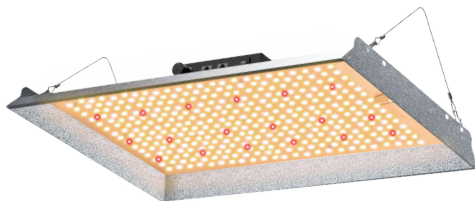


BLUME LED

H Y D R O P O N I C S

BL SERIES GROW LIGHTS USER MANUAL

BL1000/ BL1500/ BL2000



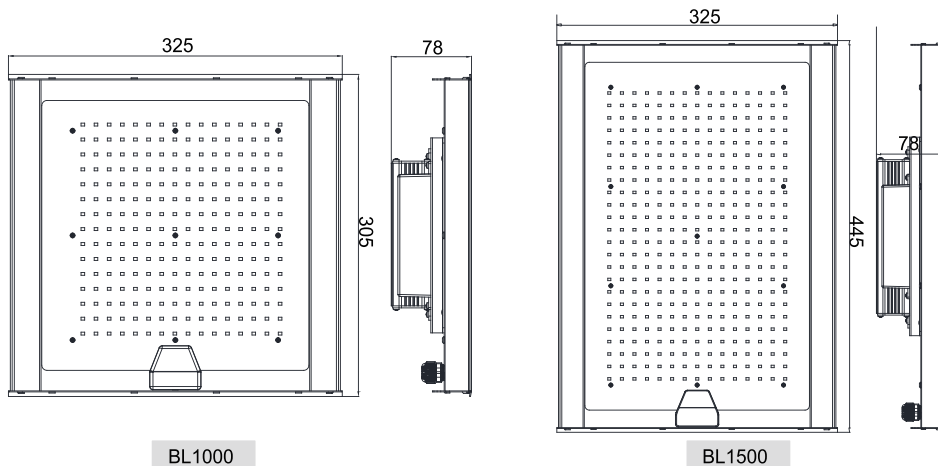
Email: info@fslled.com



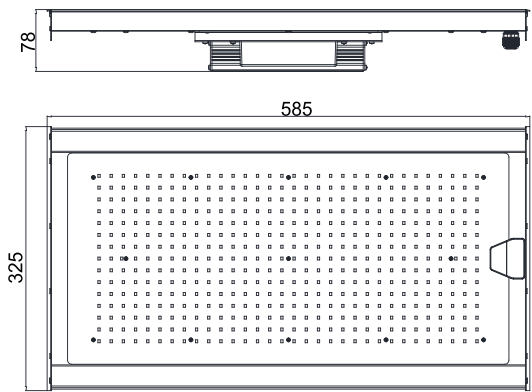
SPECIFICATIONS

Model Number	BL1000	BL1500	BL2000
INPUT POWER	100W	150W	200W
PPF($\mu\text{mol/s}$)	233	349.5	466
PPFD($\mu\text{mol/s/m}^2$) at 12"	591	780	900
Product Dimension&Weight	12.8"x12"x3.07" /3.96lbs	17.5"x12.8"x3.07" /4.85 lbs	23"x12.8"x3.07" /5.51 lbs
INPUT VOLTAGE:	120-277V	120-277V	120-277V
PF:	>0.9	>0.9	>0.9
THD:	<20%	<20%	<20%
DIMMING:	20%-40%-50%-60%-80%-100%		
COLOR TEMPERATURE:	3000K/ 6500K/ 660nm	3000K/ 6500K/ 660nm	3000K/ 6500K/ 660nm
PPE($\mu\text{MOL/J}$):	2.3	2.3	2.3
WARRANTY:	25,000h	25,000h	25,000h
CERTIFICATIONS:	UL 8800, UL 1598,DLC		

