

DIMLUX

XPLORE SERIES 800W HE LED MANUAL



USER MANUAL

Engineered & Designed in Holland

www.dimlux.nl

Manual version 2702 2024

KNOWLEDGE BASE

Direct link:

www.dimlux.nl/knowledge-base



Scan the QR-code to go to our online knowledge base with more tutorials and videos.



The Xplore 800W HE is a High Efficiency 2.8µmol/J version and offers an unprecedented price/performance ratio featuring a perfect blend of both full-spectrum white LED diodes and red LED diodes.

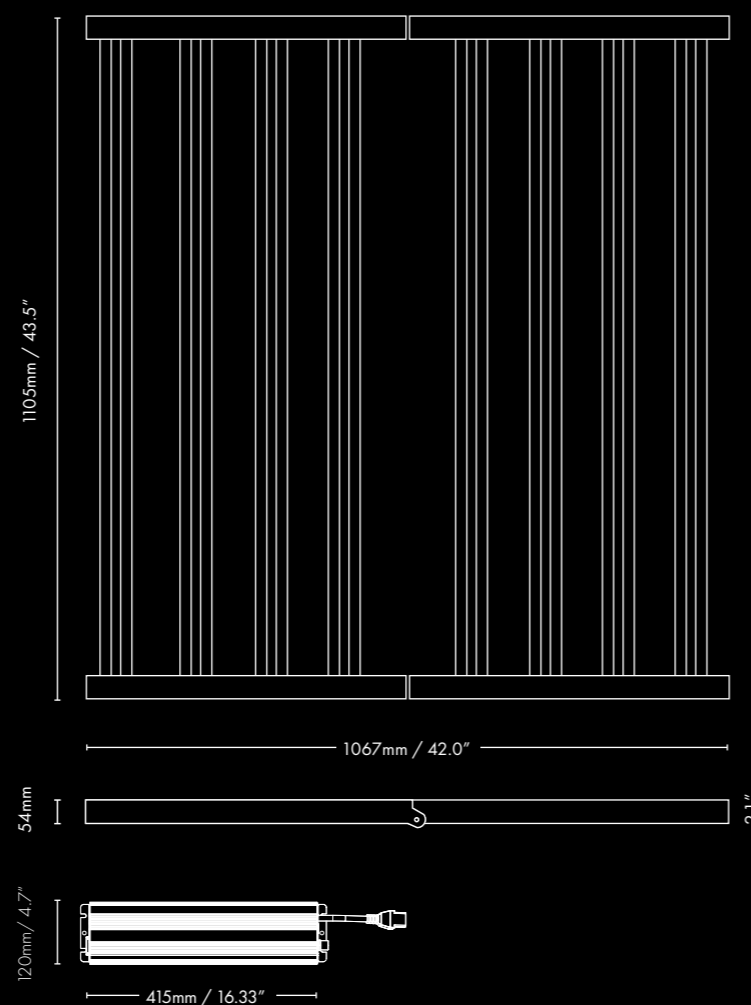
This results in the perfect spectrum for all phases of growth. The mix of white and red LEDs result in a relatively high ratio of bluish light. Blue light keeps your crop tight and compact in the vegetative stage and adds to optimal morphogenesis and light uptake by the plant. Due to the asymmetrical LED distribution, improved light distribution at the edges.

Powered and controlled by the Xplore 800W Digital Driver, this high-performing, high-efficiency LED 8 Bar Fixture can be used singly or as part of a lighting array. Lightweight and easy to install, if hung by means of Rope Ratchets the height of the fixture can be adjusted as your plants grow. The 800W Digital Driver, mounted directly on the fixture or positioned remotely, can dim the LED Fixture by the Maxi controller or with the dim button to 250W, 400W, 600W or 800W setting may be selected to give maximum light output.

