PrimaLine® 2.7 LP (Low-Profile) LED Tape Light

Actual size shown

Field cuttable every 1 in.

0.4 in. wide
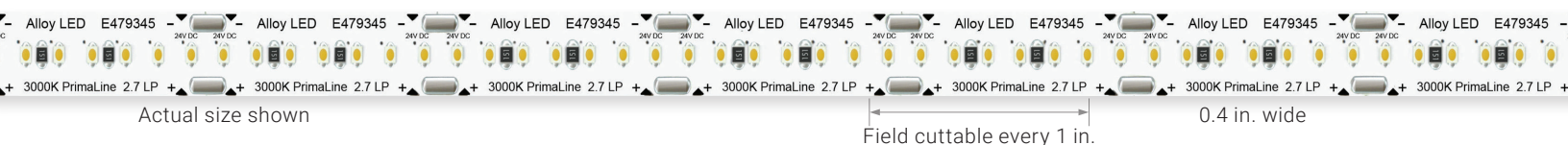
PrimaLine 2.7 LP is a low-profile, medium output, dimmable LED light that is designed with specialized diodes to emit a smooth, even line of continuous light. PrimaLine 2.7 LP features the new 2110 diode, a low profile LED chip arranged in a tight array to ensure hotspot-free lighting in most Alloy LED channels.

- Smooth, hotspot-free line of light
- Ultra low profile
- New 2110 diodes
- 97 CRI (Color Rendering Index)
- Very high R9 and R13 values for superb rendering of warm tones

TECHNICAL INFORMATION

Stocked CCTs (Color Temperature)*	2200K, 2400K, 2700K, 3000K, 4200K
Power Consumption Per Foot	2.7 Watts / 113mA
Input Voltage	24V DC
Diodes per foot	81
Diode Spacing	0.14 inches
Tape Height	0.02 inches
Beam Angle	120°
Field Cuttable (UL 2108)	Every 1 inch
Max Run Length	18 ft.
Dimmable	Yes

Diode Type	2110 SMD
Mounting	3M™ Self-Adhesive Tape (Non-porous)
Operating Temperature	-13° F to 140° F
Ambient Temperature	-40° F to 186° F
Spool Length**	13 ft., 26 ft.
Environment	Indoor, Dry
Certifications	UL Listed, UL 2108, CE, RoHS, UL Closet Rated
Warranty	6 Year Limited

* In addition to stocked colors, a wide variety of Color Temperatures is also available by special order. Please call or email to order.
**Each spool includes 36 in., CL2 rated 20 AWG tinned lead wires at both ends of the tape light.

PRODUCT INFORMATION

13 ft. spool	26 ft. spool	Color Temperature	Watts / foot	CRI	R9 Value	R13 Value	TM30	CQS	Lumens / foot
AL-01-08-2400	AL-01-08-2420	● 2200K	2.7W	96.7	91	97	N/A	N/A	160
AL-01-08-2401	AL-01-08-2421	● 2700K	2.7W	96.7	97	97	N/A	N/A	188
AL-01-08-2402	AL-01-08-2422	● 3000K	2.7W	96.7	95	96	N/A	N/A	202
AL-01-08-2403	AL-01-08-2423	○ 4200K	2.7W	96.7	98	99	N/A	N/A	224
AL-01-08-2405	AL-01-08-2425	● 2400K	2.7W	96.7	98	99	N/A	N/A	170

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## VOLTAGE DROP GUIDANCE CHART

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

| Wire Gauge	Copper Wire Resistance (Ω/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)

AmpChamp: For a more secure connection

0.29 in.
0.48 in.   0.48 in.

0.63 in.
0.29 in.
0.46 in.

