

## WELCOME

# LED LINEAR T8 DIRECTFIT (LINEAR REPLACEMENT LAMPS)

2/26/15 Webinar

**Presented by: Bill Fenimore** 





## **WEBINAR TOPICS:**



## MAXLITE PRESENTS: LED LINEAR T8 DIRECTFIT

### **Topics:**

- Why LED?
- What are DirectFit T8 Replacement Lamps?
- MaxLite's LED Linear T8 DirectFit Lamps (Overview)
- Product Specifications
- Ballast Compatibility
- Applications
- MaxLite's Other LED T8 Options
- Other DirectFit Options
- MaxLite Services
- Q&A









#### LED PRODUCTS

View our Product Library for a complete list of LED indoor and outdoor lamps and luminaires. Click Here

LEDs offer a number of advantages over traditional light sources.

#### LEDs...

- · Offer 80% energy savings over incandescents.
- · Contain no mercury, lead or other hazardous materials.
- · Turn on instantly.
- · Are dimmable.
- Last up to 100,000 hours (100 times more than an incandescent!).
- Do not emit ultraviolet or infrared rays during operation.
- · Operate cooler.
- Do not burn out (they become dimmer after their lifetime).

## WHAT IS DIRECTFIT:



## WHAT ARE LED T8 DIRECTFIT REPLACEMENT LAMPS?





## **INSTALL VIDEO:**





Watch the DirectFit LED T8 installation video at: <a href="http://youtu.be/vXMyeWmUFlw">http://youtu.be/vXMyeWmUFlw</a>







## DirectFit™ LED T8 Lamps

The Plug-And-Play Replacement For Fluorescent Tubes

#### **Easy Retrofit**

- Installs in seconds; no rewiring necessary
- Uses existing ballast, maximizing ROI
- Compatible with most instant-start ballasts; 18W also works with some programmed and dimming

#### **Energy Efficient**

- 45 percent energy savings vs. 32W linear fluorescent lamp
- DLC-listed and eligible for select utility rebates
- Achieves up to 106 lumens per watt

#### **Quality Light**

- · Excellent color rendering
- 4000K and 5000K in stock; custom orders available
- · Wide beam spread, silent operation
- · Lifetime 50,000 hours five-year warranty

Works on 4-lamp ballasts!



APPROVED FOR

DIRECT INSTALL

**PROGRAM** 

### Choose The Right DirectFit™ LED T8 Lamp For Your Project

### 18W

- 1900 lumens
- · All alass
- 240° beam angle
- · Dimmable w/compatible ballast
- Works with Back-Up Ballast (BBU)\*
- · Logo and model etched



- Half aluminum, half plastic
- · 120° beam angle
- Non-dimmable
- Not compatible with BBU
- · Logo and model label

Please note that the two wattages may not be combined in the same fixture.

\*designed for Electronic Instant Start T8 system

#### Why MaxLite?

MaxLite has been committed to providing energy-efficient lighting solutions for more than 20 years, and was one of the first movers into LED technology in the industry. An ENERGY STAR® Partner of the Year in 2014, MaxLite is proud to offer an extensive line of indoor and outdoor lamps and luminaires under the MaxLED® brand. Supported by extensive product development labs, testing facilities and in-house market research, MaxLite's products exceed the highest standards in lighting design, service, support and technology.

At MaxLite, we pride ourselves on being an easiest company to work with. Each project is unique, and our representatives and lighting application experts are committed to creating a value lighting solution tailored to your needs. We keep our products in stock and available for immediate purchase and delivery out of our distribution center in Anaheim, California, and headquarters in West Caldwell, New Jersey. For California customers, our Anaheim facility features a full product showroom and will-call service for product pick-up.











## **OVERVIEW:**



## **LED Linear T8 DirectFit Lamps**





▼ 50,000 hour life

50,000 hour life

▼ Compatible with most electronic instant-start T8 ballasts

Compatible with most electronic instant-start T8 ballasts

▼ Five year limited warranty

Five year limited warranty

▼ Suitable for use in totally enclosed recessed fixture

Suitable for use in totally enclosed recessed fixture

▼ 18W Suitable for use in damp locations

18W Suitable for use in damp locations

16W suitable for use in dry locations

16W suitable for use in dry locations

▼ THD <20%

THD <20%

▼ 16W Dimmable (ballast dependent)

16W Dimmable (ballast dependent)

Power Factor: 0.9 nominal

Power Factor: 0.9 nominal





## LED T8 - DIRECTFIT G SERIES (GLASS)











#### FEATURES:

- Input Power: 18W\*
- · Input Voltage: 120-347 VAC, determined by fluorescent ballast
- · Efficacy: 106 LPW
- . Compatible with most electronic instant-start T8 ballasts
- . All glass construction with 240° beam angle
- . Color Rendering Index (CRI): ≥83
- 50,000 hour life
- THD <20%</li>
- · Power Factor: 0.9 nominal
- Dimmable (ballast decendent)
- · Five year limited warranty
- · Suitable for use in dry locations
- · Suitable for use in totally enclosed recessed fixture
- . Not for use with T12 magnetic or electronic ballasts
- Not for use with T8 magnetic or HO ballasts
- · Not for use or to be wired to "mains voltage"

