



**iL5x**  
LED Lighting Solutions



# USER MANUAL

**iL5x MODEL 440W**



**IL-5x26FSG-120**  
**IL-5x26FSG-480**

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# CONTENTS

Pre-Install Information .....	2
Technical & Physical Specifications .....	3
Hardware & Accessories .....	4
Instructions .....	5-6
Daisy Chain Instructions .....	7
PPFD Map .....	8-9
Important Cautions & Warranty .....	10

## Please read this manual thoroughly prior to installing or operating the ILUMINAR iL5x.

- 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 SPECIFICATIONS

PPF	1144 $\mu\text{mol/s}$
Efficacy	2.6 $\mu\text{mol/j}$
Min Power Factor	0.9
THD	< 20%
Crest Factor	0.99
BTU	1460
Rated Voltage	120-277V AC / 347-480V AC
Frequency	50 / 60Hz
Dimmable	0-10V Controllable
Ambient Temperature	0 - 35°C / 32-95°F
Relative Humidity	98%
Plug Type	Power Cord Sold Separately
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	3.78A	452W
208V	2.16A	445W
240V	1.87A	443W
277V	1.63A	440W
347V	1.3A	449W
480V	0.94A	442W

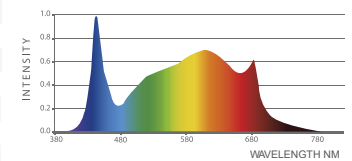
### PHYSICAL SPECIFICATIONS

Length	1067mm	42.01"
Width	1003mm	39.49"
Height	129mm	5.08"
Weight	13.5kg	29.76lbs

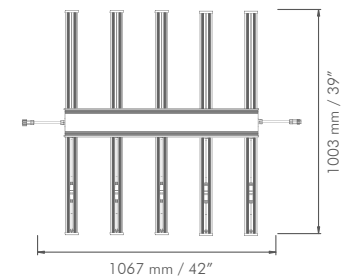
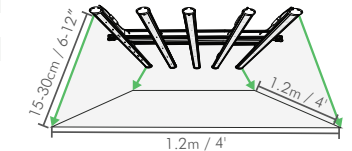
MODEL:	2.6	WATTS:	440W
VOLTAGE:	100-277V		200-480V
SKU:	IL-5x26FSG-120		IL-5x26FSG-480



### iL5x 440W LED SPECTRUM



### MOUNTING & COVERAGE



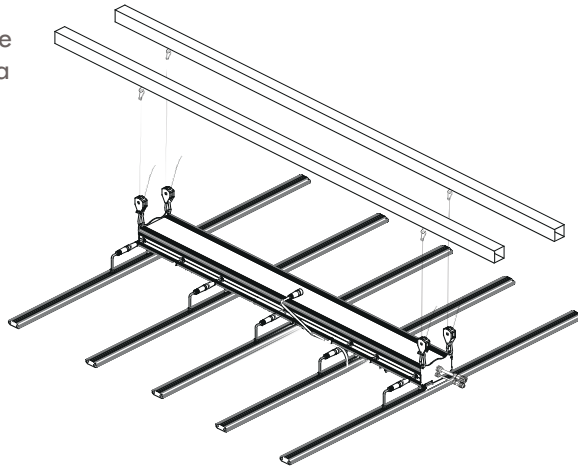
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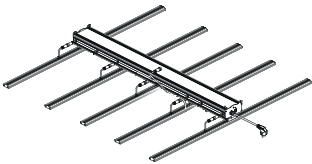
# HARDWARE AND ACCESSORIES

The iL5x can be hung from rope ratchets or can be mounted to a rack.

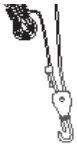
Before you begin installation, check that you have all the necessary parts to begin.



