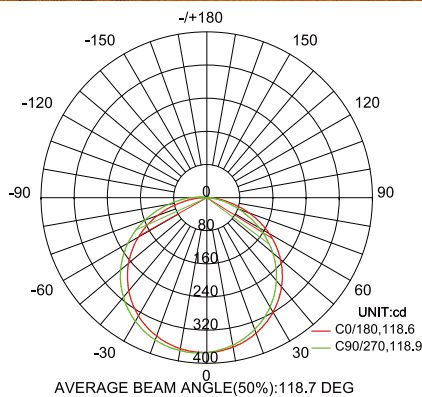
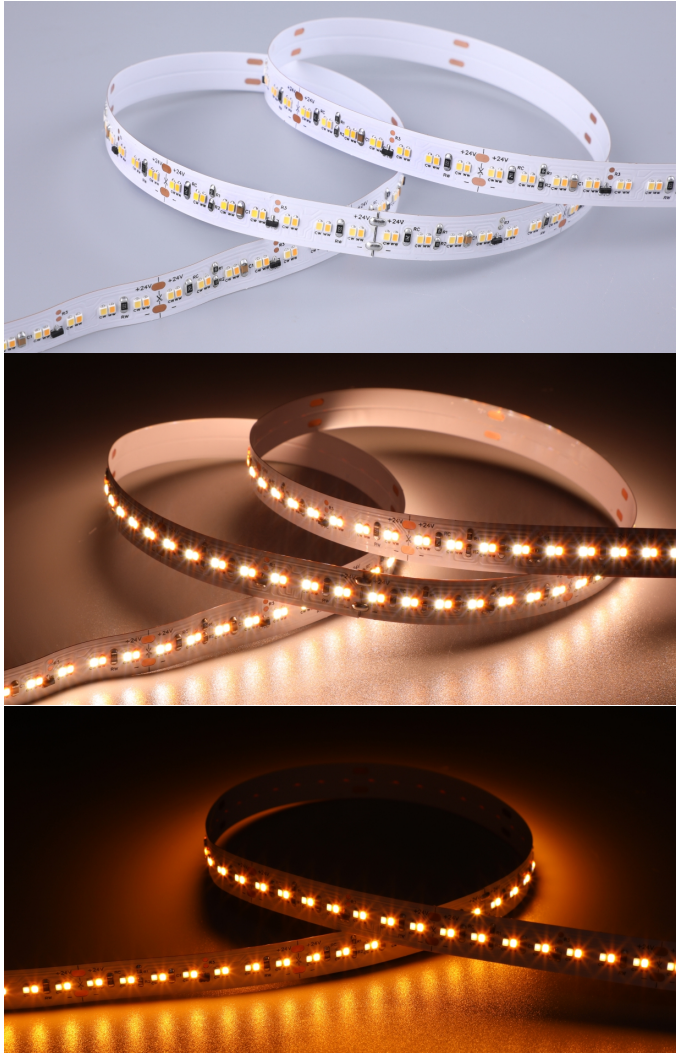


