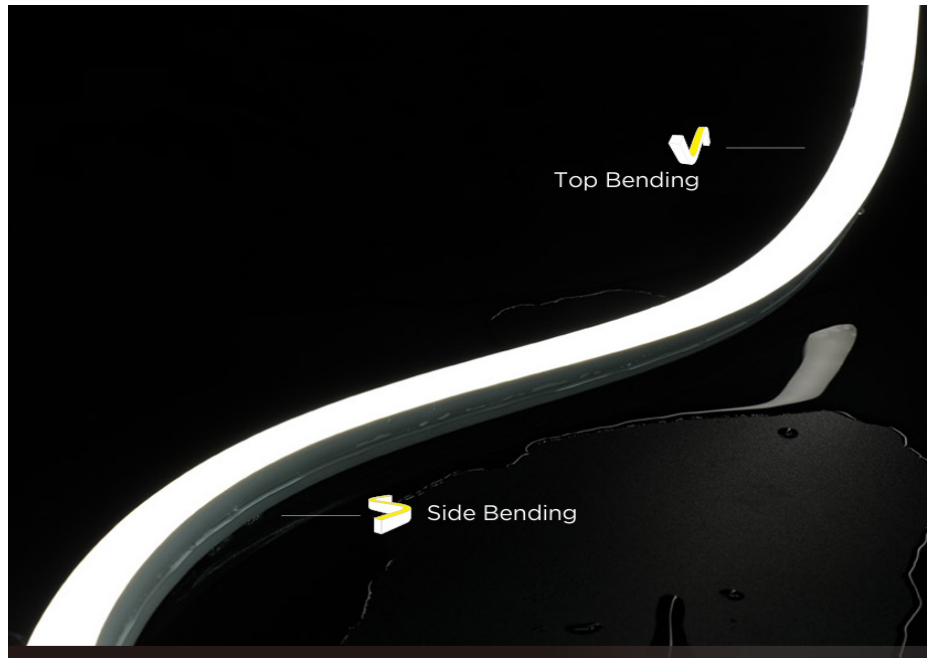




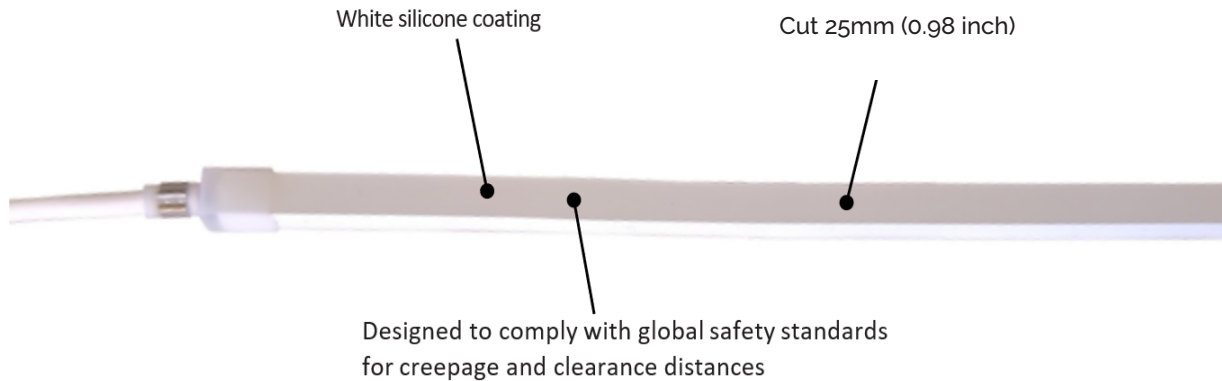
Bridgelux® 3D Premium Neon LED Strip

Product Data Sheet DS3514



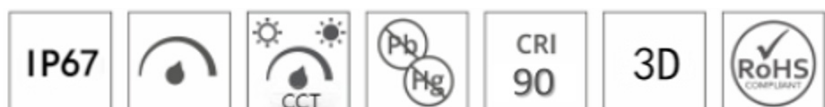
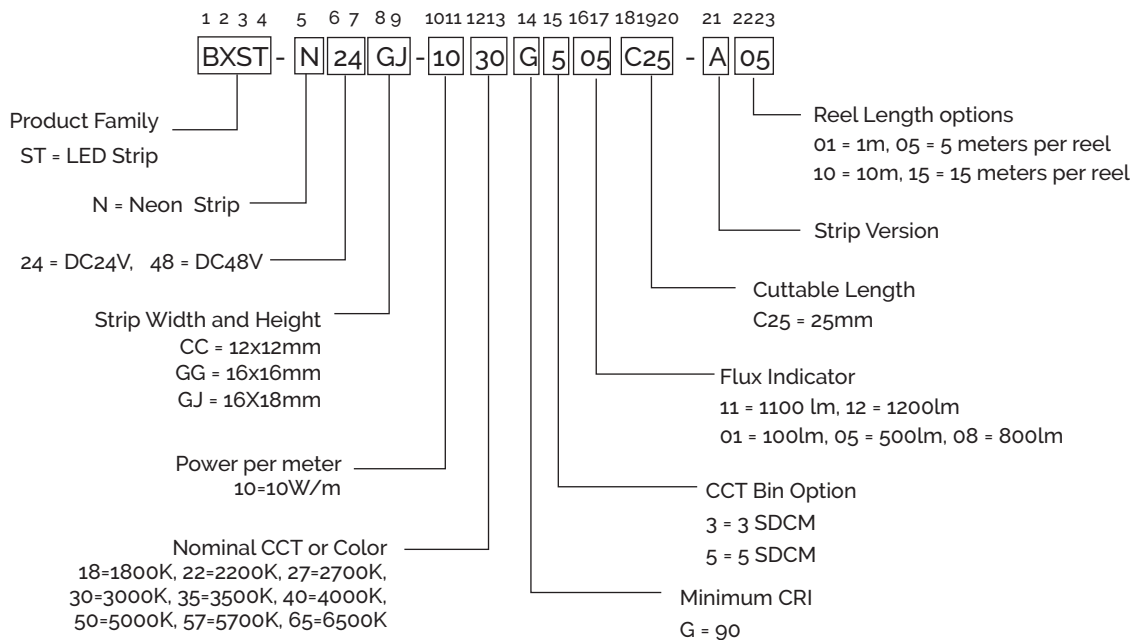
Product Feature Map

Bridgelux 3D Premium Neon Strip are fully engineered devices that provide consistent thermal and optical performance on an engineered mechanical platform. The Strip products incorporate several features to simplify design integration and assembly. Please visit www.bridgelux.com for more information on the family of products.



Product Nomenclature

The part number designation for Bridgelux 3D Premium Neon Strip is explained as follows:



Product Selection Guide

The following product configurations are available:

Table 1: Selection Guide, White Pulsed Measurement Data at 1 meter (3.28ft) length ($T_j = T_c = 25^\circ\text{C}$)

Part Number	Nominal CCT ¹ (K)	CRI ²	Forward Voltage ³ (V)	Typical Power (W)	Typical Flux ^{3, 4, 5} (lm)	Typical Efficacy (lm/W)	LED Quantity (EA/m)	Mini Cut Length (mm)
BXST-N24GJ-1027G505C25-A01	2700	90	24	10	446	44	120	25
BXST-N24GJ-1030G505C25-A01	3000							
BXST-N24GJ-1040G505C25-A01	4000							
BXST-N24GJ-1050G505C25-A01	5000							
