

Calculation of Total Power Output:

Antenna:

Shively 6812 single bay

Gain = 0.46 or -3.39 dB

Transmission Line:

length = 160 ft (RFS - LCF158-50JA)

Type = 1-5/8" foam 0.196 dB / 100 FT (estimated)

Loss = - 0.314 dB

Connectors loss = - 0.1 dB

Total loss:

-3.39 dB – 0.314 dB - 0.1 dB = - 3.804 dB

ERP calculation:

ERP from C.P. = 0.18 kW = -7.447 dBk

TPO = -7.447 dBk – 3.804 dB = -3.643 dBk (0.4322 kW)

ERP = 0.4322 kW