GE Consumer & Industrial
Lighting

Starcoat®T5 Ecolux® High Efficiency and High Output

High Output:

Offers High Lumen Package

Ideally suited for indirect luminaires and uplighting or as replacement for HID fixtures in warehouse or "big box" applications.

High Efficiency:

Offers High Lumens per Watt

Ideally suited to commercial and retail application in both direct and combined direct/indirect luminaires.

Lamp Operation:

Starcoat® T5 Ecolux® lamps were designed to reach their maximum luminous flux at an ambient draft-free air temperature of 35°C. As the cold spot is situated near the metal cap, the temperature of the cap can tell how close the Hg vapor pressure is to the optimum: a cap temperature of approx. 43°-45°C corresponds to conditions resulting in maximum light output in a stabilized T5 lamp.

System Design Considerations:

If the design of the luminaire allows higher or lower ambient temperature than 35°C the luminous output will be different from the designed maximum light output. In cases where additional cathode heating is applied by an electronic ballast during lamp operation, power dissipation may substantially increase the temperature of the cold chamber located behind the electrode. This might result in a shift of the peak light output toward temperature ranges below 35°C. Air movement within the luminaires can also substantially affect the light output of the T5 lamps since it may also change the cold spot temperature. Consult OEM fixture Manufacturer Photometric tests for more detail on thermal and light output effects (photometrics).

Benefits of T5 in High Bay Applications:

- Energy Savings
- Great Lumen Maintenance
- High Color Consistency and CRI (85)
- Limited Restrike or Warm-up Delays
- Use with Energy-Saving Controls like occupancy sensors and dimmers
- No End of Life Cycling
- Full Range of Color Temperatures 3000K-6500K (including 5000K)

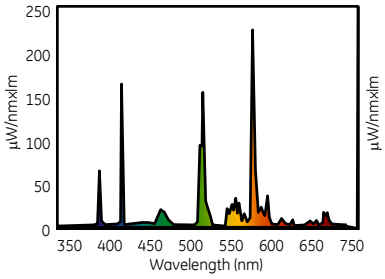
Now all GE T5 lamps are Longer Life and TCLP Compliant!

imagination at work

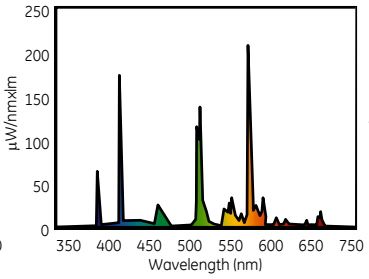
Starcoat ® T5 High Efficiency and High Output Lamp Specifications

