

[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>.

Copyright 2019 Samsung Electronics Co., Ltd. All rights reserved.
Samsung Electronics reserves the right to modify, at its sole discretion, the design, packaging, specifications, and features shown herein without notice at any time.

Samsung Electronics Co., Ltd.
Samsung-ro 1, Giheung-gu, Yongin-si,
Gyeonggi-do, 17113 Korea

www.samsungled.com

Samsung LED
Industrial
Lighting Solutions

Dramatic Changes in Industrial Lighting Market

LED lighting is being widely used in various industrial facilities with a large surface area and high ceiling, such as a sport complex and factory warehouse

High and low bay LED lights account for over 85% of the total industrial lighting field.

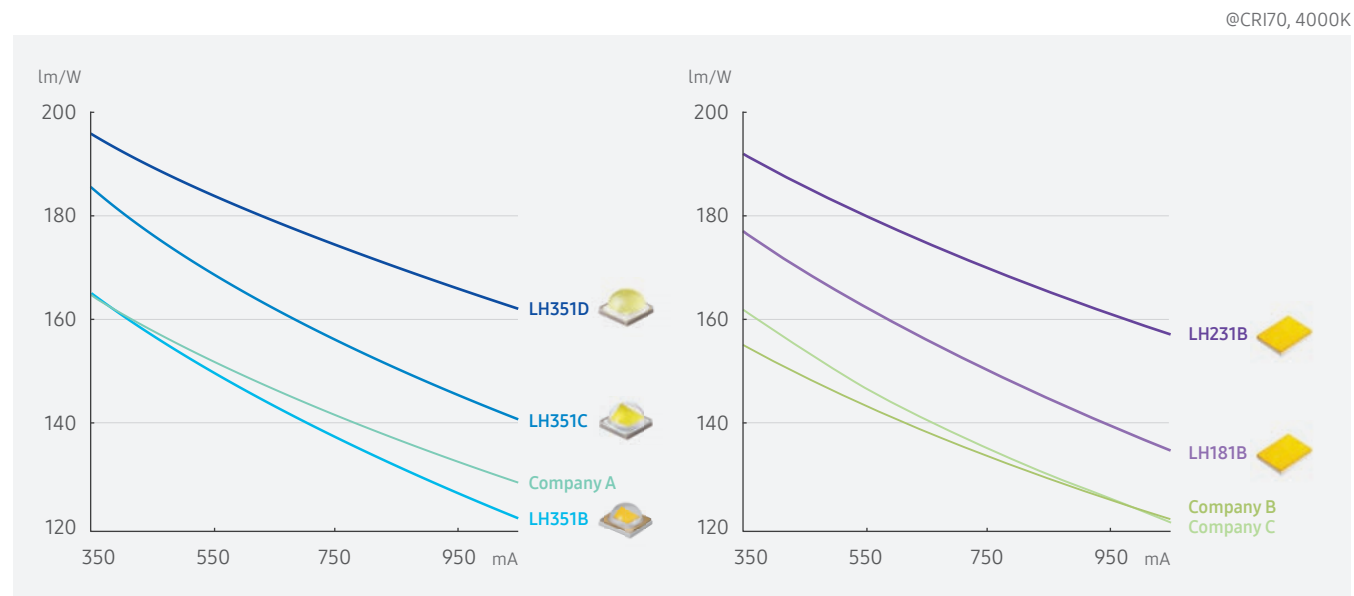
Accelerating urbanization and increasing investment in infrastructure dramatically drives the market demands for high and low bay lights.



Performance

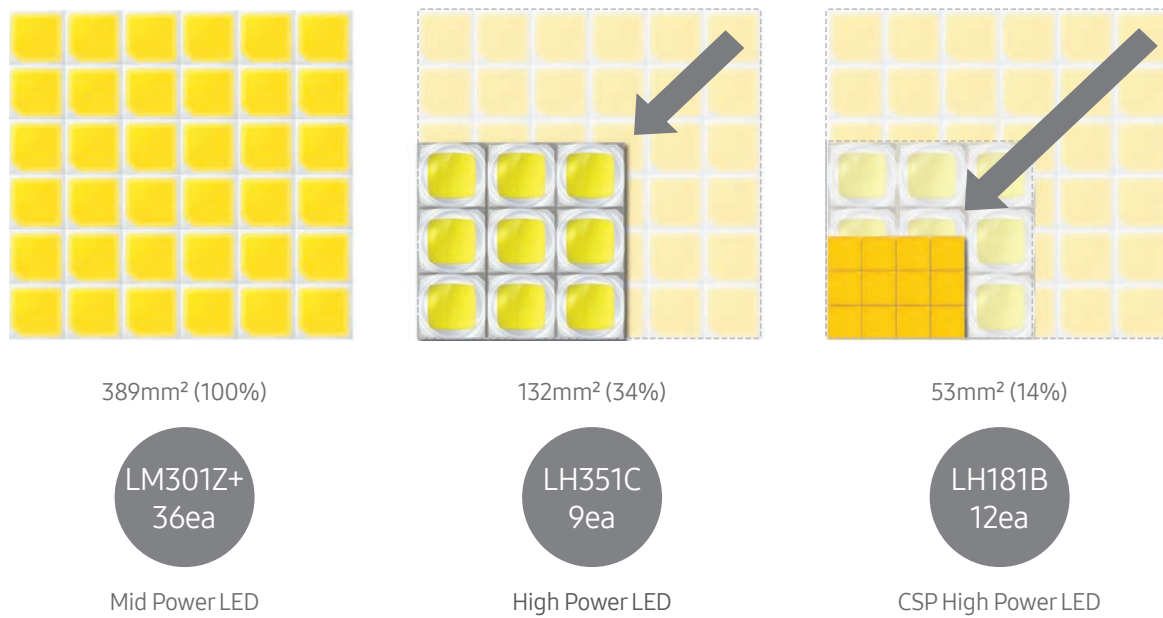
Industry-leading Light Efficacy

Based on Samsung's advanced chip technologies to boost performance and light efficacy



High Lumen Density

Design flexibility and total cost down by a smaller size of circuit board and LES dimension



Wide Lumen Flux Coverage for Industrial Lighting Applications

Optimized to replace T8/T5HO lamps




Lamp	2 lamps T8 32W	3 lamps T8 32W	4 lamps T8 32W	1 lamps T5 54W	2 lamps T5 54W	3 lamps T5 54W	4 lamps T5 54W	8 lamps T5 54W
Lamp Flux	5,400-5,600	7,800-8,400	10,400-11,200	4,450-5,000	8,900-10,000	13,350-15,000	17,800-20,000	35,600-40,000
HiInFlux	L06 (1ea)	L04 (2ea) L09 (1ea)	L06 (2ea)	L04 (1ea)	L04 (2ea) L09 (1ea)	L06 (2ea)	L09 (2ea)	L09 (4ea)

Optimized to replace Metal Halide lamps

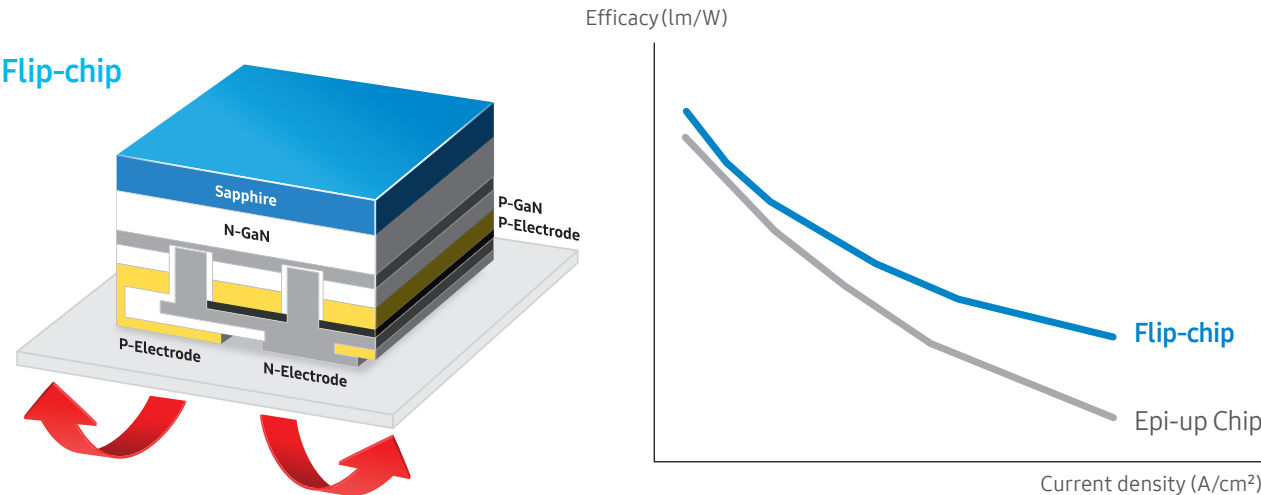



Metal Halide Lamp	Flux	HiLOM						
		HCFO (25,700lm)	SC16 (7,200lm)	SC28 (4,700lm)	SM28 (2,430lm)	RM64 (5,550lm)	RH12 (4,050lm)	RH16 (5,400lm)
70W/75W	5,000	-	2ea	2ea	2ea	1ea	1ea	1ea
100 W	8,000	-	2ea	2ea	4ea	2ea	2ea	2ea
150 W	12,000	-	2ea	3ea	6ea	4ea	4ea	4ea
250 W	20,000	1ea	4ea	4ea	8ea	4ea	6ea	4ea