18	Т8	DF	4	
WATTAGE	LAMPTYPE	OPERATION	LENGTH	сст
18= 16W	T8= T8 tube	DF= Direct Fit	4m 4FT	40-G= 4000K, Glass 50-G= 5000K, Glass
	WATTAGE 18= 18W	WATTAGE LAMP TYPE   18= 18W T8= 78 tube	WATTAGE LAMP TYPE OPERATION   18= 18W T8= T8 tube DF= Direct Fit	WATTAGE LAMPTYPE OPERATION LENGTH   18= 18W T8= T8 tube DF= Direct Fit 4= 4 FT

1. "Normal ballast factor ( 88)

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#### LED T8 - LINEAR REPLACEMENT LAMP

DirectFit G SERIES

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PECIFICATIONS:		4 - FOOT		
ITEM	SPECIFICATION	DETAILS		
GENERAL PERFORMANCE	Power Consumption	18W*		
	Lumens Delivered	1900		
	Efficacy	106 lm/W		
	CRI	83		
	Beam Angle	240		
	Color Temperature (CCT)	4000K, 5000K		
	Lumen Maintenance (L70)	50,000 hours		
ELECTRICAL Power Factor Input Voltage	Power Factor	0.9		
	Input Voltage	120-347, ballast dependent		
PHYSICAL	Operating Temperature	-4°F to 113°F		
	Certification	UL, LM79, LM80, DLC		
CERTIFICATION	Material Usage	RoHS compliant, no mercury		
CENTIFICATION	Environment	Dry		
	and the second s	EW-		

#### WATTS & LUMENS\*:

BARE LAMP WATTS			BARE LAMP LUMENS		
LOW BF= .78	NORMAL BF= .88	HIGH BF= 1.18	LOW BF= .78	NORMAL BF= .88	HIGH BF= 1.10
16	18	27	1600	1900	2700

<sup>\*</sup> Lumens and watts will vary by ballast and fixture

#### ORDERING\*:

ORDER CODE	MODEL	WATTS	LENGTH	сст	DIMENSIONS (L" x DIA")
74494	L18T8DF440-G	18	4FT	4000K	47.75° x 1.00°
74495	L18T8DF450-G	18	4FT	5000K	47.75" x 1.00"

<sup>\*</sup>Please contact your MaxLite representative to order products that don't have order codes listed here.

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Lighting layouts and spacing criteria available upon request



## LED T8 - DIRECTFIT SERIES (ALUMINUM/PLASTIC)













#### FEATURES:

Input Power: 16W\*

maintenance and labor costs.

· Input Voltage: 120-277 VAC, determined by fluorescent ballast

lumens, these energy-saving LED lamps are quick, easy and safe to install into existing linear fluorescent fixtures without any extra effort or re-wiring. MaxLite DirectFit LED T8 lamps utilize the existing T8 instant-start electronic ballasts, thus minimizing

- Efficacy: ≥106 LPW
- . Compatible with most electronic instant-start T8 ballasts
- 120° beam angle
- . Color Rendering Index (CRI): ≥82
- 50,000 hour life
- THD <20%</li>
- · Power Factor: 0.9 nominal
- · Half aluminum and half plastic construction · Five year limited warranty
- · Suitable for use in damp locations
- · Suitable for use in totally enclosed recessed fixture

L	16	Т8	DF	4	
FAMILY	WATTAGE	LAMP TYPE	OPERATION	LENGTH	сст
.= LED Linear	16= 16W	T8= T8 tube	DF= Direct Fit	4m 4FT	40= 4000K 50= 5000K

1. "Normal ballast factor ( 88)

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#### **LED T8 - LINEAR REPLACEMENT LAMP**

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PECIFICATIONS.		4 - FOOT		
ITEM	SPECIFICATION	DETAILS		
	Power Consumption	16W*		
GENERAL PERFORMANCE	Lumens Delivered	1700		
	Efficacy	≥ 106 lm/W		
	CRI	82		
	Beam Angle	120		
	Color Temperature (CCT)	4000K, 5000K		
	Lumen Maintenance (L70)	50,000 Hours		
	Power Factor	0.9		
ELECTRICAL	Input Voltage	120-277V, ballast dependent		
PHYSICAL	Operating Temperature	-4°F to 105°F		
	Certification	UL, LM79, LM80, DLC		
CERTIFICATION	Material Usage	RoHS compliant, no mercury		
CERTIFICATION	Environment	Damp		
	Warranty	5 Years		

Normal ballast factor (.88)

#### ORDERING\*:

ORDER CODE	MODEL	WATTS	LENGTH	сст	DIMENSIONS (L" x DIA")
74492	L16T8DF440	16	4FT	4000K	47.75" x 1.25"
74493	L16T8DF450	16	4FT	5000K	47.75" x 1.25"

<sup>\*</sup>Please contact your MaxLite representative to order products that don't have order codes listed here

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Lighting layouts and spacing criteria available upon request



## WILL THEY BE COMPATIBLE WITH MY FIXTURE?

The MaxLite DirectFit Series of LED T8 Replacement Lamps are compatible with a wide range of ballasts. A compatibility list is available for both models right on the data sheet.

