CREE LED® High Efficacy
LED Modules NV-8RW54290-XPC family

DK100904

NV-8RW54290-XPC family are LED modules based on the CREE LED® XP-C® optimized for cost effective and high efficacy applications. NV-8RW54290-XPC modules are providing optimized and easy integration, with excellent quality, reliability and precision.

High efficacy **166 lm/W** and
up to **1335 lm**.

MPCB thermal conductivity **1.5 W/mK** based in UHT (Ultra High Thermal),
Lead Free HASL

EPREL registered product

➢ SPECIFICATION

LED FAMILY	XP-C SERIES		
CCT/SDCM	2700K 3-STEP	4500K 3-STEP	6000K 3-STEP
Viewing Angle	120°		
Nominal Module Lumen Output**	440 lm	470 lm	500 lm
Nominal Efficacy	129 lm/W	138 lm/W	147 lm/W
CRI	80	75	70
Voltage DC (typ.)	22,5 V		
Voltage DC (max)	9,8 V		
Power Consumption	3,4 W		
Max Module Lumen Output (500 mA)*	1170 lm	1250 lm	1335 lm
Max. LED module working current **	500 mA / module		
Max power	12,2 W		
Number of LEDs	8		
Power Supply Type	Constant Current		
Risk Group Classification	RG-1 Low Risk		
Energy Class	E	D	
Operating Temperature	-30°C ÷ +60°C		
Tc max.	85°C		
Lifetime/Tc life	>36000 h		

* Source performance in real-life conditions at T=55°C; the tolerance of source lumen output is 10% - tested without heatsink.
** External heatsink required.

Contact: +48 58 781 33 99 sales@niviss.com www.niviss.com

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➢ 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

