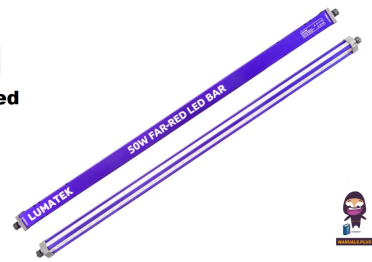


LUMATEK
PROFESSIONAL LIGHTING
**4370 50W Far Red
Bar LED Light**



LUMATEK 4370 50W Far Red Bar LED Light User Manual

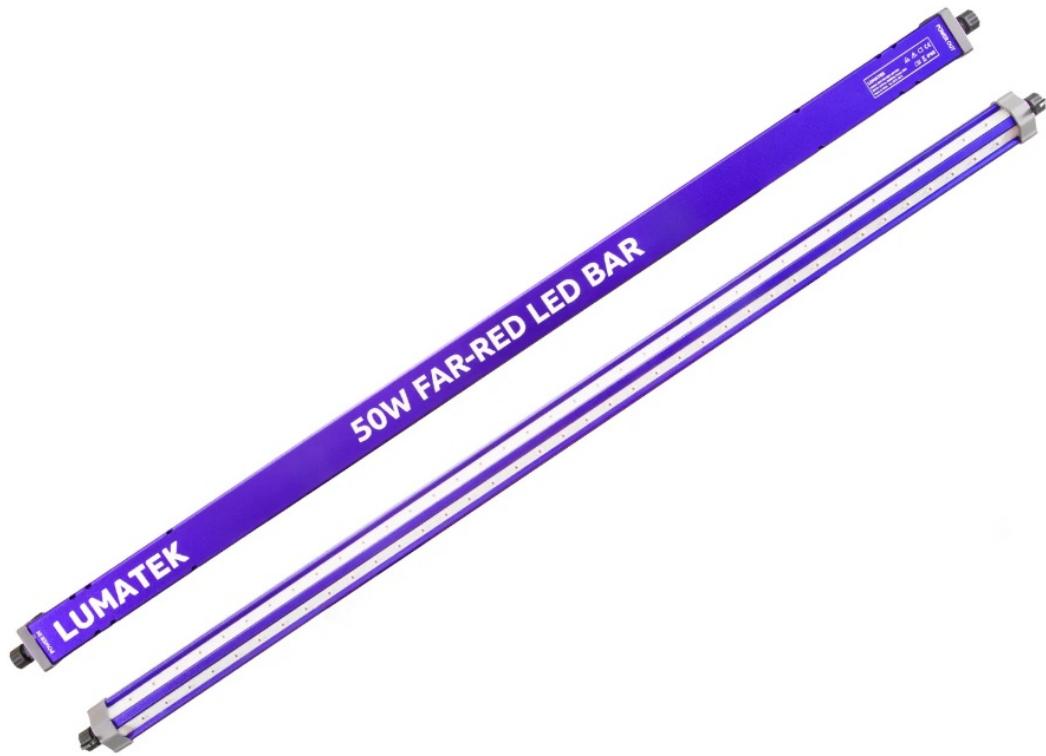
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LUMATEK 4370 50W Far Red Bar LED Light



Specifications

- **Product Name:** 50W FAR-RED LED BAR
- **Product Code:** LUMLED030
- **Manufacturer:** LUMATEK EU
- **EAN:** 5060560032335
- **ePPF [400-750] NM:** Not specified
- **Efficacy [400-750] NM:** Not specified
- **Input Voltage:** Not specified
- **Driver:** Not specified
- **Input Power:** Not specified
- **Waterproof/Dustproof:** IP65
- **Life Span:** L90 > 45000 Hrs
- **Light Distribution:** Full Spectrum – 2 x 50W Far Red LED Bar
- **Light Source Dimensions:** 42 mm x 48 mm x 1000 mm
- **Weight:** 1.2 Kg
- **Thermal Management:** Passive Heat Sink
- **Power Factor:** Not specified
- **Ambient Temperature:** Not specified
- **Working Temperature:** Not specified
- **Working Humidity:** Not specified
- **Dimmable:** No
- **Daisy-Chain Capability:** Yes (Max 18 pcs)

Product Description

The LUMATEK 50W FAR-RED LED BAR is a supplemental tool designed to extend the ZEUS LED Full-Spectrum range to [400-750] nm, enhancing PSII photochemical efficiency and photosynthetic rate. It has a peak at 730 nm and offers an output of 13 mol/s [600-700] nm and 155 mol/s [701-750] nm.

