



Bridgelux® Gen 7 Vero® 18 Array

Product Data Sheet DSg2



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.

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 for 3000K 80 CRI
- Lumen output performance ranges from 1,455 to 13,600 lumens
- Broad range of CCT options from 1750K to 6500K
- CRI options include minimum 65, 70, 80, 90, 95 and Class A
- 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



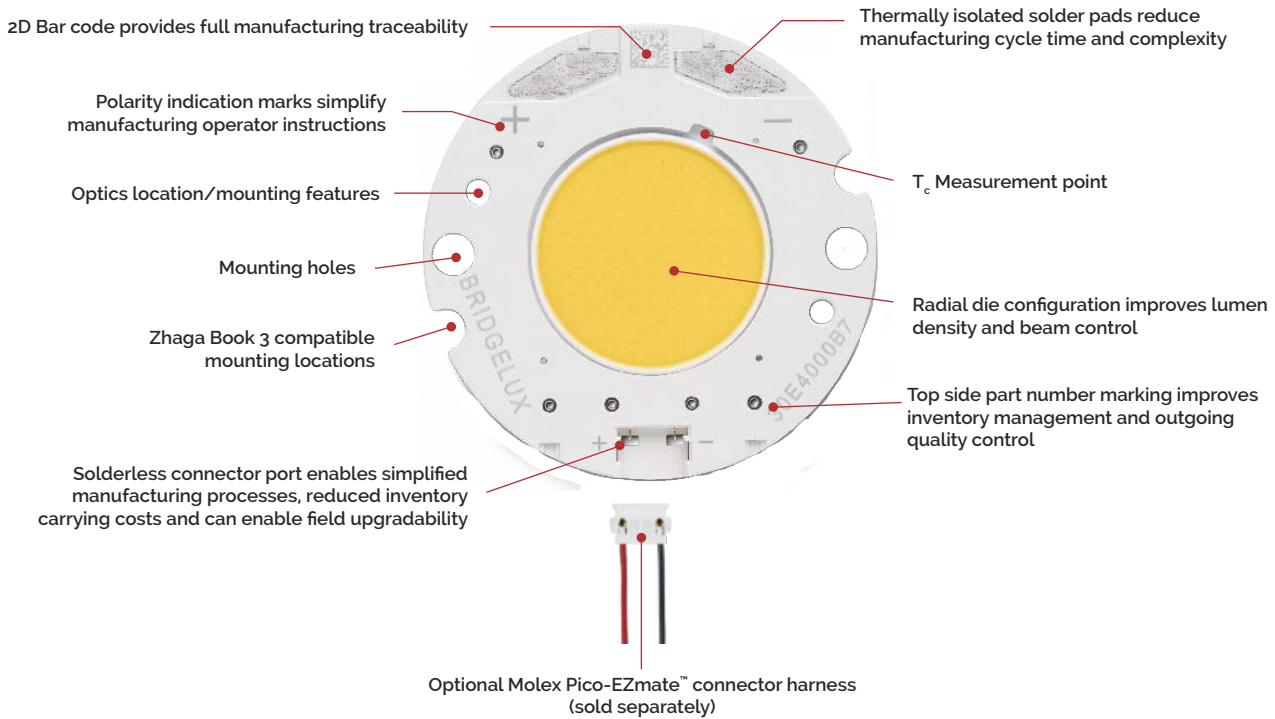
Contents

| | |
|---|----|
| Product Feature Map | 2 |
| Product Nomenclature | 2 |
| Product Selection Guide | 3 |
| European Product Registry for Energy Labeling | 10 |
| Performance at Commonly Used Drive Currents | 13 |
| Electrical Characteristics | 23 |
| Eye Safety | 24 |
| Absolute Maximum Ratings | 25 |
| Performance Curves | 26 |
| Typical Radiation Pattern | 30 |
| Typical Color Spectrum | 31 |
| Mechanical Dimensions | 32 |
| Color Binning Information | 33 |
| Packaging and Labeling | 34 |
| Design Resources | 36 |
| Precautions | 36 |
| Disclaimers | 36 |
| About Bridgelux | 37 |

Product Feature Map

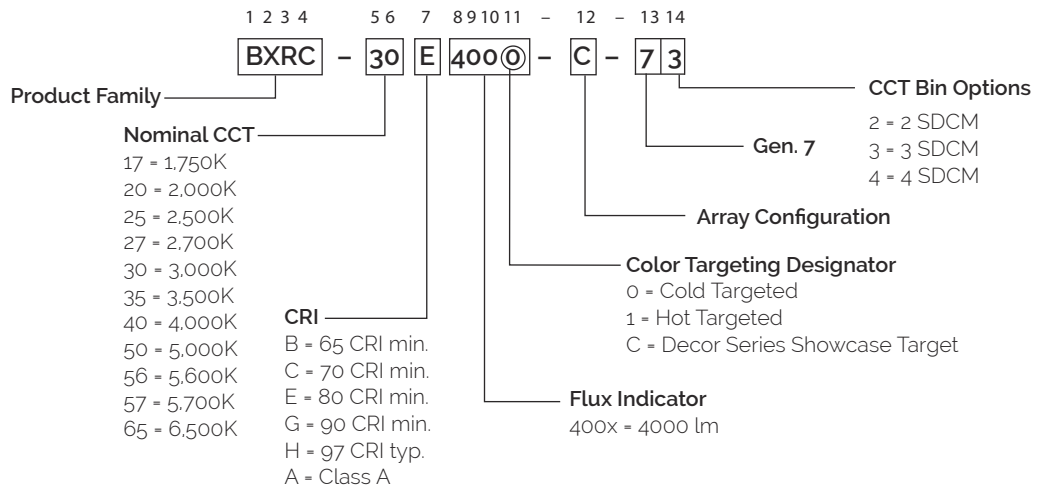
Vero 18 is the second largest form factor in the Vero family of next generation solid state light sources. In addition to delivering the performance and light quality required for many lighting applications, Vero incorporates

several features to simplify the design integration and manufacturing process, accelerate time to market and reduce system costs. Please visit www.bridgelux.com for more information on the Vero Series family of products.



Product Nomenclature

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



Product Selection Guide

The following product configurations are available:

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

| Part Number | Nominal CCT ¹ (K) | CRI ² | Nominal Drive Current ³ (mA) | Typical Pulsed Flux ^{4,5,6} $T_c = 25^\circ\text{C}$ (lm) | Minimum Pulsed Flux ^{6,7} $T_c = 25^\circ\text{C}$ (lm) | Typical V_f (V) | Typical Power (W) | Typical Efficacy (lm/W) |
|-------------------|------------------------------|------------------|---|--|--|-------------------|-------------------|-------------------------|
| BXRC-17E4000-B-7x | 1750 | 80 | 900 | 2881 | 2593 | 34.8 | 31.3 | 92 |
| BXRC-17E4000-C-7x | 1750 | 80 | 1170 | 3624 | 3261 | 34.8 | 40.7 | 89 |
| BXRC-17E4000-D-7x | 1750 | 80 | 1050 | 2710 | 2439 | 29.0 | 30.5 | 89 |
| BXRC-20B4001-C-7x | 2000 | 65 | 1170 | 6392 | 5753 | 34.8 | 40.7 | 157 |
| BXRC-20B4001-D-7x | 2000 | 65 | 1050 | 4781 | 4303 | 29.0 | 30.5 | 157 |
| BXRC-25E4000-B-7x | 2500 | 80 | 900 | 4792 | 4313 | 34.8 | 31.3 | 153 |
| BXRC-25E4000-C-7x | 2500 | 80 | 1170 | 6230 | 5607 | 34.8 | 40.7 | 153 |
| BXRC-25E4000-D-7x | 2500 | 80 | 1050 | 4659 | 4193 | 29.0 | 30.5 | 153 |
| BXRC-27E4000-B-7x | 2700 | 80 | 900 | 5011 | 4510 | 34.8 | 31.3 | 160 |
| BXRC-27E4000-C-7x | 2700 | 80 | 1170 | 6515 | 5863 | 34.8 | 40.7 | 160 |
| BXRC-27E4000-D-7x | 2700 | 80 | 1050 | 4872 | 4385 | 29.0 | 30.5 | 160 |
| BXRC-27G40H0-B-7x | 2700 | 90 | 900 | 4291 | 3862 | 34.8 | 31.3 | 137 |
| BXRC-27G40H0-C-7x | 2700 | 90 | 1170 | 5578 | 5020 | 34.8 | 40.7 | 137 |
| BXRC-27G40H0-D-7x | 2700 | 90 | 1050 | 4172 | 3754 | 29.0 | 30.5 | 137 |
| BXRC-27G4000-B-7x | 2700 | 90 | 900 | 4134 | 3721 | 34.8 | 31.3 | 132 |
| BXRC-27G4000-C-7x | 2700 | 90 | 1170 | 5375 | 4837 | 34.8 | 40.7 | 132 |
| BXRC-27G4000-D-7x | 2700 | 90 | 1050 | 4019 | 3617 | 29.0 | 30.5 | 132 |
| BXRC-27H4000-B-7x | 2700 | 97 | 900 | 3664 | 3298 | 34.8 | 31.3 | 117 |
| BXRC-27H4000-C-7x | 2700 | 97 | 1170 | 4764 | 4287 | 34.8 | 40.7 | 117 |
| BXRC-27H4000-D-7x | 2700 | 97 | 1050 | 3563 | 3206 | 29.0 | 30.5 | 117 |
| BXRC-30C4001-B-7x | 3000 | 70 | 900 | 5575 | 5017 | 34.8 | 31.3 | 178 |
| BXRC-30C4001-C-7x | 3000 | 70 | 1170 | 7247 | 6523 | 34.8 | 40.7 | 178 |
| BXRC-30C4001-D-7x | 3000 | 70 | 1050 | 5420 | 4878 | 29.0 | 30.5 | 178 |
| BXRC-30E4000-B-7x | 3000 | 80 | 900 | 5324 | 4792 | 34.8 | 31.3 | 170 |
| BXRC-30E4000-C-7x | 3000 | 80 | 1170 | 6922 | 6230 | 34.8 | 40.7 | 170 |
| BXRC-30E4000-D-7x | 3000 | 80 | 1050 | 5177 | 4659 | 29.0 | 30.5 | 170 |
| BXRC-30G40H0-B-7x | 3000 | 90 | 900 | 4322 | 3890 | 34.8 | 31.3 | 138 |
| BXRC-30G40H0-C-7x | 3000 | 90 | 1170 | 5619 | 5057 | 34.8 | 40.7 | 138 |
| BXRC-30G40H0-D-7x | 3000 | 90 | 1050 | 4202 | 3782 | 29.0 | 30.5 | 138 |
| BXRC-30G4000-B-7x | 3000 | 90 | 900 | 4510 | 4059 | 34.8 | 31.3 | 144 |
| BXRC-30G4000-C-7x | 3000 | 90 | 1170 | 5863 | 5277 | 34.8 | 40.7 | 144 |
| BXRC-30G4000-D-7x | 3000 | 90 | 1050 | 4385 | 3946 | 29.0 | 30.5 | 144 |
| BXRC-30G400C-B-7x | 3000 | 90 | 900 | 4166 | 3749 | 34.8 | 31.3 | 133 |
| BXRC-30G400C-D-7x | 3000 | 90 | 1050 | 4050 | 3645 | 29.0 | 30.5 | 133 |

Notes for Table 1:

- Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to $T_c = 85^\circ\text{C}$.
- CRI values are typical for Decor Series Ultra, Decor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum Rg value for 80 CRI products is 0, the minimum Rg value 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 **3** depending on fixture design and performance.

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-30H4000-B-7x | 3000 | 97 | 900 | 3915 | 3524 | 34.8 | 31.3 | 125 |
| BXRC-30H4000-C-7x | 3000 | 97 | 1170 | 5090 | 4581 | 34.8 | 40.7 | 125 |
| BXRC-30H4000-D-7x | 3000 | 97 | 1050 | 3806 | 3426 | 29.0 | 30.5 | 125 |
| BXRC-30A4001-B-7x ^{8,9} | 3000 | 93 | 900 | 3884 | 3495 | 34.8 | 31.3 | 124 |
| BXRC-30A4001-C-7x ^{8,9} | 3000 | 93 | 1170 | 5049 | 4544 | 34.8 | 40.7 | 124 |
| BXRC-30A4001-D-7x ^{8,9} | 3000 | 93 | 1050 | 3776 | 3398 | 29.0 | 30.5 | 124 |
| BXRC-35E4000-B-7x | 3500 | 80 | 900 | 5450 | 4905 | 34.8 | 31.3 | 174 |
| BXRC-35E4000-C-7x | 3500 | 80 | 1170 | 7085 | 6376 | 34.8 | 40.7 | 174 |
| BXRC-35E4000-D-7x | 3500 | 80 | 1050 | 5298 | 4768 | 29.0 | 30.5 | 174 |
| BXRC-35G4000-B-7x | 3500 | 90 | 900 | 4479 | 4031 | 34.8 | 31.3 | 143 |
| BXRC-35G4000-C-7x | 3500 | 90 | 1170 | 5822 | 5240 | 34.8 | 40.7 | 143 |
| BXRC-35G4000-D-7x | 3500 | 90 | 1050 | 4354 | 3919 | 29.0 | 30.5 | 143 |
| BXRC-35A4001-B-7x ^{8,9} | 3500 | 93 | 900 | 4134 | 3721 | 34.8 | 31.3 | 132 |
| BXRC-35A4001-C-7x ^{8,9} | 3500 | 93 | 1170 | 5375 | 4837 | 34.8 | 40.7 | 132 |
| BXRC-35A4001-D-7x ^{8,9} | 3500 | 93 | 1050 | 4019 | 3617 | 29.0 | 30.5 | 132 |
| BXRC-40C4001-B-7x | 4000 | 70 | 900 | 5732 | 5158 | 34.8 | 31.3 | 183 |
| BXRC-40C4001-C-7x | 4000 | 70 | 1170 | 7451 | 6706 | 34.8 | 40.7 | 183 |
| BXRC-40C4001-D-7x | 4000 | 70 | 1050 | 5572 | 5015 | 29.0 | 30.5 | 183 |
| BXRC-40E4000-B-7x | 4000 | 80 | 900 | 5481 | 4933 | 34.8 | 31.3 | 175 |
| BXRC-40E4000-C-7x | 4000 | 80 | 1170 | 7125 | 6413 | 34.8 | 40.7 | 175 |
| BXRC-40E4000-D-7x | 4000 | 80 | 1050 | 5329 | 4796 | 29.0 | 30.5 | 175 |
| BXRC-40G4000-B-7x | 4000 | 90 | 900 | 4573 | 4115 | 34.8 | 31.3 | 146 |
| BXRC-40G4000-C-7x | 4000 | 90 | 1170 | 5945 | 5350 | 34.8 | 40.7 | 146 |
| BXRC-40G4000-D-7x | 4000 | 90 | 1050 | 4446 | 4001 | 29.0 | 30.5 | 146 |
| BXRC-40H4000-B-7x | 4000 | 97 | 900 | 4134 | 3721 | 34.8 | 31.3 | 132 |
| BXRC-40H4000-C-7x | 4000 | 97 | 1170 | 5375 | 4837 | 34.8 | 40.7 | 132 |
| BXRC-40H4000-D-7x | 4000 | 97 | 1050 | 4019 | 3617 | 29.0 | 30.5 | 132 |
| BXRC-40A4001-B-7x ^{8,9} | 4000 | 93 | 900 | 4479 | 4031 | 34.8 | 31.3 | 143 |
| BXRC-40A4001-C-7x ^{8,9} | 4000 | 93 | 1170 | 5822 | 5240 | 34.8 | 40.7 | 143 |
| BXRC-40A4001-D-7x ^{8,9} | 4000 | 93 | 1050 | 4354 | 3919 | 29.0 | 30.5 | 143 |
| BXRC-50C4001-B-7x | 5000 | 70 | 900 | 5763 | 5187 | 34.8 | 31.3 | 184 |
| BXRC-50C4001-C-7x | 5000 | 70 | 1170 | 7492 | 6743 | 34.8 | 40.7 | 184 |
| BXRC-50C4001-D-7x | 5000 | 70 | 1050 | 5603 | 5043 | 29.0 | 30.5 | 184 |
| BXRC-50E4001-B-7x | 5000 | 80 | 900 | 5544 | 4989 | 34.8 | 31.3 | 177 |
| BXRC-50E4001-C-7x | 5000 | 80 | 1170 | 7207 | 6486 | 34.8 | 40.7 | 177 |
| BXRC-50E4001-D-7x | 5000 | 80 | 1050 | 5390 | 4851 | 29.0 | 30.5 | 177 |

Notes for Table 1:

- Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to $T_c = 85^\circ\text{C}$.
- CRI values are typical for Decor Series Ultra, Decor 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 value for 90 CRI products is 50, the minimum R9 value for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance for all CRI and R9 values.
- Drive current is referred to as nominal drive current.
- Products tested under pulsed condition (10ms pulse width) at nominal test current where T_j (junction temperature) - T_c (case temperature) = 25°C .
- Typical performance values are provided as a reference only and are not a guarantee of performance.
- Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
- Minimum flux values at the nominal test current are guaranteed by 100% test.
- Nominal CCT is defined by the Lighting Research Center's Class A definition. The center of the Class A color bin is on the corresponding isothermal line.
- GAI value is 80. To help ensure optimal fixture level performance, GAI is measured at the fixture level, on axis, at a case temperature of 70°C . GAI may vary depending on fixture design and performance.

