



# PLUS Slimline T8 8-Foot Fluorescent Lamps

Long Life, Environmentally-Responsible Lamps



**Ideal for applications where long life is important**



Green End-Caps are a registered trademark of Philips Electronics North America Corporation.

### ▶ Long Life

- Up to 30,000 hours rated average life
- 60% more life than competitor's 8-foot T8 lamps means reduced maintenance and disposal costs

### ▶ Environmentally Responsible

- Low mercury: TCLP\* and California TTLC\* compliant
- Energy efficient
- Long life

### ▶ Sustainable Lighting Solution

Less mercury and fewer lamps in landfills, combined with energy efficiency reduces the impact on the environment

### ▶ Look for the Green End-Caps®

Our Green End-Caps mean you are using environmentally-responsible lamps

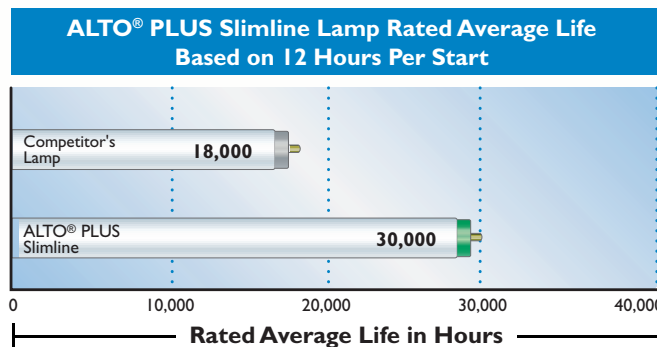
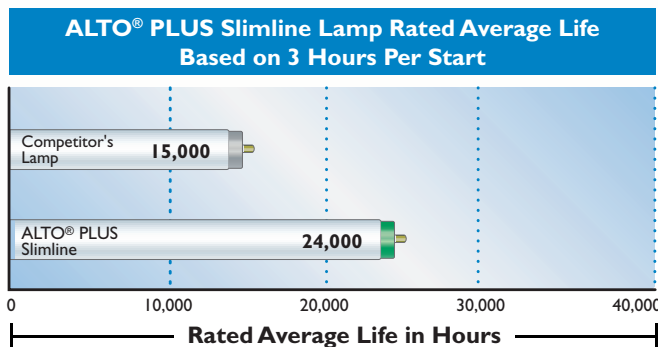
### ▶ Outstanding Lumen Maintenance

- HI-VISION® Phosphor combined with Philips exclusive cathode guard delivers:
  - 90% lumen maintenance
  - Reduced lamp-end blackening

### ▶ Enhanced CRI

85 CRI for TL80 lamps; 78 CRI for TL70 lamps

\* The TCLP is the US EPA's Toxicity Characteristic Leaching Procedure, and the TTLC is California's Total Threshold Limit Concentration test.



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Printed in USA 1/03

P-3554-D

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## ALTO® PLUS Slimline 8-Foot T8 Fluorescent Lamps

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

Product Number	Ordering Code	Package Quantity	Color Temp. (Kelvin)	Nominal Length (In.)	Rated Average Life (Hrs.) <sup>(1)</sup>		Approx. Initial Lumens	Design Lumens <sup>(2)</sup>	CRI	Lumen Maintenance
					3-Hr. Start	12-Hr. Start				
ⓔ 38800-9	F96T8/TL830/PLUS ALTO	24	3000K	96	24,000	30,000	5900	5490	85	95%
ⓔ 38801-7	F96T8/TL835/PLUS ALTO	24	3500K	96	24,000	30,000	5900	5490	85	95%
ⓔ 38802-5	F96T8/TL841/PLUS ALTO	24	4100K	96	24,000	30,000	5900	5490	85	95%
ⓔ 38803-3	F96T8/TL850/PLUS ALTO	24	5000K	96	24,000	30,000	5780	5375	85	95%
ⓔ 38805-8	F96T8/TL735/PLUS ALTO	24	3500K	96	24,000	30,000	5700	5190	78	95%
ⓔ 38806-6	F96T8/TL741/PLUS ALTO	24	4100K	96	24,000	30,000	5700	5190	78	95%

1) Rated average life based on Instant Start systems at 3 hours and 12 hours per start respectively. Rated 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.

