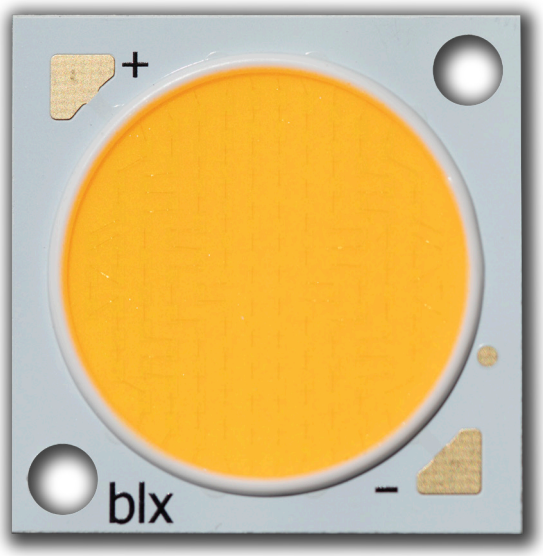
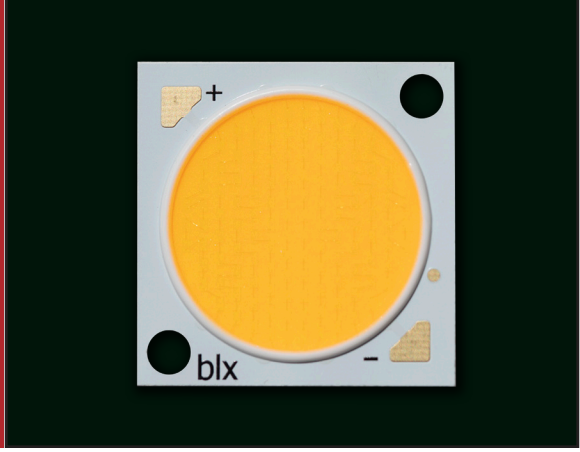


Bridgelux® Gen 7 V18 Array Series

Product Data Sheet DS102

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 V18 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 lamps.

Décor Series™ Food products offer color points developed to address the unique requirements of the food, grocery, and restaurant industries. Highlighting the distinctive colors and nuanced patterns found in meats and breads, the Décor Series Food products are a must have for any butcher counter or bakery.

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 170 lm/W typical
- Compact high flux density light source
- Uniform high quality illumination
- Minimum 65, 70, 80, 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

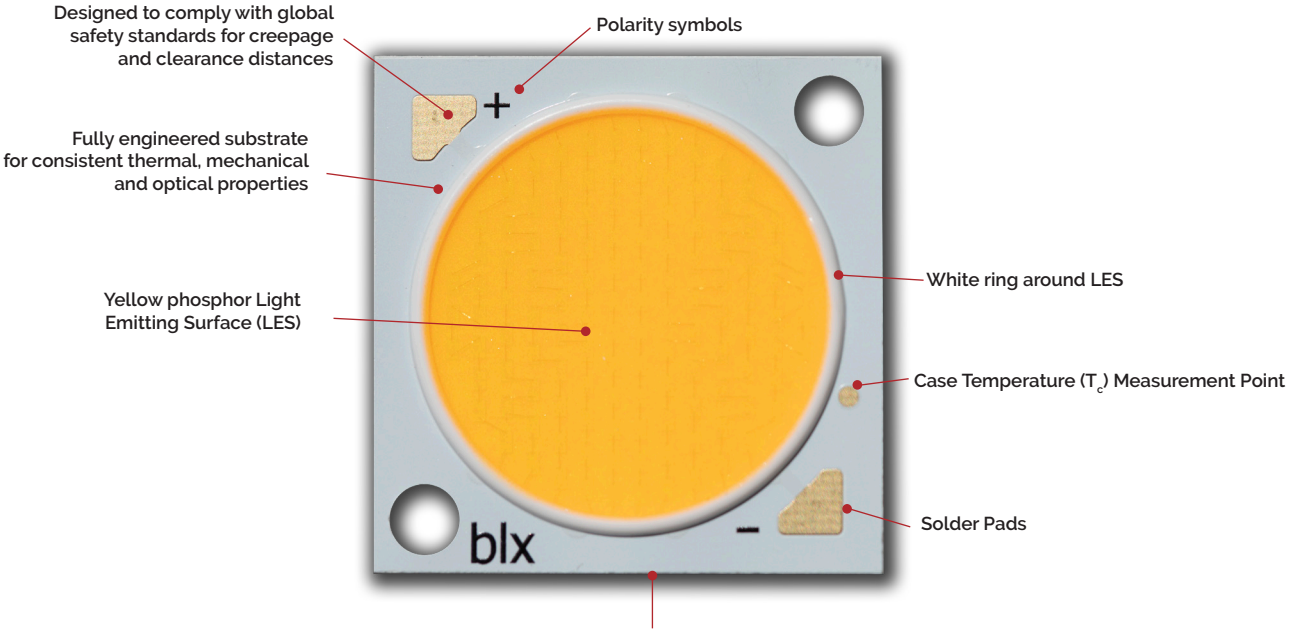
Benefits

- 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

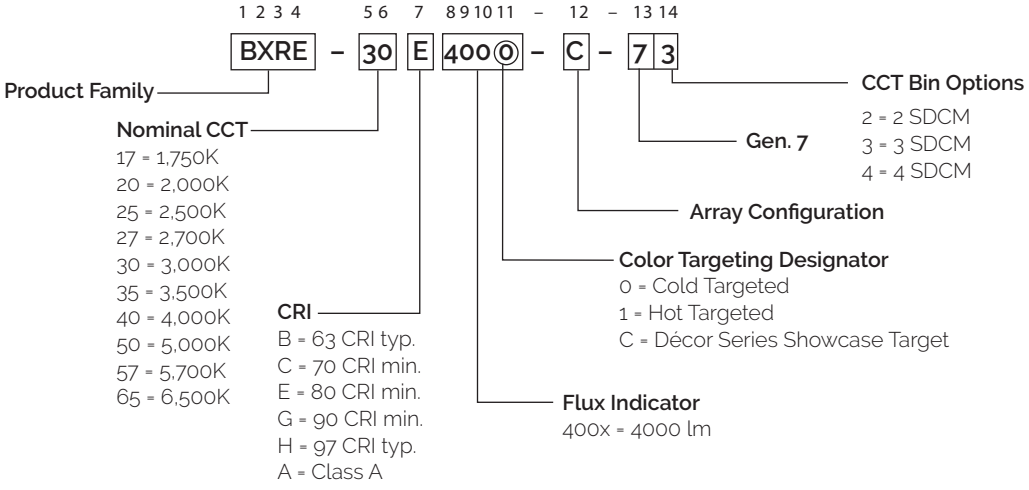
Bridgelux arrays are fully engineered devices that provide consistent thermal and optical performance on an engineered mechanical platform. The V Series arrays are the most compact chip-on-board devices across all of Bridgelux's LED Array products. The arrays incorporate several features to simplify 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°C)

