

XLamp® High-Power LEDs



Cree® is an industry leader in brightness and reliability for power LEDs with the XLamp LED family, which enables the lighting industry with efficient and environmentally friendly LED light. XLamp XR-E LEDs are “lighting class,” delivering unprecedented levels of white LED brightness and efficacy, along with the white-point stability expected by the lighting industry. XLamp XR-C LEDs give lighting designers the flexibility and performance to create the next generation of LED lighting products.

Features ▶

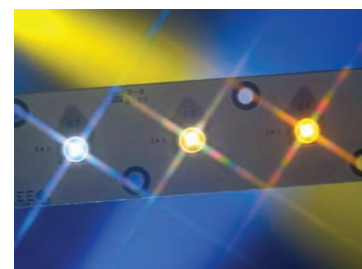
- Typical efficacy up to 90 lm/W in cool white
- Correlated color temperature (CCT) from 2,600°K to 10,000°K
- Available with currents up to 1,000 mA
- Electrically isolated thermal path
- Tested to the highest standards in the LED industry

Benefits ▶

- “Lighting class” brightness and efficacy
- Stable white point over time
- High reliability
- Lifetime up to 50,000 hours
- Directional light output

Applications ▶

- Outdoor lighting
- Portable and personal lighting
- Indoor directional lighting
- Emergency vehicle lighting
- Architectural lighting



Cree XLamp XR-E LEDs in cool, neutral, and warm white

Product Specifications ▶											
Part Number	Package Type	Color	Color Temp. (°K)	Dominant Wavelength (nm)	Max. Current (mA)	Tested Current (mA)	Forward Voltage (V)	Viewing Angle (deg)	Luminous Flux (lm)*	Luminous Intensity (mcd)	Markets
XREWHT-L1-0000-XXXXX	XLamp XR-E	Cool white	5,000-10,000	NA	1,000	350	3.9 max.	90	67.2-114	NA	CL FL TR BL SI
XREWHT-L1-0000-XXXXX		Neutral white	3,700-5,000	NA	700	350	3.9 max.	90	56.8-87.4	NA	CL FL TR BL SI
XREWHT-L1-0000-XXXXX		Warm white	2,600-3,700	NA	700	350	3.9 max.	90	51.7-73.9	NA	CL FL TR BL SI
XREROY-L1-0000-XXXXX		Royal blue	NA	450-465	700	350	3.9 max.	100	250-350 mW	NA	CL TR BL SI
XREBLU-L1-0000-XXXXX		Blue	NA	465-485	700	350	3.9 max.	100	23.5-30.6	NA	CL TR BL SI
XREGRN-L1-0000-XXXXX		Green	NA	520-535	700	350	3.9 max.	100	67.2	NA	CL TR BL SI
XRCWHT-L1-0000-XXXXX	XLamp XR-C	Cool white	5,000-10,000	NA	500	350	4.0 max.	90	45.7-67.2	NA	CL FL TR BL SI
XRCWHT-L1-0000-XXXXX		Neutral white	3,700-5,000	NA	500	350	4.0 max.	90	45.7-56.8	NA	CL FL TR BL SI
XRCWHT-L1-0000-XXXXX		Warm white	2,600-3,700	NA	500	350	4.0 max.	90	39.8-51.7	NA	CL FL TR BL SI
XRCROY-L1-0000-XXXXX		Royal blue	NA	450-465	500	350	4.0 max.	100	250-400 mW	NA	CL TR BL SI
XRCBLU-L1-0000-XXXXX		Blue	NA	465-485	500	350	4.0 max.	100	18.1-23.5	NA	CL TR BL SI
XRCGRN-L1-0000-XXXXX	Green	NA	520-535	500	350	4.0 max.	100	39.8-51.7	NA	CL TR BL SI	
XR7090AM-L1-XXXX	XLamp XR	Amber	NA	585-595	350	350	3.0 max.	100	23.5-39.8	NA	CL TR BL SI
XR7090RO-L1-XXXX		Red orange	NA	610-620	700	350	3.0 max.	100	30.6-51.7	NA	CL TR BL SI
XR7090RD-L1-XXXX		Red	NA	620-636	700	350	3.0 max.	100	18.1-39.8	NA	CL TR BL SI

MARKETS LEGEND

CL COMMERCIAL LIGHTING FL FLASHLIGHTS TR TRANSPORTATION BL BACKLIGHTING SI SIGNAGE

Note: For specific bin codes, please contact your local Arrow sales representative at 1.888.9LIGHT1, or visit lighting.arrow.com.

