

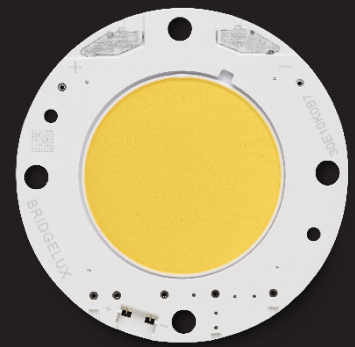
Bridgelux® Gen 7 Vero® 29 Array

Product Data Sheet DS93



Introduction

Vero® Series



Vero® Series is a revolutionary advancement in chip on board (COB) light source technology and innovation. Vero LED light sources simplify luminaire design and manufacturing processes. Vero Chip on Board (COB) LED arrays are available in four LES configurations, engineered to enable new degrees of flexibility and reliability over a broad range of electrical currents. Vero arrays deliver increased lumen density to enable improved beam control and precision lighting with 2 and 3 SDCM color control standard for clean and consistent uniform lighting.

Vero products include an onboard connector port that enables a solder-free electrical interconnect, and simple mounting features for plug-and-play installation.

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 pleasing lighting palettes. Bridgelux Décor Series color points are available on Vero® SE Series, Vero® Series, V Series™ and V Series™ HD.

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 typical R₉ value of 98, 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™ Entertainment products provide color points developed specifically for the healthcare and entertainment industries. The 5600K cool white color point combined with a CRI of 90 or 97 provides the bright white required by these industries.

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

Features

- Efficacy of 170 lm/W typical
- Lumen output performance ranges from 3,850 to 38,400 lumens
- Broad range of CCT options from 1750K to 6500K
- CRI options include minimum 65, 70, 80, and 90, 2 and 3 SDCM color control for 2700K-4000K CCT
- Reliable operation at up to 2X nominal drive current
- Radial die pattern and improved lumen density
- Thermally isolated solder pads
- Onboard connector port
- Top side part number markings
- V_r bin code backside marking

Benefits

- Broad application coverage for interior and exterior lighting
- Flexibility for application driven lighting design requirements
- High quality true color reproduction
- Uniform consistent white light
- Flexibility in design optimization
- Enhanced ease of use and assembly
- Solderless connectivity enables plug & play installation and field upgradability
- Improved inventory management and quality control



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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)
BXRC-17E10K0-B-74	1750	80	1800	8611	7750	52.0	93.6	92
BXRC-17E10K0-C-74	1750	80	1710	10918	9826	69.4	118.7	92
BXRC-17E10K0-D-74	1750	80	2100	7264	6538	37.6	79.0	92
BXRC-20B10K1-C-73	2000	65	1710	18632	16769	69.4	118.7	157
BXRC-20B10K1-D-73	2000	65	2100	12397	11157	37.6	79.0	157
BXRC-25E10K0-B-74	2500	80	1800	14321	12889	52.0	93.6	153
BXRC-25E10K0-C-74	2500	80	1710	18157	16341	69.4	118.7	153
BXRC-25E10K0-D-74	2500	80	2100	12081	10873	37.6	79.0	153
BXRC-27E10K0-B-7x	2700	80	1800	14976	13478	52.0	93.6	160
BXRC-27E10K0-C-7x	2700	80	1710	18988	17089	69.4	118.7	160
BXRC-27E10K0-D-7x	2700	80	2100	12634	11370	37.6	79.0	160
BXRC-27G1KH0-B-7x	2700	90	1800	12823	11541	52.0	93.6	137
BXRC-27G1KH0-C-7x	2700	90	1710	16258	14633	69.4	118.7	137
BXRC-27G1KH0-D-7x	2700	90	2100	10818	9736	37.6	79.0	137
BXRC-27G10K0-B-7x	2700	90	1800	12355	11120	52.0	93.6	132
BXRC-27G10K0-C-7x	2700	90	1710	15665	14098	69.4	118.7	132
BXRC-27G10K0-D-7x	2700	90	2100	10423	9380	37.6	79.0	132
BXRC-27H10K0-D-7x	2700	97	2100	9243	8319	37.6	79.0	117
BXRC-30C10K1-B-74	3000	70	1800	16661	14995	52.0	93.6	178
BXRC-30C10K1-C-74	3000	70	1710	21124	19012	69.4	118.7	178
BXRC-30C10K1-D-74	3000	70	2100	14055	12649	37.6	79.0	178
BXRC-30E10K0-B-7x ¹⁰	3000	80	1800	15912	14321	52.0	93.6	170
BXRC-30E10K0-C-7x ¹⁰	3000	80	1710	20175	18157	69.4	118.7	170
BXRC-30E10K0-D-7x ¹⁰	3000	80	2100	13423	12081	37.6	79.0	170
BXRC-30G1KH0-B-7x	3000	90	1800	13478	12131	52.0	93.6	144
BXRC-30G1KH0-C-7x	3000	90	1710	17089	15380	69.4	118.7	144
BXRC-30G1KH0-D-7x	3000	90	2100	11370	10233	37.6	79.0	144
BXRC-30G10K0-B-7x	3000	90	1800	12917	11625	52.0	93.6	138
BXRC-30G10K0-C-7x	3000	90	1710	16377	14739	69.4	118.7	138
BXRC-30G10K0-D-7x	3000	90	2100	10896	9807	37.6	79.0	138
BXRC-30H10K0-D-7x	3000	97	2100	9870	8883	37.6	79.0	125
BXRC-30A10K1-B-73 ^{8,9}	3000	93	1800	11606	10446	52.0	93.6	124
BXRC-30A10K1-C-73 ^{8,9}	3000	93	1710	14716	13244	69.4	118.7	124
BXRC-30A10K1-D-73 ^{8,9}	3000	93	2100	9791	8812	37.6	79.0	124

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 Décor Series Class A, Décor Series Street and Landmark and Décor Series Ultra 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 CRI and 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.
- SKUs can meet DLC premium (Outdoor Mid Output) requirements under certain system level conditions.

Product Selection Guide

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

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)
BXRC-35E10K0-B-7x ¹⁰	3500	80	1800	16286	14658	52.0	93.6	174
BXRC-35E10K0-C-7x ¹⁰	3500	80	1710	20649	18584	69.4	118.7	174
BXRC-35E10K0-D-7x ¹⁰	3500	80	2100	13739	12365	37.6	79.0	174
BXRC-35G10K0-B-7x	3500	90	1800	13385	12046	52.0	93.6	143
BXRC-35G10K0-C-7x	3500	90	1710	16970	15273	69.4	118.7	143
BXRC-35G10K0-D-7x	3500	90	2100	11291	10162	37.6	79.0	143
BXRC-35A10K1-B-73 ^{8,9}	3500	93	1800	12355	11120	52.0	93.6	132
BXRC-35A10K1-C-73 ^{8,9}	3500	93	1710	15665	14098	69.4	118.7	132
BXRC-35A10K1-D-73 ^{8,9}	3500	93	2100	10423	9380	37.6	79.0	132
BXRC-40C10K1-B-74	4000	70	1800	17129	15416	52.0	93.6	183
BXRC-40C10K1-C-74	4000	70	1710	21717	19546	69.4	118.7	183
BXRC-40C10K1-D-74	4000	70	2100	14450	13005	37.6	79.0	183
BXRC-40E10K0-B-7x ¹⁰	4000	80	1800	16380	14742	52.0	93.6	175
BXRC-40E10K0-C-7x ¹⁰	4000	80	1710	20768	18691	69.4	118.7	175
BXRC-40E10K0-D-7x ¹⁰	4000	80	2100	13818	12436	37.6	79.0	175
BXRC-40G10K0-B-7x	4000	90	1800	13666	12299	52.0	93.6	146
BXRC-40G10K0-C-7x	4000	90	1710	17326	15594	69.4	118.7	146
BXRC-40G10K0-D-7x	4000	90	2100	11528	10375	37.6	79.0	146
BXRC-40H10K0-D-7x	4000	97	2100	10423	9380	37.6	79.0	132
BXRC-40A10K1-B-73 ^{8,9}	4000	93	1800	13385	12046	52.0	93.6	143
BXRC-40A10K1-C-73 ^{8,9}	4000	93	1710	16970	15273	69.4	118.7	143
BXRC-40A10K1-D-73 ^{8,9}	4000	93	2100	11291	10162	37.6	79.0	143
BXRC-50C10K1-B-7x ¹⁰	5000	70	1800	17222	15500	52.0	93.6	184
BXRC-50C10K1-C-7x ¹⁰	5000	70	1710	21836	19652	69.4	118.7	184
BXRC-50C10K1-D-7x ¹⁰	5000	70	2100	14529	13076	37.6	79.0	184
BXRC-50E10K1-B-7x	5000	80	1800	16567	14910	52.0	93.6	177
BXRC-50E10K1-C-7x	5000	80	1710	21005	18905	69.4	118.7	177
BXRC-50E10K1-D-7x	5000	80	2100	13976	12578	37.6	79.0	177
BXRC-50G10K1-B-7x	5000	90	1800	14321	12889	52.0	93.6	153
BXRC-50G10K1-C-7x	5000	90	1710	18157	16341	69.4	118.7	153
BXRC-50G10K1-D-7x	5000	90	2100	12081	10873	37.6	79.0	153
BXRC-56G10K0-B-74	5600	90	1800	14414	12973	52.0	93.6	154
BXRC-56G10K0-C-74	5600	90	1710	18276	16448	69.4	118.7	154
BXRC-56G10K0-D-74	5600	90	2100	12160	10944	37.6	79.0	154
BXRC-56H10K1-D-74	5600	97	2100	10975	9878	37.6	79.0	139

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 Décor Series Class A, Décor Series Street and Landmark and Décor Series Ultra 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 value for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on CRI and 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.
- SKUs can meet DLC premium (Outdoor Mid Output) requirements under certain system level conditions.

Product Selection Guide

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

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)
BXRC-57C10K1-B-7x ¹⁰	5700	70	1800	16754	15079	52.0	93.6	179
BXRC-57C10K1-C-7x ¹⁰	5700	70	1710	21243	19118	69.4	118.7	179
BXRC-57C10K1-D-7x ¹⁰	5700	70	2100	14134	12720	37.6	79.0	179
BXRC-57E10K1-B-7x ¹⁰	5700	80	1800	15912	14321	52.0	93.6	170
BXRC-57E10K1-C-7x ¹⁰	5700	80	1710	20175	18157	69.4	118.7	170
BXRC-57E10K1-D-7x ¹⁰	5700	80	2100	13423	12081	37.6	79.0	170
BXRC-65C10K1-B-7x ¹⁰	6500	70	1800	16754	15079	52.0	93.6	179
BXRC-65C10K1-C-7x ¹⁰	6500	70	1710	21243	19118	69.4	118.7	179
BXRC-65C10K1-D-7x ¹⁰	6500	70	2100	14134	12720	37.6	79.0	179
BXRC-65E10K1-B-7x ¹⁰	6500	80	1800	16099	14489	52.0	93.6	172
BXRC-65E10K1-C-7x ¹⁰	6500	80	1710	20412	18371	69.4	118.7	172
BXRC-65E10K1-D-7x ¹⁰	6500	80	2100	13581	12223	37.6	79.0	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 $T_c = 85^\circ\text{C}$.
2. CRI values are typical for Décor Series Class A, Décor Series Street and Landmark and Décor Series Ultra 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 value for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance on CRI and Rg 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 $\pm 7\%$ 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.
10. SKUs can meet DLC premium (Outdoor Mid Output) requirements under certain system level conditions.

