



LAMP DATA 12 VOLT LAMPS

12 Volt Bi-Pin Halogen




PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
64432	12V Halogen T3 G4 10W Bi-Pin Clear Osram	G4	10	12	140	na	2,000	2,800	100	na
58661	12V Halogen T3 G4 20W Bi-Pin Sylvania	G4	20	12	320	na	2,000	3,000	100	na
58672	12V Halogen T4 GY6.35 35W Bi-Pin Sylvania	GY6.35	35	12	600	na	2,000	3,000	100	na
58676	12V Halogen T4 GY6.35 50W Bi-Pin Sylvania	GY6.35	50	12	930	na	2,000	3,000	100	na
64432	12V Halogen T4 GY6.35 35W IR Bi-Pin Clear Osram	GY6.35	50	12	800	na	4,000	3,000	100	na

12 Volt Bi-Pin Xenon




PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
1003076	12V Xenon T3 G4 5W Bi-Pin Ushio	G4	5	12	45	na	10,000	2,500	100	na
1003051	12V Xenon T3 G4 10W Bi-Pin Ushio	G4	10	12	100	na	10,000	2,600	100	na
1003079	12V Xenon T3 G4 15W Bi-Pin Ushio	G4	15	12	150	na	10,000	2,600	100	na
1003072	12V Xenon T3 G4 20W Bi-Pin Ushio	G4	20	12	200	na	5,000	2,600	100	na
715250	12V Xenon T5 GY6.35 50W Bi-Pin Bulbrite	GY6.35	50	12	600	na	10,000	2,850	100	na

12 Volt MR11 Halogen




PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
1000618	12V Halogen MR11 GZ4 10° 20W Ushio	GZ4	20	12	na	3,000	2,000	2,925	100	10 degrees
1000620	12V Halogen MR11 GZ4 17° 20W Ushio	GZ4	20	12	na	1,400	2,000	2,925	100	17 degrees
1000622	12V Halogen MR11 GZ4 30° 20W Ushio	GZ4	20	12	na	600	2,000	2,925	100	30 degrees
1000624	12V Halogen MR11 GZ4 12° 35W Ushio	GZ4	35	12	na	4,800	2,000	2,950	100	12 degrees
1000626	12V Halogen MR11 GZ4 20° 35W Ushio	GZ4	35	12	na	2,400	2,000	2,950	100	20 degrees
1000628	12V Halogen MR11 GZ4 30° 35W Ushio	GZ4	35	12	na	1,300	2,000	2,950	100	30 degrees

12 Volt MR16 Halogen



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
1000370	12V Halogen MR16 GU5.3 12° 20W Ushio: Eurostar™	GU5.3	20	12	na	3,500	5,000	2,950	100	12 degrees
1000014	12V Halogen MR16 GU5.3 36° 20W Ushio: Eurostar™	GU5.3	20	12	na	600	5,000	2,950	100	36 degrees
1000559	12V Halogen MR16 GU5.3 24° 35W Ushio: Eurostar™	GU5.3	35	12	na	2,300	5,000	2,950	100	24 degrees
1000573	12V Halogen MR16 GU5.3 36° 35W Ushio: Eurostar™	GU5.3	35	12	na	1,300	5,000	2,950	100	36 degrees
1000419	12V Halogen MR16 GU5.3 12° 50W Ushio: Eurostar™	GU5.3	50	12	na	11,000	5,000	3,000	100	12 degrees
1000430	12V Halogen MR16 GU5.3 24° 50W Ushio: Eurostar™	GU5.3	50	12	na	3,600	5,000	3,000	100	24 degrees
1000405	12V Halogen MR16 GU5.3 36° 50W Ushio: Eurostar™	GU5.3	50	12	na	2,000	5,000	3,000	100	36 degrees
1000592	12V Halogen MR16 GU5.3 60° 50W Ushio: Eurostar™	GU5.3	50	12	na	850	5,000	3,000	100	60 degrees
1000452	12V Halogen MR16 GU5.3 12° 75W Ushio: Eurostar™	GU5.3	75	12	na	13,000	5,000	3,000	100	12 degrees
1000455	12V Halogen MR16 GU5.3 24° 75W Ushio: Eurostar™	GU5.3	75	12	na	4,800	5,000	3,000	100	24 degrees
1000447	12V Halogen MR16 GU5.3 36° 75W Ushio: Eurostar™	GU5.3	75	12	na	2,700	5,000	3,000	100	36 degrees

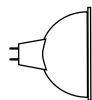
12 Volt MR16 Halogen (GE Constant Color)



