

Bridgelux® V18 F90 BBBL Array Series

Product Data Sheet DS448-3







Introduction

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

The Fgo V Series COB is a high efficacy product that uses narrow band red phosphor to significantly improve the spectrum efficacy. The improved spectrum efficacy results in the 90 CRI product of the Fg0 Series delivering better or equivalent efficacy as that of our traditional 80 CRI V Series product.

The V18 LED Array is available in a variety of electrical, CCT, and CRI combinations providing substantial design flexibility and energy efficiency advantages.

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

Features

- Efficacy of 177 lm/W typical, 3000K 90 CRI
- · Wide selection of CCT options (2700K-4000K) with minimumgo CRI options
- · Uniform high-quality illumination
- 2 and 3 SDCM binning options (2700K 4000K)
- Forward voltage bin codes and backside marking
- · Instant light with unlimited dimming
- 5-Year warranty

- Enables high efficiency lighting systems and lower operating costs
- Supports the trend toward luminaire miniaturization and delivers enhanced optical control
- · Design flexibility for a broad range of lighting applications
- · Clean white light without pixelation
- · Uniform consistent white light
- · Design flexibility for multi-source applications
- · Easy to use with daylight and motion sensors to incréase energy savings
- · Design with confidence













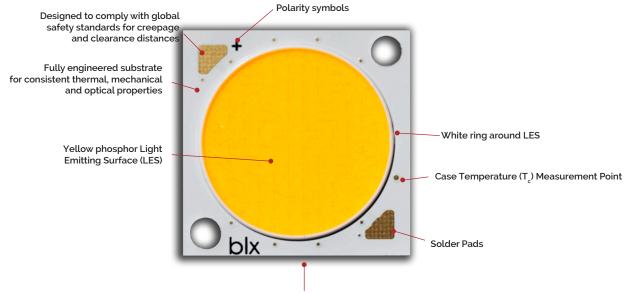
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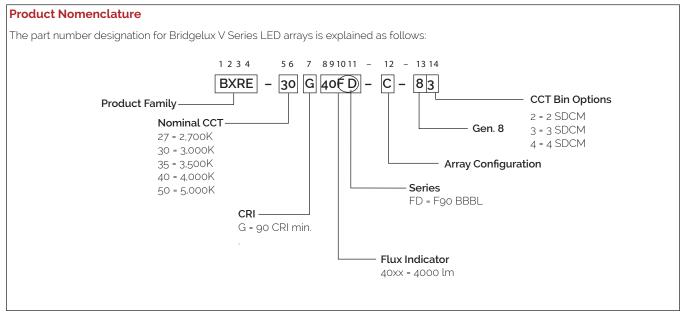
Product Feature Map

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

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



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



Product Selection Guide

The following product configurations are available:

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

Part Number	Nominal CCT¹ (K)	CRI²	Nominal Drive Current³ (mA)	Typical Pulsed Flux ^{45,6} T _c = 25°C (lm)	Minimum Pulsed Flux ^{6,7} T _c = 25°C (lm)	Typical V _r (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-27G40FD-B-8x	2700	90	700	4193	3774	34.6	24.2	173
BXRE-27G40FD-C-8x	2700	90	1050	6287	5658	34.9	36.7	171
BXRE-30G40FD-B-8x	3000	90	700	4279	3851	34.6	24.2	177
BXRE-30G40FD-C-8x	3000	90	1050	6415	5773	34.9	36.7	175
BXRE-35G40FD-B-8x	3500	90	700	4255	3830	34.6	24.2	176
BXRE-35G40FD-C-8x	3500	90	1050	6380	5742	34.9	36.7	174
BXRE-40G40FD-B-8x	4000	90	700	4297	3868	34.6	24.2	178
BXRE-40G40FD-C-8x	4000	90	1050	6443	5799	34.9	36.7	176

Notes for Table 1:

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

Product Selection Guide

Table 2: Selection Guide, Stabilized DC Performance ($T_c = 65^{\circ}C$) ^{4.5}

Part Number	Nominal CCT¹ (K)	CRI²	Nominal Drive Current³ (mA)	Typical DC Flux ⁴⁵ T _c = 65°C (lm)	Minimum DC Flux ⁶ T _c = 65°C c (lm)	Typical V _f (V)	Typical Power (W)	Typical Efficacy (lm/W)
BXRE-27G40FD-B-8x	2700	90	700	3921	3528	34.1	23.9	164
BXRE-27G40FD-C-8x	2700	90	1050	5878	5290	34.5	36.2	162
BXRE-30G40FD-B-8x	3000	90	700	4001	3600	34.1	23.9	167
BXRE-30G40FD-C-8x	3000	90	1050	5998	5398	34.5	36.2	166
BXRE-35G40FD-B-8x	3500	90	700	3979	3581	34.1	23.9	167
BXRE-35G40FD-C-8x	3500	90	1050	5965	5369	34.5	36.2	165
BXRE-40G40FD-B-8x	4000	90	700	4018	3616	34.1	23.9	168
BXRE-40G40FD-C-8x	4000	90	1050	6024	5422	34.5	36.2	166

Notes for Table 2:

- 1. Nominal CCT as defined by ANSI C78.377-2011.
- 2. CRI values are minimums and tested at T_i = T_c = 65°C. Minimum R9 value for 90 CRI products is 50,
- 3. Drive current is referred to as nominal drive current.
- 4. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.
- 5. Typical performance is estimated based on operation under DC (direct current) with LED array mounted onto a heat sink with thermal interface material and the case temperature maintained at 65°C. Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.
- 6. Minimum flux values at elevated temperatures are provided for reference only and are not guaranteed by 100% production testing. Based on Bridgelux test setup, values may vary depending on the thermal design of the luminaire and/or the exposed environment to which the product is subjected.

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 3 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 3: Part numbers registered in European Product Registry for Energy Labeling

PART NUMBER ¹	CCT (K)	CRI	Current² (mA)	Vf (V)	Useful flux³ (Фuse) at 85C (lm)	Power (W)	Efficacy (lm/W)	Energy efficiency class ⁴	Registra- tion No	URL to Product Information Sheet in EPREL Database
BXRE-27G40FD-B-8x	2700	90	1620	38.0	7874	62	128	Е	1425068	https://eprel.ec.europa.eu/qr/1425068
BXRE-27G40FD-C-8x	2700	90	2160	38.0	10606	82	129	Е	1425069	https://eprel.ec.europa.eu/qr/1425069
BXRE-30G40FD-B-8x	3000	90	1620	38.0	8035	62	131	Е	1425098	https://eprel.ec.europa.eu/qr/1425098
BXRE-30G40FD-C-8x	3000	90	2160	38.0	10823	82	132	Е	1425099	https://eprel.ec.europa.eu/qr/1425099
BXRE-35G40FD-B-8x	3500	90	1620	38.0	8115	62	132	Е	1425129	https://eprel.ec.europa.eu/qr/1425129
BXRE-35G40FD-C-8x	3500	90	2160	38.0	10931	82	133	Е	1425130	https://eprel.ec.europa.eu/qr/1425130
BXRE-40G40FD-B-8x	4000	90	1620	38.0	8196	62	133	Е	1425160	https://eprel.ec.europa.eu/qr/1425160
BXRE-40G40FD-C-8x	4000	90	2160	38.0	11039	82	135	Е	1425161	https://eprel.ec.europa.eu/qr/1425161

Notes for Table 3:

- 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 (ouse), 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.

