



  
**vivalyte**  
SMART LED SOLUTIONS

**SIDELIT**

# Sidelit LED bars

VSL-V4

Vivalyte's sidelit solutions are suitable for **both single sided and double sided** lightboxes. The unique lens in combination with **high performance LEDs** maximize the visual impact of the graphics.

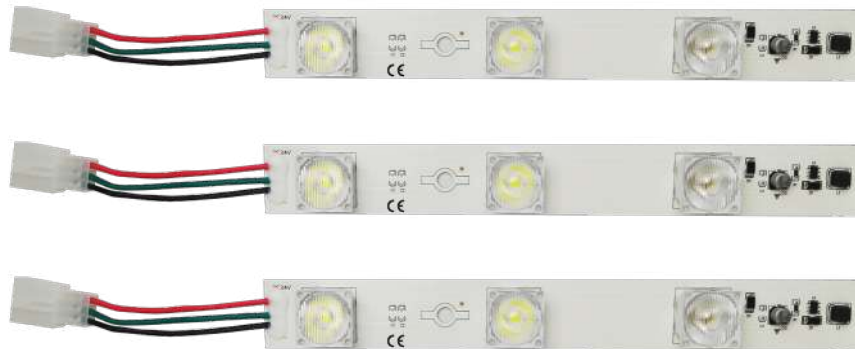
VSL-V4

## General specifications

<b>Input voltage</b>	24 VDC
<b>Current</b>	Current regulated
<b>Efficacy</b>	127 lm/W max
<b>CRI</b>	>70
<b>IP class</b>	IP20
<b>Lifetime</b>	30 000H L70
<b>LED type</b>	High power 3535
<b>Certificates</b>	CE/RoHS/UL

## Applications

- Single and double sided lightboxes
- Interior walls an ceilings
- Retail and exhibition displays
- Banners



## Key features



**Indoor use**



**5 years warranty**

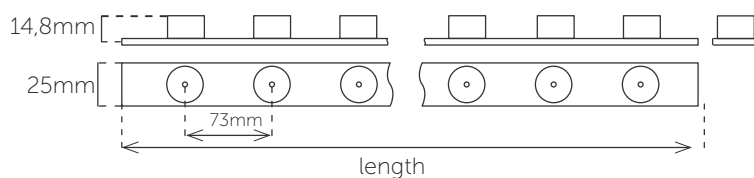


**Optional Dimmable**



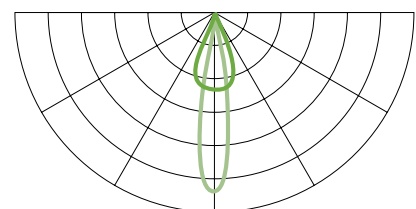
**Easy connection and installation**

## Dimensions



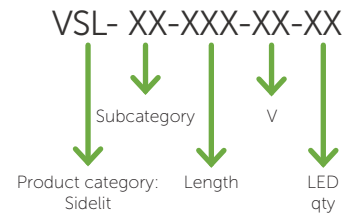
## Light distribution graph

Beam angle: **7\*25°**



# Safety & operation instructions

- Requires proper installation by qualified people
- All connections must be made while disconnected from the main power
- Non-water-resistant product for indoor installation environment only
- Operating temperature range: -20°C to 60°C
- Storage temperature range: -20°C to 70°C
- LED bars can be fixed with double-sided tape or screws, clean surface required
- 24V DC input: safe, low voltage loss & longer run

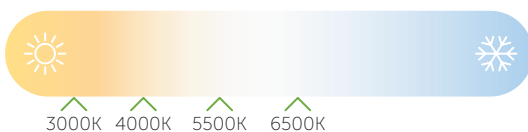


## Specifications

Article name	Length	LED (pcs)	Input voltage	Power	Light output	Max. in serial connection	Efficacy
VSL-V4-420-24-06	412 mm	6	24V (DC)	13W	1650 lm	5	127 lm/W
VSL-V4-340-24-05	340 mm	5	24V (DC)	11W	1400 lm	6	125 lm/W
VSL-V4-200-24-03	193 mm	3	24V (DC)	7W	830 lm	8	118 lm/W

### Available color temperature

Other colour options available on request



Vivalyte BV · Vlamingstraat 4 · 8560 Wevelgem Belgium  
[www.vivalyte.com](http://www.vivalyte.com) · [info@vivalyte.com](mailto:info@vivalyte.com) · +32 56 42 65 35 · BE 0500.611.159



October 2019  
 The information and data given are typical for the equipment described.  
 However, any individual item is subject to change without prior notification



# High power sidelit LED bars

VSL-V-HP

Vivaly<sup>te</sup>'s high power sidelit solutions are suitable for **ultra large-format, lightboxes**, up to 5m height. The high-quality Samsung high power LEDs bring **high brightness** and ensure a **stable and uniform light distribution**.

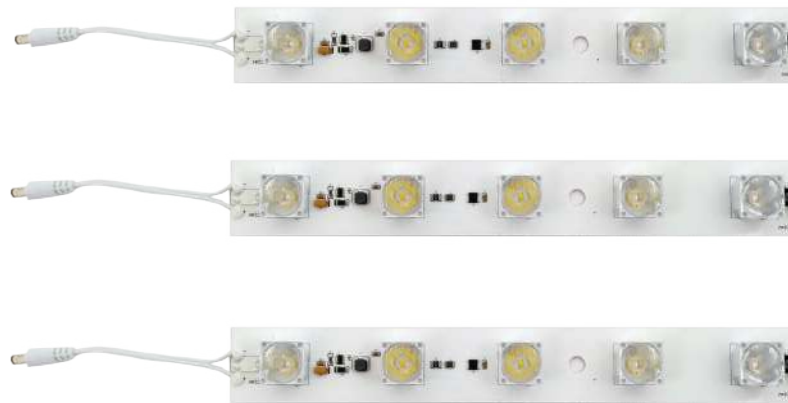
VSL-V-HP

## General specifications

Input voltage	24 VDC
Current	Current regulated
CRI	>75
Input current	50 mA
Power consumption	3W per LED
IP class	IP60
Lifetime	50 000H L70
LED type	Samsung 3535
Certificates	CE/RoHS/UL

## Applications

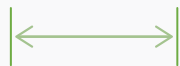
- Large format single sided and double sided lightboxes
- Event & exhibition displays
- Retail & shopping experience
- Interior walls and ceilings



