

## FLEXIBLE LED LIGHT SHEET | TW

ITEM #: **AG1-24-TW** SERIES (TUNABLE WHITE: 2700K-6500K)

## SPECIFICATION SHEET

**BACKLIGHTING // LED SHEETS // AURAGAMI® // TW**

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTIFICATION

For the latest product updates, specifications, troubleshooting, product handling, installation, and integration advisories, visit [www.evo-lite.com](http://www.evo-lite.com).



### ELECTRICAL

Input Voltage	24 Volt DC - Constant Voltage
Power Consumption	11 W per sheet (8.65 W/ft <sup>2</sup> , 93.1 W/m <sup>2</sup> ); 0.013 watts per LED**
Wires	20 AWG 3 wire (Black wire (positive +), Yellow wire (2700K), White wire (6500K))
Connector	Twelve integrated 3-pin connection blocks
Certification	UL Listed (E495221), CE Compliant (EMC and LVD), RoHS Certified, IP65

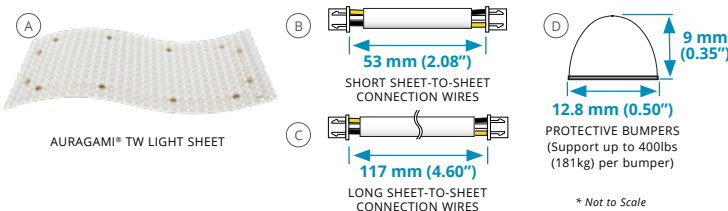
### PHYSICAL

Color Temperature	2700K ~ 6500K Tunable White Contact Evo-Lite for custom color temperatures
CRI	92+ for 2700K and 95+ 6500K
Light Output	1100 lumens per sheet
Mounting	Screws can be used within circles marked on the sheet. Use mechanical fasteners when mounted vertically or suspended. 3M adhesive backing is a supplementary method.
Operating Temp.	-22°F to 122°F (-30°C to 50°C)
Working Temp.	93°F (34°C)
Surface Temp	LED: 97°F (36°C), PCB: 90°F (32°C), Resistor: 93°F (34°C) (Measurements taken at ≥ 2 hours of operation)
Environment	Wet location (IP65 rated)
Coverage	1.27 ft <sup>2</sup> (0.118 m <sup>2</sup> ) per sheet / up to 10.18 ft <sup>2</sup> (0.94 m <sup>2</sup> ) per Class 2 guidelines
Cut/Fold Line Spacing	0.66" (16.767 mm) short axis / 0.661" (16.786 mm) long axis
Single Sheet Size	19.800" x 9.252" (503.5 mm x 235 mm)
Weight	5.0 oz (141 g) per sheet
Customization Options Available	Pre-cut, pre-mounted, specific color temperatures, IP rating, sheet sizes and/or connector placement. Contact Evo-Lite with customization requests.

**\*\* PROPORTIONAL BALANCING CONTROL REQUIRED TO MAINTAIN 11W POWER CONSUMPTION PER SHEET. REFER TO PRODUCT WIRING & CONTROL ADVISORY FOR MORE DETAILS.**

### PACKING

Each Auragami® Light Sheet has a full 3M® adhesive backing, long and short sheet-to-sheet connection wires, and protective bumpers with silicone adhesive backing. Light sheets are sold as single sheets, boxes of four, and cartons of 40.



### POWER INPUT KIT, SKU: AG1-24-TW-PIK (SOLD SEPARATELY)

Power Inputs Kits (PIK) are required for easy connection of up to 8 sheets combined to a low voltage power source (sold separately).



