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We employ 307,000 people across 84 countries. To discover more, please visit our official website at www.samsung.com and our official blog at global.samsungnews.com.

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Rev. 1.0 Sep 2015



High Quality
Lighting
Performance

Samsung COB LED
LC Series



Ultra High CRICOB

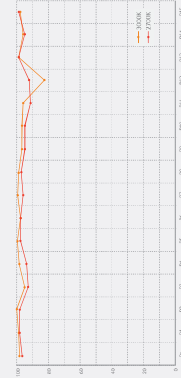
Achieving true colors

- 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)

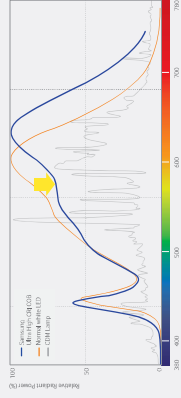
Applications Premium Lighting for Luxury Shop



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



Similar Spectrum with the CDM Lamp than normal white LED



Standard COB (CRI 80+)

Ultra High CRI COB (CRI 95+)

Vivid Color COB

For more brilliant & attractive displaying

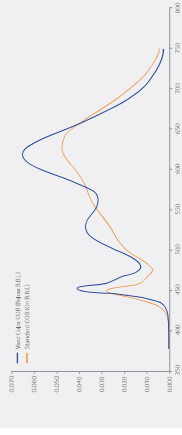
- Vivid white without yellowish tint
- Efficacy: 124 lm/W @ 3000 K, CH g2
- 6,000 hours of LM-80 testing, May 2016

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

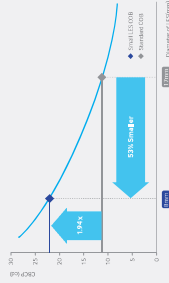
Best solution for narrow beam spot and down light

- 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

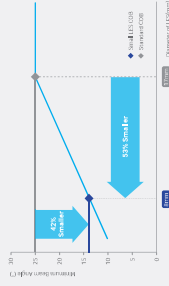
Applications: Spotlights, Downlights



Higher Flux Intensity

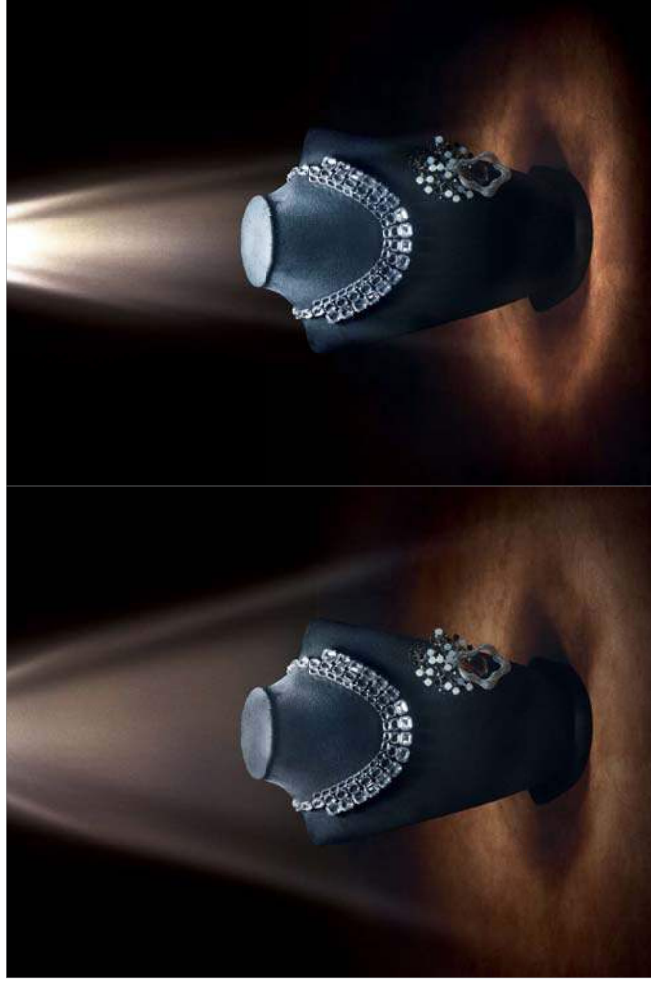
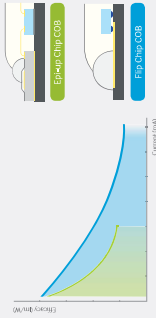


