CREE LED® High Efficacy
LED Modules 48RW_620X50SP family

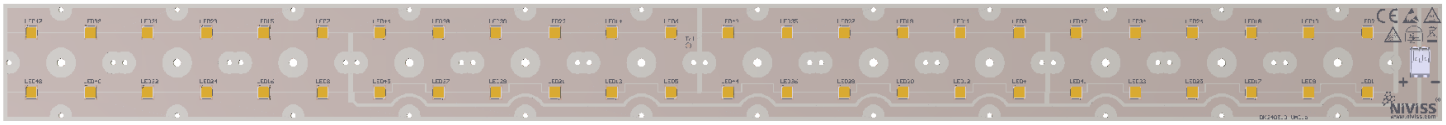
DK240510

48RW_620X50SP family are LED modules based on the CREE LED® J_Series® 5050 K-class 6V optimized for cost effective and high efficacy applications. 48RW_620X50SP modules are providing optimized and easy integration, with excellent quality, reliability and precision.

High efficacy **203 lm/W** and up to **43815 lm**.

LM-80 lifetime projections (IEC 62717)
> 109 000 (L70B10)*

EPREL registered product.



➢ SPECIFICATION

LED FAMILY	JR5050 K-class 6V	
CCT/SDCM	3000K 3-STEP	4000K 3-STEP
Viewing Angle	120°	
Nominal Module Lumen Output**	**18400 lm**	**19400 lm**
Nominal Efficacy	**172 lm/W**	**181 lm/W**
CRI	80 (90 available)	
Nominal Driving Current***	2400 mA	
Voltage DC (typ.)	44,8 V	
Power Consumption (W)	107,5 W	
Absolute Max. LED module working current ***	**6 A / module**	
Max. LED module lumen output	**41650 lm**	**43815 lm**
Number of LEDs	48	
Power Supply Type	Constant Current	
Risk Group Classification	RG-1 Low Risk	
Energy Class	**B**	**B**
Operating Temperature	-30°C ÷ +60°C	
Tc max.	105°C	
Lifetime*/Tc life	>109000 h 55˚C, 400mA per LED	

* 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.

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

➢ FEATURES

Application:

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

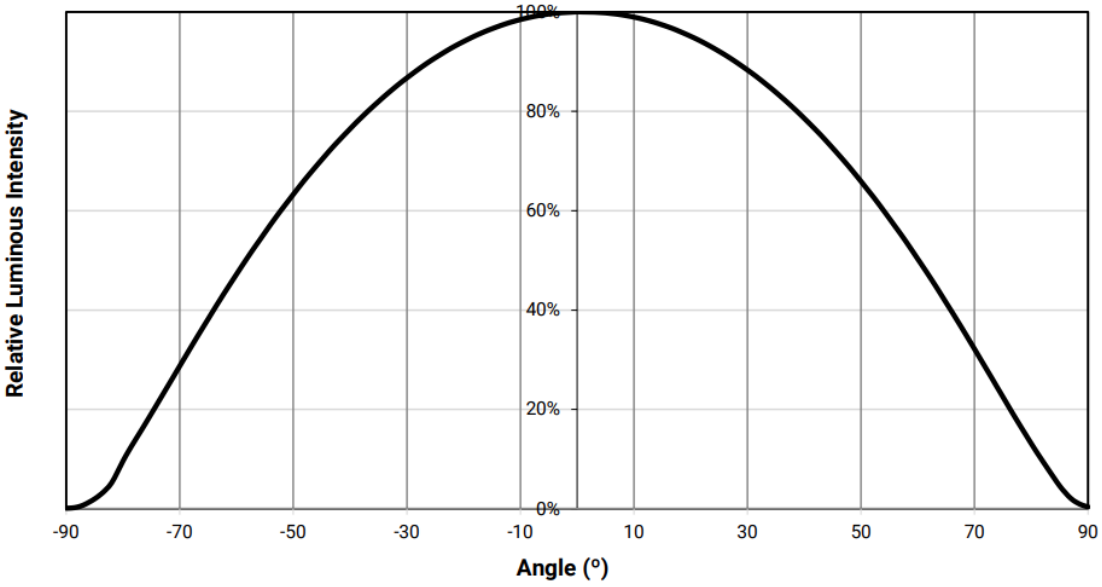
Feature:

