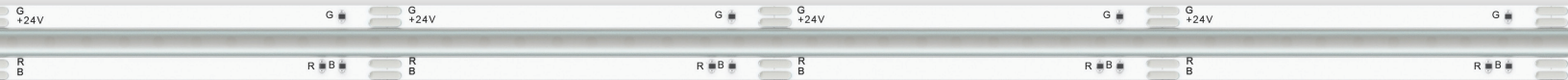# Radialux® 4.2 COB RGB LED Tape Light



Actual size shown      Cut point every 2 in.      0.4 in. wide



Radialux 4.2 COB RGB LED Tape Light's flexible, tight array LED lighting strip is designed for task and accent interior lighting applications. The diodes mounted on printed circuit board with a continuous fortified coating provide continuous hotspot-free lighting. No diffuser covers are needed.

- Highly energy-efficient at only 4.2 watts per foot
- Compatible with Alloy LED channels for a low-profile, polished appearance
- 4-year warranty

## TECHNICAL INFORMATION

| | | | | |
|---|---|---|---|---|
| **Color** | RGB | | **Diode Type** | COB |
| **Power Consumption per Foot** | 4.2 Watts | | **Mounting** | 3M™ Self-Adhesive Tape (Non-porous) |
| **Input Voltage** | 24V DC | | **Operating Temperature** | -4° F to 140° F |
| **Diodes per Foot** | 252 | | **Ambient Temperature** | -4° F to 158° F |
| **Diode Spacing** | 0.05 inches | | **Spool Length** | 16.4 ft. |
| **Tape Height** | 0.07 inches | | **Environment** | Indoor, Dry |
| **Beam Angle** | 140° | | **Certifications** | UL 2108 Listed, RoHS |
| **Field Cuttable (UL 2108)** | Every 2 in. | | **Warranty** | 4 Year Limited |
| **Maximum Run Length** | 16.4 feet | | | |
| **Dimmable** | Yes (with color controller) | | | |

Each spool includes 36 in., 22 AWG tinned lead wires at both ends of the tape light.

## PRODUCT INFORMATION

| Item Number | Length | Voltage | Lumens |
|---|---|---|---|
| AL-02-60-2401 | 16.4 ft. | 24V DC | 211 |

## VOLTAGE DROP GUIDANCE CHART

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

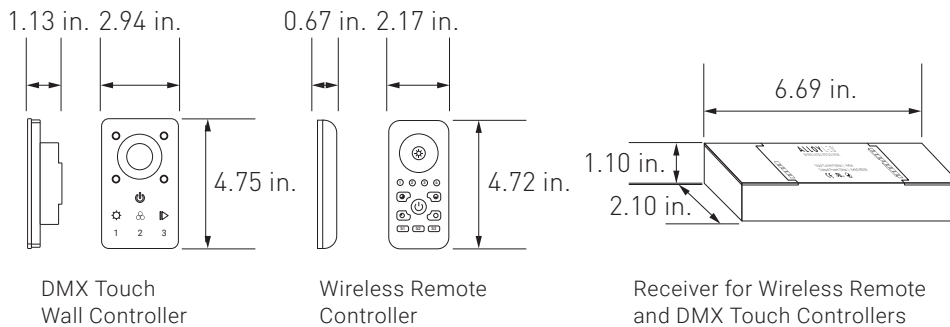| Wire Gauge | Copper Wire Resistance (O/kFT) | 10W (0.42A) | 20W (0.83A) | 30W (1.25A) | 40W (1.67A) | 50W (2.08A) | 60W (2.50A) | 70W (2.92A) | 80W (3.33A) | 90W (3.75A) | 96W (4A) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22 AWG | 16.14 | 54 ft. | 27 ft. | 18 ft. | 14 ft. | 11 ft. | 9 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/RGBW controllers and accessories.

1.13 in.  2.94 in.

4.75 in.

DMX Touch Wall Controller

0.67 in.  2.17 in.

4.72 in.

Wireless Remote Controller

6.69 in.

1.10 in.

2.10 in.

