

2006 Stage/Studio Lamp Catalog

For your best lighting performance.

Cinema Fluorescent

CSR/CSD Metal Halide

ConstantColor[®] CMH[®]

Quartzline[®] Halogen



SHOWBIZ[®]
for stage, studio, film and television lighting



imagination at work

IMPORTANT

Additional information is constantly being uncovered through research and testing, which may modify the data. This is particularly true of newer lamps.

For the latest lamp design data and information, contact your General Electric Lamp Representative.

The data in this catalog, as well as any additional information our representative may be able to furnish, are for general information only and do not represent or warrant the suitability of a lamp for particular applications or use in particular equipment, nor are our representatives authorized to make such representations or give such warranties. Applications and conditions of use are varied, and beyond our control. We cannot possibly have the same knowledge the purchaser has with respect to the design of his

equipment and the conditions of its use. It is up to the purchaser to determine the suitability of a lamp for his intended application and to assume the responsibility for that determination.

General Electric desires to supply the best possible products at all times. For this reason, General Electric reserves the right to make changes in its products when it believes such changes will improve its products.

CAUTION NOTICES

Certain precautions should be observed in the handling and use of GE Stage/Studio Lamps to provide optimum performance and safety. Please comply with the warning and caution notices, footnotes and burning position limitations noted by lamp.

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INTRODUCTION

This catalog lists and gives essential technical data for all presently available General Electric lamps that are frequently used in lighting for: theatrical performances; television, motion picture and video productions; and professional photography.

Lamp listings are grouped into tables, each containing a closely related “family” of lamps with similar configuration. In many tables, the lamps are interchangeable (subject to limitations noted). This provides a self-contained guide for selecting alternative lamps. The following paragraphs explain the use of the tables.

Lamp Identification and Ordering Codes

Many GE lamps used in stage/studio applications are “coded.”

ANSI Codes are 3-letter codes assigned by the American National Standards Institute. They provide a system for

assuring mechanical and electrical interchangeability among similarly coded lamps of various manufacturers. The letters have no rational meaning other than to identify the lamp dimensional, electrical and photometric characteristics that are on file with ANSI. GE uses the assigned ANSI 3-letter Codes as Order Codes for Photo Lamps. Some GE lamps have a multiple code (examples: BFL/BFK, DYS/DYV/BHC). The first code is the official ANSI code, but the lamp also meets or exceeds the described characteristics for the other code(s), and may be used to replace lamps of either code.

LIF Codes are assigned by the Lighting Federation of London, U.K. They ensure electrical and mechanical interchangeability of similarly coded lamps. LIF codes are divided into groups according to the primary application of the lamps. Prefix codes are:

- A** Designed for projectors, some used in raylight reflectors, martin moving mirror effects

CP Designed for use with tungsten balanced film stock at 3200K, single-ended lamp for use in Fresnel/ellipsoidal luminaires

P1 Use with 3200K film stock, open face luminaires and video sun guns

P2 Use with 3400K film stock

T Designed for theaters. Color temperature generally around 3000K.

Miniature Lamp Codes consist of numbers, also assigned by ANSI, to identify low voltage lamps from all manufacturers for interchangeability. GE uses these numerical codes as GE Description. In some instances, the GE Miniature Lamp Code includes the prefix H or Q, indicating a lamp with a halogen or quartz filament tube.

Discharge and Fluorescent Lamps

GE High Intensity Discharge lamps have brand name codes. The following describes the optimized characteristics:

CSR Metal Halide are daylight (6000K) color with CR greater than 90. Many with hot restrike (HR) and

dimnable with stable color temperature. Use with electronic or AC magnetic ballast/ignitor control gear.

ConstantColor® CMH® have CR greater than 80 with color uniformity between lamps and over lamp life.

CSS compact source specials are for disco and fiber optic application.

CSD are compact source lamps with very high color temperature and long life.

CID compact iodide daylight have color temperatures of daylight (5500K) while **CSI** compact source iodide lamps have a warmer color (4000K) that can be blended with tungsten lamps.

MVR is Multi-Vapor® Metal Halide and along with **SPL** lamps are suitable for sportslighting.

Cinema Fluorescent lamps come in warm(3200K) and daylight (5500K) colors with and without **CovRguard® (CVG)** shatter protection. There are compact **Biax® (BX)** lamps available.

INTRODUCTION (continued)

Voltage

Quartzline® halogen and incandescent lamps can be operated on AC or DC circuits. Fluorescent and metal halide lamps are for AC only, with suitable auxiliary ballasts.

Ordering Lamps

Order lamps using the codes in the GE Product Ordering Code column. Add the GE Description, plus lamp voltage (essential for lamps available in more than one voltage) to help assure getting the exact lamp required. However, if a lamp is listed with blue text in the catalog it is not stocked in North America, so procurement must be through an international distributor or your GE sales representative.

Lamp Indexes

There are indexes starting on page 13 with the 3-letter ANSI or LIF code where available. All incandescent and

halogen lamps are indexed by wattage on page 15-19. PAR reflector (by size), fluorescent and metal halide lamps are indexed by table on page 12, along with halogen lamps by base.

Lamp Tables

Each of the 45 lamp tables contains a “family” of lamps with similar configuration. Tables 1-29 each contain Quartzline® lamps having the same base and (in most cases) the same light source location. Therefore, all the lamps within each table are generally interchangeable. Tables 30-45 are various discharge lamp systems which require ballasts that may preclude interchange.

When selecting an alternative lamp from within a particular table, note any limitations to be considered as stated in the table. Filament forms may vary among lamps in some tables. Use of a different filament form may effect the light

output. Reflector lamps have differences in voltage and lamp bases as well as the usual concern for excess heat when a higher wattage lamp is substituted.

Footnotes

Throughout the lamp tables, the footnote column contains important information and safety notes. The footnotes and safety notices appear on pages 8-11.

Lamps Base Designations

Each lamp table includes the name of the base used on the lamps therein, including its letter/number ANSI/IEC designation, where applicable. Lamp bases are pictured on page 20-22.

Recommended Operating Position

Limitations on lamp operating position are shown either in the table heading or in a column within the table, in which case the following abbreviations are used:

H4 operate only horizontally within 4 degrees

H15 operate horizontally ± 15 degrees

H45 operate horizontally ± 45 degrees

HBU horizontal -15 degrees to base up

ANYCH base any position, but with filament coil axis horizontal

BD base down

BU30 within 30° of vertical base-up

BD45 within 45° of vertical base-down

BDTH base down to horizontal

BDTHCH base down to horizontal with filament coil axis horizontal

Fluorescent lamps are all “**ANY**” position

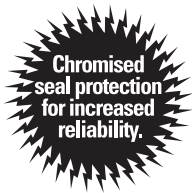
Low-Noise Construction

Many Quartzline® Stage/Studio lamps, have special “low-noise” construction - to minimize generation of audible noise when operated on AC circuits. Such lamps are identified in the tables with a footnote (1). Lamps, sockets, wiring, etc. tend to generate audible noise when used on dimmers that distort the normal AC sine wave. “Low-noise”

INTRODUCTION (continued)

lamps, therefore, often prove especially useful on wave-distorting dimmers such as SCR, Thyatron, or “mag-amp” types. No noise is generated on “flat-wave” DC circuits.

Chromised Seal Protection



Quartzline® Stage/Studio and selected CSR lamps have a special chromised seal protection, which allows lamp seal temperatures up to 500° C (vs. traditional 350° C), which increases life and reliability. Look for this seal on the package coming soon.

Other GE Publications

All the lamps in this consolidated Stage/Studio Lamp Catalog come from the GE catalogs listed below. They contain data for other lamps that may be of interest for stage/studio applications.

Specialty Catalog (PC 29119)
Lamp Products Catalog (PC 25265)

FOOTNOTES

- (1) Filament with low noise construction
- (3) Beam spread to 50% peak candlepower. Two numbers are horizontal by vertical.
- (4) Ceramic part of lamp base is slightly larger than other lamps in table 2, thus may not fit in some leaf-spring type lampholders
- (5) Beam spread to 10% peak candlepower. Two numbers are horizontal by vertical.

- (6) Candlepower is the intensity (candelas) generally at the center or maximum intensity of the beam
- (7) Pinned base to insure correct application
- (8) Light Balancing (LB) index: mired shift value limit is ± 5 . Color compensating (CC) filter value limit $\pm 5m$. CC filter density: (+) magenta, (-) green. The LB and CC limits are specified to eliminate the need to add external color adjusting filters in cinematographic lighting.
- (9) Cinema32 lamps are 3200K (tungsten), chromaticity $x=.415$ $y=.377$, CRI 95, Gold bases
- (10) Cinema55 lamps are 5500K (daylight), chromaticity $x=.325$ $y=.321$, CRI 96, Blue bases
- (11) Biax Cinema32 are 3200K, chromaticity $x=.415$ $y=.380$, CRI 86
- (12) Filament shield masks direct light
- (13) Biax Cinema56 are 5600K, chromaticity $x=.330$ $y=.335$, CRI 86
- (14) Enclosed fixture only, per UL Standard 1572. In accordance to Federal Regulations (21 CFR 1040.30) the following notice applies:
WARNING: This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if the outer envelope of the lamp is broken or punctured, and the arc tube continues to operate. Do not use where people will remain more than a few minutes unless adequate shielding or other safety precautions are used. Certain types of lamp that will automatically extinguish when the outer envelope is broken or punctured are commercially available.
- (15) Apparent lighted length slightly longer than similar clear lamp
- (16) Life dependent on service conditions. For use only in equipment specially designed to maintain bulb and base temperature within safe limits.
- (18) Available late 2003
- (19) Requires non-ANSI ballast. Narrow 6 degree spot with 1,350,000 CBCP.
- (20) Top end of bulb is opaque-coated to absorb upward light
- (21) Blue glass bulb. Color temperature may vary amongst lamps.
- (22) Because of possible overheating, this lamp is not recommended for use without forced cooling in fixtures having deep-bowl, close-fitting reflectors with lamp axis crosswise to the reflector axis.
- (23) 850,000 CBCP with 8 degrees to 50% CBCP
- (24) 820,000 CBCP with 9 degrees to 50% CBCP
- (27) Has blackening collector grid on only one side of filament. In burning positions other than base down, lamp should be installed so that grid is above filament.
- (31) GE lamp is 240 volt; 250 volt is specified for Colortran.
- (51) Silica coated
- (52) Rough service. 6 filament supports.
- (55) Burn BDTH, but avoid horizontal burning with support spine beneath filament to prevent premature arcing

SAFETY NOTES

62 Exposed Unshielded Stage and Studio Lamps

⚠ WARNING

Risk of electrical shock

- Turn power off before inspection, installation or removal

Risk of fire

- Keep combustible materials away from lamp
- Use in enclosed fixture rated for this product

Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Use eye protection when handling lamp
- Do not touch glass with bare hands
- Use in enclosed fixtures rated for this product
- Do not use lamp if outer glass is scratched or broken
- Operate lamp only in specified position
- Do not exceed 110% of rated voltage

⚠ CAUTION

Risk of burn

- Allow lamp/fixture to cool before handling
- Turn power off before installing lamp

Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Wear safety glasses and gloves when handling lamp

Lamp emits UV radiation which may cause eye/skin irritation. RG-2

- Limit unshielded exposure to less than 15 minutes per day

63 PAR Lamps and Glass Covered Stage and Studio Lamp

⚠ WARNING

Risk of electrical shock

- Turn power off before inspection, installation or removal

Risk of fire

- Keep combustible materials away from lamp
- Use in enclosed fixture rated for this product

A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass is broken. Remove and dispose of lamp.

Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Do not exceed 110% of rated voltage
- Avoid direct water/liquid contact

- Use in enclosed fixtures rated for this product
- Do not use lamp if outer glass is scratched or broken

▲ CAUTION

Risk of burn

- Allow lamp/fixture to cool before handling
- Turn power off before installing lamp

Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container

64 High Wattage Incandescent PAR Lamps

▲ WARNING

Risk of electrical shock

- Turn power off before inspection, installation, or removal

Risk of fire

- Keep combustible materials away from lamp

Unexpected lamp rupture may cause injury, fire, or property damage

- Avoid direct water/liquid contact
- Use in enclosed fixtures rated for this product

307 Low Wattage Halogen PAR Lamps

▲ WARNING

Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in closed container

INDEX BY TABLE, TECHNOLOGY AND LAMP BASE

Technology and Base Type	Table No.	Page No.	Technology and Base Type	Table No.	Page No.	Technology and Base Type	Table No.	Page No.
Halogen, Double-Ended, Compact Coil (CC-8)			Halogen, Single-Ended (continued)			Discharge-CSR (daylight) Metal Halide		
R7s with 3 1/8" MOL	1	23	GY38 Mogul Bi-Post (38mm apart)	16	37	Single-Ended Cold Start	30	59
R7s with 3 3/4" MOL	2	23	GX38Q High Volt 2 Filament	17	38	Single-Ended Short Arc	31	59
R7s with 5 5/8" MOL	3	24	E11 Miniature Candelabra Screw	18	39	Single-Ended Hot Restrike	32	59
Halogen, Double-Ended, C-8 coil			E26 Medium Screw	19	40	Double-Ended Hot Restrike	33	60
R7s with 4 11/16" MOL	4	25	E39 Mogul Screw	20	41	Single-Ended Hot Restrike UV Control	34	61
R7s with 6 9/16" MOL	5	26	BA15d Double Contact Bayonet	21	41	Discharge-ConstantColor CMH		
R7s with 7 7/16" MOL	6	27	P28s Medium Prefocus	22	43	Single-Ended Miniature	35	62
Halogen, Single-Ended			P28s with CC-8 Coil	23	44	Single-Ended	36	62
G5.3 Miniature 2-pin (5.3mm apart)	7	27	P40s Mogul Prefocus	24	45	Double-Ended	37	63
G9.5 Medium 2-pin (9.5mm apart)	8	27	Halogen and Incandescent Reflector Lamp Systems			PAR56 Reflector	38	64
G9.5/Heat Sink (Metal 2-pin)	9	29	MR16 (2" reflector)	25	46	PAR64 Reflector	39	65
GX9.5 Prefocus Med 2-pin	10	31	PAR36 (4.5" reflector)	26	47	Discharge-CSI, CID, MVR/SPL		
GY9.5 Oriented 2-pin (2 OD pins)	11	32	PAR46 (5.75" reflector)	27	49	Double-Ended	40	66
GZ9.5 Oriented 2-pin (2 OD pins)	12	33	PAR56 (7" reflector)	28	50	Single-Ended	41	66
GY16 2-pin prefocus (16mm apart)	13	34	PAR64 (8" reflector)	29	51	PAR64 Reflector	42	67
G22 Medium Bi-post (22mm apart)	14	34				Fluorescent Cinema Lighting		
G38 Mogul Bi-post	15	35				Standard Cinema	43	72
						CovRguard™ Cinema	44	73
						Biax®	45	73

INDEX: ANSI CODE

ANSI Code	Table No.	ANSI Code	Table No.	ANSI Code	Table No.	ANSI Code	Table No.	ANSI Code	Table No.	ANSI Code	Table No.	ANSI Code	Table No.	ANSI Code	Table No.	ANSI Code	Table No.
BAH	19	CBX	21	DXW	2	EGM	23	EME	4	EXG	29	FEL	8	FKH	14	FVA	10
BBA	19	CDJ	21	DXX	1	EGN	14	EMF	4	EXV	25	FEP	8	FKJ	14	FVB	10
BCA	19	CEB	21	DYH	7	EGR	14	ENH	25	EXX	25	FER	3	FKK	15	FWR	10
BCM	16	CXZ	15	DYR	12	EGT	14	ESL	18	EYH	7	FEV	21	FKM	22	FWS	10
BLC	21	CYV	15	DYS	12	EHC	8	ESM	18	EZK	25	FEX	3	FKN	22	FWT	10
BLX	21	CYX	15	DZA	7	EHD	8	ESN	18	FAD	1	FEY	3	FKR	8	GCS	11
BRH	2	DKX	20	EBV	19	EHF	8	ESP	21	FAY	26	FFM	1	FKW	11	GCT	11
BTL	22	DKZ	20	EBW	19	EHG	8	ESR	21	FBE	26	FFN	29	FLK	8	GCV	11
BTM	22	DPY	15	ECA	19	EHM	4	ESS	21	FBG	7	FFP	29	FMR	11	GCW	11
BTN	22	DRB	22	ECT	19	EHP	1	ETB	21	FBO	26	FFR	29	FRE	11	GFA	29
BTP	22	DRS	22	EFM	25	EHR	1	ETC	21	FBX	1	FFS	29	FRG	11	GFB	29
BTR	22	DSE	20	EFN	25	EHT	18	ETD	21	FBY	2	FFT	5	FRH	11	GFC	29
BVT	24	DSF	20	EFP	25	EHZ	4	ETF	21	FCB	2	FGM	29	FRJ	11	GKV	8
BVV	24	DTA	24	EFR	25	EJD	4	ETG	18	FCL	4	FGN	29	FRK	11	GLA	8
BVW	24	DTY	15	EGC	23	EJG	4	ETH	18	FCM	4	FGT	5	FRL	11	GLC	8
BWA	15	DVS	4	EGE	23	EKB	11	EVR	18	FCW	26	FHM	4	FRM	11	GLD	8
BWF	20	DVY	7	EGF	23	EKD	10	EWE	23	FCX	26	FKB	22	FSK	11	GLE	8
BWM	8	DWE	26	EGG	23	EKM	6	EXC	29	FDB	5	FKD	22	FSL	11		
BWN	8	DWT	3	EGJ	23	ELC	25	EXD	29	FDG	4	FKE	23	FTL	13		
CAX	21	DWZ	1	EGK	23	EMD	4	EXE	29	FDN	4	FKF	22	FTM	13		

INDEX: LIF CODE

LIF Code	Table No.	LIF Code	Table No.	LIF Code	Table No.	LIF Code	Table No.	LIF Code	Table No.	LIF Code	Table No.	LIF Code	Table No.	LIF Code	Table No.	LIF Code	Table No.
A1/228	2	CP30	17	CP53	24	CP79	13	CP90	10	HX800	8	P2/28	4	T15	23	T28	22
A1/233	12	CP32	17	CP58	17	CP81	11	CP91	14	P2/6	1	P2/29	4	T16	24	T29	10
A1/264	12	CP39	14	CP59	20	CP82	11	CP92	14	P2/7	6	P2/30	4	T17	22		
A1/266	1	CP40	14	CP60	29	CP83	15	CP93	14	P2/10	6	P2/31	4	T18	11		
A1/58	22	CP41	15	CP61	29	CP86	29	CP94	15	P2/11	4	T11	10	T19	10		
CP23	10	CP43	13	CP62	29	CP87	29	CP95	29	P2/12	6	T12	10	T25	11		
CP24	10	CP51	22	CP70	10	CP88	29	CP105	17	P2/13	1	T13	22	T26	11		
CP29	15	CP52	22	CP77	8	CP89	11	HX48	15	P2/27	3	T14	22	T27	11		