Narrow Beam Angle Solution



New Flip Chip based technology

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

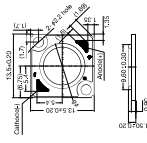


Standard COB

Small LES COB

LC006B • LC008B

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

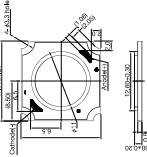


Product	CRI min. / N	LCI	16 to 33°C Typ. max. / N		Typ. max. / N		Typ. max. / N		Typ. max. / N		Part Number
			Wavelength nm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	
LC006B	Wavelength	3000	805	126	747	733	119				SPHWWHDN825YH13CF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
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											SPHWWHDN825YH13GF
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											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
LC008B	Wavelength	3000	821	129	837	825	119				SPHWWHDN825YH13CF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
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											SPHWWHDN825YH13GF
LC008B	Wavelength	3000	1104	129	1254	1254	119				SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
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											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
LC008B	Wavelength	3000	1317	130	1335	1335	123				SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
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Bin option is available, please refer to data sheet for more details.

LC013B • LC019B

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

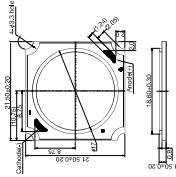


Product	CRI min. / N	LCI	16 to 33°C Typ. max. / N		Typ. max. / N		Typ. max. / N		Typ. max. / N		Part Number
			Wavelength nm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	Beam Diameter mm	
LC013B	Wavelength	3000	1410	126	1462	1463	119				SPHWWHDN825YH13CF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
LC019B	Wavelength	3000	1410	129	1497	1498	119				SPHWWHDN825YH13CF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
LC019B	Wavelength	3000	1410	129	1593	1593	119				SPHWWHDN825YH13CF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
											SPHWWHDN825YH13GF
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Bin option is available, please refer to data sheet for more details.

LC026B • LC033B LC040B

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

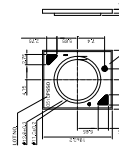
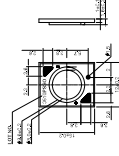
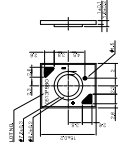


