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Feb. 2018 Ver. 1

# Samsung LED Total Solutions for

• Components • Modules • Drivers

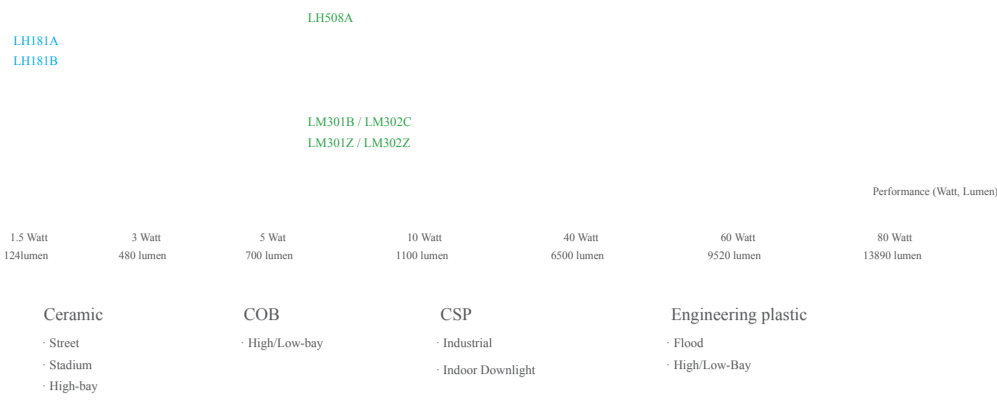
Feb. 2018

## Highly reliable LED component solutions in various types of chip structures from mid to high power LEDs

Total solution for outdoor lighting

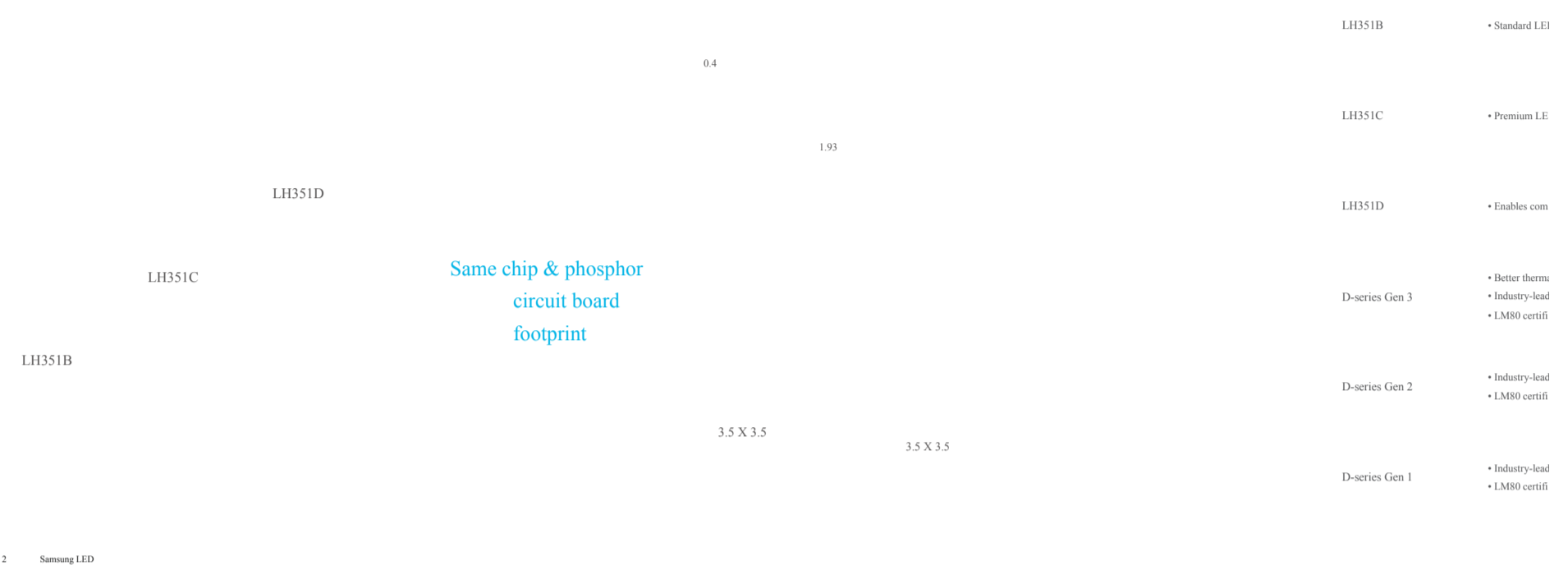
# Line-up

Price (ratio)	Product	Key Feature
	LH351D	• 3W class hig • Low thermal • Wider beam
	LH351C	
	LH351B	
	D-series Gen3 D-series Gen2 D-series Gen1	• 3W class hig • Operates at a • The industry
	LH181A	
	LH181B	
		• 5W class sup



- LH231B • Suitable for l
- LM301B • 0.3W class r  
• Highest effie
- LM302C • 0.4W class r  
• Highest effie
- LM301Z • 0.3W class r  
• EMC resin fi
- LM302Z • 0.9W class r  
• EMC resin fi

