

# PHILIPS

sense and simplicity

A new generation of sustainable light  
Philips EnduraLED T8 Specifier Series Lamps



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<b>Oneida</b> (315) 361-4149	<b>Corporate Office</b> Syracuse (315) 474-7841	<b>24 Hour Emergency Number</b> (800) 999-7841

## Philips EnduraLED T8 Specifier Series Lamps


- Why LEDs make sense?
- Why EnduraLED T8 Specifier Series lamps?
- Overview and key specs of EnduraLED T8
- Ideal application areas for EnduraLED T8
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## Why LEDs make sense?



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### Energy Efficiency

- LEDs are extremely efficient in converting electric power into light output
- Lower power consumption means lower energy bills



### Reduced Maintenance Costs

- LEDs have a longer rated average life than incandescents and many fluorescent lamps
- Longer relamp cycles means less maintenance costs
- No hazardous substances means no recycling costs



### Design and Sustainability

- LEDs can create dynamic flexible lighting solutions that make a statement
- With no hazardous substances, LEDs are a better choice for the environment
- Ideal for use with controls: switching has no effect on lamp life

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# Why EnduraLED T8 Specifier Series Lamps?

## Efficiency, Sustainability



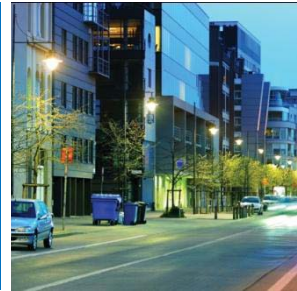
- Significant energy savings versus a T12 system (**see example below**) because TLED does not require a ballast and is more efficient
- No mercury means no need for recycling
- Emits virtually no UV rays
- Complies with DOE 2009 rulemaking regarding TL energy efficiency\*\*

## Quality & Reliability



- Full light output in spaces with temperatures down to -22°F (-30°C)
- Instant on, no flicker or buzz
- 4 year limited warranty
- Specialized separated end cap design can help create a safer operating environment
- Rated Average Life\*\*\* of 40,000 hours means more time between relamp cycles

## Sense & Simplicity



- Fits into existing T8 or T12 linear fluorescent fixtures
- Simple rewiring installation allows lamps to run directly off mains voltage
- Perfect for applications with occupancy sensors. Frequent on/off switching does not affect lamp life

### \*Example: 40% Energy Savings versus a(2) Lamp T12 system

F34T12 Magnetic System = 74 System Watts  
 (2) Lamp EnduraLED T8 GA 48" Specifier = 44 System Watts  
 74 - 44 = 30 System Watts Saved  
 30 / 74 = 40.5% Energy Saved



\*\*\*Rated Average Life based on engineering testing and probability analysis.  
 \*\* "Energy Conservation Program: Energy Conservation Standards and Test Procedures For GSFL and IRL; Final Rule" 74 Federal Register 34080, (14 July 2009)

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# Overview and Key Specs of EnduraLED T8 Lamps

Philips EnduraLED T8 Specifier – A mains wired LED replacement for existing 2 and 4 foot linear fluorescent lamps.

With long life, low energy consumption and no mercury EnduraLED T8 Specifier is the next generation in sustainable lighting.

Replacement lamp for T12 and T8 linear fluorescent lamps





# EnduraLED T8 Specifier Series – Mains Wiring

## Perfect for a wide range of applications

- Perfect for applications with occupancy sensors as there are no requirements on “on/off” switching cycles
- Buildings that desire to be mercury free
- Complies with DOE rulemaking regarding TL energy efficiency requirements being implement in 2012\*

## Easy to experience

- Instant on, no flicker or buzz
- Fits into existing linear fixtures
- Simple rewiring installation allows lamps to run directly off mains voltage\*\*\*\*

## Energy savings alternative

- Significant energy savings versus a T12 system because TLED does not require a ballast and is more efficient\*\* (see example)
- Emits virtually no UV rays, and has no mercury allowing easy disposal
- 4 year limited warranty

## Energy savings alternative

- 2ft- 11 Watts, 825 Lumens, 835 & 840 CCT, 85 CRI
- 4ft- 22 Watts, 1650 Lumens, 835 & 840 CCT, 85 CRI
- Rated Average Life of 40,000 hours\*\*\*
- 100–277V operating voltage
- Compatible with current non- shunted G13 sockets
- UL approved for both component lamp and as retrofit

### \*\*Example: 40% Energy Savings versus a(2) Lamp T12 system

F34T12 Magnetic System = 74 System Watts  
(2) Lamp EnduraLED T8 GA 48" Specifier = 44 System Watts  
74 - 44 = 30 System Watts Saved  
30 / 74 = 40.5% Energy Saved

\*Energy Conservation Program: Energy Conservation Standards and Test Procedures For GSFL and IRL; Final Rule” 74 Federal Register 34080, (14 July 2009)

\*\*\*Rated Average Life based on engineering testing and probability analysis.  
\*\*\*\* Must follow guidelines for installation from Philips Quick Installation Guide included with lamp shipment.



