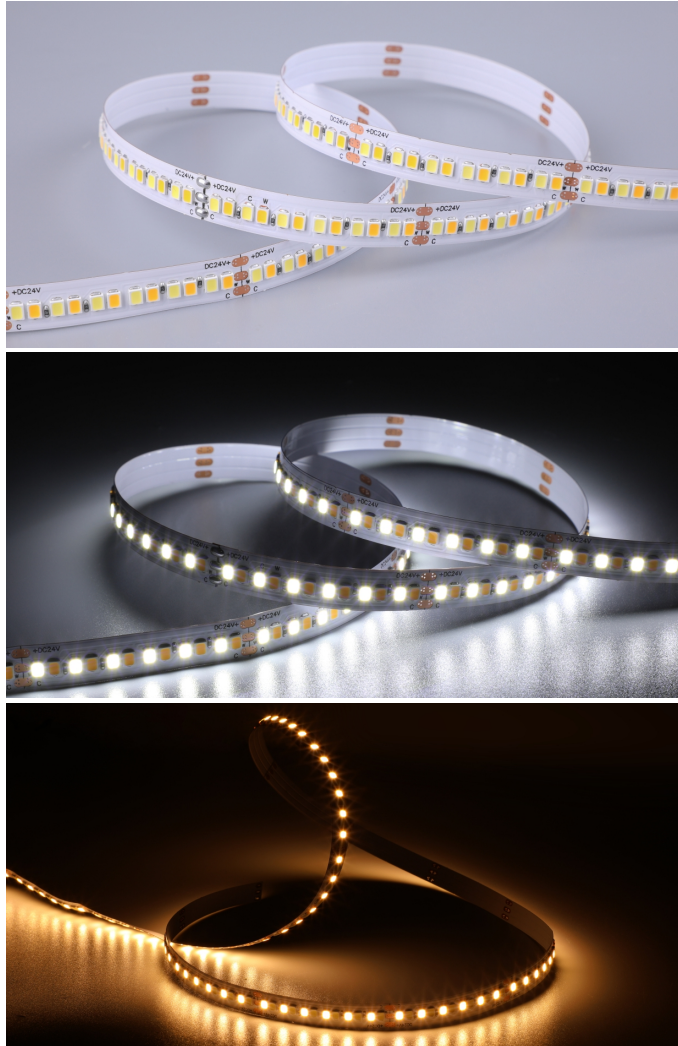


Plus Series

CCT-Tunable Series

2835 W+W High-Density

LED Flexible Strip



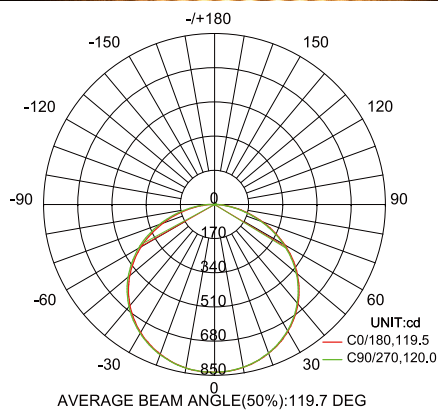
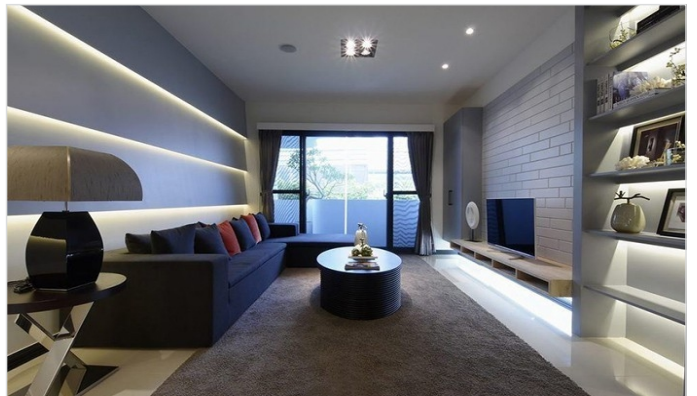
Features

