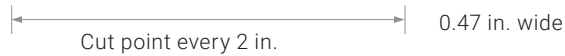


# PrimaLine® Neon 100 SB (Side-Bending)

Actual size shown



PrimaLine 24V Neon tape light is the next generation of neon lighting made from silicone for increased flexibility. It can be used indoors and outdoors for dynamic, curved lighting installations. A rugged, ultra-flexible silicone housing provides protection, longevity, and 100% hotspot-free lighting.

**PrimaLine Neon 100 SB** shines from the top and bends to the sides.

- Medium output
- Industry-leading 95+ CRI (Color Rendering Index)
- High R9 and R13 values for superb rendering of warm tones
- 5-year warranty

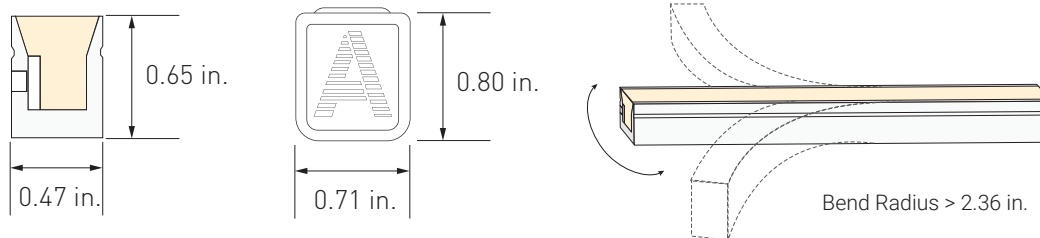
## TECHNICAL INFORMATION

<b>Color Temperature</b>	2600K, 3000K, 3500K, 4100K, Red, Blue
<b>Power Consumption per Foot</b>	3 Watts
<b>Input Voltage</b>	24V DC
<b>Tape Height</b>	0.65 inches
<b>Tape Width</b>	0.47 inches
<b>Beam Angle</b>	120°
<b>Bend Radius</b>	>2.36 inches
<b>Field Cuttable (UL 2108)</b>	Every 2 inches







<b>Maximum Run Length</b>	32.8 ft.
<b>Dimmable</b>	Yes
<b>Ambient Temperature</b>	-4° F to 113° F
<b>Spool Lengths</b>	16.4 ft., 32.8 ft.
<b>Environment</b>	Indoor/Outdoor, Dry/Wet, IP67
<b>Certifications</b>	UL Listed, UL 2108, CE, RoHS
<b>UV Rating</b>	No discoloration
<b>Warranty</b>	5 Year Limited

\*Each tape light section includes 18 in. right-hand lead wire with spliced ends on both ends.

## DIMENSIONS AND BEND RADIUS



## PRODUCT INFORMATION

16.4 ft. Spool	32 ft. Spool	Color Temperature	CRI	R9	R13	TM30	Lumens per Foot
AL-01-71-2405-SB	AL-01-71-2425-SB	 2600K	98	88	100	94	110
AL-01-71-2402-SB	AL-01-71-2422-SB	 3000K	98	92	99	93	115
N/A	AL-01-71-2428-SB	 3500K	95	79	93	94	115
AL-01-71-2406-SB	AL-01-71-2426-SB	 4100K	97	99	99	93	115
N/A	AL-01-71-2431-SB	 Red	N/A	N/A	N/A	N/A	N/A
N/A	AL-01-71-2432-SB	 Blue	N/A	N/A	N/A	N/A	N/A

## 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.

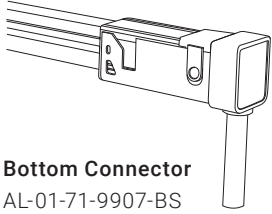
Note: These tables provide general guidelines for determining Wire Gauge based on total load and distance from LED driver to beginning of luminaire.

