

160C254-JB2835 family are LED modules based on the CREE LED<sup>®</sup> J\_Series<sup>®</sup> 2835 optimized for cost effective and high efficacy applications. 160C254-JB2835 modules are providing optimized and easy integration, with excellent quality, reliability and precision.

High efficacy **205 lm/W** and up to **34646 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



➤ **SPECIFICATION**

LED FAMILY	MOD-160C254 JB 2835 SERIES						
	2700K 3-STEP	3000K 3-STEP	3500K 3-STEP	4000K 3-STEP	5000K 3-STEP	5700K 3-STEP	6500K 3-STEP
CCT/SDCM <sup>2</sup>							
Viewing Angle	120°						
Nominal Module Lumen Output <sup>3</sup>	J class CRI 80						
	4314 lm	4483 lm	4637 lm		4776 lm		
	J class CRI 90						
	3651 lm	3821 lm	3944 lm		4083 lm		
Nominal Efficacy <sup>3</sup>	J class CRI 80						
	185 lm/W	192 lm/W	199 lm/W		205 lm/W		
	J class CRI 90						
	157 lm/W	164 lm/W	169 lm/W		175 lm/W		
CRI <sup>2</sup>	80; 90						
Nominal Driving Current	550 mA						
Voltage DC (typ.) <sup>3</sup>	42.4 V						
Power Consumption <sup>3</sup>	23.3 W						
<b>Max. LED module working current<sup>4</sup></b>	<b>4800 mA / module</b>						
<b>Voltage DC (max)<sup>4</sup></b>	<b>44.9 V</b>						
<b>Max power<sup>4</sup></b>	<b>242 W</b>						
<b>Max. LED module lumen output<sup>4</sup></b>	J class CRI 80						
	<b>31293</b>	<b>32522</b>	<b>33640</b>		<b>34646</b>		
	J class CRI 90						
	<b>26487</b>	<b>27716</b>	<b>28611</b>		<b>29616</b>		
Number of LEDs	160						
Power Supply Type	Constant Current						
Risk Group Classification <sup>5</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>						
	J class CRI 90						
	<b>D</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, 3.68 A						

<sup>1</sup> Lifetime of LEDs as declared by the manufacturer [CREE LED®](#) according to [IES LM-80-2015 Testing Results Revision:34 :2025](#).

<sup>2</sup> Non-standard options are available upon request.

<sup>3</sup> Source performance in real-life conditions at Tc=55°C, 550 mA without heatsink.

<sup>4</sup> External heatsink required.

<sup>5</sup> According to [Eye safety Cree document](#)

