LEDYI FLEX LED SHEET Customizable Backlight Panel Instruction Manual

LEDYI FLEX LED SHEET Customizable Backlight Panel

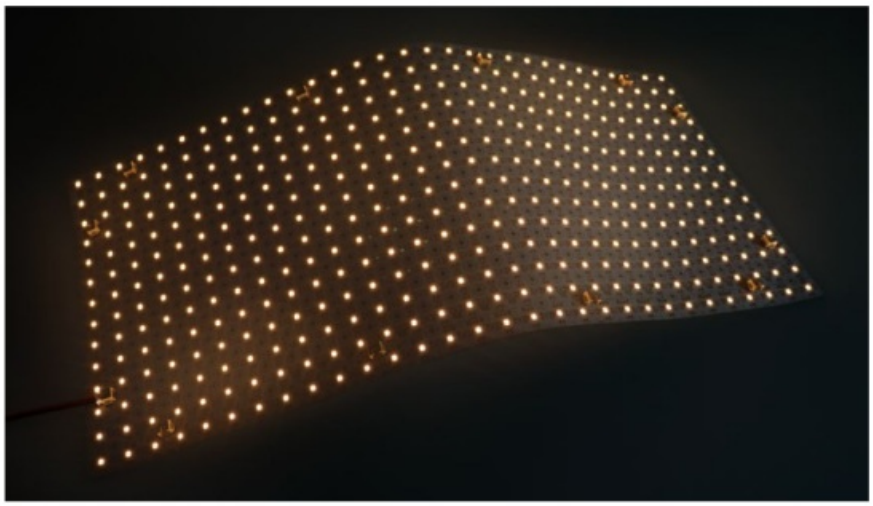
Contents

IMPORTANT NOTE

Note: LEDYI may change product specifications and installation guidance without prior notice.

FEATURES

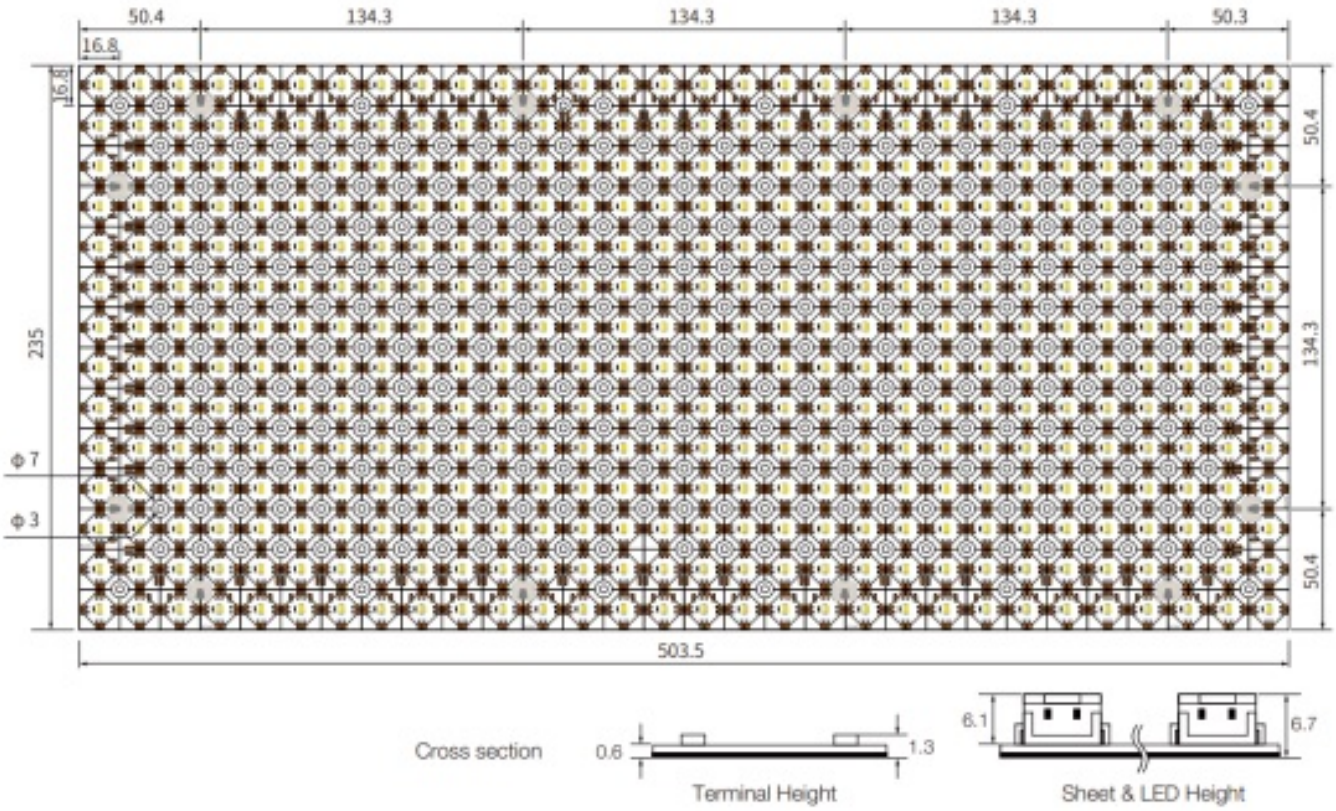
- 24 VDC input
- 90+ CRI
- Single white
- Highly adaptable design accommodates virtually any application
- LED lifetime of 50,000 hours (L70)
- 3M adhesive backing
- Operating temperature of -4°–113° F (-20°–45° C)
- IP20 environmental rating



