

**About Samsung Electronics Co., Ltd.**

Samsung Electronics Co. Ltd inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and semiconductor and LED solutions. For the latest news, please visit the Samsung Newsroom at <http://news.samsung.com>.

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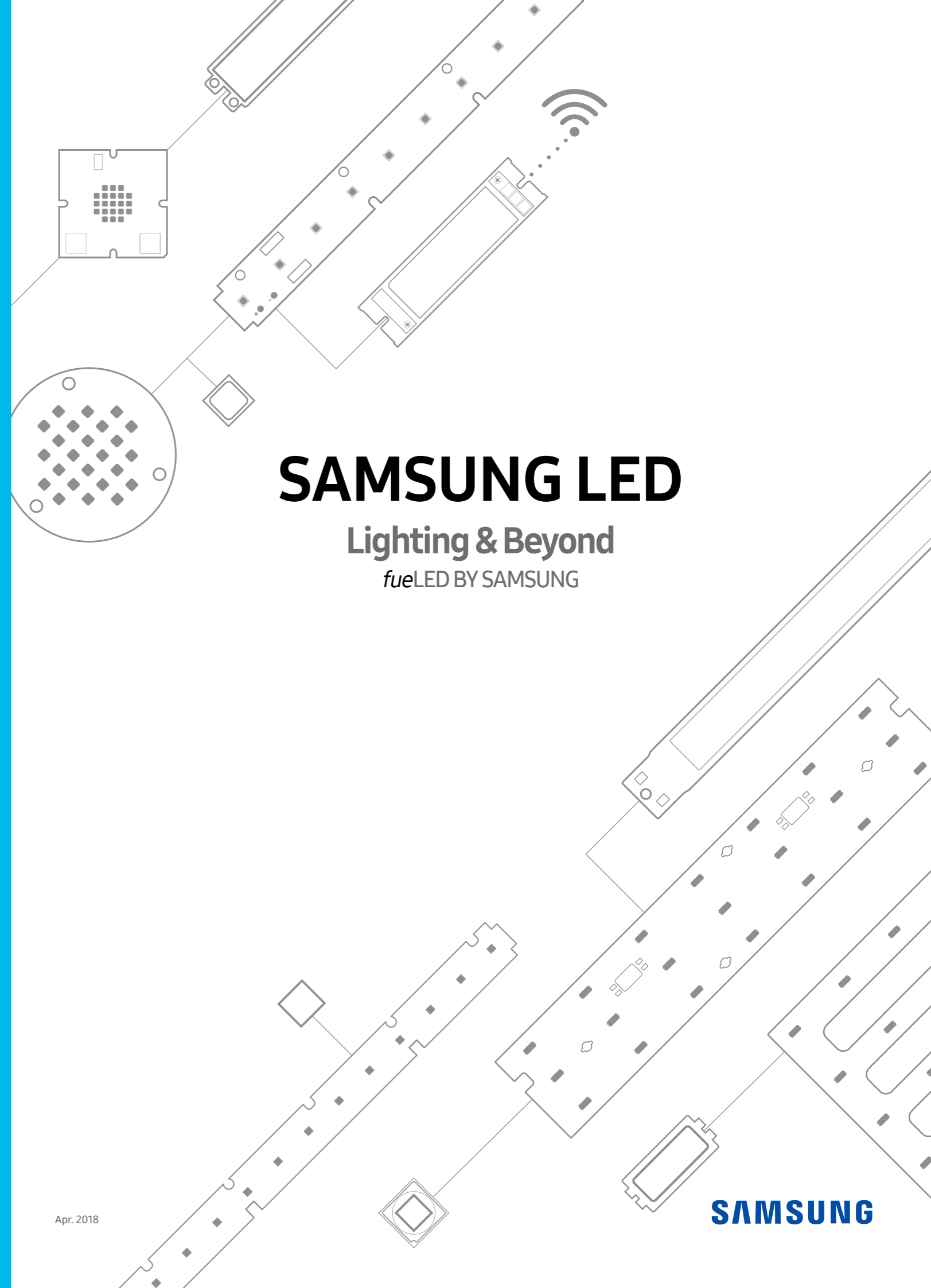
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# SAMSUNG LED

Lighting & Beyond

*fu*LED BY SAMSUNG



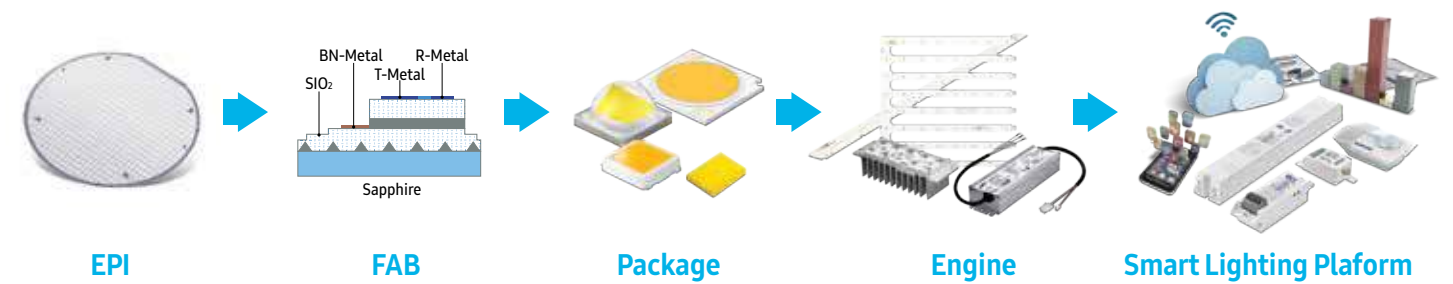
# Overview & Technology

Samsung Electronics Co., Ltd. is a global leader in consumer electronics and the core components that go into them.



Samsung aspires to create new technologies and innovative products that inspire the world, while delivering new value to enhance the lives of customers, partners and employees.

## Vertically Integrated Solution Provider



## Samsung Electronics



**1969**  
Company  
Founded



**Vision 2020**  
Inspire the world,  
create the future



**308,745+**  
Employees  
in 79 Countries

## Innovation & Market Leadership



**7**  
Design Centers



**34**  
R&D Centers



**6<sup>th</sup>**  
Best Global Brand 2017

## Reliable, on-time delivery without delays



# Life and LED Business Solution Partner

LED technology has started a new era of innovation and game-changing trends affecting diverse applications and lighting industries.

In particular, as countries around the world strengthen energy conservation programs and push for related legislation enforcement,

demand for energy-efficient lighting is on the rise at a rapid pace.

Samsung's LED Business aims to achieve excellence as a long life,

energy saving and eco-friendly light source supplier in lighting applications.

Samsung's advanced semiconductor manufacturing expertise serves as a strong foundation to deliver state-of-the-art LED devices.

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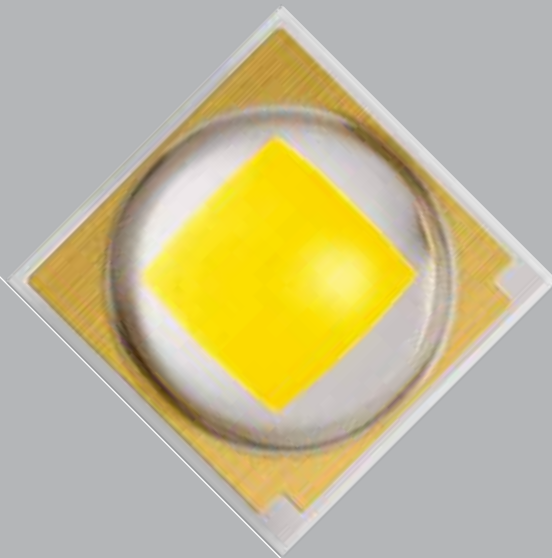
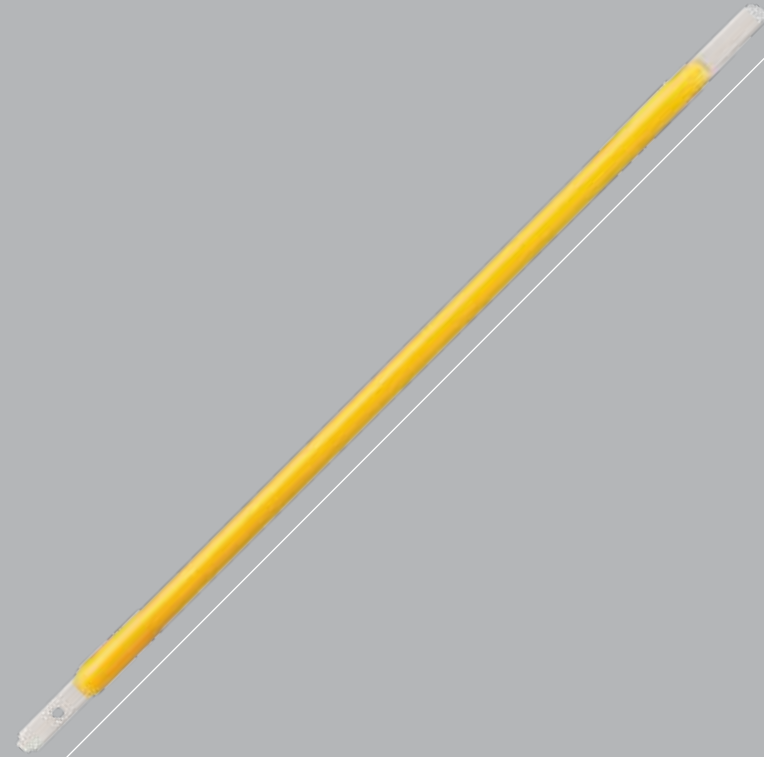


### Driver

- 94 White Tunable 2-channel
- 96 Ambient Light
- 98 Down & Spot Light
- 98 Industrial Light
- 99 Outdoor Light

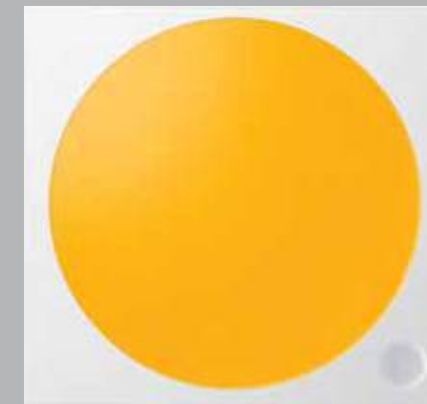
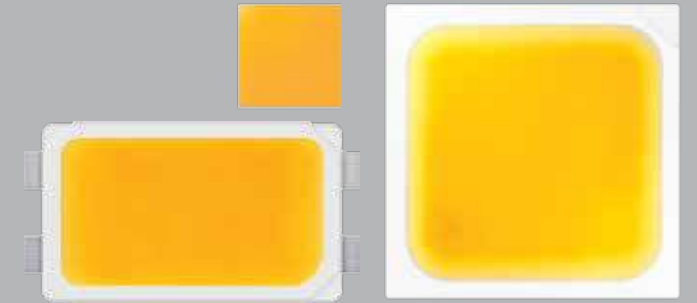


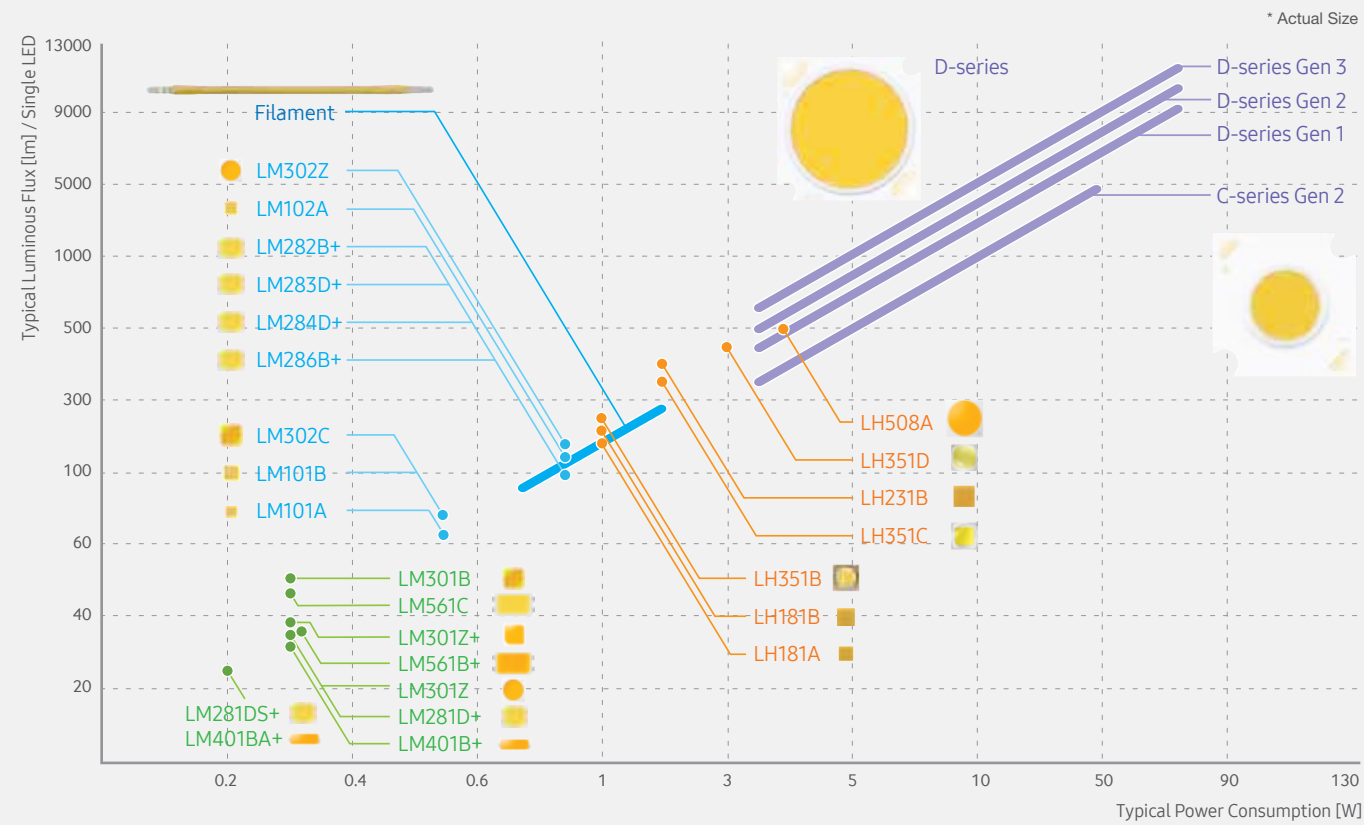
# Component



- CSP LEDs
- Mid Power LEDs
- Filament LEDs
- High Power LEDs
- COB LEDs

Samsung LED





Mid Power LED (0.3W)

- High efficacy
- Replacement for fluorescent lamps
- LED Tube, Ambient Light

Filament LED

- Aesthetic appearance
- Large freedom in bulb design
- Decorative and general lighting bulbs

Chip-on-Board LEDs

- Chip on Board solution
- Outstanding color rendering & consistency
- MR/PAR, Spotlight, High Bay & Low Bay Light

Mid Power LED (~1W)

- High flux & better lm/\$
- Replacement for incandescent lamps
- Retrofit Bulb, MR/PAR, Downlight

High Power LED

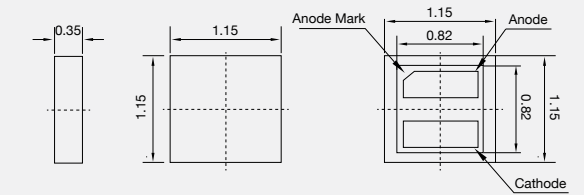
- Ultra high flux
- Provides excellent color consistency
- Spotlight, Street Light

LM101A



Compact form factor for design flexibility

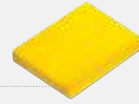
- 0.5W class mid power 3V LED
- Compact footprint: 1.18mm x 1.18mm



CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	3000	SCP7VT78HPL1V☆S06E	SD	55	59
			SE	59	63
			SF	63	67
	3500	SCP7UT78HPL1U☆S06E	SD	55	59
			SE	59	63
			SF	63	67
	4000	SCP7TT78HPL1T☆S06E	SE	59	63
			SF	63	67
			SG	67	71
	5000	SCP7RT78HPL1R☆S06E	SE	59	63
			SF	63	67
			SG	67	71
5700	SCP7QT78HPL1Q☆S06E	SF	63	67	
		SG	67	71	
		SE	59	63	
6500	SCP7PT78HPL1P☆S06E	SE	59	63	
		SF	63	67	
		SG	67	71	
80+	2700	SCP8WT78HPL1W☆S06E	SB	47	51
			SC	51	55
			SD	55	59
	3000	SCP8VT78HPL1V☆S06E	SC	51	55
			SD	55	59
			SE	59	63
	3500	SCP8UT78HPL1U☆S06E	SC	51	55
			SD	55	59
			SE	59	63
	4000	SCP8TT78HPL1T☆S06E	SD	55	59
			SE	59	63
			SF	63	67
5000	SCP8RT78HPL1R☆S06E	SD	55	59	
		SE	59	63	
		SF	63	67	
5700	SCP8QT78HPL1Q☆S06E	SC	51	55	
		SD	55	59	
		SE	59	63	
6500	SCP8PT78HPL1P☆S06E	SC	51	55	
		SD	55	59	
		SE	59	63	
90+	2700	SCP9WT78HPL1W☆S06E	SY	35	39
			SZ	39	43
			SA	43	47
	3000	SCP9VT78HPL1V☆S06E	SY	35	39
			SZ	39	43
			SA	43	47
	3500	SCP9UT78HPL1U☆S06E	SZ	39	43
			SA	43	47
			SB	47	51

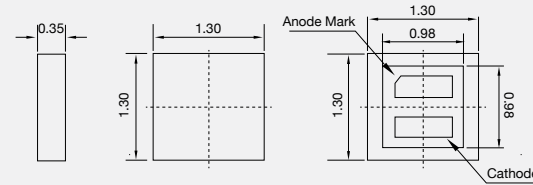
Note: "☆" can be "L" (MacAdam 5-step), "U" (MacAdam 3-step)

# LM102A



Compact form factor for design flexibility

- 1W class mid power 6V LED
- Compact footprint: 1.34mm × 1.34mm



[150mA, 85°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)			
			Bin	Min.	Max.	
70+	3000	SCS7VT93HPL2V☆S03F	SD	103	111	
			SE	111	119	
	3500	SCS7UT93HPL2U☆S03F	SD	103	111	
			SE	111	119	
	4000	SCS7TT93HPL2T☆S03F	SE	111	119	
			SF	119	127	
	5000	SCS7RT93HPL2R☆S03F	SE	111	119	
			SF	119	127	
	5700	SCS7QT93HPL2Q☆S03F	SE	111	119	
			SF	119	127	
	6500	SCS7PT93HPL2P☆S03F	SE	111	119	
			SF	119	127	
	80+	2700	SCS8WT93HPL2W☆S03F	SC	95	103
				SD	103	111
3000		SCS8VT93HPL2V☆S03F	SC	95	103	
			SD	103	111	
3500		SCS8UT93HPL2U☆S03F	SD	103	111	
			SE	111	119	
4000		SCS8TT93HPL2T☆S03F	SD	103	111	
			SE	111	119	
5000		SCS8RT93HPL2R☆S03F	SE	111	119	
			SF	119	127	
5700		SCS8QT93HPL2Q☆S03F	SD	103	111	
			SE	111	119	
6500		SCS8PT93HPL2P☆S03F	SD	103	111	
			SE	111	119	
90+	2700	SCS9WT93HPL2W☆S03F	SA	79	87	
			SB	87	95	
	3000	SCS9VT93HPL2V☆S03F	SA	79	87	
			SB	87	95	
	3500	SCS9UT93HPL2U☆S03F	SA	79	87	
			SB	87	95	

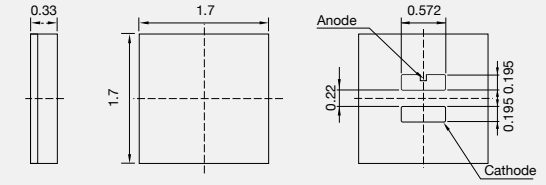
Note: "☆" can be "L" (MacAdam 5-step), "U" (MacAdam 3-step)

# LM101B



Compact form factor for design flexibility

- 0.5W class mid power 3V LED
- Compact footprint: 1.70mm × 1.70mm



[150mA, 85°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SCP7WT78HEL1W☆S06E	SE	59	63
			SF	63	67
	3000	SCP7VT78HEL1V☆S06E	SF	63	67
			SG	67	71
	3500	SCP7UT78HEL1U☆S06E	SF	63	67
			SG	67	71
	4000	SCP7TT78HEL1T☆S06E	SG	67	71
			SH	71	75
	5000	SCP7RT78HEL1R☆S06E	SG	67	71
			SH	71	75
	5700	SCP7QT78HEL1Q☆S06E	SF	63	67
			SG	67	71
	6500	SCP7PT78HEL1P☆S06E	SF	63	67
			SG	67	71
80+	2700	SCP8WT78HEL1W☆S06E	SD	55	59
			SE	59	63
	3000	SCP8VT78HEL1V☆S06E	SE	59	63
			SF	63	67
	3500	SCP8UT78HEL1U☆S06E	SE	59	63
			SF	63	67
	4000	SCP8TT78HEL1T☆S06E	SF	63	67
			SG	67	71
	5000	SCP8RT78HEL1R☆S06E	SF	63	67
			SG	67	71
	5700	SCP8QT78HEL1Q☆S06E	SE	59	63
			SF	63	67
	6500	SCP8PT78HEL1P☆S06E	SE	59	63
			SF	63	67
90+	2700	SCP9WT78HEL1W☆S06E	SA	43	47
			SB	47	51
	3000	SCP9VT78HEL1V☆S06E	SA	43	47
			SB	47	51
	3500	SCP9UT78HEL1U☆S06E	SB	47	51
			SC	51	55
4000	SCP9TT78HEL1T☆S06E	SB	47	51	
		SC	51	55	

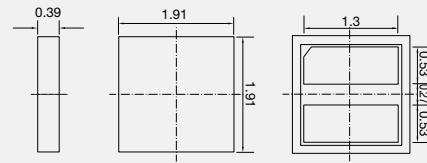
Note: "☆" can be "L" (MacAdam 5-step), "U" (MacAdam 3-step)

# LH181A



Compact form factor for design flexibility

- 3W class high power CSP
- High performance and superior lm/\$
- Compact footprint: 1.9mm x 1.9mm



[350mA, 85°C]

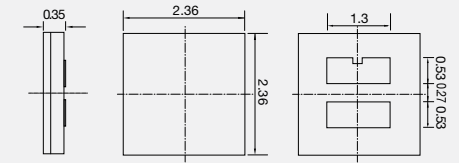
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SCP7WTF1HPLAW0J34E	J1, K1, M1	120	150
	3000	SCP7VTF1HPLAV0K34E	K1, M1, N1	130	160
	3500	SCP7UTF1HPLAU0K34E	K1, M1, N1	130	160
	4000	SCP7TTF1HPLAT0M34E	M1, N1, P1	140	170
	5000	SCP7RTF1HPLARTM34E	M1, N1, P1	140	170
	5700	SCP7QTF1HPLAQM34E	M1, N1, P1	140	170
	6500	SCP7PTF1HPLAPTM34E	M1, N1, P1	140	170
80+	2700	SCP8WTF1HPLAW0J34E	J1, K1, M1	120	150
	3000	SCP8VTF1HPLAV0K34E	K1, M1, N1	130	160
	3500	SCP8UTF1HPLAU0K34E	K1, M1, N1	130	160
	4000	SCP8TTF1HPLAT0K34E	K1, M1, N1	130	160
	5000	SCP8RTF1HPLARTK34E	K1, M1, N1	130	160
	5700	SCP8QTF1HPLAQT34E	K1, M1, N1	130	160
	6500	SCP8PTF1HPLAPTK34E	K1, M1, N1	130	160
90+	3000	SCP9VTF1HPLAV0G34E	G1, H1, J1	100	130
	4000	SCP9TTF1HPLAT0G34E	G1, H1, J1	100	130

# LH181B



Compact form factor for design flexibility

- 3W class high power CSP
- Higher performance by applying new structure
- Compact footprint: 2.36mm x 2.36mm



[350mA, 85°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SCP7WTF1HEL1W◇M34E	M1, N1, P1	140	170
	3000	SCP7VTF1HEL1V◇M34E	M1, N1, P1	140	170
	3500	SCP7UTF1HEL1U◇N34E	N1, P1, Q1	150	180
	4000	SCP7TTF1HEL1T◇N34E	N1, P1, Q1	150	180
	5000	SCP7RTF1HEL1R◇P34E	P1, Q1, R1	160	190
	5700	SCP7QTF1HEL1Q◇P34E	P1, Q1, R1	160	190
	6500	SCP7PTF1HEL1P◇N34E	N1, P1, Q1	150	180
80+	2700	SCP8WTF1HEL1W◇K34E	K1, M1, N1	130	160
	3000	SCP8VTF1HEL1V◇K34E	K1, M1, N1	130	160
	3500	SCP8UTF1HEL1U◇M34E	M1, N1, P1	140	170
	4000	SCP8TTF1HEL1T◇M34E	M1, N1, P1	140	170
	5000	SCP8RTF1HEL1R◇N34E	N1, P1, Q1	150	180
	5700	SCP8QTF1HEL1Q◇N34E	N1, P1, Q1	150	180
	6500	SCP8PTF1HEL1P◇M34E	M1, N1, P1	140	170
90+	2700	SCP9WTF1HEL1W◇G34E	G1, H1, J1	100	130
	3000	SCP9VTF1HEL1V◇G34E	G1, H1, J1	100	130
	3500	SCP9UTF1HEL1U◇H34E	H1, J1, K1	110	140
	4000	SCP9TTF1HEL1T◇H34E	H1, J1, K1	110	140
	5000	SCP9RTF1HEL1R◇H34E	H1, J1, K1	110	140

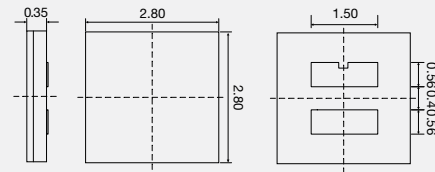
\* "◇" can be "K" (MacAdam 5-step ellipse bin), "U" (MacAdam 3-step ellipse bin) of the color binning

# LH231B



Compact form factor for design flexibility

- 5W class super high power CSP
- Suitable for highbay lighting, stadium lighting
- Compact footprint: 2.80 mm x 2.80 mm



[700mA, 85°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SCP7WTJ5HEL1W☆MF6E	MB, NB, PB	250	310
	3000	SCP7VTJ5HEL1V☆NF6E	NB, PB, QB	270	330
	3500	SCP7UTJ5HEL1U☆PF6E	PB, QB, RB	290	350
	4000	SCP7TTJ5HEL1T☆PF6E	PB, QB, RB	290	350
	5000	SCP7RTJ5HEL1R☆QF6E	QB, RB, SB	310	370
	5700	SCP7QTJ5HEL1Q☆QF6E	QB, RB, SB	310	370
	6500	SCP7PTJ5HEL1P☆PF6E	PB, QB, RB	290	350
80+	2700	SCP8WTJ5HEL1W☆KF6E	KB, MB, NB	230	290
	3000	SCP8VTJ5HEL1V☆MF6E	MB, NB, PB	250	310
	3500	SCP8UTJ5HEL1U☆MF6E	MB, NB, PB	250	310
	4000	SCP8TTJ5HEL1T☆NF6E	NB, PB, QB	270	330
	5000	SCP8RTJ5HEL1R☆NF6E	NB, PB, QB	270	330
	5700	SCP8QTJ5HEL1Q☆NF6E	NB, PB, QB	270	330
90+	2700	SCP9WTJ5HEL1W☆GF6E	GB, HB, JB	170	230
	3000	SCP9VTJ5HEL1V☆GF6E	GB, HB, JB	170	230
	3500	SCP9UTJ5HEL1U☆HF6E	HB, JB, KB	190	250
	4000	SCP9TTJ5HEL1T☆HF6E	HB, JB, KB	190	250

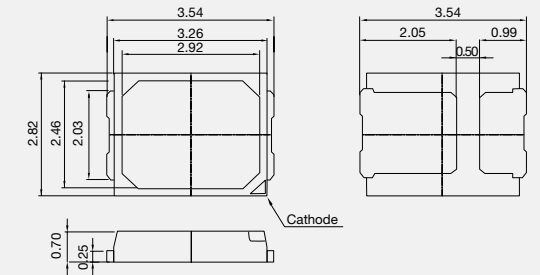
\* "☆" can be "L" (MacAdam 5-step ellipse bin), "U" (MacAdam 3-step ellipse bin) of the color binning

# LM281DS Plus



Designed for better lm/\$

- 0.2W class mid power 3V LED
- Suitable for ambient lights, downlights & lamps
- Standard footprint: 2.8mm x 3.5mm



[60mA, 25°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)			
			Bin	Min.	Max.	
80+	2700	SPMWH72286D5WAW0S2	S2	22.0	24.5	
		SPMWH72286D5WAW0S3	S3	24.5	27.0	
	3000	SPMWH72286D5WAV0S2	S2	22.5	25.0	
		SPMWH72286D5WAV0S3	S3	25.0	27.5	
	3500	SPMWH72286D5WAW0S2	S2	23.5	26.0	
		SPMWH72286D5WAW0S3	S3	26.0	28.5	
	4000	SPMWH72286D5WAT0S3	S2	24.0	26.5	
			S3	26.5	29.0	
		SPMWH72286D5WAR0S2	S2	24.5	27.0	
			S3	27.0	29.5	
		5700	SPMWH72286D5WAQ0S2	S2	24.5	27.0
			SPMWH72286D5WAQ0S3	S3	27.0	29.0
6500	SPMWH72286D5WAP0S2	S2	24.0	26.5		
	SPMWH72286D5WAP0S3	S3	26.5	29.0		
90+	2700	SPMWH72286D7WAW0S2	S2	18.5	21.0	
		SPMWH72286D7WAW0S3	S3	21.0	23.5	
	3000	SPMWH72286D7WAV0S2	S2	19.0	21.5	
		SPMWH72286D7WAV0S3	S3	21.5	24.0	
	3500	SPMWH72286D7WAW0S2	S2	20.0	22.5	
		SPMWH72286D7WAW0S3	S3	22.5	25.0	
	4000	SPMWH72286D7WAT0S3	S2	20.5	23.0	
			S3	23.0	25.5	
		SPMWH72286D7WAR0S2	S2	21.0	23.5	
			S3	23.5	26.0	
		5700	SPMWH72286D7WAQ0S2	S2	21.0	23.5
			SPMWH72286D7WAQ0S3	S3	23.5	26.0
	6500	SPMWH72286D7WAP0S2	S2	20.5	23.0	
		SPMWH72286D7WAP0S3	S3	23.0	25.5	

