

Transmitter Power Output Worksheet

Call letters: WQMZ (FM) Auxiliary
City of License: Charlottesville, VA
Channel: CH236A (95.1 MHz)
File No: BXPB-20170518AAP
Facility ID: 10653
Applicant: Tidewater Communications, LLC

Effective Radiated Power (ERP): 4.200 kW

Antenna Make: Shively Labs (SHI)
Antenna Model: 6832-2
No of Elements: Two (2)
Antenna COR AGL: 125 meters AGL
Antenna COR AMSL: 234 meters AMSL
Max Input Power: 5.00 kW

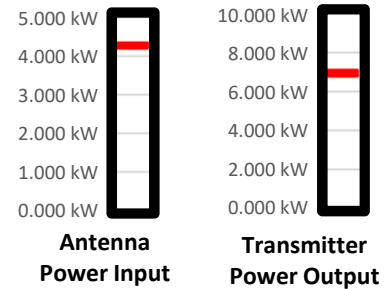
Power Gain: 0.994

Antenna Gain: -0.026 dBd

Calculated Antenna Input Power: 4.225 kW

Transmitter Rated Power: 10.000 kW

Transmitter Make/Model: Harris ZX10,000-FLX



Power Gain to Antenna gain (dBd) Conversion:
 $= \text{Log}[\text{power gain}] * 10$

Inventory of System / Insertion Losses

Explanation	Component Make/Model	Length	Loss
DIN End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
7/8" Foam Feedline	Andrew LDF5-50B (0.335 dB/100 ft)	555 ft	-1.859 dBd
DIN End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1 5/8" Motorized RF Switch	Dielectric Model DC 60000-200 Series	n/a	-0.100 dBd
DIN End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1 5/8" Rigid Line to Transmitter	Standard Rigid Line (#561) (0.186 dB/100 ft)	20 ft	-0.037 dBd
DIN End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -2.10 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 6.816 kW
 (1 / [[10[^](dB/10)/ERP]])