

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

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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