INDEX: WATTAGE

GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table
20 Watts		35 Watts		50 Watts		60 Watts		85 Watts	
CMH20/TC/U/830/G8.5	35	4436	27	4505	26	F40T12/CINEMA32/HO	43	F72T12/CINEMA32/HO	43
CMH20/TC/UVC/U/830/G8.5	35	35PAR36/H/FL30	26	50PAR26/H/SP8	26	F40T12/CINEMA32/HO/CVG	44	F72T12/CINEMA32/HO/CVG	44
CMH20/T/U/830/G12	36	35PAR36/H/SP5	26	50PAR36/H/FL30	26	F40T12/CINEMA55/HO	43	F72T12/CINEMA55/HO	43
25 Watts		35PAR36/H/SP8		50PAR36/H/SP5		F40T12/CINEMA55/HO/CVG		F72T12/CINEMA55/HO/CVG	
25PAR36	23	CMH35/T/UVC/U/830/G12	36	50PAR36NSP	26	70 Watts		100 Watts	
25PAR36/VWFL	26	CMH35/TC/UVC/U/830/G8.5	35	50PAR36VNSP	26	CMH70/T/U/830/G12	36	4509	26
25PAR36NSP	26	F20T12/CINEMA32/HO	43	50PAR36VWFL	26	CMH70/T/U/942/G12	36	4543	28
25PAR36WFL	26	F20T12/CINEMA32/HO/CVG	44	50PAR36WFL	26	CMH70/TC/UVC/U/830/G8.5	35	4545	28
25PAR46	27	F20T12/CINEMA55/HO	43	50PAR36WFL/4	26	CMH70/TC/U/830/G8.5	35	4591	26
30 Watts		F20T12/CINEMA55/HO/CVG		BLX		CMH70/TC/U/942/G8.5		4594	
4405	26	37.5 Watts		CAX		CMH70/T/UVC/U/830/G12		4595	
4435	27	H7616		EFM		CMH70/T/UVC/U/942/G12		4509X	
4515	26	39 Watts		H7604		CMH70/TD/830/Rx7s		37	
4535	27	CMH39/T/U/830/G12		H7635		CMH70/TD/UVC/830/Rx7s		37	
BLC	21	CMH39/TC/U/942/G8.5		55 Watts		CMH70/TD/UVC/942/Rx7s		37	
DZA	7	CMH39/T/U/942/G12		F55BX/CINEMA32		CMH70/TD/942/Rx7s		37	
H4405	26	CMH39/TC/U/830/G8.5		F55BX/CINEMA56		75 Watts		Q100CL/DC	
H4515	26			F55BX/CINPLUS/32		CBX/CBS		21	
				F55BX/CINPLUS/56		EFN		25	
								Q100CL/DC/2V	

INDEX: WATTAGE

GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table
100 Watts (continued)		150 Watts		150 Watts (continued)		235 Watts		250 Watts (continued)	
Q100CL/MC	18	150PAR46/1	27	CMH150/TD/942/Rx7s	37	Q235T4/3	12	Q250DC	21
Q100CL/MC/2V	18	150PAR46/3MFL	27	CMH150/TD/UVC/830/Rx7s	37	240 Watts		Q250MC	18
Q100DC	21	CMH150/PAR56/830/GX16d/SP	38	CMH150/TD/UVC/942/Rx7s	37	240PAR56/MFL	28	300 Watts	
Q100MC	18	CMH150/PAR56/830/GX16d/MFL	38	EFR	25	240PAR56/VNSP	28	300PAR/WFL	28
110 Watts		CMH150/PAR56/830/GX16d/WFL	38	EZK	25	240PAR56/WFL	28	300PAR56/MFL	28
F96T12/CINEMA32/HO	43	CMH150/PAR56/942/GH16d/SP	38	Q150CL/DC	21	250 Watts		300PAR56/NSP	28
F96T12/CINEMA32/HO/CVG	44	CMH150/PAR56/942/GH16d/MFL	38	Q150CL/DC/2V	21	4552	29	300PAR56/WFL	28
F96T12/CINEMA55/HO	43	CMH150/PAR56/942/GH16d/WFL	38	Q150CL/MC	18	4553	27	BAH	19
F96T12/CINEMA55/HO/CVG	44	CMH150/PAR64/830/GX16d/MFL	39	Q150DC	21	BBA (#1)	19	FKW-Q300T8	11
120 Watts		CMH150/PAR64/830/GX16d/SP	39	Q150MC	18	BCA (#B1)	19	FSK	11
120PAR	29	CMH150/PAR64/830/GX16d/WFL	39	200 Watts		CSD250/2/SE	30	FSL	11
120PAR56/MFL	28	CMH150/PAR64/842/GX16d/MFL	39	200PAR	28	ECA	19	Q300T3	4
120PAR56/VNSP	28	CMH150/PAR64/842/GX16d/SP	39	200PAR46/3MFL	27	ELC	25	Q300T3/CL	4
120PAR56/WFL	28	CMH150/PAR64/842/GX16d/WFL	39	200PAR46/3NSP	27	ELC/500	25	Q300T4/CL	1
125 Watts		CMH150/T/U/830/G12	36	200PAR56/MFL	28	ENH	25	350 Watts	
CSR125/SE/HR	32	CMH150/T/U/942/G12	36	99-0211CID/HR	41	EXX	25	FDH/HIR-Q350T2/4CL	4
140 Watts		CMH150/T/UVC/U/830/G12	36	CSR200/DE	33	EYH/FKT	7	Q350T3/CL/HIR	4
CSS150/850/GY9.5	41	CMH150/T/UVC/U/942/G12	36	CSR200/SE/HR	32	Q250CL/DC	21		
		CMH150/TD/830/Rx7s	37	FEV-Q200/4CL/DC	21	Q250CL/MC	18		

GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table
375 Watts		500 Watts (continued)		500 Watts (continued)		575 Watts		600 Watts (continued)	
DWZ(30V)	1	500PAR64/NSP	29	GCV	11	99-0415CID	41	GKV	8
HPL375/C	9	500PAR64/WFL	29	GCW	11	CSR575/2/SE	30	GKV-Q575T6/4CL	8
HPL375/LL/C	9	BTL-Q500T6/CL/P	22	Q500CL/DC	21	CSR575/2/T/SE	30	GKV/LL	8
400 Watts		BTM-Q500T6/4CL/2P	22	Q500DC	21	CSR575/DE	33	Q4559	29
400G/FL	19	EBV (#2)	19	Q500PAR50WFL	28	CSR575/SE/HR	32	Q4559X	29
99-0201CSI	41	EBW (#B2)	19	Q500PAR56MFL	28	CSR575/SE/HR/UV-C	34	625 Watts	
CSR400/S/DE	33	ECT	19	Q500PAR56NSP	28	CSS575/855/GY9.5	41	Q625T3/4CLP2/10	6
CSR400/SE/HR	32	EGC-Q500/5CL/P	23	Q500PAR64/MFL	29	FLK-Q575T6	8	650 Watts	
Q400CL/MC	18	EGE-Q500CL/P	23	Q500PAR64/NSP	29	FLK/LL-Q575T6	8	CP23	10
Q400MC	18	EGN-Q500T8	14	Q500PAR64/VNSP	29	GLA-Q575T6/4CL	8	CP51	22
Q400T4/CL	1	EHC-Q500/5CL	8	Q500T3/CL	4	GLC-Q575T6/5CL	8	DVY	7
420 Watts		EHD-Q500CL/TP	8	Q500T3/CL/6	4	HPL575	9	DWE-Q650PAR36/1	26
EKB-Q420/4CL/2PP	11	EVR-Q500CL/MC	18	T17	22	HPL575-X LL	9	DYR	12
FFM	1	FBG/FBD	7	T28	22	HPL575/C	9	EKD-Q650/3CL/2PP	10
425 Watts		FDG-Q500T3/4CL	4	T28	22	HPL575/LL/C	9	FAD-Q650T4/4CL	1
Q425T3/CL	4	FDN-Q500T3/4	4	525 Watts		600 Watts		FAY-Q650PAR36/3D	26
450 Watts		FKF	22	EJG/HIR-Q525T2 1/2/4	4	4559	29	FBE-Q650PAR36/5D	26
4541	28	FRG-Q500T8	11	550 Watts		DYH	7	FBO-Q650PAR36/5	26
500 Watts		FRH	11	HPL550/C	9	DYS/DYV/BHC	12	FBX-Q650T4/4	1
500PAR64/MFL	29	FRJ	11			FCB	2		
						FMR-Q600T5	11		

INDEX: WATTAGE

GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table
650 Watts (continued)		700 Watts		750 Watts (continued)		1000 Watts (continued)		1000 Watts (continued)	
FCM/HIR	4	CSR700/2/SE	30	HPL750/LL/C	9	CP95	29	EXG/PAR64/WFL	29
FCW-Q650PAR36/6	26	CSR700/SA	31	800 Watts		CYV-Q1000T7/4CL/BP	15	FBY-Q1000T5/4	2
FCX-Q650PAR36/7	26	CSR700/S/DE	33	CSR800/SE/HR	32	DKZ/DSE-Q1000PS52/4	20	FCM-Q1000T3/4CL	4
FKB	22	750 Watts		CSR800/SE/HR/UV-C	34	DRB	22	FEL-Q1000/4CL	8
FKH	14	BTN-Q750T7/CL/2P	22	DXX	1	DRC	22	FEP-Q1MT6/4CL	8
FKM	22	BTP-Q750T7/4CL/2P	22	EME-Q800T3/P2/11	4	DRS	22	FER-Q1000T6/4CL	3
FKR	8	BWM-Q750T7/4CL/TP	8	EMF-Q800T3/P2/11	4	DSE-Q1000	20	FFN-Q1000PAR64/1	29
FRE	11	EGF-Q750/4CL/P	23	HX800	8	DWT-Q1000T6/CL	3	FFP-Q1000PAR64/2	29
FRK-Q650T8	11	EGG-Q750CL/P	23	1000 Watts		DXW-Q1000T5/4CL	2	FFR-Q1000PAR64/5	29
FRL	11	EGR-Q750T7/4CL	14	99-0221CSI	41	EGJ-Q1000/4/CL/P	23	FFS-Q1000PAR64/6	29
FRM	11	EHF-Q750/4CL	8	99-0222CID	41	EGK-Q1000/4/P	23	FFT-Q1000T3/1CL	5
GCS	11	EHG-Q750CL/TP	8	99-1225CID	42	EGM-Q1000CL/P	23	FGM-Q1000PAR64/3D	29
GCT	11	EJG-Q750T3/4CL	4	99-1425CID/HR	42	EGT-Q1000T7/4CL	14	FGN-Q1000PAR64/7D	29
T12	10	EMD-Q750T3/4	4	BRH	2	EJD-Q1000T3/3CL (185V)	4	FHM-Q1000/T3/4	4
T13	22	GLD-Q750T6/4CL	8	BTR-Q1000T7/4CL/2P	22	EKM-Q1MT3/4CLP2/7	6	FKD	22
675 Watts		GLE-Q750T6/4CL	8	BVT-Q1000T7/CL/MP	24	EWE	23	FKE	23
FFT/HIR-Q675T3/4	5	HPL750	9	BVV-Q1000T7/4CL/MP	24	EXC-Q1MPAR64CP60	29	FKJ	14
		HPL750/XLL/C	9	BWN-Q1000T7/4CL/TP	8	EXD-Q1MPAR64CP61	29	FKJ	14
		HPL750/C	9	CP24	10	EXE-Q1MPAR64CP62	29	FKN	22

GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table	GE Description	Table
1000 Watts (continued)		1200 Watts (continued)		1500 Watts (continued)		2500 Watts		10000 Watts	
FVA	10	CSR1200/S/DE	33	MVR1500/HBU	41	99-0431CID/HR	41	CP83	15
FVB	10	CSR1200/SA	31	MVR1500/U/SPORTS	41	CP32-2500/2500	17	DTY-Q10M/T24/4CL	15
FWP	10	FWS	10	SPL1500/L/H/652	40	CP91	14	12000 Watts	
FWR	10	FWT	10	1650 Watts		CP94	15	CSR12000/DE	33
Q1000PAR64MFL	29	GFA-Q1200PAR64/5	29	MVR1650/HOR	41	CSR2500/DE	33	CSR12000/SE/HR	32
Q1000PAR64NSP	29	GFB-Q1200PAR64/2	29	2000 Watts		CSR2500/SE/HR	32	Q12MT26/4CL	16
Q1000PAR64WFL	29	GFC-Q1200PAR64/1	29	BVW-Q2000T10/4CL/MP	24	CSR2500/SE/HR/UV-C	34	Q12MT26/4CL	16
Q1000T8/CL	10	OC1200	14	BWA-Q2000/4CL/BP	15	3000 Watts		Q12MT26/4CL	16
SPL1000/PAR64/840	42	T29	10	BWF-Q2000/4CL	20	HX48	15	18000 Watts	
SPL1000/PAR64/HR	42	1250 Watts		CP53	24	4000 Watts		CSR18000/DE	33
T11	10	CP105-1250/650	17	CP59	20	CSR4000/DE	33	CSR18000/S/DE	33
T14	22	CP30-1250/1250	17	CP79	13	CSR4000/SE/HR	32	CSR18000/SE/HR	32
T16	24	CP58-1250/2500	17	CP92	14	CSR4000/SE/HR/UV-C	34	20000 Watts	
1200 Watts		Q1250T3/P2/12	6	CSR2000/SA	31	5000 Watts		BCM-Q20MT32/4CL	16
99-1435CID/HR	42	1500 Watts		CYX-Q2000T10/4CL	15	CP29	15	BCM-Q20MT32/4CL	16
CP90	10	CXZ-Q1500T10/4CL	15	FEX-Q2MT8/4CL	3	DPY-Q5000T20/4CL	15	BCM-Q20MT32/4CL	16
CP93	14	DKX/DSF-Q1500PS52/4	20	FEY-Q2000T8/4CL	3	6000 Watts		24000 Watts	
CSR1200/2/SE	30	DSF-Q1500	20	FKK	15	CSR6000/DE	33	Q24MT32/4CL	16
CSR1200/DE	33	DTA-Q1500T8/4CL	24	FTL	13	CSR6000/SE/HR	32	Q24MT32/4CL	16
CSR1200/SE/HR	32	FDB-Q1500T4/4CL	5	FTM	13	CSR6000/SE/HR/UV-C	34		
CSR1200/SE/HR/UV-C	34	FGT-Q1500T4/4	5	MQI12000/T9/40	41				

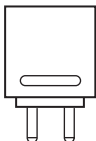
LAMP BASE DRAWINGS

(dimensions in mm)



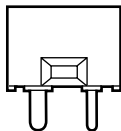
Miniature 2-Pin

G5.3 (round 1.6mm OD)
GX5.3 (round 1.5mm OD)
GY5.3 (flat 2 x .7mm)



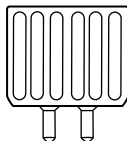
Medium 2-Pin

G9.5 (round 3.2mmOD)
GX9.5 (Prefocused)



Oriented Med 2-Pin

GY9.5 (2.4/3.2mm OD)
GZ9.5

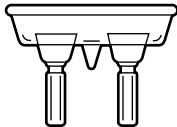


Medium 2-Pin

G9.5/Heat sink
(metal base)

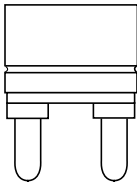


GY16d



Medium BiPost

G22 (6.35mm OD)



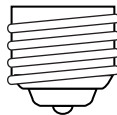
Mogul BiPost

G38 (11.1mm OD)



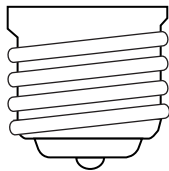
Miniature Candelabra

E11 (10.7mm screw)



Medium Screw

E26 (26mm screw)

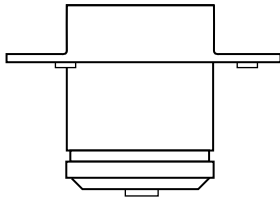


Mogul Screw

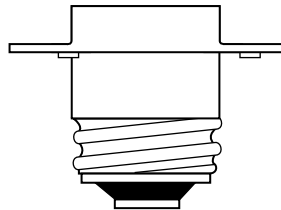
E39 (39.3mm screw)



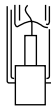
Double Contact Bayonet
BA15d (15mm diameter)



Medium Prefocus
P28s (27.5mm OD)

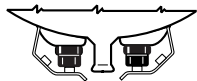


Mogul Prefocus
P40s (39.4mm OD)

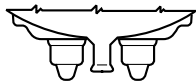


Recessed Contact
R7s (7mm OD)

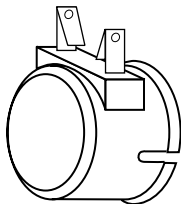
PAR LAMP BASE DRAWINGS



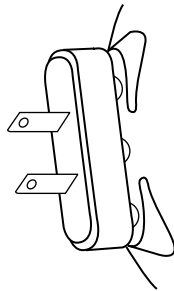
Screw Terminal



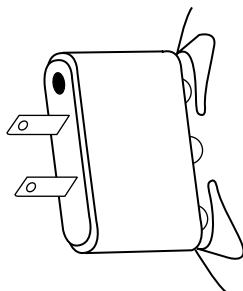
Ferrule



**Medium Side Prong
(MSP)**



**Mogul End Prong
(MEP or GX16d)**



**Extended MEP
(EMEP or GX16d)**

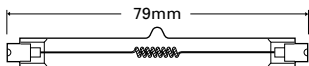


Fig. 1

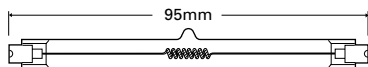


Fig. 2

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	MOL (mm)	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	Lighted Length (mm)	Bulb Finish	Burning Position	Fig. No.
Table 1: Halogen, Double-Ended, Compact Coil (CC-8), R7s Base, 79mm (3¹/₈") MOL																	
300	T-4	Q300T4/CL	62	EHP		43705	6	79	120	2900	2000	5650	CC-8	18		Any	1
375	T-4	DWZ(30V)	62	DWZ		29578	24	79	30	3000	1000	7500	CC-8	10		Any	1
400	T-4	Q400T4/CL	62	EHR		43708	12	79	120	2900	2000	7750	CC-8	21		Any	1
420	T-4	FFM	62	FFM		30276	24	79	120	3200	75	11000	CC-8	13		Any	1
650	T-4	FAD-Q650T4/4CL	62	FAD	P2/6	30325	24	79	120	3200	100	16500	CC-8	17	Frosted	Any	1
		FBX-Q650T4/4	15, 62	FBX	P2/6	30343	24	79	120	3200	100	16500	CC-8			Any	1
800	T-4	DXX	62	DXX	P2/13	36952	24	79	230	3200	75	21400	CC-8	24		Any	1
		DXX	62	DXX	P2/13	36953	24	79	240	3200	75	21400	CC-8	24		Any	1
Table 2: Halogen, Double-Ended, Compact Coil (CC-8), R7s Base, 95mm (3³/₄") MOL																	
600	T-4	FCB	4, 62	FCB	A1/228	29598	24	95	120	3250	75	17000	CC-8	17		Any	2
1000	T-5	DXW-Q1000T5/4CL	27, 62	DXW		30157	24	95	120	3200	150	28000	CC-8	22		Any	2

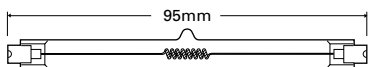


Fig. 2

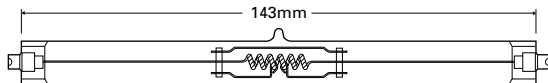


Fig. 3

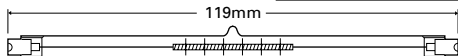


Fig. 4

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	MOL (mm)	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	Lighted Length (mm)	Bulb Finish	Burning Position	Fig. No.
Table 2: Halogen, Double-Ended, Compact Coil (CC-8), R7s Base, 95mm (3³/₄") MOL																	
1000	T-5	FBY-Q1000T5/4	15, 62	FBY		30374	24	95	120	3200	150	26000	CC-8		Frosted	Any	2
		BRH	62	BRH		29604	24	95	120	3350	75	30000	CC-8	19		Any	2
Table 3: Halogen, Double-Ended, Compact Coil (CC-8), R7s Base, 143mm (5⁵/₈") MOL																	
1000	T-6	DWT-Q1000T6/CL	62	DWT		23800	6	143	120	3000	2000	23400	CC-8	25		Any	3
		FER-Q1000T6/4CL	62	FER		33760	6	143	120	3200	500	27500	CC-8	19		Any	3
2000	T-10	FEX-Q2MT8/4CL	62	FEX	P2/27	35338	12	143	230	3200	300	50000	CC-8	37		H4	3
		FEX-Q2MT8/4CL	62	FEX	P2/27	35339	12	143	240	3200	300	50000	CC-8	37		H4	3
		FEY-Q2000T8/4CL	62	FEY	P2/27	39790	12	143	120	3200	400	57000	CC-8	25		H4	3

