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Rev. 1.0 Sep 2015



High Quality Lighting Performance

Samsung COB LED LC Series



Ultra High CRICOB

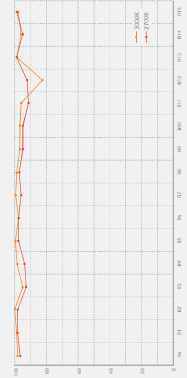
Achieving true colors

- Super High CRI: Typ. Ra 97
- Efficacy: 105 lm/W @ 3000 K, CRI 95+
- Completed 54,000 hours of LM-80 testing @ 1,05 A, 105°C (T8)

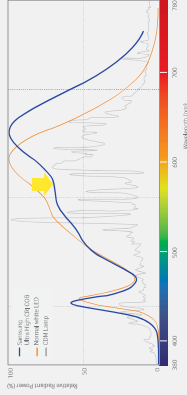
Applications Premium Lighting for Luxury Shop



Excellent color index distribution (Ra > 95, R9 > 95)



Similar Spectrum with the CDM Lamp than normal white LED



Standard COB (CRI 90+)

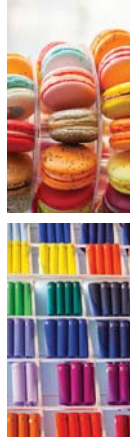
Ultra High CRI COB (CRI 95+)

Vivid Color COB

For more brilliant & attractive displaying

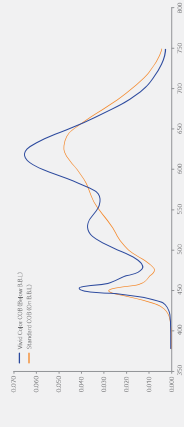
- Vivid white without yellowish tint
- Efficacy: 124 lm/W @ 3000 K, CH g2
- 6,000 hours of LM-80 testing, May 2016

Applications: Spotlights, Downlights

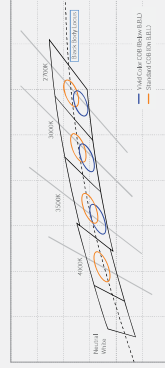


Spectrum tuning for brilliant saturated colors

Reducing yellowish tint such as filtered conventional lamp



The Chromaticity of Vivid Color COB



Halogen Lamp



Vivid Color COB

Small LES COB

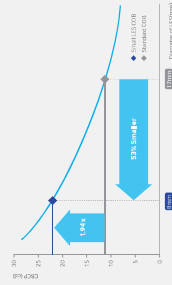
Best solution for narrow beam spot and down light

- Adapted new flip chip based technology
 - Low droop characteristic by current & thermal
 - No wire bonding - High reliability
- Efficacy: 110 lm/W @ 3000 K, CRI 80+, 85°C
- 6,000 hours of LM-40 testing; Feb. 2016

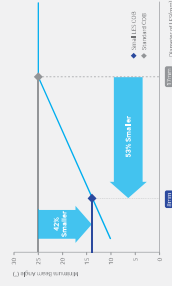
Applications Spotlights, Downlights



Higher Flux Intensity

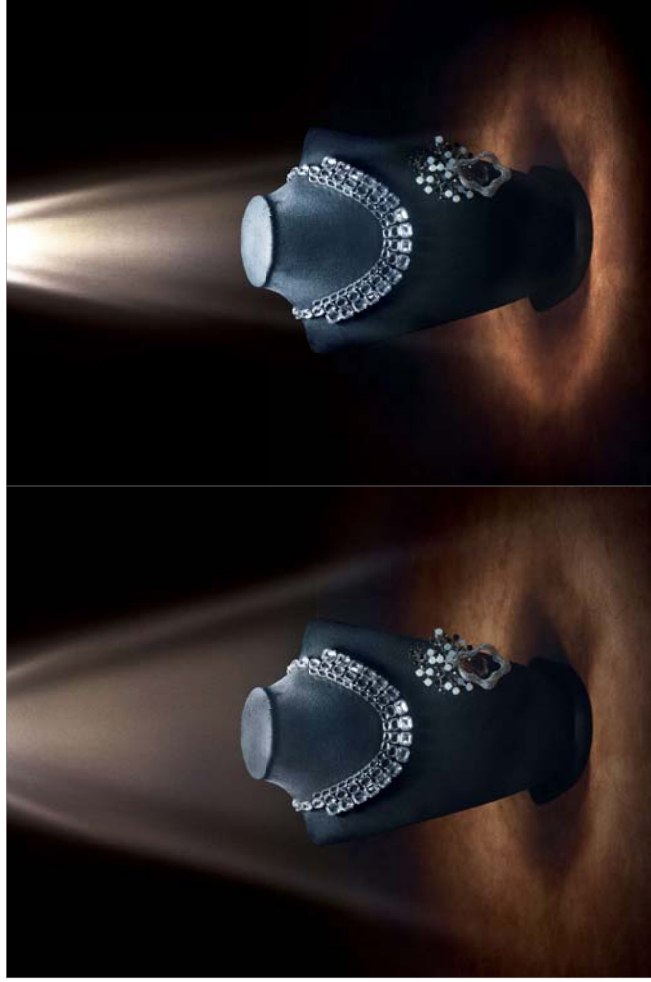
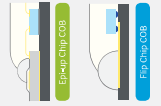
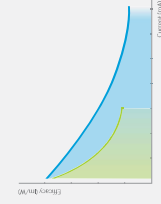


