

# Transmitter Output Power Calculation

**Date** 2019-07-22

**File No.** 0 **Facility ID** 138251

W246DG Dayton TN

97.1 MHz **Channel** 246

**ERP** 0.200 kW

**Antenna** Nicom **Model** BKY3P **Bays:** **Spacing:** Half Wave

**Antenna Power Gain** 1.408 1.487 dB

**Antenna Input Power** 0.142 kW For 0.200 kW ERP

## Transmission Line Losses

**Manufacturer** RFS HCA50 Series

**Type** 1 5/8 inch Air Dielectric

**Loss per 100 feet** -0.190 dB At: 97.1 MHz

**Transmission Line Length** 210 ft

**Transmission Line Loss** -0.399 dB

**Efficiency** 91.2%

## Additional System Losses

**Filter** 0 dB

**Isolator** 0 dB

**Misc** 0 dB

**Total Losses** -0.399 dB

**System Efficiency** 91.22%

**Transmitter Output** 0.156 kW For 0.200 kW ERP

