



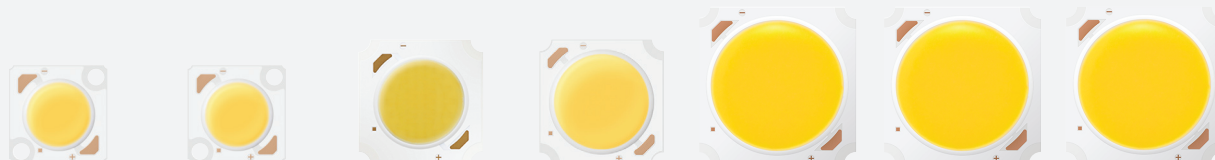
Samsung LED COB Package – LC Series

Samsung's LC series delivers high luminance from a small LES, as well as low heat resistance and outstanding light efficacy.

The LC packages also feature high color uniformity with 3-step MacAdam ellipses and consistently superior light quality. The LC series can be used in a significantly wider range of applications, including downlight for home lighting, flood light for industrial lighting, and spotlight and downlight for commercial lighting.



To deliver a wide range of wattages from 6W to 40W



	LC006B	LC008B	LC013B	LC019B	LC026B	LC033B	LC040B
LES	8mm		11mm	12.4mm	17mm		
Typical	35.5V	36.5V	35.5V				
	6.4W (180mA)	8.6W (240mA)	12.8W (360mA)	19.2W (540mA)	25.6W (720mA)	32W (900mA)	38.3W (1080mA)
Max.	12.2W (330mA)	15.8W (420mA)	24.4W (660mA)	36.3W (980mA)	48.1W (1300mA)	59.9W (1620mA)	70.3W (1900mA)
Size	13.5 x 13.5 mm		17.0 x 17.0 mm		21.5 x 21.5 mm		

Standard Type

All Samsung COB LED components completed 6000 hours of LM-80 testing. Due to their small Light Emitting Surfaces (LES), COB LEDs are very easy to work with, and will enable easier and less expensive designs. It is a broad family for many applications.

Applications

Spotlights, Downlight, Flood lighting

High CRI Type

Provides greater than 90 high color rendering (>65 R9 value with vivid color) and 2-step MacAdam color consistency, suitable for all but the most demanding artwork, retail and hospitality applications. High CRI COB LEDs are the perfect solution enhancing aesthetic beauty of your product display.

Applications

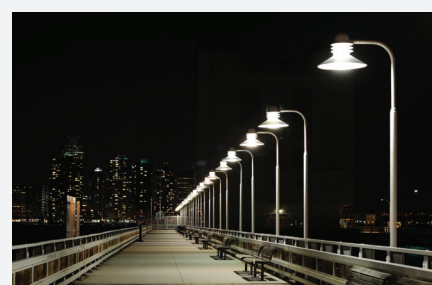
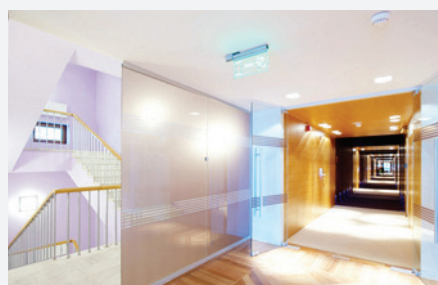
Spotlights, Downlight

High Flux Type

The industry-leading light efficacy of COB LEDs makes them particularly well-suited for use as the light source in flood lighting and outdoor lighting while reducing energy consumption.