Narrow Beam Angle Solution



New Flip Chip based technology

- Low droop characteristic by current & Thermal
- No wire bonding - High reliability

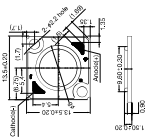


Standard COB

Small LES COB

LC006B • LC008B

Ultra-High-CRI COB / Wide Color COB / Standard COB

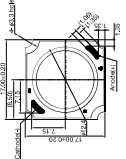
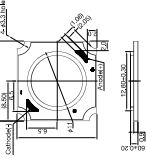


Product	CRI min.	CCT K	16 ± 3°C		T _a = 35°C		T _a = 35°C Typ. Flux lm/W	T _a = 35°C Typ. Efficiency lm/W	T _a = 35°C Typ. Power W	T _a = 35°C Typ. Beam Angle °	Part Number
			Typ. Flux lm/W	Typ. Efficiency lm/W	Typ. Power W						
LC006B	Wid	3000	805	126	733	747	119	119	119	119	SPHWWHDNS2YH13CF
		4000	829	130	755	755	122	122	122	122	SPHWWHDNS2YH13CF
		2700	688	108	626	626	102	102	102	102	SPHWWHDNS2YH32CF
	95	3000	709	111	645	645	105	105	105	105	SPHWWHDNS2YH32CF
		2700	773	121	703	715	108	108	108	108	SPHWWHDNS2YH32CF
		3000	805	126	733	733	119	119	119	119	SPHWWHDNS2YH13CF
	90	3500	821	129	747	747	122	122	122	122	SPHWWHDNS2YH13CF
		4000	829	130	755	755	123	123	123	123	SPHWWHDNS2YH13CF
		2700	620	144	837	837	137	137	137	137	SPHWWHDNS2YH32CF
		3000	659	150	872	872	142	142	142	142	SPHWWHDNS2YH32CF
	80	4000	697	156	907	907	148	148	148	148	SPHWWHDNS2YH32CF
		5000	867	155	898	898	146	146	146	146	SPHWWHDNS2YH32CF
	5100	867	155	898	898	146	146	146	146	SPHWWHDNS2YH32CF	
	3000	867	155	898	898	146	146	146	146	SPHWWHDNS2YH32CF	
70	4000	1037	162	1033	1033	152	152	152	152	SPHWWHDNS2YH32CF	
	5000	1037	162	1033	1033	152	152	152	152	SPHWWHDNS2YH32CF	
	5000	1037	162	1033	1033	152	152	152	152	SPHWWHDNS2YH32CF	
	3000	1104	126	1054	1054	119	119	119	119	SPHWWHDNS2YH13CF	
Wid	3000	1126	129	1025	1025	122	122	122	122	SPHWWHDNS2YH13CF	
	4000	1137	130	1035	1035	123	123	123	123	SPHWWHDNS2YH13CF	
	2700	843	108	868	868	102	102	102	102	SPHWWHDNS2YH32CF	
95	3000	872	111	885	885	105	105	105	105	SPHWWHDNS2YH32CF	
	2700	1002	114	911	911	108	108	108	108	SPHWWHDNS2YH32CF	
	3000	1104	121	964	964	115	115	115	115	SPHWWHDNS2YH13CF	
	3000	1104	126	1004	1004	119	119	119	119	SPHWWHDNS2YH13CF	
90	3500	1126	129	1025	1025	122	122	122	122	SPHWWHDNS2YH13CF	
	4000	1137	130	1035	1035	123	123	123	123	SPHWWHDNS2YH13CF	
	2700	1261	144	1148	1148	137	137	137	137	SPHWWHDNS2YH32CF	
	3000	1261	144	1148	1148	137	137	137	137	SPHWWHDNS2YH32CF	
	3500	1340	150	1196	1196	142	142	142	142	SPHWWHDNS2YH32CF	
80	4000	1387	156	1244	1244	148	148	148	148	SPHWWHDNS2YH32CF	
	5000	1533	155	1232	1232	146	146	146	146	SPHWWHDNS2YH32CF	
	5100	1533	155	1232	1232	146	146	146	146	SPHWWHDNS2YH32CF	
	3000	1533	155	1219	1219	145	145	145	145	SPHWWHDNS2YH32CF	
70	4000	1421	162	1279	1279	152	152	152	152	SPHWWHDNS2YH32CF	
	5000	1425	164	1281	1281	154	154	154	154	SPHWWHDNS2YH32CF	

