High CRI Flexible LED Sheets

RGB+W IP64 Light Sheet Specifications

Project _____

Date _____ Type _____

Voltage 24 VDC | RGB+W | High CRI 90+ | IP64 | 7 yr WARRANTY

Available Models[1]

- ☐ LLS-B-D40K90-C4C-49C02-24V
- ☐ LLS-B-D50K90-C4C-49C02-24V
- ☐ LLS-B-D65K90-C4C-49C02-24V

SAMPLE PART NUMBER BREAKDOWN LLS-B-D40K90-C4C-49C02-24V

Series	Type	CCT	CRI	LED Type	LEDs/Segment	IP Rating	Wattage	LEDs/Sheet	Sheet Size	Voltage
LLS-B	D	40K	90	C	4	C	49	C	02	24V
Strip Sheet	RGB+W	40K: 4000K 50K: 5000K 65K: 6500K	90+	2835 SMD	4 LED/seg	IP64	49 Watts	800 LEDs	24 x 12in.	24 VDC

Overview

The RGBW LED Light Sheet is thin and flexible, making it easily customizable and adaptable for backlighting, light boxes, and signage in damp locations. They are IP64 rated for use in damp locations such as bathrooms, bars, outdoor signage, and under-counter lighting. A compatible controller can be used to select from a range of RGB colors or a single white CCT (as ordered: 4000K, 5000K, or 6500K). There are 200 segments per sheet. To customize, cut along the solid lines to shape as needed. With a 90+ high CRI, the sheet produces eye-catching displays with high-quality color rendering and saturation. For enclosed installations, the sheet requires a minimum clearance of 1.18 in. (30 mm) for proper heat management.

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

Features

- IP64 protection against moisture and humidity
- Bendable and cuttable sheet adapts to complex shapes
- Control a range of RGB colors and static white
- High 90+ CRI produces accurate color rendering
- Class 2 Max Run: 3 Light Sheets

Product Details

- Segment size: 1.2 x 1.2 in. (30.5 x 30.5 mm)
- Enclosed fixture rated 30 mm
- IP64, suitable for damp conditions
- PWM dimmable
- 24 VDC input

Certifications and Compliances

- UL Listed - UL 2108 (IFDR)
- CE compliant

UL LISTED CE

Applications

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

Warranty

- 7-year warranty

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https://www.superbrightleds.com
email: commercial-sales@superbrightleds.com

[1]Contact customer service for additional options.

Rev V1.0 Date: 09/17/2026
Specifications subject to change without notice

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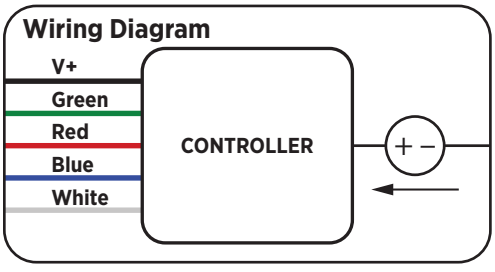
SPECIFICATIONS	
Model	**LLS-B-DxK90-C4C-49C02-24V**
PHOTOMETRIC	
CCT	4000K, 5000K, or 6500K (as ordered)
Lumens per Sheet	3150 Lumens
Efficacy	64 lm/W
CRI	90+
Beam Angle	120°
ELECTRICAL	
Operating Voltage	24 VDC
Wattage	49 Watts
Current Draw	2 A
Dimmer Type	PWM
MECHANICAL	
Dimensions	24 in. x 12 in.
Segment Size	1.2 in. x 1.2 in. (30.5 mm x 30.5 mm)
LEDs per Sheet	800
LEDs per Segment	4
LED Type	2835 SMD
Max Run[2] (Class 2)	3 Sheets
Input Connection	Pigtail
Wire Gauge	20 AWG
Wire Length	19 in.
LED Lifetime	50000 hours
ENVIRONMENTAL	
Enclosed Fixture Rated	Yes
IP Rating	IP64
Environmental Rating	Suitable for Damp Locations
Water Resistance	Water Resistant
Ambient Operating Temperature	-20 to 60°C (-4 to 140°F)