➤ **FEATURES**

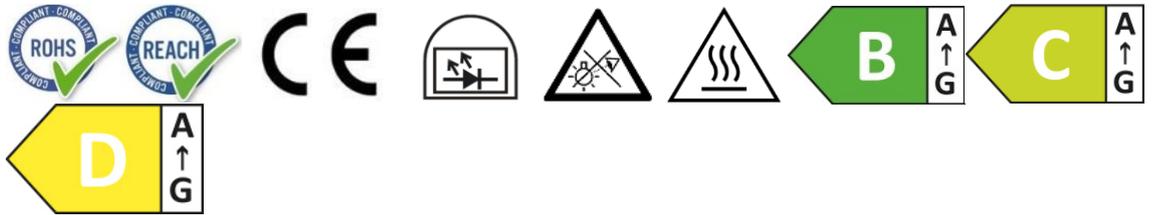
**Application:**

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

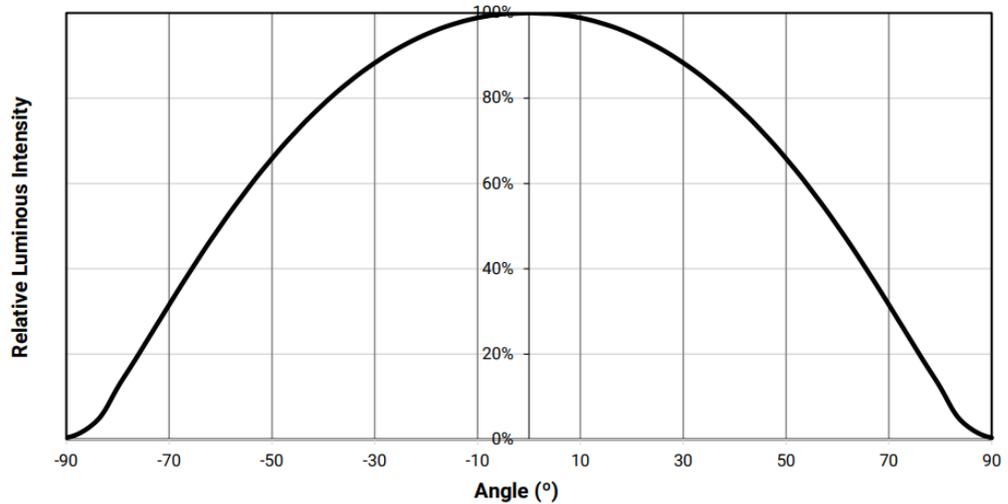
**Feature:**

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