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
20858	12V Halogen MR16 GU5.3 15° 20W GE: Constantcolor™	GU5.3	20	12	na	3150	5,000	2,900	100	15 degrees
20857	12V Halogen MR16 GU5.3 40° 20W GE: Constantcolor™	GU5.3	20	12	na	475	5,000	2,900	100	40 degrees
20860	12V Halogen MR16 GU5.3 20° 35W GE: Constantcolor™	GU5.3	35	12	na	3,200	5,000	3,000	100	20 degrees
20859	12V Halogen MR16 GU5.3 40° 35W GE: Constantcolor™	GU5.3	35	12	na	900	5,000	3,000	100	40 degrees
20872	12V Halogen MR16 GU5.3 15° 50W GE: Constantcolor™	GU5.3	50	12	na	8,400	6,000	3,050	100	15 degrees
20871	12V Halogen MR16 GU5.3 25° 50W GE: Constantcolor™	GU5.3	50	12	na	2,900	6,000	3,050	100	25 degrees
20867	12V Halogen MR16 GU5.3 40° 50W GE: Constantcolor™	GU5.3	50	12	na	1,500	6,000	3,050	100	40 degrees
20865	12V Halogen MR16 GU5.3 55° 50W GE: Constantcolor™	GU5.3	50	12	na	850	6,000	3,050	100	55 degrees
20873	12V Halogen MR16 GU5.3 40° 71W GE: Constantcolor™	GU5.3	71	12	na	2,000	4,000	3,050	100	40 degrees

LAMP DATA 12 VOLT LAMPS

12 Volt MR16 Halogen (IR)



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
58641	12V Halogen MR16 GU5.3 10° 37W IR Sylvania: Tru-Aim®	GU5.3	37	12	na	12,500	5,000	3,000	100	10 degrees
58634	12V Halogen MR16 GU5.3 25° 37W IR Sylvania: Tru-Aim®	GU5.3	37	12	na	4,400	5,000	3,000	100	25 degrees
58633	12V Halogen MR16 GU5.3 35° 37W IR Sylvania: Tru-Aim®	GU5.3	37	12	na	2,200	5,000	3,000	100	35 degrees
54175	12V Halogen MR16 GU5.3 10° 50W IR Sylvania: Tru-Aim®	GU5.3	50	12	na	15,000	5,000	3,000	100	10 degrees
54174	12V Halogen MR16 GU5.3 25° 50W IR Sylvania: Tru-Aim®	GU5.3	50	12	na	5,700	5,000	3,000	100	25 degrees
54173	12V Halogen MR16 GU5.3 35° 50W IR Sylvania: Tru-Aim®	GU5.3	50	12	na	2,850	5,000	3,000	100	35 degrees

12 Volt MR16 Halogen (18,000 hr.)



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
1003554	12V Halogen MR16 GU5.3 12° 50W 18000 hour Ushio: Ultraline™ Titan	GU5.3	50	12	na	8,600	18,000	3,100	100	12 degrees
1003553	12V Halogen MR16 GU5.3 36° 50W 18000 hour Ushio: Ultraline™ Titan	GU5.3	50	12	na	1,500	18,000	3,100	100	36 degrees

12 Volt MR16 Halogen (Aluminized Reflector)



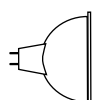
PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
1000418	12V Halogen MR16 GU5.3 12° 50W Ushio: Eurostar Reflector	GU5.3	50	12	na	11,000	3,500	3,000	100	12 degrees
1000428	12V Halogen MR16 GU5.3 24° 50W Ushio: Eurostar™ Reflector™	GU5.3	50	12	na	3,600	3,500	3,000	100	24 degrees
1000403	12V Halogen MR16 GU5.3 36° 50W Ushio: Eurostar™ Reflector™	GU5.3	50	12	na	2,000	3,500	3,000	100	36 degrees

12 Volt MR16 Halogen (Solid Back)



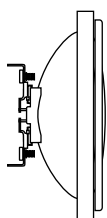
PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
1000425	12V Halogen MR16 GU5.3 24° 50W Ushio: Superline™ Reflektol™ Black	GU5.3	50	12	na	3,000	3,500	3,000	100	24 degrees
1000400	12V Halogen MR16 GU5.3 36° 50W Ushio: Superline™ Reflektol™ Black	GU5.3	50	12	na	1,580	3,500	3,000	100	36 degrees
1000439	12V Halogen MR16 GU5.3 24° 50W Ushio: Superline™ Reflektol™ Silver	GU5.3	50	12	na	3,000	3,500	3,000	100	24 degrees
1000408	12V Halogen MR16 GU5.3 36° 50W Ushio: Superline™ Reflektol™ Silver	GU5.3	50	12	na	1,580	3,500	3,000	100	36 degrees
1003542	12V Halogen MR16 GU5.3 24° 50W Ushio: Superline™ Reflektol™ Bronze	GU5.3	50	12	na	3,000	3,500	3,000	100	24 degrees
1003541	12V Halogen MR16 GU5.3 36° 50W Ushio: Superline™ Reflektol™ Bronze	GU5.3	50	12	na	1,580	3,500	3,000	100	36 degrees

12 Volt MR16 Halogen (Frost Line)



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
1003253	12V Halogen MR16 GU5.3 Frosted Ushio: Frostline™	GU5.3	20	12	250	na	4,000	2,900	100	na

