

# LED

## STRIP LIGHT

FLEXIBLE  
WALL WASHER

**P2-8 2420**





## P2-8 2420

### Features

- Optical lens design with good flexibility, suitable for wall washing and small space lighting.
- Cuttable and easy to install.
- Long lifespan with great lumen maintenance.
- Support PWM dimming.
- Multiple beam angles, CCT, and specifications are available.



### Application

- Suitable for indoor or outdoor wall washing, small scene applications, etc.

### Installation

- Fixed by screws and clips

### Optical & Electrical Parameters

Model No.	Voltage	Lens Angle	Ra	Color	LM/m	LM/W	W/m
P2-8 2420-3535-40-24-W	DC 24V	15°	>80	2700K	1632	96	17.0
				3000K	1700	100	
				3500K	1700	100	
				4000K	1751	103	
				6500K	1751	103	
P2-8 2420-2835-40-24-R/G/B	DC 24V	30/25°45/60/ASY10°	\	R: 620-630nm	528	33	16.0
				G: 520-530nm	1088	68	
				B: 460-470nm	240	15	
P2-8 2420-3030-40-24	DC 24V	30/25°45/60/ASY10°	>80	2700K	1792	112	16.0
				3000K	1840	115	
				4000K	1920	120	
				5000K	1904	119	
				6500K	1904	119	
			>90	2700K	1568	98	16.0
				3000K	1600	100	
				4000K	1696	106	
				5000K	1680	105	
				6500K	1680	105	
P2-8 2420-5050-40-24-WN	DC 24V	30/25°45/45/ASY10°	>80	W:2700K	560	70	8.0
			>80	N:6500K	600	75	8.0
			\	W+N	1152	72	16.0

Model No.	Voltage	Lens Angle	Ra	Color	LM/m	LM/W	W/m
P2-8 2420-5050-36-24-RGB	DC 24V	30/25*45/45/ASY10°	\	 R	222	39	5.7
				 G	285	50	5.7
				 B	39	7	5.7
				 RGB	510	30	17.0
P2-8 2420-F5050-36-24-RGBW	DC 24V	30/25*45/45/ASY10°	>90	 4000K	291	55	5.3
			\	 R	206	39	5.3
				 G	265	50	5.3
				 B	37	7	5.3
				 RGB	474	30	15.8
				 RGBW	777	37	21.0
P2-8 2420-5050-36-24-RGB_SPI	DC 24V	30/25*45/45/ASY10°	\	 R	192	24	8.0
				 G	264	33	8.0
				 B	40	5	8.0
				 RGB	500	27	18.5
P2-8 2420-F5050-36-24-RGB_DMX	DC 24V	30/25*45/45/ASY10°	\	 R	192	24	8.0
				 G	264	33	8.0
				 B	40	5	8.0
				 RGB	500	27	18.5
P2-8 2420-5050-36-24-RGBW_SPI	DC 24V	30/25*45/45/ASY10°	>90	 4000K	272	34	8.0
			\	 R	192	24	8.0
				 G	264	33	8.0
				 B	40	5	8.0
				 RGB	500	27	18.5
				 RGBW	755	32	23.6
P2-8 2420-F5050-36-24-RGBW_DMX	DC 24V	30/25*45/45/ASY10°	>90	 4000K	272	34	8.0
			\	 R	192	24	8.0
				 G	264	33	8.0
				 B	40	5	8.0
				 RGB	500	27	18.5
				 RGBW	755	32	23.6

