

Technical Notes

CIE 1931 Chromaticity Diagram

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SunLED white and phosphor-based LEDs are color sorted based on either CIE (coordinates) or CCT (Kelvin). Refer to below diagram (*Fig. 1*) and below tables for SunLED's binning methodology.

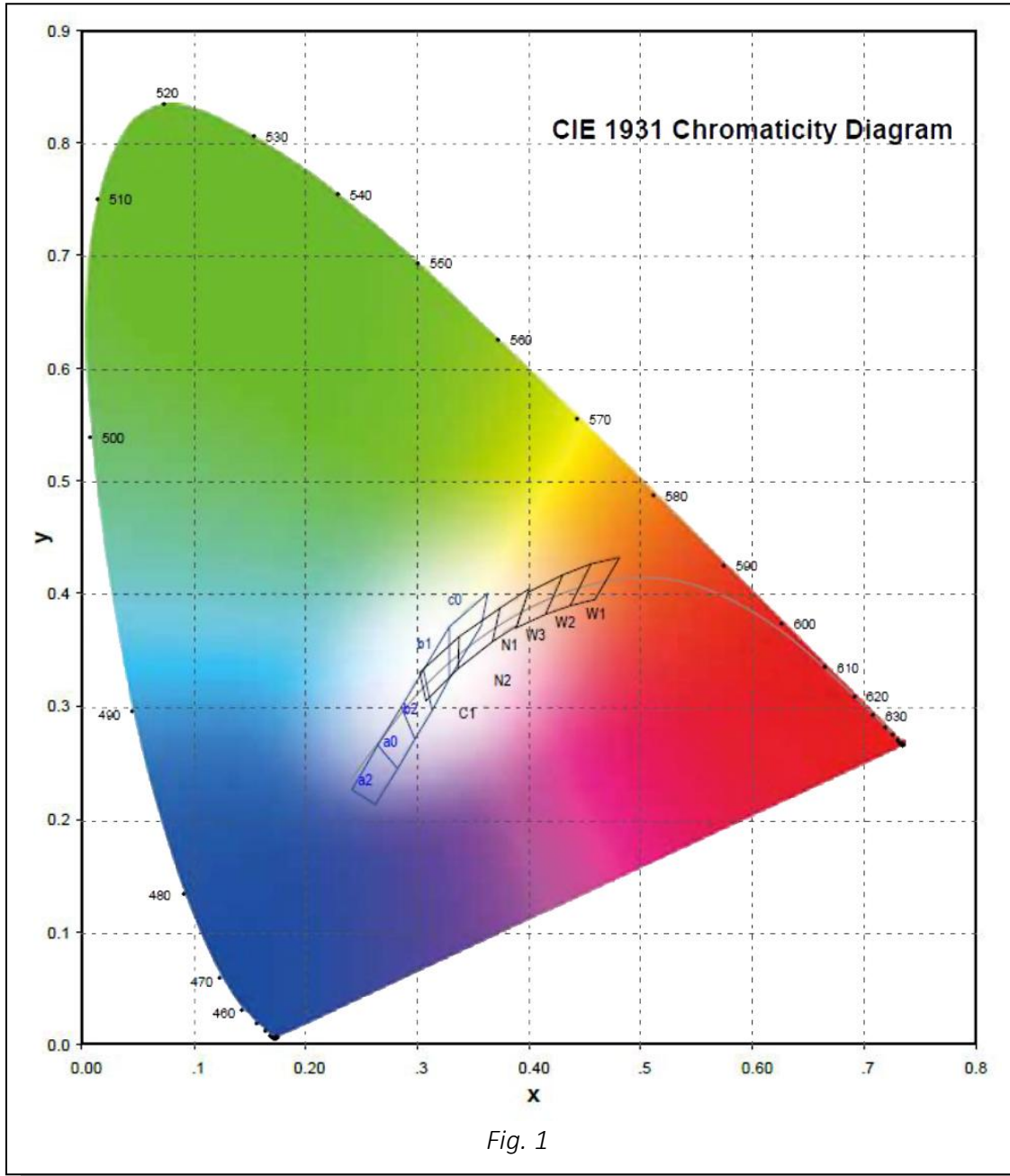


Fig. 1

CIE 1931 Chromaticity Diagram cont'd

Refer to below tables for color coordinates and temperatures based on the bin codes indicated on the above CIE 1931 diagram. Note that these are the general binning methodology used by SunLED. Always refer to the latest datasheets for each specific part for most accurate binning data.

CIE Bin Codes

Bin Code	Coordinates		CCT
	X	Y	
a2	0.263	0.213	15000K
	0.282	0.245	
	0.265	0.265	
	0.242	0.226	
a0	0.282	0.245	9000 – 15000K
	0.298	0.271	
	0.286	0.299	
	0.265	0.265	
b2	0.298	0.271	6800 – 9000K
	0.313	0.296	
	0.306	0.332	
	0.286	0.299	
b1	0.313	0.296	5600 – 6800K
	0.329	0.325	
	0.329	0.371	
	0.306	0.332	
c0	0.329	0.325	4600 – 5600K
	0.358	0.372	
	0.363	0.400	
	0.329	0.371	

CCT Bin Codes

Bin Code	CCT	Coordinates	
		X	Y
W1	2580 – 2870K	0.4373	0.3893
		0.4593	0.3944
		0.4813	0.4319
		0.4562	0.4260
W2	2870 – 3220K	0.4147	0.3814
		0.4373	0.3893
		0.4562	0.4260
		0.4299	0.4165
W3	3220 – 3710K	0.3889	0.3690
		0.4147	0.3814
		0.4299	0.4165
		0.3996	0.4015
N1	3710 – 4260K	0.3670	0.3578
		0.3898	0.3716
		0.4006	0.4044
		0.3736	0.3874
N2	4260 – 5310K	0.3361	0.3328
		0.3670	0.3578
		0.3736	0.3874
		0.3376	0.3616
C1	5310 - 7040K	0.3081	0.3049
		0.3364	0.3328
		0.3376	0.3616
		0.3028	0.3304