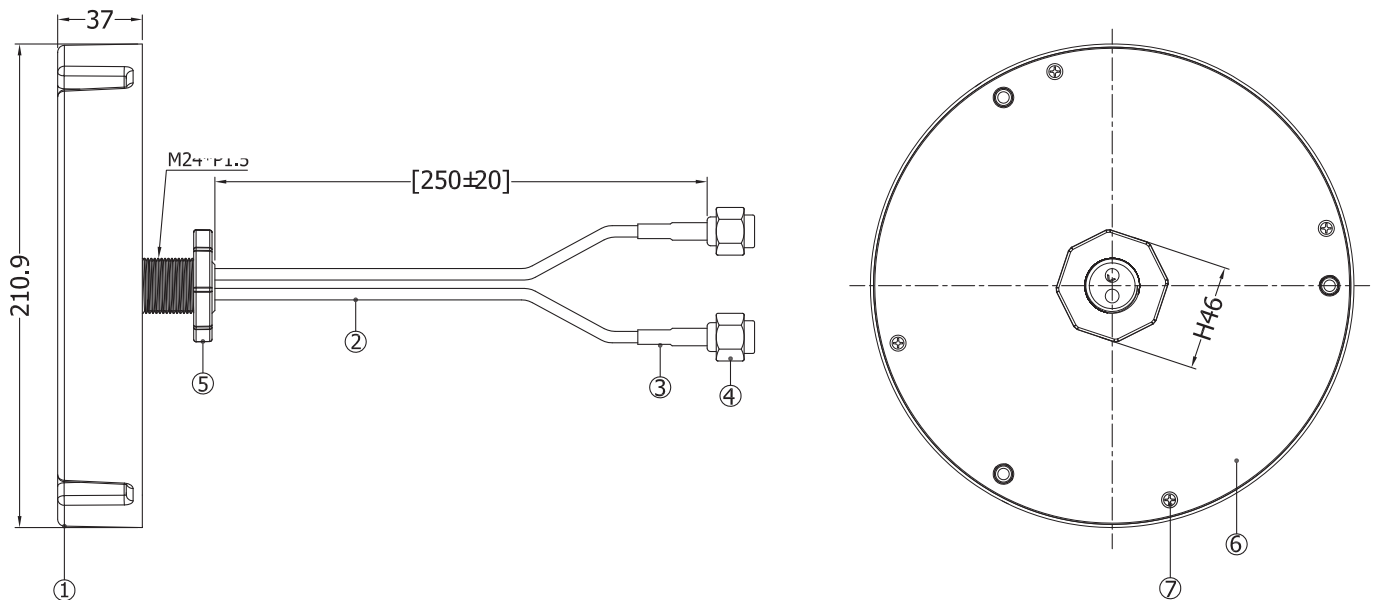


RF Antenna Assembly

Specification

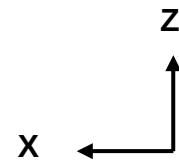
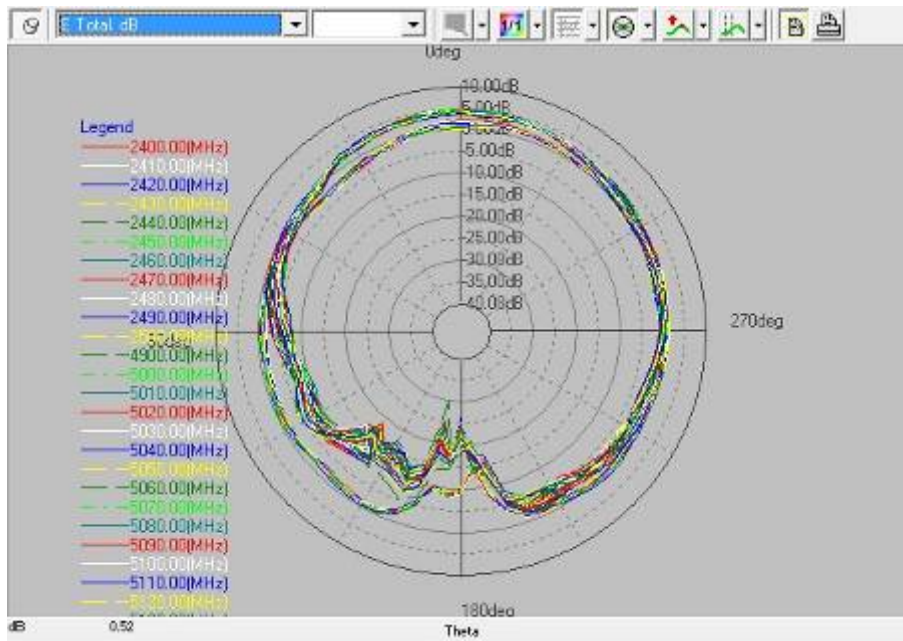
1. Electrical Properties :

- 1.1 Frequency Range.....2.4~ 2.5GHz ;4.9~5.9GHz
- 1.2 Impedance50 Ω Nominal
- 1.3 VSWR1.92 :1Max.
- 1.4 Return Loss.....-10 dB Max.
- 1.5 RadiationOmni-directional
- 1.6 Gain(peak)..... $2\pm 0.5\text{dBi}$ @ 2.4GHz ~ 2.5GHz
 $5\pm 1.0\text{dBi}$ @ 4.9GHz ~ 5.9GHz
- 1.7 Polarization.....Linearl
- 1.8 Cable.....RG-178 Coaxial Cable
- 1.9 Connector.....SMA Plug Reverse

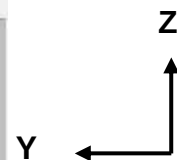
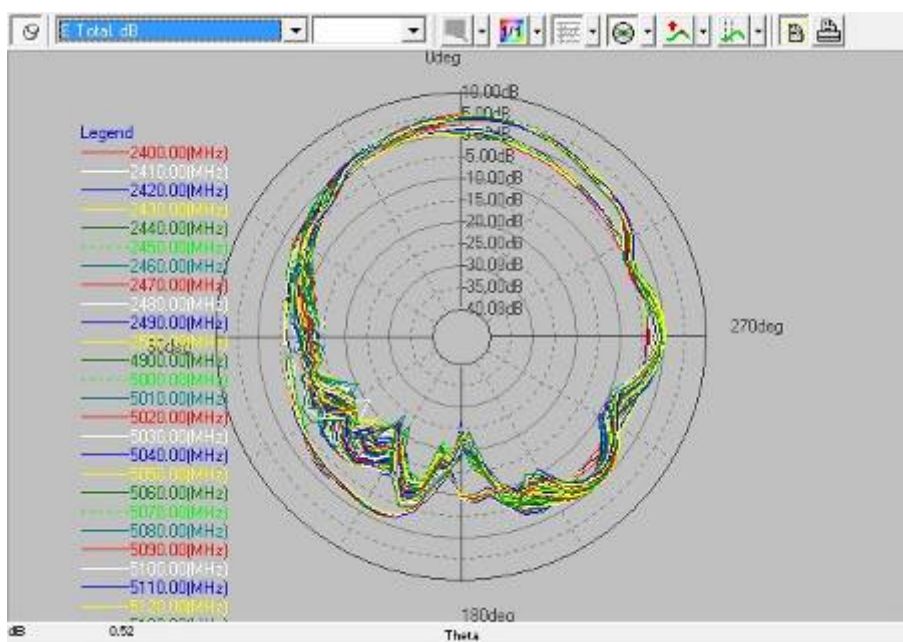


4.2 2D patterns

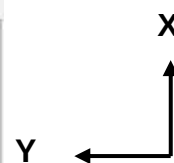
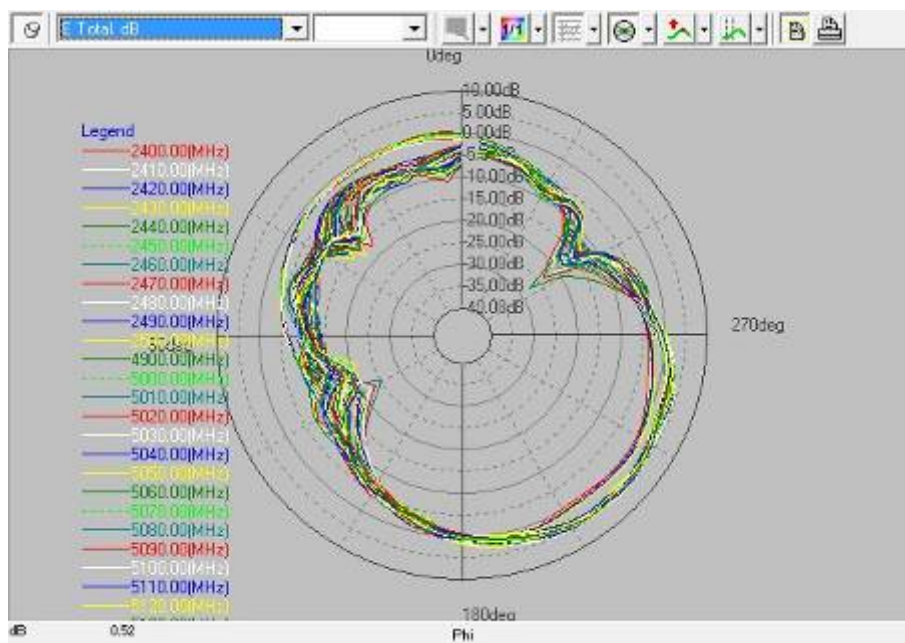
4.2.1 Ant 1



X-Z Plane



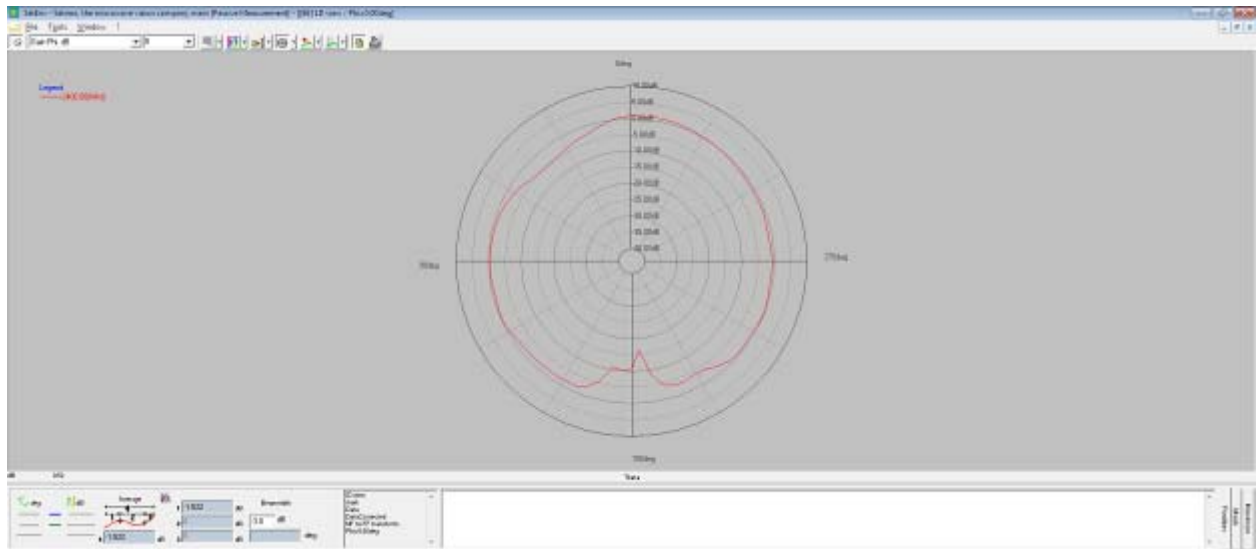
Y-Z Plane



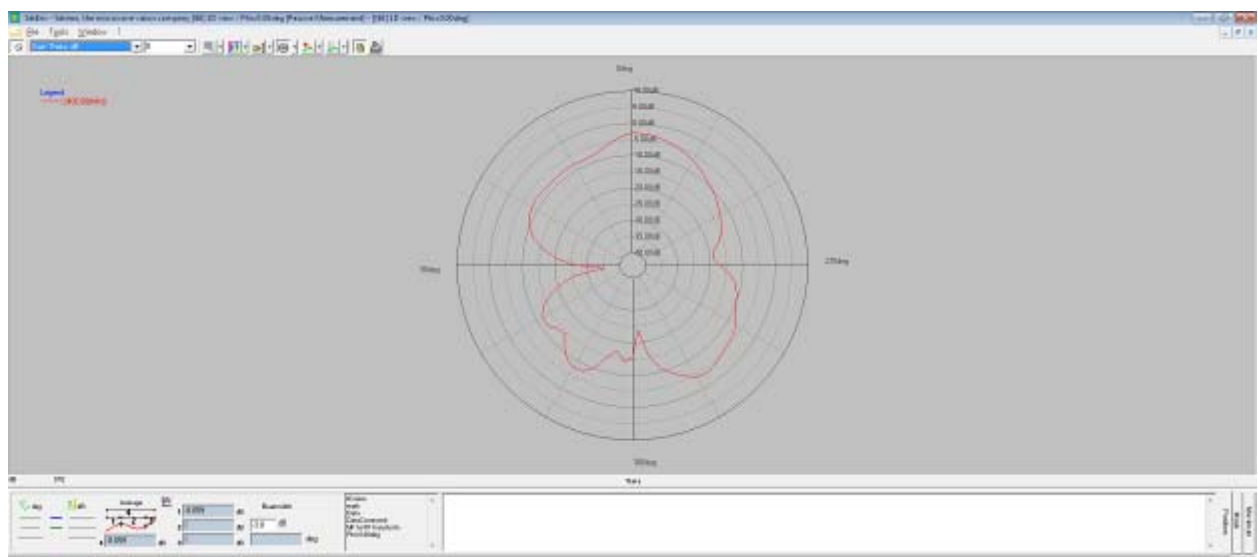
X-Y Plane

4.3 co port & cross port-Ant1

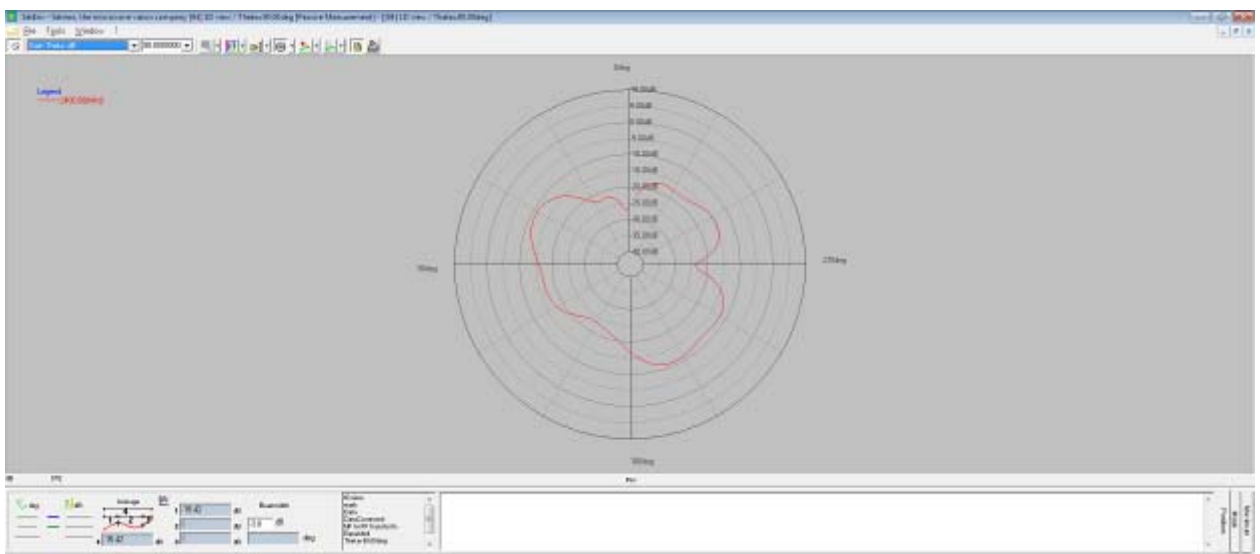
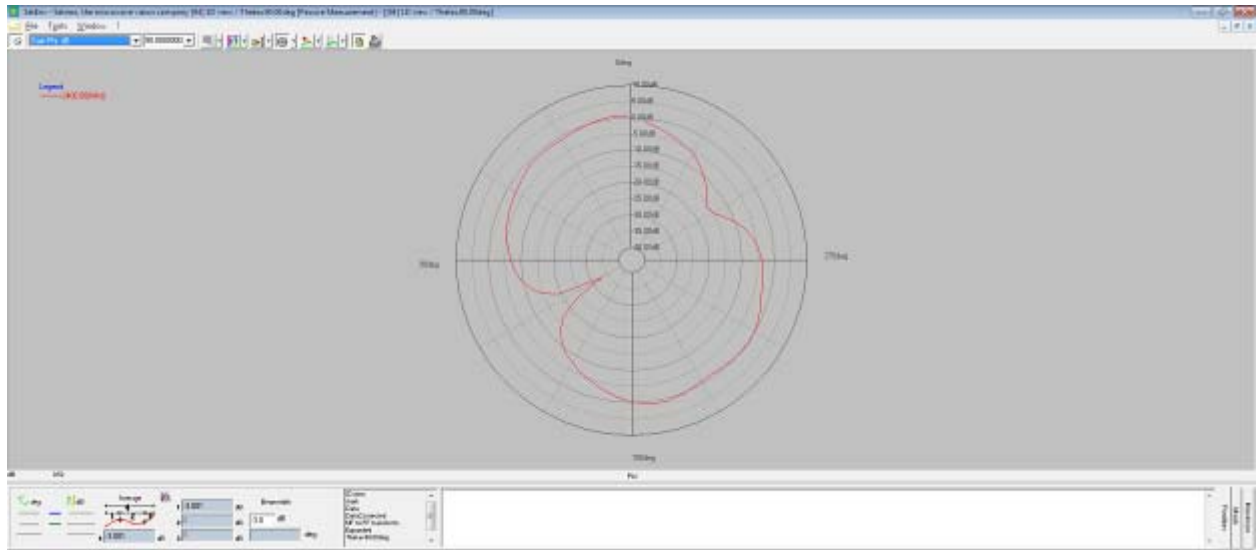
4.3.1 2400MHz