Product Selection Guide

Table 1: Selection Guide, Pulsed Measurement Data ($T_j = T_c = 25^\circ\text{C}$) (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-50G4001-B-7x | 5000 | 90 | 900 | 4792 | 4313 | 34.8 | 31.3 | 153 |
| BXRC-50G4001-C-7x | 5000 | 90 | 1170 | 6230 | 5607 | 34.8 | 40.7 | 153 |
| BXRC-50G4001-D-7x | 5000 | 90 | 1050 | 4659 | 4193 | 29.0 | 30.5 | 153 |
| BXRC-56G4000-B-7x | 5600 | 90 | 900 | 4823 | 4341 | 34.8 | 31.3 | 154 |
| BXRC-56G4000-C-7x | 5600 | 90 | 1170 | 6270 | 5643 | 34.8 | 40.7 | 154 |
| BXRC-56G400x-D-7x | 5600 | 90 | 1050 | 4689 | 4220 | 29.0 | 30.5 | 154 |
| BXRC-56H4000-D-7x | 5600 | 97 | 1050 | 4233 | 3809 | 29.0 | 30.5 | 139 |
| BXRC-57C4001-B-7x | 5700 | 70 | 900 | 5606 | 5046 | 34.8 | 31.3 | 179 |
| BXRC-57C4001-C-7x | 5700 | 70 | 1170 | 7288 | 6559 | 34.8 | 40.7 | 179 |
| BXRC-57C4001-D-7x | 5700 | 70 | 1050 | 5451 | 4905 | 29.0 | 30.5 | 179 |
| BXRC-57E4001-B-7x | 5700 | 80 | 900 | 5324 | 4792 | 34.8 | 31.3 | 170 |
| BXRC-57E4001-C-7x | 5700 | 80 | 1170 | 6922 | 6230 | 34.8 | 40.7 | 170 |
| BXRC-57E4001-D-7x | 5700 | 80 | 1050 | 5177 | 4659 | 29.0 | 30.5 | 170 |
| BXRC-65C4001-B-7x | 6500 | 70 | 900 | 5606 | 5046 | 34.8 | 31.3 | 179 |
| BXRC-65C4001-C-7x | 6500 | 70 | 1170 | 7288 | 6559 | 34.8 | 40.7 | 179 |
| BXRC-65C4001-D-7x | 6500 | 70 | 1050 | 5451 | 4905 | 29.0 | 30.5 | 179 |
| BXRC-65E4001-B-7x | 6500 | 80 | 900 | 5387 | 4848 | 34.8 | 31.3 | 172 |
| BXRC-65E4001-C-7x | 6500 | 80 | 1170 | 7003 | 6303 | 34.8 | 40.7 | 172 |
| BXRC-65E4001-D-7x | 6500 | 80 | 1050 | 5237 | 4714 | 29.0 | 30.5 | 172 |

Notes for Table 1:

- Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to $T_c = 85^\circ\text{C}$.
- CRI values are typical for Decor Series Ultra, Decor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum Rg value for 80 CRI products is 0, the minimum Rg value for 90 CRI products is 50, the minimum Rg value for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance for all 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.

Product Selection Guide

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

| Part Number | Nominal CCT ¹ (K) | GAI ² | CRI ³ | Nominal Drive Current ⁴ (mA) | Typical DC Flux ^{5,6} $T_c = 70^\circ\text{C}$ (lm) | Minimum DC Flux ^{6,9} $T_c = 70^\circ\text{C}$ (lm) | Typical V_f (V) | Typical Power (W) | Typical Efficacy (lm/W) |
|-------------------|------------------------------|------------------|------------------|---|--|--|-------------------|-------------------|-------------------------|
| BXRC-30A4001-B-7x | 3000 | 80 | 93 | 900 | 3612 | 3251 | 34.3 | 30.9 | 116 |
| BXRC-30A4001-C-7x | 3000 | 80 | 93 | 1170 | 4695 | 4226 | 34.3 | 40.2 | 116 |
| BXRC-30A4001-D-7x | 3000 | 80 | 93 | 1050 | 3511 | 3160 | 28.5 | 29.9 | 116 |
| BXRC-35A4001-B-7x | 3500 | 80 | 93 | 900 | 3845 | 3460 | 34.3 | 30.9 | 123 |
| BXRC-35A4001-C-7x | 3500 | 80 | 93 | 1170 | 4998 | 4498 | 34.3 | 40.2 | 123 |
| BXRC-35A4001-D-7x | 3500 | 80 | 93 | 1050 | 3738 | 3364 | 28.5 | 29.9 | 123 |
| BXRC-40A4001-B-7x | 4000 | 80 | 93 | 900 | 4165 | 3749 | 34.3 | 30.9 | 133 |
| BXRC-40A4001-C-7x | 4000 | 80 | 93 | 1170 | 5415 | 4873 | 34.3 | 40.2 | 133 |
| BXRC-40A4001-D-7x | 4000 | 80 | 93 | 1050 | 4050 | 3645 | 28.5 | 29.9 | 133 |

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. CRI Values are specified as typical.
4. Drive current is referred to as nominal drive current.
5. Typical performance values are provided as a reference only and are not a guarantee of performance.
6. Bridgelux maintains a $\pm 7\%$ tolerance on flux measurements.
7. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.
8. Typical performance is estimated based on operation under DC (direct current) with LED array mounted onto a heat sink with thermal interface material and the case temperature maintained at specified temperature. Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.
9. Minimum flux values at elevated temperatures are provided for reference only and are not guaranteed by 100% production testing. Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.

Product Selection Guide

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

| Part Number | Nominal CCT ¹ (K) | CRI ² | Nominal Drive Current ³ (mA) | Typical DC Flux ^{4,5} $T_c = 85^\circ\text{C}$ (lm) | Minimum DC Flux ⁶ $T_c = 85^\circ\text{C}$ (lm) | Typical V_f (V) | Typical Power (W) | Typical Efficacy (lm/W) |
|-------------------|------------------------------|------------------|---|--|--|-------------------|-------------------|-------------------------|
| BXRC-17E4000-B-7x | 1750 | 80 | 900 | 2593 | 2334 | 33.9 | 30.5 | 85 |
| BXRC-17E4000-C-7x | 1750 | 80 | 1170 | 3261 | 2935 | 33.9 | 39.7 | 82 |
| BXRC-17E4000-D-7x | 1750 | 80 | 1050 | 2439 | 2195 | 28.1 | 29.5 | 83 |
| BXRC-20B4001-C-7x | 2000 | 65 | 1170 | 5753 | 5178 | 33.9 | 39.7 | 145 |
| BXRC-20B4001-D-7x | 2000 | 65 | 1050 | 4303 | 3872 | 28.1 | 29.5 | 146 |
| BXRC-25E4000-B-7x | 2500 | 80 | 900 | 4313 | 3881 | 33.9 | 30.5 | 141 |
| BXRC-25E4000-C-7x | 2500 | 80 | 1170 | 5607 | 5046 | 33.9 | 39.7 | 141 |
| BXRC-25E4000-D-7x | 2500 | 80 | 1050 | 4193 | 3774 | 28.1 | 29.5 | 142 |
| BXRC-27E4000-B-7x | 2700 | 80 | 900 | 4510 | 4059 | 33.9 | 30.5 | 148 |
| BXRC-27E4000-C-7x | 2700 | 80 | 1170 | 5863 | 5277 | 33.9 | 39.7 | 148 |
| BXRC-27E4000-D-7x | 2700 | 80 | 1050 | 4385 | 3946 | 28.1 | 29.5 | 149 |
| BXRC-27G40H0-B-7x | 2700 | 90 | 900 | 3862 | 3476 | 33.9 | 30.5 | 127 |
| BXRC-27G40H0-C-7x | 2700 | 90 | 1170 | 5020 | 4518 | 33.9 | 39.7 | 127 |
| BXRC-27G40H0-D-7x | 2700 | 90 | 1050 | 3754 | 3379 | 28.1 | 29.5 | 127 |
| BXRC-27G4000-B-7x | 2700 | 90 | 900 | 3721 | 3349 | 33.9 | 30.5 | 122 |
| BXRC-27G4000-C-7x | 2700 | 90 | 1170 | 4837 | 4353 | 33.9 | 39.7 | 122 |
| BXRC-27G4000-D-7x | 2700 | 90 | 1050 | 3617 | 3256 | 28.1 | 29.5 | 123 |
| BXRC-27H4000-B-7x | 2700 | 97 | 900 | 3298 | 2968 | 33.9 | 30.5 | 108 |
| BXRC-27H4000-C-7x | 2700 | 97 | 1170 | 4287 | 3859 | 33.9 | 39.7 | 108 |
| BXRC-27H4000-D-7x | 2700 | 97 | 1050 | 3206 | 2886 | 28.1 | 29.5 | 109 |
| BXRC-30C4001-B-7x | 3000 | 70 | 900 | 5017 | 4516 | 33.9 | 30.5 | 164 |
| BXRC-30C4001-C-7x | 3000 | 70 | 1170 | 6523 | 5870 | 33.9 | 39.7 | 164 |
| BXRC-30C4001-D-7x | 3000 | 70 | 1050 | 4878 | 4390 | 28.1 | 29.5 | 165 |
| BXRC-30E4000-B-7x | 3000 | 80 | 900 | 4792 | 4313 | 33.9 | 30.5 | 157 |
| BXRC-30E4000-C-7x | 3000 | 80 | 1170 | 6230 | 5607 | 33.9 | 39.7 | 157 |
| BXRC-30E4000-D-7x | 3000 | 80 | 1050 | 4659 | 4193 | 28.1 | 29.5 | 158 |
| BXRC-30G40H0-B-7x | 3000 | 90 | 900 | 3890 | 3501 | 33.9 | 30.5 | 127 |
| BXRC-30G40H0-C-7x | 3000 | 90 | 1170 | 5057 | 4551 | 33.9 | 39.7 | 127 |
| BXRC-30G40H0-D-7x | 3000 | 90 | 1050 | 3782 | 3404 | 28.1 | 29.5 | 128 |
| BXRC-30G4000-B-7x | 3000 | 90 | 900 | 4059 | 3653 | 33.9 | 30.5 | 133 |
| BXRC-30G4000-C-7x | 3000 | 90 | 1170 | 5277 | 4749 | 33.9 | 39.7 | 133 |
| BXRC-30G4000-D-7x | 3000 | 90 | 1050 | 3946 | 3552 | 28.1 | 29.5 | 134 |
| BXRC-30G400C-B-7x | 3000 | 90 | 900 | 3749 | 3374 | 33.9 | 30.5 | 123 |
| BXRC-30G400C-D-7x | 3000 | 90 | 1050 | 3645 | 3280 | 28.1 | 29.5 | 124 |
| BXRC-30H4000-B-7x | 3000 | 97 | 900 | 3524 | 3171 | 33.9 | 30.5 | 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 $T_c = T_a = 25^\circ\text{C}$. CRI values are typical for Decor Series Ultra, Decor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum Rg value for 80 CRI products is 0, the minimum Rg value for 90 CRI products is 50, the minimum Rg value for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance for all 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} (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-30H4000-C-7x | 3000 | 97 | 1170 | 4581 | 4122 | 33.9 | 39.7 | 115 |
| BXRC-30H4000-D-7x | 3000 | 97 | 1050 | 3426 | 3083 | 28.1 | 29.5 | 116 |
| BXRC-30A4001-B-7x ^{8,9} | 3000 | 93 | 900 | 3495 | 3146 | 33.9 | 30.5 | 115 |
| BXRC-30A4001-C-7x ^{8,9} | 3000 | 93 | 1170 | 4544 | 4090 | 33.9 | 39.7 | 115 |
| BXRC-30A4001-D-7x ^{8,9} | 3000 | 93 | 1050 | 3398 | 3058 | 28.1 | 29.5 | 115 |
| BXRC-35E4000-B-7x | 3500 | 80 | 900 | 4905 | 4414 | 33.9 | 30.5 | 161 |
| BXRC-35E4000-C-7x | 3500 | 80 | 1170 | 6376 | 5739 | 33.9 | 39.7 | 161 |
| BXRC-35E4000-D-7x | 3500 | 80 | 1050 | 4768 | 4292 | 28.1 | 29.5 | 162 |
| BXRC-35G4000-B-7x | 3500 | 90 | 900 | 4031 | 3628 | 33.9 | 30.5 | 132 |
| BXRC-35G4000-C-7x | 3500 | 90 | 1170 | 5240 | 4716 | 33.9 | 39.7 | 132 |
| BXRC-35G4000-D-7x | 3500 | 90 | 1050 | 3919 | 3527 | 28.1 | 29.5 | 133 |
| BXRC-35A4001-B-7x ^{8,9} | 3500 | 93 | 900 | 3721 | 3349 | 33.9 | 30.5 | 122 |
| BXRC-35A4001-C-7x ^{8,9} | 3500 | 93 | 1170 | 4837 | 4353 | 33.9 | 39.7 | 122 |
| BXRC-35A4001-D-7x ^{8,9} | 3500 | 93 | 1050 | 3617 | 3256 | 28.1 | 29.5 | 123 |
| BXRC-40C4001-B-7x | 4000 | 70 | 900 | 5158 | 4643 | 33.9 | 30.5 | 169 |
| BXRC-40C4001-C-7x | 4000 | 70 | 1170 | 6706 | 6035 | 33.9 | 39.7 | 169 |
| BXRC-40C4001-D-7x | 4000 | 70 | 1050 | 5015 | 4514 | 28.1 | 29.5 | 170 |
| BXRC-40E4000-B-7x | 4000 | 80 | 900 | 4933 | 4440 | 33.9 | 30.5 | 162 |
| BXRC-40E4000-C-7x | 4000 | 80 | 1170 | 6413 | 5771 | 33.9 | 39.7 | 162 |
| BXRC-40E4000-D-7x | 4000 | 80 | 1050 | 4796 | 4316 | 28.1 | 29.5 | 163 |
| BXRC-40G4000-B-7x | 4000 | 90 | 900 | 4115 | 3704 | 33.9 | 30.5 | 135 |
| BXRC-40G4000-C-7x | 4000 | 90 | 1170 | 5350 | 4815 | 33.9 | 39.7 | 135 |
| BXRC-40G4000-D-7x | 4000 | 90 | 1050 | 4001 | 3601 | 28.1 | 29.5 | 136 |
| BXRC-40H4000-B-7x | 4000 | 97 | 900 | 3721 | 3349 | 33.9 | 30.5 | 122 |
| BXRC-40H4000-C-7x | 4000 | 97 | 1170 | 4837 | 4353 | 33.9 | 39.7 | 122 |
| BXRC-40H4000-D-7x | 4000 | 97 | 1050 | 3617 | 3256 | 28.1 | 29.5 | 123 |
| BXRC-40A4001-B-7x ^{7,8} | 4000 | 93 | 900 | 4031 | 3628 | 33.9 | 30.5 | 132 |
| BXRC-40A4001-C-7x ^{7,8} | 4000 | 93 | 1170 | 5240 | 4716 | 33.9 | 39.7 | 132 |
| BXRC-40A4001-D-7x ^{7,8} | 4000 | 93 | 1050 | 3919 | 3527 | 28.1 | 29.5 | 133 |
| BXRC-50C4001-B-7x | 5000 | 70 | 900 | 5187 | 4668 | 33.9 | 30.5 | 170 |
| BXRC-50C4001-C-7x | 5000 | 70 | 1170 | 6743 | 6068 | 33.9 | 39.7 | 170 |
| BXRC-50C4001-D-7x | 5000 | 70 | 1050 | 5043 | 4538 | 28.1 | 29.5 | 171 |
| BXRC-50E4001-B-7x | 5000 | 80 | 900 | 4989 | 4490 | 33.9 | 30.5 | 164 |
| BXRC-50E4001-C-7x | 5000 | 80 | 1170 | 6486 | 5837 | 33.9 | 39.7 | 164 |
| BXRC-50E4001-D-7x | 5000 | 80 | 1050 | 4851 | 4366 | 28.1 | 29.5 | 164 |

Notes for Table 3:

- Nominal CCT as defined by ANSI C78.377-2011. Products with a CCT of 5000K-6500K are hot targeted to $T_c = 85^\circ\text{C}$.
- All CRI values are measured at $T_c = T_a = 25^\circ\text{C}$. CRI values are typical for Decor Series Ultra, Decor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum Rg value for 80 CRI products is 0, the minimum Rg value for 90 CRI products is 50, the minimum Rg value for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance for all 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} (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-50G4001-B-7x | 5000 | 90 | 900 | 4313 | 3881 | 33.9 | 30.5 | 141 |
| BXRC-50G4001-C-7x | 5000 | 90 | 1170 | 5607 | 5046 | 33.9 | 39.7 | 141 |
| BXRC-50G4001-D-7x | 5000 | 90 | 1050 | 4193 | 3774 | 28.1 | 29.5 | 142 |
| BXRC-56G4000-B-7x | 5600 | 90 | 900 | 4341 | 3907 | 33.9 | 30.5 | 142 |
| BXRC-56G4000-C-7x | 5600 | 90 | 1170 | 5643 | 5079 | 33.9 | 39.7 | 142 |
| BXRC-56G400x-D-7x | 5600 | 90 | 1050 | 4220 | 3798 | 28.1 | 29.5 | 143 |
| BXRC-56H4000-D-7x | 5600 | 97 | 1050 | 3809 | 3428 | 28.1 | 29.5 | 129 |
| BXRC-57C4001-B-7x | 5700 | 70 | 900 | 5046 | 4541 | 33.9 | 30.5 | 165 |
| BXRC-57C4001-C-7x | 5700 | 70 | 1170 | 6559 | 5903 | 33.9 | 39.7 | 165 |
| BXRC-57C4001-D-7x | 5700 | 70 | 1050 | 4905 | 4415 | 28.1 | 29.5 | 166 |
| BXRC-57E4001-B-7x | 5700 | 80 | 900 | 4792 | 4313 | 33.9 | 30.5 | 157 |
| BXRC-57E4001-C-7x | 5700 | 80 | 1170 | 6230 | 5607 | 33.9 | 39.7 | 157 |
| BXRC-57E4001-D-7x | 5700 | 80 | 1050 | 4659 | 4193 | 28.1 | 29.5 | 158 |
| BXRC-65C4001-B-7x | 6500 | 70 | 900 | 5046 | 4541 | 33.9 | 30.5 | 165 |
| BXRC-65C4001-C-7x | 6500 | 70 | 1170 | 6559 | 5903 | 33.9 | 39.7 | 165 |
| BXRC-65C4001-D-7x | 6500 | 70 | 1050 | 4905 | 4415 | 28.1 | 29.5 | 166 |
| BXRC-65E4001-B-7x | 6500 | 80 | 900 | 4848 | 4364 | 33.9 | 30.5 | 159 |
| BXRC-65E4001-C-7x | 6500 | 80 | 1170 | 6303 | 5673 | 33.9 | 39.7 | 159 |
| BXRC-65E4001-D-7x | 6500 | 80 | 1050 | 4714 | 4242 | 28.1 | 29.5 | 160 |

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 Decor Series Ultra, Decor Series Street and Landmark and Decor Series Class A products. CRI values are minimums for all other products. Minimum Rg value for 80 CRI products is 0, the minimum Rg value for 90 CRI products is 50, the minimum Rg value for 97 CRI products is 93. Bridgelux maintains a ± 3 tolerance for all 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.

