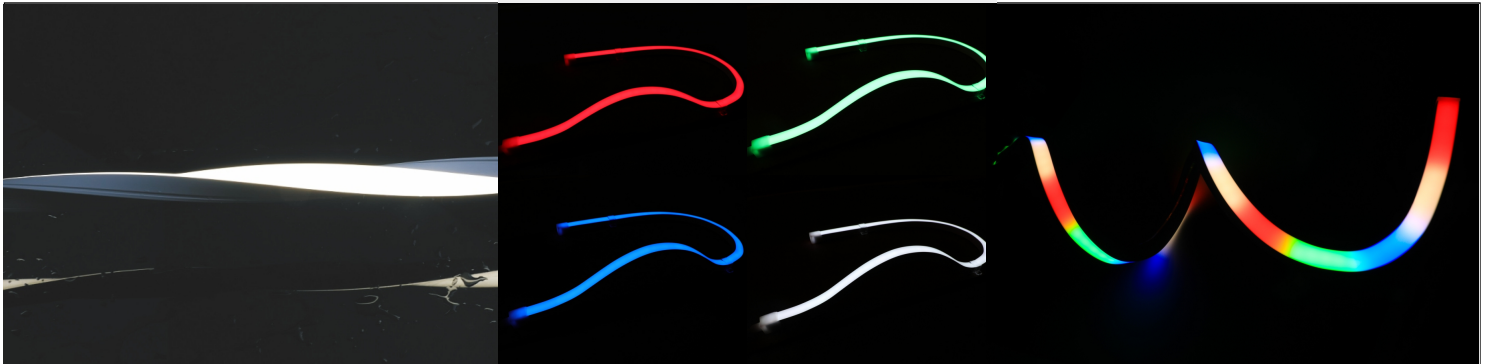


Neon SERIES | Free-Cutting Dual Bend



Application

This dual-bending LED Neon Strip is designed for decorative and ambient lighting in hotels, restaurants retail, showroom, bar and any commercial application where you want your space to stand out.

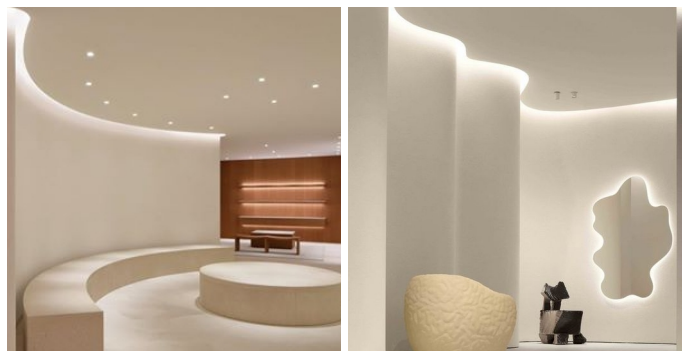
Features

- Dual-bend performance to fix many plane, curved, and complex irregular structures at will
- White, CCT-tunable, RGB, RGBW, SPI RGBW (IC in UCS8904) and DMX RGBW (IC in TM5 12AC) options are available for wide versatility
- 4.27 watts per foot
- On-site cuttable and assembly for fast and flexible customization operation, with end cap sealed by gluing process.
- Customized length with overall appearance in the same size by die- casting process
- Dimmable available with PWM signal
- Silicon extrusion technology is an advanced process resulting in a high grade appearance, soft bend flexibility, strong impact resistance and high weather resistance
- Up to 50,000h LED lifespan and 5 year warranty
- IP67 waterproofing for indoor or outdoor usage.

FNS

Introducing The Smart Lighting Company's newest upgrade to LED Tape technology! Our Dual Bend Neon Strip FNS Series is a high-performance lighting in a compact form designed to fix many plane, curved and complex structure irregularities. This top and side bending strip is cuttable on site and is IP67 rated for indoor or outdoor wet locations.

Easily customizable with options for free-cutting, this is available in Static White, Tunable White, RGB and RGBW. The FNS is dimmable, and compatible with most ELV and TRIAC dimmers. The FNS is capable of many different applications and can be fabricated to the specifications of your project.



Specifications and Performance

	STATIC WHITE	TUNABLE WHITE	RGB	RGBW	SPI RGBW	DMX RGBW
Watts per Foot	4.27	4.27	4.27	4.27	4.27	4.27
Max Run Length	16.4ft	16.4ft	16.4ft	16.4ft	16.4ft	16.4ft
Cutttable (factory cut only)	Free-cutting	Free-cutting	2.46"	2.46"	2.46"	2.46"
Lumens per Foot	286lm	280lm	310lm	158lm	93lm	91lm
Lumens per Watt	90lm/w	72lm/w	220lm/w	220lm/w	220lm/w	220lm/w
LEDs Per Foot	67	67	/	/	/	/
Input Voltage	24vdc					
Beam Spread	120°					
CRI	80, 90					
LED Lifespan	L70 ≥50,000 @ Tc ≤ 65					
Dimming	PWM					
Dimensions	0.79"x 0.79"					
CCT	2700k, 3000k, 4000k, 5000k, 6000k, TW, RGB, RGBW, SPI RGBW, DMX RGBW					
Operating Temp	-4°F to 113°F (-20°C to 45°C)					
Ambient Temp	-4°F to 140°F (-20°C to 60°C)					
Environment	IP67					
Warranty	5 Year				3 Year	
Certifications	CE, UL, RoHS,					