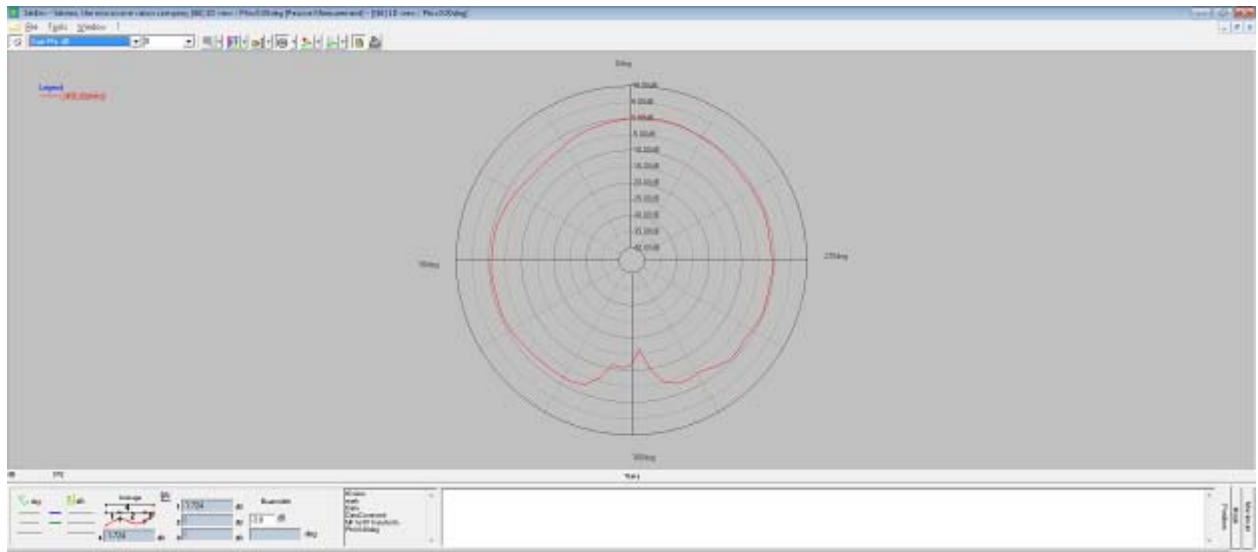
XZ-Phi



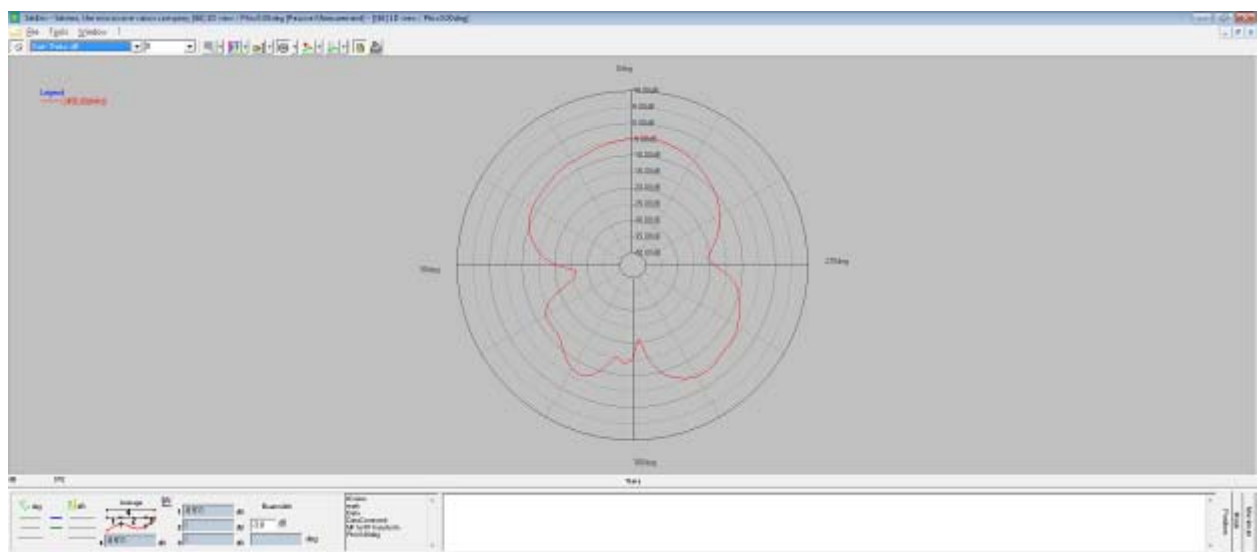
XZ-Theta



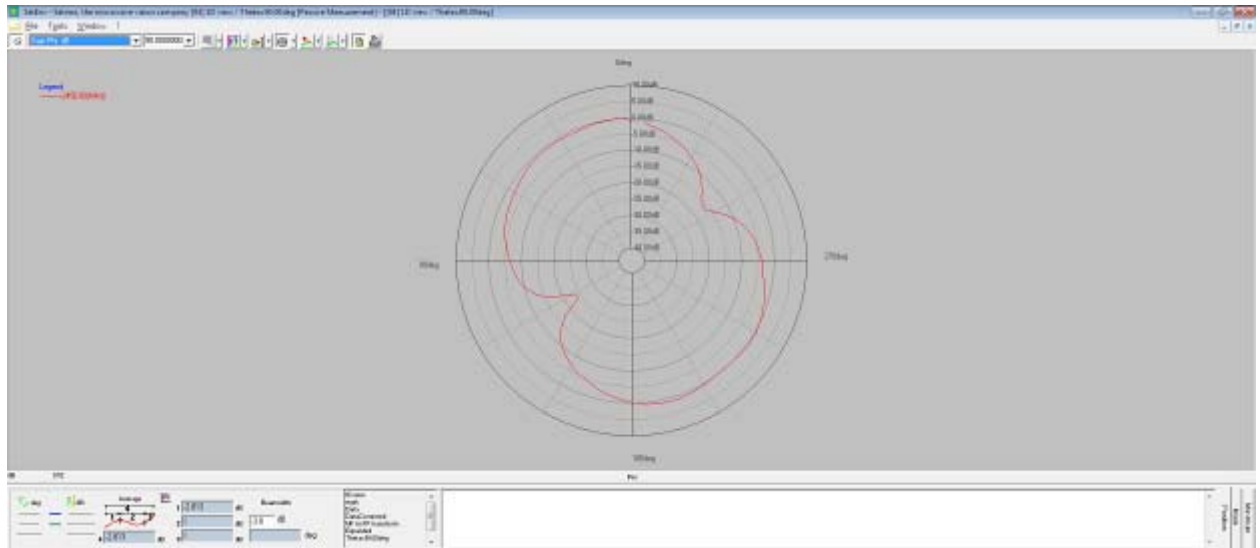
4.3.2 2450MHz



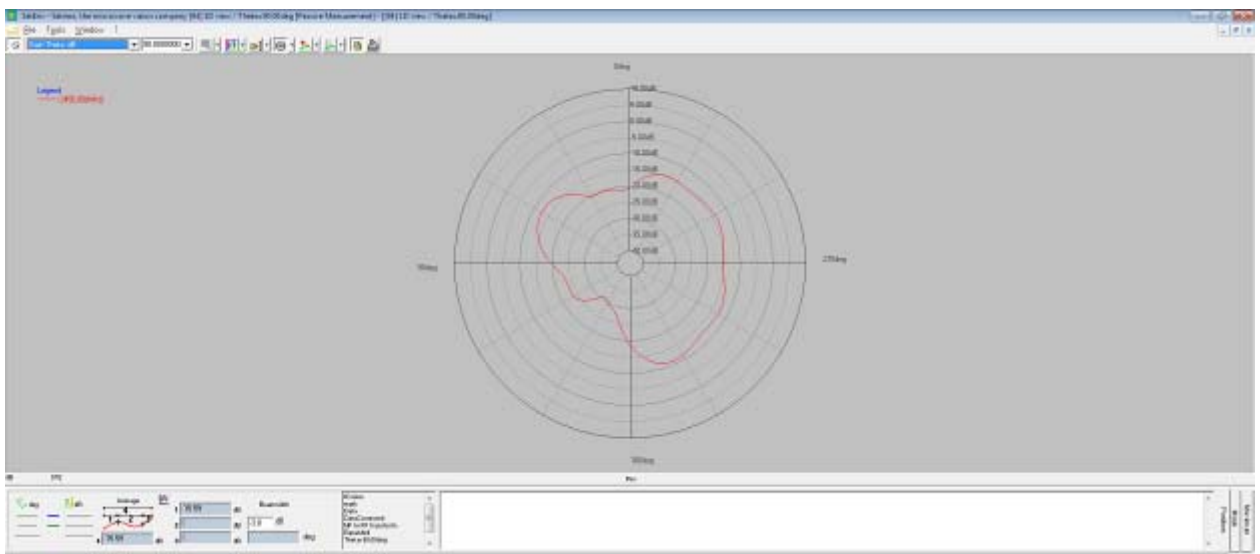
XZ-Phi



XZ-Theta

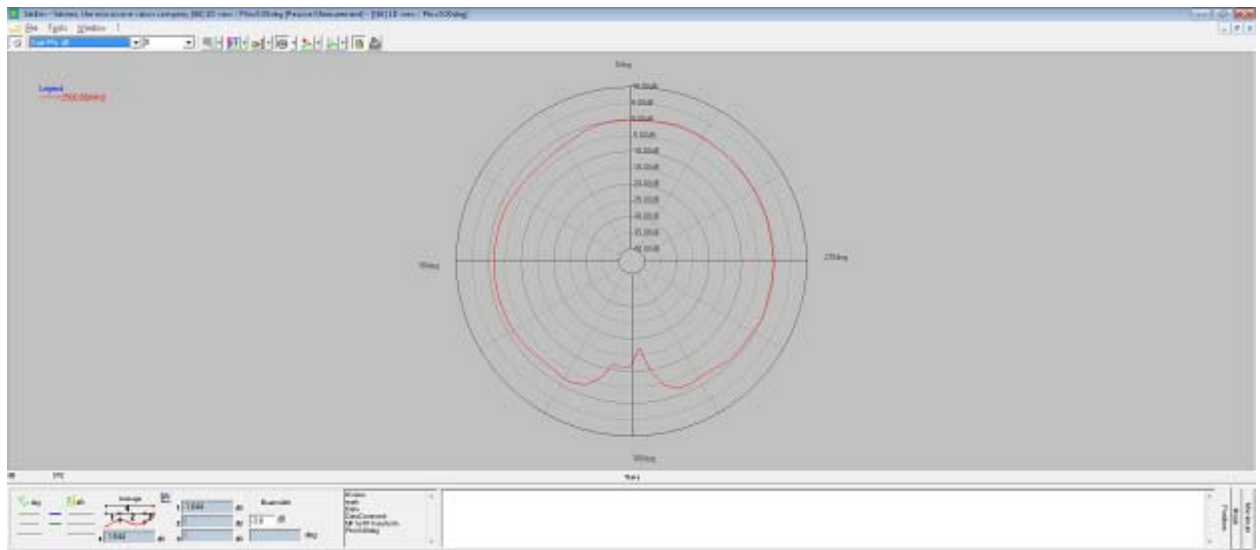


XY-Phi

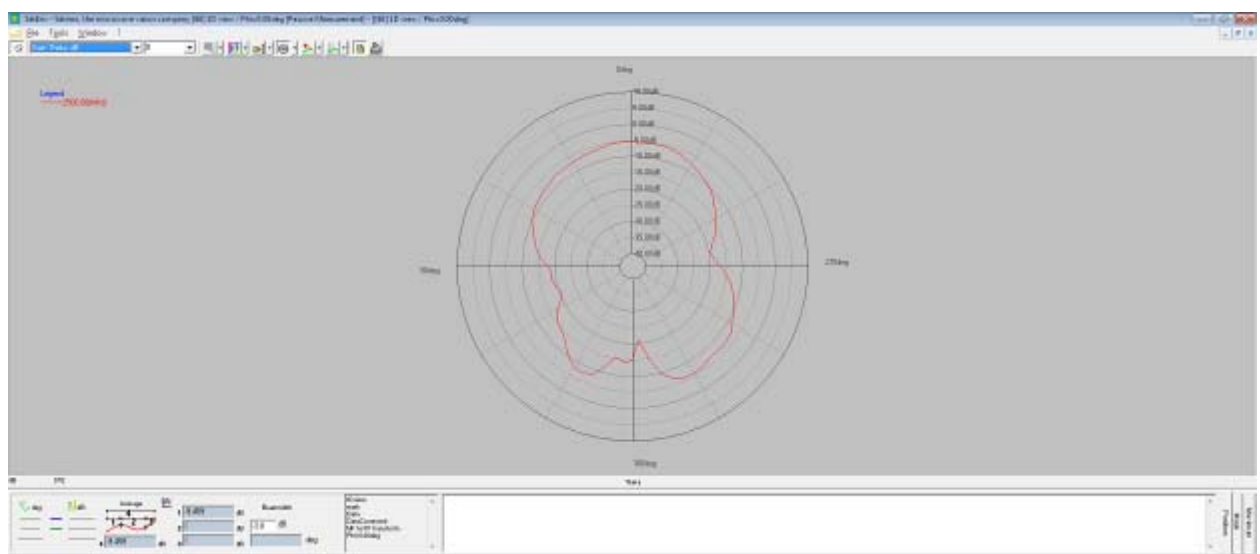


XY-Theta

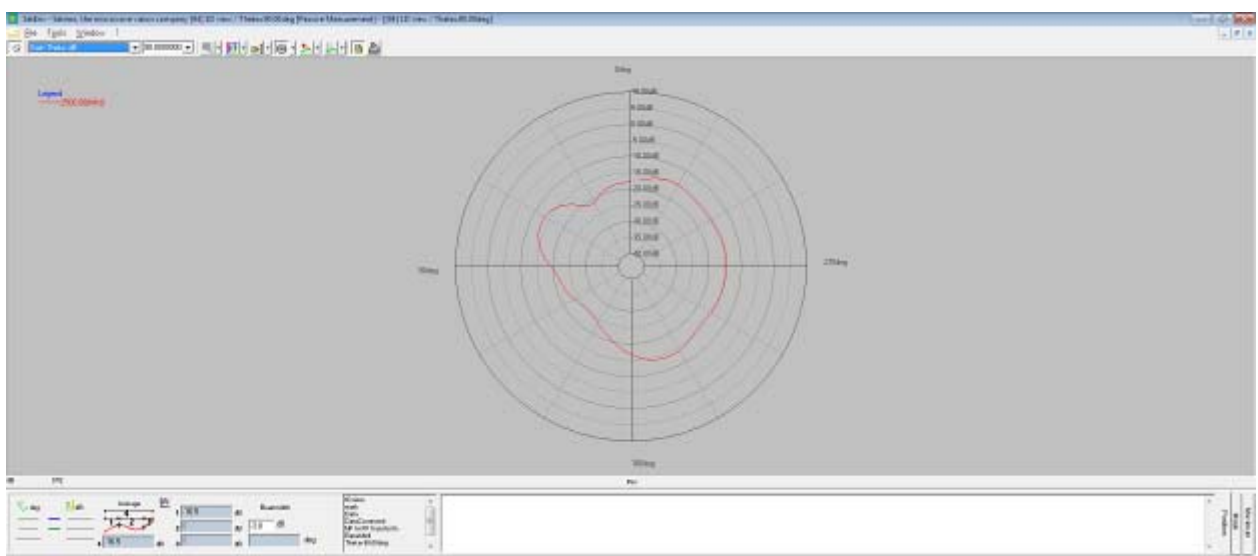
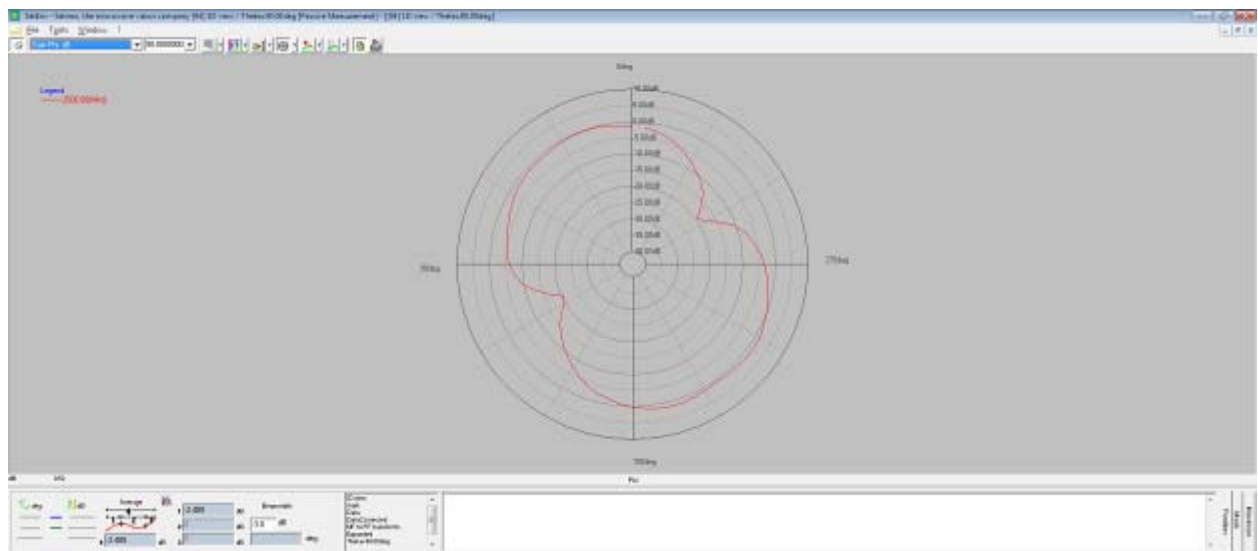
4.3.3 2500MHz



