

**About Multitasking Electronics Co., Ltd.**

Multitasking Inductor Electronic Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies, redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, printers, medical equipment, network systems and semiconductors.

We are also leading in the Internet of Things space through, among others, our Digital Health and Smart Home initiatives.

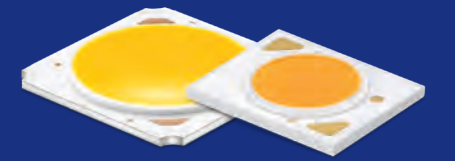
We employ 307,000 people across 84 countries. To discover more, please visit our official website at [www.multitaskingcorporation.com](http://www.multitaskingcorporation.com) and [www.senslights.com](http://www.senslights.com)

Multitasking Corporation Ltd  
647, Yeogsam-Dong, Gangnam-gu,  
KOREA



# High Quality Lighting Performance

SensLights COB LED  
SLD Series



# Ultra High CRI COB



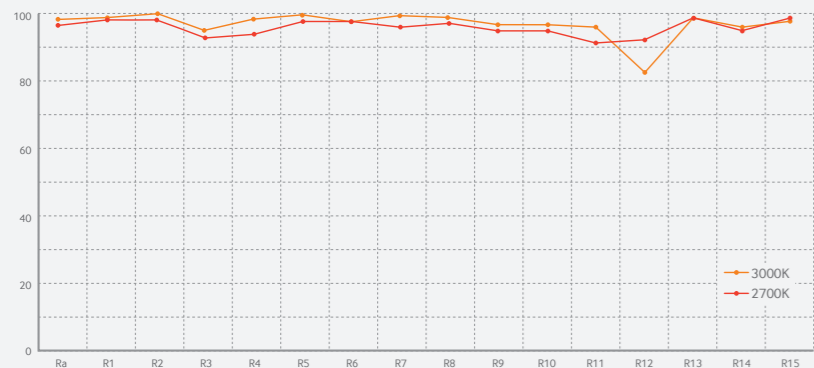
## Achieving true colors

- 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)

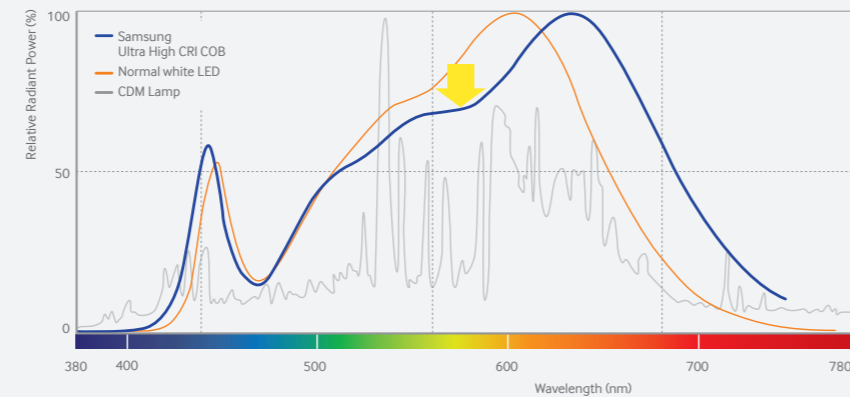
## Applications Premium Lighting for Luxury Shop



### 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

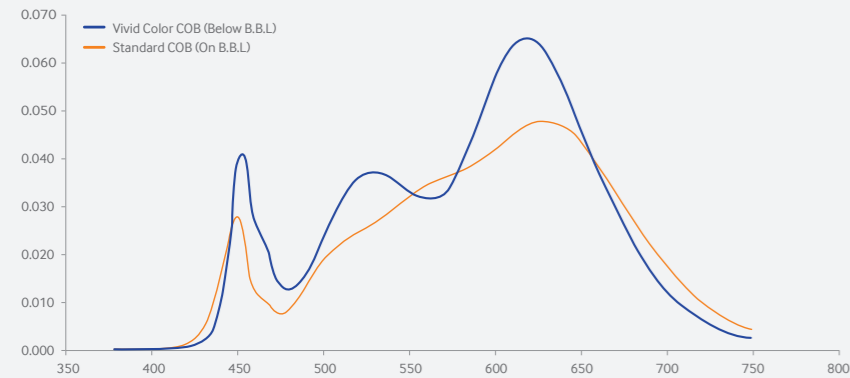
- Vivid white without yellowish tint
- Efficacy: 124 lm/W @ 3000 K, CRI 92
- 6,000 hours of LM-80 testing: May 2016

