



Bridgelux® Gen 7 V10 Array Series

Product Data Sheet DS100



Introduction

V Series



The V Series™ LED Array products deliver high quality light in a compact and cost-effective solid-state lighting package. These chip on board (CoB) arrays can be efficiently driven at twice the nominal drive current, enabling design flexibility not previously possible. This high flux density light source is designed to support a wide range of high quality, low cost directional luminaires and replacement lamps for commercial and residential applications.

The V10 LED array is available in a variety of electrical, CCT and CRI combinations providing substantial design flexibility and energy efficiencies.

Lighting system designs incorporating these LED arrays deliver increased system level efficacy and longer service life. Typical applications include, replacement lamps, and task, accent, spot, track, wide area, security, wall pack and down lights.

Bridgelux Décor Series is our state of the art color line designed specifically for premium applications, producing unmatched LED light quality with brilliant color-rendering options and offer pleasing and inspiring lighting palettes. Bridgelux Décor Series color points are available on Vero® SE Series, Vero® Series, V Series™ and H Series™.

Décor Series Class A is based on human response testing, providing color points with a combined GAI and CRI metric.

Décor Series™ Ultra products provide a high CRI of 97 and a minimum R9 value of 93, which emphasizes the reds and color tones to which the human eye is most receptive - perfect for the most luxurious retail shops and world renowned museums. Décor Series Ultra is designed as a replacement for halogen.

Décor Series™ Street and Landmark is designed to be a direct replacement for high pressure sodium lamps.

Décor Series™ Showcase is the optimal solution for replacing ceramic metal halide lamps, incorporating the same pure white light with enhanced spectrum coverage and higher efficacy.

Features

- Efficacy of 167 lm/W typical
- Compact high flux density light source
- Uniform high quality illumination
- Minimum 65, 70, 80 and 90 and 95 CRI options
- Streamlined thermal path
- ENERGY STAR® / ANSI compliant color binning structure with 2, 3 and 4 SDCM options
- More energy efficient than incandescent, halogen and fluorescent lamps
- Low voltage DC operation
- Instant light with unlimited dimming
- V_f bin code backside marking

Benefits

- Enhanced optical control
- Clean white light without pixilation
- High quality true color reproduction
- Significantly reduced thermal resistance and increased operating temperatures
- Uniform consistent white light
- Lower operating costs
- Easy to use with daylight and motion detectors to enable increased energy savings
- Reduced maintenance costs
- Environmentally friendly, no disposal issue



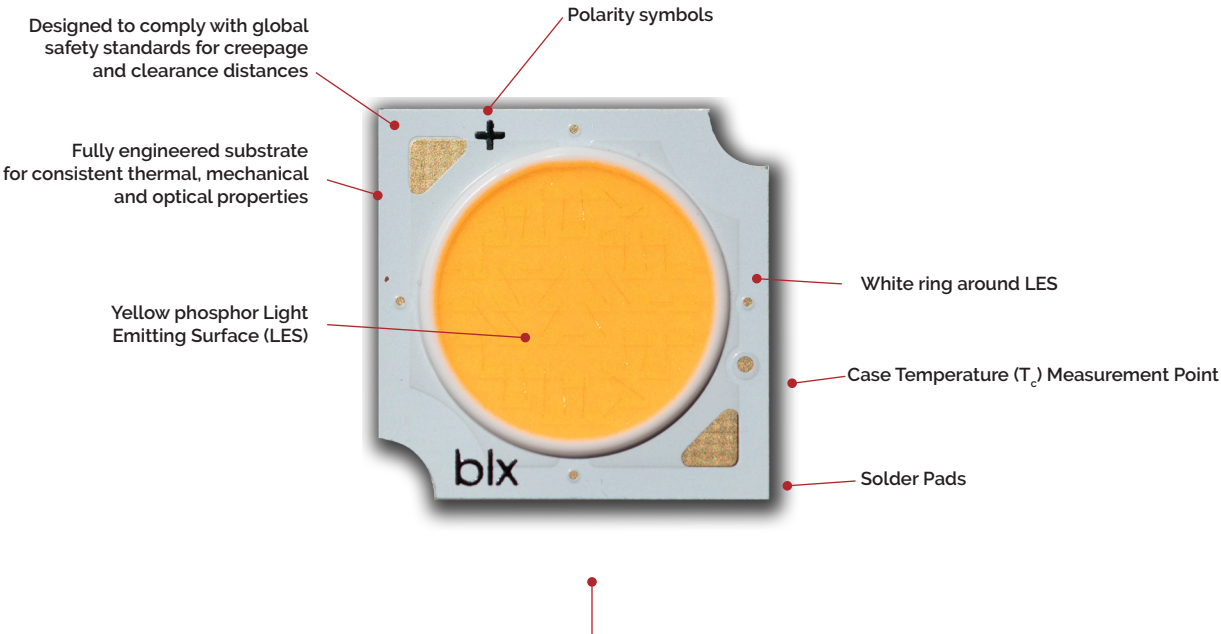
Contents

Product Feature Map	2
Product Nomenclature	2
Product Selection Guide	3
Performance at Commonly Used Drive Currents	8
Electrical Characteristics	14
Eye Safety	15
Absolute Maximum Ratings	16
Performance Curves	17
Typical Radiation Pattern	20
Typical Color Spectrum	21
Mechanical Dimensions	22
Color Binning Information	23
Packaging and Labeling	24
Design Resources	26
Precautions	26
Disclaimers	26
About Bridgelux	25

Product Feature Map

Bridgelux arrays are fully engineered devices that provide consistent thermal and optical performance on an engineered mechanical platform. The V Series arrays are the most compact chip-on-board devices across all of

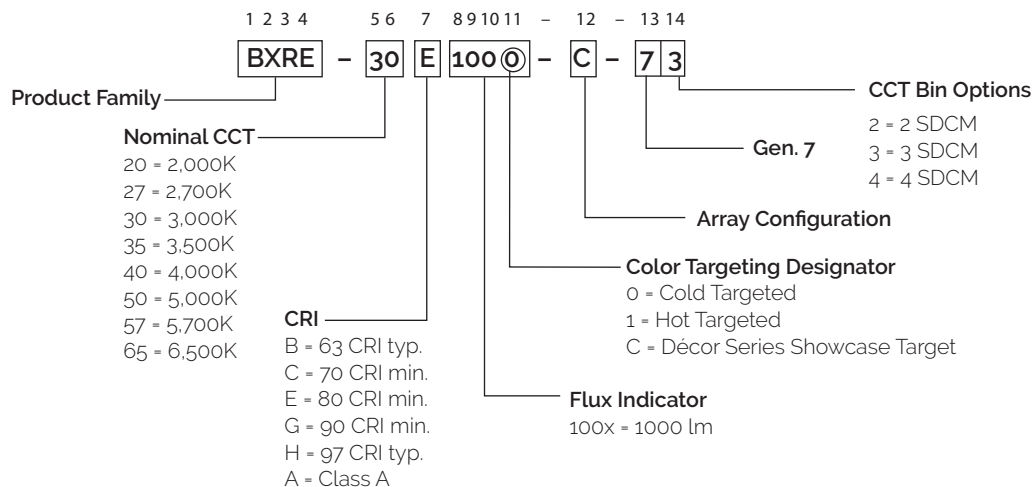
Bridgelux's LED Array products. The arrays incorporate several features to simplify design integration and assembly. Please visit www.bridgelux.com for more information on the V Series family of products.



Note: Part number and lot codes are scribed on back of array

Product Nomenclature

The part number designation for Bridgelux V Series LED arrays is explained as follows:



Product Selection Guide

The following product configurations are available:

Table 1: Selection Guide, Pulsed Measurement Data ($T_j = T_c = 25^\circ\text{C}$)

Part Number	Nominal CCT ¹ (K)	CRI ²	Nominal Drive Current ³ (mA)	Typical Pulsed Flux ^{4,5,6} $T_c = 25^\circ\text{C}$ (lm)	Minimum Pulsed Flux ^{6,7} $T_c = 25^\circ\text{C}$ (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-20B1000-B-73	2000	65	270	1439	1266	34.8	9.5	152
BXRE-27E1000-B-7x	2700	80	270	1458	1283	34.8	9.4	155
BXRE-27E1000-C-7x	2700	80	360	1944	1711	34.8	12.5	155
BXRE-27G10H0-B-7x	2700	90	270	1249	1099	34.8	9.4	133
BXRE-27G10H0-C-7x	2700	90	360	1665	1465	34.8	12.5	133
BXRE-27G1000-B-7x	2700	90	270	1203	1059	34.8	9.4	128
BXRE-27G1000-C-7x	2700	90	360	1604	1412	34.8	12.5	128
BXRE-27H1000-B-7x	2700	97	270	1066	938	34.8	9.4	113
BXRE-30C1001-B-74	3000	70	270	1622	1428	34.8	9.4	173
BXRE-30C1001-C-74	3000	70	360	2163	1904	34.8	12.5	173
BXRE-30E1000-B-7x	3000	80	270	1549	1363	34.8	9.4	165
BXRE-30E1000-C-7x	3000	80	360	2066	1818	34.8	12.5	165
BXRE-30G10H0-B-7x	3000	90	270	1312	1155	34.8	9.4	140
BXRE-30G10H0-C-7x	3000	90	360	1750	1540	34.8	12.5	140
BXRE-30G1000-B-7x	3000	90	270	1258	1107	34.8	9.4	134
BXRE-30G1000-C-7x	3000	90	360	1677	1476	34.8	12.5	134
BXRE-30G100C-B-73	3000	90	270	1212	1067	34.8	9.4	129
BXRE-30G100C-C-73	3000	90	360	1616	1422	34.8	12.5	129
BXRE-30A1001-B-73 ^{8,9}	3000	93	270	1130	995	34.8	9.4	120
BXRE-30A1001-C-73 ^{8,9}	3000	93	360	1507	1326	34.8	12.5	120
BXRE-30H1000-B-7x	3000	97	270	1139	1003	34.8	9.4	121
BXRE-35E1000-B-7x	3500	80	270	1586	1396	34.8	9.4	169
BXRE-35E1000-C-7x	3500	80	360	2114	1861	34.8	12.5	169
BXRE-35G1000-B-7x	3500	90	270	1303	1147	34.8	9.4	139
BXRE-35G1000-C-7x	3500	90	360	1738	1529	34.8	12.5	139
BXRE-35A1001-B-73 ^{8,9}	3500	93	270	1203	1059	34.8	9.4	128
BXRE-35A1001-C-73 ^{8,9}	3500	93	360	1604	1412	34.8	12.5	128
BXRE-40C1001-B-74	4000	70	270	1668	1468	34.8	9.4	178
BXRE-40C1001-C-74	4000	70	360	2224	1957	34.8	12.5	178
BXRE-40E1000-B-7x	4000	80	270	1595	1404	34.8	9.4	170
BXRE-40E1000-C-7x	4000	80	360	2127	1871	34.8	12.5	170

Notes for Table 1:

- Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are not targeted to $T_c = 85^\circ\text{C}$.
- CRI values are typical for Decor Series Ultra, Décor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum R_g value for 80 CRI products is 0, the minimum R_g values for 90 CRI products is 50, the minimum R_g values for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on R_g values.
- Drive current is referred to as nominal drive current.
- Products tested under pulsed condition (10ms pulse width) at nominal test current where T_j (junction temperature) - T_c (case temperature) = 25°C .
- Typical performance values are provided as a reference only and are not a guarantee of performance.
- Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
- Minimum flux values at the nominal test current are guaranteed by 100% test.
- Nominal CCT is defined by the Lighting Research Center's Class A definition. The center of the Class A color bin is on the corresponding isothermal line.
- GAI value is 80. To help ensure optimal fixture level performance, GAI is measured at the fixture level, on axis, at a case temperature of 70°C . GAI may vary depending on fixture design and performance.