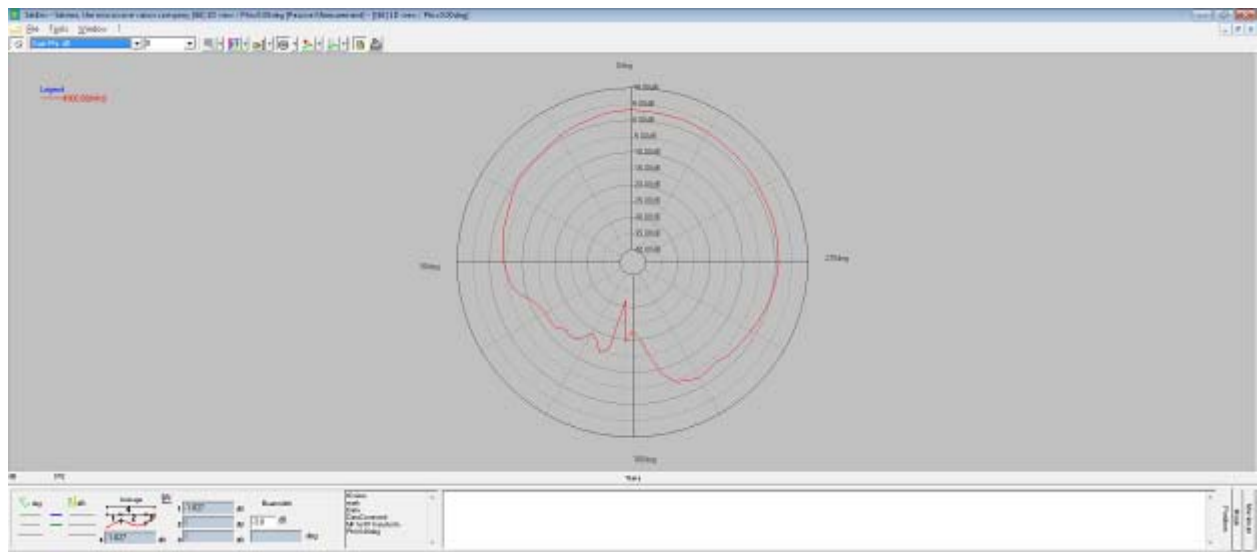
XZ-Phi



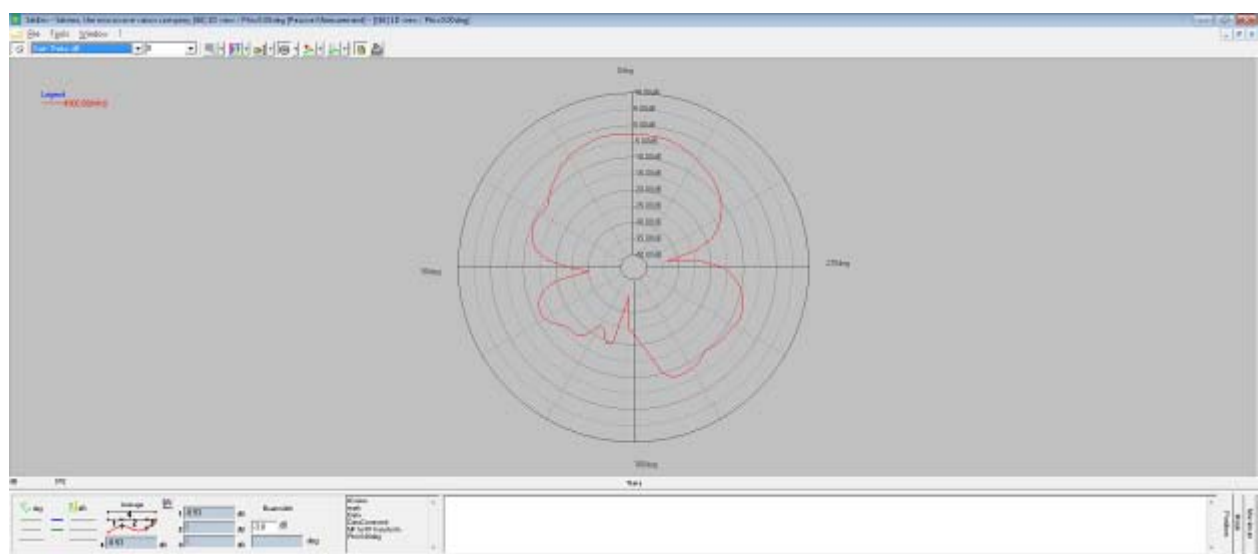
XZ-Theta



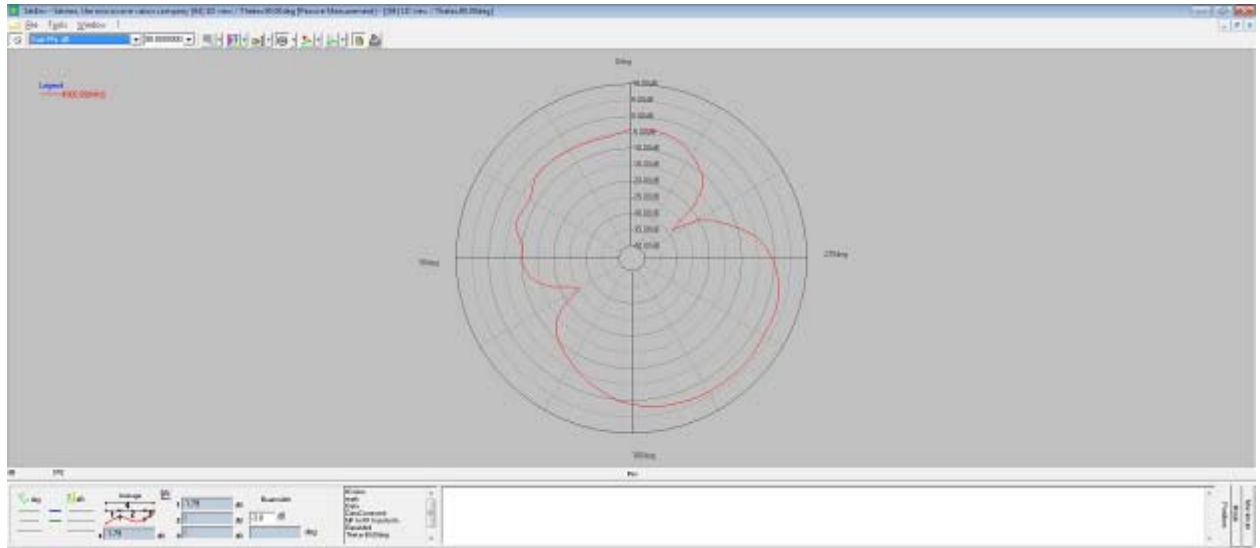
4.3.4 4900MHz



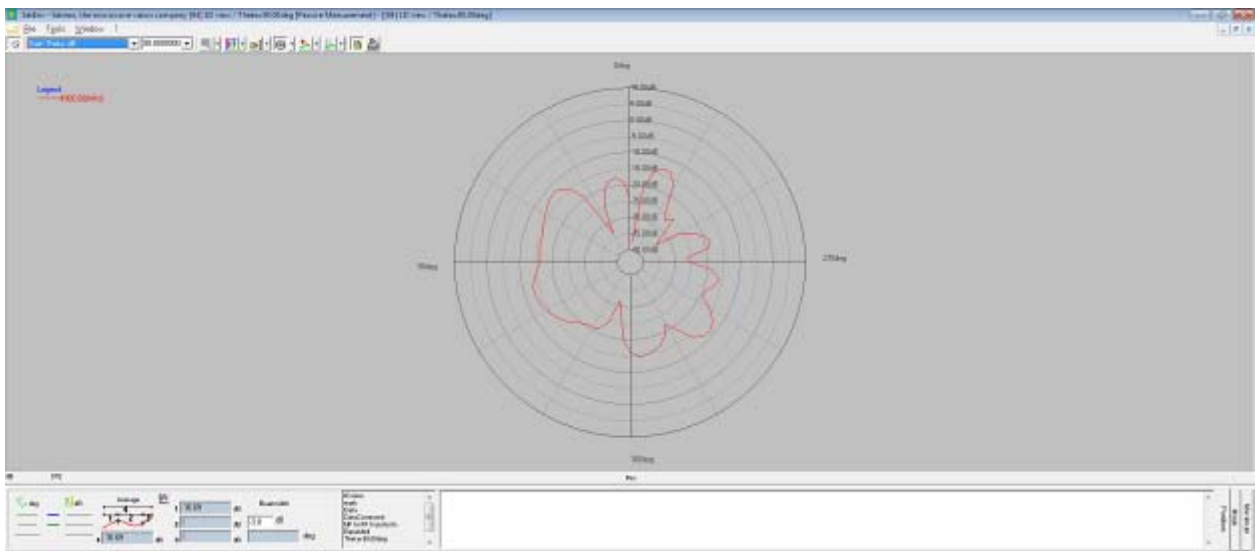
XZ-Phi



XZ-Theta

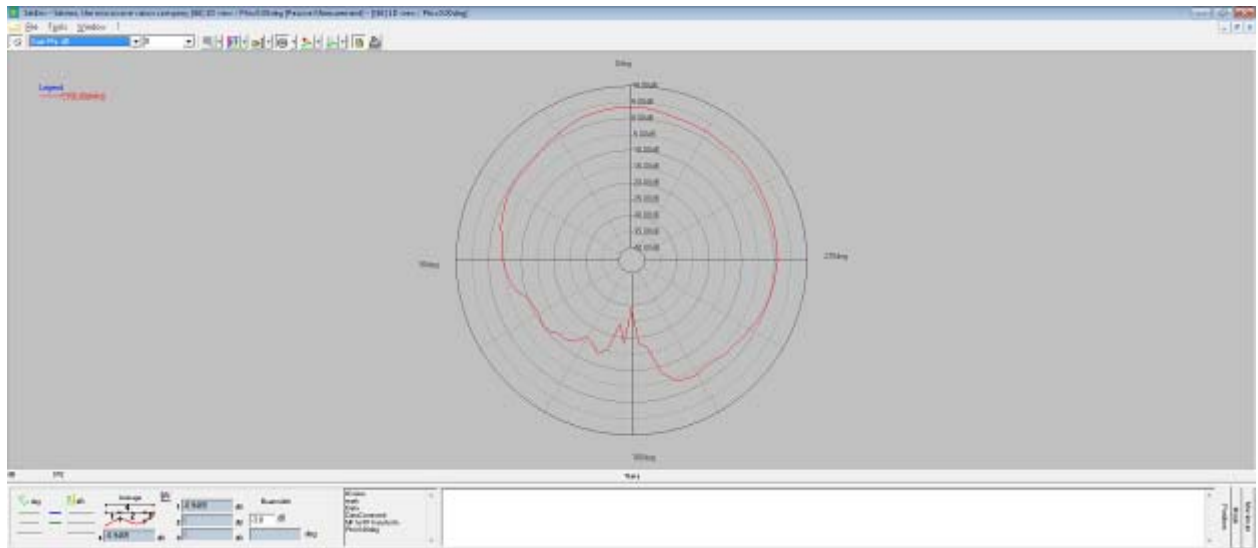


XY-Phi

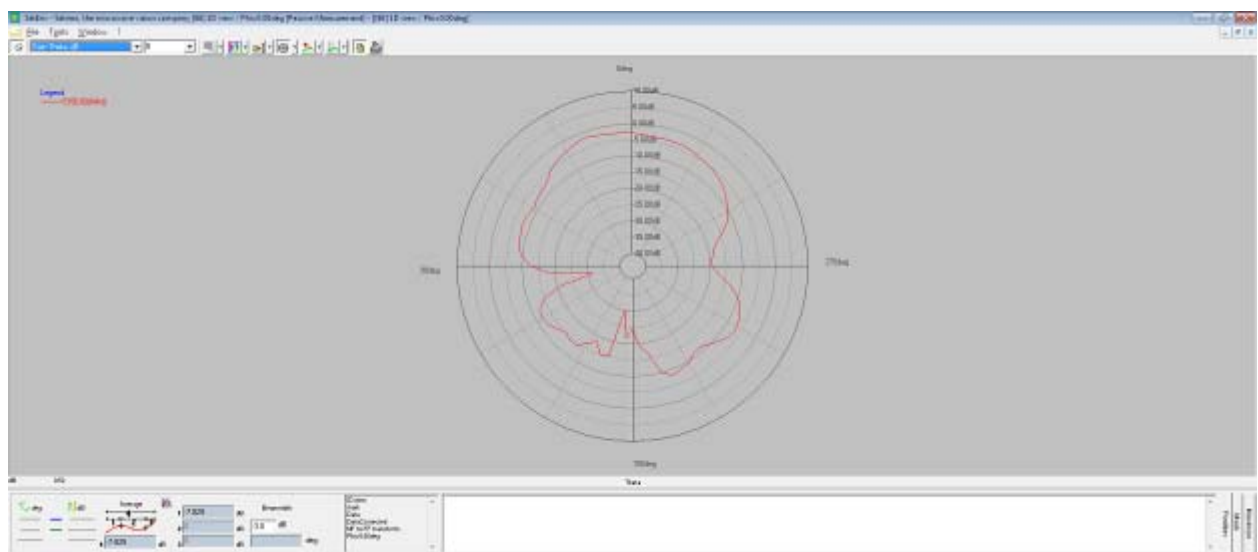


XY-Theta

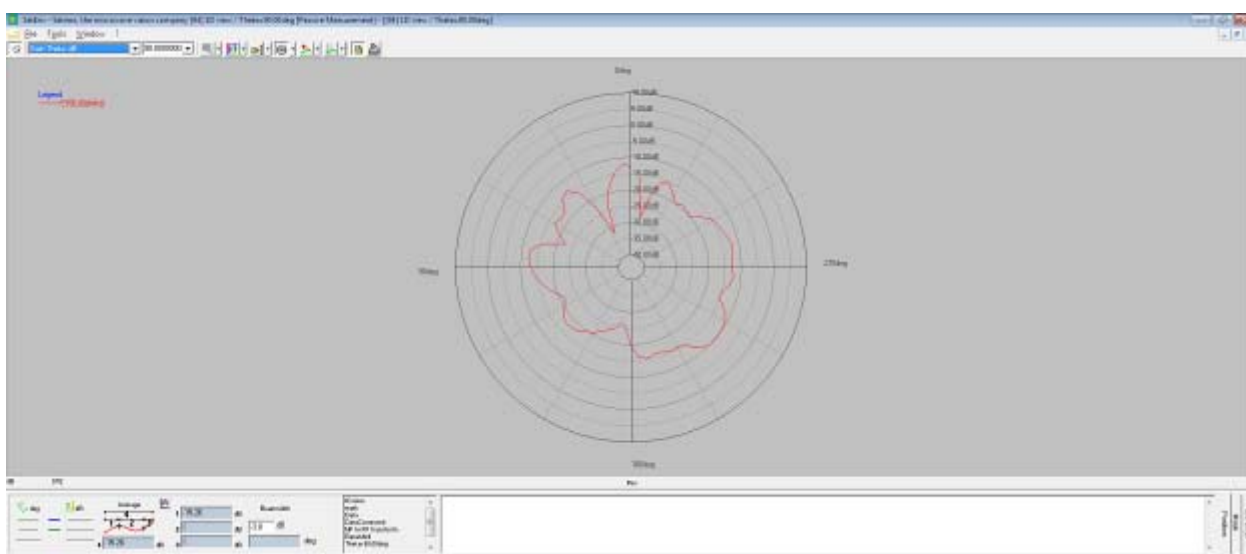
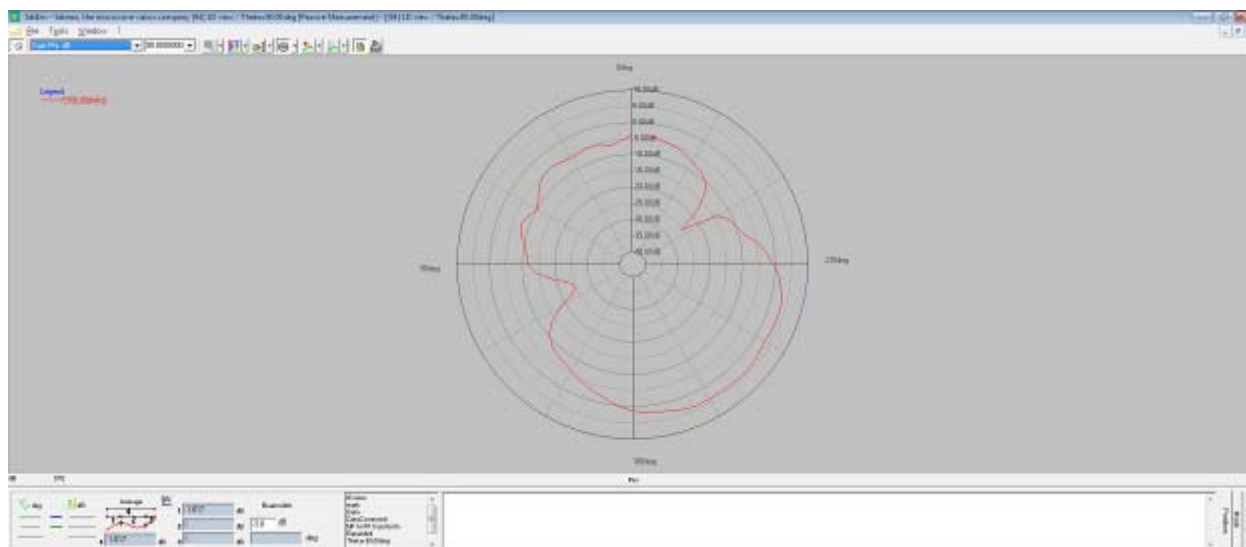
4.3.5 5150MHz