# ALLOY LED® Specifications

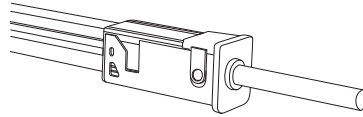
## COMPATIBLE CONNECTORS (Connectors and end caps have a IP65 rating)

### 36 in. Splice Connectors

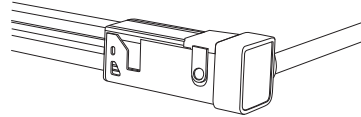
Add -10 to the end of the connector SKU to make it a 10-pack.



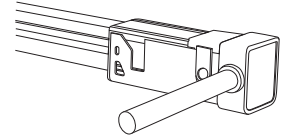
**Bottom Connector**  
AL-01-71-9907-BS



**Straight Connector**  
AL-01-71-9907-DS

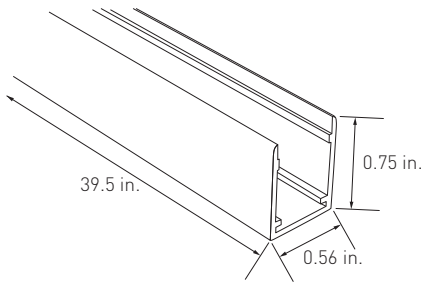


**Right Connector**  
AL-01-71-9907-RS

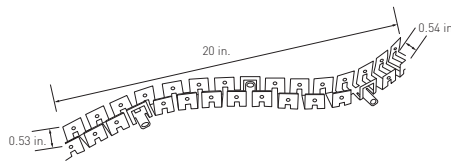


**Left Connector**  
AL-01-71-9907-LS

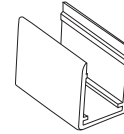
### Mounting Accessories



**Aluminum Mounting Track**  
AL-01-71-9923 (40 in.)

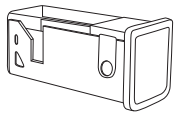


**Flexible Mounting Track**  
AL-01-71-9930 (20 in.)

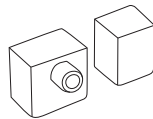


**Aluminum Mounting Clip/Screws**  
AL-01-71-9981 (1-pack)  
AL-01-71-9986 (10-pack)

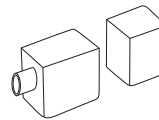
### Other Accessories



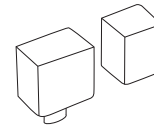
**End Cap Assembly**  
AL-01-71-9951 (1-pack)  
AL-01-71-9956 (10-pack)



**Silicone Caps (Left/Right)**  
AL-01-71-9961 (1-pack)  
AL-01-71-9966 (10-pack)



**Silicone Caps (Straight)**  
AL-01-71-9961-DS (1-pack)  
AL-01-71-9966-DS (10-pack)



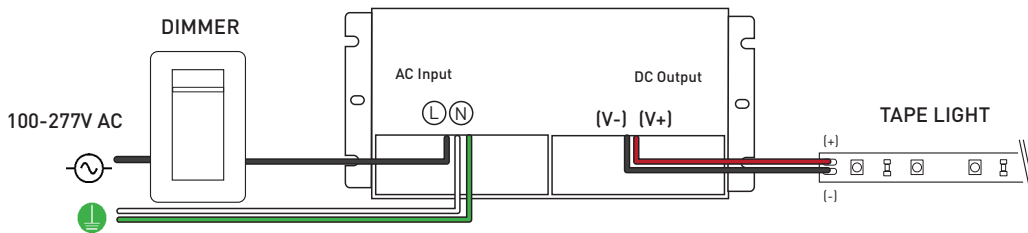
**Silicone Caps (Bottom)**  
AL-01-71-9961-BS (1-pack)  
AL-01-71-9966-BS (10-pack)

# ALLOY LED<sup>®</sup> Specifications

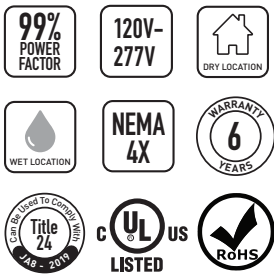
## RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)



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.



