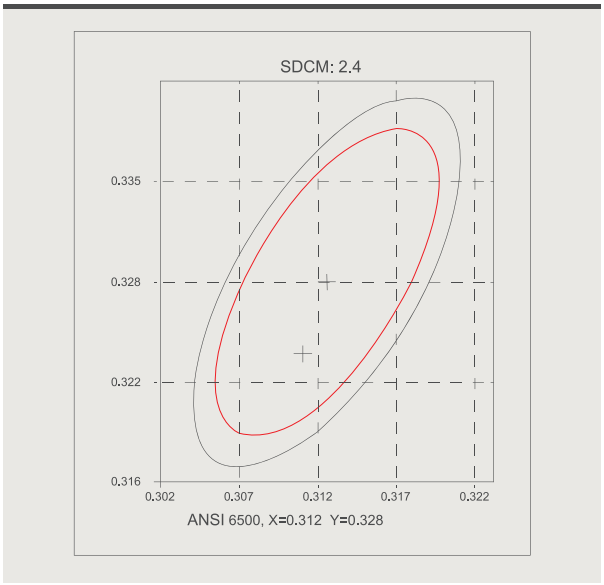
E354137 | 120° | 2835 | DC 24V | 5Years | IP20

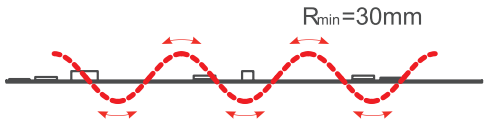
Version: **A1.0**



The figure above is the FN-H2835K+-180-24 tested at a color temperature of 6500K

Features

- High efficiency, up to 200lm/w
- SDCM<3, One Bin Shipment
- Support a variety of production processes
- Multi specifications, support customization



Installation

- Fix with 3M adhesive.

Optical & Electrical Parameters

Model No.	Voltage	Ra	CCT	LM/m	LM/W	Energy efficiency class	W/m
FN-H2835K+-72-24	24V DC	>80	2700 K	702	183	C	3.84
			3000 K	722	188	C	
			3500 K	752	196	C	
			4000 K	768	200	B	
			5000 K	775	202	B	
			6500 K	745	194	C	
FN-H2835K+-144-24	24V DC	>80	2700 K	1405	183	C	7.68
			3000 K	1428	186	C	
			3500 K	1490	194	C	
			4000 K	1550	202	B	
			5000 K	1544	201	B	
			6500 K	1505	196	C	
FN-H2835K+-180-24	24V DC	>80	2700 K	1728	180	C	9.60
			3000 K	1776	185	C	
			3500 K	1852	193	C	
			4000 K	1920	200	B	
			5000 K	1920	200	B	
			6500 K	1867	194	C	

Model No.	Voltage	Ra	CCT	LM/m	LM/W	Energy efficiency class	W/m
FN-H2835K+-72-24	24V DC	>90	2700 K	580	152	D	3.84
			3000 K	599	156	D	
			3500 K	650	166	D	
			4000 K	650	166	D	
			5000 K	660	172	D	
			6500 K	660	172	D	
FN-H2835K+-144-24	24V DC	>90	2700 K	1152	150	D	7.68
			3000 K	1198	156	D	
			3500 K	1259	164	D	
			4000 K	1306	166	D	
			5000 K	1305	170	D	9.60
			6500 K	1305	170	D	
FN-H2835K+-180-24	24V DC	>90	2700 K	1440	150	D	9.60
			3000 K	1535	160	D	
			3500 K	1584	165	D	
			4000 K	1612	167	D	
			5000 K	1632	170	D	
			6500 K	1632	170	D	

Other Parameters

Model No.	FN-H2835K+-72-24	FN-H2835K+-144-24	FN-H2835K+-180-24
LED QTY (pcs/m)	72	144	180
Standard Run (m)	5.0	5.0	5.0
Product Size L*W (mm)	5000*8	5000*8	5000*8
No Brightness Difference MAX (m)	20%:4.5 / 30%:5.5	20%:3.0 / 30%:4.0	20%:2.5 / 30%:3.5
Max Working Temperature	80 °C	80 °C	80 °C
Working Temperature	-20~+60 °C	-20~+60 °C	-20~+60 °C
Storage Temperature	-20~+70 °C	-20~+70 °C	-20~+70 °C