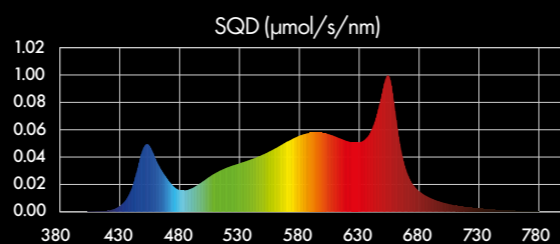
SPECIFICATIONS

Light Source	800W LED
Driver	Dimlux Xplore Digital Driver 800W
Spectrum	Full Spectrum White and Red LED Diodes
Light Output (PPF)	2231 µmol/s
Light Output Total (PPF 350-800nm)	2283 µmol/s
PAR Photon Efficacy (400-700nm)	2.80 µmol/J @ 208-277V AC
Total Photon Efficacy (350-800nm)	2.85 µmol/J @ 208-277V AC
AC Input Power	800W @ 208-277V AC
AC Input Voltage	208-277V AC, 50/60Hz
Beam Angle	120°
Optics	Conformal Coating
Rcmd Mounting Height	150x150cm min. 40cm / 5'x5' min. 1.35'
Rcmd Mounting Height	120x120cm min. 30cm / 4'x4' min. 1'
LED positioning	Asymmetrical
Ambient Temperature	-25 ~ 40°C / -13 ~ 105°F
Control	By Dim Button or Maxi Controller
Total Harmonic Distortion (THD)	< 10%
Lifetime L90	> 50,000h
IP Rating	IP44
Certifications	CE, UKCA
Measurements	1105x1067x54mm / 43.5x42.0x2.1 inch
Weight	10.60kg / 23.32 lbs
Warranty	3-year warranty: Of which the first 2 years have full warranty. The 3rd year concerns hardware guarantee only. Labour, transport and other costs are excluded in the 3rd year.

MEASUREMENTS



SPECTRUM DISTRIBUTION



IMPORTANT SAFETY PRECAUTIONS & EXPLANATION OF SYMBOLS

- Please read this manual thoroughly before attempting to install or operate any Dimlux Xplore Series LED system.
- After successful installation and configuration of the system, be sure to retain this manual in a safe place for future reference. Safety is a key component to a long lasting and trouble-free installation.
- It is important you read, fully understand, and observe the subsequent safety precautions. If you are not comfortable with the installation of high performance lighting systems, you should seek the services of a qualified installation professional.
- Connect the system only to the power sources of the appropriate voltage using the AC plug type received. Protect power cables from being pinched, walked on, or otherwise damaged. Be especially careful where the power cable enters the power outlet and the unit. Only connect the system to an electrical outlet or extension cord of appropriate type and rating. Connect the system only to the power sources of the correct voltage using the plug received.
- **DO NOT** defeat the safety purpose of a grounding or polarized plug by removing ground pins or using unsafe adapters. A polarized plug has two blades –one wider than the other. A grounding plug has a third ground prong in addition to the two main conductors. The wide blade or third grounding prong is provided for your safety.

If the provided plug does not fit your outlet, consult an electrician to replace your obsolete outlet. If you replace the power cord, only use one of similar type and equal or greater current rating.
- The system should only be cleaned as directed in the manual. You should seek service for your system by qualified service personnel if any of the following occur:
 1. The power-supply cord or the plug has been damaged
 2. The unit has been exposed to rain
 3. The unit exhibits a marked change in performance
 4. The unit has been dropped, or its enclosure or chassis is damaged

SAFETY RECOMMENDATIONS AND WARNINGS

- Always adhere to the local rules and regulations when installing or using the LED fixture.
- 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.
- This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz.
- 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.

- Modifications to the cords can lead to unwanted electromagnetic effects, which makes the product not comply with legal requirements.
- Do not expose the LED fixture to:
 - (ambient) temperatures outside the specified range;
 - dust and contamination;
 - direct sunlight during use or HID light that could heat up the ballast.
- Always disconnect the LED fixture from mains before performing any maintenance.
- 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!
- Do not use the LED fixture near flammable, explosive or reactive substances. Do not use sulfur vaporizers or water misters.

The installation and use of the LED fixture is the responsibility of the end user. Incorrect use or installation can lead to failure and damage to the LED fixture. Damage to the LED fixture and electronic circuitry as a result of incorrect installation and use revokes the warranty.

