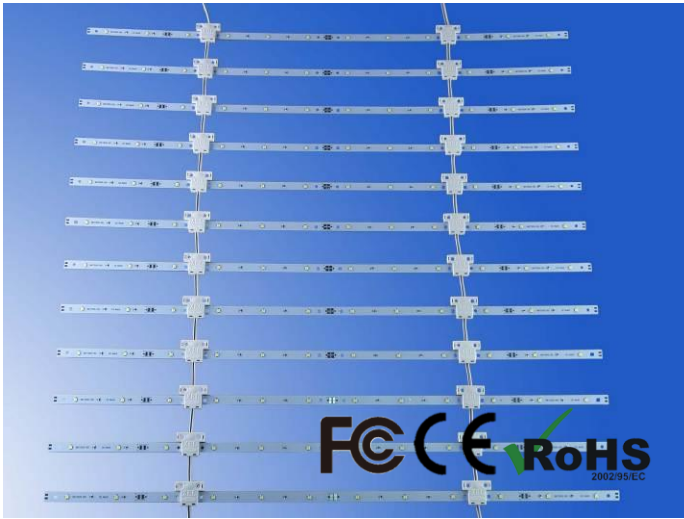


**Description:** BKT50S-50 LED lattice backlight (LED curtain, LED bamboo slips, Patent No.:ZL201220134846.) ; LATTICE LED Matrix Lighting System is the most versatile and practical illumination solution for indoor and outdoor sign cabinets and large area illumination. Innovative design of LATTICE system comes in lightweight easy-to-install rolls, which allows for easy population of perfectly spaced LEDs in minutes for uniform backlit lighting.

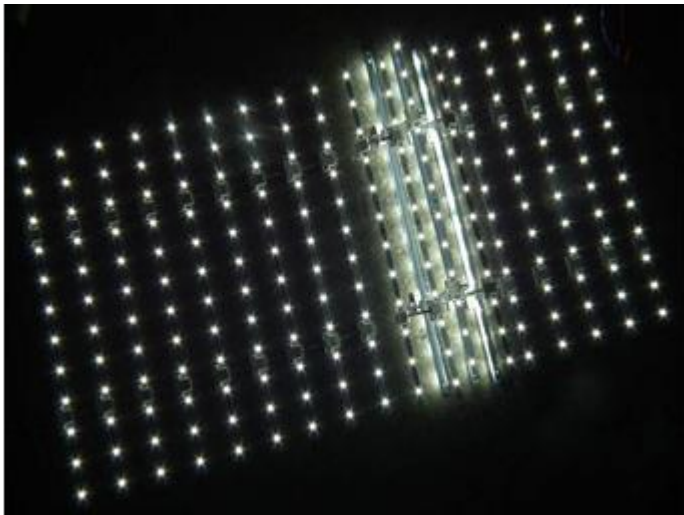


**Features:**

1. Highest luminous efficiency 100Lm/W; The actual test in excess of 50% optical efficiency than similar products.
2. 50mm (1.97") Perfect square Matrix
3. Minimal depth required at 72mm distance no hot spots on the graphic!
4. Available in 600mm, 300mm and 150mm widths and max 2.4M/7.87ft length rolls
5. Warranty: 3 years

**Scope of applications:**

Dedicated direct type backlight, advertising signs backlight, Advertising light boxes.



**LED to LED**

50mm/1.97"

**CRI > 85**

**Luminous efficiency**

100Lm/W DC12V

**Bar to Bar**

50mm/1.97"

**Brightness**

9000Lm/m<sup>2</sup>

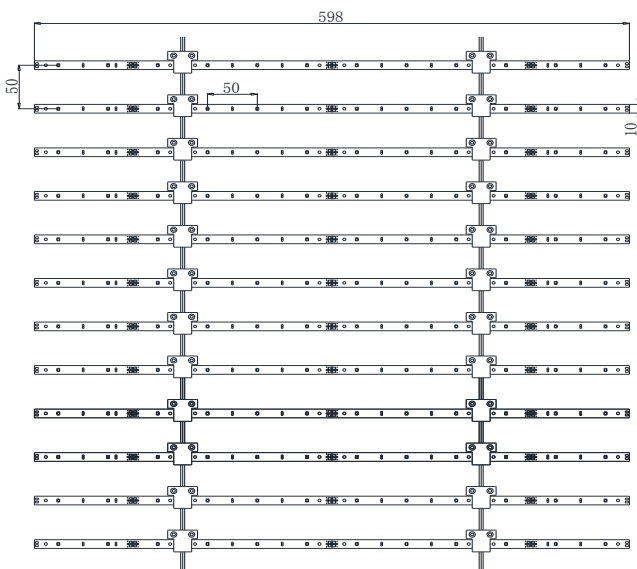
836Lm/sqft

**LED to face distance**

> 72mm/2.83"

