

# TPO Calculation Summary

## Main Antenna Operation

Call letters: W239AY  
City of License: Atlanta, GA  
Frequency: CH261 (100.1 MHz)  
File No: BMPFT-20190529AAN  
Facility ID: 156732  
Applicant: Prieto Broadcasting, Inc.

Operating Effective Radiated Power (ERP): 0.099 kW

Antenna Make: NIC  
Antenna Model: BKG1/P (Slant 45)  
No of Elements: 1  
Power Gain: 0.5

Log[power gain]\*10 = Antenna Gain: -3.010 dBd  
Calculated Antenna Input Power: 0.198 kW

### System Loss Info:

| <u>Description</u> | <u>Component Make/Model</u> | <u>Length</u>            | <u>Loss</u>                     |
|--------------------|-----------------------------|--------------------------|---------------------------------|
| Main Feedline      | Andrew LCF78-50JA           | (0.349 dB/100 ft) 455 ft | -1.588 dBd<br>dBd<br>dBd<br>dBd |

TOTAL SYSTEM GAIN/LOSS: -4.60 dBd  
 $1 / [10^{(-4.60/10)}] =$  CALCULATED TRANSMITTER POWER OUTPUT: 0.285 kW

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