

MOD-36R279.5X20-(FR4/MCPCB)-JB2835B LED modules based on the CREE LED[®] J_Series[®] 2835 optimized for cost effective and high efficacy applications. MOD-36R279.5X20-(FR4/MCPCB)-JB2835B are providing optimized and easy integration, with excellent quality, reliability and precision. Two variants of connectors allow to cover a wide range of needs.

High efficacy **212 lm/W** and up to **8215 lm**.

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

Possibility to connect up to 10 modules in series per chain for FR4.

EPREL registered product



➤ **SPECIFICATION**

LED FAMILY		MOD-36R279.5X20						
CCT/SDCM	2200K 3-STEP	2700K 3-STEP	3000K 3-STEP	3500K 3-STEP	4000K 3-STEP	5000K 3-STEP	5700K 3-STEP	6500K 3-STEP
Viewing Angle	120°							
Nominal Module Lumen Output ²	G class CRI 80							
	875 lm	1006 lm	1044 lm	1079 lm	1110 lm	1110 lm	1110 lm	1107 lm
	G class CRI 90							
	744 lm	854 lm	892 lm	923 lm	955 lm	955 lm	955 lm	951 lm
Nominal Efficacy ²	G class CRI 80							
	167 lm/W	192 lm/W	200 lm/W	206 lm/W	212 lm/W	212 lm/W	212 lm/W	212 lm/W
	G class CRI 90							
	142 lm/W	163 lm/W	171 lm/W	177 lm/W	182 lm/W	182 lm/W	182 lm/W	182 lm/W
CRI	80; 90							
Nominal Driving Current	220 mA							
Voltage DC (typ.) ²	23.8 V							
Power Consumption ²	5.2 W							
Max. LED module working current³	1920 mA / module							
Voltage DC (max) ³	28.5 V							
Max power³	54.2 W							
Max. LED module lumen output ³	G class CRI 80							
	6475	7447	7729	7985	8215	8215	8215	8189
	G class CRI 90							
	5502	6321	6603	6833	7063	7063	7063	7038
Number of LEDs	36							
Power Supply Type	Constant Current							
Risk Group Classification ⁴	RG-1 Low Risk for 2700K, 3000K, 3500K, 4000K; RG-2 Moderate Risk for 5000K, 5700K, 6500K when above 262 mA per LED							
Energy Class	G class CRI 80							
	C	B	B	B	A	A	A	A
	G class CRI 90							
	D	D	C	C	C	C	C	C
Operating Temperature	-30°C ÷ +60°C							
Tc max.	85°C							
Lifetime ¹ /Tc life	>102 000 h @ 85°C/105 °C, 240 mA,							

¹ Lifetime of LEDs as declared by the manufacturer [CREE LED®](#) according to [IES LM-80-2015 Testing Results Revision:32 :2025](#).
² Source performance in real-life conditions at Tc=55°C, 220 mA without heatsink.
³ External heatsink required.
⁴ According to [Eye safety Cree document](#)

➤ **FEATURES**

Application:

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

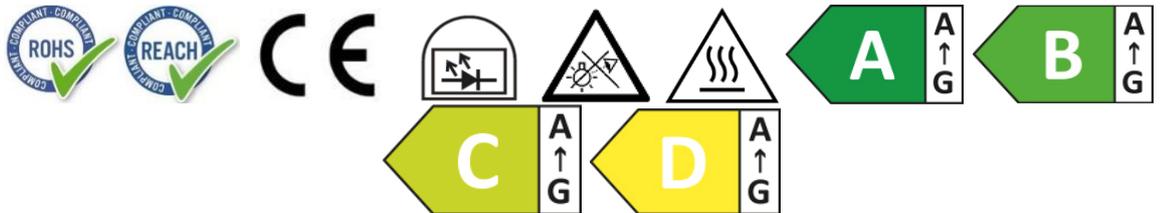
Feature:

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

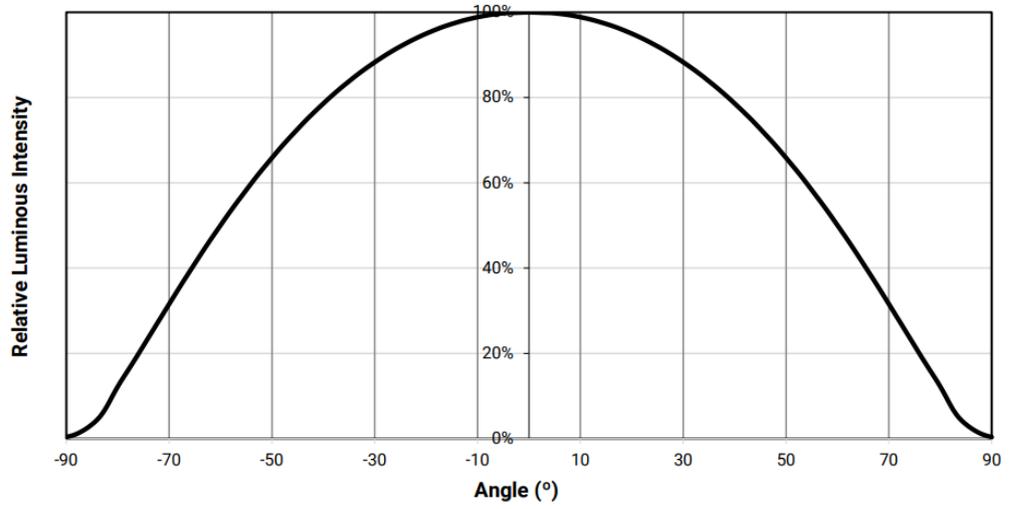
EPREL Database link

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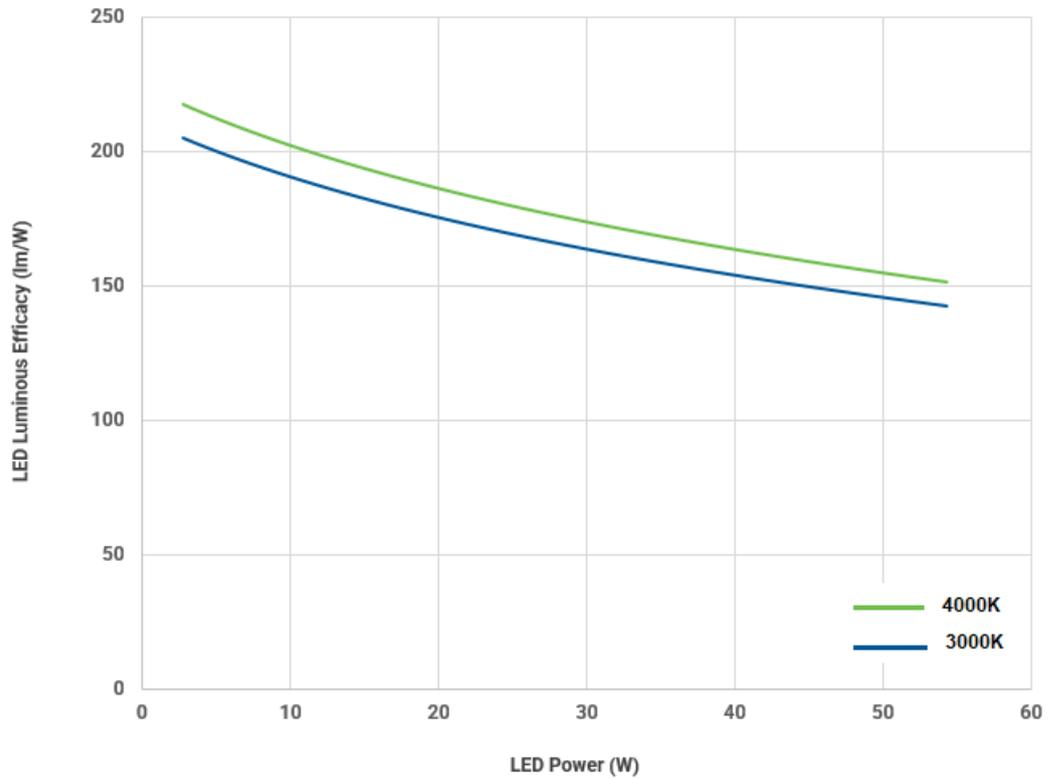
								FR4							
2200K 80CRI	2700K 80 CRI	3000K 80CRI	3500K 80CRI	4000K 80CRI	5000K 80CRI	5700K 80CRI	6500K 80CRI	2200K 80 CRI	2700K 80 CRI	3000K 80CRI	3500K 80CRI	4000K 80CRI	5000K 80CRI	5700K 80CRI	6500K 80CRI
								MCPCB							
2200K 80 CRI	2700 80 CRI	3000K 80CRI	3500K 80CRI	4000K 80CRI	5000K 80CRI	5700K 80CRI	6500K 80CRI	2200K 90CRI	2700K 90CRI	3000K 90CRI	3500K 90CRI	4000K 90CRI	5000K 90CRI	5700K 90CRI	6500K 90CRI