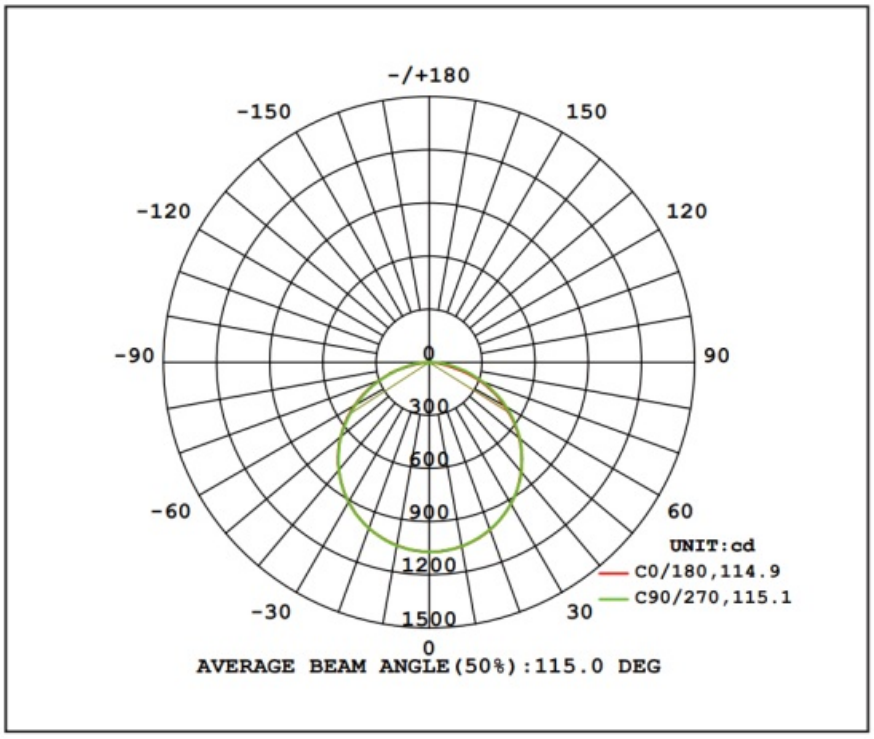
APPLICATIONS

Some common applications include sign lighting, bias lighting, cove lighting, task lighting, backlighting, accent lighting, and under cabinet lighting.

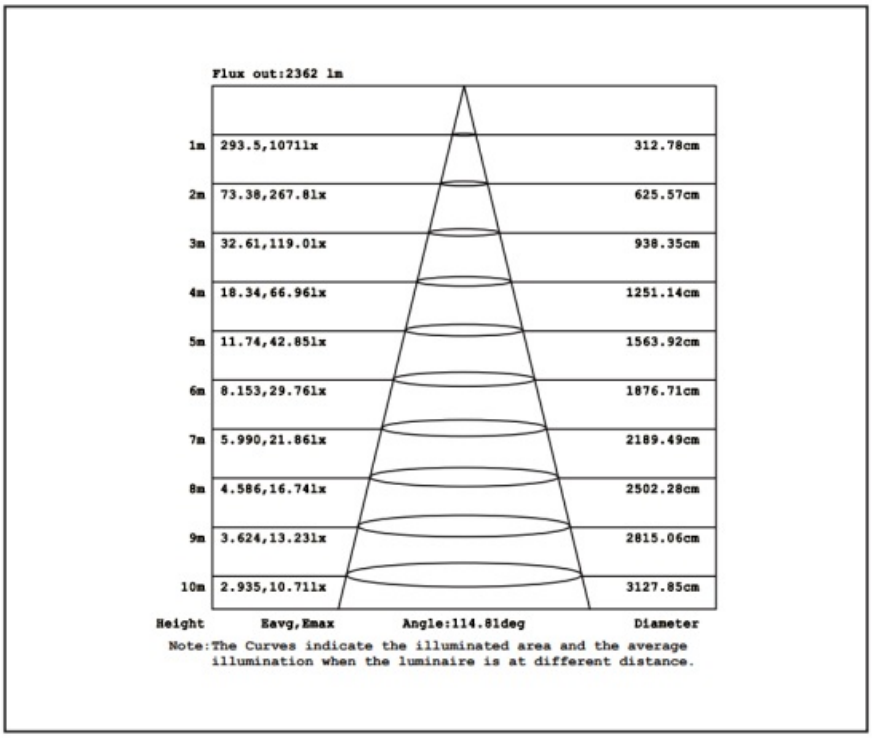
Dimensional Drawing (Unit: mm)