Applications Spotlights, Downlights

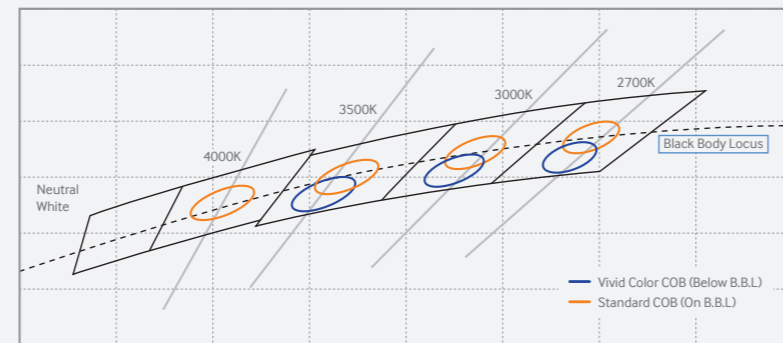


## Spectrum tuning for brilliant saturated colors

Reducing yellowish tint such as filtered conventional lamp



## The Chromaticity of Vivid Color COB



Halogen Lamp

Vivid Color COB



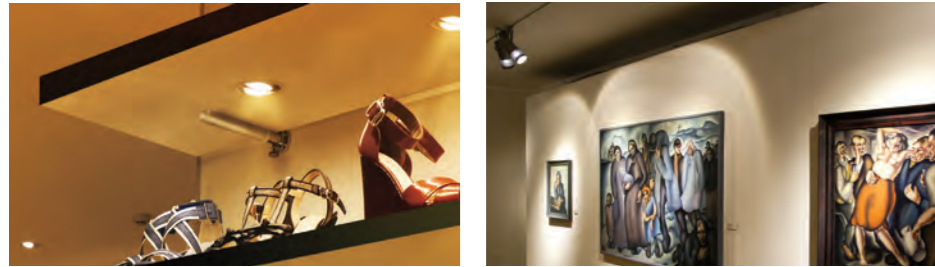
# Small LES COB



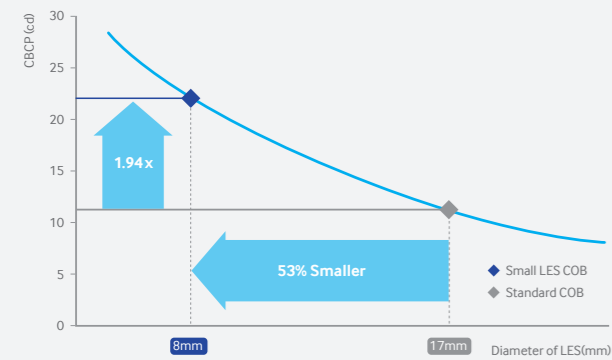
Best solution for narrow beam spot and down light