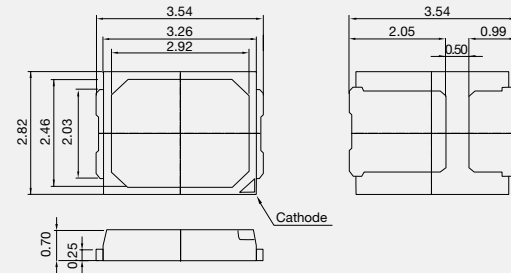


# LM281D Plus



Designed for better lm/\$

- 0.5W class mid power LED
- Suitable for ambient lights, downlights & lamps
- Standard footprint: 2.8mm x 3.5mm



[150mA, 25°C]

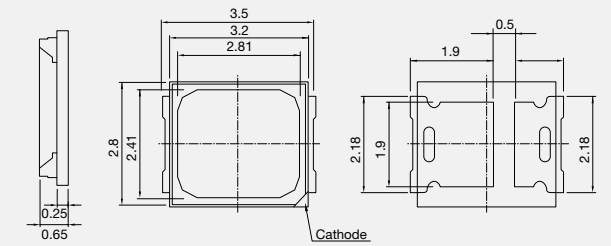
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
80+	2700	SPMWH6228FD5WAW0SC	SC	58.5	62.5
		SPMWH6228FD5WAW0SE	SE	62.5	66.5
		SPMWH6228FD5WAW0SG	SG	64.5	68.5
	3000	SPMWH6228FD5WAV0SC	SC	60.5	64.5
		SPMWH6228FD5WAV0SE	SE	64.5	68.5
		SPMWH6228FD5WAV0SG	SG	66.5	70.5
	3500	SPMWH6228FD5WAW0SC	SC	61.5	65.5
		SPMWH6228FD5WAW0SE	SE	65.5	69.5
		SPMWH6228FD5WAW0SG	SG	67.5	71.5
	4000	SPMWH6228FD5WAT0SC	SC	64.0	68.0
		SPMWH6228FD5WAT0SE	SE	68.0	72.0
		SPMWH6228FD5WAT0SG	SG	70.0	74.0
	5000	SPMWH6228FD5WAR0SC	SC	65.0	69.0
		SPMWH6228FD5WAR0SE	SE	69.0	73.0
		SPMWH6228FD5WAR0SG	SG	71.0	75.0
	5700	SPMWH6228FD5WAQ0SC	SC	64.5	68.5
		SPMWH6228FD5WAQ0SE	SE	68.5	72.5
		SPMWH6228FD5WAQ0SG	SG	70.5	74.5
6500	SPMWH6228FD5WAP0SC	SC	64.0	68.0	
	SPMWH6228FD5WAP0SE	SE	68.0	72.0	
	SPMWH6228FD5WAP0SG	SG	70.0	74.0	
90+	2700	SPMWH6228FD7WAW0SC	SC	49.5	53.0
		SPMWH6228FD7WAW0SE	SE	53.0	56.5
		SPMWH6228FD7WAW0SG	SG	55.0	58.5
	3000	SPMWH6228FD7WAV0SC	SC	51.0	54.5
		SPMWH6228FD7WAV0SE	SE	54.5	58.0
		SPMWH6228FD7WAV0SG	SG	56.5	60.0
	3500	SPMWH6228FD7WAW0SC	SC	52.0	55.5
		SPMWH6228FD7WAW0SE	SE	55.5	59.0
		SPMWH6228FD7WAW0SG	SG	57.5	61.0
	4000	SPMWH6228FD7WAT0SC	SC	54.0	57.5
		SPMWH6228FD7WAT0SE	SE	57.5	61.0
		SPMWH6228FD7WAT0SG	SG	59.5	63.0
	5000	SPMWH6228FD7WAR0SC	SC	55.0	58.5
		SPMWH6228FD7WAR0SE	SE	58.5	62.0
		SPMWH6228FD7WAR0SG	SG	60.5	64.0
	5700	SPMWH6228FD7WAQ0SC	SC	54.5	58.0
		SPMWH6228FD7WAQ0SE	SE	58.0	61.5
		SPMWH6228FD7WAQ0SG	SG	60.0	63.5
6500	SPMWH6228FD7WAP0SC	SC	54.0	57.5	
	SPMWH6228FD7WAP0SE	SE	57.5	61.0	
	SPMWH6228FD7WAP0SG	SG	59.5	63.0	

# LM282B Plus



Designed for better lm/\$

- 1W class mid power 6V LED
- Suitable for downlights, ambient lights & lamps
- Standard footprint: 2.8 mm x 3.5 mm

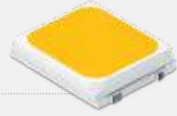


[150mA, 25°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)			
			Bin	Min.	Max.	
80+	2700	SPMWH1221FQ5GBW0SA	SA	103	113	
		SPMWH1221FQ5GBW0SB	SB	113	123	
	3000	SPMWH1221FQ5GBV0SA	SA	107	117	
		SPMWH1221FQ5GBV0SB	SB	117	127	
	3500	SPMWH1221FQ5GBU0SA	SA	109	119	
		SPMWH1221FQ5GBU0SB	SB	119	129	
	4000	SPMWH1221FQ5GBT0SA	SA	113	123	
		SPMWH1221FQ5GBT0SB	SB	123	133	
	5000	SPMWH1221FQ5GBR0SA	SA	115	125	
		SPMWH1221FQ5GBR0SB	SB	125	135	
	5700	SPMWH1221FQ5GBQ0SA	SA	114	124	
		SPMWH1221FQ5GBQ0SB	SB	124	134	
	6500	SPMWH1221FQ5GBP0SA	SA	113	123	
		SPMWH1221FQ5GBP0SB	SB	123	133	
	90+	2700	SPMWH1221FQ7GBW0SA	SA	87	95
			SPMWH1221FQ7GBW0SB	SB	95	103
		3000	SPMWH1221FQ7GBV0SA	SA	90	98
			SPMWH1221FQ7GBV0SB	SB	98	106
3500		SPMWH1221FQ7GBU0SA	SA	92	100	
		SPMWH1221FQ7GBU0SB	SB	100	108	
4000		SPMWH1221FQ7GBT0SA	SA	95	103	
		SPMWH1221FQ7GBT0SB	SB	103	111	
5000		SPMWH1221FQ7GBR0SA	SA	97	105	
		SPMWH1221FQ7GBR0SB	SB	105	113	
5700		SPMWH1221FQ7GBQ0SA	SA	96	104	
		SPMWH1221FQ7GBQ0SB	SB	104	112	
6500		SPMWH1221FQ7GBP0SA	SA	95	103	
		SPMWH1221FQ7GBP0SB	SB	103	111	

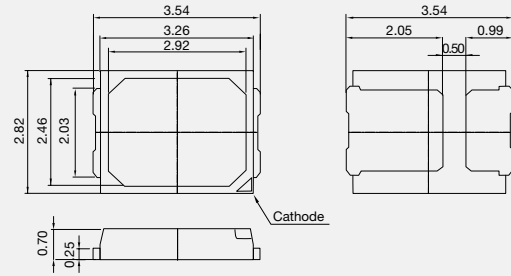
\* Color coordinates: Considering the color shift during high temp. operation, provided at hot temp. color shift coordinates.

# LM283D Plus



Designed for better lm/\$

- 1W class mid power 9V LED
- Suitable for lamps & downlights
- Standard footprint: 2.8mm x 3.5mm



[100mA, 25°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
80+	2700	SPMWH6229AQ5SGW0SL	SL	105	112
		SPMWH6229AQ5SGW0SB	SB	113	120
		SPMWH6229AQ5SGW0SM	SM	120	127
	3000	SPMWH6229AQ5SGV0SL	SL	107	114
		SPMWH6229AQ5SGV0SB	SB	117	124
		SPMWH6229AQ5SGV0SM	SM	122	129
	3500	SPMWH6229AQ5SGU0SL	SL	111	118
		SPMWH6229AQ5SGU0SB	SB	119	126
		SPMWH6229AQ5SGU0SM	SM	126	133
	4000	SPMWH6229AQ5SGT0SL	SL	114	121
		SPMWH6229AQ5SGT0SB	SB	123	130
		SPMWH6229AQ5SGT0SM	SM	129	136
	5000	SPMWH6229AQ5SGR0SL	SL	117	124
		SPMWH6229AQ5SGR0SB	SB	125	132
		SPMWH6229AQ5SGR0SM	SM	132	139
	5700	SPMWH6229AQ5SGQ0SL	SL	116	123
		SPMWH6229AQ5SGQ0SB	SB	124	131
		SPMWH6229AQ5SGQ0SM	SM	131	138
6500	SPMWH6229AQ5SGP0SL	SL	114	121	
	SPMWH6229AQ5SGP0SB	SB	123	130	
	SPMWH6229AQ5SGP0SM	SM	129	136	
90+	2700	SPMWH6229AQ7SGW0SL	SL	90	97
		SPMWH6229AQ7SGW0SM	SM	102	109
	3000	SPMWH6229AQ7SGV0SL	SL	91	98
		SPMWH6229AQ7SGV0SM	SM	103	110
	3500	SPMWH6229AQ7SGU0SL	SL	94	101
		SPMWH6229AQ7SGU0SM	SM	107	114
	4000	SPMWH6229AQ7SGT0SL	SL	97	104
		SPMWH6229AQ7SGT0SM	SM	109	116
	5000	SPMWH6229AQ7SGR0SL	SL	99	106
		SPMWH6229AQ7SGR0SM	SM	112	119
	5700	SPMWH6229AQ7SGQ0SL	SL	98	105
		SPMWH6229AQ7SGQ0SM	SM	111	118
	6500	SPMWH6229AQ7SGP0SL	SL	97	104
		SPMWH6229AQ7SGP0SM	SM	109	116

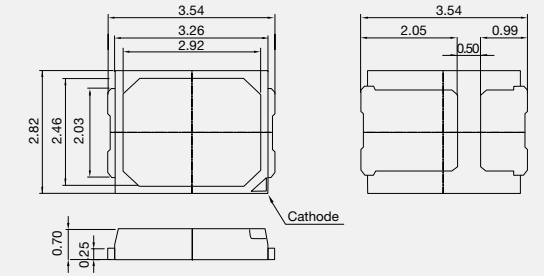
\* Color coordinates: Considering the color shift during high temp. operation, provided at hot temp. color shift coordinates.

# LM284D Plus



Designed for better lm/\$

- 1W class mid power 12V LED
- Suitable for lamps & downlights
- Standard footprint: 2.8mm x 3.5mm



[75mA, 25°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)			
			Bin	Min.	Max.	
80+	2700	SPMWH622C7Q5SHW0SB	SB	115	122	
		SPMWH622C7Q5SHW0SC	SC	120	127	
	3000	SPMWH622C7Q5SHV0SB	SB	117	124	
		SPMWH622C7Q5SHV0SC	SC	122	129	
	3500	SPMWH622C7Q5SHU0SB	SB	121	128	
		SPMWH622C7Q5SHU0SC	SC	126	133	
	4000	SPMWH622C7Q5SHT0SB	SB	124	131	
		SPMWH622C7Q5SHT0SC	SC	129	136	
	5000	SPMWH622C7Q5SHR0SB	SB	127	134	
		SPMWH622C7Q5SHR0SC	SC	132	139	
	5700	SPMWH622C7Q5SHQ0SB	SB	126	133	
		SPMWH622C7Q5SHQ0SC	SC	131	138	
	6500	SPMWH622C7Q5SHP0SB	SB	124	131	
		SPMWH622C7Q5SHP0SC	SC	129	136	
	90+	2700	SPMWH622C7Q7SHW0SB	SB	100	107
			SPMWH622C7Q7SHW0SC	SC	106	113
		3000	SPMWH622C7Q7SHV0SB	SB	101	108
			SPMWH622C7Q7SHV0SC	SC	107	114
3500		SPMWH622C7Q7SHU0SB	SB	105	112	
		SPMWH622C7Q7SHU0SC	SC	111	118	
4000		SPMWH622C7Q7SHT0SB	SB	108	115	
		SPMWH622C7Q7SHT0SC	SC	114	121	
5000		SPMWH622C7Q7SHR0SB	SB	110	117	
		SPMWH622C7Q7SHR0SC	SC	116	123	
5700		SPMWH622C7Q7SHQ0SB	SB	109	116	
		SPMWH622C7Q7SHQ0SC	SC	115	122	
6500		SPMWH622C7Q7SHP0SB	SB	108	115	
		SPMWH622C7Q7SHP0SC	SC	114	121	

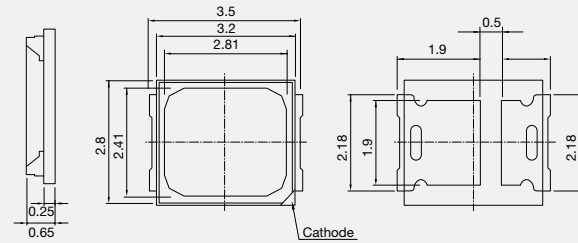
\* Color coordinates: Considering the color shift during high temp. operation, provided at hot temp. color shift coordinates.

# LM286B Plus



Designed for better lm/\$

- 1W class mid power 18V LED
- Suitable for lamps & downlights
- Standard footprint: 2.8mm x 3.5mm



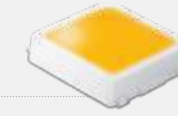
[50mA, 25°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
80+	2700	SPMWH12245Q5W8W0SA	SA	95	105
	3000	SPMWH12245Q5W8V0SA	SA	98	108
	3500	SPMWH12245Q5W8U0SA	SA	102	112
	4000	SPMWH12245Q5W8T0SA	SA	106	116
	5000	SPMWH12245Q5W8R0SA	SA	109	119
	5700	SPMWH12245Q5W8Q0SA	SA	107	117
	6500	SPMWH12245Q5W8Q0SA	SA	106	116
90+	2700	SPMWH12245Q7W8W0SA	SA	80	90
	3000	SPMWH12245Q7W8V0SA	SA	83	93
	3500	SPMWH12245Q7W8U0SA	SA	86	96
	4000	SPMWH12245Q7W8T0SA	SA	90	100
	5000	SPMWH12245Q7W8R0SA	SA	92	102
	5700	SPMWH12245Q7W8Q0SA	SA	91	101
	6500	SPMWH12245Q7W8Q0SA	SA	90	100

\*Color coordinates: Considering the color shift during high temp. operation, provided at hot temp. color shift coordinates.

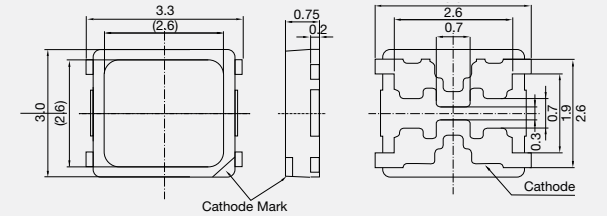


# LM301B



High performance, highest lm/W for fluorescent lamp replacement

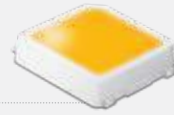
- 0.2W, 3V mid power LED
- Standard footprint: 3.0mm x 3.0mm



[65mA, 25°C]

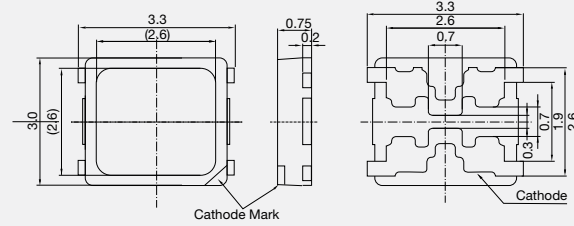
CRI	CCT (K)	Part Number	Luminous Flux (lm)			
			Bin	Min.	Max.	
70+	3000	SPMWH32AMD3XAV0S0	SJ	34	36	
			SK	36	38	
			SL	38	40	
	3500	SPMWH32AMD3XAU0S0	SJ	34	36	
			SK	36	38	
			SL	38	40	
	4000	SPMWH32AMD3XAT0S0	SK	36	38	
			SL	38	40	
			SM	40	42	
	5000	SPMWH32AMD3XAR0S0	SK	36	38	
			SL	38	40	
			SM	40	42	
	80+	2700	SPMWH32AMD5XAW0S0	SH	32	34
				SJ	34	36
SK				36	38	
3000		SPMWH32AMD5XAV0S0	SH	32	34	
			SJ	34	36	
			SK	36	38	
3500		SPMWH32AMD5XAU0S0	SJ	34	36	
			SK	36	38	
			SL	38	40	
4000		SPMWH32AMD5XAT0S0	SK	36	38	
			SL	38	40	
			SM	40	42	
90+		2700	SPMWH32AMD7XAW0S0	SK	36	38
				SL	38	40
	SM			40	42	
	3000	SPMWH32AMD7XAV0S0	SK	36	38	
			SL	38	40	
			SM	40	42	
	3500	SPMWH32AMD7XAU0S0	SK	36	38	
			SL	38	40	
			SH	32	34	
	4000	SPMWH32AMD7XAT0S0	SG	30	32	
			SH	32	34	
			SG	30	32	
	5000	SPMWH32AMD7XAR0S0	SH	32	34	
			SG	30	32	
SH			32	34		
5700	SPMWH32AMD7XAQ0S0	SG	30	32		
		SH	32	34		
		SG	30	32		
6500	SPMWH32AMD7XAP0S0	SH	32	34		
		SG	30	32		
		SH	32	34		

# LM302C



High performance, highest lm/W for fluorescent lamp replacement

- 0.4W, 6V mid power LED
- Standard footprint: 3.0 mm x 3.0 mm



[65mA, 25°C]

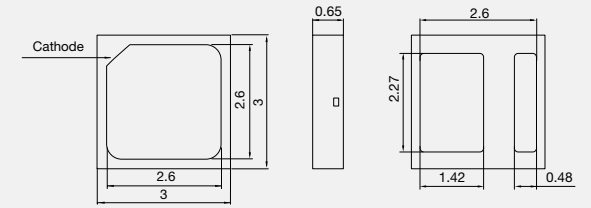
CRI	CCT (K)	Part Number	Luminous Flux (lm)			
			Bin	Min.	Max.	
70+	3000	SPMWHT32BMD3YBV0S0	SF	62	66	
			SG	66	70	
			SH	70	74	
	3500	SPMWHT32BMD3YBU0S0	SF	62	66	
			SG	66	70	
			SH	70	74	
	4000	SPMWHT32BMD3YBT0S0	SG	66	70	
			SH	70	74	
			SJ	74	78	
	5000	SPMWHT32BMD3YBR0S0	SG	66	70	
			SH	70	74	
			SJ	74	78	
80+	2700	SPMWHT32BMD5YBW0S0	SD	54	58	
			SE	58	62	
			SF	62	66	
	3000	SPMWHT32BMD5YBV0S0	SD	54	58	
			SE	58	62	
			SF	62	66	
	3500	SPMWHT32BMD5YBU0S0	SE	58	62	
			SF	62	66	
			SG	66	70	
	4000	SPMWHT32BMD5YBT0S0	SE	58	62	
			SF	62	66	
			SG	66	70	
	5000	SPMWHT32BMD5YBR0S0	SF	62	66	
			SG	66	70	
			SH	70	74	
	5700	SPMWHT32BMD5YBQ0S0	SE	58	62	
			SF	62	66	
			SG	66	70	
	6500	SPMWHT32BMD5YBP0S0	SE	58	62	
			SF	62	66	
			SG	66	70	
	90+	2700	SPMWHT32BMD7YBW0S0	SB	46	50
				SC	50	54
				SD	54	58
3000		SPMWHT32BMD7YBV0S0	SB	46	50	
			SC	50	54	
			SD	54	58	
3500		SPMWHT32BMD7YBU0S0	SD	54	58	
			SC	50	54	
			SE	58	62	
4000		SPMWHT32BMD7YBT0S0	SD	54	58	
			SE	58	62	
			SC	50	54	
5000	SPMWHT32BMD7YBR0S0	SD	54	58		
		SE	58	62		
		SC	50	54		
5700	SPMWHT32BMD7YBQ0S0	SD	54	58		
		SE	58	62		
		SC	50	54		
6500	SPMWHT32BMD7YBP0S0	SD	54	58		
		SE	58	62		
		SC	50	54		

# LM301Z Plus



Balanced lm/\$ for mainstream

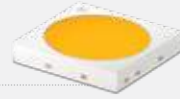
- 0.2W, 3V mid power LED
- EMC resin for high reliability
- Standard footprint: 3.0 mm x 3.0mm



[65mA, 25°C]

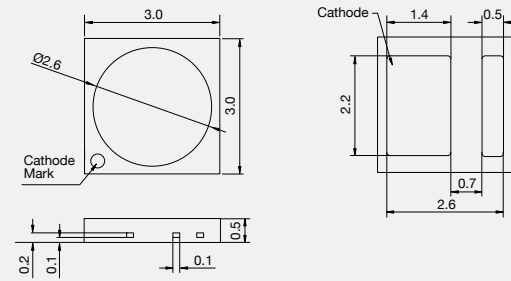
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
80+	2700	SPMWH3326MP5WAW0S0	SH	32	34
			SJ	34	36
	3000	SPMWH3326MP5WAV0S0	SH	32	34
			SJ	34	36
	3500	SPMWH3326MP5WU0S0	SH	32	34
			SJ	34	36
	4000	SPMWH3326MP5WAT0S0	SJ	34	36
			SK	36	38
	5000	SPMWH3326MP5WAR0S0	SJ	34	36
			SK	36	38
	5700	SPMWH3326MP5WAQ0S0	SJ	34	36
			SK	36	38
6500	SPMWH3326MP5WAP0S0	SH	32	34	
		SJ	34	36	

# LM301Z



Designed for best lm/\$

- 0.2W, 3V mid power LED
- EMC resin for high reliability
- Standard footprint: 3.0 mm x 3.0mm



[65mA, 25°C]

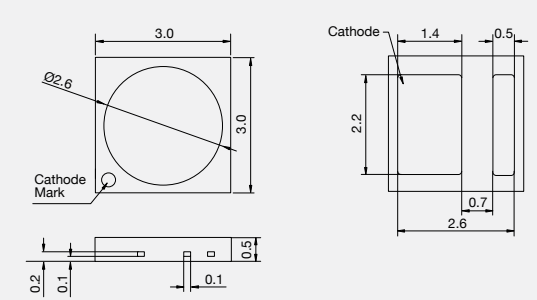
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	3000	SPMWH3326MD3WAV0SA	SA	30.5	33.5
	3500	SPMWH3326MD3WAU0SA	SA	31.5	34.5
	4000	SPMWH3326MD3WAT0SA	SA	32.5	35.5
	5000	SPMWH3326MD3WAR0SA	SA	32.5	35.5
80+	2200	SPMWH3326MD5WAY0SA	SA	26.0	29.0
	2500	SPMWH3326MD5WAX0SA	SA	28.0	31.0
	2700	SPMWH3326MD5WAW0SA	SA	29.0	32.0
	3000	SPMWH3326MD5WAV0SA	SA	30.0	33.0
	3500	SPMWH3326MD5WAU0SA	SA	30.5	33.5
	4000	SPMWH3326MD5WAT0SA	SA	31.0	34.0
	5000	SPMWH3326MD5WAR0SA	SA	33.0	36.0
	5700	SPMWH3326MD5WAQ0SA	SA	31.0	34.0
90+	6500	SPMWH3326MD5WAP0SA	SA	31.0	34.0
	2700	SPMWH3326MD7WAW0SA	SA	24.0	27.0
	3000	SPMWH3326MD7WAV0SA	SA	24.5	27.5
	3500	SPMWH3326MD7WAU0SA	SA	25.5	28.5
	4000	SPMWH3326MD7WAT0SA	SA	26.0	29.0
	5000	SPMWH3326MD7WAR0SA	SA	26.5	29.5
	5700	SPMWH3326MD7WAQ0SA	SA	26.5	29.5
	6500	SPMWH3326MD7WAP0SA	SA	26.0	29.0

# LM302Z



Designed for best lm/\$

- 0.9W, 6V mid power LED
- EMC resin for high reliability
- Standard footprint: 3.0 mm x 3.0 mm



[150mA, 25°C]

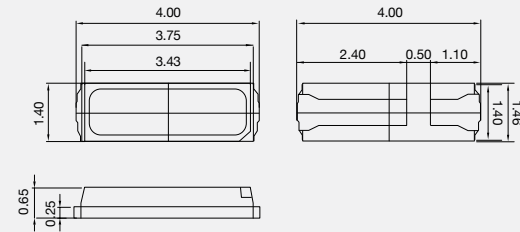
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	3000	SPMWH3326FD3GBV0SA	SA	129	139
	3500	SPMWH3326FD3GBU0SA	SA	132	142
	4000	SPMWH3326FD3GBT0SA	SA	137	147
	5000	SPMWH3326FD3GBR0SA	SA	137	147
	5700	SPMWH3326FD3GBQ0SA	SA	137	147
80+	2700	SPMWH3326FD5GBW0SA	SA	122	132
	3000	SPMWH3326FD5GBV0SA	SA	123	133
	3500	SPMWH3326FD5GBU0SA	SA	126	136
	4000	SPMWH3326FD5GBT0SA	SA	128	138
	5000	SPMWH3326FD5GBR0SA	SA	130	140
	5700	SPMWH3326FD5GBQ0SA	SA	128	138
	6500	SPMWH3326FD5GBP0SA	SA	127	137
90+	2700	SPMWH3326FD7GBW0SA	SA	102	112
	3000	SPMWH3326FD7GBV0SA	SA	105	115
	3500	SPMWH3326FD7GBU0SA	SA	107	117
	4000	SPMWH3326FD7GBT0SA	SA	111	121
	5000	SPMWH3326FD7GBR0SA	SA	112	122
	5700	SPMWH3326FD7GBQ0SA	SA	111	121
	6500	SPMWH3326FD7GBP0SA	SA	111	121

# LM401BA Plus



IP guaranteed mid-power 0.2W package for slim edge-lit panel applications

- 0.2W class mid power LED
- Suitable for slim edge-lit panel application
- Standard footprint: 4.0 mm x 1.4 mm



[60mA, 25°C]

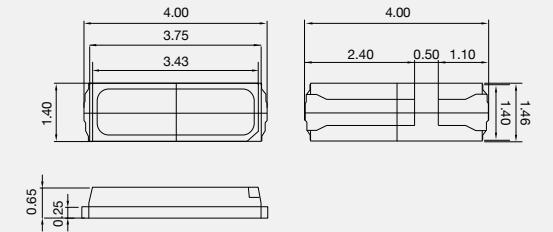
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
80+	2700	SPMWHT4106D5WAW0S*	S1	21	23
			S2	23	25
			S3	25	27
			S4	27	29
	3000	SPMWHT4106D5WAV0S*	S1	21	23
			S2	23	25
			S3	25	27
			S4	27	29
	3500	SPMWHT4106D5WAU0S*	S1	22	24
			S2	24	26
			S3	26	28
			S4	28	30
	4000	SPMWHT4106D5WAT0S*	S1	23	25
			S2	25	27
			S3	27	29
			S4	29	31
	5000	SPMWHT4106D5WAR0S*	S1	24	26
			S2	26	28
			S3	28	30
			S4	30	32
	5700	SPMWHT4106D5WAQ0S*	S1	23	25
			S2	25	27
			S3	27	29
			S4	29	31
6500	SPMWHT4106D5WAP0S*	S1	23	25	
		S2	25	27	
		S3	27	29	
		S4	29	31	

# LM401B Plus



IP guaranteed mid-power 0.5W package for slim edge-lit panel applications

- 0.5W class mid power LED
- Suitable for slim edge-lit panel applications
- Standard footprint: 4.0 mm x 1.4 mm



[120mA, 25°C]

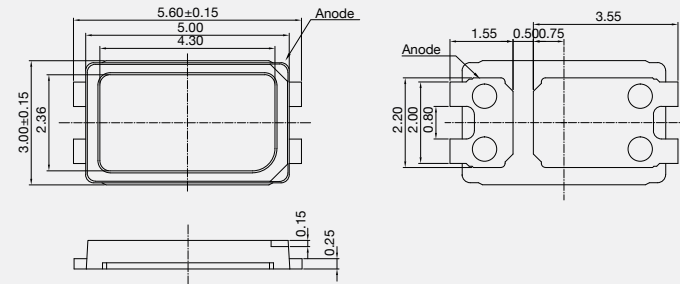
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
80+	2700	SPMWH1410CD5WAW0S*	S2	40	44
			S3	44	48
			S4	48	52
			S2	40	44
	3000	SPMWH1410CD5WAV0S*	S3	44	48
			S4	48	52
			S2	40	44
			S3	44	48
	3500	SPMWH1410CD5WAU0S*	S4	48	52
			S2	44	48
			S3	44	48
			S4	48	52
	4000	SPMWH1410CD5WAT0S*	S2	44	48
			S3	48	52
			S4	52	56
			S2	46	50
	5000	SPMWH1410CD5WAR0S*	S3	50	54
			S4	54	58
			S2	45	49
			S3	49	53
	5700	SPMWH1410CD5WAQ0S*	S4	53	57
			S2	44	48
			S3	48	52
			S4	52	56
6500	SPMWH1410CD5WAP0S*	S2	44	48	
		S3	48	52	
		S4	52	56	
		S2	44	48	

# LM561B Plus



Improved efficacy and performance of LM561B to provide better solution

- 0.3 W class mid power LED
- High efficacy for distributed light
- Standard footprint: 5.6mm x 3.0mm



[65mA, 25°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)			
			Bin	Min.	Max.	
70+	2700	SPMWHT541MP3WAW0S0	S5	32.0	34.0	
			S6	34.0	36.0	
			S7	36.0	38.0	
	3000	SPMWHT541MP3WAV0S0	S5	32.5	34.5	
			S6	34.5	36.5	
			S7	36.5	38.5	
	3500	SPMWHT541MP3WAW0S0	S5	33.0	35.0	
			S6	35.0	37.0	
			S7	37.0	39.0	
	4000	SPMWHT541MP3WAT0S0	S5	34.0	35.8	
			S6	35.8	38.0	
			S7	38.0	40.0	
5000	SPMWHT541MP3WAR0S0	S4	33.0	35.0		
		S6	37.0	39.0		
80+	2700	SPMWHT541MP5WAW0S4	S4	30.0	32.0	
			S5	32.0	34.0	
	3000	SPMWHT541MP5WAV0S4	S4	30.5	32.5	
			S5	32.5	34.5	
	3500	SPMWHT541MP5WAV0S5	S6	34.5	36.5	
			S4	31.0	33.0	
	4000	SPMWHT541MP5WAW0S4	S4	31.0	33.0	
			S5	33.0	35.0	
	5000	SPMWHT541MP5WAT0S4	S4	32.0	34.0	
			S5	34.0	36.0	
	5700	SPMWHT541MP5WAT0S5	S6	36.0	38.0	
			S4	33.0	35.0	
	6500	SPMWHT541MP5WAR0S4	S4	33.0	35.0	
			S5	35.0	37.0	
	90+	2700	SPMWHT541MP5WAW0S4	S4	30.0	32.0
				S5	32.0	34.0
		3000	SPMWHT541MP5WAV0S4	S4	30.5	32.5
				S5	32.5	34.5
3500		SPMWHT541MP5WAV0S5	S6	34.5	36.5	
			S4	31.0	33.0	
4000	SPMWHT541MP5WAT0S4	S4	32.0	34.0		
		S5	34.0	36.0		
90+ Premium Efficacy	2700	SPMWHT541MP5WAR0S4	S4	33.0	35.0	
			S5	35.0	37.0	
	3000	SPMWHT541MP5WAR0S5	S6	37.0	39.0	
			S4	32.5	34.5	
	3500	SPMWHT541MP5WAQ0S4	S4	32.5	34.5	
			S5	34.5	36.5	
4000	SPMWHT541MP5WAQ0S5	S6	36.5	38.5		
		S4	32.0	34.0		
4500	SPMWHT541MP5WAP0S4	S4	32.0	34.0		
		S5	34.0	36.0		
5000	SPMWHT541MP5WAP0S5	S6	36.0	38.0		
		S4	32.0	34.0		

