

Transmitter Power Output Worksheet

Call letters: K294CS.C
City of License: Fallbrook, CA
Channel: CH294D (106.7 MHz)
File No: BMPFT-20170316AAK
Facility ID: 142718
Applicant: Penfold Communications, Inc.

Effective Radiated Power (ERP): 0.001 kW

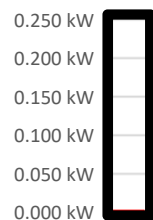
Antenna Make: Kathrein Scala (SCA)
Antenna Model: CA2-FM(Slant45)-1DA
No of Elements: One (1)
Antenna COR AGL: 9 meters AGL
Antenna COR AMSL: 628 meters AMSL
Max Input Power: 0.25 kW

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

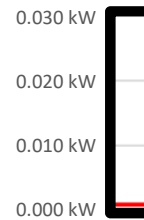
Antenna Gain: 1.000 dBd

Calculated Antenna Input Power: 0.001 kW

Transmitter Rated Power: 0.030 kW



**Antenna
Power Input**



**Transmitter
Power Output**

Power Gain to Antenna gain (dBd) Conversion:
 =Log[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 (Ground)	Heliax LDF4-50A	(0.713 dB/100 ft)	72 ft	-0.513 dBd
Type N End Connector	Generic (1@0.02 dB each)		n/a	-0.020 dBd

TOTAL SYSTEM GAIN/LOSS: 0.45 dBd
CALCULATED TRANSMITTER POWER OUTPUT: 0.001 kW
 (1 / [[10^(dB/10)/ERP]])