

COB LED STRIP SPECIFICATION

ADDRESSABLE DC24V 576 LEDS/M 3PIN 10 MM CCT COB LED STRIP

Product Model: cob-addressable-12v/24v-378leds-2pin-10mm-cct

PART 1 Product Specification



Product Parameters

Parameter	Value
Voltage	DC 24 V
IP Rated	IP20 / IP67
LED Quantity	576 LEDs/m
Color Temperature (CCT)	2700K + 6500K
CRI (Ra)	90
Beam Angle	180°
Operating Temperature	-20 °C – +80 °C
Storage Temperature	-40 °C – +100 °C
IC Type	16703/2811/...

Electrical-optical characteristics (TA=25°C) :

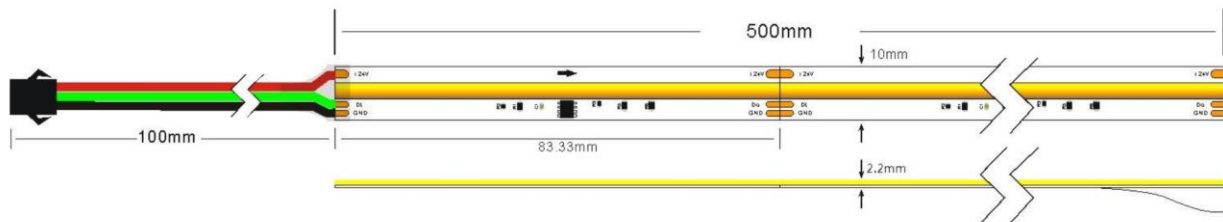
Model-576LED/M 10mm	Color	LEDs Qty.	LEDs Type	Beam angle(°)	Voltage (DC)	RA	Power (W/M)	IC	Pixel/M	Min. cut/m m
FCOB-24V-D576-10mm	2700K	576	FCOB	180	24V	≥90	10W	SPI	12Pixel	83.33
FCOB-24V-D576-10mm	6500K									83.33
FCOB-24V-D576-10mm	Mixed White									83.33

Notes:

1. Electrical parameters are tested on standard 1-meter strips.
2. Data tolerance: ±10%.
3. IP protection processing may vary dimensions, color temperature and luminous flux.