NOTE:

- The above data was measured under standard conditions and actual data may be different. We would update data without further notice.
- The luminous flux was tested while the corresponding-color products were lightened.
- UL max run refers to operating length at UL class II @100W.24V.
- Luminous flux values were measured accordance to IES LM-80-08. LED chips with tolerance range of +/- 10%.
- Each maximum-run requires a dedicated power feed from the driver. Do not exceed the recommended maximum run length. Max run may exceed Class 2 limits.
- Actual wattage may be different from the calculated wattage due to voltage drop while using.
- Actual efficacy value is determined by the specific LED driver (power supply). An estimated efficacy value can be calculated as follows: Luminous intensity divided by average power consumption.
- Do not install products in the conditions that exceed the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, luminous intensity output, and/or adversely impact color consistency.
- Operating temperature was measured under the minimum and maximum ambient temperature environment.
- Cutting segments are marked on the profiles below.
- If the product power is greater than 15W, auxiliary heat dissipation appliances must be added.

Performance

- LED chip data measured in accordance to IES LM-80-08.
- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Blueview ‘s TUV Innovation Lab.

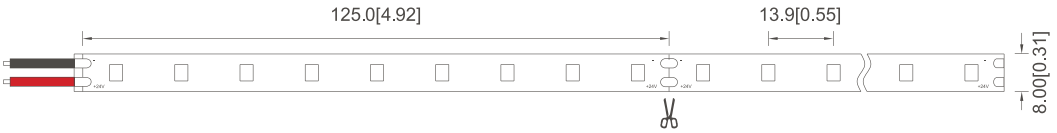
Compliance & Regulatory Approvals

CE	CE LVD	Standard: EN 60598-2-21: 2015; EN 60598-1: 2015; EN 62471: 2008; EN 62493:2015; EN 62031: 2015+A1: 2013+A2: 2015
CE	CE EMC	Standard: EN IEC 55015: 2019; EN IEC 61000-3-2: 2019; EN 61000-3-3:2013+A1: 2019;EN 61547: 2009
CB	CB	Standard: IEC 62031:2018
c UL us LISTED	UL LISTED	Standard: UL 2108 E354137-Low-voltage Lighting Systems, Power Units, Luminaires and Fittings
RoHS	RoHS	Standard: IEC62321

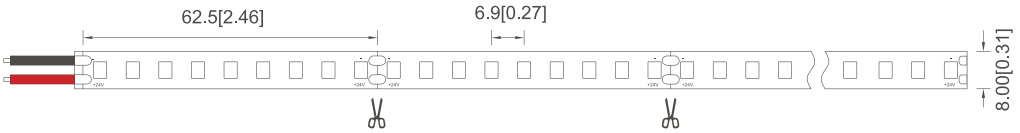
Profile Drawings

Unit: mm [inch]

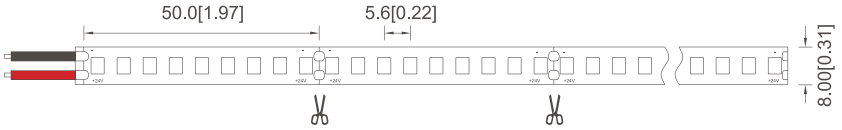
FN-H2835K+-72-24



FN-H2835K+-144-24



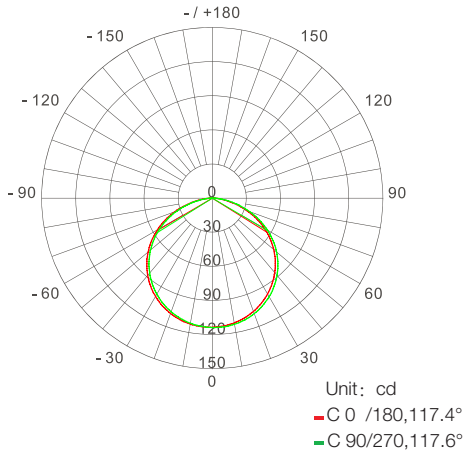
FN-H2835K+-180-24



Note:

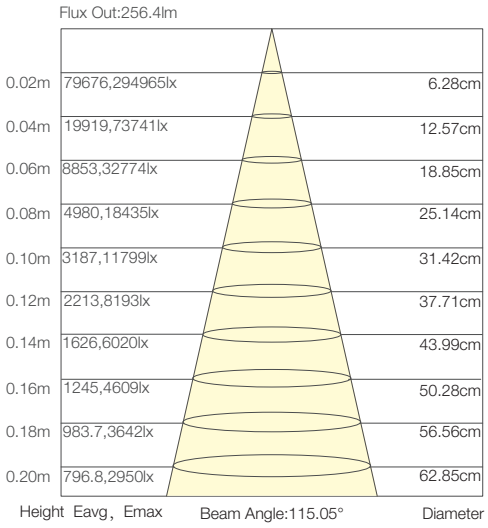
- For LED quantity less than 160leds/m with standard power, we recommend to use 20AWG parallel wire/sheathed cable with wire length less than 20cm, user need to reduce the max run when the wire length more than 20cm.
- For LED quantity more than 160leds/m with standard power, we recommend to use 18AWG parallel wire/sheathed cable in single feed, or 20AWG parallel wire or sheathed cable in both ends with wire length less than 20cm. Users need to reduce the max run properly when the wire length more than 20cm.
- Above conditions are only applicable to products with the PCB width of 10mm or more, for other width needs to be evaluated separately.

Luminous Intensity Distribution Diagram



AVERAGE BEAM ANGLE(50%):117.5°

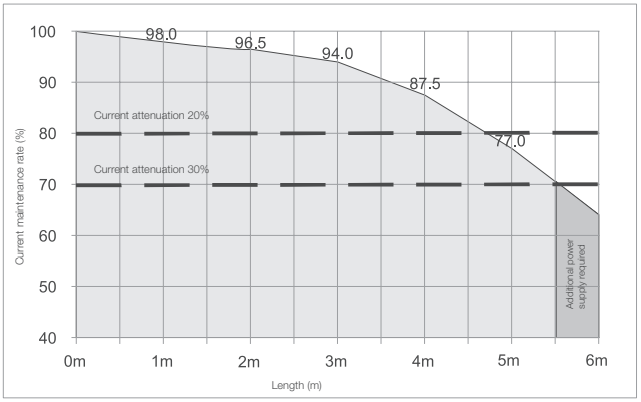
Average Illumination



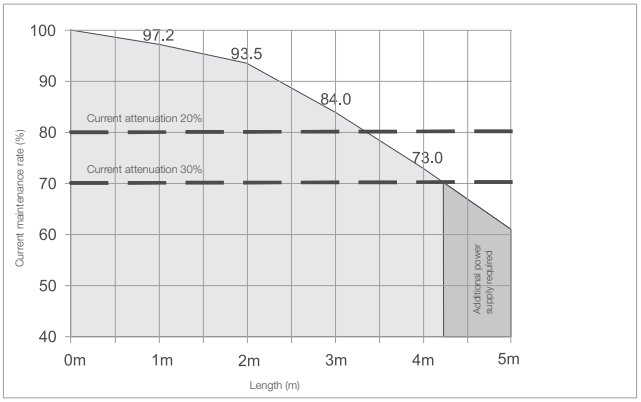
Note: Note: above data tested with FN-H2835K+-72-24 at 6500K , for other data,please consult sales rep

