

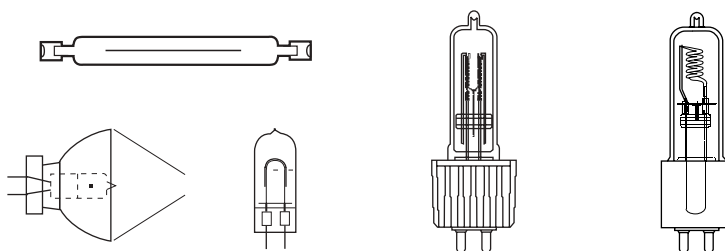
OSRAM BRAND PHOTO-OPTIC LIGHT SOURCES

Lighting to provide solutions in diverse applications such as effect lighting, stage, studio, TV, projection systems, microlithography, medical/scientific, industrial, and airfield/aircraft.

Photo-Optic Lamp Types

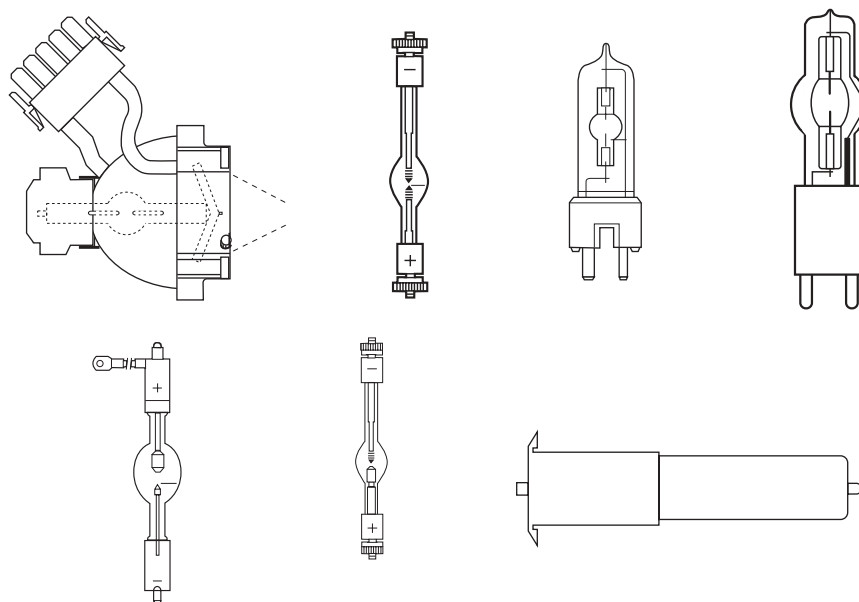
HALOGEN

Airfield/Aircraft
Audio Visual
Special Purpose Heat Lamps
Studio, Theatre, TV & Video
HPL
HPR™
OSRAM STUDIOLINE®



DISCHARGE

HBO®
HMD®
HMI®
HMP®
HSD®
HSR®
HTI®
LINEX®
VIP®
XBO®
XERADEX®



The following item was accepted into the 2003 IESNA Progress Report which recognizes innovative products introduced to the industry during that year.

LINEX Mercury-Free Xenon Fluorescent Systems

IMPORTANT! PHOTO-OPTIC WARNINGS

In accordance with ANSI/IESNA Standard RP-27, all Photo-Optic Discharge lamps are Risk Group 3 products, and all Photo-Optic Incandescent and Tungsten Halogen lamps are Risk Group 2 products.

Please read and understand the Safety and Warning Instructions for each lamp type before use. Safety and Warning Instructions can be found at the end of this Photo-Optic section.