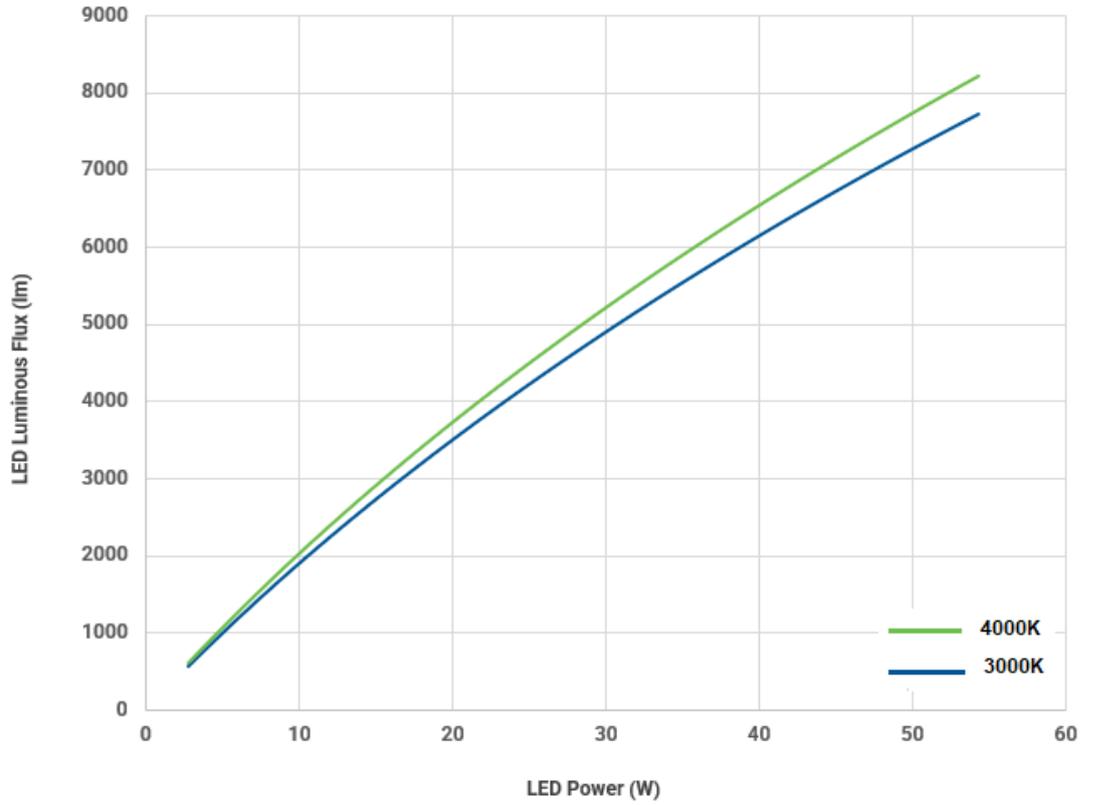
➤ **TYPICAL SPATIAL DISTRIBUTION**



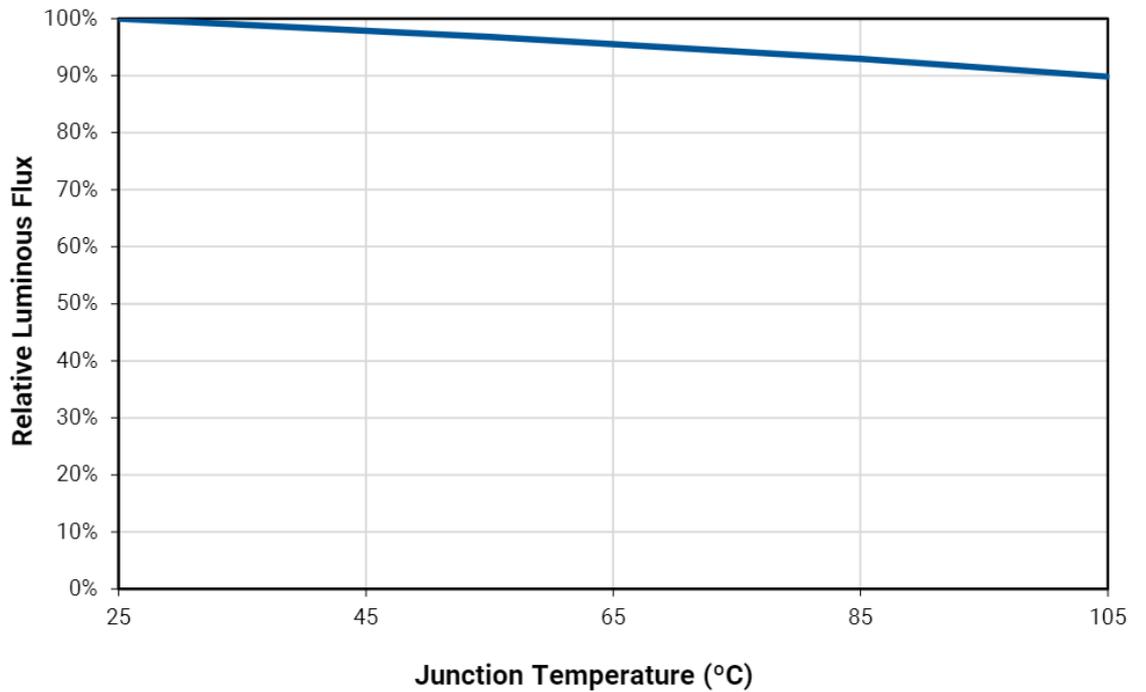