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	MOL (mm)	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	Lighted Length (mm)	Bulb Finish	Burning Position	Fig. No.
Table 4: Halogen, Double-Ended, C-8, R7s Base, 119mm (4^{11/16}") MOL																	
300	T-3	Q300T3/CL	62	EHM		43703	6	119	120	2950	2000	5950	C-8	59	Frosted	H4	4
		Q300T3	15, 62	EHZ		43704	6	119	120	2950	2000	5900	C-8			H4	4
350	T-2	FDH/HIR-Q350T2/4CL	62			20881	6	119	120	3200	400	13250	C-8	60		H4	4
	T-3	Q350T3/CL/HIR	62			13894	6	119	120	3000	2000	10000	C-8	56		H4	4
425	T-3	Q425T3/CL	62			11178	12	119	120	2950	2000	8900	C-8	56		H4	4
500	T-3	Q500T3/CL	62	DVS		23733	12	119	130	3000	2000	10550	C-8	62	Frosted	H4	4
		Q500T3/CL	62	FCL		23731	12	119	120	3000	2000	11100	C-8	57		H4	4
		Q500T3/CL/6	62			23744	12	119	120	2950	1500	10950	C-8	60		H4	4
		FDH-Q500T3/4CL	62	FDH	P2/30	23735	12	119	120	3200	400	13250	C-8	60		H4	4
		FDN-Q500T3/4	15, 62	FDN	P2/31	23734	12	119	120	3200	400	12800	C-8			H4	4
525	T-2.5	EJG/HIR-Q525T2 1/2/4	62	-	-	20883	6	119	120	3250	400	20600	C-8	62		H4	4
650	T-3	FCM/HIR-Q650T3/4	52, 62	FCM	-	13895	6	119	120	3275	400	25200	C-8	60		H4	4
750	T-3	EJG-Q750T3/4CL	62	EJG	-	23756	12	119	120	3200	400	20600	C-8	62	Frosted	H4	4
		EMD-Q750T3/4	15, 62	EMD	-	23755	12	119	120	3200	400	19500	C-8			H4	4
800	T-3	EME-Q800T3/P2/11	62	EME	P2/11	23760	12	119	240	3200	150	22000	C-8	64	Frosted	H4	4
		EMF-Q800T3/P2/11	62	EMF	P2/11	23761	12	119	240	3200	150	21400	C-8			H4	4

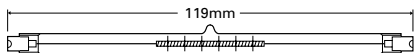


Fig. 4



Fig. 5

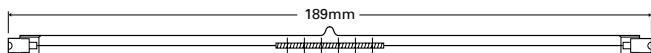


Fig. 6

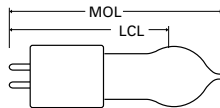


Fig. 7

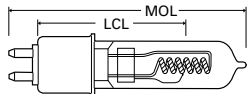


Fig. 8

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	MOL (mm)	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	Lighted Length (mm)	Bulb Finish	Burning Position	Fig. No.
Table 4: Halogen, Double-Ended, C-8, R7s Base, 119mm (4¹¹/₁₆" MOL (continued)																	
1000	T-3	FCM-Q1000T3/4CL	62	FCM	P2/28	23797	12	119	120	3200	400	28000	C-8	60		H4	4
		FHM-Q1000/T3/4	15, 31, 62	FHM	P2/29	23792	12	119	120	3200	400	27300	C-8		Frosted	H4	4
		EJD-Q1000T3/3CL (185V)	52, 62	EJD	—	23788	12	119	185	3350	100	33600	C-8	68		H4	4
Table 5: Halogen, Double-Ended, C-8, R7s Base, 167mm (6⁹/₁₆" MOL																	
675	T-3	FFT/HIR-Q675T3/4	52, 62	—	—	20884	6	167	120	3250	400	26400	C-8	67		H4	5
1000	T-3	FFT-Q1000T3/1CL	62	FFT	—	33280	12	167	120	3200	400	26400	C-8	67		H4	5
1500	T-4	FDB-Q1500T4/4CL	62	FDB	—	23841	12	167	120	3200	400	41250	C-8	62		H4	5
		FGT-Q1500T4/4	15, 62	FGT	—	41229	12	167	120	3200	400	40200	C-8		Frosted	H4	5

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	MOL (mm)	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	Lighted Length (mm)	Bulb Finish	Burning Position	Fig. No.
Table 6: Halogen, Double-Ended, C-8, R7s Base, 189mm (7⁷/₁₆" MOL																	
625	T-3	Q625T3/4CLP2/10	62		P2/10	19697	12	189	230	3200	300	16900	C-8	107		H4	6
		Q625T3/4CLP2/10	62		P2/10	19698	12	189	240	3200	300	16900	C-8	107		H4	6
1000	T-3	EKM-Q1MT3/4CLP2/7	62	EKM	P2/7	20249	12	189	230	3200	300	28000	C-8	115		H4	6
		EKM-Q1MT3/4CLP2/7	62	EKM	P2/7	20253	12	189	240	3200	300	28000	C-8	115		H4	6
1250	T-3	Q1250T3/P2/12	62		P2/12	19695	12	189	230	3200	300	35000	C-8	112		H4	6
		Q1250T3/P2/12	62		P2/12	19696	12	189	240	3200	300	35000	C-8	112		H4	6

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 7: Halogen, Single-Ended, G5.3 Miniature 2-Pin (5.3mm apart)																		
30	T-3.5	DZA	62	DZA	—	37346	24	G5.3	10.8	3100	400	530	C-6	27	51	BDTHCH		
250	G-6	EYH/FKT	62	EYH	—	13617	24	G5.3	120	3000	200	6000	CC-6	36	64	BDTHCH		7
500	G-6	FBG/FBD	62	FBG	—	33663	24	G5.3	120	3200	50	13200	CC-6	44	76	ANYCH		7
600	G-7	DYH	62	DYH	—	30364	24	G5.3	120	3200	75	17000	CC-6	36	64	ANYCH		7
650	G-6	DVY	62	DVY	—	30304	24	G5.3	120	3300	25	20000	CC-6	36	64	BDTHCH		7

Table 8: Halogen, Single-Ended, G9.5 Medium 2-Pin (9.5mm apart)																		
500	T-6	EHD-Q500CL/TP	62	EHD		39768	24	G9.5	120	2900	2000	10000	CC-8	60	105	Any		8
		EHC-Q500/5CL	62	EHC		39789	24	G9.5	120	3150	500	12700	CC-8	60	105	Any		8

Lamp stocking color code: EUROPE ONLY, EUROPE and NORTH AMERICA, NORTH AMERICA ONLY

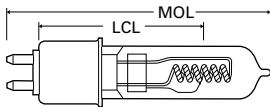


Fig. 8

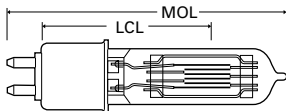


Fig. 9

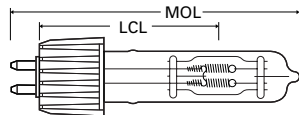


Fig. 10

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 8: Halogen, Single-Ended, G9.5 Medium 2-Pin (9.5mm apart) (continued)																		
575	T-6	FLK-Q575T6	62	FLK		11450	24	G9.5	115	3200	300	16500	CC-8	60	105	Any		8
		FLK/LL-Q575T6	62	—	—	39730	24	G9.5	115	3100	1500	12800	CC-8	60	105	Any		8
		GLA-Q575T6/4CL	62	GLA	—	93428	24	G9.5	115	3050	1500	13000	C-13D	60	105	Any		9
		GLC-Q575T6/5CL	62	GLC	—	93429	24	G9.5	115	3200	300	14500	C-13D	60	105	Any		9
600	T-6	GKV-Q575T6/4CL	62	GKV		39739	24	G9.5	230	3200	250	14000	C-13D	60	105	Any		9
		GKV	62	GKV		39750	24	G9.5	240	3200	250	14000	C-13D	60	105	Any		9
		GKV/LL	62	GKV		39751	24	G9.5	230	3000	1500	11000	C-13D	60	105	Any		9
		GKV/LL	62	GKV		39752	24	G9.5	240	3000	1500	11000	C-13D	60	105	Any		9
650	T-6	FKR	62	FKR		39734	24	G9.5	230	3100	300	15000	C-13D	60	105	Any		9
		FKR	62	FKR		39735	24	G9.5	240	3100	300	15000	C-13D	60	105	Any		9
750	T-6	EHG-Q750CL/TP	62	EHG	—	39770	24	G9.5	120	3000	2000	15000	CC-8	60	105	Any		8
		EHF-Q750/4CL	62	EHF	—	39771	24	G9.5	120	3200	300	20000	CC-8	60	105	Any		8

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
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Table 8: Halogen, Single-Ended, G9.5 Medium 2-Pin (9.5mm apart) (continued)

750	T-6	GLD-Q750T6/4CL	62	GLD	—	92771	24	G9.5	115	3200	300	19000	C-13D	60	105	Any		9
		GLE-Q750T6/4CL	62	GLE	—	92773	24	G9.5	115	3050	1500	17400	C-13D	60	105	Any		9
	T-7	BWM-Q750T7/4CL/TP	1, 62	BWM	—	39680	6	G9.5	120	3200	200	21000	C-13D	60	114	BDTH		9
800	T-6	HX800	62		HX800	39753	24	G9.5	230	3200	250	20000	C-13D	60	105	Any		9
		HX800	62		HX800	39754	24	G9.5	240	3200	250	20000	C-13D	60	105	Any		9
1000	T-6	FEL-Q1000/4CL	62,22	FEL	CP77	39769	24	G9.5	120	3200	300	27500	CC-8	60	105	Any		8
		FEP-Q1MT6/4CL	62	FEP	CP77	39738	24	G9.5	230	3200	300	25000	CC-8	60	105	Any		8
		FEP-Q1MT6/4CL	62	FEP	CP77	39736	24	G9.5	240	3200	300	25000	CC-8	60	105	Any		8
	T-7	BWN-Q1000T7/4CL/TP	62,1	BWN	—	39792	24	G9.5	120	3200	250	28500	C-13D	60	114	BDTH		9

Table 9: Halogen, Single-Ended, G9.5/Heat Sink (Metal 2-Pin)

375	T-6	HPL375/C	18, 62			17608	12	G9.5/HS	115	3250	300	10540	4-C8	60	106	Any		10
		HPL375/LL	18, 62			18189	12	G9.5/HS	115	3050	1000	8000	4-C8	60	106	Any		10
550	T-6	HPL550/C 77V	18, 62			17607	12	G9.5/ HS	77	3250	300	16170	4-C8	60	106	Any		10

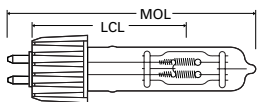


Fig. 10

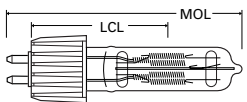


Fig. 11

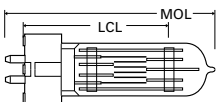


Fig. 12

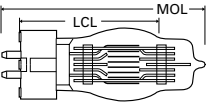


Fig. 13

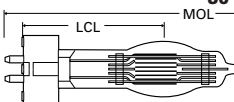


Fig. 14

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila- ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 9: Halogen, Single-Ended, G9.5/Heat Sink (Metal 2-Pin) (continued)																		
575	T-6	HPL575/C 115V	62	—	—	92431	12	G9.5/HS	115	3200	300	16500	4-C8	60	106	Any		10
		HPL575/C 120V	62	—	—	92433	12	G9.5/HS	120	3200	300	16520	4-C8	60	106	Any		10
		HPL575/LL/C 115V	62	—	—	92434	12	G9.5/HS	115	3050	2000	12360	4-C8	60	106	Any		10
		HPL575/LL/C 120V	62	—	—	92435	12	G9.5/HS	120	3050	2000	12360	4-C8	60	106	Any		10
		HPL575	62	—	—	37128	12	G9.5/HS	230	3200	300	14900	6-C8	60	106	Any		11
		HPL575	62	—	—	37131	12	G9.5/HS	240	3200	300	14900	6-C8	60	106	Any		11
		HPL575-X LL	62	—	—	37817	12	G9.5/HS	230	3050	1500	11780	6-C8	60	106	Any		11
		HPL575-X LL	62	—	—	37818	12	G9.5/HS	240	3050	1500	11780	6-C8	60	106	Any		11
750	T-6	HPL750/C 115V	7, 62	—	—	92432	12	G9.5/HS	115	3200	300	22000	4-C8	60	106	Any		10
		HPL750/LL/C	7, 62	—	—	92770	12	G9.5/HS	115	3050	2000	16400	4-C8	60	106	Any		10
		HPL750	7, 62	—	—	37824	12	G9.5/HS	230	3200	300	19750	6-C8	60	106	Any		11
		HPL750	7, 62	—	—	37826	12	G9.5/HS	240	3200	300	19750	6-C8	60	106	Any		11
		HPL750-XLL-C	7, 62	—	—	92768	12	G9.5/HS	230	3050	1500	15600	6-C8	60	106	Any		11
		HPL750-XLL-C	7, 62	—	—	92769	12	G9.5/HS	240	3050	1500	15600	6-C8	60	106	Any		11

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Filament Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 10: Halogen, Single-Ended, GX9.5 Prefocus Med 2-Pin																		
650	G-6 T-8	EKD-Q650/3CL/2PP	62	EKD	—	34328	24	GX9.5	120	3300	25	20000	CC-6	37	64	BDTHCH		
		T12	62		T12	39661	12	GX9.5	230	3000	750	13500	C-13	55	110	BDTH		12
		T12	62		T12	39663	12	GX9.5	240	3000	750	13500	C-13	55	110	BDTH		12
		CP23	62		CP23	39654	12	GX9.5	230	3200	100	16900	C-13	55	110	BDTH		12
		CP23	62		CP23	39660	12	GX9.5	240	3200	100	16900	C-13	55	110	BDTH		12
1000	G-11	CP24	62		CP24	39651	12	GX9.5	230	3200	200	26000	C-13	55	110	BDTH		13
		CP24	62		CP24	39653	12	GX9.5	240	3200	200	26000	C-13	55	110	BDTH		13
		Q1000T8/CL	62		T11	29331	24	GX9.5	120	3050	750	23500	C-13	55	110	BDTH		13
		T11	62		T11	39656	12	GX9.5	230	3050	750	23000	C-13	55	110	BDTH		13
		T11	62		T11	39659	12	GX9.5	240	3050	750	23000	C-13	55	110	BDTH		13
	T-11	FWP	62	FWP	T19	39657	12	GX9.5	230	3050	750	21000	C-13D	55	110	BDTH		12
		FWR	62	FWR	T19	39658	12	GX9.5	240	3050	750	21000	C-13D	55	110	BDTH		12
		FVA	62	FVA	CP70	39241	12	GX9.5	230	3200	200	25000	C-13D	55	110	BDTH		12
		FVB	62	FVB	CP70	39242	12	GX9.5	240	3200	200	25000	C-13D	55	110	BDTH		12
1200	G-11	T29	62		T29	39647	12	GX9.5	120	3050	400	30500	C-13D	67	125	BDTH		14
		FWS	62	FWS	T29	39723	12	GX9.5	230	3050	400	29000	C-13D	67	125	BDTH		14
		FWT	62	FWT	T29	39667	12	GX9.5	240	3050	400	29000	C-13D	67	125	BDTH		14

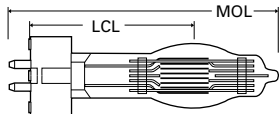


Fig. 14

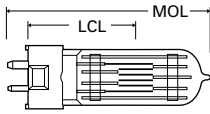


Fig. 15

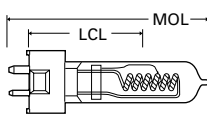


Fig. 16

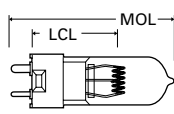


Fig. 17

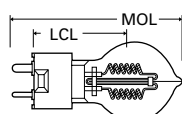


Fig. 18

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 10: Halogen, Single-Ended, GX9.5 Prefocus Med 2-Pin (continued)																		
1200	G-11	CP90	62		CP90	39724	12	GX9.5	230	3200	200	33000	C-13D	67	125	BDTH		14
		CP90	62		CP90	39725	12	GX9.5	240	3200	200	33000	C-13D	67	125	BDTH		14

Table 11: Halogen, Single-Ended, GY9.5 Oriented 2-Pin (2 OD Pins)																		
300	T-8	FKW-Q300T8	62	FKW	CP81	39781	24	GY9.5	120	3200	50	6900	C-13	46	90	BDTH		15
		FSL	62	FSL	CP81	39780	24	GY9.5	230	3200	150	6900	C-13	46	90	BDTH		15
		FSK	62	FSK	CP81	39779	24	GY9.5	240	3200	150	6900	C-13	46	90	BDTH		15
420	G-7	EKB-Q420/4CL/2PP	62	EKB	—	33934	24	GY9.5	120	3200	75	11000	CC-6	37	64	ANYCH		17
500	T-8	FRG-Q500T8	62	FRG	CP82	39623	24	GY9.5	120	3200	150	13000	C-13	46	90	BDTH		15
		FRH	62	FRH	CP82	39624	24	GY9.5	230	3200	150	12500	C-13	46	90	BDTH		15
		FRJ	62	FRJ	CP82	39628	24	GY9.5	240	3200	150	12500	C-13	46	90	BDTH		15
		GCV	62	GCV	T18	39717	24	GY9.5	230	3050	400	11000	C-13	46	90	BDTH		15

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
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Table 11: Halogen, Single-Ended, GY9.5 Oriented 2-Pin (2 OD Pins) (continued)

500	T-8	GCW	62	GCW	T18	39629	24	GY9.5	240	3050	400	11000	C-13	46	90	BDTH		15
		GCV	62	GCV	T25	39455	24	GY9.5	230	3000	360	11000	C-13D	46	90	BDTH		15
		GCW	62	GCW	T25	39262	24	GY9.5	240	3000	360	11000	C-13D	46	90	BDTH		15
600	T-5	FMR-Q600T5	62	FMR	—	30475	24	GY9.5	120	3050	2000	12600	CC-8	51	85	BDTHCH		16
650	T-8	GCT	62	GCT	T27	39456	24	GY9.5	230	3050	400	14500	C-13D	46	90	BDTH		15
		GCS	62	GCS	T27	39457	24	GY9.5	240	3050	400	14500	C-13D	46	90	BDTH		15
		FRE	62	FRE	T26	39630	24	GY9.5	120	3100	500	15500	C-13	46	90	BDTH		15
		GCT	62	GCT	T26	39635	24	GY9.5	230	3100	400	15500	C-13	46	90	BDTH		15
		GCS	62	GCS	T26	39636	24	GY9.5	240	3100	400	15500	C-13	46	90	BDTH		15
		FRK-Q650T8	62	FRK	CP89	39637	24	GY9.5	120	3200	200	16900	C-13	46	90	BDTH		15
		FRL	62	FRL	CP89	39640	24	GY9.5	230	3200	150	16250	C-13	46	90	BDTH		15
		FRM	62	FRM	CP89	39642	24	GY9.5	240	3200	150	16250	C-13	46	90	BDTH		15

