

Transmitter Output Power Calculation

Date April 17, 2016
File No. 0 Facility ID 0
W249CC Toccoa GA
93.1 MHz Channel 226
ERP 0.250 kW

Antenna Shively Model 6812B-2 Bays: 2 Spacing: Full Wave
Antenna Power Gain 0.99 -0.044 dB
Antenna Input Power 0.253 kW For 0.250 kW ERP

Transmission Line Losses

Manufacturer RFS LCF50 Series
Type 7/8 inch Foam Dielectric
Loss per 100 feet -0.336 dB At: 93.1 MHz

Transmission Line Length 155 ft
Transmission Line Loss -0.521 dB
Efficiency 88.7%

Additional System Losses

Filter 0 dB
Isolator 0 dB
Misc -0.02 dB

Total Losses -0.541 dB
System Efficiency 88.3%

Transmitter Output 0.286 kW For 0.250 kW ERP