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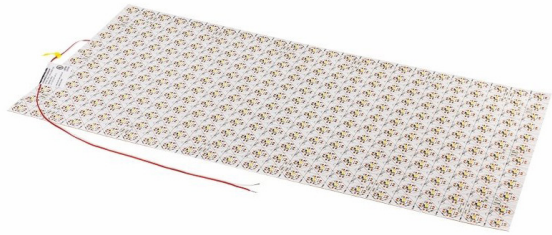
Single CCT LED Sheet

Flexible LED Sheet Specifications

Project _____

Date _____ Type _____



LLS-B-AxK80-C1A-30A01-24V

Voltage 24 VDC | 120° Beam Angle | CRI 80+ | PWM Dimming | 7 yr WARRANTY

Available Models[1]

- ☐ LLS-B-A27K80-C1A-30A01-24V
- ☐ LLS-B-A30K80-C1A-30A01-24V
- ☐ LLS-B-A35K80-C1A-30A01-24V
- ☐ LLS-B-A40K80-C1A-30A01-24V
- ☐ LLS-B-A50K80-C1A-30A01-24V
- ☐ LLS-B-A65K80-C1A-30A01-24V

SAMPLE PART NUMBER BREAKDOWN LLS-B-A27K80-C1A-30A01-24V

Series	Type	CCT	CRI	LED Type	LEDs/Segment	IP Rating	Wattage	LEDs/Sheet	Sheet Size	Voltage
LLS-B	A	27K	80	C	1	A	30	A	01	24V
Strip Sheet	Single White	27K: 2700K 30K: 3000K 35K: 3500K 40K: 4000K 50K: 5000K 65K: 6500K	80+	2835 SMD	1 LED/seg	IP20	30W	288 LEDs	18.9x9.45 in.	24 VDC

Overview

Trim to fit a unique shape and wrap corners with LLS series LED Light Sheet. This flexible sheet contains 24 x 12 rows that can be segmented in any shape simply by cutting along the horizontal, vertical, or diagonal black lines. A high density of LED chips ensures even light distribution, even in signs or backlighting with low clearance. To install, use the 3M™ adhesive backing or fasten it with screws[2] at the indicated spots.

Features

- Bendable, cuttable LED sheet – customize for complex shapes
- High density ensures uniform light, even in shallow light boxes
- Thin and bendable for application even in low-clearance spaces
- Use the 3M™ adhesive backing for easy installation

Product Details

- Segment size: 0.79” x 0.79” - 288 segments per sheet
- Max Run with Class 2 wiring: 3 sheets
- Dimensions: 18.9” x 9.45”
- Enclosed fixture rated 30 mm
- IP20, suitable for dry conditions
- 50000 hours L70 lifespan
- PWM dimmable
- 24 VDC

Certifications and Compliances

- UL Listed - UL 2108 (IFDR)

UL LISTED

Applications

- Backlighting
- Channel Letters
- Displays
- Retail Shops
- Showcases
- Sign Lighting
- Translucent Materials

Warranty

- 7-year warranty

[1] Contact customer service for additional options.
[2] Fasteners must have a flat bottom on the head to avoid damage to the sheet.

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Rev V1.1 Date: 12/05/2025
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SPECIFICATIONS	
Model	**LLS-B-AxK80-C1A-30A01-24V**
PHOTOMETRIC	
CCT	2700K, 3000K, 3500K, 4000K, 5000K, or 6500K (as ordered)
Lumens per Sheet	3060
Efficacy	102 lm/W
CRI	80+
Beam Angle	120°
ELECTRICAL	
Operating Voltage	24 VDC
Wattage	30 Watts
Current Draw	1.3A
Dimmer Type	PWM
MECHANICAL	
Dimensions	18.9 in. x 9.45 in.
Segment Size	0.79 in. x 0.79 in. (20 mm x 20 mm)
Segments Per Sheet	288
LEDs per Segment	1
LED Type	2835 SMD
Max Run[2] (Class 2)	3 Sheets
Input Connection	Pigtail
Wire Length	19 in.
LED Lifetime	50000 hours
ENVIRONMENTAL	
Enclosed Fixture Rated	Yes
IP Rating	IP20
Environmental Rating	Suitable for Dry Locations, Indoor Only
Ambient Operating Temperature	-20 to 60°C (-4 to 140°F)

[2] Max run listed is using one power supply connected at one end of the run.