Standard footprints allowing for greater design flexibility



Ceramic High Power LEDs

Ceramic High Power LEDs

Component **LH351B**

CRI	CCT (K)	Part Number	Bin	Luminous Flux (lm)		CRI	CCT (K)
				Min.	Max.		
70+	2700	SPHWH2L3D30CD4W0K3	K1, M1, N1	130	160	90+	2700
		SPHWH2L3D30CD4W0M3	M1, N1, P1	140	170		
		SPHWH2L3D30CD4W0N3	N1, P1, Q1	150	180		
		SPHWH2L3D30CD4V0K3	K1, M1, N1	130	160		
	3000	SPHWH2L3D30CD4V0M3	M1, N1, P1	140	170		3500
		SPHWH2L3D30CD4V0N3	N1, P1, Q1	150	180		
		SPHWH2L3D30CD4U0K3	K1, M1, N1	130	160		
		SPHWH2L3D30CD4U0M3	M1, N1, P1	140	170		
	3500	SPHWH2L3D30CD4T0M3	M1, N1, P1	140	170		4000
		SPHWH2L3D30CD4T0N3	N1, P1, Q1	150	180		
		SPHWH2L3D30CD4T0P3	P1, Q1, R1	160	190		
		SPHWH2L3D30CD4RTM3	M1, N1, P1	140	170		
	5000	SPHWH2L3D30CD4RTN3	N1, P1, Q1	150	180		5000
		SPHWH2L3D30CD4RTP3	P1, Q1, R1	160	190		
		SPHWH2L3D30CD4QTM3	M1, N1, P1	140	170		
		SPHWH2L3D30CD4QTN3	N1, P1, Q1	150	180		
5700	SPHWH2L3D30CD4QTP3	P1, Q1, R1	160	190	5000		
	SPHWH2L3D30CD4PTM3	M1, N1, P1	140	170			
	SPHWH2L3D30CD4PTN3	N1, P1, Q1	150	180			
	SPHWH2L3D30CD4PTP3	P1, Q1, R1	160	190			
6500	SPHWH1L3D30DD4RTM3	M1, N1, P1	140	170	70+	CCT (K)	
	SPHWH1L3D30DD4RTN3	N1, P1, Q1	150	180			
	SPHWH1L3D30DD4RTP3	P1, Q1, R1	160	190			
	SPHWH1L3D30DD4QTM3	M1, N1, P1	140	170			
75+	SPHWH1L3D30DD4QTN3	N1, P1, Q1	150	180	3500		
	SPHWH1L3D30DD4QTP3	P1, Q1, R1	160	190			
	SPHWH2L3D30ED4W0H3	H1, J1, K1	110	140			
	SPHWH2L3D30ED4W0J3	J1, K1, M1	120	150			
2700	SPHWH2L3D30ED4W0K3	K1, M1, N1	130	160	4000		
	SPHWH2L3D30ED4V0H3	H1, J1, K1	110	140			
	SPHWH2L3D30ED4V0J3	J1, K1, M1	120	150			
	SPHWH2L3D30ED4V0K3	K1, M1, N1	130	160			
3000	SPHWH2L3D30ED4U0J3	J1, K1, M1	120	150	5000		
	SPHWH2L3D30ED4U0K3	K1, M1, N1	130	160			
	SPHWH2L3D30ED4T0J3	J1, K1, M1	120	150			
	SPHWH2L3D30ED4T0K3	K1, M1, N1	130	160			
3500	SPHWH2L3D30ED4T0M3	M1, N1, P1	140	170	5700		
	SPHWH2L3D30ED4RTK3	K1, M1, N1	130	160			
	SPHWH2L3D30ED4RTM3	M1, N1, P1	140	170			
	SPHWH2L3D30ED4RTN3	N1, P1, Q1	150	180			
4000	SPHWH2L3D30ED4RTM3	M1, N1, P1	140	170	80+	CCT (K)	
	SPHWH2L3D30ED4RTN3	N1, P1, Q1	150	180			
	SPHWH2L3D30ED4RTK3	K1, M1, N1	130	160			
	SPHWH2L3D30ED4RTM3	M1, N1, P1	140	170			

**LH351C**

5700	SPHWH2L3D30ED4QTK3	K1, M1, N1	130	160	5700
	SPHWH2L3D30ED4QTM3	M1, N1, P1	140	170	2700
6000	SPHWH2L3D30ED4PQK3	K1, M1, N1	130	160	3000
	SPHWH2L3D30ED4PQM3	M1, N1, P1	140	170	90+ 3500
6500	SPHWH2L3D30ED4PTK3	K1, M1, N1	130	160	4000
	SPHWH2L3D30ED4PTM3	M1, N1, P1	140	170	5000

Ceramic High Power LEDs

Ceramic High Power LEDs

Component **LH351D**

CRI	CCT (K)	Part Number	Bin	Luminous Flux (lm)		CRI	CCT (K)
				Min.	Max.		
	2700	SPHWHTL3DA0CF4W0S6	S2, T2, U2	380	440		2700
		SPHWHTL3DA0CF4W0T6	T2, U2, V2	400	460		
	3000	SPHWHTL3DA0CF4V0T6	T2, U2, V2	400	460		3000
		SPHWHTL3DA0CF4V0U6	U2, V2, W2	420	480		
	3500	SPHWHTL3DA0CF4U0T6	T2, U2, V2	400	460	90+	3500
		SPHWHTL3DA0CF4U0U6	U2, V2, W2	420	480		
70+	4000	SPHWHTL3DA0CF4T0U6	U2, V2, W2	420	480		4000
		SPHWHTL3DA0CF4T0V6	V2, W2, Y2	440	500		5000
	5000	SPHWHTL3DA0CF4RTV6	V2, W2, Y2	440	500		6000
		SPHWHTL3DA0CF4RTW6	W2, Y2, Z2	460	520		
	5700	SPHWHTL3DA0CF4QTV6	V2, W2, Y2	440	500		
		SPHWHTL3DA0CF4QTW6	W2, Y2, Z2	460	520		
	6500	SPHWHTL3DA0CF4PTU6	U2, V2, W2	420	480		
		SPHWHTL3DA0CF4PTV6	V2, W2, Y2	440	500		
	2700	SPHWHTL3DA0EF4W0Q6	Q2, R2, S2	340	400		
		SPHWHTL3DA0EF4W0R6	R2, S2, T2	360	420		
	3000	SPHWHTL3DA0EF4V0R6	R2, S2, T2	360	420		
		SPHWHTL3DA0EF4U0R6	R2, S2, T2	360	420		
	3500	SPHWHTL3DA0EF4U0S6	S2, T2, U2	380	440		
		SPHWHTL3DA0EF4T0S6	S2, T2, U2	380	440		
	4000	SPHWHTL3DA0EF4T0T6	T2, U2, V2	400	460		
		SPHWHTL3DA0EF4RTS6	S2, T2, U2	380	440		
80+	5000	SPHWHTL3DA0EF4RTT6	T2, U2, V2	400	460		
		SPHWHTL3DA0EF4QRT6	T2, U2, V2	400	460		
	5300	SPHWHTL3DA0EF4QRU6	U2, V2, W2	420	480		
		SPHWHTL3DA0EF4QTT6	T2, U2, V2	400	460		
	5700	SPHWHTL3DA0EF4QTU6	U2, V2, W2	420	480		
		SPHWHTL3DA0EF4PQT6	T2, U2, V2	400	460		
	6000	SPHWHTL3DA0EF4PQU6	U2, V2, W2	420	480		
		SPHWHTL3DA0EF4PTT6	T2, U2, V2	400	460		
	6500	SPHWHTL3DA0EF4PTU6	U2, V2, W2	420	480		