Installation

Fixture Assembly & Installation

Please refer to the installation manual for detailed instructions on assembling and installing the LUMATEK 50W FAR-RED LED BAR securely.

Recommended Coverage

It is recommended to use two Far-Red bars to supplement each Lumatek Zeus full spectrum LED fixture for optimal coverage.

Recommended Far-Red Radiation Application

The Far-Red radiation application should be based on the specific requirements of your crops. Consult with a horticulture expert for guidance if needed.

Connecting the Far-Red Bar to the Mains Power

Ensure the unit is disconnected from the power source before connecting the Far-Red bar. Follow the provided instructions carefully to connect it safely.

Connecting Far-Red Bars in Series with Daisy Chain Cables

If you are connecting multiple Far-Red bars, use the daisy chain link cables provided. Follow the series connection guidelines to ensure proper functionality.

INTRODUCTION

Thank you for purchasing the LUMATEK 50W FAR-RED LED BAR. This manual describes how to install and use the light bar; please read this manual thoroughly before attempting to install or operate any Lumatek system. If you are not comfortable with the installation of high-performance lighting systems, you should seek the services of a qualified installation professional."

PRODUCT DESCRIPTION

The LUMATEK 50W FAR-RED LED BAR is a supplemental addition to your crop that has been specifically created to extend the ZEUS LED [400-700] nm Full-Spectrum range to [400-750] nm. Designed to fit directly on the popular LUMATEK ZEUS LED fixtures frames, the integration of the very valuable FAR-RED photons [701-750] nm harnesses the principles of the EMERSON Enhancement effect, allowing growers to promote stem elongation and leaf expansion during the vegetative and the early days of flowering stages enabling to fill in the grow area.

Also, taking advantage of their high efficacy, they can be used at the end of the life cycle to improve the overall photosynthetic efficiency.

With its peak at 730 nm and an output of 13 $\mu\text{mol/s}$ [600-700] nm and 155 $\mu\text{mol/s}$ [701-750] nm, the LUMATEK 50W FAR-RED is a supplemental LED bar tool, to help growers enhance PSII photochemical efficiency and photosynthetic rate when added to the provided Full-Spectrum by the ZEUS range.

This unit has an independent power source and can also be connected in series with daisy-chain link cables. To ensure unit performance, this LED bar has a single input and output socket for the Power Cable or Daisy Chain link Cable, depending on the use of that bar. For this reason, the Power (4 m) and Daisy Chain (1.5 m) cables are sold separately.