BXST-N24GJ-1065G505C25-A01	6500							

Notes for Table 1:

1. Nominal CCT as defined by ANSI C78.377-2011.
2. Listed CRIs are minimum values and include test tolerance.
3. Products tested under pulsed condition (10ms pulse width) at nominal drive current where T_j (junction temperature) = T_c (case temperature) = 25°C .
4. Typical performance values are provided as a reference only and are not a guarantee of performance.
5. Bridgelux maintains a $\pm 7.5\%$ tolerance on flux measurements
6. IP67 rated, provides protection against dust ingress and water droplets at up to a 15° tilt from the vertical.

Absolute Maximum Ratings

Table 2: Maximum Ratings at 1 meter (3.28ft) length

Parameter	Maximum Rating
Storage Temperature	-40°C to +85°C
Operating Case Temperature (T_c)	65°C
Soldering Temperature	350°C or lower for a maximum of 5 seconds
Maximum driving voltage (DCV)	32

Notes for Table 2:

1. For IEC 62717 requirement, please consult your Bridgelux sales representative.
2. Lumen maintenance (L70) and lifetime predictions are valid for drive current and case temperature conditions used for LM-80 testing as included in the applicable LM-80 test report for the SMDs used in the strips. Contact your Bridgelux sales representatives for LM-80 report.

