Expository Statement

Equipment Name: SPARS

Model Number: 6326

FCC ID: IR2DWW6326

Description: The 6326 SPARS(Solar Powered Fan Aspirated Radiation Shield) measures rain ,humidity and temperature. It transmits 6 bytes of information to a receiving console using on off keying (OOK) at 4800 baud every 2.5 seconds. The station is placed outside and can read up to The Davis display console 6310 is required to receive the soil and temperature data.

Circuitry: The 6326 contains 1 circuit boards called the SIM (sensor interface module). The SIM contains the RF transmitter, the uP on the board runs at 76 kHz. The SIM board has an average current draw of 100 uA and a peak current draw of no more than 10 mA. The board is solar powered during the day and powered by a 3V lithium cell at night. The transmitter is a simple integrated circuit surrounded by passive components and outputs no more than 1 mW.

Antenna: The antenna is 2" helical copper wire inside a 3" long plastic housing. It makes approximately a ¼ wave dipole with the ground plane of the SIM board.

Rated RF: .001 W
Frequency Range: 916.5 +/- .2 Mhz