

# Transmitter Power Output Worksheet

**Call letters:** WYBX (FM)  
**City of License:** Key West, FL  
**Channel:** CH202A (88.3 MHz)  
**File No:** License Modification  
**Facility ID:** 90786  
**Applicant:** Bible Broadcasting Network, Inc.

**Effective Radiated Power (ERP):** 1.900 kW

**Antenna Make:** Shively Labs (SHI)  
**Antenna Model:** 6812DSHP-2-CF  
**No of Elements:** Two (2)  
**Antenna COR AGL:** 31 meters AGL  
**Antenna COR AMSL:** 32 meters AMSL  
**Max Input Power:** 2.00 kW

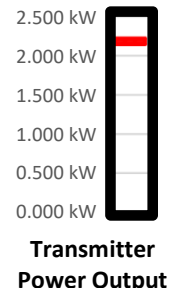
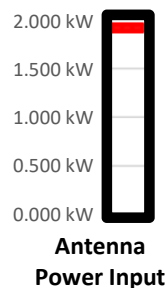
**Power Gain:** 1.01

**Antenna Gain:** 0.043 dBd

**Calculated Antenna Input Power:** 1.881 kW

**Transmitter Rated Power:** 2.150 kW

**Transmitter Make/Model:** BE-2C



**Power Gain to Antenna gain (dBd) Conversion:**  
 $= \text{Log}[\text{power gain}] * 10$

## Inventory of System / Insertion Losses

Explanation	Component Make/Model	Length	Loss
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
7/8" Foam Feedline	LDF5-50B (or equivalent) (0.323 dB/100 ft)	167 ft	-0.539 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

**TOTAL SYSTEM GAIN/LOSS:** -0.54 dBd  
**CALCULATED TRANSMITTER POWER OUTPUT:** 2.150 kW  
(1 / [[10<sup>^</sup>( dB/10)/ERP]] )