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## Ideal Application Areas

### Colder environments

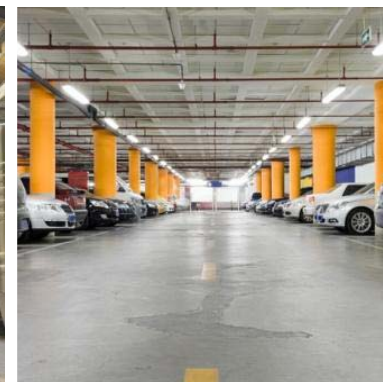
- Walk in Coolers
- Outdoor sign/Billboard lighting
- Bus shelters
- Loading docks
  - Temperature independent with 100% light output

### Industrial

- Manufacturing Facilities
- Food processing
- Dusty applications
  - rated for food processing
  - Dust on top of lamp does not effect light output

### Other key application uses

- Re-lamping to comply with DOE energy efficiency standards
- Hallways, Stairwells and other areas needing more directional light and 24/7 operation



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# 2 Lamp System Comparison (@ 12hrs per Start)

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	Philips F34T12	Philips 28W T8 Energy Adv	Philips TLED
Initial Lumens per lamp	2650	2725	1650 <sup>1</sup>
Watts	72	48	44
CRI	62	85	85
Lumen Mntc.	85%	97%	85%
Rated Average Life	20,000 <sup>2</sup>	36,000 <sup>2</sup>	40,000 <sup>3</sup>
Cost of Operation/Year <sup>4</sup>	\$31.68	\$21.12	\$19.36
<b>Savings per Year vs. T12 System<sup>5</sup></b>		<b>\$10.56</b>	<b>\$12.32</b>

•(1) While lumens is lower T-LED has the same foot candles as a Philips 28W T8 Energy Advantage. Lumens: SI unit of luminous flux. SI unit for measuring the flux of light being produced by a light source or received by a surface. Footcandle: The unit of measure for the density of light on a surface. One footcandle is equal to one lumen per foot

•(2) Average life under specified test conditions with lamps turned off and restarted no more frequently than once every 12 operating hours

•(3) Rated Average Life for TLED based on engineering testing and probability analysis

•(4) based on 4000 operating hours per year and \$0.11 kWh. Watts x Annual Operating Hours = Total Annual Watts used. Total Annual Watts used /1000 = Total KWh. Total KWh x \$0.10 kWh = Cost of Operation. Comparison is a Philips Mark 3 magnetic ballast and a Philips F34T12 lamp. Average kWh cost may vary depending on geographic region.

•(5) Cost of operating T12 system – cost of operating comparison system = total savings per year

**Same Light,  
Less Energy**

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## EnduraLED T8 Lamp Application Examples

### COMMERCIAL APPLICATIONS

**Location:** Rutgers University

**Segment:** Schools

**Application:** Bakery

**Current Lighting:** (2) Lamp T8 32W = 58 System Watts

**TLED Option:** (2) Lamp TLED 22W = 44 System Watts

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### COMMERCIAL APPLICATIONS

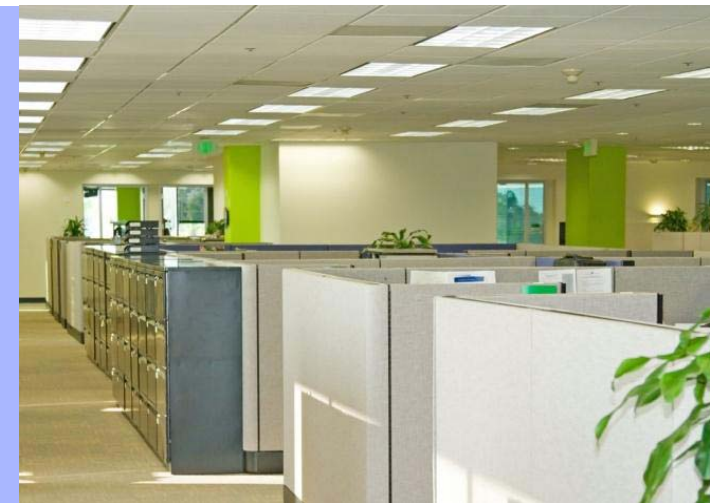
**Location:** Army Base

**Segment:** Office

**Application:** Hallway and Closed office space

**Current Lighting:** (3) Lamp T8 32W = 86 System Watts

**TLED Option:** (3) Lamp TLED 22W = 66 System Watts





# EnduraLED T8 Lamp Application Examples

## OUTDOOR/OTHER APPLICATIONS

**Location:** Rutgers University

**Segment:** Schools


**Application:** Walk In Freezer Cooler (-22F)

**Current Lighting:** (2) Lamp T8 32W = 58 System Watts  
(Sealed Fixture)

**TLED Option:** (1) Lamp TLED 22W = 22 System Watts (Optional)

**Projected Payback period of 1.2 years**




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# Learn More About EnduraLED T8 Lamps

- EnduraLED T8 Product Bulletin
- EnduraLED T8 Installation Guide
- Brain Bank eSmarts
- Local lighting distributor or Philips Sales Representative

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EnduraLED T8 Website:

[www.philips.com/tled](http://www.philips.com/tled)





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# Ordering Information: EnduraLED T8 Specifier Series

Product Number	Ordering Code	Nom. Watts	Volts	Bulb Type	Nom Length (In.)	Initial Lumens*	Base	CRI	Color Temp. (K)	Pkg. Qty.	Rated Average Life**
41868-1	EnduraLED T8 GA 11W/835 24" G13 Specifier	11	100-277	T8	24"	825	G13	85	3,500	10	40,000
41871-5	EnduraLED T8 GA 11W/840 24" G13 Specifier	11	100-277	T8	24"	825	G13	85	4,000	10	40,000
41869-9	EnduraLED T8 GA 22W/835 48" G13 Specifier	22	100-277	T8	48"	1650	G13	85	3,500	10	40,000
41872-3	EnduraLED T8 GA 22W/840 48" G13 Specifier	22	100-277	T8	48"	1650	G13	85	4,000	10	40,000

Specifications subject to change.

\*Based on Photometric testing consistent with IES LM-79  
 \*\* Rated average life based on engineering testing and probability analysis

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