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
80+ MacAdam 3 step	2700	SPMWHT541MP5WAWUS4	S4	30.0	32.0
			S5	32.0	34.0
	3000	SPMWHT541MP5WAVUS4	S4	30.5	32.5
			S5	32.5	34.5
	3500	SPMWHT541MP5WAWUS4	S4	31.0	33.0
			S5	33.0	35.0
	4000	SPMWHT541MP5WATUS4	S4	32.0	34.0
			S5	34.0	36.0
	5000	SPMWHT541MP5WARUS4	S4	33.0	35.0
			S5	35.0	37.0
	5700	SPMWHT541MP5WAQUS4	S4	32.5	34.5
			S5	34.5	36.5
6500	SPMWHT541MP5WAPUS4	S4	32.0	34.0	
		S5	34.0	36.0	
90+	2700	SPMWHT541MP7WAW0S0	S1	24.0	26.0
			S2	26.0	28.0
			S3	28.0	30.0
	3000	SPMWHT541MP7WAV0S0	S1	24.5	26.5
			S2	26.5	28.5
			S3	28.5	30.5
	3500	SPMWHT541MP7WAW0S0	S1	25.0	27.0
			S2	27.0	29.0
			S3	29.0	31.0
	4000	SPMWHT541MP7WAT0S0	S1	26.0	28.0
			S2	28.0	30.0
			S3	30.0	32.0
5000	SPMWHT541MP7WAR0S0	S1	27.0	29.0	
		S2	29.0	31.0	
		S3	31.0	33.0	
5700	SPMWHT541MP7WAQ0S0	S1	26.5	28.5	
		S2	28.5	30.5	
		S3	30.5	32.5	
6500	SPMWHT541MP7WAP0S0	S1	26.0	28.0	
		S2	28.0	30.0	
		S3	30.0	32.0	
90+ Premium Efficacy	2700	SPMWHT541MT7WAW0SB	S0	26.0	30.0
			SB	26.0	28.0
			SC	28.0	30.0
	3000	SPMWHT541MT7WAV0SB	S0	27.0	31.0
			SB	27.0	29.0
			SC	29.0	31.0
	3500	SPMWHT541MT7WAW0SB	S0	28.0	32.0
			SB	28.0	30.0
			SC	30.0	32.0
	4000	SPMWHT541MT7WAT0SB	S0	29.0	33.0
			SB	29.0	31.0
			SC	31.0	33.0
5000	SPMWHT541MT7WAR0SB	S0	30.0	34.0	
		SB	30.0	32.0	
		SC	32.0	34.0	
5700	SPMWHT541MT7WAQ0SB	S0	29.0	33.0	
		SB	29.0	31.0	
		SC	31.0	33.0	
6500	SPMWHT541MT7WAP0SB	S0	28.0	32.0	
		SB	28.0	30.0	
		SC	30.0	32.0	

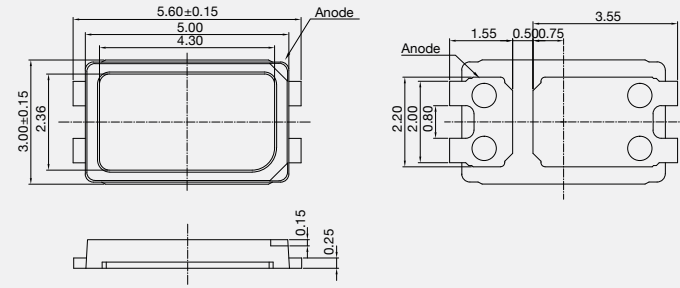


# LM561C



High performance, highest lm/W for fluorescent lamp replacement

- 0.3W class mid power LED
- Highest efficacy: 210lm/W @65mA, 5000K, CRI 80
- Standard footprint: 5.6mm x 3.0mm



[65mA, 25°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	3000	SPMWHT541ML3XAV0S0	S5	32.5	34.5
			S6	34.5	36.5
			S7	36.5	38.5
	3500	SPMWHT541ML3XAU0S0	S5	33.0	35.0
			S6	35.0	37.0
			S7	37.0	39.0
	4000	SPMWHT541ML3XAT0S0	S5	34.0	36.0
			S6	36.0	38.0
			S7	38.0	40.0
	5000	SPMWHT541ML3XAR0S0	S5	35.0	37.0
			S6	37.0	39.0
			S7	39.0	41.0
80+	2700	SPMWHT541ML5XAW0S0	S4	30.0	32.0
			S5	32.0	34.0
	3000	SPMWHT541ML5XAV0S0	S4	30.5	32.5
			S5	32.5	34.5
	3500	SPMWHT541ML5XAU0S0	S4	31.0	33.0
			S5	33.0	35.0
	4000	SPMWHT541ML5XAT0S0	S4	32.0	34.0
			S5	34.0	36.0
			S6	36.0	38.0
	5000	SPMWHT541ML5XAR0S0	S4	33.0	35.0
			S5	35.0	37.0
			S6	37.0	39.0
5700	SPMWHT541ML5XAQ0S0	S4	32.5	34.5	
		S5	34.5	36.5	
		S6	36.5	38.5	
6500	SPMWHT541ML5XAP0S0	S4	32.0	34.0	
		S5	34.0	36.0	
		S6	36.0	38.0	
80+ MacAdam 3 step	2700	SPMWHT541ML5WAWUS4	S4	30.0	32.0
			SPMWHT541ML5WAWUS5	S5	32.0
	3000	SPMWHT541ML5WAVUS5	S5	30.5	32.5
			SPMWHT541ML5WAVUS6	S6	32.5
	3500	SPMWHT541ML5WAUUS5	S5	31.0	33.0
			SPMWHT541ML5WAUUS6	S6	33.0
	4000	SPMWHT541ML5WATUS5	S5	32.0	34.0
			SPMWHT541ML5WATUS6	S6	34.0
	5000	SPMWHT541ML5WARUS5	S5	33.0	35.0
			SPMWHT541ML5WARUS6	S6	35.0

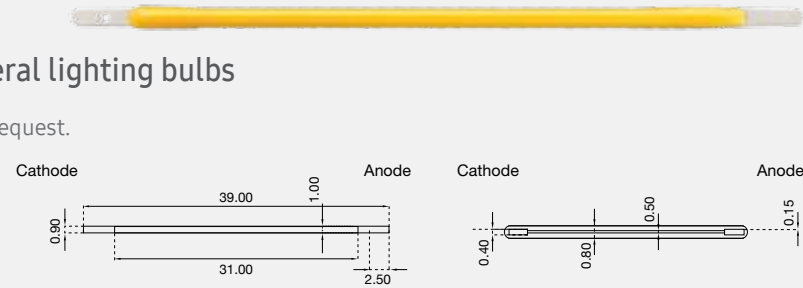
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
90+	2700	SPMWHT541ML7XAW0S0	S1	24.0	26.0
			S2	26.0	28.0
			S3	28.0	30.0
	3000	SPMWHT541ML7XAV0S0	S1	24.5	26.5
			S2	26.5	28.5
			S3	28.5	30.5
	3500	SPMWHT541ML7XAU0S0	S1	25.0	27.0
			S2	27.0	29.0
			S3	29.0	31.0
	4000	SPMWHT541ML7XAT0S0	S1	26.0	28.0
			S2	28.0	30.0
			S3	30.0	32.0
5000	SPMWHT541ML7XAR0S0	S1	27.0	29.0	
		S2	29.0	31.0	
		S3	31.0	33.0	
5700	SPMWHT541ML7XAQ0S0	S1	26.5	28.5	
		S2	28.5	30.5	
		S3	30.5	32.5	
6500	SPMWHT541ML7XAP0S0	S1	26.0	28.0	
		S2	28.0	30.0	
		S3	30.0	32.0	
90+ Premium Efficacy	2700	SPMWHT541MT7XAW0S0	S0	28.0	32.0
			SB	28.0	30.0
			SC	30.0	32.0
	3000	SPMWHT541MT7XAV0S0	S0	28.0	32.0
			SB	28.0	30.0
			SC	30.0	32.0
	3500	SPMWHT541MT7XAU0S0	S0	29.0	33.0
			SB	29.0	31.0
			SC	31.0	33.0
	4000	SPMWHT541MT7XAT0S0	S0	30.0	34.0
			SB	30.0	32.0
			SC	32.0	34.0
5000	SPMWHT541MT7XAR0S0	S0	31.0	35.0	
		SB	31.0	33.0	
		SC	33.0	35.0	
5700	SPMWHT541MT7XAQ0S0	S0	30.0	34.0	
		SB	30.0	32.0	
		SC	32.0	34.0	
6500	SPMWHT541MT7XAP0S0	S0	30.0	34.0	
		SB	30.0	32.0	
		SC	32.0	34.0	



# Filament LED

Filament LED for decorative and general lighting bulbs

- Customized designs are available per customer request.
- Length: 28, 38, 48, 58, 68mm
- Substrate: Ceramic, Sapphire
- CCT: 2200, 2400, 2700, 3000, 4000, 5000K
- CRI: 80+, 90+



## LF007A

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	90	106	10	Ceramic	0	SPMWHTFM31D523WTFY
		97	113	10	Sapphire	0	SPMWH1FM31D523WTFY

## LF009A

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	132	148	10	Sapphire	0	SPMWHTFM31D545WTKY
							-

## LF010A

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	162	190	15	Sapphire	0	SPMWHTFM3RD524WTR1

## LF310B

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	95	105	10	Ceramic	-	SPMWH1FC31D52PWTF2

## LF311B

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	100	110	10	Ceramic	-	SPMWH1FC31D52UWTG1

## LF312B

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	110	120	10	Ceramic	-	SPMWH1FC31D52TWTG1

## LF314B

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	130	140	10	Ceramic	-	SPMWH1FC31D54NWTG1

## LF321B

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	200	220	15	Ceramic	-	SPMWH1FC31D54NWTG1

## LF423B

[25°C]

CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	220	240	20	Ceramic	-	SPMWH1FC42D52TWTU1

## LF622B

[25°C]

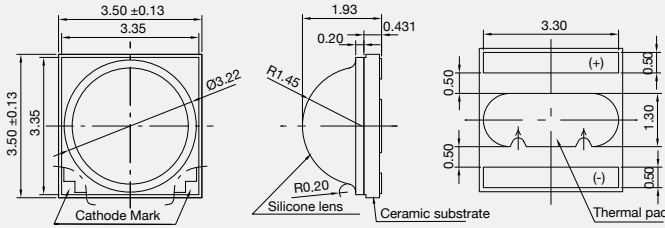
CRI	CCT (K)	Luminous Flux (lm)		IF (mA)	Substrate	1V Sorting	Part Number
		Min.	Max.				
80+	2700	210	230	10	Ceramic	-	SPMWH1FC61D59RWTG2

# LH351B



Cost effective solution for outdoor & directional lighting applications

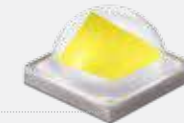
- Operates at a maximum current of up to 1.5A
- High efficacy outdoor solution (Delivering set efficacy over 110lm/W @700mA)
- Excellent efficacy: 172lm/W @350mA, 85°C, 4000K
- LM80 Certified @1A, 105°C (Ts) (L90>60,000 @ 1A)
- Footprint: 3.5mm x 3.5mm



[350mA, 85°C]

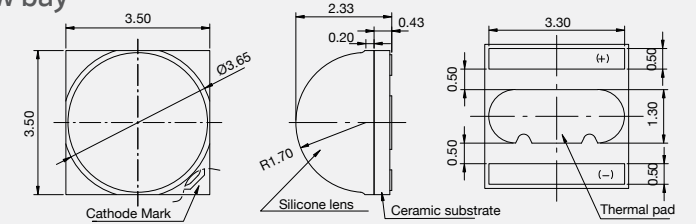
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SPHWH2L3D30CD4W0K3	K1, M1, N1	130	160
		SPHWH2L3D30CD4W0M3	M1, N1, P1	140	170
		SPHWH2L3D30CD4W0N3	N1, P1, Q1	150	180
	3000	SPHWH2L3D30CD4V0M3	M1, N1, P1	140	170
		SPHWH2L3D30CD4V0N3	N1, P1, Q1	150	180
		SPHWH2L3D30CD4U0K3	K1, M1, N1	130	160
	3500	SPHWH2L3D30CD4U0M3	M1, N1, P1	140	170
		SPHWH2L3D30CD4U0N3	N1, P1, Q1	150	180
		SPHWH2L3D30CD4T0N3	N1, P1, Q1	150	180
	4000	SPHWH2L3D30CD4T0P3	P1, Q1, R1	160	190
		SPHWH2L3D30CD4RTM3	M1, N1, P1	140	170
		SPHWH2L3D30CD4RTN3	N1, P1, Q1	150	180
		SPHWH2L3D30CD4RTP3	P1, Q1, R1	160	190
		SPHWH2L3D30CD4RTQ3	Q1, R1	170	190
		SPHWH2L3D30CD4QTN3	N1, P1, Q1	150	180
	5000	SPHWH2L3D30CD4QTP3	P1, Q1, R1	160	190
		SPHWH2L3D30CD4PTM3	M1, N1, P1	140	170
		SPHWH2L3D30CD4PTN3	N1, P1, Q1	150	180
SPHWH2L3D30CD4PTP3		P1, Q1, R1	160	190	
SPHWH1L3D30DD4RTM3		M1, N1, P1	140	170	
SPHWH1L3D30DD4RTN3		N1, P1, Q1	150	180	
75+	SPHWH1L3D30DD4RTP3	P1, Q1, R1	160	190	
	SPHWH1L3D30DD4QTM3	M1, N1, P1	140	170	
	SPHWH1L3D30DD4QTN3	N1, P1, Q1	150	180	
	SPHWH1L3D30DD4QTP3	P1, Q1, R1	160	190	
	SPHWH2L3D30ED4Y0G3	G1, H1, J1	100	130	
	SPHWH2L3D30ED4W0J3	J1, K1, M1	120	150	
80+	2700	SPHWH2L3D30ED4W0K3	K1, M1, N1	130	160
		SPHWH2L3D30ED4V0J3	J1, K1, M1	120	150
		SPHWH2L3D30ED4V0K3	K1, M1, N1	130	160
	3000	SPHWH2L3D30ED4V0M3	M1, N1, P1	140	170
		SPHWH2L3D30ED4U0K3	K1, M1, N1	130	160
		SPHWH2L3D30ED4U0M3	M1, N1, P1	140	170
	3500	SPHWH2L3D30ED4T0K3	K1, M1, N1	130	160
		SPHWH2L3D30ED4T0M3	M1, N1, P1	140	170
		SPHWH2L3D30ED4RTM3	M1, N1, P1	140	170
	4000	SPHWH2L3D30ED4RTN3	N1, P1, Q1	150	180
		SPHWH2L3D30ED4QTM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4PQK3	K1, M1, N1	130	160
	5000	SPHWH2L3D30ED4PQM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4PTK3	K1, M1, N1	130	160
		SPHWH2L3D30ED4PTM3	M1, N1, P1	140	170

# LH351C



High performance suitable for Street, High/Low bay & Stadium/Arena lighting applications

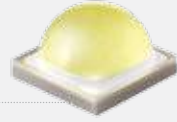
- Operates at a maximum current of up to 2.0 A
- High efficacy outdoor solution (Delivering set efficacy over 120lm/W @700mA)
- Excellent efficacy: 160lm/W @700mA, 85°C
- Footprint: 3.5mm x 3.5mm



[700mA, 85°C]

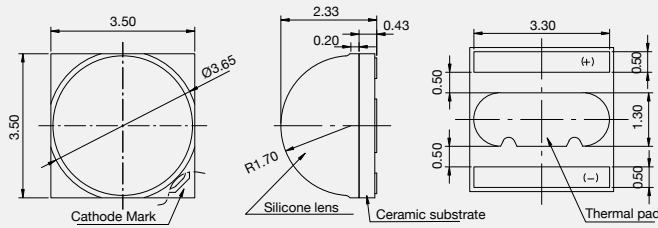
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SPHWHTL3D50CE4W0MF	MB, NB, PB	250	310
		SPHWHTL3D50CE4W0NF	NB, PB, QB	270	330
		SPHWHTL3D50CE4V0NF	NB, PB, QB	270	330
	3000	SPHWHTL3D50CE4V0PF	PB, QB, RB	290	350
		SPHWHTL3D50CE4U0PF	PB, QB, RB	290	350
		SPHWHTL3D50CE4U0QF	QB, RB, SB	310	370
	4000	SPHWHTL3D50CE4T0PF	PB, QB, RB	290	350
		SPHWHTL3D50CE4T0QF	QB, RB, SB	310	370
		SPHWHTL3D50CE4RTPF	PB, QB, RB	290	350
		SPHWHTL3D50CE4RTQF	QB, RB, SB	310	370
		SPHWHTL3D50CE4QTPF	PB, QB, RB	310	370
		SPHWHTL3D50CE4QTQF	QB, RB, SB	310	370
	5000	SPHWHTL3D50CE4PTPF	PB, QB, RB	290	350
		SPHWHTL3D50CE4PTQF	QB, RB, SB	310	370
		SPHWHTL3D50EE4W0MF	MB, NB, PB	250	310
		SPHWHTL3D50EE4V0NF	NB, PB, QB	270	330
		SPHWHTL3D50EE4U0NF	NB, PB, QB	270	330
		SPHWHTL3D50EE4T0MF	MB, NB, PB	250	310
80+	4000	SPHWHTL3D50EE4T0NF	NB, PB, QB	270	330
		SPHWHTL3D50EE4RTNF	NB, PB, QB	270	330
		SPHWHTL3D50EE4RTPF	PB, QB, RB	290	350
	5000	SPHWHTL3D50EE4QTNF	NB, PB, QB	270	330
		SPHWHTL3D50GE4W0HF	HB, JB, KB	190	250
		SPHWHTL3D50GE4W0JF	JB, KB, MB	210	270
90+	3000	SPHWHTL3D50GE4V0JF	JB, KB, MB	210	270
		SPHWHTL3D50GE4U0KF	KB, MB, NB	230	290
		SPHWHTL3D50GE4T0JF	JB, KB, MB	210	270
	4000	SPHWHTL3D50GE4T0KF	KB, MB, NB	230	290
		SPHWHTL3D50GE4RTKF	KB, MB, NB	230	290
		SPHWHTL3D50GE4RTMF	MB, NB, PB	250	310

# LH351D



Best solution for high lumen output:  
Street & Stadium/Arena lighting applications

- Operates at a maximum current of up to 3.0A
- High efficacy outdoor solution (Delivering set efficacy over 120lm/W @1050mA)
- Higher TLCI value with CRI90 line-up for broadcast use (Stadium/Arena lighting)
- Footprint: 3.5mm x 3.5mm



[1050mA, 85°C]

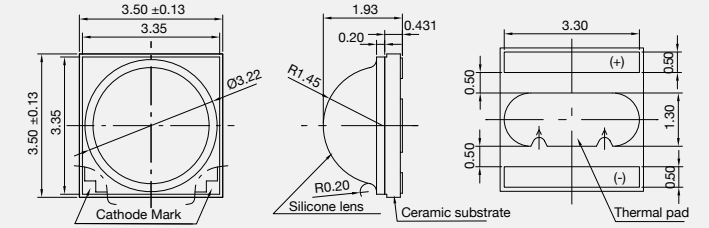
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SPHWHTL3DAOCF4W0S6	S2, T2, U2	380	440
		SPHWHTL3DAOCF4W0T6	T2, U2, V2	400	460
		SPHWHTL3DAOCF4V0T6	T2, U2, V2	400	460
		SPHWHTL3DAOCF4V0U6	U2, V2, W2	420	480
	3000	SPHWHTL3DAOCF4V0V6	V2, W2, Y2	440	500
		SPHWHTL3DAOCF4V0W6	W2, Y2, Z2	460	520
		SPHWHTL3DAOCF4U0T6	T2, U2, V2	400	460
		SPHWHTL3DAOCF4U0U6	U2, V2, W2	420	480
	3500	SPHWHTL3DAOCF4U0V6	V2, W2, Y2	440	500
		SPHWHTL3DAOCF4U0W6	W2, Y2, Z2	460	520
		SPHWHTL3DAOCF4T0U6	U2, V2, W2	420	480
		SPHWHTL3DAOCF4T0V6	V2, W2, Y2	440	500
	4000	SPHWHTL3DAOCF4T0W6	W2, Y2, Z2	460	520
		SPHWHTL3DAOCF4T0Y6	Y2, Z2, I2	480	540
		SPHWHTL3DAOCF4RTV6	V2, W2, Y2	440	500
		SPHWHTL3DAOCF4RTW6	W2, Y2, Z2	460	520
	5000	SPHWHTL3DAOCF4RTY6	Y2, Z2, I2	480	540
		SPHWHTL3DAOCF4RTZ6	Z2, I2, Z2	500	560
		SPHWHTL3DAOCF4QTV6	V2, W2, Y2	440	500
		SPHWHTL3DAOCF4QTW6	W2, Y2, Z2	460	520
5700	SPHWHTL3DAOCF4QTY6	Y2, Z2, I2	480	540	
	SPHWHTL3DAOCF4PTU6	U2, V2, W2	420	480	
	SPHWHTL3DAOCF4PTV6	V2, W2, Y2	440	500	
	SPHWHTL3DAOCF4PTW6	W2, Y2, Z2	460	520	
6500	SPHWHTL3DAOCF4PTY6	Y2, Z2, I2	480	540	
	SPHWHTL3DAOEF4W0Q6	Q2, R2, S2	340	400	
	SPHWHTL3DAOEF4W0R6	R2, S2, T2	360	420	
	SPHWHTL3DAOEF4V0R6	R2, S2, T2	360	420	
80+	3000	SPHWHTL3DAOEF4V0R6	R2, S2, T2	360	420
		SPHWHTL3DAOEF4U0R6	R2, S2, T2	360	420
		SPHWHTL3DAOEF4U0S6	S2, T2, U2	380	440
		SPHWHTL3DAOEF4T0S6	S2, T2, U2	380	440
	4000	SPHWHTL3DAOEF4T0T6	T2, U2, V2	400	460
		SPHWHTL3DAOEF4RTS6	S2, T2, U2	380	440
		SPHWHTL3DAOEF4RTT6	T2, U2, V2	400	460
		SPHWHTL3DAOEF4QRT6	T2, U2, V2	400	460
	5000	SPHWHTL3DAOEF4QRU6	U2, V2, W2	420	480
		SPHWHTL3DAOEF4QTT6	T2, U2, V2	400	460
		SPHWHTL3DAOEF4QTU6	U2, V2, W2	420	480
		SPHWHTL3DAOEF4PQT6	T2, U2, V2	400	460
	6000	SPHWHTL3DAOEF4PQU6	U2, V2, W2	420	480
		SPHWHTL3DAOEF4PTT6	T2, U2, V2	400	460
		SPHWHTL3DAOEF4PTU6	U2, V2, W2	420	480
		SPHWHTL3DAOGF4W0M6	M2, N2, P2	280	340
	2700	SPHWHTL3DAOGF4W0N6	N2, P2, Q2	300	360
		SPHWHTL3DAOGF4V0N6	N2, P2, Q2	300	360
		SPHWHTL3DAOGF4V0P6	P2, Q2, R2	320	380
		SPHWHTL3DAOGF4U0N6	N2, P2, Q2	300	360
90+	3500	SPHWHTL3DAOGF4U0P6	P2, Q2, R2	320	380
		SPHWHTL3DAOGF4TOP6	P2, Q2, R2	320	380
		SPHWHTL3DAOGF4TOQ6	Q2, R2, S2	340	400
		SPHWHTL3DAOGF4RTR6	R2, S2, T2	360	420
	5000	SPHWHTL3DAOGF4RTS6	S2, T2, U2	380	440
		SPHWHTL3DAOGF4PQR6	R2, S2, T2	360	420
		SPHWHTL3DAOGF4PQS6	S2, T2, U2	380	440

# LH351B RED



Red color high power LEDs for horticulture lighting and signage applications

- Red color - 660nm
- Footprint: 3.5mm x 3.5mm (Compatible with LH351B)



[350mA, 25°C]

Color	Wavelength (nm)	Part Number	Specification (Typical)		
			Optical power (mW)	PPF* (μmol/s)	PPF/W (μmol/J)
Red	660	SPHRD2L3D300A400D2	400	3.2	4.5

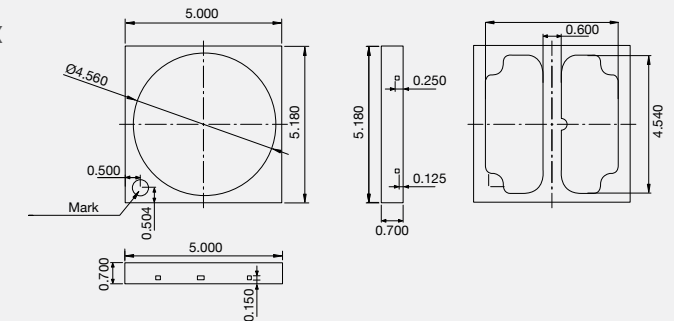
\* Photosynthetic Photon Flux

# LH508A



Designed for best lm/\$ with high luminous flux

- Hybrid solution mixing mid and high power LED
- EMC mold resin for high reliability
- Suitable for street light, high/low bay light & spot light
- Design flexible footprint: 5.0mm x 5.0mm






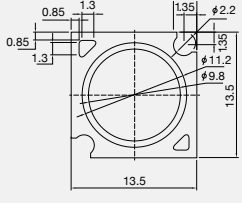
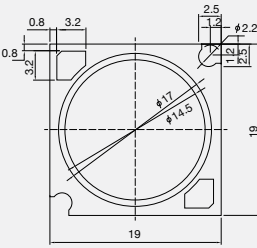
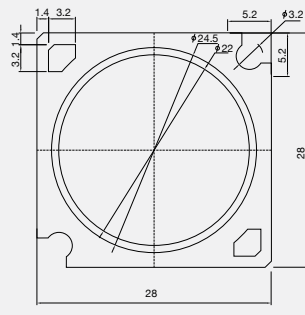
[160mA, 25°C]

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Typ.
70+	3000	SPHWHTL5N403XEV5A1	A1	521	572
	4000	SPHWHTL5N403XET5A1	A1	558	610
	5000	SPHWHTL5N403XER5A1	A1	558	610
	5700	SPHWHTL5N403XEQ5A1	A1	558	610
80+	2700	SPHWHTL5N405XEW5A1	A1	459	504
	3000	SPHWHTL5N405XEV5A1	A1	473	520
	4000	SPHWHTL5N405XET5A1	A1	521	550
	5000	SPHWHTL5N405XER5A1	A1	521	550
90+	2700	SPHWHTL5N407XEW5A1	A1	402	429
	3000	SPHWHTL5N407XEV5A1	A1	416	444
	4000	SPHWHTL5N407XET5A1	A1	443	473

## D-series Gen 3

Full line-up for various applications: MR/PAR, Spotlights, Downlights & High bay lights


- Industry-leading light efficacy in COB lineups
- Better thermal resistance than Gen 2
- High reliability satisfying DLC Premium standards
- Completed 6,000 hours of LM-80 testing

T <sub>J</sub> =85°C	LC003D Gen 3	LC006D Gen 3	LC009D Gen 3	LC013D Gen 3	LC016D Gen 3	LC019D Gen 3	LC026D Gen 3	LC033D Gen 3	LC040D Gen 3	LC060D Gen 3	LC080D Gen 3	
												
LES	9.8mm			14.5mm				22 mm				
Typical	33.8V											50.7V
	3.0W (90 mA)	6.1W (180 mA)	9.1W (270 mA)	12.2W (360 mA)	15.2W (450 mA)	18.3W (540 mA)	24.3W (720 mA)	30.4W (900 mA)	36.5W (1080 mA)	54.8W (1080 mA)	82.1W (1620 mA)	
Max.	8.7W (230 mA)	17.4W (460 mA)	26.1W (690 mA)	34.8W (920 mA)	43.5W (1150 mA)	52.2W (1380 mA)	69.6W (1840 mA)	86.9W (2300 mA)	104.3W (2760 mA)	152.9W (2760 mA)	229.3W (4140 mA)	
Dimension												
	Size	13.5mm x 13.5mm			19mm x 19mm				28mm x 28mm			