0.48 in.
0.29 in.
0.40 in.
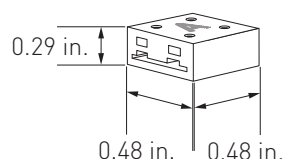
Accepts many combinations of tape and wire. Includes spade connectors for stranded wire, 3M® adhesive backing, and pre-attached 6 inch in-wall-rated 18 AWG lead wire.
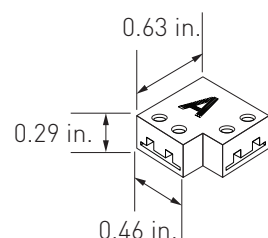
Note: AmpChamp Corner does not include the pre-attached 6 inch in-wall-rated 18 AWG lead wire.
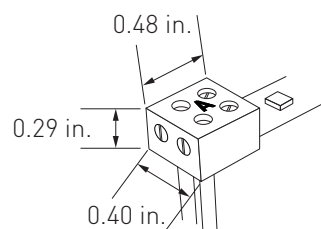
Straight AmpChamp
AL-01-08-9900
AL-01-08-9900-10   (10-pack)
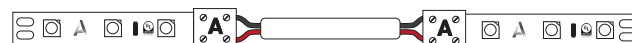AL-01-08-9900-100   (100-pack)

AmpChamp Corner
AL-01-08-9900-L

AmpChamp Up/Down
AL-01-08-9900-UD
AL-01-08-9900-UD-10 (10-pack)

AmpChamp Jumper and Power Feed Kits

AmpChamp Jumper Kit includes two standard AmpChamp Kits and one pre-tinned 18 AWG jumper wire.

AL-01-08-9900-3IN-JK   (3 in. jumper wire)
AL-01-08-9900-6IN-JK   (6 in. jumper wire)
AL-01-08-9900-36IN-JK   (36 in. jumper wire)

**AmpChamp Power Feed Kit** includes one standard AmpChamp Kit and one pre-tinned 18 AWG power feed wire.

AL-01-08-9900-36IN-PK   (36 in. power feed wire)
AL-01-08-9900-8FT-PK   (8 ft. power feed wire)

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
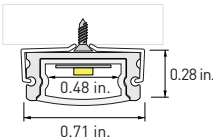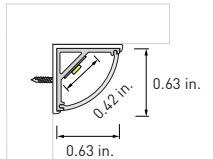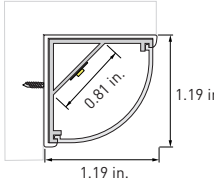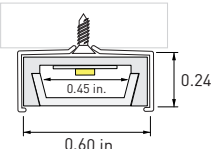- 1 tape harness every 2 feet and 1 harness at the end of the tape light to secure it

0.30 in. wide
0.22 in.
0.95 in.

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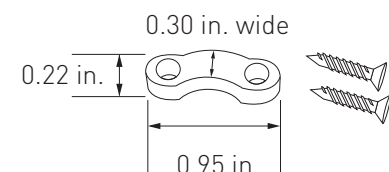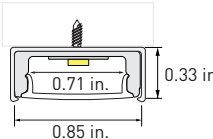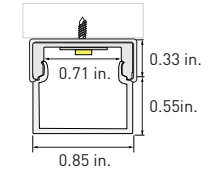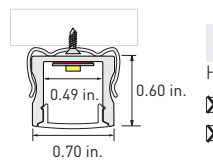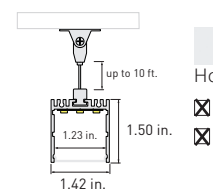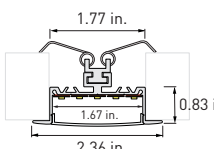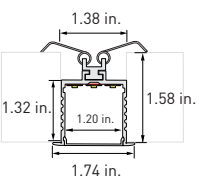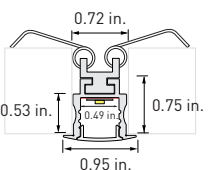
Wire Harness
Holds wire in place securely
AL-01-99-9901-10 (10-pack)
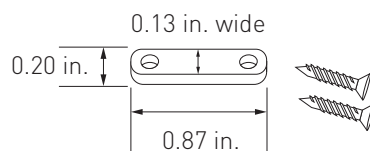
Tape Harness
Provides extra security for tape light, especially at the ends of a run
AL-01-99-9900-10 (10-pack)

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COMPATIBLE CHANNELS (Diagrams below not to scale)

Reduced Hotspot Pairings (Hotspot Rating from 0-5)

Surfa 1: Surface-Mount

0.28 in.
0.48 in.
0.71 in.

