



## LED TUBES

### Applications

- Office
- Education
- Retail
- Industrial
- Healthcare



# TUBES SELECTOR GUIDE

## LED Replacement Tubes

A complete range of solutions for nearly every application



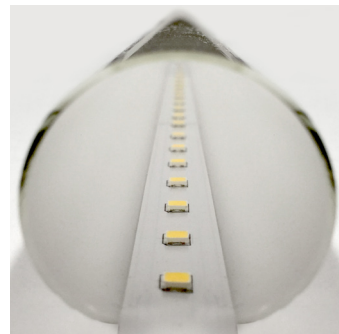
## LED LINEAR TUBE | AFFORDABLE




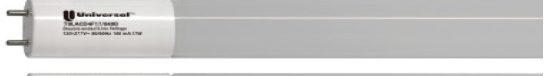
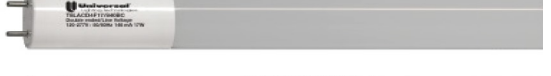

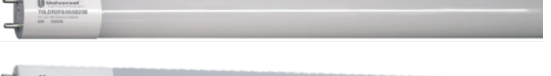
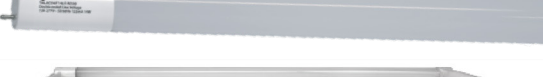





*For Linear Fluorescent Lamp Replacement*

**Universal makes it easy to update your linear fluorescent fixtures to an LED solution with Universal Douglas LED Linear Tubes.**

### FEATURES

- Standard & High Efficiency options
- Beam Angle: 210°
- Universal input voltage 120-277V and 347V
- No warm-up time, instant on
- Long Life: 50,000 hours (L70)
- Glass construction for optimum optical efficiency.
- Reduces energy by up to 40%
- Full light down to -4°F
- No UV emissions
- Ideal for frequent on/off switching



T8 LED LINEAR TUBE	
T8 LED LINEAR TUBE-COATED	
T5HO LED LINEAR TUBE	
T8 LED AC DIRECT LINEAR TUBE	
T8 LED AC DIRECT LINEAR TUBE-COATED	
T5HO AC DIRECT LINEAR TUBE	
T8 LED DIRECT WIRE 347V TUBES	
T8 LED LOW FLICKER DIRECT WIRE TUBES	
T8 LED U-BEND TUBE	
T8 LED TUBE AND DRIVER KIT	
SIGN STICKS	
LED LONG TWIN DIRECT WIRE TUBE	
LED 4-PIN CFL REPLACEMENT	



**Universal makes the replacement decision easy with a variety of LED replacement options, industry-leading reliability, and a 5 year warranty. For replacing traditional lighting with more efficient LED technology - choose Universal!**