➤ **LUMINOUS EFFICACY VS. POWER**



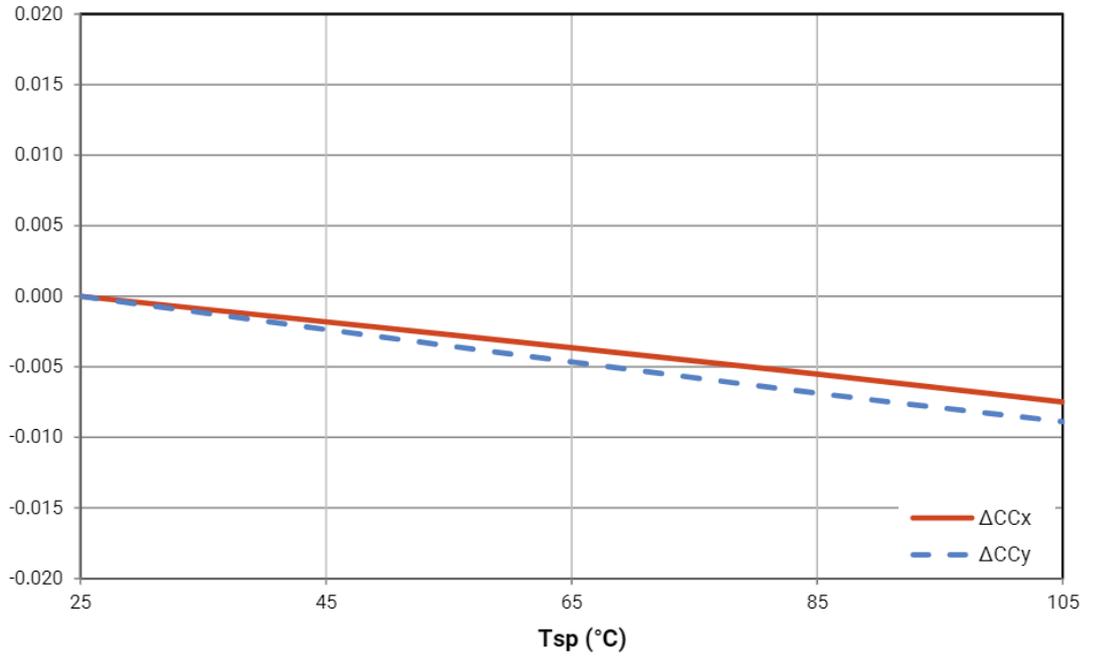
➤ LUMINOUS FLUX
