28R274X20-JB2835 family are LED modules based on the CREE LED® J_Series® 2835 optimized for cost effective and high efficacy applications. 28R274X20-JB2835 modules are providing optimized and easy integration, with excellent quality, reliability and precision.

High efficacy **167 lm/W** and up to **6063 lm**.

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

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

EPREL registered product.

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➢ SPECIFICATION

LED FAMILY	MOD-28R274x20mm JB2835 SERIES						
CCT/SDCM	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]	J class CRI 80						
	3467 lm	3604 lm	3727 lm	3839 lm	3839 lm	3839 lm	3839 lm
	J class CRI 90						
	2935 lm	3071 lm	3170 lm	3282 lm	3282 lm	3282 lm	3282 lm
Nominal Efficacy[2]	J class CRI 80						
	150 lm/W	156 lm/W	162 lm/W	167 lm/W	167 lm/W	167 lm/W	167 lm/W
	J class CRI 90						
	127 lm/W	133 lm/W	138 lm/W	142 lm/W	142 lm/W	142 lm/W	142 lm/W
CRI	80; 90						
Nominal Driving Current	560 mA						
Voltage DC (typ.) [2]	42 V						
Power Consumption[2]	21.3 W						
Max. LED module working current [3]	**960 mA / module**						
Voltage DC (max)[3]	**44.1 V**						
Max power[3]	**42.3 W**						
Max. LED module lumen output[3]	**J class CRI 80**						
	5476	**5691**	**5887**	**6063**	**6063**	**6063**	**6063**
	J class CRI 90						
	4635	**4850**	**5007**	**5183**	**5183**	**5183**	**5183**
Number of LEDs	28						
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	**J class CRI 80**						
	D	**D**	**C**	**C**	**C**	**C**	**C**
	J class CRI 90						
	E	**E**	**D**	**D**	**D**	**D**	**D**
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, 560 mA without heatsink.**
[3] **External heatsink required.**
[4] **According to Eye safety Cree document**

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➢ FEATURES

Application:

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

Feature:

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

EPREL Database link

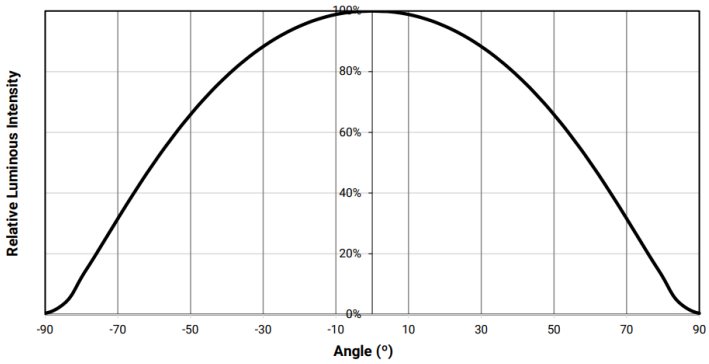
2700K 80CRI 3000K 80CRI 3500K 80CRI 4000K 80CRI