Product Selection Guide

Table 1: Selection Guide, Pulsed Measurement Data ($T_j = T_c = 25^\circ\text{C}$)

Part Number	Nominal CCT ¹ (K)	CRI ²	Nominal Drive Current ³ (mA)	Typical Pulsed Flux ^{4,5,6} $T_c = 25^\circ\text{C}$ (lm)	Minimum Pulsed Flux ^{6,7} $T_c = 25^\circ\text{C}$ (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-40G1000-B-7x	4000	90	270	1331	1171	34.8	9.4	142
BXRE-40G1000-C-7x	4000	90	360	1774	1561	34.8	12.5	142
BXRE-50C1001-B-7x	5000	70	270	1677	1476	34.8	9.4	178
BXRE-50C1001-C-7x	5000	70	360	2236	1968	34.8	12.5	178
BXRE-50E1001-B-7x	5000	80	270	1613	1420	34.8	9.4	172
BXRE-50E1001-C-7x	5000	80	360	2151	1893	34.8	12.5	172
BXRE-50G1001-B-7x	5000	90	270	1394	1227	34.8	9.4	148
BXRE-50G1001-C-7x	5000	90	360	1859	1636	34.8	12.5	148
BXRE-57C1001-B-7x	5700	70	270	1631	1436	34.8	9.4	174
BXRE-57C1001-C-7x	5700	70	360	2175	1914	34.8	12.5	174
BXRE-57E1001-B-7x	5700	80	270	1549	1363	34.8	9.4	165
BXRE-57E1001-C-7x	5700	80	360	2066	1818	34.8	12.5	165
BXRE-65C1001-B-7x	6500	70	270	1631	1436	34.8	9.4	174
BXRE-65C1001-C-7x	6500	70	360	2175	1914	34.8	12.5	174
BXRE-65E1001-B-7x	6500	80	270	1568	1380	34.8	9.4	167
BXRE-65E1001-C-7x	6500	80	360	2090	1839	34.8	12.5	167

Notes for Table 1:

- Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to $T_c = 85^\circ\text{C}$.
- CRI values are typical for Decor Series Ultra, Décor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum Rg value for 80 CRI products is 0, the minimum Rg values for 90 CRI products is 50, the minimum Rg values for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on Rg values.
- Drive current is referred to as nominal drive current.
- Products tested under pulsed condition (10ms pulse width) at nominal test current where T_j (junction temperature) = T_c (case temperature) = 25°C .
- Typical performance values are provided as a reference only and are not a guarantee of performance.
- Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
- Minimum flux values at the nominal test current are guaranteed by 100% test.
- Nominal CCT is defined by the Lighting Research Center's Class A definition. The center of the Class A color bin is on the corresponding isothermal line.
- GAI value is 80. To help ensure optimal fixture level performance, GAI is measured at the fixture level, on axis, at a case temperature of 70°C . GAI may vary depending on fixture design and performance.

Product Selection Guide

Table 2: Selection Guide, Stabilized DC Performance ($T_c = 70^\circ\text{C}$) ^{7,8}

Part Number	Nominal CCT ¹ (K)	GAI ²	CRI ³	Nominal Drive Current ⁴ (mA)	Typical DC Flux ^{5,6} $T_c = 70^\circ\text{C}$ (lm)	Minimum DC Flux ^{6,9} $T_c = 70^\circ\text{C}$ (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-30A1001-B-73	3000	80	93	270	1051	925	34.3	9.3	113
BXRE-30A1001-C-73	3000	80	93	360	1401	1233	34.3	12.3	113
BXRE-35A1001-B-73	3500	80	93	270	1119	985	34.3	9.3	121
BXRE-35A1001-C-73	3500	80	93	360	1492	1313	34.3	12.3	121

Notes for Table 2:

1. Nominal CCT is defined by the Lighting Research Center's Class A definition. The center of the Class A color bin is on the corresponding isothermal line.
2. To help ensure optimal fixture level performance, GAI is measured at the fixture level, on axis, at a case temperature of 70°C . GAI may vary depending on fixture design and performance.
3. All CRI values are measured at $T_j = T_c = 25^\circ\text{C}$. CRI Values are specified as typical.
4. Drive current is referred to as nominal drive current.
5. Typical performance values are provided as a reference only and are not a guarantee of performance.
6. Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
7. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.
8. Typical performance is estimated based on operation under DC (direct current) with LED array mounted onto a heat sink with thermal interface material and the case temperature maintained at specified temperature. Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.
9. Minimum flux values at elevated temperatures are provided for reference only and are not guaranteed by 100% production testing. Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.

Product Selection Guide

Table 3: Selection Guide, Stabilized DC Performance ($T_c = 85^\circ\text{C}$) ^{4,5}

Part Number	Nominal CCT ¹ (K)	CRI ²	Nominal Drive Current ³ (mA)	Typical DC Flux ^{4,5} $T_c = 85^\circ\text{C}$ (lm)	Minimum DC Flux ⁶ $T_c = 85^\circ\text{C}$ (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-20B1001-B-73	2000	65	270	1295	1140	33.8	9.1	142
BXRE-27E1000-B-7x	2700	80	270	1312	1155	33.8	9.1	144
BXRE-27E1000-C-7x	2700	80	360	1750	1540	33.8	12.2	144
BXRE-27G10H0-B-7x	2700	90	270	1124	989	33.8	9.1	123
BXRE-27G10H0-C-7x	2700	90	360	1498	1319	33.8	12.2	123
BXRE-27G1000-B-7x	2700	90	270	1083	953	33.8	9.1	119
BXRE-27G1000-C-7x	2700	90	360	1444	1270	33.8	12.2	119
BXRE-27H1000-B-7x	2700	97	270	960	845	33.8	9.1	105
BXRE-30C1001-B-74	3000	70	270	1460	1285	33.8	9.1	160
BXRE-30C1001-C-74	3000	70	360	1947	1713	33.8	12.2	160
BXRE-30E1000-B-7x	3000	80	270	1394	1227	33.8	9.1	153
BXRE-30E1000-C-7x	3000	80	360	1859	1636	33.8	12.2	153
BXRE-30G10H0-B-7x	3000	90	270	1181	1039	33.8	9.1	129
BXRE-30G10H0-C-7x	3000	90	360	1575	1386	33.8	12.2	129
BXRE-30G1000-B-7x	3000	90	270	1132	996	33.8	9.1	124
BXRE-30G1000-C-7x	3000	90	360	1509	1328	33.8	12.2	124
BXRE-30G100C-B-73	3000	90	270	1091	960	33.8	9.1	120
BXRE-30G100C-C-73	3000	90	360	1455	1280	33.8	12.2	120
BXRE-30A1001-B-73 ^{7,8}	3000	93	270	1017	895	33.8	9.1	111
BXRE-30A1001-C-73 ^{7,8}	3000	93	360	1356	1193	33.8	12.2	111
BXRE-30H1000-B-7x	3000	97	270	1025	902	33.8	9.1	112
BXRE-35E1000-B-7x	3500	80	270	1427	1256	33.8	9.1	156
BXRE-35E1000-C-7x	3500	80	360	1903	1675	33.8	12.2	156
BXRE-35G1000-B-7x	3500	90	270	1173	1032	33.8	9.1	128
BXRE-35G1000-C-7x	3500	90	360	1564	1376	33.8	12.2	128
BXRE-35A1001-B-73 ^{7,8}	3500	93	270	1083	953	33.8	9.1	119
BXRE-35A1001-C-73 ^{7,8}	3500	93	360	1444	1270	33.8	12.2	119
BXRE-40C1001-B-74	4000	70	270	1501	1321	33.8	9.1	164
BXRE-40C1001-C-74	4000	70	360	2001	1761	33.8	12.2	164
BXRE-40E1000-B-7x	4000	80	270	1435	1263	33.8	9.1	157
BXRE-40E1000-C-7x	4000	80	360	1914	1684	33.8	12.2	157

Notes for Table 3:

- Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to $T_c = 85^\circ\text{C}$.
- All CRI values are measured at $T_c = T_j = 25^\circ\text{C}$. CRI values are typical for Decor Series Ultra, Décor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum Rg value for 80 CRI products is 0, the minimum Rg values for 90 CRI products is 50, the minimum Rg values for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on Rg values.
- Drive current is referred to as nominal drive current.
- Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.
- Typical performance is estimated based on operation under DC (direct current) with LED array mounted onto a heat sink with thermal interface material and the case temperature maintained at 85°C . Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.
- Minimum flux values at elevated temperatures are provided for reference only and are not guaranteed by 100% production testing. Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.
- Nominal CCT is defined by the Lighting Research Center's Class A definition. The center of the Class A color bin is on the corresponding isothermal line.
- GAI value is 80. To help ensure optimal fixture level performance, GAI is measured at the fixture level, on axis, at a case temperature of 70°C . GAI may vary depending on fixture design and performance.