European Product Registry for Energy Labeling

The European Product Registry for Energy Labeling (EPREL) is defined in the EU Regulation 2017/1369 to provide important energy efficiency information to consumers. Together with Energy Labeling Regulation ELR (EU) 2019/2015 which was amended by regulation (EU) 2021/340 for energy labelling of light sources, manufacturers are required to declare an energy class based on key technical specifications from each of their product and register it in an open data base managed by EPREL. It is now a legal requirement for a vendor of light sources to upload information about their products into the EPREL database before placing these products on the market in the EU.

Table 4 below provides a list of part numbers that are in compliance with ELR and are currently listed in the EPREL database.

At Bridgelux, we are fully committed to supplying products that are compliant with pertinent laws, rules, and obligation imposed by relevant government bodies including the European Energy Labeling regulation. Customers can use these products with full confidence for any projects that fall under the ELR.

Table 4: Part numbers registered in European Product Registry for Energy Labeling

| PART NUMBER ¹ | CCT (K) | CRI | Current ² (mA) | Vf (V) | Useful flux ³ (Φ_{use}) at 85C (lm) | Power (W) | Efficacy (lm/W) | Energy efficiency class ⁴ | Registration No | URL to Product Information Sheet in EPREL Database |
|--------------------------|---------|-----|---------------------------|--------|---|-----------|-----------------|--------------------------------------|-----------------|---|
| BXRC-20B4001-C-7x | 2000 | 65 | 1900 | 34.2 | 8401 | 65.0 | 129 | E | 870977 | https://eprelec.europa.eu/qr/870977 |
| BXRC-20B4001-D-7x | 2000 | 65 | 1720 | 29.9 | 6626 | 51.5 | 129 | E | 870979 | https://eprelec.europa.eu/qr/870979 |
| BXRC-25E4000-B-7x | 2500 | 80 | 1800 | 35.2 | 7490 | 63.4 | 118 | F | 870988 | https://eprelec.europa.eu/qr/870988 |
| BXRC-25E4000-C-7x | 2500 | 80 | 2340 | 35.2 | 9736 | 82.4 | 118 | F | 870990 | https://eprelec.europa.eu/qr/870990 |
| BXRC-25E4000-D-7x | 2500 | 80 | 2100 | 30.8 | 7623 | 64.6 | 118 | F | 870992 | https://eprelec.europa.eu/qr/870992 |
| BXRC-27E4000-B-7x | 2700 | 80 | 1800 | 35.2 | 7832 | 63.4 | 124 | E | 871049 | https://eprelec.europa.eu/qr/871049 |
| BXRC-27E4000-C-7x | 2700 | 80 | 2340 | 35.2 | 10182 | 82.4 | 124 | E | 871054 | https://eprelec.europa.eu/qr/871054 |
| BXRC-27E4000-D-7x | 2700 | 80 | 2100 | 30.8 | 7971 | 64.6 | 123 | E | 871060 | https://eprelec.europa.eu/qr/871060 |
| BXRC-27G40H0-B-7x | 2700 | 90 | 1580 | 34.6 | 6023 | 54.6 | 110 | F | 871171 | https://eprelec.europa.eu/qr/871171 |
| BXRC-27G40H0-C-7x | 2700 | 90 | 2020 | 34.5 | 7721 | 69.7 | 111 | F | 871175 | https://eprelec.europa.eu/qr/871175 |
| BXRC-27G40H0-D-7x | 2700 | 90 | 1840 | 30.2 | 6121 | 55.6 | 110 | F | 871179 | https://eprelec.europa.eu/qr/871179 |
| BXRC-27G4000-B-7x | 2700 | 90 | 1410 | 34.1 | 5268 | 48.0 | 110 | F | 871154 | https://eprelec.europa.eu/qr/871154 |
| BXRC-27G4000-C-7x | 2700 | 90 | 1780 | 33.9 | 6676 | 60.4 | 110 | F | 871159 | https://eprelec.europa.eu/qr/871159 |
| BXRC-27G4000-D-7x | 2700 | 90 | 1630 | 29.7 | 5319 | 48.5 | 110 | F | 871165 | https://eprelec.europa.eu/qr/871165 |
| BXRC-27H4000-B-7x | 2700 | 95 | 980 | 32.8 | 3369 | 32.1 | 105 | F | 871221 | https://eprelec.europa.eu/qr/871221 |
| BXRC-27H4000-C-7x | 2700 | 95 | 1210 | 32.6 | 4176 | 39.5 | 106 | F | 871225 | https://eprelec.europa.eu/qr/871225 |
| BXRC-27H4000-D-7x | 2700 | 95 | 1140 | 28.6 | 3420 | 32.6 | 105 | F | 871229 | https://eprelec.europa.eu/qr/871229 |

Notes for Table 4:

- All device listed here must be disposed as e-waste upon its end of life according to local country guideline in each country.
- For information on performance values at alternative drive conditions, please refer to the Product Selection Guide, Absolute Maximum Rating Table and Performance Curves in this data sheet.
- For a definition of useful luminous flux (Φ_{use}), please see the ELR regulations at <https://tinyurl.com/4b6zvt4m>.
- EPREL requires an arrow symbol containing the letter of the energy efficiency class to be displayed, on technical promotional material. Refer to this energy efficiency class column for specific energy efficiency class on each part number.

European Product Registry for Energy Labeling

Table 4: Part numbers registered in European Product Registry for Energy Labeling (Continued)

| PART NUMBER ¹ | CCT (K) | CRI | Current ² (mA) | Vf (V) | Useful flux ³ (Φ_{use}) at 85C (lm) | Power (W) | Efficacy (lm/W) | Energy efficiency class ⁴ | Registration No | URL to Product Information Sheet in EPREL Database |
|--------------------------|---------|-----|---------------------------|--------|---|-----------|-----------------|--------------------------------------|-----------------|---|
| BXRC-30C4001-B-7x | 3000 | 70 | 1800 | 35.2 | 8713 | 63.4 | 137 | E | 871310 | https://eprelec.europa.eu/qr/871310 |
| BXRC-30C4001-C-7x | 3000 | 70 | 2340 | 35.2 | 11327 | 82.4 | 137 | E | 871316 | https://eprelec.europa.eu/qr/871316 |
| BXRC-30C4001-D-7x | 3000 | 70 | 2100 | 30.8 | 8868 | 64.6 | 137 | E | 871322 | https://eprelec.europa.eu/qr/871322 |
| BXRC-30E4000-B-7x | 3000 | 80 | 1800 | 35.2 | 8322 | 63.4 | 131 | E | 871379 | https://eprelec.europa.eu/qr/871379 |
| BXRC-30E4000-C-7x | 3000 | 80 | 2340 | 35.2 | 10818 | 82.4 | 131 | E | 871384 | https://eprelec.europa.eu/qr/871384 |
| BXRC-30E4000-D-7x | 3000 | 80 | 2100 | 30.8 | 8470 | 64.6 | 131 | E | 871390 | https://eprelec.europa.eu/qr/871390 |
| BXRC-30G40H0-B-7x | 3000 | 90 | 1800 | 35.2 | 7049 | 63.4 | 111 | F | 871517 | https://eprelec.europa.eu/qr/871517 |
| BXRC-30G40H0-C-7x | 3000 | 90 | 2340 | 35.2 | 9164 | 82.4 | 111 | F | 871521 | https://eprelec.europa.eu/qr/871521 |
| BXRC-30G40H0-D-7x | 3000 | 90 | 2100 | 30.8 | 7174 | 64.6 | 111 | F | 871525 | https://eprelec.europa.eu/qr/871525 |
| BXRC-30G4000-B-7x | 3000 | 90 | 1620 | 34.7 | 6194 | 56.2 | 110 | F | 871496 | https://eprelec.europa.eu/qr/871496 |
| BXRC-30G4000-C-7x | 3000 | 90 | 2070 | 34.6 | 7938 | 71.6 | 111 | F | 871501 | https://eprelec.europa.eu/qr/871501 |
| BXRC-30G4000-D-7x | 3000 | 90 | 1880 | 30.3 | 6277 | 56.9 | 110 | F | 871507 | https://eprelec.europa.eu/qr/871507 |
| BXRC-30G400C-B-7x | 3000 | 90 | 1620 | 34.7 | 6194 | 56.2 | 110 | F | 871513 | https://eprelec.europa.eu/qr/871513 |
| BXRC-30G400C-D-7x | 3000 | 90 | 1880 | 30.3 | 6277 | 56.9 | 110 | F | 871515 | https://eprelec.europa.eu/qr/871515 |
| BXRC-30H4000-B-7x | 3000 | 95 | 1290 | 33.7 | 4615 | 43.5 | 106 | F | 871567 | https://eprelec.europa.eu/qr/871567 |
| BXRC-30H4000-C-7x | 3000 | 95 | 1620 | 33.6 | 5819 | 54.4 | 107 | F | 871571 | https://eprelec.europa.eu/qr/871571 |
| BXRC-30H4000-D-7x | 3000 | 95 | 1490 | 29.4 | 4656 | 43.8 | 106 | F | 871575 | https://eprelec.europa.eu/qr/871575 |
| BXRC-30A4001-B-7x | 3000 | 90 | 1110 | 33.2 | 4002 | 36.8 | 109 | F | 871250 | https://eprelec.europa.eu/qr/871250 |
| BXRC-30A4001-C-7x | 3000 | 90 | 1390 | 33.0 | 5028 | 45.9 | 109 | F | 871251 | https://eprelec.europa.eu/qr/871251 |
| BXRC-30A4001-D-7x | 3000 | 90 | 1290 | 29.0 | 4058 | 37.4 | 109 | F | 871252 | https://eprelec.europa.eu/qr/871252 |
| BXRC-35E4000-B-7x | 3500 | 80 | 1800 | 35.2 | 8518 | 63.4 | 134 | E | 871653 | https://eprelec.europa.eu/qr/871653 |
| BXRC-35E4000-C-7x | 3500 | 80 | 2340 | 35.2 | 11073 | 82.4 | 134 | E | 871658 | https://eprelec.europa.eu/qr/871658 |
| BXRC-35E4000-D-7x | 3500 | 80 | 2100 | 30.8 | 8669 | 64.6 | 134 | E | 871663 | https://eprelec.europa.eu/qr/871663 |
| BXRC-35G4000-B-7x | 3500 | 90 | 1780 | 35.1 | 6927 | 62.6 | 111 | F | 871720 | https://eprelec.europa.eu/qr/871720 |
| BXRC-35G4000-C-7x | 3500 | 90 | 2280 | 35.1 | 8900 | 80.0 | 111 | F | 871725 | https://eprelec.europa.eu/qr/871725 |
| BXRC-35G4000-D-7x | 3500 | 90 | 2070 | 30.7 | 7032 | 63.6 | 111 | F | 871730 | https://eprelec.europa.eu/qr/871730 |
| BXRC-35A4001-B-7x | 3500 | 90 | 1410 | 34.1 | 5268 | 48.0 | 110 | F | 871596 | https://eprelec.europa.eu/qr/871596 |
| BXRC-35A4001-C-7x | 3500 | 90 | 1780 | 33.9 | 6676 | 60.4 | 110 | F | 871597 | https://eprelec.europa.eu/qr/871597 |
| BXRC-35A4001-D-7x | 3500 | 90 | 1630 | 29.7 | 5319 | 48.5 | 110 | F | 871598 | https://eprelec.europa.eu/qr/871598 |
| BXRC-40C4001-B-7x | 4000 | 70 | 1800 | 35.2 | 8958 | 63.4 | 141 | E | 871815 | https://eprelec.europa.eu/qr/871815 |
| BXRC-40C4001-C-7x | 4000 | 70 | 2340 | 35.2 | 11646 | 82.4 | 141 | E | 871821 | https://eprelec.europa.eu/qr/871821 |
| BXRC-40C4001-D-7x | 4000 | 70 | 2100 | 30.8 | 9117 | 64.6 | 141 | E | 871827 | https://eprelec.europa.eu/qr/871827 |
| BXRC-40E4000-B-7x | 4000 | 80 | 1800 | 35.2 | 8566 | 63.4 | 135 | E | 871885 | https://eprelec.europa.eu/qr/871885 |
| BXRC-40E4000-C-7x | 4000 | 80 | 2340 | 35.2 | 11136 | 82.4 | 135 | E | 871890 | https://eprelec.europa.eu/qr/871890 |
| BXRC-40E4000-D-7x | 4000 | 80 | 2100 | 30.8 | 8719 | 64.6 | 135 | E | 871896 | https://eprelec.europa.eu/qr/871896 |

Notes for Table 4:

1. All device listed here must be disposed as e-waste upon its end of life according to local country guideline in each country.
2. For information on performance values at alternative drive conditions, please refer to the Product Selection Guide, Absolute Maximum Rating Table and Performance Curves in this data sheet.
3. For a definition of useful luminous flux (Φ_{use}), please see the ELR regulations at <https://tinyurl.com/4b6zvt4m>.
4. EPREL requires an arrow symbol containing the letter of the energy efficiency class to be displayed, on technical promotional material. Refer to this energy efficiency class column for specific energy efficiency class on each part number.

European Product Registry for Energy Labeling

Table 4: Part numbers registered in European Product Registry for Energy Labeling (Continued)

| PART NUMBER ¹ | CCT (K) | CRI | Current ² (mA) | Vf (V) | Useful flux ³ (Φ_{use}) at 85C (lm) | Power (W) | Efficacy (lm/W) | Energy efficiency class ⁴ | Registration No | URL to Product Information Sheet in EPREL Database |
|--------------------------|---------|-----|---------------------------|--------|---|-----------|-----------------|--------------------------------------|-----------------|---|
| BXRC-40G4000-B-7x | 4000 | 90 | 1800 | 35.2 | 7147 | 63.4 | 113 | F | 871954 | https://eprel.ec.europa.eu/qr/871954 |
| BXRC-40G4000-C-7x | 4000 | 90 | 2340 | 35.2 | 9291 | 82.4 | 113 | F | 871959 | https://eprel.ec.europa.eu/qr/871959 |
| BXRC-40G4000-D-7x | 4000 | 90 | 2100 | 30.8 | 7274 | 64.6 | 113 | F | 871964 | https://eprel.ec.europa.eu/qr/871964 |
| BXRC-40H4000-B-7x | 4000 | 95 | 1540 | 34.4 | 5680 | 53.0 | 107 | F | 871984 | https://eprel.ec.europa.eu/qr/871984 |
| BXRC-40H4000-C-7x | 4000 | 95 | 1970 | 34.4 | 7284 | 67.7 | 108 | F | 871986 | https://eprel.ec.europa.eu/qr/871986 |
| BXRC-40H4000-D-7x | 4000 | 95 | 1790 | 30.1 | 5763 | 53.9 | 107 | F | 871988 | https://eprel.ec.europa.eu/qr/871988 |
| BXRC-40A4001-B-7x | 4000 | 90 | 1780 | 35.1 | 6927 | 62.6 | 111 | F | 871751 | https://eprel.ec.europa.eu/qr/871751 |
| BXRC-40A4001-C-7x | 4000 | 90 | 2280 | 35.1 | 8900 | 80.0 | 111 | F | 871752 | https://eprel.ec.europa.eu/qr/871752 |
| BXRC-40A4001-D-7x | 4000 | 90 | 2070 | 30.7 | 7032 | 63.6 | 111 | F | 871753 | https://eprel.ec.europa.eu/qr/871753 |
| BXRC-50C4001-B-7x | 5000 | 70 | 1800 | 35.2 | 9007 | 63.4 | 142 | E | 872033 | https://eprel.ec.europa.eu/qr/872033 |
| BXRC-50C4001-C-7x | 5000 | 70 | 2340 | 35.2 | 11709 | 82.4 | 142 | E | 872037 | https://eprel.ec.europa.eu/qr/872037 |
| BXRC-50C4001-D-7x | 5000 | 70 | 2100 | 30.8 | 9167 | 64.6 | 142 | E | 872041 | https://eprel.ec.europa.eu/qr/872041 |
| BXRC-50E4001-B-7x | 5000 | 80 | 1800 | 35.2 | 8664 | 63.4 | 137 | E | 872085 | https://eprel.ec.europa.eu/qr/872085 |
| BXRC-50E4001-C-7x | 5000 | 80 | 2340 | 35.2 | 11264 | 82.4 | 137 | E | 872089 | https://eprel.ec.europa.eu/qr/872089 |
| BXRC-50E4001-D-7x | 5000 | 80 | 2100 | 30.8 | 8818 | 64.6 | 136 | E | 872093 | https://eprel.ec.europa.eu/qr/872093 |
| BXRC-50G4001-B-7x | 5000 | 90 | 1800 | 35.2 | 7490 | 63.4 | 118 | F | 872138 | https://eprel.ec.europa.eu/qr/872138 |
| BXRC-50G4001-C-7x | 5000 | 90 | 2340 | 35.2 | 9736 | 82.4 | 118 | F | 872142 | https://eprel.ec.europa.eu/qr/872142 |
| BXRC-50G4001-D-7x | 5000 | 90 | 2100 | 30.8 | 7623 | 64.6 | 118 | F | 872146 | https://eprel.ec.europa.eu/qr/872146 |
| BXRC-56G4000-B-7x | 5600 | 90 | 1800 | 35.2 | 7539 | 63.4 | 119 | E | 872162 | https://eprel.ec.europa.eu/qr/872162 |
| BXRC-56G4000-C-7x | 5600 | 90 | 2340 | 35.2 | 9800 | 82.4 | 119 | E | 872163 | https://eprel.ec.europa.eu/qr/872163 |
| BXRC-56H4000-D-7x | 5600 | 95 | 2070 | 30.7 | 6835 | 63.6 | 108 | F | 872200 | https://eprel.ec.europa.eu/qr/872200 |
| BXRC-57C4001-B-7x | 5700 | 70 | 1800 | 35.2 | 8762 | 63.4 | 138 | E | 872241 | https://eprel.ec.europa.eu/qr/872241 |
| BXRC-57C4001-C-7x | 5700 | 70 | 2340 | 35.2 | 11391 | 82.4 | 138 | E | 872245 | https://eprel.ec.europa.eu/qr/872245 |
| BXRC-57C4001-D-7x | 5700 | 70 | 2100 | 30.8 | 8918 | 64.6 | 138 | E | 872249 | https://eprel.ec.europa.eu/qr/872249 |
| BXRC-57E4001-B-7x | 5700 | 80 | 1800 | 35.2 | 8322 | 63.4 | 131 | E | 872289 | https://eprel.ec.europa.eu/qr/872289 |
| BXRC-57E4001-C-7x | 5700 | 80 | 2340 | 35.2 | 10818 | 82.4 | 131 | E | 872293 | https://eprel.ec.europa.eu/qr/872293 |
| BXRC-57E4001-D-7x | 5700 | 80 | 2100 | 30.8 | 8470 | 64.6 | 131 | E | 872297 | https://eprel.ec.europa.eu/qr/872297 |
| BXRC-65C4001-B-7x | 6500 | 70 | 1800 | 35.2 | 8762 | 63.4 | 138 | E | 872338 | https://eprel.ec.europa.eu/qr/872338 |
| BXRC-65C4001-C-7x | 6500 | 70 | 2340 | 35.2 | 11391 | 82.4 | 138 | E | 872342 | https://eprel.ec.europa.eu/qr/872342 |
| BXRC-65C4001-D-7x | 6500 | 70 | 2100 | 30.8 | 8918 | 64.6 | 138 | E | 872346 | https://eprel.ec.europa.eu/qr/872346 |
| BXRC-65E4001-B-7x | 6500 | 80 | 1800 | 35.2 | 8420 | 63.4 | 133 | E | 872387 | https://eprel.ec.europa.eu/qr/872387 |
| BXRC-65E4001-C-7x | 6500 | 80 | 2340 | 35.2 | 10946 | 82.4 | 133 | E | 872391 | https://eprel.ec.europa.eu/qr/872391 |
| BXRC-65E4001-D-7x | 6500 | 80 | 2100 | 30.8 | 8569 | 64.6 | 133 | E | 872395 | https://eprel.ec.europa.eu/qr/872395 |

Notes for Table 4:

- All device listed here must be disposed as e-waste upon its end of life according to local country guideline in each country.
- For information on performance values at alternative drive conditions, please refer to the Product Selection Guide, Absolute Maximum Rating Table and Performance Curves in this data sheet.
- For a definition of useful luminous flux (Φ_{use}), please see the ELR regulations at <https://tinyurl.com/4b6zvt4m>.
- EPREL requires an arrow symbol containing the letter of the energy efficiency class to be displayed, on technical promotional material. Refer to this energy efficiency class column for specific energy efficiency class on each part number.

