

NT-3CB22-XPE2 family are LED modules based on the CREE LED® XP-E2® optimized for cost effective and high efficacy applications. NT-3CB22-XPE2 modules are providing optimized and easy integration, with excellent quality, reliability and precision.

High efficacy **180 lm/W** and up to **1165 lm**.

LM-80 lifetime projections (IEC 62717)  
**> 49,900 (L70B10)\***

**MPCB** thermal conductivity **2 W/mk** based in UHT (Ultra High Thermal),  
Lead Free HASL

**EPREL** registered product



➤ **SPECIFICATION**

LED FAMILY VARIANT	XP-E2 SERIES			
	3000K 3-STEP	WHITE		RED
CCT/SDCM	3000K 3-STEP	4000K 3-STEP	5700K 3-STEP	620-630nm
Viewing Angle	120°			
Nominal Module Lumen Output**	340 lm	360 lm	440 lm	160 lm
Nominal Efficacy	113 lm/W	120 lm/W	147 lm/W	73 lm/W
CRI	80	75	70	-
Voltage DC (typ.)	8,5 V			6,2 V
Voltage DC (max)	9,8 V			8,5 V
Power Consumption	3 W			2,2 W
Max Module Lumen Output (1500 mA)**	900 lm	960 lm	1165 lm	490 lm
Max. LED module working current ***	1500 mA / module			
Max power	14,7 W			12,7 W
Number of LEDs	3			
Power Supply Type	Constant Current			
Risk Group Classification	RG-1 Low Risk			RG-2 Moderate Risk
Energy Class	F	E	D	G
Operating Temperature	-30°C + +60°C			
Tc max.	85°C			
Lifetime*/Tc life	>49900 h 85°C, 350 mA			

\* Lifetime of LEDs as declared by the manufacturer [CREE LED®](#) according to IES LM-80-2015 Testing Results.  
 \*\* Source performance in real-life conditions at T=55°C; the tolerance of source lumen output is 10% - tested without heatsink.  
 \*\*\* External heatsink required.

➤ **FEATURES**

**Application:**

- ❖ Decorative lighting
- ❖ Accent lighting
- ❖ Task lighting
- ❖ General lighting
- ❖ Recessed furniture LED spotlight

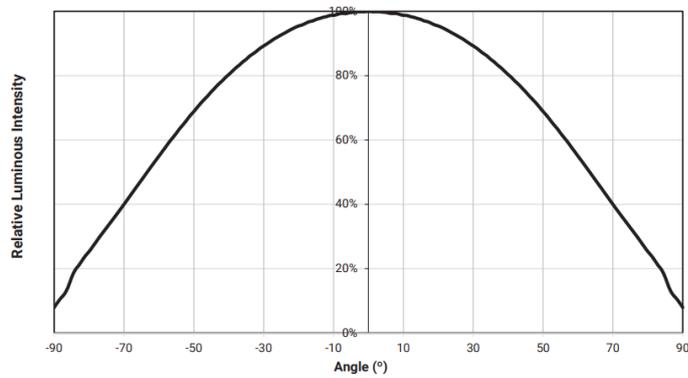
**Feature:**

- ❖ The module is dimmable by current set (0-100%)
- ❖ Long Lifetime
- ❖ Energy Saving

