

Excellent color rendering, low mercury, **improved outcome**

Philips T8 High CRI lamps featuring ALTO II technology are ideal when better color rendering properties are preferred.

Outstanding lamp performance

- 95% lumen maintenance and reduced lamp-end blackening
- 90 color rendering index
- Limited warranty period based on usage⁺

Better for the environment

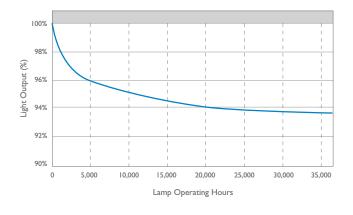
- ALTO II Technology is TCLP compliant*
- Only 1.7mg of mercury with ALTO II technology
- Reduced impact on the environment without sacrificing performance
- \cdot ALTO II means 50% less mercury than the original ALTO T8 lamps^{\dagger}

Ordering, electrical and technical data (Subject to change without notice)

						Rated Average Life (hrs) ¹					
Product Number	Ordering Code	Watts	Pack Qty	Color Temp	Nom Length	12-hr on Instant Start	12-hr on Prog Start	Approx Initial	Design Lumen ³	CRI	Lumen Maint
47959-2	F32T8/TL930/ALTO	32	30	3000K	48	30,000	36,000	2775	2635	90	95%
47960-0	F32T8/TL935/ALTO	32	30	3500K	48	30,000	36,000	2625	2500	90	95%
47962-6	F32T8/TL941/ALTO	32	30	4100K	48	30,000	36,000	2600	2470	90	<mark>95%</mark>
47963-4	F32T8/TL950/ALTO	32	30	5000K	48	30,000	36,000	2600	2470	90	95%
47964-2	F32T8/TL965/ALTO	32	30	6500K	48	30,000	36,000	2600	2470	90	95%

95% lumen maintenance

Philips T8 High CRI lamps



Rated average life Philips T8 High CRI lamps

Instant Start Ballast
Programmed Start Ballast



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

- 2. 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. 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.
- 4. 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.
- + See your Philips sales representative for details
- * The EPA's TCLP test is used to determine if an item can be managed as hazardous or non-hazardous waste. Philips ALTO and ALTO II lamps are TCLP Compliant and can be managed as non-hazardous waste.
- † This lamp is better for the environment because of its reduced mercury content. All Philips ALTO II lamps give you end-of-life options which can simplify and reduce your lamp disposal costs depending on your state and local regulations. ALTO II lamps have only 1.7mg of mercury.

