

LEDVANCE Lamps

LEDlescent™ LED T5HE UL Type B Lamps

Application

LEDVANCE LEDlescent T5 High Efficiency Ballast-Free lamps are an energy saving alternative, designed to replace traditional fluorescent T5HE lamps by bypassing the existing ballast to operate directly on 120-277V. Reduced energy usage saves operational costs resulting in attractive payback time while providing an easy way to upgrade to LED technology. These LED T5HE lamps contain no mercury, provide instant light and a uniform light distribution.

When installing the LEDlescent T5 lamps, the UL rating of the existing fixture is not voided (even when it is electrically modified) since our LEDlescent T5 lamp is UL Classified (as a luminaire conversion retrofit kit) under UL standard 1598C. UL 1598C is the standard covering LED retrofits intended for an existing UL rated fixture. Since the user is retrofitting with a UL1598C classified LED kit, the installer must follow the installation instructions included with the lamps for the modified fixture to retain its UL rating.*

Benefits and Features

- Efficacy up to 145 LPW
- CRI >80
- No lamp polarity
- No warm-up time, instant-on with full light output and stable lamp-to-lamp color
- Available in 2ft, 3ft and 4ft lengths
- 3000K, 3500K, 4100K, and 5000K color temperatures
- Beam angle: 180° with frosted glass optics
- Light emitting angle: 320°
- No UV emission
- Suitable for dry and damp locations

Electrical

- Operated directly on 120-277V
- Power Factor >0.9
- THD <20%
- 14W 4ft lamps are dimmable down to 10% with 120V phase cut dimmers

Rated Life

- 50,000 hours (L₇₀)



Wattage Comparison

Traditional Source	Traditional System Wattage	LED System	LED System Wattage	Energy Savings
QTP 2X28T5/UNV PSN	32	LED8T5HEL24FG8XXBFG2	17	47%
QTP 2X28T5/UNV PSN	47	LED11T5HEL36FG8XXBFG2	23	51%
QTP 2X28T5/UNV PSN	63	LED14T5HEL48FGDIM8XXBFG2	29	54%

Warranty

- Lamps are covered by a 5-year limited warranty. For additional details, please visit www.ledvanceUS.com/warranty
- NLB Trusted Warranty Program

Operating Temperature

- -4°F to +113°F (-20°C to +45°C)

Max Case Temperature

- 158°F (70°C)

Certifications and Listings

- cULus (UL1993, UL1598c and CSA C22.2)
- RoHS
- FCC
- NSF
- Lead Free
- Mercury Free
- DLC 5.1 for 4ft lamps

Installation

- Please refer to the Installation manual included inside the packaging and the applications information listed below for more information.

*Representative example of luminaire label to be affixed at time of installation.

This luminaire has been modified to operate LED lamps. Do not attempt to install or operate fluorescent lamps in this luminaire.

Ce luminaire a été modifié pour utiliser des lampes à DEL. Ne tentez pas d'installer ou d'utiliser des lampes fluorescentes avec ce luminaire.

LEDVANCE
 Tel:1-(800)-LIGHTBULB (1-800-544-4828)
www.ledvanceUS.com
 4160184

41581 LED14T5HEL48FGDIM830BFG2
 41582 LED14T5HEL48FGDIM835BFG2
 41583 LED14T5HEL48FGDIM841BFG2
 41584 LED14T5HEL48FGDIM850BFG2



LED596R1 10-23

Catalog #	Type
Project	
Comments	
Prepared by	

Ordering Guide

LED	XX	T5HE	LXX	FG	DIM	8	XX	BF	G2
Product Name	Wattage	Lamp Type	Length	Color/Finish	Dimming	CRI	Color Temperature	Operation	Generation
LED	8 = 8 Watts 11 = 11 Watts 14 = 14 Watts	T5HE	L24 = 24" L36 = 36" L48 = 48"	FG = Frosted Glass	DIM = Dimmable	8 = 82	30 = 3000K 35 = 3500K 41 = 4100K 50 = 5000K	BF = UL Type B	G2 = Gen 2

Ordering Information

Item Number	Ordering Abbreviation	Lamp Power (W)	Base Type	Replaces	Input Voltage (V)	Avg. Life (hrs)	Typical Lumens (lm)	CRI	CCT	Power Factor	Bulb Finish	Case Qty	DLC
42024	LED8T5HEL24FG830BFG2	8	G5	FP14/830/ECO	120-277V	50,000	950	82	3000K	>0.90	Frosted Glass	25	-
42025	LED8T5HEL24FG835BFG2	8	G5	FP14/835/ECO	120-277V	50,000	950	82	3500K	>0.90	Frosted Glass	25	-
42026	LED8T5HEL24FG841BFG2	8	G5	FP14/841/ECO	120-277V	50,000	1000	82	4100K	>0.90	Frosted Glass	25	-
42027	LED8T5HEL24FG850BFG2	8	G5	FP14/850/ECO	120-277V	50,000	1000	82	5000K	>0.90	Frosted Glass	25	-
42028	LED11T5HEL36FG830BFG2	11	G5	FP21/830/ECO	120-277V	50,000	1400	82	3000K	>0.90	Frosted Glass	25	-
42029	LED11T5HEL36FG835BFG2	11	G5	FP21/835/ECO	120-277V	50,000	1400	82	3500K	>0.90	Frosted Glass	25	-
42030	LED11T5HEL36FG841BFG2	11	G5	FP21/841/ECO	120-277V	50,000	1500	82	4100K	>0.90	Frosted Glass	25	-
42031	LED11T5HEL36FG850BFG2	11	G5	FP21/850/ECO	120-277V	50,000	1500	82	5000K	>0.90	Frosted Glass	25	-
41581	LED14T5HEL48FGDIM830BFG2	14	G5	FP28/830/ECO	120-277V	50,000	2000	82	3000K	>0.90	Frosted Glass	25	5.1
41582	LED14T5HEL48FGDIM835BFG2	14	G5	FP28/835/ECO	120-277V	50,000	2000	82	3500K	>0.90	Frosted Glass	25	5.1
41583	LED14T5HEL48FGDIM841BFG2	14	G5	FP28/841/ECO	120-277V	50,000	2100	82	4100K	>0.90	Frosted Glass	25	5.1
41584	LED14T5HEL48FGDIM850BFG2	14	G5	FP28/850/ECO	120-277V	50,000	2100	82	5000K	>0.90	Frosted Glass	25	5.1