- Light Distribution Curve



- Illuminance curve

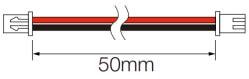
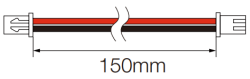
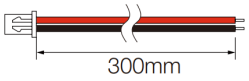


Note: The above date is based on 24V, 33W/PCS, single colour with 2700k colour temperature. If you need IES files for other types. Please contact our sales department.

Parameters

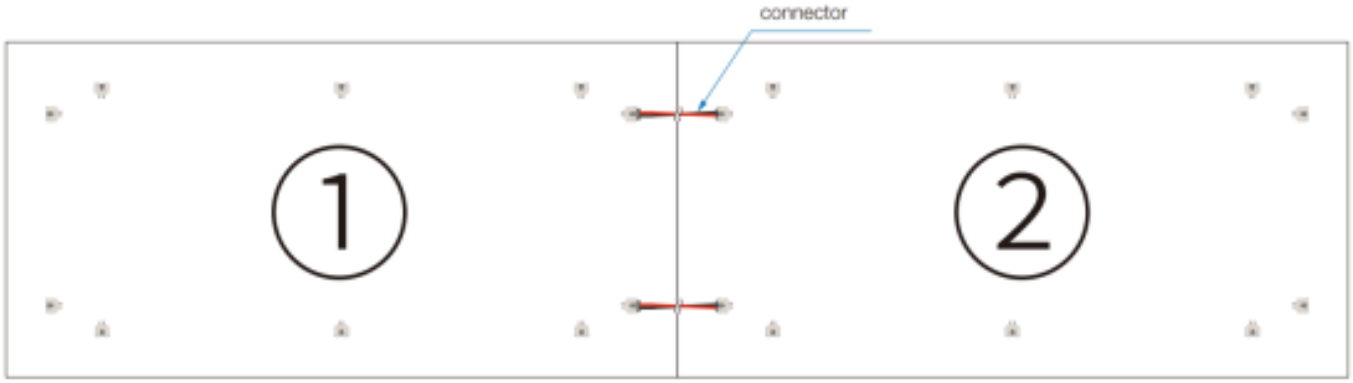
Part NO.	Size	LED Type	LED Qty	LED Segment	Voltage	Power	CRI	CCT	Lumen (lm/Sheet)	Efficacy (lm/w)
LY420-LS2835W27-24V-Ra90-11W	503.5 x 235mm	SMD2835	420LEDs /Sheet	1LED/Seg	24V	11W/Sheet	Ra>90	2700K	1012	92
LY420-LS2835W30-24V-Ra90-11W								3000K	1012	92
LY420-LS2835W40-24V-Ra90-11W								4000K	1144	104
LY420-LS2835W65-24V-Ra90-11W								6500K	1078	98
LY420-LS2835W27-24V-Ra90-22W	503.5 x 235mm	SMD2835	420LEDs /Sheet	1LED/Seg	24V	22W/Sheet	Ra>90	2700K	2024	92
LY420-LS2835W30-24V-Ra90-22W								3000K	2024	92
LY420-LS2835W40-24V-Ra90-22W								4000K	2288	104
LY420-LS2835W65-24V-Ra90-22W								6500K	2156	98
LY420-LS2835W27-24V-Ra90-33W	503.5 x 235mm	SMD2835	420LEDs /Sheet	1LED/Seg	24V	33W/Sheet	Ra>90	2700K	3036	92
LY420-LS2835W30-24V-Ra90-33W								3000K	3036	92
LY420-LS2835W40-24V-Ra90-33W								4000K	3432	104
LY420-LS2835W65-24V-Ra90-33W								6500K	3234	98