Hotspot Rating: 0
☒ Solder
☐ AmpChamp

Surfa 2: Corner-Mount

0.42 in.
0.63 in.
0.63 in.

Hotspot Rating: 0
☒ Solder
☐ AmpChamp

Surfa 2X: Corner-Mount

0.81 in.
1.19 in.
1.19 in.

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Surfa 3: Surface-Mount

0.24 in.
0.45 in.
0.60 in.

Hotspot Rating: 0
☒ Solder
☐ AmpChamp

Surfa 6: Surface-Mount
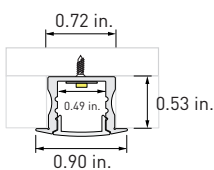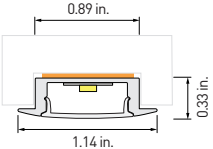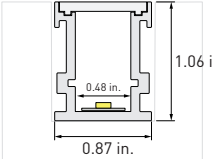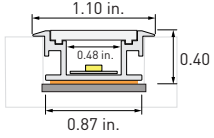
0.71 in.
0.33 in.
0.85 in.

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Surfa 6 Surround: Surface-Mount

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

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Surfa 7: Surface-Mount

0.49 in.
0.60 in.
0.70 in.

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Suspan 1: Suspended

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

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Ankr 1: In-Wall

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

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Ankr 2: In-Wall

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

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Ankr 3: In-Wall

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

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Ankr 4: Mud-In

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

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Naro 4: Recessed

0.89 in.
0.33 in.
1.14 in.

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Duro 1: In-Ground

0.48 in.
1.06 in.
0.87 in.

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

Duro 2: In-Ground

1.10 in.
0.48 in.
0.40 in.
0.87 in.

Hotspot Rating: 0
☒ Solder
☒ AmpChamp

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COMPATIBLE CHANNELS (Diagrams below not to scale)
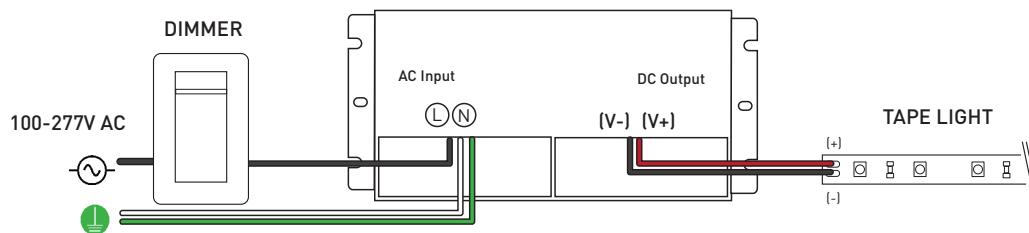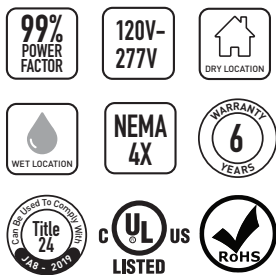
Reduced Hotspot Pairings (Hotspot Rating from 0-5)

Polymer: Surface-Mount

0.37 in.

0.71 in.

0.89 in.