The TUNE Series is a CCT Tunable flexible LED Strip. This high-density strip generates different CCT for the creation of several light environments. High-density design with both warm white and cold white in 36LED/ft. Flexible choice on LED specification combination with separated LEDs for two CCTs. Options available include Standard (2700K-6500K), Warm Dim (1800K-3000K), and Circadian Rhythm (1600-6500K). Color mixing effect is comparable to the 2in1 LED with two LEDs mounted closely. The TUNE Series offers maximum customization with multiple channel options and a segment length of 1.97".

UL and CE listed with a 5-year warranty.

Application

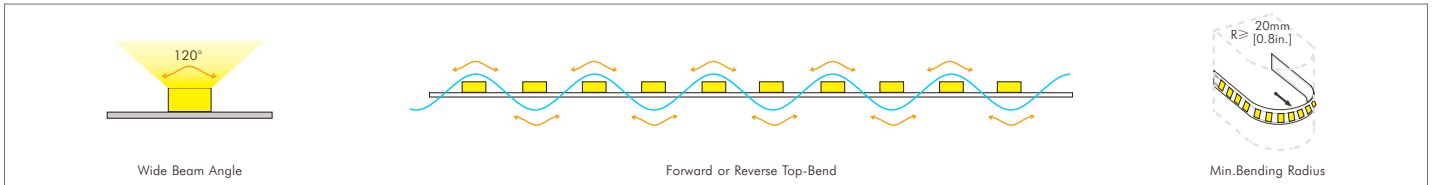
The TUNE is engineered to be indirect decorative lighting for tables, showcases, shelving, cabinetry, corridors, stairways, coves, ceilings, and suitable for countless other applications.



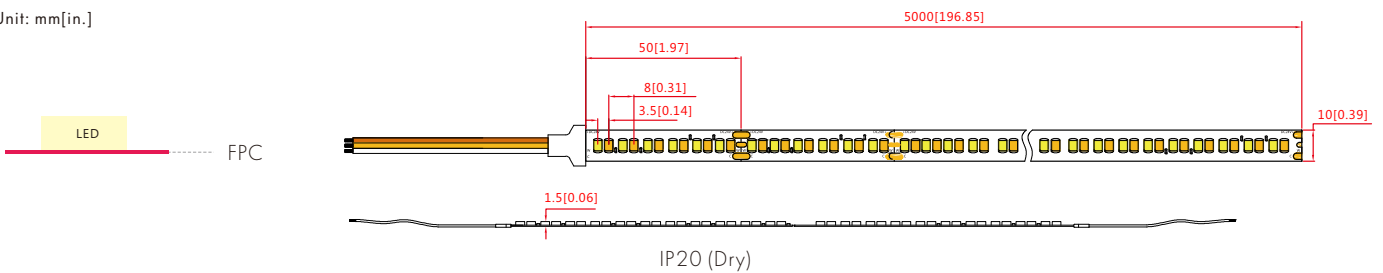
- IP20
- IP54
- IP65
- IP67
- IP68
- IP54 Plus
- IP67 Plus
- Dry
- Damp
- Wet

- Ra ≥80
- Ra ≥90
- Ra ≥95
- 3 SDCM
- 5 step/vv
- 12V
- 24V
- 120°
- 100lm/w
- 100lm/w
- 100lm/w
- PWM
- 5 Years

