

SYLVANIA Lamps

DUALescent™ Universal 3 CCT Selectable LED T8

Type A+B Lamps for use with
Compatible T8 and T12 ballasts and
Direct Wire (120-277V)

Application

DUALescent Universal LED T8 family of lamps are an ideal upgrade for any fluorescent application. These lamps are an energy saving alternative, contain no mercury, and provide instant light with uniform light distribution. These linear and U-Bend lamps are engineered to operate on magnetic T12 and both T12 and T8 electronic ballasts. Similarly, T9 circular lamps operate both electronic and magnetic ballasts. All lamps can bypass the existing ballast and be wired directly to line voltage. This family of lamps, when installed as Type B, can be wired either in the double-ended or single-ended wiring configuration. Single-ended wiring requires the use of non-shunted lamp holders and power must be wired to the end of the lamp without the CCT switch (linear and U-Bend). DUALescent Universal Selectable CCT LED lamps provide total application flexibility; allowing one lamp to offer CCT selectability and operate with a ballast or through direct wiring with single or double ended ability.

Benefits and Features

- Efficacy up to 113 LPW
- Lamps operate on shunted and non-shunted lampholders thereby reducing installation costs when wired in the double-ended configuration (recommended)
- No warm-up time, instant-on with full light output and stable lamp-to-lamp color
- CCT selectable; switch adjustable to 3000K, 4100K and 5000K correlated color temperatures.
- One lamp provides three CCT options minimizing the multiple, static color temperature lamps in stock
- Beam angle: Linear 240°, U-Bend 170°, Circline 120°
- Linear and U-Bend have glass optics with shatter-resistant PET Coating and Circline are shatter-resistant plastic.
- No UV emission
- CRI > 80
- Suitable for dry and damp locations



Electrical

- Non-Dimmable (Not DLC listed)
- Power Factor > 0.9
- THD < 20%

Rated Life

- 36,000 hours (L₇₀)

Warranty

- Lamps are covered by a 3-year limited warranty. For additional details, please visit www.ledvanceUS.com/warranty
- NLB Trusted Warranty Program

Ambient Operating Temperature

- -4°F to + 113°F (-20°C to + 45°C)

Max Case Temperature

- 140°F (60°C)

Certifications and Listings

- cULus
- RoHS
- FCC
- Lead Free
- Mercury Free

Installation

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



Specification Data

Catalog #	Type
Project	
Comments	
Prepared by	

Wattage Comparison

NAEDs	Traditional Source	Traditional System Wattage	LED System	LED system Wattage	Energy Savings
41205	2ft 17W T8 w/LHE 2X32T8/UNV ISN-SC	29	LED8T8L24FGPABRP w/LHE 2X32T8UNV ISN-SC	20	31%
41204	3ft 25W T8 w/LHE 2X32T8/UNV ISN-SC	43	LED12T8L36FGPABRP w/LHE 2X32T8UNV ISN-SC	29	33%
41202/3	4ft 32W T8 w/LHE 2X32T8/UNV ISN-SC	55	LED16T8L48FGP8SC2ABRP w/LHE 2X32T8UNV ISN-SC	38	31%
41206	2ft 32W T8 UBend w/LHE 2X32T8/UNV ISN-SC	55	LED16T8UF8P8SC2ABRP w/LHE 2X32T8UNV ISN-SC	38	31%
41207	8" T9 w/QT 1X22/120/CIRC	22	LED11C8T9FP8SC2ABRP w/QT 1X22/120/CIRC	11	50%
41208	12" T9 w/QT 1X32/120/CIRC	32	LED16C12T9FP8SC2ABRP w/QT 1X32/120/CIRC	16	50%

Ordering Guide

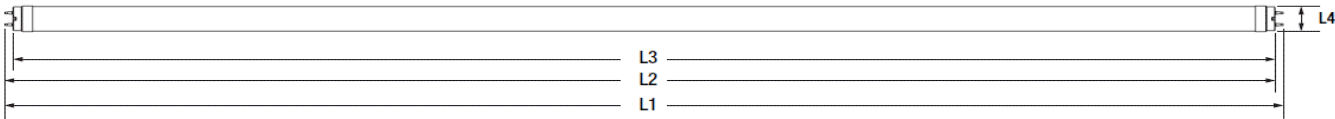
LED	Wattage	Shape	Length	FGP	CRI	Color Temp	Operation	Packaging
Technology = LED	8 = 8W	T8	L24 = 24"	Bulb Finish = Frosted Glass with PET coating	8 = 82	8SC2 = 3000/4100/5000 Selectable	AB = UL Type A+B	RP = Retail Pack
	12 = 12W	T8	L36 = 36"					
	16 = 16W	T8	L48 = 48"					
			U = U-Bend					
LED	Wattage	Shape	Outside Diamter	T9	CRI	Color Temp	Operation	Packaging
Technology = LED	11 = 11W	C = Circline	8 = 8"	T9 = Bulb Diameter	8 = 82	8SC2 = 3000/4100/5000 Selectable	AB = UL Type A+B	RP = Retail Pack
	16 = 16W		12 = 12"					