Wiring Diagram



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

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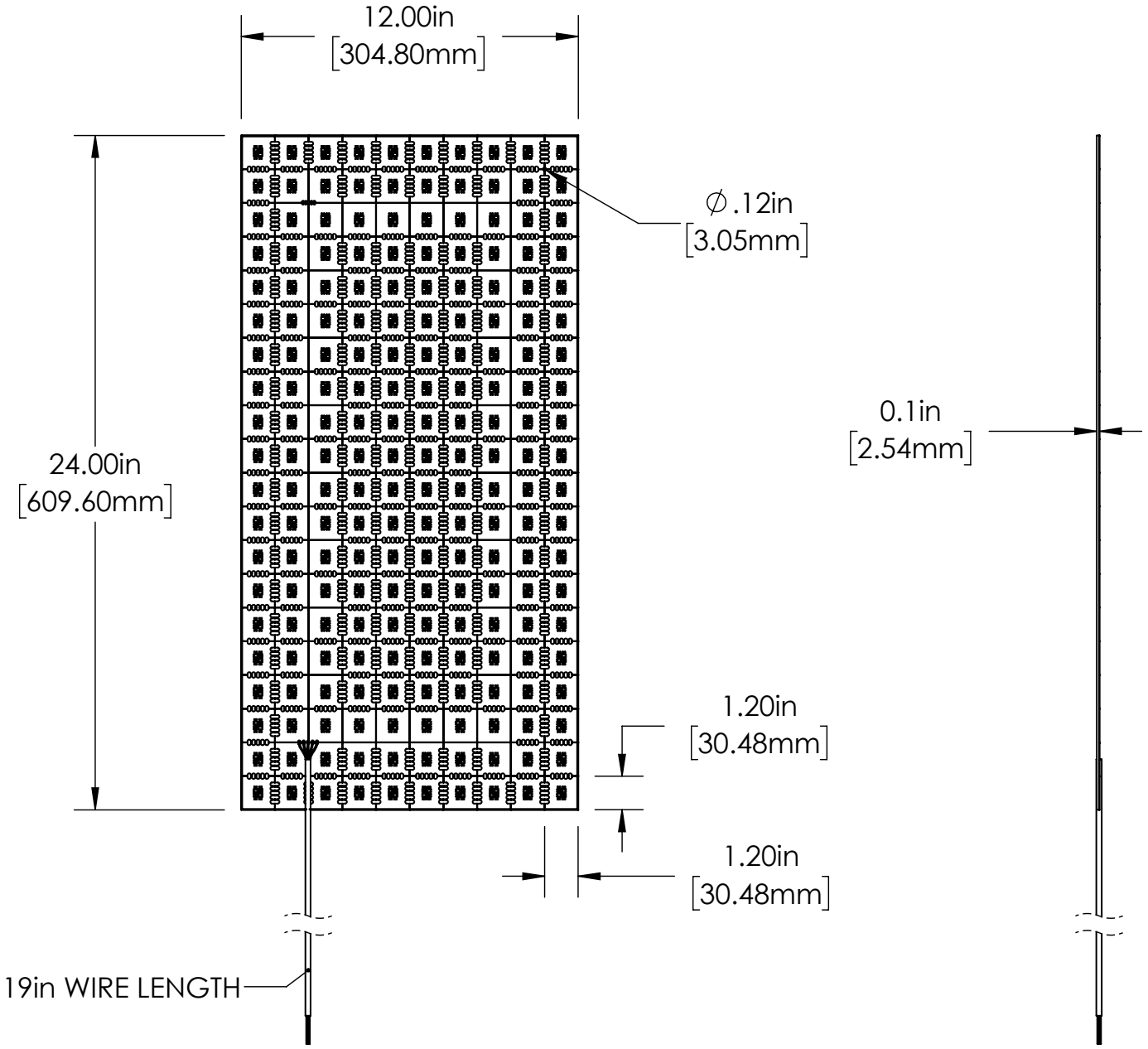
Dimensional Drawings

LLS-B-DxK90-C4C-49C02-24V



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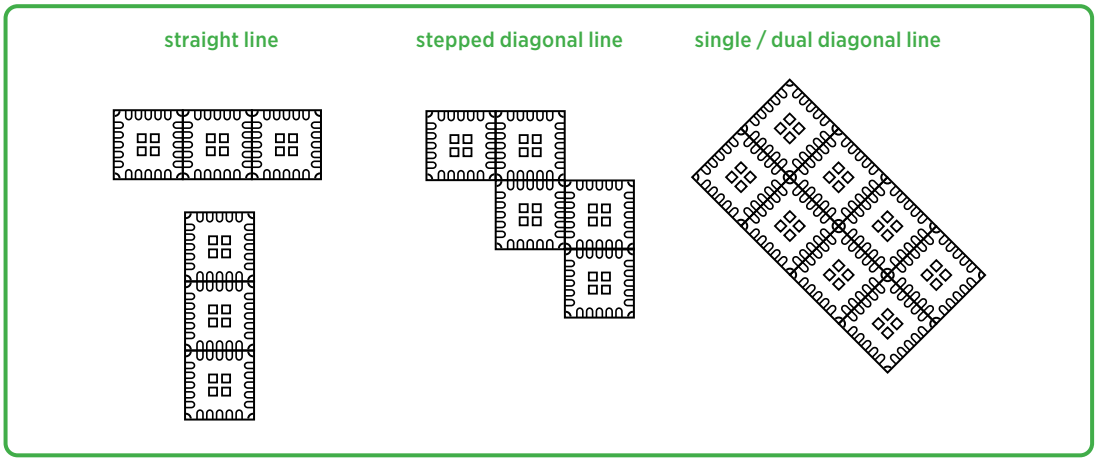
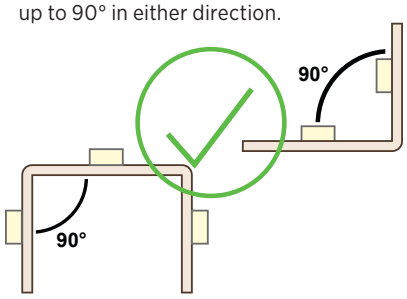
Cutting Segments

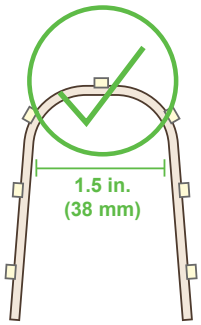
Strip sheets can be cut into many custom shapes. Cut using only the pre-marked cut lines on the sheet. Using the cut lines is essential to maintaining the integrity of electrical contacts. Images below show minimal linear routing configuration examples that work by preserving the electrical connection.



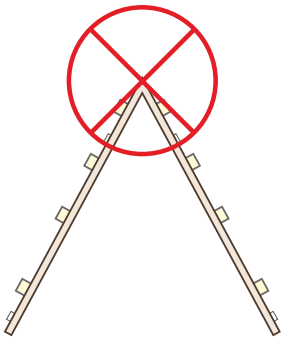
Strip Flexibility

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



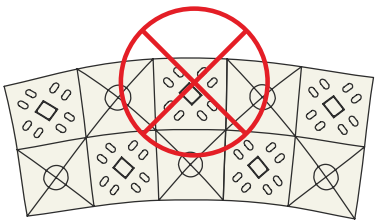


Soft bends less than 1.5in. may damage circuit traces and void warranty.



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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