

SYSTEM POWER ANALYSIS

K300DL

107.9 MHz.

FAIRBANKS, AK

TRANSMISSION SYSTEM:

VERTICAL RUN:

Type: RFS LCF78 7/8 in. Foam
Length: 160 feet
Attenuation: 0.3780 dB/100-feet
Loss this section: 0.605 dB

HORIZONTAL RUN:

Type: RFS LCF78 7/8 in. Foam
Length: 40 feet
Attenuation: 0.3780 dB/100 Feet
Loss this section: 0.151 dB

TOTAL TRANSMISSION SYSTEM:

Total Attenuation: 0.76 dB
Coax Efficiency: 84.02%

OTHER LOSSES:

Filter Loss: 0.32 dB
Connector Loss: 0.1 dB

STATION ERP:

kW: 0.25
dBk: -6.02

ANTENNA DETAIL

CP

Brand Nicom
Bays 3
Spacing .85

ANTENNA POWER GAIN:

Numeric: 1.410
dBd: 4.502

ANTENNA INPUT POWER:

kW: 0.177
dBk: -7.513

Total System Losses:

dBk: 1.176

TRANSMITTER POWER OUTPUT:

kW: 0.232
dBk: -6.337