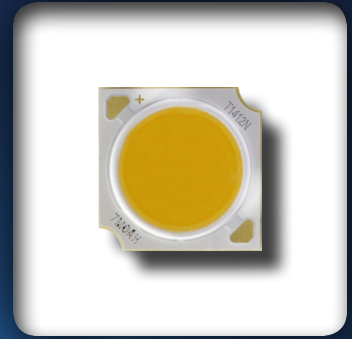


XLAMP® CMT LED ARRAYS

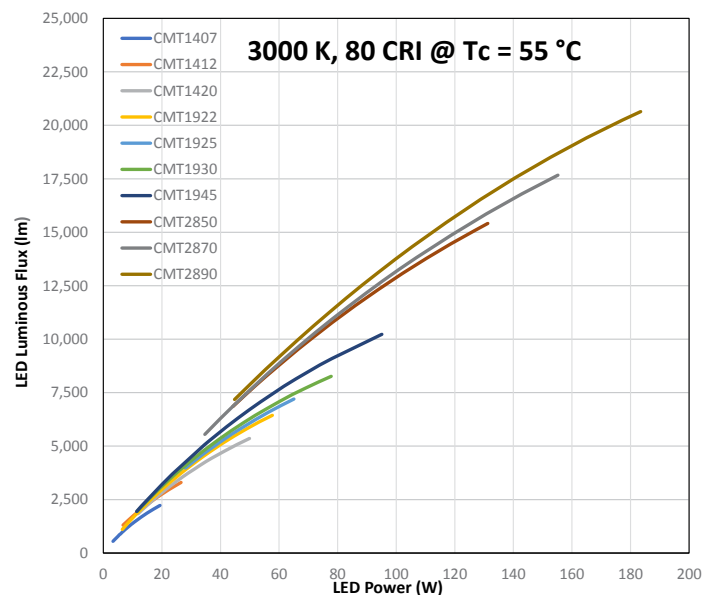
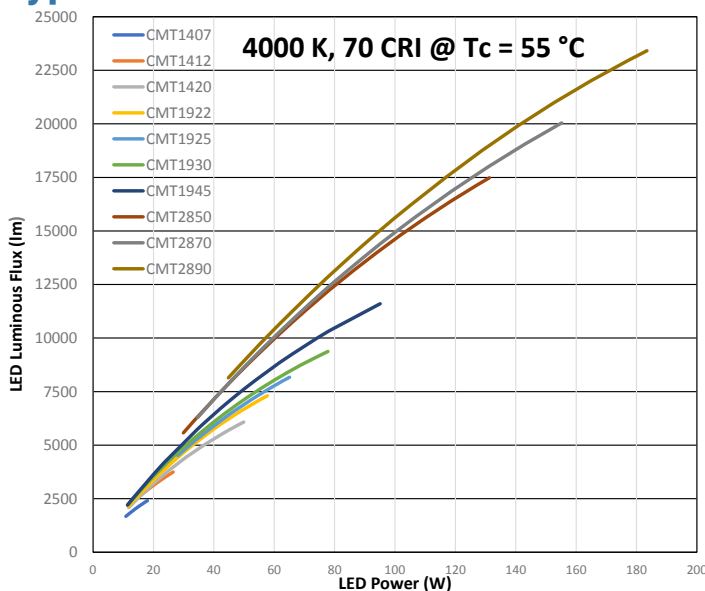
- Optimized for best-in-class lumen output, efficacy and reliability at high drive currents
- Best performance and metal COB reliability in industry-compatible footprints and LES sizes
- New innovative metal COB technology that delivers higher reliability than competing metal COBs



Product Selector: ($T_j = 85^\circ\text{C}$)

LED	Light Emitting Surface (mm)	LED Dimension (mm)	Voltage Options (V)	Typ. Power (W)	Max. Power (W)	4000 K, 70 CRI		3000 K, 80 CRI		3000 K, 90 CRI	
						Typ. Flux (lm)	Typ. LPW (lm/W)	Typ. Flux (lm)	Typ. LPW (lm/W)	Typ. Flux (lm)	Typ. LPW (lm/W)
CMT1407				7	19	1,117	163	985	144	833	122
CMT1412	9.8	13.35 x 13.35	36	12	28	1,917	159	1,690	140	1,429	118
CMT1420				19	49	2,961	156	2,610	138	2,207	116
CMT1922				21	57	3,324	162	2,930	143	2,477	121
CMT1925	14.5	18.85 x 18.85	36	24	64	3,834	160	3,380	141	2,858	119
CMT1930				28	77	4,447	162	3,920	142	3,314	120
CMT1945				42	94	6,477	156	5,710	137	4,828	116
CMT2850			36	47	130	7,997	169	7,050	149	5,961	126
CMT2870	22	27.85 x 27.85	54	71	153	10,720	150	9,450	133	7,990	112
CMT2890				82	181	13,249	162	11,680	143	9,875	121