NEON SERIES ORDERING INFORMATION

Ordering

Example: FNS-DB-xxK-xxL-24VDC

Part No.	Style	Color Temp	Length	Voltage			
FNS	DB Dual -Bend	27	2700k	16	16.4ft	24	24vdc
		30	3000k				
		35	3500k	CU	Custom Length <i>see pg.2 for available cutting lengths</i>		
		40	4000k				
		50	5000k				
		60	6000k				
		TW	Tunable white				
		RGB	RGB				
		RGBW	RGBW				
		SRGBW	SPI RGBW				
DRGBW	DMX RGBW						

Mounting Accessories

FNS-A-SMB Surface mount

FNS-A-SK Ceiling mount

FNS-A-PCC Suspended Mount

FNS-MB Mounting Bracket (2 pieces)

FNS-AL-SCH Aluminum Channel 39.37" length (1M)

FNS-AL-FDBCH Aluminum Flexible Channel 39.37" length (1M) Max Run is 196"/roll



Wiring and End Cap Accessories

FNS-RPF Rear Power Feed 11.8" (300mm) leads

FNS-SPF Side Power Feed 11.8" (300mm) leads

FNS-BPF Bottom Power Feed 11.8" (300mm) leads



**All power feeds include a front cap and an end cap*

FNS-ERF-EK Extra Rear Feed Endcap Kit Extra

FNS-ESF-EK Side Feed Endcap Kit Extra

FNS-EBF-EK Bottom Feed Endcap Kit



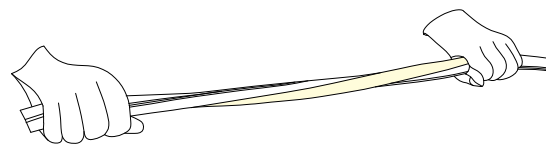
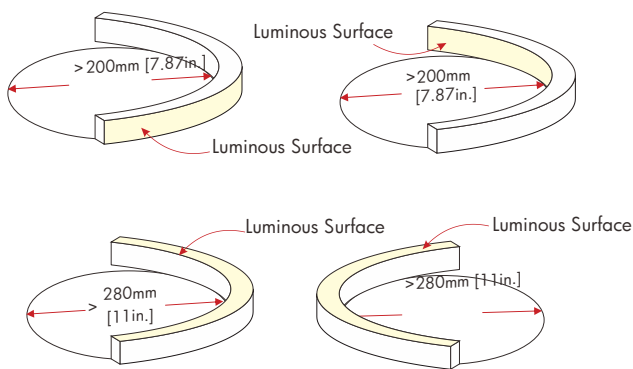
NEON SERIES ORDERING INFORMATION

Recommended Power Supplies



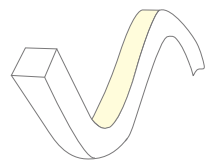
Dimmable with 0-10v, ELV, MLV, TRIAC

Item Number	Description	Max/Min Load	Input Voltage	Output Voltage	Dimmable	Dimensions
PS-TSLC-UNV-24V-30WDHV2	30W	30W / 3W	100-277V AC	24V DC	Yes*	6.49"L x 3.6"W x 1.02"H
PS-TSLC-UNV-24V-60WDHV2	60W	60W / 6W	100-277V AC	24V DC	Yes*	7.4"L x 3.6"W x 1.02"H
PS-TSLC-UNV-24V-96WDHV2	96W	96W / 9.6W	100-277V AC	24V DC	Yes*	8.66"L x 3.6"W x 1.61"H
PS-TSLC-UNV-24V-288WDHV2	288W (3 x 96W)	288W / 28.8W	100-277V AC	24V DC	Yes*	11.85"L x 4.25"W x 1.8"H

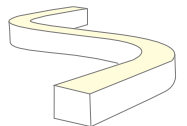


⚠ Max. Twist Angle is 360° per 1000mm[39.4in.]