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 ^{5,9} $T_c = 70^\circ\text{C}$ (lm)	Typical V_f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRC-30A10K1-B-73	3000	80	93	1800	10794	9715	50.9	91.6	118
BXRC-30A10K1-C-73	3000	80	93	1710	13685	12317	67.9	116.1	118
BXRC-30A10K1-D-73	3000	80	93	2100	9106	8195	36.8	77.3	118
BXRC-35A10K1-B-73	3500	80	93	1800	11490	10341	50.9	91.6	125
BXRC-35A10K1-C-73	3500	80	93	1710	14568	13112	67.9	116.1	126
BXRC-35A10K1-D-73	3500	80	93	2100	9693	8724	36.8	77.3	125
BXRC-40A10K1-B-73	4000	80	93	1800	12448	11203	50.9	91.6	136
BXRC-40A10K1-C-73	4000	80	93	1710	15782	14204	67.9	116.1	136
BXRC-40A10K1-D-73	4000	80	93	2100	10501	9451	36.8	77.3	136

Notes for Table 2:

- 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.
- 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.
- CRI Values are specified as typical.
- Drive current is referred to as nominal drive current.
- 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.
- 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 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.
- 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)
BXRC-17E10K0-B-74	1750	80	1800	7750	6975	50.7	91.2	85
BXRC-17E10K0-C-74	1750	80	1710	9826	8844	68.1	116.4	84
BXRC-17E10K0-D-74	1750	80	2100	6538	5884	36.6	76.8	85
BXRC-20B10K0-C-73	2000	65	1710	16769	15092	68.1	116.4	144
BXRC-20B10K0-D-73	2000	65	2100	11157	10041	36.6	76.8	145
BXRC-25E10K0-B-74	2500	80	1800	12889	11600	50.7	91.2	141
BXRC-25E10K0-C-74	2500	80	1710	16341	14707	68.1	116.4	140
BXRC-25E10K0-D-74	2500	80	2100	10873	9786	36.6	76.8	142
BXRC-27E10K0-B-7x	2700	80	1800	13478	12131	50.7	91.2	148
BXRC-27E10K0-C-7x	2700	80	1710	17089	15380	68.1	116.4	147
BXRC-27E10K0-D-7x	2700	80	2100	11370	10233	36.6	76.8	148
BXRC-27G1KH0-B-7x	2700	90	1800	11541	10387	51.0	91.7	126
BXRC-27G1KH0-C-7x	2700	90	1710	14633	13169	68.4	116.9	125
BXRC-27G1KH0-D-7x	2700	90	2100	9736	8762	36.6	76.8	127
BXRC-27G10K0-B-7x	2700	90	1800	11120	10008	51.0	91.7	121
BXRC-27G10K0-C-7x	2700	90	1710	14098	12689	68.4	116.9	121
BXRC-27G10K0-D-7x	2700	90	2100	9380	8442	36.6	76.8	122
BXRC-27H10K0-D-7x	2700	97	2100	8319	7487	36.6	76.8	108
BXRC-30C10K1-B-74	3000	70	1800	14995	13495	51.0	91.7	163
BXRC-30C10K1-C-74	3000	70	1710	19012	17110	68.4	116.9	163
BXRC-30C10K1-D-74	3000	70	2100	12649	11384	36.6	76.8	165
BXRC-30E10K0-B-7x	3000	80	1800	14321	12889	51.0	91.7	156
BXRC-30E10K0-C-7x	3000	80	1710	18157	16341	68.4	116.9	155
BXRC-30E10K0-D-7x	3000	80	2100	12081	10873	36.6	76.8	157
BXRC-30G1KH0-B-7x	3000	90	1800	12131	10918	51.0	91.7	132
BXRC-30G1KH0-C-7x	3000	90	1710	15380	13842	68.4	116.9	132
BXRC-30G1KH0-D-7x	3000	90	2100	10233	9210	36.6	76.8	133
BXRC-30G10K0-B-7x	3000	90	1800	11625	10463	50.7	91.2	127
BXRC-30G10K0-C-7x	3000	90	1710	14739	13265	68.1	116.4	127
BXRC-30G10K0-D-7x	3000	90	2100	9807	8826	36.6	76.8	128
BXRC-30H10K0-D-7x	3000	97	2100	8883	7995	36.6	76.9	116
BXRC-30A10K1-B-73 ^{7,8}	3000	93	1800	10446	9401	50.7	91.2	115
BXRC-30A10K1-C-73 ^{7,8}	3000	93	1710	13244	11920	68.1	116.4	114
BXRC-30A10K1-D-73 ^{7,8}	3000	93	2100	8812	7931	36.6	76.8	115

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 $T_c = 25^\circ\text{C}$. CRI values are typical for Décor Series Class A, Décor Series Street and Landmark and Décor Series Ultra 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 CRI and R_g 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} (continued)

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)
BXRC-35E10K0-B-7X	3500	80	1800	14658	13192	50.7	91.2	161
BXRC-35E10K0-C-7X	3500	80	1710	18584	16726	68.1	116.4	160
BXRC-35E10K0-D-7X	3500	80	2100	12365	11129	36.6	76.8	161
BXRC-35G10K0-B-7X	3500	90	1800	12046	10842	50.7	91.2	132
BXRC-35G10K0-C-7X	3500	90	1710	15273	13746	68.1	116.4	131
BXRC-35G10K0-D-7X	3500	90	2100	10162	9146	36.6	76.8	132
BXRC-35A10K1-B-73 ^{7,8}	3500	93	1800	11120	10008	50.7	91.2	122
BXRC-35A10K1-C-73 ^{7,8}	3500	93	1710	14098	12689	68.1	116.4	121
BXRC-35A10K1-D-73 ^{7,8}	3500	93	2100	9380	8442	36.6	76.8	122
BXRC-40C10K1-B-74	4000	70	1800	15416	13874	51.0	91.7	168
BXRC-40C10K1-C-74	4000	70	1710	19546	17591	68.4	116.9	167
BXRC-40C10K1-D-74	4000	70	2100	13005	11704	36.6	76.8	169
BXRC-40E10K0-B-7X	4000	80	1800	14742	13268	50.7	91.2	162
BXRC-40E10K0-C-7X	4000	80	1710	18691	16822	68.1	116.4	161
BXRC-40E10K0-D-7X	4000	80	2100	12436	11193	36.6	76.8	162
BXRC-40G10K0-B-7X	4000	90	1800	12299	11069	50.7	91.2	135
BXRC-40G10K0-C-7X	4000	90	1710	15594	14034	68.1	116.4	134
BXRC-40G10K0-D-7X	4000	90	2100	10375	9338	36.6	76.8	135
BXRC-40H10K0-D-7x	4000	97	2100	9380	8442	36.6	76.9	122
BXRC-40A10K1-B-73 ^{7,8}	4000	93	1800	12046	10842	50.7	91.2	132
BXRC-40A10K1-C-73 ^{7,8}	4000	93	1710	15273	13746	68.1	116.4	131
BXRC-40A10K1-D-73 ^{7,8}	4000	93	2100	10162	9146	36.6	76.8	132
BXRC-50C10K1-B-7x	5000	70	1800	15500	13950	50.7	91.2	170
BXRC-50C10K1-C-7x	5000	70	1710	19652	17687	68.1	116.4	169
BXRC-50C10K1-D-7x	5000	70	2100	13076	11768	36.6	76.8	170
BXRC-50E10K1-B-7x	5000	80	1800	14910	13419	50.7	91.2	163
BXRC-50E10K1-C-7x	5000	80	1710	18905	17014	68.1	116.4	162
BXRC-50E10K1-D-7x	5000	80	2100	12578	11320	36.6	76.8	164
BXRC-50G10K1-B-7x	5000	90	1800	12889	11600	50.7	91.2	141
BXRC-50G10K1-C-7x	5000	90	1710	16341	14707	68.1	116.4	140
BXRC-50G10K1-D-7x	5000	90	2100	10873	9786	36.6	76.8	142
BXRC-56G10K0-B-74	5600	90	1800	12973	11676	50.7	91.2	142
BXRC-56G10K0-C-74	5600	90	1710	16448	14803	68.1	116.4	141
BXRC-56G10K0-D-74	5600	90	2100	10944	9849	36.6	76.8	143
BXRC-56H10K1-D-74	5600	97	2100	9878	8890	36.6	76.9	129

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 $T_s = T_c = 25^\circ\text{C}$. CRI values are typical for Decor Series Class A, Decor Series Street and Landmark and Décor Series Ultra 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 CRI and 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)
BXRC-57C10K1-B-7X	5700	70	1800	15079	13571	50.7	91.2	165
BXRC-57C10K1-C-7X	5700	70	1710	19118	17207	68.1	116.4	164
BXRC-57C10K1-D-7X	5700	70	2100	12720	11448	36.6	76.8	166
BXRC-57E10K1-B-7X	5700	80	1800	14321	12889	50.7	91.2	157
BXRC-57E10K1-C-7X	5700	80	1710	18157	16341	68.1	116.4	156
BXRC-57E10K1-D-7X	5700	80	2100	12081	10873	36.6	76.8	157
BXRC-65C10K1-B-7X	6500	70	1800	15079	13571	50.7	91.2	165
BXRC-65C10K1-C-7X	6500	70	1710	19118	17207	68.1	116.4	164
BXRC-65C10K1-D-7X	6500	70	2100	12720	11448	36.6	76.8	166
BXRC-65E10K1-B-7X	6500	80	1800	14489	13040	50.7	91.2	159
BXRC-65E10K1-C-7X	6500	80	1710	18371	16534	68.1	116.4	158
BXRC-65E10K1-D-7X	6500	80	2100	12223	11001	36.6	76.8	159

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 $T_f = T_c = 25^\circ\text{C}$. CRI values are typical for Décor Series Class A, Decor Series Street and Landmark and Décor Series Ultra 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 CRI and 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.