Reliability

Excellent Heat Management

Long-lasting uniform light via low thermal resistance



No Degradation in Harsh Environment

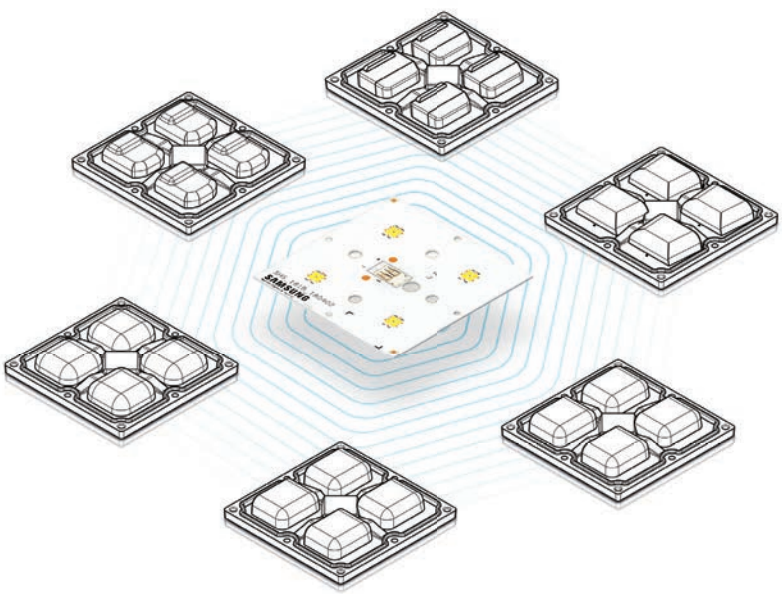
Designed with high sulfur-resistant chip structure



Service

Eco-partner for Lens Compatibility

Following Zhaga specifications, easy optic design and fast time-to-market



One Stop Solution

Total solution from LED packages to modules perfectly fit into various industrial lighting applications



Product Line-up

Mid Power LEDs

LM301B



- 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
		SPMWH32AMD5XAW0SJ	SJ	34	36
			SK	36	38
			SJ	34	36
	3000	SPMWH32AMD5XAV0S0	SK	36	38
			SL	38	40
			SK	36	38
	3500	SPMWH32AMD5XAU0S0	SJ	34	36
			SK	36	38
			SL	38	40
		SPMWH32AMD5XAU0SL	SL	38	40
			SK	36	38
			SM	40	42
	4000	SPMWH32AMD5XAT0S0	SL	38	40
			SM	40	42
			SL	38	40
		SPMWH32AMD5XAT0SL	SK	36	38
			SL	38	40
			SM	40	42
	5000	SPMWH32AMD5XAR0S0	SL	38	40
			SM	40	42
			SL	38	40
		SPMWH32AMD5XAR0SL	SK	36	38
			SL	38	40
			SM	40	42
90+	2700	SPMWH32AMD5XAQ0S0	SL	38	40
			SM	40	42
			SL	38	40
	3000	SPMWH32AMD5XAP0S0	SK	36	38
			SL	38	40
			SM	40	42
		SPMWH32AMD5XAP0SL	SL	38	40
			SK	36	38
			SG	30	32
	2700	SPMWH32AMD7XAW0S0	SF	28	30
			SG	30	32
			SH	32	34
	3000	SPMWH32AMD7XAV0S0	SF	28	30
			SG	30	32
			SH	32	34
	3500	SPMWH32AMD7XAU0S0	SG	30	32
			SH	32	34
			SG	30	32
	4000	SPMWH32AMD7XAT0S0	SH	32	34
			SG	30	32
			SH	32	34
	5000	SPMWH32AMD7XAR0S0	SG	30	32
			SH	32	34
			SG	30	32
	5700	SPMWH32AMD7XAQ0S0	SH	32	34
			SG	30	32
			SH	32	34
	6500	SPMWH32AMD7XAP0S0	SG	30	32
			SH	32	34
			SG	30	32

Mid Power LEDs

LM301Z Plus



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

@65mA, 25°C					
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	3000	SPMWH3326MP3WAV0S0	SH	32	34
			SJ	34	36
			SK	36	38
	3500	SPMWH3326MP3WAU0S0	SJ	34	36
			SK	36	38
			SK	36	38
	4000	SPMWH3326MP3WAT0S0	SJ	34	36
			SK	36	38
			SK	36	38
	5000	SPMWH3326MP3WAR0S0	SJ	34	36
			SK	36	38
			SK	36	38
80+	5700	SPMWH3326MP3WAQ0S0	SJ	34	36
			SK	36	38
			SK	36	38
	2700	SPMWH3326MP5WAW0S0	SH	32	34
			SJ	34	36
			SK	36	38
	3000	SPMWH3326MP5WAV0S0	SH	32	34
			SJ	34	36
			SK	36	38
	3500	SPMWH3326MP5WAU0S0	SH	32	34
			SJ	34	36
			SK	36	38
	4000	SPMWH3326MP5WAT0S0	SJ	34	36
			SK	36	38
			SK	36	38
	5000	SPMWH3326MP5WAR0S0	SJ	34	36
			SK	36	38
			SK	36	38
	5700	SPMWH3326MP5WAQ0S0	SJ	34	36
			SK	36	38
			SK	36	38
	6500	SPMWH3326MP5WAP0S0	SH	32	34
			SJ	34	36
			SK	36	38
90+	2700	SPMWH3326MP7WAW0S0	SE	26	28
			SF	28	30
			SG	30	32
	3000	SPMWH3326MP7WAV0S0	SE	26	28
			SF	28	30
			SG	30	32
	3500	SPMWH3326MP7WAU0S0	SE	26	28
			SF	28	30
			SG	30	32
	4000	SPMWH3326MP7WAT0S0	SF	28	30
			SG	30	32
			SG	30	32
	5000	SPMWH3326MP7WAR0S0	SF	28	30
			SG	30	32
			SG	30	32
	5700	SPMWH3326MP7WAQ0S0	SF	28	30
			SG	30	32
			SG	30	32
	6500	SPMWH3326MP7WAP0S0	SF	28	30
			SG	30	32
			SG	30	32

Product Line-up

Mid Power LEDs

LM302Z Plus



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

@150mA, 25°C					
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	3000	SPMWH3326FP3GBV0S0	SG	133	142
			SH	142	151
	3500	SPMWH3326FP3GBU0S0	SG	133	142
			SH	142	151
	4000	SPMWH3326FP3GBT0S0	SH	142	151
			SJ	151	160
80+	5000	SPMWH3326FP3GBR0S0	SH	142	151
			SJ	151	160
	5700	SPMWH3326FP3GBQ0S0	SH	142	151
			SJ	151	160
	2700	SPMWH3326FP5GBW0S0	SF	124	133
			SG	133	142
	3000	SPMWH3326FP5GBV0S0	SF	124	133
			SG	133	142
	3500	SPMWH3326FP5GBU0S0	SG	133	142
			SH	142	151
	4000	SPMWH3326FP5GBT0S0	SG	133	142
			SH	142	151
90+	5000	SPMWH3326FP5GBR0S0	SG	133	142
			SH	142	151
	5700	SPMWH3326FP5GBQ0S0	SG	133	142
			SH	142	151
	6500	SPMWH3326FP5GBP0S0	SG	133	142
			SH	142	151
	2700	SPMWH3326FP7GBW0S0	SC	97	106
			SD	106	115
	3000	SPMWH3326FP7GBV0S0	SD	106	115
			SE	115	124
	3500	SPMWH3326FP7GBU0S0	SD	106	115
			SE	115	124

Chip Scale Package LEDs

LH181B



- 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◇N34E	N1, P1, Q1	150	180
	3500	SCP7UTF1HEL1U◇N34E	N1, P1, Q1	150	180
	4000	SCP7TTF1HEL1T◇P34E	P1, Q1, R1	160	190
	5000	SCP7RTF1HEL1R◇P34E	P1, Q1, R1	160	190
	5700	SCP7QTF1HEL1Q◇P34E	P1, Q1, R1	160	190
80+	6500	SCP7PTF1HEL1P◇N34E	N1, P1, Q1	150	180
	2200	SCP8YTF1HEL1Y◇G34E	G1, H1, J1	100	130
	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
	2700	SCP9WTF1HEL1W◇G34E	G1, H1, J1	100	130
	3000	SCP9VTF1HEL1V◇G34E	G1, H1, J1	100	130
	3500	SCP9UTF1HEL1U◇H34E	H1, J1, K1	110	140
90+	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

Product Line-up

Chip Scale Package LEDs

LH231B



- 5W class super high power CSP
- Suitable for highbay lighting, stadium lighting
- Compact footprint: 2.8mm x 2.8mm