Can be top-bend



Can be side-bend



Specifications and Performance

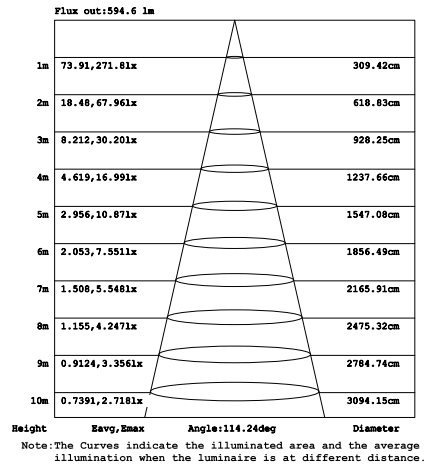
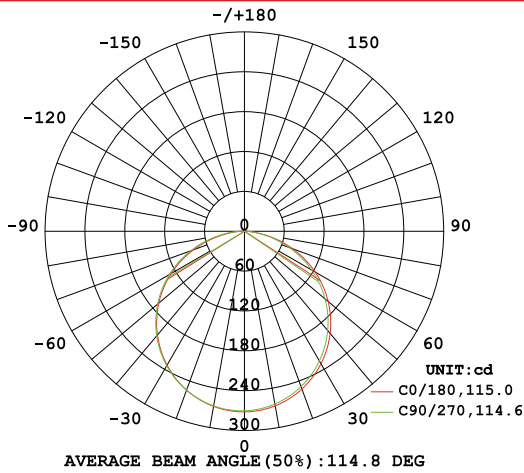
Part No.	Style	Dimension	Max. Run Length (La) & Max. Shipping Length	Strip Increment (L1)	LED Type	LED QTY	IP&IK Rating	Operating Ambient	Lifespan	Warranty
FNS	White	W0.79xH0.79in.	16.4ft. (Power fed on one side) & 98.4ft.	Free-cutting to be any length	SMD 2835	[36LED/ft.]	IP67 [Wet] & IK07	Ta: -4~113°F	50,000h (White/CCT/RGB/RGBW), 36,000h (SPI RGBW/DMX RGBW) (L70@ Tc≤149°F Tc is the temp. of LED pin.)	5 years (White/CCT/RGB/RGBW), 3 years (SPI RGBW/DMX RGBW)
	CCT					[73LED/ft.]				
	RGB		16.4ft. (Power fed on one side) & 32.8ft.	2.46in.	SMD 5050	96LED/M [29LED/ft.]				
	RGBW									
	SPI RGBW 16 pixels/3.28ft. & 4 points/pixel									
	DMX RGBW 16 pixels/3.28ft. & 4 addresses/pixel									

Photoelectric Parameters

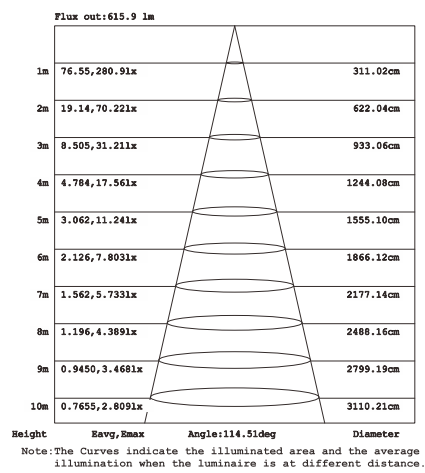
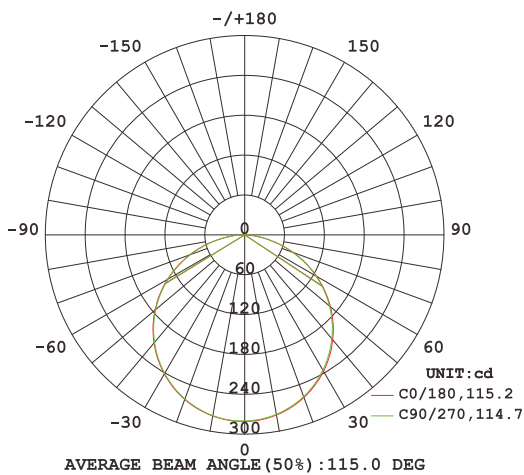
Part No.	Style	Power ±10%	Operating Voltage	Finished Product CCT/ Wavelength	IP67 CRI80, 4000K		IP67 CRI90, 4000K		Beam Angle
					Luminous Flux±10%	Light Efficiency	Luminous Flux±10%	Light Efficiency	
FNS	White	4.27W/ft.	24VDC	2700K±120K 3000K±150K 3500K±300K 4000K±300K 5000K±400K 6000K±500K	286lm/ft.	67lm/W	250lm/ft.	58lm/W	120°
	CCT			2700-6000K CCT-Tunable	2700K:134lm/ft. 6000K:146lm/ft. Mix:280lm/ft.	63lm/W 68lm/W 67lm/W	2700K:115lm/ft. 6000K:128lm/ft. Mix:244lm/ft.	54lm/W 60lm/W 57lm/W	
	RGB			R:620-630nm G:518-528nm B:460-470nm	R:27lm/ft. G:55lm/ft. B:12lm/ft. Mix:94lm/ft.	\	\	\	
	RGBW			R:620-630nm G:518-528nm B:460-470nm W:2700-6500K	R:21lm/ft. G:58lm/ft. B:12lm/ft. W:67lm/ft. Mix:158lm/ft.	\	R:21lm/ft. G:58lm/ft. B:12lm/ft. W:54lm/ft. Mix:146lm/ft.	\	
	SPI RGBW 16 pixels/3.28ft. & 4 points/pixel			R:620-630nm G:518-528nm B:460-470nm W:2700-6500K	R:11lm/ft. G:39lm/ft. B:7lm/ft. W:36lm/ft. Mix:93lm/ft.	\	R:11lm/ft. G:39lm/ft. B:7lm/ft. W:30lm/ft. Mix:88lm/ft.	\	
	DMX RGBW 16 pixels/3.28ft. & 4 addresses/pixel			R:620-630nm G:518-528nm B:460-470nm W:2700-6500K	R:8lm/ft. G:37lm/ft. B:7lm/ft. W:39lm/ft. Mix:91lm/ft.	\	R:8lm/ft. G:37lm/ft. B:7lm/ft. W:33lm/ft. Mix:85lm/ft.	\	



