

# Ideal for applications requiring maximum maintained light output

Philips T8 Lamps are energy-efficient lighting solutions that contain extra low mercury.

## **Extended life**

- Reduce maintenance costs by extending the relamping cycle
- Limited warranty period based on usage<sup>1</sup>

## Better for the environment

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

## Outstanding lumen performance

 95% lumen maintenance and reduced lamp-end blackening



ALTO II means 50% less mercury than the original ALTO T8 lamps

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. ALTO II Lamps have only 1.7mg of mercury.

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.



## Philips T8 Collection Lamps featuring ALTO II technology

Ideal for applications requiring maximum maintained light output.

## Ordering information & electrical and technical data

						Nominal	Rated Average Life (hrs) <sup>1</sup>		Approx			
	Product Number	Ordering Code	Watts	Pack Qty.	CCT (kelvin)	Length (inches)	12-hr on Instant Start	12-hr on Program Start	Initial Lumens <sup>2</sup>	Design Lumens³	CRI	Lumen Maint.
	28188-1	F17T8/TL835/ALTO	17	30	3500	24	30,000	36,000	1350	1280	85	95%
	28189-9	F17T8/TL841/ALTO	17	30	4100	24	30,000	36,000	1350	1280	84	95%
	28090-9	F17T8/TL850/ALTO	17	30	5000	24	30,000	36,000	1300	1235	82	95%
	28190-7	F25T8/TL835/ALTO	25	30	3500	36	30,000	36,000	2150	2040	85	95%
	28191-5	F25T8/TL841/ALTO	25	30	4100	36	30,000	36,000	2150	2040	84	95%
	28092-5	F25T8/TL850/ALTO	25	30	5000	36	30,000	36,000	2150	2040	82	95%
<b>3</b>	28151-9	F32T8/TL830/ALTO	32	30	3000	48	30,000	36,000	2875	2735	85	95%
<b>3</b>	28153-5	F32T8/TL835/ALTO	32	30	3500	48	30,000	36,000	2875	2735	84	95%
<b>3</b>	28155-0	F32T8/TL841/ALTO	32	30	4100	48	30,000	36,000	2875	2735	82	95%
<b>3</b>	28156-8	F32T8/TL850/ALTO	32	30	5000	48	30,000	36,000	2875	2735	82	95%
<b>3</b>	45366-2	F32T8/HL730/ALTO30K	32	30	3000	48	30,000	36,000	2850	2710	78	95%
<b>3</b>	45373-8	F32T8/HL735/ALTO30K	32	30	3500	48	30,000	36,000	2850	2710	78	95%
<b>3</b>	45375-3	F32T8/HL741/ALTO30K	32	30	4100	48	30,000	36,000	2850	2710	78	95%
<b>3</b>	45374-6	F32T8/HL750/ALTO30K	32	30	5000	48	30,000	36,000	2850	2710	78	95%
<b>3</b> (	45379-5	F32T8/HL765/ALTO30K	32	30	6500	48	30,000	36,000	2850	2710	75	95%

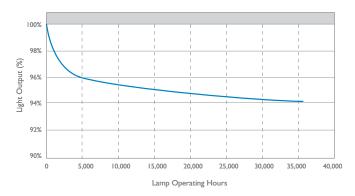
### Philips T8 Lamp rated average life

## Instant Start Ballast BASED ON 3 HOURS PER START 24,000 30,000 BASED ON 12 HOURS PER START



- Average life under engineering data with lamps turned off and restarted once every 12 operating hours.
   Design lumens are the approximate lamp lumen output at 40% of the lamp's rated average life. The contract of the lamp's rated average life.
- 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.
- 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 rated at 3 hours per start on instant start ballast.
- 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.

## Philips T8 Lamp 95% lumen maintenance



- 9 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.





Do not place in trash dispose according to local, state, or federal laws

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