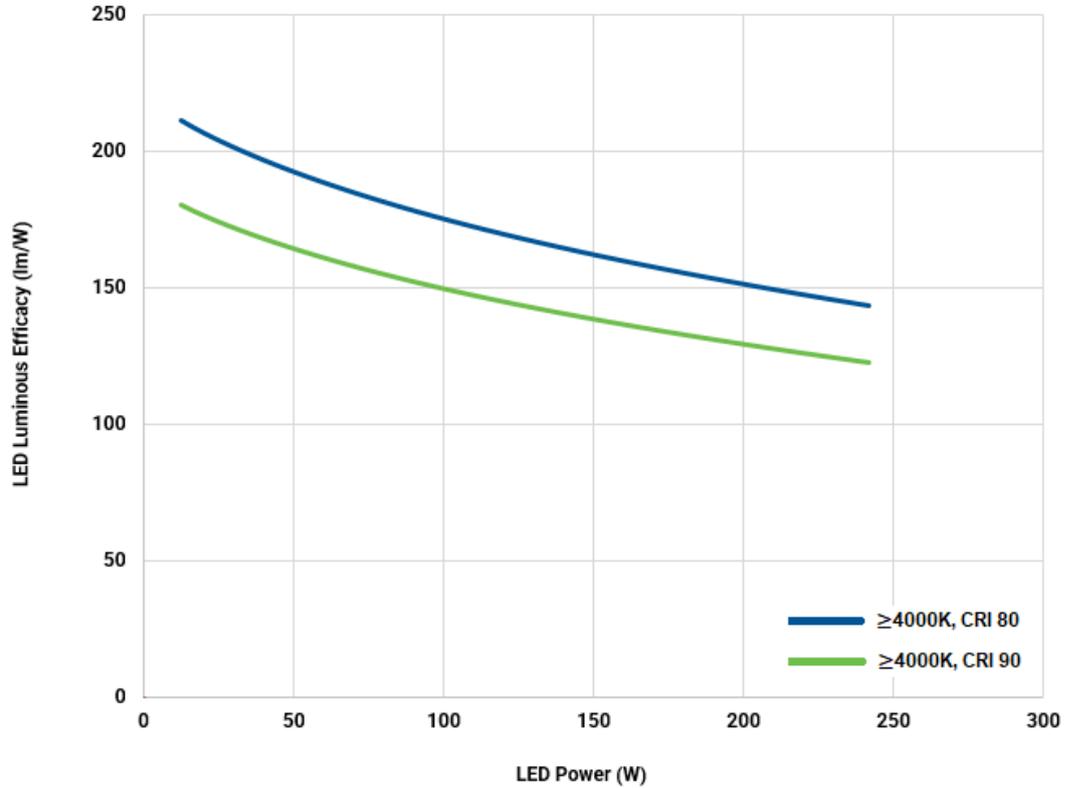
**EPREL Database link**



➤ **TYPICAL SPATIAL DISTRIBUTION**

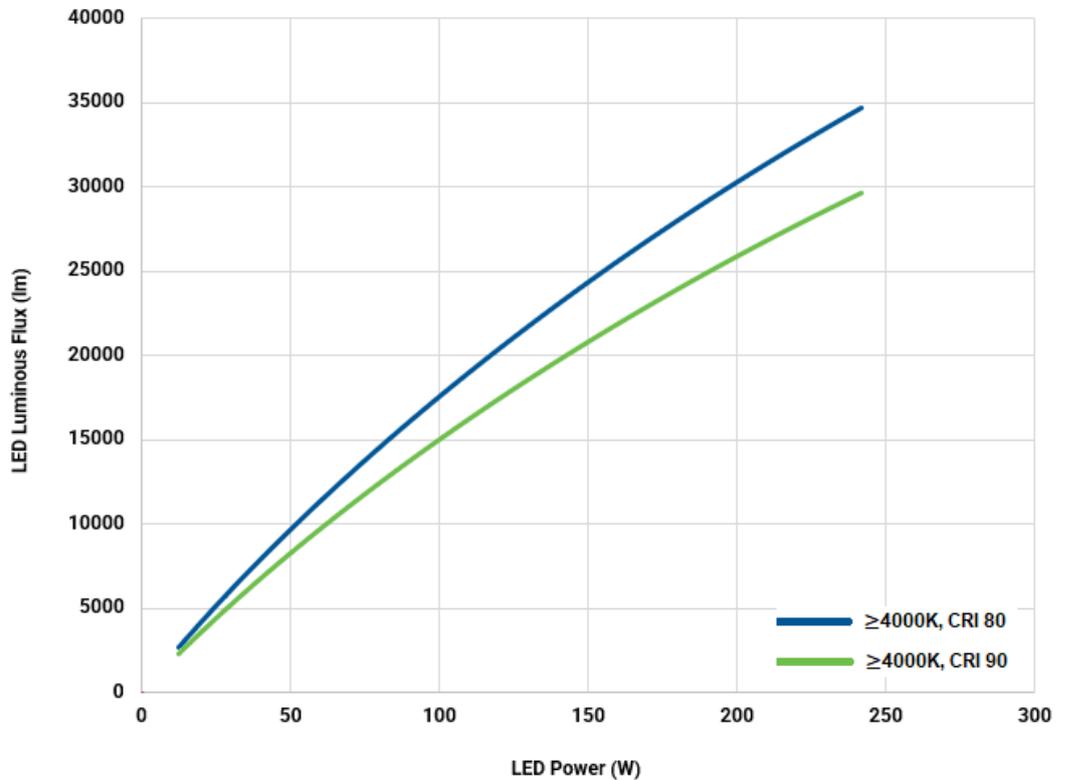


➤ LUMINOUS EFFICACY VS. POWER