## Other Parameters

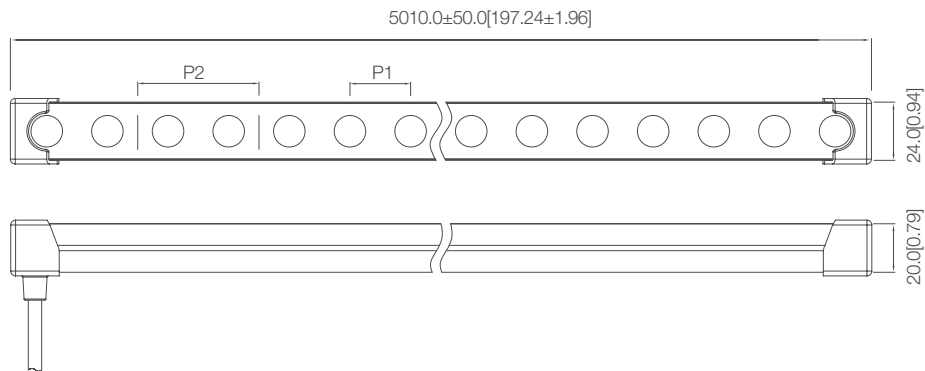
Model No.	LED QTY	Standard Packing Length	Max Run	Working Temperature	Storage Temperature
P2-8 2420-3535-40-24-W	40 pcs/m	5m	5m	-20~+50 °C	-20~+70 °C
P2-8 2420-2835-40-24-R	40 pcs/m	5m	5m		
P2-8 2420-2835-40-24-G			9m		
P2-8 2420-2835-40-24-B			8m		
P2-8 2420-3030-40-24			6m		
P2-8 2420-5050-40-24-WN			8m		
P2-8 2420-5050-36-24-RGB	36 pcs/m	5m	10m		
P2-8 2420-F5050-36-24-RGBW			8m		
P2-8 2420-5050-36-24-RGB_SPI			7m		
P2-8 2420-F5050-36-24-RGB_DMX			10m		
P2-8 2420-5050-36-24-RGBW_SPI			8m		
P2-8 2420-F5050-36-24-RGBW_DMX			7m		

### NOTE:

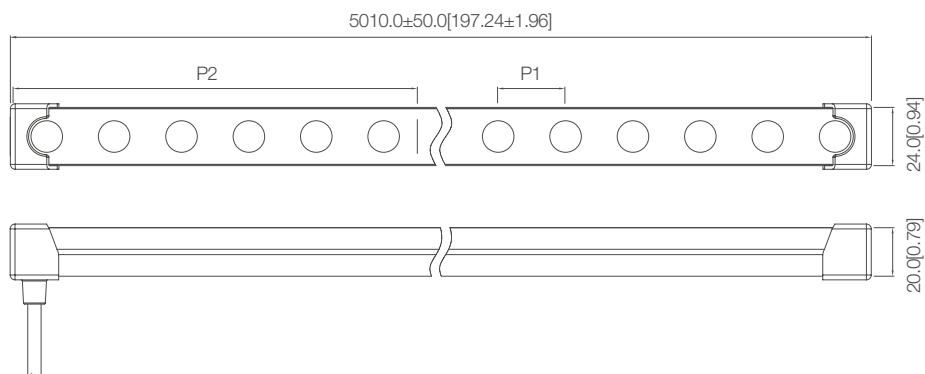
- Test environment temperature : 25±2°C.
  - The above are typical parameters, but the actual parameters may be different. We would update the data without further notice.
  - The luminous flux here is tested on the corresponding light colors.
  - If choosing other LED chips to do the test, the color temperature, wavelength, and optical parameters may be different.
- The light efficiency here is given based on the measured value.  
 Different color temperature will make luminous flux different.  
 The error in luminous flux and power is ± 10%.  
 Max run length is based on one end power feeding.

