

TPO Calculation Summary

Main Antenna Operation

Call letters: WYFY(FM)
City of License: Cambridge, OH
Frequency: CH201A - 88.1 MHz
File No: BMPED-20110825AAM
Facility ID: 172915
Applicant: Bible Broadcasting Network, Inc.

Operating Effective Radiated Power (ERP): 1.500 kW

Antenna Make: SWR
Antenna Model: FMECR/2-PLUS-DA
No of Elements: One (1)
Antenna COR AGL: 61 meters AGL
Antenna COR AMSL: 327 meters AMSL
Power Gain: 1.827

Log[power gain]*10 = Antenna Gain: 2.617 dB
Calculated Antenna Input Power: 0.821 kW

<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	Andrew 7/8" AVA5-50A (virt-AIR)	(0.317 dB/100 ft) 203 ft	-0.644 dB
7/8 Inch End Coupler	Generic (1 @0.02 dB each)		-0.020 dB
Transmitter Side Jumper	RG-214	(2.084 dB/100 ft) 9 ft	-0.188 dB
7/8 Inch End Connector	Generic (1 @0.02 dB each)		-0.020 dB

TOTAL SYSTEM GAIN/LOSS: 1.726 dB
 $1 / [10^{(1.726/10)} / \text{ERP}] =$ CALCULATED TRANSMITTER POWER OUTPUT: 1.008 kW

Munn-Reese, Inc.

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