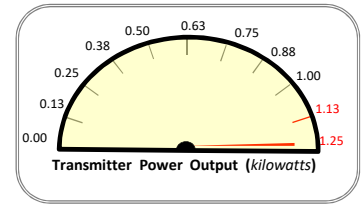


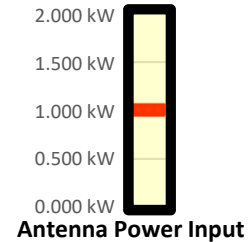
Transmitter Power Output Worksheet

Call letters: WPVQ(FM) .C (Auxiliary)
City of License: Greenfield, MA
Channel: CH237A (95.3 MHz)
File No: BXPB-20180406ABB
Facility ID: 54780
Applicant: Saga Communications of New England, LLC



Effective Radiated Power (ERP): 0.450 kW

Antenna Make: Phelps-Dodge
Antenna Model: CFM-1
No of Elements: One (1)
Antenna COR AGL: 83 meters AGL
Antenna COR AMSL: 462 meters AMSL
Max Input Power: 2.00 kW
Power Gain: 0.47
Antenna Gain: -3.279 dBd
Calculated Antenna Input Power: 0.957 kW
Transmitter Rated Power: 1.250 kW
Transmitter Make/Model: Armstrong FM-1000SC



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

Inventory of System / Insertion Losses

Explanation	Component Make/Model	Length	Loss
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
7/8" Air Feedline (Tower)	Cablewave HCA78-50J (0.350 dB/100 ft)	290 ft	-1.015 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper to Transmitter	Helix LDF5-50A (Foam) (0.645 dB/100 ft)	10 ft	-0.065 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -4.42 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 1.245 kW
 $(1 / [10^{(4.42/10)}] \text{ ERP})$