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Rev.1.0 Sep.2015



High Quality
Lighting
Performance

Samsung COB LED
LC Series



Ultra High CRI COB

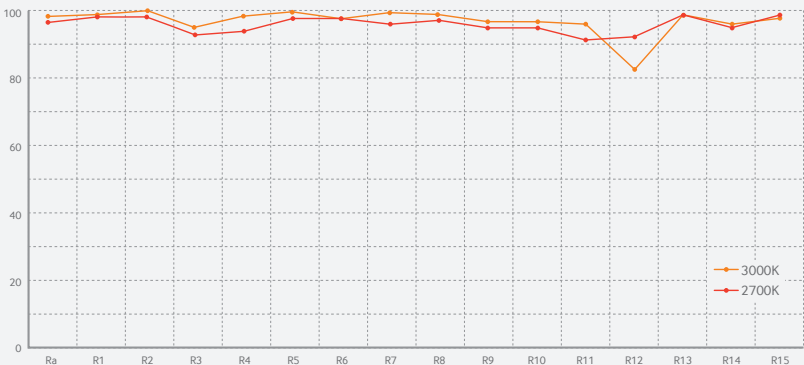
Achieving true colors

- Super High CRI: Typ. Ra 97
- Efficacy: 105 lm/W @ 3000 K, CRI 95+
- Completed 54,000 hours of LM-80 testing @ 1.08 A, 105°C (Ts)

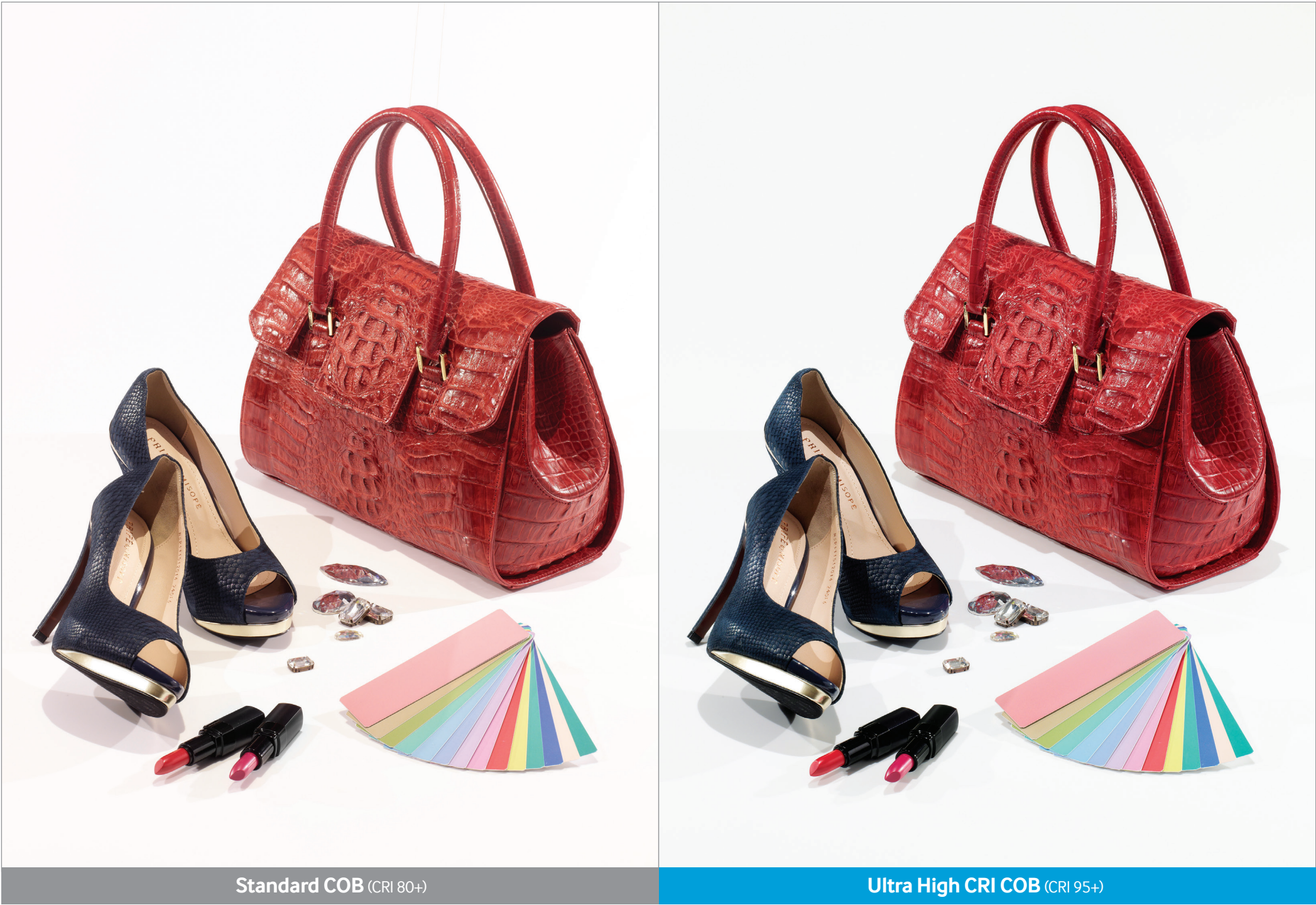
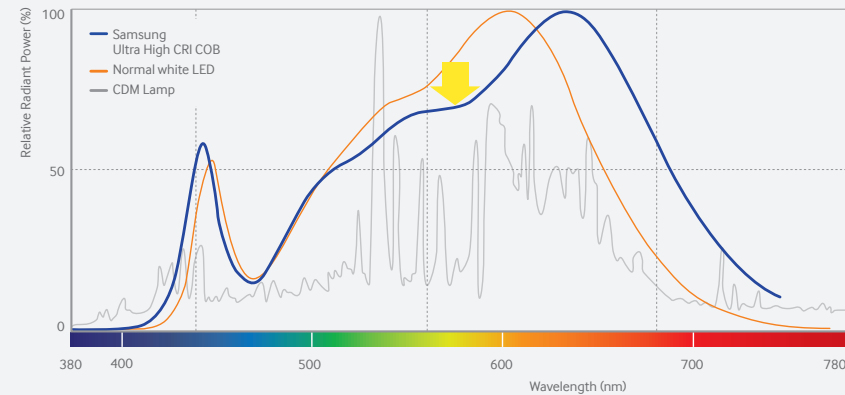
Applications Premium Lighting for Luxury Shop



