



Norman Lamps, Inc. • Product Data • 48" Tube • Type "A+B"

HYBRID™ T8 LED Lighting

17 Watts • 2,200 Lumens

The *HYBRID™ T8* is the premium universal retrofit **LED** tube that outperforms all others.

- **Ballast Compatible & Direct Line Voltage Compatible. A+B** (Patented, Internal dual mode driver)
- Dual Mode internal driver allows for either ballast compatible or direct voltage install formats.
- Compatible with electronic ballasts for quick and easy, "**plug & play**" installation.
- Operates also on direct line voltage input where ballast bypass is the desired format. (Optimal Format)
- Bypassing the ballast optimizes lamp life and efficiency by eliminating any ballast anomalies that may exist.
- Operating temperature range is -25°C ~ +40°C
- Direct voltage Input range is 120VAC ~ 277VAC
- Operates using Shunted or Non-Shunted sockets.
- **2,200 Lumens @ 17 Watts 48" Tube**
- **Qualified to DLC 5.1 & UL Listed**
- **Dimmable LED Tube** (Using 120V direct wire only.)

Licensed under U.S. Patent # 8,729,809

Single End & Double End voltage input option



Specifications:

Model:	LED-T8-48" Tube	Series:	HYBRID™ T8
Wattage:	17 Watts		
Input Voltage:	Universal voltage driver 120VAC~277VAC		
Color Temps:	2,700k, 3,000k, 3,500k, 4,000k, 5,000k, 6,500k		
Lumens:	2,200lm @ 17 Watts		
Viewing Angle:	240 Degree viewing angle		
Operating Temp:	-25°C ~ +40°C	C.R.I. >80	
Life Hours:	>50,000Hrs		
Dimensions:	1" Diameter x 48" Length	Base: G-13 Bi-Pin	
Replaces:	32W Fluorescent T8 tubes	Pack: 25/Case	

Qualifications:



Hengdian Group Tospo items are UL listed



Xiamen Homestar Tech items are ETL listed

Features & Special Data:

- Quick and Easy "Plug & Play" Installation if desired.
- Extend tube life and efficiency by using direct voltage input method.
- Direct Voltage Input range is 120VAC~277VAC.
- LED tubes are labeled with operating information and instructions.
- Compatible with existing electronic ballast or with ballast bypassed.
- Dual Mode Driver is protected under current U.S. patent # 8,729,809.
- 50% Energy Reduction with LED tubes vs 32-watt fluorescent tubes.
- **Dimmable operation under DLC 5.1** (Using 120V direct wire only.)
- Shatter Protected-Safe for use in food service industry
- 5 Year Warranty

Important Caution Notice:

It is critical to replace any damaged, broken, worn out or old lamp sockets before installing LED tubes. Failure to do so may result in electrical arcing or short which can lead to lamp failure. The condition of the lamp sockets should be determined solely by a qualified electrician trained in identifying lamp sockets in need of upgrade or replacement *before* converting to high end LED technology. While "Plug & Play" is a safe, simple and reliable retrofit method, we recommend, whenever possible, using the direct wire retrofit method and bypassing the existing ballast completely. By avoiding combining two different technologies, the direct wire method effectively eliminates any possible anomalies or technical conflicts that might prevent the LED tube from achieving and operating at 100% of its designed values. Applications and operating conditions vary greatly, and it is the responsibility of the installer or end user of the LED tube to verify that the part is compatible and suitable for their application. May not be suitable for use in fully enclosed fixtures including vapor tight fixtures. Use in these fixtures can cause premature failures and will void the warranty.

Ordering:

LED-T818-22

Model	Lumens	Color Temp
LED-T818	22	XX

T8, 17W

2,200Lm

Manufactured under DLC for NLI

Xiamen Homestar Technology Co., Ltd. (and/or)

Hengdian Group Tospo Lighting Co., Ltd.
DLC # G2-120-277-17T8 2,200lm 4FT A+B G13 GLASS SE/DE 3,500k

DLC # G2-120-277-17T8 2,200lm 4FT A+B G13 GLASS SE/DE 4,000k

DLC # G2-120-277-17T8 2,200lm 4FT A+B G13 GLASS SE/DE 5,000k

27K (2,700k) • 2,100Lm
DLC # T851-4FT-27FO18
3K (3,000k) • 2,200Lm
DLC # T851-4FT-30FO18
35K (3,500k) • 2,200Lm
DLC # T851-4FT-35FO18
4K (4,000k) • 2,200Lm
DLC # T851-4FT-40FO18
5K (5,000k) • 2,200Lm
DLC # T851-4FT-50FO18
65K (6,500k) • 2,200Lm
DLC # Not Listed in 65K