## IN THE BOX



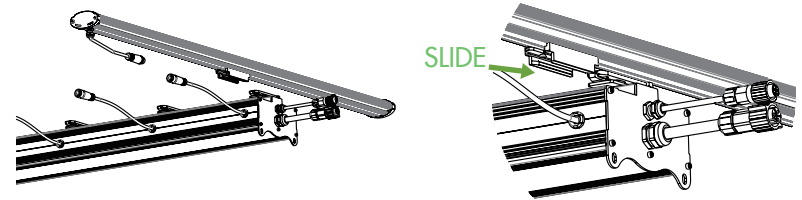
1 iL5x Fixture



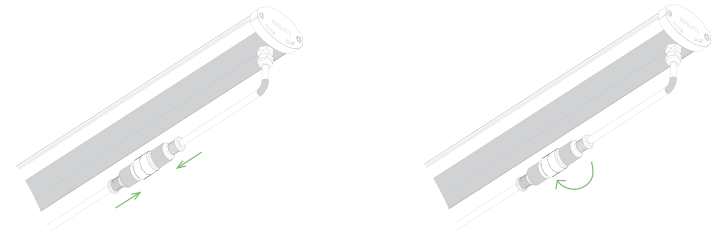
4 Rope Ratchets

# 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.



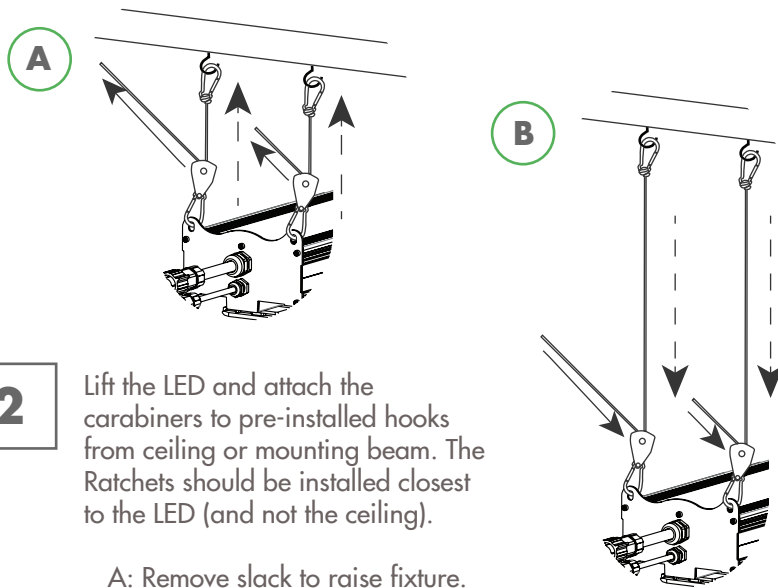
- 3 Once all the LED bars are fastened into place and A/C cables are attached to the mast, turn the fixture over (this may require more than one person). Ensure the flat surface is clear of anything that could damage the delicate diodes.



**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

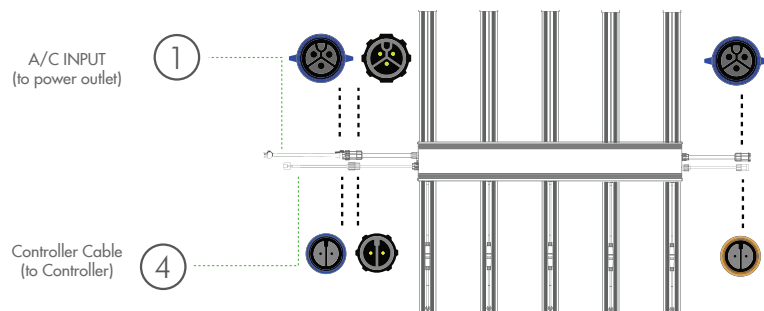
**1** To suspend mount, attach the 4 rope ratchets that come packaged with this fixture to the LED.



**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.

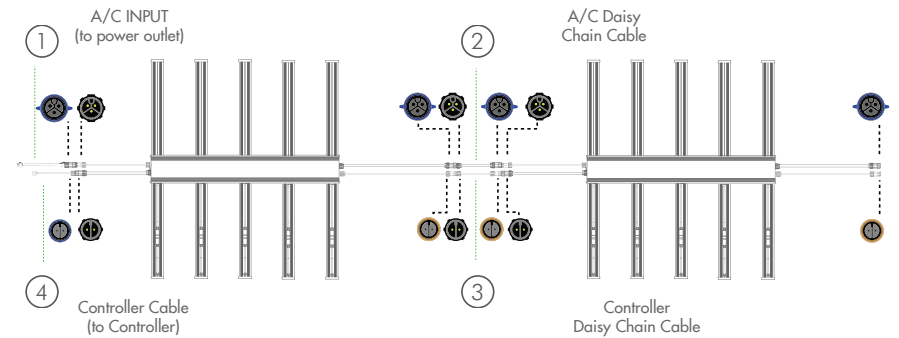
**3** Once fixture is hanging with all LED bars installed, connect the LED Power Cable from the outlet to the fixture.