Hotspot Rating: 0

☒ Solder

☒ AmpChamp
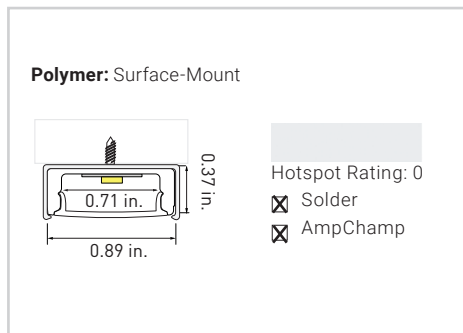
ALLOYLED® Specifications

RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

ALLOY'S TOP CHOICE

Alloy LED PowerFactor™ Dimmable Power Supplies with Integrated UL Listed Junction Box
Compact, highly efficient, and code-compliant power supply with versatile and smooth dimming capabilities.

Knockout

Knockouts included
30W and 60W models = 0.50 in. diameter
96W-300W models = 0.88 in. diameter

Knockout

DIMMER

AC Input

DC Output

100-277V AC

(L)(N)

(V-) (V+)

TAPE LIGHT

(+)

(-)

Wiring diagram is for reference only. Please refer to dimmer wiring specifications sheet for accurate directions.

99% POWER FACTOR | **120V-277V** | **DRY LOCATION**

WET LOCATION | **NEMA 4X** | **6 YEARS WARRANTY**

Title 24 JA8 - 2019 Can Be Used To Comply With | **c UL us LISTED** | **RoHS**

Single Tap Models

Item Number	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12030	12V DC	30W	Yes (NEMA 4X)	10%	6.50 x 3.72 x 1.02 in.	Yes
AL-98-10-12060	12V DC	60W	Yes (NEMA 4X)	10%	7.40 x 3.72 x 1.02 in.	Yes
AL-98-10-12120	12V DC	120W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	No
AL-98-10-24030	24V DC	30W	Yes (NEMA 4X)	10%	6.50 x 3.72 x 1.02 in.	Yes
AL-98-10-24060	24V DC	60W	Yes (NEMA 4X)	10%	7.40 x 3.72 x 1.02 in.	Yes
AL-98-10-24096	24V DC	96W	Yes (NEMA 4X)	10%	8.66 x 3.72 x 1.57 in.	Yes
AL-98-10-24150	24V DC	150W	Yes (NEMA 4X)	10%	10.24 x 4.13 x 1.77 in.	No
AL-98-10-24200	24V DC	200W	Yes (NEMA 4X)	10%	10.24 x 4.13 x 1.77 in.	No
AL-98-10-24300	24V DC	300W	Yes (NEMA 4X)	10%	10.94 x 4.33 x 1.77 in.	No

Class 2 Compliant Multi-Tap Models

Item Number	Output Voltage	Wattage	Wet Location	Minimum Load	Dimensions (L x W x H)	Class 2
AL-98-10-12300-MT	12V DC	300W	Yes (NEMA 4X)	10%	11.85 x 4.33 x 1.77 in.	Yes
AL-98-10-24192-MT	24V DC	192W	Yes (NEMA 4X)	10%	10.94 x 4.33 x 1.77 in.	Yes
AL-98-10-24288-MT	24V DC	288W	Yes (NEMA 4X)	10%	11.85 x 4.33 x 1.77 in.	Yes

Note: PowerFactor assumes 80% load.
Inspectors prefer power supply to be used with junction box.
For dimmer compatibility, refer to drivers specification sheet.

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RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