Cable

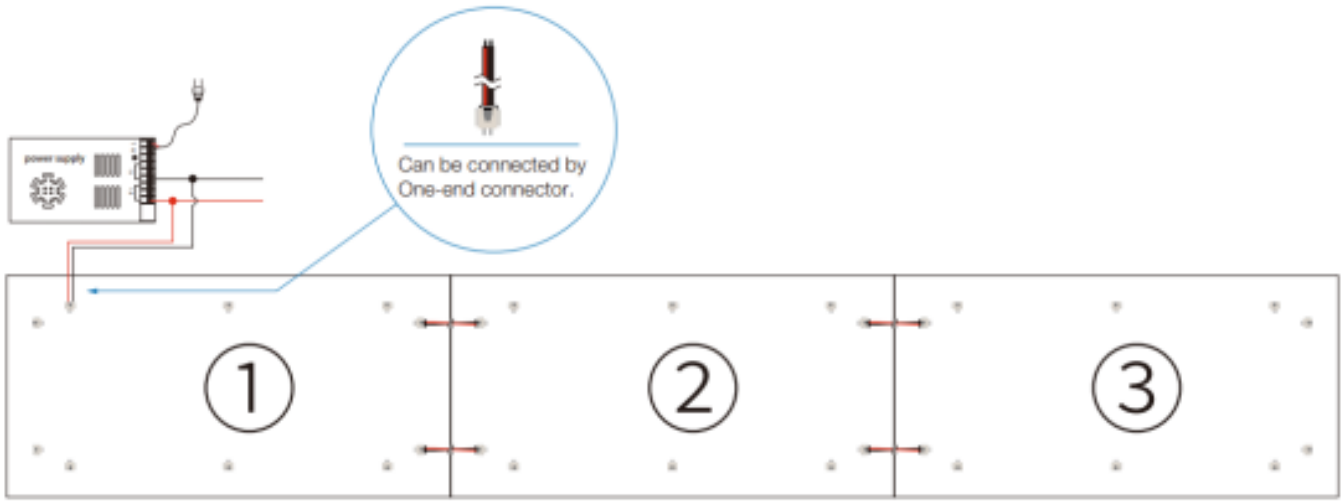
Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
Two-end connector with short cable		**Inner core** 20AWG		Red V+ Black V
Two-end connector with long cable		**Inner core** 20AWG		Red V+ Black V
One-end connector with long cable		**Inner core** 20AWG		Red V+ Black V

Connection Diagram

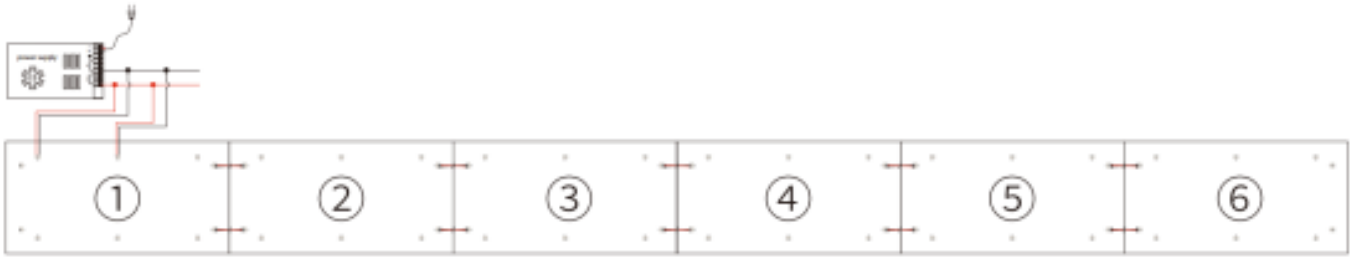
Connection of Plate:



Single Power Supply Point:



Series Connection:

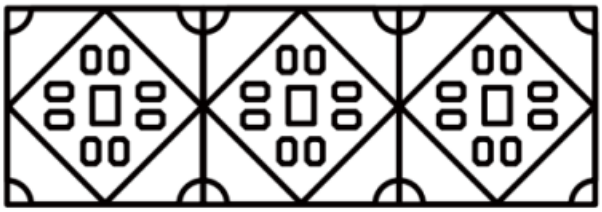


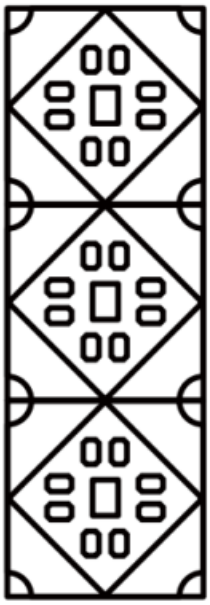
⚠ A single power supply point carries a maximum of 3PCS plates (33W/PCS), and a maximum of 6PCS (33W/PCS) plates in series.