### FEATURES

Field Customizable	Maintains UL Listing when cut*
Full Integration Support	Included
Unique Power Distribution Grid	LED groups can be cut* from any part of the Light Sheet
Flexible/Foldable PCB	Polyimide film substrate
Consistent Light Quality	Tight ANSI bin control LEDs
LED Quantity/Density	840 SMD type 2835 LEDs per sheet 664 LEDs per ft <sup>2</sup> (7144 LEDs per m <sup>2</sup> )
Energy Efficiency	100 lumens per watt
Long Lifespan	50,000+ hours
Advanced 5-Year Warranty	Included

**\*NEVER CUT AURAGAMI LIGHT SHEET(S) WHILE POWERED.**

### POWER & CONTROLS

Compatible with all control protocols via associated power and control components. Quality tested for low-end light output consistency across all LEDs. Please contact Evo-Lite for optimal solutions to fit your requirements.

### PRODUCT WIRING & CONTROL ADVISORY

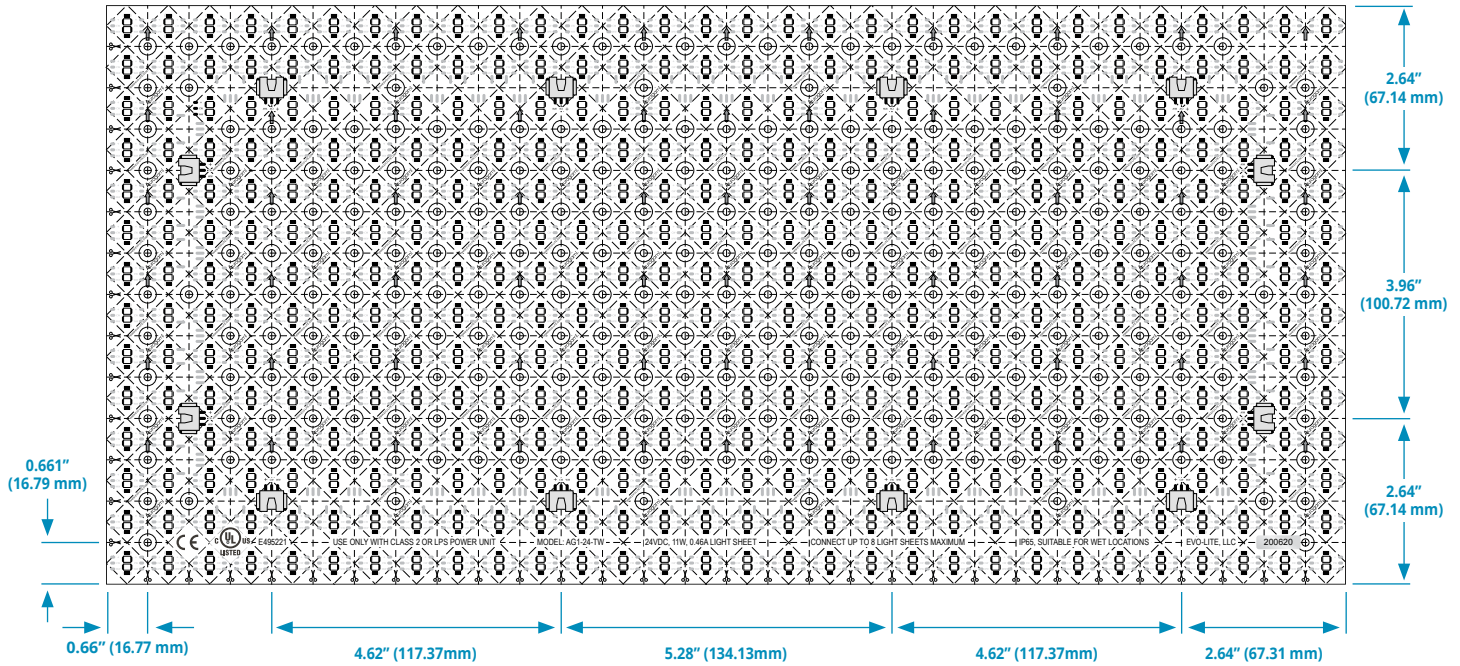
- To retain UL Listing, use only with UL Listed or UL Recognized Class 2, LPS or LVLE power supply.
- The Light Sheet's integrated connection blocks have a 4 A capacity. Do not exceed the load capacity of these connection blocks in any configuration.
- Our tunable white LEDs utilize separate warm and cool white channels for color mixing. 3rd party controls must account for proportional balancing of the two channels. Example: If Warm White = 100% ON then Cool White = OFF. If Warm White = 25% ON, then Cool White = 75% ON.
- Allowing both channels to operate at 100% will double power consumption to 22 watts per sheet, therefore decreasing the total number of allowable interconnected sheets to 4 per UL/Class 2 guidelines.
- To retain Class 2 compliance per UL regulations, do not exceed 96 watts interconnected (88 watts for eight sheets proportionally balanced). Best practices include allowing headroom for power supply longevity. Use only with Class 2 power supply.
- To avoid visible brightness variances due to voltage drop, the total distance should not exceed 6.5 feet (2 meters) from the power source input to the farthest end of any interconnected sheet.
- For optimal current flow through the interconnected sheets, connect adjacent Light Sheets with two sheet-to-sheet connection wires on each side.