12 Volt AR111



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
55102	12V Halogen AR111 G53 4° 35W Sylvania	G53	35	12	na	45,000	3,000	3,000	100	4 degrees
55105	12V Halogen AR111 G53 4° 50W Sylvania	G53	50	12	na	50,000	3,000	3,000	100	4 degrees
55104	12V Halogen AR111 G53 8° 50W Sylvania	G53	50	12	na	20,000	3,000	3,000	100	8 degrees
55103	12V Halogen AR111 G53 25° 50W Sylvania	G53	50	12	na	3,500	3,000	3,000	100	25 degrees
55125	12V Halogen AR111 G53 8° 75W Sylvania	G53	75	12	na	30,000	3,000	3,000	100	8 degrees
55123	12V Halogen AR111 G53 25° 75W Sylvania	G53	75	12	na	5,300	3,000	3,000	100	25 degrees
55124	12V Halogen AR111 G53 45° 75W Sylvania	G53	75	12	na	1,700	3,000	3,000	100	45 degrees

12 Volt AC LED MR16




PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
6MR16/827SP8	12VAC LED MR16 8° 6.2W Toshiba	GU5.3	6.2	12VAC	270	5,500	25,000	2700k	80	8 degrees
7MR16/827NFL25	12VAC LED MR16 25° 6.7W Toshiba	GU5.3	6.7	12VAC	300	1,250	25,000	2700K	80	25 degrees
7MR16/827FL35	12VAC LED MR16 35° 6.7W Toshiba	GU5.3	6.7	12VAC	300	700	25,000	2700K	80	35 degrees
6MR16/830SP8	12VAC LED MR16 8° 6.2W Toshiba	GU5.3	6.2	12VAC	275	5,600	25,000	3000K	80	8 degrees
7MR16/830NFL25	12VAC LED MR16 25° 6.7W Toshiba	GU5.3	6.7	12VAC	310	1,250	25,000	3000K	80	25 degrees
7MR16/830FL35	12VAC LED MR16 35° 6.7W Toshiba	GU5.3	6.7	12VAC	310	700	25,000	3000K	80	35 degrees

LED MR16 lamps are not compatible with enclosed fixtures.


For long life, LED MR16 must be used with open back fixtures to allow heat to escape from the back of the lamp.

LAMP DATA 12V - 120V


24 Volt Bi-Pin Halogen

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 58662	24V Halogen T3 G4 20W Bi-Pin Sylvania	G4	20	24	320	na	1,000	3,000	100	na
651036	24V Halogen T3 G6.35 35W Bi-Pin Bulbrite	G6.35	35	24	650	na	2,000	3,000	100	na
58678	24V Halogen T4 G6.35 50W Bi-Pin Sylvania	G6.35	50	24	850	na	2,000	3,000	100	na


24 Volt Bi-Pin Xenon

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 1003081	24V Xenon T3 G4 5W Bi-Pin Ushio	G4	5	24	40	na	10,000	2,400	100	na
1003083	24V Xenon T3 G4 10W Bi-Pin Ushio	G4	10	24	95	na	10,000	2,550	100	na
1003085	24V Xenon T3 G4 20W Bi-Pin Ushio	G4	20	24	200	na	10,000	2,600	100	na
715335	24V Xenon T5 G4 35W Bi-Pin Bulbrite	GY6.35	35	24	420	na	10,000		100	na


24 Volt MR11 Halogen

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 1001002	24V Halogen MR11 GZ4 12° 20W Ushio	GZ4	20	24	na	2,200	2,000	3,000	100	12 degrees
1001008	24V Halogen MR11 GZ4 13° 35W Ushio	GZ4	35	24	na	2,100	2,000	3,000	100	13 degrees
1001010	24V Halogen MR11 GZ4 30° 35W Ushio	GZ4	35	24	na	850	2,000	3,000	100	30 degrees


24 Volt MR16 Halogen

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 1001125	24V Halogen MR16 GU5.3 12° 50W Ushio: Eurostar™	GU5.3	50	24	na	7,000	4,000	2,950	100	12 degrees
1001123	24V Halogen MR16 GU5.3 24° 50W Ushio: Eurostar™	GU5.3	50	24	na	2,900	4,000	2,950	100	24 degrees
1001127	24V Halogen MR16 GU5.3 36° 50W Ushio: Eurostar™	GU5.3	50	24	na	1,600	4,000	2,950	100	36 degrees


24 Volt MR16 Halogen (GE Constant Color)

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 41487	24V Halogen MR16 GU5.3 40° 35W GE: Constantcolor™	GU5.3	35	24	na	920	4,000	2,950	100	40 degrees
41488	24V Halogen MR16 GU5.3 15° 50W GE: Constantcolor™	GU5.3	50	24	na	8,400	4,000	2,950	100	15 degrees
41489	24V Halogen MR16 GU5.3 40° 50W GE: Constantcolor™	GU5.3	50	24	na	1,570	4,000	2,950	100	40 degrees


