



PLANET
LIGHTING



DATASHEET

FOCUS

Focus Integral

Aquaculture luminaire

Focus Sea Cage Lighting by Planet Lighting represents a new era of lighting performance and sustainability for aquaculture. Designed for maximum efficiency and low maintenance, Focus can reduce your operational costs and your environmental footprint while promoting optimal conditions for your fish.

Discover Focus Integral, our user-friendly, compact luminaire combining powerful efficiency, soft start capability and illumination up to 70,000 lumens without the hassle of remote gear.

Contact us to revolutionize your aquaculture lighting today.

www.planetlighting.com/aquaculture-lighting



Focus Integral

Focus Integral is a powerful, compact and highly efficient all-in-one underwater luminaire designed for use in sea cage farming systems. No remote gear or drivers necessary.

APPLICATIONS



Aquaculture



Mariculture



Photoperiod Manipulation

SPECIFICATIONS

LED LIFETIME

L90(12K) >109,000hrs

ELECTRICAL

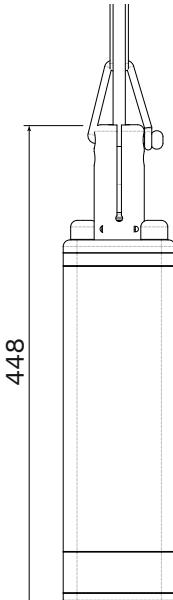
Max power: 440-465W with losses

Typical voltage: 230v/110v

Typical current: 1.9-2.0A (at 230v AC)

4.0-4.23A (at 110v AC)

Peak efficiency: 171lm/W at emitter



MATERIAL

Metalware: Marine grade aluminium

Glass: Borosilicate

Cable: CPE/EPDM rubber

AMBIENT OPERATING CONDITIONS

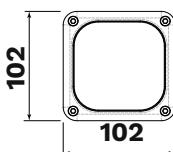
Ambient Operating Conditions

temperature rating: 40 °C to -45°C

Water temperature: -2°C to 25°C

Only use product submerged in water.

Maximum operating depth 60m.



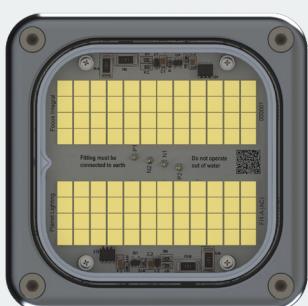
PROTECTION CLASS

IP68

WEIGHT

6.3kg without cable

All measurements in millimetres (mm)



*Specifications are subject to change without notice.



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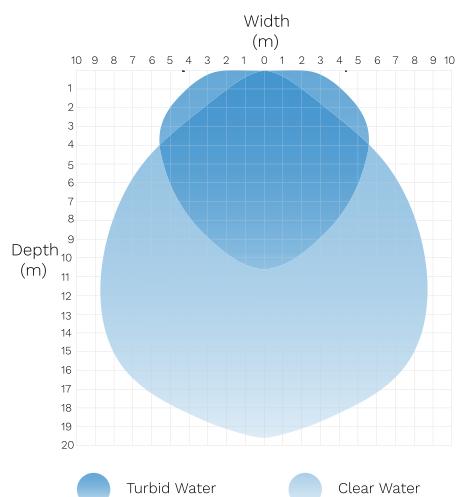
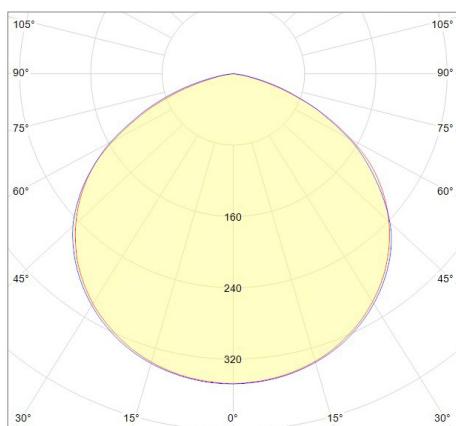
PHOTOMETRICS