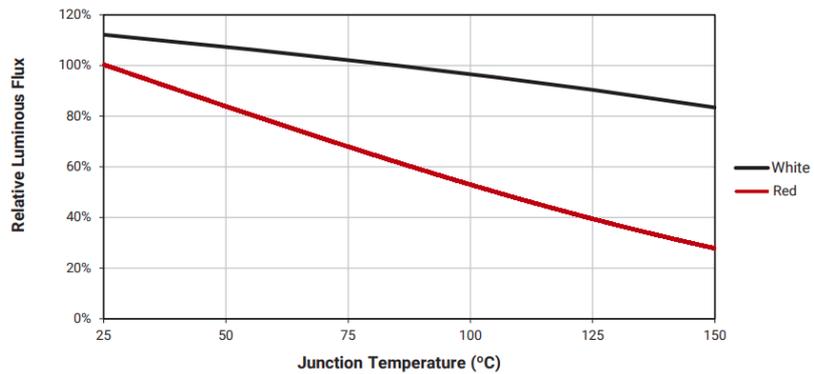
EPREL Database link  
QR Code



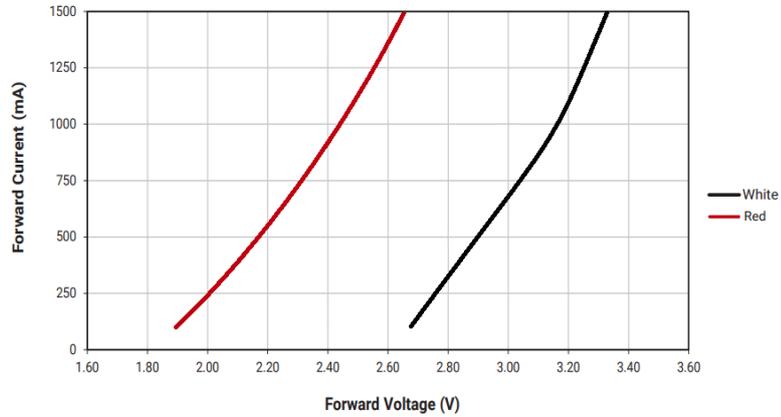
➤ **TYPICAL SPATIAL DISTRIBUTION**



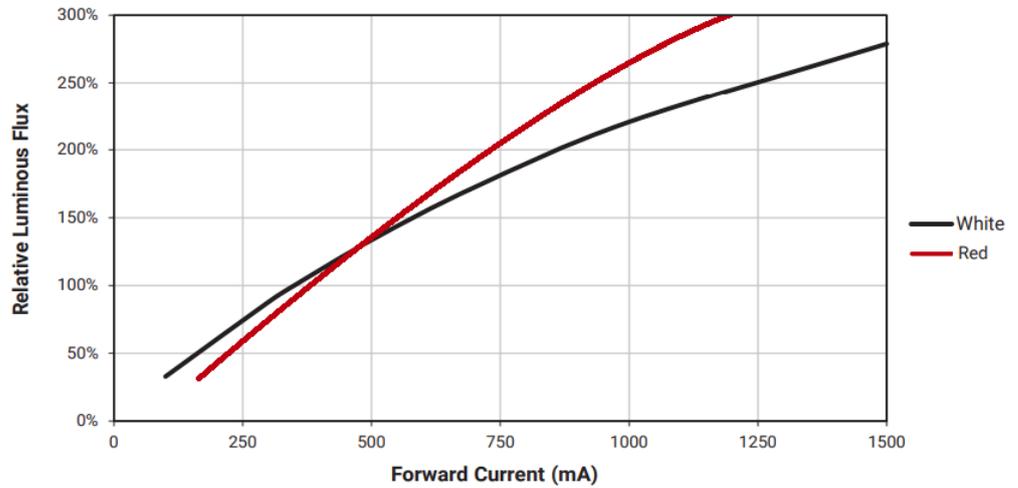
➤ **RELATIVE LUMINOUS FLUX VS. JUNCTION TEMPERATURE**



