

PLCC 2835 Lightbar Full Spectrum IP20 Series Datasheet



Product description :

- 24 V constant voltage strip (SELV), IC design
- High index, Ra>95

Features and benefits :

- Small color tolerance (Macadam 3-5)
- Color temperature 2700, 3000, 4000 and 5700 K
- Self-adhesive 3M tape at the backside for simple mounting on different surfaces
- Life-time 30,000-50,000 hours
- 3-5-year guarantee

Typical Applications :

- Linear lighting
- Architectural Lighting



Table of Contents

General Information.....	3
Technical data.....	3
Product Dimensions.....	4
Electric-Optical Characteristics	5
Standards	6
Thermal details.....	6
Life time	7
Product Packaging Information.....	8
Precaution for Use.....	9
Environmental Compliance	9
Application Notes.....	9
Revision History	10
About Edison Opto	10

General Information

Ordering Code Format

6
X1
L B R 1
X2
X X
X3
X
X4
E 0
X5
S
X6
X X X
X7
X X
X8

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

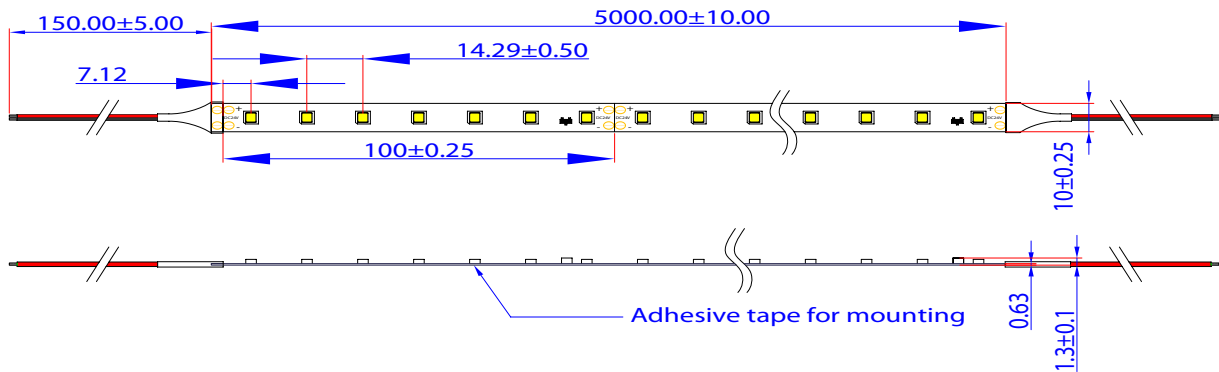
X6 Emitter	X7 Number of LEDs(M)	X8 Serial No.	
S	2835	070 70pcs 140 140pcs	xx -

Technical data

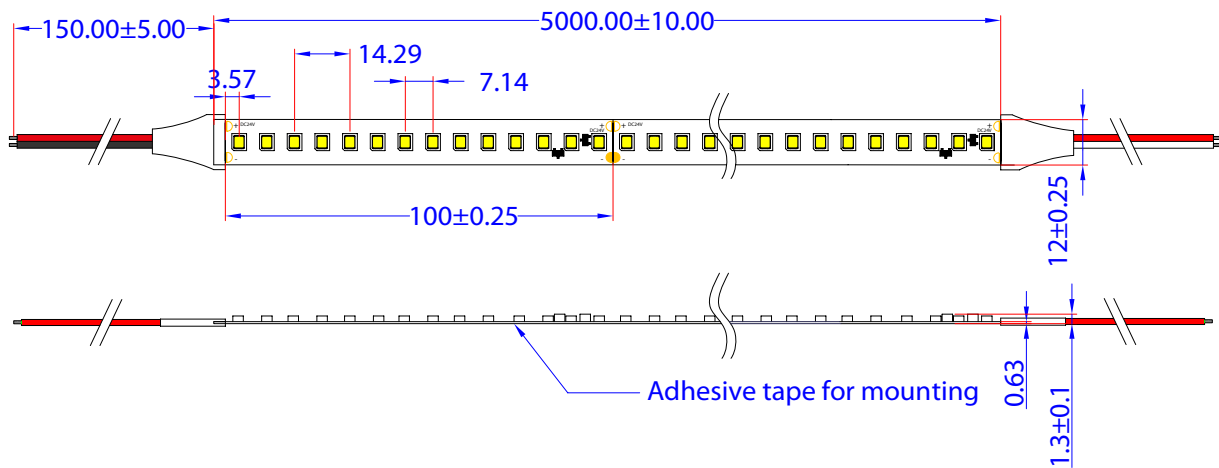
Parameter	Value	Units
Beam characteristic	120	°C
Ambient temperature range	-25~ +45	°C
Tp rated	65	°C
Tc	75	°C
Type of protection	IP20	
Color Temperature	2700	K
	3000	K
	4000	K
	5700	K
Number of connection	5	M
Risk group(EN62778)	1	
Classification acc. to	IEC62031	
	IEC62778	
	IEC62717	
	IEC61000-4-2	

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 ± 0.20 mm.

