

# Transmitter Output Power Calculation

**Date** 2020-08-18

**File No.** BLANK-0000100391 **Facility ID** 88666

WPZR Emporia Virginia

89.3 MHz **Channel** 207

**ERP** 10.500 kW

**Antenna ERI Model** MPX-2E **Bays: 2 Spacing:** Full Wave

**Antenna Power Gain** 0.997 -0.013 dB

**Antenna Input Power** 10.531 kW For 10.500 kW ERP

**Manufacturer** RFS HCA50 Series

**Type** 3 inch Air Dielectric

## Transmission Line Losses

**Loss per 100 feet** -0.120 dB At: 89.3 MHz

**Transmission Line Length** 377 ft

**Transmission Line Loss** -0.452 dB

**Efficiency** 90.1%

## Additional System Losses

**Filter** 0 dB

**Isolator** 0 dB

**Misc** 0 dB

**Total Losses** -0.452 dB

**System Efficiency** 90.11%

**Transmitter Output** 11.687 kW For 10.500 kW ERP

---

Pursuant to 47 CFR Section 73.212(A), for authorizations of transmitter power output between 10 and 30 kW, the power level is to be rounded to the nearest 0.5 kW. Thus, we have specified a transmitter output power of 11.5 kW.