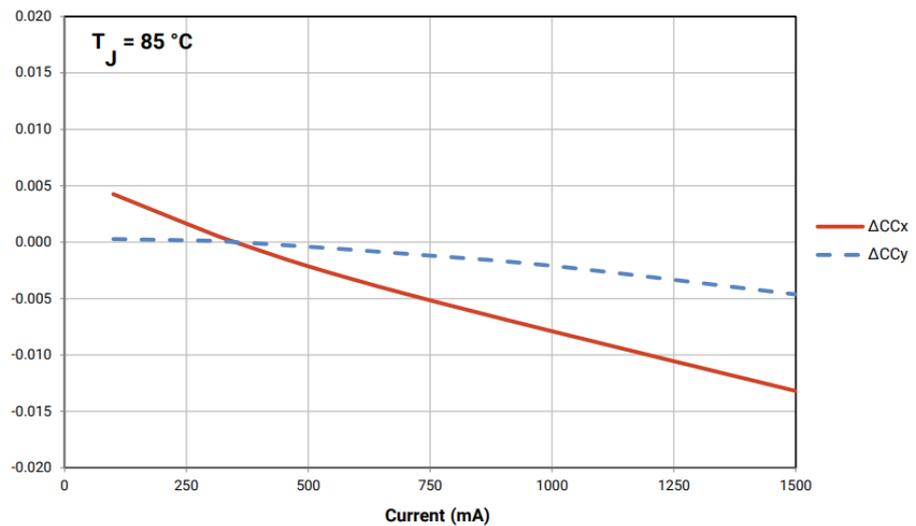
➤ FORWARD VOLTAGE VS. FORWARD CURRENT



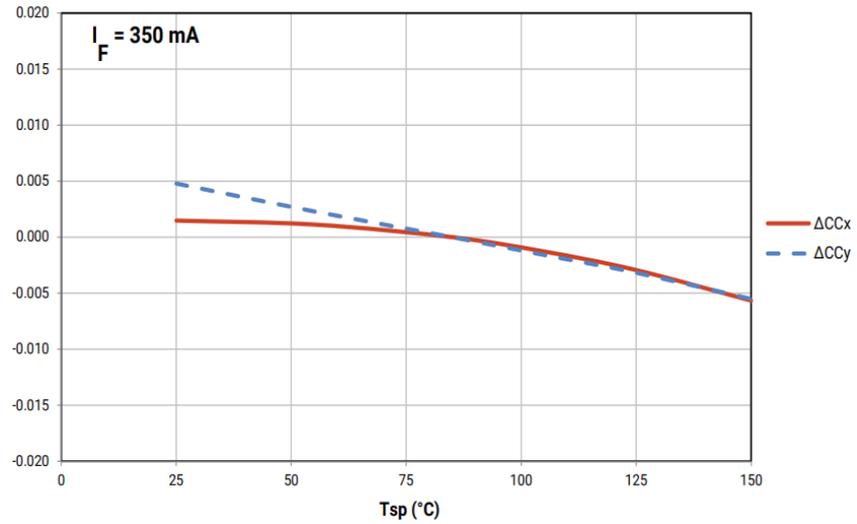
➤ RELATIVE LUMINOUS FLUX VS. FORWARD CURRENT