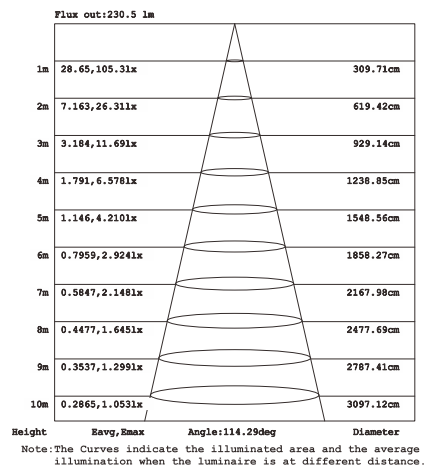
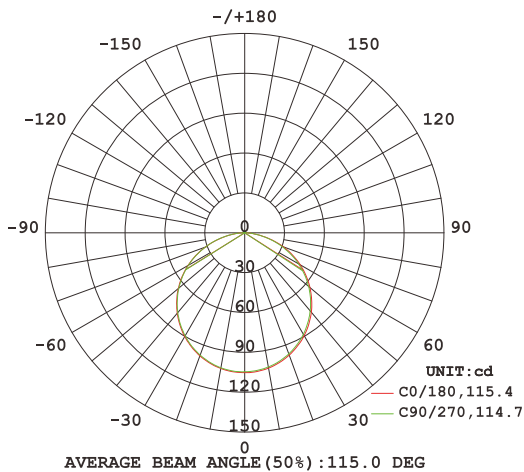
Light Distribution



White, 3000K, CRI90

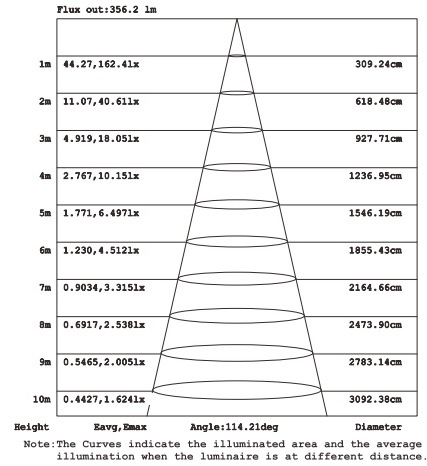
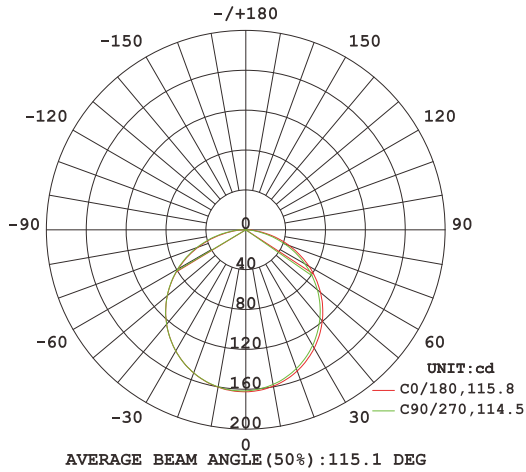


CCT, 2700+6000K, CRI90

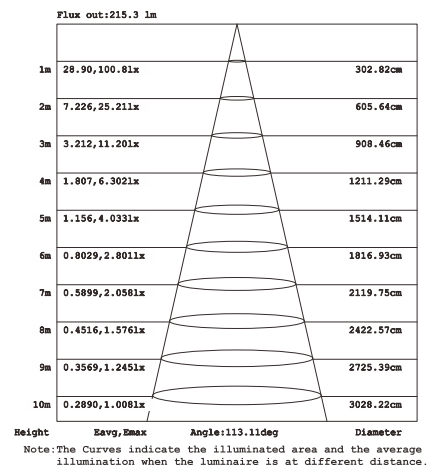
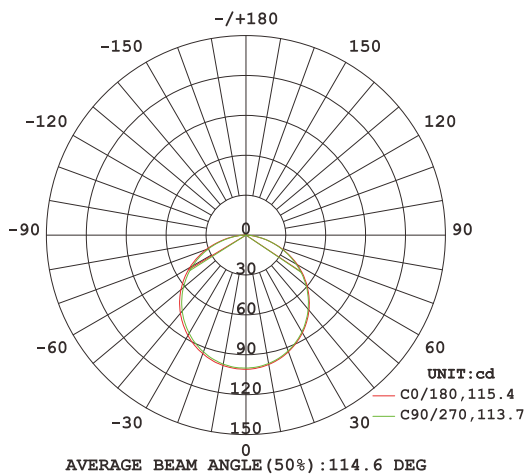


