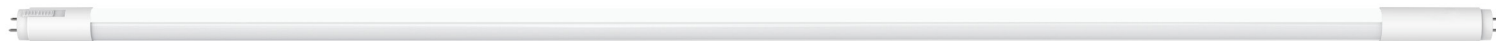


PROJECT NAME: _____ CAT. #: _____
 NOTES: _____ FIXTURE SCHEDULE: _____

UL TYPE A+B HYBRID T8

TYPE-A +B
Dual-Mode/Hybrid Series UL



Product Description:

MaxLite offers a safer, more reliable alternative to the dual-mode lamps on the market with the new Hybrid Series UL Type A/B LED T8 Lamp.

Designed as a universal solution, the Hybrid Series lamp can be used with a compatible fluorescent ballast (UL-A) or ballast bypass (UL-B). Unlike competitors' lamps, the MaxLite product features improved integrated circuit (IC) technology that detects the lamp connection and corresponding operating mode. Each pin at the lamp base is engineered with a thermal fuse that detects overheating and responds by automatically shutting the lamp off. In addition, the lamp is packaged with a re-lamping label that provides a clear wiring description to help maintenance staff easily identify fixture modifications in the field.

The MaxLite T8 also offers more robust ballast compatibility than competitors, including instant start, programmed start, emergency and dimming ballast compatibilities.

Features:

- Dual Mode: Can be used with compatible fluorescent ballast (UL-A) and ballast bypass (UL-B)
- Ballast bypass (UL-B): Can be wired for single-ended power or double-ended power.
- Compatible non-shunted lamp holders
- Instant on
- Mercury free and virtually no UV or IR light
- Suitable for damp locations
- ETL Sanitation listed (tested under NSF standard)

Ordering Information

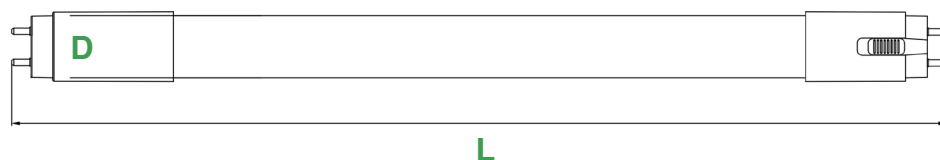
FAMILY	WATTAGE	LAMP TYPE	OPERATION	LENGTH	COLOR TEMPERATURE	-	CONSTRUCTION
L = Linear Tube	13 = 13W	T8 = T8 Tube	AB = Dual Mode A + B	4 = 4 ft	CS= CCT Selectable 3000/3500/4000/5000/6500K	-	CG = Inner Coated Glass

Stocked Items

ORDER CODE	MODEL NUMBER	DLC PRODUCT ID	DLC CLASSIFICATION	DLC PRIMARY USE DESIGNATION
113513	L13T8AB4CS-CG	S-ZFNCSF	Standard	Dual Mode Internal Driver (UL Type A and Type B)

Product Dimensions

PRODUCT	L	D
L13T8AB4CS-CG	47.7 in	1.1 in



FCC Statement

NOTE: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generated, used, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected
- Increase the separation between the equipment and receiver
- Consult the dealer or an experienced radio/TV technician for help

UL TYPE A+B HYBRID T8

TYPE-A +B
Dual-Mode/Hybrid Series UL

Specifications

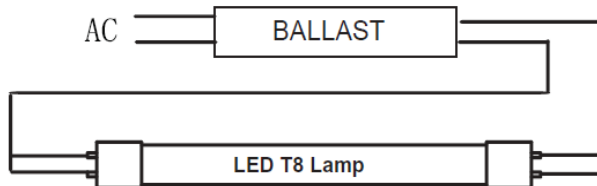
	L13T8AB4CS-CG
Length	4 ft.
Base	G13
Input Power (W)	Type A: 13W (Tube), 15.3W (System) Type B: 13W
Lumens Delivered (lm)	2,000 lm
Nominal Efficacy (lm/W)	Type A: 130 lm/W Type B: 153 lm/W
Color Temperature (K)*	3000K, 3500K, 4000K, 5000K, 6500K
CRI	≥ 80
Calculated L70 Lumen Maintenance	≥ 50,000 hours
Dimming Technology	Ballast dependent in Type A applications. TRIAC dimming at 120V AC in Type B applications
Dimming Range	Type A: Ballast Dependent. Dimming Range: 20%-100% Type B: TRIAC dimming at 120V AC, Dimming Range: 20%-100%
Input Voltage	120-277V AC, 50/60 Hz (Type B)
Power Factor	≥ 0.9
Diffuser	Inner Coated Glass
Beam Angle	210°
Operating Temperature**	-4°F to 113°F (-20°C to 45°C)
Surge Protection	Type B surges: 1000V. Ringing Wave: 2.5kV, Combination Wave: 0.5kV
Certifications	cULus listed, cULus classified, FCC, Rohs, NSF/ANSI 2 - Food Equipment (NSF Components)
Qualifications	DLC Standard
Environment	Damp Locations, Enclosed Luminaires
Warranty	5 Year warranty. Check maxlite.com/warranties for details
Case Quantity	25 pcs

