

SYLVANIA Lamps

LEDlescent™ and LEDlescent CURVALUME® T8 Nano Plastic Ballast-Free Family

Application

LEDlescent and LEDlescent Curvalume T8 Nano Plastic lamps are ideal to upgrade fluorescent fixtures whether they are currently T8 or T12. These lamps are an energy saving alternative, contain no mercury, provide instant light and have a uniform distribution. Engineered to operate directly on 120-277V, these lamps minimize labor and recycling costs and can be used in conjunction with occupancy and vacancy sensors to further increase energy savings.

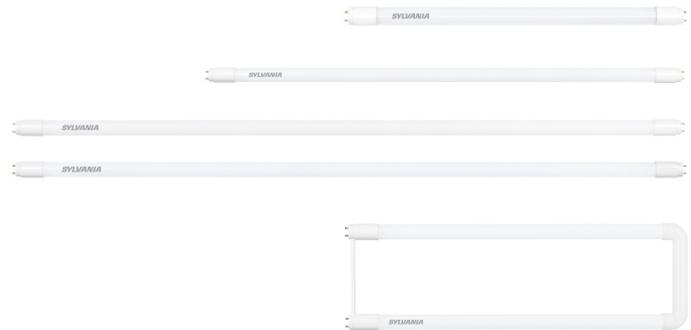
When installing the LEDlescent T8 lamps, the UL rating of the existing fixture is not voided (even when it is electrically modified) since our LEDlescent T8 lamp is UL Classified (as a luminaire conversion retrofit kit) under UL standard 1598C. UL 1598C is the standard covering LED retrofits intended for an existing UL rated fixture. Since the user is retrofitting with a UL 1598C classified LED kit, the installer must follow the installation instructions included with the lamps for the modified fixture to retain its UL rating.

Benefits and Features

- Lamps operate on shunted and non-shunted lampholders thereby reducing installation costs when wired in the double-ended configuration (recommended).
- Shatterproof Frosted Nano Plastic lamps do not break in the manner of glass LED or fluorescent lamps
- No polarity; can be installed in either direction
- 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
- Suitable for dry and damp locations – not for use where directly exposed to water
- DLC listing allows for rebates in areas where applicable, saving on overall project cost
- These lamps tested and approved with some 120V Phase Cut dimmers
- CCT: 3000K, 3500K, 4100K, 5000K
- Available beam angle: 200°
- Light emitting angle: 320°

Rated Life

- 50,000 hours (L₇₀)



Wattage Comparison

Traditional Source	Traditional System Wattage	LED System Wattage	Energy Savings*
2ft 17W T8 w/QHE 2X32T8/UNV ISN-SC	29	18	38%
3ft 25W T8 w/QHE 2X32T8/UNV ISN-SC	43	22	49%
4ft 32W T8 w/QHE 2X32T8/UNV ISN-SC	55	26	53%
4ft 32W T8 w/QHE 2X32T8/UNV ISN-SC	55	34	38%
22.5" 32W T8 U-bend w/QHE 2X32T8/UNV ISN-SC	55	30	45%

*Energy savings over life of lamp calculated at \$0.11/kWh

Electrical

- Input voltage range: 120-277V_{AC}
- Input voltage tolerance: ±10% (108V-305V)
- Power Factor >0.9
- THD <20%
- Dimmable when paired with select trailing edge, phase-cut dimmers

Warranty

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

Ambient Operating Range

- -4°F to +113°F (-20°C to +45°C)

Certifications and Listings

- cULus 1993 & 1598C
- RoHS
- FCC
- DLC 5.1
- NSF Listed: NSF/ANSI Standard 2 – Food Equipment



Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	

Ordering Guide

LED	XX	T8	LXX	FP	DIM	8	XX	BF	G2
LED	Wattage	Lamp Type	Length	Color/Finish	Dimming	CRI	CCT	Operation	Generation
LED = LED Lamp	8 = 8 Watts 11 = 11 Watts 13 = 13 Watts 15 = 15 Watts 17 = 17 Watts	T8	L24 = 24" L36 = 36" L48 = 48" U = 22.5"	FP = Frosted Nano Plastic	DIM = Dimmable	8 = 82	30 = 3000K 35 = 3500K 41 = 4100K 50 = 5000K	BF = UL Type B	G2 = Second Generation

