

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

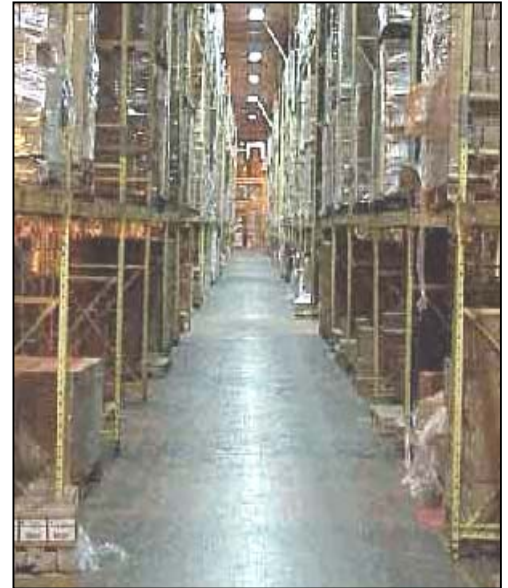
Ideally suited to commercial and retail application in both direct and combined direct/indirect luminaires.

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 (95%)

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)

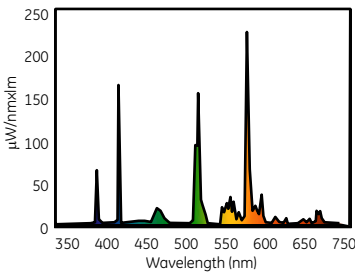


Starcoat® T5 High Efficiency and High Output Lamp Specifications

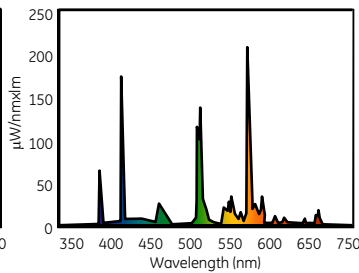
At 35°C

	HIGH EFFICIENCY					HIGH OUTPUT				
	14W	21W	28W	35W	24W	39W	54W	49W	80W	
PRODUCT CODE BY COLOR TEMP.	3000K 3500K 4100K 5000K 6500K	31590 46671 46673 46674 46676	46677 46684 46687 46686 46689	46704 46705 46706 46707 46708	46724 46727 46735 46742 46743	46699 46700 46701 46702 46703	46744 46745 46746 46747 46748	46759 46760 46761 46762 46763	46751 46752 46753 46757 46758	46802 46803 46804 46805 46806
DESCRIPTION BY COLOR TEMP.	F14WT5/830/ECO F14WT5/835/ECO F14WT5/841/ECO F14WT5/850/ECO F14WT5/865/ECO	F21WT5/830/ECO F21WT5/835/ECO F21WT5/841/ECO F21WT5/850/ECO F21WT5/865/ECO	F28WT5/830/ECO F28WT5/835/ECO F28WT5/841/ECO F28WT5/850/ECO F28WT5/865/ECO	F35WT5/830/ECO F35WT5/835/ECO F35WT5/841/ECO F35WT5/850/ECO F35WT5/865/ECO	F24WT5/830/ECO F24WT5/835/ECO F24WT5/841/ECO F24WT5/865/ECO	F39WT5/830/ECO F39WT5/835/ECO F39WT5/841/ECO F39WT5/850/ECO F39WT5/865/ECO	F54WT5/830/ECO F54WT5/835/ECO F54WT5/841/ECO F54WT5/865/ECO	F49WT5/830/ECO F49WT5/835/ECO F49WT5/841/ECO F49WT5/865/ECO	F80WT5/830/ECO F80WT5/835/ECO F80WT5/841/ECO F80WT5/850/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)	1269	1974	2726	3431	1880	3290	4700	4606	6580	
Nominal Efficacy (Lumens/Watt) - Initial	96	100	104	104	83	90	93	100	88	
Rated Life (hrs) 3hr cycle - RS ballast	20000	20000	20000	20000	20000	20000	20000	20000	20000	
Color Rendering Index (Ra) CRI	85	85	85	85	85	85	85	85	85	

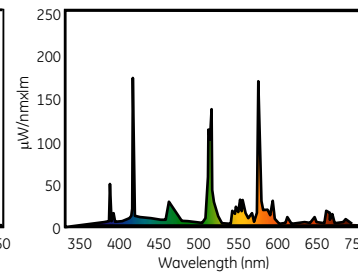
Spectral Power Distribution (3000K)



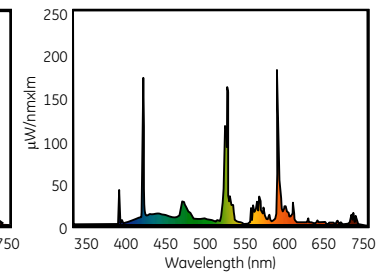
Spectral Power Distribution (3500K)



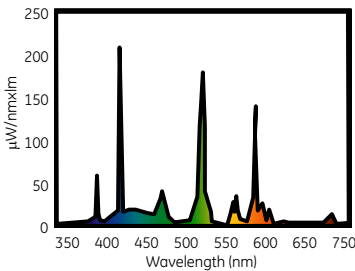
Spectral Power Distribution (4100K)



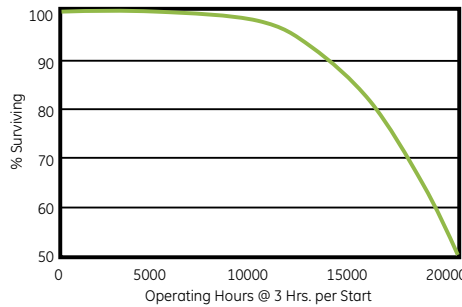
Spectral Power Distribution (5000K)



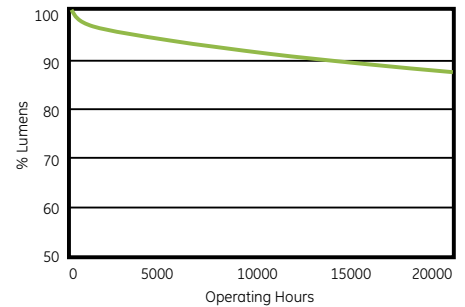
Spectral Power Distribution (6500K)



Life Expectancy



Lumen Maintenance



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