Radialux® 5.9 RGBW LED Tape Light

Actual size shown   Cut point every 4 in.   0.55 in. wide

Alloy introduces the innovative new technology of the 4-in-1 5050A diode for RGBWlighting with the Radialux 5.9 RGBWTape Light. Traditional RGBWlighting alternates separate RGB 5050 and white chips. The new 4-in-1 5050A mixes R, G, B, and W in a single diode package for brighter light using fewer watts, with better blending.

- Innovative new 4-in-1 5050A diodes seamlessly blends colors
- Perfect brightness for large accenting, retail, bars, restaurants, hospitality, home theaters, and more
- Mix of white and RGB light provides both pastel and saturated color possibilities
- Low profile is ideal for indirect lighting and reveals

TECHNICAL INFORMATION

Color	RGB-W		**Dimmable**	Yes (with color controller)
Power Consumption Per Foot	5.85 Watts/240mA		**Diode Type**	4-in-1 5050A SMD
Input Voltage	24V DC		**Mounting**	3M™ Self-Adhesive Tape (Non-porous)
Diodes per foot	18			
Diode Spacing	0.65 inches		**Operating Temperature**	-13° F to 140° F
Tape Height	0.1 inches		**Ambient Temperature**	-40° F to 186° F
Beam Angle	120°		**Spool Lengths****	16.4 ft., 100 ft.
Field Cuttable (UL 2108)	Every 4 inches		**Environment**	Indoor, Dry
Color Temperature	3500K (white)		**Certifications**	UL Listed, UL 2108, CE, RoHS
Max Run Length	16.4 ft.		**Warranty**	6 Year Limited

*Each spool includes 36 in., 20 AWG tinned lead wires at each end.

PRODUCT INFORMATION

Item Number	Length	Voltage	Lumens
AL-02-06-2401	16.4 ft.	24V DC	344
AL-02-06-2441	100 ft.	24V DC	

VOLTAGE DROP GUIDANCE CHART

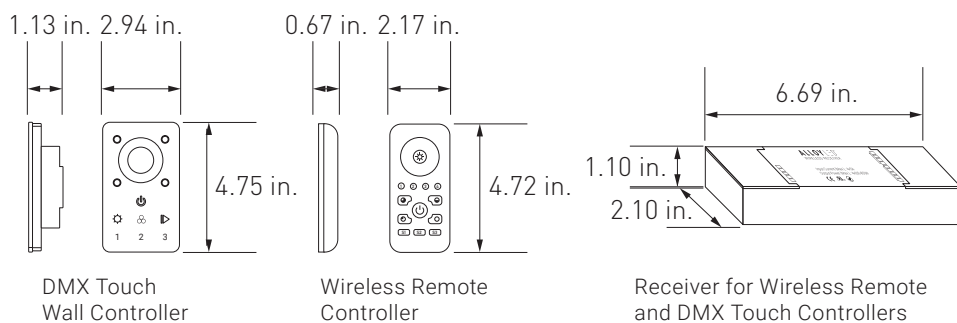### Standard Non-XT 24V Voltage Drop and Wire Length Distance Chart (3% Drop or 24V)

Wire Gauge	Copper Wire Resistance (O/kFT)	10W (0.42A)	20W (0.83A)	30W (1.25A)	40W (1.67A)	50W (2.08A)	60W (2.50A)	70W (2.92A)	80W (3.33A)	90W (3.75A)	96W (4A)
22 AWG	16.14	54 ft.	27 ft.	18 ft.	14 ft.	11 ft.	9 ft.	8 ft.	7 ft.	6 ft.	6 ft.
20 AWG	10.15	86 ft.	43 ft.	29 ft.	22 ft.	18 ft.	15 ft.	13 ft.	11 ft.	10 ft.	9 ft.
18 AWG	6.39	136 ft.	68 ft.	46 ft.	34 ft.	28 ft.	23 ft.	20 ft.	17 ft.	16 ft.	15 ft.
16 AWG	4.02	216 ft.	108 ft.	72 ft.	54 ft.	44 ft.	36 ft.	31 ft.	27 ft.	24 ft.	23 ft.
14 AWG	2.53	343 ft.	172 ft.	115 ft.	86 ft.	69 ft.	58 ft.	49 ft.	43 ft.	39 ft.	36 ft.
12 AWG	1.59	545 ft.	273 ft.	182 ft.	137 ft.	109 ft.	91 ft.	78 ft.	69 ft.	61 ft.	57 ft.
10 AWG	0.99	865 ft.	433 ft.	289 ft.	217 ft.	173 ft.	145 ft.	124 ft.	109 ft.	97 ft.	91 ft.

