

# SYLVANIA Lamps

## ECO LED T8 Type B Ballast-Free

### Application

SYLVANIA ECO LED T8 lamps deliver a quality LED light, at an affordable price. This long-lasting, economical line provides the perfect lighting solution for any budget for office, industrial or education.

### Benefits and Features

- Internal driver/line voltage linear LED T8 with optimized glass optics & G13 medium bi-pin base
- Patented built-in safety circuit prevents current from flowing through the lamp when only one end is engaged in the socket thereby eliminating potential shock hazard
- No risk of electrical arcing between the lamp pins and the lamp holders
- Double ended lamp is wired end-to-end preventing non-passive failure of a fluorescent lamp should it be inadvertently installed in the fixture
- No warm-up time, instant-on with full light output and stable lamp-to-lamp color
- No UV emission
- Approved for use with tube guards
- Maximize energy savings with occupancy sensors
- Up to 120 LPW (Lamp efficacy)
- CCT: 3500K, 4100K, 5000K
- CRI: 80
- Light Emitting Angle 340°; Beam Angle 220°

### Electrical

- Installed directly on 120-277V; no ballast required
- Power factor >0.90
- THD <20%
- Non-dimmable
- EMI/RFI: FCC Title 47 CFR, Part 15 Subpart B Class B

### Rated Life

- 50,000 hours (L<sub>70</sub>) for 18W lamps
- 35,000 hours (L<sub>70</sub>) for 17W lamps

### Warranty

- 18W: 5 Year limited lamp warranty (24/7 operation)
- 17W: 3 Year limited lamp warranty (24/7 operation)
- ECO LED T8 Ballast-Free lamps are covered by the LED T8 Lamp Limited Warranty. For additional details, please visit [www.ledvanceUS.com/warranty](http://www.ledvanceUS.com/warranty).



### Wattage Comparison

| Traditional Source                  | Traditional System Wattage | LED System Wattage | Energy Savings |
|-------------------------------------|----------------------------|--------------------|----------------|
| 32W T8 Fluorescent with QHE2x32 ISN | 55                         | 36                 | 35%            |
| 32W T8 Fluorescent with QHE2x32 ISN | 55                         | 34                 | 38%            |

### Ambient Operating Range

- -4°F to 113°F (-20°C to 45°C)

### Max Case Temperature

- 158°F (70°C)

### Certifications and Listings

- cULus 1993 & 1598C
- RoHS
- Lead Free
- Mercury Free
- FCC\*
- NSF\*\*

\*FCC Title 47 CFR, Part 15 Subpart B Class B

\*\*NSF/ANSI Standard 2 - Food Equipment

### Installation

- Please refer to the Installation manual included inside the packaging and the applications information listed below for more information.



## Specification Data

|             |      |
|-------------|------|
| Catalog #   | Type |
| Project     |      |
| Comments    |      |
| Prepared by |      |

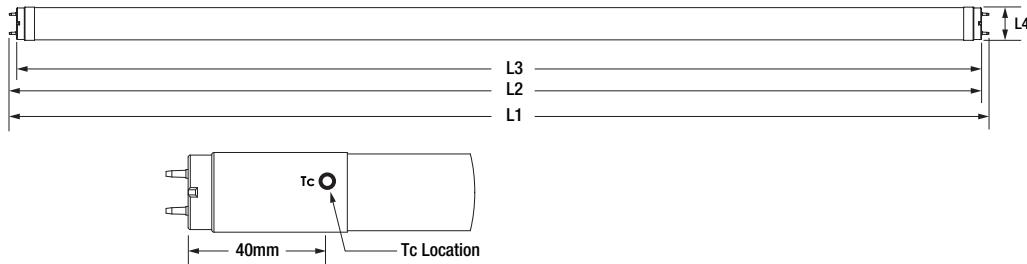
## Ordering Guide

| ECOLED  | 1X  | T8                   | L48                 | FG   | 8             | XX  | TYPEB                     |
|---------|---|----------------------|---------------------|--|---------------|---|---------------------------|
| ECO LED | Wattage<br>17 = 17 Watts<br>18 = 18 Watts | Lamp Type<br>T8 = T8 | Length<br>L48 = 48" | Material<br>FG = Frosted<br>Glass (non dimmable) | CRI<br>8 = 80 | Color Temperature<br>35 = 3500K<br>41 = 4100K<br>50 = 5000K | UL Type<br>TYPEB = Type B |

