



# Hybrid Shatterproof Glass Tube

Date: ..... Location: .....

Product: ..... Project: .....

Quantity: ..... Catalog# .....



## FEATURES

- TYPE A and B design, can work with or without ballast.
- ShatterProof design, Thermal-fuse and protect IC inside
- Hybrid ballast Plug & Play runs on 120-277V line voltage
- Bypass ballast with Single- or double-ended wiring
- 50,000+ hour lifetime
- Suitable for dry and damp indoor locations
- Operating temperature -4°F to +113°F
- DLC PREMIUM Listed

## SUITABLE APPLICATIONS

- Office Lighting
- Meeting room lighting
- Store lighting
- Restaurant lighting



## CONSTRUCTION:

Shatterproof Glass housing, high lumen out Led Chip

## ELECTRICAL:

Available as 120-277V input. -40°F to +113°F

## OPTICAL SYSTEM:

High transmission glass lens, >140° beam angle

## INSTALLATION & MOUNTING:

Hybrid Type A and B, Plug and play with current ballasts, or bypass ballast with Single- or double-ended wiring

## WARRANTY:

5-year limited warranty. Actual performance may differ as a result of end-user environment and application.

## PERFORMANCE

Model NO	Tunable Watts	Voltage/Current Input		Size[G13]	Light Efficiency	CCT
		120V(A)	277V(A)			
LS-T8UAB4FT18 -T35-XX	18W	0.15	0.064	4' LED T8 Tubes	>130LM/W	3500K-4000K-5000K
	15W	0.125	0.054	4' LED T8 Tubes	>130LM/W	3500K-4000K-5000K
	10W	0.10	0.043	2' LED T8 Tubes	>135LM/W	3500K-4000K-5000K

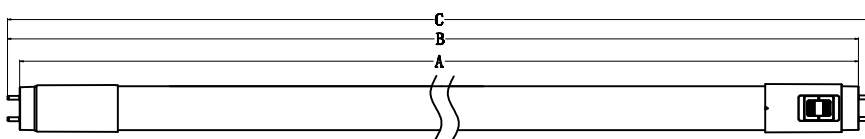
► Electric Characteristic

PRODUCT ORDERING GUIDE		OPTIONAL EMERGENCY TUBE			
LS-T8UAB4FT18-T35-XX 1 2 3 4 5 6 [LS] - [T8U] [AB] [4FT] [18] - [T35-XX]		Emergency LED TUBE Backup. CODE: EMT8-18WBC-50K			
<input checked="" type="checkbox"/> LS	LEDSION code				
<input checked="" type="checkbox"/> T8U	T8 tubes Universal				
<input checked="" type="checkbox"/> AB	Type A+B			<input checked="" type="checkbox"/> 4FT	Size
<input checked="" type="checkbox"/> 18	Wattage			<input checked="" type="checkbox"/> T35-XX	CCT 3500K-4000K-5000K

► Electric Characteristic

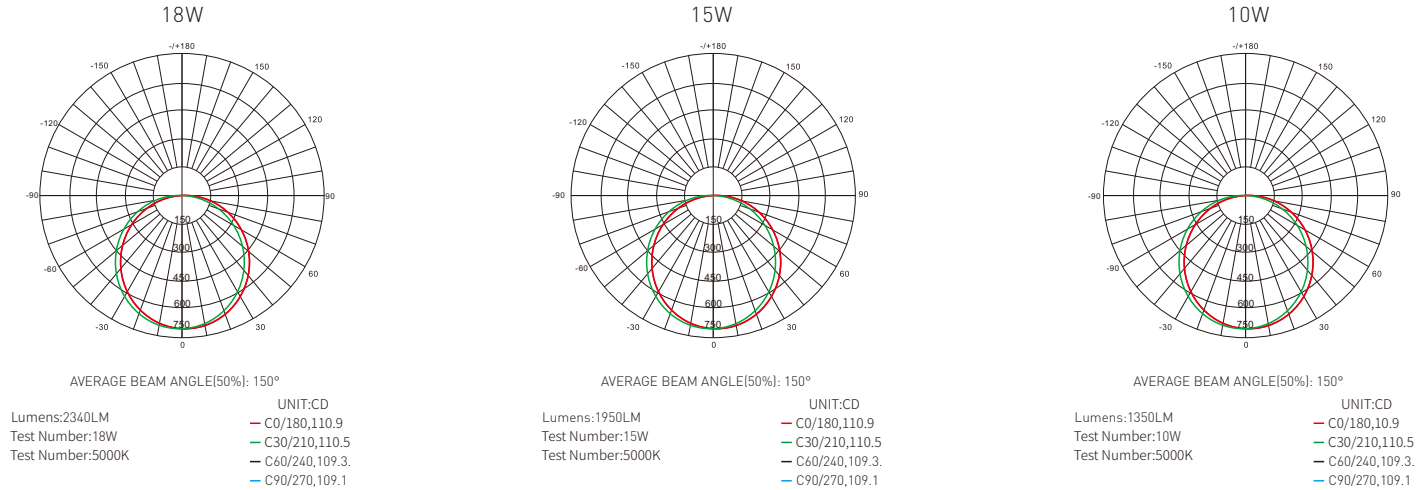
Specification/Model	LS-T8UAB4FT18-T35-XX		
LED Driver	UL Driver	UL Driver	UL Driver
Input power	18W	15W	10W
Lumens output	>2340LM	>1950LM	>1350LM
Efficiency	>130LM/W	>130LM/W	>135LM/W
CRI	>80	>80	>80
Color Temperature	3500K-4000K-5000K	3500K-4000K-5000K	3500K-4000K-5000K
Input voltage	120-277V/AC	120-277V/AC	120-277V/AC
Light distribution type	>140D	>140D	>140D
Working temperature	-4°F to +113°F	-4°F to +113°F	-4°F to +113°F
Junction temperature	<75°C	<75°C	<75°C
lamps efficiency	≥90%	≥90%	≥90%
Certificate	ETL cETL DLC	ETL cETL DLC	ETL cETL DLC
Equivalent	24-60W MH/HPS	24-60W MH/HPS	20-60W MH/HPS