- 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

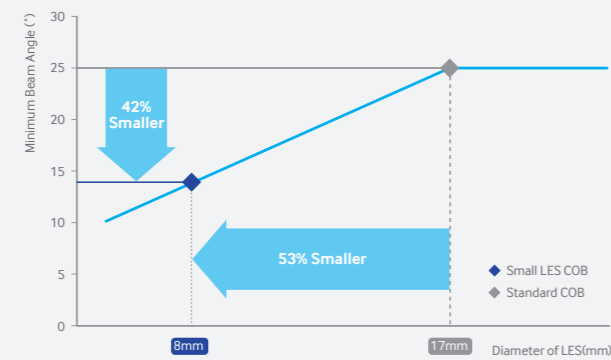
Applications Spotlights, Downlights



## Higher Flux Intensity

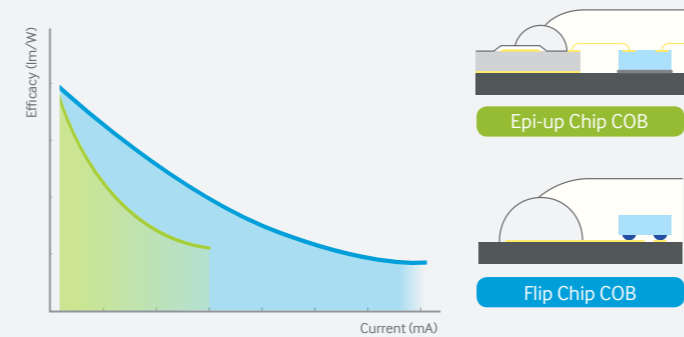


## Narrow Beam Angle Solution



## New Flip Chip based technology

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



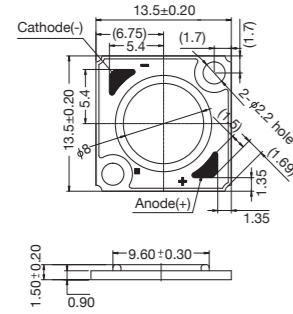
Standard COB



Small LES COB

# LC006B · LC008B

Ultra High CRI COB / Vivid Color COB / Standard COB



Product	CRI Min.	CCT (K)	Tc = 25°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)		
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
3500		978	153	890	145	SPHWW1HDN825YHU3ED		
4000		997	156	907	148	SPHWW1HDN825YHT3ED		
5000		987	155	898	146	SPHCW1HDN825YHRTED		
70	5700	987	155	898	146	SPHCW1HDN825YHQTED		
	3000	987	155	889	145	SPHWW1HDN823YHVTGE		
	4000	1,037	162	933	152	SPHWW1HDN823YHTTGE		
LC008B	Vivid	5000	1,046	164	942	154	240	SPHCW1HDN823YHRTGE
		3000	1,104	126	1,004	119		SPHWW1HDN94VYHV3FG
		3500	1,126	129	1,025	122		SPHWW1HDN94VYHU3FG
	95	4000	1,137	130	1,035	123		SPHWW1HDN94VYHT3FG
		2700	943	108	858	102		SPHWW1HDN948YHW3EC
		3000	972	111	885	105		SPHWW1HDN948YHV3EC
	90	3500	1,002	114	911	108		SPHWW1HDN948YHU3EC
		2700	1,060	121	964	115		SPHWW1HDN947YHW3FG
		3000	1,104	126	1,004	119		SPHWW1HDN947YHV3FG
	80	3500	1,126	129	1,025	122		SPHWW1HDN947YHU3FG
		4000	1,137	130	1,035	123		SPHWW1HDN947YHT3FG
		2700	1,261	144	1,148	137		SPHWW1HDN945YHW3KG
3000		1,314	150	1,196	142	SPHWW1HDN945YHV3KG		
3500		1,340	153	1,220	145	SPHWW1HDN945YHU3KG		
4000		1,367	156	1,244	148	SPHWW1HDN945YHT3KG		
70	5000	1,353	155	1,232	146	SPHCW1HDN945YHRTKG		
	5700	1,353	155	1,232	146	SPHCW1HDN945YHQTKG		
	3000	1,353	155	1,218	145	SPHWW1HDN943YHVTMG		
70	4000	1,421	162	1,279	152	SPHWW1HDN943YHTTMG		
	5000	1,435	164	1,291	154	SPHCW1HDN943YHRTMG		

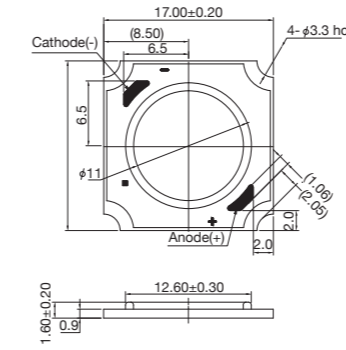
※ Bin option is available, please refer to data sheet for more details.

