	24169-5	15S11/3DC	75	120	Clear	B, C-7A	1 1/4	2 3/8	1000	140
	A-15	Med. ▲	39869-3	15A15	120	120	Inside Frosted	B, C-9		3 1/2	2500	126
			39887-5	15A15	130	120	Inside Frosted	B, C-9		3 1/2	2500	126
			21385-0	15A15/CL	120	120	Clear	B, C-9	2 3/8	3 1/2	2500	126
			21402-3	15A15/CL	130	120	Clear	B, C-9	2 3/8	3 1/2	2500	126
			36105-5	15A/W	12/2	120	Soft White	B, C-9		3 1/2	2500	120
	Med.	☐	25850-9	15A15/35	120	60	Industrial Service, I.F.	B, C-9		3 1/2	3500	123
		☐	25849-1	15A15/35	125-130	60	Industrial Service, I.F.	B, C-9		3 1/2	3500	123
	Med. ▲		21368-6	15A/B	115-125	60	Blue	B, C-9		3 1/2	2500	
			21372-8	15A/G	115-125	60	Green	B, C-9		3 1/2	2500	
			21366-0	15A/O	115-125	60	Orange	B, C-9		3 1/2	2500	
			21376-9	15A/R	115-125	60	Red	B, C-9		3 1/2	2500	
			21379-3	15A/R2	115-125	60	Rose	B, C-9		3 1/2	2500	
			21381-9	15A/WH	115-125	60	White	B, C-9		3 1/2	2500	
			21383-5	15A/Y	115-125	60	Yellow	B, C-9		3 1/2	2500	
	S-11	Cand. ▲	21464-3	15S11/IF	120	120	Indicator, Frosted	B, C-7A		2 1/4	750	135
			21460-1	15S11/14	120	60	Spotlight	B, C-7A	1 3/8	2 1/4	200	160
	Med. ▲		24480-6	15S11/102	120	24	Refrigerator, Clear	B, C-7A	1 1/16	2 1/4	400	142

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Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
15	T-6	Cand.▲	21486-6	15T6	115-125	60	Switchboard, Clear	B, C-7A		3 1/16	2000	114
		D.C. Bay.	21492-4	15T6DC	115-125	60	Clear	B, C-7A		3 1/16	2000	114
		Cand.▲	21490-8	15T6	140-150	60	Switchboard, Clear(63)	B, C-7A		3 1/16	2000	106
	T-7	D.C. Bay.	21506-1	15T7DC/IF	115-125	60	Appliance, Frosted	B, C-7A		2 1/4	(4)	113
			21510-3	15T7DC/IF	130	60	Appliance, Frosted	B, C-7A		2 1/4	(4)	113
			21503-8	15T7DC	115-125	60	Appliance, Clear	B, C-7A		2 1/4	(4)	115
			36069-3	BC-15T7DC	12/1 115-125	120	Appliance, Clear	B, C-7A		2 1/4	(4)	115
		Cand.▲	21499-9	15T7C/IF	115-125	60	Appliance, Frosted	B, C-7A		2 1/4	(4)	113
			21496-5	15T7C	115-125	60	Appliance, Clear	B, C-7A		2 1/4	(4)	115
		Inter.▲	21513-7	15T7N/IF	115-125	60	Appliance, Frosted	B, C-7A		2 1/4	(4)	113
			21511-1	15T7N	115-125	60	Appliance, Clear	B, C-7A		2 1/4	(4)	115
			36078-4	BC-15T7N	12/1 115-125	120	Appliance, Clear	B, C-7A		2 1/4	(4)	115
	T-8	Cand.▲	21515-2	15T8C	115-125	60	Clear	B, C-7A		2 5/8	1000	150
	T-8	Inter.▲	20115-2	15T8N	115-125	60	Clear	B, C-7A		2 5/8	1000	150
	T-10	Med.▲	37671-5	BC-15T10	12/1 115-125	12	Aquarium, Clear	B, C-9		5 5/8	2500	115
15 135 150	T-19	3 Ct.	36688-0	15/150T/WL	12/1 120	12	Longer Life Soft White Three-Way (8)	C, 2CC-6		5 5/8	1600	100
		Med.▲										2200
												2300
15	A-15	Med.▲	33375-7	15A	230-250	120	Inside Frosted	B, C-9		3 1/2	1000	120
17	R-20	Med.	23263-7	17R20	6.3	60	Reflector, Lt., I.F.	C, C-6		3 15/16	2000	
	S-11	S.C. Bay.	24197-6	17S11SC	13.5	120	Rwy. Lt. Signal(72)	C, C-2V	1 1/4	2 3/8	2000	
18	A-15	2 Pin Sl.	24200-8	18A15/3	10	60	Rwy. Lt. Signal(74)	C, C-2V	2 7/32	3 3/4	1500	
		3 Pin Sl.	24203-2	18A15/7	10	60	Rwy. Lt. Signal(74)	C, C-2R	2 3/16	3 3/4	1500	
		2 Pin Sl.	24201-6	18/3.5A15/5	10	60	Rwy. Lt. Signal— both Fil. in Multiple(74)	C, C-2V CC-6	2 7/32	3 3/4	1500	
	S-11	S.C. Bay.	24210-7	18S11/1SC	10	120	Rwy. Lt. Signal(72)	C, CC-6	1 1/4	2 3/8	2000	
			24213-1	18/5S11SC	12	120	Rwy. Lt. Signal(72) (73)	C, CC-6 CC-6	1 1/4	2 3/8	1000	
20	S-11	S.C. Bay	26616-3	20S11/1SC	10	120	Rwy. Lt. Signal(72)	C, CC-6	1 1/4	2 3/8	3000	
	T-6 1/2	Inter.	22511-0	20T6 1/2/IF	120	60	Exit Sign, Frosted	B, C-8		5 1/2	(3)	90
			25795-6	20T6 1/2/CL	120	60	Exit Sign, Clear	B, C-8		5 1/2	(3)	90
			22512-8	20T6 1/2DC/IF	120	60	Exit Sign, Frosted	B, C-8		5 1/2	(3)	90
			22121-8	20T6 1/2DC	120	60	Exit Sign, Clear	B, C-8		5 1/2	(3)	90
24	T-6 1/2	Inter.	28712-8	24T6 1/2/IF	120	60	Exit Sign, Frosted One Year Lamp	B, C-8		5 1/2	8760	170
		D.C. Bay.	28714-4	24T6 1/2DC/IF	120	60	Exit Sign, Frosted One Year Lamp	B, C-8		5 1/2	8760	170
25	PAR-36	M-P	27530-5	25PAR36	5.5	12	*Display Spot, Clear	C, C-6		2 3/4	1000	
	PAR-46	M-P	27528-9	25PAR46	5.5	12	*Display Spot, Clear	C, C-6		3 3/4	1000	
	A-19	Med.▲	24222-2	25A	6	120	Inside Frosted	C, C-6		4 1/4	1000	380
	S-11	S.C. Bay.	24250-3	25S11/4SC	10	120	Rwy. Lt. Signal(72)	C, CC-6	1 1/4	2 3/8	1000	
	A-19	Med.▲	24224-8	25A	12	120	Inside Frosted	C, C-6		4 1/4	1000	375
			36804-3	25A	12/2 12	24	Inside Frosted	C, C-6		4 1/4	1000	375
			20208-5	25PAR36/VNSP	12	12	*PAR Compact Very Narrow Spot	C, C-6		2 3/4	2000	150
	A-19	Med.▲	24227-1	25A	24	120	Inside Frosted	C, C-6		4 1/4	1000	345
			24229-7	25A	30	120	Train, I.F.	C, C-6		4 1/4	1000	325
			24231-3	25A19/RS	32	120	Rough Service, I.F.	B, C-9		3 15/16	1000	
			24235-4	25A	34	120	Train, I.F.	C, C-6		4 1/4	1000	325
			24278-4	25T8 1/2/IF	34	60	Inside Frosted	C, C-8		5 1/2	1000	350
	A-19	Med.▲	24240-4	25A	60	120	Train, I.F.	C, C-6		4 1/4	1000	280
	A-19	Med.▲	24243-8	25A	75	120	Inside Frosted	B, C-9		3 15/16	1000	265
			33365-8	25A19/RS	75	120	Train, Rough Service, I.F.	B, C-17		3 15/16	1000	240
			23165-4	25A15/1	115-125	120	Refrigerator, I.F.	B, C-9		3 1/2	1000	210
	A-19	Med.▲	22638-1	25A15/RFL	130	120	Sign Reflector, I.F.	B, C-9		3 1/2	2500	
			39888-3	25A	120	120	Inside Frosted	B, C-9		3 15/16	2500	232
			39890-9	25A	130	120	Inside Frosted	B, C-9		3 15/16	2500	232
			21573-1	25A/CL	120	120	Clear	B, C-9	2 1/2	3 15/16	2500	232
			21615-0	25A/CL	130	120	Clear	B, C-9	2 1/2	3 15/16	2500	232

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High Volume Lamps

† New Since Last Printing

Incandescent Lamps

INCANDESCENT

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
25	A-19	Med.	☐	25848-3 25A19/35	120	60	Industrial Service, I.F.	B, C-9		3 ¹⁵ / ₁₆	3500	220
			☐	25847-5 25A19/35	125-130	60	Industrial Service, I.F.	B, C-9		3 ¹⁵ / ₁₆	3500	220
				21557-4 25A/B	115-125	60	Blue	B, C-9		3 ¹⁵ / ₁₆	2500	
				21561-6 25A/G	115-125	60	Green	B, C-9		3 ¹⁵ / ₁₆	2500	
				21555-8 25A/O	115-125	60	Orange	B, C-9		3 ¹⁵ / ₁₆	2500	
				21564-0 25A/R	115-125	60	Red	B, C-9		3 ¹⁵ / ₁₆	2500	
				21636-6 25A/R	130	60	Red	B, C-9		3 ¹⁵ / ₁₆	2500	
				21566-5 25A/R2	115-125	60	Rose	B, C-9		3 ¹⁵ / ₁₆	2500	
				21594-7 25A/WH	115-125	120	White	B, C-9		3 ¹⁵ / ₁₆	2500	
				21567-3 25A/Y	115-125	60	Yellow	B, C-9		3 ¹⁵ / ₁₆	2500	
				21643-2 25A/Y	130	60	Yellow	B, C-9		3 ¹⁵ / ₁₆	2500	
				29734-1 25A19/GR/CL	120	120	Clear	B, C-9		3 ¹⁵ / ₁₆	3000	210
				29736-6 25A19/GR/CL	130	120	Clear	B, C-9		3 ¹⁵ / ₁₆	3000	210
		Med.▲		36130-3 25A/TB	12/1 115-125	12	Transparent Blue	B, C-9		3 ¹⁵ / ₁₆	3000	
				36131-1 25A/TG	12/1 115-125	12	Transparent Green	B, C-9		3 ¹⁵ / ₁₆	3000	
				36138-6 25A/TR	12/1 115-125	12	Transparent Red	B, C-9		3 ¹⁵ / ₁₆	3000	
				36142-8 25A/TY	12/1 115-125	12	Transparent Yellow	B, C-9		3 ¹⁵ / ₁₆	3000	
				21588-9 25A/RS	120	120	Rough Service, I.F.	B, C-17		3 ¹⁵ / ₁₆	1000	235
				21625-9 25A/RS	125-130	120	Rough Service, I.F.	B, C-17		3 ¹⁵ / ₁₆	1000	235
				21589-7 25A/VS	120	120	Vibration, I.F.	B, C-9		3 ¹⁵ / ₁₆	1000	265
				21626-7 25A/VS	125-130	120	Vibration, I.F.	B, C-9		3 ¹⁵ / ₁₆	1000	265
				21577-2 25A/CL/VS	120	120	Vibration, Clear	B, C-9	2 ¹ / ₂	3 ¹⁵ / ₁₆	1000	265
				21618-4 25A/CL/VS	125-130	120	Vibration, Clear	B, C-9	2 ¹ / ₂	3 ¹⁵ / ₁₆	1000	265
		Med.		38055-0 25A/CL/RFL	125-130	60	Sign Reflector, Clear	B, C-9		3 ¹⁵ / ₁₆	3000	
	R-12	Inter.	☐	27267-4 25R12N	120	100	Mini-Reflector, Frost	C, CC-9		2 ⁷ / ₁₆	1500	200
	R-14	Inter.		20417-2 25R14N	120	100	Mini-Reflector, Frost	C, CC-9		2 ⁹ / ₁₆	1500	200
	R-17	Med.	☐	28717-7 25R17	120	60	Mini-Reflector, Frost (23)(31)(52)	C, C-9		2 ³ / ₄	1500	
	S-11	Cand.▲		21702-6 25S11/2C	120	120	Headlamp, Clear(2)	B, C-7A	1 ¹ / ₁₆	2 ¹ / ₄	500	220
		Inter.▲		21706-7 25S11N/1	120	120	Sewing Machine, I.F.(2)	B, C-1		2 ⁹ / ₁₆	600	210
	T-6½	Inter.▲		21718-2 25T6½/IF	115-125	60	Frosted	B, C-8		5 ¹ / ₂	1000	250
				21721-6 25T6½/IF	130	60	Frosted	B, C-8		5 ¹ / ₂	1000	250
				21714-1 25T6½	115-125	60	Clear	B, C-8		5 ¹ / ₂	1000	250
				22856-9 25T6½	24 Pk. 115-125	24	Clear	B, C-8		5 ¹ / ₂	1000	250
				21720-8 25T6½	130	60	Clear	B, C-8		5 ¹ / ₂	1000	250
		D.C.Bay.		21710-9 25T6½DC/IF	115-125	60	Frosted	B, C-8		5 ¹ / ₂	1000	250
				21713-3 25T6½DC/IF	130	60	Frosted	B, C-8		5 ¹ / ₂	1000	250
				21709-1 25T6½DC	115-125	60	Clear	B, C-8		5 ¹ / ₂	1000	250
				21712-5 25T6½DC	130	60	Clear	B, C-8		5 ¹ / ₂	1000	250
				21730-7 25T8DC/IF	115-125	60	Appliance, Frosted	B, C-7A		2 ⁵ / ₈	(4)	235
T-8	D.C.Bay.			21736-4 25T8DC/IF	130	60	Appliance, Frosted	B, C-7A		2 ⁵ / ₈	(4)	235
				21726-5 25T8DC	115-125	60	Appliance, Clear	B, C-7A		2 ⁵ / ₈	(4)	235
				36086-7 BC-25T8DC	12/1 115-125	120	Appliance, Clear	B, C-7A		2 ⁵ / ₈	(4)	235
				21735-6 25T8DC	130	60	Appliance, Clear	B, C-7A		2 ⁵ / ₈	(4)	235
				21722-4 25T8C	115-125	60	Appliance, Clear	B, C-7A		2 ⁵ / ₈	(4)	235
	Cand.▲			20116-0 25T8N	115-125	60	Appliance, Clear	B, C-7A		2 ⁵ / ₈	(4)	235
				21764-6 25T10/IF	120	60	Frosted	B, C-8		5 ⁵ / ₈	1000	260
	T-10	Med.▲		37674-9 BC-25T10/IF	12/1 120	12	Frosted	B, C-8		5 ⁵ / ₈	1000	260
				21782-8 25T10/IF	130	60	Frosted	B, C-8		5 ⁵ / ₈	1000	260
				21760-4 25T10	120	60	Clear	B, C-8		5 ⁵ / ₈	1000	260
				20363-8 BC-25T10	12/1 120	12	Clear	B, C-8		5 ⁵ / ₈	1000	260
				21780-2 25T10	130	60	Clear	B, C-8		5 ⁵ / ₈	1000	260
T-19	Med.▲			36500-7 25T/SW	12/2 120	24	Soft White	C, CC-6		4 ⁷ / ₁₆	2500	235
			☐	20433-9 25T/WL	12/2 120	24	Longer Life Soft White	C, CC-6		4 ⁷ / ₁₆	3350	205

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Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
25 	A-19	Med.▲	24498-8	25A	230	120	Inside Frosted	B, C-17		3 15/16	1000	220
			24508-4	25A	250	120	Inside Frosted	B, C-17		3 15/16	1000	220
			24507-6	25A/CL	250	120	Clear	B, C-17	2 1/2	3 15/16	1000	220
			24504-3	25A/R	230	120	Red	B, C-17		3 15/16	1000	
			24512-6	25A/R	250	120	Red	B, C-17		3 15/16	1000	
			29908-1	25A/Y	230	120	Yellow	B, C-17		3 15/16	1000	
			29926-3	25A	277	120	Inside Frosted	B, C-17		3 15/16	1000	200
	T-8	Inter.▲	33208-0	25T8N	230	60	Clear	B, C-7A		2 3/4	(4)	210
		D.C. Bay.	24521-7	25T8DC	250	60	Clear	B, C-7A		2 3/4	(4)	210
	T-10	Med.▲	24526-6	25T10	230-250	60	Clear	B, C-17		5 3/8	1000	220
			28558-5	25T10	277	60	Clear	B, C-17		5 3/8	1000	220
28	S-11	S.C. Bay	28332-5	28S11/4SC	10	120	Rwy. Lt. Signal(72)	C, CC-6	1 1/4	2 3/8	2000	
30 	A-15	2-PinSl.	24289-1	30A15/1	10	60	Rwy. Lt. Signal(74)	C, C-2V	2 7/32	3 3/4	1500	
	S-11	D.C. Bay.	24294-1	30S11/100	32	60	Clear	C, C-9	1 1/4	2 3/8	500	405
			24296-6	30S11DC	64	60	Train Marker, Clear	C, C-7A	1 3/8	2 3/8	500	340
			24298-2	30S11DC	75	60	Clear	C, C-9	1 3/8	2 3/8	500	340
	A-15	Med.	21932-9	30A15	120	120	Sign Service, I.F.	C, C-9		3 1/2	3000	225
			20205-1	30A15	130	120	Sign Service, I.F.	C, C-9		3 1/2	3000	225
			20207-7	30A15/CL	120	120	Sign Service, Clear	C, C-9	2 3/8	3 1/2	3000	225
			20206-9	30A15/CL	130	120	Sign Service, Clear	C, C-9	2 3/8	3 1/2	3000	225
	R-20	Med.▲	23884-0	30R20	115-125	60	Reflector, Lt. I.F.	C, C-9		3 15/16	2000	210
			20165-7	30R20	12/1 115-125	12	Reflector, Lt. I.F.	C, C-9		3 15/16	2000	210
			37453-8	30R20	130	60	Reflector, Lt. I.F.	C, C-9		3 15/16	2000	210
	T-8	End Caps	37727-5	L30	115-125	24	Lumiline II, Clear(7)	B, C-8		18 1/16	1500	245
			37725-9	L30/IF	115-125	24	Lumiline II, Frost(7)	B, C-8		18 1/16	1500	245
			37729-1	L30/W	115-125	24	Lumiline II, White(7)	B, C-8		18 1/16	1500	
30 70 100	T-19	3Ct. Med.▲	36662-5	30/100T/SW	12/1 120	12	Soft White Three-Way(8)	C, 2CC-6		5 5/16	1200	310 945 1255
			20451-1	30/100T/WL	12/1 120	12	Longer Life Soft White Three-Way(8)	C, 2CC-6		5 5/16	1600	300 940 1240
32	A-19	Med.	39441-1	32A19/49	120	120	Sign, Clear	C, C-9	2 7/8	4 1/4	3000	255
33	A-19	Med.	22145-7	33A19/5	130	60	Sign, Clear	C, C-9		3 15/16	3000	
			30549-0	33A19/GR/CL	130	60	Sign, Clear	B, C-9		3 15/16	3000	260
	R-17	Med.	26998-5	33R17	120	60	Sign, Mini-Refl., Frost (12)(31)	C, C-9		2 3/4	2500	225
			26997-7	33R17	130	60	Sign, Mini-Refl., Frost (12)(31)	C, C-9		2 3/4	2500	225
34	A-19	Med.▲	29117-9	40A-34A/EW	120	120	Econ-o-watt, I.F.	C, CC-6		4 7/16	1500	410
			29175-7	40A-34A/EW	130	120	Econ-o-watt, I.F.	C, CC-6		4 7/16	1500	410
			29232-6	40A-34A/99/EW	120	120	Econ-o-watt, Ext. Sv., I.F.	C, CC-6		4 7/16	2500	365
			29235-9	40A-34A/99/EW	125-130	120	Econ-o-watt, Ext. Sv., I.F.	C, CC-6		4 7/16	2500	365
35	PAR-36	M-P	28667-4	35PAR36/SP	12	12	*PAR Compact Spot	C, C-6		2 3/4	2000	200
40 	A-19	Med.▲	24305-5	40A	30	120	Train, I.F.	C, C-6		4 1/4	1000	580
	A-15	Med.▲	20684-7	40A15	115-125	120	Home Appliance, I.F.	C, C-9		3 1/2	1000	455
			20317-4	BC-40A15	12/1 115-125	240	Home Appliance	C, C-9		3 1/2	1000	455
			39462-7	40A15	130	120	Home Appliance, I.F.	C, C-9		3 1/2	1000	455
			20002-2	40A15/22	115-125	120	Home Oven	C, C-9		4	1000	455

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40	A-19	Med. ▲	39891-7	40A	120	120	Inside Frosted	C, CC-6		4 7/16	1500	480
			36477-8	40A	120	48	Inside Frosted	C, CC-6		4 7/16	1500	480
			39893-3	40A	130	120	Inside Frosted	C, CC-6		4 7/16	1500	480
			21840-4	40A/CL	120	120	Clear	C, CC-6	3 1/8	4 7/16	1500	480
			36644-3	40A/CL	120	24	Clear	C, CC-6	3 1/8	4 7/16	1500	480
			21857-8	40A/CL	130	120	Clear	C, CC-6	3 1/8	4 7/16	1500	480
			21850-3	40A/99	120	120	Extended Service, I.F.	C, C-9		4 1/4	2500	415
			21863-6	40A/99	125-130	120	Extended Service, I.F.	C, C-9		4 1/4	2500	415
			21859-4	40A/99CL	125-130	120	Extended Service, Clear	C, C-9		4 1/4	2500	415
			□ 35554-5	40A/99Y	125-130	48	Bug-A-Way Yellow	C, CC-6		4 7/16	2500	
			Med. □ 25846-7	40A19/35	120	60	Industrial Service, I.F.	C, C-9		4 1/4	3500	400
			□ 25845-9	40A19/35	125-130	60	Industrial Service, I.F.	C, C-9		4 1/4	3500	400
			□ 42556-1	40/PR6	130	48	Prolong 6, I.F.	C, C-9	3	4 7/16	6000	340
	A-21	Med.	21871-9	40A/B	115-125	120	Blue	B, C-9		4 7/16	1000	
			21874-3	40A/G	115-125	120	Green	B, C-9		4 7/16	1000	
			21870-1	40A/O	115-125	120	Orange	B, C-9		4 7/16	1000	
			21876-8	40A/R	115-125	120	Red	B, C-9		4 7/16	1000	
			21878-4	40A/R2	115-125	120	Rose	B, C-9		4 7/16	1000	
			21879-2	40A/Y	115-125	120	Yellow	B, C-9		4 7/16	1000	
			21892-5	40A/Y	130	120	Yellow	B, C-9		4 7/16	1000	
			20197-0	40A21/GR/CL	130	120	Sign, Clear	B, C-9	2 7/8	4 7/16	3000	
			30891-6	40A21/GR/TB	115-125	120	Sign, Transparent Blue	B, C-9		4 7/16	3000	
			30895-7	40A21/GR/TG	115-125	120	Sign, Transparent Green	B, C-9		4 7/16	3000	
			30899-9	40A21/GR/TO	115-125	120	Sign, Transparent Orange	B, C-9		4 7/16	3000	
			30888-2	40A21/GR/TR	115-125	120	Sign, Transparent Red	B, C-9		4 7/16	3000	
			38845-4	40A21/GR/TY	115-125	120	Sign, Transparent Yellow	B, C-9		4 7/16	3000	
		Med. ▲	21881-8	40A/TS	120	120	Traffic Signal(12)	C, C-9	2 7/16	4 7/16	2000	365
			21885-9	40A/TS	130	120	Traffic Signal(12)	C, C-9	2 7/16	4 7/16	2000	365
	S-11	Inter. ▲	32270-1	40S11N/IF	120	120	Frosted	C, CC-2V		2 5/16	500	
	T-6 1/2	Inter. ▲	21909-7	40T6 1/2/2IF	115-125	60	Frosted	B, C-8		5 1/2	1000	440
			21908-9	40T6 1/2/2	115-125	60	Refrigerator, Clear	B, C-8		5 1/2	1000	440
			20491-7	BC-40T6 1/2/2	12/1	12	Refrigerator, Clear	B, C-8		5 1/2	1000	440
	T-8	Med. ▲	21916-2	40T8/IF	115-125	24	Frost	B, C-8		11 7/8	1000	410
			21914-7	40T8	115-125	24	Clear	B, C-8		11 7/8	1000	410
		End Caps	37716-8	L40	115-125	24	Lumiline II, Clear(7)	B, C-8		12 1/16	1500	370
			37715-0	L40/IF	115-125	24	Lumiline II, Frost(7)	B, C-8		12 1/16	1500	370
			37723-4	L40/W	115-125	24	Lumiline II, White(7)	B, C-8		12 1/16	1500	
	T-10	Med. ▲	21928-7	40T10/IF	120	60	Frosted	B, C-8		5 5/8	1000	440
			37679-8	BC-40T10/IF	12/1	12	Frosted	B, C-8		5 5/8	1000	440
			21940-2	40T10/IF	130	60	Frosted	B, C-8		5 5/8	1000	440
			21924-6	40T10	120	60	Clear	B, C-8		5 5/8	1000	440
			20368-7	BC-40T10	12/1	12	Clear	B, C-8		5 5/8	1000	440
	T-19	Med. ▲	21938-6	40T10	130	60	Clear	B, C-8		5 5/8	1000	440
			Med. Pf. 21941-0	40T10P	120	60	Aviation, Airport Marker	C, CC-2V	1 1/2	3 15/16	1000	
			20388-5	40T/SW	12/4	48	Soft White	C, CC-6		4 7/16	1000	490
			□ 20438-8	40T/WL	12/4	48	Longer Life Soft White	C, CC-6		4 7/16	1350	480
45	PAR-38	Med. Skt.	†\$\$\$ 26365-7	45PAR38/CAP/FL	120	12	*Halogen Econ-o-Par Flood(29)(42)(50)	C-CC-8		5 5/16	2000	
			†\$\$\$ 26366-5	45PAR38/CAP/FL	130	12	*Halogen Econ-o-Par Flood(29)(42)(50)	C-CC-8		5 5/16	2000	
			†\$\$\$ 26363-2	45PAR38/CAP/SP	120	12	*Halogen Econ-o-Par Spot(29)(42)(50)	C-CC-8		5 5/16	2000	
			†\$\$\$ 26361-6	45PAR38/CAP/SP	130	12	*Halogen Econ-o-Par Spot(29)(42)(50)	C-CC-8		5 5/16	2000	
50	A-19	Med. ▲	35546-1	50A	6	120	Inside Frosted	C, C-6		4 1/4	1000	810
			34774-0	50A	12	120	Inside Frosted	C, C-6		4 1/4	1000	790
			36805-0	50A	12/2	24	Inside Frosted	C, C-6		4 1/4	1000	790
	PAR-36	M-P	29603-8	50PAR36/WFL	12	12	*PAR Compact Wide Flood	C, C-6		2 3/4	2000	300
			22859-3	50PAR36/NSP	12	12	*PAR Compact Narrow Spot	C, C-6		2 3/4	2000	300
			26945-6	50PAR36/VNSP	12	12	*PAR Compact Very Narrow Spot	C, C-6		2 3/4	2000	300

□ Exclusive Product

\$\$\$ Energy Saving Product

High Volume Lamps

†New Since Last Printing

Incandescent Lamps

Watts	Bulb	Base		NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Initial Lumens	
50	PAR-36 Raised Dome	M-P	\$\$\$	20380-2	50PAR36Q/D/VNSP	12	12	*PAR Compact Halogen Very Narrow Spot	C, C-6		3¼	2000		
			†\$\$\$	27427-4	50PAR36Q/D/NSP	12	12	*PAR Compact Halogen Narrow Spot	C, C-6		3¼	2000		
	A-19	Med.▲		34765-8	50A	24	120	Inside Frosted	C, C-6		4¼	1000	825	
				34766-6	50A	30	120	Inside Frosted	C, C-6		4¼	1000	805	
				24321-2	50A/RS	30	120	Rough Service, I.F.	B, C-6		3 ¹⁵ / ₁₆	1000	500	
				34769-0	50A	34	120	Inside Frosted	C, C-6		4¼	1000	790	
				24324-6	50A/RS	34	120	Rough Service, I.F.	B, C-6		3 ¹⁵ / ₁₆	1000	500	
				34759-1	50A	60	120	Inside Frosted	C, C-9		4¼	1000	720	
				34761-7	50A	75	120	Inside Frosted	C, C-9		4¼	1000	700	
				24326-1	50A19/RS	75	120	Train, Rough Service, I.F.	B, C-17		3 ¹⁵ / ₁₆	1000	500	
				21952-7	50A19/31	115-125	120	Commercial Oven	B, C-9	2½	3 ¹⁵ / ₁₆	1000	500	
				21972-5	50A/RS	120	120	Rough Service, I.F.	B, C-17A		3 ¹⁵ / ₁₆	1000	465	
				20163-2	50A/RS	12/2	120	24	Rough Service, I.F.	B, C-17A		3 ¹⁵ / ₁₆	1000	465
				22004-6	50A/RS	125-130	120	Rough Service, I.F.	B, C-17A		3 ¹⁵ / ₁₆	1000	465	
				21966-7	50A19/5	120	120	Rough Service, Clear	B, C-17A	2½	3 ¹⁵ / ₁₆	1000	465	
				21997-2	50A19/5	125-130	120	Rough Service, Clear	B, C-17A	2½	3 ¹⁵ / ₁₆	1000	465	
				21976-6	50A/VS	120	120	Vibr. Service, I.F.(13)	B, C-9	2½	3 ¹⁵ / ₁₆	1000	480	
				22007-9	50A/VS	125-130	120	Vibr. Service, I.F.(13)	B, C-9	2½	3 ¹⁵ / ₁₆	1000	480	
				21968-3	50A/CL/VS	120	120	Vibr. Service, Cl.(13)	B, C-9	2½	3 ¹⁵ / ₁₆	1000	480	
				22000-4	50A/CL/VS	125-130	120	Vibr. Service, Cl.(13)	B, C-9	2½	3 ¹⁵ / ₁₆	1000	480	
	ER-30	Med.▲	\$\$\$	22367-7	50ER30	120	24	Elliptical Reflector	C, CC-6		6⅜	2000		
			\$\$\$	27830-9	50ER30	130	24	Elliptical Reflector	C, CC-6		6⅜	2000		
			\$\$\$	26629-6	50ER30/PK	120	24	Elliptical Reflector Pink	C, CC-6		6⅜	2000		
	P-25	3Ct.Mog.		22018-6	50/50P25/28	120	60	Marine (15)	C, C-5, C-9	3 ⁹ / ₁₆	5 ¹ / ₁₆	750	375	
	R-20	Med.▲		23886-5	50R20	115-125	60	Reflector, Lt. I.F.(82)	C, C-9		3 ¹⁵ / ₁₆	2000	420	
				20166-5	50R20	12/1	115-125	12	Reflector, Lt. I.F.(82)	C, C-9		3 ¹⁵ / ₁₆	2000	420
			36687-2	50R20		130	60	Reflector, Lt. I.F.(82)	C, C-9		3 ¹⁵ / ₁₆	2000	420	
			26635-3	50R20/PK	115-125	60	Pink(19)(82)	C, C-9		3 ¹⁵ / ₁₆	2000			
R-30	Med.▲	\$\$\$	24233-9	50R30/FL	120	24	Reflector Flood	C, CC-6		5 ³ / ₁₆	2000			
		\$\$\$	36296-2	50R30/FL/EM	6/1	120	6	Reflector Flood, Econo-Miser	C, CC-6		5 ³ / ₁₆	2000		
50 50	T-12	3Ct. Med.		37508-9	50/50T12	115	24	Marine Running Light, Clear(8)	C, C-5, C-9	3	5 ⁵ / ₁₆	750		
50 100 150	T-19	3Ct. Med.▲		36671-6	50/150T/SW	12/1	120	12	Soft White Three-Way(8)	C, 2CC-6		5 ⁵ / ₁₆	1200	610 1510 2120
			☐	20453-7	50/150T/WL	12/1	120	12	Longer Life Soft White Three-Way(8)	C, 2CC-6		5 ⁵ / ₁₆	1600	575 1450 2025
			☐	36727-6	50/150T/WL/TP	96/1	120	96	Longer Life Soft White Three-Way(8)	C, 2CC-6		5 ⁵ / ₁₆	1600	575 1450 2025
			☐	36725-0	50/150T/PK	12/1	115-125	12	Longer Life Beauty Tone Pink Three-Way(8)	C, 2CC-6		5 ⁵ / ₁₆	1600	
50 200 250	T-21	3Ct. Med.▲		36675-7	50/250T/SW	12/1	120	12	Soft White Three-Way(8)	C, 2CC-6		5 ¹⁵ / ₁₆	1200	610 3400 4010
			☐	20454-5	50/250T/WL	12/1	120	12	Longer Life Soft White Three-Way (8)	C, 2CC-6		5 ¹⁵ / ₁₆	1600	575 3250 3825
50	A-19	Med.▲		24558-9	50A	230	120	Inside Frosted	C, C-17A		3 ¹⁵ / ₁₆	1000		
				24569-6	50A	250	120	Inside Frosted	C, C-17A		3 ¹⁵ / ₁₆	1000		
				24553-0	50A19/37	230	120	Clear	C, C-17A		3 ¹⁵ / ₁₆	1000		
				24567-0	50A19/37	250	120	Clear	C, C-17A		3 ¹⁵ / ₁₆	1000		
				24560-5	50A/RS	230	120	Rough Service, I.F.	C, C-17A		3 ¹⁵ / ₁₆	1000		
				24572-0	50A/RS	250	120	Rough Service, I.F.	C, C-17A		3 ¹⁵ / ₁₆	1000		

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☐ High Volume Lamps

Incandescent Lamps

INCANDESCENT

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
50	A-19	Med.▲	24576-1	50A/R	250	120	Red	C, C-17A		3 1/16	1000	
			24556-3	50A19/38	230-250	120	Commercial Oven, Clear	C, C-17A	2 1/2	3 1/16	1000	
			24582-9	50A19	277	120	Mine, I.F.	C, C-17A		3 1/16	1000	
			24588-6	50A19	300	120	Mine, I.F.	C, C-17A		3 1/16	1000	
			24583-7	50A19/RS	277	120	Rough Service, I.F.	C, C-17A		3 1/16	1000	
			24589-4	50A19/RS	300	120	Rough Service, I.F.	C, C-17A		3 1/16	1000	
			24586-0	50A19/35	300	120	Mine, Clear	C, C-17A		3 1/16	1000	
			24592-8	50A19/G	300	120	Green	C, C-17A		3 1/16	1000	
			24593-6	50A19/R	300	120	Red	C, C-17A		3 1/16	1000	
52	A-19	Med.▲	29118-7	60A-52A/EW	120	120	Econ-o-watt, I.F.	C, CC-8		4 7/16	1000	800
			29127-8	60A-52A/EW	130	120	Econ-o-watt, I.F.	C, CC-8		4 7/16	1000	800
			29276-3	60A-52A/99/EW	120	120	Econ-o-watt, Ext. Sv., I.F.	C, CC-8		4 7/16	2500	705
			29279-7	60A-52A/99/EW	125-130	120	Econ-o-watt, Ext. Sv., I.F.	C, CC-8		4 7/16	2500	705
54	A-19	Med.	26827-6	54A19/35	125-130	60	Econ-o-watt Industrial Service, I.F.	C, C-9		4 1/4	3500	590
			37166-6	K54A19/TS/EW	120-125	120	Krypton Econ-o-watt Traffic Signal, Clear	C, C-11V	2 7/16	4 3/8	8000	530
55	PAR-38	Med.Skt.	28771-4	55PAR/FL/EP	120-130	12	*Econ-o-Par Flood(29)	C, CC-6		5 5/16	3000	520
			28747-4	55PAR/SP/EP	120-130	12	*Econ-o-Par Spot(29)	C, CC-6		5 5/16	3000	520
			23280-1	55PAR/A/EP	120-130	12	*Econ-o-Par Amber(29)	C, CC-6		5 5/16	3000	
	T-19	Med.▲	36564-3	55T/W/ES	12/4	48	Energy Saving, White	C, CC-8		4 7/16	1000	860
56	A-21	Med.	22071-5	56A21/BR	125	120	St. Rwy., I.F. Dsn. Amps. - .519(21)	B, C-9		4 7/16	2000	
60	PAR-46	M-P	23230-6	60PAR	38	12	*Headlight, Anti-Vibration (33)(46)	C, CC-2V		3 3/4	800	
			28321-8	60PAR/1	38	12	*Headlight, Anti-Vibration (33)(46)(83)	C, CC-2V		4 3/8	800	
			23969-9	60PAR/2/R	38	12	*Red Warning Light, Anti-Vibration	C, CC-2V		3 3/4	800	
	A-19	Med.▲	22114-3	60A	120	120	Inside Frosted	C, CC-8		4 7/16	1000	890
			36478-6	60A	12/4	48	Inside Frosted	C, CC-8		4 7/16	1000	890
			22136-6	60A	125	120	Inside Frosted	C, CC-8		4 7/16	1000	890
			22144-0	60A	130	120	Inside Frosted	C, CC-8		4 7/16	1000	890
			22111-9	60A/CL	120	120	Clear	C, CC-6	3 1/8	4 7/16	1000	890
			20148-3	60A/CL	12/2	24	Clear	C, CC-6	3 1/8	4 7/16	1000	890
			22141-6	60A/CL	130	120	Clear	C, CC-6	3 1/8	4 7/16	1000	890
			22123-4	60A/99	120	120	Extended Service, I.F.	C, CC-8		4 7/16	2500	740
			22148-1	60A/99	125-130	120	Extended Service, I.F.	C, CC-8		4 7/16	2500	740
			22113-5	60A/99CL	120	120	Extended Service, Clear	C, CC-8	3 1/8	4 7/16	2500	740
			31218-1	60A/99CL	125-130	120	Extended Service, Clear	C, CC-8	3 1/8	4 7/16	2500	740
		Med.	25844-2	60A19/35	120	60	Industrial Service, I.F.	C, C-9		4 1/4	3500	670
			25842-6	60A19/35	125-130	60	Industrial Service, I.F.	C, C-9		4 1/4	3500	670
			42611-4	60/PR6	130	48	ProLong 6, I.F.	C,C-9	3 1/8	4 7/16	6000	550
		Med.▲	22228-1	60A/Y	115-125	120	Bug-A-Way Yellow	C, CC-6		4 7/16	1000	
			22227-3	60A/Y	130	120	Bug-A-Way Yellow	C, CC-6		4 7/16	1000	
			36292-1	60A/AGRO	24/1	24	Agro-Lite Plant Light	C, CC-8		4 7/16	1000	
			22086-3	60A/D	115-125	120	Daylight, I.F.	C, CC-6		4 7/16	1000	515
			22149-9	60A/D	130	120	Daylight, I.F.	C, CC-6		4 7/16	1000	515
			23941-8	60A/SB	115-125	120	Silvered Bowl, I.F.(43)	C, CC-6		4 7/16	1000	810
			22099-6	60A19/B	115-125	60	Blue	C, CC-6		4 7/16	1000	
			22102-8	60A19/G	115-125	60	Green	C, CC-6		4 7/16	1000	
			22097-0	60A19/O	115-125	60	Orange	C, CC-6		4 7/16	1000	
			22106-9	60A19/R	115-125	60	Red	C, CC-6		4 7/16	1000	
			22109-3	60A19/R2	115-125	60	Rose	C, CC-6		4 7/16	1000	
			22110-1	60A19/Y	115-125	60	Yellow	C, CC-6		4 7/16	1000	

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High Volume Lamps

Incandescent Lamps

Watts	Bulb	Base		NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Initial Lumens	
60	A-19	Med.	† \$\$\$	21056-7	K60A19/TS/EW	120-125	120	Krypton Econ-o-watt Traffic Signal, Clear	C, C-11V	27/16	43/8	8000	610	
			\$\$\$	37167-4	K60A19/TS/EW	130	120	Krypton Econ-o-watt Traffic Signal, Clear	C, C-11V	27/16	43/8	8000	610	
	A-21	Med.		22166-3	60A21/TS	120	120	Traffic Signal, Clear(12)	C, C-9	27/16	47/16	2000	665	
				22168-9	60A21/TS	125	120	Traffic Signal, Clear(12)	C, C-9	27/16	47/16	2000	665	
				22172-1	60A21/TS	130	120	Traffic Signal, Clear(12)	C, C-9	27/16	47/16	2000	665	
				37731-7	L60	115-125	24	Lumiline II, Clear(7)	B, C-8	18 1/16	1500	535		
	T-8	End Caps		37730-9	L60/IF	115-125	24	Lumiline II, Frost(7)	B, C-8	18 1/16	1500	535		
				37732-5	L60/W	115-125	24	Lumiline II, White(7)	B, C-8	18 1/16	1500	450		
				22178-8	60T10/64IF	115-125	60	Frosted	B, C-8	5 5/8	1000	745		
	T-10	Med.		22176-2	60T10/64	115-125	60	Clear	B, C-8	5 5/8	1000	745		
				20389-3	60T/SW	12/4	120	48	Soft White	C, CC-8	47/16	1000	860	
	T-19	Med.▲		36536-1	60T/SW/TP	24/4	120	96	Soft White	C, CC-8	47/16	1000	860	
				20440-4	60T/WL	12/4	120	48	Longer Life Soft White	C, CC-8	47/16	1350	840	
				36611-2	60T/WL/TP	24/4	120	96	Longer Life Soft White	C, CC-8	47/16	1350	840	
				36639-3	60T/PK	12/2	115-125	24	Beauty Tone Pink	C, CC-8	47/16	1000		
				20471-9	60T/Y	12/2	115-125	24	Bug-A-Way Yellow	C, CC-8	47/16	1000		
				22573-0	60T/YL	12/2	115-125	24	Bug-A-Way Yellow, Longer Life	C, CC-8	47/16	1350		
				28111-3	60A	230	120	Inside Frosted	C, C-17A	3 15/16	1000	545		
				28112-1	60A	250	120	Inside Frosted	C, C-17A	3 15/16	1000	545		
	65	PAR-38	Med. Skt. \$\$\$		30232-3	75-65PAR/FL/EP	120	12	*Econ-o-Par Flood(29)	C, CC-6	5 5/16	2000		
\$\$\$				36210-3	65PAR/FL/EM	6/1	120	6	*PAR Flood(29) Econo-Miser	C, CC-6	5 5/16	2000		
\$\$\$				30234-9	75-65PAR/FL/EP	130	12	*Econ-o-Par Flood(29)	C, CC-6	5 5/16	2000			
\$\$\$				30235-6	75-65PAR/SP/EP	120	12	*Econ-o-Par Spot(29)	C, CC-6	5 5/16	2000			
\$\$\$				30236-4	75-65PAR/SP/EP	130	12	*Econ-o-Par Spot(29)	C, CC-6	5 5/16	2000			
67	A-19	Med.▲	\$\$\$	29130-2	75A-67A/EW	120	120	Econ-o-watt, I.F.	C, CC-8	47/16	750	1130		
			\$\$\$	29132-8	75A-67A/EW	130	120	Econ-o-watt, I.F.	C, CC-8	47/16	750	1130		
			\$\$\$	29242-5	75A-67A/99/EW	120	120	Econ-o-watt, Ext. Sv., I.F.	C, CC-8	47/16	2500	945		
			\$\$\$	29245-8	75A-67A/99/EW	125-130	120	Econ-o-watt, Ext. Sv., I.F.	C, CC-8	47/16	2500	945		
	A-21	Med.		39417-1	67A21/40/6M	125	120	Traffic Signal, Clear(12)	C, C-9	27/16	47/16	6000	665	
				22192-9	67A21/99TS	120	120	Traffic Signal, Clear(12)	C, C-11V	27/16	47/16	8000	610	
			22197-8	67A21/99TS	130	120	Traffic Signal, Clear(12)	C, C-11V	27/16	47/16	8000	610		
69	A-21	Med.		25341-9	69A21/TS/IF	125	120	Traffic Signal, I.F.(12)	C, C-9	47/16	8000	685		
				22199-4	69A21/TS	120	120	Traffic Signal, Clear(12)	C, C-9	27/16	47/16	8000	685	
				22202-6	69A21/TS	125	120	Traffic Signal, Clear(12)	C, C-9	27/16	47/16	8000	685	
				22204-2	69A21/TS	130	120	Traffic Signal, Clear(12)	C, C-9	27/16	47/16	8000	685	
70	T-19	Med.▲	\$\$\$	36566-8	70T/W/ES	12/4	120	Energy Saving, White	C, CC-8	47/16	750	1180		
75	A-21	Med.▲		24352-7	75A21	6	120	Inside Frosted	C, C-6	5 5/16	1000	1200		
		Med. L.H.T.		24350-1	75A21/LHT	6	120	Inside Frosted(18)	C, C-6	5 5/16	1000	1200		
		Med.▲		24353-5	75A21	12	120	Inside Frosted	C, C-6	5 5/16	1000	1100		
		Med. L.H.T.		24351-9	75A21/LHT	12	120	Inside Frosted(18)	C, C-6	5 5/16	1000	1100		
	PAR-36	M-P		26278-2	75PAR36/VNSP	12	12	*PAR Compact Very Narrow Spot	C, C-6	2 3/4	2000			
	A-21	Med.▲		34778-1	75A21	30	120	Train, I.F.	C, C-6	5 5/16	1000	1050		
	PAR-38	Med. Skt.		32452-5	75PAR/FL	32	12	*PAR Flood	C, C-6	5 5/16	1000			
	A-21	Med.▲		34779-9	75A21	34	120	Train, I.F.	C, C-6	5 5/16	1000	1100		
	PAR-46	M-P		37698-8	75PAR46	48	12	*PAR Headlight(33)	C, CC-2V	3 3/4	800			
	A-19	Med.▲		39897-4	75A	120	120	Inside Frosted	C, CC-8	47/16	750	1220		
				36480-2	75A	12/4	120	48	Inside Frosted	C, CC-8	47/16	750	1220	
				39898-2	75A	125	120	Inside Frosted	C, CC-8	47/16	750	1220		
				39899-0	75A	130	120	Inside Frosted	C, CC-8	47/16	750	1220		
				22213-3	75A/CL	120	120	Clear	C, CC-6	3 3/8	47/16	750	1220	
				36646-8	75A/CL	12/2	120	24	Clear	C, CC-6	3 3/8	47/16	750	1220
				22232-3	75A/CL	130	120	Clear	C, CC-6	3 3/8	47/16	750	1220	
				33595-0	75A/99	120	120	Extended Service, I.F.	C, CC-6	47/16	2500	1000		
				33618-0	75A/99	125-130	120	Extended Service, I.F.	C, CC-6	47/16	2500	1000		

□ Exclusive Product

\$\$\$ Energy Saving Product

□ High Volume Lamps

†New Since Last Printing

Incandescent Lamps

INCANDESCENT

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
75	A-19	Med. ☐	33699-0	75/PR6	130	60	ProLong 6, I.F.	C,C-9		4 ⁷ / ₁₆	6000	800
		Med. ☒	22225-7	75A/RX	115-125	120	Exit Light, Red	C,CC-6		4 ⁷ / ₁₆	5000	
			29589-9	75A/RS/VS	120	120	Rough & Vib. Serv., I.F.	C,C-17A		3 ¹⁵ / ₁₆	1000	750
			29588-1	75A/RS/VS	125-130	120	Rough & Vib. Serv., I.F.	C,C-17A		3 ¹⁵ / ₁₆	1000	750
	A-21	Med. ☒	20470-1	75A/RH	12/1 120	12	Rough House, I.F.	C,C-17A		5 ⁵ / ₁₆	1000	750
			31305-6	75A21	120-130	120	Inside Frosted	C,CC-8		5 ⁵ / ₁₆	1000	1130
		\$\$\$ ☐	25668-5	75A/1SBIF	130	120	I.F. Silvered bowl(43)(64)	C,CC-6		5 ⁵ / ₁₆	1000	
	ER-30	Med. ☒	20572-4	75ER30	120	24	Elliptical Reflector(19)(37)(82)	C,CC-6		6 ³ / ₁₆	2000	
			29636-8	75ER30	130	24	Elliptical Reflector(19)(37)(82)	C,CC-6		6 ³ / ₁₆	2000	
	PAR-36	End Prong	20191-3	75PAR36/NFL	120	12	*PAR Compact Narrow Flood. Formerly 75PAR36/FL	C,CC-6		3 ⁷ / ₁₆	2000	
	PAR-38	Med. Skt.	23236-3	75PAR/FL	115-125	12	*PAR Flood(29)	C,CC-6		5 ⁵ / ₁₆	2000	750
			20167-3	75PAR/FL	6/1 115-125	6	*PAR Flood(29)	C,CC-6		5 ⁵ / ₁₆	2000	750
			23242-1	75PAR/FL	130	12	*PAR Flood(29)	C,CC-6		5 ⁵ / ₁₆	2000	750
			23233-0	75PAR/SP	115-125	12	*PAR Spot(29)	C,CC-6		5 ⁵ / ₁₆	2000	750
			36223-6	75PAR/SP	6/1 115-125	6	*PAR Spot(29)	C,CC-6		5 ⁵ / ₁₆	2000	750
			23241-3	75PAR/SP	130	12	*PAR Spot(29)	C,CC-6		5 ⁵ / ₁₆	2000	750
			39817-2	75PAR38/2FL	115-125	12	*PAR Cool Beam Flood(52)(82)	C,CC-6		5 ⁵ / ₁₆	2000	750
			35582-6	75PAR38/2FL	130	12	*PAR Cool Beam Flood(52)(82)	C,CC-6		5 ⁵ / ₁₆	2000	750
			23245-4	75PAR/3FL	115-125	12	*PAR Compact Flood(32)	C,CC-6		4 ⁵ / ₁₆	2000	750
			23246-2	75PAR/3SP	115-125	12	*PAR Compact Spot(32)	C,CC-6		4 ⁵ / ₁₆	2000	750
		Med. Side Prong	20126-9	75PAR/3SP	130	12	*PAR Compact Spot(32)	C,CC-6		4 ⁵ / ₁₆	2000	750
	R-20	Med. ☐	23352-8	75R20	115-125	60	Reflector, Lt. I.F.(82)	C,C-9		3 ¹⁵ / ₁₆	2000	800
	R-30	Med. ☒	23588-7	75R30/FL	120	60	Reflector Flood(20)	C,CC-6		5 ³ / ₁₆	2000	830
			37873-7	75R30/FL	120	24	Reflector Flood(20)	C,CC-6		5 ³ / ₁₆	2000	830
			20235-8	75R30/FL	8/1 120	8	Reflector Flood(20)	C,CC-6		5 ³ / ₁₆	2000	830
			22590-4	75R30/FL/LL	8/1 120	8	Reflector Flood, Longer Life	C,CC-6		5 ³ / ₁₆	2500	800
			24225-5	75R30/FL	125-130	24	Reflector Flood(20)	C,CC-6		5 ³ / ₁₆	2000	830
			24254-5	75R30/FL/4M	120	24	Reflector Flood	C,CC-6		5 ³ / ₁₆	4000	690
			24262-8	75R30/FL/4M	125-130	24	Reflector Flood	C,CC-6		5 ³ / ₁₆	4000	690
			23584-6	75R30/SP	120	60	Reflector Spot(20)	C,CC-6		5 ³ / ₁₆	2000	830
			24196-8	75R30/SP	120	24	Reflector Spot(20)	C,CC-6		5 ³ / ₁₆	2000	830
			20236-6	75R30/SP	8/1 120	8	Reflector Spot(20)	C,CC-6		5 ³ / ₁₆	2000	830
			24209-9	75R30/SP	125-130	24	Reflector Spot(20)	C,CC-6		5 ³ / ₁₆	2000	830
			36299-6	75R30/A	8/1 115-125	8	Amber(19)	C,CC-6		5 ³ / ₁₆	2000	
			36300-2	75R30/B	8/1 115-125	8	Blue(19)	C,CC-6		5 ³ / ₁₆	2000	
			36311-9	75R30/G	8/1 115-125	8	Green(19)	C,CC-6		5 ³ / ₁₆	2000	
			36312-7	75R30/PK	8/1 115-125	8	Pink(19)	C,CC-6		5 ³ / ₁₆	2000	
			36317-6	75R30/R	8/1 115-125	8	Red(19)	C,CC-6		5 ³ / ₁₆	2000	
			36333-3	75R30/Y	8/1 115-125	8	Yellow(19)	C,CC-6		5 ³ / ₁₆	2000	
			20242-4	75R30/AGRO	6/1 120	6	Agro-Lite Plant Light(19)	C,CC-6		5 ³ / ₁₆	2000	
	R-40	Med. ☒	23426-0	75R/FL	120	24	Flood	C,CC-6		6 ¹ / ₂	2000	850
			23433-6	75R/FL	125-130	24	Flood	C,CC-6		6 ¹ / ₂	2000	850
			23424-5	75R/SP	120	24	Spot	C,CC-6		6 ¹ / ₂	2000	850
			23431-0	75R/SP	125-130	24	Spot	C,CC-6		6 ¹ / ₂	2000	850
	T-10	Med. ☒	22258-8	75T10/45	115-125	24	Clear	B,C-8		11 ⁷ / ₈	1000	820
			33486-2	75T10/SPRF/S	120	24	*Spatterproof, Clear	C,C-7A	3	4 ³ / ₈	500	750
	T-19	Med. ☒	20400-8	75T/SW	12/4 120	48	Soft White	C,CC-8		4 ⁷ / ₁₆	750	1180
			36538-7	75T/SW/TP	24/4 120	96	Soft White	C,CC-8		4 ⁷ / ₁₆	750	1180
			20441-2	75T/WL	12/4 120	48	Longer Life Soft White	C,CC-8		4 ⁷ / ₁₆	1000	1150
			36615-3	75T/WL/TP	24/4 120	96	Longer Life Soft White	C,CC-8		4 ⁷ / ₁₆	1000	1150
	A-21	Med. ☒	24623-1	75A21	230	120	Inside Frosted	C,C-7A		5 ⁵ / ₁₆	1000	815
			24625-6	75A21	250	120	Inside Frosted	C,C-7A		5 ⁵ / ₁₆	1000	790

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Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens			
88	PAR-36	M-P	29863-8	88PAR36/FL	75	12	Floodlight, Anti-Vibration	C,CC-6		2 3/4	1500				
90	A-19	Med.▲	\$\$\$	29138-5	100A-90A/EW	120	120	Econ-o-watt, I.F.	C,CC-8	4 7/16	750	1620			
			\$\$\$	29149-2	100A-90A/EW	130	120	Econ-o-watt, I.F.	C,CC-8	4 7/16	750	1620			
			\$\$\$	29246-6	100A-90A/99/EW	120	120	Econ-o-watt, Ext. Sv., I.F.	C,CC-8	4 7/16	2500	1375			
			\$\$\$	29280-5	100A-90A/99/EW	125-130	120	Econ-o-watt, Ext. Sv., I.F.	C,CC-8	4 7/16	2500	1375			
	Med.	\$\$\$	37168-2	K90A19/TS/EW	120-125	120	Krypton Econ-o-watt Traffic Signal, Clear	C, C-11V	2 7/16	4 3/8	8000	1040			
			37615-2	K90A19/1/TS/EW	120-125	120	Krypton Econ-o-watt Traffic Signal, Clear	C, C-11V	3	4 3/8	8000	1040			
	A-21	Med.	\$\$\$□	26829-2	90A21/35	125-130	60	Econ-o-watt Indus. Serv., I.F.	C,C-9		5 5/16	3500	1090		
	PAR-38	Med. Skt.	\$\$\$	30578-9	90PAR38/CAP/FL	120	12	★Halogen Econ-o-Par Flood (29)(42)(50)	C, CC-8		5 5/16	2000			
				†\$\$\$	37784-6	90PAR38/CAP/FL	130	12	★Halogen Econ-o-Par Flood (29)(42)(50)	C, CC-8		5 5/16	2000		
				†\$\$\$	37782-0	90PAR38/CAP/SP	120	12	★Halogen Econ-o-Par Spot (29)(42)(50)	C, CC-8		5 5/16	2000		
†\$\$\$				37783-8	90PAR38/CAP/SP	130	12	★Halogen Econ-o-Par Spot (29)(42)(50)	C, CC-8		5 5/16	2000			
95	T-19	Med.▲	\$\$\$	36567-6	95T/W/ES	12/4	120	48	Energy Saving, White	C,CC-8	4 7/16	750	1710		
100	A-21	Med.▲		34803-7	100A	12	120		Inside Frosted	C,C-6	5 5/16	1000	1820		
	PAR-38	Med.Side Prong		23250-4	100PAR38/FL	12	12		★PAR Flood, Anti-Vibration (55)(71)	C,C-6	4 5/16	1000	1150		
	R-20	Med.	□	33703-0	100R20/FL/S	12	60		Reflector Flood Swimming Pool(12)(26)	C,C-6	3 15/16	2000			
	R-30	Med.	□	24241-2	100R30/FL/S	12	24		Reflector Flood Swimming Pool(12)(26)	C,C-6	5 1/8	2000			
	T-8	S.C.Bay.		24386-5	100T8/1SC	20	24		Contour Map	C,CC-6	2 3/16	3 1/8	50	2600	
	A-21	Med.▲		34793-0	100A	24	120		Inside Frosted	C,C-6		5 5/16	1000	1940	
				34783-1	100A	30	120		Train, I.F.	C,C-6		5 5/16	1000	1870	
				24363-4	100A21/3	32	120		Loco. Hdt.(12)(22)	C,C-5	3	4 7/16	500	1570	
				25742-8	100A/LHT	32	120		Inside Frosted(18)	C,C-6		5 5/16	1000	1820	
		Med.L.H.T.		34781-5	100A	34	120		Train, I.F.	C,C-6		5 5/16	1000	1820	
	PAR-46	M-P.		22951-8	100PAR46	60	12		★PAR Mine Lamp, Lens Cover	C,CC-2V	3 7/8	800	1240		
	A-19	Med.▲		22279-4	100A	120	120		Inside Frosted	C,CC-8		4 7/16	750	1750	
				36496-8	100A	12/4	120	48		Inside Frosted	C,CC-8		4 7/16	750	1750
				22287-7	100A	125	120		Inside Frosted	C,CC-8		4 7/16	750	1750	
				22291-9	100A	130	120		Inside Frosted	C,CC-8		4 7/16	750	1750	
				36757-3	100A/LHT	120	120		Inside Frosted(18)	C,CC-8		4 7/16	750	1750	
				36491-9	100A/LHT	130	120		Inside Frosted(18)	C,CC-8		4 7/16	750	1750	
				22277-8	100A/CL	120	120		Clear	C, CC-8	3 1/8	4 7/16	750	1750	
				20150-9	100A/CL	12/2	120	24		Clear	C, CC-8	3 1/8	4 7/16	750	1750
				22290-1	100A/CL	130	120		Clear	C, CC-8	3 1/8	4 7/16	750	1750	
				22286-9	100A/99	120	120		Extended Service, I.F.	C, CC-8		4 7/16	2500	1510	
				22295-0	100A/99	125-130	120		Extended Service, I.F.	C, CC-8		4 7/16	2500	1510	
				37022-1	100A/99CL	125-130	120		Extended Service, Clear	C, CC-8		4 7/16	2500	1510	
				□	42738-5	100/PR6	130	48		ProLong 6, I.F.	C,C-9	3 1/8	4 7/16	6000	1130
			A-21	Med.▲		22338-8	100A21	120	120		Inside Frosted	C, CC-8		5 5/16	750
		22393-3			100A21	130	120		Inside Frosted	C, CC-8		5 5/16	750	1680	
		22300-8			100A/3	120	120		Inside Frosted(18)	C, CC-8		5 5/16	750	1680	
		22304-0			100A/3	130	120		Inside Frosted(18)	C, CC-8		5 5/16	750	1680	
		22325-5			100A21/CL	120	120		Clear	C, CC-8	3 7/8	5 5/16	750	1680	
		22383-4			100A21/CL	130	120		Clear	C, CC-8	3 7/8	5 5/16	750	1680	
A-19	Med.▲		22343-8	100A21/99	120	120		Extended Service, I.F.	C, CC-8		5 5/16	2500	1425		
			22400-6	100A21/99	125-130	120		Extended Service, I.F.	C, CC-8		5 5/16	2500	1425		
			20848-8	100A21/99Y	125-130	120		Extended Service, Yellow	C, CC-8		5 5/16	2500			
			Med.	□	25851-7	100A21/35	120	60		Industrial Service, I.F.	C, C-9	5 5/16	3500	1280	
			□	25834-3	100A21/35	125-130	60		Industrial Service, I.F.	C, C-9	5 5/16	3500	1280		
			□	25829-3	100A/35RS	120	60		Industrial Rough Service, I.F.	C, C-17A	5 5/16	3500	1020		
			□	25828-5	100A/35RS	125-130	60		Industrial Rough Service, I.F.	C, C-17A	5 5/16	3500	1020		

