

# PLCC 2835 Full Spectrum IP20 Lightbar Series



## Features :

- High Color Quality with  $Ra_{min},95$
- $R1-R15_{min},90$  with Full Color
- Best Luminous and Color Uniformity
- Low Power Requirement & Energy Efficient
- Environmental Friendly,ROHS Compliance

## Typical Applications :

- Special Commercial Lighting
- Landscape Lighting
- Museum & Exhibitions Lighting

## Specifications :

- Color: Cool White / Neutral White / Warm White

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## General Information

### Introduction

The full spectrum lightbar series is the new product from Edison, which is a strip of lighting module available in varying colors. Its flexible circuit board not only enables novel design thinking with bendable light source, but also offers a wide range of applications with dividable lighting segments. High color quality with Ramin 95, it can emit a kind of light that is closest to the natural source to restore the most authentic natural color of the subject. With the outperforming high color rendering, it is optimized to be used in high-end led mark such as boutique and luxury apparel store, museum & exhibitions lighting and photography lighting.

### Ordering Code Format

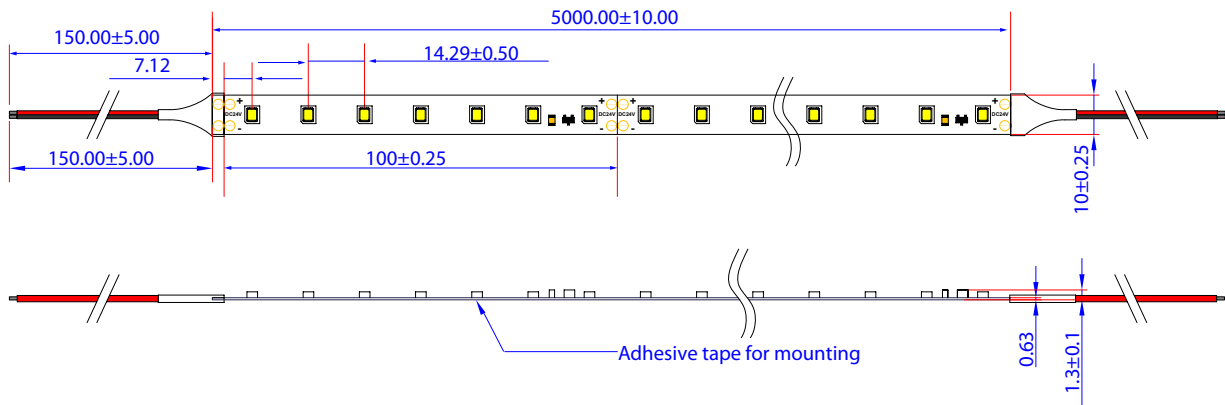
6  
X1
LBR1  
X2
XX  
X3
X  
X4
E0  
X5
S  
X6
XXX  
X7
XX  
X8

X1		X2		X3		X4		X5	
Item		Series		Emitting Color		Driver		Max Length	
6	Module	LBR1	FPC	CW	Cool White	I	CV 12V	E0	5.0M
				NW	Neutral White	J	CV 24V		
				WW	Warm White				

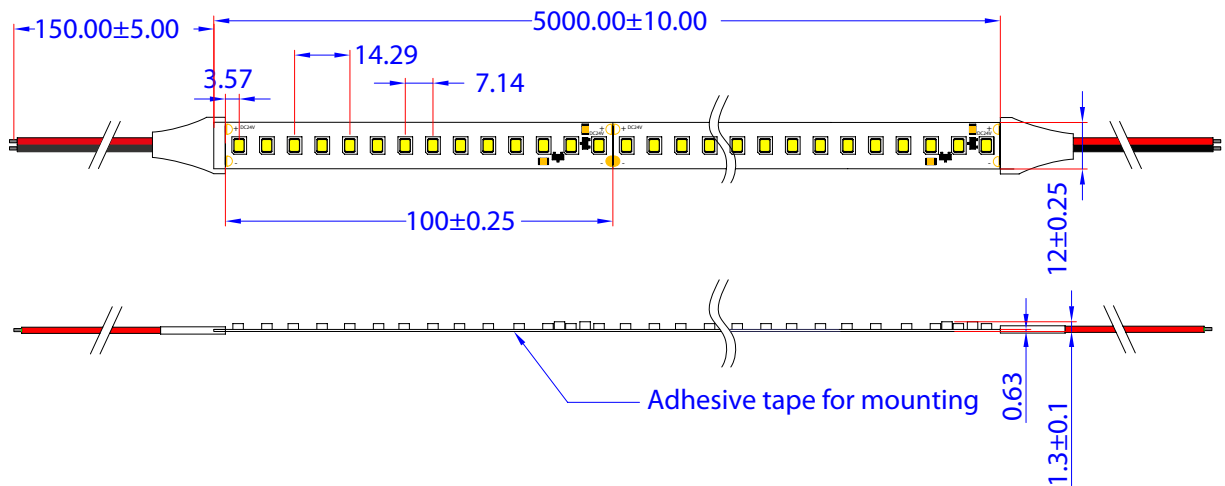
X6		X7		X8	
Emitter		Number of LEDs (M)		Serial No.	
S	2835	070	70pcs	xx	--
		140	140pcs		