Performance at Commonly Used Drive Currents

Vero LED arrays are tested to the specifications shown using the nominal drive currents in Table 1. Vero 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 & 3 and the flux vs. current characteristics shown in Figures 4, 5 & 6. 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)
BXRC-17E10K0-B-74	80	900	49.6	44.7	4470	4081	100
		1200	50.5	60.6	5886	5350	97
		1800	52.0	93.6	8611	7750	92
		2700	54.1	146.1	12413	11070	85
		3600	55.8	201.0	15887	13998	79
BXRC-17E10K0-C-74	80	855	66.2	56.6	5665	5176	100
		1140	67.3	76.7	7473	6794	97
		1710	69.4	118.7	10918	9826	92
		2565	72.1	185.0	15717	13846	85
		3420	74.4	254.6	20113	17281	79
BXRC-17E10K0-D-74	80	1050	35.4	37.2	3670	3353	99
		1400	36.2	50.7	4854	4413	96
		2100	37.6	78.9	7264	6538	92
		3150	39.5	124.4	10608	9345	85
		4200	41.2	173.0	13861	11910	80
BXRC-20B10K0-C-73	65	855	66.2	56.6	9667	8832	171
		1140	67.3	76.7	12752	11594	166
		1710	69.4	118.7	18632	16769	157
		2565	72.1	185.0	26822	23628	145
		3420	74.4	254.6	34323	29491	135
BXRC-20B10K0-D-73	65	1050	35.4	37.2	6263	5722	168
		1400	36.2	50.7	8283	7530	163
		2100	37.6	78.9	12397	11157	157
		3150	39.5	124.4	18102	15947	145
		4200	41.2	173.0	23654	20324	137
BXRC-25E10K0-B-74	80	900	49.6	44.7	7434	6786	166
		1200	50.5	60.6	9789	8898	162
		1800	52.0	93.6	14321	12889	153
		2700	54.1	146.1	20643	18410	141
		3600	55.8	201.0	26421	23279	131
BXRC-25E10K0-C-74	80	855	66.2	56.6	9421	8607	167
		1140	67.3	76.7	12427	11298	162
		1710	69.4	118.7	18157	16341	153
		2565	72.1	185.0	26138	23026	141
		3420	74.4	254.6	33448	28739	131
BXRC-25E10K0-D-74	80	1050	35.4	37.2	6103	5576	164
		1400	36.2	50.7	8072	7339	159
		2100	37.6	78.9	12081	10873	153
		3150	39.5	124.4	17641	15540	142
		4200	41.2	173.0	23051	19806	133

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)
BXRC-27E10K0-B-7x	80	900	49.6	44.7	7774	7097	174
		1200	50.5	60.6	10237	9305	169
		1800	52.0	93.6	14976	13478	160
		2700	54.1	146.1	21588	19252	148
		3600	55.8	201.0	27630	24344	137
BXRC-27E10K0-C-7x	80	855	66.2	56.6	9852	9001	174
		1140	67.3	76.7	12996	11815	169
		1710	69.4	118.7	18988	17089	160
		2565	72.1	185.0	27334	24080	148
		3420	74.4	254.6	34979	30054	137
BXRC-27E10K0-D-7x	80	1050	35.4	37.2	6382	5831	172
		1400	36.2	50.6	8441	7674	167
		2100	37.6	79.0	12634	11370	160
		3150	39.5	124.4	18448	16251	148
		4200	41.2	172.9	24106	20712	139
BXRC-27G1KH0-B-7x	90	900	49.6	44.7	6657	6076	149
		1200	50.5	60.6	8765	7968	145
		1800	52.0	93.6	12823	11541	137
		2700	54.1	146.1	18484	16485	127
		3600	55.8	201.0	23658	20844	118
BXRC-27G1KH0-C-7x	90	855	66.2	56.6	8436	7707	149
		1140	67.3	76.7	11128	10117	145
		1710	69.4	118.7	16258	14633	137
		2565	72.1	185.0	23405	20618	127
		3420	74.4	254.6	29951	25734	118
BXRC-27G1KH0-D-7x	90	1050	35.4	37.2	5465	4993	147
		1400	36.2	50.6	7228	6571	143
		2100	37.6	79.0	10818	9736	137
		3150	39.5	124.4	15796	13915	127
		4200	41.2	172.9	20641	17735	119
BXRC-27G10K0-B-7x	90	900	49.6	44.7	6414	5855	144
		1200	50.5	60.6	8445	7677	139
		1800	52.0	93.6	12355	11120	132
		2700	54.1	146.1	17810	15883	122
		3600	55.8	201.0	22795	20084	113
BXRC-27G10K0-C-7x	90	855	66.2	56.6	8128	7426	144
		1140	67.3	76.7	10721	9747	140
		1710	69.4	118.7	15665	14098	132
		2565	72.1	185.0	22551	19866	122
		3420	74.4	254.6	28857	24795	113
BXRC-27G10K0-D-7x	90	1050	35.4	37.2	5265	4811	142
		1400	36.2	50.6	6964	6331	138
		2100	37.6	79.0	10423	9380	132
		3150	39.5	124.4	15220	13407	122
		4200	41.2	172.9	19888	17088	115

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)
BXRC-27H10K0-D-7x	97	1050	35.4	37.2	4669	4266	125
		1400	36.2	50.6	6176	5615	122
		2100	37.6	79.0	9243	8319	117
		3150	39.5	124.4	13497	11890	109
		4200	41.2	172.9	17637	15154	102
BXRC-30C10K1-B-74	70	900	49.6	44.7	9464	9006	212
		1200	50.5	60.6	12029	11096	199
		1800	52.0	93.6	16661	14995	178
		2700	54.1	146.1	23635	20328	162
		3600	55.8	201.0	29625	24893	147
BXRC-30C10K1-C-74	70	855	66.2	56.6	10960	10014	194
		1140	67.3	76.7	14458	13144	188
		1710	69.4	118.7	21124	19012	178
		2565	72.1	185.0	30409	26789	164
		3420	74.4	254.6	38914	33435	153
BXRC-30C10K1-D-74	70	1050	35.4	37.2	7100	6487	191
		1400	36.2	50.6	9391	8538	185
		2100	37.6	79.0	14055	12649	178
		3150	39.5	124.4	20523	18080	165
		4200	41.2	172.9	26818	23042	155
BXRC-30E10K0-B-7x	80	900	49.6	44.7	8260	7540	185
		1200	50.5	60.6	10876	9887	180
		1800	52.0	93.6	15912	14321	170
		2700	54.1	146.1	22937	20455	157
		3600	55.8	201.0	29357	25865	146
BXRC-30E10K0-C-7x	80	855	66.2	56.6	10468	9564	185
		1140	67.3	76.7	13808	12554	180
		1710	69.4	118.7	20175	18157	170
		2565	72.1	185.0	29043	25585	157
		3420	74.4	254.6	37165	31933	146
BXRC-30E10K0-D-7x	80	1050	35.4	37.2	6781	6195	182
		1400	36.2	50.6	8969	8154	177
		2100	37.6	79.0	13423	12081	170
		3150	39.5	124.4	19601	17267	158
		4200	41.2	172.9	25613	22007	148
BXRC-30G1KH0-B-7X	90	900	49.6	44.7	6997	6387	157
		1200	50.5	60.6	9213	8375	152
		1800	52.0	93.6	13478	12131	144
		2700	54.1	146.1	19429	17327	133
		3600	55.8	201.0	24867	21909	124
BXRC-30G1KH0-C-7x	90	855	66.2	56.6	8867	8101	157
		1140	67.3	76.7	11696	10634	152
		1710	69.4	118.7	17089	15380	144
		2565	72.1	185.0	24601	21672	133
		3420	74.4	254.6	31481	27049	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)
BXRC-30G1KH0-D-7x	90	1050	35.4	37.2	5744	5248	154
		1400	36.2	50.6	7597	6907	150
		2100	37.6	79.0	11370	10233	144
		3150	39.5	124.4	16603	14626	134
		4200	41.2	172.9	21695	18641	125
BXRC-30G10K0-B-7x	90	900	49.6	44.7	6705	6121	150
		1200	50.5	60.6	8829	8026	146
		1800	52.0	93.6	12917	11625	138
		2700	54.1	146.1	18619	16605	127
		3600	55.8	201.0	23831	20997	119
BXRC-30G10K0-C-7x	90	855	66.2	56.6	8497	7763	150
		1140	67.3	76.7	11209	10191	146
		1710	69.4	118.7	16377	14739	138
		2565	72.1	185.0	23576	20769	127
		3420	74.4	254.6	30169	25922	119
BXRC-30G10K0-D-7x	90	1050	35.4	37.2	5505	5029	148
		1400	36.2	50.6	7280	6619	144
		2100	37.6	79.0	10896	9807	138
		3150	39.5	124.4	15911	14017	128
		4200	41.2	172.9	20792	17864	120
BXRC-30H10K0-D-7x	97	1050	35.4	37.2	4986	4555	134
		1400	36.2	50.6	6595	5996	130
		2100	37.6	79.0	9870	8883	125
		3150	39.5	124.4	14412	12696	116
		4200	41.2	172.9	18833	16182	109
BXRC-30A10K1-B-73	93	900	49.6	44.7	6025	5500	135
		1200	50.5	60.6	7933	7212	131
		1800	52.0	93.6	11606	10446	124
		2700	54.1	146.1	16730	14920	115
		3600	55.8	201.0	21413	18867	107
BXRC-30A10K1-C-73	93	855	66.2	56.6	7635	6976	135
		1140	67.3	76.7	10072	9157	131
		1710	69.4	118.7	14716	13244	124
		2565	72.1	185.0	21184	18662	115
		3420	74.4	254.6	27109	23292	106
BXRC-30A10K1-D-73	93	1050	35.4	37.2	4946	4519	133
		1400	36.2	50.6	6542	5948	129
		2100	37.6	79.0	9791	8812	124
		3150	39.5	124.4	14297	12595	115
		4200	41.2	172.9	18682	16052	108
BXRC-35E10K0-B-7x	80	900	49.6	44.7	8455	7718	189
		1200	50.5	60.6	11132	10119	184
		1800	52.0	93.6	16286	14658	174
		2700	54.1	146.1	23477	20937	161
		3600	55.8	201.0	30047	26474	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 ± 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)
BXRC-35E10K0-C-7x	80	855	66.2	56.6	10714	9789	189
		1140	67.3	76.7	14133	12849	184
		1710	69.4	118.7	20649	18584	174
		2565	72.1	185.0	29726	26187	161
		3420	74.4	254.6	38039	32684	149
BXRC-35E10K0-D-7x	80	1050	35.4	37.2	6941	6341	187
		1400	36.2	50.6	9180	8346	181
		2100	37.6	79.0	13739	12365	174
		3150	39.5	124.4	20062	17673	161
		4200	41.2	172.9	26215	22525	152
BXRC-35G10K0-B-7x	90	900	49.6	44.7	6948	6343	156
		1200	50.5	60.6	9149	8317	151
		1800	52.0	93.6	13385	12046	143
		2700	54.1	146.1	19294	17207	132
		3600	55.8	201.0	24694	21757	123
BXRC-35G10K0-C-7x	90	855	66.2	56.6	8805	8045	156
		1140	67.3	76.7	11615	10560	151
		1710	69.4	118.7	16970	15273	143
		2565	72.1	185.0	24430	21521	132
		3420	74.4	254.6	31262	26861	123
BXRC-35G10K0-D-7x	90	1050	35.4	37.2	5704	5211	153
		1400	36.2	50.6	7544	6859	149
		2100	37.6	79.0	11291	10162	143
		3150	39.5	124.4	16488	14525	133
		4200	41.2	172.9	21545	18512	125
BXRC-35A10K1-B-73	93	900	49.6	44.7	6414	5855	144
		1200	50.5	60.6	8445	7677	139
		1800	52.0	93.6	12355	11120	132
		2700	54.1	146.1	17810	15883	122
		3600	55.8	201.0	22795	20084	113
BXRC-35A10K1-C-73	93	855	66.2	56.6	8128	7426	144
		1140	67.3	76.7	10721	9747	140
		1710	69.4	118.7	15665	14098	132
		2565	72.1	185.0	22551	19866	122
		3420	74.4	254.6	28857	24795	113
BXRC-35A10K1-D-73	93	1050	35.4	37.2	5265	4811	142
		1400	36.2	50.6	6964	6331	138
		2100	37.6	79.0	10423	9380	132
		3150	39.5	124.4	15220	13407	122
		4200	41.2	172.9	19888	17088	115
BXRC-40C10K1-B-74	70	900	49.6	44.7	8892	8117	199
		1200	50.5	60.6	11708	10643	193
		1800	52.0	93.6	17129	15416	183
		2700	54.1	146.1	24691	22020	169
		3600	55.8	201.0	31602	27843	157