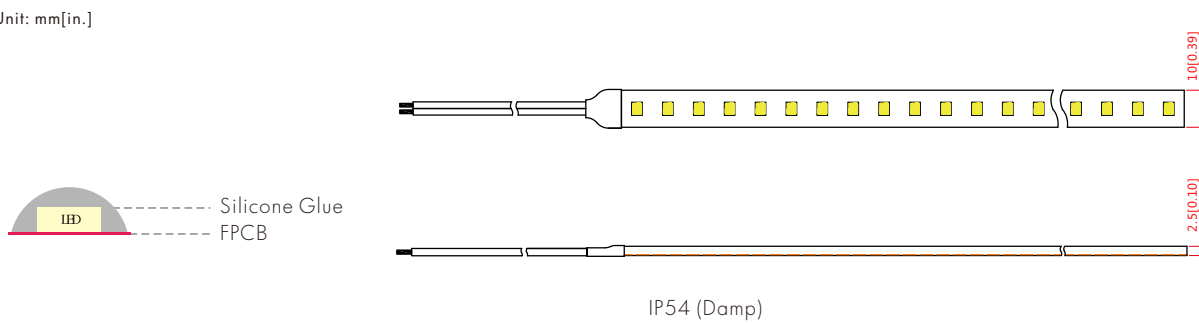
Diagram & Dimension



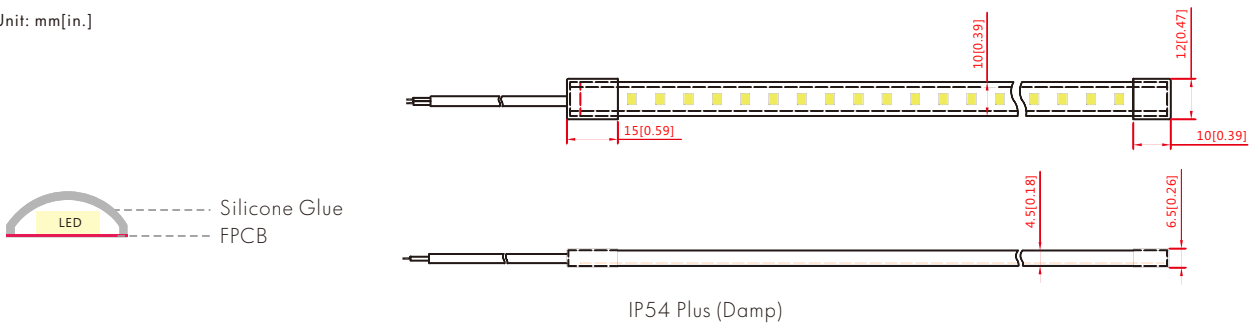
Unit: mm[in.]



Unit: mm[in.]



Unit: mm[in.]



LED Flexible Strip

Specification

Part No.	Dimension (L*W*H)	IP Rating	Lumen Flux±10% @CRI80&2700K&6500K	Light Efficiency @CRI80&2700K&6500K	Lumen Flux±10% @CRI90&2700K&6500K	Light Efficiency @CRI90&2700K&6500K
TUNE-24-LN28S	5000*10*1mm [197*0.4*0.04in.]	IP20 [dry]	1160lm/M [360lm/ft.] (WW) 1240lm/M [380lm/ft.] (CW)	97lm/W (WW) 103lm/W (CW)	990lm/M [302lm/ft.] (WW) 1050lm/M [320lm/ft.] (CW)	83lm/W (WW) 88lm/W (CW)
TUNE-24-LN28S	5000*10*2.5mm [197*0.4*0.1in.]	IP54 [damp]	1160*90%lm/M[360*95%lm/ft.] (WW) 1240*90%lm/M[380*95%lm/ft.] (CW)	97*90%lm/W (WW) 103*90%lm/W (CW)	990*90%lm/M[302*90%lm/ft.] (WW) 1050*90%lm/M[320*90%lm/ft.] (CW)	83*90%lm/W (WW) 88*90%lm/W (CW)
TUNE-24-LN28S	5000*10*4.5mm [197*0.4*0.18in.]	IP54 Plus [damp]	1160*95%lm/M[360*95%lm/ft.] (WW) 1240*95%lm/M[380*95%lm/ft.] (CW)	97*95%lm/W (WW) 103*95%lm/W (CW)	990*95%lm/M[302*95%lm/ft.] (WW) 1050*95%lm/M[320*95%lm/ft.] (CW)	83*95%lm/W (WW) 88*95%lm/W (CW)

Notice: (1) The lumen flux value above comes from integrated sphere report, it might be higher in IES report.
 (2) The lumen flux value above is base on 1M[3.28ft.] length, it need to be measured and considered separately for other longer lengths.
 (3) Energy efficiency class of regulation (EU) 2019/2020 IS F(CRI80) for 2700K in IP20, it varies depending on CRI, CCT and IP rating.

