

XLAMP® CXA LED ARRAYS: HIGH DENSITY

- New Class of LED Arrays: Optimized for Maximum Candela/\$
- Unrivaled Lumen Density, Up to 2X Competing Arrays
- Improves LED Spotlights: Smaller Size, More Intensity, Less Power
- Full LED Family to Replace CMH Light Sources
- Enables New Lighting Applications for LEDs

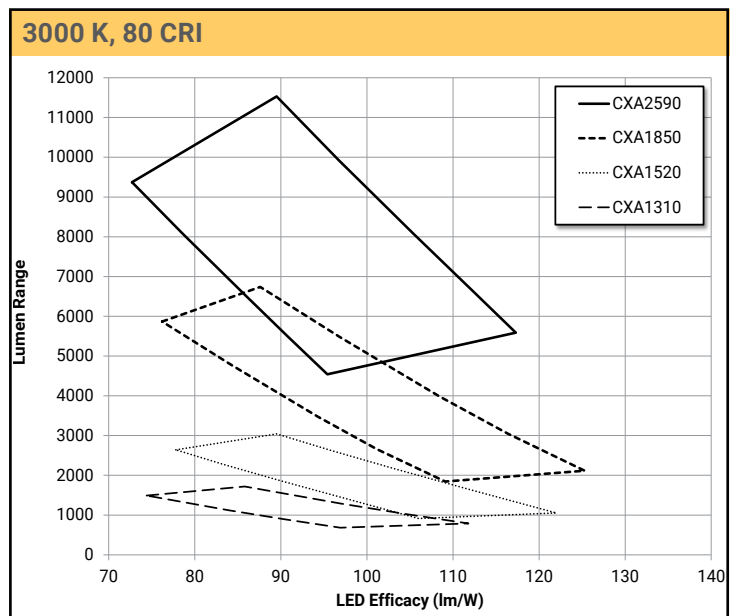
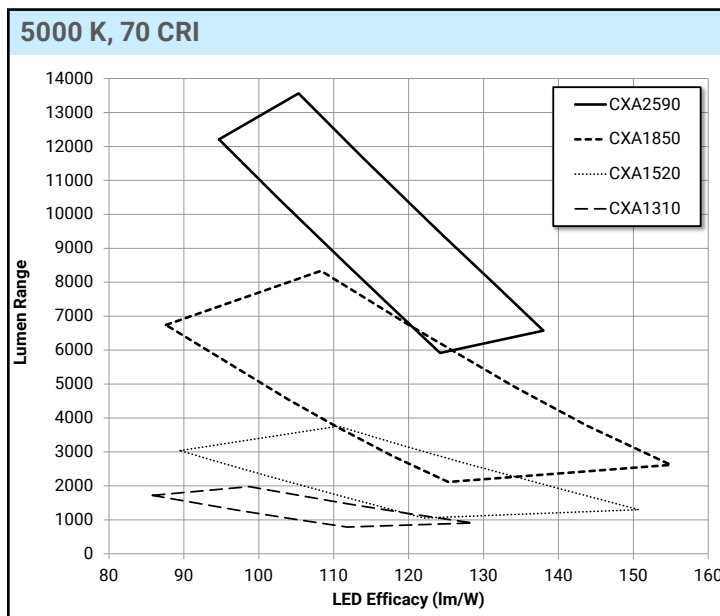


Product Selector Table



		CXA1310 (18 V)		CXA1310 (36 V)	CXA1520	CXA1850	CXA2590
Light Emitting Surface (mm)		6			9	12	19
Typical	Current (mA)	700	350	500	1400	1200	
	Vf @ 85°C (V)	17.8	35.6	35	35	69	
	Power (W)	12.5		17.5	42	83	
Max.	Current (mA)	1050	525	900	2100	1800	
	Power (W)	20		33	78	130	

Performance Selector Guide (T_c = 55 °C)



Applications

Directional

- Track / Spot: Halogen, CMH
- PAR, AR Lamp: Halogen, CMH
- High Ceiling Downlight: CMH



CRI & CCT Options

70 CRI minimum	80 CRI minimum	95 CRI typical
6500 K	5000 K	5000 K
5700 K	4000 K	4000 K
5000 K	3500 K	3500 K
4000 K	3000 K	3000 K
	2700 K	2700 K

Reference Designs

70W Halogen PAR38 Equivalent - 3000 K, 82 CRI

40° / 2,093 cd

14 W / 1010 lm / 67 LPW

CXA1310 Enables:

- 75% smaller size
- 80% lower power

High Performance Floodlight Engine - 3000 K, 82 CRI

24° / 17,100 cd

73 W / 4974 lm / 68 LPW

CXA1850 Enables:

- 70 W CMH performance with longer life, instant on and smaller footprint

39W CMH PAR38 Size - 3000 K, 82 CRI

7° / 45,000 cd

30 W / 1874 lm / 62 LPW

CXA1520 Enables:

- Narrower beam angle than possible with 39 W CMH

Very High Ceiling Downlight - 3000 K, 82 CRI

13° / 99,000 cd

135 W / 8900 lm / 66 LPW

CXA2590 Enables:

- Extreme illuminance: 30 fc @ 55' (17 m) 50 fc @ 45' (14 m)

LM-80 Data Summary

LED	I _F (mA)	Ta/Tc (°C)	TM-21 Reported (Hrs)	
			L90	L70
CXA1310 18 V	600	105	37,300	> 51,400
CXA1310 18 V	840	85	52,200	> 54,400
CXA1310 36 V	300	105	37,300	> 51,400
CXA1310 36 V	420	85	52,200	> 54,400
CXA1520	500	105	37,300	> 51,400
CXA1520	700	85	52,200	> 54,400

LED	I _F (mA)	Ta/Tc (°C)	TM-21 Reported (Hrs)	
			L90	L70
CXA1850	774	105	> 42,300	> 42,300
CXA1850	1159	105	> 36,300	> 36,300
CXA1850	1543	85	> 45,400	> 45,400
CXA2590	700	105	> 42,300	> 42,300
CXA2590	1050	105	> 36,300	> 36,300
CXA2590	1400	85	> 45,400	> 45,400