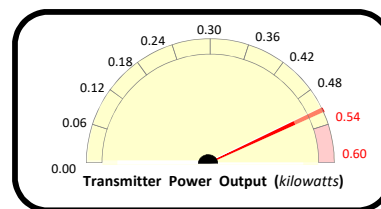


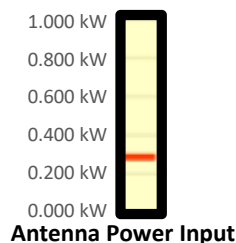
Transmitter Power Output Worksheet

Call letters: W245DP.C
City of License: Champaign, IL
Channel: CH245D (96.9 MHz)
File No: BPFT-20190821ABE
Facility ID: 149358
Applicant: Saga Communications of Illinois, LLC



Effective Radiated Power (ERP): 0.250 kW

Antenna Make: Nicom USA, Inc. (NIC)
Antenna Model: BKG77/2L(0.85 Spaced)
No of Elements: Two (2)
Antenna COR AGL: 94 meters AGL
Antenna COR AMSL: 330 meters AMSL
Max Input Power: 1.000 kW
Power Gain: 0.9
Antenna Gain: -0.458 dBd
Calculated Antenna Input Power: 0.278 kW
Transmitter Rated Power: 0.600 kW
Transmitter Make/Model: Crown FM600



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 Connectors (Type N)	Generic (2@0.02 dB each)		n/a	-0.040 dBd
Interbay Antenna Leads	RG-213(foam) (11 ft x 2 leads)	(2.000 dB/100 ft)	22 ft	-0.440 dBd
Typical End Connectors (Type N)	Generic (2@0.02 dB each)		n/a	-0.040 dBd
Interbay Power Divide	Nicom Series BAC2N		n/a	-0.300 dBd
Typical End Connector (Type N)	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Jumper to Antenna (7/8" Foam)	Andrew AVA5-50FX	(0.354 dB/100 ft)	8 ft	-0.028 dBd
Typical End Connector (Type N)	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Type N to 3 1/8" Adaptor	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Main Feedline #1 (3" Air)	Andrew HJ8-50B	(0.141 dB/100 ft)	336 ft	-0.474 dBd
3 1/8 Inch Elbow	Myat Part No. 301-025(2@0.02 dB each)		n/a	-0.040 dBd
Main Feedline #2 (3 1/8" Hardline)	3 1/8" Myat Rigid (50 Ohm)	(0.093 dB/100 ft)	8 ft	-0.007 dBd
3 1/8 Inch Elbow	Myat Part No. 301-025(3@0.02 dB each)		n/a	-0.060 dBd
Type N to 3 1/8" Adaptor	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Typical End Connector (Type N)	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Main Feedline #3 (1/2" Foam)	Andrew LDF4-50A	(0.661 dB/100 ft)	37 ft	-0.245 dBd
Typical End Connectors (Type N)	Generic (2@0.02 dB each)		n/a	-0.040 dBd
Jumper to Combiner	RG-213(foam)	(2.000 dB/100 ft)	6 ft	-0.120 dBd
Type N to DIN Adaptor	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Combiner	Nicom (T)FSD-1000 Triple Starpoint Diplexer		n/a	-0.580 dBd
Typical End Connector (Type N)	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Jumper to Transmitter	RG-213(foam)	(2.000 dB/100 ft)	6 ft	-0.120 dBd
Typical End Connector (Type N)	Generic (1@0.02 dB each)		n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -3.15 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 0.517 kW
 (1 / [[10⁴ dB/10]/ERP])