

Transmitter Power Output Worksheet

Call letters: W288CU.L (License Modification)
City of License: Portland, ME
Channel: CH288D (105.5 MHz)
File No: License Modification of BMLFT-20160913ABW
Facility ID: 150422
Applicant: Saga Communications of New England, LLC

Effective Radiated Power (ERP): 0.200 kW

Antenna Make: PSI (Propagation Systems, Inc.)
Antenna Model: FMT-4A
No of Elements: Four (4)
Antenna COR AGL: 89 meters AGL
Antenna COR AMSL: 111 meters AMSL
Max Input Power: 2.00 kW

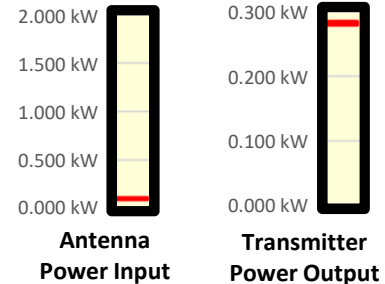
Power Gain: 2.1

Antenna Gain: 3.222 dBd

Calculated Antenna Input Power: 0.095 kW

Transmitter Rated Power: 0.300 kW

Transmitter Make/Model: BW TX300V2



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

Inventory of System / Insertion Losses

Explanation	Component Make/Model	Length	Loss
7/8 Inch End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
7/8 Inch Foam Feedline (Tower)	CellFlex LCF78-50JA (0.368 dB/100 ft)	290 ft	-1.067 dBd
7/8 Inch End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
AM Isocoupler	Kintronic FMC 1.5 Isolation Transformer	n/a	-0.200 dBd
7/8 Inch End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
7/8 Inch Foam Feedline (Ground)	CellFlex LCF78-50JA (0.368 dB/100 ft)	360 ft	-1.325 dBd
7/8 Inch End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Directional Coupler (RF Monitor)	Shively Model 078F-2P	n/a	-0.050 dBd
7/8 Inch End Plate Adapter	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper Cable	Superflex FSJ4-50B (1.081 dB/100 ft)	6 ft	-0.065 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Combiner (1)	Shively Model 2940-N-1-4 Balanced Combiner	n/a	-0.050 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper Cable	Superflex FSJ4-50B (1.081 dB/100 ft)	6 ft	-0.065 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Combiner (2)	Shively Model 2930-4/03/4 Branched Combiner	n/a	-1.340 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper Cable	Superflex FSJ4-50B (1.081 dB/100 ft)	6 ft	-0.065 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Coax Switch	Dow Key 412R-320132 Coax Switch	n/a	-0.150 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper Cable	Superflex FSJ4-50B (1.081 dB/100 ft)	6 ft	-0.065 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -1.459 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 0.280 kW
 $(1 / [10^{(1.459/10)} \text{ dB/10/ERP}])$