**Power Consumption**

90W/m<sup>2</sup> 8.36W/sqft

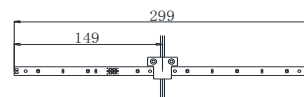


UNIT:mm

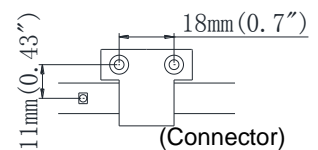
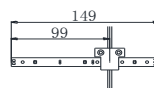
**BKT50S-50-600MM**



**BKT50S-50-300MM**



**BKT50S-50-150MM**



connectors position may change

\*Tolerance range for optical and electrical data: ±10 %. Life 40000hours@25 °C

### Application specs

MODEL	BKT50S-50
Single-sided/Double-sided	Single-sided
Brightness Level	Top Highest brightness
Brightness	836Lm/sqft
Min. Cabinet Depth*	>72mm(2.83")
Default Colors	CW 6000~6500K
Other Colors*	WW 2700~3200K NW 4200~4700K
Waterproof Rating	Non waterproof (Optional Conformal Coated, IP66)
Application Environment	Dry & Damp Locations
Operating Temperature	-22°F~158°F (-30~70°C)
Certification	CE RoHS FCC

Minimum distance required from Lattices to face. Calculated with 2447 milky white acrylic with no graphics

Depth on faces with graphics can have thinner cabinet depths  
Consult with XineLam for samples and depth demonstrations  
Special Order. Consult with XineLam Reps and Distributors

### Electrical specs

SKUs		BKT50S-50 12V-600MM	BKT50S-50 12V-300MM	BKT50S-50 12V-150MM
Operating Voltage	12V DC			
Power consumption	bar	2.7W/bar	1.35W/bar	0.675W/bar
	sqft	8.36W/sqft	8.36W/sqft	8.36W/sqft
	m <sup>2</sup>	90W/m <sup>2</sup>	90W/m <sup>2</sup>	90W/m <sup>2</sup>
	L:ft	16.45W/ft	8.23W/ft	4.11W/ft
	L:M	54W/m	27W/m	13.5W/m
Voltage Drop*	12bar 0.6m/1.97ft	-0.08V 32.4W	-0.08V 16.2W	-0.07V 8.1W
	24bar 1.2m/3.94ft	-0.30V 64W	-0.30V 32W	-0.12V 16W
Power /Roll length	48bar 2.4m/7.87ft	-0.88V 118W	-0.88V 59W	-0.8V 30W
	luminous efficiency 100Lm/W			

Voltage drop : Start bar to the end bar voltage difference between.

Series connection length: Max 48bar 2.4m@ 12V

Series connection length: Max 96bar 4.8m@ 24V products /Need to customize

### Power load recommendations

SKUs	BKT50S-50 12V-600MM	BKT50S-50 12V-300MM	BKT50S-50 12V-150MM
<a href="#">HLG-120H-12B</a> Power 120W CC+CV Driver	45bars	90bars*	180bars*
	2.25m / 7.38ft	--	--
	1.35m <sup>2</sup> / 14.53sqft		
<a href="#">NES-75-12</a> Power 75W CV driver	24bars	38bars	76bars
	1.2m/3.93ft	2.4m/7.876ft	4.8m/15.74ft
	0.7m <sup>2</sup> / 7.53sqft		
Recommended Dimming system	Dimming power + PWM signal(Option1-10V) HLG-120H-12B + DM-IR8A		
Other Dimming system	CV power + PWM signal + PWM amplifier NES-75-12 + DM-IR8A + CDA-02		

12V LED lattice – Max Series connection 48bars(2.4m/7.87ft),

If you need more series connection length: please select 24V

\*Calculations are based on 85% max load on CV power supplies

### Configuration specs

SKUs		BKT50S-50 12V-600MM	BKT50S-50 12V-300MM	BKT50S-50 12V-150MM
LED Pitch	50mm / 1.97"			
Bar to Bar Pitch*	50mm / 1.97"			
Bar Length (Roll width)	mm	600mm	300mm	150mm
	Inches	23.62"	11.81"	5.9"
#Lamps LED QTY	/ bar	12LED/bar	6LED/bar	3LED/bar
	/ sqft	36LED / sqft		
	/ m <sup>2</sup>	400LED / m <sup>2</sup>		
#Bars	Area	3.16bar/sqft	6.32bar/sqft	12.64bar/sqft
		34bar/ m <sup>2</sup>	68bar/ m <sup>2</sup>	136bar/ m <sup>2</sup>
	Length	6.09bar/ft	6.09bar/ft	6.09bar/ft
		20bar/m	20bar/m	20bar/m
/Roll	61Bar / 10ft			
	60bar / 3m Roll			
Cut Increment	Every 3 LED			

