



## Description

The XNOVA™ LED array series delivers solutions for the most demanding spot lighting, down lighting and directional applications in general lighting. Available in lumen packages from less than 300 to over 15,000lm with efficacies exceeding 130 LPW. XNOVA™ LEDs are available in the widest range of CRI options in the industry. Along with a complete white color range, XNOVA provides lighting designers and manufacturers with the choices necessary to meet the optimum performance at the most cost effective price. Tight color control combined with the highest lumen performance, quality, consistency and reliability make XNOVA your one stop solution.

## Features

- Wide range of lumen packages
  - 300lm to over 15,000lm, @ 85°C
- High Lumen per Watt
  - 115 - 129 LPW @ 3000K, 80 CRI, 85°C
  - 140 LPW @ 5000K, 80 CRI, 85°C
- 2700K, 3000K, 3500K, 4000K, 5000K, 6500K
- 90 and 80 min. standard at most CCTs
- High temperature (85°C) binning
- AccuWhite™ Series for highest CRI (97 typical)
- Sensus™ Series for brighter, purer whites
- 2-step MacAdam ellipse chromaticity binning for the most accurate color

## Applications

- Spot and Track Lighting
- Shop and Retail Lighting
- Specialty Retail Lighting
- Directional, high color rendering
- Hospitality and office space
- Halogen/CMH replacements
- PARs, BRs, MR16s, AR111
- Industrial high bay
- Outdoor area and roadway
- Architectural and Landscape

## Spot, Track and Down Lighting

Whether it's retail, hospitality, office, residential or replacement bulbs, sometimes its all about energy consumption and payback period. When searching for the shortest payback period possible, the solution in white LEDs, is XNova. Frequently available with the highest efficacy in the market, XNova LEDs can be driven to optimum currents to deliver higher lumens per dollar than the other solutions. Before deciding on another brand, check XNova, you won't be disappointed.



XNova 80 CRI Minimum									
XNova	LES (mm)	Board Dimension (mm)	Drive Current 1x (mA)	Typical Power 1x drive (W)	CCT (K)	Lumen Typ. 1X Current (85°C)		Lumen (calculated) 1.5X Current (85°C)	
						Lumen	Efficacy	Lumen	Efficacy
CLM-6	6.3	12x13	120mA	3.24	2700	315	97	441	91
					3000	330	102	462	95
CXM-6	6.3	12x13	120mA	4.2	2700	440	105	616	98
					3000	470	112	658	104
CHM-6	6.3	12x13	160mA	5.6	2700	580	104	812	97
					3000	615	110	861	103
CLM-9	9.0	13.5x13.5	160mA	5.6	2700	630	113	882	105
					3000	660	118	924	110
CXM-9	9.0	13.5x13.5	240mA	8.4	2700	920	110	1,288	102
					3000	980	117	1,372	109
CHM-9	9.0	13.5x13.5	360mA	13	2700	1,307	104	1,830	97
					3000	1,379	109	1,930	102
CXM-14	13.5	19x19	480mA	17.3	2700	1,920	111	2,688	107
					3000	2,030	117	2,842	113
CHM-14	13.5	19x19	720mA	25.2	2700	2,750	109	3,850	102
					3000	2,890	115	4,046	107
CHM-18	17.5	21.5x21.5	1,100mA	38.5	2700	3,920	102	5,488	98
					3000	4,140	108	5,796	104
CXM-22	22	28x28	1,280mA	45	2700	5,110	118	7,154	106
					3000	5,400	120	7,560	112
CHM-22	22	28x28	1,920mA	65	2700	7,080	108	9,912	98
					3000	7,465	114	10,451	104
CHM-27	26.5	31.5x31.5	2,700mA	94	2700	9,730	104	13,622	97
					3000	10,270	109	14,378	102



## Shop and Retail Lighting

Shop owners and retailers know the secret to successful sales is the right lighting. Lighting helps products look their best and this can be key for colorful merchandise like grocery store produce and luxury items. However, with the continuously increasing cost of electricity finding the best compromise is a tough job. XNova 90 CRI LEDs meet this challenge by delivering high color rendering while maintaining low energy consumption (high efficacy). These attributes assure your lighting will make products sell without paying all your profits to the utility company.