@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★QF6E	QB, RB, SB	310	370
	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★MF6E	MB, NB, PB	250	310
	3000	SCP8VTJ5HEL1V★MF6E	MB, NB, PB	250	310
	3500	SCP8UTJ5HEL1U★NF6E	NB, PB, QB	270	330
	4000	SCP8TTJ5HEL1T★NF6E	NB, PB, QB	270	330
	5000	SCP8RTJ5HEL1R★PF6E	PB, QB, RB	290	350
	5700	SCP8QTJ5HEL1Q★NF6E	NB, PB, QB	270	330
	6500	SCP8PTJ5HEL1P★NF6E	NB, PB, QB	270	330
90+	2700	SCP9WTJ5HEL1W★HF6E	HB, JB, KB	190	250
	3000	SCP9VTJ5HEL1V★HF6E	HB, JB, KB	190	250
	3500	SCP9UTJ5HEL1U★JF6E	JB, KB, MB	210	270
	4000	SCP9TTJ5HEL1T★JF6E	JB, KB, MB	210	270

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

High Power LEDs

LH508B



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

@600mA, 25°C					
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
80+	2700	SPHWH1L5N505YEW5A1	A1	460	502
	3000	SPHWH1L5N505YEV5A1	A1	460	513
	4000	SPHWH1L5N505YET5A1	A1	500	545
	5000	SPHWH1L5N505YER5A1	A1	500	545
	5700	SPHWH1L5N505YEQ5A1	A1	500	540
	6500	SPHWH1L5N505YEP5A1	A1	500	535
90+	2700	SPHWH1L5N507YEW5A1	A1	380	401
	3000	SPHWH1L5N507YEV5A1	A1	380	430
	4000	SPHWH1L5N507YET5A1	A1	420	454

High Power LEDs

LH508A Plus



- 6V and 24V high power LED
- EMC mold resin for high reliability
- Suitable for street light, high/low bay & spot lighting
- Design flexible footprint: 5.0mm x 5.0mm

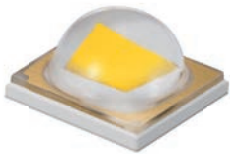
@160mA, 24V, 25°C					
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SPHWH1L5N603XEW5A1	A1	540	600
	3000	SPHWH1L5N603XEV5A1	A1	540	620
	4000	SPHWH1L5N603XET5A1	A1	580	650
	5000	SPHWH1L5N603XER5A1	A1	580	650
	5700	SPHWH1L5N603XEQ5A1	A1	580	650
	6500	SPHWH1L5N603XEP5A1	A1	540	620
	2700	SPHWH1L5N605XEW5A1	A1	500	560
80+	3000	SPHWH1L5N605XEV5A1	A1	500	585
	3500	SPHWH1L5N605XEU5A1	A1	500	595
	4000	SPHWH1L5N605XET5A1	A1	540	610
	5000	SPHWH1L5N605XER5A1	A1	540	610
	5700	SPHWH1L5N605XEQ5A1	A1	540	610
	6500	SPHWH1L5N605XEP5A1	A1	500	610
90+	2700	SPHWH1L5N607XEW5A1	A1	420	471
	3000	SPHWH1L5N607XEV5A1	A1	420	486
	3500	SPHWH1L5N607XEU5A1	A1	420	506
	4000	SPHWH1L5N607XET5A1	A1	460	526
	5000	SPHWH1L5N607XER5A1	A1	460	526
	5700	SPHWH1L5N607XEQ5A1	A1	460	526

@640mA, 6V, 25°C					
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SPHWH1L5N603YEW5A1	A1	540	600
	3000	SPHWH1L5N603YEV5A1	A1	540	620
	4000	SPHWH1L5N603YET5A1	A1	580	650
	5000	SPHWH1L5N603YER5A1	A1	580	650
	5700	SPHWH1L5N603YEQ5A1	A1	580	650
	6500	SPHWH1L5N603YEP5A1	A1	540	620
80+	2700	SPHWH1L5N605YEW5A1	A1	500	560
	3000	SPHWH1L5N605YEV5A1	A1	500	585
	3500	SPHWH1L5N605YEU5A1	A1	500	595
	4000	SPHWH1L5N605YET5A1	A1	540	610
	5000	SPHWH1L5N605YER5A1	A1	540	610
	5700	SPHWH1L5N605YEQ5A1	A1	540	610
90+	6500	SPHWH1L5N605YEP5A1	A1	500	610
	2700	SPHWH1L5N607YEW5A1	A1	420	471
	3000	SPHWH1L5N607YEV5A1	A1	420	486
	3500	SPHWH1L5N607YEU5A1	A1	420	506
	4000	SPHWH1L5N607YET5A1	A1	460	526
	5000	SPHWH1L5N607YER5A1	A1	460	526

Product Line-up

I High Power LEDs

LH351B

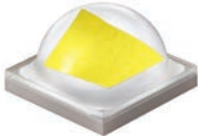


- Operates at a maximum current of up to 1.5A
- High efficacy outdoor solution (Delivering set efficacy over 110lm/W @700mA)
- Excellent efficacy: 172lm/W @350mA, 85°C, 4000K
- Footprint: 3.5mm x 3.5mm

@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
		SPHWH2L3D30CD4RTQ2	Q1, R1	170	190
	5700	SPHWH2L3D30CD4QTN3	N1, P1, Q1	150	180
		SPHWH2L3D30CD4QTP3	P1, Q1, R1	160	190
	6500	SPHWH2L3D30CD4PTN3	N1, P1, Q1	150	180
		SPHWH2L3D30CD4PTP3	P1, Q1, R1	160	190
80+	2200	SPHWH2L3D30ED4Y0G3	G1, H1, J1	100	130
		SPHWH2L3D30ED4W0J3	J1, K1, M1	120	150
		SPHWH2L3D30ED4W0K3	K1, M1, N1	130	160
	3000	SPHWH2L3D30ED4V0J3	J1, K1, M1	120	150
		SPHWH2L3D30ED4V0K3	K1, M1, N1	130	160
		SPHWH2L3D30ED4V0M3	M1, N1, P1	140	170
	3500	SPHWH2L3D30ED4U0K3	K1, M1, N1	130	160
		SPHWH2L3D30ED4U0M3	M1, N1, P1	140	170
	4000	SPHWH2L3D30ED4T0K3	K1, M1, N1	130	160
		SPHWH2L3D30ED4T0M3	M1, N1, P1	140	170
	5000	SPHWH2L3D30ED4RTM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4RTN3	N1, P1, Q1	150	180
	5700	SPHWH2L3D30ED4QTM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4PQK3	K1, M1, N1	130	160
	6000	SPHWH2L3D30ED4PQM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4PTK3	K1, M1, N1	130	160
		SPHWH2L3D30ED4PTM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4PTN3	N1, P1, Q1	150	180
90+	2700	SPHWH2L3D30GD4W0F3	F1, G1, H1	90	120
		SPHWH2L3D30GD4W0G3	G1, H1, J1	100	130
	3000	SPHWH2L3D30GD4V0G3	G1, H1, J1	100	130
		SPHWH2L3D30GD4V0H3	H1, J1, K1	110	140
	3500	SPHWH2L3D30GD4U0G3	G1, H1, J1	100	130
		SPHWH2L3D30GD4U0H3	H1, J1, K1	110	140
	4000	SPHWH2L3D30GD4T0J3	J1, K1, M1	120	150
		SPHWH2L3D30GD4T0K3	K1, M1, N1	130	160
	5000	SPHWH2L3D30GD4T0L3	L1, M1, N1	140	170
		SPHWH2L3D30GD4T0M3	M1, N1, P1	150	180

I High Power LEDs

LH351C



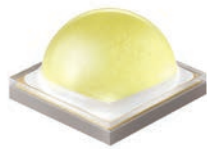
- Operates at a maximum current of up to 2.0A
- High efficacy outdoor solution (Delivering set efficacy over 120lm/W @700mA)
- Excellent efficacy: 160lm/W @700mA, 85°C
- Footprint: 3.5mm x 3.5mm

@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
	3000	SPHWHTL3D50CE4V0NF	NB, PB, QB	270	330
		SPHWHTL3D50CE4V0PF	PB, QB, RB	290	350
	3500	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
	5000	SPHWHTL3D50CE4RTPF	PB, QB, RB	290	350
		SPHWHTL3D50CE4RTQF	QB, RB, SB	310	370
	5700	SPHWHTL3D50CE4QTPF	PB, QB, RB	310	370
		SPHWHTL3D50CE4QTQF	QB, RB, SB	310	370
	6500	SPHWHTL3D50CE4PTPF	PB, QB, RB	290	350
		SPHWHTL3D50CE4PTQF	QB, RB, SB	310	370
75+	3000	SPHWHTL3D50DE4V0PF	PB, QB, RB	290	350
		SPHWHTL3D50DE4U0PF	PB, QB, RB	290	350
	4000	SPHWHTL3D50DE4T0PF	PB, QB, RB	290	350
		SPHWHTL3D50DE4RTPF	PB, QB, RB	290	350
	5000	SPHWHTL3D50DE4RTQF	QB, RB, SB	310	370
		SPHWHTL3D50DE4QTPF	PB, QB, RB	290	350
	5700	SPHWHTL3D50DE4QTQF	QB, RB, SB	310	370
		SPHWHTL3D50DE4QTPF	PB, QB, RB	290	350
80+	2700	SPHWHTL3D50EE4W0MF	MB, NB, PB	250	310
		SPHWHTL3D50EE4V0NF	NB, PB, QB	270	330
	3500	SPHWHTL3D50EE4U0NF	NB, PB, QB	270	330
		SPHWHTL3D50EE4T0MF	MB, NB, PB	250	310
	4000	SPHWHTL3D50EE4T0NF	NB, PB, QB	270	330
		SPHWHTL3D50EE4RTNF	NB, PB, QB	270	330
	5000	SPHWHTL3D50EE4RTPF	PB, QB, RB	290	350
		SPHWHTL3D50EE4QTNF	NB, PB, QB	270	330
90+	2700	SPHWHTL3D50GE4W0HF	HB, JB, KB	190	250
		SPHWHTL3D50GE4W0JF	JB, KB, MB	210	270
	3000	SPHWHTL3D50GE4V0JF	JB, KB, MB	210	270
		SPHWHTL3D50GE4U0JF	JB, KB, MB	210	270
	3500	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
	5000	SPHWHTL3D50GE4RTMF	MB, NB, PB	250	310
		SPHWHTL3D50GE4RTNF	NB, PB, QB	270	330
	5700	SPHWHTL3D50GE4QTMF	MB, NB, PB	250	310
		SPHWHTL3D50GE4QTMF	MB, NB, PB	250	310