LED Flexible Strip

CCT-Tunable Series

Dim-to-warm PWM

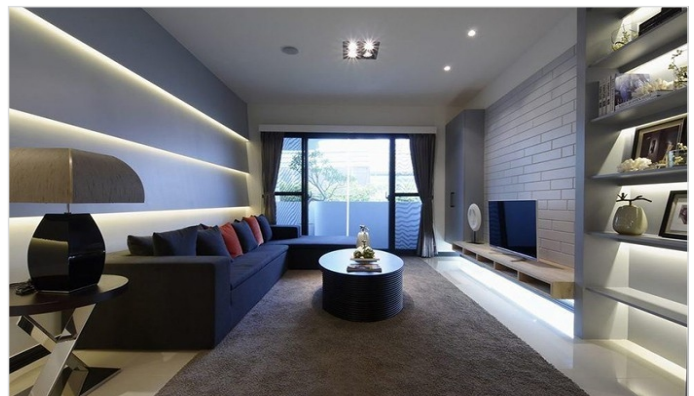


Features

The DTWP Series is a Dim-to-Warm flexible LED Strip. It warms as it is dimmed in only 2 wires. Dim-to-Warm dims CCT from 3000K to 1800K while its brightness is dimmed from 100% to 3% synchronously and smoothly, perfectly simulating the warmth and dimming curve of incandescent and halogen lamps, which create a comfortable and natural lighting effect (varies according to LED driver or controller). Direct dimming with PWM (Pulse-Width Modulation) driver, no remote controller, no receiver, and simple and convenient wiring. High-density design with both warm white and cold white in 38LED/ft., perfect for premium linear performance when affixing into aluminum profile. Flexible choice on LED specification combination with separated LEDs for two CCTs. Color mixing effect is comparable to the 2in1 LED with two LEDs mounted closely. The DTWP Series offers maximum customization with multiple channel options and a segment length of 2.19". UL and CE listed with a 5-year warranty.

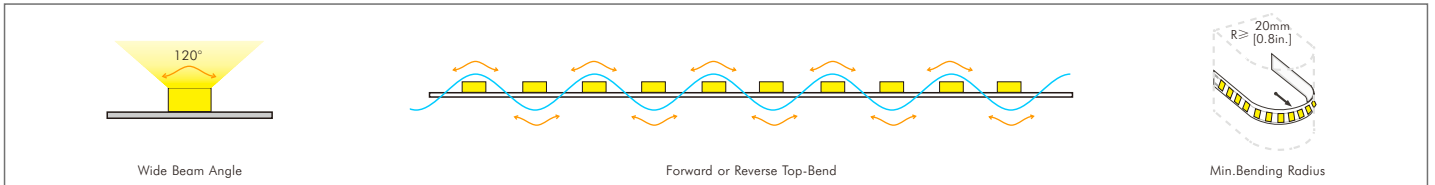
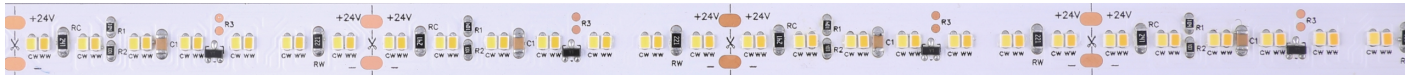
Application