General Parameters		Photoelectric Parameters	
Standard Length	5M [16.4ft.] (power fed on one side)	Power±10%	24W/M [7.32W/ft.]
Min. Unit & LED QTY	50mm [1.97in.] & 12LEDs	Input Voltage	24VDC
LED Type	SMD2835 white	LED Current	23~27mA/LED
LED QTY	240 LEDs/M [73 LEDs/ft.]	LED CCT & Wavelength	2700~6500K (CCT-Tunable Normal), 1800~3000K (CCT-Tunable Warm Dim), 1600~6500K (CCT-Tunable Circadian Rhythm)
PCB Type	3oz white FPC, OSP	SDCM	ErP & ANSI Norm, 3 step
Operating Ambient	Ta(working): -20~45°C [-4~113°F] & Tstg (storage): -20~60°C [-4~140°F]	CRI	Ra≥80&90
Warranty	5 years	Beam Angle	120°
Lifespan	L70≥50,000@Tc≤65°C [149°F] (Tc is temperature of LED pin)	Dimming Method	PWM (dimmable driver like RF, Bluetooth, 0/1-10V, Triac, DALI, DMX, WIFI etc.)
Certification	CE, UL, CB, SAA, RoHS, LM80		

- Note:
- 1: Dimension and optical parameters such as lumen flux, CCT, etc. of the waterproof product may vary compared with the IP20 version.
 - 2: Luminous flux for CCT 2700K is 10% lower, for CCT 3000K/3500K is 5% lower, for CCT 5000K/6500K is the same, compared with 4000K.
 - 3: Transmittance for IP54 Thin/IP54/IP67/IP68, 2700K/3000K is 95%, 3500K/4000K is 90%, 5000K/6500K is 80%; transmittance for IP65/IP54 Plus/IP67 Plus Thin/IP67 Plus is 95%.
 - 4: Applying with extra heat sink for cooling is mandatory.
 - 5: 3M 300LSE yellow adhesive tape attached on backside, is standard configuration of Plus Series.
 - 6: One end of 200mm brown/yellow/white silicone cable or waterproof connector kit according to specific IP rating, is standard configuration of Plus Series.
 - 7: Transparent reel and silvery ESD bag, are standard configuration of Plus Series.
 - 8: Installation accessories such as clip, screw, plug etc. are all optional base on specific demand.
 - 9: Power maintenance rate=actual measured power in a certain length/(a same certain length*actual measured power in 1M[3.28ft.] length);
 Brightness maintenance rate=actual measured brightness on the tail section in a certain length/actual measured brightness on the first section in a same certain length.

POWER & BRIGHTNESS vs. LENGTH CHARACTERISTIC (POWER FED ON ONE SIDE)					
Length Of Single Product	1M [3.28ft.]	2M [6.56ft.]	3M [9.84ft.]	4M [13.1ft.]	5M [16.4ft.]
Actual Measured Power	12.5W (WW)	24.3W (WW)	35.5W (WW)	46W (WW)	55.4W (WW)
	12.2W (CW)	24.1W (CW)	35.4W (CW)	45.8W (CW)	55.4W (CW)
	24.4W (WW+CW)	48.4W (WW+CW)	69.6W (WW+CW)	88.8W (WW+CW)	101.5W (WW+CW)
Power Maintenance Rate	100% (WW)	97.2% (WW)	94.7% (WW)	92% (WW)	88% (WW)
	100% (CW)	98.8% (CW)	96.7% (CW)	93.9% (CW)	90.8% (CW)
	100% (WW+CW)	99.2% (WW+CW)	95.1% (WW+CW)	91% (WW+CW)	83.2% (WW+CW)
Brightness Maintenance Rate	95% (WW)	94.9% (WW)	94.7% (WW)	92.8% (WW)	91.9% (WW)
	98.6% (CW)	97.3% (CW)	96.4% (CW)	93.1% (CW)	92.1% (CW)
	99.3% (WW+CW)	96.8% (WW+CW)	93.8% (WW+CW)	90.3% (WW+CW)	83.9% (WW+CW)

