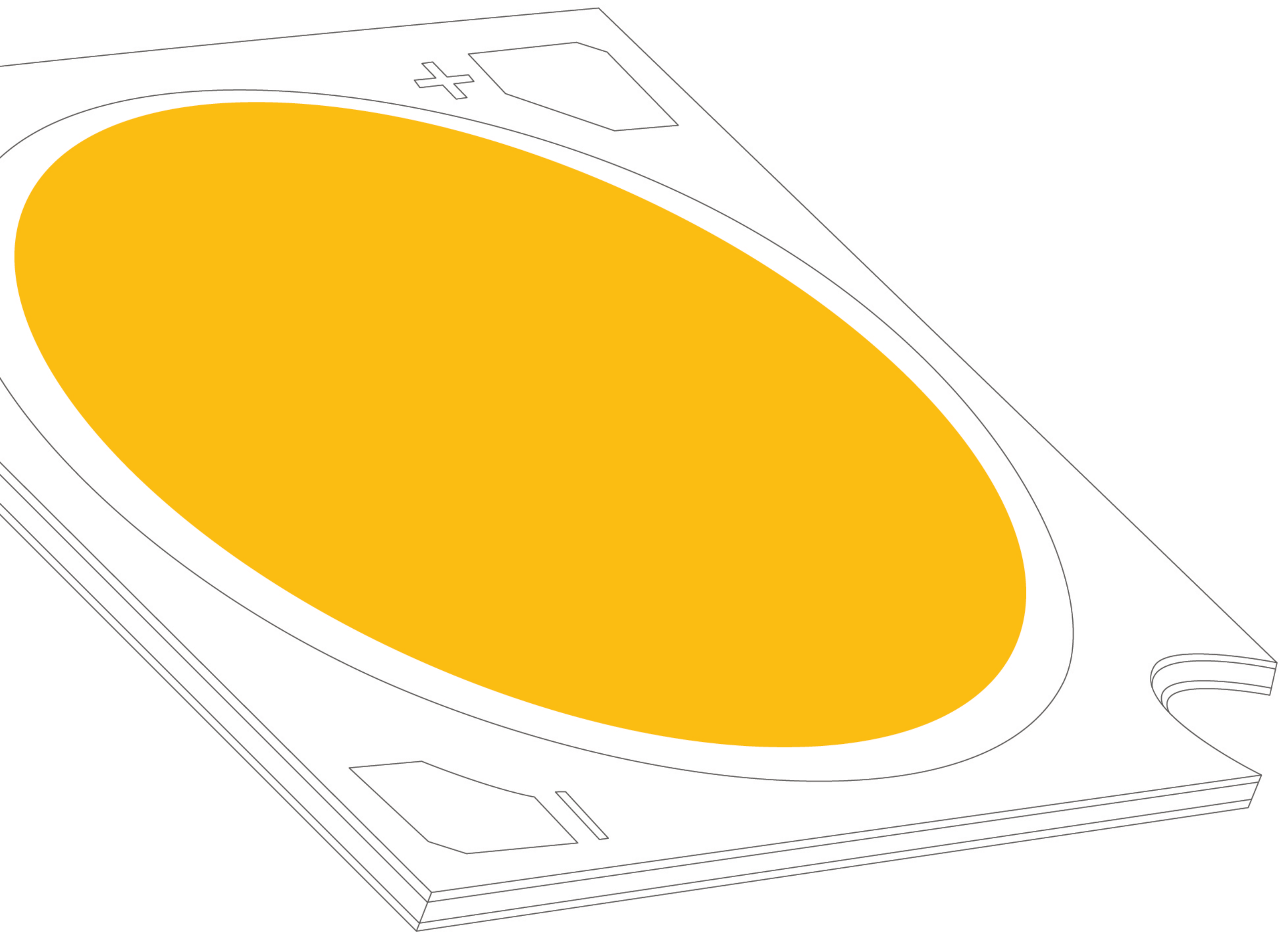


General Lighting | Package

COB LEDs

D Series

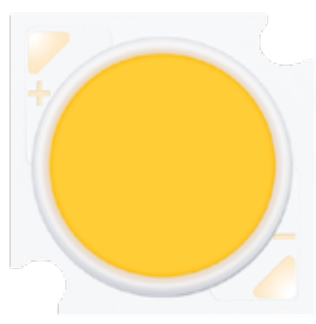


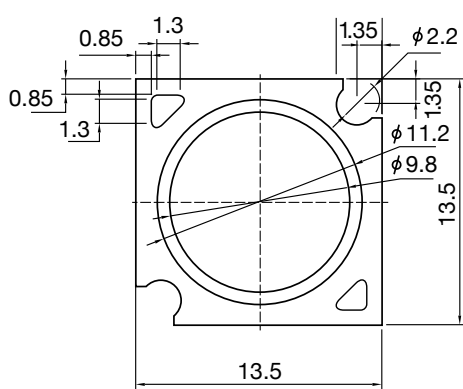
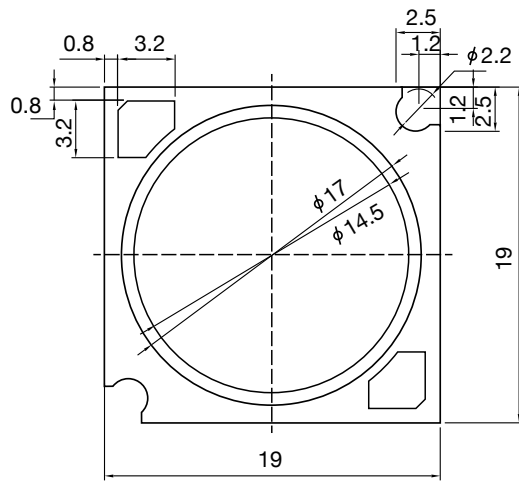
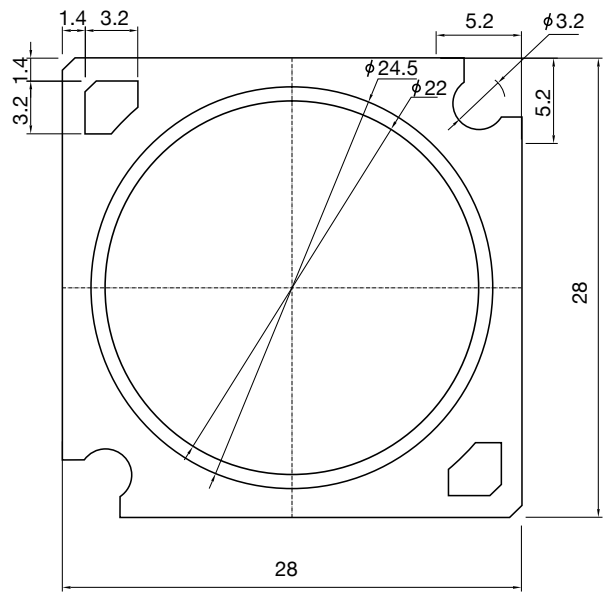


D-series Gen 3



Full line-up for various applications: MR/PAR, spotlights, downlights & high bay lights

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

$T_J=85^\circ\text{C}$	LC003D Gen 3	LC006D Gen 3	LC009D Gen 3	LC013D Gen 3	LC016D Gen 3	LC019D Gen 3	LC026D Gen 3	LC033D Gen 3	LC040D Gen 3	LC060D Gen 3	LC080D Gen 3	
												
LES	9.8mm			14.5mm				22 mm				
Typ.	3.0W	6.1W	9.1W	12.2W	15.2W	18.3W	24.3W	30.4W	36.5W	54.8W	82.1W	
	90 mA	180 mA	270 mA	360 mA	450 mA	540 mA	720 mA	900 mA	1080 mA	1080 mA	1620 mA	
Max.	8.7W	17.4W	26.1W	34.8W	43.5W	52.2W	69.6W	86.9W	104.3W	152.9W	229.3W	
	230 mA	460 mA	690 mA	920 mA	1150 mA	1380 mA	1840 mA	2300 mA	2760 mA	2760 mA	4140 mA	
Dimension												
Size	13.5mm x 13.5mm			19mm x 19mm				28mm x 28mm				

D-series Gen 3

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)	
LC003D Gen 3	80+	2700	MacAdam 1step	SPHWH AHDNA25YZW1D3	475	156	90mA 33.8V
			MacAdam 2step	SPHWH AHDNA25YZW2D3			
			MacAdam 3step	SPHWH AHDNA25YZW3D3			
		3000	MacAdam 1step	SPHWH AHDNA25YZV1D3	499	164	
			MacAdam 2step	SPHWH AHDNA25YZV2D3			
			MacAdam 3step	SPHWH AHDNA25YZV3D3			
		3500	MacAdam 1step	SPHWH AHDNA25YZU1D3	514	169	
			MacAdam 2step	SPHWH AHDNA25YZU2D3			
			MacAdam 3step	SPHWH AHDNA25YZU3D3			
		4000	MacAdam 1step	SPHWH AHDNA25YZT1D3	524	172	
			MacAdam 2step	SPHWH AHDNA25YZT2D3			
			MacAdam 3step	SPHWH AHDNA25YZT3D3			
		5000	MacAdam 2step	SPHWH AHDNA25YZR2D3	529	174	
			MacAdam 3step	SPHWH AHDNA25YZR3D3			
		5700	MacAdam 2step	SPHWH AHDNA25YZQ2D3	529	174	
			MacAdam 3step	SPHWH AHDNA25YZQ3D3			
		6500	MacAdam 2step	SPHWH AHDNA25YZP2D3	524	172	
			MacAdam 3step	SPHWH AHDNA25YZP3D3			
	90+	2700	MacAdam 1step	SPHWH AHDNA27YZW1D3	407	134	
			MacAdam 2step	SPHWH AHDNA27YZW2D3			
			MacAdam 3step	SPHWH AHDNA27YZW3D3			
		3000	MacAdam 1step	SPHWH AHDNA27YZV1D3	428	141	
			MacAdam 2step	SPHWH AHDNA27YZV2D3			
			MacAdam 3step	SPHWH AHDNA27YZV3D3			
3500		MacAdam 1step	SPHWH AHDNA27YZU1D3	441	145		
		MacAdam 2step	SPHWH AHDNA27YZU2D3				
		MacAdam 3step	SPHWH AHDNA27YZU3D3				
4000		MacAdam 1step	SPHWH AHDNA27YZT1D3	450	148		
		MacAdam 2step	SPHWH AHDNA27YZT2D3				
		MacAdam 3step	SPHWH AHDNA27YZT3D3				
5000	MacAdam 2step	SPHWH AHDNA27YZR2D3	453	149			
	MacAdam 3step	SPHWH AHDNA27YZR3D3					

D-series Gen 3

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)	
LC006D Gen 3	80+	2700	MacAdam 1step	SPHWHHAHDNB25YZW1D3	946	155	180mA 33.8V
			MacAdam 2step	SPHWHHAHDNB25YZW2D3			
			MacAdam 3step	SPHWHHAHDNB25YZW3D3			
		3000	MacAdam 1step	SPHWHHAHDNB25YZV1D3	994	163	
			MacAdam 2step	SPHWHHAHDNB25YZV2D3			
			MacAdam 3step	SPHWHHAHDNB25YZV3D3			
		3500	MacAdam 1step	SPHWHHAHDNB25YZU1D3	1023	168	
			MacAdam 2step	SPHWHHAHDNB25YZU2D3			
			MacAdam 3step	SPHWHHAHDNB25YZU3D3			
		4000	MacAdam 1step	SPHWHHAHDNB25YZT1D3	1043	171	
			MacAdam 2step	SPHWHHAHDNB25YZT2D3			
			MacAdam 3step	SPHWHHAHDNB25YZT3D3			
	5000	MacAdam 2step	SPHWHHAHDNB25YZR2D3	1052	173		
		MacAdam 3step	SPHWHHAHDNB25YZR3D3				
	5700	MacAdam 2step	SPHWHHAHDNB25YZQ2D3	1052	173		
		MacAdam 3step	SPHWHHAHDNB25YZQ3D3				
	6500	MacAdam 2step	SPHWHHAHDNB25YZP2D3	1043	171		
		MacAdam 3step	SPHWHHAHDNB25YZP3D3				
	90+	2700	MacAdam 1step	SPHWHHAHDNB27YZW1D3	809	133	
			MacAdam 2step	SPHWHHAHDNB27YZW2D3			
			MacAdam 3step	SPHWHHAHDNB27YZW3D3			
		3000	MacAdam 1step	SPHWHHAHDNB27YZV1D3	851	140	
			MacAdam 2step	SPHWHHAHDNB27YZV2D3			
			MacAdam 3step	SPHWHHAHDNB27YZV3D3			
3500		MacAdam 1step	SPHWHHAHDNB27YZU1D3	877	144		
		MacAdam 2step	SPHWHHAHDNB27YZU2D3				
		MacAdam 3step	SPHWHHAHDNB27YZU3D3				
4000		MacAdam 1step	SPHWHHAHDNB27YZT1D3	895	147		
		MacAdam 2step	SPHWHHAHDNB27YZT2D3				
		MacAdam 3step	SPHWHHAHDNB27YZT3D3				
5000	MacAdam 2step	SPHWHHAHDNB27YZR2D3	902	148			
	MacAdam 3step	SPHWHHAHDNB27YZR3D3					

D-series Gen 3

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)	
LC009D Gen 3	70+	3000	MacAdam 2step	SPHWHHAHDNC23YZV2D3	1594	174	270mA 33.8V
			MacAdam 3step	SPHWHHAHDNC23YZV3D3			
		4000	MacAdam 2step	SPHWHHAHDNC23YZT2D3	1624	177	
			MacAdam 3step	SPHWHHAHDNC23YZT3D3			
		5000	MacAdam 2step	SPHWHHAHDNC23YZR2D3	1653	180	
			MacAdam 3step	SPHWHHAHDNC23YZR3D3			
	80+	2700	MacAdam 1step	SPHWHHAHDNC25YZW1D3	1405	154	
			MacAdam 2step	SPHWHHAHDNC25YZW2D3			
			MacAdam 3step	SPHWHHAHDNC25YZW3D3			
		3000	MacAdam 1step	SPHWHHAHDNC25YZV1D3	1476	162	
			MacAdam 2step	SPHWHHAHDNC25YZV2D3			
			MacAdam 3step	SPHWHHAHDNC25YZV3D3			
		3500	MacAdam 1step	SPHWHHAHDNC25YZU1D3	1519	166	
			MacAdam 2step	SPHWHHAHDNC25YZU2D3			
			MacAdam 3step	SPHWHHAHDNC25YZU3D3			
		4000	MacAdam 1step	SPHWHHAHDNC25YZT1D3	1550	170	
			MacAdam 2step	SPHWHHAHDNC25YZT2D3			
			MacAdam 3step	SPHWHHAHDNC25YZT3D3			
		5000	MacAdam 2step	SPHWHHAHDNC25YZR2D3	1563	171	
			MacAdam 3step	SPHWHHAHDNC25YZR3D3			
		5700	MacAdam 2step	SPHWHHAHDNC25YZQ2D3	1563	171	
			MacAdam 3step	SPHWHHAHDNC25YZQ3D3			
		6500	MacAdam 2step	SPHWHHAHDNC25YZP2D3	1550	170	
			MacAdam 3step	SPHWHHAHDNC25YZP3D3			
	90+	2700	MacAdam 1step	SPHWHHAHDNC27YZW1D3	1202	132	
			MacAdam 2step	SPHWHHAHDNC27YZW2D3			
			MacAdam 3step	SPHWHHAHDNC27YZW3D3			
		3000	MacAdam 1step	SPHWHHAHDNC27YZV1D3	1264	139	
			MacAdam 2step	SPHWHHAHDNC27YZV2D3			
			MacAdam 3step	SPHWHHAHDNC27YZV3D3			
		3500	MacAdam 1step	SPHWHHAHDNC27YZU1D3	1302	143	
			MacAdam 2step	SPHWHHAHDNC27YZU2D3			
			MacAdam 3step	SPHWHHAHDNC27YZU3D3			
		4000	MacAdam 1step	SPHWHHAHDNC27YZT1D3	1329	146	
			MacAdam 2step	SPHWHHAHDNC27YZT2D3			
			MacAdam 3step	SPHWHHAHDNC27YZT3D3			
5000	MacAdam 2step	SPHWHHAHDNC27YZR2D3	1340	147			
	MacAdam 3step	SPHWHHAHDNC27YZR3D3					

D-series Gen 3

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)		
LC013D Gen 3	70+	2200	MacAdam 2step	SPHWH AHDND23YZY2D3	1755	144	360mA 33.8V	
			MacAdam 3step	SPHWH AHDND23YZY3D3				
		2700	MacAdam 2step	SPHWH AHDND23YZW2D3	1975	162		
			MacAdam 3step	SPHWH AHDND23YZW3D3				
		3000	MacAdam 2step	SPHWH AHDND23YZV2D3	2094	171		
			MacAdam 3step	SPHWH AHDND23YZV3D3				
		4000	MacAdam 2step	SPHWH AHDND23YZT2D3	2133	174		
			MacAdam 3step	SPHWH AHDND23YZT3D3				
		5000	MacAdam 2step	SPHWH AHDND23YZR2D3	2171	177		
			MacAdam 3step	SPHWH AHDND23YZR3D3				
		5700	MacAdam 2step	SPHWH AHDND23YZQ2D3	2125	175		
			MacAdam 3step	SPHWH AHDND23YZQ3D3				
		80+	2700	MacAdam 1step	SPHWH AHDND25YZW1D3	1845		152
				MacAdam 2step	SPHWH AHDND25YZW2D3			
				MacAdam 3step	SPHWH AHDND25YZW3D3			
			3000	MacAdam 1step	SPHWH AHDND25YZV1D3	1939		159
				MacAdam 2step	SPHWH AHDND25YZV2D3			
				MacAdam 3step	SPHWH AHDND25YZV3D3			
	3500		MacAdam 1step	SPHWH AHDND25YZU1D3	1996	164		
			MacAdam 2step	SPHWH AHDND25YZU2D3				
			MacAdam 3step	SPHWH AHDND25YZU3D3				
	4000		MacAdam 1step	SPHWH AHDND25YZT1D3	2036	167		
			MacAdam 2step	SPHWH AHDND25YZT2D3				
			MacAdam 3step	SPHWH AHDND25YZT3D3				
	5000		MacAdam 2step	SPHWH AHDND25YZR2D3	2053	169		
			MacAdam 3step	SPHWH AHDND25YZR3D3				
	5700		MacAdam 2step	SPHWH AHDND25YZQ2D3	2053	169		
			MacAdam 3step	SPHWH AHDND25YZQ3D3				
	6500		MacAdam 2step	SPHWH AHDND25YZP2D3	2036	167		
			MacAdam 3step	SPHWH AHDND25YZP3D3				
	90+	2700	MacAdam 1step	SPHWH AHDND27YZW1D3	1579	130		
			MacAdam 2step	SPHWH AHDND27YZW2D3				
			MacAdam 3step	SPHWH AHDND27YZW3D3				
		3000	MacAdam 1step	SPHWH AHDND27YZV1D3	1661	137		
			MacAdam 2step	SPHWH AHDND27YZV2D3				
			MacAdam 3step	SPHWH AHDND27YZV3D3				
3500		MacAdam 1step	SPHWH AHDND27YZU1D3	1710	141			
		MacAdam 2step	SPHWH AHDND27YZU2D3					
		MacAdam 3step	SPHWH AHDND27YZU3D3					
4000		MacAdam 1step	SPHWH AHDND27YZT1D3	1745	143			
		MacAdam 2step	SPHWH AHDND27YZT2D3					
		MacAdam 3step	SPHWH AHDND27YZT3D3					
5000	MacAdam 2step	SPHWH AHDND27YZR2D3	1760	145				
	MacAdam 3step	SPHWH AHDND27YZR3D3						