Performance Curves

Figure 1: Relative Current vs. Case Temperature

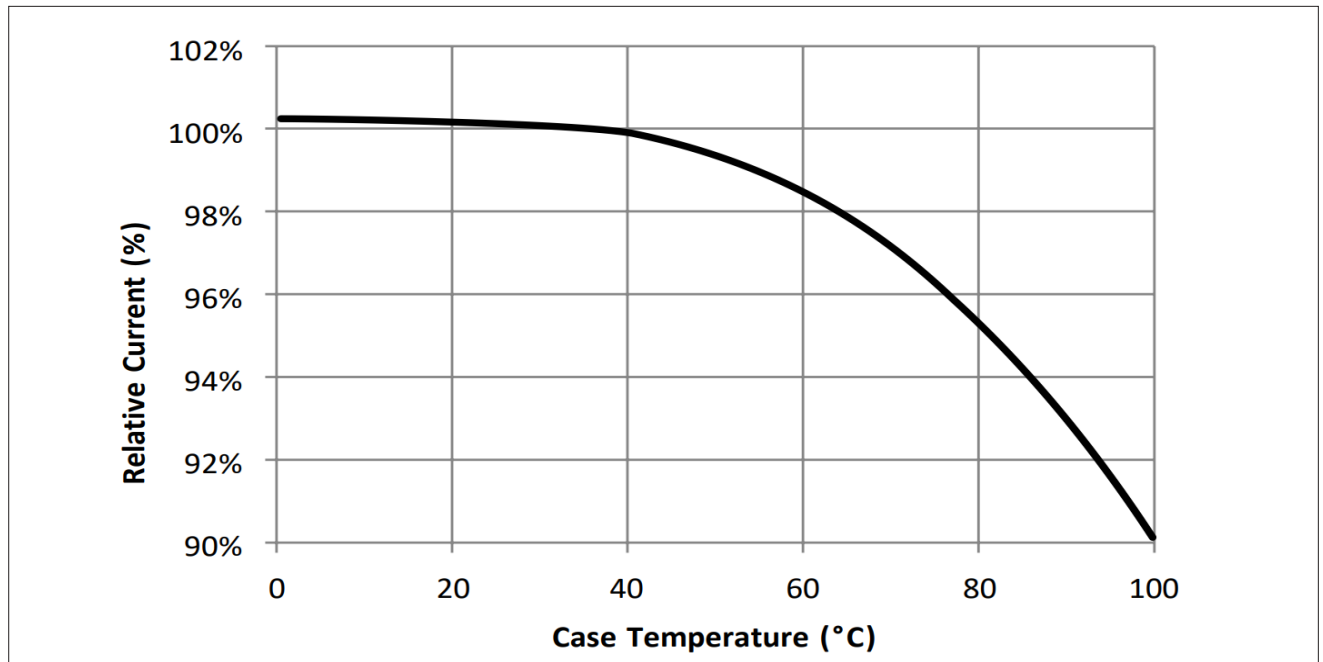
