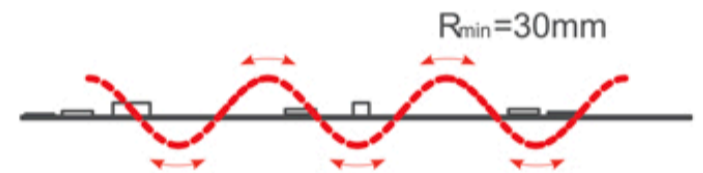


The above figure is the test result of FNH2835K-90-24 at 2700k;
*If you have any other questions, please contact the sales rep;

Features

- Color consistency : 2.2 SDCM;
- High light efficiency, up to 215lm / W;
- Support a variety of production processes;
- Multiple specifications available, 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-90-24	24V DC	>80	2700K	950	198	C	4.8
			3000K	988	206	B	
			4000K	1042	217	B	
			5000 K	1008	210	B	
			6500 K	1018	212	B	
FN-H2835K-144-24	24V DC	>80	2700K	1520	198	C	7.68
			3000K	1582	206	B	
			4000K	1650	215	B	
			5000 K	1605	209	B	
			6500 K	1612	210	B	
FN-H2835K-180-24	24V DC	>80	2700K	1862	194	C	9.60
			3000K	1948	203	B	
			4000K	2044	213	B	
			5000 K	1996	208	B	
			6500 K	2016	210	B	

	Voltage	CRI	CCT	LM/m	LM/W	W/m
FN-H2835K-90-24	24V DC	>90	 2700K	845	176	4.8
			 3000K	874	182	
			 4000K	874	182	
			 5000 K	888	185	
			 6500 K	854	178	
FN-H2835K-144-24	24V DC	>90	 2700K	1350	176	7.68
			 3000K	1395	182	
			 4000K	1395	182	
			 5000 K	1421	185	
			 6500 K	1367	178	
FN-H2835K-180-24	24V DC	>90	 2700K	1670	174	9.60
			 3000K	1725	180	
			 4000K	1725	180	
			 5000 K	1747	182	
			 6500 K	1690	176	

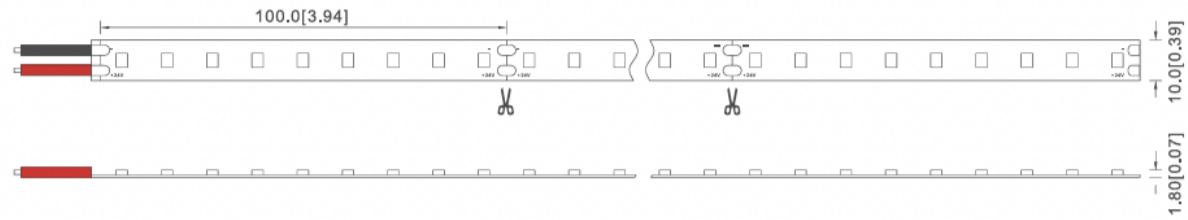
Energy efficiency classes of light sources

Energy efficiency class	Total mains efficacy η_{TM} (lm/W)
A	$210 \leq \eta_{TM}$
B	$185 \leq \eta_{TM} < 210$
C	$160 \leq \eta_{TM} < 185$
D	$135 \leq \eta_{TM} < 160$
E	$110 \leq \eta_{TM} < 135$
F	$85 \leq \eta_{TM} < 110$
G	$\eta_{TM} < 85$

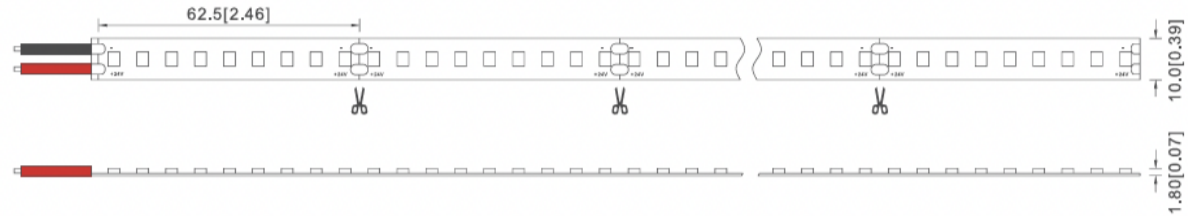
Profile Drawings

Unit: mm [inch]