PRODUCT INFORMATION AND SPECIFICATIONS

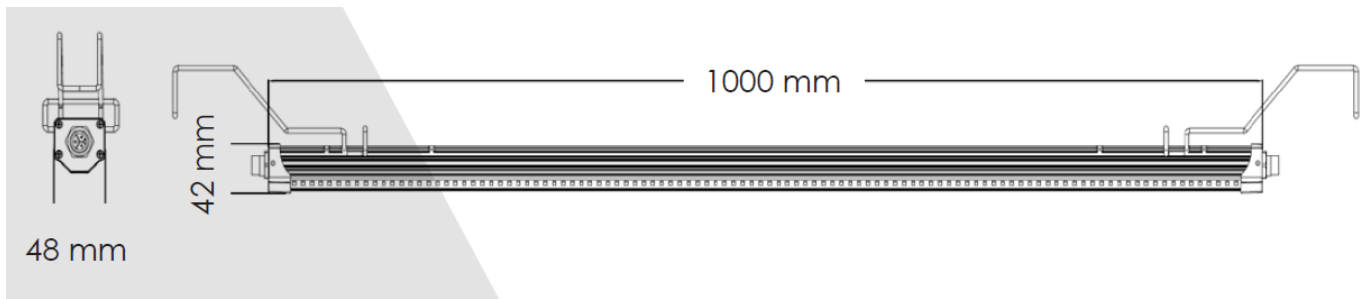
General Product Information

PRODUCT NAME	50W FAR-RED LED BAR
PRODUCT CODE	LUMLED030
MANUFACTURER	LUMATEK EU
EAN	5060560032335

Technical Specifications

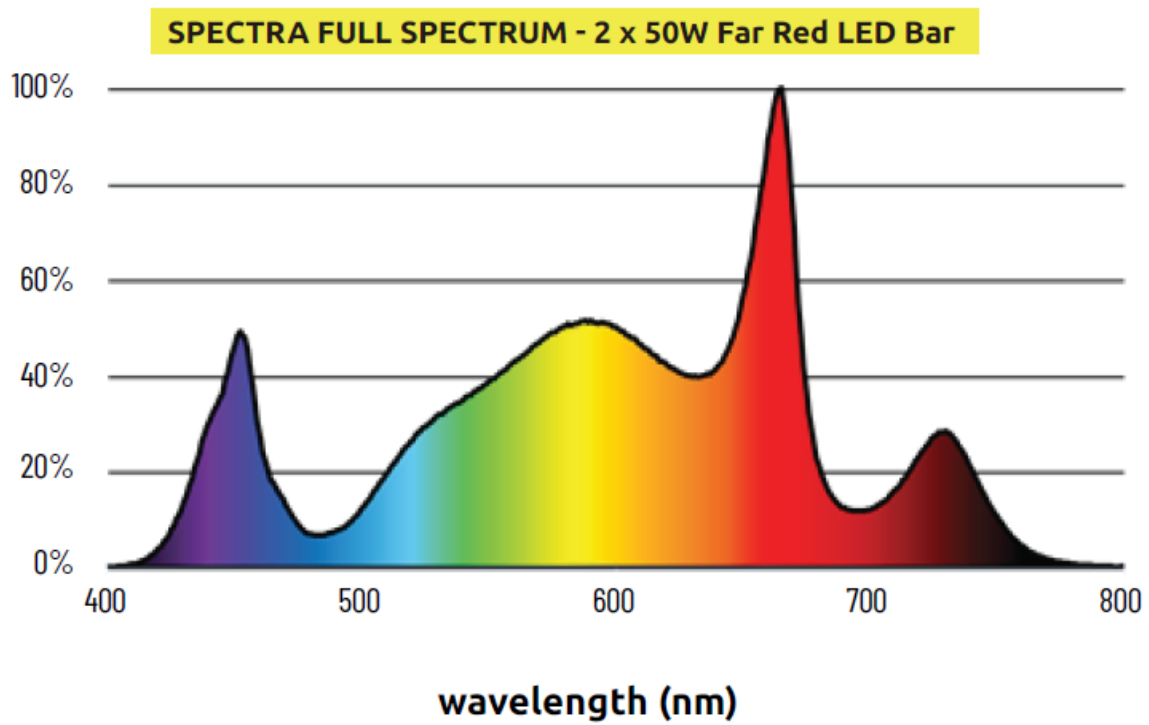
ePPF [400-750] NM	155 µmol/s
eEFFICACY [400-750] NM	3.1 µmol/J
INPUT VOLTAGE	220-240V AC 50-60 Hz
DRIVER	50 W, 220-240 V AC 50-60 Hz INTEGRATED
INPUT POWER	50 W (±5%) @230 V AC
WATERPROOF/DUSTPROOF	IP65
LIFE SPAN	L90 > 45000 Hrs
LIGHT DISTRIBUTION:	140°
LIGHT SOURCE	FAR RED DIODES
DIMENSIONS	1000 x 48 x 42 mm
WEIGHT	1.2 Kg
THERMAL MANAGEMENT	PASSIVE HEAT SINK
POWER FACTOR	>0.90
AMBIENT TEMPERATURE	25 °C
WORKING TEMPERATURE	-10 °C - +40 °C
WORKING HUMIDITY	20% - 80% NON-CONDENSING
DIMMABLE	NO
DAISY-CHAIN CAPABILITY	YES (MAX 18 PCS)