At 35° C		HIGH EFFICIENCY				HIGH OUTPUT				
		14W	21W	28W	35W	24W	39W	54W	49W	80W
PRODUCT CODE BY COLOR TEMP.	3000K	31590	46677	46704	46724	46699	46744	46759	46751	46802
	3500K	46671	46684	46705	46727	46700	46745	46760	46752	46803
	4100K	46673	46687	46706	46735	46701	46746	46761	46753	46804
	5000K	46674	46686	46707	46742	46702	46747	46762	46757	46805
	6500K	46676	46689	46708	46743	46703	46748	46763	46758	46806
DESCRIPTION BY COLOR TEMP.		F14WT5/830/ECO	F21WT5/830/ECO	F28WT5/830/ECO	F35WT5/830/ECO	F24WT5/830/ECO	F39WT5/830/ECO	F54WT5/830/ECO	F49WT5/830/ECO	F80WT5/830/ECO
		F14WT5/835/ECO	F21WT5/835/ECO	F28WT5/835/ECO	F35WT5/835/ECO	F24WT5/835/ECO	F39WT5/835/ECO	F54WT5/835/ECO	F49WT5/835/ECO	F80WT5/835/ECO
		F14WT5/841/ECO	F21WT5/841/ECO	F28WT5/841/ECO	F35WT5/841/ECO	F24WT5/841/ECO	F39WT5/841/ECO	F54WT5/841/ECO	F49WT5/841/ECO	F80WT5/841/ECO
		F14WT5/850/ECO	F21WT5/850/ECO	F28WT5/850/ECO	F35WT5/850/ECO	F24WT5/850/ECO	F39WT5/850/ECO	F54WT5/850/ECO	F49WT5/850/ECO	F80WT5/850/ECO
		F14WT5/865/ECO	F21WT5/865/ECO	F28WT5/865/ECO	F35WT5/865/ECO	F24WT5/865/ECO	F39WT5/865/ECO	F54WT5/865/ECO	F49WT5/865/ECO	F80WT5/865/ECO
CASE QUANTITY		40	40	40	40	40	40	40	40	40
PHYSICAL CHARACTERISTICS										
Bulb Designation		T5	T5	T5	T5	T5	T5	T5	T5	T5
Max Bulb Diameter (D) (inches)		0.669	0.669	0.669	0.669	0.669	0.669	0.669	0.669	0.669
Nominal Bulb Diameter (inches)		0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625	0.625
Base Type		G5 Min Bipin	G5 Min Bipin	G5 Min Bipin	G5 Min Bipin	G5 Min Bipin	G5 Min Bipin	G5 Min Bipin	G5 Min Bipin	G5 Min Bipin
Max Base Face to Base Face (A) (inches)		21.61	33.42	45.23	57.04	21.61	33.42	45.23	57.04	57.04
Max Face to End of Opposing Pin (B) (inches)		21.89	33.70	45.51	57.32	21.89	33.70	45.51	57.32	57.32
Min Face to End of Opposing Pin (B) (inches)		21.79	33.61	45.42	57.23	21.79	33.61	45.42	57.23	57.23
Max (Pin to Pin)		22.2	33.4	45.8	57.6	22.2	33.9	45.8	57.6	57.6
TCLP Compliant		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ELECTRICAL CHARACTERISTICS										
Nominal Lamp Watts		14	21	28	35	24	39	54	49	80
Nominal Lamp Volts		82	123	167	209	75	112	117	191	145
Nominal Lamp Operating Current (mA)		.170	.170	.170	.170	.300	.340	.460	.260	.555
Nominal Lamp Operating Frequency (kHz)		>20	>20	>20	>20	>20	>20	>20	>20	>20
Minimum Starting Temp (deg C)		-20	-20	-20	-20	-20	-20	-20	-20	-20
Dimmable (yes/no)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PHOTOMETRIC CHARACTERISTICS										
Reference - Initial Lumens		1350	2100	2900	3650	2000	3500	5000	4900	7000
- For 5000K		1300	2000	2750	3500	1900	3350	4800	4700	6700
- For 6500K		1250	1950	2700	3400	1900	3330	4750	4650	6650
Mean Lumens (40% Rated life)		1240	1930	2660	3350	1840	3220	4600	4500	6440
Nominal Efficacy (Lumens/Watt) - Initial		96	100	104	104	83	90	93	100	88
Avg. Rated Life (hrs) 3hr cycle - RS ballast		30000	30000	30000	30000	30000	30000	30000	30000	30000
12hr cycle - RS ballast		36000	36000	36000	36000	36000	36000	36000	36000	36000
Color Rendering Index (Ra) CRI		85	85	85	85	85	85	85	85	85

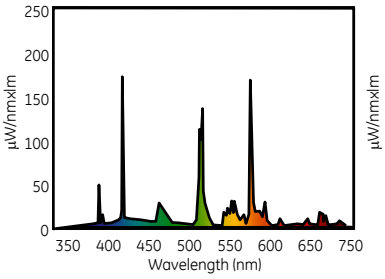
Spectral Power Distribution (3000K)



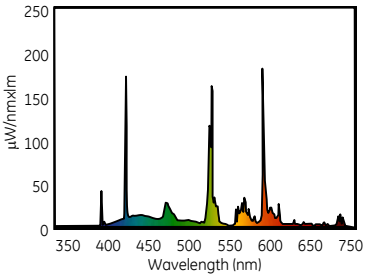
Spectral Power Distribution (3500K)



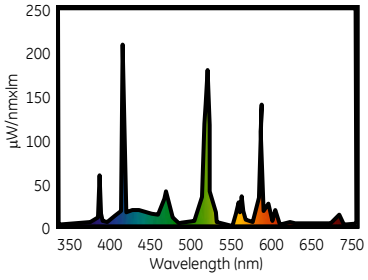
Spectral Power Distribution (4100K)



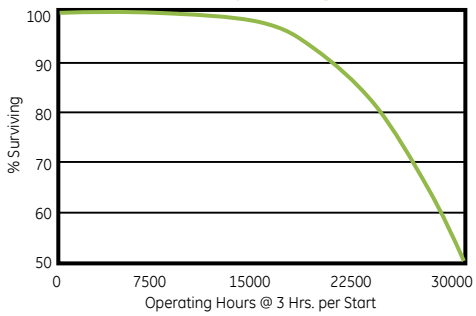
Spectral Power Distribution (5000K)



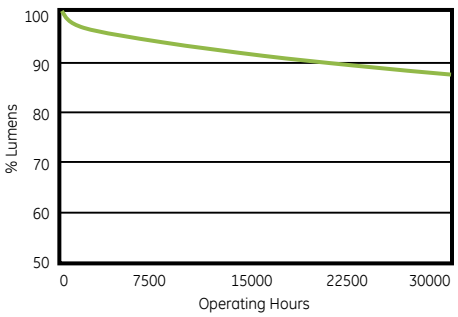
Spectral Power Distribution (6500K)



Life Expectancy



Lumen Maintenance



For additional product and application information, please consult GE's Website: www.gelighting.com

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