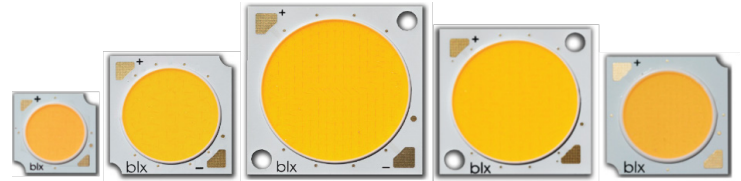


F90™ Generation 2

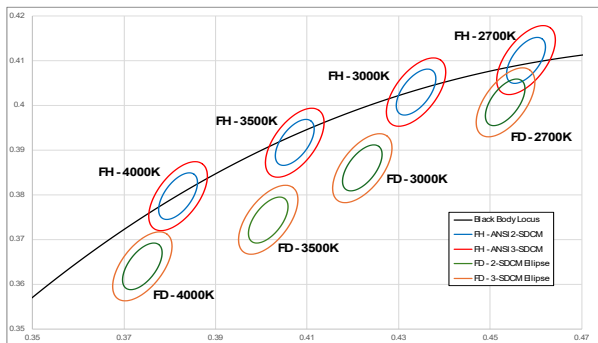
F90™ Generation 2 Differentiation

Bridgelux F90™ Generation 2 Chip-on-Board (COB) series is the latest in KSF phosphor technology products by Bridgelux. F90 Generation 2 is a breakthrough for color-point stability across wider operating temperatures than previous generations, all while achieving CRI 90 at efficacy levels that match or exceed conventional CRI 80 products. Building on the proven F90 platform, Generation 2 addresses the primary limitation of the previous generation – color shift over temperature – while further elevating performance for demanding professional lighting applications. The high-fidelity spectral output of F90 creates stunning environments with excellent color rendering and outstanding TM-30 metrics.



Features

- F90 Gen2 performance is same or better than CRI80 at wider temperature ranges
- Typical efficacy of CRI90 COBs, up to 201 lm/W when under-driven by 30%
- Two color point options of ANSI compliant color bins, and Bridgelux white color points Below Black Body Locus
- FH Version - CIE binned at $T_c = 65^\circ\text{C}$ along Black Body Locus (BBL)
- FD Version - CIE binned at $T_c = 65^\circ\text{C}$ Below BBL
- Industry standard form factors and footprint
- Delivering a CRI of min 90 and Rg of min 50
- DLC Premium Lumen maintenance $L_{90} \geq 36,000$ hours



Benefits

- Typical color shift ($\Delta u'v'$) of ≤ 0.004 from 25°C to 85°C (previously ≤ 0.006)
- Enables high efficiency lighting systems and lower operating costs
- Supports the trend toward luminaire miniaturization and delivers enhanced optical control
- Design flexibility for a broad range of lighting applications
- Clean white light without pixelation
- Increase the vividness of strong red colors particularly desirable in retail applications
- Easy to use with daylight and motion sensors to increase energy savings
- General lighting to high-end retail luxury applications
- Design with confidence

Applications

- Retail & Hospitality
- Architectural & Museums
- Industrial & Warehouse
- Residential
- Healthcare
- Education
- Entertainment
- Food



F90 Gen2 Product	CCT Range	F90 Target	SDCM	Typ Flux (lm)* 3000K 90 CRI	Drive Current (mA)	Voltage (V)	Power (W)	Efficacy (lm/W)* 3000K, 90 CRI	True LES (mm)	Datasheets
V10A	2700K - 6500K	FH/FD	2, 3	1892	300	33.9	10.2	186	10.2	DS1305-10/11
V13C	2700K - 6500K	FH/FD	2, 3	3176	500	33.8	16.9	188	13.6	DS1304-12/13
V13H	2700K - 6500K	FH/FD	2, 3	4026	630	33.8	21.3	189	14.8	DS1304-10/11
V15H	2700K - 6500K	FH/FD	2, 3	4775	750	33.9	25.4	188	15.6	DS1308-10/11
V18H	2700K - 6500K	FH/FD	2, 3	6069	950	33.9	32.2	189	19.6	DS1309-10/11
V22H	2700K - 6500K	FH/FD	2, 3	7677	1050	33.9	35.6	189	23.3	DS1310-10/11

* All measurements are at $T_c = 25^\circ\text{C}$

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For more information: [bridgelux.com](https://www.bridgelux.com)
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