DIMENSION



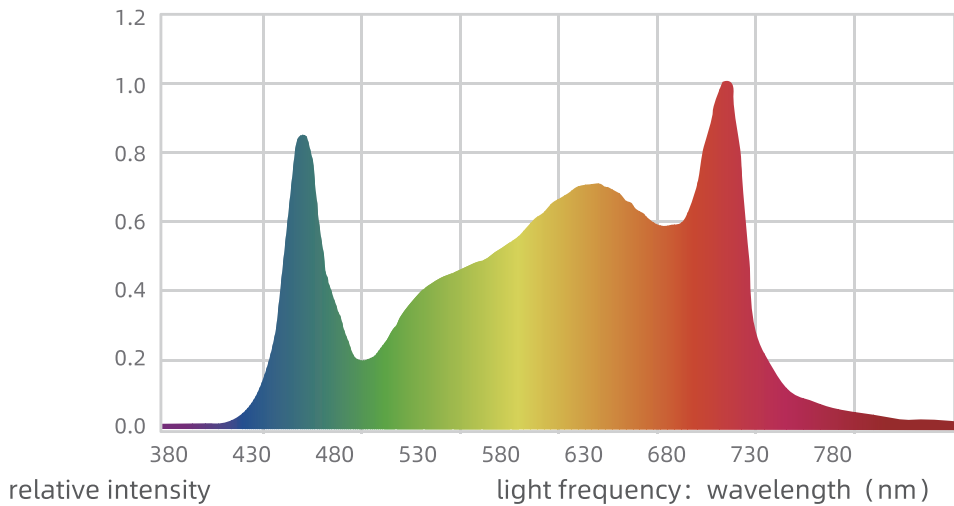
DIMENSION



BL2000

PHOTOMETRY

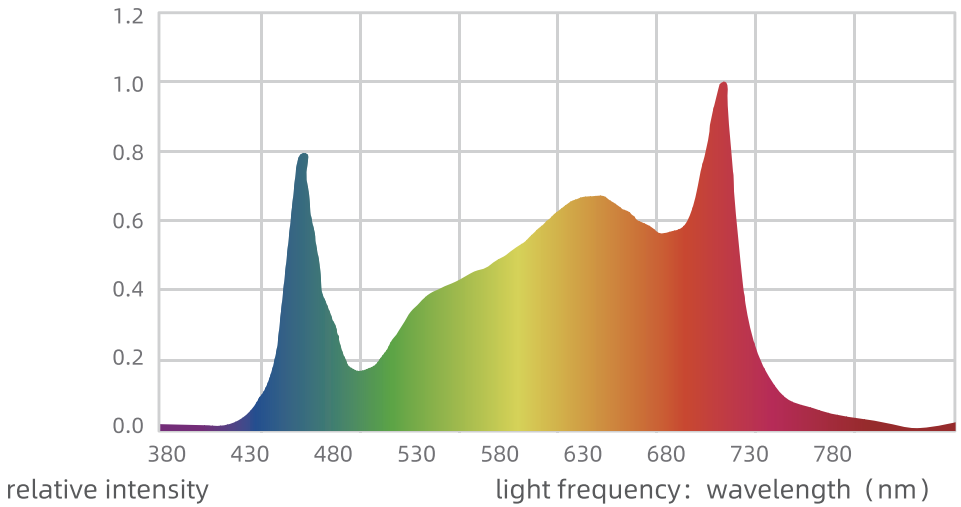
Relative Spectral Power Distribution



BL1000

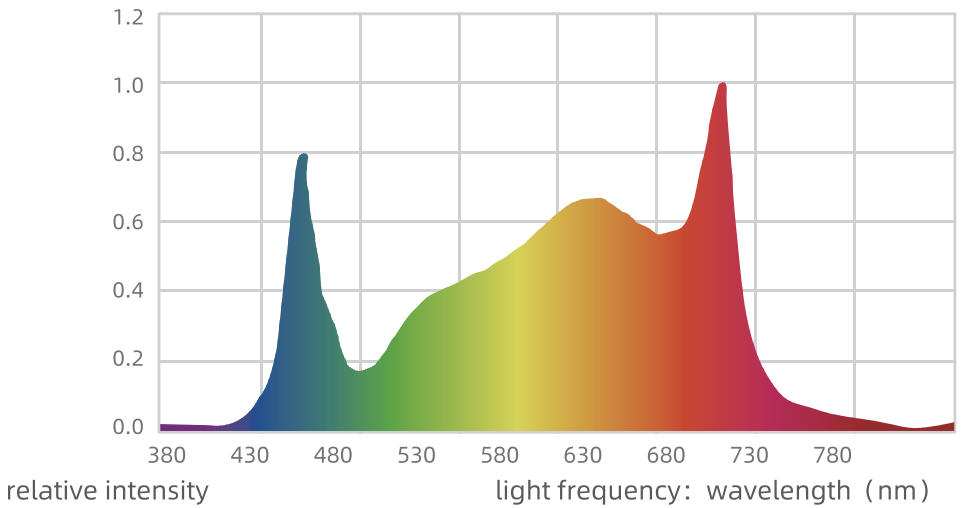
TOOLS REQUIRED

Relative Spectral Power Distribution



BL1500

Relative Spectral Power Distribution



BL2000

SPECTRA

BL1000 PPFD MAP

Height: 12"(30cm)		$\mu\text{mol}/\text{m}^2/\text{S}$									
4FT(120cm)	25	31	44	53	59	59	53	43	30	24	
	31	39	60	79	92	91	79	60	39	31	
	45	62	116	175	220	220	175	116	61	44	
	58	87	185	302	395	393	296	176	79	53	
	69	109	250	425	565	558	407	229	95	60	
	72	115	265	447	591	584	430	244	101	62	
	66	100	217	351	455	453	345	208	93	60	
	55	76	145	216	268	268	216	144	75	53	
	38	49	76	100	116	116	100	76	49	38	
	30	38	54	65	73	72	65	53	38	28	

BL1500 PPFD MAP

Height: 12"(30cm)		$\mu\text{mol}/\text{m}^2/\text{S}$									
4FT(120cm)	37	48	72	79	92	91	79	72	49	37	
	52	74	111	138	167	167	138	111	74	52	
	70	111	199	290	377	377	288	198	106	67	
	77	136	282	442	592	585	425	264	125	71	
	90	171	357	571	762	755	551	338	155	80	
	93	176	368	587	780	773	567	346	159	83	
	85	153	315	486	647	640	468	297	142	79	
	79	129	237	340	439	439	338	233	124	75	
	60	88	136	168	204	204	168	136	88	60	
	42	57	85	94	109	109	94	85	56	42	

4FT(120cm)

BL2000 PPFD MAP

Height: 12"(30cm)		$\mu\text{mol}/\text{m}^2/\text{S}$									
4FT(120cm)	62	81	123	158	182	182	158	123	81	61	
	76	100	170	238	289	289	238	170	100	76	
	100	142	287	452	581	581	452	287	143	101	
	115	171	370	606	794	794	607	370	172	115	
	122	187	413	684	900	900	685	413	188	123	
	123	187	412	684	899	900	685	413	187	123	
	114	170	369	604	792	792	605	369	171	115	
	100	141	285	450	578	578	450	285	142	101	
	75	99	168	236	287	287	236	168	100	75	
	60	79	120	154	177	177	154	120	79	58	

4FT(120cm)

SAFETY INSTRUCTION

Please read and understand all instructions before operate or install the product.To reduce the risk of FIRE OR INJURY TO PERSONS.

1. Shut off the electricity to the wires that you are working on.
2. Do not open or disassemble the LED fixture, it contains no serviceable parts inside. Opening or modifying the LED fixture can be dangerous and will void the warranty.
3. Storage environment: store the LED fixtrue in a dry aand clean environment, with an ambient temperature of -4--180°F (-20--80℃) 。
