

Transmitter Power Output Calculation

Translator K248DM

Channel 248D – 97.5 MHz

0.250 kW ERP – 609 m COR AMSL

Huntsville, Arkansas

January 2019

Given:

Effective Radiated Power: 0.250 kW

Antenna Gain (Multiplier): 0.9

Transmission Line Efficiency: 77.1%

Calculation:

0.250 kW Effective Radiated Power ÷ 0.9 Antenna Gain = 27778 kW Antenna Input Power

0.27778 kW Antenna Input Power ÷ 0.771 Transmission Line Efficiency = 0.360 kW
Transmitter Power Output