Product Selection Guide

Table 3: Selection Guide, Stabilized DC Performance ($T_c = 85^\circ\text{C}$)^{4,5}

Part Number	Nominal CCT ¹ (K)	CRI ²	Nominal Drive Current ³ (mA)	Typical DC Flux ^{4,5} $T_c = 85^\circ\text{C}$ (lm)	Minimum DC Flux ⁶ $T_c = 85^\circ\text{C}$ (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-40G1000-B-7x	4000	90	270	1198	1054	33.8	9.1	131
BXRE-40G1000-C-7x	4000	90	360	1597	1405	33.8	12.2	131
BXRE-50C1001-B-7x	5000	70	270	1509	1328	33.8	9.1	165
BXRE-50C1001-C-7x	5000	70	360	2012	1771	33.8	12.2	165
BXRE-50E1001-B-7x	5000	80	270	1452	1278	33.8	9.1	159
BXRE-50E1001-C-7x	5000	80	360	1936	1704	33.8	12.2	159
BXRE-50G1001-B-7x	5000	90	270	1255	1104	33.8	9.1	137
BXRE-50G1001-C-7x	5000	90	360	1673	1473	33.8	12.2	137
BXRE-57C1001-B-7x	5700	70	270	1468	1292	33.8	9.1	161
BXRE-57C1001-C-7x	5700	70	360	1958	1723	33.8	12.2	161
BXRE-57E1001-B-7x	5700	80	270	1394	1227	33.8	9.1	153
BXRE-57E1001-C-7x	5700	80	360	1859	1636	33.8	12.2	153
BXRE-65C1001-B-7x	6500	70	270	1468	1292	33.8	9.1	161
BXRE-65C1001-C-7x	6500	70	360	1958	1723	33.8	12.2	161
BXRE-65E1001-B-7x	6500	80	270	1411	1242	33.8	9.1	154
BXRE-65E1001-C-7x	6500	80	360	1881	1655	33.8	12.2	154

Notes for Table 3:

1. Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to $T_c = 85^\circ\text{C}$.
2. All CRI values are measured at $T_a = T_c = 25^\circ\text{C}$. CRI values are typical for Decor Series Ultra, Décor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum R_g value for 80 CRI products is 0, the minimum R_g values for 90 CRI products is 50, the minimum R_g values for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on R_g values.
3. Drive current is referred to as nominal drive current.
4. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.
5. Typical performance is estimated based on operation under DC (direct current) with LED array mounted onto a heat sink with thermal interface material and the case temperature maintained at 85°C . Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.
6. Minimum flux values at elevated temperatures are provided for reference only and are not guaranteed by 100% production testing. Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.
7. Nominal CCT is defined by the Lighting Research Center's Class A definition. The center of the Class A color bin is on the corresponding isothermal line.
8. GAI value is 80. To help ensure optimal fixture level performance, GAI is measured at the fixture level, on axis, at a case temperature of 70°C . GAI may vary depending on fixture design and performance.

Performance at Commonly Used Drive Currents

V Series LED arrays are tested to the specifications shown using the nominal drive currents in Table 1. V Series LED Arrays may also be driven at other drive currents dependent on specific application design requirements. The performance at any drive current can be derived from the current vs. voltage characteristics shown in Figures 1 & 2 and the flux vs. current characteristics shown in Figures 3 & 4. The performance at commonly used drive currents is summarized in Table 4.

Table 4: Product Performance at Commonly Used Drive Currents

Part Number	CRI	Drive Current ¹ (mA)	Typical V_f $T_c = 25^\circ\text{C}$ (V)	Typical Power $T_c = 25^\circ\text{C}$ (W)	Typical Flux ² $T_c = 25^\circ\text{C}$ (lm)	Typical DC Flux ³ $T_c = 85^\circ\text{C}$ (lm)	Typical Efficacy $T_c = 25^\circ\text{C}$ (lm/W)
BXRE-20B1001-B-73	65	135	33.2	4.5	753	683	168
		180	34.0	6.1	991	896	162
		270	34.8	9.4	1439	1295	153
		405	35.6	14.4	2077	1851	144
		540	36.1	19.5	2678	2361	137
BXRE-27E1000-B-7X	80	135	33.2	4.5	763	692	170
		180	34.0	6.1	1004	908	164
		270	34.8	9.4	1458	1312	155
		405	35.6	14.4	2104	1876	146
		540	36.1	19.5	2713	2392	139
BXRE-27E1000-C-7X	80	180	33.2	6.0	1018	923	170
		240	34.0	8.2	1339	1211	164
		360	34.8	12.5	1944	1750	155
		540	35.6	19.2	2803	2499	146
		720	36.1	26.0	3613	3186	139
BXRE-27G10H0-B-7x	90	135	33.2	4.5	653	592	146
		180	34.0	6.1	860	778	140
		270	34.8	9.4	1249	1124	133
		405	35.6	14.4	1802	1606	125
		540	36.1	19.5	2323	2048	119
BXRE-27G10H0-C-7x	90	180	33.2	6.0	872	790	146
		240	34.0	8.2	1146	1037	140
		360	34.8	12.5	1665	1498	133
		540	35.6	19.2	2400	2140	125
		720	36.1	26.0	3094	2728	119
BXRE-27G1000-B-7x	90	135	33.2	4.5	629	571	140
		180	34.0	6.1	828	749	135
		270	34.8	9.4	1203	1083	128
		405	35.6	14.4	1736	1548	120
		540	36.1	19.5	2238	1973	115
BXRE-27G1000-C-7x	90	180	33.2	6.0	840	762	141
		240	34.0	8.2	1104	999	135
		360	34.8	12.5	1604	1444	128
		540	35.6	19.2	2313	2062	120
		720	36.1	26.0	2981	2628	115
BXRE-27H1000-B-7x	97	135	33.2	4.5	558	506	124
		180	34.0	6.1	734	664	120
		270	34.8	9.4	1066	960	113
		405	35.6	14.4	1539	1372	107
		540	36.1	19.5	1984	1749	102

Notes for Table 4:

1. Alternate drive currents are provided for reference only and are not a guarantee of performance.
2. Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Performance at Commonly Used Drive Currents

Table 4: Product Performance at Commonly Used Drive Currents (Continued)

Part Number	CRI	Drive Current ¹ (mA)	Typical V_f $T_c = 25^\circ\text{C}$ (V)	Typical Power $T_c = 25^\circ\text{C}$ (W)	Typical Flux ² $T_c = 25^\circ\text{C}$ (lm)	Typical DC Flux ³ $T_c = 85^\circ\text{C}$ (lm)	Typical Efficacy $T_c = 25^\circ\text{C}$ (lm/W)
BXRE-30C1001-B-74	70	135	33.2	4.5	849	769	189
		180	34.0	6.1	1117	1010	182
		270	34.8	9.4	1622	1460	173
		405	35.6	14.4	2341	2087	162
		540	36.1	19.5	3018	2661	155
BXRE-30C1001-C-74	70	180	33.2	6.0	1133	1027	189
		240	34.0	8.2	1489	1347	182
		360	34.8	12.5	2163	1947	173
		540	35.6	19.2	3119	2780	162
		720	36.1	26.0	4020	3544	154
BXRE-30E1000-B-7x	80	135	33.2	4.5	811	735	181
		180	34.0	6.1	1067	965	174
		270	34.8	9.4	1549	1394	165
		405	35.6	14.4	2236	1993	155
		540	36.1	19.5	2883	2542	148
BXRE-30E1000-C-7x	80	180	33.2	6.0	1082	981	181
		240	34.0	8.2	1422	1287	174
		360	34.8	12.5	2066	1859	165
		540	35.6	19.2	2978	2655	155
		720	36.1	26.0	3839	3385	148
BXRE-30G10H0-B-7x	90	135	33.2	4.5	687	622	153
		180	34.0	6.1	904	817	148
		270	34.8	9.4	1312	1181	140
		405	35.6	14.4	1894	1688	131
		540	36.1	19.5	2442	2153	125
BXRE-30G10H0-C-7x	90	180	33.2	6.0	916	831	153
		240	34.0	8.2	1205	1090	148
		360	34.8	12.5	1750	1575	140
		540	35.6	19.2	2523	2249	131
		720	36.1	26.0	3252	2867	125
BXRE-30G1000-B-7x	90	135	33.2	4.5	658	597	147
		180	34.0	6.1	866	783	141
		270	34.8	9.4	1258	1132	134
		405	35.6	14.4	1815	1618	126
		540	36.1	19.5	2340	2063	120
BXRE-30G1000-C-7x	90	180	33.2	6.0	878	796	147
		240	34.0	8.2	1155	1044	141
		360	34.8	12.5	1677	1509	134
		540	35.6	19.2	2418	2155	126
		720	36.1	26.0	3116	2748	120

Notes for Table 4:

1. Alternate drive currents are provided for reference only and are not a guarantee of performance.
2. Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Performance at Commonly Used Drive Currents

Table 4: Product Performance at Commonly Used Drive Currents (Continued)

