

Transmitter Power Output Calculation

Translator K264DA

Channel 264D – 100.7 MHz

0.250 kW ERP – 421 m COR AMSL

Bentonville, Arkansas

August 2021

Given:

Effective Radiated Power: 0.250 kW

Antenna Gain (Multiplier): 0.47

Transmission Line Efficiency: 77.14%

Connector Efficiency: 98.55%

Calculation:

0.250 kW Effective Radiated Power \div 0.47 Antenna Gain = 0.5319 kW Antenna Input Power

0.5319 kW Antenna Input Power \div 0.7714 Transmission Line Efficiency \div 0.9855 Connector Efficiency = 0.6997 kW Transmitter Power Output*

*0.6997 kW Transmitter Power Output rounds to 0.700 kW per §73.212(a)