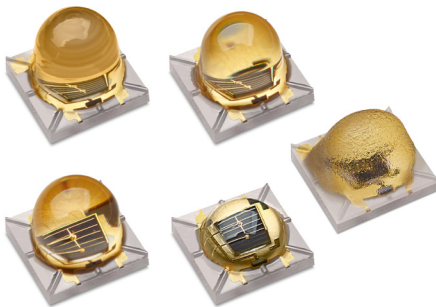




LUXEON IR Domed Line

High power infrared emitters with engineered primary optics for high efficiency and beam control



The LUXEON IR Domed Line high power infrared emitters are tailored to application needs by offering a variety of products at multiple infrared wavelengths and optical radiation patterns. LUXEON IR Domed Line is designed with innovative LUXEON technology to provide industry-leading performance. Through best-in-class thermal conductivity, LUXEON IR Domed Line has excellent performance at actual operating conditions. The LUXEON IR Domed Line uses an industry standard footprint for ease of integration and upgrading existing system designs.

FEATURES AND BENEFITS

Available in 850nm and 940nm wavelengths to provide optimized performance for each type of application

Radiant Power of 1550mW (850nm) and 1550mW (940nm) for a greater system performance

High drive current (up to 1.5A DC and 5A pulsed) available for applications requiring more performance

Five emission patterns: 50°, 60°, 90°, 150° and an asymmetric radiation pattern of 95 x 58°

The five emission patterns address diverse application needs, high punch, long range and high uniformity

3.7mm x 3.7mm package with 3 pad configuration compatible with the industry standard footprint, enabling a direct upgrade in existing designs

Ultra-low R_{th} of 2.5°C/W typ, the industry's best thermal conductivity, solves thermal challenges and supports space saving designs

PRIMARY APPLICATIONS

Surveillance / CCTV

Machine Vision

3D Scanning / Time of Flight

Biometric Identification

User Interface Control

Augmented / Virtual Reality

LUXEON IR Domed Line product performance at 1000mA, T_j=25°C

PEAK WAVELENGTH ^[1] (nm)	TYPICAL FWHM BEAM ANGLE (°)	RADIOMETRIC POWER ^[2] (mW)		TYPICAL RADIANT INTENSITY (mW/sr)	PART NUMBER
		MINIMUM	TYPICAL		
850	150	1000	1350	335	L110-0850150000000 ^[3]
850	90	1000	1350	750	L110-0850090000000 ^[3]
850	60	1000	1350	1150	L110-0850060000000 ^[3]
940	150	1100	1450	350	L110-0940150000000 ^[3]
940	90	1100	1450	780	L110-0940090000000 ^[3]
940	60	1100	1450	1190	L110-0940060000000 ^[3]
850	150	1300	1550	380	L110-0850150200000
850	90	1300	1550	850	L110-0850090200000
850	60	1300	1550	1295	L110-0850060200000
850	50	1300	1550	1435	L110-0850050200000
850	95 x 58	1300	1550	750	L110-0850955800000
940	150	1300	1550	380	L110-0940150200000
940	90	1300	1550	850	L110-0940090200000
940	60	1300	1550	1295	L110-0940060200000
940	50	1300	1550	1435	L110-0940050200000
940	95 x 58	1300	1550	750	L110-0940955800000

Notes:

1. Lumileds maintains a tolerance of ±2nm on peak wavelength measurements.
2. Lumileds maintains a tolerance of ±7% on radiometric power measurements.
3. Not recommended for new design.