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)

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. |

**ALLOY**LED® Specifications

## ACCESSORIES (SOLD SEPARATELY)

### Wire and Tape Light Management

We recommend the use of the wire and tape harness.

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



0.30 in. wide
0.22 in.
0.95 in.

0.13 in. wide
0.20 in.
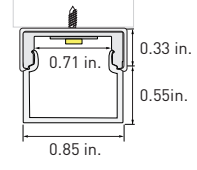0.87 in.
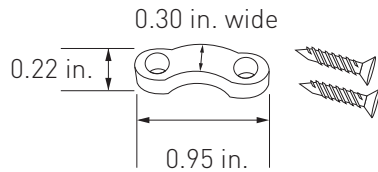
**Wire Harness**
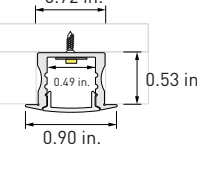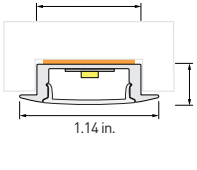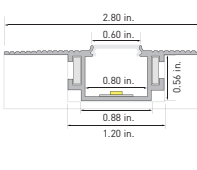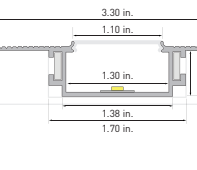Holds wire in place securely
AL-01-99-9901-10 (10-pack)
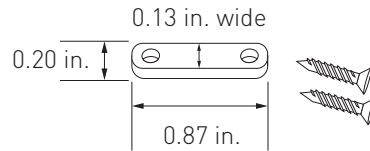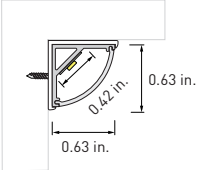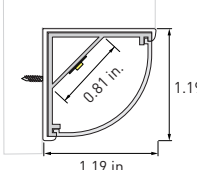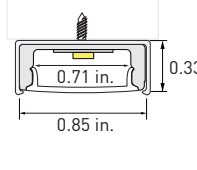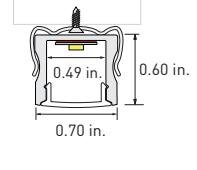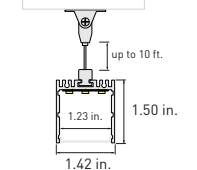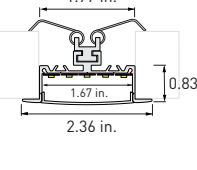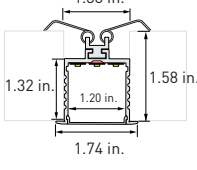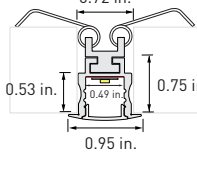
**Tape Harness**
Provides extra security for tape light,
especially at the ends of a run
AL-01-99-9900-10 (10-pack)

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Specifications subject to change without notice.
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## COMPATIBLE CHANNELS (Diagrams below not to scale)
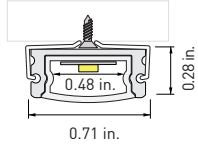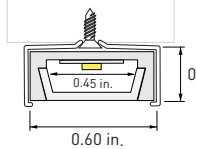
### Reduced Hotspot Pairings (Hotspot Rating from 0-5)

**Surfa 2:** Corner-Mount

0.42 in. | 0.63 in. | 0.63 in.

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

**Surfa 2X:** Corner-Mount

0.81 in. | 1.19 in. | 1.19 in.

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

**Surfa 6:** Surface-Mount

0.71 in. | 0.33 in. | 0.85 in.

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

**Surfa 6 Surround:** Surface-Mount

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

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

**Surfa 7:** Surface-Mount

0.49 in. | 0.60 in. | 0.70 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 1:** In-Wall

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

**Ankr 3:** In-Wall

0.72 in. | 0.53 in. | 0.49 in. | 0.75 in. | 0.95 in.

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

**Ankr 4:** Mud-In

0.72 in. | 0.49 in. | 0.53 in. | 0.90 in.