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 5.

Table 5: 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-17E4000-B-7x | 80 | 450 | 33.2 | 14.9 | 1547 | 1390 | 104 |
| | | 600 | 34.0 | 20.4 | 2029 | 1820 | 99 |
| | | 900 | 34.8 | 31.3 | 2881 | 2593 | 92 |
| | | 1350 | 35.6 | 48.1 | 4286 | 3776 | 89 |
| | | 1800 | 36.1 | 65.1 | 5515 | 4794 | 85 |
| BXRC-17E4000-C-7x | 80 | 585 | 33.2 | 19.4 | 1946 | 1748 | 100 |
| | | 780 | 34.0 | 26.5 | 2552 | 2289 | 96 |
| | | 1170 | 34.8 | 40.7 | 3624 | 3261 | 89 |
| | | 1755 | 35.6 | 62.5 | 5390 | 4749 | 86 |
| | | 2340 | 36.1 | 84.6 | 6935 | 6029 | 82 |
| BXRC-17E4000-D-7x | 80 | 525 | 27.7 | 14.6 | 1455 | 1307 | 100 |
| | | 700 | 28.2 | 19.8 | 1909 | 1712 | 97 |
| | | 1050 | 29.0 | 30.5 | 2710 | 2439 | 89 |
| | | 1575 | 30.4 | 47.9 | 4031 | 3551 | 84 |
| | | 2100 | 31.5 | 66.2 | 5187 | 4509 | 78 |
| BXRC-20B4001-C-7x | 65 | 585 | 33.2 | 19.4 | 3432 | 3084 | 177 |
| | | 780 | 34.0 | 26.5 | 4502 | 4038 | 170 |
| | | 1170 | 34.8 | 40.7 | 6392 | 5753 | 157 |
| | | 1755 | 35.6 | 62.5 | 9507 | 8377 | 152 |
| | | 2340 | 36.1 | 84.6 | 12234 | 10635 | 145 |
| BXRC-20B4001-D-7x | 65 | 525 | 27.7 | 14.6 | 2567 | 2306 | 176 |
| | | 700 | 28.2 | 19.8 | 3367 | 3020 | 170 |
| | | 1050 | 29.0 | 30.5 | 4781 | 4303 | 157 |
| | | 1575 | 30.4 | 47.9 | 7110 | 6265 | 148 |
| | | 2100 | 31.5 | 66.2 | 9150 | 7954 | 138 |
| BXRC-25E4000-B-7x | 80 | 450 | 33.2 | 14.9 | 2573 | 2312 | 172 |
| | | 600 | 34.0 | 20.4 | 3375 | 3027 | 165 |
| | | 900 | 34.8 | 31.3 | 4792 | 4313 | 153 |
| | | 1350 | 35.6 | 48.1 | 7127 | 6280 | 148 |
| | | 1800 | 36.1 | 65.1 | 9171 | 7972 | 141 |
| BXRC-25E4000-C-7x | 80 | 585 | 33.2 | 19.4 | 3345 | 3005 | 172 |
| | | 780 | 34.0 | 26.5 | 4387 | 3935 | 165 |
| | | 1170 | 34.8 | 40.7 | 6230 | 5102 | 153 |
| | | 1755 | 35.6 | 62.5 | 9265 | 8164 | 148 |
| | | 2340 | 36.1 | 84.6 | 11923 | 10364 | 141 |
| BXRC-25E4000-D-7x | 80 | 525 | 27.7 | 14.6 | 2501 | 2248 | 172 |
| | | 700 | 28.2 | 19.8 | 3281 | 2943 | 166 |
| | | 1050 | 29.0 | 30.5 | 4659 | 4193 | 153 |
| | | 1575 | 30.4 | 47.9 | 6929 | 6105 | 145 |
| | | 2100 | 31.5 | 66.2 | 8917 | 7751 | 135 |

Notes for Table 5:

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 5: 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-27E4000-B-7x | 80 | 450 | 33.2 | 14.9 | 2691 | 2418 | 180 |
| | | 600 | 34.0 | 20.4 | 3529 | 3166 | 173 |
| | | 900 | 34.8 | 31.3 | 5011 | 4510 | 160 |
| | | 1350 | 35.6 | 48.1 | 7453 | 6567 | 155 |
| | | 1800 | 36.1 | 65.1 | 9591 | 8337 | 147 |
| BXRC-27E4000-C-7x | 80 | 585 | 33.2 | 19.4 | 3404 | 3221 | 175 |
| | | 780 | 34.0 | 26.5 | 4460 | 4133 | 168 |
| | | 1170 | 34.8 | 40.7 | 6515 | 5863 | 160 |
| | | 1755 | 35.6 | 62.5 | 9372 | 8249 | 150 |
| | | 2340 | 36.1 | 84.6 | 12021 | 10361 | 142 |
| BXRC-27E4000-D-7x | 80 | 525 | 27.7 | 14.6 | 2595 | 2409 | 178 |
| | | 700 | 28.2 | 19.8 | 3375 | 3093 | 171 |
| | | 1050 | 29.0 | 30.5 | 4872 | 4385 | 160 |
| | | 1575 | 30.4 | 47.9 | 6959 | 6154 | 145 |
| | | 2100 | 31.5 | 66.2 | 8859 | 7704 | 134 |
| BXRC-27G40H0-B-7x | 90 | 450 | 33.2 | 14.9 | 2304 | 2070 | 154 |
| | | 600 | 34.0 | 20.4 | 3022 | 2711 | 148 |
| | | 900 | 34.8 | 31.3 | 4291 | 3862 | 137 |
| | | 1350 | 35.6 | 48.1 | 6382 | 5623 | 133 |
| | | 1800 | 36.1 | 65.1 | 8212 | 7139 | 126 |
| BXRC-27G40H0-C-7x | 90 | 585 | 33.2 | 19.4 | 2914 | 2758 | 150 |
| | | 780 | 34.0 | 26.5 | 3819 | 3539 | 144 |
| | | 1170 | 34.8 | 40.7 | 5578 | 5020 | 137 |
| | | 1755 | 35.6 | 62.5 | 8025 | 7063 | 128 |
| | | 2340 | 36.1 | 84.6 | 10293 | 8872 | 122 |
| BXRC-27G40H0-D-7x | 90 | 525 | 27.7 | 14.6 | 2222 | 2063 | 153 |
| | | 700 | 28.2 | 19.8 | 2890 | 2648 | 146 |
| | | 1050 | 29.0 | 30.5 | 4172 | 3754 | 137 |
| | | 1575 | 30.4 | 47.9 | 5959 | 5269 | 124 |
| | | 2100 | 31.5 | 66.2 | 7585 | 6596 | 115 |
| BXRC-27G4000-B-7x | 90 | 450 | 33.2 | 14.9 | 2220 | 1995 | 149 |
| | | 600 | 34.0 | 20.4 | 2912 | 2612 | 143 |
| | | 900 | 34.8 | 31.3 | 4134 | 3721 | 132 |
| | | 1350 | 35.6 | 48.1 | 6149 | 5418 | 128 |
| | | 1800 | 36.1 | 65.1 | 7913 | 6878 | 122 |
| BXRC-27G4000-C-7x | 90 | 585 | 33.2 | 19.4 | 2808 | 2658 | 145 |
| | | 780 | 34.0 | 26.5 | 3680 | 3410 | 139 |
| | | 1170 | 34.8 | 40.7 | 5375 | 4837 | 132 |
| | | 1755 | 35.6 | 62.5 | 7732 | 6805 | 124 |
| | | 2340 | 36.1 | 84.6 | 9918 | 8548 | 117 |
| BXRC-27G4000-D-7x | 90 | 525 | 27.7 | 14.6 | 2141 | 1987 | 147 |
| | | 700 | 28.2 | 19.8 | 2784 | 2552 | 141 |
| | | 1050 | 29.0 | 30.5 | 4019 | 3617 | 132 |
| | | 1575 | 30.4 | 47.9 | 5741 | 5077 | 120 |
| | | 2100 | 31.5 | 66.2 | 7308 | 6355 | 110 |

Notes for Table 5:

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 5: 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-27H4000-B-7x | 97 | 450 | 33.2 | 14.9 | 1967 | 1812 | 132 |
| | | 600 | 34.0 | 20.4 | 2581 | 2326 | 126 |
| | | 900 | 34.8 | 31.3 | 3664 | 3298 | 117 |
| | | 1350 | 35.6 | 48.1 | 5450 | 4628 | 113 |
| | | 1800 | 36.1 | 65.1 | 7013 | 5794 | 108 |
| BXRC-27H4000-C-7x | 97 | 585 | 33.2 | 19.4 | 2489 | 2355 | 128 |
| | | 780 | 34.0 | 26.5 | 3262 | 3024 | 123 |
| | | 1170 | 34.8 | 40.7 | 4764 | 4287 | 117 |
| | | 1755 | 35.6 | 62.5 | 6853 | 6017 | 110 |
| | | 2340 | 36.1 | 84.6 | 8791 | 7532 | 104 |
| BXRC-27H4000-D-7x | 97 | 525 | 27.7 | 14.6 | 1898 | 1762 | 130 |
| | | 700 | 28.2 | 19.8 | 2468 | 2262 | 125 |
| | | 1050 | 29.0 | 30.5 | 3563 | 3206 | 117 |
| | | 1575 | 30.4 | 47.9 | 5089 | 4500 | 106 |
| | | 2100 | 31.5 | 66.2 | 6478 | 5633 | 98 |
| BXRC-30C4001-B-7x | 70 | 450 | 33.2 | 14.9 | 2993 | 2757 | 200 |
| | | 600 | 34.0 | 20.4 | 3926 | 3539 | 192 |
| | | 900 | 34.8 | 31.3 | 5575 | 5017 | 178 |
| | | 1350 | 35.6 | 48.1 | 8292 | 7041 | 172 |
| | | 1800 | 36.1 | 65.1 | 10670 | 8815 | 164 |
| BXRC-30C4001-C-7x | 70 | 585 | 33.2 | 19.4 | 3787 | 3584 | 195 |
| | | 780 | 34.0 | 26.5 | 4962 | 4601 | 187 |
| | | 1170 | 34.8 | 40.7 | 7247 | 6523 | 178 |
| | | 1755 | 35.6 | 62.5 | 10426 | 9154 | 167 |
| | | 2340 | 36.1 | 84.6 | 13374 | 11460 | 158 |
| BXRC-30C4001-D-7x | 70 | 525 | 27.7 | 14.6 | 2887 | 2680 | 198 |
| | | 700 | 28.2 | 19.8 | 3755 | 3441 | 190 |
| | | 1050 | 29.0 | 30.5 | 5420 | 4878 | 178 |
| | | 1575 | 30.4 | 47.9 | 7742 | 6846 | 162 |
| | | 2100 | 31.5 | 66.2 | 9855 | 8570 | 149 |
| BXRC-30E4000-B-7x | 80 | 450 | 33.2 | 14.9 | 2859 | 2569 | 191 |
| | | 600 | 34.0 | 20.4 | 3750 | 3363 | 184 |
| | | 900 | 34.8 | 31.3 | 5324 | 4792 | 170 |
| | | 1350 | 35.6 | 48.1 | 7919 | 6977 | 165 |
| | | 1800 | 36.1 | 65.1 | 10190 | 8858 | 157 |
| BXRC-30E4000-C-7x | 80 | 585 | 33.2 | 19.4 | 3617 | 3423 | 186 |
| | | 780 | 34.0 | 26.5 | 4739 | 4392 | 179 |
| | | 1170 | 34.8 | 40.7 | 6922 | 6230 | 170 |
| | | 1755 | 35.6 | 62.5 | 9958 | 8764 | 159 |
| | | 2340 | 36.1 | 84.6 | 12773 | 11009 | 151 |
| BXRC-30E4000-D-7x | 80 | 525 | 27.7 | 14.6 | 2758 | 2560 | 189 |
| | | 700 | 28.2 | 19.8 | 3586 | 3286 | 181 |
| | | 1050 | 29.0 | 30.5 | 5177 | 4659 | 170 |
| | | 1575 | 30.4 | 47.9 | 7394 | 6538 | 154 |
| | | 2100 | 31.5 | 66.2 | 9412 | 8185 | 142 |

Notes for Table 5:

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 5: 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-30G40H0-B-7x | 90 | 450 | 33.2 | 14.9 | 2321 | 2085 | 155 |
| | | 600 | 34.0 | 20.4 | 3044 | 2730 | 149 |
| | | 900 | 34.8 | 31.3 | 4322 | 3890 | 138 |
| | | 1350 | 35.6 | 48.1 | 6428 | 5664 | 134 |
| | | 1800 | 36.1 | 65.1 | 8272 | 7191 | 127 |
| BXRC-30G40H0-C-7x | 90 | 585 | 33.2 | 19.4 | 2936 | 2778 | 151 |
| | | 780 | 34.0 | 26.5 | 3847 | 3565 | 145 |
| | | 1170 | 34.8 | 40.7 | 5619 | 5057 | 138 |
| | | 1755 | 35.6 | 62.5 | 8083 | 7115 | 129 |
| | | 2340 | 36.1 | 84.6 | 10368 | 8937 | 123 |
| BXRC-30G40H0-D-7x | 90 | 525 | 27.7 | 14.6 | 2238 | 2078 | 154 |
| | | 700 | 28.2 | 19.8 | 2911 | 2667 | 147 |
| | | 1050 | 29.0 | 30.5 | 4202 | 3782 | 138 |
| | | 1575 | 30.4 | 47.9 | 6002 | 5307 | 125 |
| | | 2100 | 31.5 | 66.2 | 7641 | 6644 | 115 |
| BXRC-30G4000-B-7x | 90 | 450 | 33.2 | 14.9 | 2421 | 2176 | 162 |
| | | 600 | 34.0 | 20.4 | 3176 | 2849 | 156 |
| | | 900 | 34.8 | 31.3 | 4510 | 4059 | 144 |
| | | 1350 | 35.6 | 48.1 | 6708 | 5910 | 139 |
| | | 1800 | 36.1 | 65.1 | 8632 | 7503 | 133 |
| BXRC-30G4000-C-7x | 90 | 585 | 33.2 | 19.4 | 3063 | 2899 | 158 |
| | | 780 | 34.0 | 26.5 | 4014 | 3720 | 151 |
| | | 1170 | 34.8 | 40.7 | 5863 | 5277 | 144 |
| | | 1755 | 35.6 | 62.5 | 8435 | 7424 | 135 |
| | | 2340 | 36.1 | 84.6 | 10819 | 9325 | 128 |
| BXRC-30G4000-D-7x | 90 | 525 | 27.7 | 14.6 | 2336 | 2168 | 160 |
| | | 700 | 28.2 | 19.8 | 3037 | 2783 | 154 |
| | | 1050 | 29.0 | 30.5 | 4385 | 3946 | 144 |
| | | 1575 | 30.4 | 47.9 | 6263 | 5538 | 131 |
| | | 2100 | 31.5 | 66.2 | 7973 | 6933 | 120 |
| BXRC-30G400C-B-7x | 90 | 450 | 33.2 | 14.9 | 2236 | 2010 | 150 |
| | | 600 | 34.0 | 20.4 | 2934 | 2631 | 144 |
| | | 900 | 34.8 | 31.3 | 4166 | 3749 | 133 |
| | | 1350 | 35.6 | 48.1 | 6195 | 5459 | 129 |
| | | 1800 | 36.1 | 65.1 | 7972 | 6930 | 123 |
| BXRC-30G400C-D-7x | 90 | 525 | 27.7 | 14.6 | 2157 | 2002 | 148 |
| | | 700 | 28.2 | 19.8 | 2805 | 2571 | 142 |
| | | 1050 | 29.0 | 30.5 | 4050 | 3645 | 133 |
| | | 1575 | 30.4 | 47.9 | 5785 | 5115 | 121 |
| | | 2100 | 31.5 | 66.2 | 7364 | 6404 | 111 |
| BXRC-30H4000-B-7x | 97 | 450 | 33.2 | 14.9 | 2102 | 1936 | 141 |
| | | 600 | 34.0 | 20.4 | 2757 | 2485 | 135 |
| | | 900 | 34.8 | 31.3 | 3915 | 3524 | 125 |
| | | 1350 | 35.6 | 48.1 | 5823 | 4945 | 121 |
| | | 1800 | 36.1 | 65.1 | 7493 | 6190 | 115 |

Notes for Table 5:

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 5: 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-30H4000-C-7x | 97 | 585 | 33.2 | 19.4 | 2659 | 2517 | 137 |
| | | 780 | 34.0 | 26.5 | 3485 | 3231 | 131 |
| | | 1170 | 34.8 | 40.7 | 5090 | 4581 | 125 |
| | | 1755 | 35.6 | 62.5 | 7322 | 6428 | 117 |
| | | 2340 | 36.1 | 84.6 | 9392 | 8048 | 111 |
| BXRC-30H4000-D-7x | 97 | 525 | 27.7 | 14.6 | 2028 | 1882 | 139 |
| | | 700 | 28.2 | 19.8 | 2637 | 2416 | 133 |
| | | 1050 | 29.0 | 30.5 | 3806 | 3426 | 125 |
| | | 1575 | 30.4 | 47.9 | 5437 | 4807 | 113 |
| | | 2100 | 31.5 | 66.2 | 6921 | 6018 | 105 |
| BXRC-30A4001-B-7x | 93 | 450 | 33.3 | 15.0 | 2085 | 1874 | 139 |
| | | 600 | 33.9 | 20.4 | 2735 | 2453 | 134 |
| | | 900 | 35.0 | 31.2 | 3884 | 3495 | 124 |
| | | 1350 | 36.7 | 49.5 | 5776 | 5089 | 117 |
| | | 1800 | 38.0 | 68.4 | 7433 | 6461 | 109 |
| BXRC-30A4001-C-7x | 93 | 585 | 33.4 | 19.5 | 2638 | 2496 | 135 |
| | | 780 | 34.0 | 26.5 | 3457 | 3203 | 130 |
| | | 1170 | 35.0 | 40.6 | 5049 | 4544 | 124 |
| | | 1755 | 36.8 | 64.5 | 7263 | 6393 | 113 |
| | | 2340 | 38.1 | 89.3 | 9317 | 8030 | 104 |
| BXRC-30A4001-D-7x | 93 | 525 | 27.7 | 14.6 | 2011 | 1867 | 138 |
| | | 700 | 28.2 | 19.8 | 2615 | 2397 | 132 |
| | | 1050 | 29.0 | 30.4 | 3776 | 3398 | 124 |
| | | 1575 | 30.4 | 47.9 | 5393 | 4769 | 113 |
| | | 2100 | 31.5 | 66.2 | 6866 | 5970 | 104 |
| BXRC-35E4000-B-7x | 80 | 450 | 33.2 | 14.9 | 2926 | 2629 | 196 |
| | | 600 | 34.0 | 20.4 | 3838 | 3443 | 188 |
| | | 900 | 34.8 | 31.3 | 5450 | 4905 | 174 |
| | | 1350 | 35.6 | 48.1 | 8105 | 7142 | 168 |
| | | 1800 | 36.1 | 65.1 | 10430 | 9067 | 160 |
| BXRC-35E4000-C-7x | 80 | 585 | 33.2 | 19.4 | 3702 | 3503 | 191 |
| | | 780 | 34.0 | 26.5 | 4851 | 4495 | 183 |
| | | 1170 | 34.8 | 40.7 | 7085 | 6376 | 174 |
| | | 1755 | 35.6 | 62.5 | 10192 | 8970 | 163 |
| | | 2340 | 36.1 | 84.6 | 13073 | 11268 | 155 |
| BXRC-35E4000-D-7x | 80 | 525 | 27.7 | 14.6 | 2822 | 2620 | 194 |
| | | 700 | 28.2 | 19.8 | 3670 | 3363 | 186 |
| | | 1050 | 29.0 | 30.5 | 5298 | 4768 | 174 |
| | | 1575 | 30.4 | 47.9 | 7568 | 6692 | 158 |
| | | 2100 | 31.5 | 66.2 | 9634 | 8378 | 145 |
| BXRC-35G4000-B-7x | 90 | 450 | 33.2 | 14.9 | 2405 | 2161 | 161 |
| | | 600 | 34.0 | 20.4 | 3154 | 2829 | 155 |
| | | 900 | 34.8 | 31.3 | 4479 | 4031 | 143 |
| | | 1350 | 35.6 | 48.1 | 6661 | 5869 | 138 |
| | | 1800 | 36.1 | 65.1 | 8572 | 7451 | 132 |

Notes for Table 5:

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 5: Product Performance at Commonly Used Drive Currents (Continued)

| Part Number | CRI | Drive Current ¹ (mA) | Typical V_f $T_c = 25^\circ\text{C}$ (V) | Typical Power $T_c = 25^\circ\text{C}$ (W) | Typical Flux ² $T_c = 25^\circ\text{C}$ (lm) | Typical DC Flux ³ $T_c = 85^\circ\text{C}$ (lm) | Typical Efficacy $T_c = 25^\circ\text{C}$ (lm/W) |
|-------------------|-----|---------------------------------|---|---|--|---|---|
| BXRC-35G4000-C-7x | 90 | 585 | 33.2 | 19.4 | 3042 | 2879 | 157 |
| | | 780 | 34.0 | 26.5 | 3986 | 3694 | 150 |
| | | 1170 | 34.8 | 40.7 | 5822 | 5240 | 143 |
| | | 1755 | 35.6 | 62.5 | 8376 | 7372 | 134 |
| | | 2340 | 36.1 | 84.6 | 10744 | 9260 | 127 |
| BXRC-35G4000-D-7x | 90 | 525 | 27.7 | 14.6 | 2320 | 2153 | 159 |
| | | 700 | 28.2 | 19.8 | 3016 | 2764 | 153 |
| | | 1050 | 29.0 | 30.5 | 4354 | 3919 | 143 |
| | | 1575 | 30.4 | 47.9 | 6220 | 5500 | 130 |
| | | 2100 | 31.5 | 66.2 | 7918 | 6885 | 120 |
| BXRC-35A4001-B-7x | 80 | 450 | 33.2 | 14.9 | 2220 | 1995 | 149 |
| | | 600 | 34.0 | 20.4 | 2912 | 2612 | 143 |
| | | 900 | 34.8 | 31.3 | 4134 | 3721 | 132 |
| | | 1350 | 35.6 | 48.1 | 6149 | 5418 | 128 |
| | | 1800 | 36.1 | 65.1 | 7913 | 6878 | 122 |
| BXRC-35A4001-C-7x | 80 | 585 | 33.2 | 19.4 | 2808 | 2658 | 145 |
| | | 780 | 34.0 | 26.5 | 3680 | 3410 | 139 |
| | | 1170 | 34.8 | 40.7 | 5375 | 4837 | 132 |
| | | 1755 | 35.6 | 62.5 | 7732 | 6805 | 124 |
| | | 2340 | 36.1 | 84.6 | 9918 | 8548 | 117 |
| BXRC-35A4001-D-7x | 80 | 525 | 27.7 | 14.6 | 2141 | 1987 | 147 |
| | | 700 | 28.2 | 19.8 | 2784 | 2552 | 141 |
| | | 1050 | 29.0 | 30.5 | 4019 | 3617 | 132 |
| | | 1575 | 30.4 | 47.9 | 5741 | 5077 | 120 |
| | | 2100 | 31.5 | 66.2 | 7308 | 6355 | 110 |
| BXRC-40C4001-B-7x | 80 | 450 | 33.2 | 14.9 | 3077 | 2765 | 206 |
| | | 600 | 34.0 | 20.4 | 4037 | 3621 | 198 |
| | | 900 | 34.8 | 31.3 | 5732 | 5158 | 183 |
| | | 1350 | 35.6 | 48.1 | 8525 | 7511 | 177 |
| | | 1800 | 36.1 | 65.1 | 10970 | 9536 | 169 |
| BXRC-40C4001-C-7x | 80 | 585 | 33.2 | 19.4 | 3893 | 3684 | 200 |
| | | 780 | 34.0 | 26.5 | 5102 | 4728 | 192 |
| | | 1170 | 34.8 | 40.7 | 7451 | 6706 | 183 |
| | | 1755 | 35.6 | 62.5 | 10719 | 9434 | 171 |
| | | 2340 | 36.1 | 84.6 | 13750 | 11851 | 163 |
| BXRC-40C4001-D-7x | 80 | 525 | 27.7 | 14.6 | 2968 | 2755 | 204 |
| | | 700 | 28.2 | 19.8 | 3860 | 3537 | 195 |
| | | 1050 | 29.0 | 30.5 | 5572 | 5015 | 183 |
| | | 1575 | 30.4 | 47.9 | 7959 | 7038 | 166 |
| | | 2100 | 31.5 | 66.2 | 10132 | 8811 | 153 |
| BXRC-40E4000-B-7x | 80 | 450 | 33.2 | 14.9 | 2943 | 2644 | 197 |
| | | 600 | 34.0 | 20.4 | 3860 | 3462 | 189 |
| | | 900 | 34.8 | 31.3 | 5481 | 4933 | 175 |
| | | 1350 | 35.6 | 48.1 | 8152 | 7183 | 169 |
| | | 1800 | 36.1 | 65.1 | 10490 | 9119 | 161 |

Notes for Table 5:

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

Performance at Commonly Used Drive Currents

Table 5: Product Performance at Commonly Used Drive Currents (Continued)

| Part Number | CRI | Drive Current ¹ (mA) | Typical V_f $T_c = 25^\circ\text{C}$ (V) | Typical Power $T_c = 25^\circ\text{C}$ (W) | Typical Flux ² $T_c = 25^\circ\text{C}$ (lm) | Typical DC Flux ³ $T_c = 85^\circ\text{C}$ (lm) | Typical Efficacy $T_c = 25^\circ\text{C}$ (lm/W) |
|-------------------|-----|---------------------------------|---|---|--|---|---|
| BXRC-40E4000-C-7x | 80 | 585 | 33.2 | 19.4 | 3723 | 3523 | 192 |
| | | 780 | 34.0 | 26.5 | 4879 | 4521 | 184 |
| | | 1170 | 34.8 | 40.7 | 7125 | 6413 | 175 |
| | | 1755 | 35.6 | 62.5 | 10250 | 9022 | 164 |
| | | 2340 | 36.1 | 84.6 | 13148 | 11333 | 155 |
| BXRC-40E4000-D-7x | 80 | 525 | 27.7 | 14.6 | 2839 | 2635 | 195 |
| | | 700 | 28.2 | 19.8 | 3691 | 3383 | 187 |
| | | 1050 | 29.0 | 30.5 | 5329 | 4796 | 175 |
| | | 1575 | 30.4 | 47.9 | 7611 | 6730 | 159 |
| | | 2100 | 31.5 | 66.2 | 9689 | 8426 | 146 |
| BXRC-40G4000-B-7x | 90 | 450 | 33.2 | 14.9 | 2455 | 2206 | 164 |
| | | 600 | 34.0 | 20.4 | 3221 | 2889 | 158 |
| | | 900 | 34.8 | 31.3 | 4573 | 4115 | 146 |
| | | 1350 | 35.6 | 48.1 | 6801 | 5992 | 141 |
| | | 1800 | 36.1 | 65.1 | 8752 | 7608 | 135 |
| BXRC-40G4000-C-7x | 90 | 585 | 33.2 | 19.4 | 3106 | 2939 | 160 |
| | | 780 | 34.0 | 26.5 | 4070 | 3772 | 153 |
| | | 1170 | 34.8 | 40.7 | 5945 | 5350 | 146 |
| | | 1755 | 35.6 | 62.5 | 8552 | 7527 | 137 |
| | | 2340 | 36.1 | 84.6 | 10970 | 9455 | 130 |
| BXRC-40G4000-D-7x | 90 | 525 | 27.7 | 14.6 | 2368 | 2198 | 163 |
| | | 700 | 28.2 | 19.8 | 3080 | 2822 | 156 |
| | | 1050 | 29.0 | 30.5 | 4446 | 4001 | 146 |
| | | 1575 | 30.4 | 47.9 | 6350 | 5615 | 132 |
| | | 2100 | 31.5 | 66.2 | 8084 | 7030 | 122 |
| BXRC-40H4000-B-7x | 97 | 450 | 33.2 | 14.9 | 2220 | 1995 | 149 |
| | | 600 | 34.0 | 20.4 | 2912 | 2612 | 143 |
| | | 900 | 34.8 | 31.3 | 4134 | 3721 | 132 |
| | | 1350 | 35.6 | 48.1 | 6149 | 5418 | 128 |
| | | 1800 | 36.1 | 65.1 | 7913 | 6878 | 122 |
| BXRC-40H4000-C-7x | 97 | 585 | 33.2 | 19.4 | 2808 | 2658 | 145 |
| | | 780 | 34.0 | 26.5 | 3680 | 3410 | 139 |
| | | 1170 | 34.8 | 40.7 | 5375 | 4837 | 132 |
| | | 1755 | 35.6 | 62.5 | 7732 | 6805 | 124 |
| | | 2340 | 36.1 | 84.6 | 9918 | 8548 | 117 |
| BXRC-40H4000-D-7x | 97 | 525 | 27.7 | 14.6 | 2141 | 1987 | 147 |
| | | 700 | 28.2 | 19.8 | 2784 | 2552 | 141 |
| | | 1050 | 29.0 | 30.5 | 4019 | 3617 | 132 |
| | | 1575 | 30.4 | 47.9 | 5741 | 5077 | 120 |
| | | 2100 | 31.5 | 66.2 | 7308 | 6355 | 110 |
| BXRC-40A4001-B-7x | 80 | 450 | 33.2 | 14.9 | 2405 | 2161 | 161 |
| | | 600 | 34.0 | 20.4 | 3154 | 2829 | 155 |
| | | 900 | 34.8 | 31.3 | 4479 | 4031 | 143 |
| | | 1350 | 35.6 | 48.1 | 6661 | 5869 | 138 |
| | | 1800 | 36.1 | 65.1 | 8572 | 7451 | 132 |

Notes for Table 5:

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

Performance at Commonly Used Drive Currents

Table 5: 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-40A4001-C-7x | 80 | 585 | 33.2 | 19.4 | 3042 | 2879 | 157 |
| | | 780 | 34.0 | 26.5 | 3986 | 3694 | 150 |
| | | 1170 | 34.8 | 40.7 | 5822 | 5240 | 143 |
| | | 1755 | 35.6 | 62.5 | 8376 | 7372 | 134 |
| | | 2340 | 36.1 | 84.6 | 10744 | 9260 | 127 |
| BXRC-40A4001-D-7x | 80 | 525 | 27.7 | 14.6 | 2320 | 2153 | 159 |
| | | 700 | 28.2 | 19.8 | 3016 | 2764 | 153 |
| | | 1050 | 29.0 | 30.5 | 4354 | 3919 | 143 |
| | | 1575 | 30.4 | 47.9 | 6220 | 5500 | 130 |
| | | 2100 | 31.5 | 66.2 | 7918 | 6885 | 120 |
| BXRC-50C4001-B-7x | 70 | 450 | 33.2 | 14.9 | 3094 | 2780 | 207 |
| | | 600 | 34.0 | 20.4 | 4059 | 3640 | 199 |
| | | 900 | 34.8 | 31.3 | 5763 | 5187 | 184 |
| | | 1350 | 35.6 | 48.1 | 8571 | 7552 | 178 |
| | | 1800 | 36.1 | 65.1 | 11030 | 9588 | 170 |
| BXRC-50C4001-C-7x | 70 | 585 | 33.2 | 19.4 | 3914 | 3704 | 201 |
| | | 780 | 34.0 | 26.5 | 5129 | 4753 | 193 |
| | | 1170 | 34.8 | 40.7 | 7492 | 6743 | 184 |
| | | 1755 | 35.6 | 62.5 | 10778 | 9486 | 172 |
| | | 2340 | 36.1 | 84.6 | 13825 | 11915 | 163 |
| BXRC-50C4001-D-7x | 70 | 525 | 27.7 | 14.6 | 2985 | 2770 | 205 |
| | | 700 | 28.2 | 19.8 | 3881 | 3557 | 196 |
| | | 1050 | 29.0 | 30.5 | 5603 | 5043 | 184 |
| | | 1575 | 30.4 | 47.9 | 8003 | 7077 | 167 |
| | | 2100 | 31.5 | 66.2 | 10188 | 8859 | 154 |
| BXRC-50E4001-B-7x | 80 | 450 | 33.2 | 14.9 | 2976 | 2675 | 199 |
| | | 600 | 34.0 | 20.4 | 3904 | 3502 | 191 |
| | | 900 | 34.8 | 31.3 | 5544 | 4989 | 177 |
| | | 1350 | 35.6 | 48.1 | 8245 | 7265 | 171 |
| | | 1800 | 36.1 | 65.1 | 10610 | 9223 | 163 |
| BXRC-50E4001-C-7x | 80 | 585 | 33.2 | 19.4 | 3765 | 3563 | 194 |
| | | 780 | 34.0 | 26.5 | 4934 | 4573 | 186 |
| | | 1170 | 34.8 | 40.7 | 7207 | 6486 | 177 |
| | | 1755 | 35.6 | 62.5 | 10368 | 9125 | 166 |
| | | 2340 | 36.1 | 84.6 | 13299 | 11462 | 157 |
| BXRC-50E4001-D-7x | 80 | 525 | 27.7 | 14.6 | 2871 | 2665 | 197 |
| | | 700 | 28.2 | 19.8 | 3733 | 3421 | 189 |
| | | 1050 | 29.0 | 30.5 | 5390 | 4851 | 177 |
| | | 1575 | 30.4 | 47.9 | 7698 | 6807 | 161 |
| | | 2100 | 31.5 | 66.2 | 9800 | 8522 | 148 |
| BXRC-50G4001-B-7x | 90 | 450 | 33.2 | 14.9 | 2573 | 2312 | 172 |
| | | 600 | 34.0 | 20.4 | 3375 | 3027 | 165 |
| | | 900 | 34.8 | 31.3 | 4792 | 4313 | 153 |
| | | 1350 | 35.6 | 48.1 | 7127 | 6280 | 148 |
| | | 1800 | 36.1 | 65.1 | 9171 | 7972 | 141 |

Notes for Table 5:

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 5: 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-50G4001-C-7x | 90 | 585 | 33.2 | 19.4 | 3255 | 3080 | 168 |
| | | 780 | 34.0 | 26.5 | 4265 | 3953 | 161 |
| | | 1170 | 34.8 | 40.7 | 6230 | 5607 | 153 |
| | | 1755 | 35.6 | 62.5 | 8962 | 7888 | 143 |
| | | 2340 | 36.1 | 84.6 | 11496 | 9908 | 136 |
| BXRC-50G4001-D-7x | 90 | 525 | 27.7 | 14.6 | 2482 | 2304 | 170 |
| | | 700 | 28.2 | 19.8 | 3227 | 2957 | 163 |
| | | 1050 | 29.0 | 30.5 | 4659 | 4193 | 153 |
| | | 1575 | 30.4 | 47.9 | 6654 | 5884 | 139 |
| | | 2100 | 31.5 | 66.2 | 8471 | 7367 | 128 |
| BXRC-56G4000-B-7x | 90 | 450 | 33.2 | 14.9 | 2569 | 2385 | 172 |
| | | 600 | 34.0 | 20.4 | 3341 | 3062 | 164 |
| | | 900 | 34.8 | 31.3 | 4823 | 4341 | 154 |
| | | 1350 | 35.6 | 48.1 | 6889 | 6092 | 143 |
| | | 1800 | 36.1 | 65.1 | 8770 | 7627 | 135 |
| BXRC-56G4000-C-7x | 90 | 585 | 33.2 | 19.4 | 3340 | 3100 | 172 |
| | | 780 | 34.0 | 26.5 | 4343 | 3980 | 164 |
| | | 1170 | 34.8 | 40.7 | 6270 | 5643 | 154 |
| | | 1755 | 35.6 | 62.5 | 8956 | 7920 | 143 |
| | | 2340 | 36.1 | 84.6 | 11401 | 9915 | 135 |
| BXRC-56G400x-D-7x | 90 | 525 | 27.7 | 14.6 | 2498 | 2319 | 172 |
| | | 700 | 28.2 | 19.8 | 3248 | 2977 | 164 |
| | | 1050 | 29.0 | 30.5 | 4689 | 4220 | 154 |
| | | 1575 | 30.4 | 47.9 | 6698 | 5923 | 140 |
| | | 2100 | 31.5 | 66.2 | 8527 | 7415 | 129 |
| BXRC-56H4000-D-7x | 97 | 525 | 27.7 | 14.6 | 2255 | 2093 | 155 |
| | | 700 | 28.2 | 19.8 | 2932 | 2687 | 148 |
| | | 1050 | 29.0 | 30.5 | 4233 | 3809 | 139 |
| | | 1575 | 30.4 | 47.9 | 6046 | 5346 | 126 |
| | | 2100 | 31.5 | 66.2 | 7696 | 6693 | 116 |
| BXRC-57C4001-B-7x | 70 | 450 | 33.2 | 14.9 | 3010 | 2705 | 201 |
| | | 600 | 34.0 | 20.4 | 3949 | 3541 | 194 |
| | | 900 | 34.8 | 31.3 | 5606 | 5046 | 179 |
| | | 1350 | 35.6 | 48.1 | 8338 | 7347 | 173 |
| | | 1800 | 36.1 | 65.1 | 10730 | 9327 | 165 |
| BXRC-57C4001-C-7x | 70 | 585 | 33.2 | 19.4 | 3808 | 3604 | 196 |
| | | 780 | 34.0 | 26.5 | 4990 | 4624 | 188 |
| | | 1170 | 34.8 | 40.7 | 7288 | 6559 | 179 |
| | | 1755 | 35.6 | 62.5 | 10485 | 9228 | 168 |
| | | 2340 | 36.1 | 84.6 | 13449 | 11592 | 159 |
| BXRC-57C4001-D-7x | 70 | 525 | 27.7 | 14.6 | 2904 | 2695 | 199 |
| | | 700 | 28.2 | 19.8 | 3776 | 3460 | 191 |
| | | 1050 | 29.0 | 30.5 | 5451 | 4905 | 179 |
| | | 1575 | 30.4 | 47.9 | 7785 | 6884 | 162 |
| | | 2100 | 31.5 | 66.2 | 9911 | 8618 | 150 |

Notes for Table 5:

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 5: Product Performance at Commonly Used Drive Currents (Continued)

| Part Number | CRI | Drive Current ¹ (mA) | Typical V_f $T_c = 25^\circ\text{C}$ (V) | Typical Power $T_c = 25^\circ\text{C}$ (W) | Typical Flux ² $T_c = 25^\circ\text{C}$ (lm) | Typical DC Flux ³ $T_c = 85^\circ\text{C}$ (lm) | Typical Efficacy $T_c = 25^\circ\text{C}$ (lm/W) |
|-------------------|-----|---------------------------------|---|---|--|---|---|
| BXRC-57E4001-B-7x | 80 | 450 | 33.2 | 14.9 | 2859 | 2569 | 191 |
| | | 600 | 34.0 | 20.4 | 3750 | 3363 | 184 |
| | | 900 | 34.8 | 31.3 | 5324 | 4792 | 170 |
| | | 1350 | 35.6 | 48.1 | 7919 | 6977 | 165 |
| | | 1800 | 36.1 | 65.1 | 10190 | 8858 | 157 |
| BXRC-57E4001-C-7x | 80 | 585 | 33.2 | 19.4 | 3617 | 3423 | 186 |
| | | 780 | 34.0 | 26.5 | 4739 | 4392 | 179 |
| | | 1170 | 34.8 | 40.7 | 6922 | 6230 | 170 |
| | | 1755 | 35.6 | 62.5 | 9958 | 8764 | 159 |
| | | 2340 | 36.1 | 84.6 | 12773 | 11009 | 151 |
| BXRC-57E4001-D-7x | 80 | 525 | 27.7 | 14.6 | 2758 | 2560 | 189 |
| | | 700 | 28.2 | 19.8 | 3586 | 3286 | 181 |
| | | 1050 | 29.0 | 30.5 | 5177 | 4659 | 170 |
| | | 1575 | 30.4 | 47.9 | 7394 | 6538 | 154 |
| | | 2100 | 31.5 | 66.2 | 9412 | 8185 | 142 |
| BXRC-65C4001-B-7x | 70 | 450 | 33.2 | 14.9 | 3010 | 2705 | 201 |
| | | 600 | 34.0 | 20.4 | 3949 | 3541 | 194 |
| | | 900 | 34.8 | 31.3 | 5606 | 5046 | 179 |
| | | 1350 | 35.6 | 48.1 | 8338 | 7347 | 173 |
| | | 1800 | 36.1 | 65.1 | 10730 | 9327 | 165 |
| BXRC-65C4001-C-7x | 70 | 585 | 33.2 | 19.4 | 3808 | 3604 | 196 |
| | | 780 | 34.0 | 26.5 | 4990 | 4624 | 188 |
| | | 1170 | 34.8 | 40.7 | 7288 | 6559 | 179 |
| | | 1755 | 35.6 | 62.5 | 10485 | 9228 | 168 |
| | | 2340 | 36.1 | 84.6 | 13449 | 11592 | 159 |
| BXRC-65C4001-D-7x | 70 | 525 | 27.7 | 14.6 | 2904 | 2695 | 199 |
| | | 700 | 28.2 | 19.8 | 3776 | 3460 | 191 |
| | | 1050 | 29.0 | 30.5 | 5451 | 4905 | 179 |
| | | 1575 | 30.4 | 47.9 | 7785 | 6884 | 162 |
| | | 2100 | 31.5 | 66.2 | 9911 | 8618 | 150 |
| BXRC-65E4001-B-7x | 80 | 450 | 33.2 | 14.9 | 2892 | 2599 | 194 |
| | | 600 | 34.0 | 20.4 | 3794 | 3403 | 186 |
| | | 900 | 34.8 | 31.3 | 5387 | 4848 | 172 |
| | | 1350 | 35.6 | 48.1 | 8012 | 7059 | 167 |
| | | 1800 | 36.1 | 65.1 | 10310 | 8962 | 158 |
| BXRC-65E4001-C-7x | 80 | 585 | 33.2 | 19.4 | 3659 | 3463 | 188 |
| | | 780 | 34.0 | 26.5 | 4795 | 4443 | 181 |
| | | 1170 | 34.8 | 40.7 | 7003 | 6303 | 172 |
| | | 1755 | 35.6 | 62.5 | 10075 | 8867 | 161 |
| | | 2340 | 36.1 | 84.6 | 12923 | 11138 | 153 |
| BXRC-65E4001-D-7x | 80 | 525 | 27.7 | 14.6 | 2790 | 2590 | 192 |
| | | 700 | 28.2 | 19.8 | 3628 | 3325 | 184 |
| | | 1050 | 29.0 | 30.5 | 5237 | 4714 | 172 |
| | | 1575 | 30.4 | 47.9 | 7481 | 6615 | 156 |
| | | 2100 | 31.5 | 66.2 | 9523 | 8281 | 144 |

Notes for Table 5:

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

Electrical Characteristics

Table 6: 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-xxx400x-B-7x | 900 | 32.2 | 34.8 | 37.4 | -14.9 | 0.15 | 31.0 | 38.4 |
| | 1800 | 33.4 | 36.1 | 38.8 | -14.9 | 0.19 | 32.2 | 39.8 |
| BXRC-xxx400x-C-7x | 1170 | 32.2 | 34.8 | 37.4 | -14.9 | 0.11 | 31.0 | 38.4 |
| | 2340 | 33.4 | 36.1 | 38.8 | -14.9 | 0.13 | 32.2 | 39.8 |
| BXRC-xxx400x-D-7x | 1050 | 26.8 | 29.0 | 31.2 | -12.2 | 0.16 | 25.8 | 32.0 |
| | 2100 | 29.2 | 31.5 | 33.9 | -12.2 | 0.19 | 28.2 | 34.7 |

Notes for Table 6:

- 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 62031:2018. 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 7: Eye Safety Risk Group (RG) Classifications

| Part Number | Drive Current ⁵ (mA) | CCT ¹⁻⁵ | | | |
|-------------------|---------------------------------|--------------------|--------------------|--------------------|--------------------|
| | | 2700K/3000K | 4000K ² | 5000K ³ | 6500K ⁴ |
| BXRC-xxx400x-B-7x | 900 | RG1 | RG1 | RG1 | RG1 |
| | 1350 | RG1 | RG1 | RG1 | RG2 |
| | 1800 | RG1 | RG1 | RG2 | RG2 |
| BXRC-xxx400x-C-7x | 1170 | RG1 | RG1 | RG1 | RG1 |
| | 1755 | RG1 | RG1 | RG2 | RG2 |
| | 2340 | RG1 | RG1 | RG2 | RG2 |
| BXRC-xxx400x-D-7x | 1050 | RG1 | RG1 | RG1 | RG1 |
| | 1575 | RG1 | RG1 | RG1 | RG2 |
| | 2100 | RG1 | RG1 | RG2 | RG2 |

Notes for Table 7:

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 8: 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-xxx400x-B-7x | BXRC-xxx400x-C-7x | BXRC-xxx400x-D-7x |
| Maximum Drive Current ³ | 1800mA | 2340mA | 2100mA |
| Maximum Peak Pulsed Drive Current ⁴ | 2570mA | 3340mA | 3000mA |
| Maximum Reverse Voltage ⁵ | -60V | -60V | -50V |

Notes for Table 8:

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. 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: Vero 18B Drive Current vs. Voltage

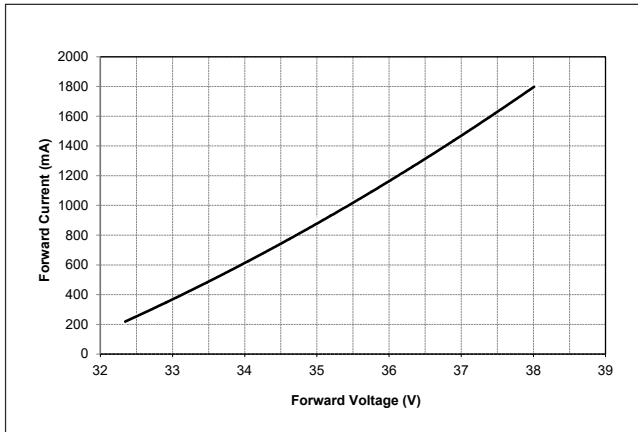


Figure 2: Vero 18C Drive Current vs. Voltage

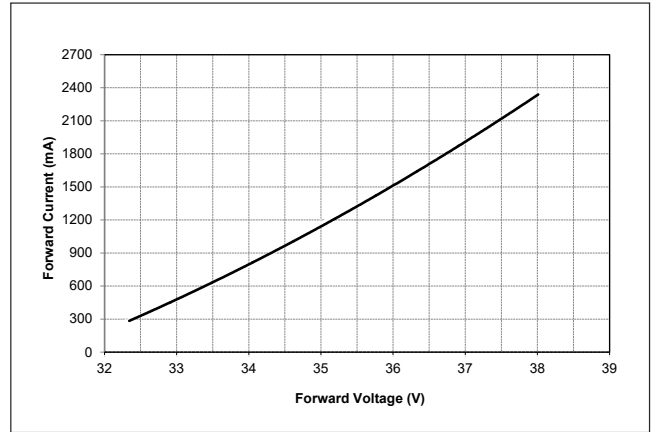


Figure 3: Vero 18D Drive Current vs. Voltage

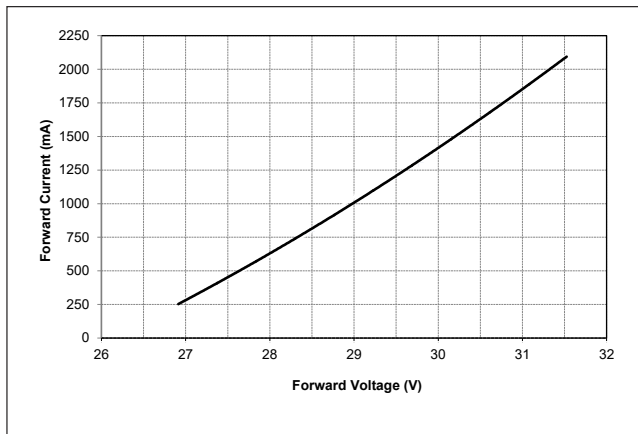


Figure 4: Vero 18B Typical Relative Flux vs. Current

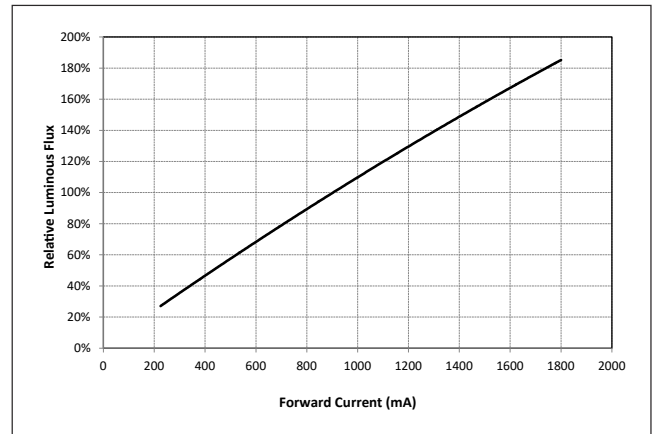


Figure 5: Vero 18C Typical Relative Flux vs. Current

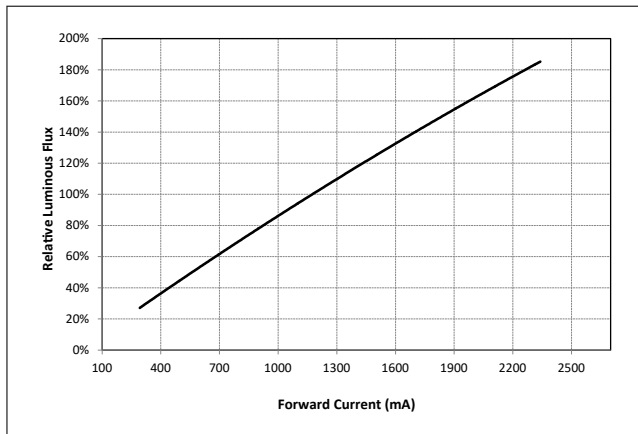
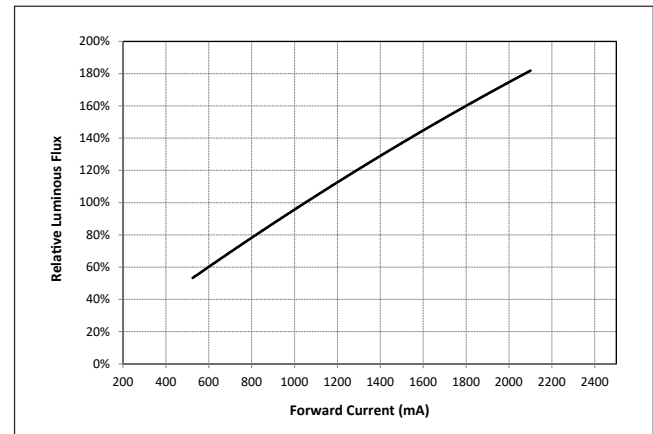


Figure 6: Vero 18D Typical Relative Flux vs. Current



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

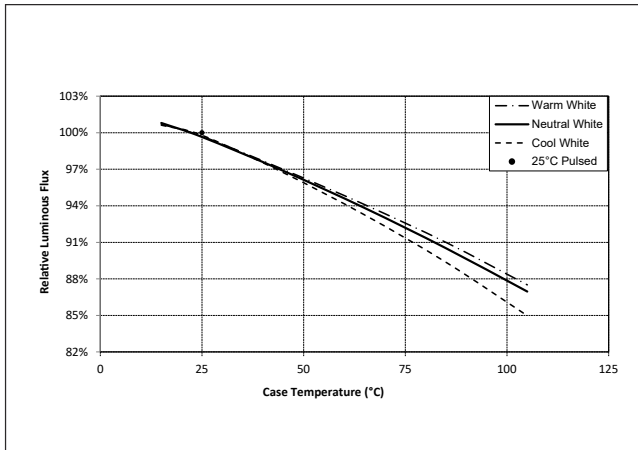


Figure 8: Typical DC ccy Shift vs. Case Temperature

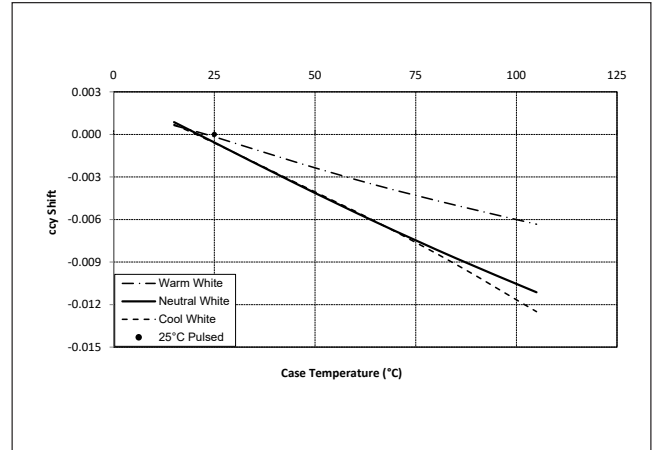
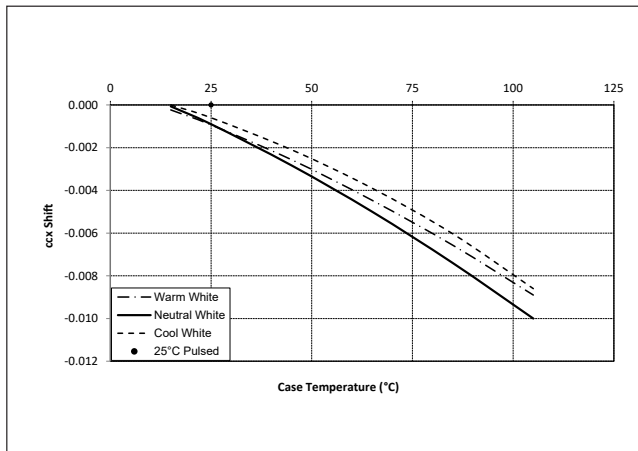


