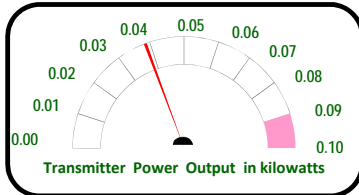
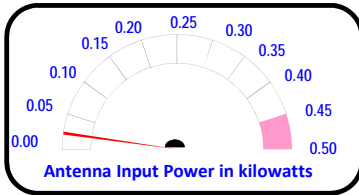


TPO Calculation Summary

Main Antenna Operation

Call letters: W293BQ
City of License: Harrisonburg, VA
Frequency: CH293D - 106.5 MHz
File No: BPFT-20100323AHY
Facility ID: 5135
Applicant: Bible Broadcasting Network, Inc.



Operating Effective Radiated Power (ERP): 0.010 kW

Antenna Make: SWR Inc.
Antenna Model: FM-1
No of Elements: One (1)
Antenna COR AGL: 5 meters AGL
Antenna COR AMSL: 993 meters AMSL
Max Input Power: 0.5 kW
Power Gain: 0.441

$\text{Log}[\text{power gain}] * 10 = \text{Antenna Gain:}$ -3.556 dB

Calculated Antenna Input Power: 0.023 kW

Transmitter Make/Model: TBD

Transmitter Rated Power: 0.1 kW

System Loss Info:

Description	Component Make/Model	Length	Loss
1/2 Inch End Connector	Generic (1@0.02 dB each)		-0.020 dB
Main Antenna Feedline	Andrew 1/2" LDF4-50A (Foam) (0.683 dB/100 ft)	23 ft	-0.157 dB
1/2 Inch End Coupler	Generic (1@0.02 dB each)		-0.020 dB
Cavity Filter	Telewave Model TWPC-1005-1		-2.000 dB
1/2 Inch End Coupler	Generic (1@0.02 dB each)		-0.020 dB
Transmitter Side Jumper	RG8 (2.026 dB/100 ft)	4 ft	-0.081 dB
1/2 Inch End Connector	Generic (1@0.02 dB each)		-0.020 dB

TOTAL SYSTEM GAIN/LOSS: -5.874 dB

$1 / [10^{(-5.874/10)}] = \text{CALCULATED TRANSMITTER POWER OUTPUT:}$ 0.039 kW

Munn-Reese, Inc.

Broadcast Engineering Consultants

Coldwater, MI 49036