

TPO Calculation Summary

Main Antenna Operation

Call letters: W255DF
City of License:
Frequency:
File No:
Facility ID:
Applicant:

Operating Effective Radiated Power (ERP): 0.250 kW

Antenna Make: Nicom USA, Inc. (NIC)

Antenna Model: BKG77

No of Elements: 1

Power Gain: 0.47

$\text{Log}[\text{power gain}] * 10 = \text{Antenna Gain: } -3.279 \text{ dBd}$

Calculated Antenna Input Power: 0.532 kW

System Loss Info:

<u>Description</u>	<u>Component Make/Model</u>	<u>Length</u>	<u>Loss</u>
Type N End Connector	Generic (2@0.02 dB each)		-0.040 dBd
Jumper	LDF4-50 (1/2" foam) (0.630 dB/100 ft)	6 ft	dBd
Main Feedline	RFS LCF78-50JA (7/8" foam) Foam) (0.650 dB/100 ft)	175 ft	-1.138 dBd
Jumper	LDF4-50 (1/2" foam) (0.630 dB/100 ft)	6 ft	dBd

TOTAL SYSTEM GAIN/LOSS: -4.46 dBd

$1 / [10^{(-4.46/10)}] = \text{CALCULATED TRANSMITTER POWER OUTPUT: } 0.698 \text{ kW}$

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