# LUNERA T8 LED U-BEND

15W/18W LED Replacement for Bi-Pin T8 U-Bend Fluorescent Lamp Type B - Ballast Bypassed

### Description

The **LUNERA T8 LED U-BEND** is a (Type B, ballast bypassed) T-LED replacement for a Bi-Pin T8 U-Bend (G13) fluorescent lamp up to 32W. Its built-in universal driver allows lamp operation at 120V ~ 277V.

This LED lamp emits beautiful light with a 330° Beam Angle, has a Color Rendering Index (CRI) of 83 and delivers up to 1,800 lumens (15W) or 2,200 lumens (18W) of usable light. The LUNERA T8 LED U-BEND features a glass tube for improved optics and is available in 3000K, 3500K, 4000K and 5000K color temperatures. Both a 6-inch or 1-5/8-inch gap configuration are available.

The LUNERA T8 LED U-BEND lamp is rated at 50,000 hours and is backed by a five-year warranty. It does not contain mercury allowing for non-hazardous waste disposal.

This is a Type B lamp. The lamp does not support operation with a fluorescent T8 ballast and the Non-Shunted G13 sockets must be wired into AC line voltage.

### **Features**

- Directly replaces up to 32W/31W/29W/28W/25W (G13) Bi-Pin T8 U-Bend fluorescent lamps with 15W or 18W LED
- Type B Lamp Ballast Bypassed; supports 120V ~ 277V
- Delivers up to 1,800 (15W) and 2,200 (18W) lumens of usable light
- >80 CR
- CCT 3000K, 3500K, 4000K and 5000K
- 50,000 hours life to L70
- 5 Year Warranty

# 6" Gap (T8UL-version)





6" Gap version; Excl 3000K

Example: HN-T8UL-L-22-15W-830-G1

# Ordering Information

Series	Socket Type	Power Supply	Dimension	Lamp Wattage	CCT	Generation
HN Lunera T8 LED U-Bend	T8UL U-Bend Bi-Pin T8 socket (G13) 6" apart. (Non-Shunted)	L Ballast Bypass Supports 120V~277V	22 22 inch tube	15W Replaces up to 32W with 1,800lm (UL) or 1,700lm (US)	<b>830:</b> 3000K <b>835:</b> 3500K <b>840:</b> 4000K <b>850:</b> 5000K	G1: 1st Generation Frosted
	T8US U-Bend Bi-Pin T8 socket (G13) 1 5/8" apart. (Non-Shunted)			18W Replaces up to 32W with 2,200lm (UL) or 2,100lm (US)		