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>J</sub> =85°C		I <sub>F</sub> (mA)	V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
 LC003D Gen 3	80+	2700	MacAdam 2step	SPHWAHDNA25YZW2D3	475	156	90mA	33.8V
			MacAdam 3step	SPHWAHDNA25YZW3D3				
		3000	MacAdam 2step	SPHWAHDNA25YZV2D3	499	164		
			MacAdam 3step	SPHWAHDNA25YZV3D3				
		3500	MacAdam 2step	SPHWAHDNA25YZU2D3	514	169		
			MacAdam 3step	SPHWAHDNA25YZU3D3				
	4000	MacAdam 2step	SPHWAHDNA25YZT2D3	524	172			
		MacAdam 3step	SPHWAHDNA25YZT3D3					
	5000	MacAdam 3step	SPHWAHDNA25YZR3D3	529	174			
	5700	MacAdam 3step	SPHWAHDNA25YZQ3D3	529	174			
	6500	MacAdam 3step	SPHWAHDNA25YZP3D3	524	172			
	90+	2700	MacAdam 2step	SPHWAHDNA27YZW2D3	407	134		
MacAdam 3step			SPHWAHDNA27YZW3D3					
3000		MacAdam 2step	SPHWAHDNA27YZV2D3	428	141			
		MacAdam 3step	SPHWAHDNA27YZV3D3					
3500		MacAdam 2step	SPHWAHDNA27YZU2D3	441	145			
		MacAdam 3step	SPHWAHDNA27YZU3D3					
4000		MacAdam 2step	SPHWAHDNA27YZT2D3	450	148			
		MacAdam 3step	SPHWAHDNA27YZT3D3					
5000		MacAdam 3step	SPHWAHDNA27YZR3D3	453	149			
80+		2700	MacAdam 2step	SPHWAHDNB25YZW2D3	946	155	180mA	33.8V
			MacAdam 3step	SPHWAHDNB25YZW3D3				
		3000	MacAdam 2step	SPHWAHDNB25YZV2D3	994	163		
	MacAdam 3step		SPHWAHDNB25YZV3D3					
	3500	MacAdam 2step	SPHWAHDNB25YZU2D3	1023	168			
		MacAdam 3step	SPHWAHDNB25YZU3D3					
	4000	MacAdam 2step	SPHWAHDNB25YZT2D3	1043	171			
		MacAdam 3step	SPHWAHDNB25YZT3D3					
	5000	MacAdam 3step	SPHWAHDNB25YZR3D3	1052	173			
	5700	MacAdam 3step	SPHWAHDNB25YZQ3D3	1052	173			
	6500	MacAdam 3step	SPHWAHDNB25YZP3D3	1043	171			
	90+	2700	MacAdam 2step	SPHWAHDNB27YZW2D3	809	133		
MacAdam 3step			SPHWAHDNB27YZW3D3					
3000		MacAdam 2step	SPHWAHDNB27YZV2D3	851	140			
		MacAdam 3step	SPHWAHDNB27YZV3D3					
3500		MacAdam 2step	SPHWAHDNB27YZU2D3	877	144			
		MacAdam 3step	SPHWAHDNB27YZU3D3					
4000		MacAdam 2step	SPHWAHDNB27YZT2D3	895	147			
		MacAdam 3step	SPHWAHDNB27YZT3D3					
5000		MacAdam 3step	SPHWAHDNB27YZR3D3	902	148			


# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC009D Gen 3	70+	3000	MacAdam 3step	SPHWAHDNC23YZV3D3	1594	174	270mA 33.8V
		4000	MacAdam 3step	SPHWAHDNC23Yzt3D3	1624	177	
		5000	MacAdam 3step	SPHWAHDNC23YzR3D3	1653	180	
	80+	2700	MacAdam 2step	SPHWAHDNC25YZW2D3	1405	154	
			MacAdam 3step	SPHWAHDNC25YZW3D3			
		3000	MacAdam 2step	SPHWAHDNC25YZV2D3	1476	162	
			MacAdam 3step	SPHWAHDNC25YZV3D3			
		3500	MacAdam 2step	SPHWAHDNC25YZU2D3	1519	166	
			MacAdam 3step	SPHWAHDNC25YZU3D3			
	4000	MacAdam 2step	SPHWAHDNC25Yzt2D3	1550	170		
		MacAdam 3step	SPHWAHDNC25Yzt3D3				
	90+	5000	MacAdam 3step	SPHWAHDNC25YzR3D3	1563	171	
			MacAdam 3step	SPHWAHDNC25YzQ3D3			
		6500	MacAdam 3step	SPHWAHDNC25YzP3D3	1550	170	
			MacAdam 2step	SPHWAHDNC27YZW2D3			
		2700	MacAdam 3step	SPHWAHDNC27YZW3D3			
			3000	MacAdam 2step	SPHWAHDNC27YZV2D3	1264	
		MacAdam 3step		SPHWAHDNC27YZV3D3			
3500		MacAdam 2step	SPHWAHDNC27YZU2D3	1302	143		
		MacAdam 3step	SPHWAHDNC27YZU3D3				
4000		MacAdam 2step	SPHWAHDNC27Yzt2D3	1329	146		
		MacAdam 3step	SPHWAHDNC27Yzt3D3				
5000		MacAdam 3step	SPHWAHDNC27YzR3D3	1340	147		
	MacAdam 3step	SPHWAHDND23YZV3D3	2094			171	
70+	4000	MacAdam 3step		SPHWAHDND23Yzt3D3	2133		174
	5000	MacAdam 3step	SPHWAHDND23YzR3D3	2171	177		
	2700	MacAdam 2step	SPHWAHDND35YZW2D3	1845	152		
MacAdam 3step		SPHWAHDND35YZW3D3					
80+	3000	MacAdam 2step	SPHWAHDND35YZV2D3	1939	159		
		MacAdam 3step	SPHWAHDND35YZV3D3				
	3500	MacAdam 2step	SPHWAHDND35YZU2D3	1996	164		
		MacAdam 3step	SPHWAHDND35YZU3D3				
	4000	MacAdam 2step	SPHWAHDND35Yzt2D3	2036	167		
		MacAdam 3step	SPHWAHDND35Yzt3D3				
5000	MacAdam 3step	SPHWAHDND35YzR3D3	2053	169			
	MacAdam 3step	SPHWAHDND35YzQ3D3					
90+	6500	MacAdam 3step	SPHWAHDND35YzP3D3	2036	167		
		MacAdam 2step	SPHWAHDND37YZW2D3			1579	130
	2700	MacAdam 3step	SPHWAHDND37YZW3D3				
		3000	MacAdam 2step	SPHWAHDND37YZV2D3	1661	137	
	MacAdam 3step		SPHWAHDND37YZV3D3				
	3500	MacAdam 2step	SPHWAHDND37YZU2D3	1710	141		
		MacAdam 3step	SPHWAHDND37YZU3D3				
	4000	MacAdam 2step	SPHWAHDND37Yzt2D3	1745	143		
		MacAdam 3step	SPHWAHDND37Yzt3D3				
	5000	MacAdam 3step	SPHWAHDND37YzR3D3	1760	145		
		MacAdam 3step	SPHWAHDND37YzQ3D3				


# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC016D Gen 3	70+	3000	MacAdam 3step	SPHWAHDNE23YZV3D3	2697	176	450mA 33.8V
		4000	MacAdam 3step	SPHWAHDNE23Yzt3D3	2747	180	
		5000	MacAdam 3step	SPHWAHDNE23YzR3D3	2797	183	
	80+	2700	MacAdam 2step	SPHWAHDNE25YZW2D3	2376	156	
			MacAdam 3step	SPHWAHDNE25YZW3D3			
		3000	MacAdam 2step	SPHWAHDNE25YZV2D3	2497	164	
			MacAdam 3step	SPHWAHDNE25YZV3D3			
		3500	MacAdam 2step	SPHWAHDNE25YZU2D3	2570	169	
			MacAdam 3step	SPHWAHDNE25YZU3D3			
	4000	MacAdam 2step	SPHWAHDNE25Yzt2D3	2622	172		
		MacAdam 3step	SPHWAHDNE25Yzt3D3				
	90+	5000	MacAdam 3step	SPHWAHDNE25YzR3D3	2644	174	
			MacAdam 3step	SPHWAHDNE25YzQ3D3			
		6500	MacAdam 3step	SPHWAHDNE25YzP3D3	2622	172	
			MacAdam 2step	SPHWAHDNE27YZW2D3			
		2700	MacAdam 3step	SPHWAHDNE27YZW3D3			
			3000	MacAdam 2step	SPHWAHDNE27YZV2D3	2139	
		MacAdam 3step		SPHWAHDNE27YZV3D3			
3500		MacAdam 2step	SPHWAHDNE27YZU2D3	2203	145		
		MacAdam 3step	SPHWAHDNE27YZU3D3				
4000		MacAdam 2step	SPHWAHDNE27Yzt2D3	2248	148		
		MacAdam 3step	SPHWAHDNE27Yzt3D3				
5000		MacAdam 3step	SPHWAHDNE27YzR3D3	2267	149		
	MacAdam 3step	SPHWAHDNF23YZV3D3	3220			175	
70+	4000	MacAdam 3step		SPHWAHDNF23Yzt3D3	3280		179
	5000	MacAdam 3step	SPHWAHDNF23YzR3D3	3339	182		
	2700	MacAdam 2step	SPHWAHDNF25YZW2D3	2837	155		
MacAdam 3step		SPHWAHDNF25YZW3D3					
80+	3000	MacAdam 2step	SPHWAHDNF25YZV2D3	2982	163		
		MacAdam 3step	SPHWAHDNF25YZV3D3				
	3500	MacAdam 2step	SPHWAHDNF25YZU2D3	3069	168		
		MacAdam 3step	SPHWAHDNF25YZU3D3				
	4000	MacAdam 2step	SPHWAHDNF25Yzt2D3	3130	171		
		MacAdam 3step	SPHWAHDNF25Yzt3D3				
5000	MacAdam 3step	SPHWAHDNF25YzR3D3	3157	173			
	MacAdam 3step	SPHWAHDNF25YzQ3D3					
90+	6500	MacAdam 3step	SPHWAHDNF25YzP3D3	3130	171		
		MacAdam 2step	SPHWAHDNF27YZW2D3			2428	133
	2700	MacAdam 3step	SPHWAHDNF27YZW3D3				
		3000	MacAdam 2step	SPHWAHDNF27YZV2D3	2554	140	
	MacAdam 3step		SPHWAHDNF27YZV3D3				
	3500	MacAdam 2step	SPHWAHDNF27YZU2D3	2630	144		
		MacAdam 3step	SPHWAHDNF27YZU3D3				
	4000	MacAdam 2step	SPHWAHDNF27Yzt2D3	2684	147		
		MacAdam 3step	SPHWAHDNF27Yzt3D3				
	5000	MacAdam 3step	SPHWAHDNF27YzR3D3	2707	148		
		MacAdam 3step	SPHWAHDNF27YzQ3D3				


# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC026D Gen 3	70+	3000	MacAdam 3step	SPHWAHDNG23YZV3D3	4230	174	720mA 33.8V
		4000	MacAdam 3step	SPHWAHDNG23YZT3D3	4308	177	
		5000	MacAdam 3step	SPHWAHDNG23YZR3D3	4387	180	
	80+	2700	MacAdam 2step	SPHWAHDNG25YZW2D3	3727	153	
			MacAdam 3step	SPHWAHDNG25YZW3D3			
		3000	MacAdam 2step	SPHWAHDNG25YZV2D3	3917	161	
			MacAdam 3step	SPHWAHDNG25YZV3D3			
		3500	MacAdam 2step	SPHWAHDNG25YZU2D3	4032	166	
			MacAdam 3step	SPHWAHDNG25YZU3D3			
	4000	MacAdam 2step	SPHWAHDNG25YZT2D3	4112	169		
		MacAdam 3step	SPHWAHDNG25YZT3D3				
	90+	5000	MacAdam 3step	SPHWAHDNG25YZR3D3	4147	170	
MacAdam 3step			SPHWAHDNG25YZQ3D3				
6500		MacAdam 3step	SPHWAHDNG25YZP3D3	4112	169		
		MacAdam 2step	SPHWAHDNG27YZW2D3				
2700		MacAdam 3step	SPHWAHDNG27YZW3D3	3190	131		
		MacAdam 2step	SPHWAHDNG27YZV2D3				
3000		MacAdam 3step	SPHWAHDNG27YZV3D3	3355	138		
		MacAdam 2step	SPHWAHDNG27YZU2D3				
3500		MacAdam 3step	SPHWAHDNG27YZU3D3	3455	142		
		MacAdam 2step	SPHWAHDNG27YZT2D3				
4000		MacAdam 3step	SPHWAHDNG27YZT3D3	3526	145		
		MacAdam 2step	SPHWAHDNG27YZR3D3				
70+	3000	MacAdam 3step	SPHWAHDNH23YZV3D3	5235	172		
		MacAdam 3step	SPHWAHDNH23YZT3D3				
	4000	MacAdam 3step	SPHWAHDNH23YZR3D3	5332	175		
		MacAdam 3step	SPHWAHDNH23YZP3D3				
	5000	MacAdam 3step	SPHWAHDNH23YZQ3D3	5429	178		
		MacAdam 2step	SPHWAHDNH25YZW2D3				
80+	2700	MacAdam 3step	SPHWAHDNH25YZW3D3	4612	152		
		MacAdam 2step	SPHWAHDNH25YZV2D3				
	3000	MacAdam 3step	SPHWAHDNH25YZV3D3	4847	159		
		MacAdam 2step	SPHWAHDNH25YZU2D3				
	3500	MacAdam 3step	SPHWAHDNH25YZU3D3	4989	164		
		MacAdam 2step	SPHWAHDNH25YZT2D3				
	4000	MacAdam 3step	SPHWAHDNH25YZT3D3	5089	167		
		MacAdam 2step	SPHWAHDNH25YZR3D3				
	5000	MacAdam 3step	SPHWAHDNH25YZQ3D3	5132	169		
		MacAdam 3step	SPHWAHDNH25YZP3D3				
	90+	2700	MacAdam 2step	SPHWAHDNH27YZW2D3	3947	130	
			MacAdam 3step	SPHWAHDNH27YZW3D3			
3000		MacAdam 2step	SPHWAHDNH27YZV2D3	4152	136		
		MacAdam 3step	SPHWAHDNH27YZV3D3				
3500		MacAdam 2step	SPHWAHDNH27YZU2D3	4276	141		
		MacAdam 3step	SPHWAHDNH27YZU3D3				
4000		MacAdam 2step	SPHWAHDNH27YZT2D3	4364	143		
		MacAdam 3step	SPHWAHDNH27YZT3D3				
5000		MacAdam 2step	SPHWAHDNH27YZR3D3	4401	145		
		MacAdam 3step	SPHWAHDNH27YZQ3D3				

# Chip-on-Board LEDs




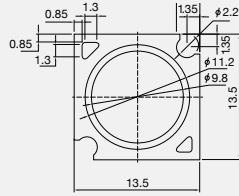
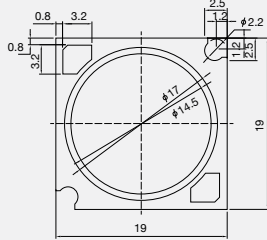
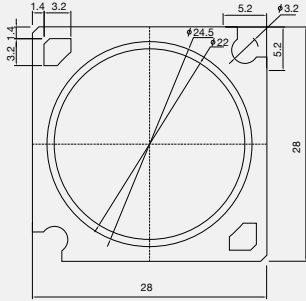
Component


Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC040D Gen 3	70+	3000	MacAdam 3step	SPHWAHDNK23YZV3D3	6440	176	1080mA 33.8V
		4000	MacAdam 3step	SPHWAHDNK23YZT3D3	6560	180	
		5000	MacAdam 3step	SPHWAHDNK23YZR3D3	6679	183	
	80+	2700	MacAdam 2step	SPHWAHDNK25YZW2D3	5675	155	
			MacAdam 3step	SPHWAHDNK25YZW3D3			
		3000	MacAdam 2step	SPHWAHDNK25YZV2D3	5963	163	
			MacAdam 3step	SPHWAHDNK25YZV3D3			
		3500	MacAdam 2step	SPHWAHDNK25YZU2D3	6138	168	
			MacAdam 3step	SPHWAHDNK25YZU3D3			
	4000	MacAdam 2step	SPHWAHDNK25YZT2D3	6261	172		
		MacAdam 3step	SPHWAHDNK25YZT3D3				
	90+	5000	MacAdam 3step	SPHWAHDNK25YZR3D3	6313	173	
MacAdam 3step			SPHWAHDNK25YZQ3D3				
5700		MacAdam 3step	SPHWAHDNK25YZP3D3	6313	173		
		MacAdam 3step	SPHWAHDNK25YZP3D3				
6500		MacAdam 3step	SPHWAHDNK27YZW2D3	4856	133		
		MacAdam 3step	SPHWAHDNK27YZW3D3				
70+	3000	MacAdam 3step	SPHWAHDNK27YZV2D3	5108	140		
		MacAdam 3step	SPHWAHDNK27YZV3D3				
	3500	MacAdam 2step	SPHWAHDNK27YZU2D3	5260	144		
		MacAdam 3step	SPHWAHDNK27YZU3D3				
	4000	MacAdam 2step	SPHWAHDNK27YZT2D3	5369	147		
		MacAdam 3step	SPHWAHDNK27YZT3D3				
	5000	MacAdam 3step	SPHWAHDNK27YZR3D3	5415	148		
		MacAdam 3step	SPHWAHDNK27YZR3D3				
	80+	3000	MacAdam 3step	SPHWAHDNL231ZV3D3	9518	174	
			MacAdam 3step	SPHWAHDNL231ZT3D3			
		4000	MacAdam 3step	SPHWAHDNL231ZR3D3	9694	177	
			MacAdam 3step	SPHWAHDNL231ZR3D3			
5000		MacAdam 3step	SPHWAHDNL231ZP3D3	9870	180		
		MacAdam 2step	SPHWAHDNL251ZW2D3				
90+	2700	MacAdam 3step	SPHWAHDNL251ZW3D3	8386	153		
		MacAdam 2step	SPHWAHDNL251ZW3D3				
	3000	MacAdam 2step	SPHWAHDNL251ZV2D3	8813	161		
		MacAdam 3step	SPHWAHDNL251ZV3D3				
	3500	MacAdam 2step	SPHWAHDNL251ZU2D3	9071	166		
		MacAdam 3step	SPHWAHDNL251ZU3D3				
	4000	MacAdam 2step	SPHWAHDNL251ZT2D3	9253	169		
		MacAdam 3step	SPHWAHDNL251ZT3D3				
	70+	5000	MacAdam 3step	SPHWAHDNL251ZR3D3	9330	170	
			MacAdam 3step	SPHWAHDNL251ZQ3D3			
		5700	MacAdam 3step	SPHWAHDNL251ZP3D3	9330	170	
			MacAdam 3step	SPHWAHDNL251ZP3D3			
6500		MacAdam 2step	SPHWAHDNL271ZW2D3	9253	169		
		MacAdam 2step	SPHWAHDNL271ZW2D3				
80+	2700	MacAdam 3step	SPHWAHDNL271ZW3D3	7177	131		
		MacAdam 2step	SPHWAHDNL271ZV2D3				
	3000	MacAdam 3step	SPHWAHDNL271ZV3D3	7549	138		
		MacAdam 2step	SPHWAHDNL271ZU2D3				
	3500	MacAdam 3step	SPHWAHDNL271ZU3D3	7774	142		
		MacAdam 2step	SPHWAHDNL271ZT2D3				
	4000	MacAdam 3step	SPHWAHDNL271ZT3D3	7934	145		
		MacAdam 2step	SPHWAHDNL271ZR3D3				
	70+	5000	MacAdam 3step	SPHWAHDNL271ZR3D3	8002	146	
			MacAdam 3step	SPHWAHDNL271ZR3D3			
		3000	MacAdam 3step	SPHWAHDNM231ZV3D3	14115	172	
			MacAdam 3step	SPHWAHDNM231ZV3D3			
4000		MacAdam 3step	SPHWAHDNM231ZT3D3	14376	175		
		MacAdam 3step	SPHWAHDNM231ZT3D3				
5000	MacAdam 3step	SPHWAHDNM231ZR3D3	14637	178			
	MacAdam 2step	SPHWAHDNM251ZW2D3					
90+	2700	MacAdam 3step	SPHWAHDNM251ZW3D3	12437	151		
		MacAdam 2step	SPHWAHDNM251ZW3D3				
	3000	MacAdam 2step	SPHWAHDNM251ZV2D3	13069	159		
		MacAdam 3step	SPHWAHDNM251ZV3D3				
	3500	MacAdam 2step	SPHWAHDNM251ZU2D3	13452	164		
		MacAdam 3step	SPHWAHDNM251ZU3D3				
	4000	MacAdam 2step	SPHWAHDNM251ZT2D3	13721	167		
		MacAdam 3step	SPHWAHDNM251ZT3D3				
	80+	5000	MacAdam 3step	SPHWAHDNM251ZR3D3	13836	168	
			MacAdam 3step	SPHWAHDNM251ZR3D3			
		5700	MacAdam 3step	SPHWAHDNM251ZQ3D3	13836	168	
			MacAdam 3step	SPHWAHDNM251ZQ3D3			
6500		MacAdam 3step	SPHWAHDNM251ZP3D3	13721	167		
		MacAdam 2step	SPHWAHDNM271ZW2D3				
90+	2700	MacAdam 3step	SPHWAHDNM271ZW3D3	10643	130		
		MacAdam 2step	SPHWAHDNM271ZW3D3				
	3000	MacAdam 2step	SPHWAHDNM271ZV2D3	11195	136		
		MacAdam 3step	SPHWAHDNM271ZV3D3				
	3500	MacAdam 2step	SPHWAHDNM271ZU2D3	11529	140		
		MacAdam 3step	SPHWAHDNM271ZU3D3				
	4000	MacAdam 2step	SPHWAHDNM271ZT2D3	11766	143		
		MacAdam 3step	SPHWAHDNM271ZT3D3				
	5000	MacAdam 2step	SPHWAHDNM271ZR3D3	11867	144		
		MacAdam 3step	SPHWAHDNM271ZR3D3				

## D-series Gen 2

Full line-up for various applications: MR/PAR, Spotlights, Downlights & High bay lights



- Industry-leading light efficacy in COB lineups
- Better thermal resistance than Gen 1
- High reliability satisfying DLC Premium standards
- Completed 6,000 hours of LM-80 testing

T <sub>J</sub> =85°C	LC003D Gen 2	LC006D Gen 2	LC009D Gen 2	LC013D Gen 2	LC016D Gen 2	LC019D Gen 2	LC026D Gen 2	LC033D Gen 2	LC040D Gen 2	LC060D Gen 2	LC080D Gen 2
											
LES	9.8mm			14.5mm				22 mm			
Typical	34.6 V										
	3.1 W (90 mA)	6.2 W (180 mA)	9.4 W (270 mA)	12.5 W (360 mA)	15.6 W (450 mA)	18.7 W (540 mA)	24.9 W (720 mA)	31.1W (900 mA)	37.4 W (1080 mA)	56.1 W (1080 mA)	84.2 W (1620 mA)
Max.	8.6 W (230 mA)	17.2W (460 mA)	25.9 W (690 mA)	34.5 W (920 mA)	43.1 W (1150 mA)	51.8 W (1380 mA)	69 W (1840 mA)	86.2 W (2300 mA)	103.5 W (2760 mA)	143.4 W (2760 mA)	215 W (4140 mA)
Dimension											
	13.5mm x 13.5mm			19mm x 19mm				28mm x 28mm			
Size	13.5mm x 13.5mm			19mm x 19mm				28mm x 28mm			

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>J</sub> =85°C		I <sub>F</sub> (mA)	V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
 LC003D Gen 2	80+	2700	MacAdam 2step	SPHWAHDNA25YZW2D2	459	147	90mA	34.6V
			MacAdam 3step	SPHWAHDNA25YZW3D2				
		3000	MacAdam 2step	SPHWAHDNA25YZV2D2	483	155		
			MacAdam 3step	SPHWAHDNA25YZV3D2				
		3500	MacAdam 2step	SPHWAHDNA25YZU2D2	501	161		
			MacAdam 3step	SPHWAHDNA25YZU3D2				
	4000	MacAdam 2step	SPHWAHDNA25YZT2D2	507	163			
		MacAdam 3step	SPHWAHDNA25YZT3D2					
	5000	MacAdam 3step	SPHWAHDNA25YZR3D2	513	165			
		5700	MacAdam 3step	SPHWAHDNA25YZQ3D2	513	165		
	6500		MacAdam 3step	SPHWAHDNA25YZP3D2	507	163		
		 LC006D Gen 2	90+	2700	MacAdam 2step	SPHWAHDNA27YZW2D2		
MacAdam 3step	SPHWAHDNA27YZW3D2							
3000	MacAdam 2step			SPHWAHDNA27YZV2D2	406	130		
	MacAdam 3step			SPHWAHDNA27YZV3D2				
3500	MacAdam 2step			SPHWAHDNA27YZU2D2	419	135		
	MacAdam 3step			SPHWAHDNA27YZU3D2				
4000	MacAdam 2step		SPHWAHDNA27YZT2D2	427	137			
	MacAdam 3step		SPHWAHDNA27YZT3D2					
5000	MacAdam 3step		SPHWAHDNA27YZR3D2	430	138			
	80+		2700	MacAdam 2step	SPHWAHDNB25YZW2D2	924	148	
MacAdam 3step				SPHWAHDNB25YZW3D2				
3000			MacAdam 2step	SPHWAHDNB25YZV2D2	971	156		
		MacAdam 3step	SPHWAHDNB25YZV3D2					
3500		MacAdam 2step	SPHWAHDNB25YZU2D2	1001	161			
		MacAdam 3step	SPHWAHDNB25YZU3D2					
4000	MacAdam 2step	SPHWAHDNB25YZT2D2	1024	164				
	MacAdam 3step	SPHWAHDNB25YZT3D2						
5000	MacAdam 3step	SPHWAHDNB25YZR3D2	1030	165				
	5700	MacAdam 3step	SPHWAHDNB25YZQ3D2	1030	165			
6500		MacAdam 3step	SPHWAHDNB25YZP3D2	1018	163			
	 LC006D Gen 2	90+	2700	MacAdam 2step	SPHWAHDNB27YZW2D2	786	126	
MacAdam 3step				SPHWAHDNB27YZW3D2				
3000			MacAdam 2step	SPHWAHDNB27YZV2D2	824	132		
			MacAdam 3step	SPHWAHDNB27YZV3D2				
3500			MacAdam 2step	SPHWAHDNB27YZU2D2	853	137		
			MacAdam 3step	SPHWAHDNB27YZU3D2				
4000		MacAdam 2step	SPHWAHDNB27YZT2D2	870	140			
		MacAdam 3step	SPHWAHDNB27YZT3D2					
5000		MacAdam 3step	SPHWAHDNB27YZR3D2	874	140			



# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)	
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
 LC009D Gen 2	70+	3000	MacAdam 3step	SPHWAHDNC23YZV3D2	1578	161	270mA 34.6V	
		4000	MacAdam 3step	SPHWAHDNC23YZT3D2	1654	169		
		5000	MacAdam 3step	SPHWAHDNC23YZR3D2	1707	174		
	80+	2700	MacAdam 2step	SPHWAHDNC25YZW2D2	1342	144		
			MacAdam 3step	SPHWAHDNC25YZW3D2				
		3000	MacAdam 2step	SPHWAHDNC25YZV2D2	1418	152		
			MacAdam 3step	SPHWAHDNC25YZV3D2				
		3500	MacAdam 2step	SPHWAHDNC25YZU2D2	1459	156		
			MacAdam 3step	SPHWAHDNC25YZU3D2				
	4000	MacAdam 2step	SPHWAHDNC25YZT2D2	1494	160			
		MacAdam 3step	SPHWAHDNC25YZT3D2					
	90+	5000	MacAdam 3step	SPHWAHDNC25YZR3D2	1506	161		
			5700	MacAdam 3step	SPHWAHDNC25YZQ3D2	1506		161
			6500	MacAdam 3step	SPHWAHDNC25YZP3D2	1488		159
		2700	MacAdam 2step	SPHWAHDNC27YZW2D2	1152	123		
MacAdam 3step			SPHWAHDNC27YZW3D2					
3000		MacAdam 2step	SPHWAHDNC27YZV2D2	1206	129			
		MacAdam 3step	SPHWAHDNC27YZV3D2					
3500		MacAdam 2step	SPHWAHDNC27YZU2D2	1245	133			
		MacAdam 3step	SPHWAHDNC27YZU3D2					
4000		MacAdam 2step	SPHWAHDNC27YZT2D2	1273	136			
		MacAdam 3step	SPHWAHDNC27YZT3D2					
70+		5000	MacAdam 3step	SPHWAHDNC27YZR3D2	1278	137		
	3000	MacAdam 3step	SPHWAHDND23YZV3D2	2106	161			
	4000	MacAdam 3step	SPHWAHDND23YZT3D2	2173	166			
 LC013D Gen 2	70+	5000	MacAdam 3step	SPHWAHDND23YZR3D2	2207	169	360mA 34.6V	
		2700	MacAdam 2step	SPHWAHDND25YZW2D2	1764	142		
			MacAdam 3step	SPHWAHDND25YZW3D2				
	3000	MacAdam 2step	SPHWAHDND25YZV2D2	1857	149			
		MacAdam 3step	SPHWAHDND25YZV3D2					
	3500	MacAdam 2step	SPHWAHDND25YZU2D2	1915	154			
		MacAdam 3step	SPHWAHDND25YZU3D2					
	4000	MacAdam 2step	SPHWAHDND25YZT2D2	1950	157			
		MacAdam 3step	SPHWAHDND25YZT3D2					
	90+	5000	MacAdam 3step	SPHWAHDND25YZR3D2	1967	158		
			5700	MacAdam 3step	SPHWAHDND25YZQ3D2	1967		158
			6500	MacAdam 3step	SPHWAHDND25YZP3D2	1938		156
		2700	MacAdam 2step	SPHWAHDND27YZW2D2	1509	121		
			MacAdam 3step	SPHWAHDND27YZW3D2				
		3000	MacAdam 2step	SPHWAHDND27YZV2D2	1580	127		
MacAdam 3step			SPHWAHDND27YZV3D2					
3500		MacAdam 2step	SPHWAHDND27YZU2D2	1635	131			
		MacAdam 3step	SPHWAHDND27YZU3D2					
4000		MacAdam 2step	SPHWAHDND27YZT2D2	1670	134			
		MacAdam 3step	SPHWAHDND27YZT3D2					
5000		MacAdam 3step	SPHWAHDND27YZR3D2	1674	134			