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INCANDESCENT

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Approximate Initial Lumens	
100 	A-19	Med.▲	35717-8	100A/D	115-125	60	Daylight, I.F.	C, C-9		5 ⁵ / ₁₆	750	1000	
			23944-2	100A/1SBIF	115-125	120	I.F. Silvered Bowl(43)(64)	C, CC-6		5 ⁵ / ₁₆	1000	1420	
			31760-2	100A/1SBIF	130	120	I.F. Silvered Bowl(43)(64)	C, CC-6		5 ⁵ / ₁₆	1000	1420	
			22344-6	100A/RS/VS	120	120	Rough & Vib. Serv., I.F.	C, C-17A		5 ⁵ / ₁₆	1000	1230	
			20337-2	100A/RS/VS	125-130	120	Rough & Vib. Serv., I.F.	C, C-17A		5 ⁵ / ₁₆	1000	1230	
			20327-3	100A/CL/RS/VS	120	120	Rough & Vib. Serv., Clear	C, C-17A		5 ⁵ / ₁₆	1000	1230	
				20335-6	100A/CL/RS/VS	125-130	120	Rough & Vib. Serv., Clear	C, C-17A		5 ⁵ / ₁₆	1000	1230
		Med.	23609-1	100A21/SP/33	120	60	Spotlight(23)	C, C-5	3	4 ⁷ / ₁₆	200	1350	
	22333-9		100A21/TS	120	120	Traffic Signal, Clear(12)	C, C-9	2 ⁷ / ₁₆	4 ⁷ / ₁₆	2000	1260		
	22390-9		100A21/TS	130	120	Traffic Signal, Clear(12)	C, C-9	2 ⁷ / ₁₆	4 ⁷ / ₁₆	2000	1260		
	Med. Pf.	22310-7	100A21P	120	60	Aviation-Airport Marker(12)	C, CC-2V	2 ³ / ₄	5 ⁵ / ₁₆	2000			
	A-23	Med.▲	22430-3	100A23	120-130	120	Inside Frosted	C, CC-6		6 ⁵ / ₁₆	750	1650	
			22404-8	100A23/20	115-125	120	Commercial Oven	C, C-9	4 ³ / ₈	6 ¹ / ₁₆	1000	1530	
			24597-7	100A/SB	120-130	120	Silvered Bowl, I.F.(43)	C, CC-6		6 ⁵ / ₁₆	1000	1530	
			22415-4	100A23/B	115-125	60	Blue	C, CC-6		6 ⁵ / ₁₆	750		
			22418-8	100A23/G	115-125	60	Green	C, CC-6		6 ⁵ / ₁₆	750		
			22422-0	100A23/R	115-125	60	Red	C, CC-6		6 ⁵ / ₁₆	750		
			22425-3	100A23/R2	115-125	60	Rose	C, CC-6		6 ⁵ / ₁₆	750		
			22426-1	100A23/Y	115-125	60	Yellow	C, CC-6		6 ⁵ / ₁₆	750		
	G-16½	D.C. Bay	23619-0	100G16½/29DC	120	24	Spotlight(12)(25)	C, CC-13	1 ³ / ₈	3	200	1630	
		PAR-38	Med.Skt.	36619-5	100PAR/FL	120	12	*PAR Flood(29)	C, CC-6		5 ⁵ / ₁₆	2000	1250
20467-7				100PAR/FL	125-130	12	*PAR Flood(29)	C, CC-6		5 ⁵ / ₁₆	2000	1250	
36620-3				100PAR/SP	120	12	*PAR Spot(29)	C, CC-6		5 ⁵ / ₁₆	2000	1250	
20468-5				100PAR/SP	125-130	12	*PAR Spot(29)	C, CC-6		5 ⁵ / ₁₆	2000	1250	
36235-0				100PAR/A	6/1 115-125	6	*PAR Amber(29)	C, CC-6		5 ⁵ / ₁₆	2000		
20177-2				100PAR/B	6/1 115-125	6	*PAR Blue(29)	C, CC-6		5 ⁵ / ₁₆	2000		
36237-6				100PAR/BW	6/1 115-125	6	*PAR Blue White(29)	C, CC-6		5 ⁵ / ₁₆	2000		
20186-3				100PAR/G	6/1 115-125	6	*PAR Green(29)	C, CC-6		5 ⁵ / ₁₆	2000		
36249-1				100PAR/PK	6/1 115-125	6	*PAR Pink(29)	C, CC-6		5 ⁵ / ₁₆	2000		
20228-3				100PAR/R	6/1 115-125	6	*PAR Red(29)	C, CC-6		5 ⁵ / ₁₆	2000		
		20232-5	100PAR/Y	6/1 115-125	6	*PAR Yellow(29)	C, CC-6		5 ⁵ / ₁₆	2000			
	R-20	Med.	□	33702-2	100R20	120-130	60	Reflector, Lt.I.F.(12)	C, C-9		3 ¹⁵ / ₁₆	2000	
	R-30	Med.	□	37507-1	100R30/FL	120	24	Reflector Flood(19)	C, CC-6		5 ⁵ / ₁₆	2000	
	R-40	Med.▲		23441-9	100R/FL	120	24	Flood(19)	C, CC-6		6 ¹ / ₂	2000	1160
				23447-6	100R/FL	125-130	24	Flood(19)	C, CC-6		6 ¹ / ₂	2000	1160
				23439-3	100R/SP	120	24	Spot(19)	C, CC-6		6 ¹ / ₂	2000	1160
				23446-8	100R/SP	125-130	24	Spot(19)	C, CC-6		6 ¹ / ₂	2000	1160
	T-19	Med.▲		20401-6	100T/SW	12/4 120	48	Soft White	C, CC-8		4 ⁷ / ₁₆	750	1710
				36545-2	100T/SW/TP	24/4 120	96	Soft White	C, CC-8		4 ⁷ / ₁₆	750	1710
			□	20442-0	100T/WL	12/4 120	48	Longer Life Soft White	C, CC-8		4 ⁷ / ₁₆	1000	1660
			□	36617-9	100T/WL/TP	24/4 120	96	Longer Life Soft White	C, CC-8		4 ⁷ / ₁₆	1000	1660
			36640-1	100T/PK	12/2 115-125	24	Beauty Tone Pink	C, CC-8		4 ⁷ / ₁₆	1000		
			20472-7	100T/Y	12/2 115-125	24	Bug-A-Way Yellow	C, CC-8		4 ⁷ / ₁₆	1000		
†□			22581-3	100T/YL	12/2 115-125	24	Bug-A-Way Yellow, Longer Life	C, CC-8		4 ⁷ / ₁₆	1350		
100 200 300	PS-25	3 Ct. Mog.▲	36734-2	100/300/W	12/1 120	12	Soft White Three-Way (8)	C, 2CC-6		6 ¹³ / ₁₆	1200	1350 3350 4700	
100 	A-21	Med.▲	29956-0	100A	230	120	Inside Frosted	C, C-7A		5 ⁵ / ₁₆	1000	1270	
			29955-2	100A	250	120	Inside Frosted	C, C-7A		5 ⁵ / ₁₆	1000	1270	
			29954-5	100A/CL	250	120	Clear	C, C-7A	3 ³ / ₈	5 ⁵ / ₁₆	1000	1270	
			29802-6	100A/RS	250	120	Rough Service, I.F.	C, C-17A		5 ⁵ / ₁₆	1000	1030	
			24655-3	100A/99	250	120	Extended Service, I.F.	C, C-7A		5 ⁵ / ₁₆	2500	1065	
			24661-1	100A	277	120	Mine, I.F.	C, C-7A		5 ⁵ / ₁₆	1000	1070	
			24668-6	100A	300	120	Inside Frosted	C, C-7A		5 ⁵ / ₁₆	1000	1040	
			24669-4	100A/RS	300	120	Rough Service, I.F.	C, C-17A		5 ⁵ / ₁₆	1000	860	

□ Exclusive Product

\$\$\$ Energy Saving Product

High Volume Lamps

†New Since Last Printing

Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
110	R-30	Med.	24265-1	110R30/RS	120	24	Reflector Flood, Rough Service, I.F.	C, C-17		5 ³ / ₁₆	2000	1195
116	A-21	Med.	22483-2	116A21/TS	120	120	Traffic Signal, Clear(12)	C, C-9	2 ⁷ / ₁₆	4 ⁷ / ₁₆	8000	1260
			22485-7	116A21/TS	130	120	Traffic Signal, Clear(12)	C, C-9	2 ⁷ / ₁₆	4 ⁷ / ₁₆	8000	1260
120	PAR-38	Med.Skt. \$\$\$	28355-6	150-120PAR/FL/EP	120	12	*Econ-o-Par Flood(29)(82)	C, CC-6		5 ⁵ / ₁₆	2000	1450
			36224-4	120PAR/FL/EM 6/1	120	6	*PAR Flood(29)(82) Econo-Miser	C, CC-6		5 ⁵ / ₁₆	2000	1450
		\$\$\$	28661-7	150-120PAR/FL/EP	125-130	12	*Econ-o-Par Flood(29)(82)	C, CC-6		5 ⁵ / ₁₆	2000	1450
		\$\$\$	28356-4	150-120PAR/SP/EP	120	12	*Econ-o-Par Spot(29)(82)	C, CC-6		5 ⁵ / ₁₆	2000	1450
		\$\$\$	28663-3	150-120PAR/SP/EP	125-130	12	*Econ-o-Par Spot(29)(82)	C, CC-6		5 ⁵ / ₁₆	2000	1450
	PAR-64	M.P.	36260-8	120PAR64/VNSP	6	8	*PAR Spotlight, Flat cover glass	C, C-6		4	3000	
	ER-40	Med.▲ \$\$\$	21562-4	120ER40	120	24	Elliptical Reflector (19)(37)(82)	C, CC-6		7 ³ / ₁₆	2000	
		\$\$\$	21565-7	120ER40	130	24	Elliptical Reflector (19)(37)(82)	C, CC-6		7 ³ / ₁₆	2000	
125	G-16½	D.C.Bay.	23634-9	125G16½DC	120	24	Spotlight(12)(25)	C, C-13B	1½	3	600	1630
	R-40	Med.Skt.	23821-2	125R40	115-125	24	Infrared Indust.(11)(19)	C, C-9		7¼	(27)	
		Med.▲	36350-7	125R40/1	6/1 115-125	6	Infrared (11)(19)	C, C-9		6½	(27)	
	T-10	Med.Pf.	23640-6	125T10P	120	24	Spotlight(8)	C, C-13B	2¾	5¾	500	1740
133	P-25	Med.	29215-1	133P25/TS	125	60	Traffic Signal, Clear(12)	C, C-9	3	4¾	3000	1650
			22489-9	133P25/TS	130	60	Traffic Signal, Clear(12)	C, C-9	3	4¾	3000	1650
135	A-21	Med.▲ \$\$\$	29162-5	150A-135A/EW	120	60	Econ-o-watt, I.F.	C, CC-8		5 ⁵ / ₁₆	750	2580
		\$\$\$	29164-1	150A-135A/EW	130	60	Econ-o-watt, I.F.	C, CC-8		5 ⁵ / ₁₆	750	2580
		\$\$\$	29281-3	150A-135A/99/EW	120	60	Econ-o-watt, Ext. Sv., I.F.	C, CC-8		5 ⁵ / ₁₆	2500	2105
		\$\$\$	29288-8	150A-135A/99/EW	125-130	60	Econ-o-watt, Ext. Sv., I.F.	C, CC-8		5 ⁵ / ₁₆	2500	2105
		†\$\$\$	37616-0	K135A21/TS/EW	120-125	60	Krypton Econ-o-watt Traffic Signal, Clear	C, C-11V	3	4 ¹¹ / ₁₆	6000	1750
	A-25	Med. \$\$\$□	26836-7	135A25/35	125-130	60	Econ-o-watt Indus. Serv., I.F.	C, C-9		6 ¹⁵ / ₁₆	3500	1790
150	PAR-38	Med.Side Prong	23328-8	150PAR38/FL	12	12	*PAR Flood, Anti-Vibration (55)(71)	C, C-6		4 ⁵ / ₁₆	1000	
			38040-2	150PAR38	32	12	*PAR Anti-Vibration (46)(55)(71)	C, CC-8		4 ⁵ / ₁₆	1000	
	PAR-46	M-P.	23340-3	150PAR46/1	32	12	*PAR Headlight, Rounded Cover	C, CC-8		3 ³ / ₁₆	1000	
	A-21	Med.▲	29693-9	150A	120	60	Inside Frosted	C, CC-8		5 ⁵ / ₁₆	750	2850
			30481-6	150A	125	60	Inside Frosted	C, CC-8		5 ⁵ / ₁₆	750	2850
			30483-2	150A	130	60	Inside Frosted	C, CC-8		5 ⁵ / ₁₆	750	2850
			39641-6	150A/CL	120	60	Clear	C, CC-8	3 ⁷ / ₈	5 ⁵ / ₁₆	750	2850
			36659-1	150A/CL	12/1 120	12	Clear	C, CC-8	3 ⁷ / ₈	5 ⁵ / ₁₆	750	2850
			39611-9	150A/CL	130	60	Clear	C, CC-8	3 ⁷ / ₈	5 ⁵ / ₁₆	750	2850
			28416-6	150A/99	120	60	Extended Service, I.F.	C, CC-8		5 ⁵ / ₁₆	2500	2350
			28452-1	150A/99	125-130	60	Extended Service, I.F.	C, CC-8		5 ⁵ / ₁₆	2500	2350
			28455-4	150A/99CL	120	60	Extended Service, Clear	C, CC-8	4 ⁵ / ₈	5 ⁵ / ₁₆	2500	2350
			28457-0	150A/99CL	125-130	60	Extended Service, Clear	C, CC-8	4 ⁵ / ₈	5 ⁵ / ₁₆	2500	2350
	A-23	Med.▲	22509-4	150A23	120	60	Inside Frosted	C, CC-6		6 ⁵ / ₁₆	750	2740
			22529-2	150A23	130	60	Inside Frosted	C, CC-6		6 ⁵ / ₁₆	750	2740
		Med.L.H.T.	22492-3	150A23/LHT	120	60	Inside Frosted(18)	C, CC-6		6 ⁵ / ₁₆	750	2740
			22494-9	150A23/LHT	130	60	Inside Frosted(18)	C, CC-6		6 ⁵ / ₁₆	750	2740

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High Volume Lamps

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Incandescent Lamps

INCANDESCENT

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate		
											Hours Life	Initial Lumens	
	A-23	Med.▲	22506-0	150A23/CL	120	60	Clear	C, CC-6	4⅞	6⅞ ₁₆	750	2740	
			22526-8	150A23/CL	130	60	Clear	C, CC-6	4⅞	6⅞ ₁₆	750	2740	
			32253-7	150A/RS/VS	120	60	Rough & Vib. Serv., I.F.	C, C-17A		6⅞ ₁₆	1000	2100	
			32256-0	150A/RS/VS	125-130	60	Rough & Vib. Serv., I.F.	C, C-17A		6⅞ ₁₆	1000	2100	
			24968-0	150A/CL/RS/VS	120	60	Rough & Vib. Serv., Clear	C, C-17A	4⅞	6⅞ ₁₆	1000	2100	
			24939-1	150A/CL/RS/VS	125-130	60	Rough & Vib. Serv., Clear	C, C-17A	4⅞	6⅞ ₁₆	1000	2100	
		Med.	33362-5	150A/35RS	120	60	Industrial Rough Serv., I.F.	C, C-17A		6⅞ ₁₆	3500	1770	
			33363-3	150A/35RS	125-130	60	Industrial Rough Serv., I.F.	C, C-17A		6⅞ ₁₆	3500	1770	
		Med.▲	22505-2	150A/Y	115-125	24	Bug-A-Way Yellow	C, CC-8		6⅞ ₁₆	1000		
		A-25	Med.	39771-1	150A25/35	120	60	Industrial Service, I.F.	C, C-9		6⅞ ₁₆	3500	2150
	39810-7		150A25/35	125-130	60	Industrial Service, I.F.	C, C-9		6⅞ ₁₆	3500	2150		
	P-25	Med.	23653-9	150P25/2	120	60	Spotlight, Clear(23)	C, C-5		4¾	200	2100	
			24938-3	150P25/2SB	120	60	Spotlight, Clear Silvered Bowl(31)	C, C-5		4¾	200		
			23654-7	150P25/10	120	60	Spotlight, Light I.F.(23)	C, C-5	3	4¾	200	2100	
			23658-8	150P25/10	125-130	60	Spotlight, Light I.F.(23)	C, C-5	3	4¾	200	2100	
	PAR-36	End Prong	22910-4	150PAR36/WFL	120	12	*PAR Compact Wide Flood(29)(82)	C, CC-6		3¼	2000		
		22929-4	150PAR36/SP	120	12	*PAR Compact Spot(29)(82)	C, CC-6		3¼	2000			
	PAR-38	Med.Skt.	23290-0	150PAR/FL	120	12	*PAR Flood(29)(30)(82)	C, CC-6		5⅞ ₁₆	2000	1730	
			20175-6	150PAR/FL	6/1 120	6	*PAR Flood(29)(30)(82)	C, CC-6		5⅞ ₁₆	2000	1730	
			25121-5	150PAR/FL/LL	120	12	*PAR Flood, Longer Life(29)(82)	C, CC-6		5⅞ ₁₆	2500	1670	
			22586-2	150PAR/FL/LL	6/1 120	6	*PAR Flood, Longer Life(29)(82)	C, CC-6		5⅞ ₁₆	2500	1670	
			23319-7	150PAR/FL	125-130	12	*PAR Flood(29)(30)(82)	C, CC-6		5⅞ ₁₆	2000	1730	
			23402-1	K150PAR/FL	120	12	*PAR Flood (Krypton)(29)(82)	C, CC-6		5⅞ ₁₆	4000	1660	
			23407-0	K150PAR/FL	125-130	12	*PAR Flood (Krypton)(29)(82)	C, CC-6		5⅞ ₁₆	4000	1660	
			38540-1	150PAR/WFL	120	12	*PAR Wide Flood(29)(82)	C, CC-6		5⅞ ₁₆	2000	1730	
			38782-9	150PAR/WFL	125-130	12	*PAR Wide Flood(29)(82)	C, CC-6		5⅞ ₁₆	2000	1730	
			36365-5	150PAR38/2FL	120	12	*PAR Cool Beam Flood(9)(52)(82)	C, CC-6		5⅞ ₁₆	2000	1730	
		PAR-38	Med.Skt.	36534-6	150PAR38/2FL	125-130	12	*PAR Cool Beam Flood(9)(52)(82)	C, CC-6		5⅞ ₁₆	2000	1730
			20142-6	150PAR38/2WFL	125-130	12	*PAR Cool Beam Wide Flood(9)(52)(82)	C, CC-6		5⅞ ₁₆	2000	1730	
		Med.Side Prong	23331-2	150PAR/3FL	115-125	12	*PAR Flood(30)(32)	C, CC-6		4⅞ ₁₆	2000	1730	
			23336-1	150PAR/3FL	130	12	*PAR Flood(30)(32)	C, CC-6		4⅞ ₁₆	2000	1730	
26980-3	150PAR/3VWFL		120-130	12	*PAR Very Wide Flood Mine(32)(71)	C, C-13		4⅞ ₁₆	2000				
23334-6	150PAR/4FL		120-130	12	*PAR Flood, Anti-vibration(32)(71)	C, C-13		4⅞ ₁₆	2000				
Med.Skt.	23315-5	150PAR/5FL	120-130	12	*PAR Flood, Anti-vibration(82)	C, C-13		5⅞ ₁₆	2000				
	23284-3	150PAR/SP	120	12	*PAR Spotlight(29)(30)(82)	C, CC-6		5⅞ ₁₆	2000	1730			
	20176-4	150PAR/SP	6/1 120	6	*PAR Spotlight(29)(30)(82)	C, CC-6		5⅞ ₁₆	2000	1730			
	23316-3	150PAR/SP	125-130	12	*PAR Spotlight(29)(30)(82)	C, CC-6		5⅞ ₁₆	2000	1730			
	23408-8	K150PAR/SP	120	12	*PAR Spotlight (Krypton)(82)	C, CC-6		5⅞ ₁₆	4000	1660			
	23412-0	K150PAR/SP	125-130	12	*PAR Spotlight (Krypton)(82)	C, CC-6		5⅞ ₁₆	4000	1660			
	36366-3	150PAR38/2SP	120	12	*PAR Cool Beam Spot(9)(52)(82)	C, CC-6		5⅞ ₁₆	2000	1730			
PAR-38	Med.Side Prong	23329-6	150PAR/3SP	115-125	12	*PAR Spotlight(30)(32)	C, CC-6		4⅞ ₁₆	2000	1730		
	23335-3	150PAR/3SP	130	12	*PAR Spotlight(30)(32)	C, CC-6		4⅞ ₁₆	2000	1730			
	PAR-46	M-P	23345-2	150PAR46	120-130	12	*PAR Mine Locomotive Headlight(33)	C, C-13		3⅞	1000		
	PS-25	Med.▲	22568-0	150	120	60	Inside Frosted	C, C-9		6⅞ ₁₆	750	2650	
			22612-6	150	130	60	Inside Frosted	C, C-9		6⅞ ₁₆	750	2650	
			22557-3	150/CL	120	60	Clear	C, C-9	5¼	6⅞ ₁₆	750	2650	
			22597-9	150/CL	130	60	Clear	C, C-9	5¼	6⅞ ₁₆	750	2650	
			22574-8	150PS25/99	120	60	Extended Service, I.F.	C, C-9		6⅞ ₁₆	2500	2300	
			22617-5	150PS25/99	125-130	60	Extended Service, I.F.	C, C-9		6⅞ ₁₆	2500	2300	
			22604-3	150PS25/99CL	125-130	60	Extended Service, Clear	C, C-9	5¼	6⅞ ₁₆	2500	2300	
22548-2	150/D	115-125	60	Daylight, I.F.	C, C-9		6⅞ ₁₆	1000					

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Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L. C. L. (In.)	M. O. L. (In.)	Hours Life	Initial Lumens
150	PS-25 Med. ▲		23949-1	150/SB	120	60	Silvered Bowl, I.F.(31)(43)	C, C-9		6 ¹⁵ / ₁₆	1000	2250
			23952-5	150/SB	125-130	60	Silvered Bowl, I.F.(31)(43)	C, C-9		6 ¹⁵ / ₁₆	1000	2250
			22550-8	150/WB	115-125	60	White Bowl	C, C-9		6 ¹⁵ / ₁₆	750	2500
	PS-30 Med. ▲		20437-0	150PS30	130	60	Inside Frosted	C, C-9		8 ¹ / ₁₆	1000	2400
	R-40 Med. ▲		23474-0	150R/FL	120	24	Reflector Flood(9)(19)(36)	C, CC-6		6 ¹ / ₂	2000	1900
			20237-4	150R/FL	6/1 120	6	Reflector Flood(9)(19)(36)	C, CC-6		6 ¹ / ₂	2000	1900
			23494-8	150R/FL	125-130	24	Reflector Flood(9)(19)(36)	C, CC-6		6 ¹ / ₂	2000	1900
			34838-3	150R/FL/4M	120	24	Reflector Flood(9)(19)	C, CC-6		6 ¹ / ₂	4000	1580
			34849-0	150R/FL/4M	125-130	24	Reflector Flood(9)(19)	C, CC-6		6 ¹ / ₂	4000	1580
			23470-8	150R/SP	120	24	Reflector Spot(9)(19)(36)	C, CC-6		6 ¹ / ₂	2000	1900
			36340-8	150R/SP	6/1 120	6	Reflector Spot(9)(19)(36)	C, CC-6		6 ¹ / ₂	2000	1900
			23491-4	150R/SP	125-130	24	Reflector Spot(9)(19)(36)	C, CC-6		6 ¹ / ₂	2000	1900
			27191-6	150R/B	115-125	24	Blue(9)(19)	C, CC-6		6 ¹ / ₂	2000	
			27198-1	150R/G	115-125	24	Green(9)(19)	C, CC-6		6 ¹ / ₂	2000	
			27210-4	150R/PK	115-125	24	Pink(9)(19)	C, CC-6		6 ¹ / ₂	2000	
			27230-2	150R/R	115-125	24	Red(9)(19)	C, CC-6		6 ¹ / ₂	2000	
			27300-3	150R/Y	115-125	24	Yellow(9)(19)	C, CC-6		6 ¹ / ₂	2000	
			20239-0	150R/AGRO	6/1 120	6	Agro-Lite Plant Light(9)(19)	C, CC-6		6 ¹ / ₂	2000	
			20694-6	150R40/TB	120	24	Jewelry Spot-Reflector, Transparent Daylight Blue(34)(41)	C, CC-6		6 ¹ / ₂	2000	
			20697-9	150R40/TB	130	24	Jewelry Spot-Reflector, Transparent Daylight Blue(34)(41)	C, CC-6		6 ¹ / ₂	2000	
	T-10 Med.		33502-6	150T10/SPRF	120	24	*Spatterproof, Clear(8)	C, C-7A	3	5 ¹ / ₂	500	2000
	T-19 Med. ▲		36556-9	150T/SW	12/1 120	12	Soft White	C, CC-8		5 ⁵ / ₁₆	750	2800
			20443-8	150T/WL	12/1 120	12	Longer Life Soft White	C, CC-8		5 ⁵ / ₁₆	1000	2650
	PS-35 3Ct. Mog.		23659-6	150/400	115-125	24	Hospital, I.F.	C, 2C-7A		9 ³ / ₈	200	
	PS-25 Med. ▲		24679-3	150PS25/IF	230	60	Inside Frosted	C, CC-9		6 ¹⁵ / ₁₆	1000	2150
			24685-0	150PS25/IF	250	60	Inside Frosted	C, CC-9		6 ¹⁵ / ₁₆	1000	2100
			24674-4	150PS25	230	60	Clear	C, CC-9		6 ¹⁵ / ₁₆	1000	2150
			24682-7	150PS25	250	60	Clear	C, CC-9		6 ¹⁵ / ₁₆	1000	2100
			24689-2	150PS25	277	60	Clear	C, CC-9		6 ¹⁵ / ₁₆	1000	1875
			24687-6	150PS25/99IF	250	60	Extended Service, I.F.	C, CC-9		6 ¹⁵ / ₁₆	2500	1840
			24684-3	150PS25/99CL	250	60	Extended Service, Clear	C, CC-9		6 ¹⁵ / ₁₆	2500	1840
175	PAR-38 Med. Skt. \$\$\$		37780-4	175PAR38/HEAT	115-125	15	*PAR Infrared, Clear	C, C-9		5 ⁵ / ₁₆	5000	
199	PAR-56 Mog. End Prong		23347-8	199PAR56/6.6	6.6A	8	*PAR Aviation-Airport Approach, Lens cover(55)	C, C-13		5	75	4800
200	PAR-56 M-P		23371-8	200PAR	30	8	*PAR Headlight(10)	C, CC-8		4 ¹ / ₂	500	
			23373-4	200PAR	32	8	*PAR Headlight(10)	C, CC-8		4 ¹ / ₂	500	
			24397-2	200	32	60	Clear	C, C-6		8 ¹ / ₁₆	1000	3800
	PS-30 Med. ▲		36289-7	200A	120	60	Inside Frosted	C, CC-8		6 ⁵ / ₁₆	750	3900
	A-23 Med. ▲		36291-3	200A	125-130	60	Inside Frosted	C, CC-8		6 ⁵ / ₁₆	750	3900
			39642-4	200A/CL	120	60	Clear	C, CC-8	4 ³ / ₈	6 ⁵ / ₁₆	750	3900
			36144-4	200A/CL	12/1 120	12	Clear	C, CC-8	4 ³ / ₈	6 ⁵ / ₁₆	750	3900
			39995-6	200A/CL	125-130	60	Clear	C, CC-8	4 ³ / ₈	6 ⁵ / ₁₆	750	3900
			32447-5	200A/99	120	60	Extended Service, I.F.	C, CC-8		6 ⁵ / ₁₆	2500	3250
			32451-7	200A/99	125-130	60	Extended Service, I.F.	C, CC-8		6 ⁵ / ₁₆	2500	3250
			32373-3	200A/99CL	120	60	Extended Service, Clear	C, CC-8	4 ³ / ₈	6 ⁵ / ₁₆	2500	3250
			32383-2	200A/99CL	125-130	60	Extended Service, Clear	C, CC-8	4 ³ / ₈	6 ⁵ / ₁₆	2500	3250
	A-25 Med. ▲		22656-3	200A25	120	60	Inside Frosted	C, CC-8		6 ¹⁵ / ₁₆	750	3900
			22674-6	200A25	130	60	Inside Frosted	C, CC-8		6 ¹⁵ / ₁₆	750	3900
			22670-4	200A25/CL	130	60	Clear	C, CC-8	5 ¹ / ₄	6 ¹⁵ / ₁₆	750	3900
	Med.		39761-2	200A25/35	120	60	Industrial Service, I.F.	C, C-9		6 ¹⁵ / ₁₆	3500	2890
			39813-1	200A25/35	125-130	60	Industrial Service, I.F.	C, C-9		6 ¹⁵ / ₁₆	3500	2890
	P-25 Med.		22645-6	200P25/26	115-125	60	X-Ray Illuminator, Daylight, I.F.	C, C-7A		4 ³ / ₄	100	

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Incandescent Lamps

INCANDESCENT

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
200	PAR-46	Med. Side Prong	23349-4	200PAR46/3MFL	120	12	*PAR Medium Flood(9)(32)	C, CC-13		4	2000	2250
			23357-7	200PAR46/3MFL	125-130	12	*PAR Medium Flood(9)(32)	C, CC-13		4	2000	2250
			23351-0	200PAR46/3NSP	120	12	*PAR Narrow Spot(9)(32)	C, CC-13		4	2000	2250
			23359-3	200PAR46/3NSP	125-130	12	*PAR Narrow Spot(9)(32)	C, CC-13		4	2000	2250
	PAR-56	Mog. End \$\$\$ Prong \$\$\$	21982-4	200PAR56/MFL	125-130	8	*PAR Medium Flood(9)(55)	C, CC-13		5	2000	2700
			29917-2	200PAR56/NSP	125-130	8	*PAR Narrow Spot (9)(46)(55)	C, CC-13		5	2000	2700
	PS-30	Med.▲	22708-2	200/IF	120	60	Inside Frosted	C, C-9		8 1/16	750	3710
			22735-5	200/IF	130	60	Inside Frosted	C, C-9		8 1/16	750	3710
			22701-7	200	120	60	Clear	C, C-9	6	8 1/16	750	3710
			22729-8	200	130	60	Clear	C, C-9	6	8 1/16	750	3710
			22707-4	200/99IF	120	60	Extended Service, I.F.	C, C-9		8 1/16	2500	3200
			22737-1	200/99IF	125-130	60	Extended Service, I.F.	C, C-9		8 1/16	2500	3200
			22703-3	200/99	120	60	Extended Service, Clear	C, C-9	6	8 1/16	2500	3200
			22731-4	200/99	125-130	60	Extended Service, Clear	C, C-9	6	8 1/16	2500	3200
		Mog.	23956-6	200/SBIF	120	60	Silvered Bowl, I.F.(31)(43)	C, C-9		8 1/16	1000	3320
			23958-2	200/SBIF	125-130	60	Silvered Bowl, I.F.(31)(43)	C, C-9		8 1/16	1000	3320
			22747-0	200PS30/12IF	120	60	Inside Frosted	C, C-9		8 1/16	750	3700
			22024-4	200PS30/12IF	125-130	60	Inside Frosted	C, C-9		8 1/16	750	3700
			22746-2	200PS30/12	120	60	Clear	C, C-9	6 3/8	8 1/16	750	3700
			22751-2	200PS30/12	125-130	60	Clear	C, C-9	6 3/8	8 1/16	750	3700
		Med.▲	22704-1	200PS30/23	120	60	Rough Service, I.F.	C, C-9		8 1/16	1000	3500
			22732-2	200PS30/23	125-130	60	Rough Service, I.F.	C, C-9		8 1/16	1000	3500
			22698-5	200PS30/24	120	60	Rough Service, Clear	C, C-9	6	8 1/16	1000	3500
			22726-4	200PS30/24	125-130	60	Rough Service, Clear	C, C-9	6	8 1/16	1000	3500
	R-40	Med.▲	23510-1	200R/FL	120	24	Reflector Flood(9)(19)(82)	C, C-9		6 1/2	2000	2050
			23519-2	200R/FL	125-130	24	Reflector Flood(9)(19)(82)	C, C-9		6 1/2	2000	2050
	T-21	Med.▲	36145-1	200T/SW	12/1 120	12	Soft White	C, CC-8		6 1/8	750	3750
			20447-9	200T/WL	12/1 120	12	Longer Life Soft White	C, CC-8		6 1/8	1000	3600
	PS-25	Med.▲	34961-3	200/IF	230	60	Inside Frosted	C, CC-9		6 15/16	1000	3000
			34974-6	200/IF	250	60	Inside Frosted	C, CC-9		6 15/16	1000	3000
			34960-5	200	230	60	Clear	C, CC-9	5 1/4	6 15/16	1000	3000
			34965-4	200	250	60	Clear	C, CC-9	5 1/4	6 15/16	1000	3000
			36116-2	200/99IF	250	60	Extended Service, I.F.	C, CC-9		6 15/16	2500	2650
			36117-0	200/99	250	60	Extended Service, Clear	C, CC-9		6 15/16	2500	2650
	PS-30	Med.▲	24722-1	200PS30/RS/IF	250	60	Rough Service, I.F.	C, C-9		8 1/16	1000	2850
			24717-1	200PS30/RS	250	60	Rough Service, Clear	C, C-9	6	8 1/16	1000	2850
	PS-25	Med.▲	34982-9	200/IF	300	60	Inside Frosted	C, CC-9		6 15/16	1000	2600
			34976-1	200	277	60	Mine, Clear	C, CC-9	5 1/4	6 15/16	1000	2650
			34979-5	200	300	60	Mine, Clear	C, CC-9	5 1/4	6 15/16	1000	2600
250	P-25	Med.	24409-5	250P25	32	60	Headlight(12)(22)	C, C-5A	3	4 3/4	500	4500
	G-30	Med.Skt.	23822-0	250G30	115-125	60	Infrared, Indust.(11)(31)	C, C-11	5	7 7/16	(27)	
	PAR-38	Med. Skt.	32239-6	K250PAR38/FL	120	12	*PAR Floodlight (Krypton)(53)(82)	C, CC-6		5 5/16	4000	3100
			28348-1	K250PAR38/FL	125-130	12	*PAR Floodlight (Krypton)(53)(82)	C, CC-6		5 5/16	4000	3100
			32240-4	K250PAR38/SP	120	12	*PAR Spotlight (Krypton)(53)(82)	C, CC-6		5 5/16	4000	3100
			28349-9	K250PAR38/SP	125-130	12	*PAR Spotlight (Krypton)(53)(82)	C, CC-6		5 5/16	4000	3100
	R-40	Med.▲	20489-1	250R40/HR	12/1 115-125	12	*Heat Ray, Red Bowl	C, C-9		6 7/8	(27)	
			23831-1	250R40/HR/1	115-125	12	*Reflector Infrared, Industrial Red Bowl	C, C-9		6 7/8	(27)	
			23827-9	250R40/1	115-125	24	Reflector Infrared, Lt. I.F.(19)	C, C-9		6 1/2	(27)	
			20243-2	250R40/1	6/1 115-125	6	Reflector Infrared, Lt. I.F.(19)	C, C-9		6 1/2	(27)	
			23832-9	250R40/3	115-125	24	Reflector Infrared, Brooder-Lite(19)	C, C-9		6 1/2	(27)	

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Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
250	R-40	Med. Skt.	23825-3	250R40/4	115-125	24	Reflector Infrared, Industrial, Lt.I.F.(19)(31)	C, C-9		7 1/4	(27)	
			23824-6	250R40/5	115-125	24	*Reflector Infrared, Industrial	C, C-9		7 5/8	(27)	
	T-14	Med.	33505-9	250T14/1	120	24	Spotlight, Clear(8)	C,C-7A		5 1/2	800	3750
275	R-40	Med.▲	36739-1	275R40/HR/1	230-250	12	*Reflector Infrared, Industrial-Red Bowl(31)(76)	C, C-7A		6 7/8	(27)	
300	PAR-56	M-P	26084-4	300PAR56/WFL	12	8	*PAR Wide Flood, Swimming Pool(84)	C, C-6		4 1/2	1000	6000
	R-40	Med.	33710-5	300R/FL/1	12	24	*Reflector Flood, I.F.(19)(37)(53)	C,C-2V		6 3/8	2000	
	PAR-56 Mog.End Prong		23382-5	300PAR56/MFL	120	8	*PAR Medium Flood(9)(55)	C, CC-13		5	2000	3720
			23405-4	300PAR56/MFL	125-130	8	*PAR Medium Flood(9)(55)	C, CC-13		5	2000	3720
			23388-2	300PAR56/WFL	120	8	*PAR Wide Flood(9)(55)	C, CC-13		5	2000	3720
			23410-4	300PAR56/WFL	125-130	8	*PAR Wide Flood(9)(55)	C, CC-13		5	2000	3720
			23378-3	300PAR56/NSP	120	8	*PAR Narrow Spotlight (9)(46)(55)	C, CC-13		5	2000	3720
			23400-5	300PAR56/NSP	125-130	8	*PAR Narrow Spotlight (9)(46)(55)	C, CC-13		5	2000	3720
	PS-25 Med.▲		37154-2	300M/IF	120	60	Inside Frosted	C, CC-8		6 15/16	750	6300
			36259-0	300M/IF	12/1 120	12	Inside Frosted	C, CC-8		6 15/16	750	6300
			37156-7	300M/IF	130	60	Inside Frosted	C, CC-8		6 15/16	750	6300
			37151-8	300M	120	60	Clear	C, CC-8 5 1/4		6 15/16	750	6300
			37153-4	300M	130	60	Clear	C, CC-8 5 1/4		6 15/16	750	6300
			35008-2	300M/99IF	120	60	Extended Service, I.F.	C, CC-8		6 15/16	2500	5060
			35009-0	300M/99IF	125-130	60	Extended Service, I.F.	C, CC-8		6 15/16	2500	5060
			35006-6	300M/99	120	60	Extended Service, Clear	C, CC-8 5 1/4		6 15/16	2500	5060
			35007-4	300M/99	125-130	60	Extended Service, Clear	C, CC-8 5 1/4		6 15/16	2500	5060
	PS-30 Med.▲		22783-5	300M/PS30IF	120	60	Inside Frosted	C, C-9		8 1/16	750	6100
			22808-0	300M/PS30IF	130	60	Inside Frosted	C, C-9		8 1/16	750	6100
			22779-3	300M/PS30	120	60	Clear	C, C-9 6		8 1/16	750	6100
			22802-3	300M/PS30	130	60	Clear	C, C-9 6		8 1/16	750	6100
	PS-30 Med.		39767-9	300M/PS30/35	120	60	Industrial Service, I.F.	C, C-9		8 1/16	3500	4880
			39798-4	300M/PS30/35	125-130	60	Industrial Service, I.F.	C, C-9		8 1/16	3500	4880
		Mog.▲	22820-5	300/2IF	120	24	Inside Frosted	C, CC-8		8 5/8	1000	6000
			22833-8	300/2IF	130	24	Inside Frosted	C, CC-8		8 5/8	1000	6000
			22816-3	300/2	120	24	Clear	C, CC-8 7		8 5/8	1000	6000
			22829-6	300/2	130	24	Clear	C, CC-8 7		8 5/8	1000	6000
	PS-35 Mog.		39658-0	300/RSIF	120	24	Rough Service, I.F.	C, C-9		9 3/8	1000	5250
			39450-2	300/RS	120	24	Rough Service, Clear	C, C-9 7		9 3/8	1000	5250
			39661-4	300/RS	125-130	24	Rough Service, Clear	C, C-9 7		9 3/8	1000	5250
		Mog.▲	22869-2	300/IF	120	24	Inside Frosted	C, C-9		9 3/8	1000	5700
			22883-3	300/IF	125	24	Inside Frosted	C, C-9		9 3/8	1000	5700
			22897-3	300/IF	130	24	Inside Frosted	C, C-9		9 3/8	1000	5700
			22862-7	300	120	24	Clear	C, C-9 7		9 3/8	1000	5700
			22889-0	300	130	24	Clear	C, C-9 7		9 3/8	1000	5700
			22870-0	300/99IF	120	24	Extended Service, I.F.	C, C-9		9 3/8	2500	5200
		Mog.	22898-1	300/99IF	125-130	24	Extended Service, I.F.	C, C-9		9 3/8	2500	5200
			22865-0	300/99	120	24	Extended Service, Clear	C, C-9 7		9 3/8	2500	5200
			22890-8	300/99	125-130	24	Extended Service, Clear	C, C-9 7		9 3/8	2500	5200
			39770-3	300PS35/35	120	24	Industrial Service, I.F.	C, C-9		9 3/8	3500	4930
			39800-8	300PS35/35	125-130	24	Industrial Service, I.F.	C, C-9		9 3/8	3500	4930
		Mog.▲	23966-5	300/SBIF	120	24	Silvered Bowl, I.F.(31)(43)	C, C-9		9 3/8	1000	5400
			23970-7	300/SBIF	125-130	24	Silvered Bowl, I.F.(31)(43)	C, C-9		9 3/8	1000	5400
		Med.Skt.	23960-8	300MS/SBIF	115-125	24	Silvered Bowl, I.F.(31)(43)	C, C-9		9 3/8	1000	5400
			23961-6	300MS/SBIF	130	24	Silvered Bowl, I.F.(31)(43)	C, C-9		9 3/8	1000	5400
	R-40 Med.▲		23530-9	300R/FL	120	24	Reflector Flood (9)(19)(31)(37)(48)	C, CC-11		6 1/2	2000	3600
			23545-7	300R/FL	125-130	24	Reflector Flood (9)(19)(31)(37)(48)	C, CC-11		6 1/2	2000	3600

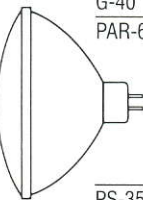
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High Volume Lamps

Incandescent Lamps

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			NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.		Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Approximate Initial Lumens	
Watts	Bulb	Base					Description						
300		R-40 Med.▲	23533-3	300R/FL/1	120	24	★Reflector Flood (31)(37)(51)	C, CC-11		6⅞	2000	3600	
			23547-3	300R/FL/1	125-130	24	★Reflector Flood (31)(37)(51)	C, CC-11		6⅞	2000	3600	
		Mog.	23551-5	300R/3FL	120	24	★Reflector Flood (51)	C, CC-11		7¼	2000	3600	
			23557-2	300R/3FL	125-130	24	★Reflector Flood (51)	C, CC-11		7¼	2000	3600	
		Med.▲	23526-7	300R/SP	120	24	Reflector Spot (9)(19)(31)(37)(48)	C, CC-11		6½	2000	3600	
			23542-4	300R/SP	125-130	24	Reflector Spot (9)(19)(31)(37)(48)	C, CC-11		6½	2000	3600	
	T-20	Med. Bip.	22907-0	300T20/1	130	12	★I.F.-Base Up(77)	C, C-13	4	6½	1000	5000	
	PS-30	Med.▲	24740-3	300M/1	250	60	Clear	C, CC-9	6	8⅛	1000	4800	
			20835-5	300M/1	277	60	Clear	C, CC-9	6	8⅛	1000	4300	
	PS-35	Mog.▲	24750-2	300/IF	230	24	Inside Frosted	C, CC-9		9⅞	1000	4800	
			24754-4	300	250	24	Clear	C, CC-9	7	9⅞	1000	4800	
			24759-3	300	277	24	Clear	C, CC-9	7	9⅞	1000	4300	
R-40	Mog.	31013-6	300R/3FL	230	24	★Reflector Flood(19)	C, C-7A		7¼	2000	3000		
		24760-1	300R/3FL	250	24	★Reflector Flood(19)	C, C-7A		7¼	2000	3000		
375	G-30	Med. Skt.	23837-8	375G30	115-125	60	Infrared, Indus.(11)(31)	C, C-7A	5	7⅛	(27)		
	R-40	Med. Skt.	23838-6	375R40	115-125	24	Reflector Infrared, Ind. Lt. I.F.(11)(19)(31)	C, C-7A		7¼	(27)		
			23840-2	375R40/1	115-125	24	★Reflector Infrared, Ind. Lt. I.F.(11)(31)	C, C-7A		7⅞	(27)		
400	G-30	Med.	23699-2	400G/FL	120	60	Floodlight(12)(22)	C, C-7A	3	5⅞	800	6760	
			35710-3	400G/FL	130	60	Floodlight(12)(22)	C, C-7A	3	5⅞	800	6760	
500		G-30	Med. Skt.	23843-6	500G30/1	115-125	60	Infrared, Indus.(11)(31)	C, C-7A	5	7⅛	(27)	
		G-40	Mog.	23712-3	500G/FL	120	24	Floodlight(12)(22)	C, C-5	4¼	7⅛	800	8800
		PAR-64	Ext. Mog. End Prong	23417-9	500PAR64/MFL	120	8	★PAR Med. Flood(9)(55)	C, CC-13		6	2000	6500
				23421-1	500PAR64/MFL	125-130	8	★PAR Med. Flood(9)(55)	C, CC-13		6	2000	6500
				23418-7	500PAR64/WFL	120	8	★PAR Wide Flood(9)(55)	C, CC-13		6	2000	6500
				23423-7	500PAR64/WFL	125-130	8	★PAR Wide Flood(9)(55)	C, CC-13		6	2000	6500
	23416-1	500PAR64/NSP	120	8	★PAR Narrow Spot (9)(46)(55)	C, CC-13		6	2000	6500			
	PS-35	Mog.	22914-6	500	120	24	Clear	C, CC-8	7	9⅞	1000	10750	
			22916-1	500	130	24	Clear	C, CC-8	7	9⅞	1000	10750	
			20020-4	500/IF	120	24	Inside Frosted	C, CC-8	7	9⅞	1000	10750	
			20022-0	500/IF	130	24	Inside Frosted	C, CC-8	7	9⅞	1000	10750	
			35010-8	500/99	120	24	Extended Service, Clear	C, CC-8	7	9⅞	2500	8750	
			35011-6	500/99	125-130	24	Extended Service, Clear	C, CC-8	7	9⅞	2500	8750	
			35013-2	500/99IF	120	24	Extended Service, I.F.	C, CC-8		9⅞	2500	8750	
			35016-5	500/99IF	125-130	24	Extended Service, I.F.	C, CC-8		9⅞	2500	8750	
	PS-40	Mog.	22932-8	500PS40	120	24	Clear	C, C-9	7	9¾	1000	10100	
			22953-4	500PS40	130	24	Clear	C, C-9	7	9¾	1000	10100	
			22938-5	500PS40/IF	120	24	Inside Frosted	C, C-9		9¾	1000	10100	
			22960-9	500PS40/IF	130	24	Inside Frosted	C, C-9		9¾	1000	10100	
			39796-8	500PS40/35CL	125-130	24	Industrial Service, Clear	C, C-9	7	9¾	3500	8480	
			23975-6	500/SBIF	120	24	Silvered Bowl, I.F.(14)(31)	C, C-9		9¾	1000	9500	
			23977-2	500/SBIF	125-130	24	Silvered Bowl, I.F.(14)(31)	C, C-9		9¾	1000	9500	
			22936-9	500/RS	120	24	Rough Service, Clear	C, C-9	7	9¾	1000	9500	
			22957-5	500/RS	125-130	24	Rough Service, Clear	C, C-9	7	9¾	1000	9500	

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Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Initial Lumens	
500 	R-40	Mog.	23563-0	500R/3FL	120	24	*Reflector Flood, I.F. (51)(53)	C, CC-11	7¼	2000	6500		
			23568-9	500R/3FL	125-130	24	*Reflector Flood, I.F. (51)(53)	C, CC-11	7¼	2000	6500		
		Med.	33730-3	500R/3FL/2S	125-130	24	*Reflector Flood, I.F. (31)(53)	C,C-7A	6⅞	2000			
		Mog.	23561-4	500R/3SP	120	24	*Reflector Spot, Lt. I.F. (51)(53)	C, CC-11	7¼	2000	6500		
	R-52	Mog.	32310-5	500R52	120	12	Reflector Wide Beam (9)(19)(54)	C, C-7A	11¼	2000	7850		
			32306-3	500R52	130	12	Reflector Wide Beam (9)(19)(54)	C, C-7A	11¼	2000	7850		
	T-12	Med. Pf.	23721-4	500T12/9	120	24	*Spotlight(14)	C, C-13D	3½	5¾	200	10200	
	T-20	Med. Bip.	22981-5	500T20/13	130	12	*Airway Beacon(8)	C, C-13B	3	6½	500	9500	
		Med. Pf.	23733-9	500T20/48	120	12	*Spotlight	C, C-13	2⅞	5¾	200	11000	
		Med. Bip.	22976-5	500T20/50	120	12	*Inside Frosted(14)	C, C-13	4	6½	1000	9300	
		Med. Pf.	23734-7	500T20/64	120	12	*Display Spot(12)	C, C-13	2⅞	5¾	500	9500	
	PS-40	Mog.	24773-4	500	250	24	Clear	C, CC-9	7	9¾	1000	9100	
			24776-7	500/IF	250	24	Inside Frosted	C, CC-9		9¾	1000	9100	
			24775-9	500/99	250	24	Extended Service, Clear	C, CC-9	7	9¾	2500	7800	
			24780-9	500	277	24	Clear	C, CC-9		9¾	1000	7700	
	R-40	Mog.	24783-3	500R/3FL	250	24	*Reflector Flood, I.F. Special Service(19)	C, C-7A	7¼	2000	5400		
	R-52	Mog.	32300-6	500R52	250	12	Reflector Wide Beam (9)(19)(54)	C, C-7A	11¼	2000	6600		
620	PS-40	Mog. Pf.	22992-2	620PS40P	120	24	Code Beacon	C, C-7A	5⅞	10⅞	3000	11000	
			22994-8	620PS40P	130	24	Code Beacon	C, C-7A	5⅞	10⅞	3000	11000	
750 	PS-52	Mog.	31194-4	750	120	12	Clear	C, 2CC-8	9½	13⅞	1000	16700	
			31204-1	750	130	12	Clear	C, 2CC-8	9½	13⅞	1000	16700	
			31197-7	750/IF	120	12	Inside Frosted	C, 2CC-8		13⅞	1000	16700	
			31206-6	750/IF	130	12	Inside Frosted	C, 2CC-8		13⅞	1000	16700	
			31356-9	750/99	125-130	12	Extended Service, Clear	C, C-7A	9½	13⅞	2500	14000	
			31329-6	750/SBIF	120	12	Silvered Bowl, I.F.(14)(31)	C, 2CC-8		13⅞	1000		
	R-52	Mog.	32305-5	750R52	120	12	Reflector Wide Beam (9)(19)(54)	C, C-7A	11¼	2000	12700		
			32303-0	750R52	130	12	Reflector Wide Beam (9)(19)(54)	C, C-7A	11¼	2000	12700		
	R-60	Mog.	20585-6	750R60/FL	125-130	6	*Reflector Flood, Light I.F.(14)	C, C-7A		10⅞	2000	11800	
	T-12	Med. Pf.	23744-6	750T12/9	120	24	*Spotlight(14)	C, C-13D	3½	6⅞	200	16500	
	T-24	Med. Bip.	23041-7	750T24	130	12	*Inside Frosted(14)	C, C-13		9⅞	1000	14200	
	PS-52	Mog.	32401-2	750	250	12	Clear	C, C-7A	9½	13⅞	2000	13600	
	R-52	Mog.	32299-0	750R52	277	12	Wide Beam Reflector, Lt. I.F.(9)(19)(54)	C, C-7A		11¼	2000	9900	
	R-60	Mog.	34409-3	750R60/FL	230-250	6	*Reflector Flood	C,C-5		10⅞	2000		
	1000 	G-25	Med.	23043-3	1M/G25/1	115-125	12	*Diving, under-water burning only(2)	C, C-5	3⅞	5½	50	24500
				23768-5	1M/G40FL	120	24	*Flood(12)	C, C-5	5¼	8	800	19500
		G-40	Mog.	23758-6	1M/G40PSP	120	24	*Spotlight(12)	C, C-5	3⅞	8⅞	200	22500
Mog. Pf.													
PS-52		Mog.	31233-0	1000	120	12	Clear	C, 2CC-8	9½	13⅞	1000	23100	
			31254-6	1000	130	12	Clear	C, 2CC-8	9½	13⅞	1000	23100	
			31238-9	1000/IF	120	12	Inside Frosted	C, 2CC-8		13⅞	1000	23100	
			31256-1	1000/IF	130	12	Inside Frosted	C, 2CC-8		13⅞	1000	23100	
			31362-7	1000/99	120	12	Extended Service, Clear	C, C-7A	9½	13⅞	2500	19500	
			31370-0	1000/99	125-130	12	Extended Service, Clear	C, C-7A	9½	13⅞	2500	19500	
			20576-5	1000R60/FL	120	6	*Reflector Flood(14)	C, C-7A		10⅞	2000	16800	
T-24		Med. Bip.	23089-6	1M/T24	120	12	*I.F., Collector Grid(14)	C, C-13		9⅞	1000	20000	
			23092-0	1M/T24	130	12	*I.F., Collector Grid(14)	C, C-13		9⅞	1000	20000	
PS-52		Mog.	32403-8	1000	250	12	Clear	C, C-7A	9½	13⅞	2000	17700	
			31275-1	1000	277	12	Clear	C, C-7A	9½	13⅞	1000	17500	
			20582-3	1000R60/FL	250	6	*Reflector Flood(14)	C, C-7A		10⅞	2000	13600	
R-60		Mog.	34413-5	1000R60/FL	277	6	*Reflector Flood	C, C-7A		10⅞	2000		

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\$\$\$ Energy Saving Product

▬ High Volume Lamps

Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
1500	G-48	Mog.	23789-1	1500G48/6	125	6	*Flood(12)	C, C-5	5 1/4	8 3/4	800	30000
	PS-52	Mog.	31292-6	1500	120	12	Clear(56)	C, C-7A	9 1/2	13 1/16	1000	33300
			31303-1	1500	130	12	Clear(56)	C, C-7A	9 1/2	13 1/16	1000	33300
			31393-2	1500/99	125-130	12	Extended Service, Clear(56)	C, C-7A	9 1/2	13 1/16	2500	30200
			32405-3	1500	250	12	Clear	C, C-7A	9 1/2	13 1/16	2000	26000
			31327-0	1500	277	12	Clear	C, C-7A	9 1/2	13 1/16	1000	27000

Philinea Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
35	T-8	2XS14s	42517-3	P35/W/6275X	120	25	Philinea, White	B, C-8		11 13/16	1500	230
60	T-8	2XS14s	42519-9	P60/W/6276X	120	25	Philinea, White	B, C-8		19 11/16	1500	400
120	T-8	2XS14s	42521-5	P120/W/6277X	120	25	Philinea, White	B, C-8		39 3/8	1500	780

High Intensity Lamps

Watts or C.P.	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty. (cds)	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approx. Hours Life
15C.P.	S-8	S.C.Bay.	20362-0	BC-93	12/2	12	Clear	C, C-2R	1 1/8	2	500
32C.P.	RP-11	S.C.Bay.	36100-6	BC-1133	12/2	6	Clear	C, C-2R	1 1/4	2 1/4	200
40W	S-11	Inter.▲	20321-6	BC-40S11N	12/1	120	Clear	C, CC-2V	1 9/16	2 5/16	500

Decorative Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approx. Hours Life
10	B-12	Cand.	36778-9	BC-10B12C/3W	6/2	120	White(12)	B, C-7A		2 9/16	1500
15	BA-9	Cand.	36736-7	BC-15BA9C/3	6/2	120	Bent Tip, Clear(12)	B, C-7A		3 3/4	1500
	F-10	Cand.	36779-7	BC-15F10C/3	6/2	120	Flame, Clear(12)	B, C-7A		3 1/16	1500
			36780-5	BC-15F10C/3A	6/2	120	Flame, Amber(12)	B, C-7A		3 1/16	1500
	G-16 1/2	Cand.	36798-7	BC-15G16 1/2 C/3W	6/2	120	Globe, White(12)	B, C-7A		3	1500
			25162-9	15G16 1/2 C		60	Globe, Clear(12)	B, C-7A		3	1500
			25164-5	15G16 1/2 C/W		60	Globe, White(12)	B, C-7A		3	1500
	S-11	Cand.	21462-7	15S11/13		115-125	Clear(12)	B, C-7A	1 9/16	2 1/4	750
25	B-10 1/2	Cand.	36766-4	BC-25B10 1/2 /3	6/2	120	Straight Tip, Clear(12)	C, C-7A		4 1/16	1500
	BA-9	Cand.	36737-5	BC-25BA9C/3	6/2	120	Bent Tip, Clear(12)	C, C-7A		4 3/16	1500
			23158-9	BC-25BA9C/3LL	6/2	120	Bent Tip, Clear(12)	C, C-7A		4 3/16	2000
			36746-6	BC-25BA9C/3F	6/2	120	Bent Tip, Frost(12)	C, C-7A		4 3/16	1500
			35112-2	25BA9C/4M		120	Bent Tip, Clear(12)	C, CC-2V		4 3/16	4000
			35226-0	25BA9C/4MF		120	Bent Tip, Frost(12)	C, CC-2V		4 3/16	4000
	BA-9 1/2	Med.	36755-7	BC-25BA9 1/2 /3	6/2	120	Bent Tip, Clear(12)	C, C-7A		4 1/16	1500
	F-10	Cand.	36782-1	BC-25F10C/3	6/2	120	Flame, Clear(8)	C, C-7A		3 1/16	1500
	F-15	Med.▲	36784-7	BC-25F15/3	6/2	120	Flame, Clear(12)	B, C-9		4 1/2	1500
			23144-9	BC25F15/3LL	6/2	120	Flame, Clear(12)	C, C-9		3 3/4	2000
			36786-2	BC-25F15/3A	6/2	120	Flame, Transparent Amber(12)	B, C-9		4 1/2	1500
			36788-8	BC-25F15/3IR	6/2	120	Flame, Iridescent(12)	B, C-9		4 1/2	1500
			36789-6	BC-25F15/3W	6/2	120	Flame, White(12)	B, C-9		4 1/2	1500
			21669-7	25F15		120	Flame, Clear(12)	B, C-9		4 1/2	1500
			35227-8	25F15/4M		120	Flame, Clear(12)	B, C-9		4 1/2	4000
			21671-3	25F15/FT		120	Flame, Flametint(12)	B, C-9		4 1/2	1500
			25150-4	25F15/PK		120	Flame, Pink(12)	B, C-9		4 1/2	1500

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\$\$\$ Energy Saving Product