CUTTING SEGMENTS

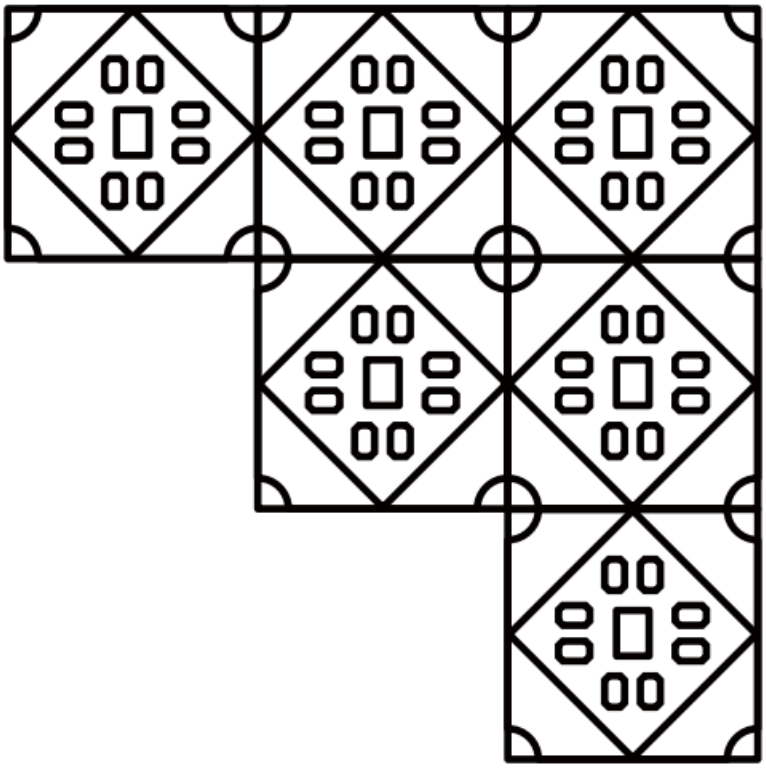
Strip sheets can be cut into many custom shapes. When cutting strips, it is important to use only the pre-marked cut lines on the sheet and also to maintain electrical contact. The images below represent the smallest possible linear routing types. The green box represents strip routing types that work by preserving the electrical connection, and the one in red represents a routing type that will not function correctly due to interruptions of the electrical connection.