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

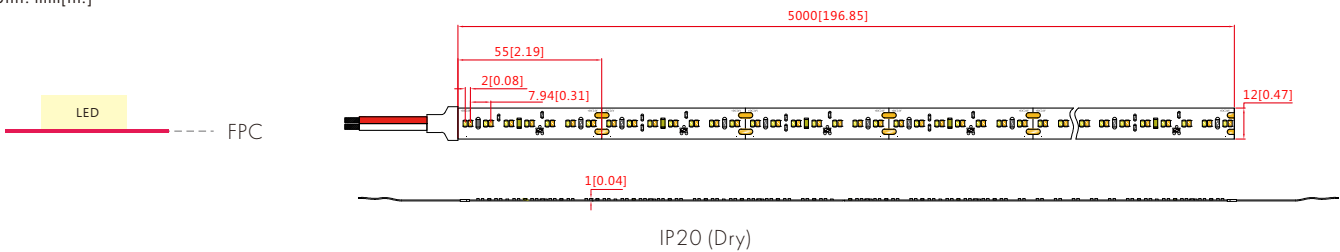


LED Flexible Strip

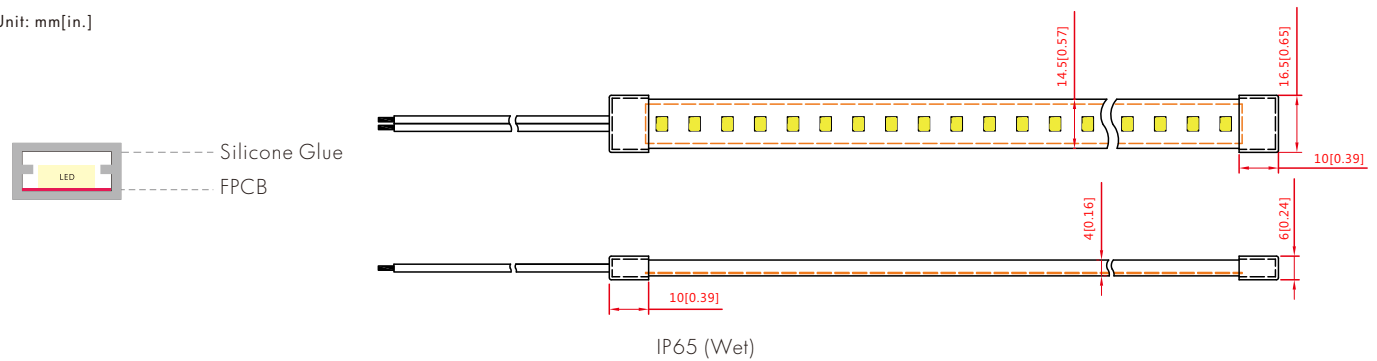
Diagram & Dimension



Unit: mm[in.]

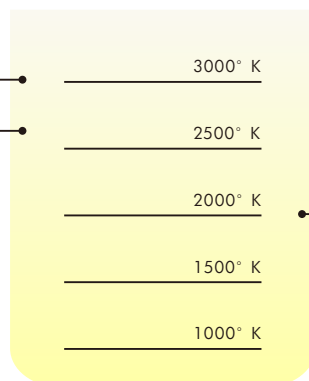


Unit: mm[in.]



Halogen
3000° K

Incandescent
2700° K



Candle Light 2000° K
The warmest light source of all measures around 2,000 degrees Kelvin

Measurements shown in degrees Kelvin.

LED Flexible Strip

Specification

Part No.	Dimension (L*W*H)	IP Rating	Lumen Flux±10% @CRI80&3000K&15W	Light Efficiency @CRI80&3000K&15W	Lumen Flux±10% @CRI90&3000K&15W	Light Efficiency @CRI90&3000K&15W
DTWP-LN27S-330	5000*12*1mm [197*0.47*0.04in.]	IP20 [dry]	/	/	1100lm/M [330lm/ft.]	73lm/W
DTWP-LN27S-330	5000*14*4mm [197*0.55*0.16in.]	IP65 [wet]	/	/	1100*95%lm/M [330*95%lm/ft.]	73*95%lm/W

Part No.	Dimension (L*W*H)	IP Rating	Lumen Flux±10% @CRI80&3000K&9.6W	Light Efficiency @CRI80&3000K&9.6W	Lumen Flux±10% @CRI90&3000K&9.6W	Light Efficiency @CRI90&3000K&9.6W
DTWP-LN27S-220	5000*12*1mm [197*0.47*0.04in.]	IP20 [dry]	/	/	730lm/M [220lm/ft.]	76lm/W
DTWP-LN27S-220	5000*14*4mm [197*0.55*0.16in.]	IP65 [wet]	/	/	730*95%lm/M [220*95%lm/ft.]	76*95%lm/W

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 G(CRI90) for 3000K and 9.6W/M 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%	(15/9.6)W/M [(4.57/2.93)W/ft.]
Min. Unit & LED QTY	55.6mm [2.19in.] & 14LEDs	Input Voltage	24VDC
LED Type	SMD2216 white	LED Current	(16~20/10~13)mA/LED
LED QTY	252 LEDs/M [76 LEDs/ft.]	LED CCT & Wavelength	1800~3000K (Dim-to-warm)
PCB Type	3oz white FPC, OSP	SDCM	\
Operating Ambient	Ta(working): -20~45°C [-4~113°F] & Tstg(storage): -20~60°C [-4~140°F]	CRI	Ra ≥ 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, it's not necessary for 9.6W/M[2.93W/ft.] and proposed for 15W/M[4.57W/ft.].
- 5: 3M 300LSE yellow adhesive tape attached on backside, is standard configuration of Plus Series.
- 6: One end of 200mm red/white silicon 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	15.3W	30.2W	44.1W	56.9W	68.4W
Power Maintenance Rate	100%	98.7%	96.1%	93%	89%
Brightness Maintenance Rate	97%	95.3%	94.9%	89.4%	89.4%

