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Paradigm Shift in Outdoor Lighting Market

Mismanaged outdoor lighting interferes circadian rhythms of environments including humans and wildlife. As the lighting pollution becomes a threat to our lives, the demand for right usage of artificial lighting is increasing.

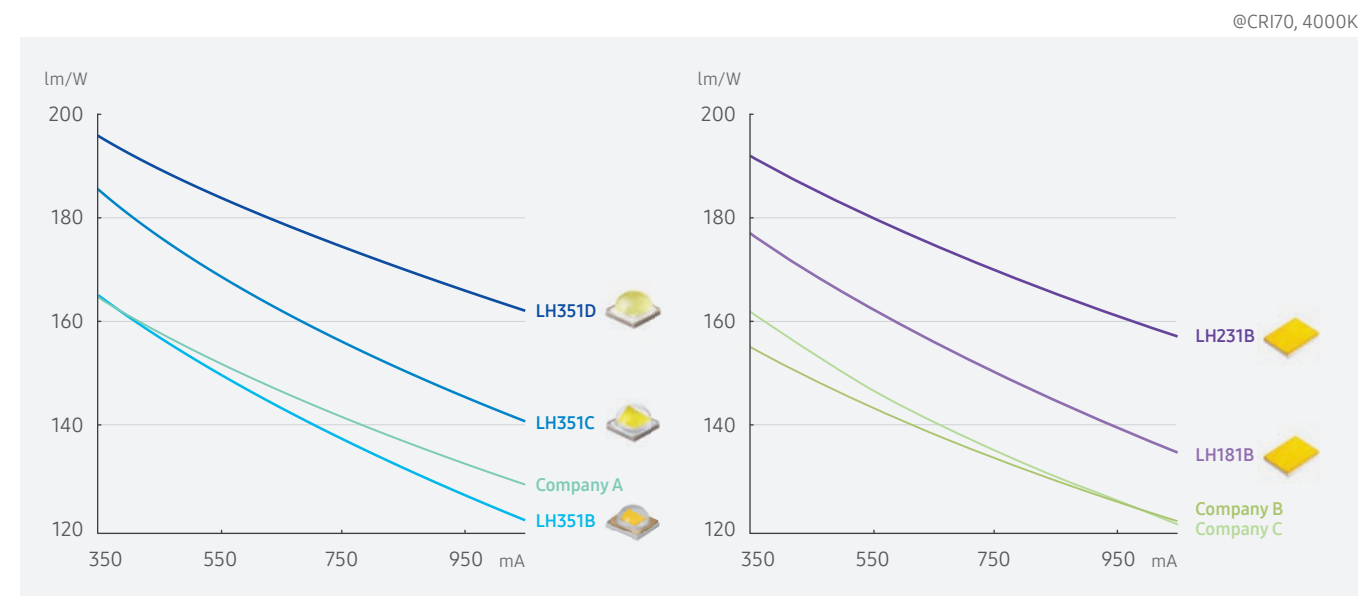
The main purpose of using outdoor lighting is securing safety at night and this essential function requires outdoor lighting to have high brightness levels and reliability in various environments.