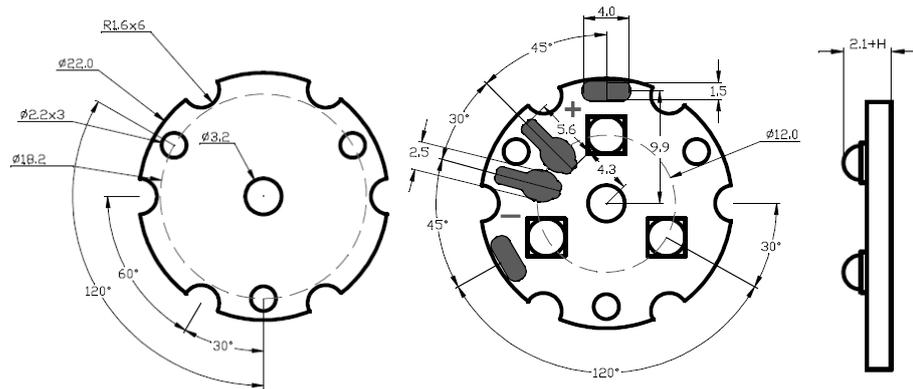
➤ RELATIVE CHROMATICITY VS. CURRENT



➤ **RELATIVE CHROMATICITY VS. JUNCTION TEMPERATURE**



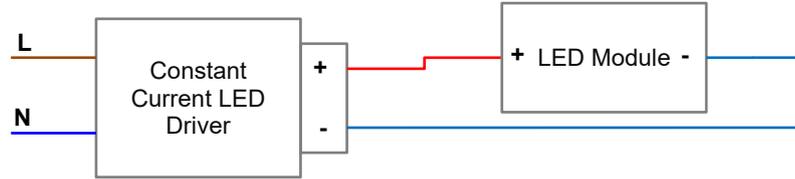
➤ **DIMENSIONS**



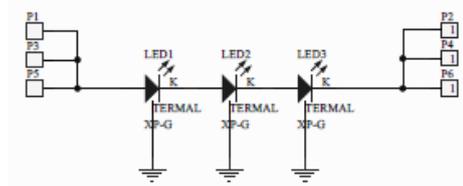
Notes:  
Drawing is not to scale.  
All dimensions are in millimeters.

MECHANICAL SPECIFICATION	
Dimensions	22 $\phi$ mm
Board Thickness	2 mm
Board Material	MCPCB, 5052 Alloy, 2 W/(m <sup>2</sup> K), black soldermask
Shape	Circular

➤ **ELECTRICAL INSTALLATION**



➤ **ELECTRICAL SCHEMA**



➤ **ORDERING CODE**

ORDERING CODE / ARTICLE CODE	DESCRIPTION
NT-3CB22-XPE2WH1Q57B4	LED Module, High Efficacy, black soldermask, 3 LED, 22Ø mm, XP-E2, 3000K CRI 80
NT-3CB22-XPE2N75R25A3	LED Module, High Efficacy, black soldermask, 3 LED, 22Ø mm, XP-E2, 4000K CRI 75
NT-3CB22-XPE2C70R52B	LED Module, High Efficacy, black soldermask, 3 LED, 22Ø mm, XP-E2, 5700K CRI 70
NT-3CB22-XPE2REDR2N4	LED Module, High Efficacy, black soldermask, 3LED, 22Ø mm, XP-E2, Red (620-630nm)

➤ **COMMERCIAL INFORMATION**

COMMERCIAL INFORMATION	
Minimum Order Quantity	20 pcs.
Warranty	2 years

➤ **GENERAL TERMS OF USE**

- The range of acceptable input voltages must include the expected voltage dropout across the LED string check on CREE LED [Website XP/XT Series®](#).
- Connecting to the power supply should be done when the power supply is off.
- Modules should be connected to heatsink to dissipate heat form LED module. Temperature on the module shouldn't be higher than recommended by LED producer. Due to power of the module, appropriate heatsink should be used with thermal conductive tape or paste. The lower temperature on LED module causes longer lifetime.
- During installation of the LED module it is absolutely necessary to use ESD protection. Luminaire design should protect the module from ESD. Installation of the LED module should be done by qualified person.
- Lenses, diodes and other components on the module must be protected against mechanical damage and exposure to liquids and dirt.
- The modules shouldn't have contact with hazardous and corrosive substances or aromatic organic compounds such as toluene, acetone, xylene, benzene.
- For installation of modules use substances recommended and tested by the CREE LED®. List of substances available on the manufacturer's website: [cree-led.com](http://cree-led.com)

**Niviss is not responsible for any damage or failure due to not comply with above rules.**

**Otherwise, the complaint will not be taken into account.**

➤ **ENVIRONMENTAL CAUTION**



**Caution!**

It is prohibited to dispose of obsolete and waste electrical and electronic equipment together with regular household wastes. They should be properly sorted and recycled. Old electrical and electronic equipment should be returned to a waste collection point established by a waste-management service. Waste electrical and electronic equipment can be broken down to base materials and then recycled. For more information regarding waste management please contact your local authorities, waste-management service or the seller of electrical and electronic devices.

➤ **DATA  
DOWNLOAD**



[3D PDF FILE](#)

[STEP FILE](#)

[EU DECLARATION OF CONFORMITY \(CE\)](#)