Datasheet OrgaLED® Side Deco Color

ORGANIC LIGHTING® SYSTEMS

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Side Deco Color

The OrgaLED® Side Deco LED strip (IP40) is a high quality, flexible LED strip with a unique co-extrusion technology. The combination of high quality and exceptional flexibility, allows for an endless range of indoor and outdoor applications. Combine with either the IP67 or IP68 solution.

In addition to the red, green, blue and amber, the OrgaLED® Side Deco LED strips are also available in white colors 2400K-6500K.

For the latest version of this datasheet, visit our website:
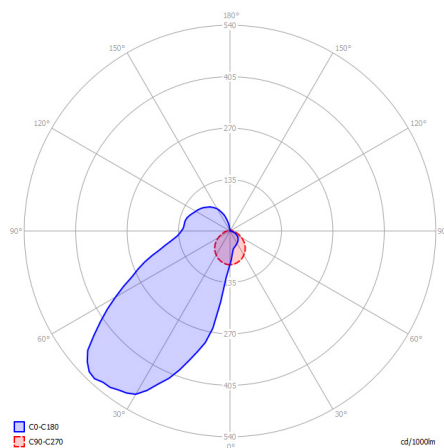www.organiclighting.com

Available Colors

- 🟥 OrgaLED® Side Deco Red
- 🟩 OrgaLED® Side Deco Green
- 🟦 OrgaLED® Side Deco Blue
- 🟧 OrgaLED® Side Deco Amber

Features
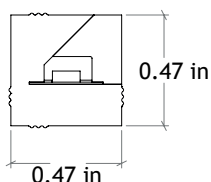
Made in USA/EU

Unique co-extrusion technology with built in reflector (hollow chamber)

UV, frost, seawater & chlorine vapor resistant

IP40 (IP68 with liniLED® Side Mirror Welded Connector)

Very flexible (bend radius > 1.2")

Dimmable

Effective heat dissipation

Excellent lumen/ Watt ratio

Binning ± 50K

Available in long lengths

Available in various colors

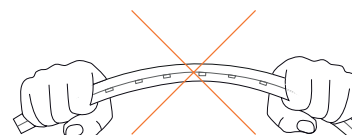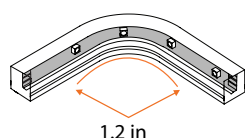Extensive range of accessories

Plug & Play

Asymmetric Diagram

C0-C180
C90-C270
cd/1000lm

Organic Lighting | 12203 Magnolia Avenue, Suite 1, Riverside CA 92503 | 626.969.6140 | www.organiclighting.com

Product Codes & Characteristics

	Side Deco Red	Side Deco Green	Side Deco Blue	Side Deco Amber
Product code [m]	011762	011763	011764	011761
Power (24 V DC)	1.3 W/ft	0.8 W/ft	0.5 W/ft	1.3 W/ft
Power (25 V DC)	1.4 W/ft	0.8 W/ft	0.5 W/ft	1.4 W/ft
CRI	> 80	> 80	> 80	> 80
Luminous flux	11.59 lm/ft	28.35 lm/ft	3.96 lm/ft	9.14 lm/ft
Luminous efficiency	8.9 lm/W	35.4 lm/W	7.92 lm/W	7lm/W
Wave length	617 nm	469 nm	525 nm	587 nm
Spool length	Max. 164 ft			
Section length	7.9 in			
LED	Top LED® long life			
Number of LEDs	7 per section / 10.6 per ft			
Max. connection length	65.6 ft			
Operation voltage	24 V DC			
Max. operation voltage	25 V DC			
Beam angle	55°			
Dimensions	0.47 x 0.47 in			
Dimmable	PWM dimming, 0-10V dimming			
Binning	± 50K			
Weight	1.6 oz/ft			
Expected lifetime	B50/L70 > 50,000 hours @ 104 °F			
Degree of protection (IP)	IP40 (IP68 with mirror welded connector)			
Storage temperature	-4 °F - 131 °F			
Operation temperature	-22 °F - 131 °F[1]			
Minimal bending radius	1.2 in			