Part Number	CRI	Drive Current ¹ (mA)	Typical V _f T _c = 25°C (V)	Typical Power T _c = 25°C (W)	Typical Flux ² T _c = 25°C (lm)	Typical DC Flux ³ T _c = 85°C (lm)	Typical Efficacy T _c = 25°C (lm/W)
BXRE-30G100C-B-73	90	135	33.2	4.5	634	575	141
		180	34.0	6.1	835	755	136
		270	34.8	9.4	1212	1091	129
		405	35.6	14.4	1749	1559	121
		540	36.1	19.5	2255	1988	116
BXRE-30G100C-C-73	90	180	33.2	6.0	846	767	142
		240	34.0	8.2	1113	1007	136
		360	34.8	12.5	1616	1455	129
		540	35.6	19.2	2330	2077	121
		720	36.1	26.0	3003	2648	115
BXRE-30A1001-B-73	93	135	33.2	4.5	591	536	132
		180	34.0	6.1	778	704	127
		270	34.8	9.4	1130	1017	120
		405	35.6	14.4	1631	1454	113
		540	36.1	19.5	2103	1854	108
BXRE-30A1001-C-73	93	180	33.2	6.0	789	715	132
		240	34.0	8.2	1037	938	127
		360	34.8	12.5	1507	1356	120
		540	35.6	19.2	2173	1937	113
		720	36.1	26.0	2800	2469	108
BXRE-30H1000-B-7x	97	135	33.2	4.5	596	540	133
		180	34.0	6.1	784	710	128
		270	34.8	9.4	1139	1025	121
		405	35.6	14.4	1644	1466	114
		540	36.1	19.5	2120	1869	109
BXRE-35E1000-B-7x	80	135	33.2	4.5	830	752	185
		180	34.0	6.1	1092	988	178
		270	34.8	9.4	1586	1427	169
		405	35.6	14.4	2288	2040	159
		540	36.1	19.5	2950	2601	151
BXRE-35E1000-C-7x	80	180	33.2	6.0	1107	1004	185
		240	34.0	8.2	1456	1317	178
		360	34.8	12.5	2114	1903	169
		540	35.6	19.2	3049	2718	158
		720	36.1	26.0	3929	3464	151
BXRE-35G1000-B-7x	90	135	33.2	4.5	682	618	152
		180	34.0	6.1	897	812	147
		270	34.8	9.4	1303	1173	139
		405	35.6	14.4	1881	1677	130
		540	36.1	19.5	2425	2138	124
BXRE-35G1000-C-7x	90	180	33.2	6.0	910	825	152
		240	34.0	8.2	1196	1082	147
		360	34.8	12.5	1738	1564	139
		540	35.6	19.2	2505	2233	130
		720	36.1	26.0	3229	2847	124

Notes for Table 4:

1. Alternate drive currents are provided for reference only and are not a guarantee of performance.
2. Bridgelux maintains a ± 7% tolerance on flux measurements.
3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Performance at Commonly Used Drive Currents

Table 4: Product Performance at Commonly Used Drive Currents (Continued)

Part Number	CRI	Drive Current ¹ (mA)	Typical V _f T _c = 25°C (V)	Typical Power T _c = 25°C (W)	Typical Flux ² T _c = 25°C (lm)	Typical DC Flux ³ T _c = 85°C (lm)	Typical Efficacy T _c = 25°C (lm/W)
BXRE-35A1001-B-73	93	135	33.2	4.5	629	571	140
		180	34.0	6.1	828	749	135
		270	34.8	9.4	1203	1083	128
		405	35.6	14.4	1736	1548	120
		540	36.1	19.5	2238	1973	115
BXRE-35A1001-C-73	93	180	33.2	6.0	840	762	141
		240	34.0	8.2	1104	999	135
		360	34.8	12.5	1604	1444	128
		540	35.6	19.2	2313	2062	120
		720	36.1	26.0	2981	2628	115
BXRE-40C1001-B-74	70	135	33.2	4.5	873	791	195
		180	34.0	6.1	1149	1039	188
		270	34.8	9.4	1668	1501	178
		405	35.6	14.4	2407	2146	167
		540	36.1	19.5	3103	2736	159
BXRE-40C1001-C-74	70	180	33.2	6.0	1165	1056	195
		240	34.0	8.2	1531	1385	188
		360	34.8	12.5	2224	2001	178
		540	35.6	19.2	3206	2858	167
		720	36.1	26.0	4133	3644	159
BXRE-40E1000-B-7x	80	135	33.2	4.5	834	756	186
		180	34.0	6.1	1098	993	179
		270	34.8	9.4	1595	1435	170
		405	35.6	14.4	2302	2052	159
		540	36.1	19.5	2967	2616	152
BXRE-40E1000-C-7x	80	180	33.2	6.0	1114	1010	186
		240	34.0	8.2	1464	1324	179
		360	34.8	12.5	2127	1914	170
		540	35.6	19.2	3066	2733	159
		720	36.1	26.0	3952	3484	152
BXRE-40G1000-B-7x	90	135	33.2	4.5	696	631	155
		180	34.0	6.1	916	829	150
		270	34.8	9.4	1331	1198	142
		405	35.6	14.4	1920	1712	133
		540	36.1	19.5	2476	2183	127
BXRE-40G1000-C-7x	90	180	33.2	6.0	929	842	155
		240	34.0	8.2	1222	1105	150
		360	34.8	12.5	1774	1597	142
		540	35.6	19.2	2558	2280	133
		720	36.1	26.0	3297	2907	127

Notes for Table 4:

1. Alternate drive currents are provided for reference only and are not a guarantee of performance.
2. Bridgelux maintains a ± 7% tolerance on flux measurements.
3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Performance at Commonly Used Drive Currents

Table 4: Product Performance at Commonly Used Drive Currents (Continued)

Part Number	CRI	Drive Current ¹ (mA)	Typical V_f $T_c = 25^\circ\text{C}$ (V)	Typical Power $T_c = 25^\circ\text{C}$ (W)	Typical Flux ² $T_c = 25^\circ\text{C}$ (lm)	Typical DC Flux ³ $T_c = 85^\circ\text{C}$ (lm)	Typical Efficacy $T_c = 25^\circ\text{C}$ (lm/W)
BXRE-50C1001-B-7x	70	135	33.2	4.5	877	795	196
		180	34.0	6.1	1155	1045	189
		270	34.8	9.4	1677	1509	178
		405	35.6	14.4	2420	2157	168
		540	36.1	19.5	3120	2751	160
BXRE-50C1001-C-7x	70	180	33.2	6.0	1171	1062	196
		240	34.0	8.2	1539	1392	189
		360	34.8	12.5	2236	2012	178
		540	35.6	19.2	3224	2874	168
		720	36.1	26.0	4155	3664	160
BXRE-50E1001-B-7x	80	135	33.2	4.5	844	765	188
		180	34.0	6.1	1111	1005	181
		270	34.8	9.4	1613	1452	172
		405	35.6	14.4	2328	2075	161
		540	36.1	19.5	3001	2646	154
BXRE-50E1001-C-7x	80	180	33.2	6.0	1126	1021	188
		240	34.0	8.2	1481	1339	181
		360	34.8	12.5	2151	1936	172
		540	35.6	19.2	3101	2764	161
		720	36.1	26.0	3997	3524	154
BXRE-50G1001-B-7x	90	135	33.2	4.5	729	661	163
		180	34.0	6.1	960	869	157
		270	34.8	9.4	1394	1255	148
		405	35.6	14.4	2012	1794	139
		540	36.1	19.5	2594	2287	133
BXRE-50G1001-C-7x	90	180	33.2	6.0	974	883	163
		240	34.0	8.2	1280	1158	157
		360	34.8	12.5	1859	1673	148
		540	35.6	19.2	2681	2390	139
		720	36.1	26.0	3455	3046	133
BXRE-57C1001-B-7x	70	135	33.2	4.5	853	774	190
		180	34.0	6.1	1123	1016	184
		270	34.8	9.4	1631	1468	174
		405	35.6	14.4	2354	2099	163
		540	36.1	19.5	3035	2676	156
BXRE-57C1001-C-7x	70	180	33.2	6.0	1139	1033	191
		240	34.0	8.2	1498	1355	183
		360	34.8	12.5	2175	1958	174
		540	35.6	19.2	3136	2796	163
		720	36.1	26.0	4042	3564	155

Notes for Table 4:

1. Alternate drive currents are provided for reference only and are not a guarantee of performance.
2. Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Performance at Commonly Used Drive Currents

Table 4: Product Performance at Commonly Used Drive Currents (Continued)

Part Number	CRI	Drive Current ¹ (mA)	Typical V_f $T_c = 25^\circ\text{C}$ (V)	Typical Power $T_c = 25^\circ\text{C}$ (W)	Typical Flux ² $T_c = 25^\circ\text{C}$ (lm)	Typical DC Flux ³ $T_c = 85^\circ\text{C}$ (lm)	Typical Efficacy $T_c = 25^\circ\text{C}$ (lm/W)
BXRE-57E1001-B-7x	80	135	33.2	4.5	811	735	181
		180	34.0	6.1	1067	965	174
		270	34.8	9.4	1549	1394	165
		405	35.6	14.4	2236	1993	155
		540	36.1	19.5	2883	2542	148
BXRE-57E1001-C-7x	80	180	33.2	6.0	1082	981	181
		240	34.0	8.2	1422	1287	174
		360	34.8	12.5	2066	1859	165
		540	35.6	19.2	2978	2655	155
		720	36.1	26.0	3839	3385	148
BXRE-65C1001-B-7x	70	135	33.2	4.5	853	774	190
		180	34.0	6.1	1123	1016	184
		270	34.8	9.4	1631	1468	174
		405	35.6	14.4	2354	2099	163
		540	36.1	19.5	3035	2676	156
BXRE-65C1001-C-7x	70	180	33.2	6.0	1139	1033	191
		240	34.0	8.2	1498	1355	183
		360	34.8	12.5	2175	1958	174
		540	35.6	19.2	3136	2796	163
		720	36.1	26.0	4042	3564	155
BXRE-65E1001-B-7x	80	135	33.2	4.5	820	744	183
		180	34.0	6.1	1079	976	176
		270	34.8	9.4	1568	1411	167
		405	35.6	14.4	2262	2017	157
		540	36.1	19.5	2917	2572	149
BXRE-65E1001-C-7x	80	180	33.2	6.0	1095	992	183
		240	34.0	8.2	1439	1302	176
		360	34.8	12.5	2090	1881	167
		540	35.6	19.2	3013	2686	157
		720	36.1	26.0	3884	3425	149

Notes for Table 4:

1. Alternate drive currents are provided for reference only and are not a guarantee of performance.
2. Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Electrical Characteristics

Table 5: Electrical Characteristics

Part Number	Drive Current (mA)	Forward Voltage Pulsed, $T_c = 25^\circ\text{C}$ (V) ^{1, 2, 3, 8}			Typical Coefficient of Forward Voltage ⁴ $\Delta V_f / \Delta T_c$ (mV/ $^\circ\text{C}$)	Typical Thermal Resistance Junction to Case ^{5,6} R_{j-c} ($^\circ\text{C}/\text{W}$)	Driver Selection Voltages ⁷ (V)	
		Minimum	Typical	Maximum			V_f Min. Hot $T_c = 105^\circ\text{C}$ (V)	V_f Max. Cold $T_c = -40^\circ\text{C}$ (V)
BXRE-xxx100x-B-7x	270	32.2	34.8	37.4	-16.1	0.49	30.9	38.5
	540	33.4	36.1	38.8	-16.1	0.56	32.1	39.9
BXRE-xxx100x-C-7x	360	32.2	34.8	37.4	-16.1	0.37	30.9	38.5
	720	33.4	36.1	38.8	-16.1	0.45	32.1	39.9

Notes for Table 5:

- Parts are tested in pulsed conditions, $T_c = 25^\circ\text{C}$. Pulse width is 10ms.
- Voltage minimum and maximum are provided for reference only and are not a guarantee of performance.
- Bridgelux maintains a tester tolerance of $\pm 0.10\text{V}$ on forward voltage measurements.
- Typical coefficient of forward voltage tolerance is $\pm 0.1\text{mV}$ for nominal current.
- Thermal resistance values are based from test data of a 3000K 80 CRI product.
- Thermal resistance value was calculated using total electrical input power; optical power was not subtracted from input power. The thermal interface material used during testing is not included in the thermal resistance value.
- V_f min hot and max cold values are provided as reference only and are not guaranteed by test. These values are provided to aid in driver design and selection over the operating range of the product.
- This product has been designed and manufactured per IEC 62031:2014. This product has passed dielectric withstand voltage testing at 1160 V. The working voltage designated for the insulation is 80V d.c. The maximum allowable voltage across the array must be determined in the end product application.