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

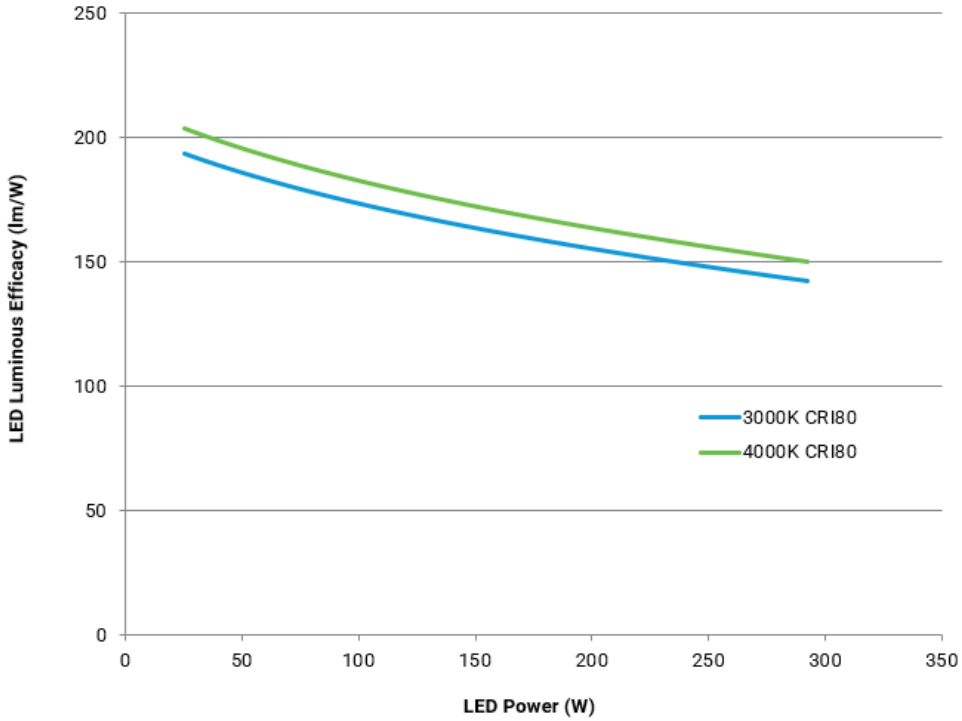
EPREL Database link

QR CODE

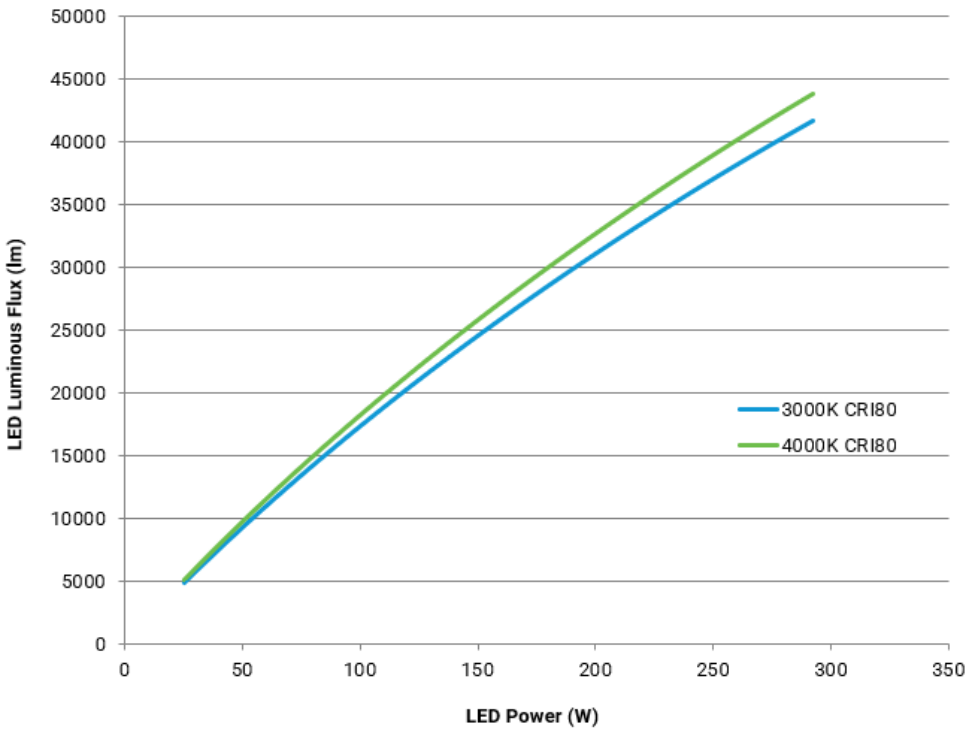