Electric-Optical Characteristics

2835-24V-70LEDS/M

Order code	CCT (K)	Voltage (CV)	Luminous flux TP25°C	Luminous flux TP65°C	Efficacy TP25°C	Efficacy TP65°C	Power (W/M)	Ra
6LBR1CWJE0S07012	5700	24	1550 lm/M	1390 lm/M	108 lm/W	97 lm/W	14.4	>95
6LBR1NWJE0S07012	4000	24	1550 lm/M	1390 lm/M	108 lm/W	97 lm/W	14.4	>95
6LBR1WWJE0S07012	3000	24	1483 lm/M	1335 lm/M	103 lm/W	93 lm/W	14.4	>95
	2700	24	1365 lm/M	1229 lm/M	95 lm/W	86 lm/W	14.4	>95

2835-24V-140LEDS/M

Order code	CCT (K)	Voltage (CV)	Luminous flux TP25°C	Luminous flux TP65°C	Efficacy TP25°C	Efficacy TP65°C	Power (W/M)	Ra
6LBR1CWJE0S14012	5700	24	3110 lm/M	2780 lm/M	108 lm/W	97 lm/W	28.8	>95
6LBR1NWJE0S14012	4000	24	3110 lm/M	2780 lm/M	108 lm/W	97 lm/W	28.8	>95
6LBR1WWJE0S14012	3000	24	2966 lm/M	2670 lm/M	103 lm/W	93 lm/W	28.8	>95
	2700	24	2735 lm/M	2462 lm/M	95 lm/W	85 lm/W	28.8	>95

Notes:

1. The Maximum and minimum lumen flux are based on $\pm 10\%$ of the typical rate.
2. The Maximum and minimum Power are based on $\pm 10\%$ of the typical rate.

Standards

Energy classification

Type	CCT	Energy Classification
2835-24v-70LED/M Series	2700/3000K	A+
	4000/5700K	A+
2835-24v-80LED/M Series	2700/3000K	A+
	4000/5700K	A+

Thermal details

Storage and humidity

Storage temperature:-35 ... +70 °C

Operation only in non condensing environment.

Humidity during processing of the module should be between 0 to 70 %

Life time

Life-time, lumen maintenance and failure rate

1. The light output of an LED Module decreases over the life-time, this is characterized with the L value.
2. L70 means that the LED module will give 70 % of its initial luminous flux. This value is always related to the number of operation hours and therefore defines the life-time of an LED module.
3. As the L value is a statistical value and the lumen maintenance may vary over the delivered LED modules value defines the amount of modules which are below the specific L value, e.g. L70B10 means 10 % of the LED modules are below 70 % of the initial luminous flux, respectively 90 % will be above 70 % of the initial value. In addition the percentage of failed modules (fatal failure) is characterized by the C value.
4. The F value is the combination of the B and C value. That means for F degradation and complete failures are considered, e.g. L70F10 means 10 % of the LED Modules may fail or below 70% of the initial luminous flux.