▢ High Volume Lamps

† New Since Last Printing

Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approx. Hours Life	
Decorative Lamps												
	25	G-16½ Cand.	†	20358-8	BC-25G16½C/3	6/2 120	12*	Globe, Clear(12)	B, C-7A	3	1500	
				23143-1	BC25G16½C/3LL	6/2 120	12*	Globe, Clear(12)	B, C-7A	3	2000	
				20354-7	BC-25G16½C/3W	6/2 120	12*	Globe, White(12)	B, C-7A	3	1500	
				23140-7	BC-25G16½C/3WLL6/2	120	12	Globe, White(12)	B, C-7A	3	2000	
				25166-0	25G16½C	120	60	Globe, Clear(12)	B, C-7A	3	1500	
				25169-4	25G16½C/W	120	60	Globe, White(12)	B, CC-2V	3	1500	
				20092-3	25G16½C/4M	120	24	Globe, Clear(12)	B, CC-2V	3	4000	
				35228-6	25G16½C/4MW	120	24	Globe, White(12)	B, C-7A	3	4000	
				G-18½ Med.▲	21686-1	25G18½	115-125	120	Globe, Clear	B, C-9	3⅞	750
	21692-9	25G18½/W	115-125		60	Globe, White	B, C-9	3⅞	750			
	G-25 Med.▲	20194-7	25G25/3	12/1 120	12	Globe, Clear	C, C-9	4⅞	1500			
		20246-5	25G25/3W	12/1 120	12	Globe, White	C, C-9	4⅞	1500			
		21695-2	25G25	115-125	60	Globe, Clear	C, C-9	4⅞	750			
		21699-4	25G25/W	115-125	60	Globe, White	C, C-9	4⅞	750			
	G-40 Med.▲	33389-8	25G40/4M	120	24	Globe, Clear	C, C-9	6⅞	4000			
20588-0		25G40/4MW	120	24	Globe, White	C, C-9	6⅞	4000				
	40	B-10½ Cand.	†	36768-0	BC-40B10½/3	6/2 120	12*	Straight Tip, Clear(12)	C, C-7A	4⅞	1500	
				36771-4	BC-40B10½/3W	6/2 120	12*	Straight Tip, White(12)	C, C-7A	4⅞	1500	
		BA-9 Cand.	†	36749-0	BC-40BA9C/3	6/2 120	12*	Bent Tip, Clear(12)	C, C-7A	4⅞	1500	
	23176-1			BC-40BA9C/3LL	6/2 120	12*	Bent Tip, Clear(12)	C, C-7A	4⅞	2000		
	36750-8			BC-40BA9C/3F	6/2 120	12*	Bent Tip, White(12)	C, C-7A	4⅞	1500		
	35113-0			40BA9C/4M	120	24	Bent Tip, Clear(12)	C, CC-2V	4⅞	4000		
	35114-8			40BA9C/4MF	120	24	Bent Tip, Frost(12)	C, C-7A	4⅞	4000		
	BA-9½ Med.			†	36759-9	BC-40BA9½/3	6/2 120	12*	Bent Tip, Clear(8)	C, C-7A	4⅞	1500
		23189-4	BC-40BA9½/3LL		6/2 120	12*	Bent Tip, Clear(8)	C, C-7A	4⅞	2000		
		36760-7	BC-40BA9½/3F		6/2 120	12*	Bent Tip, Frost(8)	C, C-7A	4⅞	1500		
	F-15 Med.▲	†	36794-6	BC-40F15/3	6/2 120	12*	Flame, Clear(12)	C, C-9	4½	1500		
			23145-6	BC-40F15/3LL	6/2 120	12*	Flame, Clear(12)	C, C-9	3¾	2000		
			36795-3	BC-40F15/3IR	6/2 120	12*	Flame, Iridescent (12)	C, C-9	4½	1500		
			36796-1	BC-40F15/3W	6/2 120	12*	Flame, White(12)	C, C-9	4½	1500		
			22686-0	40F15	120	60	Flame, Clear(12)	C, C-9	4½	1500		
			35117-1	40F15/4M	120	24	Flame, Clear(12)	C, C-9	4½	4000		
			G-16½ Cand.		20359-6	BC-40G16½C/3	6/2 120	12*	Globe, Clear(12)	C, C-7A	3	1500
					20357-0	BC-40G16½C/3W	6/2 120	12*	Globe, White(12)	C, C-7A	3	1500
	28460-4	40G16½C			120	60	Globe, Clear(12)	C, C-7A	3	1500		
	22819-7	40G16½C/W			120	60	Globe, White(12)	C, C-7A	3	1500		
	26946-4	40G16½C/4M			120	60	Globe, Clear(12)	C, CC-2V	3	4000		
	26947-2	40G16½C/4MW			120	60	Globe, White(12)	C, CC-2V	3	4000		
	G-25 Med.▲		20198-8	40G25/3	12/1 120	12	Globe, Clear	C, C-9	4⅞	1500		
			20193-9	40G25/3W	12/1 120	12	Globe, White	C, C-9	4⅞	1500		
			21905-5	40G/W	115-125	60	Globe, White	C, C-9	4⅞	750		
	G-30 Med.		37657-4	40G30/3W	120	24	Globe, White	C, C-9	5½	4000		
	G-40 Med.▲		32172-9	40G40/4M	120	24	Globe, Clear	C, C-9	6⅞	4000		
			36168-3	40G40/3	6/1 120	6	Globe, Clear	C, C-9	6⅞	2500		
			32168-7	40G40/4MW	120	24	Globe, White	C, C-9	6⅞	4000		
			36182-4	40G40/3W	6/1 120	6	Globe, White	C, C-9	6⅞	2500		
			60	B-10½ Cand.	†	36773-0	BC-60B10½/3	6/2 120	12*	Straight Tip, Clear(12)	C, C-7A	4⅞
	36753-2	BC-60BA9C/3				6/2 120	12*	Bent Tip, Clear(12)	C, C-7A	4⅞	1500	
	23195-1	BC-60BA9C/LL				6/2 120	12*	Bent Tip, Clear(12)	C, C-7A	4⅞	2000	
	BA-9 Cand.		36754-0	BC-60BA9C/3F	6/2 120	12*	Bent Tip, Frost(12)	C, C-7A	4⅞	1500		
			35119-7	60BA9C/4M	120	24	Bent Tip, Clear(12)	C, CC-2V	4⅞	4000		
			36764-9	BC-60BA9½/3	6/2 120	12*	Bent Tip, Clear(8)	C, C-7A	4⅞	1500		
			20676-3	BC-60BA9½/3F	6/2 120	12*	Bent Tip, Frost(8)	C, C-7A	4⅞	1500		
	F-15 Med.		36797-9	BC-60F15/3	6/2 120	12*	Flame, Clear(12)	C, C-9	4½	1500		
	G-30 Med.		37659-0	60G30/3W	120	24	Globe, White	C, C-9	5½	4000		

□ Exclusive Product

\$\$\$ Energy Saving Product

■ High Volume Lamps

† New Since Last Printing

Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approx. Hours Life
Decorative Lamps											
60	G-40	Med.▲		32197-6 60G40/4M	120	24	Globe, Clear	C, C-9	6 ¹⁵ / ₁₆	4000	
				20202-8 60G40/3	6/1 120	6	Globe, Clear	C, C-9	6 ¹⁵ / ₁₆	2500	
				32196-8 60G40/4MW	120	24	Globe, White	C, C-9	6 ¹⁵ / ₁₆	4000	
				20201-0 60G40/3W	6/1 120	6	Globe, White	C, C-9	6 ¹⁵ / ₁₆	2500	
			□	25985-3 60G40/3Y	120	24	Globe, Yellow	C, C-9	6 ¹⁵ / ₁₆	4000	
100	G-40	Med.		32200-8 100G40/4M	120	24	Globe, Clear	C, C-9	6 ¹⁵ / ₁₆	4000	
				36187-3 100G40/3	6/1 120	6	Globe, Clear	C, C-9	6 ¹⁵ / ₁₆	2500	
				32199-2 100G40/4MW	120	24	Globe, White	C, C-9	6 ¹⁵ / ₁₆	4000	
				20248-1 100G40/3W	6/1 120	6	Globe, White	C, C-9	6 ¹⁵ / ₁₆	2500	
150	G-40	Med.▲		36203-8 150G40/3	6/1 120	6	Globe, Clear	C, C-9	6 ¹⁵ / ₁₆	2500	
				20265-5 150G40/3W	6/1 120	6	Globe, White	C, C-9	6 ¹⁵ / ₁₆	2500	

Silicone Coated Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description (66)	Class and Filament	M.O.L. (In.)	Approx. Hours Life
25	A-15	Med.▲	□	31055-7 25A15/1/TF	115-125	120	Refrigerator, Frost Silicone Coated	B, C-9	3 ¹ / ₂	1000
	A-19	Med.▲		30031-9 25A/TF	115-125	120	Frost Silicone Coated	B, C-9	3 ¹⁵ / ₁₆	2500
30	A-15	Med.	□	20275-4 30A15/TF	130	120	Sign Service, Frost Silicone Coated	C, C-9	3 ¹ / ₂	3000
	R-20	Med.	□	22601-9 30R20/SFL/TF	125-130	60	Reflector Sign, Frost Silicone Coated	C, C-9	3 ¹⁵ / ₁₆	6000
40	A-15	Med.▲	□	25109-0 40A15/TF	115-125	120	Refrigerator, Frost Silicone Coated	C, C-9	3 ¹ / ₂	1000
	A-19	Med.	□	20276-2 40A19/TF	130	120	Sign Service, Frost Silicone Coated	C, C-9	4 ¹ / ₄	2500
		Med.▲		30033-5 40A/TF	115-125	120	Frost Silicone Coated	C, C-9	4 ¹ / ₄	1500
50	A-19	Med.▲		30034-3 50A/RS/TF	115-125	120	Rough Service, Frost Silicone Coated	B, C-17A	3 ¹⁵ / ₁₆	1000
60	A-19	Med.▲		30038-4 60A/TF	115-125	120	Frost Silicone Coated	C, CC-6	4 ⁷ / ₁₆	1000
		Med.	□	25836-8 60A/35/TF	120	60	Industrial Service, Frost Silicone Coated	C, C-9	4 ¹ / ₄	3500
65	R-30	Med.	□	24270-1 65R30/SFL/TF	125-130	24	Reflector Sign, Frost Silicone Coated	C, C-17A	5 ³ / ₁₆	5000
75	A-21	Med.▲		29640-0 75A/RS/TF	115-125	120	Rough Service, Frost Silicone Coated	C, C-17A	5 ⁵ / ₁₆	1000
			†	20922-1 75A/RH/TF	12/1 120	12	Tough Bulb, Frost Silicone Coated	C, C-17A	5 ⁵ / ₁₆	1000
	R-30	Med.▲		24277-6 75R30/FL/TF	115-125	24	Reflector, Frost Silicone Coated	C, CC-6	5 ³ / ₁₆	2000
100	A-21	Med.▲		30051-7 100A21/TF	115-125	120	Frost Silicone Coated	C, CC-8	5 ⁵ / ₁₆	750
		Med.	□	25838-4 100A21/35/TF	120	60	Industrial Service(14), Frost Silicone Coated	C, C-9	5 ⁵ / ₁₆	3500
		Med.▲		30052-5 100A/RS/TF	115-125	120	Rough Service, Frost Silicone Coated	C, C-17A	5 ⁵ / ₁₆	1000
				24928-4 100A/RS/TF	250	120	Rough Service, Frost Silicone Coated	C, C-17A	5 ⁵ / ₁₆	1000
150	A-25	Med.	□	22965-8 150A25/35/TF	120	60	Industrial Service(14), Frost Silicone Coated	C, C-9	6 ¹⁵ / ₁₆	3500
				35835-8 150A25/35/TF	125-130	60	Industrial Service(14), Frost Silicone Coated	C, C-9	6 ¹⁵ / ₁₆	3500
	PS-25	Med.▲		30056-6 150PS25/TF	115-125	60	Frost Silicone Coated	C, C-9	6 ¹⁵ / ₁₆	1000
	PS-25	Med.▲		30045-9 150/RS/TF	115-125	60	Rough Service, Frost Silicone Coated	C, C-17A	6 ¹⁵ / ₁₆	1000
200	PS-30	Med.▲		30059-0 200/TF	115-125	60	Frost Silicone Coated	C, C-9	8 ¹ / ₁₆	750
		Med.	□	22995-5 200/35/TF	120	60	Industrial Service(14), Frost Silicone Coated	C, C-9	8 ¹ / ₁₆	3500
		Med.▲		30022-8 200PS30/RS/TF	115-125	60	Rough Service, Frost Silicone Coated	C, C-9	8 ¹ / ₁₆	1000

Street Lighting Lamps (Multiple)(43)

Watts	Nominal Lumens	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
58	600	A-19	Med.		24960-7 58A19/62	120	120	Clear	C, C-9	2 ⁷ / ₈	4 ¹ / ₄	3000	655
					24964-9 58A19/62	130	120	Clear	C, C-9	2 ⁷ / ₈	4 ¹ / ₄	3000	655
92	1000	A-23	Med.		24971-4 92A23/49	120	120	Clear	C, C-9	4 ³ / ₈	6 ¹ / ₁₆	3000	1200
					39688-7 92A23/49	125	120	Clear	C, C-9	4 ³ / ₈	6 ¹ / ₁₆	3000	1200
103	1000	A-23	Med.		38447-9 103A23	125	120	Clear	C, C-9	4 ³ / ₈	6 ¹ / ₁₆	6000	1150
					38448-7 103A23	130	120	Clear	C, C-9	4 ³ / ₈	6 ¹ / ₁₆	6000	1150
105	1000	A-23	Med.		25826-9 K105A23	120	60	Clear (Krypton)	C, C-9	4 ³ / ₈	6 ¹ / ₁₆	12000	1260

□ Exclusive Product

\$\$\$ Energy Saving Product

High Volume Lamps

† New Since Last Printing

Incandescent Lamps

Watts	Nominal Lumens	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
Street Lighting Lamps (Multiple)(43)													
189	2500	PS-25	Med.	24995-3	189PS25/64	120	60	Clear	C, C-9	5¼	6½ ¹⁵ / ₁₆	3000	2900
				39423-9	189PS25/64	125	60	Clear	C, C-9	5¼	6½ ¹⁵ / ₁₆	3000	2900
				39636-6	189PS25/64	130	60	Clear	C, C-9	5¼	6½ ¹⁵ / ₁₆	3000	2900
202	2500	PS-25	Med.	20527-8	202PS25	120	60	Clear	C, C-9	5¼	6½ ¹⁵ / ₁₆	6000	2800
				20528-6	202PS25	125	60	Clear	C, C-9	5¼	6½ ¹⁵ / ₁₆	6000	2800
				36128-7	202PS25/1	125	60	Clear	C, C-9	5¾	7½	6000	2800
		PS-35	Mog.	36231-9	202PS35	120	24	Clear	C, C-9	7	9¾	6000	2700
205	2500	PS-25	Med.	33735-2	K205PS25	120	60	Clear (Krypton)	C, C-9	5¼	6½ ¹⁵ / ₁₆	12000	2750
				33736-0	K205PS25	125	60	Clear (Krypton)	C, C-9	5¼	6½ ¹⁵ / ₁₆	12000	2750
230	...	PS-30	Med.	25012-6	230PS30/26	120	60	Clear	C, C-9	6	8½ ¹⁵ / ₁₆	3000	3500
295	4000	PS-35	Mog.	25020-9	295PS35/58	120	24	Clear	C, C-9	7	9¾	3000	4800
				25021-7	295PS35/58	125	24	Clear	C, C-9	7	9¾	3000	4800
				25023-3	295PS35/58	130	24	Clear	C, C-9	7	9¾	3000	4800
327	4000	PS-35	Mog.	20531-0	327PS35	125	24	Clear	C, C-9	7	9¾	6000	4750
340	...	PS-35	Mog.	25030-8	340PS35/52	120	24	Clear	C, C-9	7	9¾	3000	5600
405	6000	PS-40	Mog.	25035-7	405PS40/54	120	24	Clear	C, C-9	7	9¾	3000	6700
448	6000	PS-40	Mog.	20533-6	448PS40	120	24	Clear	C, C-9	7	9¾	6000	6650
				20534-4	448PS40	125	24	Clear	C, C-9	7	9¾	6000	6650

Street Lighting Lamps (Series)

Rated Initial Lumens	Amps.	Bulb	Base	NAED Number 04-6677-	Ordering Code	Initial Volts	Pkg. Qty.	Description — Burning Position(43)	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approx. Hours Life
1000	6.6	PS-25	Mog.	20539-3	1M/66G	11.2	60	Clear	C, C-8	5¾	7½	6000
2500	6.6	PS-25	Mog.	26968-8	2500/66G/PS25	24.0	60	Clear, Base Up	C, C-2V	5¾	7½	6000
		PS-35	Mog.	25065-4	2500/66R	22.8	24	Clear	C, C-2V	7	9¾	3000
				36785-4	2500/66G	24.0	24	Clear	C, C-2V	7	9¾	6000
4000	6.6	PS-35	Mog.	25069-6	4M/66R	34.0	24	Clear	C, C-2V	7	9¾	3000
				20543-5	4M/66G	36.5	24	Clear	C, C-2V	7	9¾	6000
6000	6.6	PS-40	Mog.	24941-7	6M/66	48.1	24	Clear(43)	C, C-2V	7	9¾	2000
				25078-7	6M/66R	50.0	24	Clear	C, C-2V	7	9¾	3000
				20540-1	6M/66G	52.7	24	Clear	C, C-2V	7	9¾	6000
6000	20	PS-40	Mog.	25082-9	6M/20R/BU	16.2	24	Clear, Base Up	C, C-2V	7	9¾	3000
10000	20	PS-40	Mog.	25086-0	10M/20R/BU	26.3	24	Clear, Base Up	C, C-7	7	9¾	3000

Lamps Listed by Amps. & Volts, or Lumens

Watts	Nominal Lumens	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
.25A	S-8	S.C.Pf.(A)		23164-7	25A/S8SCP	6.2	100	Marine Signal, Spiral Lead	B, C-8	1½	2	500	
.55A	S-8	S.C.Pf.(A)		23181-1	55A/S8	12	100	Marine Signal, Spiral Lead	C, C-8	1½	2	500	
.77A	S-8	S.C.Pf.(A)		23185-2	77A/S8	12	100	Marine Signal, Spiral Lead	C, C-8	1½	2	500	
.11A	T-4	Cand.		23219-9	11A/T4C	18	100	Switchboard	B, C-2V	1 ¹⁵ / ₁₆	1½	2000	
3.05A	S-11	S.C.Pf.(A)		23205-8	3.05A/S11SCP	12	120	Marine Signal, Spiral Lead	C, C-8	1½	2¾	500	
6.6A	T-10	Med.Pf.		24300-6	6.6A/T10/1P	30W	60	Airpt. Marker(8)(MS25012-1)	C, C-2V	1½	3½ ¹⁵ / ₁₆	1000	435
				24319-6	6.6A/T10P	45W	60	Airpt. Marker(8)(MS25012-1)	C, C-2V	1½	3½ ¹⁵ / ₁₆	1000	700
	T-14	Med.Pf.		24402-0	6.6A/T14P	200W	24	Airpt. Marker(8)(MS25012-1)	C, C-13	2¾ ¹⁵ / ₁₆	5¾	75	4900
				24404-6	6.6A/T14/2P	204W	24	Aviation, Runway Marker (MS25013-2)	C, C-13	2¾ ¹⁵ / ₁₆	5¾	500	4200
850L	A-21	Med.		32190-1	850L/A21/TS	130	120	Traffic Signal(12)	C, C-9	2¾ ¹⁵ / ₁₆	4¾ ¹⁵ / ₁₆	6000	
1950L	P-25	Med.		20494-1	1950L/P25/TS	120	60	Traffic Signal(12)	C, C-9	3	4¾	8000	
				26482-0	1950L/P25/TS	130	60	Traffic Signal(12)	C, C-9	3	4¾	8000	

☐ Exclusive Product

\$\$\$ Energy Saving Product

▬ High Volume Lamps

Tubular Quartz Infrared Lamps

Tubular quartz infrared heat lamps are designed for service other than illumination. Unless otherwise noted,

1. Tubular quartz heat lamps should not be used in equipment where the seal temperatures exceed 650°F.
2. Operating position is HORIZONTAL.
3. R.S.C. Base = Recessed Single Contact

Fig. 1

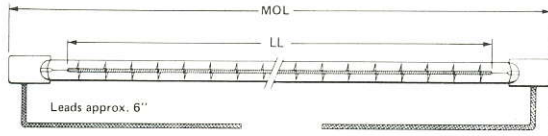


Fig. 2

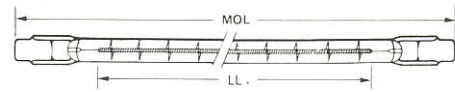


Fig. 3

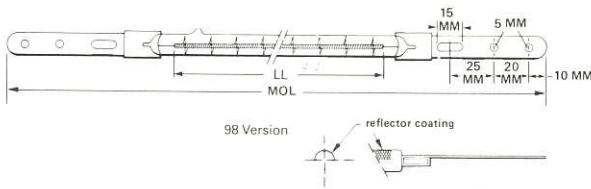


Fig. 4

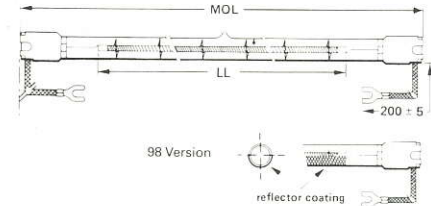


Fig. 5

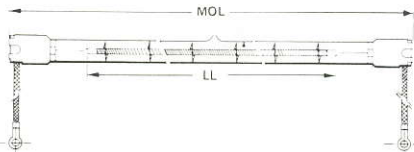


Fig. 6

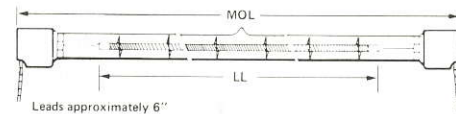
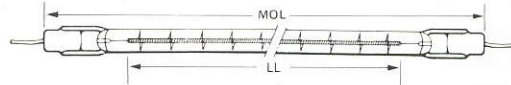


Fig. 7



Watts	Bulb	Base (Fig. No.)	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.L. (In.)	M.O.L. (In.)	Approx. Hours Life(27)
300	T-3	6	22382-6	300T3	115-125	12	Frosted(23)	C, C-8	5	8 ¹³ / ₁₆	
375	T-3	6	23842-8	375T3	115-125	12	Frosted(23)	C, C-8	5	8 ¹³ / ₁₆	
		2	36369-7	375T3/7	115-125	12	Frosted(23)	C, C-8	5	8 ⁵ / ₈	
500	T-3	6	23845-1	500T3	105	12	Frosted(23)	C, C-8	5	8 ¹³ / ₁₆	
			23850-1	500T3	115-125	12	Frosted(23)	C, C-8	5	8 ¹³ / ₁₆	
		2	23851-9	500T3/7	115-125	12	Frosted(23)	C, C-8	5	8 ⁵ / ₈	
		6	23846-9	500T3/CL	115-125	12	Clear(23)	C, C-8	5	8 ¹³ / ₁₆	
			20681-3	500T3/CL/HT	115-125	12	Clear, High Temp. Construction	C, C-8	5	8 ¹³ / ₁₆	(59)
		3	31203-3	13169X	110-130	10	Clear	C-8	5.5	11.68	
		1	31207-4	13169Y	110-130	10	Clear	C-8	5.5	7.0	
		3	31205-8	13169X/98	110-130	10	Reflector	C-8	5.5	11.68	
600	T-3	6	30436-0	600T3/CL/12	104	12	Clear	C, C-8	6	11 ¹⁵ / ₁₆	
800	T-3	6	29472-8	800T3	115-125	12	Frosted(23)	C, C-8	8	11 ¹⁵ / ₁₆	
900	T-3	6	30106-9	900T3/CL/16	215	12	Clear	C, C-8	9	15 ¹⁵ / ₁₆	
1000	T-3	6	23856-8	1000T3	208	12	Frosted	C, C-8	10	13 ¹³ / ₁₆	
			23859-2	1000T3	230-250	12	Frosted	C, C-8	10	13 ¹³ / ₁₆	
			23860-0	1000T3/CL	230-250	12	Clear	C, C-8	10	11 ¹⁵ / ₁₆	
			23862-6	1000T3/2CL	230-250	12	Clear	C, C-8	10	13 ¹³ / ₁₆	
			29474-4	1000T3/CL/HT	230-250	12	Clear, High Temp. Construction(17)(78)	C, C-8	10	11 ¹⁵ / ₁₆	(59)
		3	31213-2	13195X	220-250	10	Clear	C-8	10.7	16.73	
			31216-5	13195X/98	220-250	10	Reflector	C-8	10.7	16.73	
		1	31225-6	13195Y	220-250	10	Clear	C-8	10.7	13.70	
		4	37812-5	13195Z/98	220-250	10	Reflector	C-8	10.7	14.07	
			31267-8	13713Z/98	220-250	10	Reflector, Vertical Burning	C-8	10.7	14.07	

□ Exclusive Product

\$\$\$ Energy Saving Product

■ High Volume Lamps

† New Since Last Printing

Incandescent Lamps

Watts	Bulb	Base (Fig. No.)	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.L. (In.)	M.O.L. (In.)	Approx. Hours Life(27)
Tubular Quartz Infrared Lamps											
1000	T-3	3		31260-3 13713X	220-250	10	Clear, Vertical Burning	C-8	10.7	16.73	
1350	T-3	7		31257-9 13381/99	115	10	Clear	C-8	10.2	12.68	
				31255-3 13381/99	220	10	Clear	C-8	10.2	12.68	
1500	T-3	6		30129-1 1500T3/CL/22	225	12	Clear	C, C-8	15	21 ¹⁵ / ₁₆	
				36574-2 1500T3/CL/HT	230-250	12	Clear, High Temp. Construction(17)(78)	C, C-8	9 ¹ / ₄	11 ¹⁵ / ₁₆	(59)
1600	T-3	6		23869-1 1600T3	208	12	Frosted	C, C-8	16	19 ¹³ / ₁₆	
				29483-5 1600T3/7	208	12	Frosted	C, C-8	16	19 ⁵ / ₈	
				37470-2 1600T3/R	208	12	Red	C, C-8	16	19 ¹³ / ₁₆	
				23872-5 1600T3	230-250	12	Frosted	C, C-8	16	19 ¹³ / ₁₆	
				23873-3 1600T3/5	230-250	12	Frosted	C, C-8	16	19 ¹¹ / ₁₆	
				29478-5 1600T3/7	230-250	12	Frosted	C, C-8	16	19 ⁵ / ₈	
				23870-9 1600T3/CL	230-250	12	Clear	C, C-8	16	19 ¹³ / ₁₆	
				20297-8 1600T3/1CL/HT	230-250	12	Clear, High Temp. Construction(17)(78)	C, C-8	16	17 ¹⁵ / ₁₆	(59)
				20121-0 1600T3/R	230-250	12	Red	C, C-8	16	19 ¹³ / ₁₆	
				20495-8 1600T3/7	277	12	Frosted	C, C-8	16	19 ⁵ / ₈	
2000	T-3	6		36553-6 2000T3/1CL	230-250	12	Clear(2)(17)(78)	C, C-8	9 ³ / ₄	11 ¹⁵ / ₁₆	
				20824-9 2000T3/1CL/HT	230-250	12	Clear, High Temp. Construction(17)(78)	C, C-8	9 ³ / ₄	11 ¹⁵ / ₁₆	(59)
				24856-7 2MT3/1CL/HT/VB	230-250	12	Clear, High Temp. Construction, Vertical Burning(17)(78)	C, C-8	9 ³ / ₄	11 ¹⁵ / ₁₆	(59)
				26907-6 2000T3/524	230-250	6	Frosted	C, C-8	20	23 ³ / ₄	(59)
				31198-5 13168X	220-250	10	Clear, Vertical Burning	C-8	11.0	16.73	
				31200-9 13168Z/98	220-250	10	Reflector, Vertical Burning	C-8	11.0	14.07	
				35703-8 13168V	220-250	10	Clear, Vertical Burning	C-8	11.0	13.78	
				37811-7 13213Z/98	220-250	10	Reflector	C-8	11.0	14.07	
				21169-8 13213Y	220-250	10	Clear	C-8	11.0	13.70	
				31250-4 13245X	380-420	10	Clear	C-8	16.14	22.17	
2400	T-3	6		30159-8 2400T3/CL/31	460	6	Clear	C, C-8	24	30 ¹⁵ / ₁₆	
2500	T-3	6		23878-2 2500T3	460-500(60)	6	Frosted	C, C-8	25	28 ¹³ / ₁₆	
				23876-6 2500T3/5	460-500(60)	6	Frosted	C, C-8	25	28 ¹¹ / ₁₆	
				29480-1 2500T3/7	460-500(60)	6	Frosted	C, C-8	25	28 ⁵ / ₈	
				23874-1 2500T3/CL	460-500(60)	6	Clear	C, C-8	25	28 ¹³ / ₁₆	
				20301-8 2500T3/CL/HT	460-500(60)	6	Clear, High Temp. Construction(17)(78)	C, C-8	25	28 ¹³ / ₁₆	(59)
				20862-9 2500T3/VB	460-500(60)	6	Frosted, Vertical Burning(57)	C, C-8	25	28 ¹³ / ₁₆	
				25671-9 2500T3/CL/VB	460-500	6	Clear, Vertical Burning(57)	C, C-8	25	28 ¹³ / ₁₆	
				29479-3 2500T3/R	460-500(60)	6	Red	C, C-8	25	28 ¹³ / ₁₆	
3000	T-3	3		31244-7 13230X	380-420	10	Clear	C-8	27.56	33.58	
				44476-0 13215X	380-420	10	Clear	C-8	27.56	33.58	
3800	T-3	6		23881-6 3800T3	550-600(61)	6	Frosted	C, C-8	38	41 ¹³ / ₁₆	
				36552-8 3800T3/CL	550-600(61)	6	Clear	C, C-8	38	41 ¹³ / ₁₆	
				20303-4 3800T3/VB	550-600(61)	6	Frosted, Vertical Burning(57)	C, C-8	38	41 ¹³ / ₁₆	
				21348-8 3800T3/HT	420	6	Frosted, High Temp. Construction	C, C-8	38	41 ¹³ / ₁₆	
				20490-9 3800T3/CL/VB	550-600	6	Clear, Vertical Burning(57)	C, C-8	38	41 ¹³ / ₁₆	
4600	T-3	Special		31272-8 13136V	400	10	Clear, Epitaxial	C-8	9.29	11.73	
5000	T-3	6		36845-6 5000T3/1CL/HT	576-625(62)	6	Clear, High Temp. Construction(17)(78)	C, C-8	25	28 ¹³ / ₁₆	(59)

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High Volume Lamps

†New Since Last Printing

Tungsten Halogen Lamps

Tungsten Halogen lamps operate at above atmospheric pressure when lamp is energized and care should be taken to:

1. Provide adequate screening to protect people and surroundings in case of violent failure.
2. Avoid scratching and abrading the quartz tube as this reduces the strength of the tube.

3. Do not operate above 110% rated voltage to prevent excessive pressure.

For satisfactory lamp operation, a minimum quartz tube wall temperature of 500°F is required.

Except where noted, Tungsten Halogen tubular lamps should not be used in equipment where the seal temperature exceeds 650°F.

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty.	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Approximate Hours Life	Initial Lumens
50	T-3½	S.C. Bay	31286-8	50CL/SC/12V	12	24	Auto Spot	C, C-6F	1¼	2½	50	1700
75	T-3	D.C. Bay	44224-4	75T3Q/CL/DC	28	12	*Dental Spot(68)	C, CC-6	1⅜	2¼	2000	1400
		Min. Screw	42996-9	75Q/CL/28V	28	12	Dental Spot(68)	C, CC-6	1⅜	2¼	2000	1400
100	T-4	Mini-Can	30760-3	100Q ETE	120	12	Frosted	C-CC2V	1⅜	2¾	1000	1850
			30759-5	100Q/CL ESN	120	12	Clear	C-CC-2V	1⅜	2¾	1000	1900
		D.C. Bay	44280-6	100Q/DC ETD	120	12	Frosted	C-CC-2V	1⅜	2⅞	1000	1850
			31888-1	100Q/CL/DC ESR	120	12	Clear	C-CC-2V	1⅜	2⅞	1000	1900
150	T-4	R.S.C.	44267-3	150T4Q/CL	25	12	*Dental Spot(68)	C, CC-8	5/16	2⅞	2000	2750
		Mini-Can	34754-2	150Q/CL ETG	120	12	*Clear(68)	C, CC-8	1½	3	2000	2800
			29856-2	150Q ETH	120	12	Frosted	C-CC-2V	1½	3	2000	2700
			43011-6	150Q/CL ESL	120	12	Clear	C-CC-2V	1⅜	2¾	1000	2600
			20049-3	150Q/CL	130	12	*Clear(68)	C, CC-8	1½	3	2000	2800
		D.C. Bay	26676-7	150Q/CL/DC ETC	120	12	*Clear (68)	C, CC-8	1½	2⅞	2000	2800
			29850-5	150Q/DC ETF	120	12	Frosted	C-CC-2V	1½	2⅞	2000	2700
			26676-7	150Q/CL/DC ESP	120	24	Clear	C-CC-2V	1⅜	2⅞	1000	2800
200	T-3	R.S.C.	38035-2	200T3Q/CL	120	12	*Clear(10)	C, C-8	2	4⅞	1000	3500
			38047-7	200T3Q	120	12	*Frost(10)	C, C-8	2	4⅞	1000	3500
	T-4	R.S.C.	44258-2	200T4Q/CL/6.6A	6.6A	24	Airfield Lighting	C, C-8	1⅜	2⅞	500	4400
250	T-4	Mini-Can	37857-0	250Q/CL EHT	120	12	*Clear(68)	C, CC-8	1⅜	3⅞	2000	4800
			22886-6	250Q/CL	130	12	*Clear(68)	C, CC-8	1⅜	3⅞	2000	4800
		D.C. Bay	31584-6	250Q/CL/DC ESS	120	12	*Clear(68)	C, CC-8	1⅜	2⅞	2000	4800
			22894-0	250Q/CL/DC	130	12	*Clear(68)	C, CC-8	1⅜	2⅞	2000	4800
		Mini-Can	23384-1	250Q ESM	120	12	*Frost	C, CC-8		3⅞	2000	4800
			35610-5	250Q	130	12	*Frost	C, CC-8		3⅞	2000	4800
		D.C. Bay	31581-2	250Q/DC ETB	120	12	*Frost	C, CC-8		2⅞	2000	4800
			22902-1	250Q/DC	130	12	*Frost	C, CC-8		2⅞	2000	4800
300	T-3	R.S.C.	39282-9	300T3Q/CL EHM	120	12	*Clear(10)	C, C-8	2	4⅞	2000	6000
			38206-9	300T3Q EHZ	120	12	*Frost(10)	C, C-8		4⅞	2000	6000
	T-4	R.S.C.	37960-2	300T4Q/CL EHP	120	12	*Clear	C, CC-8	5/8	3⅞	2000	5400
			31674-5	300T4Q/CL	130	12	*Clear	C, CC-8	5/8	3⅞	2000	5400
400	T-3	R.S.C. \$\$\$	26545-4	400T3Q/CL	120	12	*Clear (10) Econ-o-watt	C, C-8	2¼	4⅞	2000	9200
	T-4	R.S.C.	20797-7	400T4Q/CL EHR	120	12	*Clear	C, CC-8	¾	3⅞	2000	7500
			39162-3	400T4Q/CL	125-130	12	*Clear	C, CC-8	¾	3⅞	2000	7500
500	PAR-56	Mog. End Prong	35621-2	500PAR56Q/MFL	120	8	*PAR Medium Flood(9)(55)	C, CC-6		5	4000	7000
			35620-4	500PAR56Q/WFL	120	8	*PAR Wide Flood(9)(55)	C, CC-6		5	4000	7000
			35619-6	500PAR56Q/NSP	120	8	*PAR Narrow Spot(9)(55)	C, CC-6		5	4000	7000
500	T-3	R.S.C.	20010-5	500T3Q/CL FCL	120	12	*Clear(10)	C, C-8	2¼	4⅞	2000	10500
			392 84-5	500T3Q/CL	125-130	12	*Clear(10)	C, C-8	2¼	4⅞	2000	10500
			36774-8	500T3Q FCZ	120	12	*Frost(10)	C, C-8		4⅞	2000	10200
			34727-8	500T3Q	125-130	12	*Frost(10)	C, C-8		4⅞	2000	10200
	T-4	Mini-Can	38079-0	500Q/CL EVR	120	12	*Clear(68)	C, CC-8	2	3⅞	2000	9800
			36335-8	500Q/CL EYW	130	12	*Clear(68)	C, CC-8	2	3⅞	2000	9800
		D.C. Bay	31586-1	500Q/CL/DC	120	12	*Clear(68)	C, CC-8	2	3⅞	2000	9800
		Mini-Can	35605-5	500Q EYX	120	12	*Frost	C, CC-8		3⅞	2000	9800
			35604-8	500Q EYV	130	12	*Frost	C, CC-8		3⅞	2000	9800
		D.C. Bay	31585-3	500Q/DC	120	12	*Frost	C, CC-8		3⅞	2000	9800
	T-5	Med. Two-Pin	26971-2	500Q/CL EHD	120	12	Clear	C-CC-8	2⅞	3¼	2000	10,600

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High Volume Lamps

†New Since Last Printing

Incandescent Lamps

Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code		Volts	Pkg. Qty. ●	Description	Class and Filament	L.C.L. (In.)	M.O.L. (In.)	Hours Life	Initial Lumens	
Tungsten Halogen Lamps														
750	T-5	Med. Two-Pin	26972-0	750Q/CL	EHG	120	12	Clear	C-CC-8	2⅜	4¼	2000	15,000	
1000	PAR-64	Ext. Mog. End Prong	27556-0	1000PAR64Q/MFL		120	8	★PAR Medium Flood(9)(55)	C, CC-8		6	4000	19400	
			27558-6	1000PAR64Q/WFL		120	8	★ PAR Wide Flood(9)(55)	C, CC-8		6	4000	19400	
			27555-2	1000PAR64Q/NSP		120	8	★PAR Narrow Spot(9)(55)	C, CC-8		6	4000	19400	
	T-3	R.S.C.	38135-0	1000T3Q/CL		220	12	★Clear(10)	C, C-8	6	10⅞	2000	21000	
			38320-8	1000T3Q/CL		240	12	★Clear(10)	C, C-8	6	10⅞	2000	21000	
	T-6	R.S.C.	38711-8	1000T6Q/CL	DWT	120	12	★Clear	C, CC-8	1	5⅝	2000	21000	
1200	T-3	R.S.C.	\$\$\$	26468-9	1200T3Q/CL		240	12	★Clear(10) Econ-o-watt	C, C-8	6¾	10⅞	2000	29200
1250	T-3	R.S.C.		20798-5	1250T3Q/CL		208	12	★Clear(10)	C, C-8	5¾	10⅞	2000	28000
1500	T-3	R.S.C.		37806-7	1500T3Q/CL		208	12	★Clear(10)	C, C-8	6¾	10⅞	2000	33000
				37536-0	1500T3Q/CL		220	12	★Clear(10)	C, C-8	6¾	10⅞	2000	33000
				23867-5	1500T3Q/CL		240	12	★Clear(10)	C, C-8	6¾	10⅞	2000	33000
				23868-3	1500T3Q/CL		277	12	★Clear(10)	C, C-8	6¾	10⅞	2000	33000
45	T-2½	R.S.C.		20580-7	6.6A/T2½Q/CL	6.6A	12	★Clear	C, C-8	⅞	2⅞	1000	630	
		Cartridge □		36868-8	6.6A/T2½Q/5CL	6.6A	12	★Clear	C, C-8	⅞	2⅝	1000	630	
65	T-2½	Cartridge □		24112-5	6.6A/T2½Q/9CL	6.6A	12	★Clear	C, C-8	⅞	2⅝	1000		
200	T-4	R.S.C.		20665-6	6.6A/T4Q/CL	6.6A	12	★Clear	C, CC-8	⅜	2⅞	500	4400	
		D.C. Ring		32878-1	6.6A/T4Q/DCR	6.6A	12	★Clear(68)	C, CC-6	1⅞	2⅝	500	5150	

Halogen A Lamps

T-10 Bulb



BT-15 Bulb



			NAED Number 04-6677-	Ordering Code	Volts	Pkg. Qty. ●			L.C.L. (In.)	M.O.L. (In.)	Approximate	
Watts	Bulb	Base					Description				Hours Life	Initial Lumens
100	T-10	Med.	26892-0	100T10/Q/CAP/IF	120	12	Inside Frosted	3	4½	2000	1525	
	BT-15	Med.	26893-8	100BT15/Q/CAP/CL	120	12	Clear	3	4½	2000	1600	
			26895-3	100BT15/Q/CAP/W	120	12	White	3	4½	2000	1450	
150	T-10	Med.	26896-1	150T10/Q/CAP/IF	120	12	Inside Frosted	3	4½	2000	2450	
	BT-15	Med.	26897-9	150BT15/Q/CAP/CL	120	12	Clear	3	4½	2000	2500	
			26900-1	150BT15/Q/CAP/W	120	12	White	3	4½	2000	2100	

Halogen Aluminum Reflector Lamps

ANSI Code	NAED Number 04-6677-	Philips Type No.	Std. Pkg.	Watts	Volts	Base	Reflector Dia. (mm)/Material	Avg. Life (Hours)	Luminous Intensity (cd)	Beam Spread† Degrees	O.A.L. (In.)
GBA	☐ 32828-6	6424	50	15	6	B15d	37 Alum.	3000	5000	6	1.378
GBB	☐ 32834-4	6425	50	15	6	B15d	56 Alum.	3000	12000	4	2.205
GBC	☐ 32839-3	6426	50	15	6	B15d	56 Alum.	3000	1400	14	2.205
GBD	☐ 32840-1	6433	50	20	12	B15d	37 Alum.	3000	7000	6	1.378
GBE	☐ 32841-9	6434	50	20	12	B15d	37 Alum.	3000	1400	18	1.378
GBF	☐ 32842-7	6435	50	20	12	B15d	37 Alum.	3000	350	32	1.378
GBG	☐ 32397-2	6429	50	35	6	B15d	56 Alum.	3000	15500	6	2.205
GBH	☐ 32855-9	6430	50	35	6	B15d	56 Alum.	3000	4000	14	2.205
GBJ	☐ 32826-0	6438	50	50	12	B15d	56 Alum.	3000	11000	10	2.205
GBK	☐ 32827-8	6439	50	50	12	B15d	56 Alum.	3000	1900	25	2.205

†Angle measured at which the luminous intensity is one-half of the center beam.

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†New Since Last Printing

Accent 1200 Halogen Display Lamps (51 MM Dichroic Reflectors) (MR 16)

NAED Number 04-6677-	ANSI Code	Watts	Volts	Base	Filament	Approx. Color Temp. (Degrees K)	Average Center Candle-power	Approx. Beam Spread (Degrees)	Average Rated Life (Hours)
37495-9	BAB	20	12	GX5.3	CC-6	2925	460	36	2000
37487-6	ESX	20	12	GX5.3	CC-6	2925	3300	12	2000
31499-7	FJX	25	12	GX5.3	C-8	3050	8500	6	2000
37498-3	EXN	50	12	GX5.3	C-6	3050	1500	40	3000
37496-7	EXT	50	12	GX5.3	C-6	3050	9150	13	3000
37497-5	EXZ	50	12	GX5.3	C-6	3075	3000	24	3000
27386-2	ENL	50	12	GX5.3	CC-6	3050	2500	30	3000
37500-6	EYC	75	12	GX5.3	CC-6	3050	2000	38	3500
37499-1	EYF	75	12	GX5.3	CC-6	3050	11500	14	3500

Accent 1200 Halogen Color Display Lamps (51 MM Dichroic Reflectors) (MR 16)

NAED Number 04-6677-	ANSI Code	Watts	Volts	Base	Filament	Color	Approx. Beam Spread (°)	MBCP +	Average Rated Life (Hours)
37488-4	FNC	50	12	GX5.3	C-6	Yellow	10	13000	3000
37489-2	FND	50	12	GX5.3	C-6	Red	10	3000	3000
37490-0	FNE	50	12	GX5.3	C-6	Green	10	5500	3000
37491-8	FNF	50	12	GX5.3	C-6	Blue	10	2800	3000

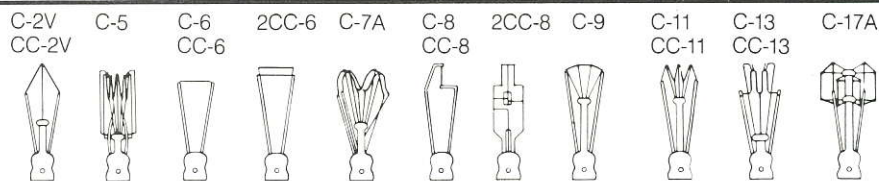
+ Max. Beam Candela

Footnotes

- Quantity shown is minimum shipping container — Refer to Net Price Schedule for number of lamps to qualify as a standard case.
- * Two Lamp Carded Pack.
- ▲ Aluminum base.
- ★ Heat resisting glass bulb.
- (2) Although the lamp is of the highest quality in material and workmanship, it has been designed to meet certain purchase requirements which preclude a guarantee of performance.
- (3) Indefinite-long life.
- (4) Average laboratory life is 200 hours for vacuum cleaner and 600 hours for sewing machine service. Design life 1000 hours.
- (5) Not recommended for general lighting service.
- (6) Light inside frosted and side aluminized. Medium screw base with spring contact. M.O.L. is exclusive of spring contact.
- (7) Average overall length.
- (8) Burn base down.
- (9) This lamp should be shielded from moisture to prevent breakage.
- (10) Burning position — horizontal.
- (11) Design volts 115.
- (12) Burn base down to horizontal.
- (13) Not recommended for horizontal burning.
- (14) Burn base up.
- (15) Burn base down. Filaments operated separately.
- (16) Flexible connector not included in maximum overall length.
- (17) Designed for use only in special equipment.
- (18) Base is medium left hand thread.
- (19) May not give satisfactory performance if any accessory equipment is attached to or touches the glass bulb.
- (20) Average initial cone lumens: spot-220 (30°), flood-270 (60°); approximate initial mean candlepower in 10° cone at 10': spot-1800, flood-430.
- (21) Nominal watts. Actual watts are determined by multiplying the volts by the amperes.
- (22) Unsatisfactory lamp operation is likely to occur in burning positions between horizontal and base up, particularly between 45° from base up, and base up.
- (23) May be burned in any position.
- (25) Base pins approximately parallel to plane of filament.
- (26) Use only on circuits supplying the voltage as marked on the lamp. Do NOT use in household sockets.
- (27) Average laboratory life in excess of 5000 hours. In-service life depends upon service conditions.
- (28) Burn horizontal with offset filament in down position.
- (29) Suitable for indoor and outdoor service.
- (30) Average initial cone lumens: spot-1100 (30°), flood-1350 (60°); approximate initial mean candlepower in 10° cone at 10': spot-10,500, flood-3400.
- (31) Burn only in porcelain sockets.
- (32) For use only with heat resistant connector and with lamp supported by bulb rim or metal shell of base.
- (33) Burning position — plane through lamp axis and base terminals horizontal.
- (34) Burn base up to horizontal.
- (35) Filaments operated separately or in multiple.
- (36) Average initial cone lumens: spot-660 (30°), flood-810 (60°); approximate initial maximum mean candlepower in 10° cone at 10': spot-6000, flood-1250.
- (37) Should not be used in equipment where the base temperature will exceed 500°F.
- (38) Approximate hours life 200/200: approximate initial lumens — 2000/2100.
- (39) Bulb sides selected for minimum glass imperfections.
- (40) Ceramic sleeve with approx. 6" flexible leads.
- (41) Avoid use at short distances on materials that are inflammable or susceptible to heat damage.
- (42) The tungsten halogen inner lamp may continue to operate if the outer (PAR-38) envelope is cracked or broken. The inner lamp is pressurized and could shatter. Replace immediately and dispose of the old bulb with care.
- (43) Unless otherwise noted, may be burned in any position but lumen maintenance is best when burned vertically base up.
- (46) Stippled, rounded cover.
- (47) Leads parallel to lamp axis. OAL does not include leads.
- (48) Average initial cone lumens: spot-1450 (30°), flood-1500 (60°); approximate initial maximum mean candlepower in 10° cone at 10': spot-13,500, flood-2400.
- (49) Should not be used in equipment where the seal temperature exceeds 750°F.
- (50) For use on 50-60 cycle A.C. circuits.
- (51) Light output is maintained best when burned within 45° of vertically base up.
- (52) For use only in a fixture with a well-ventilated back.
- (53) The bulb, though made of heat resistant glass, may break if moisture falls on it. Not recommended for use in enclosed, close-fitting housings.
- (54) Burn within 25° of vertically base up. Collector grid.
- (55) For use only with heat resistant connector and with lamp supported by bulb rim.
- (56) Recommended burning position any within 60° of vertically base up or base down but lumen maintenance is best when burned vertically base up.
- (57) When burned in a position other than horizontal, lamp end marked, "This end up" should be higher than the other end.
- (58) Lighted length includes shorted sections of filament.
- (59) Life dependent upon service conditions.
- (60) Design volts 480.
- (61) Design volts 570.
- (62) Design volts 600.
- (63) Design volts 145.
- (64) For use only in equipment specially designed to maintain bulb and base temperature within safe limits.
- (65) AA tolerance 1/32", LCL tolerance 3/64".
- (66) Silicone Coating reduces lumen output from Standard Values less than 3%.
- (67) Nominal lumens.
- (68) Lighted length value refers to light center length for this lamp.
- (70) Watts Nominal.
- (71) Burning Position — Prongs up or Down.
- (72) Light Center Length & axial alignment tolerance 1/64".
- (73) Both filaments in multiple.
- (74) Single contact medium bayonet base without pins having 2 or 3 pin focusing sleeve as indicated.
- (75) 2 3/4" diameter unsilvered spot on end of bulb.
- (76) Design Volts — 230.
- (77) Collector grid.
- (78) Intermittent Burning.
- (80) For operation in series with ballast and one 14W fluorescent lamp on 60 Volt DC circuits.
- (81) LCL & Axial Alignment tolerances 1/32".
- (82) To avoid deterioration of lampholder by heat, use only in porcelain lampholders or fixtures listed by a nationally recognized electrical testing organization for use with reflector or PAR lamps.
- (83) Base does not have ceramic insulator.
- (84) Burn 45° base down to horizontal.

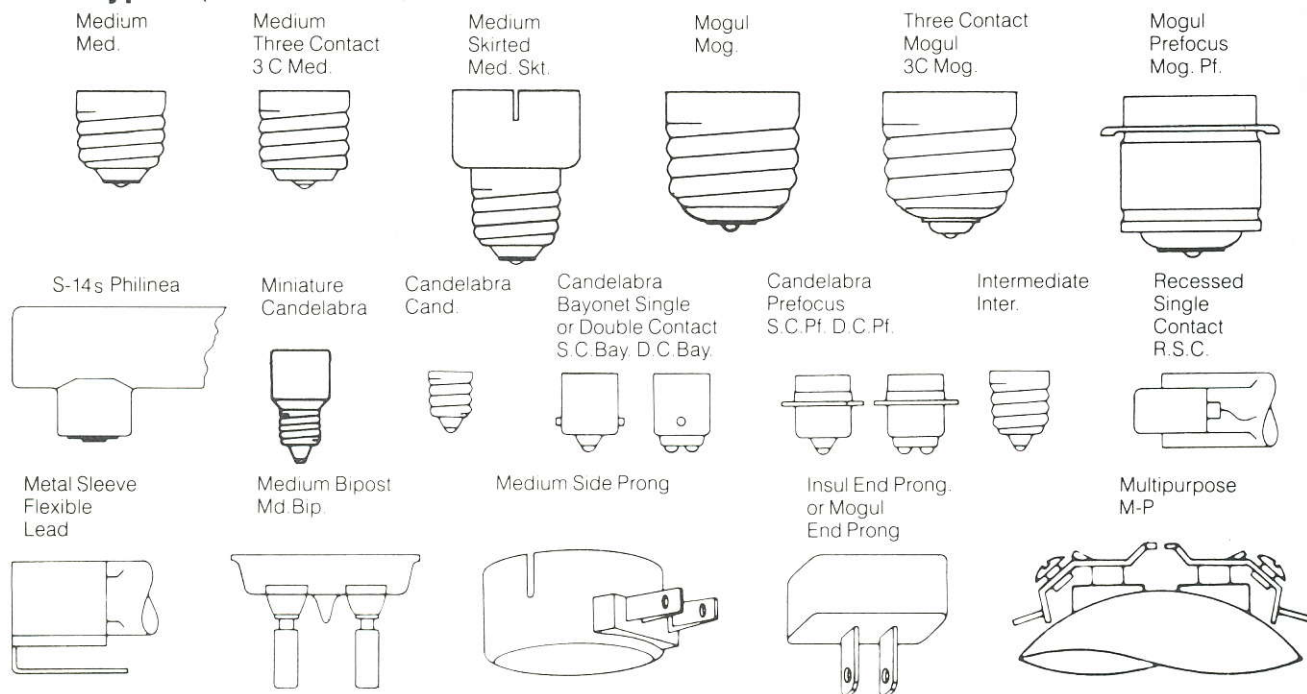
Incandescent Lamps

Filament Designations



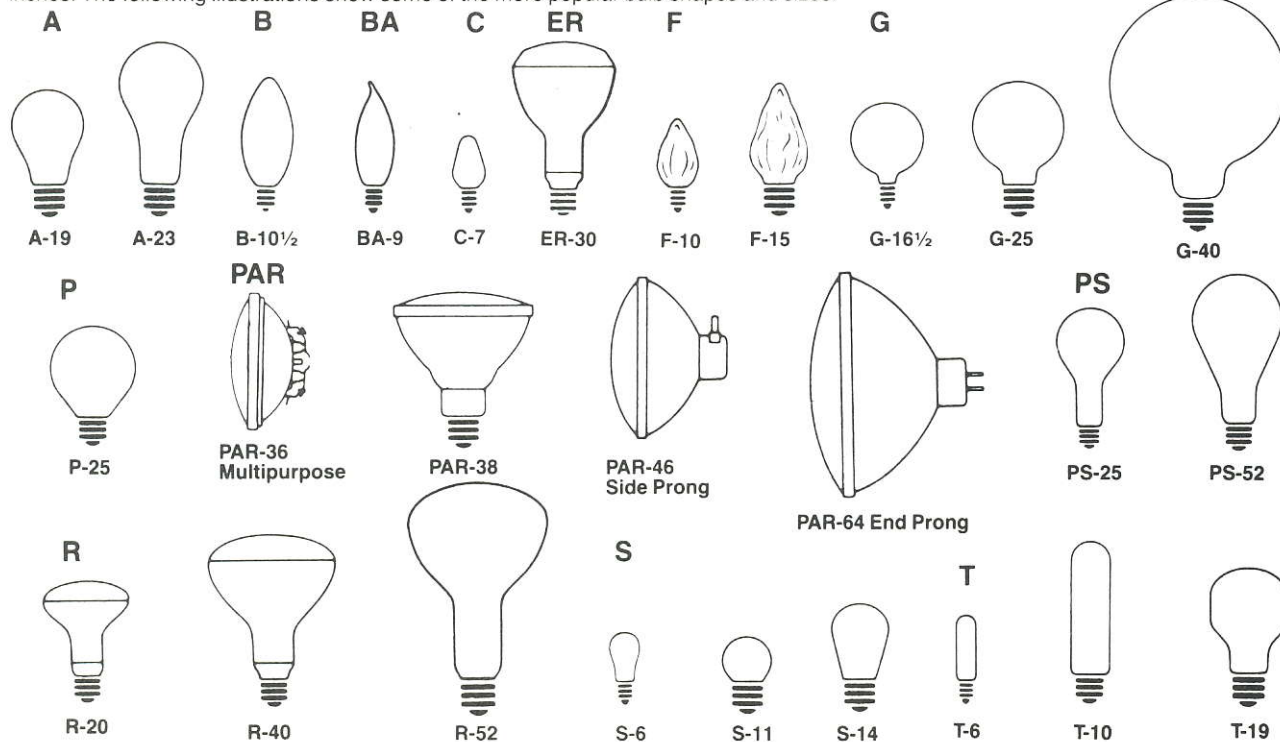
Filament Designations consist of a letter or letters to indicate how the wire is coiled, and an arbitrary number sometimes followed by a letter to indicate the arrangement of the filament on the supports. Prefix letters include C (coil) — wire is wound into a helical coil or it may be deeply fluted; CC (coiled coil) — wire is wound into a helical coil and this coiled wire again wound into a helical coil. Some of the more commonly used types of filament arrangements are illustrated.

Base Types (Not Actual Sizes)



Bulb Shapes (Not Actual Sizes)

The size and shape of a bulb is designated by a letter or letters followed by a number. The letter indicates the shape of the bulb while the number indicates the diameter of the bulb in eighths of an inch. For example, "T-10" indicates a tubular shaped bulb having a diameter of 10/8 or 1¼ inches. The following illustrations show some of the more popular bulb shapes and sizes.



Ordering Code Cross Reference Guide

A number of incandescent lamps manufactured by Philips are identified with different ordering codes by General Electric and Sylvania. If a Philips Ordering Code is shown, but nothing is shown for General Electric or Sylvania, it means that their ordering code is the same, or they do not make the lamp.

Use this guide particularly on decorative lamps. Refer to it for help on colored lamps, extended service lamps and numerous other individual types to provide quick identification of the Philips lamp. For example, an inquiry is received for a 250R40/10 lamp. A quick check in this guide shows that the code 250R40/10 is used by GE and Sylvania and it is comparable to the Philips 250R40/HR.

General Electric Quartz Heat lamps and Tungsten Halogen lamps have essentially the same ordering codes as Philips lamps, except that the ordering codes are preceded by a QH or Q respectively.

Philips	General Electric	Sylvania	Philips Volts
7½S/G ⁽¹⁾	7½S/CG	7½S/CG	115-125, 130
10S11N/G ⁽¹⁾	10S11N/CG (130)	10S11N/CG	115-125
10S14/G ⁽¹⁾	10S14/CG (120)	10S14/CG	115-125
11S14/G ⁽¹⁾	11S14/G (130)	11S14/CG	115-125, 130
15A/Colors	15A/Colors (120)	15A15/Colors	115-125
15BA9C/3	15CAC (120)	15B10C/BL (120-125)	120
15F10C/3	15FC (120)	15FC/4M (120)	120
15F10C/3A	15FC/A (120)	15FC/AIC/BL (120-125)	120
15G16½C/3	15GC (120)	15G16½C (120-125)	120
15G16½C/3W	15GC/W (120)	15G16½C/W (120-125)	120
15/150T/WL	15/150	15/150A/W/RP	120
25A19/RS	25A17/RS	25A17/RS	75
25A15/1	—	25A15	115-125
25A/CL/RFL	—	25A/99CL/RFL (130)	120, 125-130
25B10½/3	25BC (120)	25B10C/ST/BL (120-125)	120
25BA9C/3	25CAC (120)	25B10C/BL (120-125)	120
25BA9C/3F	25CAC/F (120)	—	120
25BA9C/4M	25CAC/L (120)	—	120
25BA9C/4MF	25CAC/F/L (120)	—	120
25BA9½/3	25CAM/L (120)	—	120
25BA9½/3F	25CAM/F/L (120)	25C11/BL (120-125)	120
25F10C/3	25FC (120)	25FC (120-125)	120
25F15/3	25FM (120)	25F (120-125)	120
25F15/3W	25FM/W (120)	25F/W/BL (120-125)	120
25F15/3A	25FM/A (120)	25F/AIC/BL (120-125)	120
25F15/3IR	25FM/AU (120)	25F/IC/BL (120-125)	120
25F15/4M	25FM/L	—	120
25F15/FT	—	25F/FT (120-125)	120
25G16½C/3	25GC (120)	25G16½C (115-125)	120
25G16½C/3W	25GC/W (120)	25G16½C/W (120-125)	120
25G16½C/4M	25GC/L (120)	—	120
25G16½C/4MW	25GC/W/L (120)	25G16½C/W/4M	120
25G40/3	25G40 (120)	25G40	120
25G40/3W	25G40/W (120)	25G40/W	120
40A/99	—	40A/99/XL (120, 130)	120, 125-130
40A/99CL	—	40A/99/CL/XL (130)	125-130
40B10½/3	40BC (120)	40C9½C/BL (120-125)	120
40B10½/3W	40BC/W (120)	40C9½C/W/BL (120-125)	120
40BA9C/3	40CAC (120)	40B10C/BL (120-125)	120
40BA9C/3F	40CAC/F (120)	—	120
40BA9C/4M	40CAC/L	—	120
40BA9C/4MF	40CAC/FL	—	120
40BA9½/3	40CAM (120)	40C11/BL (120-125)	120-130

(1) Other colors of this lamp follow a similar pattern, i.e., the letter designating color is preceded by a "C" in G.E. and Sylvania ordering codes.

(2) Note the difference in bulb size.

