



Distributed by Norman Lamps, Inc.  
 Product Data – 48” Tube – DLC “A”  
**HYBRID™ T8 LED Lighting**

18 Watts • 2,200 Lumens

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

- **Ballast Compatible & Direct Line Voltage Compatible.** (Patented, Internal dual mode driver)
- Dual Mode internal driver allows for either ballast compatible or direct voltage install formats.
- Compatible with *most* electronic ballasts for quick and easy, “**plug & play**” installation \*
- Operates 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 (Single end or Double end input options)
- Operates using Shunted or Non-Shunted sockets
- **2,200 Lumens @ 18 Watts 48” Tube**
- **Qualified to DLC 4.2 & UL “A” Functions**



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

**Specifications:**

Factory test data results:

<b>Model:</b>	LED-T8-48” Tube	<b>Series:</b> <i>HYBRID™ T8</i>
<b>Wattage:</b>	18 Watts	
<b>Input Voltage:</b>	Built-in universal voltage driver 120VAC~277VAC	
<b>Color Temp:</b>	3,500k, 4,000k, 5,000k, 6,500k	
<b>Lumens:</b>	2,200lm @ 18 Watts	C.R.I. >83
<b>Viewing Angle:</b>	240 Degree viewing angle	
<b>Operating Temp:</b>	-25°C ~ 40°C	
<b>Life Hours:</b>	>50,000Hrs	
<b>Dimensions:</b>	1” Diameter x 48” Length	Base: G-13 Bi-Pin
<b>Replaces:</b>	32W Fluorescent T8 tubes	Pack: 30/Case

**Qualification:**



DLC 4.2 “A”



UL Type “A”



**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.
- **Shatter protected** - Safe use in food service industries.
- 5 Year Warranty

**Ordering:**

Manufactured by:  
 Xiamen Grace Solar Technology Co., Ltd  
 Xiamen Byme Lighting Co., Ltd



<b>22 (2,200lm)</b>	<b>35K (3,500k)</b> UL Listed Only; 3,500k
2100lum 4K	<b>4K (4,000k)</b> DLC # GTJ0801-40L0 or T08J01-40H3
2200lum 5K	<b>5K (5,000k)</b> DLC # GTJ0801-50L0 or T08J01-50H3
	<b>65K</b> UL only

**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 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, 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.

*Not all product variations listed on this page are DLC qualified. To ensure that a specific model is qualified, visit [www.designlights.org/search](http://www.designlights.org/search).*