

K245CX - Rochester, MN
 FacID# 201092 -- 96.9MHz
 Effective Radiated Power = 250W
Exhibit #12 - TPO Calculation

<u>System Component</u>	<u>Length (ft)</u>	<u>Loss/100'</u>	<u>Gain/Loss</u>	<u>Units</u>
Antenna Gain (Bext TFC2K-3 -- Numeric Gain 1.5488)			1.9	dB
Andrew AVA5-50A Transmission Line	275	-0.366	-1.007	dB
Combiner Filters			-0.8	dB
Andrew FSJ4-50B RF Jumper	3	-1.073	-0.032	dB
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Andrew FSJ4-50B RF Jumper	25	-1.073	-0.268	dB
Total Transmission Line Loss			-2.14	dB
Transmission Line Efficiency	Efficiency = 100*(antilog(loss/10))		61.1	%
Total system gain (loss)			-0.239	dB
Required TPO to achieve ERP	TPO = 250W/(antilog(-.239/10))		<u>264</u>	<u>W</u>