Incandescent Lamps

Ordering Code Cross Reference Guide

Philips	General Electric	Sylvania	Philips Volts
40BA9½/3F	40CAM/F (120)	—	120
40F15/3	40FM (120)	40F (120-125)	120
40F15/3IR	40FM/AU (120)	40F/IC/BL (120-125)	120
40F15/3W	40FM/W (120)	40F/W/BL (120-125)	120
40F15/4M	40FM/L	—	120
40G40/3	40G40 (120)	40G40	120
40G40/3W	40G40/W (120)	40G40/W	120
40S11N	40S11N/1 (120)	—	115-125
40S11N/IF	40S11N/I/IF	40S11N/CF	120
50A	50A21	50A21	12, 30, 34
50A/RS/TF	50A/RS/TF (120)	50A/RS/SL	115-125
50/150T/SW	50/150	50/150A/W	120
50/250T/SW	50/250	50/250M/W	120
60A/99	—	60A/99/XL (120, 130)	120, 125-130
60A/TF	60A/TF (120)	60A/SL (120)	115-125
60A/AGRO	60A/PL	60A/GRO	120
60A19/Colors ⁽²⁾	60A21/Colors (120)	60A19/C Colors (120)	115-125
60B10½/3	60BC (120)	60B10C/ST/BL (120-125)	120
60BA9C/3	60CAC (120)	60B10C/BL (120-125)	120
60BA9C/4M	60CAC/L	—	120
60BA9C/3F	60CAC/F (120)	—	120
60BA9½/3	60CAM (120)	—	120
60G40/3	60G40 (120)	60G40	120
60G40/3W	60G40/W (120)	60G40/W	120
60T10/64IF	60T10/F (120)	60T10/CF (120)	115-125
67A21/99/TS	67A21/TS (120, 125, 130)	67A2½/0/8M (120, 125, 130)	120, 130
75A/99	—	75A/99/XL (120, 130)	120, 125-130
75R30/AGRO	75R30/PL	75R30/GRO	120
90PAR38/CAP/FL	90PAR/FL/H (120, 130)	90PAR38/CAP/FL (120, 130)	120, 130
100A	100A23	—	12
100A/99	—	100A/99/XL (120, 130)	120, 125-130
100A/1SB	100A21/SB (120)	—	115-125
100A21/99IF	100A21/99 (120, 130)	100A21/99/XL (120, 130)	120, 125-130
100A21/SP/33	100A21/SP (120, 130)	100A21/SP (120, 125, 130)	120, 125-130
100A21/TF	100A21/TF (120)	100A21/SL (120)	115-125
100A/RS/VS	100A/RS (120, 130)	100A/RS	120, 125-130
100A/RS/VS ⁽²⁾	100A23/VS (120, 130)	100A/VS (120, 125, 130)	120, 125-130
100A/CL/RS/VS	100A/CL/RS (120, 130)	100A/CL/RS	120, 125-130
100A/CL/RS/VS	—	100A/CL/VS (120, 125)	120, 125-130
100A/RS/TF	100A/RS/TF (120)	100A21/RS/SL	115-125
100A/99	—	100A/99/XL (230-250)	250
100A21/99	—	100A21/99/XL (120, 130)	120, 125-130
100A23/Colors	100A/Colors	100A/Colors	115-125
100G40/3	100G40 (120)	100G40	120
100/300/W	100/300	100/300	120
110R30/RS	110R30/FL/RS (120)	110R30/FL/RS (120)	120-130
150A/Y	150PS25/Y (120)	—	115-125
150A/RS/VS	150A/RS (120, 130)	150A/RS	120, 125-130
150A/CL/RS/VS	—	150A/CL/RS	120, 125-130
150A/99 ⁽²⁾	150A23/99 (120, 130)	150A/99/XL (120, 130)	120, 125-130
150A/99CL ⁽²⁾	150A23/99CL (120, 130)	150A/99CL/XL (120, 130)	120, 125-130
150PAR/4FL	150PAR/4	150PAR/4	120-130
150PAR/5FL	150PAR/5	150PAR/5	120-130
150PAR/WFL	—	150PAR38/VWFL	120, 125-130
1950L/P25/TS	1950L/P25/TS (120, 130)	1950L/P25/8 (120, 130)	120-130

(2) Note the difference in bulb size.

Ordering Code Cross Reference Guide

Philips	General Electric	Sylvania	Philips Volts
150PS25/99CL 150PS25/99 150PS25/99CL 150PS25/TF 150/RS/TF	150/99CL (130) 150/99 (120, 130) 150/99CL (120, 130) 150PS25/TF (120) 150/RS/TF (120)	— 150/99/XL (125, 130) 150/99/CL/XL (230-250) 150/SL 150/RS/SL	120, 125-130 120, 125-130 250 115-125 115-125
150R/AGRO 200A/99CL 200/TF 200PS30/RS/TF	150R40/PL 200A/99CL (125-130) 200PS30/TF (120) 200PS30/RS/TF (120)	150R40/GRO — 200PS30/SL 200PS30/23/SL	120 120, 125-130 115-125 115-125
200/99IF 200/99 250R40/HR 300PAR56/WFL	200/99IF (230-250) 200/99 (230-250) 250R40/10 —	200/99/IF/XL (230-250) 200/99/XL (230-250) 250R40/10 25A/PAR56/WFL	250 250 115-125 12
300M/99IF 300M/99 300/2 300/2IF 300/99IF	— — — — —	300M/IF99/XL 300M/99/XL 300AX (120, 125, 130) 300AX/IF (120, 125, 130) 300/99IF/XL	120, 125-130 120, 125-130 120-130 120-130 120, 125-130
300/99 300/99 500/99 500/99IF 500/99	— — 500/99 (120, 130) 500/99IF (120, 130) 500/99 (230-250)	300/99/XL 300/99/XL (230-250) 500/99/XL 500/99IF/XL 500/99/XL	120, 125-130 250 120, 125-130 120, 125-130 250
750/99 1000/99 2000T3/1CL/HT	— — QH2MT3/1CL/HT	750/99/XL 1000/9/XL —	120, 125-130 120, 125-130 230-250

High Intensity Lamps

C.P.	Bulb	Volts	Philips	General Electric	Sylvania
32 C.P. 15 C.P.	RP-11 S-8	6.2 12.8	BC-1133 BC-93	24RP/1133 12S8/93T	1133/BL 93/BL

Lamps Listed By Amperes

Amp.	Bulb	Volts	Philips	General Electric	Sylvania
.46 .70	S-8 S-8	6.2 6.2	46A/S8SCP 70A/S8	46/S8SCP/1 70A/S8/1	— —

Tungsten Halogen Lamps

Philips	General Electric	Sylvania	ANSI ⁽³⁾	Philips Volts
K250PAR38/SP K250PAR38/FL 250Q/CL 300T3Q/CL	Q250PAR38SP (120) Q250PAR38FL (120) Q250CL/MC —	— — 250Q/CL 300T2½Q/CL	— — EHT EHM	120, 125-130 120, 125-130 120, 130 120

(1) Other colors of this lamp follow a similar pattern, i.e., the letter designating color is preceded by a "C" in G.E. and Sylvania ordering codes.

(2) Note the difference in bulb size.

(3) American National Standards Institute code usually applied to Photo Lamps.

Fluorescent Lamps

For use only with auxiliary equipment designed to produce proper electrical values.
Unless otherwise noted, ratings apply to operation on A.C. circuits.

Preheat PL* Fluorescent Lamps (216) Lamps with integral preheat starters. For use with preheat ballasts only.

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Length (In.)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
9	PL	Md.▲	☐ \$\$\$	26752-6 PL*5/27/SYS	10	PL*5/27 With Adapter	5¾	10000	250
10	PL	Md.▲	\$\$\$	26753-4 PL*7/27/SYS	10	PL*7/27 With Adapter	6⅞	10000	400
12	PL	Md.▲	\$\$\$	26754-2 PL*9/27/SYS	10	PL*9/27 With Adapter	8⅞	10000	600
			\$\$\$	33106-6 BC-PL*9/27/SYS/EM	6	Blister Card PL*9/27 With Adapter	8⅞	10000	600
5	PL	G23		33233-8 PL*5/27	60	2700K, Boxed	4⅞ M.O.L.	10000	250
7	PL	G23		34256-8 PL*7/27	60	2700K, Boxed	5¼ M.O.L.	10000	400
				30663-9 PL*7/27	50	2700K	5¼ M.O.L.	10000	400
				36809-2 PL*7/41	50	4100K	5¼ M.O.L.	10000	400
9	PL	G23		34257-6 PL*9/27	60	2700K, Boxed	6½ M.O.L.	10000	600
				30665-4 PL*9/27	50	2700K	6½ M.O.L.	10000	600
				31470-8 BC-PL*9/27/EM	6	2700K, Blister Card	6½ M.O.L.	10000	600
				36810-0 PL*9/41	50	4100K	6½ M.O.L.	10000	600
13	PL	GX23		34258-4 PL*13/27	60	2700K, Boxed	7⅞ M.O.L.	10000	900
				30667-0 PL*13/27	50	2700K	7⅞ M.O.L.	10000	900
				36811-8 PL*13/41	50	4100K	7⅞ M.O.L.	10000	900

Preheat — Rapid Start PL* Fluorescent Lamps (216)

18	PL	2G11	☐	34499-4 PL*18/27	25	2700K	8⅞ M.O.L.	10000	1250
			☐	34500-9 PL*18/30	25	3000K	8⅞ M.O.L.	10000	1250
			☐	34501-7 PL*18/41	25	4100K	8⅞ M.O.L.	10000	1250
24	PL	2G11	☐	34504-1 PL*24/27	25	2700K	12⅞ M.O.L.	10000	1800
			☐	34505-8 PL*24/30	25	3000K	12⅞ M.O.L.	10000	1800
			☐	34508-2 PL*24/41	25	4100K	12⅞ M.O.L.	10000	1800
36	PL	2G11	☐	34509-0 PL*36/27	25	2700K	16⅞ M.O.L.	10000	2900
			☐	34511-6 PL*36/30	25	3000K	16⅞ M.O.L.	10000	2900
			☐	34942-3 PL*36/35	25	3500K	16⅞ M.O.L.	10000	2900
			☐	34513-2 PL*36/41	25	4100K	16⅞ M.O.L.	10000	2900

Preheat PLC* 10MM Compact Fluorescent Lamps (216)

Lamps with integral preheat starters. Use with auto-transformer ballasts only.

10	PLC	G24D-1		34944-9 PLC*10MM/10W/27	40	Compact 2700K, Boxed	4⅞ M.O.L.	10000	600
13	PLC	G24D-1		34945-6 PLC*10MM/13W/27	40	Compact 2700K, Boxed	5⅞ M.O.L.	10000	900
18	PLC	G24D-2		34947-2 PLC*10MM/18W/27	40	Compact 2700K, Boxed	6⅞ M.O.L.	10000	1250
26	PLC	G24D-3		34953-0 PLC*10MM/26W/27	40	Compact 2700K, Boxed	7⅞ M.O.L.	10000	1800

Preheat PLC* 10MM Compact Fluorescent Lamps (216)

Lamps with integral starters. Use choke ballast. Fits many PL*13 sockets.

13	PLC	GX23	†	24546-4 PLC*10MM/13W/27/USA	40	Compact 2700K, Boxed	4⅞ M.O.L.	10000	860
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Preheat PLC* 15MM Compact Fluorescent Lamps (216) Lamps with integral starters. Use choke ballast.

16	PLC	GX32d-1	† ☐	20473-5 PLC*15MM/16W/27	40	Compact 2700K, Boxed	4⅞	10000	900
22	PLC	GX32d-2	† ☐	20478-4 PLC*15MM/22W/27	40	Compact 2700K, Boxed	5⅞	10000	1200
28	PLC	GX32d-3	† ☐	20479-2 PLC*15MM/28W/27	40	Compact 2700K, Boxed	6⅞	10000	1600

Preheat Fluorescent Lamps T-5 Approx 5/8" Diameter

(for use in fixtures with starters or in fixtures containing starterless quick starting circuits)

4	T-5	Min. Bipin		33236-1 F4T5/CW	25	Cool White	6 (201)	6000	135
				33239-5 F4T5/D	25	Daylight	6 (201)	6000	115

☐ Exclusive Product

\$\$\$ Energy Saving Product

☐ High Volume Lamps

†New Since Last Printing

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Preheat Fluorescent Lamps T-5 Approx. 5/8" Diameter

4 	T-5	Min. Bipin	33240-3	F4T5/W	25	White	6	6000	130
			35839-0	F4T5/BL	25	Black Light(211)	6	6000	
			35840-8	F4T5/BLB	25	Black Lt. — Integral Filter(211)	6	6000	
6	T-5	Min. Bipin	33241-1	F6T5/CW	25	Cool White	9	7500	295
			33242-9	F6T5/D	25	Daylight	9	7500	230
			33246-0	F6T5/W	25	White	9	7500	260
			35841-6	F6T5/BLB	25	Black Lt. — Integral Filter(211)	9	7500	
8	T-5	Min. Bipin	33247-8	F8T5/CW	25	Cool White	12	7500	400
			33249-4	F8T5/D	25	Daylight	12	7500	330
			33251-0	F8T5/W	25	White	12	7500	410
			33252-8	F8T5/WW	25	Warm White	12	7500	410
			 35579-2	F8T5/27U	25	2700K Ultralume	12	7500	450
			 35580-0	F8T5/41U	25	4100K Ultralume	12	7500	450
			35842-4	F8T5/BL	25	Black Light(211)	12	7500	
			35843-2	F8T5/BLB	25	Black Lt. — Integral Filter(211)	12	7500	
13	T-5	Min. Bipin	33253-6	F13T5/CW	25	Cool White	21	7500	820
			 35581-8	F13T5/27U	25	2700K Ultralume	21	7500	1000
			 35585-9	F13T5/41U	25	4100K Ultralume	21	7500	1000

T-8 Approx. 1" Diameter

13.5	T-8	Md. Bipin		25910-1	F13½T8/CW	24	Cool White	12	7500	500
				25913-5	F13½T8/D	24	Daylight	12	7500	390
15	T-8	Md. Bipin		25936-6	F15T8/CW	24	Cool White	18	7500	870
				20570-8	F15T8/CW	6	Cool White, Retail Pack	18	7500	870
				29911-5	F15T8/CW	2496	Cool White, Palletized	18	7500	870
				25944-0	F15T8/CWX	24	Deluxe Cool White	18	7500	610
				25952-3	F15T8/D	24	Daylight	18	7500	750
				37316-7	F15T8/D	6	Daylight	18	7500	750
				20852-0	F15T8/N	24	Natural	18	7500	590
				36427-3	F15T8/SW	6	Soft White, Retail Pack	18	7500	610
				25949-9	F15T8/W	24	White	18	7500	870
				25946-5	F15T8/WW	24	Warm White	18	7500	870
				25131-4	F15T8/AGRO	24	Agro-Lite	18	7500	410
				36425-7	F15T8/AGRO	6	Agro-Lite, Retail Pack	18	7500	410
				34286-5	F15T8/C50	24	Colortone 50	18	7500	590
				37318-3	F15T8/B	6	Blue	18	7500	330
				37319-1	F15T8/G	6	Green	18	7500	1230
				37321-7	F15T8/GO	6	Gold	18	7500	650
				37320-9	F15T8/PK	6	Pink	18	7500	330
				37322-5	F15T8/R	6	Red	18	7500	40
				31436-9	F15T8/BL	6	Black Light(211)	18	7500	
				31437-7	F15T8/BLB	6	Black Lt. — Integral Filter(211)	18	7500	

Ultralume Preheat Fluorescent Lamps

15	T-8	Md. Bipin		31515-0	F15T8/30U	24	3000K Ultralume	18	7500	900
				☐ 31516-8	F15T8/41U	24	4100K Ultralume	18	7500	900
				☐ 31519-2	F15T8/50U	24	5000K Ultralume	18	7500	900

Preheat Fluorescent Lamps

30	T-8	Md. Bipin		26050-5	F30T8/CW	24	Cool White	36	7500	2200
				20589-8	F30T8/CW	6	Cool White, Retail Pack	36	7500	2200
				26056-2	F30T8/CWX	24	Deluxe Cool White	36	7500	1580
				38899-1	F30T8/CWX	6	Deluxe Cool White	36	7500	1580
				26063-8	F30T8/D	24	Daylight	36	7500	1500
				39825-5	F30T8/D	6	Daylight	36	7500	1500
				20039-4	F30T8/N	24	Natural	36	7500	1500
				36434-9	F30T8/SW	6	Soft White, Retail Pack	36	7500	1540

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☐ High Volume Lamps

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Preheat Fluorescent Lamps T-12 Approx. 1 1/2" Diameter

30	T-8	Md. Bipin	26060-4	F30T8/W	24	White	36	7500	2260
			26058-8	F30T8/WW	24	Warm White	36	7500	2260
			39647-3	F30T8/B	6	Blue	36	7500	840
			39648-1	F30T8/G	6	Green	36	7500	3150
			39650-7	F30T8/GO	6	Gold	36	7500	1470
			39649-9	F30T8/PK	6	Pink	36	7500	840
			39651-5	F30T8/R	6	Red	36	7500	105
			30117-6	F30T8/BL	6	Black Light(211)	36	7500	
			31438-5	F30T8/BLB	6	Black Lt. — Integral Filter(211)	36	7500	
14	T-12	Md. Bipin	25916-8	F14T12/CW	24	Cool White	15	9000	500
			20590-6	F14T12/CW	6	Cool White, Retail Pack	15	9000	500
			38896-7	F14T12/CWX	6	Deluxe Cool White	15	9000	500
			25926-7	F14T12/D	24	Daylight	15	9000	610
			36424-0	F14T12/SW	6	Soft White, Retail Pack	15	9000	500
			25923-4	F14T12/W	24	White	15	9000	720
			25921-8	F14T12/WW	24	Warm White	15	9000	720
			37330-8	F14T12/B	6	Blue	15	9000	320
			37332-4	F14T12/GO	6	Gold	15	9000	425
			37331-6	F14T12/PK	6	Pink	15	9000	320
15	T-12	Md. Bipin	25971-3	F15T12/CW	24	Cool White	18	9000	540
			20591-4	F15T12/CW	24	Cool White, Retail Pack	18	9000	540
			25974-7	F15T12/CWX	24	Deluxe Cool White	18	9000	540
			25980-4	F15T12/D	24	Daylight	18	9000	650
			31431-0	F15T12/D	6	Daylight	18	9000	650
			36429-9	F15T12/SW	6	Soft White, Retail Pack	18	9000	540
			25978-8	F15T12/W	24	White	18	9000	800
			31430-2	F15T12/W	6	White	18	9000	800
			25975-4	F15T12/WW	24	Warm White	18	9000	800
			31425-2	F15T12/WW	6	Warm White	18	9000	800
20	T-12	Md. Bipin	23057-3	F15T12/AGRO	24	Agro-Lite	18	9000	380
			25996-0	F20T12/CW	24	Cool White	24	9000	1300
			20566-6	F20T12/CW	6	Cool White, Retail Pack	24	9000	1300
			29903-2	F20T12/CW	2160	Cool White, Palletized	24	9000	1300
			26006-7	F20T12/CWX	24	Deluxe Cool White	24	9000	850
			26013-3	F20T12/D	24	Daylight	24	9000	1075
			37351-4	F20T12/D	6	Daylight	24	9000	1075
			36222-8	F20T12/N	24	Natural	24	9000	850
			37722-6	F20T12/N	6	Natural	24	9000	850
			36432-3	F20T12/SW	6	Soft White, Retail Pack	24	9000	850
			26011-7	F20T12/W	24	White	24	9000	1320
			37350-6	F20T12/W	6	White	24	9000	1320
			26007-5	F20T12/WW	24	Warm White	24	9000	1300
			37348-0	F20T12/WW	6	Warm White	24	9000	1300
			26881-3	F20T12/WWX	24	Deluxe Warm White	24	9000	850
			26806-0	F20T12/C50	24	Colortone 50	24	9000	850
			25133-0	F20T12/AGRO	24	Agro-Lite	24	9000	600
			24688-4	F20T12/AGRO	6	Agro-Lite, Retail Pack	24	9000	600
			37353-0	F20T12/B	6	Blue	24	9000	450
			31745-3	F20T12/BB	6	Special Blue	24	9000	225
			37354-8	F20T12/G	6	Green	24	9000	1850
			37356-3	F20T12/GO	6	Gold, Bug-A-Way	24	9000	900
			37355-5	F20T12/PK	6	Pink	24	9000	450
			37357-1	F20T12/R	6	Red	24	9000	80
			30118-4	F20T12/BL	6	Black Light(211)	24	9000	
			31435-1	F20T12/BLB	6	Black Lt. — Integral Filter(211)	24	9000	

☐ Exclusive Product

\$\$\$Energy Saving Product

High Volume Lamps

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Ultralume Preheat Fluorescent Lamps

20	T-12	Md. Bipin	31522-6	F20T12/30U	24	3000K Ultralume	24	9000	1360
			37999-0	F20T12/35U	24	3500K Ultralume	24	9000	1360
			☐ 31523-4	F20T12/41U	24	4100K Ultralume	24	9000	1360
			☐ 31524-2	F20T12/50U	24	5000K Ultralume	24	9000	1360

Preheat Fluorescent Lamps

25	T-12	Md. Bipin	26030-7	F25T12/CW	24	Cool White	33	7500	1950
			26041-4	F25T12/D	24	Daylight	33	7500	1650
			30126-7	F25T12/W	6	White	33	7500	1950
			30125-9	F25T12/WW	6	Warm White	33	7500	1950

Econ-o-watt Preheat Fluorescent Lamps Replaces F90T17 lamps. They are physically and electrically interchangeable.

84	T-12	Mg. Bipin	\$\$\$ 25106-6	F90T12/CW/60/EW	24	Cool White	60	9000	6250
			\$\$\$ 28764-9	F90T12/D/60/EW	24	Daylight	60	9000	5400
			\$\$\$ 28394-5	F90T12/W/60/EW	24	White	60	9000	6400

Econ-o-watt Rapid Start Fluorescent Lamps

25	T-12	Md. Bipin	\$\$\$ 35984-4	F30T12/CW/RS/EW-II	24	Cool White(209)(214)	36	18000	2000
			\$\$\$ 35985-1	F30T12/WW/RS/EW-II	24	Warm White(209)(214)	36	18000	2050

Rapid Start Fluorescent Lamps

30	T-12	Md. Bipin	26076-0	F30T12/CW/RS	24	Cool White	36	18000	2300
			26078-6	F30T12/CWX/RS	24	Deluxe Cool White	36	18000	1600
			26085-1	F30T12/D/RS	24	Daylight	36	18000	1950
			† 22115-0	F30T12/SPEC35/RS	24	3500K SPEC	36	18000	2400
			26083-6	F30T12/W/RS	24	White	36	18000	2370
			26079-4	F30T12/WW/RS	24	Warm White	36	18000	2370
			26886-2	F30T12/WWX/RS	24	Deluxe Warm White	36	18000	1600
			26808-6	F30T12/RS/C50	24	Colortone 50	36	18000	1280

Ultralume Rapid Start Fluorescent Lamps

30	T-12	Md. Bipin	31525-9	F30T12/30U/RS	24	3000K Ultralume	36	18000	2400
			† 38001-4	F30T12/35U/RS	24	3500K Ultralume	36	18000	2400
			☐ 31526-7	F30T12/41U/RS	24	4100K Ultralume	36	18000	2400
			☐ 31528-3	F30T12/50U/RS	24	5000K Ultralume	36	18000	2400

Octolume Rapid Start Fluorescent Lamps Use only with 265 ma ballasts

25	T-8	Md. Bipin	37196-3	F025/30	25	3000K Octolume	36	20000	2150
			37197-1	F025/41	25	4100K Octolume	36	20000	2150
32	T-8	Md. Bipin	28474-5	F032/30	25	3000K Octolume	48	20000	2900
			† 22229-9	F032/35	25	3500K Octolume	48	20000	2900
			28475-2	F032/41	25	4100K Octolume	48	20000	2900
40	T-8	Md. Bipin	34800-3	F040/30	25	3000K Octolume	60	20000	3650
			34801-1	F040/41	25	4100K Octolume	60	20000	3650

Econ-o-watt Rapid Start Fluorescent Lamps

34	T-12	Md. Bipin	\$\$\$ 28484-4	F40CW/RS/EW-II	30	Cool White(214)	48	20000 +	2775
			\$\$\$ 35786-3	F40CW/RS/EW-II	600	Cool White, Palletized(214)	48	20000 +	2775
			\$\$\$ 28511-4	F40CWX/RS/EW-II	30	Deluxe Cool White(214)	48	20000 +	1925
			\$\$\$ 28545-2	F40D/RS/EW-II	30	Daylight(214)	48	20000 +	2350
			\$\$\$ 28534-6	F40LW/RS/EW-II	30	Lite White(214)	48	20000 +	2925
			\$\$\$ 35790-5	F40LW/RS/EW-II	600	Lite White, Palletized(214)	48	20000 +	2925
			\$\$\$ 31553-1	F40SPEC30/RS/EW-II	30	3000K SPEC(214)	48	20000 +	2925
			\$\$\$ 37992-5	F40SPEC35/RS/EW-II	30	3500K SPEC(214)	48	20000 +	2925
			\$\$\$ 31546-5	F40SPEC41/RS/EW-II	30	4100K SPEC(214)	48	20000 +	2925

☐ Exclusive Product

\$\$\$ Energy Saving Product

☐ High Volume Lamps

† New Since Last Printing

FLUORESCENT

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Econ-o-watt Rapid Start Fluorescent Lamps

34	T-12	Md. Bipin	\$\$\$	28546-0	F40W/RS/EW-II	30	White(214)	48	20000 +	2825
			\$\$\$	28547-8	F40WW/RS/EW-II	30	Warm White(214)	48	20000 +	2825
			\$\$\$	36441-4	F40WW/RS/EW-II/EM	6	Warm White, Retail Pack(214)	48	20000 +	2825
			\$\$\$	35791-3	F40WW/RS/EW-II	600	Warm White, Palletized(214)	48	20000 +	2825
			\$\$\$	28527-0	F40WWX/RS/EW-II	30	Deluxe Warm White(214)	48	20000 +	1925

Ultralume Econ-o-watt Rapid Start Lamps

34	T-12	Md. Bipin	\$\$\$	31532-5	F40/30U/RS/EW-II	30	3000K Ultralume(214)	48	20000 +	2925
			\$\$\$	38004-8	F40/35U/RS/EW-II	30	3500K Ultralume(214)	48	20000 +	2925
			\$\$\$	31533-3	F40/41U/RS/EW-II	30	4100K Ultralume(214)	48	20000 +	2925
			□\$\$\$	31535-8	F40/50U/RS/EW-II	30	5000K Ultralume(214)	48	20000 +	2925

Econ-o-watt Preheat Fluorescent Lamps

34	T-12	Md. Bipin	□\$\$\$	28477-8	F40CW/EW-PH	30	Cool White(214)(215)	48	15000 +	2850
			□\$\$\$	28476-0	F40WW/EW-PH	30	Warm White(214)(215)	48	15000 +	2900

Preheat — Rapid Start Fluorescent Lamps

40	T-12	Md. Bipin		30187-9	F40CW	30	Cool White	48	20000 +	3150
				26180-0	F40CW	6	Cool White	48	20000 +	3150
				20568-2	F40CW	6	Cool White, Retail Pack	48	20000 +	3150
				35776-4	F40CW	600	Cool White, Palletized	48	20000 +	3150
				30192-9	F40CW/RFL	30	Cool White, Reflector	48	20000 +	2600
				30193-7	F40CWXX	30	Deluxe Cool White	48	20000 +	2200
				38900-7	F40CWXX	6	Deluxe Cool White	48	20000 +	2200
				30194-5	F40D	30	Daylight	48	20000 +	2600
				26198-2	F40D	6	Daylight	48	20000 +	2600
				30198-6	F40N	30	Natural	48	20000 +	2100
				37924-8	F40N	6	Natural	48	20000 +	2100
				22116-8	F40/SPEC35	30	3500 SPEC	48	20000 +	3300
				36440-6	F40SW	6	Soft White, Retail Pack	48	20000 +	2150
				30197-8	F40W	30	White	48	20000 +	3200
				26194-1	F40W	6	White	48	20000 +	3200
				30199-4	F40WW	30	Warm White	48	20000 +	3200
				20604-5	F40WW	6	Warm White	48	20000 +	3200
				35785-5	F40WW	600	Warm White, Palletized	48	20000 +	3200
				30201-8	F40WWX	30	Deluxe Warm White	48	20000 +	2200
				26888-8	F40WWX	6	Deluxe Warm White	48	20000 +	2200
				30203-4	F40C50	30	Colortone 50	48	20000 +	2200
				33464-9	F40C75	30	Colortone 75	48	20000 +	2000
				30204-2	F40CG	30	Cool Green	48	20000 +	2850
				31433-6	F40CG	6	Cool Green	48	20000 +	2850
				30205-9	F40/AGRO	30	Agro-Lite	48	20000 +	1600
				20597-1	F40/AGRO	6	Agro-Lite, Retail Pack	48	20000 +	1600
				39631-7	F40B	6	Blue	48	20000 +	1200
				20189-7	F40/BB	6	Special Blue	48	20000 +	550
				39632-5	F40G	6	Green	48	20000 +	4400
				39635-8	F40GO	6	Gold, Bug-A-Way	48	20000 +	2400
				39633-3	F40PK	6	Pink	48	20000 +	1160
				39634-1	F40R	6	Red	48	20000 +	195
				31439-3	F40BL	6	Black Light (211)	48	20000 +	
				31440-1	F40BLB	6	Black Lt. — Integral Filter (211)	48	20000 +	

Ultralume Preheat — Rapid Start Fluorescent Lamps

40	T-12	Md. Bipin		31537-4	F40/30U	30	3000K Ultralume	48	20000 +	3300
				38003-0	F40/35U	30	3500K Ultralume	48	20000 +	3300
				31538-2	F40/41U	30	4100K Ultralume	48	20000 +	3300
			□	31539-0	F40/50U	30	5000K Ultralume	48	20000 +	3300

□ Exclusive Product

\$\$\$ Energy Saving Product

High Volume Lamps

†New Since Last Printing

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Preheat — Rapid Start Extended Service Fluorescent Lamps

	40	T-10	Md. Bipin	☐	25009-2	F40T10/CW/99	30	Cool White, Ext. Serv.	48	24000 + (205)	3200
				☐	25031-6	F40T10/CWX/99	30	Deluxe Cool White, Ext. Serv.	48	24000 + (205)	2270
				☐	25059-7	F40T10/D/99	30	Daylight, Ext. Serv.	48	24000 + (205)	2700
				☐	25060-5	F40T10/LW-SB/99	30	Lite White — Super Bright	48	24000 + (205)	3400
				☐	25066-2	F40T10/W/99	30	White, Ext. Serv.	48	24000 + (205)	3250
				☐	25070-4	F40T10/WW/99	30	Warm White, Ext. Serv.	48	24000 + (205)	3250

Advantage X Preheat — Rapid Start Extended Service Fluorescent Lamps

40	T-10	Md. Bipin	☐	20714-2	F40AX30	30	3000K Advantage X	48	24000 + (205)	3700
			☐	24992-0	F40AX35	30	3500K Advantage X	48	24000 + (205)	3700
			☐	24996-1	F40AX41	30	4100K Advantage X	48	24000 + (205)	3700

Instant Start Fluorescent Lamps

F40T12/IS/60 lamps replace F40T17/IS. They are physically and electrically interchangeable.

40	T-12	Md. Bipin		30237-2	F40T12/CW/IS	30	Cool White(206)	48	7500	3100
				30238-0	F40T12/D/IS	30	Daylight(206)	48	7500	2500
				30123-4	F40T12/WW/IS	6	Warm White(206)	48	7500	3100
40	T-12	Mg. Bipin		28396-0	F40T12/CW/IS/60	24	Cool White(206)	60	7500	3400
				28395-2	F40T12/WW/IS/60	24	Warm White(206)	60	7500	3400

High Output Fluorescent Lamps (800 ma)

35	T-12	Recessed D.C.		26279-0	F24T12/CW/HO	24	Cool White(207)	24	9000	1700
				26274-1	F24T12/D/HO	24	Daylight(207)	24	9000	1400
				27409-2	F24T12/C50/HO	24	Colortone 50(207)	24	9000	1140
40	T-12	Recessed D.C.		22646-4	F30T12/CW/HO	24	Cool White(207)	30	9000	2290
				34334-3	F30T12/D/HO	24	Daylight(207)	30	9000	1920
50	T-12	Recessed D.C.		26286-5	F36T12/CW/HO	24	Cool White(207)	36	9000	2900
				26290-7	F36T12/D/HO	24	Daylight(207)	36	9000	2500
				27099-1	F36T12/C50/HO	24	Colortone 50(207)	36	9000	1900
55	T-12	Recessed D.C.		26304-6	F42T12/CW/HO	24	Cool White(207)	42	9000	3500
				26306-1	F42T12/D/HO	24	Daylight(207)	42	9000	3000
				27114-8	F42T12/C50/HO	24	Colortone 50(207)	42	9000	2240
60	T-12	Recessed D.C.		22242-2	F48T12/CW/HO	30	Cool White(207)	48	12000	4300
				22380-0	F48T12/CW/HO	10	Cool White(207)	48	12000	4300
				35613-9	FJ48T12/CW/HO	8	Cool White, T-14½ Jacket(207)	48	12000	4300††
				22384-2	F48T12/CWX/HO	10	Deluxe Cool White(207)	48	12000	3050
				22272-9	F48T12/D/HO	30	Daylight(207)	48	12000	3600
				27120-5	F48T12/C50/HO	30	Colortone 50(207)	48	12000	2850
				22280-2	F48T12/W/HO	30	White(207)	48	12000	4300
				22281-0	F48T12/WW/HO	30	Warm White(207)	48	12000	4300
				22283-6	F48T12/N/HO	30	Natural(207)	48	12000	2700
75	T-12	Recessed D.C.		22285-1	F60T12/CW/HO	30	Cool White(207)	60	12000	5400
				22293-5	F60T12/D/HO	30	Daylight(207)	60	12000	4650
				27125-4	F60T12/C50/HO	30	Colortone 50(207)	60	12000	3580
				22301-6	F60T12/WW/HO	30	Warm White(207)	60	12000	5500
80	T-12	Recessed D.C.		22322-2	F64T12/CW/HO	30	Cool White(207)	64	12000	5800
				22323-0	F64T12/D/HO	30	Daylight(207)	64	12000	4900
				27415-9	F64T12/C50/HO	30	Colortone 50(207)	64	12000	3840
85	T-12	Recessed D.C.		21199-5	F72T12/CW/HO	15	Cool White(207)	72	12000	6650
				35615-4	FJ72T12/CW/HO	8	Cool White, T-14½ Jacket(207)	72	12000	6650††
				21200-1	F72T12/D/HO	15	Daylight(207)	72	12000	5600
				27148-6	F72T12/C50/HO	15	Colortone 50(207)	72	12000	4400
				22385-9	F72T12/WW/HO	10	Warm White(207)	72	12000	6650
				22388-3	F72T12/GO/HO	10	Gold(207)	72	12000	4400
				21204-3	F72T12/N/HO	15	Natural(207)	72	12000	4200
95	T-12	Recessed D.C.		21205-0	F84T12/CW/HO	15	Cool White(207)	84	12000	7800
				21206-8	F84T12/D/HO	15	Daylight(207)	84	12000	6900
				27426-6	F84T12/C50/HO	15	Colortone 50(207)	84	12000	5180

☐ Exclusive Product

\$\$\$Energy Saving Product

☐ High Volume Lamps

†New Since Last Printing

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Econ-o-watt High Output Fluorescent Lamps (800 ma)

95	T-12	Rec. D.C.	\$\$\$	34214-7	F96T12/CW/HO/EW	15	Cool White(207)(214)	96	12000	8300
				34215-4	F96T12/D/HO/EW	15	Daylight(207)(214)	96	12000	7200
				34216-2	F96T12/LW/HO/EW	15	Lite White(207)(214)	96	12000	8800
				34861-5	F96T12/SPEC30/HO/EW	15	3000K SPEC(207)(214)	96	12000	8800
				22117-6	F96T12/SPEC35/HO/EW	15	3500K SPEC(207)(214)	96	12000	8800
				34848-2	F96T12/SPEC41/HO/EW	15	4100K SPEC(207)(214)	96	12000	8800
				34218-8	F96T12/W/HO/EW	15	White(207)(214)	96	12000	8500
				34219-6	F96T12/WW/HO/EW	15	Warm White(207)(214)	96	12000	8500

Ultralume Econ-o-watt High Output Fluorescent Lamps (800 ma)

95	T-12	Rec. D.C.	\$†□	34862-3	F96T12/41U/HO/EW	15	4100K Ultralume(207)(214)	96	12000	8900
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High Output Fluorescent Lamps (800 ma)

110	T-12	Rec. D.C.	34220-4	F96T12/CW/HO	15	Cool White(207)	96	12000	9200
			34221-2	F96T12/CW/RFL/HO	15	Cool White, Reflector(207)	96	12000	7550
			35623-8	FJ96T12/CW/HO	8	Cool White, T-14½ Jacket(207)	96	12000	9200††
			34222-0	F96T12/CWX/HO	15	Deluxe Cool White(207)	96	12000	6600
			34223-8	F96T12/D/HO	15	Daylight(207)	96	12000	7800
			34227-9	F96T12/W/HO	15	White(207)	96	12000	9200
			34228-7	F96T12/WW/HO	15	Warm White(207)	96	12000	9200
			34247-7	F96T12/GO/HO	10	Gold(207)	96	12000	6200
			34230-3	F96T12/N/HO	15	Natural(207)	96	12000	6250
			†	34226-1	F96T12/C50/HO	15	Colortone 50(207)	96	12000
100	T-12	Md. Bipin	26227-9	F100T12/CW/HO	12	Cool White, Street Ltg.(208)	72	7500	6950

Ultralume High Output Lamps (800 ma)

60	T-12	Rec. D.C.	□	22284-4	F48T12/41U/HO	30	4100K Ultralume(207)	48	12000	4500
85	T-12	Rec. D.C.	□	21904-8	F72T12/41U/HO	15	4100K Ultralume(207)	72	12000	6650
110	T-12	Rec. D.C.	□	34863-1	F96T12/30U/HO	15	3000K Ultralume(207)	96	12000	9400
				34864-9	F96T12/41U/HO	15	4100K Ultralume(207)	96	12000	9400
				34865-6	F96T12/50U/HO	15	5000K Ultralume(207)	96	12000	9400

Very-Hi Output Fluorescent Lamps (1500 ma)

59	T-12	Rec. D.C.		21392-6	F18T12/CW/135RFL/VHO-II	12	Cool White Reflector	18	9000	1400
73	T-12	Rec. D.C.		20952-8	F24T12CW/135RFL/VHO-II	24	Cool White Reflector	24	9000	2400
110	T-12	Rec. D.C.		22332-1	F48T12CW/VHO	30	Cool White	48	12000	6950
				25321-1	F48T12/D/VHO	10	Daylight	48	12000	5940
				25324-5	F48T12/WW/VHO	10	Warm White	48	12000	7200
135	T-12	Rec. D.C.		22335-4	F60T12/CW/VHO	30	Cool White	60	12000	8900
160	T-12	Rec. D.C.		21210-0	F72T12/CW/VHO	15	Cool White	72	12000	11100
				22389-1	F72T12/D/VHO	10	Daylight	72	12000	9380
				22392-5	F72T12/WW/VHO	10	Warm White	72	12000	11300

Econ-o-watt Very-Hi Output Fluorescent Lamps (1500 ma)

185	T-12	Rec. D.C.	\$\$\$	34232-9	F96T12/CW/VHO/EW	15	Cool White(214)	96	12000	14000
				34233-7	F96T12/LW/VHO/EW	15	Lite White(214)	96	12000	14900

Very-Hi Output Fluorescent Lamps (1500 ma)

215	T-12	Rec. D.C.		34234-5	F96T12/CW/VHO	15	Cool White	96	12000	15500
				34236-0	F96T12/CWX/VHO	15	Deluxe Cool White	96	12000	11000
				34237-8	F96T12/D/VHO	15	Daylight	96	12000	12900
				34224-6	F96T12/W/VHO	10	White	96	12000	16000
				34242-8	F96T12/WW/VHO	15	Warm White	96	12000	16000

□ Exclusive Product

\$\$\$ Energy Saving Product

High Volume Lamps

†New Since Last Printing

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Outdoor (1500 ma) T-12 Fluorescent Lamps

116	T-12	Recessed D.C.	22340-4	F48T12/CW/VHO-0	30	Cool White	48	10000	6900†
			22342-0	F48T12/CWX/VHO-0	30	Deluxe Cool White	48	10000	5000†
140	T-12	Recessed D.C.	22345-3	F60T12/CW/VHO-0	30	Cool White	60	10000	9400†
162	T-12	Recessed D.C.	21211-8	F72T12/CW/VHO-0	15	Cool White	72	10000	12000†
212	T-12	Recessed D.C.	34243-6	F96T12/CW/VHO-0	15	Cool White	96	10000	15500†

Low Temperature Lighting Jacketed Lamps (1500 ma) T14½ (1⅓/16" Dia. Jacket)

116	T-12	Recessed D.C.	28409-1	FJ48T12/CW/VHO-0	12	Cool White	48	10000	6900†
			28408-3	FJ48T12/CWX/VHO-0	12	Deluxe Cool White	48	10000	5000†
140	T-12	Recessed D.C.	26471-3	FJ60T12/CW/VHO-0	12	Cool White	60	10000	9400†
162	T-12	Recessed D.C.	28410-9	FJ72T12/CW/VHO-0	8	Cool White	72	10000	12000†
212	T-12	Recessed D.C.	28397-8	FJ96T12/CW/VHO-0	8	Cool White	96	10000	15500†

Econ-o-watt Slimline Fluorescent Lamps (Instant Start) T-8 Approx. 1" Diameter

F42T8/EW lamps replace F42T6. F64T8/EW lamps replace F64T6. These energy saving lamps are physically and electrically interchangeable.

23	T-8	Single Pin	\$\$\$	34355-8	F42T8/CW/EW	24	Cool White(210)(214)	42	7500	1800
			\$\$\$	34358-2	F42T8/CWX/EW	24	Deluxe Cool White(210)(214)	42	7900	1250
			\$\$\$	34359-0	F42T8/D/EW	24	Daylight(210)(214)	42	7500	1560
			\$\$\$	34362-4	F42T8/WW/EW	24	Warm White(210)(214)	42	7500	1800
			\$\$\$	34363-2	F42T8/WWX/EW	24	Deluxe Warm White(210)(214)	42	7500	1250
35	T-8	Single Pin	\$\$\$	34364-0	F64T8/CW/EW	24	Cool White(210)(214)	64	7500	2850
			\$\$\$	34365-7	F64T8/CWX/EW	24	Deluxe Cool White(210)(214)	64	7500	2000
			\$\$\$	34366-5	F64T8/WW/EW	24	Warm White(210)(214)	64	7500	2850

Slimline Fluorescent Lamps (Instant Start) T-8 Approx. 1" Diameter

37.5	T-8	Single Pin	26355-8	F72T8/CW	24	Cool White(210)	72	7500	3000
			39829-7	F72T8/WW	6	Warm White(210)	72	7500	3000
50	T-8	Single Pin	26397-0	F96T8/CW	24	Cool White(210)	96	7500	4300
			39830-5	F96T8/CW	6	Cool White(210)	96	7500	4300
			39831-3	F96T8/CWX	6	Deluxe Cool White(210)	96	7500	2870
			39834-7	F96T8/D	6	Daylight(210)	96	7500	3450
			39833-9	F96T8/W	6	White(210)	96	7500	4200
			26401-0	F96T8/WW	24	Warm White(210)	96	7500	4200

T-12 Approx. 1½" Diameter

20	T-12	Single Pin	26277-4	F24T12/CW	24	Cool White	24	7500	1150
			26281-6	F24T12/D	24	Daylight	24	7500	990
30	T-12	Single Pin	26284-0	F36T12/CW	24	Cool White	36	7500	1950
			26289-9	F36T12/D	24	Daylight	36	7500	1680
35	T-12	Single Pin	26303-8	F42T12/CW	24	Cool White	42	7500	2300
			26305-3	F42T12/D	24	Daylight	42	7500	1980

Econ-o-watt Slimline Fluorescent Lamps (Instant Start)

30	T-12	Single Pin	\$\$\$	22348-7	F48T12/CW/EW	30	Cool White(214)	48	9000	2500
			\$\$\$	22352-9	F48T12/LW/EW	30	Lite White(214)	48	9000	2675

Slimline Fluorescent Lamps (Instant Start) T-12 Approx. 1½" Diameter

38.5	T-12	Single Pin	22353-7	F48T12/CW	30	Cool White	48	9000	3000
			22396-6	F48T12/CW	10	Cool White	48	9000	3000
			22354-5	F48T12/CWX	30	Deluxe Cool White	48	9000	2100
			22356-0	F48T12/D	30	Daylight	48	9000	2500
			22401-4	F48T12/GO	10	Gold	48	9000	2340
			22405-5	F48T12/N	10	Natural	48	9000	1900
			22358-6	F48T12/W	30	White	48	9000	3000
			22359-4	F48T12/WW	30	Warm White	48	9000	3000

□ Exclusive Product

\$\$\$Energy Saving Product

High Volume Lamps

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Slimline Fluorescent Lamps (Instant Start) T-12 Approx. 1 1/2" Diameter

50	T-12	Single Pin	22362-8	F60T12/CW	30	Cool White	60	12000	3550
			22406-3	F60T12/CW	10	Cool White	60	12000	3550
			22365-1	F60T12/D	30	Daylight	60	12000	3150
51	T-12	Single Pin	22369-3	F64T12/CW	30	Cool White	64	12000	3850
			22370-1	F64T12/D	30	Daylight	64	12000	3200
56	T-12	Single Pin	21213-4	F72T12/CW	15	Cool White	72	12000	4600
			22407-1	F72T12/CW	10	Cool White	72	12000	4600
			21214-2	F72T12/CWX	15	Deluxe Cool White	72	12000	3100
			21218-3	F72T12/D	15	Daylight	72	12000	3800
			22408-9	F72T12/N	10	Natural	72	12000	3100
56	T-12	Single Pin	21224-1	F72T12/W	15	White	72	12000	4650
			21227-4	F72T12/WW	15	Warm White	72	12000	4650
			22413-9	F72T12/WWX	10	Deluxe Warm White	72	12000	3100
			22416-2	F72T12/GO	10	Gold	72	12000	3040
65	T-12	Single Pin	22377-6	F84T12/CW	15	Cool White	84	12000	5400
			21237-3	F84T12/D	15	Daylight	84	12000	4425

Econ-o-watt Slimline Fluorescent Lamps (Instant Start)

60	T-12	Single Pin	\$\$\$	34189-1	F96T12/CW/EW	15	Cool White(214)	96	12000	5600
			\$\$\$	34191-7	F96T12/CWX/EW	15	Deluxe Cool White(214)	96	12000	4000
			\$\$\$	34192-5	F96T12/D/EW	15	Daylight(214)	96	12000	4840
			\$\$\$	34193-3	F96T12/LW/EW	15	Lite White(214)	96	12000	6000
			\$\$\$	34846-6	F96T12/SPEC30/EW	15	3000K SPEC(214)	96	12000	5850
			\$\$\$	37998-2	F96T12/SPEC35/EW	15	3500K SPEC(214)	96	12000	5850
			\$\$\$	34844-1	F96T12/SPEC41/EW	15	4100K SPEC(214)	96	12000	5850
			\$\$\$	34194-1	F96T12/W/EW	15	White(214)	96	12000	5600
			\$\$\$	34195-8	F96T12/WW/EW	15	Warm White(214)	96	12000	5600
			\$\$\$	34196-6	F96T12/WWX/EW	15	Deluxe Warm White(214)	96	12000	3870
			\$\$\$	34198-2	F96T12/C50/EW	15	Colortone 50(214)	96	12000	4100

Ultralume Econ-o-watt Slimline Fluorescent Lamp (Instant Start)

60	T-12	Single Pin	\$\$\$	34205-5	F96T12/30U/EW	15	3000°K Ultralume(214)	96	12000	5860
			†\$\$\$	22175-4	F96T12/35U/EW	15	3500°K Ultralume(214)	96	12000	5860
			\$\$\$	34207-1	F96T12/41U/EW	15	4100°K Ultralume(214)	96	12000	5860
			□\$\$\$	34209-7	F96T12/50U/EW	15	5000°K Ultralume(214)	96	12000	5860

Slimline Fluorescent Lamps (Instant Start) T-12 Approximately 1 1/2" Diameter

75	T-12	Single Pin	+	34158-6	F96T12/CW	15	Cool White	96	12000	6300
				34172-7	F96T12/CW	10	Cool White	96	12000	6300
				34160-2	F96T12/CW/RFL	15	Cool White, Reflector	96	12000	5200
				34161-0	F96T12/CWX	15	Deluxe Cool White	96	12000	4500
				34173-5	F96T12/CWX	10	Deluxe Cool White	96	12000	4500
				34162-8	F96T12/D	15	Daylight	96	12000	5450
				34174-3	F96T12/D	10	Daylight	96	12000	5450
				34165-1	F96T12/N	15	Natural	96	12000	4300
				34176-8	F96T12/N	10	Natural	96	12000	4300
				22118-4	F96T12/SPEC35	15	3500K SPEC	96	12000	6600
				34166-9	F96T12/W	15	White	96	12000	6400
				34168-5	F96T12/WW	15	Warm White	96	12000	6400
				34178-4	F96T12/WW	10	Warm White	96	12000	6400
				34169-3	F96T12/WWX	15	Deluxe Warm White	96	12000	4350
				34170-1	F96T12/C50	15	Colortone 50	96	12000	4650
				34171-9	F96T12/CG	15	Cool Green	96	12000	5400
				34181-8	F96T12/B	10	Blue	96	12000	2500
				34183-4	F96T12/G	10	Green	96	12000	9000
				34184-2	F96T12/GO	10	Gold	96	12000	4600
				34185-9	F96T12/PK	10	Pink	96	12000	2400
				34187-5	F96T12/R	10	Red	96	12000	300

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Ultralume Slimline Fluorescent Lamps (Instant Start) T-12 Approximately 1 1/2" Diameter

38.5	T-12	Single Pin	22377-6	F48T12/30U	30	3000K Ultralume	48	9000	3140
56	T-12	Single Pin	21230-8	F72T12/30U	15	3000K Ultralume	72	12000	4820
			21235-7	F72T12/41U	15	4100K Ultralume	72	12000	4820
75	T-12	Single Pin	34200-6	F96T12/30U	15	3000K Ultralume	96	12000	6600
			38005-5	F96T12/35U	15	3500K Ultralume	96	12000	6600
			34201-4	F96T12/41U	15	4100K Ultralume	96	12000	6600
			34204-8	F96T12/50U	15	5000K Ultralume	96	12000	6600

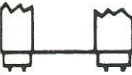
Circline Fluorescent Lamps† T-9 Approx. 1 1/8" Diameter

20	T-9	4-Pin	24982-1	FC6T9/CW	12	Cool White	O.D. 6 1/2	12000	800
			24981-3	FC6T9/WW	12	Warm White	O.D. 6 1/2	12000	825
22	T-9	4-Pin	20601-1	FC8T9/CW	12	Cool White	O.D. 8 1/4	12000	1050
			26234-5	FC8T9/D	12	Daylight	O.D. 8 1/4	12000	910
			36445-5	FC8T9/SW	12	Soft White	O.D. 8 1/4	12000	745
			26243-6	FC8T9/WW	12	Warm White	O.D. 8 1/4	12000	1000
			26247-7	FC8T9/BL	12	Black Light(211)	O.D. 8 1/4	12000	
32	T-9	4-Pin	20602-9	FC12T9/CW	12	Cool White	O.D. 12	12000	1800
			26260-0	FC12T9/D	12	Daylight	O.D. 12	12000	1570
			36446-3	FC12T9/SW	12	Soft White	O.D. 12	12000	1300
			26259-2	FC12T9/W	12	White	O.D. 12	12000	1830
			26255-0	FC12T9/WW	12	Warm White	O.D. 12	12000	1800
			26263-4	FC12T9/BL	12	Black Light(211)	O.D. 12	12000	
40	T-9	4-Pin	36451-3	FC16T9/CW	12	Cool White	O.D. 16	12000	2500
			26273-3	FC16T9/D	12	Daylight	O.D. 16	12000	2000
			36452-1	FC16T9/SW	12	Soft White	O.D. 16	12000	1760
			22662-1	FC16T9/WW	12	Warm White	O.D. 16	12000	2500

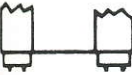
Econ-o-watt U-Bent Fluorescent Lamps T-12 Approx. 1 1/2" Diameter Each Leg

34	T-12	Md. Bipin	\$\$\$	29425-6	FB40CW/6/EW-II	12	Cool White(212)(214)	22 7/16	12000	2600
			\$\$\$	30240-6	FB40LW/6/EW-II	12	Lite White(212)(214)	22 7/16	12000	2730
			\$\$\$	29424-9	FB40WW/6/EW-II	12	Warm White(212)(214)	22 7/16	12000	2600

U-Bent Fluorescent Lamps T-12 Approx. 1 1/2" Diameter Each Leg

40	T-12	Md. Bipin		26812-8	FB40CW/3	12	Cool White(212)	22 7/16	12000	2825
				26811-0	FB40WW/3	12	Warm White(212)	22 7/16	12000	2800
				30090-5	FB40CW/6	12	Cool White(212)	22 7/16	12000	2950
				25147-0	FB40CW/6	12	Deluxe Cool White(212)	22 7/16	12000	2080
				23706-5	FB40/SPEC35/6	12	3500K SPEC(212)	22 7/16	12000	3075
				30088-9	FB40W/6	12	White(212)	22 7/16	12000	3025
				30091-3	FB40WW/6	12	Warm White(212)	22 7/16	12000	3025
				30242-2	FB40WWX/6	12	Deluxe Warm White(212)	22 7/16	12000	1950

Ultralume U-Bent Fluorescent Lamps T-12 Approx. 1 1/2" Diameter Each Leg

40	T-12	Md. Bipin		21238-1	FB40/30U/3	12	3000K Ultralume(212)	22 7/16	12000	3015
				21240-7	FB40/41U/3	12	4100K Ultralume(212)	22 7/16	12000	3015
				35449-8	FB40/30U/6	12	3000K Ultralume(212)	22 7/16	12000	3150
				22124-2	FB40/35U/6	12	3500K Ultralume(212)	22 7/16	12000	3150
				34876-3	FB40/41U/6	12	4100K Ultralume(212)	22 7/16	12000	3150

☐ Exclusive Product

\$\$\$ Energy Saving Product

☐ High Volume Lamps

† New Since Last Printing

FLUORESCENT

Fluorescent Lamps

Nominal Lamp Watts	Bulb	Base(216)	NAED Number 04-6677-	Ordering Code	Pg. Qty.	Description	Nominal Length (In.)(201)	Aver. Life, Hrs. (202)	Approx.: Initial(203) Lumens(204)
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Appliance Fluorescent Lamps (For use with Starters)

14	T-8	Md. Bipin	25914-3	F14T8/CW/15	24	Cool White	15	7500	700
			25915-0	F14T8/D/15	24	Daylight	15	7500	580
15	T-8	Md. Bipin	25938-2	F15T8/CW/24	24	Cool White	24	7500	1175
16	T-8	Md. Bipin	25989-5	F16T8/CW/26	24	Cool White	26	7500	1275
22	T-8	Md. Bipin	26028-1	F22T8/CW/26	24	Cool White	26	7500	1275
17	T-8	Md. Bipin	25990-3	F17T8/CW/28	24	Cool White	28	7500	1350
18	T-8	Md. Bipin	25992-9	F18T8/CW/30	24	Cool White	30	7500	1400
20	T-12	Md. Bipin	25999-4	F20T12/CW/26	24	Cool White	26	7500	1250
			20450-3	F20T12/D/22	24	Daylight	22	7500	900
25	T-12	Md. Bipin	26034-9	F25T12/CW/28	24	Cool White	28	7500	1600
			26042-2	F25T12/D/28	24	Daylight	28	7500	1370
			26033-1	F25T12/CW/30	24	Cool White	30	7500	1600

Luma-Stick

Portable Fluorescent Plug-in Light Fixture

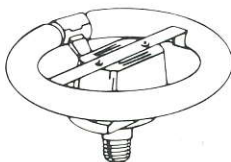


Complete with one F15T12/WW/EM 15 watt Warm White fluorescent lamp

18	Includes ballast		36456-2	FLS15/WW/EM	6	Luma-Stick	23 3/4	9000 (Lamp Only)	800
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Luma-Circle

Screw in Fluorescent Circline Lighting Fixture



Complete with one FC8T9/WW fluorescent lamp

25	Includes ballast	Med.▲	\$\$\$	36461-2	FLC22/WW/EM	6	Luma-Circle	O.D. 8 1/4	12000 (Lamp Only)	1000
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SL* Lamps

Screw in Electronic Fluorescent System with integral electronic ballast

SL* 18



SL* 18/G40



SL* 18/R40



18	SL*18	Med.▲	□\$\$\$	30570-6	SL*18/27	6	Compact 2700 K	7 5/16	10000	1100
	G-40	Med.▲	†□\$\$\$	36815-9	SL*18/G40W/27	6	Globe 2700 K	7 1/4	7500	950
	R-40	Med.▲	†□\$\$\$	34297-2	SL*18/R40W/27	6	Reflector 2700 K	7 1/4	10000	800

□ Exclusive Product

\$\$\$ Energy Saving Product

High Volume Lamps

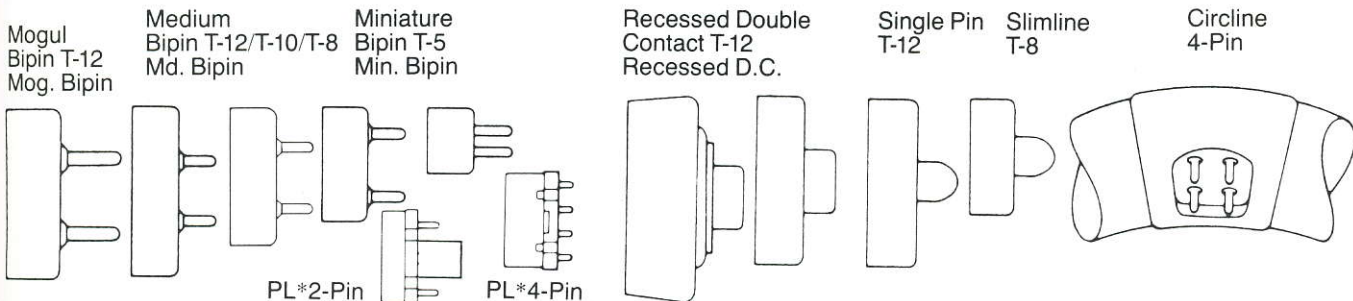
†New Since Last Printing

Footnotes

- Because of frequent improvements, the values listed may not be current ratings. For design purposes, obtain ratings from current technical bulletins.
 - †† Peak values.
 - † Rapid start design for operation in preheat, trigger start or rapid start fixtures.
 - Quantity shown is a minimum shipping container—Refer to Net Price Schedule for number of lamps to qualify as a standard case.
 - ▲ Medium screw base.
- (201) Nominal length is the overall length of one lamp base face to base face, plus two standard lamp holders.
- (202) Average life under specified test conditions with lamps turned off and restarted no oftener than once every 3 burning hours. Lamp life is appreciably longer if lamps are started less frequently.
- (203) Actual lumens produced will depend on the operating conditions; chiefly on the ballast used and the line voltage applied.
- (204) Approximate initial lumens after 100 hours operation.
- (205) Approx. hours life value for F40 lamps apply to rapid start burning at 3 or more burning hours per start. On preheat circuits rated average life at 3 or more burning hours per start is 15000 + hours. F40/99 under similar operation is 19000 + hours.
- (206) The pins of these lamps are short circuited inside the end caps and lamp will not operate on preheat or rapid start ballast circuits.
- (207) Approximate initial Lumens are for 800 ma. operation. For 1000 ma. operation Lumens are approximately 10% higher and watts approximately 15% higher.
- (208) Approximate initial lumens are for operation at 1000 ma. Life under specified test conditions with lamps turned off and restarted no oftener than once every 10 burning hours.
- (209) Operation on existing single lamp ballasts is not recommended because of marginal starting.
- (210) Approximate initial lumens are for operation at 200 ma.
- (211) Designed for service other than illumination. No claim is made for the effectiveness in medical applications.
- (212) Nominal-length measured from face of base to maximum distant outside point of U. Measurement does not include base pins. Leg spacing center to center approximately 6"; for 6 and 3 5/8" for 3/ lamps.
- (213) Unique construction maintains light output over a wide range of operating temperatures.
- (214) Econ-o-watt lamps are only recommended for use on high power factor lead, indoor ballasts that meet ANSI standards. The lamps are not recommended for use in drafty areas, or locations where the ambient temperature is less than 60°F, except as noted. Also they should not be operated on low power factor ballasts, reduced light or reduced current ballasts, dimming ballasts or emergency system inverter ballasts.
- (215) This lamp will operate on rapid start circuits provided ambient temperature is above 60°F, line voltage is 116 volts or higher and the lamps are located within 1/4" of the grounded starting aid (usually the reflector).
- (216) PL*5, -7, -9 & -13 and all PLC*10MM lamps have 10MM (.39 in.) diameter tubes, and PL*18W, 24W & 36W and PLC*15MM have 15MM (.59 in.) diameter tubes. PL*5 lamps should not be operated in sockets intended only for PL*7 and PL*9 lamps. PL*13 and PLC*10MM/13W/27/USA lamps are electrically compatible and may be operated from the same socket.