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Dimensional Drawings

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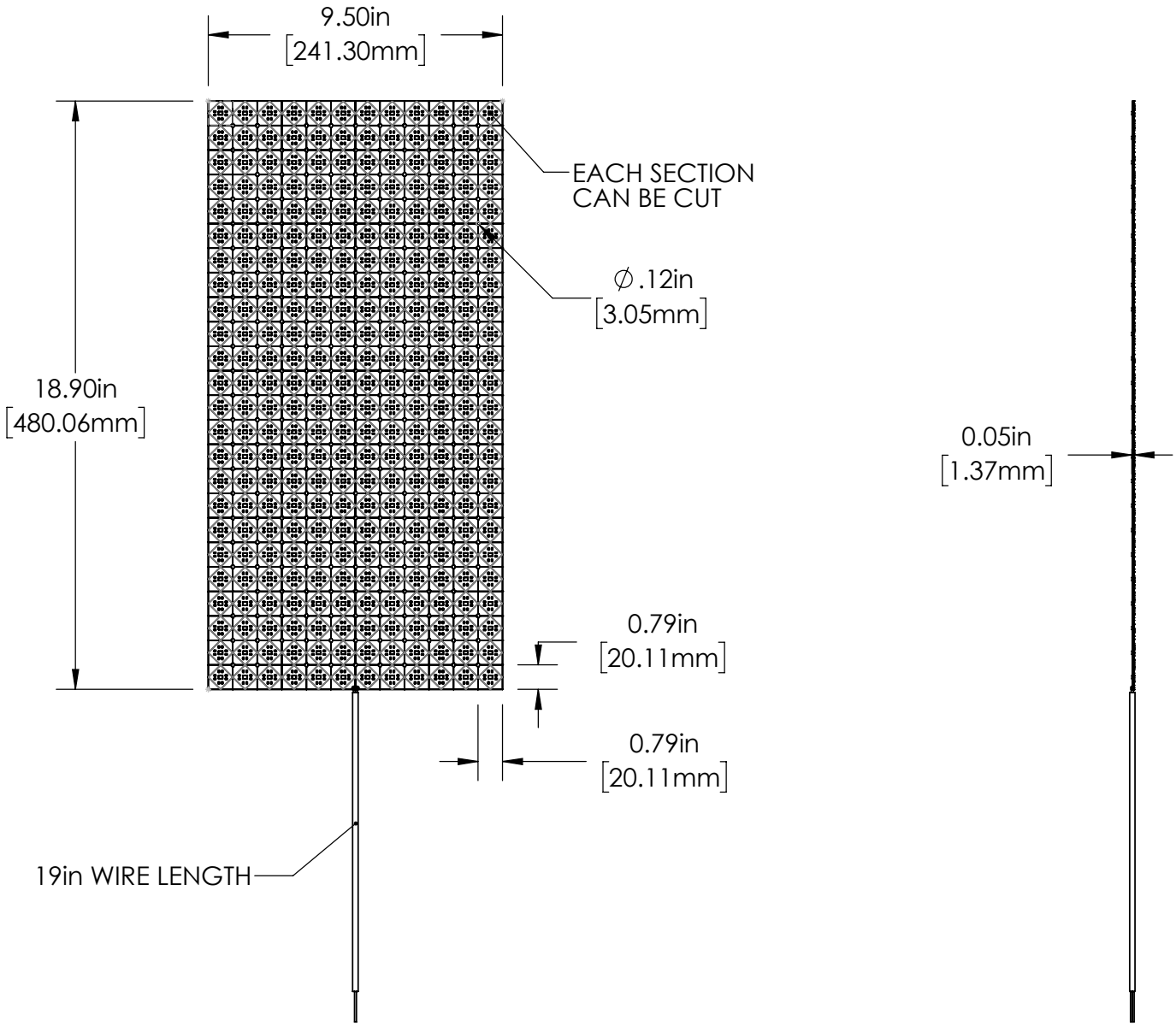