## Product Dimensions

### 2835-70LEDs/M Series Dimensions (CV 24V IP20)



### 2835-140LEDs/M Series Dimensions (CV 24V IP20)



**Notes:**

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.20$  mm.

## Absolute Maximum Ratings

Parameter	Symbol	Value	Units
Thermal Measurement Point	$T_c$	80	°C
Operating Temperature	$T_{opr}$	-20 ~ +40	°C
Storage Temperature	$T_s$	-20 ~ +65	°C
Number of FPC Connection	-	5	M

Notes:

1. Proper current derating must be observed to maintain junction temperature below the maximum at all time.
2. LEDs are not designed to be driven in reverse bias.
3. If use under bending condition, bending position should avoid area of resistance, diode or triode and the bend angle couldn't be less than 45o for long time.

## Characteristics

Parameter	Symbol	Value	Units
Beam Characteristic	$2\theta_{1/2}$	120	Degree
Waterpro of Level	IP	IP 20	--
CCT	2110	5700	K
		4000	
		3000	
		2700	
Ra		95	--

Notes:

CCT is measured with an accuracy of  $\pm 10\%$

## Electric-Optical Characteristics (T<sub>a</sub>=25°C)

### 2835-TM30/24V-70LEDs/M Series

Order Code	Color	CCT (K/nm)	Input Voltage (CV)	Typ Flux (Lm/M)	Typ Efficiency (Lm/W)	Number of LEDs (M)	Power (W/M)	IP	Ra
6LBR1CWJE0S07012	Cool White	5700K	24	1510	105	70	14.4	20	95
6LBR1NWJE0S07012	Neutral White	4000K	24	1510	105	70	14.4	20	95
6LBR1WWJE0S07012	Warm White	3000K	24	1440	100	70	14.4	20	95
		2700K	24	1365	95	70	14.4	20	95

### 2835-TM30/24V-140LEDs/M Series

Order Code	Color	CCT (K/nm)	Input Voltage (CV)	Typ Flux (Lm/M)	Typ Efficiency (Lm/W)	Number of LEDs (M)	Power (W/M)	IP	Ra
6LBR1CWJE0S14012	Cool White	5700K	24	3025	105	140	28.8	20	95
6LBR1NWJE0S14012	Neutral White	4000K	24	3025	105	140	28.8	20	95
6LBR1WWJE0S14012	Warm White	3000K	24	2880	100	140	28.8	20	95
		2700K	24	2735	95	140	28.8	20	95

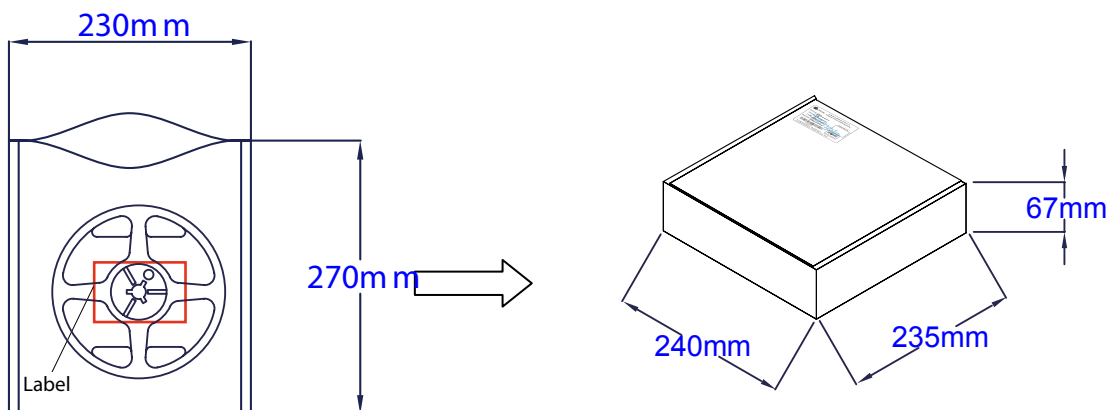
Notes:

1. The maximum and minimum lumen flux are based on ± 10% of the typical rate
2. The maximum and minimum inout power are based on ± 10% of the typical rate
3. CCT is measured with an accuracy of ± 10%

## Product Packaging Information

### PLCC Lightbar FPC Material Description

Package Type	Quantity	Dimension
Antistatic bag	1 Reel	270mm x 230mm
Inside box	4 Antistatic bags	240mm x 235mm x 67mm
Outside box	10 Inside boxes	488mm x 364mm x 261mm

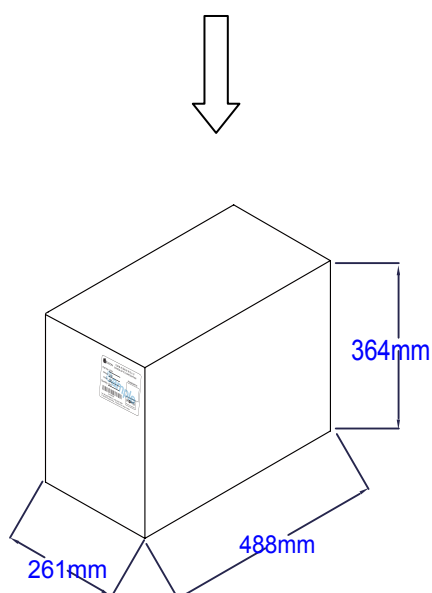


EX:

	艾笛森光電股份有限公司 EDISON OPTO CORPORATION
Part No. : <u>6LBR1WWJE0S07012</u>	Inspected by:
Color : <u>Cool White(303)</u>	<input type="text"/>
Quantity : <u>1 Reel(5M)</u>	
Lot No. : <u>XXXX</u>	
 A41000005	<b>ROHS</b> Directive Compliance
Tel +86-2-82276996 Fax +86-2-8227-6997 4F No.800 Chung-Cheng ., Chung-Ho City Taipei, Taiwan	

#### Label information

Part NO. : Order code  
Color : Color(Emitter BIN color)  
Quantity : The number of packing  
Lot NO. : Date code



## Precaution for Use

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1. DO NOT use the products with materials has Sulfur.
2. DO NOT assemble in humid environment or the conditions of containing oxidizing gas such as Cl, H<sub>2</sub>S, NH<sub>3</sub>, SO<sub>2</sub>, NO<sub>X</sub>, etc.
3. DO NOT add or change wires while the circuit of Module is active. Long time exposure to sunlight or UV should be avoided.
4. DO NOT press the product; even a slight pressure may damage the product. The environments such as high temperatures, high humidity or direct expose to sunlight should be avoided since the product is sensitive to these conditions.

## Environmental Compliance

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The full spectrum lightbar FPC series are compliant to the Restriction of Hazardous Substances Directive or RoHS. The restricted materials including lead, mercury cadmium hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ether (PBDE) are not used in lightbar FPC series to provide an environmentally friendly product to the customers.

## Application Notes

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The full spectrum lightbar series are available in cool white , neutral white and warm white for application such as under-cabinet lighting, cove lighting and festivals, shows and exhibitions decorative lighting. Moreover, additional fine-tuned high color rendering index (CRI) version of cool white , neutral white and warm white all make lightbar the ideal lighting choice for vividly building or decoration products, presenting the products outline.



## Revision History

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Versions	Description	Release Date
1	Establish order code information	2019/1/4

## About Edison Opto

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Edison Opto is a leading manufacturer of high power LED and a solution provider experienced in LDMS. LDMS is an integrated program derived from the four essential technologies in LED lighting applications- Thermal Management, Electrical Scheme, Mechanical Refinement, Optical Optimization, to provide customer with various LED components and modules. More Information about the company and our products can be found at [www.edison-opto.com](http://www.edison-opto.com)

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