

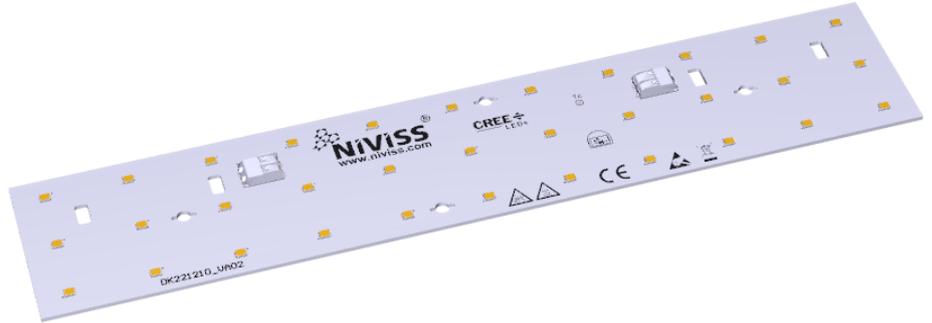
33R280x55-JB2835 family are LED modules based on the CREE LED<sup>®</sup> J\_Series<sup>®</sup> J2835 optimized for cost effective and high efficacy applications. 33R280x55-JB2835 modules are providing optimized and easy integration, with excellent quality, reliability and precision.

High efficacy **204 lm/W** and up to **7146 lm**.

LM-80 lifetime projections (IEC 62717)  
**> 100,000 (L70B10)<sup>1</sup>**

Quick and effective heat dissipation due to the using MPCB with thermal conductivity **1.3 W/mK**, Lead Free HASL

EPREL registered product



➤ **SPECIFICATION**

LED FAMILY	MOD-33R280x55mm JB 2835 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 <sup>2</sup>	J class CRI 80						
	968 lm	1006 lm	1041 lm	1072 lm	1072 lm	1072 lm	1072 lm
	J class CRI 90						
	819 lm	857 lm	885 lm	916 lm	916 lm	916 lm	916 lm
Nominal Efficacy <sup>2</sup>	J class CRI 80						
	184 lm/W	191 lm/W	198 lm/W	204 lm/W	204 lm/W	204 lm/W	204 lm/W
	J class CRI 90						
	156 lm/W	163 lm/W	168 lm/W	174 lm/W	174 lm/W	174 lm/W	174 lm/W
CRI	80; 90						
Nominal Driving Current	180 mA						
Voltage DC (typ.) <sup>2</sup>	33 V						
Power Consumption <sup>2</sup>	5.3 W						
<b>Max. LED module working current<sup>3</sup></b>	<b>1440 mA / module</b>						
<b>Voltage DC (max)<sup>3</sup></b>	<b>34.9 V</b>						
<b>Max power<sup>3</sup></b>	<b>49.8 W</b>						
<b>Max. LED module lumen output<sup>3</sup></b>	J class CRI 80						
	<b>6454</b>	<b>6708</b>	<b>6938</b>	<b>7146</b>	<b>7146</b>	<b>7146</b>	<b>7146</b>
	J class CRI 90						
	<b>5463</b>	<b>5717</b>	<b>5901</b>	<b>6108</b>	<b>6108</b>	<b>6108</b>	<b>6108</b>
Number of LEDs	33						
Power Supply Type	Constant Current						
Risk Group Classification <sup>4</sup>	RG-1 Low Risk for 2700K, 3000K, 3500K, 4000K; RG-2 Moderate Risk for 5000K, 5700K, 6500K when above 262 mA per LED						
<b>Energy Class</b>	J class CRI 80						
	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>
	J class CRI 90						
	<b>D</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>	<b>C</b>
Operating Temperature	-30°C + +60°C						
Tc max.	85°C						
Lifetime <sup>1</sup> /Tc life	>102 000 h @ 85°C/105 °C, 240 mA,						

<sup>1</sup> Lifetime of LEDs as declared by the manufacturer [CREE LED®](#) according to [IES LM-80-2015 Testing Results Revision:32 :2025](#).  
<sup>2</sup> Source performance in real-life conditions at Tc=55°C, 180 mA without heatsink.  
<sup>3</sup> External heatsink required.  
<sup>4</sup> 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**