➢ TYPICAL SPATIAL DISTRIBUTION



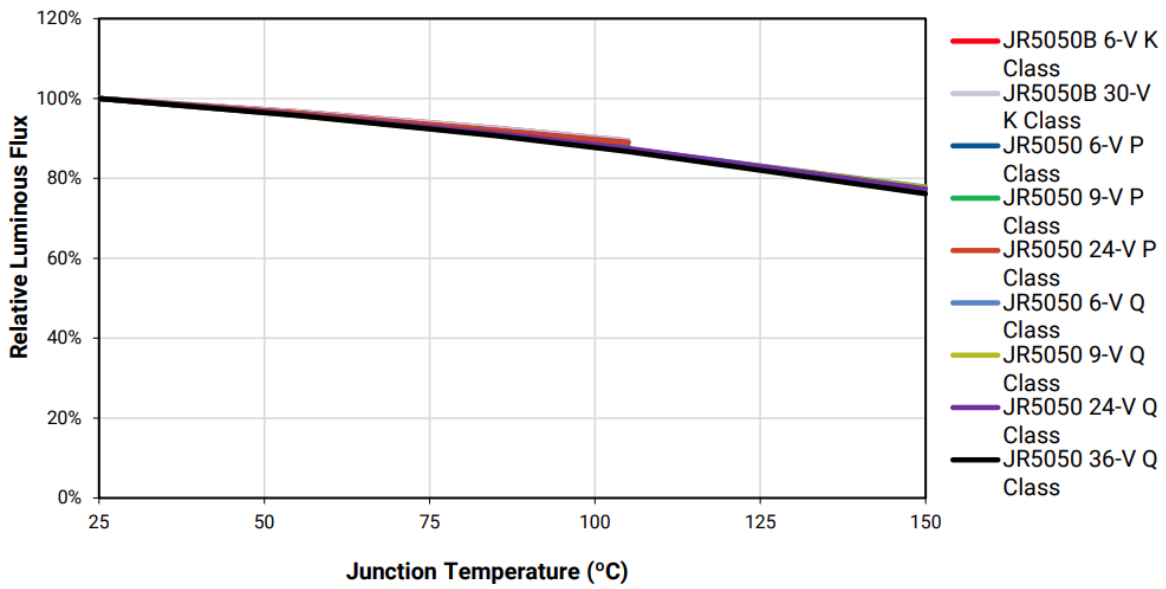
- **LUMINOUS EFFICACY VS. POWER**



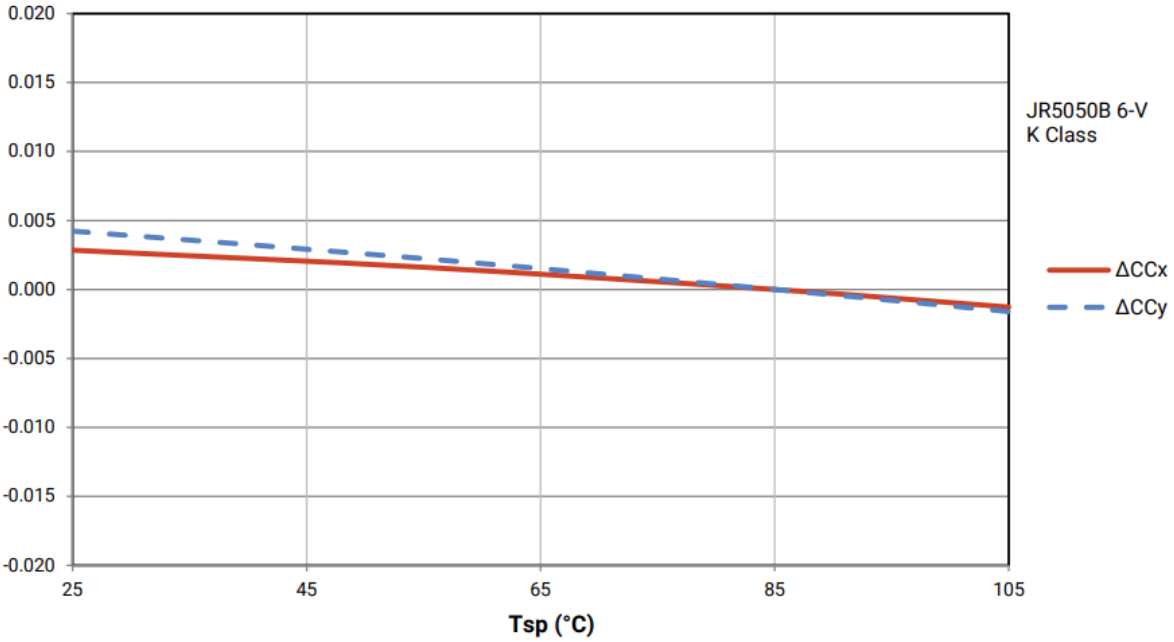
- **LUMINOUS FLUX VS. POWER**