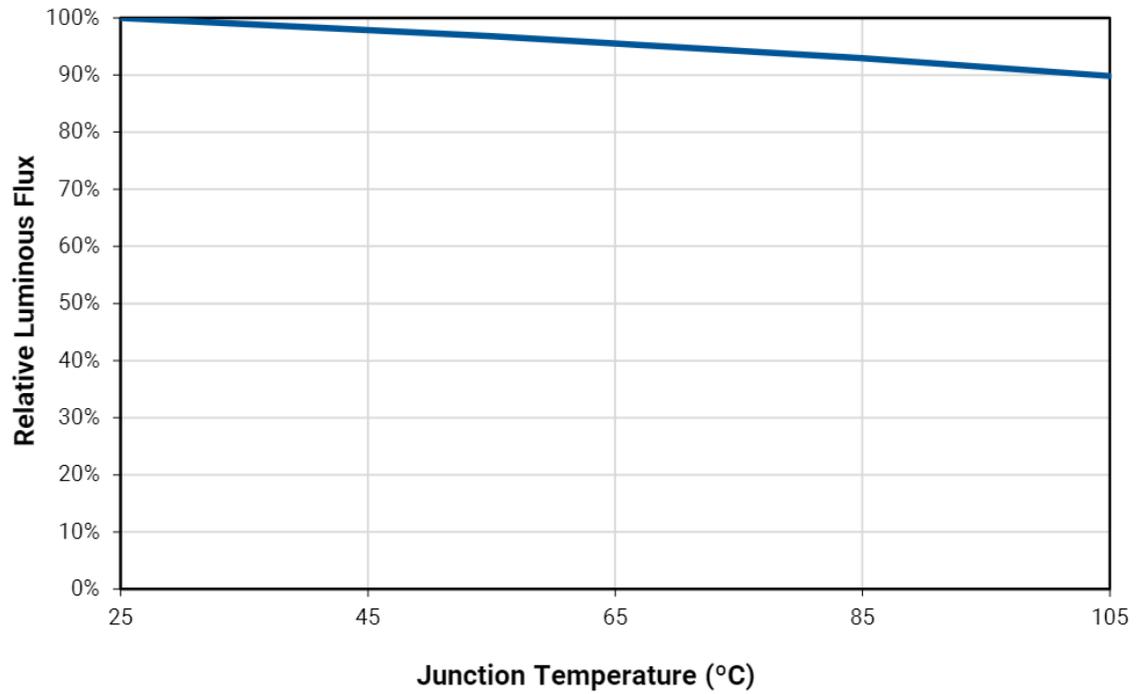
Charts for non-standard options are available upon request.

➤ LUMINOUS FLUX VS. POWER

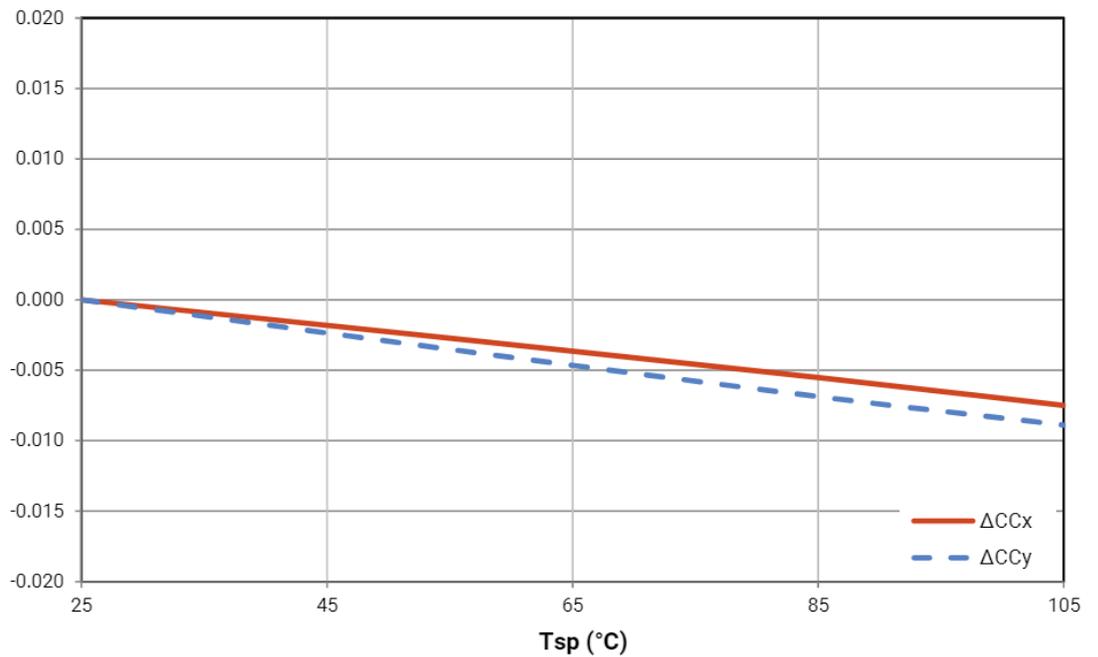


Charts for non-standard options are available upon request.