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



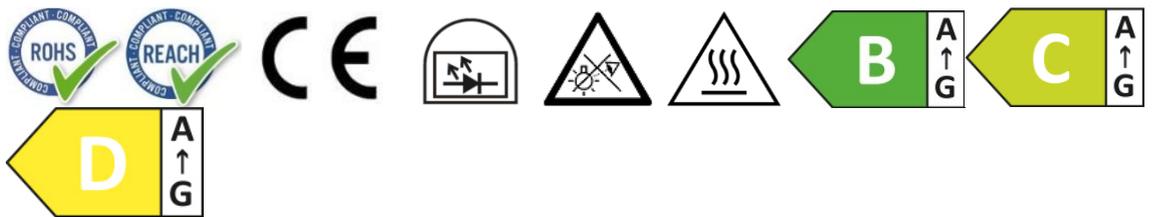
5000K 80CRI 5700K 80CRI 6500K 80CRI



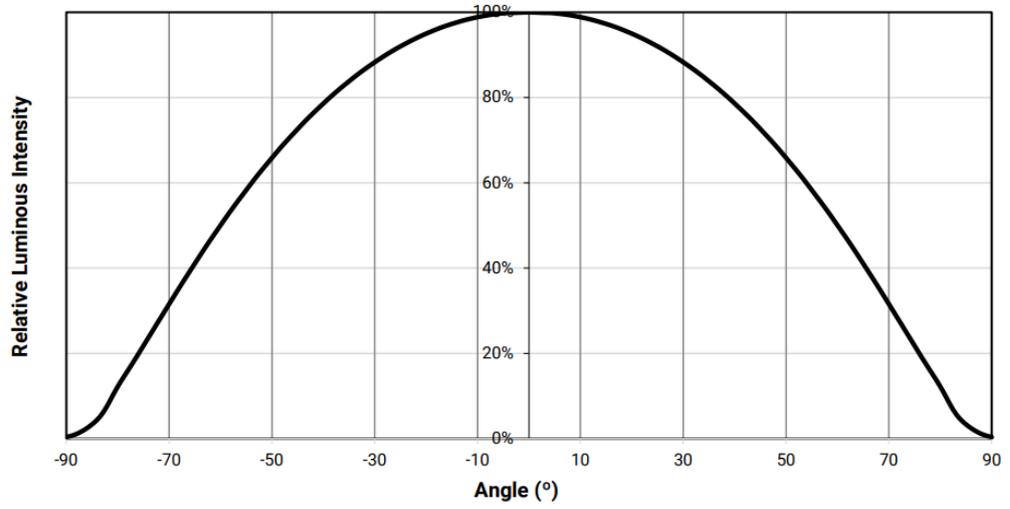
2700K 90CRI 3000K 90CRI 3500K 90CRI 4000K 90CRI