# LC013B · LC019B

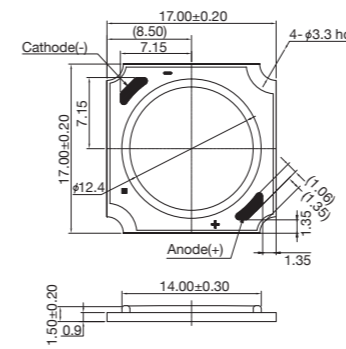
Ultra High CRI COB / Vivid Color COB / Standard COB



LC013B



LC019B



Product	CRI Min.	CCT (K)	Tc = 25°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)		
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
3500		1,955	153	1,779	145	SPHWW1HDNA25YHU31D		
4000		1,994	156	1,815	148	SPHWW1HDNA25YHT31D		
5000		1,975	155	1,797	146	SPHCW1HDNA25YHRT1D		
70	5700	1,975	155	1,797	146	SPHCW1HDNA25YHQ1D		
	3000	1,975	155	1,777	145	SPHWW1HDNA23YHVT1F		
	4000	2,073	162	1,866	152	SPHWW1HDNA23YHTT1F		
LC019B	Vivid	5000	2,093	164	1,884	154	540	SPHCW1HDNA23YHRT1F
		3000	2,415	126	2,198	119		SPHWW1HDNB2VYHV32J
		3500	2,464	129	2,242	122		SPHWW1HDNB2VYHU32J
	95	4000	2,488	130	2,264	123		SPHWW1HDNB2VYHT32J
		2700	2,064	108	1,878	102		SPHWW1HDNB28HW31F
		3000	2,128	111	1,936	105		SPHWW1HDNB28YHV31F
	90	3500	2,192	114	1,994	108		SPHWW1HDNB28YHU31F
		2700	2,319	121	2,110	115		SPHWW1HDNB27YHW32J
		3000	2,415	126	2,198	119		SPHWW1HDNB27YHV32J
	80	3500	2,464	129	2,242	122		SPHWW1HDNB27YHU32J
		4000	2,488	130	2,264	123		SPHWW1HDNB27YHT32J
		2700	2,760	144	2,512	137		SPHWW1HDNB25YHW31G
3000		2,876	150	2,617	142	SPHWW1HDNB25YHV31G		
3500		2,933	153	2,669	145	SPHWW1HDNB25YHU31G		
4000		2,992	156	2,722	148	SPHWW1HDNB25YHT31G		
70	5000	2,962	155	2,695	146	SPHCW1HDNB25YHRT1G		
	5700	2,962	155	2,695	146	SPHCW1HDNB25YHQ1G		
	3000	2,962	155	2,666	145	SPHWW1HDNB23YHVT2F		
70	4000	3,110	162	2,799	152	SPHWW1HDNB23YHTT2F		
	5000	3,139	164	2,826	154	SPHCW1HDNB23YHRT2F		

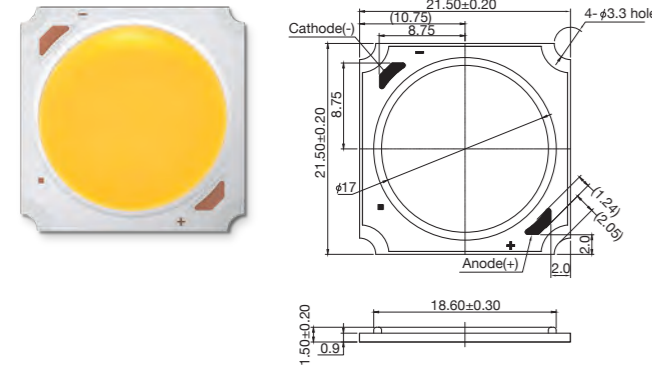
※ Bin option is available, please refer to data sheet for more details.