CSP High Power LEDs

CSP High Power LEDs

Component **LH181A**

**LH231B**

CRI	CCT (K)	Part Number	Bin	Luminous Flux (lm)		CRI	CCT (K)
				Min.	Max.		
	2700	SCP7WTF1HPLAW0J34E	J1, K1, M1	120	150		2700
		SCP7VTF1HPLAV0K34E	K1, M1, N1	130	160		
	3500	SCP7UTF1HPLAU0K34E	K1, M1, N1	130	160		3000
70+	4000	SCP7TTF1HPLAT0M34E	M1, N1, P1	140	170		3500
		SCP7RTF1HPLARTM34E	M1, N1, P1	140	170	70+	4000
	5700	SCP7QTF1HPLAQT34E	M1, N1, P1	140	170		
		SCP7PTF1HPLAPT34E	M1, N1, P1	140	170		5000
	2700	SCP8WTF1HPLAW0J34E	J1, K1, M1	120	150		5700
		SCP8VTF1HPLAV0K34E	K1, M1, N1	130	160		
	3500	SCP8UTF1HPLAU0K34E	K1, M1, N1	130	160		6500

CRI	CCT (K)	Part Number	Bin	Luminous Flux (lm)	Max.
80+	4000	SCP8TTF1HPLAT0K34E	K1, M1, N1	130	160
	5000	SCP8RTF1HPLARTK34E	K1, M1, N1	130	160
	5700	SCP8QTF1HPLAQTK34E	K1, M1, N1	130	160
	6500	SCP8PTF1HPLAPTK34E	K1, M1, N1	130	160
	3000	SCP9VTF1HPLAV0G34E	G1, H1, J1	100	130
90+	4000	SCP9TTF1HPLAT0G34E	G1, H1, J1	100	130

# LH181B

CRI	CCT (K)	Part Number	Bin	Luminous Flux (lm)	
				Min.	Max.
	2700	SCP7WTF1HEL1W◊M34E	M1, N1, P1	140	170
	3000	SCP7VTF1HEL1V◊M34E	M1, N1, P1	140	170
	3500	SCP7UTF1HEL1U◊N34E	N1, P1, Q1	150	180
70+	4000	SCP7TTF1HEL1T◊N34E	N1, P1, Q1	150	180
	5000	SCP7RTF1HEL1R◊P34E	P1, Q1, R1	160	190
	5700	SCP7QTF1HEL1Q◊P34E	P1, Q1, R1	160	190
	6500	SCP7PTF1HEL1P◊N34E	N1, P1, Q1	150	180
	2700	SCP8WTF1HEL1WK◊34E	K1, M1, N1	130	160
	3000	SCP8VTF1HEL1VK◊34E	K1, M1, N1	130	160
	3500	SCP8UTF1HEL1U◊M34E	M1, N1, P1	140	170
80+	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
90+	3500	SCP9UTF1HEL1U◊H34E	H1, J1, K1	110	140
	4000	SCP9TTF1HEL1T◊H34E	H1, J1, K1	110	140
	5000	SCP9RTF1HEL1R◊H34E	H1, J1, K1	110	140

[350mA, 85°C]

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

## EMC Mid Power LEDs

## EMC Mid Power LEDs

### Component LM301B

CRI	CCT (K)	Part Number	Bin	Luminous Flux (lm)		CRI	CCT (K)
				Min.	Max.		
	3000	SPMWH32AMD3WAV0S0	SJ	34	36		
			SK	36	38		3000
			SL	38	40		
	3500	SPMWH32AMD3WAU0S0	SJ	34	36		3500
70+			SK	36	38	70+	
			SL	38	40		4000
	4000	SPMWH32AMD3WAT0S0	SM	40	42		
			SK	36	38		5000
	5000	SPMWH32AMD3WAR0S0	SL	38	40		
			SM	40	42		2700
	2700	SPMWH32AMD5WAW0S0	SH	32	34		
			SJ	34	36		3000
	3000	SPMWH32AMD5WAV0S0	SK	36	38		
			SJ	34	36		3500
	3500	SPMWH32AMD5WAU0S0	SK	36	38		
80+	4000	SPMWH32AMD5WAT0S0	SK	36	38	80+	4000
			SL	38	40		
	5000	SPMWH32AMD5WAR0S0	SK	36	38		
			SL	38	40		5000
	5700	SPMWH32AMD5WAQ0S0	SK	36	38		
			SL	38	40		5700
	6500	SPMWH32AMD5WAP0S0	SL	38	40		
			SK	36	38		5000
	2700	SPMWH32AMD7WAW0S0	SF	28	30		6500
			SG	30	32		
	3000	SPMWH32AMD7WAV0S0	SF	28	30		2700
			SG	30	32		
	3500	SPMWH32AMD7WAU0S0	SG	30	32		3000
			SH	32	34		
	4000	SPMWH32AMD7WAT0S0	SG	30	32		
90+			SH	32	34		3500
	5000	SPMWH32AMD7WAR0S0	SG	30	32		
			SH	32	34		4000
	5700	SPMWH32AMD7WAQ0S0	SG	30	32	90+	
			SH	32	34		5000
	6500	SPMWH32AMD7WAP0S0	SG	30	32		
			SH	32	34		5000

[65mA, 25°C]

EMC Mid Power LEDs

Component **LM301Z**

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

[65mA, 25°C]

EMC Mid Power LEDs

**LH508A**

CRI	CCT (K)
70+	3000
	4000
	5000
80+	5700
	2700
	3000
90+	4000
	5000
90+	2700
	3000
90+	4000

**LM302Z**

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

[150mA, 25°C]

Chip-on-Board LEDs

Component **D-series Gen 3**

T <sub>p</sub> =85°C	LC016D Gen 3	LC019D Gen 3	LC026D Gen 3	LC033D Gen 3	LC040D Gen 3	LC060D Gen 3	LC080D Gen 3	Product	CRI	CCT (K)	Cc
LES			14.5mm				22 mm			2700	MacA
			33.8V				50.7V			3000	MacA
Typical	15.2W (450 mA)	18.3W (540 mA)	24.3W (720 mA)	30.4W (900 mA)	36.5W (1080 mA)	54.8W (1080 mA)	82.1W (1620 mA)		80+	3500	MacA
Max.	43.5W (1150 mA)	52.2W (1380 mA)	69.6W (1840 mA)	86.9W (2300 mA)	104.3W (2760 mA)	152.9W (2760 mA)	229.3W (4140 mA)			4000	MacA
Size			19mm x 19mm				28mm x 28mm			5000	MacA
										5700	MacA
										6500	MacA
										2700	MacA
								LC019D Gen 3		3000	MacA