Lumen maintenance for 2835-24v-70LED/M Series

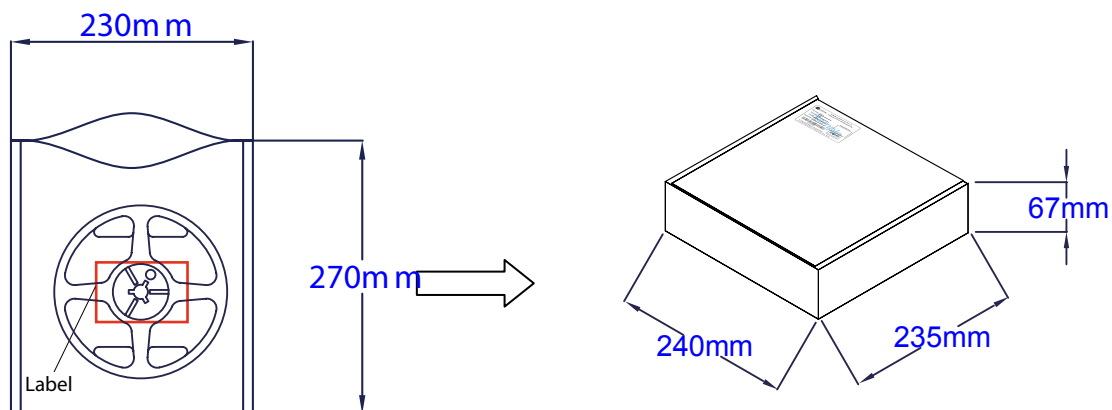
Supply Voltage	Tp temperature	L90/F10	L90/F50	L80/F10	L80/F50	L70/F10	L70/F50
24V	40	>27,000 h	>28,000 h	>29,000 h	>30,000 h	>30,000 h	>30,000 h
24V	45	>26,000 h	>27,000 h	>28,000 h	>30,000 h	>30,000 h	>30,000 h
24V	55	>24,000 h	>26,000 h	>27,000 h	>30,000 h	>30,000 h	>30,000 h
24V	65	>22,000 h	>24,000 h	>25,000 h	>30,000 h	>30,000 h	>30,000 h
24V	75	>20,000 h	>22,000 h	>23,000 h	>30,000 h	>30,000 h	>30,000 h

Lumen maintenance for 2835-24v-140LED/M Series

Supply Voltage	Tp temperature	L90/F10	L90/F50	L80/F10	L80/F50	L70/F10	L70/F50
24V	40	>27,000 h	>28,000 h	>29,000 h	>30,000 h	>30,000 h	>30,000 h
24V	45	>26,000 h	>27,000 h	>28,000 h	>30,000 h	>30,000 h	>30,000 h
24V	55	>24,000 h	>26,000 h	>27,000 h	>30,000 h	>30,000 h	>30,000 h
24V	65	>22,000 h	>24,000 h	>25,000 h	>30,000 h	>30,000 h	>30,000 h
24V	75	>20,000 h	>22,000 h	>23,000 h	>30,000 h	>30,000 h	>30,000 h

Product Packaging Information

Type	Anti-static bag size(mm)	Anti-static bags/ inner box(pcs)	Inner box/carton(pcs)	Outside Carton size(mm)	GW±5% (kg)
2835-24V-70LED/M Series	260x230x10	4	10	488x261x364	6.8
2835-24V-140LED/M Series	260x230x10	4	10	488x261x364	6.8

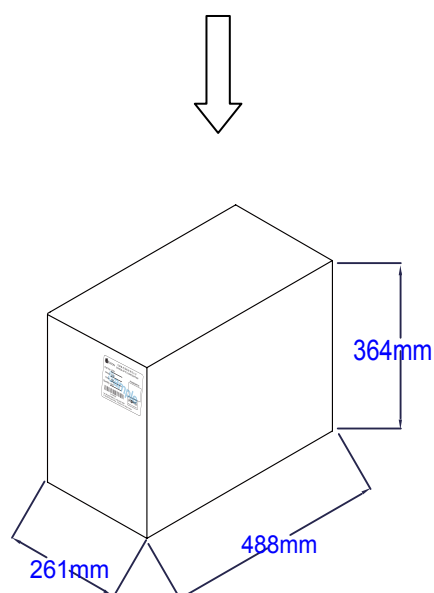


EX:

 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>	
 A410000005 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

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 C1, H2S, NH3, SO2, NOX, 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.
5. Installation of LED modules (with power supplies) needs to be made with regard to all applicable and safety standards. Only qualified personnel should be allowed to perform installations.
6. Assembly must not damage or destroy conducting paths on the circuit board.
7. Please ensure that the power supply is of adequate power to operate the total load.
8. The maximum run length from any power feed should be limited to 5000 mm.

Environmental Compliance

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

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

Versions	Description	Release Date
1	Establish order code information	2019/01/04
2	Upgrade version	2019/08/29

About Edison Opto

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

Copyright©2019 Edison Opto. All rights reserved. No part of publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photo copy, recording or any other information storage and retrieval system, without prior permission in writing from the publisher. The information in this publication are subject to change without notice.

www.edison-opto.com

For general assistance please contact:
service@edison-opto.com.tw

For technical assistance please contact:
LED.Detective@edison-opto.com.tw