CULTIVATION BEST PRACTICES

- Check the growth and health of your plants regularly. Dimlux lighting systems deliver high PPF levels, typically more than experienced in nature. Adjustments to H2O, CO2, RH, nutrients and temperature are usually required. Because the LED fixture does not give off radiant heat towards the plants, it is recommended to work with the Dimlux Plant temperature camera to determine the correct plant temperature.
- The Xplore Series LED is designed to provide a uniform light distribution in the shape of a square. How high? There is a very simple and unique way to determine the minimum height of the luminaire. The rule of thumb is that the shortest distance from armature to crop is half the distance between the armatures (centre size) in a multi-luminaire set-up. It doesn't matter whether the LED is 730 Watt or 800 Watt. A 800 Watt fixture should illuminate a larger area than a 730 Watt fixture, which automatically increases the distance between reflector and crop.
- Due to the lack of radiant heat with LED, the plant temperature will be considerably lower than with HPS. As a result, the temperature of the plant and the ambient temperature in the room vary enormously, so controlling for ambient temperature is no longer sufficient. For accurate results, you can measure the temperature of the leaf surface using the Dimlux plant temperature camera that can be connected directly to the LED fixture.
- Many plants prefer higher temperatures when exposed to high PPF. Experiment with higher temperatures to achieve higher yields. Canopy temperature and room ambient temperature often vary for accurate results, test at the canopy level to gauge leaf surface temperature.

SYSTEM HARDWARE & ACCESSORIES

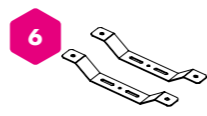
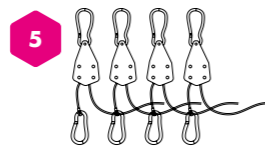
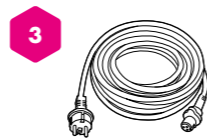
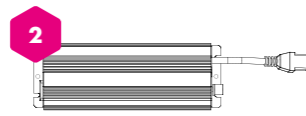
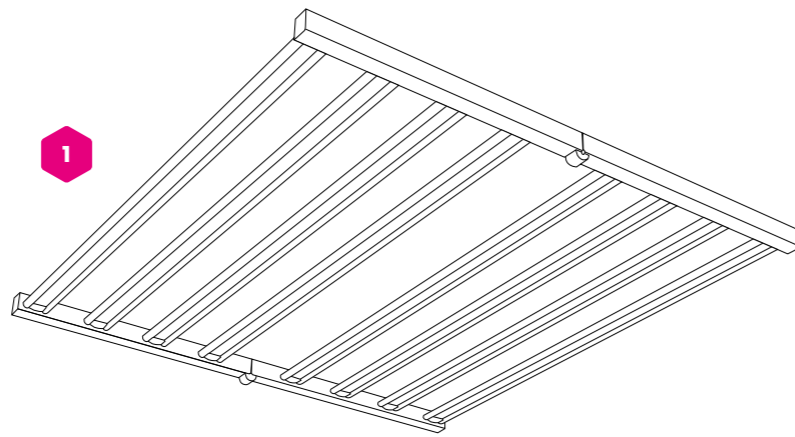
SYSTEM HARDWARE

(Depending on your product selection at the time of purchase)

- 1 Dimlux Xplore 800W LED**
fixture pre-configured with:
- 2 LED Driver 1x**
Dimlux Xplore Driver 800W
- 3 Standard DC Cable 1x** (EU/UK/USA)
(based on the continent of purchase)
- 4 RJ14 Cable 1x**
Digital RJ14 Cable

MOUNTING HARDWARE OPTIONS

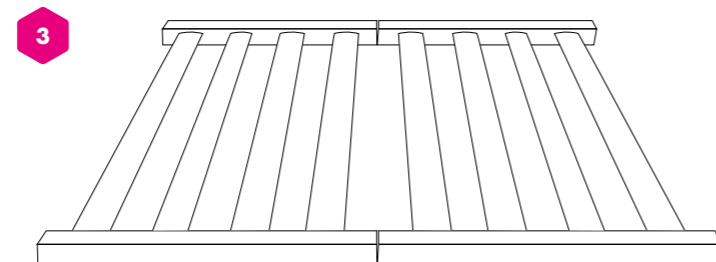
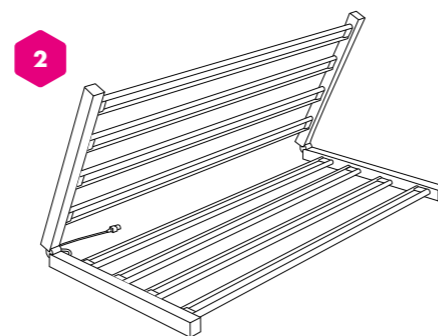
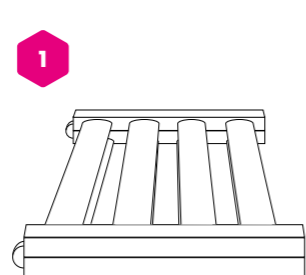
- 5 Rope Ratchets 4x**
- 6 LED mounting Brackets 2x**
- 7 Screws 8x**