Table 12: Halogen, Single-Ended, GZ9.5 Oriented 2-Pin (2 OD Pins)

235	T-4	Q235T4/3	62	—	—	11548	12	GZ9.5	33	3125	150	6000	CC-6	39	64	BDTHCH	Frosted	
600	G-7	DYS/DYV/BHC	62	DYS	A1/264	32955	24	GZ9.5	120	3200	75	17000	CC-6	37	64	BDTHCH		17
650	G-7	DYR	62	DYR	A1/233	26896	24	GZ9.5	220	3200	50	16500	2CC-8	37	64	Any		18
		DYR	62	DYR	A1/233	26895	24	GZ9.5	240	3200	50	16500	2CC-8	37	64	Any		18

Lamp stocking color code: EUROPE ONLY, EUROPE and NORTH AMERICA, NORTH AMERICA ONLY

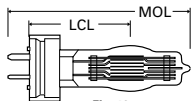


Fig. 19

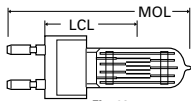


Fig. 20

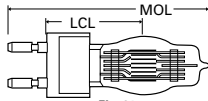


Fig. 21

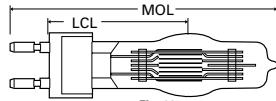


Fig. 22

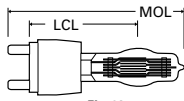


Fig. 23

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 13: Halogen, Single-Ended, GY16 2-Pin Prefocus (16mm Apart)																		
2000	G-13	FTM	62	FTM	CP43	20309	12	GY16	230	3200	400	54000	C-13	70	145	BDTH		19
		FTL	62	FTL	CP43	20310	12	GY16	240	3200	400	54000	C-13	70	145	BDTH		19
		CP79	62		CP79	90360	12	GY16	120	3200	350	54000	C-13D	70	145	BDTH		19
		CP79	62		CP79	30497	12	GY16	230	3200	350	54000	C-13D	70	145	BDTH		19
		CP79	62		CP79	30498	12	GY16	240	3200	350	54000	C-13D	70	145	BDTH		19
Table 14: Halogen, Single-Ended, G22 Medium Bi-post (22mm Apart)																		
500	T-8	EGN-Q500T8	62	EGN	—	30373	12	G22	120	3200	150	13000	C-13	64	140	BDTH		20
650	T-8	FKH	62	FKH	CP39	20320	12	G22	230	3200	100	16900	C-13	64	140	BDTH		20
		FKH	62	FKH	CP39	20321	12	G22	240	3200	100	16900	C-13	64	140	BDTH		20
750	T-7	EGR-Q750T7/4CL	1, 62	EGR	—	39190	12	G22	120	3200	200	21000	C-13D	64	127	BDTH		20

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 14: Halogen, Single-Ended, G22 Medium Bi-post (22mm Apart) (continued)																		
1000	T-7	EGT-Q1000T7/4CL	1, 62	EGT	—	39191	12	G22	120	3200	250	28500	C-13D	64	127	BDTH		20
	T-8	FKJ	62	FKJ	CP40	39655	12	G22	230	3200	200	26000	C-13	64	140	BDTH		20
		FKJ	62	FKJ	CP40	20286	12	G22	240	3200	200	26000	C-13	64	140	BDTH		20
1200	T-8	OC1200	62			91580	12	G22	80	3300	300	37500	C-13D	64	140	BDTH		20
	G-11	CP93	62		CP93	30384	12	G22	240	3200	200	33000	C-13D	64	140	BDTH		21
2000	G-13	CP92	62		CP92	30391	12	G22	120	3200	400	55000	C-13D	90	175	BDTH		22
		CP92	62		CP92	30394	12	G22	230	3200	400	52000	C-13D	90	175	BDTH		22
		CP92	62		CP92	30397	12	G22	240	3200	400	52000	C-13D	90	175	BDTH		22
2500	G-13	CP91	62		CP91	30415	12	G22	230	3200	400	67500	C-13D	90	175	BDTH		22
		CP91	62		CP91	30423	12	G22	240	3200	400	67500	C-13D	90	175	BDTH		22

Table 15: Halogen, Single-Ended, G38 Mogul Bi-post																		
1000	T-7	CYV-Q1000T7/ 4CL/BP	1, 62	CYV	—	42697	6	G38	120	3200	200	28500	C-13D	127	203	BDTH		23
1500	T-10	CXZ-Q1500T10/4CL	1, 62	CXZ	—	37564	6	G38	120	3200	400	44500	C-13	127	216	BDTH		23

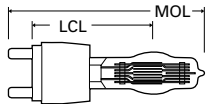


Fig. 23

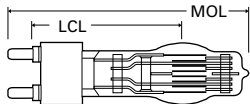


Fig. 24

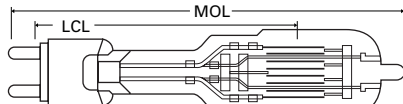


Fig. 25

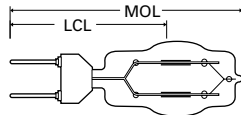


Fig. 28

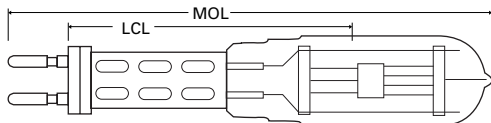


Fig. 26

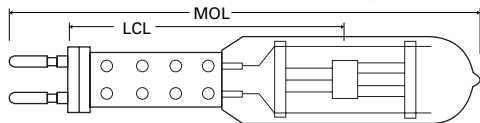


Fig. 27

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
2000	T-10	CYX-Q2000T10/4CL	1, 62	CYX	—	36636	6	G38	120	3200	350	59000	C-13	127	216	BDTH		23
	G-10	FKK	62	FKK	CP41	31844	12	G38	230	3200	400	54000	C-13	127	216	BDTH		23
		FKK	62	FKK	CP41	31849	12	G38	240	3200	400	54000	C-13	127	216	BDTH		23
	T-8	BWA-Q2000/4CL/BP	1, 55, 62	BWA	—	39587	6	G38	120	3200	500	54000	CC-8	127	210	BDTH		23
2500	G-13	CP94	62		CP94	30499	12	G38	230	3200	400	67500	C-13D	127	210	BDTH		23
		CP94	62		CP94	30500	12	G38	240	3200	400	67500	C-13D	127	210	BDTH		23

Table 15: Halogen, Single-Ended, G38 Mogul Bi-post (continued)

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 15: Halogen, Single-Ended, G38 Mogul Bi-post (continued)																		
3000	G-15	HX48	62		HX48	30503	12	G38	230	3200	400	82000	C-13	127	210	BD45		23
		HX48	62		HX48	30504	12	G38	240	3200	400	82000	C-13	127	210	BD45		23
5000	T-20	DPY-Q5000T20/4CL	1, 62	DPY	CP29	41736	6	G38	120	3200	500	143000	C-13	165	279	BD45		24
	G-20	CP29	62		CP29	30505	12	G38	230	3200	500	135000	C-13	165	279	BDTH		24
		CP29	62		CP29	30506	12	G38	240	3200	500	135000	C-13	165	279	BDTH		24
10000	T-24	DTY-Q10M/T24/4CL	1, 62	DTY	—	24886	4	G38	120	3200	300	290000	C-13	254	400	BD45		25
	T-27	CP83	62		CP83	12036	1	G38	230	3200	500	280000	C-13	254	405	BDTH		25
		CP83	62		CP83	12037	1	G38	240	3200	500	280000	C-13	254	405	BDTH		25

Table 16: Halogen, Single-Ended, GX38 Mogul Bi-post (38mm Apart)																		
12000	T-26	Q12MT26/4CL	62	—	—	48770	1	GX38	120	3400	150	420000	C-13	254	410	BD45		26
		Q12MT26/4CL	62	—	—	48771	1	GX38	230	3400	130	420000	C-13	254	410	BD45		26
		Q12MT26/4CL	62	—	—	48779	1	GX38	240	3400	130	420000	C-13	254	410	BD45		26
20000	T-32	BCM-Q20MT32/4CL	62	BCM	—	48772	1	GX38	208	3200	400	580000	C-13	354	560	BD45		27
		BCM-Q20MT32/4CL	62	BCM	—	48773	1	GX38	230	3200	400	580000	C-13	354	560	BD45		27
		BCM-Q20MT32/4CL	62	BCM	—	48774	1	GX38	240	3200	400	580000	C-13	354	560	BD45		27
24000	T-32	Q24MT32/4CL	62	—	—	48776	1	GX38	230	3400	150	800000	C-13	354	560	BD45		27
		Q24MT32/4CL	62	—	—	48777	1	GX38	240	3400	150	800000	C-13	354	560	BD45		27

Lamp stocking color code: EUROPE ONLY, EUROPE and NORTH AMERICA, NORTH AMERICA ONLY

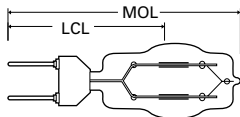


Fig. 28

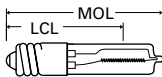


Fig. 29

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 17: Halogen, Single-Ended, GX38Q, High Volt, 2 Filament																		
1250	G-18	CP105-1250/650	62		CP105	34056	12	GX38q	230	3050	250	27M 13M	2C-13	143	220	BD45		28
		CP105-1250/650	62		CP105	34024	12	GX38q	240	3050	250	27M 13M	2C-13	143	220	BD45		28
		CP30-1250/1250	62		CP30	30513	12	GX38q	230	3200	300	27M 56M	2C-13	143	220	BD45		28
		CP30-1250/1250	62		CP30	30514	12	GX38q	240	3200	300	27M 56M	2C-13	143	220	BD45		28
	G-22	CP58-1250/2500	62		CP58	30515	12	GX38q	230	3200	300	27M 91M	2C-13	143	220	BD45		28
		CP58-1250/2500	62		CP58	30517	12	GX38q	240	3200	300	27M 91M	2C-13	143	220	BD45		28

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 17: Halogen, Single-Ended, GX38Q, High Volt, 2 Filament (continued)																		
2500	G-22	CP32-2500/2500	62		CP32	30518	12	GX38q	230	3200	300	59M 127M	2C-13	143	220	BD45		28
		CP32-2500/2500	62		CP32	30519	12	GX38q	240	3200	300	59M 127M	2C-13	143	220	BD45		28
Table 18: Halogen, Single-Ended, E11 Miniature Candelabra Screw																		
100	T-4	Q100CL/MC/2V	62	ESN	—	44385	6	E11	120	2950	750	1800	CC-2V	35	71	Any		29
		Q100CL/MC	62	—	—	15507	6	E11	120	2950	2000	1600	CC-8	35	71	Any		29
		Q100MC	62	—	—	16452	6	E11	120	2950	2000	1550	CC-8	35	71	Any	Frosted	29
150	T-4	Q150CL/MC	62	ETG	—	43694	6	E11	120	2950	2000	2800	CC-8	35	76	Any		29
		Q150MC	62	ETH	—	44654	6	E11	120	2950	2000	2700	CC-8	35	76	Any	Frosted	29
250	T-4	Q250CL/MC	62	—	—	43700	6	E11	130	2950	2000	5000	CC-8	41	80	Any		29
		Q250CL/MC	62	EHT	—	43699	6	E11	120	2950	2000	5000	CC-8	41	80	Any		29
		Q250MC	62	—	—	43696	6	E11	130	2950	2000	4850	CC-8	41	80	Any	Frosted	29
		Q250MC	62	ESM	—	43695	6	E11	120	2950	2000	4850	CC-8	41	80	Any	Frosted	29
400	T-4	Q400CL/MC	62	—	—	43707	6	E11	120	2950	2000	8250	CC-8	51	92	Any		29
		Q400MC	62	—	—	43706	6	E11	120	2950	2000	7850	CC-8	51	92	Any	Frosted	29

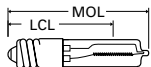


Fig. 29

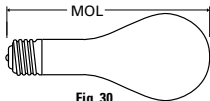


Fig. 30

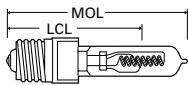


Fig. 31



Fig. 32



Fig. 33

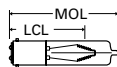


Fig. 34

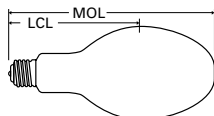


Fig. 77

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 18: Halogen, Single-Ended, E11 Miniature Candelabra Screw (continued)																		
500	T-4	EVR-Q500CL/MC	16, 62	EVR	—	47950	6	E11	120	2950	2000	10450	CC-8	51	92	Any		29
Table 19: Incandescent, Single-Ended, E26 Medium Screw																		
250	A-21	BBA (#1)	21	BBA	—	40563	24	E26	120	3400	3	8000	C-9		125	Any	Frosted	30
		BCA (#B1)		BCA	—	40564	24	E26	120	4800	3	5000	C-9		125	Any	Frosted	30
	A-23	ECA		ECA	—	40565	24	E26	120	3200	20	6500	C-9		152	Any	Frosted	30
300	A-21	BAH		BAH	—	40886	24	E26	115	3200	20	9000	C-9		125	Any	Frosted	30
400	G-30	400G/FL		—	—	21363	60	E26	120		800	6800	C-5		130	BDTH	Frosted	30
500	PS-25	EBV (#2)	21	EBV	—	40566	24	E26	120	3400	6	17000	C-9	133	176	Any	Frosted	30
		EBW (#B2)		EBW	—	40567	24	E26	120	4800	6	10500	C-9	133	176	Any	Frosted	30
		ECT		ECT	—	40568	24	E26	120	3200	60	13650	C-9	133	176	Any	Frosted	30

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 20: Halogen, Single-Ended, E39 Mogul Screw																		
1000	PS-52	DKZ/DSE-Q1000 PS52/4	1, 51, 62	DKZ	—	39582	12	E39	120	3200	750	28000	CC-8	241	330	Any	Frosted	30
	T10	DSE-Q1000	1, 62	DSE		19926	10	E39	120	3200	750	28000	CC-8	241	330	Any	Frosted	31
1500	PS-52	DKX/DSF-Q1500 PS52/4	1, 51, 62	DKX	—	40357	12	E39	120	3200	1000	41000	C-8	241	330	Any	Frosted	30
	T10	DSF-Q1500	1, 62	DSF		19927	10	E39	120	3200	1000	41000	C-8	241	330	Any	Frosted	31
2000	T-8	BWF-Q2000/4CL	62	BWF	—	37086	6	E39	120	3200	500	54000	CC-8	133	191	Any		31
	T-10	CP59	62		CP59	29424	12	E39	230	3200	300	50000	CC-8	133	191	Any		31
		CP59	62		CP59	29426	12	E39	240	3200	300	50000	CC-8	133	191	Any		31

Table 21: Halogen/Incandescent, Single-Ended, BA15d Double Contact Bayonet																		
30	S-11	BLC		BLC	—	29140	120	BA15d	120	2775	50	400	CC-2V	35	60	Any		32
50	S-11	BLX		BLX	—	29156	120	BA15d	120	2850	50	780	CC-2V	44	60	BDTH		32
	T-8	CAX		CAX	—	29171	24	BA15d	120	2875	50	775	CC-2V	35	79	BD30		33
75	T-8	CBX/CBS	20	CBX	—	29208	24	BA15d	120	2925	50	1200	CC-13	35	79	BD30		33
100	T-8	CDJ		CDJ	—	29266	24	BA15d	120	2975	50	2000	CC-2V	35	79	BD30		33
		CEB		CEB	—	29244	24	BA15d	120	2975	50	1850	CC-13	35	79	BD30		33
	T-4	Q100CL/DC/2V	62	ESR	—	44386	6	BA15d	120	2950	750	1800	CC-2V	35	62	Any		34

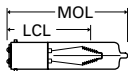


Fig. 34

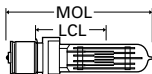


Fig. 35

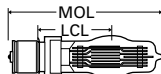


Fig. 36

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 21: Halogen/Incandescent, Single-Ended, BA15d Double Contact Bayonet (continued)																		
100	T-4	Q100CL/DC	62	—	—	15508	6	BA15d	120	2950	2000	1600	CC-8	35	62	Any		34
		Q100DC	62	—	—	16451	6	BA15d	120	2950	2000	1550	CC-8	35	62	Any	Frosted	34
150	T-4	Q150CL/DC/2V	62	ESP	—	44384	6	BA15d	120	2950	1000	2800	CC-2V	35	62	Any		34
		Q150CL/DC	62	ETC	—	43693	6	BA15d	120	2950	2000	2800	CC-8	35	62	Any		34
		Q150DC	62	ETF	—	44653	6	BA15d	120	2950	2000	2700	CC-8	35	62	Any	Frosted	34
200	T-4	FEV-Q200/4CL/DC	62	FEV	—	14119	6	BA15d	120	3200	50	5500	CC-2V	35	62	Any		34
250	T-4	Q250CL/DC	62	ESS	—	43697	6	BA15d	120	2950	2000	5000	CC-8	41	76	Any		34
		Q250CL/DC	62	—	—	43698	6	BA15d	130	2950	2000	5000	CC-8	41	76	Any		34
		Q250DC	62	ETB	—	43701	6	BA15d	120	2950	2000	4850	CC-8	41	76	Any	Frosted	34
		Q250DC	62	—	—	43702	6	BA15d	130	2950	2000	4850	CC-8	41	76	Any	Frosted	34
500	T-4	Q500CL/DC	62	—	—	43710	6	BA15d	120	2950	2000	10450	CC-8	54	87	Any		34
		Q500DC	62	—	—	43709	6	BA15d	120	2950	2000	10100	CC-8	54	87	Any	Frosted	34

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
Table 22: Halogen/Incandescent, Single-Ended, P28s Medium Prefocus																		
500	T-6	BTL-Q500T6/CL/P	62	BTL	T17	11966	12	P28s	120	3000	500	11000	C-13	55	133	BDTH		35
		BTM-Q500T6/4CL/2P	62	BTM	—	16465	12	P28s	120	3200	150	13000	C-13	55	130	BDTH		35
		FKF	62	FKF	T17	30535	12	P28s	230	2950	750	9500	C-13	55	130	BDTH		35
		T17	62		T17	30536	12	P28s	240	2950	750	9500	C-13	55	130	BDTH		35
		T28	62		T28	39731	12	P28s	230	3000	300	11000	C-13	55	130	BDTH		35
		T28	62		T28	39733	12	P28s	240	3000	300	11000	C-13	55	130	BDTH		35
650	T-8	FKB	62	FKB	T13	30541	12	P28s	230	3000	750	13500	C-13	55	130	BDTH		35
		T13	62		T13	30542	12	P28s	240	3000	750	13500	C-13	55	130	BDTH		35
		FKM	62	FKM	CP51	20323	12	P28s	230	3200	200	16900	C-13	55	130	BDTH		35
		CP51	62		CP51	20324	12	P28s	240	3200	200	16900	C-13	55	130	BDTH		35
750	T-7	BTN-Q750T7/CL/2P	1, 62	BTN	—	11953	12	P28s	120	3050	500	17600	C-13D	55	121	BD30		35
		BTP-Q750T7/4CL/2P	1, 62	BTP	—	11954	12	P28s	120	3200	200	21000	C-13D	55	121	BD30		35
1000	T-7	BTR-Q1000T7/4CL/2P	1, 62	BTR	—	11955	12	P28s	120	3200	250	28500	C-13D	55	121	BD30		35
		G-11	FKD	62	FKD	T14	20385	12	P28s	230	3050	750	23000	C-13D	55	130	BDTH	
			T14	62		T14	20388	12	P28s	240	3050	750	23000	C-13D	55	130	BDTH	

