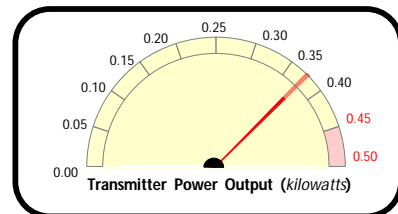


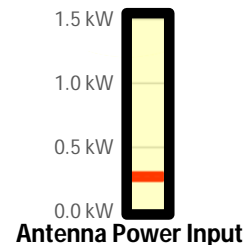
# Transmitter Power Output Worksheet

Call letters: K258AE.C  
 City of License: Hutchinson, KS  
 Channel: CH258D (99.5 MHz)  
 File No: LMS(cp)-0000233340  
 Facility ID: 5196  
 Applicant: Bible Broadcasting Network, Inc.



Effective Radiated Power (ERP): 0.250 kW

Antenna Make: Shively Labs (SHI)  
 Antenna Model: 6812B-2(FW)  
 No of Elements: Two (2)  
 Antenna COR AGL: 61.0 meters AGL  
 Antenna COR AMSL: 527.3 meters AMSL  
 Max Input Power: 1.500 kW  
 Power Gain: 1.01  
 Antenna Gain: 0.043 dBd  
 Calculated Antenna Input Power: 0.248 kW  
 Transmitter Rated Power: 0.500 kW  
 Transmitter Make/Model: Crown FM500



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 "Type N" End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Main Feedline (1/2" Foam)	Altelix AX400	(1.500 dB/100 ft)	33 ft	-0.495 dBd
Typical "Type N" Splice Connectors	Generic (2@0.02 dB each)		n/a	-0.040 dBd
Main Feedline (1/2" Foam)	Altelix AX400	(1.500 dB/100 ft)	51 ft	-0.765 dBd
Typical "Type N" End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
External Filter	Shively Model 2914-1		n/a	-0.360 dBd
Typical "Type N" End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Jumper to Transmitter (1/2" Foam)	RG214 Jumper	(2.200 dB/100 ft)	3 ft	-0.066 dBd
Typical "Type N" End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -1.76 dBd  
 CALCULATED TRANSMITTER POWER OUTPUT: 0.375 kW  
 (1 / [[10<sup>(-1.76/10)</sup>]/ERP])