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

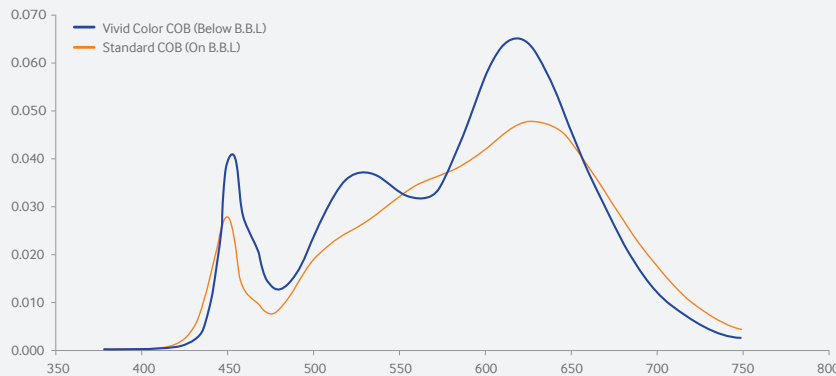
- Vivid white without yellowish tint
- Efficacy: 124 lm/W @ 3000 K, CRI 92
- 6,000 hours of LM-80 testing: May 2016

Applications Spotlights, Downlights

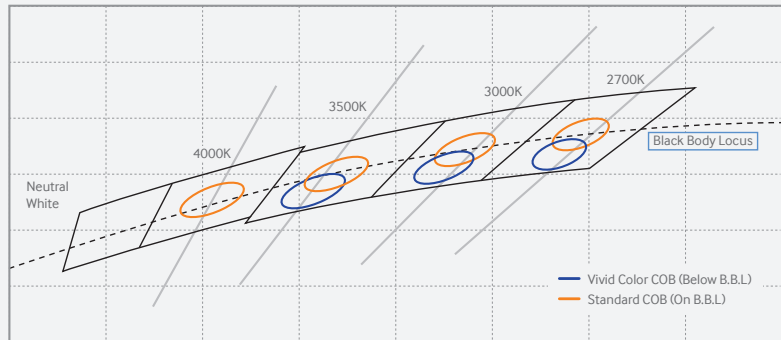


Spectrum tuning for brilliant saturated colors

Reducing yellowish tint such as filtered conventional lamp



The Chromaticity of Vivid Color COB



Halogen Lamp

Vivid Color COB

Small LES COB

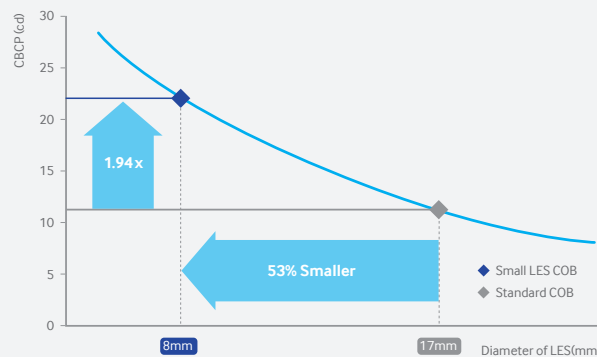
Best solution for narrow beam spot and down light

