



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 or 1-800-555-0050

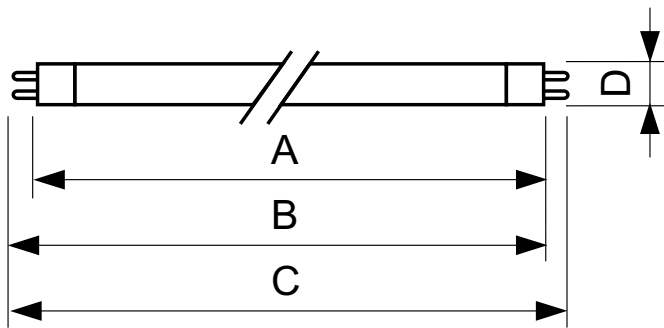
T5 Energy Advantage

Versions



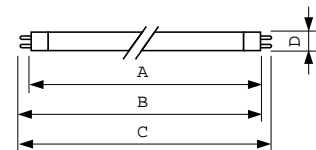
G5, T5

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
F28T5 850 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

Controls and Dimming

Dimmable Yes

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

Temperature

Design Temperature (Nom) 35 °C

Approval and Application

Order Code	Full Product Name	Energy Efficiency Label (EEL)
406314	F28T5/835/EA/ALTO 25W 40/1	A
414201	F28T5 850 HE EA ALTO 25W	A
417824	F54T5/841/HO/XEW/ALTO/44W	A+

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
414201	F28T5 850 HE EA ALTO 25W	0.170 A	25.2 W

Order Code	Full Product Name	Lamp Current (Nom)	Power (Rated) (Nom)
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)	Life To 50%		
			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 %
414201	F28T5 850 HE EA ALTO 25W	25000 h	99 %	94 %	99 %

Order Code	Full Product Name	Life To 50% Failures Preheat (Nom)	Life To 50%		
			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)

T5 Energy Advantage

Order Code	Full Product Name	Color Code	Color Designation	Correlated Color Temperature (Nom)	Luminous Efficacy (@ Max Lumen, Rated) (Nom)
406314	F28T5/835/EA/ALTO 25W 40/1	835	White (WH)	3500 K	114 lm/W
414201	F28T5 850 HE EA ALTO 25W	850	Daylight	5000 K	109 lm/W

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

Light Technical (2/2)

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
414201	F28T5 850 HE EA ALTO 25W	99 lm/W	2775 lm	2500 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