Alloy LED Primavolt® No Minimum Load Dimmable Power Supplies with ETL Listed Junction Box
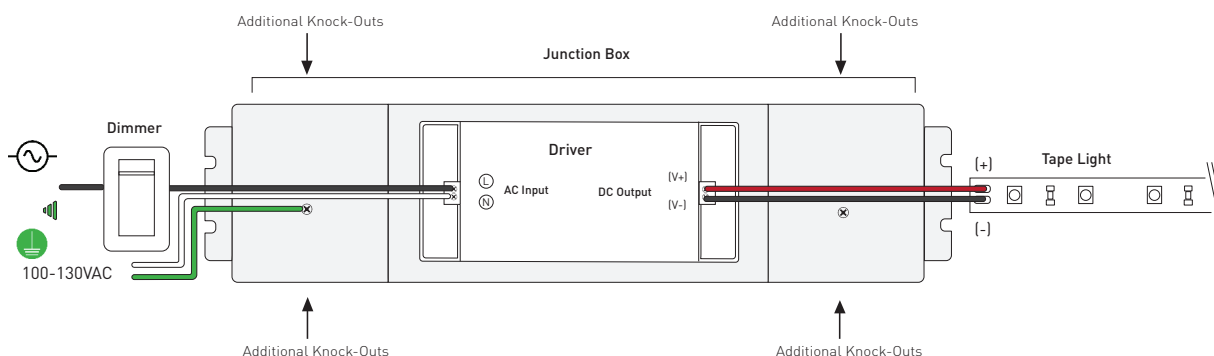
Code-compliant power supply with versatile and smooth dimming capabilities. Compatible with Incandescent, On/Off, ELV and MLV dimmers.
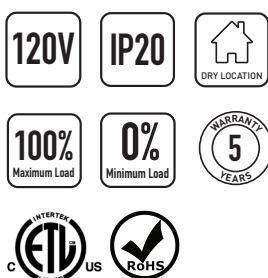

Dry Location Model
White model for 60W and lower

Wet Location Model
Black model for 80W and higher

Wiring diagram is for reference only. Please refer to dimmer wiring specifications sheet for accurate directions.

| Item Number	Output Voltage	Wattage	Minimum Load	Dimensions (Junction Box) (L x W x H)	Class 2
AL-98-03-12024-NM	12V DC	24W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-12048-NM	12V DC	48W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-12060-NM	12V DC	60W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-12080-NM	12V DC	80W	0%	14.96 x 3.03 x 2.24 in.	No
AL-98-03-12120-NM	12V DC	120W	0%	14.96 x 3.03 x 2.24 in.	No
AL-98-03-24024-NM	24V DC	24W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-24048-NM	24V DC	48W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-24060-NM	24V DC	60W	0%	13.78 x 3.03 x 1.46 in.	Yes
AL-98-03-24080-NM	24V DC	80W	0%	14.96 x 3.03 x 2.24 in.	Yes
AL-98-03-24096-NM	24V DC	96W	0%	14.96 x 3.03 x 2.24 in.	Yes
AL-98-03-24150-NM	24V DC	150W	0%	15.98 x 3.43 x 2.36 in.	No
AL-98-03-24200-NM	24V DC	200W	0%	15.98 x 3.43 x 2.36 in.	No

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.

RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

ELV Dimmable Power Supplies for Remote Enclosures

The drivers are derated, but when installed in a small enclosure with no heatsink or air circulation, we recommend a maximum load of 40W.
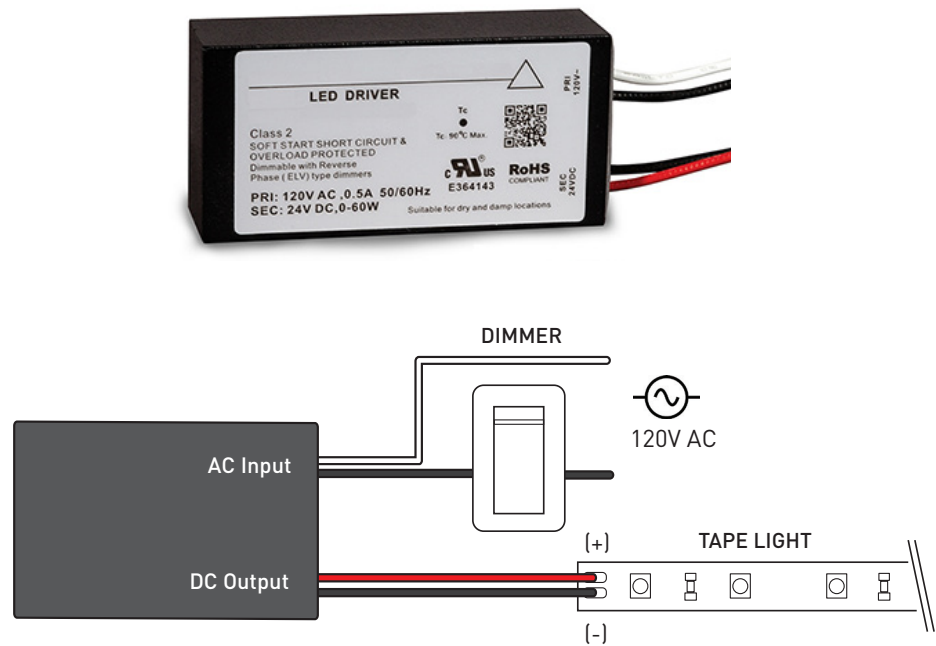
Wiring diagram is for reference only. Please refer to dimmer wiring specifications sheet for accurate directions.