VS.
POWER



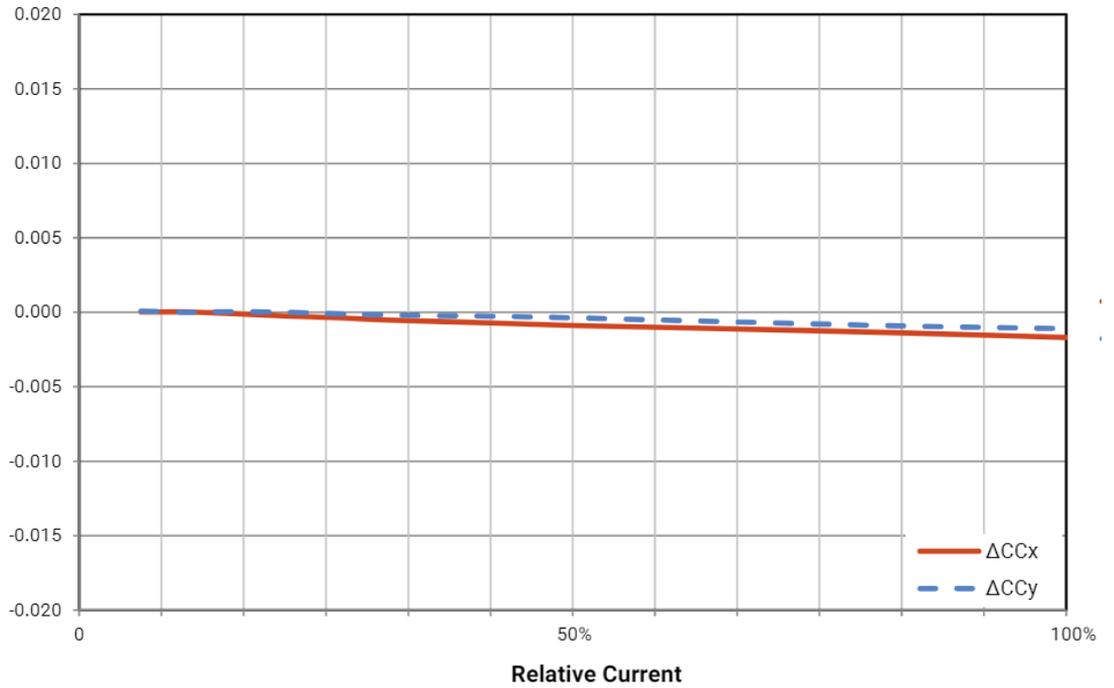
➤ LUMINOUS FLUX
VS.
JUNCTION
TEMPERATURE



