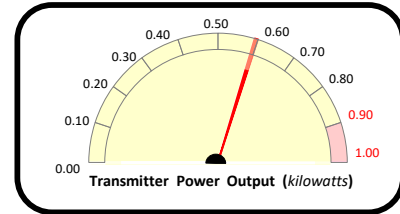


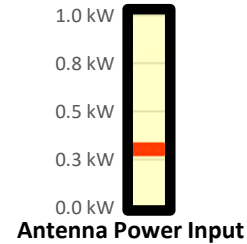
Transmitter Power Output Worksheet

Call letters: W263DE.L (License Modification)
City of License: Greenfield, MA
Channel: CH263D (100.5 MHz)
File No: LMS-0000190167
Facility ID: 201279
Applicant: Saga Communications of New England, LLC



Effective Radiated Power (ERP): 0.250 kW

Antenna Make: Nicom USA, Inc.
Antenna Model: BKG77/2L (DA)
No of Elements: Two (2)
Antenna COR AGL: 38.0 meters AGL
Antenna COR AMSL: 91.3 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: 1.000 kW
Transmitter Make/Model: Nautel VS1



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	Generic (2@0.02 dB each)		n/a	-0.040 dBd
Interbay Antenna Leads	RG-213(foam) (8 ft x 2 leads)	(2.000 dB/100 ft)	16 ft	-0.320 dBd
Typical End Connectors	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	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Main Feedline #1 (7/8" Foam)	Andrew AVA5-50FX	(0.368 dB/100 ft)	125 ft	-0.460 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Isocoupler	Kintronics Model #FMC-1.5		n/a	-0.200 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Main Feedline #2 (7/8" Foam)	Andrew AVA5-50FX	(0.368 dB/100 ft)	300 ft	-1.104 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Jumper to Combiner	Andrew LDF4-50A	(0.688 dB/100 ft)	6 ft	-0.041 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Combiner	Microwave Filter Company 19507		n/a	-0.600 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Jumper to Transmitter	Andrew LDF4-50A	(0.688 dB/100 ft)	10 ft	-0.069 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -3.77 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 0.596 kW
 $(1 / [10^{(3.77/10)} \text{ dB/10/ERP}])$