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



### 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.

# ALLOY LED® Specifications

## RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

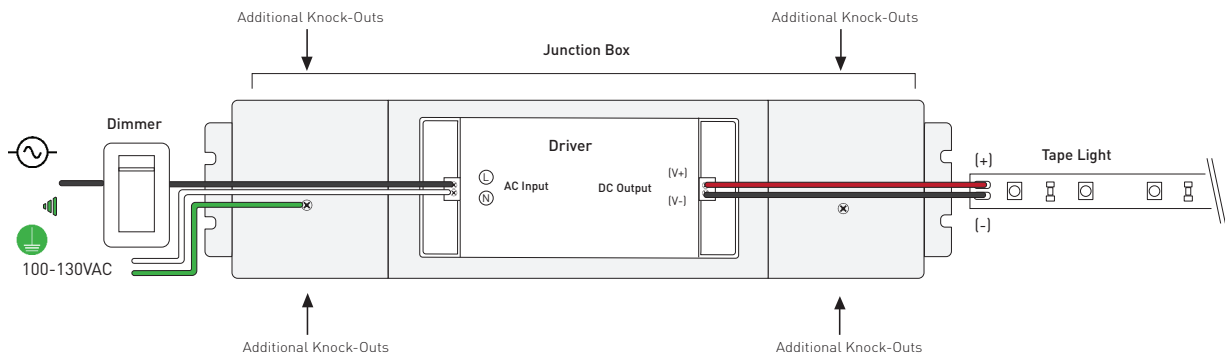
Alloy LED Primavolt® No Minimum Load Dimmable Power Supplies with ETL Listed Junction Box  
Code-compliant power supply with versatile and smooth dimming capabilities. Compatible with Incandescent, On/Off, ELV and MLV dimmers.



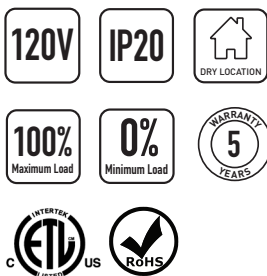
Dry Location Model  
White model for 60W and lower



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

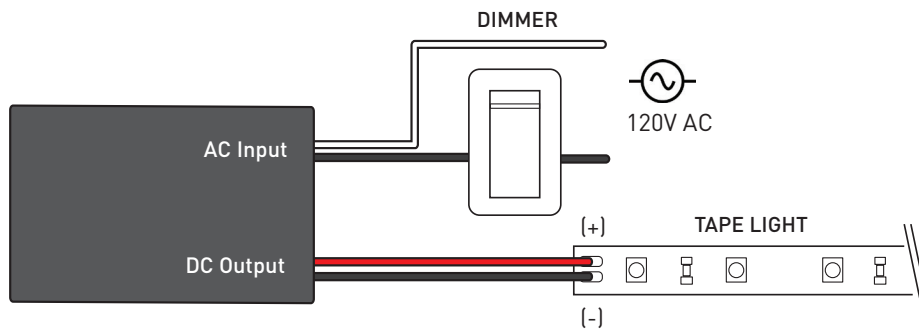
Note: Alloy LED strongly recommends using Listed Class 2 power supplies for all installations. Always install in accordance with local and national electrical code regulations. Inspectors prefer power supply to be used with junction box. For dimmer compatibility, refer to drivers specification sheet.

# ALLOY LED® Specifications

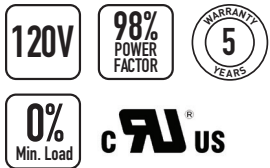
## RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

