

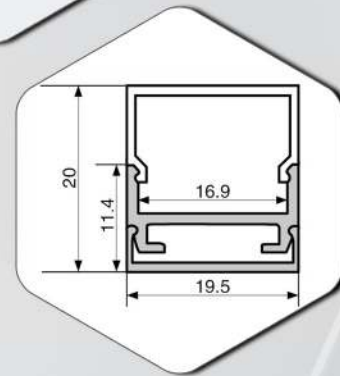
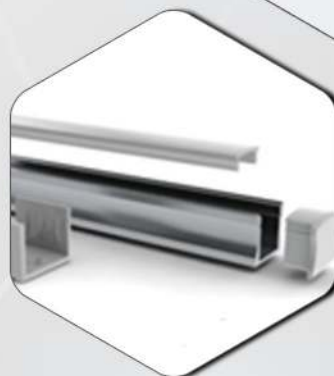


light rail

STB120

DESCRIPTION

- SMD SAMSUNG 2835 LED chip
- Supplied in 5m, 7.5m, 10m rolls or custom lengths with special length leads and / or connectors available
- Constant current for even light distribution across longer distances
- Working current: 30mA
- Maximum rating: 150mA
- Working temperature -30 to +60 deg C
- Thermal protection over 40 deg via temperature sensor
- Cut every 50mm
- 24v DC constant voltage supply
- CRI>80



Name	Code	LED pm	Lm/m (approx.)	Voltage DC	Watts pm	Width (mm)	CRI
STB120 2700k	STB120.27K	120	1900	24	15	10	>80
STB120 3000K	STB120.3K	120	1925	24	15	10	>80
STB120 4000k	STB120-CW	120	1950	24	15	10	>80
STB120 6500k	STB120-DL	120	2050	24	15	10	>80
Weatherproof code add	IP65, IP67, IP68					IP68 12mm	

Max run 10m wires one end

Lumens shown do not include installation into any LED profile



LED STRIP DETAIL

- * LED type: SAMSUNG SMD 2835 LED
- * LED Qty: 120LEDs/m
- * PCB Dimension: 5000/7500/10000x10x0.2mm
- * Voltage: 24v DC
- * Max power: 15w/m
- * IP rating: IP20/IP65/IP67/IP68
- * Lifetime: 50000h
- * CRI > 80 Ra

TEMPERATURE CONTROL

Temp. Control: If the temperature of the LED strip is below 40°C the current will stay at 30mA.

When the temp. of the LED strip rises above 40°C the sensor inside the IC will start working to lower the current.

Normally the balance point is 45°C, where the working current will be 28-29mA and 95% lumen output.

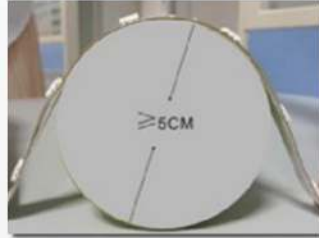
If the surrounding temperature is high, such as 60°C the balance point will become 60°C and the current will be 26-27mA and 80-85% lumen output.

APPLICATION EXAMPLES



WARNINGS

- Do not install while the electrical cables are live
- Do not touch or press the LED surface during transportation and installation
- Do not power up the strips before taking them off the roll
- Do not install the strip under direct sun light
- The strip is highly flexible but requires a bending diameter $\geq 5\text{cm}$ (see picture 1) during installation.
- Do not bend the strip as shown in picture 2



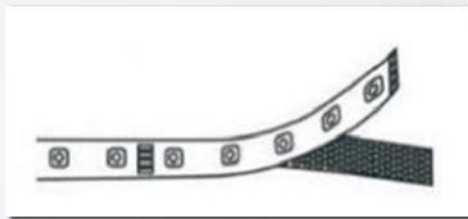
Picture 1: maximum bending dia $\geq 5\text{cm}$



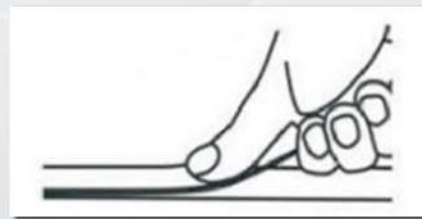
Picture 2: do not bend as shown

CONNECTION DIAGRAM

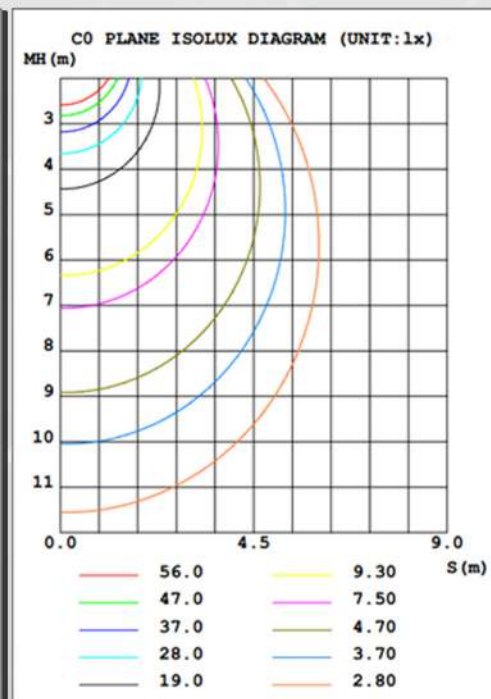
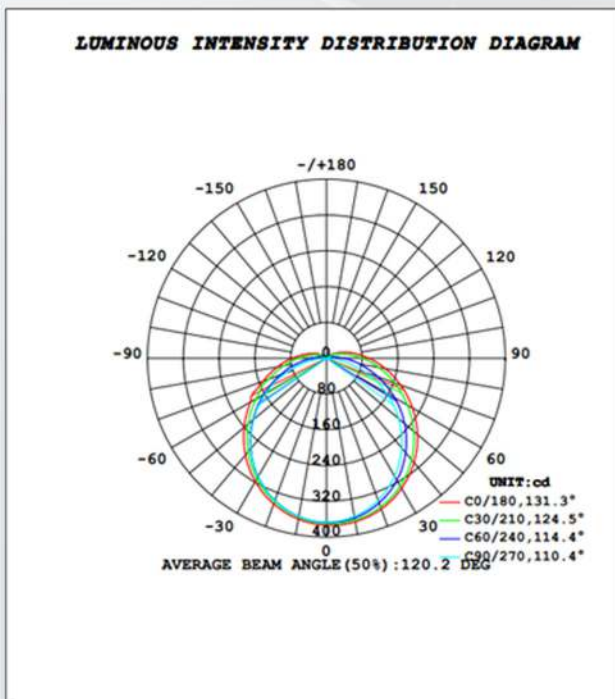
- Clean installation surface before installing
- Installation guide below is STB120 LED strip with 3M double sided adhesive tape