- 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-80 testing: Feb. 2016

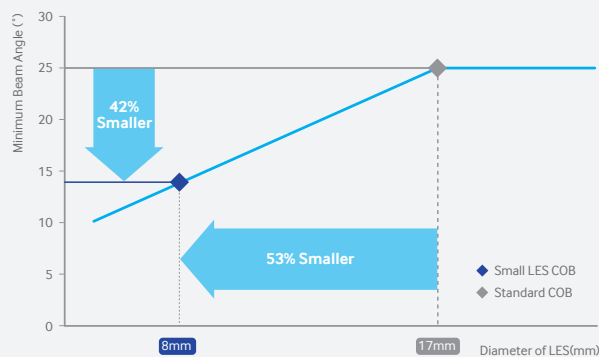
Applications Spotlights, Downlights



Higher Flux Intensity

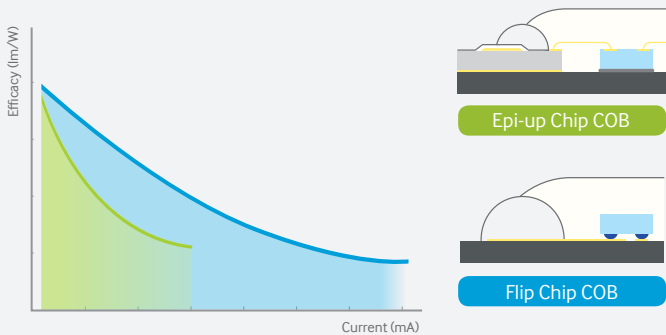


Narrow Beam Angle Solution



New Flip Chip based technology

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

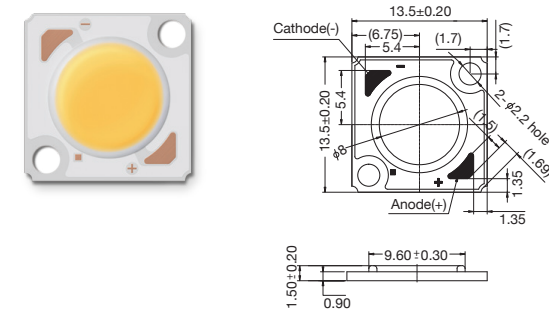


Standard COB

Small LES COB

LC006B · LC008B

Ultra High CRI COB / Vivid Color COB / Standard COB

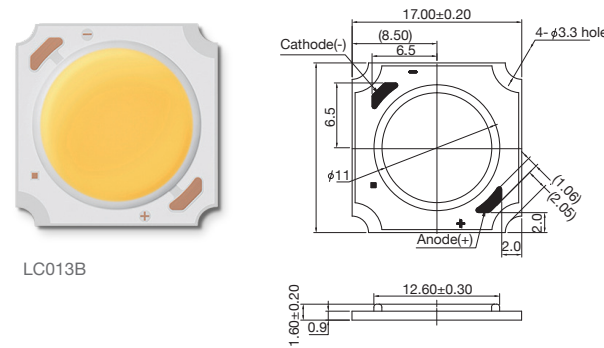


Product	CRI Min.	CCT (K)	Tc = 25℃		Tc = 85℃		IF (mA)	Part Number
			Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
LC006B	Vivid	3000	805	126	733	119	180	SPHWW1HDN82VYHV3CF
		3500	821	129	747	122		SPHWW1HDN82VYHU3CF
		4000	829	130	755	123		SPHWW1HDN82VYHT3CF
	95	2700	688	108	626	102		SPHWW1HDN828YHW3CC
		3000	709	111	645	105		SPHWW1HDN828YHV3CC
		3500	731	114	665	108		SPHWW1HDN828YHU3CC
	90	2700	773	121	703	115		SPHWW1HDN827YHW3CF
		3000	805	126	733	119		SPHWW1HDN827YHV3CF
		3500	821	129	747	122		SPHWW1HDN827YHU3CF
	80	4000	829	130	755	123		SPHWW1HDN827YHT3CF
		2700	920	144	837	137		SPHWW1HDN825YHW3ED
		3000	959	150	872	142		SPHWW1HDN825YHV3ED
	70	3500	978	153	890	145		SPHWW1HDN825YHU3ED
		4000	997	156	907	148		SPHWW1HDN825YHT3ED
