

Transmitter Power Output Worksheet

Call letters: WUVA (FM)
City of License: Charlottesville, VA
Channel: CH224A (92.7 MHz)
File No: BPH-20170120AAQ
Facility ID: 74161
Applicant: Saga Communications of Charlottesville, LLC

Effective Radiated Power (ERP): 0.610 kW

Antenna Make: Shively Labs (SHI)
Antenna Model: 6813-1
No of Elements: 1
Antenna COR AGL: 44 meters AGL
Antenna COR AMSL: 478 meters AMSL
Max Input Power: 3.00 kW

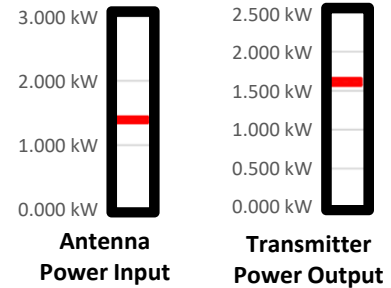
Power Gain: 0.45

Antenna Gain: -3.468 dBd

Calculated Antenna Input Power: 1.356 kW

Transmitter Rated Power: 2.500 kW

Transmitter Make/Model: Nautel VS2.5



Power Gain to Antenna gain (dBd) Conversion:
=Log[power gain]*10

Inventory of System / Insertion Losses

Explanation	Component Make/Model	Length	Loss
7/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
7/8" Air Feedline	Cablewave HCA78-50J (0.359 dB/100 ft)	171 ft	-0.614 dBd
7/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -4.12 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 1.576 kW
(1 / [[10^(dB/10)/ERP]])