CREE LED® High Efficacy
LED Module MOD-XP-G-2x160

DK231207

MOD-RAY-XPG are LED modules based on the CREE LED® XLamp® XP optimized for cost effective and high efficacy applications. MOD-RAY-XPG modules are providing optimized and easy integration, with excellent quality, reliability and precision. Modules are recommended for lighting applications where high efficacy and long lifetime are critical, such as sport arenas lighting, outdoors area and indoor directional lights.

High efficacy **179 lm/W** at **76 220 lm**
High **CRI** and **TLCI** minimum **95**
Max **lumen output 233 750 lm**

LM-80 lifetime projections (IEC 62717)
> 100,000 (L70B10)[1]

EPREL registered product

Over temperature protection circuit compliant with INVENTRONICS power supply

➢ SPECIFICATION

LED FAMILY	XP-G3	XP-G4
CCT/SDCM	5700K 3-STEP	
Viewing Angle	120°	
Nominal Module Lumen Output[2]	72 500 lm	76 220 lm
Nominal Efficacy[2]	168 lm/W	179 lm/W
CRI / TLCI	80	95
Nominal Driving Current	2.0A	
Voltage DC[2] (typ.)	230 V	
Nominal Power Consumption[2] (W)	446 W	
Max. LED module working current[3]	**8 A / module**	**10 A / module**
Max. LED module lumen output[3]	**222 300 lm**	**233 750 lm**
Number of LEDs	320	
Power Supply Type	Constant Current	
Risk Group Classification[4]	RG-2 Moderate risk	
Energy Class	**D**	
Operating Temperature	-35°C ÷ +60°C	
Tc max.	85°C	
Lifetime[1]/Tc life	>109000 h 55˚C, 2.64 A,	

[1] **Lifetime of LEDs as declared by the manufacturer CREE LED® according to IES LM-80-2015 Testing Results.**
[2] **Source performance in real-life conditions at T=55°C without heatsink.**
[3] **External heatsink required.**
[4] **According to Eye safety Cree document**

➢ FEATURES

Application:

- Decorative lighting
- Sport Arena Lighting
- Task lighting
- General lighting
- Lighting for Video

Feature:

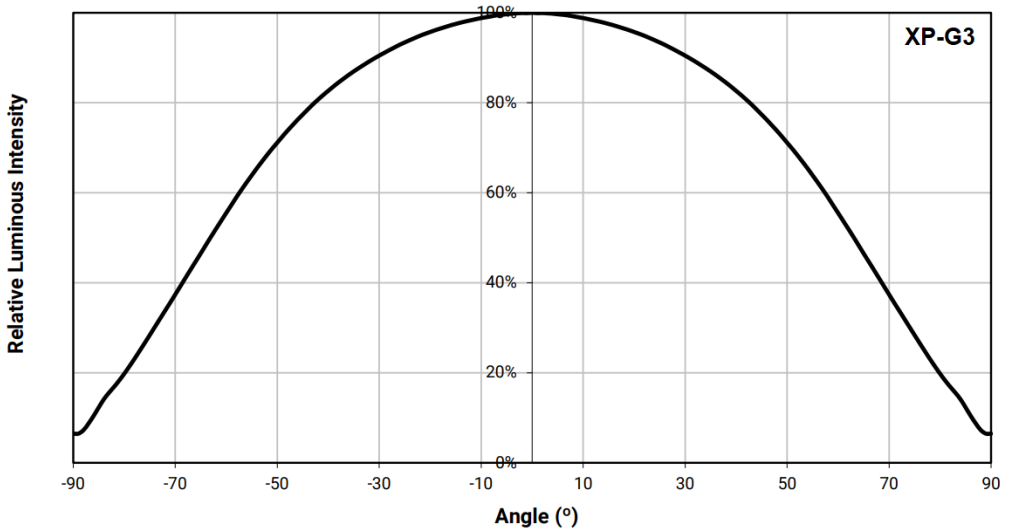
- The module is dimmable by current set (0-100%)
- Long Lifetime
- Energy Saving