**XNova 90 CRI Minimum**

XNova	LES (mm)	Board Dimension (mm)	Drive Current 1x (mA)	Typical Power 1x drive (W)	CCT (K)	Lumen Typ. 1X Current (85°C)		Lumen (calculated) 1.5X Current (85°C)	
						Lumen	Efficacy	Lumen	Efficacy
CLM-6	6.3	12x13	120mA	3.24	2700	245	76	343	71
					3000	280	86	392	81
CXM-6	6.3	12x13	120mA	4.2	2700	340	81	476	76
					3000	395	94	553	88
CHM-6	6.3	12x13	160mA	5.6	2700	450	80	630	75
					3000	520	93	728	87
CLM-9	9.0	13.5x13.5	160mA	5.6	2700	490	88	686	82
					3000	560	100	784	93
CXM-9	9.0	13.5x13.5	240mA	8.4	2700	720	86	1,008	80
					3000	830	99	1,162	92
CHM-9	9.0	13.5x13.5	360mA	13	2700	1,021	81	1,430	76
					3000	1,171	93	1,640	87
CXM-14	13.5	19x19	480mA	17.3	2700	1,500	87	2,100	83
					3000	1,720	100	2,408	96
CHM-14	13.5	19x19	720mA	25.2	2700	2,150	85	3,010	80
					3000	2,470	98	3,458	91
CHM-18	17.5	21.5x21.5	1,100mA	38.5	2700	3,060	79	4,284	77
					3000	3,520	91	4,928	88
CXM-22	22	28x28	1,280mA	45	2700	3,990	89	5,586	83
					3000	4,590	102	6,426	95
CHM-22	22	28x28	1,920mA	65	2700	5,520	84	7,728	77
					3000	6,365	97	8,911	88
CHM-27	26.5	31.5x31.5	2,700mA	94	2700	7,585	81	10,619	75
					3000	8,750	93	12,250	87

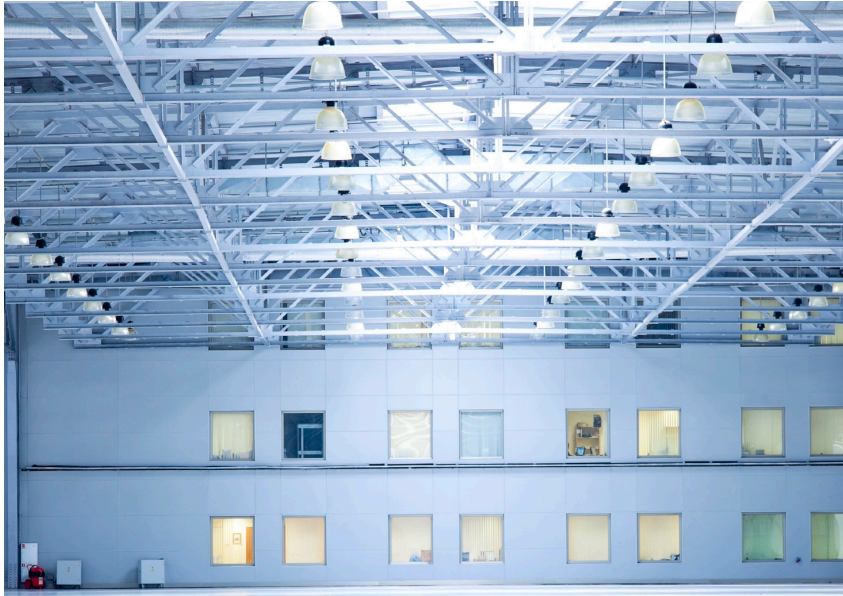


## AccuWhite™ Proprietary Color Rendering System

In many high value commercial applications the first criteria must be lighting's appearance. How does it look, is the only question. When color rendering tops your list, XNova has the solution. Developed by our engineers to deliver unique characteristics AccuWhite is the choice for the most discriminating applications. Proven to exceed the competition in efficacy, AccuWhite is the choice when only the best will do.