Figure 9: Typical DC ccx Shift vs. Case Temperature



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 10: 1750K Color Shift vs. Case Temperature¹

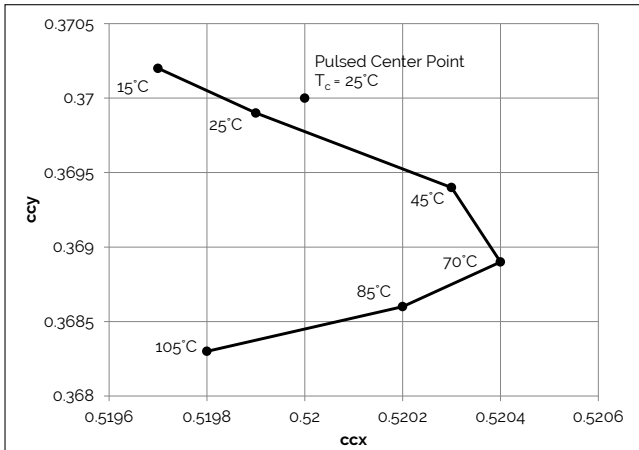


Figure 11: 2000K, 65 CRI Color Shift vs. Case Temperature

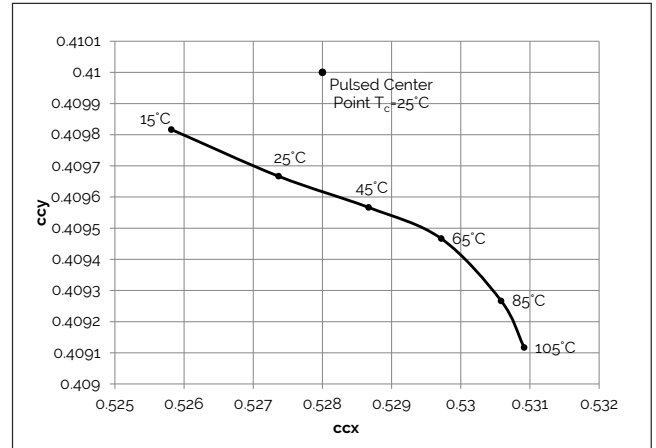


Figure 12: 2500K Color Shift vs. Case Temperature¹

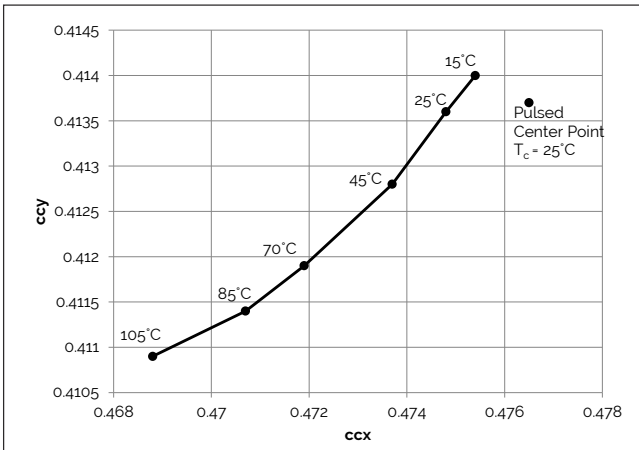


Figure 13: 3000K, 90 CRI Color Shift vs. Case Temperature^{1,3}

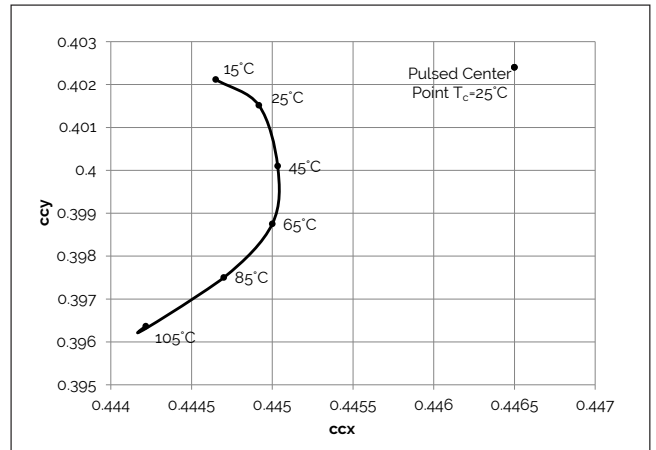


Figure 14: 2700K, 97 CRI Color Shift vs. Case Temperature¹

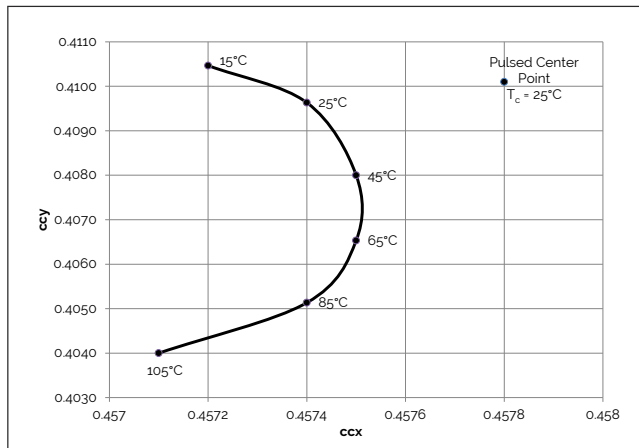
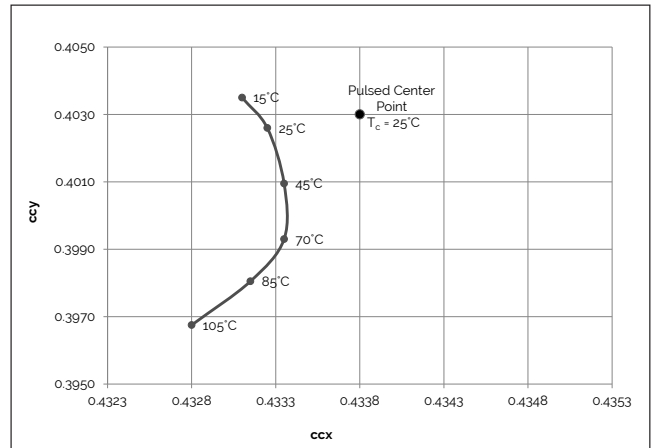


Figure 15: 3000K, 97 CRI Color Shift vs. Case Temperature¹



Notes for Figures 10-15:

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, BXRC-30G400C-x-73

Performance Curves

Figure 16: 5600K Color Shift vs. Case Temperature^{1,3}

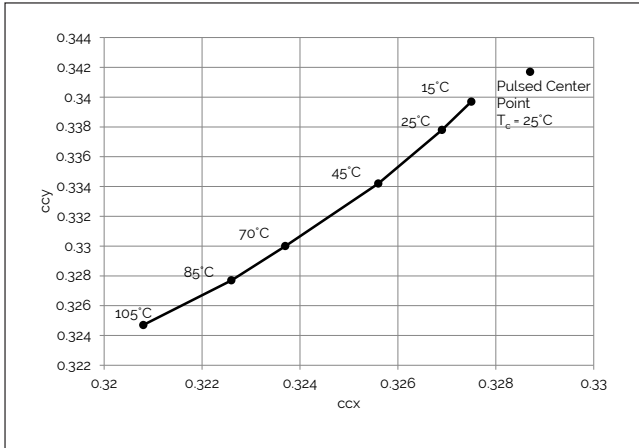


Figure 17: 3000K Class A Color Shift vs. Case Temperature¹

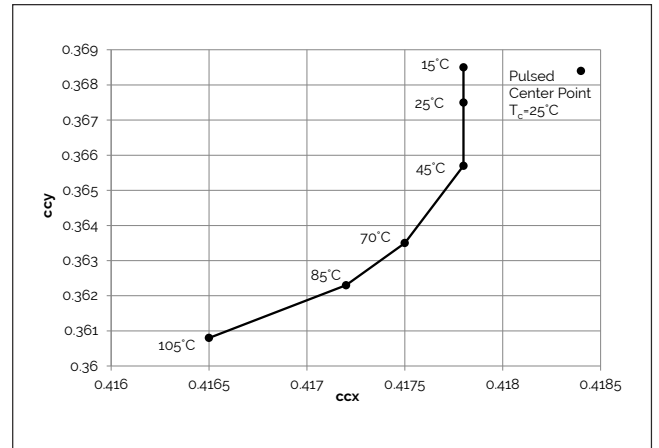


Figure 18: 3500K Class A Color Shift vs. Case Temperature¹

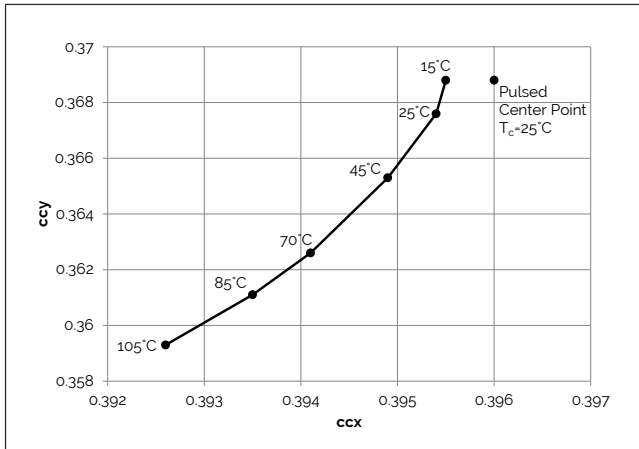
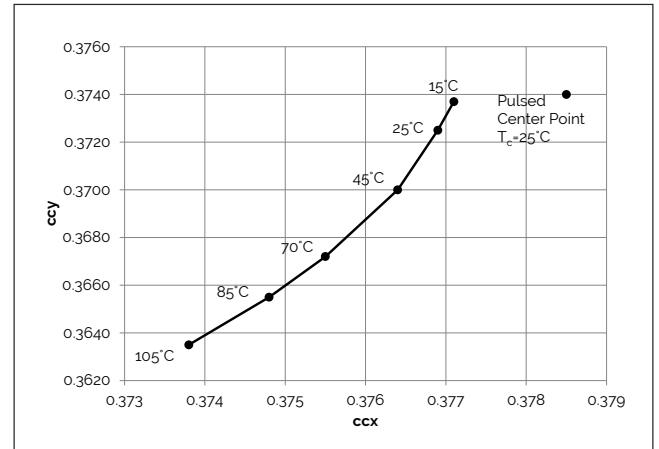


Figure 19: 4000K Class A Color Shift vs. Case Temperature¹

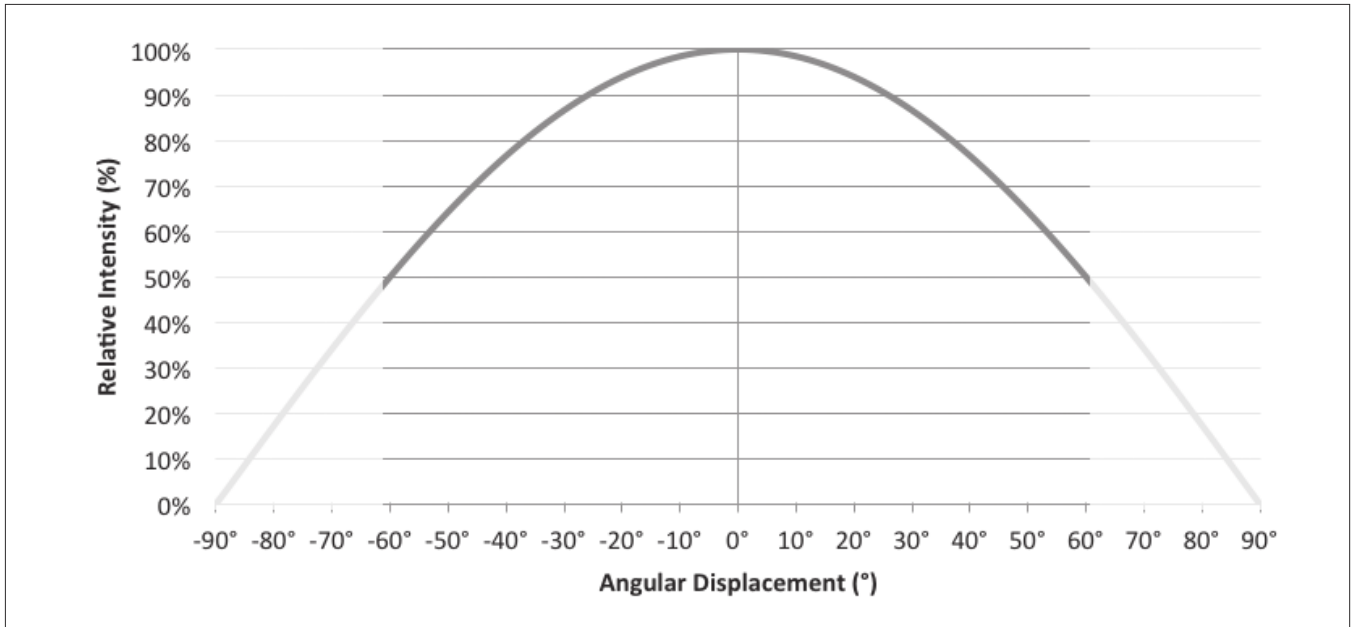


Notes for Figures 16-19:

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 $T_c = 85^\circ\text{C}$

Typical Radiation Pattern

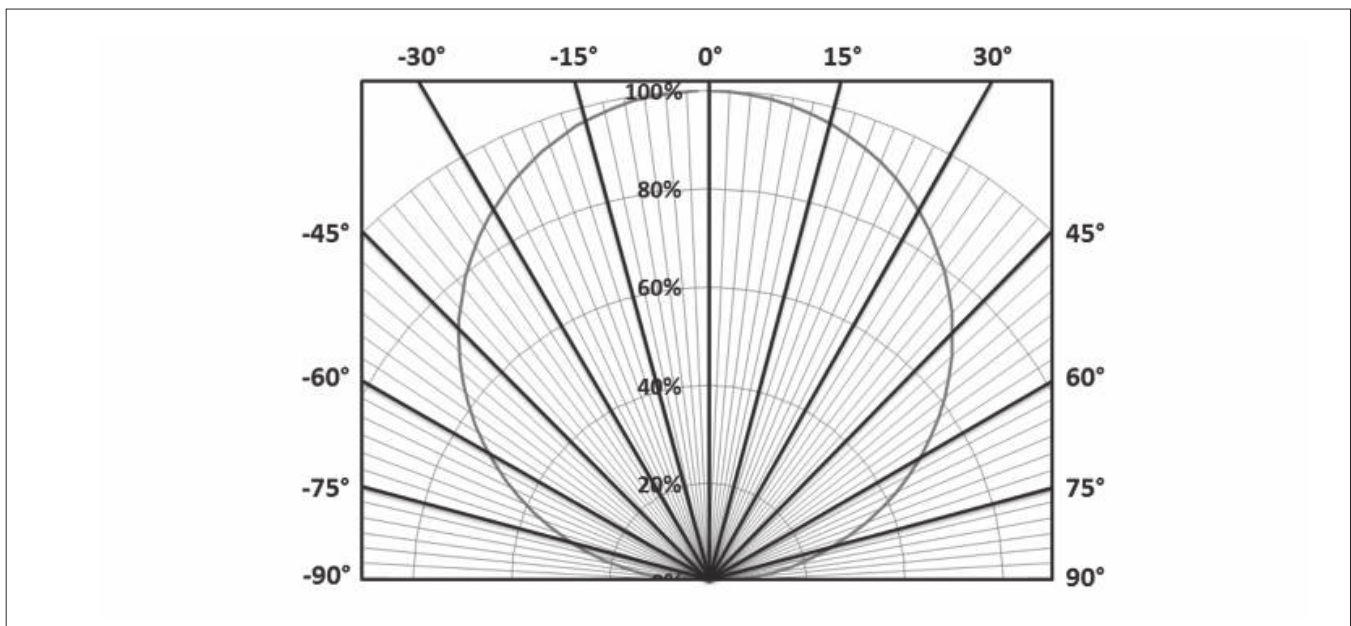
Figure 20: Typical Spatial Radiation Pattern



Notes for Figure 20:

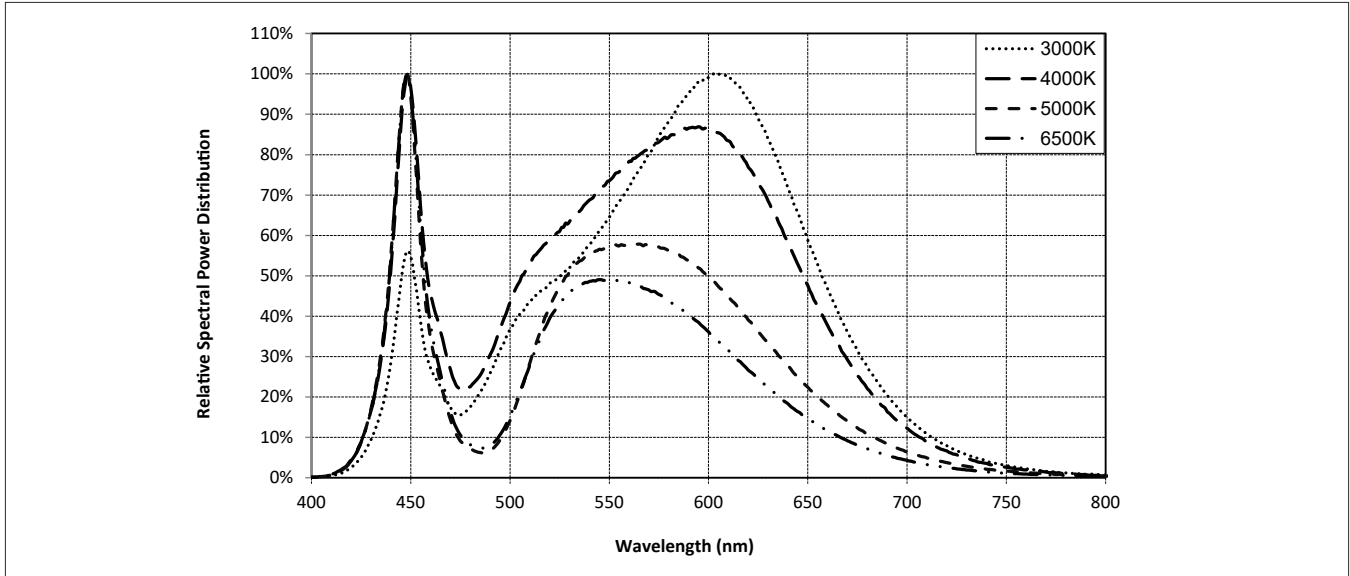
1. Typical viewing angle is 120°.
2. The viewing angle is defined as the off axis angle from the centerline where intensity is ½ of the peak value.

