

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.