		5000	987	155	898	146		SPHCW1HDN825YHRTED
		5700	987	155	898	146		SPHCW1HDN825YHQTED
		3000	987	155	889	145		SPHWW1HDN823YHVTGE
		4000	1,037	162	933	152		SPHWW1HDN823YHTTGE
		5000	1,046	164	942	154		SPHCW1HDN823YHRTGE
	Vivid	3000	1,104	126	1,004	119	240	SPHWW1HDN94VYHV3FG
		3500	1,126	129	1,025	122		SPHWW1HDN94VYHU3FG
		4000	1,137	130	1,035	123		SPHWW1HDN94VYHT3FG
	95	2700	943	108	858	102		SPHWW1HDN948YHW3EC
		3000	972	111	885	105		SPHWW1HDN948YHV3EC
		3500	1,002	114	911	108		SPHWW1HDN948YHU3EC
	90	2700	1,060	121	964	115		SPHWW1HDN947YHW3FG
		3000	1,104	126	1,004	119		SPHWW1HDN947YHV3FG
		3500	1,126	129	1,025	122		SPHWW1HDN947YHU3FG
	80	4000	1,137	130	1,035	123		SPHWW1HDN947YHT3FG
		2700	1,261	144	1,148	137		SPHWW1HDN945YHW3KG
		3000	1,314	150	1,196	142		SPHWW1HDN945YHV3KG
	70	3500	1,340	153	1,220	145		SPHWW1HDN945YHU3KG
		4000	1,367	156	1,244	148		SPHWW1HDN945YHT3KG
		5000	1,353	155	1,232	146		SPHCW1HDN945YHRTKG
		5700	1,353	155	1,232	146		SPHCW1HDN945YHQTKG
		3000	1,353	155	1,218	145		SPHWW1HDN943YHVTMG
		4000	1,421	162	1,279	152		SPHWW1HDN943YHTTMG
		5000	1,435	164	1,291	154		SPHCW1HDN943YHRTMG

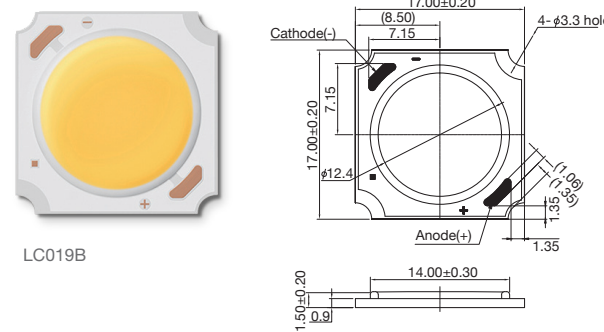
※ Bin option is available, please refer to data sheet for more details.