Applications

Flood lighting, Parking lots, Outdoor lights



Product Selection Table

Product	CRI	CCT	Color Binning	If (mA)	Tc = 25°C		Voltage Typ. (V)	Input Power Typ. (W)	Tc = 85°C		Absolute Max. Rating		Part Number	
					Luminous flux Typ. (lm)	Luminous efficacy Typ. (lm/W)			Luminous flux Typ. (lm)	Luminous efficacy Typ. (lm/W)	Power (W)	If max (mA)		
LC006B	90	2700K	MacAdam 3-Step	180	685	107	35.5	6.4	604	98	12.2	330	SPHWWW1HDN827YHW3CF	
		3000K			729	114			643	104			SPHWWW1HDN827YHV3CF	
		3500K			751	117			662	107			SPHWWW1HDN827YHU3CF	
		4000K	772		121	681			110	SPHWWW1HDN827YHT3CF				
		2700K	685		107	604			98	SPHWWW1HDN827YHW2CF				
		3000K	729		114	643			104	SPHWWW1HDN827YHV2CF				
		3500K	751		117	662			107	SPHWWW1HDN827YHU2CF				
		4000K	772		121	681			110	SPHWWW1HDN827YHT2CF				
		2700K	796		125	702			113	SPHWWW1HDN825YHW3ED				
		3000K	847		133	747			121	SPHWWW1HDN825YHV3ED				
	80	3500K	MacAdam 3-Step		873	137			770	124			SPHWWW1HDN825YHU3ED	
		4000K			898	141			792	128			SPHWWW1HDN825YHT3ED	
		5000K			907	142			800	129			SPHCW1HDN825YHR3ED	
		2700K	796		125	702			113	SPHWWW1HDN825YHW2ED				
		3000K	847		133	747			121	SPHWWW1HDN825YHV2ED				
		3500K	873		137	770			124	SPHWWW1HDN825YHU2ED				
		4000K	898		141	792			128	SPHWWW1HDN825YHT2ED				
		5000K	907		142	800			129	SPHCW1HDN825YHRTED				
		70	3000K		MacAdam 7-Step	901			141	795			128	SPHWWW1HDN823YHVNGE
			4000K			959			150	845			137	SPHWWW1HDN823YHTNGE
	5000K		965			151			851	137			SPHCW1HDN823YHRNGE	
LC008B	90	2700K	MacAdam 3-Step	240	939	107	36.5	8.6	828	98	15.8	420	SPHWWW1HDN947YHW3FG	
		3000K			999	114			881	104			SPHWWW1HDN947YHV3FG	
		3500K			1029	117			908	107			SPHWWW1HDN947YHU3FG	
		4000K	1059		121	934			110	SPHWWW1HDN947YHT3FG				
		2700K	939		107	828			98	SPHWWW1HDN947YHW2FG				
		3000K	999		114	881			104	SPHWWW1HDN947YHV2FG				
		3500K	1029		117	908			107	SPHWWW1HDN947YHU2FG				
		4000K	1059		121	934			110	SPHWWW1HDN947YHT2FG				
		2700K	1092		125	963			113	SPHWWW1HDN945YHW3KE				
		3000K	1162		133	1025			121	SPHWWW1HDN945YHV3KE				
	80	3500K	MacAdam 3-Step		1196	137			1055	124			SPHWWW1HDN945YHU3KE	
		4000K			1231	141			1086	128			SPHWWW1HDN945YHT3KE	
		5000K			1244	142			1097	129			SPHCW1HDN945YHR3KE	
		2700K	1092		125	963			113	SPHWWW1HDN945YHW2KE				
		3000K	1162		133	1025			121	SPHWWW1HDN945YHV2KE				
		3500K	1196		137	1055			124	SPHWWW1HDN945YHU2KE				
		4000K	1231		141	1086			128	SPHWWW1HDN945YHT2KE				
		5000K	1244		142	1097			129	SPHCW1HDN945YHRTKE				