Item Number	Output	Wattage	Dimensions (L x W x H)	Class 2
AL-98-08-12060	12V DC	60W	2.66 x 1.30 x 0.83 in.	Yes
AL-98-08-24060	24V DC	60W	2.66 x 1.30 x 0.83 in.	Yes

Note: Inspectors prefer power supply to be used with junction box.
For dimmer compatibility, refer to drivers specification sheet.

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ALLOYLED® Specifications

DIMMING ACCESSORIES (SOLD SEPARATELY)

Lutron® Dimming Accessories

By participating in Lutron's OEM Advantage program, Alloy LED is able to offer a range of the highest quality low voltage power supplies and selected controls on the market.

Hi-lume Premier 0.1% EcoSystem / 3-wire LED Driver (96W 24VDC)

Hi-lume 1% LED Driver 40W
- EcoSystem / 3-wire control
- 2-wire 120V forward phase control

Lutron Vive PowPak RF Module
- RF module for EcoSystem LED driver control

- Use with the Lutron EcoSystem drivers shown to "Vive-enable" Alloy LED products

Lutron® Hi-lume LED Drivers

Item Number	Output	Wattage	Minimum Load	Class 2
AL-98-07-12040	12V DC	40W	N/A	Yes
AL-98-07-12040-3WIRE	12V DC	40W	N/A	Yes
AL-98-07-24040	24V DC	40W	N/A	Yes
AL-98-07-24040-3WIRE	24V DC	40W	N/A	Yes
AL-98-07-24096-3WIRE	24V DC	96W	N/A	Yes

Lutron® Controls

Item Number	Description	Voltage
AL-98-07-9901	EcoSystem Control Module	N/A
AL-98-07-9901-8	EcoSystem Control Module - 8-pack	N/A
AL-98-07-9950	CL Dimmer	120V AC
AL-98-07-9950-FPLATE	CL Dimmer faceplate	N/A

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ALLOYLED® Specifications

DIMMING ACCESSORIES (SOLD SEPARATELY)

Dimmers and Switches

SlimDim Wireless Dimmer Switch

Using long-range RF technology, these LED dimmers connect wirelessly to a receiver, offering freedom to mount anywhere. Can also be used as a fob for mobile, hand-held control.
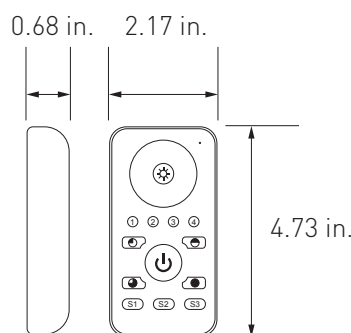
AL-70-01-0001	SlimDim Wireless Dimmer
AL-70-01-0002	Single Color Receiver (96W max.) (sold separately) c UL US
AL-98-07-9950 -FPLATE	SlimDim Wall Plate (sold separately)

0.35 in. 1.30 in. 2.60 in.

0.33 in. 3.0 in. 4.70 in.