## Key features



Indoor use



Up to 5 m



5 years warranty

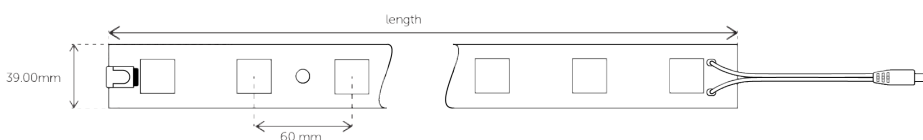


Optional  
Dimmable



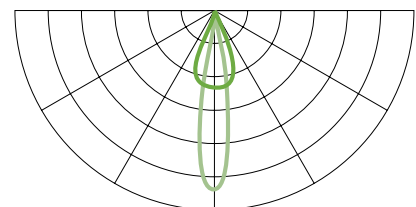
easy connection  
and installation

## Dimensions



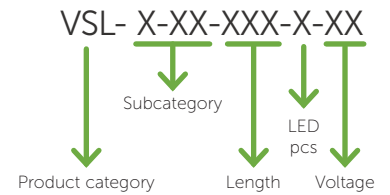
## Light distribution graph

Beam angle: 7\*25°



# Safety & operation instructions

- Requires proper installation by qualified people
- All connections must be made while disconnected from the main power
- Non-water-resistant product for indoor installation environment only
- Operating temperature range: -20°C to 60°C
- Storage temperature range: -25°C to 70°C
- LED bars can be fixed with double-sided tape or screws, clean surface required
- 24V DC input: safe, low voltage loss & longer run

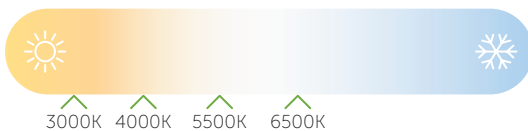


# Specifications

Article name	Length	LED (pcs)	input current	Power	Light output	Max. in serial connection	Efficacy
VSL-V-HP-178-3-24	178 mm	3	375 mA	9 W	944,43 lm	10	100 lm/W
VSL-V-HP-236-4-24	236 mm	4	500 mA	12 W	1229,2 lm	7	101 lm/W
VSL-V-HP-298-5-24	298 mm	5	625 mA	15 W	1539,1 lm	6	104 lm/W
VSL-V-HP-473-8-24	473 mm	8	1000 mA	24 W	2483,5 lm	3	98 lm/W
VSL-V-HP-888-15-24	888 mm	15	1875 mA	45 W	4636,3 lm	2	101 lm/W

## Available color temperature

Other colour options available on request



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# High power sidelit LED bars

VSL-V-HPE

Vivaly<sup>te</sup>'s high power sidelit solutions are suitable for **ultra large-format, lightboxes**, up to 5m height. The high-quality Samsung high power LEDs bring **high brightness** and ensure a **stable and uniform light distribution**.

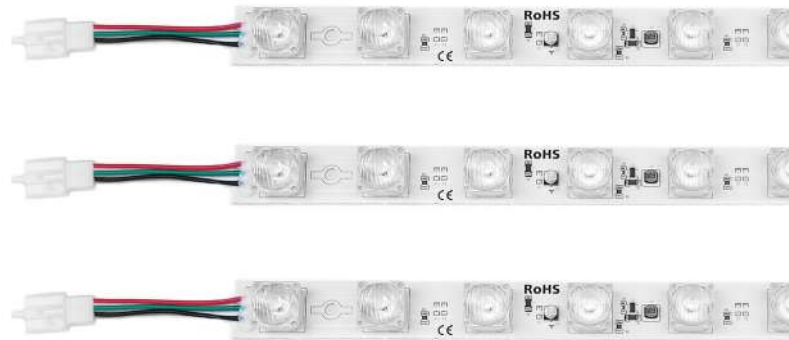
VSL-V-HPE

## General specifications

Input voltage	24 VDC
Current	current regulated
Efficacy	101 lm/W
CRI	>70
IP class	IP20
Lifetime	30 000H L70
LED type	Samsung 3535
Certificates	CE/RoHS/UL

## Applications

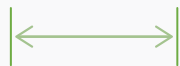
- Large format single sided and double sided lightboxes
- Event & exhibition displays
- Retail & shopping experience
- Interior walls and ceilings



## Key features



Indoor use



Up to 5 m



5 years warranty

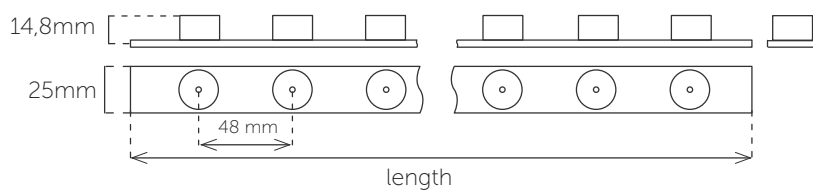


Optional  
Dimmable



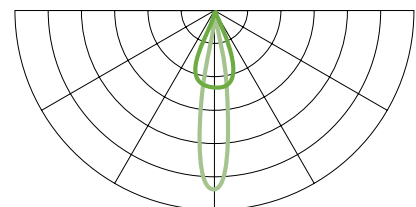
easy connection  
and installation

## Dimensions



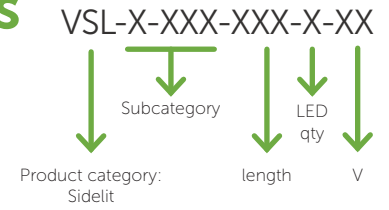
## Light distribution graph

Beam angle: 7\*25°



# Safety & operation instructions

- Requires proper installation by qualified people
- All connections must be made while disconnected from the main power
- Non-water-resistant product for indoor installation environment only
- Operating temperature range: -20°C to 60°C
- Storage temperature range: -20°C to 70°C
- LED bars can be fixed with double-sided tape or screws, clean surface required
- 24V DC input: safe, low voltage loss & longer run

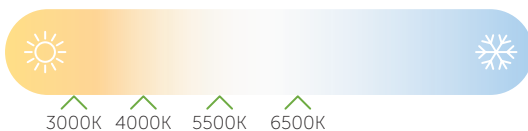


## Specifications

Article name	Length	LED (pcs)	Input voltage	Power	Light output	Max. in serial connection	Efficacy
VSL-V-HPE-430-9-24	428 mm	9	24V (DC)	20W	2038lm	4	101 lm/W
VSL-V-HPE-200-4-24	200mm	4	24V (DC)	9W	912lm	8	101 lm/W

