



**iL8x**  
LED Lighting Solutions



# USER MANUAL

**iL8x MODEL 670W**



**IL-8x26FSG-120**  
**IL-8x26FSG-480**

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**Please read this manual thoroughly prior to installing or operating the ILUMINAR iL8x.**

- Observe all safety precautions (see page 10), seek the services of a qualified electrician, installation professional, or call ILUMINAR Lighting technicians for assistance.
- DO NOT handle or touch the fixture while in use.
- Connect the fixture only to the power sources of the appropriate voltage using the correct AC plug type. Protect power cables from being pinched, walked on, or otherwise damaged. Be especially careful where the power cable enters the power outlet to the unit. Only connect the fixture to an electrical outlet or extension cord of comparable standard and level rating. Connect the fixture ONLY to the power sources of the correct voltage using the plug received.
- The fixture should only be cleaned as directed. Always seek service for your system by qualified service personnel if any of the following occur:
  1. The fixture shows a noticeable change in performance.
  2. The powersupply cord or plug is damaged.
  3. The fixture has been dropped, or the exterior is damaged.



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**TECHNICAL SPECS**

Rated Voltage	120-277V AC	347-480V AC
Voltage Range (+/-10%)	100-277V	200-480V
PPF	1742 μmol/s	
Efficacy	2.6 μmol/j	
Min Power Factor	0.9	
THD	< 20%	
Crest Factor	0.99	
BTU	2278	
Frequency	50 / 60Hz	
Dimmable	0-10V Controllable	
Ambient Temperature	0 - 35°C / 32-95°F	
Relative Humidity	98%	
Color Temperature	4000k	
Color Rendering Index	88	
Minimum Mounting Height	6"-12" to top of Canopy	
Emitter Cooling	Passive / Extruded Case	
Light Distribution +/- 5%	125°	
Waterproof Rating	IP65 for Damp/Wet Conditions	
LED Lifespan (90% of Life)	55,000+ hours	

**VOLTAGE AND AMPERAGE**

120V	5.69A	680W
208V	3.25A	670W
240V	2.8A	662W
277V	2.42A	656W
347V	1.97A	678W
480V	1.41A	660W

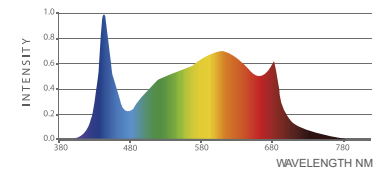
**PHYSICAL SPECIFICATIONS**

Length	1067mm	42.01"
Width	1003mm	39.49"
Height	129mm	5.08"
Weight	16kg	35.3lbs

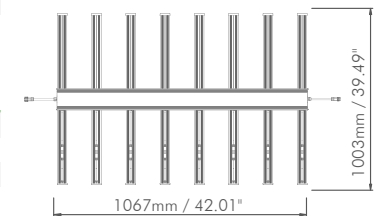
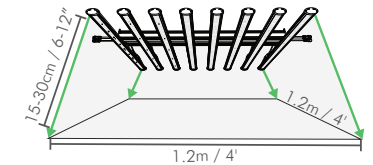
MODEL:	2.6	WATTS:	670W
VOLTAGE:	100-277V	200-480V	
SKU:	IL-8x26FSG-120	IL-8x26FSG-480	



**iL8x 670W LED SPECTRUM**



**MOUNTING & COVERAGE**



**5 YEAR WARRANTY**

iluminarlighting.com



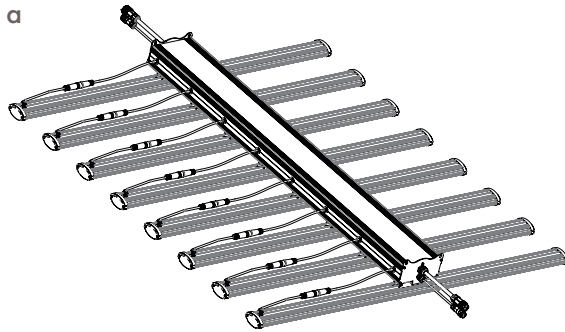
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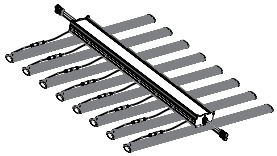
# HARDWARE AND ACCESSORIES

The iL8x can be hung from rope ratchets or can be mounted to a rack.