4. Operating environment: a mechanical ventilation or cooling system is required to maintain the temperature within the growing space among 32--95°F(0--35℃) when the horticultural luminaire is in operation.
5. Do not use the LED fixture when either the LED fixture or its power cord are damaged. Replace the power cord only with original certified cords.
6. Always allow for a cool down period of at least 30 minutes before touching the LED rails. Touching the LED rails when the fixture is lit or immediately afterwards can result in severe burns.
7. Regularly check the LED fixture for dust or dirt buildup. Clean if necessary. Contamination may cause overheating and decreased performance. Clean the outside of the LED fixture using a dry or damp cloth.
8. Installation and Operating Instructions
 - 1)The minimum required distance are 150mm, the distances include: between adjacent lighting equipment, between the lighting equipment and combustible materials such as walls, ceilings, movable partitions, and the like; and between lighting equipment and other heat generating wquippment(providing these installation limitations are needed to prevent overheating of lighting equipment, other equipment, or combustible materials within the installation environment)
 - 2) Instructions specifying the method for connecting the lighting equipment to the branch circuit or to a remote power unit or both
 - 3) For lighting equipment with cords or wiring harnesses, the cords:
 - Are not concealed or extended through a wall, floor, ceiling, or other parts of the building structure
 - Are not located above a suspended ceiling or dropped ceiling
 - Are not permanently affixed to the building structure
 - Are routed so that they are not subject to strain and are protected from physical damage
 - Are visible over their entire length
 - Are used within their rated ampacity as determined for the maximum temperature of the installed environment specified in the instructions

READ BEFORE INSTALLATION

WARNING:

To avoid the damaging the LED chips, don't touch the LED chips with you hands or anything else during all the processes of opening the package, installing the fixture and maintaining the fixture.