Eye Safety

Table 6: Eye Safety Risk Group (RG) Classifications

Part Number	Drive Current ⁵ (mA)	CCT ^{1,5}			
		2700K/3000K	4000K ²	5000K ³	6500K ⁴
BXRE-xxx100x-B-7x	270	RG1	RG1	RG1	RG1
	405	RG1	RG1	RG1	RG2
	540	RG1	RG1	RG2	RG2
BXRE-xxx100x-C-7x	360	RG1	RG1	RG1	RG2
	540	RG1	RG1	RG2	RG2
	720	RG1	RG2	RG2	RG2

Notes for Table 6:

1. Eye safety classification for the use of Bridgelux V Series LED arrays is in accordance with specification IEC/TR 62778: Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires.
2. For products classified as RG2 at 4000K, $E_{thr} = 1847.5$ lx.
3. For products classified as RG2 at 5000K $E_{thr} = 1315.8$ lx.
4. For products classified as RG2 at 6500K, $E_{thr} = 1124.5$ lx.
5. Please contact your Bridgelux sales representative for E_{thr} values at specific drive currents and CCTs not listed.

Absolute Maximum Ratings

Table 7: Maximum Ratings

Parameter	Maximum Rating	
LED Junction Temperature (T_j)	150°C	
Storage Temperature	-40°C to +105°C	
Operating Case Temperature ¹ (T_c)	105°C	
Soldering Temperature ²	300°C or lower for a maximum of 6 seconds	
	BXRE-xxx100x-B-7x	BXRE-xxx100x-C-7x
Maximum Drive Current ³	540mA	720mA
Maximum Peak Pulsed Drive Current ⁴	770mA	1030mA
Maximum Reverse Voltage ⁵	-60V	-60V

Notes for Table 7:

1. For IEC 62717 requirement, please consult your Bridgelux sales representative.
2. Refer to Bridgelux Application Note AN101: Handling and Assembly of Bridgelux V Series LED Arrays.
3. Arrays may be driven at higher currents however lumen maintenance may be reduced.
4. Bridgelux recommends a maximum duty cycle of 10% and pulse width of 20 ms when operating LED Arrays at maximum peak pulsed current specified. Maximum peak pulsed currents indicate values where LED Arrays can be driven without catastrophic failures.
5. Light emitting diodes are not designed to be driven in reverse voltage and will not produce light under this condition. Maximum rating provided for reference only.

Performance Curves

Figure 1: V10B Drive Current vs. Voltage

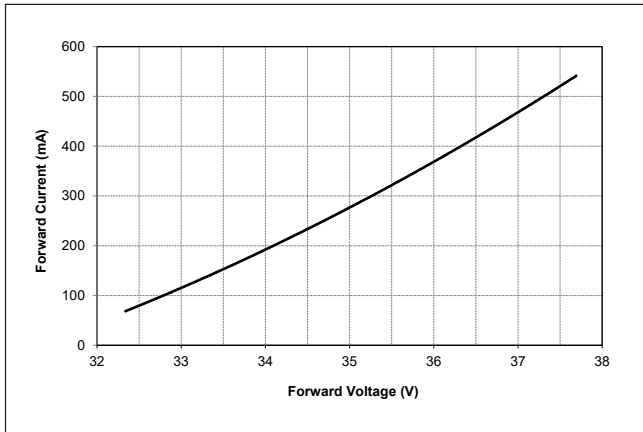


Figure 2: V10C Drive Current vs. Voltage

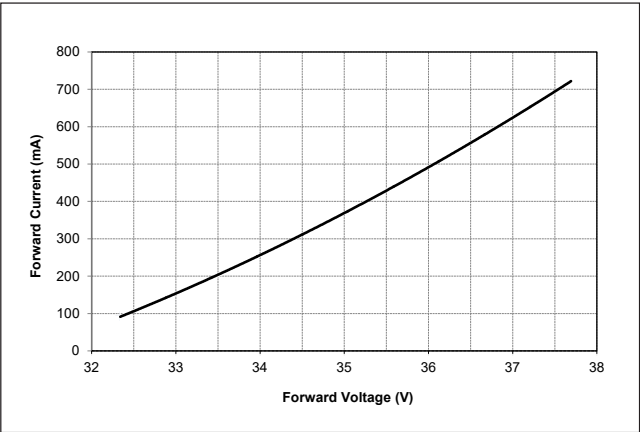


Figure 3: V10B Typical Relative Flux vs. Current

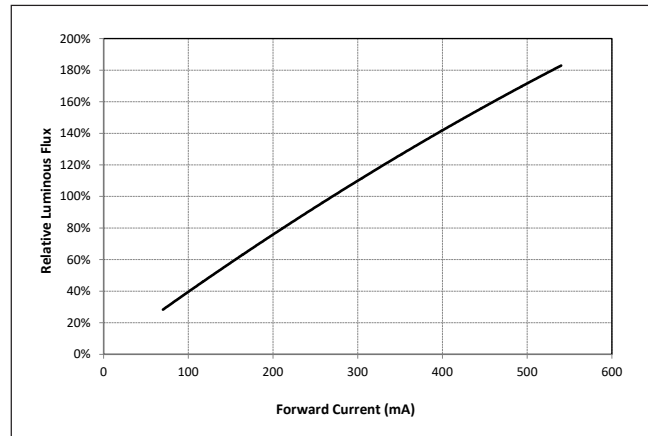
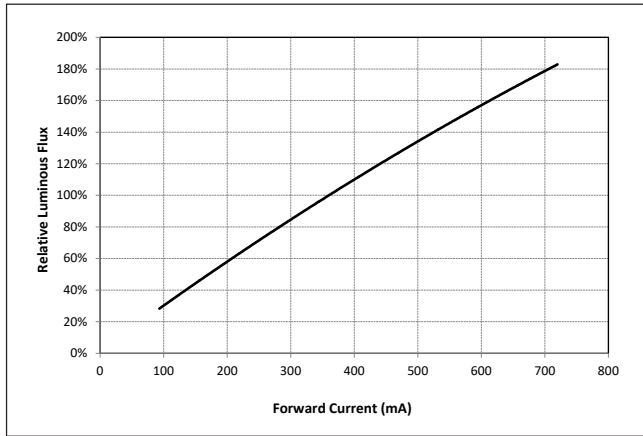


Figure 4: V10C Typical Relative Flux vs. Current



- Notes for Figures 1-4:
1. Bridgelux does not recommend driving high power LEDs at low currents. Doing so may produce unpredictable results. Pulse width modulation (PWM) is recommended for dimming effects.
 2. Products tested under pulsed condition (10ms pulse width) at nominal test current where T_j (junction temperature) = T_c (case temperature) = 25°C.

Performance Curves

Figure 5: Typical DC Flux vs. Case Temperature⁵

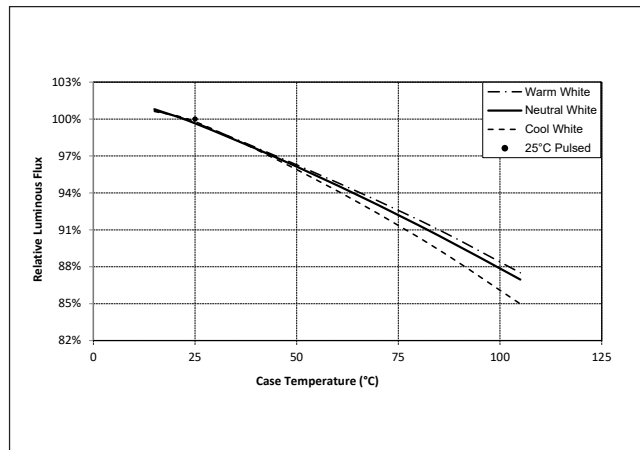


Figure 6: Typical DC ccy Shift vs. Case Temperature

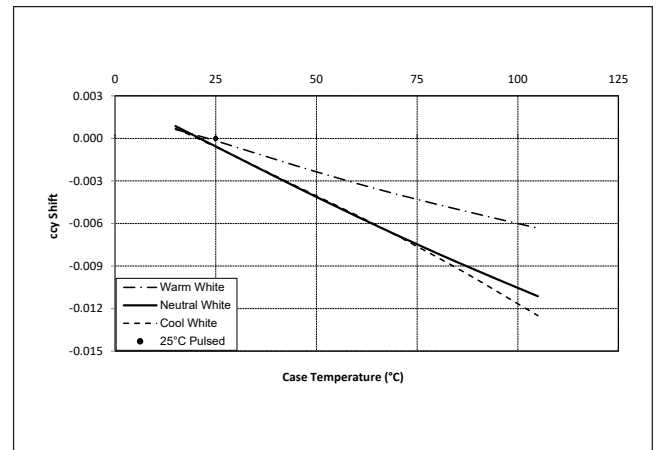
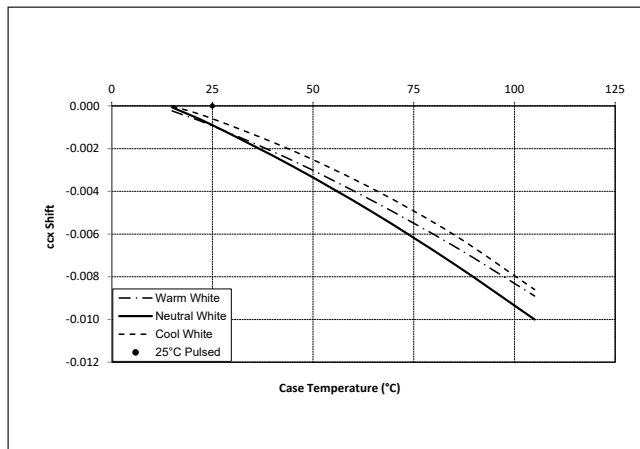


Figure 7: Typical DC ccx Shift vs. Case Temperature



Notes for Figures 5-7:

1. Characteristics shown for warm white based on 3000K and 80 CRI.
2. Characteristics shown for neutral white based on 4000K and 80 CRI.
3. Characteristics shown for cool white based on 5000K and 70 CRI.
4. Characteristics shown for warm white includes Decor Series Class A
5. For other color SKUs, the shift in color will vary. Please contact your Bridgelux Sales Representative for more information.

