



**IRTRONIX**  
Global Partner in UV LED Solutions



# UV-C LIGHT BAR SPECIFICATIONS

Model No. : UV1001T

Part No. : IRT1X56060R1C-100LB278

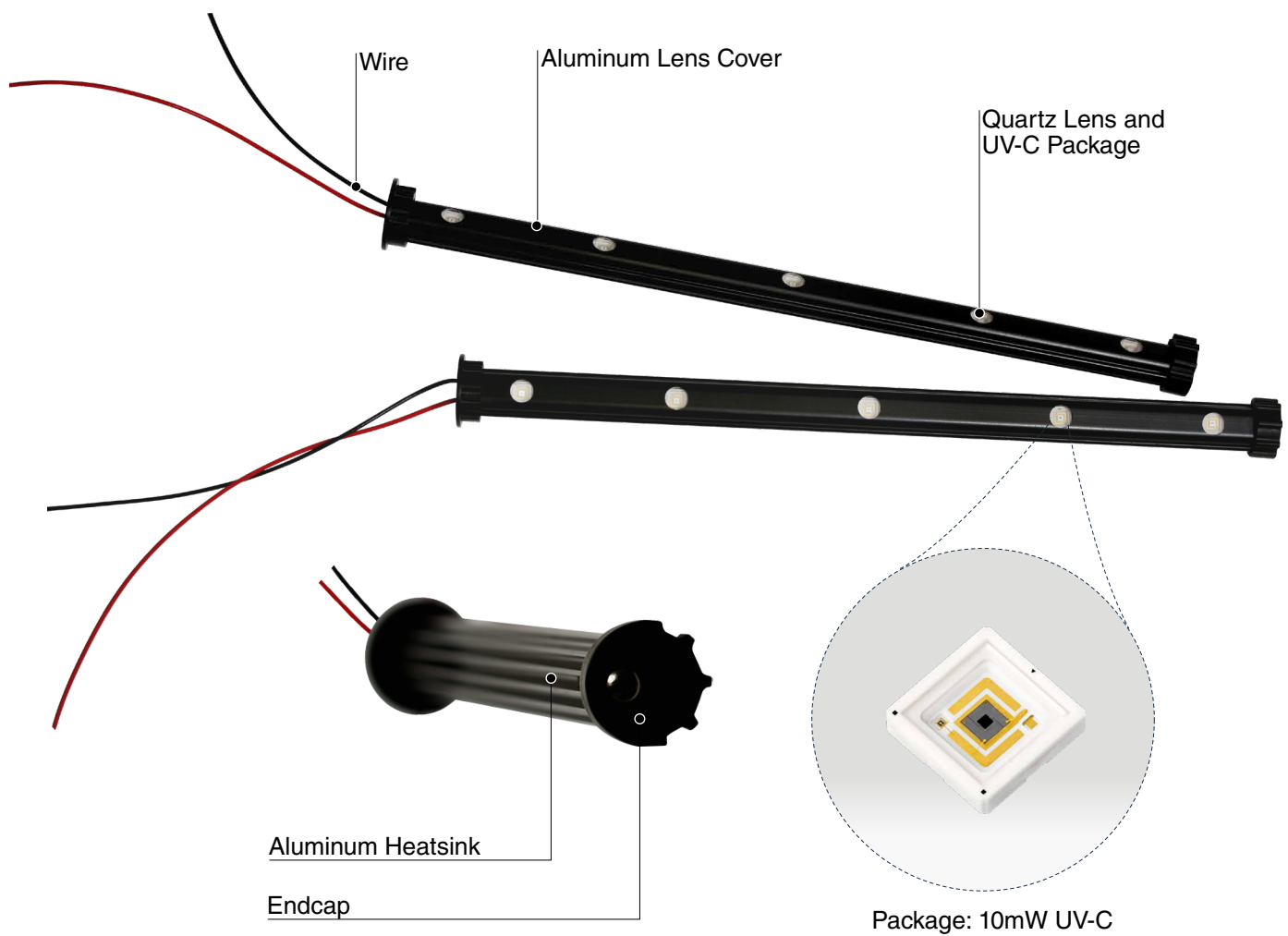
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Model No. : UV1001T

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\*Scale: NTS

## UV-C LIGHT BAR

Model No. : **UV1001T**

Using 10mW 278nm UV-C

### **1. Description**

Our UV Light Bar is the compact module which can be used for water purifying systems, air ventilation systems, and surface disinfection. It uses 5 of LG Innotek's 10mW UV-C LEDs which emits light at 278nm. This wavelength is able to break down cells and molecular bonds to either disable or kill viruses and bacteria to effectively reduce chances of sickness and infection.