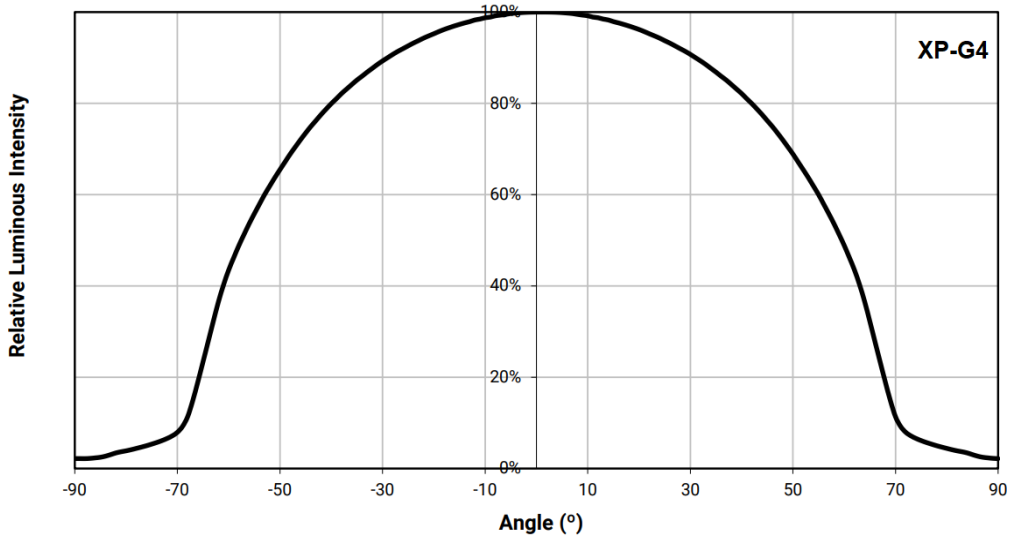
EPREL Database link
QR CODE

5700K CRI 80 — **2621262**

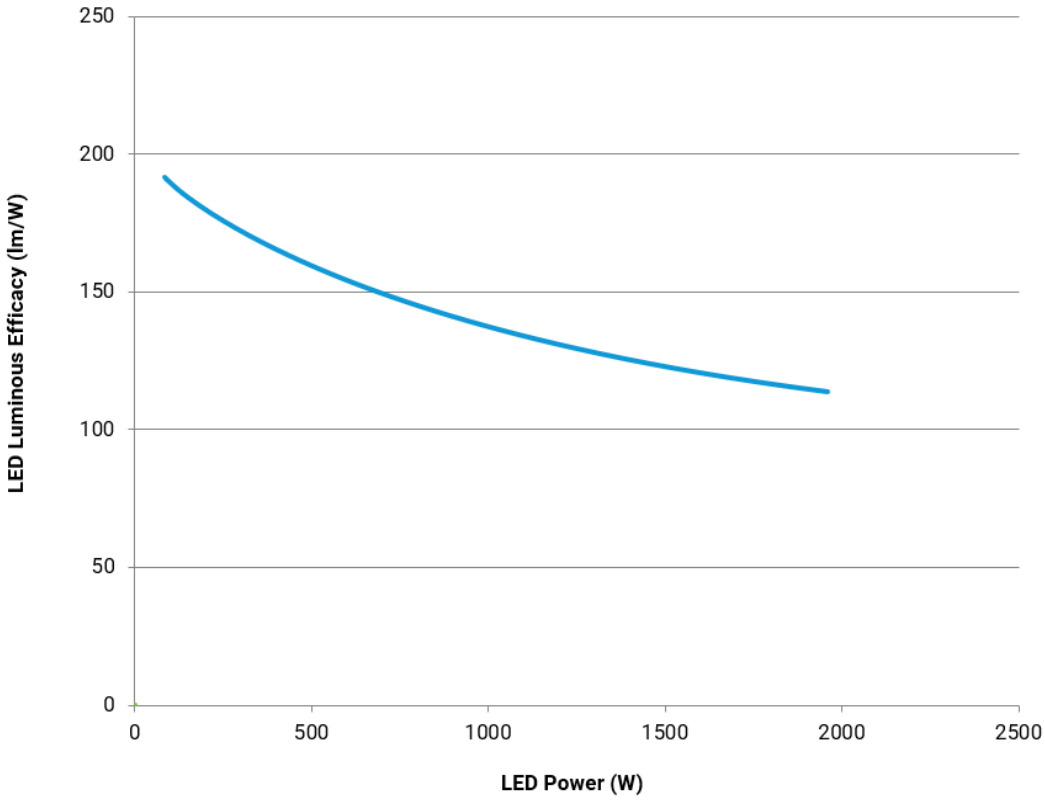