RGB

Light Distribution



RGBW, 4000K, CRI90



DMX RGBW, 4000K, CRI90

Diagram & Dimensions - Endcap sealed by gluing process

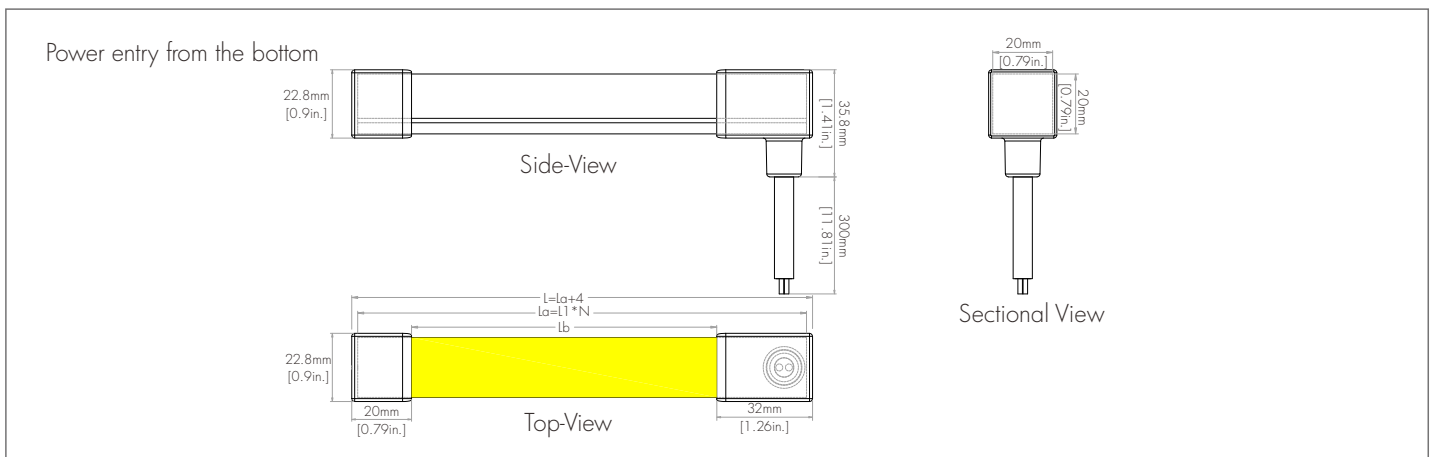
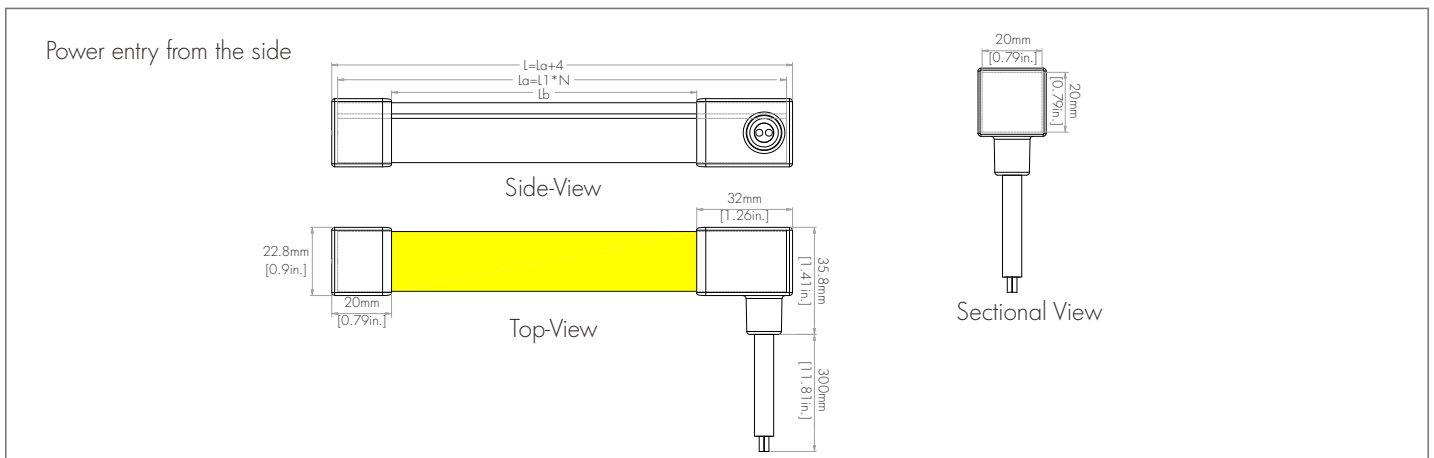