AccuWhite™ 95 CRI Minimum									
XNova	LES (mm)	Board Dimension (mm)	Drive Current 1x (mA)	Typical Power 1x drive (W)	CCT (K)	Lumen Typ. 1X Current (85°C)		Lumen (calculated) 1.5X Current (85°C)	
						Lumen	Efficacy	Lumen	Efficacy
CLM-6	6.3	12x13	120mA	3.24	2700	235	73	329	68
					3000	260	80	364	75
CXM-6			120mA	4.2	2700	325	77	455	72
					3000	370	88	518	82
CHM-6			160mA	5.6	2700	429	77	600	71
					3000	485	87	679	81
CLM-9	9.0	13.5x13.5	160mA	5.6	2700	460	82	644	77
					3000	520	93	728	87
CXM-9			240mA	8.4	2700	680	81	952	76
					3000	770	92	1,078	86
CHM-9			360mA	13	2700	964	77	1,350	71
					3000	1,086	86	1,520	80
CXM-14	13.5	19x19	480mA	17.3	2700	1,410	82	1,974	78
					3000	1,600	93	2,240	89
CHM-14			720mA	25.2	2700	2,020	80	2,828	75
					3000	2,280	90	3,192	84
CHM-18			1,100mA	38.5	2700	2,880	75	4,032	72
					3000	3,250	84	4,550	81
CXM-22	22	28x28	1,280mA	45	2700	3,755	83	5,257	78
					3000	4,240	94	5,936	88
CHM-22			1,920mA	65	2700	5,200	80	7,280	72
					3000	5,880	90	8,232	82
CHM-27			2,700mA	94	2700	7,140	76	9,996	71
					3000	8,085	86	11,319	80



## Cool and Neutral White Selection

XNova LEDs are raising the bar for lighting. The new standard for cool white light sources is 80 CRI. This has only recently been possible because of LEDs outstanding performance. XNova cool white LEDs are again setting the standard by achieving industry leading efficacies with guaranteed CRI performance. Watch XNova in the coming months as the new range of 90CRI cool white solutions hit the market. XNova, always the leader.

**Cool White and Neutral White, 80 CRI Minimum**

XNova	LES (mm)	Board Dimension (mm)	Drive Current 1x (mA)	Typical Power 1x drive (W)	CCT (K)	Lumen Typ. 1X Current (85°C)		Lumen (calculated) 1.5X Current (85°C)			
						Lumen	Efficacy	Lumen	Efficacy		
CLM-6	6.3	12x13	120mA	3.24	4000	360	111	504	104		
					5000	370	114	518	107		
CXM-6			120mA	4.2	4000	495	118	693	110		
					5000	515	123	721	114		
CHM-6			160mA	5.6	4000	655	117	917	109		
					5000	670	120	938	112		
CLM-9	9.0	13.5x13.5	160mA	5.6	4000	710	127	994	118		
					5000	720	129	1,008	120		
CXM-9			240mA	8.4	4000	1,050	125	1,470	117		
					5000	1,060	126	1,484	118		
CHM-9			360mA	13	4000	1,479	117	2,070	110		
					5000	1,507	120	2,110	112		
CXM-14	13.5	19x19	480mA	17.3	4000	2,160	125	3,024	120		
					5000	2,220	128	3,108	123		
CHM-14			720mA	25.2	4000	3,100	123	4,340	115		
					5000	3,160	125	4,424	117		
CHM-18			17.5	21.5x21.5	1,100mA	38.5	4000	4,420	115	6,188	111
							5000	4,530	118	6,342	113
CXM-22	22	28x28	1,280mA	45	4000	5,770	128	8,078	120		
					5000	5,905	131	8,267	122		
CHM-22			1,920mA	65	4000	7,985	122	11,179	111		
					5000	8,180	125	11,452	114		
CHM-27			26.5	31.5x31.5	2,700mA	94	4000	10,985	117	15,379	109
							5000	11,250	120	15,750	112

