

Space Data Corporation 2535 W. Fairview St. Suite 101 Chandler, Arizona 85224

Space Data Corporation SkySite MK2 Co-Linear Antenna Specification

Antenna 2 for the SKS900MK2 consists six element co-linear dipole array with fixed phasing between the elements to provide a down tilted pattern such that the power level on the ground is approximately uniform after adjusting for free space loss when the SKS900MK2 is transmitting at an altitude of 26 km above the ground. The antenna is implemented with properly shaped metal foil elements laminated in a dielectric and held straight within a thin-walled polycarbonate tube.

Frequency: 900 – 941 MHz

Max Power: 10 Watts

Gain: 9.11 dBi at 900 MHz

9.22 dBi at 941 MHz

Downtilt: 3.5 degrees at 900 MHz

7.8 degrees at 940 MHz

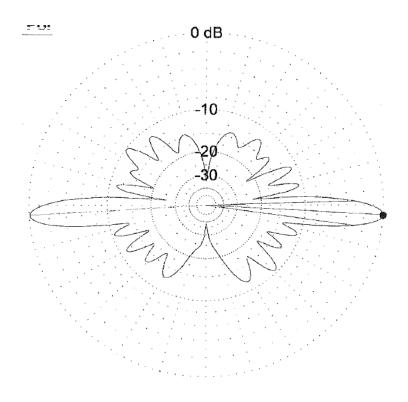
3 dB Beamwidth: 9.7 degrees at 900 MHz

8.8 degrees at 941 MHz

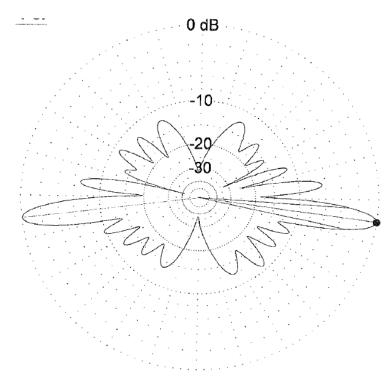
Return Loss: 25 dB at 900 MHz

22 dB at 910 MHz 22 dB at 920 MHz 24 dB at 930 MHz 17 dB at 941 MHz

Antenna 2 Vertical Pattern at 900 MHz



Antenna 2 Pattern at 941 MHz



Note: the radiaitons patterns in the horixontal plan are axisyemtric about the vertical axis of Antenna 2 (e.g. circular)