Part Number	Nominal CCT[1] (K)	CRI[2]	Nominal Drive Current[3] (mA)	Typical Pulsed Flux[4,5,6] T_c = 25°C (lm)	Minimum Pulsed Flux[6,7] T_c = 25°C (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-17E4000-B-74	1750	80	900	2881	2593	34.8	31.3	92
BXRE-20B4001-C-73	2000	65	1170	6392	5753	34.8	40.7	157
BXRE-25E4000-B-74	2500	80	900	4792	4313	34.8	31.3	153
BXRE-27E4000-B-7x	2700	80	900	5011	4510	34.8	31.3	160
BXRE-27E4000-C-7x	2700	80	1170	6515	5863	34.8	40.7	160
BXRE-27G40H0-B-7x	2700	90	900	4291	3862	34.8	31.3	137
BXRE-27G40H0-C-7x	2700	90	1170	5578	5020	34.8	40.7	137
BXRE-27G4000-B-7x	2700	90	900	4134	3721	34.8	31.3	132
BXRE-27G4000-C-7x	2700	90	1170	5375	4837	34.8	40.7	132
BXRE-27H4000-B-7x	2700	97	900	3664	3298	34.8	31.3	117
BXRE-30C4001-B-74	3000	70	900	5575	5017	34.8	31.3	178
BXRE-30C4001-C-74	3000	70	1170	7247	6523	34.8	40.7	178
BXRE-30E4000-B-7x	3000	80	900	5324	4792	34.8	31.3	170
BXRE-30E4000-C-7x	3000	80	1170	6922	6230	34.8	40.7	170
BXRE-30G40H0-B-7x	3000	90	900	4510	4059	34.8	31.3	144
BXRE-30G40H0-C-7x	3000	90	1170	5863	5277	34.8	40.7	144
BXRE-30G4000-B-7x	3000	90	900	4322	3890	34.8	31.3	138
BXRE-30G4000-C-7x	3000	90	1170	5619	5057	34.8	40.7	138
BXRE-30G400C-B-73	3000	90	900	4176	3759	34.8	31.4	133
BXRE-30H4000-B-7x	3000	97	900	3915	3524	34.8	31.3	125
BXRE-35E4000-B-7x	3500	80	900	5450	4905	34.8	31.3	174
BXRE-35E4000-C-7x	3500	80	1170	7085	6376	34.8	40.7	174
BXRE-35G4000-B-7x	3500	90	900	4479	4031	34.8	31.3	143
BXRE-35G4000-C-7x	3500	90	1170	5822	5240	34.8	40.7	143
BXRE-35A4001-B-73[8,9]	3500	93	900	4134	3721	34.8	31.3	132
BXRE-40C4001-B-74	4000	70	900	5732	5158	34.8	31.3	183
BXRE-40C4001-C-74	4000	70	1170	7451	6706	34.8	40.7	183
BXRE-40E4000-B-7x	4000	80	900	5481	4933	34.8	31.3	175
BXRE-40E4000-C-7x	4000	80	1170	7125	6413	34.8	40.7	175
BXRE-40G4000-B-7x	4000	90	900	4573	4115	34.8	31.3	146
BXRE-40G4000-C-7x	4000	90	1170	5945	5350	34.8	40.7	146
BXRE-50C4001-B-7x	5000	70	900	5763	5187	34.8	31.3	184
BXRE-50C4001-C-7x	5000	70	1170	7492	6743	34.8	40.7	184

Notes for Table 1:

1. Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to T_c = 85°C.
2. 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 R9 value for 80 CRI products is 0, the minimum R9 values for 90 CRI products is 50, the minimum R9 values for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on R9 values.
3. Drive current is referred to as nominal drive current.
4. Products tested under pulsed condition (10ms pulse width) at nominal test current where T_j (junction temperature) = T_c (case temperature) = 25°C.
5. Typical performance values are provided as a reference only and are not a guarantee of performance.
6. Bridgelux maintains a ±7% tolerance on flux measurements.
7. Minimum flux values at the nominal test current are guaranteed by 100% test.
8. 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.
9. 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

The following product configurations are available:

Table 1: Selection Guide, Pulsed Measurement Data (T_j = T_c = 25˚C) (continued)

Part Number	Nominal CCT[1] (K)	CRI[2]	Nominal Drive Current[3] (mA)	Typical Pulsed Flux[4,5,6] T_c = 25°C (lm)	Minimum Pulsed Flux[6,7] T_c = 25°C (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-50E4001-B-7x	5000	80	900	5544	4989	34.8	31.3	177
BXRE-50E4001-C-7x	5000	80	1170	7207	6486	34.8	40.7	177
BXRE-50G4001-B-7x	5000	90	900	4792	4313	34.8	31.3	153
BXRE-50G4001-C-7x	5000	90	1170	6230	5607	34.8	40.7	153
BXRE-57C4001-B-7x	5700	70	900	5606	5046	34.8	31.3	179
BXRE-57C4001-C-7x	5700	70	1170	7288	6559	34.8	40.7	179
BXRE-57E4001-B-7x	5700	80	900	5324	4792	34.8	31.3	170
BXRE-57E4001-C-7x	5700	80	1170	6922	6230	34.8	40.7	170
BXRE-65C4001-B-7x	6500	70	900	5606	5046	34.8	31.3	179
BXRE-65C4001-C-7x	6500	70	1170	7288	6559	34.8	40.7	179
BXRE-65E4001-B-7x	6500	80	900	5387	4848	34.8	31.3	172
BXRE-65E4001-C-7x	6500	80	1170	7003	6303	34.8	40.7	172

Notes for Table 1:

1. Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to T_c = 85˚C.
2. 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 R9 value for 80 CRI products is 0, the minimum R9 values for 90 CRI products is 50, the minimum R9 values for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on R9 values.
3. Drive current is referred to as nominal drive current.
4. Products tested under pulsed condition (10ms pulse width) at nominal test current where T_j (junction temperature) = T_c (case temperature) = 25˚C.
5. Typical performance values are provided as a reference only and are not a guarantee of performance.
6. Bridgelux maintains a ±7% tolerance on flux measurements.
7. Minimum flux values at the nominal test current are guaranteed by 100% test.
8. 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.
9. 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.

Table 2: Selection Guide, Stabilized DC Performance (T_c = 70˚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°C (lm)	Minimum DC Flux[6,9] T_c = 70°C (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-35A4001-B-73	3500	80	93	900	3845	3460	34.3	30.9	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˚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 ±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°C) [4,5]

Part Number	Nominal CCT[1] (K)	CRI[2]	Nominal Drive Current[3] (mA)	Typical DC Flux[4,5] T_c = 85°C (lm)	Minimum DC Flux[6] T_c = 85°C (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-17E4000-B-74	1750	80	900	2593	2334	33.9	30.6	85
BXRE-20B4001-C-73	2000	65	1170	5753	5178	34.0	39.8	145
BXRE-25E4000-B-74	2500	80	900	4313	3881	33.9	30.6	141
BXRE-27E4000-B-7x	2700	80	900	4510	4059	33.9	30.6	148
BXRE-27E4000-C-7x	2700	80	1170	5863	5277	33.9	39.7	148
BXRE-27G40H0-B-7x	2700	90	900	3862	3476	33.9	30.6	126
BXRE-27G40H0-C-7x	2700	90	1170	5020	4518	33.9	39.7	126
BXRE-27G4000-B-7x	2700	90	900	3721	3349	33.9	30.6	122
BXRE-27G4000-C-7x	2700	90	1170	4837	4353	33.9	39.7	122
BXRE-27H4000-B-7x	2700	97	900	3298	2968	33.9	30.6	108
BXRE-30C4001-B-74	3000	70	900	5017	4516	33.9	30.6	164
BXRE-30C4001-C-74	3000	70	1170	6523	5870	33.9	39.7	164
BXRE-30E4000-B-7x	3000	80	900	4792	4313	33.9	30.6	157
BXRE-30E4000-C-7x	3000	80	1170	6230	5607	33.9	39.7	157
BXRE-30G40H0-B-7x	3000	90	900	4059	3653	33.9	30.6	133
BXRE-30G40H0-C-7x	3000	90	1170	5277	4749	33.9	39.7	133
BXRE-30G4000-B-7x	3000	90	900	3890	3501	33.9	30.6	127
BXRE-30G4000-C-7x	3000	90	1170	5057	4551	33.9	39.7	127
BXRE-30G400C-B-73	3000	90	900	3759	3383	34.0	30.6	123
BXRE-30H4000-B-7x	3000	97	900	3524	3171	33.9	30.6	115
BXRE-35E4000-B-7x	3500	80	900	4905	4414	33.9	30.6	161
BXRE-35E4000-C-7x	3500	80	1170	6376	5739	33.9	39.7	161
BXRE-35G4000-B-7x	3500	90	900	4031	3628	33.9	30.6	132
BXRE-35G4000-C-7x	3500	90	1170	5240	4716	33.9	39.7	132
BXRE-35A4001-B-73[8,9]	3500	93	900	3721	3349	33.9	30.6	122
BXRE-40C4001-B-74	4000	70	900	5158	4643	33.9	30.6	169
BXRE-40C4001-C-74	4000	70	1170	6706	6035	33.9	39.7	169
BXRE-40E4000-B-7x	4000	80	900	4933	4440	33.9	30.6	161
BXRE-40E4000-C-7x	4000	80	1170	6413	5771	33.9	39.7	161
BXRE-40G4000-B-7x	4000	90	900	4115	3704	33.9	30.6	135
BXRE-40G4000-C-7x	4000	90	1170	5350	4815	33.9	39.7	135
BXRE-50C4001-B-7x	5000	70	900	5187	4668	33.9	30.6	170
BXRE-50C4001-C-7x	5000	70	1170	6743	6068	33.9	39.7	170

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°C.
2. All CRI values are measured at T_j = T_c = 25°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 R9 value for 80 CRI products is 0, the minimum R9 values for 90 CRI products is 50, the minimum R9 values for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on R9 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.