PROJECT	CONTACT	MODEL NO.
REFERENCE NO.	QUANTITY	DATE

### **Product Specifications**

### Illumination

T8UL (6"Gap) Up to 1,800lm (15W) (6"Gap) Up to 2,200lm (18W) T8US Up to 1,700lm (15W) Up to 2,100lm (15W) (1-5/8" Gap) Up to 2,100lm (18W)  CRI >80  Color Consistency Lunera TruColor LED Selection Luner Maintenance (L70) 50,000+ hours life  Electrical System  Power Factor >90% Total Harmonic Distortion < 20% Input Voltage 120VAC ~ 277VAC Total Power* 15W 18W  Lamp Wattage Replaced Up to 32W Dimming No  Physical  Weight 0.50 lbs Housing and Finish Glass, White Optics Optical Glass Diffusion Beam Angle / Beam Spread 330° / 230°  Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C) Ambient Operating Humidity Dry and Damp Certified  Installation  Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files Available. Contact Lunera. DesignLights Consortium Listed Yes, 4.2	Color Temperatures	3000K, 3500K, 4000K, 5000K				
T8US (1-5/8" Gap) Up to 1,700lm (15W) (1-5/8" Gap) Up to 2,100lm (18W)  CRI >80  Color Consistency Lunera TruColor LED Selection Lumen Maintenance (L70) 50,000+ hours life  Electrical System  Power Factor >90%  Total Harmonic Distortion   <20% Input Voltage   120VAC ~ 277VAC   Total Power*   15W   18W   Lamp Wattage Replaced   Up to 32W   Dimming   No  Physical  Weight   0.50 lbs   Housing and Finish   Glass, White   Optics   Optical Glass Diffusion   Beam Angle / Beam Spread   330° / 230°   Environment  Ambient Operating Temp   -40°F to 104°F (-40°C to 40°C)   Ambient Operating Humidity   Dry and Damp Certified   Installation  Socket Type   G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)   Line Voltage   Yes, [120V~277V]   Certifications & Qualifications  UL (US and Canada)   Classified (UL1598-C)   RoHS Compliant   Contains no lead or mercury   FCC**   Compliant with Parts 15A/B   LM79, LM80, IES Files   Available. Contact Lunera.   DesignLights Consortium Listed   Yes, 4.2	•					
(1-5/8" Gap) Up to 2,100lm (18W)  CRI >80  Color Consistency Lunera TruColor LED Selection  Lumen Maintenance (L70) 50,000+ hours life  Electrical System  Power Factor >90%  Total Harmonic Distortion   20VAC ~ 277VAC   15W   18W    Lamp Wattage Replaced Up to 32W   Dimming No  Physical  Weight 0.50 lbs  Housing and Finish Glass, White   Optics Optical Glass Diffusion   330° / 230°    Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C)   Ambient Operating Humidity Dry and Damp Certified    Installation  Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)   Line Voltage Yes, [120V~277V]    Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C)   RoHS Compliant Contact Lunera.    LM79, LM80, IES Files   Available. Contact Lunera.    DesignLights Consortium Listed Yes, 4.2	(6"Gap)					
CRI Color Consistency Lumen Maintenance (L70)  Electrical System  Power Factor Total Harmonic Distortion Input Voltage Lump Wattage Replaced Dimming  Physical Weight Optics Optical Glass Diffusion Beam Angle / Beam Spread  Environment Ambient Operating Temp Ambient Operating Humidity  Installation Socket Type  G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage Ucyte, 120V-277V]  Certifications & Qualifications UL (US and Canada) University Compliant with Parts 15A/B LM79, LM80, IES Files DesignLights Consortium Listed Ve0%  Line Voltage Ves, 4.2		, ,				
Color Consistency Lumen Maintenance (L70)  Electrical System  Power Factor > 90%  Total Harmonic Distortion   15W   18W   Lamp Wattage Replaced   Up to 32W   Dimming   No  Physical  Weight   0.50 lbs   Housing and Finish   Glass, White   Optics   Optical Glass Diffusion   Beam Angle / Beam Spread   330° / 230°    Environment  Ambient Operating Temp   -40°F to 104°F (-40°C to 40°C)   Ambient Operating Humidity   Dry and Damp Certified   Installation  Socket Type   G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)   Line Voltage   Yes, [120V~277V]    Certifications & Qualifications  UL (US and Canada)   Classified (UL1598-C)   RoHS Compliant   Contact Lunera.  DesignLights Consortium Listed   Yes, 4.2						
Lumen Maintenance (L70) 50,000+ hours life  Electrical System  Power Factor > 90%  Total Harmonic Distortion < 20%  Input Voltage 120VAC ~ 277VAC  Total Power* 15W 18W  Lamp Wattage Replaced Up to 32W  Dimming No  Physical  Weight 0.50 lbs  Housing and Finish Glass, White  Optics Optical Glass Diffusion  Beam Angle / Beam Spread 330° / 230°  Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C)  Ambient Operating Humidity Dry and Damp Certified  Installation  Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C)  RoHS Compliant Contains no lead or mercury  FCC** Compliant with Parts 15A/B  LM79, LM80, IES Files Available. Contact Lunera.  DesignLights Consortium Listed Yes, 4.2						
Electrical System  Power Factor > 90%  Total Harmonic Distortion < 20%  Input Voltage 120VAC ~ 277VAC  Total Power* 15W 18W  Lamp Wattage Replaced Up to 32W  Dimming No  Physical  Weight 0.50 lbs  Housing and Finish Glass, White Optics Optical Glass Diffusion  Beam Angle / Beam Spread 330° / 230°  Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C)  Ambient Operating Humidity Dry and Damp Certified  Installation  Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C)  RoHS Compliant Contains no lead or mercury  FCC** Compliant with Parts 15A/B  LM79, LM80, IES Files Available. Contact Lunera.  DesignLights Consortium Listed Yes, 4.2	-					
Power Factor > 90% Total Harmonic Distortion < 20% Input Voltage 120VAC ~ 277VAC  Total Power* 15W 18W  Lamp Wattage Replaced Up to 32W Dimming No  Physical Weight 0.50 lbs Housing and Finish Glass, White Optics Optical Glass Diffusion Beam Angle / Beam Spread 330° / 230°  Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C) Ambient Operating Humidity Dry and Damp Certified  Installation Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files Available. Contact Lunera. DesignLights Consortium Listed Yes, 4.2	Lumen Maintenance (L/U)	50,000+ hours life				
Total Harmonic Distortion < 20% Input Voltage 120VAC ~ 277VAC  Total Power* 15W Lamp Wattage Replaced Up to 32W Dimming No  Physical Weight 0.50 lbs Housing and Finish Glass, White Optics Optical Glass Diffusion Beam Angle / Beam Spread 330° / 230°  Environment Ambient Operating Temp -40°F to 104°F (-40°C to 40°C) Ambient Operating Humidity Dry and Damp Certified  Installation Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files Available. Contact Lunera. DesignLights Consortium Listed Yes, 4.2	Electrical System					
Input Voltage Total Power*  To	Power Factor	> 90%				
Total Power* 15W 18W  Lamp Wattage Replaced Up to 32W  Dimming No  Physical  Weight 0.50 lbs  Housing and Finish Glass, White Optics Optical Glass Diffusion  Beam Angle / Beam Spread 330° / 230°  Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C)  Ambient Operating Humidity Dry and Damp Certified  Installation  Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C)  RoHS Compliant Contains no lead or mercury  FCC** Compliant with Parts 15A/B  LM79, LM80, IES Files Available. Contact Lunera.  DesignLights Consortium Listed Yes, 4.2	Total Harmonic Distortion	< 20%				