SlimDim Wireless Dimmer

SlimDim Wall Plate (Sold Seperately)
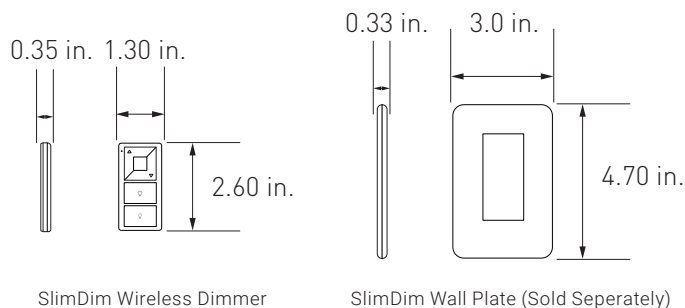
Remote Control Dimmer Switch

Provides full dimming and on/off control, and includes a touch wheel that allows for direct visual selection of brightness. It can also operate up to four independent zones.
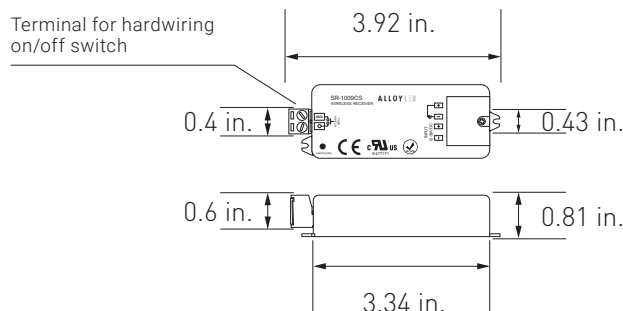
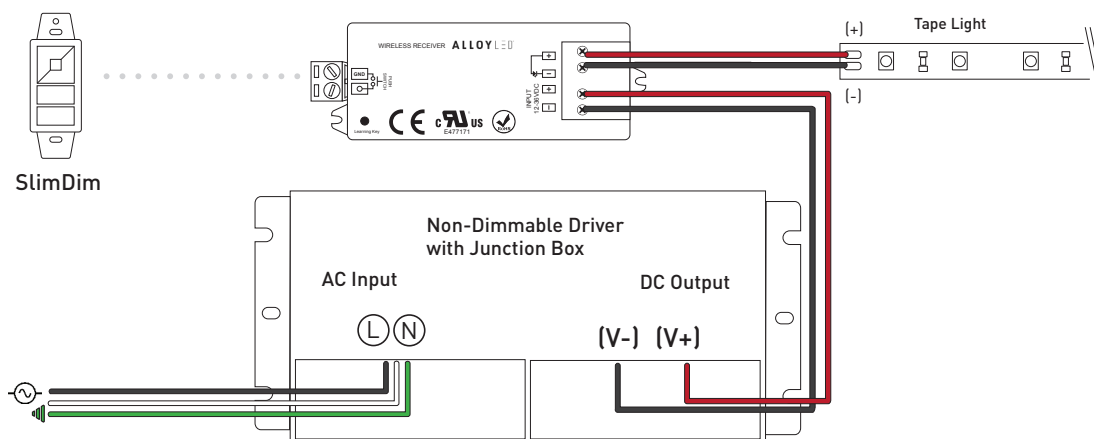| AL-60-03-0001	Remote Control Dimmer Switch
AL-70-01-0002	Single Channel Receiver (sold separately) c UL US
AL-60-03-0004-V2	Wireless Receiver (RGB & RGBW) (sold separately) c UL US

0.68 in. 2.17 in. 4.73 in.

Single Channel Wireless Receiver

Pair with the Remote Control Dimmer Switch or the SlimDim Wireless Dimmer to dim PrimaLine tape lights. Use one remote to make independent lighting zones with multiple receivers with certain controllers.

AL-70-01-0002	Single Channel Wireless Receiver

Terminal for hardwiring on/off switch

3.92 in.

0.4 in. 0.43 in.

0.6 in. 0.81 in.

3.34 in.