Product Selection Guide

Table 3: Selection Guide, Stabilized DC Performance (T_c = 85°C) [4,5] (continued)

Part Number	Nominal CCT[1] (K)	CRI[2]	Nominal Drive Current[3] (mA)	Typical DC Flux[4,5] T_c = 85°C (lm)	Minimum DC Flux[6] T_c = 85°C (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-50E4001-B-7x	5000	80	900	4989	4490	33.9	30.6	163
BXRE-50E4001-C-7x	5000	80	1170	6486	5837	33.9	39.7	163
BXRE-50G4001-B-7x	5000	90	900	4313	3881	33.9	30.6	141
BXRE-50G4001-C-7x	5000	90	1170	5607	5046	33.9	39.7	141
BXRE-57C4001-B-7x	5700	70	900	5046	4541	33.9	30.6	165
BXRE-57C4001-C-7x	5700	70	1170	6559	5903	33.9	39.7	165
BXRE-57E4001-B-7x	5700	80	900	4792	4313	33.9	30.6	157
BXRE-57E4001-C-7x	5700	80	1170	6230	5607	33.9	39.7	157
BXRE-65C4001-B-7x	6500	70	900	5046	4541	33.9	30.6	165
BXRE-65C4001-C-7x	6500	70	1170	6559	5903	33.9	39.7	165
BXRE-65E4001-B-7x	6500	80	900	4848	4364	33.9	30.6	159
BXRE-65E4001-C-7x	6500	80	1170	6303	5673	33.9	39.7	159

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°C.
2. All CRI values are measured at T_j = T_c = 25°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 R9 value for 80 CRI products is 0, the minimum R9 values for 90 CRI products is 50, the minimum R9 values for 97 CRI products is 93. 4. Bridgelux maintains a ± 3 tolerance on R9 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 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°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-17E4000-B-74	80	450	33.2	14.9	1488	1360	100
		600	33.8	20.3	1955	1777	96
		900	**34.8**	**31.4**	**2881**	**2593**	**92**
		1350	36.3	49.0	4157	3662	85
		1800	37.5	67.5	5241	4504	78
BXRE-20B4001-C-73	65	585	33.2	19.4	3302	3016	170
		780	33.8	26.3	4336	3942	165
		1170	**34.8**	**40.8**	**6392**	**5753**	**157**
		1755	36.2	63.6	9222	8124	145
		2340	37.5	87.6	11628	9991	133
BXRE-25E4000-B-74	80	450	33.2	14.9	2475	2261	166
		600	33.8	20.3	3250	2955	160
		900	**34.8**	**31.4**	**4792**	**4313**	**153**
		1350	36.3	49.0	6913	6090	141
		1800	37.5	67.5	8717	7490	129
BXRE-27E4000-B-7x	80	450	33.2	14.9	2588	2365	173
		600	33.8	20.3	3399	3090	168
		900	**34.8**	**31.4**	**5011**	**4510**	**160**
		1350	36.3	49.0	7230	6369	148
		1800	37.5	67.5	9116	7832	135
BXRE-27E4000-C-7x	80	585	33.2	19.4	3365	3074	173
		780	33.8	26.3	4419	4017	168
		1170	**34.8**	**40.8**	**6515**	**5863**	**160**
		1755	36.2	63.6	9399	8280	148
		2340	37.5	87.6	11850	10182	135
BXRE-27G40H0-B-7x	90	450	33.2	14.9	2216	2025	148
		600	33.8	20.3	2911	2646	144
		900	**34.8**	**31.4**	**4291**	**3862**	**137**
		1350	36.3	49.0	6190	5453	126
		1800	37.5	67.5	7805	6706	116
BXRE-27G40H0-C-7x	90	585	33.2	19.4	2881	2632	148
		780	33.8	26.3	3784	3440	144
		1170	**34.8**	**40.8**	**5578**	**5020**	**137**
		1755	36.2	63.6	8048	7089	127
		2340	37.5	87.6	10147	8718	116
BXRE-27G4000-B-7x	90	450	33.2	14.9	2135	1951	143
		600	33.8	20.3	2804	2550	138
		900	**34.8**	**31.4**	**4134**	**3721**	**132**
		1350	36.3	49.0	5965	5254	122
		1800	37.5	67.5	7520	6462	111

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-27G4000-C-7x	90	585	33.2	19.4	2776	2536	143
		780	33.8	26.3	3646	3314	138
		1170	**34.8**	**40.8**	**5375**	**4837**	**132**
		1755	36.2	63.6	7754	6831	122
		2340	37.5	87.6	9776	8400	112
BXRE-27H4000-B-7x	97	450	33.2	14.9	1893	1729	127
		600	33.8	20.3	2486	2260	123
		900	**34.8**	**31.4**	**3664**	**3298**	**117**
		1350	36.3	49.0	5287	4657	108
		1800	37.5	67.5	6666	5727	99
BXRE-30C4001-B-74	70	450	33.2	14.9	2879	2631	193
		600	33.8	20.3	3782	3438	187
		900	**34.8**	**31.4**	**5575**	**5017**	**178**
		1350	36.3	49.0	8043	7085	164
		1800	37.5	67.5	10141	8713	150
BXRE-30C4001-C-74	70	585	33.2	19.4	3743	3420	193
		780	33.8	26.3	4916	4469	187
		1170	**34.8**	**40.8**	**7247**	**6523**	**178**
		1755	36.2	63.6	10456	9211	164
		2340	37.5	87.6	13183	11327	150
BXRE-30E4000-B-7x	80	450	33.2	14.9	2750	2512	184
		600	33.8	20.3	3612	3283	178
		900	**34.8**	**31.4**	**5324**	**4792**	**170**
		1350	36.3	49.0	7682	6767	157
		1800	37.5	67.5	9685	8322	144
BXRE-30E4000-C-7x	80	585	33.2	19.4	3575	3266	184
		780	33.8	26.3	4695	4269	178
		1170	**34.8**	**40.8**	**6922**	**6230**	**170**
		1755	36.2	63.6	9986	8797	157
		2340	37.5	87.6	12591	10818	144
BXRE-30G40H0-B-7x	90	450	33.2	14.9	2329	2128	156
		600	33.8	20.3	3059	2781	151
		900	**34.8**	**31.4**	**4510**	**4059**	**144**
		1350	36.3	49.0	6507	5732	133
		1800	37.5	67.5	8204	7049	122
BXRE-30G40H0-C-7x	90	585	33.2	19.4	3028	2767	156
		780	33.8	26.3	3977	3616	151
		1170	**34.8**	**40.8**	**5863**	**5277**	**144**
		1755	36.2	63.6	8459	7452	133
		2340	37.5	87.6	10665	9164	122
BXRE-30G4000-B-7x	90	450	33.2	14.9	2232	2040	149
		600	33.8	20.3	2932	2665	145
		900	**34.8**	**31.4**	**4322**	**3890**	**138**
		1350	36.3	49.0	6236	5493	127
		1800	37.5	67.5	7862	6755	116

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-30G4000-C-7x	90	585	33.2	19.4	2902	2651	149
		780	33.8	26.3	3811	3465	145
		1170	**34.8**	**40.8**	**5619**	**5057**	**138**
		1755	36.2	63.6	8106	7141	127
		2340	37.5	87.6	10221	8782	117
BXRE-30G400C-B-73	90	450	33.2	14.9	2157	1971	144
		600	33.8	20.3	2833	2575	140
		900	**34.8**	**31.4**	**4176**	**3759**	**133**
		1350	36.3	49.0	6025	5308	123
		1800	37.5	67.5	7597	6527	113
BXRE-30H4000-B-7x	97	450	33.2	14.9	2022	1847	135
		600	33.8	20.3	2656	2414	131
		900	**34.8**	**31.4**	**3915**	**3524**	**125**
		1350	36.3	49.0	5648	4976	115
		1800	37.5	67.5	7122	6119	106
BXRE-35E4000-B-7x	80	450	33.2	14.9	2815	2572	188
		600	33.8	20.3	3697	3361	182
		900	**34.8**	**31.4**	**5450**	**4905**	**174**
		1350	36.3	49.0	7862	6926	161
		1800	37.5	67.5	9913	8518	147
BXRE-35E4000-C-7x	80	585	33.2	19.4	3659	3343	188
		780	33.8	26.3	4806	4369	182
		1170	**34.8**	**40.8**	**7085**	**6376**	**174**
		1755	36.2	63.6	10221	9004	161
		2340	37.5	87.6	12887	11073	147
BXRE-35G4000-B-7x	90	450	33.2	14.9	2313	2113	155
		600	33.8	20.3	3038	2762	150
		900	**34.8**	**31.4**	**4479**	**4031**	**143**
		1350	36.3	49.0	6462	5692	132
		1800	37.5	67.5	8147	7000	121
BXRE-35G4000-C-7x	90	585	33.2	19.4	3007	2747	155
		780	33.8	26.3	3949	3591	150
		1170	**34.8**	**40.8**	**5822**	**5240**	**143**
		1755	36.2	63.6	8400	7400	132
		2340	37.5	87.6	10591	9100	121
BXRE-35A4001-B-73	93	450	33.2	14.9	2135	1951	143
		600	33.8	20.3	2804	2550	138
		900	**34.8**	**31.4**	**4134**	**3721**	**132**
		1350	36.3	49.0	5965	5254	122
		1800	37.5	67.5	7520	6462	111
BXRE-40C4001-B-74	70	450	33.2	14.9	2960	2705	198
		600	33.8	20.3	3888	3535	192
		900	**34.8**	**31.4**	**5732**	**5158**	**183**
		1350	36.3	49.0	8269	7284	169
		1800	37.5	67.5	10426	8958	154