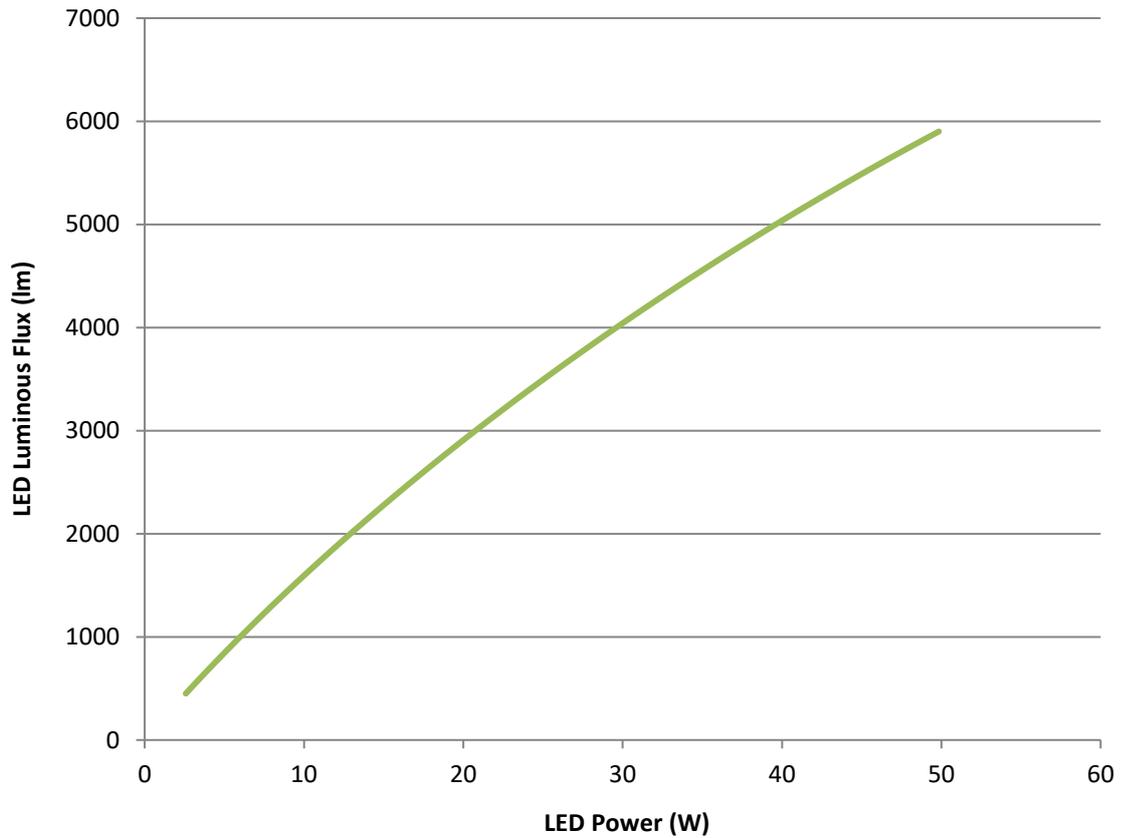
5000K 90CRI 5700K 90CRI 6500K 90CRI



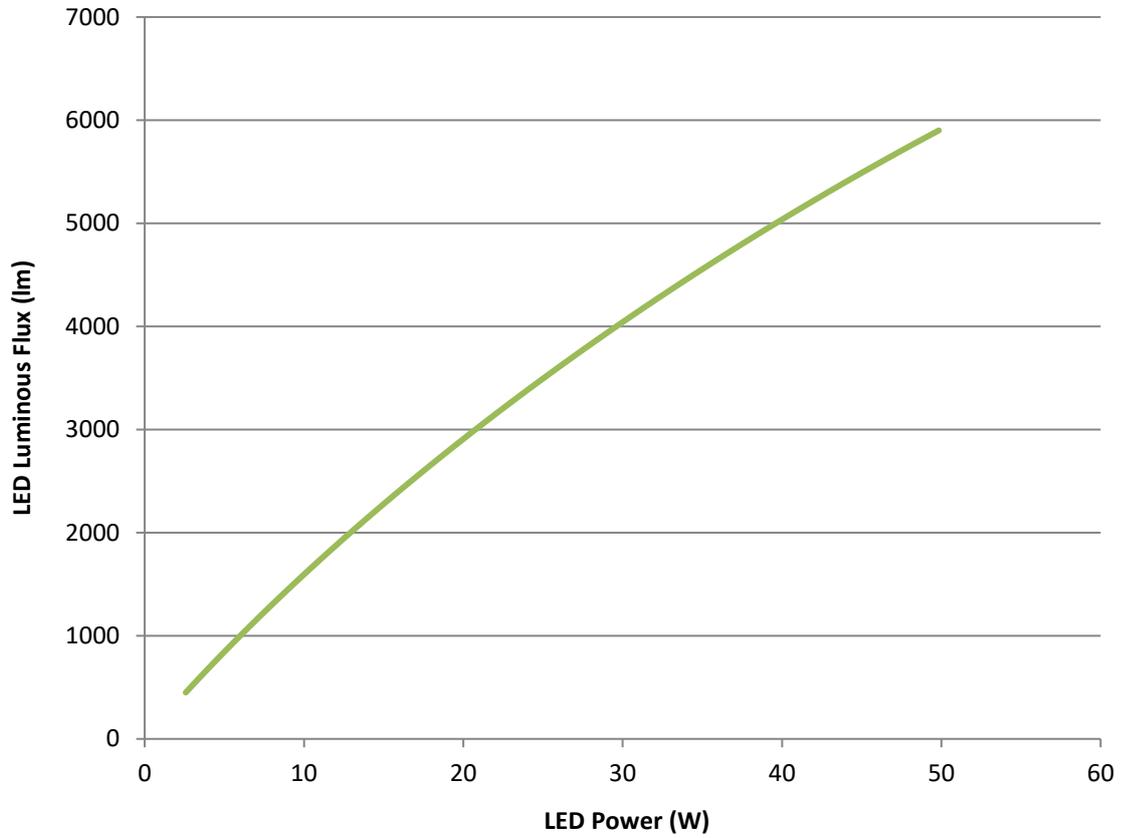