### 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.

# ALLOY LED® 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

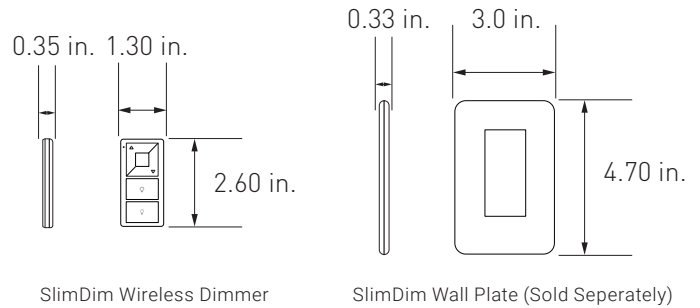
## DIMMING ACCESSORIES (SOLD SEPARATELY)

### 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.

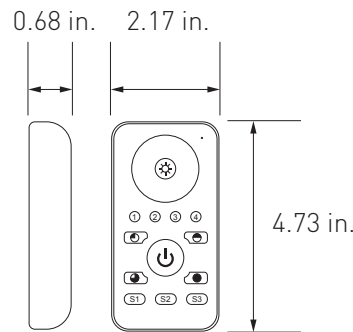
AL-70-01-0001	SlimDim Wireless Dimmer
AL-70-01-0002	Single Color Receiver (96W max.) (sold separately)
AL-98-07-9950 -FPLATE	SlimDim Wall Plate (sold separately)



#### 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.

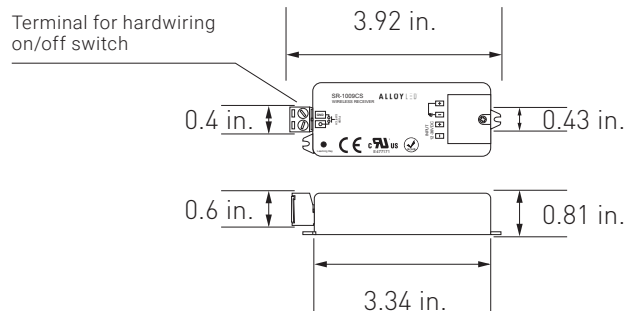
AL-60-03-0001	Remote Control Dimmer Switch
AL-70-01-0002	Single Channel Receiver (sold separately)
AL-60-03-0004-V2	Wireless Receiver (RGB & RGBW) (sold separately)



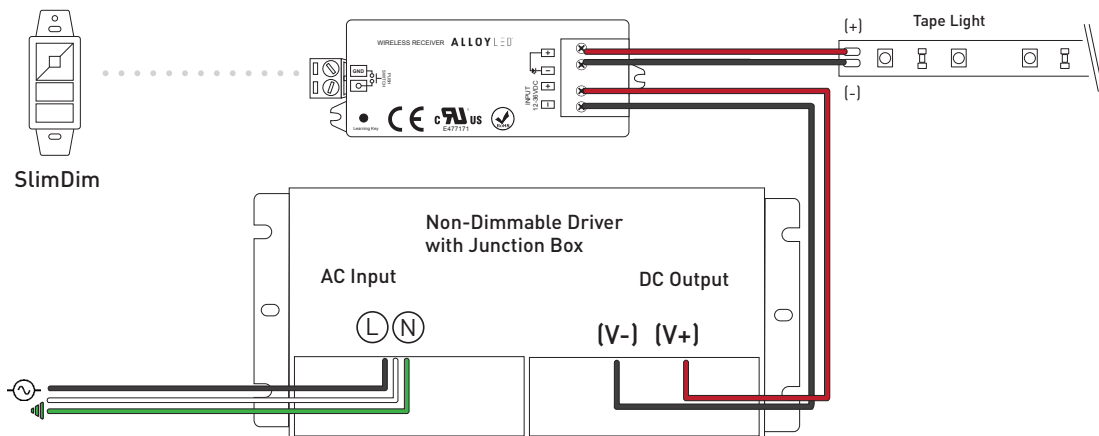
#### Single Channel Wireless Receiver

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
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## WIRING DIAGRAM



