















LUXEON UV U Line

Highest power density, superior efficiency, powered by leading Chip Scale Package (CSP) technology



At a micro package size compared to other ultraviolet and violet LEDs, LUXEON UV U Line LEDs are SMT devices that can be assembled in tight arrays with spacing of only 200 microns, which enables high power density (W/cm²) systems for superior efficiency and design freedom. These products are undomed for precise optical control and include a portfolio of 1mm² and 2mm² die sizes covering ultraviolet and violet light. The superior power density, excellent robustness of CSP technology and real world efficacy enable leading performance and efficient solution development in a wide variety of UV specialty lighting applications.

FEATURES AND BENEFITS

Offering ultraviolet in 380-400nm and violet (400–420nm) for a range of options Small 2.2 to 3.6mm² SMT footprint enables highest W/cm² power density, design freedom

1A per mm² die size maximum drive current allows more power per LED

Up to 50%+ efficiency reduces heat output

AIN package R_{th} as low as 1.8 K/W for better thermal management

PRIMARY APPLICATIONS

Specialty Lighting

- Analytical Instrumentation
- Curing
- Medical
- Security
- UV Photoreaction

LUXEON UV U1 product performance at 500mA and 1000mA, T_i=25°C.

PEAK WAVELENGTH [1]	TYPICAL RADIOMETRIC POWER [2] (mW)		PART NUMBER
	500mA	1000mA	TAKI NOMBEK
415 ±5nm	725	1378	LHUV-0415-A070
405 ±5nm	675	1283	LHUV-0405-A065
	725	1378	LHUV-0405-A070
395 ±5nm	625	1188	LHUV-0395-A060
	675	1283	LHUV-0395-A065
385 ±5nm	425	808	LHUV-0385-A040
	475	903	LHUV-0385-A045

- Lumileds maintains a tolerance of ±2nm for peak wavelength measurements.
 Lumileds maintains a tolerance of ±10% for radiometric power measurements.

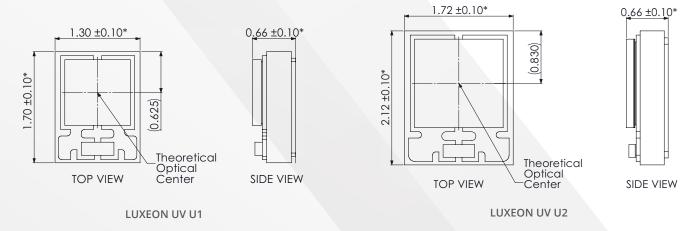
LUXEON UV U2 product performance at 1000mA and 2000mA, T_i=25°C.

PEAK WAVELENGTH [1]	TYPICAL RADIOMETRIC POWER [2] (mW)		PART NUMBER
	1000mA	2000mA	TARTNOMBER
410-420nm	1450	2610	L1F3-U410200014000
400-410nm	1300	2340	L1F3-U400200012000
390-400nm	1300	2340	L1F3-U390200012000
380-390nm	700	1260	L1F3-U380200006000
	900	1620	L1F3-U380200008000

Notes:

- 1. Lumileds maintains a tolerance of ± 2 nm for peak wavelength measurements. 2. Lumileds maintains a tolerance of $\pm 10\%$ for radiometric power measurements

Mechanical Dimensions.



- Notes:
 1. Drawings are not to scale.
 2. All dimensions are in millimeters.

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