➤ **TYPICAL SPATIAL DISTRIBUTION**



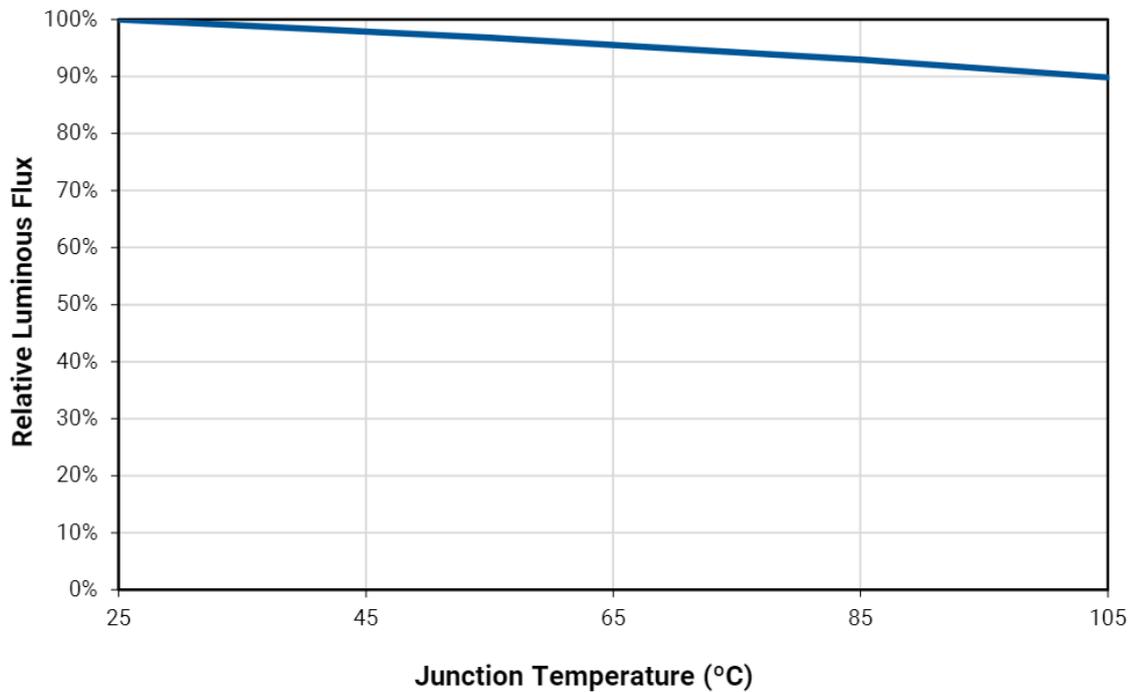
➤ **LUMINOUS EFFICACY VS. POWER (LED 4000K 80CRI)**