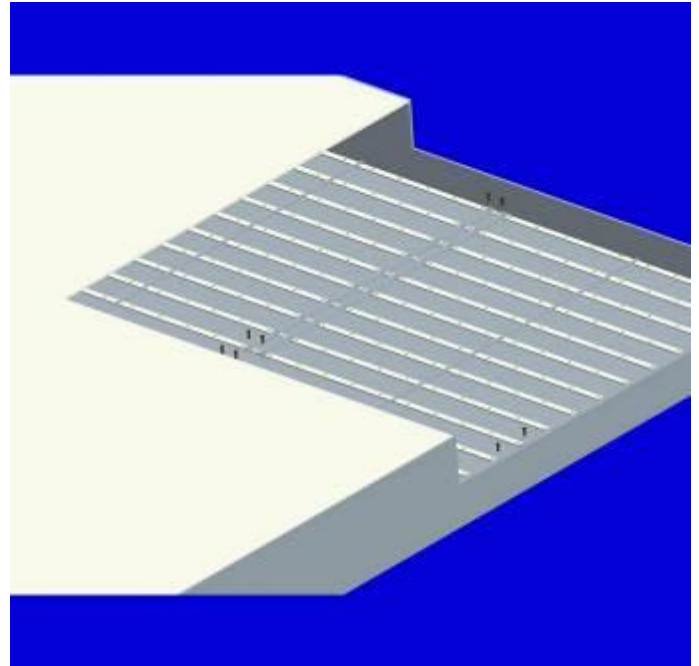
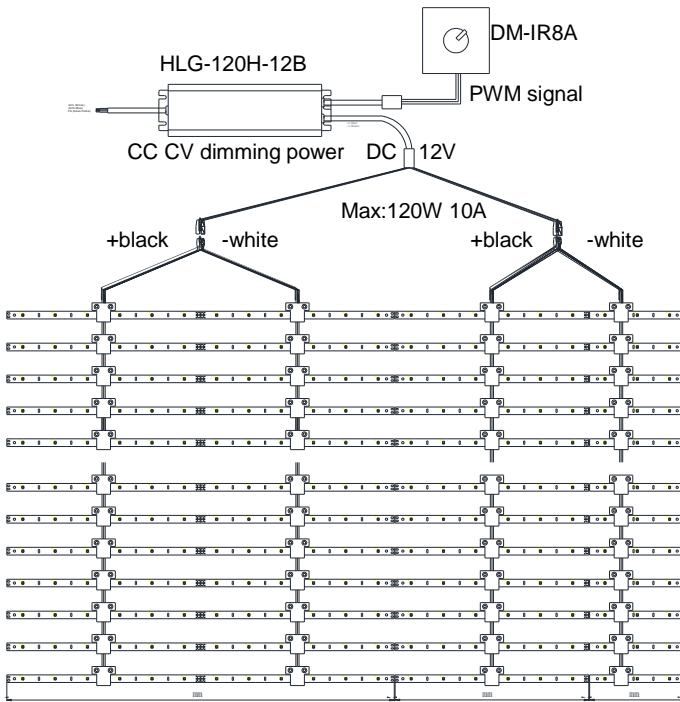
Bar to Bar pitch:

You can choose 60mm pitch product, installation adjustments to reduce bar to bar of size

Packaging : 3.6m/Roll (72bar/Roll)

\*Or according to customer requirements

## Wiring Diagram



**CAUTION: This product is installed by a professional engineering staff.**

### Safety Information

1. The LED lattice (curtain) itself and all its components may not be mechanically stressed.
2. Assembly must not damage or destroy conducting paths on the circuit board.
3. Installation of LED lamp (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
4. Correct electrical polarity needs to be observed. Wrong polarity may destroy the LED lattice (curtain).
5. Please ensure that the power supply of adapters power to operate the total load.
6. When mounting on metallic or otherwise conductive surfaces, there needs to be an electrical isolation points between strip and the mounting surface.
7. Pay attention to standard ESD precautions when installing the LED lattice (curtain).
8. Damaged by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
9. Non Waterproof LED lattice (curtain)
10. LED lattice (curtain) can't be used as support, you need fixed in the frame, fixed to the wall, otherwise, may cause deformation.
11. Please be sure you choose right AC/DC power adaptor to drive LED lattices. If you have difficulty to buy such adaptor locally, please turn to us. (If you use poor quality of the LED power supply; LED lattice (caused damage, we will not warranty).