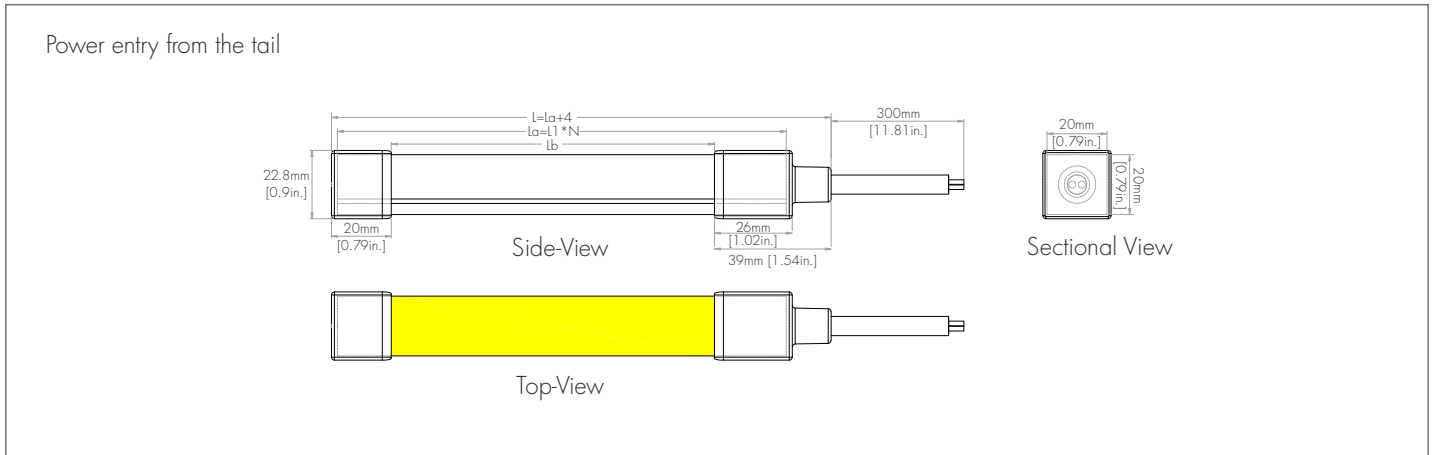
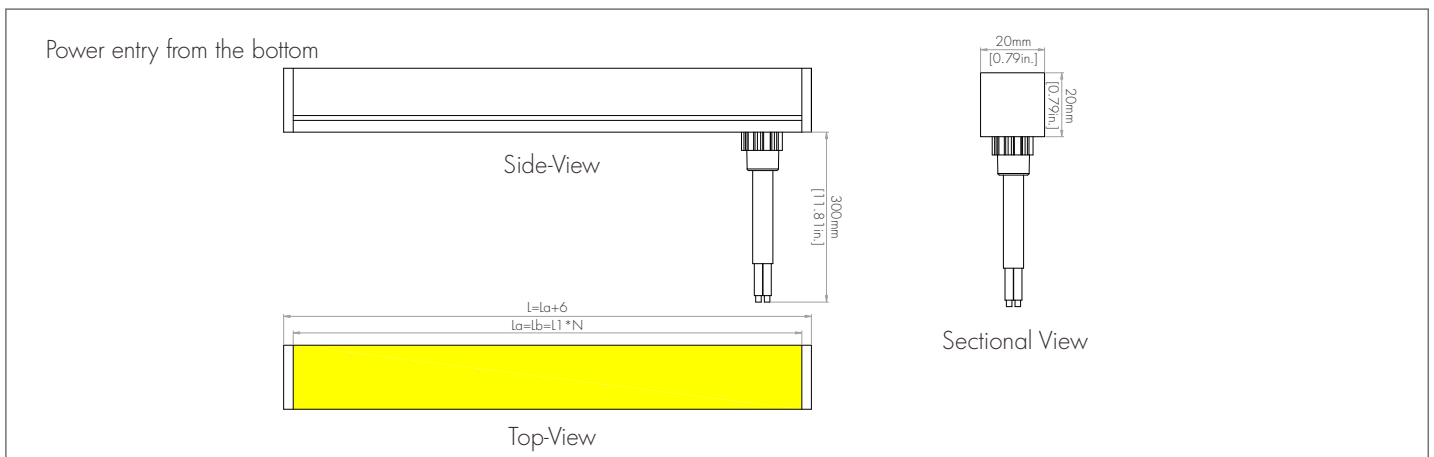
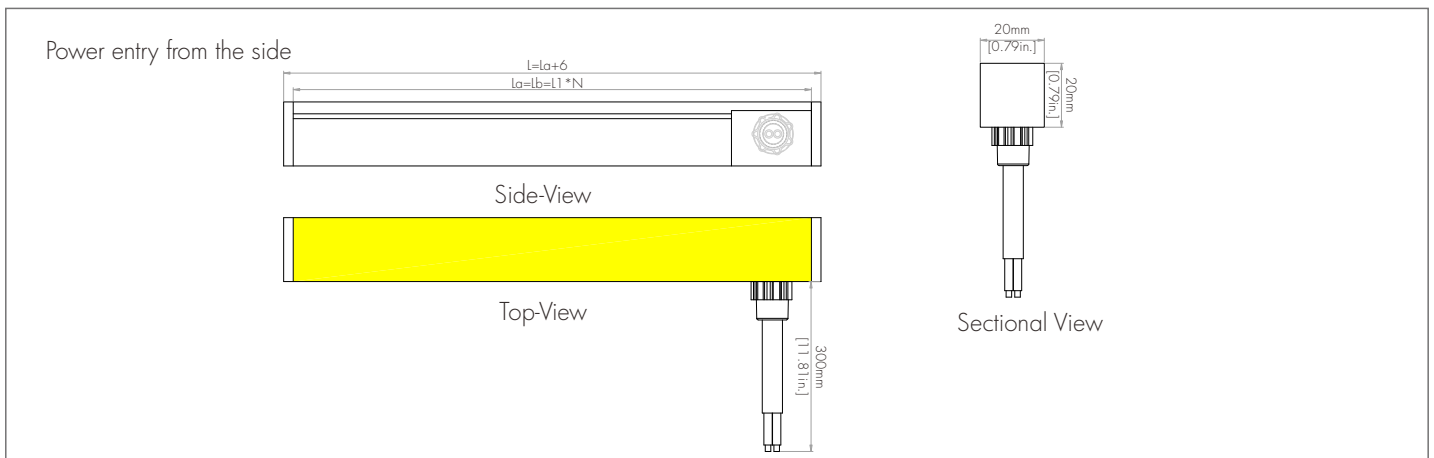
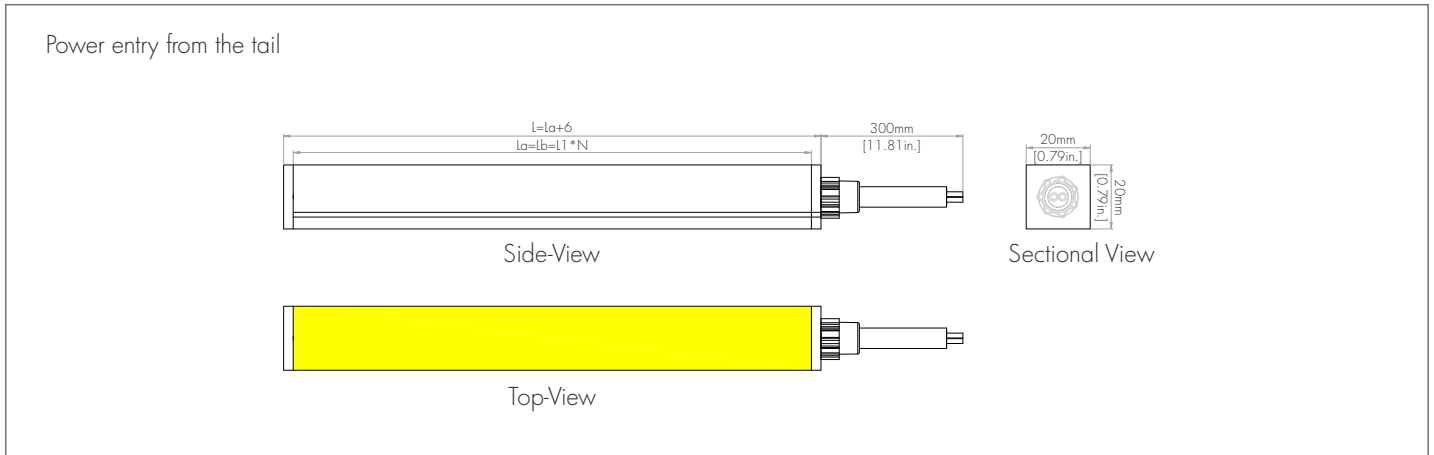
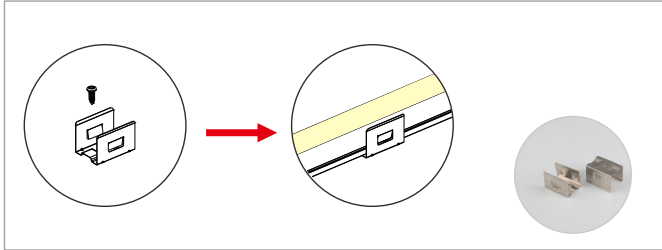