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-40C4001-C-74	70	585	33.2	19.4	3848	3516	198
		780	33.8	26.3	5054	4595	192
		1170	**34.8**	**40.8**	**7451**	**6706**	**183**
		1755	36.2	63.6	10750	9470	169
		2340	37.5	87.6	13554	11646	155
BXRE-40E4000-B-7x	80	450	33.2	14.9	2831	2586	189
		600	33.8	20.3	3718	3380	183
		900	**34.8**	**31.4**	**5481**	**4933**	**175**
		1350	36.3	49.0	7908	6966	162
		1800	37.5	67.5	9970	8566	148
BXRE-40E4000-C-7x	80	585	33.2	19.4	3680	3362	189
		780	33.8	26.3	4833	4394	184
		1170	**34.8**	**40.8**	**7125**	**6413**	**175**
		1755	36.2	63.6	10280	9056	162
		2340	37.5	87.6	12961	11136	148
BXRE-40G4000-B-7x	90	450	33.2	14.9	2362	2158	158
		600	33.8	20.3	3102	2820	153
		900	**34.8**	**31.4**	**4573**	**4115**	**146**
		1350	36.3	49.0	6597	5812	135
		1800	37.5	67.5	8318	7147	123
BXRE-40G4000-C-7x	90	585	33.2	19.4	3070	2805	158
		780	33.8	26.3	4032	3666	153
		1170	**34.8**	**40.8**	**5945**	**5350**	**146**
		1755	36.2	63.6	8576	7555	135
		2340	37.5	87.6	10813	9291	123
BXRE-50C4001-B-7x	70	450	33.2	14.9	2977	2719	199
		600	33.8	20.3	3909	3554	193
		900	**34.8**	**31.4**	**5763**	**5187**	**184**
		1350	36.3	49.0	8314	7324	170
		1800	37.5	67.5	10483	9007	155
BXRE-50C4001-C-7x	70	585	33.2	19.4	3869	3535	199
		780	33.8	26.3	5082	4620	193
		1170	**34.8**	**40.8**	**7492**	**6743**	**184**
		1755	36.2	63.6	10808	9521	170
		2340	37.5	87.6	13628	11709	155
BXRE-50E4001-B-7x	80	450	33.2	14.9	2863	2616	192
		600	33.8	20.3	3760	3419	186
		900	**34.8**	**31.4**	**5544**	**4989**	**177**
		1350	36.3	49.0	7998	7046	163
		1800	37.5	67.5	10084	8664	149
BXRE-50E4001-C-7x	80	585	33.2	19.4	3722	3401	192
		780	33.8	26.3	4888	4444	186
		1170	**34.8**	**40.8**	**7207**	**6486**	**177**
		1755	36.2	63.6	10397	9159	163
		2340	37.5	87.6	13109	11264	150

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-50G4001-B-7x	90	450	33.2	14.9	2475	2261	166
		600	33.8	20.3	3250	2955	160
		900	**34.8**	**31.4**	**4792**	**4313**	**153**
		1350	36.3	49.0	6913	6090	141
		1800	37.5	67.5	8717	7490	129
BXRE-50G4001-C-7x	90	585	33.2	19.4	3218	2940	166
		780	33.8	26.3	4226	3842	160
		1170	**34.8**	**40.8**	**6230**	**5607**	**153**
		1755	36.2	63.6	8987	7917	141
		2340	37.5	87.6	11332	9736	129
BXRE-57C4001-B-7x	70	450	33.2	14.9	2896	2646	194
		600	33.8	20.3	3803	3457	188
		900	**34.8**	**31.4**	**5606**	**5046**	**179**
		1350	36.3	49.0	8088	7125	165
		1800	37.5	67.5	10198	8762	151
BXRE-57C4001-C-7x	70	585	33.2	19.4	3764	3439	194
		780	33.8	26.3	4944	4495	188
		1170	**34.8**	**40.8**	**7288**	**6559**	**179**
		1755	36.2	63.6	10515	9263	165
		2340	37.5	87.6	13257	11391	151
BXRE-57E4001-B-7x	80	450	33.2	14.9	2750	2512	184
		600	33.8	20.3	3612	3283	178
		900	**34.8**	**31.4**	**5324**	**4792**	**170**
		1350	36.3	49.0	7682	6767	157
		1800	37.5	67.5	9685	8322	144
BXRE-57E4001-C-7x	80	585	33.2	19.4	3575	3266	184
		780	33.8	26.3	4695	4269	178
		1170	**34.8**	**40.8**	**6922**	**6230**	**170**
		1755	36.2	63.6	9986	8797	157
		2340	37.5	87.6	12591	10818	144
BXRE-65C4001-B-7x	70	450	33.2	14.9	2896	2646	194
		600	33.8	20.3	3803	3457	188
		900	**34.8**	**31.4**	**5606**	**5046**	**179**
		1350	36.3	49.0	8088	7125	165
		1800	37.5	67.5	10198	8762	151
BXRE-65C4001-C-7x	70	585	33.2	19.4	3764	3439	194
		780	33.8	26.3	4944	4495	188
		1170	**34.8**	**40.8**	**7288**	**6559**	**179**
		1755	36.2	63.6	10515	9263	165
		2340	37.5	87.6	13257	11391	151
BXRE-65E4001-B-7x	80	450	33.2	14.9	2782	2542	186
		600	33.8	20.3	3654	3322	180
		900	**34.8**	**31.4**	**5387**	**4848**	**172**
		1350	36.3	49.0	7772	6847	159
		1800	37.5	67.5	9799	8420	145

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-65E4001-C-7x	80	585	33.2	19.4	3617	3305	186
		780	33.8	26.3	4750	4319	180
		1170	**34.8**	**40.8**	**7003**	**6303**	**172**
		1755	36.2	63.6	10104	8901	159
		2340	37.5	87.6	12739	10946	145

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.

Electrical Characteristics

Table 5: Electrical Characteristics

Part Number	Drive Current (mA)	Forward Voltage Pulsed, T_c = 25°C (V) [1, 2, 3, 8]			Typical Coefficient of Forward Voltage[4] $\Delta V_f/\Delta T_c$ (mV/°C)	Typical Thermal Resistance Junction to Case[5,6] R_{j-c} (°C/W)	Driver Selection Voltages[7] (V)	
		Minimum	Typical	Maximum			V_f Min. Hot T_c = 105°C (V)	V_f Max. Cold T_c = -40°C (V)
BXRE-xxx400x-B-7x	900	32.2	34.8	37.5	-14.5	0.15	31.1	38.4
	1800	34.7	37.5	40.3	-14.5	0.18	33.5	41.2
BXRE-xxx400x-C-7x	1170	32.2	34.8	37.5	-14.5	0.11	31.1	38.4
	2340	34.6	37.5	40.3	-14.5	0.13	33.5	41.2

Notes for Table 5:

1. Parts are tested in pulsed conditions, T_c = 25°C. Pulse width is 10ms.
2. Voltage minimum and maximum are provided for reference only and are not a guarantee of performance.
3. Bridgelux maintains a tester tolerance of ± 0.10V on forward voltage measurements.
4. Typical coefficient of forward voltage tolerance is ± 0.1mV for nominal current.
5. Thermal resistance values are based from test data of a 3000K 80 CRI product.
6. 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.
7. 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.
8. 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-xxx400x-B-7x	900	RG1	RG1	RG1	RG1
	1350	RG1	RG1	RG1	RG2
	1800	RG1	RG1	RG2	RG2
BXRE-xxx400x-C-7x	1170	RG1	RG1	RG1	RG1
	1755	RG1	RG1	RG2	RG2
	2340	RG1	RG1	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-xxx400x-B-7x	BXRE-xxx400x-C-7x
Maximum Drive Current[3]	1800mA	2340mA
Maximum Peak Pulsed Drive Current[4]	2570mA	3340mA
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: V18B Drive Current vs. Voltage

