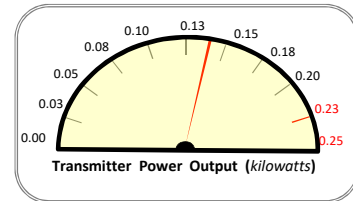


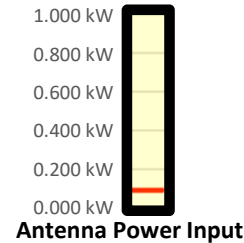
# Transmitter Power Output Worksheet

**Call letters:** K255CJ.C  
**City of License:** Briggs, NE  
**Channel:** CH255D (98.9 MHz)  
**File No:** BPFT-20170718AAH  
**Facility ID:** 138732  
**Applicant:** CSN International



**Effective Radiated Power (ERP):** 0.062 kW

**Antenna Make:** Nicom USA, Inc. (NIC)  
**Antenna Model:** BKG77/2(HW) (half-wave spaced)  
**No of Elements:** Two (2)  
**Antenna COR AGL:** 132 meters AGL  
**Antenna COR AMSL:** 492 meters AMSL  
**Max Input Power:** 1.00 kW



**Power Gain:** 0.7

**Antenna Gain:** -1.549 dBd

**Calculated Antenna Input Power:** 0.089 kW

**Transmitter Rated Power:** 0.250 kW

**Transmitter Make/Model:** Crown 250

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

## Inventory of System / Insertion Losses

Explanation	Component Make/Model		Length	Loss
1/2 Inch End Connectors	Generic (2@0.02 dB each)		n/a	-0.040 dBd
Antenna Bay Leads	RG8(foam) (8ft x 2leads)	(2.000 dB/100 ft)	16 ft	-0.320 dBd
1/2 Inch End Connectors	Generic (2@0.02 dB each)		n/a	-0.040 dBd
Power Divide (2-way)	Nicom Series BAC2N Power Divide		n/a	-0.300 dBd
1/2 Inch End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Jumper to Antenna	Helix LDF4-50A	(0.661 dB/100 ft)	6 ft	-0.040 dBd
1/2" to 1 5/8" Coupler	Generic (1@0.02 dB each)		n/a	-0.020 dBd
1 5/8" Feedline (Section 1)	Helix HJ7-50A	(0.203 dB/100 ft)	480 ft	-0.974 dBd
1/2" to 1 5/8" Coupler	Generic (1@0.02 dB each)		n/a	-0.020 dBd
1/2" Feedline (Section 2)	Helix LDF4-40A	(0.661 dB/100 ft)	45 ft	-0.297 dBd
1/2 Inch End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd

**TOTAL SYSTEM GAIN/LOSS:** -3.64 dBd

**CALCULATED TRANSMITTER POWER OUTPUT:** 0.143 kW

$(1 / [10^{(dB/10)/ERP}])$