

# Transmitter Power Output Worksheet

**Call letters:** K283CG.C  
**City of License:** Las Cruces, NM  
**Channel:** 283D (104.5 MHz)  
**File No:** BPFT-20150203ABV  
**Facility ID:** 152916  
**Applicant:** Adams Radio of Las Cruces, LLC

**Effective Radiated Power (ERP):** 0.215 kW

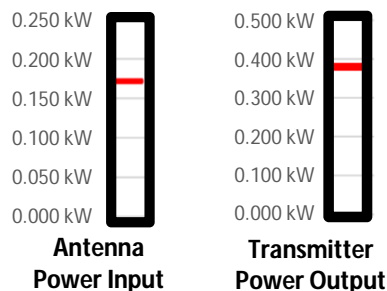
**Antenna Make:** Kathrein Scala (SCA)  
**Antenna Model:** CA2-FM(Slant45)  
**No of Elements:** One (1)  
**Antenna COR AGL:** 110 meters AGL  
**Antenna COR AMSL:** 1288 meters AMSL  
**Max Input Power:** 0.25 kW

**Power Gain:** 4 dBd - 3 dBd = 1 dBd due to (H&V) Configuration

**Antenna Gain:** 1.000 dBd

**Calculated Antenna Input Power:** 0.171 kW

**Transmitter Rated Power:** 0.500 kW



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

## Inventory of System / Insertion Losses

Explanation	Component Make/Model		Length	Loss
Type N End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd
1/2" Foam Feedline (Tower)	Cablewave LCF12-50JA	(0.684 dB/100 ft)	355 ft	-2.428 dBd
Type N to DIN Coupler	Generic (1@0.02 dB each)		n/a	-0.020 dBd
Isocoupler	LBA Group CAMI 1800 Isocoupler		n/a	-0.600 dBd
DIN to Type N Coupler	Generic (1@0.02 dB each)		n/a	-0.020 dBd
1/2" Foam Feedline (Ground)	Cablewave LCF12-50JA	(0.684 dB/100 ft)	45 ft	-0.308 dBd
Type N to DIN Coupler	Generic (1@0.02 dB each)		n/a	-0.020 dBd

**TOTAL SYSTEM GAIN/LOSS:** -2.42 dBd  
**CALCULATED TRANSMITTER POWER OUTPUT:** 0.375 kW  
 (1 / [[10<sup>4</sup> dB/10]/ERP])