

ULTRA HE LED T8 Retrofit Kits



Key Features & Benefits

- Lumen package:
 - Up to 1150 lumens @ 10W
 - Up to 2450 lumens @ 19W
 - Up to 2450 lumens @ 22W
- CCT: 3000K, 3500K, 4100K, 5000K
- Beam angle: 150°
- Universal input 120-277V; 50/60Hz (external driver) & 347V; 50/60Hz (external driver)
- THD <20%, power factor >0.90
- G13 medium bi-pin base
- Long life: 60,000 hour life (L₇₀)
- 5 year warranty (24 hour burn cycle), 7 year warranty (16 hour burn cycle), 8 year warranty (12 hour burn cycle)
- Reduces energy consumption up to 35%
- No warm-up time, instant-on with full light output and stable lamp to lamp color
- Glass free, vibration and impact resistant
- No UV emission
- Suitable for dry and damp locations (cannot come in direct contact with water)
- Made in South Korea, a favored trading partner
- DesignLights Consortium® (DLC) qualified

The SYLVANIA ULTRA HE LED T8 retrofit kits are an energy saving and longer-life alternative to replace traditional fluorescent T12 or T8 lamps. Compared to traditional fluorescent lamps, ULTRA HE LED T8 lamps offer higher efficacy and equivalent light output.

Lamp requires dedicated external driver and non-shunted G13 medium bi-pin lamp holders which are included in the retrofit kit.

For retrofit application, lamps and drivers are offered together as 1-lamp, 2-lamp, 3-lamp and 4-lamp retrofit kits.

Product Offering

Length	Lumen Output	Wattage	Color Temperature	CRI
24in.	Up to 1150	10	3000K, 3500K, 4100K, 5000K	>82
48in.	Up to 2450	19	3000K, 3500K, 4100K, 5000K	>82
48in.	Up to 2450	22	3500K, 4100K, 5000K	>82

Application Information

Applications

- Cooler/freezer case
- Cove lighting
- Display case
- General illumination
- High bay
- Parking garage
- Tunnels

Application Notes

1. The ULTRA HE T8 LED lamp is designed to use a dedicated external driver and G13 medium bi-pin non-shunted lamp holders.
2. Operating temperature range between -4°F and 122°F (-20°C and 50°C).
3. Suitable for use in dry and damp environments.
4. Not intended for use with emergency light fixtures or exit lights.
5. Maximum mounting distance between tube and driver is 10 feet.
6. For detailed warranty information, please see www.sylvania.com

Specifications and Certifications



Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	

Specifications

Energy Data

Ambient Operating Temperature: -4°F to 122°F (-20°C to 50°C)

EMI/RFI: FCC Title 47 CFR, Part 15, Class B

Input Voltage: 120-277V

Input Frequency: 50/60Hz

Input Power: 10W (2ft), 19W (4ft) & 22W (4ft)

Input Current @ 120VAc: 0.09A (2ft) & 0.18A (4ft)

Input Current @ 277VAc: 0.04A (2ft) & 0.08A (4ft)

Power Factor: >0.90

THD: <20%

Lighting Data

Lumen Output: Up to 1150lm (2ft) & 2450lm (4ft)