Chip-on-Board LEDs

Product	CRI	CCT (K)	Color rank	Part Number	Luminous Flux Typ. (lm)	$T_j=85^{\circ}\text{C}$ Luminous Efficacy Typ. (lm/W)	$I_f$ (mA) $V_f$ (V)	90+	3500	MacA		
LC016D Gen 3	80+	2700	MacAdam 2step	SPHWHAHDNE25YZW2D3	2376	156	450mA 33.8V	70+	4000	MacA		
			MacAdam 3step	SPHWHAHDNE25YZW3D3						MacA		
		3000	MacAdam 2step	SPHWHAHDNE25YZV2D3	2497	164			5000	MacA		
			MacAdam 3step	SPHWHAHDNE25YZV3D3					3000	MacA		
	3500	MacAdam 2step	SPHWHAHDNE25YZU2D3	2570	169	80+		4000	MacA			
			MacAdam 3step					SPHWHAHDNE25YZU3D3	5000	MacA		
		4000	MacAdam 2step	SPHWHAHDNE25YZT2D3	2622			172	2700	MacA		
			MacAdam 3step	SPHWHAHDNE25YZT3D3					3000	MacA		
	5000	MacAdam 3step	SPHWHAHDNE25YZR3D3	2644	174	90+		3500	MacA			
			MacAdam 3step					SPHWHAHDNE25YZQ3D3	4000	MacA		
		6500	MacAdam 3step	SPHWHAHDNE25YZP3D3	2622			172	5000	MacA		
			MacAdam 2step	SPHWHAHDNE27YZW2D3					LC026D Gen 3	5000	MacA	
	LC026D Gen 3	90+	2700	MacAdam 3step	SPHWHAHDNE27YZW3D3	2033		134	450mA 33.8V	90+	5700	MacA
				MacAdam 2step	SPHWHAHDNE27YZV2D3							6500
			3000	MacAdam 2step	SPHWHAHDNE27YZV2D3	2139		141			2700	MacA
				MacAdam 3step	SPHWHAHDNE27YZV3D3							3000
		3500	MacAdam 2step	SPHWHAHDNE27YZU2D3	2203	145		3000		MacA		
				MacAdam 3step						SPHWHAHDNE27YZU3D3	90+	3500
			4000	MacAdam 2step	SPHWHAHDNE27YZT2D3	2248				148	4000	MacA
				MacAdam 3step	SPHWHAHDNE27YZT3D3						4000	MacA
5000		MacAdam 3step	SPHWHAHDNE27YZR3D3	2267	149	5000	MacA					
			MacAdam 3step				SPHWHAHDNE27YZR3D3	5000		MacA		

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Chip-on-Board LEDs

Chip-on-Board LEDs

Component

Product	CRI	CCT (K)	Color rank	Part Number	$T_j=85^{\circ}\text{C}$ Luminous Flux Typ. (lm)	$T_j=85^{\circ}\text{C}$ Luminous Efficacy Typ. (lm/W)	$I_f$ (mA) $V_f$ (V)	Product	CRI	CCT (K)	Co	
LC033D Gen 3	70+	3000	MacAdam 3step	SPHWHAHDNH23YZV3D3	5235	172	900mA 33.8V	70+	3000	MacA		
			MacAdam 3step	SPHWHAHDNH23YZT3D3						5332	175	4000
		5000	MacAdam 3step	SPHWHAHDNH23YZR3D3	5429	178			5000	MacA		
			MacAdam 2step	SPHWHAHDNH25YZW2D3						2700	MacA	
	80+	2700	MacAdam 3step	SPHWHAHDNH25YZW3D3	4612	152		80+	2700	MacA		
			MacAdam 2step	SPHWHAHDNH25YZV2D3						3000	MacA	
		3000	MacAdam 3step	SPHWHAHDNH25YZV3D3	4847	159			3000	MacA		
			MacAdam 2step	SPHWHAHDNH25YZU2D3						3500	MacA	
	3500	MacAdam 3step	SPHWHAHDNH25YZU3D3	4989	164	3500		80+	3500	MacA		
			MacAdam 2step					SPHWHAHDNH25YZT2D3	4000	MacA		
		4000	MacAdam 3step	SPHWHAHDNH25YZT3D3	5089			167	4000	MacA		
			MacAdam 3step	SPHWHAHDNH25YZR3D3						5132	169	5000
	LC060D Gen 3	90+	5700	MacAdam 3step	SPHWHAHDNH25YZQ3D3	5132		169	900mA 33.8V	90+	5700	MacA
				MacAdam 3step	SPHWHAHDNH25YZP3D3							5089
			2700	MacAdam 2step	SPHWHAHDNH27YZW2D3	3947		130			2700	MacA
				MacAdam 3step	SPHWHAHDNH27YZW3D3							3000
		3000	MacAdam 2step	SPHWHAHDNH27YZV2D3	4152	136		3000		MacA		
				MacAdam 3step						SPHWHAHDNH27YZV3D3	90+	3500
			3500	MacAdam 2step	SPHWHAHDNH27YZU2D3	4276				141	3500	MacA
				MacAdam 3step	SPHWHAHDNH27YZU3D3							4000
4000		MacAdam 2step	SPHWHAHDNH27YZT2D3	4364	143	4000	MacA					
			MacAdam 3step				SPHWHAHDNH27YZT3D3	5000		MacA		
		5000	MacAdam 3step	SPHWHAHDNH27YZR3D3	4401		145	5000		MacA		
			MacAdam 3step	SPHWHAHDNK23YZV3D3						3000	MacA	
LC040D Gen 3		70+	4000	MacAdam 3step	SPHWHAHDNK23YZT3D3	6560	180	1080mA 33.8V		70+	4000	MacA
				MacAdam 3step	SPHWHAHDNK23YZR3D3							6679
			2700	MacAdam 2step	SPHWHAHDNK25YZW2D3	5675	155				2700	MacA
				MacAdam 3step	SPHWHAHDNK25YZW3D3							3000
	3000	MacAdam 2step	SPHWHAHDNK25YZV2D3	5963	163	3000	MacA					
			MacAdam 3step				SPHWHAHDNK25YZV3D3		3500	MacA		
		3500	MacAdam 2step	SPHWHAHDNK25YZU2D3	6138		168		3500	80+	3500	MacA
			MacAdam 3step	SPHWHAHDNK25YZU3D3						4000	MacA	
	4000	MacAdam 2step	SPHWHAHDNK25YZT2D3	6261	172	4000	MacA					
			MacAdam 3step				SPHWHAHDNK25YZT3D3		5000	MacA		
		5000	MacAdam 3step	SPHWHAHDNK25YZR3D3	6313		173		5000	MacA		
			MacAdam 3step	SPHWHAHDNK25YZQ3D3						5700	MacA	
	LC080D Gen 3	90+	6500	MacAdam 3step	SPHWHAHDNK25YZP3D3	6261	172		1080mA 33.8V	90+	6500	MacA
				MacAdam 2step	SPHWHAHDNK27YZW2D3							2700
			2700	MacAdam 3step	SPHWHAHDNK27YZW3D3	4856	133				2700	MacA
				MacAdam 2step	SPHWHAHDNK27YZV2D3							3000
3000		MacAdam 3step	SPHWHAHDNK27YZV3D3	5108	140	3000	MacA					
			MacAdam 2step				SPHWHAHDNK27YZV2D3	90+		3500	MacA	
		3500	MacAdam 2step	SPHWHAHDNK27YZU2D3	5260		144	3500		MacA		
			MacAdam 3step	SPHWHAHDNK27YZU3D3						4000	MacA	
4000		MacAdam 2step	SPHWHAHDNK27YZT2D3	5369	147	4000	MacA					
			MacAdam 3step				SPHWHAHDNK27YZT3D3	5000		MacA		
		5000	MacAdam 3step	SPHWHAHDNK27YZR3D3	5415		148	5000		MacA		