Performance Curves

Figure 8: 2000K, 65 CRI Color Shift vs. Case Temperature

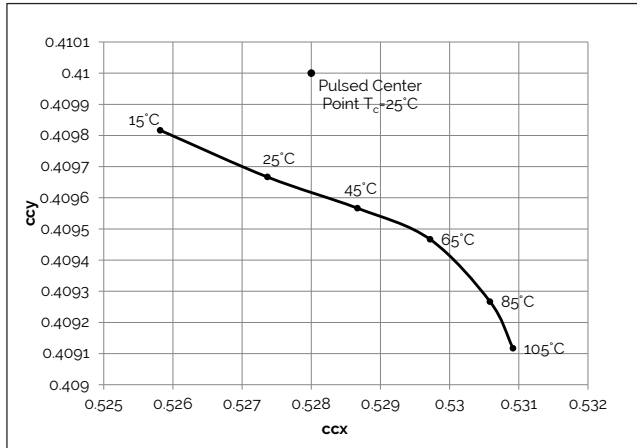


Figure 9: 3000K, 90 CRI Color Shift vs. Case Temperature^{1,3}

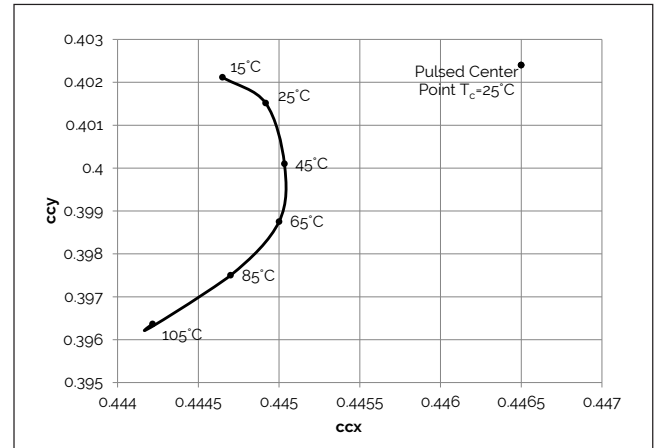


Figure 10: 2700K, 97 CRI Color Shift vs. Case Temperature¹

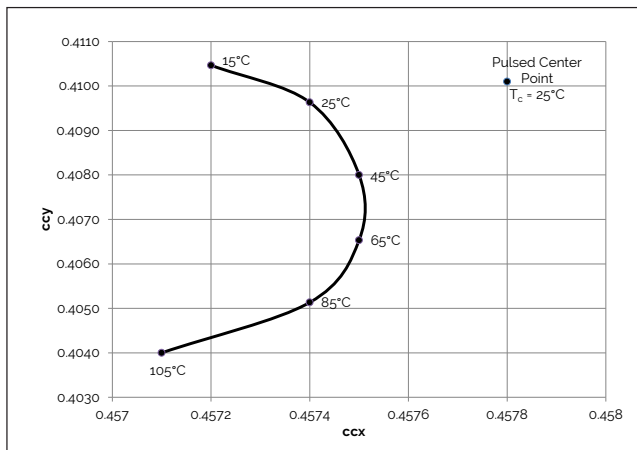


Figure 11: 3000K, 97 CRI Color Shift vs. Case Temperature¹

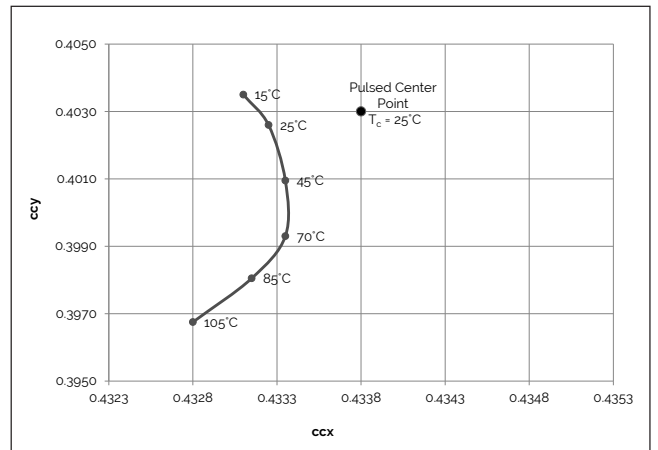


Figure 12: 3000K Class A Color Shift vs. Case Temperature¹

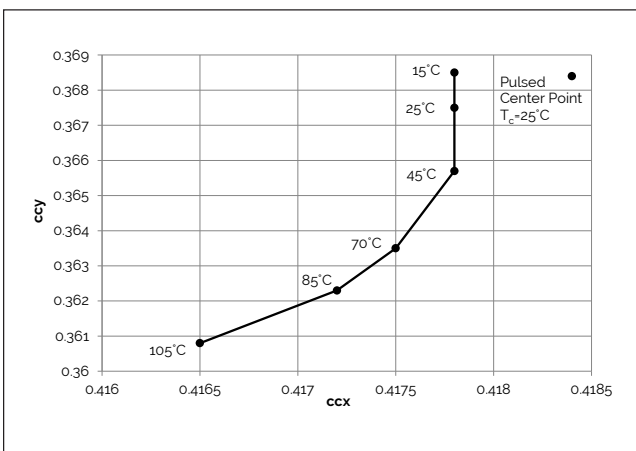
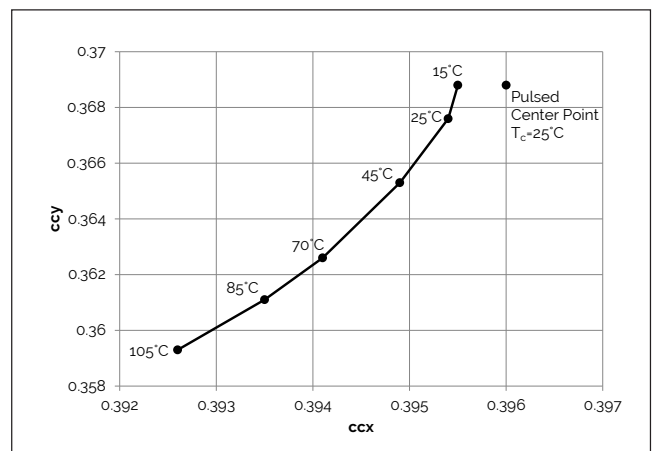


Figure 13: 3500K Class A Color Shift vs. Case Temperature¹

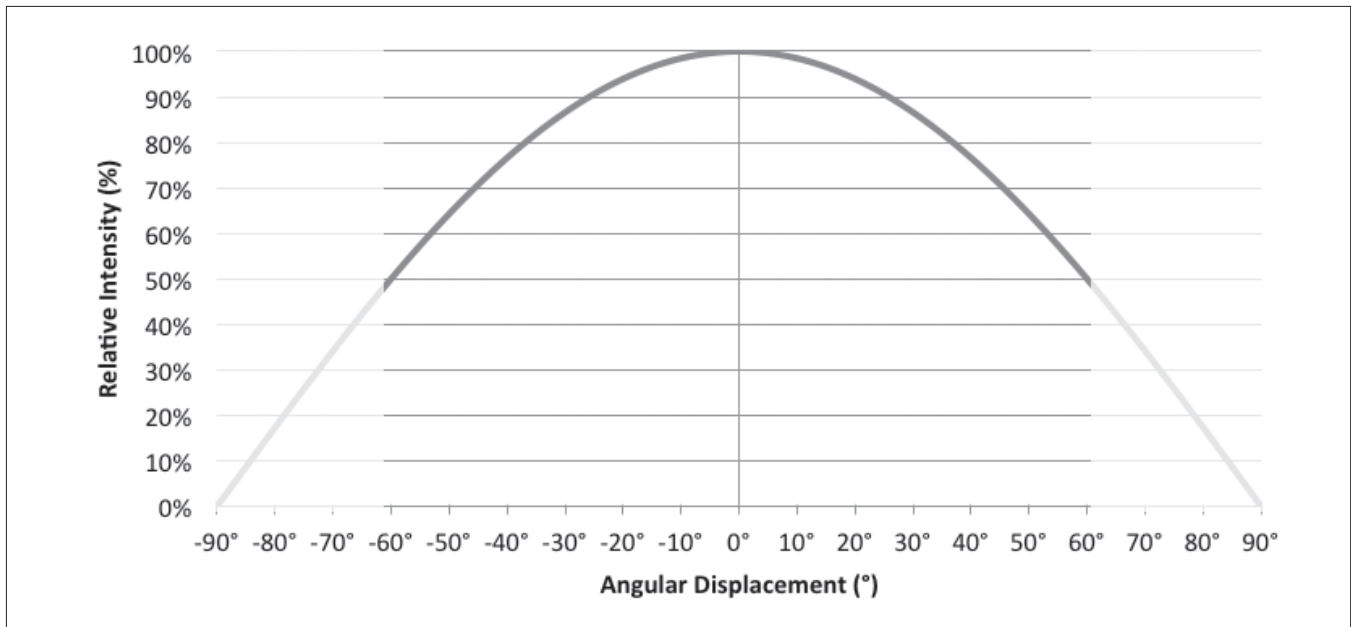


Note for Figures 8-13:

1. Measurements made under DC test conditions at the nominal drive current.
2. Typical color shift is shown with a tolerance of ± 0.002 .
3. Characteristics shown for Decor Series Showcase products, BXRE-30G100C-x-73