Performance

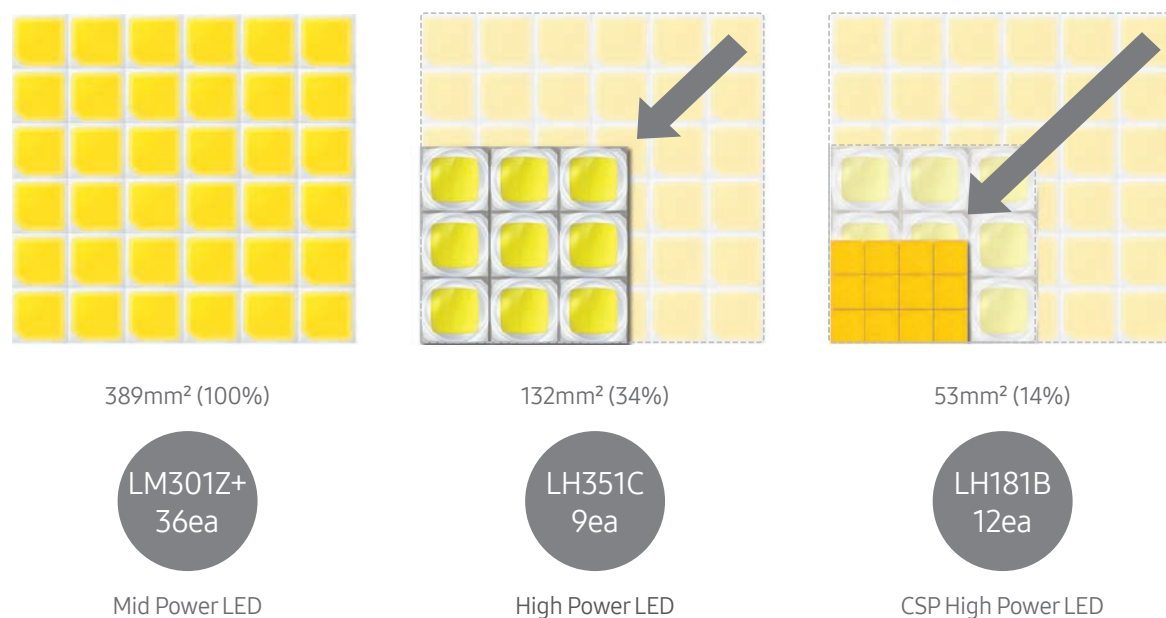
Industry-leading Light Efficacy

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



High Lumen Density

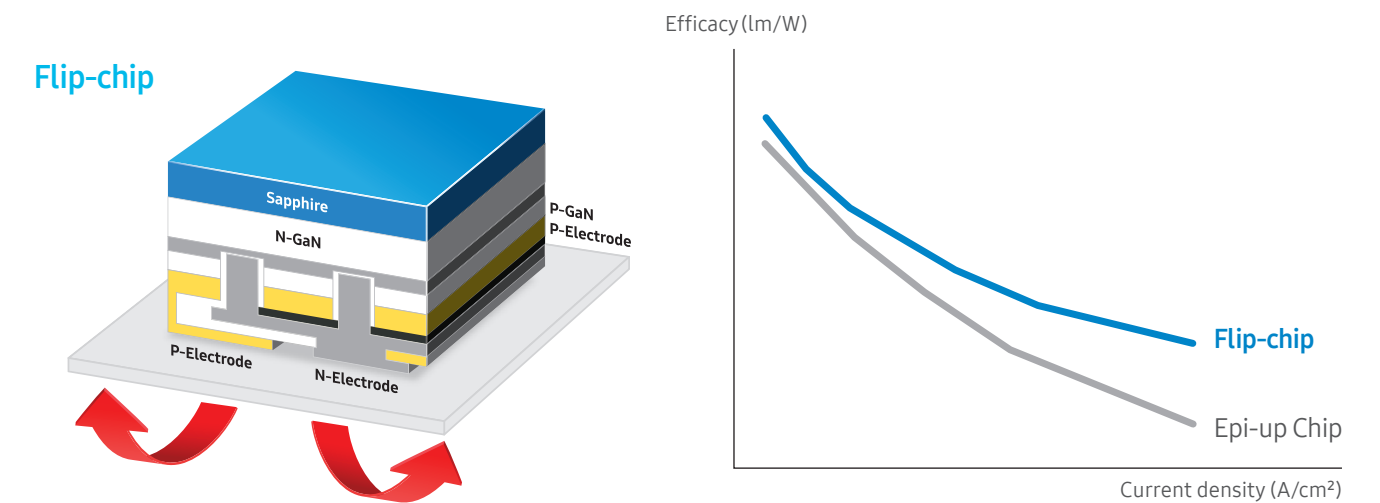
Design flexibility and total cost down by a smaller size of circuit board and LES dimension