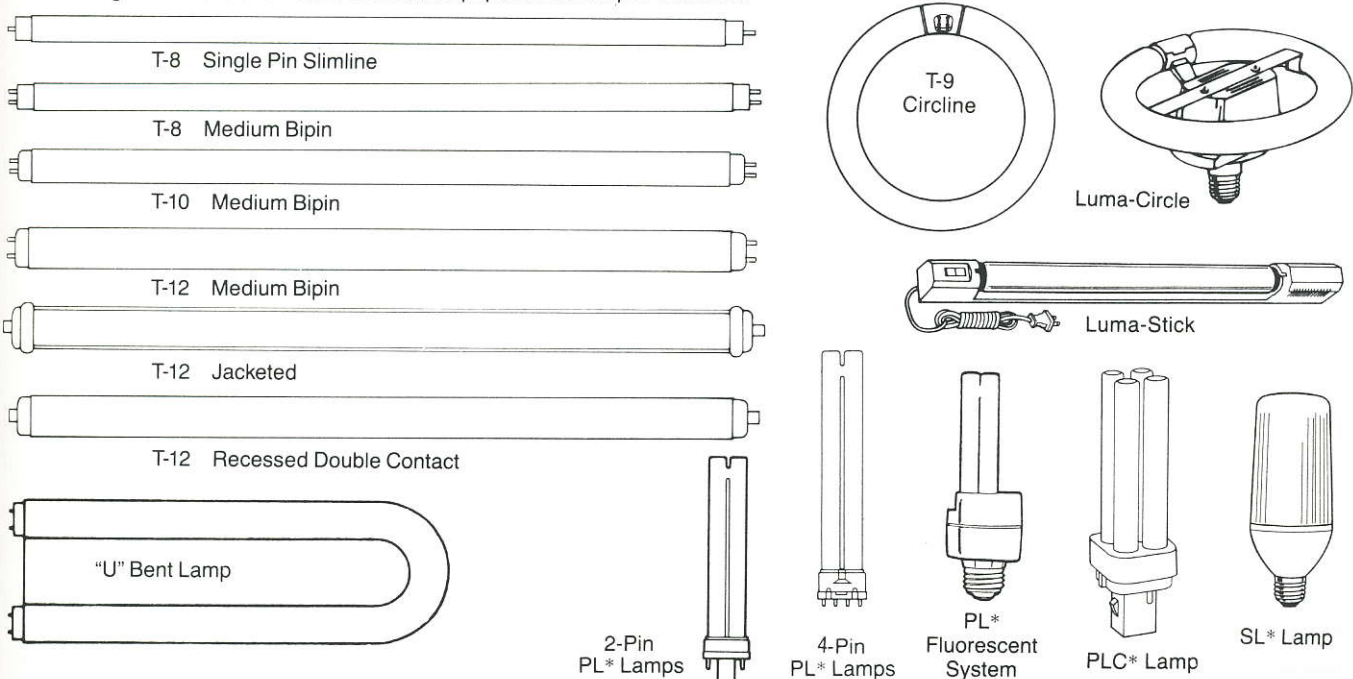
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Base Types (not Actual Sizes)



Bulb Shapes (Not Actual Sizes)

The size and shape of a bulb is designated by a letter or letters followed by a number. The letter indicates the shape of the bulb while the number indicates the diameter of the bulb in eighths of an inch. For example, "T-12" indicates a tubular shaped bulb having a diameter of 12/8 or 1 1/2 inches. The following illustrations show some of the more popular bulb shapes and sizes.



Fluorescent Lamps

Ordering Code Cross Reference Guide

Although certain fluorescent lamp types listed by Philips, General Electric and Sylvania have different ordering codes, they are physically and electrically interchangeable. For your convenience, we are listing a direct type comparison between manufacturers.

In certain areas the Philips lamp offers a customer advantage over its competitive counterpart. For example, the Philips F40T12/IS/60 and F90T12/60 lamps offer the advantages of easier handling and stocking over the competitive T-17 lamp.

In the Econ-o-watt line only Philips makes an F40/EW-PH lamp for preheat installations.

Fluorescent Lamp Interchangeability Comparison

Philips	General Electric	Sylvania
PL*5/27	—	F5TT/27K
PL*7/27	F7TT/SPX27	F7TT/27K
PL*9/27	F9TT/SPX27	F9TT/27K
PL*13/27	F13TT/SPX27	F13TT/27K
PL*18/41	F18BX/SPX41	—
PL*24/41	F24BX/SPX41	—
PL*36/35	F39BX/SPX35	—
PLC*10MM/13W/27/USA	—	F13DTT/27K
F15T8/CW/24	F24" T8/CW/4	F18T8/CW/K/24
F16T8/CW/26	F26" T8/CW/4	F18T8/CW/K/26
F17T8/CW/28	F28" T8/CW/4	F18T8/CW/K/28
F18T8/CW/30	F30" T8/CW/4	F18T8/CW/K/30
F20T12/CW (6 Pack)	F20T12/CW (6 Pack)	F20T12/CW/6
F25T12/CW	F25T12/CW/33	F25T12/CW/33
F30T12/CW/RS/EW-II	F30T12/CW/RS/WM	F30T12/CW/RS/SS
FO25/41	F25T8/SP41/RS	FO25/41K
FO32/41	F32T8/SP41/RS	FO32/41K
FO40/41	F40T8/SP41/RS	FO40/41K
F40CW/RS/EW-II	F40CW/RS/WM	F40CW/RS/SS
F40LW/RS/EW-II	F40LW/RS/WM-II	F40LW/RS/SS
F42T8/CW/EW	F42T6/CW	F42T6/CW
F64T8/CW/EW	F64T6/CW	F64T6/CW
F96T12/CW/EW	F96T12/CW/WM	F96T12/CW/SS
F96T12CW/HO/EW	F96T12/CW/HO/WM	F96T12/CW/HO/SS
F96T12CW/VHO/EW	F96PG17/CW/WM	F96T12/CW/VHO/SS
F40CW/RFL	FR40CW	FR40CW/235
FB40CW/6/EW-II	F40CW/U/6/WM	FB40CW/6/SS
FB40CW/3	FB40CW/U/3	—
FB40CW/6	F40CW/U/6	FB40/CW/6"
F40T12/CW/IS/60	F40T17/CW/IS	F40T17/CW/IS
F90T12/CW/60/EW	F90T17/CW	F90T17/CW
F48T12/CW/VHO	F48T12/CW/1500	F48T12/CW/VHO
	F48PG17/CW	
F72T12/CW/VHO	F72T12/CW/1500	F72T12/CW/VHO
	F72PG17/CW	
F96T12/CW/VHO	F96T12/CW/1500	F96T12/CW/VHO
	F96PG17/CW	
F48T12/CW/VHO-O	F48T12/CW/1500/0	F48T12/CW/VHO/LT
		F48T12/CW/VHO/O
F60T12/CW/VHO-O	F60T10/CW	—
F72T12/CW/VHO-O	F72T12/CW/1500/0	F72T12/CW/VHO/LT
		F72T12/CW/VHO/O
F96T12/CW/VHO-O	F96T12/CW/1500/0	F96T12/CW/VHO/LT
		F96T12/CW/VHO/O
FJ48T12/CW/VHO-O	F48T10J/CW	FJ48T12/CW/VHO/LT
FJ60T12/CW/VHO-O	F60T10J/CW	—
FJ72T12/CW/VHO-O	F72T10J/CW	FJ72T12/CW/VHO/LT
FJ96T12/CW/VHO-O	F96T10J/CW	FJ96T12/CW/VHO/LT

High Intensity Discharge Lamps

Ceramalux High Pressure Sodium Lamps

Explanation of suffix in ordering code:

No suffix — Clear

/D Diffuse Coated

/PAR Parabolic Reflector

/M Medium Base

Burning Position — Any

/DE Double Ended



B-17



E-18



E-23 1/2



E-25



E-28



PAR-38

Lamp Watts	Bulb/Volts	Base	NAED Number 04-6677-	Ordering Code	ANSI Code	Pkg. Qty.	Description (See Page 46)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life, Hrs. (351)	Approximate Lumens:	
											Initial	Mean
35	B-17 52V	Med. ■	30632-4	C35S76/M	S76HA-35	12	*G(360)(373) (376)	3 1/16	5 1/16	16000	2250	2025
			30633-2	C35S76/D/M	S76HB-35	12	*G(360)(373) (376)	3 1/16	5 1/16	16000	2150	1935
50	B-17 52V	Med. ■	30336-2	C50S68/M	S68LP-50	12	*G(360)(373) (376)	3 1/16	5 1/16	24000 +	4000	3600
			30337-0	C50S68/D/M	S68LR-50	12	*G(360)(373) (376)	3 1/16	5 1/16	24000 +	3800	3420
	E-23 1/2 52V	Mog. ■	33153-8	C50S68	S68MS-50	12	*G,S(360)(373) (376)	5	7 3/4	24000 +	4000	3600
			33154-6	C50S68/D	S68MT-50	12	*G,S(360)(373) (376)	5	7 3/4	24000 +	3800	3420
70	B-17 52V	Med. ■	33192-6	C70S62/M	S62LG-70	12	*G(360)(373)(376)	3 1/16	5 1/16	24000 +	6300	5670
			33214-8	C70S62/D/M	S62LH-70	12	*G(360)(373)(376)	3 1/16	5 1/16	24000 +	5860	5270
	E-23 1/2 52V	Mog. ■	33219-7	C70S62	S62ME-70	12	*G,S(360) (373)(376)	5	7 3/4	24000 +	6300	5670
			33225-4	C70S62/D	S62MF-70	12	*G,S(360) (373)(376)	5	7 3/4	24000 +	5860	5270
	PAR-38 52V	Med. Skt. □	24989-6	C70S62/PAR/M	S62MX-70	12	*G,PW(357) (360)(373)		5 5/16	10000	4500	4000
		Med. Side Prong □	20474-3	C70S62/PAR	S62MY-70	12	*PW(357) (360)(373)		4 5/16	7500	4500	4000
100	B-17 55V	Med. ■	34446-5	C100S54/M	S54SG-100	12	*G(360)(373) (376)	3 1/2	5 1/16	24000 +	9500	8550
			34448-1	C100S54/D/M	S54SH-100	12	*G(360)(373)(376)	3 1/2	5 1/16	24000 +	8800	7920
	E-23 1/2 55V	Mog. ■	33226-2	C100S54	S54SB-100	12	*G,S(360) (373)(376)	5	7 3/4	24000 +	9500	8550
			33227-0	C100S54/D	S54MC-100	12	*G,S(360) (373)(376)	5	7 3/4	24000 +	8800	7920
150	B-17 55V	Med. ■	30347-9	C150S55/M	S55RN-150	12	*G(360)(373) (376)	3 11/16	5 11/16	24000 +	16000	14400
			30348-7	C150S55/D/M	S55RP-150	12	*G(360)(373) (376)	3 11/16	5 11/16	24000 +	15000	13500
	E-23 1/2 55V	Mog. ■	33183-5	C150S55	S55SC-150	12	*G,S(360)(370) (373)(376)	5	7 3/4	24000 +	16000	14400
			33228-8	C150S55/D	S55MD-150	12	*G,S(360)(370) (373)(376)	5	7 3/4	24000 +	15000	13500
	E-28 100V	Mog. ■	33155-3	C150S56	S56SD-150	12	*G,S(360)(370) (373)(376)	5	8 5/16	24000 +	16000	14400
			33156-1	C150S56/D	S56SE-150	12	*G,S(360)(370) (373)(376)	5	8 5/16	24000 +	15000	13500
200	E-18 100V	Mog. ■	33229-6	C200S66	S66MN-200	12	*G,S(360) (373)(376)	5 3/4	9 3/4	24000 +	22000	19800
250	E-18 100V	Mog. ■	33170-2	C250S50	S50VA-250	12	*G,S(360) (373)(376)	5 3/4	9 3/4	24000 +	27500	24750
			33171-0	C250S50/S	S50VA-250/S	12	*G,S(360)(373)(376)	5 3/4	9 3/4	24000 +	30000	27000
	E-28 100V	Mog. ■	33173-6	C250S50/D/28	S50VC-250	12	*G,S(360) (373)(376)	5	8 5/16	24000 +	26000	23400
310	E-18 100V	Mog. ■	20226-7	C310S67	S67MR-310	12	*G,S(360) (373)(376)	5 3/4	9 3/4	24000 +	37000	33300

□ Exclusive Product

\$\$\$ Energy Saving Product

High Volume Lamps

† New Since Last Printing

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High Intensity Discharge Lamps

Lamp Watts	Bulb/Volts	Base	NAED Number 04-6677-	Ordering Code	ANSI Code	Pkg. Qty.	Description (Burning position — Any)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life, Hrs. (351)	Approximate Lumens:	
											Initial	Mean

Ceramelux™ High Pressure Sodium Lamps

400	E-18 100V	Mog. ■	34285-7	C400S51	S51WA-400	12	*G,S(360) (373)(376)	5¾	9¾	24000 +	50000	45000
	E-37 100V	Mog. ■	34602-3	C400S51/D	S51WB-400	6	*G,S(360) (373)(376)	7	11½	24000 +	47500	42750
	T-6 100V	R.S.C. ■	26918-3	C400S51/DE	S51WF-400	12	*G(360)(371) (373)(376)		10½	10000	45000	40500
1000	E-25 250V	Mog. ■	20940-3	C1000S52	S52XB-1000	6	*G,S(359)(360) (362)(373)(376)	8¾	15½	24000 +	140000	126000

Instant Restrike High Pressure Sodium Lamps

For applications where momentary power interruptions occur.

70	E-23½ 52V	Mog. ■ †□	26541-3	C70S62/2		12	*G,S(360)(373)(376)	5	7¾	24000 +	5600	5050
100	E-23½ 55V	Mog. ■ †□	26560-3	C100S54/2		12	*G,S(360)(373)(376)	5	7¾	24000 +	9100	8190
150	E-23½ 55V	Mog. ■ †□	26561-1	C150S55/2		12	*G,S(360)(373)(376)	5	7¾	24000 +	15600	14000
250	E-18	Mog. ■	37717-6	C250S50/2	S50VJ-250	12	*G(360)(373) (376)	5¾	9¾	24000 +	27500	24750
400	E-18	Mog. ■	37688-9	C400S51/2	S51WG-400	12	*G(360)(373) (376)	5¾	9¾	24000 +	50000	45000

"Econolux" High Pressure Sodium Lamps

For operation on mercury lag type autotransformer ballasts or 240-277 volt reactors.
Will operate on most mercury series circuits. Burning Position — Any.

150W retrofits 175 watt Mercury
215W retrofits 250 watt Mercury
360W retrofits 400 watt Mercury

150	E-28	Mog. ■	\$\$\$	33672-7	C150S63/EL	S63MG-150	12	*G,S(376)	5	8½	24000	13000	11700
				26898-7	C150S63/D/EL	S63MH-150	12	*G,S, Diffuse (376)	5	8½	24000	12000	10800
215	E-28	Mog. ■	\$\$\$	20262-2	C215S65/EL	S65ML-215	12	*G,S(376)	5	8½	12000	20000	18000
360	E-37	Mog. ■	\$\$\$	24984-7	C360S64/EL	S64MJ-360	6	*G,S(376)	7	11½	16000	38000	34960

Low Pressure Sodium Lamps — SOX-E — Highest Efficacy

Lamp Watts	Bulb/Volts	Base	NAED Number 04-6677-	Ordering Code	ANSI Code	Pkg. Qty.	Description (Burning position — As noted)	M.O.L. (In.)	Rated Aver. Life, Hrs. (351)	Approximate Lumens:	
										Initial	Mean
18	T-17	D.C.Bay. □	23404-7	SOX-E18	L69RA-18	12	Clear BU ± 110°	8½	14000	1800	1800
26	T-17	D.C.Bay. †□	25831-9	SOX-E26		12	Clear BU ± 110°	12¾	18000	3700	3700
36	T-17	D.C.Bay. †□	24468-1	SOX-E36		9	Clear BU ± 110°	16¾	18000	5700	5700
66	T-21	D.C.Bay. †□	25833-5	SOX-E66		9	Clear Horiz. ± 20°	20¾	18000	10700	10700
91	T-21	D.C.Bay. †□	24473-1	SOX-E91		9	Clear Horiz. ± 20°	30½	18000	17000	17000
131	T-21	D.C.Bay. †□	25835-0	SOX-E131		9	Clear Horiz. ± 20°	44½	18000	26000	26000

Low Pressure Sodium Lamps — SOX — Standard Efficacy

Lamp Watts	Bulb/Volts	Base	NAED Number 04-6677-	Ordering Code	ANSI Code	Pkg. Qty.	Description (Burning position — As noted)	M.O.L. (In.)	Rated Aver. Life, Hrs. (351)	Approximate Lumens:	
										Initial	Mean
35	T-17	D.C.Bay. □	32781-7	SOX35	L70RB-35	12	Clear BU ± 110°	12¾	18000	4800	4800
55	T-17	D.C.Bay. □	32782-5	SOX55	L71RC-55	9	Clear BU ± 110°	16¾	18000	8000	8000
90	T-21	D.C.Bay. □	32783-3	SOX90	L72RD-90	9	Clear Horiz. ± 20°	20¾	18000	13500	13500
135	T-21	D.C.Bay. □	32785-8	SOX135	L73RE-135	9	Clear Horiz. ± 20°	30½	18000	22500	22500
180	T-21	D.C.Bay. □	32799-9	SOX180	L74RF-180	9	Clear Horiz. ± 20°	44½	18000	33000	33000

□ Exclusive Product

\$\$\$ Energy Saving Product

High Volume Lamps

† New Since Last Printing

Metal Halide Lamps

See Safety Lifeguard Metal Halide Lamps for those applications where the lamps are to be used in open luminaires to light areas where activities are conducted that can result in the outer envelope being broken or punctured and where prolonged exposure of a population confined to the area can occur.

WARNING: These lamps can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available."

Operating Instructions

WARNING: The arc tubes of metal halide lamps are designed to operate under high pressure and at temperatures up to 900°C. If the arc tube ruptures for any reason, the outer bulb might break and pieces of extremely hot glass might be discharged into the surrounding environment, with an associated risk of property damage or personal injury. The following **GOOD LAMP PRACTICES** must be followed to reduce the possibility of arc tube rupture.

- TURN LAMPS OFF AT LEAST ONCE PER WEEK FOR AT LEAST 15 MINUTES**, in systems which are otherwise operating on a continuous basis (24 hours/day — 7 days/week).
- RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE.** Allowing such lamps to burn until they fail is not advised and may increase the possibility of inner arc tube rupture.
- BURN LAMP ONLY IN ITS RECOMMENDED BURNING POSITIONS.**
- OPERATE LAMP WITH PROPER CIRCUITS AND AUXILIARY EQUIPMENT.**

Lamp Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	ANSI Code	Pkg. Qty.	Description (Burning Position — Any, unless otherwise indicated)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life Hrs. (351)	Approximate Lumens(352): Initial Mean(353)
70	B-17	Med.	26203-0	MH70/4/M	M98SJ-70	12	Gen. Clear Vertical $\pm 15^\circ$ (372)(374)(377)	3 $\frac{1}{16}$	5 $\frac{1}{16}$	5000	5600 4750
175 (Enclosed fixtures only) Operate on ANSI specified "M57" Metal Halide Ballasts.	BT-28	Mog.	23288-4	MH175/4	M57PE-175	12	*Gen. & St. Ltg. Clear Vertical $\pm 15^\circ$ (372)(374)(377)	5	8 $\frac{5}{16}$	10000	14000 10800
			23291-8	MH175/C	M57PF-175	12	*Gen. & St. Ltg. Vertical $\pm 15^\circ$ Phosphor Coated(372)(374)(377)	5	8 $\frac{5}{16}$	10000	14000 10200
			28733-4	MH175/U	M57PE-175	12	Gen. & St. Ltg. Clear (372)(374)(377)(385)	5	8 $\frac{5}{16}$	10000 (385)	13000 10350
			28728-4	MH175/C/U	M57PF-175		Gen. & St. Ltg. Phosphor Coated (372)(374)(377)(385)	5	8 $\frac{5}{16}$	10000 (385)	13000 9500
250 (Enclosed fixtures only) Operate on ANSI specified "M58" Metal Halide Ballasts.	BT-28	Mog.	27484-5	MH250/U	M58PG-250	12	*Gen. & St. Ltg. Clear (372)(374)(377)	5	8 $\frac{5}{16}$	10000	20500 17000
			29169-0	MH250/C/U	M58PH-250	12	*Gen. & St. Ltg. Phosphor Coated (372)(374)(377)	5	8 $\frac{5}{16}$	10000	20500 16000
300 Operate on ANSI specified "M59" Metal Halide Ballasts.	BT-37	Mog.	23312-2	MH300/4	Econ-o-watt	6	*Gen. & St. Ltg. Clear (372)(374)(377)	7	11 $\frac{1}{2}$	10000	24000 18000
			23313-0	MH300/C	Econ-o-watt	6	*Gen. & St. Ltg. Phos. Coated (372)(374)(377)	7	11 $\frac{1}{2}$	10000	24000 16800
400 Operate on ANSI specified "M59" Metal Halide Ballasts.	BT-37	Mog.	34415-0	MH400/U	M59PJ-400/U	6	*Gen. & St. Ltg. Clear (372)(374)(377)	7	11 $\frac{1}{2}$	20000 (364)	36000 28800
			34416-8	MH400/C/U	M59PK-400/U	6	*Gen. & St. Ltg. Phos. Coated (372)(374)(377)	7	11 $\frac{1}{2}$	20000 (364)	36000 27700
			30170-5	MS400/BU	M59PJ-400/BU	6	High Efficacy, Base Up Clear(372)(374)(377)	7	11 $\frac{1}{2}$	20000	40000 32000
			30172-1	MS400/C/BU	M59PK-400/BU	6	High Efficacy, Base Up Phos. Coated(372)(374)(377)	7	11 $\frac{1}{2}$	20000	40000 31000
			T-18	MH400/E	M59PL-400	12	*Gen., Clear(372)(374)(377)	5 $\frac{3}{4}$	9 $\frac{3}{4}$	10000	36000 27700
750	BT-37	Mog.	28450-5	MH750/BU	M89NJ-750	6	*Gen., Clear(372)(374)(377)	7	11 $\frac{1}{2}$	5000	82500 66000
1000 Operate on ANSI specified "M47" Metal Halide Ballasts.	BT-56	Mog.	29826-5	MH1000/U	M47PA-1000/U	6	*Gen. & St. Ltg. Clear (359)(372)(377)	9 $\frac{1}{2}$	15 $\frac{3}{8}$	12000	110000 88000
			29827-3	MH1000/C/U	M47PB-1000/U	6	*Gen. & St. Ltg. Phos. Coated (359)(372)(377)	9 $\frac{1}{2}$	15 $\frac{3}{8}$	12000	110000 83000
			25093-6	MS1000/BU	M47PA-1000/BU/S	6	*High Efficiency, Base Up Clear(372)(374)(377)	9 $\frac{1}{2}$	15 $\frac{3}{8}$	10000	125000 100000
			25130-6	MS1000/BD	M47PA-1000/BD/S	6	*High Efficiency, Base Down Clear(372)(374)(377)	9 $\frac{1}{2}$	15 $\frac{3}{8}$	10000	125000 100000
			25137-1	MS1000/C/BU	M47PB-1000/BU/S	6	*High Efficiency, Base Up, Phos. Coated(372)(374)(377)	9 $\frac{1}{2}$	15 $\frac{3}{8}$	10000	125000 95800
			25136-3	MS1000/C/BD	M47PB-1000/BD/S	6	*High Efficiency, Base Down, Phos. Coated(372)(374)(377)	9 $\frac{1}{2}$	15 $\frac{3}{8}$	10000	125000 95800
1500 (Enclosed fixtures only) Operate on ANSI specified "M48" Metal Halide Ballasts.	BT-56	Mog.	23028-4	MH1500BU	M48PC-1500/BU	6	*Gen. & St. Ltg. Base-up to Hor.(359)(362)(372)(374)(377)	9 $\frac{1}{2}$	15 $\frac{3}{8}$	3000	155000 142000
			23020-1	MH1500BD	M48PC-1500/BD	6	*Gen. & St. Ltg. Base-down to Hor.(359)(362)(372)(374)(377)	9 $\frac{1}{2}$	15 $\frac{3}{8}$	3000	155000 142000

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\$\$\$ Energy Saving Product

High Volume Lamps

† New Since Last Printing

High Intensity Discharge Lamps

Safety Lifeguard Metal Halide Lamps

Safety Lifeguard lamps are designed to reduce the danger of possible injury from shortwave ultraviolet radiation. The lamp will self-extinguish automatically within 15 minutes after the outer envelope is broken by any means, accidental or intentional.

These lamps are particularly suited for use in open luminaires where the outer envelope is vulnerable to breakage, and the risk of exposure to ultraviolet radiation is present. However, the lamp's ability to self-extinguish does not protect against the danger of breakage itself. Accordingly, the users are advised to follow the good lamping practices noted in the Operating Instructions for Metal Halide Lamps.

In case of lamp failure, for safety and to preserve ballast life, turn off electric power and replace lamp promptly.

Lamp Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	ANSI Code	Pkg. Qty.	Description (Burning Position — Any, unless otherwise indicated)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life Hrs. (351)	Approximate Lumens(352): Initial Mean(353)
400 Operate on ANSI specified "M59" Metal Halide Ballasts.	BT-37	Mog.	34598-3	MHT400/U	M59PJ-T400/U	6	*Gen. & St. Ltg. Clear (372)(374)(377)	7	11½	20000 (364)	34200 27400
			34601-5	MHT400/C/U	M59PK-T400/U	6	*Gen. & St. Ltg. Phos. Coated (372)(374)(377)	7	11½	20000 (364)	34200 26300
1000 Operate on ANSI specified "M47" Metal Halide Ballasts.	BT-56	Mog.	23358-5	MHT1000/U	M47PA-T1000/U	6	*Gen. & St. Ltg. Clear (359)(372)(374)(377)	9½	15%	12000	104500 83600
			23369-2	MHT1000/C/U	M47PB-T1000/U	6	*Gen. & St. Ltg. Phos. Coated (359)(372)(374)(377)	9½	15%	12000	104500 79000

Mercury Vapor Lamps

Lifeguard lamps with Weather Duty bulbs, except as noted. Lamps may be burned in any position.

Explanation of color suffix in ordering abbreviation:

/DX Deluxe White No suffix — Clear
/N Style-Tone (non-phosphor coated)
/C Standard White

"WARNING: These lamps can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available."

See Safety Lifeguard Mercury Vapor Lamps for those applications where the lamps are to be used in open luminaires to light areas where activities are conducted that can result in the outer envelope being broken or punctured and where prolonged exposure of a population confined to the area can occur.

Operating Instructions

WARNING: The following good lamp practices are recommended to reduce the possibility of an arc tube rupture and the associated risk of property damage or personal injury.

- 1. TURN LAMPS OFF AT LEAST ONCE PER WEEK FOR AT LEAST 15 MINUTES**, in systems which are otherwise operating on a continuous basis (24 hours/day — 7 days/week).
- 2. RELAMP FIXTURES AT OR BEFORE THE END OF RATED LIFE.** Allowing such lamps to burn until they fail is not advised and may increase the possibility of inner arc tube rupture.
- 3. OPERATE LAMP WITH PROPER CIRCUITS AND AUXILIARY EQUIPMENT.**

Lamp Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code(363) (See above)	Former Code(363) or Trade Name	Pkg. Qty.	Description (See below)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life Hrs. (351)	Approximate: Lumens(352) Initial Mean(353)
50	B-17	Med.	35664-2	H46DL-40-50/DX	H46DL/DX	12	*G(379)(384)	3½	5½	24000 +	1580 1260
			25463-1	H46DL-40-50/N	Style-Tone	12	*G(379)(384)	3½	5½	24000 +	1100 830
75	B-17	Med.	27526-3	H43AN-75		12	*G,S	3½	5½	24000 +	2800 2400
			27524-8	H43AV-75/DX		12	*G,S(379)	3½	5½	24000 +	2800 2250
			27525-5	H43AV-75/N	Style-Tone	12	*G,S(379)	3½	5½	24000 +	2050 1600
	PAR-38	Med. Side Prong	36132-9	H43/44KL-75-100		12	*PW(356)		4½	16000 +	1920 1230
100	A-23	Med.	36679-9	H38LL-100	H38-4LL	24	*G	3½	5½	24000 +	4100 3450
			35658-4	H38MP-100/DX	H38-4MP/DX	24	*G(379)	3½	5½	24000 +	4300 3400
			25458-1	H38MP-100/N	Style-Tone	24	*G(379)	3½	5½	24000 +	3600 2800
	E-23½	Mog.	31949-1	H38HT-100	H38-4HT	24	*G,S,B(355)	5	7½	24000 +	4100 3450
			24802-1	H38JA-100/DX	H38-4JA/DX	24	*G,S(379)	5	7½	24000 +	4400 3400
			25456-5	H38JA-100/N	Style-Tone	24	*G,S(379)	5	7½	24000 +	3750 2800
	R-40	Med.	20464-4	H38BM-100		12	*RF,FF,W(355)		7½	24000 +	2850 2280
			31947-5	H38BP-100/DX	H38BP/DX	12	*RF,FF,VW(379)		7½	24000 +	2850 2300
			25457-3	H38BP-100/N	Style-Tone	12	*RF,FF,VW(379)		7½	24000 +	2450 1950

Descriptive Symbols

For color identification, see top of page and ordering abbreviation.

B Black Light
FF Frosted Face
G General Lighting

PF PAR Flood
PS PAR Spot
PW PAR Wide Flood
RF Reflector Flood

S Street Lighting
VW Very Wide Beam
W Wide Beam

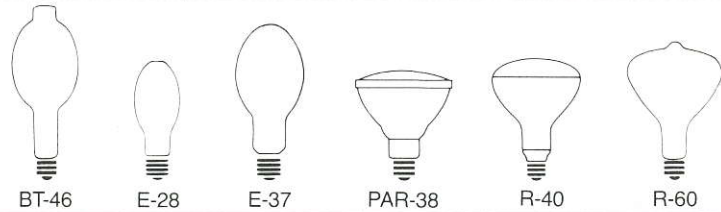
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High Volume Lamps

High Intensity Discharge Lamps

Mercury Vapor Lamps



Lamp Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code(363) (See above)	Former Code(363) or Trade Name	Pkg. Qty.	Description (See below)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life, Hrs. (351)	Approximate:				
											Initial	Mean(353)			
100	PAR-38	Med.Skt.	26866-4	H44GS-100/M		12	*PS,B(355)(356)(357)		5 ⁵ / ₁₆	16000 +	2800	1800			
		Admed.Skt.	25163-7	H44GS-100	H38-4GS	12	*PS,B(355)(356)(357)		5 ⁷ / ₁₆	16000 +	2800	1800			
			25209-8	H44JM-100	H38-4JM	12	*PF,B(355)(356)(357)		5 ⁷ / ₁₆	16000 +	2800	1800			
		Med. Side Prong	36132-9	H43/44KL-75-100		12	*PW,(356)		4 ⁵ / ₁₆	16000 +	2800	1800			
175	E-28	Mog.	31965-7	H39KB-175	H39-22KB	12	*G,S,B(355)	5	8 ⁵ / ₁₆	24000 +	7900	7400			
			24805-4	H39KC-175/DX	H39-22KC/DX	12	*G,S(379)	5	8 ⁵ / ₁₆	24000 +	8500	7600			
			28449-7	H39KC-175/DX	H39-22KC/DX	6	*G,S(379)	5	8 ⁵ / ₁₆	24000 +	8500	7600			
			24049-9	H39KC-175/N	Style-Tone	12	*G,S(379)	5	8 ⁵ / ₁₆	24000 +	7000	6000			
			31970-7	H39KC-175/C		12	*G,S(379)	5	8 ⁵ / ₁₆	24000 +	7700	6300			
	R-40	Med.	32258-6	H39BM-175	H39-22BM	12	*RF,FF,W	7 ¹ / ₂	24000 +	6100	5150				
			30105-1	H39BP-175/DX	H39-22BP/DX	12	*RF,FF,VW(379)	7 ¹ / ₂	24000 +	5750	4800				
			25461-5	H39BP-175/N	Style-Tone	12	*RF,FF,VW(379)	7 ¹ / ₂	24000 +	4600	3650				
		Mog.	30713-2	H39BS-175	H39-22BS	12	*RF,FF,W	7 ¹ / ₂	24000 +	6100	5150				
			30751-2	H39BV-175/DX	H39-22BV/DX	12	*RF,FF,VW(379)	7 ¹ / ₂	24000 +	5750	4800				
			250	E-28	Mog.	31985-5	H37KB-250	H37-5KB	12	*G,S,B(355)	5	8 ⁵ / ₁₆	24000 +	12100	10500
						24814-6	H37KC-250/DX	H37-5KC/DX	12	*G,S(379)	5	8 ⁵ / ₁₆	24000 +	13000	10700
24031-7	H37KC-250/N	Style-Tone				12	*G,S(379)	5	8 ⁵ / ₁₆	24000 +	11000	8400			
31988-9	H37KC-250/C					12	*G,S(379)	5	8 ⁵ / ₁₆	24000 +	11900	9450			
300	E-37	Mog.	☐ \$\$\$	27030-6	H33CD-300	Econ-o-watt	6	*G,S(378)	7	11 ¹ / ₂	16000 +	14000			
			☐ \$\$\$	27028-0	H33GL-300/DX	Econ-o-watt	6	*G,S(378)	7	11 ¹ / ₂	16000 +	15700			
			☐ \$\$\$	23680-2	H33GL-300/N	Econ-o-watt	6	*G,S(378)	7	11 ¹ / ₂	16000 +	13000			
400	E-37	Mog.		25205-6	H33CD-400	H33-1-CD	6	*G,S,B(355)	7	11 ¹ / ₂	24000 +	21000	18900		
				24842-7	H33GL-400/DX	H33-1-GL/DX	6	*G,S(379)	7	11 ¹ / ₂	24000 +	23000	19100		
				22760-3	H33GL-400/N	Style-Tone	6	*G,S(379)	7	11 ¹ / ₂	24000 +	19500	16000		
				25216-3	H33GL-400/C		6	*G,S(379)	7	11 ¹ / ₂	24000 +	20500	17400		
	BT-37	Mog.		37718-4	H33GL-400/DX/BT		6	*G,S(379)	7	11 ¹ / ₂	24000 +	23000	19100		
	R-57	Mog.		25226-2	H33FY-400	H33-1-FY	6	*G,B,RF,FF,W(355)		12 ³ / ₄	24000 +	18500	16400		
			☐	25230-4	H33HS-400	H33-1-HS	6	*G,B,RF,FF,M(355)		12 ³ / ₄	24000 +	17500	15200		
	R-60	Mog.		35660-0	H33DN-400/DX	H33-1-DN/DX	6	*G,SR(379)		12 ³ / ₄	24000 +	23000	19100		
			☐	25092-8	H33LN-400	H33-1-LN	6	*K,FF,RF(355)		10 ⁷ / ₈	24000 +	17200	15000		
				35661-8	H33FS-400/DX	H33-1-FS/DX	6	*K,FF,RF(379)		10 ⁷ / ₈	24000 +	15500	12400		
700	BT-46	Mog.		25114-0	H35NA-700	H35-18NA	6	*G,S(355)	9 ¹ / ₂	14 ¹ / ₂	24000 +	41000	35700		
				35662-6	H35ND-700/DX	H35-18ND/DX	6	*G,S(379)	9 ¹ / ₂	14 ¹ / ₂	24000 +	43000	33600		
1000	BT-56	Mog.		25104-1	H34GV-1000	H34-12GV	6	*G,B(355)(359)	9 ¹ / ₂	15 ³ / ₈	16000 +	55000	44000		
				35659-2	H34GW-1000/DX	H34-12GW/DX	6	*G(359)(379)	9 ¹ / ₂	15 ³ / ₈	16000 +	60000	45000		
Note – H34 Types are used INDOORS at 50°F or higher (and outdoors only in very mild climates). They are not electrically interchangeable with H36 lamps.															
Note-H36 Types are used both OUTDOORS and INDOORS. They are not electrically interchangeable with H34 lamps.				25107-4	H36GV-1000	H36-15GV	6	*G,S,B(355)(359)	9 ¹ / ₂	15 ³ / ₈	24000 +	57500	48400		
				39707-5	H36GW-1000/DX	H36-15GW/DX	6	*G,S(359)(361)(379)	9 ¹ / ₂	15 ³ / ₈	24000 +	63000	47500		
				25452-4	H36GW-1000/N	Style-Tone	6	*G,S(359)(361)(379)	9 ¹ / ₂	15 ³ / ₈	24000 +	53500	38000		
				25129-8	H36GW-1000/C		6	*G,S(359)(361)(379)	9 ¹ / ₂	15 ³ / ₈	24000 +	54500	43000		
				31918-6	H36KY-1000/DX	H36KY/DX	6	*G,SR(359)(379)	9 ¹ / ₂	15 ³ / ₈	24000 +	58000	37700		
1000	R-80	Mog.Skt. Clamp		30219-0	H36FB-1000	H36-15FB	4	*K,FF,RF(355)(359)		13 ³ / ₈	24000 +	46000	39800		
				33747-7	H36FA-1000/DX	H36FA/DX	4	*K,RF(359)(379)		13 ³ / ₈	24000 +	49000	32000		

Descriptive Symbols

For color identification, see top of page and ordering abbreviation.

B Black Light
FF Frosted Face
G General Lighting

K Kleen-Beam
RF Reflector Flood
S Street Lighting

SR Semi Reflector
VW Very Wide Beam
W Wide Beam

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\$\$\$ Energy Saving Product

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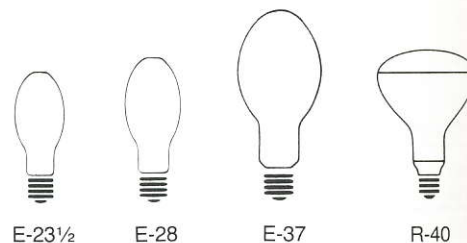
High Intensity Discharge Lamps

Safety Lifeguard Mercury Vapor Lamps

Safety Lifeguard lamps are designed to reduce the danger of possible injury from shortwave ultraviolet radiation. The lamp will self-extinguish automatically within 15 minutes after the outer envelope is broken by any means, accidental or intentional.

These lamps are particularly suited for use in open luminaires where the outer envelope is vulnerable to breakage, and the risk of exposure to ultraviolet radiation is present. However, the lamp's ability to self-extinguish does not protect against the danger of breakage itself. Accordingly, the users are advised to follow the good lamping practices noted on page 56 in the Operating Instructions for Mercury Vapor Lamps.

In case of lamp failure, for safety and to preserve ballast life, turn off electric power and replace lamp promptly.



Lamp Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code(363) (See above)	Former Code(363) or Trade Name	Pkg. Qty. *	Description (See Page 46)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life, Hrs. (351)	Approximate: Lumens(352) Initial Mean(353)
100 *	E-23 1/2	Mog.	☐	20182-2	H38HT-T100	24	*G,S,B(355)	5	7 1/2	24000 +	3700 3100
			☐	20180-6	H38JA-T100/DX	24	*G,S(379)	5	7 1/2	24000 +	3950 3060
			☐	20178-0	H38JA-T100/N	24	*G,S(379)	5	7 1/2	24000	3400 2500
	R-40	Med.	☐	23078-9	H38BM-T100	12	*RF,FF,W(355)		7 1/2	24000 +	2550 2050
			☐	23068-0	H38BP-T100/DX	12	*RF,FF,VW(379)		7 1/2	24000 +	2550 2070
175 *	E-28	Mog.	☐	25291-6	H39KB-T175	12	*G,S,B(355)	5	8 5/16	24000 +	7100 6660
			☐	25269-2	H39KC-T175/DX	12	*G,S(379)	5	8 5/16	24000 +	7700 6850
			☐	25270-0	H39KC-T175/N	12	*G,S(379)	5	8 5/16	24000 +	6300 5400
	R-40	Med.	☐	23093-8	H39BP-T175/DX	12	*RF,FF,VW(379)		7 1/2	24000 +	5200 4300
			☐	38657-3	H37KB-T250	12	*G,S,B(355)	5	8 5/16	24000 +	10900 9450
250 *	E-28	Mog.	☐	38663-1	H37KC-T250/DX	12	*G,S(379)	5	8 5/16	24000 +	11700 9650
			☐	38669-8	H37KC-T250/N	12	*G,S(379)	5	8 5/16	24000 +	9900 7550
	E-37	Mog.	☐	25298-1	H33CD-T400	6	*G,S,B(355)	7	11 1/2	24000 +	18900 17000
			☐	25292-4	H33GL-T400/DX	6	*G,S(379)	7	11 1/2	24000 +	20700 17200
			☐	25295-7	H33GL-T400/N	6	*G,S(379)	7	11 1/2	24000 +	17500 14400
1000 *	BT-56	Mog.	☐	20741-5	H36GV-T1000	6	*G,S,B(355) (358)(359)(361)	9 1/2	15 3/8	24000 +	51800 43600
			☐	20742-3	H36GW-T1000/DX	6	*G,S(359)(361)(379)	9 1/2	15 3/8	24000 +	56700 42800

*Available on made-to-order basis - 90-day delivery

Self-Ballasted Mercury Lamps

Lamp Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	ANSI Code	Pkg. Qty. *	Description (Burning Position — Any, unless otherwise indicated)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life, Hrs. (351)	Approximate Lumens: Initial Mean(353)
160	E-23	Med.	☐	33889-7	S160E23/DX	12	*General Ltg. 120V — Deluxe White(368)(382)	4 9/16	7	12000	2800 2250
	PS-30	Med.	☐	34987-8	S160PS30/DX	24	General Ltg. 120V Deluxe White(362)(368)(369)	5 5/16	7 5/16	16000	2200 1800
	R-38	Med.	☐	33890-5	S160R38/FL	12	*Reflector Flood, 120V (368)(382)(383)		5 13/16	12000	1850
	R-40	Med.	☐	33891-3	S160R/FL	12	*Reflector Flood, 120V (368)(382)(383)		7	12000	1970
250	E-28	Med.	☐	33894-7	S250E28/DX/M	12	*General Ltg. 120V Deluxe White(368)(382)(383)	5 3/4	8 1/2	12000	5990
		Mog.	☐	33899-6	S250E28/DX	12	*General Ltg. 120V Deluxe White(368)(382)(383)	5 3/4	8 5/16	12000	5990
	R-40	Med.	☐	33912-7	S250R/FL/M	12	*Reflector Flood, 120V (368)(382)(383)		7	12000	3810
		Mog.	☐	33913-5	S250R/FL	12	*Reflector Flood, 120V (368)(382)(383)		7 3/8	12000	3540

Descriptive Symbols

For color identification, see top of page and ordering abbreviation.

B Black Light
FF Frosted Face
G General Lighting

K Kleen-Beam
RF Reflector Flood
S Street Lighting

SR Semi Reflector
VW Very Wide Beam
W Wide Beam

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High Intensity Discharge Lamps

Self-Ballasted Mercury Lamps

Lamp Watts	Bulb	Base	NAED Number 04-6677-	Ordering Code	ANSI Code	Pkg. Qty.	Description (Burning Position — Any, unless otherwise indicated)	L.C.L. (In.)	M.O.L. (In.)	Rated Aver. Life, Hrs. (351)	Approximate Lumens: Initial Mean(353)	
450	BT-37	Mog.	30466-7	S450BT37		6	*General Ltg. 120V — Clear Base-up $\pm 75^\circ$ (368)(369)	7	11½	16000	9100	8280
			☐ 39578-0	S450BT37		6	*General Ltg. 208V — Clear(365)(366)	7	11½	16000	11300	9700
			☐ 36860-5	S450BT37		6	*General Ltg. 230V — Clear(365)(367)	7	11½	16000	10500	9500
			☐ 20044-4	S450BT37		6	*General Ltg. 250V — Clear(365)(367)	7	11½	16000	9850	9050
			30467-5	S450BT37/C		6	*General Ltg. 120V — Std. White Base-up $\pm 75^\circ$ (368)(369)	7	11½	16000	8200	6970
			☐ 39579-8	S450BT37/C		6	*General Ltg. 208V — Std. White(365)(366)	7	11½	16000	10500	8500
			☐ 38516-1	S450BT37/C		6	*General Ltg. 230V — Std. White(365)(367)	7	11½	16000	9700	8300
			☐ 20042-8	S450BT37/C		6	*General Ltg. 250V — Std. White(365)(367)	7	11½	16000	9200	8000
			☐ 33756-8	S450BT37/C		6	*General Ltg. 270V — Std. White(365)(367)	7	11½	16000	8900	7750
750	R-57	Mog.	29620-2	S750R57	B78YE-750	6	*General Ltg. 120V — Refl. I.F. Base-up $\pm 75^\circ$ (368)(369)		12¾	16000	14000	11200
			☐ 39269-6	S750R57/C		6	*General Ltg. Semi-Refl. 208V — Std. White(365)(366)		12¾	16000	18200	14600
			36861-3	S750R57/C		6	*General Ltg. Semi-Refl. 230V — Std. White(365)(367)		12¾	16000	17800	15100
			36864-7	S750R57/C		6	*General Ltg. Semi-Refl. 250V — Std. White(365)(367)		12¾	16000	17300	15400
			☐ 30206-7	S750R57/C		6	*General Ltg. Semi-Refl. 270V — Std. White(365)(367)		12¾	16000	16500	14400
	R-60	Mog.	☐ 20561-7	S750R60/C	B78YK-750	6	*General Ltg. 120V — Refl. Std. White Base-up $\pm 75^\circ$ (368)(369)		10⅞	16000	11500	
			☐ 32171-1	S750R60		6	*General Ltg. 250V — Refl. I.F.(365)(367)		10⅞	16000	15000	

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High Intensity Discharge Lamps

Footnotes

- Because of frequent improvements, the values listed may not be current ratings. For design purposes, obtain ratings from current technical bulletins.
- Quantity shown is minimum shipping container—Refer to Net Price Schedule for number of lamps to qualify as a standard case.
 - * Heat resisting glass bulb.
 - Nickel plated brass base.
- (351) Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more burning hours per start. It is based on survival of at least 50% of the lamps and allows for individual lamps, or groups of lamps, to vary considerably from the average.
- (352) Values for vertical operation of lamp.
- (353) Average lumens over 16000 operating hours or rated life whichever is shorter.
- (355) Separate filter is required for black light application.
- (356) Opaque coating on reflecting section of bulb.
- (357) Protect bulb from moisture when used in base down position. Non Weather Duty bulb.
- (358) For indoor use only—the fixture, holder, or shield should provide adequate ventilation near the socket and base of the lamp.
- (359) Electrically insulated support for bulb may be required, especially in horizontal and nearly horizontal operating positions.
- (360) Follow fixture manufacturer's recommendations regarding proximity of ballast to bulb.
- (362) This lamp should be shielded from moisture to prevent breakage.
- (363) These ordering abbreviations generally conform to the designation system of the American National Standards Institute, which has been changed to include lamp wattage. Other High Intensity Discharge lamps will be changed as ANSI codes are developed.

- (364) Rated life: Vertical $\pm 30^\circ$ 20000 hours
Other positions 15000 hours
- (365) Supply voltage must be held to ± 10 volts of rated lamp voltage.
- (366) Lamps will start down to 15°F .
- (367) Lamps will start down to -10°F .
- (368) Supply voltage must be held to ± 5 volts of rated lamp voltage.
- (369) Lamps will start down to 0°F .
- (370) C150S55 and C150S56 lamps are not electrically interchangeable. Different ballasts are required for the proper operation of each lamp type. ANSI type S55 ballast is for the 55-volt (nominal) lamp and the ANSI type S56 ballast is for the 100 volt (nominal) lamp.
- (371) For use in luminaires facing down to facing horizontal.
- (372) Color characteristics may vary somewhat from one lamp type to another. Time should be allowed for the lamp to stabilize in color when it is turned on for the first time or if for any reason its burning position is changed. This may require several hours' operation, with more than one start. Lamp color and output may change temporarily if the lamp is subjected to excess vibration or shock. Lamp color characteristics may change after long accumulated burning time.
- (373) Fixtures should be designed so that sockets and wiring withstand starting pulse up to 5000 volts for 1000 watt types and 4000 volts for other sizes.
- (374) Performance may not be satisfactory unless operated within specified burning positions. If specified burning position is base up or base down to horizontal, this permits 15 degrees beyond the horizontal. Light output may be substantially reduced when operated in positions other than vertical.
- (376) For use in fixtures which do not redirect a substantial portion of the energy toward the arc tube; otherwise very early burnout is anticipated.

- (377) Requires a ballast specified or approved for Philips metal halide lamps, or one that is designed to operate all popular brands of metal halide lamps. 1000W types will operate from H36 conventional lag type ballast for Mercury Vapor lamps at ambient temperatures of 50°F or higher. 1000W types must not be burned at 1500°F .
- (378) ECON-O-WATT lamps are identified with the H33 ANSI group for convenience but differ slightly in electrical characteristics.
- Ratings apply for operation on "regulated output" or similar H33 ballasts, on series type H33 isolating transformers, or on lead-peaked ballasts for 400W metal halide lamps. Operation on other ballast types is not recommended, as ballast life expectancy may be reduced substantially. It is advisable to check with the luminaire or ballast manufacturer.
- (379) It is a characteristic of phosphor-coated vapor lamps to require a few hundred hours of operation to gradually reach normal characteristic color. New lamps may have a slight pink appearance during this initial operating period.
- (382) Though made of heat-resistant glass, breakage may result if moisture falls on bulb. Use in well ventilated housing.
- (383) For indoor and outdoor use: if outdoors, in base down operation, lamp should be protected by a fully enclosed fixture, adequately ventilated. In base up operation, lamp can be used in open face fixture, 40° below horizontal. All fixtures should protect the lamp and wiring from water and corrosive atmospheric gases. The fixture, holder or shield should provide adequate ventilation near the socket and base of the lamp.
- (384) For 40-watt operation use H45 ballast
- | Ordering Code | Approx. Lumens Initial | Mean |
|----------------|------------------------|------|
| H46DL-40-50/DX | 1140 | 910 |
| H46DL-40-50/N | 800 | 580 |
- (385) Rated life: Vertical $\pm 15^\circ$ 10000 hours
Other positions 7500 hours

High Intensity Discharge Lamp Information

Ceramelux™ High Pressure Sodium, Metal Halide, Mercury Vapor and Self-Ballasted Mercury Lamps are all high intensity electric discharge lamps. Except for self-ballasted lamps, auxiliary equipment such as ballasts and starters must be provided for proper starting and operation of each type, in accordance with American National Standards Institute (ANSI) specifications.

Low Pressure Sodium lamps, although technically not high intensity discharge lamps, are used in many similar applications. As with HID lamps they require auxiliary equipment for proper starting and operation. These lamps which have efficacies up to 200L/W have a mixture of neon and argon gas plus sodium metal in the arc tube and an evacuated outer bulb. When voltage is applied to the lamp the arc discharge is through the neon and argon gas. As the sodium metal in the arc tube heats up and vaporizes, the characteristic yellow amber color of sodium is achieved.

Nominal Wattage of Ceramelux Lamps

Lamp wattage varies during life, because of ballast and lamp characteristics. Ballast data should be reviewed for actual wattage levels.

Voltage Control

An interruption in the power supply or a sudden voltage drop may extinguish the arc. Before the lamp will relight, it must cool

sufficiently, reducing the vapor pressure to a point where the arc will restrike with available voltage. Instant restrike Ceramelux lamps restrike immediately with the resumption of power providing approximately 5% of steady state lumens and a rapid warm-up. All other Ceramelux lamps require approximately one minute cooling before relighting. Other HID types take 3 to 20 minutes, depending on type of lamp and luminaire.

Lamp Designations

Philips uses the ANSI designation for mercury vapor lamp ordering codes. The number following the letter "H" in the designation indicates the electrical characteristics and includes the identification of ballast type for proper lamp operation. For High Pressure Sodium lamps, the letter C (Ceramelux) coupled with the wattage and ballast designation are used (C100S54). For Metal Halide lamps the letters MH or MS are used together with the wattage and any burning position restrictions.

Emission Material

Ceramelux lamps use a special emission material in the electrodes which provide voltage stability throughout the life of the lamp, thus providing long life and excellent lumen maintenance. Mercury Vapor lamps use a trimetallic oxide emission material in the

electrodes which provides good lumen maintenance throughout a long life. Metal Halide lamps do not contain emission material.

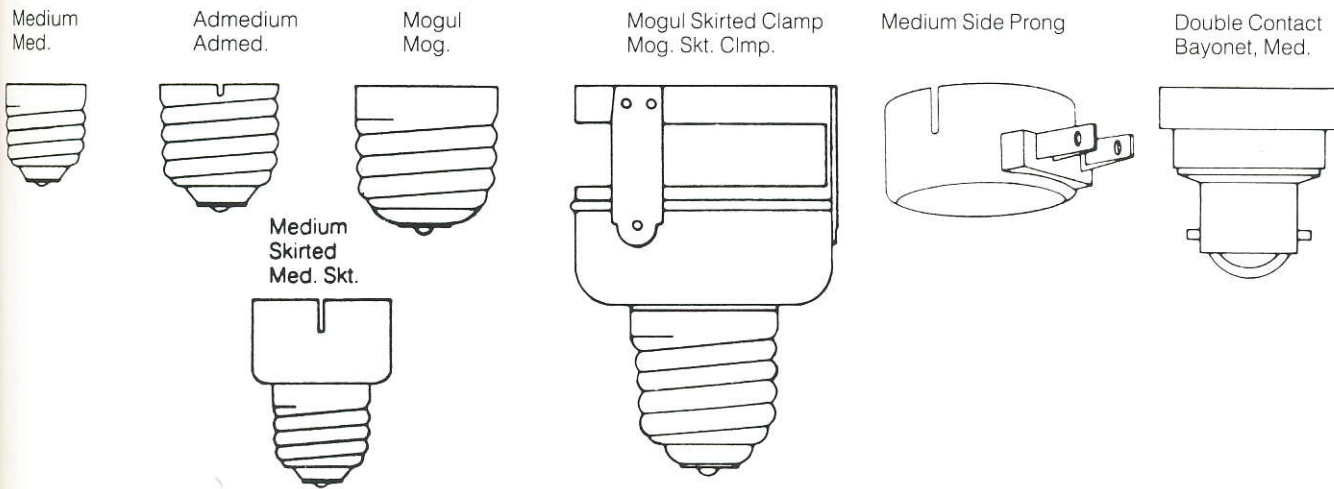
The WEATHER DUTY outer bulb is made of heat-resistant glass, making the lamp suitable for service outdoors and in applications with unfavorable atmospheric conditions. These bulbs will resist thermal shock, as from water striking the hot bulb, and may be exposed to most common industrial fumes without danger of crazing or cracking (however, lamp bases, sockets and wiring may need protection).

Lamp Bases

All Philips HID lamps with mogul screw bases feature date-code markings on the base. This enables users to record the date an individual lamp is placed in service and to keep a systematic record of lamp performance. Appropriate symbols denote the month and year, and may be checked off easily with any sharp instrument. All Ceramelux High Pressure Sodium lamps have a nickel-plated brass base which minimizes base-to-socket seizure which can occur with long-lived lamps. For other HID lamps a brass base is used and a graphite coating is applied to the base to give protection for corrosion and to ensure easy removal from the socket.

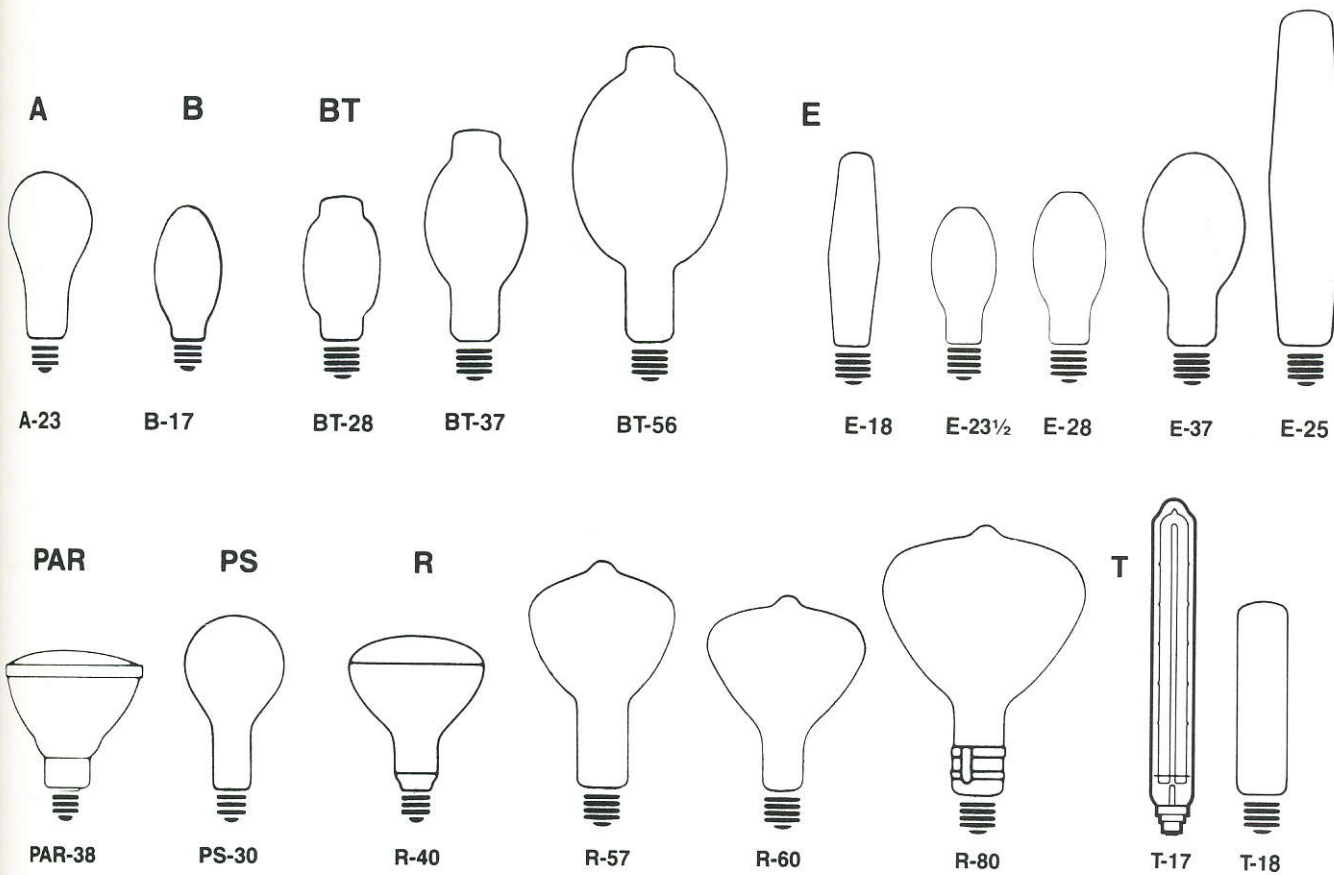
High Intensity Discharge Lamps

Base Types (Not Actual Sizes)



Bulb Shapes (Not Actual Sizes)

The size and shape of a bulb is designated by a letter or letters followed by a number. The letter indicates the shape of the bulb while the number indicates the diameter of the bulb in eighths of an inch. For example, "T-17" indicates a tubular shaped bulb having a diameter of 17/8 or 2 1/8 inches. The following illustrations show some of the more popular bulb shapes and sizes.



