

realUV™ LED Strip Lights

PN: 7021

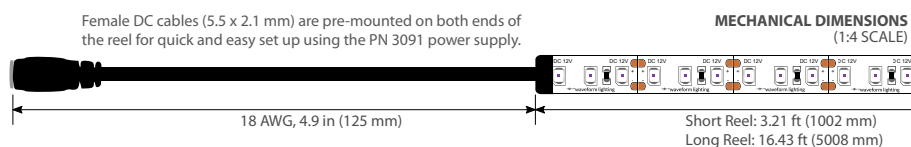
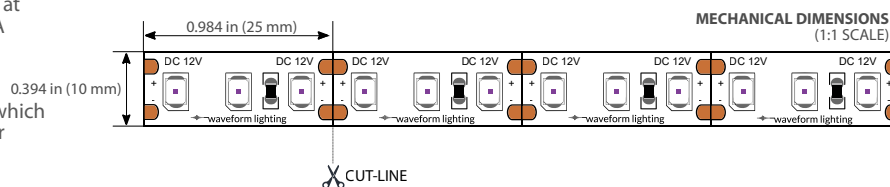
Waveform Lighting's realUV™ LED strip lights provide high power ultraviolet light at 365 nanometers or 395 nanometers. These wavelengths are considered true UV-A wavelengths, and are the optimal wavelengths for activating and observing fluorescence and other UV-A phenomenon.

The back side of the LED strip includes pre-applied 3M VHB® double-sided tape, which provides a simple but extremely strong adhesive mounting method for all of your projects.

The LED strips are 16.4 feet (5.0 meters) in length (also available as short 3.2 ft reels), and are conveniently reeled for quick and easy application, and can be cut to length every 1-inch (25 mm) with just a pair of scissors.

PRODUCT AND FEATURES

- Available in either 365 nm or 395 nm
- The light emitted from the 365 nm version is largely invisible, but a miniscule amount of visible light is also emitted and appears as a very dim bluish-white light.
- The 395 nm version emits a portion of its output energy in the visible wavelength range and appears as a dim, violet light.
- Available in either full reel (5 meter) or short reel (1 meter)



PHOTOMETRIC SPECIFICATIONS

UV output per ft (365 nm):	0.75 W
UV output per ft (395 nm):	1.10 W
Radiometric Efficiency (365 nm):	15%
Radiometric Efficiency (395 nm):	22%
Spectrum FWHM:	10 nm
Emission angle:	120 deg

Download full photometric reports at <https://www.waveformlighting.com/photometrics>

ELECTRICAL SPECIFICATIONS

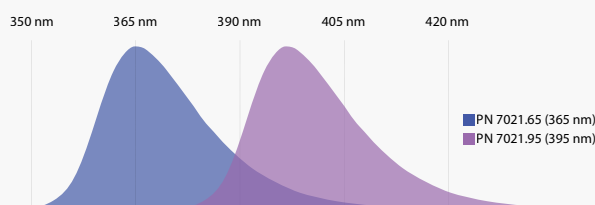
Input type:	Constant Voltage
Input voltage:	12V DC
Current draw per ft:	400 mA @ 12V DC
Current draw per full reel:	6.0 A @ 12V DC
Power draw per ft:	4.8 W @ 12V DC
Power draw per full reel:	72 W @ 12V DC
Max run:	16.4 ft (5 meters)

POWER SUPPLY SELECTION

Compatible with Waveform Lighting PN 3091 or third-party 12V DC constant voltage power supply. If you choose to utilize a third-party power supply unit, you will need to ensure that the power capacity of the power supply is sufficient for the length of LED strip being connected. Use the table below to determine if the power supply is sufficient for your project.

LENGTH	MINIMUM POWER SUPPLY CAPACITY
1 ft:	420 mA / 5 W
3 ft:	1.3 A / 16 W
6 ft:	2.5 A / 30 W
9 ft:	3.8 A / 46 W
12 ft:	5.0 A / 60 W
16.4 ft:	6.7 A / 80 W

TYPICAL EMISSION SPECTRUM



We maintain a ± 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.

MECHANICAL SPECIFICATIONS (FULL REEL)

Length:	16.43 ft (5008 mm)
Width:	0.394 in (10 mm)
Height:	0.067 in (1.7 mm)
LED spacing (OC):	0.327 in (8.3 mm)
Cut-line spacing:	0.984 in (25 mm)
PCB copper thickness:	4 oz
Connection (both ends):	Female DC 2.1 x 5.5 mm connector

COMPATIBLE ACCESSORIES

Power Supplies:	3091, 3093.120†
Connectors:	3070, 3071, 3072, 7098, 7094, 7095
Dimmers:	3081, 3093.120 + TRIAC wall-dimmers§
Aluminum Channels:	3060, 3061; diffusers are not compatible with UV output

† Requires PN 7095 or equivalent adapter to connect
§ See tested dimmer list under PN 3094 for additional details

THERMAL MANAGEMENT

Max Ambient Temp (T_A):	125°F (50°C)
Max Case Temp (T_C*):	185°F (85°C)
Typical temp rise:	$\Delta 54^\circ\text{F}$ ($\Delta 30^\circ\text{C}$)

These LED strip lights are designed to be operated without the need for any additional thermal management. Aluminum channel accessories may assist somewhat in dissipating heat away from the LED strip lights, but are not necessary.

* 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.

PART NUMBERS AND ORDERING

365 nm short reel:	7021.65
395 nm short reel:	7021.95
365 nm full reel:	7021.65.5M
395 nm full reel:	7021.95.5M