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)
BXRC-40C10K1-C-74	70	855	66.2	56.6	11268	10295	199
		1140	67.3	76.7	14864	13514	194
		1710	69.4	118.7	21717	19546	183
		2565	72.1	185.0	31263	27541	169
		3420	74.4	254.6	40007	34375	157
BXRC-40C10K1-D-74	70	1050	35.4	37.2	7300	6669	196
		1400	36.2	50.6	9654	8777	191
		2100	37.6	79.0	14450	13005	183
		3150	39.5	124.4	21100	18587	170
		4200	41.2	172.9	27571	23690	159
BXRC-40E10K0-B-7x	80	900	49.6	44.7	8503	7762	190
		1200	50.5	60.6	11196	10178	185
		1800	52.0	93.6	16380	14742	175
		2700	54.1	146.1	23611	21057	162
		3600	55.8	201.0	30220	26626	150
BXRC-40E10K0-C-7x	80	855	66.2	56.6	10776	9845	190
		1140	67.3	76.7	14214	12923	185
		1710	69.4	118.7	20768	18691	175
		2565	72.1	185.0	29897	26337	162
		3420	74.4	254.6	38258	32872	150
BXRC-40E10K0-D-7x	80	1050	35.4	37.2	6981	6378	188
		1400	36.2	50.6	9232	8394	182
		2100	37.6	79.0	13818	12436	175
		3150	39.5	124.4	20177	17775	162
		4200	41.2	172.9	26366	22654	152
BXRC-40G10K0-B-7X	90	900	49.6	44.7	7094	6476	159
		1200	50.5	60.6	9341	8491	154
		1800	52.0	93.6	13666	12299	146
		2700	54.1	146.1	19699	17568	135
		3600	55.8	201.0	25212	22214	125
BXRC-40G10K0-C-7X	90	855	66.2	56.6	8990	8213	159
		1140	67.3	76.7	11859	10781	155
		1710	69.4	118.7	17326	15594	146
		2565	72.1	185.0	24942	21973	135
		3420	74.4	254.6	31918	27425	125
BXRC-40G10K0-D-7X	90	1050	35.4	37.2	5824	5321	157
		1400	36.2	50.6	7702	7003	152
		2100	37.6	79.0	11528	10375	146
		3150	39.5	124.4	16834	14829	135
		4200	41.2	172.9	21997	18900	127
BXRC-40H10K0-D-7x	97	1050	35.4	37.2	5265	4811	142
		1400	36.2	50.6	6964	6331	138
		2100	37.6	79.0	10423	9380	132
		3150	39.5	124.4	15220	13407	122
		4200	41.2	172.9	19888	17088	115

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)
BXRC-40A10K1-B-73	93	900	49.6	44.7	6948	6343	156
		1200	50.5	60.6	9149	8317	151
		1800	52.0	93.6	13385	12046	143
		2700	54.1	146.1	19294	17207	132
		3600	55.8	201.0	24694	21757	123
BXRC-40A10K1-C-73	93	855	66.2	56.6	8805	8045	156
		1140	67.3	76.7	11615	10560	151
		1710	69.4	118.7	16970	15273	143
		2565	72.1	185.0	24430	21521	132
		3420	74.4	254.6	31262	26861	123
BXRC-40A10K1-D-73	93	1050	35.4	37.2	5704	5211	153
		1400	36.2	50.6	7544	6859	149
		2100	37.6	79.0	11291	10162	143
		3150	39.5	124.4	16488	14525	133
		4200	41.2	172.9	21545	18512	125
BXRC-50C10K1-B-7x	70	900	49.6	44.7	8941	8161	200
		1200	50.5	60.6	11772	10701	194
		1800	52.0	93.6	17222	15500	184
		2700	54.1	146.1	24826	22140	170
		3600	55.8	201.0	31774	27995	158
BXRC-50C10K1-C-7x	70	855	66.2	56.6	11330	10351	200
		1140	67.3	76.7	14945	13587	195
		1710	69.4	118.7	21836	19652	184
		2565	72.1	185.0	31434	27691	170
		3420	74.4	254.6	40226	34562	158
BXRC-50C10K1-D-7x	70	1050	35.4	37.2	7340	6706	197
		1400	36.2	50.6	9707	8825	192
		2100	37.6	79.0	14529	13076	184
		3150	39.5	124.4	21215	18689	171
		4200	41.2	172.9	27722	23819	160
BXRC-50E10K1-B-7x	80	900	49.6	44.7	8600	7851	193
		1200	50.5	60.6	11324	10294	187
		1800	52.0	93.6	16567	14910	177
		2700	54.1	146.1	23881	21298	164
		3600	55.8	201.0	30565	26930	152
BXRC-50E10K1-C-7x	80	855	66.2	56.6	10899	9957	193
		1140	67.3	76.7	14376	13070	187
		1710	69.4	118.7	21005	18905	177
		2565	72.1	185.0	30238	26638	163
		3420	74.4	254.6	38695	33248	152
BXRC-50E10K1-D-7x	80	1050	35.4	37.2	7060	6450	190
		1400	36.2	50.6	9338	8490	184
		2100	37.6	79.0	13976	12578	177
		3150	39.5	124.4	20408	17978	164
		4200	41.2	172.9	26667	22913	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)
BXRC-50G10K1-B-7x	90	900	49.6	44.7	7434	6786	166
		1200	50.5	60.6	9789	8898	162
		1800	52.0	93.6	14321	12889	153
		2700	54.1	146.1	20643	18410	141
		3600	55.8	201.0	26421	23279	131
BXRC-50G10K1-C-7x	90	855	66.2	56.6	9421	8607	167
		1140	67.3	76.7	12427	11298	162
		1710	69.4	118.7	18157	16341	153
		2565	72.1	185.0	26138	23026	141
		3420	74.4	254.6	33448	28739	131
BXRC-50G10K1-D-7x	90	1050	35.4	37.2	6103	5576	164
		1400	36.2	50.6	8072	7339	159
		2100	37.6	79.0	12081	10873	153
		3150	39.5	124.4	17641	15540	142
		4200	41.2	172.9	23051	19806	133
BXRC-56G10K0-B-7x	80	900	49.6	44.7	7483	6831	168
		1200	50.5	60.6	9853	8956	163
		1800	52.0	93.6	14414	12973	154
		2700	54.1	146.1	20778	18530	142
		3600	55.8	201.0	26594	23431	132
BXRC-56G10K0-C-7x	80	855	66.2	56.6	9483	8663	168
		1140	67.3	76.7	12508	11372	163
		1710	69.4	118.7	18276	16448	154
		2565	72.1	185.0	26309	23177	142
		3420	74.4	254.6	33667	28927	132
BXRC-56G10K0-D-7x	80	1050	35.4	37.2	6143	5612	165
		1400	36.2	50.6	8125	7386	160
		2100	37.6	79.0	12160	10944	154
		3150	39.5	124.4	17756	15642	143
		4200	41.2	172.9	23202	19936	134
BXRC-56H10K1-D-74	97	1050	35.4	37.2	5545	5066	149
		1400	36.2	50.6	7333	6667	145
		2100	37.6	79.0	10975	9878	139
		3150	39.5	124.4	16027	14118	129
		4200	41.2	172.9	20942	17994	121
BXRC-57C10K1-B-7x	70	900	49.6	44.7	8698	7939	195
		1200	50.5	60.6	11452	10410	189
		1800	52.0	93.6	16754	15079	179
		2700	54.1	146.1	24151	21538	165
		3600	55.8	201.0	30911	27235	154
BXRC-57C10K1-C-7x	70	855	66.2	56.6	11022	10070	195
		1140	67.3	76.7	14539	13218	190
		1710	69.4	118.7	21243	19118	179
		2565	72.1	185.0	30580	26939	165
		3420	74.4	254.6	39132	33623	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)
BXRC-57C10K1-D-7x	70	1050	35.4	37.2	7140	6523	192
		1400	36.2	50.6	9443	8586	186
		2100	37.6	79.0	14134	12720	179
		3150	39.5	124.4	20639	18181	166
		4200	41.2	172.9	26969	23172	156
BXRC-57E10K1-B-7x	80	900	49.6	44.7	8260	7540	185
		1200	50.5	60.6	10876	9887	180
		1800	52.0	93.6	15912	14321	170
		2700	54.1	146.1	22937	20455	157
		3600	55.8	201.0	29357	25865	146
BXRC-57E10K1-C-7x	80	855	66.2	56.6	10468	9564	185
		1140	67.3	76.7	13808	12554	180
		1710	69.4	118.7	20175	18157	170
		2565	72.1	185.0	29043	25585	157
		3420	74.4	254.6	37165	31933	146
BXRC-57E10K1-D-7x	80	1050	35.4	37.2	6781	6195	182
		1400	36.2	50.6	8969	8154	177
		2100	37.6	79.0	13423	12081	170
		3150	39.5	124.4	19601	17267	158
		4200	41.2	172.9	25613	22007	148
BXRC-65C10K1-B-7x	70	900	49.6	44.7	8698	7939	195
		1200	50.5	60.6	11452	10410	189
		1800	52.0	93.6	16754	15079	179
		2700	54.1	146.1	24151	21538	165
		3600	55.8	201.0	30911	27235	154
BXRC-65C10K1-C-7x	70	855	66.2	56.6	11022	10070	195
		1140	67.3	76.7	14539	13218	190
		1710	69.4	118.7	21243	19118	179
		2565	72.1	185.0	30580	26939	165
		3420	74.4	254.6	39132	33623	154
BXRC-65C10K1-D-7x	70	1050	35.4	37.2	7140	6523	192
		1400	36.2	50.6	9443	8586	186
		2100	37.6	79.0	14134	12720	179
		3150	39.5	124.4	20639	18181	166
		4200	41.2	172.9	26969	23172	156
BXRC-65E10K1-B-7x	80	900	49.6	44.7	8357	7629	187
		1200	50.5	60.6	11004	10003	182
		1800	52.0	93.6	16099	14489	172
		2700	54.1	146.1	23207	20696	159
		3600	55.8	201.0	29702	26170	148
BXRC-65E10K1-C-7x	80	855	66.2	56.6	10591	9676	187
		1140	67.3	76.7	13970	12701	182
		1710	69.4	118.7	20412	18371	172
		2565	72.1	185.0	29384	25886	159
		3420	74.4	254.6	37602	32308	148

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)
BXRC-65E10K1-D-7X	80	1050	35.4	37.2	6861	6268	184
		1400	36.2	50.6	9074	8250	179
		2100	37.6	79.0	13581	12223	172
		3150	39.5	124.4	19831	17470	159
		4200	41.2	172.9	25914	22266	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.

