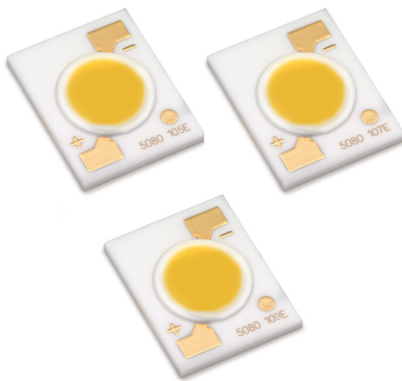




# LUXEON CoB Compact Range

Unsurpassed light quality and CBCP due to small LES



LUXEON CoB Compact Range offers the industry's smallest Light Emitting Surface (LES) that enables more cost effective designs and provides good Center Beam Candle Power (CBCP) for crisp light beams with the best luminance and color uniformity. LUXEON CoB Compact Range parts are available in 3-step (80CRI and 90CRI) MacAdam ellipse, ensuring uniform optical performance in retrofit lamps and spotlight applications. LUXEON CoB Compact Range LEDs are all hot-tested at 85°C—real world operating conditions—which means that luminaire design is simplified and testing can be minimized.

## FEATURES AND BENEFITS

- Highest flux densities with industry's smallest LES, 6.5mm
- Industry leading thermal resistance allows for smaller heat sinks
- Ceramic substrate that offers better protection in Hi Pot testing
- Supported by a comprehensive optical, mechanical and electrical ecosystem
- 3-step MacAdam ellipse color definition: *Freedom from Binning* for color consistency from luminaire to luminaire
- Tested at  $T_j=85^{\circ}\text{C}$  for accurate color in application

## PRIMARY APPLICATIONS

- Downlights
- High Bay & Low Bay
- Lamps
  - Directional
- Spotlights

LUXEON CoB Compact Range product performance at test current, T<sub>j</sub>=85°C.

PRODUCT	FORWARD VOLTAGE (V <sub>f</sub> )	NOMINAL CCT	MINIMUM CRI <sup>[1,2]</sup>	LUMINOUS FLUX <sup>[1]</sup> (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES (mm)	PART NUMBER
				MINIMUM	TYPICAL				
LUXEON CoB 105	12V	2700K	80	405	450	112	350	6.5	L2C3-2780105B06000
		3000K	80	425	472	117	350	6.5	L2C3-3080105B06000
		3500K	80	435	493	122	350	6.5	L2C3-3580105B06000
		4000K	80	457	507	126	350	6.5	L2C3-4080105B06000
		2700K	90	347	385	96	350	6.5	L2C3-2790105B06000
		3000K	90	369	410	102	350	6.5	L2C3-3090105B06000
		3500K	90	378	419	104	350	6.5	L2C3-3590105B06000
		4000K	90	395	439	109	350	6.5	L2C3-4090105B06000
	36V	2200K	80	375	425	79	150	6.5	L2C3-2280105E06000
		2700K	80	525	575	106	150	6.5	L2C3-2780105E06000
		3000K	80	525	600	111	150	6.5	L2C3-3080105E06000
		3500K	80	525	600	111	150	6.5	L2C3-3580105E06000
		4000K	80	550	625	116	150	6.5	L2C3-4080105E06000
		5000K	80	600	650	120	150	6.5	L2C3-5080105E06000
		5700K	80	600	650	120	150	6.5	L2C3-5780105E06000
		2200K	90	350	400	74	150	6.5	L2C3-2290105E06000
		2700K	90	450	500	93	150	6.5	L2C3-2790105E06000
		3000K	90	475	500	93	150	6.5	L2C3-3090105E06000
		3500K	90	475	525	97	150	6.5	L2C3-3590105E06000
		4000K	90	525	575	106	150	6.5	L2C3-4090105E06000
LUXEON CoB 107	36V	2200K	80	500	550	77	200	6.5	L2C3-2280107E06000
		2700K	80	625	725	102	200	6.5	L2C3-2780107E06000
		3000K	80	650	750	106	200	6.5	L2C3-3080107E06000
		3500K	80	675	750	106	200	6.5	L2C3-3580107E06000
		4000K	80	700	775	109	200	6.5	L2C3-4080107E06000
		5000K	80	700	800	113	200	6.5	L2C3-5080107E06000
		5700K	80	700	800	113	200	6.5	L2C3-5780107E06000
		2200K	90	450	500	70	200	6.5	L2C3-2290107E06000
		2700K	90	550	625	88	200	6.5	L2C3-2790107E06000
		3000K	90	550	650	92	200	6.5	L2C3-3090107E06000
		3500K	90	575	675	95	200	6.5	L2C3-3590107E06000
		4000K	90	600	675	95	200	6.5	L2C3-4090107E06000

Table continued on next page:

1. Lumileds maintains a tolerance of ±2 on CRI and ±6.5% on luminous flux measurements.
2. Typical CRI is approximately 2 points more than the CRI minimum, but not guaranteed.

