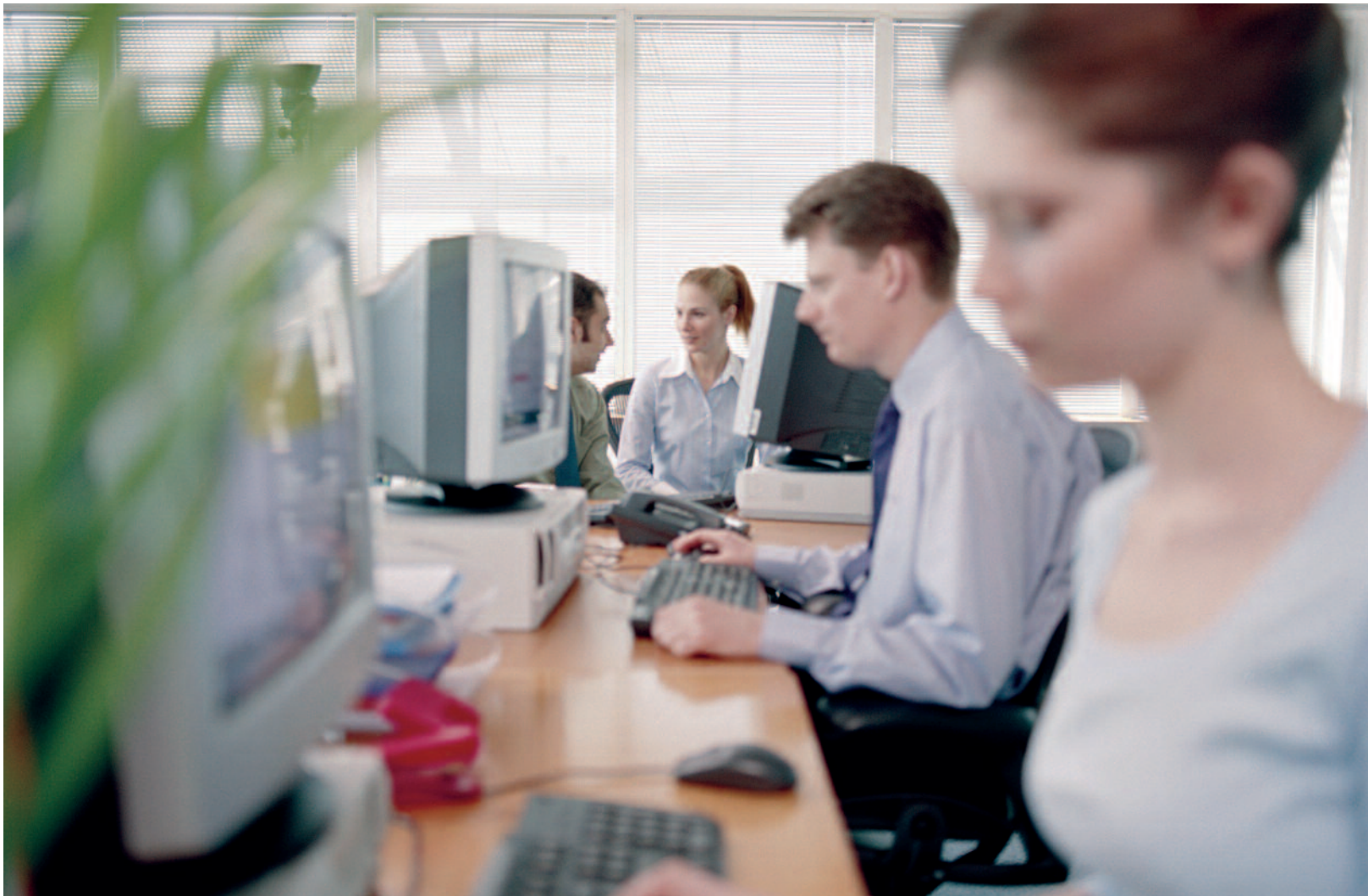




Maximum energy savings, environmentally-responsible fluorescent lamps

Philips Energy Advantage Long Life 25W T8 Lamps

PHILIPS

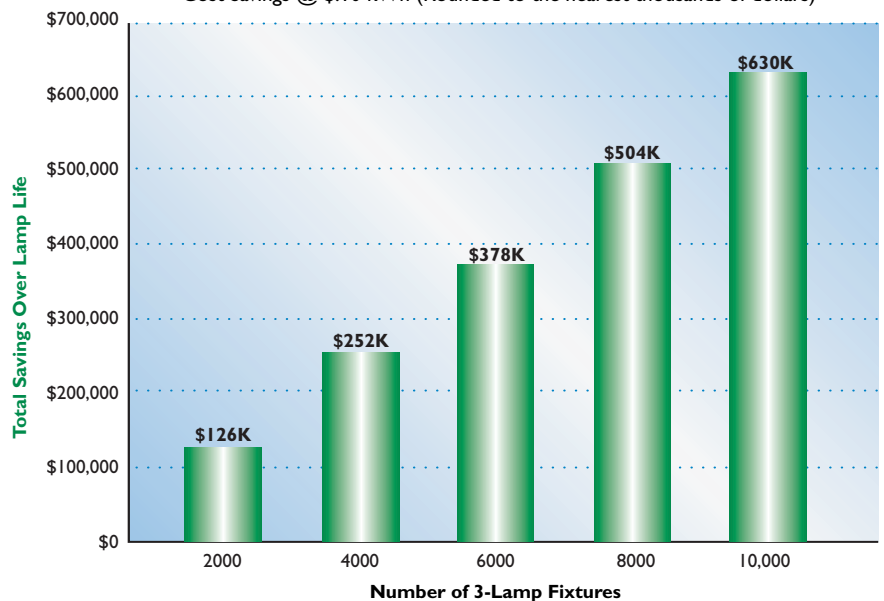


- > Sustainable Lighting Solution—Less mercury and fewer lamps in landfills, combined with energy efficiency, safer for on the environment
- > Featuring ALTO® Lamp Technology
- > Our Green End-Caps® mean you are using environmentally-responsible lamps
- > Operates on any ANSI approved instant start ballast



Switching from Standard 4-Ft Linear Fluorescent 32W T8 to Energy Advantage Long Life 25W T8

Cost Savings @ \$.10 kWh (Rounded to the nearest thousands of dollars)



Total Savings Over Lamp Life = Savings Over Lamp Life x 3 x Number of Fixtures.
Lamp Life = 30,000 Hours @ 12 Hours per Start on Instant Start Ballast.
Annual Operating Hours = 4380 (12 Hours a Day x 365 Days per Year).

Energy Advantage Long Life 25W T8 Lamps

versus Standard 32W T8 Lamps

Why choose the Energy Advantage Long Life 25W T8 over 32W T8 lamps? It's simple. The 25W design makes it the lowest energy consuming 4-foot T8 lamp on the market, and the 7-watt reduction translates into up to 25% energy savings versus a standard 32W T8. That means the Energy Advantage Long Life 25W T8 puts money in your pocket.

