Norman Lamps, Inc. - Product Data

High-Output™ T5 LED Lighting

Ballast Bypass

*The High-Output™ T5 Bypass **LED** tube that outperforms all other T5 **LED** technology*

- ***T5 High-Output LED 2'**(22.1"), **3'**(34") **& 4'**(45.2") **tube lamp "Bypass Ballast"***
- Direct Voltage LED Tube for retrofit of F14, F21, F24, F28, F39 fluorescent T5 tubes.
- Retrofits into any T5 lighting fixture by bypassing the ballast and bringing power directly to the socket.
- Bypassing the ballast optimizes lamp life and efficiency by eliminating any ballast anomalies that may exist.
- Single and Double End power input @ 120VAC~277VAC
- Lifespan of 50,000 hours.
- Operating temperature range is -25°C ~ +40°C
- DLC & cULus Certified LED Tubes. (DLC on 4' Tubes only)
- Built-in overload protection.
- NSF Certified for food equipment

Verify DLC Certification and DLC Test Data Results at:
www.designlights.org

Specifications:

Factory test data results:

Model:	**LED-T5 Bypass Ballast** *High-Output™ T5*
Dimming:	**Full dimming with line voltage power. (Double End Only)**
Input Voltage:	**120VAC~277VAC Direct Input. Single & Double End.**
Color Temp:	**3,000k, 3,500k, 4,000k, 5,000k**
Base:	**G5 Miniature 2-Pin**
Viewing Angle:	**280 Degree viewing angle**
Operating Temp:	**-25°C ~ 40°C**
Life Hours:	**50,000** **FP39 (34")**
Dimensions:	**FP14 (22.1"), FP24 (22.1"), FP21 (34"), FP28 (45.2")**
Diameter:	**0.75" (Replaces T5 LED Tube)** **Pack: 25/Case**

Certifications:

DLC 5.1
4' Tubes Only

Features:

- **Install by direct voltage to the lamp socket. Use No Ballast.**
- **120VAC~277VAC input with single & double end input option.**
- **High Output LED tube directly replaces T5 fluorescent tubes.**
- **Fully dimmable operation with constant color temperature output.**
- **Ballast Bypass LED tube to be used exclusively *without ballasts*.**
- **High output, wide angle diodes for powerful and even light distribution.**
- **Detailed wiring diagram & instructions on each LED Tube.**
- **Tube is rated for use in food service industry. NSF & ETL**
- **>83 C.R.I.** **Compatible Lutron Dimmers:**
- **5 Year Warranty**
- **DLC 5.1 qualified (4' LED Tubes Only)**

DIMMABLE →

Lutron	CTELV-303P-WH		Lumen Output	
Lutron	MAELD-600-WH		21/39	2,050 lm @ 16 Watts
Lutron	SELV-300P-WH		14/24	1,550 lm @ 12 Watts
Lutron	NTEL-600-WH		28	1,800 lm @ 13 Watts
Lutron	MSLELV-600M-SW			
Lutron	DVEL-V-300P			

Ordering:

NLI Ordering Code:

Model		Color Temp.
LED-FPxx/xx	–	xxx
21/39		835
14/24		840
28		850

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.

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.

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