Specifications & Lighting Data

Lamp	Ballast	Current (AMPS)	System Power (W)	System Lumens (lm)*	System Efficacy (lm/W)	No of Lamps
LED8T5HEL24FG8XXBFG2	N/A	0.142/0.061	17	2000	118	2
LED11T5HEL36FG8XXBFG2	N/A	0.192/0.083	23	2800	122	2
LED14T5HEL48FGDIM8XXBFG2	N/A	0.242/0.105	29	4200	145	2

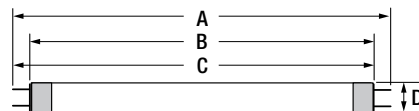
*Lumens at 4100K CCT

Dimmer Compatibility

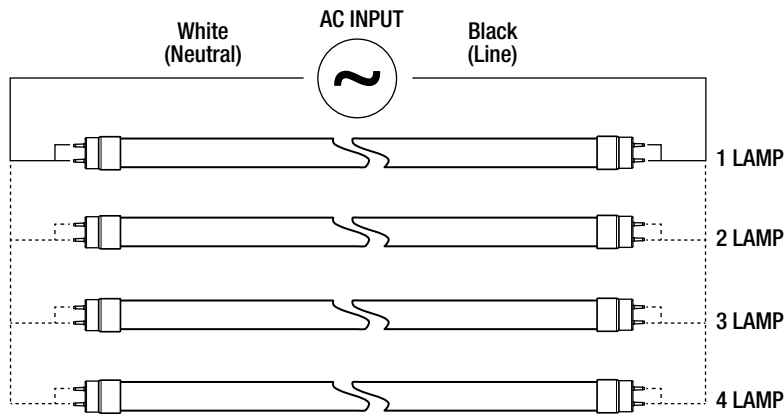
4 ft lamps are dimmable with 120V phase cut dimmers. Lamps are tested and compatible with Lutron CTELV-303P and DVELV-303P dimmers.

Physical Information

Model	(A) Max. Overall Length (in/mm)	(B) MIN Base Face to Opposite Base Face (in/mm)	(B) MAX Base Face to Base Face (in/mm)	(C) MIN Base Face to Opposite Base Pin (in/mm)	(C) MAX Base Face to Opposite Base Pin (in/mm)	(D) MAX (in/mm)
LED8T5HEL24FG8XXBFG2	22.17/563	21.54/547	21.61/549	21.8/553	21.89/556	0.67/17
LED11T5HEL36FG8XXBFG2	33.98/863	33.35/847	33.43/849	33.61/853	33.71/856	0.67/17
LED14T5HEL48FGDIM8XXBFG2	45.80/1163	45.16/1147	45.24/1149	45.42/1153	45.52/1156	0.67/17



Wiring Diagram



Note:

1. LEDlescent™ lamp is polarity neutral. Can be installed in either direction.
2. Socket may be shunted or non-shunted. Tie socket leads together with an external jumper for a non-shunted socket.

Application Information

1. Please read and comply with all instructions before attempting installation.
2. Not suitable for enclosed fixtures (air-tight). Suitable for open fixtures only.
3. Do not use LEDlescent™ T5HE lamps with external LED drivers or ballasts.
4. All installation, inspection, and maintenance of lighting fixtures should be done with the power to the fixture turned off. Lamps should be installed and operated in compliance with the National Electrical Code (NEC), Underwriters Laboratories Inc. (UL) requirements, and all applicable codes and regulations.
5. Please do not install LED lamps and fluorescent lamps in the same fixture.
6. Ensure lamp holders/sockets are in good operating condition before installation.
7. Best practice: cap off the remaining ballast wires should the ballast be left in the fixture after disconnecting.
8. To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
9. When using LEDlescent lamps, to conform to UL, you MUST affix the luminaire warning sticker, included inside the packaging, to the fixture during installation.
10. EM ballast that operates with fluorescent ballasts must be disconnected from the lamps.
11. Make sure the lamps have the proper connections before restoring power.
12. Operating temperature range between -4°F and 113°F (-20°C and 45°C).
13. LEDlescent is compatible with Philips Bodine ELI-S-20 Emergency Lighting Inverters and IOTA inverter models IIS-25-I, IIS-35-I, IIS-50-1, IIS125, IIS-375, IIS-550.
14. Suitable for use in dry and damp environments.
15. For detailed warranty information, please see www.ledvanceUS.com.

LEDVANCE LLC
181 Ballardvale Street, Suite 203
Wilmington, MA 01887 USA
Phone 1-800-LIGHTBULB (1-800-544-4828)
www.ledvanceUS.com

LEDVANCE is a registered trademark. All other trademarks are those of their respective owners. Specifications subject to change without notice.



SCAN TO FOLLOW US
ON SOCIAL MEDIA