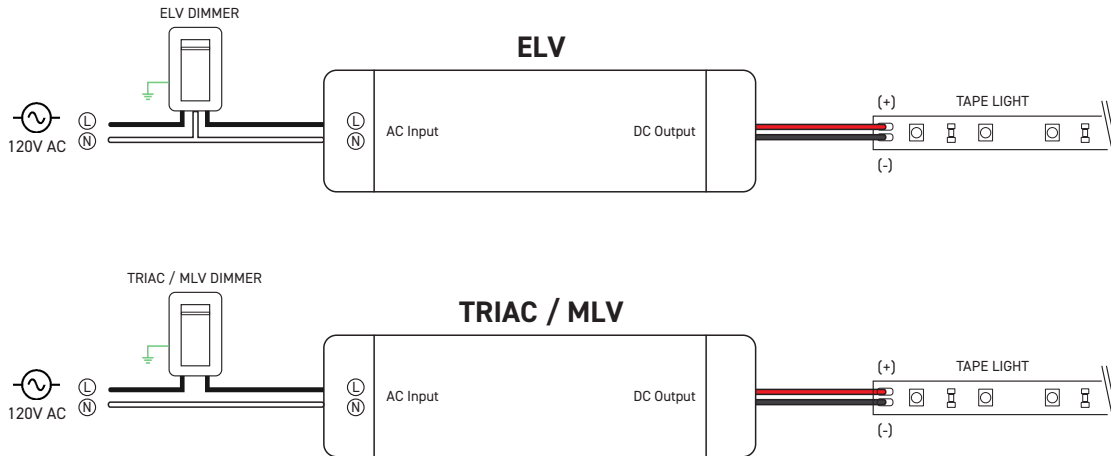


# ALLOY LED® Specifications

## RECOMMENDED POWER SUPPLIES (SOLD SEPARATELY)

### Alloy LED TRIAC/MLV/ELV Dimmable Drivers for Remote Locations

Offers stable power in even in the most remote settings. Compatibility with TRIAC, ELV, or MLV dimmers.



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



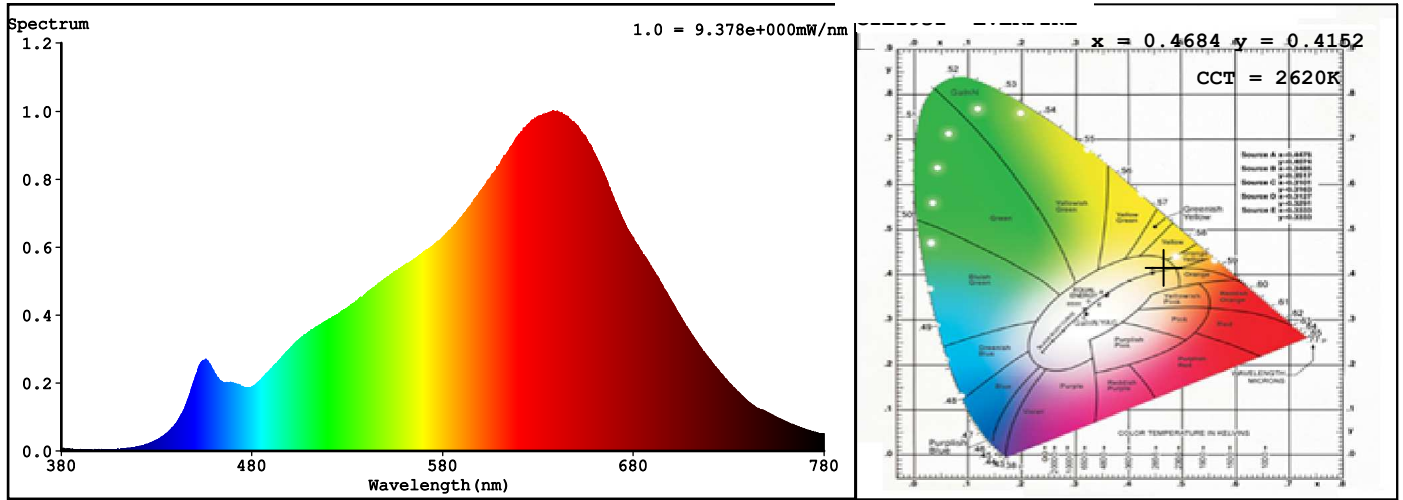
Item Number	Output Voltage	Wattage	Dimensions (L x W x H)	Class 2
AL-98-09-12060	12V DC	60W	3.31 x 1.57 x 0.98	Yes
AL-98-09-24096	24V DC	96W	3.31 x 1.57 x 0.98	Yes

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.