D-series Gen 3

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+	2200	MacAdam 2step	SPHWH AHDNE23YZY2D3	2238	147	450mA 33.8V	
			MacAdam 3step	SPHWH AHDNE23YZY3D3				
		2700	MacAdam 2step	SPHWH AHDNE23YZW2D3	2470	162		
			MacAdam 3step	SPHWH AHDNE23YZW3D3				
		3000	MacAdam 2step	SPHWH AHDNE23YZV2D3	2697	176		
			MacAdam 3step	SPHWH AHDNE23YZV3D3				
		4000	MacAdam 2step	SPHWH AHDNE23YZT2D3	2747	180		
			MacAdam 3step	SPHWH AHDNE23YZT3D3				
		5000	MacAdam 2step	SPHWH AHDNE23YZR2D3	2797	183		
			MacAdam 3step	SPHWH AHDNE23YZR3D3				
		5700	MacAdam 2step	SPHWH AHDNE23YZQ2D3	2737	180		
			MacAdam 3step	SPHWH AHDNE23YZQ3D3				
		80+	2700	MacAdam 1step	SPHWH AHDNE25YZW1D3	2376		156
				MacAdam 2step	SPHWH AHDNE25YZW2D3			
				MacAdam 3step	SPHWH AHDNE25YZW3D3			
			3000	MacAdam 1step	SPHWH AHDNE25YZV1D3	2497		164
				MacAdam 2step	SPHWH AHDNE25YZV2D3			
				MacAdam 3step	SPHWH AHDNE25YZV3D3			
	3500		MacAdam 1step	SPHWH AHDNE25YZU1D3	2570	169		
			MacAdam 2step	SPHWH AHDNE25YZU2D3				
			MacAdam 3step	SPHWH AHDNE25YZU3D3				
	4000		MacAdam 1step	SPHWH AHDNE25YZT1D3	2622	172		
			MacAdam 2step	SPHWH AHDNE25YZT2D3				
			MacAdam 3step	SPHWH AHDNE25YZT3D3				
	5000		MacAdam 2step	SPHWH AHDNE25YZR2D3	2644	174		
			MacAdam 3step	SPHWH AHDNE25YZR3D3				
	5700		MacAdam 2step	SPHWH AHDNE25YZQ2D3	2644	174		
			MacAdam 3step	SPHWH AHDNE25YZQ3D3				
	6500		MacAdam 2step	SPHWH AHDNE25YZP2D3	2622	172		
			MacAdam 3step	SPHWH AHDNE25YZP3D3				
	90+	2700	MacAdam 1step	SPHWH AHDNE27YZW1D3	2033	134		
			MacAdam 2step	SPHWH AHDNE27YZW2D3				
			MacAdam 3step	SPHWH AHDNE27YZW3D3				
		3000	MacAdam 1step	SPHWH AHDNE27YZV1D3	2139	141		
			MacAdam 2step	SPHWH AHDNE27YZV2D3				
			MacAdam 3step	SPHWH AHDNE27YZV3D3				
3500		MacAdam 1step	SPHWH AHDNE27YZU1D3	2203	145			
		MacAdam 2step	SPHWH AHDNE27YZU2D3					
		MacAdam 3step	SPHWH AHDNE27YZU3D3					
4000		MacAdam 1step	SPHWH AHDNE27YZT1D3	2248	148			
		MacAdam 2step	SPHWH AHDNE27YZT2D3					
		MacAdam 3step	SPHWH AHDNE27YZT3D3					
5000	MacAdam 1step	SPHWH AHDNE27YZR1D3	2267	149				
	MacAdam 3step	SPHWH AHDNE27YZR3D3						

D-series Gen 3

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+	2200	MacAdam 2step	SPHWHHAHDNF23YZY2D3	2673	146	540mA 33.8V	
			MacAdam 3step	SPHWHHAHDNF23YZY3D3				
		2700	MacAdam 2step	SPHWHHAHDNF23YZW2D3	2960	162		
			MacAdam 3step	SPHWHHAHDNF23YZW3D3				
		3000	MacAdam 2step	SPHWHHAHDNF23YZV2D3	3220	175		
			MacAdam 3step	SPHWHHAHDNF23YZV3D3				
		4000	MacAdam 2step	SPHWHHAHDNF23YZT2D3	3280	179		
			MacAdam 3step	SPHWHHAHDNF23YZT3D3				
		5000	MacAdam 2step	SPHWHHAHDNF23YZR2D3	3339	182		
			MacAdam 3step	SPHWHHAHDNF23YZR3D3				
		5700	MacAdam 2step	SPHWHHAHDNF23YZQ2D3	3269	179		
			MacAdam 3step	SPHWHHAHDNF23YZQ3D3				
		80+	2700	MacAdam 1step	SPHWHHAHDNF25YZW1D3	2837		155
				MacAdam 2step	SPHWHHAHDNF25YZW2D3			
				MacAdam 3step	SPHWHHAHDNF25YZW3D3			
			3000	MacAdam 1step	SPHWHHAHDNF25YZV1D3	2982		163
				MacAdam 2step	SPHWHHAHDNF25YZV2D3			
				MacAdam 3step	SPHWHHAHDNF25YZV3D3			
	3500		MacAdam 1step	SPHWHHAHDNF25YZU1D3	3069	168		
			MacAdam 2step	SPHWHHAHDNF25YZU2D3				
			MacAdam 3step	SPHWHHAHDNF25YZU3D3				
	4000		MacAdam 1step	SPHWHHAHDNF25YZT1D3	3130	171		
			MacAdam 2step	SPHWHHAHDNF25YZT2D3				
			MacAdam 3step	SPHWHHAHDNF25YZT3D3				
	5000		MacAdam 2step	SPHWHHAHDNF25YZR2D3	3157	173		
			MacAdam 3step	SPHWHHAHDNF25YZR3D3				
	5700		MacAdam 2step	SPHWHHAHDNF25YZQ2D3	3157	173		
			MacAdam 3step	SPHWHHAHDNF25YZQ3D3				
	6500		MacAdam 2step	SPHWHHAHDNF25YZP2D3	3130	171		
			MacAdam 3step	SPHWHHAHDNF25YZP3D3				
	90+	2700	MacAdam 1step	SPHWHHAHDNF27YZW1D3	2428	133		
			MacAdam 2step	SPHWHHAHDNF27YZW2D3				
			MacAdam 3step	SPHWHHAHDNF27YZW3D3				
		3000	MacAdam 1step	SPHWHHAHDNF27YZV1D3	2554	140		
			MacAdam 2step	SPHWHHAHDNF27YZV2D3				
			MacAdam 3step	SPHWHHAHDNF27YZV3D3				
		3500	MacAdam 1step	SPHWHHAHDNF27YZU1D3	2630	144		
			MacAdam 2step	SPHWHHAHDNF27YZU2D3				
			MacAdam 3step	SPHWHHAHDNF27YZU3D3				
		4000	MacAdam 1step	SPHWHHAHDNF27YZT1D3	2684	147		
			MacAdam 2step	SPHWHHAHDNF27YZT2D3				
			MacAdam 3step	SPHWHHAHDNF27YZT3D3				
5000		MacAdam 2step	SPHWHHAHDNF27YZR2D3	2707	148			
		MacAdam 3step	SPHWHHAHDNF27YZR3D3					

D-series Gen 3

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 Gen 3	70+	2200	MacAdam 2step	SPHWHHAHDNG23YZY2D3	3511	144	720mA 33.8V	
			MacAdam 3step	SPHWHHAHDNG23YZY3D3				
		2700	MacAdam 2step	SPHWHHAHDNG23YZW2D3	3950	162		
			MacAdam 3step	SPHWHHAHDNG23YZW3D3				
		3000	MacAdam 2step	SPHWHHAHDNG23YZV2D3	4230	174		
			MacAdam 3step	SPHWHHAHDNG23YZV3D3				
		4000	MacAdam 2step	SPHWHHAHDNG23YZT2D3	4308	177		
			MacAdam 3step	SPHWHHAHDNG23YZT3D3				
		5000	MacAdam 2step	SPHWHHAHDNG23YZR2D3	4387	180		
			MacAdam 3step	SPHWHHAHDNG23YZR3D3				
		5700	MacAdam 2step	SPHWHHAHDNG23YZQ2D3	4294	176		
			MacAdam 3step	SPHWHHAHDNG23YZQ3D3				
		80+	2700	MacAdam 1step	SPHWHHAHDNG25YZW1D3	3727		153
				MacAdam 2step	SPHWHHAHDNG25YZW2D3			
				MacAdam 3step	SPHWHHAHDNG25YZW3D3			
			3000	MacAdam 1step	SPHWHHAHDNG25YZV1D3	3917		161
				MacAdam 2step	SPHWHHAHDNG25YZV2D3			
				MacAdam 3step	SPHWHHAHDNG25YZV3D3			
	3500		MacAdam 1step	SPHWHHAHDNG25YZU1D3	4032	166		
			MacAdam 2step	SPHWHHAHDNG25YZU2D3				
			MacAdam 3step	SPHWHHAHDNG25YZU3D3				
	4000		MacAdam 1step	SPHWHHAHDNG25YZT1D3	4112	169		
			MacAdam 2step	SPHWHHAHDNG25YZT2D3				
			MacAdam 3step	SPHWHHAHDNG25YZT3D3				
	5000		MacAdam 2step	SPHWHHAHDNG25YZR2D3	4147	170		
			MacAdam 3step	SPHWHHAHDNG25YZR3D3				
	5700		MacAdam 2step	SPHWHHAHDNG25YZQ2D3	4147	170		
			MacAdam 3step	SPHWHHAHDNG25YZQ3D3				
	6500		MacAdam 2step	SPHWHHAHDNG25YZP2D3	4112	169		
			MacAdam 3step	SPHWHHAHDNG25YZP3D3				
	90+	2700	MacAdam 1step	SPHWHHAHDNG27YZW1D3	3190	131		
			MacAdam 2step	SPHWHHAHDNG27YZW2D3				
			MacAdam 3step	SPHWHHAHDNG27YZW3D3				
		3000	MacAdam 1step	SPHWHHAHDNG27YZV1D3	3355	138		
			MacAdam 2step	SPHWHHAHDNG27YZV2D3				
			MacAdam 3step	SPHWHHAHDNG27YZV3D3				
		3500	MacAdam 1step	SPHWHHAHDNG27YZU1D3	3455	142		
			MacAdam 2step	SPHWHHAHDNG27YZU2D3				
			MacAdam 3step	SPHWHHAHDNG27YZU3D3				
		4000	MacAdam 1step	SPHWHHAHDNG27YZT1D3	3526	145		
			MacAdam 2step	SPHWHHAHDNG27YZT2D3				
			MacAdam 3step	SPHWHHAHDNG27YZT3D3				
5000	MacAdam 2step	SPHWHHAHDNG27YZR2D3	3556	146				
	MacAdam 3step	SPHWHHAHDNG27YZR3D3						

D-series Gen 3

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+	2200	MacAdam 2step	SPHWAHNDNH23YZY2D3	4308	142	900mA 33.8V	
			MacAdam 3step	SPHWAHNDNH23YZY3D3				
		2700	MacAdam 2step	SPHWAHNDNH23YZW2D3	4940	162		
			MacAdam 3step	SPHWAHNDNH23YZW3D3				
		3000	MacAdam 2step	SPHWAHNDNH23YZV2D3	5235	172		
			MacAdam 3step	SPHWAHNDNH23YZV3D3				
		4000	MacAdam 2step	SPHWAHNDNH23YZT2D3	5332	175		
			MacAdam 3step	SPHWAHNDNH23YZT3D3				
		5000	MacAdam 2step	SPHWAHNDNH23YZR2D3	5429	178		
			MacAdam 3step	SPHWAHNDNH23YZR3D3				
		5700	MacAdam 2step	SPHWAHNDNH23YZQ2D3	5313	175		
			MacAdam 3step	SPHWAHNDNH23YZQ3D3				
		80+	2700	MacAdam 1step	SPHWAHNDNH25YZW1D3	4612		152
				MacAdam 2step	SPHWAHNDNH25YZW2D3			
				MacAdam 3step	SPHWAHNDNH25YZW3D3			
			3000	MacAdam 1step	SPHWAHNDNH25YZV1D3	4847		159
				MacAdam 2step	SPHWAHNDNH25YZV2D3			
				MacAdam 3step	SPHWAHNDNH25YZV3D3			
	3500		MacAdam 1step	SPHWAHNDNH25YZU1D3	4989	164		
			MacAdam 2step	SPHWAHNDNH25YZU2D3				
			MacAdam 3step	SPHWAHNDNH25YZU3D3				
	4000		MacAdam 1step	SPHWAHNDNH25YZT1D3	5089	167		
			MacAdam 2step	SPHWAHNDNH25YZT2D3				
			MacAdam 3step	SPHWAHNDNH25YZT3D3				
	5000		MacAdam 2step	SPHWAHNDNH25YZR2D3	5132	169		
			MacAdam 3step	SPHWAHNDNH25YZR3D3				
	5700		MacAdam 2step	SPHWAHNDNH25YZQ2D3	5132	169		
			MacAdam 3step	SPHWAHNDNH25YZQ3D3				
	6500		MacAdam 2step	SPHWAHNDNH25YZP2D3	5089	167		
			MacAdam 3step	SPHWAHNDNH25YZP3D3				
	90+	2700	MacAdam 1step	SPHWAHNDNH27YZW1D3	3947	130		
			MacAdam 2step	SPHWAHNDNH27YZW2D3				
			MacAdam 3step	SPHWAHNDNH27YZW3D3				
		3000	MacAdam 1step	SPHWAHNDNH27YZV1D3	4152	136		
			MacAdam 2step	SPHWAHNDNH27YZV2D3				
			MacAdam 3step	SPHWAHNDNH27YZV3D3				
3500		MacAdam 1step	SPHWAHNDNH27YZU1D3	4276	141			
		MacAdam 2step	SPHWAHNDNH27YZU2D3					
		MacAdam 3step	SPHWAHNDNH27YZU3D3					
4000		MacAdam 1step	SPHWAHNDNH27YZT1D3	4364	143			
		MacAdam 2step	SPHWAHNDNH27YZT2D3					
		MacAdam 3step	SPHWAHNDNH27YZT3D3					
5000	MacAdam 2step	SPHWAHNDNH27YZR2D3	4401	145				
	MacAdam 3step	SPHWAHNDNH27YZR3D3						

D-series Gen 3

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 3	70+	2200	MacAdam 2step	SPHWHHAHDNK23YZY2D3	5346	146	1080mA 33.8V	
			MacAdam 3step	SPHWHHAHDNK23YZY3D3				
		2700	MacAdam 2step	SPHWHHAHDNK23YZW2D3	5930	162		
			MacAdam 3step	SPHWHHAHDNK23YZW3D3				
		3000	MacAdam 2step	SPHWHHAHDNK23YZV2D3	6440	176		
			MacAdam 3step	SPHWHHAHDNK23YZV3D3				
		4000	MacAdam 2step	SPHWHHAHDNK23YZT2D3	6560	180		
			MacAdam 3step	SPHWHHAHDNK23YZT3D3				
		5000	MacAdam 2step	SPHWHHAHDNK23YZR2D3	6679	183		
			MacAdam 3step	SPHWHHAHDNK23YZR3D3				
		5700	MacAdam 2step	SPHWHHAHDNK23YZQ2D3	6537	179		
			MacAdam 3step	SPHWHHAHDNK23YZQ3D3				
		80+	2700	MacAdam 1step	SPHWHHAHDNK25YZW1D3	5675		155
				MacAdam 2step	SPHWHHAHDNK25YZW2D3			
				MacAdam 3step	SPHWHHAHDNK25YZW3D3			
			3000	MacAdam 1step	SPHWHHAHDNK25YZV1D3	5963		163
				MacAdam 2step	SPHWHHAHDNK25YZV2D3			
				MacAdam 3step	SPHWHHAHDNK25YZV3D3			
	3500		MacAdam 1step	SPHWHHAHDNK25YZU1D3	6138	168		
			MacAdam 2step	SPHWHHAHDNK25YZU2D3				
			MacAdam 3step	SPHWHHAHDNK25YZU3D3				
	4000		MacAdam 1step	SPHWHHAHDNK25YZT1D3	6261	172		
			MacAdam 2step	SPHWHHAHDNK25YZT2D3				
			MacAdam 3step	SPHWHHAHDNK25YZT3D3				
	5000		MacAdam 2step	SPHWHHAHDNK25YZR2D3	6313	173		
			MacAdam 3step	SPHWHHAHDNK25YZR3D3				
	5700		MacAdam 2step	SPHWHHAHDNK25YZQ2D3	6313	173		
			MacAdam 3step	SPHWHHAHDNK25YZQ3D3				
	6500		MacAdam 2step	SPHWHHAHDNK25YZP2D3	6261	172		
			MacAdam 3step	SPHWHHAHDNK25YZP3D3				
	90+	2700	MacAdam 1step	SPHWHHAHDNK27YZW1D3	4856	133		
			MacAdam 2step	SPHWHHAHDNK27YZW2D3				
			MacAdam 3step	SPHWHHAHDNK27YZW3D3				
		3000	MacAdam 1step	SPHWHHAHDNK27YZV1D3	5108	140		
			MacAdam 2step	SPHWHHAHDNK27YZV2D3				
			MacAdam 3step	SPHWHHAHDNK27YZV3D3				
3500		MacAdam 1step	SPHWHHAHDNK27YZU1D3	5260	144			
		MacAdam 2step	SPHWHHAHDNK27YZU2D3					
		MacAdam 3step	SPHWHHAHDNK27YZU3D3					
4000		MacAdam 1step	SPHWHHAHDNK27YZT1D3	5369	147			
		MacAdam 2step	SPHWHHAHDNK27YZT2D3					
		MacAdam 3step	SPHWHHAHDNK27YZT3D3					
5000	MacAdam 2step	SPHWHHAHDNK27YZR2D3	5415	148				
	MacAdam 3step	SPHWHHAHDNK27YZR3D3						

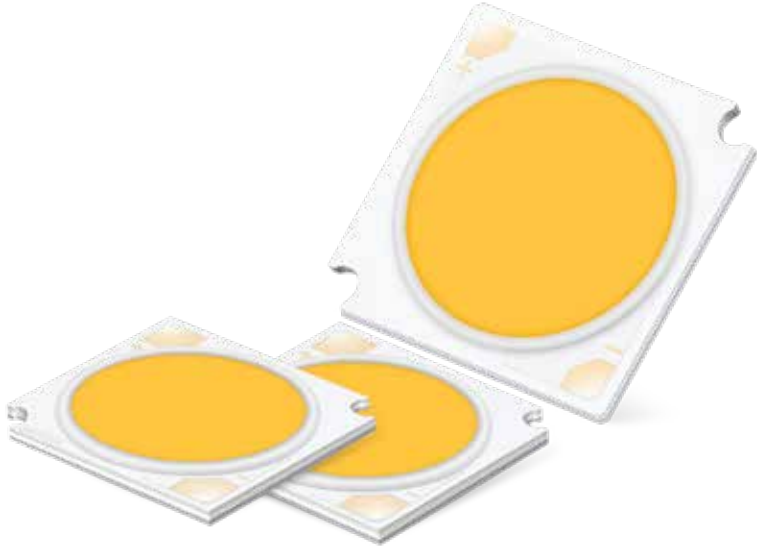
D-series Gen 3

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+	2200	MacAdam 2step	SPHWHHAHDNL231ZY2D3	7900	144	1080mA 50.7V
			MacAdam 3step	SPHWHHAHDNL231ZY3D3			
		2700	MacAdam 2step	SPHWHHAHDNL231ZW2D3	9000	164	
			MacAdam 3step	SPHWHHAHDNL231ZW3D3			
		3000	MacAdam 2step	SPHWHHAHDNL231ZV2D3	9518	174	
			MacAdam 3step	SPHWHHAHDNL231ZV3D3			
		4000	MacAdam 2step	SPHWHHAHDNL231ZT2D3	9694	177	
			MacAdam 3step	SPHWHHAHDNL231ZT3D3			
		5000	MacAdam 2step	SPHWHHAHDNL231ZR2D3	9870	180	
			MacAdam 3step	SPHWHHAHDNL231ZR3D3			
		5700	MacAdam 2step	SPHWHHAHDNL231ZQ2D3	9661	176	
			MacAdam 3step	SPHWHHAHDNL231ZQ3D3			
	80+	2700	MacAdam 1step	SPHWHHAHDNL251ZW1D3	8386	153	
			MacAdam 2step	SPHWHHAHDNL251ZW2D3			
			MacAdam 3step	SPHWHHAHDNL251ZW3D3			
		3000	MacAdam 1step	SPHWHHAHDNL251ZV1D3	8813	161	
			MacAdam 2step	SPHWHHAHDNL251ZV2D3			
			MacAdam 3step	SPHWHHAHDNL251ZV3D3			
		3500	MacAdam 1step	SPHWHHAHDNL251ZU1D3	9071	166	
			MacAdam 2step	SPHWHHAHDNL251ZU2D3			
			MacAdam 3step	SPHWHHAHDNL251ZU3D3			
		4000	MacAdam 1step	SPHWHHAHDNL251ZT1D3	9253	169	
			MacAdam 2step	SPHWHHAHDNL251ZT2D3			
			MacAdam 3step	SPHWHHAHDNL251ZT3D3			
		5000	MacAdam 2step	SPHWHHAHDNL251ZR2D3	9330	170	
			MacAdam 3step	SPHWHHAHDNL251ZR3D3			
		5700	MacAdam 2step	SPHWHHAHDNL251ZQ2D3	9330	170	
			MacAdam 3step	SPHWHHAHDNL251ZQ3D3			
		6500	MacAdam 2step	SPHWHHAHDNL251ZP2D3	9253	169	
			MacAdam 3step	SPHWHHAHDNL251ZP3D3			
	90+	2700	MacAdam 1step	SPHWHHAHDNL271ZW1D3	7177	131	
			MacAdam 2step	SPHWHHAHDNL271ZW2D3			
			MacAdam 3step	SPHWHHAHDNL271ZW3D3			
		3000	MacAdam 1step	SPHWHHAHDNL271ZV1D3	7549	138	
			MacAdam 2step	SPHWHHAHDNL271ZV2D3			
			MacAdam 3step	SPHWHHAHDNL271ZV3D3			
		3500	MacAdam 1step	SPHWHHAHDNL271ZU1D3	7774	142	
			MacAdam 2step	SPHWHHAHDNL271ZU2D3			
			MacAdam 3step	SPHWHHAHDNL271ZU3D3			
		4000	MacAdam 1step	SPHWHHAHDNL271ZT1D3	7934	145	
			MacAdam 2step	SPHWHHAHDNL271ZT2D3			
			MacAdam 3step	SPHWHHAHDNL271ZT3D3			
5000		MacAdam 2step	SPHWHHAHDNL271ZR2D3	8002	146		
		MacAdam 3step	SPHWHHAHDNL271ZR3D3				