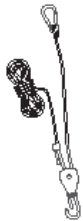
Before you begin installation, check that you have all the necessary parts to begin.



# IN THE BOX



1 iL8x Fixture

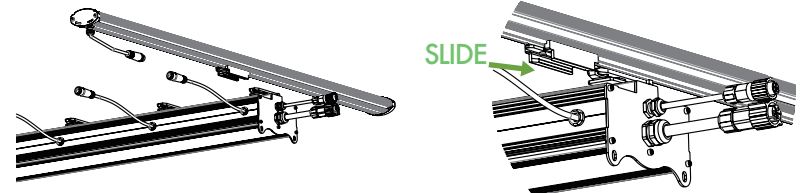


4 Rope Ratchets

# CONNECTION INSTRUCTIONS

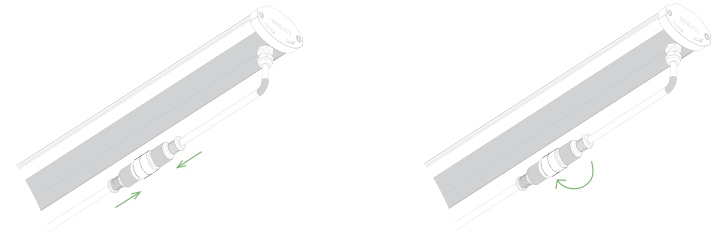
1

Lay the central mast on a flat table top or surface with the attachment brackets facing UP. Attach each LED Bar by aligning the plastic clips and carefully sliding them into place until you hear a soft click.



2

Once the plastic clips are all snapped in place, attach the A/C cables coming from the mast to each LED bar by aligning the connector pins and pressing the ends together. Lock by twisting in opposite directions.



3

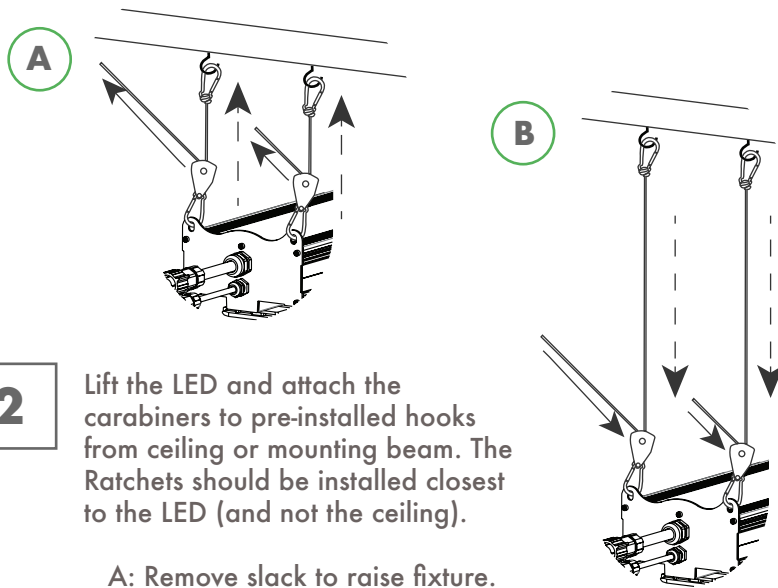
Once all the LED bars are fastened into place and A/C cables are attached to the mast, turn the fixture over (this may require more than one person). Ensure the flat surface is clear of anything that could damage the delicate diodes.



**CAUTION** when handling your ILUMINAR iL Fixture. The LED array should NOT come in contact with sharp objects. DO NOT touch diodes or apply direct force to the diodes as this can/will cause permanent damage.