PART	LIGHT SHEET DESCRIPTION	QTY
A	Auragami® Light Sheet (19.80" x 9.25" / 503.5 mm x 235 mm) with 3M® adhesive backing and 12 integrated connection blocks	1
PART ACCESSORY PACK (INCLUDED: AG1-24-TW-AP)		QTY
B	20 AWG short sheet-to-sheet connection wires 2.08" (53 mm)	2
C	20 AWG long sheet-to-sheet connection wires 4.60" (117 mm)	2
D	Protective bumpers with silicone adhesive backing	8
PART POWER INPUT KIT (SOLD SEPARATELY: AG1-24-TW-PIK)		QTY
E	20 AWG 3-conductor power input cable, 48" (1219.2 mm)	1
F	Wago same polarity, two port splicing connectors	3
G	Cable management clips with silicone adhesive backing	4

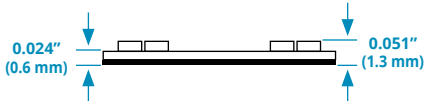
# MEASUREMENTS & CONNECTOR LOCATIONS

## TUNABLE WHITE LIGHT SHEET

Overall Sheet Size: 19.800" x 9.252" (503.5 mm x 235 mm). Not to scale.



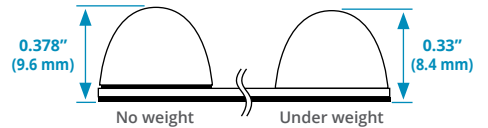
Sheet & LED Height



Terminal Height



Bumper Height



### SPECIFYING AURAGAMI

#### TUNABLE WHITE (TW)

ITEM NUMBER	DESCRIPTION
AG1-24-TW	2700K - 6500K Tunable White

#### OTHER AVAILABLE OPTIONS

##### SINGLE COLOR WHITE (SCW)

ITEM NUMBER	DESCRIPTION
AG1-24-27	2700K
AG1-24-30	3000K
AG1-24-35	3500K
AG1-24-40	4000K
AG1-24-53	5300K

##### DYNAMIC COLOR (RGBW)

ITEM NUMBER	DESCRIPTION
AG1-24-RGBW	RGB + 5300K White

### AURAGAMI CUSTOMIZATION OPTIONS

Evo-Lite can customize the Auragami Light Sheet to meet your exact specifications. Minimum order quantities apply.

#### CUSTOMIZE:

- Specific color temperatures
- IP Ratings
- LED pitch and placement
- Connector type and placement
- Sheet size and shape
- Pre-cut custom shapes from standard sheets
- Pre-mounted sheets to quick install substrates
- Wattage / energy-efficiency
- Lumens / brightness
- PCB material type – flexible or rigid

Contact Evo-Lite with customization requests

Note: This specifications sheet is specifically designed for Tunable White LED Sheets.

Please consult our other specification sheets for Single Color White and RGBW Auragami LED Sheets.



Auragami® is a patented product of Evo-Lite, LLC. For more information please visit [www.evo-lite.com/patent](http://www.evo-lite.com/patent)