### **2. Mechanical Characteristics**

- Dimensions  
Length: 8.5"  
Diameter: 0.625"
- Weight: TBD
- Anodized aluminum heatsink and cover
- Copper PCB with thermoelectric separation for thermal management
- Quartz window to allow for UV transmission
- Aluminum cover and endcaps to protect the LEDs from external debris
- Passively cooled

### **3. Operating Procedures**

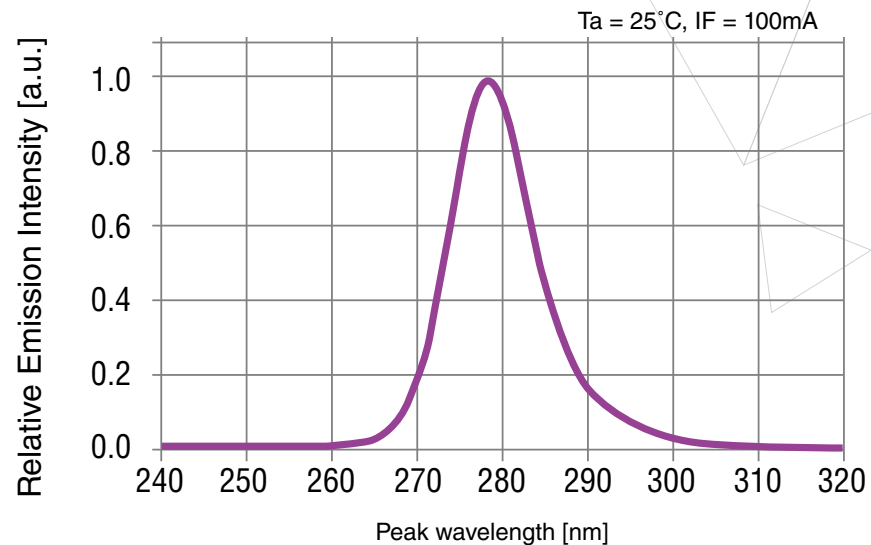
Equipment needed: An external adjustable DC power supply with output voltage and current meter. The DC power supply should have voltage adjustable from 0 to 45V. To avoid unnecessary overheating of the light bar due to excessive driving voltage, please follow steps below:

- 1) Turn on the DC power supply and set output to 0V.
- 2) Connect the red lead of the light bar to the positive output of the power supply.
- 3) Connect the black lead of the light bar to the negative output of the power supply.
- 4) Slowly increase the power supply output voltage and notice that the light bar starts to lit up at about 25Vdc, but the current should be still not in regulation yet.
- 5) Continue to increase the power supply DC voltage and note the current meter.
- 6) When the current meter show ~ 100mA then just increase the DC voltage an additional 0.5 to 1V.
- 7) Now the light bar is set up at proper driving voltage level with minimum power dissipation.

## 4. Electrical Characteristics

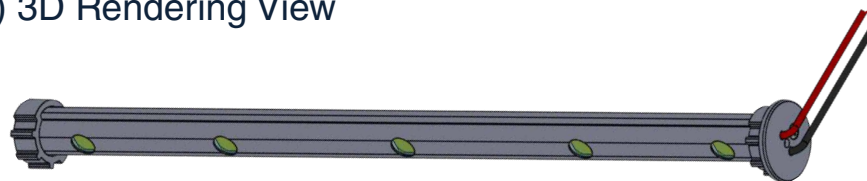
Number of LEDs	5
Package Size	6060 (6mmx6mm)
Total Optical Power	50mW (10mW LED)
Wavelength	278nm
Beam Angle	110 degrees
Forward Current	100mA
Forward Voltage (min)	25V
Forward Voltage (max)	45V
Power Consumption	2.5W-4.5 W