Ordering Information

MODEL	COLOR	LENGTH	IP	VOLTAGE
DTWP-LN27S-330	DTW 1800-3000k Dim to Warm	16.4	20	24V 24 Volt DC
DTWP-LN27S-220		CU	65	
		16.4' Reel Custom Length	IP20 IP65	

Accessories

- FS-DTWP-LN27S-WL Wire lead connector for static white strip
- FS-DTWP-LN27S-JC Jumper cable connector static white strip
- FS-DTWP-LN27S-SSC Strip to strip connector for static white strip



Recommended Power Supplies

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



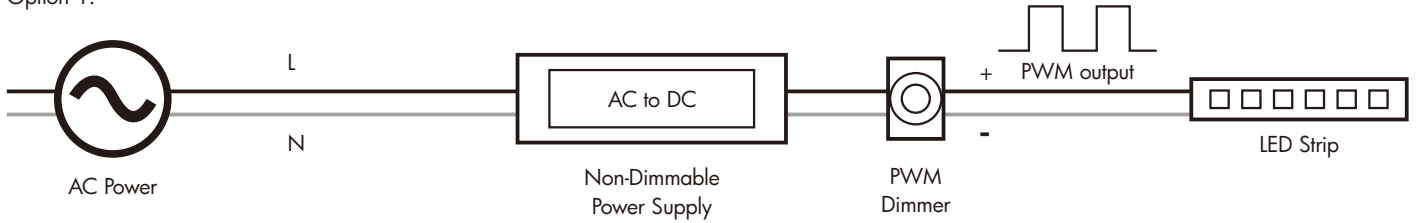
Item Number	Description	Max/Min Load	Input Voltage	Output Voltage	Dimmable	Dimensions
PS-TSLC-UNV-24V-30WDHV2	30W	30W / 3W	100-277V AC	24V DC	Yes*	6.49"L x 3.6"W x 1.02"H
PS-TSLC-UNV-24V-60WDHV2	60W	60W / 6W	100-277V AC	24V DC	Yes*	7.4"L x 3.6"W x 1.02"H
PS-TSLC-UNV-24V-96WDHV2	96W	96W / 9.6W	100-277V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