# Chip-on-Board LEDs


Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)	
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
 LC016D Gen 2	70+	3000	MacAdam 3step	SPHWAHDNE23YZV3D2	2617	168	450mA 34.6V	
		4000	MacAdam 3step	SPHWAHDNE23YZT3D2	2701	173		
		5000	MacAdam 3step	SPHWAHDNE23YZR3D2	2742	176		
	80+	2700	MacAdam 2step	SPHWAHDNE25YZW2D2	2293	147		
			MacAdam 3step	SPHWAHDNE25YZW3D2				
		3000	MacAdam 2step	SPHWAHDNE25YZV2D2	2423	156		
			MacAdam 3step	SPHWAHDNE25YZV3D2				
		3500	MacAdam 2step	SPHWAHDNE25YZU2D2	2513	161		
			MacAdam 3step	SPHWAHDNE25YZU3D2				
	4000	MacAdam 2step	SPHWAHDNE25YZT2D2	2558	164			
		MacAdam 3step	SPHWAHDNE25YZT3D2					
	90+	5000	MacAdam 3step	SPHWAHDNE25YZR3D2	2581	166		
			5700	MacAdam 3step	SPHWAHDNE25YZQ3D2	2581		166
			6500	MacAdam 3step	SPHWAHDNE25YZP3D2	2558		164
		2700	MacAdam 2step	SPHWAHDNE27YZW2D2	1967	126		
MacAdam 3step			SPHWAHDNE27YZW3D2					
3000		MacAdam 2step	SPHWAHDNE27YZV2D2	2084	134			
		MacAdam 3step	SPHWAHDNE27YZV3D2					
3500		MacAdam 2step	SPHWAHDNE27YZU2D2	2146	138			
		MacAdam 3step	SPHWAHDNE27YZU3D2					
4000		MacAdam 2step	SPHWAHDNE27YZT2D2	2189	141			
		MacAdam 3step	SPHWAHDNE27YZT3D2					
70+		5000	MacAdam 3step	SPHWAHDNE27YZR3D2	2209	142		
	3000	MacAdam 3step	SPHWAHDNF23YZV3D2	3107	166			
	4000	MacAdam 3step	SPHWAHDNF23YZT3D2	3207	172			
 LC019D Gen 2	70+	5000	MacAdam 3step	SPHWAHDNF23YZR3D2	3256	174	540mA 34.6V	
		2700	MacAdam 2step	SPHWAHDNF25YZW2D2	2728	146		
			MacAdam 3step	SPHWAHDNF25YZW3D2				
	3000	MacAdam 2step	SPHWAHDNF25YZV2D2	2877	154			
		MacAdam 3step	SPHWAHDNF25YZV3D2					
	3500	MacAdam 2step	SPHWAHDNF25YZU2D2	2965	159			
		MacAdam 3step	SPHWAHDNF25YZU3D2					
	4000	MacAdam 2step	SPHWAHDNF25YZT2D2	3026	162			
		MacAdam 3step	SPHWAHDNF25YZT3D2					
	90+	5000	MacAdam 3step	SPHWAHDNF25YZR3D2	3059	164		
			5700	MacAdam 3step	SPHWAHDNF25YZQ3D2	3059		164
			6500	MacAdam 3step	SPHWAHDNF25YZP3D2	3026		162
		2700	MacAdam 2step	SPHWAHDNF27YZW2D2	2336	125		
			MacAdam 3step	SPHWAHDNF27YZW3D2				
		3000	MacAdam 2step	SPHWAHDNF27YZV2D2	2449	131		
MacAdam 3step			SPHWAHDNF27YZV3D2					
3500		MacAdam 2step	SPHWAHDNF27YZU2D2	2539	136			
		MacAdam 3step	SPHWAHDNF27YZU3D2					
4000		MacAdam 2step	SPHWAHDNF27YZT2D2	2594	139			
		MacAdam 3step	SPHWAHDNF27YZT3D2					
5000		MacAdam 3step	SPHWAHDNF27YZR3D2	2596	139			




# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC026D Gen 2	70+	3000	MacAdam 3step	SPHWHHDNG23YZV3D2	4063	163	720mA 34.6V
		4000	MacAdam 3step	SPHWHHDNG23YZT3D2	4193	168	
		5000	MacAdam 3step	SPHWHHDNG23YZR3D2	4258	171	
	80+	2700	MacAdam 2step	SPHWHHDNG25YZW2D2	3580	144	
			MacAdam 3step	SPHWHHDNG25YZW3D2			
		3000	MacAdam 2step	SPHWHHDNG25YZV2D2	3762	151	
			MacAdam 3step	SPHWHHDNG25YZV3D2			
		3500	MacAdam 2step	SPHWHHDNG25YZU2D2	3872	155	
			MacAdam 3step	SPHWHHDNG25YZU3D2			
	4000	MacAdam 2step	SPHWHHDNG25YZT2D2	3950	159		
		MacAdam 3step	SPHWHHDNG25YZT3D2				
	90+	5000	MacAdam 3step	SPHWHHDNG25YZR3D2	3983	160	
5700		MacAdam 3step	SPHWHHDNG25YZQ3D2	3983	160		
6500		MacAdam 3step	SPHWHHDNG25YZP3D2	3950	159		
2700		MacAdam 2step	SPHWHHDNG27YZW2D2	3064	123		
		MacAdam 3step	SPHWHHDNG27YZW3D2				
3000		MacAdam 2step	SPHWHHDNG27YZV2D2	3223	129		
		MacAdam 3step	SPHWHHDNG27YZV3D2				
3500		MacAdam 2step	SPHWHHDNG27YZU2D2	3319	133		
		MacAdam 3step	SPHWHHDNG27YZU3D2				
4000		MacAdam 2step	SPHWHHDNG27YZT2D2	3387	136		
		MacAdam 3step	SPHWHHDNG27YZT3D2				
5000		MacAdam 3step	SPHWHHDNG27YZR3D2	3416	137		
70+	3000	MacAdam 3step	SPHWHHDNG23YZV3D2	5014	161		
	4000	MacAdam 3step	SPHWHHDNG23YZT3D2	5175	166		
	5000	MacAdam 3step	SPHWHHDNG23YZR3D2	5255	169		
80+	2700	MacAdam 2step	SPHWHHDNH25YZW2D2	4418	142		
		MacAdam 3step	SPHWHHDNH25YZW3D2				
	3000	MacAdam 2step	SPHWHHDNH25YZV2D2	4643	149		
		MacAdam 3step	SPHWHHDNH25YZV3D2				
	3500	MacAdam 2step	SPHWHHDNH25YZU2D2	4779	153		
		MacAdam 3step	SPHWHHDNH25YZU3D2				
	4000	MacAdam 2step	SPHWHHDNH25YZT2D2	4875	157		
		MacAdam 3step	SPHWHHDNH25YZT3D2				
	5000	MacAdam 3step	SPHWHHDNH25YZR3D2	4916	158		
	5700	MacAdam 3step	SPHWHHDNH25YZQ3D2	4916	158		
	6500	MacAdam 3step	SPHWHHDNH25YZP3D2	4875	157		
	90+	2700	MacAdam 2step	SPHWHHDNH27YZW2D2	3781	121	
		MacAdam 3step	SPHWHHDNH27YZW2D2				
3000		MacAdam 2step	SPHWHHDNH27YZV2D2	3977	128		
		MacAdam 3step	SPHWHHDNH27YZV3D2				
3500		MacAdam 2step	SPHWHHDNH27YZU2D2	4096	132		
		MacAdam 3step	SPHWHHDNH27YZU3D2				
4000		MacAdam 2step	SPHWHHDNH27YZT2D2	4180	134		
		MacAdam 3step	SPHWHHDNH27YZT2D2				
5000		MacAdam 3step	SPHWHHDNH27YZR3D2	4216	135		

# Chip-on-Board LEDs




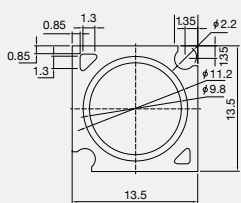
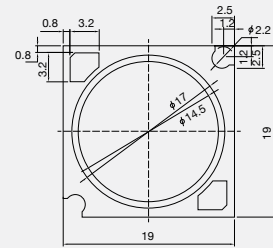
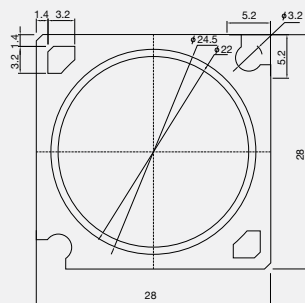
Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC040D Gen 2	70+	3000	MacAdam 3step	SPHWHHDNK23YZV3D2	6304	169	1080mA 34.6V
		4000	MacAdam 3step	SPHWHHDNK23YZT3D2	6506	174	
		5000	MacAdam 3step	SPHWHHDNK23YZR3D2	6607	177	
	80+	2700	MacAdam 2step	SPHWHHDNK25YZW2D2	5547	148	
			MacAdam 3step	SPHWHHDNK25YZW3D2			
		3000	MacAdam 2step	SPHWHHDNK25YZV2D2	5837	156	
			MacAdam 3step	SPHWHHDNK25YZV3D2			
		3500	MacAdam 2step	SPHWHHDNK25YZU2D2	6016	161	
			MacAdam 3step	SPHWHHDNK25YZU3D2			
	4000	MacAdam 2step	SPHWHHDNK25YZT2D2	6146	164		
		MacAdam 3step	SPHWHHDNK25YZT3D2				
	5000	MacAdam 3step	SPHWHHDNK25YZR3D2	6175	165		
5700	MacAdam 3step	SPHWHHDNK25YZQ3D2	6205	166			
6500	MacAdam 3step	SPHWHHDNK25YZP3D2	6138	164			
90+	2700	MacAdam 2step	SPHWHHDNK27YZW2D2	4755	127		
		MacAdam 3step	SPHWHHDNK27YZW3D2				
	3000	MacAdam 2step	SPHWHHDNK27YZV2D2	5024	134		
		MacAdam 3step	SPHWHHDNK27YZV3D2				
	3500	MacAdam 2step	SPHWHHDNK27YZU2D2	5152	138		
		MacAdam 3step	SPHWHHDNK27YZU3D2				
	4000	MacAdam 2step	SPHWHHDNK27YZT2D2	5266	141		
		MacAdam 3step	SPHWHHDNK27YZT3D2				
	5000	MacAdam 3step	SPHWHHDNK27YZR3D2	5325	143		
	3000	MacAdam 3step	SPHWHHDNL231ZV3D2	9225	164		
	70+	4000	MacAdam 3step	SPHWHHDNL231ZT3D2	9521	170	
		5000	MacAdam 3step	SPHWHHDNL231ZR3D2	9668	172	
2700		MacAdam 2step	SPHWHHDNL251ZW2D2	8107	144		
	MacAdam 3step	SPHWHHDNL251ZW3D2					
80+	3000	MacAdam 2step	SPHWHHDNL251ZV2D2	8542	152		
		MacAdam 3step	SPHWHHDNL251ZV3D2				
	3500	MacAdam 2step	SPHWHHDNL251ZU2D2	8812	157		
		MacAdam 3step	SPHWHHDNL251ZU3D2				
	4000	MacAdam 2step	SPHWHHDNL251ZT2D2	8995	160		
		MacAdam 3step	SPHWHHDNL251ZT3D2				
	5000	MacAdam 3step	SPHWHHDNL251ZR3D2	9039	161		
	5700	MacAdam 3step	SPHWHHDNL251ZQ3D2	9084	162		
	6500	MacAdam 3step	SPHWHHDNL251ZP3D2	8990	160		
	2700	MacAdam 2step	SPHWHHDNL271ZW2D2	6959	124		
		MacAdam 3step	SPHWHHDNL271ZW3D2				
	90+	3000	MacAdam 2step	SPHWHHDNL271ZV2D2	7352	131	
		MacAdam 3step	SPHWHHDNL271ZV3D2				
3500		MacAdam 2step	SPHWHHDNL271ZU2D2	7539	134		
	MacAdam 3step	SPHWHHDNL271ZU3D2					
70+	4000	MacAdam 2step	SPHWHHDNL271ZT2D2	7706	137		
		MacAdam 3step	SPHWHHDNL271ZT3D2				
	5000	MacAdam 3step	SPHWHHDNL271ZR3D2	7793	139		
	3000	MacAdam 3step	SPHWHHDNM231ZV3D2	13465	160		
	70+	4000	MacAdam 3step	SPHWHHDNM231ZT3D2	13896	165	
		5000	MacAdam 3step	SPHWHHDNM231ZR3D2	14112	168	
		2700	MacAdam 2step	SPHWHHDNM251ZW2D2	11815	140	
		MacAdam 3step	SPHWHHDNM251ZW3D2				
	80+	3000	MacAdam 2step	SPHWHHDNM251ZV2D2	12468	148	
			MacAdam 3step	SPHWHHDNM251ZV3D2			
		3500	MacAdam 2step	SPHWHHDNM251ZU2D2	12852	153	
			MacAdam 3step	SPHWHHDNM251ZU3D2			
4000		MacAdam 2step	SPHWHHDNM251ZT2D2	13123	156		
		MacAdam 3step	SPHWHHDNM251ZT3D2				
5000		MacAdam 3step	SPHWHHDNM251ZR3D2	13196	157		
5700		MacAdam 3step	SPHWHHDNM251ZQ3D2	13258	157		
6500		MacAdam 3step	SPHWHHDNM251ZP3D2	13121	156		
90+		2700	MacAdam 2step	SPHWHHDNM271ZW2D2	10157	121	
			MacAdam 3step	SPHWHHDNM271ZW3D2			
		3000	MacAdam 2step	SPHWHHDNM271ZV2D2	10731	127	
		MacAdam 3step	SPHWHHDNM271ZV3D2				
	3500	MacAdam 2step	SPHWHHDNM271ZU2D2	11004	131		
		MacAdam 3step	SPHWHHDNM271ZU3D2				
	4000	MacAdam 2step	SPHWHHDNM271ZT2D2	11247	134		
		MacAdam 3step	SPHWHHDNM271ZT3D2				
	5000	MacAdam 3step	SPHWHHDNM271ZR3D2	11375	135		

## D-series Gen 1

Full line-up for various applications: MR/PAR, spot lights, downlights & flood lights

- Chip-on-Board (COB) solution makes it easy to design in
- Simple assembly reduces manufacturing & tooling cost
- Low thermal resistance
- Completed 6,000 hours of LM-80 testing

T <sub>J</sub> =85°C	LC003D Gen 1	LC006D Gen 1	LC009D Gen 1	LC013D Gen 1	LC016D Gen 1	LC019D Gen 1	LC026D Gen 1	LC040D Gen 1	LC060D Gen 1	LC080D Gen 1	
											
LES	9.8mm			14.5mm			22 mm				
Typical	34.6 V							52 V			
	3.1 W (90 mA)	6.2 W (180 mA)	9.4 W (270 mA)	12.5 W (360 mA)	15.6 W (450 mA)	18.7 W (540 mA)	24.9 W (720 mA)	37.4 W (1080 mA)	56.1 W (1080 mA)	84.2 W (1620 mA)	
Max.	8.6 W (230 mA)	17.2 W (460 mA)	25.9 W (690 mA)	34.5 W (920 mA)	43.1 W (1150 mA)	51.8 W (1380 mA)	69 W (1840 mA)	103.5 W (2760 mA)	143.4 W (2760 mA)	215 W (2760 mA)	
Dimension											
Size	13.5mm x 13.5mm			19mm x 19mm			28mm x 28mm				

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>J</sub> =85°C		I <sub>F</sub> (mA)	V <sub>F</sub> (V)	
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)			
LC003D Gen 1	2700	80+	MacAdam 2step	SPHWAHDNA25YZW2A9	413	133	90mA	34.6V	
			MacAdam 3step	SPHWAHDNA25YZW3A9					
			MacAdam 2step	SPHWAHDNA25YZW2D1	434	139			
			MacAdam 3step	SPHWAHDNA25YZW3D1					
			3000	MacAdam 2step	SPHWAHDNA25YZV2B1	435			140
				MacAdam 3step	SPHWAHDNA25YZV3B1				
	MacAdam 2step	SPHWAHDNA25YZV2D1		457	147				
	MacAdam 3step	SPHWAHDNA25YZV3D1							
	3500	MacAdam 2step	SPHWAHDNA25YZU2B2	451	145				
		MacAdam 3step	SPHWAHDNA25YZU3B2						
		MacAdam 2step	SPHWAHDNA25YZU2D1	474	152				
		MacAdam 3step	SPHWAHDNA25YZU3D1						
4000	MacAdam 2step	SPHWAHDNA25YZT2B3	457	147					
	MacAdam 3step	SPHWAHDNA25YZT3B3							
	MacAdam 2step	SPHWAHDNA25YZT2D1	480	154					
	MacAdam 3step	SPHWAHDNA25YZT3D1							
5000	MacAdam 3step	SPHWAHDNA25YZR3B3	462	148					
		SPHWAHDNA25YZR3D1	485	156					
5700	MacAdam 3step	SPHWAHDNA25YZQ3B3	462	148					
		SPHWAHDNA25YZQ3D1	485	156					
6500	MacAdam 3step	SPHWAHDNA25YZP3B3	457	147					
		SPHWAHDNA25YZP3D1	480	154					
LC003D Gen 1	2700	90+	MacAdam 2step	SPHWAHDNA27YZW2A3	349	112			
			MacAdam 3step	SPHWAHDNA27YZW3A3					
			MacAdam 2step	SPHWAHDNA27YZW2D1	367	118			
			MacAdam 3step	SPHWAHDNA27YZW3D1					
			3000	MacAdam 2step	SPHWAHDNA27YZV2A4	365	117		
				MacAdam 3step	SPHWAHDNA27YZV3A4				
	MacAdam 2step	SPHWAHDNA27YZV2D1		384	123				
	MacAdam 3step	SPHWAHDNA27YZV3D1							
	3500	MacAdam 2step	SPHWAHDNA27YZU2A5	377	121				
		MacAdam 3step	SPHWAHDNA27YZU3A5						
		MacAdam 2step	SPHWAHDNA27YZU2D1	396	127				
		MacAdam 3step	SPHWAHDNA27YZU3D1						
4000		MacAdam 2step	SPHWAHDNA27YZT2A6	385	124				
		MacAdam 3step	SPHWAHDNA27YZT3A6						
	MacAdam 2step	SPHWAHDNA27YZT2D1	404	130					
MacAdam 3step	SPHWAHDNA27YZT3D1								
5000	MacAdam 3step	SPHWAHDNA27YZR3A6	387	124					
		SPHWAHDNA27YZR3D1	407	131					

# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC006D Gen 1	80+	2700	MacAdam 2step	SPHWAHDNB25YZW2E9	832	134	180mA 34.6V
			MacAdam 3step	SPHWAHDNB25YZW3E9			
		MacAdam 2step	SPHWAHDNB25YZW2D1	874	140		
		MacAdam 3step	SPHWAHDNB25YZW3D1				
	3000	MacAdam 2step	SPHWAHDNB25YZV2F3	875	140		
		MacAdam 3step	SPHWAHDNB25YZV3F3				
		MacAdam 2step	SPHWAHDNB25YZV2D1	919	148		
		MacAdam 3step	SPHWAHDNB25YZV3D1				
	3500	MacAdam 2step	SPHWAHDNB25YZU2F5	902	145		
		MacAdam 3step	SPHWAHDNB25YZU3F5				
		MacAdam 2step	SPHWAHDNB25YZU2D1	947	152		
		MacAdam 3step	SPHWAHDNB25YZU3D1				
	4000	MacAdam 2step	SPHWAHDNB25YZT2F8	923	148		
		MacAdam 3step	SPHWAHDNB25YZT3F8				
		MacAdam 2step	SPHWAHDNB25YZT2D1	969	156		
		MacAdam 3step	SPHWAHDNB25YZT3D1				
	5000	MacAdam 3step	SPHWAHDNB25YZR3F8	928	149		
			SPHWAHDNB25YZR3D1	975	157		
	5700	MacAdam 3step	SPHWAHDNB25YZQ3F8	928	149		
			SPHWAHDNB25YZQ3D1	975	157		
	6500	MacAdam 3step	SPHWAHDNB25YZP3F7	918	147		
			SPHWAHDNB25YZP3D1	964	155		
	2700	MacAdam 2step	SPHWAHDNB27YZW2D7	709	114		
			SPHWAHDNB27YZW3D7				
		MacAdam 2step	SPHWAHDNB27YZW2D1	744	119		
		MacAdam 3step	SPHWAHDNB27YZW3D1				
	3000	MacAdam 2step	SPHWAHDNB27YZV2E9	743	119		
		MacAdam 3step	SPHWAHDNB27YZV3E9				
MacAdam 2step		SPHWAHDNB27YZV2D1	780	125			
MacAdam 3step		SPHWAHDNB27YZV3D1					
3500	MacAdam 2step	SPHWAHDNB27YZU2E0	768	123			
	MacAdam 3step	SPHWAHDNB27YZU3E0					
	MacAdam 2step	SPHWAHDNB27YZU2D1	807	130			
	MacAdam 3step	SPHWAHDNB27YZU3D1					
4000	MacAdam 2step	SPHWAHDNB27YZT2E4	784	126			
	MacAdam 3step	SPHWAHDNB27YZT3E4					
	MacAdam 2step	SPHWAHDNB27YZT2D1	824	132			
	MacAdam 3step	SPHWAHDNB27YZT3D1					
5000	MacAdam 3step	SPHWAHDNB27YZR3E4	787	126			
		SPHWAHDNB27YZR3D1	827	133			



LC006D Gen 1

# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC009D Gen 1	80+	2700	MacAdam 2step	SPHWAHDNC25YZW2H1	1209	129	270mA 34.6V
			MacAdam 3step	SPHWAHDNC25YZW3H1			
		MacAdam 2step	SPHWAHDNC25YZW2D1	1270	136		
		MacAdam 3step	SPHWAHDNC25YZW3D1				
	3000	MacAdam 2step	SPHWAHDNC25YZV2H2	1278	137		
		MacAdam 3step	SPHWAHDNC25YZV3H2				
		MacAdam 2step	SPHWAHDNC25YZV2D1	1342	144		
		MacAdam 3step	SPHWAHDNC25YZV3D1				
	3500	MacAdam 2step	SPHWAHDNC25YZU2H2	1315	141		
		MacAdam 3step	SPHWAHDNC25YZU3H2				
		MacAdam 2step	SPHWAHDNC25YZU2D1	1381	148		
		MacAdam 3step	SPHWAHDNC25YZU3D1				
	4000	MacAdam 2step	SPHWAHDNC25YZT2H2	1347	144		
		MacAdam 3step	SPHWAHDNC25YZT3H2				
		MacAdam 2step	SPHWAHDNC25YZT2D1	1414	151		
		MacAdam 3step	SPHWAHDNC25YZT3D1				
	5000	MacAdam 3step	SPHWAHDNC25YZR3H2	1357	145		
			SPHWAHDNC25YZR3D1	1425	153		
	5700	MacAdam 3step	SPHWAHDNC25YZQ3H2	1357	145		
			SPHWAHDNC25YZQ3D1	1425	153		
	6500	MacAdam 3step	SPHWAHDNC25YZP3H2	1341	144		
			SPHWAHDNC25YZP3D1	1408	151		
	2700	MacAdam 2step	SPHWAHDNC27YZW2G8	1038	111		
		MacAdam 3step	SPHWAHDNC27YZW3G8				
		MacAdam 2step	SPHWAHDNC27YZW2D1	1090	117		
		MacAdam 3step	SPHWAHDNC27YZW3D1				
	3000	MacAdam 2step	SPHWAHDNC27YZV2H0	1087	116		
		MacAdam 3step	SPHWAHDNC27YZV3H0				
MacAdam 2step		SPHWAHDNC27YZV2D1	1141	122			
MacAdam 3step		SPHWAHDNC27YZV3D1					
3500	MacAdam 2step	SPHWAHDNC27YZU2H0	1122	120			
	MacAdam 3step	SPHWAHDNC27YZU3H0					
	MacAdam 2step	SPHWAHDNC27YZU2D1	1178	126			
	MacAdam 3step	SPHWAHDNC27YZU3D1					
4000	MacAdam 2step	SPHWAHDNC27YZT2H0	1147	123			
	MacAdam 3step	SPHWAHDNC27YZT3H0					
	MacAdam 2step	SPHWAHDNC27YZT2D1	1204	129			
	MacAdam 3step	SPHWAHDNC27YZT3D1					
5000	MacAdam 3step	SPHWAHDNC27YZR3H1	1152	123			
		SPHWAHDNC27YZR3D1	1210	130			



LC009D Gen 1

# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC013D Gen 1	80+	2700	MacAdam 2step	SPHWAHDND25YZW2H5	1589	128	360mA 34.6V
			MacAdam 3step	SPHWAHDND25YZW3H5			
			MacAdam 2step	SPHWAHDND25YZW2D1	1669	134	
			MacAdam 3step	SPHWAHDND25YZW3D1			
		3000	MacAdam 2step	SPHWAHDND25YZV2H5	1673	134	
			MacAdam 3step	SPHWAHDND25YZV3H5			
			MacAdam 2step	SPHWAHDND25YZV2D1	1757	141	
			MacAdam 3step	SPHWAHDND25YZV3D1			
	3500	MacAdam 2step	SPHWAHDND25YZU2H6	1725	138		
		MacAdam 3step	SPHWAHDND25YZU3H6				
		MacAdam 2step	SPHWAHDND25YZU2D1	1812	145		
		MacAdam 3step	SPHWAHDND25YZU3D1				
	4000	MacAdam 2step	SPHWAHDND25YZT2H6	1757	141		
		MacAdam 3step	SPHWAHDND25YZT3H6				
		MacAdam 2step	SPHWAHDND25YZT2D1	1844	148		
		MacAdam 3step	SPHWAHDND25YZT3D1				
	5000	MacAdam 3step	SPHWAHDND25YZR3H6	1772	142		
			SPHWAHDND25YZR3D1	1861	149		
	5700	MacAdam 3step	SPHWAHDND25YZQ3H6	1772	142		
			SPHWAHDND25YZQ3D1	1861	149		
	6500	MacAdam 3step	SPHWAHDND25YZP3H6	1746	140		
			SPHWAHDND25YZP3D1	1834	147		
	90+	2700	MacAdam 2step	SPHWAHDND27YZW2H2	1359	109	
			MacAdam 3step	SPHWAHDND27YZW3H2			
MacAdam 2step			SPHWAHDND27YZW2D1	1427	115		
MacAdam 3step			SPHWAHDND27YZW3D2				
3000		MacAdam 2step	SPHWAHDND27YZV2H3	1423	114		
		MacAdam 3step	SPHWAHDND27YZV3H3				
		MacAdam 2step	SPHWAHDND27YZV2D1	1494	120		
		MacAdam 3step	SPHWAHDND27YZV3D1				
3500		MacAdam 2step	SPHWAHDND27YZU2H4	1473	118		
		MacAdam 3step	SPHWAHDND27YZU3H4				
		MacAdam 2step	SPHWAHDND27YZU2D1	1547	124		
		MacAdam 3step	SPHWAHDND27YZU3D1				
4000		MacAdam 2step	SPHWAHDND27YZT2H4	1505	121		
		MacAdam 3step	SPHWAHDND27YZT3H4				
		MacAdam 2step	SPHWAHDND27YZT2D1	1580	127		
		MacAdam 3step	SPHWAHDND27YZT3D1				
5000	MacAdam 3step	SPHWAHDND27YZR3H4	1508	121			
		SPHWAHDND27YZR3D1	1584	127			



LC013D Gen 1

# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC016D Gen 1	80+	2700	MacAdam 2step	SPHWAHDNE25YZW2H9	2065	133	450mA 34.6V
			MacAdam 3step	SPHWAHDNE25YZW3H9			
			MacAdam 2step	SPHWAHDNE25YZW2D1	2169	139	
			MacAdam 3step	SPHWAHDNE25YZW3D1			
		3000	MacAdam 2step	SPHWAHDNE25YZV2J0	2182	140	
			MacAdam 3step	SPHWAHDNE25YZV3J0			
			MacAdam 2step	SPHWAHDNE25YZV2D1	2291	147	
			MacAdam 3step	SPHWAHDNE25YZV3D1			
	3500	MacAdam 2step	SPHWAHDNE25YZU2J1	2263	145		
		MacAdam 3step	SPHWAHDNE25YZU3J1				
		MacAdam 2step	SPHWAHDNE25YZU2D1	2376	153		
		MacAdam 3step	SPHWAHDNE25YZU3D1				
	4000	MacAdam 2step	SPHWAHDNE25YZT2J1	2304	148		
		MacAdam 3step	SPHWAHDNE25YZT3J1				
		MacAdam 2step	SPHWAHDNE25YZT2D1	2419	155		
		MacAdam 3step	SPHWAHDNE25YZT3D1				
	5000	MacAdam 3step	SPHWAHDNE25YZR3J2	2324	149		
			SPHWAHDNE25YZR3D1	2440	157		
	5700	MacAdam 3step	SPHWAHDNE25YZQ3J2	2324	149		
			SPHWAHDNE25YZQ3D1	2440	157		
	6500	MacAdam 3step	SPHWAHDNE25YZP3J1	2304	148		
			SPHWAHDNE25YZP3D1	2419	155		
	90+	2700	MacAdam 2step	SPHWAHDNE27YZW2H6	1771	114	
			MacAdam 3step	SPHWAHDNE27YZW3H6			
MacAdam 2step			SPHWAHDNE27YZW2D1	1860	119		
MacAdam 3step			SPHWAHDNE27YZW3D1				
3000		MacAdam 2step	SPHWAHDNE27YZV2H7	1877	121		
		MacAdam 3step	SPHWAHDNE27YZV3H7				
		MacAdam 2step	SPHWAHDNE27YZV2D1	1970	127		
		MacAdam 3step	SPHWAHDNE27YZV3D1				
3500		MacAdam 2step	SPHWAHDNE27YZU2H8	1932	124		
		MacAdam 3step	SPHWAHDNE27YZU3H8				
		MacAdam 2step	SPHWAHDNE27YZU2D1	2029	130		
		MacAdam 3step	SPHWAHDNE27YZU3D1				
4000		MacAdam 2step	SPHWAHDNE27YZT2H8	1971	127		
		MacAdam 3step	SPHWAHDNE27YZT3H8				
		MacAdam 2step	SPHWAHDNE27YZT2D1	2069	133		
		MacAdam 3step	SPHWAHDNE27YZT3D1				
5000	MacAdam 3step	SPHWAHDNE27YZR3H8	1989	128			
		SPHWAHDNE27YZR3D1	2089	134			



LC016D Gen 1

# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC019D Gen 1	80+	2700	MacAdam 2step	SPHWAHDNF25YZW2J3	2458	132	540mA 34.6V
			MacAdam 3step	SPHWAHDNF25YZW3J3			
		MacAdam 2step	SPHWAHDNF25YZW2D1	2581	138		
		MacAdam 3step	SPHWAHDNF25YZW3D1				
	3000	MacAdam 2step	SPHWAHDNF25YZV24	2592	139		
		MacAdam 3step	SPHWAHDNF25YZV3J4				
		MacAdam 2step	SPHWAHDNF25YZV2D1	2722	146		
		MacAdam 3step	SPHWAHDNF25YZV3D1				
	3500	MacAdam 2step	SPHWAHDNF25YZU25	2672	143		
		MacAdam 3step	SPHWAHDNF25YZU3J5				
		MacAdam 2step	SPHWAHDNF25YZU2D1	2805	150		
		MacAdam 3step	SPHWAHDNF25YZU3D1				
	4000	MacAdam 2step	SPHWAHDNF25YZT25	2726	146		
		MacAdam 3step	SPHWAHDNF25YZT3J5				
		MacAdam 2step	SPHWAHDNF25YZT2D1	2863	153		
		MacAdam 3step	SPHWAHDNF25YZT3D1				
	5000	MacAdam 3step	SPHWAHDNF25YZR3J6	2756	148		
			SPHWAHDNF25YZR3D1	2894	155		
	5700	MacAdam 3step	SPHWAHDNF25YZQ3J6	2756	148		
			SPHWAHDNF25YZQ3D1	2894	155		
6500	MacAdam 3step	SPHWAHDNF25YZP3J5	2726	146			
		SPHWAHDNF25YZP3D1	2863	153			
90+	2700	MacAdam 2step	SPHWAHDNF27YZW2H9	2104	113		
		MacAdam 3step	SPHWAHDNF27YZW3H9				
		MacAdam 2step	SPHWAHDNF27YZW2D1	2210	118		
		MacAdam 3step	SPHWAHDNF27YZW3D1				
	3000	MacAdam 2step	SPHWAHDNF27YZV2J0	2207	118		
		MacAdam 3step	SPHWAHDNF27YZV3J0				
		MacAdam 2step	SPHWAHDNF27YZV2D1	2317	124		
		MacAdam 3step	SPHWAHDNF27YZV3D1				
	3500	MacAdam 2step	SPHWAHDNF27YZU2J1	2287	122		
		MacAdam 3step	SPHWAHDNF27YZU3J1				
		MacAdam 2step	SPHWAHDNF27YZU2D1	2402	129		
		MacAdam 3step	SPHWAHDNF27YZU3D1				
4000	MacAdam 2step	SPHWAHDNF27YZT2J2	2337	125			
	MacAdam 3step	SPHWAHDNF27YZT3J2					
	MacAdam 2step	SPHWAHDNF27YZT2D1	2454	131			
	MacAdam 3step	SPHWAHDNF27YZT3D1					
5000	MacAdam 3step	SPHWAHDNG27YZR3J8	2339	125			
		SPHWAHDNG27YZR3D1	2456	131			



