Extra long life, extra low mercury.

Philips T8 32W Twice the Life Lamps featuring ALTO II Technology offer long life and reduce maintenance.

Extra long life
• Significantly reduce maintenance and recycling costs by extending the relamping cycle
• Almost twice the longer life than an industry standard T8 lamp**
• Limited warranty period based on usage+

Outstanding lumen performance
• 97% lumen maintenance and reduced lamp-end blackening

Better for the environment
• Only 1.7mg of mercury with ALTO II Technology
• Reduced impact on the environment without sacrificing performance

(*, **, + See back of page for footnotes)
Ordering, Electrical and Technical Data (Subject to change without notice)

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<td>97%</td>
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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. Design lumens are rated at 3 hours per start on instant start ballast.
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.

Lamp meets US Federal Minimum Efficiency Standards.

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.

97% Lumen Maintenance
Philips T8 32W 2XL Lamps

![Graph showing 97% lumen maintenance over lamp operating hours]

Rated Average Life
Philips T8 32W 2XL Lamps

![Graph showing rated average life in hours]

Footnotes from the front:
* 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.
** When replacing a standard 4' T8 32W lamp with 24,000 hours rated average life and 2850 lumens with a Philips T8 32W Twice The Life lamp with 46,000 hours rated average life and 2950 lumens. RAL based on 3 hours per start on an instant start ballast.
+ See your sales representative for details