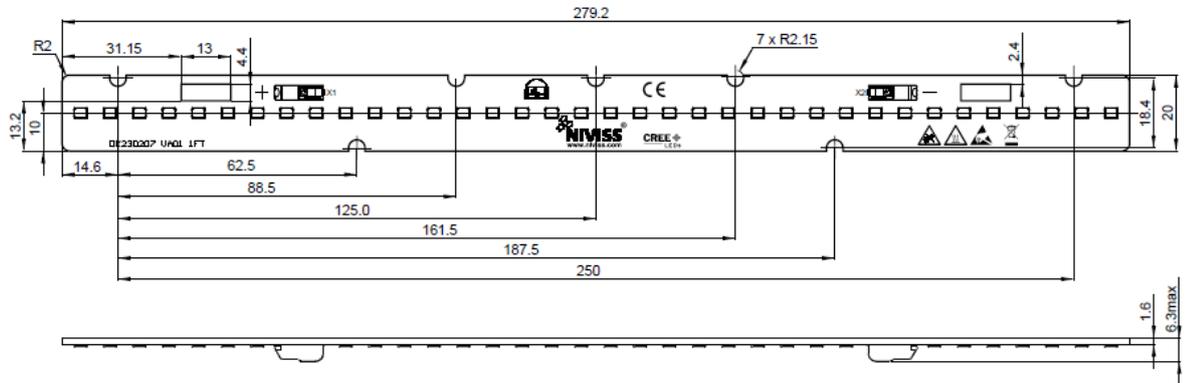
➤ **RELATIVE CHROMATICITY VS. TEMPERATURE**



➤ **RELATIVE CHROMATICITY VS. CURRENT**



➤ DIMENSIONS



Variant with through-board connectors:



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

MECHANICAL SPECIFICATION	
Dimensions	279.2 x 20 mm
Board Thickness	1.6 mm
Board Material	FR4 or MCPCB; white soldermask
Shape	Rectangular

➤ CONNECTION



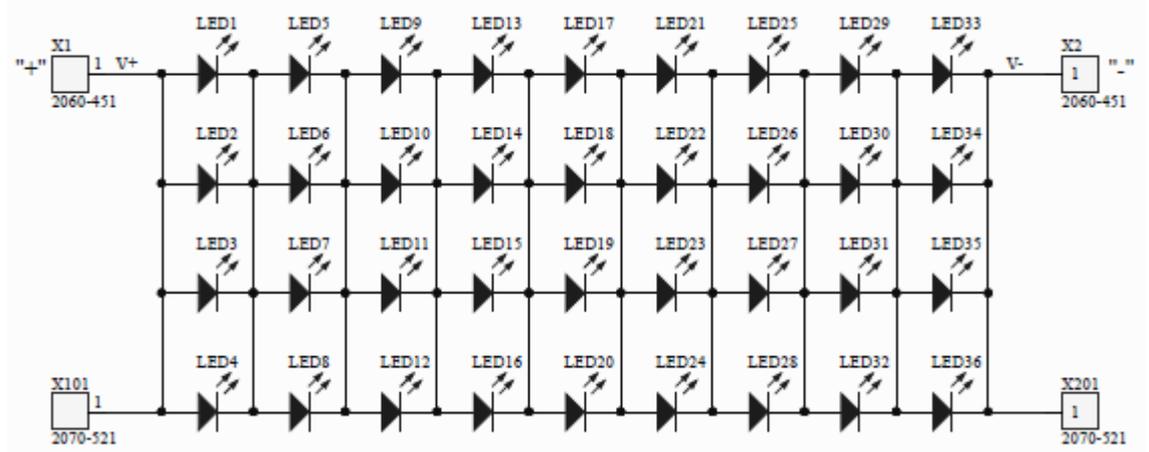
Inserting solid conductors via push-in termination.