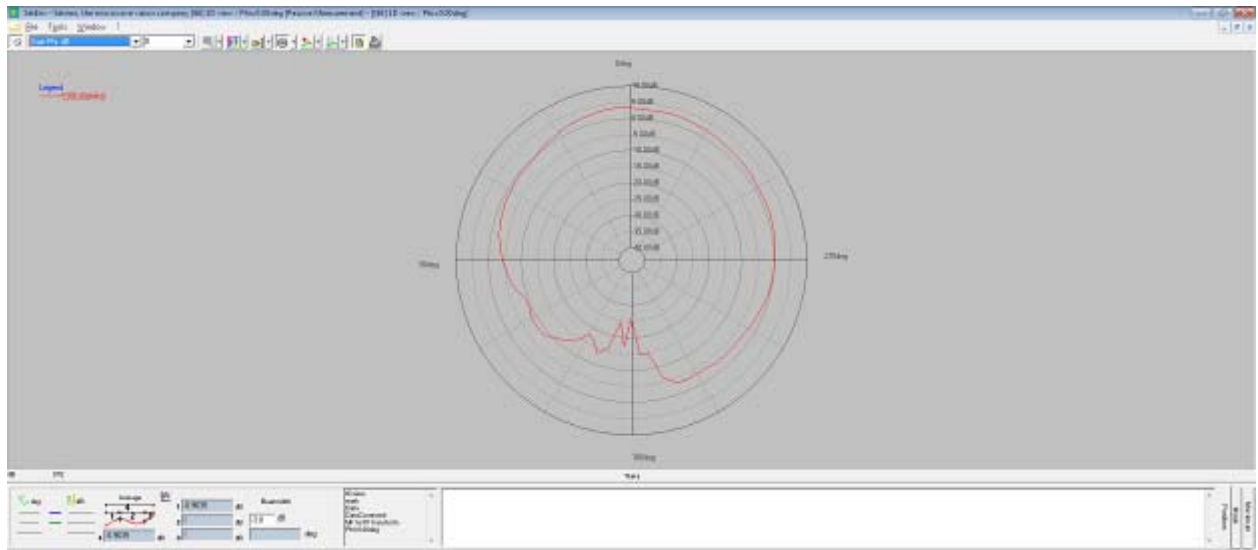
XZ-Phi



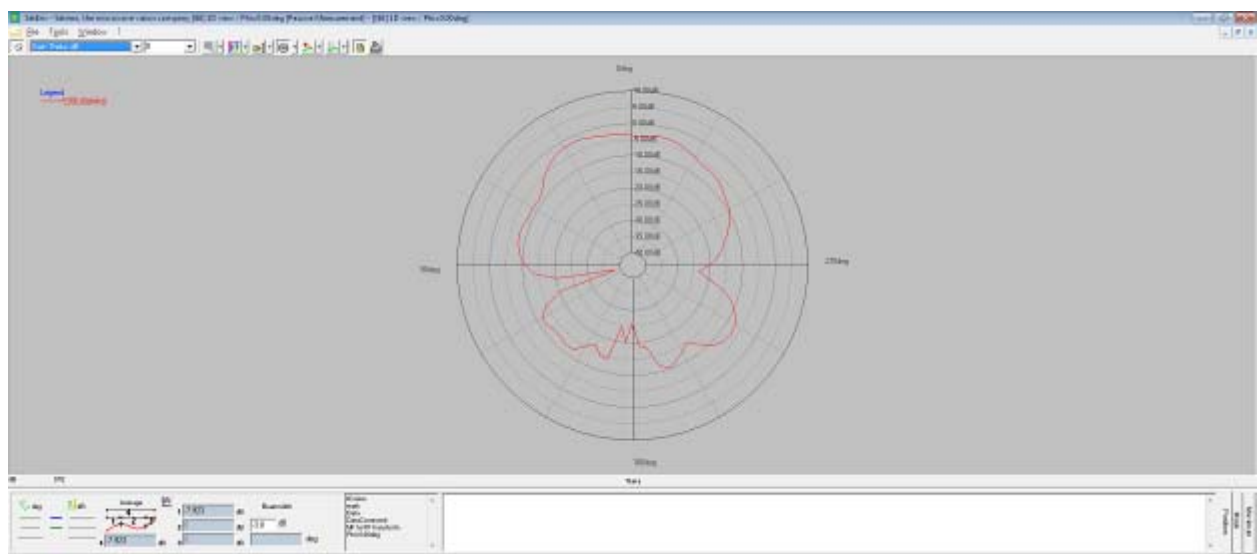
XZ-Theta



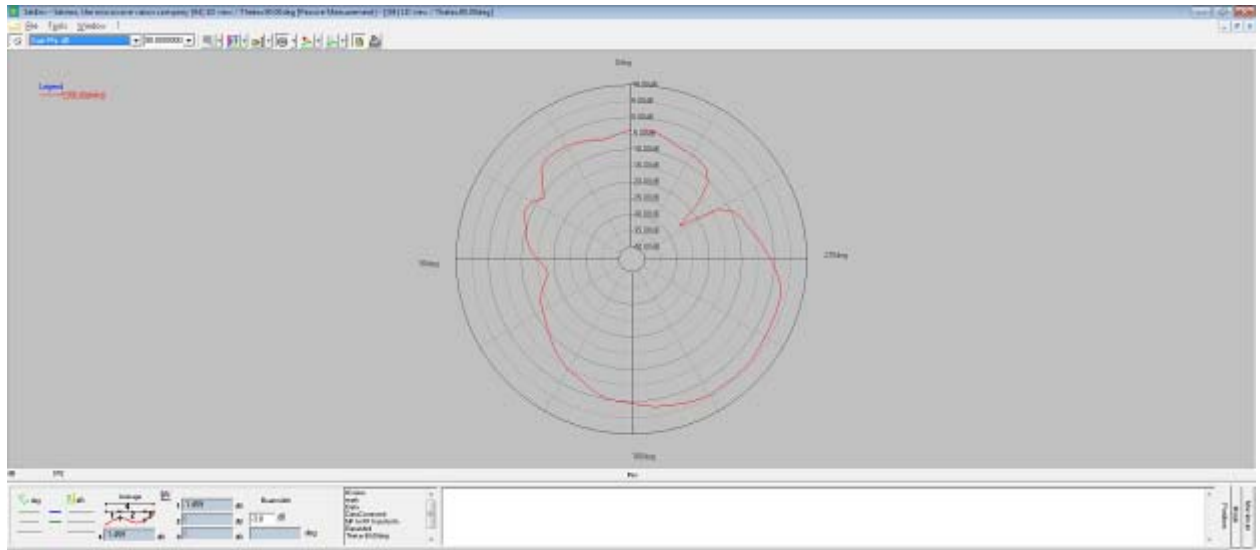
4.3.6 5350MHz



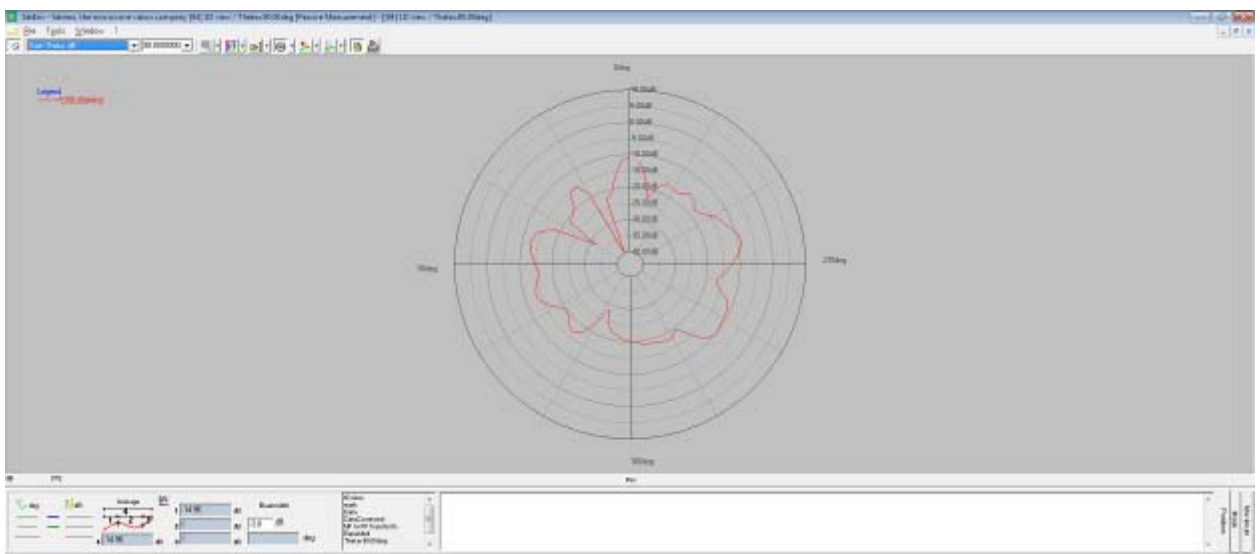
XZ-Phi



XZ-Theta

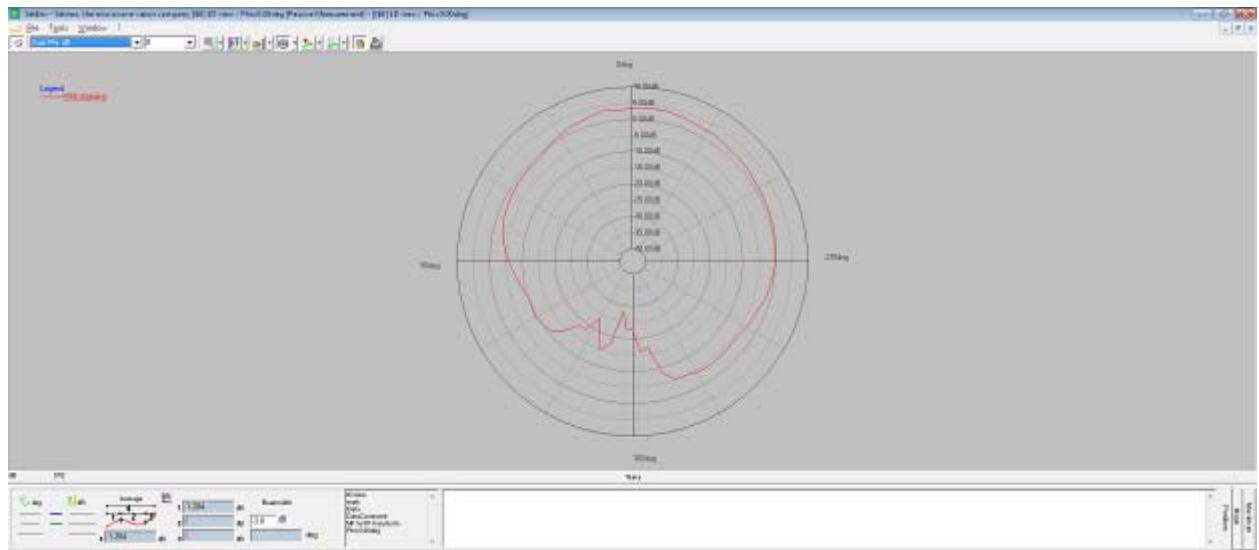


XY-Phi

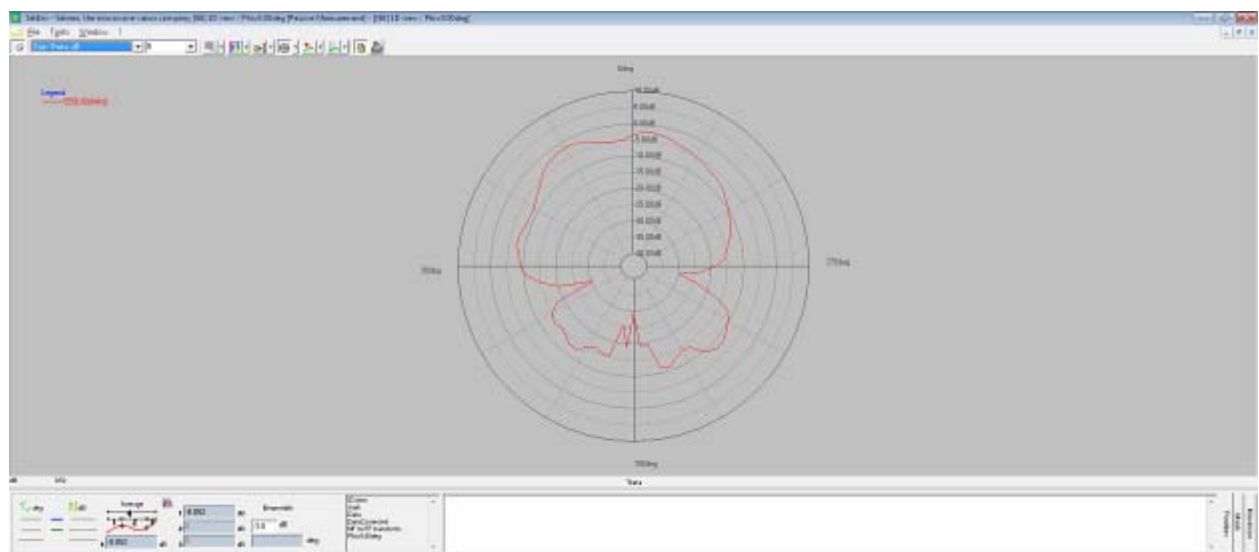


XY-Theta

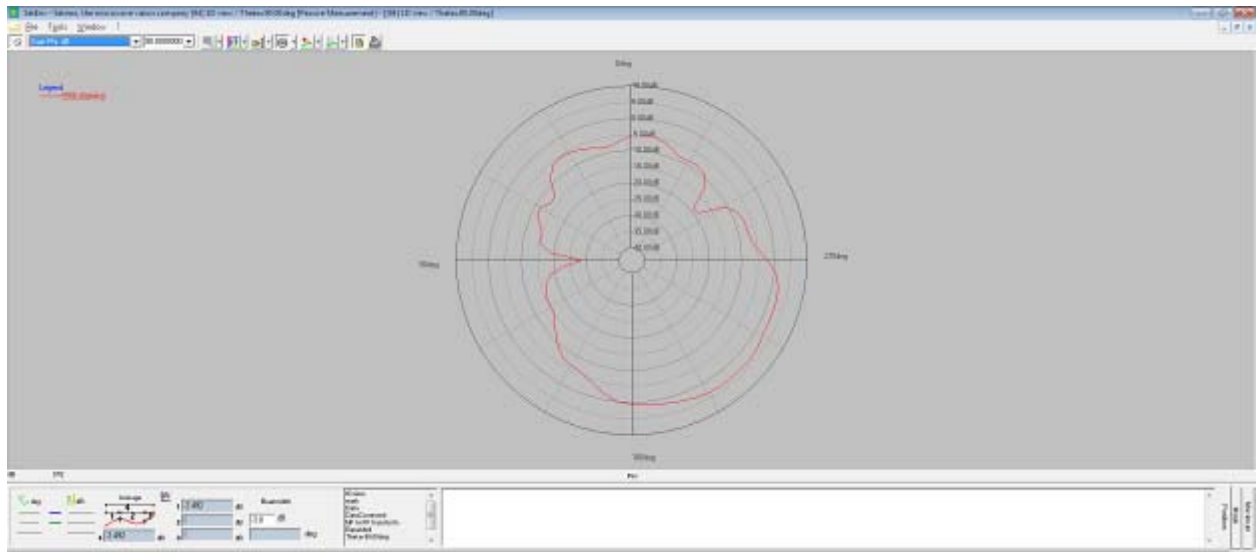
4.3.7 5550MHz



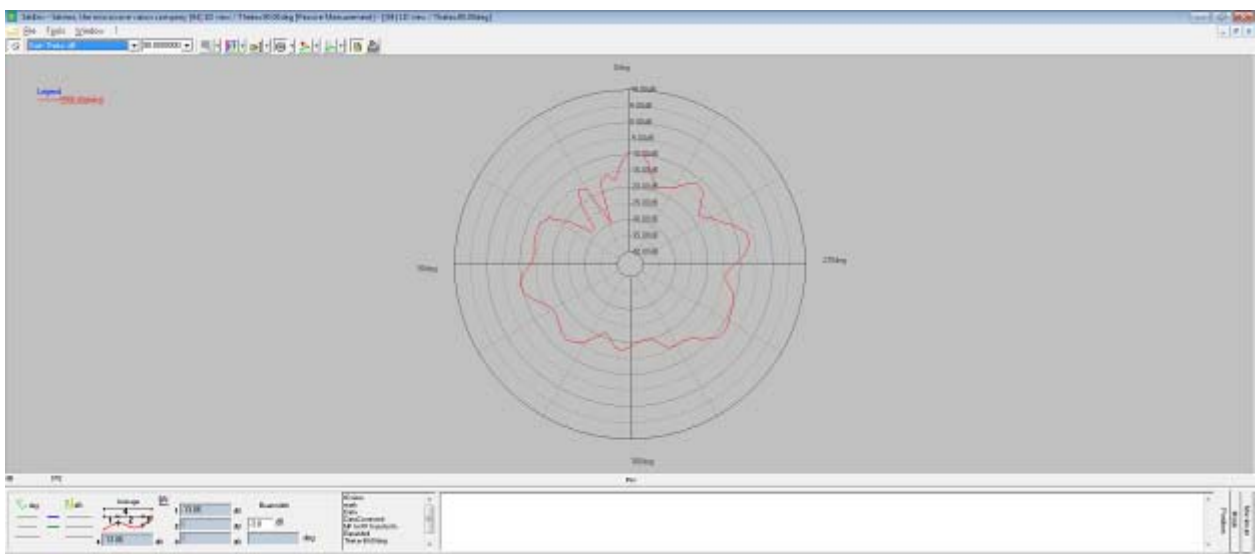
XZ-Phi



XZ-Theta

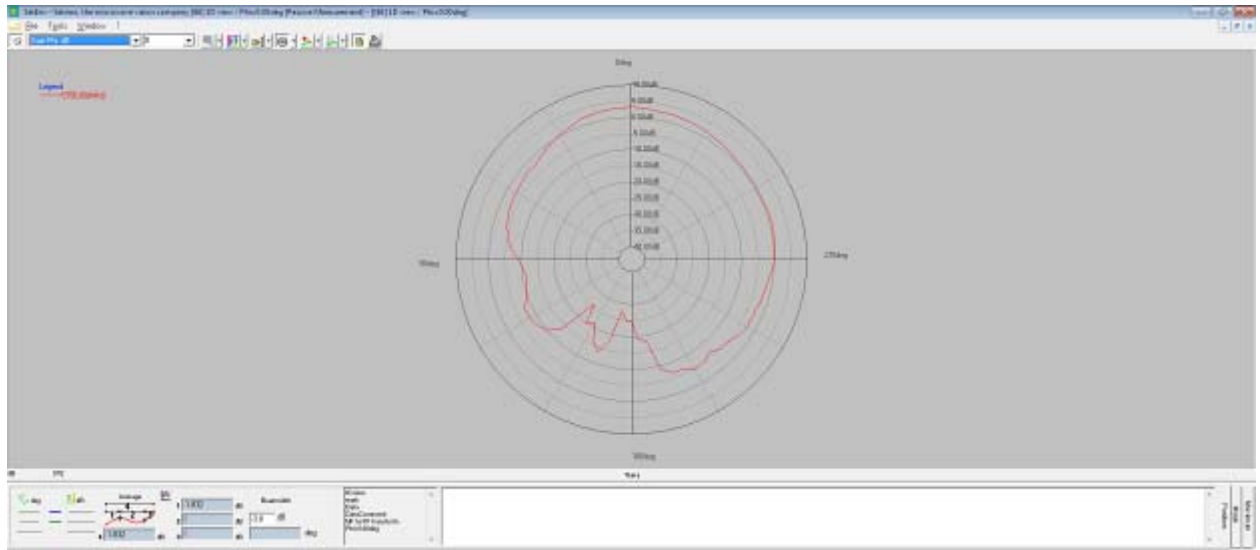


XY-Phi

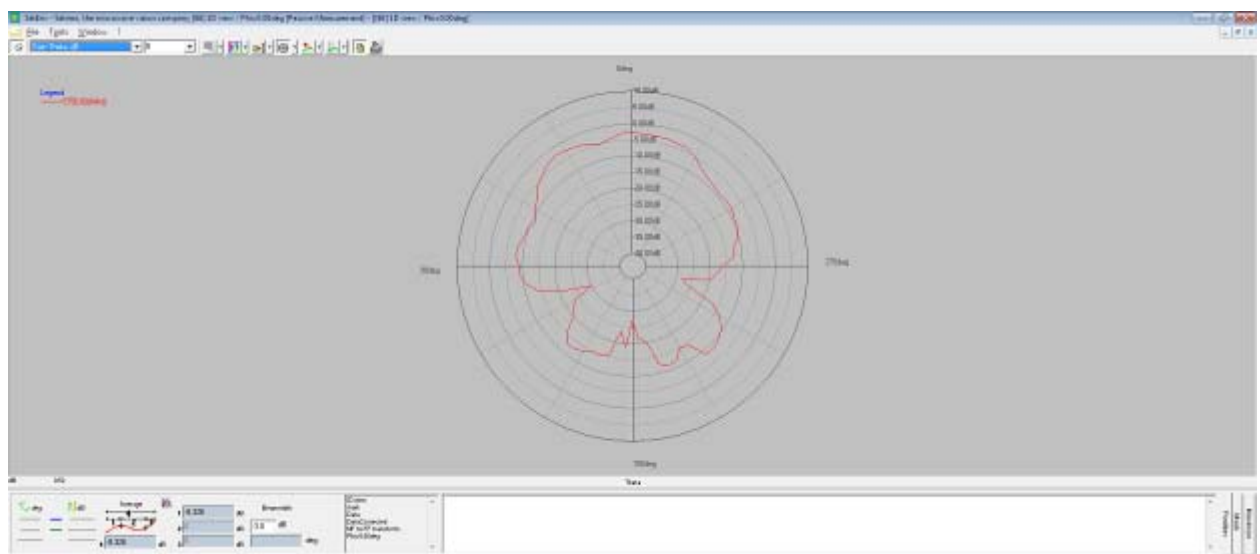


XY-Theta