D-series Gen 3

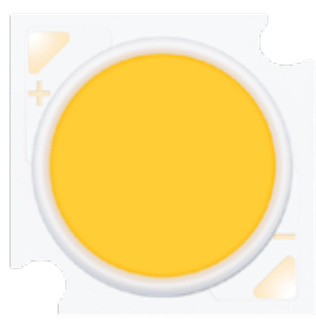


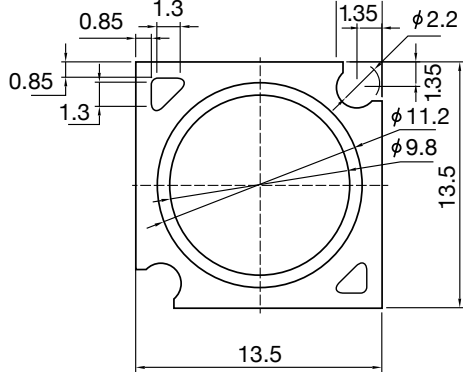
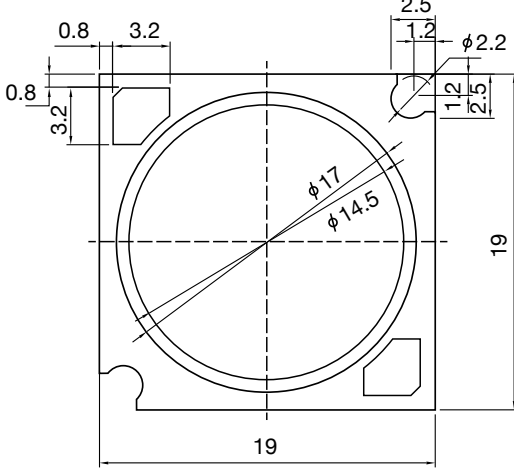
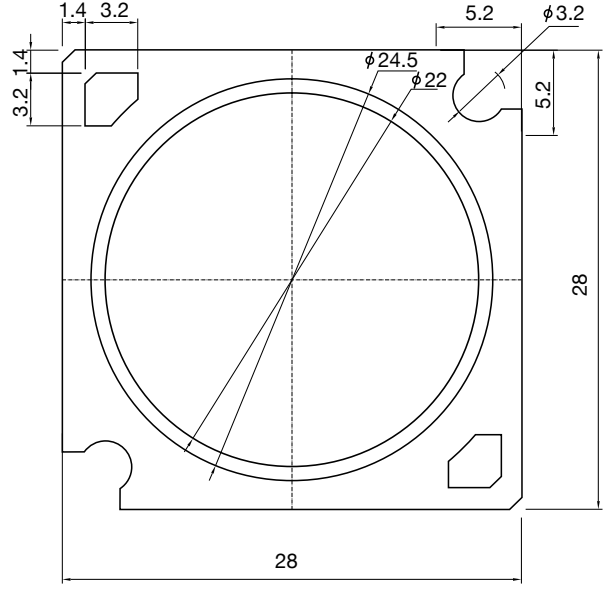
Product	CRI	CCT (K)	Color Rank	Part Number	T _J = 85°C		I _F (mA) V _F (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC080D Gen 3	70+	2200	MacAdam 2step	SPHWHHAHDNM231ZY2D3	11169	134	1620mA 50.7V
			MacAdam 3step	SPHWHHAHDNM231ZY3D3			
		2700	MacAdam 2step	SPHWHHAHDNM231ZW2D3	13600	164	
			MacAdam 3step	SPHWHHAHDNM231ZW3D3			
		3000	MacAdam 2step	SPHWHHAHDNM231ZV2D3	14115	172	
			MacAdam 3step	SPHWHHAHDNM231ZV3D3			
		4000	MacAdam 2step	SPHWHHAHDNM231ZT2D3	14376	175	
			MacAdam 3step	SPHWHHAHDNM231ZT3D3			
		5000	MacAdam 2step	SPHWHHAHDNM231ZR2D3	14637	178	
			MacAdam 3step	SPHWHHAHDNM231ZR3D3			
		5700	MacAdam 2step	SPHWHHAHDNM231ZQ2D3	14326	172	
			MacAdam 3step	SPHWHHAHDNM231ZQ3D3			
	80+	2700	MacAdam 1step	SPHWHHAHDNM251ZW1D3	12437	151	
			MacAdam 2step	SPHWHHAHDNM251ZW2D3			
			MacAdam 3step	SPHWHHAHDNM251ZW3D3			
		3000	MacAdam 1step	SPHWHHAHDNM251ZV1D3	13069	159	
			MacAdam 2step	SPHWHHAHDNM251ZV2D3			
			MacAdam 3step	SPHWHHAHDNM251ZV3D3			
		3500	MacAdam 1step	SPHWHHAHDNM251ZU1D3	13452	164	
			MacAdam 2step	SPHWHHAHDNM251ZU2D3			
			MacAdam 3step	SPHWHHAHDNM251ZU3D3			
		4000	MacAdam 1step	SPHWHHAHDNM251ZT1D3	13721	167	
			MacAdam 2step	SPHWHHAHDNM251ZT2D3			
			MacAdam 3step	SPHWHHAHDNM251ZT3D3			
		5000	MacAdam 2step	SPHWHHAHDNM251ZR2D3	13836	168	
			MacAdam 3step	SPHWHHAHDNM251ZR3D3			
		5700	MacAdam 2step	SPHWHHAHDNM251ZQ2D3	13836	168	
			MacAdam 3step	SPHWHHAHDNM251ZQ3D3			
		6500	MacAdam 2step	SPHWHHAHDNM251ZP2D3	13721	167	
			MacAdam 3step	SPHWHHAHDNM251ZP3D3			
	90+	2700	MacAdam 1step	SPHWHHAHDNM271ZW1D3	10643	130	
			MacAdam 2step	SPHWHHAHDNM271ZW2D3			
			MacAdam 3step	SPHWHHAHDNM271ZW3D3			
		3000	MacAdam 1step	SPHWHHAHDNM271ZV1D3	11195	136	
			MacAdam 2step	SPHWHHAHDNM271ZV2D3			
			MacAdam 3step	SPHWHHAHDNM271ZV3D3			
		3500	MacAdam 1step	SPHWHHAHDNM271ZU1D3	11529	140	
			MacAdam 2step	SPHWHHAHDNM271ZU2D3			
			MacAdam 3step	SPHWHHAHDNM271ZU3D3			
		4000	MacAdam 1step	SPHWHHAHDNM271ZT1D3	11766	143	
			MacAdam 2step	SPHWHHAHDNM271ZT2D3			
			MacAdam 3step	SPHWHHAHDNM271ZT3D3			
5000	MacAdam 2step	SPHWHHAHDNM271ZR2D3	11867	144			
	MacAdam 3step	SPHWHHAHDNM271ZR3D3					

D-series Gen 3+



Full line-up for various applications: MR/PAR, spotlights, downlights & high bay lights

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

$T_J=85^\circ\text{C}$	LC003D Gen 3+	LC006D Gen 3+	LC009D Gen 3+	LC013D Gen 3+	LC016D Gen 3+	LC019D Gen 3+	LC026D Gen 3+	LC033D Gen 3+	LC040D Gen 3+	LC060D Gen 3+	LC080D Gen 3+	
												
LES	9.8mm			14.5mm				22 mm				
	33.7V									50.6V		
Typ.	3.0W	6.1W	9.1W	12.1W	15.2W	18.2W	24.3W	30.3W	36.4W	54.6W	82.0W	
	90mA	180mA	270mA	360mA	450mA	540mA	720mA	900mA	1080mA	1080mA	1620mA	
Max.	6.6W	13.2W	19.8W	26.4W	33W	39.5W	52.7W	65.9W	79.1W	118.4W	177.6W	
	180mA	360mA	540mA	720mA	900mA	1080mA	1440mA	1800mA	2160mA	2160mA	3240mA	
Dimension												
Size	13.5mm x 13.5mm			19mm x 19mm				28mm x 28mm				

D-series Gen 3+

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)	
LC003D Gen 3+	80+	2700	MacAdam 1step	SPHWH AHDNA25YZW1DC	479	158	90mA 33.7V
			MacAdam 2step	SPHWH AHDNA25YZW2DC			
			MacAdam 3step	SPHWH AHDNA25YZW3DC			
		3000	MacAdam 1step	SPHWH AHDNA25YZV1DC	498	164	
			MacAdam 2step	SPHWH AHDNA25YZV2DC			
			MacAdam 3step	SPHWH AHDNA25YZV3DC			
		3500	MacAdam 1step	SPHWH AHDNA25YZU1DC	516	170	
			MacAdam 2step	SPHWH AHDNA25YZU2DC			
			MacAdam 3step	SPHWH AHDNA25YZU3DC			
		4000	MacAdam 1step	SPHWH AHDNA25YZT1DC	526	173	
			MacAdam 2step	SPHWH AHDNA25YZT2DC			
			MacAdam 3step	SPHWH AHDNA25YZT3DC			
		5000	MacAdam 2step	SPHWH AHDNA25YZR2DC	536	177	
			MacAdam 3step	SPHWH AHDNA25YZR3DC			
		5700	MacAdam 2step	SPHWH AHDNA25YZQ2DC	529	174	
			MacAdam 3step	SPHWH AHDNA25YZQ3DC			
		6500	MacAdam 2step	SPHWH AHDNA25YZP2DC	520	171	
			MacAdam 3step	SPHWH AHDNA25YZP3DC			
	90+	2700	MacAdam 1step	SPHWH AHDNA27YZW1DC	407	134	
			MacAdam 2step	SPHWH AHDNA27YZW2DC			
			MacAdam 3step	SPHWH AHDNA27YZW3DC			
		3000	MacAdam 1step	SPHWH AHDNA27YZV1DC	428	141	
			MacAdam 2step	SPHWH AHDNA27YZV2DC			
			MacAdam 3step	SPHWH AHDNA27YZV3DC			
3500		MacAdam 1step	SPHWH AHDNA27YZU1DC	441	145		
		MacAdam 2step	SPHWH AHDNA27YZU2DC				
		MacAdam 3step	SPHWH AHDNA27YZU3DC				
4000		MacAdam 1step	SPHWH AHDNA27YZT1DC	450	148		
		MacAdam 2step	SPHWH AHDNA27YZT2DC				
		MacAdam 3step	SPHWH AHDNA27YZT3DC				
5000	MacAdam 2step	SPHWH AHDNA27YZR2DC	459	151			
	MacAdam 3step	SPHWH AHDNA27YZR3DC					

D-series Gen 3+

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)	
LC006D Gen 3+	80+	2700	MacAdam 1step	SPHWAHHDNB25YZW1DC	945	156	180mA 33.7V
			MacAdam 2step	SPHWAHHDNB25YZW2DC			
			MacAdam 3step	SPHWAHHDNB25YZW3DC			
		3000	MacAdam 1step	SPHWAHHDNB25YZV1DC	983	162	
			MacAdam 2step	SPHWAHHDNB25YZV2DC			
			MacAdam 3step	SPHWAHHDNB25YZV3DC			
		3500	MacAdam 1step	SPHWAHHDNB25YZU1DC	1021	168	
			MacAdam 2step	SPHWAHHDNB25YZU2DC			
			MacAdam 3step	SPHWAHHDNB25YZU3DC			
		4000	MacAdam 1step	SPHWAHHDNB25YZT1DC	1038	171	
			MacAdam 2step	SPHWAHHDNB25YZT2DC			
			MacAdam 3step	SPHWAHHDNB25YZT3DC			
		5000	MacAdam 2step	SPHWAHHDNB25YZR2DC	1056	174	
			MacAdam 3step	SPHWAHHDNB25YZR3DC			
		5700	MacAdam 2step	SPHWAHHDNB25YZQ2DC	1038	171	
			MacAdam 3step	SPHWAHHDNB25YZQ3DC			
		6500	MacAdam 2step	SPHWAHHDNB25YZP2DC	1022	168	
			MacAdam 3step	SPHWAHHDNB25YZP3DC			
	90+	2700	MacAdam 1step	SPHWAHHDNB27YZW1DC	796	131	
			MacAdam 2step	SPHWAHHDNB27YZW2DC			
			MacAdam 3step	SPHWAHHDNB27YZW3DC			
		3000	MacAdam 1step	SPHWAHHDNB27YZV1DC	838	138	
			MacAdam 2step	SPHWAHHDNB27YZV2DC			
			MacAdam 3step	SPHWAHHDNB27YZV3DC			
3500		MacAdam 1step	SPHWAHHDNB27YZU1DC	865	143		
		MacAdam 2step	SPHWAHHDNB27YZU2DC				
		MacAdam 3step	SPHWAHHDNB27YZU3DC				
4000		MacAdam 1step	SPHWAHHDNB27YZT1DC	884	146		
		MacAdam 2step	SPHWAHHDNB27YZT2DC				
		MacAdam 3step	SPHWAHHDNB27YZT3DC				
5000	MacAdam 2step	SPHWAHHDNB27YZR2DC	902	149			
	MacAdam 3step	SPHWAHHDNB27YZR3DC					

D-series Gen 3+

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)	
LC009D Gen 3+	70+	3000	MacAdam 2step	SPHWH AHDNC23YZV2DC	1586	174	270mA 33.7V
			MacAdam 3step	SPHWH AHDNC23YZV3DC			
		4000	MacAdam 2step	SPHWH AHDNC23YZT2DC	1610	177	
			MacAdam 3step	SPHWH AHDNC23YZT3DC			
		5000	MacAdam 2step	SPHWH AHDNC23YZR2DC	1625	179	
			MacAdam 3step	SPHWH AHDNC23YZR3DC			
	80+	2700	MacAdam 1step	SPHWH AHDNC25YZW1DC	1406	155	
			MacAdam 2step	SPHWH AHDNC25YZW2DC			
			MacAdam 3step	SPHWH AHDNC25YZW3DC			
		3000	MacAdam 1step	SPHWH AHDNC25YZV1DC	1463	161	
			MacAdam 2step	SPHWH AHDNC25YZV2DC			
			MacAdam 3step	SPHWH AHDNC25YZV3DC			
		3500	MacAdam 1step	SPHWH AHDNC25YZU1DC	1519	167	
			MacAdam 2step	SPHWH AHDNC25YZU2DC			
			MacAdam 3step	SPHWH AHDNC25YZU3DC			
		4000	MacAdam 1step	SPHWH AHDNC25YZT1DC	1550	170	
			MacAdam 2step	SPHWH AHDNC25YZT2DC			
			MacAdam 3step	SPHWH AHDNC25YZT3DC			
		5000	MacAdam 2step	SPHWH AHDNC25YZR2DC	1576	173	
			MacAdam 3step	SPHWH AHDNC25YZR3DC			
		5700	MacAdam 2step	SPHWH AHDNC25YZQ2DC	1555	171	
			MacAdam 3step	SPHWH AHDNC25YZQ3DC			
		6500	MacAdam 2step	SPHWH AHDNC25YZP2DC	1529	168	
			MacAdam 3step	SPHWH AHDNC25YZP3DC			
	90+	2700	MacAdam 1step	SPHWH AHDNC27YZW1DC	1190	131	
			MacAdam 2step	SPHWH AHDNC27YZW2DC			
			MacAdam 3step	SPHWH AHDNC27YZW3DC			
		3000	MacAdam 1step	SPHWH AHDNC27YZV1DC	1254	138	
			MacAdam 2step	SPHWH AHDNC27YZV2DC			
			MacAdam 3step	SPHWH AHDNC27YZV3DC			
		3500	MacAdam 1step	SPHWH AHDNC27YZU1DC	1294	142	
			MacAdam 2step	SPHWH AHDNC27YZU2DC			
			MacAdam 3step	SPHWH AHDNC27YZU3DC			
		4000	MacAdam 1step	SPHWH AHDNC27YZT1DC	1322	145	
			MacAdam 2step	SPHWH AHDNC27YZT2DC			
			MacAdam 3step	SPHWH AHDNC27YZT3DC			
5000	MacAdam 2step	SPHWH AHDNC27YZR2DC	1348	148			
	MacAdam 3step	SPHWH AHDNC27YZR3DC					

D-series Gen 3+

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)	
LC013D Gen 3+	70+	3000	MacAdam 2step	SPHWAHDND23YZV2DC	2098	173	360mA 33.7V
			MacAdam 3step	SPHWAHDND23YZV3DC			
		4000	MacAdam 2step	SPHWAHDND23YZT2DC	2133	176	
			MacAdam 3step	SPHWAHDND23YZT3DC			
		5000	MacAdam 2step	SPHWAHDND23YZR2DC	2162	178	
			MacAdam 3step	SPHWAHDND23YZR3DC			
	80+	2700	MacAdam 1step	SPHWAHDND25YZW1DC	1869	154	
			MacAdam 2step	SPHWAHDND25YZW2DC			
			MacAdam 3step	SPHWAHDND25YZW3DC			
		3000	MacAdam 1step	SPHWAHDND25YZV1DC	1945	160	
			MacAdam 2step	SPHWAHDND25YZV2DC			
			MacAdam 3step	SPHWAHDND25YZV3DC			
		3500	MacAdam 1step	SPHWAHDND25YZU1DC	2020	167	
			MacAdam 2step	SPHWAHDND25YZU2DC			
			MacAdam 3step	SPHWAHDND25YZU3DC			
		4000	MacAdam 1step	SPHWAHDND25YZT1DC	2056	169	
			MacAdam 2step	SPHWAHDND25YZT2DC			
			MacAdam 3step	SPHWAHDND25YZT3DC			
		5000	MacAdam 2step	SPHWAHDND25YZR2DC	2090	172	
			MacAdam 3step	SPHWAHDND25YZR3DC			
		5700	MacAdam 2step	SPHWAHDND25YZQ2DC	2057	170	
			MacAdam 3step	SPHWAHDND25YZQ3DC			
		6500	MacAdam 2step	SPHWAHDND25YZP2DC	2034	168	
			MacAdam 3step	SPHWAHDND25YZP3DC			
	90+	2700	MacAdam 1step	SPHWAHDND27YZW1DC	1579	130	
			MacAdam 2step	SPHWAHDND27YZW2DC			
			MacAdam 3step	SPHWAHDND27YZW3DC			
		3000	MacAdam 1step	SPHWAHDND27YZV1DC	1661	137	
			MacAdam 2step	SPHWAHDND27YZV2DC			
			MacAdam 3step	SPHWAHDND27YZV3DC			
		3500	MacAdam 1step	SPHWAHDND27YZU1DC	1712	141	
			MacAdam 2step	SPHWAHDND27YZU2DC			
			MacAdam 3step	SPHWAHDND27YZU3DC			
		4000	MacAdam 1step	SPHWAHDND27YZT1DC	1748	144	
			MacAdam 2step	SPHWAHDND27YZT2DC			
			MacAdam 3step	SPHWAHDND27YZT3DC			
5000	MacAdam 2step	SPHWAHDND37YZR2DC	1792	148			
	MacAdam 3step	SPHWAHDND37YZR3DC					

