

# XLAMP® CMU & CHA LEDs

- Industry-leading performance in commonly-available LES sizes
- Pro9™ versions offer up to 15% higher efficacy for 90 & 95 CRI
- Optimized for outdoor & premium indoor lighting applications
- Premium color options: Fidelity (98 CRI) and Specialty (below BBL)

August 2023 (FS38R3)

## PRODUCT SELECTOR: CMU (T<sub>J</sub> = 85°C)

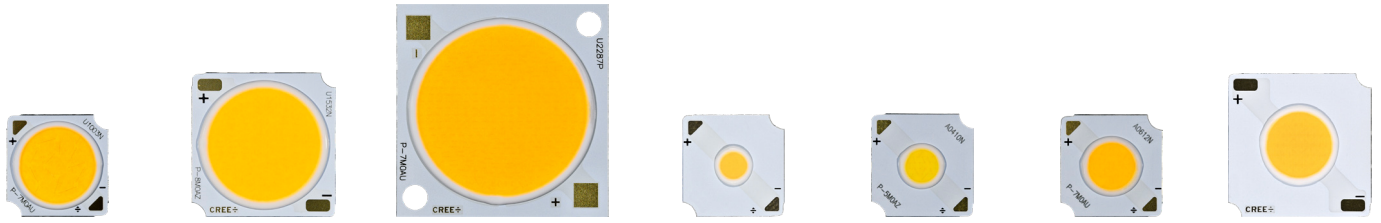
Compatible with Citizen Standard optics & holders

Light Emitting Surface (mm)	XLamp	Voltage Class	Typ. Current (A)	Typ. Voltage (V)	Max. Current (A)	Max. Power (W)	Standard Version 3000 K, 80 CRI		Pro9™ Version 3000 K, 90 CRI	
							Typ. Flux (lm)	Typ. LPW (lm/W)	Typ. Flux (lm)	Typ. LPW (lm/W)
9.8	CMU1003	36V	0.090	33.6	0.240	9	533	176	522	172
	CMU1006	36V	0.180	33.6	0.480	17	1,051	174	1,032	170
	CMU1010	36V	0.270	33.6	0.720	26	1,550	171	1,524	167
	CMU1013	36V	0.360	33.6	0.960	35	2,025	167	1,992	164
14.5	CMU1516	36V	0.450	33.6	1.200	43	2,644	175	2,575	170
	CMU1519	36V	0.540	33.6	1.440	52	3,139	173	3,057	168
	CMU1526	36V	0.720	33.6	1.920	69	4,102	170	3,995	165
	CMU1532	36V	0.900	33.6	2.400	86	5,098	169	4,963	164
22	CMU2236	36V	0.990	33.6	2.640	95	5,839	176	5,737	172
	CMU2239	36V	1.080	33.6	2.880	104	6,367	175	6,253	172
	CMU2258	54V	1.080	50.5	2.880	156	9,321	171	9,154	168
	CMU2287	54V	1.620	50.5	4.320	233	13,603	166	13,361	163

## PRODUCT SELECTOR: CHA (T<sub>J</sub> = 85°C)

Compatible with Citizen High Intensity optics & holders

Light Emitting Surface (mm)	XLamp	Voltage Class	Typ. Current (A)	Typ. Voltage (V)	Max. Current (A)	Max. Power (W)	Standard Version 3000 K, 80 CRI		Pro9™ Version 3000 K, 90 CRI	
							Typ. Flux (lm)	Typ. LPW (lm/W)	Typ. Flux (lm)	Typ. LPW (lm/W)
3.3	CHA0304	21V	0.175	20.8	0.300	7	454	125	460	125
4.2	CHA0410	12V	0.525	12	0.900	12	804	128	801	127
		36V	0.175	35.8	0.300	12	806	129	801	127
6.0	CHA0612	18V	0.700	18	1.200	24	1,603	127	1,623	129
		36V	0.350	35.8	0.600	24	1,603	128	1,623	129
8.5	CHA0825	36V	0.700	35.8	1.200	47	3,246	130	3,528	140



CMU10xx    CMU15xx    CMU22xx    CHA0304    CHA0410    CHA0612    CHA0825

### CRI & CCT OPTIONS

Version	CRI	Standard Colors							
		6500K	5700K	5000K	4000K	3500K	3000K	2700K	2200K
Standard	70	#	#	#	#		#		
	80	#	#	#	o	o	o	o	#
	90		#	#	o	o	o	o	
Pro9™	90			#	o	o	o	o	

Colors	CRI	Premium Colors					
		4000K	3500K	3100K below BBL	3000K	3000K below BBL	2700K
Fidelity	98	40H	35H		30H		27H
Specialty	90			31Q		30Q	30U
	95					L7C	

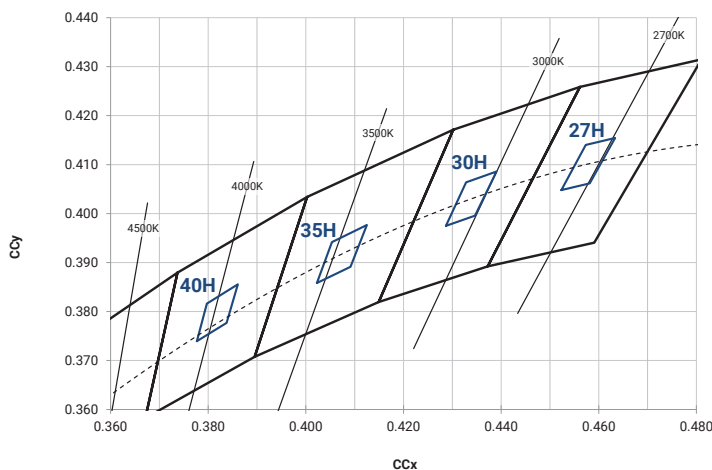
# = CMU only    o = CMU & CHA

### COLOR RENDERING REFERENCE DATA: PREMIUM COLORS

Metric	Standard Version								Pro9™ Version							
	40H	35H	30H	27H	31Q	30Q	30U	L7C	40H	35H	30H	27H	31Q	30Q	30U	L7C
CRI Ra	97	97	98	98	91	92	92	96	97	97	97	97	93	94	93	96
CRI R9	95	97	92	93	56	58	60	93	86	88	83	67	59	63	61	93
TM-30 Rf	91	91	93	96	90	89	89	92	92	94	94	94	90	92	91	92
TM-30 Rg	99	99	99	101	100	99	101	101	99	100	99	99	98	99	100	101

### PREMIUM COLORS: FIDELITY

On BBL for Halogen appearance



### PREMIUM COLORS: SPECIALTY

Below BBL for CMH appearance