- > **Simple replacement** for existing 32 Watt T8
- > **Maximum energy savings**—Consumes the least amount of energy of any 4-foot T8 fluorescent lamp on the market
- > **Outstanding illumination quality**—Hi-Vision® phosphor delivers 95% lumen maintenance and 85 CRI
- > **Outstanding lumen maintenance**

Energy Advantage Long Life 25W T8 System vs F32T8 System

	3 LAMP SYSTEM		4 LAMP SYSTEM	
	Standard F32T8 .87 BF*	Energy Advantage Long Life 25W T8 .87 BF*	Standard F32T8 .87 BF*	Energy Advantage Long Life 25W T8 .87 BF*
System Wattage	88	67	112	84
Maintained Lumens	2800 x .87 BF* x .95 LM x 3 = 6943	2400 x .87 BF* x .95 LM x 3 = 5951	2800 x .87 BF* x .95 LM x 4 = 9257	2400 x .87 BF* x .95 LM x 4 = 7934
Energy Savings	21 WATTS SAVED!		28 WATTS SAVED!	

*Ballast Factor (BF) Measure of light output from lamp operated by commercial ballast, as compared to a laboratory standard reference ballast.

Replace Existing 32W T8 Systems with
Energy Advantage Long Life 25W T8 Systems &
Save Up To 25% in Energy Costs!