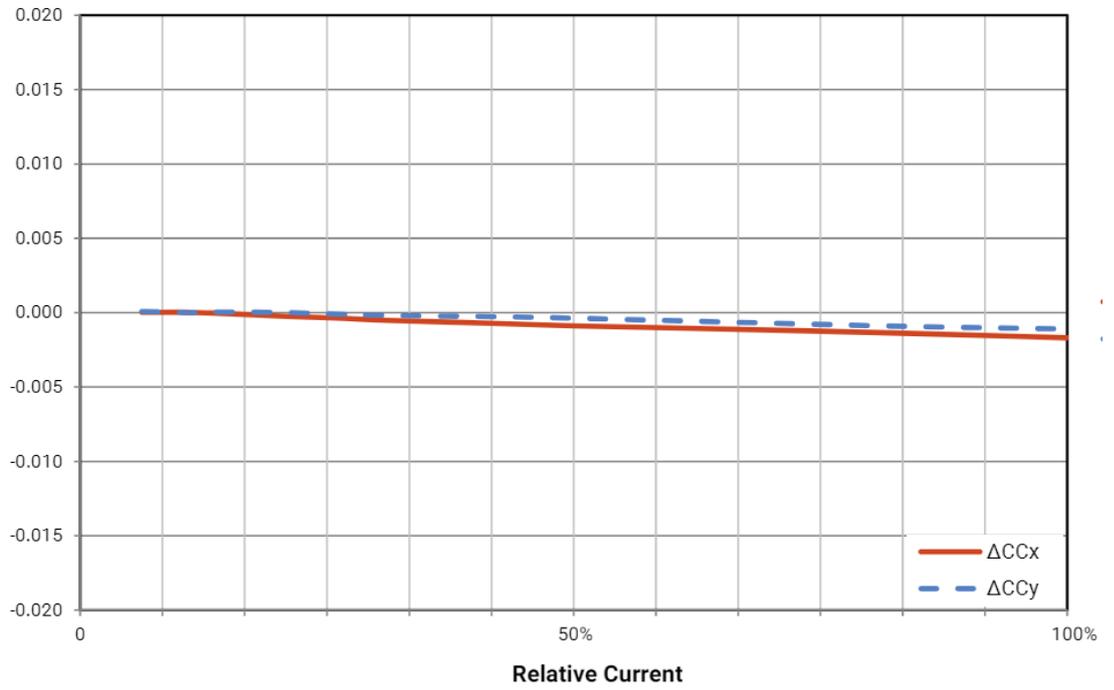
➤ LUMINOUS FLUX  
VS.  
JUNCTION  
TEMPERATURE