## Profile Drawings

Unit: mm [inch]



Model No.	LED Pitch P1	Min. Cutting Length P2	Min. Cuttable LED Quantity
P2-8 2420-2835-40-24-R	25.00 [0.98]	50.00 [1.96]	2 LEDs
P2-8 2420-2835-40-24-G			
P2-8 2420-2835-40-24-B			
P2-8 2420-3030-40-24			
P2-8 2420-5050-40-24-WN			
P2-8 2420-5050-36-24-RGB	27.77 [1.09]	83.33 [3.28]	3 LEDs
P2-8 2420-F5050-36-24-RGBW			
P2-8 2420-5050-36-24-RGB_SPI			
P2-8 2420-F5050-36-24-RGB_DMx			
P2-8 2420-5050-36-24-RGBW_SPI			
P2-8 2420-F5050-36-24-RGBW_DMx			



Color	LED Pitch P1	Min. Cutting Length P2	Min. Cuttable LED Quantity
P2-8 2420-3535-40-24-Single color	25.0 [0.98]	200.0 [7.87]	8 LEDs

## Note:

Dimension tolerance: length +65mm/-10mm[+2.56/-0.39inch]; width ±1mm[0.04inch]; thickness ±1.5mm[0.06inch].

For more info, please contact sales rep.

