



# LUXEON XR-5050 HE

High performance LED modules with extreme efficacy for robust lighting designs



LUXEON XR-5050 HE integrated modules are standard products compatible with off-the-shelf drivers, optics, and heat sinks. These versatile building blocks feature 8, 12, 16 or 24 LUXEON 5050 HE LEDs on a MCPCB substrate for thermal efficiency and mechanical robustness. This approach simplifies system integration and accelerates time-to-market.

## FEATURES AND BENEFITS

- Efficacy and Luminous flux of up to 191lm/W typ and 8636lm available
- CCT/CRI Options: 2200K, 2700K, 3000K, 3500K, 4000K, 5000K, 5700K (70, 80 and 90 CRI)
- Superior board level color control of  $\leq 3$ SDCM
- MCPCB for efficient heat dissipation and mechanical robustness
- UL 8750, ENEC, ENEC+, CE, UKCA compliance
- 5-year limited guarantee
- Designs compatible with standard third-party optics

## PRIMARY APPLICATIONS

- High Bay
- Low Bay
- Sport Lights
- Outdoor Area Lights
- Roadway Lights

Product performance of LUXEON XR-5050 HE 8up, 12up and 16up at 700mA, T<sub>c</sub>=85°C

NOMINAL CCT	MINIMUM CRI <sup>[1, 2]</sup>	LUMINOUS FLUX <sup>[1]</sup> (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	ENERGY EFFICIENCY CLASS <sup>[3]</sup>	PART NUMBER
		MINIMUM	TYPICAL			
2200K	70	2438	2523	161	D	L225-2270008MLU010
2700K	70	2698	2801	179	D	L225-2770008MLU010
3000K	70	2801	2880	184	C	L225-3070008MLU010
3500K	70	2831	2911	186	C	L225-3570008MLU010
4000K	70	2882	2985	191	C	L225-4070008MLU010
5000K	70	2882	2981	191	C	L225-5070008MLU010
5700K	70	2865	2919	187	C	L225-5770008MLU010
2700K	80	2344	2492	159	E	L225-2780008MLU010
3000K	80	2448	2605	167	D	L225-3080008MLU010
3500K	80	2556	2713	173	D	L225-3580008MLU010
4000K	80	2661	2763	177	D	L225-4080008MLU010
2200K	70	3657	3785	161	D	L225-2270012MLU010
2700K	70	4046	4202	179	D	L225-2770012MLU010
3000K	70	4202	4320	184	C	L225-3070012MLU010
3500K	70	4246	4366	186	C	L225-3570012MLU010
4000K	70	4323	4478	191	C	L225-4070012MLU010
5000K	70	4323	4471	191	C	L225-5070012MLU010
5700K	70	4298	4378	187	C	L225-5770012MLU010
2700K	80	3516	3738	159	E	L225-2780012MLU010
3000K	80	3673	3907	167	D	L225-3080012MLU010
3500K	80	3835	4069	173	D	L225-3580012MLU010
4000K	80	3991	4144	177	D	L225-4080012MLU010
2200K	70	4876	5047	161	D	L225-2270016MLU010
2700K	70	5395	5603	179	D	L225-2770016MLU010
3000K	70	5603	5760	184	C	L225-3070016MLU010
3500K	70	5661	5822	186	C	L225-3570016MLU010
4000K	70	5764	5970	191	C	L225-4070016MLU010
5000K	70	5764	5962	191	C	L225-5070016MLU010
5700K	70	5731	5837	187	C	L225-5770016MLU010
2700K	80	4688	4984	159	E	L225-2780016MLU010
3000K	80	4897	5209	167	D	L225-3080016MLU010
3500K	80	5113	5426	173	D	L225-3580016MLU010
4000K	80	5321	5526	177	D	L225-4080016MLU010

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.
3. Energy efficiency class as specified in Commission Delegated Regulation (EU) 2019/2015. The available range of energy efficiency classes is A-G.