### Available color temperature

Other colour options available on request



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## Features

- Input voltage: DC24V
- CREE single color LED, color mixing well, excellent light performance and stability
- Can be connected with external controller, and achieve full-color effect
- Beam angle 10\*60°, better light effect and longer shooting distance
- Aluminum PCB and backside with heat conductive adhesive tape, better heat diffusion

## Application

Applied for full-color light boxes and projects

VIVALYTE BVBA

Tel: +32 56 42 65 35

Mail: [info@vivalyte.com](mailto:info@vivalyte.com) Web.: [www.vivalyte.com](http://www.vivalyte.com)

Add: Kouterstraat 6, Wevelgem, B-8560, Belgium VAT: BE500611159



## 2525 non-waterproof full-color rigid bar

### Installation

Fixed by screw

### Specifications

<b>Part No.</b>	VSL-VRGB-0509
<b>Light color</b>	Full-color
<b>Wave length (nm)</b>	R 620-625 G 520-525 B 465-470
<b>Beam Angle(°)</b>	10x60°
<b>Luminous Flux(lm)</b>	800
<b>RA</b>	/
<b>Light Efficiency(lm/w)</b>	42
<b>Voltage</b>	24V DC
<b>Power(W/pcs)</b>	≤19
<b>Standard Serial connection Qty (pcs)</b>	4
<b>Max.Standard Serial connection Qty (pcs)</b>	4
<b>Operating Temperature(°C)</b>	-25~+60
<b>Storage Temperature(°C)</b>	-25~+70

Remark:

- The test temperature is 25±2;
- Typical data as above, may some difference with reasonable fluctuation range.

VIVALYTE BVBA

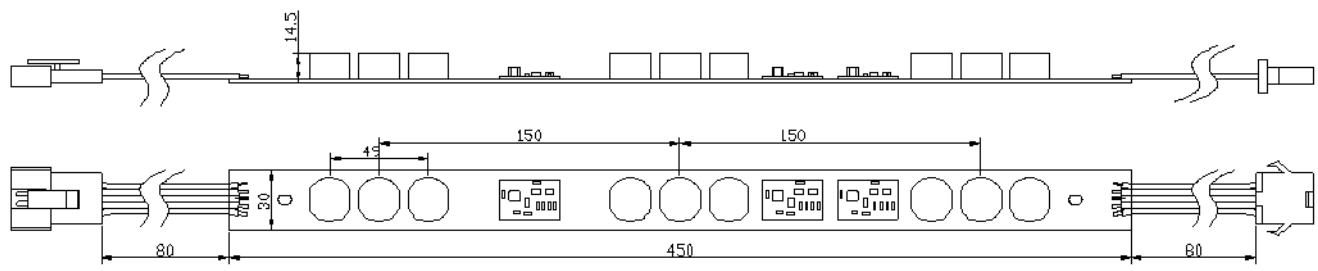
Tel: +32 56 42 65 35

Mail: info@vivalyte.com Web.: www.vivalyte.com

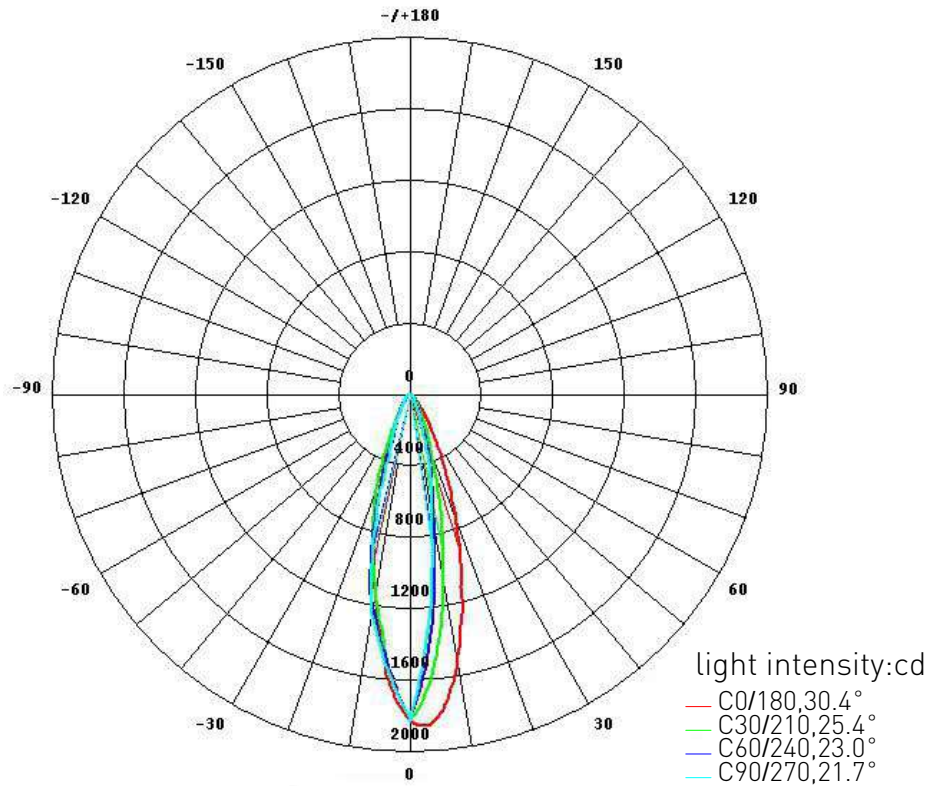
Add: Kouterstraat 6, Wevelgem, B-8560, Belgium VAT: BE500611159

**Dimension //**

Unit:mm[in]



**Luminous Intensity Distribution Diagram //**



THE AVERAGE BEAM ANGLE(50%):25.1 DEG

**Package //**



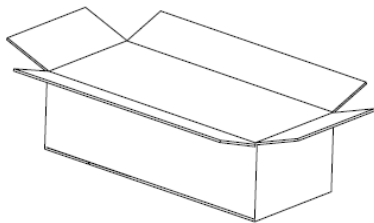
Put the product into the plastic bag



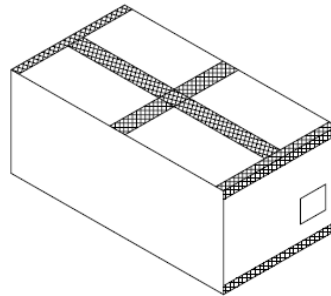
Sealed both ends of the bag



Put the products into the carton and separated the layer by foam ,then seal it with sealing tape ,stick the laber at the side of the carton



Stick packing list on carton

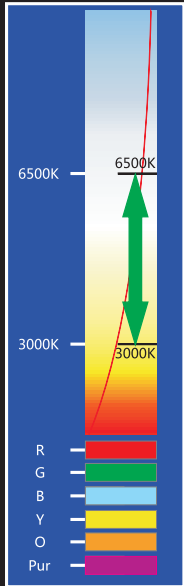


**Packing details:**

- 1.Packaged by PE transparent pocket, with normal export carton;
- 2.Packing size: 550\*400\*340mm;
- 3.