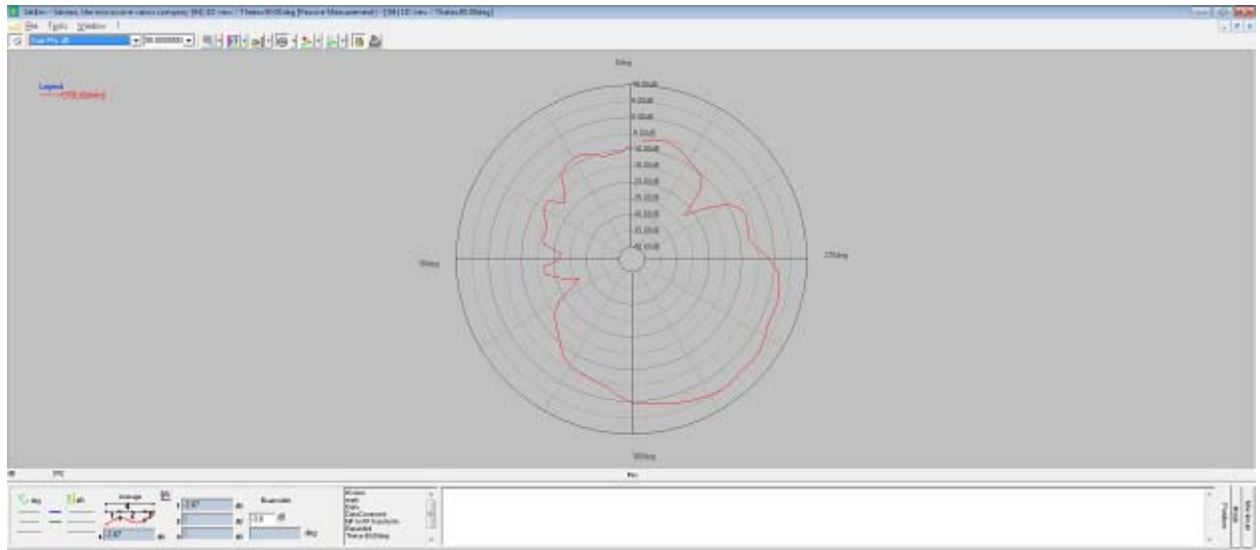
4.3.8 5750MHz



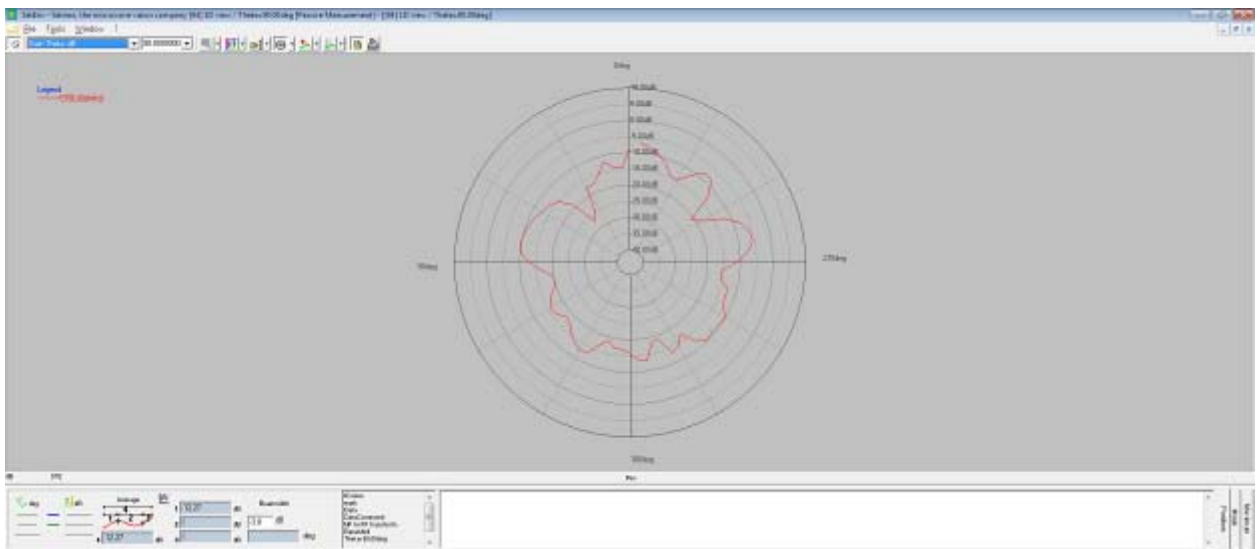
XZ-Phi



XZ-Theta

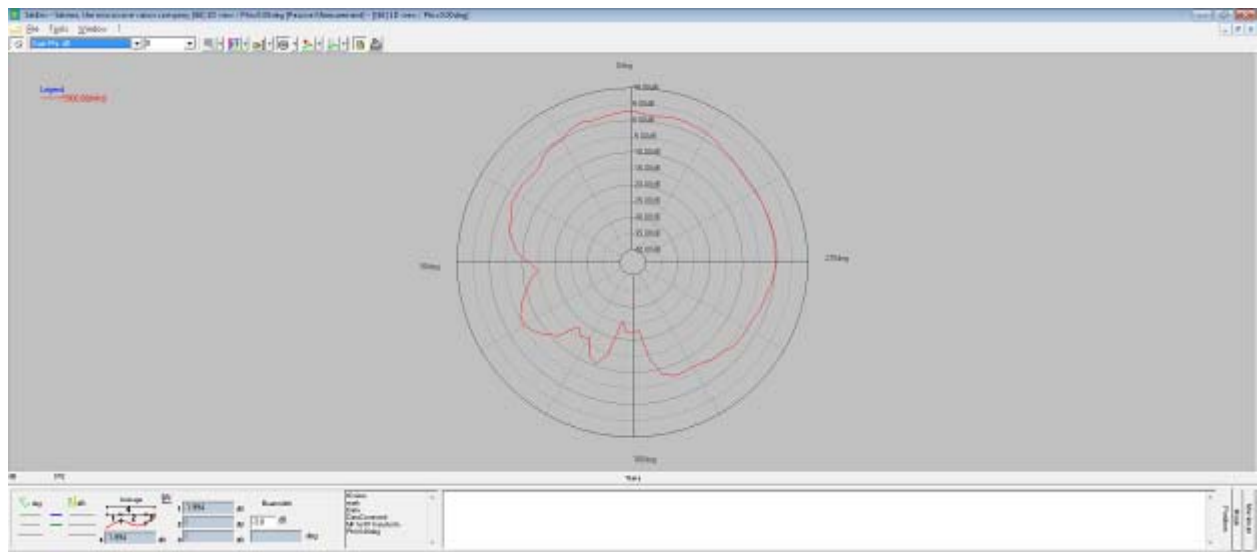


XY-Phi

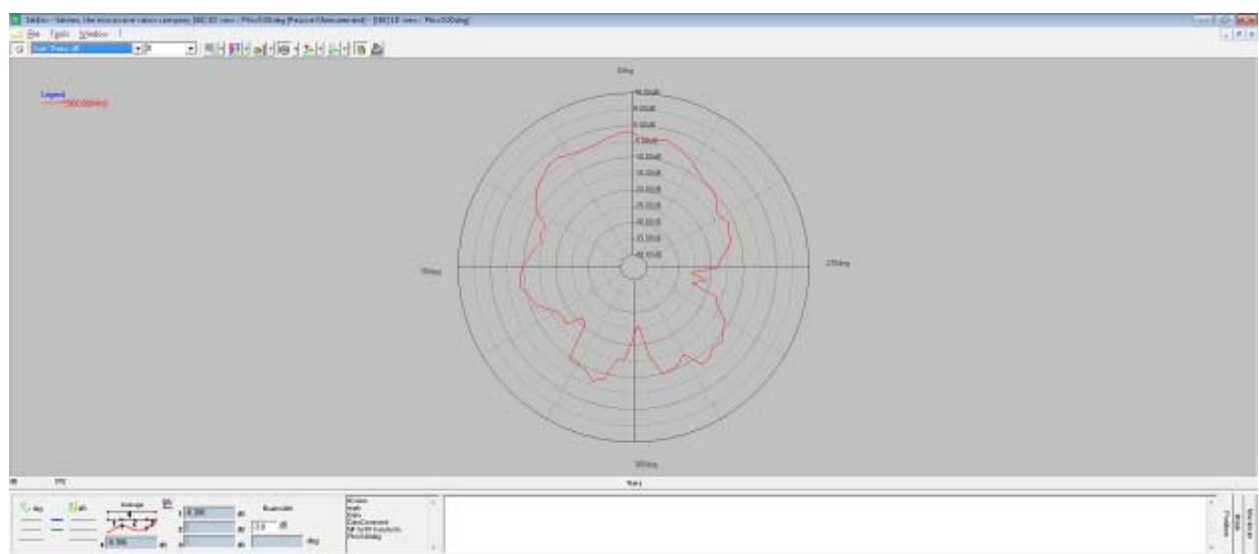


XY-Theta

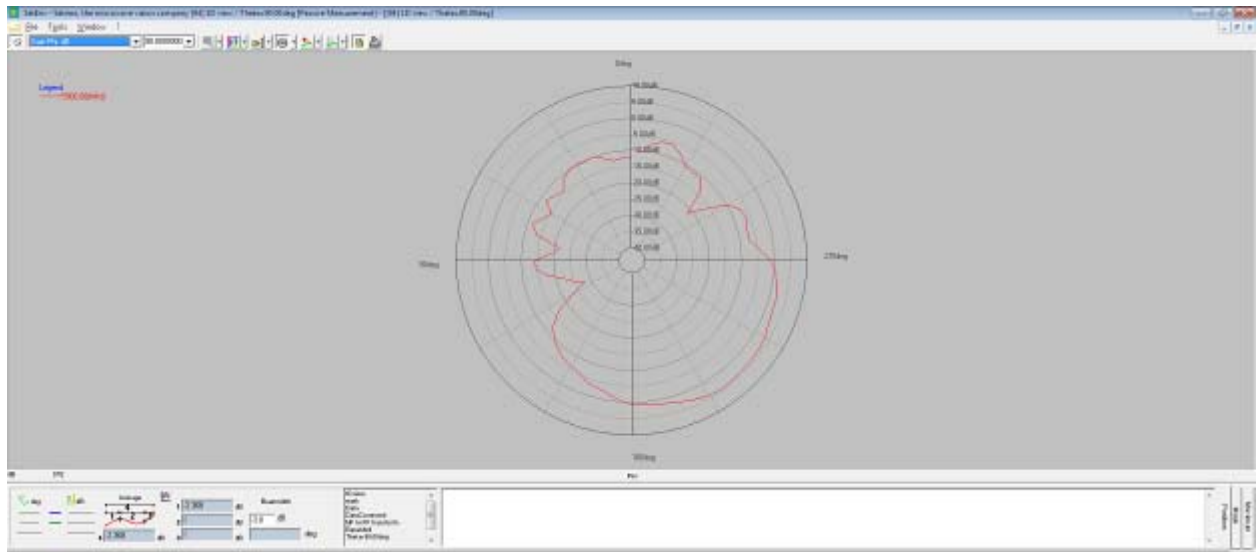
4.3.9 5900MHz



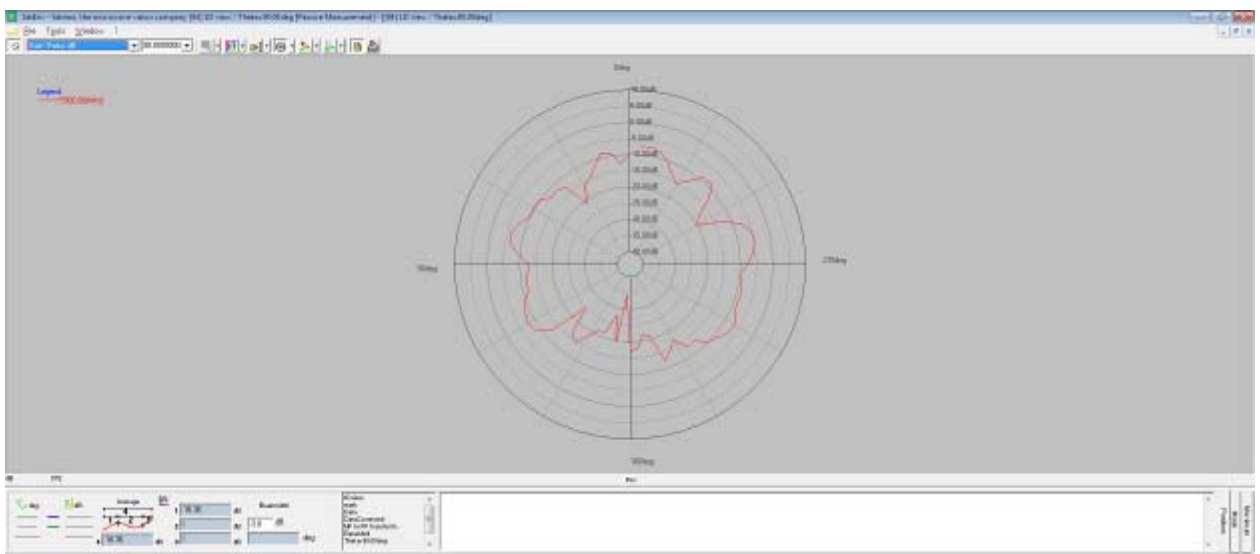
XZ-Phi



XZ-Theta



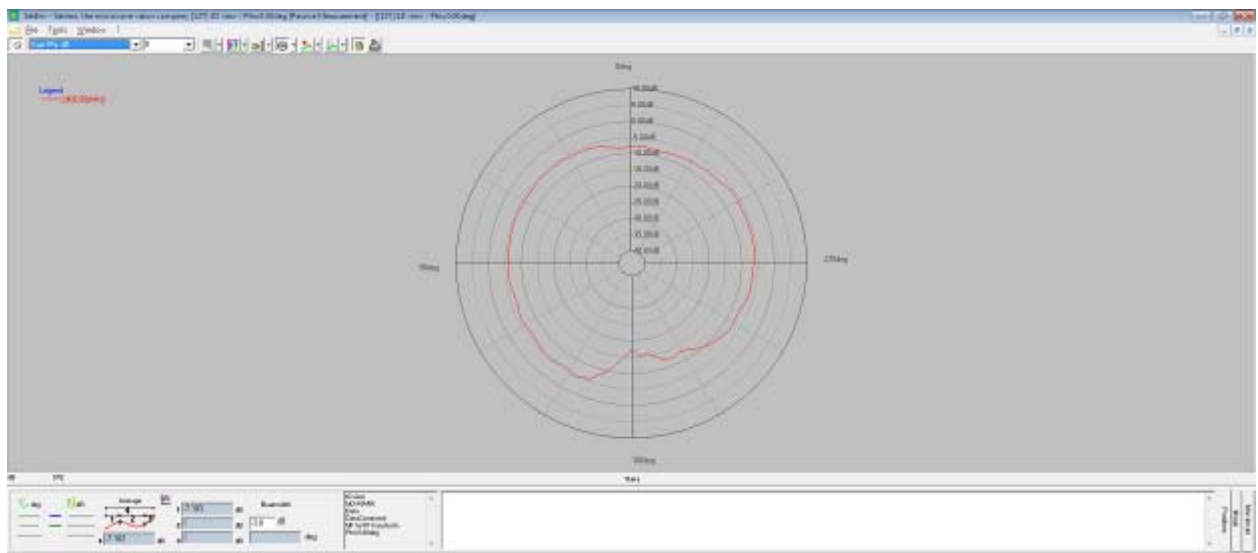
XY-Phi



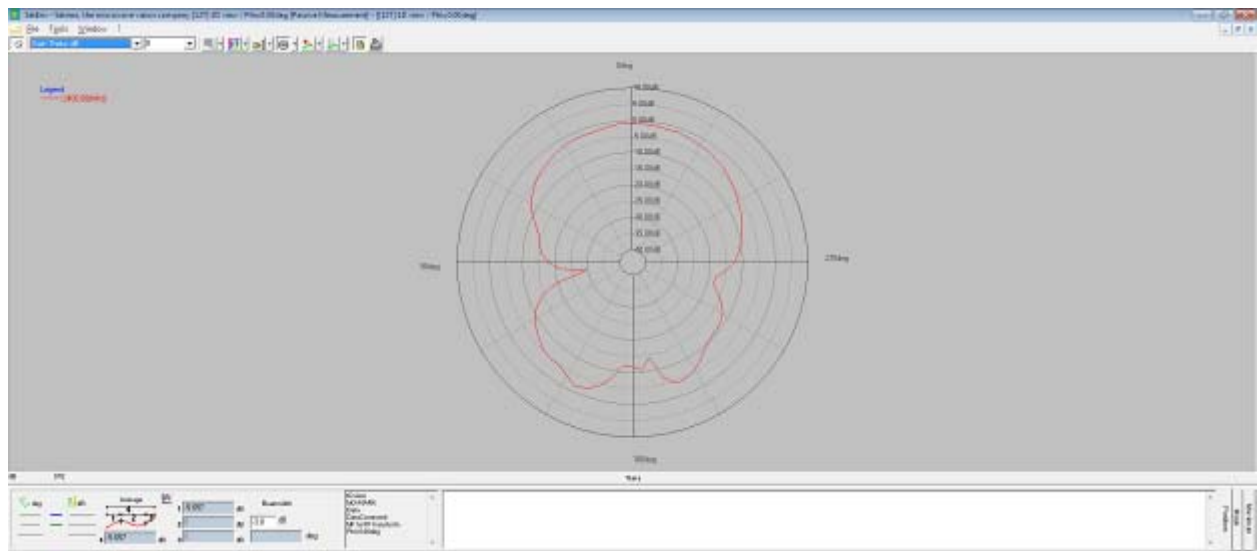
XY-Theta

4.4 co port & cross port-Ant2

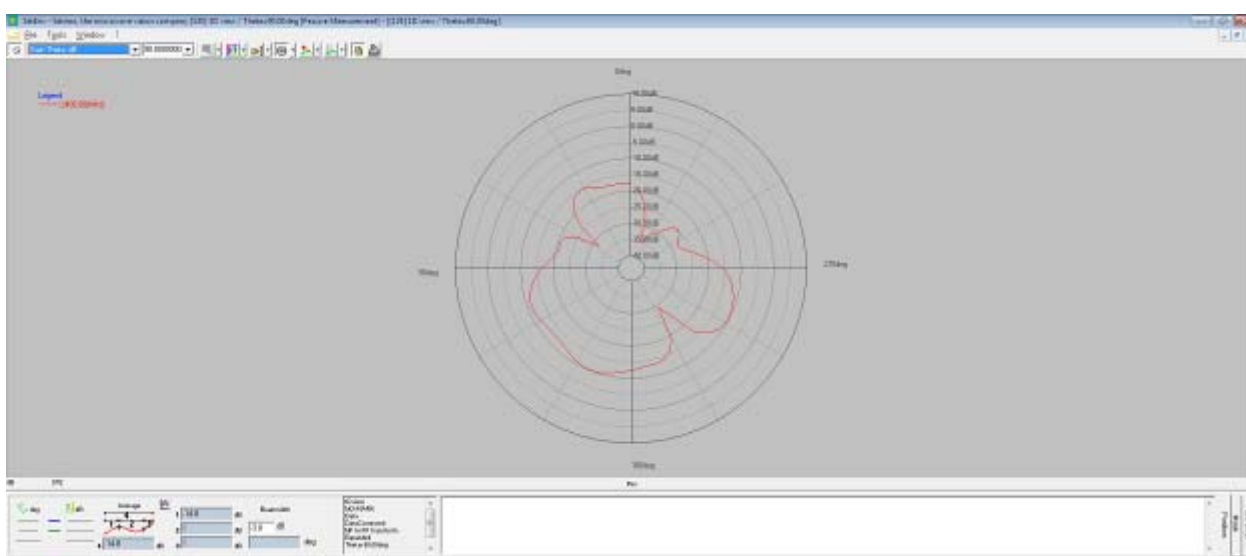
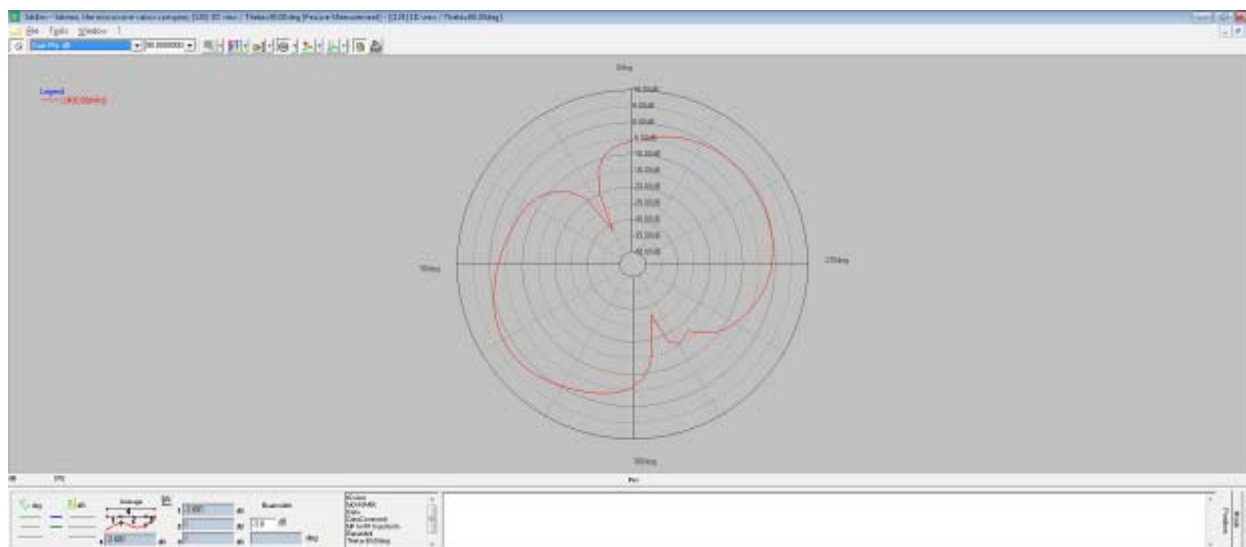
4.4.1 2400MHz