Catalog	Ordering Code	Length	Power <sup>1</sup> (W)	Nominal Lumens	CCT <sup>2</sup> (°K)	Package Qty	DLC <sup>®</sup> QPL
<b>Type A, Direct Replacement</b>							
<b>T8</b>							
T8LDR2F8/8xxD	T8LDR2F8/8xxD25C	2ft	8	1250	3500/4000/5000	25	Y
T8LDR3F10/8xxD	T8LDR3F10/8xxD25C	3ft	10	1450	3500/4000/5001	25	Y
T8LDR4F9/8xxD	T8LDR4F9/8xxD25C	4ft	9.5	1650	3500/4000/5002	25	Y
T8LDR4F11/8xxD	T8LDR4F11/8xxD25C	4ft	11	1800	3500/4000/5003	25	Y
T8LDR4F14/8xxD	T8LDR4F14/8xxD25C	4ft	14	2200	3500/4000/5004	25	Y
T8LDR6U12/8xxB	T8LDR6U12/8xxB12C	22" U-Bend	12	1800	3500/4000	12	Y
<b>T8 - Coated</b>							
T8LDR4F11/8xxDC	T8LDR4F11/8xxDC25C	4ft	11	1800	4000/5000	25	Y
T8LDR4F14/8xxDC	T8LDR4F14/8xxDC25C	4ft	14	2200	4000	25	Y
<b>T5HO</b>							
T5LDR4F25/8xxA	T5LDR4F25/8xxA25C	4ft	25.5	3300/3400	4000/5000	25	Y
<b>Type B, AC Direct</b>							
<b>T8 Standard Efficacy, 120-277V</b>							
T8LACD2F9/8xxB	T8LACD2F9/8xxB25EC	2ft	9	1050	3500/4000/5000	25	Y
T8LACD3F12/8xxB	T8LACD3F12/8xxB25EC	3ft	12	1450	3500/4000/5000	25	Y
T8LACD4F14/8xxB	T8LACD4F14/8xxB25EC	4ft	14	1800	3500/4000/5000	25	Y
T8LACD4F17/8xxB	T8LACD4F17/8xxB25EC	4ft	17	2200	3500/4000/5000	25	Y
T8LACD4F25/8XXB	T8LACD4F25/8XXB25EC	4ft	25	3000	4000/5000	25	Y
T8LACD6U15/8XXB	T8LACD6U15/8XXB12C	22" U-Bend	15.1	3500/4000	3500/4000	12	Y
<b>T8 Standard Efficacy - Coated, 120-277V</b>							
T8LACD4F14/8xxBC	T8LACD4F14/8xxBC25EC	4ft	14	1800	4000/5000	25	Y
T8LACD4F17/8xxBC	T8LACD4F17/8xxBC25EC	4ft	17	2200	4000/5000	25	Y
T8LACD4F18/8xxBC	T8LACD4F18/8xxBC25EC	4ft	18.5	2600	4000/5000	25	Y
<b>T8 Premium Efficacy, 120-277V</b>							
T8LACD4F10/8xxB	T8LACD4F10/8xxB25EC	4ft	10.5	1650	3500/4000/5000	25	Y
T8LACD4F12/8xxB	T8LACD4F12/8xxB25EC	4ft	12	1800	3500/4000/5000	25	Y
T8LACD4F15/8xxB	T8LACD4F15/8xxB25EC	4ft	15	2200	3500/4000/5000	25	Y
<b>T8, 347V AC Direct</b>							
T8L347D4F14/8xxB	T8L347D4F14/8xxB25C	4ft	14	1800	3500/4000/5000	25	Y
T8L347D4F17/8xxB	T8L347D4F17/8xxB25C	4ft	17	2200	4000/5000	25	Y
<b>T8 Low Flicker, 120-277V</b>							
T8LACD4F14LF/8xxB	T8LACD4F14/8xxB25C	4ft	14	1800	3500/4000	25	Y
<b>T5HO, 120-277V</b>							
T5HOLACD4F25/8xxA	T5HOLACD4F25/8xxA25C	4ft	25	3500	4000/5000	25	Y