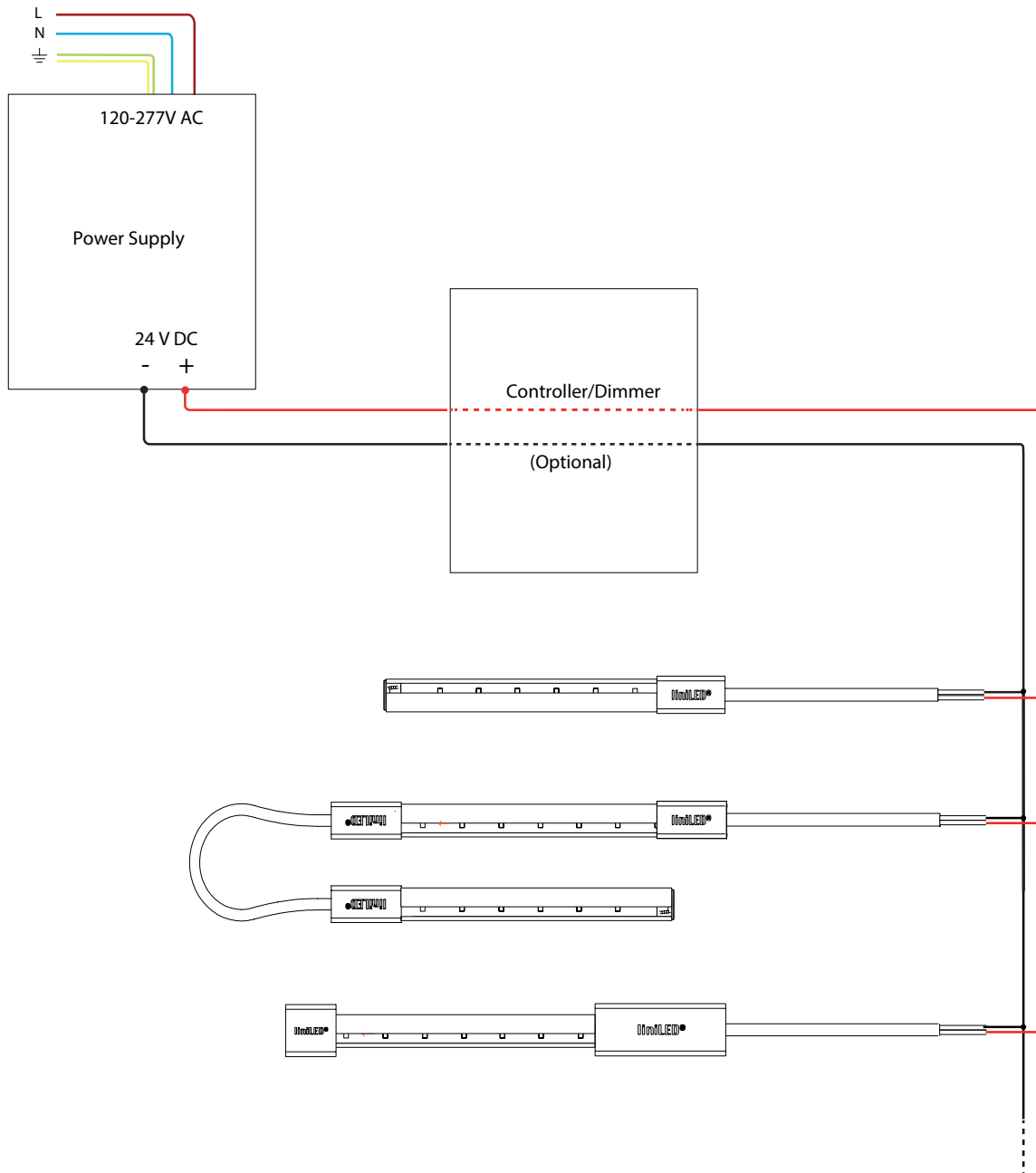Max. connection length between -4 °F and -22 °F is 46 ft

0.47 in
0.47 in

Bending Radius

Maximum bending radius is 1.2 in. Solely bend up or downward. Do not compress, stretch or bend the LED strip.

1.2 in

Power & Connection Diagram

Power Supply - 24V DC

To calculate the power consumption of a single length of LED strip, use the equation below.

$$P_{STRIP} = W_{WATTS} \times X_{LENGTH} \times 110\%$$
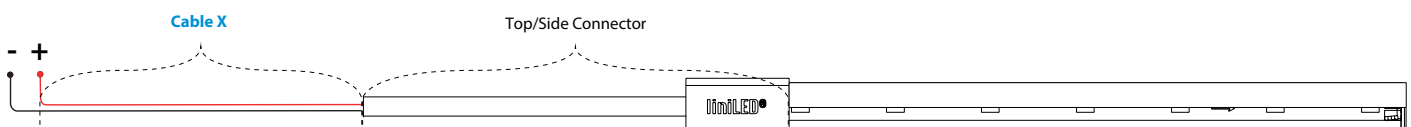
P_{STRIP}	Calculated power consumption of one LED strip in Watt
W_{WATTS}	Typical power consumption in Watt per foot of the selected LED strip
	This value can be found under 'Product characteristics' on page 2
X_{LENGTH}	Length of the connected LED strip in feet
110%	Safety margin to buffer differences over all production batches

Cable Selection

The OrgaLED® LED strips need a minimum voltage at the beginning of the LED strip to function according to the specifications. The table below gives an indication of the maximum cable length based on the cable thickness and power supply voltage. The connection between the cable and LED strip is with a cable length of 3.28 ft.

