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LLS Series LED Light Sheet
RGB+CCT Flexible LED Sheet Specifications

Project_____

Date_____Type_____

Voltage 24 VDC

RGB+ Tunable White

CRI 90+

IP20

5yr WARRANTY

SAMPLE PART NUMBER BREAKDOWN   **LLS-G90-AC36A-50C02-24V**

Series	Type	CRI	LED Type	LEDs/Segment	IP Rating	Wattage	Density	Sheet Size	Voltage
LLS	**G**	**90**	**AC**	**36**	**A**	**50**	**C**	**02**	**24V**
Strip Sheet	RGB+CCT	90+	5050+2835 SMD	36 LEDs/seg	IP20	50 watts	864 LEDs/sheet	24x12in. (610x305mm)	24 VDC

Overview
The LLS Series Flexible RGB+Tunable CCT LED Light Sheet can be cut to fit unique shapes and wrap corners in channel letters, displays, and sign lighting. Each sheet features 864 high-density LEDs for bright, uniform illumination, dynamic RGB color-changing, tunable white (2700K–6500K), and dimming capabilities. The 90+ high CRI provides accurate color rendering for display applications. Each 24" x 12" flexible sheet is divided into 24 segments, each measuring 6" x 2" and containing 36 LEDs. Apply the sheet by exposing the 3M™ adhesive backing or fastening it with screws at the indicated spots.

Note: Using only the pre-marked lines when cutting the sheet is essential to maintaining electrical contact.

Features
• RGB + tunable white (2700K-6500K)
• Color-changing and dimming options
• 90+ CRI for vibrant and accurate color rendering
• Flexible and cuttable design for versatile applications

Product Details
• Enclosure rated: Min. 1.18" (from LEDs to diffuser)
• Max run[3] (Class 2): 2 Sheets
• 19" pigtail connection
• PWM Dimmable
• 120° beam angle
• 24 VDC input

Certifications and Compliances
• UL Listed - UL 2108 (IFDR)

UL LISTED

Applications
• Backlighting
• Billboards
• Channel Letters
• Displays
• Photography Lighting
• Retail Shops
• Showcases
• Sign Lighting
• Translucent Materials

Warranty
• 5-year warranty

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Rev V2.2 Date: 04/24/2025
Specifications are subject to change without notice.

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Specifications

Model	LLS-G90-AC36A-50C02-24V
PHOTOMETRIC	
LED Color	RGB+Tunable CCT
Color Temperature	Tunable CCT (2700K-6500K)
Lumens per Sheet	Up to 1160 lumens (white LEDs only)
Efficacy	116 lm/W
CRI	90+
LED Beam Angle	120°
ELECTRICAL	
Input Voltage	24 VDC
Wattage	50 watts/sheet (3.3 watts/segment)
Current Draw	2A
Dimmer Type	PWM
MECHANICAL	
Max Run (Class 2)[3]	2 Sheets
LED Type	2835 SMD, 5050 SMD
LEDs per Segment	36
Input Connection Type	Pigtail
LED Lifetime	50000 hours
ENVIRONMENTAL	
IP Rating	IP20
Environmental Rating	Non-weatherproof, Suitable for Dry Locations
Ambient Operating Temperature	-20 to 45°C (-4 to 113°F)

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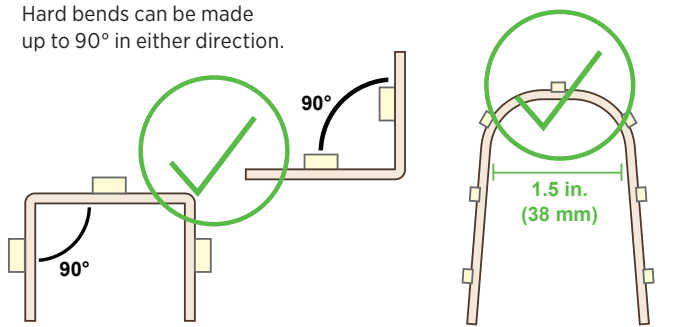F 314.972.6202
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Dimensional Drawings

12.00in
[304.80mm]

.08in
[1.99mm]

EACH SECTION CAN
BE CUT INDIVIDUALLY

24.00in
[609.60mm]