**Dollars Saved Over the Life of
Energy Advantage Long Life 25W T8 Lamps vs Standard F32T8 Lamps**

Energy Savings Calculator			
7 Watts per Lamp Saved	Annual Operating Hrs. (12 hour cycle)	Annual Operating Hrs. (24 hour cycle)	SAVINGS OVER LAMP LIFE
kWh Rate	4380*	8760**	30,000 Hours
\$0.06	\$1.84	\$3.68	\$12.26
\$0.08	\$2.45	\$4.90	\$16.80
\$0.10	\$3.07	\$6.13	\$21.00
\$0.12	\$3.68	\$7.36	\$25.20
\$0.20	\$6.13	\$12.60	\$42.00

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

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

Energy Advantage Long Life 25W T8 Lamps

versus Standard F34T12 Lamps

Replacing existing F34T12 magnetic systems with Energy Advantage Long Life 25W T8 lamps on instant start ballasts, results in an energy savings of up to 60-watts per fixture! That's approximately a 40% energy savings. The Energy Advantage Long Life 25W T8 is ideal for office environments that are currently overlit with antiquated T12 lamps and need more energy efficiency without sacrificing light quality.

- > **Save 60-watts per fixture** by replacing a 4 lamp T12 magnetic ballast system with a 4 lamp 25W T8 instant start ballast system
- > **Improves CRI from 62 to 85**

Energy Advantage Long Life 25W T8 System vs F34T12/EW System

	3 LAMP SYSTEM		4 LAMP SYSTEM	
	Standard F34T12/EW .87 BF*	Energy Advantage Long Life 25W T8 .87 BF*	Standard F34T12/EW .87 BF*	Energy Advantage Long Life 25W T8 .87 BF*
System Wattage	115	64	144	84
Maintained Lumens	2650 x .87 BF* x .87 LM x 3 = 6017	2400 x .87 BF* x .95 LM x 3 = 5951	2650 x .87 BF* x .87 LM x 4 = 8023	2400 x .87 BF* x .95 LM x 4 = 7934
Energy Savings	51 WATTS SAVED!		60 WATTS SAVED!	

*Ballast Factor (BF) Measure of light output from lamp operated by commercial ballast, as compared to a laboratory standard reference ballast.

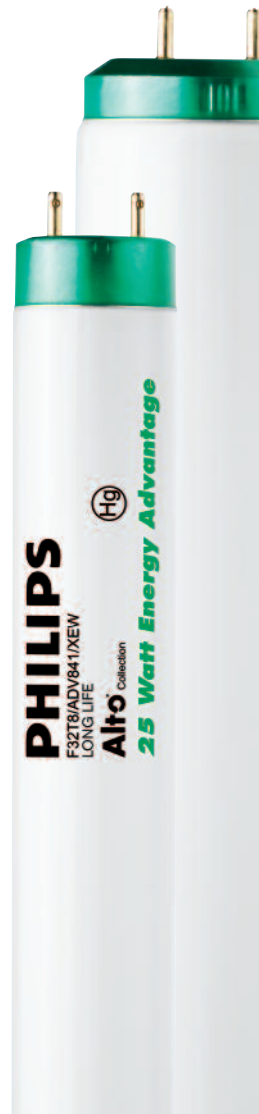
Replace Existing 34W T12 Systems with
Energy Advantage Long Life 25W T8 Systems &
Save Up To 40% in Energy Costs!

Dollars Saved Over the Life of Energy Advantage Long Life 25W T8 System vs Standard F34T12 System

Energy Savings Calculator			
15 Watts per Lamp Saved	Annual Operating Hrs. (12 hour cycle)	Annual Operating Hrs. (24 hour cycle)	SAVINGS OVER LAMP LIFE
kWh Rate	4380*	8760**	30,000 Hours
\$0.06	\$3.94	\$7.88	\$27.00
\$0.08	\$5.26	\$10.52	\$36.00
\$0.10	\$6.57	\$13.14	\$45.00
\$0.12	\$7.88	\$15.76	\$54.00
\$0.20	\$13.14	\$26.28	\$90.00

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

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



Energy Advantage Long Life 25W T8 Lamps

versus Competitive Energy Savings T8 Lamps

Stacking up against the competition, the Energy Advantage Long Life 25W 4-foot T8 lamps lead the industry in energy savings over life versus competitive low wattage 4-foot T8 lamps.