- straight line

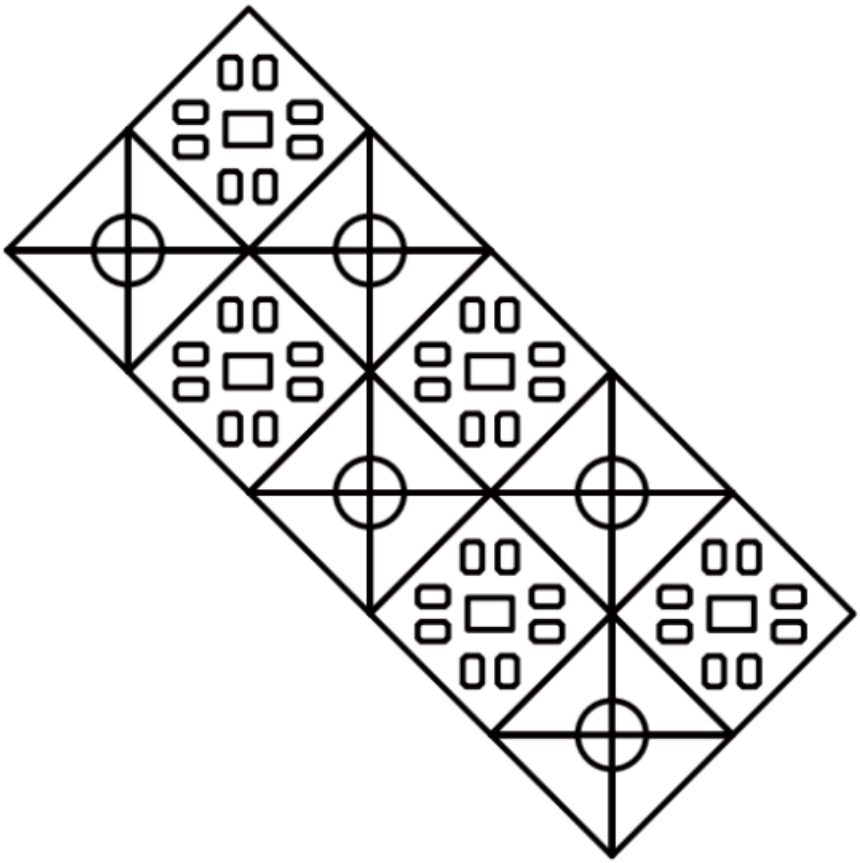




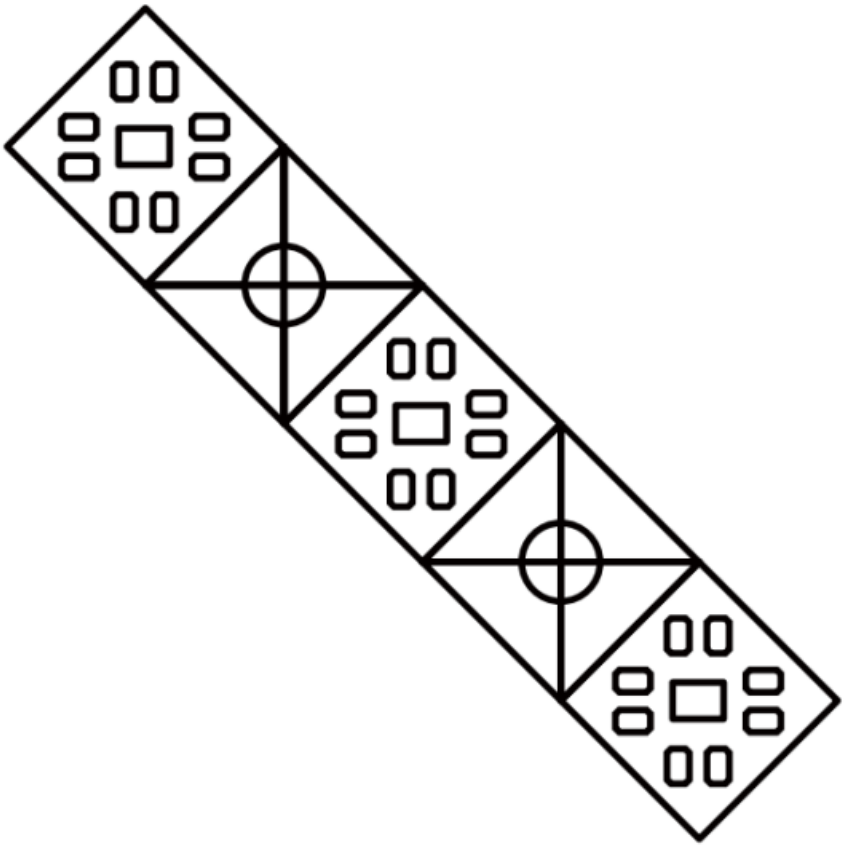
- stepped diagonal line



- smooth diagonal line

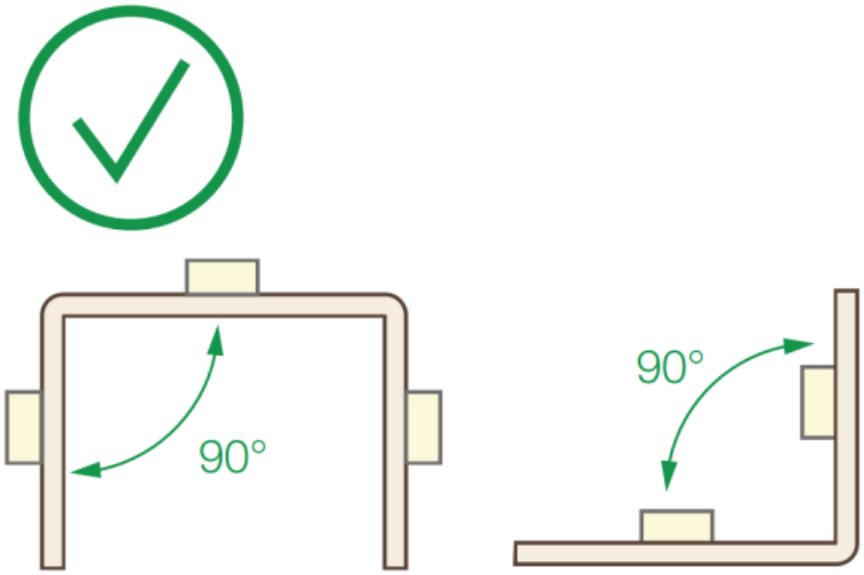


- **single diagonal line**

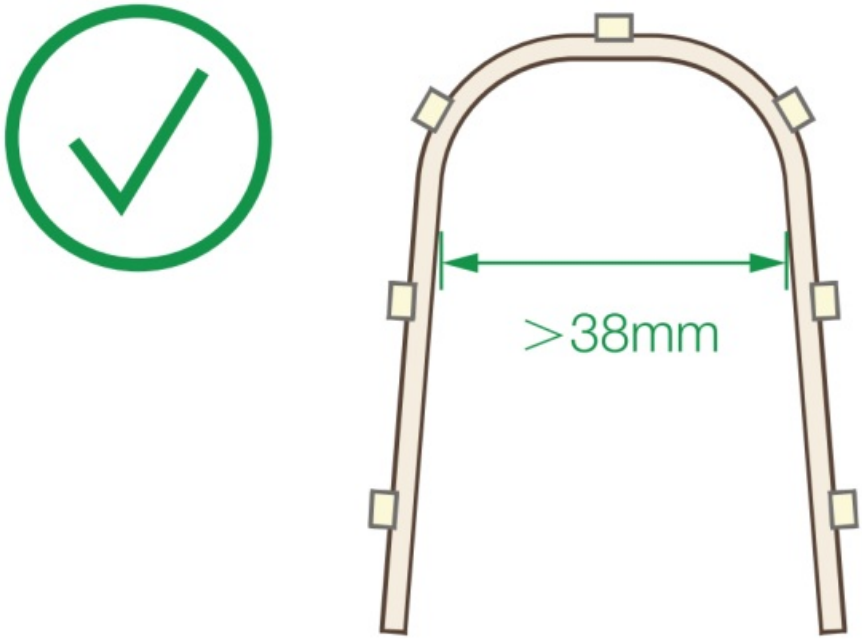


LED SHEET FLEXIBILITY