Catalog	Ordering Code	Length	Power <sup>1</sup> (W)	Nominal Lumens	CCT <sup>2</sup> (°K)	Package Qty	DLC® QPL
<b>Type C, Tube &amp; Driver Retrofit Kit</b>							
<b>Low Power (1800lm/Lamp)</b>							
LR14T8-18L8xx-10D3	LR14T8-18L8xx-10D310C	1 x 4ft	15	1800	3500/4000/5000	10	Y
LR24T8-36L8xx-10D3	LR24T8-36L8xx-10D310C	2 x 4ft	29	3600	3500/4000/5000	10	Y
LR34T8-54L8xx-10D3	LR34T8-54L8xx-10D310C	3 x 4ft	43	5400	3500/4000/5000	10	Y
LR44T8-72L8xx-10D3	LR44T8-72L8xx-10D310C	4 x 4ft	58	7200	3500/4000/5000	10	Y
LR14T8-18L8xx-10DU	LR14T8-18L8xx-10DU10C	1 x 4ft	15	1800	3500/4000/5000	10	Y
LR24T8-36L8xx-10DU	LR24T8-36L8xx-10DU10C	2 x 4ft	29	3600	3500/4000/5000	10	Y
LR34T8-54L8xx-10DU	LR34T8-54L8xx-10DU10C	3 x 4ft	43	5400	3500/4000/5000	10	Y
LR44T8-72L8xx-10ADU	LR44T8-72L8xx-10ADU10C	4 x 4ft	58	7200	3500/4000/5000	10	Y
<b>Normal Power (2200lm/Lamp)</b>							
LR14T8-22L8xx-10D3	LR14T8-22L8xx-10D310C	1 x 4ft	19	2200	3500/4000/5000	10	Y
LR24T8-44L8xx-10D3	LR24T8-44L8xx-10D310C	2 x 4ft	36	4400	3500/4000/5000	10	Y
LR34T8-66L8xx-10D3	LR34T8-66L8xx-10D310C	3 x 4ft	52	6600	3500/4000/5000	10	Y
LR44T8-88L8xx-10D3	LR44T8-88L8xx-10D310C	4 x 4ft	70	8800	3500/4000/5000	10	Y
LR14T8-22L8xx-10DU	LR14T8-22L8xx-10DU10C	1 x 4ft	19	2200	3500/4000/5000	10	Y
LR24T8-44L8xx-10DU	LR24T8-44L8xx-10DU10C	2 x 4ft	36	4400	3500/4000/5000	10	Y
LR34T8-66L8xx-10DU	LR34T8-66L8xx-10DU10C	3 x 4ft	52	6600	3500/4000/5000	10	Y
LR44T8-88L8xx-10DU	LR44T8-88L8xx-10DU10C	4 x 4ft	70	8800	3500/4000/5000	10	Y
<b>Low Power w/ Bluetooth Control, 120-277V</b>							
LR14T8-18L8xx-10DU-XCT	LR14T8-18L8xx-10DU-XCT10C	1 x 4ft	15	1800	3500/4000/5000	10	Y
LR24T8-36L8xx-10DU-XCT	LR24T8-36L8xx-10DU-XCT10C	2 x 4ft	30	3600	3500/4000/5000	10	Y
LR34T8-54L8xx-10DU-XCT	LR34T8-54L8xx-10DU-XCT10C	3 x 4ft	44	5400	3500/4000/5000	10	Y
LR44T8-72L8xx-10DU-XCT	LR44T8-72L8xx-10DU-XCT10C	4 x 4ft	59	7200	3500/4000/5000	10	Y
<b>2-Foot (120-277V)</b>							
LR22T8-24L8xx-10DU	LR22T8-24L8xx-10DU10C	2 x 2ft	20	2400	3500/4000/5000	10	Y
LR32T8-36L8xx-10DU	LR32T8-36L8xx-10DU10C	3 x 2ft	30	3600	3500/4000/5000	10	Y
LR42T8-48L8xx-10DU	LR42T8-48L8xx-10DU10C	4 x 2ft	40	4800	3500/4000/5000	10	Y
<b>2-Foot w/ Bluetooth Control, 120/277V</b>							
LR22T8-24L8xx-10DU-XCT	LR22T8-24L8xx-20DU-XCT10C	2 x 2ft	20	2400	3500/4000/5000	10	Y
LR32T8-36L8xx-10DU-XCT	LR32T8-36L8xx-10DU-XCT10C	3 x 2ft	30	3600	3500/4000/5000	10	Y
LR42T8-48L8xx-10DU-XCT	LR42T8-48L835-10DU-XCT10C	4 x 2ft	40	4800	3500/4000/5000	10	Y
<b>AC Direct Twin Tube LED</b>							
TT5LACD17/8xxB	TT5LACD17/8xxB24C	22in	17	2100/2200	3500/4000	24	Y
TT5LACD23/8xxB	TT5LACD23/8xxB24C	22in	23	2600/2800	3500/4000	24	Y
<b>High Efficiency CFL LED</b>							
CFLDRH9/8xxB	CFLDRH9/8xxB24C	169mm (6.65 in)	12	1050/1100	3500/4000	24	Y
CFLDRV9/8xxB	CFLDRV9/8xxB24C	119mm (4.68 in)	12	1050/1100	3500/4000	24	Y