D-series Gen 3+

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 2step	SPHWH AHDNE23YZV2DC	2727	180	450mA 33.7V
			MacAdam 3step	SPHWH AHDNE23YZV3DC			
		4000	MacAdam 2step	SPHWH AHDNE23YZT2DC	2763	182	
			MacAdam 3step	SPHWH AHDNE23YZT3DC			
		5000	MacAdam 2step	SPHWH AHDNE23YZR2DC	2797	184	
			MacAdam 3step	SPHWH AHDNE23YZR3DC			
	80+	2700	MacAdam 1step	SPHWH AHDNE25YZW1DC	2426	160	
			MacAdam 2step	SPHWH AHDNE25YZW2DC			
			MacAdam 3step	SPHWH AHDNE25YZW3DC			
		3000	MacAdam 1step	SPHWH AHDNE25YZV1DC	2524	166	
			MacAdam 2step	SPHWH AHDNE25YZV2DC			
			MacAdam 3step	SPHWH AHDNE25YZV3DC			
		3500	MacAdam 1step	SPHWH AHDNE25YZU1DC	2621	173	
			MacAdam 2step	SPHWH AHDNE25YZU2DC			
			MacAdam 3step	SPHWH AHDNE25YZU3DC			
		4000	MacAdam 1step	SPHWH AHDNE25YZT1DC	2669	176	
			MacAdam 2step	SPHWH AHDNE25YZT2DC			
			MacAdam 3step	SPHWH AHDNE25YZT3DC			
		5000	MacAdam 2step	SPHWH AHDNE25YZR2DC	2713	179	
			MacAdam 3step	SPHWH AHDNE25YZR3DC			
		5700	MacAdam 2step	SPHWH AHDNE25YZQ2DC	2670	176	
			MacAdam 3step	SPHWH AHDNE25YZQ3DC			
		6500	MacAdam 2step	SPHWH AHDNE25YZP2DC	2627	173	
			MacAdam 3step	SPHWH AHDNE25YZP3DC			
	90+	2700	MacAdam 1step	SPHWH AHDNE27YZW1DC	2047	135	
			MacAdam 2step	SPHWH AHDNE27YZW2DC			
			MacAdam 3step	SPHWH AHDNE27YZW3DC			
		3000	MacAdam 1step	SPHWH AHDNE27YZV1DC	2154	142	
			MacAdam 2step	SPHWH AHDNE27YZV2DC			
			MacAdam 3step	SPHWH AHDNE27YZV3DC			
		3500	MacAdam 1step	SPHWH AHDNE27YZU1DC	2223	147	
			MacAdam 2step	SPHWH AHDNE27YZU2DC			
			MacAdam 3step	SPHWH AHDNE27YZU3DC			
		4000	MacAdam 1step	SPHWH AHDNE27YZT1DC	2273	150	
			MacAdam 2step	SPHWH AHDNE27YZT2DC			
			MacAdam 3step	SPHWH AHDNE27YZT3DC			
5000	MacAdam 1step	SPHWH AHDNE27YZR1DC	2328	154			
	MacAdam 3step	SPHWH AHDNE27YZR3DC					

D-series Gen 3+

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 2step	SPHWAHDFNF23YZV2DC	3284	180	540mA 33.7V
			MacAdam 3step	SPHWAHDFNF23YZV3DC			
		4000	MacAdam 2step	SPHWAHDFNF23YZT2DC	3332	183	
			MacAdam 3step	SPHWAHDFNF23YZT3DC			
		5000	MacAdam 2step	SPHWAHDFNF23YZR2DC	3369	185	
			MacAdam 3step	SPHWAHDFNF23YZR3DC			
	80+	2700	MacAdam 1step	SPHWAHDFNF25YZW1DC	2925	161	
			MacAdam 2step	SPHWAHDFNF25YZW2DC			
			MacAdam 3step	SPHWAHDFNF25YZW3DC			
		3000	MacAdam 1step	SPHWAHDFNF25YZV1DC	3044	167	
			MacAdam 2step	SPHWAHDFNF25YZV2DC			
			MacAdam 3step	SPHWAHDFNF25YZV3DC			
		3500	MacAdam 1step	SPHWAHDFNF25YZU1DC	3161	174	
			MacAdam 2step	SPHWAHDFNF25YZU2DC			
			MacAdam 3step	SPHWAHDFNF25YZU3DC			
		4000	MacAdam 1step	SPHWAHDFNF25YZT1DC	3218	177	
			MacAdam 2step	SPHWAHDFNF25YZT2DC			
			MacAdam 3step	SPHWAHDFNF25YZT3DC			
		5000	MacAdam 2step	SPHWAHDFNF25YZR2DC	3271	180	
			MacAdam 3step	SPHWAHDFNF25YZR3DC			
		5700	MacAdam 2step	SPHWAHDFNF25YZQ2DC	3217	177	
			MacAdam 3step	SPHWAHDFNF25YZQ3DC			
		6500	MacAdam 2step	SPHWAHDFNF25YZP2DC	3164	174	
			MacAdam 3step	SPHWAHDFNF25YZP3DC			
	90+	2700	MacAdam 1step	SPHWAHDFNF27YZW1DC	2469	136	
			MacAdam 2step	SPHWAHDFNF27YZW2DC			
			MacAdam 3step	SPHWAHDFNF27YZW3DC			
		3000	MacAdam 1step	SPHWAHDFNF27YZV1DC	2597	143	
			MacAdam 2step	SPHWAHDFNF27YZV2DC			
			MacAdam 3step	SPHWAHDFNF27YZV3DC			
		3500	MacAdam 1step	SPHWAHDFNF27YZU1DC	2680	147	
			MacAdam 2step	SPHWAHDFNF27YZU2DC			
			MacAdam 3step	SPHWAHDFNF27YZU3DC			
		4000	MacAdam 1step	SPHWAHDFNF27YZT1DC	2738	150	
			MacAdam 2step	SPHWAHDFNF27YZT2DC			
			MacAdam 3step	SPHWAHDFNF27YZT3DC			
5000	MacAdam 2step	SPHWAHDFNF27YZR2DC	2804	154			
	MacAdam 3step	SPHWAHDFNF27YZR3DC					

D-series Gen 3+

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 Gen 3+	70+	3000	MacAdam 2step	SPHWHHAHDNG23YZV2DC	4289	177	720mA 33.7V
			MacAdam 3step	SPHWHHAHDNG23YZV3DC			
		4000	MacAdam 2step	SPHWHHAHDNG23YZT2DC	4347	179	
			MacAdam 3step	SPHWHHAHDNG23YZT3DC			
		5000	MacAdam 2step	SPHWHHAHDNG23YZR2DC	4396	181	
			MacAdam 3step	SPHWHHAHDNG23YZR3DC			
	80+	2700	MacAdam 1step	SPHWHHAHDNG25YZW1DC	3816	157	
			MacAdam 2step	SPHWHHAHDNG25YZW2DC			
			MacAdam 3step	SPHWHHAHDNG25YZW3DC			
		3000	MacAdam 1step	SPHWHHAHDNG25YZV1DC	3971	164	
			MacAdam 2step	SPHWHHAHDNG25YZV2DC			
			MacAdam 3step	SPHWHHAHDNG25YZV3DC			
		3500	MacAdam 1step	SPHWHHAHDNG25YZU1DC	4125	170	
			MacAdam 2step	SPHWHHAHDNG25YZU2DC			
			MacAdam 3step	SPHWHHAHDNG25YZU3DC			
		4000	MacAdam 1step	SPHWHHAHDNG25YZT1DC	4198	173	
			MacAdam 2step	SPHWHHAHDNG25YZT2DC			
			MacAdam 3step	SPHWHHAHDNG25YZT3DC			
		5000	MacAdam 2step	SPHWHHAHDNG25YZR2DC	4268	176	
			MacAdam 3step	SPHWHHAHDNG25YZR3DC			
		5700	MacAdam 2step	SPHWHHAHDNG25YZQ2DC	4301	177	
			MacAdam 3step	SPHWHHAHDNG25YZQ3DC			
		6500	MacAdam 2step	SPHWHHAHDNG25YZP2DC	4133	170	
			MacAdam 3step	SPHWHHAHDNG25YZP3DC			
	90+	2700	MacAdam 1step	SPHWHHAHDNG27YZW1DC	3222	133	
			MacAdam 2step	SPHWHHAHDNG27YZW2DC			
			MacAdam 3step	SPHWHHAHDNG27YZW3DC			
		3000	MacAdam 1step	SPHWHHAHDNG27YZV1DC	3389	140	
			MacAdam 2step	SPHWHHAHDNG27YZV2DC			
			MacAdam 3step	SPHWHHAHDNG27YZV3DC			
		3500	MacAdam 1step	SPHWHHAHDNG27YZU1DC	3496	144	
			MacAdam 2step	SPHWHHAHDNG27YZU2DC			
			MacAdam 3step	SPHWHHAHDNG27YZU3DC			
		4000	MacAdam 1step	SPHWHHAHDNG27YZT1DC	3572	147	
			MacAdam 2step	SPHWHHAHDNG27YZT2DC			
			MacAdam 3step	SPHWHHAHDNG27YZT3DC			
5000	MacAdam 2step	SPHWHHAHDNG27YZR2DC	3663	151			
	MacAdam 3step	SPHWHHAHDNG27YZR3DC					

D-series Gen 3+

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 2step	SPHWAHHDNH23YZV2DC	5261	173	900mA 33.7V
			MacAdam 3step	SPHWAHHDNH23YZV3DC			
		4000	MacAdam 2step	SPHWAHHDNH23YZT2DC	5337	176	
			MacAdam 3step	SPHWAHHDNH23YZT3DC			
		5000	MacAdam 2step	SPHWAHHDNH23YZR2DC	5424	179	
			MacAdam 3step	SPHWAHHDNH23YZR3DC			
	80+	2700	MacAdam 1step	SPHWAHHDNH25YZW1DC	4686	155	
			MacAdam 2step	SPHWAHHDNH25YZW2DC			
			MacAdam 3step	SPHWAHHDNH25YZW3DC			
		3000	MacAdam 1step	SPHWAHHDNH25YZV1DC	4875	161	
			MacAdam 2step	SPHWAHHDNH25YZV2DC			
			MacAdam 3step	SPHWAHHDNH25YZV3DC			
		3500	MacAdam 1step	SPHWAHHDNH25YZU1DC	5064	167	
			MacAdam 2step	SPHWAHHDNH25YZU2DC			
			MacAdam 3step	SPHWAHHDNH25YZU3DC			
		4000	MacAdam 1step	SPHWAHHDNH25YZT1DC	5150	170	
			MacAdam 2step	SPHWAHHDNH25YZT2DC			
			MacAdam 3step	SPHWAHHDNH25YZT3DC			
		5000	MacAdam 2step	SPHWAHHDNH25YZR2DC	5240	173	
			MacAdam 3step	SPHWAHHDNH25YZR3DC			
		5700	MacAdam 2step	SPHWAHHDNH25YZQ2DC	5158	170	
			MacAdam 3step	SPHWAHHDNH25YZQ3DC			
		6500	MacAdam 2step	SPHWAHHDNH25YZP2DC	5089	168	
			MacAdam 3step	SPHWAHHDNH25YZP3DC			
	90+	2700	MacAdam 1step	SPHWAHHDNH27YZW1DC	3955	130	
			MacAdam 2step	SPHWAHHDNH27YZW2DC			
			MacAdam 3step	SPHWAHHDNH27YZW3DC			
		3000	MacAdam 1step	SPHWAHHDNH27YZV1DC	4160	137	
			MacAdam 2step	SPHWAHHDNH27YZV2DC			
			MacAdam 3step	SPHWAHHDNH27YZV3DC			
		3500	MacAdam 1step	SPHWAHHDNH27YZU1DC	4293	142	
			MacAdam 2step	SPHWAHHDNH27YZU2DC			
			MacAdam 3step	SPHWAHHDNH27YZU3DC			
		4000	MacAdam 1step	SPHWAHHDNH27YZT1DC	4386	145	
			MacAdam 2step	SPHWAHHDNH27YZT2DC			
			MacAdam 3step	SPHWAHHDNH27YZT3DC			
5000	MacAdam 2step	SPHWAHHDNH27YZR2DC	4493	148			
	MacAdam 3step	SPHWAHHDNH27YZR3DC					

D-series Gen 3+

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 3+	70+	3000	MacAdam 2step	SPHWHHAHDNK23YZV2DC	6446	177	1080mA 33.7V
			MacAdam 3step	SPHWHHAHDNK23YZV3DC			
		4000	MacAdam 2step	SPHWHHAHDNK23YZT2DC	6560	180	
			MacAdam 3step	SPHWHHAHDNK23YZT3DC			
		5000	MacAdam 2step	SPHWHHAHDNK23YZR2DC	6639	182	
			MacAdam 3step	SPHWHHAHDNK23YZR3DC			
	80+	2700	MacAdam 1step	SPHWHHAHDNK25YZW1DC	5737	158	
			MacAdam 2step	SPHWHHAHDNK25YZW2DC			
			MacAdam 3step	SPHWHHAHDNK25YZW3DC			
		3000	MacAdam 1step	SPHWHHAHDNK25YZV1DC	5968	164	
			MacAdam 2step	SPHWHHAHDNK25YZV2DC			
			MacAdam 3step	SPHWHHAHDNK25YZV3DC			
		3500	MacAdam 1step	SPHWHHAHDNK25YZU1DC	6199	170	
			MacAdam 2step	SPHWHHAHDNK25YZU2DC			
			MacAdam 3step	SPHWHHAHDNK25YZU3DC			
		4000	MacAdam 1step	SPHWHHAHDNK25YZT1DC	6311	173	
			MacAdam 2step	SPHWHHAHDNK25YZT2DC			
			MacAdam 3step	SPHWHHAHDNK25YZT3DC			
		5000	MacAdam 2step	SPHWHHAHDNK25YZR2DC	6414	176	
			MacAdam 3step	SPHWHHAHDNK25YZR3DC			
		5700	MacAdam 2step	SPHWHHAHDNK25YZQ2DC	6313	173	
			MacAdam 3step	SPHWHHAHDNK25YZQ3DC			
		6500	MacAdam 2step	SPHWHHAHDNK25YZP2DC	6242	172	
			MacAdam 3step	SPHWHHAHDNK25YZP3DC			
	90+	2700	MacAdam 1step	SPHWHHAHDNK27YZW1DC	4856	133	
			MacAdam 2step	SPHWHHAHDNK27YZW2DC			
			MacAdam 3step	SPHWHHAHDNK27YZW3DC			
		3000	MacAdam 1step	SPHWHHAHDNK27YZV1DC	5108	140	
			MacAdam 2step	SPHWHHAHDNK27YZV2DC			
			MacAdam 3step	SPHWHHAHDNK27YZV3DC			
		3500	MacAdam 1step	SPHWHHAHDNK27YZU1DC	5260	145	
			MacAdam 2step	SPHWHHAHDNK27YZU2DC			
			MacAdam 3step	SPHWHHAHDNK27YZU3DC			
		4000	MacAdam 1step	SPHWHHAHDNK27YZT1DC	5374	148	
			MacAdam 2step	SPHWHHAHDNK27YZT2DC			
			MacAdam 3step	SPHWHHAHDNK27YZT3DC			
5000	MacAdam 2step	SPHWHHAHDNK27YZR2DC	5507	151			
	MacAdam 3step	SPHWHHAHDNK27YZR3DC					

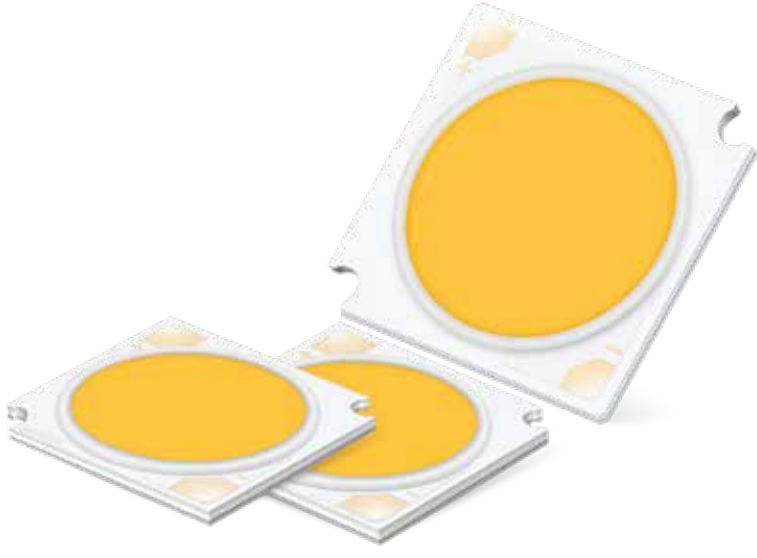
D-series Gen 3+

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 2step	SPHWAHDNL231ZV2DC	9585	175	1080mA 50.6V
			MacAdam 3step	SPHWAHDNL231ZV3DC			
		4000	MacAdam 2step	SPHWAHDNL231ZT2DC	9723	178	
			MacAdam 3step	SPHWAHDNL231ZT3DC			
		5000	MacAdam 2step	SPHWAHDNL231ZR2DC	9870	181	
			MacAdam 3step	SPHWAHDNL231ZR3DC			
	80+	2700	MacAdam 1step	SPHWAHDNL251ZW1DC	8537	156	
			MacAdam 2step	SPHWAHDNL251ZW2DC			
			MacAdam 3step	SPHWAHDNL251ZW3DC			
		3000	MacAdam 1step	SPHWAHDNL251ZV1DC	8882	163	
			MacAdam 2step	SPHWAHDNL251ZV2DC			
			MacAdam 3step	SPHWAHDNL251ZV3DC			
		3500	MacAdam 1step	SPHWAHDNL251ZU1DC	9225	169	
			MacAdam 2step	SPHWAHDNL251ZU2DC			
			MacAdam 3step	SPHWAHDNL251ZU3DC			
		4000	MacAdam 1step	SPHWAHDNL251ZT1DC	9383	172	
			MacAdam 2step	SPHWAHDNL251ZT2DC			
			MacAdam 3step	SPHWAHDNL251ZT3DC			
		5000	MacAdam 2step	SPHWAHDNL251ZR2DC	9546	175	
			MacAdam 3step	SPHWAHDNL251ZR3DC			
		5700	MacAdam 2step	SPHWAHDNL251ZQ2DC	9395	172	
			MacAdam 3step	SPHWAHDNL251ZQ3DC			
		6500	MacAdam 2step	SPHWAHDNL251ZP2DC	9253	169	
			MacAdam 3step	SPHWAHDNL251ZP3DC			
	90+	2700	MacAdam 1step	SPHWAHDNL271ZW1DC	7206	132	
			MacAdam 2step	SPHWAHDNL271ZW2DC			
			MacAdam 3step	SPHWAHDNL271ZW3DC			
		3000	MacAdam 1step	SPHWAHDNL271ZV1DC	7579	139	
			MacAdam 2step	SPHWAHDNL271ZV2DC			
			MacAdam 3step	SPHWAHDNL271ZV3DC			
		3500	MacAdam 1step	SPHWAHDNL271ZU1DC	7821	143	
			MacAdam 2step	SPHWAHDNL271ZU2DC			
			MacAdam 3step	SPHWAHDNL271ZU3DC			
		4000	MacAdam 1step	SPHWAHDNL271ZT1DC	7990	146	
			MacAdam 2step	SPHWAHDNL271ZT2DC			
			MacAdam 3step	SPHWAHDNL271ZT3DC			
5000	MacAdam 2step	SPHWAHDNL271ZR2DC	8186	150			
	MacAdam 3step	SPHWAHDNL271ZR3DC					