PART 2 Product Dimensions

24V | 10mm

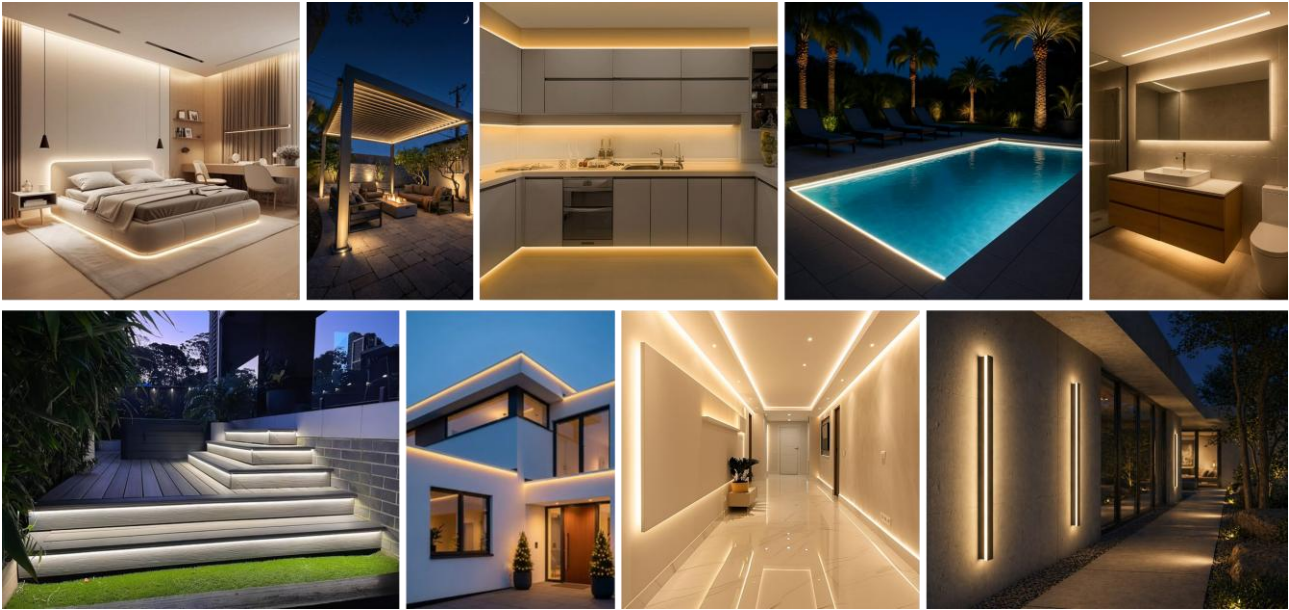


PART 3 Product Features

- Uniform glow with no spots or dark shadows, delivering soft gentle light
- Maximum beam angle reaches 180° for wide-area illumination
- HBM Class 2 ESD resistance (2000–4000V), tested per MIL-STD-883E
- Flexible for easy installation; free of hazardous substances and RoHS compliant
- Low heat generation for stable long-term operation
- High color consistency to maintain steady CCT performance.
- Strong bending tolerance for curved & irregular mounting scenes

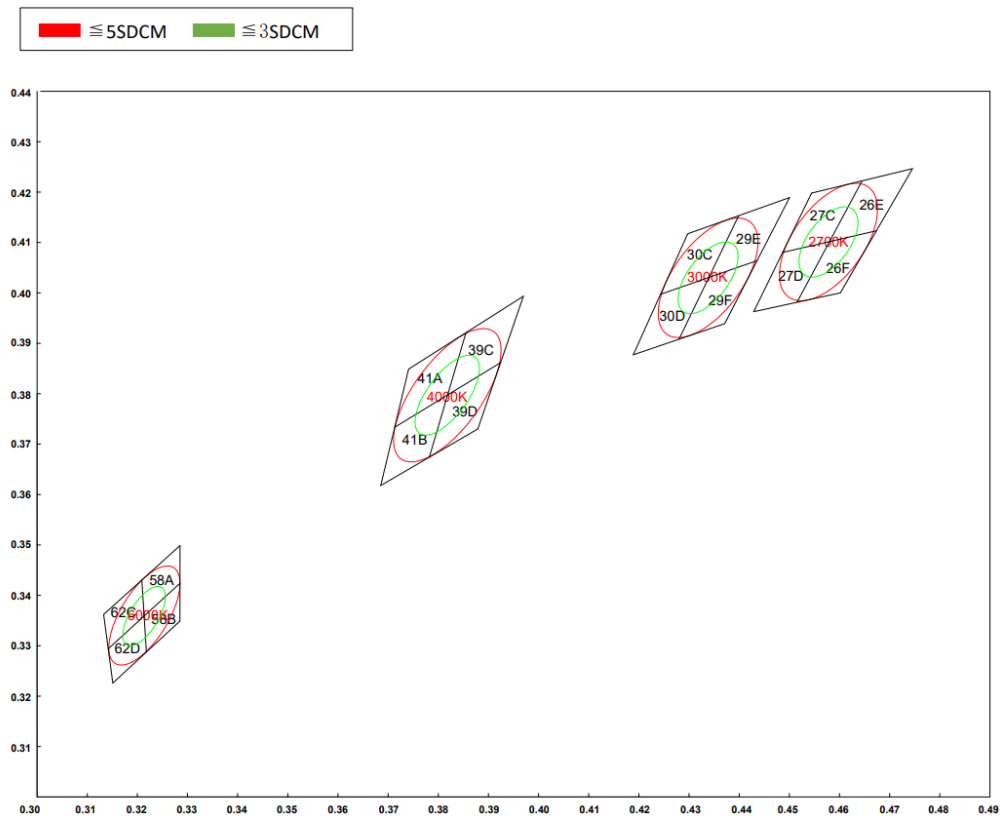
PART 4 Production Application

This COB LED strip works perfectly for illuminated signs, advertising billboards, indoor & outdoor decoration, hotels, bedrooms, guest rooms, corridors, shopping malls, museums and display cabinets. It also fits home accent lighting, bar/wine cabinet backlighting, ceiling indirect lighting, stage ambient lighting, retail shelf display lighting and aquarium landscape lighting.