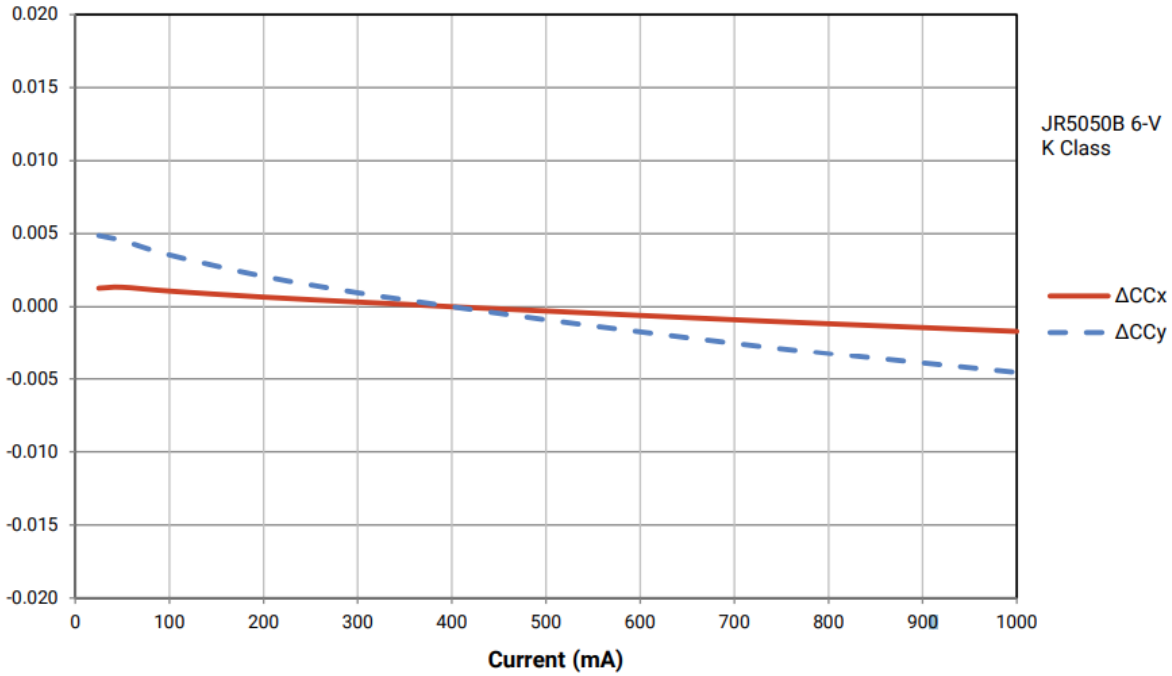
- **LUMINOUS FLUX VS. JUNCTION TEMPERATURE**



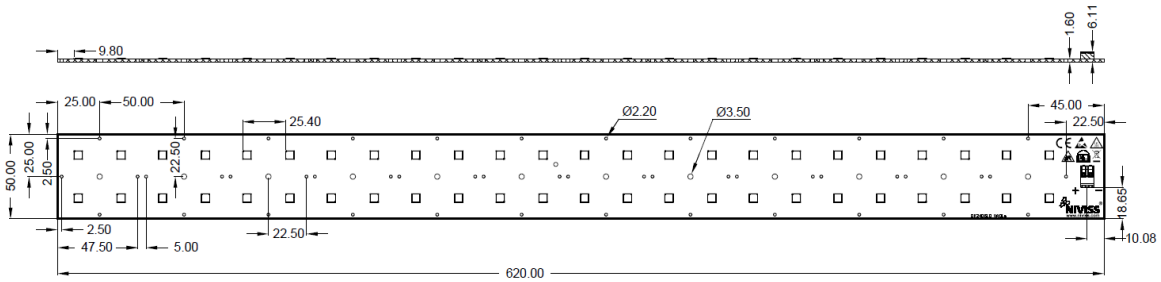
- **RELATIVE CHROMATICITY VS. TEMPERATURE**



