

TPO Calculation Summary

Main Antenna Operation

Call letters: WYBQ(FM)
City of License: Leesport, PA
Frequency: CH202A - 88.3 MHz
File No: BNPED-20071019APD
Facility ID: 175920
Applicant: Bible Broadcasting Network, Inc.

Operating Effective Radiated Power (ERP): 0.670 kW

Antenna Make: SWR

Antenna Model: FMEEDS/1-DA

No of Elements: one (1)

Antenna COR AGL: 72 meters AGL

Antenna COR AMSL: 240 meters AMSL

Power Gain: 2.662

$\text{Log}[\text{power gain}] * 10 = \text{Antenna Gain:}$ 4.252 dB

Calculated Antenna Input Power: 0.252 kW

System Loss Info:

<u>Description</u>	<u>Component Make/Model</u>	<u>Length</u>	<u>Loss</u>
7/8 Inch End Connector	Generic (1@0.02 dB each)		-0.020 dB
Main Antenna Feedline (Tower)	Andrew 7/8" AVA5-50 (Foam) (0.317 dB/100 ft)	277 ft	-0.878 dB
7/8 Inch End Connector	Generic (1@0.02 dB each)		-0.020 dB

TOTAL SYSTEM GAIN/LOSS: 3.334 dB

$1 / [10^{(3.334/10)}] = \text{CALCULATED TRANSMITTER POWER OUTPUT:}$ 0.311 kW