

T8 Series

4' Linear LED Lamp

Product Description

The Cree® linear LED T8 lamp delivers 2100 lumens of enhanced spectrum 90 CRI light while achieving 100 lumens per watt at the system level. The innovative oval-shaped design allows more uplight than standard 180-degree LED tubes, thereby providing a more uniform light output. The unique end caps which twist and lock make the upgrade from fluorescent lamps to energy-saving LED lamps easy. The T8 lamp is available in neutral or cool color temperatures and operates using existing fluorescent T8 electronic instant start, programmed start, rapid start and dimmable fluorescent ballasts. The T8 lamp is easy to install and fits into linear fluorescent fixtures, making it a perfect upgrade solution where energy savings and long life are critical.

Performance Summary

Operates on ballasts that support 25W/48T8/HF fluorescent lamps

Utilizes Cree TrueWhite® Technology

Efficacy: 100 LPW at system level

Lamp Delivered Light Output : 2100 lumens per LED lamp*

Target Fixture Delivered Light Output (2 Lamps): 4200 lumens*

Input Power: 21 watts**

CRI: 90

CCT: 3500K, 4000K

Input Voltage: 120-347 VAC, determined by fluorescent ballast

Lifetime: Designed to last 50,000 hours

Controls: Dimmable (ballast dependent)

Mounting: Linear fluorescent fixtures

Limited Warranty†: 5 years



4' LED Lamp
MOL- 48" (1219mm)

Ordering Information

Example: LEDT8-48-21L-40K-B10

LEDT8-48	21L				
Product	Lumen Output	Color Temperature	Voltage	Control	Options
LEDT8-48	21L 21W, 2100 lumens - 100 LPW	35K 3500 Kelvin 40K 4000 Kelvin	Blank 120-347 Volt Ballast Dependent	Blank Dimmable	B10 10 single boxed lamps T24 24 Tray pack lamps in master carton (Bulk Pack)

* Nominal ballast factor

** Varies by ballast

† See www.cree.com/lighting/products/warranty for warranty terms



Rev. Date: 05/01/2014



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Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy - a true no compromise solution.

LUMEN MAINTENANCE FACTORS

- Reference www.cree.com/lighting for detailed lumen maintenance factors

CONSTRUCTION & MATERIALS

- Lightweight aluminum heat sink housing provides strength and durability

OPTICAL SYSTEM

- Specialized lens design for optimal light distribution and smooth visual effect
- Measured and designed to achieve optimal light performance in existing fluorescent troffers

ELECTRICAL SYSTEM

- Integral, high-efficiency driver and power supply to remodulate current to LEDs
- Utilizes existing fluorescent ballast
- Power Factor:** = 0.9 nominal
- Input Power:** Ballast dependent
- Input Voltage:** 120-277V, 347V, 50/60Hz
- Battery Backup:** Operates on emergency ballasts that support 25W/48T8/HF fluorescent lamps
- Temperature Rating:** Designed to operate in temperatures 0 °C to 35 °C
- Total Harmonic Distortion:** < 20%
- Not for use with magnetic ballasts
- Not for use or to be wired to "mains voltage"

CONTROLS

- Dimmable (ballast dependent)

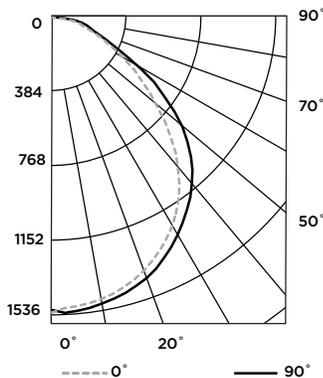
REGULATORY & VOLUNTARY QUALIFICATIONS

- UL Listed to UL 1993, UL 8750, CSA C22.2 No. 1993-12 & CSA C22.2 No. 250.13-12
- DLC qualified
- Suitable for damp locations
- Designed for indoor use

Photometry

(2) LEDT8-48-21L-35K INSTALLED IN A 2X4 RECESSED TROFFER BASED ON CESTL REPORT TEST #: CESTL-PLO3149-001

Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.



Coefficients Of Utilization - Zonal Cavity Method

RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	110	105	101	98
2	100	93	86	81
3	92	82	74	68
4	85	73	65	59
5	78	66	57	51
6	72	59	51	45
7	67	54	46	40
8	63	49	41	36
9	59	45	37	32
10	55	42	34	29

Effective Floor Cavity Reflectance: 20%

Average Luminance Table (cd/m2)

Horizontal Angle		0°	45°	90°
Vertical Angle	45°	2056	1876	1757
	55°	1780	1608	1420
	65°	1227	1137	1111
	75°	1116	723	963
	85°	1531	1061	1079

Zonal Lumen Summary

Zone	Lumens	% Lamp	Luminaire
0-30	117.8	N/A	31.0%
0-40	1920.1	N/A	50.6%
0-60	3210.0	N/A	84.6%
0-90	3795.4	N/A	100%
0-180	3795.4	N/A	100%

Reference www.cree.com/lighting for detailed photometric data.

Product Number	Case UPC	Description	Lamp Type	Watts	CCT	Lamps per Pack	CRI	Lumens	Rated Life (Hrs)
LEDT8-48-21L-35K-B10	10810048029553	Linear LED T8 Replacement Lamp	T8	21W	3500K	10	90	2100	50,000
LEDT8-48-21L-40K-B10	10810048029546	Linear LED T8 Replacement Lamp	T8	21W	4000K	10	90	2100	50,000
LEDT8-48-21L-35K-T24	10810048029577	Linear LED T8 Replacement Lamp	T8	21W	3500K	24	90	2100	50,000
LEDT8-48-21L-40K-T24	10810048029560	Linear LED T8 Replacement Lamp	T8	21W	4000K	24	90	2100	50,000