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Component D-series Gen 2

T <sub>j</sub> =85°C	LC016D Gen 2	LC019D Gen 2	LC026D Gen 2	LC033D Gen 2	LC040D Gen 2	LC060D Gen 2	LC080D Gen 2	Product	CRI	CCT (K)	Color
LES		14.5mm				22 mm				2700	MacAdam 2step
			34.6 V			52 V				3000	MacAdam 3step
Typical	15.6 W (450 mA)	18.7 W (540 mA)	24.9 W (720 mA)	31.1W (900 mA)	37.4 W (1080 mA)	56.1 W (1080 mA)	84.2 W (1620 mA)			3500	MacAdam 2step
Max.	43.1 W (1150 mA)	51.8 W (1380 mA)	69 W (1840 mA)	86.2 W (2300 mA)	103.5 W (2760 mA)	143.4 W (2760 mA)	215 W (4140 mA)		80+	4000	MacAdam 3step
Size		19mm x 19mm				28mm x 28mm				5000	MacAdam 2step
										5700	MacAdam 3step
								LC019D Gen 2		6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										90+	MacAdam 3step
										3500	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										80+	MacAdam 3step
										3500	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
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										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
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										4000	MacAdam 3step
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										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
										3000	MacAdam 2step
										3500	MacAdam 3step
										90+	MacAdam 2step
										3500	MacAdam 3step
										4000	MacAdam 2step
										4000	MacAdam 3step
										5000	MacAdam 2step
										5700	MacAdam 3step
										6500	MacAdam 2step
										2700	MacAdam 3step
					</						

Product	Power (W)	Current (mA)	Part Number	Luminous Flux (lm)	Luminous Efficacy (lm/W)	Color Temp (K)	Beam Angle	Mounting
LC040D Gen 2	5000	135	SPHWAHDNH27YZR3D2	4216	135	70+	4000	MacA
	3000	169	SPHWAHDNK23YZV3D2	6304	169	70+	5000	MacA
	4000	174	SPHWAHDNK23YZT3D2	6506	174	70+	3000	MacA
	5000	177	SPHWAHDNK23YZR3D2	6607	177	70+	4000	MacA
	2700	148	SPHWAHDNK25YZW2D2	5547	148	70+	5000	MacA
	3000	156	SPHWAHDNK25YZV2D2	5837	156	70+	2700	MacA
	3000	156	SPHWAHDNK25YZV3D2	5837	156	70+	3000	MacA
	3500	161	SPHWAHDNK25YZU2D2	6016	161	70+	3000	MacA
	3500	161	SPHWAHDNK25YZU3D2	6016	161	80+	3500	MacA
	4000	164	SPHWAHDNK25YZT2D2	6146	164	80+	4000	MacA
	4000	164	SPHWAHDNK25YZT3D2	6146	164	80+	4000	MacA
	5000	165	SPHWAHDNK25YZR3D2	6175	165	1080mA 34.6V	5000	MacA
	5700	166	SPHWAHDNK25YZQ3D2	6205	166	5700	MacA	
	6500	164	SPHWAHDNK25YZP3D2	6138	164	6500	MacA	
	2700	127	SPHWAHDNK27YZW2D2	4755	127	LC080D Gen 2	2700	MacA
	3000	134	SPHWAHDNK27YZV2D2	5024	134	3000	MacA	
	3000	134	SPHWAHDNK27YZV3D2	5024	134	3000	MacA	
	3500	138	SPHWAHDNK27YZU2D2	5152	138	90+	3500	MacA
	4000	141	SPHWAHDNK27YZT2D2	5266	141	4000	MacA	
	5000	143	SPHWAHDNK27YZR3D2	5325	143	5000	MacA	

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Component D-series Gen 1

T <sub>j</sub> =85°C	LC016D Gen 1	LC019D Gen 1	LC026D Gen 1	LC040D Gen 1	LC060D Gen 1	LC080D Gen 1	Product	CRI	CCT (K)	Co
LES		14.5mm			22 mm					MacAc
Typical			34.6 V			52 V			2700	MacAc
	15.6 W (450 mA)	18.7 W (540 mA)	24.9 W (720 mA)	37.4 W (1080 mA)	56.1 W (1080 mA)	84.2 W (1620 mA)				MacAc
Max.	43.1 W (1150 mA)	51.8 W (1380 mA)	69 W (1840 mA)	103.5 W (2760 mA)	143.4 W (2760 mA)	215 W (2760 mA)			3000	MacAc
Size		19mm x 19mm			28mm x 28mm					MacAc
								90+		MacAc
									3500	MacAc
							LC016D Gen 1			MacAc
Product	CRI	CCT (K)	Color rank	Part Number	Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	I <sub>v</sub> (mA) V <sub>i</sub> (V)			MacAc
									4000	MacAc
		2700	MacAdam 2step	SPHWAHDNE25YZW2H9	2065	133				MacAc
			MacAdam 3step	SPHWAHDNE25YZW3H9						MacAc
			MacAdam 2step	SPHWAHDNE25YZW2D1	2169	139			5000	MacAc
			MacAdam 3step	SPHWAHDNE25YZW3D1						MacA
			MacAdam 2step	SPHWAHDNE25YZV2J0	2182	140			2700	MacA
			MacAdam 3step	SPHWAHDNE25YZV3J0						MacA
		3000	MacAdam 2step	SPHWAHDNE25YZV2D1	2291	147				MacA
			MacAdam 3step	SPHWAHDNE25YZV3D1						MacA
			MacAdam 2step	SPHWAHDNE25YZU2J1	2263	145			3000	MacA
			MacAdam 3step	SPHWAHDNE25YZU3J1						MacA
		3500	MacAdam 2step	SPHWAHDNE25YZU2D1	2376	153	450mA 34.6V			MacA
			MacAdam 3step	SPHWAHDNE25YZU3D1					3500	MacA
			MacAdam 2step	SPHWAHDNE25YZT2J1	2304	148				MacA
			MacAdam 3step	SPHWAHDNE25YZT3J1						MacA
		4000	MacAdam 2step	SPHWAHDNE25YZT2D1	2419	155				MacA
			MacAdam 3step	SPHWAHDNE25YZT3D1					4000	MacA
			MacAdam 3step	SPHWAHDNE25YZR3J2	2324	149				MacA
		5000	MacAdam 3step	SPHWAHDNE25YZR3D1	2440	157				MacA
			MacAdam 3step	SPHWAHDNE25YZQ3J2	2324	149			5000	MacA
		5700	MacAdam 3step	SPHWAHDNE25YZQ3D1	2440	157				MacA
			MacAdam 3step	SPHWAHDNE25YZP3J1	2304	148			5700	MacA
		6500	MacAdam 3step	SPHWAHDNE25YZP3D1	2419	155				MacA