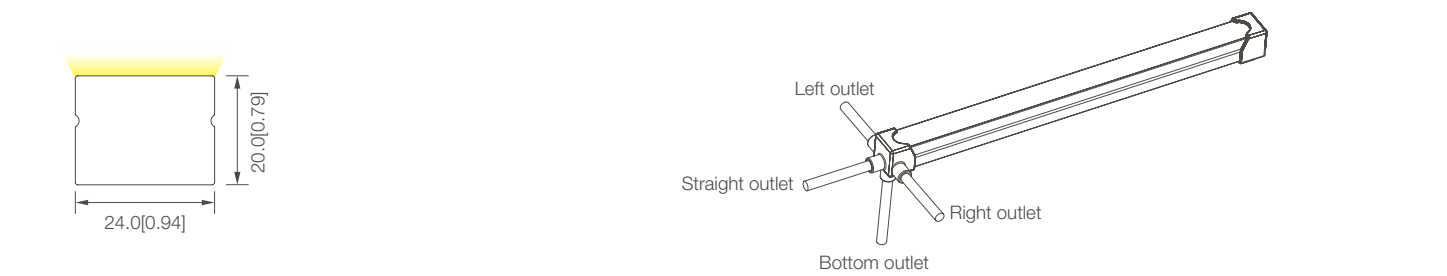
Bending Diameter: Single color

Bending Diameter: RGB/RGBW

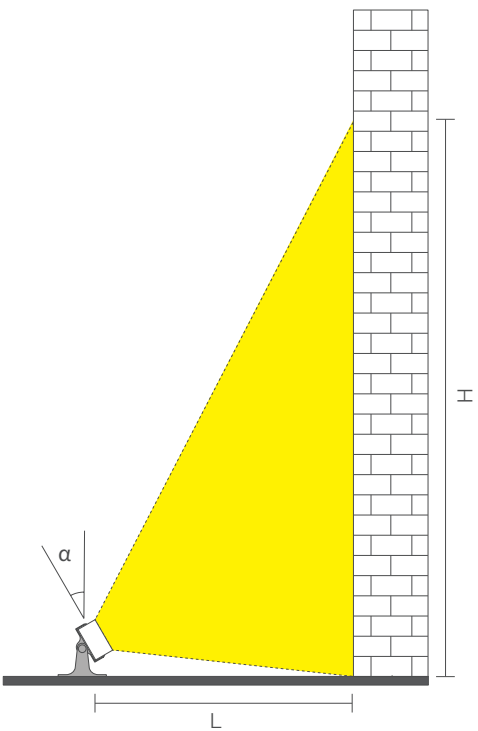


Sectional view

End cap (Glue process) - outlet diagram

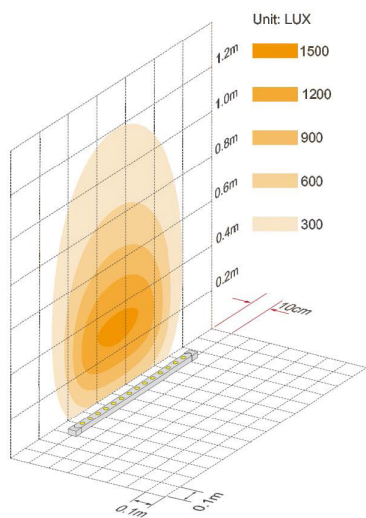


Lighting Effect Illustration

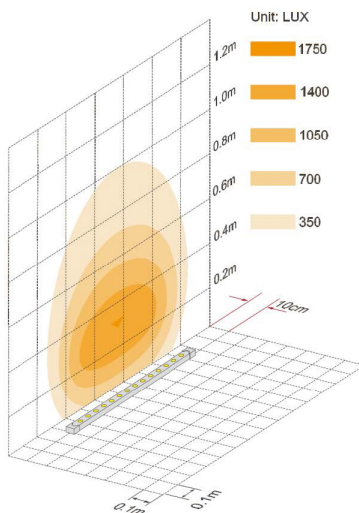


Test Angle	Lens Angle (°)	Finished Product Angle (°)	L(cm)	H(m)
$\alpha=0^{\circ}$	30	45	5	0.7
			10	1.2
			20	2.0
			30	2.5
			50	3.0
	25*45	50*60	5	0.5
			10	1.0
			20	1.5
			30	2.0
			50	2.5
	60	63	5	0.3
			10	0.6
			20	1.0
			30	1.5
			50	2.0
	15	30	10	2
			20	4
	22° (ASY10°)	22° (ASY10°)	5	0.8
			10	1.3
			20	2.0
			30	2.5
			50	3.0

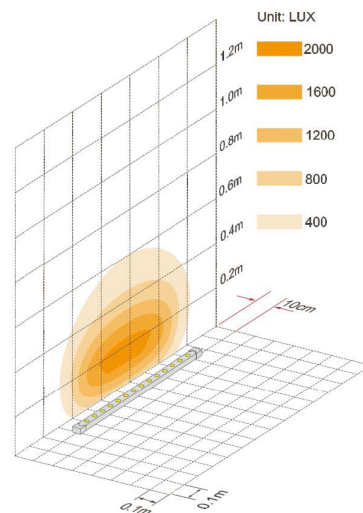
30° Lens Angle, Distance to the wall is 10cm



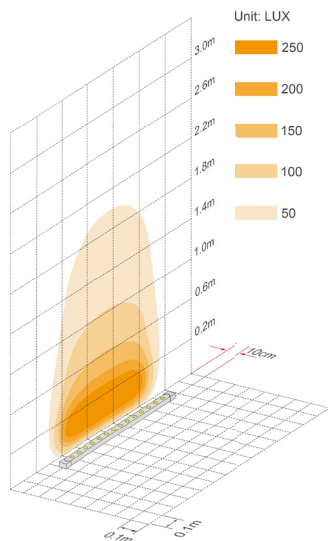
25°45° Lens Angle, Distance to the wall is 10cm



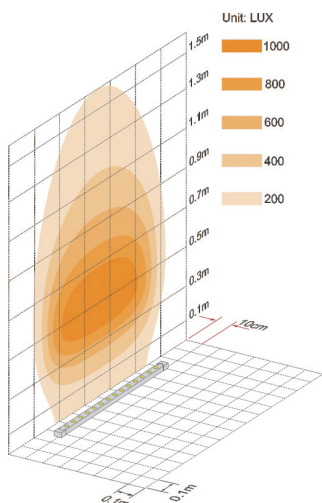
60° Lens Angle, Distance to the wall is 10cm



15° Beam Angle, Distance to the wall is 10cm



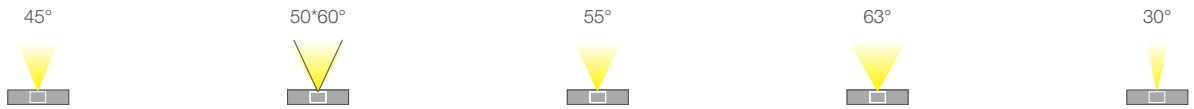
ASY 10° Beam Angle, Distance to the wall is 10cm