Product	CRI Min. / Typ.	CCT K	Ta = 25°C		Ta = 85°C		Part Number
			Typ. Thermal Flux W/100mm ²	Luminous Efficacy Typ. (lm/W)	Typ. Thermal Flux W/100mm ²	Luminous Efficacy Typ. (lm/W)	
LC026B	Vivid	3000	3,421	128	2,831	119	SPHWWH0N023YH1ZSF
		4000	3,417	130	2,818	122	SPHWWH0N023YH1ZSP
		5000	3,413	130	2,815	122	SPHWWH0N023YH1ZSE
		2700	2,732	105	2,504	102	SPHWWH0N023YH1WSF
		3500	2,822	114	2,656	108	SPHWWH0N023YH1WSJ
		3500	2,822	114	2,656	108	SPHWWH0N023YH1WSF
	80	2700	3,692	121	2,813	115	SPHWWH0N027YH1WSF
		3500	3,295	129	2,868	122	SPHWWH0N027YH1WSJ
		4000	3,217	130	2,819	123	SPHWWH0N027YH1WSE
		3000	3,834	150	3,489	142	SPHWWH0N025YH1WSJ
		4000	3,893	150	3,850	148	SPHWWH0N025YH1WSF
		3000	3,849	155	3,594	148	SPHWWH0N025YH1WSJ
LC033B	Vivid	3000	3,849	155	3,554	145	SPHWWH0N023YH1TTF
		4000	4,146	162	3,729	152	SPHWWH0N023YH1TTF
		5000	4,026	156	3,663	149	SPHWWH0N023YH1TSP
		3500	4,108	159	3,727	152	SPHWWH0N023YH1TSP
		2700	3,440	108	3,150	102	SPHWWH0N028YH1WSJ
		3500	3,653	114	3,327	108	SPHWWH0N028YH1WSJ
	80	2700	3,665	121	3,517	115	SPHWWH0N027YH1WSJ
		3500	4,105	129	3,725	122	SPHWWH0N027YH1WSJ
		4000	4,146	130	3,773	123	SPHWWH0N027YH1TSP
		3000	4,793	150	4,381	142	SGK0WH0N025YH1WSJ
		3500	4,888	153	4,448	145	SGK0WH0N025YH1WSJ
		3000	4,808	155	4,462	146	SGK0WH0N025YH1WSJ
LC040B	Vivid	3000	4,896	155	4,442	145	SPHWWH0N023YH1TTF
		4000	5,183	162	4,665	152	SPHWWH0N023YH1TTF
		5000	4,831	156	4,390	149	SPHWWH0N023YH1TSP
		3500	4,927	159	4,484	152	SPHWWH0N023YH1TSP
		2700	4,128	108	3,757	102	SPHWWH0N028YH1WSJ
		3500	4,259	111	3,873	105	SPHWWH0N028YH1WSJ
	80	2700	4,639	121	4,220	115	SPHWWH0N027YH1WSJ
		3500	4,821	128	4,406	122	SPHWWH0N027YH1WSJ
		4000	4,821	128	4,406	122	SPHWWH0N027YH1TTF
		3000	4,970	130	4,528	123	SPHWWH0N025YH1WSJ
		4000	5,251	150	5,253	142	SPHWWH0N025YH1WSJ
		3500	5,866	153	5,338	145	SPHWWH0N025YH1WSJ
70	5700	5,824	155	5,300	146	SPHWWH0N023YH1TTF	
	5000	5,924	155	5,390	146	SPHWWH0N023YH1TTF	
	4000	6,220	162	5,698	152	SPHWWH0N023YH1TTF	
	4000	6,220	162	5,698	152	SPHWWH0N023YH1TTF	
	5000	6,279	164	5,651	154	SPHWWH0N023YH1TTF	

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

LC010C • LC020C LC040C

Small-IES COB



Product	CRI Min. / Typ.	CCT K	Ta = 25°C		Ta = 85°C		Part Number
			Typ. Thermal Flux W/100mm ²	Luminous Efficacy Typ. (lm/W)	Typ. Thermal Flux W/100mm ²	Luminous Efficacy Typ. (lm/W)	
LC010C	80	2700	915	88	871	84	
		3000	952	102	908	97	
		4000	971	104	926	99	
		2700	1,087	117	1,037	111	
		3000	1,133	122	1,091	116	240
		3500	1,156	124	1,102	118	
	80	4000	1,179	127	1,124	121	
		5000	1,167	125	1,113	119	
		5700	1,167	125	1,113	119	
		2700	1,732	93	1,653	89	
		3000	1,805	97	1,721	92	
		3500	1,841	99	1,756	94	
LC020C	80	4000	1,859	100	1,773	95	
		2700	2,082	111	1,987	106	
		3000	2,148	115	2,049	110	
		3500	2,191	118	2,090	112	
		4000	2,235	120	2,132	114	
		5000	2,213	119	2,111	113	
	80	2700	3,495	93	3,305	89	
		3000	3,609	97	3,443	92	
		3500	3,681	99	3,512	94	
		4000	3,718	100	3,546	95	
		2700	4,125	111	3,925	106	1,680
		3000	4,297	115	4,089	110	
80	3500	4,583	118	4,181	112		
	4000	4,470	120	4,264	114		
	5000	4,428	119	4,222	113		
	5700	4,408	119	4,222	113		

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