

Underwater LiFi Transmitter

General Description

The Underwater LiFi Transmitter is a custom-design front-end for underwater visible light communications (UVLC). It has 20 MHz bandwidth to support even the most demanding video streaming applications. The transmitter has a powerful 1W blue LED with an interchangeable lens mechanism.

Features

- Plug-and-play solution for VLC R&D
- Compatible with NI platforms USRP and PXI
- 20 MHz bandwidth
- Interchangeable lens mechanism
- 1W Blue power LED
- 50 Ohm I/O impedance



Transmitter Module

Specifications

DC Input Voltage (Max)	5 V
AC Input Voltage (Max)	200m Vpp
Input Impedance	50 Ohms
3dB Bandwidth	100kHz to 20 MHz
Optical Output (Max)	1W Blue LED
Operating Temperature	5° to 35° C
Storage Temperature	0° to 50° C
Package	Underwater LiFi Transmitter 1" Lens Holder 5V Power Supply
Part Number	ULIFITXFE

Optical Specifications

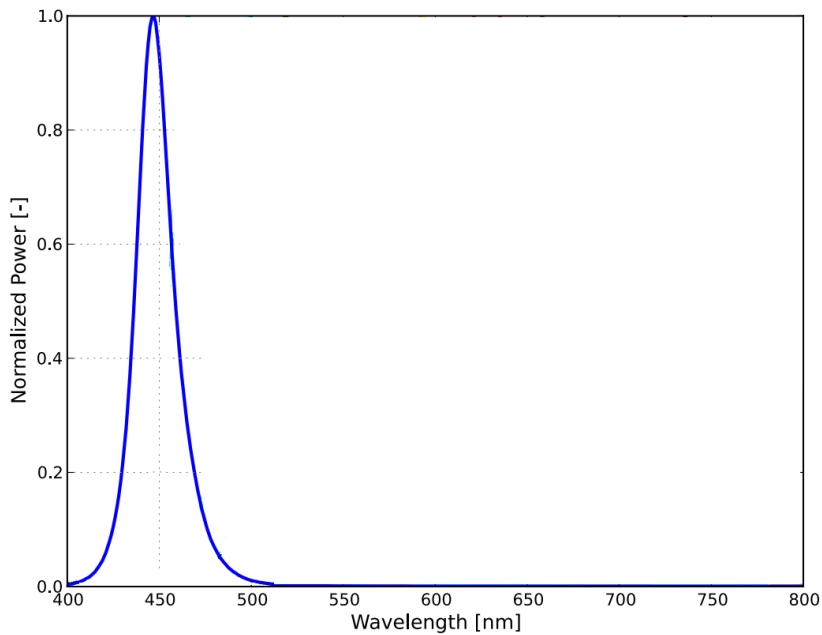


Fig. 1 - Optical Output Spectrum

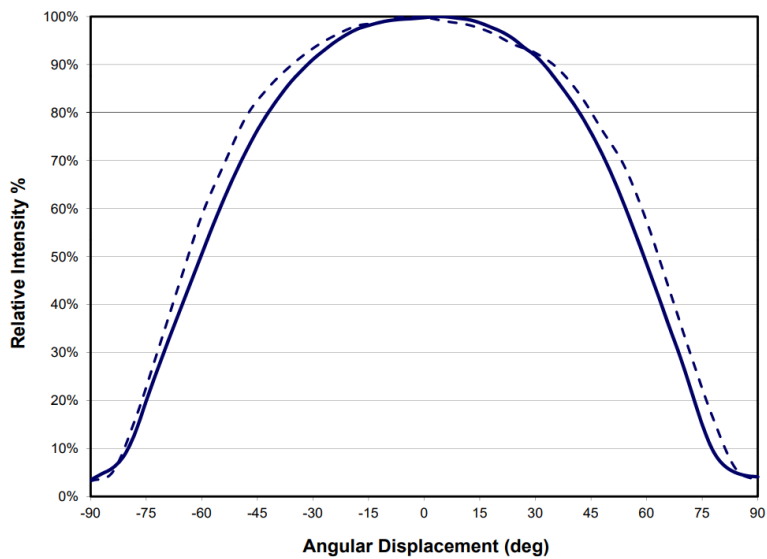


Fig. 2 - Typical Radiation Pattern

Electrical Specifications

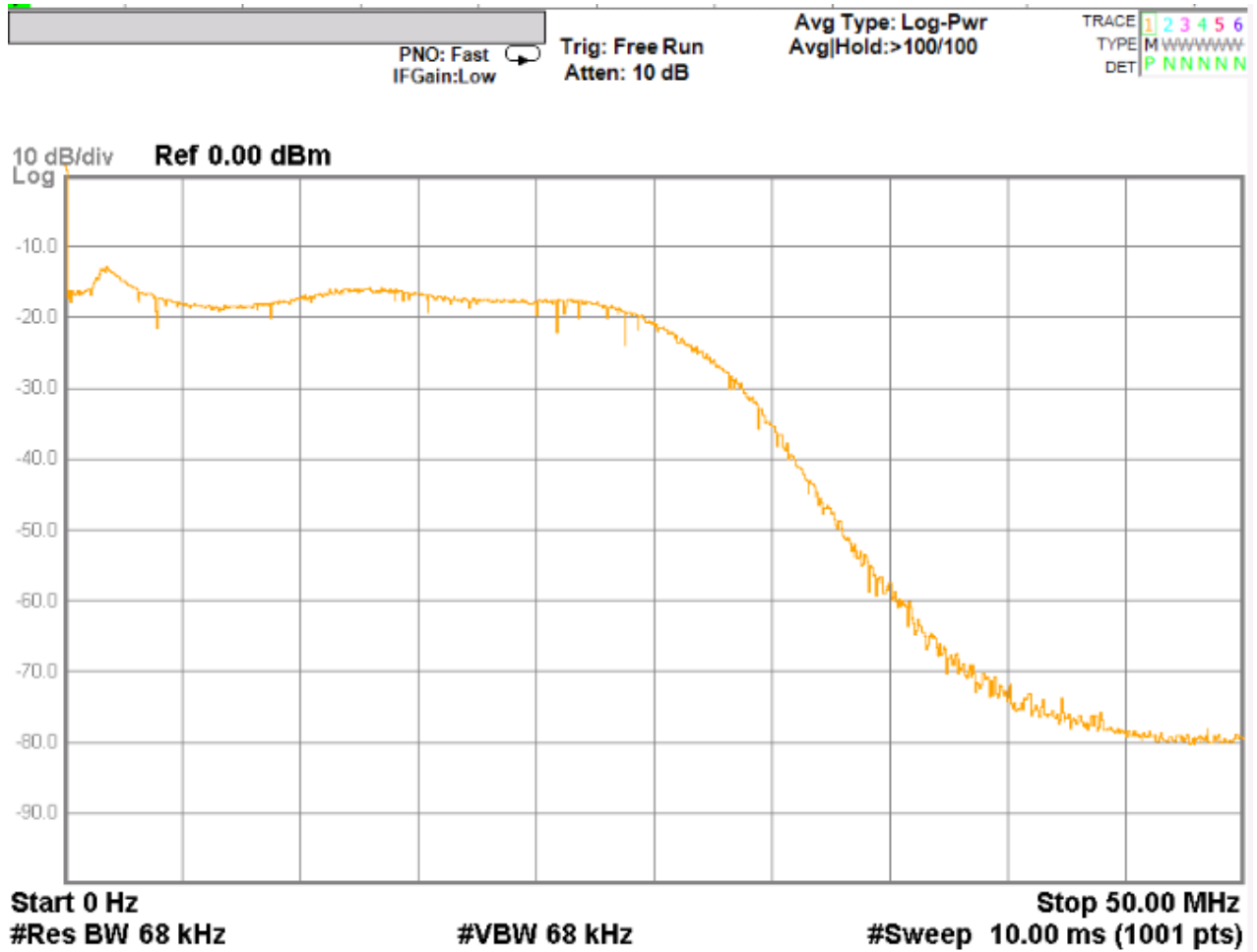


Fig. 3 – Frequency Response to Swept Signal
(Measured with Hyperion Technologies LiFi Receiver)

Mechanical Specifications

