



XLamp® High-Power LEDs

Cree® is an industry leader in LED technology, and set the lighting-class standard for LEDs with the XLamp® XR product family in 2006. The introduction of the XP and MC product families further demonstrates Cree's commitment to delivering unprecedented levels of white LED brightness and efficacy along with the white-point stability needed for use in general illumination.



Cree® XLamp® product families:
XP (left), MC (center), XR (right)

Features ▶

- Full portfolio of white and color LEDs
- Correlated color temperature (CCT) from 2,600°K to 10,000°K
- Available with drive 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
- Proven reliability
- Lifetime up to 50,000 hours
- Directional light output

Applications ▶

- Indoor and outdoor general lighting
- Portable lighting
- Architectural lighting
- Transportation lighting
- Emergency vehicle lighting

Product Specifications ▶

Part Number	Package Type	Color	Color Temp. (°K)	Dominant Wavelength (nm)	Max. Current (mA)	Tested Current (mA)	Forward Voltage (V)	Viewing Angle (°)	Luminous Flux (lm)	Luminous Intensity (mcd)	Markets
XPEWHT-L1-0000-XXXXX	XLamp XP-E	Cool white	5,000-10,000	-	700	350	3.2	115	87.4-122	-	CL FL TR BL SI
XPEWHT-L1-0000-XXXXX		Neutral white	3,700-5,000	-	700	350	3.2	115	80.6-107	-	CL FL TR BL SI
XPEWHT-L1-0000-XXXXX		Warm white	2,600-3,700	-	700	350	3.2	115	67.2-93.9	-	CL FL TR BL SI
XPCWHT-L1-0000-XXXXX	XLamp XP-C	Cool white	5,000-10,000	-	500	350	3.4	110	73.9-100	-	CL FL TR BL SI
XPCWHT-L1-0000-XXXXX		Neutral white	3,700-5,000	-	500	350	3.4	110	67.2-87.4	-	CL FL TR BL SI
XPCWHT-L1-0000-XXXXX		Warm white	2,600-3,700	-	500	350	3.4	110	56.8-73.9	-	CL FL TR BL SI
MCE4WT-A2-0000-XXXXXX	XLamp MC-E	Cool white	5,000-10,000	-	700 per die	350 per die	3.2	110	370-490	-	CL FL TR
MCE4WT-A2-0000-XXXXXX		Neutral white	3,700-5,000	-	700 per die	350 per die	3.2	110	320-430	-	CL FL TR
MCE4WT-A2-0000-XXXXXX		Warm white	2,600-3,700	-	700 per die	350 per die	3.2	110	240-370	-	CL FL TR
XREWHT-L1-0000-XXXXX	XLamp XR-E	Cool white	5,000-10,000	-	1,000	350	3.3	90	80.6-114	-	CL FL TR BL SI
XREWHT-L1-0000-XXXXX		Neutral white	3,700-5,000	-	700	350	3.3	90	62-100	-	CL FL TR BL SI
XREWHT-L1-0000-XXXXX		Warm white	2,600-3,700	-	700	350	3.3	90	56.8-87.4	-	CL FL TR BL SI
XREROY-L1-0000-XXXXX		Royal blue	-	450-465	1,000	350	3.3	100	300-500 mW	-	CL TR BL SI
XREBLU-L1-0000-XXXXX		Blue	-	465-485	1,000	350	3.3	100	23.5-39.8	-	CL TR BL SI
XREGRN-L1-0000-XXXXX		Green	-	520-535	700	350	3.3	100	67.2-87.4	-	CL TR BL SI
XRCWHT-L1-0000-XXXXX	XLamp XR-C	Cool white	5,000-10,000	-	500	350	3.5	90	56.8-93.9	-	CL FL TR BL SI
XRCWHT-L1-0000-XXXXX		Neutral white	3,700-5,000	-	500	350	3.5	90	56.8-87.4	-	CL FL TR BL SI
XRCWHT-L1-0000-XXXXX		Warm white	2,600-3,700	-	500	350	3.5	90	45.7-73.9	-	CL FL TR BL SI
XRCROY-L1-0000-XXXXX		Royal blue	-	450-465	500	350	3.5	100	250-350 mW	-	CL TR BL SI
XRCBLU-L1-0000-XXXXX		Blue	-	465-475	500	350	3.5	100	13.9-23.5	-	CL TR BL SI
XRCGRN-L1-0000-XXXXX		Green	-	520-535	500	350	3.7	100	39.8-67.2	-	CL TR BL SI
XRCAMB-L1-0000-XXXXX		Amber	-	585-595	350	350	2.2	90	23.5-51.7	-	CL TR BL SI
XRCRDO-L1-0000-XXXXX		Red orange	-	610-620	700	350	2.2	90	30.6-51.7	-	CL TR BL SI
XRCRED-L1-0000-XXXXX	Red	-	620-630	700	350	2.2	90	23.5-51.7	-	CL TR BL SI	

MARKETS LEGEND

CL COMMERCIAL LIGHTING FL FLASHLIGHTS TR TRANSPORTATION BL BACKLIGHTING SI SIGNAGE

Choose the Right Cree LED ▶

Visit our new website www.arrow.com/cree and get the information you need to select the best Cree LEDs for your lighting designs.