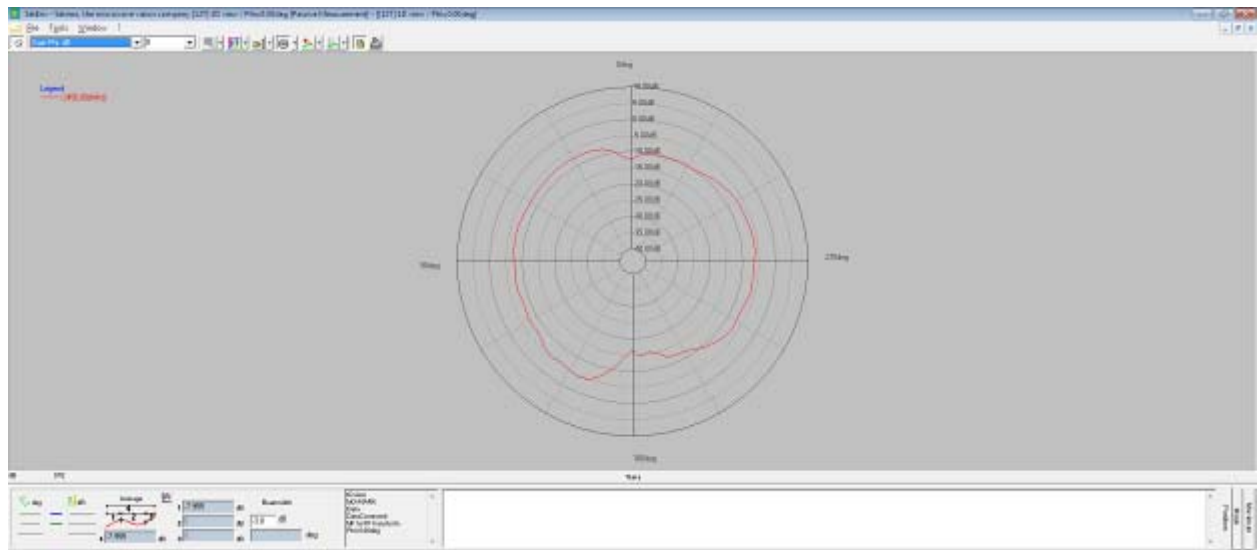
XZ-Phi



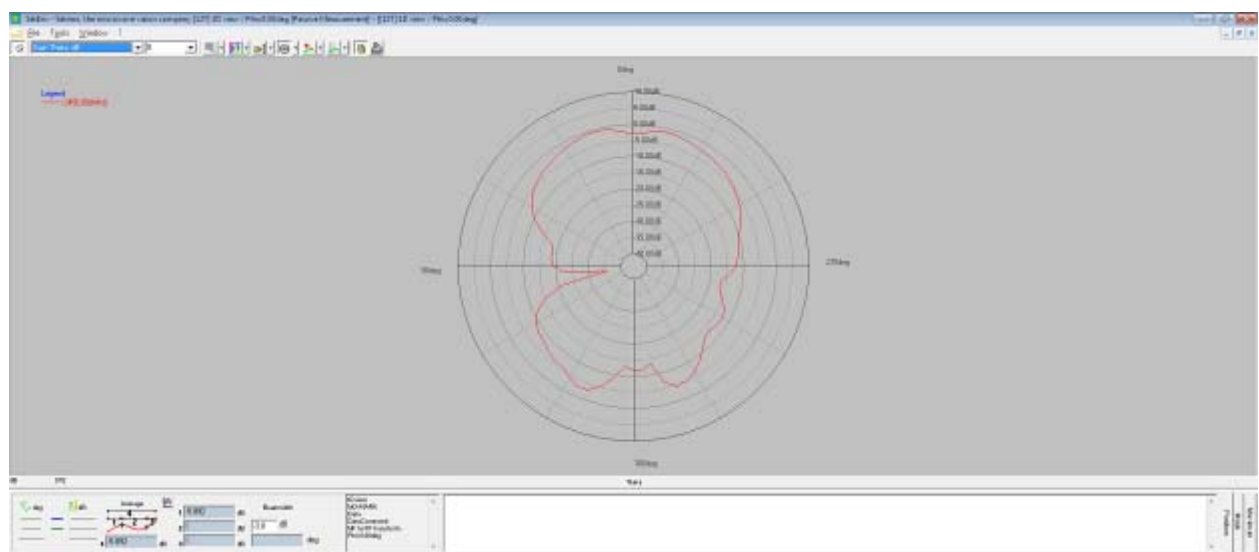
XZ-Theta



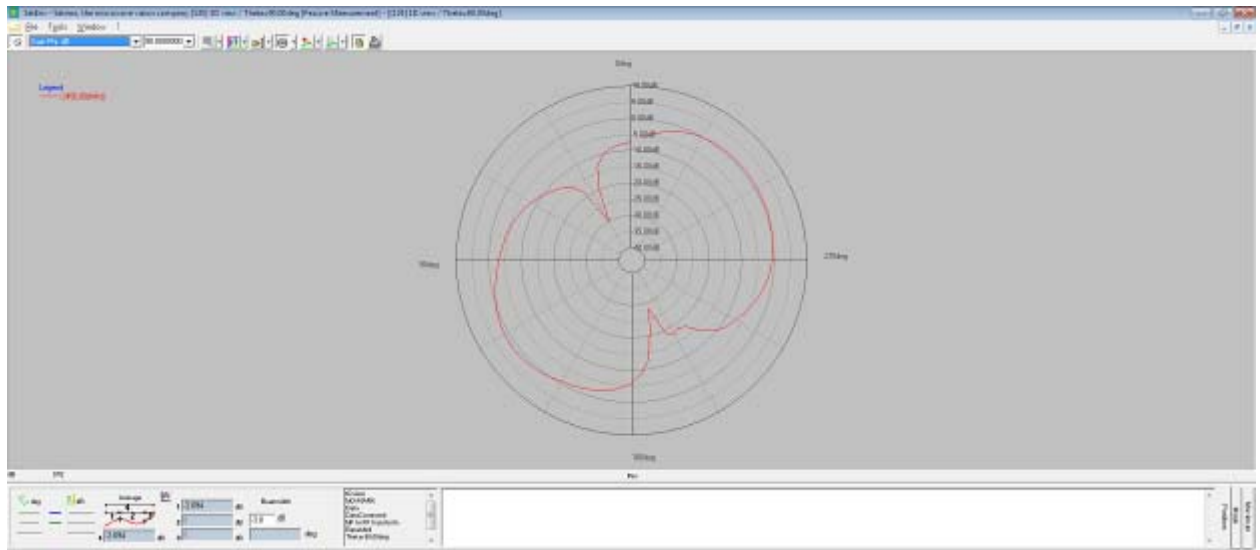
4.4.2 2450MHz



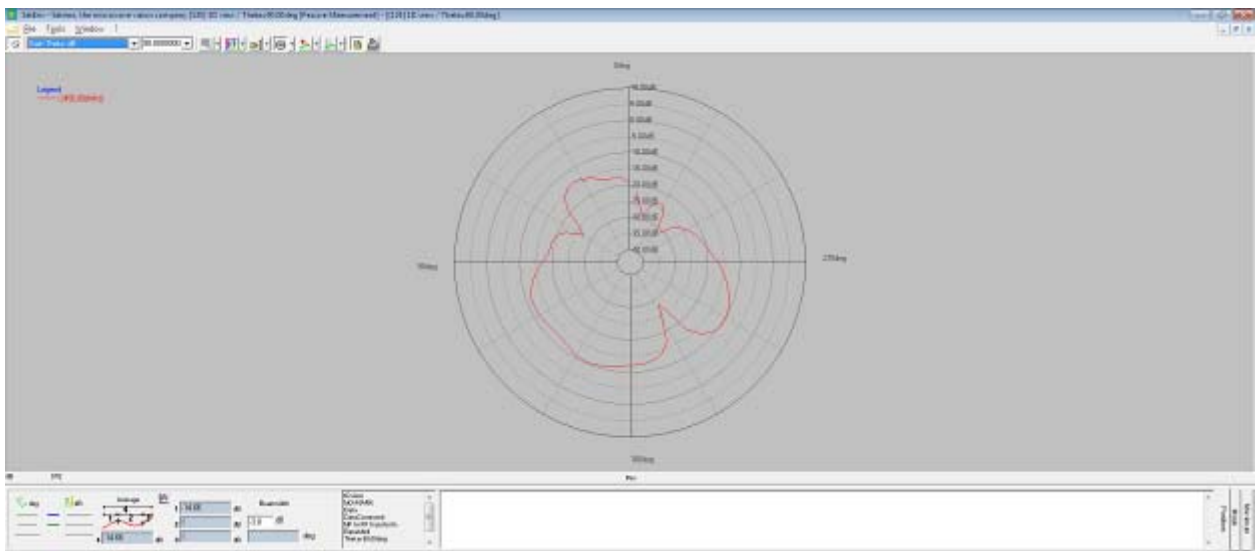
XZ-Phi



XZ-Theta

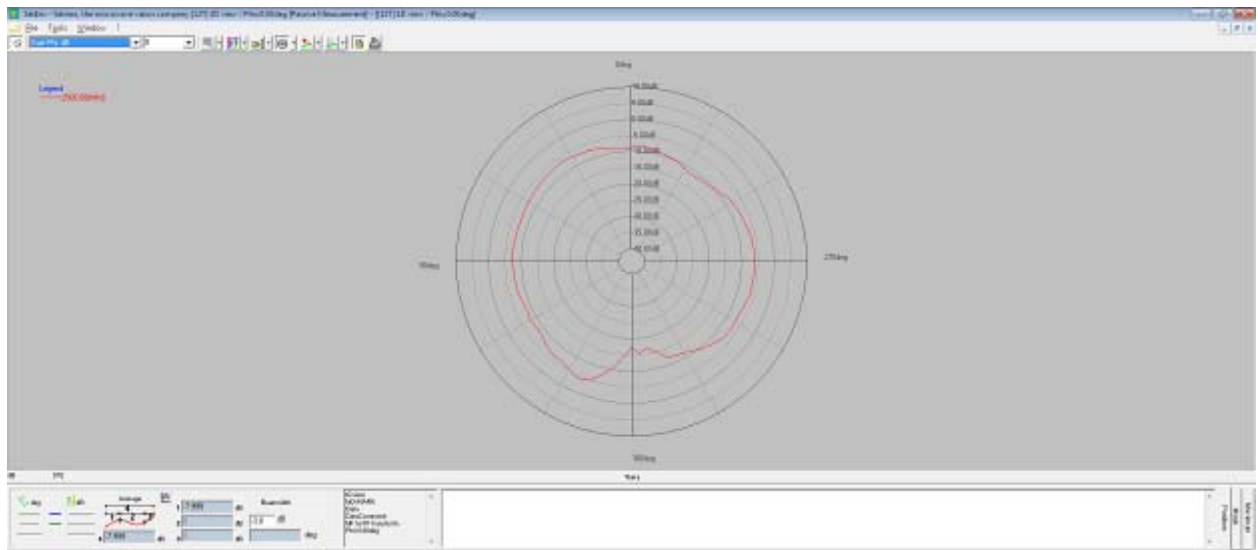


XY-Phi

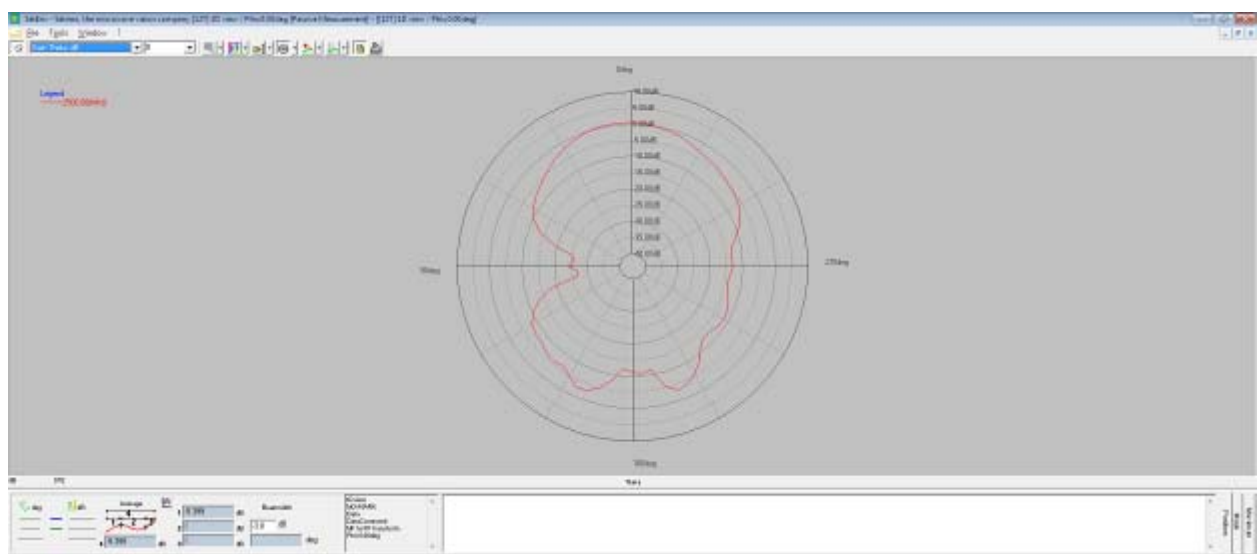


XY-Theta

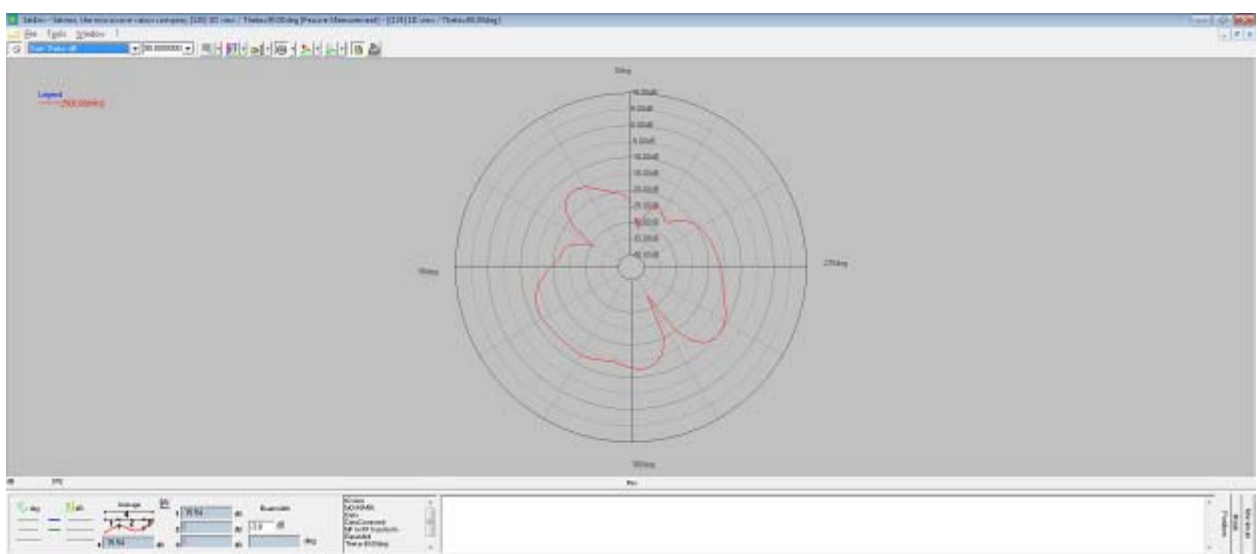
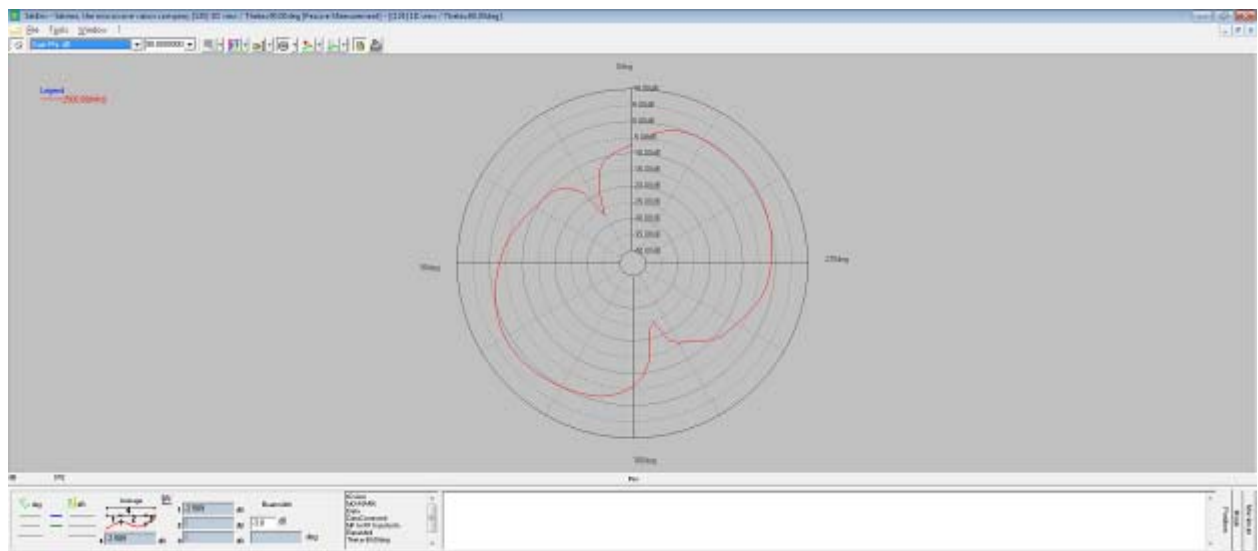
4.4.3 2500MHz