Figure 21: Typical Polar Radiation Pattern



Typical Color Spectrum

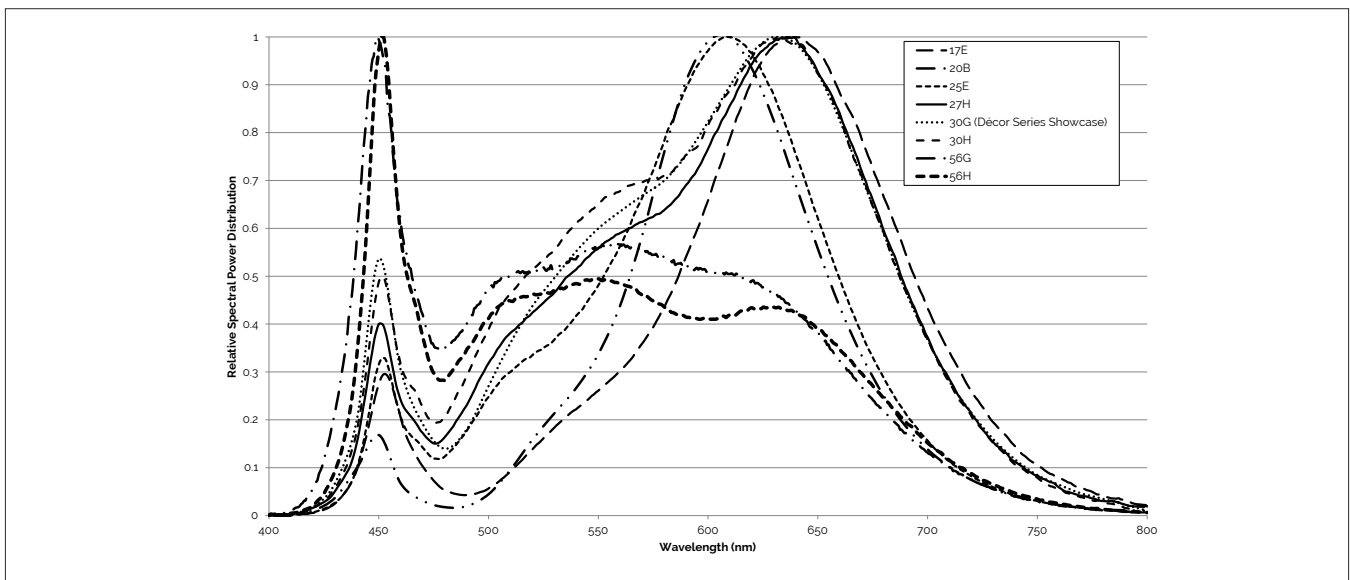
Figure 22: Typical Color Spectrum



Notes for Figure 22:

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 23: Typical Color Spectrum for Vero 18 with Décor Series

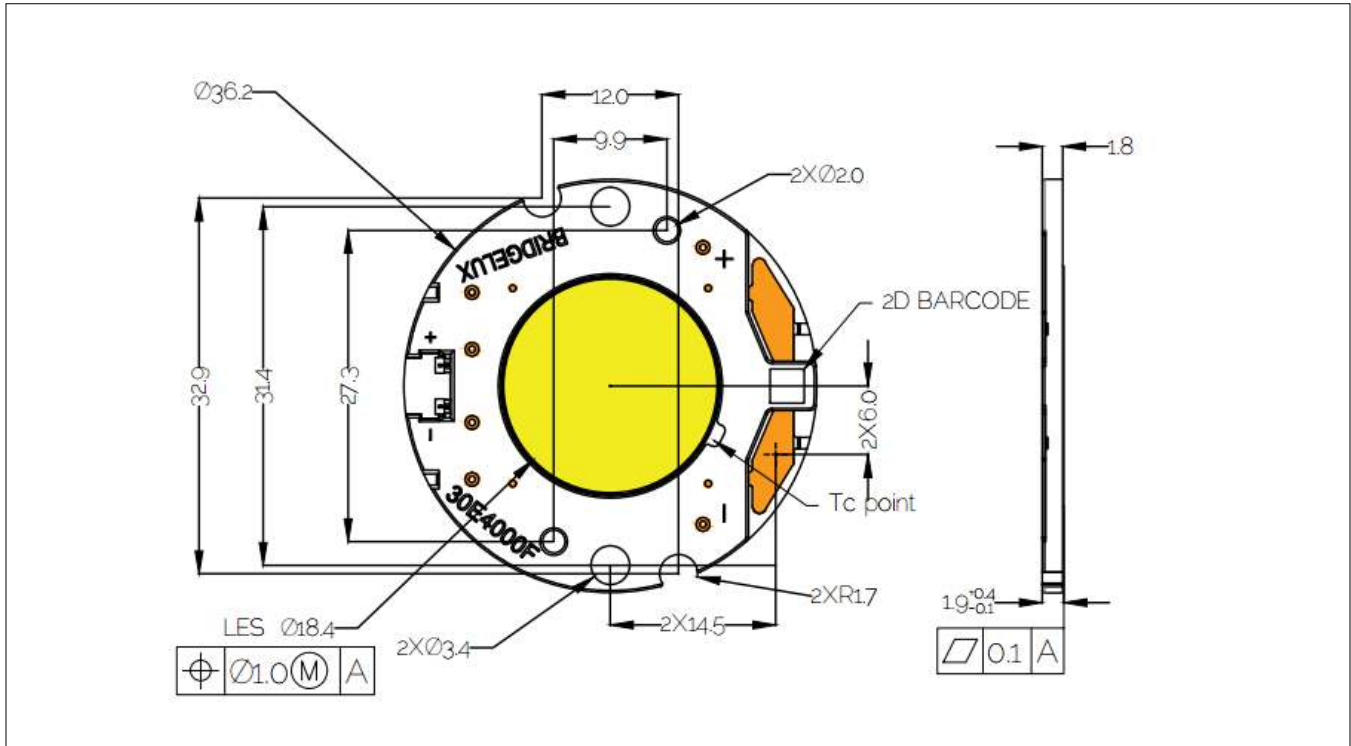


Note for Figure 23:

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

Mechanical Dimensions

Figure 24: Drawing for Vero 18 LED Array

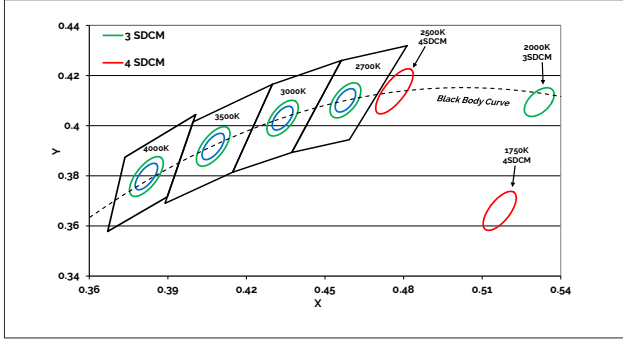


Notes for Figure 24:

1. Drawings are not to scale.
2. Drawing dimensions are in millimeters.
3. Unless otherwise specified, tolerances are ± 0.1 mm.
4. Mounting holes (2X) are for M2.5 screws.
5. Bridgelux recommends two tapped holes for mounting screws with 31.4 ± 0.10 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 ± 0.2 mm.
11. Bridgelux maintains a flatness of 0.10mm across the mounting surface of the array.

Color Binning Information

Figure 25: Warm and Neutral White Test Bins in xy Color Space



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

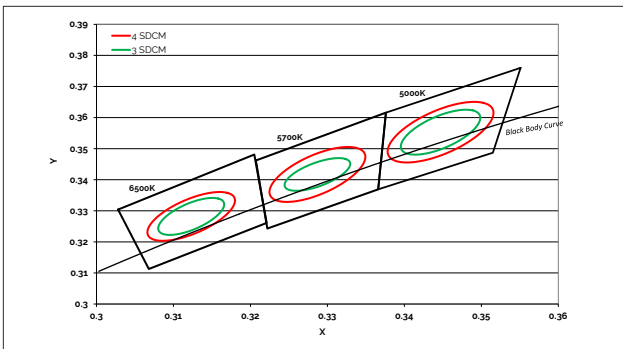
Table 9: Warm and Neutral White xy Bin Coordinates and Associated Typical CCT

| Bin Code | 1750K | 2000K | 2500K | 2700K | 3000K ¹ | 3500K ¹ | 4000K ² |
|-------------------------------|-----------------|------------------|------------------|------------------|--|--------------------|--------------------|
| 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, 0.336) | (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) |

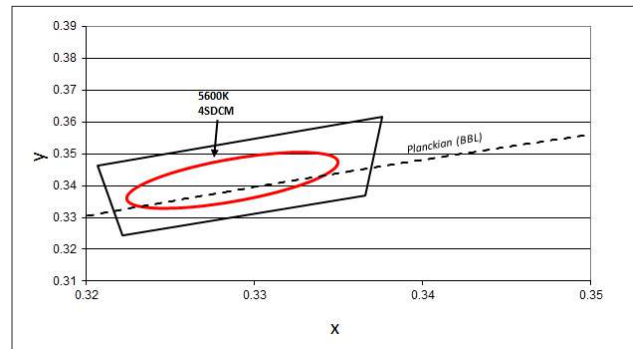
Notes for Table 9:

- Color Binning information excludes Decor Series Class A products. Please contact your Bridgelux Sales Representative for more information.
- Center Point for Decor Series Showcase.
- Bridgelux maintains a tolerance of +/- 0.007 on x and y color coordinates in the CIE 1931 color Space.

Figure 26: 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 10: Cool White xy Bin Coordinates and Associated Typical CCT (product is hot targeted to $T_c = 85^\circ\text{C}$)

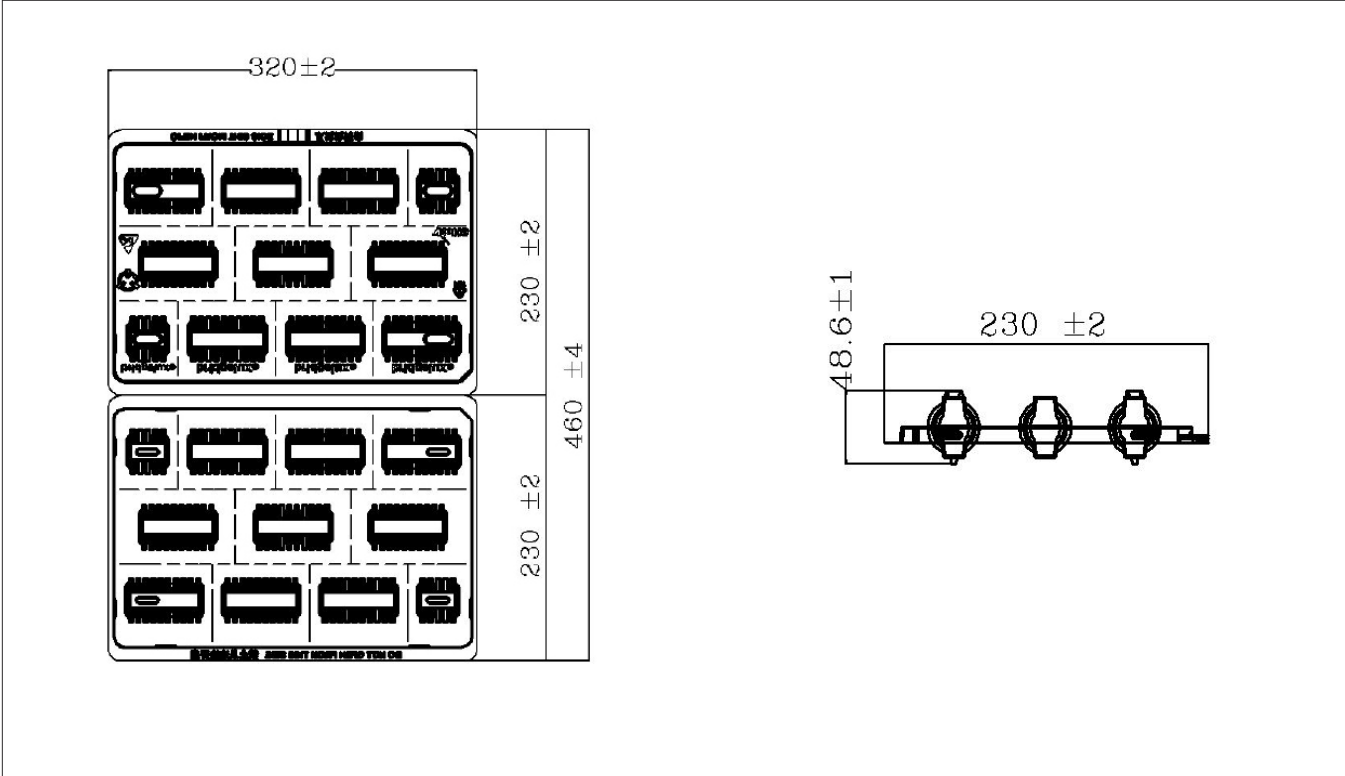
| Bin Code | 5000K | 5600K | 5700K | 6500K |
|-------------------------------|------------------|------------------|------------------|------------------|
| ANSI Bin (for reference only) | (4745K - 5311K) | (5310K - 6020K) | (5312K - 6022K) | (6022K - 7042K) |
| 74 (4 SDCM) | (4801K - 5282K) | (5475K - 5830K) | (5395K - 5970K) | (6200K - 6910K) |
| 73 (3 SDCM) | (4835K - 5215K) | (5490K - 5820K) | (5460K - 5891K) | (6279K - 6811K) |
| Center Point (x,y) | (0.3447, 0.3553) | (0.3293, 0.3423) | (0.3287, 0.3417) | (0.3123, 0.3282) |

Notes for Table 10:

- Select configurations with a CCT of 5600K are available with center point targets at $T_c = 85^\circ\text{C}$ or $T_c = 25^\circ\text{C}$.
- Bridgelux maintains a tolerance of +/- 0.007 on x and y color coordinates in the CIE 1931 color Space.

Packaging and Labeling

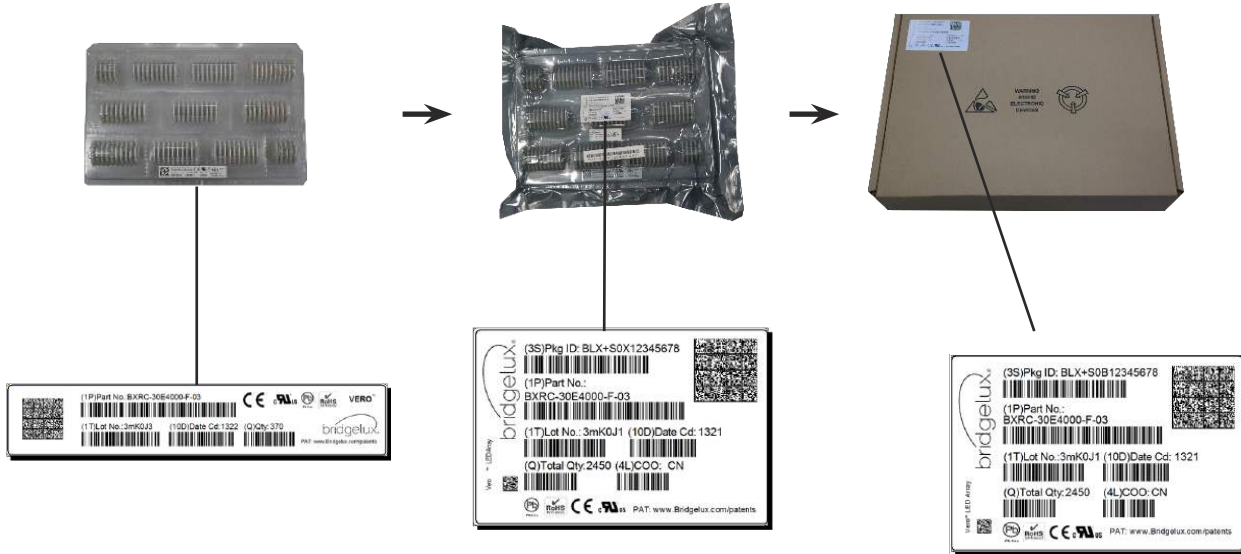
Figure 27: Drawing for Vero 18 Packaging Tray



- Notes for Figure 27:
- 1. Dimensions are in millimeters.
 - 2. Drawings are not to scale.

Packaging and Labeling

Figure 28: Vero Series Packaging and Labeling



Notes for Figure 28:

1. Each tray holds 100 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 29: 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.



Customer Use- 2D Barcode
Scannable barcode provides product part number and other Bridgelux internal production information.

Customer Use- Product part number

30E4000C 73 2F

Customer Use- V_f Bin Code
included to enable greater luminaire design flexibility. Refer to ANG2 for bin code definitions.

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



46410 Fremont Boulevard
Fremont, CA 94538 U.S.A.
Tel (925) 583-8400
www.bridgelux.com

© 2021 Bridgelux, Inc. All rights reserved. Product specifications are subject to change without notice. Bridgelux, the Bridgelux stylized logo design, Vero, V Series and V Series HD are registered trademarks, and Decor Series is a trademark of Bridgelux, Inc. All other trademarks are the property of their respective owners.

Bridgelux Gen 7 Vero 18 Array Series Product Data Sheet DSg2 Rev. Q (08/2021)