TECHNICAL

Daylight White LED
CRI 70

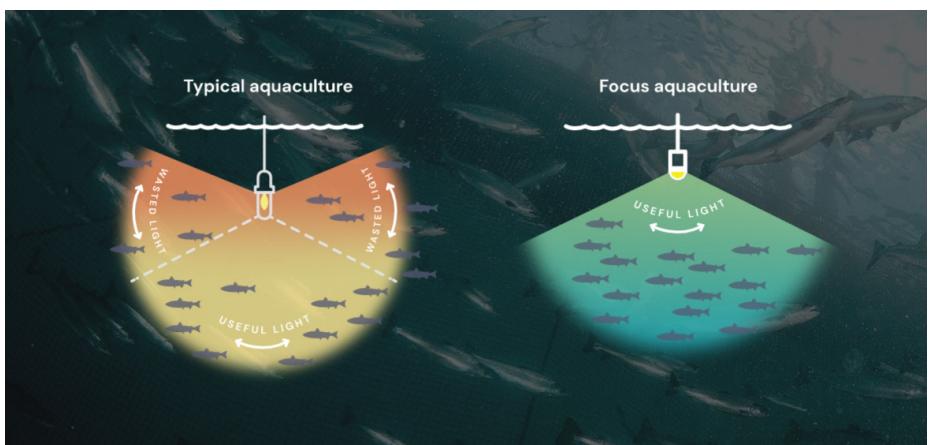
PERFORMANCE

Efficiency: 156 lm/W
Peak efficiency: 171lm/W at emitter
Max lumen output: 72000 lm
Typical lumen output: 66000 lm
Performance: +/-10%



LIGHT DISTRIBUTION

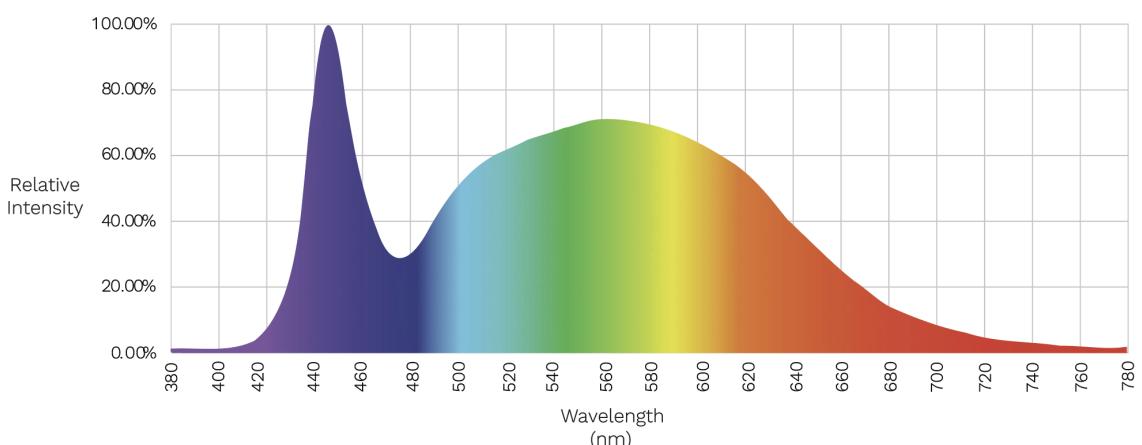
Circular with a beam angle of 110°



A typical aquaculture light

Focus Integral aquaculture luminaire

Focus Integral has a downwelling light for maximum light effectiveness and to help increase fish health outcomes.



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INSTALLATION

- Designed to retrofit to existing RCD protected circuits at your pen.
- Luminaire to be suspended underwater from a rope through the shackle.

CABLE

- Black CPE over EPDM marine grade rubber cable, UV resistant, oil resistant, and flame retardant.
- Each cable kit is supplied with the new suspension rod, which delivers tangle free strain relief.

CONTROL

- The Focus Integral drivers are not programmable and require external control to execute a soft start or soft stop sequence.
- Standard control offers a 30 minute soft start when powered.