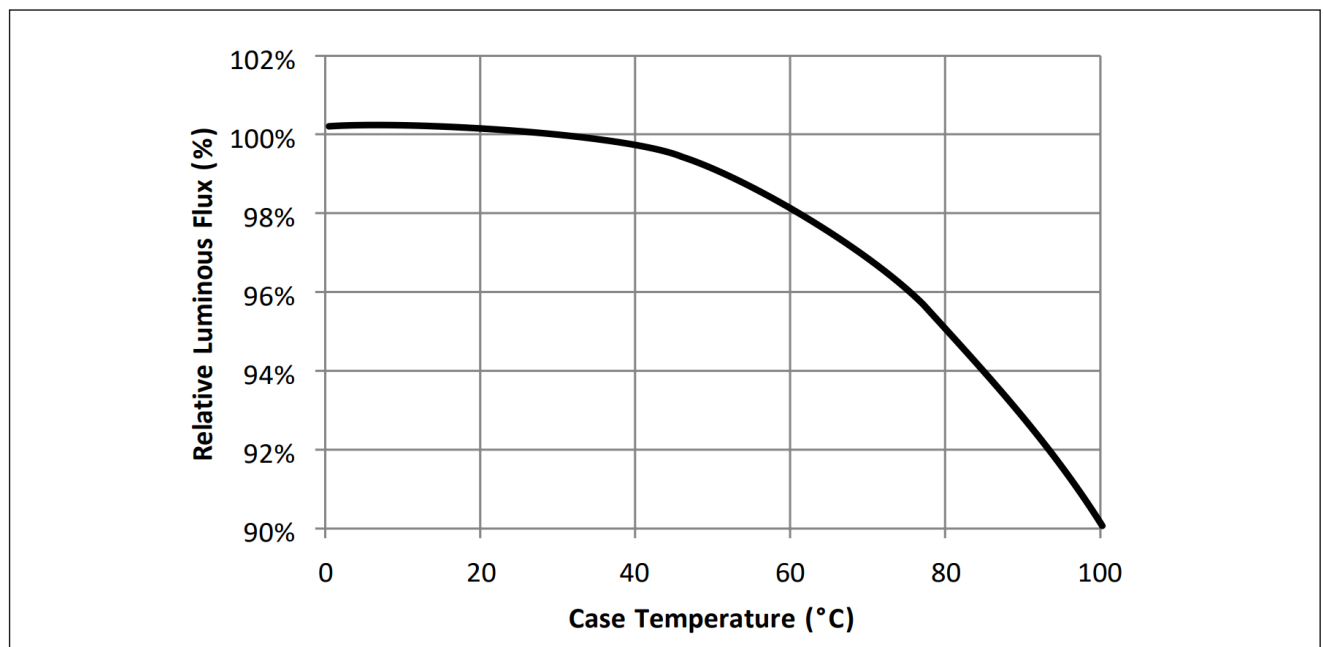
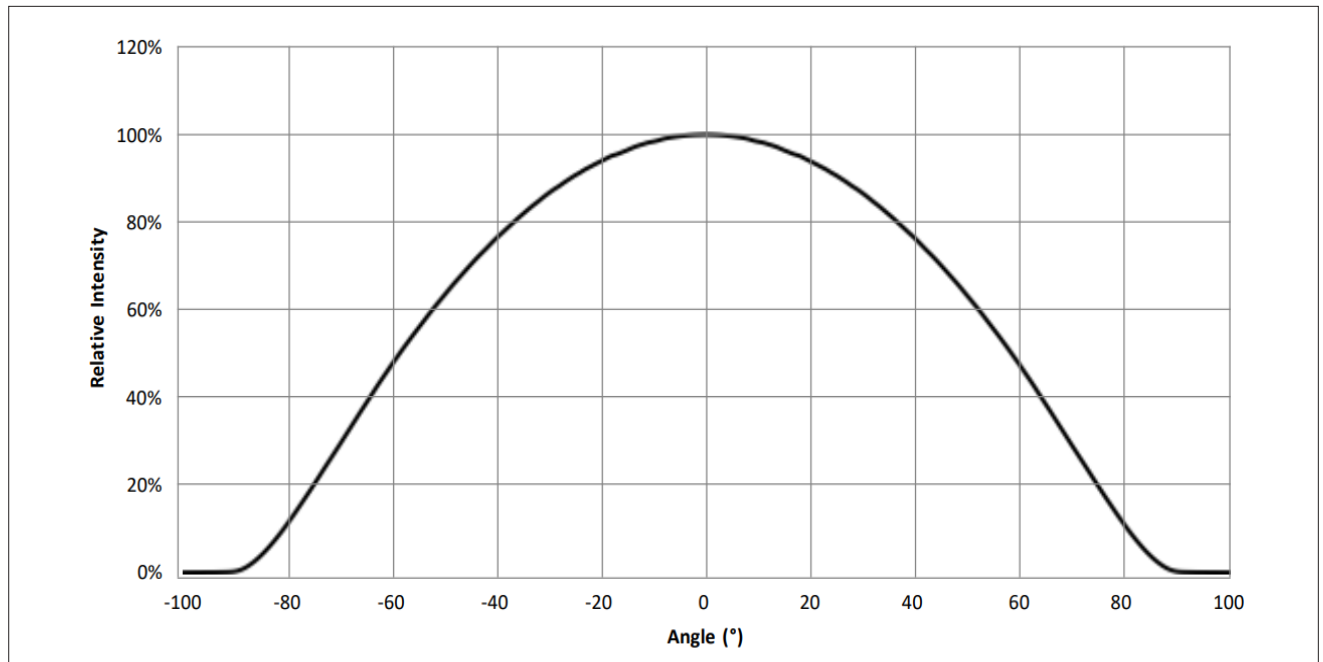


