

## Back-Lighter Series

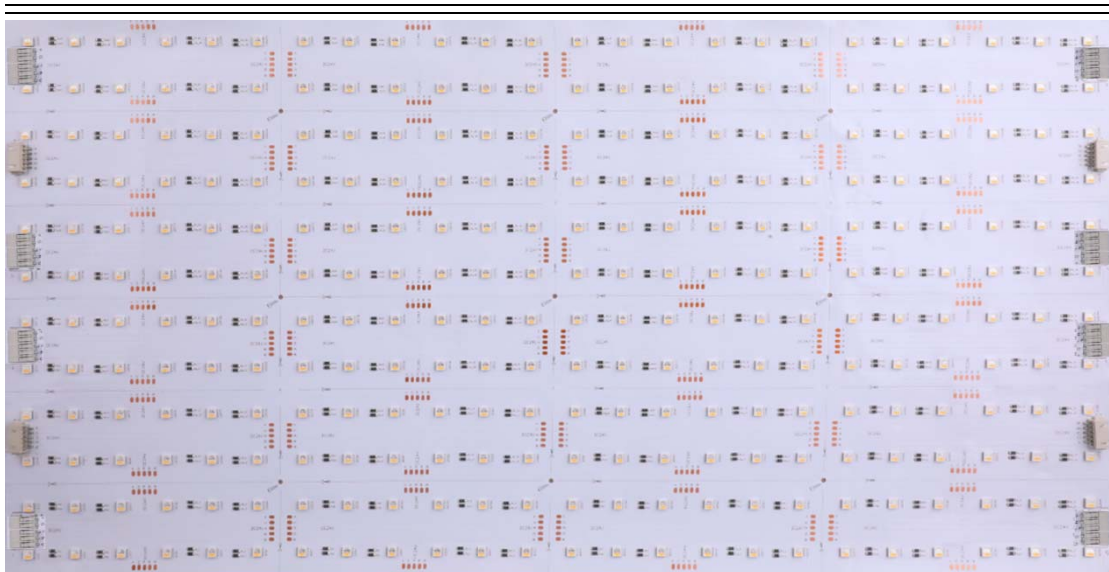
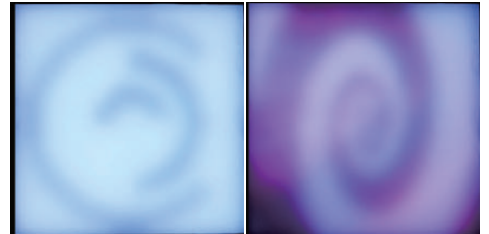
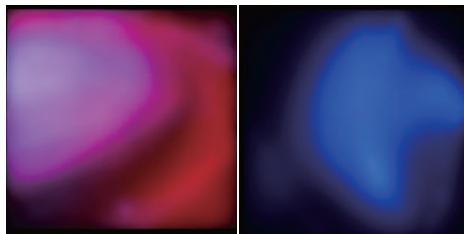
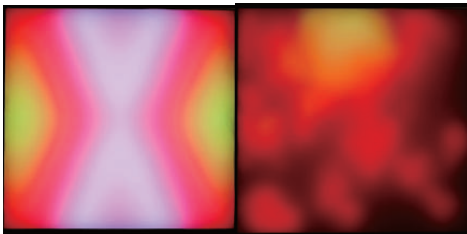
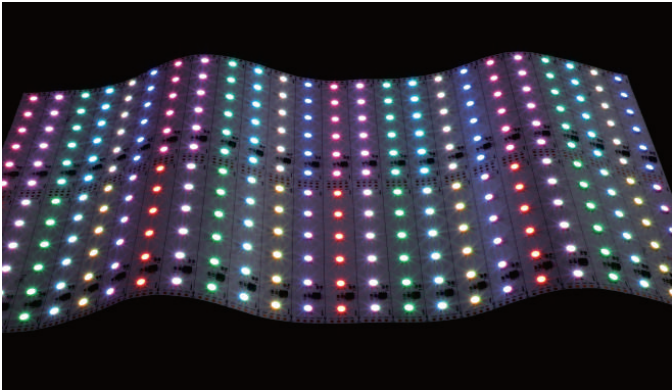
## LED RGBW Flexible Sheet