*Min.-max. @ 350 mA



Round and Oval High-Brightness LEDs

Cree® offers a range of high-brightness LEDs in a variety of colors, including red, green, blue, and amber. They come in 4 mm and 5 mm oval packages with 70° or 110° viewing angles and 5 mm round packages with 15°, 30°, or 60° viewing angles. The oval LEDs are designed for full-color video screens and passenger information signs. They have very smooth, matched radiation patterns, ensuring consistent color mixing and uniformity.



Cree makes a wide selection of high-performance round and oval LEDs

Features ▶

- Single-color and intensity binning
- Tight intensity bin range for uniform brightness
- Multiple viewing-angle options
- Supplied tape-and-reel for automatic machine-insertion options
- RoHS compliant

Benefits ▶

- High reliability
- Long lifetime
- High performance

Applications ▶

- Amusement machines
- Full-color video screens
- Variable-message signs
- Traffic signals
- Backlighting for mobile devices and channel letters

Product Specifications ▶

Part Number	Package Type	Color	Color Temp. (°K)	Dominant Wavelength (nm)	Max. Current (mA)	Tested Current (mA)	Forward Voltage (V)	Viewing Angle (deg)	Luminous Flux (lm)	Luminous Intensity (mcd)	Markets
LC503UHR1-15P-A	5 mm round	Red	NA	618-630	50	20	2.1	15	NA	5,860-16,800	TR BL SI
LC503UHR1-15Q-A		Red	NA	618-630	50	20	2.1	15	NA	5,860-16,800	TR BL SI
LC503UHR1-30P-A		Red	NA	618-630	50	20	2.1	30	NA	3,000-8,200	TR BL SI
LC503UHR1-30Q-A		Red	NA	618-630	50	20	2.1	30	NA	3,000-8,200	TR BL SI
LC503UYL1-15P-A		Amber	NA	584-596	50	20	2.1	15	NA	5,860-23,500	TR BL SI
LC503UYL1-15Q-A		Amber	NA	584-596	50	20	2.1	15	NA	5,860-23,500	TR BL SI
LC503UYL1-30P-A		Amber	NA	584-596	50	20	2.1	30	NA	3,000-8,200	TR BL SI
LC503UYL1-30Q-A		Amber	NA	584-596	50	20	2.1	30	NA	3,000-8,200	TR BL SI
LC503FPG1-15Q-A3		Green	NA	520-535	25	20	3.2	15	NA	12,000-32,900	TR BL SI
LC503FPG1-30Q-A3		Green	NA	520-535	25	20	3.2	30	NA	5,860-16,800	TR BL SI
LC503FBL1-15Q-A3		Blue	NA	465-475	25	20	3.2	15	NA	3,000-12,000	TR BL SI
LC503FBL1-30Q-A3		Blue	NA	465-475	25	20	3.2	30	NA	2,130-5,860	TR BL SI
LC503FWH1-15Q-A0		White	Cool	NA	25	20	3.2	15	NA	16,800-32,900	TR BL SI
L0494UHR4-B0G-A3		4 mm oval	Red	NA	618-630	50	20	2.1	105 x 50	NA	770-2,130
L0494UYL4-B0G-A3	Amber		NA	584-596	50	20	2.1	105 x 50	NA	770-2,130	TR BL SI
L0494EPG4-B0G-A3	Green		NA	520-535	25	20	3.4	105 x 50	NA	1,520-4,180	TR BL SI
L0494EBL4-B0G-A3	Blue		NA	465-475	25	20	3.4	105 x 50	NA	390-1,520	TR BL SI
L0566UHR3-70G-A3	5 mm oval	Red	NA	618-630	50	20	2.1	70 x 30	NA	1,520-4,180	TR BL SI
L0566UHR3-70H-A3		Red	NA	618-630	50	20	2.1	70 x 30	NA	1,520-4,180	TR BL SI
L0566UYL3-70G-A3		Amber	NA	584-596	50	20	2.1	70 x 30	NA	1,520-4,180	TR BL SI
L0566UYL3-70H-A3		Amber	NA	584-596	50	20	2.1	70 x 30	NA	1,520-4,180	TR BL SI
L0566EPG3-70G-A3		Green	NA	520-535	25	20	3.4	70 x 35	NA	3,000-8,200	TR BL SI
L0566EPG3-70H-A3		Green	NA	520-535	25	20	3.4	70 x 35	NA	3,000-8,200	TR BL SI
L0566EBL3-70G-A3		Blue	NA	465-475	25	20	3.4	70 x 35	NA	550-2,130	TR BL SI
L0566EBL3-70H-A3		Blue	NA	465-475	25	20	3.4	70 x 35	NA	550-2,130	TR BL SI
L05SMUHR4-B0G-A3		Red	NA	618-630	50	20	2.1	110 x 40	NA	1,100-3,000	TR BL SI
L05SMUYL4-B0G-A3		Amber	NA	584-596	50	20	2.1	110 x 40	NA	770-3,000	TR BL SI
L05SMEPG4-B0G-A3	Green	NA	520-535	25	20	3.4	110 x 40	NA	2,130-5,860	TR BL SI	
L05SMEBL4-B0G-A3	Blue	NA	465-475	25	20	3.4	110 x 40	NA	390-1,520	TR BL SI	