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

2600K

### Spectrum



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.4684$   $y = 0.4152$  /  $u' = 0.2659$   $v' = 0.5304$  ( $duv=1.02e-03$ )

CCT= 2620K Prcp WL:  $L_d=584.3nm$  Purity=65.2%

Peak WL:  $L_p=638nm$  FWHM:  $=145.3nm$  Ratio:R=27.7% G=69.7% B=2.6%

Render Index:  $R_a = 97.9$  TM30: $R_f=94$   $R_g=99$

R1 =100 R2 =100 R3 =99 R4 =99 R5 =99 R6 =97 R7 =96

R8 =94 R9 =88 R10=99 R11=97 R12=90 R13=100 R14=98 R15=97

LEVEL:OUT WHITE:ANSI\_2700K

### Photometric & Radiometric Parameters

Flux = 385.82 lm Eff. : 36.68 lm/W  $F_e = 1.5020 W$

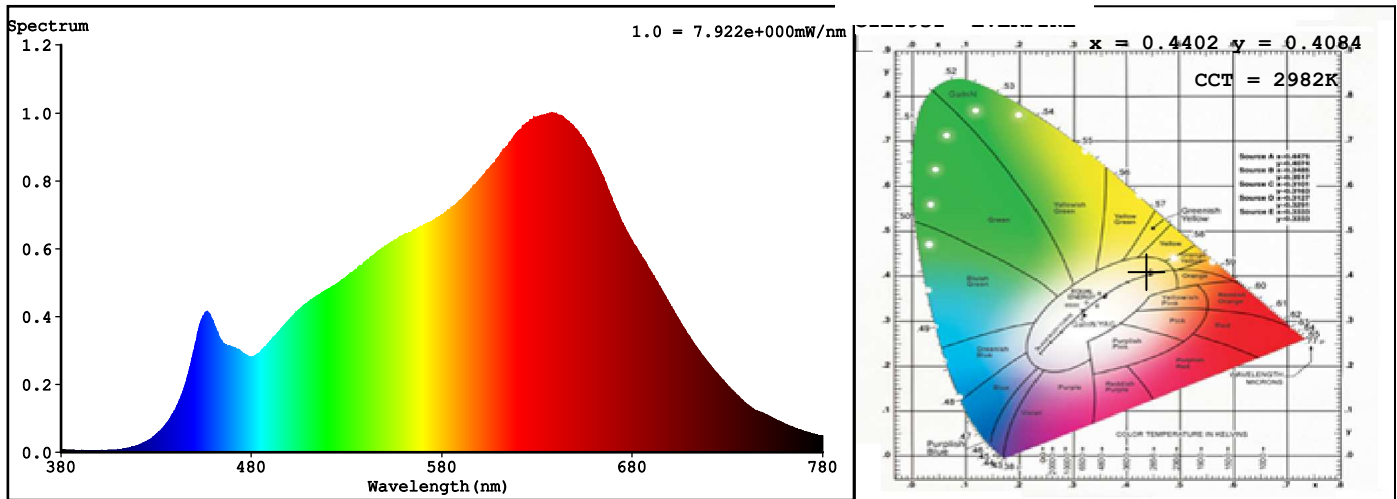
### Electrical parameters

V = 24.00 V I = 0.4383 A P = 10.52 W PF = 1.000 F=0.00 Hz

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

3000K

### Spectrum



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.4402$   $y = 0.4084$  /  $u' = 0.2508$   $v' = 0.5236$  ( $duv=1.29e-03$ )