LC013B · LC019B

Ultra High CRI COB / Vivid Color COB / Standard COB



LC013B



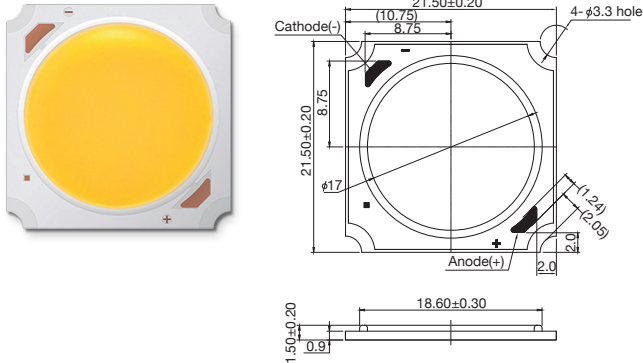
LC019B

Product	CRI Min.	CCT (K)	Tc = 25℃		Tc = 85℃		IF (mA)	Part Number
			Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
LC013B	Vivid	3000	1,610	126	1,465	119	360	SPHWW1HDNA2VYHV31F
		3500	1,642	129	1,495	122		SPHWW1HDNA2VYHU31F
		4000	1,659	130	1,509	123		SPHWW1HDNA2VYHT31F
	95	2700	1,376	108	1,252	102		SPHWW1HDNA28YHW31E
		3000	1,419	111	1,291	105		SPHWW1HDNA28YHV31E
		3500	1,461	114	1,330	108		SPHWW1HDNA28YHU31E
	90	2700	1,546	121	1,407	115		SPHWW1HDNA27YHW31F
		3000	1,610	126	1,465	119		SPHWW1HDNA27YHV31F
		3500	1,642	129	1,495	122		SPHWW1HDNA27YHU31F
	80	4000	1,659	130	1,509	123		SPHWW1HDNA27YHT31F
		2700	1,840	144	1,675	137		SPHWW1HDNA25YHW31D
		3000	1,917	150	1,744	142		SPHWW1HDNA25YHV31D
	70	3500	1,955	153	1,779	145		SPHWW1HDNA25YHU31D
		4000	1,994	156	1,815	148		SPHWW1HDNA25YHT31D
		5000	1,975	155	1,797	146		SPHCW1HDNA25YHRT1D
		5700	1,975	155	1,797	146		SPHCW1HDNA25YHQT1D
		3000	1,975	155	1,777	145		SPHWW1HDNA23YHVT1F
		4000	2,073	162	1,866	152		SPHWW1HDNA23YHTT1F
		5000	2,093	164	1,884	154		SPHCW1HDNA23YHRT1F
	Vivid	3000	2,415	126	2,198	119	540	SPHWW1HDNB2VYHV32J
		3500	2,464	129	2,242	122		SPHWW1HDNB2VYHU32J
		4000	2,488	130	2,264	123		SPHWW1HDNB2VYHT32J
	95	2700	2,064	108	1,878	102		SPHWW1HDNB28HW31F
		3000	2,128	111	1,936	105		SPHWW1HDNB28YHV31F
		3500	2,192	114	1,994	108		SPHWW1HDNB28YHU31F
	90	2700	2,319	121	2,110	115		SPHWW1HDNB27YHW32J
		3000	2,415	126	2,198	119		SPHWW1HDNB27YHV32J
		3500	2,464	129	2,242	122		SPHWW1HDNB27YHU32J
	80	4000	2,488	130	2,264	123		SPHWW1HDNB27YHT32J
		2700	2,760	144	2,512	137		SPHWW1HDNB25YHW31G
		3000	2,876	150	2,617	142		SPHWW1HDNB25YHV31G
	70	3500	2,933	153	2,669	145		SPHWW1HDNB25YHU31G
		4000	2,992	156	2,722	148		SPHWW1HDNB25YHT31G
		5000	2,962	155	2,695	146		SPHCW1HDNB25YHRT1G
		5700	2,962	155	2,695	146		SPHCW1HDNB25YHQT1G
		3000	2,962	155	2,666	145		SPHWW1HDNB23YHVT2F
		4000	3,110	162	2,799	152		SPHWW1HDNB23YHTT2F
		5000	3,139	164	2,826	154		SPHCW1HDNB23YHRT2F