Fixture Dimensions

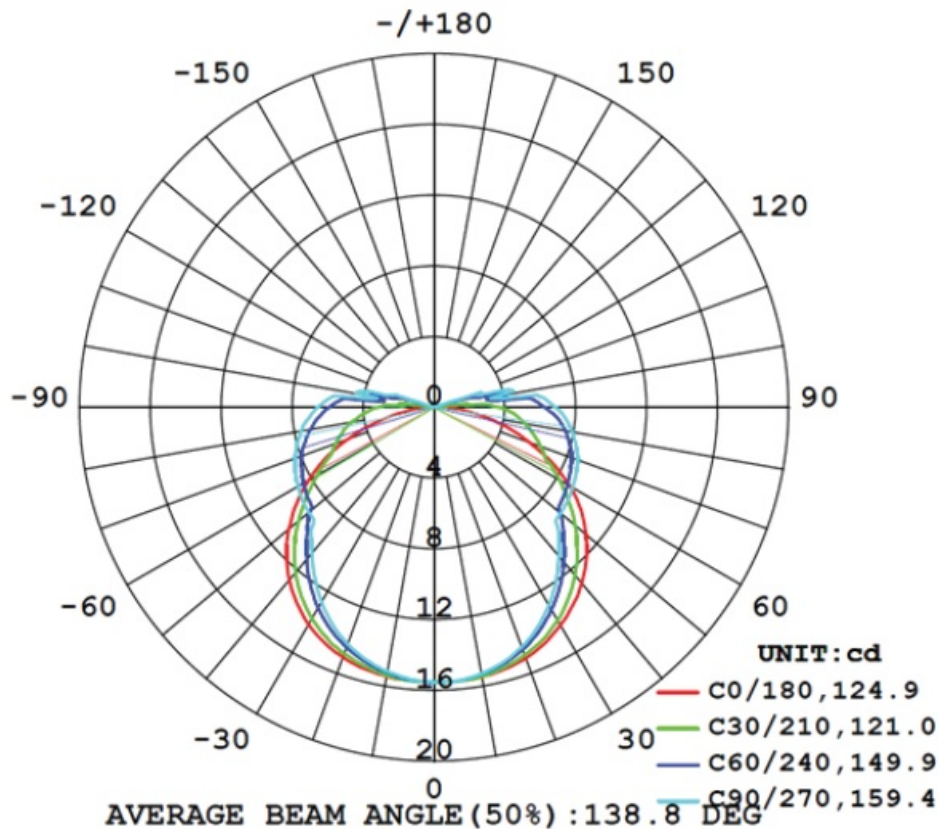


Spectral Quantum Distribution Graph

The 50W Far-Red bar has been developed for use with Lumatek Zeus full spectrum LED fixtures. It is recommended to use two Far-Red bars to supplement each fixture.



Light distribution curve



Environment

- The LED fixture is intended to be used in climate-controlled grow rooms and indoor farms.
- The product may be used in damp environments but may not be used in wet environments or outdoors. The product will operate in ambient temperatures from -10°C to 40°C but will function at optimal level between 20°C to 30°C.
- The product will operate in 20% – 80% humidity, non-condensing.

Legal

This product is designed with precision and quality in mind, our product complies seamlessly with industry standards, guaranteeing a user experience that meets and exceeds the expected norms.

SAFETY RECOMMENDATIONS AND WARNINGS

The LUMATEK 50W FAR-RED LED BAR produces Far-Red electromagnetic radiation with wavelengths from 700 to 800 nm.

Warning! Carefully read the warnings below before using or working with the product!

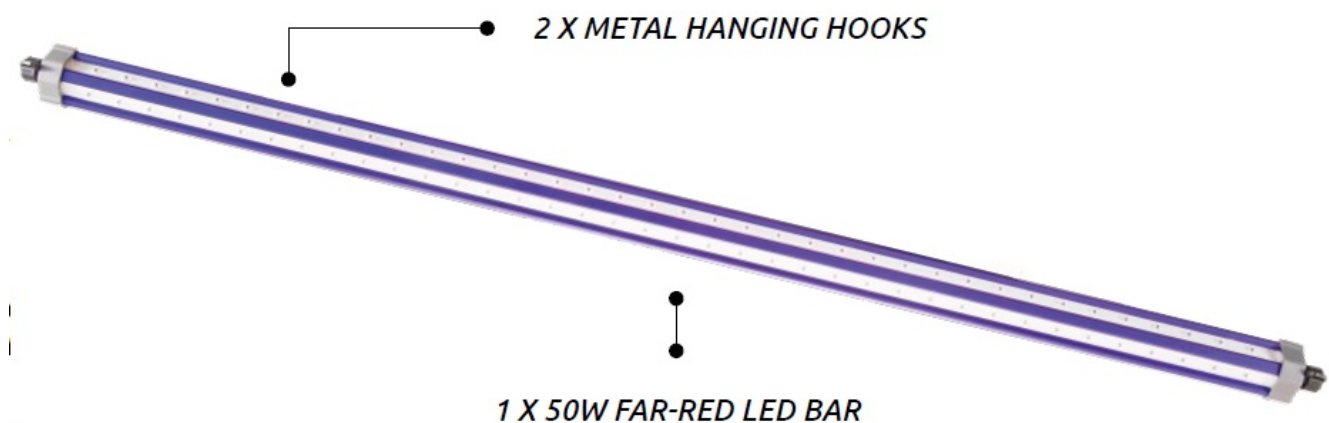
- Always adhere to the local rules and regulations when installing or using the LED fixture.
- Do not open or disassemble the LED fixture as it contains no serviceable parts inside. Opening or modifying the LED fixture can be dangerous and will void the warranty.
- Do not use the LED fixture when either the LED fixture or its power cable are damaged. Replace the power cable with a correctly rated cable only.
- Modifications to the cables can lead to unwanted electromagnetic effects which may make the product not comply with legal requirements.
- Do not expose the LED fixture to:
 - Condensing humidity, heavy mist or direct spray;