### Features

The Backlight Series uses high quality LEDs and allows flexible cutting into multiple shapes such as lines, squares, rectangle, circular, "L", "T", "S", or "+" shapes; customization is endless! Customization is possible by every 12 LEDs, and it offers on-site board-to-power or board-to-board split joint. Convenient for advertising board applications due to the on-board connector and additional soldering processing (4-directional solder pads designed on each unit for both square and diamond shape). 3M tape on backside is standard for installation and for applying on any flat or curved mounting surface. Staple guns and/or nails can also be applied for further security due to the inside open circles being a "non-electrified" area where it can be stapled through.

### Applications

The SBLS is engineered for flat or curvy, space-sensitive, back-lighting applications. It is perfect for back-lighting projects where a lighting solution that is both thin and bendable may be needed to fit into soft and/or curving surfaces and spaces. The SBLS is also engineered to serve as the back-light for translucent stone, showcase, shelf, billboard, signage with features of small size and thin width.



# LED Flexible Sheet

## Specification

Part No.	Dimension (L*W*H)	IP Rating	Lumen Flux (all) +-10%	Lumen Flux (red) +-10%	Lumen Flux (green) +-10%	Lumen Flux (blue) +-10%	Lumen Flux (white) +-10%
SBLS-35-RGBW-24V	610*305*2.5mm [24*12*0.1in.]	IP54 Thin [damp]	3750*95%lm/sheet 160*95%lm/unit piece 20400*95%lm/m2 [1880*95%lm/ft2.]	630*95%lm/sheet 26*95%lm/unit piece 3470*95%lm/m2 [320*95%lm/ft2.]	630*95%lm/sheet 26*95%lm/unit piece 3470*95%lm/m2 [320*95%lm/ft2.]	280*95%lm/sheet 12*95%lm/unit piece 1520*95%lm/m2 [140*95%lm/ft2.]	1620*95%lm/sheet 68*95%lm/unit piece 8780*95%lm/m2 [810*95%lm/ft2.]

## General Parameters

## Photoelectric Parameters

Dimension	Sheet: 2'x1' (L610mm*W305mm), Unit Piece 6"x2" (L152.4mm*W50.8mm) (Wago or XH Female Connector for options) Total Height with On-Board Wago Female Connector: 0.26" (6.5mm) Total Height with On-Board XH Female Connector: 0.31" (8mm)	Power±10%	Sheet: 160W (15W/color), Unit Piece: 2.5W 30W/ft <sup>2</sup> , [330W/m <sup>2</sup> ] (Equated to 4.9W/ft [16W/M], base on Min. cutting row)
Operating Ambient	Ta: -20~45°C[-4~113°F]	Input Voltage	24VDC
LED Type	SMD5050 RGBW 4in1	LED Current	52mA/LED (13mA/color)
LED Pitch	1"x1" (L25.4xW25.4mm)	CRI	W: Ra≥80 & 90
PCB Type	2oz white FPC, OSP	SDCM	ErP & ANSI Norm, 5 step
LED QTY	Sheet: 24(Row)*12(Column)=288pcs, Unit Piece: 12pcs (Equated to24LED/ft (79LED/M) based on Min. Cutting Row)	LED CCT & Wavelength	R: 620~625nm, G: 520~525nm, B: 460~467nm, W: 2700k-6500k
Warranty	5 years	Beam Angle	120°
Lifespan	50kh (L70B50@Tc<65°C, Tc is temperature of LED pin)	Dimming Method	PWM (dimmable driver like RF, Bluetooth, 0/1-10V, Triac, DALI, DMX, WIFI, etc.)
Certification	CE, UL, RoHS		
Rated Current/Power	Sheet: 10A/240W, (Wago or XH Female Connector for options) On-Board XH Female Connector: 3A/24V (Available for AWG22 Cable) On-Board Wago Female Connector: 6A/24V (Available for AWG22-18 Cable)	Max. Load Sheet QTY	3pcs (for 240W), 1pcs (for 100W)

## Notes

Note 1: Luminous flux for CCT 2700K is 10% lower, for CCT 3000K/3500K is 5% lower, for CCT 5000K/6500K is the same, compared with 4000K.