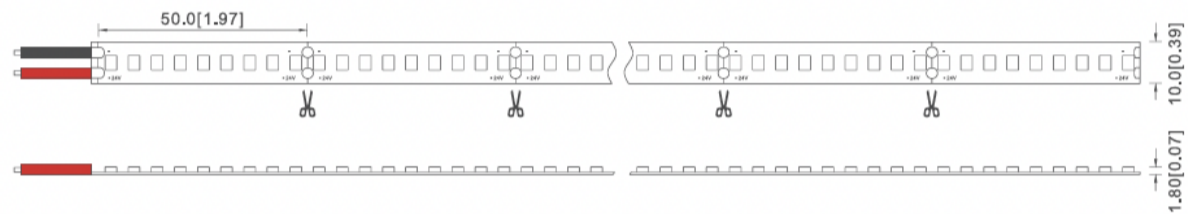
FN-H2835K-90-24



FN-H2835K-144-24



FN-H2835K-180-24

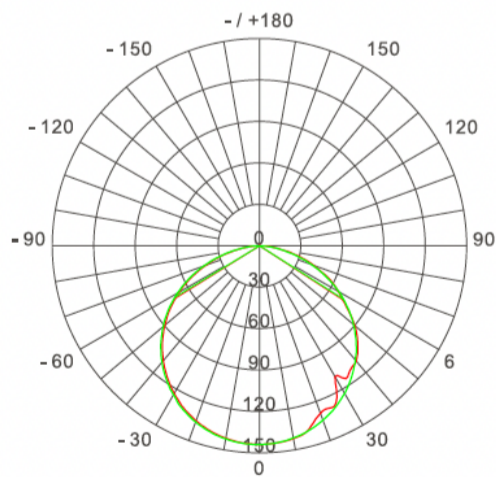


Note:

- 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 Illumination

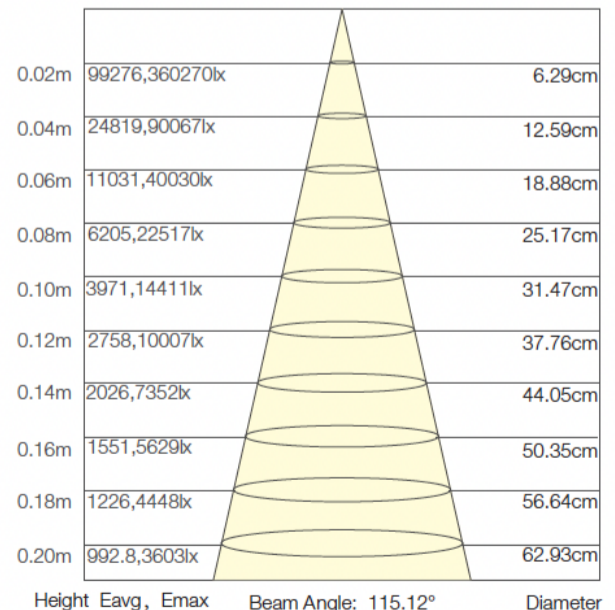


Unit: cd
 - C 0 /180,115.1°
 - C 90/270,116.2°

AVERAGE BEAM ANGLE(50%): 115.7°

Flux Out: 319.5lm

CCT=2700K



Note: above data tested with FN-H2835K-90-24 at 2700K , for other data,please consult sales rep.

