SubstiTUBE® Value LED T8

Compatible LED T8 for use with instant start and select programmed rapid start electronic T8 ballasts

Application

SYLVANIA SubstiTUBE Value LED T8 lamps are an energy saving alternative, designed to replace traditional fluorescent T8 lamps. These LED T8 lamps contain no mercury, provide instant light and a uniform light distribution with an optimized glass optic design.

Engineered to operate on existing instant start and select programmed rapid start electronic T8 ballasts, these lamps minimize labor costs. Because the SubstiTUBE Value LED T8 is not affected by switching cycles, the use of occupancy or vacancy sensors can be installed with the existing ballasts for optimal energy savings.

Benefits and Features

- Available in 4ft
- CCT: 3000K, 3500K, 4100K, 5000K
- Beam angle: 220°
- G13 medium bi-pin base
- Reduces energy consumption up to 40%
- No warm-up time, instant-on with full light output and stable lamp to lamp color
- Lamps with DIM in description are 0-10V dimming with compatible dimming ballasts
- Optimized glass optical design
- No UV emission
- Suitable for dry and damp locations (cannot come in direct contact with water)
- Maximize energy savings with occupancy sensors
- Approved for use with Tube Guards

Electrical

- Compatible with instant start and select programmed rapid start electronic T8 ballasts with input voltage of 120-277V and 347V
- THD <20%, power factor >0.90

Rated Life

- 50,000 hours (L_{70})

Certifications and Listings

- cULus
- RoHS
- FCC
- Lead-Free
- Mercury-Free
- NSF
- DLC Standard

Wattage Comparison

Traditional Source	Traditional System Wattage	LED System Wattage	Energy Savings
4ft 32W T8 w/QHE 2X32T8/UNV ISN-SC	55	32.8	40%

Warranty

- Up to 5 year limited lamp warranty (24/7 operation)
- NLB Trusted Warranty Program

Operating Temperature

- -4°F to +113°F (-20°C to +45°C)

Installation

- Please refer to the installation manual included inside the packaging and the applications information listed below for more information (G13 medium bi-pin base).
- For proper use and warranty coverage, installer must consult the ballast compatibility list to ensure that the lamp and ballast combination is deemed compatible and will operate as intended.

Ballast Compatibility Guide

Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	

Specifications

Energy Data

Ambient Operating Temperature: -4°F to 113°F (-20°C to 45°C)
EMI/RFI: FCC Title 47 CFR, Part 18, Non-Consumer

Lighting Data

Lumen Output: See specification table (output is dependent on operating ballast)
Lumens per Watt: Up to 131
Correlated Color Temperature (CCT): 3000K, 3500K, 4100K, 5000K
Color Rendering Index (CRI): >80
R9: Up to 21

Ordering Guide

LED	15	T8	L	48	FG	DIM	8	41	SUB	G9
LED	Wattage (QHE ISN ballast) 15 = 15W	Lamp Type	Length	48 = 48"	Frosted Glass	Dimmable	CRI 8 = >80	Color Temperature 30 = 3000K 35 = 3500K 41 = 4100K 50 = 5000K	SubstiTUBE® Value (Compatible LED T8 for use with T8 electronic ballasts)	Generation 9 = Generation 9

Ordering Information

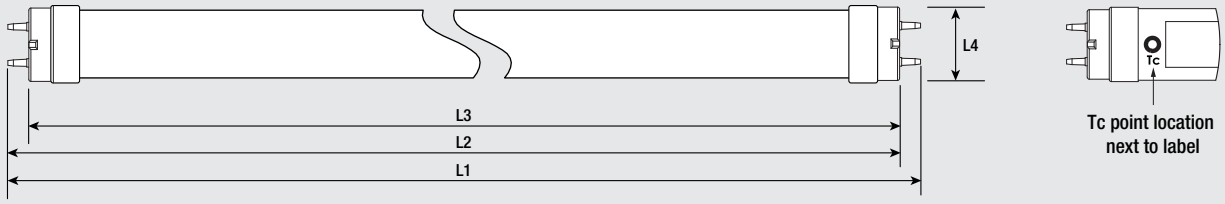
Item Number	Ordering Abbreviation	Length	Base Type	Lamp Power (W)[1]	Lamp Lumens (lm)[1]	Color Temp.	CRI	Life Rating	Beam Angle (°)	Bulb Finish	Case Quantity	DLC 5.1
41826	LED15T8L48FGDIM830SUBG9	4ft	G13	15	2100	3000K	>80	50,000	220°	Frosted Glass	25	Y
41827	LED15T8L48FGDIM835SUBG9	4ft	G13	15	2100	3500K	>80	50,000	220°	Frosted Glass	25	Y
41828	LED15T8L48FGDIM841SUBG9	4ft	G13	15	2200	4100K	>80	50,000	220°	Frosted Glass	25	Y
41829	LED15T8L48FGDIM850SUBG9	4ft	G13	15	2200	5000K	>80	50,000	220°	Frosted Glass	25	Y

[1]Lamp Power and Lamp Lumens rated on QHE1x32T8/UNV ISN.

Specifications & Lighting Data

Lamp	Ballast	Current (Amps)	System Power (W)	System Lumens (lm)	System Efficacy (lm/W)	No of Lamps
LED15T8L48FGDIM8XXSUBG9 (3000K/3500K)	QHE 2X32T8/UNV ISN	0.27/0.12	32.8	3900	>125	2
LED15T8L48FGDIM8XXSUBG9 (4100K/5000K)	QHE 2X32T8/UNV ISN	0.27/0.12	32.8	4300	>131	2

Physical Information



Product Description	L1 End of Base Pin to End of Opposite Pin End	L2 Base Face to End of Opposite Base Pin	L3 Base Face to Base Face	L4 Bulb Outside Diameter
LED15T8/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)

Application Notes

1. Due to numerous ballast designs and topologies, this lamp should be tested on existing ballasts before mass quantities are installed.
2. Not intended for use with older dedicated voltage (120V or 277V) ballasts. These ballasts have electronic components that degrade over time and may become unsuitable for the new LED T8 lamp.
3. Not for use with ballasts more than ten years old.
4. 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.
5. Insert and align tubes properly in lamp holders. Partial insertion results in a poor or intermittent electrical contact that can result in short lamp life and arcing. Arcing at the lamp holder can result in localized overheating.
6. For instant start ballasts, use lamp holders with an internal shunt or ensure that lamp holders are wired in a shunt configuration.
7. De-lamp is not allowed for ISH ballasts.
8. For approved ISN and ISL ballasts, de-lamp is allowed for only 1 lamp so long as the ballast factor remains below 1.20 (for example, 4 lamp ballast can de-lamp to 3 lamps).
9. Operating temperature range between -4°F and 113°F (-20°C and 45°C).
10. Suitable for use in dry and damp environments.
11. Maximum mounting distance between tube and ballast is 20 feet.
12. Please read all installation instructions before attempting installation.
13. For detailed warranty information, please see www.ledvanceUS.com

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