Performance at Commonly Used Drive Currents

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

 Table 4: Product Performance at Commonly Used Drive Currents

Part Number	CRI	Drive Current¹ (mA)	Typical V _f T _c = 25°C (V)	Typical Power T _c = 25°C (W)	Typical Flux² T _c = 25°C (lm)	Typical DC Flux³ T _c = 65°C (lm)	Typical Efficacy T _c = 25°((lm/W)
		350	33.2	11.6	2147	2044	185
		525	33.9	17.8	3176	3004	179
DVDE 27C (2FD D 0)		700	34.6	24.2	4193	3921	173
BXRE-27G40FD-B-8x	90	900	35.4	31.8	5341	4919	168
		1400	37.2	52.1	8141	7212	156
		1620	38.0	61.6	9342	8142	152
		525	33.4	17.5	3331	3083	190
		785	34.1	26.8	4913	4503	183
DVDE0ED 0 0		1050	34.9	36.7	6287	5878	171
BXRE-27G40FD-C-8x	90	1170	35.3	41.3	7217	6478	175
		2100	37.9	79.6	12597	10716	158
		2160	38.0	82.2	12935	10967	157
		350	33.2	11.6	2191	2086	189
		525	33.9	17.8	3241	3065	182
DVDE 0 50 0 0		700	34.6	24.2	4279	4001	177
BXRE-30G40FD-B-8x	90	900	35.4	31.8	5450	5019	171
		1400	37.2	52.1	8307	7359	159
		1620	38.0	61.6	9533	8308	155
		525	33.4	17.5	3399	3146	194
		785	34.1	26.8	5013	4595	187
		1050	34.9	36.7	6415	5998	175
BXRE-30G40FD-C-8x	90	1170	35.3	41.3	7364	6610	178
		2100	37.9	79.6	12854	10935	162
		2160	38.0	82.2	13199	11191	161
		350	33.2	11.6	2179	2075	188
		525	33.9	17.8	3223	3048	181
D)/DE 0 ED D 0		700	34.6	24.2	4255	3979	176
BXRE-35G40FD-B-8x	90	900	35.4	31.8	5420	4992	170
		1400	37.2	52.1	8262	7319	158
		1620	38.0	61.6	9481	8263	154
		525	33.4	17.5	3380	3128	193
		785	34.1	26.8	4986	4570	186
D\/DE0 :-ED 0 0		1050	34.9	36.7	6380	5965	174
BXRE-35G40FD-C-8x	90	1170	35.3	41.3	7324	6574	177
		2100	37.9	79.6	12784	10875	161
		2160	38.0	82.2	13127	11130	160

Notes for Table 4:

- 1. Alternate drive currents in Table 4 are provided for reference only and are not a guarantee of performance.
- 2. Bridgelux maintains a ± 7% tolerance on flux measurements.
- 3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Performance at Commonly Used Drive Currents

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

Part Number	CRI	Drive Current¹ (mA)	Typical V _f T _c = 25°C (V)	Typical Power T _c = 25°C (W)	Typical Flux² T _c = 25°C (lm)	Typical DC Flux³ T _c = 65°C (lm)	Typical Efficacy T _c = 25°C (lm/W)
		350	33.2	11.6	2201	2095	190
		525	33.9	17.8	3255	3079	183
DVDE 40C40ED D 0v	000	700	34.6	24.2	4297	4018	178
BXRE-40G40FD-B-8x	90	900	35.4	31.8	5473	5041	172
		1400	37.2	52.1	8344	7392	160
		1620	38.0	61.6	9575	8344	155
		525	33.4	17.5	3414	3159	195
		785	34.1	26.8	5035	4615	188
BXRE-40G40FD-C-8x		1050	34.9	36.7	6443	6024	176
	90	1170	35.3	41.3	7397	6639	179
		2100	37.9	79.6	12911	10983	162
		2160	38.0	82.2	13257	11240	161

Notes for Table 4:

- 1. Alternate drive currents in Table 4 are provided for reference only and are not a guarantee of performance.
- 2. Bridgelux maintains a ± 7% tolerance on flux measurements.
- 3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Electrical Characteristics

Table 5: Electrical Characteristics

			orward Voltag ed, T _c = 25°C (V		Typical Coefficient	Typical Thermal	Driver Selection Voltages ⁷ (V)	
Part Number	Drive Current (mA)	Minimum	Typical	Maximum	of Forward Voltage⁴ ∆V _₹ ∕∆T _c (mV/°C)	Resistance Junction to Case ^{5,6} R _{j-c} (°C/W)	V _i Min. Hot T _c = 95°C (V)	V _r Max. Cold T _c = -40°C (V)
	700	32.5	34.6	36.7	-10	0.14	31.8	37.3
BXRE-xxx40FD-B-8x	1620	35.7	38.0	40.3	-11	0.23	35.0	41.0
BXRE-xxx40FD-C-8x	1050	32.8	34.9	37.0	-10	0.12	32.1	37.7
	2160	35.8	38.0	40.3	-11	0.20	35.0	41.1

Notes for Table 5:

