

Waveform Lighting's realUV™ flexible LED panel lights emit high levels of true UV-A light in a new, square panel format.

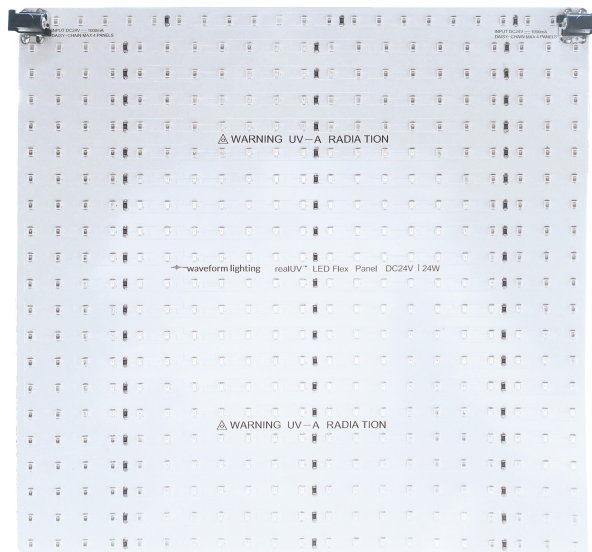
The panel format is functionally equivalent to creating a multi-row array of realUV™ LED strip lights, but without the need to cut, connect and assemble the rows together.

Up to four panels can be connected to a single power source, allowing for a variety of configurations such as a 2 x 2 ft or 1 x 4 ft installation.

realUV™ LED lights can be used in a variety of UV-A and blacklight applications, ranging from fluorescent artwork & photography, industrial and scientific uses for UV curing, and screen emulsion exposure.

## PRODUCT FEATURES

- Flexible LED panel light with 9.4 x 9.4 inch square dimensions
- Array of 441 UV-A ultraviolet 365 nm LED emitters
- Industrial-grade 3M VHB double-sided adhesive pre-applied on panel backside for reliable mounting
- Join up to 4 panels together (daisy-chain); use PN 7096 (sold separately)
- Requires DC 24V power to operate; power supplies sold separately

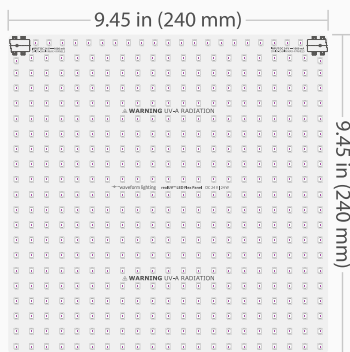


**WARNING - HIGH INTENSITY ULTRAVIOLET LIGHT** THIS PRODUCT EMITS UV-A RADIATION, WHICH IS NOT DIRECTLY VISIBLE TO THE HUMAN EYE. AVOID LOOKING DIRECTLY AT THE LIGHT. EYE OR SKIN IRRITATION MAY RESULT FROM EXPOSURE. USE APPROPRIATE SHIELDING.

## ELECTRICAL SPECIFICATIONS

<b>Input type:</b>	DC Barrel Jack (2.5 x 5.5 mm)
<b>Input voltage:</b>	DC 24 volts
<b>Input current:</b>	1000 mA
<b>Power Draw:</b>	24 watts
<b>Max Daisy Chain:</b>	4 panels

## MECHANICAL DIMENSIONS

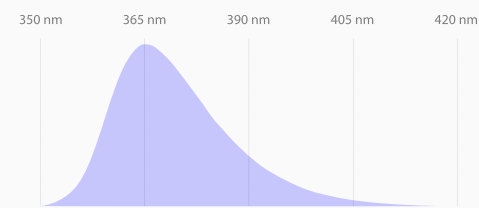


## MECHANICAL SPECIFICATIONS

<b>Length:</b>	9.45 in (240 mm)
<b>Width:</b>	9.45 in (240 mm)
<b>Height:</b>	0.55 in (14 mm)

## SPECTRAL SPECIFICATIONS

<b>Peak Wavelength:</b>	365 nm
<b>FWHM:</b>	16 nm



We maintain a  $\pm 5$  nm tolerance for wavelength specifications. FWHM stands for *Full-Width Half-Max*, the size of the wavelength range across which irradiance is measured to be at least 50% of the peak wavelength irradiance value.