5700K CRI 95 — **2621289**

➢ TYPICAL SPATIAL DISTRIBUTION

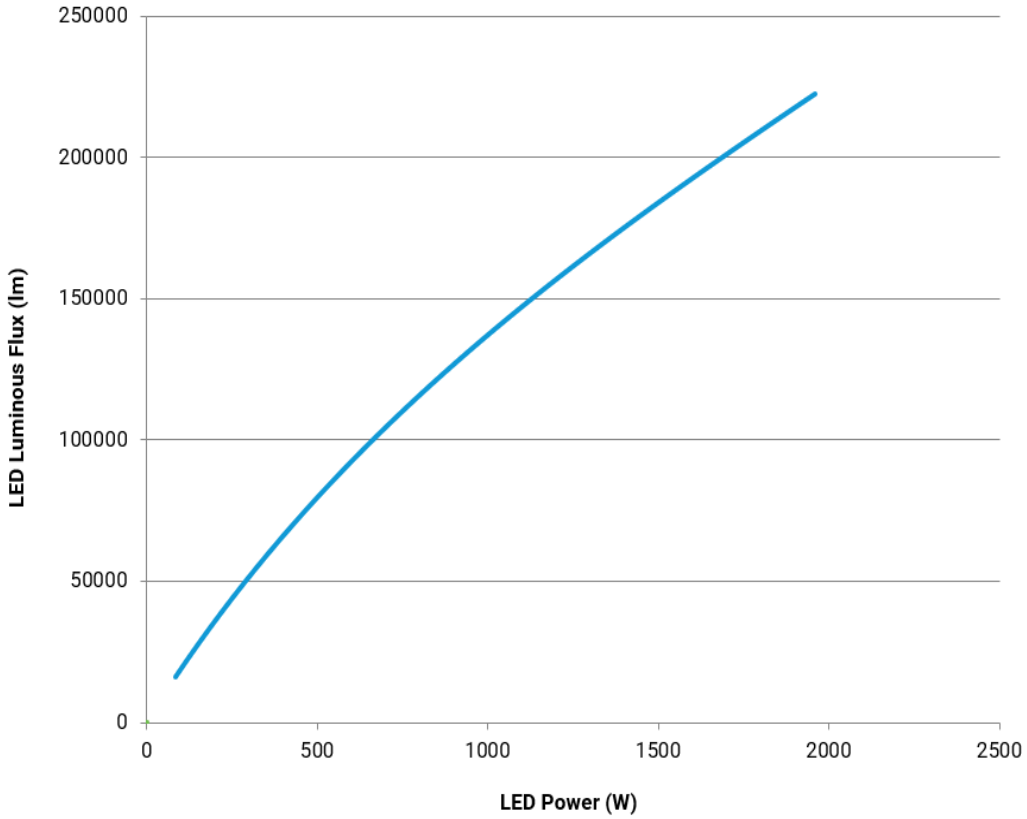