Catalog	Ordering Code	Length	Power <sup>1</sup> (W)	Nominal Lumens	CCT <sup>2</sup> (°K)	Package Qty	DLC® QPL
<b>LED Sign Sticks</b>							
<b>LED Single Sided Sign Stick - 12V</b>							
EVSS12-65-24	EVSS12-65-24001C EVSS12-65-24004C	2 ft	3.9	600	6500	1 4	N
EVSS12-65-36	EVSS12-65-36001C EVSS12-65-36004C	3 ft	5.8	900	6500	1 4	N
EVSS12-65-48	EVSS12-65-48001C EVSS12-65-48004C	4 ft	7.8	1200	6500	1 4	N
EVSS12-65-60	EVSS12-65-60001C EVSS12-65-60004C	5 ft	9.7	1500	6500	1 4	N
EVSS12-65-72	EVSS12-65-72001C EVSS12-65-72004C	6 ft	11.6	1800	6500	1 4	N
EVSS12-65-84	EVSS12-65-84001C EVSS12-65-84004C	7 ft	13.6	2100	6500	1 4	N
EVSS12-65-96	EVSS12-65-96001C EVSS12-65-96004C	8 ft	15.5	2400	6500	1 4	N
EVSS12-65-108	EVSS12-65-108001C EVSS12-65-108004C	9 ft	17.5	2700	6500	1 4	N
EVSS12-65-120	EVSS12-65-120001C EVSS12-65-120004C	10 ft	19.4	3000	6500	1 4	N
<b>LED Double Sided Sign Stick - 24V</b>							
EVDS24-65-24	EVDS24-65-24001C EVDS24-65-24004C	2 ft	7.8	1200	6500	1 4	N
EVDS24-65-36	EVDS24-65-36001C EVDS24-65-36004C	3 ft	11.6	4800	6500	1 4	N
EVDS24-65-48	EVDS24-65-48001C EVDS24-65-48004C	4 ft	15.5	2400	6500	1 4	N
EVDS24-65-60	EVDS24-65-60001C EVDS24-65-60004C	5 ft	19.4	3000	6500	1 4	N
EVDS24-65-72	EVDS24-65-72001C EVDS24-65-72004C	6 ft	23.3	3600	6500	1 4	N
EVDS24-65-84	EVDS24-65-84001C EVDS24-65-84004C	7 ft	27.2	4200	6500	1 4	N
EVDS24-65-96	EVDS24-65-96001C EVDS24-65-96004C	8 ft	31	4800	6500	1 4	N
EVDS24-65-108	EVDS24-65-108001C EVDS24-65-108004C	9 ft	35	5400	6500	1 4	N
EVDS24-65-120	EVDS24-65-120001C EVDS24-65-120004C	10 ft	38.8	6000	6500	1 4	N

**Notes:**

<sup>1</sup> Power for type A lamps is lamp power only and does not include ballast power losses

<sup>2</sup> CCT: xx = 35 for 3500, xx=40 for 4000, xx=50 for 5000

Consult Specification sheets at [www.unvlt.com](http://www.unvlt.com) for more details.

For a list of DesignLights Consortium® QPL listed products please visit [www.designlights.org/qpl/en/saved/UBU24XJ](http://www.designlights.org/qpl/en/saved/UBU24XJ)



# Three different types of LED Linear tube options have been designated by Underwriters Laboratories (UL). The tubes are differentiated by how they interact with the ballast that operates the existing T8 fluorescent lamps.