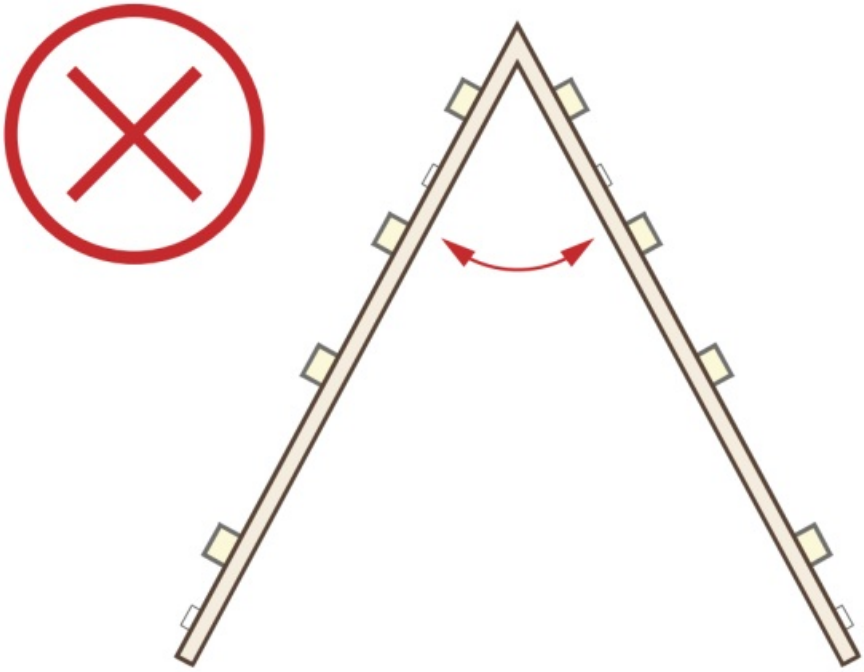
- Hard bends can be ma de up to 90° in either direction



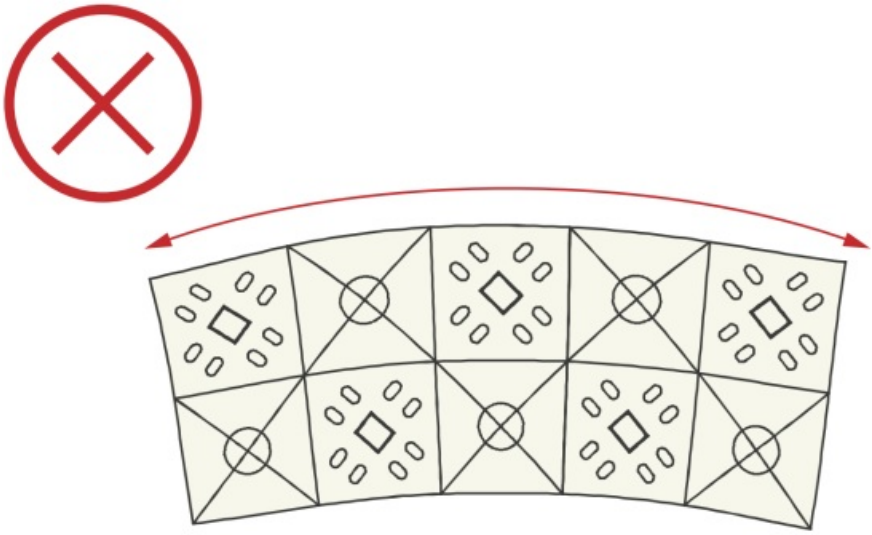
- Soft bends less than 15. in may damage circuit traces and void warranty.



- Bending strips sheets or sections at sharp angles will damage circuit traces and void warranty.