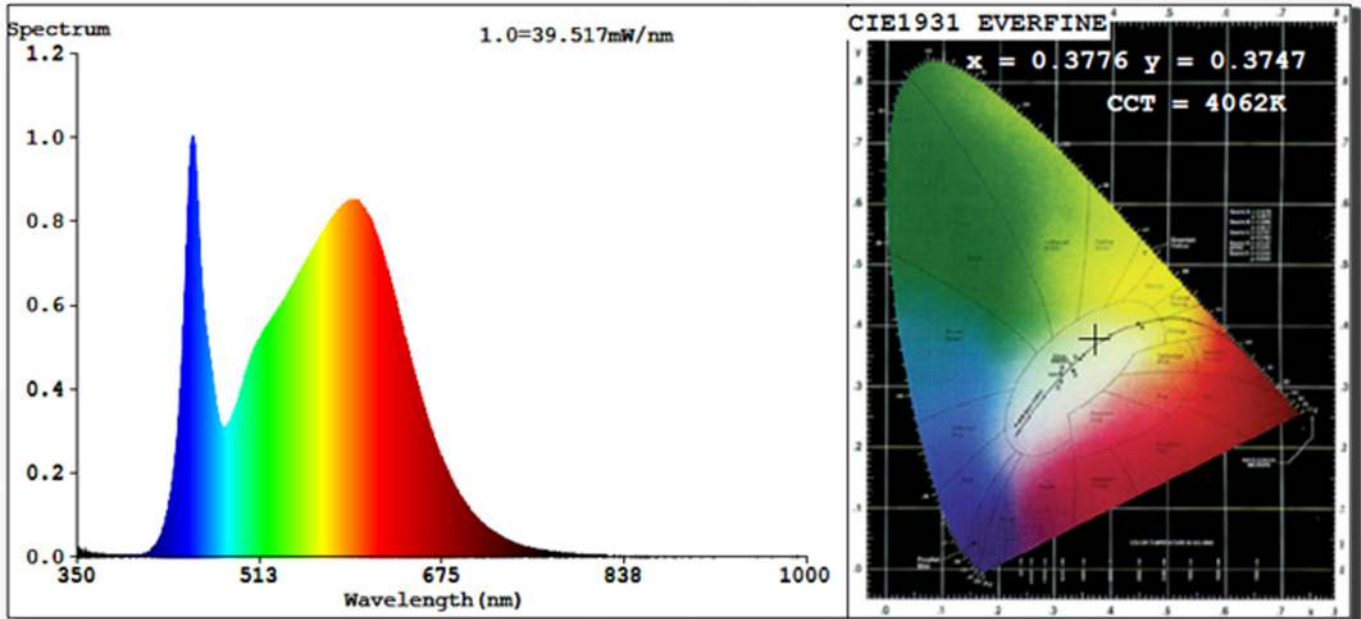


Remove the release paper



Stick to the installation surface





COLOR PARAMETERS:

Chromaticity Coordinate: $x=0.3776$ $y=0.3747$ / $u'=0.2241$ $v'=0.5002$
 CCT=4062K (Duv=-0.0002) Dominant WL: $\lambda_d = 578.9\text{nm}$ Purity=25.8%

Ratio: R=18.4% G=77.5% B=4.1% Peak WL: $\lambda_p = 453.7\text{nm}$ FWHM=23.0nm

Render Index: Ra=84.7

R1 =83 R2 =92 R3 =96 R4 =82 R5 =83 R6 =88 R7 =86
 R8 =66 R9 =16 R10=80 R11=81 R12=64 R13=86 R14=98 R15=78

Photo Parameters:

Flux = 1947 lm Eff. : 129.47 lm/W Fe = 6.014 W

Electrical parameters:

V = 23.998 V I = 0.6266 A P = 15.04 W PF = 1.000

LEVEL: OUT **WHITE:** ANSI_4000K

Status: Integral T = 500 ms I_p = 36498 (56%)

Model: SAMSUNG 2835-120 Number:68

Temperature: 25.3Deg Humidity: 65.0%

Technical Features:

Constant current IC	Resistors	LEDs
Brand: ALJ Pack: SOT-23	Brand: FENGHUA	Brand: SAMSUNG 2835 Original
QTY: 2PCS	1. 0603 pack 224 (220K Ω)	Standard Lumen: 60-65lm/LED
Function: Constant Current: This feature keeps the whole length of LED strip working at the current of 30Ma to a maximum 10m before a new cable entry is required	Function: protect the IC, limits the base current, prevent the current being too high and burning the IC	Working Current: 30 mA
	2. 0603 pack 180 (18 Ω)	Maximum rating for working current is 150mA
		CRI: >80