- 1. Parts are tested in pulsed conditions, T_c = 25°C. Pulse width is 10ms.
- 2. Voltage minimum and maximum are provided for reference only and are not a guarantee of performance.
- 3. Bridgelux maintains a tester tolerance of \pm 0.10V on forward voltage measurements.
- 4. Typical coefficient of forward voltage tolerance is ± 0.1mV for nominal current.
- 5. Thermal resistance values are based from test data of a 3000K go CRI product.
- 6. Thermal resistance value was calculated using total electrical input power; optical power was not subtracted from input power. The thermal interface material used during testing is not included in the thermal resistance value.
- 7. V_r min hot and max cold values are provided as reference only and are not guaranteed by test. These values are provided to aid in driver design and selection over the operating range of the product.
- 8. This product has been designed and manufactured per IEC 62031:2018. This product has passed dielectric withstand voltage testing at 1140 V. The working voltage designated for the insulation is 70V d.c. The maximum allowable voltage across the array must be determined in the end product application.

Eye Safety

Table 6: Eye Safety Risk Group (RG) Classifications

Part Number	Drive Current (mA)	co	TT⁴
		2700K/3000K	3500-5000K ^{2,3}
DVDE	1500	RG1	RG1
BXRE-xxx40Fx-B-8x	1620	RG1	RG2
DVDE	1560	RG1	RG1
BXRE-xxx40Fx-C-8x	2160	RG1	RG2

Notes for Table 6:

- 1. Eye safety classification for the use of Bridgelux V Series LED arrays is in accordance with specification IEC/TR 62778: Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires.
- 2. For products classified as RG2 at 4000K, Ethr= 1980 lx.
- 3. For products classified as RG2 at 5000K Ethr= 1530 lx.
- 4. Please contact your Bridgelux sales representative for Ethr values at specific drive currents and CCTs not listed.

Absolute Maximum Ratings

Table 7: Maximum Ratings

Parameter	Maximum Rating			
LED Junction Temperature (T _j)	150°C			
Storage Temperature ¹	-40°C to +95°C			
Operating Case Temperature² (T _c)	95°C			
Soldering Temperature ³	300°C or lower for a maximum of 6 seconds			
	BXRE-xxx4oFD-B-8x	BXRE-xxx40FD-C-8x		
Maximum Drive Current⁴	1620 mA at ≤85°C 1215 mA at 95°C	2160 mA at ≤85°C 1620 mA at 95°C		
Maximum Peak Pulsed Drive Current ⁵	2320mA	3090 mA		
Maximum Reverse Voltage ⁶	-6oV	-6oV		

Notes for Table 7:

- 1. The Fgo product is robust enough to pass our internal humidity test but it is still more sensitive compared to regular LED array product The product needs to be stored in a dry environment. It is not recommended to use the product in a damp environment that directly exposes it to moisture.
- 2. For IEC 62717 requirement, please consult your Bridgelux sales representative.
- 3. Refer to Bridgelux Application Note AN101: Handling and Assembly of Bridgelux V Series LED Arrays
- 4. Arrays may be driven at higher currents however lumen maintenance may be reduced and warranty will not apply.
- 5. Bridgelux recommends a maximum duty cycle of 10% and pulse width of 20 ms when operating LED Arrays at maximum peak pulsed current specified. Maximum peak pulsed currents indicate values where LED Arrays can be driven without catastrophic failures.
- 6. Light emitting diodes are not designed to be driven in reverse voltage and will not produce light under this condition. Maximum rating provided for reference only.