D-series Gen 3+

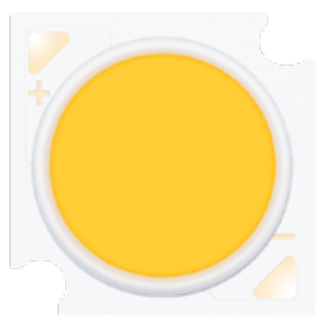


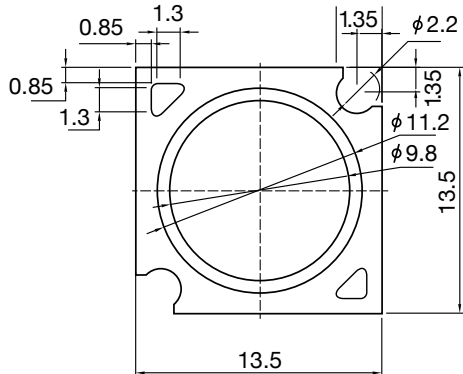
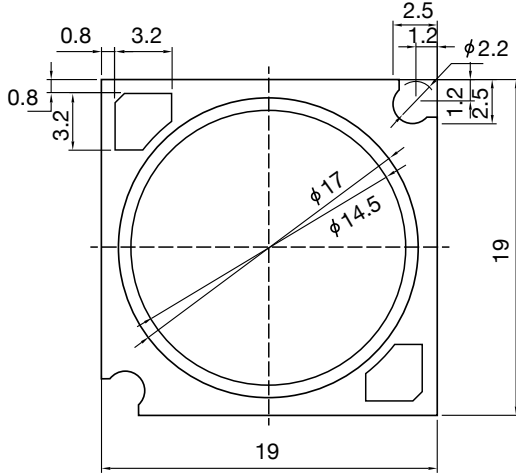
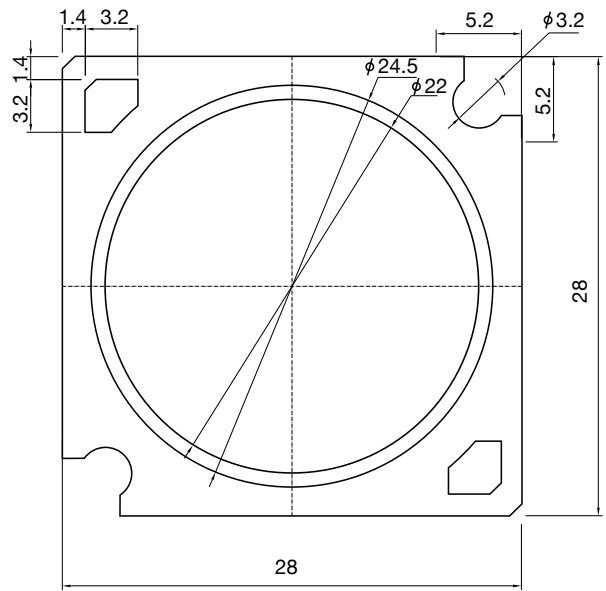
Product	CRI	CCT (K)	Color Rank	Part Number	T _J = 85°C		I _F (mA) V _F (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC080D Gen 3+	70+	3000	MacAdam 2step	SPHWHHAHDNM231ZV2DC	14087	172	1620mA 50.6V
			MacAdam 3step	SPHWHHAHDNM231ZV3DC			
		4000	MacAdam 2step	SPHWHHAHDNM231ZT2DC	14290	174	
			MacAdam 3step	SPHWHHAHDNM231ZT3DC			
		5000	MacAdam 2step	SPHWHHAHDNM231ZR2DC	14449	176	
			MacAdam 3step	SPHWHHAHDNM231ZR3DC			
	80+	2700	MacAdam 1step	SPHWHHAHDNM251ZW1DC	12487	152	
			MacAdam 2step	SPHWHHAHDNM251ZW2DC			
			MacAdam 3step	SPHWHHAHDNM251ZW3DC			
		3000	MacAdam 1step	SPHWHHAHDNM251ZV1DC	12990	158	
			MacAdam 2step	SPHWHHAHDNM251ZV2DC			
			MacAdam 3step	SPHWHHAHDNM251ZV3DC			
		3500	MacAdam 1step	SPHWHHAHDNM251ZU1DC	13492	165	
			MacAdam 2step	SPHWHHAHDNM251ZU2DC			
			MacAdam 3step	SPHWHHAHDNM251ZU3DC			
		4000	MacAdam 1step	SPHWHHAHDNM251ZT1DC	13735	168	
			MacAdam 2step	SPHWHHAHDNM251ZT2DC			
			MacAdam 3step	SPHWHHAHDNM251ZT3DC			
		5000	MacAdam 2step	SPHWHHAHDNM251ZR2DC	13961	170	
			MacAdam 3step	SPHWHHAHDNM251ZR3DC			
		5700	MacAdam 2step	SPHWHHAHDNM251ZQ2DC	13767	168	
			MacAdam 3step	SPHWHHAHDNM251ZQ3DC			
		6500	MacAdam 2step	SPHWHHAHDNM251ZP2DC	13585	166	
			MacAdam 3step	SPHWHHAHDNM251ZP3DC			
	90+	2700	MacAdam 1step	SPHWHHAHDNM271ZW1DC	10590	129	
			MacAdam 2step	SPHWHHAHDNM271ZW2DC			
			MacAdam 3step	SPHWHHAHDNM271ZW3DC			
		3000	MacAdam 1step	SPHWHHAHDNM271ZV1DC	11139	136	
			MacAdam 2step	SPHWHHAHDNM271ZV2DC			
			MacAdam 3step	SPHWHHAHDNM271ZV3DC			
		3500	MacAdam 1step	SPHWHHAHDNM271ZU1DC	11495	140	
			MacAdam 2step	SPHWHHAHDNM271ZU2DC			
			MacAdam 3step	SPHWHHAHDNM271ZU3DC			
		4000	MacAdam 1step	SPHWHHAHDNM271ZT1DC	11743	143	
			MacAdam 2step	SPHWHHAHDNM271ZT2DC			
			MacAdam 3step	SPHWHHAHDNM271ZT3DC			
5000	MacAdam 2step	SPHWHHAHDNM271ZR2DC	11974	146			
	MacAdam 3step	SPHWHHAHDNM271ZR3DC					

D-series Gen 2



Full line-up for various applications: MR/PAR, spotlights, downlights & high bay lights

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

$T_J=85^\circ\text{C}$	LC003D Gen 2	LC006D Gen 2	LC009D Gen 2	LC013D Gen 2	LC016D Gen 2	LC019D Gen 2	LC026D Gen 2	LC033D Gen 2	LC040D Gen 2	LC060D Gen 2	LC080D Gen 2	
												
LES	9.8mm			14.5mm				22 mm				
Typ.	3.1 W	6.2 W	9.4 W	12.5 W	15.6 W	18.7 W	24.9 W	31.1W	37.4 W	56.1 W	84.2 W	
	90 mA	180 mA	270 mA	360 mA	450 mA	540 mA	720 mA	900 mA	1080 mA	1080 mA	1620 mA	
Max.	8.6 W	17.2W	25.9 W	34.5 W	43.1 W	51.8 W	69 W	86.2 W	103.5 W	143.4 W	215 W	
	230 mA	460 mA	690 mA	920 mA	1150 mA	1380 mA	1840 mA	2300 mA	2760 mA	2760 mA	4140 mA	
Dimension												
Size	13.5mm x 13.5mm			19mm x 19mm				28mm x 28mm				

D-series Gen 2

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)	
LC003D Gen 2	80+	2700	MacAdam 1step	SPHWAHDNA25YZW1D2	459	147	90mA 34.6V
			MacAdam 2step	SPHWAHDNA25YZW2D2			
			MacAdam 3step	SPHWAHDNA25YZW3D2			
		3000	MacAdam 1step	SPHWAHDNA25YZV1D2	483	155	
			MacAdam 2step	SPHWAHDNA25YZV2D2			
			MacAdam 3step	SPHWAHDNA25YZV3D2			
		3500	MacAdam 1step	SPHWAHDNA25YZU1D2	501	161	
			MacAdam 2step	SPHWAHDNA25YZU2D2			
			MacAdam 3step	SPHWAHDNA25YZU3D2			
		4000	MacAdam 1step	SPHWAHDNA25YZT1D2	507	163	
			MacAdam 2step	SPHWAHDNA25YZT2D2			
			MacAdam 3step	SPHWAHDNA25YZT3D2			
		5000	MacAdam 2step	SPHWAHDNA25YZR2D2	513	165	
			MacAdam 3step	SPHWAHDNA25YZR3D2			
		5700	MacAdam 2step	SPHWAHDNA25YZQ2D2	513	165	
			MacAdam 3step	SPHWAHDNA25YZQ3D2			
		6500	MacAdam 2step	SPHWAHDNA25YZP2D2	507	163	
			MacAdam 3step	SPHWAHDNA25YZP3D2			
	90+	2700	MacAdam 1step	SPHWAHDNA27YZW1D2	388	125	
			MacAdam 2step	SPHWAHDNA27YZW2D2			
			MacAdam 3step	SPHWAHDNA27YZW3D2			
		3000	MacAdam 1step	SPHWAHDNA27YZV1D2	406	130	
			MacAdam 2step	SPHWAHDNA27YZV2D2			
			MacAdam 3step	SPHWAHDNA27YZV3D2			
3500		MacAdam 1step	SPHWAHDNA27YZU1D2	419	135		
		MacAdam 2step	SPHWAHDNA27YZU2D2				
		MacAdam 3step	SPHWAHDNA27YZU3D2				
4000		MacAdam 1step	SPHWAHDNA27YZT1D2	427	137		
		MacAdam 2step	SPHWAHDNA27YZT2D2				
		MacAdam 3step	SPHWAHDNA27YZT3D2				
5000	MacAdam 2step	SPHWAHDNA27YZR2D2	430	138			
	MacAdam 3step	SPHWAHDNA27YZR3D2					

D-series Gen 2

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)	
LC006D Gen 2	80+	2700	MacAdam 1step	SPHWHAHDNB25YZW1D2	924	148	180mA 34.6V
			MacAdam 2step	SPHWHAHDNB25YZW2D2			
			MacAdam 3step	SPHWHAHDNB25YZW3D2			
		3000	MacAdam 1step	SPHWHAHDNB25YZV1D2	971	156	
			MacAdam 2step	SPHWHAHDNB25YZV2D2			
			MacAdam 3step	SPHWHAHDNB25YZV3D2			
		3500	MacAdam 1step	SPHWHAHDNB25YZU1D2	1001	161	
			MacAdam 2step	SPHWHAHDNB25YZU2D2			
			MacAdam 3step	SPHWHAHDNB25YZU3D2			
		4000	MacAdam 1step	SPHWHAHDNB25YZT1D2	1024	164	
			MacAdam 2step	SPHWHAHDNB25YZT2D2			
			MacAdam 3step	SPHWHAHDNB25YZT3D2			
		5000	MacAdam 2step	SPHWHAHDNB25YZR2D2	1030	165	
			MacAdam 3step	SPHWHAHDNB25YZR3D2			
		5700	MacAdam 2step	SPHWHAHDNB25YZQ2D2	1030	165	
			MacAdam 3step	SPHWHAHDNB25YZQ3D2			
		6500	MacAdam 2step	SPHWHAHDNB25YZP2D2	1018	163	
			MacAdam 3step	SPHWHAHDNB25YZP3D2			
	90+	2700	MacAdam 1step	SPHWHAHDNB27YZW1D2	786	126	
			MacAdam 2step	SPHWHAHDNB27YZW2D2			
			MacAdam 3step	SPHWHAHDNB27YZW3D2			
		3000	MacAdam 1step	SPHWHAHDNB27YZV1D2	824	132	
			MacAdam 2step	SPHWHAHDNB27YZV2D2			
			MacAdam 3step	SPHWHAHDNB27YZV3D2			
3500		MacAdam 1step	SPHWHAHDNB27YZU1D2	853	137		
		MacAdam 2step	SPHWHAHDNB27YZU2D2				
		MacAdam 3step	SPHWHAHDNB27YZU3D2				
4000		MacAdam 1step	SPHWHAHDNB27YZT1D2	870	140		
		MacAdam 2step	SPHWHAHDNB27YZT2D2				
		MacAdam 3step	SPHWHAHDNB27YZT3D2				
5000	MacAdam 2step	SPHWHAHDNB27YZR2D2	874	140			
	MacAdam 3step	SPHWHAHDNB27YZR3D2					

D-series Gen 2

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)	
LC009D Gen 2	70+	3000	MacAdam 2step	SPHWAHDNC23YZV2D2	1578	161	270mA 34.6V
			MacAdam 3step	SPHWAHDNC23YZV3D2			
		4000	MacAdam 2step	SPHWAHDNC23YZT2D2	1654	169	
			MacAdam 3step	SPHWAHDNC23YZT3D2			
		5000	MacAdam 2step	SPHWAHDNC23YZR2D2	1707	174	
			MacAdam 3step	SPHWAHDNC23YZR3D2			
	80+	2700	MacAdam 1step	SPHWAHDNC25YZW1D2	1342	144	
			MacAdam 2step	SPHWAHDNC25YZW2D2			
			MacAdam 3step	SPHWAHDNC25YZW3D2			
		3000	MacAdam 1step	SPHWAHDNC25YZV1D2	1418	152	
			MacAdam 2step	SPHWAHDNC25YZV2D2			
			MacAdam 3step	SPHWAHDNC25YZV3D2			
		3500	MacAdam 1step	SPHWAHDNC25YZU1D2	1459	156	
			MacAdam 2step	SPHWAHDNC25YZU2D2			
			MacAdam 3step	SPHWAHDNC25YZU3D2			
		4000	MacAdam 1step	SPHWAHDNC25YZT1D2	1494	160	
			MacAdam 2step	SPHWAHDNC25YZT2D2			
			MacAdam 3step	SPHWAHDNC25YZT3D2			
		5000	MacAdam 2step	SPHWAHDNC25YZR2D2	1506	161	
			MacAdam 3step	SPHWAHDNC25YZR3D2			
		5700	MacAdam 2step	SPHWAHDNC25YZQ2D2	1506	161	
			MacAdam 3step	SPHWAHDNC25YZQ3D2			
		6500	MacAdam 2step	SPHWAHDNC25YZP2D2	1488	159	
			MacAdam 3step	SPHWAHDNC25YZP3D2			
	90+	2700	MacAdam 1step	SPHWAHDNC27YZW1D2	1152	123	
			MacAdam 2step	SPHWAHDNC27YZW2D2			
			MacAdam 3step	SPHWAHDNC27YZW3D2			
		3000	MacAdam 1step	SPHWAHDNC27YZV1D2	1206	129	
			MacAdam 2step	SPHWAHDNC27YZV2D2			
			MacAdam 3step	SPHWAHDNC27YZV3D2			
		3500	MacAdam 1step	SPHWAHDNC27YZU1D2	1245	133	
			MacAdam 2step	SPHWAHDNC27YZU2D2			
			MacAdam 3step	SPHWAHDNC27YZU3D2			
		4000	MacAdam 1step	SPHWAHDNC27YZT1D2	1273	136	
			MacAdam 2step	SPHWAHDNC27YZT2D2			
			MacAdam 3step	SPHWAHDNC27YZT3D2			
5000	MacAdam 2step	SPHWAHDNC27YZR2D2	1278	137			
	MacAdam 3step	SPHWAHDNC27YZR3D2					

D-series Gen 2

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)	
LC013D Gen 2	70+	3000	MacAdam 2step	SPHWHAHDND23YZV2D2	2106	161	360mA 34.6V
			MacAdam 3step	SPHWHAHDND23YZV3D2			
		4000	MacAdam 2step	SPHWHAHDND23YZT2D2	2173	166	
			MacAdam 3step	SPHWHAHDND23YZT3D2			
		5000	MacAdam 2step	SPHWHAHDND23YZR2D2	2207	169	
			MacAdam 3step	SPHWHAHDND23YZR3D2			
	80+	2700	MacAdam 1step	SPHWHAHDND25YZW1D2	1764	142	
			MacAdam 2step	SPHWHAHDND25YZW2D2			
			MacAdam 3step	SPHWHAHDND25YZW3D2			
		3000	MacAdam 1step	SPHWHAHDND25YZV1D2	1857	149	
			MacAdam 2step	SPHWHAHDND25YZV2D2			
			MacAdam 3step	SPHWHAHDND25YZV3D2			
		3500	MacAdam 1step	SPHWHAHDND25YZU1D2	1915	154	
			MacAdam 2step	SPHWHAHDND25YZU2D2			
			MacAdam 3step	SPHWHAHDND25YZU3D2			
		4000	MacAdam 1step	SPHWHAHDND25YZT1D2	1950	157	
			MacAdam 2step	SPHWHAHDND25YZT2D2			
			MacAdam 3step	SPHWHAHDND25YZT3D2			
		5000	MacAdam 2step	SPHWHAHDND25YZR2D2	1967	158	
			MacAdam 3step	SPHWHAHDND25YZR3D2			
		5700	MacAdam 2step	SPHWHAHDND25YZQ2D2	1967	158	
			MacAdam 3step	SPHWHAHDND25YZQ3D2			
		6500	MacAdam 2step	SPHWHAHDND25YZP2D2	1938	156	
			MacAdam 3step	SPHWHAHDND25YZP3D2			
	90+	2700	MacAdam 1step	SPHWHAHDND27YZW1D2	1509	121	
			MacAdam 2step	SPHWHAHDND27YZW2D2			
			MacAdam 3step	SPHWHAHDND27YZW3D2			
		3000	MacAdam 1step	SPHWHAHDND27YZV1D2	1580	127	
			MacAdam 2step	SPHWHAHDND27YZV2D2			
			MacAdam 3step	SPHWHAHDND27YZV3D2			
		3500	MacAdam 1step	SPHWHAHDND27YZU1D2	1635	131	
			MacAdam 2step	SPHWHAHDND27YZU2D2			
			MacAdam 3step	SPHWHAHDND27YZU3D2			
		4000	MacAdam 1step	SPHWHAHDND27YZT1D2	1670	134	
			MacAdam 2step	SPHWHAHDND27YZT2D2			
			MacAdam 3step	SPHWHAHDND27YZT3D2			
5000	MacAdam 2step	SPHWHAHDND27YZR2D2	1674	134			
	MacAdam 3step	SPHWHAHDND27YZR3D2					

D-series Gen 2

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)	
LC013D Gen 2	95+	2700	MacAdam 1step	SPHWAHDNC27YZW1D2	1223	98	360mA 34.6V
			MacAdam 2step	SPHWAHDNC27YZW2D2			
			MacAdam 3step	SPHWAHDNC27YZW3D2			
		3000	MacAdam 1step	SPHWAHDNC27YZV1D2	1285	103	
			MacAdam 2step	SPHWAHDNC27YZV2D2			
			MacAdam 3step	SPHWAHDNC27YZV3D2			
		3500	MacAdam 1step	SPHWAHDNC27YZU1D2	1337	107	
			MacAdam 2step	SPHWAHDNC27YZU2D2			
			MacAdam 3step	SPHWAHDNC27YZU3D2			
		4000	MacAdam 1step	SPHWAHDNC27YZT1D2	1379	111	
			MacAdam 2step	SPHWAHDNC27YZT2D2			
			MacAdam 3step	SPHWAHDNC27YZT3D2			
		5000	MacAdam 2step	SPHWAHDNC27YZR2D2	1390	112	
			MacAdam 3step	SPHWAHDNC27YZR3D2			
		LC016D Gen 2	70+	3000	MacAdam 2step	SPHWAHDNE23YZV2D2	
MacAdam 3step	SPHWAHDNE23YZV3D2						
4000	MacAdam 2step			SPHWAHDNE23YZT2D2	2701	173	
	MacAdam 3step			SPHWAHDNE23YZT3D2			
5000	MacAdam 2step			SPHWAHDNE23YZR2D2	2742	176	
	MacAdam 3step			SPHWAHDNE23YZR3D2			
80+	2700		MacAdam 1step	SPHWAHDNE25YZW1D2	2293	147	
			MacAdam 2step	SPHWAHDNE25YZW2D2			
			MacAdam 3step	SPHWAHDNE25YZW3D2			
	3000		MacAdam 1step	SPHWAHDNE25YZV1D2	2423	156	
			MacAdam 2step	SPHWAHDNE25YZV2D2			
			MacAdam 3step	SPHWAHDNE25YZV3D2			
	3500		MacAdam 1step	SPHWAHDNE25YZU1D2	2513	161	
			MacAdam 2step	SPHWAHDNE25YZU2D2			
			MacAdam 3step	SPHWAHDNE25YZU3D2			
	4000	MacAdam 1step	SPHWAHDNE25YZT1D2	2558	164		
		MacAdam 2step	SPHWAHDNE25YZT2D2				
		MacAdam 3step	SPHWAHDNE25YZT3D2				
5000	MacAdam 2step	SPHWAHDNE25YZR2D2	2581	166			
	MacAdam 3step	SPHWAHDNE25YZR3D2					
5700	MacAdam 2step	SPHWAHDNE25YZQ2D2	2581	166			
	MacAdam 3step	SPHWAHDNE25YZQ3D2					
6500	MacAdam 2step	SPHWAHDNE25YZP2D2	2558	164			
	MacAdam 3step	SPHWAHDNE25YZP3D2					

D-series Gen 2

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	90+	2700	MacAdam 1step	SPHWH AHDNE27YZW1D2	1967	126	450mA 34.6V
			MacAdam 2step	SPHWH AHDNE27YZW2D2			
			MacAdam 3step	SPHWH AHDNE27YZW3D2			
		3000	MacAdam 1step	SPHWH AHDNE27YZV1D2	2084	134	
			MacAdam 2step	SPHWH AHDNE27YZV2D2			
			MacAdam 3step	SPHWH AHDNE27YZV3D2			
		3500	MacAdam 1step	SPHWH AHDNE27YZU1D2	2146	138	
			MacAdam 2step	SPHWH AHDNE27YZU2D2			
			MacAdam 3step	SPHWH AHDNE27YZU3D2			
		4000	MacAdam 1step	SPHWH AHDNE27YZT1D2	2189	141	
			MacAdam 2step	SPHWH AHDNE27YZT2D2			
			MacAdam 3step	SPHWH AHDNE27YZT3D2			
	5000	MacAdam 2step	SPHWH AHDNE27YZR2D2	2209	142		
		MacAdam 3step	SPHWH AHDNE27YZR3D2				
	95+	2700	MacAdam 1step	SPHWH AHDNE28YZW1D2	1575	101	
			MacAdam 2step	SPHWH AHDNE28YZW2D2			
			MacAdam 3step	SPHWH AHDNE28YZW3D2			
		3000	MacAdam 1step	SPHWH AHDNE28YZV1D2	1655	106	
			MacAdam 2step	SPHWH AHDNE28YZV2D2			
			MacAdam 3step	SPHWH AHDNE28YZV3D2			
		3500	MacAdam 1step	SPHWH AHDNE28YZU1D2	1722	111	
			MacAdam 2step	SPHWH AHDNE28YZU2D2			
			MacAdam 3step	SPHWH AHDNE28YZU3D2			
		4000	MacAdam 1step	SPHWH AHDNE28YZT1D2	1776	114	
MacAdam 2step			SPHWH AHDNE28YZT2D2				
MacAdam 3step			SPHWH AHDNE28YZT3D2				
5000	MacAdam 2step	SPHWH AHDNE28YZR2D2	1791	115			
	MacAdam 3step	SPHWH AHDNE28YZR3D2					