® Bin option is available, please refer to data sheet for more details.

LC013B • LC019B

Ultra-High-CRI COB / Wide Color COB / Standard COB

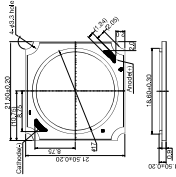


Product	CRI min.	CCT K	16 ± 3°C		T _a = 35°C		T _a = 35°C Typ. Flux lm/W	T _a = 35°C Typ. Efficiency lm/W	T _a = 35°C Typ. Power W	T _a = 35°C Typ. Beam Angle °	Part Number
			Typ. Flux lm/W	Typ. Efficiency lm/W	Typ. Power W						
LC013B	Wid	3000	1610	126	1463	1463	119	119	119	119	SPHWWHDNS2YH13CF
		4000	1659	130	1509	1509	123	123	123	123	SPHWWHDNS2YH13CF
		2700	1376	108	1252	1252	102	102	102	102	SPHWWHDNS2YH32CF
	95	3000	1419	111	1291	1291	105	105	105	105	SPHWWHDNS2YH32CF
		3500	1461	114	1330	1330	108	108	108	108	SPHWWHDNS2YH32CF
		2700	1546	121	1407	1407	115	115	115	115	SPHWWHDNS2YH13CF
		3000	1610	126	1465	1465	119	119	119	119	SPHWWHDNS2YH13CF
	90	3500	1642	129	1495	1495	122	122	122	122	SPHWWHDNS2YH13CF
		4000	1659	130	1509	1509	123	123	123	123	SPHWWHDNS2YH13CF
		2700	1840	144	1675	1675	137	137	137	137	SPHWWHDNS2YH32CF
		3000	1917	150	1744	1744	142	142	142	142	SPHWWHDNS2YH32CF
	80	4000	1955	153	1779	1779	145	145	145	145	SPHWWHDNS2YH32CF
	5000	1994	156	1815	1815	148	148	148	148	SPHWWHDNS2YH32CF	
	5100	1975	155	1797	1797	146	146	146	146	SPHWWHDNS2YH32CF	
	3000	1975	155	1777	1777	145	145	145	145	SPHWWHDNS2YH32CF	
70	4000	2073	162	1886	1886	154	154	154	154	SPHWWHDNS2YH32CF	
	5000	2073	162	1886	1886	154	154	154	154	SPHWWHDNS2YH32CF	
	5000	2073	162	1886	1886	154	154	154	154	SPHWWHDNS2YH32CF	
	3000	2415	126	2198	2198	119	119	119	119	SPHWWHDNS2YH13CF	
Wid	3000	2464	129	2243	2243	122	122	122	122	SPHWWHDNS2YH13CF	
	4000	2488	130	2264	2264	123	123	123	123	SPHWWHDNS2YH13CF	
	2700	2484	108	1878	1878	102	102	102	102	SPHWWHDNS2YH32CF	
95	3000	2498	111	1906	1906	105	105	105	105	SPHWWHDNS2YH32CF	
	3500	2498	114	1904	1904	108	108	108	108	SPHWWHDNS2YH32CF	
	2700	2415	121	2110	2110	115	115	115	115	SPHWWHDNS2YH13CF	
	3000	2415	126	2188	2188	119	119	119	119	SPHWWHDNS2YH13CF	
90	3500	2464	129	2242	2242	122	122	122	122	SPHWWHDNS2YH13CF	
	4000	2488	130	2264	2264	123	123	123	123	SPHWWHDNS2YH13CF	
	2700	2760	144	2512	2512	137	137	137	137	SPHWWHDNS2YH32CF	
	3000	2876	150	2659	2659	142	142	142	142	SPHWWHDNS2YH32CF	
80	4000	2892	153	2689	2689	145	145	145	145	SPHWWHDNS2YH32CF	
	5000	2892	156	2722	2722	148	148	148	148	SPHWWHDNS2YH32CF	
	5100	2882	155	2695	2695	146	146	146	146	SPHWWHDNS2YH32CF	
	3000	2882	155	2695	2695	146	146	146	146	SPHWWHDNS2YH32CF	
	3000	2882	155	2666	2666	145	145	145	145	SPHWWHDNS2YH32CF	
70	4000	3110	162	2799	2799	152	152	152	152	SPHWWHDNS2YH32CF	
	5000	3109	164	2800	2800	154	154	154	154	SPHWWHDNS2YH32CF	