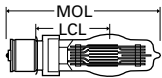


Fig. 36

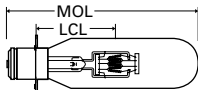


Fig. 37

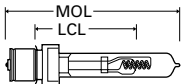


Fig. 38

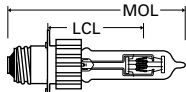


Fig. 39

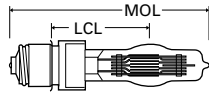


Fig. 40

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
1000	G-11 T-20	FKN	62	FKN	CP52	30546	12	P28s	240	3200	200	26000	C-13D	55	121	BDTH		36
		DRC		DRB	—	29979	24	P28s	120	3250	50	30000	C-13	55	146	BD30		37
		DRS		DRS	A1/58	29947	24	P28s	120	3325	25	28500	C-13D	55	146	BD30		37
		DRB		DRB	—	29968	24	P28s	120	3350	25	32000	C-13	55	146	BD30		37

Table 22: Halogen/Incandescent, Single-Ended, P28s Medium Prefocus (continued)

Table 23: Halogen, Single-Ended, P28s with CC-8 Coil																		
500	T-4	EGE-Q500CL/P	62	EGE	—	39135	12	P28s	120	2950	2000	10450	CC-8	89	152	Any		38
		EGC-Q500/5CL/P	62	EGC	—	39134	12	P28s	120	3150	500	12700	CC-8	89	152	Any		38
750	T-6	EGG-Q750CL/P	62	EGG	—	39137	12	P28s	120	3000	2000	15750	CC-8	89	152	Any		38
		EGF-Q750/4CL/P	62	EGF	—	39136	12	P28s	120	3200	300	20400	CC-8	89	152	Any		38
1000	T-6	EGJ-Q1000/4/CL/P	62	EGJ	—	38853	12	P28s	120	3200	300	27500	CC-8	89	152	Any		38
		EGK-Q1000/4/P	62	EGK	—	38852	12	P28s	120	3200	300	26500	CC-8	89	152	Any	Frosted	38
		EGM-Q1000CL/P	62	EGM	—	39138	12	P28s	120	3000	2000	21500	CC-8	89	152	Any		38

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Product Order Code	Std. Pack Qty.	Base Type	Design Volts	Design Color Temp (K)	Rated Life (hrs)	Initial Design Lumens	Fila-ment Type	LCL (mm)	MOL (mm)	Burning Position	Bulb Finish	Fig. No.
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Table 23: Halogen, Single-Ended, P28s with CC-8 Coil (continued)

1000	T-6	EWE	62	EWE	—	30534	12	P28s	240	3200	250	26500	CC-8	89	152	BDTH		38
	G-11	FKE	62	FKE	T15	30532	12	P28s	240	3050	750	23000	C-13	89	160	BDTH		36

Table 24: Halogen, Single-Ended, P40 Mogul Prefocus

1000	T-7	BVT-Q1000T7/ CL/MP	1, 62	BVT	—	12554	6	P40s	120	3050	500	24500	C-13D	100	184	BDTH		39
		BVV-Q1000T7/ 4CL/MP	1, 62	BVV	—	12553	6	P40s	120	3200	200	28500	C-13D	100	184	BDTH		39
	G-11	T16	62		T16	30521	12	P40s	240	3050	750	23000	C-13	87	180	BDTH		40
1500	T-8	DTA-Q1500T8/4CL	62	DTA	—	30522	6	P40s	120	3200	300	41000	C-13D	87	200	BDTH		39
2000	T-10	BVW-Q2000T10/ 4CL/MP	62	BVW	CP53	12555	6	P40s	120	3200	350	59000	C-13	100	215	BDTH		39
	G-13	CP53	62		CP53	20311	12	P40s	230	3200	400	54000	C-13	87	200	BDTH		40
		CP53	62		CP53	20312	12	P40s	240	3200	400	54000	C-13	87	200	BDTH		40

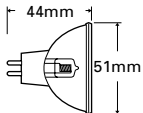


Fig. 41

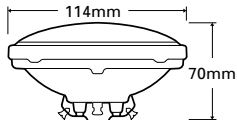


Fig. 42

Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
50	EFM BULK 50PK	63	EFM		8	21276	50	GX5.3	3300	50					Any	41
75	EFN	63	EFN		12	21277	50	GX5.3	3350	50					Any	41
100	EFP BULK 50PK	63	EFP		12	21278	50	GX5.3	3350	50					Any	41
	EXV	63	EXV		12	12003	20	GX5.3	3350	50				3100	Any	41
150	EFR	63	EFR		15	21279	50	GX5.3	3350	50					Any	41
	EZK	63	EZK	—	120	15477	20	GY5.3	3200	200				3600	Any	41
250	ENH	63	ENH	—	120	38686	20	GY5.3	3250	175				11700	BDTH	41
	EXX	63	EXX	—	120	11750	20	GY5.3	3300	25				6750	Any	41
	ELC	63	ELC		24	37462	20	G5.3	3400	50					Any	41
	ELC/500	18, 63	ELC		24	15377	20	G5.3	3350	500					Any	41

Table 25: MR16 (2" Reflector)

Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
Table 26: PAR36 (4.5" Reflector)																
25	25PAR36	12			5.5	14553	12	Scr. Term.	3000	1000	VNSP		5	19700	Any	42
	25PAR36NSP	12	—	—	12	14554	12	Scr. Term.		2000	NSP		9	2600	Any	42
	25PAR36WFL	12	—	—	12	14555	12	Scr. Term.		2000	WFL	49 X 41	37 X 26	360	Any	42
	25PAR36/VWFL	12	—	—	12	14556	12	Scr. Term.		2000	VWFL		55	160	Any	42
30	H4515	12, 307	—	—	6.4	15133	12	Scr. Term.		100	VNSP	5.5 X 4		67000	Any	42
	4515	12	—	—	6.4	24673	12	Scr. Term.		100	VNSP	5 X 5		55000	Any	42
	4405	12	—	—	12.8	24425	12	Scr. Term.		100	VNSP	6 X 5		50000	Any	42
	H4405	12, 307	—	—	12.8	15129	12	Scr. Term.		100	VNSP	7 X 4		66000	Any	42
35	35PAR36/H/SP5	307	—	—	12	19873	12	Scr. Term.	3050	4000	VNSP		5	25000	Any	42
	35PAR36/H/FL30	307	—	—	12	19877	12	Scr. Term.	3050	4000	WFL		30	900	Any	42
	35PAR36/H/SP8	307	—	—	12	19876	12	Scr. Term.	3050	4000	NSP		8	20000	Any	42
37.5	H7616	307	—	—	12.8	42838	12	Scr. Term.		300	VNSP	7 X 4		70000	Any	42
50	50PAR36/H/SP8	307	—	—	12	19879	12	Scr. Term.	3050	4000	NSP		8	30000	Any	42
	50PAR36/H/SP5	307	—	—	12	19878	12	Scr. Term.	3050	4000	VNSP		5	35000	Any	42
	50PAR36/H/FL30	307	—	—	12	19880	12	Scr. Term.	3050	4000	WFL		30	1300	Any	42
	50PAR36VNSP	12	—	—	12	12892	12	Scr. Term.		2000	VNSP		6	19000	Any	42
	50PAR36NSP	12	—	—	12	16540	12	Scr. Term.		2000	NSP		10	11000	Any	42

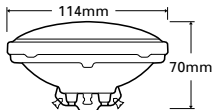


Fig. 42

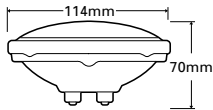


Fig. 43

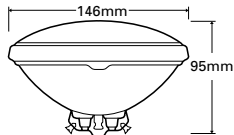


Fig. 44

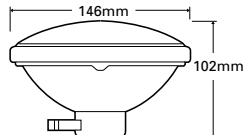


Fig. 45

Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
Table 26: PAR36 (4.5" Reflector) (continued)																
50	50PAR36WFL	12	—	—	12	16541	12	Scr. Term.		2000	WFL	48 X 41	36 X 28	900	Any	42
	50PAR36WFL/4	12	—	—	12	11468	12	Scr. Term.		4000	WFL	48 X 41	36 X 28	720	Any	42
	50PAR36VWFL		—	—	12	16542	12	Scr. Term.		2000	VWFL		55	600	Any	42
	H7604	307	—	—	12.8	43576	12	Scr. Term.		100	VNSP	7 X 5		100000	Any	42
	4505		—	—	28	24640	12	Scr. Term.		400	VNSP	11 X 5		45000	Any	42
100	4509		—	—	13	24650	12	Scr. Term.		25	VNSP	12 X 6		110000	Any	42
	4509X	12	—	—	13	41503	12	Scr. Term.		25	VNSP	12 X 6		110000	Any	42
	4595		—	—	28	24892	12	Scr. Term.		300	VNSP	14 X 6		60000	Any	42
	4591		—	—	28	24882	12	Scr. Term.		25	VNSP	12 X 6		90000	Any	42
	4594		—	—	28	24891	12	Scr. Term.		300	VNSP	13 X 7		70000	Any	42
650	DWE-Q650PAR36/1	63	DWE	—	120	41667	12	Scr. Term.	3200	100	MFL		40 X 30	24000	H15	42
	FAY-Q650PAR36/3D	63	FAY	—	120	41668	12	Ferrule	5000	30	SP		25 X 15	36000	H15	43

Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
Table 26: PAR36 (4.5" Reflector) (continued)																
650	FBE-Q650PAR36/5D	63	FBE	—	120	41669	12	Scr. Term.	5000	30	SP		25 X 15	36000	H15	42
	FBO-Q650PAR36/5	63	FBO	—	120	41671	12	Scr. Term.	3400	30	SP		25 X 15	67000	H15	42
	FCW-Q650PAR36/6	63	FCW	—	120	41672	12	Ferrule	3200	100	FL		60 X 55	9000	H15	43
	FCX-Q650PAR36/7	63	FCX	—	120	41673	12	Ferrule	3200	100	MFL		40 X 30	24000	H15	43
Table 27: PAR46 (5.75" Reflector)																
25	25PAR46	12	—	—	5.5	14562	12	Scr. Term.		1000	VNSP	5.5 X 4.5		55000	Any	44
30	4535	12	—	—	6.4	24735	12	Scr. Term.		100	VNSP	5.5 X 4		95000	Any	44
	4435	12	—	—	12.8	24577	12	Scr. Term.		100	VNSP	5 X 5		75000	Any	44
35	4436		—	—	12.8	24582	12	Scr. Term.		300	VNSP	10 X 4		60000	Any	44
50	H7635	307	—	—	12.8	43591	12	Scr. Term.		100	VNSP	6.5 X 4		160000	Any	44
150	150PAR46/1	64	—	—	32	19512	12	Scr. Term.		800	VNSP	9 X 9		100000	Any	44
	150PAR46/3MFL	64	—	—	125	41968	12	MSP	2750	2000	MFL	39 X 25	26 X 13	8000	Any	45
200	200PAR46/3NSP	64	—	—	120	20115	12	MSP	2750	2000	NSP	23 X 19	12 X 8	31000	Any	45
	200PAR46/3NSP	64	—	—	130	20117	12	MSP	2750	2000	NSP	23 X 19	12 X 8	31000	Any	45
	200PAR46/3MFL	64	—	—	120	20138	12	MSP	2750	2000	MFL	40 X 24	27 X 13	11500	Any	45
	200PAR46/3MFL	64	—	—	130	20140	12	MSP	2750	2000	MFL	40 X 24	12 X 13	11500	Any	45
250	4553		—	—	28	24799	12	Scr. Term.		25	VNSP	11 X 12		300000	Any	44

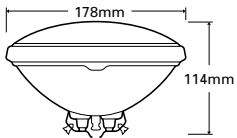


Fig. 46

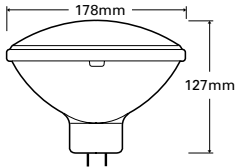


Fig. 47

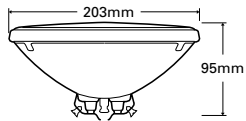


Fig. 48

Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
Table 28: PAR56 (7" Reflector)																
100	4545		—	—	12	24768	12	Scr. Term.		100	VNSP	9 X 5		225000	Any	46
	4543		—	—	12.5	24764	12	Scr. Term.		50	VNSP	9 X 5		225000	Any	46
120	120PAR56/VNSP	64	—	—	12	19023	12	Scr. Term.		2000	VNSP	15 X 10	8 X 6	60000	Any	46
	120PAR56/MFL	64	—	—	12	19024	12	Scr. Term.		2000	MFL	29 X 15	18 X 9	19000	Any	46
	120PAR56/WFL	64	—	—	12	19025	12	Scr. Term.		2000	WFL	50 X 25	35 X 18	5625	Any	46
200	200PAR		—	—	30	20122	12	Scr. Term.		350	VNSP	9 X 9		230000	Any	46
	200PAR56/MFL	64	—	—	120	49889	12	MEP	2750	2000	MFL	34 X 22	22 X 13	15000	Any	47
240	240PAR56/VNSP		—	—	12	20575	12	Scr. Term.		2000	VNSP	17 X 10	9 X 6	140000	Any	46
	240PAR56/MFL		—	—	12	20576	12	Scr. Term.		2000	MFL	28 X 15	19 X 8	46000	Any	46
	240PAR56/WFL		—	—	12	20577	12	Scr. Term.		2000	WFL	50 x 27	35 x 18	13000	Any	46

Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
Table 28: PAR56 (7" Reflector) (continued)																
300	300PAR56/NSP	64	—	—	120	20803	12	MEP	2750	2000	NSP	20 X 14	10 X 8	68000	Any	47
	300PAR56/MFL	64	—	—	120	20836	12	MEP	2750	2000	MFL	34 X 19	23 X 11	24000	Any	47
	300PAR56/WFL	64	—	—	120	20849	12	MEP	2750	2000	WFL	57 X 27	37 X 18	11000	Any	47
	300PAR/WFL	64	—	—	130	20851	12	MEP	2750	2000	WFL	57 X 27	37 X 18	11000	Any	47
	300PAR/NSP	64	—	—	230	20853	12	MEP		2000	NSP			40000	Any	47
	300PAR/MFL	64			230	20852	12	MEP		2000	MFL			30000	Any	47
	300PAR/WFL	64			230	20854	12	MEP		2000	WFL			10000	Any	47
	300PAR/MFL	64			240	18677	12	MEP		2000	MFL			30000	Any	47
	300PAR/NSP	64			240	18676	12	MEP		2000	NSP			40000	Any	47
	300PAR/WFL	64			240	18678	12	MEP		2000	WFL			10000	Any	47
450	4541		—	—	28	24756	12	Scr. Term.		25	NSP	15 X 11		470000	Any	46
500	Q500PAR56NSP	63	—	—	120	43494	6	MEP	2950	4000	NSP	32 X 15	13 X 8	96000	Any	47
	Q500PAR56MFL	63	—	—	120	43495	6	MEP	2950	4000	MFL	42 X 20	26 X 10	43000	Any	47
	Q500PAR50WFL	63	—	—	120	43496	6	MEP	2950	4000	WFL	66 X 34	44 X 20	19000	Any	47
Table 29: PAR64 (8" Reflector)																
120	120PAR	12	—	—	6	39395	12	Scr. Term.		3000	VNSP	9 X 5		180000	Any	48
250	4552		—	—	28	40576	12	Scr. Term.		25	VNSP	8 X 7		50000	Any	48

Lamp stocking color code: EUROPE ONLY, EUROPE and NORTH AMERICA, NORTH AMERICA ONLY

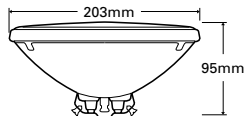


Fig. 48

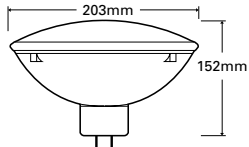


Fig. 49

Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
Table 29: PAR64 (8" Reflector) (continued)																
600	4559		—	—	28	40578	12	Scr. Term.		25	VNSP	11 X 12		600000	Any	48
	Q4559	63	—	—	28	40579	12	Scr. Term.		100	VNSP	12 X 8		600000	Any	48
	Q4559X	63	—	—	28	42552	12	Scr. Term.		100	VNSP	11 X 7.5		765000	Any	48
500	500PAR64/NSP	64	—	—	120	39406	12	EMEP	2800	2000	NSP	19 X 14	12 X 7	110000	Any	49
	500PAR64/MFL	64	—	—	120	39409	12	EMEP	2800	2000	MFL	35 X 19	23 X 11	37000	Any	49
	500PAR64/WFL	64	—	—	120	39412	12	EMEP	2800	2000	WFL	55 X 32	42 X 20	13000	Any	49
	500/PAR64/MFL	64	—	—	230	39411	12	EMEP	2700	2000	WFL	32 X 19	21 X 10		Any	49
	500/PAR64/WFL	64	—	—	230	39414	12	EMEP	2700	2000	WFL	55 X 32	42 X 20		Any	49
	Q500PAR64/VNSP	63		CP86	230	25492	6	EMEP	3200	300	VNSP	16 X 13	10 X 7	240000	Any	49
	Q500PAR64/VNSP	63		CP86	240	25493	6	EMEP	3200	300	VNSP	16 X 13	10 X 7	240000	Any	49
	Q500PAR64/NSP	63		CP87	230	25504	6	EMEP	3200	300	NSP	19 X 16	11 X 9	140000	Any	49

Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
Table 29: PAR64 (8" Reflector) (continued)																
500	Q500PAR64/NSP	63		CP87	240	25507	6	EMEP	3200	300	NSP	19 X 16	11 X 9	140000	Any	49
	Q500PAR64/MFL	63		CP88	230	25513	6	EMEP	3200	300	MFL	32 X 19	21 X 10	65000	Any	49
	Q500PAR64/MFL	63		CP88	240	25520	6	EMEP	3200	300	MFL	32 X 19	21 X 10	65000	Any	49
1000	Q1000PAR64NSP	63	—	—	120	43497	6	EMEP	3000	4000	NSP	31 X 14	15 X 8	200000	Any	49
	Q1000PAR64MFL	63	—	—	120	43498	6	EMEP	3000	4000	MFL	45 X 22	28 X 12	80000	Any	49
	Q1000PAR64WFL	63	—	—	120	43499	6	EMEP	3000	4000	WFL	72 X 45	48 X 24	33000	Any	49
	FFN-Q1000PAR64/1	63	FFN		120	13233	6	EMEP	3200	800	VNSP	24 X 10	12 X 6	400000	Any	49
	FFP-Q1000PAR64/2	63	FFP		120	13229	6	EMEP	3200	800	NSP	26 X 14	14 X 7	330000	Any	49
	FFR-Q1000PAR64/5	63	FFR		120	13228	6	EMEP	3200	800	MFL	44 X 21	28 X 12	125000	Any	49
	FFS-Q1000PAR64/6	63	FFS		120	13227	6	EMEP	3200	800	WFL	71 X 45	48 X 24	40000	Any	49
	FGM-Q1000PAR64/3D	63	FGM		120	13226	6	EMEP	5200	200	NSP	24 X 12	13 X 6	200000	Any	49
	FGN-Q1000PAR64/7D	63	FGN		120	13225	6	EMEP	5200	200	MFL	43 X 20	27 X 11	70000	Any	49
	EXC-Q1MPAR64CP60	63	EXC	CP60	230	93409	6	EMEP	3200	300	VNSP	20 X 17	12 X 9	352000	Any	49
	EXC-Q1MPAR64CP60	63	EXC	CP60	240	10925	6	EMEP	3200	300	VNSP	20 X 17	12 X 9	352000	Any	49
	EXD-Q1MPAR64CP61	63	EXD	CP61	230	10928	6	EMEP	3200	300	NSP	22 X 20	14 X 10	297000	Any	49
	EXD-Q1MPAR64CP61	63	EXD	CP61	240	10929	6	EMEP	3200	300	NSP	22 X 20	14 X 10	297000	Any	49
	EXE-Q1MPAR64CP62	63	EXE	CP62	230	10930	6	EMEP	3200	300	MFL	38 X 20	24 X 11	138000	Any	49