WIRING DIAGRAM

SlimDim

Tape Light

(+)
(-)

WIRELESS RECEIVER **ALLOY**LED

Non-Dimmable Driver with Junction Box

AC Input

L N

DC Output

(V-) (V+)

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Specifications subject to change without notice.
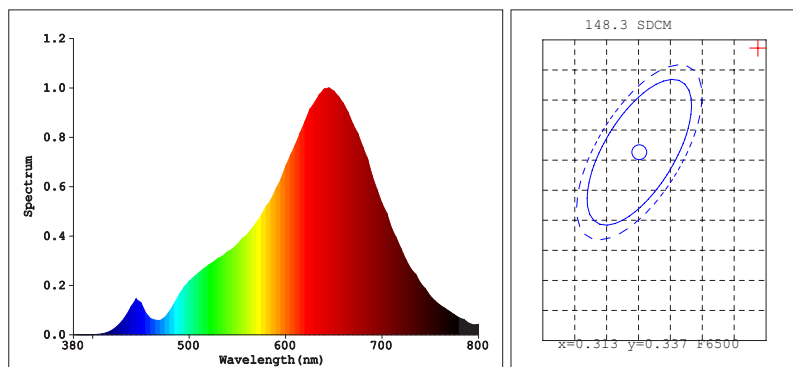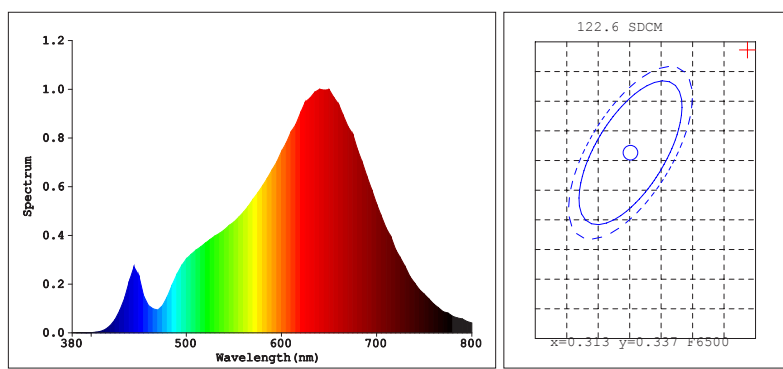
ALLOYLED® Specifications

Alloy LED Light Lab™ Photometrics
Note: specifications are representative of the diode type and not a particular tape light article.

2200K

2400K

2700K

3000K

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Alloy LED Light Lab™ Photometrics

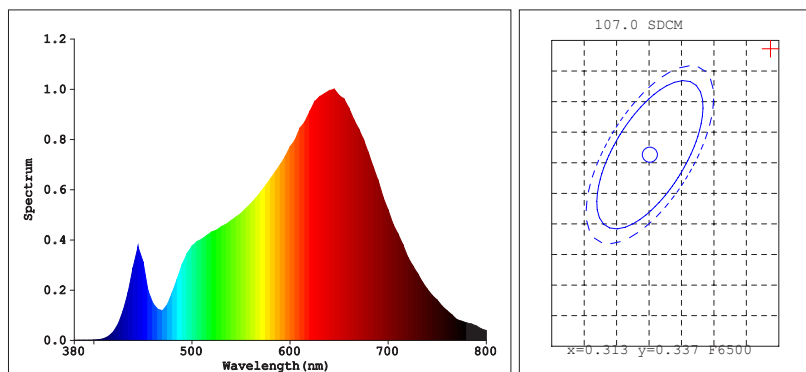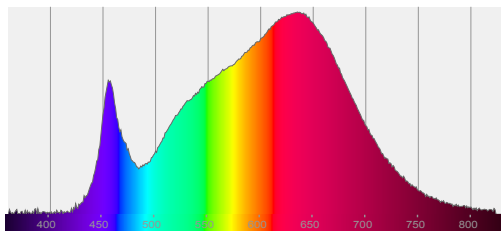Note: specifications are representative of the diode type and not a particular tape light article.

4200K

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