D-series Gen 2

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	70+	3000	MacAdam 2step	SPHWAHDFNF23YZV2D2	3107	166	540mA 34.6V
			MacAdam 3step	SPHWAHDFNF23YZV3D2			
		4000	MacAdam 2step	SPHWAHDFNF23YZT2D2	3207	172	
			MacAdam 3step	SPHWAHDFNF23YZT3D2			
		5000	MacAdam 2step	SPHWAHDFNF23YZR2D2	3256	174	
			MacAdam 3step	SPHWAHDFNF23YZR3D2			
	80+	2700	MacAdam 1step	SPHWAHDFNF25YZW1D2	2728	146	
			MacAdam 2step	SPHWAHDFNF25YZW2D2			
			MacAdam 3step	SPHWAHDFNF25YZW3D2			
		3000	MacAdam 1step	SPHWAHDFNF25YZV1D2	2877	154	
			MacAdam 2step	SPHWAHDFNF25YZV2D2			
			MacAdam 3step	SPHWAHDFNF25YZV3D2			
		3500	MacAdam 1step	SPHWAHDFNF25YZU1D2	2965	159	
			MacAdam 2step	SPHWAHDFNF25YZU2D2			
			MacAdam 3step	SPHWAHDFNF25YZU3D2			
		4000	MacAdam 1step	SPHWAHDFNF25YZT1D2	3026	162	
			MacAdam 2step	SPHWAHDFNF25YZT2D2			
			MacAdam 3step	SPHWAHDFNF25YZT3D2			
		5000	MacAdam 2step	SPHWAHDFNF25YZR2D2	3059	164	
			MacAdam 3step	SPHWAHDFNF25YZR3D2			
		5700	MacAdam 2step	SPHWAHDFNF25YZQ2D2	3059	164	
			MacAdam 3step	SPHWAHDFNF25YZQ3D2			
		6500	MacAdam 2step	SPHWAHDFNF25YZP2D2	3026	162	
			MacAdam 3step	SPHWAHDFNF25YZP3D2			
	90+	2700	MacAdam 1step	SPHWAHDFNF27YZW1D2	2336	125	
			MacAdam 2step	SPHWAHDFNF27YZW2D2			
			MacAdam 3step	SPHWAHDFNF27YZW3D2			
		3000	MacAdam 1step	SPHWAHDFNF27YZV1D2	2449	131	
			MacAdam 2step	SPHWAHDFNF27YZV2D2			
			MacAdam 3step	SPHWAHDFNF27YZV3D2			
		3500	MacAdam 1step	SPHWAHDFNF27YZU1D2	2539	136	
			MacAdam 2step	SPHWAHDFNF27YZU2D2			
			MacAdam 3step	SPHWAHDFNF27YZU3D2			
		4000	MacAdam 1step	SPHWAHDFNF27YZT1D2	2594	139	
			MacAdam 2step	SPHWAHDFNF27YZT2D2			
			MacAdam 3step	SPHWAHDFNF27YZT3D2			
5000	MacAdam 2step	SPHWAHDFNF27YZR2D2	2596	139			
	MacAdam 3step	SPHWAHDFNF27YZR3D2					

D-series Gen 2

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	95+	2700	MacAdam 1step	SPHWAHDNF28YZW1D2	1880	101	540mA 34.6V
			MacAdam 2step	SPHWAHDNF28YZW2D2			
			MacAdam 3step	SPHWAHDNF28YZW3D2			
		3000	MacAdam 1step	SPHWAHDNF28YZV1D2	1976	106	
			MacAdam 2step	SPHWAHDNF28YZV2D2			
			MacAdam 3step	SPHWAHDNF28YZV3D2			
		3500	MacAdam 1step	SPHWAHDNF28YZU1D2	2056	110	
			MacAdam 2step	SPHWAHDNF28YZU2D2			
			MacAdam 3step	SPHWAHDNF28YZU3D2			
		4000	MacAdam 1step	SPHWAHDNF28YZT1D2	2121	114	
			MacAdam 2step	SPHWAHDNF28YZT2D2			
			MacAdam 3step	SPHWAHDNF28YZT3D2			
		5000	MacAdam 2step	SPHWAHDNF28YZR2D2	2138	114	
			MacAdam 3step	SPHWAHDNF28YZR3D2			
		LC026D Gen 2	70+	3000	MacAdam 2step	SPHWAHDNG23YZV2D2	
MacAdam 3step	SPHWAHDNG23YZV3D2						
4000	MacAdam 2step			SPHWAHDNG23YZT2D2	4193	168	
	MacAdam 3step			SPHWAHDNG23YZT3D2			
5000	MacAdam 2step			SPHWAHDNG23YZR2D2	4258	171	
	MacAdam 3step			SPHWAHDNG23YZR3D2			
80+	2700		MacAdam 1step	SPHWAHDNG25YZW1D2	3580	144	
			MacAdam 2step	SPHWAHDNG25YZW2D2			
			MacAdam 3step	SPHWAHDNG25YZW3D2			
	3000		MacAdam 1step	SPHWAHDNG25YZV1D2	3762	151	
			MacAdam 2step	SPHWAHDNG25YZV2D2			
			MacAdam 3step	SPHWAHDNG25YZV3D2			
	3500		MacAdam 1step	SPHWAHDNG25YZU1D2	3872	155	
			MacAdam 2step	SPHWAHDNG25YZU2D2			
			MacAdam 3step	SPHWAHDNG25YZU3D2			
	4000	MacAdam 1step	SPHWAHDNG25YZT1D2	3950	159		
		MacAdam 2step	SPHWAHDNG25YZT2D2				
		MacAdam 3step	SPHWAHDNG25YZT3D2				
5000	MacAdam 2step	SPHWAHDNG25YZR2D2	3983	160			
	MacAdam 3step	SPHWAHDNG25YZR3D2					
5700	MacAdam 2step	SPHWAHDNG25YZQ2D2	3983	160			
	MacAdam 3step	SPHWAHDNG25YZQ3D2					
6500	MacAdam 2step	SPHWAHDNG25YZP2D2	3950	159			
	MacAdam 3step	SPHWAHDNG25YZP3D2					

D-series Gen 2

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 Gen 2	90+	2700	MacAdam 1step	SPHWHHAHDNG27YZW1D2	3064	123	720mA 34.6V
			MacAdam 2step	SPHWHHAHDNG27YZW2D2			
			MacAdam 3step	SPHWHHAHDNG27YZW3D2			
		3000	MacAdam 1step	SPHWHHAHDNG27YZV1D2	3223	129	
			MacAdam 2step	SPHWHHAHDNG27YZV2D2			
			MacAdam 3step	SPHWHHAHDNG27YZV3D2			
		3500	MacAdam 1step	SPHWHHAHDNG27YZU1D2	3319	133	
			MacAdam 2step	SPHWHHAHDNG27YZU2D2			
			MacAdam 3step	SPHWHHAHDNG27YZU3D2			
		4000	MacAdam 1step	SPHWHHAHDNG27YZT1D2	3387	136	
			MacAdam 2step	SPHWHHAHDNG27YZT2D2			
			MacAdam 3step	SPHWHHAHDNG27YZT3D2			
	5000	MacAdam 2step	SPHWHHAHDNG27YZR2D2	3416	137		
		MacAdam 3step	SPHWHHAHDNG27YZR3D2				
	95+	2700	MacAdam 1step	SPHWHHAHDNG28YZW1D2	2470	99	
			MacAdam 2step	SPHWHHAHDNG28YZW2D2			
			MacAdam 3step	SPHWHHAHDNG28YZW3D2			
		3000	MacAdam 1step	SPHWHHAHDNG28YZV1D2	2596	104	
			MacAdam 2step	SPHWHHAHDNG28YZV2D2			
			MacAdam 3step	SPHWHHAHDNG28YZV3D2			
		3500	MacAdam 1step	SPHWHHAHDNG28YZU1D2	2701	108	
			MacAdam 2step	SPHWHHAHDNG28YZU2D2			
			MacAdam 3step	SPHWHHAHDNG28YZU3D2			
		4000	MacAdam 1step	SPHWHHAHDNG28YZT1D2	2786	112	
MacAdam 2step			SPHWHHAHDNG28YZT2D2				
MacAdam 3step			SPHWHHAHDNG28YZT3D2				
5000	MacAdam 2step	SPHWHHAHDNG28YZR2D2	2809	113			
	MacAdam 3step	SPHWHHAHDNG28YZR3D2					

D-series Gen 2

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 2step	SPHWAHNDNH23YZV2D2	5014	161	900mA 34.6V
			MacAdam 3step	SPHWAHNDNH23YZV3D2			
		4000	MacAdam 2step	SPHWAHNDNH23YZT2D2	5175	166	
			MacAdam 3step	SPHWAHNDNH23YZT3D2			
		5000	MacAdam 2step	SPHWAHNDNH23YZR2D2	5255	169	
			MacAdam 3step	SPHWAHNDNH23YZR3D2			
	80+	2700	MacAdam 1step	SPHWAHNDNH25YZW1D2	4418	142	
			MacAdam 2step	SPHWAHNDNH25YZW2D2			
			MacAdam 3step	SPHWAHNDNH25YZW3D2			
		3000	MacAdam 1step	SPHWAHNDNH25YZV1D2	4643	149	
			MacAdam 2step	SPHWAHNDNH25YZV2D2			
			MacAdam 3step	SPHWAHNDNH25YZV3D2			
		3500	MacAdam 1step	SPHWAHNDNH25YZU1D2	4779	153	
			MacAdam 2step	SPHWAHNDNH25YZU2D2			
			MacAdam 3step	SPHWAHNDNH25YZU3D2			
		4000	MacAdam 1step	SPHWAHNDNH25YZT1D2	4875	157	
			MacAdam 2step	SPHWAHNDNH25YZT2D2			
			MacAdam 3step	SPHWAHNDNH25YZT3D2			
		5000	MacAdam 2step	SPHWAHNDNH25YZR2D2	4916	158	
			MacAdam 3step	SPHWAHNDNH25YZR3D2			
		5700	MacAdam 2step	SPHWAHNDNH25YZQ2D2	4916	158	
			MacAdam 3step	SPHWAHNDNH25YZQ3D2			
		6500	MacAdam 2step	SPHWAHNDNH25YZP2D2	4875	157	
			MacAdam 3step	SPHWAHNDNH25YZP3D2			
	90+	2700	MacAdam 1step	SPHWAHNDNH27YZW1D2	3781	121	
			MacAdam 2step	SPHWAHNDNH27YZW2D2			
			MacAdam 3step	SPHWAHNDNH27YZW2D2			
		3000	MacAdam 1step	SPHWAHNDNH27YZV1D2	3977	128	
			MacAdam 2step	SPHWAHNDNH27YZV2D2			
			MacAdam 3step	SPHWAHNDNH27YZV3D2			
		3500	MacAdam 1step	SPHWAHNDNH27YZU1D2	4096	132	
			MacAdam 2step	SPHWAHNDNH27YZU2D2			
			MacAdam 3step	SPHWAHNDNH27YZU3D2			
		4000	MacAdam 1step	SPHWAHNDNH27YZT1D2	4180	134	
			MacAdam 2step	SPHWAHNDNH27YZT2D2			
			MacAdam 3step	SPHWAHNDNH27YZT2D2			
5000	MacAdam 2step	SPHWAHNDNH27YZR2D2	4216	135			
	MacAdam 3step	SPHWAHNDNH27YZR3D2					

D-series Gen 2

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	95+	2700	MacAdam 1step	SPHWAHDNH28YZW1D2	3057	98	900mA 34.6V
			MacAdam 2step	SPHWAHDNH28YZW2D2			
			MacAdam 3step	SPHWAHDNH28YZW3D2			
		3000	MacAdam 1step	SPHWAHDNH28YZV1D2	3212	103	
			MacAdam 2step	SPHWAHDNH28YZV2D2			
			MacAdam 3step	SPHWAHDNH28YZV3D2			
		3500	MacAdam 1step	SPHWAHDNH28YZU1D2	3343	107	
			MacAdam 2step	SPHWAHDNH28YZU2D2			
			MacAdam 3step	SPHWAHDNH28YZU3D2			
		4000	MacAdam 1step	SPHWAHDNH28YZT1D2	3447	111	
			MacAdam 2step	SPHWAHDNH28YZT2D2			
			MacAdam 3step	SPHWAHDNH28YZT3D2			
5000	MacAdam 2step	SPHWAHDNH28YZR2D2	3476	112			
	MacAdam 3step	SPHWAHDNH28YZR3D2					
LC040D Gen 2	70+	3000	MacAdam 2step	SPHWAHDNK23YZV2D2	6304	169	1080mA 34.6V
			MacAdam 3step	SPHWAHDNK23YZV3D2			
		4000	MacAdam 2step	SPHWAHDNK23YZT2D2	6506	174	
			MacAdam 3step	SPHWAHDNK23YZT3D2			
		5000	MacAdam 2step	SPHWAHDNK23YZR2D2	6607	177	
			MacAdam 3step	SPHWAHDNK23YZR3D2			
	80+	2700	MacAdam 1step	SPHWAHDNK25YZW1D2	5547	148	
			MacAdam 2step	SPHWAHDNK25YZW2D2			
			MacAdam 3step	SPHWAHDNK25YZW3D2			
		3000	MacAdam 1step	SPHWAHDNK25YZV1D2	5837	156	
			MacAdam 2step	SPHWAHDNK25YZV2D2			
			MacAdam 3step	SPHWAHDNK25YZV3D2			
		3500	MacAdam 1step	SPHWAHDNK25YZU1D2	6016	161	
			MacAdam 2step	SPHWAHDNK25YZU2D2			
			MacAdam 3step	SPHWAHDNK25YZU3D2			
		4000	MacAdam 1step	SPHWAHDNK25YZT1D2	6146	164	
			MacAdam 2step	SPHWAHDNK25YZT2D2			
			MacAdam 3step	SPHWAHDNK25YZT3D2			
5000	MacAdam 2step	SPHWAHDNK25YZR2D2	6175	165			
	MacAdam 3step	SPHWAHDNK25YZR3D2					
5700	MacAdam 2step	SPHWAHDNK25YZQ2D2	6205	166			
	MacAdam 3step	SPHWAHDNK25YZQ3D2					
6500	MacAdam 2step	SPHWAHDNK25YZP2D2	6138	164			
	MacAdam 3step	SPHWAHDNK25YZP3D2					

D-series Gen 2

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	90+	2700	MacAdam 1step	SPHWWAHDNK27YZW1D2	4755	127	1080mA 34.6V
			MacAdam 2step	SPHWWAHDNK27YZW2D2			
			MacAdam 3step	SPHWWAHDNK27YZW3D2			
		3000	MacAdam 1step	SPHWWAHDNK27YZV1D2	5024	134	
			MacAdam 2step	SPHWWAHDNK27YZV2D2			
			MacAdam 3step	SPHWWAHDNK27YZV3D2			
		3500	MacAdam 1step	SPHWWAHDNK27YZU1D2	5152	138	
			MacAdam 2step	SPHWWAHDNK27YZU2D2			
			MacAdam 3step	SPHWWAHDNK27YZU3D2			
		4000	MacAdam 1step	SPHWWAHDNK27YZT1D2	5266	141	
			MacAdam 2step	SPHWWAHDNK27YZT2D2			
			MacAdam 3step	SPHWWAHDNK27YZT3D2			
	5000	MacAdam 2step	SPHWWAHDNK27YZR2D2	5325	143		
		MacAdam 3step	SPHWWAHDNK27YZR3D2				
	95+	2700	MacAdam 1step	SPHWWAHDNK28YZW1D2	3760	101	
			MacAdam 2step	SPHWWAHDNK28YZW2D2			
			MacAdam 3step	SPHWWAHDNK28YZW3D2			
		3000	MacAdam 1step	SPHWWAHDNK28YZV1D2	3952	106	
			MacAdam 2step	SPHWWAHDNK28YZV2D2			
			MacAdam 3step	SPHWWAHDNK28YZV3D2			
		3500	MacAdam 1step	SPHWWAHDNK28YZU1D2	4113	110	
			MacAdam 2step	SPHWWAHDNK28YZU2D2			
			MacAdam 3step	SPHWWAHDNK28YZU3D2			
		4000	MacAdam 1step	SPHWWAHDNK28YZT1D2	4241	113	
MacAdam 2step			SPHWWAHDNK28YZT2D2				
MacAdam 3step			SPHWWAHDNK28YZT3D2				
5000	MacAdam 2step	SPHWWAHDNK28YZR2D2	4277	114			
	MacAdam 3step	SPHWWAHDNK28YZR3D2					

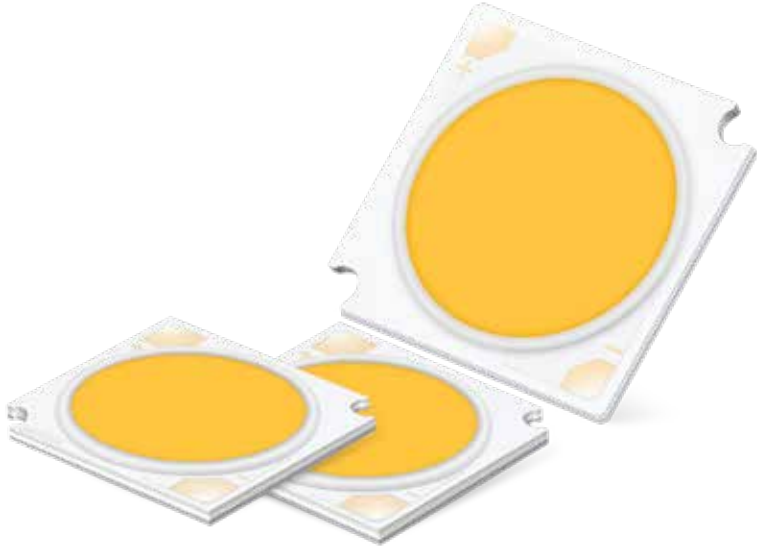
D-series Gen 2

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 2	70+	3000	MacAdam 2step	SPHWAHDNL231ZV2D2	9225	164	1080mA 52V
			MacAdam 3step	SPHWAHDNL231ZV3D2			
		4000	MacAdam 2step	SPHWAHDNL231ZT2D2	9521	170	
			MacAdam 3step	SPHWAHDNL231ZT3D2			
		5000	MacAdam 2step	SPHWAHDNL231ZR2D2	9668	172	
			MacAdam 3step	SPHWAHDNL231ZR3D2			
	80+	2700	MacAdam 1step	SPHWAHDNL251ZW1D2	8107	144	
			MacAdam 2step	SPHWAHDNL251ZW2D2			
			MacAdam 3step	SPHWAHDNL251ZW3D2			
		3000	MacAdam 1step	SPHWAHDNL251ZV1D2	8542	152	
			MacAdam 2step	SPHWAHDNL251ZV2D2			
			MacAdam 3step	SPHWAHDNL251ZV3D2			
		3500	MacAdam 1step	SPHWAHDNL251ZU1D2	8812	157	
			MacAdam 2step	SPHWAHDNL251ZU2D2			
			MacAdam 3step	SPHWAHDNL251ZU3D2			
		4000	MacAdam 1step	SPHWAHDNL251ZT1D2	8995	160	
			MacAdam 2step	SPHWAHDNL251ZT2D2			
			MacAdam 3step	SPHWAHDNL251ZT3D2			
		5000	MacAdam 2step	SPHWAHDNL251ZR2D2	9039	161	
			MacAdam 3step	SPHWAHDNL251ZR3D2			
		5700	MacAdam 2step	SPHWAHDNL251ZQ2D2	9084	162	
			MacAdam 3step	SPHWAHDNL251ZQ3D2			
		6500	MacAdam 2step	SPHWAHDNL251ZP2D2	8990	160	
			MacAdam 3step	SPHWAHDNL251ZP3D2			
	90+	2700	MacAdam 1step	SPHWAHDNL271ZW1D2	6959	124	
			MacAdam 2step	SPHWAHDNL271ZW2D2			
			MacAdam 3step	SPHWAHDNL271ZW3D2			
		3000	MacAdam 1step	SPHWAHDNL271ZV1D2	7352	131	
			MacAdam 2step	SPHWAHDNL271ZV2D2			
			MacAdam 3step	SPHWAHDNL271ZV3D2			
		3500	MacAdam 1step	SPHWAHDNL271ZU1D2	7539	134	
			MacAdam 2step	SPHWAHDNL271ZU2D2			
			MacAdam 3step	SPHWAHDNL271ZU3D2			
		4000	MacAdam 1step	SPHWAHDNL271ZT1D2	7706	137	
			MacAdam 2step	SPHWAHDNL271ZT2D2			
			MacAdam 3step	SPHWAHDNL271ZT3D2			
5000	MacAdam 2step	SPHWAHDNL271ZR2D2	7793	139			
	MacAdam 3step	SPHWAHDNL271ZR3D2					