Reliability

Excellent Heat Management

Long-lasting uniform light via low thermal resistance



No Degradation in Harsh Environment

Designed with high sulfur-resistant chip structure

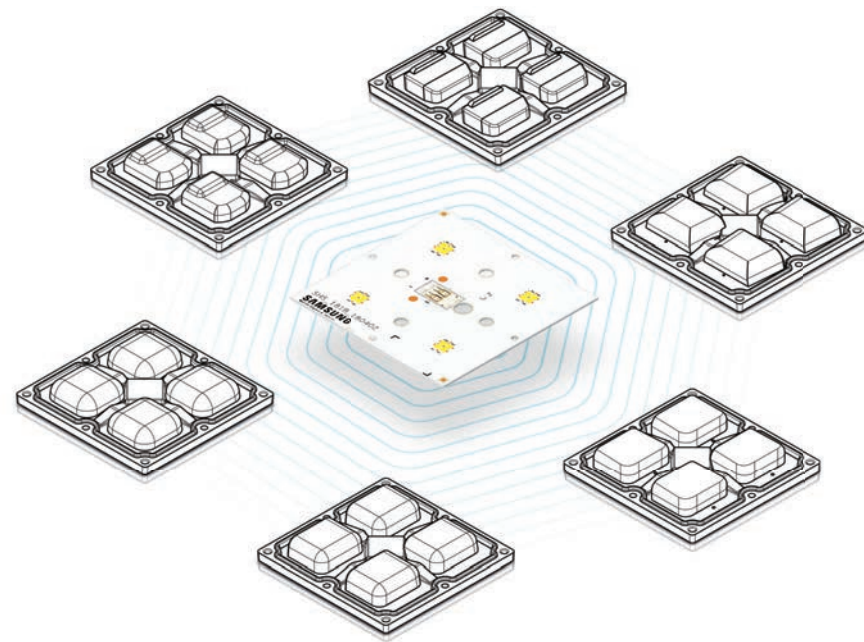


Service

Easy Design

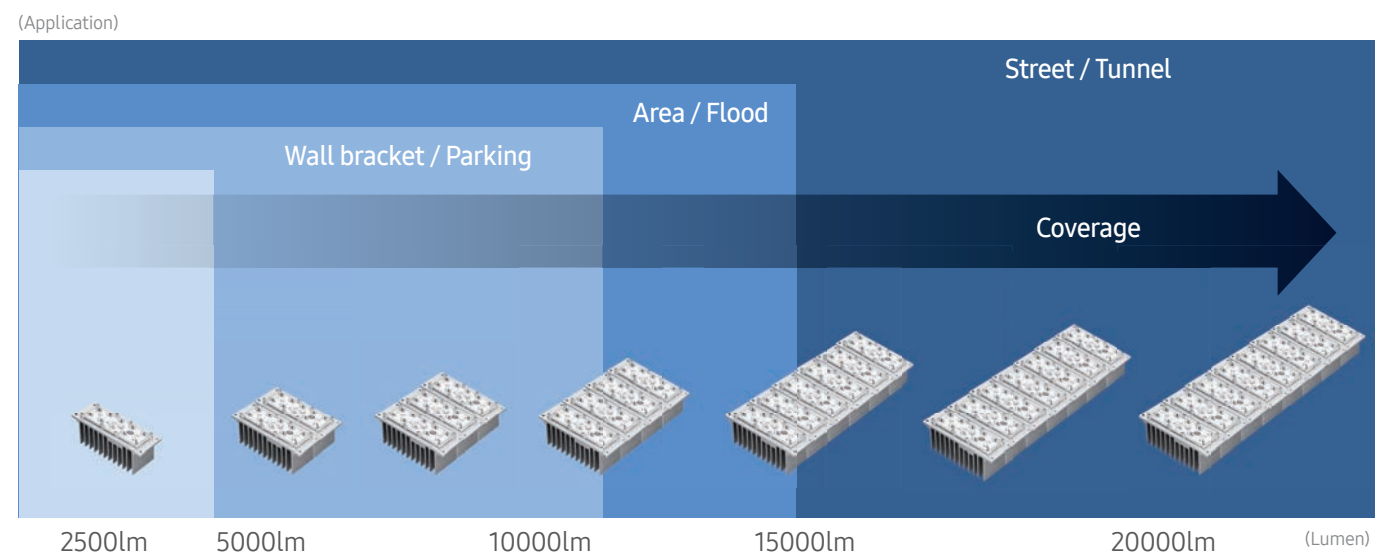
Eco partner for lens compatibility

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



Seamless modular design

Greater design flexibility for a wide range of outdoor lighting applications



One Stop Solution

Total solutions from LED packages to modules and drivers



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
	3500	SPMWH32AMD7XAW0S0	SF	28	30
			SG	30	32
			SH	32	34
	4000	SPMWH32AMD7XAU0S0	SG	30	32
			SH	32	34
			SG	30	32
	5000	SPMWH32AMD7XAT0S0	SH	32	34
			SG	30	32
			SH	32	34
	5700	SPMWH32AMD7XAR0S0	SG	30	32
			SH	32	34
			SG	30	32
	6500	SPMWH32AMD7XAQ0S0	SH	32	34
			SG	30	32
			SH	32	34

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	SPMWH3326MP3WAV0SJ	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+	2700	SPMWH3326MP3WAQ0S0	SJ	34	36
			SK	36	38
			SK	36	38
	3000	SPMWH3326MP5WAW0S0	SH	32	34
			SJ	34	36
			SK	36	38
	3500	SPMWH3326MP5WAV0S0	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	SPMWH3326MP7WAT0S0	SE	26	28
			SF	28	30
			SG	30	32
	4000	SPMWH3326MP7WAR0S0	SF	28	30
			SG	30	32
			SG	30	32
	5000	SPMWH3326MP7WAQ0S0	SF	28	30
			SG	30	32
			SG	30	32
	5700	SPMWH3326MP7WAP0S0	SF	28	30
			SG	30	32
			SG	30	32
	6500	SPMWH3326MP7WAP0SL	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
	5000	SPMWH3326FP3GBR0S0	SH	142	151
			SJ	151	160
	5700	SPMWH3326FP3GBQ0S0	SH	142	151
			SJ	151	160
80+	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
	5000	SPMWH3326FP5GBR0S0	SG	133	142
			SH	142	151
	5700	SPMWH3326FP5GBQ0S0	SG	133	142
			SH	142	151
	6500	SPMWH3326FP5GBP0S0	SG	133	142
			SH	142	151
90+	2700	SPMWH3326FP7GBW0S0	SC	97	106
			SD	106	115
	3000	SPMWH3326FP7GBV0S0	SD	106	115
			SE	115	124
	3500	SPMWH3326FP7GBU0S0	SD	106	115
			SE	115	124
	4000	SPMWH3326FP7GBT0S0	SE	115	124
			SF	124	133
	5000	SPMWH3326FP7GBR0S0	SE	115	124
			SF	124	133
	5700	SPMWH3326FP7GBQ0S0	SE	115	124
			SF	124	133
	6500	SPMWH3326FP7GBP0S0	SE	115	124
			SF	124	133

