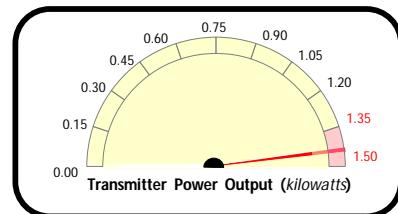


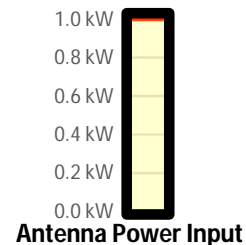
# Transmitter Power Output Worksheet

Call letters: KYHK (FM) .C  
 City of License: Kearney, NE  
 Channel: CH208A (89.5 MHz)  
 File No: LMS-0000167304  
 Facility ID: 762136  
 Applicant: Bible Broadcasting Network, Inc.



Effective Radiated Power (ERP): 1.000 kW

Antenna Make: Nicom USA, Inc.  
 Antenna Model: BKG88-2L(NDA)  
 No of Elements: Two (2)  
 Antenna COR AGL: 84 meters AGL  
 Antenna COR AMSL: 776 meters AMSL  
 Max Input Power: 1.000 kW  
 Power Gain: 0.92  
 Antenna Gain: -0.362 dBd  
 Calculated Antenna Input Power: 1.087 kW  
 Transmitter Rated Power: 1.500 kW  
 Transmitter Make/Model: Nautel VX1.5



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 7/8" EIS Flange Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Main Feedline (7/8" foam)	Cablewave (RFS) LCF78-50JA (0.354 dB/100 ft)	289 ft	-1.023 dBd
Typical 7/8" EIS Flange 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 BDME Line Section Model BPME7DD-VLP	n/a	-0.050 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)	4 ft	-0.026 dBd
Typical 7/8" EIS Flange Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Typical 7/16" DIN Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -1.58 dBd  
 CALCULATED TRANSMITTER POWER OUTPUT: 1.439 kW  
 $(1 / [10^{(-1.58/10)} \text{ dB/10/ERP}])$