

PROJECT NAME \_\_\_\_\_  
 CATALOG NUMBER \_\_\_\_\_  
 NOTES \_\_\_\_\_

## BFDW SERIES Ballast Friendly or Direct Wire 4' LED T8 Linear Replacement Lamp Universal (non-dimming) Ballast Friendly or Direct Wire

### PRODUCT DESCRIPTION:

The Lumentek BFDW Series is a “Ballast Friendly” LED Replacement tube. It is a direct replacement for T8 & T12 fluorescent lamps. It operates on most non-dimming Instant Start, Rapid Start, Program Rapid Start electronic or magnetic ballasts. The BFDW Series tube can also be Direct Wired if desired or if the ballast should fail. Advanced circuitry allows the LED tube to operate on most ballasts (even some failed ballasts\*) eliminating ballast losses\*\*.

For the first time there exists a universal replacement lamp that is safe and provides a single replacement item by eliminating the need for high voltage circuitry from the ballast.



### FEATURES:

- High Lumens Per Watt - Up to 118 lumens per watt.
- High Color Rendering – 81 CRI.
- Plug and Play operation.
- Long Life 50,000 hours operation.
- Available in 18 watt or 21 watt versions.
- Cooler operation extends existing ballast life.
- Universal 120-277 Volt Direct Wire operation.
- Operates LED and Fluorescents on the same ballast.
- Ballast Friendly operation does not disturb the fixture’s existing wiring.



- ✓ \* Will operate on failed ballasts if the ballast fails in a way that maintains continuity.
- ✓ \*\* Eliminates Ballast Losses – The wattage and lumen output are the same when operated either direct wired or used with a ballast.

MODEL SELECTION		Example LG-T8-1200-18-27-C-BFDW-DLC					
LG	T8	1200	18	27	C	BFDW	DLC
FAMILY	LAMP TYPE	LENGTH	WATTAGE	CCT	LENS TYPE	SERIES	LISTING
LG= Lumentek Global	T8 – replaces T8 or T12	1200 =1200MM (4' Nominal)	18 = 18 Watt 21 = 21 Watt	27C = 2700 Kelvin 30C = 3000 Kelvin 35C = 3500 Kelvin 40C = 4000 Kelvin 45C = 4500 Kelvin 50C = 5000 Kelvin	C = Clear F = Frosted	BF = Ballast Friendly DW = Direct Wire	DLC = DLC Listed  Blank = Not DLC Listed

# LG-BFDW Series LED T8 Linear Replacement Lamp “Ballast Friendly” or “Direct Wire”



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## SPECIFICATIONS

ITEM	SPECIFICATION	DETAILS			
GENERAL PERFORMANCE	Wattage / Lens Type	18W / CLEAR	18W / FROSTED	21W / CLEAR	21W / FROSTED
	Lumens Delivered	2,083	1,929	2,389	2,212
	Efficacy	118 lm/w	109 lm/w	114 lm/w	106 lm/w
	Color Temperature (CCT)	2700K, 3000K, 3500K 4000K, 4500K, 5000K	2700K, 3000K, 3500K 4000K, 4500K, 5000K	2700K, 3000K, 3500K 4000K, 4500K, 5000K	2700K, 3000K, 3500K 4000K, 4500K, 5000K
	Beam Angle	120			
	CRI	81			
	Lumen Maintenance L70	50,000 hours			
ELECTRICAL	Power Factor	96%			
	Input Voltage	120V-277V 50/60 Hz			
PHYSICAL	Operating Temperature	-4 F to 104 F / -20 C to 40 C			
	Base	G13 - Medium Bipin			
	Length	1200 mm – 4' nominal			
	Lens	Polycarbonate			
CERTIFICATION	Certification	-ETL, LM79, LM80, DLC			
	Material Usage	RoHS compliant; no mercury			
	Environment	Damp & Dry			
	Warranty	5 Years			