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)
BXRC-xxx10Kx-B-7x	1800	48.1	52.0	55.9	-24.9	0.06	46.1	57.5
	3600	51.7	55.8	60.0	-24.9	0.07	49.7	61.6
BXRC-xxx10Kx-C-7x	1710	64.2	69.4	74.6	-33.2	0.04	61.5	76.8
	3420	68.8	74.4	80.0	-33.2	0.05	66.2	82.2
BXRC-xxx10Kx-D-7x	2100	34.8	37.6	40.4	-17.4	0.06	33.4	41.6
	4200	38.1	41.2	44.3	-17.4	0.07	36.7	45.4

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
BXRC-xxx10Kx-B-7x	1800	RG1	RG1	RG1	RG1
	2700	RG1	RG1	RG2	RG2
	3600	RG1	RG1	RG2	RG2
BXRC-xxx10Kx-C-7x	1710	RG1	RG1	RG1	RG2
	2565	RG1	RG1	RG2	RG2
	3420	RG1	RG2	RG2	RG2
BXRC-xxx10Kx-D-7x	2100	RG1	RG1	RG1	RG1
	3150	RG1	RG1	RG1	RG2
	4200	RG1	RG1	RG2	RG2

Notes for Table 6:

1. Eye safety classification for the use of Bridgelux Vero 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		
	BXRC-xxx10Kx-B-7x	BXRC-xxx10Kx-C-7x	BXRC-xxx10Kx-D-7x
Maximum Drive Current ³	3600mA	3420mA	4200mA
Maximum Peak Pulsed Drive Current ^{4,5}	5140mA	4890mA	6000mA
Maximum Reverse Voltage ⁶	-90V	-120V	-65V

Notes for Table 7:

1. For IEC 62717 requirement, please consult your Bridgelux sales representative.
2. Refer to Bridgelux Application Note AN31: Assembly Considerations for Bridgelux Vero LED Arrays.
3. Arrays may be driven at higher currents however lumen maintenance may be reduced.
4. Per IEC 62031, LED Modules for General Lighting - Safety Specifications, the maximum allowable current when using the Molex Pico Connector is 3150mA.
5. 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.
6. 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: Vero 29B Drive Current vs. Voltage

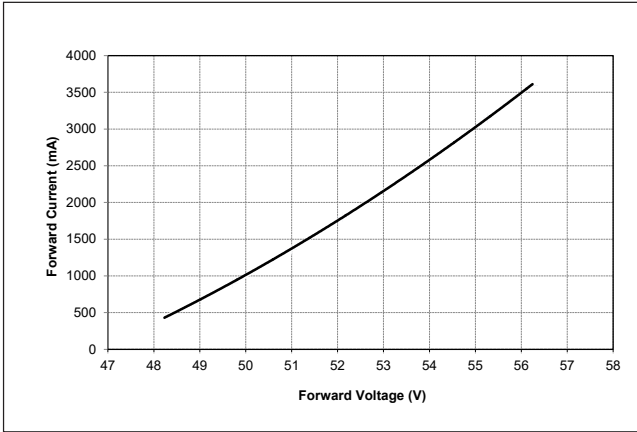


Figure 2: Vero 29C Drive Current vs. Voltage

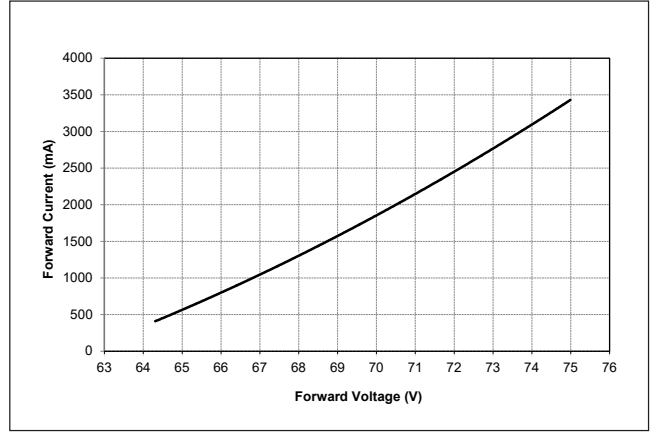


Figure 3: Vero 29D Drive Current vs. Voltage

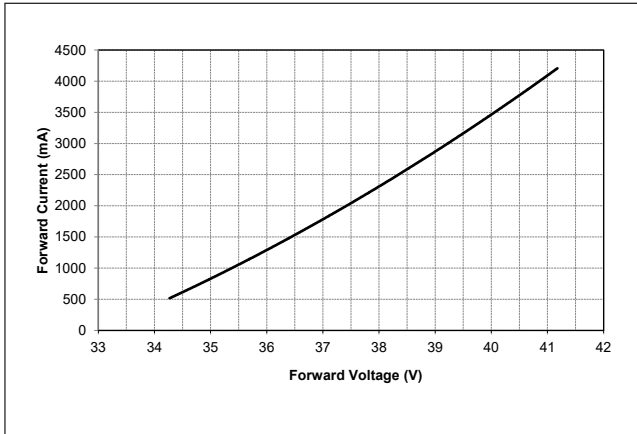


Figure 4: Vero 29B Typical Relative Flux vs. Current

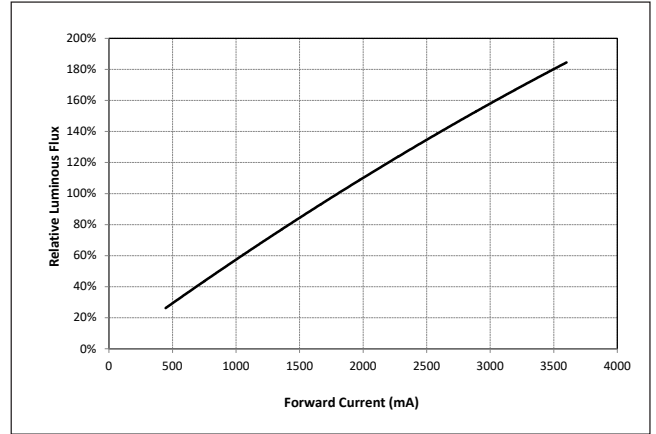


Figure 5: Vero 29C Typical Relative Flux vs. Current

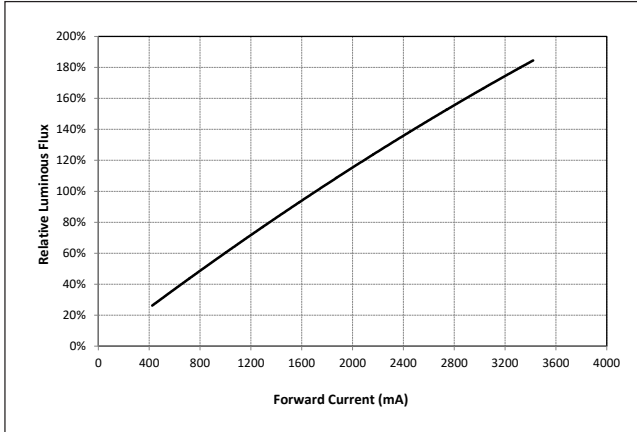
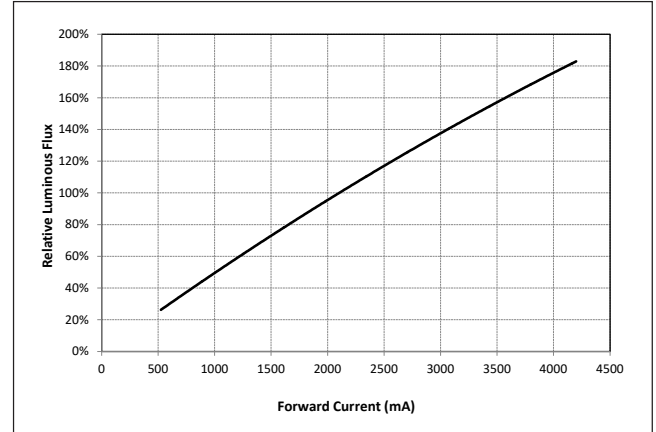


Figure 6: Vero 29D Typical Relative Flux vs. Current



Notes for Figures 1-6:

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 7: Typical DC Flux vs. Case Temperature

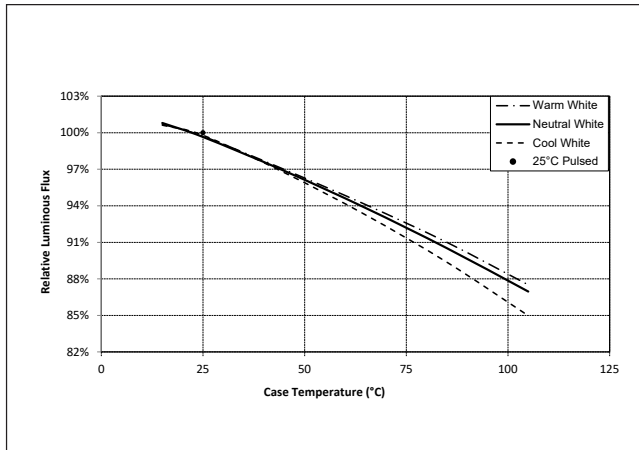


Figure 8: Typical DC ccy Shift vs. Case Temperature

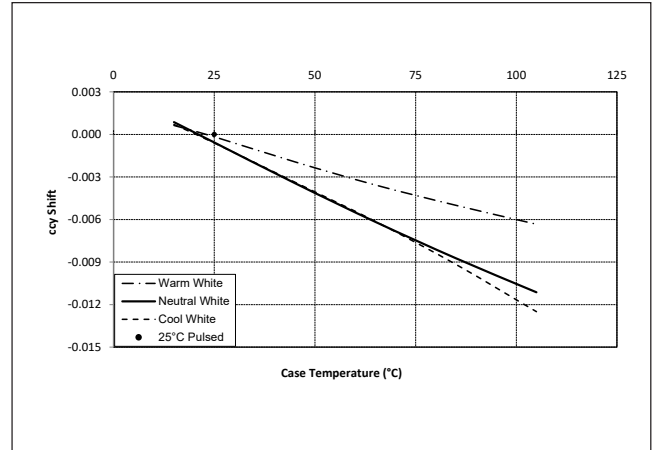


Figure 9: Typical DC ccx Shift vs. Case Temperature

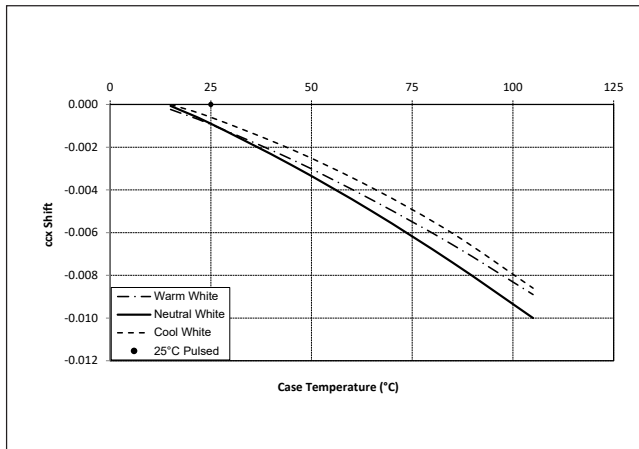
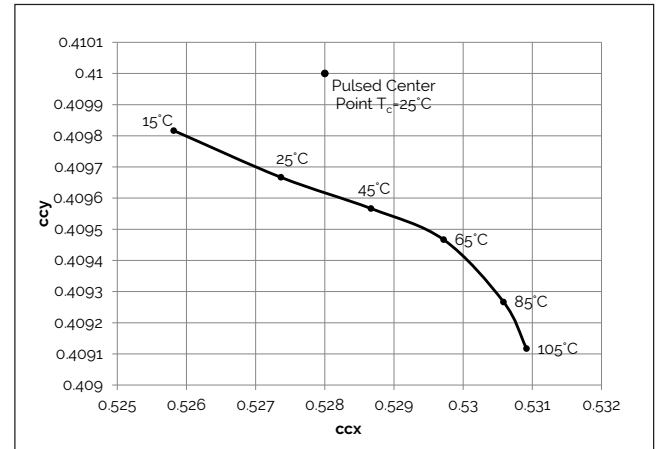


Figure 10: 2000K, 65 CRI Color Shift vs. Case Temperature



Notes for Figures 7 - 9:

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 11: 1750K Color Shift vs. Case Temperature¹

