# **COMMERCIAL LIGHTING DEVICES**

## **BALLAST BYPASS** ED Type B T5

LED compatible replacement for linear fixtures that operate independently of ballasts.

## Limitless Options for the following applications:

- Offices
  - Restaurants
- **Retail Stores**









CONFORMS TO NSF STD. 2

Lobbies

Schools

• Hospitals

we know light.™

## LED LiberaT5™ Tubes

### Features and Benefits

>40% energy savings
Long life: 50,000
Bypass Application: 120-277 line voltage
Instant on/off
Non-flickering
Single End Construction
Highly durable SHATTERPROOF plastic (4, 3 and 2 foot tubes)
UL rated for enclosed fixtures
No energy losses due to fluorescent ballast

## Specifications

Base Types: G5
Construction: Single ended
Wattage: 9w, 12w, 13w, 16w, 25w
Minimum starting temperature range: -22F / -30C
Safety: UL Classified
Environment: Damp/dry locations
Enclosed: Suitable for enclosed luminaires
Rated life: L70 50,000+ hours
Beam Angle: 4, 3 & 2 foot 180°
Field Angle: 4, 3 & 2 foot 280°
Non-shunted lampholders

## Shatterproof PET Coated Glass 4 foot 3 foot 2 foot 2 foot

G5 base

### Listing

UL Classified and Component	
Recognized Component ETL	

## Warranty

Five years against defects in manufacturing





CONFORMS TO NSF STD. 2



US



To view our DLC qualified products, please consult the DLC Qualified Products List at www.designlights.org/qpl.

## LED LiberaT5™ Tubes

#### LED Ballast Bypass T5 Tubes – 4', 3' and 2'

Item#	Description	DLC QPL	LED Wattage	Voltage	Fluorescent Equivalency	Lumens	LPW	Base	сст	CRI	Master Pack
LED 12 WATT T5 TUBE - 2	2 FOOT										
LT5HO12B130K	LED 12VV 2' T5 BYPASS 30K SC		12	120-277V	24W	1450	120.8	G5	3000K	80	25
lt5h012b135k	LED 12VV 2' T5 BYPASS 35K SC		12	120-277V	24W	1450	120.8	G5	3500K	80	25
lt5h012b141k	LED 12VV 2' T5 BYPASS 41K SC		12	120-277V	24W	1450	120.8	G5	4100K	80	25
lt5h012B150K	LED 12VV 2' T5 BYPASS 50K SC		12	120-277V	24W	1450	120.8	G5	5000K	80	25
LED 16 WATT T5 TUBE -	3 FOOT										
lt5h016b130k	LED 16VV 3' T5 BYPASS 30K SC		16	120-277V	39W	1850	115.6	G5	3000K	80	25
lt5h016b135k	LED 16VV 3' T5 BYPASS 35K SC		16	120-277V	39W	1850	115.6	G5	3500K	80	25
lt5h016b141k	LED 16VV 3' T5 BYPASS 41K SC		16	120-277V	39W	1850	115.6	G5	4100K	80	25
LT5HO16B150K	LED 16VV 3' T5 BYPASS 50K SC		16	120-277V	39W	1850	115.6	G5	5000K	80	25
LED 25 WATT T5 TUBE -	4 FOOT (DLC LOOK-UP LT5H025B1XXK)										
LT5HO25B130K	LED 25VV 4' T5 BYPASS 30K SC	*	25	120-277V	54W	3200	128.0	G5	3000K	80	25
LT5HO25B135K	LED 25VV 4' T5 BYPASS 35K SC	*	25	120-277V	54W	3200	128.0	G5	3500K	80	25
LT5HO25B141K	LED 25VV 4' T5 BYPASS 41K SC	*	25	120-277V	54W	3200	128.0	G5	4100K	80	25
LT5HO25B150K	LED 25VV 4' T5 BYPASS 50K SC	*	25	120-277V	54W	3200	128.0	G5	5000K	80	25
LED 9 WATT T5 TUBE - 2	FOOT										
LT5HE09B130K	LED 9VV 2' T5 BYPASS 30K SC		9	120-277V	14W	1150	127.7	G5	3000K	80	25
LT5HE09B135K	LED 9VV 2' T5 BYPASS 35K SC		9	120-277V	14W	1150	127.7	G5	3500K	80	25
LT5HE09B141K	LED 9VV 2' T5 BYPASS 41K SC		9	120-277V	14W	1150	127.7	G5	4100K	80	25
LT5HE09B150K	LED 9VV 2' T5 BYPASS 50K SC		9	120-277V	14W	1150	127.7	G5	5000K	80	25
LED 12 WATT T5 TUBE -	3 FOOT										
LT5HE12B130K	LED 12VV 3' T5 BYPASS 30K SC		12	120-277V	21W	1350	112.5	G5	3000K	80	25
LT5HE12B135K	LED 12VV 3' T5 BYPASS 35K SC		12	120-277V	21W	1350	112.5	G5	3500K	80	25
LT5HE12B141K	LED 12VV 3' T5 BYPASS 41K SC		12	120-277V	21W	1350	112.5	G5	4100K	80	25
LT5HE12B150K	LED 12VV 3' T5 BYPASS 50K SC		12	120-277V	21W	1350	112.5	G5	5000K	80	25
LED 13 WATT T5 TUBE -	4 FOOT (DLC LOOK-UP LT5HE13B1XXK)										
LT5HE13B130K	LED 13W 4' T5 BYPASS 30K SC	*	13	120-277V	28W	1650	126.9	G5	3000K	80	25
LT5HE13B135K	LED 13W 4' T5 BYPASS 35K SC	*	13	120-277V	28W	1650	126.9	G5	3500K	80	25
LT5HE13B141K	LED 13W 4' T5 BYPASS 41K SC	*	13	120-277V	28W	1650	126.9	G5	4100K	80	25
LT5HE13B150K	LED 13WV 4' T5 BYPASS 50K SC	*	13	120-277V	28W	1650	130.7	G5	5000K	80	25

Inspect lamp holders, ballast, and wiring to ensure these lamp holders are NON SHUNTED LAMP HOLDERS. TCP LiberaT5 Series lamps do not require a ballast to operate. They have an internal LED driver that operates on 120-277V. These tubes require power to only one end of the fixture, called the "power" side. The TCP LiberaT5 lamp is clearly marked at one end to signify power end. This must be installed in "power" end. The lamp holders (or tombstones) must be non-shunted as the power flows through the LED T5 tube. (Shunt means "an electrical conductor joining two points of a circuit, through which more or less of a current may be diverted"). Both "power" end and opposite end must both have unshunted tombstones. The "opposite" end acts as simply a mechanical holder with TCP LED LiberaT5 lamps.

