

Transmitter Output Power Calculation

Date 2020-07-07

File No. 0000116209 **Facility ID** 202532

W252EJ HENDERSONVILLE NC

98.3 MHz **Channel** 252

ERP 0.102 kW

Antenna SCALA **Model** CLFM **Bays:** 1 **Spacing:** Full Wave

Antenna Power Gain 5.012 7.000 dB

Antenna Input Power 0.020 kW For 0.102 kW ERP

Transmission Line Losses

Manufacturer Andrew LDF50 Series

Type 1/2 inch Foam Dielectric

Loss per 100 feet -0.654 dB At: 98.3 MHz

Transmission Line Length 380 ft

Transmission Line Loss -2.487 dB

Efficiency 56.4%

Additional System Losses

Filter 0 dB

Isolator 0 dB

Misc -0.25 dB

Total Losses -2.737 dB

System Efficiency 53.25%

Transmitter Output 0.038 kW For 0.102 kW ERP