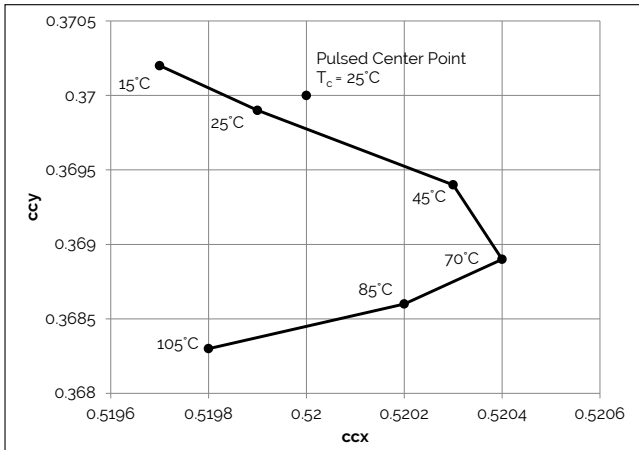


Figure 12: 2500K Color Shift vs. Case Temperature¹

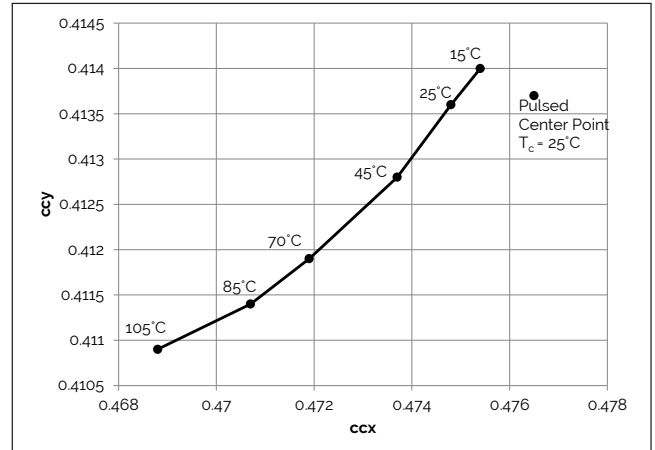


Figure 13: 5600K Color Shift vs. Case Temperature^{1,3}

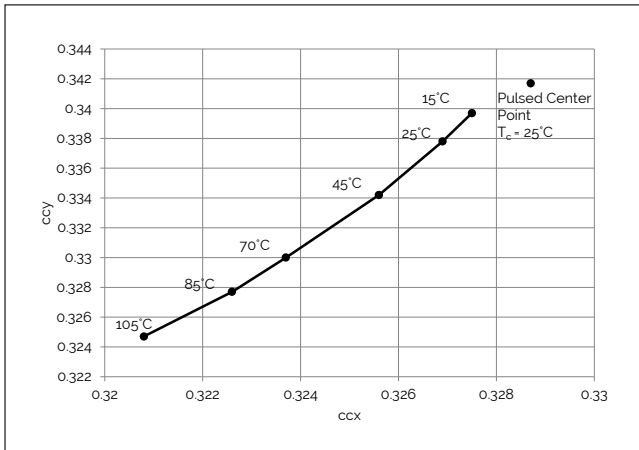


Figure 14: 3000K, Class A Color Shift vs. Case Temperature¹

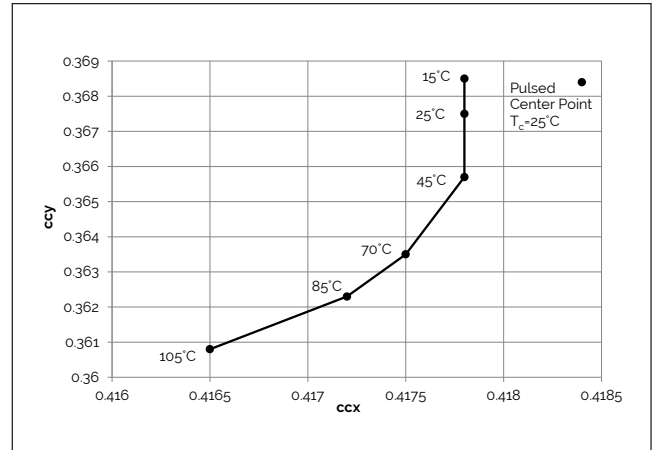


Figure 15: 3500K, Class A Color Shift vs. Case Temperature¹

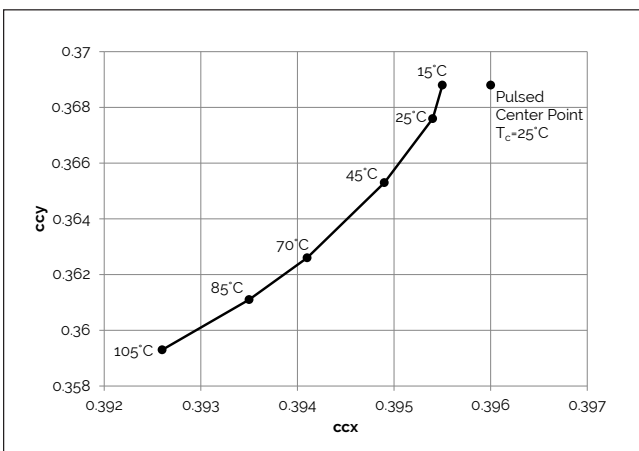
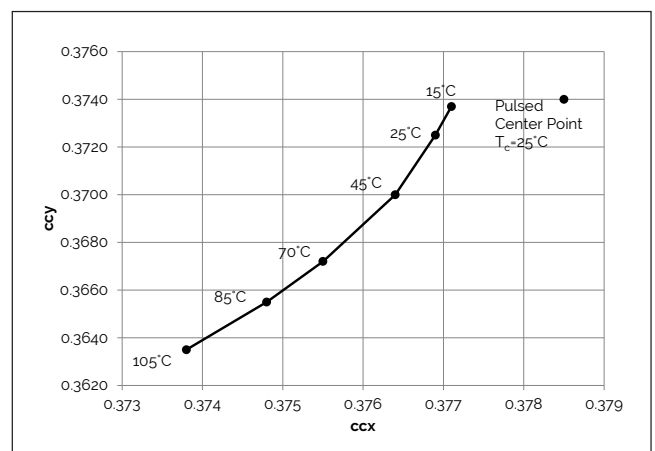


Figure 16: 4000K, Class A Color Shift vs. Case Temperature¹

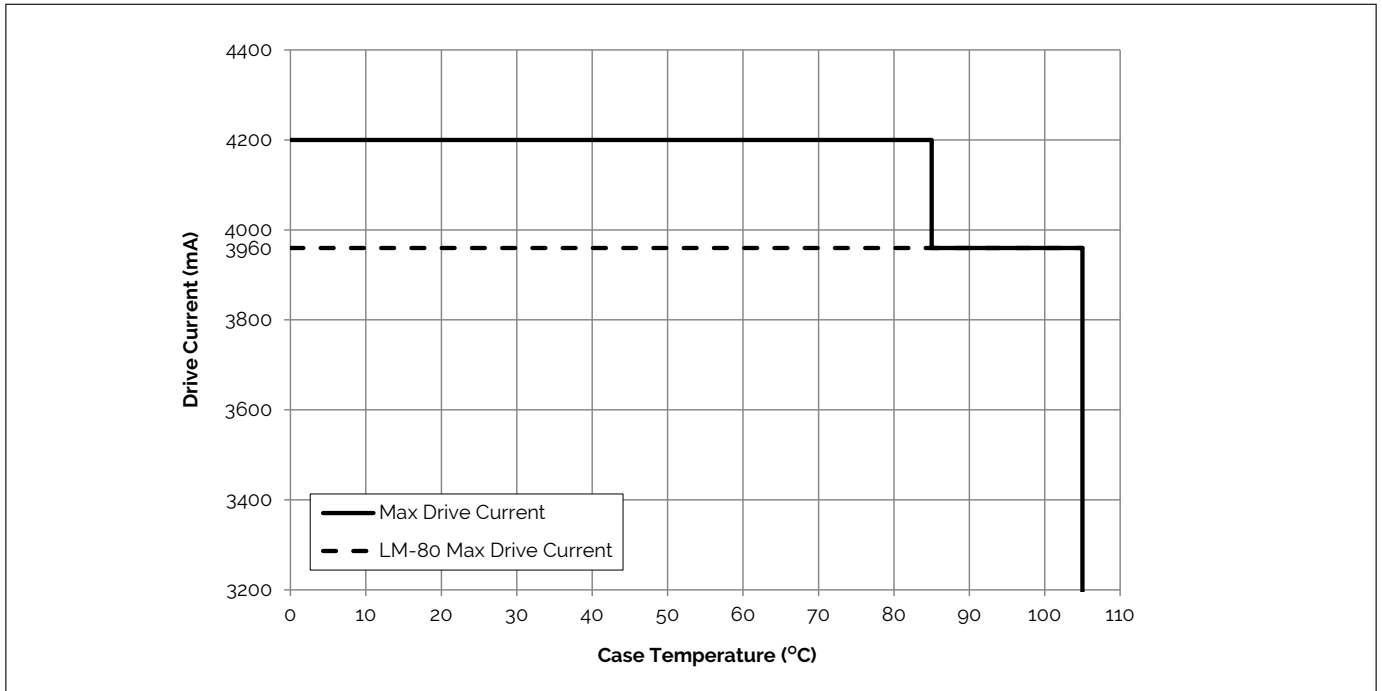


Note for Figures 10-16:

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. Color shift shown for product hot targeted at $T_c = 85^\circ\text{C}$

Performance Curves

Figure 17: Vero 29D Drive Current Derating Curve

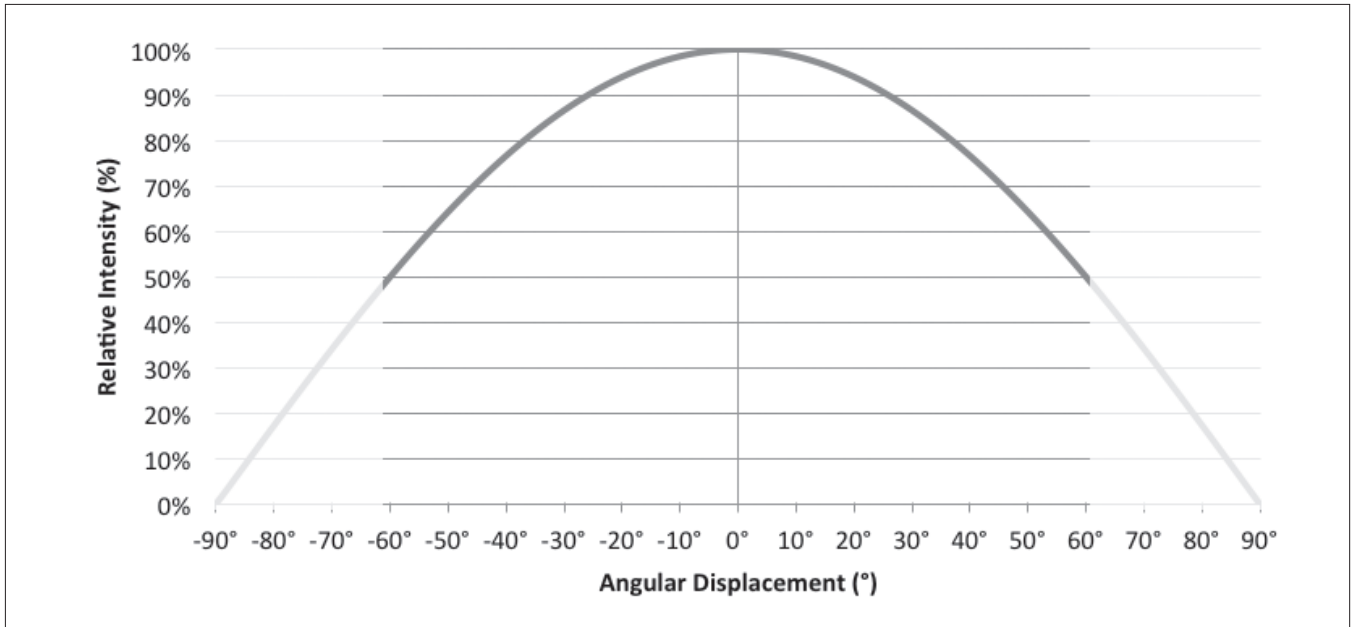


Notes for Figure 17:

1. The maximum allowable drive current for the Vero 29D product is dependent on the operating case temperature. Please refer to the Product Feature Map (page 2) for the location of the T_c Point
2. LM-80 Max Drive Current must not be exceeded in order to meet LM-80 lifetime projections.
3. Lumen maintenance (L70) and lifetime predictions are valid for drive current and case temperature conditions used for LM-80 testing as included in the applicable LM-80 test report for these products. Contact your Bridgelux sales representative for LM-80 report.