		70	3000K		MacAdam 7-Step	1235			141	1089			128	SPHWWW1HDN943YHVNMG
			4000K			1305			149	1151			136	SPHWWW1HDN943YHTNMG
	5000K		1314			150			1159	137			SPHCW1HDN943YHRNMG	
LC013B	90	2700K	MacAdam 3-Step	360	1405	110	35.5	12.8	1239	100	24.4	660	SPHWWW1HDNA27YHW31F	
		3000K			1495	117			1318	106			SPHWWW1HDNA27YHV31F	
		3500K			1540	120			1358	110			SPHWWW1HDNA27YHU31F	
		4000K	1586		124	1399			113	SPHWWW1HDNA27YHT31F				
		2700K	1405		110	1239			100	SPHWWW1HDNA27YHW21F				
		3000K	1495		117	1318			106	SPHWWW1HDNA27YHV21F				
		3500K	1540		120	1358			110	SPHWWW1HDNA27YHU21F				
		4000K	1586		124	1399			113	SPHWWW1HDNA27YHT21F				
		2700K	1634		128	1441			116	SPHWWW1HDNA25YHW31F				
		3000K	1738		136	1533			124	SPHWWW1HDNA25YHV31F				
	80	3500K	MacAdam 3-Step		1790	140			1579	127			SPHWWW1HDNA25YHU31F	
		4000K			1842	144			1625	131			SPHWWW1HDNA25YHT31F	
		5000K			1860	146			1640	132			SPHCW1HDNA25YHR31F	
		2700K	1634		128	1441			116	SPHWWW1HDNA25YHW21F				
		3000K	1738		136	1533			124	SPHWWW1HDNA25YHV21F				
		3500K	1790		140	1579			127	SPHWWW1HDNA25YHU21F				
		4000K	1842		144	1625			131	SPHWWW1HDNA25YHT21F				
		5000K	1860		146	1640			132	SPHCW1HDNA25YHRT1F				
		70	3000K		MacAdam 7-Step	1840			144	1623			131	SPHWWW1HDNA23YHVN1F
			4000K			1955			153	1725			139	SPHWWW1HDNA23YHTN1F
	5000K		1968			154			1736	140			SPHCW1HDNA23YHRN1F	
LC019B	90	2700K	MacAdam 3-Step	540	2065	108	35.5	19.2	1822	98	36.3	980	SPHWWW1HDNB27YHW32J	
		3000K			2197	115			1938	104			SPHWWW1HDNB27YHV32J	
		3500K			2263	118			1996	107			SPHWWW1HDNB27YHU32J	
		4000K	2329		121	2054			111	SPHWWW1HDNB27YHT32J				
		2700K	2065		108	1822			98	SPHWWW1HDNB27YHW22J				
		3000K	2197		115	1938			104	SPHWWW1HDNB27YHV22J				
		3500K	2263		118	1996			107	SPHWWW1HDNB27YHU22J				
		4000K	2329		121	2054			111	SPHWWW1HDNB27YHT22J				
		2700K	2402		125	2118			114	SPHWWW1HDNB25YHW32J				
		3000K	2555		133	2253			121	SPHWWW1HDNB25YHV32J				
	80	3500K	MacAdam 3-Step		2632	137			2321	125			SPHWWW1HDNB25YHU32J	
		4000K			2708	141			2389	129			SPHWWW1HDNB25YHT32J	
		5000K			2734	143			2411	130			SPHCW1HDNB25YHR32J	
		2700K	2402		125	2118			114	SPHWWW1HDNB25YHW22J				
		3000K	2555		133	2253			121	SPHWWW1HDNB25YHV22J				
		3500K	2632		137	2321			125	SPHWWW1HDNB25YHU22J				
		4000K	2708		141	2389			129	SPHWWW1HDNB25YHT22J				
		5000K	2734		143	2411			130	SPHCW1HDNB25YHRT2J				
		70	3000K		MacAdam 7-Step	2703			141	2384			128	SPHWWW1HDNB23YHVN2F
			4000K			2876			150	2536			137	SPHWWW1HDNB23YHTN2F
	5000K		2895			151			2553	137			SPHCW1HDNB23YHRN2F	