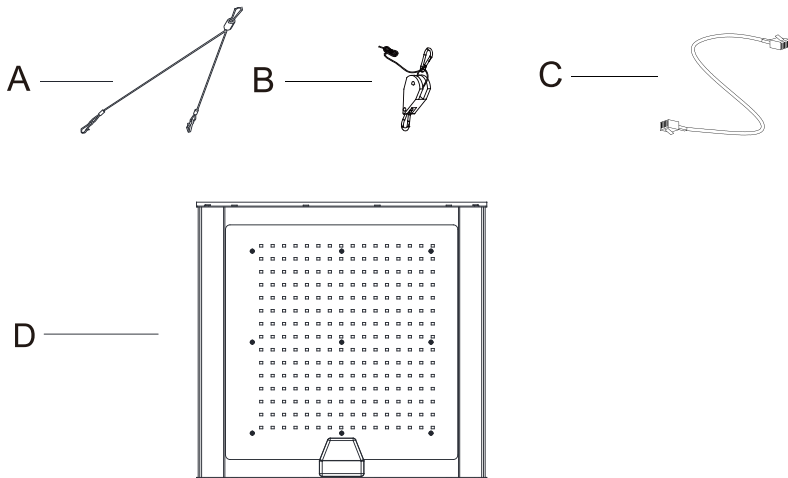
Mounting and installing of the LED fixture may only be executed by certified service personnel, in accordance with the applicable local laws and regulations, the installer is responsible for correct and safe installation. Ensure the local cabling can support the voltage and current requirements of the LED fixture.

Ensure the power cord and the controller cables not to touch any of the led rails after assembly.

CAUTION:

- UV emitted from this product
- Possible hazardous optical radiation emitted from this product
- IR Emitted from this product

PACKAGE CONTENT



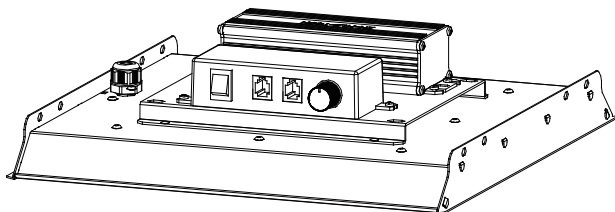
PACKAGE CONTENT

	PARTS	Dimension	pcs
A	Cable	L 14.9"	2
B	Rope Shrink	L 88"	2
C	Daisy Chain Cord	L 118"	1
D	LED fixture(BL1000)	D 12.36"*W 12.8"*H 3.07"	1
	LED fixture(BL1500)	D 17.87"*W 12.8"*H 3.07"	1
	LED fixture(BL2000)	D 23.39"*W 12.8"*H 5.51"	1

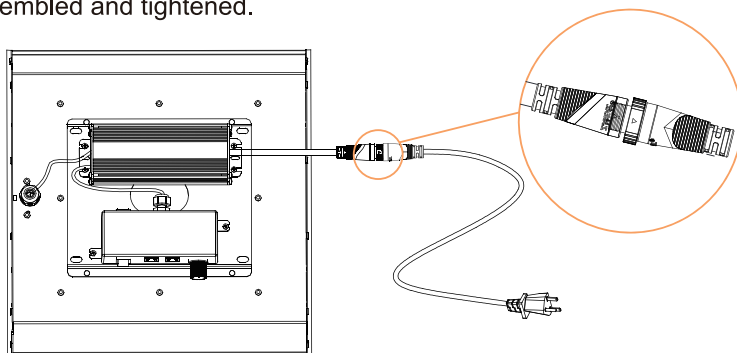
INSTALLATION

Take caution when handling light bars .ensure the LED array does not come in contact with sharp objects or force that may damage the diodes.

- 1 Gently place the fixture on a stable and flush surface.