ASSEMBLY INSTRUCTIONS

TAKE CAUTION WHEN HANDLING LIGHT BARS. ENSURE THE LED/LENSES DO NOT COME IN CONTACT WITH SHARP OBJECTS OR FORCE THAT MAY DAMAGE THE LENSES

- 1** Unbox The Dimlux Xplore LED and check that all in the indicated system and mounting hardware are present in the box.
- 2** Unfold module and place on flush, stable surface then carefully turnaround the fixture so the lenses are facing downwards.
- 3** The Dimlux Xplore LED Fixture is ready to have the ballast/driver mounted.



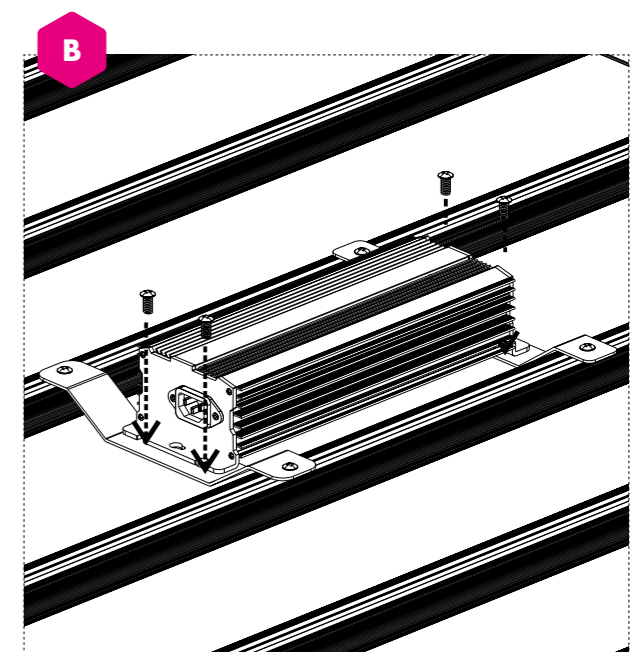
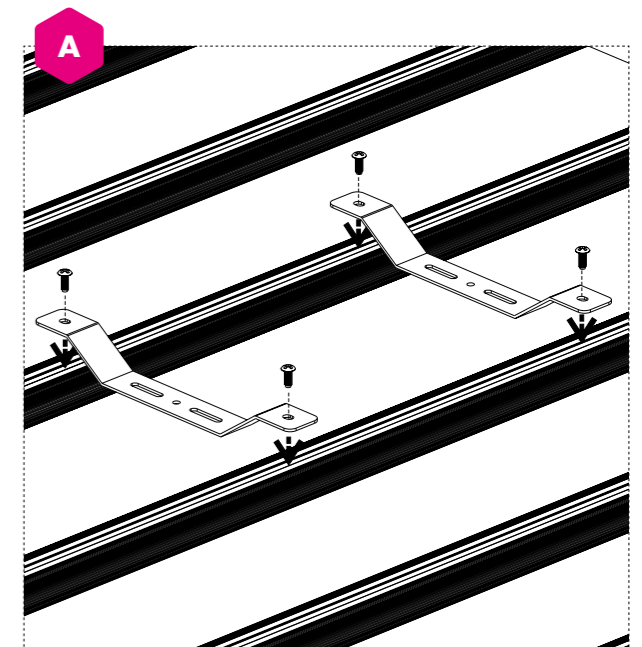
PREPARATION FOR INSTALLATION

- 1** Refer to your lightplan. Arrange the place for the fixture to be mounted. Prepare appropriate "hangers" or other tools to hang the fixture
- 2** Take caution when handling the LED light bars. Ensure the LED array does not come in contact with sharp objects or force that may damage the diodes. Unbox and unfold the fixture, then place it on flat, stable surface.
- 3** Switch off the main voltage.