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

**Naro 4:** Recessed

0.89 in. | 0.33 in. | 1.14 in.

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

**Mudr 1:** In-Wall

2.80 in. | 0.60 in. | 0.80 in. | 0.56 in. | 0.88 in. | 1.20 in.

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

**Mudr 2:** In-Wall

3.30 in. | 1.10 in. | 1.30 in. | 1.38 in. | 1.70 in.

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

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Specifications subject to change without notice.

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## COMPATIBLE CHANNELS (Diagrams below not to scale)

### Other Compatible Pairings (Hotspot Rating from 0-5)

**Surfa 1:** Surface-Mount

0.28 in.
0.48 in.
0.71 in.

Hotspot Rating: 1
☒ Solder
☐ Connector
☐ Amp Champ

**Surfa 3:** Surface-Mount

0.24 in.
0.45 in.
0.60 in.

Hotspot Rating: 1
☒ Solder
☐ Connector
☐ Amp Champ

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v4

## RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

**ALLOY'S**
Ⓐ
**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
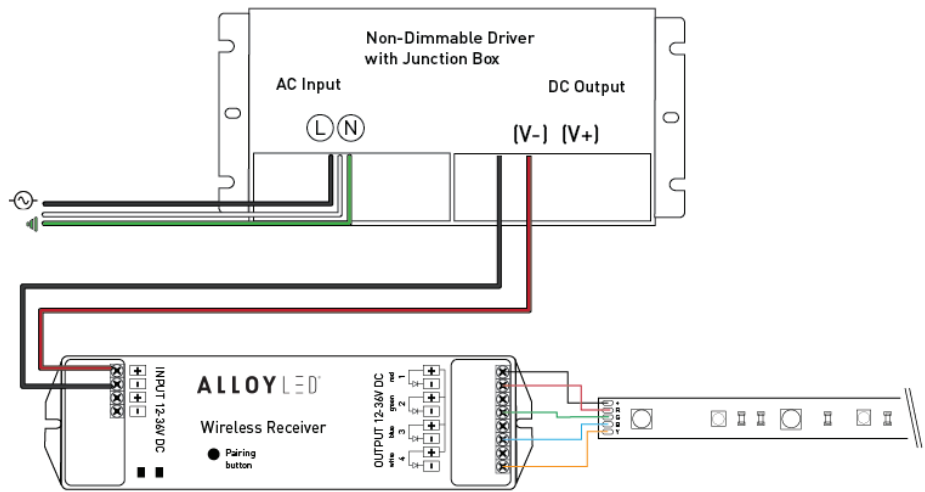


Wiring diagram is for reference only. Please refer to dimmer wiring specifications sheet for accurate directions.
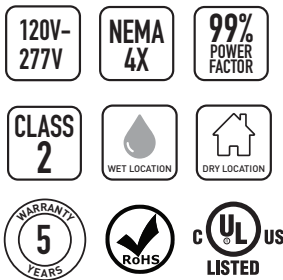
| 120V–277V | NEMA 4X | 99% POWER FACTOR |
| CLASS 2 | WET LOCATION | DRY LOCATION |
| WARRANTY 5 YEARS | RoHS | c(UL)us LISTED |

| 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 | 36W | Yes (NEMA 4X) | 10% | 6.5 x 3.6 x 1.02 in. | Yes |
| AL-98-12-24060 | 24V DC | 60W | Yes (NEMA 4X) | 10% | 7.4 x 3.6 x 1.02 in. | Yes |
| AL-98-12-24080 | 24V DC | 80W | Yes (NEMA 4X) | 10% | 8.6 x 3.7 x 1.6 in. | Yes |
| AL-98-12-24096 | 24V DC | 96W | Yes (NEMA 4X) | 10% | 8.6 x 3.7 x 1.6 in. | Yes |
| AL-98-12-24192-MT | 24V DC | 192W | Yes (NEMA 4X) | 10% | 10.9 x 4.25 x 1.8 in. | Yes |
| AL-98-12-24288-MT | 24V DC | 288W | Yes (NEMA 4X) | 10% | 11.8 x 4.25 x 1.8 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.