Ordering Information

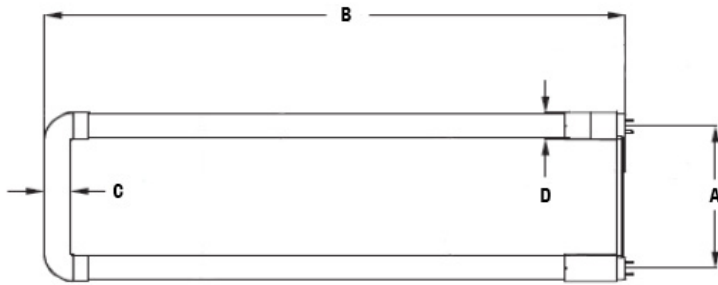
Item Number	Ordering Abbreviation	Lamp Power (W)	Base Type	Length	Lens Material	Typical Lumens (lm)	Bare Lamp Efficacy			Beam Angle (°)	Life (L70) Hours	SKU/Case Package Qty
							(LPW)	CRI	CCT (K)			
41205	LED8T8L24FGP8SC2ABRP	8	G13	2ft	Frosted Glass with PET	900	113	82	3000/4100/5000K	240	36,000	1/6
41204	LED12T8L36FGP8SC2ABRP	12	G13	3ft	Frosted Glass with PET	1350	113	82	3000/4100/5000K	240	36,000	1/6
41202	LED16T8L48FGP8SC2ABRP2	16	G13	4ft	Frosted Glass with PET	1800	113	82	3000/4100/5000K	240	36,000	2/24
41203	LED16T8L48FGP8SC2ABRP10	16	G13	4ft	Frosted Glass with PET	1800	113	82	3000/4100/5000K	240	36,000	10/10
41206	LED16T8UF8P8SC2ABRP	16	G13	2ft	Frosted Glass with PET	1800	113	82	3000/4100/5000K	170	36,000	1/6
41207	LED11C8T9FP8SC2ABRP	11	G10q	8" (Outside Diameter)	Frosted Plastic	1200	109	82	3000/4100/5000K	120	36,000	1/6
41208	LED16C12T9FP8SC2ABRP	16	G10q	12" (Outside Diameter)	Frosted Plastic	1700	106	82	3000/4100/5000K	120	36,000	1/6

Physical Information

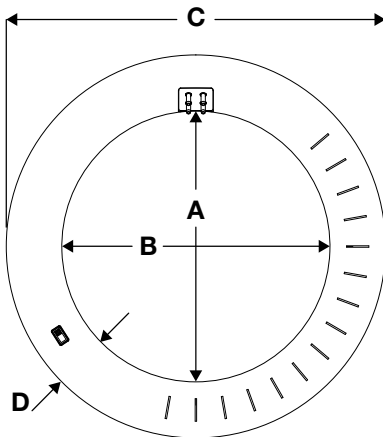
Product Description	L1 End of Base Pin to End of Opposite Pin End (inch/mm)	L2 Base Face to End of Opposite Base Pin (inch/mm)	L3 Base Face to Base Face (inch/mm)	L4 Bulb Outside Diameter (inch/mm)	Bare Weight (lb/grams)
LED16T8L48FGP8SC2ABRPXX	47.725 ± 0.055 (1212.2 ± 1.4)	47.45 ± 0.05 (1205.25 ± 1.25)	max 47.22 (1199.4)	1.02 ± 0.08 (25.9 ± 2.0)	.44 lb / 200 g
LED12T8L36FGP8SC2ABRP	35.72 ± 0.055 (907.4 ± 1.4)	35.45 ± 0.05 (900.45 ± 1.25)	Max 35.22 (894.6)	1.02 ± 0.08 (25.9 ± 2.0)	.35 lb / 160 g
LED8T8L24FGP8SC2ABRP	23.72 ± 0.055 (602.6 ± 1.4)	23.45 ± 0.05 (595.65 ± 1.25)	Max 23.22 (589.8)	1.02 ± 0.08 (25.9 ± 2.0)	.25 lb / 113 g