2) Approximate lumens at 40% of rated average life (6000 hours).

ⓔ Lamp meets US Federal Minimum Efficiency Standards.

### Cost of Ownership Savings

ALTO PLUS Slimline 8-foot T8 Fluorescent Lamps vs. Standard 8-foot T8 Lamps

#### General Overview

ALTO PLUS Slimline 8-foot T8 fluorescent lamps provide up to 60% longer life than standard 8-foot T8 products. With an incremental cost as little as \$1.00 per lamp, benefits and financial impact can be significant.

#### Benefits

By using ALTO PLUS Slimline 8-foot T8 lamps the lamp replacement and labor costs are extended by an extra 2 years on a facility that operates an average of 4,000 hours per year. For example, a standard 8-foot T8 product, with a rated average life expectancy of 15,000 hours, will last nearly 4 years (15,000 hours rated average life/4,000 hours per year = 3 3/4 years). Conversely, ALTO PLUS Slimline 8-foot T8 lamps will operate for 6 years due to their rated average life expectancy of 24,000 hours (24,000 hours rated average life/4,000 hours per year = 6 years).

#### Financial Impact

With the extended life expectancy of 2 years and the benefits of Philips' exclusive ALTO TCLP-compliant low mercury technology, the positive financial impact of installing ALTO PLUS Slimline 8-foot T8 lamps will provide cost of ownership savings per lamp as follows:

Incremental Cost	\$ (1.00)
Material Cost Avoidance <sup>A</sup>	\$ 4.00
Labor Cost Avoidance <sup>B</sup>	\$ 3.72
Disposal Cost Avoidance <sup>C</sup>	\$ 0.72
<b>Cost of Ownership Savings</b>	<b>\$ 7.44</b>

**A** Material Cost Avoidance is the annualized acquisition cost per lamp (average cost per lamp of \$7.50 for standard 8-Foot T8 product / 3 3/4 years = \$2.00 per year). By installing ALTO PLUS Slimline 8-Foot T8 lamps, a material cost per lamp of \$4.00 is avoided due to the extra 2 years of life expectancy. Note that the average cost per lamp may vary.

**B** Labor Cost Avoidance is the annualized labor replacement cost per lamp (labor replacement cost per lamp of \$7.00 / 3 years = \$1.86 per year). By installing ALTO PLUS Slimline 8-Foot T8 lamps, a labor replacement cost per lamp of \$3.72 is avoided due to the extra 2 years life expectancy. Note that the labor replacement cost per lamp may vary.

**C** Disposal Cost Avoidance is based on an average of \$.09 per foot for lamp recycling or \$.72 per 8-foot lamp. Philips Lighting Company encourages the recycling of all fluorescent lamps.

### ALTO PLUS Slimline 8-Foot T8 System—Lamp Specification Lamps shall be Philips ALTO PLUS Slimline 8-Foot T8 Lamps having:

- ▶ Color rendering index of \_\_\_\_ (78 or 85)
- ▶ T8 diameter bulb
- ▶ Single pin bases
- ▶ Color temperature of \_\_\_\_\_ K (3000, 3500, 4100, 5000)
- ▶ Nominal wattage of 59
- ▶ Powered by electronic ballasts designed for F96T8 lamps



† This fluorescent lamp is better for the environment because of its reduced mercury content. All fluorescent lamps contain mercury for effective operation, however, Philips lamps with ALTO® Lamp Technology average 70% less mercury than the 2001 industry average for fluorescent lamps up to sixty inches which are not TCLP-compliant.