In case the required length is larger than the length mentioned in this table, the supply voltage is different or if a detailed wire plan with branches is planned, please contact your distributor for a detailed cable calculation.

Wire Gauge	LED strip	Max. **cable x** length Red, Amber		Max. **cable x** length Blue		Max. **cable x** length Green	
		@ 24 V DC	@ 25V DC	@ 24 V DC	@ 25V DC	@ 24 V DC	@ 25V DC
20 AWG x 2	3.3 ft	226.81 ft	439.36 ft	593.75 ft	1143.87 ft	402.39 ft	776.47 ft
	16.4 ft	41.98 ft	84.49 ft	115.36 ft	225.4 ft	77.08 ft	151.9 ft
	32.8 ft	18.86 ft	40.11 ft	55.56 ft	110.57 ft	36.44 ft	73.83 ft
	65.6 ft	7.31 ft	17.94 ft	25.68 ft	53.17 ft	16.1 ft	34.8 ft
18 AWG x 2	3.3 ft	341.19 ft	660.92 ft	893.14 ft	1720.69 ft	605.29 ft	1168.04 ft
	16.4 ft	63.14 ft	127.1 ft	173.54 ft	335.77 ft	115.98 ft	228.52 ft
	32.8 ft	28.4 ft	60.38 ft	83.61 ft	166.36 ft	54.81 ft	111.09 ft
	65.6 ft	11.02 ft	27.03 ft	38.64 ft	80 ft	24.24 ft	52.38 ft
16 AWG x 2	3.3 ft	682.37 ft	1321.84 ft	1786.29 ft	2441.38 ft	1210.62 ft	2336.08 ft
	16.4 ft	126.31 ft	254.2 ft	347.12 ft	678.11 ft	231.96 ft	457.07 ft
	32.8 ft	56.81 ft	120.77 ft	167.21 ft	332.72 ft	109.65 ft	222.19 ft
	65.6 ft	22.07 ft	54.05 ft	77.28 ft	160 ft	48.48 ft	104.76 ft
14 AWG x 2	3.3 ft	1135.7 ft	2199.93 ft	2972.93 ft	5727.47 ft	2014.84 ft	3887.92 ft
	16.4 ft	210.25 ft	423.09 ft	577.71 ft	1128.62 ft	386.09 ft	760.7 ft
	32.8 ft	94.56 ft	201 ft	278.31 ft	553.76 ft	182.5 ft	369.79 ft
	65.6 ft	41.44 ft	89.94 ft	128.61 ft	266.34 ft	80.69 ft	174.33 ft

Cable X Top/Side Connector

Symbols

UL is a world leader in product safety testing and certification. UL sets standards and tests products to make sure they meet standards.

The ETL Listed mark indicates that your product has been tested by Intertek and found in compliance with accepted UL standards.

Electro Static Discharge (ESD) sensitive device, apply standard ESD precautions when handling the product.

Manufacturer's declaration that the product meets the applicable EC directives.

Suitable for mounting on all surfaces and suitable to cover with insulating material.

Restriction of Hazardous Substances (RoHS): product complies with the RoHS directive and each homogeneous material does not exceed the limits for the materials mentioned under the RoHS directive (Pb, Hg, Cd, Cr6+, PBB and PBDE).

This product can be both IP40 and IP68 depending on the configuration and application. See the documentation for the exact IP rating.

Bending of the LED strip is possible with a radius of ≥ 1.2 inches in the specified direction.

Electrical appliance class III: this product is designed to be supplied from an extra-low voltage (≤ 60.0 V DC or ≤ 42.4 V AC).

System guarantee of 5 years when the complete system consist of OrgaLED® products with the 5 year system warranty logo.

Product is resistant against ultraviolet (UV) light or sunlight. Non-UV resistant products can degrade or discolor fast when exposed to UV.

Product can be cleaned with normal cleaning agents as specified in the datasheet under 'chemical compliances.'

This product can be stored and used below 32 degrees Fahrenheit. Verify the minimum storage and operation temperature in the datasheet for the lowest temperature allowed.

This product can be applied in seawater and its environment. Elements in seawater will have no harmful effect on the product. For chemical specifications see datasheet. Verify the IP rating for proper use.

This product can be applied inside swimming pool environments. Elements in the air will have no harmful effect on the product. For chemical specifications of these elements see datasheet. Verify the IP rating for proper use.

This product is available on request and can be submerged n swimming pools and their environments. Disinfectants will have no harmful effect on product. For chemical specifications of these elements see datasheet. Verify the IP rating for proper use.

The CRI value of this product is 80 or higher.

The binning tolerance of this product is 2 MacAdam.

Disclaimer

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