# 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, you can 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"	5-15P
	240V Input Power Connection Cord	240V	IL-LED-240AC	1.7m / 68"	6-15P
	277V Input Power Connection Cord	277V	IL-LED-277AC	1.7m / 68"	L7-15P
	347V Input Power Connection Cord	347V	IL-LED-347AC	1.7m / 68"	L24-20P
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'	

# PPFD MAP

## Legend



PPFD MAP iL5x at 0.5ft

295	470	543	523	523	543	472	297
466	747	812	827	827	813	749	470
503	806	879	896	896	880	808	508
511	818	893	911	911	894	820	517
511	817	892	910	910	892	819	516
501	802	875	892	892	875	805	506
460	740	803	818	818	804	742	464
286	457	498	508	508	499	459	289

<b>Clearance</b>	0.5	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	678.06	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	911	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	286	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	775.5	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	42.18	%
<b>Watts</b>	440	W

PPFD MAP iL5x at 3ft

163	100	207	247	240	200	109	164
188	219	241	254	254	242	220	190
207	241	267	281	281	268	243	209
217	253	280	295	296	281	255	219
216	252	280	295	295	281	254	218
206	240	265	279	280	266	241	207
186	216	239	251	251	240	217	188
160	185	204	214	215	205	186	162

<b>Clearance</b>	3	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	230.08	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	296	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	100	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	240	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	43.46	%
<b>Watts</b>	440	W

PPFD MAP iL5x at 1ft

257	366	425	440	440	426	360	260
365	526	610	641	642	611	528	369
421	606	704	741	741	706	609	425
441	634	738	776	777	739	637	446
440	633	736	775	775	738	636	445
418	602	699	735	736	701	605	422
359	518	601	631	632	602	520	363
250	357	414	436	436	415	359	253

<b>Clearance</b>	1	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	541.39	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	777	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	250	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	564.5	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	46.18	%
<b>Watts</b>	440	W

PPFD MAP iL5x at 4ft

125	139	149	154	154	149	140	126
139	154	166	172	172	166	155	140
149	166	179	185	185	179	167	150
154	172	185	192	192	186	173	155
154	172	185	192	192	185	172	155
148	165	178	184	185	178	166	149
138	153	165	171	171	165	154	139
124	137	147	153	153	148	138	125

<b>Clearance</b>	4	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	161.09	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	192	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	124	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	160	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	76.98	%
<b>Watts</b>	440	W

PPFD MAP iL5x at 1.5ft

233	304	354	377	370	355	306	235
304	402	469	500	500	470	405	307
352	467	545	581	582	546	470	356
374	496	578	617	618	580	499	378
373	494	577	616	617	579	497	377
349	463	540	576	577	542	466	352
300	396	462	492	493	463	399	302
227	298	346	369	369	347	299	229

<b>Clearance</b>	1.5	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	433.06	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	618	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	277	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	433.5	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	52.42	%
<b>Watts</b>	440	W

PPFD MAP iL5x at 5ft

97	104	110	113	113	110	105	97
105	113	119	122	122	119	113	105
110	119	126	129	129	126	120	111
113	122	129	133	133	129	123	113
113	122	129	133	133	129	123	113
110	119	125	129	129	126	119	110
104	112	118	122	122	119	113	104
96	104	109	112	112	109	104	97

<b>Clearance</b>	5	ft
<b>Qty</b>	1	u
<b>Average PPFD</b>	116.42	µmol/m <sup>2</sup> /s
<b>Max PPFD</b>	133	µmol/m <sup>2</sup> /s
<b>Min PPFD</b>	96	µmol/m <sup>2</sup> /s
<b>Median PPFD</b>	115.5	µmol/m <sup>2</sup> /s
<b>Min/Average</b>	82.46	%
<b>Watts</b>	440	W

# CAUTION

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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. Only handle, clean or move fixture when it's unplugged and completely cool.
4. Keep the fixture free of dust, debris, deposits to ensure the maximum potential of the fixture.
5. NEVER use cloth to clean the diodes. This will scratch the diodes and could potentially break or dislodge them.
6. DO NOT use chemicals to clean the fixture. Use ONLY low pressure air or low pressure water to remove dust and debris.
7. Do not exceed 70% max load for breakers due to inrush current in LED fixtures

**5** YEAR  
WARRANTY

**GUARANTEE**

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