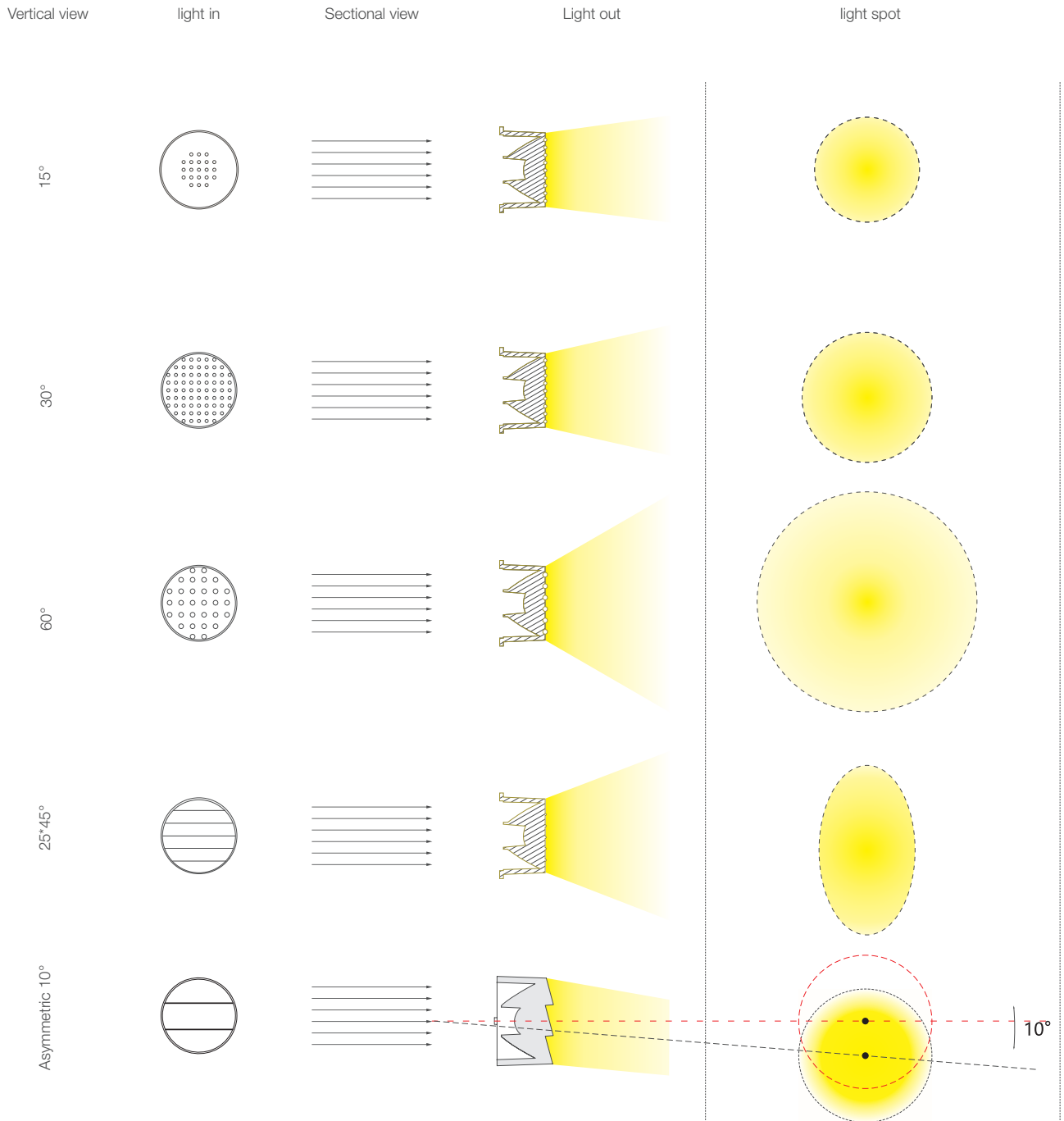
## Beam Angle Illustration

Lens Angle (°)	Finished Product Angle (With Designo Polish)	Lens Angle (Without Designo Polish)
15	30	18
30	45	35
25°45	50°60	40°55
45	55	50
60	63	60