## ORDERING

DLC MODEL #	WATTS	LUMENS	CCT	CRI	PF	THD	CLEAR	FROSTED	EFFICACY (L/W)
LG-T8-1200-18-27C-BFDW-DLC	17.7	2083	2700	81	0.96	11.50%	x		117.7
LG-T8-1200-18-30C-BFDW-DLC	17.7	2083	3000	81	0.96	11.50%	x		117.7
LG-T8-1200-18-35C-BFDW-DLC	17.7	2083	3500	81	0.96	11.50%	x		117.7
LG-T8-1200-18-40C-BFDW-DLC	17.7	2083	4000	81	0.96	11.50%	x		117.7
LG-T8-1200-18-45C-BFDW-DLC	17.7	2083	4500	81	0.96	11.50%	x		117.7
LG-T8-1200-18-50C-BFDW-DLC	17.7	2083	5000	81	0.96	11.50%	x		117.7
LG-T8-1200-18-27F-BFDW-DLC	17.7	1929	2700	81.6	0.96	17.90%		x	109.0
LG-T8-1200-18-30F-BFDW-DLC	17.7	1929	3000	81	0.96	11.50%		x	109.0
LG-T8-1200-18-35F-BFDW-DLC	17.7	1929	3500	81	0.96	11.50%		x	109.0
LG-T8-1200-18-40F-BFDW-DLC	17.7	1929	4000	81	0.96	11.50%		x	109.0
LG-T8-1200-18-45F-BFDW-DLC	17.7	1929	4500	81	0.96	11.50%		x	109.0
LG-T8-1200-18-50F-BFDW-DLC	17.7	1929	5000	81	0.96	11.50%		x	109.0
LG-T8-1200-21-27C-BFDW	20.9	2389	2700	81	0.96	11.50%	x		114.3
LG-T8-1200-21-30C-BFDW	20.9	2389	3000	81	0.96	11.50%	x		114.3
LG-T8-1200-21-35C-BFDW	20.9	2389	3500	81	0.96	11.50%	x		114.3
LG-T8-1200-21-40C-BFDW-DLC	20.9	2389	4000	81	0.96	11.50%	x		114.3
LG-T8-1200-21-45C-BFDW-DLC	20.9	2389	4500	81	0.96	11.50%	x		114.3
LG-T8-1200-21-50C-BFDW-DLC	20.9	2389	5000	81	0.96	11.50%	x		114.3
LG-T8-1200-21-27F-BFDW	20.9	2212	2700	81	0.96	11.50%		x	114.3
LG-T8-1200-21-30F-BFDW	20.9	2212	3000	81	0.96	11.50%		x	114.3
LG-T8-1200-21-35F-BFDW	20.9	2212	3500	81	0.96	11.50%		x	114.3
LG-T8-1200-21-40F-BFDW-DLC	20.9	2212	4000	81.5	0.97	11.36%		x	105.8
LG-T8-1200-21-45F-BFDW	20.9	2212	4500	81	0.97	11.36%		x	105.8
LG-T8-1200-21-50F-BFDW-DLC	20.9	2212	5000	81	0.96	11.50%		x	105.8

### INSTALLATION INSTRUCTIONS – ***Ballast Friendly*** - ***With Existing Ballast***

The Lumentek Global "Ballast Friendly" LED tube operates on most non-dimming Instant Start, Rapid Start, Program Rapid Start, electronic or magnetic ballasts. No wiring required. Simply remove the fluorescent lamp and replace with the new LED tube. In the case of an older T12 system with a starter, the starter must be removed.

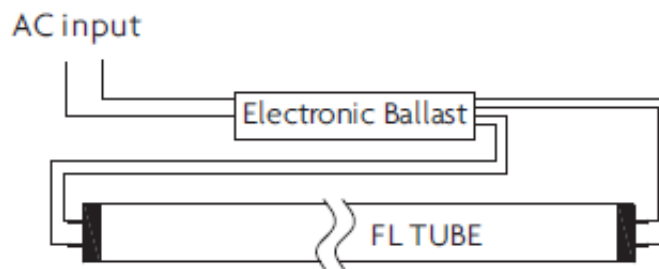
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### INSTALLATION INSTRUCTIONS – ***Direct Wire*** - ***Remove Existing Ballast***

In the event that the existing ballast fails or if you desire to remove the ballast. - The Lumentek Global "Ballast Friendly" LED tube can also operate without the ballast by wiring the fixture direct to line voltage. Disconnect Power, remove existing ballast and wire Hot to both pins on one end of the tube and wire Neutral to both pins on the other end of the tube. In the case of an older T12 system with a starter, the starter must be removed.

### LED Tube wiring diagram with ballast disconnected

Before



After

