

FM System Calculator

Options

Solve For: ☒ TPO ☐ ERP

Antenna input: ☒ End fed ☐ Center Fed

Edit Antenna Database

Transmission Line FM Mid-Band Average Power Rating is 8.08kW

User Input

ERP: .028 kW

Frequency: 99.9 MHz

Center of Radiation (COR) - AGL: 131 ft 39.9 m

Athens Antenna

Additional Losses: 0 dB

Distance, Transmitter to Tower: 25 ft 7.6 m

Andrew LDF5-50A, 7/8" Foam Heliax Trans. Line

Calculated Results

Antenna Power Gain 1.74

Antenna Field Gain 1.3191

Ant. FI @ 1 mi./1kW 181.507 mV/m

Antenna Input Power .016 kW

Line Attenuation/100 ft .3628 dB

Power Loss in Coax .002 kW 87.8 % Eff

TPO .018 kW

Tx Line Length 156 ft (47.6 m)

Minimum Tower Aperture 11 ft (3.4 m)

Top Bay Elevation - AGL 131 ft (40 m)

Antenna Length 1 ft (0.2 m)

Bottom of Antenna - AGL 131 ft (39.9 m)

This Software is Provided for
Planning Purposes Only