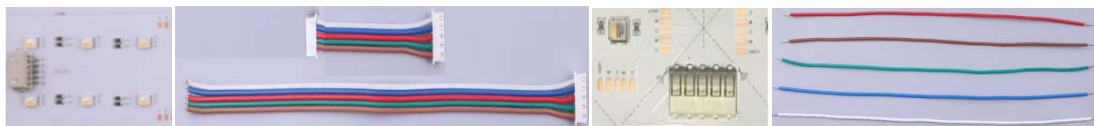
Note 2: Applying with extra heat sink is not necessary with self-cooling capacity

Note 3: 3M 300LSE yellow adhesive tape attached on backside, is standard configuration of Plus Series.

Note 4: (1) With XH connector: Split joint of sheet-to-sheet or sheet-to-power supply in soldering-free, using 4pcs on-board XH 5-pins female connectors (2pcs on each short side, L=300mm[11.8in.] AWG22 brown/green/red/blue/white power cable with male plug in one end, and L=50mm[1.97in.] AWG22 brown/green/red/blue/white extension cable with male plug in two ends.

(2) With Wago connector: Split joint of sheet-to-sheet or sheet-to-power supply in soldering-free, using 16pcs on-board Wago 2-pins/3-pins female connectors (8pcs on each short side, L=300mm[11.8in.] AWG18 brown/green/red/blue/white power cable and L=50mm[1.97in.] AWG18 brown/green/red/blue/white extension cable.

(3) Without connector: Split joint of sheet-to-sheet or sheet-to-power supply by soldering process.



Note 5: Transparent ESD bag, is standard configuration of Plus Series.

Note 6: 3M tape on backside is a standard configuration for installation, applying to any flat or curved mounting surface. Staple gun or nails can also be applied for further secure, through the diagram of circular screw hole.

Note 7: Flexible cut to be desired shape following any solid lines in the direction of horizontal and vertical.

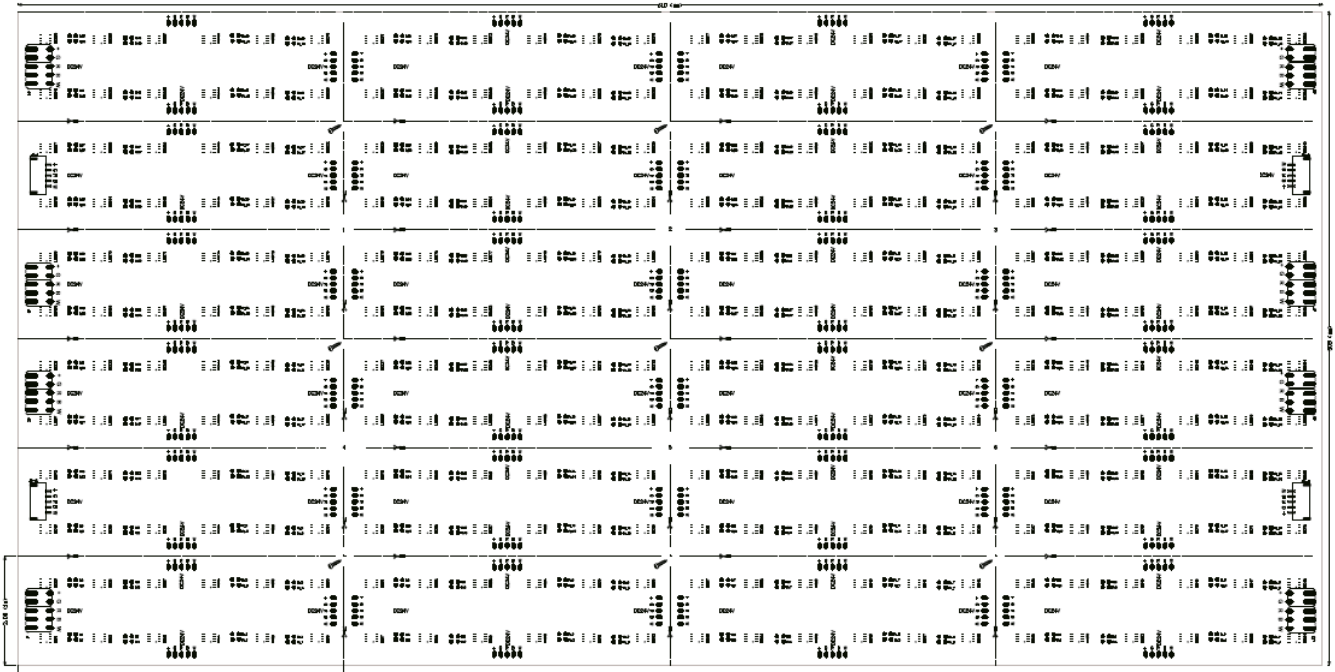
Note 8: In order to get uniform area light without light-spot, the distance between light sheet and sign should be ≥38mm[1.5in.], means 1.5 times of LED pitch. (Measured with a milky PC sheet in 2mm thickness and 50% light transmittance).

