

TPO Calculation Summary

Main Antenna Operation

Call letters: WVQC-LP
City of License: Cincinnati, OH
Frequency: CH239L1 (95.7 MHz)
File No: BPL-20180117ABP
Facility ID: 132345
Applicant: Music Resource Center -- Cincinnati

Operating Effective Radiated Power (ERP): 0.028 kW

Antenna Make: SWR
Antenna Model: FMEC/1
No of Elements: 1
Power Gain: 0.441

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

Calculated Antenna Input Power: 0.063 kW

System Loss Info:

<u>Description</u>	<u>Component Make/Model</u>	<u>Length</u>	<u>Loss</u>
Main Feedline	1/2" Foam Andrew LDF4-50 (0.646 dB/100 ft)	131 ft	-0.847 dBd

Type N End Connector	Generic (2@0.02 dB each)	-0.040 dBd
Lightning Arrestor	Generic (1@0.1 dB each)	-0.100 dBd

TOTAL SYSTEM GAIN/LOSS: -4.54 dBd

$1 / [10^{(-4.54/10)}] = \text{CALCULATED TRANSMITTER POWER OUTPUT: } 0.080 \text{ kW}$

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