## TYPE A

**DIRECT REPLACEMENT,  
USES EXISTING BALLAST**

### INPUT VOLTAGE:

Ballast Dependent, 120-277V, & 347V

### UNIVERSAL DOUGLAS FAMILIES:

LED T5HO Replacement Tubes  
LED T8 Replacement Tubes  
LED T8 Replacement Tubes- Coated

### POWER CONSUMPTION RATING:

Lamp wattages do not include ballast losses, consult spec sheet for full system wattage

### UNIVERSAL DOUGLAS LED REPLACEMENT TUBE ADVANTAGE:

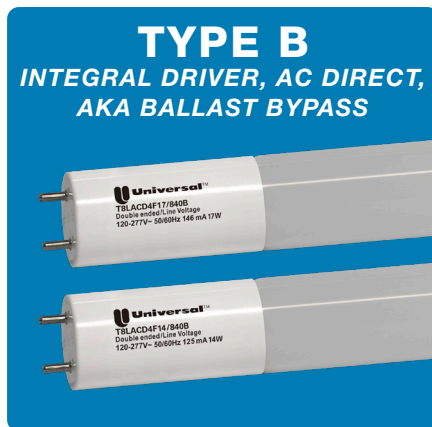
- Installs directly into existing fixtures that have compatible electronic ballasts
- Seamless glass design with 210° light distribution
- Mercury Free
- ROHS compliant

### TYPE A COMPATIBLE BALLASTS:

#### Compatible

T5HO, T8, and Emergency ballast listed

**Note:** The Compatibility List is frequently updated on website



## TYPE B

**INTEGRAL DRIVER, AC DIRECT,  
AKA BALLAST BYPASS**

### INPUT VOLTAGE:

120-277V

### UNIVERSAL DOUGLAS FAMILIES:

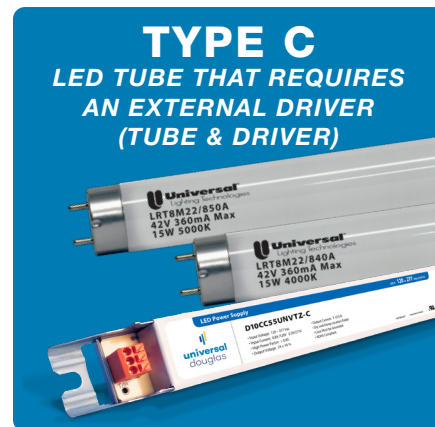
T5HO LED AC Direct Tube  
T8 LED AC Direct Tube  
T8 LED AC Direct Tube- Coated

### POWER CONSUMPTION RATING:

There are no additional ballast losses, the rating is the actual power

### UNIVERSAL DOUGLAS LED DUAL END WIRING ADVANTAGE:

- No need to replace lamp sockets
- Uses shunted or non-shunted socket
- No rewiring of socket bars
  - Leads from one side wire to "Hot" lead
  - Leads from other side wire to "Neutral"



## TYPE C

**LED TUBE THAT REQUIRES  
AN EXTERNAL DRIVER  
(TUBE & DRIVER)**

### INPUT VOLTAGE:

120-277V

### UNIVERSAL DOUGLAS FAMILIES:

LED T8 Tube and Driver Kit (bundles of 10)

### POWER CONSUMPTION RATING:

There are no additional ballast losses, the rating is the actual power

### DIMMING:

Type C is the only LED Replacement Tube that has the option for dimming

### LED REPLACEMENT TUBE & DRIVER ADVANTAGE:

- Retrofits 4ft fluorescent luminaires to LED
- Replaces existing fluorescent lamps and ballasts
- Uses existing lamp holders
- No redesign or revised layout needed
- Equipped with 0-10V dimmable LED driver to 1%
- LED System efficacies exceed 120 LPW

To request a demo [upgrade@unvlt.com](mailto:upgrade@unvlt.com)

### DOUGLAS LIGHTING CONTROLS

toll free: 877-873-2797

direct: 604-873-2797

[lighting@douglaslightingcontrols.com](mailto:lighting@douglaslightingcontrols.com)

[www.douglaslightingcontrols.com](http://www.douglaslightingcontrols.com)

### UNIVERSAL LIGHTING TECHNOLOGIES, INC.

toll free: 1-800-225-5278

direct: (615) 316-5100

[upgrade@unvlt.com](mailto:upgrade@unvlt.com)

[www.unvlt.com](http://www.unvlt.com)

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