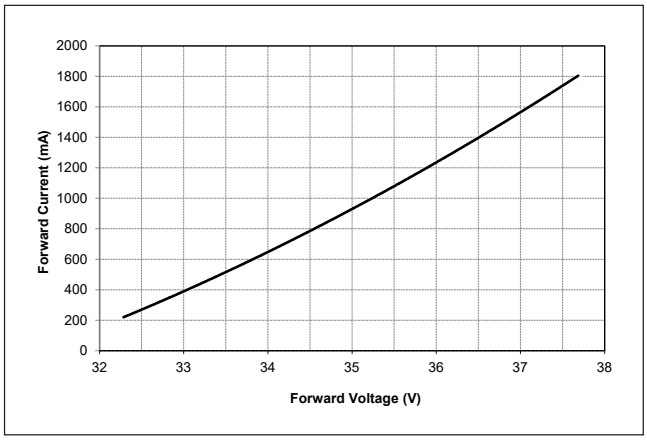


Figure 2: V18C Drive Current vs. Voltage

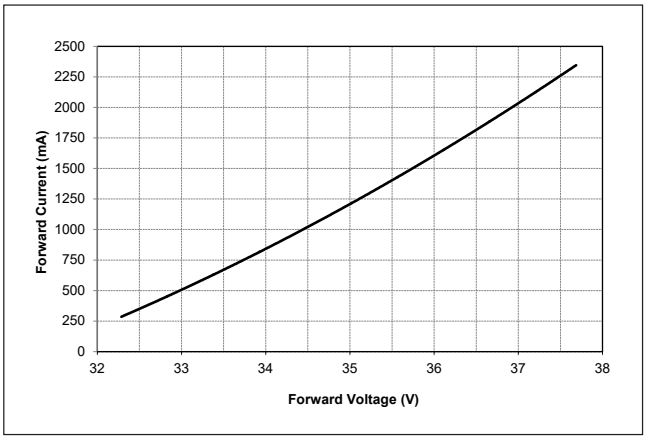


Figure 3: V18B Typical Relative Flux vs. Current

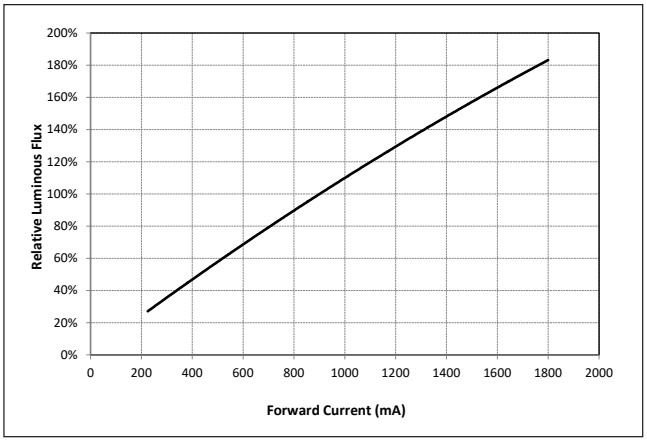
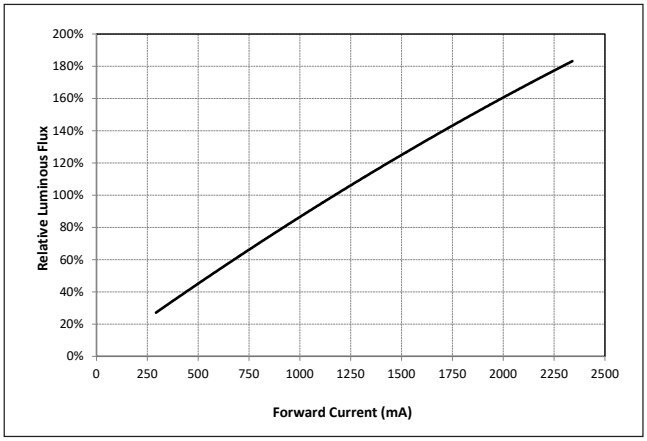


Figure 4: V18C Typical Relative Flux vs. Current



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 Temperature

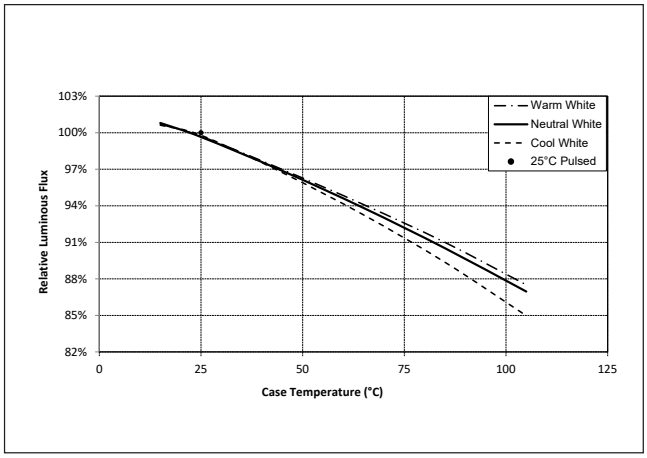


Figure 6: Typical DC ccy Shift vs. Case Temperature

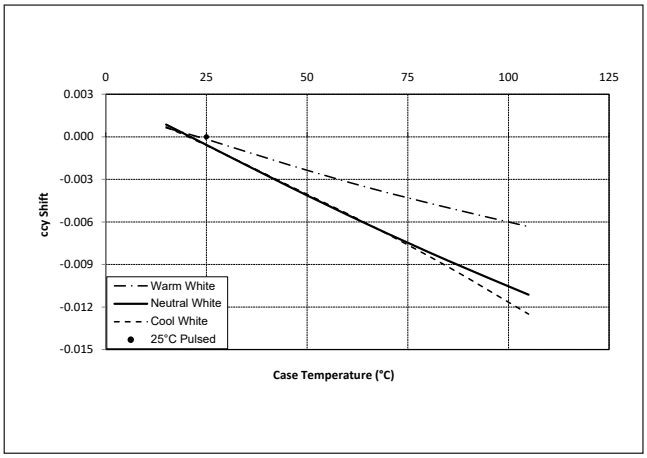


Figure 7: Typical DC ccx Shift vs. Case Temperature

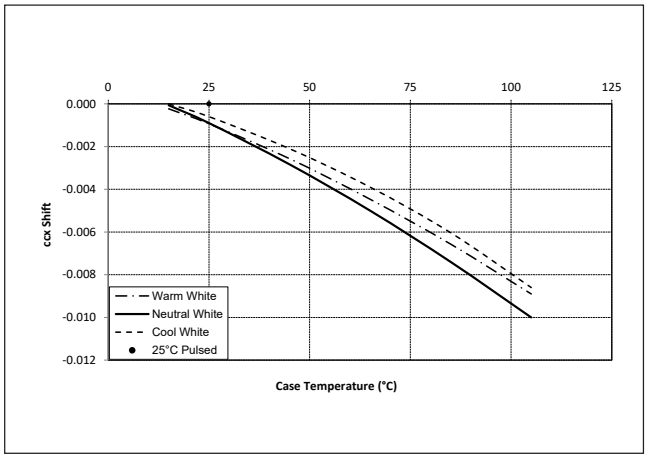
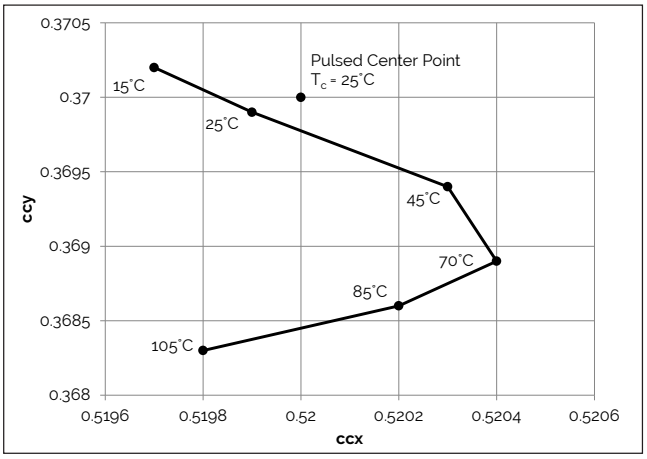


Figure 8: 1750K Color Shift vs. Case Temperature[1]



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. For other color SKUs, the shift in color will vary. Please contact your Bridgelux Sales Representative for more information.