MARKETS LEGEND

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P4 and SMD High-Brightness LEDs

Cree®'s high-performance P4 and SMD LEDs demonstrate the company's commitment to providing industry-leading technology in standard, cost-effective packages. Cree's P4 LEDs feature high luminous flux with superior heat dissipation. These LEDs are perfect for use in exterior lighting, interior architectural illumination and accent lighting, and exterior automotive applications. Cree's SMD LEDs are comprised of several product families, each providing unique features and benefits for a wide range of lighting applications and are available with 2, 4, or 6 leads..



Features ▶

- Single-color and intensity binning
- Tight intensity bin range for uniform brightness
- High-brightness and focused radiation in the beam direction
- Low power consumption
- RoHS compliant

Benefits ▶

- High reliability
- Long lifetime
- High performance

Applications ▶

- Amusement machines
- Full-color video screens
- Variable-message signs
- Traffic signals
- Backlighting for mobile devices and channel letters



Cree LEDs are available in a wide range of sizes, colors, and types, including SMD and P4

Product Specifications ▶											
Part Number	Package Type	Color	Color Temp. (°K)	Dominant Wavelength (nm)	Max. Current (mA)	Tested Current (mA)	Forward Voltage (V)	Viewing Angle (deg)	Luminous Flux (lm)	Luminous Intensity (mcd)	Markets
LP377UHR1-40G-01	7.6 x 7.6 P4	Red	NA	618-630	70	70	2.5	40	4.4-11	NA	TR BL SI
LP377UHR1-70G-01		Red	NA	618-630	70	70	2.5	70	4.4-11	NA	TR BL SI
LP377UHR1-A0G-01		Red	NA	618-630	70	70	2.5	100	4.4-11	NA	TR BL SI
LP377UYL1-40G-01		Amber	NA	584-599	70	70	2.5	40	4.4-11	NA	TR BL SI
LP377UYL1-70G-01		Amber	NA	584-599	70	70	2.5	70	5.5-11	NA	TR BL SI
LP377UYL1-A0G-01		Amber	NA	584-599	70	70	2.5	100	5.5-11	NA	TR BL SI
LP377FPG1-70G		Green	NA	515-535	30	30	3.6	70	0.66-2.75	NA	TR BL SI
LP377FBL1-70G		Blue	NA	462-475	30	30	3.6	70	4.4-11	NA	TR BL SI