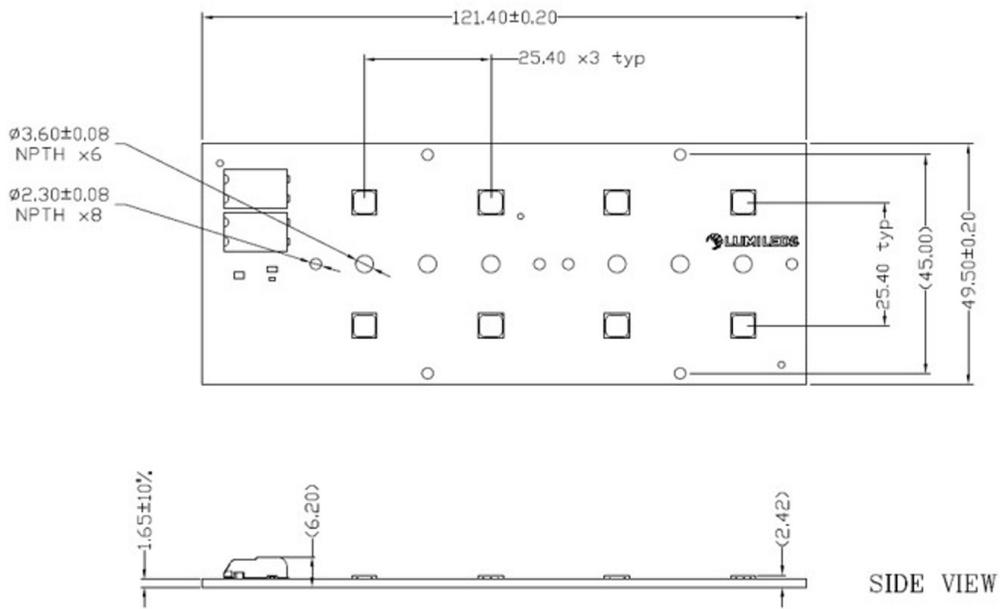
Product performance of LUXEON XR-5050 HE 24up at 1050mA, T<sub>c</sub>=85°C

NOMINAL CCT	MINIMUM CRI <sup>[1, 2]</sup>	LUMINOUS FLUX <sup>[1]</sup> (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	ENERGY EFFICIENCY CLASS <sup>[3]</sup>	PART NUMBER
		MINIMUM	TYPICAL			
2200K	70	6856	7272	155	E	L225-2270024MLU010
2700K	70	7618	8042	171	D	L225-2770024MLU010
3000K	70	7923	8328	177	D	L225-3070024MLU010
4000K	70	8317	8636	184	C	L225-4070024MLU010
5000K	70	8317	8636	184	C	L225-5070024MLU010
5700K	70	8121	8442	179	D	L225-5770024MLU010
2700K	80	6733	7241	154	E	L225-2780024MLU010
3000K	80	7039	7553	161	D	L225-3080024MLU010
4000K	80	7661	8025	171	D	L225-4080024MLU010
5000K	80	7661	8025	171	D	L225-5080024MLU010
5700K	80	7578	7914	168	D	L225-5780024MLU010
5700K	90	6396	6834	145	E	L225-5790024MLU010

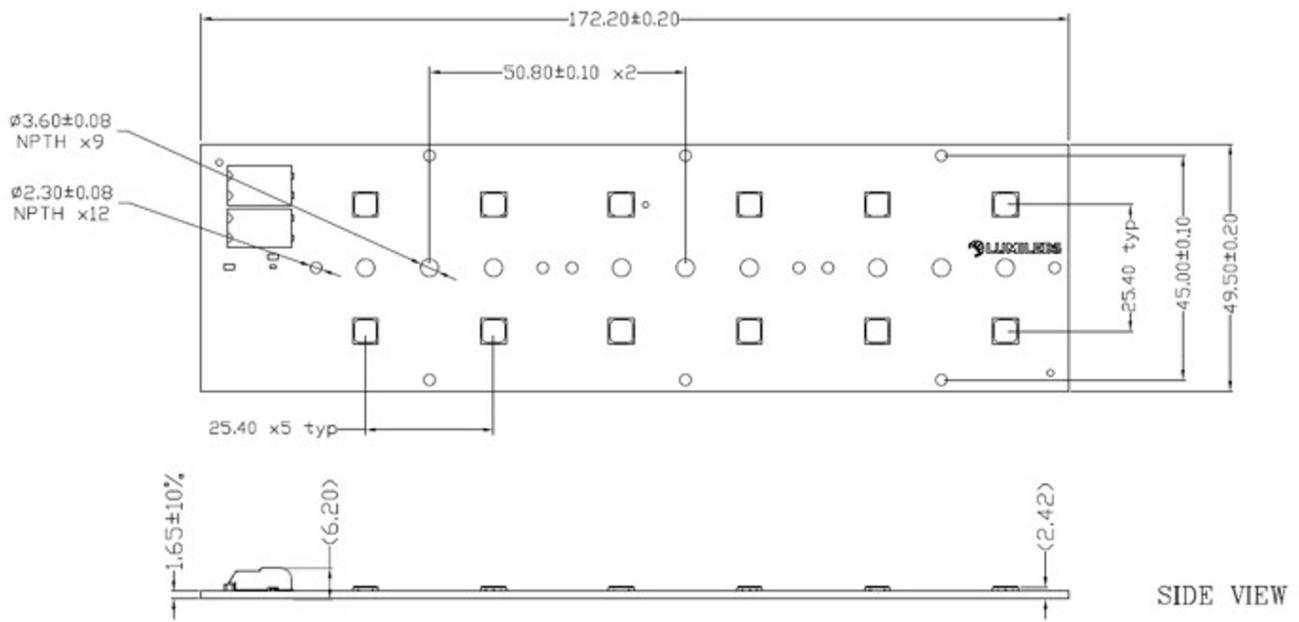
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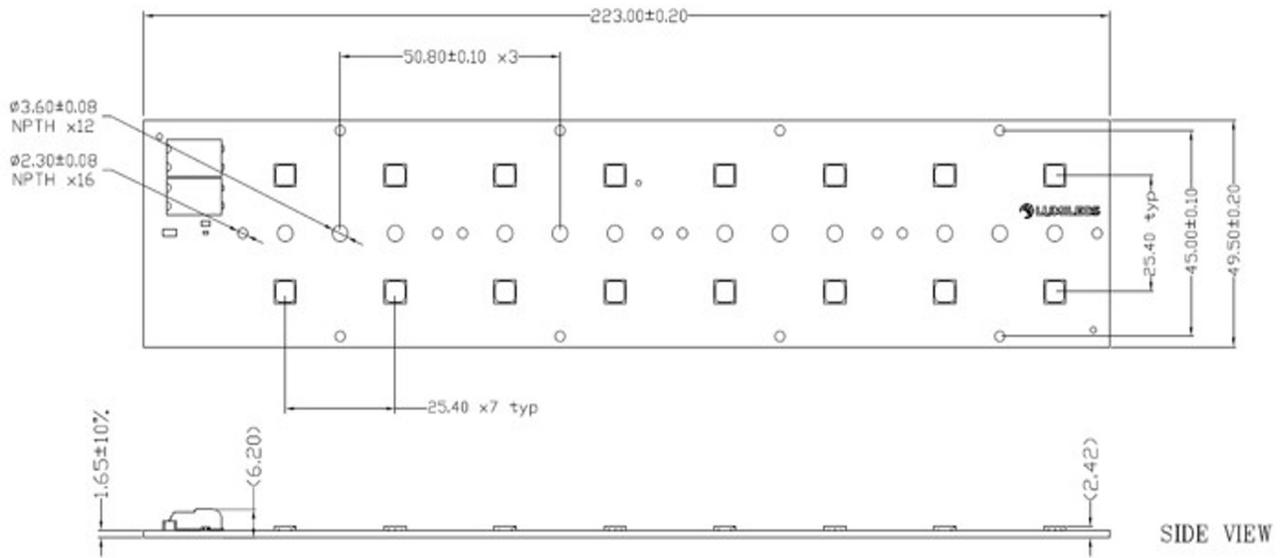
Mechanical Dimensions