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
	6500	SCP7PTF1HEL1P◇N34E	N1, P1, Q1	150	180
80+	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
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

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 × 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 × 5.0mm

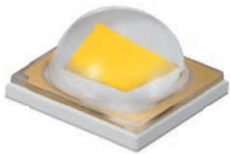
@160mA, 24V, 25°C					
CRI	CCT (K)	Part Number	Luminous Flux (lm)		
			Bin	Min.	Max.
70+	2700	SPHWH1L5N603XEW5A1	A1	540	600
	3000	SPHWH1L5N603XEV5A1	A1	540	620
	4000	SPHWH1L5N603XET5A1	A1	580	650
	5000	SPHWH1L5N603XER5A1	A1	580	650
	5700	SPHWH1L5N603XEQ5A1	A1	580	650
	6500	SPHWH1L5N603XEP5A1	A1	540	620
	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

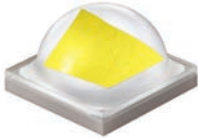


- Operates at a maximum current of up to 1.5A
- High efficacy outdoor solution (Delivering set efficacy over 110lm/W @700mA)
- Excellent efficacy: 172lm/W @350mA, 85°C, 4000K
- Footprint: 3.5mm x 3.5mm

@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
		SPHWH2L3D30CD4QTN3	N1, P1, Q1	150	180
	5000	SPHWH2L3D30CD4QTP3	P1, Q1, R1	160	190
		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
	2700	SPHWH2L3D30ED4V0J3	J1, K1, M1	120	150
		SPHWH2L3D30ED4V0K3	K1, M1, N1	130	160
		SPHWH2L3D30ED4V0M3	M1, N1, P1	140	170
	3000	SPHWH2L3D30ED4U0K3	K1, M1, N1	130	160
		SPHWH2L3D30ED4U0M3	M1, N1, P1	140	170
		SPHWH2L3D30ED4T0K3	K1, M1, N1	130	160
	3500	SPHWH2L3D30ED4T0M3	M1, N1, P1	140	170
		SPHWH2L3D30ED4RTM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4RTN3	N1, P1, Q1	150	180
	4000	SPHWH2L3D30ED4RTM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4QTM3	M1, N1, P1	140	170
		SPHWH2L3D30ED4PQM3	K1, M1, N1	130	160
	5000	SPHWH2L3D30ED4PTK3	M1, N1, P1	140	170
		SPHWH2L3D30ED4PTM3	M1, N1, P1	140	170
90+	2700	SPHWH2L3D30GD4W0F3	F1, G1, H1	90	120
		SPHWH2L3D30GD4W0G3	G1, H1, J1	100	130
		SPHWH2L3D30GD4V0G3	G1, H1, J1	100	130
	3000	SPHWH2L3D30GD4V0H3	H1, J1, K1	110	140
		SPHWH2L3D30GD4U0G3	G1, H1, J1	100	130
		SPHWH2L3D30GD4U0H3	H1, J1, K1	110	140
	3500	SPHWH2L3D30GD4T0J3	J1, K1, M1	120	150
		SPHWH2L3D30GD4T0K3	K1, M1, N1	130	160
	4000				
	5000				

I High Power LEDs

LH351C



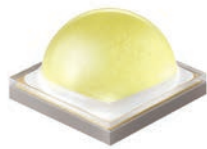
- Operates at a maximum current of up to 2.0A
- High efficacy outdoor solution (Delivering set efficacy over 120lm/W @700mA)
- Excellent efficacy: 160lm/W @700mA, 85°C
- Footprint: 3.5mm x 3.5mm