## LED Flexible Sheet

### Technical Drawing

Unit: mm [in.]

2 [0.08]



## LED Flexible Sheet

### Ordering Information

MODEL	COLOR	VOLTAGE
SBLS-35	RGBW	24
	RGBW	24 Volt DC

### Accessories

FS-SLBS-RGBW-WL

Wire lead connector



FS-SLBS-RGBW-JC

Jumper

FS-SBLS-RGBW-BFC

Bare wire connection



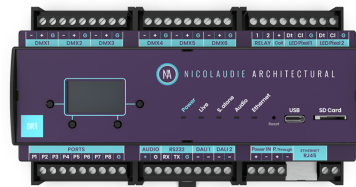
NIC-DMX-STICK-DE3

For up to 2 runs, 512x2 channels



NIC-DMX-DINA-DR1

Up to 6 runs on 1 device, 3172 channels



### Recommended Power Supplies

Dimmable with 0-10v, ELV, MLV, TRIAC

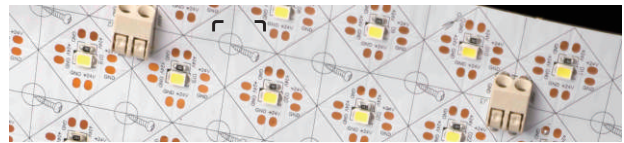
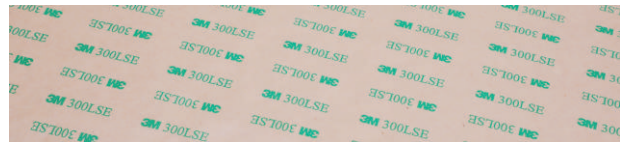
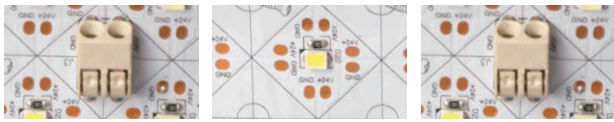