D-series Gen 2

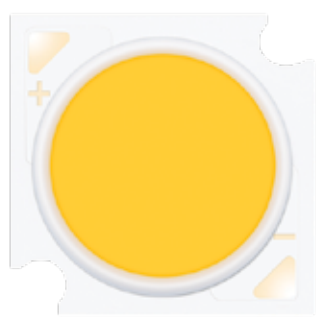


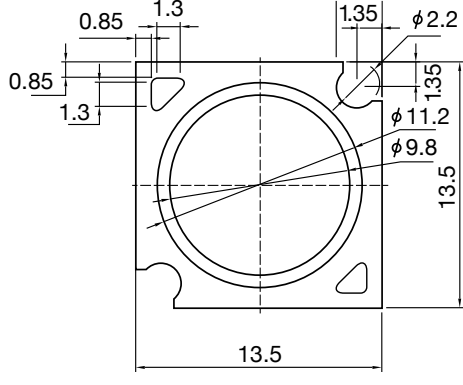
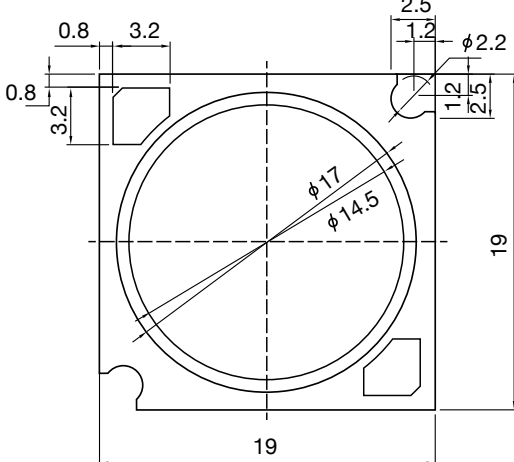
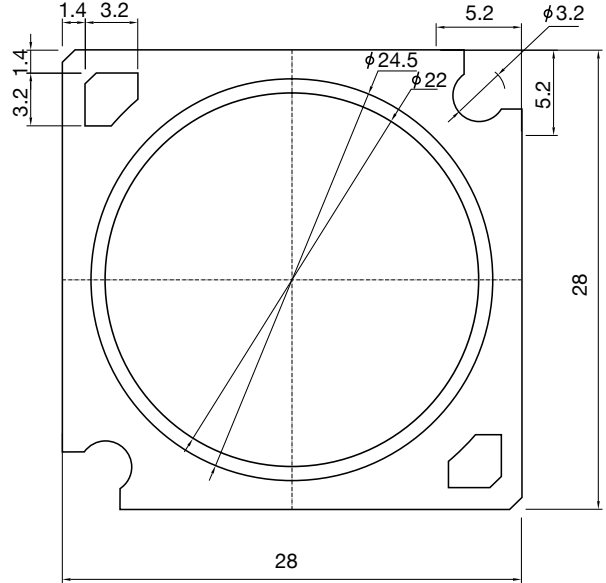
Product	CRI	CCT (K)	Color Rank	Part Number	T _J = 85°C		I _F (mA) V _F (V)
					Luminous Flux Typ. (lm)	Luminous Efficacy Typ. (lm/W)	
LC080D Gen 2	70+	3000	MacAdam 2step	SPHWHHAHDNM231ZV2D2	13465	160	1620mA 52V
			MacAdam 3step	SPHWHHAHDNM231ZV3D2			
		4000	MacAdam 2step	SPHWHHAHDNM231ZT2D2	13896	165	
			MacAdam 3step	SPHWHHAHDNM231ZT3D2			
		5000	MacAdam 2step	SPHWHHAHDNM231ZR2D2	14112	168	
			MacAdam 3step	SPHWHHAHDNM231ZR3D2			
	80+	2700	MacAdam 1step	SPHWHHAHDNM251ZW1D2	11815	140	
			MacAdam 2step	SPHWHHAHDNM251ZW2D2			
			MacAdam 3step	SPHWHHAHDNM251ZW3D2			
		3000	MacAdam 1step	SPHWHHAHDNM251ZV1D2	12468	148	
			MacAdam 2step	SPHWHHAHDNM251ZV2D2			
			MacAdam 3step	SPHWHHAHDNM251ZV3D2			
		3500	MacAdam 1step	SPHWHHAHDNM251ZU1D2	12852	153	
			MacAdam 2step	SPHWHHAHDNM251ZU2D2			
			MacAdam 3step	SPHWHHAHDNM251ZU3D2			
		4000	MacAdam 1step	SPHWHHAHDNM251ZT1D2	13123	156	
			MacAdam 2step	SPHWHHAHDNM251ZT2D2			
			MacAdam 3step	SPHWHHAHDNM251ZT3D2			
		5000	MacAdam 2step	SPHWHHAHDNM251ZR2D2	13196	157	
			MacAdam 3step	SPHWHHAHDNM251ZR3D2			
		5700	MacAdam 2step	SPHWHHAHDNM251ZQ2D2	13258	157	
			MacAdam 3step	SPHWHHAHDNM251ZQ3D2			
		6500	MacAdam 2step	SPHWHHAHDNM251ZP2D2	13121	156	
			MacAdam 3step	SPHWHHAHDNM251ZP3D2			
	90+	2700	MacAdam 1step	SPHWHHAHDNM271ZW1D2	10157	121	
			MacAdam 2step	SPHWHHAHDNM271ZW2D2			
			MacAdam 3step	SPHWHHAHDNM271ZW3D2			
		3000	MacAdam 1step	SPHWHHAHDNM271ZV1D2	10731	127	
			MacAdam 2step	SPHWHHAHDNM271ZV2D2			
			MacAdam 3step	SPHWHHAHDNM271ZV3D2			
		3500	MacAdam 1step	SPHWHHAHDNM271ZU1D2	11004	131	
			MacAdam 2step	SPHWHHAHDNM271ZU2D2			
			MacAdam 3step	SPHWHHAHDNM271ZU3D2			
		4000	MacAdam 1step	SPHWHHAHDNM271ZT1D2	11247	134	
			MacAdam 2step	SPHWHHAHDNM271ZT2D2			
			MacAdam 3step	SPHWHHAHDNM271ZT3D2			
5000	MacAdam 2step	SPHWHHAHDNM271ZR2D2	11375	135			
	MacAdam 3step	SPHWHHAHDNM271ZR3D2					

D-series Gen 2+



Full line-up for various applications: MR/PAR, spotlights, downlights & high bay lights

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

$T_J=85^\circ\text{C}$	LC003D Gen 2+	LC006D Gen 2+	LC009D Gen 2+	LC013D Gen 2+	LC016D Gen 2+	LC019D Gen 2+	LC026D Gen 2+	LC033D Gen 2+	LC040D Gen 2+	LC060D Gen 2+	LC080D Gen 2+	
												
LES	9.8mm			14.5mm				22 mm				
	34V									51.1V		
Typ.	3.1W	6.1W	9.2W	12.2W	15.3W	18.4W	24.5W	30.6W	36.7W	55.2W	82.8W	
	90mA	180mA	270mA	360mA	450mA	540mA	720mA	900mA	1080mA	1080mA	1620mA	
Max.	6.6W	13.3W	19.9W	26.6W	33.2W	39.9W	53.1W	66.4W	79.7W	119.4W	179.4W	
	180mA	360mA	540mA	720mA	900mA	1080mA	1440mA	1800mA	2160mA	2160mA	3240mA	
Dimension												
Size	13.5mm x 13.5mm			19mm x 19mm				28mm x 28mm				

D-series Gen 2+

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)	
LC003D Gen 2+	80+	2700	MacAdam 1step	SPHWH AHDNA25WJW1DB	468	153	180mA 17V
			MacAdam 2step	SPHWH AHDNA25WJW2DB			
			MacAdam 3step	SPHWH AHDNA25WJW3DB			
		3000	MacAdam 1step	SPHWH AHDNA25WJV1DB	485	158	
			MacAdam 2step	SPHWH AHDNA25WJV2DB			
			MacAdam 3step	SPHWH AHDNA25WJV3DB			
		3500	MacAdam 1step	SPHWH AHDNA25WJU1DB	501	164	
			MacAdam 2step	SPHWH AHDNA25WJU2DB			
			MacAdam 3step	SPHWH AHDNA25WJU3DB			
		4000	MacAdam 1step	SPHWH AHDNA25WJT1DB	510	167	
			MacAdam 2step	SPHWH AHDNA25WJT2DB			
			MacAdam 3step	SPHWH AHDNA25WJT3DB			
		5000	MacAdam 2step	SPHWH AHDNA25WJR2DB	516	169	
			MacAdam 3step	SPHWH AHDNA25WJR3DB			
		5700	MacAdam 2step	SPHWH AHDNA25WJQ2DB	516	169	
			MacAdam 3step	SPHWH AHDNA25WJQ3DB			
		6500	MacAdam 2step	SPHWH AHDNA25WJP2DB	510	167	
			MacAdam 3step	SPHWH AHDNA25WJP3DB			
	90+	2700	MacAdam 1step	SPHWH AHDNA27WJW1DB	392	128	
			MacAdam 2step	SPHWH AHDNA27WJW2DB			
			MacAdam 3step	SPHWH AHDNA27WJW3DB			
		3000	MacAdam 1step	SPHWH AHDNA27WJV1DB	410	134	
			MacAdam 2step	SPHWH AHDNA27WJV2DB			
			MacAdam 3step	SPHWH AHDNA27WJV3DB			
		3500	MacAdam 1step	SPHWH AHDNA27WJU1DB	423	138	
			MacAdam 2step	SPHWH AHDNA27WJU2DB			
			MacAdam 3step	SPHWH AHDNA27WJU3DB			
4000		MacAdam 1step	SPHWH AHDNA27WJT1DB	432	141		
		MacAdam 2step	SPHWH AHDNA27WJT2DB				
		MacAdam 3step	SPHWH AHDNA27WJT3DB				
5000	MacAdam 2step	SPHWH AHDNA27WJR2DB	440	144			
	MacAdam 3step	SPHWH AHDNA27WJR3D2					

D-series Gen 2+

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)	
LC003D Gen 2+	80+	2700	MacAdam 1step	SPHWAHDNA25YZW1DB	468	153	90mA 34V
			MacAdam 2step	SPHWAHDNA25YZW2DB			
			MacAdam 3step	SPHWAHDNA25YZW3DB			
		3000	MacAdam 1step	SPHWAHDNA25YZV1DB	485	158	
			MacAdam 2step	SPHWAHDNA25YZV2DB			
			MacAdam 3step	SPHWAHDNA25YZV3DB			
		3500	MacAdam 1step	SPHWAHDNA25YZU1DB	501	164	
			MacAdam 2step	SPHWAHDNA25YZU2DB			
			MacAdam 3step	SPHWAHDNA25YZU3DB			
		4000	MacAdam 1step	SPHWAHDNA25YZT1DB	510	167	
			MacAdam 2step	SPHWAHDNA25YZT2DB			
			MacAdam 3step	SPHWAHDNA25YZT3DB			
		5000	MacAdam 2step	SPHWAHDNA25YZR2DB	516	169	
			MacAdam 3step	SPHWAHDNA25YZR3DB			
		5700	MacAdam 2step	SPHWAHDNA25YZQ2DB	516	169	
			MacAdam 3step	SPHWAHDNA25YZQ3DB			
		6500	MacAdam 2step	SPHWAHDNA25YZP2DB	510	167	
			MacAdam 3step	SPHWAHDNA25YZP3DB			
	90+	2700	MacAdam 1step	SPHWAHDNA27YZW1DB	392	128	
			MacAdam 2step	SPHWAHDNA27YZW2DB			
			MacAdam 3step	SPHWAHDNA27YZW3DB			
		3000	MacAdam 1step	SPHWAHDNA27YZV1DB	410	134	
			MacAdam 2step	SPHWAHDNA27YZV2DB			
			MacAdam 3step	SPHWAHDNA27YZV3DB			
3500		MacAdam 1step	SPHWAHDNA27YZU1DB	423	138		
		MacAdam 2step	SPHWAHDNA27YZU2DB				
		MacAdam 3step	SPHWAHDNA27YZU3DB				
4000		MacAdam 1step	SPHWAHDNA27YZT1DB	432	141		
		MacAdam 2step	SPHWAHDNA27YZT2DB				
		MacAdam 3step	SPHWAHDNA27YZT3DB				
5000	MacAdam 2step	SPHWAHDNA27YZR2DB	440	144			
	MacAdam 3step	SPHWAHDNA27YZR3D2					

D-series Gen 2+

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)	
LC003D Gen 2+	80+	2700	MacAdam 1step	SPHWAHDNB25YZW1DB	928	152	180mA 34V
			MacAdam 2step	SPHWAHDNB25YZW2DB			
			MacAdam 3step	SPHWAHDNB25YZW3DB			
		3000	MacAdam 1step	SPHWAHDNB25YZV1DB	971	159	
			MacAdam 2step	SPHWAHDNB25YZV2DB			
			MacAdam 3step	SPHWAHDNB25YZV3DB			
		3500	MacAdam 1step	SPHWAHDNB25YZU1DB	1001	164	
			MacAdam 2step	SPHWAHDNB25YZU2DB			
			MacAdam 3step	SPHWAHDNB25YZU3DB			
		4000	MacAdam 1step	SPHWAHDNB25YZT1DB	1024	167	
			MacAdam 2step	SPHWAHDNB25YZT2DB			
			MacAdam 3step	SPHWAHDNB25YZT3DB			
		5000	MacAdam 2step	SPHWAHDNB25YZR2DB	1020	167	
			MacAdam 3step	SPHWAHDNB25YZR3DB			
		5700	MacAdam 2step	SPHWAHDNB25YZQ2DB	1010	165	
			MacAdam 3step	SPHWAHDNB25YZQ3DB			
		6500	MacAdam 2step	SPHWAHDNB25YZP2DB	1008	165	
			MacAdam 3step	SPHWAHDNB25YZP3DB			
	90+	2700	MacAdam 1step	SPHWAHDNB27YZW1DB	786	128	
			MacAdam 2step	SPHWAHDNB27YZW2DB			
			MacAdam 3step	SPHWAHDNB27YZW3DB			
		3000	MacAdam 1step	SPHWAHDNB27YZV1DB	824	135	
			MacAdam 2step	SPHWAHDNB27YZV2DB			
			MacAdam 3step	SPHWAHDNB27YZV3DB			
3500		MacAdam 1step	SPHWAHDNB27YZU1DB	853	139		
		MacAdam 2step	SPHWAHDNB27YZU2DB				
		MacAdam 3step	SPHWAHDNB27YZU3DB				
4000		MacAdam 1step	SPHWAHDNB27YZT1DB	870	142		
		MacAdam 2step	SPHWAHDNB27YZT2DB				
		MacAdam 3step	SPHWAHDNB27YZT3DB				
5000	MacAdam 2step	SPHWAHDNB27YZR2DB	878	143			
	MacAdam 3step	SPHWAHDNB27YZR3DB					

D-series Gen 2+

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)	
LC009D Gen 2+	70+	3000	MacAdam 2step	SPHWH AHDNC23YZV2DB	1548	161	270mA 34V
			MacAdam 3step	SPHWH AHDNC23YZV3DB			
		4000	MacAdam 2step	SPHWH AHDNC23YZT2DB	1591	169	
			MacAdam 3step	SPHWH AHDNC23YZT3DB			
		5000	MacAdam 2step	SPHWH AHDNC23YZR2DB	1626	174	
			MacAdam 3step	SPHWH AHDNC23YZR3DB			
	80+	2700	MacAdam 1step	SPHWH AHDNC25YZW1DB	1382	151	
			MacAdam 2step	SPHWH AHDNC25YZW2DB			
			MacAdam 3step	SPHWH AHDNC25YZW3DB			
		3000	MacAdam 1step	SPHWH AHDNC25YZV1DB	1425	155	
			MacAdam 2step	SPHWH AHDNC25YZV2DB			
			MacAdam 3step	SPHWH AHDNC25YZV3DB			
		3500	MacAdam 1step	SPHWH AHDNC25YZU1DB	1466	160	
			MacAdam 2step	SPHWH AHDNC25YZU2DB			
			MacAdam 3step	SPHWH AHDNC25YZU3DB			
		4000	MacAdam 1step	SPHWH AHDNC25YZT1DB	1502	164	
			MacAdam 2step	SPHWH AHDNC25YZT2DB			
			MacAdam 3step	SPHWH AHDNC25YZT3DB			
		5000	MacAdam 2step	SPHWH AHDNC25YZR2DB	1513	165	
			MacAdam 3step	SPHWH AHDNC25YZR3DB			
		5700	MacAdam 2step	SPHWH AHDNC25YZQ2DB	1513	162	
			MacAdam 3step	SPHWH AHDNC25YZQ3DB			
		6500	MacAdam 2step	SPHWH AHDNC25YZP2DB	1496	163	
			MacAdam 3step	SPHWH AHDNC25YZP3DB			
	90+	2700	MacAdam 1step	SPHWH AHDNC27YZW1DB	1158	126	
			MacAdam 2step	SPHWH AHDNC27YZW2DB			
			MacAdam 3step	SPHWH AHDNC27YZW3DB			
		3000	MacAdam 1step	SPHWH AHDNC27YZV1DB	1212	132	
			MacAdam 2step	SPHWH AHDNC27YZV2DB			
			MacAdam 3step	SPHWH AHDNC27YZV3DB			
		3500	MacAdam 1step	SPHWH AHDNC27YZU1DB	1257	137	
			MacAdam 2step	SPHWH AHDNC27YZU2DB			
			MacAdam 3step	SPHWH AHDNC27YZU3DB			
		4000	MacAdam 1step	SPHWH AHDNC27YZT1DB	1285	140	
			MacAdam 2step	SPHWH AHDNC27YZT2DB			
			MacAdam 3step	SPHWH AHDNC27YZT3DB			
5000	MacAdam 2step	SPHWH AHDNC27YZR2DB	1304	142			
	MacAdam 3step	SPHWH AHDNC27YZR3DB					

D-series Gen 2+

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)	
LC013D Gen 2+	70+	3000	MacAdam 2step	SPHWAHDND23YZV2DB	2006	164	360mA 34V
			MacAdam 3step	SPHWAHDND23YZV3DB			
		4000	MacAdam 2step	SPHWAHDND23YZT2DB	2070	169	
			MacAdam 3step	SPHWAHDND23YZT3DB			
		5000	MacAdam 2step	SPHWAHDND23YZR2DB	2060	168	
			MacAdam 3step	SPHWAHDND23YZR3DB			
	80+	2700	MacAdam 1step	SPHWAHDND25YZW1DB	1773	145	
			MacAdam 2step	SPHWAHDND25YZW2DB			
			MacAdam 3step	SPHWAHDND25YZW3DB			
		3000	MacAdam 1step	SPHWAHDND25YZV1DB	1857	152	
			MacAdam 2step	SPHWAHDND25YZV2DB			
			MacAdam 3step	SPHWAHDND25YZV3DB			
		3500	MacAdam 1step	SPHWAHDND25YZU1DB	1877	153	
			MacAdam 2step	SPHWAHDND25YZU2DB			
			MacAdam 3step	SPHWAHDND25YZU3DB			
		4000	MacAdam 1step	SPHWAHDND25YZT1DB	1930	158	
			MacAdam 2step	SPHWAHDND25YZT2DB			
			MacAdam 3step	SPHWAHDND25YZT3DB			
		5000	MacAdam 2step	SPHWAHDND25YZR2DB	1938	158	
			MacAdam 3step	SPHWAHDND25YZR3DB			
		5700	MacAdam 2step	SPHWAHDND25YZQ2DB	1928	158	
			MacAdam 3step	SPHWAHDND25YZQ3DB			
		6500	MacAdam 2step	SPHWAHDND25YZP2DB	1919	157	
			MacAdam 3step	SPHWAHDND25YZP3DB			
	90+	2700	MacAdam 1step	SPHWAHDND27YZW1DB	1486	121	
			MacAdam 2step	SPHWAHDND27YZW2DB			
			MacAdam 3step	SPHWAHDND27YZW3DB			
		3000	MacAdam 1step	SPHWAHDND27YZV1DB	1556	127	
			MacAdam 2step	SPHWAHDND27YZV2DB			
			MacAdam 3step	SPHWAHDND27YZV3DB			
		3500	MacAdam 1step	SPHWAHDND27YZU1DB	1635	134	
			MacAdam 2step	SPHWAHDND27YZU2DB			
			MacAdam 3step	SPHWAHDND27YZU3DB			
		4000	MacAdam 1step	SPHWAHDND27YZT1DB	1670	136	
			MacAdam 2step	SPHWAHDND27YZT2DB			
			MacAdam 3step	SPHWAHDND27YZT3DB			
5000	MacAdam 2step	SPHWAHDND27YZR2DB	1674	137			
	MacAdam 3step	SPHWAHDND27YZR3DB					