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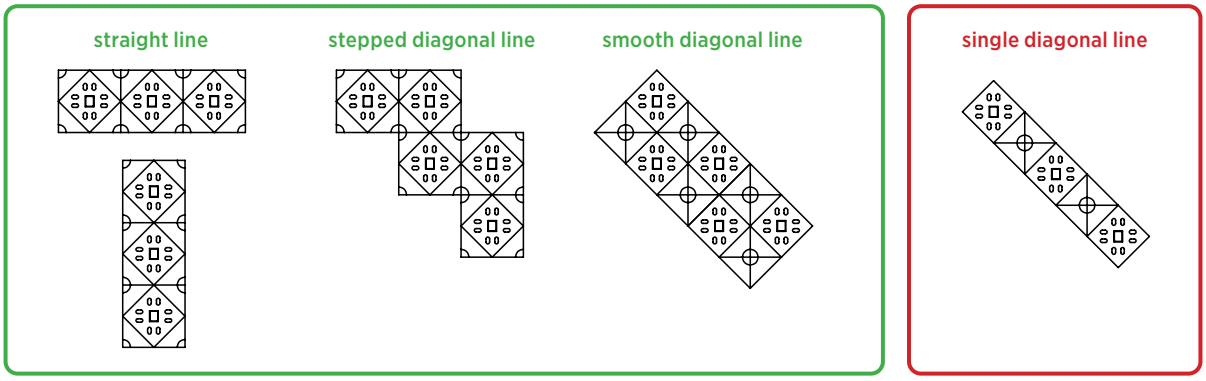
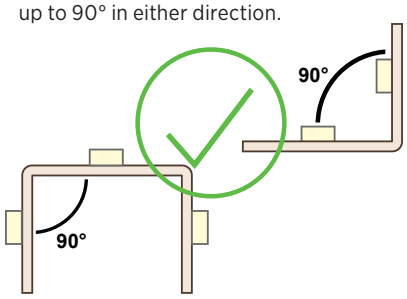
Cutting Segments

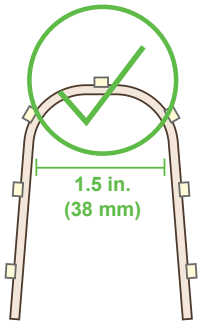
Strip sheets can be cut into many custom shapes. Cut using only the pre-marked cut lines on the sheet. Using the cut lines is essential to maintaining the integrity of electrical contacts. The images below represent the minimal linear routing configurations. The green box represents strip routing layouts 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.



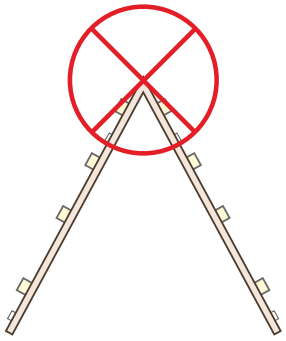
Strip Flexibility

Hard bends can be made up to 90° in either direction.



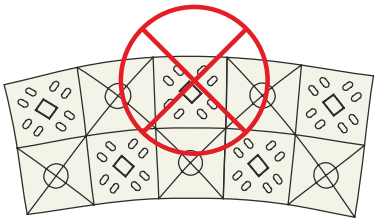


Soft bends less than 1.5in. may damage circuit traces and void warranty.



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.