Performance Curves

Figure 1: V18B Drive Current vs. Voltage

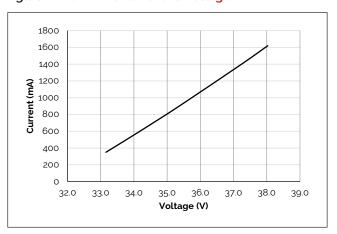


Figure 3: V18B Typical Relative Flux vs. Current

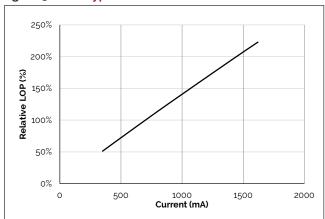


Figure 5: Typical DC Flux vs. Case Temperature

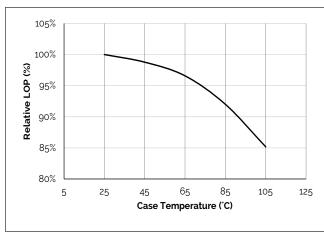


Figure 2: V18C Drive Current vs. Voltage

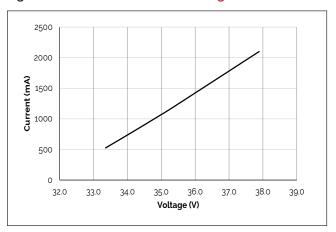


Figure 4: V18C Typical Relative Flux vs. Current

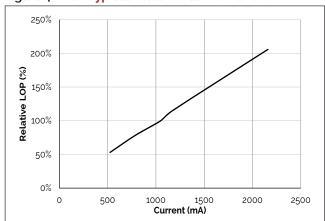
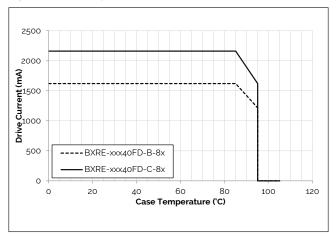


Figure 6:Derating Curve

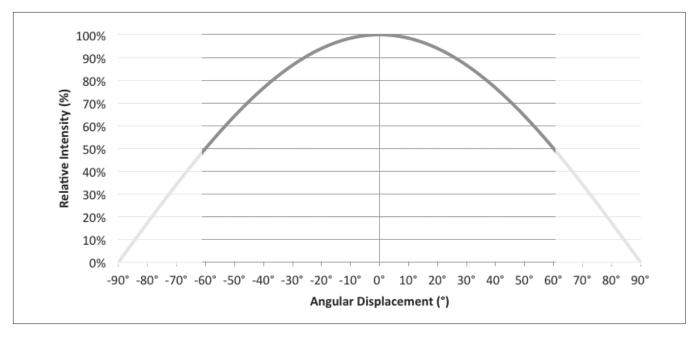


Notes for Figures 1-4:

- 1. Bridgelux does not recommend driving high power LEDs at low currents. Doing so may produce unpredictable results. Pulse width modulation (PWM) is recommended for dimming effects.
- 2. Products tested under pulsed condition (10ms pulse width) at nominal test current where T_j (junction temperature) = T_c (case temperature) = 25°C. Note for Figures 5-6:
- 1. Characteristics shown for Warm White.

Typical Radiation Pattern

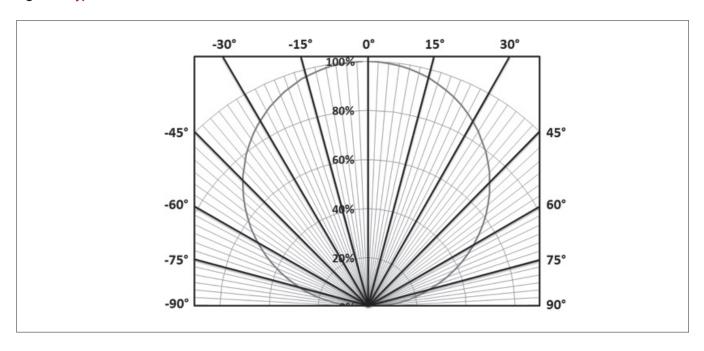
Figure 7: Typical Spatial Radiation Pattern



Notes for Figure 7:

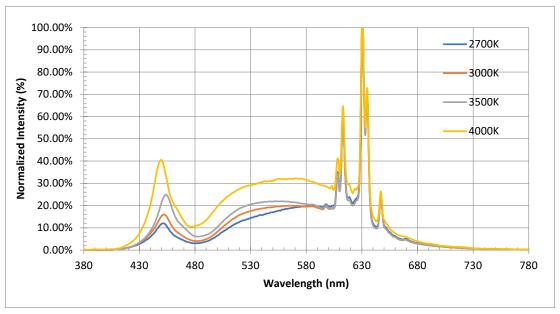
- 1. Typical viewing angle is 120°.
- 2. The viewing angle is defined as the off axis angle from the centerline where intensity is ½ of the peak value.