D-series Gen 2+

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 2step	SPHWH AHDNE23YZV2DB	2617	171	450mA 34V
			MacAdam 3step	SPHWH AHDNE23YZV3DB			
		4000	MacAdam 2step	SPHWH AHDNE23YZT2DB	2674	175	
			MacAdam 3step	SPHWH AHDNE23YZT3DB			
		5000	MacAdam 2step	SPHWH AHDNE23YZR2DB	2688	176	
			MacAdam 3step	SPHWH AHDNE23YZR3DB			
	80+	2700	MacAdam 1step	SPHWH AHDNE25YZW1DB	2305	151	
			MacAdam 2step	SPHWH AHDNE25YZW2DB			
			MacAdam 3step	SPHWH AHDNE25YZW3DB			
		3000	MacAdam 1step	SPHWH AHDNE25YZV1DB	2399	157	
			MacAdam 2step	SPHWH AHDNE25YZV2DB			
			MacAdam 3step	SPHWH AHDNE25YZV3DB			
		3500	MacAdam 1step	SPHWH AHDNE25YZU1DB	2463	161	
			MacAdam 2step	SPHWH AHDNE25YZU2DB			
			MacAdam 3step	SPHWH AHDNE25YZU3DB			
		4000	MacAdam 1step	SPHWH AHDNE25YZT1DB	2520	165	
			MacAdam 2step	SPHWH AHDNE25YZT2DB			
			MacAdam 3step	SPHWH AHDNE25YZT3DB			
		5000	MacAdam 2step	SPHWH AHDNE25YZR2DB	2529	165	
			MacAdam 3step	SPHWH AHDNE25YZR3DB			
		5700	MacAdam 2step	SPHWH AHDNE25YZQ2DB	2529	165	
			MacAdam 3step	SPHWH AHDNE25YZQ3DB			
		6500	MacAdam 2step	SPHWH AHDNE25YZP2DB	2507	164	
			MacAdam 3step	SPHWH AHDNE25YZP3DB			
	90+	2700	MacAdam 1step	SPHWH AHDNE27YZW1DB	1776	116	
			MacAdam 2step	SPHWH AHDNE27YZW2DB			
			MacAdam 3step	SPHWH AHDNE27YZW3DB			
		3000	MacAdam 1step	SPHWH AHDNE27YZV1DB	1986	130	
			MacAdam 2step	SPHWH AHDNE27YZV2DB			
			MacAdam 3step	SPHWH AHDNE27YZV3DB			
		3500	MacAdam 1step	SPHWH AHDNE27YZU1DB	2094	137	
			MacAdam 2step	SPHWH AHDNE27YZU2DB			
			MacAdam 3step	SPHWH AHDNE27YZU3DB			
		4000	MacAdam 1step	SPHWH AHDNE27YZT1DB	2156	141	
			MacAdam 2step	SPHWH AHDNE27YZT2DB			
			MacAdam 3step	SPHWH AHDNE27YZT3DB			
5000	MacAdam 2step	SPHWH AHDNE27YZR2DB	2200	144			
	MacAdam 3step	SPHWH AHDNE27YZR3DB					

D-series Gen 2+

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+	70+	3000	MacAdam 2step	SPHWWAHDNF23YZV2DB	3107	203	540mA 34V
			MacAdam 3step	SPHWWAHDNF23YZV3DB			
		4000	MacAdam 2step	SPHWWAHDNF23YZT2DB	3207	210	
			MacAdam 3step	SPHWWAHDNF23YZT3DB			
		5000	MacAdam 2step	SPHWWAHDNF23YZR2DB	3191	209	
			MacAdam 3step	SPHWWAHDNF23YZR3DB			
	80+	2700	MacAdam 1step	SPHWWAHDNF25YZW1DB	2742	149	
			MacAdam 2step	SPHWWAHDNF25YZW2DB			
			MacAdam 3step	SPHWWAHDNF25YZW3DB			
		3000	MacAdam 1step	SPHWWAHDNF25YZV1DB	2877	157	
			MacAdam 2step	SPHWWAHDNF25YZV2DB			
			MacAdam 3step	SPHWWAHDNF25YZV3DB			
		3500	MacAdam 1step	SPHWWAHDNF25YZU1DB	2921	159	
			MacAdam 2step	SPHWWAHDNF25YZU2DB			
			MacAdam 3step	SPHWWAHDNF25YZU3DB			
		4000	MacAdam 1step	SPHWWAHDNF25YZT1DB	2996	163	
			MacAdam 2step	SPHWWAHDNF25YZT2DB			
			MacAdam 3step	SPHWWAHDNF25YZT3DB			
		5000	MacAdam 2step	SPHWWAHDNF25YZR2DB	3013	164	
			MacAdam 3step	SPHWWAHDNF25YZR3DB			
		5700	MacAdam 2step	SPHWWAHDNF25YZQ2DB	2998	163	
			MacAdam 3step	SPHWWAHDNF25YZQ3DB			
		6500	MacAdam 2step	SPHWWAHDNF25YZP2DB	2966	162	
			MacAdam 3step	SPHWWAHDNF25YZP3DB			
	90+	2700	MacAdam 1step	SPHWWAHDNF27YZW1DB	2301	125	
			MacAdam 2step	SPHWWAHDNF27YZW2DB			
			MacAdam 3step	SPHWWAHDNF27YZW3DB			
		3000	MacAdam 1step	SPHWWAHDNF27YZV1DB	2413	131	
			MacAdam 2step	SPHWWAHDNF27YZV2DB			
			MacAdam 3step	SPHWWAHDNF27YZV3DB			
		3500	MacAdam 1step	SPHWWAHDNF27YZU1DB	2526	138	
			MacAdam 2step	SPHWWAHDNF27YZU2DB			
			MacAdam 3step	SPHWWAHDNF27YZU3DB			
		4000	MacAdam 1step	SPHWWAHDNF27YZT1DB	2581	141	
			MacAdam 2step	SPHWWAHDNF27YZT2DB			
			MacAdam 3step	SPHWWAHDNF27YZT3DB			
5000	MacAdam 2step	SPHWWAHDNF27YZR2DB	2596	141			
	MacAdam 3step	SPHWWAHDNF27YZR3DB					

D-series Gen 2+

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 Gen 2+	70+	3000	MacAdam 2step	SPHWHHAHDNG23YZV2DB	4063	166	720mA 34V
			MacAdam 3step	SPHWHHAHDNG23YZV3DB			
		4000	MacAdam 2step	SPHWHHAHDNG23YZT2DB	4193	171	
			MacAdam 3step	SPHWHHAHDNG23YZT3DB			
		5000	MacAdam 2step	SPHWHHAHDNG23YZR2DB	4194	171	
			MacAdam 3step	SPHWHHAHDNG23YZR3DB			
	80+	2700	MacAdam 1step	SPHWHHAHDNG25YZW1DB	3616	148	
			MacAdam 2step	SPHWHHAHDNG25YZW2DB			
			MacAdam 3step	SPHWHHAHDNG25YZW3DB			
		3000	MacAdam 1step	SPHWHHAHDNG25YZV1DB	3762	154	
			MacAdam 2step	SPHWHHAHDNG25YZV2DB			
			MacAdam 3step	SPHWHHAHDNG25YZV3DB			
		3500	MacAdam 1step	SPHWHHAHDNG25YZU1DB	3872	158	
			MacAdam 2step	SPHWHHAHDNG25YZU2DB			
			MacAdam 3step	SPHWHHAHDNG25YZU3DB			
		4000	MacAdam 1step	SPHWHHAHDNG25YZT1DB	3950	161	
			MacAdam 2step	SPHWHHAHDNG25YZT2DB			
			MacAdam 3step	SPHWHHAHDNG25YZT3DB			
		5000	MacAdam 2step	SPHWHHAHDNG25YZR2DB	3983	163	
			MacAdam 3step	SPHWHHAHDNG25YZR3DB			
		5700	MacAdam 2step	SPHWHHAHDNG25YZQ2DB	3943	161	
			MacAdam 3step	SPHWHHAHDNG25YZQ3DB			
		6500	MacAdam 2step	SPHWHHAHDNG25YZP2DB	3930	161	
			MacAdam 3step	SPHWHHAHDNG25YZP3DB			
	90+	2700	MacAdam 1step	SPHWHHAHDNG27YZW1DB	3048	125	
			MacAdam 2step	SPHWHHAHDNG27YZW2DB			
			MacAdam 3step	SPHWHHAHDNG27YZW3DB			
		3000	MacAdam 1step	SPHWHHAHDNG27YZV1DB	3190	130	
			MacAdam 2step	SPHWHHAHDNG27YZV2DB			
			MacAdam 3step	SPHWHHAHDNG27YZV3DB			
		3500	MacAdam 1step	SPHWHHAHDNG27YZU1DB	3319	136	
			MacAdam 2step	SPHWHHAHDNG27YZU2DB			
			MacAdam 3step	SPHWHHAHDNG27YZU3DB			
		4000	MacAdam 1step	SPHWHHAHDNG27YZT1DB	3387	138	
			MacAdam 2step	SPHWHHAHDNG27YZT2DB			
			MacAdam 3step	SPHWHHAHDNG27YZT3DB			
5000	MacAdam 2step	SPHWHHAHDNG27YZR2DB	3433	140			
	MacAdam 3step	SPHWHHAHDNG27YZR3DB					

D-series Gen 2+

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 2step	SPHWAHHDNH23YZV2DB	5014	164	900mA 34V
			MacAdam 3step	SPHWAHHDNH23YZV3DB			
		4000	MacAdam 2step	SPHWAHHDNH23YZT2DB	5175	169	
			MacAdam 3step	SPHWAHHDNH23YZT3DB			
		5000	MacAdam 2step	SPHWAHHDNH23YZR2DB	5202	170	
			MacAdam 3step	SPHWAHHDNH23YZR3DB			
	80+	2700	MacAdam 1step	SPHWAHHDNH25YZW1DB	4462	146	
			MacAdam 2step	SPHWAHHDNH25YZW2DB			
			MacAdam 3step	SPHWAHHDNH25YZW3DB			
		3000	MacAdam 1step	SPHWAHHDNH25YZV1DB	4643	152	
			MacAdam 2step	SPHWAHHDNH25YZV2DB			
			MacAdam 3step	SPHWAHHDNH25YZV3DB			
		3500	MacAdam 1step	SPHWAHHDNH25YZU1DB	4779	156	
			MacAdam 2step	SPHWAHHDNH25YZU2DB			
			MacAdam 3step	SPHWAHHDNH25YZU3DB			
		4000	MacAdam 1step	SPHWAHHDNH25YZT1DB	4875	159	
			MacAdam 2step	SPHWAHHDNH25YZT2DB			
			MacAdam 3step	SPHWAHHDNH25YZT3DB			
		5000	MacAdam 2step	SPHWAHHDNH25YZR2DB	4916	161	
			MacAdam 3step	SPHWAHHDNH25YZR3DB			
		5700	MacAdam 2step	SPHWAHHDNH25YZQ2DB	4891	160	
			MacAdam 3step	SPHWAHHDNH25YZQ3DB			
		6500	MacAdam 2step	SPHWAHHDNH25YZP2DB	4875	159	
			MacAdam 3step	SPHWAHHDNH25YZP3DB			
	90+	2700	MacAdam 1step	SPHWAHHDNH27YZW1DB	3781	124	
			MacAdam 2step	SPHWAHHDNH27YZW2DB			
			MacAdam 3step	SPHWAHHDNH27YZW2DB			
		3000	MacAdam 1step	SPHWAHHDNH27YZV1DB	3977	130	
			MacAdam 2step	SPHWAHHDNH27YZV2DB			
			MacAdam 3step	SPHWAHHDNH27YZV3DB			
		3500	MacAdam 1step	SPHWAHHDNH27YZU1DB	4096	134	
			MacAdam 2step	SPHWAHHDNH27YZU2DB			
			MacAdam 3step	SPHWAHHDNH27YZU3DB			
		4000	MacAdam 1step	SPHWAHHDNH27YZT1DB	4180	137	
			MacAdam 2step	SPHWAHHDNH27YZT2DB			
			MacAdam 3step	SPHWAHHDNH27YZT3DB			
5000	MacAdam 2step	SPHWAHHDNH27YZR2DB	4237	138			
	MacAdam 3step	SPHWAHHDNH27YZR3DB					

D-series Gen 2+

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+	70+	3000	MacAdam 2step	SPHWHHAHDNK23YZV2DB	6304	172	1080mA 34V
			MacAdam 3step	SPHWHHAHDNK23YZV3DB			
		4000	MacAdam 2step	SPHWHHAHDNK23YZT2DB	6506	177	
			MacAdam 3step	SPHWHHAHDNK23YZT3DB			
		5000	MacAdam 2step	SPHWHHAHDNK23YZR2DB	6474	176	
			MacAdam 3step	SPHWHHAHDNK23YZR3DB			
	80+	2700	MacAdam 1step	SPHWHHAHDNK25YZW1DB	5575	152	
			MacAdam 2step	SPHWHHAHDNK25YZW2DB			
			MacAdam 3step	SPHWHHAHDNK25YZW3DB			
		3000	MacAdam 1step	SPHWHHAHDNK25YZV1DB	5837	159	
			MacAdam 2step	SPHWHHAHDNK25YZV2DB			
			MacAdam 3step	SPHWHHAHDNK25YZV3DB			
		3500	MacAdam 1step	SPHWHHAHDNK25YZU1DB	5925	161	
			MacAdam 2step	SPHWHHAHDNK25YZU2DB			
			MacAdam 3step	SPHWHHAHDNK25YZU3DB			
		4000	MacAdam 1step	SPHWHHAHDNK25YZT1DB	6084	166	
			MacAdam 2step	SPHWHHAHDNK25YZT2DB			
			MacAdam 3step	SPHWHHAHDNK25YZT3DB			
		5000	MacAdam 2step	SPHWHHAHDNK25YZR2DB	6113	166	
			MacAdam 3step	SPHWHHAHDNK25YZR3DB			
		5700	MacAdam 2step	SPHWHHAHDNK25YZQ2DB	6081	166	
			MacAdam 3step	SPHWHHAHDNK25YZQ3DB			
		6500	MacAdam 2step	SPHWHHAHDNK25YZP2DB	6015	164	
			MacAdam 3step	SPHWHHAHDNK25YZP3DB			
	90+	2700	MacAdam 1step	SPHWHHAHDNK27YZW1DB	4660	127	
			MacAdam 2step	SPHWHHAHDNK27YZW2DB			
			MacAdam 3step	SPHWHHAHDNK27YZW3DB			
		3000	MacAdam 1step	SPHWHHAHDNK27YZV1DB	4923	134	
			MacAdam 2step	SPHWHHAHDNK27YZV2DB			
			MacAdam 3step	SPHWHHAHDNK27YZV3DB			
		3500	MacAdam 1step	SPHWHHAHDNK27YZU1DB	5100	139	
			MacAdam 2step	SPHWHHAHDNK27YZU2DB			
			MacAdam 3step	SPHWHHAHDNK27YZU3DB			
		4000	MacAdam 1step	SPHWHHAHDNK27YZT1DB	5213	142	
			MacAdam 2step	SPHWHHAHDNK27YZT2DB			
			MacAdam 3step	SPHWHHAHDNK27YZT3DB			
5000	MacAdam 2step	SPHWHHAHDNK27YZR2DB	5325	145			
	MacAdam 3step	SPHWHHAHDNK27YZR3DB					

D-series Gen 2+

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 2+	70+	3000	MacAdam 2step	SPHWH AHDNL231ZV2DB	9225	167	1080mA 51.1V
			MacAdam 3step	SPHWH AHDNL231ZV3DB			
		4000	MacAdam 2step	SPHWH AHDNL231ZT2DBB	9521	173	
			MacAdam 3step	SPHWH AHDNL231ZT3DB			
		5000	MacAdam 2step	SPHWH AHDNL231ZR2DB	9475	172	
			MacAdam 3step	SPHWH AHDNL231ZR3DB			
	80+	2700	MacAdam 1step	SPHWH AHDNL251ZW1DB	8148	148	
			MacAdam 2step	SPHWH AHDNL251ZW2DB			
			MacAdam 3step	SPHWH AHDNL251ZW3DB			
		3000	MacAdam 1step	SPHWH AHDNL251ZV1DB	8499	154	
			MacAdam 2step	SPHWH AHDNL251ZV2DB			
			MacAdam 3step	SPHWH AHDNL251ZV3DB			
		3500	MacAdam 1step	SPHWH AHDNL251ZU1DB	8680	157	
			MacAdam 2step	SPHWH AHDNL251ZU2DB			
			MacAdam 3step	SPHWH AHDNL251ZU3DB			
		4000	MacAdam 1step	SPHWH AHDNL251ZT1DB	8905	161	
			MacAdam 2step	SPHWH AHDNL251ZT2DB			
			MacAdam 3step	SPHWH AHDNL251ZT3DB			
		5000	MacAdam 2step	SPHWH AHDNL251ZR2DB	8949	162	
			MacAdam 3step	SPHWH AHDNL251ZR3DB			
		5700	MacAdam 2step	SPHWH AHDNL251ZQ2DB	8902	161	
			MacAdam 3step	SPHWH AHDNL251ZQ3DB			
		6500	MacAdam 2step	SPHWH AHDNL251ZP2DB	8855	160	
			MacAdam 3step	SPHWH AHDNL251ZP3DB			
	90+	2700	MacAdam 1step	SPHWH AHDNL271ZW1DB	6854	124	
			MacAdam 2step	SPHWH AHDNL271ZW2DB			
			MacAdam 3step	SPHWH AHDNL271ZW3DB			
		3000	MacAdam 1step	SPHWH AHDNL271ZV1DB	7205	131	
			MacAdam 2step	SPHWH AHDNL271ZV2DB			
			MacAdam 3step	SPHWH AHDNL271ZV3DB			
		3500	MacAdam 1step	SPHWH AHDNL271ZU1DB	7539	137	
			MacAdam 2step	SPHWH AHDNL271ZU2DB			
			MacAdam 3step	SPHWH AHDNL271ZU3DB			
		4000	MacAdam 1step	SPHWH AHDNL271ZT1DB	7629	138	
			MacAdam 2step	SPHWH AHDNL271ZT2DB			
			MacAdam 3step	SPHWH AHDNL271ZT3DB			
5000	MacAdam 2step	SPHWH AHDNL271ZR2DB	7793	141			
	MacAdam 3step	SPHWH AHDNL271ZR3DB					

D-series Gen 2+

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 Gen 2+	70+	3000	MacAdam 2step	SPHWHHAHDNM231ZV2DB	13465	163	1620mA 51.1V
			MacAdam 3step	SPHWHHAHDNM231ZV3DB			
		4000	MacAdam 2step	SPHWHHAHDNM231ZT2DB	13966	169	
			MacAdam 3step	SPHWHHAHDNM231ZT3DB			
		5000	MacAdam 2step	SPHWHHAHDNM231ZR2DB	14041	170	
			MacAdam 3step	SPHWHHAHDNM231ZR3DB			
	80+	2700	MacAdam 1step	SPHWHHAHDNM251ZW1DB	12051	146	
			MacAdam 2step	SPHWHHAHDNM251ZW2DB			
			MacAdam 3step	SPHWHHAHDNM251ZW3DB			
		3000	MacAdam 1step	SPHWHHAHDNM251ZV1DB	12468	151	
			MacAdam 2step	SPHWHHAHDNM251ZV2DB			
			MacAdam 3step	SPHWHHAHDNM251ZV3DB			
		3500	MacAdam 1step	SPHWHHAHDNM251ZU1DB	12852	155	
			MacAdam 2step	SPHWHHAHDNM251ZU2DB			
			MacAdam 3step	SPHWHHAHDNM251ZU3DB			
		4000	MacAdam 1step	SPHWHHAHDNM251ZT1DB	13123	159	
			MacAdam 2step	SPHWHHAHDNM251ZT2DB			
			MacAdam 3step	SPHWHHAHDNM251ZT3DB			
		5000	MacAdam 2step	SPHWHHAHDNM251ZR2DB	13196	159	
			MacAdam 3step	SPHWHHAHDNM251ZR3DB			
		5700	MacAdam 2step	SPHWHHAHDNM251ZQ2DB	13126	159	
			MacAdam 3step	SPHWHHAHDNM251ZQ3DB			
		6500	MacAdam 2step	SPHWHHAHDNM251ZP2DB	13121	159	
			MacAdam 3step	SPHWHHAHDNM251ZP3DB			
	90+	2700	MacAdam 1step	SPHWHHAHDNM271ZW1DB	10157	123	
			MacAdam 2step	SPHWHHAHDNM271ZW2DB			
			MacAdam 3step	SPHWHHAHDNM271ZW3DB			
		3000	MacAdam 1step	SPHWHHAHDNM271ZV1DB	10678	129	
			MacAdam 2step	SPHWHHAHDNM271ZV2DB			
			MacAdam 3step	SPHWHHAHDNM271ZV3DB			
3500		MacAdam 1step	SPHWHHAHDNM271ZU1DB	11004	133		
		MacAdam 2step	SPHWHHAHDNM271ZU2DB				
		MacAdam 3step	SPHWHHAHDNM271ZU3DB				
4000		MacAdam 1step	SPHWHHAHDNM271ZT1DB	11247	136		
		MacAdam 2step	SPHWHHAHDNM271ZT2DB				
		MacAdam 3step	SPHWHHAHDNM271ZT3DB				
5000	MacAdam 2step	SPHWHHAHDNM271ZR2DB	11432	138			
	MacAdam 3step	SPHWHHAHDNM271ZR3DB					