

Exhibit : 12

Transmitter Power Output Calculations

TRANSMITTER OUTPUT: 60 WATTS
TRANSMISSION LINE: Cablewave LCF12-50J 1/2 inch foam
LENGTH OF LINE: 75 METERS
LOSS IN DB/100 M. AT 92.1 MHZ: 2.18 DB
LINE EFFICIENCY AT 92.1 MHZ: 68.628%
MAX. AVERAGE POWER RATING OF LINE: 3.9 KW
POWER DISSIPATED IN LINE: 19 WATTS
POWER AT INPUT TO ANTENNA: 41 WATTS
ANTENNA MAKE/MODEL: SHIVELY 6812
NUMBER OF BAYS: ONE
POLARIZATION: CIRCULAR
MAX. ANTENNA INPUT POWER RATING: .5 KW
ANTENNA POWER GAIN: .46

SYSTEM E. R. P.: 19 WATTS