Part No.	Product size	Qty per carton	Net weight (NW/kg)	Gross weight (GW/kg)
VSL-VRGB-0509	450*30	100	10.7(1±10%)KG	12.2(1±10%)KG

4.Above mentioned quantity and weight are based on above packing method only, quantity and weight differs when applying other packing, please refer to actual situation.



## Features

1. Special optical lens is used
2. The Aluminum PCB back uses heat dissipation tape
3. Using external controllers can achieve rich color conversion
4. Multiple specifications available and customizable

## Application

Suitable for advertising lightbox and signage lighting project etc.

## Installation

Fix by adhesive tape or screws

## Specification

Model No.	Light Color	Color Temperature/ Wavelength(K/nm)	Beam Angle	Typical Luminous Flux value(lm/pcs)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
VSL-V-RGBW-0407-24	W	6500	10*20°	243	70+	/	24	3
	R	615-625		138				3
	G	515-530		247				3
	B	450-460		38				3
	RGB	100000		409				9
	RGBW	100000		630				12

## Other Parameters

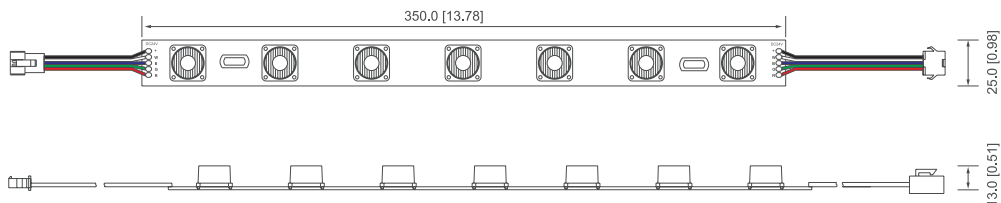
Model No.	LED Quantity/pcs	Product Size L*W*H(mm)	Max Run(single feed)(pcs)	Working Temperature	Storage Temperature
VSL-V-RGBW-0407-24	7	350*25*13	4	-20~+60°C	-20~+70°C

### NOTE:

1. Test environment temperature : 25±2°C.
2. The above data is typical values. The actual data of each single product may differ from the typical values. The data is subject to change without notice.
3. Luminous flux is tested when lighting on with the single color.
4. Different color temperature will make luminous flux different.

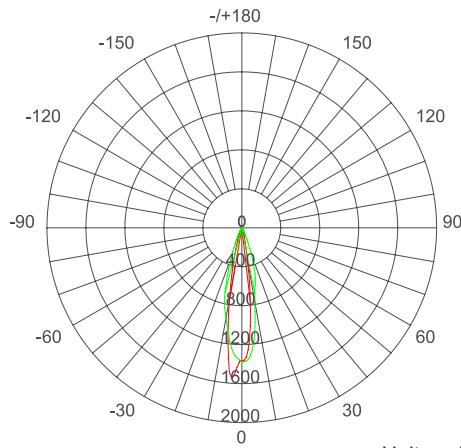
## Profile Drawings

Unit:mm[inch]



NOTE: for detailed drawing, please consult sales rep.

## Luminous Intensity Distribution Diagram



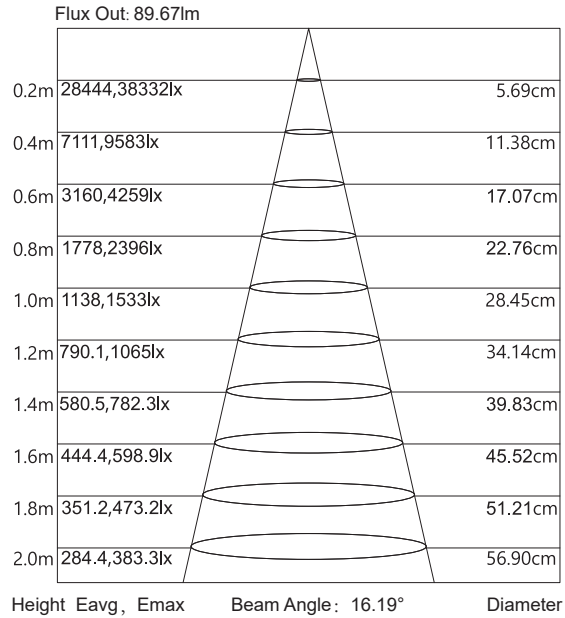
Unit: cd

— C0 /180,16.2°

— C90/270,25.8°

AVERAGE BEAM ANGLE(50%): 21.0°

## Average Illumination

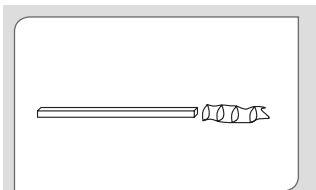


NOTE: The above two figures are tested with the sample VSL-V-RGBW-0407-24, for other data, please consult sales rep.

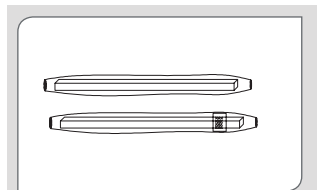
## Reliability Test

Test Sort	Test item	Reference Standard	Test condition	Test result
Environmental test	PTC test	Internal test standard	TH=-40~60°C, continuous cycle, every 2 hours per times (normal temperature for 15 minutes, temperature rise and fall for 45 minutes)	PASS
	High Temperature Resistance Test		TH=60/80°C, continuous lightened up	
	Room temperature aging test		TH=25°C, continuous lightened up	
Other tests	Luminous flux maintenance test		TH=60°C ,TH=25°C	
	lens thrust test		>20KGF	
	Wire tensile test		>20KGF	

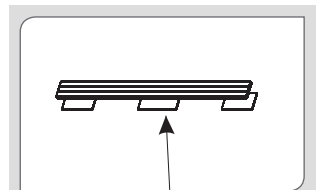
## packing



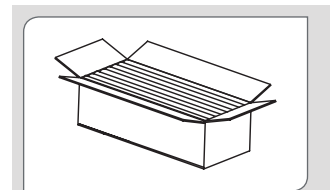
Put the product into PE bag.