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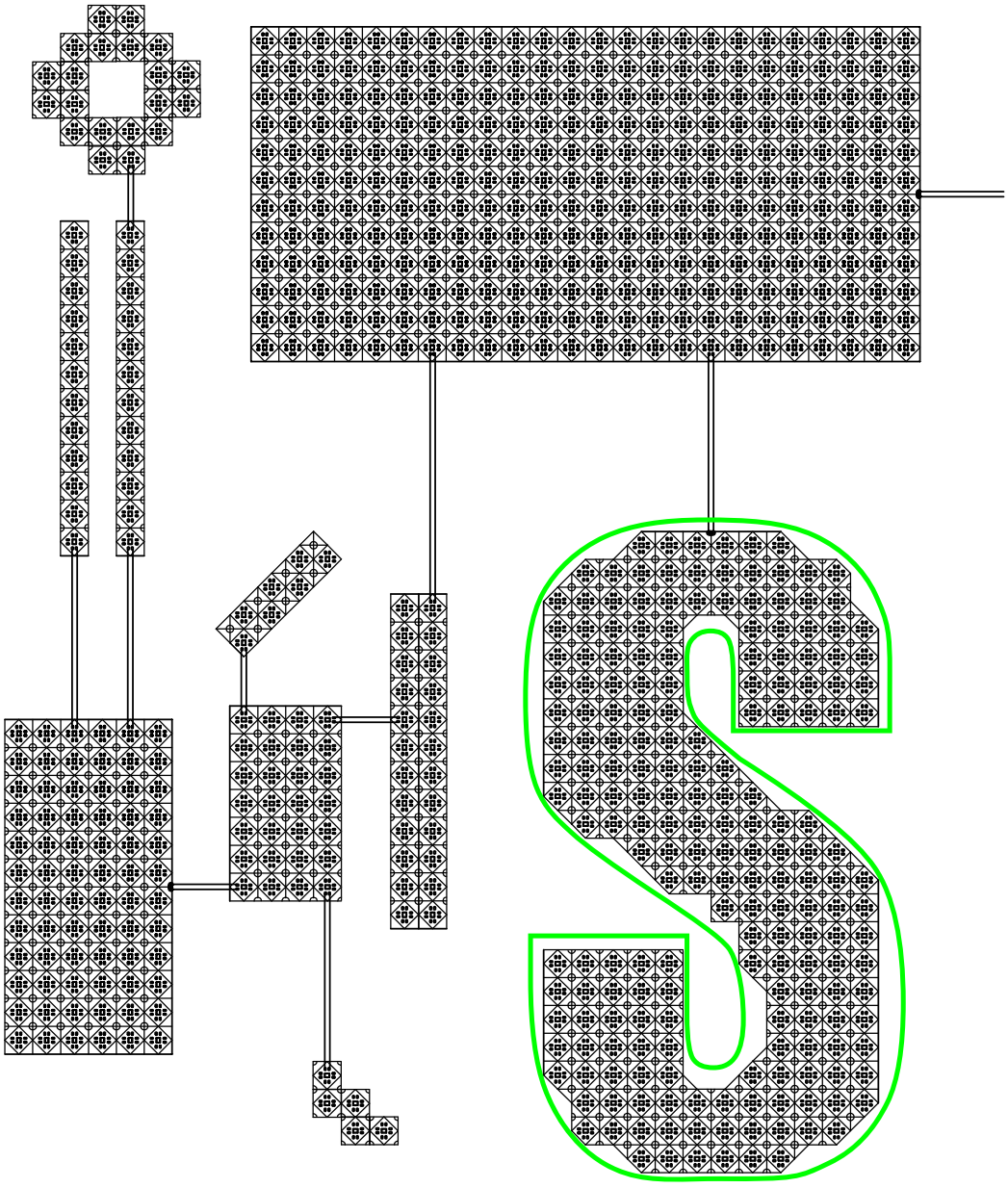
Application

Below are examples of the types of shapes and patterns that can be made and linked as needed to fit nearly any application. The only limiting factor is max run (see spec table), which can be easily extended by connecting additional power supplies[5].

Additional power supplies can connect to any individual square LED segment anywhere in the run for maximum flexibility.



[5]When multiple power supplies are connected to one run, each power connection requires a separate controller. This type of application requires controllers with synchronize capabilities.

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