Performance Curves

Figure 9: 2000K, 65 CRI Color Shift vs. Case Temperature

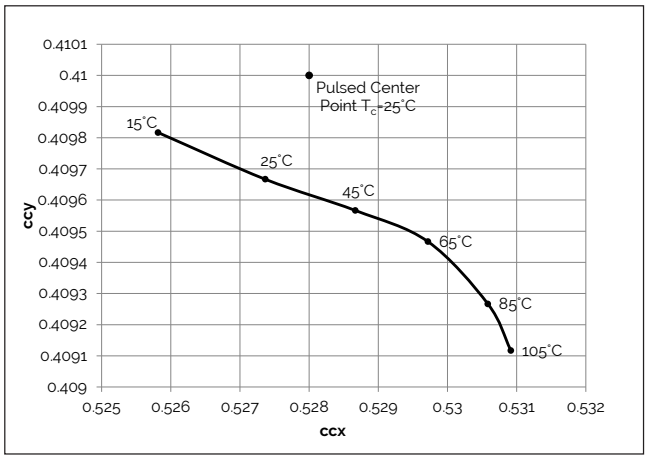


Figure 10: 2500K Color Shift vs. Case Temperature[1]

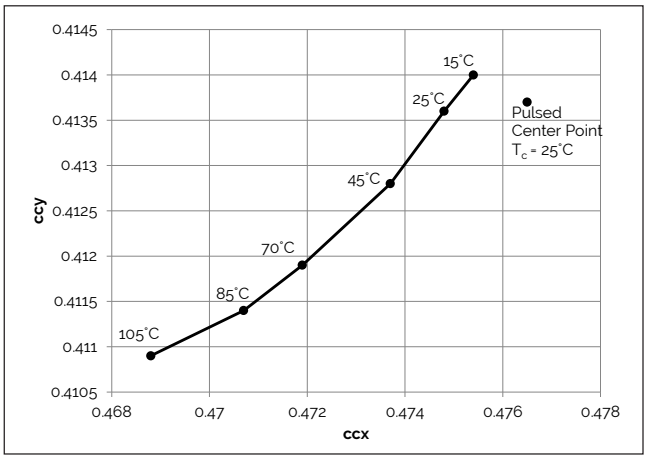


Figure 11: 2700K, 97 CRI Color Shift vs. Case Temperature[1]

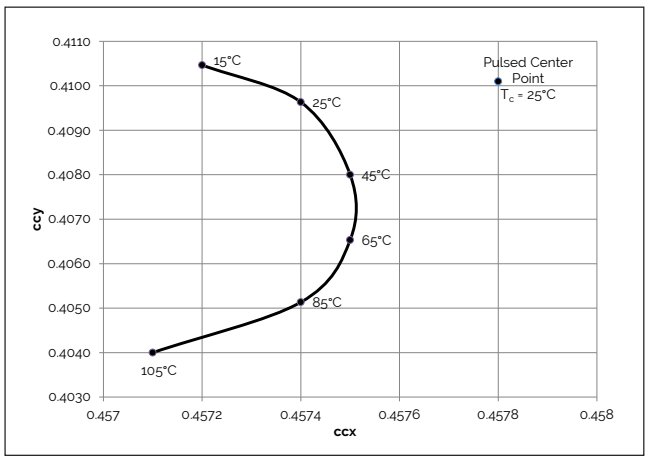


Figure 12: 3000K, 90 CRI Color Shift vs. Case Temperature[3]

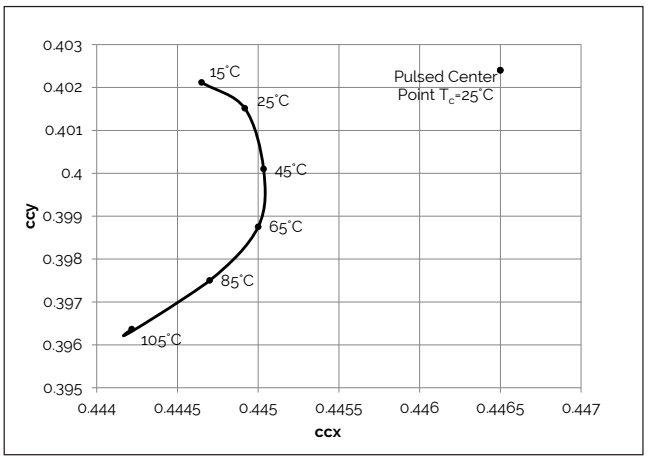


Figure 13: 3000K, 97 CRI Color Shift vs. Case Temperature[1]

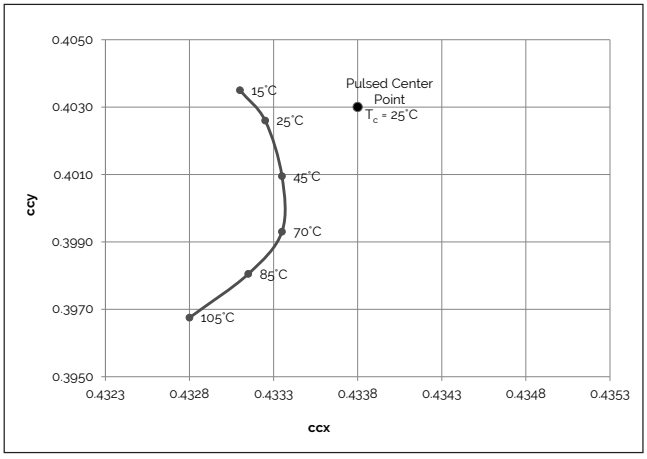
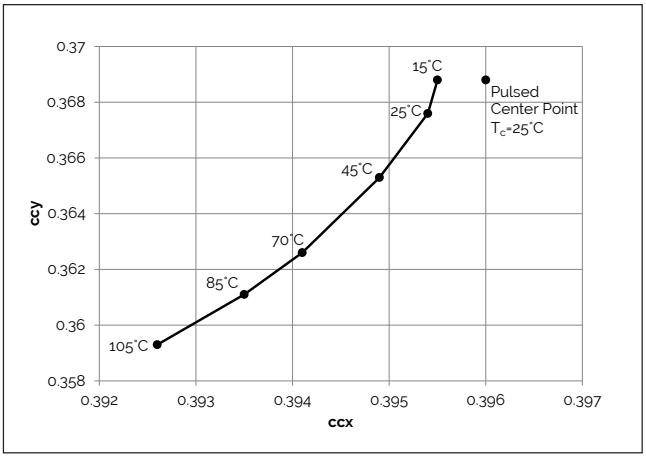


Figure 14: 3500K Class A Color Shift vs. Case Temperature[1]