MOUNTING DRIVER / BALLAST

The LED fixture comes with **8 Bolts** and **2 Mounting Brackets**.

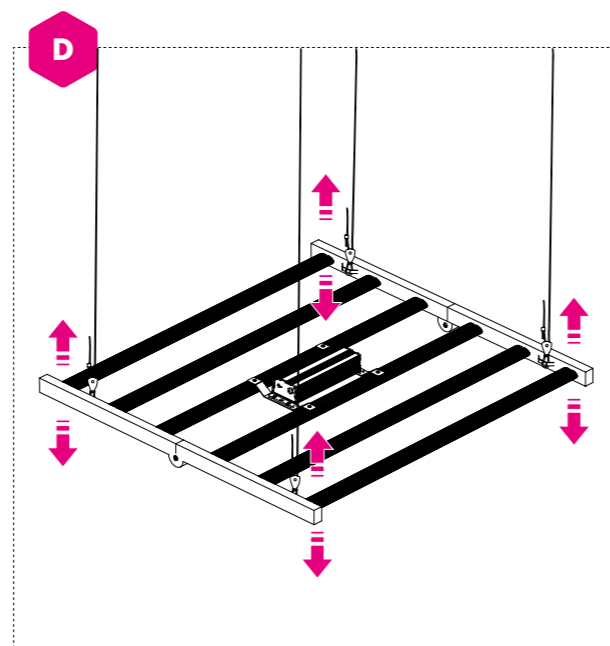
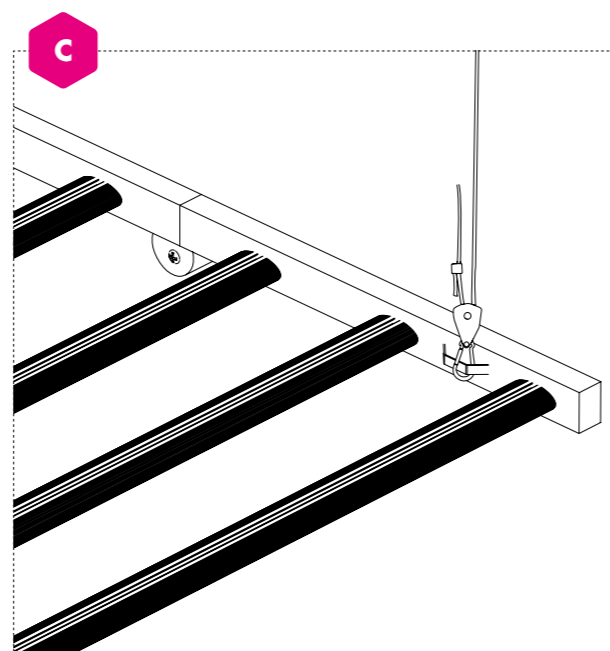
- 1** Fasten the mounting brackets on the LED light bar by using the nuts in the LED bar and the 4 Bolts **(A)**
- 2** Fasten the Driver/Ballast on the mounting brackets by using the 4 Bolts **(B)**
- 3** Distribute the Driver/Ballast weight evenly so it is positioned ideally for your cables.



HANGING THE LED FIXTURE

The LED fixture comes equipped 4 with hanging points.