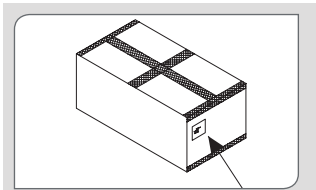
Seal the bag in two ends, and label it.



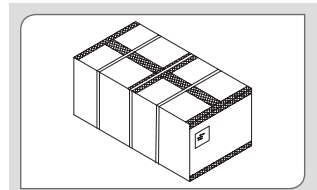
Separate the product layer by layer with foam



Put the product into carton box.



Seal and label the box.



Use packing belt to pack. Add edge protectors if necessary.

### Packaging information

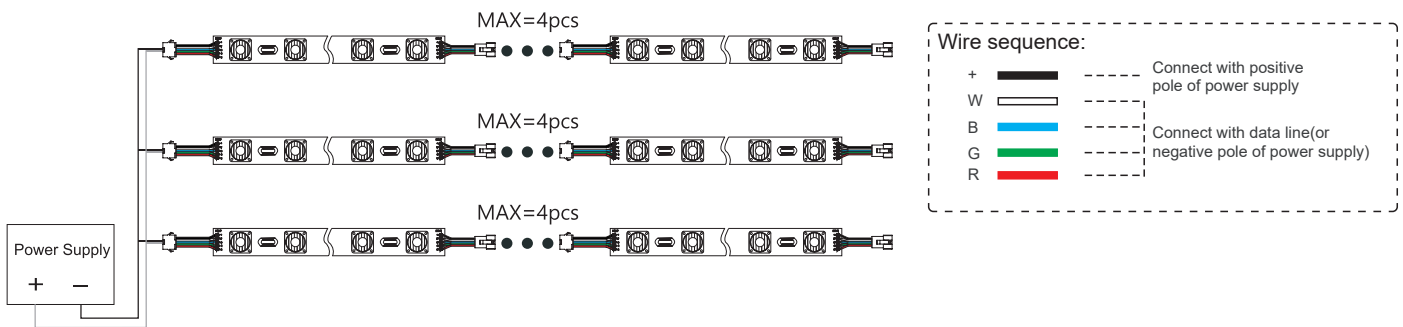
Model No.	Product Size L*W*H(mm)	Carton Size(mm)	PCS/Carton	Net Weight(kg)	Gross Weight(kg)
VSL-V-RGBW-0407-24	350*25*13	390*390*325	150	10.45(1±10%)	11.79(1±10%)

#### Note:

1. Packing material: PE bags and carton box
2. 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

### 1.Connection Diagram



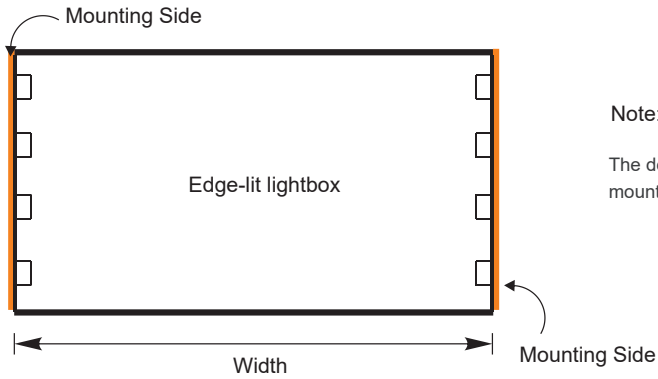
### 2.Installation Reference

Model No.	Lighting Mode	Surface Material	Width(m)	Depth H(cm)	Color	Illumination (Lux)	Evenness	Watt Density (W/m <sup>2</sup> )	Density (pcs/2m)	Effect
VSL-V-RGBW-0407-24	Double Side	White non weaving canvas	1.5	12	W	400-630	0.63	8	2*2	OK
					R	--	--	8		
					G	--	--	8		
					B	--	--	8		
					RGB	--	--	24		
					RGBW	--	--	32		
VSL-V-RGBW-0407-24	Double Side	White non weaving canvas	2	15	W	300-400	0.75	6	2*2	OK
					R	--	--	6		
					G	--	--	6		
					B	--	--	6		
					RGB	--	--	18		
					RGBW	--	--	24		

**Note:**

The density is within a light box of 1 square meter. PCS/m indicates the product quantity installed on single side, and PCS/2m indicates the quantity of double-sided installation.

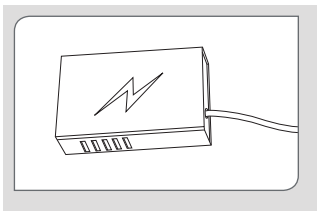




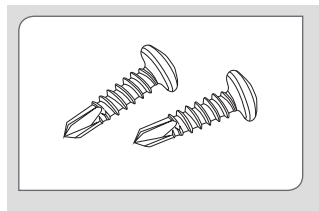
**Note:**

The density refers to product quantities installed on the mounting side, and "1\*2" refers to 2 mounting sides and each side with 1pcs.

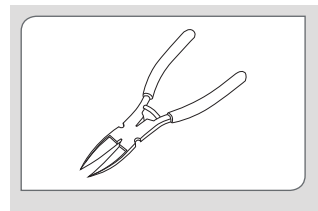
### 3.Products and Tools



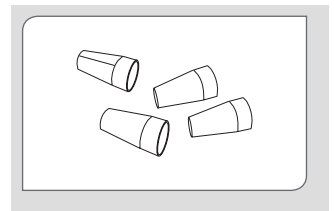
LED power supply



Screws

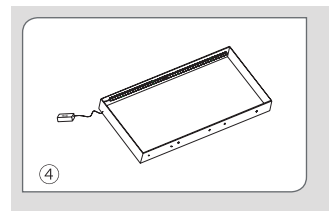
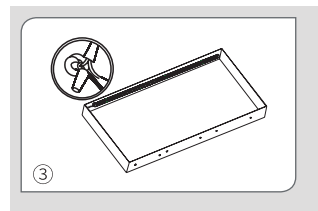
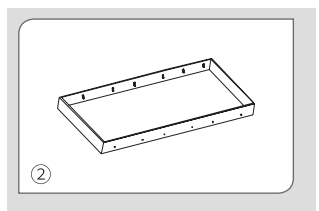
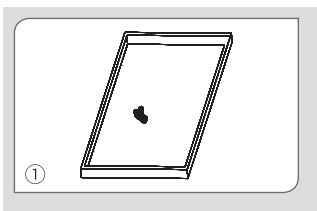


Diagonal pliers



Connection Terminals

### 4.Installation Methods and Steps



- 1.Clean the mounting surface
- 2.Determine the mounting distance,fix with the installation clips
- 3.For bare wire connection, please use terminals.  
Treat the thread with insulation,waterproof, and anti-corrosion arrangement as it cannot pull out by hands.
- 4.Check and ensure correct installation, and fix the product with screws ,then power on for self-test.