Ordering Information

Item Number	Ordering Abbreviation	Wattage (W)	Base Type	Replaces	Input Voltage (V)	Average Rated Life (hrs.)	CCT	Typical Lumens (lm)	CRI	Power Factor	Bulb Finish	Case Qty	DLC Listed
41965	LED8T8L24FPDIM830BFG2	8	G13	F017830ECO	120-277V	50,000	3000K	1150	82	>0.9	Frosted Nano Plastic	25	5.1
41966	LED8T8L24FPDIM835BFG2	8	G13	F017835ECO	120-277V	50,000	3500K	1250	82	>0.9	Frosted Nano Plastic	25	5.1
41967	LED8T8L24FPDIM841BFG2	8	G13	F017841ECO	120-277V	50,000	4100K	1250	82	>0.9	Frosted Nano Plastic	25	5.1
41968	LED8T8L24FPDIM850BFG2	8	G13	F017850ECO	120-277V	50,000	5000K	1250	82	>0.9	Frosted Nano Plastic	25	5.1
41969	LED11T8L36FPDIM830BFG2	11	G13	F025830ECO	120-277V	50,000	3000K	1550	82	>0.9	Frosted Nano Plastic	25	5.1
41970	LED11T8L36FPDIM835BFG2	11	G13	F025835ECO	120-277V	50,000	3500K	1650	82	>0.9	Frosted Nano Plastic	25	5.1
41971	LED11T8L36FPDIM841BFG2	11	G13	F025841ECO	120-277V	50,000	4100K	1650	82	>0.9	Frosted Nano Plastic	25	5.1
41972	LED11T8L36FPDIM850BFG2	11	G13	F025850ECO	120-277V	50,000	5000K	1650	82	>0.9	Frosted Nano Plastic	25	5.1
41973	LED13T8L48FPDIM830BFG2	13	G13	F032830ECO	120-277V	50,000	3000K	2000	82	>0.9	Frosted Nano Plastic	25	5.1
41974	LED13T8L48FPDIM835BFG2	13	G13	F032835ECO	120-277V	50,000	3500K	2100	82	>0.9	Frosted Nano Plastic	25	5.1
41975	LED13T8L48FPDIM841BFG2	13	G13	F032841ECO	120-277V	50,000	4100K	2100	82	>0.9	Frosted Nano Plastic	25	5.1
41976	LED13T8L48FPDIM850BFG2	13	G13	F032850ECO	120-277V	50,000	5000K	2100	82	>0.9	Frosted Nano Plastic	25	5.1
41977	LED17T8L48FPDIM830BFG2	17	G13	F032830ECO	120-277V	50,000	3000K	2300	82	>0.9	Frosted Nano Plastic	25	5.1
41978	LED17T8L48FPDIM835BFG2	17	G13	F032835ECO	120-277V	50,000	3500K	2500	82	>0.9	Frosted Nano Plastic	25	5.1
41979	LED17T8L48FPDIM841BFG2	17	G13	F032841ECO	120-277V	50,000	4100K	2500	82	>0.9	Frosted Nano Plastic	25	5.1
41980	LED17T8L48FPDIM850BFG2	17	G13	F032850ECO	120-277V	50,000	5000K	2500	82	>0.9	Frosted Nano Plastic	25	5.1
41981	LED15T8UFPDIM830BFG2	15	G13	F032830ECO	120-277V	50,000	3000K	2200	82	>0.9	Frosted Nano Plastic	10	5.1
41982	LED15T8UFPDIM835BFG2	15	G13	F032835ECO	120-277V	50,000	3500K	2200	82	>0.9	Frosted Nano Plastic	10	5.1
41983	LED15T8UFPDIM841BFG2	15	G13	F032841ECO	120-277V	50,000	4100K	2200	82	>0.9	Frosted Nano Plastic	10	5.1
41984	LED15T8UFPDIM850BFG2	15	G13	F032850ECO	120-277V	50,000	5000K	2200	82	>0.9	Frosted Nano Plastic	10	5.1

Dimmer Compatibility

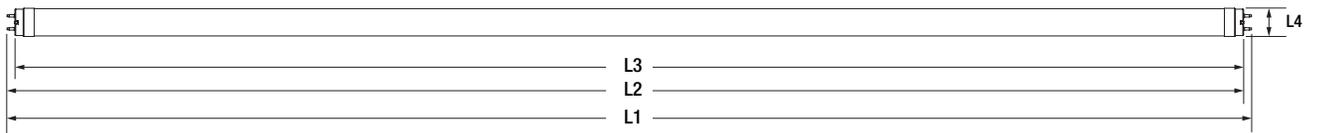
LUTRON MAELV-600 and DVELV-303P Reverse Phase Control dimmers are tested and compatible with these lamps.

