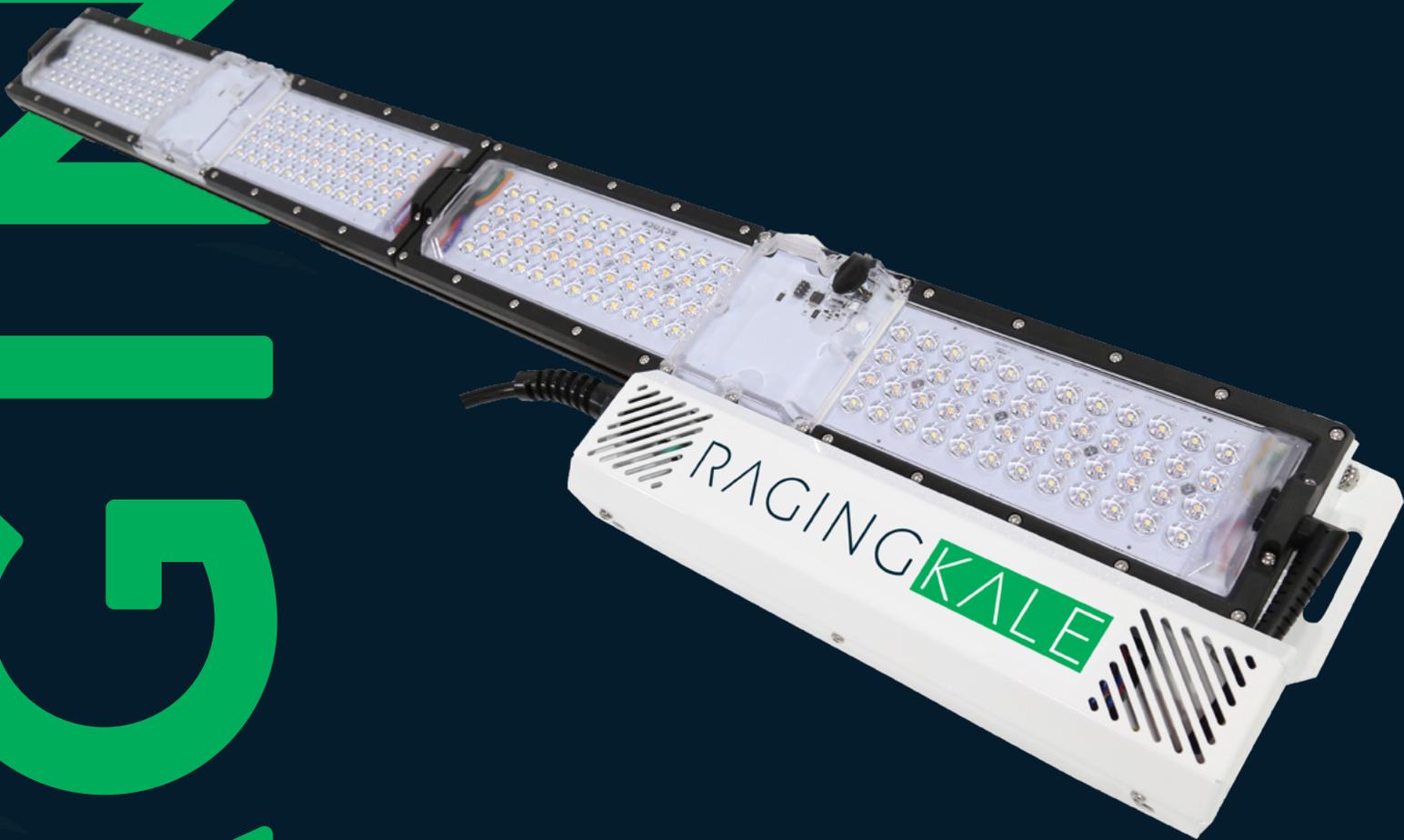


RAGING KALE



RAGING KALE

USER MANUAL & INSTALLATION GUIDE

For all our User Manuals please visit www.scynceled.com/support

MANUAL FOR END USER AND INSTALLER

Thank you for purchasing the Scynce Raging Kale fixture. This manual contains all the information needed to quickly familiarize yourself with the product. Please review this information carefully, before installing and/or operating the product.

We recommend you keep this manual on hand for future reference.