LC019D Gen 1

# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC026D Gen 1	80+	2700	MacAdam 2step	SPHWAHDNK25YZW2M7	3225	129	720mA 34.6V
			MacAdam 3step	SPHWAHDNK25YZW3M7			
		MacAdam 2step	SPHWAHDNK25YZW2D1	3386	136		
		MacAdam 3step	SPHWAHDNK25YZW3D1				
	3000	MacAdam 2step	SPHWAHDNK25YZV2M9	3389	136		
		MacAdam 3step	SPHWAHDNK25YZV3M9				
		MacAdam 2step	SPHWAHDNK25YZV2D1	3558	143		
		MacAdam 3step	SPHWAHDNK25YZV3D1				
	3500	MacAdam 2step	SPHWAHDNK25YZU2N1	3488	140		
		MacAdam 3step	SPHWAHDNK25YZU3N1				
		MacAdam 2step	SPHWAHDNK25YZU2D1	3663	147		
		MacAdam 3step	SPHWAHDNK25YZU3D1				
	4000	MacAdam 2step	SPHWAHDNK25YZT2N2	3558	143		
		MacAdam 3step	SPHWAHDNK25YZT3N2				
		MacAdam 2step	SPHWAHDNK25YZT2D1	3736	150		
		MacAdam 3step	SPHWAHDNK25YZT3D1				
	5000	MacAdam 3step	SPHWAHDNK25YZR3N2	3588	144		
			SPHWAHDNK25YZR3D1	3767	151		
	5700	MacAdam 3step	SPHWAHDNK25YZQ3N3	3588	144		
			SPHWAHDNK25YZQ3D1	3767	151		
6500	MacAdam 3step	SPHWAHDNK25YZP3N2	3558	143			
		SPHWAHDNK25YZP3D1	3736	150			
90+	2700	MacAdam 2step	SPHWAHDNK27YZW2M0	2760	111		
		MacAdam 3step	SPHWAHDNK27YZW3M0				
		MacAdam 2step	SPHWAHDNK27YZW2D1	2898	116		
		MacAdam 3step	SPHWAHDNK27YZW3D1				
	3000	MacAdam 2step	SPHWAHDNK27YZV2M2	2903	117		
		MacAdam 3step	SPHWAHDNK27YZV3M2				
		MacAdam 2step	SPHWAHDNK27YZV2D1	3048	122		
		MacAdam 3step	SPHWAHDNK27YZV3D1				
	3500	MacAdam 2step	SPHWAHDNK27YZU2M4	2990	120		
		MacAdam 3step	SPHWAHDNK27YZU3M4				
		MacAdam 2step	SPHWAHDNK27YZU2D1	3139	126		
		MacAdam 3step	SPHWAHDNK27YZU3D1				
4000	MacAdam 2step	SPHWAHDNK27YZT2M5	3051	122			
	MacAdam 3step	SPHWAHDNK27YZT3M5					
	MacAdam 2step	SPHWAHDNK27YZT2D1	3204	129			
	MacAdam 3step	SPHWAHDNK27YZT3D1					
5000	MacAdam 3step	SPHWAHDNK27YZR3M5	3077	124			
		SPHWAHDNK27YZR3D1	3231	130			



LC026D Gen 1

# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC040D Gen 1	70+	2700	MacAdam 2step	SPHWAHDNG25YZW2K0	4996	134	1080mA 34.6V
			MacAdam 3step	SPHWAHDNG25YZW3K0			
			MacAdam 2step	SPHWAHDNG25YZW2D1	5246	140	
			MacAdam 3step	SPHWAHDNG25YZW3D1			
	3000	MacAdam 2step	SPHWAHDNG25YZV2K2	5257	141		
		MacAdam 3step	SPHWAHDNG25YZV3K2				
		MacAdam 2step	SPHWAHDNG25YZV2D1	5520	148		
		MacAdam 3step	SPHWAHDNG25YZV3D1				
	3500	MacAdam 2step	SPHWAHDNG25YZU2K3	5418	145		
		MacAdam 3step	SPHWAHDNG25YZU3K3				
		MacAdam 2step	SPHWAHDNG25YZU2D1	5689	152		
		MacAdam 3step	SPHWAHDNG25YZU3D1				
	4000	MacAdam 2step	SPHWAHDNG25YZT2K3	5535	148		
		MacAdam 3step	SPHWAHDNG25YZT3K3				
		MacAdam 2step	SPHWAHDNG25YZT2D1	5812	156		
		MacAdam 3step	SPHWAHDNG25YZT3D1				
	5000	MacAdam 3step	SPHWAHDNG25YZR3K4	5561	149		
			SPHWAHDNG25YZR3D1				
		MacAdam 3step	SPHWAHDNG25YZQ3K4	5588	150		
			SPHWAHDNG25YZQ3D1				
	5700	MacAdam 3step	SPHWAHDNG25YZP3K3	5528	148		
			SPHWAHDNG25YZP3D1				
		MacAdam 3step	SPHWAHDNG25YZZ2K3	5804	155		
			SPHWAHDNG25YZZ3K3				
70+	2700	MacAdam 2step	SPHWAHDNG27YZW2J6	4283	115		
		MacAdam 3step	SPHWAHDNG27YZW3J6				
		MacAdam 2step	SPHWAHDNG27YZW2D1	4497	120		
		MacAdam 3step	SPHWAHDNG27YZW3D1				
3000	MacAdam 2step	SPHWAHDNG27YZV2J7	4525	121			
	MacAdam 3step	SPHWAHDNG27YZV3J7					
	MacAdam 2step	SPHWAHDNG27YZV2D1	4751	127			
	MacAdam 3step	SPHWAHDNG27YZV3D1					
3500	MacAdam 2step	SPHWAHDNG27YZU2J8	4640	124			
	MacAdam 3step	SPHWAHDNG27YZU3J8					
	MacAdam 2step	SPHWAHDNG27YZU2D1	4872	130			
	MacAdam 3step	SPHWAHDNG27YZU3D1					
4000	MacAdam 2step	SPHWAHDNG27YZT2J8	4742	127			
	MacAdam 3step	SPHWAHDNG27YZT3J8					
	MacAdam 2step	SPHWAHDNG27YZT2D1	4979	133			
	MacAdam 3step	SPHWAHDNG27YZT3D1					
5000	MacAdam 3step	SPHWAHDNG27YZR3J8	4796	128			
		SPHWAHDNG27YZR3D1			5036	135	



LC040D Gen 1

# Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)	
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
LC060D Gen 1	70+	3000	MacAdam 3step	SPHWAHDNL231ZV3Q8	8284	148	1080mA 52V	
			MacAdam 3step	SPHWAHDNL231ZT3R1				
			MacAdam 3step	SPHWAHDNL231ZR3R2	8683	155		
			MacAdam 2step	SPHWAHDNL251ZW2P9				
	80+	2700	MacAdam 3step	SPHWAHDNL251ZW3P9	7277	130		
			MacAdam 2step	SPHWAHDNL251ZV2Q3				
		3000	MacAdam 3step	SPHWAHDNL251ZV3Q3	7667	137		
			MacAdam 2step	SPHWAHDNL251ZU2Q5				
	70+	3500	MacAdam 3step	SPHWAHDNL251ZU3Q5	7904	141		
			MacAdam 2step	SPHWAHDNL251ZT2Q6				
			4000	MacAdam 3step	SPHWAHDNL251ZT3Q6	8075		144
				MacAdam 2step	SPHWAHDNL251ZR3Q7			
		5000	MacAdam 3step	SPHWAHDNL251ZQ3Q7	8113	144		
			MacAdam 3step	SPHWAHDNL251ZQ3Q7				
			6500	MacAdam 3step	SPHWAHDNL271ZP3Q6	8066		144
				MacAdam 3step	SPHWAHDNM231ZV3U5			
80+	3000	MacAdam 3step	SPHWAHDNM231ZT3U9	12084	143			
		MacAdam 3step	SPHWAHDNM231ZR3V0					
		2700	MacAdam 2step	SPHWAHDNM251ZW2T1	10612	126		
			MacAdam 3step	SPHWAHDNM251ZW3T1				
	3500	MacAdam 2step	SPHWAHDNM251ZV2T6	11201	133			
		MacAdam 3step	SPHWAHDNM251ZV3T6					
		4000	MacAdam 2step	SPHWAHDNM251ZU2T9	11533	137		
			MacAdam 3step	SPHWAHDNM251ZU3T9				
5000	MacAdam 2step	SPHWAHDNM251ZT2U2	11780	140				
	MacAdam 3step	SPHWAHDNM251ZT3U2						
	5700	MacAdam 3step	SPHWAHDNM251ZR3U2	11847	141			
		MacAdam 3step	SPHWAHDNM251ZQ3V0					
6500	MacAdam 3step	SPHWAHDNM251ZQ3V0	11904	141				
	MacAdam 3step	SPHWAHDNM251ZP3V5			11723	139		



LC060D Gen 1

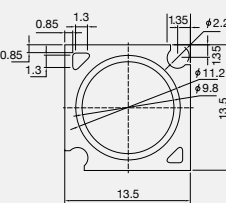
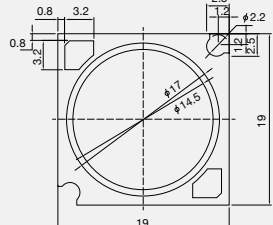
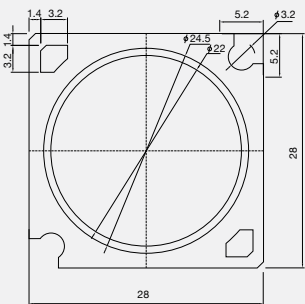








LC080D Gen 1

## D-series Premium color - High CRI

Full line-up for major applications: ultra high CRI for spot & down lights

- Ultra High CRI (Ra 95+): Typ. R9 > 95
- Excellent color index distribution




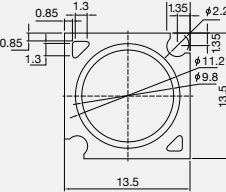
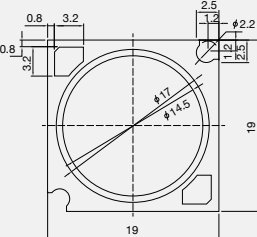
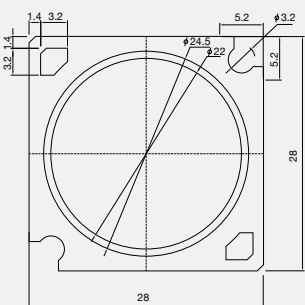
T <sub>j</sub> =85°C	LC013D	LC016D	LC019D	LC026D	LC033D	LC040D
LES	9.8mm	14.5mm			22 mm	
Typical	34.6 V					
	12.5W (360mA)	15.6W (450mA)	18.7W (540mA)	24.9W (720mA)	31.1W (900mA)	37.4W (1080mA)
Max.	34.5W (920mA)	43.1W (1150mA)	51.8W (1380mA)	69.0W (1840mA)	86.2W (2300mA)	103.5W (2760mA)
Dimension						
Size	13.5mm x 13.5mm	19mm x 19mm			28mm x 28mm	

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
	95+	2700	MacAdam 2step	SPHWAHDND28YZW2D2	1223	98	360mA 34.6V
			MacAdam 3step	SPHWAHDND28YZW3D2			
		3000	MacAdam 2step	SPHWAHDND28YZV2D2	1285	103	
			MacAdam 3step	SPHWAHDND28YZV3D2			
		3500	MacAdam 2step	SPHWAHDND28YZU2D2	1337	107	
			MacAdam 3step	SPHWAHDND28YZU3D2			
4000	MacAdam 2step	SPHWAHDND28YZT2D2	1379	111			
	MacAdam 3step	SPHWAHDND28YZT3D2					
	95+	2700	MacAdam 2step	SPHWAHDNE28YZW2D2	1575	101	450mA 34.6V
			MacAdam 3step	SPHWAHDNE28YZW3D2			
		3000	MacAdam 2step	SPHWAHDNE28YZV2D2	1655	106	
			MacAdam 3step	SPHWAHDNE28YZV3D2			
		3500	MacAdam 2step	SPHWAHDNE28YZU2D2	1722	111	
			MacAdam 3step	SPHWAHDNE28YZU3D2			
4000	MacAdam 2step	SPHWAHDNE28YZT2D2	1776	114			
	MacAdam 3step	SPHWAHDNE28YZT3D2					
	95+	2700	MacAdam 2step	SPHWAHDNF28YZW2D2	1880	101	540mA 34.6V
			MacAdam 3step	SPHWAHDNF28YZW3D2			
		3000	MacAdam 2step	SPHWAHDNF28YZV2D2	1976	106	
			MacAdam 3step	SPHWAHDNF28YZV3D2			
		3500	MacAdam 2step	SPHWAHDNF28YZU2D2	2056	110	
			MacAdam 3step	SPHWAHDNF28YZU3D2			
4000	MacAdam 2step	SPHWAHDNF28YZT2D2	2121	114			
	MacAdam 3step	SPHWAHDNF28YZT3D2					
	95+	2700	MacAdam 2step	SPHWAHDNG28YZW2D2	2470	99	720mA 34.6V
			MacAdam 3step	SPHWAHDNG28YZW3D2			
		3000	MacAdam 2step	SPHWAHDNG28YZV2D2	2596	104	
			MacAdam 3step	SPHWAHDNG28YZV3D2			
		3500	MacAdam 2step	SPHWAHDNG28YZU2D2	2701	108	
			MacAdam 3step	SPHWAHDNG28YZU3D2			
4000	MacAdam 2step	SPHWAHDNG28YZT2D2	2786	112			
	MacAdam 3step	SPHWAHDNG28YZT3D2					
	95+	2700	MacAdam 2step	SPHWAHDNH28YZW2D2	3057	98	900mA 34.6V
			MacAdam 3step	SPHWAHDNH28YZW3D2			
		3000	MacAdam 2step	SPHWAHDNH28YZV2D2	3212	103	
			MacAdam 3step	SPHWAHDNH28YZV3D2			
		3500	MacAdam 2step	SPHWAHDNH28YZU2D2	3343	107	
			MacAdam 3step	SPHWAHDNH28YZU3D2			
4000	MacAdam 2step	SPHWAHDNH28YZT2D2	3447	111			
	MacAdam 3step	SPHWAHDNH28YZT3D2					
	95+	2700	MacAdam 2step	SPHWAHDNK28YZW2D2	3760	101	1080mA 34.6V
			MacAdam 3step	SPHWAHDNK28YZW3D2			
		3000	MacAdam 2step	SPHWAHDNK28YZV2D2	3952	106	
			MacAdam 3step	SPHWAHDNK28YZV3D2			
		3500	MacAdam 2step	SPHWAHDNK28YZU2D2	4113	110	
			MacAdam 3step	SPHWAHDNK28YZU3D2			
4000	MacAdam 2step	SPHWAHDNK28YZT2D2	4241	113			
	MacAdam 3step	SPHWAHDNK28YZT3D2					
		5000	MacAdam 3step	SPHWAHDNK28YZR3D2	4277	114	

## D-series Premium color - Vivid color

Much more vivid colors for displaying & Attractive object appearance for human eye perception

- Vivid white without yellowish tint
- Attractive color for human eye perception
- The chromaticity of vivid color COB - below B.B.L

T <sub>j</sub> =85°C	LC013D	LC016D	LC019D	LC026D	LC033D	LC040D
LES						
Typical	34.6 V					
Max.	12.5W (360mA)	15.6W (450mA)	18.7W (540mA)	24.9W (720mA)	31.1W (900mA)	37.4W (1080mA)
Dimension						
Size	13.5mm x 13.5mm		19mm x 19mm			28mm x 28mm

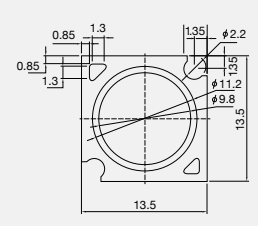
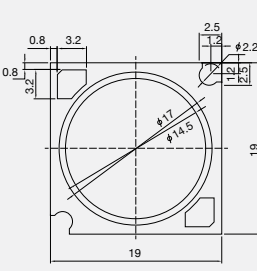
Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC013D Premium color	Vivid color	3000 (Below BBL)	MacAdam 2step	SPHWAHDND2VYZV2D2	1334	107	360mA 34.6V
			MacAdam 3step	SPHWAHDND2VYZVVD2			
		3300 (Below BBL)	MacAdam 2step	SPHWAHDND2VYZA2D2	1394	112	
			MacAdam 3step	SPHWAHDND2VYZAVD2			
		3500 (Below BBL)	MacAdam 2step	SPHWAHDND2VYZU2D2	1433	115	
			MacAdam 3step	SPHWAHDND2VYZUVD2			
4000 (Below BBL)	MacAdam 2step	SPHWAHDND2VYZT2D2	1533	123			
	MacAdam 3step	SPHWAHDND2VYZTVD2					
 LC016D Premium color	Vivid color	3000 (Below BBL)	MacAdam 2step	SPHWAHDNE2VYZV2D2	1745	112	450mA 34.6V
			MacAdam 3step	SPHWAHDNE2VYZVVD2			
		3300 (Below BBL)	MacAdam 2step	SPHWAHDNE2VYZA2D2	1823	117	
			MacAdam 3step	SPHWAHDNE2VYZAVD2			
		3500 (Below BBL)	MacAdam 2step	SPHWAHDNE2VYZU2D2	1875	120	
			MacAdam 3step	SPHWAHDNE2VYZUVD2			
4000 (Below BBL)	MacAdam 2step	SPHWAHDNE2VYZT2D2	2005	129			
	MacAdam 3step	SPHWAHDNE2VYZTVD2					
 LC019D Premium color	Vivid color	3000 (Below BBL)	MacAdam 2step	SPHWAHDNF2VYZV2D2	2068	111	540mA 34.6V
			MacAdam 3step	SPHWAHDNF2VYZVVD2			
		3300 (Below BBL)	MacAdam 2step	SPHWAHDNF2VYZA2D2	2160	116	
			MacAdam 3step	SPHWAHDNF2VYZAVD2			
		3500 (Below BBL)	MacAdam 2step	SPHWAHDNF2VYZU2D2	2222	119	
			MacAdam 3step	SPHWAHDNF2VYZUVD2			
4000 (Below BBL)	MacAdam 2step	SPHWAHDNF2VYZT2D2	2376	127			
	MacAdam 3step	SPHWAHDNF2VYZTVD2					
 LC026D Premium color	Vivid color	3000 (Below BBL)	MacAdam 2step	SPHWAHDNG2VYZV2D2	2706	109	720mA 34.6V
			MacAdam 3step	SPHWAHDNG2VYZVVD2			
		3300 (Below BBL)	MacAdam 2step	SPHWAHDNG2VYZA2D2	2827	113	
			MacAdam 3step	SPHWAHDNG2VYZAVD2			
		3500 (Below BBL)	MacAdam 2step	SPHWAHDNG2VYZU2D2	2907	117	
			MacAdam 3step	SPHWAHDNG2VYZUVD2			
4000 (Below BBL)	MacAdam 2step	SPHWAHDNG2VYZT2D2	3108	125			
	MacAdam 3step	SPHWAHDNG2VYZTVD2					
 LC033D Premium color	Vivid color	3000 (Below BBL)	MacAdam 2step	SPHWAHDNH2VYZV2D2	3339	107	900mA 34.6V
			MacAdam 3step	SPHWAHDNH2VYZVVD2			
		3300 (Below BBL)	MacAdam 2step	SPHWAHDNH2VYZA2D2	3488	112	
			MacAdam 3step	SPHWAHDNH2VYZAVD2			
		3500 (Below BBL)	MacAdam 2step	SPHWAHDNH2VYZU2D2	3588	115	
			MacAdam 3step	SPHWAHDNH2VYZUVD2			
4000 (Below BBL)	MacAdam 2step	SPHWAHDNH2VYZT2D2	3836	123			
	MacAdam 3step	SPHWAHDNH2VYZTVD2					
 LC040D Premium color	Vivid color	3000 (Below BBL)	MacAdam 2step	SPHWAHDNK2VYZV2D2	4150	111	1080mA 34.6V
			MacAdam 3step	SPHWAHDNK2VYZVVD2			
		3300 (Below BBL)	MacAdam 2step	SPHWAHDNK2VYZA2D2	4335	116	
			MacAdam 3step	SPHWAHDNK2VYZAVD2			
		3500 (Below BBL)	MacAdam 2step	SPHWAHDNK2VYZU2D2	4459	119	
			MacAdam 3step	SPHWAHDNK2VYZUVD2			
4000 (Below BBL)	MacAdam 2step	SPHWAHDNK2VYZT2D2	4768	128			
	MacAdam 3step	SPHWAHDNK2VYZTVD2					



## D-series Premium color - Special color

Much more vivid colors for displaying & Attractive object appearance for human eye perception

- Fashion light effect: Clean, Elegant, Vivid
- Meat light effect: Fresh (Red), Delicious (Red), Vivid
- Vegetable light effect: Fresh, Delicious, Vivid

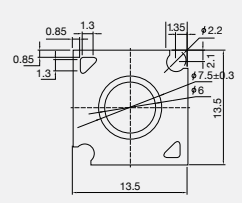
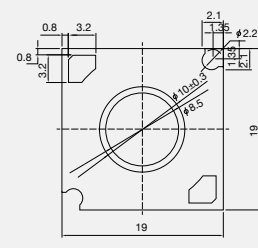
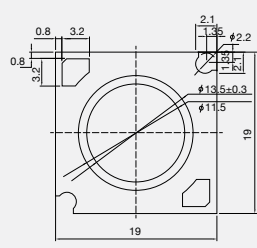
T <sub>j</sub> =85°C	LC013D	LC016D	LC019D	LC026D	LC033D
LES	9.8mm	14.5mm			
Typical	34.6 V				
	12.5W (360mA)	15.6W (450mA)	18.7W (540mA)	24.9W (720mA)	31.1W (900mA)
Max.	34.5W (920mA)	43.1W (1150mA)	51.8W (1380mA)	69.0W (1840mA)	86.2W (2300mA)
Dimension					
Size	13.5mm x 13.5mm	19mm x 19mm			





Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC013D Premium color	Special color	Fashion	MacAdam 2step	SPHWAHDND2VYZUSD2	1085	1142	360mA 34.6V
		Meat	MacAdam 2step	SPHWAHDND2VYZTSD2	868	914	
		Vegetable	MacAdam 2step	SPHWAHDND2VYZRSD2	1128	1188	
 LC016D Premium color	Special color	Fashion	MacAdam 2step	SPHWAHDNE2VYZUSD2	1411	1485	450mA 34.6V
		Meat	MacAdam 2step	SPHWAHDNE2VYZTSD2	1129	1188	
		Vegetable	MacAdam 2step	SPHWAHDNE2VYZRSD2	1467	1544	
 LC019D Premium color	Special color	Fashion	MacAdam 2step	SPHWAHDNF2VYZUSD2	1677	1765	540mA 34.6V
		Meat	MacAdam 2step	SPHWAHDNF2VYZTSD2	1341	1412	
		Vegetable	MacAdam 2step	SPHWAHDNF2VYZRSD2	1744	1835	
 LC026D Premium color	Special color	Fashion	MacAdam 2step	SPHWAHDNG2VYZUSD2	2192	2307	720mA 34.6V
		Meat	MacAdam 2step	SPHWAHDNG2VYZTSD2	1753	1845	
		Vegetable	MacAdam 2step	SPHWAHDNG2VYZRSD2	2279	2399	
 LC033D Premium color	Special color	Fashion	MacAdam 2step	SPHWAHDNH2VYZUSD2	2712	2855	900mA 34.6V
		Meat	MacAdam 2step	SPHWAHDNH2VYZTSD2	2170	2284	
		Vegetable	MacAdam 2step	SPHWAHDNH2VYZRSD2	2820	2969	

## C-series Gen 2 [Small LES COB]

Suitable for narrow beam spot lights and downlights

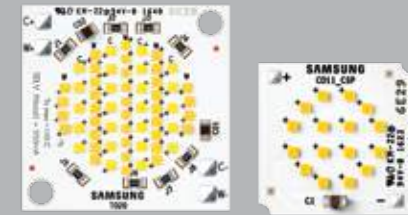
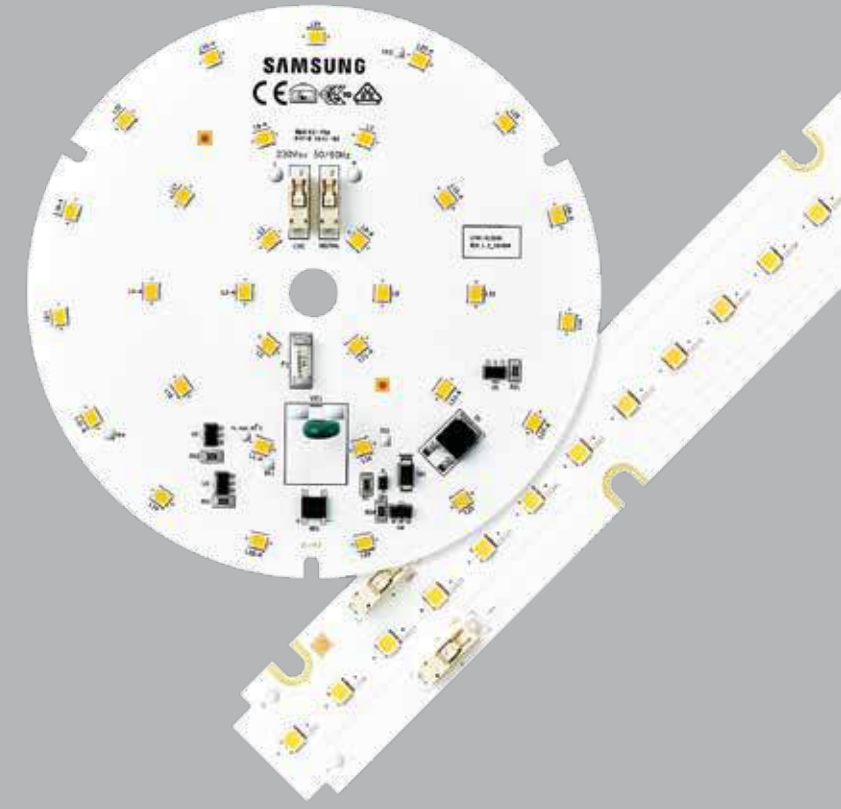
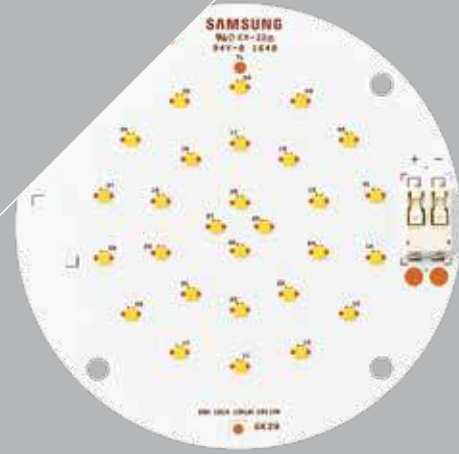
- Uses new flip chip technology
- Low droop to improve current and thermal performance
- High reliability
- Completed 6,000 hours of LM-80 testing

T <sub>j</sub> =85°C	LC010C Gen 2	LC020C Gen 2	LC030C Gen 2	LC040C Gen 2
LES	6.0mm	8.5mm	11.5mm	
Typical	35.0V			
	10.5W (300mA)	21.0W (600mA)	31.5W (900mA)	36.8W (1050mA)
Max.	13.8W (380mA)	34.0W (920mA)	51.1W (1380mA)	59.5W (1610mA)
Dimension				
Size	13.5mm x 13.5mm	19mm x 19mm	19mm x 19mm	

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>j</sub> =85°C		I <sub>F</sub> (mA) V <sub>F</sub> (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC010C Gen 2	80+	2700K	MacAdam 3step	SPHWAHDNC25YZW3C2	1212	115	300mA 35.0V
		3000K	MacAdam 3step	SPHWAHDNC25YZV3C2	1274	121	
		3500K	MacAdam 3step	SPHWAHDNC25YZU3C2	1311	125	
		4000K	MacAdam 3step	SPHWAHDNC25YZT3C2	1337	127	
		5000K	MacAdam 3step	SPHWAHDNC25YZR3C2	1348	128	
	90+	2700K	MacAdam 3step	SPHWAHDNC27YZW3C2	1037	99	
		3000K	MacAdam 3step	SPHWAHDNC27YZV3C2	1091	104	
		3500K	MacAdam 3step	SPHWAHDNC27YZU3C2	1123	107	
		4000K	MacAdam 3step	SPHWAHDNC27YZT3C2	1147	109	
		5000K	MacAdam 3step	SPHWAHDNC27YZR3C2	1156	110	
 LC020C Gen 2	80+	2700K	MacAdam 3step	SPHWAHDNF25YZW3C2	2485	118	600mA 35.0V
		3000K	MacAdam 3step	SPHWAHDNF25YZV3C2	2625	125	
		3500K	MacAdam 3step	SPHWAHDNF25YZU3C2	2688	128	
		4000K	MacAdam 3step	SPHWAHDNF25YZT3C2	2742	131	
		5000K	MacAdam 3step	SPHWAHDNF25YZR3C2	2765	132	
	90+	2700K	MacAdam 3step	SPHWAHDNF27YZW3C2	2127	101	
		3000K	MacAdam 3step	SPHWAHDNF27YZV3C2	2237	107	
		3500K	MacAdam 3step	SPHWAHDNF27YZU3C2	2304	110	
		4000K	MacAdam 3step	SPHWAHDNF27YZT3C2	2351	112	
		5000K	MacAdam 3step	SPHWAHDNF27YZR3C2	2372	113	
 LC030C Gen 2	80+	2700K	MacAdam 3step	SPHWAHDNH25YZW3C2	3765	120	900mA 35.0V
		3000K	MacAdam 3step	SPHWAHDNH25YZV3C2	3956	126	
		3500K	MacAdam 3step	SPHWAHDNH25YZU3C2	4072	129	
		4000K	MacAdam 3step	SPHWAHDNH25YZT3C2	4154	132	
		5000K	MacAdam 3step	SPHWAHDNH25YZR3C2	4188	133	
	90+	2700K	MacAdam 3step	SPHWAHDNH27YZW3C2	3222	102	
		3000K	MacAdam 3step	SPHWAHDNH27YZV3C2	3389	108	
		3500K	MacAdam 3step	SPHWAHDNH27YZU3C2	3490	111	
		4000K	MacAdam 3step	SPHWAHDNH27YZT3C2	3562	113	
		5000K	MacAdam 3step	SPHWAHDNH27YZR3C2	3592	114	
 LC040C Gen 2	80+	2700K	MacAdam 3step	SPHWAHDNK25YZW3C2	4305	117	1050mA 35.0V
		3000K	MacAdam 3step	SPHWAHDNK25YZV3C2	4524	123	
		3500K	MacAdam 3step	SPHWAHDNK25YZU3C2	4657	127	
		4000K	MacAdam 3step	SPHWAHDNK25YZT3C2	4750	129	
		5000K	MacAdam 3step	SPHWAHDNK25YZR3C2	4790	130	
	90+	2700K	MacAdam 3step	SPHWAHDNK27YZW3C2	3684	100	
		3000K	MacAdam 3step	SPHWAHDNK27YZV3C2	3875	105	
		3500K	MacAdam 3step	SPHWAHDNK27YZU3C2	3991	109	
		4000K	MacAdam 3step	SPHWAHDNK27YZT3C2	4073	111	
		5000K	MacAdam 3step	SPHWAHDNK27YZR3C2	4108	112	

# Module

Samsung LED



- Indoor Linear Light
- Industrial Light
- Indoor Area Light
- Down & Spot Light
- Outdoor Light



With their modular construction, easy-to-use connections and optimal color consistency, Samsung's linear module line-ups are well-suited for a wide variety of luminaires.