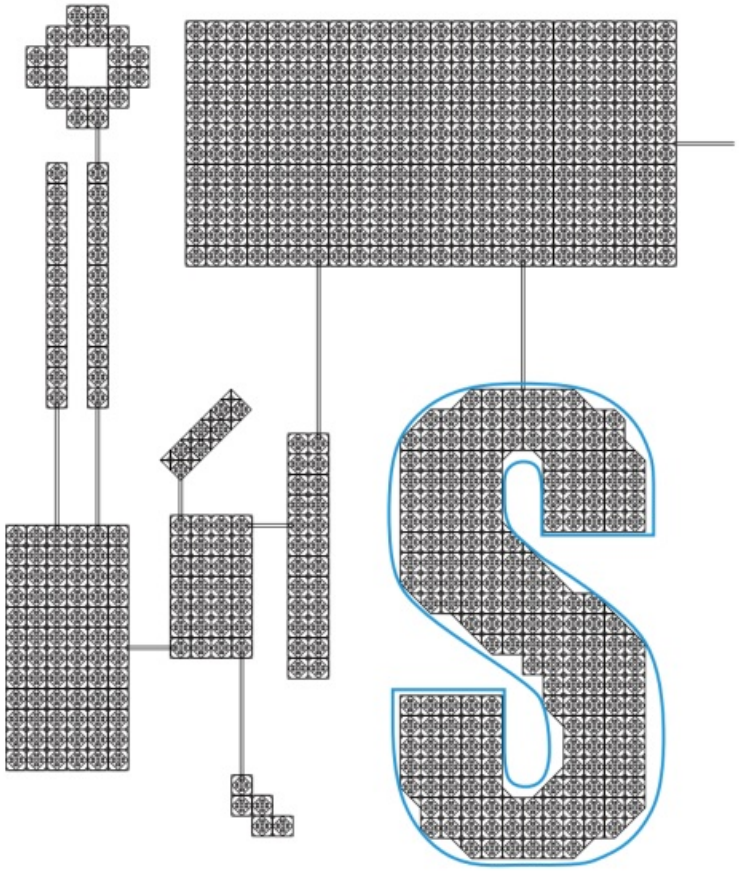


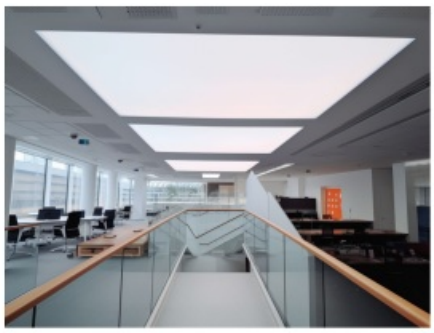
- Bending strip sheets or sections on horizontal plane will damage circuit traces and void warranty.

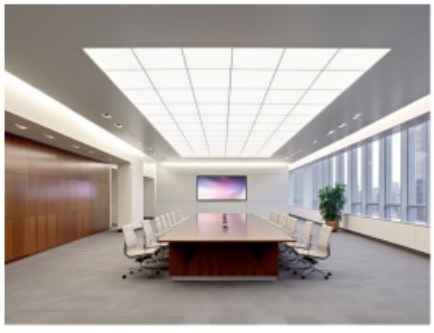


Applications

Below are examples of the types of shapes and patterns that ca n be made and linked as needed to fit nearly any application. The only limiting factor is max run, which can be easily extended by connecting additional power supplies 3. Additional power supplies can connect to any individual square LED segment anywhere in the run for maximum flexibility.








NOTES

- Before use, please check whether the product has been damaged during transportation. If it is damaged, please do not install it;
- Please check the voltage range before use, and select the right power supply for use;
- Best working environment temperature: -20°C~+50°C;
- Best storage environment temperature: -25°C~+60°C; It is recommended to install the product in a place with good ventilation and heat dissipation.
- Because the sealed space will affect the heat dissipation of the product;
- Please turn off the power supply during installation, and then turn on the power after installation.
- Do not touch the product during use;
- Pay attention to ESD prevention during installation and use; It can be used indoors or outdoors according to the different waterproof levels of the product;
- During use, please avoid looking directly at the luminous body with your eyes;
- Please strictly follow the product parameters and instructions when use.

CUSTOMER SUPPORT

Web: www.ledyi.com | **Mail:** sales@ledyi.com | **Tel.:** +86 0755 2302 5890

Documents / Resources

	**LEDYI FLEX LED SHEET Customizable Backlight Panel** [pdf] Instruction Manual LY420-LS2835W27-24V-Ra90-11W, LY420-LS2835W30-24V-Ra90-22W, LY420-LS2835W40-24V-Ra90-33W, LY420-LS2835W65-24V-Ra90-33W, FLEX LED SHEET Customizable Backlight Panel, FLEX LED SHEET, Customizable Backlight Panel, Backlight Panel, Panel

References

- **User Manual**