Note: These tables provide general guidelines for determining Wire Gauge based on total load and distance from LED driver to beginning of luminaire.

ACCESSORIES (SOLD SEPARATELY)

Recommended Accessories

See our website for the full range of RGB/RGBWcontrollers and accessories.

DMX Touch Wall Controller

Wireless Remote Controller

Receiver for Wireless Remote and DMX Touch Controllers

Item Number	Description
AL-60-03-0002*	Wireless Remote Controller
AL-60-03-0003*	DMX Touch Wall Controller
AL-60-03-0004-V2	Receiver for Wireless Remote and DMX Touch Controllers

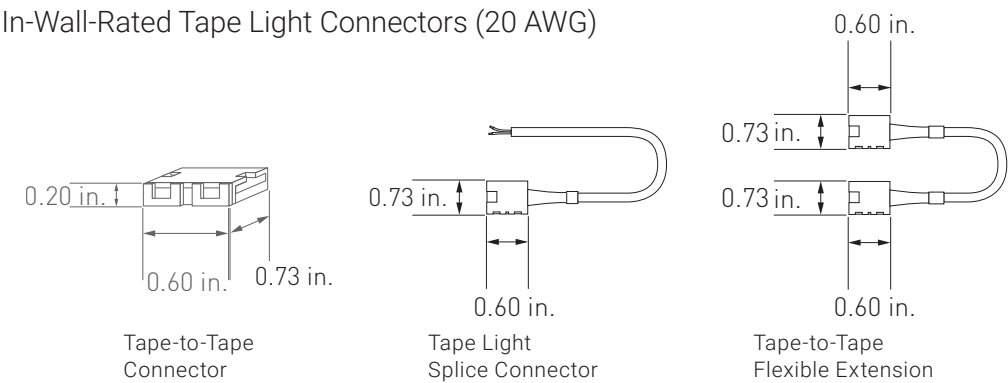*Use with the Wireless Receiver AL-60-03-0004-V2 (sold separately)

Mean Well Non-Dimmable Drivers

Item Number	Voltage	Wattage	Dimensions
AL-98-04-24036	24V DC	36W	5.83 x 1.58 x 1.18 in.
AL-98-04-24060	24V DC	60W	6.4 x 1.67 x 1.26 in.
AL-98-04-24100	24V DC	100W	7.5 x 2 x 1.46 in.
AL-98-04-24151	24V DC	151W	7.52 x 2.5 x 1.48 in.
AL-98-04-24200	24V DC	200W	8.47 x 5.43 x 1.18 in.

ACCESSORIES (SOLD SEPARATELY)

In-Wall-Rated Tape Light Connectors (20 AWG)

0.20 in.
0.60 in. 0.73 in.

Tape-to-Tape
Connector

0.73 in.
0.60 in.

Tape Light
Splice Connector

0.60 in.
0.73 in.
0.73 in.
0.60 in.

Tape-to-Tape
Flexible Extension

Item Number	Description	Length
AL-02-06-9901	Tape-to-Tape Connector	N/A
AL-02-06-9902	Tape Light Splice Connector	6 in.
AL-02-06-9907	Tape Light Splice Connector	36 in.
AL-02-06-9910	Tape Light Splice Connector	8 ft.
AL-02-06-9911	Tape-to-Tape Flexible Extension	3 in.
AL-02-06-9912	Tape-to-Tape Flexible Extension	6 in.
AL-02-06-9917	Tape-to-Tape Flexible Extension	36 in.

AmpChamp: For a more secure connection

0.35 in.
0.67 in. 0.39 in.

0.90 in.
0.29 in.
0.67 in.
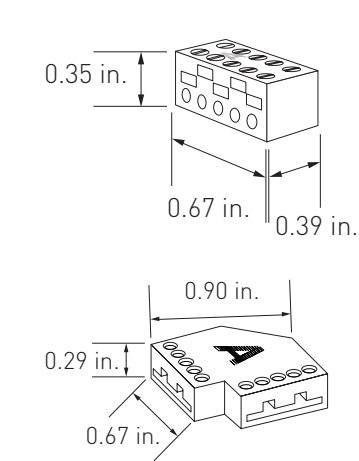
Accepts many combinations of tape and wire. Includes spade connectors for stranded wire, 3M® adhesive backing, and pre-attached 6 inch in-wall-rated 18 AWG lead wire.