Energy Savings Comparison when Replacing a 32W T8 with an Energy Advantage Long Life 25W T8 Lamps or GE UltraMax™ 28W T8 Lamps

Savings Over Lamp Life ¹			
	GE UltraMax™ 28 Watt T8	Philips Energy Advantage Long Life 25W T8	The Philips Extra Savings vs GE 28 Watt
kWh Rate	Saves 4 Watts 24,000 Hours ²	Saves 7 Watts 30,000 Hours ³	
\$0.06	\$6.91	\$12.60	\$5.69
\$0.08	\$7.68	\$16.80	\$9.12
\$0.10	\$9.60	\$21.00	\$11.40
\$0.12	\$11.52	\$25.20	\$13.68
\$0.20	\$19.20	\$42.00	\$22.80

1. Hours x kWh Rate x Watts Saved ÷ 1000.

2. Information taken from GE Web site based on product sell sheets and product brochures in effect on 4/1/05.

3. Average life under engineering data with lamps turned off and restarted once every 12 operating hours.

Energy Savings Comparison when Replacing a 32W T8 with an Energy Advantage Long Life 25W T8 Lamps or OSI Octron® XP™ SS 28W T8 Lamps

Savings Over Lamp Life ¹			
	OSI XP™ SS 28 Watt T8	Philips Energy Advantage Long Life 25W T8	The Philips Extra Savings vs OSI 28 Watt
kWh Rate	Saves 4 Watts 26,000 Hours ²	Saves 7 Watts 30,000 Hours ³	
\$0.06	\$6.24	\$12.60	\$6.36
\$0.08	\$8.32	\$16.80	\$8.48
\$0.10	\$10.40	\$21.00	\$10.60
\$0.12	\$12.48	\$25.20	\$12.72
\$0.20	\$20.08	\$42.00	\$21.92

1. Hours x kWh Rate x Watts Saved ÷ 1000.

2. Information taken from OSI Web site based on product sell sheets and product brochures in effect on 4/1/04.

3. Average life under engineering data with lamps turned off and restarted once every 12 operating hours.

Energy Advantage Long Life 25W T8 Lamps featuring ALTO® Lamp Technology

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

Product Number	Ordering Code	Lamp Wattage	Color Temp. (Kelvin)	Nominal Length (In.)	Rated Average Life (Hrs.) 12-Hr. Start ¹	Approx. Initial Lumens ²	Design Lumens ³	CRI	Lumen Maintenance
© 13781-0	F32T8/ADV830/XEW/ALTO	25	3000K	48	30,000	2400	2280	85	95%
© 13782-8	F32T8/ADV835/XEW/ALTO	25	3500K	48	30,000	2400	2280	85	95%
© 13783-6	F32T8/ADV841/XEW/ALTO	25	4100K	48	30,000	2400	2280	85	95%
© 13784-4	F32T8/ADV850/XEW/ALTO	25	5000K	48	30,000	2400	2280	85	95%

1) Average life under engineering data with lamps turned off and restarted once every 12 operating hours. Not recommended for use with occupancy or motion sensors on instant start ballasts.

2) 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. 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.

3) 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.

Products that utilize ALTO® Lamp Technology introduce less mercury into the environment.

Reduce Philips ALTO® fluorescent lamps combine low mercury with long life and energy efficiency—which together help achieve sustainability:

- > **Low Mercury** Philips ALTO lamps average 70 percent less mercury than the 2001 industry average for fluorescent lamps up to 60" which are not TCLP⁴-compliant. Source reduction during the manufacturing phase is essential to mercury management throughout the product lifecycle.
- > **Long Life** Philips ALTO PLUS T8 lamps achieve 50 percent longer life than standard T8 lamps, safer for the environment.
- > **Energy Efficiency** Energy-efficient lighting not only reduces operating costs; it also supports a clean and sustainable environment.

Reuse ALTO lamps use 100 percent recycled mercury during the ALTO manufacturing process.

Recycle Philips encourages recycling of all spent mercury-containing lamps at end of life. For information on recycling regulations in your state go to www.lamprecycle.org.

Did You Know?

- > ALTO T8 lamps have warranty periods ranging from 2–3 years⁵.
- > ALTO T8 require no burn in before dimming.
- > ALTO T8 lamps can contribute to LEED-EB certification. For more information go to www.usgbc.org.
- > Since 1995 over **one billion** ALTO lamps have been installed nationwide.

4) The TCLP is the US EPA's Toxicity Characteristic Leaching Procedure.

5) Warranties: Universal T8, 24 months; Energy Advantage Long Life 25W T8, 24 months; PLUS T8, 30 months; Advantage T8, 36 months.

