

# SYSTEM POWER ANALYSIS

**KSVB**

**94.1 MHz.**

**Big Bear City, CA**

**TRANSMISSION SYSTEM:**

**VERTICAL RUN:**

Type: Andrew LDF-4-50 1/2: Foam Line  
 Length: 40 feet  
 Attenuation: 0.6399 dB/100-feet  
 Loss this section: 0.256 dB

**HORIZONTAL RUN:**

Type: Andrew LDF-4-50 1/2: Foam Line  
 Length: 110 feet  
 Attenuation: 0.6399 dB/100 Feet  
 Loss this section: 0.704 dB

**TOTAL TRANSMISSION SYSTEM:**

Total Attenuation: 0.96 dB  
 Coax Efficiency: 80.17% %  
 Coax Power Rating: 3.51 kW  
 \*Coax Safety Factor: 16.35 dB \*

**OTHER LOSSES AND DERATING INFO:**

Filter Loss: 0.00 dB  
 Connector Loss: 0.1 dB  
 Antenna Height AMSL: 6200 Ft  
 Ambient Temperature: 68 °F  
 Derated for 1.3:1 VSWR: 2.70 kW  
 Derated for Elevation: 2.07 kW  
 Derated for Temperature: 2.07 kW  
 Safety Amount (Derate-TPO): 1.99 kW \*\*

**STATION ERP:**

kW: 0.03  
 dBk: -15.23

**ANTENNA DETAIL**

**CP**  
 Brand: Jampro  
 Bays: 1  
 Spacing: 1

**ANTENNA POWER GAIN:**

Numeric: 0.460  
 dBd: -0.362

**ANTENNA INPUT POWER:**

kW: 0.065  
 dBk: -11.856

**Total System Losses:**

dBk: 1.060

**TRANSMITTER POWER OUTPUT:**

kW: 0.083  
 dBk: -10.796

**Date:** 8-Jun-2015

Provided by Bobgroome.us who is not responsible for errors of any kind

\* Not including altitude, temperature and VSWR safety margin.

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

The antenna gains are approximate; Not all makes have gains for all configurations.

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

Errors occur for non logical arrays; ie: one bay half wave is not possible

\* & \*\* If cell/value is red, coax not large enough