Finished Product Angle



## Lens Lighting Effect





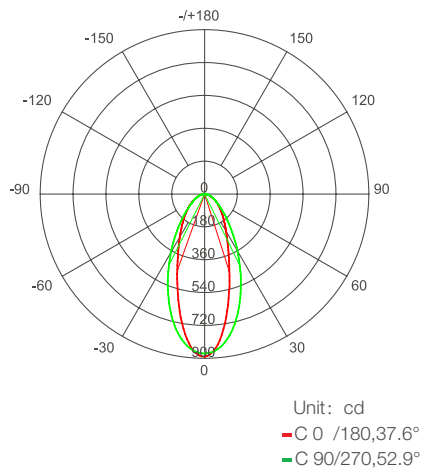
## Recommended power supply upon working length

P2-8 2420-3030-40-24

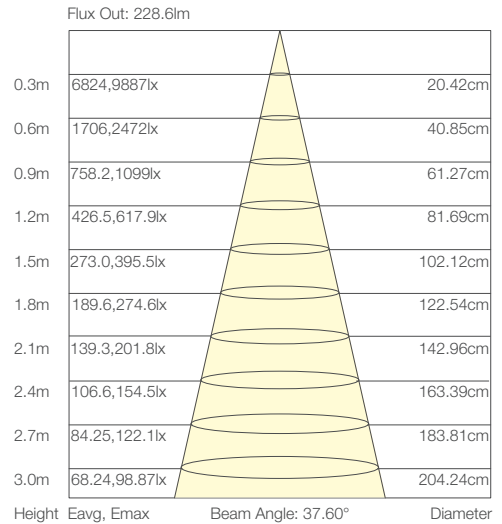
Operating Length (m)	1	2	3	4	5	6	7	8	9	10
Operation Voltage (DC V)	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total current (A)	0.68	1.32	1.91	2.43	2.89	3.25	3.55	3.81	4.01	4.17
Total Power (W)	16.25	31.78	45.82	58.27	69.02	77.95	85.25	91.49	96.01	100.08
Head voltage (DC V)	23.95	23.92	23.88	23.84	23.83	23.81	23.79	23.77	23.76	23.75
Tail voltage (DC V)	23.92	23.81	23.65	23.48	23.28	23.06	22.88	22.67	22.49	22.30
Head current (mA)	32.87	32.53	32.17	31.83	31.37	31.10	31.07	31.03	30.93	31.40
Tail current (mA)	34.43	33.23	31.47	29.50	28.10	24.30	21.67	19.50	18.30	15.33
Head-to-tail voltage drop rate(%)	0.13	0.46	0.96	1.51	2.31	3.15	3.83	4.63	5.35	6.11
Head-to-tail current drop rate(%)	-4.77	-2.15	2.18	7.33	10.41	21.86	30.26	37.6	40.84	51.17
Single/Double feed	Single feed	Single feed	Single feed	Single feed	Single feed	Single feed	Double feed	Double feed	Double feed	Double feed

## Luminous Intensity Distribution Diagram

## Average Illumination



AVERAGE BEAM ANGLE(50%): 45.3°



Note: above data tested with P2-8 2420-3030-40-24. For other data, please consult sales rep.