**Note:**

1. Screw to avoid welding plate, avoiding short circuit
2. When fastening the screw, make sure to add plastic gaskets to insulate the screw from the LED panel.

## Attentions before installation

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.  
Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.  
The terminal should have insulation,waterproof and anti-corrosive treatment.

## Common Faults and Troubleshoot

Quick Guide		
Problems	Reasons	Solutions
All LEDs can not light on.	No electric supply.	Power on
	Automatic power protection from the open or short circuit in output of the power supply.	Fix the short circuit problem.
	Wrong connection of power supply.	
LEDs can not light on partly.	Some switching mode power supplies are not powered.	Check the power supply system to fix it.
	Power supply line error.	
	Mistaken wire connection of some of products	Correctly connection
Brightness of LED is inconsistent for insufficient.	Power overloaded.	Replace with more powerful power
	Power supply circuit excessive consumption.	Make sure the working voltage of the product within $\pm 5\%$ of standard voltage, or keep balance by circuit power consumption.
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement.
LED flicker.	Connection point fault.	Remove bad connection point.
	Switching power supply failure.	Replace a new power supply.
	Wrong Installation or use of products	Please follow the instructions

### ⚠ Warning

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- 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.

## Statements and Recycling

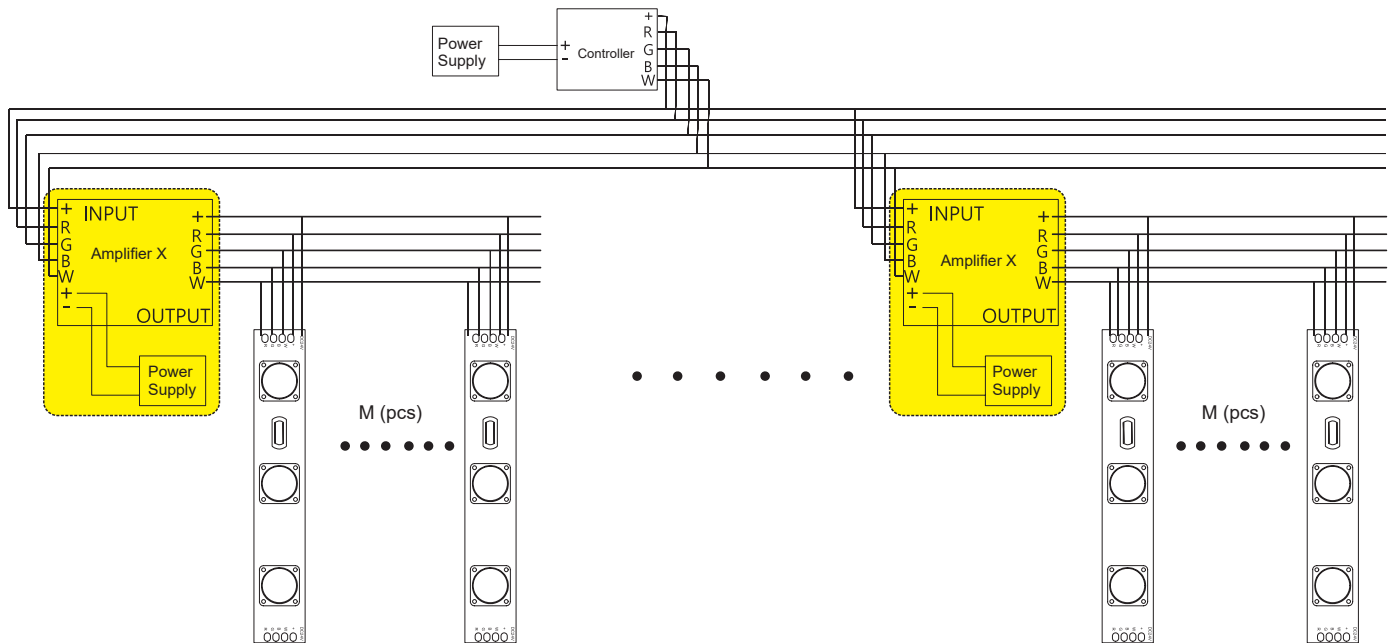
### Statements:

Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged.  
The parameters given in this manual are typical values and for reference only.  
All illustrations and drawings in this manual are for reference.  
This product is subject to change without notice.

### Recycling:

LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.

## Connection Diagram of Controller

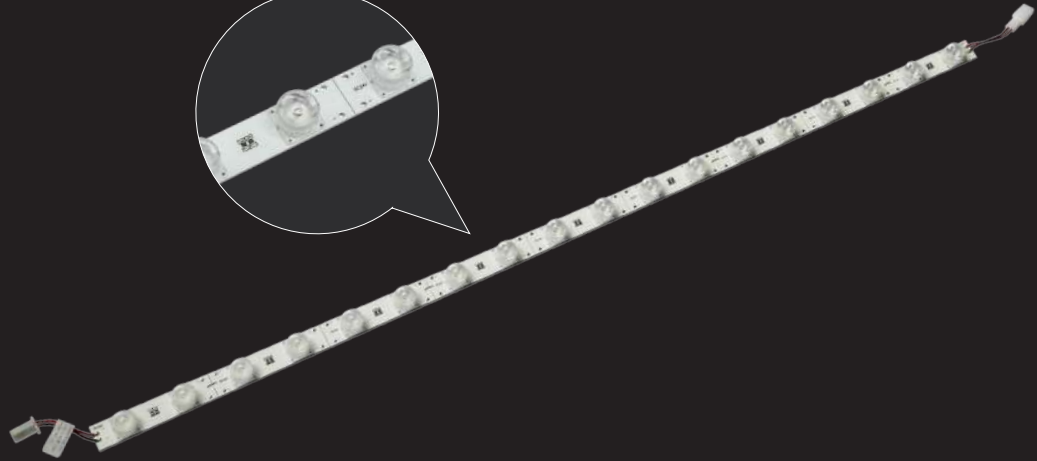
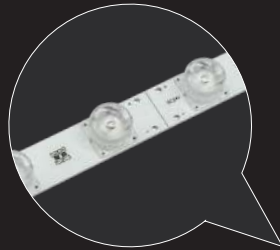
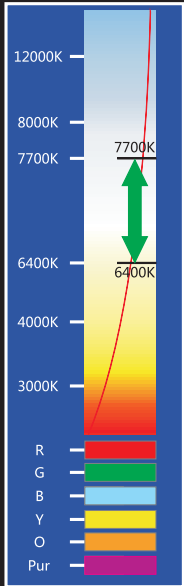


