

# LUXEON CoB

## High Uniformity and High Efficiency Array



LUXEON® CoB is a high-voltage, high-lumen array solution enabling the best efficacy and performance in a very small Light Emitting Surface. LUXEON CoB is the best choice for high lumen downlights (1000-6000 lm) and directional bulbs (like PAR/AR111) due to its uniform, robust package.

### Features

- Efficacies up to 120 lm/W hot
- Small LES
- 36V solution
- Existing ecosystem
- High circular uniformity
- MCPCB solution
- 85°C = T<sub>j</sub> tested

### Benefits

- Easier to meet standards (e.g. ENERGY STAR)
- Enabling smaller optics/beam angles
- Compatible with efficient driver systems
- Holders and clamps ready to fit on the CoB
- Perfect match with reflectors and lenses
- Increased robustness in handling the parts
- Guaranteed performance in application conditions

### Key Applications

- Retrofit bulbs
- Downlights
- Spotlights

**Table I. Performance and Electrical Characteristics at T<sub>j</sub> = 85°C for 3000K parts (80 CRI)**

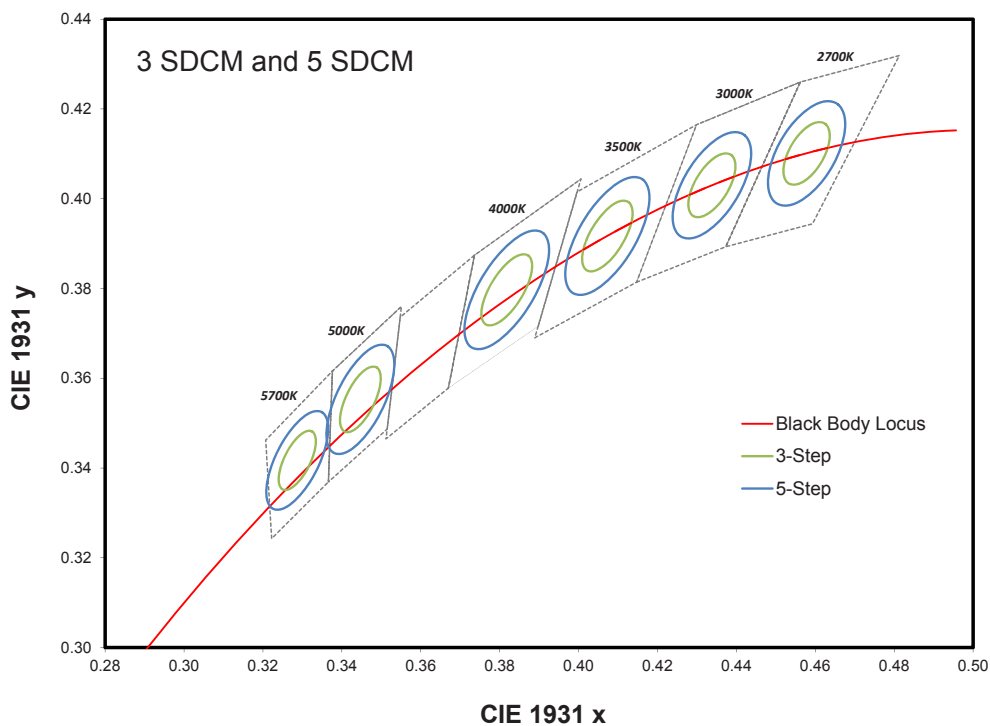
Nominal CCT	Part Number	If	Luminous Flux <sup>[1]</sup>	CRI <sup>[1]</sup>	Vf	Efficacy	LES <sup>[2]</sup>	Thermal Resistance Junction to case <sup>[3]</sup>
		mA	Typ. lm	Min	Typ	Typ. lm/W	(mm)	Typ. R <sub>th</sub> (°C/W)
3000K	LHCI-3080-1203	300	1150	>80	36	105	9	0.49
3000K	LHCI-3080-1204	450	1725	>80	36	105	13	0.40
3000K	LHCI-3080-1205	600	2300	>80	36	105	13	0.32
3000K	LHCI-3080-1208	900	3450	>80	36	105	15	0.22

#### Notes for Table:

1. Philips Lumileds maintains a tolerance of ±6.5% on luminous flux, ±2 on CRI.
2. Light Emitting Surface (LES) is the inner diameter (phosphor area) inside the dam.
3. Thermal Resistance is based on junction to case with a tolerance of ±0.05 K/W.

## Color Bin Definitions

### LUXEON Chip-On-Board Color Proliferations



## Ecosystem for LUXEON CoB

[www.philipslumileds.com/designtools](http://www.philipslumileds.com/designtools)



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