➢ RELATIVE CHROMATICITY VS. CURRENT



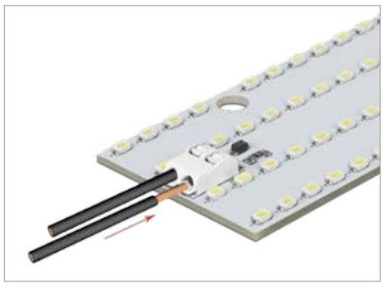
➢ DIMENSIONS



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

MECHANICAL SPECIFICATION	
Dimensions	620 x 50 mm
Board Thickness	1.6 mm
Board Material	MCPCB; white soldermask
Shape	Rectangular

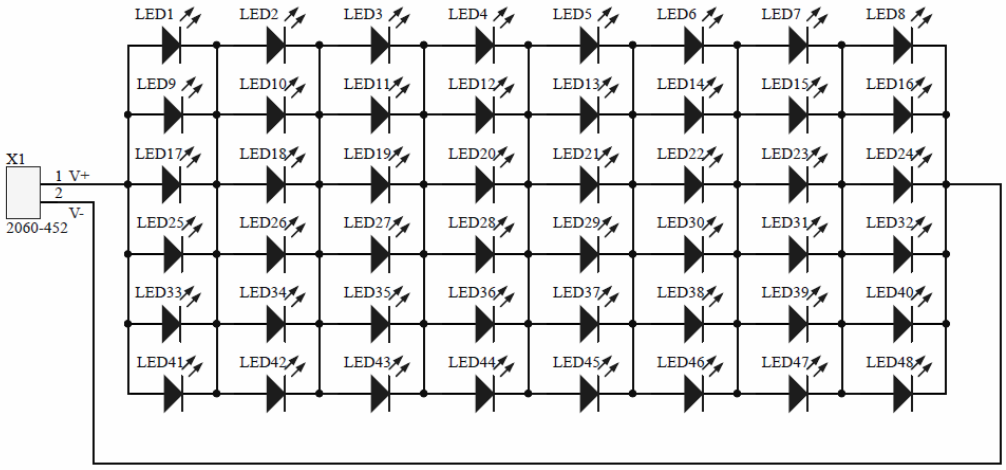
➢ CONNECTION



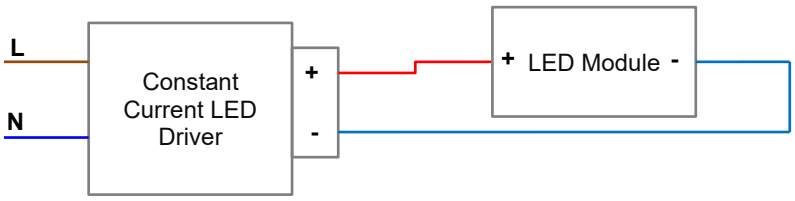
Inserting solid conductors via push-in termination.

Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).

➢ ELECTRICAL SCHEMA



➢ ELECTRICAL INSTALLATION



➢ ORDERING CODE

ORDERING CODE / ARTICLE CODE	DESCRIPTION
MOD-48R620X50-JR5050B-3080-VA01	LED Module; High Efficacy; 620x50mm; 48 LED 5050 K class 6V; 3000K; CRI 80; VA01
MOD-48R620X50-JR5050B-4080-VA01	LED Module; High Efficacy; 620x50mm; 48 LED 5050 K class 6V; 4000K; CRI 80; VA01

➢ COMMERCIAL INFORMATION

COMMERCIAL INFORMATION	
Connector	WAGO 2060-452
Available Lenses	LENS-KH-04 LENS-HK-50 LENS-LI-STRADA-2x2-M LENS-LI-STRADA-2x2-T LENS-LI-STRADA-2x2-A LENS-LI-STRADA-2x2-D LENS-LI-STRADA-2x2-V LENS-LI-STRADA-2x2-X LENS-LI-STRADA-2x2-C LENS-LI-STRADA-2x2-F LENS-LI-STRADA-2x2-S LENS-LI-STRADA-2x2-P LENS-LI-STRADA-2x2-B LENS-LI-STRADA-2x2-L
Minimum Order Quantity	10 pcs.
Warranty	3 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 J Series® 5050
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)