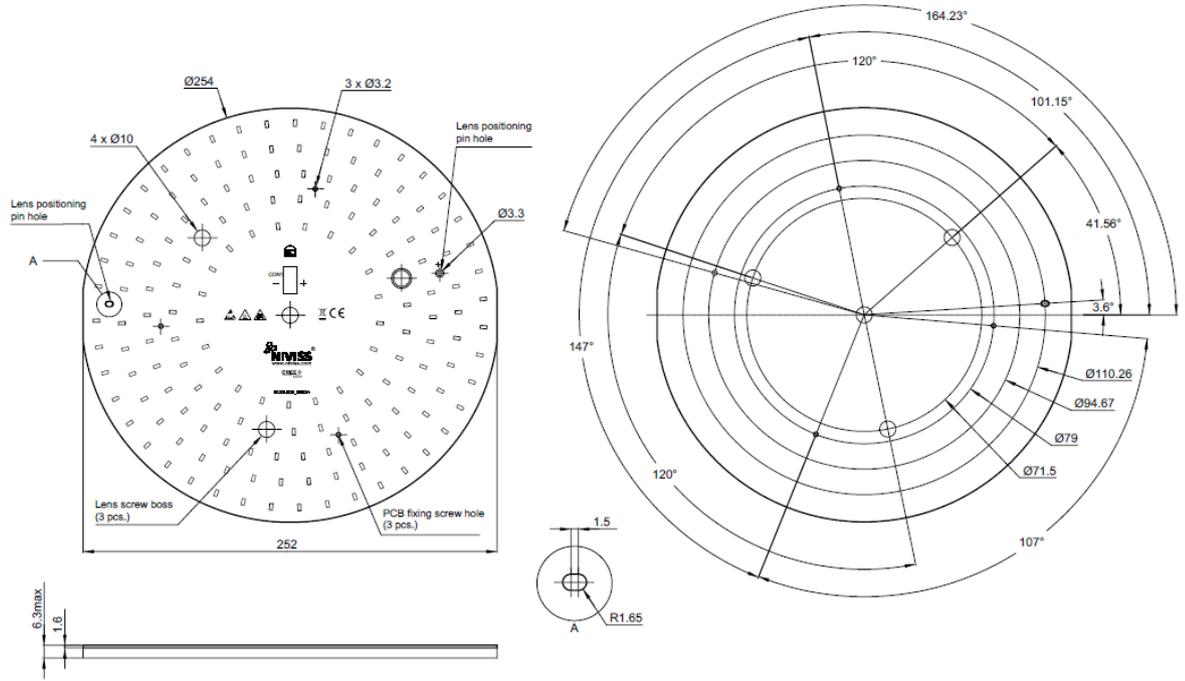
➤ RELATIVE  
CHROMATICITY  
VS.  
TEMPERATURE



➤ **RELATIVE CHROMATICITY VS. CURRENT**



➤ DIMENSIONS



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

MECHANICAL SPECIFICATION	
Dimensions	Ø254 mm
Board Thickness	1.6 mm
Board Material	MCPCB, 1060 Alloy, 1.5 W/(m*K), white soldermask
Shape	Circular

➤ CONNECTION



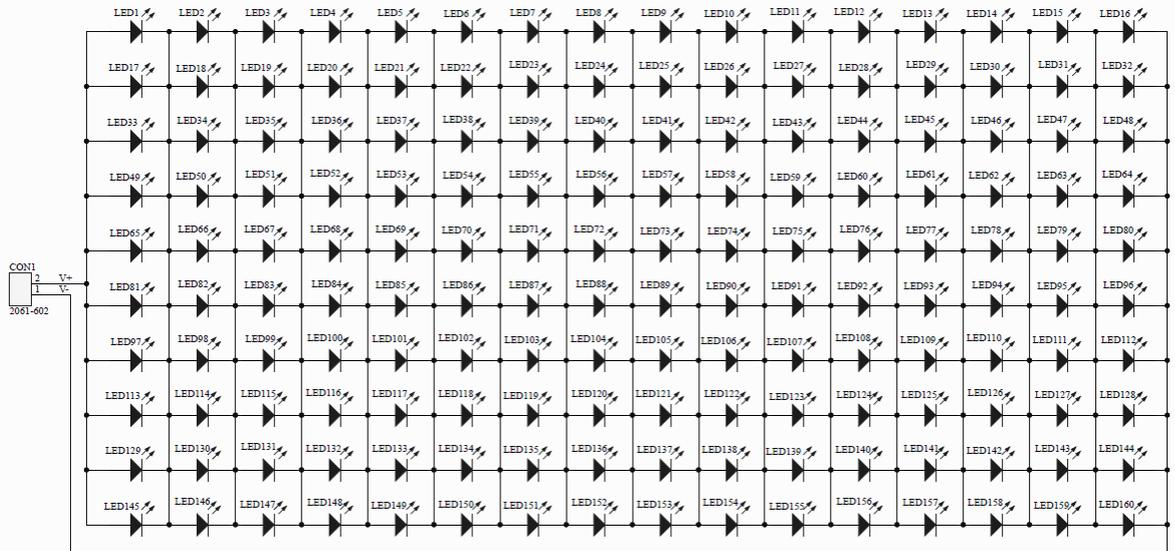
Inserting solid conductors via push-in termination.