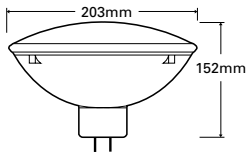
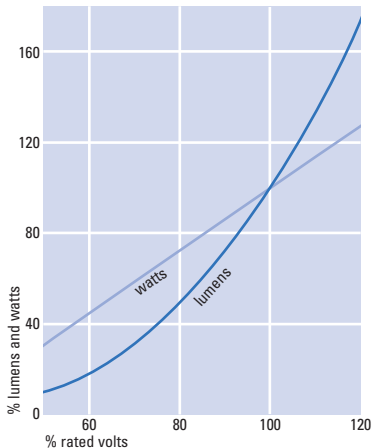


Fig. 49

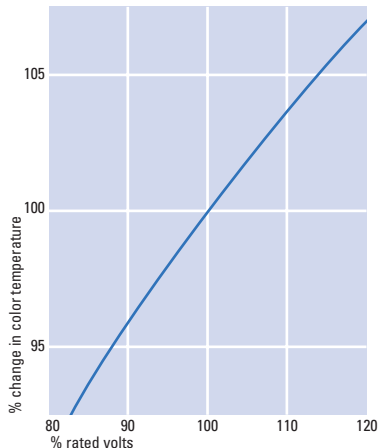
Watts	GE Description	Footnotes/ Safety Notices	ANSI Code	LIF Code	Volts	Product Order Code	Std. Pack Qty.	Base	Design Color Temp (K)	Rated Life (hrs)	Beam Descr.	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Approx. CP ⁶	Burning Position	Fig. No.
Table 29: PAR64 (8" Reflector) (continued)																
1000	EXE-Q1MPAR64CP62	63	EXE	CP62	240	10931	6	EMEP	3200	300	MFL	38 X 20	24 X 11	138000	Any	49
	EXG/PAR64/WFL	63	EXG		230	35482	6	EMEP	3200	300	WFL	73 X 36	57 X 21	38000	Any	49
	EXG/PAR64/WFL	63	EXG		240	35483	6	EMEP	3200	300	WFL	73 X 36	57 X 21	38000	Any	49
	CP95	63		CP95	230	30277	6	EMEP	3200	300		125 X 95	70 X 70	15000	Any	49
	CP95	63		CP95	240	30278	6	EMEP	3200	300		125 X 95	70 X 70	15000	Any	49
1200	GFC-Q1200PAR64/1	63	GFC	—	120	34808	6	EMEP	3200	400	VNSP	14 x 16	8 x 10	540000	Any	49
	GFB-Q1200PAR64/2	63	GFB	—	120	34810	6	EMEP	3200	400	NSP	16 X 18	8 X 10	450000	Any	49
	GFA-Q1200PAR64/5	63	GFA	—	120	34812	6	EMEP	3200	400	MFL	22 X 36	13 X 24	160000	Any	49

QUARTZLINE® HALOGEN LAMP PERFORMANCE

Variation of Light Output and Wattage with Applied Voltage for a Typical Studio Lamp

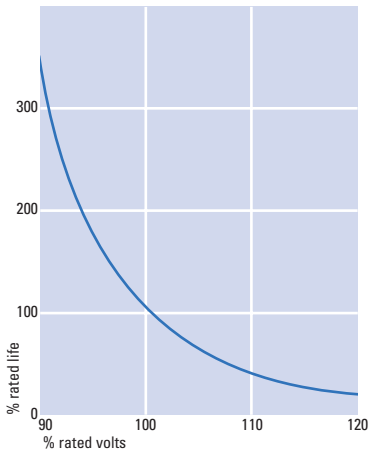


Color Temperature Variation with Voltage for a Typical Studio Lamp



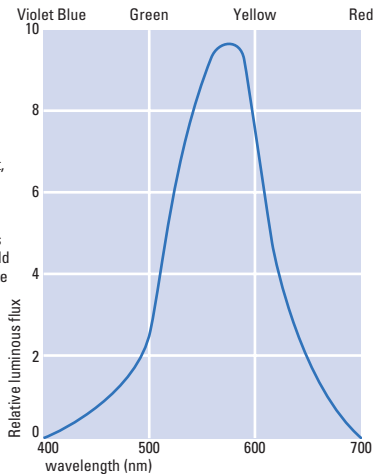
QUARTZLINE® HALOGEN LAMP PERFORMANCE (CONTINUED)

Typical Life Variation Against Operation



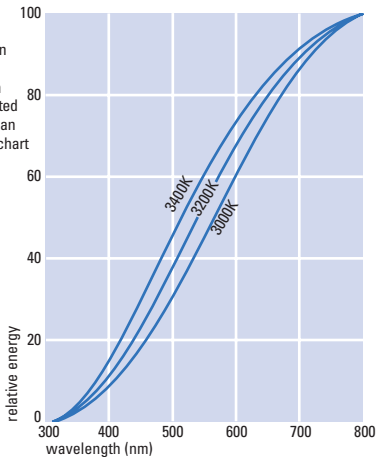
Spectral Distribution of Luminous Flux (Lumens) for Typical Theater and Studio

Calculations of lamp life achievement taken from this graph should be considered strictly theoretical as the life factor is considerably influenced by frequency of switching, environment, vibration, handling, cleaning, etc. This graph is based on the average achievement of numerous lamp tests, and thus should be used as an approximate guide to performance.



Total Spectral Energy Distribution of Typical Studio Lamp

Spectral energy distribution can be shown in absolute terms whereas radiation in terms of visible light is related to the response of the human eye. (Spectral distribution chart on previous page).



Operating Temperature of Tungsten Halogen Studio Lamps

Studio Lamps

The following maximum and minimum temperatures are suggested for optimum life. Operation outside these figures will not necessarily cause immediate failure but will affect life adversely to an increasing extent.

Seal: 500°C Maximum

Above this figure the sealing foil oxidises at a rate increasing with temperature and is frequently the cause of short life due to seal failure.

Bulb: 250° – 800°C

Outside this range the halogen cycle becomes less efficient and blackening may occur. Temperatures above 1200°C will cause the bulb to soften.

Pins: 350°C Maximum

Above this figure the plating on the pins may lose adhesion and the contact will deteriorate. Such

QUARTZLINE® HALOGEN LAMP PERFORMANCE (CONTINUED)

deterioration may form local hot spots which rapidly worsen and may result in arcing and irreparable damage to both lamp and holder. Should signs of this be evident on removal of a failed lamp, it is important

that a good contact is restored by replacing the lampholder before the next lamp is fitted. Otherwise the new lamp will rapidly fail in a similar manner.

Turn On Time of Studio Lamps

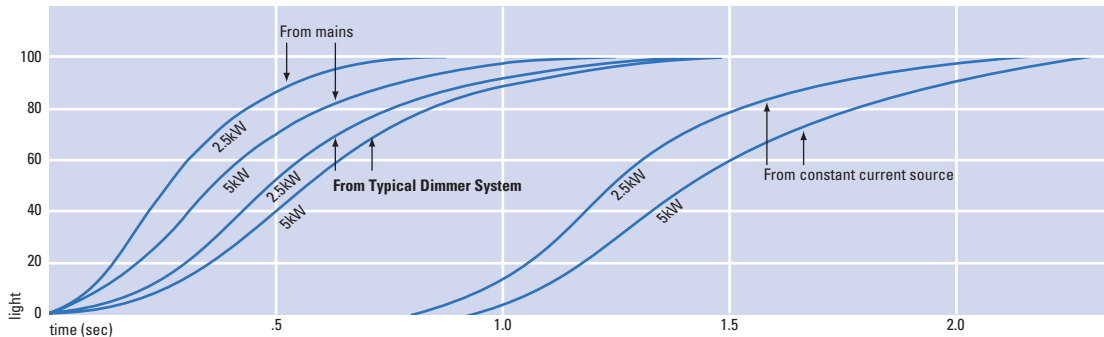




Fig. 50

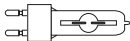


Fig. 51



Fig. 75



Fig. 76

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Volts	Initial Design Lumens	Design Color Temp (K)	Color CRI Index	CIE Color x y	Arc Length (mm)	Rated Life (hrs)	LCL (mm)	MOL (mm)	Burn Position	Fig. No.
Table 30: Discharge-CSR/CSD (Daylight) Metal Halide, Single-Ended Cold Start																	
250	T7	CSD250/2/SE	14, 63	27817	10	GY9.5	90	18000	8500	65+	.289 .305	5	2000			Any	50
575	T9	CSR575/2/T/SE	14, 63	49492	10	GX9.5	97	49000	7200	80+	.302 .320	7	1000	65	125	Any	50
		CSR575/2/SE	14, 63	15378	10	GX9.5	97	49000	7200	80+	.302 .320	7	1000	65	125	Any	50
700	T9	CSR700/2/SE	14, 63	49491	10	G22	70	55000	7200	80+	.302 .320	8	1000	75	155	Any	51
1200	T12	CSR1200/2/SE	14, 63	49490	6	G22/30X53	100	110000	7200	85+	.302 .320	10	800	85	175	Any	51
Table 31: Discharge-CSR (Daylight) Metal Halide, Single-Ended Short Arc																	
700	G7	CSR700/SA	14, 63	15380	6	GY9.5	70	58000	5600	75+	.330 .342	4	500	39	85	Any	75
1200	G9	CSR1200/SA	14, 18, 63	21849	6	GY22	100	100000	5800	80+	.326 .330	7	750	59	135	Any	76
1800	G9	CSR2000/SA	14, 18, 63	21801	4	GY22	100	155000	6000	80+	.320 .330	7	750	59	135	Any	76
Table 32: Discharge-CSR (Daylight) Metal Halide, Single-Ended Hot Restrike																	
125	T5	CSR125/SE/HR	14, 63	48461	10	GZX9.5	80	9400	5600	90+	.323 .328	4	200	39	75	Any	50
200	T6	CSR200/SE/HR	14, 63	48462	10	GZY9.5	70	15000	5600	90+	.323 .328	5	200	39	80	Any	50
400	T6	CSR400/SE/HR	14, 18, 63	21853	10	GZZ9.5	70	32000	6000	90+	.323 .328	6	750	60	110	Any	50



Fig. 51



Fig. 52



Fig. 53



Fig. 54



Fig. 55



Fig. 56



Fig. 57



Fig. 58



Fig. 59

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Volts	Initial Design Lumens	Design Color Temp (K)	Color CRI Index	CIE Color x y	Arc Length (mm)	Rated Life (hrs)	LCL (mm)	MOL (mm)	Burn Position	Fig. No.
Table 32: Discharge-CSR (Daylight) Metal Halide, Single-Ended Hot Restrike (continued)																	
575	T9.5	CSR575/SE/HR	14, 63	48463	10	G22	95	48000	6000	90+	.323 .328	7	750	70	145	Any	51
1200	T13	CSR1200/SE/HR	14, 63	48464	6	G38	100	110000	6000	90+	.323 .328	11	750	107	200	Any	52
2500	T19.5	CSR2500/SE/HR	14, 63	48465	6	G38	100	220000	6000	90+	.323 .328	14	500	127	240	Any	53
4000	T24	CSR4000/SE/HR	14, 63	48466	6	G38	200	380000	6000	90+	.323 .328	20	500	142	260	Any	53
6000	T26.5	CSR6000/SE/HR	14, 63	48467	6	G38	130	540000	6000	90+	.323 .328	24	300	210	360	Any	54
12000	T32	CSR12000/SE/HR	14, 63	48468	4	G38	160	1100000	6000	90+	.323 .328	28	250	255	450	Any	54
18000	T32	CSR18000/SE/HR	14, 63	22496	1	G51	225	1650000	6000	90+	.323 .328	35	250	260	460	Any	51

Table 33: Discharge-CSR (Daylight) Metal Halide, Double-Ended Hot Restrike																	
200	T4.5	CSR200/DE	14, 63	48450	10	X515	80	16000	6000	90+	.323 .325	8	300		75	H15	55
400	T6.5	CSR400/S/DE	14, 63	22478	10	SFc 10-4 SI/M4	49	26000	7500	80+	.323 .325	3	750		135	Any	56
575	T6.5	CSR575/DE	14, 63	48451	10	SFc 10-4 SI/M4	95	49000	6000	90+	.323 .325	7	750		145	Any	56

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Volts	Initial Design Lumens	Design Color Temp (K)	Color CRI Index	CIE Color x y	Arc Length (mm)	Rated Life (hrs)	LCL (mm)	MOL (mm)	Burn Position	Fig. No.
Table 33: Discharge-CSR (Daylight) Metal Halide, Double-Ended Hot Restrike (continued)																	
700	T6.5	CSR700/S/DE	14, 63	22493	10	SFc 10-4 SI/M4	70	59000	6000	85+	.323 .325	4	750		135	Any	56
1200	T6.5	CSR1200/S/DE	14, 63	22494	10	SFc 10-4 SI/M4	100	110000	6000	90+	.323 .325	7	500		145	H15	56
	T8.5	CSR1200/DE	14, 63	48453	6	SFc 15.5-6 SI/M6	100	110000	6000	90+	.323 .325	10	750		220	Any	56
2500	T9.5	CSR2500/DE	14, 63	48454	6	Sfa21-12	115	240000	6000	90+	.323 .325	14	500		355	Any	59
4000	T12	CSR4000/DE	14, 63	48455	6	Sfa21-12	200	410000	6000	90+	.323 .325	34	500		405	H15	59
6000	T16	CSR6000/DE	14, 63	48456	6	25x51 Cyl 165mm	125	570000	6000	90+	.323 .325	24	300		450	H15	57
12000	T22.5	CSR12000/DE	14, 63	48457	4	30x70 Cyl 165mm	160	1100000	6000	90+	.323 .325	32	300		470	H15	57
18000	T28	CSR18000/DE	14, 63	45459	4	30x70 Cyl 165mm	225	1650000	6000	90+	.323 .325	45	300		500	H15	58
		CSR18000/S/DE	14, 63	48460	4	30x70 Cyl 165mm	225	1650000	6000	90+	.323 .325	45	300		470	H15	58
Table 34*: CSR (Daylight) Metal Halide, Single-Ended Hot Restrike UV-Control																	
575	T9.5	CSR575/SE/HR/UV-C	14, 63	40460	10	G22	95	48000	5800	90+	.323 .328	7	750	70	145	Any	51
800	T9.5	CSR800/SE/HR/UV-C	14, 63	22495	10	G22	95	64000	5800	90+	.325 .327	7	1000	70	145	Any	51
1200	T13	CSR1200/SE/HR/UV-C	14, 63	27764	6	G38	100	110000	5800	90+	.323 .328	11	750	107	200	Any	52
2500	T19.5	CSR2500/SE/HR/UV-C	14, 63	40482	6	G38	100	220000	5800	90+	.323 .328	14	500	127	240	Any	53
4000	T24	CSR4000/SE/HR/UV-C	14, 63	27765	6	G38	200	380000	5800	90+	.323 .328	20	500	142	260	Any	53
6000	T26.5	CSR6000/SE/HR/UV-C	14, 63	40492	6	G38	130	540000	5800	90+	.323 .328	24	300	210	360	Any	54

* See Spectral Distribution Chart - Page 68

Lamp stocking color code: EUROPE ONLY, EUROPE and NORTH AMERICA, NORTH AMERICA ONLY



Fig. 60

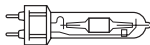


Fig. 61

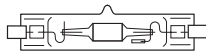


Fig. 62

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Ballast Type ANSI	Initial Design Lumens	Design Color Temp (K)	Color CRI Index	Arc Length (mm)	Rated Life (hrs)	LCL (mm)	MOL (mm)	Burn Position	Fig. No.
Table 35: Discharge-ConstantColor® CMH® Ceramic Metal Halide, Single-Ended Miniature																
20	T4.5	CMH20/TC/U/830/G8.5	14, 63	92696	12	G8.5	M156	1700	3000	81		7500V/ 9000H	51	86	Any	60
		CMH20/TC/UVC/U/830/G8.5	14, 63	92079	12	G8.5		1700	3000	81		7500V/ 9000H	51	86	Any	60
35	T4.5	CMH35/TC/UVC/U/830/G8.5	14, 63	38697	12	G8.5		3400	3000	82		10000	51	86	Any	60
39	T4.5	CMH39/TC/U/830/G8.5	14, 63	90352	12	G8.5	M130	3400	3000	82		10000	51	86	Any	60
		CMH39/TC/U/942/G8.5	14, 63	29698	12	G8.5	M130	3150	4200	88		12000	51	86	Any	60
70	T4.5	CMH70/TC/U/830/G8.5	14, 63	92585	12	G8.5	M98, 139	6200	3000	83		9000	51	86	Any	60
		CMH70/TC/UVC/U/830/G8.5	14, 63	38700	12	G8.5		6200	3000	83		9000	51	86	Any	60
		CMH70/TC/U/942/G8.5	14, 63	29701	12	G8.5	M98, 139	6000	4200	90		15000	51	86	Any	60
Table 36: Discharge-ConstantColor® CMH® Ceramic Metal Halide, Single-Ended G12																
20	T6	CMH20/T/U/830/G12	14, 63	29703	12	G8.5	M156	1700	3000	81		7500V/ 9000H	55	90	Any	61
35	T6	CMH35/T/UVC/U/830/G12	14, 63	38696	12	G12		3400	3000	82		10000	55	90	Any	61
39	T6	CMH39/T/U/830/G12	14, 63	20153	12	G12	M130	3400	3000	82		10000	55	90	Any	61

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Ballast Type ANSI	Initial Design Lumens	Design Color Temp (K)	Color CRI Index	Arc Length (mm)	Rated Life (hrs)	LCL (mm)	MOL (mm)	Burn Position	Fig. No.
Table 36: Discharge-ConstantColor® CMH® Ceramic Metal Halide, Single-Ended G12 (continued)																
39	T6	CMH39/T/U/942/G12	14, 63	29696	12	G12	M130	3150	4200	88		12000	55	90	Any	61
70	T6	CMH70/T/U/830/G12	14, 63	20016	12	G12	M85, 98, 139	6200	3000	83		15000	55	90	Any	61
		CMH70/T/U/942/G12	14, 63	20023	12	G12	M85, 98, 139	6000	4200	93		15000	55	90	Any	61
		CMH70/T/UVC/U/830/G12	14, 63	36844	12	G12		6200	3000	83		15000	55	90	Any	61
		CMH70/T/UVC/U/942/G12	14, 63	38694	12	G12		6000	4200	93		15000	55	90	Any	61
150	T6	CMH150/T/U/830/G12	14, 63	20017	12	G12	M81, 102, 142	14000	3000	82		12000	55	100	Any	61
		CMH150/T/U/942/G12	14, 63	20018	12	G12	M81, 102, 142	13000	4200	94		12000	55	100	Any	61
		CMH150/T/UVC/U/830/G12	14, 63	36863	12	G12		14000	3000	82		12000	55	100	Any	61
		CMH150/T/UVC/U/942/G12	14, 63	38694	12	G12		13000	4200	94		12000	55	100	Any	61
Table 37: Discharge-ConstantColor® CMH® Ceramic Metal Halide, Double-Ended																
70	T6	CMH70/TD/830/Rx7s	14, 63	92587	12	Rx7s	M85, 98, 139	7000	3000	81		15000	57	114	H45	62
		CMH70/TD/942/Rx7s	14, 63	92588	12	Rx7s	M85, 98, 139	6200	4200	88		15000	57	114	H45	62
		CMH70/TD/UVC/830/Rx7s	14, 63	36910	12	Rx7s		7000	3000	81		15000	57	114	H45	62
		CMH70/TD/UVC/942/Rx7s	14, 63	38698	12	Rx7s		6200	4200	88		15000	57	114	H45	62
150	T7	CMH150/TD/830/Rx7s	14, 63	92589	12	Rx7s	M81, 102, 142	14000	3000	80		15000	67	136	H45	62
		CMH150/TD/942/Rx7s	14, 63	92590	12	Rx7s	M81, 102, 142	12500	4200	93		15000	67	136	H45	62