Product Line-up

I High Power LEDs

LH351D



- 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 broadcasting 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	SPHWHTL3DA0CF4W0S6	S2, T2, U2	380	420
		SPHWHTL3DA0CF4W0T6	T2, U2, V2	400	440
	3000	SPHWHTL3DA0CF4V0T6	T2, U2, V2	400	440
		SPHWHTL3DA0CF4V0U6	U2, V2, W2	420	460
		SPHWHTL3DA0CF4V0V6	V2, W2, Y2	440	480
		SPHWHTL3DA0CF4V0W6	W2, Y2, Z2	460	500
	3500	SPHWHTL3DA0CF4U0T6	T2, U2, V2	400	440
		SPHWHTL3DA0CF4U0U6	U2, V2, W2	420	460
		SPHWHTL3DA0CF4U0V6	V2, W2, Y2	440	480
		SPHWHTL3DA0CF4U0W6	W2, Y2, Z2	460	500
	4000	SPHWHTL3DA0CF4T0W6	W2, Y2, Z2	460	520
		SPHWHTL3DA0CF4T0Y6	Y2, Z2, 12	480	540
		SPHWHTL3DA0CF4RTW6	W2, Y2, Z2	460	500
	5000	SPHWHTL3DA0CF4RTY6	Y2, Z2, 12	480	520
		SPHWHTL3DA0CF4RTZ6	Z2, 12, 22	500	540
		SPHWHTL3DA0CF4QTV6	V2, W2, Y2	440	480
	5700	SPHWHTL3DA0CF4QTW6	W2, Y2, Z2	460	500
		SPHWHTL3DA0CF4QTY6	Y2, Z2, 12	480	520
	6500	SPHWHTL3DA0CF4PTW6	W2, Y2, Z2	460	500
		SPHWHTL3DA0CF4PTY6	Y2, Z2, 12	480	520
80+	2700	SPHWHTL3DA0EF4W0Q6	Q2, R2, S2	340	380
		SPHWHTL3DA0EF4W0R6	R2, S2, T2	360	400
	3000	SPHWHTL3DA0EF4V0R6	R2, S2, T2	360	400
	3500	SPHWHTL3DA0EF4U0R6	R2, S2, T2	360	400
		SPHWHTL3DA0EF4U0S6	S2, T2, U2	380	420
	4000	SPHWHTL3DA0EF4T0S6	S2, T2, U2	380	420
		SPHWHTL3DA0EF4T0T6	T2, U2, V2	400	440
	5000	SPHWHTL3DA0EF4RTS6	S2, T2, U2	380	420
		SPHWHTL3DA0EF4RTT6	T2, U2, V2	400	440
	5300	SPHWHTL3DA0EF4QRT6	T2, U2, V2	400	440
		SPHWHTL3DA0EF4QRU6	U2, V2, W2	420	460
	5700	SPHWHTL3DA0EF4QTT6	T2, U2, V2	400	440
		SPHWHTL3DA0EF4QTU6	U2, V2, W2	420	460
	6000	SPHWHTL3DA0EF4PQT6	T2, U2, V2	400	440
		SPHWHTL3DA0EF4PQU6	U2, V2, W2	420	460
	6500	SPHWHTL3DA0EF4PTT6	T2, U2, V2	400	440
		SPHWHTL3DA0EF4PTU6	U2, V2, W2	420	460

CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
90+	2700	SPHWHTL3DA0GF4W0M6	M2, N2, P2	280	320
		SPHWHTL3DA0GF4W0N6	N2, P2, Q2	300	340
	3000	SPHWHTL3DA0GF4V0N6	N2, P2, Q2	300	340
		SPHWHTL3DA0GF4V0P6	P2, Q2, R2	320	360
	3500	SPHWHTL3DA0GF4U0N6	N2, P2, Q2	300	340
		SPHWHTL3DA0GF4U0P6	P2, Q2, R2	320	360
	4000	SPHWHTL3DA0GF4T0P6	P2, Q2, R2	320	360
		SPHWHTL3DA0GF4T0Q6	Q2, R2, S2	340	380
		SPHWHTL3DA0GF4RTR6	R2, S2, T2	360	400
	5000	SPHWHTL3DA0GF4RTS6	S2, T2, U2	380	420
		SPHWHTL3DA0GF4PQR6	R2, S2, T2	360	400
	6000	SPHWHTL3DA0GF4PQS6	S2, T2, U2	380	420

Product Line-up

I Chip-on-Board LEDs

D-series Gen 3



- 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

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _f (mA) V _F (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				
		5000	MacAdam 3step	SPHWAHDNE25YZR3D3	2644	174		
		5700	MacAdam 3step	SPHWAHDNE25YZQ3D3	2644	174		
		6500	MacAdam 3step	SPHWAHDNE25YZP3D3	2622	172		
	90+	2700	MacAdam 2step	SPHWAHDNE27YZW2D3	2033	134		
			MacAdam 3step	SPHWAHDNE27YZW3D3				
		3000	MacAdam 2step	SPHWAHDNE27YZV2D3	2139	141		
			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		

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _F (mA) V _F (V)	
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
 LC019D Gen 3	70+	3000	MacAdam 3step	SPHWAHDNF23YZV3D3	3220	175	540mA 33.8V	
		4000	MacAdam 3step	SPHWAHDNF23YZT3D3	3280	179		
		5000	MacAdam 3step	SPHWAHDNF23YZR3D3	3339	182		
	80+	2700	MacAdam 2step	SPHWAHDNF25YZW2D3	2837	155		
			MacAdam 3step	SPHWAHDNF25YZW3D3				
		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		
		5700	MacAdam 3step	SPHWAHDNF25YZQ3D3	3157	173		
		6500	MacAdam 3step	SPHWAHDNF25YZP3D3	3130	171		
	90+	2700	MacAdam 2step	SPHWAHDNF27YZW2D3	2428	133		
			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		
 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				
		5000	MacAdam 3step	SPHWAHDNG25YZR3D3	4147	170		
		5700	MacAdam 3step	SPHWAHDNG25YZQ3D3	4147	170		
		6500	MacAdam 3step	SPHWAHDNG25YZP3D3	4112	169		
	90+	2700	MacAdam 2step	SPHWAHDNG27YZW2D3	3190	131		
			MacAdam 3step	SPHWAHDNG27YZW3D3				
		3000	MacAdam 2step	SPHWAHDNG27YZV2D3	3355	138		
			MacAdam 3step	SPHWAHDNG27YZV3D3				
		3500	MacAdam 2step	SPHWAHDNG27YZU2D3	3455	142		
			MacAdam 3step	SPHWAHDNG27YZU3D3				
		4000	MacAdam 2step	SPHWAHDNG27YZT2D3	3526	145		
			MacAdam 3step	SPHWAHDNG27YZT3D3				
		5000	MacAdam 3step	SPHWAHDNG27YZR3D3	3556	146		