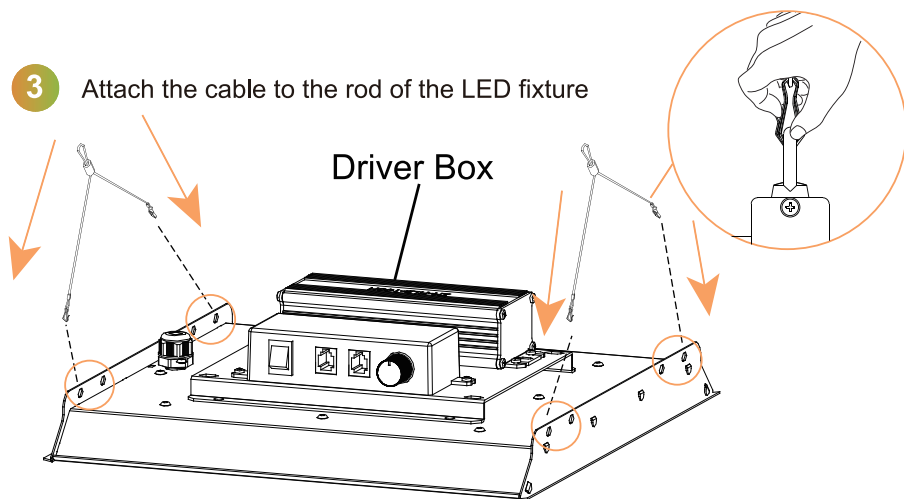


- 2 Double check and make sure all the joints for the power cord are assembled and tightened.

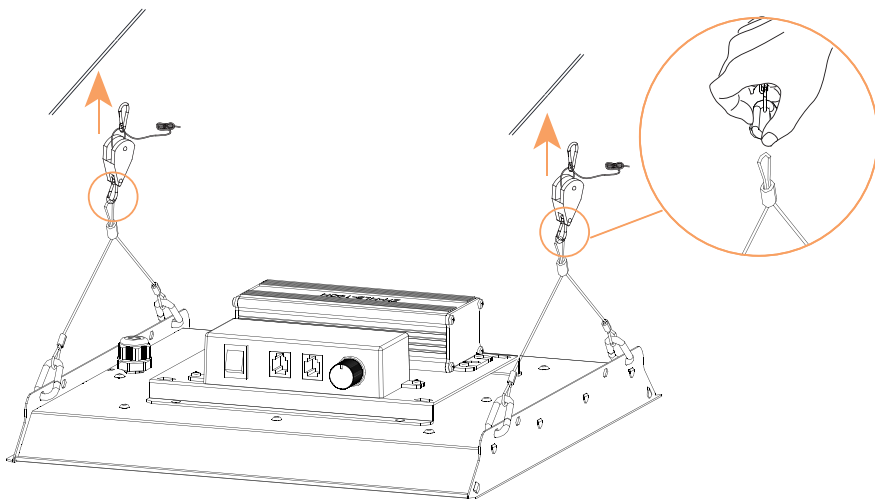


INSTALLATION

- 3 Attach the cable to the rod of the LED fixture

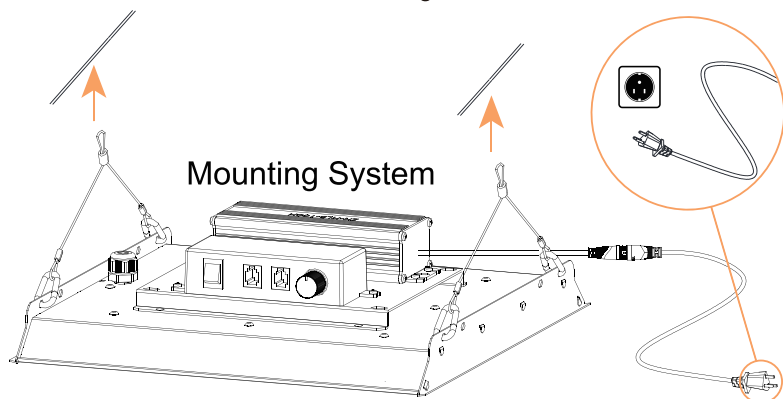


- 4 REMARK: There is 1pc rope shrink (88") used to extend the cable.