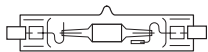


Fig. 62

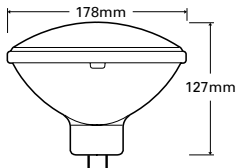


Fig. 47

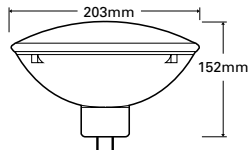
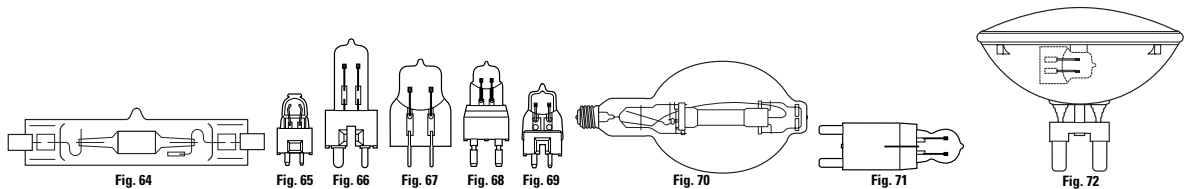


Fig. 49

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Ballast Type ANSI	Initial Design Lumens	Design Color Temp (K)	Color CRI Index	Arc Length (mm)	Rated Life (hrs)	LCL (mm)	MOL (mm)	Burn Position	Fig. No.
Table 37: Discharge-ConstantColor® CMH® Ceramic Metal Halide, Double-Ended (continued)																
150	T7	CMH150/TD/UVC/830/Rx7s	14, 63	36912	12	Rx7s		14500	3000	80		15000	67	136	H45	62
		CMH150/TD/UVC/942/Rx7s	14, 63	38692	12	Rx7s		12500	4200	93		15000	67	136	H45	62

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Ballast Type ANSI	Approx. CP ⁶	Design Color Temp (K)	Color CRI Index	Beam Descr.	Design Life (hrs)	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Burn Position	Fig. No.
Table 38: Discharge-ConstantColor® CMH® Ceramic Metal Halide, PAR56 Reflector																
150	PAR56	CMH150/PAR56/830/Gx16d/SP	14, 18, 63	22993	6	Gx16d	M81,102,142	80000	3000	80+	SP	5000	68 X 63	14 X 19	Any	47
		CMH150/PAR56/830/Gx16d/MFL	14, 18, 63	22994	6	Gx16d	M81,102,142	60000	3000	80+	MFL	5000	74 X 65	19 X 22	Any	47
		CMH150/PAR56/830/Gx16d/WFL	14, 18, 63	22996	6	Gx16d	M81,102,142	50000	3000	80+	WFL	5000	81 X 67	29 X 23	Any	47
		CMH150/PAR56/942/Gx16d/SP	14, 18, 63	22997	6	Gx16d	M81,102,142	80000	4200	90+	SP	5000	68 X 63	14 X 19	Any	47
		CMH150/PAR56/942/Gx16d/MFL	14, 18, 63	22700	6	Gx16d	M81,102,142	60000	4200	90+	MFL	5000	74 X 65	19 X 22	Any	47
		CMH150/PAR56/942/Gx16d/WFL	14, 18, 63	22702	6	Gx16d	M81,102,142	50000	4200	90+	WFL	5000	81 X 67	29 X 23	Any	47

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Ballast Type ANSI	Approx. CP ⁵	Design Color Temp (K)	Color CRI Index	Beam Descr.	Rated Life (hrs)	Beam Spread ⁵ (degrees)	Beam Angle ³ (degrees)	Burn Position	Fig. No.
Table 39: Discharge-ConstantColor[®] CMH[®] Ceramic Metal Halide, PAR64 Reflector																
150	PAR64	CMH150/PAR64/830/Gx16d/SP	14, 18, 63	16958	6	Gx16d	M81,102,142	154000	3000	80+	SP	8000	18 X 18	9 X 9	Any	49
		CMH150/PAR64/830/Gx16d/MFL	14, 18, 63	16959	6	Gx16d	M81,102,142	47000	3000	80+	MFL	8000	34 X 26	22 X 14	Any	49
		CMH150/PAR64/830/Gx16d/WFL	14, 18, 63	16960	6	Gx16d	M81,102,142	16000	3000	80+	WFL	8000	62 X 36	46 X 23	Any	49
		CMH150/PAR64/942/Gx16d/SP	14, 18, 63	16961	6	Gx16d	M81,102,142	154000	4200	90+	SP	8000	18 X 18	9 X 9	Any	49
		CMH150/PAR64/942/Gx16d/MFL	14, 18, 63	16962	6	Gx16d	M81,102,142	47000	4200	90+	MFL	8000	34 X 26	22 X 14	Any	49
		CMH150/PAR64/942/Gx16d/WFL	14, 18, 63	16963	6	Gx16d	M81,102,142	16000	4200	90+	WFL	8000	62 X 36	46 X 23	Any	49

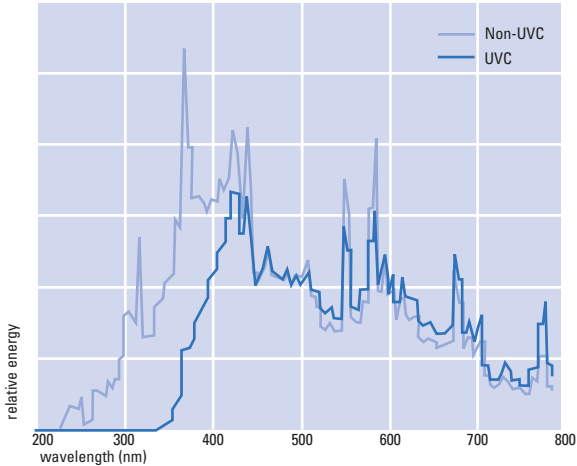


Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Volts or ANSI ballast	Initial Design Lumens	Design Color Temp (K)	Color CRI Index	Arc Length (mm)	Rated Life (hrs)	LCL (mm)	MOL (mm)	Burn Position	Fig. No.
Table 40: Discharge-CSI, CID, MVR/SPL, Double-Ended																
1500	T-7	SPL1500/H/652	14, 63	16920	1	Rx7s	Special	120000	5200	80		6000	127	257	H4	64
Table 41: Discharge-CSI, CID, MVR/SPL, Single-Ended																
140	T-7	CSS150/850/GY9.5	14, 63	34813	10	GY9.5	85	10000	5000	80	6	1000	30	48	BDTH	65
200	T-5	99-0211CID	14, 63	30560	1	Special	70	14000	5500	85	5.5	150	36	57	BDTH	66
400	T-6	99-0201CSI	14, 63	30555	1	Special	100	32000	4000	80	9	500	25	55	BDTH	67
575	T-7	99-0415CID	14, 63	30563	1	G22	95	40250	5500	85	9	500	52	94	BDTH	68
		CSS575/855/GY9.5	14, 63	34822	10	GY9.5	95	40250	5500	85	9	500	52	94	BDTH	69
1000	T-10	99-0221CSI	14, 63	30558	1	G22	77	90000	4000	80	14	500	64	115	BDTH	68
		99-0222CID	14, 63	30561	1	G22	77	70000	5500	85	15	500	64	115	BDTH	68

Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Volts or ANSI ballast	Initial Design Lumens	Design Color Temp (K)	Color CRI Index	Arc Length (mm)	Rated Life (hrs)	LCL (mm)	MOL (mm)	Burn Position	Fig. No.
Table 41: Discharge-CSI, CID, MVR/SPL, Single-Ended (continued)																
1500	BT56	MVR1500/U/SPORTS	14, 63	47326	6	E39	M48	178000	4000	65		3000	241	390	Any	70
		MVR1500/HBU	14, 63	37405	6	E39	M48	165000	3900	65		3000	241	390	HBU	70
1650	BT56	MVR1650/HOR	14, 63	25532	6	E39p	M112	177000	3200	65		3000	241	390	H15	70
2000	T-9	MQI/2000/T9/40	14, 63	12275	10	Special	M134	200000	4000	65		4000	109	254	H15	
2500	G-13	99-0431CID/HR	14, 63	30567	1	G38	100	200000	5500	85	18	350	127	175	BDTH	71

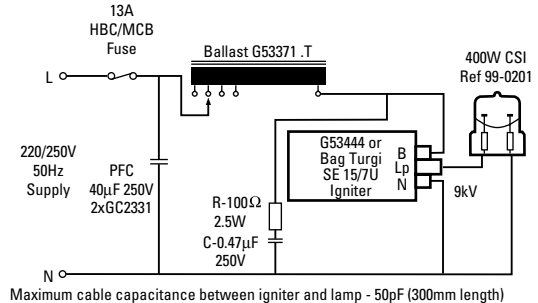
Watts	Bulb OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Volts or ANSI ballast	Approx CP ⁶	Design Color Temp (K)	Color CRI Index	Arc Length (mm)	Rated Life (hrs)	Beam Spread ⁵ (degree)	MOL (mm)	Burn Position	Fig. No.
Table 42: Discharge-CSI, CID, MVR/SPL, PAR64 Reflector																
1000	PAR64	SPL1000/PAR64/840	14, 19, 63	29333	1	G38	77	1350000	4000	80		3500		175	Any	72
		SPL1000/PAR64/HR	14, 19, 63	29336	1	G38	77	1350000	4000	80		3500		175	Any	72
		99-1225CID	14, 23, 63	30360	1	G38	77	850000	5500	85	15	1500	20	175	Any	72
		99-1425CID/HR	14, 23, 63	30371	1	G38	77	850000	5500	85	15	1000	20	175	Any	72
1200	PAR64	99-1435CID/HR	14, 24, 63	30372	1	G38	100	820000	5500	85	18	1000	18	175	Any	72

UV-Control Discharge Spectral Distribution

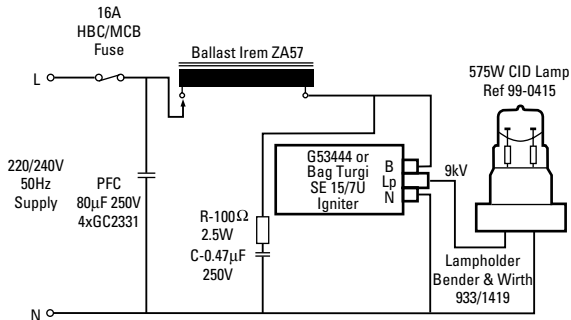


DISCHARGE LAMP WIRING DIAGRAMS

400 Watt CSI Lamp Circuit Diagram

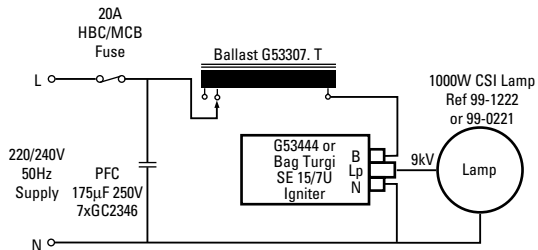


575 Watt CID Lamp Circuit Diagram



Maximum cable capacitance between igniter and lamp - 50pF (300mm length)

1000 Watt CSI Lamp Circuit Diagram



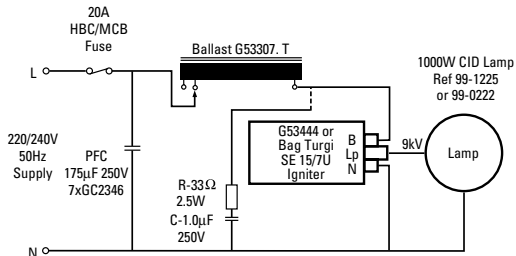
Lampholder for 99-1222 - Bender & Wirth 938/223 and for 99-0221 - Bender & Wirth 933/1419

Maximum cable capacitance between igniter and lamp - 50pF (300mm length)

Replace G53445 (or Bag Turgi SE600/D) igniter sparkgap element when replacing a failed lamp

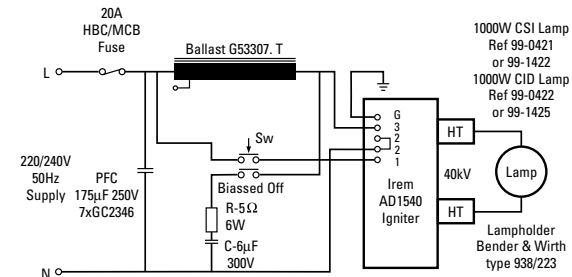
DISCHARGE LAMP WIRING DIAGRAMS (CONTINUED)

1000 Watt CID Lamp Circuit Diagram



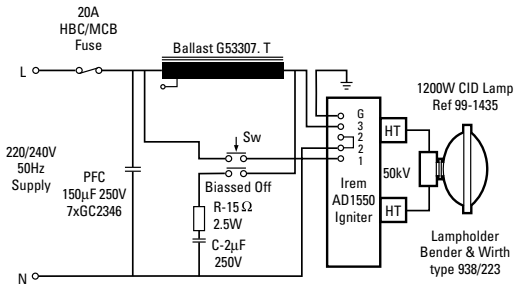
Lampholder for 99-1222 - Bender & Wirth 938/223 and for 99-0222- Bender & Wirth 933/1419
 R/C components necessary ONLY when used on a 220V rate supply
 Maximum cable capacitance between igniter and lamp - 50pF (300mm length)
 Replace G53445 (or Bag Turgi SE600/D) igniter sparkgap element when replacing a failed lamp

1000 Watt CSI/CID Hot-Restart Lamp Circuit



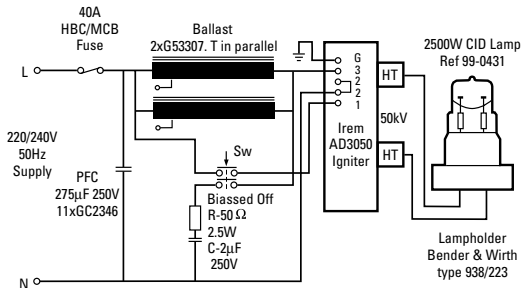
Sw - Normally open contacts - Manual switch or 2 second ON timer
 Maximum cable capacitance between igniter and lamp - 30pF (200mm length)

1200 Watt CID Hot-Restart Lamp Circuit Diagram



Sw - Normally open contacts - Manual switch or 2 second ON timer
 Maximum cable capacitance between igniter and lamp - 30pF (200mm length)

2500 Watt CID Hot-Restart Lamp Circuit Diagram



Sw - Normally open contacts - Manual switch or 2 second ON timer
 Maximum cable capacitance between igniter and lamp - 30pF (200mm length)



Fig. 73

Watts	Bulb OD	GE Description	Footnote/ Safety Notices	Product Code	Std. Pack Qty.	Base	Initial Lumens	Mean Lumens	Rated Life (hrs)	MOL (mm)	Fig. No.
Table 43: Fluorescent Cinema Lighting, Standard Cinema											
35	T12	F20T12/CINEMA32/HO	8, 9	15712	24	G-13 Med BiPin	1130	800	7500	610	73
		F20T12/CINEMA55/HO	8, 10	15713	24	G-13 Med BiPin	1100	770	7500	610	73
60	T12	F40T12/CINEMA32/HO	8, 9	15716	30	G-13 Med BiPin	2900	2030	15000	1219	73
		F40T12/CINEMA55/HO	8, 10	15717	30	G-13 Med BiPin	2820	1974	15000	1219	73
85	T12	F72T12/CINEMA32/HO	8, 9	15718	15	G-13 Med BiPin	4150	2905	15000	1829	73
		F72T12/CINEMA55/HO	8, 10	15719	15	G-13 Med BiPin	4050	2835	15000	1829	73
110	T12	F96T12/CINEMA32/HO	8, 9	15720	15	G-13 Med BiPin	5800	4060	15000	2438	73
		F96T12/CINEMA55/HO	8, 10	15721	15	G-13 Med BiPin	5650	3955	15000	2438	73



Fig. 73

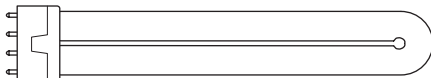


Fig. 74

Watts	Bulb OD	GE Description	Footnote/ Safety Notices	Product Code	Std. Pack Qty.	Base	Initial Lumens	Mean Lumens	Rated Life (hrs)	MOL (mm)	Fig. No.
Table 44: Fluorescent Cinema Lighting, CovRguard® Cinema											
35	T12	F20T12/CINEMA32/HO/CVG	8, 9	15775	24	G-13 Med BiPin	1130	800	7500	610	73
		F20T12/CINEMA55/HO/CVG	8, 10	15776	24	G-13 Med BiPin	1100	770	7500	610	73
60	T12	F40T12/CINEMA32/HO/CVG	8, 9	15782	30	G-13 Med BiPin	2900	2030	15000	1219	73
		F40T12/CINEMA55/HO/CVG	8, 10	15783	30	G-13 Med BiPin	2820	1974	15000	1219	73
85	T12	F72T12/CINEMA32/HO/CVG	8, 9	15785	15	G-13 Med BiPin	4150	2905	15000	1829	73
		F72T12/CINEMA55/HO/CVG	8, 10	15786	15	G-13 Med BiPin	4050	2835	15000	1829	73
110	T12	F96T12/CINEMA32/HO/CVG	8, 9	15794	15	G-13 Med BiPin	5800	4060	15000	2438	73
		F96T12/CINEMA55/HO/CVG	8, 10	15798	15	G-13 Med BiPin	5650	3955	15000	2438	73

Table 45: Fluorescent Cinema Lighting, BiAx®											
55	T5	F55BX/CINEMA32	11	15811	10	2G11-4 PIN	4100	3485	8000	536	74
		F55BX/CINEMA56	13	15814	10	2G11-4 PIN	4100	3485	8000	536	74
		F55BX/CINPLUS/32	18	22084	10	2G11-4 PIN	2400	2040	8000	536	74
		F55BX/CINPLUS/55	18	22085	10	2G11-4 PIN	2400	2040	8000	536	74

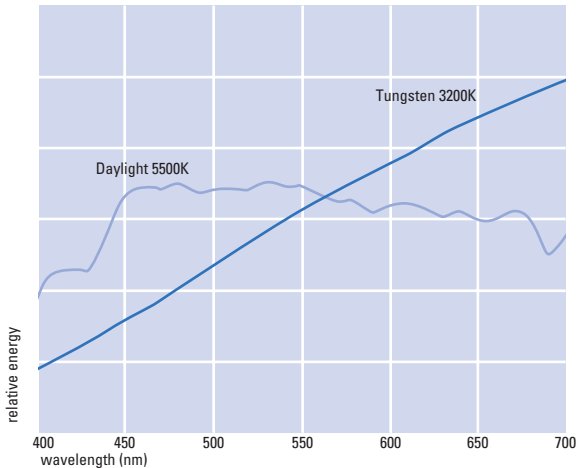
GE CINEMA FLUORESCENT LAMPS

GE Cinema Lamps Provide Predictable Color for Standard Film Processing

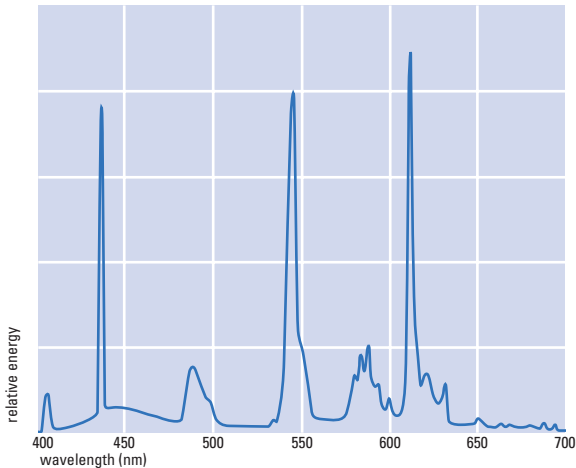
In the entertainment industry the use of color film has always been based on incandescent or Tungsten lighting. These standards were established before fluorescent lighting was invented in 1939. With the introduction of fluorescent lighting it was soon discovered that cool white fluorescent and triphosphor lamps did not work well with film. Extensive filtering was required resulting in loss of light and added cost and labor.