CCT= 2982K Prcp WL:  $L_d=582.5nm$  Purity=54.7%

Peak WL:  $L_p=638nm$  FWHM: =166.7nm Ratio:R=25.0% G=71.7% B=3.3%

Render Index:  $R_a = 97.9$  TM30:Rf=93 Rg=99

R1 =99 R2 =99 R3 =99 R4 =98 R5 =98 R6 =98 R7 =97

R8 =96 R9 =92 R10=99 R11=99 R12=86 R13=99 R14=98 R15=97

LEVEL:OUT WHITE:ANSI\_3000K

### Photometric & Radiometric Parameters

Flux = 368.21 lm Eff. : 38.23 lm/W  $F_e = 1.3867 W$

### Electrical parameters

V = 24.00 V I = 0.4013 A P = 9.630 W PF = 1.000 F=0.00 Hz

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

3500K

**Light efficiency:**

**n/a Lumen/Watt**

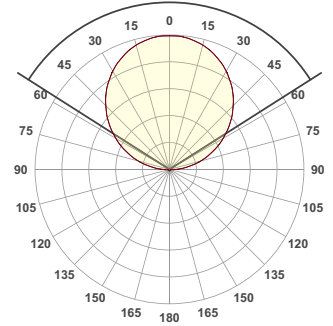
**Light quality:**

**CRI: 97.4**

**Color temperature:**

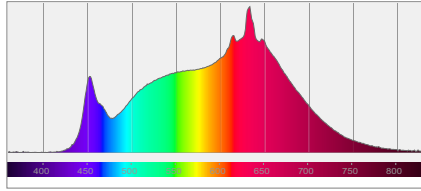
**3284 K**

115.1°

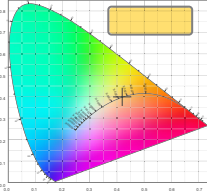


**Output: 309 Lumen Power consumption: 0.00**

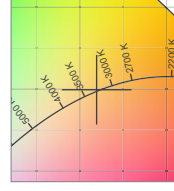
**Spectral distribution**



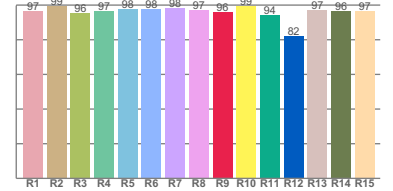
**Color coordinates**



**White color point**

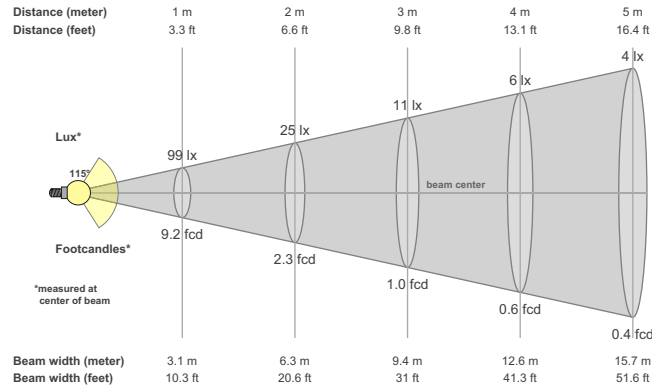


**CRI R values**



Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3284 K	97.4	95.7	93.8	100.6	95.9	0.419	0.399	0.241	0.345	0.0009

**Beam details**



**Beam angles**

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%
115.1°	170.3°	189.4°

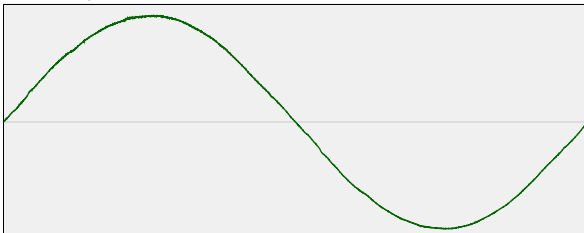
**Beam intensities**

Peak intensity	Int. ratio in 120° cone	Int. ratio in 90° cone
99.2 cd	73.2%	49.4%

