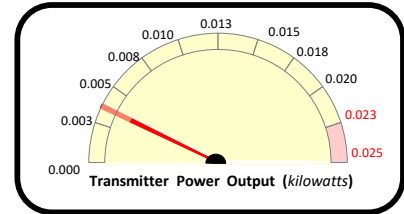


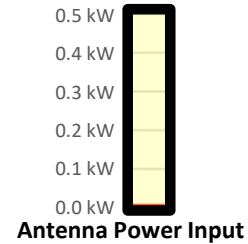
Transmitter Power Output Worksheet

Call letters: W233AN (STA)
City of License: Richmond, IN
Channel: CH233D (94.5 MHz)
File No: Special Temporary Authority
Facility ID: 140563
Applicant: Star Educational Media Network, Inc.



Effective Radiated Power (ERP): 0.0015 kW

Antenna Make: Systems With Reliability (SWR)
Antenna Model: FM1-1 (NDA)
No of Elements: One (1)
Antenna COR AGL: 7.5 meters AGL
Antenna COR AMSL: 309.5 meters AGL
Max Input Power: 0.500 kW
Power Gain: 0.441
Antenna Gain: -3.556 dBd
Calculated Antenna Input Power: 0.003 kW
Transmitter Rated Power: 0.025 kW



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	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Main Feedline (1/2" foam)	Cablewave LCF12-50J (0.658 dB/100 ft)	30 ft	-0.197 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: -3.79 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 0.004 kW
 $(1 / [10^{(3.79/10)} / \text{ERP}])$