Lumens per Watt: Up to 129

Correlated Color Temperature (CCT): 3000K, 3500K, 4100K, 5000K

Color Rendering Index (CRI): >82

R9: Up to 21

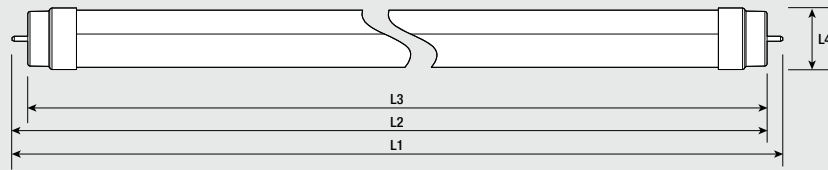
Ordering Information

Item Number	Ordering Abbreviation	Input Voltage (V)	Length (in.)	Lamp Power (W)	System Power (W)	Lumens per Lamp	LPW	Color Temp.	CRI	Beam Angle	No. of Lamps	No. of Drivers	No. of Lamp Holders	DLC (Y/N)
73113	LED10T8/L24/F/1x2HE/830/UNV	120-277	24	10	20	1100	110	3000K	82	150	2	1 Non-Dimmable Driver	4	Y
73099	LED10T8/L24/F/1x2HE/835/UNV	120-277	24	10	20	1100	110	3500K	83	150	2	1 Non-Dimmable Driver	4	Y
73100	LED10T8/L24/F/1x2HE/841/UNV	120-277	24	10	20	1100	110	4100K	85	150	2	1 Non-Dimmable Driver	4	Y
73101	LED10T8/L24/F/1x2HE/850/UNV	120-277	24	10	20	1150	115	5000K	83	150	2	1 Non-Dimmable Driver	4	Y
73119	LED19T8/L48/F/1x2HE/830/UNV	120-277	48	19	38	2350	124	3000K	82	150	2	1 Non-Dimmable Driver	4	Y
73106	LED19T8/L48/F/1x2HE/835/UNV	120-277	48	19	38	2350	124	3500K	83	150	2	1 Non-Dimmable Driver	4	Y
73107	LED19T8/L48/F/1x2HE/841/UNV	120-277	48	19	38	2350	124	4100K	85	150	2	1 Non-Dimmable Driver	4	Y
73108	LED19T8/L48/F/1x2HE/850/UNV	120-277	48	19	38	2450	129	5000K	83	150	2	1 Non-Dimmable Driver	4	Y
73112	LED10T8/L24/F/1x1HE/830/UNV	120-277	24	10	10	1100	110	3000K	82	150	1	1 Non-Dimmable Driver	2	Y
73096	LED10T8/L24/F/1x1HE/835/UNV	120-277	24	10	10	1100	110	3500K	83	150	1	1 Non-Dimmable Driver	2	Y
73097	LED10T8/L24/F/1x1HE/841/UNV	120-277	24	10	10	1100	110	4100K	85	150	1	1 Non-Dimmable Driver	2	Y
73098	LED10T8/L24/F/1x1HE/850/UNV	120-277	24	10	10	1150	115	5000K	83	150	1	1 Non-Dimmable Driver	2	Y
73118	LED19T8/L48/F/1x1HE/830/UNV	120-277	48	19	19	2350	124	3000K	82	150	1	1 Non-Dimmable Driver	2	Y
73102	LED19T8/L48/F/1x1HE/835/UNV	120-277	48	19	19	2350	124	3500K	83	150	1	1 Non-Dimmable Driver	2	Y
73103	LED19T8/L48/F/1x1HE/841/UNV	120-277	48	19	19	2350	124	4100K	85	150	1	1 Non-Dimmable Driver	2	Y
73104	LED19T8/L48/F/1x1HE/850/UNV	120-277	48	19	19	2450	129	5000K	83	150	1	1 Non-Dimmable Driver	2	Y
73114	LED10T8/L24/F/1x3HE/830/UNV	120-277	24	10	30	1100	110	3000K	82	150	3	1 Non-Dimmable Driver	6	Y
73115	LED10T8/L24/F/1x3HE/835/UNV	120-277	24	10	30	1100	110	3500K	83	150	3	1 Non-Dimmable Driver	6	Y
73116	LED10T8/L24/F/1x3HE/841/UNV	120-277	24	10	30	1100	110	4100K	85	150	3	1 Non-Dimmable Driver	6	Y
73117	LED10T8/L24/F/1x3HE/850/UNV	120-277	24	10	30	1100	110	5000K	83	150	3	1 Non-Dimmable Driver	6	Y
73142	LED22T8/L48/F/DIM1x2HE/835/UNV	120-277	48	22	44	2350	107	3500K	83	150	2	1 (0-10V) Dimmable Driver	4	N
73143	LED22T8/L48/F/DIM1x2HE/841/UNV	120-277	48	22	44	2350	107	4100K	85	150	2	1 (0-10V) Dimmable Driver	4	N
73144	LED22T8/L48/F/DIM1x2HE/850/UNV	120-277	48	22	44	2450	111	5000K	83	150	2	1 (0-10V) Dimmable Driver	4	N
73121	LED19T8/L48/F/1x2HE/830/347V	347	48	19	38	2150	113	3000K	84	150	2	1 Non-Dimmable Driver	4	Y
73122	LED19T8/L48/F/1x2HE/835/347V	347	48	19	38	2150	113	3500K	90	150	2	1 Non-Dimmable Driver	4	Y
73123	LED19T8/L48/F/1x2HE/841/347V	347	48	19	38	2150	113	4100K	88	150	2	1 Non-Dimmable Driver	4	Y
73124	LED19T8/L48/F/1x2HE/850/347V	347	48	19	38	2150	113	5000K	88	150	2	1 Non-Dimmable Driver	4	Y
73369	LED19T8/L48/F/1x3HE/830/UNV	120-277	48	19	58	2350	122	3000K	82	150	3	1 Non-Dimmable Driver	6	Y
73370	LED19T8/L48/F/1x3HE/835/UNV	120-277	48	19	58	2350	122	3500K	83	150	3	1 Non-Dimmable Driver	6	Y
73371	LED19T8/L48/F/1x3HE/841/UNV	120-277	48	19	58	2350	122	4100K	85	150	3	1 Non-Dimmable Driver	6	Y
73372	LED19T8/L48/F/1x3HE/850/UNV	120-277	48	19	58	2450	127	5000K	83	150	3	1 Non-Dimmable Driver	6	Y
73365	LED19T8/L48/F/1x4HE/830/UNV	120-277	48	19	78	2350	121	3000K	82	150	4	1 Non-Dimmable Driver	8	Y
73366	LED19T8/L48/F/1x4HE/835/UNV	120-277	48	19	78	2350	121	3500K	83	150	4	1 Non-Dimmable Driver	8	Y
73367	LED19T8/L48/F/1x4HE/841/UNV	120-277	48	19	78	2350	121	4100K	85	150	4	1 Non-Dimmable Driver	8	Y
73368	LED19T8/L48/F/1x4HE/850/UNV	120-277	48	19	78	2450	126	5000K	83	150	4	1 Non-Dimmable Driver	8	Y