® Bin option is available, please refer to data sheet for more details.

LC026B • LC033B LC040B

Ultra-High-CRI COB / Wide Color COB / Standard COB

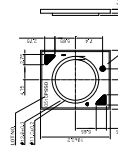
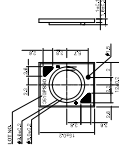
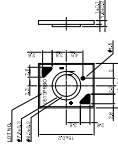


Product	CIR Size, (R)	CCT	Ta = 25°C		Ta = 85°C		Part Number
			Typ. Input Flux lm/W	Typ. Input Power W	Typ. Input Flux lm/W	Typ. Input Power W	
LC026B	Vivid	3000	3,421	128	2,831	119	SPHWWH0N023YH12ZF
		4000	3,417	130	2,831	122	SPHWWH0N023YH12ZF
		5000	3,417	130	2,831	122	SPHWWH0N023YH12ZF
	95	2700	2,732	105	2,504	102	SPHWWH0N023YH12ZF
		3500	2,822	114	2,656	108	SPHWWH0N023YH12ZF
		5000	3,092	121	2,813	115	SPHWWH0N023YH12ZF
	80	3500	3,295	129	2,968	122	SPHWWH0N023YH12ZF
		4000	3,217	130	3,019	123	SPHWWH0N023YH12ZF
		5000	3,834	150	3,489	142	SPHWWH0N023YH12ZF
	80	4000	3,893	150	3,850	148	SPHWWH0N023YH12ZF
		5000	3,849	155	3,594	148	SPHWWH0N023YH12ZF
		5000	3,849	155	3,554	145	SPHWWH0N023YH12ZF
70	4000	4,148	162	3,729	152	SPHWWH0N023YH12ZF	
	4000	4,026	156	3,663	149	SPHWWH0N023YH12ZF	
	5000	4,108	159	3,727	152	SPHWWH0N023YH12ZF	
LC033B	Vivid	3000	3,440	128	3,150	122	SPHWWH0N023YH12ZF
		4000	3,440	128	3,150	122	SPHWWH0N023YH12ZF
		5000	3,440	128	3,150	122	SPHWWH0N023YH12ZF
	95	2700	2,732	105	2,504	102	SPHWWH0N023YH12ZF
		3500	2,822	114	2,656	108	SPHWWH0N023YH12ZF
		5000	3,092	121	2,813	115	SPHWWH0N023YH12ZF
	80	3500	3,295	129	2,968	122	SPHWWH0N023YH12ZF
		4000	3,217	130	3,019	123	SPHWWH0N023YH12ZF
		5000	3,834	150	3,489	142	SPHWWH0N023YH12ZF
	80	4000	3,893	150	3,850	148	SPHWWH0N023YH12ZF
		5000	3,849	155	3,594	148	SPHWWH0N023YH12ZF
		5000	3,849	155	3,554	145	SPHWWH0N023YH12ZF
70	4000	4,148	162	3,729	152	SPHWWH0N023YH12ZF	
	4000	4,026	156	3,663	149	SPHWWH0N023YH12ZF	
	5000	4,108	159	3,727	152	SPHWWH0N023YH12ZF	
LC040B	Vivid	3000	4,927	129	4,684	122	SPHWWH0N023YH12ZF
		4000	4,927	129	4,684	122	SPHWWH0N023YH12ZF
		5000	4,927	129	4,684	122	SPHWWH0N023YH12ZF
	95	2700	4,129	108	3,757	102	SPHWWH0N023YH12ZF
		3500	4,259	111	3,873	105	SPHWWH0N023YH12ZF
		5000	4,639	121	4,220	115	SPHWWH0N023YH12ZF
	80	3500	4,821	128	4,496	122	SPHWWH0N023YH12ZF
		4000	4,821	128	4,496	122	SPHWWH0N023YH12ZF
		5000	5,751	150	5,253	142	SPHWWH0N023YH12ZF
	80	3500	5,866	153	5,338	145	SPHWWH0N023YH12ZF
		4000	5,824	155	5,306	146	SPHWWH0N023YH12ZF
		5000	6,220	162	5,698	152	SPHWWH0N023YH12ZF
70	4000	6,220	162	5,698	152	SPHWWH0N023YH12ZF	
	4000	6,220	162	5,698	152	SPHWWH0N023YH12ZF	
	5000	6,279	164	5,651	154	SPHWWH0N023YH12ZF	