- Access the new Cree Product Characterization Tool
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Round and Oval High-Brightness LEDs

Cree® offers a range of high-brightness LEDs in a variety of colors, including red, green, blue, white, and amber. They come in 4 mm and 5 mm oval packages with 70° or 110° viewing angles. The 5 mm round packages are available with 15°, 23°, 30°, and other viewing angles. The Screen Master® oval LEDs are designed for monochrome and full-color video screens. They have a very smooth, matched radiation pattern, ensuring superior displayed image quality.



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

Features ▶

- Intensity and color binning
- Radiation pattern matching for Screen Master® oval LEDs
- High quality
- Bulk or ammo pack options
- RoHS compliant

Benefits ▶

- Uniform display brightness
- Superior image quality
- Long lifetime
- Automatic machine insertion

Applications ▶

- Full-color video screens
- Gas price signs
- Variable-message signs
- Gaming machines
- 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 (°)	Luminous Flux (lm)	Luminous Intensity (mcd)	Markets	
C503B-WAN	5 mm round	White	6,500-9,000	-	25	20	3.2	15	-	14,400-32,900	FL TR SI	
C535A-WJN		White	6,500-9,000	-	25	20	3.2	110	-	770-3,300	FL SI	
C503B-RAS		Red	-	624	50	20	2.1	15	-	5,860-23,500	TR SI	
C503B-RBS		Red	-	624	50	20	2.1	23	-	3,000-12,000	TR SI	
C503B-RCS		Red	-	624	50	20	2.1	30	-	3,000-12,000	TR SI	
C503B-AAS		Amber	-	591	50	20	2.1	15	-	5,860-23,500	TR SI	
C503B-ABS		Amber	-	591	50	20	2.1	23	-	3,000-12,000	TR SI	
C503B-ACS		Amber	-	591	50	20	2.1	30	-	3,000-8,200	TR SI	
C503B-GAS		Green	-	527	25	20	3.2	15	-	16,800-46,100	TR SI	
C503B-GCS		Green	-	527	25	20	3.2	30	-	5,860-23,500	TR SI	
C503B-BAS		Blue	-	470	25	20	3.2	15	-	5,860-23,500	TR SI	
C503B-BCS		Blue	-	470	25	20	3.2	30	-	2,130-8,200	TR SI	
C4SMF-RJS		4 mm oval	Red	-	621	50	20	2.1	40 x 110	-	1,100-4,180	TR SI
C4SMG-RJS			Red	-	621	50	20	2.1	40 x 110	-	550-2,130	TR SI
C4SMF-GJS	Green		-	527	25	20	3.4	40 x 110	-	2,130-8,200	TR SI	
C4SMG-GJS	Green		-	527	25	20	3.4	40 x 110	-	1,100-4,180	TR SI	
C4SMF-BJS	Blue		-	470	25	20	3.4	40 x 110	-	550-2,130	TR SI	
C4SMG-BJS	Blue		-	470	25	20	3.4	40 x 110	-	390-1,520	TR SI	
C5SME-RJS	5 mm oval	Red	-	621	50	20	2.1	40 x 110	-	770-2,130	TR SI	
C4SMF-RJS		Red	-	621	50	20	2.1	40 x 110	-	1,100-4,180	TR SI	
C5SMF-GJS		Green	-	527	25	20	3.4	40 x 110	-	2,130-8,200	TR SI	
C5SMF-BJS		Blue	-	470	25	20	3.4	40 x 110	-	550-2,130	TR SI	
C566C-RFS		Red	-	621	50	20	2.1	30 x 70	-	1,100-4,180	TR SI	
C566C-AFS		Amber	-	591	50	20	2.1	30 x 70	-	1,520-4,180	TR SI	
C566C-GFS		Green	-	527	25	20	3.4	30 x 70	-	2,130-12,000	TR SI	
C566C-BFS		Blue	-	470	25	20	3.4	30 x 70	-	770-4,180	TR SI	

MARKETS LEGEND

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Choose the Right Cree LED ▶

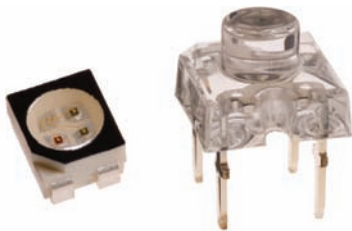
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- Access the new Cree Product Characterization Tool
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P4 and SMD High-Brightness LEDs

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 illumination and accent lighting applications. Cree's high-brightness SMD LEDs provide unique features that benefit a wide range of lighting applications and are available with 2, 4, or 6 leads.