Ordering Guide

LED	10	T8	/	L	24	/	F	/	1	X	2	HE	/	8	35	/	UNV
LED	Wattage	Lamp Type		Length	24 Inches Overall Length		Frosted Lens		1 Driver/Kit		2 Lamps/Kit	High Efficiency		CRI 83	Color Temperature 35 = 3500K		Universal Voltage

Assembly Diagram



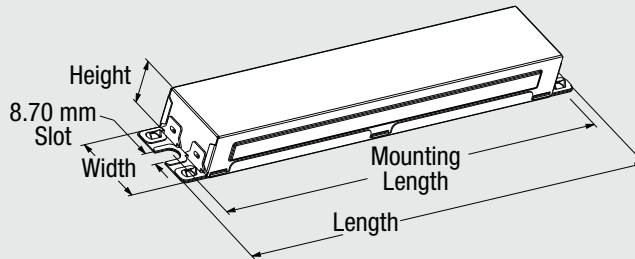
Product Description	L1 End of Base Pin to End of Opposite Pin End	L2 Base Face to End of Opposite Base Pin	L3 Base Face to Base Face	L4 Bulb Outside Diameter
LED10T8L24 (2ft)	23.725" ± 0.055" (602.6mm ± 1.4mm)	23.45" ± 0.05" (595.65mm ± 1.25mm)	max 23.22" (589.8mm)	1.02" ± 0.08" (25.9mm ± 2.0mm)
LED19T8L48 (4ft)	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)
LED22T8L48 (4ft)	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)

Dimensions:

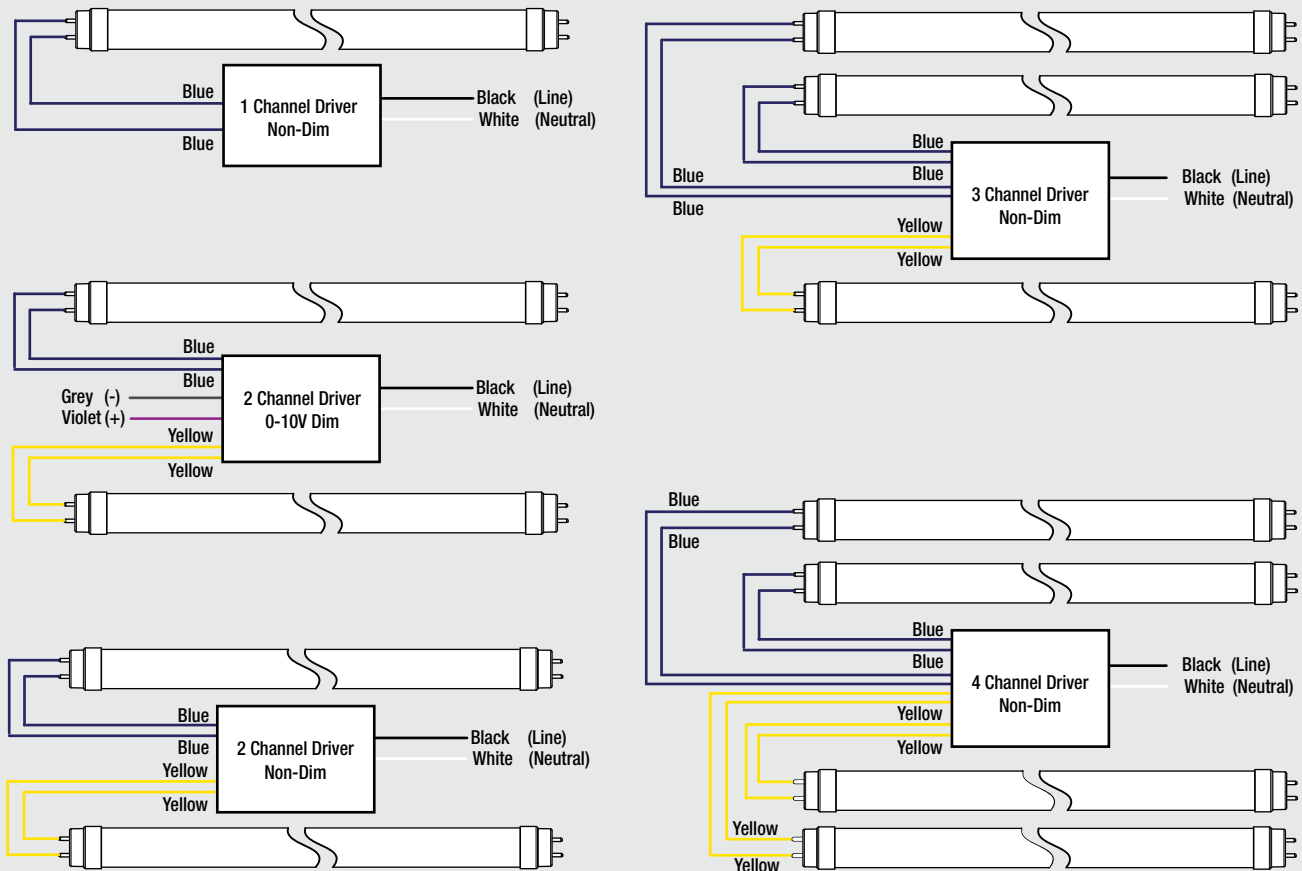
Overall: 9.4" L x 1.8" W x 1.2" H
Mounting: 8.90"

Wiring:

Input lead length 29.5" (750mm), 18 AWG
Output lead length 11.0" (280mm), 20 AWG



Wiring Diagram



Note:

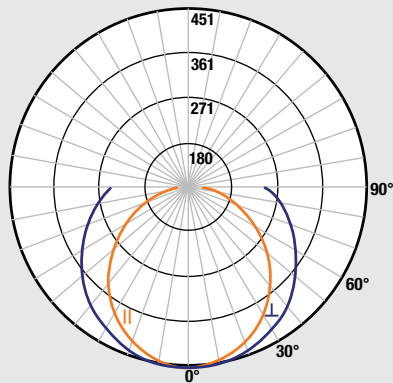
1. Driver output is polarity neutral.
2. Electrical connection can be made through either end of the lamp.
3. For 1 lamp operation, cap off unused leads.

Photometric Information

Illuminance at a Distance

	Center Beam Illuminance	Beam Width	
		Along \parallel	Across \perp
6.5 ft	10.4 fc	17.1 ft	106.6 ft
13 ft	2.6 fc	34.4 ft	212.9 ft
20 ft	1.1 fc	51.5 ft	319.6 ft

Polar Chart



Maximum Intensity: 451 cd
 — Across \perp
 — Along \parallel

Total Lumen Distribution

Zone	Lumens	% Lamp
0-30	352	17
0-40	583	28
0-60	1082	53
0-90	1647	80
60-90	565	27
0-80	2062	100

Photometric information for LED19T8L48/F/1x1HE/830/UNV; 1 lamp operation

Warranty

ULTRA HE LED T8 Retrofit Kits are covered by the LED T8 System Limited Warranty, a comprehensive system warranty. For additional details, please visit www.sylvania.com/warranty

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