For further information please contact:

SCYNCE

4641 East Ivy Street, Mesa, AZ 85205

T: 480 256-0017 E: Info@scynce.ag

www.scynceled.com

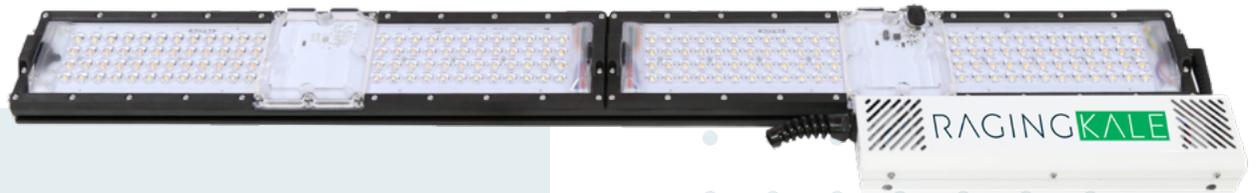


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PRODUCT DESCRIPTION

INTENDED USE /S

Scynce Raging Kale fixture is intended for overhead illumination of horticultural crops. For other applications in professional horticulture, please contact a representative at SCYNCE.

Any use other than the approved intended use described above is considered unintended use. SCYNCE cannot be held responsible for possible consequential damage caused by improper, incorrect or inadvisable use.

SYMBOLS USED

The following symbols are used in this manual to draw attention to specific topics or actions

WARNING

A warning indicates the possibility of injury to the user and/or damage to the product should the user not perform the procedures as described.

ATTENTION

A note alerts the user to potential problems which may occur if a procedure is not carried out as described.

SPECIFICATIONS

RAGING KALE

GENERAL SPECS

Not for use in dwellings

Manufactures Identification	120deg Optic: 52650
Name:	Scynce Raging Kale
Market Introduction:	2019



TECHNICAL SPECIFICATIONS

MECHANICAL

Product Dims (L.W.H):	1168 x 152 x 25 mm (46 x 6 x 1.5 in)
Product Weight:	Gen 1 = 15 lbs. (6.8 kg) Gen 2 = 12 lbs. (5.5 kg)
Housing :	Anodized aluminum & Powder coated aluminum
Ingress Protection Rating:	IP66
Installation Environment	Suitable for damp location

ELECTRICAL

Main Voltage +/- 10%:	120 – 277 VAC. 50/60 Hz
Power Draw:	Max. 250 W, full power to either channel
Power Factor:	> 0.9
Color Spectra:	Two channels: 2700K White / 6500K White
Dimmable:	Two channel independent dimming, 0%-100%, with Scheduling

OTHER

Ambient Operating Temp:	-40~30°C
Certification	Tested to UL1598, UL8750, UL8800, CSA C22.2 NO. 250.0-08, CSA C22.2 NO. 250.13
Warranty	5 years (please refer to https://scynceled.com/product-warranty/ for full details)

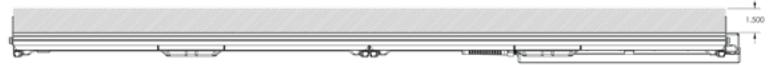
THERMAL MANAGEMENT

All Scynce fixtures have built-in dynamic thermal monitoring. Scynce Raging Kale utilizes a passive cooling system. Should the light begin to overheat, the light will automatically reduce output to protect the light while still maintaining a minimal level of output.

To ensure that the fixture operate at its peak optical output the temperature of the installed environment (ambient temperature) must be no greater than 30 °C (86 °F). It may be necessary to add mechanical ventilation or a cooling system to maintain the temperature within the growing space when the fixture is in operation.

WARNING

Never block the cooling fins on the Scynce Raging Kale fixture, leave a minimum of 1.5 inch clearance around the back of the fixture. Blocking the cooling fins will cause the performance of the fixture to reduce and may cause permanent damage.



Passive cooling fins

LIGHT OUTPUT

The Raging Kale has one distribution optical angle option. 120° distribution angle has exceptional uniformity of the light onto the crop and is our standard option for indoor, warehouse and greenhouse where 100% artificial light is required.

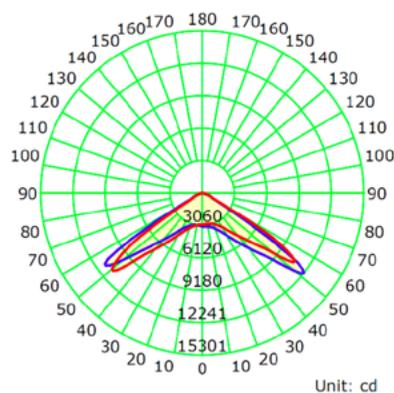
OPTICAL DISTRIBUTION

The luminosity distribution curve for the 120° optic is depicted below. The 120° optic offers intensity (radiated energy) that is slightly brighter on the outside of the beam. When hanging fixtures it is important to overlap the beams to achieve an even intensity of the plant canopy.