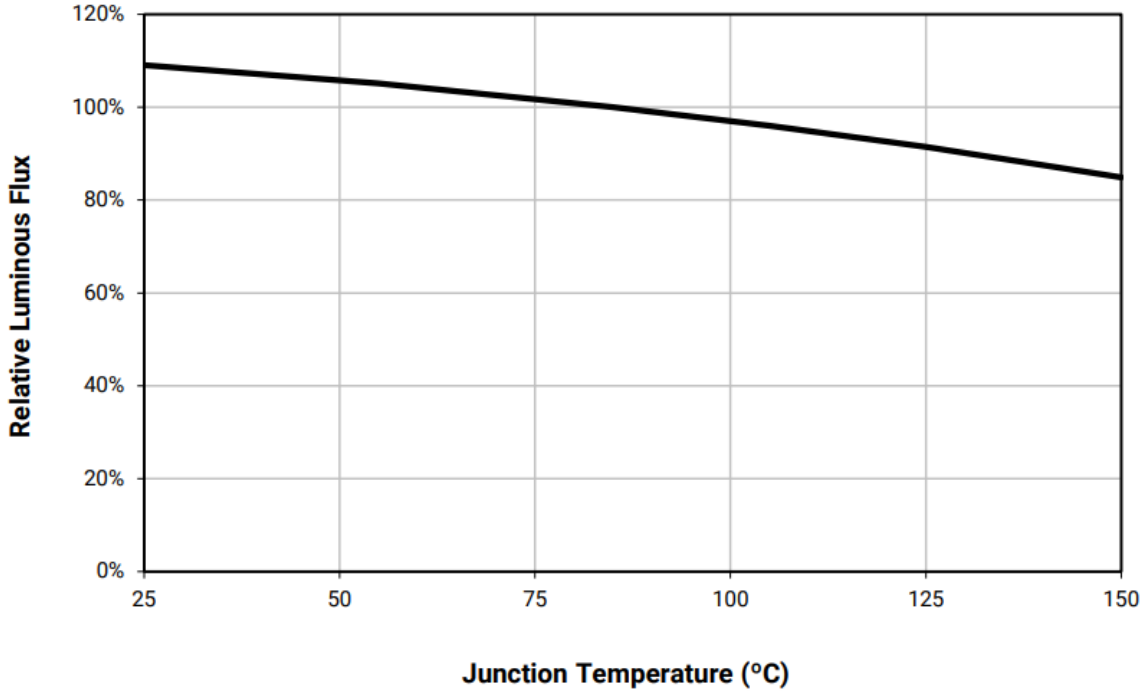
- **LUMINOUS EFFICACY VS. POWER**



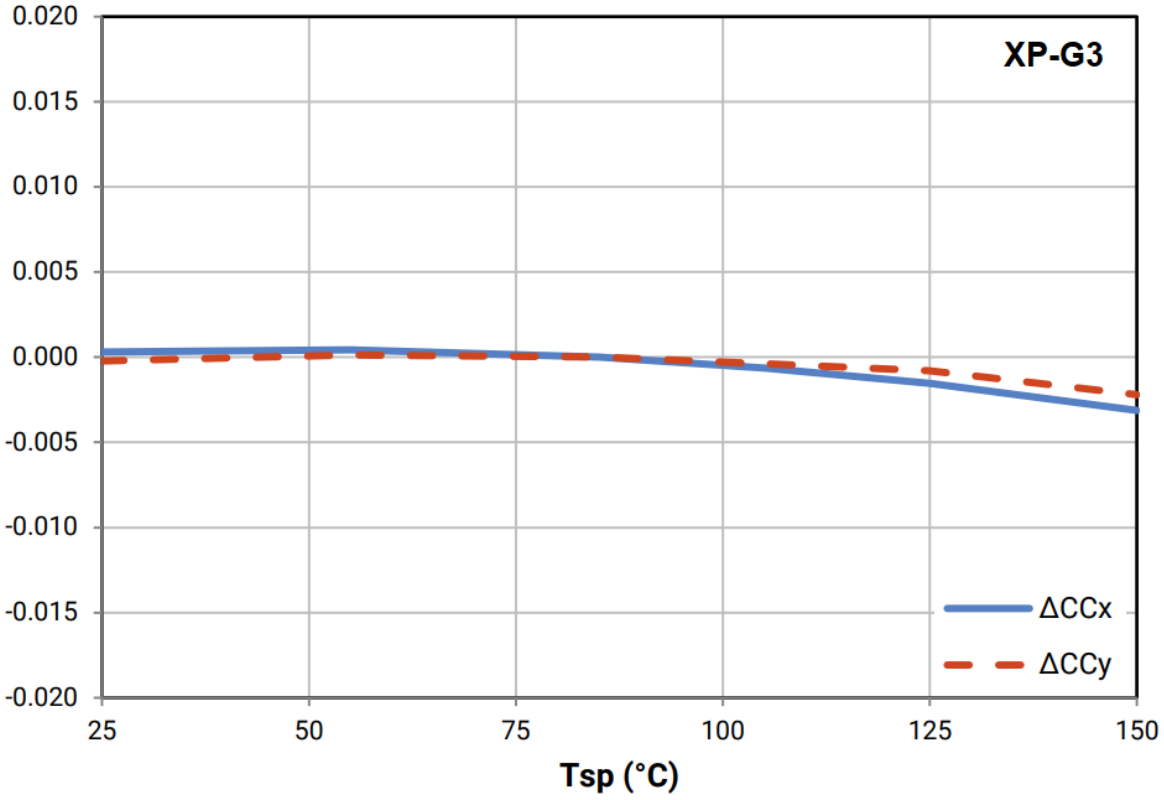