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High Intensity Discharge Lamps

Ordering Code Cross Reference Guide

High Pressure Sodium Lamps

Philips	General Electric	Sylvania	ANSI
Ceramalux C35S76/M C35S76/D/M C50S68/M C50S68/D/M	Lucalox LU35MED LU35/D/MED LU50/MED LU50/D/MED	Lumalux LU35/MED LU35/D/MED LU50/MED LU50/D/MED	S76HA-35 S76HB-35 S68LP-50 S68LR-50
C50S68 C50S68/D C70S62 C70S62/D C70S62/M	LU50 LU50/D LU70 LU70/D LU70/MED	LU50 LU50/D LU70 LU70/D LU70/MED	S68MS-50 S68MT-50 S62ME-70 S62MF-70 S62LG-70
C70S62/D/M C70S62/PAR/M C70S62/PAR C100S54 C100S54/D	LU70/D/MED — — LU100 LU100/D	LU70/MED — — LU100 LU100/D	S62LH-70 S62MX-70 S62MY-70 S54SB-100 S54MC-100
C100S54/M C100S54/D/M C150S55 C150S55/D C150S55/M	LU100/MED LU100/D/MED LU150/55 LU150/55/D LU150/MED	LU100/MED LU100/D/MED LU150/55 LU150/55/D LU150/MED	S54SG-100 S54S4-100 S55SC-150 S55MD-150 S55RN-150
C150S55/DM C150S56 C150S56/D C200S66 C250S50	LU150/D/MED LU150/100 — LU200 LU250	LU150/D/MED LU150/100 — LU200 LU250	S55RP-150 S56SD-150 S56SE-150 S66MN-200 S50VA-250
C250S50/S C250S50/D — — C310S67	LU250/S LU250/D LU250/DX — LU310	LU250 LU250/D — LU250T7/RSC LU310	S50VA-250/S S50VC-250 S50VA-250/DX S50VH-250 S67MR-310
C400S51 C400S51/D C400S51/DE C1000S52	LU400 LU400/D — LU1000	LU400 LU400/D LU400/T7/RSC LU1000	S51WA-400 S51WB-400 S51WF-400 S52XB-1000

Retrofit High Pressure Sodium Lamps

C70S62/2 C100S54/2 C150S55/2 C250S50/2 C400S51/2 —	— — — — — —	— — — LU250/SBY LU400/SBY LU1000/SBY	— — — S50VJ-250 S51WG-400 —
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Retrofit High Pressure Sodium Lamps

Econolux C150S63/EL C150S63/D/EL C215S65/EL C360S64/EL — —	E-Z Lux LUH150/EZ LUH150/D/EZ LUH215/EZ — — —	Unalux ULX150 ULX150/D ULX215 ULX360 ULX360/D ULX880	S63MG-150 S63MH-150 S65ML-215 S64MJ-360 S64MK-360 —
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High Intensity Discharge Lamps

Ordering Code Cross Reference Guide Metal Halide Lamps

Philips	General Electric	Sylvania	ANSI
<u>Metal Halide</u>	<u>Multivapor</u>	<u>Metalarc</u>	
—	MXR32C/VBU	—	—
MH70/4/M	—	M100/BU/BD	M98SJ-70
—	—	M100/C/BU/BD	—
—	MXR175/BU	—	M57PF-175/XBU
—	MXR175/C/BU	—	M57PF-175/XBU
—	MXR175/BD	—	M57PE-175/XBD
—	MXR175/C/BD	—	M57PF-175/XBD
MH175/U	MVR175/U	—	M57PE-175
MH175/C/U	MVR175/C/U	—	M57PF-175
MH175/4	—	M175/BU/BD-Only	M57PE-175
MH175/C	—	M175/C/BU/BD-Only	M57PF-175
—	—	MS175/HOR	—
—	—	MS175/C/HOR	—
—	—	MS175/3K/HOR	—
MH250/U	MVR250/U	M250/U	M58PG-250
MH250/C/U	MVR250/C/U	M250/C/U	M58PH-250
—	—	MS250/HOR	—
—	—	MS250/C/HOR	—
—	—	MS250/3K/HOR	—
MH300/4	—	—	—
MH300/C	—	—	—
—	MVR325/I/U/WM	—	—
—	MVR325/C/I/U/WM	—	—
—	MVT325/I/U/WM	—	—
—	MVT325/C/I/U/WM	—	—
MH400/U	MVR400/U	M400/U	M59PJ-400/U
MH400/C/U	MVR400/C/U	M400/C/U	M59PK-400
MH400/E	—	—	—
—	—	MS400/HOR	—
—	—	MS400/C/HOR	—
—	—	MS400/3K/HOR	—
MS400/BU	MVR400/VBU	MS400/BU-Only	M59PJ-400/BU
—	MVR400/VBD	MS400/BD-Only	—
MS400/C/BU	MVR400/C/VBU	MS400/C/BU-Only	M59PK-400/BU
—	MVR400/C/VBD	MS400/C/BD-Only	—
—	—	MS400/3K/BU-Only	—
—	MVR400/I/U	—	M59PJ-400/I/U
—	MVR400/C/I/U	—	M59PK-400/I/U
—	MVR400/BU/I	—	M59PJ-400/BU/I
—	MVR400/BD/I	—	M59PJ-400/BD/I
MHT400/U	—	—	M59PJ-T400/U
MHT400/C/U	—	—	M59PK-T400/U
—	MVT400/VBU	MST400/BU-Only	—
—	MVT400/C/VBU	MST400/C/BU-Only	—
—	MVT400/I/U	—	M59PJ-T400/I/U
—	MVT400/C/I/U	—	M59PK-T400/I/U
MH750BU	—	M750/BU-Only	—
MH1000/U	MVR1000/U	M1000/U	M47PA-1000/U
MH1000/C/U	MVR1000/C/U	M1000/C/U	M47PB-1000/U
MS1000/BU	MVR1000/VBU	MS1000/BU-Only	—
MS1000/BD	MVR1000/VBD	MS1000/BD-Only	—
MS1000/C/BU	—	MS1000/C/BU-Only	—
MS1000/C/BD	—	MS1000/C/BD-Only	—
—	MVR950/I/VBU	—	—
—	MVR950/I/VBD	—	—
MHT1000/U	MVT1000/VBU	—	M47PA-T1000/U
MHT1000/C/U	—	—	M47PB-T1000/U
—	—	MST1000/BU-Only	—
—	—	MST1000/C/BU-Only	—
MH1500BU	MVR1500/HBU/E	M1500/BU-HOR	M48PC-1500/BU
MH1500BD	MVR1500/HBD/E	M1500/BD	M48PC-1500/BD

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High Intensity Discharge Lamps

Ordering Code Cross Reference Guide

Mercury Lamps

Philips	General Electric	Sylvania	ANSI
H46DL-40-50/DX H46DL-40-50/N H43AV-75/DX	HR40/50DX45-46 — HR75DX43	H45/46DL-40/50/DX — H43AV-75/DX	H46DL-50/DX H46DL-50/N H43AV-75/DX
H43AN-75 H43AV-75/N H43/44KL-75-100 — —	— — HR75/100PFL43-44 H85A3 H85A3/UV	— H43AV-75/N H43/44-75/100/PFL — —	H43A/N-75 H43AV-75/N H43KL-75 H3FG-85 H3FE-85
H38LL-100 H38MP-100/DX H38MP-100/N H38HT-100 H38HT-T100	HR100A38/A23 HR100DX38/A23 — HR100A38 —	— H38AV-100/DX H38AV-100/N H38HT-100 —	H38LL-100 H38MP-100/DX H38MP-100/N H38HT-100 H38HT-T100
H38JA-100/DX H38JA-T100/DX H38JA-100/N H38JA-T100/N H38BP-100/DX	HR100DX38 HT100DX38 HR100WDX38 — HR100RDXFL38	H38JA-100/DX H38JA-T100/DX H38JA-100/N — H38BP-100/DX	H38JA-100/DX H38JA-T100/DX H38JA-100/N H38JA-T100/N H38BP-100/DX
H38BP-T100/DX H38BP-100/N H38BM-100 H38BM-T100	— — HR100RFL38 —	— — — —	— H38BP-100/N H38BM-100 —
H44GS-100 H44JM-100 — H39KB-175 H39KB-T175	HR100PSP44 HR100PFL44 H100A4/T HR175A39 —	H44GS-100 H44JM-100 — H39KB-175 —	H44GS-100 H44JM-100 H44AB-100 H39KB-175 H39KB-T175
H39KC-175/DX H39KC-T175/DX H39KC-175/N H39KC-T175/N H39KC-175/C	HR175DX39 HT175DX39 HR175WDX39 — —	H39KC-175/DX H39KC-T175/DX H39KC-175/N — —	H39KC-175/DX H39KC-T175/DX H39KC-175/N — H39KC-175/C
H39BM-175 H39BP-175/DX H39BP-T175/DX H39BP-175/N H39BS-175	HR175RFL39 HR175RDXFL39 — — HR175RFL39/M	— — — — H39BN-175/DX	H39BM-175 H39BP-175/DX — H39BP-175/N H39BS-175
H39BV-175/DX H37KB-250 H37KB-T250 H37KC-250/DX H37KC-T250/DX	— HR250A37 — HR250DX37 HT250DX37	— H37KB-250 — H37KC-250/DX H37KC-T250/DX	H39BV-175/DX H37KB-250 H37KB-T250 H37KC-250/DX H37KC-T250/DX
H37KC-250/N H37KC-T250/N H37KC-250/C H33CD-300 H33GL-300/DX	HR250WDX37 — — — —	H37KC-250/N — — — —	H37KC-250/N H37KC-T250/N H37KC-250/C — —
H33GL-300/N H33CD-400 H33CD-T400 H33GL-400/DX —	— HR400A33 — [HR400DX33] [HR400DX33/BT]	— H33CD-400 — H33GL-400/DX —	— H33CD-400 H33CD-T400 H33GL-400/DX —
H33GL-T400/DX H33GL-400/N H33GL-T400/N H33GL-400/C H33FY-400	HT400DX33 HR400WDX33 — — HR400R33	H33GL-T400/DX H33GL-400/N — — —	H33GL-T400/DX H33GL-400/N H33GL-T400/N H33GL-400/C H33FY-400

High Intensity Discharge Lamps

Ordering Code Cross Reference Guide Mercury Lamps (cont'd)

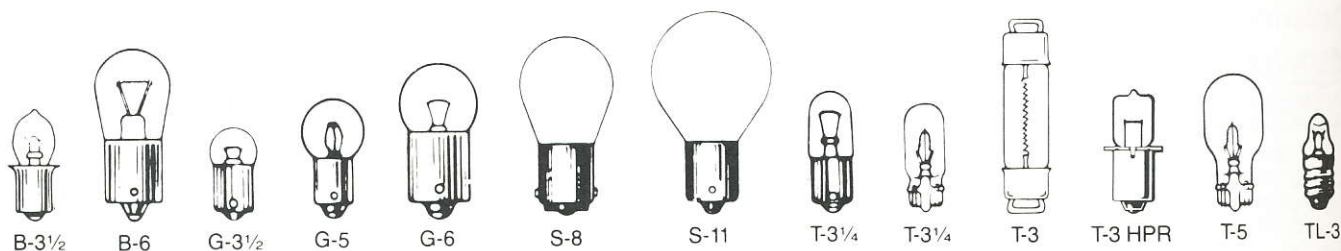
Philips	General Electric	Sylvania	ANSI
H33HS-400 H33DN-400/DX H33LN-400 H33FS-400/DX	— HR400RDX33 — HR400RDXFL33	— — — —	H33HS-400 H33DN-400/DX H33LN-400 H33FS-400/DX
— — H35NA-700 H35ND-700/DX H34GV-1000 H34GW-1000/DX	HR400RSP33 HR400A33/T16 HR700A35 HR700DX35 HR1000A34 HR1000DX34	— H33AR-400 — — H34GV-1000 H34GW-1000/DX	H33FP-400 H33AR-400 H35NA-700 H35ND-700/DX H34GV-1000 H34GW-1000/DX
H36GV-1000 H36GV-T1000 H36GW-1000/DX H36GW-T1000/DX H36GW-1000/N	HR1000A36 — HR1000DX36 HT1000DX36 HR1000WDX36	H36GV-1000 — H36GW-1000/DX H36GW-T1000/DX —	H36GV-1000 H36GV-T1000 H36GW-1000/DX H36GW-T1000/DX H36GW-1000/N
H36GW-1000/C H36KY-1000/DX H36FB-1000 H36FA-1000/DX —	— HR1000RDX36 HR1000RFL36 HR1000RDXFL36 HR1000RSDX36	— — — — —	H36GW-1000/C H36KY-1000/DX H36FB-1000 H36FA-1000/DX —

Self-Ballasted Lamps

S160E23/DX S160PS30/DX S160R38/FL S160RFL	— HSB160/PS30/M — —	— — — —	B87YL-160 B87YN-160 B87YP-160 B87YS-160
S250E28/DX S250E28/DX/M S250R/FL/M S250R/FL S450BT37 120V	HSB250 HSB250/M — — HSB450	— — — — —	— — B94HY-250 B94HZ-250 —
S450BT37 230V S450BT37 250V S450BT37/C 120V S450BT37 208V S450BT37/C 208V	— — HSB450 — —	— — — — —	— — — — —
S450BT37/C 230V S450BT37/C 250V S450BT37/C 270V S750R57 120V —	— — — — HSB750R/120	— — — — —	— — — B78YE-750 —
S750R57/C 208V S750R57/C 230V S750R57/C 250V S750R57/C 270V S750R60/C 120V	— HSB750R/240 HSB750R/240 — —	— — — — —	— — — — B78YK-750
S750R60 250V —	— HSB750R/120	— —	— —

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Miniature Lamps



Lamp Trade No.	Bulb	Service and Special Description	Vac(B) or Gas(C)	Design Volts	Design Amps.	Design Watts	Approx. Mean Spherical Candela (MSCd)	Rated Avg. Life, Hours	Base	Filament Designation	Light Center Length In.	Light Center Length mm	Max. Overall Length In.	Max. Overall Length mm
PR1	B-3 1/2	Flashlight	B	2.00	.95	1.90	1.00	40	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR2	B-3 1/2	Flashlight-2 D Cells	B	2.38	.50	1.19	.80	15	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR3	B-3 1/2	Flashlight-3 D Cells	B	3.57	.50	1.79	1.50	15	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR4	B-3 1/2	Flashlight-2 C Cells	B	2.33	.27	.63	.40	10	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR6	B-3 1/2	Flashlight-2 D Ind. Cells	B	2.47	.30	.74	.45	30	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR7	B-3 1/2	Flashlight-3 D Ind. Cells	B	3.70	.30	1.11	.90	30	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR12	B-3 1/2	Flashlight-5 D Cells	C	5.95	.50	3.00	3.10	15	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR13	B-3 1/2	Hand Lantern-4 F Cells	C	4.75	.50	2.38	2.20	15	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR15	B-3 1/2	Hand Lantern-6 Volt Battery	C	4.82	.50	2.41	2.00	30	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR18	B-3 1/2	Flashlight-6 D Cells	C	7.20	.55	3.96	4.80	3	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
PR20	B-3 1/2	Flashlight-7 D Cells	C	8.63	.50	4.32	5.00	15	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	32
KPR102	B-3 1/2	Flashlight-Krypton 2 Cells	C	2.40	.70	1.68	1.30	15	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	31
KPR103	B-3 1/2	Flashlight-Krypton 3 Cells	C	3.60	.75	2.70	2.70	20	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	31
KPR113	B-3 1/2	Flashlight-Krypton 4 Cells	C	4.80	.75	3.60	4.06	20	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	31
KPR118	B-3 1/2	Flashlight-Krypton 6 Cells	C	7.20	.55	3.96	5.23	15	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	31
KPR131	B-3 1/2	Flashlight-Krypton 2 Cells	C	2.40	.835	2.00	1.47	15	S.C. Min. Fig.	C-2R	1/4	6.4	1 1/4	31
HPR36	T-3	Flashlight-Halogen	C	5.50	1.00	5.50	7.95	40	S.C. Min. Fig.	C-6	1/4	6.4	1 1/4	31
HPR40	T-3	Flashlight-Halogen	C	6.0	.67	4.02	6.0	50	S.C. Min. Fig.	C-6	1/4	6.4	1 1/4	31
HPR41	T-3	Flashlight-Halogen	C	3.75	.75	2.81	3.1	100	S.C. Min. Fig.	C-6	1/4	6.4	1 1/4	31
HPR50	T-3	Flashlight-Halogen 4 Cells	C	5.20	.85	4.42	6.76	25	S.C. Min. Fig.	C-6	1/4	6.4	1 1/4	31
HPR51	T-3	Flashlight-Halogen	C	6.50	.70	4.55	7.16	25	S.C. Min. Fig.	C-6	1/4	6.4	1 1/4	31
HPR52	T-3	Flashlight-Halogen 2 Cells	C	2.80	.85	2.38	2.78	10	S.C. Min. Fig.	C-6	1/4	6.4	1 1/4	31
HPR53	T-3	Flashlight-Halogen	C	4.00	.85	3.40	4.77	25	S.C. Min. Fig.	C-6	1/4	6.4	1 1/4	31
HMO3	T-3	Flashlight-Halogen	C	6.0	.67	4.0	6.05	50	Wedge	C-6	—	8.5	—	25
6	S-8	Sewing Machine	C	6.40	3.00	19.20	23.00	500	D.C. Bay	C-2R	1 1/4	31.8	2	51
13	G-3 1/2	Flashlight-3 D Cells	B	3.70	.30	1.11	1.00	15	Min. Sc.	C-2R	23/32	18.2	1 5/16	24
14	G-3 1/2	Flashlight-2 D Cells	B	2.47	.30	.74	.50	15	Min. Sc.	C-2R	23/32	18.2	1 5/16	24
27	G-4 1/2	Hand Lantern-4 F Cells	B	4.90	.30	1.47	1.40	30	Min. Sc.	C-2R	23/32	18.2	1 1/16	27
31	G-4 1/2	Flashlight-5 D Cells	B	6.15	.30	1.85	2.00	15	Min. Sc.	C-2R	23/32	18.2	1 1/16	27
35	G-5 1/2	Hand Lantern-2 No. 6 Cells	B	2.50	.80	2.00	1.20	150	Min. Sc.	C-2R	7/8	22.2	1 1/4	32
40	T-3 1/4	Radio	B	6.30	.15	.95	.50	3000	Min. Sc.	C-2R	7/8	22.6	1 1/16	31
41	T-3 1/4	Radio and Indicator	B	2.50	.50	1.25	.50	3000	Min. Sc.	C-2R	31/32	24.6	1 1/16	31
43	T-3 1/4	Indicator	B	2.50	.50	1.25	.50	3000	Min. Bay.	C-2R	25/32	19.8	1 1/16	31
44	T-3 1/2	Radio, TV and Indicator	B	6.30	.25	1.58	.90	3000	Min. Bay.	C-2R	11/16	18.0	1 1/16	31
45	T-3 1/4	Radio	B	3.20	.35	1.12	.50	3000	Min. Bay.	C-2R	11/16	18.0	1 1/16	31
46	T-3 1/4	Radio, TV and Indicator	B	6.30	.25	1.58	.90	3000	Min. Sc.	C-2R	7/8	22.8	1 1/16	31
47	T-3 1/4	Radio, TV and Indicator	B	6.30	.15	.95	.52	3000	Min. Bay.	C-2R	11/16	18.0	1 1/16	31
51	G-3 1/2	Auto and Indicator	B	7.50	.22	1.65	1.00	1000	Min. Bay.	C-2R	1/2	12.7	1 5/16	24
52	G-3 1/2	Indicator	B	14.40	.12	1.73	.75	1000	Min. Sc.	C-2V	5/8	15.9	1 5/16	24
53	G-3 1/2	Auto and Indicator	B	14.40	.12	1.73	1.00	1000	Min. Bay.	C-2V	1/2	12.7	1 5/16	24
53X	G-3 1/2	Auto	B	14.40	.12	1.73	1.00	1000	Min. Bay.	C-2F	1/2	12.7	1 5/16	24
55	G-4 1/2	Auto	C	7.00	.41	2.80	2.00	500	Min. Bay.	C-2R	9/16	14.2	1 1/16	27
57	G-4 1/2	Auto	B	14.00	.24	3.36	2.00	500	Min. Bay.	C-2V	9/16	14.2	1 1/16	27
57X	G-4 1/2	Auto	B	14.00	.24	3.36	2.00	500	Min. Bay.	C-2F	9/16	14.2	1 1/16	27
63	G-6	Auto, Aviation and Coin Machine	C	7.00	.63	4.41	3.00	1000	S.C. Bay.	C-2R	3/4	19.0	1 1/16	37
64	G-6	Auto, Aviation and Coin Machine	C	7.00	.63	4.41	3.00	1000	D.C. Bay.	C-2R	3/4	19.0	1 1/16	37

Miniature Lamps

Lamp Trade No.	Bulb	Service and Special Description	Vac(B) or Gas(C)	Design Volts	Design Amps.	Design Watts	Approx. Mean Spherical Candela (MSCd)	Rated Avg. Life, Hours	Base	Filament Designation	Light Center Length In. mm	Max. Overall Length In. mm
67	G-6	Auto	C	13.50	.59	7.97	4.00	5000† ^[9]	S.C. Bay.	C-2R	1 ³ / ₁₆ 20.6	1 ⁷ / ₁₆ 37
68	G-6	Auto and Marine	C	13.50	.59	7.97	4.00	5000† ^[9]	D.C. Bay.	C-2R	1 ³ / ₁₆ 20.6	1 ⁷ / ₁₆ 37
72	G-6	Special Service	B	22.00	.18	3.96	3.00	200	D.C. Bay.	C-2V	3/4 19.0	1 ⁷ / ₁₆ 37
81	G-6	Auto, Aviation and Coin Machine	C	6.50	1.02	6.63	6.00	500	S.C. Bay.	C-2R	3/4 19.0	1 ⁷ / ₁₆ 37
82	G-6	Auto and Marine	C	6.50	1.02	6.63	6.00	500	D.C. Bay.	C-2R	3/4 19.0	1 ⁷ / ₁₆ 37
87	S-8	Auto ^[1]	C	6.80	1.91	13.00	15.00	300	S.C. Bay.	C-6	1 ¹ / ₈ 28.6	2 51
89	G-6	Auto	C	13.00	.58	7.50	6.00	750	S.C. Bay.	C-2R	3/4 19.0	1 ⁷ / ₁₆ 37
89K	G-6	Indicator	C	13.00	.58	7.50	6.00	750	Cand. Sc.	C-2R	1 ⁵ / ₁₆ 23.8	1 ³ / ₈ 35
90	G-6	Auto and Marine	C	13.00	.58	7.50	6.00	750	D.C. Bay.	C-2R	3/4 19.0	1 ⁷ / ₁₆ 37
93	S-8	Auto ^[1]	C	12.80	1.04	13.31	15.00	700	S.C. Bay.	C-6	1 ¹ / ₈ 28.6	2 51
94	S-8	Auto and Marine ^[1]	C	12.80	1.04	13.31	15.00	700	D.C. Bay.	C-6	1 ¹ / ₈ 28.6	2 51
96	G-6	Auto	C	13.50	.69	9.32	4.00	5000† ^[9]	D.C. Bay.	C-2V	1 ³ / ₁₆ 20.6	1 ⁷ / ₁₆ 37
97	G-6	Auto	C	13.50	.69	9.32	4.00	5000† ^[9]	S.C. Bay.	C-2V	1 ³ / ₁₆ 20.6	1 ⁷ / ₁₆ 37
97A	G-6	Auto Outside Coated Translucent Amber	C	13.50	.69	9.32	-	5000† ^[9]	S.C. Bay.	C-2V	- -	1 ⁷ / ₁₆ 37
98	G-6	Auto	C	13.00	.62	8.06	6.00	1300	S.C. Bay.	C-2V	3/4 19.0	1 ⁷ / ₁₆ 37
99	G-6	Auto	C	13.00	.62	8.06	6.00	1300	D.C. Bay.	C-2V	3/4 19.0	1 ⁷ / ₁₆ 37
104	B-6	Auto	C	12.80	1.00	12.80	12.00	1200	D.C. Bay.	C-6	1 ¹ / ₁₆ 26.9	1 ³ / ₄ 45
105	B-6	Auto	C	12.80	1.00	12.80	12.00	1200	S.C. Bay.	C-6	1 ¹ / ₁₆ 26.9	1 ³ / ₄ 45
112	TL-3	Flashlight-1 AA Cell ^[2]	B	1.20	.22	.26	-	5	Min. Sc.	S-2	- -	1 ⁵ / ₁₆ 24
123	G-3 ¹ / ₂	Flashlight-1 D Cell	B	1.25	.30	.38	.10	10	Min. Sc.	S-2	2 ³ / ₃₂ 18.2	1 ⁵ / ₁₆ 24
124E	T-3 ¹ / ₄	Side Marker	B	14.00	.27	3.80	1.50	5000	Wire Term. 5/8"	C-2F	9/16 14.3	1 ¹ / ₁₆ 27
130	G-3 ¹ / ₂	Indicator, Radio and TV	B	6.30	.15	.95	.32	15,000	Min. Bay.	C-2R	1/2 12.7	1 ⁵ / ₁₆ 24
131	G-3 ¹ / ₂	Bicycle-1 D Cell	B	1.30	.10	.13	.03	50	Min. Sc.	C-2R	2 ³ / ₃₂ 18.2	1 ⁵ / ₁₆ 24
133	G-3 ¹ / ₂	Indicator	B	6.30	.15	.95	.32	15,000	Min. Sc.	C-2R	2 ³ / ₃₂ 18.2	1 ⁵ / ₁₆ 24
158	T-3 ¹ / ₄	Auto	B	14.00	.24	3.36	2.00	500	Wedge	C-2V	9/16 14.2	1 ¹ / ₁₆ 27
159	T-3 ¹ / ₄	Indicator	B	6.30	.15	.95	.34	10,000	Wedge	C-2R	9/16 14.2	1 ¹ / ₁₆ 27
161	T-3 ¹ / ₄	Auto	B	14.00	.19	2.66	1.00	4000	Wedge	C-2F	9/16 14.2	1 ¹ / ₁₆ 27
168	T-3 ¹ / ₄	Auto	B	14.00	.35	4.90	3.00	1500	Wedge	C-2F	9/16 14.2	1 ¹ / ₁₆ 27
182	G-3 ¹ / ₂	Auto	B	14.40	.18	2.59	1.00	2000	Min. Bay.	C-2F	1/2 12.7	1 ⁵ / ₁₆ 24
184	T-3 ¹ / ₄	Auto	B	14.40	.24	3.46	1.10	7000	Wedge	C-2F	9/16 14.2	1 ¹ / ₁₆ 27
192	T-3 ¹ / ₄	Auto	B	13.00	.33	4.29	3.00	1000	Wedge	C-2V	9/16 14.2	1 ¹ / ₁₆ 27
193	T-3 ¹ / ₄	Auto	B	14.00	.33	4.62	2.00	75,000	Wedge	C-2F	9/16 14.2	1 ¹ / ₁₆ 27
194	T-3 ¹ / ₄	Auto	B	14.00	.27	3.78	2.00	3500	Wedge	C-2F	9/16 14.2	1 ¹ / ₁₆ 27
194A	T-3 ¹ / ₄	Auto Outside Coated Translucent Amber	B	14.00	.27	3.78	-	3500	Wedge	C-2F	- -	1 ¹ / ₁₆ 27
194E	T-3 ¹ / ₄	Side Marker	B	14.00	.27	3.78	2.00	3500	Wire Term.	C-2F	9/16 14.3	1 ¹ / ₁₆ 27
198	S-8	Auto ^[1]	C	12.80 14.00	2.25 .68	28.80 9.52	32.00 3.00	1500 5000†	D.C. Index	C-6 C-6	1 ¹ / ₄ 31.8	2 51
199	S-8	Auto ^[1]	C	12.80	2.25	28.80	32.00	1500	S.C. Bay.	C-6	1 ¹ / ₄ 31.8	2 51
209	B-6	Auto	C	6.50	1.78	11.57	15.00	100	S.C. Bay.	C-6	1 ¹ / ₁₆ 26.9	1 ³ / ₄ 45
210	B-6	Auto and Marine	C	6.50	1.78	11.57	15.00	100	D.C. Bay.	C-6	1 ¹ / ₁₆ 26.9	1 ³ / ₄ 45
211-2	T-3	Auto	C	12.80	.97	12.42	12.00	1000	Dbl. End Cap	C-8	- -	1 ²³ / ₃₂ 44
212-2	T-3	Auto	C	13.50	.74	10.00	6.00	5000	Dbl. End Cap	C-8	- -	1 ²³ / ₃₂ 44
214-2	T-3	Auto	C	13.50	.52	7.02	4.00	2000	Dbl. End Cap	C-8	- -	1 ²³ / ₃₂ 44
216	T-3 ¹ / ₄	Auto Radio	B	14.40	.24	3.46	1.10	7000	Min. Bay.	C-2F	5/8 15.9	1 ³ / ₁₆ 31
222	TL-3	Flashlight-2 AA Cells ^[2]	B	2.25	.25	.56	-	5	Min. Sc.	C-2R	- -	1 ⁵ / ₁₆ 24
233	G-3 ¹ / ₂	Flashlight-2 C Cells	B	2.33	.27	.63	.42	10	Min. Sc.	C-2R	2 ³ / ₃₂ 18.2	1 ⁵ / ₁₆ 24
243	TL-3	Flashlight-2 C Cells ^[2]	B	2.33	.27	.63	-	10	Min. Sc.	C-2R	- -	1 ⁵ / ₁₆ 24
243D	TL-3	Flashlight-2 D Cells	B	2.33	.27	.63	-	10	Wire Leads Tinned	C-2R	- -	- -
256	T-3 ¹ / ₄	Auto. Flasher	B	14.0	.27	3.78	1.6	500	Min. Bay.	C-2R	.63 16	1.19 30.23
257	G-4 ¹ / ₂	Auto. Flasher	B	14.00	.27	3.78	3.10	500 ^[5]	Min. Bay.	C-2R	5/8 15.9	1 ¹ / ₁₆ 27
293	G-4 ¹ / ₂	Auto	B	14.00	.33	4.62	2.00	7500	Min. Bay.	C-2F	9/16 14.2	1 ¹ / ₁₆ 27

^[1] Base pins approximately at right angles to plane of filament.

^[2] Lens end.

^[9] At 14.0 volts.

†5000 plus Hours.

MIN. & SEALED BEAM

Miniature Lamps

Lamp Trade No.	Bulb	Service and Special Description	Vac(B) or Gas(C)	Design Volts	Design Amps.	Design Watts	Approx. Mean Spherical Candela (MSCd)	Rated Avg. Life, Hours	Base	Filament Designation	Light Center Length In. mm	Max. Overall Length In. mm
302	G-5	Aviation [1]	B	28.00	.17	4.76	3.00	500	D.C. Bay.	C-2F	1 1/16 17.5	1 3/8 35
303	G-6	Aviation [1]	B	28.00	.30	8.40	6.00	500	S.C. Bay.	C-2F	3/4 19.0	1 7/16 37
304	G-6	Aviation [1]	B	28.00	.30	8.40	6.00	500	D.C. Bay.	C-2F	3/4 19.0	1 7/16 37
305	S-8	Aviation [1]	C	28.00	.51	14.28	15.00	300	S.C. Bay.	C-2V	1 1/8 28.6	2 51
305IF	S-8	Aviation. Inside Frosted	C	28.00	.51	14.28	-	300	S.C. Bay.	C-2V	- -	2 51
306	S-8	Aviation [1]	C	28.00	.51	14.28	15.00	300	D.C. Bay.	C-2V	1 1/8 28.6	2 51
307	S-8	Aviation [1]	C	28.00	.67	18.48	21.00	300	S.C. Bay.	C-2V	1 1/8 28.6	2 51
307IF	S-8	Aviation. Inside Frosted	C	28.00	.67	18.48	-	300	S.C. Bay.	C-2V	- -	2 51
308	S-8	Aviation [1]	C	28.00	.67	18.48	21.00	300	D.C. Bay.	C-2V	1 1/8 28.6	2 51
308IF	S-8	Aviation. Inside Frosted	C	28.00	.67	18.48	-	300	D.C. Bay.	C-2V	- -	2 51
309	S-11	Aviation [1]	C	28.00	.90	25.20	32.00	300	S.C. Bay.	C-2V	1 1/4 31.8	2 3/8 61
311	S-11	Aviation [1]	C	28.00	1.29	36.12	50.00	300	S.C. Bay.	C-2V	1 1/4 31.8	2 3/8 61
312	S-11	Aviation [1]	C	28.00	1.29	36.12	50.00	300	D.C. Bay.	C-2V	1 1/4 31.8	2 3/8 61
313	T-3 1/4	Aviation	B	28.00	.17	4.76	3.50	500	Min. Bay.	C-2F	5/8 15.9	1 3/16 31
356	G-3 1/2	Aviation	B	28.00	.17	4.76	3.50	500	Min. Bay.	C-2V	1/2 12.7	1 5/16 24
407	G-4 1/2	Hand Lantern Flasher-4 F Cells	B	4.90	.30	1.47	1.40	50 [5]	Min. Sc.	C-2R	1 3/16 20.6	1 1/16 27
425	G-4 1/2	Hand Lantern-4 F Cells	C	5.00	.50	2.50	2.30	15	Min. Sc.	C-2R	2 3/32 18.2	1 1/16 27
428	G-4 1/2	Toy	B	12.50	.25	3.13	2.40	250	Min. Sc.	C-2V	2 3/32 18.2	1 1/16 27
432	G-4 1/2	Toy	B	18.00	.25	4.50	3.50	250	Min. Sc.	C-2V	2 3/32 18.2	1 1/16 27
455	G-4 1/2	Indicator Flasher	C	6.50	.50	3.25	2.00	500 [5]	Min. Bay.	C-2R	9/16 14.2	1 1/16 27
502	G-4 1/2	Hand Lantern-4 F Cells	B	5.10	.15	.77	.60	100	Min. Sc.	C-2R	2 3/32 18.2	1 1/16 27
509	G-6	Indicator	B	24.00	.18	4.32	2.80	1000	S.C. Bay.	C-2V	3/4 19.0	1 7/16 37
509K	G-6	Indicator	B	24.00	.18	4.32	2.80	1000	Cand. Sc.	C-2V	1 5/16 23.8	1 3/8 35
555	T-3 1/4	Coin Machine	B	6.30	.25	1.60	.90	3000	Wedge	C-2R	2 1/32 16.5	1 1/4 32
561	T-3	Auto	C	12.80	.97	12.41	12.00	1000	Double Wedge	C-8	- -	1 23/32 44
562	T-3	Auto	C	13.50	.74	10.00	6.00	2000 [9]	Double Wedge	C-8	- -	1 23/32 44
563	T-3	Auto	C	13.50	.52	7.02	4.00	1000 [9]	Double Wedge	C-8	- -	1 23/32 44
605	G-4 1/2	Flashlight-5 D Cells	C	6.15	.50	3.08	3.40	15	Min. Sc.	C-2R	2 3/32 18.2	1 1/16 27
623	G-6	Auto. Two Identical Fil. in Series	B	28.00	.37	10.36	6.00	1000	S.C. Bay.	2C-2V	3/4 19.0	1 7/16 37
624	G-6	Auto. Marine. Two Identical Fil. in Series	B	28.00	.37	10.36	6.00	1000	D.C. Bay.	2C-2V	3/4 19.0	1 7/16 37
631	G-6	Auto. Two Identical Fil. in Series	C	14.00	.63	8.82	6.00	1000	S.C. Bay.	2C-2R	3/4 19.0	1 7/16 37
755	T-3 1/4	Indicator	B	6.30	.15	.95	.33	20,000	Min. Bay.	C-2R	1 1/16 18.0	1 3/16 31
795	T-4	Emergency Vehicle-Halogen	C	12.8	3.9	49.92	100	200	S.C. Bay.	C-6	1.25 31.75	2.50 63.50
756	T-3 1/4	Indicator	B	14.00	.08	1.12	.33	20,000	Min. Bay.	C-2F	5/8 16.0	1 1/8 30
904	T-5	Auto	C	13.50	.69	9.32	4.00	5000† [9]	Wedge	C-2F	1 3/16 20.6	1 1/2 38
906	T-5	Auto	C	13.00	.69	9.00	6.00	1000	Wedge	C-2F	1 3/16 20.6	1 1/2 38
908	T-5	Emergency Lighting	C	6.00	1.50	9.00	12.00	50	Wedge	C-2R	1 3/16 20.6	1 1/2 39
912	T-5	Auto	C	12.80	1.00	12.80	12.00	1000	Wedge	C-2R	1 3/16 20.6	1 1/2 38
914	T-5	Emergency Lighting	C	4.00	.90	3.60	3.50	50	Wedge	C-6	1 3/16 20.6	1 1/2 39
916	T-5	Auto	C	13.50	.54	7.30	2.00	10,000	Wedge	C-2F	1 3/16 20.6	1 1/2 39
921	T-5	Auto	C	12.80	1.40	18.00	21.00	1000	Wedge	C-2R	1 3/16 20.6	1 1/2 39
922	T-5	Auto	C	12.80	.98	12.55	15.00	200	Wedge	C-2R	1 3/16 20.6	1 1/2 39
923	T-5	Auto	C	12.80	.90	12.50	12.50	500	Wedge	C-2R	1 3/16 20.6	1 1/2 39
1003	B-6	Auto	C	12.80	.94	12.03	15.00	200	S.C. Bay.	C-6	1 1/16 26.9	1 3/4 45
1004	B-6	Auto and Marine	C	12.80	.94	12.03	15.00	200	D.C. Bay.	C-6	1 1/16 26.9	1 3/4 45
1016	S-8	Auto [1]	C	12.80 14.00	1.34 .59	17.15 8.26	21.00 6.00	300 1500	D.C. Index	C-6 C-6	1 1/4 31.8	2 51
1019	G-16 1/2	Searchlight [1]	C	11.75	5.10	60.00	100.00	100	S.C. Bay.	C-2V	1 1/4 31.8	3 77
1034	S-8	Auto [1]	C	12.80 14.00	1.80 .59	23.04 8.26	32.00 3.00	200 5000	D.C. Index	C-6 C-6	1 1/4 31.8	2 51
1034A	S-8	Auto. Outside Coated Translucent Amber [1]	C	12.80 14.00	1.80 .59	23.04 8.26	- -	200 5000	D.C. Index	C-6 C-6	1 1/4 31.8	2 51

[1] Base pins approximately at right angles to plane of filament.

[2] Lens end.

[5] Average useful life.

[9] At 14.0 volts.

Miniature Lamps

Lamp Trade No.	Bulb	Service and Special Description	Vac(B) or Gas(C)	Design Volts	Design Amps.	Design Watts	Approx. Mean Spherical Candela (MSCd)	Rated Avg. Life, Hours	Base	Filament Designation	Light Center Length		Max. Overall Length	
											In.	mm	In.	mm
1054	RP-11	Marine [1]	C	32.00	.74	23.68	32.00	100	D.C. Bay.	C-2V	1¼	31.8	2¼	58
1061	B-6	Indicator [1]	C	6.70	1.80	12.10	13.00	400	D.C. Bay.	C-6	1¼	26.9	1¼	4
1073	S-8	Auto [1]	C	12.80	1.80	23.04	32.00	200	S.C. Bay.	C-6	1¼	31.8	2	51
1076	S-8	Auto [1]	C	12.80	1.80	23.04	32.00	200	D.C. Bay.	C-6	1¼	31.8	2	51
1093	S-8	Auto [1]	C	12.80	1.19	15.23	15.00	1000	S.C. Bay.	C-2R	1¼	31.8	2	51
1129	S-8	Auto [1]	C	6.40	2.63	16.83	21.00	200	S.C. Bay.	C-6	1¼	31.8	2	51
1130	S-8	Auto [1]	C	6.40	2.63	16.83	21.00	200	D.C. Bay.	C-6	1¼	31.8	2	51
1132IF	S-8	Sewing Machine. Inside Frosted. Brass Contact Soldered to each Base Eyelet	C	6.40	2.63	16.83	-	200	D.C. Bay.	C-6	-	-	2	51
1133	RP-11	Auto [1]	C	6.20	3.91	24.24	32.00	200	S.C. Bay.	C-2R	1¼	31.8	2¼	58
1134	RP-11	Auto [10]	C	6.20	3.91	24.24	32.00	200	D.C. Bay.	C-2R	1¼	31.8	2¼	58
1141	S-8	Auto [1]	C	12.80	1.44	18.43	21.00	1000	S.C. Bay.	C-6	1¼	31.8	2	51
1142	S-8	Auto [1]	C	12.80	1.44	18.43	21.00	1000	D.C. Bay.	C-6	1¼	31.8	2	51
1143	RP-11	Auto [1]	C	12.50	2.00	25.00	32.00	400	S.C. Bay.	C-2R	1¼	31.8	2¼	58
1144	RP-11	Auto [1]	C	12.50	2.00	25.00	32.00	400	D.C. Bay.	C-2R	1¼	31.8	2¼	58
1154	S-8	Auto [1]	C	6.40 7.00	2.63 .75	16.83 5.25	21.00 3.00	200 1000	D.C. Index	C-6 C-6	1¼	31.8	2	51
1155	G-6	Auto	C	13.50	.59	7.97	4.00	5000†[9]	S.C. Bay.	2C-2R	1¾	20.6	17½	37
1156	S-8	Auto [1]	C	12.80	2.10	26.88	32.00	1200	S.C. Bay.	C-6	1¼	31.8	2	51
1157	S-8	Auto [1]	C	12.80 14.00	2.10 .59	26.88 8.26	32.00 3.00	1200 5000†	D.C. Index	C-6 C-6	1¼	31.8	2	51
1157A	S-8	Auto. Outside Coated Translucent Amber [1]	C	12.80 14.00	2.10 .59	26.88 8.26	- -	1200 5000†	D.C. Index	C-6 C-6	1¼	31.8	2	51
1157NA	S-8	Auto. Amber (Natural) [1]	C	12.80 14.00	2.10 .59	26.88 8.26	24.00 2.20	1200 5000†	D.C. Index	C-6 C-6	1¼	31.8	2	51
1158	S-8	Auto [10]	C	6.40 7.00	2.63 .75	16.83 5.25	21.00 3.00	200 1000	D.C. Bay.	C-6 C-6	1¼	31.8	2	51
1159	S-8	Auto [1]	C	12.80	1.60	20.48	21.00	500	S.C. Bay.	C-6	1¼	31.8	2	51
1176	S-8	Auto [10]	C	12.80 14.00	1.34 .59	17.15 8.26	21.00 6.00	300 1500	D.C. Bay.	C-6 C-6	1¼	31.8	2	51
1178	G-6	Auto	C	13.50	.69	9.32	4.00	5000†[9]	D.C. Bay.	C-2V	1¾	20.6	17½	37
1183	RP-11	Auto [1]	C	5.50	6.25	34.98	50.00	100	S.C. Bay.	C-2V	1¼	31.8	2¼	58
1184	RP-11	Auto [1]	C	5.50	6.25	34.98	50.00	100	D.C. Bay.	C-2V	1¼	31.8	2¼	58
1195	RP-11	Auto [1]	C	12.50	3.00	37.50	50.00	300	S.C. Bay.	C-2R	1¼	31.8	2¼	58
1196	RP-11	Auto [1]	C	12.50	3.00	37.50	50.00	300	D.C. Bay.	C-2R	1¼	31.8	2¼	58
1203	S-8	Auto [1]	C	28.00	.71	19.60	21.00	400	S.C. Bay.	C-2V	1¼	31.8	2	51
1209	RP-11	Auto	C	6.10	4.00	23.97	32.00	125	S.C. Pref. [8]	C-6	7⁄8	22.2	2¼	58
1224	G-6	Marine [1]	B	32.00	.16	5.12	3.80	500	D.C. Bay.	C-2V	1¼	17.5	17½	37
1224K	G-6	Indicator	B	32.00	.16	5.12	3.80	500	Cand. Sc.	C-2V	7⁄8	22.2	1¾	35
1228	S-8	Marine [10]	C	32.00	.45	14.40	15.00	250	D.C. Bay.	C-2V	1½	28.6	2	51
1230	RP-11	Marine [1]	C	32.00	.55	17.60	21.00	100	D.C. Bay.	C-2V	1¼	31.8	2¼	58
1238	G-16½	Marine [1]	C	32.00	3.50	112.00	225.00	50	D.C. Bay.	CC-6	1¼	31.8	3	77
1251	G-6	Auto. Two Identical Supported Fil. in Series	B	28.00	.23	6.44	3.00	2000	S.C. Bay.	2C-2V	¾	19.0	17½	37
1252	G-6	Auto. Two Identical Supported Fil. in Series	B	28.00	.23	6.44	3.00	2000	D.C. Bay.	2C-2V	¾	19.0	17½	37
1295	S-8	Auto	C	12.5	3.0	37.50	50.0	200	S.C. Bay.	C-2R	1.25	31.75	2.00	50.80
1323	RP-11	Auto	C	6.20	4.10	24.24	32.00	200	S.C. Pref. [8]	C-2V	7⁄8	22.2	2¼	58
1327	RP-11	Auto	C	12.75	2.08	26.52	32.00	300	S.C. Pref. [8]	C-2V	7⁄8	22.2	2¼	58
1408	T-3¼	Signal	B	10.00	.13	1.30	.80	250	Min. Bay.	C-2V	5⁄8	15.9	1¾	31
1445	G-3½	Auto	B	14.40	.18	1.94	.70	2000	Min. Bay.	C-2V	½	12.7	1½	24
1449	G-3½	Toy	B	14.00	.20	2.80	2.00	250	Min. Sc.	C-2V	23⁄32	18.2	1½	24
1450	G-3½	Indicator	B	24.00	.035	.84	.30	3000	Min. Bay.	C-2V	½	12.7	1½	24

[1] Base pins approximately at right angles to plane of filament.

[9] At 14.0 volts.

[10] Base pins approximately parallel to plane of filament.

†5000 plus Hours.

[8] Dimension, bottom of base contact to the bottom of the collar is .562.

MIN. & SEALED BEAM

Miniature Lamps

Lamp Trade No.	Bulb	Service and Special Description	Vac(B) or Gas(C)	Design Volts	Design Amps.	Design Watts	Approx. Mean Spherical Candela (MSCd)	Rated Avg. Life, Hours	Base	Filament Designation	Light Center Length In. mm	Max. Overall Length In. mm
1460	S-8	Instrument. Medical	C	6.50	2.75	17.88	23.00	100	D.C. Pref. [11]	C-6	1 1/4 31.8	2 51
1460X	S-8	Microscope. Silver Contacts	C	6.50	2.75	17.88	23.00	100	D.C. Pref.	C-6	1 1/4 31.8	2 51
1487	T-3 1/4	Coin Machine	B	14.00	.20	2.80	1.50	3000	Min. Sc.	C-2V	1 9/16 23.8	1 3/16 31
1490	T-3 1/4	Radio	B	3.20	.16	.51	.20	3000	Min. Bay.	C-2R	1 1/16 18.0	1 3/16 31
1493	S-8	Instrument. Microscope Illuminator [12] [10]	C	6.50	2.75	17.88	23.00	100	D.C. Bay.	C-6	1 1/8 28.6	2 51
1630	S-8	Instrument. Microscope Illuminator [12]	C	6.50	2.75	17.88	23.00	100	D.C. Pref. [11]	C-6	1 25.4	2 51
1631X	S-8	Instrument. Colorimeter. Silver Plated Brass Contact Soldered to Each Brass Eyelet. Selected Bulb Top. High Temp. Collar Solder. Nickel Plated Base	C	6.50	2.75	17.88	23.00	100	D.C. Pref. [11]	C-6	1 25.4	2 51
1638	S-8	Marine. Two Identical Filaments in Series	C	28.00	1.02	28.56	32.00	500	D.C. Bay.	2C-6	1 1/4 31.8	2 51
1651	S-8	Hand Lantern-4 F Cells or 8 F Cells in Series Parallel [1]	C	5.00	.60	3.00	3.00	20	S.C. Bay.	C-6	1 1/8 28.6	2 51
1662	S-8	Construction Equipment [1] [3]	C	28.00	.93 .34	26.00 9.50	32.00 6.00	400 1000	D.C. Index	CC-6 C-2V	1 1/4 38.1	2 51
1665	S-8	Aircraft	C	28.00	.80	22.40	21.00	1000	S.C. Bay.	C-2V	1 1/8 28.6	2 51
1666	S-8	Aviation. Both Fil. Offset [1]	C	28.00	.63 .63	17.64 17.64	21.00 21.00	300 300	D.C. Bay.	CC-6 CC-6	1 1/4 31.8	2 51
1676	S-8	Indicator. Subway Door	B	45.50	.22	10.00	7.60	1000	D.C. Bay.	C-13	1 1/8 28.6	2 51
1683	S-8	Auto and Aviation. Two Identical Fil. in Series. Base Down to Horiz. [1]	C	28.00	1.02	28.56	32.00	500	S.C. Bay.	2C-2R	1 1/4 31.8	2 51
1691	S-8	Auto. Two Identical Fil. in Series [1]	C	28.00	.61	17.08	15.00	1000	S.C. Bay.	2C-2R	1 1/8 28.6	2 51
1691IF	S-8	Aviation. Inside Frosted. Two Identical Fil. in Series	C	28.00	.61	17.08	-	1000	S.C. Bay.	2C-2R	- -	2 51
1692	S-8	Marine. Two Identical Fil. in Series [1]	C	28.00	.61	17.08	15.00	1000	D.C. Bay.	2C-2R	1 1/8 28.6	2 51
1724	S-11	Indicator. Base Down to Horiz. [1]	C	6.20	4.50	27.90	32.00	400	D.C. Bay.	C-6	1 1/4 31.8	2 3/8 61
1810	T-3 1/4	Special Service	B	6.30	.40	2.52	1.40	3000	Min. Bay.	C-2R	23/32 18.2	1 1/8 29
1813	T-3 1/4	Radio	B	14.40	.10	1.44	.86	1000	Min. Bay.	C-2V	5/8 15.9	1 3/16 31
1815	T-3 1/4	Indicator	B	14.00	.20	2.80	1.40	3000	Min. Bay.	C-2V	1 1/16 18.0	1 3/16 31
1816	T-3 1/4	Aviation and Auto	B	13.00	.33	4.29	3.00	1000	Min. Bay.	C-2V	5/8 15.9	1 3/16 31
1819	T-3 1/4	Aviation and Indicator	B	28.00	.04	1.12	.34	4000	Min. Bay.	C-2V	5/8 15.9	1 3/16 31
1820	T-3 1/4	Aviation	B	28.00	.10	2.80	1.60	1000	Min. Bay.	C-2F	5/8 15.9	1 3/16 31
1821	T-e 1/4	Indicator	B	28.00	.17	4.76	3.40	500	Min. Sc.	C-2F	13/16 20.6	1 3/16 31
1822	T-3 1/4	Indicator	B	36.00	.10	3.60	2.10	1000	Min. Bay.	C-2F	5/8 15.9	1 3/16 31
1828	T-3 1/4	Indicator	B	37.50	.05	1.88	.65	3000	Min. Bay.	C-2F	5/8 15.9	1 3/16 31
1829	T-3 1/4	Coin Machine and Indicator	B	28.00	.07	1.96	1.00	1000	Min. Bay.	C-2F	5/8 15.9	1 3/16 31
1835	T-3 1/4	Indicator	B	55.00	.05	2.75	1.10	5000	Min. Bay.	C-5	5/8 15.9	1 13/16 31
1841	T-4	Indicator	B	24.00	.17	4.08	3.30	250	Cand. Sc.	C-2V	15/16 23.8	1 1/2 39
1847	T-3 1/4	Radio, TV and Indicator	B	6.30	.15	.95	.38	15,000	Min. Bay.	C-2R	1 1/16 18.0	1 3/16 31
1850	T-3 1/4	Signal	B	5.00	.09	.45	.25	1500	Min. Bay.	C-6	5/8 15.9	1 3/16 31
1855	T-4 1/2	Radio and TV	C	6.30	.80	5.04	3.60	3000	Min. Bay.	C-2R	23/32 18.2	1 3/8 35
1864	T-3 1/4	Aviation	B	28.00	.17	4.76	3.00	1500	Min. Bay.	C-2F	5/8 15.9	1 3/16 31
1866	T-3 1/4	Radio, TV and Indicator	B	6.30	.25	1.58	.65	5000	Min. Bay.	C-2R	1 1/16 18.0	1 3/16 31
1883U	T-3 1/4	Side Marker	B	14.00	.33	4.62	2.00	7500	Wire Term.	C-2F	9/16 14.3	1 1/4 32
1888	T-3 1/4	Auto	B	7.00	.50	3.50	2.20	3000	Min. Bay.	C-2R	9/16 14.2	1 3/16 31
1889	T-3 1/4	Auto	B	14.00	.27	3.78	2.00	3500	Min. Bay.	C-2F	9/16 14.2	1 3/16 31
1891	T-3 1/4	Auto Radio and Indicator	B	14.00	.24	3.36	2.10	500	Min. Bay.	C-2F	9/16 14.2	1 3/16 31
1892	T-3 1/4	Auto. Radio	B	14.40	.12	1.73	.75	1000	Min. Bay.	C-2F	5/8 15.9	1 3/16 31

[1] Base pins approximately at right angles to plane of filament.

[3] Filament wiring reverse to 1157.

[8] Dimension, bottom of base contact to the bottom of the collar is .562.

[9] At 14.0 volts.

[10] Base pins approximately parallel to plane of filament.

[11] Dimension, bottom of base contact to the bottom of the collar is .406.

[12] Bulb top selected for minimum glass imperfection.

+5000 plus Hours.

Miniature Lamps

Lamp Trade No.	Bulb	Service and Special Description	Vac(B) or Gas(C)	Design Volts	Design Amps.	Design Watts	Approx. Mean Spherical Candela (MSCd)	Rated Avg. Life, Hours	Base	Filament Designation	Light Center Length		Max. Overall Length	
											In.	mm	In.	mm
1893	T-3¼	Radio	B	14.00	.33	4.62	2.00	7500	Min. Bay.	C-2F	⅝	15.9	1⅜	31
1895	G-4½	Auto	B	14.00	.27	3.78	2.00	3500	Min. Bay.	C-2F	⅞	14.2	1⅞	27
1895A	G-4½	Auto. Outside Coated Translucent Amber	B	14.00	.27	3.78	-	3500	Min. Bay.	C-2F	-	-	1⅞	27
1895R	G-4½	Auto. Outside Coated Translucent Red	B	14.00	.27	3.78	-	3500	Min. Bay.	C-2F	-	-	1⅞	27
1895G	G-4½	Auto. Outside Coated Translucent Green	B	14.00	.27	3.78	-	3500	Min. Bay.	C-2F	-	-	1⅞	27
1896	G-4½	Auto	B	7.00	.50	3.50	2.20	3000	Min. Bay.	C-2R	⅞	14.2	1⅞	27
1906	T-3¼	Signal	B	5.00	.07	.35	.19	1000	Min. Bay.	C-6	⅝	15.9	1⅜	31
2057	S 8	Auto [1]	C	12.80 14.00	2.10 .48	26.88 6.72	32.00 2.00	1200 5000	D.C. Index	C-6/ C-6	1¼	31.8	2	51
2057NA	S-8	Auto [1]	C	12.80 14.00	2.10 .48	26.88 6.72	24.00 1.50	1200 5000	D.C. Index	C-6/ C-6	1¼	31.8	2	51
2232	S-8	Aircraft. Spiral Lead	C	28.00	.64	18.00	18.00	2000	S.C. Bay.	CC-8	1⅜	30.1	2	51
2242	S-8	Auto. 1" Leads	C	12.80 14.00	2.10 .59	26.88 8.26	32.00 3.00	1200 5000†	Wire Term.	C-6 C-6	-	-	1¾ [4]	45
2357	S-8	Auto [1]	C	12.80 14.00	2.23 .59	28.54 8.26	40.00 3.00	600 5000†	D.C. Index	C-6 C-6	1¼	31.8	2	51
2357NA	S-8	Auto. Amber (Natural)	C	12.80 14.00	2.23 .59	28.54 8.26	28.00 2.20	600 5000†	D.C. Index	C-6 C-6	1¼	31.8	2	51

[1] Base pins approximately at right angles to plane of filament.

[4] Glass parts only.

[11] Dimension, bottom of base contact to the bottom of the collar is .406.

† 5000 plus Hours.

Telephone Lamps

Lamp Trade No.	Bulb	Service and Special Description	Vac(B) or Gas(C)	Design Volts	Design Amps.	Design Watts	Approx. Mean Spherical Candela (MSCd)	Rated Avg. Life, Hours	Base	Filament Designation	Light Center Length		Max. Overall Length	
											In.	mm	In.	mm
6C-2	T-2	Telephone Fil. Tilted	B	6.0	.04(.035-.045)	.24	.04	(L)	Tel. Slide 2	C-2V	-	-	1⅞	43
12A-2	T-2	Telephone	B	12.0	.10(.09-.11)	1.20	.25	(L)	Tel. Slide 2	C-2F	-	-	1⅞	43
12B-2	T-2	Telephone Fil. Tilted	B	12.0	.035(.032-.038)	.42	.05	(L)	Tel. Slide 2	C-2V	-	-	1⅞	43
12C-2	T-2	Telephone	B	12.0	.17(.015-.19)	2.04	.10	1500	Tel. Slide 2	C-2F	-	-	1⅞	43
18A-2	T-2	Telephone	B	18.0	.04(.035-.045)	.72	.15	(L)	Tel. Slide 2	C-2F	-	-	1⅞	43
24A-1	T-2	Telephone	B	24.0	.03(.025-.035)	.72	.15	(L)	Tel. Slide 1	C-2F	-	-	1⅞	43
24A-2	T-2	Telephone	B	24.0	.03(.025-.035)	.72	.15	(L)	Tel. Slide 2	C-2F	-	-	1⅞	43
24B-2	T-2	Telephone	B	24.0	.04(.035-.045)	.96	.20	(L)	Tel. Slide 2	C-2F	-	-	1⅞	43
24C-2	T-2	Telephone	B	24.0	.07(.06-.085)	1.68	-	(L)	Tel. Slide 2	C-2F	-	-	1⅞	43
24D-2	T-2	Telephone	B	24.0	.10(.09-.11)	2.40	-	5000	Tel. Slide 2	C-2F	-	-	1⅞	43
24E-1	T-2	Telephone	B	24.0	.035(.032-.038)	.84	.20	5000	Tel. Slide 1	C-2F	-	-	1⅞	43
24E-2	T-2	Telephone	B	24.0	.035(.032-.038)	.84	.20	5000	Tel. Slide 2	C-2F	-	-	1⅞	43
24X-2	T-2	Supervisory Control Indicator-Special Tel. Slide Base with Raised Prick Punches	B	24.0	.035(.032-.038)	.84	.20	5000	Special	C-2F	-	-	1⅞	43
30A-1	T-2	Telephone	B	30.0	.07(.06-.085)	2.10	-	(L)	Tel. Slide 1	C-2F	-	-	1⅞	43
30A-2	T-2	Telephone	B	30.0	.07(.06-.085)	2.10	-	(L)	Tel. Slide 2	C-2F	-	-	1⅞	43
30B-2	T-2	Telephone	B	30.0	.10(.09-.11)	3.00	-	(L)	Tel. Slide 2	C-2F	-	-	1⅞	43
35A-2	T-2	Telephone	B	35.0	.04(.035-.045)	1.40	-	(L)	Tel. Slide 2	C-2F	-	-	1⅞	43
48A-2	T-2	Telephone	B	48.0	.07(.06-.085)	3.36	-	(L)	Tel. Slide 2	C-5	-	-	1⅞	43
48B-2	T-2	Telephone	B	48.0	.10(.09-.11)	4.80	-	(L)	Tel. Slide 2	C-5	-	-	1⅞	43
48C-2	T-2	Telephone	B	48.0	.035(.032-.038)	1.68	-	5000	Tel. Slide 2	C-5	-	-	1⅞	43
48D-2	T-2	Telephone	B	48.0	.021(.017-.025)	1.01	-	(L)	Tel. Slide 2	C-5	-	-	1⅞	43
55C-1	T-2	Telephone	B	55.0	.05(.045-.06)	2.75	-	5000	Tel. Slide 1	C-5	-	-	1⅞	43
55C-2	T-2	Telephone	B	55.0	.05(.045-.06)	2.75	-	5000	Tel. Slide 2	C-5	-	-	1⅞	43

(L) Indefinite — long life.