Typical Radiation Pattern

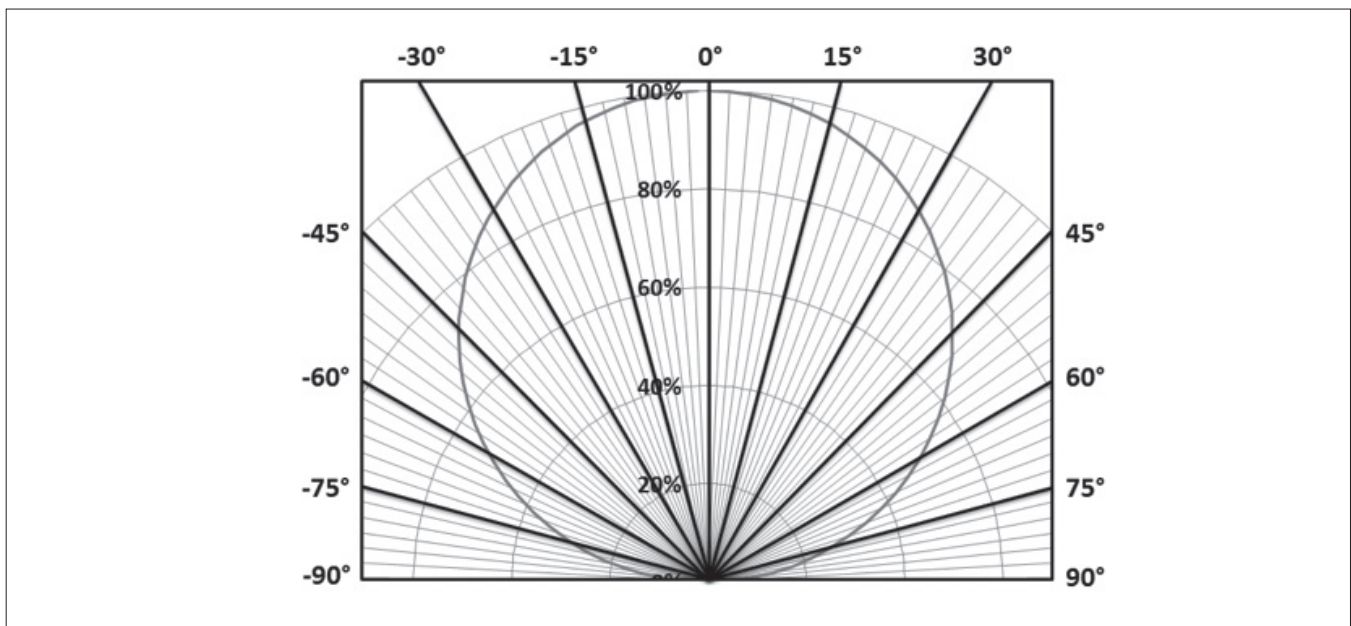
Figure 18: Typical Spatial Radiation Pattern



Note for Figure 18:

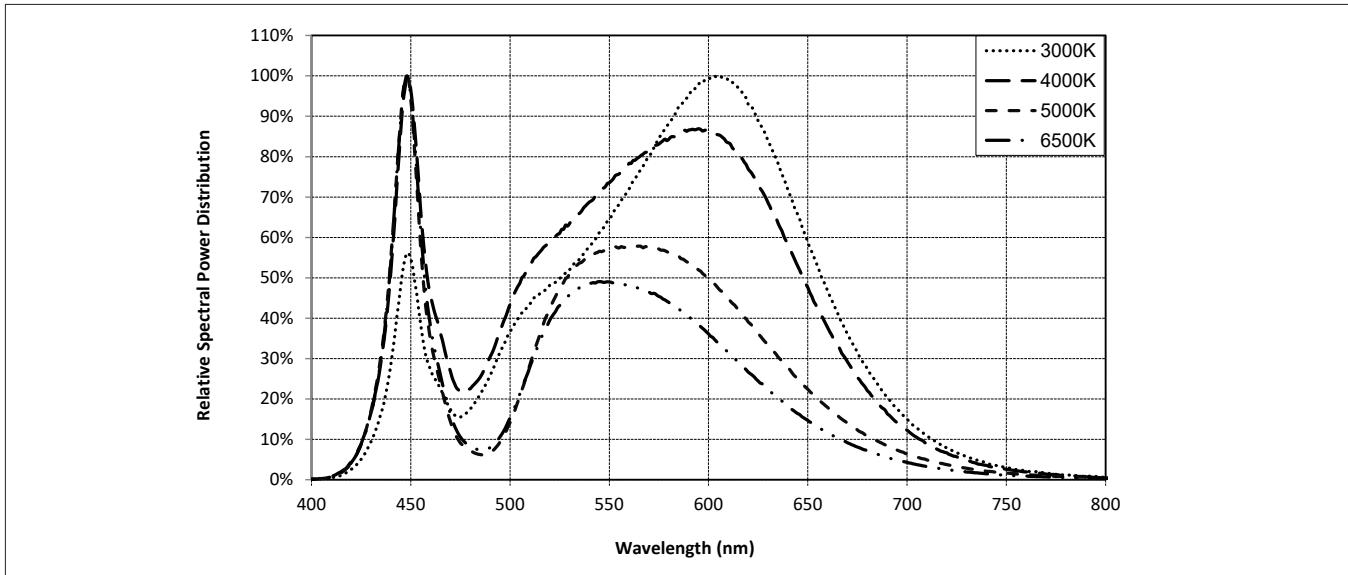
1. Typical viewing angle is 120°.
2. The viewing angle is defined as the off axis angle from the centerline where intensity is ½ of the peak value.

Figure 19: Typical Polar Radiation Pattern



Typical Color Spectrum

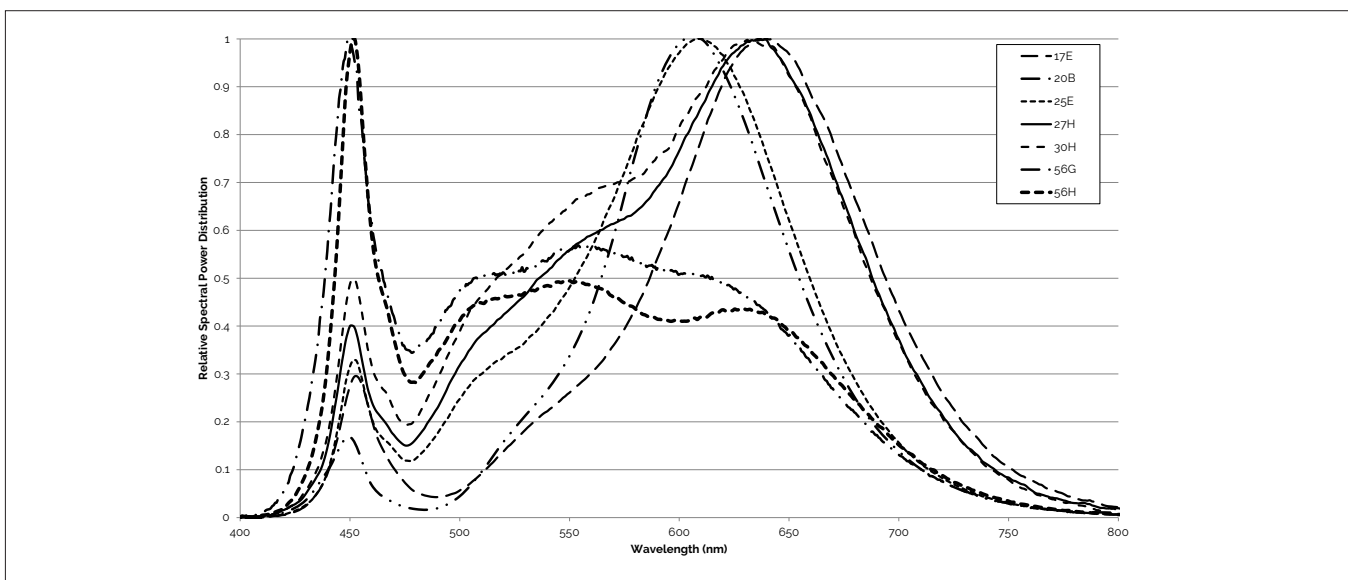
Figure 20: Typical Color Spectrum



Note for Figure 20:

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 21: Typical Color Spectrum for Vero 29 with Décor Series

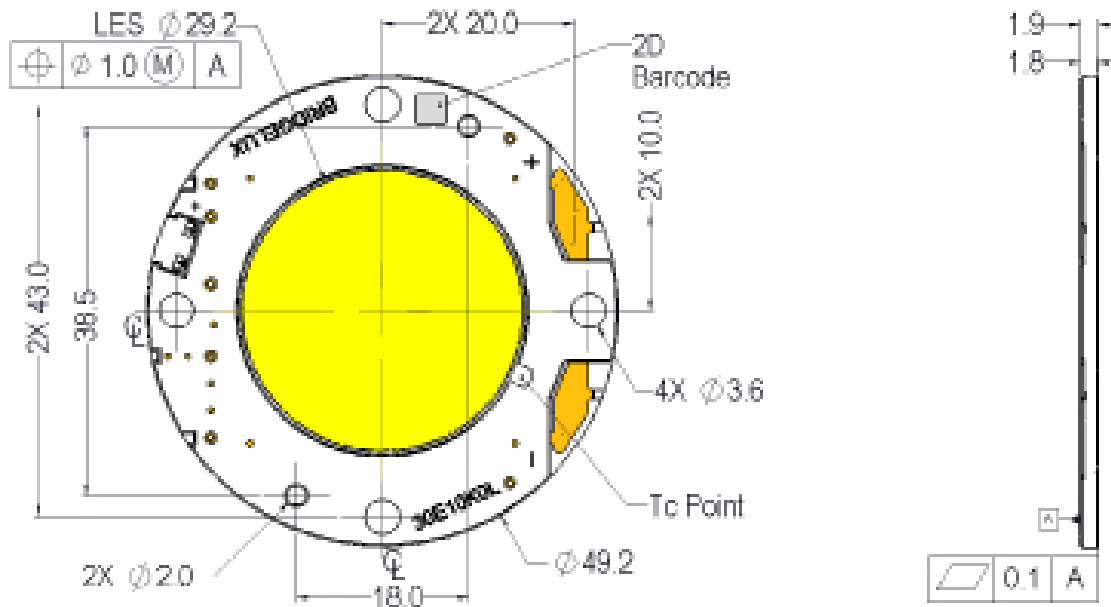


Note for Figure 21:

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

Mechanical Dimensions

Figure 22: Drawing for Vero 29 LED Array

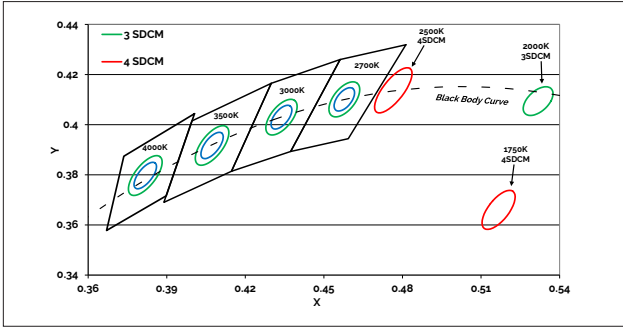


Notes for Figure 22:

1. Drawings are not to scale.
2. Drawing dimensions are in millimeters.
3. Unless otherwise specified, tolerances are $\pm 0.10\text{mm}$.
4. Mounting holes (4X) are for M3 screws.
5. Bridgelux recommends four tapped holes for mounting screws with $43.0 \pm 0.10\text{mm}$ center-to-center spacing.
6. Screws with flat shoulders (pan, dome, button, round, truss, mushroom) provide optimal torque control. Do NOT use flat, countersink, or raised head screws.
7. Solder pads and connector port are labeled "+" and "-" to denote positive and negative, respectively.
8. It is not necessary to provide electrical connections to both the solder pads and the connector port. Either set may be used depending on application specific design requirements.
9. Refer to Application Notes AN30 and AN31 for product handling, mounting and heat sink recommendations.
10. The optical center of the LED Array is nominally defined by the mechanical center of the array to a tolerance of $\pm 0.2\text{mm}$.
11. Bridgelux maintains a flatness of 0.10mm across the mounting surface of the array.

Color Binning Information

Figure 23: Graph of Warm and Neutral White Test Bins in xy Color Space



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

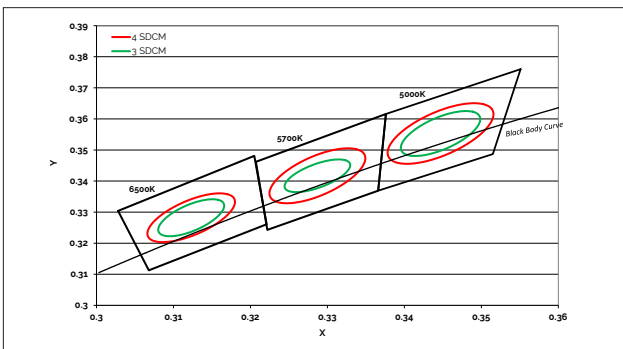
Table 8: Warm and Neutral White xy Bin Coordinates and Associated Typical CCT

Bin Code	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)	(0.4073, 0.3917)	(0.3818, 0.3797)

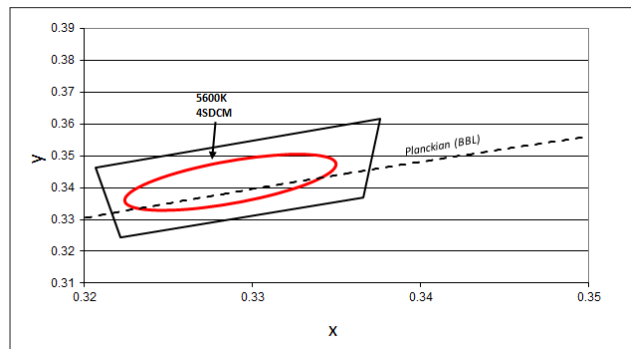
Note for Table 8:

1. Color Binning information excludes Decor Series Class A products. Please contact your Bridgelux Sales Representative for more information.

Figure 24: Graph of Cool White Test Bins in xy Color Space



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



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

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

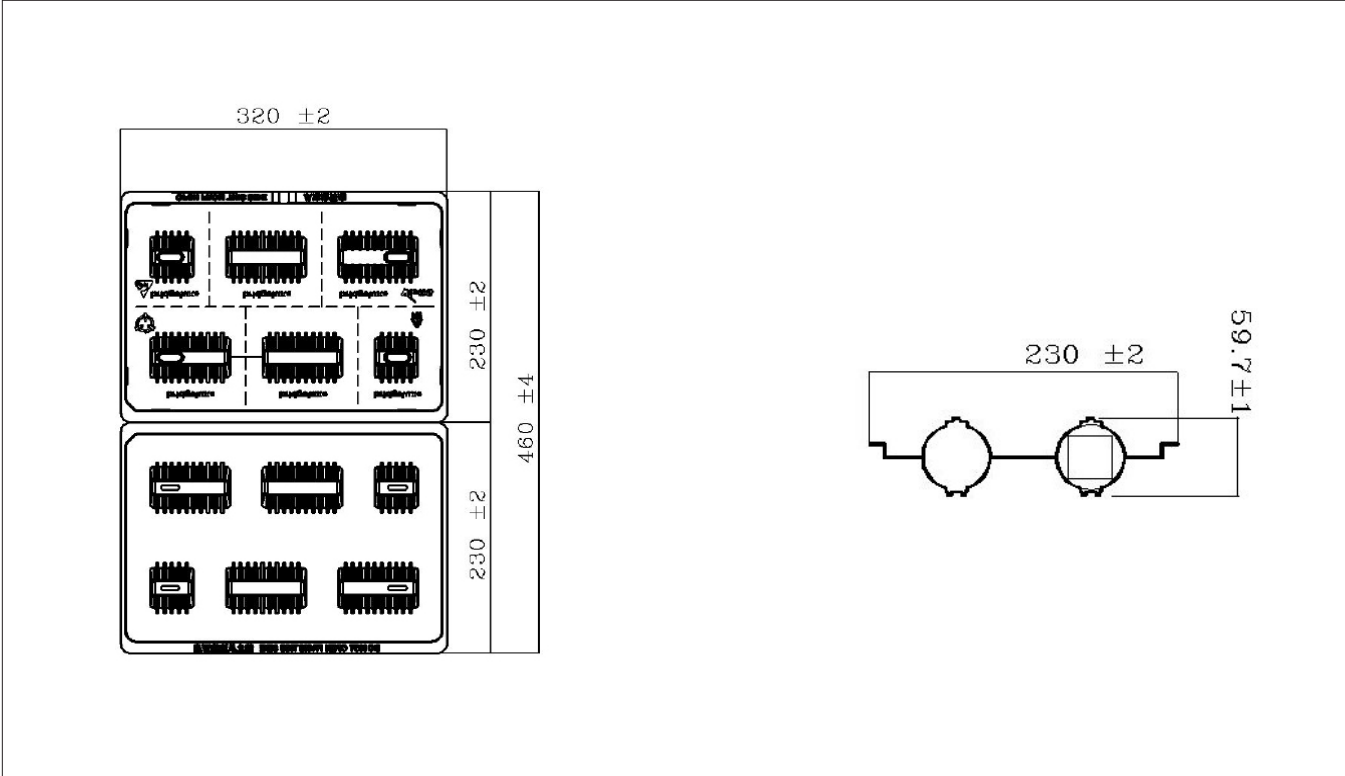
Bin Code	5000K	5600K ¹	5700K	6500K
ANSI Bin (for reference only)	(4745K - 5311K)	(5310K - 6020K)	(5312K - 6022K)	(6022K - 7042K)
74 (4 SDCM)	(4801K - 5282K)	(5475K - 5830K)	(5829K - 5481K)	(6270K - 6765K)
73 (3 SDCM)	(4835K - 5215K)	(5490K - 5820K)	(5490K - 5820K)	(6250K - 6745K)
Center Point (x,y)	(0.3447, 0.3553)	(0.3293, 0.3423)	(0.3287, 0.3417)	(0.3123, 0.3282)

Note for Table 9:

1. Select configurations with a CCT of 5600K are available with center point targets at $T_c = 85^\circ\text{C}$ or $T_c = 25^\circ\text{C}$.

Packaging and Labeling

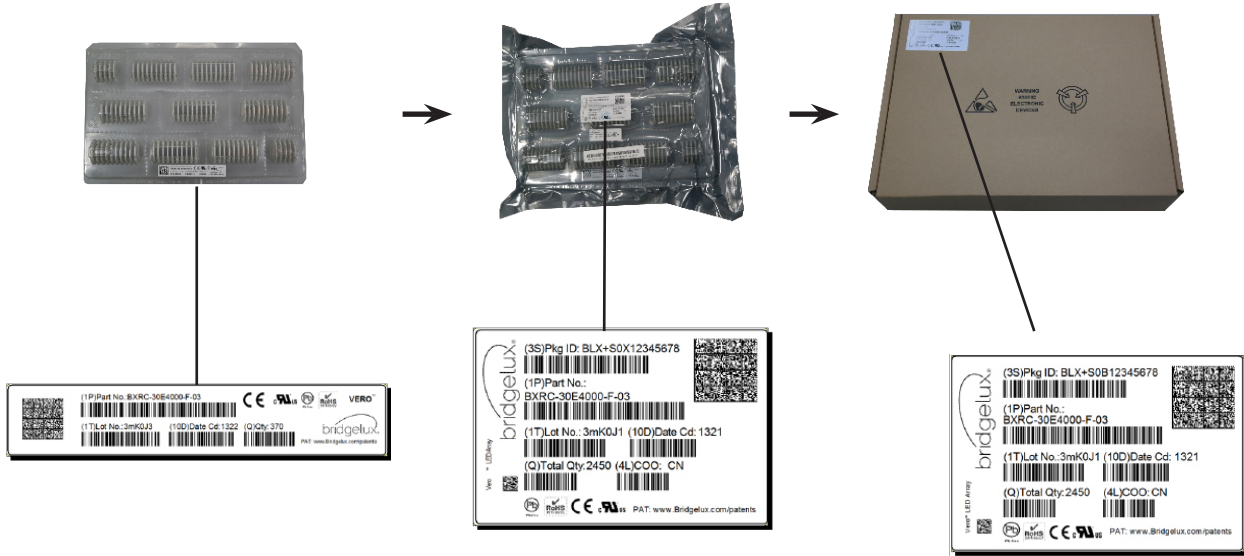
Figure 25: Drawing for Vero 29 Packaging Tray



- Notes for Figure 25:
- 1. Dimensions are in millimeters.
 - 2. Drawings are not to scale.

Packaging and Labeling

Figure 26: Vero Series Packaging and Labeling



Notes for Figure 26:

1. Each tray holds 50 COBs.
2. Each tray is vacuum sealed in an anti-static bag and placed in its own box.
3. Each tray, bag and box is to be labeled as shown above.

Figure 27: 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 Vero 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 Vero 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 AN31 for additional information.

CAUTION: RISK OF BURN

Do not touch the Vero LED array during operation. Allow the array to cool for a sufficient period of time before handling. The Vero 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). Optical devices may be mounted on the top surface of the plastic housing of the Vero LED array. Use the mechanical features of the LED array housing, edges and/or mounting holes to locate and secure optical devices as needed.

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
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youtube.com/user/Bridgelux
linkedin.com/company/bridgelux-inc-_2
WeChat ID: BridgeluxInChina



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Bridgelux Gen 7 Vero 29 Array Series Product Data Sheet DS93 Rev. R (09/2020)