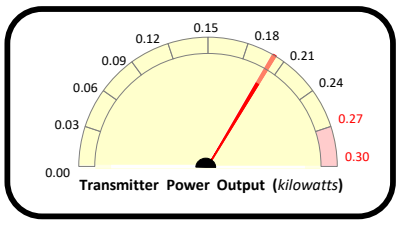
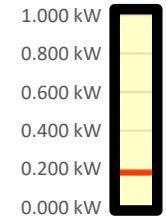
Transmitter Power Output Worksheet

Call letters: W222CH.C
City of License: Greenfield, MA
Channel: CH222D (92.3 MHz)
File No: LMS-0000189362
Facility ID: 140079
Applicant: Saga Communications of New England, LLC



Effective Radiated Power (ERP): 0.250 kW



Antenna Power Input

Antenna Make: Nicom USA, Inc. (NIC)
Antenna Model: BKY3P-1DA(Slant45)
No of Elements: One (1)
Antenna COR AGL: 15.8 meters AGL
Antenna COR AMSL: 308.3 meters AMSL
Max Input Power: 1.000 kW
Power Gain: 4.5 dBd - 3 dBd = (1.5 dBd) due to (H&V) Configuration
Antenna Gain: 1.500 dBd
Calculated Antenna Input Power: 0.177 kW
Transmitter Rated Power: 0.300 kW
Transmitter Make/Model: GatesAir FAX300

Power Gain to Antenna gain (dBd) Conversion:
=Log[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
Jumper to Antenna	Andrew FSJ4-50B Superflex	(1.038 dB/100 ft)	3 ft	-0.031 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Main Feedline (7/8" foam)	Andrew AVA5-50FX	(0.354 dB/100 ft)	110 ft	-0.389 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Jumper to Transmitter	Andrew FSJ4-50B Superflex	(1.038 dB/100 ft)	6 ft	-0.062 dBd
Typical End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: 0.94 dBd
CALCULATED TRANSMITTER POWER OUTPUT: **0.201 kW**
(1 / [[10^[dB/10]/ERP]])

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