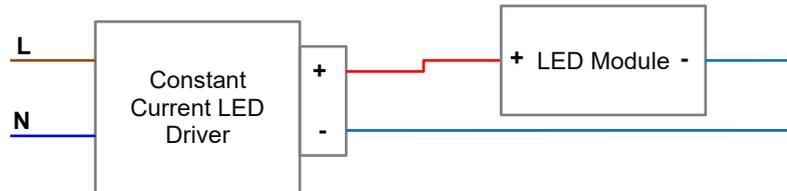
Inserting/removing fine-stranded conductors by lightly pressing on push-button (e.g., using a 206-860 operating tool).



➤ **ELECTRICAL SCHEMA**



➤ **ELECTRICAL INSTALLATION**



➤ **ORDERING CODE**

ORDERING CODE / ARTICLE CODE	DESCRIPTION
MOD-160C254-JB2835BJ-2780-VB02	Round Led Module 254mm 42V, High Efficacy, High Reflectivity White Soldermask, 160 LED, JB2835B class J, 2700K, CRI 80, 1.6 mm MCPCB
MOD-160C254-JB2835BJ-3080-VB02	Round Led Module 254mm 42V, High Efficacy, High Reflectivity White Soldermask, 160 LED, JB2835B class J, 3000K, CRI 80, 1.6 mm MCPCB
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MOD-160C254-JB2835BJ-4080-VB02	Round Led Module 254mm 42V, High Efficacy, High Reflectivity White Soldermask, 160 LED, JB2835B class J, 4000K, CRI 80, 1.6 mm MCPCB
MOD-160C254-JB2835BJ-5080-VB02	Round Led Module 254mm 42V, High Efficacy, High Reflectivity White Soldermask, 160 LED, JB2835B class J, 5000K, CRI 80, 1.6 mm MCPCB
MOD-160C254-JB2835BJ-5780-VB02	Round Led Module 254mm 42V, High Efficacy, High Reflectivity White Soldermask, 160 LED, JB2835B class J, 5700K, CRI 80, 1.6 mm MCPCB
MOD-160C254-JB2835BJ-6580-VB02	Round Led Module 254mm 42V, High Efficacy, High Reflectivity White Soldermask, 160 LED, JB2835B class J, 6500K, CRI 80, 1.6 mm MCPCB
MOD-160C254-JB2835BJ-2790-VB02	Round Led Module 254mm 42V, High Efficacy, High Reflectivity White Soldermask, 160 LED, JB2835B class J, 2700K, CRI 90, 1.6 mm MCPCB
MOD-160C254-JB2835BJ-3090-VB02	Round Led Module 254mm 42V, High Efficacy, High Reflectivity White Soldermask, 160 LED, JB2835B class J, 3000K, CRI 90, 1.6 mm MCPCB
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<b>Customer Modules on request</b>	

➤ **COMMERCIAL INFORMATION**

COMMERCIAL INFORMATION	
Connector	<a href="#">WAGO 2061</a>
Available Lenses	<a href="#">LEDIL VICTORIA Ø300mm</a>
Minimum Order Quantity	5 pcs.
Warranty	2 years
Power Supply	<a href="#">PS-HBG-160-48</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 \(CE\)](#)