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Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>r</sub> =85°C		I <sub>r</sub> (mA) V <sub>r</sub> (V)	Product	CRI	CCT (K)	Co									
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)														
LC019D Gen 1	90+	2700	MacAdam 2step	SPHWHAHDFNF27YZW2H9	2104	113	540mA 34.6V	LC026D Gen 1	90+	2700	MacAdam 3step	SPHWHAHDFNF27YZW3H9	MacAdam 2step	SPHWHAHDFNF27YZW2D1	MacAdam 3step	SPHWHAHDFNF27YZW3D1				
			MacAdam 2step	SPHWHAHDFNF27YZV2J0							MacAdam 3step	SPHWHAHDFNF27YZV3J0								
			MacAdam 2step	SPHWHAHDFNF27YZV2D1							MacAdam 3step	SPHWHAHDFNF27YZV3D1								
			MacAdam 2step	SPHWHAHDFNF27YZU2J1							MacAdam 3step	SPHWHAHDFNF27YZU3J1								
			MacAdam 2step	SPHWHAHDFNF27YZU2D1							MacAdam 3step	SPHWHAHDFNF27YZU3D1								
		80+	3000	MacAdam 2step	SPHWHAHDFNF27YZT2J2	2287				122	720mA 34.6V	LC040D Gen 1	80+	3500	MacAdam 3step	SPHWHAHDFNF27YZT3J2	MacAdam 2step	SPHWHAHDFNF27YZT2D1	MacAdam 3step	SPHWHAHDFNF27YZT3D1
				MacAdam 2step	SPHWHAHDFNF27YZT2D1										MacAdam 3step	SPHWHAHDFNF27YZT3D1				
				MacAdam 2step	SPHWHAHDFNF27YZR3J8										MacAdam 3step	SPHWHAHDFNF27YZR3D1				
				MacAdam 2step	SPHWHAHDFNF27YZR3D1										MacAdam 3step	SPHWHAHDFNF27YZR3D1				
				MacAdam 2step	SPHWHAHDFNF27YZR3D1										MacAdam 3step	SPHWHAHDFNF27YZR3D1				
	80+		2700	MacAdam 2step	SPHWHAHDFNF27YZR3J8	2337	125	720mA 34.6V	LC040D Gen 1	80+	2700	MacAdam 3step	SPHWHAHDFNF27YZR3D1	MacAdam 2step	SPHWHAHDFNF27YZR3D1	MacAdam 3step	SPHWHAHDFNF27YZR3D1			
				MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1							
				MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1							
				MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1							
				MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1							
		3000	MacAdam 2step	SPHWHAHDFNF27YZR3D1	2454	131	3000				MacAdam 2step	SPHWHAHDFNF27YZR3D1	MacAdam 3step	SPHWHAHDFNF27YZR3D1						
			MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1								
			MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1								
			MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1								
			MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1								
80+	3500	MacAdam 2step	SPHWHAHDFNF27YZR3D1	2456	131	720mA 34.6V	LC040D Gen 1	80+	3500	MacAdam 3step	SPHWHAHDFNF27YZR3D1	MacAdam 2step	SPHWHAHDFNF27YZR3D1	MacAdam 3step	SPHWHAHDFNF27YZR3D1					
		MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1									
		MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1									
		MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1									
		MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1									
	5000	MacAdam 2step	SPHWHAHDFNF27YZR3D1	3225	129				5000	MacAdam 2step	SPHWHAHDFNF27YZR3D1	MacAdam 3step	SPHWHAHDFNF27YZR3D1							
		MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1									
		MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1									
		MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1									
		MacAdam 2step	SPHWHAHDFNF27YZR3D1							MacAdam 3step	SPHWHAHDFNF27YZR3D1									
5700	MacAdam 2step	SPHWHAHDFNF27YZR3D1	3386	136	5700	MacAdam 2step	SPHWHAHDFNF27YZR3D1	MacAdam 3step	SPHWHAHDFNF27YZR3D1											
	MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1													
	MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1													
	MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1													
	MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1													
6500	MacAdam 2step	SPHWHAHDFNF27YZR3D1	3389	136	6500	MacAdam 2step	SPHWHAHDFNF27YZR3D1	MacAdam 3step	SPHWHAHDFNF27YZR3D1											
	MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1													
	MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1													
	MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1													
	MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1													

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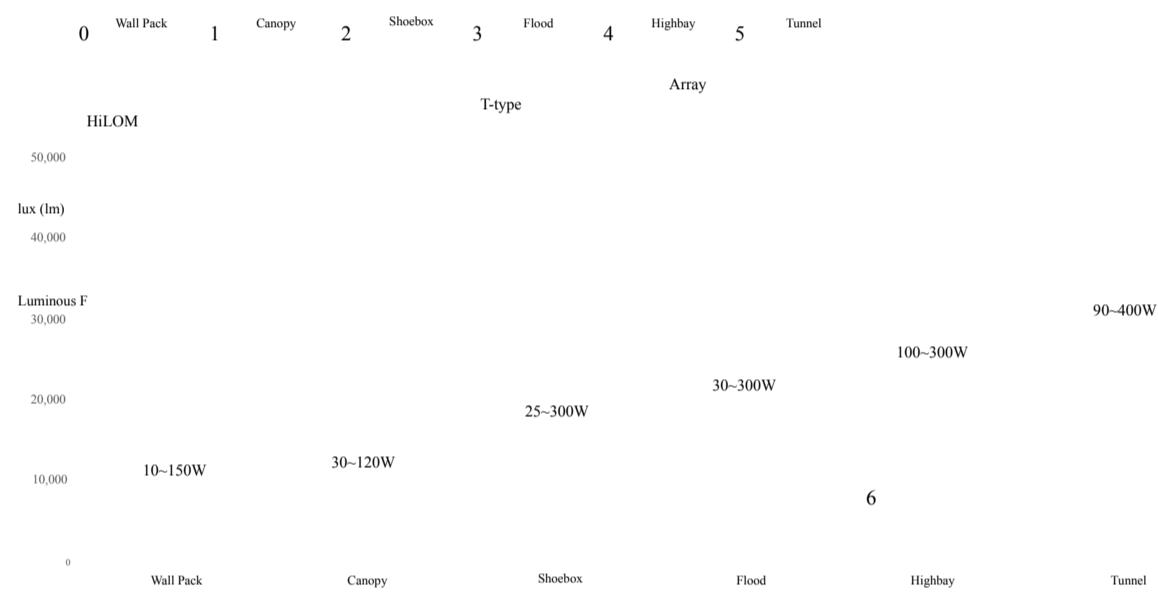
Component

