

Transmitter Power Output Calculation

Translator W248CT

Channel 248D – 97.5 MHz

0.0015 kW ERP – 17 m COR AMSL

Callahan, Florida

May 2017

Given:

Effective Radiated Power: 0.0015 kW

Antenna Gain (Multiplier): 0.5

Transmission Line Efficiency: 92.75%

Calculation:

$0.0015 \text{ kW Effective Radiated Power} \div 0.5 \text{ Antenna Gain} = 0.003 \text{ kW Antenna Input Power}$

$0.003 \text{ kW Antenna Input Power} \div 0.9275 \text{ Transmission Line Efficiency} = 0.0032 \text{ kW}$
Transmitter Power Output