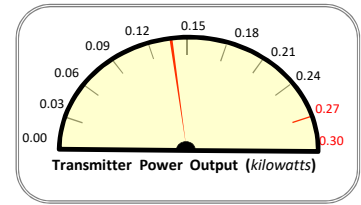


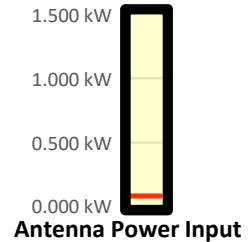
Transmitter Power Output Worksheet

Call letters: W268CZ.C
 City of License: Northampton, MA
 Channel: CH268D (101.5 MHz)
 File No: BNPFT-20180314ABW
 Facility ID: 200012
 Applicant: Saga Communications of New England, LLC



Effective Radiated Power (ERP): 0.235 kW

Antenna Make: Nicom USA, Inc. (NIC)
 Antenna Model: BKG1/P-3L-DA(0.85WL) (VERTICAL ONLY)
 No of Elements: Three (3)
 Antenna COR AGL: 69 meters AGL
 Antenna COR AMSL: 259 meters AMSL
 Max Input Power: 1.50 kW



Power Gain: 2.81

Antenna Gain: 4.487 dBd

Calculated Antenna Input Power: 0.084 kW

Transmitter Rated Power: 0.300 kW

Transmitter Make/Model: GatesAir FAX300

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(s)	Generic (3@0.02 dB each)	n/a	-0.060 dBd
Interbay Antenna Leads	RG-213 (3 x 9 ft Leads) (2.000 dB/100 ft)	27 ft	-0.540 dBd
Typical End Connector(s)	Generic (3@0.02 dB each)	n/a	-0.060 dBd
Interbay Power Divide	Nicom Series BAC3L	n/a	-0.300 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
DIN to Type N Adaptor	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper to Antenna	LMR-400 (1/2" foam) (1.300 dB/100 ft)	20 ft	-0.260 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1 1/4" Foam Feedline	Heliast LDF6-60 (AVA6-50) (0.243 dB/100 ft)	268 ft	-0.651 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Lightning Arrestor	Polyphaser IS-50NX Series (or equivalent)	n/a	-0.100 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper to Transmitter	LMR-400 (1/2" foam) (1.300 dB/100 ft)	3 ft	-0.039 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: 2.36 dBd

CALCULATED TRANSMITTER POWER OUTPUT: 0.137 kW
 $(1 / [10^{(2.36/10)}] \text{ ERP})$