Figure 8: Typical Polar Radiation Pattern



Typical Color Spectrum

Figure 9: Typical Color Spectrum

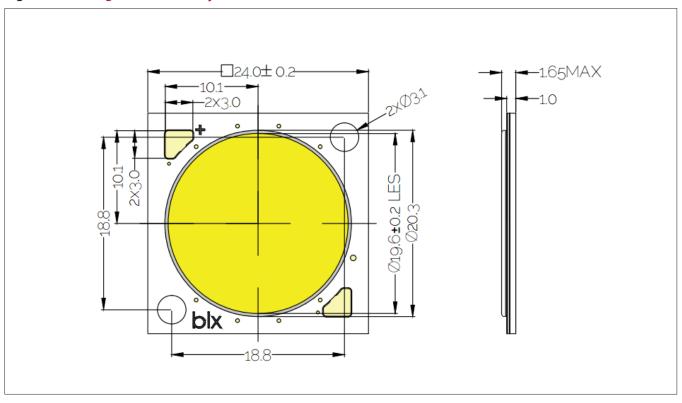


Notes for Figure 9:

- 1. Color spectra measured at nominal current for T_j = T_c = 65°C.
- 2. Color spectra shown is 2700K and 90CRI.
- 3. Color spectra shown is 3000K and 90 CRI.
- 4. Color spectra shown is 3500K and 90 CRI.
- 5. Color spectra shown is 4000K and 90 CRI.

Mechanical Dimensions

Figure 10: Drawing for V18 LED Array



Notes for Figure 16;

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

Color Binning Information

2700K 0.41 3000К 3500K 0.39 0.38 -ANSI-3 Step Ellipse 0.37 -blackBodyLocus -FD-3 Step Ellipse -ANSI-2 Step Ellipse -FD-2 Step Ellipse 0.35 + 0.35 0.39 0.45 0.43 0.47

Figure 11: Warm and Neutral White Test Bins in xy Color Space

Note: Pulsed Test Conditions, T_c = 65 $^{\circ}$ C

Table 8: Warm and Neutral White xy Bin Coordinates and Associated Typical CCT (product is hot targeted to Tc = 65°C)

Bin Code	2700K	3000K	3500K	4000K
ANSI Bin (for reference only)	(2580K - 2870K)	(2870K - 3220K)	(3220K - 3710K)	(3710K - 4260K)
83 (3 SDCM)	(2645K - 2788K)	(3025K - 3210K)	(3333K - 3567K)	(3935K - 4254K)
82 (2 SDCM)	(2668K - 2764K)	(3055K - 3178K)	(3370K - 3526K)	(3985K - 4197K)
Center Point (x,y)	(0.4533, 0.4007)	(0.422 0.386)	(0.4015 0.3744)	(0.374, 0.364)

Note for Table 8:

^{1.} Bridgelux maintains a tolerance of +/- 0.007 on x and y color coordinates in the CIE 1931 color Space.

Packaging and Labeling

Figure 12: Drawing for V18 Packaging Tube



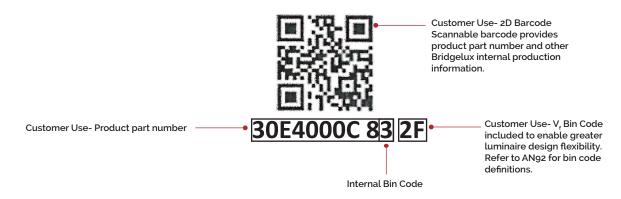
Notes for Figure 12

- 1. Each tube holds 20 V18 COB arrays.
- 2. One tube is sealed in an anti-static bag. Four bags are placed in a shipping box. Depending on quantities ordered, a bigger shipping box, containing four boxes may be used to ship products.
- 3. Each bag and box is to be labeled as shown above.
- 4. Dimensions for each tube are 26.3 (W) \times 9.5(H) \times 510 (L). Dimensions for the anti-static bag are 75 (W) \times 615 (L) \times 3.1 (T) mm. Dimensions for the shipping box are 58.7 \times 13.3 \times 79 cm

Packaging and Labeling

Figure 13: Gen. 8 Product Labeling

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



Design Resources

Application Notes

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

Optical Source Models

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

Precautions

3D CAD Models

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

LM8o

Please contact your Bridgelux sales representative for LM-80 report.

CAUTION: CHEMICAL EXPOSURE HAZARD

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

CAUTION: RISK OF BURN

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

CAUTION

CONTACT WITH LIGHT EMITTING SURFACE (LES)

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

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

Disclaimers

MINOR PRODUCT CHANGE POLICY

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

STANDARD TEST CONDITIONS

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

About Bridgelux: Bridging Light and Life™

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

For more information about the company, please visit bridgelux.com
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