DATE:

PROJECT:

FIRM:

INSTALLER:

NOTES:

High-output submersible luminaire with intelligent Full Spectrum RGBW LED's

The F-Series line of underwater marine lighting fixtures is designed to be mounted at a depth of up to 4.6 m (15 ft) below the water's surface to provide vibrant color and color-changing light in the water. With watertight aluminum bronze housings and hardware, Metro Marine's F-Series luminaires are perfect for mounting to yachts and boats. Leveraging Metro's rich legacy of innovation and leadership in optics & LED control technology, the F-Series underwater lighting fixtures introduce a unique LED array to the market with 72 H.O. LEDs per fixture, allowing close adjacent fixture placement where fully-mixed, uniform light is important. Our F-Series RGBW Luminaires also integrate a separate white LED in each of the 18 individually optically lensed RGBW LED configurations, creating higher-quality whites and richer color blends than possible with traditional RGB+White fixtures.

The F-BME1-V-FS-45 is a superior underwater RGBW LED luminaire with 45° optical lensing for lighting boat and yachts ranging from 10 m (32 ft) to 30 m (100 ft) with uniform color control, and high efficiency.

• Rugged and watertight: Metro's aluminum bronze housing and hardware is designed for submersion in water to a depth of 4.6 m (15 ft).

• Close mixing distance: F-Series luminaires feature t45° beam angle with 72 LEDs, utilizing custom optical lenses. This unique design virtually eliminates pixilation and shortens mixing distance dramatically, providing beautiful consistent light, even at close range.

• Unified power and data cable: Each F-Series RGBW luminaire comes with a 3m (9.84 ft.) unified power and data cable to minimize wiring. Our F-Series RGBW luminaires are designed for use with Metro Marine's F-HB-2-FS5 power/data distribution Hubs.

• Temperature monitoring: The F-Series Luminaires have an internal temperature monitoring system that automatically reduces operation to protect the fixtures from damage in extreme operating temperatures.

• High output, underwater: This submersible luminaire offers a full range of 22 million RGBW variations of colors with an output of over 3200 lumens. Long-life state-of-the-art Nichia LEDs significantly reduce or eliminate required maintenance, a major advantage for underwater installations.

• Easily controlled: Metro Marine's F-Series luminaires work seamlessly with Metro's MM-CC-V1 Control Center /MFD Interface, as well as Metro's full range of other RGBW controllers.

For detailed product information, please refer to the F-Series Product Guide at www.metromarinelighting.com/support

SPECIFICATIONS*

*Due to continuous improvements and innovations, specifications may change without notice.

Output

Beam Angle: 45°

Lumens per channel: R: 229.25 lm / G: 1527.8 lm / B: 173.72 lm / W: 1719.9 lm

Lumens (Maximum): 3174.4 lm

Efficiency (lm/W): Maximum 37.05 lm/W

LED Channels: Red/Green/Blue/6500K

Electrical

Input Voltage: 10VDC - 30VDC

Power Consumption: 85.68 W (Maximum)

For additional Surge Protection Requirements for LED Lighting Systems, please refer to www.metromarinelighting.com/support

Control

Interface: Control Center MM-CC-V1

To see the full range of controllers or third-party controllers available, please visit www.metromarinelighting.com/products

Lumen Maintenance

Threshold Ambient Temperature Reported Calculated

L50 25 °C > 66,000 > 100,000 50 °C > 66,000 > 100,000

Physical

Dimensions: W: 74.08mm(2.91″) H: 183.72mm(7.23″) D: 27.90mm(1.09″)

Net Weight: 1.55 kg (3.41 lb)

Housing Material: Die-cast marine aluminum bronze, polished finish

Lens: Clear Quartz

Luminaire Connections: Integral male/female IP68 connectors.

Temperature Ranges

-40 to 50 °C (-40 to 122 °F) Operating

-20 to 50 °C (-4 to 122 °F) Startup

-40 to 80 °C (-40 to 176 °F) Storage

Corrosion Resistance

Complies with ASTM B117 standard for > 1,500 hours
Humidity 0 to 95%, non-condensing.

Luminaire Run Lengths

To calculate luminaire run lengths and total power consumption for your specific installation, contact www.metromarinelighting.com/support

Certification and Safety

Approbation, Lloyd's Register(Pending), ABS(Pending) , ABYC Compliant.
Environment Wet Location, IP68 Submersible up to 4.6 m (15 ft)

LUMINAIRE and ACCESSORIES

Use Item Number when ordering in North America

Luminaire Item Number

F-Series RGBW, ITEM#: F-BME1-V-FS-45, Luminaire only. Accessories sold separately.

Accessories

F-Series Full Spectrum Hub: F-HB-2-FS5
Control Center: MM-CC-V1
Full Spectrum, 3 Meter, Jumper Cable: F-FS-3M-EX
Full Spectrum, 8 Meter, Data Cable: DATA-8M-EX
Full Spectrum, 15 Meter, Data Cable: DATA-15M-EX

11 Smith Street Englewood, NJ 07631
212-477-2727 info@metromarinelighting.com
www.metromarinelighting.com

This product is covered by U.S. Patent No(s) 10,436,437; 10,517,972; 10,786,584; 12,092,309
Additional patents pending.
© 2025 Metro Marine LLC, All Rights Reserved.

Page 3