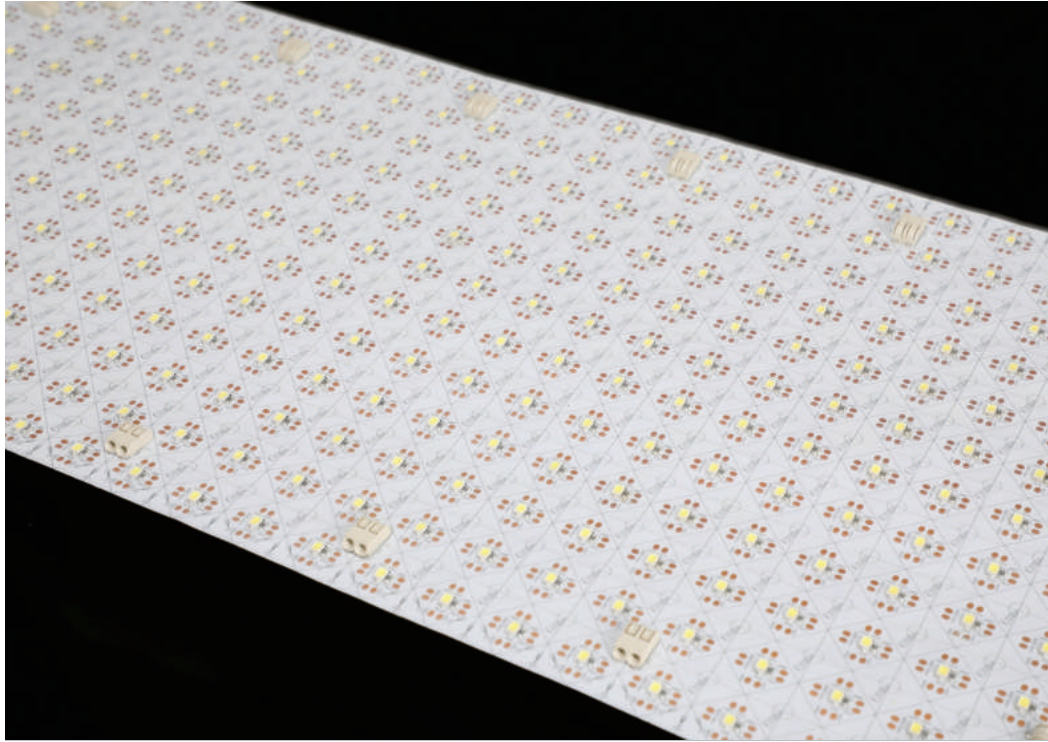


Item Number	Description	Max/Min Load	Input Voltage	Output Voltage	Dimmable	Dimensions
PS-TSLC-UNV-24V-30WDHV2	30W	30W / 3W	100-277V AC	24V DC	Yes*	6.49"L x 3.6"W x 1.02"H
PS-TSLC-UNV-24V-60WDHV2	60W	60W / 6W	100-277V AC	24V DC	Yes*	7.4"L x 3.6"W x 1.02"H
PS-TSLC-UNV-24V-96WDHV2	96W	96W / 9.6W	100-277V AC	24V DC	Yes*	8.66"L x 3.6"W x 1.61"H
PS-TSLC-UNV-24V-288WDHV2	288W (3 x 96W)	288W / 28.8W	100-277V AC	24V DC	Yes*	11.85"L x 4.25"W x 1.8"H

## LED Flexible Sheet

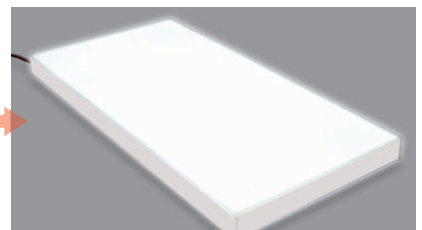
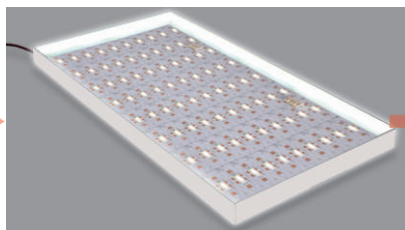
### SIGN BACKLIGHT SERIES

Highlight your brand concept.