Product	CRI	CCT	Color Binning	If (mA)	Tc = 25°C		Voltage Typ. (V)	Input Power Typ. (W)	Tc = 85°C		Absolute Max. Rating		Part Number		
					Luminous flux Typ. (lm)	Luminous efficacy Typ. (lm/W)			Luminous flux Typ. (lm)	Luminous efficacy Typ. (lm/W)	Power (W)	If max (mA)			
LC026B	90	2700K	MacAdam 3-Step	720	2810	110	35.5	25.6	2479	100	48.1	1300	SPHWW1HDNC27YHW32F		
		3000K			2989	117			2637	106			SPHWW1HDNC27YHV32F		
		3500K			3079	120			2716	110			SPHWW1HDNC27YHU32F		
		4000K			3169	124			2795	113			SPHWW1HDNC27YHT32F		
		2700K	MacAdam 2-Step		2810	110			2479	100			SPHWW1HDNC27YHW22F		
		3000K			2989	117			2637	106			SPHWW1HDNC27YHV22F		
		3500K			3079	120			2716	110			SPHWW1HDNC27YHU22F		
		4000K			3169	124			2795	113			SPHWW1HDNC27YHT22F		
	80	2700K	MacAdam 3-Step		3268	128			2882	116			SPHWW1HDNC25YHW32F		
		3000K			3476	136			3066	124			SPHWW1HDNC25YHV32F		
		3500K			3580	140			3158	127			SPHWW1HDNC25YHU32F		
		4000K			3685	144			3250	131			SPHWW1HDNC25YHT32F		
		5000K	MacAdam 2-Step		3719	146			3281	132			SPHCW1HDNC25YHR33F		
		2700K			3268	128			2882	116			SPHWW1HDNC25YHW22F		
		3000K			3476	136			3066	124			SPHWW1HDNC25YHV22F		
		3500K			3580	140			3158	127			SPHWW1HDNC25YHU22F		
	70	4000K	MacAdam 2-Step		3685	144			3250	131			SPHWW1HDNC25YHT22F		
		5000K			3719	146			3281	132			SPHCW1HDNC25YHRT3F		
		3000K			3685	144			3250	131			SPHWW1HDNC23YHVN3F		
		4000K			3832	150			3380	136			SPHWW1HDNC23YHTN3F		
		5000K	MacAdam 7-Step		3869	151			3412	138			SPHCW1HDNC23YHRN3F		
LC033B	90	2700K			MacAdam 3-Step	900	3460	108	35.5	32	3052	99	59.9	1620	SPHWW1HDND27YHW33P
		3000K					3681	115			3246	105			SPHWW1HDND27YHV33P
		3500K					3791	119			3344	108			SPHWW1HDND27YHU33P
		4000K	3902	122			3441	111			SPHWW1HDND27YHT33P				
		2700K	MacAdam 2-Step		3460		108	3052			99	SPHWW1HDND27YHW23P			
		3000K			3681		115	3246			105	SPHWW1HDND27YHV23P			
		3500K			3791		119	3344			108	SPHWW1HDND27YHU23P			
		4000K			3902		122	3441			111	SPHWW1HDND27YHT23P			
	80	2700K	MacAdam 3-Step		4023		126	3548			115	SPHWW1HDND25YHW33P			
		3000K			4280		134	3775			122	SPHWW1HDND25YHV33P			
		3500K			4408		138	3888			126	SPHWW1HDND25YHU33P			
		4000K			4537		142	4001			129	SPHWW1HDND25YHT33P			
		5000K	MacAdam 2-Step		4580		143	4039			130	SPHCW1HDND25YHR33P			
		2700K			4023		126	3548			115	SPHWW1HDND25YHW23P			
		3000K			4280		134	3775			122	SPHWW1HDND25YHV23P			
		3500K			4408		138	3888			126	SPHWW1HDND25YHU23P			
	70	4000K	MacAdam 2-Step		4537		142	4001			129	SPHWW1HDND25YHT23P			
		5000K			4580		143	4039			130	SPHCW1HDND25YHRT3P			
		3000K			4537		142	4002			129	SPHWW1HDND23YHVN4P			
		4000K			4729		148	4171			135	SPHWW1HDND23YHTN4P			
		5000K	MacAdam 7-Step		4761		149	4199			136	SPHCW1HDND23YHRN4P			
LC040B	90	2700K			MacAdam 3-Step	1080	4110	107	35.5	38.3	3625	98	70.3	1900	SPHWW1HDNE27YHW34J
		3000K					4372	114			3856	104			SPHWW1HDNE27YHV34J
		3500K					4503	117			3972	107			SPHWW1HDNE27YHU34J
		4000K	4634	121			4088	110			SPHWW1HDNE27YHT34J				
		2700K	MacAdam 2-Step		4110		107	3625			98	SPHWW1HDNE27YHW24J			
		3000K			4372		114	3856			104	SPHWW1HDNE27YHV24J			
		3500K			4503		117	3972			107	SPHWW1HDNE27YHU24J			
		4000K			4634		121	4088			110	SPHWW1HDNE27YHT24J			
	80	2700K	MacAdam 3-Step		4779		125	4215			113	SPHWW1HDNE25YHW34J			
		3000K			5084		133	4484			121	SPHWW1HDNE25YHV34J			
		3500K			5236		137	4619			124	SPHWW1HDNE25YHU34J			
		4000K			5389		141	4753			128	SPHWW1HDNE25YHT34J			
		5000K	MacAdam 2-Step		5440		142	4798			129	SPHCW1HDNE25YHR34J			
		2700K			4779		125	4215			113	SPHWW1HDNE25YHW24J			
		3000K			5084		133	4484			121	SPHWW1HDNE25YHV24J			
		3500K			5236		137	4619			124	SPHWW1HDNE25YHU24J			
	70	4000K	MacAdam 2-Step		5389		141	4753			128	SPHWW1HDNE25YHT24J			
		5000K			5440		142	4798			129	SPHCW1HDNE25YHRT4J			
		3000K			5389		141	4753			128	SPHWW1HDNE23YHVN4J			
		4000K			5604		146	4943			133	SPHWW1HDNE23YHTN4J			
		5000K	MacAdam 7-Step		5658		148	4991			134	SPHCW1HDNE23YHRN5J			