Note: AmpChamp Corner does not include the pre-attached 6 inch in-wall-rated 18 AWG lead wire.

Straight AmpChamp
AL-02-06-9900
AL-02-06-9900-10 (10-pack)
AL-02-06-9900-100 (100-pack)

AmpChamp Corner
AL-02-06-9900-L

Wire and Tape Light Management

We recommend the use of the wire and tape harness.

- At least 1 wire harness at the beginning to secure the lead wire; for longer lead wires, place a harness every 2 feet
- 1 tape harness every 2 feet and 1 harness at the end of the tape light to secure it

0.30 in. wide
0.22 in.
0.95 in.
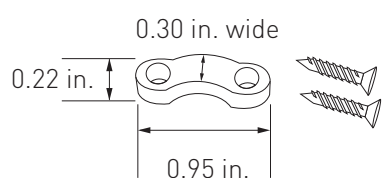
Wire Harness
Holds wire in place securely
AL-01-99-9901-10 (10-pack)

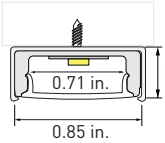v4

COMPATIBLE CHANNELS (Diagrams below not to scale)

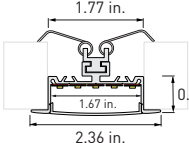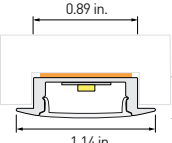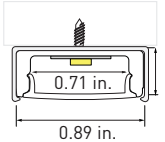### Reduced Hotspot Pairings (Hotspot Rating from 0-5)

Surfa 2X: Corner-Mount

0.81 in.
1.19 in.
1.19 in.

Hotspot Rating: 0
- ☐ Solder
- ☒ Connector
- ☐ AmpChamp

Surfa 6 Surround: Surface-Mount

0.71 in.
0.33 in.
0.55in.
0.85 in.

Hotspot Rating: 0
- ☐ Solder
- ☒ Connector
- ☐ AmpChamp

Suspan 1: Suspended

up to 10 ft.
1.23 in.
1.50 in.
1.42 in.

Hotspot Rating: 0
- ☐ Solder
- ☒ Connector
- ☐ AmpChamp

Ankr 2: In-Wall

1.38 in.
1.32 in.
1.58 in.
1.20 in.
1.74 in.

Hotspot Rating: 0
- ☐ Solder
- ☒ Connector
- ☐ AmpChamp

page 4 of 6

www.AlloyLED.com | Call: 800.910.LEDS [5337] | solutions@AlloyLED.com
Specifications subject to change without notice.

v4

COMPATIBLE CHANNELS (Diagrams below not to scale)

Other Compatible Pairings (Hotspot Rating from 0-5)

Surfa 6: Surface-Mount

0.33 in.
0.71 in.
0.85 in.

Hotspot Rating: 5
☒ Solder
☐ Connector
☐ AmpChamp

Ankr 1: In-Wall

1.77 in.
1.67 in.
2.36 in.
0.83 in.

Hotspot Rating: 3
☐ Solder
☒ Connector
☐ AmpChamp

Naro 4: Recessed

0.89 in.
0.33 in.
1.14 in.

Hotspot Rating: 5
☒ Solder
☐ Connector
☐ AmpChamp

Polymer: Surface-Mount

0.37 in.
0.71 in.
0.89 in.

Hotspot Rating: 5
☒ Solder
☐ Connector
☐ AmpChamp

page 5 of 6

www.AlloyLED.com | Call: 800.910.LEDS [5337] | solutions@AlloyLED.com
Specifications subject to change without notice.

v4

RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

ALLOY'S **A** **TOP CHOICE**

Alloy LED PowerFactor™ Non-Dimmable Power Supplies with Integrated UL Listed Junction Box