Specifications & Lighting Data

Lamp	Ballast	Current – 120V/277V (AMPS)	System Power (W)	System Lumens (lm)	System Efficacy (lm/W)	No of Lamps
LED8T8L24FPDIM8XXBFG2	N/A	0.133/0.058	16.5	2330	141	2
LED11T8L36FPDIM8XXBFG2	N/A	0.183/0.079	24	3400	142	2
LED13T8L48FPDIM8XXBFG2	N/A	0.217/0.094	26	4170	160	2
LED17T8L48FPDIM8XXBFG2	N/A	0.283/0.123	34	4775	140	2
LED15T8UFPDIM8XXBFG2	N/A	0.250/0.108	30	4225	141	2

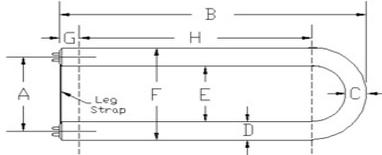
Physical Information

24"/36"/48"



Lamp Description	L1 End of Base Pin to End of Opposite Pin End	L2 Base Face to Opposite Base Pin	L3 Base Face to Base Face	L4 Bulb Outside Diameter
LED8T8L24FPDIM8XXBFG2	23.72" ±0.055" (602.6mm ±1.4mm)	23.45" ±0.05" (595.65mm ±1.25mm)	max 23.22" (589.8mm)	1.02" ±0.08" (25.9mm ±2.0mm)
LED11T8L36FPDIM8XXBFG2	35.72" ±0.055" (907.4mm ±1.4mm)	35.45" ±0.05" (900.45mm ±1.25mm)	max 35.22" (894.6mm)	1.02" ±0.08" (25.9mm ±2.0mm)
LED13T8L48FPDIM8XXBFG2	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)
LED17T8L48FPDIM8XXBFG2	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)

U-bend



Lamp Description	(A) Lamp Legs, center to center, nominal (min and max)	(B) Base face to lamp end (min/max)	(C) Bulb diameter in bend (min/max)	(D) Bulb diameter in legs (min/max)	(E) Distance between legs (min)	(F) Distance outside of legs (max)
LED15T8UFPDIM8XXBFG2	6.0" (152.0mm)	22.25"/22.60" (565.2/574.0mm)	0.89"/1.15" (22.6/29.2mm)	0.94"/1.10" (23.9/27.9mm)	4.70" (119.4mm)	7.10" (180.3mm)

Installation

1. Please read and comply with all instructions, including the installation manual included inside the packaging before attempting installation.
2. 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 Electric Code (NEC), Underwriters Laboratories, Inc. (UL) requirements, and all applicable codes and regulations.
3. IMPORTANT: For all new installations operating as UL Type B, follow the wiring instructions for double-ended wiring (recommended). Approved for single-ended configuration for existing UL Type B applications previously wired as such. See installation manual for wiring options.
4. Ensure lampholders/sockets are in good operating condition before installation and if any defects are detected, change the lampholders/sockets.
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. Not for use with other LED or fluorescent lamps in the same fixture.
7. When using LEDescent™ lamps, to conform to UL, you MUST affix the luminaire warning sticker, included inside the packaging, to the fixture during installation (this maintains existing UL safety ratings).
8. Best practice: cap off the remaining ballast wires should the ballast be left in the fixture after disconnecting.
9. Do not make or alter any open holes in an enclosure of wiring or electrical components during installation.
10. Do not expose wiring to edges of sheet metal or other sharp objects.
11. Make sure the lamps have the proper connections before restoring power.
12. When converting a fixture to Type B and emergency back-up is desired, the installer would also have to change the existing emergency back-up to an inverter-type emergency driver.
13. LEDescent 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.
14. For detailed warranty information, please visit www.ledvanceUS.com.

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