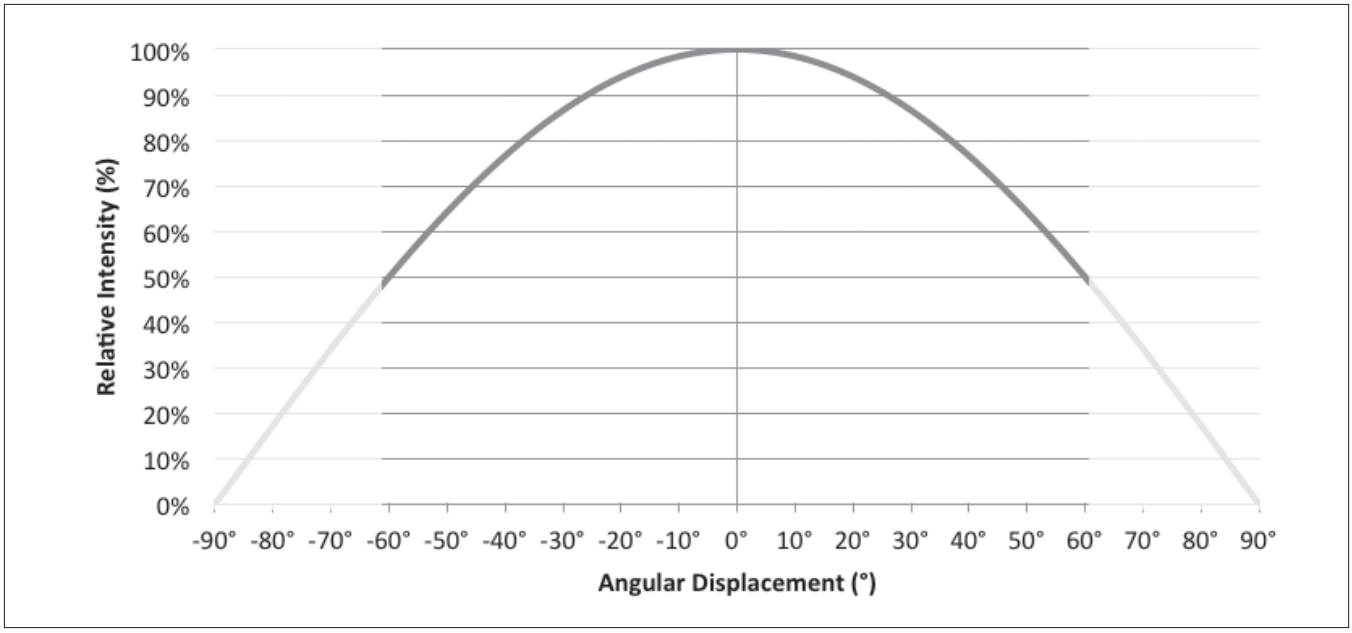


Note for Figures 8-14:

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-30G400C-x-73

Typical Radiation Pattern

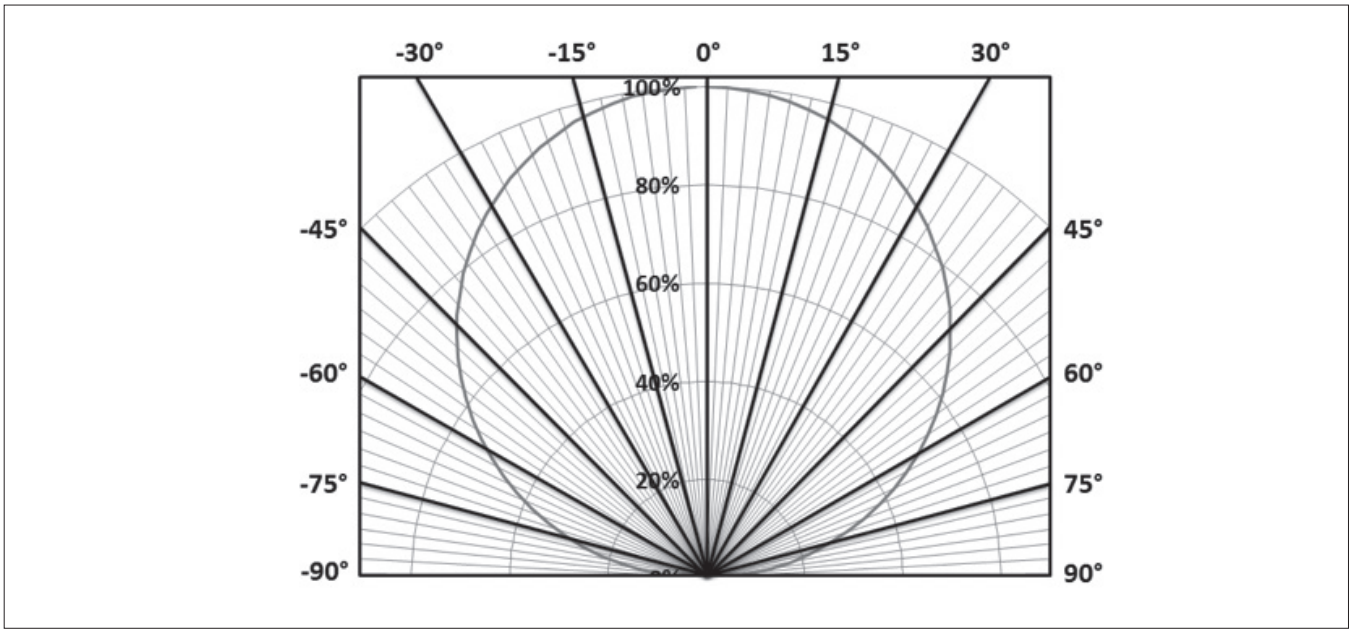
Figure 15: Typical Spatial Radiation Pattern



Note for Figure 15:

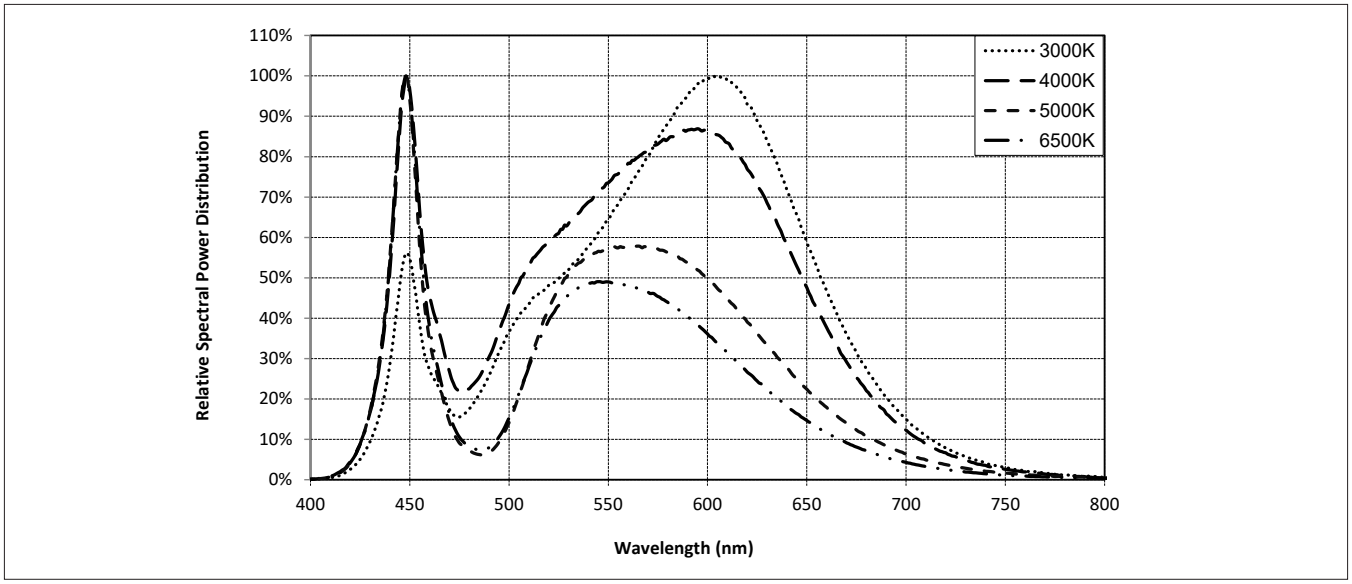
1. Typical viewing angle is 120°.
2. The viewing angle is defined as the off axis angle from the centerline where intensity is ½ of the peak value.

Figure 16: Typical Polar Radiation Pattern



Typical Color Spectrum

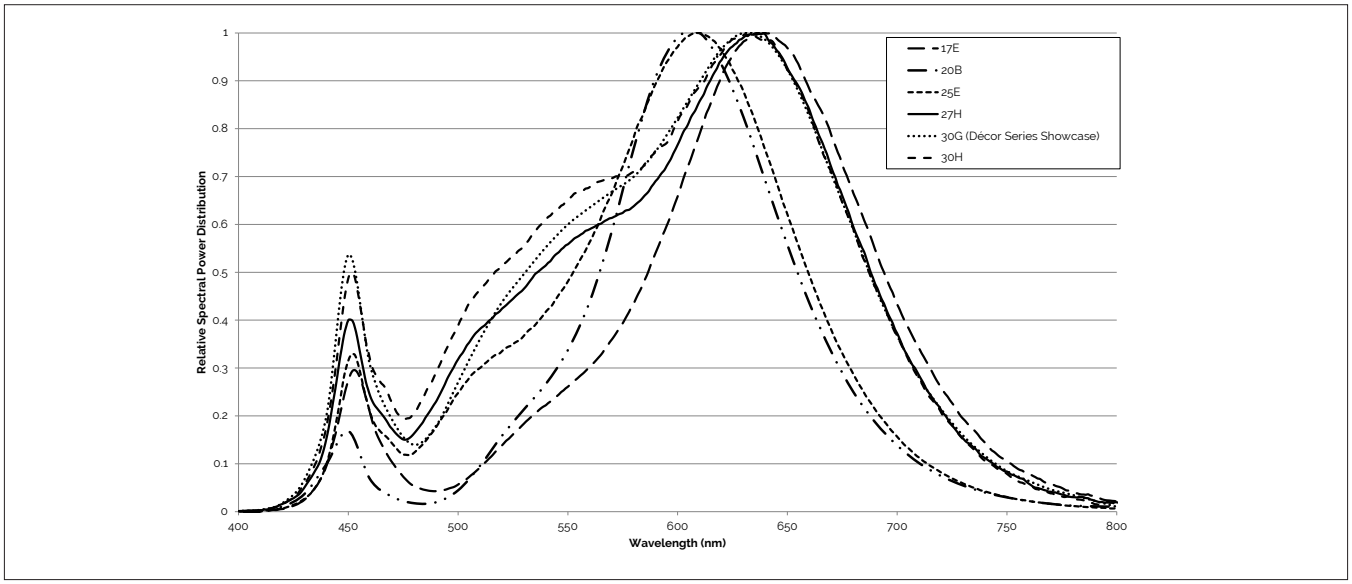
Figure 17: Typical Color Spectrum



Note for Figure 17:

1. Color spectra measured at nominal current for $T_j = T_c = 25°C$.
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 18: Typical Color Spectrum for Décor Series

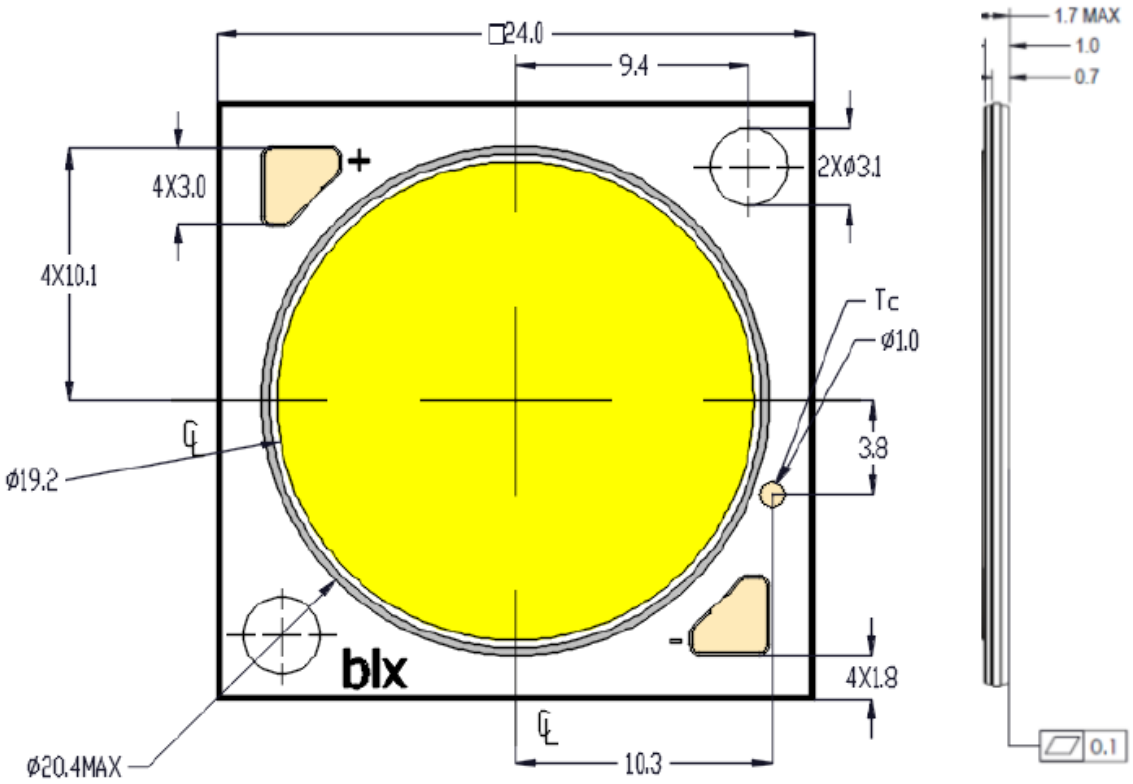


Note for Figure 18:

1. Color spectra measured at nominal current for $T_j = T_c = 25°C$.

Mechanical Dimensions

Figure 19: Drawing for V18 LED Array

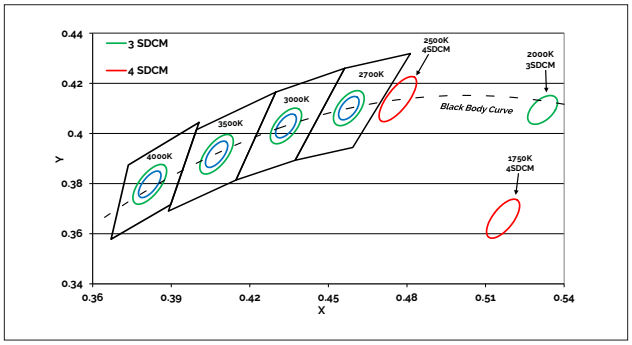


Notes for Figure 19;

1. Drawings are not to scale.
2. Drawing dimensions are in millimeters.
3. Unless otherwise specified, tolerances are ±0.1mm.
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 ± 0.2mm.
7. Bridgelux maintains a flatness of 0.10mm across the mounting surface of the array.

Color Binning Information

Figure 20: Warm and Neutral White Test Bins in xy Color Space



Note: Pulsed Test Conditions, T_c = 25°C

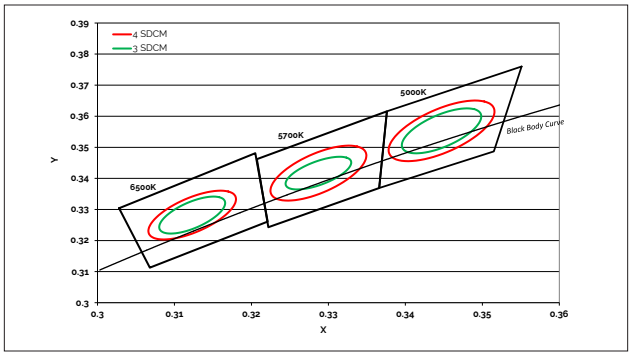
Table 8: Warm and Neutral White xy Bin Coordinates and Associated Typical CCT

Bin Code	1750K	2000K	2500K	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)	(0.5167, 0.366)	(0.5280, 0.4100)	(0.4765, 0.4137)	(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:

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

Figure 21: Graph of Cool White Test Bins in xy Color Space



Note: Pulsed Test Conditions, T_c = 25°C

Table 9: Cool White xy Bin Coordinates and Associated Typical CCT (product is hot targeted to T_c = 85°C)

Bin Code	5000K	5700K	6500K
ANSI Bin (for reference only)	(4745K - 5311K)	(5312K - 6022K)	(6022K - 7042K)
74 (4 SDCM)	(4801K - 5282K)	(5829K - 5481K)	(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 22: Drawing for V18 Packaging Tube

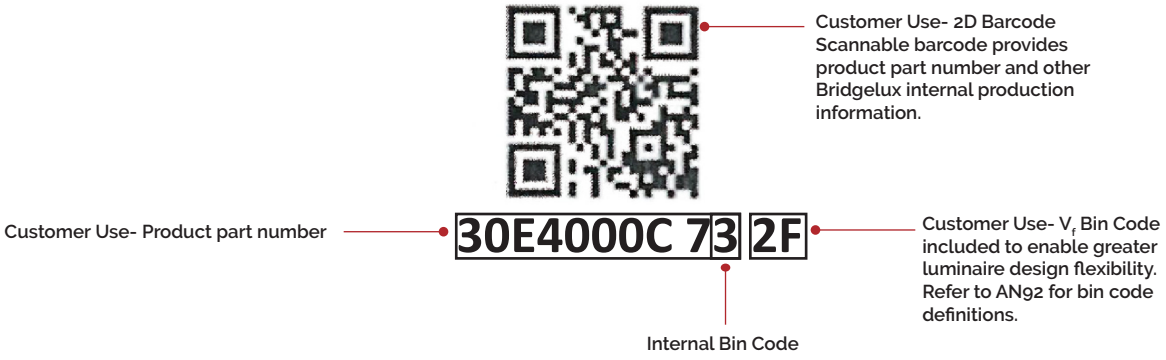
Notes for Figure 22:

1. Each tube holds 20 V18 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 26.3 (W) x 9.5(H) x 510 (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 23: **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.

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