@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
		SPHWHTL3D50CE4T0PF	PB, QB, RB	290	350
	4000	SPHWHTL3D50CE4T0QF	QB, RB, SB	310	370
		SPHWHTL3D50CE4RTPF	PB, QB, RB	290	350
		SPHWHTL3D50CE4RTQF	QB, RB, SB	310	370
	5000	SPHWHTL3D50CE4QTPF	PB, QB, RB	310	370
		SPHWHTL3D50CE4QTQF	QB, RB, SB	310	370
		SPHWHTL3D50CE4PTPF	PB, QB, RB	290	350
	6500	SPHWHTL3D50CE4PTQF	QB, RB, SB	310	370
75+	3000	SPHWHTL3D50DE4V0PF	PB, QB, RB	290	350
	3500	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
		SPHWHTL3D50DE4QTQF	QB, RB, SB	310	370
	5700				
80+	2700	SPHWHTL3D50EE4W0MF	MB, NB, PB	250	310
	3000	SPHWHTL3D50EE4V0NF	NB, PB, QB	270	330
	3500	SPHWHTL3D50EE4U0NF	NB, PB, QB	270	330
	4000	SPHWHTL3D50EE4T0MF	MB, NB, PB	250	310
		SPHWHTL3D50EE4T0NF	NB, PB, QB	270	330
	5000	SPHWHTL3D50EE4RTNF	NB, PB, QB	270	330
		SPHWHTL3D50EE4RTPF	PB, QB, RB	290	350
	5700	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
		SPHWHTL3D50GE4U0KF	KB, MB, NB	230	290
	3500	SPHWHTL3D50GE4T0JF	JB, KB, MB	210	270
		SPHWHTL3D50GE4T0KF	KB, MB, NB	230	290
		SPHWHTL3D50GE4RTKF	KB, MB, NB	230	290
	4000	SPHWHTL3D50GE4RTMF	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
		SPHWHTL3DA0EF4RTS6	S2, T2, U2	380	420
	5000	SPHWHTL3DA0EF4RTT6	T2, U2, V2	400	440
		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		
			MacAdam 3step	SPHWAHDNF25YZQ3D3				
		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		
			MacAdam 3step	SPHWAHDNG25YZQ3D3				
		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

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				
			MacAdam 2step	SPHWAHDNH25YZT2D3				
		4000	MacAdam 3step	SPHWAHDNH25YZT3D3	5089	167		
			MacAdam 3step	SPHWAHDNH25YZR3D3				
			MacAdam 3step	SPHWAHDNH25YZQ3D3				
		5000	MacAdam 3step	SPHWAHDNH25YZQ3D3	5132	169		
		5700	MacAdam 3step	SPHWAHDNH25YZQ3D3	5132	169		
		6500	MacAdam 3step	SPHWAHDNH25YZP3D3	5089	167		
	90+	2700	MacAdam 2step	SPHWAHDNH27YZW2D3	3947	130		
			MacAdam 3step	SPHWAHDNH27YZW3D3				
		3000	MacAdam 2step	SPHWAHDNH27YZV2D3	4152	136		
			MacAdam 3step	SPHWAHDNH27YZV3D3				
			MacAdam 2step	SPHWAHDNH27YZU2D3				
		3500	MacAdam 3step	SPHWAHDNH27YZU3D3	4276	141		
			MacAdam 2step	SPHWAHDNH27YZT2D3				
		4000	MacAdam 3step	SPHWAHDNH27YZT3D3	4364	143		
 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		
		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				
			MacAdam 3step	SPHWAHDNK25YZV3D3				
		3500	MacAdam 2step	SPHWAHDNK25YZU2D3	6138	168		
			MacAdam 3step	SPHWAHDNK25YZU3D3				
			MacAdam 2step	SPHWAHDNK25YZT2D3				
		4000	MacAdam 3step	SPHWAHDNK25YZT3D3	6261	172		
			MacAdam 3step	SPHWAHDNK25YZR3D3				
			MacAdam 3step	SPHWAHDNK25YZQ3D3				
		5000	MacAdam 3step	SPHWAHDNK25YZQ3D3	6313	173		
		5700	MacAdam 3step	SPHWAHDNK25YZQ3D3	6313	173		
		6500	MacAdam 3step	SPHWAHDNK25YZP3D3	6261	172		
	90+	2700	MacAdam 2step	SPHWAHDNK27YZW2D3	4856	133		
			MacAdam 3step	SPHWAHDNK27YZW3D3				
		3000	MacAdam 2step	SPHWAHDNK27YZV2D3	5108	140		
			MacAdam 3step	SPHWAHDNK27YZV3D3				
			MacAdam 2step	SPHWAHDNK27YZU2D3				
		3500	MacAdam 3step	SPHWAHDNK27YZU3D3	5260	144		
			MacAdam 2step	SPHWAHDNK27YZT2D3				
		4000	MacAdam 3step	SPHWAHDNK27YZT3D3	5369	147		
			MacAdam 3step	SPHWAHDNK27YZR3D3				
		5000	MacAdam 3step	SPHWAHDNK27YZR3D3	5415	148		