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

**LC026B · LC033B
LC040B**

Ultra High CRI COB / Vivid Color COB / Standard COB

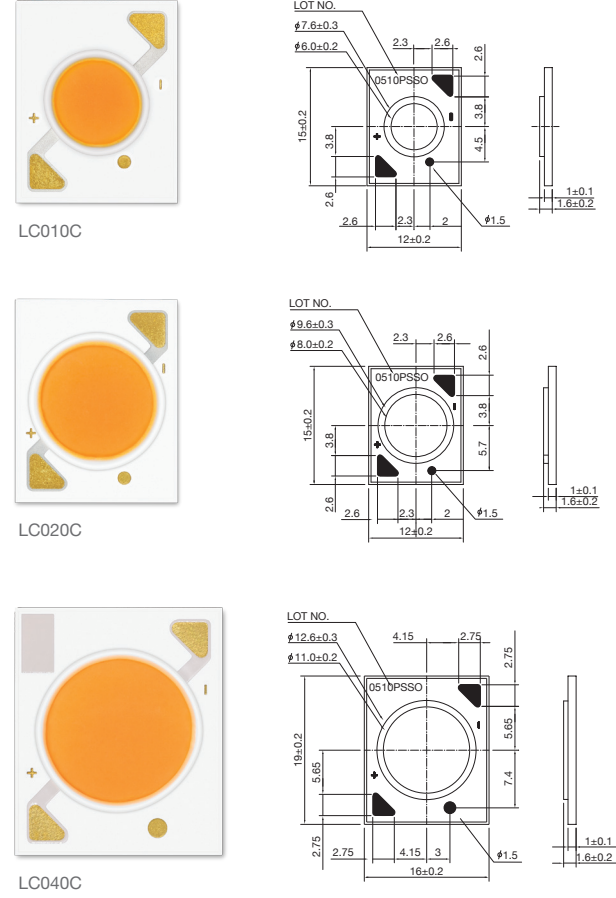


Product	CRI Min.	CCT (K)	Tc = 25℃		Tc = 85℃		IF (mA)	Part Number	
			Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)			
LC026B	Vivid	3000	3,221	126	2,931	119	720	SPHWW1HDNC2VYHV32F	
		3500	3,285	129	2,989	122		SPHWW1HDNC2VYHU32F	
		4000	3,317	130	3,019	123		SPHWW1HDNC2VYHT32F	
	95	2700	2,752	108	2,504	102		SPHWW1HDNC28YHW32F	
		3000	2,837	111	2,582	105		SPHWW1HDNC28YHV32F	
		3500	2,922	114	2,659	108		SPHWW1HDNC28YHU32F	
	90	2700	3,092	121	2,813	115		SPHWW1HDNC27YHW32F	
		3000	3,221	126	2,931	119		SPHWW1HDNC27YHV32F	
		3500	3,285	129	2,989	122		SPHWW1HDNC27YHU32F	
	80	4000	3,317	130	3,019	123		SPHWW1HDNC27YHT32F	
		2700	3,681	144	3,349	137		SPHWW1HDNC25YHW32G	
		3000	3,834	150	3,489	142		SPHWW1HDNC25YHV32G	
		3500	3,911	153	3,559	145		SPHWW1HDNC25YHU32G	
		4000	3,989	156	3,630	148		SPHWW1HDNC25YHT32G	
		5000	3,949	155	3,594	146		SPHCW1HDNC25YHRT2G	
	70	5700	3,949	155	3,594	146		SPHCW1HDNC25YHQT2G	
		3000	3,949	155	3,554	145		SPHWW1HDNC23YHVT3F	
		4000	4,146	162	3,732	152		SPHWW1HDNC23YHTT3F	
		5000	4,186	164	3,767	154		SPHCW1HDNC23YHRT3F	
		Vivid	3000	4,026	126	3,663		119	SPHWW1HDND2VYHV33P
			3500	4,106	129	3,737		122	SPHWW1HDND2VYHU33P
	4000		4,146	130	3,773	123		SPHWW1HDND2VYHT33P	
	95	2700	3,440	108	3,130	102		SPHWW1HDND28YHW33J	
		3000	3,546	111	3,227	105		SPHWW1HDND28YHV33J	
3500		3,653	114	3,324	108	SPHWW1HDND28YHU33J			
90	2700	3,865	121	3,517	115	SPHWW1HDND27YHW33P			
	3000	4,026	126	3,663	119	SPHWW1HDND27YHV33P			
	3500	4,106	129	3,737	122	SPHWW1HDND27YHU33P			
	4000	4,146	130	3,773	123	SPHWW1HDND27YHT33P			
	2700	4,601	144	4,187	137	SGHWW1HDND25YHW33G			
	3000	4,793	150	4,361	142	SGHWW1HDND25YHV33G			
80	3500	4,888	153	4,448	145	SGHWW1HDND25YHU33G			
	4000	4,986	156	4,537	148	SGHWW1HDND25YHT33G			
	5000	4,936	155	4,492	146	SGHCW1HDND25YHRT3G			
	5700	4,936	155	4,492	146	SGHCW1HDND25YHQT3G			
	3000	4,936	155	4,443	145	SPHWW1HDND23YHVT4P			
	4000	5,183	162	4,665	152	SPHWW1HDND23YHTT4P			