Diagram & Dimensions - Endcap sealed by die-casting process

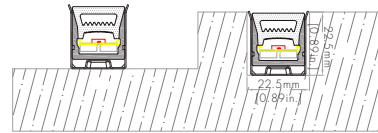


Installation

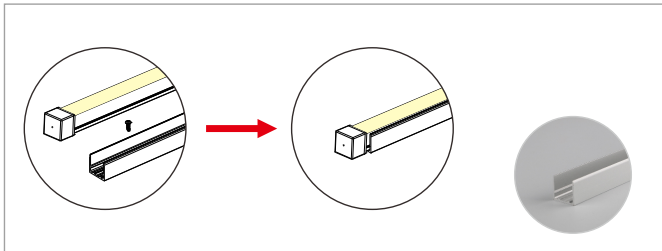
Option 1: Fixed by bracket.



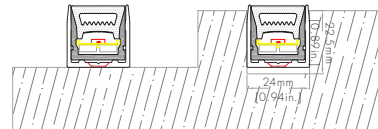
The groove size is shown as below



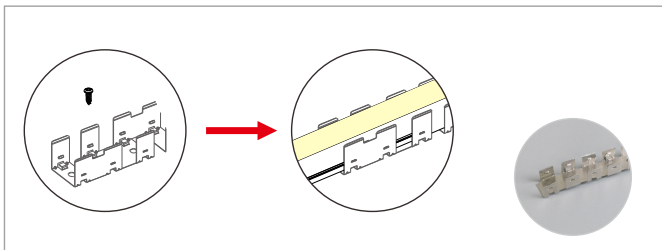
Option 2: Fixed by aluminum channel.