➢ **LUMINOUS FLUX VS. POWER**

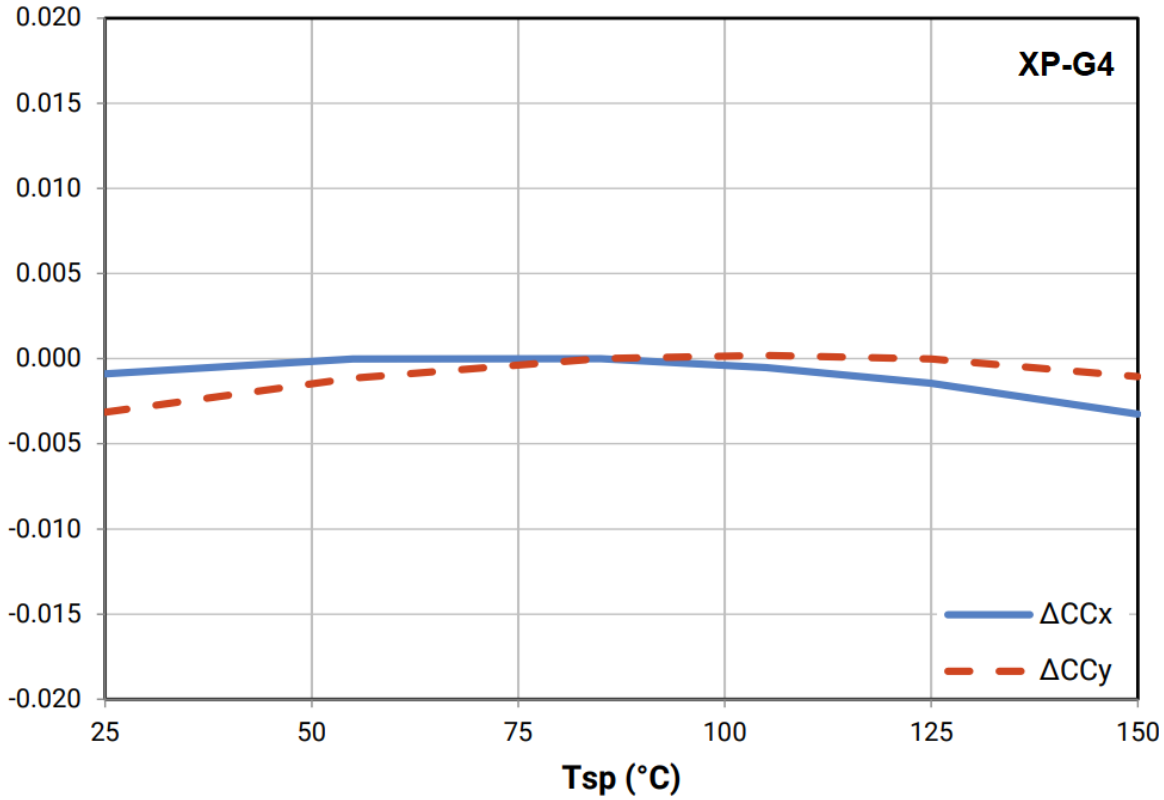


➢ **LUMINOUS FLUX VS. JUNCTION TEMPERATURE**