Please contact MaxLite for questions about third party ballasts that are not on this list.









## **APPLICATIONS:**



## LED T8 DIRECTFIT REPLACEMENT LAMP APPLICATIONS







General Office

Schools and Universities

Warehouse

Retail

## Applications

MaxLite DirectFit LED T8 lamps are the ideal plug and play solution that works straight out of the box. Designed to deliver over 1700 lumens, these energy-saving LED lamps are quick, easy and safe to install into existing linear fluorescent fixtures without any extra effort or re-wiring. MaxLite DirectFit LED T8 lamps utilize the existing T8 instant-start electronic ballasts, thus minimizing maintenance and labor costs.



## **APPLICATIONS:**



## LED T8 DIRECTFIT REPLACEMENT LAMP APPLICATIONS











## **OTHER OPTIONS:**



## MAXLITE'S OTHER LED T8 OPTIONS



#### LED Linear T8 - External Driver

An LED F32 T8 lamp for all locations where four-foot fluorescent tubes are now used, the LED T8 consumes just 20 watts and is powered by either a one- or two-lamp driver configuration, allowing for one to six LED tube configurations within a typical troffer.



#### LED Linear T8 - Internal Driver

MaxLite's LED Linear T8 with internal driver replacement Lamps are the ideal energy saving choices when upgrading traditional linear T8 or T12 fluorescent lamps in fixtures containing standard non-shunted G13 (medium bi-pin) sockets.



#### LED Linear T8 - DirectFit

DirectFit LED T8 lamps make upgrading fluorescent fixtures to LED technology effortless. By using the existing ballast, these energy-saving replacement lamps install into linear fluorescent fixtures without any extra labor or re-wiring.

MaxLite also offers External Driver and Internal Driver LED Linear T8 Lamps In addition to the DirectFit Series.

For more information see: <a href="http://www.maxlite.com/products/led-linear-t8s/list">http://www.maxlite.com/products/led-linear-t8s/list</a>



## **OTHER OPTIONS:**



## MAXLITE'S OTHER DIRECTFIT OPTIONS

MaxLite also now offers ballast-compatible PL Lamps for four-pin fixtures.

#### LED PL Lamps - DirectFit



#### Overview:

MaxLite LED PL DirectFit lamp is the ideal plug and play solution that works straight out of the box. The 13W LED PL lamp is designed to replace CFL downlights with 4-pin G24q sockets. These energy-saving LED lamps are quick, easy and safe to install into existing CFL fixtures without any extra effort or re-wiring. Available in horizontal and vertical installation position and 3 different correlated color temperature.







- 50,000 Hour life
- Dimmable (ballast dependent)
- Five year limited warranty
- Instant on

- Rotatable 270 Degrees (Horizontal Model)
- Suitable for damp locations
- Suitable for use with wall-mounted and ceiling fixtures

## **MAXLITE UNIVERSITY:**



## University.MaxLite.com



## MAXLITE LIGHTING & TECHNOLOGY UNIVERSITY







The department function is to train and provide product training material for all MaxLite representatives, customers and employees. The goal of the department is to educate the staff and rep network to a full and complete understanding of our products, technologies, marketplace, and business environments. We endeavor to educate how and why lighting functions, repair and replacement, as well as compare to competitors or listing requirements. We will accomplish this by providing the tools and services proactively and as needed to supplement.

Click here to get started!



## **CUSTOM PRODUCT/TECH TRAINING:**



## **Custom Product & Technology Training**

### Ask about our FREE custom webinar/training services!

- Lunch and Learn
- Breakfast and Learn
- Online via webinar
- Focus on a specific MaxLite product or a broad overview
- Focus on LED Technology or general lighting training
- Custom Presentations for your customers or staff

Email Bill Fenimore at <a href="mailto:bfenimore@maxlite.com">bfenimore@maxlite.com</a> for more info!



## **UTILITY REBATE SERVICES:**



## **MAXLITE'S UTILITY REBATE SERVICES**

MaxLite makes it easy to find and complete rebates for you and your customers!

- C&I Rebate Finder
- Utility Rebate Flyers
- Custom Rebate Calculator
- DLC / ENERGY STAR / LDL Product Listings
- Utility Rebate Paperwork Service

Email Joe Pater at jpater@maxlite.com for more info!



### **THANKS FOR ATTENDING!**



#### **QUESTIONS/ANSWERS**

Thank you everyone for your attention! Please feel free to use this opportunity to ask any questions you may have about MaxLite or the products/topics discussed in this presentation.

FOR MORE INFORMATION ABOUT OTHER MAXLITE PRODUCTS, OR FOR LIGHTING QUESTIONS IN GENERAL; PLEASE CONTACT:

info@maxlite.com http://www.maxlite.com 1-800-555-5629