- Tight color binning for best color consistency and high uniformity
- Modular design flexibility makes a wide variety of luminaire designs possible
- Peace of mind with Samsung-backed quality and performance

Product	Key Features	Efficacy (lm/W)	Lifespan
 Q-series	<ul style="list-style-type: none"> <li>• Highest performance</li> <li>• 203lm/W [4000K, CRI 80+, Tp 40°C]</li> </ul>	●●●●●	●●●●●
 H-series	<ul style="list-style-type: none"> <li>• High performance</li> <li>• 187lm/W [4000K, CRI 80+, Tp 40°C]</li> </ul>	●●●●○	●●●●●
 M-series	<ul style="list-style-type: none"> <li>• Flexible design choices</li> <li>• High efficacy up to 165lm/W @4000K</li> </ul>	●●●○○	●●●●●
 S-series	<ul style="list-style-type: none"> <li>• High voltage solution</li> <li>• 170lm/W [4000K, CRI 80+, Tp 50°C]</li> </ul>	●●●○○	●●●●●
 V-series	<ul style="list-style-type: none"> <li>• Value solution</li> <li>• 146lm/W [4000K, CRI80+, Tp 50°C]</li> </ul>	●●○○○	●●●●○
 T-series	<ul style="list-style-type: none"> <li>• White tunable solution from 2700K to 6500K</li> </ul>	●●○○○	●●●●○

### Q-series



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-QB22A	3680	19.7	43.8	450	900	187	80+	3000	115	1120x18x5.2	-20~+50	50000	UL, cUL	SI-B8V201B20US
	3900					198		3500						SI-B8U201B20US
	4000					203		4000						SI-B8T201B20US
	4100					208		5000						SI-B8R201B20US
LT-Q562A	1840	9.9	21.9	450	900	187	80+	3000	115	560x18x5.8	-20~+50	50000	UL, cUL	SI-B8V101560US
	1950					198		3500						SI-B8U101560US
	2000					203		4000						SI-B8T101560US
	2050					208		5000						SI-B8R101560US
LT-Q282A	920	4.9	10.9	450	900	187	80+	3000	115	275x18x5.8	-20~+50	50000	UL, cUL	SI-B8V051280US
	975					198		3500						SI-B8U051280US
	1000					203		4000						SI-B8T051280US
	1025					208		5000						SI-B8R051280US



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-Q562B	1840	9.9	54.8	180	360	187	80+	3000	115	560x24x5.2	-20~+50	50000	CE, ENEC	SI-B8V103560EU
	2000					203		4000						SI-B8T103560EU
	2000					203		6500						SI-B8P103560EU
LT-Q282B	920	4.9	27.4	180	360	187	80+	3000	115	280x24x5.2	-20~+50	50000	CE, ENEC	SI-B8V053280EU
	1000					203		4000						SI-B8T053280EU
	1000					203		6500						SI-B8P053280EU

### H-series



LT-HB22D



LT-H562D



LT-H282D

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	I <sub>max</sub> (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-HB22D	3870	21.6	22.5	960	2400	179	80+	3000	115	1120x18x5.8	-20~+50	50000	UL, cUL	SI-B8V221B2HUS
	3925					182		3500						SI-B8U221B2HUS
	4040					187		4000						SI-B8T221B2HUS
	4040					187		5000						SI-B8R221B2HUS
LT-H562D	1935	10.8	22.5	480	1200	179	80+	3000	115	560x18x5.8	-20~+50	50000	UL, cUL	SI-B8V11156HUS
	1965					182		3500						SI-B8U11156HUS
	2020					187		4000						SI-B8T11156HUS
	2020					187		5000						SI-B8R11156HUS
LT-H282D	970	5.4	22.5	240	600	180	80+	3000	115	275x18x5.8	-20~+50	50000	UL, cUL	SI-B8V05128HUS
	980					181		3500						SI-B8U05128HUS
	1010					187		4000						SI-B8T05128HUS
	1010					187		5000						SI-B8R05128HUS



LT-H562C



LT-H562C



LT-H282C



LT-H282C

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	I <sub>max</sub> (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-H562C	1935	10.8	45.0	240	600	179	80+	3000	115	559.7x23.8x5.2	-20~+50	50000	CE, ENEC	SI-B8V11156HEU
														SI-B8U11156HEU
	2020					187		4000						SI-B8T11156HEU
														SI-B8R11156HEU
LT-H282C	970	5.4	22.5	240	600	180	80+	3000	115	279.7x23.8x5.2	-20~+50	50000	CE, ENEC	SI-B8V05128HEU
														SI-B8U05128HEU
	1010					187		4000						SI-B8T05128HEU
														SI-B8R05128HEU

\* Front wiring connector, Rear wiring connector

### M-series



LT-MB22C Gen 3



LT-M562C Gen 3



LT-M282C Gen 3

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	I <sub>max</sub> (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-MB22C Gen 3	5330	33.6	24	1400	2160	159	80+	3000	115	1120x18x5.2	-20~+50	50000	UL, cUL	SI-B8V341B2001
	5400					161		3500						SI-B8U341B2001
	5550					165		4000						SI-B8T341B2001
	5550					165		5000						SI-B8R341B2001
LT-M562C Gen 3	2665	16.8	24	700	1080	159	80+	3000	115	560x18x5.8	-20~+50	50000	UL, cUL	SI-B8V17256001
	2700					161		3500						SI-B8U17256001
	2775					165		4000						SI-B8T17256001
	2775					165		5000						SI-B8R17256001
LT-M282C Gen 3	1660	11.2	24.8	450	540	149	80+	3000	115	275x18x5.8	-20~+50	50000	UL, cUL	SI-B8V11428001
	1680					151		3500						SI-B8U11428001
	1730					155		4000						SI-B8T11428001
	1730					155		5000						SI-B8R11428001



LT-MB22A



LT-MB22B



LT-MB22C

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	I <sub>max</sub> (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-MB22A	3160	22.3	24.8	900	1080	142	80+	3000	115	1120x18x5.2	-20~+50	50000	UL, cUL	SI-B8V221B20WW
	3210					144		3500						SI-B8U221B20WW
	3300					148		4000						SI-B8T221B20WW
	3300					148		5000						SI-B8R221B20WW
LT-MB22B	4210	29.8	24.8	1200	1440	141	80+	3000	115	1120x18x5.2	-20~+50	50000	UL, cUL	SI-B8V301B20WW
	4280					144		3500						SI-B8U301B20WW
	4400					148		4000						SI-B8T301B20WW
	4400					148		5000						SI-B8R301B20WW
LT-MB22C	5070	33.6	24.0	1400	2160	151	80+	3000	115	1120x18x5.2	-20~+50	50000	UL, cUL	SI-B8V341B20WW
	5150					153		3500						SI-B8U341B20WW
	5310					158		4000						SI-B8T341B20WW
	5310					158		5000						SI-B8R341B20WW

# Indoor Linear Light

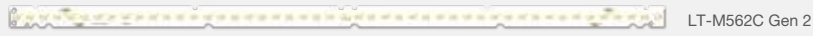
Module



LT-M562A Gen 2



LT-M562B Gen 2



LT-M562C Gen 2

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-M562A Gen 2	1580	11.2	24.8	450	540	141	80+	3000	115	560x18x5.8	-20~+50	50000	CE UL, cUL	SI-B8V113560WW
	1605					144		3500						SI-B8U113560WW
	1650					148		4000						SI-B8T113560WW
	1650					148		5000						SI-B8R113560WW
LT-M562B Gen 2	2105	14.9	24.8	600	720	141	80+	3000	115	560x18x5.8	-20~+50	50000	CE UL, cUL	SI-B8V152560WW
	2140					144		3500						SI-B8U152560WW
	2200					148		4000						SI-B8T152560WW
	2200					148		5000						SI-B8R152560WW
LT-M562C Gen 2	2535	16.8	24.0	700	1080	151	80+	3000	115	560x18x5.8	-20~+50	50000	CE UL, cUL	SI-B8V172560WW
	2575					153		3500						SI-B8U172560WW
	2655					158		4000						SI-B8T172560WW
	2655					158		5000						SI-B8R172560WW



LT-M282A Gen 2



LT-M282B Gen 2



LT-M282C Gen 2

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-M282A Gen 2	790	5.6	12.4	450	540	142	80+	3000	115	275x18x5.8	-20~+50	50000	CE UL, cUL	SI-B8V052280WW
	800					143		3500						SI-B8U052280WW
	825					148		4000						SI-B8T052280WW
	825					148		5000						SI-B8R052280WW
LT-M282B Gen 2	1050	7.4	24.8	300	360	142	80+	3000	115	275x18x5.8	-20~+50	50000	CE UL, cUL	SI-B8V072280WW
	1070					144		3500						SI-B8U072280WW
	1100					148		4000						SI-B8T072280WW
	1100					148		5000						SI-B8R072280WW
LT-M282C Gen 2	1580	11.2	24.8	450	540	142	80+	3000	115	275x18x5.8	-20~+50	50000	CE UL, cUL	SI-B8V114280WW
	1605					144		3500						SI-B8U114280WW
	1650					148		4000						SI-B8T114280WW
	1650					148		5000						SI-B8R114280WW

# Indoor Linear Light

Module



LT-M562F



LT-M562G



LT-M562H

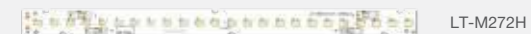
Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-M562F	1205	11.2	24.8	450	540	108	90+	2700	115	560x18x5.8	-20~+50	50000	UL, cUL	SI-B9W111560WW
	1225					110		3000						SI-B9V111560WW
	1250					112		3500						SI-B9U111560WW
	1300					116		4000						SI-B9T111560WW
LT-M562G	1605	14.9	24.8	600	720	108	90+	2700	115	560x18x5.8	-20~+50	50000	UL, cUL	SI-B9W151560WW
	1635					110		3000						SI-B9V151560WW
	1670					112		3500						SI-B9U151560WW
	1730					116		4000						SI-B9T151560WW
LT-M562H	1935	16.8	24.0	700	1080	115	90+	2700	115	560x18x5.8	-20~+50	50000	UL, cUL	SI-B9W171560WW
	1970					117		3000						SI-B9V171560WW
	2010					120		3500						SI-B9U171560WW
	2085					124		4000						SI-B9T171560WW



LT-M272F



LT-M272G



LT-M272H

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-M272F	600	5.6	12.4	450	540	108	90+	2700	115	275x18x5.8	-20~+50	50000	UL, cUL	SI-B9W051280WW
	615					110		3000						SI-B9V051280WW
	625					112		3500						SI-B9U051280WW
	650					116		4000						SI-B9T051280WW
LT-M272G	800	7.4	24.8	300	360	108	90+	2700	115	275x18x5.8	-20~+50	50000	UL, cUL	SI-B9W071280WW
	820					110		3000						SI-B9V071280WW
	835					112		3500						SI-B9U071280WW
	865					116		4000						SI-B9T071280WW
LT-M272H	1205	11.2	24.8	450	540	108	90+	2700	115	275x18x5.8	-20~+50	50000	UL, cUL	SI-B9W113280WW
	1225					110		3000						SI-B9V113280WW
	1250					112		3500						SI-B9U113280WW
	1300					116		4000						SI-B9T113280WW

### S-series



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-S562H	2155	13.2	46.9	280	540	163	80+	3000	115	559.7×23.8×5.2 559.7×23.8×7.4	-20~+50	50000	CE, ENEC	SI-B8V13156SEU
	2250					170		4000						SI-B8T13156SEU
	2250					170		6500						SI-B8P13156SEU
LT-S282H	1070	6.6	23.4	280	540	163	80+	3000	115	279.7×23.8×5.2 279.7×23.8×7.4	-20~+50	50000	CE, ENEC	SI-B8V07128VEU
	1120					170		4000						SI-B8T07128VEU
	1120					170		6500						SI-B8P07128VEU
LT-S142H	535	3.3	11.7	280	540	163	80+	3000	115	139.8×23.8×5.2 139.8×23.8×7.4	-20~+50	50000	CE, ENEC	SI-B8V03114SEU
	560					170		4000						SI-B8T03114SEU
	560					170		6500						SI-B8P03114SEU
LT-S562H	1715	13.1	46.9	280	540	131	90+	3000	115	559.7×23.8×5.2 559.7×23.8×7.4	-20~+50	50000	CE, ENEC	SI-B9V13156SEU
	1810					138		4000						SI-B9T13156SEU
	1875					143		5000						SI-B9R13156SEU
	1875					143		6500						SI-B9P13156SEU
	860					131		3000						SI-B9V07128VEU
LT-S282H	905	6.6	23.5	280	540	138	90+	4000	115	279.7×23.8×5.2 279.7×23.8×7.4	-20~+50	50000	CE, ENEC	SI-B9T07128VEU
	940					143		5000						SI-B9R07128VEU
	940					143		6500						SI-B9P07128VEU
	430					131		3000						SI-B9V03114SEU
LT-S142H	455	3.3	11.7	280	540	139	90+	4000	115	139.8×23.8×5.2 139.8×23.8×7.4	-20~+50	50000	CE, ENEC	SI-B9T03114SEU
	470					143		5000						SI-B9R03114SEU
	470					143		6500						SI-B9P03114SEU
	470					143		6500						SI-B9P03214SEU

\* Front wiring connector, Rear wiring connector



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-S562H_V2	1070	6.6	23.4	280	540	163	80+	3000	115	559.7×23.8×5.2	-20~+50	50000	CE, ENEC	SI-B8V07156SEU
	1120					170		4000						SI-B8T07156SEU
	1120					170		6500						SI-B8P07156SEU
LT-S282H_V2	530	3.3	11.7	280	540	161	80+	3000	115	279.7×23.8×5.2	-20~+50	50000	CE, ENEC	SI-B8V03128SEU
	560					170		4000						SI-B8T03128SEU
	560					170		6500						SI-B8P03128SEU
LT-S142H_V2	270	1.6	5.9	280	540	165	80+	3000	115	139.8×23.8×5.2	-20~+50	50000	CE, ENEC	SI-B8V02114SEU
	280					171		4000						SI-B8T02114SEU
	280					171		6500						SI-B8P02114SEU
LT-S562H_V2	860	6.6	23.4	280	540	131	90+	3000	115	559.7×23.8×5.2	-20~+50	50000	CE, ENEC	SI-B9V07156SEU
	905					138		4000						SI-B9T07156SEU
	940					143		5000						SI-B9R07156SEU
	940					143		6500						SI-B9P07156SEU
	430					131		3000						SI-B9V03128SEU
LT-S282H_V2	455	3.3	11.7	280	540	139	90+	4000	115	279.7×23.8×5.2	-20~+50	50000	CE, ENEC	SI-B9T03128SEU
	470					143		5000						SI-B9R03128SEU
	470					143		6500						SI-B9P03128SEU
	470					143		6500						SI-B9P03128SEU
LT-S142H_V2	215	1.6	5.9	280	540	131	90+	3000	115	139.8×23.8×5.2	-20~+50	50000	CE, ENEC	SI-B9V02114SEU
	230					139		4000						SI-B9T02114SEU
	235					143		5000						SI-B9R02114SEU
	235					143		6500						SI-B9P02114SEU

### V-series



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-VB22A	2696	21.2	25.2	840	1080	127	80+	3000	115	1120x18x5.5	-20~+50	50000	UL, cUL	SI-B8V221B2CUS
	2800					3500		SI-B8U221B2CUS						
	2904					4000		SI-B8T221B2CUS						
	2904					5000		SI-B8R221B2CUS						
	4090					3000		SI-B8V301B2CUS						
LT-VB22B	4218	32.0	25.4	1260	1440	132	80+	3500	115	1120x18x5.5	-20~+50	50000	UL, cUL	SI-B8U301B2CUS
	4314					4000		SI-B8T301B2CUS						
	4314					5000		SI-B8R301B2CUS						
	4540					3000		SI-B8V341B2CUS						
LT-VB22C	4738	33.6	48.0	700	1080	141	80+	3500	115	1120x18x5.5	-20~+50	50000	UL, cUL	SI-B8U341B2CUS
	4920					4000		SI-B8T341B2CUS						
	4920					5000		SI-B8R341B2CUS						
	1348					10.6		25.2						420
1400	3500	SI-B8U11156CWW												
1452	4000	SI-B8T11156CWW												
1452	5000	SI-B8R11156CWW												
LT-V562B	2045	16.0	25.4	630	720	128	80+	3000	115	560x18x5.5	-20~+50	50000	UL, cUL	SI-B8V15156CWW
	2109					3500		SI-B8U15156CWW						
	2157					4000		SI-B8T15156CWW						
	2157					5000		SI-B8R15156CWW						
LT-V562C	2270	16.8	24.0	700	1080	135	80+	3000	115	560x18x5.5	-20~+50	50000	UL, cUL	SI-B8V17156CWW
	2369					3500		SI-B8U17156CWW						
	2460					4000		SI-B8T17156CWW						
	2460					5000		SI-B8R17156CWW						
LT-V282A	724	5.7	12.6	450	540	128	80+	3000	115	275x18x5.5	-20~+50	50000	UL, cUL	SI-B8V06128CWW
	746					3500		SI-B8U06128CWW						
	769					4000		SI-B8T06128CWW						
	769					5000		SI-B8R06128CWW						
LT-V282B	965	7.6	25.2	300	360	128	80+	3000	115	275x18x5.5	-20~+50	50000	UL, cUL	SI-B8V08128CWW
	995					3500		SI-B8U08128CWW						
	1026					4000		SI-B8T08128CWW						
	1026					5000		SI-B8R08128CWW						

### T-series








Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-T562C	1900	13.5	18.0 / 0	750 / 0	-	141	80+	2700	115	560x18x5.5	-20~+50	50000	UL, cUL	SI-B8A131560WW
	2075	12.6	16.7 / 16.7	375 / 375	165	4000								
	2060	13.5	0 / 18.0	0 / 750	153	6500								
	950	6.8	9.0 / 0	750 / 0	141	2700								
LT-T282C	1040	6.3	8.4 / 8.4	375 / 375	-	165	80+	4000	115	275x18x5.5	-20~+50	50000	UL, cUL	SI-B8A071280WW
	1030	6.8	0 / 9.0	0 / 750	153	6500								



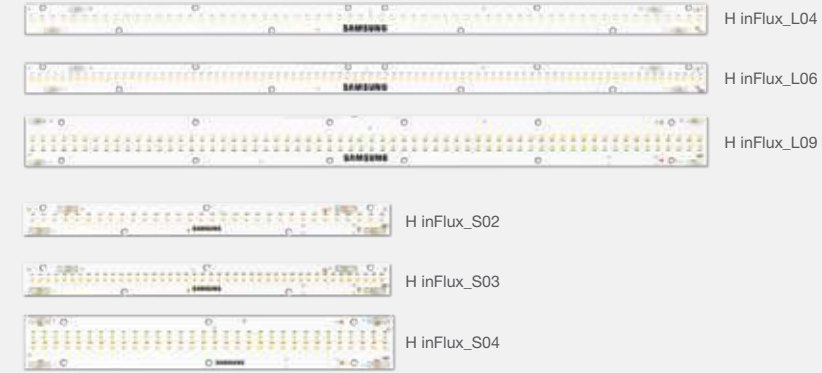


### Superior performance for high flux luminaires in industrial lighting

- Optimized for industrial lighting applications
- Reduced thermal resistance using Samsung's high performing mid-power LEDs
- Better uniformity & cost effective

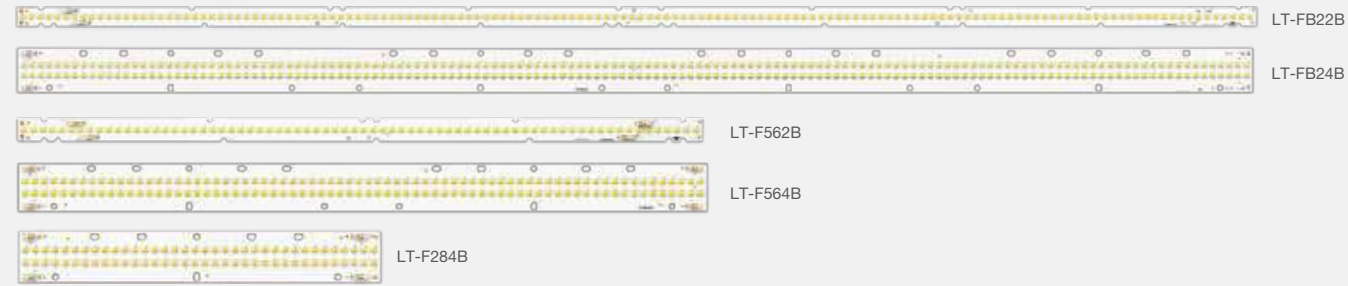
Product	Key Features	Efficacy (lm/W)	Lifespan
 H inFlux	<ul style="list-style-type: none"> <li>• Wide lumen flux coverage - up to 40,000lm by combining modules</li> <li>• Highest performance</li> <li>• 192lm/W [4000K, CRI 80+, Tp 55°C]</li> </ul>	●●●●●	●●●●●
 F-series	<ul style="list-style-type: none"> <li>• High lumen density of 18,600lm to replace tubes in high/low bay lighting</li> <li>• Platform &amp; flexible design choices</li> <li>• High efficacy up to 175lm/W @4000K</li> </ul>	●●●●○	●●●●●
 V-series F-type	<ul style="list-style-type: none"> <li>• Value solution</li> <li>• 146lm/W [4000K, CRI80+, Tp 50°C]</li> </ul>	●●○○○	●●●●○
 R-series	<ul style="list-style-type: none"> <li>• High lm/W for high ceiling/height applications</li> <li>• High efficacy up to 169lm/W @4000K</li> </ul>	●●●●○	●●●●●
 Round Highbay	<ul style="list-style-type: none"> <li>• Wide lumen choice available in the same fixture</li> <li>• Good thermal management by flip-chip technology</li> </ul>	●●●○○	●●●●●

## H inFlux



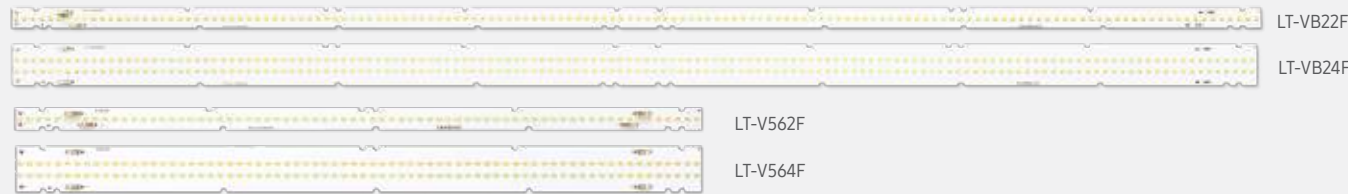
Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
H inFlux_L04	3960	22.3	22.3	1000	1380	178	80+	3000	120	560x24x5.9	-30~+50	50000	CE, UL, cUL	SL-B8V2N80LAWW
	4060					182		3500						SL-B8U2N80LAWW
	4280					192		4000						SL-B8T2N80LAWW
	4280					192		5000						SL-B8R2N80LAWW
H inFlux_L06	5630	32.0	22.4	1430	950	176	80+	3000	120	560x24x5.9	-30~+50	50000	CE, UL, cUL	SL-B8V3N80LAWW
	5800					181		3500						SL-B8U3N80LAWW
	6110					191		4000						SL-B8T3N80LAWW
	6110					191		5000						SL-B8R3N80LAWW
H inFlux_L09	7910	44.6	44.6	1000	1380	177	80+	3000	120	561x41x5.9	-30~+50	50000	CE, UL, cUL	SL-B8V4N90LAWW
	8130					182		3500						SL-B8U4N90LAWW
	8570					192		4000						SL-B8T4N90LAWW
	8570					192		5000						SL-B8R4N90LAWW
H inFlux_S02	1980	11.1	11.1	1000	1380	178	80+	3000	120	280x24x5.9	-30~+50	50000	CE, UL, cUL	SL-B8V1N30LAWW
	2030					183		3500						SL-B8U1N30LAWW
	2140					193		4000						SL-B8T1N30LAWW
	2140					193		5000						SL-B8R1N30LAWW
H inFlux_S03	2820	16.0	11.2	1430	950	176	80+	3000	120	280x24x5.9	-30~+50	50000	CE, UL, cUL	SL-B8V1N60LAWW
	2890					180		3500						SL-B8U1N60LAWW
	3060					191		4000						SL-B8T1N60LAWW
	3060					191		5000						SL-B8R1N60LAWW
H inFlux_S04	3960	22.3	22.3	1000	1380	178	80+	3000	120	281x41x5.9	-30~+50	50000	CE, UL, cUL	SL-B8V2N70LAWW
	4060					182		3500						SL-B8U2N70LAWW
	4280					192		4000						SL-B8T2N70LAWW
	4280					192		5000						SL-B8R2N70LAWW

### F-series



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-FB22B	8670	51.5	46.0	1120	1800	168	80+	3000	115	1120x18x5.2	-30~+50	50000	UL, cUL	SI-B8V521B20WW
	8800					171		3500						SI-B8U521B20WW
	9000					175		4000						SI-B8T521B20WW
	9300					181		5000						SI-B8R521B20WW
LT-FB24B	17340	103.0	46.0	2240	3600	168	80+	3000	115	1120x39.8x5.2	-30~+50	50000	UL, cUL	SI-B8VZ91B20WW
	17600					171		3500						SI-B8UZ91B20WW
	18000					175		4000						SI-B8TZ91B20WW
	18600					181		5000						SI-B8RZ91B20WW
LT-F562B	4335	25.8	23.0	1120	1800	168	80+	3000	115	560x18x5.2	-30~+50	50000	UL, cUL	SI-B8V261560WW
	4400					171		3500						SI-B8U261560WW
	4500					175		4000						SI-B8T261560WW
	4650					181		5000						SI-B8R261560WW
LT-F564B	8670	51.5	46.0	1120	1800	168	80+	3000	115	559.7x39.8x5.2	-30~+50	50000	UL, cUL	SI-B8V521560WW
	8800					171		3500						SI-B8U521560WW
	9000					175		4000						SI-B8T521560WW
	9300					181		5000						SI-B8R521560WW
LT-F284B	4335	25.8	23.0	1120	1800	168	80+	3000	115	280x40x5.2	-30~+50	50000	UL, cUL	SI-B8V261280WW
	4400					171		3500						SI-B8U261280WW
	4500					175		4000						SI-B8T261280WW
	4650					181		5000						SI-B8R261280WW

### V-series F-type



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-VB22F	7214	54.7	48.8	1120	1620	132	80+	3000	115	1120x18x5.5	-30~+50	50000	UL, cUL	SI-B8V521B2CUS
	7488					137		3500						SI-B8U521B2CUS
	7816					143		4000						SI-B8T521B2CUS
	8160					149		5000						SI-B8R521B2CUS
LT-VB24F	14428	109.3	48.8	2240	3240	132	80+	3000	115	1120x39.8x5.5	-30~+50	50000	UL, cUL	SI-B8VZ91B2CUS
	14976					137		3500						SI-B8UZ91B2CUS
	15632					143		4000						SI-B8TZ91B2CUS
	16388					149		5000						SI-B8RZ91B2CUS
LT-V562F	3607	27.3	24.4	1120	1620	132	80+	3000	115	560x18x5.5	-30~+50	50000	UL, cUL	SI-B8V26156CUS
	3744					137		3500						SI-B8U26156CUS
	3908					143		4000						SI-B8T26156CUS
	4072					149		5000						SI-B8R26156CUS
LT-V564F	7214	54.7	48.8	1120	1620	132	80+	3000	115	560x39.8x5.5	-30~+50	50000	UL, cUL	SI-B8V52156CUS
	7488					137		3500						SI-B8U52156CUS
	7816					143		4000						SI-B8T52156CUS
	8160					149		5000						SI-B8R52156CUS

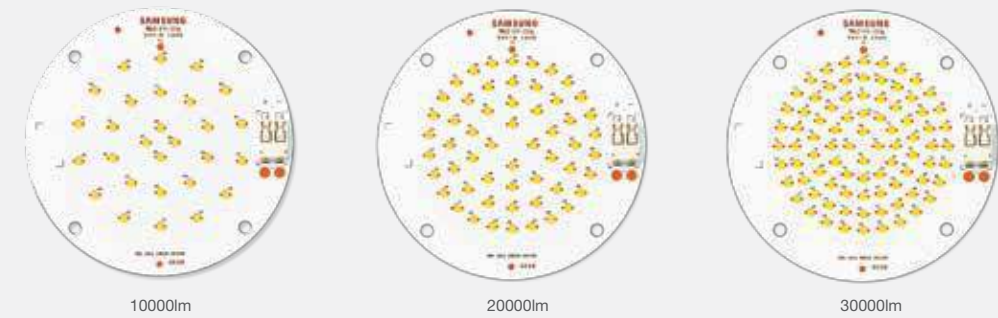
### R-series



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LT-R286A	1520	9.4	32.3	290	540	162	80+	3000	115	280x55x5.8 280x55x7.4	-20~+50	50000	CE, ENEC UL, cUL	SI-B8V09A280WW
	1590					169		4000						SI-B8T09A280WW
	1635					174		5000						SI-B8R09A280WW
	1590					169		6500						SI-B8P09A280WW
LT-R286C	2810	20.7	32	648	1050	136	80+	3000	115	280x55x5.8 280x55x7.4	-20~+50	50000	CE	SI-B8V211280WW
	3000					145		4000						SI-B8T211280WW
	3000					145		5000						SI-B8R211280WW
	3000					145		5000						SI-B8P211280WW

\* Front wiring connector, Rear wiring connector

### Round Highbay





Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
10000lm	10300	74	40.1	2100	2500	140	80+	4000	115	Ø76x5.75	10~+50	TBD	TBD	SL-B8T8NA0L1WW
	10400					142		5000						SL-B8R8NA0L1WW
20000lm	20700	148	80.3	2100	2500	140	80+	4000	115	Ø76x5.75	10~+50	TBD	TBD	SL-B8TANB0L1WW
	20900					142		5000						SL-B8RANB0L1WW
30000lm	31000	222	120.4	2100	2500	140	80+	4000	115	Ø76x5.75	10~+50	TBD	TBD	SL-B8TANC0L1WW
	31499					142		5000						SL-B8RANC0L1WW



High efficacy Area Platform Modules that are cost-effective and deliver uniform light output.