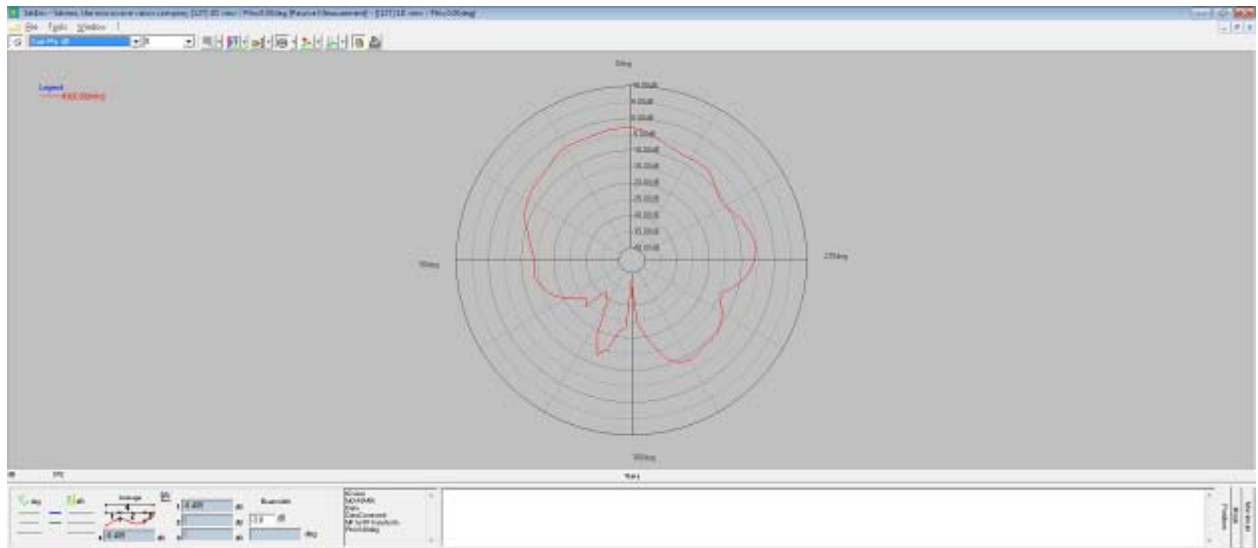
XZ-Phi



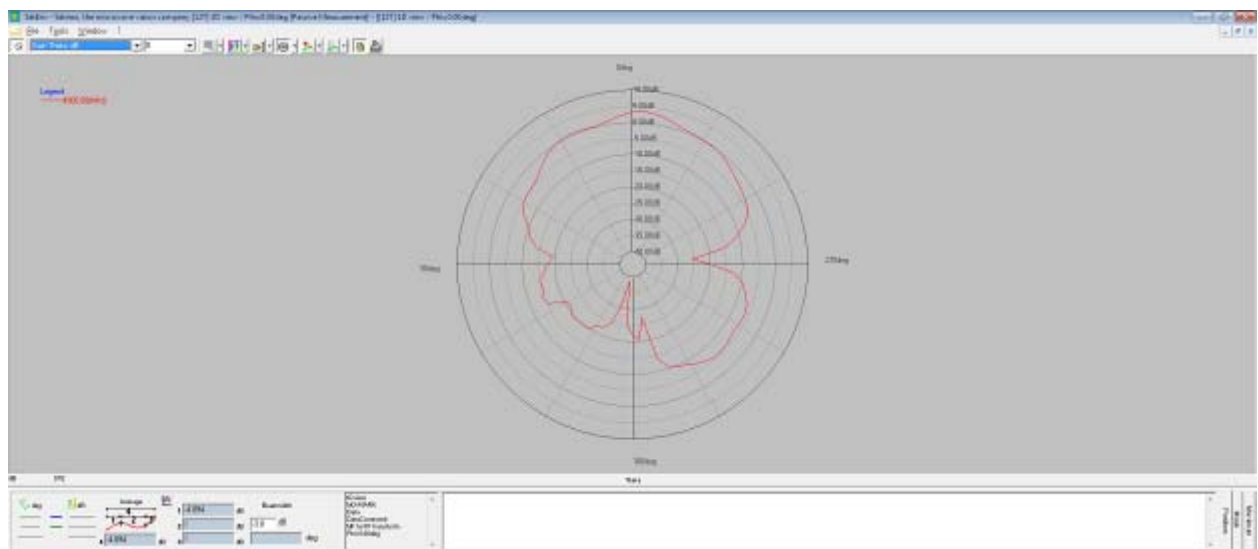
XZ-Theta



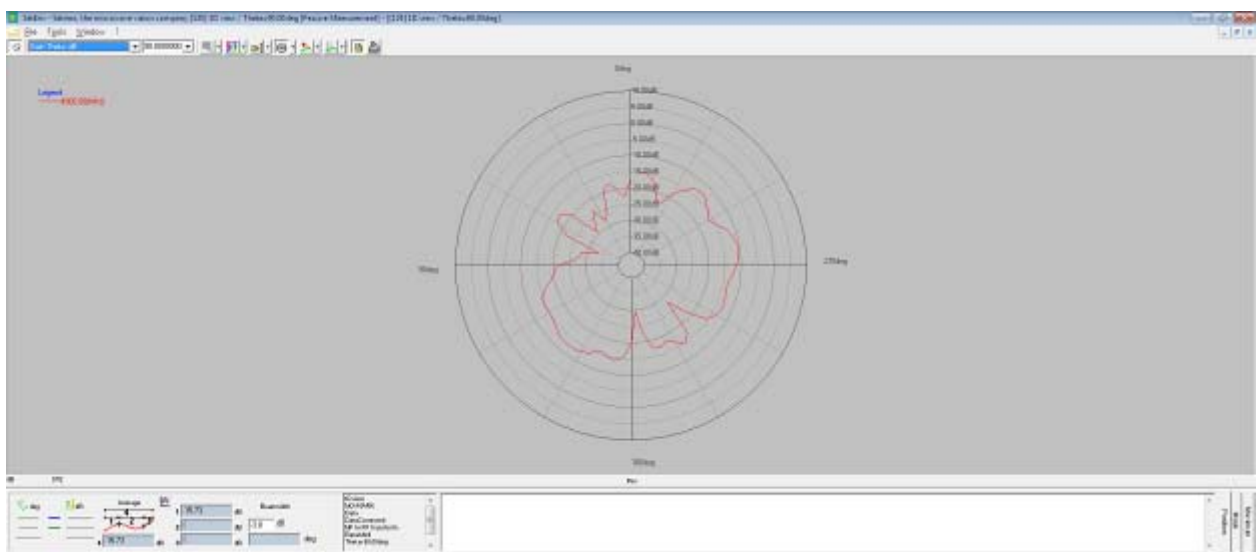
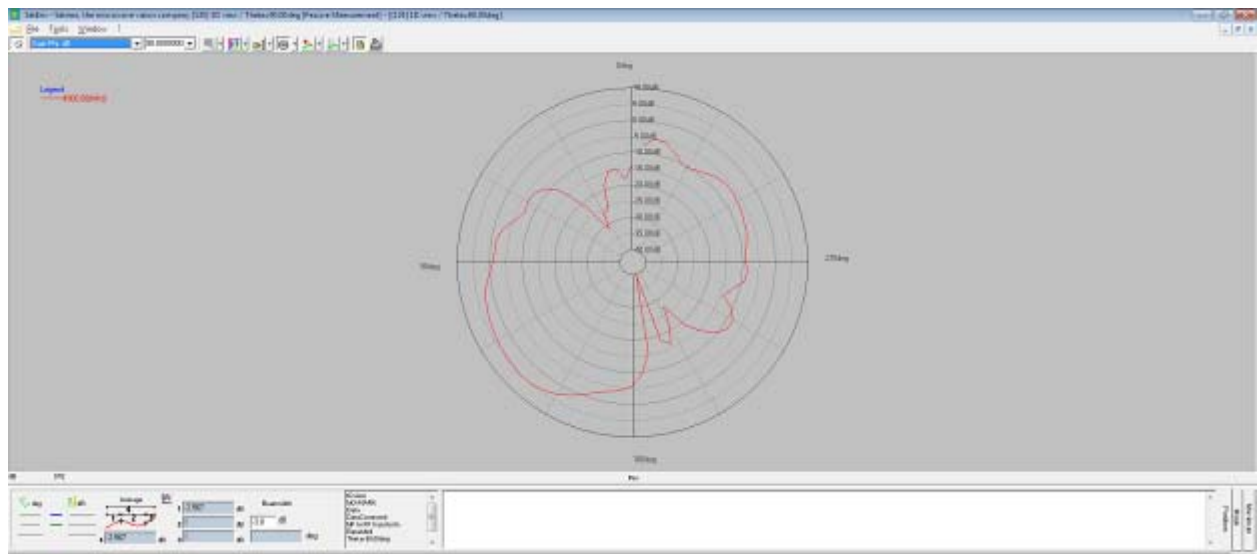
4.4.4 4900MHz

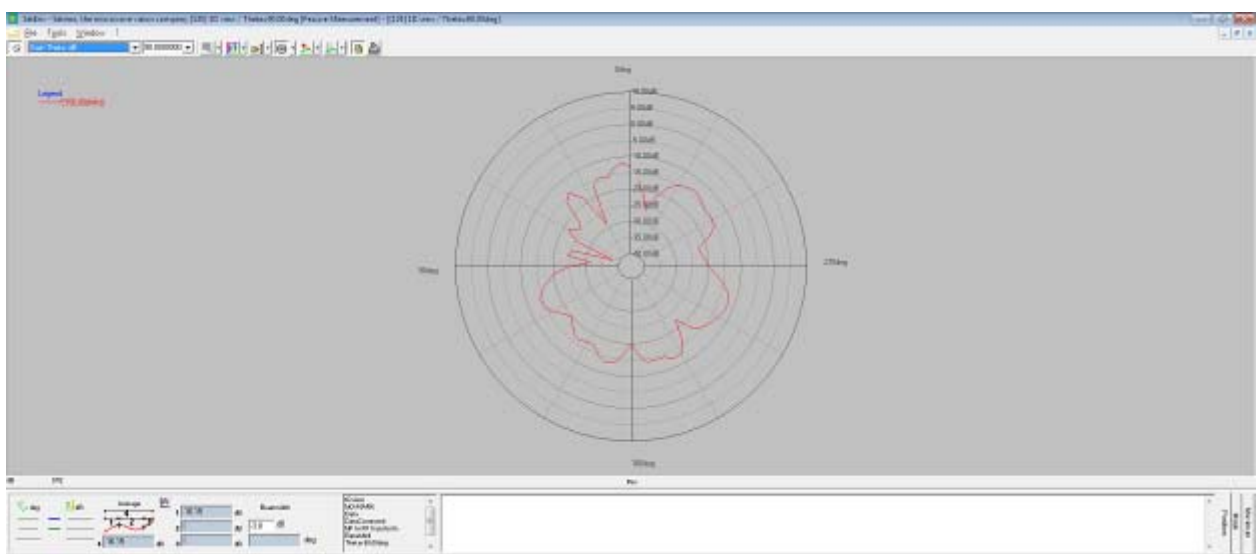
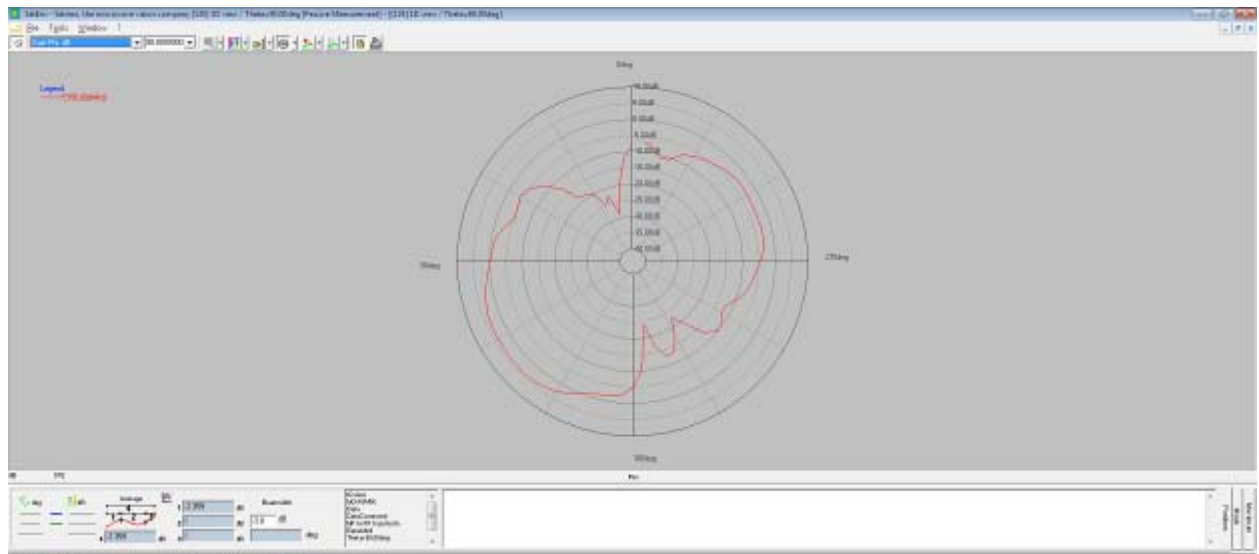