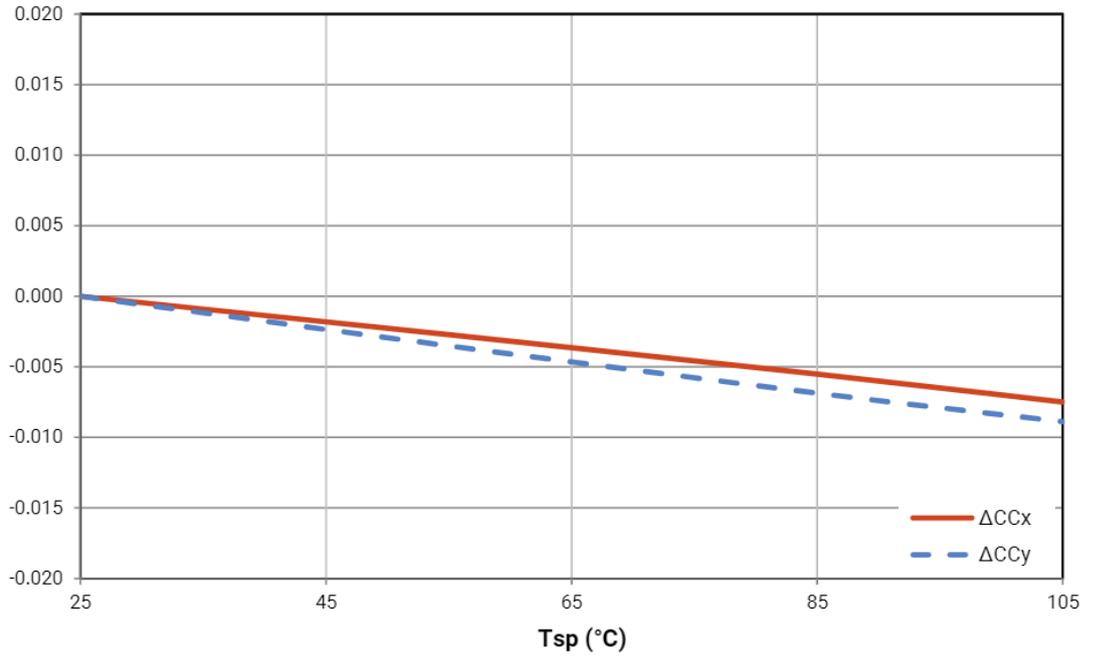
➤ LUMINOUS FLUX  
VS.  
POWER (LED  
4000K, 80CRI)



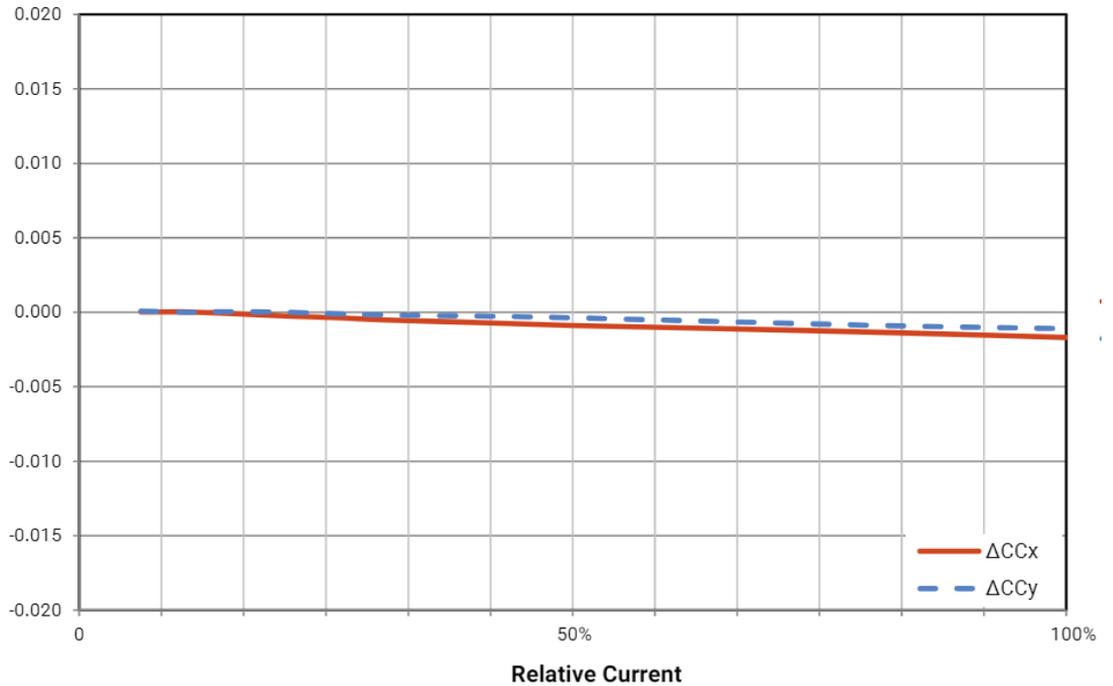
➤ LUMINOUS FLUX  
VS.  
JUNCTION  
TEMPERATURE