AUDIOVISUAL

ANSI Code	Product Number	Ordering Abbreviation	Application	Watts	Volts	Base	Lumens	Avg Rated Life(hrs)	Bulb	Pkg Qty	Footnotes
BAA	54924	BAA	Projector	75	28	GX5.3		2000	MR16	24	
BBA	11619	BBA 118V									

AUDIOVISUAL

ANSI Code	Product Number	Ordering Abbreviation	Application	Watts	Volts	Base	Lumens	Avg Rated Life(hrs)	Bulb	Pkg Qty	Footnotes
EHE	54038	EHE 64626 HLX	Projector	100	12	PG22	3600	50	T4	30	
EHJ	54045	EHJ 64655 HLX	Projector, Microfilm, Microscope, Studio	250	24	G6.35	10000	50	T4	100	
EJA	54753	EJA	Projector - Fiber optics	150	21	GX5.3	354	40	MR16	24	
EJL	54730	EJL	Projector - 16mm Color printer	200	24	GX5.3	725	50	MR16	24	4
EJM	54747	EJM	Projector - 8mm	150	21	GX5.3	170	40	TB18	24	4
EJV	54732	EJV	Projector - 8mm, Printer	150	21	GX5.3	270	100	MR16	24	4
EKE	54842	EKE	Projector - 8mm, Fiber-Optics	150	21	GX5.3	80	200	MR16	24	4
EKE/X	58771	EKE/X	Projector - 8mm, Fiber-Optics	150	21	GX5.3	80	1000	MR16	24	4
EKP/ENA	54734	EKP/ENA	Projector - 8mm	80	30	GX5.3	115	25	MR16	24	4
ELC	54212	ELC 64653 HLX	Overhead projection, fiber-optic, entertainment	250	24	GX5.3		50	MR16	20	
ELC	54840	ELC	Overhead projection, fiber-optic, entertainment	250	24	GX5.3	800	50	MR16	24	4
ELC-3/X	54841	ELC-3/X	Overhead projection, fiber-optic, entertainment	250	24	GX5.3	550	300	MR16	24	4
ELC-7/X	54811	ELC-7/X BULK	Overhead projection, fiber-optic, entertainment	250	24	GX5.3	475	700	MR16	100	4
ELC-7/X	54814	ELC-7/X	Overhead projection, fiber-optic, entertainment	250	24	GX5.3	475	700	MR16	24	4
ELC-HL	54804	ELC-HL	Overhead projection, fiber-optic, entertainment	250	24	GX5.3	950	50	MR16	24	
ELD	54745	ELD	Projector - Microfilm	150	21	GX5.3	350	40	MR16	24	4
ELH	54776	ELH	Projector - Overhead	300	120	GY5.3	525	35	MR16	24	4
ELS	54810	ELS	Projector	50	16	GX7.9	20	650	TB14	24	4
ELV	54765	ELV	Projector	150	22	GX7.9	225	100	TB18	24	4
ELZ	54816	ELZ	Projector	150	21	GX7.9	350	60	TB18	24	4
EMG	54828	EMG	Projector	500	220	GY9.5		75	T6	24	
EMM/EKS	54960	EMM/EKS	Projector - 16mm	250	24	GX7.9	725	50	MR14	24	4
ENG	54957	ENG	Projector	300	120	GY5.3	690	15	MR16	24	4
ENH	54986	ENH	Projector - Slide	250	120	GY5.3	340	175	MR16	24	4
ENH-5	54988	ENH-5	Projector - Overhead	250	125	GY5.3	340	175	MR16	24	4
ENL	58786	ENL	Projector - Display, Fiber-Optics	50	12	GX5.3	85	4000	MR16	24	
ENX	54984	ENX	Projector - Overhead	360	82	GY5.3	460	75	MR16	24	4
ENX-5	54913	ENX-5	Projector - Overhead	360	86	GY5.3	540	75	MR16	24	4
ENX-7	54916	ENX-7	Projector - Overhead	360	88	GY5.3	540	75	MR16	24	4
EPR	54829	EPR	Projector	500	120	G17t		50	T6	24	1
EPS	54977	EPS	Projector	500	240	G17t		50	T6	24	1,3
EPS/230	54975	EPS/230	Projector	500	230	G17t		50	T6	24	3,5
EPT	58782	EPT	Projector - Fiber-Optics	42	11	GX5.3		8000	MR16	24	
EPV	54926	EPV	Projector - Microfilm	90	14	GX5.3	36	500	MR16	24	4