### LED Full Sheet Utilization

#### LIGHT SHEET

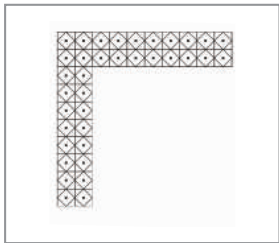
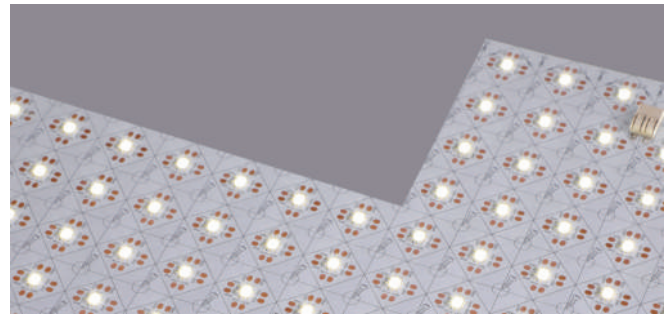
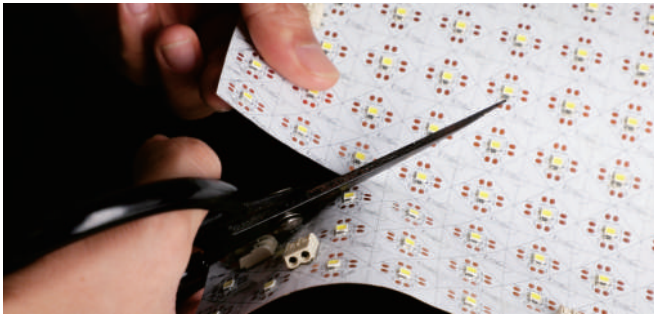


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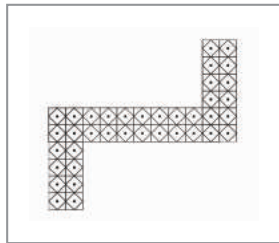
### Cutting Options

Flexible cut per single LED to desired shape, following any solid line in the direction of horizontal, vertical or 45-degree tilted solid line, and apply as the back-light of customized brand sign.

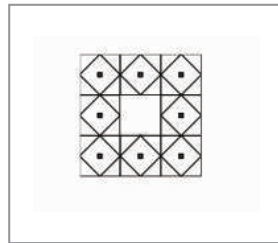
Examples of cutting options below.



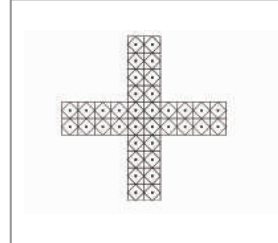
"L" shaped run



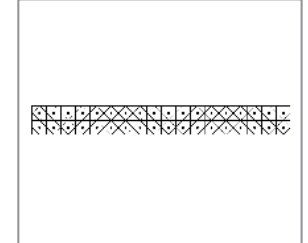
"S" shaped run



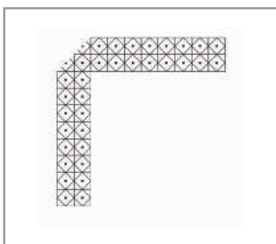
Donut-shaped run



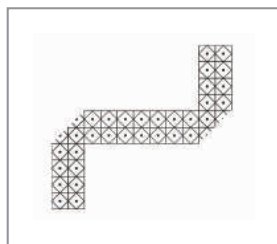
Cross-shaped run



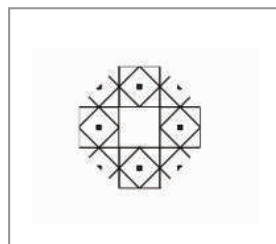
Straight run



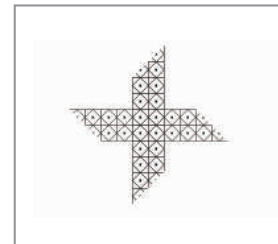
"L" shaped run



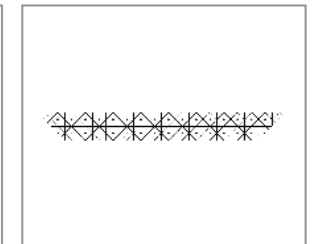
"S" shaped run



Donut-shaped run



Cross-shaped run



Straight run