## Sensus™ Series XNova LEDs

The Luminus XNOVA Sensus™ LED Series is specifically targeted below the Black Body Locus (BBL) to deliver warm, pure white light and brighter colors. Designed around the 3000K color point, Sensus™ products deliver 80 CRI minimum, providing the human eye with crisper whites and more vivid colors, especially reds. Since the effect is achieved by color targeting, efficacy and light output levels are comparable to the standard chromaticity product.



Sensus™ Series 80 CRI Minimum									
XNova	LES (mm)	Board Dimension (mm)	Drive Current 1x (mA)	Typical Power 1x drive (W)	CCT (K)	Lumen Typ. 1X Current (85°C)		Lumen (calculated) 1.5X Current (85°C)	
						Lumen	Efficacy	Lumen	Efficacy
CXM-6	6.3	12x13	120mA	4.2	3000	445	106	623	99
CHM-6			160mA	5.6	3000	585	104	819	98
CLM-9	9.0	13.5x13.5	160mA	5.6	3000	625	112	875	104
CXM-9			240mA	8.4	3000	930	111	1,302	103
CHM-9			360mA	13	3000	1,310	101	1,834	94
CXM-14	13.5	19x19	480mA	17.3	3000	1,930	112	2,702	104
CHM-14			720mA	25.2	3000	2,745	109	3,843	102
CHM-18	17.5	21.5x21.5	1,100mA	38.5	3000	3,930	102	5,502	95
CXM-22	22	28x28	1,280mA	45	3000	5,130	120	7,182	112
CHM-22			1,920mA	65	3000	7,090	109	9,926	102

## Where to Buy

### Luminus Devices, Inc.

#### US Headquarters

1145 Sonora Ct.  
Sunnyvale, CA 94086, USA  
Tel: +1 (408) 708-7000  
sales@luminus.com  
www.luminus.com

#### Luminus China

Ning Fang: +86 13606901640  
4FE, No. 1725, Lvling Rd.,  
Xiamen City, Fujian Province,  
361009, P.R. China  
Tel: +86-592-5500720

#### Luminus Customer Service

1100 Technology Park Drive,  
Billerica, MA 01821, USA,  
Tel: +1 (978) 528-8000,  
Email: cs@luminus.com

### Europe, Middle East, Africa

#### EBV Elektronik GmbH & Co.KG

Tel: +49-8121-774 0  
generallighting@ebv.com  
www.ebv.com

### Worldwide

#### Mouser Electronics, Inc.

Tel: +1-800-346-6873  
sales@mouser.com  
www.mouser.com

#### Digi-Key

Tel: +1-800-344-4539  
webmaster@digkey.com  
www.digkey.com

### North America

#### Avnet Electronics Marketing

Tel: +1-480-643-8329  
phlatlight@avnet.com  
www.em.avnet.com

### Asia-Pacific

#### Avnet Asia (China)

Tel: +86-13316928860  
horseman.gan@avnet.com  
www.em.avnetasia.com

#### XMholder(China)

Tel: +86-135-9952-5710  
Jianguo\_wang@xmholder.com  
www.xmholder.com

#### SIMO (China)

Tel: +86-159-6038-0250  
mark.wei@simoasia.com  
www.simoasia.com

#### Dadoutec

Tel: +86-(0)755-86013113  
honter.ni@dadoutec.com  
www.dadoutec.com