TPO Calculation Summary
Main Antenna Operation

Call letters: W299CY
City of License: Charleston, SC
Frequency: CH299 (98.5 MHz)
File No: BMPFT-2019060AAH
Facility ID: 202463
Applicant: The Moody Bible Institute of Chicago

Operating Effective Radiated Power (ERP): 0.250 kW

Antenna Make: SWR
Antenna Model: FMEC/2-Plus 1/2 Wave SP
No of Elements: 2
Power Gain: 0.695
Log[power gain]*10 = **Antenna Gain:** -1.580 dBd
Calculated Antenna Input Power: 0.360 kW

System Loss Info:

Description	Component Make/Model		Length	Loss
Main Feedline	Andrew LCF78-50JA	(0.362 dB/100 ft)	400 ft	-1.448 dBd
Main Feedline(ground)	Andrew LCF78-50JA	(0.362 dB/100 ft)	364 ft	-1.318 dBd
FM Combiner	Kintronics			-1.000 dBd
ISO Coupler	ISO-100-FM-716DIN			-0.400 dBd

TOTAL SYSTEM GAIN/LOSS: -5.75 dBd
1 / [[10^[dB/10]/ERP]] = **CALCULATED TRANSMITTER POWER OUTPUT:** 0.939 kW

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