



LUXEON IR Domed for Automotive Line

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



LUXEON IR Domed for Automotive Line are high power infrared emitters tailored to application needs by offering a variety of products at multiple infrared wavelengths and optical radiation patterns. Through best-in-class thermal conductivity, LUXEON IR Domed for Automotive Line has excellent performance at actual operating conditions. Its industry standard footprint allows ease of integration and upgrading existing system designs. All LUXEON IR Domed for Automotive Line emitters are AEC-Q102 qualified and are designed with innovative LUXEON technology to provide industry leading performance.

FEATURES AND BENEFITS

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

Radiant Power of 1350mW (850nm) and 1450mW (940nm) for a greater system performance

Four emission patterns of 50°, 60°, 90°, 145° and 150° to address diverse application needs, high punch, long range, and high uniformity

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

Ultra-low Rth of 1.9-2.1°C/W, the industry's best thermal conductivity, solves thermal challenges and supports space saving designs

PRIMARY APPLICATIONS

Driver Monitoring Systems

Biometric Identification

Exterior Sensing Applications

Interior Presence Detection

Gesture Control

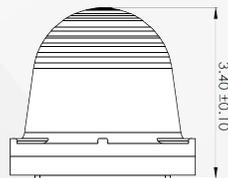
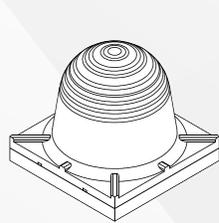
LUXEON IR Domed for Automotive Line product performance and optical characteristics at 1000mA, T_j=25°C.

PEAK WAVELENGTH ^[1] (nm)	TYPICAL FWHM BEAM ANGLE ^[3] (°)	RADIOMETRIC POWER ^[2] (mW)		TYPICAL RADIANT INTENSITY (mW/sr)	PART NUMBER
		MINIMUM	TYPICAL		
850	135	1050	1350	335	L110-A850150000000
850	145	1050	1350	300	L110-A850145000000
850	85	1050	1350	750	L110-A850090000000
850	60	1050	1350	1150	L110-A850060000000
850	48	1050	1350	1255	L110-A850050000000
930	135	1125	1450	350	L110-A930150000000
930	145	1125	1450	320	L110-A930145000000
940	135	1125	1450	350	L110-A940150000000
940	145	1125	1450	320	L110-A940145000000
940	85	1125	1450	780	L110-A940090000000
940	60	1125	1450	1190	L110-A940060000000
940	48	1125	1450	1335	L110-A940050000000

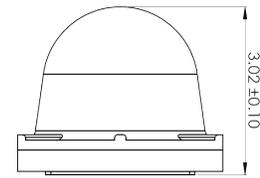
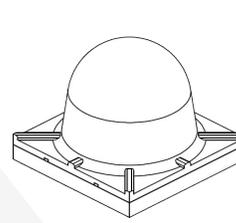
Notes:

1. Lumileds maintains a tolerance of ±2nm on peak wavelength measurements.
2. Lumileds maintains a tolerance of ±7% on radiometric power measurements.
3. FWHM denotes the viewing angle off-axis angle from the LED centerline where the luminous intensity is ½ of the peak value.

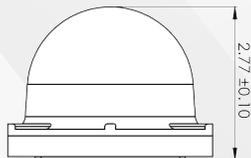
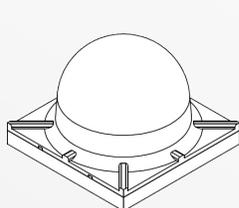
Mechanical Dimensions



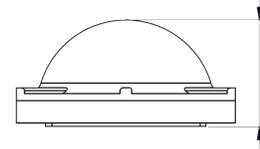
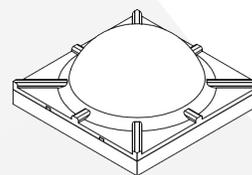
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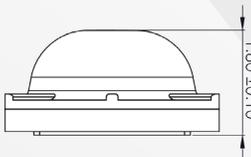
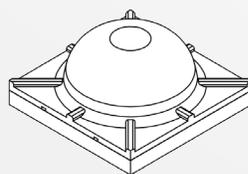
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L110-Axxx090000000



L110-Axxx145000000



L110-Axxx150000000

Notes:

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

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