Reliable, efficient low voltage power to RGB and RGBW color controllers and for use with white tape light on an on/off switch
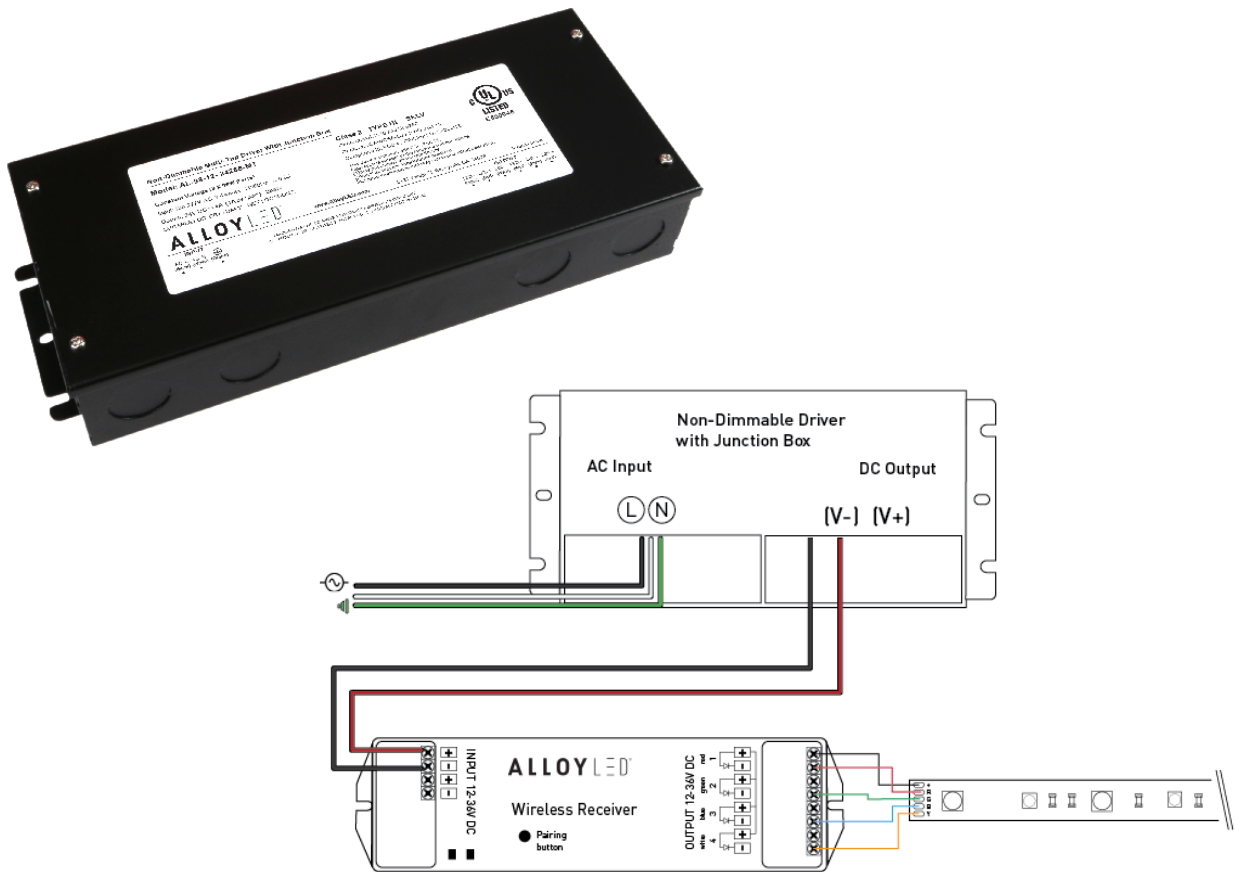
Wiring diagram is for reference only. Please refer to dimmer wiring specifications sheet for accurate directions.

120V–277V | **NEMA 4X** | **99% POWER FACTOR**

CLASS 2 | WET LOCATION | DRY LOCATION

6 YEARS WARRANTY | RoHS | c(UL)us LISTED

Item Number	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (Junction box) (L x W x H)	Class 2
AL-98-12-24030	24V DC	30W	Yes (NEMA 4X)	10%	6.5 x 3.72 x 1.57 in.	Yes
AL-98-12-24060	24V DC	60W	Yes (NEMA 4X)	10%	7.4 x 3.72 x 1.57 in.	Yes
AL-98-12-24080	24V DC	80W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	Yes
AL-98-12-24096	24V DC	96W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	Yes
AL-98-12-24192-MT	24V DC	2*96W	Yes (NEMA 4X)	10%	10.94 x 4.25 x 1.77 in.	Yes
AL-98-12-24288-MT	24V DC	3*96W	Yes (NEMA 4X)	10%	11.85 x 4.25 x 1.77 in.	Yes

Note: Alloy LED strongly recommends using Listed Class 2 power supplies for all installations.
Always install in accordance with local and national electrical code regulations.
Inspectors prefer power supply to be used with junction box.
For dimmer compatibility, refer to drivers specification sheet.