# LC026B · LC033B LC040B

Ultra High CRI COB / Vivid Color COB / Standard COB



Product	CRI Min.	CCT (K)	Tc = 25°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)		
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
		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
		4000	3,317	130	3,019	123		SPHWW1HDNC27YHT32F
		2700	3,681	144	3,349	137		SPHWW1HDNC25YHW32G
		3000	3,834	150	3,489	142		SPHWW1HDNC25YHV32G
LC033B	80	3500	3,911	153	3,559	145	900	SPHWW1HDNC25YHU32G
		4000	3,989	156	3,630	148		SPHWW1HDNC25YHT32G
		5000	3,949	155	3,594	146		SPHCW1HDNC25YHRT2G
		5700	3,949	155	3,594	146		SPHCW1HDNC25YHQT2G
		3000	3,949	155	3,554	145		SPHWW1HDNC23YHVT3F
		4000	4,146	162	3,732	152		SPHWW1HDNC23YHTT3F
	70	5000	4,186	164	3,767	154		SPHCW1HDNC23YHRT3F
		3000	4,026	126	3,663	119		SPHWW1HDND2VYHV33P
		3500	4,106	129	3,737	122		SPHWW1HDND2VYHU33P
		4000	4,146	130	3,773	123		SPHWW1HDND2VYHT33P
		2700	3,440	108	3,130	102		SPHWW1HDND28YHW33J
		3000	3,546	111	3,227	105		SPHWW1HDND28YHV33J
LC040B	95	3500	3,653	114	3,324	108	1,080	SPHWW1HDND28YHU33J
		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
	80	3000	4,793	150	4,361	142		SGHWW1HDND25YHV33G
		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
LC040C	70	4000	5,183	162	4,665	152	1,080	SPHWW1HDND23YHTT4P
		5000	5,232	164	4,709	154		SPHCW1HDND23YHRT4P
		3000	4,831	126	4,396	119		SPHWW1HDNE2VYHV34J
		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
		3000	4,831	126	4,396	119		SPHWW1HDNE27YHV34J
		3500	4,927	129	4,484	122		SPHWW1HDNE27YHU34J
		4000	4,976	130	4,528	123		SPHWW1HDNE27YHT34J
80	2700	5,521	144	5,024	137	1,080	SPHWW1HDNE25YHW34G	
	3000	5,751	150	5,233	142		SPHWW1HDNE25YHV34G	
	3500	5,866	153	5,338	145		SPHWW1HDNE25YHU34G	
	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	

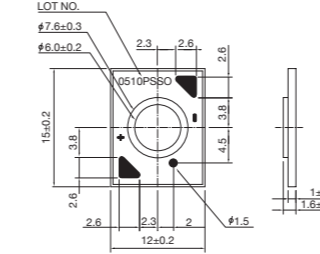
※ Bin option is available, please refer to data sheet for more details.

# LC010C · LC020C LC040C

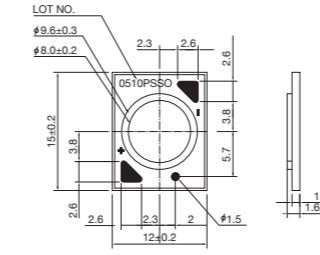
Small LES COB



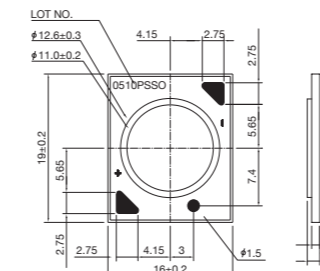
LC010C



LC020C



LC040C



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	
		3000	952	102	908	97		
		3500	971	104	926	99		
		4000	980	105	935	100		
		2700	1,087	117	1,037	111		
		3000	1,133	122	1,081	116		
LC020C	80	3500	1,155	124	1,102	118	540	TBD
		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		
LC040C	90	3500	1,841	99	1,756	94	1,080	
		4000	1,859	100	1,773	95		
		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		
LC040C	80	5000	2,213	119	2,111	113	1,080	
		5700	2,213	119	2,111	113		
		2700	3,465	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		
	90	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.