## LIFETIME INFORMATION

<b>Warranty period:</b>	36 months (3 years)
<b>Lifetime (L90):</b>	45,000 hours
<b>Lifetime (L70):</b>	54,000+ hours

Lifetime data are based on LED case temperatures ( $T_c$ ) of 185°F (85°C) using LM-80 and TM-21 calculation methods at 9k hours of actual test data. L90 refers to 90% lumen maintenance (10% light loss), and L70 refers to 70% lumen maintenance (30% light loss).

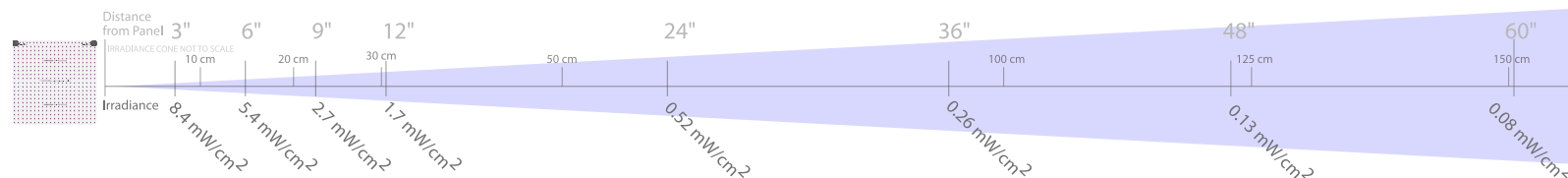
## THERMAL MANAGEMENT

<b>Max Ambient Temp (<math>T_a</math>):</b>	125°F (50°C)
<b>Max Case Temp (<math>T_c^*</math>):</b>	185°F (85°C)
<b>Typical temp rise:</b>	$\Delta 54^\circ\text{F}$ ( $\Delta 30^\circ\text{C}$ )

These LED panel lights are designed to be operated without the need for any additional thermal management.

\* $T_c$  refers to the temperature of the solder joint between the LED and circuitboard. For non-typical installations where power or thermal density may be higher, monitor this  $T_c$  temperature point and verify that the LED solder joints remain below 185°F (85°C) after the system reaches thermal stability.

## IRRADIANCE DATA



The irradiance chart illustrates the amount of irradiance measured from various distances away from the panel. Irradiance values indicate the total amount of UV-A (365 nm) wavelength energy falls on a particular surface, and is an essential metric to determine whether or not the amount of UV-A radiation is sufficient for a particular application.

Irradiance values decrease rapidly as the distance from the panel increases. For chemical processes such as epoxy and resin curing, we recommend placing the panel within 10 inches of the target surface to achieve sufficient UV levels. For general fluorescence and illumination, the panel provides sufficient UV output up to 5 feet (60 inches) away.

Multiple panels pointed in the same direction will linearly increase the irradiance values. For example, three panels would lead to irradiance values that are three times higher.

## COMPATIBLE ACCESSORIES

<b>Power Supplies:</b>	3092, 3094.096 <sup>†</sup> , 3102 <sup>†</sup> , 3104 <sup>†</sup>
<b>Connectors:</b>	7098, 7095 <sup>‡</sup>
<b>Dimmers:</b>	3081, 3094.096 + TRIAC wall-dimmers <sup>§</sup>

<sup>†</sup> Requires PN 7095 or equivalent adapter to connect  
<sup>‡</sup> Requires connection to wires pre-installed on reel ends, or PN 3070  
<sup>§</sup> See tested dimmer list under PN 3094 for additional details

## PART NUMBERS AND ORDERING

**365 nm / 24 watts** 7502

For single-row LED strip, see PN 7021

## CERTIFICATIONS