Ordering Information

MODEL	COLOR	LENGTH	IP	VOLTAGE	
TUNE-LN28S	TN	27k~65k (CCT-Tunable Normal),	16.4 16.4' Reel CU Custom Length	20 IP20 54 IP54 54P IP54P	24V 24 Volt DC
	TWD	18k~30k (CCT-Tunable Warm Dim),			
	TCR	16k~65k (CCT-Tunable Circadian Rhythm)			

Accessories

FS-TUNE-LN28S-WL Wire lead connector for static white strip

FS-TUNE-LN28S-JC Jumper cable connector static white strip

FS-TUNE-LN28S-SSC Strip to strip connector for static white strip



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

LED Flexible Strip

Aluminum Channel Compatibility ("√" means complete fit. "×" means Fit except the end caps.)

Mini Surface Mounted Series	3951	0335	3939	0603	4735			
	IP20 / IP54 Thin / IP54							
	IP54 Plus							
	IP67 Plus Thin							
IP65 / IP67 / IP67 Plus / IP68								
Mini Recessed Mounted Series	6359	0547						
	IP20 / IP54 Thin / IP54							
	IP54 Plus							
	IP67 Plus Thin							
IP65 / IP67 / IP67 Plus / IP68								
Regular Surface Mounted Series	6733	6760	5928	6351	4759	9354		
	IP20 / IP54 Thin / IP54	√	√			√		
	IP54 Plus							
	IP67 Plus Thin							
IP65 / IP67 / IP67 Plus / IP68						√		
Regular Surface Mounted Series	6759	6760	7679-A	7679-B				
	IP20 / IP54 Thin / IP54	√	√	√	√			
	IP54 Plus							
	IP67 Plus Thin							
IP65 / IP67 / IP67 Plus / IP68			×	×				
Regular Recessed Mounted Series	9831	9680	8367	9447				
	IP20 / IP54 Thin / IP54	√	√	√				
	IP54 Plus							
	IP67 Plus Thin							
IP65 / IP67 / IP67 Plus / IP68								

LED Flexible Strip

Aluminum Channel Compatibility ("√" means complete fit. "✗" means Fit except the end caps.)

Corner Mounted Series	6363-S	6363-R	7272						
	IP20 / IP54 Thin / IP54		√						
	IP54 Plus								
	IP67 Plus Thin								
	IP65 / IP67 / IP67 Plus / IP68		✗						
Regular Suspension Series	80106-R	80106-S	118						
	IP20 / IP54 Thin / IP54	√	√	√					
	IP54 Plus								
	IP67 Plus Thin								
	IP65 / IP67 / IP67 Plus / IP68	√	√	√					
In Ground Series	84102								
	IP20 / IP54 Thin / IP54	√							
	IP54 Plus								
	IP67 Plus Thin								
	IP65 / IP67 / IP67 Plus / IP68								
Wall Washer Series	1970								
	IP20 / IP54 Thin / IP54	√							
	IP54 Plus								
	IP67 Plus Thin								
	IP65 / IP67 / IP67 Plus / IP68								

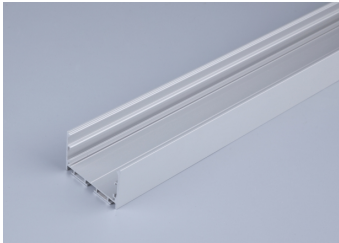
LED Flexible Strip

Aluminum Channel Compatibility ("√" means complete fit. "×" means Fit except the end caps.)