**Beam intensities from 1-20m**

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
99lx	25lx	11lx	6lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx
9.2fcd	2.3fcd	1fcd	0.6fcd	0.4fcd	0.3fcd	0.2fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0.1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd

**Power scope**



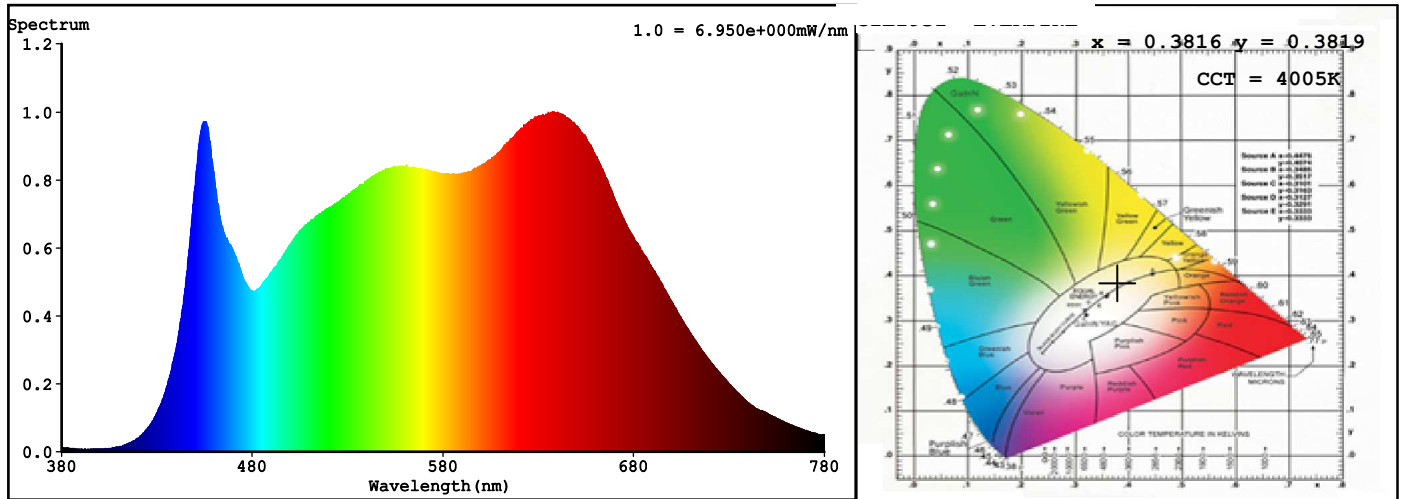
Power	Power factor	Power frequency
0.00 W	n/a	{FREQ } Hz

Nominal voltage	Voltage	Current
230 V	111 V	0.000 A

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

4100K

### Spectrum



### Colorimetric Parameters

Chromaticity Coordinate:  $x = 0.3816$   $y = 0.3819$  /  $u' = 0.2238$   $v' = 0.5040$  ( $duv=2.04e-03$ )

CCT= 4005K Prcp WL:  $Ld=578.0nm$  Purity=29.1%

Peak WL:  $Lp=638nm$  FWHM:  $=207.7nm$  Ratio:R=20.2% G=75.1% B=4.6%

Render Index:  $Ra = 97.4$  TM30:Rf=93 Rg=99

R1 =99 R2 =99 R3 =97 R4 =96 R5 =97 R6 =97 R7 =97

R8 =97 R9 =99 R10=97 R11=98 R12=76 R13=99 R14=98 R15=97

LEVEL:OUT WHITE:ANSI\_4000K

### Photometric & Radiometric Parameters

Flux = 403.69 lm Eff. : 40.22 lm/W Fe = 1.4903 W

### Electrical parameters

V = 24.00 V I = 0.4182 A P = 10.04 W PF = 1.000 F=0.00 Hz