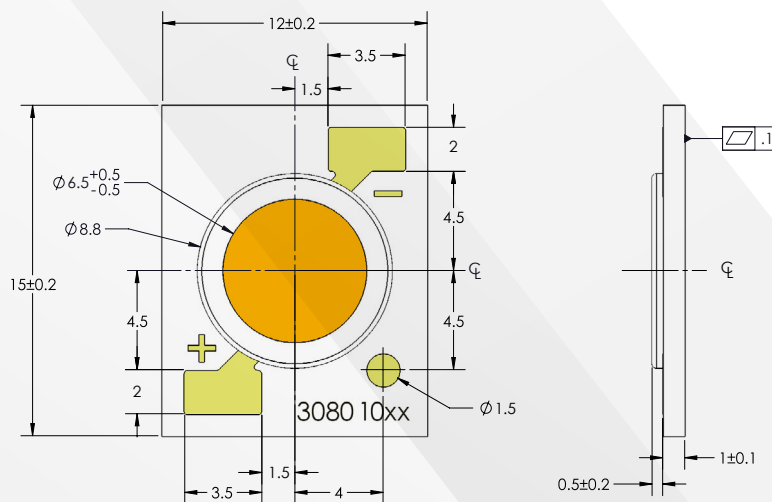
LUXEON CoB Compact Range product performance at test current,  $T_j=85^{\circ}\text{C}$  (continued).

PRODUCT	FORWARD VOLTAGE (V <sub>f</sub> )	NOMINAL CCT	MINIMUM CRI <sup>[1,2]</sup>	LUMINOUS FLUX <sup>[1]</sup> (lm)		TYPICAL LUMINOUS EFFICACY (lm/W)	TEST CURRENT (mA)	LES (mm)	PART NUMBER	
				MINIMUM	TYPICAL					
LUXEON CoB 109	24V	2700K	80	792	880	109	350	6.5	L2C3-2780109D06000	
		3000K	80	810	900	112	350	6.5	L2C3-3080109D06000	
		3500K	80	842	936	117	350	6.5	L2C3-3580109D06000	
		4000K	80	871	968	120	350	6.5	L2C3-4080109D06000	
		2700K	90	680	755	94	350	6.5	L2C3-2790109D06000	
		3000K	90	710	789	98	350	6.5	L2C3-3090109D06000	
		3500K	90	720	800	99	350	6.5	L2C3-3590109D06000	
		4000K	90	753	837	104	350	6.5	L2C3-4090109D06000	
		36V	2200K	80	700	775	87	250	6.5	L2C3-2280109E06000
			2700K	80	875	975	110	250	6.5	L2C3-2780109E06000
	3000K		80	900	1025	115	250	6.5	L2C3-3080109E06000	
	3500K		80	950	1075	121	250	6.5	L2C3-3580109E06000	
	4000K		80	950	1075	121	250	6.5	L2C3-4080109E06000	
	5000K		80	1000	1100	124	250	6.5	L2C3-5080109E06000	
	5700K		80	1000	1100	124	250	6.5	L2C3-5780109E06000	
	2200K		90	625	700	79	250	6.5	L2C3-2290109E06000	
	2700K		90	775	850	96	250	6.5	L2C3-2790109E06000	
	3000K		90	775	875	99	250	6.5	L2C3-3090109E06000	
	3500K	90	800	875	99	250	6.5	L2C3-3590109E06000		
	4000K	90	825	925	104	250	6.5	L2C3-4090109E06000		

Notes:

1. Lumileds maintains a tolerance of  $\pm 2$  on CRI and  $\pm 6.5\%$  on luminous flux measurements.
2. Typical CRI is approximately 2 points more than the CRI minimum, but not guaranteed.

Mechanical Dimensions.



Notes:

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

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