



Philips Energy Advantage  
T5 HO 44W Lamps  
featuring ALTO  
Lamp Technology

*Ideal for medium-bay  
and high-bay retail and  
industrial applications*

Energy Advantage



† This lamp is better for the environment because of its reduced mercury content. All Philips ALTO lamps give you end-of-life options which can simplify and reduce your lamp disposal costs depending on your state and local regulations.

\* Fluorescent lamps that are TCLP compliant reduce the amount of pollutants released into the environment.

## Maximize your energy savings by changing a lamp

Philips Energy Advantage T5 HO 44W lamps are a sustainable lighting solution while offering significant energy savings and lumen performance.

### Reduced maintenance and disposal costs

- Long life (40,000 hrs RAL<sup>1</sup>) for an extended relamping cycle
- Warranty period: 42 months

### Outstanding energy savings

- Save 10 watts when switching from a standard T5 HO 54W lamp, while maintaining 93% of the lumen performance
- Save \$44.00 in energy costs over the rated average life of the lamp as compared to a 54W T5 HO lamp<sup>§</sup>
- Approved for use with ANSI/IEC approved programmed start ballasts

### Sustainable lighting solution

- Better for the environment: low mercury, energy efficiency, long life, and less waste
- Only 1.4 mg of mercury, the lowest in the industry

(1, §. See back of page for footnotes)

# PHILIPS

sense and simplicity

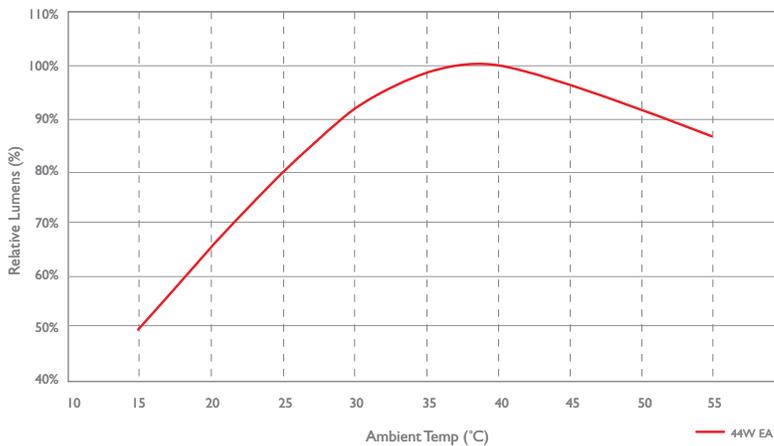
# Philips Energy Advantage T5 HO 44W Lamps featuring ALTO Lamp Technology

## Ordering, Electrical and Technical Data (Subject to change without notice)

Product Number	Ordering Code	Nom. Watts	Pkg. Qty.	Color Temp. (Kelvin)	Nom. Length (In.)	Rated Avg. Life (Hrs.) <sup>1</sup>		Approx. Initial Lumens <sup>4,5</sup>	Design Lumens <sup>6</sup>	CRI	Lumen Maint.
						3-hr Start <sup>2</sup>	12-hr Start <sup>3</sup>				
41781-6	F54T5/835/HO/EA/ALTO 44W	44	40	3500	46	35000	40,000	4520	4140	85	93%
41782-4	F54T5/841/HO/EA/ALTO 44W	44	40	4100	46	35000	40,000	4520	4140	85	93%
41783-2	F54T5/850/HO/EA/ALTO 44W	44	40	5000	46	35000	40,000	4300	3950	82	93%

- 1) Rated average life is the length of operation (in hours) at which point an average of 50% of a large sample of lamps will still be operational and 50% will not.
  - 2) Average life under specified test conditions with lamps turned off and restarted no more frequently than once every 3 operating hours. Lamp life is appreciably longer if lamps are started less frequently.
  - 3) Average life under engineering data with lamps turned off and restarted once every 12 operating hours.
  - 4) Approximate initial lumens. The lamp lumen output is based upon lamp performance after 100 hours of operating life, when the output is measured during operation on a reference ballast under standard laboratory conditions.
  - 5) For expected lamp lumen output, commercial ballast manufacturers can advise the appropriate ballast factor for each of their ballasts when they are informed of the designated lamp. The ballast factor is a multiplier applied to the designated lamp lumen output.
  - 6) Design lumens are the approximate lamp lumen output at 40% of the lamp's rated average life. This output is based upon measurements obtained during lamp operation on a reference ballast under standard laboratory conditions.
- Ⓢ Lamp meets US Federal Minimum Efficiency Standards.

## Relative Lumens vs. Ambient Temperature\*



\* As is typical with other energy saver fluorescent lamps, the 44W T5/HO can exhibit striations when operated at temperatures below 20°C. These striations will have minimum impact on overall performance or life.

+ Actual savings may vary depending on the energy costs in your geographic location.

### Footnotes from front:

§ When substituting Energy Advantage 44W T5 HO lamp with a 54W T5 HO lamp 10W saved x 40,000 hrs (rated average life) / 1000 x \$0.11 = \$44.00.

## Energy Advantage T5 HO 44W Fluorescent vs. Standard 54W T5 HO lamps

Save 10 Watts Instantly			
10 watts per lamp saved	Energy Savings Calculator**		
	Annual Operating Hours*	Savings Over Lamp Life	
kWh Rate	4380	8760	40,000 hrs.
\$0.06	\$2.63	\$5.26	\$24.00
\$0.08	\$3.50	\$7.00	\$32.00
\$0.10	\$4.38	\$8.76	\$40.00
\$0.12	\$5.26	\$10.52	\$48.00
\$0.20	\$8.76	\$17.52	\$80.00

\* 4380 hours are based on operating the lamps 12 hours per day/7 days per week. 8760 hours are based on operating the lamps 24 hours per day/7 days per week.

Note: Chart details potential savings by switching from a Philips T5 HO 54W lamp to a Philips T5 HO 44W lamp. Find your kWh rate on the left column. Columns 2 and 3 detail the savings per year per lamp depending on annual operating hours. Column 4 details total energy savings over the life of the lamp.

\*\* (Annual operating hours x watts saved) / 1000 = kWh saved. kWh x kWh rate = annual energy savings. Annual energy savings x years of life = Savings over life of lamp. Years of life = Rated Average Life of lamp (40,000) / Annual Operating hours



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