Product Line-up

Package

Package

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _f (mA) V _F (V)	
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
 LC033D Gen 3	70+	3000	MacAdam 3step	SPHWAHDNH23YZV3D3	5235	172	900mA 33.8V	
		4000	MacAdam 3step	SPHWAHDNH23YZT3D3	5332	175		
		5000	MacAdam 3step	SPHWAHDNH23YZR3D3	5429	178		
	80+	2700	MacAdam 2step	SPHWAHDNH25YZW2D3	4612	152		
			MacAdam 3step	SPHWAHDNH25YZW3D3				
		3000	MacAdam 2step	SPHWAHDNH25YZV2D3	4847	159		
			MacAdam 3step	SPHWAHDNH25YZV3D3				
			MacAdam 3step	SPHWAHDNH25YZV3D3				
		3500	MacAdam 2step	SPHWAHDNH25YZU2D3	4989	164		
			MacAdam 3step	SPHWAHDNH25YZU3D3				
		4000	MacAdam 2step	SPHWAHDNH25YZT2D3	5089	167		
			MacAdam 3step	SPHWAHDNH25YZT3D3				
			MacAdam 3step	SPHWAHDNH25YZR3D3				
	90+	5000	MacAdam 3step	SPHWAHDNH25YZQ3D3	5132	169		
			MacAdam 3step	SPHWAHDNH25YZQ3D3				
			MacAdam 3step	SPHWAHDNH25YZP3D3				
		2700	MacAdam 2step	SPHWAHDNH27YZW2D3	3947	130		
			MacAdam 3step	SPHWAHDNH27YZW3D3				
		3000	MacAdam 2step	SPHWAHDNH27YZV2D3	4152	136		
			MacAdam 3step	SPHWAHDNH27YZV3D3				
			MacAdam 3step	SPHWAHDNH27YZU2D3				
		3500	MacAdam 3step	SPHWAHDNH27YZU3D3	4276	141		
			MacAdam 3step	SPHWAHDNH27YZT2D3				
			MacAdam 3step	SPHWAHDNH27YZT3D3				
 LC040D Gen 3	70+	5000	MacAdam 3step	SPHWAHDNH27YZR3D3	4401	145	1080mA 33.8V	
		3000	MacAdam 3step	SPHWAHDNK23YZV3D3	6440	176		
		4000	MacAdam 3step	SPHWAHDNK23YZT3D3	6560	180		
	80+	5000	MacAdam 3step	SPHWAHDNK23YZR3D3	6679	183		
		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				
			MacAdam 3step	SPHWAHDNK25YZR3D3				
	90+	5000	MacAdam 3step	SPHWAHDNK25YZQ3D3	6313	173		
			MacAdam 3step	SPHWAHDNK25YZQ3D3				
MacAdam 3step			SPHWAHDNK25YZP3D3					
2700		MacAdam 2step	SPHWAHDNK27YZW2D3	4856	133			
		MacAdam 3step	SPHWAHDNK27YZW3D3					
3000		MacAdam 2step	SPHWAHDNK27YZV2D3	5108	140			
		MacAdam 3step	SPHWAHDNK27YZV3D3					
		MacAdam 3step	SPHWAHDNK27YZV3D3					
3500		MacAdam 2step	SPHWAHDNK27YZU2D3	5260	144			
		MacAdam 3step	SPHWAHDNK27YZU3D3					
		MacAdam 3step	SPHWAHDNK27YZU3D3					
4000		MacAdam 2step	SPHWAHDNK27YZT2D3	5369	147			
	MacAdam 3step	SPHWAHDNK27YZT3D3						
	MacAdam 3step	SPHWAHDNK27YZR3D3						
5000	MacAdam 3step	SPHWAHDNK27YZR3D3	5415	148				

Product Line-up

I Chip-on-Board LEDs

D-series Gen 2



- 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

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _f (mA) V _F (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				
		5000	MacAdam 3step	SPHWAHDNE25YZR3D2	2581	166		
		5700	MacAdam 3step	SPHWAHDNE25YZQ3D2				
		6500	MacAdam 3step	SPHWAHDNE25YZP3D2	2558	164		
	90+	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				
		5000	MacAdam 3step	SPHWAHDNE27YZR3D2	2209	142		
	95+	2700	MacAdam 2step	SPHWAHDNE28YZW2D2	1575	101		
			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				
		5000	MacAdam 3step	SPHWAHDNE28YZR3D2	1791	115		
	 LC019D Gen 2	70+	3000	MacAdam 3step	SPHWAHDNF23YZV3D2	3107	166	540mA 34.6V
			4000	MacAdam 3step	SPHWAHDNF23YZT3D2	3207	172	
			5000	MacAdam 3step	SPHWAHDNF23YZR3D2	3256	174	
80+		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				

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _f (mA) V _F (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC019D Gen 2	80+	4000	MacAdam 2step	SPHWAHDNF25YZT2D2	3026	162	540mA 34.6V
			MacAdam 3step	SPHWAHDNF25YZT3D2			
		5000	MacAdam 3step	SPHWAHDNF25YZR3D2	3059	164	
		5700	MacAdam 3step	SPHWAHDNF25YZQ3D2	3059	164	
		6500	MacAdam 3step	SPHWAHDNF25YZP3D2	3026	162	
	90+	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	
		95+	2700	MacAdam 2step	SPHWAHDNF28YZW2D2	1880	
			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				
5000	MacAdam 3step		SPHWAHDNF28YZR3D2	2138	114		
 LC026D Gen 2	70+		3000	MacAdam 3step	SPHWAHDNG23YZV3D2	4063	163
		4000	MacAdam 3step	SPHWAHDNG23YZT3D2	4193	168	
		5000	MacAdam 3step	SPHWAHDNG23YZR3D2	4258	171	
	80+	2700	MacAdam 2step	SPHWAHDNG25YZW2D2	3580	144	
			MacAdam 3step	SPHWAHDNG25YZW3D2			
		3000	MacAdam 2step	SPHWAHDNG25YZV2D2	3762	151	
			MacAdam 3step	SPHWAHDNG25YZV3D2			
		3500	MacAdam 2step	SPHWAHDNG25YZU2D2	3872	155	
			MacAdam 3step	SPHWAHDNG25YZU3D2			
		4000	MacAdam 2step	SPHWAHDNG25YZT2D2	3950	159	
			MacAdam 3step	SPHWAHDNG25YZT3D2			
		5000	MacAdam 3step	SPHWAHDNG25YZR3D2	3983	160	
		5700	MacAdam 3step	SPHWAHDNG25YZQ3D2	3983	160	
	6500	MacAdam 3step	SPHWAHDNG25YZP3D2	3950	159		
	90+	2700	MacAdam 2step	SPHWAHDNG27YZW2D2	3064	123	
			MacAdam 3step	SPHWAHDNG27YZW3D2			
		3000	MacAdam 2step	SPHWAHDNG27YZV2D2	3223	129	
			MacAdam 3step	SPHWAHDNG27YZV3D2			
		3500	MacAdam 2step	SPHWAHDNG27YZU2D2	3319	133	
			MacAdam 3step	SPHWAHDNG27YZU3D2			
		4000	MacAdam 2step	SPHWAHDNG27YZT2D2	3387	136	
			MacAdam 3step	SPHWAHDNG27YZT3D2			
		5000	MacAdam 3step	SPHWAHDNG27YZR3D2	3416	137	
		95+	2700	MacAdam 2step	SPHWAHDNG28YZW2D2	2470	99
			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				
5000	MacAdam 3step		SPHWAHDNG28YZR3D2	2809	113		

Product Line-up

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _f (mA) V _F (V)		
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)			
 LC033D Gen 2	70+	3000	MacAdam 3step	SPHWAHDNH23YZV3D2	5014	161	900mA 34.6V		
		4000	MacAdam 3step	SPHWAHDNH23Yzt3D2	5175	166			
		5000	MacAdam 3step	SPHWAHDNH23YzR3D2	5255	169			
	80+	2700	MacAdam 2step	SPHWAHDNH25YZW2D2	4418	142			
			MacAdam 3step	SPHWAHDNH25YZW3D2					
		3000	MacAdam 2step	SPHWAHDNH25YZV2D2	4643	149			
			MacAdam 3step	SPHWAHDNH25YZV3D2					
		3500	MacAdam 2step	SPHWAHDNH25YZU2D2	4779	153			
			MacAdam 3step	SPHWAHDNH25YZU3D2					
		4000	MacAdam 2step	SPHWAHDNH25Yzt2D2	4875	157			
			MacAdam 3step	SPHWAHDNH25Yzt3D2					
		5000	MacAdam 3step	SPHWAHDNH25YzR3D2	4916	158			
		5700	MacAdam 3step	SPHWAHDNH25YzQ3D2	4916	158			
		6500	MacAdam 3step	SPHWAHDNH25YzP3D2	4875	157			
	90+	2700	MacAdam 2step	SPHWAHDNH27YZW2D2	3781	121			
			MacAdam 3step	SPHWAHDNH27YZW2D2					
		3000	MacAdam 2step	SPHWAHDNH27YZV2D2	3977	128			
			MacAdam 3step	SPHWAHDNH27YZV3D2					
		3500	MacAdam 2step	SPHWAHDNH27YZU2D2	4096	132			
			MacAdam 3step	SPHWAHDNH27YZU3D2					
		4000	MacAdam 2step	SPHWAHDNH27Yzt2D2	4180	134			
			MacAdam 3step	SPHWAHDNH27Yzt2D2					
		5000	MacAdam 3step	SPHWAHDNH27YzR3D2	4216	135			
		95+	2700	MacAdam 2step	SPHWAHDNH28YZW2D2	3057		98	
			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					
	5000	MacAdam 3step	SPHWAHDNH28YzR3D2	3476	112				
	LC040D Gen 2	70+	3000	MacAdam 3step	SPHWAHDNK23YZV3D2	6304		169	1080mA 34.6V
			4000	MacAdam 3step	SPHWAHDNK23Yzt3D2	6506		174	
			5000	MacAdam 3step	SPHWAHDNK23YzR3D2	6607		177	
80+		2700	MacAdam 2step	SPHWAHDNK25YZW2D2	5547	148			
			MacAdam 3step	SPHWAHDNK25YZW3D2					
		3000	MacAdam 2step	SPHWAHDNK25YZV2D2	5837	156			
			MacAdam 3step	SPHWAHDNK25YZV3D2					
		3500	MacAdam 2step	SPHWAHDNK25YZU2D2	6016	161			
			MacAdam 3step	SPHWAHDNK25YZU3D2					
		4000	MacAdam 2step	SPHWAHDNK25Yzt2D2	6146	164			
			MacAdam 3step	SPHWAHDNK25Yzt3D2					
		5000	MacAdam 3step	SPHWAHDNK25YzR3D2	6175	165			
		5700	MacAdam 3step	SPHWAHDNK25YzQ3D2	6205	166			
		6500	MacAdam 3step	SPHWAHDNK25YzP3D2	6138	164			
90+		2700	MacAdam 2step	SPHWAHDNK27YZW2D2	4755	127			
			MacAdam 3step	SPHWAHDNK27YZW3D2					
		3000	MacAdam 2step	SPHWAHDNK27YZV2D2	5024	134			
			MacAdam 3step	SPHWAHDNK27YZV3D2					
		3500	MacAdam 2step	SPHWAHDNK27YZU2D2	5152	138			
			MacAdam 3step	SPHWAHDNK27YZU3D2					
	4000	MacAdam 2step	SPHWAHDNK27Yzt2D2	5266	141				
		MacAdam 3step	SPHWAHDNK27Yzt3D2						
	5000	MacAdam 3step	SPHWAHDNK27YzR3D2	5325	143				