Current maintenance rate & Power supply mode

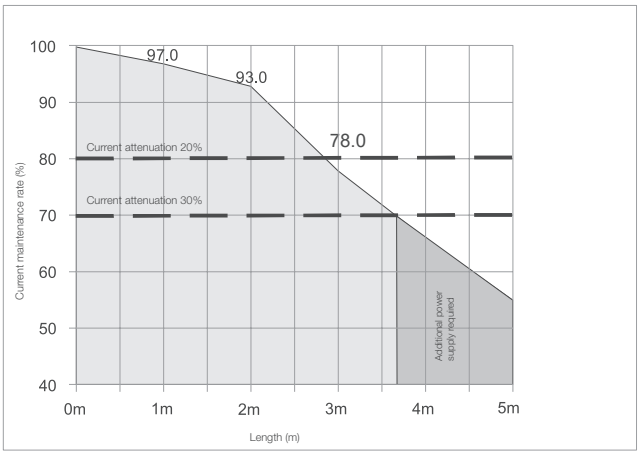
FN-H2835K+-72-24



FN-H2835K+-144-24



FN-H2835K+-180-24



Recommended power supply upon working length

FN-H2835K+-72-24

Operating Length (m)	1.0	2.0	3.0	4.0	5.0	6.0
Total Power (W)	3.84	7.20	10.32	13.20	15.84	18.24
Head-to-tail Voltage Drop Rate (%)	0.17	0.34	0.71	0.96	1.34	1.80
Head-to-tail Current Drop Rate (%)	2.00	3.50	6.00	12.50	23.00	36.00
Single/Double feed	Single feed	Single feed	Single feed	Single feed	Single feed	Double feed

FN-H2835K+-144-24

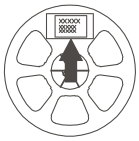
Operating Length (m)	1.0	2.0	3.0	4.0	5.0
Total Power (W)	7.20	13.68	19.44	23.52	28.56
Head-to-tail Voltage Drop Rate (%)	0.21	0.63	1.13	1.63	2.13
Head-to-tail Current Drop Rate (%)	2.80	6.50	16.00	27.00	39.00
Single/Double feed	Single feed	Single feed	Single feed	Single feed	Double feed

FN-H2835K+-180-24

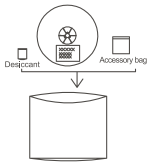
Operating Length (m)	1.0	2.0	3.0	4.0	5.0
Total Power (W)	8.80	16.63	22.70	27.60	31.44
Head-to-tail Voltage Drop Rate (%)	0.25	0.71	1.21	1.71	2.25
Head-to-tail Current Drop Rate (%)	3.00	7.00	22.00	34.00	45.00
Single/Double feed	Single feed	Single feed	Single feed	Double feed	Double feed

Note: If the current attenuation rate exceeds 20%, additional power supply is required; "double feed" means that the additional power supply is required;

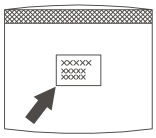
Packaging Information



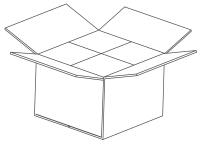
Label the reel;



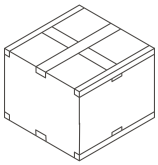
Put reel, accessory bag and desiccant together into static shielding bag;



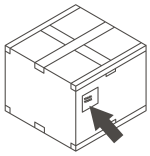
Seal and label the static shielding bag;



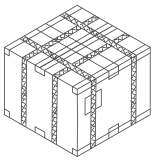
Put the packed static shielding bag into carton box;



Seal the carton box;



Label the box;



Use packing belt to pack. Add edge protectors if necessary.

Packaging information

Model No.	Product Size L*W (mm)	Carton Size (mm)	Meter/Reel	Reel/Carton	Net Weight (kg)	Gross Weight (kg)
FN-H2835K+-72-24	5000*8	550*400*340	5	100	8.06 (1±10%)	12.68 (1±10%)
FN-H2835K+-144-24	5000*8	550*400*340	5	100	8.36 (1±10%)	12.98 (1±10%)
FN-H2835K+-180-24	5000*8	550*400*340	5	100	8.56 (1±10%)	13.18 (1±10%)

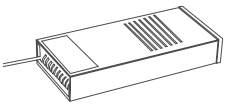
NOTE:

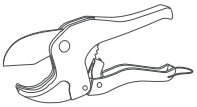
- **The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.**
- **The gross weights of all above model are less than volume weight, the volume weight is14.96kg.**