PRODUCT CODE

FI2-A-40RX

STANDARD SPECIFICATION

Focus Integral daylight white LED on 40m cable

FI2-A-95RX-2

Focus Integral daylight white LED on 95m cable with dual anodes

*Specifications are subject to change without notice.



Focus

More light. Less work.

The ultimate high efficiency all-in-one aquaculture lighting solution, Focus Integral is designed for easy Plug & Play operation.

Contact us to find out more.



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Anti-twist suspension rod:

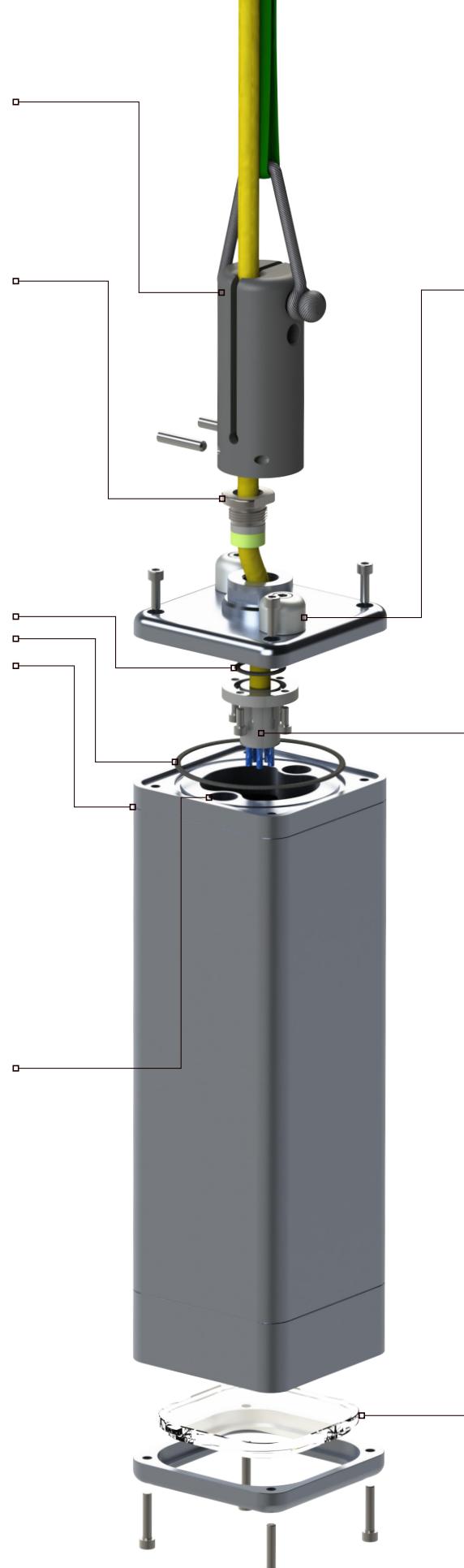
With a set screw fixing method, the improved suspension rod, with its trade mark strain relief, now puts less stress on the cable during assembly.

Marine grade cable gland design:

Customised to be robust and durable in the harshest marine environments: 316 Stainless steel hollow bolt with a Silicon gland, and marine grade Aluminium housing.

O-ring Seals:

Implementing best practice o-ring seals throughout ensures reliability at depth.



Dual anode

The dual anode design delivers flexibility to the anti-corrosion system, allowing the farmer to ramp up protection in harsher environments.

Water Stop:

This innovative seal stops water from entering the light through the cable, which is a common fault in aquaculture, especially at depth. This reduces cable costs by avoiding the use of expensive water blocking cable.

Our propriety assembly processes deliver a controlled cable replacement process, and delivers repeatable reliability over the full life cycle of the luminaire.

Rear assembly:

The rear assembly allows efficient access for cable replacement, and delivers better controls on maintenance costs.

Deep water lens:

Tested extensively, the deep water lens delivers strength and reliability under the pressure of 60m depth, and under the rugged use scenarios common to salmon farming.

The 10mm stepped glass design, which finishes flush with the front face of the metal ware, also removes any possibility of trapped air bubbles on the lens face, and removes the need for air vents on the front plate.



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