



LUXEON XR-5050 SQR

High performance LED modules with extreme efficacy for robust lighting designs



LUXEON XR-5050 SQR products are LED modules optimized for lighting applications requiring high efficacy LED arrays mounted on a rigid and thermally conductive substrate. These versatile building blocks feature 8, 12 or 16 LUXEON 5050 Square LEDs on a MCPCB substrate, electrical connectors, and are designed for ease of system integration, faster time to market, and use with industry standard optics. LUXEON XR-5050 SQR is a complete solution when used in combination with standard third party optics and heatsinks.

FEATURES AND BENEFITS

Efficacy and luminous flux of up to 186lm/W and 5770lm available

Available CCT/CRI combinations: 70CRI (2200K, 2700K, 3000K, 4000K and 5000K) and 80CRI (2700K, 3000K and 4000K)

Superior board level color control of $\leq 3\text{SDCM}$

Excellent case to heatsink thermal resistance of $3.5\text{K/W}_{\text{th}}$

Design compatible with standard third party optics

Features LUXEON 5050 SQR LEDs with industry-leading efficacy and lumens in multi-die, high power package

5-year guarantee

PRIMARY APPLICATIONS

High Bay

Low Bay

Urban Streetlights

LUXEON XR-5050 SQR product performance at 700mA, T_c =85°C.

NOMINAL CCT	MINIMUM CRI ^[1, 2]	LUMINOUS FLUX ⁽¹⁾ (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	ENERGY EFFICIENCY CLASS	PART NUMBER
		MINIMUM	TYPICAL			
		700mA				
2200	70	2272	2450	158	E	L213-2270008MRH001
2700	70	2477	2706	174	D	L213-2770008MRH001
3000	70	2563	2778	179	D	L213-3070008MRH001
4000	70	2664	2885	186	D	L213-4070008MRH001
5000	70	2545	2885	186	D	L213-5070008MRH001
2700	80	2210	2374	153	E	L213-2780008MRH001
3000	80	2272	2494	161	E	L213-3080008MRH001
4000	80	2366	2609	168	E	L213-4080008MRH001
2200	70	3409	3675	158	E	L213-2270012MRH001
2700	70	3716	4060	174	D	L213-2770012MRH001
3000	70	3844	4167	179	D	L213-3070012MRH001
4000	70	3996	4327	186	D	L213-4070012MRH001
5000	70	3818	4327	186	D	L213-5070012MRH001
2700	80	3315	3561	153	E	L213-2780012MRH001
3000	80	3409	3741	161	E	L213-3080012MRH001
4000	80	3549	3913	168	E	L213-4080012MRH001
2200	70	4545	4900	158	E	L213-2270016MRH001
2700	70	4955	5413	174	D	L213-2770016MRH001
3000	70	5126	5556	179	D	L213-3070016MRH001
4000	70	5328	5770	186	D	L213-4070016MRH001
5000	70	5091	5770	186	D	L213-5070016MRH001
2700	80	4420	4748	153	E	L213-2780016MRH001
3000	80	4545	4988	161	E	L213-3080016MRH001
4000	80	4732	5218	168	E	L213-4080016MRH001

Notes:

1. Lumileds maintains a tolerance of ±2 on CRI and ±7% on luminous flux measurements.
2. Typical CRI is approximately 2 points higher than the minimum CRI specified, but this is not guaranteed.