Lamp Wattage Replaced Up to 32W Dimming No  Physical Weight 0.50 lbs Housing and Finish Glass, White Optics Optical Glass Diffusion Beam Angle / Beam Spread 330° / 230°  Environment Ambient Operating Temp -40°F to 104°F (-40°C to 40°C) Ambient Operating Humidity Dry and Damp Certified  Installation Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files Available. Contact Lunera. DesignLights Consortium Listed Yes, 4.2	Input Voltage	120VAC ~ 277VAC				
Dimming No  Physical  Weight 0.50 lbs  Housing and Finish Glass, White Optics Optical Glass Diffusion  Beam Angle / Beam Spread 330° / 230°  Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C)  Ambient Operating Humidity Dry and Damp Certified  Installation  Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C)  RoHS Compliant Contains no lead or mercury  FCC** Compliant with Parts 15A/B  LM79, LM80, IES Files Available. Contact Lunera.  DesignLights Consortium Listed Yes, 4.2	Total Power*					
Physical Weight 0.50 lbs Housing and Finish Glass, White Optics Optical Glass Diffusion Beam Angle / Beam Spread 330° / 230°  Environment Ambient Operating Temp -40°F to 104°F (-40°C to 40°C) Ambient Operating Humidity Dry and Damp Certified  Installation Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files Available. Contact Lunera. DesignLights Consortium Listed Yes, 4.2	Lamp Wattage Replaced					
Weight Housing and Finish Optics Optics Optical Glass Diffusion Beam Angle / Beam Spread  Environment Ambient Operating Temp Ambient Operating Humidity  Installation Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage  Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files DesignLights Consortium Listed  Ves, 4.2	Dimming	No				
Weight Housing and Finish Optics Optics Optical Glass Diffusion Beam Angle / Beam Spread  Environment Ambient Operating Temp Ambient Operating Humidity  Installation Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage  Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files DesignLights Consortium Listed  Ves, 4.2	Dhysical					
Housing and Finish Optics Optical Glass Diffusion Beam Angle / Beam Spread 330° / 230°  Environment Ambient Operating Temp Ambient Operating Humidity Ory and Damp Certified  Installation Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files DesignLights Consortium Listed Yes, 4.2	-	0.50 11-				
Optics Optical Glass Diffusion Beam Angle / Beam Spread 330° / 230°  Environment Ambient Operating Temp -40°F to 104°F (-40°C to 40°C) Ambient Operating Humidity Dry and Damp Certified  Installation Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones) Line Voltage Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) ROHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files Available. Contact Lunera. DesignLights Consortium Listed Yes, 4.2	9					
Beam Angle / Beam Spread 330° / 230°  Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C)  Ambient Operating Humidity Dry and Damp Certified  Installation  Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C)  RoHS Compliant Contains no lead or mercury  FCC** Compliant with Parts 15A/B  LM79, LM80, IES Files Available. Contact Lunera.  DesignLights Consortium Listed Yes, 4.2	9	/				
Environment  Ambient Operating Temp -40°F to 104°F (-40°C to 40°C)  Ambient Operating Humidity Dry and Damp Certified  Installation  Socket Type G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C)  RoHS Compliant Contains no lead or mercury  FCC** Compliant with Parts 15A/B  LM79, LM80, IES Files Available. Contact Lunera.  DesignLights Consortium Listed Yes, 4.2	•	•				
Ambient Operating Temp  Ambient Operating Humidity  Installation  Socket Type  G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage  Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada)  RoHS Compliant  Contains no lead or mercury  FCC**  Compliant with Parts 15A/B  LM79, LM80, IES Files  DesignLights Consortium Listed  Available. Contact Lunera.	beam Angle / beam Spread	330 / 230				
Ambient Operating Humidity  Installation  Socket Type  G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage  Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada)  Classified (UL1598-C)  RoHS Compliant  Contains no lead or mercury  FCC**  Compliant with Parts 15A/B  LM79, LM80, IES Files  DesignLights Consortium Listed  Yes, 4.2	Environment					
Installation  Socket Type  G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage  Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada)  Classified (UL1598-C)  RoHS Compliant  Contains no lead or mercury  FCC**  Compliant with Parts 15A/B  LM79, LM80, IES Files  DesignLights Consortium Listed  Yes, 4.2	Ambient Operating Temp	-40°F to 104°F (-40°C to 40°C)				
Socket Type  G13, Medium Bi-Pin T8 socket (Non-Shunted tombstones)  Line Voltage  Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada)  Classified (UL1598-C)  RoHS Compliant  Contains no lead or mercury  FCC**  Compliant with Parts 15A/B  LM79, LM80, IES Files  DesignLights Consortium Listed  Yes, 4.2	Ambient Operating Humidity	Dry and Damp Certified				
(Non-Shunted tombstones) Line Voltage Yes, [120V~277V]  Certifications & Qualifications UL (US and Canada) Classified (UL1598-C) RoHS Compliant Contains no lead or mercury FCC** Compliant with Parts 15A/B LM79, LM80, IES Files DesignLights Consortium Listed Yes, 4.2	Installation					
Line Voltage  Yes, [120V~277V]  Certifications & Qualifications  UL (US and Canada)  RoHS Compliant  Contains no lead or mercury  FCC**  Compliant with Parts 15A/B  LM79, LM80, IES Files  DesignLights Consortium Listed  Yes, 4.2	Socket Type					
Certifications & Qualifications  UL (US and Canada) Classified (UL1598-C)  RoHS Compliant Contains no lead or mercury  FCC** Compliant with Parts 15A/B  LM79, LM80, IES Files Available. Contact Lunera.  DesignLights Consortium Listed Yes, 4.2		,				
UL (US and Canada)  RoHS Compliant  Contains no lead or mercury  Compliant with Parts 15A/B  LM79, LM80, IES Files  DesignLights Consortium Listed  Classified (UL1598-C)  Compliant with Parts 15A/B  Available. Contact Lunera.  Yes, 4.2	Line Voltage	Yes, [120V~277V]				
RoHS Compliant  Contains no lead or mercury FCC**  Compliant with Parts 15A/B LM79, LM80, IES Files  Available. Contact Lunera.  DesignLights Consortium Listed  Yes, 4.2	Certifications & Qualifications					
FCC** Compliant with Parts 15A/B LM79, LM80, IES Files Available. Contact Lunera. DesignLights Consortium Listed Yes, 4.2	,	,				
LM79, LM80, IES Files Available. Contact Lunera.  DesignLights Consortium Listed Yes, 4.2	·	<u>*</u>				
DesignLights Consortium Listed Yes, 4.2						
DesignLights Consortium Listed Yes, 4.2 (6" Gap version: Excl. 3000K)						
(5 Cap Vol. 50 )	DesignLights Consortium Listed	Yes, 4.2 (6" Gap version; Excl. 3000K)				
Warranty						
Warranty 5 years	-	5 years				