Amplifier power supply rated power (W): P  
 Product rated power (W): P(long)  
 Controller load: M(pcs)  
 Module max run: MAX=50

$$M = \frac{P \times 0.8}{P_{(long)} \times MAX}$$

For example: the product max run MAX=4pcs, the power supply is 400W, so the controller load is

$$M = \frac{P \times 0.8}{P_{(long)} \times MAX} = \frac{400 \times 0.8}{12 \times 4} \doteq 13(\text{pcs})$$



### Features

1. Suitable for edge-lit lightbox with width less than 2m.
2. Secondary optical lens for uniform light
4. Cuttable and easy installing
5. Multiple length optional,customizable

### Application

Suitable for above 8cm deep edge-lit lightbox

### Installation

Fix by screws or adhesive tape

## Specification

Model No.	Light Color	Color Temperature(K)	Beam Angle	Typical Luminous Flux value(lm/pcs)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
VSL-V5EL-50-10	White	6400-7700	12*24°	1530	70+	85	24V	15.6
VSL-V5EL-90-18				2760				28

## Other Parameters

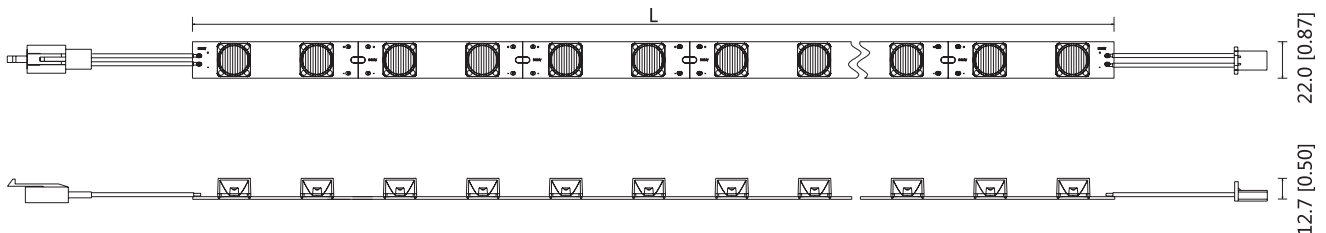
Model No.	LED Quantity/pc	Product Size L*W*H(mm)	Standard Packing Quantity(pcs)	Working Temperature	Storage Temperature
VSL-V5EL-50-10	10	500*22*12.7	4	-20~+60°C	-20~+70°C
VSL-V5EL-90-18	18	900*22*12.7	2		

**NOTE:**

1. Test environment temperature : 25±2°C.
2. The above data is typical values. The actual data of each single product may differ from the typical values. The data is subject to change without notice.
3. Luminous flux is tested when lighting on with the single color.
4. Different color temperature will make luminous flux different.
5. The Luminous flux and Power tolerance within ±10%.
6. Max run is in single feed.

## Profile Drawings

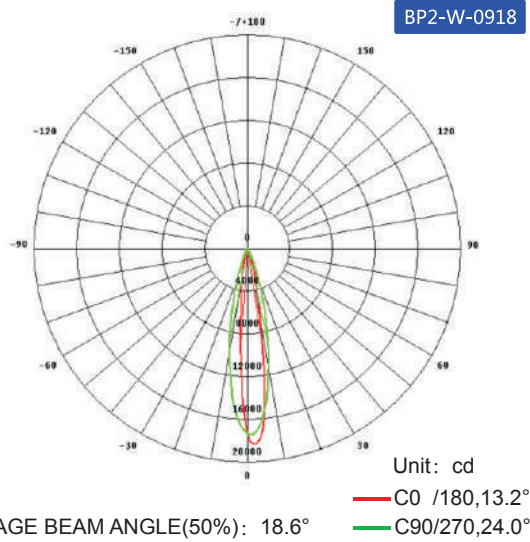
Unit:mm[inch]



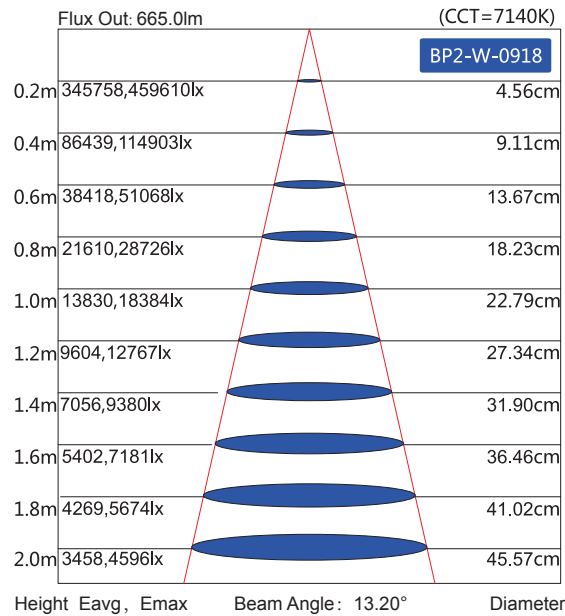
**NOTE:**

AMPR terminals are used at both ends  
For detailed drawing, please consult sales rep.

## Luminous Intensity Distribution Diagram



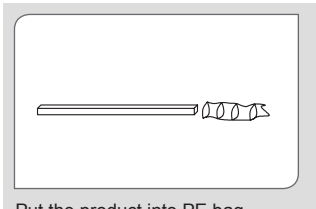
## Average Illumination



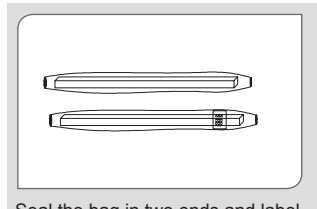
**NOTE:**

The above two figures are tested with the sample BP2-W-0918 at 7140K, for other data, please consult sales rep.