5000K 80CRI 5700K 80CRI 6500K 80CRI

2700K 90CRI 3000K 90CRI 3500K 90CRI 4000K 90CRI

5000K 90CRI 5700K 90CRI 6500K 90CRI

➢ TYPICAL SPATIAL DISTRIBUTION



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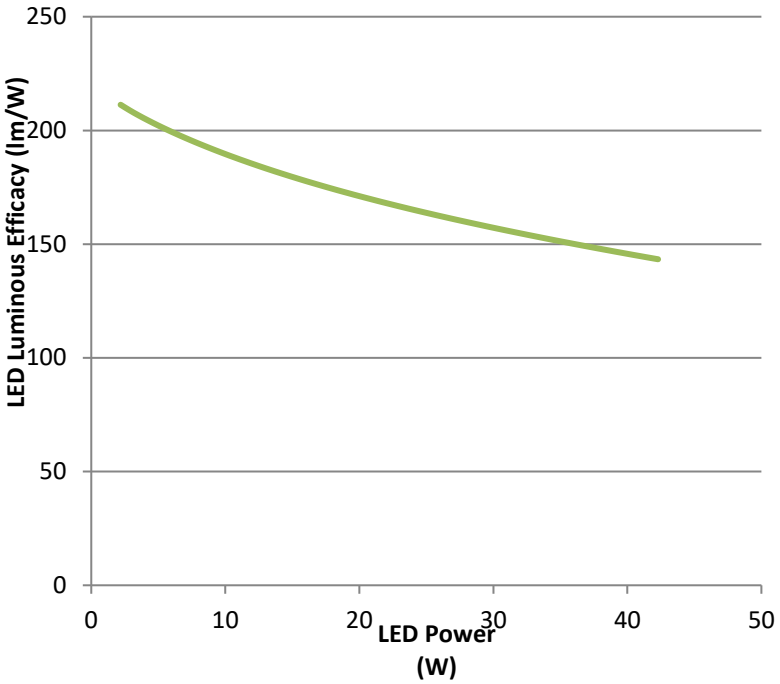
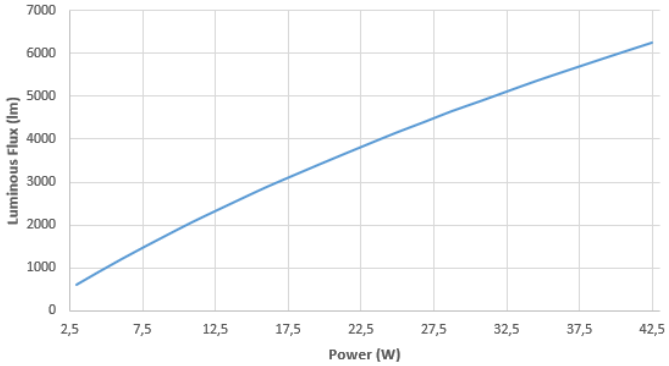
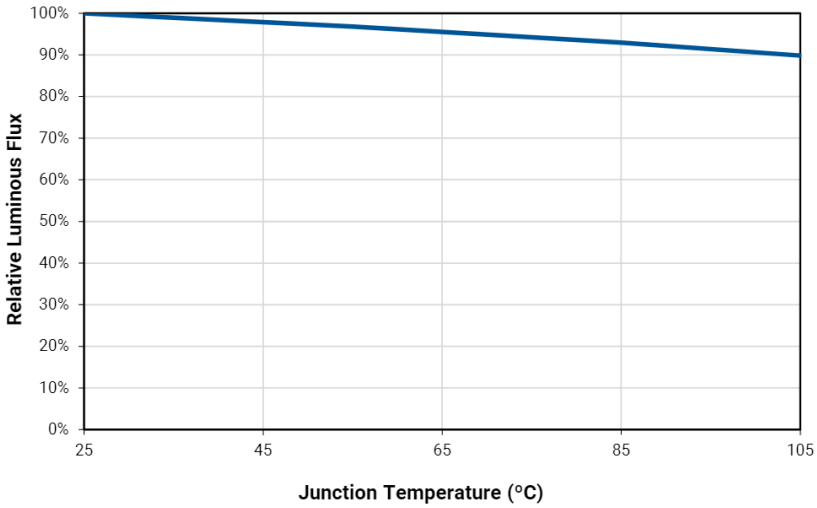
- **LUMINOUS EFFICACY VS. POWER**