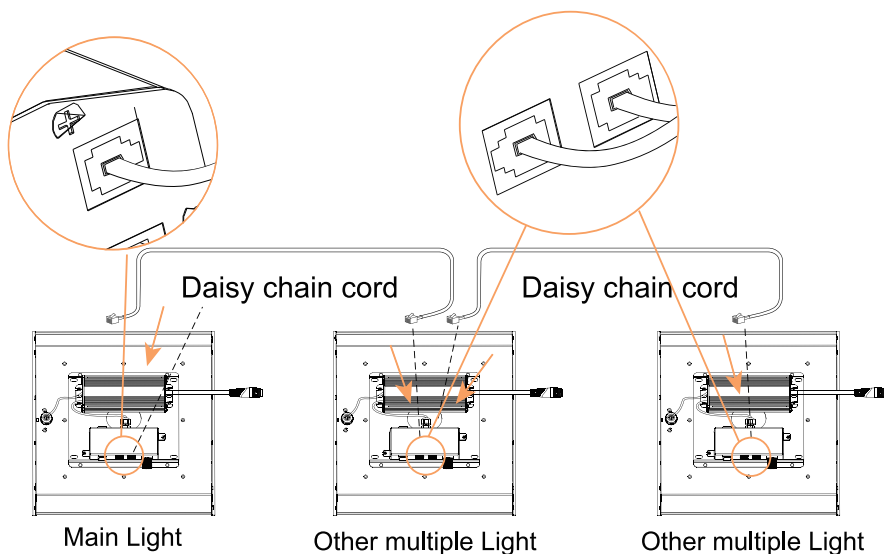


INSTALLATION

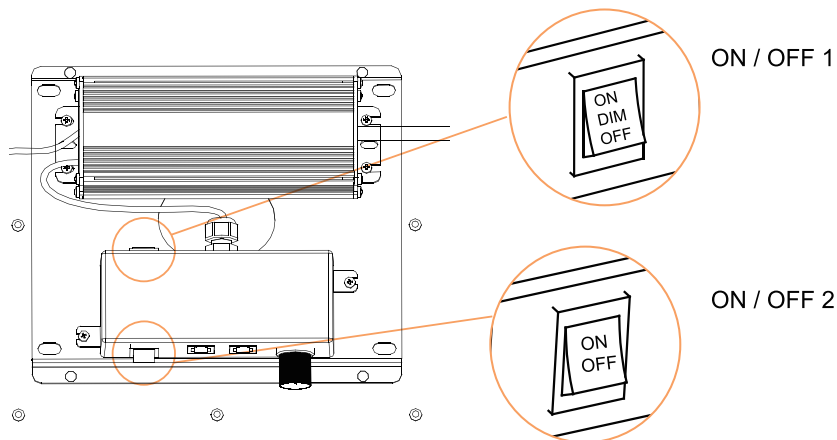
- 5 Hang up the fixture and plug the power cord to light on. Be sure to hang from the center of the lance hanger to ensure a balanced fixture



DAISY CHAIN FUNCTION



DAISY CHAIN FUNCTION



For multiple lights connected together, there is 1pc (118") daisy chain cord for connect lights. You will only need to operate the main light to control all the other lights dimmable & turn on and off. Easy operation providing great convenience to your planting.

- Choose one main light and make sure the ON OFF 1 of the main light is ON.
- Turn the dimming knob on all of the fixtures to "OFF" (ON OFF 1) except the main light.
- Plug the daisy chain cord into the port of the main light and the other light.
- Repeat this process to connect up to 50 LED fixtures per group.
- You can only operate the ON OFF 2 of main light to control all the other lights dimmable & turn on and off.

Daisy Chain Function Explanation			
ON OFF 1 (Main Light)	ON/OFF1 (Other multiple lights)	ON/OFF2 (Main Light)	How it works
ON	OFF	ON	All the lights will be ON and can be dimmed through the main light.
ON	OFF	OFF	All the lights will be OFF.

Warning: Do not use external controller for the light fixture.

TROUBLESHOOTING

Descriptions	Causes/Solutions
No light output.	<ol style="list-style-type: none"> 1. Power cord isn't connected properly or connections are loosen. <ul style="list-style-type: none"> • Check the power cord connections. 2. If you use the LED fixture as a stand alone, the dimmer switch is on OFF mode. <ul style="list-style-type: none"> • Adjust dimmer switch to 100W to 200W mode.
Light burn or light stress (Green plants leaves or tips becoming yellow unnaturally.)	<ol style="list-style-type: none"> 1. LED lights are too close to green plants. <ul style="list-style-type: none"> • Move your LED lights further away from green plants right away. 2. Too much lights. <ul style="list-style-type: none"> • While using dimmer switch, adjust your dimmer switch to export less lights.

WARRANTY

This product is warranted for 3 years from the date of purchase. If this product does not perform to the specifications supplied on this package, send an email to info@fsllled.com for product return and replacement. This replacement is the sole remedy available. Liability for incidental or consequential damage is expressly excluded.

