



LUXEON CoB Core Range – High Density

Double the flux in the same form factor



LUXEON CoB Core Range – High Density focuses on achieving the highest Center Beam Candle Power (CBCP). With a focus on 6, 9 and 11mm Light Emitting Surfaces, we can cover a flux range as high as 8,000 lumens. Using the mechanical dimensions of our LUXEON CoB Core Range, the High Density range will also benefit from the ability to utilize existing an ecosystem of holders, optics and drivers.

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

Downlights

Outdoor

Spotlights

LUXEON CoB Core Range – High Density product performance at specified test current, T_j=85°C.

PRODUCT	NOMINAL CCT	MINIMUM CRI ^[1, 2, 3]	LUMINOUS FLUX ^[1] (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES ^[4] (mm)	ENERGY EFFICIENCY CLASS ^[5]	PART NUMBER	
			MINIMUM	TYPICAL						
LUXEON CoB 1202HD	4000K	70	1505	1673	129	350	6	Note 6	L2C5-40701202EH600	
	5000K	70	1505	1673	129	350	6	Note 6	L2C5-50701202EH600	
	2700K	80	1240	1378	106	350	6	F	L2C5-27801202EH600	
	3000K	80	1368	1520	117	350	6	F	L2C5-30801202EH600	
	3500K	80	1406	1562	121	350	6	E	L2C5-35801202EH600	
	4000K	80	1438	1598	123	350	6	E	L2C5-40801202EH600	
	5000K	80	1425	1583	122	350	6	E	L2C5-50801202EH600	
	5700K	80	1432	1591	123	350	6	E	L2C5-57801202EH600	
	2700K	90	1134	1260	97	350	6	Note 6	L2C5-27901202EH600	
	3000K	90	1211	1345	104	350	6	F	L2C5-30901202EH600	
	3500K	90	1223	1359	105	350	6	F	L2C5-35901202EH600	
	4000K	90	1218	1353	104	350	6	F	L2C5-40901202EH600	
	LUXEON CoB 1204HD	3000K	70	2887	3207	124	700	9	Note 6	L2C5-30701204E0900
		3500K	70	2800	3111	120	700	9	Note 6	L2C5-35701204E0900
4000K		70	3011	3345	129	700	9	Note 6	L2C5-40701204E0900	
5000K		70	3011	3345	129	700	9	Note 6	L2C5-50701204E0900	
5700K		70	2866	3185	123	700	9	Note 6	L2C5-57701204E0900	
6500K		70	2824	3137	121	700	9	Note 6	L2C5-65701204E0900	
2200K		80	2140	2378	92	700	9	Note 6	L2C5-22801204E0900	
2700K		80	2554	2838	110	700	9	Note 6	L2C5-27801204E0900	
3000K		80	2688	2987	115	700	9	F	L2C5-30801204E0900	
3500K		80	2742	3047	118	700	9	F	L2C5-35801204E0900	
4000K		80	2850	3167	122	700	9	E	L2C5-40801204E0900	
5000K		80	2850	3167	122	700	9	E	L2C5-50801204E0900	
5700K		80	2891	3212	124	700	9	E	L2C5-57801204E0900	
2200K		90	1864	2071	80	700	9	Note 6	L2C5-22901204E0900	
2700K		90	2187	2430	94	700	9	Note 6	L2C5-27901204E0900	
3000K		90	2306	2562	99	700	9	Note 6	L2C5-30901204E0900	
3200K		90	2340	2600	100	700	9	Note 6	L2C5-32901204E0900	
3500K		90	2520	2800	108	700	9	F	L2C5-35901204E0900	
4000K		90	2551	2834	109	700	9	F	L2C5-40901204E0900	
LUXEON CoB 1205HD		4000K	70	3780	4200	126	900	11	Note 6	L2C5-40701205E1100
	5000K	70	3780	4200	126	900	11	Note 6	L2C5-50701205E1100	
	2700K	80	3306	3673	110	900	11	Note 6	L2C5-27801205E1100	
	3000K	80	3463	3848	116	900	11	Note 6	L2C5-30801205E1100	
	3500K	80	3546	3940	118	900	11	Note 6	L2C5-35801205E1100	
	4000K	80	3650	4056	122	900	11	Note 6	L2C5-40801205E1100	
	5000K	80	3545	3939	118	900	11	Note 6	L2C5-50801205E1100	
	5700K	80	3703	4114	124	900	11	Note 6	L2C5-57801205E1100	
	2700K	90	2763	3070	92	900	11	Note 6	L2C5-27901205E1100	
	3000K	90	2925	3250	98	900	11	Note 6	L2C5-30901205E1100	
	4000K	90	3176	3529	106	900	11	Note 6	L2C5-40901205E1100	

Table notes:

1. Lumileds maintains a tolerance of ±2 on CRI and ±6.5% on luminous flux measurements.
2. Typical CRI is approximately 2 points higher than the minimum CRI specified, but this is not guaranteed.
3. R9 value of 90CRI products is >50.
4. Light Emitting Surface (LES) is the inner diameter (phosphor area) inside the dam.
5. Energy efficiency class as specified in Commission Delegated Regulation (EU) 2019/2015. The available range of energy efficiency classes is A-G.
6. Exception: Not available in EU or UK.