









LUXEON CoB Core Range Gen 6

Uniform, high efficacy and easy to design array



LUXEON CoB represents a new breakthrough for arrays. Due to its small Light Emitting Surface (LES) and industry-leading thermal resistance, LUXEON CoB is easy to work with, enabling simplified and less expensive luminaire designs. LUXEON CoBs are hot-tested at 85°C—real world operating conditions—which means additional testing can be minimized. LUXEON CoB LEDs are available in 3-step MacAdam ellipse, ensuring uniform optical performance in a wide range of applications.

FEATURES AND BENEFITS

Highest flux densities with industry's smallest LES

3-step MacAdam ellipse color definition: Freedom from Binning for color consistency from luminaire to luminaire

Up to 4x lower thermal resistance than competition, enabling smaller heatsinks and higher lumens

Supported by a comprehensive optical, mechanical and electrical ecosystem

PRIMARY APPLICATIONS

Spotlights
Track Lights
Downlights
High Bay
Low Bay
Floodlights
More









LUXEON CoB Core Range product performance at specified test current, T_i=85°C.

LES ^[1] (mm)	NOMINAL CCT	MINIMUM CRI ^[2, 3, 4]	LUMINOUS FLUX [2] (lm)		TYPICAL	TEST	ENERGY	
			MINIMUM	TYPICAL	LUMINOUS EFFICACY (lm/W)	CURRENT (mA)	CLASS [5]	PART NUMBER [6]
6	2700K	90	984	1093	161	200	D	L2C5-27901202l060
6	3000K	90	978	1087	160	200	D	L2C5-30901202l060
6	3500K	90	994	1105	163	200	D	L2C5-35901202l060
6	4000K	90	1007	1119	165	200	D	L2C5-40901202l060
6	5000K	90	1012	1124	166	200	D	L2C5-50901202l060
9	2700K	90	1013	1126	166	200	D	L2C5-27901202l090
9	3000K	90	1008	1120	165	200	D	L2C5-30901202l090
9	3500K	90	1024	1138	168	200	D	L2C5-35901202l090
9	4000K	90	1037	1152	170	200	D	L2C5-40901202l090
9	5000K	90	1042	1158	171	200	D	L2C5-50901202l090
9	2700K	90	1466	1628	160	300	D	L2C5-27901203l090
9	3000K	90	1458	1620	159	300	D	L2C5-30901203l090
9	3500K	90	1481	1646	162	300	D	L2C5-35901203l090
9	4000K	90	1500	1667	164	300	D	L2C5-40901203I090
9	5000K	90	1508	1675	165	300	D	L2C5-50901203l090
9	2700K	90	1948	2164	160	400	D	L2C5-27901204l090
9	3000K	90	1937	2152	159	400	D	L2C5-30901204l090
9	3500K	90	1968	2187	161	400	D	L2C5-35901204l090
9	4000K	90	1993	2215	163	400	D	L2C5-40901204l090
9	5000K	90	2004	2226	164	400	D	L2C5-50901204l090
13	2700K	90	2857	3174	153	600	D	L2C5-27901205l130
13	3000K	90	2921	3245	157	600	D	L2C5-30901205l130
13	3500K	90	3009	3343	162	600	D	L2C5-35901205l130
13	4000K	90	3083	3426	165	600	D	L2C5-40901205I130
13	5000K	90	3025	3362	162	600	D	L2C5-50901205I130
15	2700K	90	4289	4766	155	900	D	L2C5-27901208I150
15	3000K	90	4485	4983	162	900	D	L2C5-30901208I150
15	3500K	90	4526	5029	163	900	D	L2C5-35901208l150
15	4000K	90	4625	5139	167	900	D	L2C5-40901208I150
15	5000K	90	4552	5057	164	900	D	L2C5-50901208I150
15	2700K	90	4395	4883	161	900	D	L2C5-27901210I150
15	3000K	90	4459	4954	164	900	D	L2C5-30901210I150
15	3500K	90	4538	5042	167	900	D	L2C5-35901210I150
15	4000K	90	4672	5191	172	900	D	L2C5-40901210I150
15	5000K	90	4650	5167	171	900	D	L2C5-50901210I150

- Light Emitting Surface (LES) is the inner diameter (phosphor area) inside the dam. Lumileds maintains a tolerance of ± 2 on CRI and $\pm 6.5\%$ on luminous flux measurements.
- Typical CRI is approximately 2 points higher than the minimum CRI specified, but this is not guaranteed. R9 value of 90CRI products is >50.
- Energy efficiency class as specified in Commission Delegated Regulation (EU) 2019/2015. The available range of energy efficiency classes is A-G. Part number ends with "x" designates SDCM available in both 2-step (x=2) and 3-step (x=0) MacAdam.

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