Larson Electronics LLC
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Product ID: 149639

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image:

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

Specifications / Additional Information

LEDT8-48-D-X2 23 watt T-series Dimmable LED Tube

Lamp Type: LED Tube
Dimensions: 48"
Weight: 614 grams
Watts: 23 watts
Total Lumens: 2,875
Lumens Per Watt: 125
Lamp Life Expectancy: 50,000+ Hours
Beam angle: 150 degrees
Color temperature: 4500K (clear) or 5600K (light frost)
CRI: 80
Voltage: 90 to 132 VAC
Dimmable: Yes
Power Efficiency: 90%
Power Factor: >0.95
Operating Temp: -25°C to +45°C
Materials: Aluminum Body / Polycarbonate Lens

Ratings/Approvals

Listed for United States and Canada
UL-1993
CAN/CSA C22.2 No 1993
125 lm/w efficiency
IP20 Rated
80% Lumen Retention @ 50,000+ Hours
Internal Driver
Double End Powered
Works with Lutron or Leviton electronic dimmers

Special Orders - Special Requirements

Contact us for special requirements
Toll Free: 1-800-369-6671
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E-mail:sales@larsonelectronics.com

The Larson Electronics LEDT8-48-D-X2 23 watt T-series Dimmable LED tube lamp is an excellent choice for upgrading existing T8 dimming fluorescent lamp fixtures to LEDs as well as a direct replacement for our own LED light fixtures. The LEDT8-48-D-X2

features a double ended wiring configuration. Operators simply connect line voltage to one end and the neutral line to the other end during installation.

This 23 Watt T-series LED Bulb works with any T8 fluorescent light fixtures, can be configured for any T series fluorescent bulb fixture and requires no ballast for operation. Internally, you simply bring the black wire to one pin and the white wire to the other. Power for this dimmable LED tube is double ended, meaning line voltage is connected to one end and neutral voltage is connected to the other end. The polycarbonate lens diffuses the light and makes this bulb ideal for food safe environments as there is no glass. The aluminum housing serves as a heat sink and provides rigidity and strength for this LED bulb. These LED light tubes can also be plugged directly into fluorescent light fixtures with magnetic ballasts, which makes them an ideal retrofit for older T12 fluorescent lights with magnetic ballasts.

In fluorescent light fixtures with electronic ballasts, the operator needs to bypass the ballast and wire the power directly to one end of the LED tube (black wire to one pin and white wire to the other). Thus, this is an ideal upgrade for 4 foot fixtures with failed ballasts. These multi-voltage LED bulbs run directly off any voltage ranging from 90 volts to 132 volts AC, including 110 volts, 115 volts, and 120 volts AC.



Click Photo to Enlarge



Click Photo to Enlarge

LED Benefits: Unlike gas burning and arc type lamps that have glass bulbs, LEDs have no filaments or fragile housings to break during operation and/or transportation. Instead of heating a small filament or using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current is applied, providing instant illumination with no warm up or cool down time before re-striking. Because there is no warm up period, this light can be cycled on and off with no reduction in lamp life.

LED lights run at significantly cooler temperatures than traditional metal halide and high pressure sodium lights and contain no harmful gases, vapors, or mercury, making them both safer and more energy efficient. No extra energy is wasted in cooling enclosed work areas due to external heat emissions from bulb type lights, and the operator risks associated with traditional lighting methods, such as accidental burns and exposure to hazardous substances contained in the glass bulbs, are eliminated. In addition, LEDs are also safer for the environment as they are 100% recyclable, which eliminates the need for costly special disposal services required with traditional gas burning and arc type lamps.

These are the first generation of our dimmable 23 watt LED tubes. Lumen output is 125 lumens per watt for a total of 2,875 lumens per bulb. This LED lamp features rotating pins, allowing operators to adjust the direction of light dispersion after installation. While fluorescent lamps are omni-directional and illuminate 360°, the LED style replacement lamps are

directional and offer a 160° beam spread. While this is more efficient than traditional fluorescent lighting, the pin alignment in retrofits may not always line up. With the rotating pins offering 300° of adjustability, operators can install the LED lamp, then rotate the center of the tube to the desired positioning.

This dimming LED tube uses electronic silicon control dimming. We have tested this lamp on all Lutron and Leviton electronic dimmers, such as the Leviton 6633-PLW. When using electronic dimmer switches, fixtures equipped with the LEDT8-48-D-X2 LED bulb will dim from 0% up to 100% via the user provided dimming switch. This lamp will not work on voltage outside of the 90-132V AC range and internal damage may occur when higher voltage is applied to the lamp.

These LED fluorescent tube replacements can be used as upgrades or replacements to our own explosion proof fluorescent lights, explosion proof paint spray booth lights as well as any other T series light fixture the operator already has in house. We have specially designed these for our explosion proof light fixtures, however, they can be used as replacements in standard fluorescent light fixtures. In our facilities, we replaced worn or spent fluorescent bulbs with these LED bulbs by removing the ballasts and bringing the white wire to one end and the black wire to the other end of the LED tube.

At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.

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Frequently Asked Questions (FAQ)

There are no Faqs

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Product ID: 149639

Harmonized System (HS) Code: 9405.41.84.10
Export Control Classification Number (ECCN): EAR99

Options:

-Voltage-Color Temp-Diffusion
Example: -120V-3000K-CLR

Voltage	
120V	-120V
240V	-240V

Color Temp	
3000K	-3000K
4500K	-4500K
5600K	-5600K

Diffusion	
CLEAR	-CLR
FROSTED	-FRST
HEAVY FROST	-HIFRST

Links (Click on the below items to view):

- **Canadian CEC Certificate (Commonly referred to as CSA Certificate)**(https://www.larsonelectronics.com//images/product/CECCert/149639.PDF)
- **Operations Manual**(https://www.larsonelectronics.com//images/product/Manual/149639.PDF)
- **USA NEC Certificate (Commonly referred to as UL Certificate)**(https://www.larsonelectronics.com//images/product/NECCert/149639.PDF)
- **HigResPic1**(https://www.larsonelectronics.com//images/product/HigResPic1/149639.JPG)
- **HigResPic2**(https://www.larsonelectronics.com//images/product/HigResPic2/149639.JPG)
- **HigResPic9**(https://www.larsonelectronics.com//images/product/HigResPic9/149639.JPG)
- **Video1**(https://www.youtube.com/watch?v=12Quu_Q_Hml)
- **Video2**(http://www.youtube.com/watch?v=cE3FBDuoWr4)
- **ISO 9001 Certification**(http://larsonelectronics.com/images/pdfdocs/ISO9001.PDF)
- **Business Certificate**(https://www.larsonelectronics.com/images/pdfdocs/w9.PDF)
- **Shipping Time Map**(https://www.larsonelectronics.com/images/product/ShippingTimeMap/ShippingTimeMap.pdf)