P4 and SMD high-brightness LEDs

Features ▶

- Color and intensity binning
- High-brightness
- High quality and reliability
- High performance
- RoHS compliant

Benefits ▶

- Improved LED matching
- Low power consumption
- Reduced maintenance cost
- Long lifetime

Applications ▶

- Gaming machines
- Full-color video screens
- Accent/linear lighting
- Variable-message signs
- 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 (°)	Luminous Flux (lm)	Luminous Intensity (mcd)	Markets
CP41B-WES	7.6 x 7.6 P4	White	6,500	-	30	30	3.6	60	3.8-11.0	-	CL TR SI
CP41B-WGS		White	6,500	-	30	30	3.6	90	3.8-11.0	-	CL TR SI
CP41B-RDS		Red	-	624	70	70	2.5	40	4.4-11.0	-	CL TR SI
CP41B-RFS		Red	-	624	70	70	2.5	70	4.4-11.0	-	CL TR SI
CP41B-RHS		Red	-	624	70	70	2.5	100	4.4-13.2	-	CL TR SI
CP41B-ADS		Amber	-	527	70	70	2.5	40	4.4-13.2	-	CL TR SI
CP41B-AFS		Amber	-	527	70	70	2.5	70	5.5-13.2	-	CL TR SI
CP41B-AHS		Amber	-	527	70	70	2.5	100	5.5-13.2	-	CL TR SI
CP43B-RGS		Red	-	624	70	70	2.5	35 x 90	2.1-8.2	-	CL TR SI
CP43B-AGS		Amber	-	527	70	70	2.5	35 x 90	2.1-8.2	-	CL TR SI
CP41B-BFS		Blue	-	470	35	30	3.6	70	1.6-3.3	-	CL TR SI
CP41B-GFS		Green	-	527	35	30	3.6	70	4.4-8.7	-	CL TR SI
CLM1C-WKW		3.2 x 2.7 PLCC2	White	6,800	-	25	20	3.2	120	-	710-1,800
CLM1B-RKW	Red		-	624	50	20	2.1	120	-	450-1,120	TR BL SI
CLM1B-AKW	Amber		-	591	50	20	2.1	120	-	355-900	TR BL SI
CLM1B-GKW	Green		-	527	25	20	3.4	120	-	710-2,240	TR BL SI
CLM1B-BKW	Blue		-	470	25	20	3.4	120	-	280-710	TR BL SI
CLA1A-WKW	3.2 x 2.7 PLCC4	White	5,500	-	35	30	3.6	120	1.8-4.5	-	TR BL SI
CLA1A-MKW		Warm white	3,200	-	35	30	3.6	120	1.1-3.5	-	TR BL SI
CLM4B-RKW		Red	-	624	70	50	2.4	120	-	1,120-2,800	TR BL SI
CLM4B-AKW		Amber	-	591	70	60	2.4	120	-	1,120-2,800	TR BL SI
CLM4B-GKW		Green	-	527	30	30	3.6	120	-	1,400-3,550	TR BL SI
CLM4B-BKW	Blue	-	470	30	30	3.6	120	-	355-900	TR BL SI	
CLP6C-FKB	6.0 x 5.0 3-in-1 full color	RGB	-	R=621/G=527/ B=470	R=50/G=50/ B=50	R=20/G=20/ B=20	R=2.0/G=3.2/ B=3.2	115	-	R=560-1,120/G=1,120-2,240/ B=280-560	TR BL SI
CLV1A-FKB	3.2 x 2.8 3-in-1 full color	RGB	-	R=621/G=527/ B=470	R=50/G=25/ B=25	R=20/G=20/ B=20	R=2.0/G=3.2/ B=3.2	120	-	R=355-900/G=560-1,400/ B=180-450	TR BL SI
CLP6B-WKW	6.0 x 5.0	White	6,800	-	3 x 50	3 x 50	3.8	115	15.0-30.0	7,100-18,000	CL TR
CLN6A-MKW		Warm white	3,200	-	350	300	3.8	115	51.0-85.6	-	CL TR
CLN6A-WKW		White	5,500	-	350	300	3.8	115	60.5-101.8	-	CL TR

MARKETS LEGEND

CL COMMERCIAL LIGHTING

FL FLASHLIGHTS

TR TRANSPORTATION

BL BACKLIGHTING

SI SIGNAGE

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