120 Volt Bi-Pin Halogen

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 57025	120V Halogen T4 40W Bi-Pin Frosted Sylvania	G9	40	120	480	na	2,000	2,900	100	Frosted
57024	120V Halogen T4 60W Bi-Pin Frosted Sylvania	G9	60	120	790	na	2,000	2,900	100	Frosted

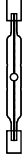
120 Volt MR16 Halogen

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 620120	120V Halogen MR16 GU10 38° 20W Bulbrite	GU10	20	120	na	750	2,000	2850	100	38 degrees
620135	120V Halogen MR16 GU10 35W Frosted Bulbrite	GU10	35	120	520	na	2,000	2850	100	Frosted

120 Volt T10 Halogen

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 614152	120V Halogen T10 20W Frosted Bulbrite	E26	150	120	2,100	na	2,000	3050	100	Frosted

120 Volt Double-End Halogen

PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
 601075	120V Halogen T3 75W Double End Bulbrite	RSC	75	120	950	na	2,000	3050	100	na
601101	120V Halogen T3 100W Double End Bulbrite	RSC	100	120	1,300	na	2,000	3050	100	na
600201	120V Halogen T3 200W Double End Bulbrite	RSC	200	120	3,200	na	2,000	3050	100	na
600251	120V Halogen T3 250W Double End Bulbrite	RSC	250	120	4,200	na	2,000	3050	100	na
600301	120V Halogen T3 300W Double End Bulbrite	RSC	300	120	5,000	na	2,000	3050	100	na
600101	120V Halogen T3 100W Double End Bulbrite	RSC	100	120	1,300	na	2,000	3050	100	na

LAMP DATA 12V - 120V

120 Volt Krypton (Double-End)



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
473180	120V Krypton T4 180W Double End Bulbrite	RSC	180	120	3,950	na	2,000	3,000	100	na

120 Volt Krypton (E11 Base)



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
473141	120V Krypton T3 40W Frosted Bulbrite	E11	40	120	560	na	3,000	2,850	100	Frosted

120 Volt Krypton (E12 Base)



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
473020	120V Krypton T3 20W Clear Bulbrite	E12	20	120	200	na	3,000	2,850	100	na

Compact Full Spring



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
48918C	CFL Full Spring 18W TCP	E12	18	120	1,300	na	12,000	2,700	90	na

T5 Compact Fluorescent (2G11 Base)



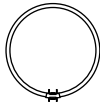
PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
504550	CFL Twin Tube T5 55W Bulbrite	2G11	55	na	4,800	na	12,000	3,000	82	na
504521	CFL Twin Tube T5 55W Bulbrite	2G11	24	na	1,800	na	12,000	3,500	82	na
20585	CFL Twin Tube T5 55W Sylvania	2G11	40	na	3,150	na	20,000	3,500	82	na

T4 Compact Fluorescent



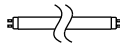
PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
20881	CFL T4 26W GX24Q Sylvania	GX24Q-3	26	na	1,746	na	12,000	3,500	82	na
20885	CFL T4 32W GX24Q Sylvania	GX24Q-3	32	na	2,328	na	12,000	3,500	82	na
504728	CFL T4 26W G24Q Bulbrite	G24Q-3	26	na	1,710	na	12,000	3,500	82	na
20313	CFL T4 9W 2G7 Sylvania	2G7	9	na	580	na	10,000	2,700	82	na
504716	CFL T4 13W G24Q Bulbrite	G24Q-1	13	na	900	na	12,000	3,500	82	na

T5 Circline (Pentron®)



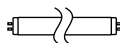
PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
20712	Fluorescent Circline T5 22W 2GX13 Sylvania: Pentron®	2GX13	22	na	1,800	na	12,000	3,500	82	na
20732	Fluorescent Circline T5 40W 2GX13 Sylvania: Pentron®	2GX13	40	na	3,200	na	12,000	3,500	82	na

T5 Linear Fluorescent (High Output) Bi-Pin



PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
20928	Fluorescent T5 HO 24W Sylvania: Pentron®	Miniature Bi-Pin	24	na	2,000	na	20,000	3,000	85	na
20929	Fluorescent T5 HO 24W Sylvania: Pentron®	Miniature Bi-Pin	24	na	2,000	na	20,000	3,500	85	na
927928082718	Fluorescent T5 HO 24W Philips	G5	24	na	1,950	na	24,000	2,700	82	na
927928582739	Fluorescent T5 HO 39W Philips	G5	39	na	3,500	na	24,000	2,700	85	na
20932	Fluorescent T5 HO 39W Sylvania: Pentron®	Miniature Bi-Pin	39	na	3,500	na	20,000	3,000	85	na
20904	Fluorescent T5 HO 54W Sylvania: Pentron®	Miniature Bi-Pin	54	na	5,000	na	20,000	3,500	85	na

T8 Linear Fluorescent Bi-Pin

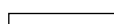


PROD SKU	DESCRIPTION	BASE	WATTS	VOLTS	LUMENS	CBCP	RATED LIFE	COLOR TEMP (K)	CRI	BEAM SPREAD
508017	Fluorescent T8 17W Bi-Pin Bulbrite	Bi-Pin	17	na	1,300	na	20,000	3,000	75	na

Fluorescent Sleeve Filters



PROD SKU	DESCRIPTION
T5X2-22-55K	A pair of T5 color correction filters that turn 3000K to 2500K filter, 22" long.