PART 5 Color Bin Limits

Based on MacAdam Ellipse, compliant with ENERGY-STAR® requirements



PART 6 Color Ranks at VF=24V, Ta=25°C

色温	色区代码	中心坐标		椭圆半径 (1step)		角度
		x	y	a	b	
6000K	6000K	0.3214	0.3360	0.00223	0.00095	58.57
4000K	4000K	0.3818	0.3797	0.00313	0.00134	53.72
3000K	3000K	0.4338	0.4030	0.00278	0.00136	53.22

3000K	X1	Y1	X2	Y2	X3	Y3	X4	Y4
29E	0.4339	0.4031	0.4399	0.4153	0.4500	0.4189	0.4436	0.4064
29F	0.4280	0.3908	0.4339	0.4031	0.4436	0.4064	0.4371	0.3939
30C	0.4243	0.3997	0.4297	0.4117	0.4399	0.4153	0.4339	0.4031
30D	0.4189	0.3877	0.4243	0.3997	0.4339	0.4031	0.4280	0.3908

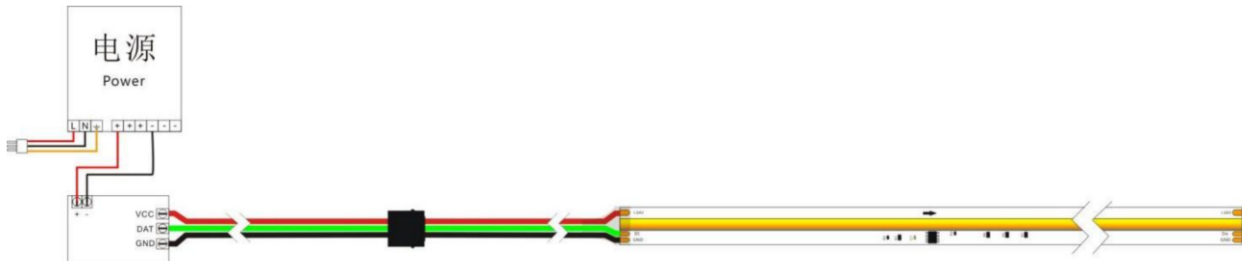
4000K	X1	Y1	X2	Y2	X3	Y3	X4	Y4
39C	0.3819	0.3798	0.3855	0.3921	0.3970	0.3993	0.3924	0.3862
39D	0.3782	0.3674	0.3819	0.3798	0.3924	0.3862	0.3879	0.3730
41A	0.3713	0.3733	0.3741	0.3849	0.3855	0.3921	0.3819	0.3798
41B	0.3685	0.3618	0.3713	0.3733	0.3819	0.3798	0.3782	0.3674

6000K	X1	Y1	X2	Y2	X3	Y3	X4	Y4
58A	0.3213	0.3359	0.3209	0.3430	0.3285	0.3499	0.3285	0.3424
58B	0.3218	0.3287	0.3213	0.3359	0.3285	0.3424	0.3285	0.3349
62C	0.3142	0.3294	0.3133	0.3362	0.3209	0.3430	0.3213	0.3359
62D	0.3151	0.3226	0.3142	0.3294	0.3213	0.3359	0.3218	0.3287

PART 7 Reliability Test Items and Conditions

No.	Test Item 测试项目	Test Conditions 测试条件	Note 频次	Number of Damaged
01	Thermal Shock 冷热冲击测试	-25°C 15min ↑↓ 100°C 15min	300 cycle	0/22
02	Life Test 常温寿命测试	Ta=25°C 额定电压	1000 hrs	0/22
03	Temperature Humidity Storage 恒温恒湿贮藏测试	Ta=85°C RH=85%	1000 hrs	0/22

PART 8 Wiring Diagram



PART 9 10m Packing Instruction



- Carton size: 240 × 220 × 70 mm

- LED strips: 10 m/Roll, 300 m/box

Note: The above packing quantity is for illustration purposes only. Quantities may differ under other packing configurations. Actual product shall prevail.

PART 10 Installation & Usage Notes

1. Choose a suitable LED driver. Strip total power consumption shall be approx. 80 % of driver rated power; avoid full load for stable voltage output.
2. Standard roll length: 5 m. Brightness inconsistency occurs above 5 m. Lengths over 5 m available per customer's agreement.
3. Back adhesive works well on smooth glass, metal and plastic. Fabric / wood surfaces may degrade adhesion. Test before installation.

- 4. Minimum bending diameter: 60 mm. Prevent damage to FPC and components to avoid strip failure.*
- 5. For waterproof & anti-corrosion performance: fill connectors with one-component silicone gel (neutral glass glue / waterproof grease), seal exposed copper wires after wiring.*
- 6. Non-waterproof strips cannot be used outdoors. Do not touch/install strips when powered.*
- 7. Use safety-certified switching power supplies with short-circuit, over-voltage and over-current protection.*