Now Cinema lamps require phosphore blends which better match Daylighting and Tungsten Spectral Power Distribution (SPD) in order to provide predictable color for standard film processing — without the need for expensive filtering on the set.

SPD for Tungsten 3200K and Daylight 5500K



SP41 Spectral Power Distribution



Standard SP41 Spectral Power Distribution

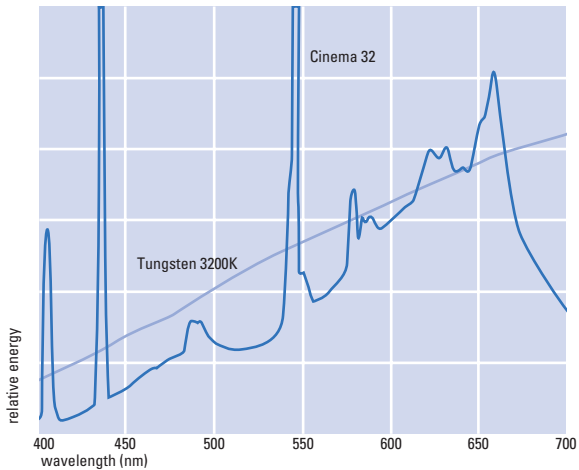
Typical modern triphosphor fluorescent lamp spectra optimized for eye response, especially green for lumens.

Matching Phosphor Blends to Film Light Reference Sources

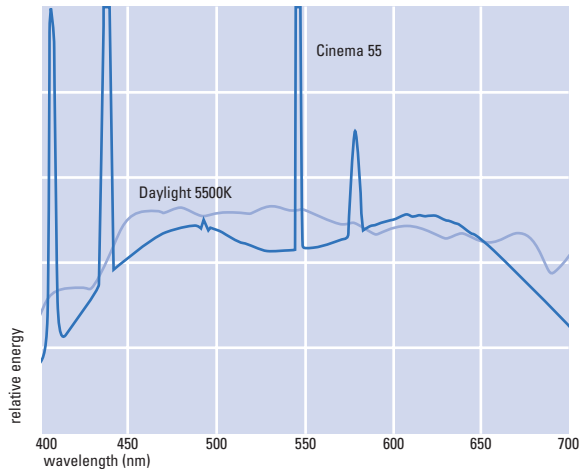
GE Cinema design uses full spectrum phosphor blends for Cinematography lamps. Color is matched for Tungsten 3200K and Daylight 5500K spectra. Final matching is done using Minolta IIIf meter as a gage for determining filtering needs which become the effective color specification limits.

GE CINEMA FLUORESCENT LAMPS (CONTINUED)

Cinema 32 vs Tungsten 3200K



Cinema 55 vs. 5500K Daylight



A Full Range of Operating Currents and Dimming Conditions Can Be Used Without Requiring Added Filtration

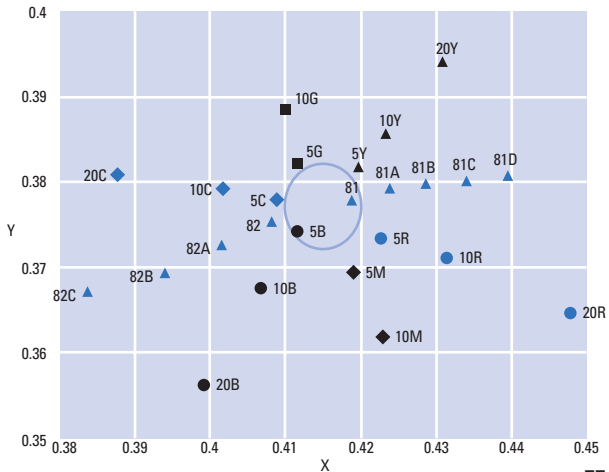
GE Cinema lamps are designed to minimize the need to add filters for color correction.

X, Y Chromaticity Plots for Daylight 5500K (Chart 2) and Tungsten 3200K (Chart 1) Light Sources

Kodak Wratten filter values, and corresponding color shift are also indicated. Color specification limits are best represented by circles rather than MacAdam Ellipses for the Cinema lamp products due to the differences between eye and film color sensitivity.

Chart 1: Tungsten 3200K Color Shift with Wratten Filters

Color Specification for Cinema 32



GE CINEMA FLUORESCENT LAMPS (CONTINUED)

Chart 2: Daylight Color Shift with Wratten Filters

Color Specification for Cinema 55

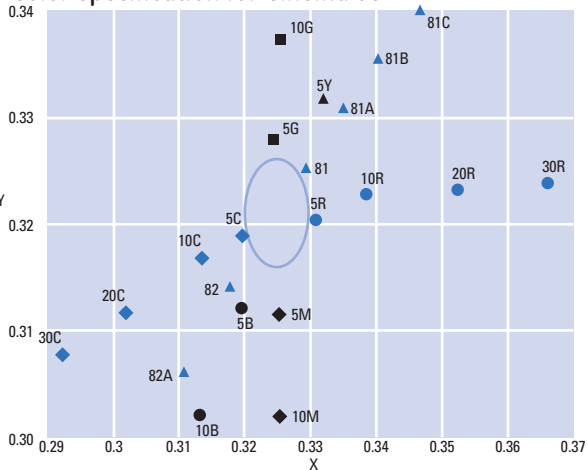
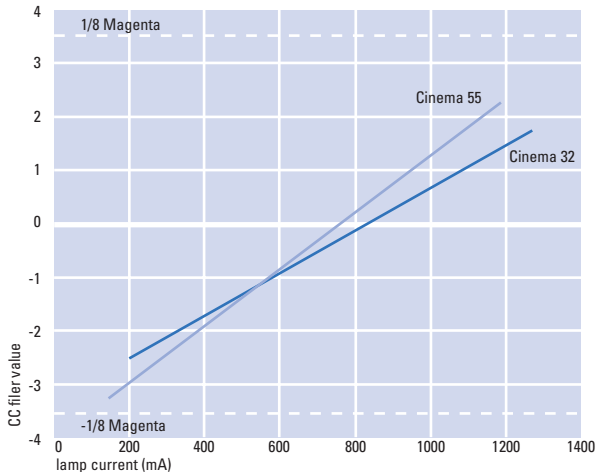


Chart 3: Color vs. Lamp Current for F40T12 Cinema Lamps



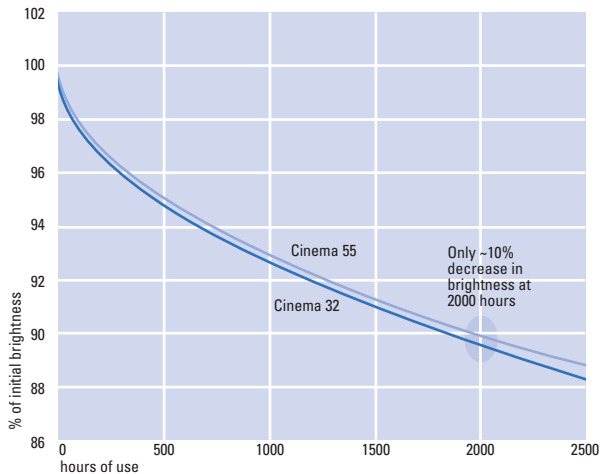
Color vs. Lamp Current for F40T12 Cinema Lamps (Chart 3)

- Cinema lamp color shift with lamp operating current.
- All readings made using Minolta IIIf color meter.
- Lamp stabilized for 20 minutes at each current level before measuring color.

Lamp Brightness Decreases with Lamp Age (Chart 4)

- Cinema lamps maintain 90% of initial brightness up to 2000 hours of use.
- Color drift during this time period is minimal for both colors.
- Cinema lamps exhibit good brightness stability and minimal color change with use.

Chart 4: Lamp Brightness Decreases with Lamp Age



GE CINEMA FLUORESCENT LAMPS (CONTINUED)

Usage Guidelines

Warm Up Time

Allow at least ½ hour stabilization time before checking color of GE Cinema lamps. This applies to new and used lamps. Color will drift (mostly the mired shift, or LB value) during the warm up period.

Breakage During Set-up and Transport

Specify covRguard® safety coated lamps when lamps will be moved and transported during use. The covRguard® design minimizes breakage and contains the lamp components if breakage occurs – minimizing set clean-up issues.

Ballast Compatibility

Assure that the correct type of ballast is used with Cinema lamps. High current ballast such as provided with Kino Flo fixtures require HO lamp types. If brightness control through dimming is desired, be sure to specify ballasts designed for dimmability.

Fixture Compatibility

GE recommends the F40/HO and F20/HO versions to be used in high current cinematography fixtures such as those manufactured by Kino Flo. The standard F40 and F20 Cinema lamps are recommended for ANSI approved general lighting fixtures.

FILTERS

Selected Manufacturers of Filters for Color Correction of Light Sources

Selected filter products (see websites for additional information:
www.rosco.com, www.leefilters.com, www.gamonline.com

Kelvin Temperature Compensation

AMBER TO REDUCE KELVIN

Rosco					Lee					Gam
Balance	Product No.	Mired Shift	Tran (%)		Balance	Product No.	Mired Shift	Tran (%)	Product No.	
To 3200K	3401	+131	58	To	3200K	204 (CTO)	+159	55.4	1543	
2900K	3407(CTO)	+167	47		3600K	285 (3/4CTO)	+124	61.3	1546	
3200K	3411 (3/4CTO)	+131	58		3800K	205 (1/2CTO)	+109	70.8	1549	
3800K	3408 (1/2CTO)	+81	73		4600K	206 (1/4CTO)	+64	79.1	1552	
4500K	3409 (1/4CTO)	+42	81		5550K	223 (1/8CTO)	+26	85.2	1555	
4900K	3410 (1/8CTO)	+20	92							
2000K	3420 (2X CTO)	+320	23						1540	

FILTERS (CONTINUED)

Kelvin Temperature Compensation (continued)

STRAW TO REDUCE KELVIN

Rosco					Lee					Gam
Balance 5500K	Product No.	Mired Shift	Tran (%)		Balance 6500K	Product No.	Mired Shift	Tran (%)		Product No.
To 2900K	3441 (full CTS)	+131	47		To 3200K	441 (full CTS)	+160	57.3		
3800K	3408 (1/2 CTS)	+81	73		4300K	442 (1/2 CTS)	+81	71.2		
4500K	3409 (1/4 CTS)	+42	81		5100K	443 (1/4 CTS)	+42	79.8		
4900K	3410 (1/8 CTS)	+20	92		5700K	444 (1/8 CTS)	+20	83.1		

Filters will reduce the color temperature of any source. Both 5500K and 6500K are used for reference.

BLUE TO INCREASE KELVIN

Rosco

Lee

Gam

Balance 3200K	Product No.	Mired Shift	Tran (%)	Balance 3200K	Product No.	Mired Shift	Tran (%)	Product No.
To 5500K	3202 (full CTB)	-131	36	To 5700K	201 (full CTB)	-137	34	1523
4700K	3203 (3/4 CTB)	-100	41	5000K	281 (3/4 CTB)	-112	45.5	1526
4100K	3204 (1/2 CTB)	-68	52	4300K	202 (1/2 CTB)	-78	54.9	1529
3800K	3206 (1/3 CTB)	-49	64					
3500K	3208 (1/4 CTB)	-30	74	3600K	203 (1/4 CTB)	-35	69.2	1532
3300K	3216 (1/8 CTB)	-12	81	3400K	218 (1/8 CTB)	-18	81.3	1535
10000K	3220 (2X CTB)	-260	10	app 26000K	200 (2X CTB)	-274	16.2	1520

Color Compensation (CC)

INCREASE GREEN/REDUCE MAGENTA

Rosco

Lee

Gam

	Product No.	CC Value	Tran %	Product No.	CC Value	Tran %	Product No.
Plus Green	3304	30G	76	244	30G	74.2	1585
1/2 Plus Green	3315	15G	90	245	15G	81.7	1587
1/4 Plus Green	3316	7.5G	92	246	7.5G	84.6	1588
1/8 Plus Green	3317	3.5G	93	278		87.7	1589

FILTERS (CONTINUED)

Color Compensation (CC) (continued)

REDUCE GREEN/INCREASE MAGENTA

Rosco				Lee			Gam
	Product No.	CC Value	Tran %	Product No.	CC Value	Tran %	Product No.
Minus Green	3308	30M	55	247	30M	57.8	1580
1/2 Minus Green	3313	15M	71	248	15M	72	1582
1/4 Minus Green	3314	7.5M	81	249	7.5M	82.4	1583
1/8 Minus Green	3318	3.5M	88	279		86.5	1584

FILTER TUNGSTEN TO MATCH FLUORESCENT (BY INDUSTRY NAME)*

Industry Name	Approx. K	Rosco	Lee
Cool White/Daylight	5700	60C (#4360)	241 (with FL-B or FL-D)
White	4300		242 (with FL-B or FL-D)
Warm White	3600	30C+15C (#4330+4315)	243 (with FL-B or FL-D)

FILTER FLUORESCENT/DISCHARGE TO TUNGSTEN OR DAYLIGHT FILM*

Rosco

Lee

Source	To Tungsten	To Daylight	To Tungsten
Cool White	60R (4660)	30M (4730)	
Warm White	30R+15R (4360+4615)	30B (4230)	
Multi-Vapor	60R+15Y (4660+4515)	15R+15M (4615+4715)	
HMI		3107	236
CID			237
CSI			238
White Flame Arc	3106		232

* Discharge lamps are diverse in performance, so the above is a very limited list of examples. Contact the filter manufacturer for additional information and recommendations.

TEMPERATURE RATING OF CONDUCTOR

Allowable Ampacities of Insulated Conductors Rated 0 – 2000 Volts, 60°C – 90°C (140°F – 194°F), Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried), Based on Ambient Temperature of 30° C (86°F).

Copper

60°C (140°F) Types: TW, UF

75°C (167°F) Types: RHW, THHW, THW, THWN, USE, XHHW, ZW

90°C (194°F) Types: FEP, FEPB, MI, RHH, RHW-2, SA, SIS, TBS, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW, XHHW-2, ZW-2

Size AWG or 60°C kcmil (140°F)	75°C (167°F)	90°C (194°F)	Size AWG or 60°C kcmil (140°F)	75°C (167°F)	90°C (194°F)	Size AWG or 60°C kcmil (140°F)	75°C (167°F)	90°C (194°F)
18	–	–	1/0	125	150	750	400	475
16	–	–	2/0	145	175	800	410	490
14	20	20	3/0	165	200	900	435	520
12	25	25	4/0	195	230	1000	455	545
10	30	35	250	215	255	1250	495	590
8	40	50	300	240	285	1500	520	625
6	55	65	350	260	310	1750	545	650
4	70	85	400	280	335	2000	560	665
3	85	100	500	320	380			
2	95	115	600	355	420			
1	110	130	700	385	460			

Aluminum or Copper-Clad Aluminum

60°C (140°F) Types: TW, UF

75°C (167°F) Types: RHW, THHW, THW, THWN, USE, XHHW

90°C (194°F) Types: RHH, RHW-2, SA, SIS, TBS, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW, XHHW-2, ZW-2

Size AWG or 60°C kcmil (140°F)	75°C (167°F)	90°C (194°F)	Size AWG or 60°C kcmil (140°F)	75°C (167°F)	90°C (194°F)	Size AWG or 60°C kcmil (140°F)	75°C (167°F)	90°C (194°F)
12	20	20	3/0	130	155	800	330	395
10	25	30	4/0	150	180	900	355	425
8	30	40	250	170	205	1000	375	445
6	40	50	300	190	230	1250	405	485
4	55	65	350	210	250	1500	435	520
3	65	75	400	225	270	1750	455	545
2	75	90	500	260	310	2000	470	560
1	85	100	600	285	340			
1/0	100	120	700	310	375			
2/0	115	135	750	320	385			

Allowable Ampacities of Single-Insulated Conductors Rated 0 – 2000 Volts in Free Air, Based on Ambient Air Temperature of 30°C (86°F)

Copper

60°C (140°F) Types: TW, UF

75°C (167°F) Types: RHW, THHW, THW, THWN, USE, XHHW, ZW

90°C (194°F) Types: FEP, FEPB, MI, RHH, RHW-2, SA, SIS, TBS, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW, XHHW-2, ZW-2

Size	60°C	75°C	90°C
AWG or kcmil	(140°F)	(167°F)	(194°F)
18	—	—	18
16	—	—	24
14	25	30	35
12	30	35	40
10	40	50	55
8	60	70	80
6	80	95	105
4	105	125	140
3	120	145	165
2	140	170	190
1	165	195	220

Size	60°C	75°C	90°C
AWG or kcmil	(140°F)	(167°F)	(194°F)
1/0	195	230	260
2/0	225	265	300
3/0	260	310	350
4/0	300	360	405
250	340	405	455
300	375	445	505
350	420	505	570
400	455	545	615
500	515	620	700

Size	60°C	75°C	90°C
AWG or kcmil	(140°F)	(167°F)	(194°F)
600	575	690	780
700	630	755	855
750	655	785	885
800	680	815	920
900	730	870	985
1000	780	935	1055
1250	890	1065	1200
1500	980	1175	1325
1750	1070	1280	1445
2000	1155	1385	1560

Aluminum or Copper-Clad Aluminum

60°C (140°F) Types: TW, UF

75°C (167°F) Types: RHW, THHW, THW, THWN, USE, XHHW

90°C (194°F) Types: RHH, RHW-2, SA, SIS, TBS, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW, XHHW-2, ZW-2

Size	60°C	75°C	90°C
AWG or kcmil	(140°F)	(167°F)	(194°F)
12	25	30	35
10	35	40	40
8	45	55	60
6	60	75	80
4	80	100	110
3	95	115	130
2	110	135	150
1	130	155	175

Size	60°C	75°C	90°C
AWG or kcmil	(140°F)	(167°F)	(194°F)
1/0	150	180	205
2/0	175	210	235
3/0	200	240	275
4/0	235	280	315
250	265	315	355
300	290	350	395
350	330	395	445
400	355	425	480
500	405	485	545

Size	60°C	75°C	90°C
AWG or kcmil	(140°F)	(167°F)	(194°F)
600	455	540	615
700	500	595	675
750	515	620	700
800	535	645	725
900	580	700	785
1000	625	750	845
1250	710	855	960
1500	795	950	1075
1750	875	1050	1185
2000	960	1150	1335

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