AUDIOVISUAL

ANSI Code	Product Number	Ordering Abbreviation	Application	Watts	Volts	Base	Lumens	Avg Rated Life(hrs)	Bulb	Pkg Qty	Footnotes
EPX	54927	EPX	Projector - Microfilm	90	14	GX5.3	43	500	MR16	24	4
EPZ	54743	EPZ	Projector - Microfilm	50	14	GX5.3	80	3000	MR16	24	4
ERK	55050	ERK BULK	Projector	12	6	Wedge		150	T2.25	500	
ERM	55054	ERM BULK	Projector	7	6	Wedge		30	T2.25	500	
ESA/FHD	54025	ESA/FHD 64225	Projector	10	6	G4	200	100	T3	100	
ESB	54019	ESB 64250 HLX	Projector	20	6	G4	480	100	T3.5	100	
ETJ	54928	ETJ	Projector	250	120	GY5.3	600	175	MR16	24	4
EVA	54052	EVA 64623 HLX	Projector, Microfilm, Microscope, Studio	100	12	GY6.35	2800	2000	T4	100	
EVC	54047	EVC 64657 HLX	Projector, Microfilm, Microscope, Studio	250	24	G6.35	9000	300	T4	100	
EVD	54100	EVD 64663 HLX	Projector, Microfilm, Studio	400	36	G6.35	16000	50	T6	24	6
EVD	54103	EVD 64663 HLX BULK	Projector, Microfilm, Studio	400	36	G6.35	16000	50	T6	100	
EVW	54723	EVW	Projector	250	82	GY5.3	390	50	MR16	24	4
EXR	54392	EXR	Projector - Slide	300	82	GX5.3	925	35	MR13	24	4
EXR	54393	EXR BULK	Projector - Slide	300	82	GX5.3		35	MR13	100	4
EXW	54388	EXW	Projector - Slide	300	82	GX5.3	1050	15	MR13	24	4
EXY	54394	EXY	Projector - Slide	250	82	GX5.3	400	200	MR13	24	4
EYB	54446	EYB	Projector, Stage & Studio	360	82	G5.3	10000	75	T3.5	24	
EYB-5	54448	EYB-5	Projector, Microfilm, Stage & Studio	360	86	G5.3	10000	75	T3.5	24	
EYB-7	54455	EYB-7	Projector, Microfilm, Stage & Studio	360	88	G5.3	10000	75	T3.5	24	
EZE	54386	EZE	Projector, Stage & Studio	150	82	GX5.3	350	150	MR13	24	4
FBV	54568	FBV	Projector, Microfilm, Stage & Studio	250	30	E10	7000	6	T3	12	
FCR	54036	FCR 64625 HLX	Projector, Microfilm, Microscope, Studio	100	12	GY6.35	3600	50	T3.5	100	
FCS	54041	FCS 64640 HLX	Projector	150	24	G6.35	6000	50	T4	100	
FCS	54042	FCS 64640 HLX BULK	Projector	150	24	G6.35	6000	50	T4	250	
FDS/DZE	54055	FDS/DZE 64643	Projector, Microfilm, Microscope, Studio	150	24	GY9.5	5000	100	T4	30	
FDT 64628	54031	FDT 64628	Projector, Stage & Studio	100	12	GY9.5	3000	50	T4	30	
FDV	54054	FDV 64642 HLX	Projector, Microfilm, Microscope, Studio	150	24	G6.35	5000	300	T4	100	
FHS	54979	FHS	Projector - Slide	300	82	GX5.3	650	70	MR16	24	4
FKT/EYH	54547	FKT/EYH	Projector - Video Camera	250	120	G5.3	5400	200	T6	24	
FLE	54383	FLE	Projector	360	82	GY5.3	1250	75	MR16	24	4,7
FLT	54440	FLT	Projector - Video Camera, Microfilm	25	14	G4		500	MR11	24	8
FNS	58635	FNS 64512	Projector, Stage & Studio	300	120	GX6.35	9500	15	T5	25	
FNT	54044	FNT 64656PT HLX	Projector, Microfilm, Microscope, Studio	275	24	G6.35	10000	75	T4	100	