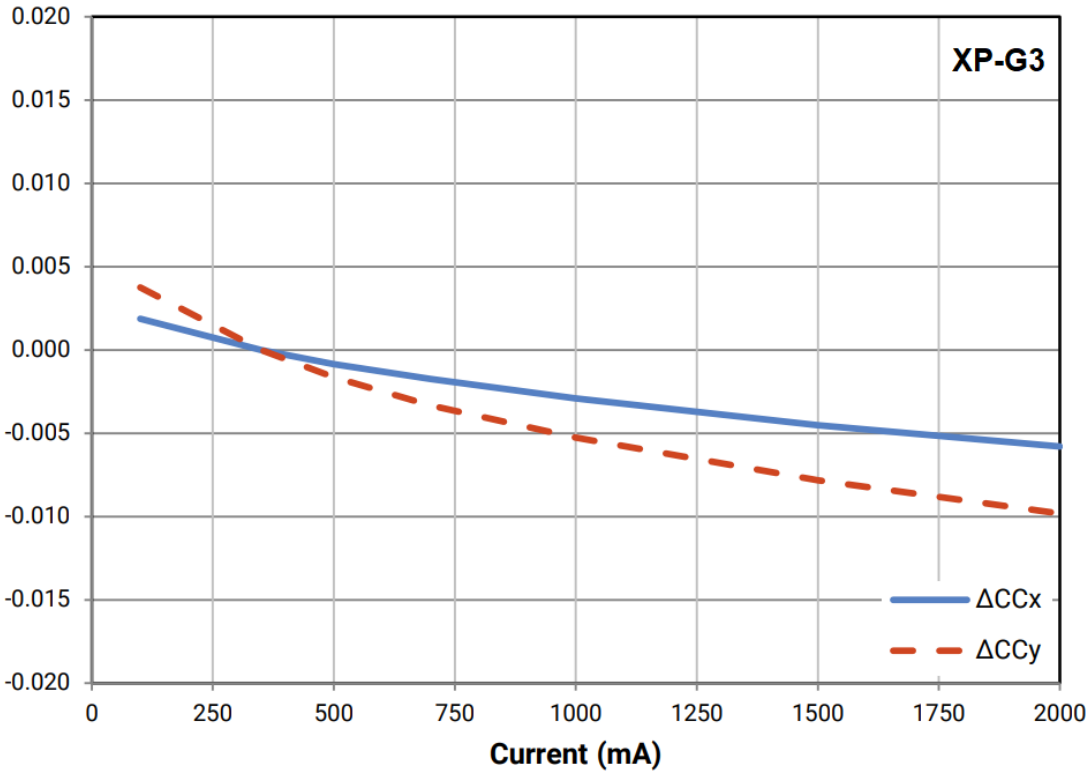


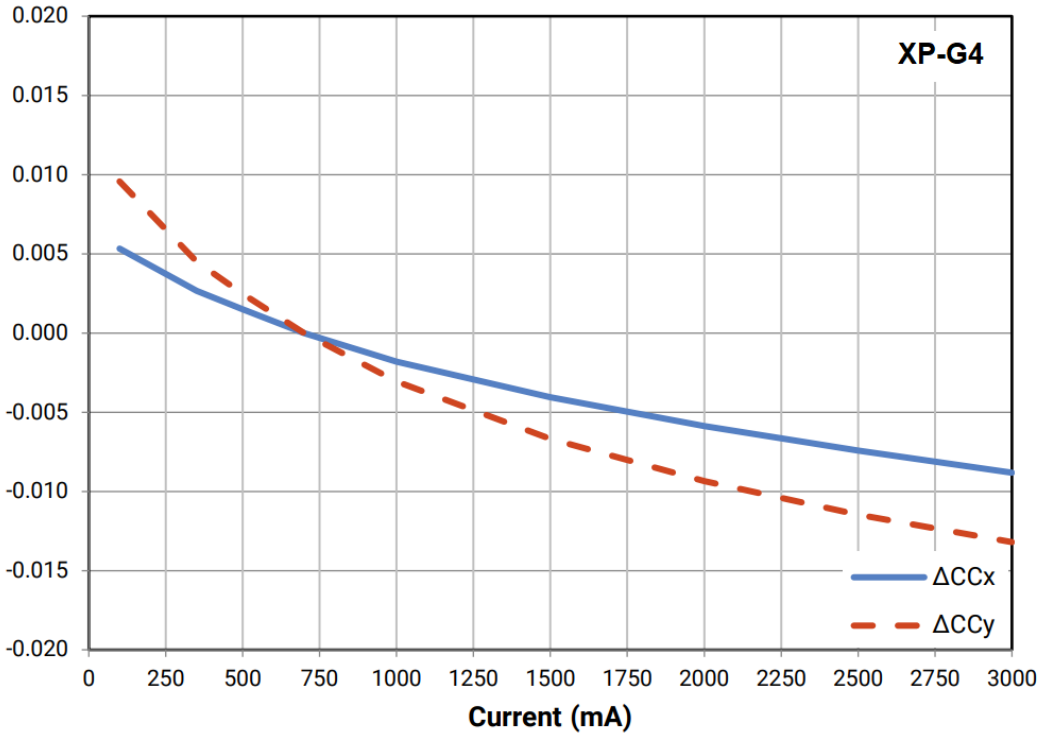
- **RELATIVE CHROMATICITY VS. TEMPERATURE**