ⓘ Bin option is available, please refer to data sheet for more details.

LC010C • LC020C LC040C

Small-IES COB



Product	CIR Size, (R)	CCT	Ta = 25°C		Ta = 85°C		Part Number	
			Typ. Input Flux lm/W	Typ. Input Power W	Typ. Input Flux lm/W	Typ. Input Power W		
LC010C	80	2700	915	88	871	84	SPHWWH0N023YH12ZF	
		3500	952	102	908	97	SPHWWH0N023YH12ZF	
		5000	971	104	926	99	SPHWWH0N023YH12ZF	
	80	2700	1,087	117	1,037	111	SPHWWH0N023YH12ZF	
		3500	1,133	122	1,091	116	SPHWWH0N023YH12ZF	
		5000	1,159	124	1,102	118	SPHWWH0N023YH12ZF	
	80	4000	1,179	127	1,124	121	SPHWWH0N023YH12ZF	
		5000	1,167	125	1,113	119	SPHWWH0N023YH12ZF	
		5700	1,167	125	1,113	119	SPHWWH0N023YH12ZF	
	LC020C	80	2700	1,732	93	1,653	89	SPHWWH0N023YH12ZF
			3500	1,805	97	1,721	92	SPHWWH0N023YH12ZF
			5000	1,841	99	1,756	94	SPHWWH0N023YH12ZF
80		4000	1,859	100	1,773	95	SPHWWH0N023YH12ZF	
		2700	2,082	111	1,987	106	SPHWWH0N023YH12ZF	
		3500	2,148	115	2,049	110	SPHWWH0N023YH12ZF	
80		4000	2,191	118	2,090	112	SPHWWH0N023YH12ZF	
		5000	2,235	120	2,132	114	SPHWWH0N023YH12ZF	
		5700	2,213	119	2,111	113	SPHWWH0N023YH12ZF	
LC040C		80	2700	3,495	93	3,305	89	SPHWWH0N023YH12ZF
			3500	3,609	97	3,443	92	SPHWWH0N023YH12ZF
			5000	3,681	99	3,512	94	SPHWWH0N023YH12ZF
	80	4000	3,718	100	3,546	95	SPHWWH0N023YH12ZF	
		2700	4,125	111	3,925	106	SPHWWH0N023YH12ZF	
		3500	4,297	115	4,089	110	SPHWWH0N023YH12ZF	
	80	4000	4,383	118	4,181	112	SPHWWH0N023YH12ZF	
		5000	4,470	120	4,264	114	SPHWWH0N023YH12ZF	
		5700	4,428	119	4,222	113	SPHWWH0N023YH12ZF	
	80	4000	4,428	119	4,222	113	SPHWWH0N023YH12ZF	
		4000	4,428	119	4,222	113	SPHWWH0N023YH12ZF	
		5000	4,428	119	4,222	113	SPHWWH0N023YH12ZF	

ⓘ Bin option is available, please refer to data sheet for more details.