Figure 2: Relative Luminous Flux vs. Case Temperature



Performance Curves

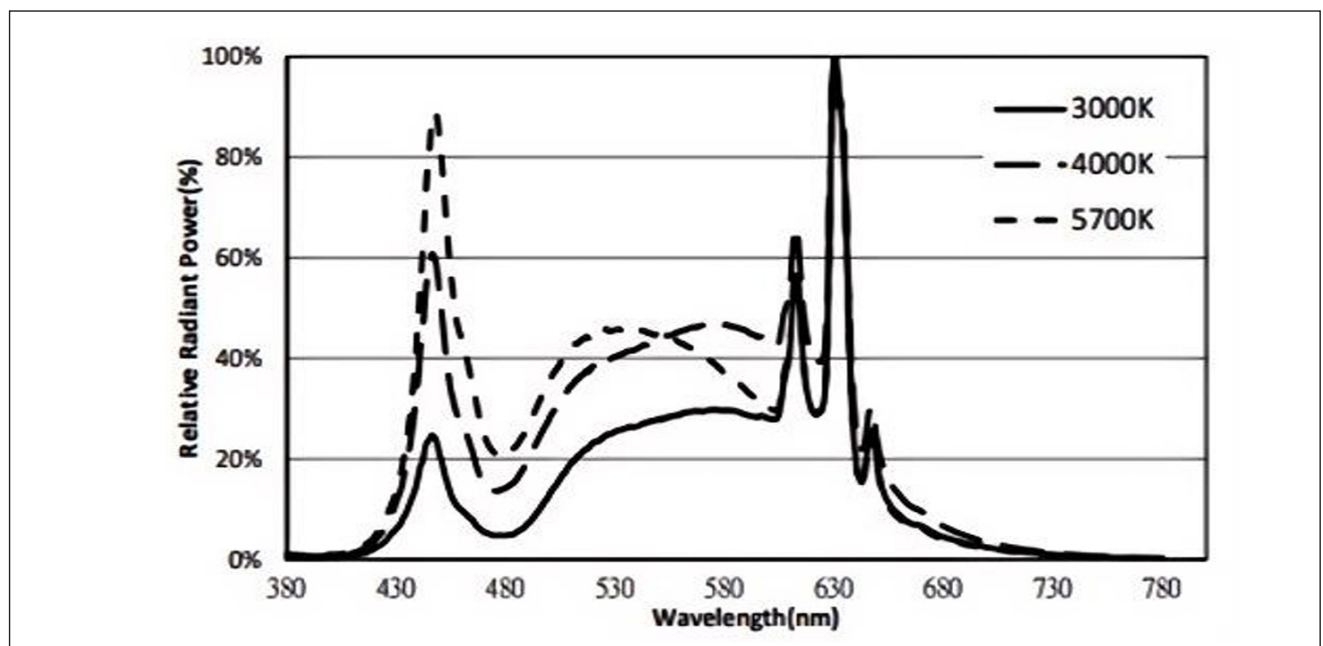
Figure 3: Typical Spatial Radiation Pattern



Note for Figure 3:

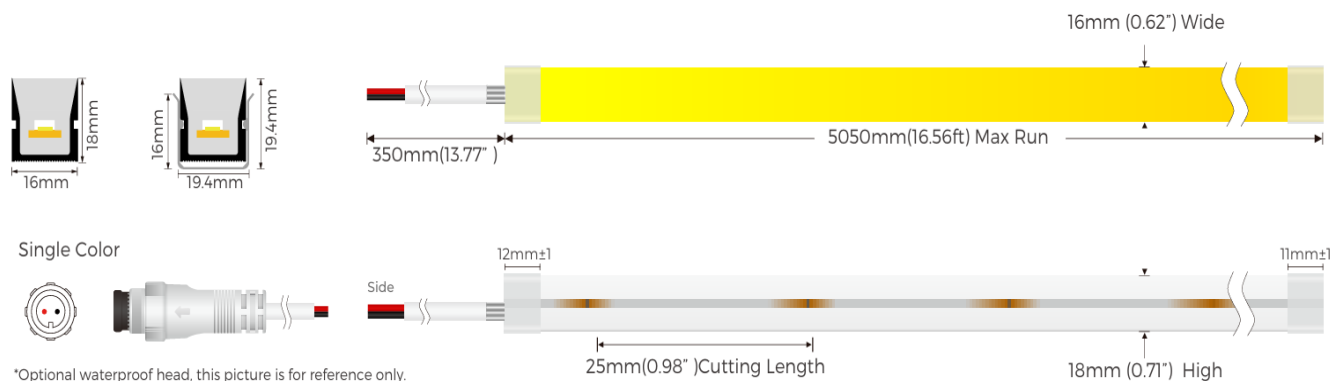
1. Typical viewing angle is 120°.
2. The viewing angle is defined as the off axis angle from the centerline where I_v is $\frac{1}{2}$ of the peak value.

