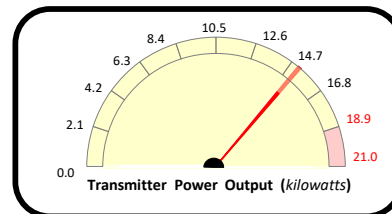


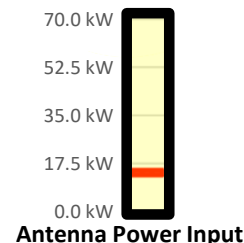
Transmitter Power Output Worksheet

Call letters: KNEB-FM.C
 City of License: Scottsbluff, NE
 Channel: CH231C1 (94.1 MHz)
 File No: LMS-0000150145
 Facility ID: 51462
 Applicant: Nebraska Rural Radio Association



Effective Radiated Power (ERP): 75.000 kW

Antenna Make: Jampro Antennas, Inc.
 Antenna Model: JCPB-20HR-.5RFR
 No of Elements: Twenty (20)
 Antenna COR AGL: 137 meters AGL
 Antenna COR AMSL: 1630 meters AMSL
 Max Input Power: 70.000 kW



Power Gain: 5.7
 Antenna Gain: 7.559 dBd
 Calculated Antenna Input Power: 13.158 kW
 Transmitter Rated Power: 21.000 kW
 Transmitter Make/Model: Rohde & Schwarz THR9-4

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

Inventory of System / Insertion Losses

Explanation	Component Make/Model		Length	Loss
Main Feedline (5" Air)	Andrew HJ9-50 Heliax	(0.074 dB/100 ft)	465 ft	-0.344 dBd
CONSTANT IMPEDANCE COMBINER	Jampro Model RCCC-621-FM3H / RCCS-633-2.0H		n/a	-0.280 dBd

TOTAL SYSTEM GAIN/LOSS: 6.93 dBd
 CALCULATED TRANSMITTER POWER OUTPUT: 15.191 kW
 $(1 / [10^{(6.93/10)}] \text{ ERP})$