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 Gen 3	70+	3000	MacAdam 3step	SPHWAHDNL231ZV3D3	9518	174	1080mA 50.7V	
		4000	MacAdam 3step	SPHWAHDNL231ZT3D3	9694	177		
		5000	MacAdam 3step	SPHWAHDNL231ZR3D3	9870	180		
	80+	2700	MacAdam 2step	SPHWAHDNL251ZW2D3	8386	153		
			MacAdam 3step	SPHWAHDNL251ZW3D3				
		3000	MacAdam 2step	SPHWAHDNL251ZV2D3	8813	161		
			MacAdam 3step	SPHWAHDNL251ZV3D3				
			MacAdam 3step	SPHWAHDNL251ZV3D3				
		3500	MacAdam 2step	SPHWAHDNL251ZU2D3	9071	166		
			MacAdam 3step	SPHWAHDNL251ZU3D3				
			MacAdam 3step	SPHWAHDNL251ZT2D3				
		4000	MacAdam 3step	SPHWAHDNL251ZT3D3	9253	169		
			MacAdam 3step	SPHWAHDNL251ZT3D3				
			MacAdam 3step	SPHWAHDNL251ZT3D3				
		5000	MacAdam 3step	SPHWAHDNL251ZR3D3	9330	170		
		5700	MacAdam 3step	SPHWAHDNL251ZQ3D3	9330	170		
		6500	MacAdam 3step	SPHWAHDNL251ZP3D3	9253	169		
	90+	2700	MacAdam 2step	SPHWAHDNL271ZW2D3	7177	131		
			MacAdam 3step	SPHWAHDNL271ZW3D3				
		3000	MacAdam 2step	SPHWAHDNL271ZV2D3	7549	138		
			MacAdam 3step	SPHWAHDNL271ZV3D3				
			MacAdam 3step	SPHWAHDNL271ZV3D3				
		3500	MacAdam 2step	SPHWAHDNL271ZU2D3	7774	142		
			MacAdam 3step	SPHWAHDNL271ZU3D3				
		4000	MacAdam 2step	SPHWAHDNL271ZT2D3	7934	145		
			MacAdam 3step	SPHWAHDNL271ZT3D3				
 LC080D Gen 3	70+	5000	MacAdam 3step	SPHWAHDNL271ZR3D3	8002	146	1620mA 50.7V	
		3000	MacAdam 3step	SPHWAHDNM231ZV3D3	14115	172		
		4000	MacAdam 3step	SPHWAHDNM231ZT3D3	14376	175		
		5000	MacAdam 3step	SPHWAHDNM231ZR3D3	14637	178		
	80+	2700	MacAdam 2step	SPHWAHDNM251ZW2D3	12437	151		
			MacAdam 3step	SPHWAHDNM251ZW3D3				
		3000	MacAdam 2step	SPHWAHDNM251ZV2D3	13069	159		
			MacAdam 3step	SPHWAHDNM251ZV3D3				
			MacAdam 3step	SPHWAHDNM251ZV3D3				
		3500	MacAdam 2step	SPHWAHDNM251ZU2D3	13452	164		
			MacAdam 3step	SPHWAHDNM251ZU3D3				
			MacAdam 2step	SPHWAHDNM251ZT2D3				
		4000	MacAdam 3step	SPHWAHDNM251ZT3D3	13721	167		
			MacAdam 3step	SPHWAHDNM251ZT3D3				
			MacAdam 3step	SPHWAHDNM251ZT3D3				
		5000	MacAdam 3step	SPHWAHDNM251ZR3D3	13836	168		
		5700	MacAdam 3step	SPHWAHDNM251ZQ3D3	13836	168		
		6500	MacAdam 3step	SPHWAHDNM251ZP3D3	13721	167		
	90+	2700	MacAdam 2step	SPHWAHDNM271ZW2D3	10643	130		
			MacAdam 3step	SPHWAHDNM271ZW3D3				
		3000	MacAdam 2step	SPHWAHDNM271ZV2D3	11195	136		
			MacAdam 3step	SPHWAHDNM271ZV3D3				
			MacAdam 3step	SPHWAHDNM271ZV3D3				
		3500	MacAdam 2step	SPHWAHDNM271ZU2D3	11529	140		
			MacAdam 3step	SPHWAHDNM271ZU3D3				
			MacAdam 3step	SPHWAHDNM271ZU3D3				
		4000	MacAdam 2step	SPHWAHDNM271ZT2D3	11766	143		
			MacAdam 3step	SPHWAHDNM271ZT3D3				
5000	MacAdam 3step	SPHWAHDNM271ZR3D3	11867	144				

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	2581	166		
		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	SPHWAHDNF25YZU3D2					

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		101		
			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	720mA 34.6V
				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				
			MacAdam 3step	SPHWAHDNH25Yzt2D2				
		4000	MacAdam 2step	SPHWAHDNH25Yzt3D2	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		
			MacAdam 3step	SPHWAHDNH27YzR3D2				
	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		
			MacAdam 3step	SPHWAHDNH28YzR3D2				
 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		
			MacAdam 3step	SPHWAHDNK27YzR3D2				