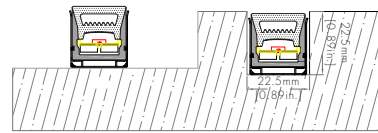
The groove size is shown as below



Option 3: Fixed by bendable bracket.



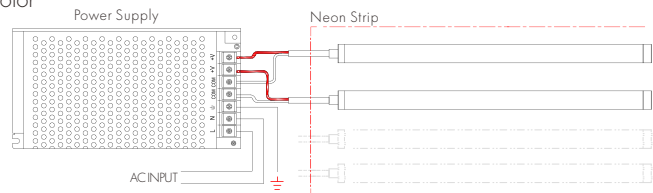
The groove size is shown as below



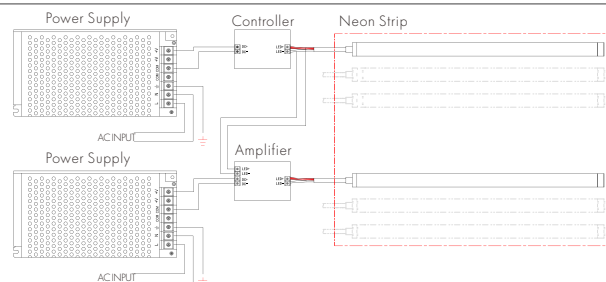
Note: It can also support surface & recessed mounting by gluing process.

Connection

Non-Dimming Status for White Color

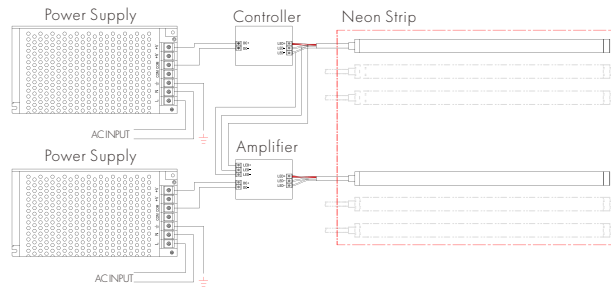


Dimming Status for White Color

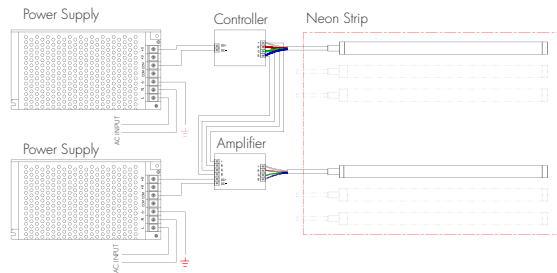


Connection

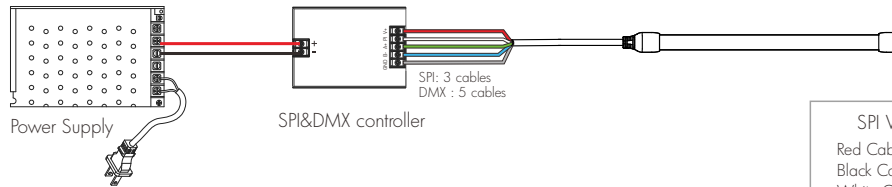
Dimming Status for CCT-Tunable Color



Dimming and tuning status for RGB/RGBW



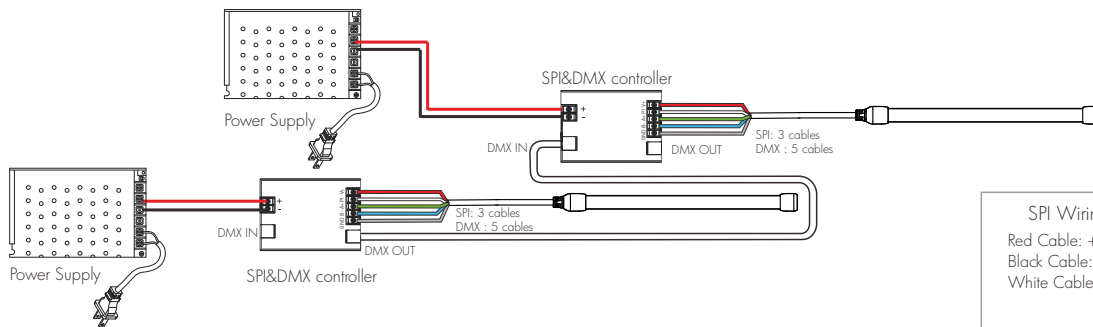
Dimming and tuning status for SPI/DMX RGB/RGBW (option 1)



SPI Wiring
 Red Cable: +24V
 Black Cable: GND
 White Cable: DI

DMX Wiring
 Red Cable: +24V
 Black Cable: GND
 Green Cable: A
 Blue Cable: B
 White Cable: PI

Dimming and tuning status for SPI/DMX RGB/RGBW (option 2)



SPI Wiring
 Red Cable: +24V
 Black Cable: GND
 White Cable: DI

DMX Wiring
 Red Cable: +24V
 Black Cable: GND
 Green Cable: A
 Blue Cable: B
 White Cable: PI

Important notice for wiring: the linkable connection must be form DI/PI to Do/PO strictly following the arrow printing on connector. It cannot be connected in reverse, otherwise the product will not work.