- Ambient temperatures outside the specified range;
- Dust and contamination;
- Direct sunlight during use or HID light that may heat the driver.
- Always disconnect the LED fixture from mains before performing any maintenance.
- Always allow for a cool down period of at least 20-30 minutes before touching the LED light bars. Touching the LED Bars when the fixture is lit or immediately after may result in burns!
- Natural convection removes heat away from the heatsink. For the system to properly cool itself, at least 5cm of space is required between the fixture and the roof of your grow area. Do not use abrasive materials or aggressive cleaning agents to clean the LED fixture as this may damage the secondary optics. Instead, use a clean, dry fabric/cloth.
- Do not use the LED fixture near flammable, explosive or reactive substances. The LED fixture can reach temperatures of 40°C.
- Do not use sulphur 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.

CONTENTS

1 X MANUAL

[PLS NOTE: POWER & DAISY-CHAIN CABLES ARE SOLD SEPARATELY]



INSTALLATION

Warning! Mounting and installing the LED fixture must be by the applicable local laws and regulations.

Warning! The installer is responsible for correct and safe installation.

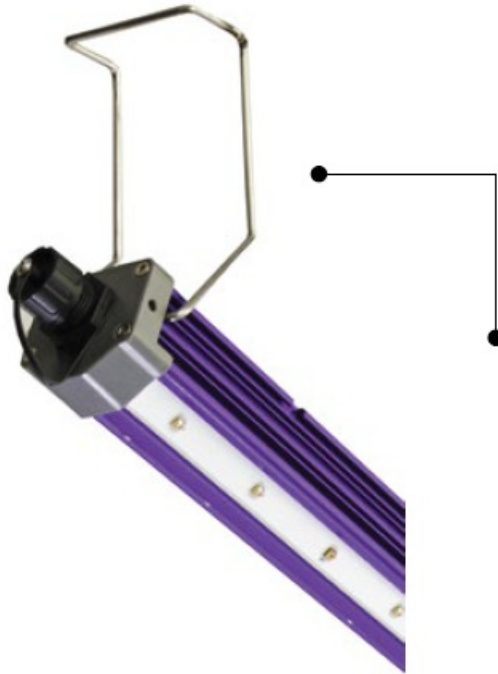
Warning! Ensure the local cabling can support the voltage and current requirements of the LED fixture. **Warning!** Avoid coiled cables and keep mains leads separated to help prevent electromagnetic interference. **Warning!** Do not connect or disconnect the LED fixture under load.

Fixture assembly & installation

WARNING! The light bar is shipped with a protective plastic cover over the diodes. Please ensure this protective

cover is removed before use!

- Insert the metal hanger hooks into the mounting holes on each side of the light bar, at both ends.
- The Far-Red bar can be placed between the Zeus fixture full spectrum bars and supported with the metal hangers placed over the Zeus frame end pieces.



Recommended Coverage

The Lumatek 50W FAR-RED LED BAR was designed to fit directly into the Zeus fixtures. To make sure you achieve the best light spread over the canopy, we recommend: Integrate a minimum of 2 units of 50W FAR-RED LED Bar, with:

- ZEUS 465W PRO 2.9 | 1.2 x 1.2 m footprint
- ZEUS 600W PRO 3.1 | 1.5 x 1.5 m footprint
- ZEUS 1000W XTREME CO2 | 1.5 x 1.5 m footprint w/ CO2 Supplement

Integrate a minimum of 3 units of 50W FAR-RED LED BAR, with:

- ZEUS 1000W PRO – 2.0 x 1.5 m footprint



Recommended Far-Red Application

- Always mix the supplemental FAR-RED radiation with the previously mentioned LUMATEK ZEUS.
- Full-Spectrum LED Range.
- For a good FAR-RED radiation spread, ensure to install the recommended minimum units, and follow the distance to canopy referred to on the Grow Light Strategies table.
- FAR-RED can also damage plants. If you notice plant damage, we recommend increasing the distance between fixture and canopy or decreasing the FAR-RED radiation delivered by reducing the photoperiodic time.
- There is no specific defined photoperiodic time as it will depend on the grower's plant morphology preferences.