Product	CRI	CCT (K)	Color rank	Part Number	T <sub>r</sub> =85°C		I <sub>r</sub> (mA) V <sub>r</sub> (V)	Product	CRI	CCT (K)	Co									
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)														
LC040D Gen 1	70+	2700	MacAdam 2step	SPHWHAHDFNF27YZW2J6	4283	115	1080mA 34.6V	LC080D Gen 1	80+	3000	MacAdam 3step	SPHWHAHDFNF27YZW3J6	MacAdam 2step	SPHWHAHDFNF27YZW2D1	MacAdam 3step	SPHWHAHDFNF27YZW3D1				
			MacAdam 2step	SPHWHAHDFNF27YZV2J7							MacAdam 3step	SPHWHAHDFNF27YZV3J7								
			MacAdam 2step	SPHWHAHDFNF27YZV2D1							MacAdam 3step	SPHWHAHDFNF27YZV3D1								
			MacAdam 2step	SPHWHAHDFNF27YZU2J8							MacAdam 3step	SPHWHAHDFNF27YZU3J8								
			MacAdam 2step	SPHWHAHDFNF27YZU2D1							MacAdam 3step	SPHWHAHDFNF27YZU3D1								
		80+	3000	MacAdam 2step	SPHWHAHDFNF27YZT2J8	4497				120	3000	LC080D Gen 1	80+	3500	MacAdam 3step	SPHWHAHDFNF27YZT3J8	MacAdam 2step	SPHWHAHDFNF27YZT2D1	MacAdam 3step	SPHWHAHDFNF27YZT3D1
				MacAdam 2step	SPHWHAHDFNF27YZT2D1										MacAdam 3step	SPHWHAHDFNF27YZT3D1				
				MacAdam 2step	SPHWHAHDFNF27YZR3J8										MacAdam 3step	SPHWHAHDFNF27YZR3D1				
				MacAdam 2step	SPHWHAHDFNF27YZR3D1										MacAdam 3step	SPHWHAHDFNF27YZR3D1				
				MacAdam 2step	SPHWHAHDFNF27YZR3D1										MacAdam 3step	SPHWHAHDFNF27YZR3D1				
	5000		MacAdam 2step	SPHWHAHDFNF27YZR3D1	4525	121	5000	MacAdam 2step	SPHWHAHDFNF27YZR3D1	MacAdam 3step	SPHWHAHDFNF27YZR3D1									
			MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1											
			MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1											
			MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1											
			MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1											
	6500	MacAdam 2step	SPHWHAHDFNF27YZR3D1	4751	127	6500	MacAdam 2step	SPHWHAHDFNF27YZR3D1	MacAdam 3step	SPHWHAHDFNF27YZR3D1										
		MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1												
		MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1												
		MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1												
		MacAdam 2step	SPHWHAHDFNF27YZR3D1				MacAdam 3step	SPHWHAHDFNF27YZR3D1												

LC060D Gen 1	70+	80+	MacAdam 3step	SPHWAHDNL231ZV3Q8	8284	148	
			MacAdam 3step	SPHWAHDNL231ZT3R1	8550	152	
			MacAdam 3step	SPHWAHDNL231ZR3R2	8683	155	
			MacAdam 2step	SPHWAHDNL251ZW2P9	7277	130	
			MacAdam 3step	SPHWAHDNL251ZW3P9			
			MacAdam 2step	SPHWAHDNL251ZV2Q3	7667	137	
			MacAdam 3step	SPHWAHDNL251ZV3Q3			1080mA 52V
			MacAdam 2step	SPHWAHDNL251ZU2Q5	7904	141	
			MacAdam 3step	SPHWAHDNL251ZU3Q5			
			MacAdam 2step	SPHWAHDNL251ZT2Q6	8075	144	
			MacAdam 3step	SPHWAHDNL251ZT3Q6			
			MacAdam 3step	SPHWAHDNL251ZR3Q7	8113	144	
			MacAdam 3step	SPHWAHDNL251ZQ3Q7	8151	145	
			MacAdam 3step	SPHWAHDNL271ZP3Q6	8066	144	

Variously integrated with LED packages, optics and thermal components for superior lumen density and reliability

