

**Transmitter Power Output Calculation
Translator K291CK (Formerly K277AZ)**

Channel 291D – 106.1 MHz
0.250 kW ERP – 530 m COR AMSL
Fayetteville, Arkansas
October 2018

Given:

Effective Radiated Power: 0.250 kW
Antenna Gain (Multiplier): 1.85
Transmission Line Efficiency: 80%

Calculation:

$0.250 \text{ kW Effective Radiated Power} \div 1.85 \text{ Antenna Gain} = 0.135 \text{ kW Antenna Input Power}$

$0.135 \text{ kW Antenna Input Power} \div 0.80 \text{ Transmission Line Efficiency} = 0.169 \text{ kW}$
Transmitter Power Output*

* 0.169 kW Transmitter Power Output rounds to 0.170 kW per §73.212(a).