PROD SKU	DESCRIPTION
T5X2-34-25K	A pair of T5 color correction filters that turn 3000K to 2500K filter, 34" long.



PROD SKU	DESCRIPTION
T12X4-22-25K	A set of 4 T12 color correction filters that turn 3000K to 2500K 22" long.

ACCENT LIGHTING FOOTCANDLE VALUES

MR16 LOW VOLTAGE HALOGEN LAMPS & LEDS

20 WATT IR			37 WATT IR		
WATTAGE	20 WATT MR16 IR	WATTAGE	20 WATT MR16 IR	WATTAGE	37 WATT MR16 IR
BEAM ANGLE	10°	BEAM ANGLE	25°	BEAM ANGLE	40°
CBPC	6000	CBPC	2300	CBPC	4400
RATED LIFE	4000 HRS.	RATED LIFE	4000 HRS.	RATED LIFE	4000 HRS.
0° AIMING ANGLE	HORIZONTAL FOOT CANDLES	0° AIMING ANGLE	HORIZONTAL FOOT CANDLES	0° AIMING ANGLE	HORIZONTAL FOOT CANDLES
D FC DIA.	8' 94 1.4' 12' 42 2.1' 16' 23 2.8' 20' 15 3.5'	D FC DIA.	4' 64 2.9' 8' 36 3.5' 10' 23 4.4' 12' 16 5.3'	D FC DIA.	4' 63 2.9' 6' 28 4.4' 8' 16 5.8' 10' 10 7.3'
30° AIMING ANGLE	VERTICAL FOOT CANDLES	30° AIMING ANGLE	VERTICAL FOOT CANDLES	30° AIMING ANGLE	VERTICAL FOOT CANDLES
L W	1.5' 8.5" 2.1' 1.0" 2.9' 1.4" 3.6' 1.7"	L W	4.2' 1.8" 6.2' 2.7" 8.3' 3.5" 10.4' 4.4"	L W	4.8' 1.5" 9.7' 2.9" 14.5' 4.4" 19.3' 5.8"
D C FC	2' 3.5' 188 3' 5.2' 83 4' 6.9' 47 5' 8.7' 30	D C FC	2' 3.5' 72 3' 5.2' 32 4' 6.9' 18 5' 8.7' 12	D C FC	1' 1.7' 125 2' 3.5' 174 3' 5.2' 14 4' 6.9' 08
45° AIMING ANGLE	VERTICAL FOOT CANDLES	45° AIMING ANGLE	VERTICAL FOOT CANDLES	45° AIMING ANGLE	VERTICAL FOOT CANDLES
L W	1.8' 1.2" 2.5' 1.7" 3.2' 2.2" 3.9' 2.7"	L W	2.8' 1.9" 4.7' 3.1" 6.5' 4.4" 8.4' 5.6"	L W	5.0' 3.1" 6.7' 4.1" 8.4' 5.1" 10.1' 6.2"
D C FC	5' 5.0' 87 7' 7.0' 43 9' 9.0' 26 11' 11.0' 18	D C FC	3' 3.0' 97 5' 5.0' 33 7' 7.0' 17 9' 9.0' 10	D C FC	3' 3.0' 40 4' 4.0' 22 5' 5.0' 14 6' 6.0' 10

