

TOTAL POWER OUTPUT CALCULATIONS

ITEM	DESCRIPTION/LENGTHS	GAIN/LOSS
Call Letters	KFOI	
Freq.	90.9MHz	
Date	9/7/2017	
Antenna Make/Model/Bays	Shively 6025-2SS	
Antenna Gain dB (loss negative)		8.554
Antenna Pwr Gain (multiplier)		7.17
Transmission Line Descrip	RFS HCA148-50J	
Loss per 100ft	0.183	
Length (f)	186	
Line Loss dB (loss positive)		0.340
Other loss 1 - description/dB	8ft Eupin EC5-50a 7/8" coax 0.331/100ft	0.026
Other loss 2 - description/dB	Shively 99958-G502 matching section	0.007
Other loss 3 - description/dB		0.000
Other loss 4 - description/dB		0.000
TOTAL SYSTEM GAIN dB (loss negative)		8.181
System ERP (W)		12,000.0
TRANSMITTER TPO (W)		1,824.4
105% Max. TPO (W)		1,915.62
90% Min. TPO (W)		1,733.18