Lamp Description	A: Lamp Legs, center to center End of Opposite Pin End (inch/mm)	B: Base Face to Lamp End (inch/mm)	C :Bulb Diameter in Bend (inch/mm)	D: Bulb Diameter in Legs (inch/mm)	Bare Weight (lb/grams)
LED16T8UFGDIM8XXDC280	6 (152)	22.6 (574)	Max 1.15 (29.2)	1.10 (27.9)	.44 lb / 200 g



Lamp Description	A: Inside Base to Opposite Wall (inch/mm)	B: Inside Wall to Inside Wall (inch/mm)	C: Lamp Outside Diameter (inch/mm)	D: Bulb Diameter (inch/mm)	Bare Weight (lb/grams)
LED11C8T9FP8C2ABRP	6.00 (±0.13)/152.4 (±3.3)	6.00 (±0.19)/152.4 (±4.8)	8.25 (±0.25)/209.55(±6.35)	1.125 (±0.095)/28.6(±2.4)	0.28/125
LED16C12T9FP8C2ABRP	9.56 (±0.13)/152.4 (±3.3)	9.50 (±0.19)/241.3 (±4.8)	11.75 (±0.25)/298.45(±6.35)	1.125 (±0.095)/28.6(±2.4)	0.44/200



Representative sticker provided with retrofit lamps which must be affixed to the luminaire in order to maintain the UL rating of the luminaire after retrofit when wiring directly to line voltage. In the event lamps are used at Type A with a compatible ballast, retain the stickers for future retrofit compliance.

**This luminaire has been modified to operate LED lamps.
Do not attempt to install or operation 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.**

SYLVANIA

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

LED16T8L48FGP8SC2AB

4033822

☐ Single Ended Input(Type B)

☐ Double Ended Input(Type B)

Application Information

1. Please read and comply with all instructions, including the installation manual included inside the packaging before attempting installation.
2. 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 Electric Code (NEC), Underwriters Laboratories, Inc. (UL) requirements, and all applicable codes and regulations
3. IMPORTANT: For all new installations operating as UL Type B, follow the wiring instructions for double-ended wiring (recommended). Approved for Single-ended configuration for existing UL Type B applications previously wired as such. See installation manual for wiring options.
4. Ensure lampholders/sockets are in good operating condition before installation and if any defects are detected, change the lampholders/sockets.
5. Insert and align tubes properly in lamp holders. Partial insertion results in a poor or intermittent electrical contact that can result in short lamp life and arcing. Arcing at the lamp holder can result in localized overheating.
6. For instant start ballasts, use lamp holders with an internal shunt or ensure that lamp holders are wired in a shunt configuration.
7. For Programmed Rapid Start ballast, use rapid-start lamp holders (non-shunted lamp holders).
8. De-lamp is not allowed for ISH ballasts. For approved ISN and ISL ballast, de-lamp is allowed for only 1 lamp so long as the ballast factor remains below 1.20 (for example, 4 lamp ballast can de-lamp to 3 lamps).
9. Not for use on dedicated voltage ballasts.
10. Maximum mounting distance between lamp and ballast is 20 feet.
11. Not for use with other LED or fluorescent lamps on the same ballast.
12. When using DUALescent™ as UL Type B wired directly to line voltage, to conform to UL, you MUST affix the luminaire warning sticker, included inside the packaging, to the fixture during installation. Should you install as UL Type A, please retain the luminaire warning stickers in a safe place for future use, should the ballast fail, and luminaire is converted to UL Type B.
13. Best practice when using an UL Type B: cap off the remaining ballast wires should the ballast be left in the fixture after disconnecting.
14. Do not make or alter any open holes in an enclosure of wiring or electrical components during installation.
15. Do not expose wiring to edges of sheet metal or other sharp objects.
16. Make sure the lamps have the proper connections before restoring power.
17. When converting a fixture from Type A to Type B and emergency back-up is desired, the installer would also have to change the existing emergency back-up to an inverter-type emergency driver.
18. For detailed warranty information, please visit www.ledvanceUS.com.

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