LP377FWH1-60G		White	NA	NA	30	30	3.6	60	NA	4,180-12,000	TR BL SI
LP377FWH1-90G		White	NA	NA	30	30	3.6	90	NA	2,130-8,200	TR BL SI
LM1-UHR1-01-N1		3.2 x 2.7 PLCC2	Red	NA	618-630	50	20	2.1	120	NA	450-900
LM1-EPG1-01-N2	Green		NA	520-540	25	20	3.4	120	NA	560-1,400	TR BL SI
LM1-EBL1-01-N2	Blue		NA	460-480	25	20	3.4	120	NA	112-710	TR BL SI
LM1-UYL1-01-N1	Amber		NA	584-596	50	20	2.1	120	NA	355-900	TR BL SI
LM1-EWN1-01-N2	White		NA	NA	25	20	3.4	120	2,700	710-1,800	TR BL SI
LM3-EWN1-01-N1	2.7 x 2.0 PLCC2	White	NA	NA	25	20	3.4	120	4,000	1,120-2,240	TR BL SI
LM1-UHR1-11-N1	3.2 x 2.7 PLCC4	Red	NA	618-630	70	50	2.4	120	NA	1,120-2,800	TR BL SI
LM1-EPG1-11-N2		Green	NA	516-536	30	30	3.6	120	NA	710-1,800	TR BL SI
LM1-EBL1-11-N2		Blue	NA	460-480	30	30	3.6	120	NA	180-1,120	TR BL SI
LM1-UYL1-11-N1		Amber	NA	584-599	70	50	2.4	120	NA	1,120-2,800	TR BL SI
LM1-EWN1-11-N2		White	NA	NA	30	30	3.6	120	NA	900-2,240	TR BL SI
LM2-UHR1-F1-N1		Red	NA	618-630	70	50	2.5	60	NA	2,240-5,600	TR BL SI
LM2-UYL1-F1-N1		Amber	NA	584-596	70	50	2.5	60	NA	2,800-7,100	TR BL SI
LV1-UEE2-01-N2	3.2 x 2.8 3-in-1 full color	RGB	NA	R=618 ~ 630/G=520-540/B ~ 460-480	R=200/G=100/B=100	20	R=2.0/G=3.2/B=3.2	120	NA	R=355-900/G=560-1,400/B=224-560	TR BL SI
LVB-UEE2-01-N2		RGB	NA	R=618 ~ 630/G=518-538/B=460 ~ 480	R=200/G=100/B=100	20	R=2.0/G=3.2/B=3.2	120	NA	R=224-320/G=280-500/B=90-160	TR BL SI
LUG-UEE2-01-N2	3.3 x 3.5 3-in-1 full color	RGB	NA	R=618 ~ 630/G=520-540/B=460 ~ 480	R=200/G=100/B=100	20	R=2.0/G=3.2/B=3.2	120	NA	R=450-900/G=710-1,400/B=224-450	TR BL SI
LP6-UEE2-0B-T2	6.0 x 5.0 3-in-1 full color	RGB	NA	R=618 ~ 630/G=520-540/B=460 ~ 480	R=200/G=100/B=100	20	R=2.0/G=3.2/B=3.2	120	NA	R=450-620/G=560-1,100/B=224-355	TR BL SI
LS8-FWH1-01-N2	2.8 x 1.2 x 0.8 side view	White	NA	NA	25	20	3.4	120	NA	1,500-2,000	TR BL SI
LV6-FWH1-03-N3	3.5 x 3.2 3-in-1 PLCC6	White	NA	NA	60	TBA	TBA	120	NA	4,200	CL BL
LP6-FWH1-03-N3	5.0 x 6.0 3-in-1 PLCC6	White	NA	NA	150	TBA	TBA	120	NA	10,000	CL BL

MARKETS LEGEND

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