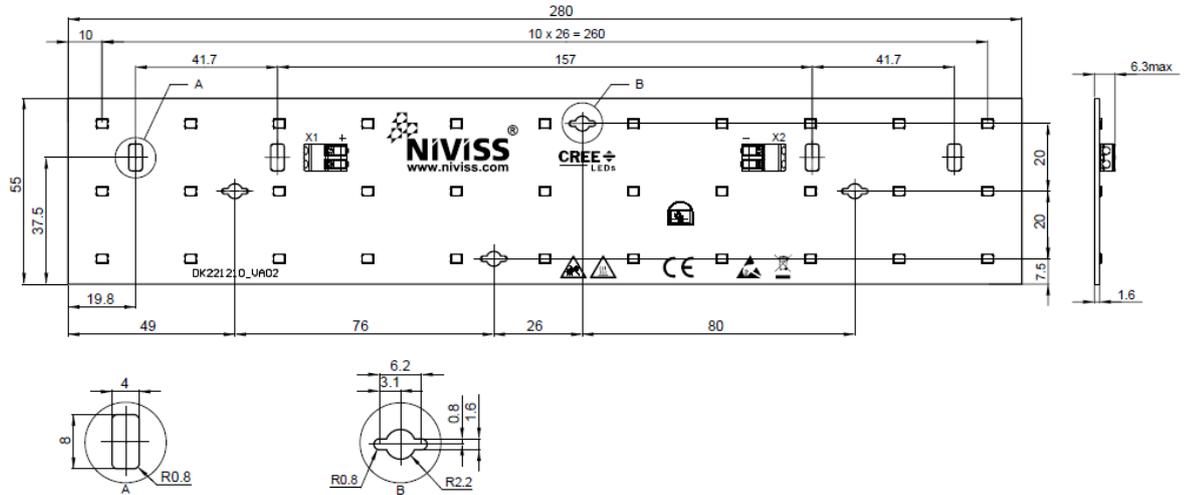
➤ **RELATIVE CHROMATICITY VS. TEMPERATURE**



➤ **RELATIVE CHROMATICITY VS. CURRENT**



➤ DIMENSIONS



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

MECHANICAL SPECIFICATION	
Dimensions	280 x 55 mm
Board Thickness	1.6 mm
Board Material	MCPCB, 3003 Alloy, 1.3W/(m <sup>2</sup> K); white soldermask
Shape	Rectangular

