

Transmitter Power Output Calculation

Translator W237FM

Channel 237D – 95.3 MHz

0.099 kW ERP – 148.4 m COR AMSL

Portsmouth, Virginia

May 2022

Given:

Effective Radiated Power: 0.099 kW

Antenna Gain (Multiplier): 0.47

Transmission Line Efficiency: 68.03%

Calculation:

0.099 kW Effective Radiated Power ÷ 0.47 Antenna Gain = 0.210638 kW Antenna Input Power

0.210638 kW Antenna Input Power ÷ 0.6803 Transmission Line Efficiency = 0.3096 kW Transmitter Power Output*

* 0.3096 kW Transmitter Power Output rounds to 0.310 kW per §73.212(a).