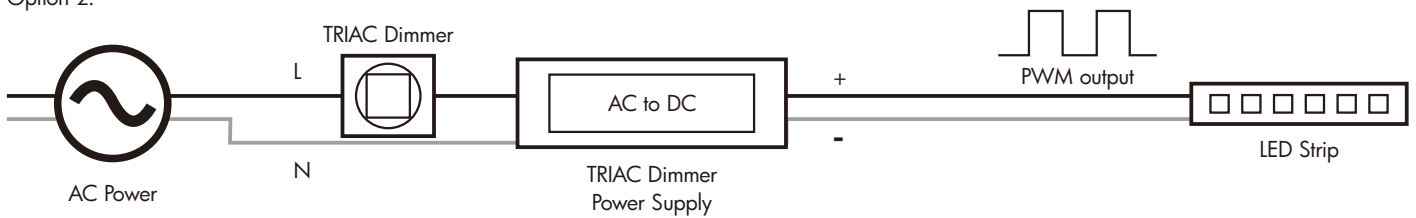
Connection

Dimming Connection Diagram

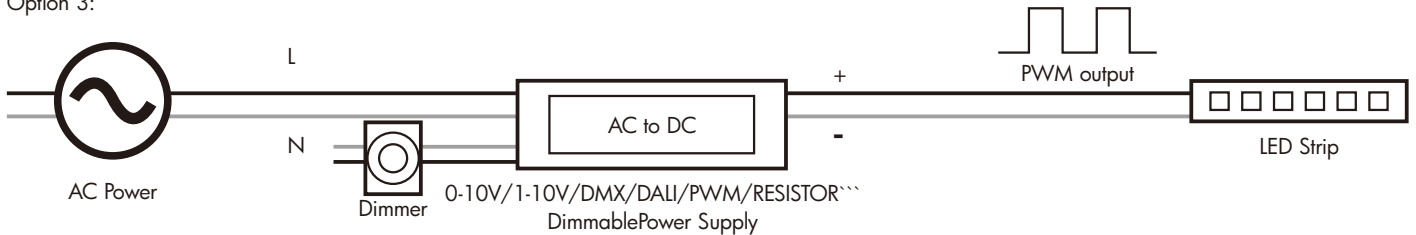
Option 1:



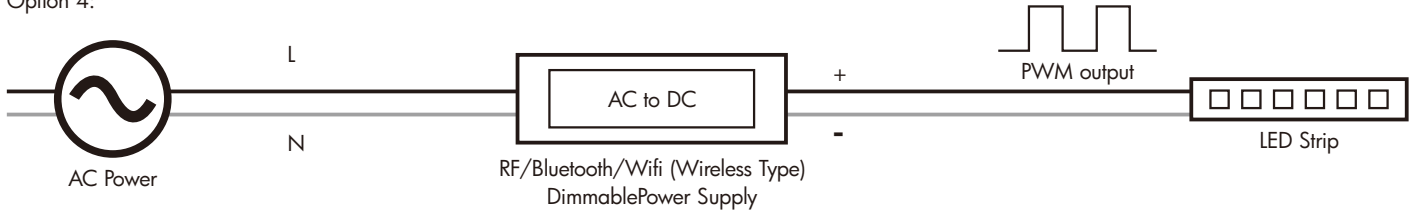
Option 2:



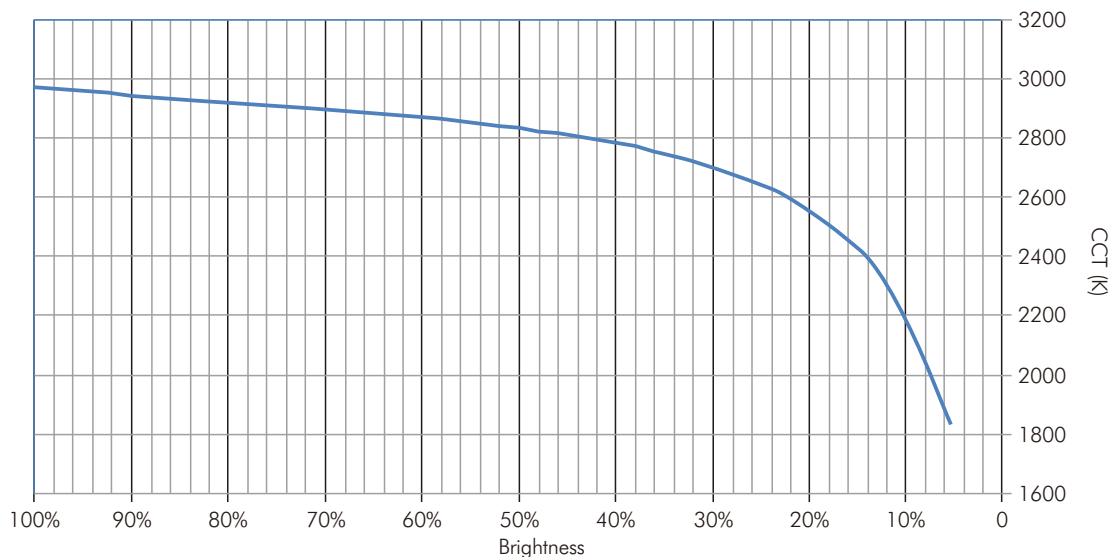
Option 3:



Option 4:



Dimming Curve Demonstration



(Connection Diagram According to Option 1)

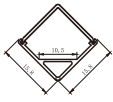
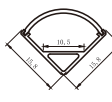
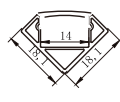
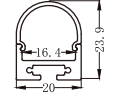
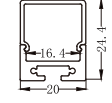
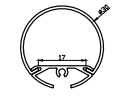
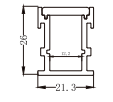
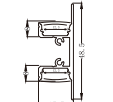
LED Flexible Strip

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

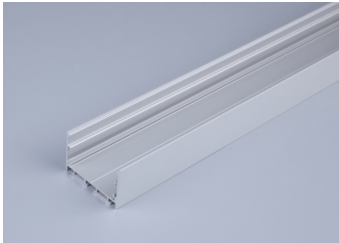
Aluminum Channel Compatibility ("√" means complete fit. "×" means Fit except the end caps.)

	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								

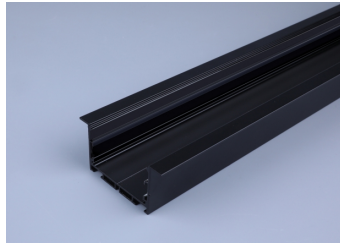
LED Flexible Strip

Aluminum Channel Compatibility

Aluminum Options



Silver

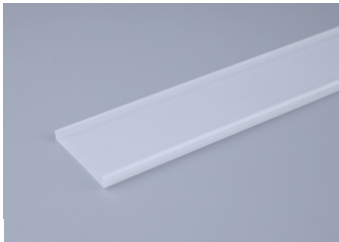


Black

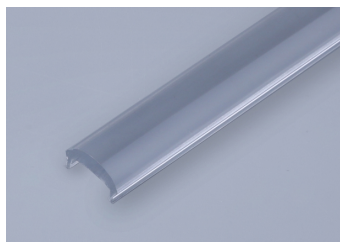


White

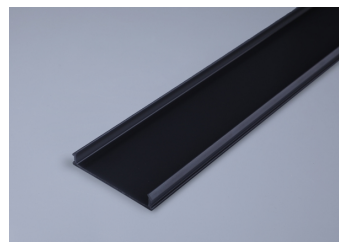
Diffusion PC Cover Options



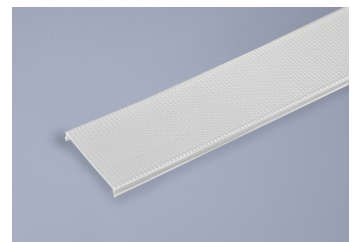
Milky
Transmission: 83%
For Dot-free



Transparent
Transmission: 93%
For High transmittance



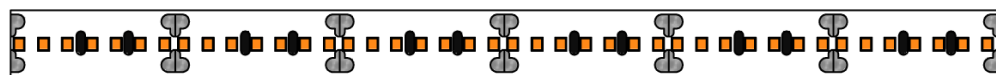
Black
Transmission: 60%
For Decoration



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

Length Increment Diagram Illustration

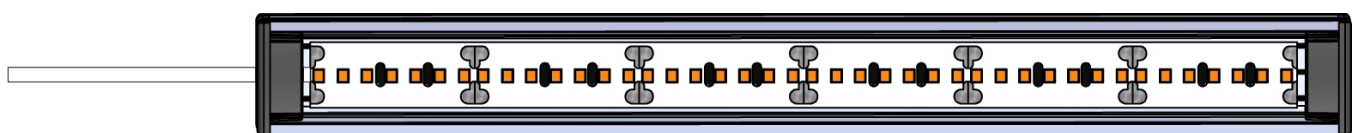
LED Strip



Aluminum Profile+Endcap



LED Strip+Cable+Aluminum Profile+Endcap



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