



# Saving energy was never so simple

## T5 Energy Advantage

Philips Energy Advantage T5 lamps featuring ALTO Lamp Technology offer ultimate energy savings without any sacrifice to light levels.

### Benefits

- Outstanding energy savings - save 3 watts when switching from a standard T5 28W lamp, with no sacrifice to performance.
- Sustainable Lighting Solution - only 1.4 mg of mercury per lamp.

### Features

- Save 3 watts by simply changing a lamp (when replacing a Standard T5 28W lamp).
- Save \$12.00 in energy costs over the life of the lamp when compared to a Standard T5 28W (based on 40,000 hrs Rated Average Life at \$.10 per start).
- Operates on Programmed Start electronic ballast only.
- Sustainable lighting solution- Reduces the impact on the environment: low mercury, energy efficiency, long life, and less material.
- Only 1.4 mg of mercury, the lowest in the industry.
- Dimmable.
- Available in 25 Watt- 3000K, 3500K and 4100K Color Temperatures.

### Application

- Ideal for general, decorative and architectural lighting in offices, retail stores, hotels, schools and hospitals.

### Warnings and Safety

- Lamp contains mercury. Manage in Accord with Disposal Laws. See: [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-555-0050

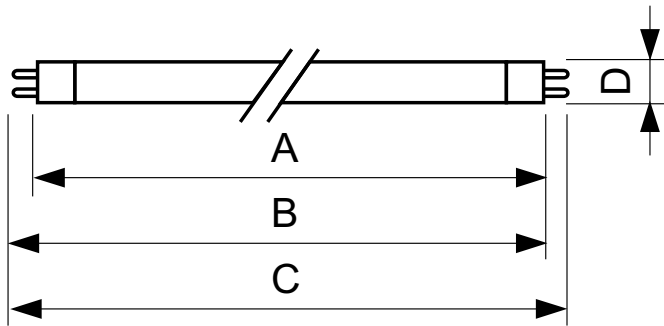
# T5 Energy Advantage

## Versions

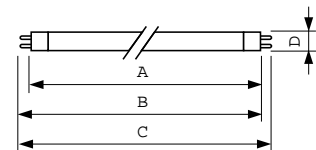


G5, T5

## Dimensional drawing



Product	D (max)	A (max)	B (max)	B (min)	C (max)
F54T5/841/HO/XEW/ ALTO 44W	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm



Product	D (max)	A (max)	B (max)	B (min)	C (max)
F28T5 835 HE EA ALTO 25W	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm

# T5 Energy Advantage

## Approval and Application

Mercury (Hg) Content (Nom)	1.4 mg
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## Controls and Dimming

Dimmable	Yes
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## General Information

Cap-Base	G5
LSF Preheat 4000 h Rated	99 %
LSF Preheat 6000 h Rated	99 %
LSF Preheat 8000 h Rated	99 %

## Light Technical

Color Rendering Index (Max)	85
Color Rendering Index (Min)	80
Color Rendering Index (Nom)	82
LLMF 12000 h Rated	92 %
LLMF 16000 h Rated	91 %
LLMF 2000 h Rated	96 %
LLMF 20000 h Rated	90 %
LLMF 4000 h Rated	95 %
LLMF 6000 h Rated	94 %
LLMF 8000 h Rated	93 %

## Mechanical and Housing

Bulb Shape	T5
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## Temperature

Design Temperature (Nom)	35 °C
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## Operating and Electrical

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
406314	F28T5/835/EA/ALTO 25W 40/1	0.170 A	25.2 W
417824	F54T5/841/HO/XEW/ALTO/44W	0.460 A	42.8 W

## General Information

Order Code	Full Product Name	Life To 50%			
		Failures Preheat (Nom)	LSF Preheat 16000 h Rated	LSF Preheat 20000 h Rated	LSF Preheat 2000 h Rated
406314	F28T5/835/EA/ALTO 25W 40/1	25000 h	99 %	94 %	99 %

Order Code	Full Product Name	Life To 50%			
		Failures Preheat (Nom)	LSF Preheat 16000 h Rated	LSF Preheat 20000 h Rated	LSF Preheat 2000 h Rated
417824	F54T5/841/HO/XEW/ALTO/44W	30000 h	98 %	97 %	100 %

## Light Technical (1/2)

Order Code	Full Product Name	Color Code	Color Designation	Correlated Color	Luminous Efficacy (@
				Temperature (Nom)	Max Lumen, Rated) (Nom)
406314	F28T5/835/EA/ALTO 25W 40/1	835	White (WH)	3500 K	114 lm/W

Order Code	Full Product Name	Color Code	Color Designation	Correlated Color	Luminous Efficacy (@
				Temperature (Nom)	Max Lumen, Rated) (Nom)
417824	F54T5/841/HO/XEW/ALTO/44W	841	Cool White (CW)	4100 K	102 lm/W

## Light Technical (2/2)

## T5 Energy Advantage

Order Code	Full Product Name	Luminous		
		Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
406314	F28T5/835/EA/ALTO 25W 40/1	103 lm/W	2900 lm	2600 lm

Order Code	Full Product Name	Luminous		
		Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
417824	F54T5/841/HO/XEW/ALTO/44W	91 lm/W	4500 lm	3900 lm

