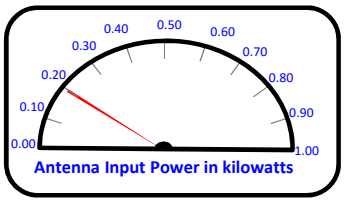
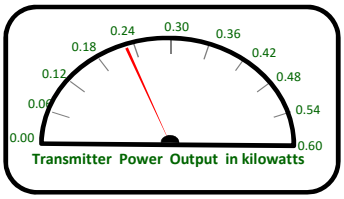
TPO Calculation Summary
Main Antenna Operation

Call letters: K295BI
City of License: Kearney, NE
Frequency: CH295D (106.9 MHz)
File No: BMPFT-20151207AKG
Facility ID: 142187
Applicant: Nebraska Rural Radio Association





Operating Effective Radiated Power (ERP): 0.250 kW

Antenna Make: Nicom USA, Inc.
Antenna Model: BKY3/P-1DA(Slant45)
No of Elements: One (1)
Antenna COR AGL: 91 meters AGL
Antenna COR AMSL: 783 meters AMSL
Max Input Power: 1.0 kW
Power Gain: (4.5 dBd - 3.0 dBd = 1.5 dBd for H&V Configuration)
Log[power gain]*10 = **Antenna Gain:** 1.5 dBd
Calculated Antenna Input Power: 0.177 kW
Transmitter Make/Model: BW TX600 V2
Transmitter Rated Power: 0.600 kW

System Loss Info:

Description	Component Make/Model		Length	Loss
Type N End Connector	Generic (1@0.02 dB each)			-0.020 dBd
Antenna Side Jumper	Andrew FSJ4-50B Superflex (1/2" Foam)	(1.075 dB/100 ft)	6 ft	-0.065 dBd
Type N End Coupler(s)	Generic (2@0.02 dB each)			-0.040 dBd
Main Feedline	Commscope CR-1873-G (1 5/8" Foam)	(0.200 dB/100 ft)	302 ft	-0.604 dBd
Type N End Coupler(s)	Generic (2@0.02 dB each)			-0.040 dBd
Transmitter Side Jumper	LMR-600 (1/2" Foam)	(0.800 dB/100 ft)	15 ft	-0.120 dBd
Type N End Connector	Generic (1@0.02 dB each)			-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: 0.59 dBd
1 / [[10^[dB/10]/ERP]] = **CALCULATED TRANSMITTER POWER OUTPUT:** 0.218 kW

Munn–Reese, Inc.
Broadcast Engineering Consultants
Coldwater, MI 49036