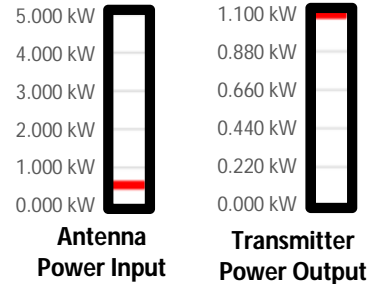


# Transmitter Power Output Worksheet

**Call letters:** KISM(FM).C  
**City of License:** Bellingham, WA  
**Channel:** CH225C (92.9 MHz)  
**File No:** BMXPH-20161007AAM  
**Facility ID:** 34469  
**Applicant:** Saga Broadcasting, LLC

**Effective Radiated Power (ERP):** 0.680 kW

**Antenna Make:** Nicom USA, Inc. (NIC)  
**Antenna Model:** BKG77/3M  
**No of Elements:** Three (3)  
**Antenna COR AGL:** 62 meters AGL  
**Antenna COR AMSL:** 134 meters AMSL  
**Max Input Power:** 5.00 kW  
**Power Gain:** 1.41  
**Antenna Gain:** 1.492 dBd  
**Calculated Antenna Input Power:** 0.482 kW  
**Transmitter Rated Power:** 1.200 kW  
**Transmitter Make/Model:** Gates Air FAX-1000



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

## Inventory of System / Insertion Losses

Explanation	Component Make/Model	Length	Loss
Interbay End Connector(s)	Generic (3@0.02 dB each)	n/a	-0.060 dBd
Interbay Antenna Lead(s)	RG-213 (10ft x 3 leads) (1.900 dB/100 ft)	30 ft	-0.570 dBd
Interbay End Connector(s)	Generic (3@0.02 dB each)	n/a	-0.060 dBd
Interbay Power Divide	Nicom Series BAP3N	n/a	-0.300 dBd
1 5/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1 5/8" Foam Feedline (Tower)	Cablewave LCF158-50JA (0.196 dB/100 ft)	205 ft	-0.402 dBd
1 5/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
AM Isocoupler	Kintronic ISO-170-FM Isocoil (High Power)	n/a	-0.800 dBd
1 5/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1 5/8" Foam Feedline (Ground 1)	Cablewave LCF158-50JA (0.196 dB/100 ft)	340 ft	-0.370 dBd
1 5/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Combiner	Kintronics FMC-5X1K Five Port Custom Combiner	n/a	-0.570 dBd
1 5/8" End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1 5/8" to Type N Coupler	Generic (1@0.02 dB each)	n/a	-0.020 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd
1/2" Foam Feedline (Ground 2)	Cablewave LCF12-50JA (0.658 dB/100 ft)	30 ft	-0.197 dBd
Type N End Connector	Generic (1@0.02 dB each)	n/a	-0.020 dBd

**TOTAL SYSTEM GAIN/LOSS:** -2.00 dBd  
**CALCULATED TRANSMITTER POWER OUTPUT:** 1.077 kW  
 (1 / [[10<sup>4</sup> dB/10]/ERP])