Total solution for outdoor lighting



Full optic solutions allowing for fast

- Lens compatibility

Ceramic

Roa

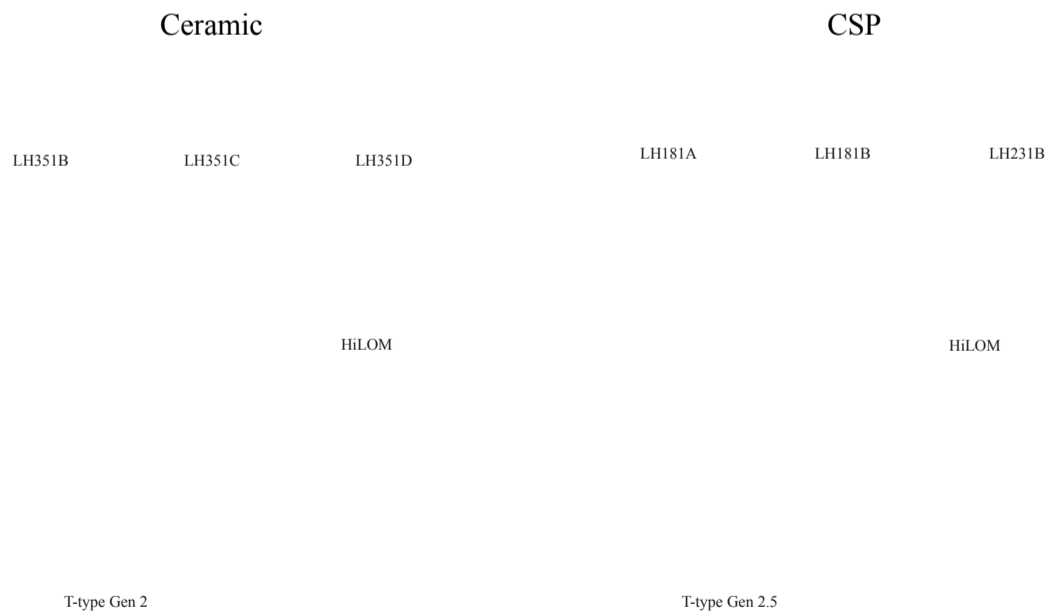


CSP & EMC

Roa



Standard footprints allowing for greater design flexibility



High compatibility with existing lighting

- Following Zhaga specifications
- Easy to design 2nd optics

Module

Module

Modular Platform Engine

HiLOM

Module		E-type		F-type											HiLOM(LH351C)							
Model	Light Distribution	Heat Sink	Connector	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Weight (g)	Waterproof/Dustproof Grade	Temperature Range (Operation, Tc)	Certification	Part Number	Model	Connector	Luminous Flux (lm)	Power Consumption (W)	I Vt	
E-type	Type2 Short	Fin	Connector	2300 2650	21	30	700 1000	100.0 80+	3000	114.3	75+	5000	230	IP66	-30~+80	CE, UL	SL-P8V2V27MBWW SL-PGR2V47MBWW	HiLOM (LH351C)	Poke-in	4680 5060	32.7 32.7	
F-type	Type2 Medium Beam angle 85	-	Wire	2400	21	30	700 1,000	100.0 70+	4000			170	IP66	+10~+90	CE	SL-P7T2F32MBKI SL-P7V2F385BKI SL-P7T2F385BKI			5060	32.7		

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

## Integrated Array Mod

		T-type Gen2				T-type Gen2.5 (LH181A)											Integrated Array Mod					
Model	Light Distribution	Heat Sink	Connector	Luminous Flux (lm)	Power Consumption (W)	Input Voltage (V)	IF (mA)	Imax (mA)	Efficacy (lm/W)	CRI	CCT (K)	Weight (g)	Waterproof/Dustproof Grade	Temperature Range (Operation, Tc)	Certification	Part Number	Model	Light Distribution	Heat Sink	Connector	Luminous Flux (lm)	
T-type Gen2	Type1 Short Type2 Very Short Type2 Short Type1 Short Type2 Very Short Type1 Short Type1 Very Short Type2 Short Type2 Very Short Type2 Medium Type5 Short Beam angle 85 Type1 Short Type2 Very Short Type2 Short Type2 Short Type2 Long Beam angle 85	Fin	Wire	2650	21	30	700 1000	126.2 75+	5000	295	IP66	-30~+80	CE, UL	SL-PGR2W53LBWW SL-PGR2W53MBWW SL-PGR2W57MBWW SL-PGQ2W53LBWW SL-PGQ2W53MBWW SL-PGR2W51SBGL SL-PGR2W6T1BGL SL-PGR2W52SBGL SL-PGR2W57SBGL SL-PGR2W52MBGL SL-PGR2W55SBGL SL-P7R2W58SBGL SL-PGR2W51SBGL SL-PGR2W57SBGL SL-PGR2W52SBGL SL-P7R2W5R1BGL SL-P7R2W5R2BGL SL-P7R2W58SBGL	Array	Type2 Short Type2 Short Beam angle 70 Beam angle 120	Fin	Connector	6450 9700			
T-type Gen2.5 (LH181A)	-	Fin	Connector	2600 2800 2850 2850	20	28	700 1000	130.0 140.0 142.5	3000 4000 5000	80+	5000	290	IP66	+10~+95	-	SL-P8V2W6RA1WW SL-P8T2W6RA1WW SL-P8R2W6RA1WW SL-P8Q2W6RA1WW						

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

## Driver

## Driver

SL-L27012503KR											SL-L21425003KR				SL-L22127503KR				SL-L2701A5N1KR							
SL-L2282A013KR											SL-L2352A213KR				SL-L2422A513KR				SL-L2562B013KR				SL-LU1425501US			
Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming	Certification	Power Factor	Remark	Part Number	Power Consumption (W)	Size (mm)	In Volt (V)											
SL-L27012503KR	25	177 × 40 × 37			700	85				>0.9		SL-L2701A5N1KR	150	258 × 68 × 33.9	220											
SL-L21425003KR	50	210 × 40 × 37			1400	87				>0.95		SL-L2701B0N1KR	200	258 × 68 × 33.9	220											
SL-L22127503KR	75				2100	88				>0.95		SL-LU0923501US	35	193 × 42.5 × 34.5												
SL-L2282A013KR	100		220-240	24-33	2800	89	<20	1-10V	KS	>0.95	Independent type, IP67, Molex	SL-LU1425501US	55	173 × 67.5 × 40	120											
SL-L2352A213KR	125	228 × 68 × 39.5			3500	90				>0.95		SL-LU2027801US	78	173 × 67.5 × 40												
SL-L2422A513KR	150				4200	90				>0.95		SL-LU262A001US	100	187 × 67.5 × 40												
SL-L2562B013KR	200				5600	91				>0.95																

Total Solutions for Outdoor Lighting

Part Number	Power Consumption (W)	Size (mm)	Input Voltage (V)	Output Voltage (V)	Output Current/ch (mA)	Efficiency (%)	THD (%)	Dimming Certification	Power Factor	Remark	Part Number	Power Consumption (W)	Size (mm)	In Vol (				
SL-L2701151AKR	15	177 × 40 × 37		18-33		84					SL-LA7012502US	25	193 × 42.5 × 34.5					
SL-L2701251AKR	25			18-33		85					SL-LA1425002US	50						
SL-L2701301AKR	30			39-63		86					SL-LA1425002US	50						
SL-L2701401AKR	40	210 × 40 × 37	220-240	39-63		87				Independent type, IP67, KET	SL-L22127502US	75	173 × 67.5 × 40	100				
SL-L2701501AKR	50	39-63		700		88					<20	1-10V	KS		>0.9	SL-LA142A002US	100	187 × 67.5 × 40
SL-L2701751AKR	75	182 × 66 × 38.8		85-125		89										SL-LA212A502US	150	221 × 67.5 × 40
SL-L2701A01AKR	100	228 × 68 × 39.5		85-125		90					SL-LA212A502US	150	221 × 67.5 × 40					
SL-L2701A51AKR	150			177-243		91											SL-L2282B002US	200
SL-L2701B01AKR	200			177-243		92												

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