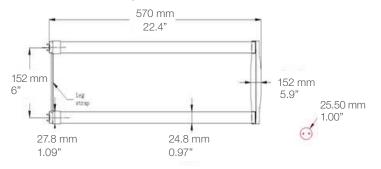
### **CAUTION**

Turn power OFF when installing the lamp.

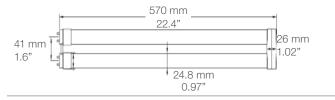
**CAUTION** - IF THE LAMP OR LUMINAIRE EXHIBITS UNDESIRABLE OPERATION (BUZZING, FLICKERING, ETC.), IMMEDIATELY TURN OFF POWER, REMOVE LAMP FROM LUMINAIRE AND CONTACT MANUFACTURER.

### **Dimensions**

U-Bend with 6" apart G13 sockets



### U-Bend with 1 5/8" apart G13 sockets



## **Application Notes**

This lamp does NOT support Shunted tombstones. Shunted tombstones must be removed and replaced with Non-Shunted tombstones.

**Product warranty will be voided** under the following conditions or if installed into the following applications:

- Lamp installed into luminaires with input voltage above 277V
- Lamp installed in a gasketed (sealed) fixture
- Incorrect wiring configuration to the lamp
- Lamp installed into fluorescent ballasts or LED Drivers
- Lamp installation into shunted socket
- Lamp installation into cracked, broken, dirty or rusty tombstones
- \* Total Power equals Lamp Power since ballast is bypassed or removed
- \*\* Operation is subject to the following conditions:
  - (1) this device may not cause harmful interference, and
  - (2) this device must accept any interference received, including interference that may cause undesired operations.

### **Electrical Connection**

Lunera T8 LED U-Bend driven by 120V/277V 60Hz AC.