50 WATT			50 WATT IR		
WATTAGE	50 WATT MR16	WATTAGE	50 WATT MR16	WATTAGE	50 WATT MR16 IR
BEAM ANGLE	15°	BEAM ANGLE	25°	BEAM ANGLE	40°
CBPC	8400	CBPC	2900	CBPC	15000
RATED LIFE	6000 HRS.	RATED LIFE	6000 HRS.	RATED LIFE	4000 HRS.
0° AIMING ANGLE	HORIZONTAL FOOT CANDLES	0° AIMING ANGLE	HORIZONTAL FOOT CANDLES	0° AIMING ANGLE	HORIZONTAL FOOT CANDLES
D FC DIA.	8' 131 2.1' 12' 58 3.1' 16' 33 4.1' 20' 21 5.2'	D FC DIA.	4' 81 2.7' 8' 45 3.5' 10' 29 4.4' 12' 20 5.3'	D FC DIA.	4' 94 2.9' 5' 34 5.1' 7' 17 7.2' 9' 10 9.3'
30° AIMING ANGLE	VERTICAL FOOT CANDLES	30° AIMING ANGLE	VERTICAL FOOT CANDLES	30° AIMING ANGLE	VERTICAL FOOT CANDLES
L W	2.1' 1.0" 3.3' 1.6" 4.4' 2.1" 5.5' 2.6"	L W	4.2' 1.8" 6.2' 2.7" 8.3' 3.5" 10.4' 4.4"	L W	22.3' 2.0" 44.5' 4.1" 66.8' 6.2" 89.0' 8.3"
D C FC	2' 3.5' 263 3' 5.2' 117 4' 6.9' 66 5' 8.7' 42	D C FC	2' 3.5' 91 3' 5.2' 40 4' 6.9' 23 5' 8.7' 15	D C FC	1' 1.7' 106 2' 3.5' 27 3' 5.2' 21 4' 6.9' 12
45° AIMING ANGLE	VERTICAL FOOT CANDLES	45° AIMING ANGLE	VERTICAL FOOT CANDLES	45° AIMING ANGLE	VERTICAL FOOT CANDLES
L W	2.7' 1.9" 3.8' 2.6" 4.9' 3.3" 5.9' 4.0"	L W	2.8' 1.9" 4.7' 3.1" 6.5' 4.4" 8.4' 5.6"	L W	5.0' 3.1" 6.7' 4.1" 8.4' 5.1" 10.1' 6.2"
D C FC	5' 5.0' 122 7' 7.0' 61 9' 9.0' 37 11' 11.0' 25	D C FC	3' 3.0' 122 5' 5.0' 42 7' 7.0' 21 9' 9.0' 13	D C FC	2' 2.0' 74 3' 3.0' 34 4' 4.0' 19 5' 5.0' 12

FOOT CANDLE GUIDELINES

When selecting appropriate light fixtures for an environment it is important to provide adequate light levels. The examples above show the amount of light each lamp provides at various distances and aiming angles. The chart below gives some common examples of adequate light levels for typical environments and tasks.

	500	300	200	150	100	75	50	30.	20.	15	10	7.5	5	3	2
HOUSE				Sewing		Reading Study Kitchen		Make-Up Grooming	Dinning Table	Recreation Activities	Washing Lavatory				
OFFICE			Typing Drafting	Clerical Work		Conference Room Reception Room Desktop		Hallways Stairs		Entrance Warehouse Auditorium		Indoor Emergency Stairs			
STORE	Forefront of Show Window			Show Window Packing Table		Elevator	Display Stand	Reception Room	Corridor Stairs	Indoors				Parking	