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					
	70+	4000	MacAdam 2step	SPHWAHDNK28Yzt2D2	4241	113			
			MacAdam 3step	SPHWAHDNK28Yzt3D2					
		5000	MacAdam 3step	SPHWAHDNK28YzR3D2	4277	114			
			MacAdam 3step	SPHWAHDNL231ZV3D2				9225	164
		4000	MacAdam 3step	SPHWAHDNL231ZT3D2	9521	170			
			5000	MacAdam 3step				SPHWAHDNL231ZR3D2	9668
80+	2700	MacAdam 2step		SPHWAHDNL251ZW2D2	8107	144	1080mA 52V		
		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				
		MacAdam 3step	SPHWAHDNL251ZQ3D2			9084		162	
	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				
		MacAdam 3step	SPHWAHDNL271ZR3D2						
	 LC060D Gen 2	70+	3000	MacAdam 3step	SPHWAHDNM231ZV3D2	13465		160	1620mA 52V
				MacAdam 3step	SPHWAHDNM231ZT3D2				
4000			MacAdam 3step	SPHWAHDNM231ZT3D2	13896	165			
			MacAdam 3step	SPHWAHDNM231ZR3D2			14112	168	
5000			MacAdam 3step	SPHWAHDNM231ZR3D2	14112	168			
			80+	2700			MacAdam 2step	SPHWAHDNM251ZW2D2	
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			
		MacAdam 3step		SPHWAHDNM251ZQ3D2			13258	157	
5700		MacAdam 3step		SPHWAHDNM251ZQ3D2	13258	157			
		6500		MacAdam 3step			SPHWAHDNM251ZP3D2	13121	
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				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				

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			
			MacAdam 3step	SPHWAHDNG25YZV3D1			
		3500	MacAdam 2step	SPHWAHDNG25YZU2K3	5418	145	
			MacAdam 3step	SPHWAHDNG25YZU3K3			
			MacAdam 2step	SPHWAHDNG25YZU2D1			
			MacAdam 3step	SPHWAHDNG25YZU3D1			
		4000	MacAdam 2step	SPHWAHDNG25YZT2K3	5535	148	
			MacAdam 3step	SPHWAHDNG25YZT3K3			
			MacAdam 2step	SPHWAHDNG25YZT2D1			
			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			
			MacAdam 3step	SPHWAHDNG27YZW3D1			
		3000	MacAdam 2step	SPHWAHDNG27YZV2J7	4525	121	
			MacAdam 3step	SPHWAHDNG27YZV3J7			
			MacAdam 2step	SPHWAHDNG27YZV2D1			
			MacAdam 3step	SPHWAHDNG27YZV3D1			
3500		MacAdam 2step	SPHWAHDNG27YZU2J8	4640	124		
		MacAdam 3step	SPHWAHDNG27YZU3J8				
		MacAdam 2step	SPHWAHDNG27YZU2D1				
		MacAdam 3step	SPHWAHDNG27YZU3D1				
4000		MacAdam 2step	SPHWAHDNG27YZT2J8	4742	127		
		MacAdam 3step	SPHWAHDNG27YZT3J8				
		MacAdam 2step	SPHWAHDNG27YZT2D1				
		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

Module

Modular Platform Engine

- Total solution integrating LED+Optics+Thermal
- With LH351B/LH351C, higher lumen density of 2850lm
- IP66



Model	Light Distribution type	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	
RM 150x65mm 2850lm 7xx G2 (T-type Gen 2)	Type2 Medium	Connector	2650	21	30	700	1000	128	70+	3000	295	+10~+92	CE,UL	SL-P7V2W52MBWW	
	Type5		2800					135		4000				SL-P7T2W52MBWW	
			2850					135		5000				SL-P7R2W52MBWW	
	Type1 Short	Wire	2850	21	30	700	1000	135.0	70+	5000	295	+10~+92	CE,UL	SL-PGR2W51SBGL	
	Type2 Very Short													SL-PGR2W57SBGL	
	Type2 Short													SL-PGR2W52SBGL	
	Type2 Medium													SL-P7R2W5R1BGL	
	Type5													SL-P7R2W5R2BGL	
RM 150x65mm 2900lm 8xx G2.5 (T-type Gen 2.5, LH181A)	Type2 Short	Connector	2600	20	28	700	1000	130	80+	3000	290	+10~+92	CE,UL	SL-P8V2W6RA1WW	
	Type2 Short		2800					140		4000				SL-P8T2W6RA1WW	
	Type2 Short		2900					145		5000				SL-P8R2W6RA1WW	
	Type2 Short							145		5700				SL-P8Q2W6RA1WW	
	Type1 Very Short							140		4000				SL-P8T2W6SA1WW	
	Type1 Very Short							145		5000				SL-P8R2W6SA1WW	
	Tunnel							145		5000				SL-P8R2W6TA1WW	
	Tunnel							145		5700				SL-P8Q2W6TB1WW	
RM 150x65mm 2850lm 735 G4	Security	Connector	2850	20	29	700	1000	143	75+	3500	295	+10~+92	CE,UL	SL-P7U1E6SACKR	
RM 150x65mm 2300lm 750 G4	Road	Connector	2300	14	20	700	1000	164	75+	5000	295	+10~+92	CE,UL	SL-PFR1E33LCWW	
RM 150x65mm 3210lm 750 G4	Tunnel	Connector	3210	18	25.4	700	1000	178	75+	5000	295	+10~+92	CE,UL	SL-P8R1E63MAWW	

