

K252FP - Missoula, MT
 FacID# 138129 -- 98.3 MHz
Effective Radiated Power = 250W
 TPO Calculation

<u>System Component</u>	<u>Length (ft)</u>	<u>Loss/100'</u>	<u>Gain/Loss</u>	<u>Units</u>
Antenna Gain (Nicom BKG-77 -- Numeric Power Gain = .5)			-3	dB
AVA5-50A Transmission Line	110	-0.354	-0.3894	dB
Shively Bandpass Filter			-0.75	dB
Andrew FSJ4-50B RF Jumper	10	-1.038	-0.1038	dB
Belden 9913 RF Jumper	10	-1.4	-0.14	dB
Total Transmission Line Loss			-1.3832	dB
Transmission Line Efficiency		Efficiency = 100*(antilog(loss/100))		72.7 %
Total system gain (loss)			-4.3832	dB
Required TPO to achieve ERP	TPO = 250W/(antilog(-4.3832/100))		<u>686</u>	<u>W</u>