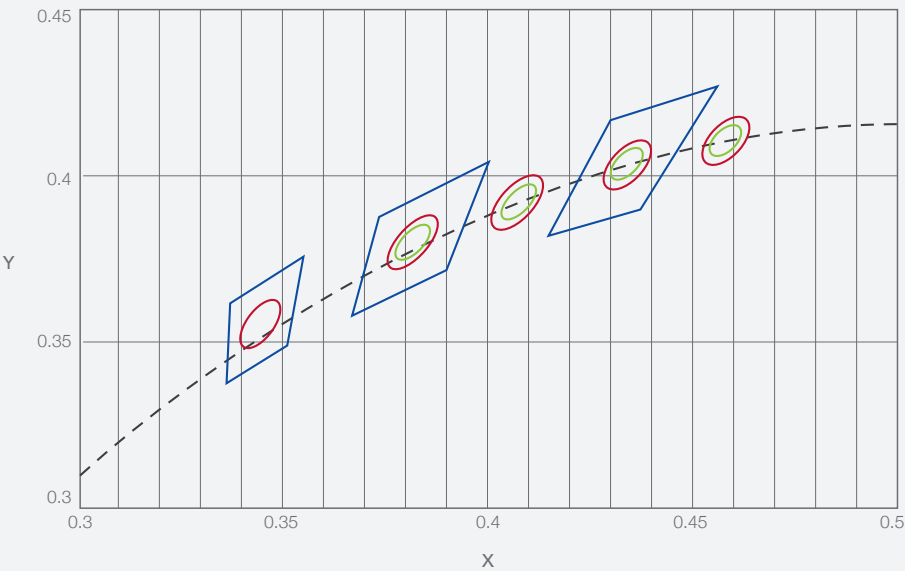
Smart Partner, Brilliant Solutions

Creating a new world with leading LED technology

Color Variations

Product	Ra 80 Min.					Ra 90 Min.				Ra 70+		
	2700K	3000K	3500K	4000K	5000K	2700K	3000K	3500K	4000K	3000K	4000K	5000K
LC006B	o	o	o	o	o	o	o	o	o	o	o	o
LC008B	o	o	o	o	o	o	o	o	o	o	o	o
LC013B	o	o	o	o	o	o	o	o	o	o	o	o
LC019B	o	o	o	o	o	o	o	o	o	o	o	o
LC026B	o	o	o	o	o	o	o	o	o	o	o	o
LC033B	o	o	o	o	o	o	o	o	o	o	o	o
LC040B	o	o	o	o	o	o	o	o	o	o	o	o