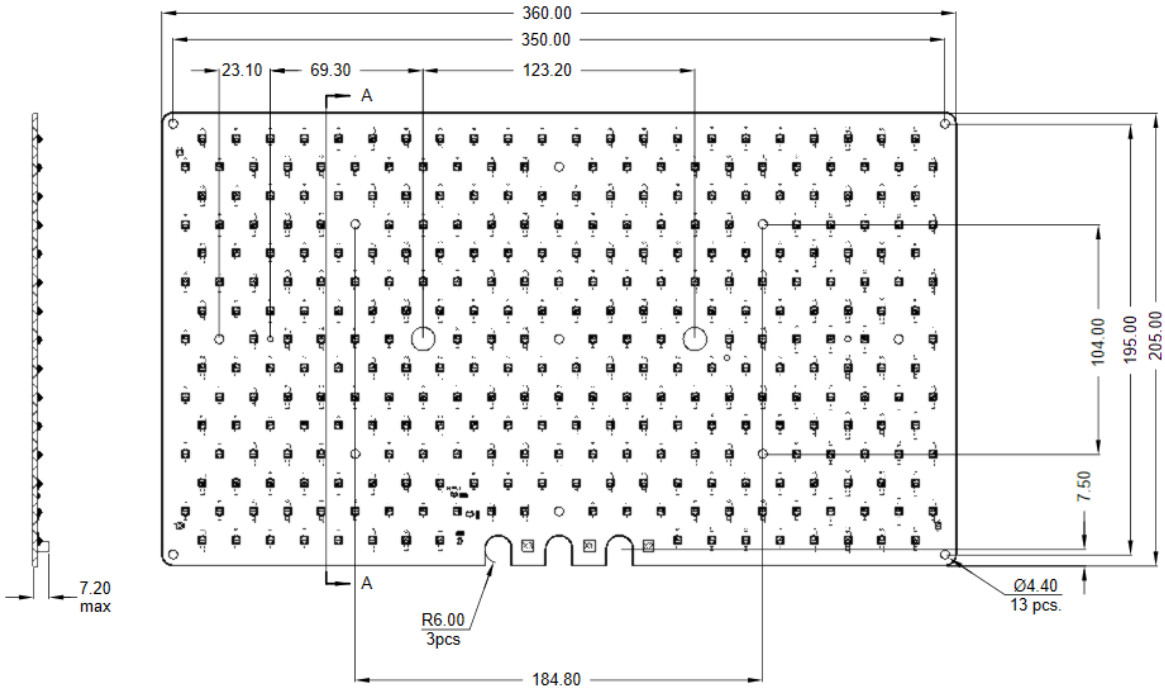


- **RELATIVE CHROMATICITY VS. CURRENT**





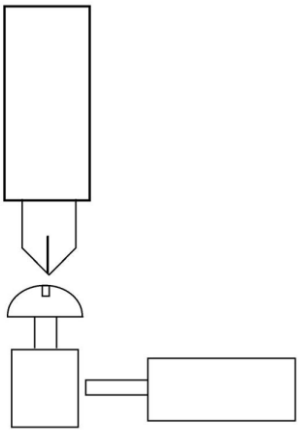
➢ DIMENSIONS



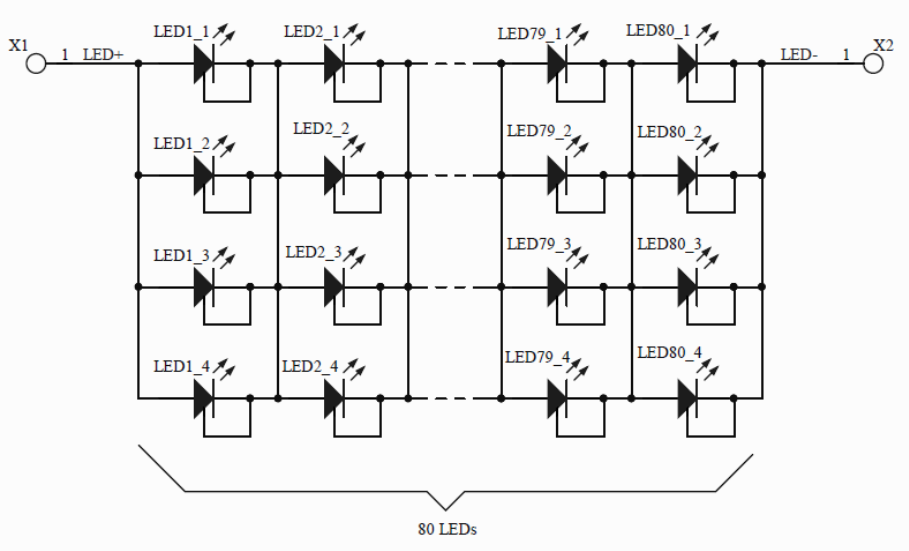
Notes:
Drawing is not to scale.
All dimensions are in millimeters.

	MECHANICAL SPECIFICATION
Dimensions	360 x 205 mm
Board Thickness	2 mm
Board Material	MCPCB, 5052 Alloy, 2.2/(m*K), 2 oz.
Shape	Rectangular

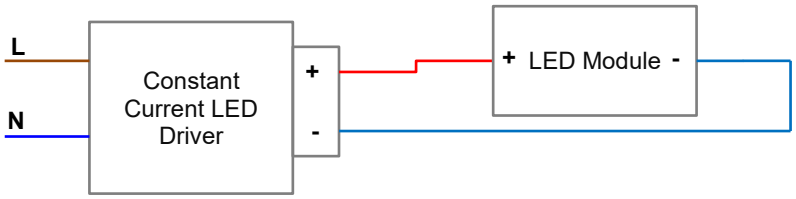
➢ CONNECTION



➢ ELECTRICAL SCHEMA



➢ ELECTRICAL INSTALLATION



➢ ORDERING CODE

ORDERING CODE / ARTICLE CODE	DESCRIPTION
MOD-XP-G-2X160-RA80	LED Module High Efficacy 360x205mm 320 LED XP-G3, 5700K, CRI 80, Thermal protection circuit
MOD-XP-G-2X160-TLCI-RA95	LED Module High Efficacy 360x205mm 320 LED XP-G4, 5700K, CRI 95, Thermal protection circuit

➢ COMMERCIAL INFORMATION

COMMERCIAL INFORMATION	
Connector	B12-NM-SMT-RLM-CT
Power Supply	NES-1K8TxxxBC prod. INVENTRONICS
Available Lenses	no
Minimum Order Quantity	1 pcs.
Warranty	2 years

➢ GENERAL TERMS OF USE

1. The range of acceptable input voltages must include the expected voltage dropout across the LED string check on CREE LED Website XLamp® XP LEDs
2. Connecting to the power supply should be done when the power supply is off.
3. Modules should be connected to heatsink to dissipate heat form LED module. Temperature on the module shouldn't be higher than recommended by Cree®. 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.
4. 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.
5. Lenses, diodes and other components on the module must be protected against mechanical damage and exposure to liquids and dirt.
6. The modules shouldn't have contact with hazardous and corrosive substances or aromatic organic compounds such as toluene, acetone, xylene, benzene.
7. 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

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)