ACCENT LIGHTING FOOTCANDLE VALUES

MR16 LOW VOLTAGE HALOGEN LAMPS & LEDS

50 WATT IR CONTINUED		LED MR16		Toshiba 6MR16/827SP8		Toshiba 7MR16/827NFL25		Toshiba 7MR16/827FL35		Toshiba 6MR16/830SP8		Toshiba 7MR16/830NFL25		Toshiba 7MR16/830FL35					
WATTAGE	50 WATT MR16IR	WATTAGE	6.2 WATT LED	WATTAGE	6.7 WATT LED	WATTAGE	6.7 WATT LED	WATTAGE	6.2 WATT LED	WATTAGE	6.7 WATT LED	WATTAGE	6.7 WATT LED	WATTAGE	6.7 WATT LED				
BEAM ANGLE	60°	BEAM ANGLE	8° 2700K	BEAM ANGLE	8° 2700K	BEAM ANGLE	35° 2700K	BEAM ANGLE	8° 3000K	BEAM ANGLE	25° 3000K	BEAM ANGLE	35° 3000K	BEAM ANGLE	35° 3000K				
CBCP	1430	CBCP	5500	CBCP	1250	CBCP	700	CBCP	5600	CBCP	1250	CBCP	700	CBCP	700				
RATED LIFE	4000 HRS.	RATED LIFE	25,000 HRS.	RATED LIFE	25,000 HRS.	RATED LIFE	25,000 HRS.	RATED LIFE	25,000 HRS.	RATED LIFE	25,000 HRS.	RATED LIFE	25,000 HRS.	RATED LIFE	25,000 HRS.				
0° AIMING ANGLE HORIZONTAL FOOT CANDLES		0° AIMING ANGLE HORIZONTAL FOOT CANDLES		0° AIMING ANGLE HORIZONTAL FOOT CANDLES		0° AIMING ANGLE HORIZONTAL FOOT CANDLES		0° AIMING ANGLE HORIZONTAL FOOT CANDLES		0° AIMING ANGLE HORIZONTAL FOOT CANDLES		0° AIMING ANGLE HORIZONTAL FOOT CANDLES		0° AIMING ANGLE HORIZONTAL FOOT CANDLES					
<p>D FC DIA. 3' 159 3.5" 5' 57 5.8" 7' 29 8.1" 9' 18 10.4"</p>		<p>D FC DIA. 4' 344 7" 6' 153 10" 8' 86 1.1" 10' 55 1.4"</p>		<p>D FC DIA. 6' 35 2.7" 8' 20 3.5" 10' 13 4.4" 12' 9 5.3"</p>		<p>D FC DIA. 4' 44 2.5" 6' 19 3.8" 8' 11 5.0" 10' 7 6.3"</p>		<p>D FC DIA. 6' 35 2.7" 8' 20 3.5" 10' 13 4.4" 12' 9 5.3"</p>		<p>D FC DIA. 4' 44 2.5" 6' 19 3.8" 8' 11 5.0" 10' 7 6.3"</p>		<p>D FC DIA. 6' 35 2.7" 8' 20 3.5" 10' 13 4.4" 12' 9 5.3"</p>		<p>D FC DIA. 4' 350 7" 6' 19 3.2" 8' 11 4.3" 10' 7 5.4"</p>		<p>D FC DIA. 4' 350 7" 6' 19 3.2" 8' 11 4.3" 10' 7 5.4"</p>			
30° AIMING ANGLE VERTICAL FOOT CANDLES		30° AIMING ANGLE VERTICAL FOOT CANDLES		30° AIMING ANGLE VERTICAL FOOT CANDLES		30° AIMING ANGLE VERTICAL FOOT CANDLES		30° AIMING ANGLE VERTICAL FOOT CANDLES		30° AIMING ANGLE VERTICAL FOOT CANDLES		30° AIMING ANGLE VERTICAL FOOT CANDLES		30° AIMING ANGLE VERTICAL FOOT CANDLES					
<p>L W 2' 3" 4' 4.6" 6' 9.2" 9.2"</p> <p>D C FC 1' 1.7 179 2' 3.5 45 3' 5.2 20 4' 6.9 11</p>		<p>L W 7' 3" 1.1 7" 2.2 14" 2.2 14"</p> <p>D C FC 1' 1.8 688 2' 3.5 172 3' 5.1 76 4' 7.0 43</p>		<p>L W 4.2' 1.8" 6.2' 2.7" 8.3' 3.5" 10.4' 4.4"</p> <p>D C FC 2' 3.5 156 3' 5.2 39 4' 6.9 17 5' 8.7 10</p>		<p>L W 2.8' 1.1" 5.5' 2.1" 8.1' 3.2" 11' 4.3"</p> <p>D C FC 1' 1.8 88 2' 3.5 22 3' 5.1 10 4' 7.0 5</p>		<p>L W 7' 3" 1.1 7" 2.2 14" 2.2 14"</p> <p>D C FC 1' 1.8 700 2' 3.5 175 3' 5.1 78 4' 7.0 44</p>		<p>L W 4.2' 1.8" 6.2' 2.7" 8.3' 3.5" 10.4' 4.4"</p> <p>D C FC 2' 3.5 156 3' 5.2 39 4' 6.9 17 5' 8.7 10</p>		<p>L W 3.5' 2.5" 4.7' 3.3" 5.8' 4.1" 7.0' 5.0"</p> <p>D C FC 3' 3' 28 4' 4' 15 5' 5' 10 6' 6' 7</p>		<p>L W 10' 7" 1.1 9.4" 1.4 10" 1.7 11"</p> <p>D C FC 3' 3' 225 4' 4' 122 5' 5' 81 6' 6' 55</p>		<p>L W 2.8' 1.9" 4.7' 3.1" 6.5' 4.4" 8.4' 5.6"</p> <p>D C FC 3' 3' 50 5' 5.0 27 7' 7.0 18 9' 9.0 12</p>		<p>L W 3.5' 2.5" 4.7' 3.3" 5.8' 4.1" 7.0' 5.0"</p> <p>D C FC 3' 3' 28 4' 4' 15 5' 5' 10 6' 6' 7</p>	
45° AIMING ANGLE VERTICAL FOOT CANDLES		45° AIMING ANGLE VERTICAL FOOT CANDLES		45° AIMING ANGLE VERTICAL FOOT CANDLES		45° AIMING ANGLE VERTICAL FOOT CANDLES		45° AIMING ANGLE VERTICAL FOOT CANDLES		45° AIMING ANGLE VERTICAL FOOT CANDLES		45° AIMING ANGLE VERTICAL FOOT CANDLES		45° AIMING ANGLE VERTICAL FOOT CANDLES					
<p>L W 6.9' 3.3" 10.4' 4.9" 13.9' 6.5" 17.3' 8.2"</p> <p>D C FC 2' 2.0 179 3' 3.0 58 4' 4.0 31 5' 5.0 21</p>		<p>L W 10' 7" 1.1 9.4" 1.4 10" 1.7 11"</p> <p>D C FC 3' 3' 50 5' 5.0 27 7' 7.0 18 9' 9.0 12</p>		<p>L W 2.8' 1.9" 4.7' 3.1" 6.5' 4.4" 8.4' 5.6"</p> <p>D C FC 3' 3' 50 5' 5.0 27 7' 7.0 18 9' 9.0 12</p>		<p>L W 3.5' 2.5" 4.7' 3.3" 5.8' 4.1" 7.0' 5.0"</p> <p>D C FC 3' 3' 28 4' 4' 15 5' 5' 10 6' 6' 7</p>		<p>L W 10' 7" 1.1 9.4" 1.4 10" 1.7 11"</p> <p>D C FC 3' 3' 225 4' 4' 122 5' 5' 81 6' 6' 55</p>		<p>L W 2.8' 1.9" 4.7' 3.1" 6.5' 4.4" 8.4' 5.6"</p> <p>D C FC 3' 3' 50 5' 5.0 27 7' 7.0 18 9' 9.0 12</p>		<p>L W 3.5' 2.5" 4.7' 3.3" 5.8' 4.1" 7.0' 5.0"</p> <p>D C FC 3' 3' 28 4' 4' 15 5' 5' 10 6' 6' 7</p>		<p>L W 10' 7" 1.1 9.4" 1.4 10" 1.7 11"</p> <p>D C FC 3' 3' 225 4' 4' 122 5' 5' 81 6' 6' 55</p>		<p>L W 2.8' 1.9" 4.7' 3.1" 6.5' 4.4" 8.4' 5.6"</p> <p>D C FC 3' 3' 50 5' 5.0 27 7' 7.0 18 9' 9.0 12</p>		<p>L W 3.5' 2.5" 4.7' 3.3" 5.8' 4.1" 7.0' 5.0"</p> <p>D C FC 3' 3' 28 4' 4' 15 5' 5' 10 6' 6' 7</p>	