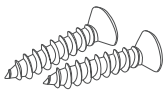
Reliability test

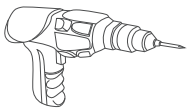
Project	Reference standards	Category	Test conditions	Outcome
Environmental test	Blueview standard	PTC test	TH = - 40 / 60°C for 15min, TH = - 40 / 60°C for 45min, one cycle every 2h, light on for 5min and light off for 5min	Pass
		High temperature resistant test	TH=60°C , continuous power on	
		Room temperature aging test	Ta = 25°C, continuous power on	

Installation


LED power supply


Cutter

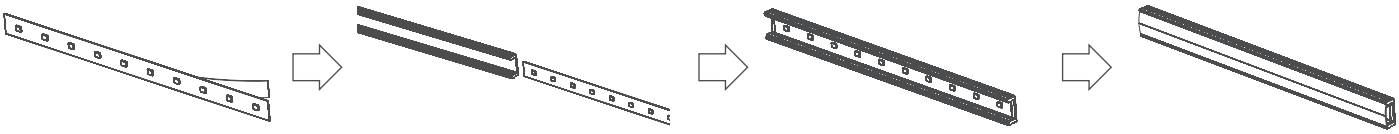

Screw


Electric Drill


Clips

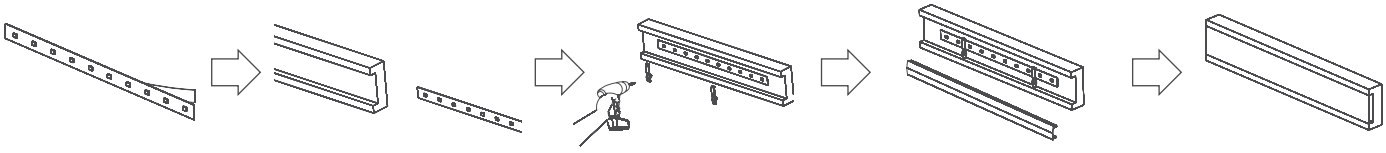
Installation Methods and Steps

Aluminum channel installation



1. Peel away the self adhesive tape on the back of strip.
2. Cut off the excess part based on the installation position.
3. Evenly arrange the strips with appropriate space in the track.
4. Install the cover and end cap.

Covered channel installation



1. Peel away the self adhesive tape on the back of strip.
2. Cut off the excess part based on the installation position.
3. Evenly arrange the strips with appropriate space in the track and fix them with clips.
4. Install the cover and end cap.
5. Finished

Attentions before installation

- Check whether the power line is screwed into the terminal firmly, and it is better not to pull it out by hand.
- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- The wiring terminal must be provided with effective waterproof and anti-corrosion treatment.

Common Faults and Troubleshoot

Quick Guide		
Problems	Reasons	Solutions
All LEDs can not light on.	No electric supply.	Fix the short circuit problem.
	Automatic power protection from the open or short circuit in output of the power supply.	
	Wrong connection of power supply.	
LEDs can not light on partly.	Some switching mode power supplies are not powered.	Correctly connection.
	Power supply line error.	
	Mistaken wire connection of some of products	
Brightness of LED is inconsistent tor insufficient.	Power overloaded.	Replace with more powerful power.
	Power supply circuit excessive consumption.	Make sure the working voltage of the product within ±5% of standard voltage, or keep balance by circuit power consumption.
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement.
LED flicker.	Connection point fault.	Remove bad connection point.
	Switching power supply failure.	Replace a new power supply.
	Wrong Installation or use of products	Please follow the instructions

Warning

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation,especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation,waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm² cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters.Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

Statements and Recycling

Statements:

- Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged.
- The parameters given in this manual are typical values and for reference only.
- All illustrations and drawings in this manual are for reference.
- This product is subject to change without notice.

Recycling:

- LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.

BLUEVIEW ELEC-OPTIC TECH CO.,LTD

☐ Tel: +86-28-8148 0011
☐ Fax: +86-28-8148 1258
☐ Web.: www.blueviewled.com
☐ Email: sales@blueviewled.com
☐ Add.: No. 1000, Section 2, Konggang 2nd Road, Shuangliu, Chengdu 610207, Sichuan, CHINA