Typical Radiation Pattern

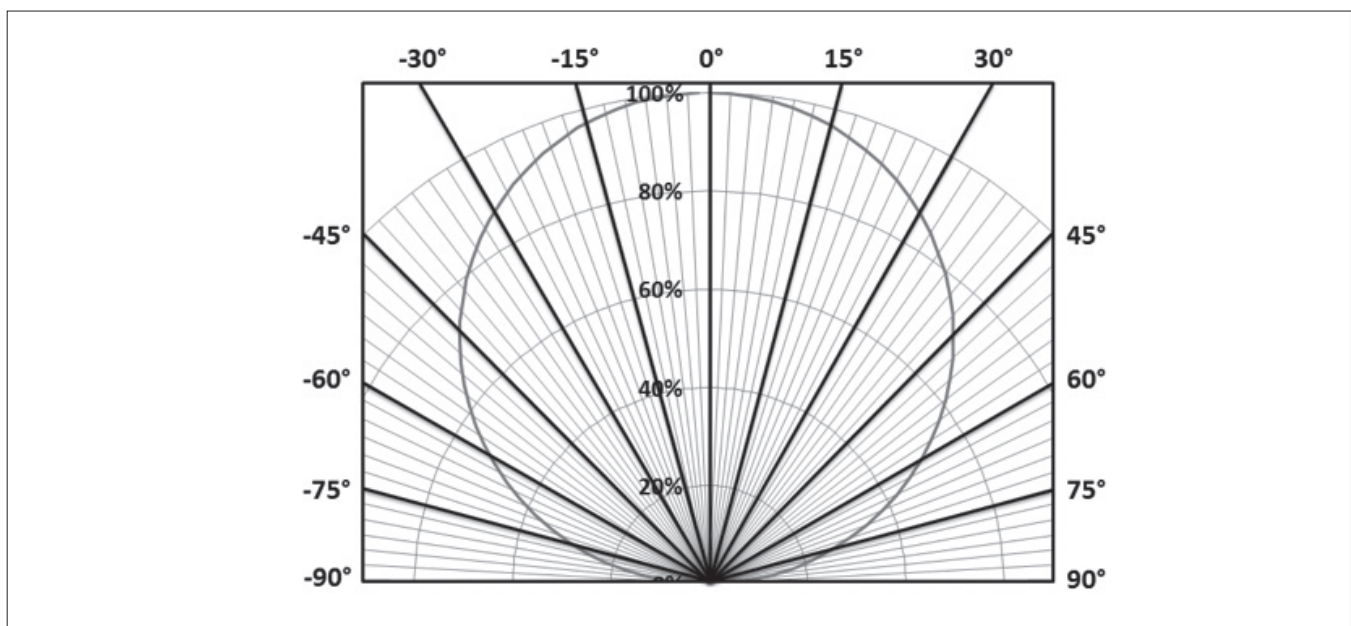
Figure 14: Typical Spatial Radiation Pattern



Note for Figure 14:

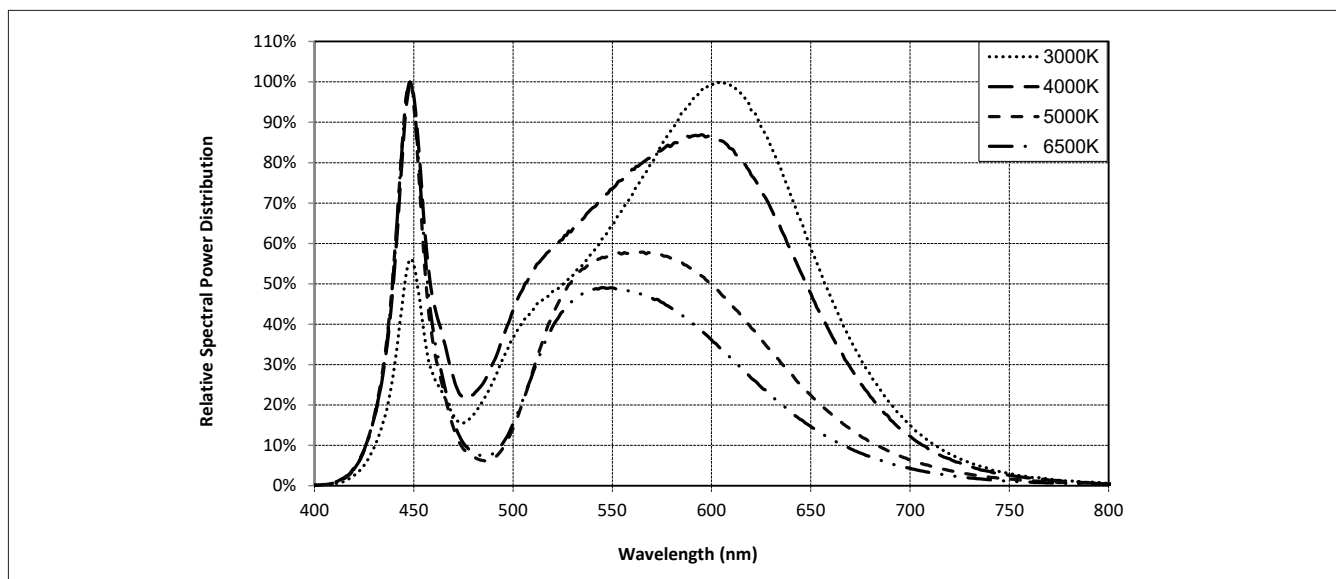
1. Typical viewing angle is 120°.
2. The viewing angle is defined as the off axis angle from the centerline where intensity is ½ of the peak value.

Figure 15: Typical Polar Radiation Pattern



Typical Color Spectrum

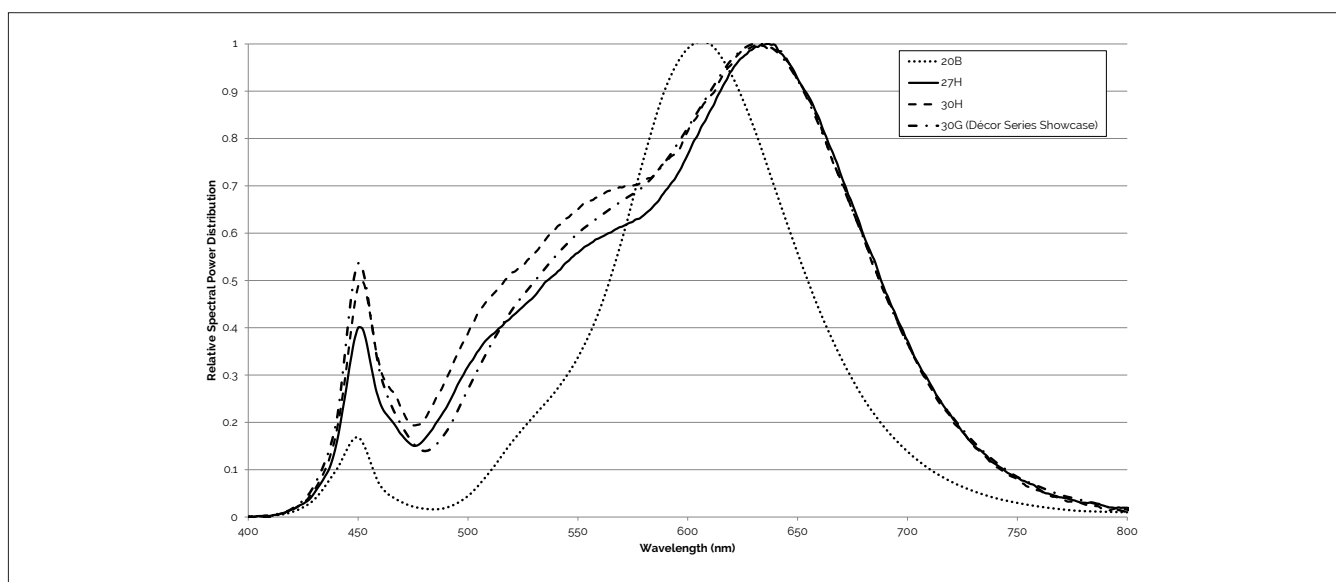
Figure 16: Typical Color Spectrum



Note for Figure 16:

1. Color spectra measured at nominal current for $T_j = T_c = 25^\circ\text{C}$.
2. Color spectra shown is 3000K and 80 CRI.
3. Color spectra shown is 4000K and 80 CRI.
4. Color spectra shown is 5000K and 70 CRI.
4. Color spectra shown is 6500K and 70 CRI.

Figure 17: Typical Color Spectrum for Décor Series

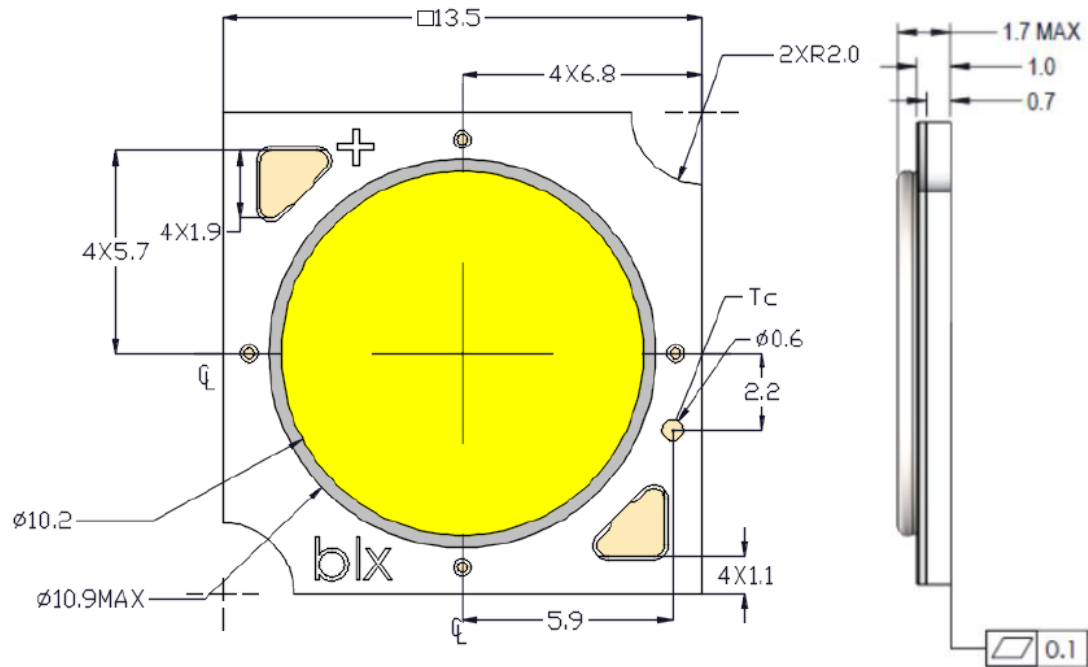


Note for Figure 17:

1. Color spectra measured at nominal current for $T_j = T_c = 25^\circ\text{C}$.

Mechanical Dimensions

Figure 18: Drawing for V10 LED Array

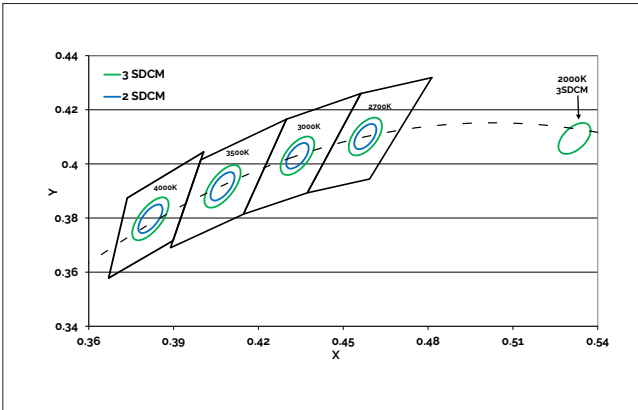


Notes for Figure 18:

1. Drawings are not to scale.
2. Drawing dimensions are in millimeters.
3. Unless otherwise specified, tolerances are $\pm 0.1\text{mm}$.
4. Solder pad labeled "+" denotes positive contact.
5. Refer to Application Notes AN101 for product handling, mounting and heat sink recommendations.
6. The optical center of the LED Array is nominally defined by the mechanical center of the array to a tolerance of $\pm 0.2\text{mm}$.
7. Bridgelux maintains a flatness of 0.10mm across the mounting surface of the array.

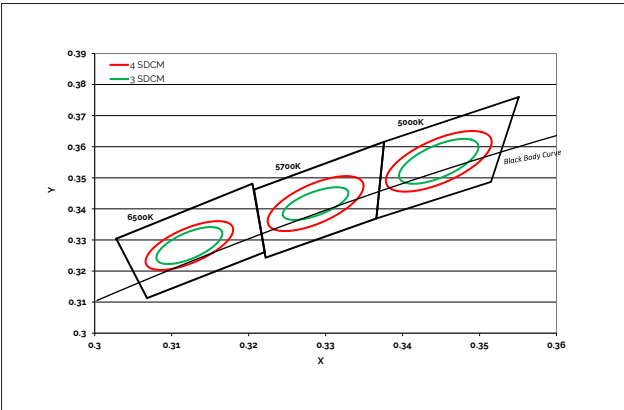
Color Binning Information

Figure 19: Warm and Neutral White Test Bins in xy Color Space



Note: Pulsed Test Conditions, $T_c = 25^\circ\text{C}$

Figure 20: Cool White Test Bins in xy Color Space



Note: Pulsed Test Conditions, $T_c = 25^\circ\text{C}$

Table 8: Warm and Neutral White xy Bin Coordinates and Associated Typical CCT

Bin Code	2000K	2700K	3000K ¹	3500K ¹	4000K ¹
ANSI Bin (for reference only)	–	(2580K - 2870K)	(2870K - 3220K)	(3220K - 3710K)	(3710K - 4260K)
73 (3 SDCM)	–	(2651K - 2794K)	(2968K - 3136K)	(3369K - 3586K)	(3851K - 4130K)
72 (2 SDCM)	–	(2674K - 2769K)	(2995K - 3107K)	(3404K - 3548K)	(3895K - 4081K)
Center Point (x,y)	(0.5280, 0.4100)	(0.4578, 0.4101)	(0.4338, 0.403) (0.4465, 0.4024) ²	(0.4073, 0.3917)	(0.3818, 0.3797)

Note for Table 8:

- Color Binning information excludes Décor Series Class A products. Please contact your Bridgelux Sales Representative for more information.
- Center Point for Décor Series Showcase.

Table 9: Cool White xy Bin Coordinates and Associated Typical CCT (product is hot targeted to $T_c = 85^\circ\text{C}$)

Bin Code	5000K	5700K	6500K
ANSI Bin (for reference only)	(4745K - 5311K)	(5312K - 6022K)	(6022K - 7042K)
74 (4 SDCM)	(4801K - 5282K)	(5481K - 5829K)	(6270K - 6765K)
73 (3 SDCM)	(4835K - 5215K)	(5490K - 5820K)	(6250K - 6745K)
Center Point (x,y)	(0.3447, 0.3553)	(0.3287, 0.3417)	(0.3123, 0.3282)

Packaging and Labeling

Figure 21: V10 Packaging Tube



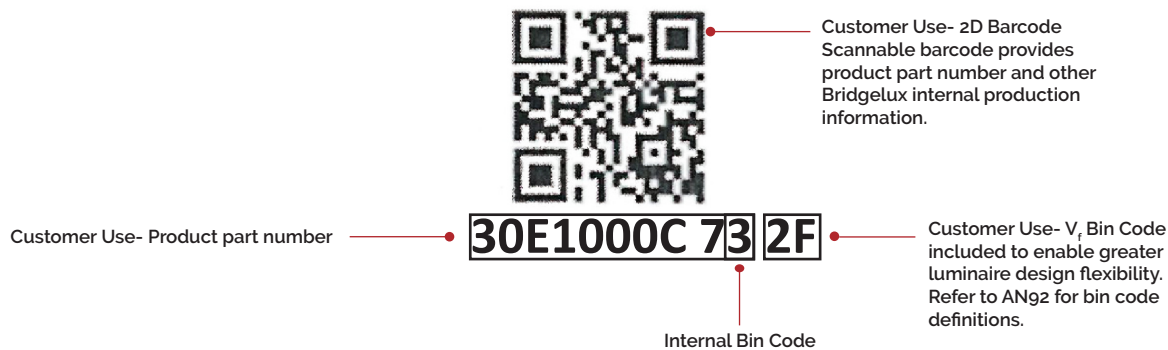
Notes for Figure 21:

1. Each tube holds 30 V10 COB arrays.
2. One tube is sealed in an anti-static bag. Four bags are placed in a shipping box. Depending on quantities ordered, a bigger shipping box, containing four boxes may be used to ship products.
3. Each bag and box is to be labeled as shown above.
4. Dimensions for each tube are 8.3 (W) x 15.4 (H) x 430 (L). Dimensions for the anti-static bag are 75 (W) x 615 (L) x 3.1 (T) mm. Dimensions for the shipping box are 58.7 x 13.3 x 7.9 cm

Packaging and Labeling

Figure 22: Gen. 7 Product Labeling

Bridgelux COB arrays have laser markings on the back side of the substrate to help with product identification. In addition to the product identification markings, Bridgelux COB arrays also contain markings for internal Bridgelux manufacturing use only. The image below shows which markings are for customer use and which ones are for Bridgelux internal use only. The Bridgelux internal manufacturing markings are subject to change without notice, however these will not impact the form, function or performance of the COB array.



Design Resources

Application Notes

Bridgelux has developed a comprehensive set of application notes and design resources to assist customers in successfully designing with the V Series product family of LED array products. For all available application notes visit www.bridgelux.com.

Optical Source Models

Optical source models and ray set files are available for all Bridgelux products. For a list of available formats, visit www.bridgelux.com.

3D CAD Models

Three dimensional CAD models depicting the product outline of all Bridgelux V Series LED arrays are available in both IGS and STEP formats. Please contact your Bridgelux sales representative for assistance.

LM80

LM80 testing has been completed and the LM80 report is now available. Please contact your Bridgelux sales representative for LM-80 report.

Precautions

CAUTION: CHEMICAL EXPOSURE HAZARD

Exposure to some chemicals commonly used in luminaire manufacturing and assembly can cause damage to the LED array. Please consult Bridgelux Application Note AN101 for additional information.

CAUTION: RISK OF BURN

Do not touch the V Series LED array during operation. Allow the array to cool for a sufficient period of time before handling. The V Series LED array may reach elevated temperatures such that could burn skin when touched.

CAUTION

CONTACT WITH LIGHT EMITTING SURFACE (LES)

Avoid any contact with the LES. Do not touch the LES of the LED array or apply stress to the LES (yellow phosphor resin area). Contact may cause damage to the LED array.

Optics and reflectors must not be mounted in contact with the LES (yellow phosphor resin area).

Disclaimers

MINOR PRODUCT CHANGE POLICY

The rigorous qualification testing on products offered by Bridgelux provides performance assurance. Slight cosmetic changes that do not affect form, fit, or function may occur as Bridgelux continues product optimization.

STANDARD TEST CONDITIONS

Unless otherwise stated, array testing is performed at the nominal drive current.

About Bridgelux: Bridging Light and Life™

At Bridgelux, we help companies, industries and people experience the power and possibility of light. Since 2002, we've designed LED solutions that are high performing, energy efficient, cost effective and easy to integrate. Our focus is on light's impact on human behavior, delivering products that create better environments, experiences and returns—both experiential and financial. And our patented technology drives new platforms for commercial and industrial luminaires.

For more information about the company, please visit

bridgelux.com

twitter.com/Bridgelux

facebook.com/Bridgelux

youtube.com/user/Bridgelux

linkedin.com/company/bridgelux-inc-_2

WeChat ID: BridgeluxInChina



46430 Fremont Boulevard

Fremont, CA 94538 U.S.A.

Tel (925) 583-8400

www.bridgelux.com

© 2016-2019 Bridgelux, Inc. All rights reserved. Product specifications are subject to change without notice. Bridgelux, the Bridgelux stylized logo design, Vero, V Series and V Series HD are registered trademarks, and Decor Series is a trademark of Bridgelux, Inc. All other trademarks are the property of their respective owners.

Bridgelux Gen 7 V13 Array Series Product Data Sheet DS101 Rev. Q (09/2020)