Module

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+		17.5			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+	32.5	40.0			SL-B7T2N80LCWW
RM 146x45mm 4050lm 740 G1 (HiLOM-RH12)	Ledil STRADA-IP-2*6	4050	24.7	23.4	700	770	164	70+					SL-B7T2N70LCWW

Product Line-up

Driver



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	25	265 x 70 x 48.5	220-240	27-33	700	86	<20	1-10V	KC, KS	>0.9	Independent Type, IP67, Molex, <THD 30%@1V Dimming, High Surge (±8-10KV)
SL-L21425017KR	50				1400	86.5				>0.95	
SL-L22127517KR	75				2100	87					
SL-L2282A017KR	100				2800	88.5					
SL-L2422A517KR	150				4200	90.5					
SL-L2562B017KR	200				5600	91					



SL-L21425019KR

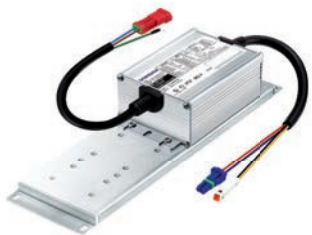


SL-L22127519KR



SL-L2352A213KR

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-L21425019KR	50	182x69x39.5	220-240	27-33	700	88	<20	Non Dim	KC, KS	>0.95	Independent Type, 2Channel, Available KS cert, KET Connector
SL-L22127519KR	75	182x69x39.5	220-240	27-33	700	90	<20	Non Dim	KC, KS	>0.95	Independent Type, 3Channel, Available KS cert, KET Connector
SL-L2352A213KR	125	228×68×39.5	220-240	24-33	3500	90	<20	1-10V	KS	>0.95	Independent Type, IP67, Molex



SL-L27012518KR



SL-L21425018KR
SL-L22127518KR
SL-L2282A018KR



SL-L2422A518KR
SL-L2562B018KR

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-L27012518KR	25	265 x 70 x 48.5	220-240	27-33	700	86	<20	1-10V	KC, KS	>0.9	Independent Type, IP67, Waterproof JST, High Surge (±8-10KV)
SL-L21425018KR	50				1400	86.5				>0.95	
SL-L22127518KR	75				2100	87					
SL-L2282A018KR	100				2800	88.5					
SL-L2422A518KR	150				4200	90.5					
SL-L2562B018KR	200				5600	91					



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	177 × 40 × 37	220-240	18-33	700	84	<20	1-10V	KS	>0.9	Independent Type, IP67, KET
SL-L2701251AKR	25					85					
SL-L2701301AKR	30					86					
SL-L2701401AKR	40	210 × 40 × 37		39-63		87					
SL-L2701501AKR	50					88					
SL-L2701751AKR	75					89					
SL-L2701A01AKR	100	182 × 66 × 38.8		85-125		90					
SL-L2701A51AKR	150					91					
SL-L2701B01AKR	200					92					
		228 × 68 × 39.5				177-243					

Product Line-up



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		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	120-277	30-39	700-1050	87	<20	0-10V	cUL, UL	>0.9	Programmable Output Current, IP67
SL-LU1425501US	55	173 x 67.5 x 40	120-277	30-39	1400	88	<20	0-10V	cUL, UL	>0.9	Independent Type, IP67
SL-LU2027801US	78	173 x 67.5 x 40			2000						
SL-LU262A001US	100	187 x 67.5 x 40			2600						



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 × 42.5 × 34.5	100-277	18-36	700	85	<20	0-10V	cUL, UL	>0.9	Independent Type, IP67
SL-LA1425002US	50				1400	88					
SL-L22127502US	75	173 × 67.5 × 40			2100	89					
SL-LA142A002US	100	187 × 67.5 × 40		17-34	2800	87					
SL-LA212A502US	150	221 × 67.5 × 40		18-36	4200	88					
SL-L2282B002US	200	251 × 67.5 × 40			5600						



SL-LA212A001WW



SL-LA212A003WW

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-LA212A001WW	100	Φ130 x 70	120-240	29-71	140-2100	90.5	<20	0-10V	CE, ENEC	>0.9	Independent Type, Programmable Output Current, IP65
SL-LA212A003WW	100	187 x 67.5 x 37	120-240	29-71	140-2100	90.5	<20	0-10V	CE, ENEC	>0.9	Independent Type, Programmable Output Current, IP67