Connecting the FAR-RED bar to the mains power

Warning! Make sure mains power is switched off.

Warning! Ensure the power supply cable is not coiled and does not touch any hot surfaces. **Warning!** Connect the cables according to local rules, safety regulations, and electrical code.

Warning! Do not connect or disconnect the LED fixture under load.

- The Lumatek Far-Red Bar power cable (4m) and the Far-Red Bar daisy chain cable (1.5m) are both sold separately.
- The power cable should be connected to the Far-Red bar power input port;
- Remove dust cap from Far-Red bar Input connector.
- Correctly align connectors and push together until 'click-locked'.
- Connect mains power plug to switching gear/power supply.
- Switch on mains power.
- To disconnect; Switch OFF the mains power, turn the power cable connector twist-lock anti-clockwise, and pull apart from the bar connector port.

Connecting FAR-RED bars in series with daisy chain cables

- A Far-Red bar power cable is required to power the first Far-Red bar, and then further Far-Red bars can be connected in series from the first bar and powered with the Far-Red daisy chain cables.

- Maximum 18 pcs Far-Red bars can be daisy-chained from one power source.
- Ensure mains power is OFF.
- Using the Lumatek Far-Red daisy chain cable; connect Far-Red Bar [1] power output port to Far-Red Bar [2] power input port by correctly aligning connectors and push together until 'click-locked'.
- Continue until all Far-Red Bars are connected.
- Switch on mains power.
- To disconnect; Switch OFF the mains power
- Turn daisy chain cable connector twist-lock anti-clockwise and pull apart from bar connector port. Warning! Do not connect or disconnect the Far-Red bars under load.

INSPECTION, MAINTENANCE AND REPAIR

Warning! Disconnect the LED fixture from mains before performing any maintenance or repairs.

Warning! Do not connect or disconnect the LED fixture under load.

Warning! Do not open or disassemble the LED fixture, it contains no serviceable parts inside. Opening the LED fixture can be dangerous and will void the warranty.

Warning! Always wait 20 – 30 minutes for the LED light bars to cool down before handling.

Caution! Do not clean the LED fixture with detergents, abrasives or other aggressive substances.

- Regularly check the LED fixture for dust or dirt build up. Clean if necessary. Contamination may cause overheating and decreased performance. Clean the outside of the LED fixture using a dry or damp cloth.
- Regularly check the cables of the LED fixture to ensure it is undamaged.

STORAGE AND DISPOSAL

Store the LED fixture in a dry and clean environment, with an ambient temperature of -25°C to 55°C.

The product must not be discarded as unsorted municipal waste but must be collected separately for treatment, recovery and environmentally sound disposal.

WARRANTY

Lumatek warrants the mechanical and electronic components of their product to be free of defects in material and workmanship if used under normal operating conditions for three (3) years from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use, Lumatek shall, at its discretion, either replace or repair the product using suitable new or reconditioned products or parts. In case Lumatek decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e. three (3) years from the date of purchase of the original product. For service, return the product to your shop with the original sales receipt.

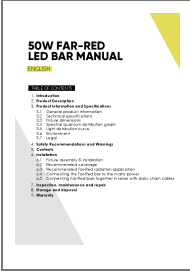
Lumatek products sold in the territory of the Swiss Confederation are manufactured with a separate serial number series and labelled as exclusively for sale in the Swiss Confederation market, and available only for licenced Swiss distributors. If you are an end customer resident or domiciled in the Swiss Confederation, the Lumatek Warranty is only valid for products marked with the serial number series used exclusively in this market.

For more information on Lumatek products visit www.lumatek-lighting.com

FAQs

What is the wavelength range of the Far-Red electromagnetic radiation produced by the LUMATEK 50W FAR-RED LED BAR?

The Far-Red electromagnetic radiation produced ranges from 700 to 800 nm.

	<p>LUMATEK 4370 50W Far Red Bar LED Light [pdf] User Manual</p> <p>5060560031217, 4370 50W Far Red Bar LED Light, 4370, 50W Far Red Bar LED Light, Far Red Bar LED Light, Bar LED Light, LED Light, Light</p>
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References

- [L LUMATEK Professional Grow Lighting 8Y; LED Lights | HID Fixtures & More](#)
- [User Manual](#)

[Manuals](#)+, [Privacy Policy](#)

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