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _f (mA) V _F (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC040D Gen 2	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	
 LC060D Gen 2	70+	3000	MacAdam 3step	SPHWAHDNL231ZV3D2	9225	164	
		4000	MacAdam 3step	SPHWAHDNL231zt3D2	9521	170	
		5000	MacAdam 3step	SPHWAHDNL231zR3D2	9668	172	
	80+	2700	MacAdam 2step	SPHWAHDNL251ZW2D2	8107	144	
		MacAdam 3step	SPHWAHDNL251ZW3D2				
		3000	MacAdam 2step	SPHWAHDNL251ZV2D2	8542	152	
		MacAdam 3step	SPHWAHDNL251ZV3D2				
		3500	MacAdam 2step	SPHWAHDNL251ZU2D2	8812	157	
		MacAdam 3step	SPHWAHDNL251ZU3D2				
		4000	MacAdam 2step	SPHWAHDNL251zt2D2	8995	160	
		MacAdam 3step	SPHWAHDNL251zt3D2				
		5000	MacAdam 3step	SPHWAHDNL251zR3D2	9039	161	
	5700	MacAdam 3step	SPHWAHDNL251zQ3D2	9084	162		
	6500	MacAdam 3step	SPHWAHDNL251zP3D2	8990	160		
	90+	2700	MacAdam 2step	SPHWAHDNL271ZW2D2	6959	124	
		MacAdam 3step	SPHWAHDNL271ZW3D2				
		3000	MacAdam 2step	SPHWAHDNL271ZV2D2	7352	131	
		MacAdam 3step	SPHWAHDNL271ZV3D2				
		3500	MacAdam 2step	SPHWAHDNL271ZU2D2	7539	134	
		MacAdam 3step	SPHWAHDNL271ZU3D2				
		4000	MacAdam 2step	SPHWAHDNL271zt2D2	7706	137	
MacAdam 3step		SPHWAHDNL271zt3D2					
5000		MacAdam 3step	SPHWAHDNL271zR3D2	7793	139		
 LC080D Gen 2	70+	3000	MacAdam 3step	SPHWAHDNM231ZV3D2	13465	160	
		4000	MacAdam 3step	SPHWAHDNM231zt3D2	13896	165	
		5000	MacAdam 3step	SPHWAHDNM231zR3D2	14112	168	
	80+	2700	MacAdam 2step	SPHWAHDNM251ZW2D2	11815	140	
		MacAdam 3step	SPHWAHDNM251ZW3D2				
		3000	MacAdam 2step	SPHWAHDNM251ZV2D2	12468	148	
		MacAdam 3step	SPHWAHDNM251ZV3D2				
		3500	MacAdam 2step	SPHWAHDNM251ZU2D2	12852	153	
		MacAdam 3step	SPHWAHDNM251ZU3D2				
		4000	MacAdam 2step	SPHWAHDNM251zt2D2	13123	156	
		MacAdam 3step	SPHWAHDNM251zt3D2				
		5000	MacAdam 3step	SPHWAHDNM251zR3D2	13196	157	
	5700	MacAdam 3step	SPHWAHDNM251zQ3D2	13258	157		
	6500	MacAdam 3step	SPHWAHDNM251zP3D2	13121	156		
	90+	2700	MacAdam 2step	SPHWAHDNM271ZW2D2	10157	121	
		MacAdam 3step	SPHWAHDNM271ZW3D2				
		3000	MacAdam 2step	SPHWAHDNM271ZV2D2	10731	127	
		MacAdam 3step	SPHWAHDNM271ZV3D2				
		3500	MacAdam 2step	SPHWAHDNM271ZU2D2	11004	131	
		MacAdam 3step	SPHWAHDNM271ZU3D2				
		4000	MacAdam 2step	SPHWAHDNM271zt2D2	11247	134	
MacAdam 3step		SPHWAHDNM271zt3D2					
5000		MacAdam 3step	SPHWAHDNM271zR3D2	11375	135		

Product Line-up

I Chip-on-Board LEDs

D-series Gen 1



- 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

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _F (mA) V _F (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		

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _F (mA) V _F (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC019D Gen1	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		

Product Line-up

Package

Product	CRI	CCT (K)	Color Rank	Part Number	T _J =85°C		I _F (mA) V _F (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
 LC026D Gen1	80+	2700	MacAdam 2step	SPHWAHDNK25YZW2M7	3225	129	720mA 34.6V
			MacAdam 3step	SPHWAHDNK25YZW3M7			
			MacAdam 2step	SPHWAHDNK25YZW2D1			
			MacAdam 3step	SPHWAHDNK25YZW3D1			
		3000	MacAdam 2step	SPHWAHDNK25YZV2M9	3389	136	
			MacAdam 3step	SPHWAHDNK25YZV3M9			
			MacAdam 2step	SPHWAHDNK25YZV2D1			
			MacAdam 3step	SPHWAHDNK25YZV3D1			
		3500	MacAdam 2step	SPHWAHDNK25YZU2N1	3488	140	
			MacAdam 3step	SPHWAHDNK25YZU3N1			
			MacAdam 2step	SPHWAHDNK25YZU2D1			
			MacAdam 3step	SPHWAHDNK25YZU3D1			
		4000	MacAdam 2step	SPHWAHDNK25YZT2N2	3558	143	
			MacAdam 3step	SPHWAHDNK25YZT3N2			
			MacAdam 2step	SPHWAHDNK25YZT2D1			
			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			
			MacAdam 3step	SPHWAHDNK27YZW3D1			
		3000	MacAdam 2step	SPHWAHDNK27YZV2M2	2903	117	
			MacAdam 3step	SPHWAHDNK27YZV3M2			
			MacAdam 2step	SPHWAHDNK27YZV2D1			
			MacAdam 3step	SPHWAHDNK27YZV3D1			
		3500	MacAdam 2step	SPHWAHDNK27YZU2M4	2990	120	
			MacAdam 3step	SPHWAHDNK27YZU3M4			
MacAdam 2step			SPHWAHDNK27YZU2D1				
MacAdam 3step			SPHWAHDNK27YZU3D1				
4000		MacAdam 2step	SPHWAHDNK27YZT2M5	3051	122		
		MacAdam 3step	SPHWAHDNK27YZT3M5				
		MacAdam 2step	SPHWAHDNK27YZT2D1				
		MacAdam 3step	SPHWAHDNK27YZT3D1				
5000		MacAdam 3step	SPHWAHDNK27YZR3M5	3077	124		
			SPHWAHDNK27YZR3D1	3231	130		

Product	CRI	CCT (K)	Color Rank	Part Number	T _j =85°C		I _F (mA) V _F (V)		
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)			
 LC040D Gen1	80+	2700	MacAdam 2step	SPHWAHDNG25YZW2K0	4996	134	1080mA 34.6V		
			MacAdam 3step	SPHWAHDNG25YZW3K0					
			MacAdam 2step	SPHWAHDNG25YZW2D1					
			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	5839	156			
		5700	MacAdam 3step	SPHWAHDNG25YZQ3K4	5588	150			
				SPHWAHDNG25YZQ3D1	5868	157			
		6500	MacAdam 3step	SPHWAHDNG25YZP3K3	5528	148			
				SPHWAHDNG25YZP3D1	5804	155			
	90+	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				

Package

Product Line-up

Package

Product	CRI	CCT (K)	Color Rank	Part Number	T _J =85°C		I _F (mA) V _F (V)	
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
 LC060D Gen1	70+	3000	MacAdam 3step	SPHWAHDNL231ZV3Q8	8284	148	1080mA 52V	
		4000	MacAdam 3step	SPHWAHDNL231ZT3R1	8550	152		
		5000	MacAdam 3step	SPHWAHDNL231ZR3R2	8683	155		
	80+	2700	MacAdam 2step	SPHWAHDNL251ZW2P9	7277	130		
			MacAdam 3step	SPHWAHDNL251ZW3P9				
		3000	MacAdam 2step	SPHWAHDNL251ZV2Q3	7667	137		
			MacAdam 3step	SPHWAHDNL251ZV3Q3				
		3500	MacAdam 2step	SPHWAHDNL251ZU2Q5	7904	141		
			MacAdam 3step	SPHWAHDNL251ZU3Q5				
		4000	MacAdam 2step	SPHWAHDNL251ZT2Q6	8075	144		
			MacAdam 3step	SPHWAHDNL251ZT3Q6				
		5000	MacAdam 3step	SPHWAHDNL251ZR3Q7	8113	144		
		5700	MacAdam 3step	SPHWAHDNL251ZQ3Q7	8151	145		
		6500	MacAdam 3step	SPHWAHDNL271ZP3Q6	8066	144		