► DIMENSION



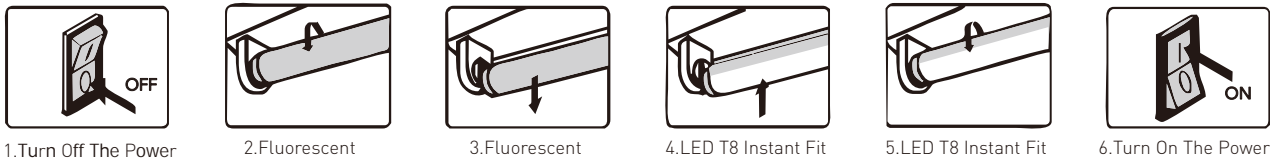
Maximum overall length (mm)	2ft	4ft
A	589.8	1199.4
B	596.9	1206.5
C	604	1213.6

## DISTRIBUTION DIAGRAM



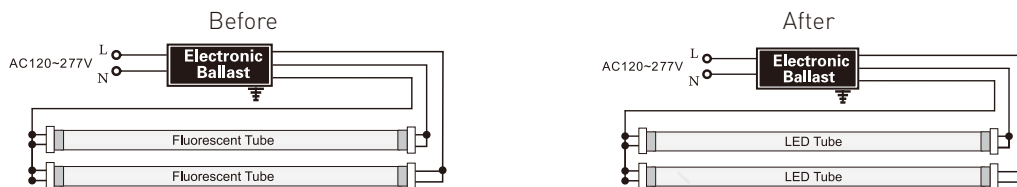
## Installation Diagram

### Installation Guide:



### Plug & Play Procedure

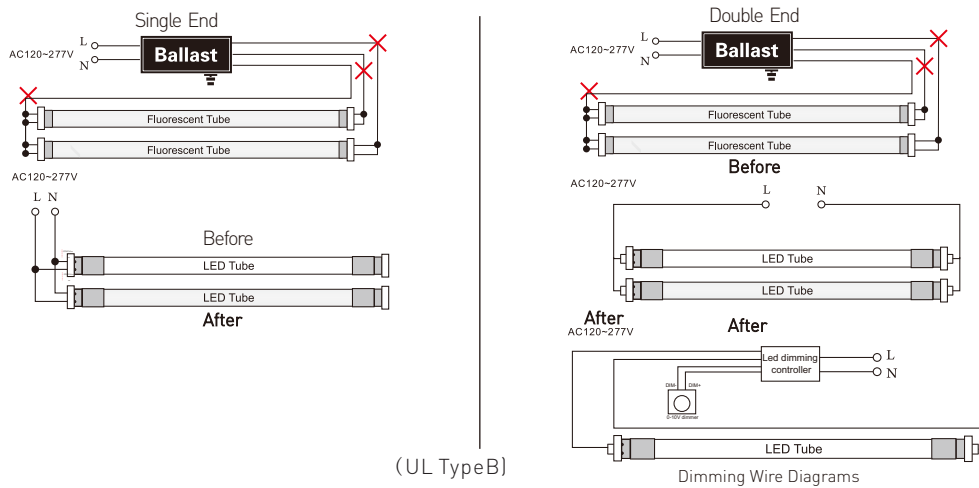
1. Turn off the power.
2. Remove diffuser(if there is).
3. Remove the fluorescent tubes. Please dispose of these items properly as they contain mercury.
4. Select the appropriate CCT, then put led tube in the lighting fixture.
5. Install the led tubes, close the diffuser(if provided).
6. Turn on the power.