Figure 4: Typical Color Spectra, 90 CRI



Mechanical Dimensions

Figure 5: Drawing Overview for 3D Premium Neon Strip



Notes for Figure 5:

1. Solder pads are labeled "+" to denote positive polarity, and "-" to denote negative polarity.
2. Drawing dimensions are in millimeters.
3. The 24V version (BXST-N24GJ-10xxx11C39-Axx) is 38.5 mm cuttable, the 48V version (BXST-N24GJ-10xxG505C25-Axx) is 83.3 mm cuttable
4. Standard cable length is 500 mm at each end. Custom cable lengths are available.
5. Both ends of the strip are supplied with cables as standard. Only the 1 m packaged version is supplied with a cable at one end.

Table 3: Strip Dimensions

Parameter	BXST-NxxGJ-10xxGxxxxCxx-A05	BXST-NxxGJ-10xxGxxxxCxx-A10
Strip length per reel	5,000 mm	10,000 mm
PCB width	8 mm	
Strip Width and Height	16 mm x 16 mm	

Note for Table 3:

1. The table above lists the standard reel lengths. Additional lengths may be available upon request, please consult your Bridgelux sales representative.

Table 4: Reel Package Option

Part Number	Strip Length Per Reel Package
BXST-N24GJ-10xxGxxxC39-A05	5 meters
BXST-N24GJ-10xxGxxxC39-A10	10 meters

Packaging and Labeling

Figure 6: Strip Series Packaging and Labeling



ACCESSORIES SPECIFICATION (Optional accessories)

Name	Quantity	Note
1 End cap	4pc	
2 Front outlet end cap	2pc	
3 Front outlet end cap	-	*Optional
4 Clips	10pc	
5 Glue	2pc	
6 Glue nozzle	2pc	
7 Screw	10pc	



Table 5: Packaging Structure

Box Parameter	BXST-NxxGJ-10xxxxxxCxx-A05	BXST-NxxGJ-10xxxxxxCxx-A10
Quantity	5 reels	5 reels
Weight	9.6 KG	19 KG
Dimension	38cm x 38 cm x 32 cm (L*W*H)	

Figure 7: Product Labeling

Bridgelux 3D Premium Neon Strip contain a label on the front to help with product identification. In addition to the product identification markings, Bridgelux 3D Premium Neon Strip 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 strip.



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

Design Resources

Application Notes

Bridgelux has developed a comprehensive set of application notes and design resources to assist customers in successfully designing with the product family of 3D Premium Neon Strip products. For a list of resources under development, 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 3D Premium Neon Strip are available in both IGS and STEP formats. Please contact your Bridgelux sales representative for assistance.

LM80

Please contact your Bridgelux sales representative for more information.

Precautions

CAUTION: CHEMICAL EXPOSURE HAZARD

Exposure to some chemicals commonly used in luminaire manufacturing and assembly can cause damage to the 3D Premium Neon Strip. Please consult Bridgelux Application Note for additional information.

CAUTION: EYE SAFETY

The Bridgelux 3D Premium Neon Strip emits visible light, that, under certain circumstances, could be harmful to the eye. Proper safeguards must be used.

CAUTION: RISK OF BURN

Do not touch the 3D Premium Neon Strip during operation. Allow the 3D Premium Neon Strip to cool for a sufficient period of time before handling. The 3D Premium Neon Strip 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 3D Premium Neon Strip or apply stress to the LES

(yellow phosphor resin area). Contact may cause damage to the 3D Premium Neon Strip.

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 3D Premium Neon Strip. Use the mechanical features of the 3D Premium Neon Strip housing, edges and/or mounting holes to locate and secure optical devices

Disclaimers

STANDARD TEST CONDITIONS

Unless otherwise stated, 3D Premium Neon Strip testing is performed at the nominal drive current.

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.

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

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