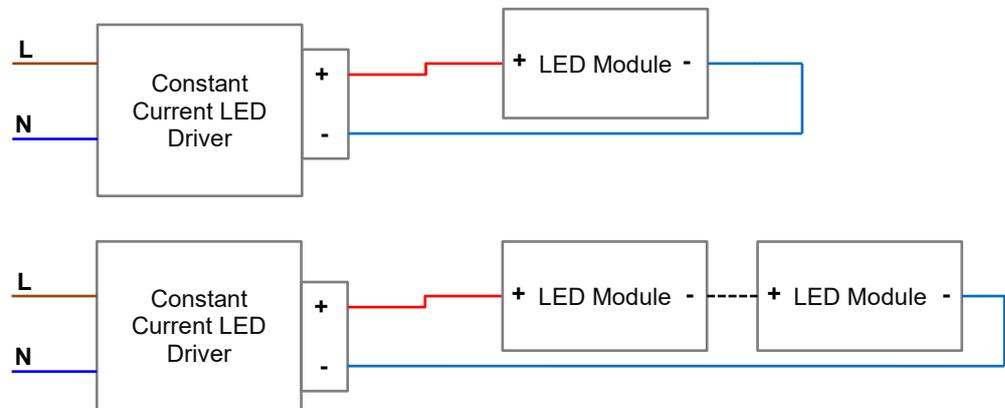
Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).



➤ **ELECTRICAL SCHEMA**



➤ **ELECTRICAL INSTALLATION**



- Note:**
1. Max number of modules in series per chain for FR4 – 10;
 2. Max Number of modules in series per chain for MCPCB – 6.

➤ **ORDERING CODE**

ORDERING CODE / ARTICLE CODE	DESCRIPTION
MOD-36R279.5X20-FR4-JB2835B-2280-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 2200K, CRI 80, FR4
MOD-36R279.5X20-FR4-JB2835B-2780-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 2700K, CRI 80, FR4
MOD-36R279.5X20-FR4-JB2835B-3080-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 3000K, CRI 80, FR4
MOD-36R279.5X20-FR4-JB2835B-3580-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 3500K, CRI 80, FR4
MOD-36R279.5X20-FR4-JB2835B-4080-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 4000K, CRI 80, FR4
MOD-36R279.5X20-FR4-JB2835B-5080-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 5000K, CRI 80, FR4
MOD-36R279.5X20-FR4-JB2835B-5780-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 5700K, CRI 80, FR4
MOD-36R279.5X20-FR4-JB2835B-6580-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 6500K, CRI 80, FR4
MOD-36R279.5X20-FR4-JB2835B-2290-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 2200K, CRI 90, FR4
MOD-36R279.5X20-FR4-JB2835B-2790-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 2700K, CRI 90, FR4
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MOD-36R279.5X20-FR4-JB2835B-5790-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 5700K, CRI 90, FR4
MOD-36R279.5X20-FR4-JB2835B-6590-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 6500K, CRI 90, FR4
MOD-36R279.5X20-MCPCB-JB2835B-2280-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 2200K, CRI 80, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-2780-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 2700K, CRI 80, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-3080-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 3000K, CRI 80, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-3580-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 3500K, CRI 80, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-4080-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 4000K, CRI 80, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-5080-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 5000K, CRI 80, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-5780-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 5700K, CRI 80, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-6580-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 6500K, CRI 80, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-2290-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 2200K, CRI 90, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-2790-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 2700K, CRI 90, MCPCB
MOD-36R279.5X20-MCPCB-JB2835B-3090-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 3000K, CRI 90, MCPCB
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MOD-36R279.5X20-MCPCB-JB2835B-6590-VA01	LED Module High Efficacy 279,2x20mm 36 LED 2835 G Class, 6500K, CRI 90, MCPCB

➤ **COMMERCIAL INFORMATION**

COMMERCIAL INFORMATION	
Connector	WAGO 2060
Available Lenses	No
Minimum Order Quantity	20 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[®] 2835](#)
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**



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[STEP FILE](#)

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