(UL TypeA)

### Retrofit Procedure

1. Turn off the power.
2. Remove diffuser(if provided).
3. Remove the fluorescent tubes. Please dispose of these items properly as they contain mercury.
4. Cut the wires as shown in the diagram.
5. Make the new wire connect to branch circuit as shown.
6. Replace the cover over the wiring channel.
7. Install the led tubes, close the diffuser.
8. Turn on the power.



## WARNING

1. These LED Tubes should be installed by a licensed electrician.
2. These LED Tubes should be used indoors (damp or dry locations only). Not suitable for wet location.
3. Make sure tombstones/lampholder are still in good condition and not defected before installation.
4. Ensure the brand and model no. of the ballast of replacement tube are in our compatible ballast list.
5. Make sure the ballast is working and still under warranty before installation.
6. Put LED tubes/G13 pins into right position of the socket, install properly.
7. This device is not suitable for using with emergency exits.
8. These led tubes can not match with phase-cut dimmer or 0/1-10V dimmer directly. please coordinate with customized 1-10V dimming driver to achieve dimming function.
9. Manufacturer is not liable for any damage to product or property due to improper installation. Please refer to the above Installation Instructions for reference.

## Ballast Compatible List For T8 LED Tube

1. Our tubes can be compatible with the ballasts listed below, if you intend to install ballast compatible tube with ballasts not be listed below, risk of damage or losses may occur. We disclaim liability for any damage or losses by not following the instructions in this document.
2. We are testing more and more ballasts and will update this list all the time. If you do not see your ballast on the list please contact us.

ACCUPRO		GE		11	GE132MAX-H/ULTRA
1	AP-432IP-UNV	1	GE232MAX-L/Ultra	Halco	
2	AP-332IP-UNV-M	2	GE332MAX-N/Ultra	1	EP232IS/L/MV/HE
ADVANCE		3	GE232MAX347-N	HOWARD INDUSTRIES	
1	IOPA-4P32-LW-N	4	GE432MAX347-N	1	EP3/32IS/MV/MC/HE
ESPEN		5	GE232-MVPS-N	KEYSTONE	
1	VE232MVHIPL	6	GE332-MVPS-N	1	KTEB-232RIS-1-TP-SL
2	VVE232MVHIPE	7	GE432-MVPS-N	2	KTEB-232RIS-1-TP-SL/Ga
3	VE432MVHIPE	8	GE432-120RESDIYB	OSRAM	
4	VE432MVHIPL	9	GE-240-RS-MV-N	1	QHE 2x32T8/UNV ISN-SC
5	VE432120HIP	10	GE232-N-347	2	QHE 3x32T8/UNV ISN-SC

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3	QHE 3x32T8/UNV PSN-SC	3	QTP 2x32T8/UNV ISL-SC	1	B332IUNVHE-A
<b>PHILIPS</b>		4	QTP 2x32T8/UNV ISN-SC	2	B432IUNVHE-A
1	ICN-2P32-N	5	QQT 4X32/120 LP	3	B232IUNVEL-N
2	ICN-3P32-N	6	QT 2x32 T8/347 ISL-SC	4	B332IUNVEL-A
3	IOP-4P32-LW-N	7	QHE 4x32T8/347 ISN-SC	5	B232IUNVHEH-A
4	IOPA-1P32-N	8	QHE 4x32T8/347 ISL-SC	6	B332PUNVHE-A
5	IOPA-4P32-N	<b>TRIAD</b>		7	B4321UNVEL-A
6	IOPA-2P32-LW-N	1	B232IUNVHP-N	<b>WORK HORSE</b>	
7	IOP-3P32-N	2	B332IUNVHP-A	1	WH3-120-C
<b>SYLVANIA</b>		3	B432IUNVHP-A	2	WH3-120-L
1	QHE 1x32T8/UNV ISN-SC	4	B232IUNVHP-B	<b>Pacific Fluorescent</b>	
2	QHE 3x32T8/UNV ISL-SC	<b>UNIVERSAL</b>		1	EB-232IS-120-RES