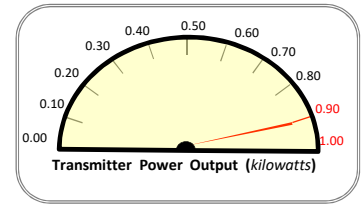


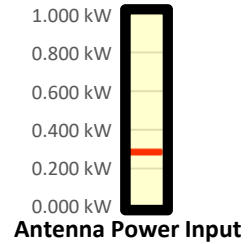
# Transmitter Power Output Worksheet

**Call letters:** K260BO.L (License Modification)  
**City of License:** Yankton, SD  
**Channel:** CH260D (99.9 MHz)  
**File No:** BLFT-20111019AHW  
**Facility ID:** 154848  
**Applicant:** Saga Communications of South Dakota, LLC



**Effective Radiated Power (ERP):** 0.250 kW

**Antenna Make:** Nicom USA, Inc. (NIC)  
**Antenna Model:** BKG77/2 (NDA)  
**No of Elements:** Two (2)  
**Antenna COR AGL:** 279 meters AGL  
**Antenna COR AMSL:** 636 meters AMSL  
**Max Input Power:** 1.00 kW



**Power Gain:** 0.9

**Antenna Gain:** -0.458 dBd

**Calculated Antenna Input Power:** 0.278 kW

**Transmitter Rated Power:** 1.000 kW

**Transmitter Make/Model:** GatesAir FAX-1K

**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(s)	Generic (2@0.02 dB each)	n/a	-0.040 dBd
Interbay Antenna Leads	RG-213(foam) (10 ft x 2 leads) (2.000 dB/100 ft)	20 ft	-0.400 dBd
Typical End Connector(s)	Generic (2@0.02 dB each)	n/a	-0.040 dBd
Interbay Power Divide	Nicom Series BAC2N	n/a	-0.300 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
7/8" Foam Feedline	Andrew AVA5-50FX (0.354 dB/100 ft)	912 ft	-3.228 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
AM Isocoil	Kintonics ISO-100-FM	n/a	-0.400 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
7/8" Foam Feedline	Andrew AVA5-50FX (0.354 dB/100 ft)	20 ft	-0.071 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper to Combiner	SCF12-50JFN (Superflex) (0.978 dB/100 ft)	6 ft	-0.059 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Combiner	Nicom TFST1000 Starpoint Triplexer	n/a	-0.530 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Jumper to Transmitter	SCF12-50JFN (Superflex) (0.978 dB/100 ft)	6 ft	-0.059 dBd
Typical End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

**TOTAL SYSTEM GAIN/LOSS:** -5.72 dBd

**CALCULATED TRANSMITTER POWER OUTPUT:** 0.934 kW

$(1 / [10^{(-5.72/10)}])$