By controlling the beam with optics, light energy is gathered and focused, taking full advantage of the LED directed radiation pattern. If you need assistance with fixture layout to achieve a desired PAR level at the plant contact your Scynce sales representative, we can help.

120° OPTICS

Luminous Intensity Distribution Curve



* 120 degrees is the ideal optic for indoor and vertical applications. The fixtures can be mounted between 12" and 36" over the canopy.

ENERGY DISTRIBUTION

PAR (Photosynthetically Active Radiation) is a region of the electromagnetic spectrum (400 to 700 nm) that promotes photosynthesis.

PPF (Photosynthetic Photon Flux) tells us how much PAR a light-source emits. PPF does not measure PAR at a specific location (such as your crop canopy), but it tells you how many photons within the PAR region are coming out of the light source every second.

PPFD (Photosynthetic Photon Flux Density) measures the number of photons within the PAR region at a specific location (such as your crop canopy) every second. Most PAR meters report PPFD ($\mu\text{mol}/\text{m}^2/\text{s}$) measurements.

* For more detailed PAR maps, including how the fixtures work in an array, please visit: www.sScynceLED.com

PRECAUTIONARY MEASURES AND SAFETY INSTRUCTIONS

WARNING

- Always adhere to the local building and electrical codes when installing or using the fixture.
- High Voltage - Switch off the main voltage before commencing installation or maintenance work.
- Do not open or disassemble the fixture, it contains no serviceable parts inside. Opening the fixture can be dangerous and will void the warranty.
- Never look directly into the light source while fixture is turned on. Doing so can cause damage to the eyes.

ATTENTION

- The end user is responsible for ensuring correct installation and use of the product. Incorrect installation can cause damage to the product. The warranty shall become void if the product and/or electronic components are damaged due to incorrect installation.
- The performance of the fixture may be compromised if operated outside of the recommended ambient temperature guidelines.

Risk Group 2

CAUTION. Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eye.

Product tested against IEC62471

Groupe de Risque 2

MISE EN GARDE. Rayonnement optique potentiellement dangereux émis par ce produit. Ne regardez pas la lampe en marche. Peut être nocif pour les yeux.

Produit testé contre IEC62471

INSTALLATION OF FIXTURES

INSTALLATION PREP

1. Switch off the main voltage
2. Refer to your light plan. Arrange boxed light fixtures in specified mounting locations.
3. Remove the fixture from the packaging and check contents.
4. Gather any additional tools and/or hardware that may be required to mount the fixture.

ATTENTION

This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

ELECTRICAL CONNECTION

The Scynce Raging Kale fixture is equipped with an 8ft power cord, terminated with a North American standard wall pug (NEMA 5-15). Simply plug the light and you are ready to go.

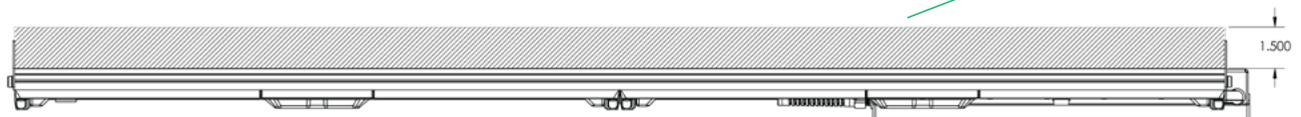
When routing the fixture power cord ensure that;

- The cord is not concealed or extended through a wall, floor, ceiling, or other parts of the building structure.
- The cord is not located above a suspended ceiling or dropped ceiling
- The cord is not permanently affixed to the building structure
- The cord is routed so that it is not subject to strain and is protected from physical damage.
- The cord is visible over its entire length.

To maintain optimal performance of the fixture it may be necessary to control the temperature of the room by mechanical ventilation or cooling system to below the maximum ambient operating temperature of 30°C (86°F).

MOUNTING BRACKET

The Scynce Raging Kale fixture comes equipped with hanging brackets at either end of the fixture's housing. Always hang the fixture with a minimum of 1.5 inch spacing above the cooling fins.



MOUNTING THE LIGHT FIXTURE

The Scynce Raging Kale is designed to be hung the mounting brackets at either end of the fixture's housing.

When mounting the Scynce Raging Kale fixtures in an array a minimum distance of 8 inches side to side and a minimum distance of 1 inch end-to-end must be maintained.