- 4 Use Rope Ratchet to pass through the hanging point of the LED fixture, and then fix the other end of Rope Ratchet on the ceiling of the greenhouse. **(C)**
- 5 Distribute the fixture weight evenly so fixture hangs level. Upwards and downwards according to your crop height. **(D)**
- 6 First connect the fixture with a power cable. Only then plug the power cable into the electrical socket, and you are ready to go



GENERAL CARE

- Natural convection removes heat away from the heatsink. In order for the system to properly cool itself, at least 5cm (two inch) of space is required between the fixture and the ceiling of your grow area. Failure to do so may shorten the fixture's lifespan.
- To achieve the optimal lifespan and performance of your fixtures, routinely check for and remove excess dust, debris, and mineral build up from heatsink and LED array.
- Do not clean the LED fixture with detergents, abrasives, and/or any other aggressive substances, such as solvents, acetone, alcohol, alkaline cleaners, windows cleaners, and similar.
- Regularly check the power cables of the fixture to ensure it is undamaged and safe to use.
- To limit degradation, avoid touching the diodes with your hands, even in a powered-off state.
- When cleaning, make sure you have unplugged the LED fixture and allow to it cool to room temperature. Do not open the retaining clips when cleaning. The LED fixture can be cleaned with a feather duster or a soft damp cloth. You should plug in the lighting fixture after it has been completely dried.



WARNING:

Risk of electrical shock To reduce the possibility of serious injury, always take the proper precautions and unplug the fixture before performing any maintenance, repairs, moving or cleaning. LED fixture surfaces may be hot. Allow sufficient cooling time before handling Always allow for a cool down period of at least 30 minutes before touching the LED fixture.

WARNING:

Fixture and power supply are UL 1598 Wet Location rated but are not designed to be submerged in water In the event that the module or power supply enclosure becomes submersed, first disengage the circuit breaker, then unplug submersed components before proceeding to remove from water.

CAUTION:

To prevent eye damage, avoid looking directly at the unshielded LEDs.

CAUTION:

To reduce the risk of overheating or fire, never place operating fixtures face down on a flush surface Always allow for adequate ventilation of fixtures and power supplies.

WARRANTY:

Never open or disassemble the product. It will void the warranty and will break the water-tight seal.

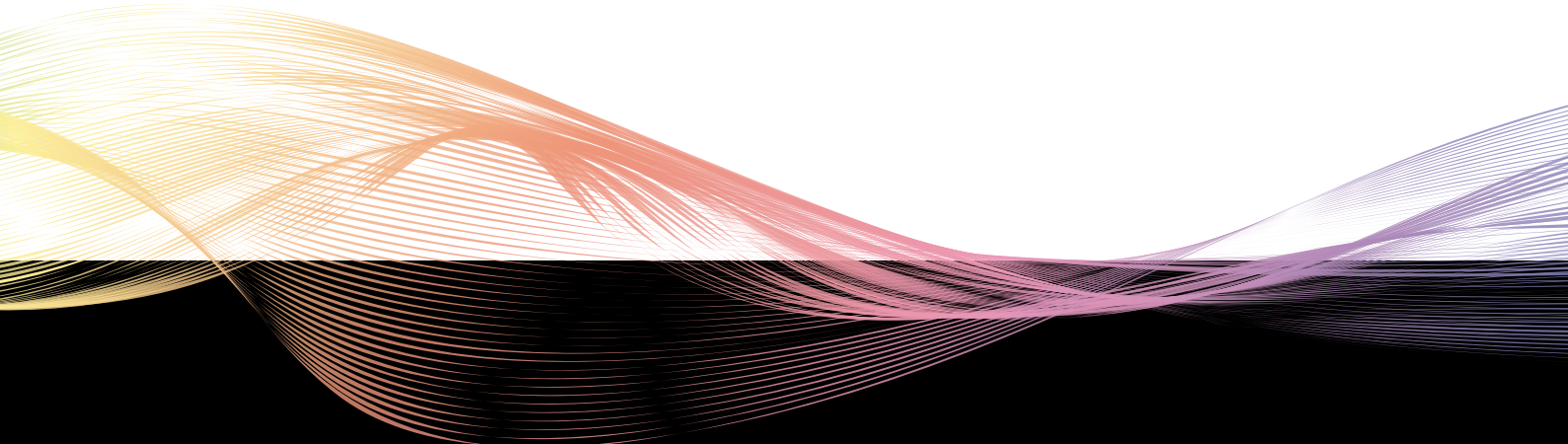
The warranty shall become void if the product and/or electronic components are damaged due to incorrect installation

Warning! Mounting and installing of the LED fixture may only be executed by certified service personnel, in accordance with the applicable local laws and regulations.

Warning! Mount the system to something that can hold the weight of the LED fixture.

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JUST GOT BRIGHTER.**