70	5000	5,232	164	4,709	154	SPHCW1HDND23YHRT4P			
	3000	4,831	126	4,396	119	SPHWW1HDNE2VYHV34J			
	Vivid	3500	4,927	129	4,484	122	SPHWW1HDNE2VYHU34J		
4000		4,976	130	4,528	123	SPHWW1HDNE2VYHT34J			
2700		4,128	108	3,757	102	SPHWW1HDNE28YHW33M			
95	3000	4,256	111	3,873	105	SPHWW1HDNE28YHV33M			
	3500	4,383	114	3,989	108	SPHWW1HDNE28YHU33M			
	2700	4,638	121	4,220	115	SPHWW1HDNE27YHW34J			
90	3000	4,831	126	4,396	119	SPHWW1HDNE27YHV34J			
	3500	4,927	129	4,484	122	SPHWW1HDNE27YHU34J			
	4000	4,976	130	4,528	123	SPHWW1HDNE27YHT34J			
	2700	5,521	144	5,024	137	SPHWW1HDNE25YHW34G			
	3000	5,751	150	5,233	142	SPHWW1HDNE25YHV34G			
	3500	5,866	153	5,338	145	SPHWW1HDNE25YHU34G			
80	4000	5,983	156	5,445	148	SPHWW1HDNE25YHT34G			
	5000	5,924	155	5,390	146	SPHCW1HDNE25YHRT4G			
	5700	5,924	155	5,390	146	SPHCW1HDNE25YHQT4G			
	3000	5,924	155	5,331	145	SPHWW1HDNE23YHVT4J			
	4000	6,220	162	5,598	152	SPHWW1HDNE23YHTT4J			
	5000	6,279	164	5,651	154	SPHCW1HDNE23YHRT5J			

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

**LC010C · LC020C
LC040C**

Small LES COB



Product	CRI Min.	CCT (K)	Tc = 25°C		Tc = 85°C		IF (mA)	Part Number
			Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
LC010C	90	2700	913	98	871	94	240	TBD
		3000	952	102	908	97		
		3500	971	104	926	99		
		4000	980	105	935	100		
	80	2700	1,087	117	1,037	111		
		3000	1,133	122	1,081	116		
		3500	1,155	124	1,102	118		
		4000	1,179	127	1,124	121		
		5000	1,167	125	1,113	119		
		5700	1,167	125	1,113	119		
LC020C	90	2700	1,732	93	1,653	89	540	TBD
		3000	1,805	97	1,721	92		
		3500	1,841	99	1,756	94		
		4000	1,859	100	1,773	95		
	80	2700	2,062	111	1,967	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		
		5700	2,213	119	2,111	113		
LC040C	90	2700	3,465	93	3,305	89	1,080	TBD
		3000	3,609	97	3,443	92		
		3500	3,681	99	3,512	94		
		4000	3,718	100	3,546	95		
	80	2700	4,125	111	3,935	106		
		3000	4,297	115	4,099	110		
		3500	4,383	118	4,181	112		
		4000	4,470	120	4,264	114		
		5000	4,426	119	4,222	113		
		5700	4,426	119	4,222	113		

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