MIN. & SEALED BEAM

Sealed Beam Lamps

Lamp Trade No.	Bulb	Service and Special Description	Design Volts	Design Watts or Amps.	Approx. Initial Max. Beam Candela	Approx. Spread to 10% Max. C.P. (Deg.)		Rated Avg. Life, Hours	Base	Filament Designation	Max. Overall Length	
						Hor.	Vert.				In.	mm
4000	PAR-46	Auto Headlamp Low Beam-4-Lamp Round System. [13]	12.8 12.8	37.5 60.0	- -	- -	- -	200 [9] 320 [9]	3 Lugs	C-6 C-6	4	102
4000A	PAR-46	Warning Lamp, Amber [13]	12.8 12.8	37.5 60.0	- -	34 34	7 7	200 [9] 320 [9]	3 Lugs	C-6 C-6	4	102
4000R	PAR-46	Signal-Red	12.8 12.8	37.5 60.0	- -	34 34	7 7	200 [9] 320 [9]	3 Lugs	C-6 C-6	4	102
4001	PAR-46	Auto Headlamp High Beam-4 Lamp Round System	12.8	37.5	-	-	-	200 [9]	2 Lugs	C-6	4	102
4001A	PAR-46	Warning Lamp, Amber	12.8	37.5	-	26	5	200 [9]	2 Lugs	C-6	4	102
4001R	PAR-46	Warning Lamp, Red	12.8	37.5	-	26	5	200 [9]	2 Lugs	C-6	4	102
4007	PAR-46	Spot/Flood Lamp	13.0 13.0	100.0 100.0	200,000 50,000	7 13	5 16	25 25	3M-P	C-6 C-6	3 5/8	92
4007S	PAR-46	Spot/Flood Lamp [13]	13.0 13.0	100.0 100.0	200,000 100,000	7 11	5 9	25 25	3M-P	C-6 C-6	3 5/8	92
Q4011	PAR-46	Spot Lamp.	12.8	50.0	110,000	10	5	200	M-P	C-6	3 5/8	92
4013	PAR-46	Tractor	6.4	25.0	900	80	20	300	M-P	C-6	3 11/16	94
4014	PAR-36	Auto Signal	6.4	18.0	1,500	50	25	200	M-P	C-6	2 3/4	70
4019	PAR-46	Tractor	6.2	30.0 Nom.	5,500	Trapezoidal		300 [6]	M-P	C-6	3 11/16	94
4037A	PAR-46	Sign Board Amber	12.8	18.0	12,000	26	5	300	M-P	C-6	4	102
4040	PAR-46	Auto Headlamp Low Beam-4-Lamp Round System. [13]	12.8 12.8	37.5 60.0	- -	- -	- -	300 [9] 500 [9]	3 Lugs	C-6 C-6	4	102
4044	PAR-36	Emergency Lighting	12.0	12.0	1,100	30	25	150	M-P	C-2R	2 3/4	70
4048	PAR-46	Auto Spot	13.0	155.0	300,000	15	7	15	M-P	C-6	3 5/8	92
4049	PAR-46	Spot Lamp	13.0	150.0	300,000	15	7	15	M-P	C-6	3 11/16	94
4049S	PAR-46	Spot Lamp [13]	13.0	150.0	300,000	15	7	15	M-P	C-6	3 11/16	94
4340	PAR-36	Electric Vehicles	48.0	80.0	2,500	Trapezoidal		400	M-P	C-2V	2 3/4	70
4350	PAR-36	Electric Vehicles	36.0	60.0	2,100	Trapezoidal		400	M-P	C-2V	2 3/4	70
4404	PAR-36	Auto Spot [13]	12.8	30.0	35,000	9	4	300	M-P	C-6	2 3/4	70
4405	PAR-36	Auto Spot [13]	12.8	30.0	50,000	6	5	100	M-P	C-6	2 3/4	70
Q4405	PAR-36	Spot Light	12.8	50.0	50,000	6	5	200	M-P	C-6	2 3/4	70
4406	PAR-36	Tractor	12.8	35.0 Nom.	600	80	30	300 [9]	M-P	C-6	2 3/4	70
4411	PAR-36	Auto Tractor	12.8	35.0 Nom.	4,000	Trapezoidal		300 [9]	M-P	C-6	2 3/4	70
4412	PAR-46	Auto Fog [13]	12.8	35.0	10,000	40	6	300	M-P	C-6	3 11/16	94
4412A	PAR-46	Auto Fog Amber [13]	12.8	35.0	8,800	40	6	300	M-P	C-6	3 11/16	94
4413	PAR-46	Tractor	12.8	35.0 Nom.	1,300	80	20	300 [9]	M-P	C-6	3 11/16	94
4414	PAR-36	Auto Signal	12.8	18.0	1,500	50	25	300	M-P	C-6	2 3/4	70
4414A	PAR-36	Auto Signal Amber	12.8	18.0	1,000	50	25	300	M-P	C-6	2 3/4	70
4414AX	PAR-36	Auto Signal Light Amber	12.8	18.0	1,200	50	25	300	M-P	C-6	2 3/4	70
4414R	PAR-36	Auto Signal Red	12.8	18.0	-	50	25	300	M-P	C-6	2 3/4	70
4415	PAR-36	Auto Fog [13]	12.8	35.0	9,000	40	5	300	M-P	C-6	2 3/4	70
4415A	PAR-36	Auto Fog Amber [13]	12.8	35.0	7,000	40	5	300	M-P	C-6	2 3/4	70
4416	PAR-36	Auto Spot [15]	12.8	30.0	35,000	11	4	300	M-P	C-6	2 3/4	70
4416R	PAR-36	Auto Signal Red	12.8	30.0	-	11	4	300	M-P	C-6	2 3/4	70
4419	PAR-46	Tractor	12.8	35.0 Nom.	1,600	Trapezoidal		300 [9]	M-P	C-6	3 11/16	94
4421	PAR-46	Auto Special Service [13]	13.0	100.0	23,000	50	6	300	M-P	C-6	3 3/4	96
4434A	PAR-46	Auto Signal Amber	12.8	40.0	-	55	25	100	M-P	C-6	3 11/16	94
4435	PAR-46	Auto Spot [13] [15]	12.8	30.0	45,000	6	5	300	M-P	C-6	3 11/16	94
4435H	PAR-46	Auto Spot	12.8	30.0	50,000	6	5	300	M-P	C-6	3 11/16	94
4436	PAR-46	Auto Spot	12.8	35.0	60,000	10	4	300	M-P	C-6	3 11/16	94

[6] At 7.0 volts.

[15] Lightly stippled lens.

[9] At 14.0 volts.

Note: All sealed beams use heat resistant glass bulbs.

[13] Filament shielded.

Sealed Beam Lamps

Lamp Trade No.	Bulb	Service and Special Description	Design Volts	Design Watts or Amps.	Approx. Initial Max. Beam Candela	Approx. Spread to 10% Max. C.P. (Deg.)		Rated Avg. Life, Hours	Base	Filament Designation	Max. Overall Length	
						Hor.	Vert.				In.	mm
4440	PAR-36	Tractor	12.8 12.8	40.0 40.0	6,000 4,500	33	9	320 320	3 Lugs	C-6 C-6	3	77
4442	PAR-36	Special Service, Flood	12.8	18.0 Nom.	100	80	80	2000	M-P	C-6	2¾	70
4446	PAR-36	Special Service, Flood	12.8	25.0 Nom.	150	80	80	2000	M-P	C-6	2¾	70
4461	PAR-36	Tractor	12.8	60.0	6,000	Trapezoidal		300 [9]	M-P	C-6	2¾	70
4464	PAR-36	Auto Signal	12.8	60.0	50,000	12	5	300	M-P	C-6	2¾	70
4502	PAR-36	Auto, Aviation, Military Headlamp	28.0	50.0	10,000	40	7	400	M-P	CC-6	2¾	70
4505	PAR-36	Aviation Passing	28.0	50.0	45,000	11	5	400	M-P	CC-6	2¾	70
4505R	PAR-36	Aviation Passing Red	28.0	50.0	-	11	5	400	M-P	CC-6	2¾	70
4509	PAR-36	Aviation Landing	13.0	100.0	110,000	11	6	25	M-P	C-6	2¾	70
4509S	PAR-36	Spot Lamp [13]	13.0	100.0	110,000	11	6	25	M-P	C-6	2¾	70
4510	PAR-36	Auto Utility	6.4	25.0	750	80	20	300	M-P	C-6	2¾	70
4511	PAR-36	Auto Tractor	6.2	30.0 Nom.	2,300	Trapezoidal		300 [6]	M-P	C-6	2¾	70
4512	PAR-36	Bicycle Headlamp	4.7	.5	150	Trapezoidal		100	M-P	C-2R	2¾	70
4515	PAR-36	Auto Spot [13]	6.4	30.0	55,000	5	5	100	M-P	C-6	2¾	70
4516	PAR-36	Auto Spot	6.2	30.0	40,000	9	4	300	M-P	C-6	2¾	70
4522	PAR-36	Aviation Landing Fil. Segments Parallel [13]	13.0	250.0	290,000	12	10	25	M-P	C-2	3⅞	80
4531	PAR-46	Auto Mil. Headlamp	12.5	40.0	30,000	20	6	400	M-P	C-6	3⅞	94
4534S	PAR-46	Spot [13]	13.0	100.0	200,000	8	5	25	M-P	C-6	3⅞	94
4535	PAR-46	Auto Spot [13]	6.4	30.0	95,000	5	4	100	M-P	C-6	3⅞	94
4537	PAR-46	Aviation Landing	13.0	100.0	200,000	11	6	25	M-P	C-6	3⅞	94
4537S	PAR-46	Auto Spot [13]	13.0	100.0	200,000	11	6	25	M-P	C-6	3⅞	94
4543	PAR-56	Special Serv. Spotlight	12.5	100.0	250,000	9	5	50	M-P	C-6	4½	114
4545	PAR-56	Marine Searchlight [13]	12.0	100.0	240,000	9	5	100	M-P	C-6	4½	114
4546	PAR-36	Hand Lantern-4 F Cells	4.7	.5	4,000	4	4	100	M-P	C-2R	2¾	70
4546H	PAR-36	Hand Lantern-4 F Cells Clear	4.7	.5	4,500	4	4	100	M-P	C-2R	2¾	70
4551	PAR-46	Aircraft	28.0	250.0	75,000	50	10	25	M-P	CC-6	3⅞	99
4559	PAR-64	Aviation Landing [13]	28.0	600.0	600,000	11	12	25	M-P	CC-8	4	102
Q4559	PAR-64	Aviation Land. Quartz	28.0	600.0	600,000	12	8	100	M-P	CC-6	4	102
Q4559X	PAR-64	Aviation Landing-Quartz	28.0	600.0	765,000	12	8	100	M-P	CC-6	4	102
4570	PAR-46	Aviation Taxiing	28.0	150.0	32,000	50	9	300	M-P	CC-6	3⅞	99
4581	PAR-46	Aircraft Landing	28.0	450.0	400,000	13	14	10	M-P	CC-8	4	102
4589	PAR-36	Aviation	28.0	50.0	5,000	Trapezoidal		400	M-P	CC-6	2¾	70
4619	PAR-46	Auto Headlamp High Beam-24 Volt 4-Lamp Round System	28.0	50.0	-	-	-	400	2 Lugs	CC-6	4	102
4624	PAR-46	Auto Headlamp Low Beam-24 Volt 4-Lamp Round System	28.0 28.0	50.0 50.0	-	-	-	400 400	3 Lugs	CC-6 CC-6	4	102
4627	PAR-36	Aircraft	28.00	100.0	3,000	80	30	300	M-P	CC-6	4	102
Q4631	PAR-36	Aircraft Landing (Quartz)	13.0	250.0	80,000	13	12	500	M-P	C-6	2¾	70
Q4632	PAR-36	Aircraft (Quartz)	13.0	250.0	75,000	14	12	500	M-P	C-6	2¾	70
4651	REC-58	Auto Headlamp High Beam-4-Lamp Rectangular System	12.8	50.0	-	-	-	200 [9]	2 Lugs	C-6	4½	114
H4651	REC-58	Auto Headlamp High Beam-4-Lamp Rectangular System (Halogen)	12.8	50.0	-	-	-	200 [9]	2 Lugs	C-6	4½	114
4651B	REC-58	Signal-Blue	12.8	50.0	-	-	-	200 [9]	M-P	C-6	4½	114
4651R	REC-58	Signal-Red	12.8	50.0	-	-	-	200 [9]	M-P	C-6	4½	114
4652	REC-58	Auto Headlamp Low Beam-4-Lamp Rectangular System	12.8 12.8	60.0 40.0	- -	- -	- -	200 [9] 320 [9]	3 Lugs	C-6 C-6	4½	114
H4656	REC-58	Auto Headlamp Low Beam-4-Lamp Rectangular System (Halogen)	12.8 12.8	35.0 35.0	- -	- -	- -	200 [9] 320 [9]	3 Lugs	C-6 C-6	4½	114
H4666	REC-58	Auto Headlamp (Halogen)	12.80 12.80	65.0 45.0	- -	- -	- -	150 320	3 Lugs	C-8 C-6	4½	114

[6] At 7.0 volts. [13] Filament shielded. Note: All sealed beams use heat resistant glass bulbs.
 [9] At 14.0 volts. [15] Lightly stippled lens.

MIN. & SEALED BEAM

Sealed Beam Lamps

Lamp Trade No.	Bulb	Service and Special Description	Design Volts	Design Watts or Amps.	Approx. Initial Max. Beam Candela	Approx. Spread to 10% Max. C.P. (Deg.)		Rated Avg. Life, Hours	Base	Filament Designation	Max. Overall Length	
						Hor.	Vert.				In.	mm
4675	PAR-36	Auto-Special Service [13]	13.0	75.0	15,000	40	7	300	M-P	C-6	2¾	70
H4701	REC-48	Auto Headlamp High Beam (Halogen)	14.0	65.0	-	-	-	150	2 Lugs	C-8	3 11/32	85
H4703	REC-48	Auto Headlamp Low Beam (Halogen)	14.0	55.0	-	-	-	320	2 Lugs	C-8	3 11/32	85
4710	PAR-56	Spot/Flood	13.0	100.0 100.0	200,000 50,000	8 16	5 12	25 25	M-P	C-6 C-6	5¼	134
4715	PAR-64	Marine Spot Light	13.0	250.0	500,000	8	7	25	M-P	C-2	4	102
H4719	PAR-46	Tractor Spot (Halogen)	12.8	50.0	-	Trapezoidal		200 [9]	M-P	C-6	3 11/16	94
4919	REC-58	Tractor	12.8	50.0	3,700	Trapezoidal		400 [9]	M-P	C-6	4½	114
5001	PAR-46	Auto Headlamp High Beam-4-Lamp Round System	12.8	50.0	-	-	-	200 [9]	2 Lugs	C-6	4	102
H5001	PAR-46	Auto Headlamp High Beam-4-Lamp Round System (Halogen)	12.8	50.0	-	-	-	200 [9]	2 Lugs	C-6	4	102
H5006	PAR-46	Auto Headlamp Low Beam-4-Lamp Round System (Halogen)	12.8	35.0 35.0	- -	- -	- -	200 [9] 320 [9]	3 Lugs	C-6 C-6	4	102
5411	PAR-36	Tractor	13.0	100.0	16,000	Trapezoidal		300	M-P	C-6	2¾	70
5419	PAR-46	Tractor	13.0	100.0	21,000	Trapezoidal		300	M-P	C-6	3 11/16	94
6006	PAR-56	Auto Headlamp Aimer Buttons on Lens [13]	6.1 6.2	50.0 40.0	- -	- -	- -	300 500	3 Lugs	C-6 C-6	5¼	134
6014	PAR-56	Auto Headlamp 2-Lamp Round System [13]	12.8 12.8	60.0 50.0	- -	- -	- -	200 [9] 320 [9]	3 Lugs	C-6 C-6	5¼	134
6014A	PAR-56	Warning Lamp Amber [13]	12.8 12.8	60.0 50.0	- -	30 30	6 6	200 [9] 320 [9]	3 Lugs	C-6 C-6	5¼	134
6015	PAR-56	Truck-Heavy Duty Headlamp [13]	12.8 12.8	60.0 50.0	- -	- -	- -	300 500	3 Lugs	C-6 C-6	5¼	134
6016	PAR-56	Auto Fleet Service High/Low Beam Headlamp [13]	12.8 12.8	60.0 50.0	- -	- -	- -	300 500	3 Lugs	C-6 C-6	5¼	134
H6017	PAR-56	Auto Headlamp 2-Lamp Round System (Halogen)	12.8 12.8	60.0 35.0	- -	- -	- -	200 [9] 320 [9]	3 Lugs	C-6 C-6	5¼	134
H6024	PAR-56	Auto Headlamp 2-Lamp Round System (Halogen)	12.8 12.8	65.0 35.0	- -	- -	- -	200 [9] 320 [9]	3 Lugs	C-6 C-6	5¼	134
6052	REC-68	Auto Headlamp 2-Lamp Rectangular System	12.8 12.8	65.0 55.0	- -	- -	- -	150 [9] 320 [9]	3 Lugs	C-6 C-6	5½	143
H6054	REC-68	Auto Headlamp 2-Lamp Rectangular System (Halogen)	12.8 12.8	65.0 35.0	- -	- -	- -	150 [9] 300 [9]	3 Lugs	C-6 C-6	5½	143
7128	PAR-36	Emergency Lighting	12.0	8.0	800	24	18	50	M-P	C-2R	2¾	70
7400	PAR-36	Rotating Beacon and Auto Spot	12.8	35.0	35,000	12	5	300	M-P	C-6	2¾	70
7400A	PAR-36	Rotating Beacon Amber	12.8	35.0	-	12	5	300	M-P	C-6	2¾	70
7400R	PAR-36	Rotating Beacon Red	12.8	35.0	-	12	5	300	M-P	C-6	2¾	70
7401	PAR-36	Auto-Spot	13.0	150.0	170,000	11	6	15	M-P	C-6	2¾	70
Q7455	PAR-36	Warning Lamp	12.8	55.0	72,000	12	5	200	M-P	C-6	2¾	70
7613	PAR-36	Emergency Lighting	6.0	8.0	800	24	18	50	M-P	C-2R	2¾	70
H7635	PAR-46	Halogen Spot Lamp	12.8	50.0	160,000	6	4	100	M-P	C-6	3 11/16	94
7672	PAR-36	Emergency Lighting	6.0	7.2	600	24	18	50	M-P	C-6	2¾	70
7701	PAR-46	Auxiliary Passing Lamp	12.8	50.0	50,000	12	6	200 [9]	M-P	C-6	3 11/16	94
7711	PAR-46	Driving Lamp [13]	12.8	100.0	100,000	12	6	25	M-P	C-6	3 11/16	94
9004	T-5	Auto-Replaceable Halogen Headlamp Bulb	12.8 12.8	65.0 45.0	*95 *56	- -	- -	150 320	Special	C-6 C-6	3 11/16	94
9005	T-4	Auto-Replaceable Halogen Headlamp Bulb-High Beam	12.8	65.0	*136	-	-	150 [9]	Special	C-8	3	77
9006	T-4	Auto-Replaceable Halogen Headlamp Bulb-Low Beam	12.8	55.0	*80	-	-	320 [9]	Special	C-8	3½	80

[9] At 14.0 volts.

Note: All sealed beams use heat resistant glass bulbs.

[13] Filament shielded.

*Approx. MSCd (Mean Spherical Candela)

Philips European Halogen Miniature Lamp Types

The Halogen Process

Halogen lamps eliminate bulb blackening caused by filament deposits, through a Halogen Cycle process that returns the deposits to the filament — to maintain filament strength and high light output. The Philips halogen lamp distributes an even, white light for better visibility and operates at close to 100% efficiency throughout life. This highly efficient Halogen process generates 1/3 more light per watt than conventional incandescent lamps.

Applications: Motorcycles • Snowmobiles • Fog lights
• Police/security vehicles • Auxiliary driving lights

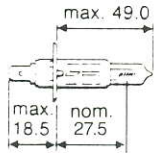


Fig. 1

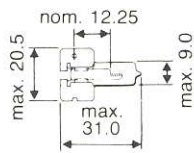


Fig. 2

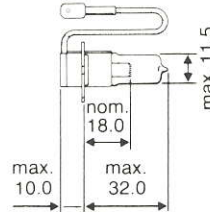


Fig. 3

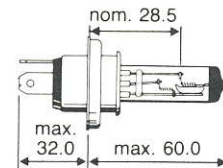


Fig. 4

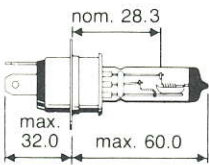


Fig. 5

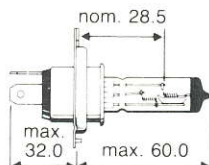


Fig. 6

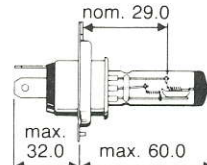


Fig. 7

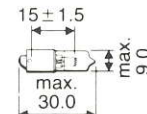


Fig. 8

All dimension in mm.

Ordering Information

Lamp Type	Case Pack	Type Number	Ordering Product Number	Volts	Watts	Light Output Lumens	Life Hours	Base	Fig.	Comment
H1	200	12258	308700	12	55	1550	150	P14.5s	1	—
H1	200	13258	308767	24	70	1900	150	P14.5s	1	—
H1	200	12454	308783	12	100	2800	150	P14.5s	1	Special Base
H1	200**	12456	308817	12	55	1550	150	P14.5s	1	—
H2	100	6311	308841	6	55	1300	150	X511	2	—
H2	100	12311	308858	12	55	1800	150	X511	2	—
H2	100	12507	308866	12	100	3000	100	X511	2	Special Base
H2	100	13311	308874	24	70	2150	150	X511	2	—
H3	200	6336	309286	6	55	1050	150	PK22s	3	—
H3	200	12336	309336	12	55	1450	150	PK22s	3	—
H3	200	12455	309344	12	100	2350	100	PK22s	3	Special Base
H3	200	13336	309369	24	70	1750	150	PK22s	3	—
H3	24	50/CL/SC	312868	12	50	1700	1200	S.C. Bay	*	—
H4	100	12342	309443	12	60/55	1650/1600	100/200	P43t	4	—
H4	100	12342/99	309526	12	60/55	1650/1600	100/200	P43t	4	Heavy Duty
H4	100	12453	309534	12	60/55	1650/1600	100/200	P36t	5	—
H4	100	12569	438473	12	100/90	2600/1500	100/200	P43t	6	—
H4	100	12593	435750	12	100/55	2600/1000	100/200	P43t	6	—
H4	200	13342	309542	24	60/55	1650/1600	100/200	P43t	7	—
Min Bay	200	12452	309567	12	20	500	100	Min Bay	8	—
Bi-Pin	200	12345	309609	12	20	550	100	Bi-Pin	*	—

*Not Shown

**Bulk Pack

MIN. & SEALED BEAM

Philips European Miniature Lamp Types

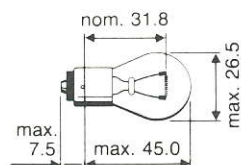


Fig. 9

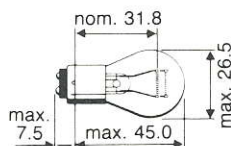


Fig. 10

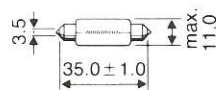


Fig. 11

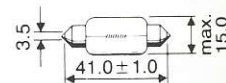


Fig. 12

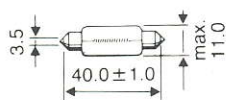


Fig. 13

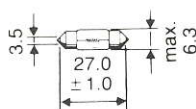


Fig. 14

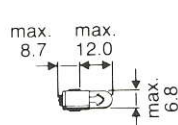


Fig. 15

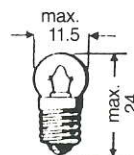


Fig. 16

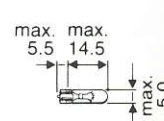


Fig. 17

All dimensions in mm.

Ordering Information

Lamp #	Case Pack	Ordering Product Number	Volts	Watts	Light Output Lumens	Life Hours	MOL (mm)	Max. Dia.	Base	Figure	Comment
6522	1000	438390	6	.18	.45	1000@74 5000	20	5	W2 × 4.6d	17	Wedge
7135D/34	100**	438069	2.5	.75	6.9	15	24	11.5	E10/13	16	—
12400	500	435453	12	10	125	300	35	18.5	BA15d	10	—
12498 (P25-1)	250**	435495	12	21	460	300	52.5	26.5	BA15s	9	—
12499 (P25-2)	250**	435503	12	21/5	440	300/3000	52.5	26.5	BA15d	10	—
12516	1000	438416	12	1.2	7.5	1000	20	.5	W2 × 4.6d	17	Wedge
12521	1000	438432	12	1	4	5000	20	5	W2 × 4.6d	17	Wedge
12522	1000	438457	12	.36	.9	1000@15V	20	5	W2 × 4.6d	17	Wedge
12818	500	357947	12	3	26.5	600	28	6.3	SV6	14	—
12829	1000	357939	12	2	—	600	20.7	6.8	BA7s	15	—
12850	500	395517	12	15	215	300	42	15	SV 8.5	12	—
12854	500	357921	12	10	115	600	36	11	SV 8.5	11	—
12864	1000**	206391	12	5	6	200	41	11	SV 8.5	13	—
12866	500	435487	12	10	115	200	41	11	SV 8.5	13	—
13499	100	435461	24	21/5	440/40	300/3000	52.5	26.5	BA15d	10	—
13521	1000	438481	24	1	3.85	1000@30V 5000	20	5	W2 × 4.6d	17	Wedge
13522	1000	438507	24	.72	2	1000@30V 5000	20	5	W2 × 4.6d	17	Wedge
13807	500	435511	24	18	275	75	42	15	SV 8.5	12	—
13807CC	500	435529	24	18	275	75	42	15	SV 8.5	12	Heavy Duty Coiled Coil Filament
13844	500	435537	24	5	45	200	36	11	SV 8.5	11	—
13850	500	395533	24	15	165	100	42	15	SV 8.5	12	—

*Not Shown

**Bulk Pack

Fleet Service Miniature Lamps (Substitution Guide)

Miniature Service	Fleet Service Types Trade No.	Original Equipment Types Trade No.	Design: CP	Volts	Amps	Rated Avg. Life at Design Volts-Hrs.	Filament Type	Bulb	Base
Instrument Indicator	182	53X	1	14.4	0.18	2000	C-2F	G-3½	Min. Bay
		53	1	14.4	0.12	1000	C-2F	G-3½	Min. Bay.
		53	1	14.4	0.12	1000	C-2V	G-3½	Min. Bay
	184	161	1	14.4	0.24	7000	C-2F	T-3¼	Wedge
Instrument Indicator Identification Clearance Marker	293	1895	2	14.0	0.33	7500	C-2F	G-4½	Min. Bay
		57	2	14.0	0.27	3500	C-2F	G-4½	Min. Bay.
		57	2	14.0	0.24	500	C-2V	G-4½	Min. Bay.
	1893	1889	2	14.0	0.33	7500	C-2F	T-3¼	Min. Bay
		1891	2	14.0	0.27	3500	C-2F	T-3¼	Min. Bay
		1891	2	14.0	0.24	500	C-2F	T-3¼	Min. Bay
	193	194	2	14.0	0.33	7500	C-2F	T-3¼	Wedge
		158	2	14.0	0.27	3500	C-2F	T-3¼	Wedge
		158	2	14.0	0.24	500	C-2V	T-3¼	Wedge
Instrument Parking Clearance Marker	97	1155	4	13.5	0.69	5000t**	C-2V	G-6	Single Contact
		67	4	13.5	0.59	5000t**	2C-2R	G-6	Bayonet
		67	4	13.5	0.59	5000t**	C-2R	G-6	
Tail License Plate	96	68	4	13.5	0.69	5000t**	C-2V	G-6	Double Contact
Front Turn Signal	199*	1156*	32	12.8	2.25	1500	C-6	S-8	Single Contact
		1073	32	12.8	2.10	1200	C-6	S-8	Bayonet
		1073	32	12.8	1.80	200	C-6	S-8	
Rear Turn Signal	1159	1141	21	12.8	1.60	500	C-6	S-8	Single Contact
		1141	21	12.8	1.44	1000	C-6	S-8	Bayonet
Stop	1093	93	15	12.8	1.19	1000	C-2R	S-8	Single Contact
		93	15	12.8	1.04	700	C-6	S-8	Bayonet
Front Park & Turn Tail & Turn Signal Stop & Tail Stop, Tail & Turn Signal	198*	1157*	32/3	12.8/14.0	2.25/.68	1500/5000t	C-6/C-6	S-8	Double Contact Index Bayonet
		1034	32/3	12.8/14.0	2.1/.59	1200/5000t	C-6/C-6	S-8	
		1034	32/3	12.8/14.0	1.8/.59	200/5000	C-6/C-6	S-8	
Dome	105	1003	12	12.8	1.0	1200	C-6	B-6	Single Contact
		1003	15	12.8	.94	200	C-6	B-6	Bayonet
	104	1004	12	12.8	1.0	1200	C-6	B-6	Double Contact
		1004	15	12.8	.94	200	C-6	B-6	Bayonet
	1093	93	15	12.8	1.19	1000	C-2R	S-8	Single Contact
		93	15	12.8	1.04	700	C-6	S-8	Bayonet
	98	631	6	13.0	0.62	1300	C-2V	G-6	Single Contact Bayonet
		89	6	14.0	0.63	1000	2C-2R	G-6	
		89	6	13.0	0.58	750	C-2R	G-6	
	99	632	6	14.0	0.63	1000	2C-2R	G-6	Double Contact
		90	6	13.0	0.58	750	C-2R	G-6	Bayonet

*Variable load flasher required

**At 14.0 Volts

t5000 plus Hours.

MIN. & SEALED BEAM

Fleet Service Sealed Beam Lamps (Substitution Guide)

Sealed Beam Service	Fleet Service Types Trade No.	To Replace Trade No.	Design: Volts	Watts	Max. Amps at Design Volts	Rated Avg. Life at Design Volts-Hrs.	Filament Type	Bulb	Terminals	
									No.	Type
Low Beam Headlamp ^{x4}	4040	4000	12.8	37.5/60	3.14/5.02	900/1500	C-6/C-6	Par-46	3	Lugs
			12.8	37.5/60	3.14/5.02	600/960	C-6/C-6		3	Lugs
High Beam Headlamp ^x	5001	4006 4001	12.8	50	4.18	600	C-6	Par-46	2	Lugs
			12.8	37.5	3.14	720	C-6		2	Lugs
			12.8	37.5	3.14	600	C-6		2	Lugs
High/Low Beam Headlamp ^{x4} ^{xx}	6016	6015 6014	12.8	60/50	5.02/4.18	900/1500	C-6/C-6	Par-56	3	Lugs
			12.8	60/50	4.97/4.20	300/500	C-6/C-6		3	Lugs
			12.8	60/50	5.02/4.18	600/960	C-6/C-6		3	Lugs

^{x4} Lamp Round System

¹³ Filament Shielded

^{xx}2 Lamp Round System

Terminology

1. **Lamp Number** — Lamps are marked with a Philips lamp number which has been registered with American National Standards Institute (ANSI).
2. **Bulb** — Refer to Illustration Chart next page.
3. **Service and Special Description** — The application for which the lamp was designed. Sealed Beam lamps can be used in applications other than that for which they were originally designed. Contact your local Philips sales rep for application assistance.
4. **Vac. or Gas** — Indicates whether lamp is Vacuum (B) or Gas (C) filled.
5. **Design Voltage** — The voltage at which the lamp was designed to operate.
6. **Design Amps** — The amount of current consumed when operating the lamp at design voltage.
7. **Design Wattage** — The amount of power consumed when operating the lamp at design voltage.
8. **Approximate Mean Spherical Candela** — The spherical candela emitted by the light source. This measurement is approximate, due to the difficulty in measuring and the variation from lamp to lamp. This measurement can be converted to Lumens by multiplying by $12.57(4\pi)$. Also known as Approximate Mean Spherical Candlepower.

9. **Lumens** — The amount of light emitted by a bulb. This can be converted to spherical candlepower by dividing by $12.57(4\pi)$.
10. **Approximate Initial Maximum Beam Candela** — The amount of light at the point of highest intensity in the beam. Values are approximate because of the difficulty in measurement and because of variation from lamp to lamp. This is also known as Approximate Initial Peak Beam Candlepower (AIPBC).
11. **Beam Spread to 10% of Maximum** — The spread to 10% of initial beam candela is an approximate measure of the height and width of a beam pattern. This measurement is not precise and is only intended to classify beam pattern sizes in a general way. The unit of measurement is the degree.
12. **Rated Average Life** — The rated average life is a statistical average of lamp life under controlled laboratory conditions. The actual life may vary depending on the environmental conditions, such as shock, vibration, temperature and voltage fluctuations of the application.
13. **Base** — Refer to illustration charts on following pages.
14. **Filament Designation** — Refer to illustrations in the Filament Designation Section below.

15. **Light Center Length** — Light center length indicates the location of the filament with reference to the lamp base. It is subject to manufacturing tolerances. The light center length is measured from the geometric center of the light source to a particular point of the base. This point is shown below for the base types used.

Screw — End of bottom base contact.
 Bayonet — Top of base pins.
 S.C. or D.C. Prefocus — Bottom of indentations on prefocusing collar.
 S.C. Miniature Flanged — Top of bosses in flange.
 D.C. Index — Top of base pin nearer bottom contacts.
 Wedge — Center of notch.
 Flanged — Top of flange.
 Midget Grooved — Center of groove.
 Wire Terminal — Not Specified.

16. **Maximum Overall Length** — The dimension which includes the bulb and base is designated as the overall length of the lamp. In the case of wire terminal lamps, this dimension applies only to the glass portion. The figures listed here are maximum tolerances.

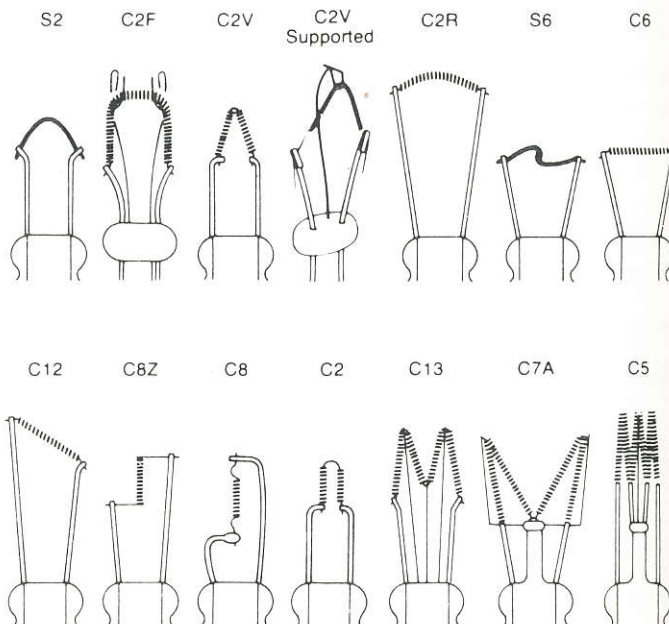
Filament Designations

The method of mounting a filament in a tungsten filament lamp is designed by an identification made up of a prefix letter or letters and an arbitrary number. The prefix letter indicates whether the filament wire is straight, coiled or coiled coil and the number indicates the form or arrangements of the filament on the supports.

S = Straight, there is no coil to the filament.

C = Coiled, the filament is wound into a helical coil.

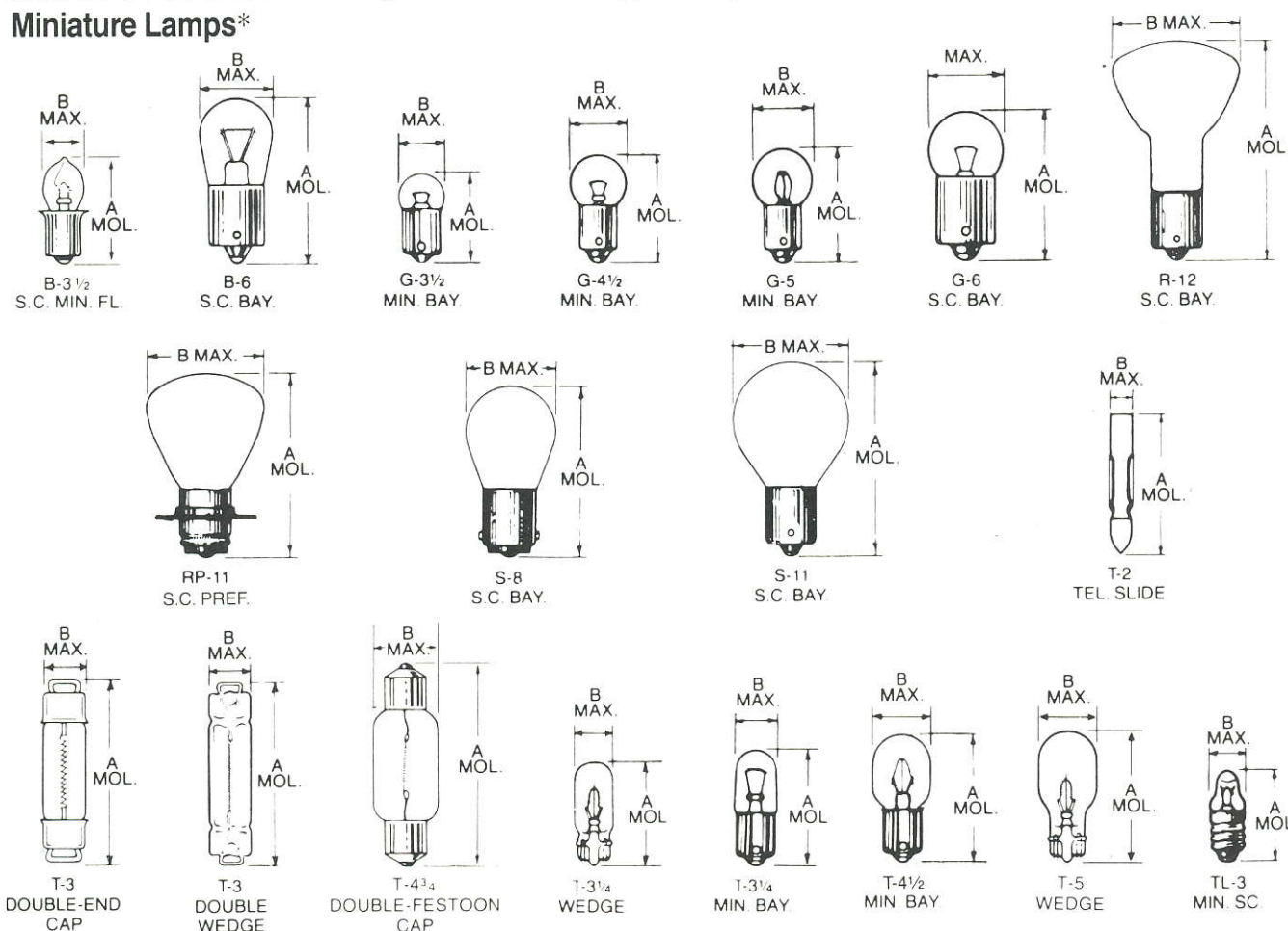
CC = Coiled Coil, the helical coiled filament is wound again into another helical coil.



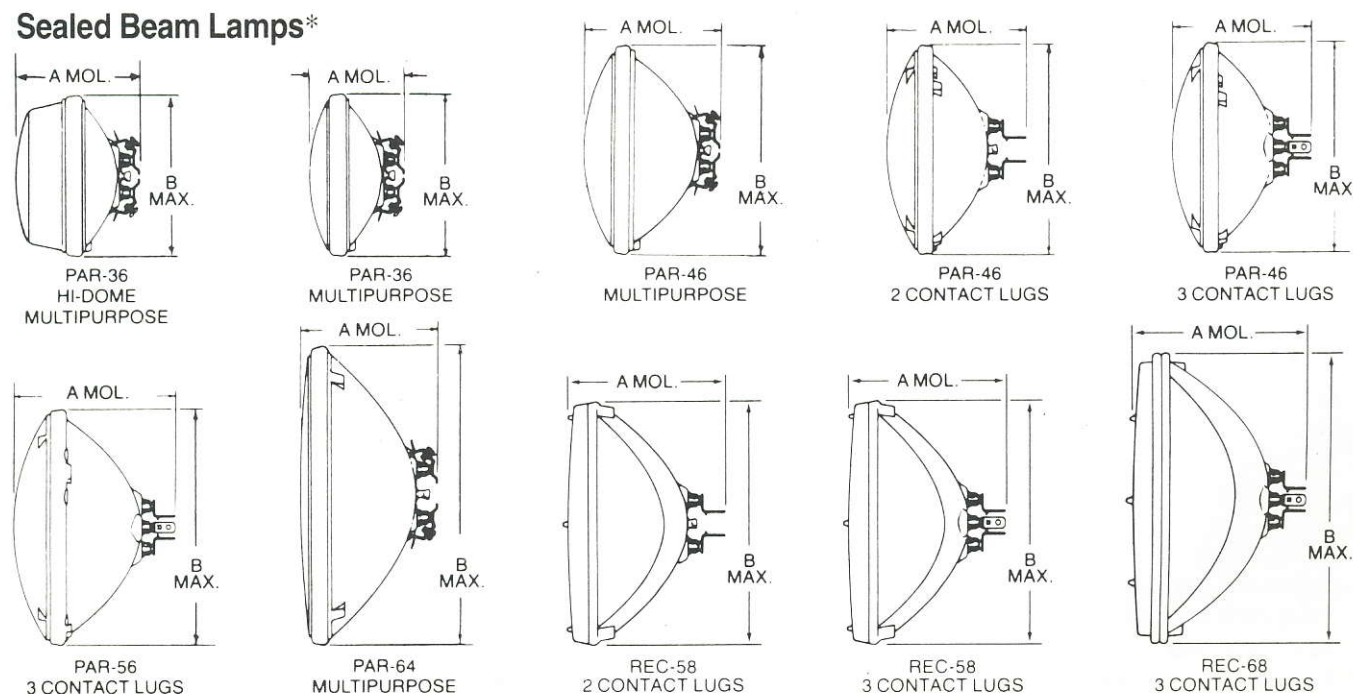
Bulb Designations

Bulbs are identified by a letter or letters followed by a number. This letter indicates the shape of the bulb, and the number indicates the diameter of the bulb in eighths of an inch. EXAMPLE: "S-8" indicates 'S' bulb having a diameter of $\frac{8}{8}$ ths or approximately 1 inch.

Miniature Lamps*



Sealed Beam Lamps*



*See chart on page 80 for dimensions.

MIN. & SEALED BEAM

Miniature/Sealed Beam Lamps

BASE DESIGNATIONS

The base serves two functions:
support for the lamp and the providing of electrical contact.

Sealed beam base types:

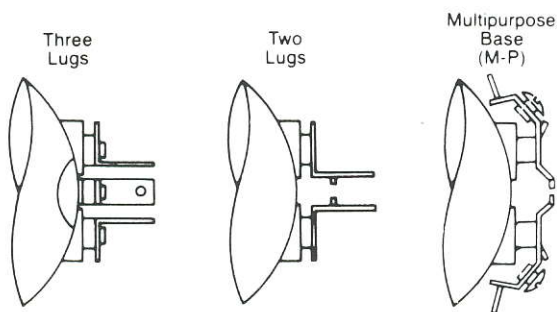
2 contact lugs — mainly used on automotive headlamps where two terminals are required (high beam headlamps).

3 contact lugs — mainly used on automotive headlamps where three terminals are required (low beam/high beam headlamps).

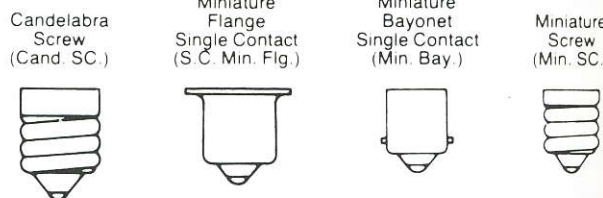
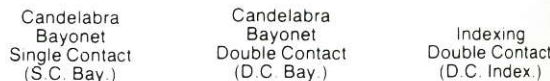
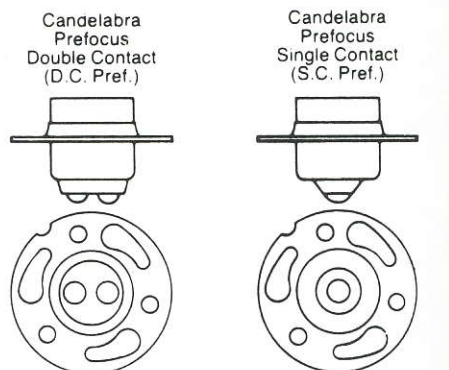
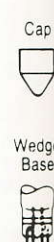
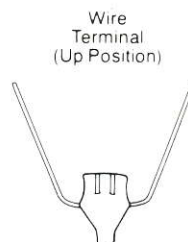
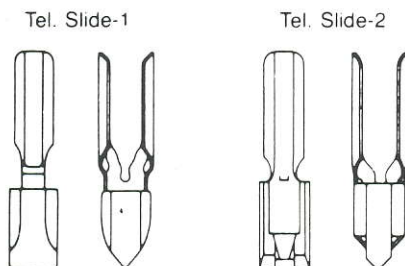
Multi-Purpose (M-P) Terminal — mainly used on non-headlamp applications. This base is designed to accept both slipon and screw lugs.

Miniature base types:

See illustrations



Telephone Slide Base



Dimensions for Miniature and Sealed Beam Lamps (see illustration page 79)

Bulb Shape	A MOL Dimension		B MAX Dimension		Bulb Shape	A MOL Dimension		B MAX Dimension	
	Inch	mm	Inch	mm		Inch	mm	Inch	mm
B-3½ S.C. MIN. FL.	1¼	32	.437	11.1	T-3¼ WEDGE	1¼	27	.40	10.3
B-6 S.C. BAY	1¾	45	.78	19.7	T-3¼ MIN. BAY	1¾	31	.43	10.9
G-3½ MIN. BAY	1⅝	24	.46	11.7	T-4½ MIN. BAY	1⅝	35	.59	14.9
G-4½ MIN. BAY	1⅞	27	.59	15	T-5 WEDGE	1½	38.1	.625	15.9
G-5 MIN. BAY	1⅞	30	.64	16.2	TL-3 MIN. S.C.	1⅝	24	.39	10
G-6 S.C. BAY	1⅞	37	.75	19	PAR-36 HI-DOME MULTIPURPOSE	3⅞	79	4.5	113.3
R-12 S.C. BAY	2⅝	67	1.54	39	PAR-36 MULTIPURPOSE	2¾	70	4.5	113.3
RP-11 S.C. PREF	2¼	58	1.42	36	PAR-46 MULTIPURPOSE	3⅞	99	5.7	144.8
S-8 S.C. BAY	2	51	1.04	26.5	PAR-46 2 CONTACT LUGS	4	102	5.7	144.8
S-11 S.C. BAY	2⅜	61	1.42	36	PAR-46 3 CONTACT LUGS	4	102	5.7	144.8
T-2 TEL. SLIDE	1⅞	43	.28	7.1	PAR-56 3 CONTACT LUGS	5¼	134	7.05	178.6
T-3 DOUBLE-END CAP	1⅞	44	.39	10.0	PAR-64 MULTIPURPOSE	4	102	8.1	205.7
T-3 DOUBLE WEDGE	1⅞	44	.39	10.0	REC-58 2 CONTACT LUGS	4½	114	6.5	166
T-3 S.C. MIN. FLG.	1¼	31	.39	10.0	REC-58 3 CONTACT LUGS	4½	114	6.5	166
T-4¾ DOUBLE-FESTOON CAP	1¾	45	.64	16.3	REC-68 3 CONTACT LUGS	5⅝	143	7.87	200

Photo, Projection, Sound Reproducer and Film Viewer Lamps

ANSI Code	NAED Number 04-6677-	Philips Type No.	Std. Pkg.	Watts (Amps.)	Volts	Base	Bulb	Rated Approx.		L.C.L. (In.)	M.O.L. (In.)	Coil Type
								Life(Hrs.)	Lumens			
BAK	30769-4		24	(0.75)	4	P30s	T5	250	30	1.126	2.000	C6
BCK	31625-7		24	500	120	G17t	T6	50	11000	1.563	3.500	C13D
BEH	38661-5	6284C	24	150	120	G17q	T10	15	3500	1.315	3.126	2CC8
BGB/BGK	30770-2		24	(0.75)	4	P30d	S8	50	30	1.126	2.000	C6
BGK	See BGB											
BHC	See DYS/DYV/BHC											
BLC	27067-8		120	30	115	BA15d	S11	50	400	1.374	2.374	CC2V
BLX	26625-4		120	50	120	BA15d	S11	50	780	1.374	2.374	CC2V
BMG/BMH	30638-1		120	100	115	BA15d	S11	25	2000	1.374	2.374	CC2V
BMH	See BMG											
BRH	31626-5		24	1000	120	R7s	T5	75	30000	—	3.752	CC8
BRK	30772-8	7090C	24	(0.75)	4	P30s	T5	50	28	1.126	2.374	C8
BRL	31627-3	7027	24	50	12	G6.35	T3.5	50	1400	1.181	1.732	C6F
BRS	30774-4	7253C	24	(0.75)	4	P30s	T6	50	30	1.126	2.000	C6
BRX	43917-4		24	(1.00)	6	P30d	T5	100	70	1.126	2.374	C6
BSB/BSS	30782-7		24	(1.00)	6	P30s	T5	100	70	1.126	2.374	C8
BSK	30776-9		24	(1.00)	6	P30s	T5	100	70	1.126	2.000	C6
BSS	See BSB											
BSW	30778-5		24	(0.20)	7	P30s	T5	50	15	1.126	2.374	C8
BTB	30784-3		24	(0.20)	7	P30d	T5	50	16	1.126	2.374	C6
BVE	30762-9		24	625	120	GZ9.5	T6	75	15000	1.752	3.500	C13D
BVK/BVS	30785-0		24	(6.50)	5	P30s	T8	50	365	1.626	2.626	C8
BVS	See BVK											
BWD	31580-4		24	(4.20)	8.5	P30d	T8	150	700	1.626	3.126	C8
BXA	27223-7		24	(7.50)	10	P30s	T8	100	—	1.468	3.126	C6
BXB	30787-6		24	(4.00)	8.5	P30s	T8	100	690	1.626	3.126	C8
BXE	27221-1		24	(7.50)	10	BA15s	T8	100	690	1.752	3.126	C8
BXG	27220-3	6056N	24	(7.50)	10	BA15s	T8	100	1600	1.594	3.126	C6
BXM	27213-8		24	(4.00)	9	P30s	T8	500	—	1.468	3.126	C6
BXN	31559-8	6057C	24	(5.00)	10	P30s	T8	100	1050	1.468	3.126	C6
CAL	26791-4		24	300	120	G17q	T10	25	3200	1.563	4.000	C13
CAR	26715-3		24	150	120	G17q	T10	15	3100	1.315	3.126	2CC8
CAW/CAX	26628-8		24	50	120	BA15d	T8	50	810	1.374	3.126	CC13
CAX	See CAW											
CBA	31628-1		24	500	120	G17t	T6	50	11000	1.28	3.225	C13D
CBC	See CBJ											
CBJ/CBC	26649-4		24	75	120	BA15s	T8	50	1250	1.374	3.126	CC13
CBS/CBX	26641-1		24	75	120	BA15d	T8	50	1250	1.374	3.126	CC13
CBX	See CBS											
CDJ/CEL	30648-0	6158W	24	100	120	BA15d	T8	50	2000	1.374	3.126	CC2V
CDS/CDX	31561-4	6158N	24	100	120	BA15s	T8	50	1800	1.374	3.126	CC13
CDX	See CDS											
CEL	See CDJ											
CEW/CFC	26702-1	13141N	24	150	120	BA15s	T8	25	3500	1.374	3.626	2CC8
CFC	See CEW											
CLG/CLS	26770-8	7212N	24	300	120	BA15s	T8.5	25	7700	1.374	4.126	C13
CLS	See CLG											
CLX/CMB	26757-5		24	300	120	BA15d	T8.5	25	7600	1.374	4.126	C13
CMB	See CLX											
CTT/DAX	30590-4		24	1000	120	G17q	T12	25	—	1.563	4.626	C13D
CWA	31558-0	133W	24	750	120	G17q	T12	25	—	1.563	4.626	C13D
CWD	26794-8	6280C	24	300	120	G17q	T10	25	7500	1.563	4.000	C13
CXK	30766-0	6131C	24	300	120	P28s	T10	25	7500	2.189	5.748	C13
CXL	See CXR											
CXR/CXL	31566-3	13120C	50	50	8	P30s	TB6	25	—	1.850	3.780	C6F
CXY	26805-2		24	300	120	P28s	T10	25	7300	2.189	5.752	C13D
CZA/CZB	37494-2	6294C	24	500	120	G17q	T10	25	11900	1.563	4.000	C13D
CZB	See CZA											

*SPECIAL ORDER ITEM — Consult Customer Service for minimum order quantities and delivery.
All dimensions are in inches. To convert inches to millimeters multiply by 25.4001.

PHOTO

Photo, Projection, Sound Reproducer and Film Viewer Lamps

ANSI Code	NAED Number 04-6677-	Philips Type No.	Std. Pkg.	Watts (Amps.)	Volts	Base	Bulb	Rated Approx.		L.C.L. (In.)	M.O.L. (In.)	Coil Type
								Life(Hrs.)	Lumens			
CZS	31567-1		24	500	120	E26/24	T10	25	12500	3.000	5.500	C13D
CZX/DAB	30087-1	6152C	24	500	120	P28s	T10	25	12500	2.189	5.752	C13D
DAB	See CZX											
DAK	26837-5		24	500	120	G17q	T10	25	13400	1.563	4.000	C13D
DAX	See CTT											
DCX	26959-7		24	750	120	E26/24	T12	25	19500	3.000	5.500	C13D
DDB	31676-0	6153C	24	750	115	P28s	T12	25	20000	2.189	5.752	C13D
DDL	31509-3		24	150	20	GX5.3	51Dich	500	—	—	1.752	CC6
DDS	31510-1	13160	24	80	21	GX5.3	51Dich	1000	—	—	1.752	CC6
DDY	26951-4		24	750	120	P28s	T12	200	17000	2.189	5.748	C13D
DED	31475-7	13194	24	85	13.8	GX5.3	51Dich	1000	—	—	1.752	C8
DEJ	26930-8		24	750	120	Special	T12	25	20000	2.315	5.500	C13D
DEK/DFW	30081-4		24	500	120	G17q	T12	25	—	1.752	3.543	C13D
DEP	26923-3		24	750	120	G17q	T12	25	20000	1.563	4.626	C13D
DFD	26992-8		24	1000	120	P28s	T12	10	31000	2.189	5.752	C13D
DFG	See DFA											
DFT	26994-4	7242C	24	1000	120	P28s	T12	25	28000	2.189	5.752	C13D
DFW	See DEK											
DFY	30765-2		24	1000	120	Special	T12	25	28000	2.236	5.500	C13D
DGH	26952-2		24	750	120	P28s	T12	500	15000	2.189	5.752	C13D
DGS	31681-0		24	1000	120	Special	T12	10	33000	3.500	5.874	C13D
DHT	27033-0		24	1200	120	P28s	T12	10	37000	2.189	5.752	C13D
DJT	31482-3	13189	24	50	13.8	GX5.3	51Dich	1000	—	—	1.752	C8
DLG	43979-4		24	150	21.5	GX17q	T14	10	—	1.563	3.563	CC6
DLT	31683-6		24	500	30	E26/24	T20	50	1250	3.000	5.500	C13
DLY	31688-5		24	500	30	P28s	T20	50	1250	2.189	5.752	C13
DMS	31689-3	375E	24	500	120	E26/24	T20	50	13200	3.000	5.500	C13
DMX	31690-1	375C	24	500	115	P28s	T20	50	13200	2.189	5.748	C13
DPB	31692-7		24	750	120	E26/24	T20	25	20500	3.000	5.500	C13D
DPJ	31693-5		24	750	120	P28s	T20	25	19000	2.189	5.752	C13D
DPT	31694-3	297G	24	1000	120	E39	T20	50	28000	4.752	9.063	C13
DPW	31724-8	297C	24	1000	120	P40s	T20	50	28000	3.437	9.500	C13
DRC	31728-9		24	1000	120	P28s	T20	50	29000	2.189	5.752	C13
DRS	31730-5	6185C	24	1000	115	P28s	T20	25	29000	2.189	5.752	C13D
DRW	31741-2		24	1000	120	E39	T20	25	28500	4.752	9.063	C13D
DSB	31742-0		24	1000	120	P40s	T20	25	28500	3.437	9.500	C13D
DTJ	31744-6		24	1500	120	P40s	T20	25	42500	3.437	9.500	C13D
DWY	31176-1		12	650	120	R7s	TZ4	25	20000	—	3.173	CC8
DWZ	31750-3	12098R	100	375	30	R7s	T4	1000	7000	—	3.173	CC8
DXN	31202-5		12	1000	120	R7s	T5	30	33000	—	3.752	CC8
DXW	31219-9		12	1000	120	R7s	T5	150	28000	—	3.752	CC8
DXX	31753-7	6366R	100	800	240	R7s	T4	75	20500	—	3.173	CC8
DYA	31224-9		12	1000	120	R7s	T5	200	28000	—	4.374	CC8
DYH	31638-0		24	600	120	G5.3	GT7	75	17000	1.437	2.500	CC6
DYP	31637-2		24	600	120	Special	GT7	75	17000	1.563	2.350	CC6
DYS/DYV/BHC	31639-8		24	600	120	CZ9.5	GT7	75	17000	1.437	2.500	CC6
DYV	See DYS											
DZA	33781-6	—	24	30	10.8	G5.3	T3.5	400	800	1.063	2.00	—
DZB	31636-4		24	100	12	G5.3	T3	50	2800	1.063	2.000	C6F
DZE	See FDS											
DZZ	31629-9		24	100	12	GZ9.5	T3.5	1000	2700	1.059	2.252	C6F
EBP	31754-5		24	1000	120	E26/24	T12	25	28000	3.000	5.500	C13D
EFM	31484-9	6847	50	50	8	GZ6.35	51Dich	50	—	—	1.654	C8
EFN	31502-8	6853	50	75	12	GZ6.35	51Dich	50	—	—	1.654	C8
EFP	31488-0	6834	50	100	12	GZ6.35	51Dich	50	—	—	1.654	C8
EFR	31490-6	6423	50	150	15	GZ6.35	51Dich	50	—	—	1.654	C8

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								Life(Hrs.)	Lumens			
EGH	31640-6		24	500	120	G17t	T6	50	11900	1.563	3.500	C13D
*EGY	31757-8	PF811	24	1000	225	GX6.35	T7	15	31000	1.496	2.402	—
EHA	31641-4	5968	24	500	120	GZ9.5	T6	50	11000	1.437	3.000	C13D
EHJ	31758-6	7748	100	250	24	G6.35	T4	50	8000	1.299	2.165	C6F
EJA	33732-9		24	150	21	GX5.3	51Dich	40	—	—	1.850	CC6
EJL	31508-5	13164	24	200	24	GX5.3	51Dich	50	—	—	1.850	CC6
EJM	31589-5	5995	24	150	21	GX5.3	51Dich	40	—	—	1.850	CC6
EJN	See ELD											
EJV	33744-4		24	150	21	GX5.3	51Dich	40	—	—	1.850	CC6
EJY	31624-0		24	80	19	GX5.3	51Dich	25	—	—	1.850	CC6
EKE	31592-9		24	150	21	GX5.3	51Dich	200	—	—	1.752	CC6
EKG	31593-7		24	80	19	GX5.3	51Dich	25	—	—	1.850	CC6
*EKM	31762-8	13989R	72	1000	225	R7s	T3	200	26000	—	7.535	—
EKN	31595-2		24	120	17.7	GX5.3	51Dich	120	—	—	1.752	CC6
EKP/ENA	31601-8		24	80	30	GX5.3	51Dich	25	—	—	1.752	CC6
ELB	31617-4		24	80	30	GX5.3	51Dich	18	—	—	1.752	CC6
ELC	31491-4	13163	24	250	24	GX5.3	51Dich	50	—	—	1.850	CC6
ELD/EJN	31618-2	13158	24	150	21	GX5.3	51Dich	40	—	—	1.850	CC6
ELH	31619-0		24	300	120	GY5.3	51Dich	35	—	—	1.850	CC8
ENA	See EKP											
ENG	31925-1		24	300	120	GY5.3	51Dich	15	—	—	1.752	CC8
ENH	31621-6		24	250	120	GY5.3	51Dich	175	—	—	1.752	CC8
ENW	31938-4		24	80	19	GY5.3	51Dich	300	—	—	1.850	CC6
ENX	31927-7		24	360	82	GY5.3	51Dich	75	—	—	1.752	CC8
EPK	31622-4		24	80	30	GX5.3	51Dich	18	—	—	1.752	CC6
EPV	31493-0	13186	24	90	14.5	GX5.3	51Dich	500	—	—	1.752	CC6
EPX	31494-8	13186	24	90	14.5	GX5.3	51Dich	500	—	—	1.752	CC6
EPZ	31496-3	13189	24	50	13.8	GX5.3	51Dich	1000	—	—	1.752	CC6
ESA/FHD	31764-4	7387	200	10	6	G4	T2.5	100	200	0.768	1.181	C6
ESB	31767-7	7388	200	20	6	G4	T3	100	420	0.768	1.220	C6
ETA	31882-4	6839C	24	100	12	PG22d	T3.5	50	3000	0.709	1.890	—
EVA	31642-2	7724	24	100	12	GY6.35	T3.5	1000	2500	1.181	1.732	C6F
EVB	31883-2	6550	100	150	15	G6.35	T3.5	50	5000	1.181	1.732	—
EVC	31884-0	6958	100	250	24	G6.35	—	300	8400	1.417	2.362	C6F
*EVD	31885-7	7787	100	400	36	G6.35	T6	50	14500	1.417	2.362	—
EWJ	31498-9	13075	50	28	12	GX5.3	51Dich	750	—	—	1.752	C8
FAD	31182-9	6365R	12	650	120	R7s	T4	100	16500	—	3.173	CC8
FAL	30761-1	12216R	100	420	120	R7s	T4	75	11000	—	2.626	CC8
FBY	31221-5		12	1000	120	R7s	T5	150	25000	—	3.752	CC8
FCB	31919-4	12260R	24	600	129	R7s	T4	75	16500	—	3.752	CC8
FCM	33269-2		12	1000	120	R7s	T3	300	27000	—	4.720	CC8
FCR	31643-0	7023	24	100	12	GY6.35	T3.5	50	2900	1.181	1.752	C6F
FCS	20607-8	7158	24	150	24	G6.35	T4	50	4500	1.181	2.000	C6F
FCV	29857-0		12	1000	120	G9.5	T6	300	25500	2.374	4.000	CC8
FCV	44206-1		24	1000	120	G9.5	T6	300	25500	2.374	4.000	CC8
*FDF	20255-6	13868R	12	500	120	R7s	T3	400	13250	—	4.720	CC8
FDN	31271-0		12	500	120	R7s	T3	400	12500	—	4.720	CC8
FDS/DZE	31655-4	5974	24	150	24	GZ9.5	T4	50	4450	1.315	2.252	C6F
FDT	31653-9	5973	24	100	12	GZ9.5	T3.25	100	2900	1.063	2.252	C6F
FDV	31663-8		24	150	24	G6.35	T4	100	4300	1.181	2.000	C6F
*FDW	31664-6		24	150	24	G6.35	T4	50	4450	1.181	2.000	C6F
FDX	31665-3		24	100	12	GY6.35	T3.25	50	3400	1.181	1.736	C6F
*FEB	31886-5	12260R	100	600	225	R7s	T4	75	17000	—	3.752	CC8
FEL	26979-5		12	1000	120	G9.5	T6	300	27500	2.374	4.000	CC8
FHD	See ESA											
FHM	31155-5		12	1000	120	R7s	T3	300	26000	—	4.720	C8
FHR	31666-1	5994	24	50	12	G5.3	T3.5	50	1400	1.157	2.000	C6F
FHV	31671-1		24	150	32	G6.35	T4	50	5000	1.181	1.968	C6F

*SPECIAL ORDER ITEM — Consult Customer Service for minimum order quantities and delivery.
All dimensions are in inches. To convert inches to millimeters multiply by 25.4001.