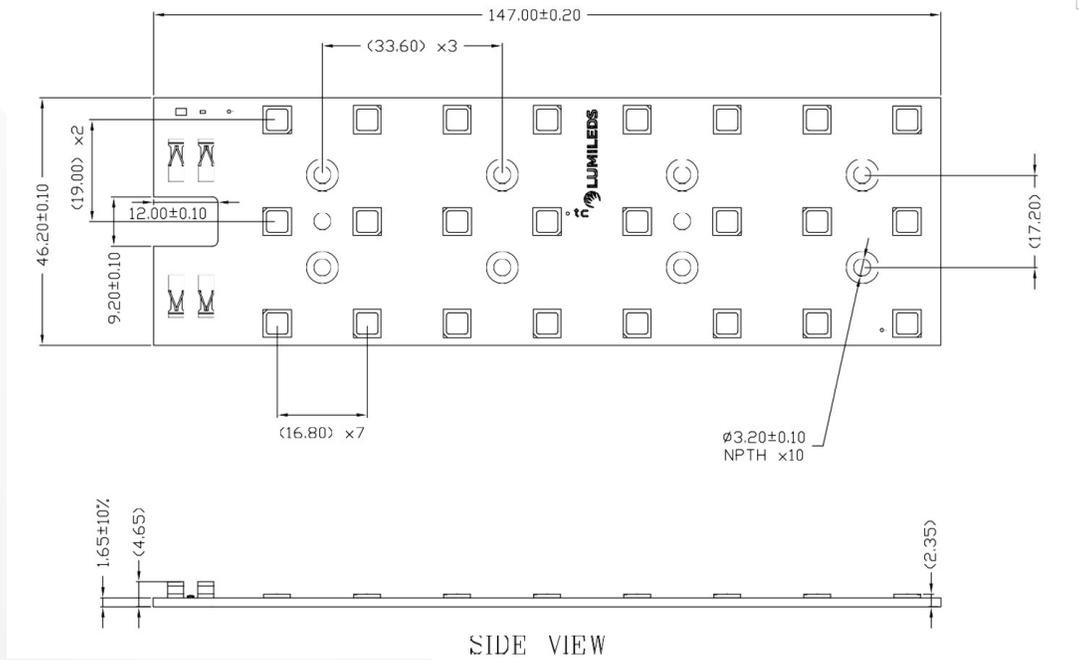
Mechanical dimensions for L225-xxxx008MLU010



Mechanical dimensions for L225-xxxx012MLU010



Mechanical dimensions for L225-xxxx016MLU010



Mechanical dimensions for L225-xxxx024MLU010

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