SCOPE 9.3 WATT	
WATTAGE	9.3 WATT LED
BEAM ANGLE	20°
CBCP	1,739
RATED LIFE	50,000 HRS.
0° AIMING ANGLE HORIZONTAL FOOT CANDLES	
<p>D FC DIA. 4' 109 1.4" 6' 48 2.1" 8' 27 2.9" 10' 17 3.5"</p>	
30° AIMING ANGLE VERTICAL FOOT CANDLES	
<p>L W 1.6' 9" 3.0' 1.4" 4.7' 2.1" 6.2' 2.9"</p> <p>D C FC 1' 1.8' 217 2' 3.5' 54 3' 5.2' 24 4' 7.0' 14</p>	
45° AIMING ANGLE VERTICAL FOOT CANDLES	
<p>L W 2.1' 9" 3.7' 1.3" 4.4' 1.6"</p> <p>D C FC 3' 3' 70 4' 4' 38 5' 5' 25 6' 6' 17</p>	

ATLAS 19.2 WATT	
WATTAGE	19.2 WATT LED
BEAM ANGLE	8°
CBCP	21,617
RATED LIFE	80,000 HRS.
0° AIMING ANGLE HORIZONTAL FOOT CANDLES	
<p>D FC DIA. 4' 1,351 7" 6' 600 10" 8' 338 1.1" 10' 216 1.4"</p>	
30° AIMING ANGLE VERTICAL FOOT CANDLES	
<p>L W 7' 3" 1.1 7" 1.8 10" 2.2 14"</p> <p>D C FC 1' 1.8' 2,702 2' 3.5' 676 3' 5.1' 300 4' 7.0' 169</p>	
45° AIMING ANGLE VERTICAL FOOT CANDLES	
<p>L W 10' 7" 1.1 9.4" 1.4 10" 1.7 11"</p> <p>D C FC 3' 3' 870 4' 4' 472 5' 5' 313 6' 6' 212</p>	

LMR16-3W-16D-30K = MR16 20 watt halogen
LMR16-6W-22D-29K = MR16 27 watt halogen

DEFINITIONS AND NOTES

FC – Initial footcandles at the center of beam.

CBCP – Center beam candlepower (candelas).

L – Length of the beam where the candlepower is reduced to 50% of the center beam candlepower.

W – Width of the beam where the candlepower is reduced to 50% of the center beam candlepower.

C – Distance to the center of the beam.

D – Distance to wall or ceiling.

DIA. – Diameter of the beam where the candlepower is reduced to 50% of the center beam candlepower.

RATED LIFE HALOGEN – Length of operation (in hours) at which point an average of 50% of the lamps will still be operational and 50% will not.

RATED LIFE LED – Length of operation (in hours) at which an LED will produce 70% of initial lumens.

Lamp data shown is typical and is based on bare lamp photometrics. The specifications shown may be subject to change for design and specification improvement without prior notice.

LED cone of light data for 0 degree aiming angle is taken from third party tests. All other angles are estimates. IES files are available to generate data for specific applications.

*Calculation not possible for this lamp and geometry combination.

Verify our Light Output Comparison Chart by downloading the Energy Star Program Requirements for Integral LED Lamps. or got to http://www.edgelighting.com/products/lighting_tools.php

Lamp and Technical Info