SINGLE PHASE CORD TERMINATION

BLACK	Line
WHITE	Neutral
GREEN	Ground

DOUBLE PHASE CORD TERMINATION

BLACK	Line
WHITE	Line
GREEN	Ground

CONTROLLING THE LIGHT

The Scynce Raging Kale fixture is equipped with two independent channels of LEDs (White 2700K, White 6500K). Each channel can be independently dimmed from 0% to 100%. Channel dimming can be adjusted on-the-fly using the mobile app (See Mobile App Instructions for details) or by setting up an embedded schedule in the light (See Scheduling Instructions for details).

*Mobile app and Scheduling Instructions can be found at:
<https://scynceled.com/installation/>
 and <https://scynceled.com/support/>

WARNING

Always ensure that fixtures are compliant with local building codes

MAINTENANCE

WARNING

- High Voltage - Switch off the main voltage before commencing maintenance work. Risk of Fire. Risk of shock.
- Don't touch. Fixture reaches high temps while in use.
- Do not open or disassemble the product. Opening the product will void the warranty and will break the water tight seal.

ATTENTION

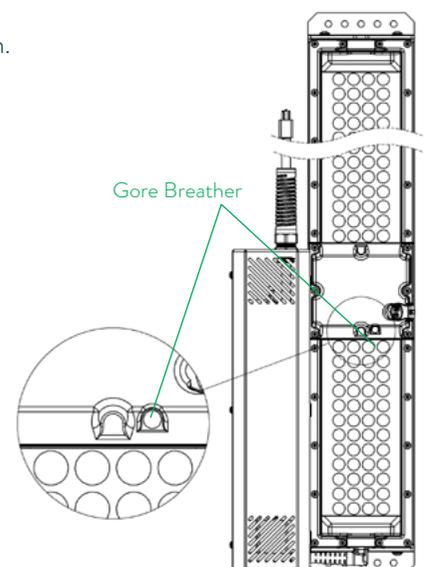
If the product is defective or damaged, contact SCYNCE customer support. Never switch on a defective or damaged fixture

- Check the product at regular intervals for build-up of dust and dirt. Clean the product if necessary. Contamination can lead to overheating and reduced performance.
- Clean the fixture with water and a damp cloth a vinegar and water solution (1:1 ratio) or a polycarbonate safe cleaner such as Novus #1 Cleaner. Ensure that the polycarbonate lens is always clean.

CLEANING

- Always allow the fixture to cool to room temperature before cleaning it.
- Clean the fixture with water and a damp cloth or a vinegar and water solution (1:100 ratio) or with a hydrogen dioxide and water solution (<10:100 ratio) such as ZeroTol 2.0 with their recommended dilution of 1:50 or a polycarbonate safe cleaner such as Novus #1 Cleaner. Always ensure that the lens is always clean.
- Never clean the fixture with corrosive cleaning agents or other aggressive liquids. The following cleaners are known to cause damage to polycarbonate and/or PMMA.
 - o Solvents; Acetone, Alcohol...
 - o Window Cleaner; Windex, 409...
 - o Alkaline Cleaners
- Never use abrasive cleaners, abrasive pads, or gritty cloths to clean, the lenses will scratch.
- Never scrape the lenses to remove build-up.
- Fixtures have been tested under Chlorine gas exposure at manufacturer's recommended dosage with no adverse effects.
- Oil based and non oil based fungicides and pesticides used at manufactures recommendations will not degrade lenses or the fixture.

Do Not remove or damage the Gore breathers. Removal or damage of the breather could allow condensation and contaminants to enter the fixture.



TROUBLESHOOTING

WARNING

Do not open or disassemble the product. Opening the product can prove hazardous and will void the warranty.

ATTENTION

Never switch on a physically damaged fixture. In the event the product is defective or damaged, contact the dealer where you purchased the fixture or contact SCYNCE directly.

WHAT CAN YOU SEE?

WHAT SHOULD I DO?

The fixture does not emit any light

Reset the fixture by disconnecting the main voltage for more than 5 seconds and then reconnect.

In the event that the fixture switches off again, lower the ambient temperature.

Check main voltage line for correct voltage range (120-277vac).

Reload default settings.

If the issue persists, contact supplier for assistance.

Only half of the fixture lights turn on

Reset the fixture by disconnecting the main voltage from the fixture for more than 5 seconds and then reconnecting.

If the issue persists, contact supplier for assistance.

The fixture emits too little light when compared to the other fixture(s).

Reload default settings.

Contact the installer and have the wiring checked.

If the issue persists, contact supplier for assistance.

Fixture will not respond to Dim Control.

Reload default settings.

Contact the installer and have the wiring checked

If the issue persists, contact supplier for assistance.

RAGING KALE

PRODUCT DIMENSIONS