## Reliability test

Project	Reference standards	Category	Test conditions	Outcome
Environmental test	Blueview standard	PTC test	Test temperature -40°C to 60°C, cycle once every 2h (temperature holding time 15min, heating and cooling time 45min)	Pass
		High temperature and humidity test	TH=85°C/RH=85%	
		UV test	UVB:315-400nm; radiation intensity:0.83W/m², TH=50°C/5h; spray 1h	
		Salt spray corrosion test	TH=35°C, concentration 5%, volume 1~2ml/h/80cm²	
		Waterproof test	IPX8: soaking depth 1.3m/1h	IP68



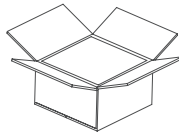
## Packaging Information



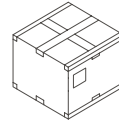
Roll up the product



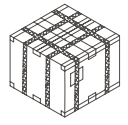
Wrap the product tightly with PE film and put it into a bag



Put the boxes into a carton



Label the carton

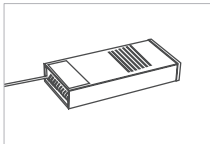


Use packing belt to pack.

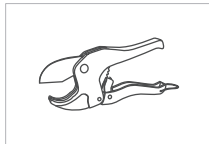
Model No.	Product Size L*W*H (mm)	Carton Size (mm)	Meter/Reel	Reel/Carton	Net Weight (kg)	Gross Weight (kg)
P2-8 2420-2835-40-24-R	5010*24*20	505*505*150	5	5	13.90(1±10%)	15.30(1±10%)
P2-8 2420-2835-40-24-G						
P2-8 2420-2835-40-24-B						
P2-8 2420-3030-40-24						
P2-8 2420-5050-40-24-WN						
P2-8 2420-5050-36-24-RGB	5010*24*20	505*505*150	5	5	13.60(1±10%)	15.00(1±10%)
P2-8 2420-F5050-36-24-RGBW						
P2-8 2420-5050-36-24-RGB_SPI						
P2-8 2420-F5050-36-24-RGB_DMX						
P2-8 2420-5050-36-24-RGBW_SPI						
P2-8 2420-F5050-36-24-RGBW_DMX						
P2-8 2420-3535-40-24-W						

NOTE: The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.

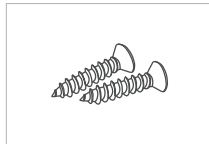
## Installation



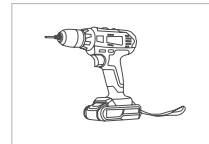
LED power supply



Cutter

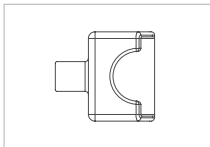
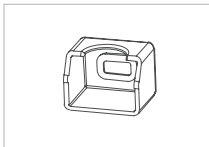
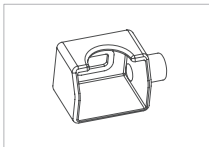
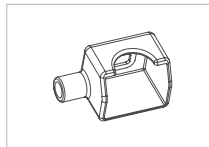
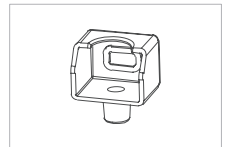
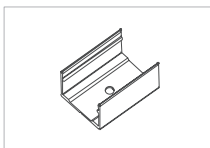
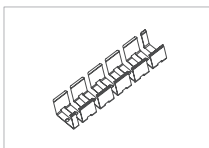
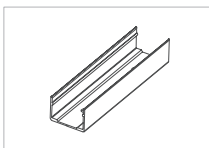
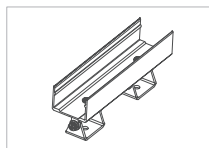


Screw



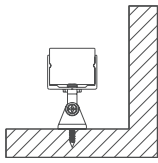
Electric drill

## Product accessories

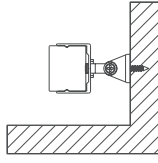

 Item: Front cap (straight outlet)  
 Part No.: 01.06.10602000346  
 Size: 30\*27\*23mm