Recommended power supply upon working length

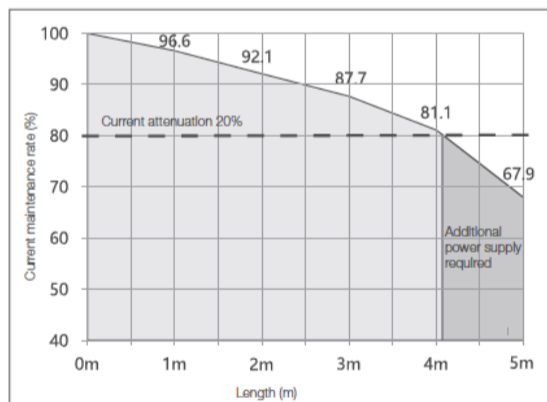
FN-H2835K-90-24					
Operating Length (m)	1.0	2.0	3.0	4.0	5.0
Total Power (W)	4.80	8.88	12.24	15.36	18.72
Head-to-tail Voltage Drop Rate (%)	0.125	0.34	0.55	0.80	1.13
Head-to-tail Current Drop Rate (%)	3.4	7.9	12.3	18.9	32.1
Single/Double feed	Single feed	Single feed	Single feed	Single feed	Double feed

FN-H2835K-144-24					
Operating Length (m)	1.0	2.0	3.0	4.0	5.0
Total Power (W)	7.68	14.11	19.68	23.76	27.36
Head-to-tail Voltage Drop Rate (%)	0.125	0.42	0.75	1.09	1.50
Head-to-tail Current Drop Rate (%)	3.90	11.00	17.50	27.50	41.20
Single/Double feed	Single feed	Single feed	Single feed	Double feed	Double feed

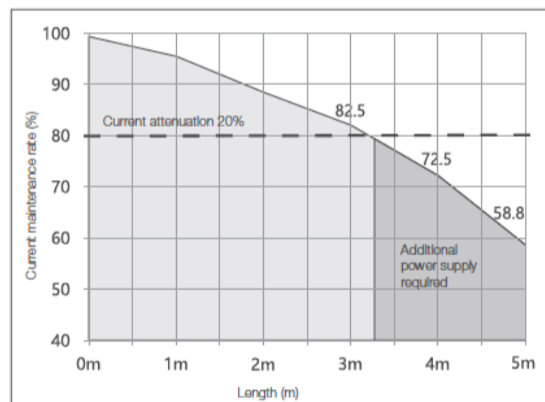
FN-H2835K-180-24					
Operating Length (m)	1.0	2.0	3.0	4.0	5.0
Total Power (W)	9.60	17.52	24.48	28.32	32.16
Head-to-tail Voltage Drop Rate (%)	0.17	0.46	0.88	1.29	1.75
Head-to-tail Current Drop Rate (%)	4.20	13.5	21.00	32.50	41.20
Single/Double feed	Single feed	Single feed	Double feed	Double feed	Double feed

Current maintenance rate & Power supply mode

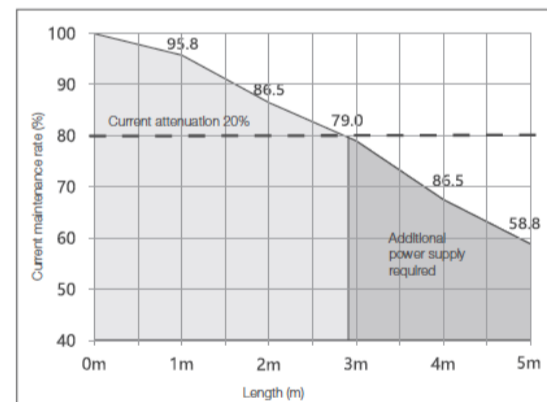
FN-H2835K-90-24



FN-H2835K-144-24



FN-H2835K-180-24



Note: double feed means additional power supply is required, more info, please contact sales rep

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	
		High and low temperature cycle test	TH=60°C , continuous power on	
		Room temperature aging test	Ta = 25°C, continuous power on	
Other tests	Blueview standard	Distortion test	Fixed the head and tail ends of the sample on the fixture respectively, and rotate one of the ends for 360 degrees each time, and test 10 times in total	Pass

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 $\pm 5\%$ 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.
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