- Available to design slimmer luminaire integrating optical technology (LAM Type)
- Value added optical technology designed by Samsung (LAM Type)
- Optimized number of packages for superior light uniformity

Product	Key Features	Efficacy (lm/W)	Lifespan
 LAM type	<ul style="list-style-type: none"> <li>• Best solution for slim luminaire design</li> <li>• Good uniformity even curved optic design</li> </ul>	●●○○○	●●●●●
 Finger type	<ul style="list-style-type: none"> <li>• Better uniformity solution for flat panel type</li> <li>• High efficacy up to 186lm/W @4000K</li> </ul>	●●●●●	●●●●●

LAM Type



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
LAM-SQ30C	1445	10.6	30.2	350	540	137	80+	3000	145	259x250x6.6	-20~+50	50000	CE, ENEC	SI-B8V114250WW
	1515					143		4000						SI-B8T114250WW
	1515					143		6500						SI-B8P114250WW
LAM-RT30C	1445	10.6	30.2	350	540	137	80+	3000	145	216x273x6.6	-20~+50	50000	CE, ENEC	SI-B8V116280WW
	1515					143		4000						SI-B8T116280WW
	1515					143		6500						SI-B8P116280WW
LAM-SQ32B	1280	9.0	23.5	385	600	141	80+	3000	145	259x250x6.6	-20~+50	50000	UL	SI-B8V09526001
	1300					144		3500						SI-B8U09526001
	1340					148		4000						SI-B8T09526001
	1380					153		5000						SI-B8R09526001

Finger Type









Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
Finger-128D	2450	12.4	21.7	570	2880	198	80+	3000	115	250x523x5.8	-20~+50	50000	CE, ENEC	SI-B8V121530WW
	2600					210		4000						SI-B8T121530WW
	1385					178		3000						SI-B8V102250WW
Finger-SQ64C	1405	7.8	11.2	700	2400	180	80+	3500	115	259x250x5.8	-20~+50	50000	CE, ENEC	SI-B8U102250WW
	1450					186		4000						SI-B8T102250WW
	1495					192		5000						SI-B8R102250WW
	1450					186		6500						SI-B8P102250WW
	1385					178		3000						SI-B8V104280WW
Finger-RT64C	1405	7.8	11.2	700	2400	180	80+	3500	115	230x273x5.8	-20~+50	50000	CE, ENEC	SI-B8U104280WW
	1450					186		4000						SI-B8T104280WW
	1495					192		5000						SI-B8R104280WW
	1450					186		6500						SI-B8P104280WW
Finger-SQ30C	1535	10.6	30.2	350	540	145	80+	3000	115	259x250x5.8	-20~+50	50000	CE, ENEC	SI-B8V113250WW
	1610					152		4000						SI-B8T113250WW
	1610					152		6500						SI-B8P113250WW
Finger-RT30C	1535	10.6	30.2	350	540	145	80+	3000	115	216x273x5.8	-20~+50	50000	CE, ENEC	SI-B8V115280WW
	1610					152		4000						SI-B8T115280WW
	1610					152		6500						SI-B8P115280WW
Finger-SQ32B	1370	9.0	23.5	385	600	151	80+	3500	115	259x250x5.8	-20~+50	50000	UL	SI-B8U09626001
	1410					156		4000						SI-B8T09626001
	1450					160		5000						SI-B8R09626001



### High efficacy modules that are ideal for use in downlights and spotlights

- High efficacy downlight modules with latest LED technology from Samsung
- Suitable for various applications including general flood light, spotlight and ceiling light
- Best color consistency derived from Samsung's extensive binning expertise

Product	Key Features	Efficacy (lm/W)	Lifespan
 CSP Spot	<ul style="list-style-type: none"> <li>• Designed following Zhaga specification, excellent compatibility of eco-partner's component</li> <li>• Possible to design various sizes of downlights</li> </ul>	●●●○○	●●●○○
 CSP Spot Tunable	<ul style="list-style-type: none"> <li>• 1000/2000lm color tunable solutions with a small LES</li> </ul>	●●●○○	●●●○○
 Round Module Gen 3	<ul style="list-style-type: none"> <li>• High efficacy down-light modules with latest LED technology</li> <li>• Possible to design 4~8inch downlight</li> </ul>	●●●●●	●●●○○
 ACOM DLE	<ul style="list-style-type: none"> <li>• Quickly and easily integrated</li> <li>• Simplified downlight design possibilities</li> </ul>	●●●○○	●●●○○
 Round ACOM Gen 2	<ul style="list-style-type: none"> <li>• Easy installation (No external driver required)</li> <li>• Cost competitive with good lm/\$</li> </ul>	●●●○○	●●●○○
 Title 24 ACOM	<ul style="list-style-type: none"> <li>• Flicker-free(%Flicker &lt; 30%), Dimming to 10% brightness with good dimmer compatibility</li> <li>• Designed following CEC Title-24 standard</li> </ul>	●●●○○	●●●○○

### CSP Spot



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	I <sub>max</sub> (mA)	Efficacy (lm/W)	T <sub>p</sub> (°C)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
CO10	1010	9.4	23.5	400	700	107	65	80+	2700	150	19x19x2.2	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8W0916E0WW
	1050					3000			SI-N8V0916E0WW						
	1070					3500			SI-N8U0916E0WW						
	1140					4000			SI-N8T0916E0WW						
CO20	1980	18.3	23.4	780	1400	108	65	80+	2700	140	19x19x2.2	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8W1816E0WW
	2060					3000			SI-N8V1816E0WW						
	2110					3500			SI-N8U1816E0WW						
	2240					4000			SI-N8T1816E0WW						
CO30	2980	27.4	23.4	1170	2100	109	65	80+	2700	145	28x28x2.2	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8W2716E0WW
	3090					3000			SI-N8V2716E0WW						
	3160					3500			SI-N8U2716E0WW						
	3360					4000			SI-N8T2716E0WW						
CO40	3970	36.5	23.4	1560	2800	109	65	80+	2700	140	28x28x2.2	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8W3616E0WW
	4120					3000			SI-N8V3616E0WW						
	4220					3500			SI-N8U3616E0WW						
	4490					4000			SI-N8T3616E0WW						

### CSP Spot Tunable



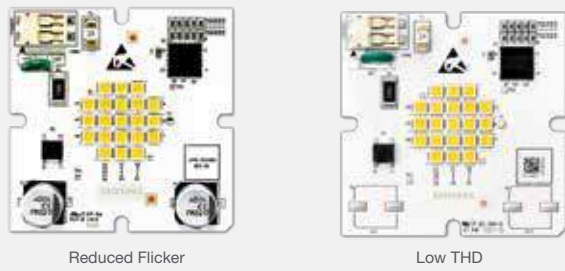
Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	I <sub>max</sub> (mA)	Efficacy (lm/W)	T <sub>p</sub> (°C)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
TO10	990	8.5	33.9	250	350	117	65	80+	2700	150	28x28x2.2	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8A1016E0WW
	1020	9.0	35.9			114			6500	145					SI-N8B1016E0WW
	990	8.5	33.9			117			2700	150					
	1080	9.0	35.9			120			5000	145					
TO20	1940	17.4	34.7	500	700	112	65	80+	2700	140	28x28x2.2	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8A1816E0WW
	2040	18.0	35.9			114			6500						
	1940	17.4	34.7			112			2700	140					
	2160	18.0	35.9			120			5000						

### Round Module Gen 3



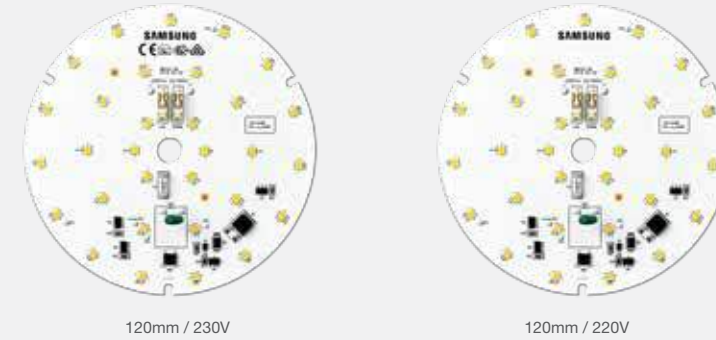
Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	I <sub>max</sub> (mA)	Efficacy (lm/W)	T <sub>p</sub> (°C)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
Round-090C	1200	8.3	23.6	350	540	146	55	80+	3000	115	Φ90x5.7	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8V0814B0WW
	1220					3500			SI-N8U0814B0WW						
	1250					4000			SI-N8T0814B0WW						
Round-110C	2350	16.9	24.2	700	900	139	55	80+	3000	115	Φ110x5.7	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8V1714B0WW
	2380					3500			SI-N8U1714B0WW						
	2460					4000			SI-N8T1714B0WW						
Round-130C	3770	27.3	39.0	700	900	139	55	80+	3000	115	Φ130x5.7	-20~+50	50000	CE, ENEC, UL, cUL	SI-N8V2816B0WW
	3830					3500			SI-N8U2816B0WW						
	3950					4000			SI-N8T2816B0WW						

### ACOM DLE



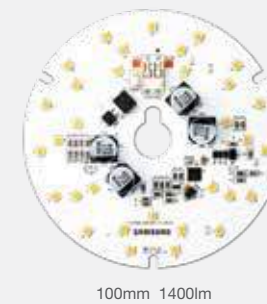
Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	Flicker (%)	THD (%)	Efficacy (lm/W)	T <sub>p</sub> (°C)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
Reduced Flicker	1070	11.4	120 (AC)	50	19	94	65	80+	2700	115	55x55x12.5	-20~+50	50000	UL, cUL	SI-N8W1113B1US
	1080					3000			SI-N8V1113B1US						
	1110					3500			SI-N8U1113B1US						
	1130					4000			SI-N8T1113B1US						
	1150					5000			SI-N8R1113B1US						
	870					77			2700						SI-N9W1113B1US
Low THD	920	11.5	120 (AC)	100	14	81	65	80+	3000	115	55x55x12.5	-20~+50	50000	UL, cUL	SI-N9V1113B1US
	1070					94			2700						SI-N8W1123B1US
	1080					95			3000						SI-N8V1123B1US
	1110					98			3500						SI-N8U1123B1US
	1130					100			4000						SI-N8T1123B1US
	1150					100			5000						SI-N8R1123B1US

### Round ACOM Gen 2



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	Flicker (%)	THD (%)	Efficacy (lm/W)	T <sub>p</sub> (°C)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
120mm / 230V	1425	12.1	230(AC)	100	15	118	25	80+	2700	115	Φ120x5.5	-20~+40	50000	CE, ENEC	SI-N8W1225B1EU
	1435					3000			SI-N8V1225B1EU						
	1540					4000			SI-N8T1225B1EU						
120mm / 220V	1460	11.2	220(AC)	100	18	130	25	80+	5700	115	Φ120x5.5	-20~+40	50000	-	SI-N8Q1115B1KR

### Title 24 ACOM






Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	Flicker (%)	THD (%)	Efficacy (lm/W)	T <sub>p</sub> (°C)	CRI	CCT (K)	Beam Angle (°)	Size (mm)	Temperature Range (°C)	Life time (hrs)	Certification	Part Number
100mm 1400lm	1345	16	120(AC)	< 30	11	84	65	90+	2700	115	Φ100x11	-20~+40	50000	UL, cUL	SI-N9W1624B1US
	1400					88			SI-N9V1624B1US						
	1425					89			SI-N9U1624B1US						
	1470					92			SI-N9T1624B1US						

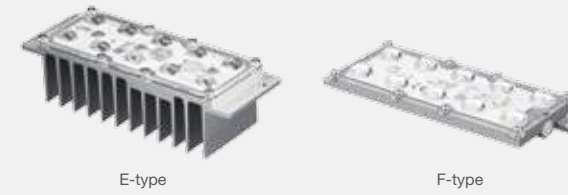


Easy-to-use modular design with various lumen packages combined with IP66-certified durability, makes it the smart choice for use in the harshest of environments

- Wide range of engine combinations well-suited for a variety of harsh environment applications
- High luminous efficacy
- Available with a full range of compatible drivers

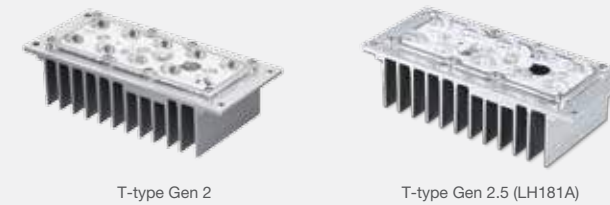
Product	Key Features	Efficacy (lm/W)	Lifespan
 Modular Platform T-type Gen 2	<ul style="list-style-type: none"> <li>• Total solution integrating LED+Optics+Thermal</li> <li>• With LH351B, higher lumen density of 2,650lm</li> <li>• IP66</li> </ul>	●●●●○	●●●●○
 Array	<ul style="list-style-type: none"> <li>• Total solution integrating LED+Optics+Thermal</li> <li>• High efficacy at module</li> <li>• Suitable for flood and highbay lighting</li> <li>• Robust design with waterproof durability</li> </ul>	●●●●○	●●●●●
 HiLOM	<ul style="list-style-type: none"> <li>• Greater design flexibility for various fixture designs</li> <li>• High performance, 4,400lm (700mA) with efficacy of 132lm/W</li> </ul>	●●●●●	●●●●○

Modular Platform Engine



Model	Light Distribution	Heat Sink	Connector	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Weight (g)	Waterproof/Dustproof Grade	Temperature Range (Operation, Tc)	Certification	Part Number
E-type	Type2 Short	Fin	Connector	2300	21	30	700	1000	100.0	80+	3000	230	IP66	-30~+80	CE, UL	SL-P8V2V27MBWW
				2650					114.3							5000
F-type	Type2 Medium	-	Wire	2400	21	30	700	1000	100.0	70+	3000	170	IP66	+10~+90	CE	SL-P7V2F32MBKI
											4000					SL-P7T2F32MBKI
											3000					SL-P7V2F385BKI
											4000					SL-P7T2F385BKI

\* E-type: with fin (thermal management by engine), F-type: without fin (thermal management by fixture), T-type: flange with fin (H/S with Tetra screw-holes)



Model	Light Distribution	Heat Sink	Connector	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Weight (g)	Waterproof/Dustproof Grade	Temperature Range (Operation, Tc)	Certification	Part Number
T-type Gen 2	Type1 Short	Fin	Connector	2650	21	30	700	1000	126.2	75+	5000	295	IP66	-30~+80	CE, UL	SL-PGR2W53LBWW
	Type2 Very Short															SL-PGR2W53MBWW
	Type2 Short															SL-PGR2W57MBWW
	Type1 Short															SL-PGQ2W53LBWW
	Type2 Very Short															SL-PGQ2W53MBWW
	Type1 Short															SL-PGR2W51SBGL
	Type1 Very Short															SL-PGR2W61BGL
	Type2 Short															SL-PGR2W52SBGL
	Type2 Very Short															SL-PGR2W57SBGL
	Type2 Medium															SL-PGR2W52MBGL
	Type5 Short															SL-PGR2W55SBGL
	Beam angle 85															SL-P7R2W585BGL
	Type1 Short															SL-PGR2W51SBGL
	Type2 Very Short															SL-PGR2W57SBGL
Type2 Short	SL-PGR2W52SBGL															
Type2 Short	SL-P7R2W5R1BGL															
Type2 Long	SL-P7R2W5R2BGL															
Beam angle 85	SL-P7R2W585BGL															
T-type Gen 2.5 (LH181A)	-	Fin	Connector	2600	20	28	700	1000	130.0	80+	3000	290	IP66	+10~+95	-	SL-P8V2W6RA1WW
				2800					140.0		4000					SL-P8T2W6RA1WW
				2850					142.5		5000					SL-P8R2W6RA1WW
				2850					142.5		5700					SL-P8Q2W6RA1WW

\* E-type: with fin (thermal management by engine), F-type: without fin (thermal management by fixture), T-type: flange with fin (H/S with Tetra screw-holes)

# Outdoor Light

## Integrated Array Module



Array 47W



Array 70W

Model	Light Distribution	Heat Sink	Connector	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Weight (g)	Waterproof/Dustproof Grade	Temperature Range (Operation, Tc)	Part Number
Array	Type2 Short	Fin	Connector	6450	47	52	900	2000	137	70+	5000	1660	IP66	-30~+80	SL-IGR5E82SBWW
	Type2 Short			9700	70	52	1350	3000	139						SL-IGR7E97SBWW
	Beam angle 70														SL-IGR7E970BWW
	Beam angle 120														SL-IGR7E9C0BWW

## HiLOM



HiLOM(LH351C)

Model	Connector	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Weight (g)	Temperature Range (Operation, Tc)	Certification	Part Number
HiLOM (LH351C)	Poke-in	4680	32.7	23.4			143		3000	37			SL-B7V3N80LCWW
		5060	32.7	23.4	1400	2000	155	70+	4000	37	+10 ~ +95	CE, UL	SL-B7T3N80LCWW
		5060	32.7	23			155		5000	37			SL-B7R3N80LCWW

\* HiLOM: High Luminance Outdoor Module

# Driver



- White Tunable Light
- Ambient Light
- Down & Spot Light
- Industrial Light
- Outdoor Light



Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SLP-DUA0250AUS	25	103 x 67 x 29.5			350-1000				UL, cUL	>0.90	
SLP-DUA4350AUS	35	127 x 76.4 x 36.2	120-277	10-50	350-1400	88	<20	0-10V	UL, cUL	>0.90	Programmable Native White Tuning Dim to warm Auxiliary Power (24V)
SLP-DUA4550AUS	55	127 x 76.4 x 36.2			350-1400				UL, cUL	>0.90	



Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SLP-DUA43501US	35	270 x 33 x 25			350-1400				UL, cUL	>0.90	
SLP-DUA45501US	55	300 x 33 x 25	120-277	10-50	350-1400	88	<20	0-10V	UL, cUL	>0.90	Programmable Native White Tuning Dim to warm Auxiliary Power (24V)
SLP-DUA47501US	75	330 x 33 x 30			350-1000				UL, cUL	>0.90	



Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SLP-DUA025DAWW	25	127 x 76.4 x 36.2	120-277	10-50	350-1000	88	<20	DALI	CE, ENEC, UL, cUL	>0.90	Programmable Device Type 8 Auxiliary Power (24V)



Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SLP-DUA435D1US	35	270 x 33 x 25			350-1400				UL, cUL	>0.90	
SLP-DUA455D1US	55	300 x 33 x 25	120-277	10-50	350-1400	88	<20	DALI	UL, cUL	>0.90	Programmable Device Type 8 Auxiliary Power (24V)
SLP-DUA475D1US	75	330 x 33 x 30			350-1400				UL, cUL	>0.90	



Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SLP-D2A435D1EU	35	270 x 33 x 25			350-1400				CE, ENEC	>0.90	
SLP-D2A455D1EU	55	300 x 33 x 25	220-240	10-50	350-1400	88	<20	DALI	CE, ENEC	>0.90	Programmable Device Type 8 Auxiliary Power (24V)
SLP-D2A475D1EU	75	330 x 33 x 30			350-1400				CE, ENEC	>0.90	



Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SLP-DUA47531WW	75	330 x 30 x 30	120-277	10-50	350-1000	88	<20	0-10V, DALI	CE, UL, cUL	>0.90	Programmable Native White Tuning Device Type 8 Auxiliary Power (24V)





SI-CU1023001WW / SI-CU1023002WW

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-CU1023001WW	30	300 x 30 x 21	120-277	14-54	350-800	87	<20	0-10V	UL, cUL, Class P	>0.9	Output current adjustable by Rset, 1% - 100% Dimming
SI-CU1023002WW	30		120-277								



SI-CU1625001US / SI-CU1625002US

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-CU1625001US	50	300 x 30 x 21	120-277	15-54	700-1600	87	<20	0-10V	UL, cUL, Class P	>0.9	Output current adjustable by Programming, 1% - 100% Dimming
SI-CU1625002US	50		120-277								



SI-C235150N1EU



SI-C2H5170N1EU

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-C235150N1EU	50	280 x 30 x 21	30-270	220-240	100-350	94	<20	Non Dim	CE, ENEC	>0.9	Output current adjustable by Dip Switch
SI-C2H5170N1EU	70		15-54								



SI-EPF006660WW



SI-EPF007040WW

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-EPF006660WW	50	300 x 30 x 21	120-277	20-50	500-1400	88	<20	0-10V	UL, cUL	>0.9	Output current adjustable by Rset
SI-EPF007040WW	75			22-52							



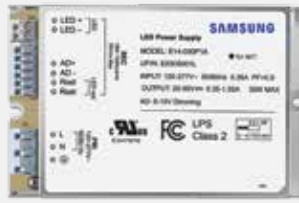
SI-CU7014011KR



SI-C2G814501KR / SI-C2H817201KR

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-CU7014011KR	40	160 x 46.4 x 30.8	120-277	25-50	500-700	87	<20	1-10V	KC	>0.9	Output current adjustable by Rset
SI-C2G814501KR	45										
SI-C2H817201KR	72	300 x 43 x 30.5	220-240	18-26	2550	86	<20	0-10V	KC	>0.9	-

## Down & Spot Light



SI-EPF006640WW / SI-EPF006650WW



SI-OU1424001WW



SI-OU1424002WW

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-EPF006640WW	15	123 x 79 x 33	120-277	20-50	180-500	86	<20	0-10V	UL, cUL	>0.9	Output current adjustable by Rset
SI-EPF006650WW	30			20-50	350-1050	86	<20				
SI-OU1424001WW	40	125.6 x 61.1 x 27.5	120-277	20-54	400-1400	86	<20	0-10V	UL, cUL, Type TL	>0.9	Programmable Output Current, 1% - 100% Dimming
SI-OU1424002WW	40			20-54	400-1400	86	<20				



SI-CF70120D1EU



SI-C270134N1EU

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-CF70120D1EU	20	110.4 x 52 x 22	220-240	2-43	250-700	87	<20	DALI	CE, ENEC	>0.9	Output current adjustable by Dip Switch
SI-C270134N1EU	34	97 x 42.5 x 30	220-240	10-50	250-700	85	<20	Non Dim	CE, ENEC	>0.9	



SI-C242120N1KR

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-C242120N1KR	20	94.5 x 39.5 x 31	220-240	25-40	420	86	<10	Non Dim	KC	>0.9	Fixed current

## Industrial Light



SI-CA1427501US



SI-CA2029601US

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SI-CA1427501US	75	360 x 31 x 26	100-277	27-54	975-1400	88	<20	0-10V	UL, cUL	>0.9	Programmable Output Current
SI-CA2029601US	100	420 x 31 x 26		24-48	1400-2000						

## Outdoor Light



SL-L27012517KR



SL-L21425017KR  
SL-L22127517KR  
SL-L2282A017KR



SL-L2422A517KR  
SL-L2562B017KR

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SL-L27012517KR	25W	265 x 70 x 48.5	220-240	27-33	700	86	<20	1-10V	KS	>0.9	Independent type, IP67, Molex, <THD 30%@1V Dimming, High Surge
SL-L21425017KR	50W				1400	86.5					
SL-L22127517KR	75W				2100	87					
SL-L2282A017KR	100W				2800	88.5					
SL-L2422A517KR	150W				4200	90.5					
SL-L2562B017KR	200W	5600	91	>0.95							



SL-L27012503KR



SL-L21425003KR  
SL-L22127503KR



SL-L2282A013KR  
SL-L2352A213KR  
SL-L2422A513KR  
SL-L2562B013KR

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SL-L27012503KR	25	177 x 40 x 37	220-240	24-33	700	85	<20	1-10V	KS	>0.9	Independent type, IP67, Molex
SL-L21425003KR	50	210 x 40 x 37			1400	87					
SL-L22127503KR	75	2100			88						
SL-L2282A013KR	100	2800			89						
SL-L2352A213KR	125	3500			90						
SL-L2422A513KR	150	4200	90								
SL-L2562B013KR	200	5600	91	>0.95							



SL-L2701151AKR  
SL-L2701251AKR



SL-L2701301AKR  
SL-L2701401AKR  
SL-L2701501AKR



SL-L2701751AKR  
SL-L2701A01AKR



SL-L2701A51AKR  
SL-L2701B01AKR

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SL-L2701151AKR	15	210 x 40 x 37	220-240	39-63	700	84	<20	1-10V	KS	>0.9	Independent type, IP67, KET
SL-L2701251AKR	25					85					
SL-L2701301AKR	30					86					
SL-L2701401AKR	40					87					
SL-L2701501AKR	50					88					
SL-L2701751AKR	75	89									
SL-L2701A01AKR	100	90									
SL-L2701A51AKR	150	91									
SL-L2701B01AKR	200	92									



SL-L2701A5N1KR



SL-L2701B0N1KR

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SL-L2701A5N1KR	150	258 x 68 x 33.9	220-240	80-100	700	92	<20	Non Dim	KS	>0.9	Independent type, 2 channel, IP67, KET
SL-L2701B0N1KR	200			100-130	700	93					



SL-LU0923501US



SL-LU1425501US



SL-LU2027801US



SL-LU262A001US

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SL-LU0923501US	35	193 x 42.5 x 34.5			700-1050	87					Programmable Output Current, IP67
SL-LU1425501US	55	173 x 67.5 x 40	120-277	30-39	1400	88	<20	0-10V	UL, cUL	>0.9	Independent type, IP67
SL-LU2027801US	78	173 x 67.5 x 40			2000	88					
SL-LU262A001US	100	187 x 67.5 x 40			2600	88					



SL-LA7012502US  
SL-LA1425002US



SL-L22127502US



SL-LA142A002US



SL-LA212A502US



SL-L2282B002US

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark
SL-LA7012502US	25	193 x 42.5 x 34.5			700	85					
SL-LA1425002US	50				18-36	1400					
SL-L22127502US	75	173 x 67.5 x 40	100-277		2100	89	<20	0-10V	UL, cUL	>0.9	Independent type, IP67
SL-LA142A002US	100	187 x 67.5 x 40			17-34	2800					
SL-LA212A502US	150	221 x 67.5 x 40			4200	88					
SL-L2282B002US	200	251 x 67.5 x 40			5600	88					

# Certification Support Program

To provide more valuable services for your successful business

## Program Overview

### Pre-Certification Test Support

Product structure, test and review by Samsung.  
Samsung is an accredited partner of UL, VDE & KOLAS

### Certification Accreditations Support

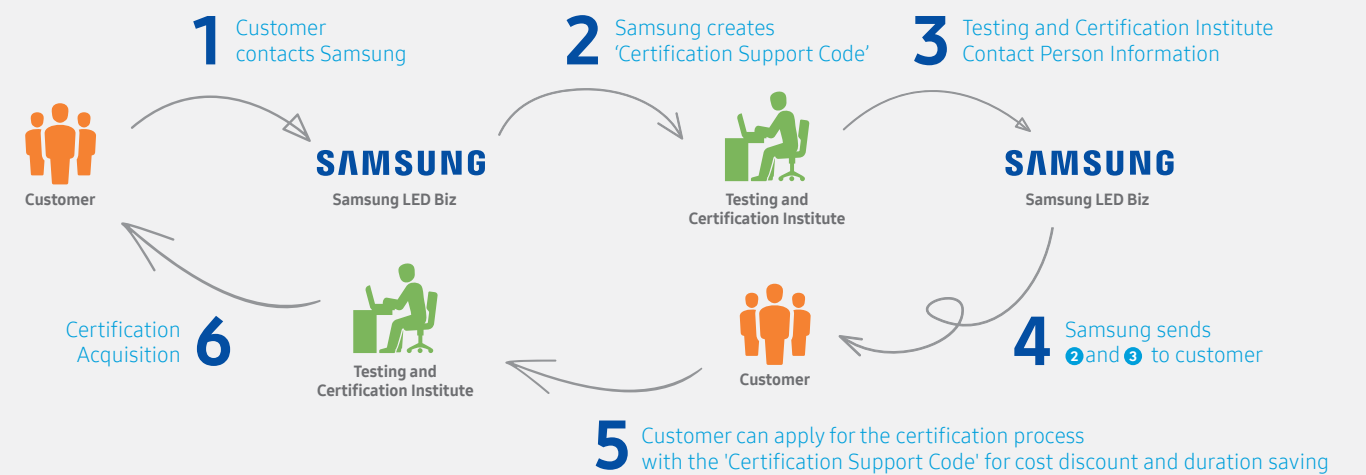
- Customer support for **Cost and Test Period Saving for the EU, US & ASIA certification**
- Global certification program roll out soon to be available

## Customer Benefit

Certification	ETL, Energy Star, DLC <sup>1)</sup> , FCC, LM 79	KS/High Efficiency	PSE	S-Mark	CE, ErP, ENEC, ENEC+, EU Eco-Label, GS mark	CCC/CQC
Customer Location	US	Korea/China	-		EU/US/Asia	China
Cost Discount	Testing	-20%	-30%	-30%	-30%	-20%
	Handling	-	-	-	-	-
Test Period Savings	-30 ~ -50%	-30 ~ -50%	-20 ~ -30%		-20 ~ -30%	-20 ~ -30%
Company	Intertek		KTL (Korea Testing Laboratory)		TUV SUD	CCIC
Branch	North America, China, Hong Kong, Korea		Korea, China		North America, Germany, China, Hong Kong, Singapore, Taiwan, Korea	Korea, China

1) Energy Star, DLC's duration is not included for Lumen Maintenance test duration.  
2) Discount rate is based on the standard price of Companies.

## Process



Testing and Certification Institute



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