Product	CRI	CCT (K)	Color Rank	Part Number	T _J =85°C		I _F (mA) V _F (V)	
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)		
 LC080D Gen1	70+	3000	MacAdam 3step	SPHWAHDNM231ZV3U5	12084	143	1620mA 52V	
		4000	MacAdam 3step	SPHWAHDNM231ZT3U9	12483	148		
		5000	MacAdam 3step	SPHWAHDNM231ZR3V0	12673	150		
	80+	2700	MacAdam 2step	SPHWAHDNM251ZW2T1	10612	126		
			MacAdam 3step	SPHWAHDNM251ZW3T1				
		3000	MacAdam 2step	SPHWAHDNM251ZV2T6	11201	133		
			MacAdam 3step	SPHWAHDNM251ZV3T6				
		3500	MacAdam 2step	SPHWAHDNM251ZU2T9	11533	137		
			MacAdam 3step	SPHWAHDNM251ZU3T9				
		4000	MacAdam 2step	SPHWAHDNM251ZT2U2	11780	140		
			MacAdam 3step	SPHWAHDNM251ZT3U2				
		5000	MacAdam 3step	SPHWAHDNM251ZR3U2	11847	141		
		5700	MacAdam 3step	SPHWAHDNM251ZQ3V0	11904	141		
		6500	MacAdam 3step	SPHWAHDNM251ZP3V5	11723	139		

Package

Product Line-up

I Module

H inFlux

- Wide lumen flux coverage - up to 40,000lm by combining modules
- Highest performance
- 192lm/W [4000K, CRI 80+, Tp 55°C]
- Lifetime: 50,000 hours, Beam angle: 120°C



LM 24x560mm 4000lm (H inFlux_L04)



LM 24x560mm 6000lm (H inFlux_L06)



LM 40x560mm 8000lm (H inFlux_L09)



LM 24x280mm 2000lm (H inFlux_S02)



LM 24x280mm 3000lm (H inFlux_S03)



LM 40x280mm 4000lm (H inFlux_S04)

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Size (mm)	Temperature Range (°C)	Certification	Part Number
LM 24x560mm 4000lm 830 64LED G1 (H inFlux_L04)	3960	22.3	22.3	1000	1380	178	80+	3000	560x24x5.9	-40~+50	CE, cUL, UL	SL-B8V2N80LAWW
LM 24x560mm 4000lm 835 64LED G1 (H inFlux_L04)	4060					182		3500				SL-B8U2N80LAWW
LM 24x560mm 4000lm 840 64LED G1 (H inFlux_L04)	4280					192		4000				SL-B8T2N80LAWW
LM 24x560mm 4000lm 850 64LED G1 (H inFlux_L04)	4280					192		5000				SL-B8R2N80LAWW
LM 24x560mm 6000lm 830 88LED G1 (H inFlux_L06)	5630	32.0	22.4	1430	950	176	80+	3000	560x24x5.9	-40~+50	CE, cUL, UL	SL-B8V3N80LAWW
LM 24x560mm 6000lm 835 88LED G1 (H inFlux_L06)	5800					181		3500				SL-B8U3N80LAWW
LM 24x560mm 6000lm 840 88LED G1 (H inFlux_L06)	6110					191		4000				SL-B8T3N80LAWW
LM 24x560mm 6000lm 850 88LED G1 (H inFlux_L06)	6110					191		5000				SL-B8R3N80LAWW
LM 40x560mm 8000lm 830 128LED G1 (H inFlux_L09)	7910	44.6	44.6	1000	1380	177	80+	3000	561x41x5.9	-40~+50	CE, cUL, UL	SL-B8V4N90LAWW
LM 40x560mm 8000lm 835 128LED G1 (H inFlux_L09)	8130					182		3500				SL-B8U4N90LAWW
LM 40x560mm 8000lm 840 128LED G1 (H inFlux_L09)	8570					192		4000				SL-B8T4N90LAWW
LM 40x560mm 8000lm 850 128LED G1 (H inFlux_L09)	8570					192		5000				SL-B8R4N90LAWW
LM 24x280mm 2000lm 830 32LED G1 (H inFlux_S02)	1980	11.1	11.1	1000	1380	178	80+	3000	280x24x5.9	-40~+50	CE, cUL, UL	SL-B8V1N30LAWW
LM 24x280mm 2000lm 835 32LED G1 (H inFlux_S02)	2030					183		3500				SL-B8U1N30LAWW
LM 24x280mm 2000lm 840 32LED G1 (H inFlux_S02)	2140					193		4000				SL-B8T1N30LAWW
LM 24x280mm 2000lm 850 32LED G1 (H inFlux_S02)	2140					193		5000				SL-B8R1N30LAWW
LM 24x280mm 3000lm 830 44LED G1 (H inFlux_S03)	2820	16.0	11.2	1430	950	176	80+	3000	280x24x5.9	-40~+50	CE, cUL, UL	SL-B8V1N60LAWW
LM 24x280mm 3000lm 835 44LED G1 (H inFlux_S03)	2890					180		3500				SL-B8U1N60LAWW
LM 24x280mm 3000lm 840 44LED G1 (H inFlux_S03)	3060					191		4000				SL-B8T1N60LAWW
LM 24x280mm 3000lm 850 44LED G1 (H inFlux_S03)	3060					191		5000				SL-B8R1N60LAWW
LM 40x280mm 4000lm 830 64LED G1 (H inFlux_S04)	3960	22.3	22.3	1000	1380	178	80+	3000	281x41x5.9	-40~+50	CE, cUL, UL	SL-B8V2N70LAWW
LM 40x280mm 4000lm 835 64LED G1 (H inFlux_S04)	4060					182		3500				SL-B8U2N70LAWW
LM 40x280mm 4000lm 840 64LED G1 (H inFlux_S04)	4280					192		4000				SL-B8T2N70LAWW
LM 40x280mm 4000lm 850 64LED G1 (H inFlux_S04)	4280					192		5000				SL-B8R2N70LAWW

F-series

- High lumen density of 18,600lm to replace tubes in high/low bay lighting
- Platform & flexible design choices
- High efficacy - up to 175lm/W @4000K
- Lifetime: 50,000 hours, Beam angle: 115°C



LM 18x1120mm 9000lm (LT-FB22B)



LM 40x1120mm 18000lm (LT-FB24B)



LM 18x560mm 4500lm (LT-F562B)



LM 40x560mm 9000lm (LT-F564B)



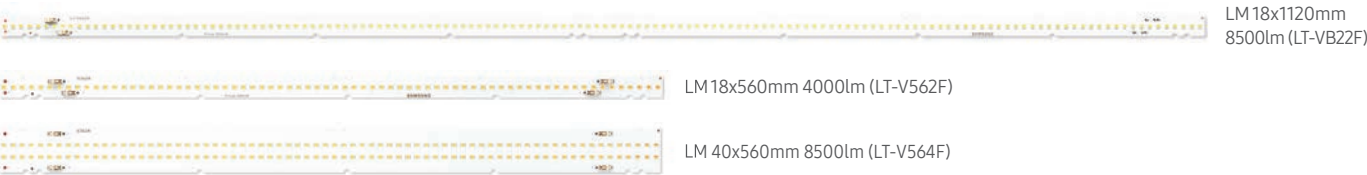
LM 40x280mm 4500lm (LT-F284B)

Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Size (mm)	Temperature Range (°C)	Certification	Part Number
LM 18x1120mm 9000lm 830 144LED G3 (LT-FB22B)	8670	51.5	46.0	1120	1800	168	80+	3000	1120x18x5.2	-30~+55	cUL, UL	SI-B8V521B20WW
LM 18x1120mm 9000lm 835 144LED G3 (LT-FB22B)	8800					171		3500				SI-B8U521B20WW
LM 18x1120mm 9000lm 840 144LED G3 (LT-FB22B)	9000					175		4000				SI-B8T521B20WW
LM 18x1120mm 9000lm 850 144LED G3 (LT-FB22B)	9300					181		5000				SI-B8R521B20WW
LM 40x1120mm 18000lm 830 288LED G3 (LT-FB24B)	17340					168		3000				SI-B8VZ91B20WW
LM 40x1120mm 18000lm 835 288LED G3 (LT-FB24B)	17600	103.0	46.0	2240	3600	171	80+	3500	1120x39.8x5.2	-30~+55	cUL, UL	SI-B8UZ91B20WW
LM 40x1120mm 18000lm 840 288LED G3 (LT-FB24B)	18000					175		4000				SI-B8TZ91B20WW
LM 40x1120mm 18000lm 850 288LED G3 (LT-FB24B)	18600					181		5000				SI-B8RZ91B20WW
LM 18x560mm 4500lm 830 72LED G3 (LT-F562B)	4335	25.8	23.0	1120	1800	168	80+	3000	560x18x5.2	-30~+55	cUL, UL	SI-B8V261560WW
LM 18x560mm 4500lm 835 72LED G3 (LT-F562B)	4400					171		3500				SI-B8U261560WW
LM 18x560mm 4500lm 840 72LED G3 (LT-F562B)	4500					175		4000				SI-B8T261560WW
LM 18x560mm 4500lm 850 72LED G3 (LT-F562B)	4650					181		5000				SI-B8R261560WW
LM 40x560mm 9000lm 830 144LED G3 (LT-F564B)	8670	51.5	46.0	1120	1800	168	80+	3000	559.7x39.8x5.2	-30~+55	cUL, UL	SI-B8V521560WW
LM 40x560mm 9000lm 835 144LED G3 (LT-F564B)	8800					171		3500				SI-B8U521560WW
LM 40x560mm 9000lm 840 144LED G3 (LT-F564B)	9000					175		4000				SI-B8T521560WW
LM 40x560mm 9000lm 850 144LED G3 (LT-F564B)	9300					181		5000				SI-B8R521560WW
LM 40x280mm 4500lm 830 72LED G3 (LT-F284B)	4335	25.8	23.0	1120	1800	168	80+	3000	280x40x5.2	-30~+55	cUL, UL	SI-B8V261280WW
LM 40x280mm 4500lm 835 72LED G3 (LT-F284B)	4400					171		3500				SI-B8U261280WW
LM 40x280mm 4500lm 840 72LED G3 (LT-F284B)	4500					175		4000				SI-B8T261280WW
LM 40x280mm 4500lm 850 72LED G3 (LT-F284B)	4650					181		5000				SI-B8R261280WW

Product Line-up

I Module

- V-series F-type
- Value solution
 - 167lm/W [4000K, CRI80+, Tp 65°C]
 - Lifetime: 50,000 hours, Beam angle: 115°C



Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Size (mm)	Temperature Range (°C)	Certification	Part Number
LM18x1120mm 8500lm 830 144LED G2 (LT-VB22F)	8300	52.1	46.5	1120	1350	159	80+	3000	1120x18x5.5	-30~+50	cUL, UL	SI-B8V522B2CUS
LM18x1120mm 8500lm 835 144LED G2 (LT-VB22F)	8410					161		3500				SI-B8U522B2CUS
LM18x1120mm 8500lm 840 144LED G2 (LT-VB22F)	8690					167		4000				SI-B8T522B2CUS
LM18x1120mm 8500lm 850 144LED G2 (LT-VB22F)	8800					169		5000				SI-B8R522B2CUS
LM18x560mm 4000lm 830 72LED G2 (LT-V562F)	4150	26.1	23.3	1120	1350	159	80+	3000	560x18x5.5	-30~+50	cUL, UL	SI-B8V26256CUS
LM18x560mm 4000lm 835 72LED G2 (LT-V562F)	4205					161		3500				SI-B8U26256CUS
LM18x560mm 4000lm 840 72LED G2 (LT-V562F)	4345					167		4000				SI-B8T26256CUS
LM18x560mm 4000lm 850 72LED G2 (LT-V562F)	4400					169		5000				SI-B8R26256CUS
LM 40x560mm 8500lm 830 144LED G2 (LT-V564F)	8300	52.1	46.5	1120	1350	159	80+	3000	560x39.8x5.5	-30~+50	cUL, UL	SI-B8V52256CUS
LM 40x560mm 8500lm 835 144LED G2 (LT-V564F)	8410					161		3500				SI-B8U52256CUS
LM 40x560mm 8500lm 840 144LED G2 (LT-V564F)	8690					167		4000				SI-B8T52256CUS
LM 40x560mm 8500lm 850 144LED G2 (LT-V564F)	8800					169		5000				SI-B8R52256CUS

- R-series
- High lm/W for high ceiling/height applications
 - High efficacy up to 169lm/W @4000K
 - Lifetime: 50,000 hours, Beam angle: 115°C

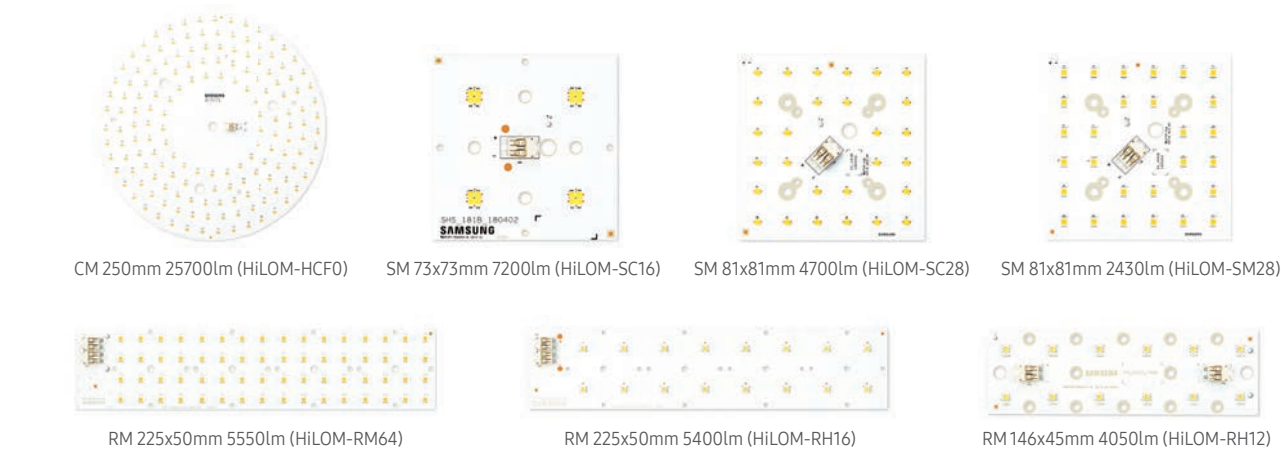


Product	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Size (mm)	Temperature Range (°C)	Certification	Part Number
LM 55x280mm 1600lm 830 33LED G1 (LT-R286A)	1433	9.4	32.3	290	540	153	80+	3000	280×55×5.8 280×55×7.4	-20~+50	CE, cUL, ENEC, UL	SI-B8V09A280WW SI-B8V09B280WW
LM 55x280mm 1600lm 840 33LED G1 (LT-R286A)	1501					160		4000				SI-B8T09A280WW SI-B8T09B280WW
LM 55x280mm 1600lm 850 33LED G1 (LT-R286A)	1547					165		5000				SI-B8R09A280WW SI-B8R09B280WW
LM 55x280mm 1600lm 865 33LED G1 (LT-R286A)	1501					160		6500				SI-B8P09A280WW SI-B8P09B280WW
LM 55x280mm 3000lm 830 33LED G1 (LT-R286C)	2810	20.7	32	648	1050	136	80+	3000	280×55×5.8 280×55×7.4	-20~+50	CE	SI-B8V211280WW SI-B8V212280WW
LM 55x280mm 3000lm 840 33LED G1 (LT-R286C)	3000					145		4000				SI-B8T211280WW SI-B8T212280WW
LM 55x280mm 3000lm 850 33LED G1 (LT-R286C)	3000					145		5000				SI-B8R211280WW SI-B8R212280WW

* Front wiring connector, Rear wiring connector

HiLOM

- Greater design flexibility for various fixture designs
- High performance, 4,400lm (700mA) with efficacy of 132lm/W
- Compatible with LEDiL



Model	Light Distribution Type	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
CM 250mm 25700lm 740 G1 (HiLOM-HCF0)	Ledil VICTORIA-HB	25700	148.8	45.1	3300	3630	173	70+	4000	240	-30~+80	CE, UL	SL-B7TANB0L2WW
SM 73x73mm 7200lm 740 G1 (HiLOM-SC16)	Ledil STRADA-2*2-MX	7200	59.3	24.9	2100	2310	138	70+		175			SL-B7T5N90L2WW
SM 81x81mm 4700lm 740 G1 (HiLOM-SC28)	Ledil STRADELLA-IP-28	4700	27.7	19.8	1400	1540	171	70+		21.2			SL-B7T2N80L2WW
SM 81x81mm 2430lm 840 G1 (HiLOM-SM28)	Ledil STRADELLA-IP-28	2430	13.8	19.7	700	770	176	80+		21.2			SL-B8T1N50L4WW
RM 225x50mm 5550lm 840 G1 (HiLOM-RM64)	Ledil STRADELLA-16-HB	5550	31.5	22.5	1400	1540	176	80+		40.0			SL-B8T3N80L4WW
RM 225x50mm 5400lm 740 G1 (HiLOM-RH16)	Ledil STRADA-2*2	5400	32.9	23.5	1400	1540	164	70+		40.0			SL-B7T3N80LCWW
RM 146x45mm 4050lm 740 G1 (HiLOM-RH12)	Ledil STRADA-IP-2*6	4050	24.7	23.4	700	770	164	70+		32.5			SL-B7T2N70LCWW

I Driver

- Driver
- Value solution
 - 146lm/W [4000K, CRI80+, Tp 50°C]



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	cUL, UL	>0.9	Programmable Output Current, 5% - 100% Dimming
SI-CA2029601US	100	420 x 31 x 26		24-48	1400-2000						