6.00in
[152.40mm]

2.00in
[50.80mm]

3M ADHESIVE TAPE

18in WIRE LENGTH
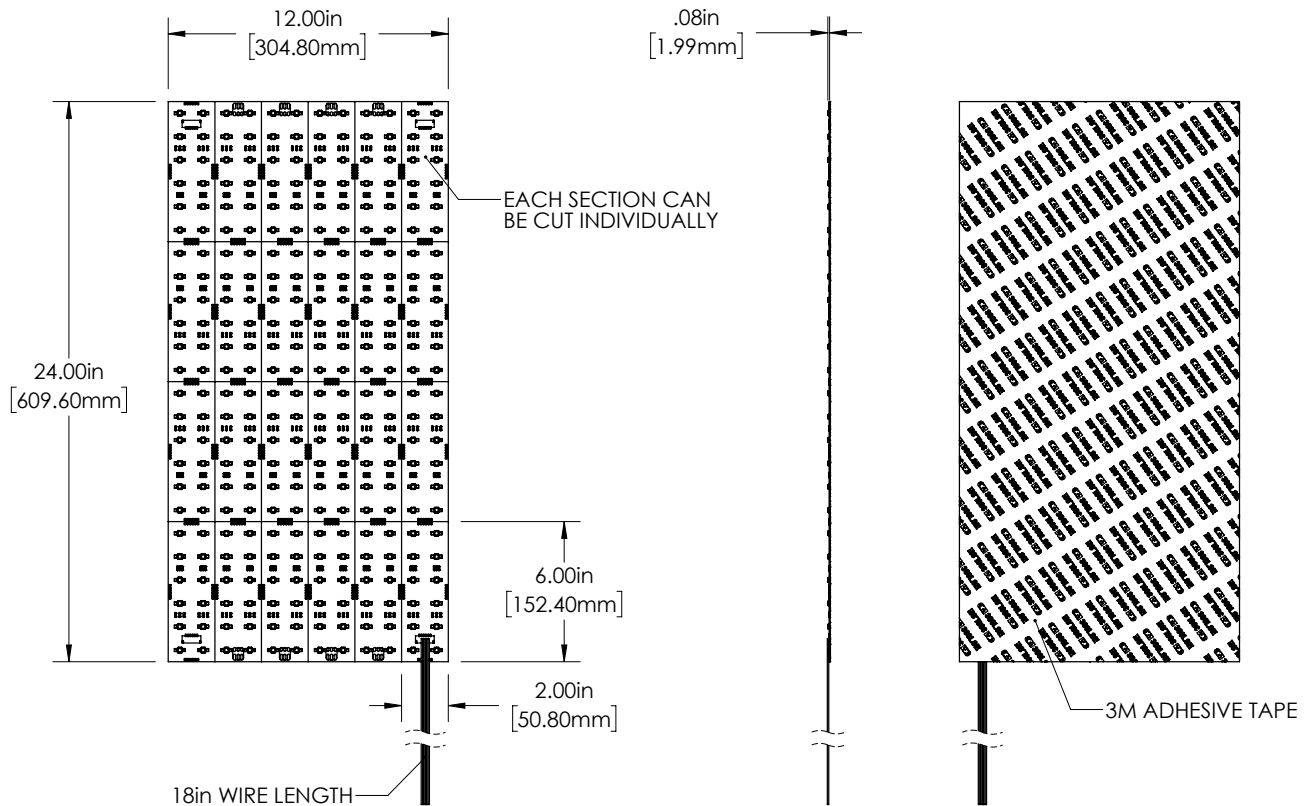
Strip Flexibility

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

90°

90°

1.5 in.
(38 mm)

Soft bends less than 1.5 in.
may damage circuit traces
and void warranty.
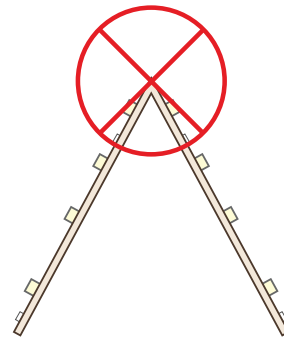
Bending strips sheets or sections
at sharp angles will damage circuit
traces and void warranty.

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