PHOTO

Photo, Projection, Sound Reproducer and Film Viewer Lamps

ANSI Code	NAED Number 04-6677-	Philips Type No.	Std. Pkg.	Watts (Amps.)	Volts	Base	Bulb	Rated Approx.		L.C.L. (In.)	M.O.L. (In.)	Coil Type
								Life(Hrs.)	Lumens			
FJX	31499-7	13155	24	30	13.8	GX5.3	51Dich	500	—	—	1.772	C8
FJY	31501-0	13074	24	28	12	G3.9	35Dich	1000	—	—	1.654	C8
*FJZ	31505-1	13527	24	30	13.8	GZ4	35Dich	500	—	—	1.575	C8
FKT	44099-0		24	250	120	G5.3	T6	200	5500	1.437	2.468	CC6
FKY	31924-4	13124	24	9	6	G3.9	35Dich	250	—	—	1.654	C6
*FKZ	31923-6	13122	24	25	13.8	GZ4	35Dich	250	—	—	1.500	C8
FLN	31935-0		24	50	13.8	GX5.3	51Dich	1000	—	—	1.752	C8
FLZ	31929-3		24	125	18.7	GX5.3	51Dich	120	—	—	1.850	CC6
FMK	34289-9		24	250	120	GZ9.5	GT7	200	5500	1.437	2.500	CC6
FML	33511-7		300	50	13.8	GX5.3	51Dich	1000	—	—	1.850	C8
GED	33766-7	13131	50	85	13.8	Leads	51Dich	1000	—	—	1.968	C8
GJT	33769-1	13125	50	50	13.8	Leads	51Dich	1000	—	—	1.968	C8
* —	31387-4	PF810	24	650	225	G6.35	T5	15	21000	1.614	2.638	
—	31333-8	5972	100	10	6	G4	T3	200	150	0.945	1.496	
—	31337-9	6144F	24	(8)	16	BA21d	G13	25	3455	1.031	2.559	
—	31284-3	6604	50	75	12	GZ6.35	54Dich	50	—	—	2.000	C8
* —	31335-3	6605	200	10	6	G4	T3	1000	140	0.768	1.181	
* —	31339-5	7389	24	500	225	GY9.5	T7	75	14000	1.437	2.953	
* —	31341-1	7763C	100	250	24	PG22d	T4	50	8500	0.906	2.205	
* —	31447-6	13116C	50	100	12	P30s	TB	25	—	1.732	3.740	C6F
—	37614-5	13117	50	150	17	GX5.3	51Dich	1000	21250	—	1.75	
* —	31448-4	13119C	24	150	12	P30s	TB	25	—	2.165	3.740	C6F
—	33545-5	13139	50	75	12	GX5.3	51Dich	1000	—	—	1.654	C8
—	31503-6	13151	300	15	6	GZ4	51Dich	500	—	—	1.772	C6
—	44295-4	13165	50	35	14	G24	35Dich	50	—	—	1.496	—
—	31450-0	13347C	100	15	6	PX22d	T6	100	210	0.256	2.126	
—	31453-4	13347W	100	15	6	BA15d	T6	100	210	0.256	2.126	
—	31455-9	13347Z	100	15	6	BA15dPF	T6	100	210	—	2.126	
—	31349-4	13477R	12	800	220	R7s	T3.5	150	21600	—	4.720	
* —	31504-4	13528	360	15	6	GZ4	35Dich	500	—	—	1.496	C6
* —	31507-7	13529	360	9	6	GZ4	35Dich	250	—	—	1.496	C6
—	31456-7	13702C	100	15	6	PX22d	T6	100	218	0.256	2.126	
—	31457-5	13730C	50	75	12	P35s	TB	15	—	1.732	3.740	
* —	31353-6	13912R	72	550	110	R7s	—	—	—	—	—	

* SPECIAL ORDER ITEM — Consult Customer Service for minimum order quantities and delivery.
All dimensions are in inches. To convert inches to millimeters multiply by 25.4001.

Halogen Display Lamps

Halogen Aluminum Reflector Lamps

ANSI Code	NAED Number 04-6677-	Philips Type No.	Std. Pkg.	Watts	Volts	Base	Reflector Dia. (mm)/ Material	Avg. Life (Hours)	Luminous Intensity (cd)	Beam Spread† Degrees	O.A.L. (In.)
GBA	□ 32828-6	6424	50	15	6	B15d	37 Alum.	3000	5000	6	1.378
GBB	□ 32834-4	6425	50	15	6	B15d	56 Alum.	3000	12000	4	2.205
GBC	□ 32839-3	6426	50	15	6	B15d	56 Alum.	3000	1400	14	2.205
GBD	□ 32840-1	6433	50	20	12	B15d	37 Alum.	3000	7000	6	1.378
GBE	□ 32841-9	6434	50	20	12	B15d	37 Alum.	3000	1400	18	1.378
GBF	□ 32842-7	6435	50	20	12	B15d	37 Alum.	3000	350	32	1.378
GBG	□ 32397-2	6429	50	35	6	B15d	56 Alum.	3000	15500	6	2.205
GBH	□ 32855-9	6430	50	35	6	B15d	56 Alum.	3000	4000	14	2.205
GBJ	□ 32826-0	6438	50	50	12	B15d	56 Alum.	3000	11000	10	2.205
GBK	□ 32827-8	6439	50	50	12	B15d	56 Alum.	3000	1900	25	2.205

†Angle measured at which the luminous intensity is one-half of the center beam.

□ Exclusive Product

Halogen Display Lamps

Accent 1200 Halogen Display Lamps (51 MM Dichroic Reflectors) (MR 16)

NAED Number 04-6677-	ANSI Code	Watts	Volts	Base	Filament	Approx. Color Temp. (Degrees K)	Average Center Candle-power	Approx. Beam Spread (Degrees)	Average Rated Life (Hours)
37495-9	BAB	20	12	GX5.3	CC-6	2925	460	36	2000
37487-6	ESX	20	12	GX5.3	CC-6	2925	3300	12	2000
31499-7	☐ FJX	25	12	GX5.3	C-8	3050	8500	6	2000
37498-3	EXN	50	12	GX5.3	C-6	3050	1500	40	3000
37496-7	EXT	50	12	GX5.3	C-6	3050	9150	13	3000
37497-5	EXZ	50	12	GX5.3	C-6	3075	3000	24	3000
27386-2	ENL	50	12	GX5.3	CC-6	3050	2500	30	3000
37500-6	EYC	75	12	GX5.3	CC-6	3050	2000	38	3500
37499-1	EYF	75	12	GX5.3	CC-6	3050	11500	14	3500

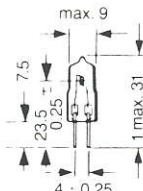
Accent 1200 Halogen Color Display Lamps (51 MM Dichroic Reflectors) (MR 16)

NAED Number 04-6677-	ANSI Code	Watts	Volts	Base	Filament	Color	Approx. Beam Spread (°)	MBCP†	Average Rated Life (Hours)
37488-4	FNC	50	12	GX5.3	C-6	Yellow	10	13000	3000
37489-2	FND	50	12	GX5.3	C-6	Red	10	3000	3000
37490-0	FNE	50	12	GX5.3	C-6	Green	10	5500	3000
37491-8	FNF	50	12	GX5.3	C-6	Blue	10	2800	3000

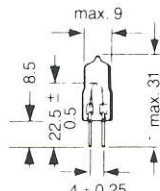
†Max. Beam Candela ☐ Exclusive Product

Halogen Burners — Lamps Without Reflectors

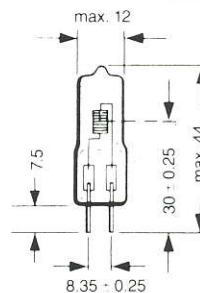
Dimensions in Millimeters



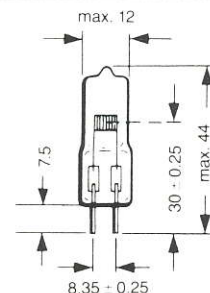
13078



13091 13283
13093 13284



13094



13079 13082 13089
13083 13090

NAED Number 04-6677-	Description	Watts	Volts	Base	Lumens	L.C.L. mm	M.O.L. mm	Package Qty.	Average Rated Life (Hours)
23256-1	13093	15	6	G4	225	22.5	31	100	2000
23259-5	13094	35	6	GY6.35	600	30	44	100	2000
23260-3	13283	5	12	G4	60	22.5	31	100	2000
23262-9	13284	10	12	G4	140	22.5	31	100	2000
23264-5	13078	20	12	G4	350	23.5	31	100	2000
23265-2	13079	50	12	GY6.35	950	30	44	100	2000
23266-0	13082	75	12	GY6.35	1600	30	44	100	2000
23268-6	13083	100	12	GY6.35	2550	33	44	100	2000
23270-2	13091	20	24	G4	350	22.5	31	100	1000
23273-6	13090	50	24	GY6.35	900	30	44	100	2000
23274-4	13089	100	24	GY6.35	2000	30	44	100	2000

Cross Reference List of IEC and ANSI Base Designations:

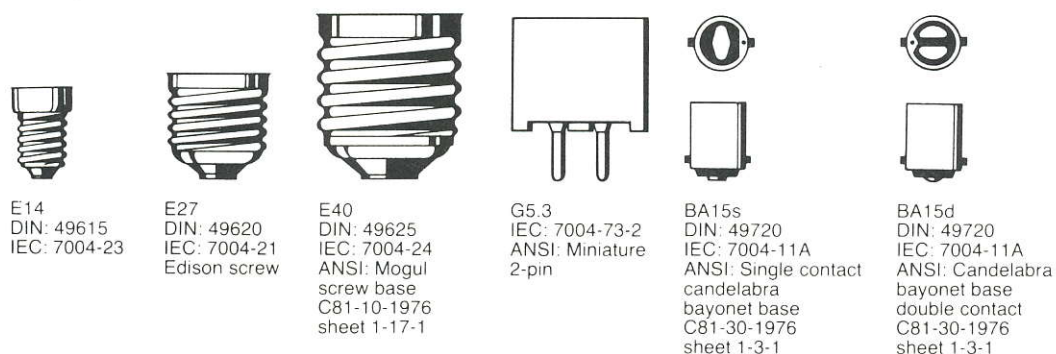
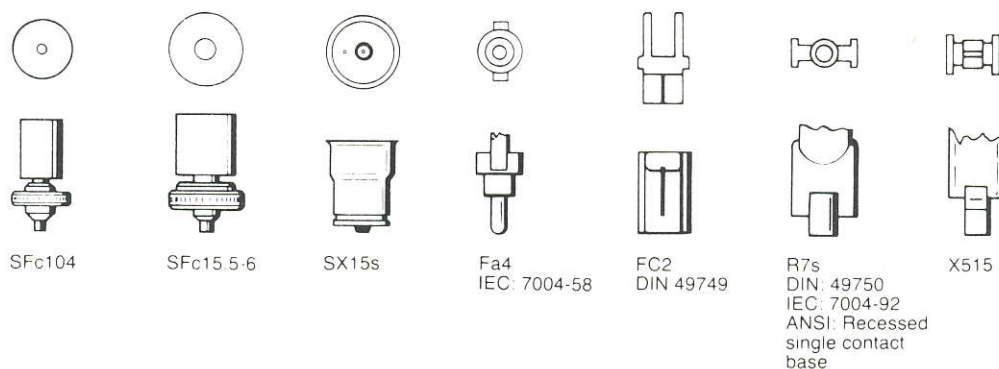
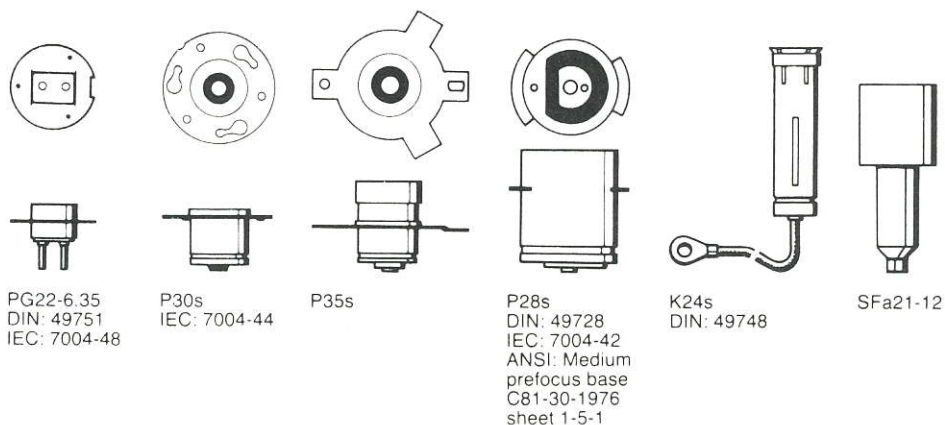
IEC	ANSI	IEC	ANSI	IEC	ANSI	IEC	ANSI
E10/12	Miniature Screw	G13	Medium Bipin	G17t	3-Pin Prefocus	GY9.5	Prefocus Two-Pin (Higher Wattage)
E12/15	Candelabra Screw	G20	Mogul Bipin	G17q	4-Pin Prefocus	GZ9.5	Prefocus Two-Pin
E17/20	Intermediate Screw	R17d	Recessed D.C.	GX17q	4-Pin Prefocus (Low-Volt)	G22	Medium Bipost
E26s	Medium Screw S.C.	BA15s	Candelabra Bayonet S.C.	G5.3	Miniature Two-Pin	G38	Mogul Bipost
E26d	Medium Screw D.C.	BA15d	Candelabra Bayonet D.C.	G6.35	Glass Two-Pin	R7s	Recessed S.C.
E39	Mogul Screw	P28s	Medium Prefocus	GY6.35	Glass Two-Pin	GX5.3	Two-Pin Reflector (Low Volt)
Fa8	Single-Pin	P40s	Mogul Prefocus	G9.5	Medium Two-Pin	GY5.3	Two-Pin Reflector
G5	Miniature Bipin						

*SPECIAL ORDER ITEM — Consult Customer Service for minimum order quantities and delivery.
Unless otherwise noted all dimensions are in inches. To convert inches to millimeters multiply by 25.4001.

PHOTO

Photo, Projection, Sound Reproducer and Film Viewer Lamps

Base Types (Not Actual Size)



Photo, Projection, Sound Reproducer and Film Viewer Lamps

Base Types (Not Actual Size)



B15d
DIN: 49721
IEC: 7004-11



BA20d
DIN: 49730
IEC: 7004-12



BA21s
IEC: 7004-13



B22d/22
IEC: 7004-10



G3.9



G4
IEC: 7004-72



GX5.3
(Round pin)



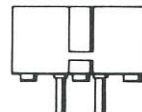
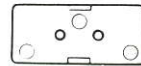
G6.35
GX6.35
GY6.35
IEC: 7004-59
ANSI: 81-40-1976
Sheet 1-2-3



GZ6.35
DIN: 49754
IEC: 7004-59A



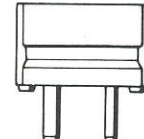
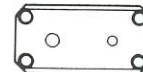
GZ4



GX9.5
DIN: 49638
IEC: 7004-70A



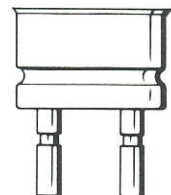
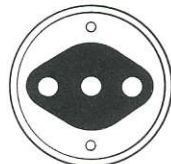
GY9.5
IEC: 7004-70B
ANSI: Two-pin
ceramic



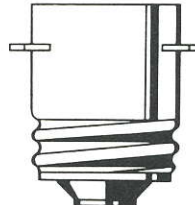
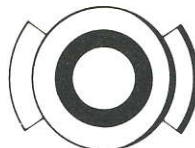
GY16
IEC: 7004-74



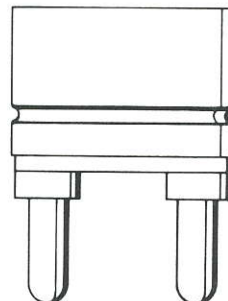
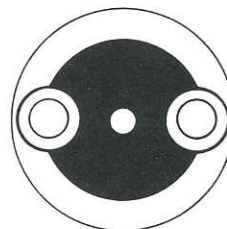
GX17q
GX17q
G17q
DIN: 49665
IEC: 7004-45
ANSI: Four-pin
prefocus base
C81-30-1976
sheet 1-9-1



G22
IEC: 7004-75
ANSI: Medium
bipost



P40s
DIN: 49728
IEC: 7004-43
ANSI: Mogul
prefocus base



G38
IEC: 7004-76
ANSI: Mogul
bipost

PHOTO

Stage/Studio/TV Lamps

ANSI Code	NAED Number 04-6677-	Watts	Description	Volts	Base	M.O.L. (In.)	L.L. (In.)	L.C.L. (In.)	Mean Lumens	Average Rated Life (Hrs.)	Filament	Color Temp. (°K)	Envelope Finish
BFE	31298-0	750	750T20P/SP	120	Mog. Pf	5¼	—	2⅞	17,000	2000	C-13	3000	Clear
BLX	26525-4	50	—	120	BA15d	2⅞	—	1⅞	780	50	CC-2V	2850	Clear
BMG/BMH	30638-1	100	—	115	BA15d	2⅞	—	1⅞	2000	25	CC-2V	3000	Clear
BRH	31626-5	1000	—	120	R7s	3¼	1⅞	—	30000	75	CC-8	3375	Clear
BTL	31891-5	500	—	120	Med. Pf.	4½	—	2⅞	11000	500	C-13D	3050	Clear
BTM	31890-7	500	—	120	Med. Pf.	4½	—	2⅞	12000	100	C-13D	3200	Clear
BTP	30514-4	750	750T7Q/4CL/2P	120	Med. Pf.	4½	—	2⅞	21000	200	C-13D	3200	Clear
BTR	30533-4	1000	1000T7Q/4CL/2P	120	Med. Pf.	4½	—	2⅞	28,500	250	C-13D	3200	Clear
BWM	20613-6	750	—	120	Med. Two-Pin	4½	—	2⅞	21,000	200	C-13D	3200	Clear
BWN	20154-1	1000	—	120	Med. Two-Pin	4½	—	2⅞	28,500	250	C-13D	3200	Clear
CAW/CAX	26628-8	50	—	120	BA 15d	3⅞	—	1⅞	810	50	CC-13	2875	Clear
CBS/CBX	26641-1	75	—	120	BA 15d	3⅞	—	1⅞	1250	50	CC-13	2925	Clear
CDJ/CEL	30648-0	100	—	120	BA 15d	3⅞	—	1⅞	2000	50	CC-2V	2975	Clear
CLX/CMB	26757-5	300	—	120	BA 15d	4⅞	—	1⅞	7600	25	C-13	3150	Clear
CXK	30766-0	300	—	120	Med. Pf.	5¼	—	2⅞	7500	25	C-13	3200	Clear
CYV	31892-3	1000	—	120	Mog. Bipost	7¼	—	5	28500	200	C-13D	3200	Clear
CYX	31893-1	2000	—	120	Mog. Bipost	8½	—	5	59000	300	C-13	3200	Clear
DEB	31295-9	500	500T12/8	120	Med. Pf.	6⅞	—	3½	9000	800	C-13D	2850	Clear
DGH	26952-2	750	—	120	Med. Pf.	5¼	—	2⅞	15000	500	C-13D	3050	Clear
DMS	31689-3	500	—	120	Med. Screw	5½	—	3	13,200	50	C-13	3200	Clear
DMX	31690-1	500	—	115	Med. Pf.	5¼	—	2⅞	13,200	500	C-13	3200	Clear
DNS	23721-4	500	500T12/9	120	Med. Pf.	6⅞	—	3½	11,000	200	C-13D	2950	Clear
DNT	23744-6	750	750T12/9	120	Med. Pf.	6⅞	—	3½	17,000	200	C-13D	3000	Clear
DNW	23734-7	500	500T12/64	120	Med. Pf.	5¼	—	2⅞	9500	500	C-13	2900	Clear
DPJ	31693-5	750	—	120	Med. Pf.	5¼	—	2⅞	19,000	25	C-13D	3250	Clear
DPW	31724-8	1000	—	120	Mog. Pf.	9½	—	3⅞	28,500	25	C-13D	3225	Clear
DPY	31922-8	5000	—	120	Mog. Bipost	11	—	6½	14300	500	C-13	3200	Clear
DRC	31728-9	1000	—	120	Med. Pf.	5¼	—	2⅞	30,000	50	C-13	3250	Clear
DRS	31730-5	1000	—	120	Med. Pf.	5¼	—	2⅞	29,500	25	C-13	3325	Clear
DSB	31742-0	1000	—	120	Mog. Pf.	9½	—	3⅞	28,500	25	C-13D	3225	Clear
DTJ	31744-6	1500	—	120	Mog. Pf.	9½	—	3⅞	42,500	25	C-13D	3225	Clear
DTY	37557-6	10000	—	120	Mog. Bipost	15⅞	—	10	28500	300	—	3200	Clear
DWT	38711-8	1000	1000T6Q/CL	120	R7s	5⅞	1	—	23400	2000	CC-8	3000	Clear
DWY	31176-1	650	650T4Q/2CL	120	R7s	3⅞	⅝	—	20000	25	CC-8	3400	Clear
DWZ	31750-3	375	—	30	R7s	3⅞	—	—	7800	1000	CC-8	2900	Clear
DXN	31202-5	1000	1000T5Q/CL	120	R7s	3¾	1⅞	—	33500	50	CC-8	3400	Clear
DXW	31219-9	1000	1000T5Q/CL	120	R7s	3¾	1⅞	—	28000	150	CC-8	3200	Clear
DXX	31753-7	800	6366R	240	R7s	3⅞	1	—	20500	75	CC-8	3200	Clear
DYA	31224-9	1000	1000T5Q/2CL	120	R7s	4⅞	1⅞	—	28000	200	CC-8	3200	Clear
DYH	31638-0	600	GT7 Bulb	120	Min. Two-Pin	2½	—	1⅞	17000	75	CC-6	3200	Clear
DYN	31237-1	1000	1000T5Q/2	120	R7s	4⅞	—	—	28000	200	CC-8	3200	Frosted
DYS/DYV/BHC	31639-8	600	GT7 Bulb	120	Two-Pin Pf.	2½	—	1⅞	17000	75	CC-6	3200	Clear
EGE	26969-6	500	—	120	Med. Pf.	5½	—	3½	10000	2000	CC-8	3000	Clear
EGF	31894-9	750	—	120	Med. Pf.	6	—	3½	20400	250	CC-8	3200	Clear
EGG	26973-8	750	—	120	Med. Pf.	6	—	3½	15000	2000	CC-8	3000	Clear
EGJ	26975-3	1000	—	120	Med. Pf.	6	—	3½	27500	400	CC-8	3200	Clear
EGK	29845-5	1000	—	120	Med. Pf.	6	—	3½	26500	400	CC-8	3200	Frosted
EGN	34450-7	500	500Q/CL	120	Med. Bipost	5½	—	2½	1300	100	C-13D	3200	Clear
EGR	31895-6	750	—	120	Med. Bipost	5½	—	2½	21000	150	C-13D	3200	Clear
EGT	31896-4	1000	—	120	Med. Bipost	5½	—	2½	28500	250	C-13D	3200	Clear
EHC/EHB	31897-2	500	500Q/CL	120	Med. Two-Pin	3¾	—	2⅞	13000	300	CC-8	3200	Clear
EHD	26971-2	500	500Q/CL	120	Med. Two-Pin	3¾	—	2⅞	10600	2000	CC-8	3000	Clear
EHF	31898-0	750	750Q/CL	120	Med. Two-Pin	4	—	2⅞	20400	300	CC-8	3200	Clear
EHG	26972-0	750	750Q/CL	120	Med. Two-Pin	4¼	—	2⅞	15000	2000	CC-8	3000	Clear
EHM	39282-9	300	300T3Q/CL	120	R7s	4⅞	2⅞	—	6000	2000	C-8	2950	Clear
EHP	37960-2	300	300T4Q/CL	120	R7s	3⅞	⅝	—	5600	2000	CC-8	3000	Clear
EHR	20797-7	400	400T4Q/CL	120	R7s	3⅞	⅝	—	7800	2000	CC-8	3000	Clear
EHT	37857-0	250	250Q/CL	120	Mini-Can	3⅝	—	1⅞	5000	2000	CC-8	3000	Clear
EHX	29851-3	300	300T4Q	120	R7s	3⅞	—	—	5600	2000	C-8	2950	Frosted

Stage/Studio/TV Lamps

S
S
/TV

ANSI Code	NAED Number 04-6677-	Watts	Description	Volts	Base	M.O.L. (In.)	L.L. (In.)	L.C.L. (In.)	Mean Lumens	Average Rated Life (Hrs.)	Filament	Color Temp. (°K)	Envelope Finish
EHZ	38206-9	300	300T3Q	120	R7s	4 ¹¹ / ₁₆	—	—	6000	2000	C-8	2950	Frosted
EJG	31136-5	750	750T3Q/4CL	120	R7s	4 ¹¹ / ₁₆	2 ⁷ / ₁₆	—	20600	400	C-8	3200	Clear
EMD	31154-8	750	750T3Q/4	120	R7s	4 ¹¹ / ₁₆	—	—	20600	400	C-8	3200	Frosted
ESL	43011-6	150	150Q/CL	120	Mini-Can	2 ³ / ₄	—	1 ³ / ₈	2600	1000	CC-2V	3000	Clear
ESM	23384-1	250	250Q	120	Mini-Can	3 ⁵ / ₃₂	—	1 ³ / ₈	4800	2000	CC-8	3000	Frosted
ESN	30759-5	100	100Q/CL	120	Mini-Can	2 ³ / ₄	—	1 ³ / ₈	1900	1000	CC-2V	3000	Clear
ESP	44265-7	150	150Q/CL/DC	120	D.C. Bay.	2 ⁷ / ₁₆	—	1 ³ / ₈	2800	1000	CC-2V	3000	Clear
ESR	31888-1	100	1000/CL/DC	120	D.C. Bay.	2 ⁷ / ₁₆	—	1 ³ / ₈	1900	1000	CC-2V	3000	Clear
ESS	31584-6	250	250Q/CL/DC	120	D.C. Bay.	3	—	1 ³ / ₈	5000	2000	CC-8	3000	Clear
ETB	31581-2	250	250Q/DC	120	D.C. Bay.	3	—	1 ³ / ₈	4700	2000	CC-8	3000	Frosted
ETC	26676-7	150	150QCL/DC	120	D.C. Bay.	2 ⁵ / ₈	—	1 ¹ / ₂	2800	200	CC-8	2900	Clear
ETD	31887-3	100	100Q/DC	120	D.C. Bay.	2 ⁷ / ₁₆	—	1 ³ / ₈	1850	1000	CC-2V	3000	Frosted
ETE	30760-3	100	100Q	120	Mini-Can	2 ³ / ₄	—	1 ³ / ₈	1850	1000	CC-2V	3000	Frosted
ETF	29850-5	150	150Q/DC	120	D.C. Bay.	2 ⁵ / ₈	—	1 ¹ / ₂	2700	2000	CC-8	2900	Frosted
ETG	34754-2	150	150Q/CL	120	Mini-Can	3	—	1 ¹ / ₂	2800	2000	CC-8	2900	Clear
ETH	29856-2	150	150Q	120	Mini-Can	3	—	1 ¹ / ₂	2700	2000	CC-8	2900	Frosted
EVR	38079-0	500	500Q/CL	120	Mini-Can	3 ³ / ₄	—	2	10000	2000	CC-8	3000	Clear
EYV	35604-8	500	500Q	130	Mini-Can	3 ⁵ / ₈	—	—	9800	2000	CC-8	3000	Frosted
EYW	36335-8	500	500Q/CL	130	Mini-Can	3 ³ / ₄	—	2	10800	2000	CC-8	3000	Clear
EYX	35605-5	500	500Q	120	Mini-Can	3 ⁵ / ₈	—	—	9800	2000	CC-8	3000	Frosted
FAD	31182-9	650	650T4Q	120	R7s	3 ¹ / ₈	5 ¹ / ₈	—	16500	100	CC-8	3200	Clear
FBX	31159-7	650	650T4Q	120	R7s	3 ¹ / ₈	—	—	16500	100	CC-8	3200	Frosted
FBY	31221-5	1000	1000T5Q/1	120	R7s	3 ³ / ₄	—	—	26000	150	CC-8	3200	Frosted
FBZ	31211-6	1000	1000T5Q	120	R7s	3 ³ / ₄	—	—	33000	30	CC-8	3400	Frosted
FCA	31179-5	650	650T4Q/2	120	R7s	3 ¹ / ₈	—	—	20000	25	CC-8	3400	Frosted
FCB	31919-4	600	(12260R)	120	R7s	3 ³ / ₄	1 ¹ / ₁₆	—	17000	75	CC-8	3200	Clear
FCL	20010-5	500	500T3Q/CL	120	R7s	4 ¹¹ / ₁₆	2	—	10500	2600	C-8	3000	Clear
FCM	33269-2	1000	1000T3Q/CL	120	R7s	4 ¹¹ / ₁₆	2 ¹ / ₂	—	28000	300	C-8	3200	Clear
FCV	29857-0	1000	1000Q	120	Med. Two-Pin	4	—	2 ³ / ₈	26500	300	CC-8	3200	Frosted
FCZ	36774-8	500	500T3Q	120	R7s	4 ¹¹ / ₁₆	—	—	10000	2000	C-8	3000	Frosted
FDA	20285-3	400	—	120	R7s	3 ¹ / ₈	5 ¹ / ₈	—	10,400	250	CC-8	3200	Clear
FDT	31653-9	100	—	12	Pin	2 ¹ / ₄	—	1 ¹ / ₄	2900	100	C-6F	3300	Clear
PDF	20255-6	500	500T2 ¹ / ₂ Q/CL	120	R7s	4 ¹¹ / ₁₆	2 ¹ / ₄	—	13250	400	C-8	3200	Clear
FDN	31271-0	500	500T2 ¹ / ₂ Q	120	R7s	4 ¹¹ / ₁₆	—	—	12800	400	C-8	3200	Frosted
FEL	26979-5	1000	1000Q/CL	120	Med. Two-Pin	4	—	2 ³ / ₈	27500	300	CC-8	3200	Clear
FEP	31899-8	1000	—	220	Med. Two-Pin	4	—	2 ³ / ₈	26000	200	CC-8	3200	Clear
FEP	31903-8	1000	—	240	Med. Two-Pin.	4	—	2 ³ / ₈	26000	200	CC-8	3200	Clear
FER/EHS	31240-5	1000	1000T6Q/4CL	120	R7s	5 ⁵ / ₈	3 ³ / ₄	—	27500	500	CC-8	3200	Clear
FEV	31904-6	200	200Q/CL/DC	120	D.C. Bay.	2 ⁷ / ₁₆	—	1 ³ / ₈	5500	50	CC-2V	3200	Clear
FEX	31907-9	2000	—	220	R7s	5 ⁵ / ₈	1 ¹ / ₄	—	42500	300	CC-8	3200	Clear
FEX	31915-2	2000	—	240	R7s	5 ⁵ / ₈	1 ¹ / ₄	—	42500	300	CC-8	3200	Clear
FEY	31916-0	2000	—	120	R7s	5 ⁵ / ₈	1 ¹ / ₄	—	57000	400	CC-8	3200	Clear
FFN	34350-9	1000	Q1000PAR64VNSP	120	Ext. Mog. End	—	—	—	400,000	800	—	3200	Clear
FFP	34351-7	1000	Q1000PAR64NSP	120	Ext. Mog. End	—	—	—	330,000	800	—	3200	Clear
FFR	34352-5	1000	Q1000PAR64MFL	120	Ext. Mog. End	—	—	—	125,000	800	—	3200	Clear
FFS	34353-3	1000	Q1000PAR64WFL	120	Ext. Mog. End	—	—	—	40,000	800	—	3200	Clear
FFT	31921-0	1000	—	120	R7s	6 ⁵ / ₈	2 ⁹ / ₁₆	—	27000	300	C-8	3200	Clear
FHM	31155-5	1000	1000T3Q	120	R7s	4 ¹¹ / ₁₆	—	—	27300	400	C-8	3200	Frosted
FKK	31917-8	2000	—	220	Mog. Bipost	8 ¹ / ₄	—	5	54000	400	C-13D	3200	Clear
—	29852-1	75	75Q/CL	28	Mini-Can	2 ¹ / ₄	—	1 ³ / ₁₆	1400	2000	CC-6	3000	Clear
—	22886-6	250	250Q/CL	130	Mini-Can	3 ⁵ / ₃₂	—	1 ³ / ₈	5000	2000	CC-8	3000	Clear
—	31674-5	300	300T4Q/CL	130	R7s	3 ¹ / ₈	5 ¹ / ₈	—	5600	2000	CC-8	3000	Clear
—	39162-3	400	400T4Q/CL	130	R7s	3 ¹ / ₈	5 ¹ / ₈	—	7800	2000	CC-8	3000	Clear
—	31586-1	500	500Q/CL/DC	120	D.C. Bay.	3 ⁷ / ₁₆	—	2 ¹ / ₈	10000	2000	CC-8	3000	Clear
—	31920-2	500	500Q/CL	130	Med. Two-Pin	4	—	2 ³ / ₈	10200	2000	CC-8	3000	Clear

Stage/Studio/TV Lamps

Philips SureSpot™

ANSI Code	NAED Number 04-6677-	Watts	Description	Volts	Base	M.O.L. (In.)	L.L. (In.)	L.C.L. (In.)	Mean Lumens	Average Rated Life (Hrs.)	Filament	Color Temp. (°K)	Envelope Finish
BKD	21175-5	750	—	120	Med. Bipost	5½	—	2½	18,000	150	C-13D	3200	Clear
BKE	21177-1	1000	—	120	Med. Bipost	5½	—	2½	25,000	175	C-13D	3200	Clear
CZM	21173-0	2000	—	120	Mog. Bipost	8½	—	5	55,000	250	C-13	3200	Clear

☐ Exclusive Product

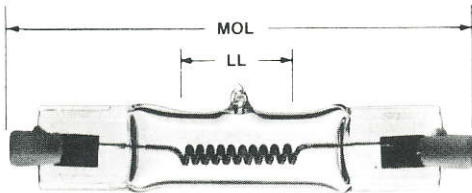
MSI Lamps (HMI Types) Gas Discharge

Description	NAED Number 04-6677	Watts	Min Stable Operation Volts	Lamp Current Amps	Lumens	Average Rated Life (Hours)	Burning Position	Base	Color Temperature (°K)
MSI 200	30709-0	200	200	3.1	16,000	300	Horiz ± 15°	X515	5600
MSI 575	30710-8	575	200	7.0	49,000	750	Any	SFc 10-4	5600
MSI 1200	30711-6	1200	200	13.8	110,000	750	Any	SFc 15.5-6	5600
MSI 2500	30716-5	2500	210	25.6	240,000	500	Horiz ± 15°	SFa 21-12	5600
MSI 4000	30718-1	4000	360	24.0	410,000	500	Horiz ± 15°	SFa 21-12	5600
MSI 6000	34337-6	6000	200	55.0	630,000	350	Horiz ± 15°	K 25 s	5600

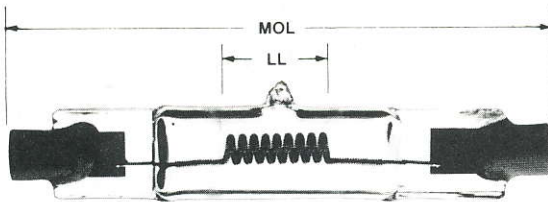
Bulb Shapes and Base Types (Not Actual Size)

DOUBLE ENDED TUNGSTEN HALOGEN LAMPS
3¾", 4¾" AND 5¾" MOL R7s BASE

INTERMEDIATE WATTAGE DOUBLE-ENDED
TUNGSTEN HALOGEN LAMPS - 3¾" MOL R7s BASE

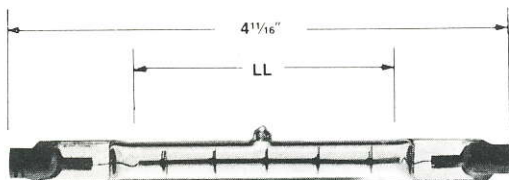


DXN DXW FBY BRH EHP EHR FAD DXX
FCB FBX DWY FBZ FCA DWZ



DYA DYN FER/EHS
DWT FEX FEY

UNIVERSAL T-3 DOUBLE-ENDED TUNGSTEN HALOGEN
4¼" AND 6¾" MOL R7s BASE



FCM FHM EJG EMD FCL FCZ FDF FDN
EHM EHZ (4¼" MOL)
FFT (6¾" MOL)

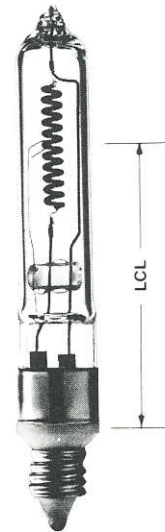
MINI-CAN BASE SINGLE ENDED
TUNGSTEN HALOGEN LAMPS



ESN
ESL ETE
ETH



EHT
ESM
250Q CL

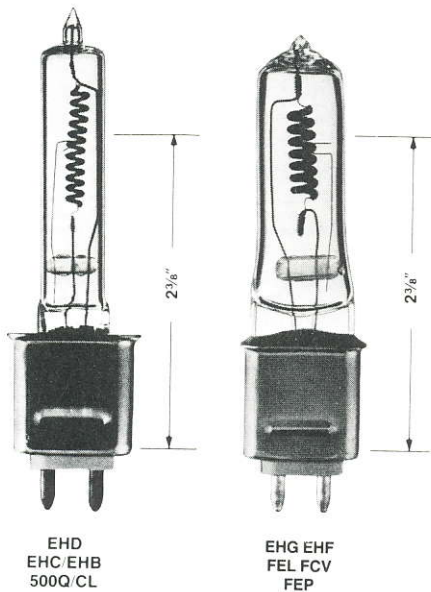


EYW
EVR

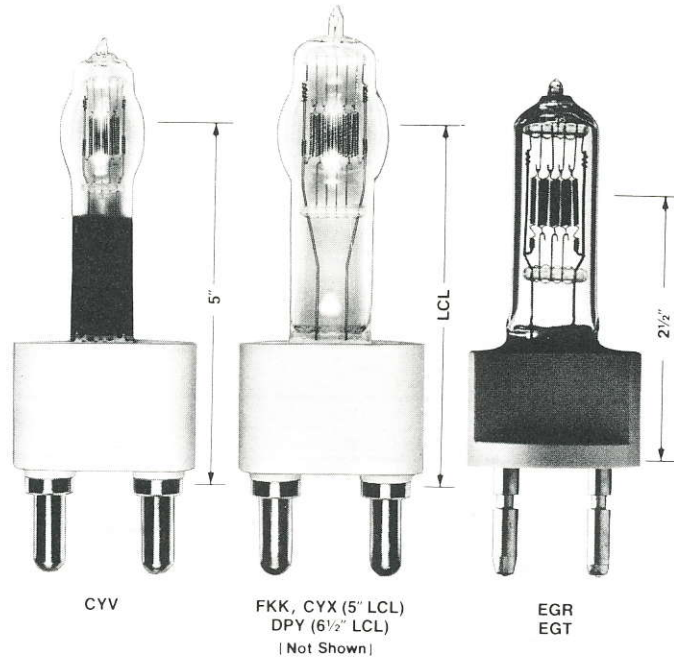
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Bulb Shapes and Base Types (Not Actual Size)

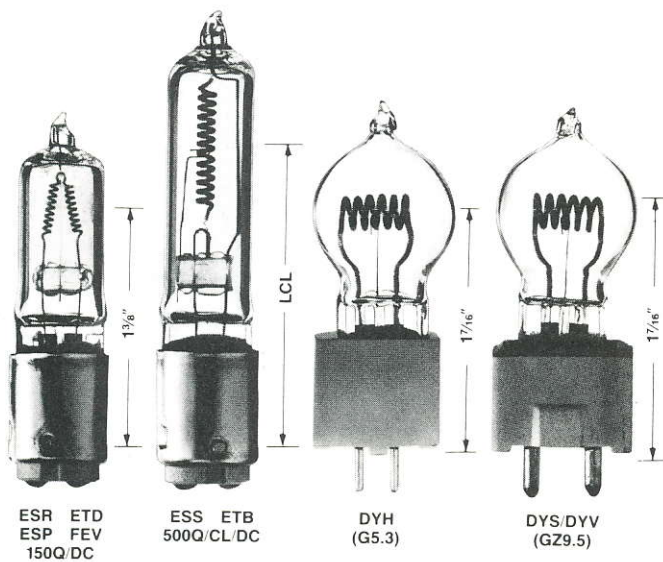
MEDIUM TWO PIN
TUNGSTEN HALOGEN LAMPS (G.9.5)



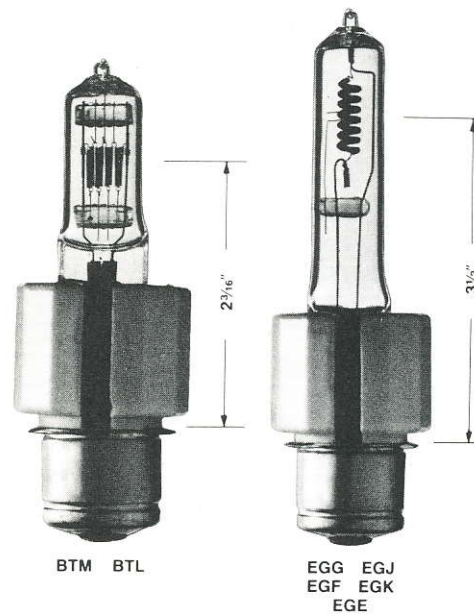
MOGUL BIPOST LAMPS WITH 5" AND 6 1/2" LCL (G 38)
MEDIUM BIPOST LAMPS WITH 2 1/2" LCL (G 22)



DOUBLE CONTACT BAYONET BASES (BA 15d)
TUNGSTEN HALOGEN-MINIATURE TWO-PIN BASE (G5.3)
TUNGSTEN HALOGEN-TWO PIN PREFOCUS BASE (GZ 9.5)



MEDIUM PREFOCUS LAMPS WITH 2 3/16" LCL (P28s)
MEDIUM PREFOCUS LAMPS WITH 3 1/2" LCL (P28s)



Specialty Lamps

Compact Source Lamps — CS, CSI, CSX, TIN Halide

NAED Number 04-6677-	Description	Wattage	Supply Voltage	Lumens
31046-6	CS 50W/3	50	55 DC	1300
31045-8	CS 100W/2	100	50 DC	2000
31044-1	CS 150W/2	150	150 DC	7500
31043-3	CS 150W/4	150	200 DC	7500
31035-9	CS 200W/2	20	120 DC	10000
31033-4	CS 200W/4	200	200 AC	9500
31020-1	☐ CSI 250W	250	220 AC	15000
31019-3	☐ CSI 250W/1	250	220 AC	15000
30625-8	CSX 75W/2/OF	75	50 DC	1000
30639-9	CSX 150W/1/AS/OF	150	65 DC	3000
30628-2	CSX 150W/1/OF	150	65 DC	2900
30640-7	CSX 450W/OF	450	70 DC	12000
30811-4	☐ SN 250-505	220	75 AC	13000
30810-6	☐ SN 500-507	440	75 AC	26000

Short Arc Lamps

NAED Number 04-6677-	Description	Nominal Watts	Lamp Voltage	Lumens†	Base	L.C.L. (In.)	M.O.L. (In.)
31645-5	☐ SAH250A* A.C. Operation only††	250	37	10000	Med. Pf.	2.80	6
31644-8	☐ SAH250B* D.C. Operation only†††	250	42	10000	Med. Pf.	2.80	6

*Heat resisting glass bulb.

††Should only be operated on a control circuit which supplies alternating current to the lamp.

†Values for vertical operation of lamp.

†††Should only be operated on a control circuit which supplies direct current to the lamp.

Special Mercury Lamps

NAED Number 04-6677-	Description	Nominal Lamp Wattage	Voltage	Base	Length (mm)
30866-8	☐ HPR 125W	125	120	E27	222
30867-6	☐ HPK 125W	125	125	BA15d	101
30865-0	☐ HPW 125W	125	120	E27	177

Medium Pressure Metal Halide Lamps

NAED Number 04-6677-	Description	Nominal Wattage	Lamp Voltage	Nominal Length (mm)	Diameter (mm)
44441-4	HPM 10	400	125	97	17
44431-5	HPM 10/B	400	125	97	17
37617-8	HPM 10/C	400	125	97	17
30832-0	HPM 12	460	120	98	22
44440-6	HPM 13	1000	135	149	27.5
44432-3	HPM 14	1200	525	200	17.5
34335-0	HPM 14/C	1200	525	200	17.5
30831-2	HPM 15	1000-4000	240	201	35
30829-6	HPM 17	1000-4000	220	177	30
30828-8	HPM 19	2000	210	153	26
30827-0	HPM 20	3000	350	209	30
44439-8	HPM 20C	3000	250	209	30
44448-9	HPA 400	380	135	108.5	17
44447-1	HPA 400/30	380	135	93	18
34441-6	HPA 1000	930	133	149	28.5
34442-4	HPA 1000/20	1100	120	132	28.5
34443-2	HPA 2000	1750	265	177	28.5

Low Pressure Pulsed Xenon Discharge Lamps

NAED Number 04-6677-	Description	Nominal Wattage	Lamp Voltage	Max. Length (mm)	Width or Diameter (mm)	Height (mm)
30750-4	XOP 7 O/F	750	52	241	16.2	—
30749-6	XOP 15 O/F	1500	105	395	16.2	—
30738-9	XOP 25 O/F	2000	115	540	16.2	—
30737-1	XOP 30 O/F	3000	210	698	16.2	—
30734-8	XOP 40 O/F	4000	210	64	67	118
30721-5	XOP 80 O/F	8000	420	109	67	118

Spectral Lamps

NAED Number 04-6677-	Description	Philips Type Number	Base	Isolated Wavelength (mm)
30777-3	Argon	93100	E27	*
30985-6	Cadmium (Quartz)	93107	E27	326.1
30997-1	Cadmium	93162	E27	467.8
30983-1	Caesium	93105	E27	699.0
30962-5	Helium	93098	E27	588.0
30999-7	Indium	103778	E27	*
30978-1	Krypton	93101	E27	*
30987-2	Quartz Mercury (High Pressure)	93110	E27	312.6
30990-6	Mercury (High Pressure)	93136	E27	404.7
30986-4	Mercury (Low Pressure)	93109	E27	253.7
30989-8	Quartz Mercury (Low Pressure)	93123	E27	404.7
30991-4	Mercury (Cadmium-Zinc)	93145	E27	*
30996-3	Quartz Mercury (Cadmium-Zinc)	93146	E27	*
30974-0	Neon	93099	E27	*
30982-3	Rubidium	93104	E27	*
30988-0	Sodium	93122	E27	589.0
30961-7	Sodium Polarimeter	4348	E14	589.0
30981-5	Xenon	93102	E27	*
30998-9	Zinc	103137	E27	472.0
30984-9	Zinc	93106	E27	307.6

*Note: None Specific

Specialty Lamps

Fluorescent Blacklight — Special†

NAED Number 04-6677-	Description	Wattage	Diameter	Base	Nominal Length (In.)
26841-7	F72T12/BL-S/HO	80	T-12	Rec. D.C.	72
26840-9	F72T12/BL-S/VH0-0	162	T-12	Rec. D.C.	72

Fluorescent Lamps with Super Actinic Radiation

NAED Number 04-6677-	Description	Nominal Wattage	Nominal Current (Amps.)	Diameter (mm)	Nominal Length (cm)
30800-7	TL20W/03	20	0.37	38	60
30805-6	TLD30W/03	30	0.84	26	45
30801-5	TL40W/03	40	0.43	38	122
30807-2	TLK40W/03	40	0.88	38	61
30803-1	TL60W/03	60	0.80	38	120
30809-8	TLM120W/03	120	1.50	35	150
30808-0	☐ TL140W/03	140	1.33	38	150

Fluorescent Lamps with Actinic Radiation

30815-5	TL6W/05	6	0.16	16	23
30825-4	TLD15W/05	15	0.31	26	46
30823-9	TL20W/05	20	0.37	38	61
30818-9	TLDK30W/05	30	0.84	38	46
30817-1	TL40W/05	40	0.43	38	122
30812-2	TLK40W/05	40	0.88	38	61
30814-8	TL65-80W/05	65/80	0.67/0.88	38	150
30813-0	TLM120W/05	120	1.50	35	150

☐ Exclusive Product

Specialty Lamps

Germicidal Sterilamp® Tubes

NAED Number 04-6677-	Description	Nominal Wattage ⁽¹⁾	Diameter	Base	Ozone	Nominal Length (In.)
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Hot Cathode

29930-5	G8T5	8	T-5	Min. Bipin	Negligible	12 ⁽³⁾
28824-1	G15T8	15	T-8	Md. Bipin	Negligible	18 ⁽³⁾
28825-8	G30T8	30	T-8	Mid. Bipin	Negligible	36 ⁽³⁾

Cold Cathode

28807-6	782L-10	12 ⁽⁵⁾	T-5	Single Pin	Negligible	16 $\frac{7}{8}$ ⁽³⁾
20339-8	782H-10	12	T-5	Single Pin	High	16 $\frac{7}{8}$ ⁽³⁾
20340-6	782L-20	14	T-5	Single Pin	Negligible	26 $\frac{7}{8}$ ⁽³⁾
20341-4	782L-30	17	T-5	Single Pin	Negligible	36 $\frac{7}{8}$ ⁽³⁾
20342-2	782H-30	17	T-5	Single Pin	High	36 $\frac{7}{8}$ ⁽³⁾

Slimline

21642-4	G10T5½L	15 ⁽⁴⁾	T-5½	Single Pin	Negligible	16 $\frac{7}{8}$ ⁽³⁾
20344-8	G10T5½H	15 ⁽⁴⁾	T-5½	Single Pin	High	16 $\frac{7}{8}$ ⁽³⁾
20346-3	G36T6L	39 ⁽²⁾	T-6	Single Pin	Negligible	36 $\frac{7}{8}$ ⁽³⁾
20345-5	G36T6H	39 ⁽²⁾	T-6	Single Pin	High	36 $\frac{7}{8}$ ⁽³⁾
20347-1	G37T6VH	39	T-6	Single Pin	Very High	37 ⁽³⁾

Footnotes

- (1) Wattages shown are for operation from a transformer or ballast, currently standard, under specified test conditions.
- (2) Wattage shown is for lamp operating current of 420 ma. Wattage will vary at other operating currents as follows:
120 ma. — 17 watts; 200 ma. — 25 watts; 300 ma. — 32 watts.
- (3) Approximate over-all length including two standard lamp holders.
- (4) Wattage shown is for lamp operating at 400 ma.
- (5) Wattage shown is for lamp operating at 60 ma. Lamp may also be operated at 100 ma. — 20 watts.

†DANGER ULTRAVIOLET RADIATION FOLLOW INSTRUCTIONS — USE ONLY IN FIXTURE EQUIPPED WITH A TIMER.

As with natural sunlight, overexposure can cause eye injury and sunburn; repeated exposure may cause premature aging of the skin and skin cancer. Medications or cosmetics applied to the skin may increase sensitivity to ultraviolet light. Consult a physician before using lamp if taking any medication, or if you believe yourself especially sensitive to sunlight.
USERS MUST WEAR SUITABLE PROTECTIVE EYE GOGGLES.

††Lamps intended for use as photochemical and ultraviolet curing sources only.

**AUTOMOTIVE & SPECIAL LAMP DIVISION
SALES OFFICES AND LAMP ORDERING INFORMATION**

City	Address	Telephone No.	FAX No.
ATLANTA, GA	4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2124	(404) 346-2118
CHICAGO, IL	440 N. Medinah Road, Roselle, IL 60172	(312) 307-3207	(312) 307-3293
DALLAS, TX	1435 Bradley Lane, Carrollton, TX 75007	(214) 323-8238	(214) 245-1248
DETROIT, MI	32605 Twelve Mile Road, Suite 303, Farmington Hills, MI 48108	(313) 553-6060	(313) 553-6058
LOS ANGELES, CA	2100 E. Valencia Drive, Suite E, Fullerton, CA 92631	(714) 447-5360	(714) 447-5382
SAN FRANCISCO, CA	P.O. Box 5038, Hayward, CA 94540	(415) 887-7844	(415) 887-1715
HEADQUARTERS	Philips Square, P.O. Box 6800, Somerset, NJ 08875-6800	(201) 563-3684	(201) 563-3641

**CONSUMER DIVISION
SALES OFFICES AND LAMP ORDERING INFORMATION**

City	Address	Telephone No.	FAX No.
ATLANTA, GA	4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2100	(404) 346-2118
BUFFALO, NY	5586 Main Street, Williamsville, NY 14221	(716) 634-7926	(716) 633-2319
CHICAGO, IL	440 North Medinah Road, Roselle, IL 60172	(312) 307-3223	(312) 307-3293
CINCINNATI, OH	9624 Cincinnati-Columbus Road, Suite 101A, Cincinnati, OH 45241	(513) 779-2711	(513) 777-0898
CLEVELAND, OH	35401 Euclid Avenue, Suite 100, Willoughby, OH 44094	(216) 951-9124	(216) 951-9961
DETROIT, MI	32605 Twelve Mile Road, Suite 303, Farmington Hills, MI 48018	(313) 553-6050	(313) 553-6058
LOS ANGELES, CA	2100 E. Valencia Drive, Suite E, Fullerton, CA 92631	(714) 447-5358	(714) 447-5382
MEMPHIS, TN	6099 Mt. Moriah, Suite 17, Memphis, TN 38115	(901) 362-0369	(901) 362-6346
MINNEAPOLIS, MN	1005 Berkshire Lane, P.O. Box 41248, Plymouth, MN 55447	(612) 545-7939	(612) 545-9116
PRINCETON, NJ	Docks Corner Road, P.O. Box 668, Dayton, NJ 08810-0030	(201) 329-3800	(201) 329-8727
RICHMOND, VA	1601 Rolling Hills Drive, Suite 123, Box K-195, Richmond, VA 23288	(804) 288-2211	(804) 285-4331
SAN FRANCISCO, CA	P.O. Box 5038, Hayward, CA 94540	(415) 887-7858	(415) 887-1715
SEATTLE, WA	P.O. Box 3996, Seattle, WA 98124	(206) 575-1874	(206) 575-4547
ST. LOUIS, MO	300 Chesterfield Center, Suite 150, Chesterfield, MO 63017	(314) 537-3324	(314) 536-1673
HEADQUARTERS	Philips Square, P.O. Box 6800, Somerset, NJ 08875-6800	(201) 563-3451	(201) 563-3229

For Sales Offices of Industrial/Commercial Division, see page 96.

**INDUSTRIAL / COMMERCIAL DIVISION
SALES OFFICES AND TECHNICAL INFORMATION**

City	Address	Telephone No.
ATLANTA, GA	4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2101
BALTIMORE, MD	3300 Northridge Road, Suite 155, Ellicott City, MD 21043	(301) 465-6902
BOSTON, MA	Point West Place, 111 Speen St., Framingham, MA 01701	(617) 879-9070
CHARLOTTE, NC	5445 77 Center Drive, Suite 81, Charlotte, NC 28217	(704) 523-7777
CHICAGO, IL	440 North Medinah Road, Roselle, IL 60172	(312) 307-3220
DALLAS, TX	1435 Bradley Lane, Carrollton, TX 75007	(214) 323-8208
DENVER, CO	141 Union Blvd., Suite 120, Lakewood, CO 80228	(303) 980-9180
DETROIT, MI	32605 Twelve Mile Road, Suite 303, Farmington Hills, MI 48018	(313) 553-6040
HONOLULU, HI	415 Uluniu St., Suite E, Kailua, HI 96734	(808) 262-5466
HOUSTON, TX	10510 Harwin Dr., Houston, TX 77036	(713) 778-4540
INDIANAPOLIS, IN	5726 Professional Circle, Suite 101, P.O. Box 418143, Indianapolis, IN 46241	(317) 248-2140
KANSAS CITY, MO	4134 Front St., Kansas City, MO 64120	(816) 483-4711
LOS ANGELES, CA	2100 E. Valencia Drive, Suite E, Fullerton, CA 92631	(714) 447-5367
MIAMI, FL	9104 N.W. 105 Way, Medley, FL 33178	(305) 887-1422
MINNEAPOLIS, MN	1005 Berkshire Lane, P.O. Box 41248, Plymouth, MN 55447	(612) 545-7939
NASHVILLE, TN	24 Stanley St., P.O. Box 100965, Nashville, TN 37210	(615) 256-7722
NEW ORLEANS, LA	1000 River Bend Boulevard, Suite P, St. Rose, LA 70087	(504) 466-0281
NEW YORK, NY	1 Expressway Plaza, Bldg. 1, Suite 201, Roslyn Heights, NY 11577	(516) 484-3064
PHILADELPHIA, PA	489 Devon Park Drive, Suite 310, Wayne, PA 19087	(215) 293-1310
PITTSBURGH, PA	601 Meadowlands Blvd., Meadowlands, PA 15347	(412) 746-4212
PRINCETON, NJ	Docks Corner Road, P.O. Box 668, Dayton, NJ 08810-0030	(201) 329-3800
RICHMOND, VA	1601 Rolling Hills Drive, Suite 123, Box K-195, Richmond, VA 23288	(804) 288-2211
SAN FRANCISCO, CA	P.O. Box 5038, Hayward, CA 94540	(415) 887-7841
SEATTLE, WA	P.O. Box 3996, Seattle, WA 98124	(206) 575-1874
ST. LOUIS, MO	2200 West Port Plaza Drive, Suite 202, St. Louis, MO 63146	(314) 576-4002
SYRACUSE, NY	6707 Brooklawn Parkway, Syracuse, NY 13211	(315) 437-4449

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**INDUSTRIAL / COMMERCIAL DIVISION
LAMP ORDERING INFORMATION**

Address	Telephone No.	FAX No.
4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2100	(404) 346-2118
4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2100	(404) 346-2118
Docks Corner Road, Dayton, NJ 08810-0030	(201) 329-6940	(201) 329-8727
4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2100	(404) 346-2118
440 North Medinah Road, Roselle, IL 60172	(312) 307-3200	(312) 307-3250
1435 Bradley Lane, Carrollton, TX 75007	(214) 323-8230	(214) 245-1248
4134 Front St., Kansas City, MO 64120	(816) 483-4711	(816) 241-5745
440 North Medinah Road, Roselle, IL 60172	(312) 307-3200	(312) 307-3250
2258 West Winton Avenue, Hayward, CA 94545	(415) 887-2853	(415) 887-1715
1435 Bradley Lane, Carrollton, TX 75007	(214) 323-8230	(214) 245-1248
440 North Medinah Road, Roselle, IL 60172	(312) 307-3200	(312) 307-3250
4134 Front St., Kansas City, MO 64120	(816) 483-4711	(816) 241-5745
255 West Carob Street, Compton, CA 90220	(213) 605-1710	(213) 608-1304
4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2100	(404) 346-2118
1005 Berkshire Lane, P.O. Box 41248, Plymouth, MN 55447	(612) 545-8818	(612) 545-9116
24 Stanley St., P.O. Box 100965, Nashville, TN 37210	(615) 256-1629	(615) 256-3640
4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2100	(404) 346-2118
Docks Corner Road, Dayton, NJ 08810-0030	(201) 329-6940	(201) 329-8727
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4875 W. Park Drive, Atlanta, GA 30336	(404) 346-2100	(404) 346-2118
2258 W. Winton Avenue, Hayward, CA 94545	(415) 887-2853	(415) 887-1715
1180 Andover Park West, Tukwila, WA 98188	(206) 575-1871	(206) 575-4547
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