AUDIOVISUAL

ANSI Code	Product Number	Ordering Abbreviation	Application	Watts	Volts	Base	Lumens	Avg Rated Life(hrs)	Bulb	Pkg Qty	Footnotes
FNT	54046	FNT 64656PT HLX BULK	Projector, Microfilm, Microscope, Studio	275	24	G6.35	10000	75	T4	250	
FSG	54899	FSG	Projector	1200	120	P28s	28000	100	T7	12	
FSX	54897	FSX/230	Projector	400	230	GY9.5		75	T6	24	3
FSY	54898	FSY	Projector	400	240	GY9.5		75	T6	24	3
FXL	54912	FXL	Projector - Overhead	410	82	GY5.3	640	75	MR16	24	
FXL-HL	54904	FXL-HL	Projector - Overhead	410	82	GY5.3	850	40	MR16	24	4
GCB	54430	GCB	Projector, Stage & Studio, Video	200	30	G5.3	5300	200	T3	24	
GCC	54432	GCC	Projector, Stage & Studio	100	12	G5.3	3100	200	T3	24	
GCD	54845	GCD	Projector, Microfilm, Stage & Studio	590	50	GZ9.5	21500	50	T6	24	
	53998	64638 HLX	Projector	100	24	G6.35	2900	300	T3	100	
	53999	64265 HLX	Projector	30	6	G4	765	100	T2	100	
	54021	64251 HLX	Projector	20	6	PG22	500	100	T3	30	
	54022	64260	Projector	30	12	PG22	800	50	T3	30	
	54023	64261	Projector	30	12	G6.35	750	50	T3.25	100	
	54026	62138 HLX	Projector	100	12	GZ6		25	T3	100	
	54027	64275	Projector	35	6	G4	780	50	T3	100	
	54028	64611 HLX	Projector	50	12	G6.35	1350	100	T3.25	100	
	54032	64621 HLX	Projector, Microfilm, Stage & Studio, Aircraft	100	12	PG22	2750	2000	T3	30	
	54050	64223	Projector	10	6	G4	150	300	T3	100	
	54056	64650	Projector, Microfilm, Microscope, Studio	50	23	G6.35	1000	1300	T4	100	
	54057	64664 HLX	Projector, Microfilm, Microscope, Studio	400	36	G6.35	14500	150	T6	25	9
	54058	64665 HLX	Projector, Microfilm, Microscope, Studio	400	36	G6.35	12200	300	T6	25	
	54120	64258 HLX	Projector	20	12	G4		2000	T3	100	
	54121	64617S	Projector	75	12	G5.3-4.8		25	MR11	20	
	54122	64255	Projector	20	8	GZX4		50	MR11	20	
	54124	64617	Projector	75	12	G5.3-4.8		25	MR11	20	
	54125	64624	Projector	100	12	G5.3-4.8		25	MR11	20	
	54136	64654 HLX	Projector, Microfilm, Microscope, Studio	250	24	GY9.5	9000	300	T6	30	
	54138	64602	Projector, Microfilm, Microscope, Studio	50	12	G6.35	1000	1100	T3.25	100	
	54214	64637	Projector	100	12	GZ6.35		1500	MR16	20	
	54233	64635 HLX	Projector, Fiber-Optic	150	15	GZ6.35		50	MR16	20	
	54400	85T3/RM	Projector	85	82	GX5.3		40	MR16	24	
	54466	120/T4/SPECIAL	Projector	120	24	Special	2750	500	T4	24	
	58729	60T4QCL	Medical Overhead Illumination	60	24	BA15d	1280	500	T4	12	
	58939	220T4Q/2PPF	Medical Overhead Illumination	220	22	GY9.5	6200	200	T4	12	