

^ Click tab to go back to input page

<http://www.rfspecialties.com/>  
 (<http://www.rfspecialties.com/>)



## SYSTEM POWER ANALYSIS

### TRANSMISSION SYSTEM:

### CALLS:

**W231CT**

### VERTICAL RUN:

Location: Longwood, FL

Type: AndrewAVA5-50J 7/8 in. Foam Lii

Frequency: 94.1 MHz.

Length: 410 feet

Attenuation: 0.3314 dB/100-feet

### STATION ERP:

Loss this section: 1.359 dB

kW At Peak: 0.25

kW At Horizon: 0.25

### HORIZONTAL RUN:

Type: AndrewAVA5-50J 7/8 in. Foam Lii

Length: 30 feet

Attenuation: 0.3314 dB/100 Feet

### ANTENNA POWER GAIN AT PEAK:

Loss this section: 0.099 dB

Numeric: 0.690

dBd: -1.612

### TOTAL TRANSMISSION SYSTEM:

### ANTENNA POWER GAIN AT HORIZON:

Total Attenuation: 1.46 dB

Coax Efficiency: 71.48% %

kW: 0.690

Coax Power Rating: 7.92 kW

dBk: -1.612

\*Coax Safety Factor: 11.94 dB \*

### TRANSMISSION SYSTEM LOSS:

### OTHER LOSSES AND DERATING INFO:

kW: 2.158

Filter Loss 0.60 dB

dBk: 1.644

Connector Loss 0.1 dB

Antenna Height AMSL 0 Ft

### TRANSMITTER POWER OUTPUT:

Derated for 1.3: VSWR 6.09 kW

Derated for Elevation 6.09 kW

kW: 0.596

Derated For Temperature 6.09 kW

dBk: -2.251

\*\*Safety Amount (Derate - TPO) 5.59 kW

Date: 17-Nov-2015

Provided by RF Specialties who is not responsible for errors of any kind

\* For both solar and altitude but not including VSWR safety margin.

\*\* The kW Difference number should be over 0 to allow for a VSWR of 1.3:1 at the load.

This program does not check for the correct connectors nor antenna input power rating.