Typical LED Luminous Flux vs. Power



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March 2018 (FS35R1)

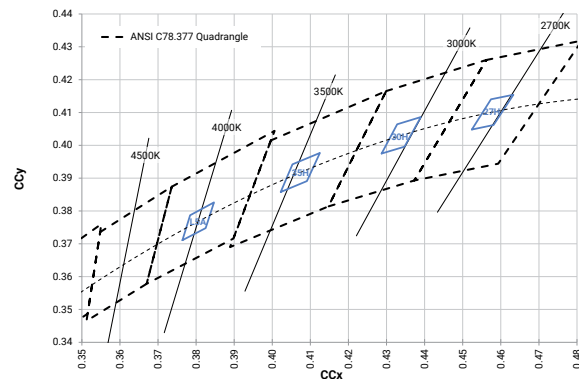
+1 919-313-5300 • 800-533-2583
xlampsales@cree.com

CRI & CCT Options: Standard & Premium

Series	CRI	CCT							XLamp CMT LEDs									
		6500 K	5700 K	5000 K	4000 K	3500 K	3000 K	2700 K	1407	1412	1420	1922	1925	1930	1945	2850	2870	2890
Standard	70	o	o	o	o	o	o	o	●	●	●	●	●	●	●	●	●	●
	80	o	o	o	o	o	o	o	●	●	●	●	●	●	●	●	●	●
	90		o	o	o	o	o	o	●	●	●	●	●	●	●	●	●	●
Premium	Fidelity 98				o	o	o	o	●	●	●	●	●	●	●	●	●	●
	80							o	●	●	●	●	●	●	●	●	●	●
	Specialty 90							o	●	●	●	●	●	●	●	●	●	●
	98							o	●	●	●	●	●	●	●	●	●	●

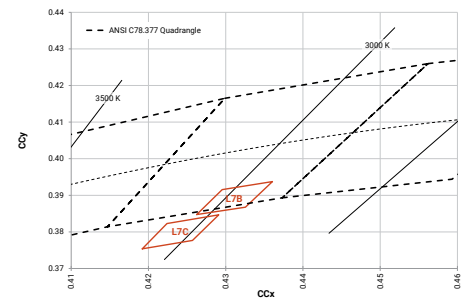
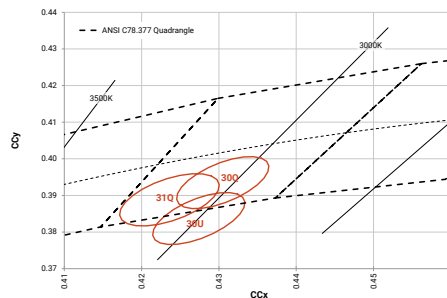
Fidelity

CCT	CRI		TM-30		Bin
	Ra	R9	Rf	Rg	
4000 K	97	95	91	99	L5A
3500 K	97	97	91	99	35H
3000 K	98	88	93	99	30H
2700 K	98	93	96	101	27H



Speciality

CCT	CRI		TM-30		Bin
	Ra	R9	Rf	Rg	
3100 K	91	56	90	100	31Q
3000 K	84	16	83	96	L7B
3000 K	92	58	89	99	30Q
3000 K	92	60	89	101	30U
3000 K	95	84	92	101	L7C



LM-80 Data Summary

Tc (°C)	6k Hour Timing	LM-80 Current (A)									
		CMT1407	CMT1412	CMT1420	CMT1922	CMT1925	CMT1930	CMT1945	CMT2850	CMT2870	CMT2890
85	Max @ 85 °C	0.500	0.700	1.300	1.500	1.700	2.000	2.500	3.500	2.800	3.300
	Apr 2018	0.261	0.392		0.653	0.784	1.080	1.425	2.340	1.980	2.196
	Jun 2018	0.420	0.630	1.050	1.050						
	Q3 CY18					1.245	1.714	1.741	2.860	2.420	2.684
105	Max @ 105 °C	0.346	0.485	0.95	1.039	1.177	1.385	1.731	2.423	1.939	2.285
	Apr 2018	0.28	0.42	0.7	0.7	0.697	0.96	1.266	2.08	1.76	1.951
	Q3 CY18	0.36	0.493		0.9	1.08	1.2	1.4			