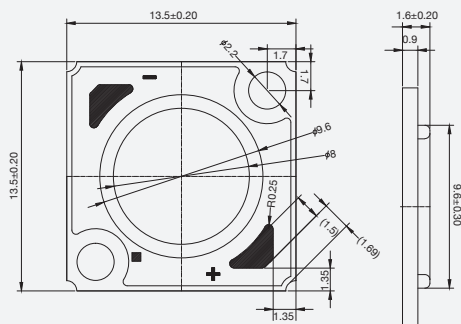
Chromaticity Coordinates



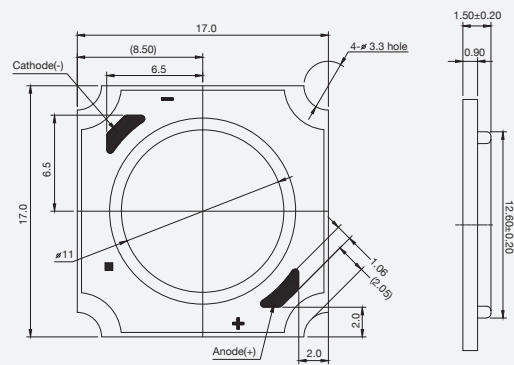
CIE1931
Chromaticity Diagram
(E-Star)

	Ra 80 Min.					Ra 90 Min.				Ra 70+		
	2700K	3000K	3500K	4000K	5000K	2700K	3000K	3500K	4000K	3000K	4000K	5000K
MacAdam 3-Step	o	o	o	o	o	o	o	o	o			
MacAdam 2-Step	o	o	o	o		o	o	o	o			
MacAdam 7-Step (ANSI)					o					o	o	o

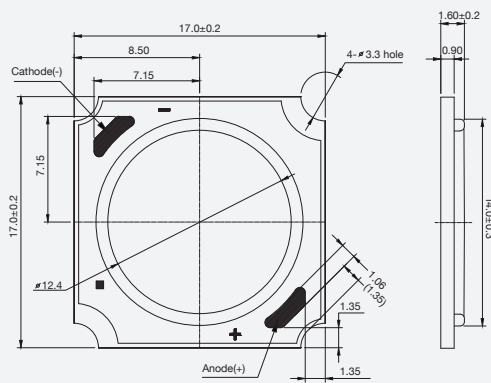
Product Dimentions



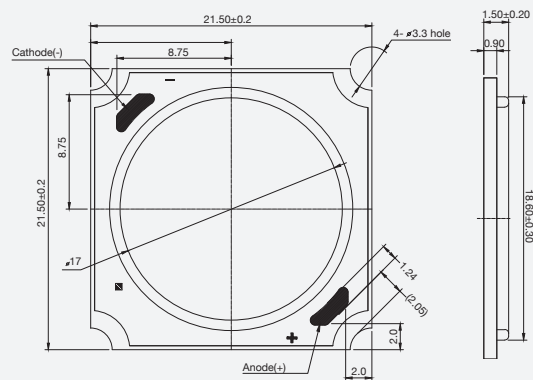
LC006B / LC008B



LC013B



LC019B



LC026B / LC033B / LC040B

Solution

Samsung's partner network is designed to provide customers with diverse lighting application solutions all around the world. More information about Samsung eco solution partners can be found at <http://www.samsung.com/global/business/led/support/partner-network/partners>



Optic



Thermal



Power



Holder

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