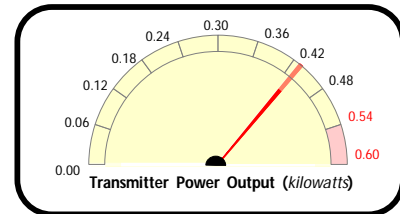


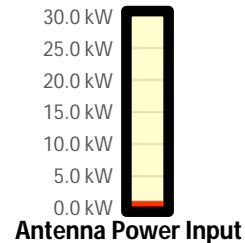
Transmitter Power Output Worksheet

Call letters: KYFG(FM).L (License Modification)
City of License: Omaha, NE
Channel: CH205A (88.9 MHz)
File No: BLEd-20021218AAZ
Facility ID: 50311
Applicant: Bible Broadcasting Network, Inc.



Effective Radiated Power (ERP): 1.500 kW

Antenna Make: Shively Labs
Antenna Model: 6810-3R-H/V-DA
No of Elements: Three (3)
Antenna COR AGL: 134 meters AGL
Antenna COR AMSL: 485 meters AMSL
Max Input Power: 30.000 kW
Power Gain: 4.774
Antenna Gain: 6.789 dBd
Calculated Antenna Input Power: 0.314 kW
Transmitter Rated Power: 0.600 kW
Transmitter Make/Model: Nautel VX600



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

Inventory of System / Insertion Losses

Explanation	Component Make/Model	Length	Loss
Typical 1 5/8" Flange Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Feedline Tower (1 5/8" Air)	Andrew HJ7-50A (0.203 dB/100 ft)	419 ft	-0.851 dBd
Typical 1 5/8" Flange Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
AM Base Isocoupler	Kintronic Model FMC-7.5 Isocoupler	n/a	-0.200 dBd
Typical 1 5/8" Flange Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Feedline Ground (1 5/8" Air)	Andrew HJ7-50A (0.203 dB/100 ft)	27 ft	-0.055 dBd
Typical 1 5/8" Flange Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Typical 1 5/8" Elbow Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1 5/8" to 7/8" Reducer/Adaptor	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Typical 7/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Shortening Stub	Xenirad model XEN-078FL	n/a	-0.020 dBd
Wattmeter Line Section	Bird BPME Line Section Model BPME7DD-VM	n/a	-0.050 dBd
Typical 7/8" Elbow Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Typical 7/8" EIS Flange Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper to Transmitter (1/2" foam)	Andrews LDF4-50A (0.661 dB/100 ft)	3 ft	-0.020 dBd
Typical 7/16" DIN Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: 5.39 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 0.433 kW
 (1 / [[10^(dB/10)/ERP]])