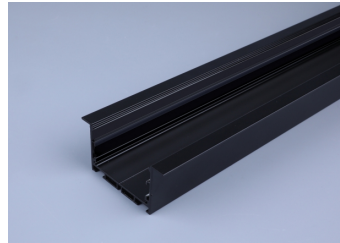
	181102	209091	2209	24055	14045	14045-S		
Decorative Series								
IP20 / IP54 Thin / IP54	√	√	√	√	√	√		
IP54 Plus								
IP67 Plus Thin								
IP65 / IP67 / IP67 Plus / IP68				√				
Office Suspension Series	138S 	197S 	295S 					
IP20 / IP54 Thin / IP54								
IP54 Plus								
IP67 Plus Thin								
IP65 / IP67 / IP67 Plus / IP68								
Office Recessed Mounted Series	138R 	197R 	295R 					
IP20 / IP54 Thin / IP54								
IP54 Plus								
IP67 Plus Thin								
IP65 / IP67 / IP67 Plus / IP68								
Mounting Accessory Series for Waterproof Strip	5030 	6030 						
IP20 / IP54 Thin / IP54								
IP54 Plus								
IP67 Plus Thin								
IP65 / IP67 / IP67 Plus / IP68								

Aluminum Channel Compatibility

Aluminum Options



Silver

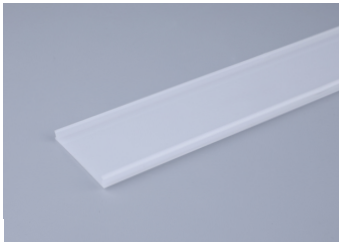


Black

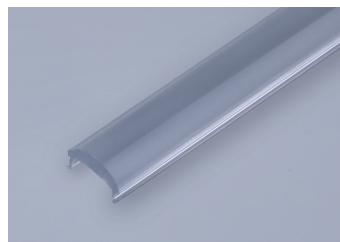


White

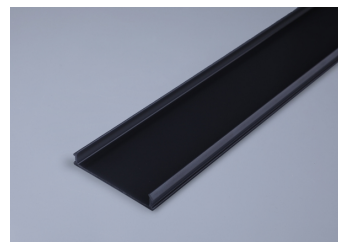
Diffusion PC Cover Options



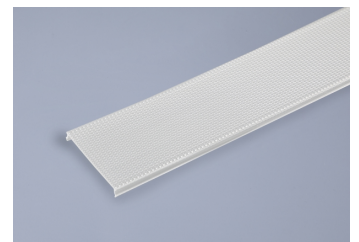
Milky
Transmission: 83%
For Dot-free



Transparent
Transmission: 93%
For High transmittance



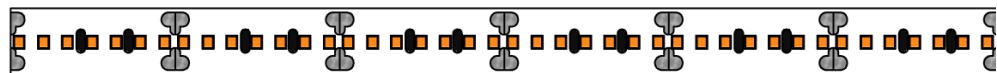
Black
Transmission: 60%
For Decoration



Prismatic
Transmission: 83%
For Anti-glare
UGR < 19 optional

Length Increment Diagram Illustration

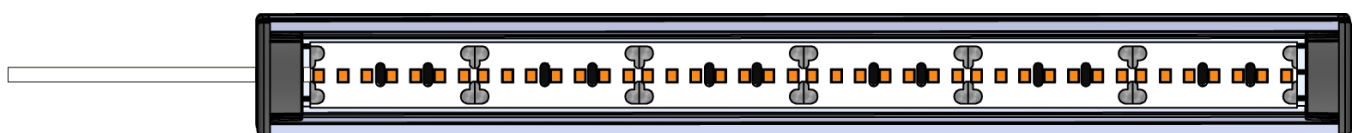
LED Strip



Aluminum Profile+Endcap



LED Strip+Cable+Aluminum Profile+Endcap



End Cap Length Extra Profile Length LED Strip Length Extra Profile Length End Cap Length