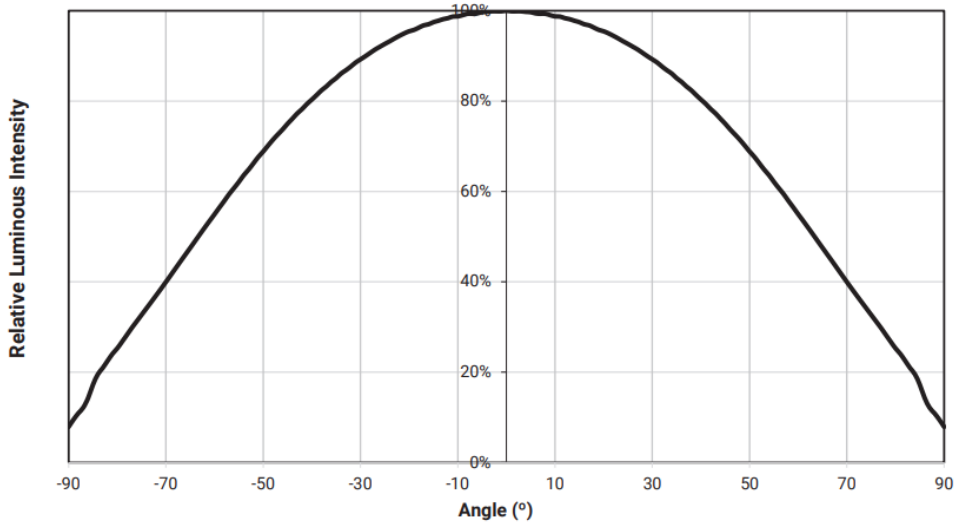
EPREL Database link QR Code

2700K 2120738

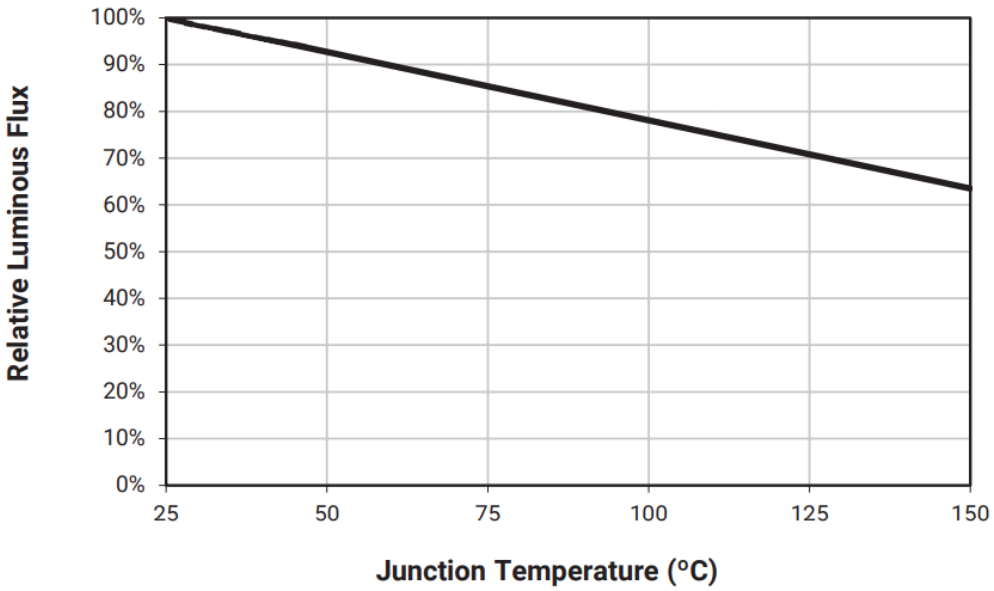
4500K 2120754

6000K 2120764

➢ TYPICAL SPATIAL DISTRIBUTION



➢ RELATIVE LUMINOUS FLUX VS. JUNCTION TEMPERATURE



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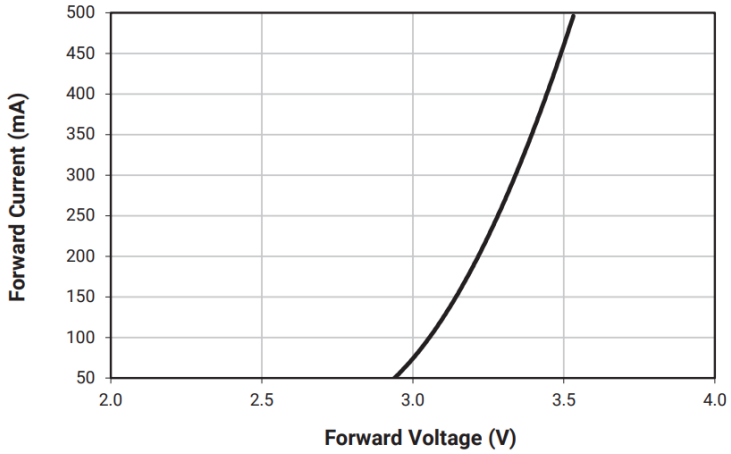
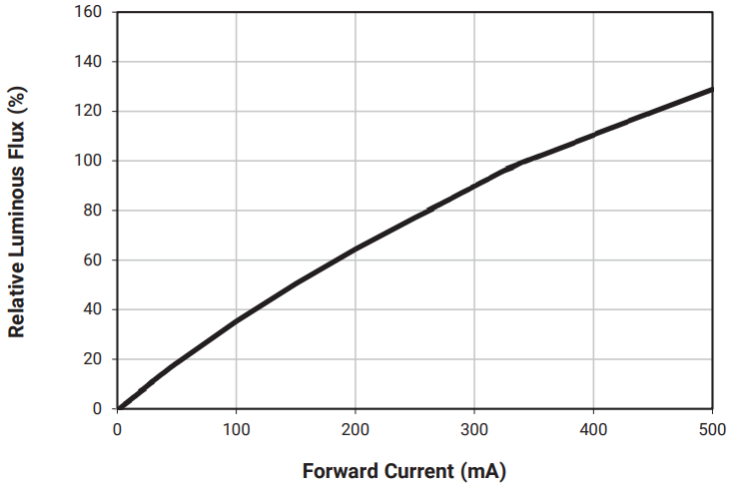
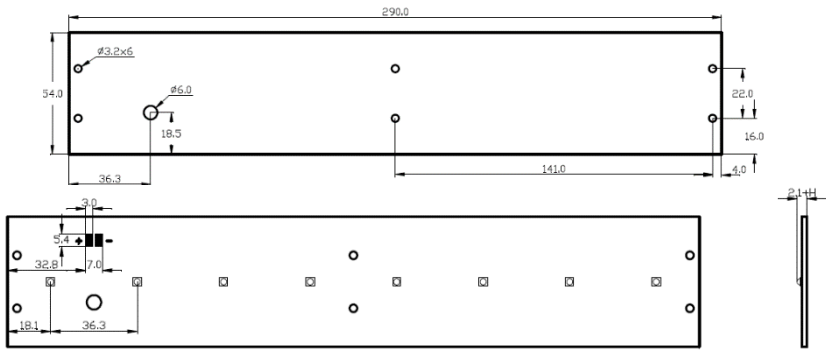
- **FORWARD VOLTAGE VS. FORWARD CURRENT**



- **RELATIVE LUMINOUS FLUX VS. FORWARD CURRENT**



- **DIMENSIONS**



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

MECHANICAL SPECIFICATION	
Dimensions	54x290mm
Board Thickness	2 mm
Board Material	MCPCB, 1060 Alloy, 1.5 W/(m*K), white soldermask
Shape	Rectangular

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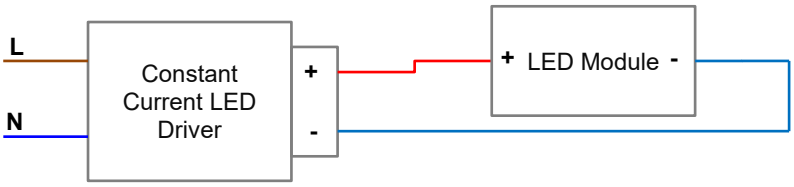
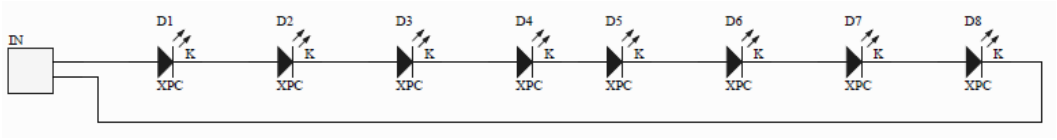
➢ ELECTRICAL INSTALLATION



➢ ELECTRICAL SCHEMA



➢ ORDERING CODE

ORDERING CODE / ARTICLE CODE	DESCRIPTION
NV-8RW54290-XPCWWP28A	LED Module, High Efficacy, white soldermask, 8 LED, 54x290 mm, XP-C, 2700K CRI 80
NV-8RW54290-XPCWNQ24C	LED Module, High Efficacy, white soldermask, 8 LED, 54x290 mm, XP-C, 4500K CRI 75
NV-8RW54290-XPCWCR21C	LED Module, High Efficacy, white soldermask, 8 LED, 54x290 mm, XP-C, 6000K CRI 70

➢ COMMERCIAL INFORMATION

COMMERCIAL INFORMATION	
Minimum Order Quantity	4 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 XP-C Series®.
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 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.
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)

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