# HANGING INSTALLATION

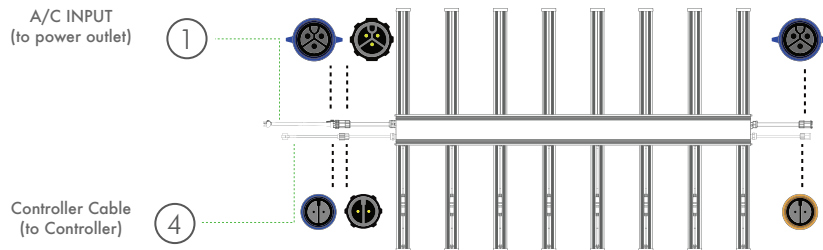
**1** To suspend mount, attach the 4 rope ratchets that come packaged with this fixture to the LED.



**2** Lift the LED and attach the carabiners to pre-installed hooks from ceiling or mounting beam. The Ratchets should be installed closest to the LED (and not the ceiling).

A: Remove slack to raise fixture.  
B: Give slack to lower fixture.

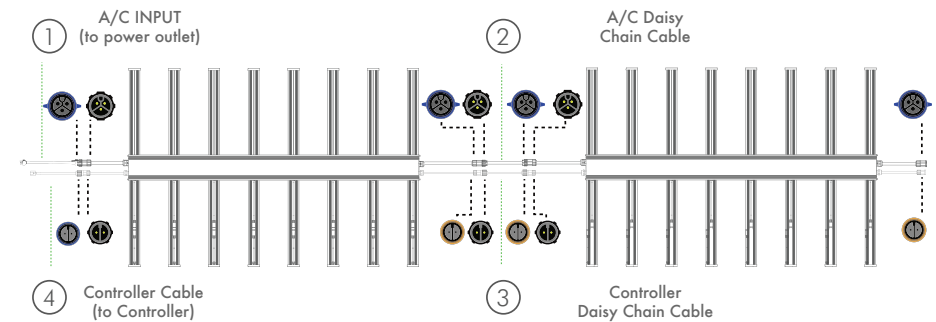
**3** Once fixture is hanging with all LED bars installed, connect the LED Power Cable from the outlet to the fixture.



# DAISY CHAIN CONNECTIONS

If you plan to utilize several LEDs in your room or facility, one of the many benefits of the ILUMINAR LED is that you can “daisy chain” one fixture to another to save space and use only one outlet to run several lamps, thus minimizing the amount of cords used in your space.

If you plan to utilize the ILUMINAR HASH Controller, connect the connections from the controller to the fixture and then connect the Daisy Chain Controller Cable from fixture to fixture. Please consult with our lighting layout designers to ensure proper spacing of outlets for your unique setup.



## AVAILABLE CABLES

	NAME	VOLTAGE	SKU	LENGTH	DIAGRAM
①	120V Input Power Connection Cord	120V	IL-LED-120AC	1.7m / 68"	
	240V Input Power Connection Cord	240V	IL-LED-240AC	1.7m / 68"	
	277V Input Power Connection Cord	277V	IL-LED-277AC	1.7m / 68"	
	347V Input Power Connection Cord	347V	IL-LED-347AC	1.7m / 68"	
②	Daisy Chain Power Cable 1.8 Meter	120-277V	IL-LED-DC120	1.8m / 70"	
	Daisy Chain Power Cable 3 Meter	120-277V	IL-LEDDC1203M	3m / 118"	
	Daisy Chain Power Cable 1.8 Meter (Hi-Volt)	200-480V	IL-LED-DC480	1.8m / 70"	
	Daisy Chain Power Cable 3 Meter (Hi-Volt)	200-480V	IL-LED-DC4803M	3m / 118"	
③	Cord Set for LEDs Daisy Chain Dimmer	N/A	IL-1Dim18	1.8m / 70"	
	Cord Set for LEDs Daisy Chain Dimmer	N/A	IL-1Dim3	3m / 118"	
④	Cord Set for LEDs (Fixture to Touch controller)	N/A	IL-1DimRJ9	3m / 10'	
	Cord Set for LEDs (Fixture to HASH controller)	N/A	IL-1DimRJ14	3m / 10'	
	Cord Set for LEDs (Original - Fixture to 2 Wire)	N/A	IL-1Dim	0.7m / 2.3'	