- **LUMINOUS FLUX VS. POWER**



- **LUMINOUS FLUX VS. JUNCTION TEMPERATURE**



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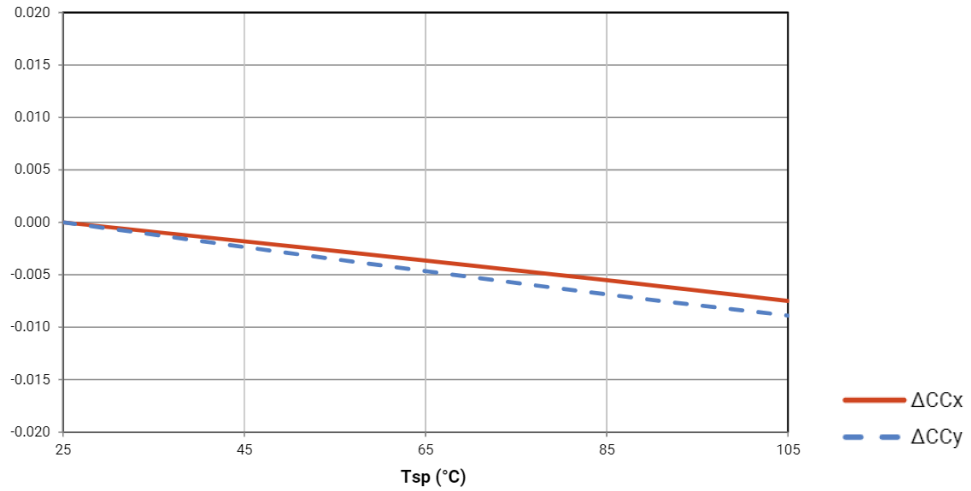
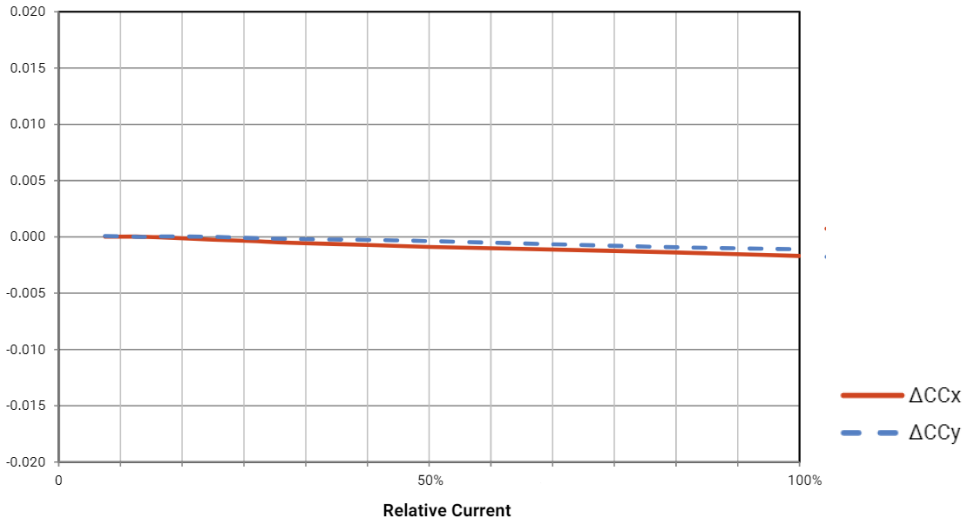
- **RELATIVE CHROMATICITY VS. TEMPERATURE**



- **RELATIVE CHROMATICITY VS. CURRENT**



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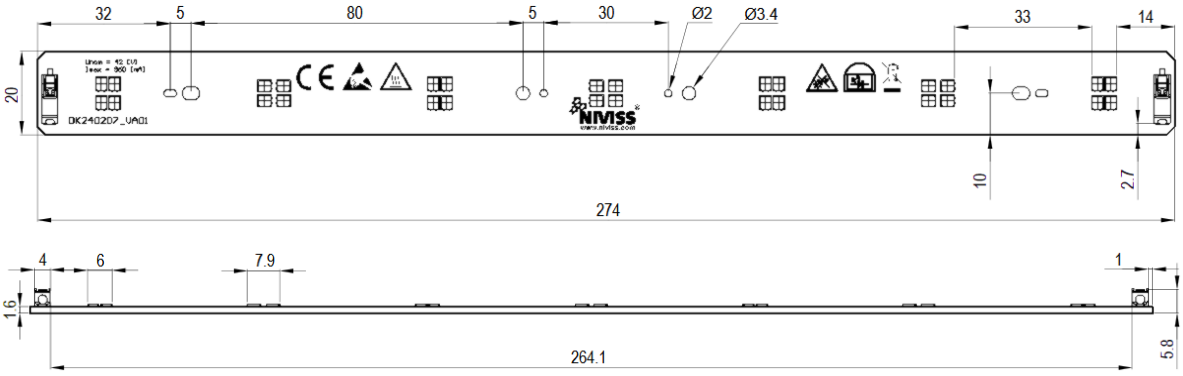
➢ DIMENSIONS