* Default factory setting for CCT is 4000K

** Install max of 4 tubes in an enclosed fixture. Max Operating Temperature 86°F (30°C)

Wiring Diagram

Type A



Type B

Single End Wiring Non-Shunted



Double End Wiring Non-Shunted



Compatible Dimmers

WIRING METHOD	DIMMING METHOD	DIMMERS		QUANTITY OF LAMPS		
		DIMMER BRAND	DIMMER MODEL	1	4	8
Type B	Trail Edge Dimming @ 120V	LUTRON	CTELV-303P	yes	yes	yes
			DVELV-303P	yes	yes	yes
			SELV-300P	yes	yes	yes
			NTELV-300	yes	yes	yes
Type A	0-10V @ Ballast: IZT-2P16-TLED-SC	Sylvania	Elogic 45167	yes	yes	N/A

UL TYPE A+B HYBRID T8

TYPE-A +B
Dual-Mode/Hybrid Series UL

Type A Compatible Ballasts

BRAND	MODEL
General Electric	GE-332-MV-N-DIY
	GE-432-MV-N-DIY
	GE332MAX-N/ULTRA
	GE432MAX-L/ULTRA
	GE332MAX-H/ULTRA
	GE432MAX347-N

BRAND	MODEL
Osram Sylvania	QTP 1X32T8/UNV ISN-SC
	QTP 2X32T8/UNV ISN-SC
	QTP 3X32T8/UNV ISN-SC
	QTP 2X32T8/347 ISN-SC
	QHE 2X32T8/UNV ISN-SC
	QHE 3x32T8/UNV ISN-SC
	QHE 4X32T8/UNV ISN-SC
	QHE 4X32T8/347 ISN-SC
	QHE 2X32T8/UNV ISL-SC
	QHE 3x32T8/UNV ISL-SC
	QHE 4X32T8/UNV ISL-SC
	QHE 4x32T8/UNV ISH
	QHE 1X32T8/UNV ISH HT SC
	QHE 2X32T8/UNV ISH HT SC
	QHE 3x32T8/UNV ISN-SC-1
	QHE 4x32T8/UNV ISN-SC-1
	QHE 3x32T8/UNV ISL-SC-1
	QHE 4x32T8/UNV ISL-SC-1

BRAND	MODEL
Universal Lighting	B132IUNVHP-N
	B232IUNVHP-N
	B332IUNVHP-A
	B432IUNVHP-A
	B132IUNVHE-A
	B332IUNVHE-A
	B432IUNVHE-A
	B132IUNVEL-A
	B232IUNVEL-A
	B432IUNVEL-A
	B432I277HEH
	B432I347HP

BRAND	MODEL
Philips Advance	ICN-1P32-N
	ICN-2P32-N
	ICN-3P32-N
	ICN-4P32-N
	IOPA-1P32-N
	IOPA-4P32-N
	IOPA-2P32-LW-N
	IOPA-3P32-LW-N
	IOPA-4P32-LW-N
	IOPA-1P32-HL-N
	IOPA-4P32-HL-90C-G
	IOP-1P32-N
	IOP-3P32-N
	IOP-4P32-N
	IOP-1P32-LW-N
	IOP-2P32-LW-N
	IOP-3P32-LW-N
	IOP-2P32-HL-N
	IOP-3P32-HL-N
	GOPA-1P32-SC
	GOPA-2P32-SC
	GOPA-4P32-SC
	GOPA-1P32-LW-SC
	REB-2P32-N
	ICN2P16TLEDN
	ICN2P16HLTLEDSC
	ICN4P16HLTLEDSC
	IZT-2P16-TLED-SC
	IZT-4P16-TLED-SC
	ICN2P16TLEDELN
	IOP-2PSP32-LW-N
	IOP-4PSP32-LW-SC
	IOP-1PSP32-N
	IOP-2PSP32-N
	ICN-4S54-90C-2LS-G
	RELB-2S40-N
	REZ-3S32-SC
	ICN-2S110-SC
	ICN-2S54-T
	ICN-2S28-N
	IOP-3S32-SC
	IOP-1S32-LW-SC
	IOP-2S32-LW-SC