## 5. Spectrum



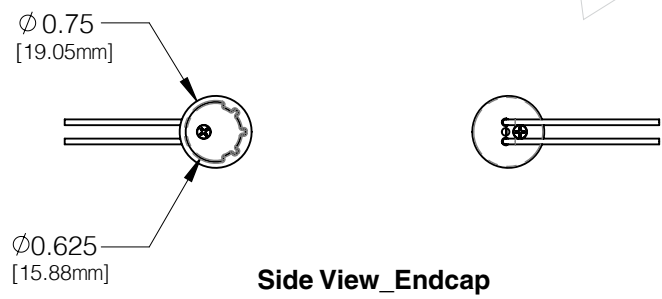
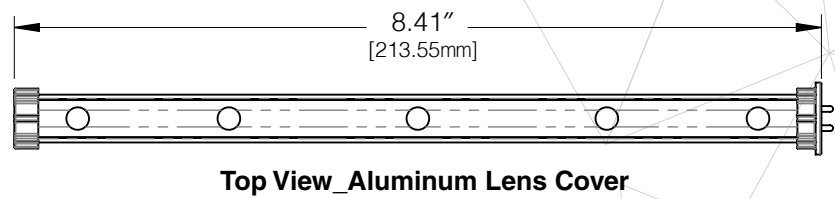
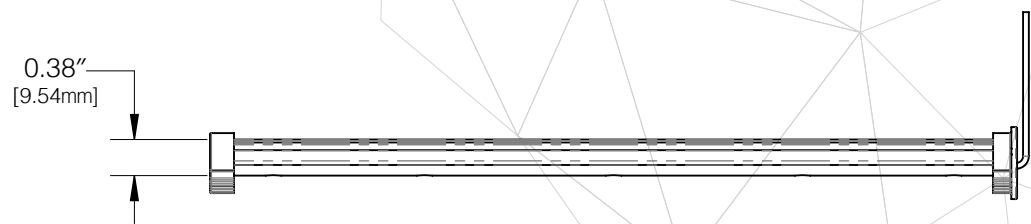
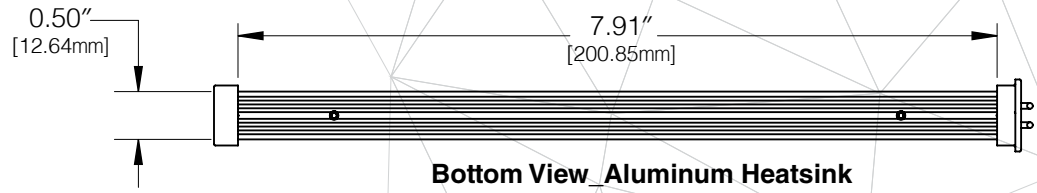
## 6. Mechanical Dimensions

### 1 ) 3D Rendering View



\*Scale: NTS

## 2 ) Outline Dimensions



\*Scale: 1:1/2

## 5. Cautions on Use

- IRTronix is not responsible for any damages or accidents caused if the operating or storage conditions exceed the absolute maximum ratings recommended in this document.
- The LEDs described in this document are intended to be operated by ordinary electronic equipment.
- The LEDs should not be used at any lighting products together with the other LEDs, which has a different part number. If required, please contact any salesperson.
- It is recommended to consult with IRTronix when the environment or the LED operation is nonstandard in order to avoid any possible malfunctions or damage to product or risk of life or health.
- Disassembly of the LED products for the purpose of reverse engineering is prohibited without prior written consent from IRTronix. All defected LEDs must be reported to IRTronix and are not to be disassembled or analyzed.
- The product information can be modified and upgraded without prior notice.

## 6. Disclaimers: Safety Guidelines



- ULTRAVIOLET light may be harmful. Do not expose to your eyes and skin.
- Proceed with caution to avoid the risk of damage to the eyes when examining the LEDs with optical instruments.