

TPO Calculation Summary

Main Antenna Operation - w/addition of Bandpass filter

Call letters: W262DM
City of License: Elyria, OH
Frequency: CH262D (100.3 MHz)
File No:
Facility ID: 202991
Applicant: Elyria-Lorain Broadcasting Co.

Operating Effective Radiated Power (ERP): 0.025 kW

Antenna Make: Nicom
Antenna Model: BKG77-2
No of Elements: 2
Antenna COR AGL: 200 meters AGL
Antenna COR AMSL: 455 meters AMSL
Power Gain: 0.9

Log[power gain]*10 = Antenna Gain: -0.458 dBd
Calculated Antenna Input Power: 0.028 kW

System Loss Info:

Description	Component Make/Model	Length	Loss
Jumper to Antenna	Andrew 1/2" Foam (1.038 dB/100 ft)	6 ft	-0.062 dBd
Connector	Generic (2@0.02db/ea)		-0.040 dBd
Feedline	RFS 7/8" Cellflex (0.345 dB/100 ft)	938 ft	-3.236 dBd
Connector	Generic (2@0.02db/ea)		-0.040 dBd
Jumper to Polyphasor	Andrew 7/8" Superflex (0.345 dB/100 ft)	6 ft	-0.021 dBd
Polyphasor	IS -50NX-CO-MA		-0.100 dBd
Connector	Generic (2@0.02db/ea)		-0.040 dBd
Jumper to Transmitter	Andrew 7/8" Superflex (0.345 dB/100 ft)	10 ft	-0.035 dBd
Connector	RFS 7/8" to N Connector (2 @ .05 db ea)		-0.100 dBd
Connector	Generic (4@0.02db/ea)		-0.080
Band Pass Filter			-0.650
Jumpers	Andrew 1/2" Foam (1.038 dB/100 ft)	20 ft	-0.208 dBd

TOTAL SYSTEM GAIN/LOSS: -5.069 dBd
 $1 / [(10^{(-5.069/10)})/ERP] =$ CALCULATED TRANSMITTER POWER OUTPUT: 0.080 kW