

SYSTEM POWER ANALYSIS

3/7/2017

WPBE-LP

98.3 Mhz

West Palm Beach, FL

TRANSMISSION SYSTEM:

Vertical Run:

Type Andrew LDF-4-50 1/2" Foam Line
Length 130 feet
Attenuation: 0.6545 dB/100 feet
Loss this section: 0.851 dB

Horizontal Run:

Type Andrew LDF-4-50 1/2" Foam Line
Length 45 feet
Attenuation: 0.6545 dB/100 feet
Loss this section: 0.295dB

TOTAL TRANSMISSION SYSTEM:

Total attenuation 1.15 dB
Coax Efficiency: 76.82%
Coax Power Rating: 3.43 kW
Coax Safety Factor: 14.40dB

OTHER LOSSES AND DERATING INFO:

Connector Loss: .1dB
Antenna Height AMSL: 130 Ft.
Derated for 1:3:1 VSWR: 2.64 kW
Derated for Elevation: 2.64 kW
Derated for Temperature: 2.64 kW
Safety Amount (Derate TPO) 2.51 kW

STATION ERP:

kW 0.045
dBk -13.47

ANTENNA DETAIL:

Bays: 1
Spacing: N/A

ANTENNA POWER GAIN:

Numeric: 0.47
dBd -0.3

ANTENNA INPUT POWER:

kW: 0.096
dBk: -10.189

Total System Losses:

dBk: 1.245

TRANSMITTER POWER OUTPUT:

kW: **0.128**
dBk: **-8.943**