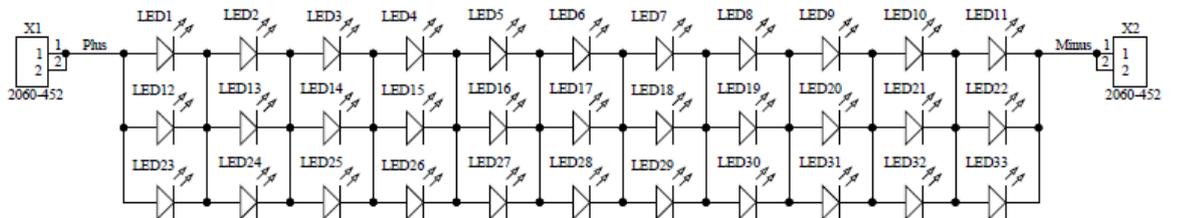
➤ CONNECTION



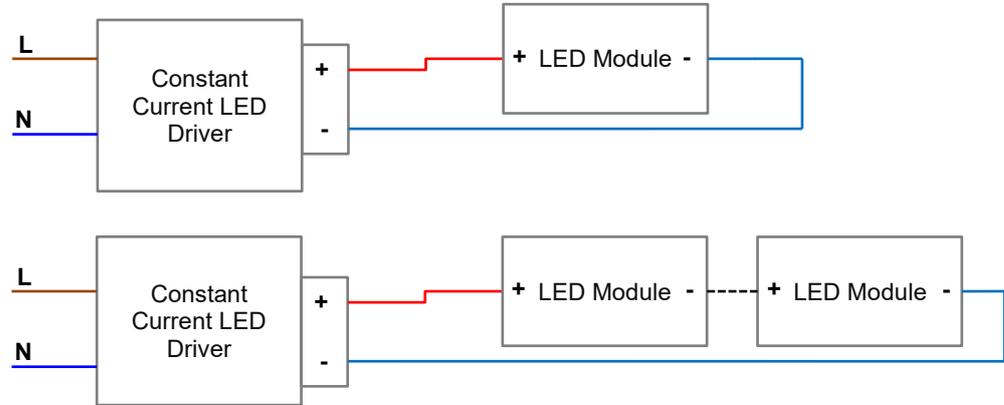
Inserting solid conductors via push-in termination.

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-33R280x55-JB2835BJ-2780-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 2700K, CRI 80, 1.6 mm MCPCB
MOD-33R280x55-JB2835BJ-3080-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 3000K, CRI 80, 1.6 mm MCPCB
MOD-33R280x55-JB2835BJ-3580-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 3500K, CRI 80, 1.6 mm MCPCB
MOD-33R280x55-JB2835BJ-4080-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 4000K, CRI 80, 1.6 mm MCPCB
MOD-33R280x55-JB2835BJ-5080-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 5000K, CRI 80, 1.6 mm MCPCB
MOD-33R280x55-JB2835BJ-5780-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 5700K, CRI 80, 1.6 mm MCPCB
MOD-33R280x55-JB2835BJ-6580-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 6500K, CRI 80, 1.6 mm MCPCB
MOD-33R280x55-JB2835BJ-2790-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 2700K, CRI 90, 1.6 mm MCPCB
MOD-33R280x55-JB2835BJ-3090-VA02	Linear Led Module 1 feet 280x55mm 33V, High Efficacy, High Reflectivity White Soldermask, 33 LED, JB2835B class J, 3000K, CRI 90, 1.6 mm MCPCB
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➤ **COMMERCIAL INFORMATION**

COMMERCIAL INFORMATION	
Connector	WAGO 2060
Available Lenses	<a href="#">12927 CARCLO</a> <a href="#">12927-V2 CARCLO</a> <a href="#">F14170 FLORENCE-ZT25 LEDIL</a> <a href="#">F15069 FLORENCE-O LEDIL</a> <a href="#">F15244 FLORENCE-ZT25-S LEDIL</a> <a href="#">F16007 FLORENCE2-Z90 LEDIL</a> <a href="#">F13853 FLORENCE-Z90 LEDIL</a> <a href="#">F14112 FLORENCE-Z60 LEDIL</a>
Minimum Order Quantity	10 pcs.
Warranty	2 years
Power Supply	<a href="#">FLS-25-700DALI2-LA1 EAGLERISE</a> <a href="#">FLS-21-500LD EAGLERISE</a> <a href="#">LCM-25 MEAN-WELL</a> <a href="#">LCM-25DA MEAN-WELL</a> <a href="#">LDC-35 MEAN-WELL</a> <a href="#">LDC-35B MEAN-WELL</a>

➤ 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](http://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 \(CE\)](#)