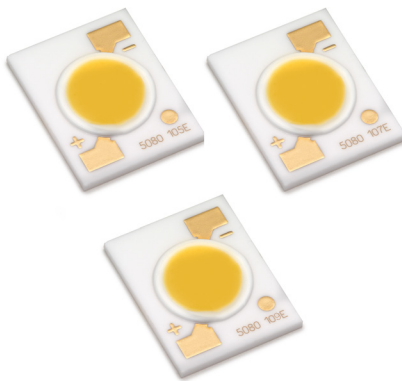




LUXEON CoB Compact Range

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, $T_j=85^{\circ}\text{C}$.

| PRODUCT | FORWARD VOLTAGE (V _f) | NOMINAL CCT | MINIMUM CRI ^[1,2] | LUMINOUS FLUX ^[1] (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 $\pm 6.5\%$ on luminous flux measurements.
2. Typical CRI is approximately 2 points more than the CRI minimum, but not guaranteed.

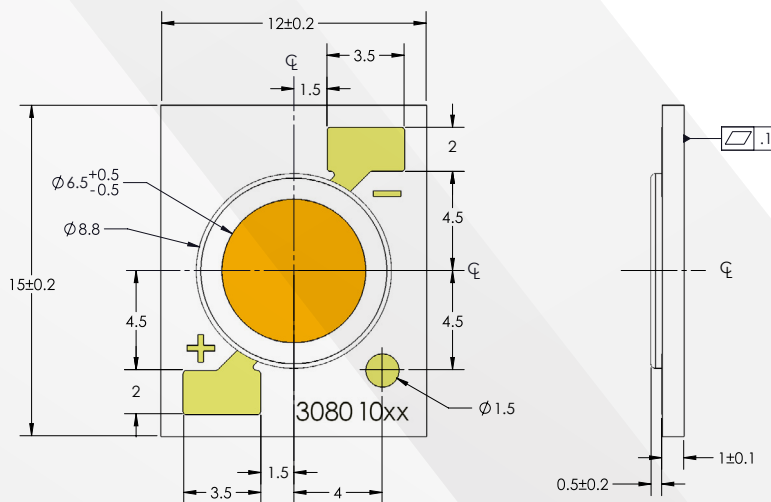
LUXEON CoB Compact Range product performance at test current, T_j=85°C (continued).

| PRODUCT | FORWARD VOLTAGE (V _f) | NOMINAL CCT | MINIMUM CRI ^[1,2] | LUMINOUS FLUX ^[1] (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 ±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.

Mechanical Dimensions.



Notes:

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

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