## Ordering Information

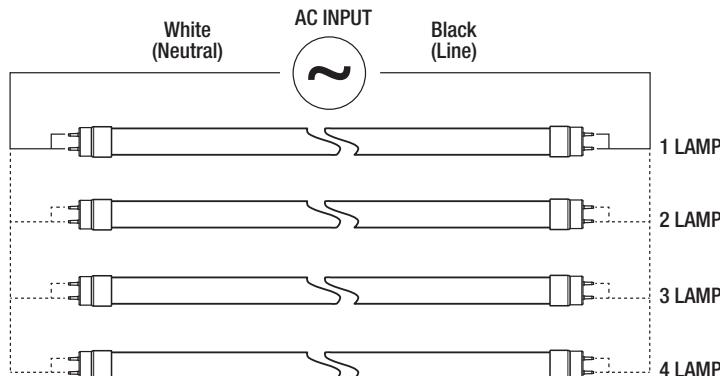
| Item Number | Ordering Abbreviation   | Lamp Length | Base Type | Power (W) | Initial Lumens (lm) | Color Temperature (CCT) | CRI | Beam Angle (°) | Bulb Finish   | Package Qty | DLC Listed |
|-------------|-------------------------|-------------|-----------|-----------|---------------------|-------------------------|-----|----------------|---------------|-------------|------------|
| 41997       | ECOLED17T8L48FG835TYPEB | 4ft         | G13       | 17        | 1800                | 3500K                   | 80  | 220            | Frosted Glass | 25          | No         |
| 41998       | ECOLED17T8L48FG841TYPEB | 4ft         | G13       | 17        | 1800                | 4100K                   | 80  | 220            | Frosted Glass | 25          | No         |
| 41999       | ECOLED17T8L48FG850TYPEB | 4ft         | G13       | 17        | 1800                | 5000K                   | 80  | 220            | Frosted Glass | 25          | No         |
| 40969       | ECOLED18T8L48FG835TYPEB | 4ft         | G13       | 18        | 2160                | 3500K                   | 80  | 220            | Frosted Glass | 25          | No         |
| 40970       | ECOLED18T8L48FG841TYPEB | 4ft         | G13       | 18        | 2160                | 4100K                   | 80  | 220            | Frosted Glass | 25          | No         |
| 40971       | ECOLED18T8L48FG850TYPEB | 4ft         | G13       | 18        | 2160                | 5000K                   | 80  | 220            | Frosted Glass | 25          | No         |

## Physical Information



| Lamp Description | L1<br>End of Base Pin to<br>End of Opposite Pin End | L2<br>Base Face to<br>Opposite Base Pin | L3<br>Base Face to<br>Base Face | L4<br>Bulb Outside<br>Diameter |
|------------------|---|---|---------------------------------|--------------------------------|
| ECO LED/L48      | 47.725"±0.055" (1212.2mm ±1.4mm)                    | 47.45"±0.05" (1205.25mm±1.25mm)         | max 47.22" (1199.4mm)           | 1.02"±0.08" (25.9mm±2.0mm)     |

## Wiring Diagram



Note:

1. ECO LED Type B lamp is polarity neutral. Can be installed in either direction.
2. Sockets may be shunted or non-shunted. Tie socket leads together for non-shunted sockets.

## Application Information

1. Suitable for open and enclosed fixtures.
2. Suitable for use in dry and damp environments; cannot come in direct contact with water.
3. Ensure lamp holders/sockets are in good operating condition before installation.
4. No socket change required. Sockets may be shunted or non-shunted. Tie socket leads together for non-shunted sockets as instructed in installation guide.
5. Not for emergency lighting.
6. Not to be used with dimmers.
7. Do not use ECO LED Type B T8 lamps with external LED drivers or ballasts.
8. To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
9. When installing the ECO LED Type B T8 lamps, the UL rating of the existing fixture is not voided (even when it is electrically modified) since our ECO LED Type B T8 lamp is UL Classified (as a luminaire conversion retrofit kit) under UL standard 1598C. UL 1598C is the standard covering LED retrofits intended for an existing UL rated fixture. Since the user is retrofitting with a UL1598C classified LED kit, the installer must follow the installation instructions included with the lamps for the modified fixture to retain its UL rating.
10. All installation, inspection, and maintenance of lighting fixtures should be done with the power to the fixture turned off. Lamps should be installed and operated in compliance with the National Electrical Code (NEC), Underwriters Laboratories Inc. (UL) requirements, and all applicable codes and regulations.
11. Please read all installation instructions before attempting installation.
12. ECO LED Type B is compatible with Philips Bodine ELI-S-20 Emergency Lighting Inverters and IOTA inverter models IIS-25-I, IIS-35-I, IIS-50-1, IIS125, IIS-375, IIS-550.
13. For detailed warranty information, please see [www.ledvanceUS.com/warranty](http://www.ledvanceUS.com/warranty).

LEDVANCE LLC  
181 Ballardvale Street  
Wilmington, MA 01887 USA  
Phone 1-800-LIGHTBULB (1-800-544-4828)  
[www.ledvanceUS.com](http://www.ledvanceUS.com)

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