SubC Imaging

Scientific wavelengths of light | Designed for deepsea applications

The Aquorea Mk3 Colour is a high-efficiency, TTL synchronized **subsea LED** that can simultaneously operate as a lamp and strobe. Available in custom wavelengths, each LED Colour is designed for specific deepsea applications:

· Far-red assists in capturing deepwater natural species behavior
· Deep-blue is ideal for bio-fluorescence and leak detection
· Additional wavelengths are available. Contact us for more information.

SubC LEDs and lasers are plug-and-play when coupled with the **Rayfin camera** and are easily integrated into subsea ROV, observatory, drop, tow, and battery-deployed camera systems.

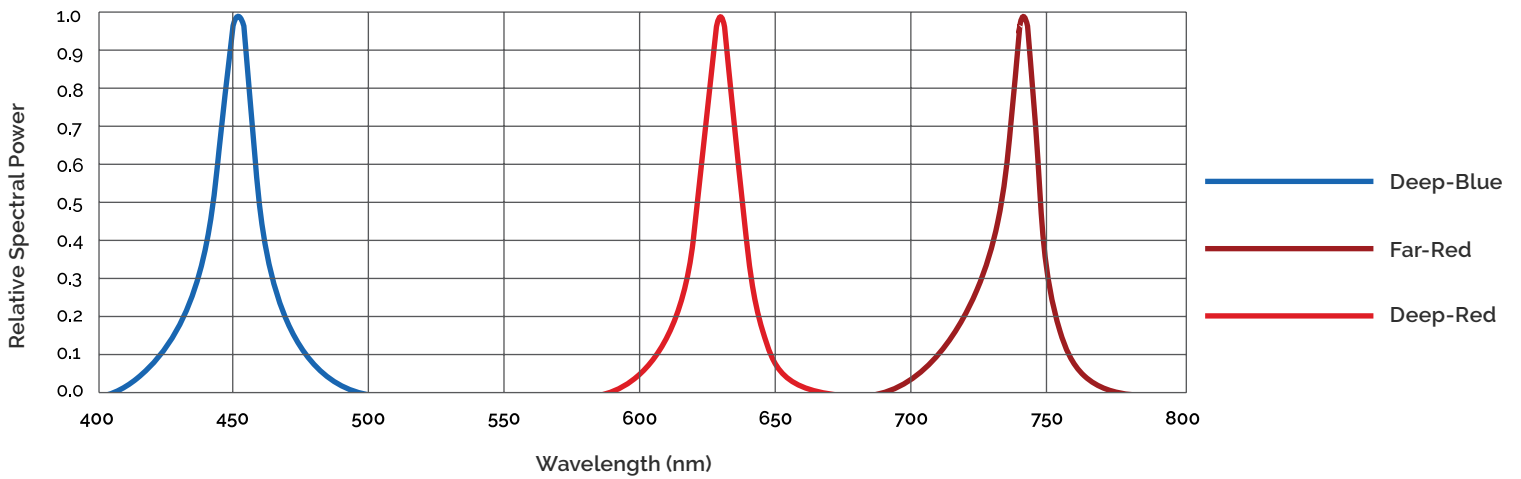| Specifications		Deep-Blue	Deep-Red	Far-Red
Light Specs	Wavelength	457nm	624nm	740nm
	Intensity	2200 lumens	8400 lumens	108 µmols/sec
	Beam Angle	80% of the light is within an 80˚ beam 85% of the light is within an 90˚ beam		
	Reaction Speed	Approx. 190 microseconds		
Electrical	Protection	Short Circuit, UV-OV-RV, ESD, OT		
	Thermal Protection	Auto Dim/Shutoff		
	Control	Serial RS-485		
	Strobe	TTL 5V (active high)		
	Power	18-32 Vdc / 48 Watts		
Mechanical	Min./Max. Temperature	-10˚C - +20˚C in water		
	Materials	Sapphire, Grade 5 Titanium		
	Weight	0.9kg in water, 1.5kg in air		
	Depth Rating	6000m		

Ti
Titanium construction

Smart subsea LED

80°
80° Beam Angle

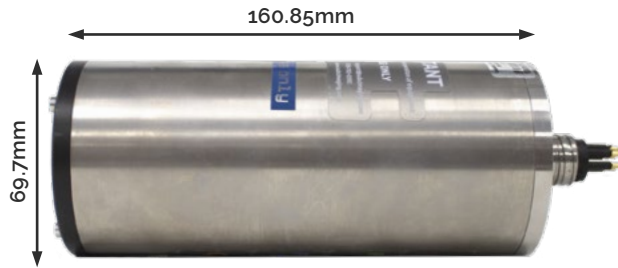## Typical Relative Spectral Power Distribution

Deep-Red & Far-Red

The advantage of far-red light lies in the fact that most deep-sea creatures are unable to see in the red spectrum. The Deep-red and Far-red LEDs allow researchers to view biota in their natural behavior.

Deep-Blue

The deep-blue LED was designed for underwater bio-fluorescence and leak detection.

Fluorescent chemicals absorb energy from light and then emit a different colour of light. Bio-fluorescence is the absorption and reemission of light from living organisms.

160.85mm

69.7mm

Pin #	MCBH5M
1	GND
2	PWR
3	Strobe enable
4	RS-485 B(-)
5	RS-485 A(+)

SubC is here to help you plan your next project.

Our equipment is available for direct purchase or rental.
To speak with an expert or schedule a demo please contact us.