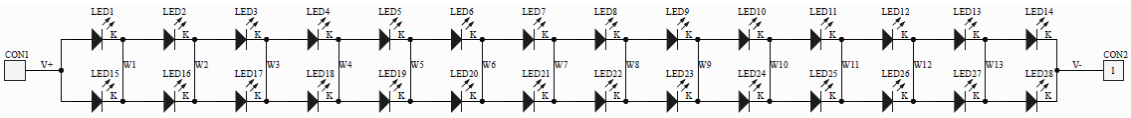
Notes:
Drawing is not to scale.
All dimensions are in millimeters.

MECHANICAL SPECIFICATION	
Dimensions	274x20 mm
Board Thickness	1.6 mm
Board Material	MCPCB, 1060 Alloy, 1.5 W/(m*K), High reflectivity white soldermask
Shape	Rectangular

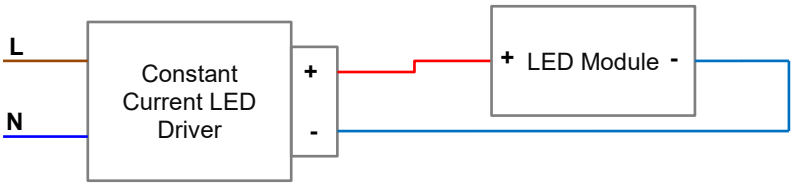
➢ CONNECTION

Inserting solid conductors via push-in termination. Easy conductor removal, e.g., via 206-859 operating tool.

➢ ELECTRICAL SCHEMA



➢ ELECTRICAL INSTALLATION



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➢ ORDERING CODE

ORDERING CODE / ARTICLE CODE	DESCRIPTION
MOD-28R274x20-JB2835BJ-2780-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 2700K, CRI 80, 1.6 mm MCPCB
MOD-28R274x20-JB2835BJ-3080-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 3000K, CRI 80, 1.6 mm MCPCB
MOD-28R274x20-JB2835BJ-3580-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 3500K, CRI 80, 1.6 mm MCPCB
MOD-28R274x20-JB2835BJ-4080-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 4000K, CRI 80, 1.6 mm MCPCB
MOD-28R274x20-JB2835BJ-5080-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 5000K, CRI 80, 1.6 mm MCPCB
MOD-28R274x20-JB2835BJ-5780-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 5700K, CRI 80, 1.6 mm MCPCB
MOD-28R274x20-JB2835BJ-6580-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 6500K, CRI 80, 1.6 mm MCPCB
MOD-28R274x20-JB2835BJ-2790-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 2700K, CRI 90, 1.6 mm MCPCB
MOD-28R274x20-JB2835BJ-3090-2C-VA01	Linear Led Module 274x20mm 42V, High Efficacy, High Reflectivity White Soldermask, 28 LED, JB2835B class J, 3000K, CRI 90, 1.6 mm MCPCB
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➢ COMMERCIAL INFORMATION

COMMERCIAL INFORMATION	
Connector	WAGO 2059
Available Lenses	LEDIL DAISY-7X1-W
Minimum Order Quantity	10 pcs.
Warranty	2 years
Power Supply	FLS-25-700DALI2-LA1 EAGLERISE LCM-25 MEAN-WELL LCM-25DA MEAN-WELL PS-929001487906

➢ 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.

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➢ 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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