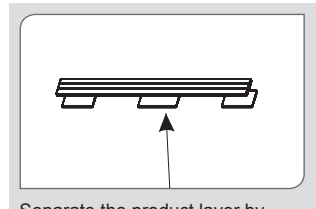
### packing



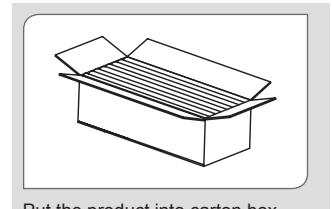
Put the product into PE bag.



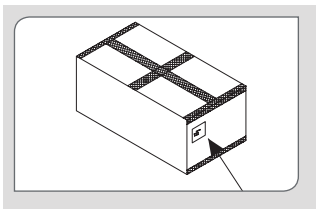
Seal the bag in two ends, and label it.



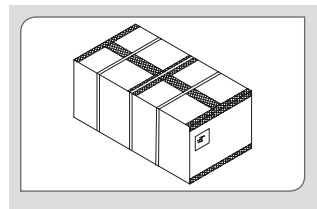
Separate the product layer by layer with foam



Put the product into carton box.



Seal and label the box.



Use packing belt to pack. Add edge protectors if necessary.

#### Packaging information

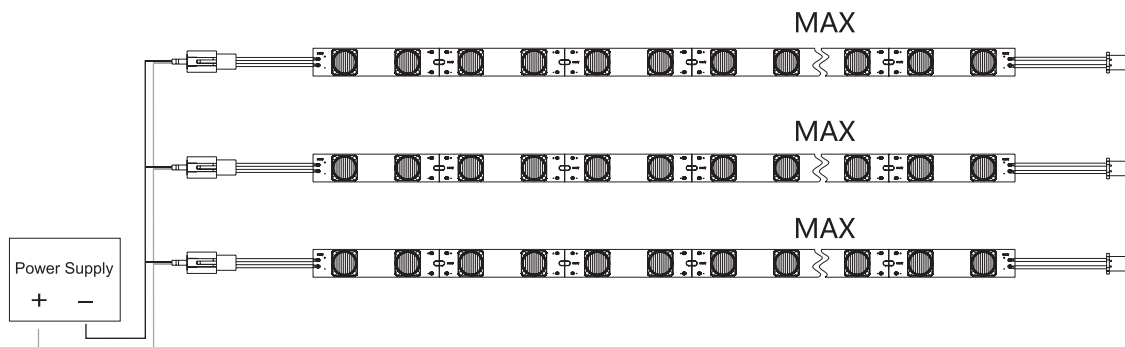
Model No.	Product Size L*W*H(mm)	Carton Size(mm)	Total Quantity(pcs)	Net Weight(kg)	Gross Weight(kg)
VSL-V5EL-50-10	500*22*12.7	--	--	--(1±10%)	--(1±10%)
VSL-V5EL-90-18	900*22*12.7	1000*185*185	35	4.55(1±10%)	6.05(1±10%)

#### Note:

1. Packing material: PE bag and carton box
2. 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

#### 1. Connection Diagram



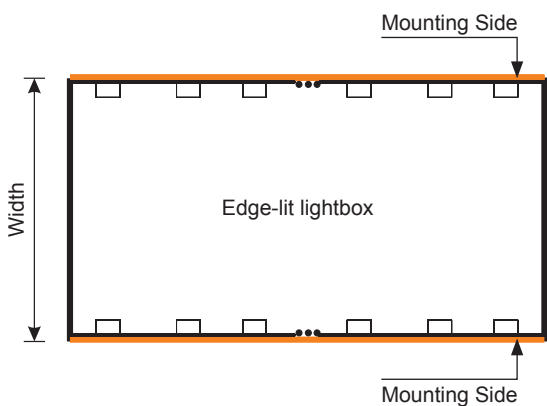
Note: the "MAX" here means the max connectable series

## 2. Installation Reference

Model No.	Light Box type	Lighting Mode	Surface Material	Width(m)	Depth H(cm)	Watt Density (W/m )	Density (pcs/2m)	Illumination (Lux)	Evenness
VSL-V5EL-90-18	Double Side Light box	Double Side	White non weaving canvas	1	8	64.8	1*2	3400-4030	0.84
				1.2	8	54.0	1*2	2720-3740	0.73
				1.5	8	43.2	1*2	1920-3250	0.59
				1	10	64.8	1*2	3150-3670	0.86
				1.2	10	54.0	1*2	2620-3300	0.79
				1.5	10	43.2	1*2	1910-2900	0.66

### Note:

The density is within a light box of 1 square meter. PCS/m indicates the product quantity installed on single side, and PCS/2m indicates the quantity of double-sided installation.



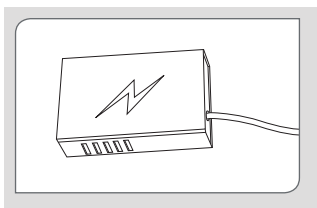
### Note:

The density refers to product quantities installed on the mounting side, and "1\*2" refers to 2 mounting sides and each side with 1pcs.

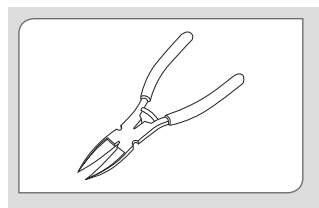
The spacing means centre spacing of the product, see the left.

The above products use porcelain whiteboard.

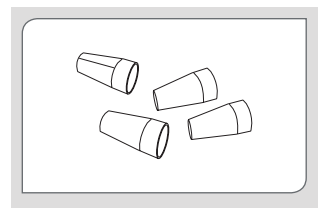
## 3. Products and Tools



LED power supply



Diagonal pliers



Connection Terminals



## Attentions before installation

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.  
Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.  
The terminal should have insulation,waterproof and anti-corrosive treatment.

## Common Faults and Troubleshoot

Quick Guide		
Problems	Reasons	Solutions
All LEDs can not light on.	No electric supply.	Power on
	Automatic power protection from the open or short circuit in output of the power supply.	Fix the short circuit problem.
	Wrong connection of power supply.	
LEDs can not light on partly.	Some switching mode power supplies are not powered.	Check the power supply system to fix it.
	Power supply line error.	
	Mistaken wire connection of some of products	Correctly connection
Brightness of LED is inconsistent for insufficient.	Power overloaded.	Replace with more powerful power
	Power supply circuit excessive consumption.	Make sure the working voltage of the product within $\pm 5\%$ of standard voltage, or keep balance by circuit power consumption.
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement.
LED flicker.	Connection point fault.	Remove bad connection point.
	Switching power supply failure.	Replace a new power supply.
	Wrong Installation or use of products	Please follow the instructions

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