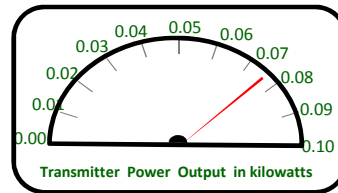
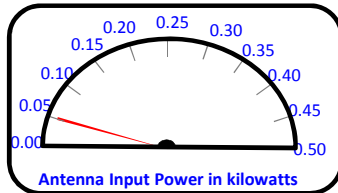


TPO Calculation Summary

Main Antenna Operation

Call letters: W241BP
City of License: Kissimmee, FL
Frequency: CH241D - 96.1 MHz
File No: BMPFT-20130611AAJ
Facility ID: 158244
Applicant: Bible Broadcasting Network, Inc.



Operating Effective Radiated Power (ERP): 0.019 kW

Antenna Make: SWR Inc.
Antenna Model: FMEC/1
No of Elements: One (1)
Antenna COR AGL: 99 meters AGL
Antenna COR AMSL: 126 meters AMSL
Max Input Power: 0.5 kW
Power Gain: 0.441

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

Calculated Antenna Input Power: 0.043 kW

Transmitter Make/Model: Crown FM100

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 (Tower)	Andrew 1/2" LDF4-50A (Foam) (0.648 dB/100 ft)	342 ft	-2.216 dB
1/2 Inch End Connector	Generic (1@0.02 dB each)		-0.020 dB
Polyphaser #IS-1583	Lightning Protection Kit		-0.100 dB
1/2 Inch End Connector	Generic (1@0.02 dB each)		-0.020 dB
Main Antenna Feedline (Ground)	LMR 400 (Foam) (1.200 dB/100 ft)	16 ft	-0.192 dB
1/2 Inch End Connector	Generic (1@0.02 dB each)		-0.020 dB

TOTAL SYSTEM GAIN/LOSS: -6.144 dB

$1 / [10^{(-6.144/10)}] = \text{CALCULATED TRANSMITTER POWER OUTPUT: } 0.078 \text{ kW}$

Munn-Reese, Inc.

Broadcast Engineering Consultants

Coldwater, MI 49036