 Item: Closing-end cap  
 Part No.: 01.06.KL23081104  
 Size: 20\*27\*23mm

 Item: Front cap (left outlet)  
 Part No.: 01.06.10602000347  
 Size: 20\*37\*23mm

 Item: Front cap (Right outlet)  
 Part No.: 01.06.10602000348  
 Size: 20\*37\*23mm

 Item: Front cap (bottom outlet)  
 Part No.: 01.06.KL23081103  
 Size: 20\*27\*33mm

 Item: KK-24mm Aluminum clip  
 Part No.: 01.08.0423082701  
 Size: 35\*26\*18mm

 Item: S-type stainless steel groove set  
 Customizable length  
 Size: L\*26\*18mm

 Item: Aluminum groove set  
 Customizable length  
 Size: L\*26\*18mm

 Item: Rotatable aluminum groove set  
 Customizable length  
 Size: L\*26\*39mm

## Installation Methods and Steps

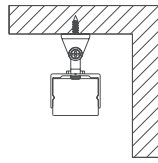
### Rotatable Bracket



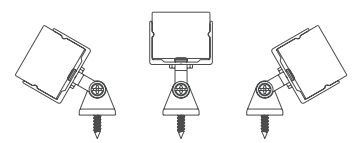
Ground Mounting



Wall Mounting

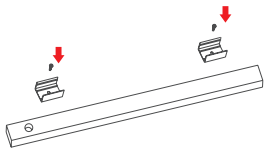


Ceiling Mounting

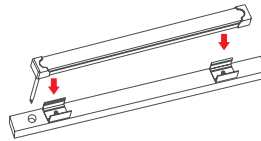


Max rotation degree 150°

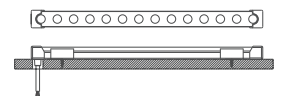
### Mounting Clips



Fixed the mounting clips



Press the light strip into the mounting clip



Finished

### Aluminum Channel With Rotatable Bracket



Screw the rotatable brackets to the aluminum channel



Fix the rotatable brackets to the mounting place with screws

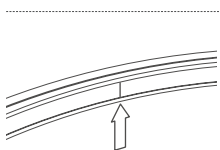


Install strip into the aluminum channel

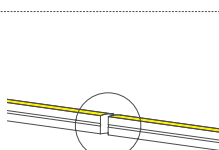


Finished

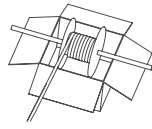
## Warning Mark



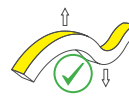
Cuttable identifier.



Neat and smooth cut.



Insert stick through reel on box for easy product access.



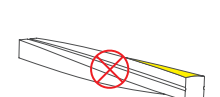
Top bending



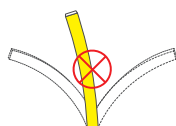
Side bending



No irregular or uneven cutting



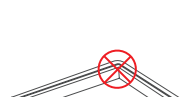
No twisting



Avoid repeated bending to prevent circuit damage



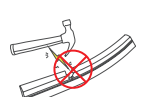
No twisting or kinking



Avoid right-angle bends



Avoid twisting.



Avoid touching sharp objects.

### Notes:

1. Please pay attention to the above warnings during transportation and mounting;
2. Our company will not be held responsible for any quality hazards caused by damage to the product due to contact with sharp objects.

## Attentions before installation

- Check whether the power line is screwed into the terminal firmly, and it is better not to pull it out by hand.
- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- The wiring terminal must be provided with effective waterproof and anti-corrosion treatment.
- **If the use length exceeds max run, extra power supply is needed.**
- **Please install the product in a well-ventilated area with good heat dissipation.**
- **Pay attention to waterproof treatment, and the end cap should not be facing upwards or immersed in water.**
- **Do not damage the silicone tube during installation, or use sharp tools to strike the product body.**

## Warning

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation, especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation, waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm<sup>2</sup> cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters. Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

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A1.1	Update: Basic Parameters	2025-11-20