### Legend



PPFD MAP iL8x at 0.5ft

539	752	795	805	805	985	752	539
710	992	1051	1065	1065	1051	992	710
744	1040	1105	1121	1121	1105	1040	744
753	1052	1118	1135	1135	1118	1052	753
753	1052	1118	1135	1135	1118	1052	753
744	1040	1105	1121	1121	1105	1040	744
710	992	1051	1065	1065	1051	992	710
540	752	795	805	805	795	752	539

<b>Clearance</b>	0.5	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	926.55	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	1135	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	539	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	1016	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	58.17	%
<b>Watts</b>	670	W

PPFD MAP iL8x at 3ft

233	269	295	309	309	295	269	233
268	310	342	359	359	342	310	268
294	341	377	396	396	377	341	294
308	358	395	415	415	395	358	308
308	358	395	415	415	395	358	308
294	341	377	396	396	377	341	294
268	310	342	359	359	342	310	268
233	269	295	309	309	295	269	233

<b>Clearance</b>	3	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	329.31	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	415	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	233	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	325.5	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	70.75	%
<b>Watts</b>	670	W

PPFD MAP iL8x at 1ft

400	547	617	642	642	617	547	400
533	731	824	857	857	824	731	533
595	815	920	953	958	920	815	595
617	844	954	994	993	954	844	617
617	844	954	994	993	954	844	617
595	815	920	958	958	920	815	595
533	731	824	857	857	824	731	533
400	547	617	642	642	617	547	400

<b>Clearance</b>	1	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	740.39	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	994	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	400	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	773	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	54.03	%
<b>Watts</b>	670	W

PPFD MAP iL8x at 4ft

180	200	214	222	222	214	200	180
199	222	238	247	247	238	222	199
214	238	256	266	266	256	238	214
221	247	266	276	276	266	247	221
221	247	266	276	276	266	247	221
214	238	256	266	266	256	238	214
199	222	238	247	247	238	222	199
180	200	214	222	222	214	200	180

<b>Clearance</b>	4	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	231.63	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	276	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	180	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	230	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	77.71	%
<b>Watts</b>	670	W

PPFD MAP iL8x at 1.5ft

343	441	504	532	532	504	441	343
436	564	645	681	681	645	564	436
494	640	732	774	774	732	640	494
520	673	771	815	815	771	673	520
520	673	771	815	815	771	673	520
494	640	732	774	774	732	640	494
436	564	645	681	681	645	564	436
343	441	504	532	532	504	441	343

<b>Clearance</b>	1.5	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	597.81	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	815	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	343	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	602	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	57.38	%
<b>Watts</b>	670	W

PPFD MAP iL8x at 5ft

140	151	160	164	164	160	151	140
151	164	173	178	178	173	164	151
159	173	182	188	188	182	173	159
164	178	188	193	193	188	178	164
164	178	188	193	193	188	178	164
159	173	182	188	188	182	173	159
151	164	173	178	178	173	164	151
140	151	160	164	164	160	151	140

<b>Clearance</b>	5	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	169.13	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	193	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	140	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	168.5	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	82.78	%
<b>Watts</b>	670	W

# PRECAUTIONS

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Please read the following list carefully prior to beginning installation.

1. Leave at least one inch of space between the fixture and the mounting area for maximum performance and lifespan.
2. ALWAYS wear protective eye wear when looking directly at the diodes to prevent eye damage.
3. The LED array should NEVER come in contact with sharp objects.
4. Do not touch or apply force to the diodes - this will cause permanent damage.
5. Only handle, clean or move fixture when it's unplugged and completely cool.
6. Keep the fixture free of dust, debris, deposits to ensure the maximum potential of the fixture.
7. NEVER use cloth to clean the diodes. This will scratch the diodes and could potentially break or dislodge them.
8. DO NOT use chemicals to clean the fixture. Use ONLY low pressure air or low pressure water to remove dust and debris.

**5** YEAR  
WARRANTY

**GUARANTEE**

At ILUMINAR, we stand behind our products and our technology as well as our customers. All ILUMINAR LED fixtures are backed by our 5-Year Guarantee. Please visit our website [iluminarlighting.com/warranty](http://iluminarlighting.com/warranty) for more information.