XZ-Phi

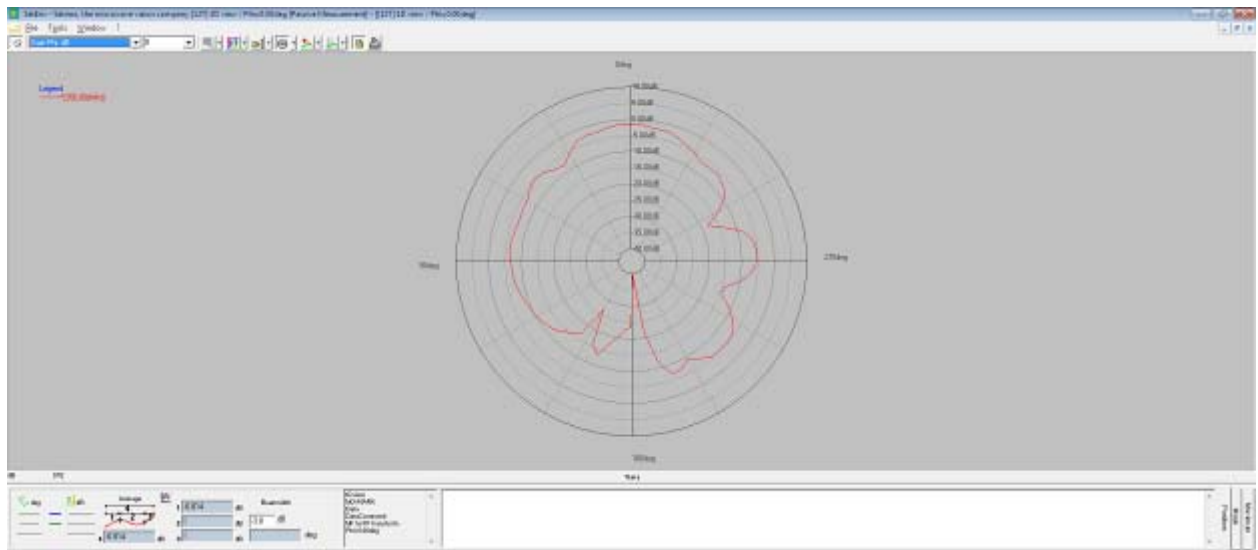


XZ-Theta

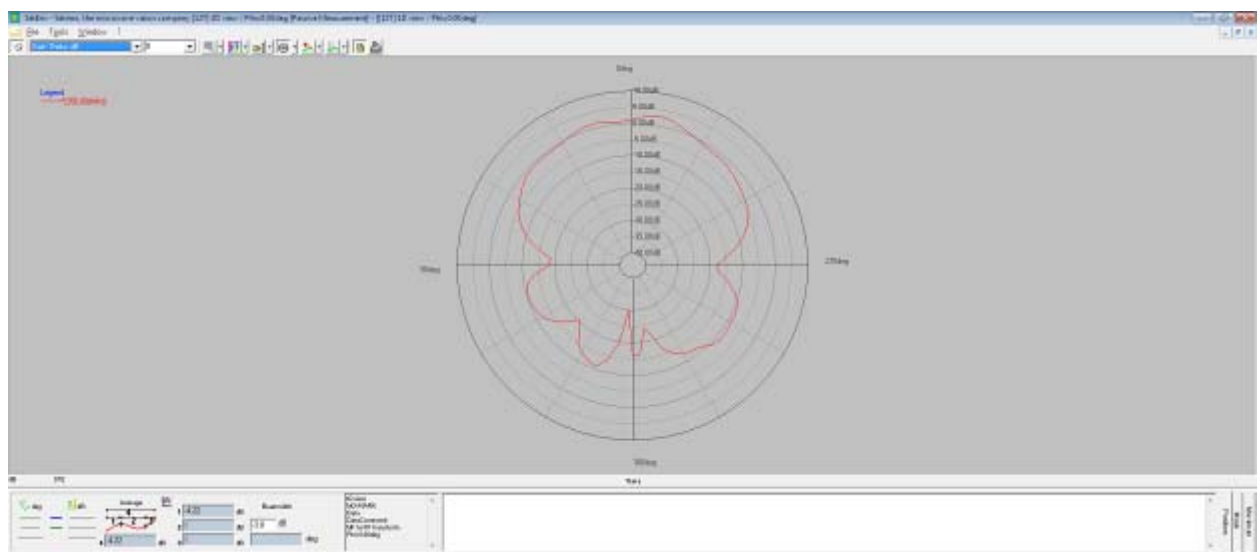




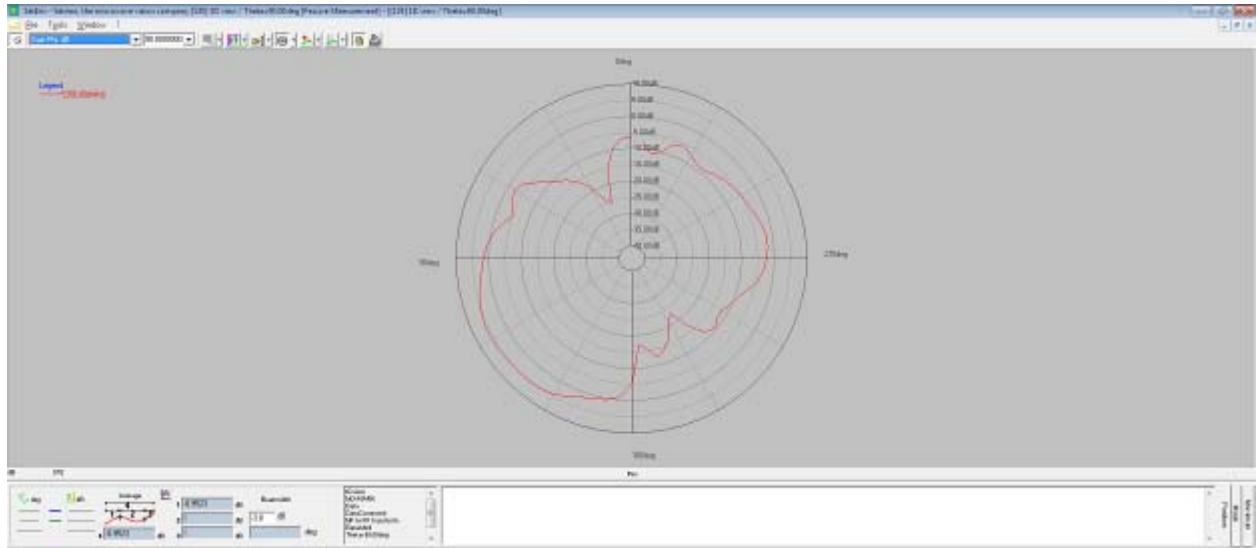
4.4.6 5350MHz



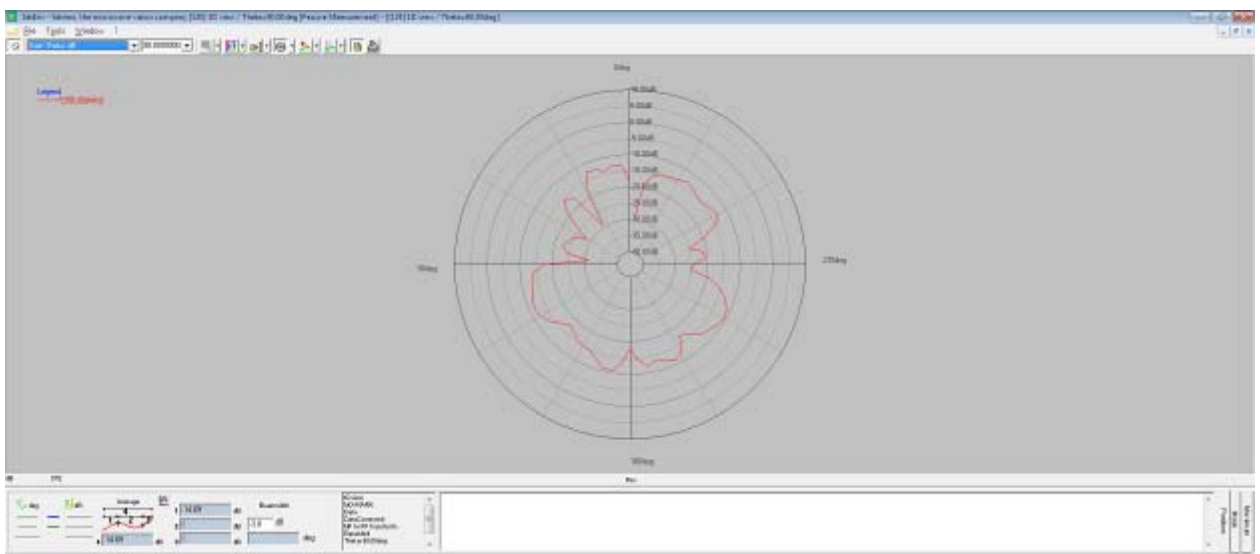
XZ-Phi



XZ-Theta

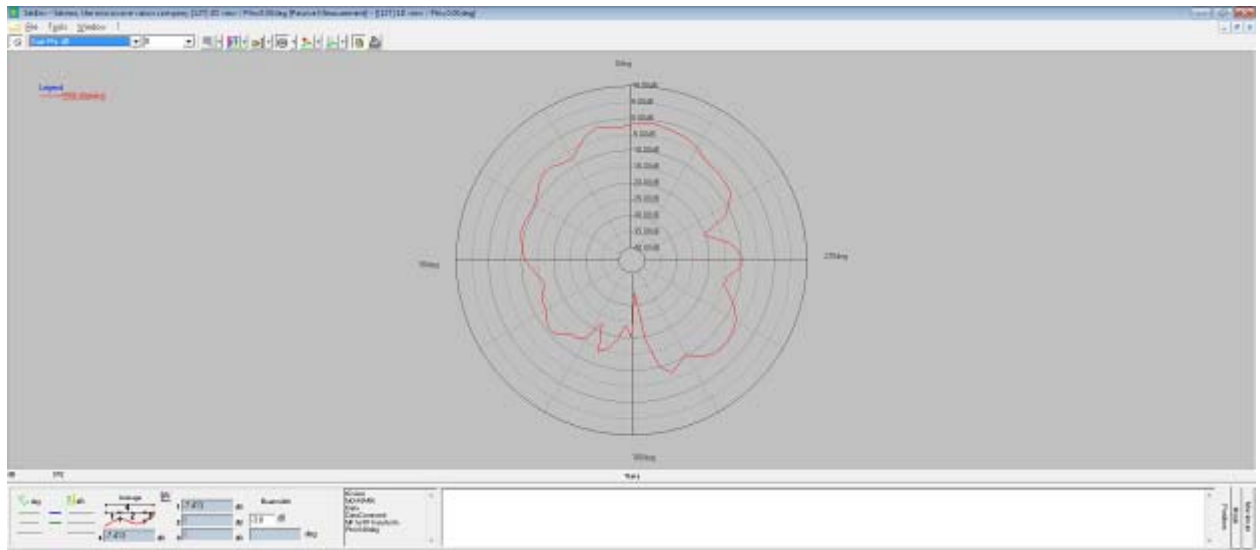


XY-Phi

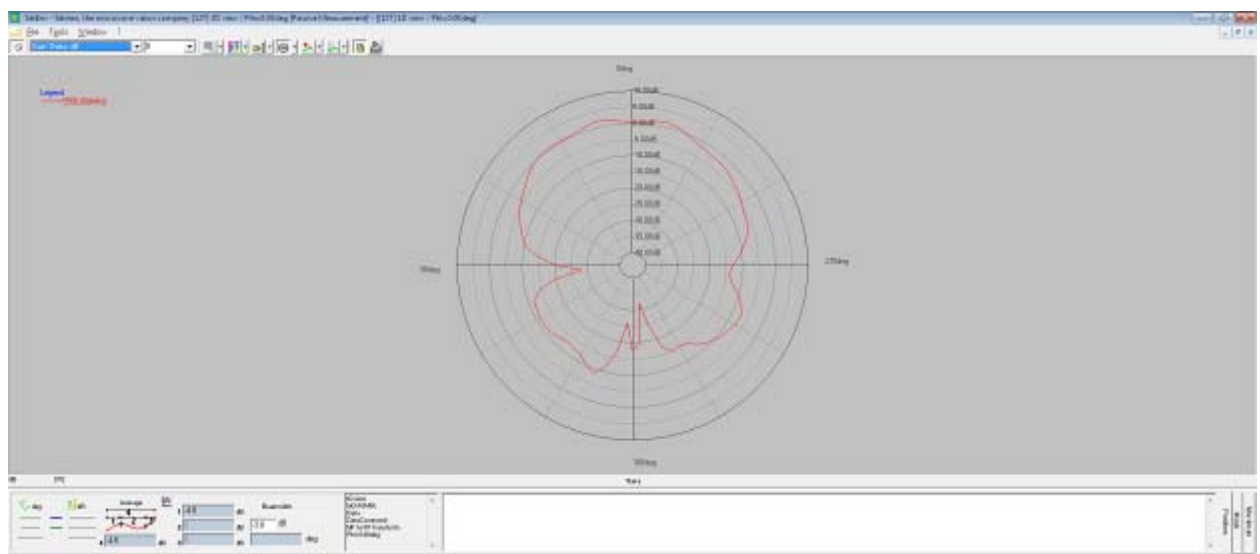


XY-Theta

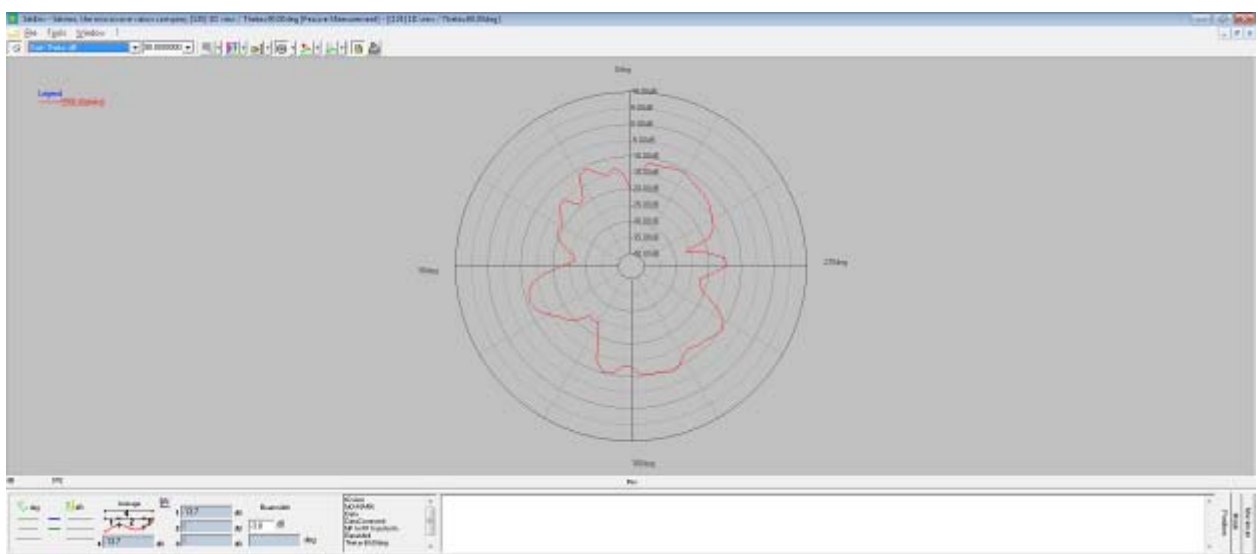
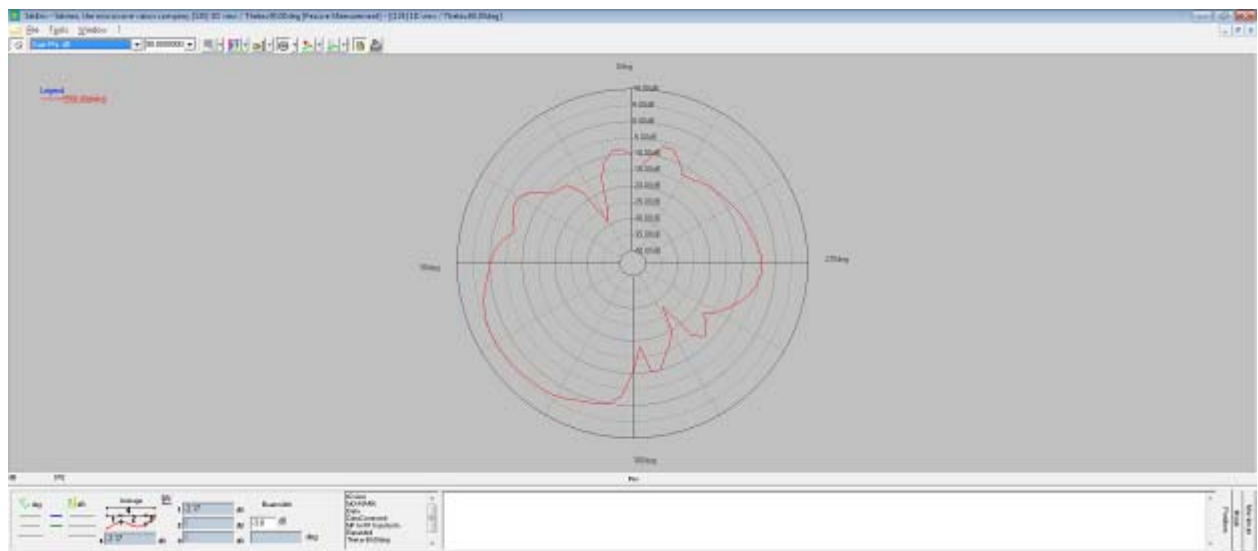
4.4.7 5550MHz



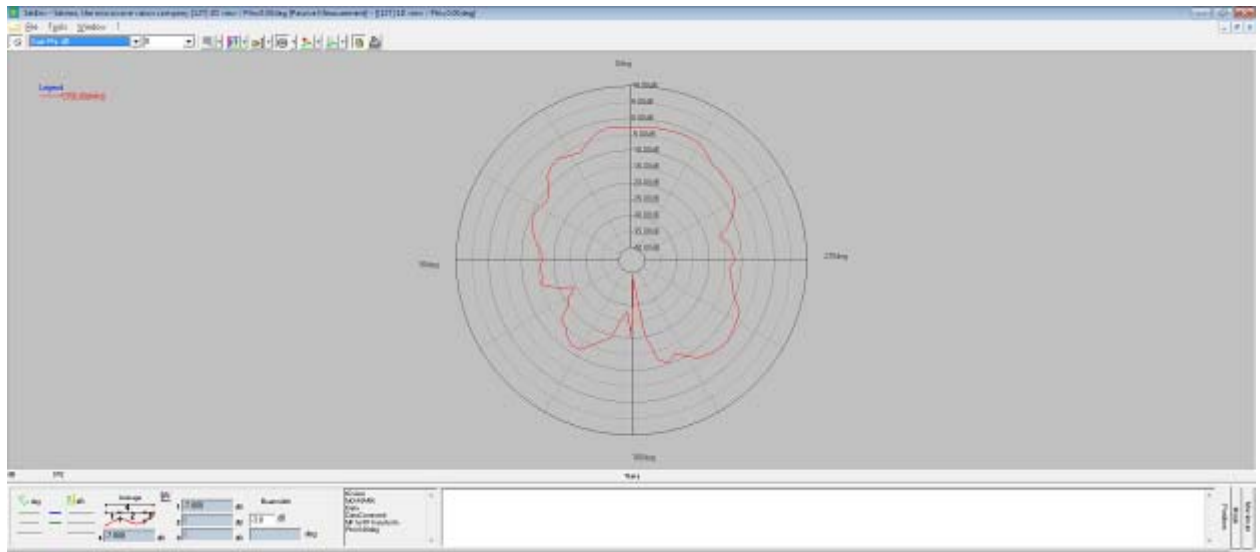
XZ-Phi



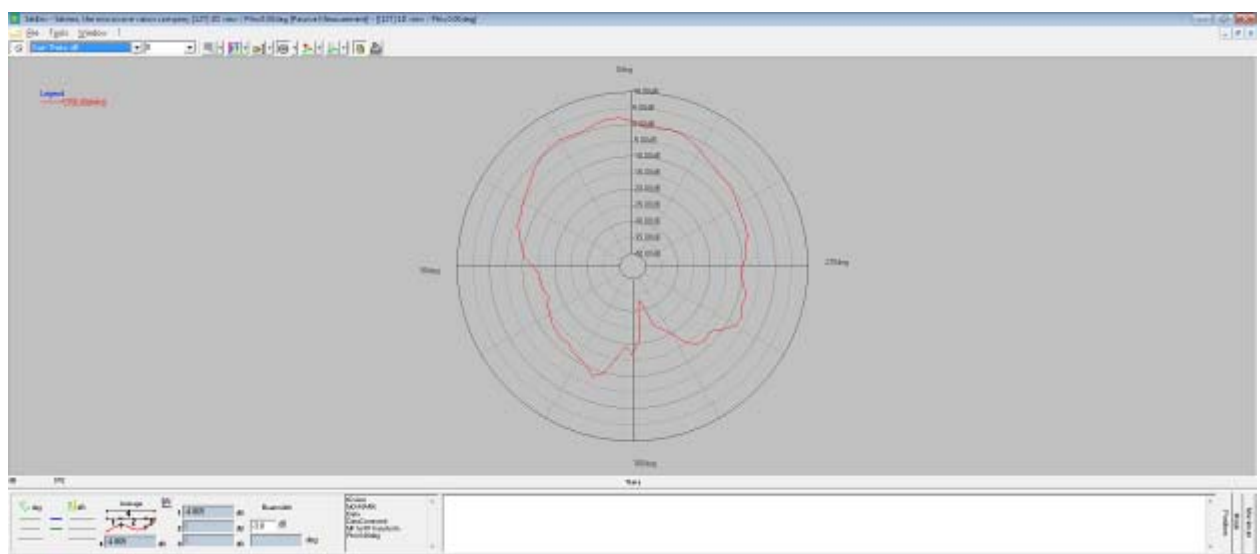
XZ-Theta



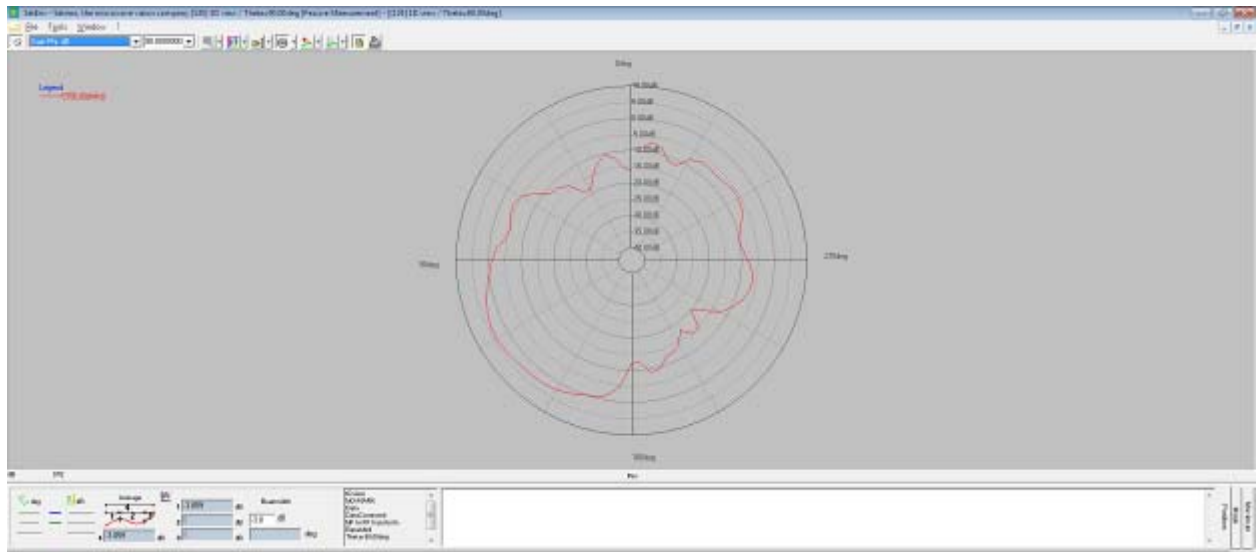
4.4.8 5750MHz



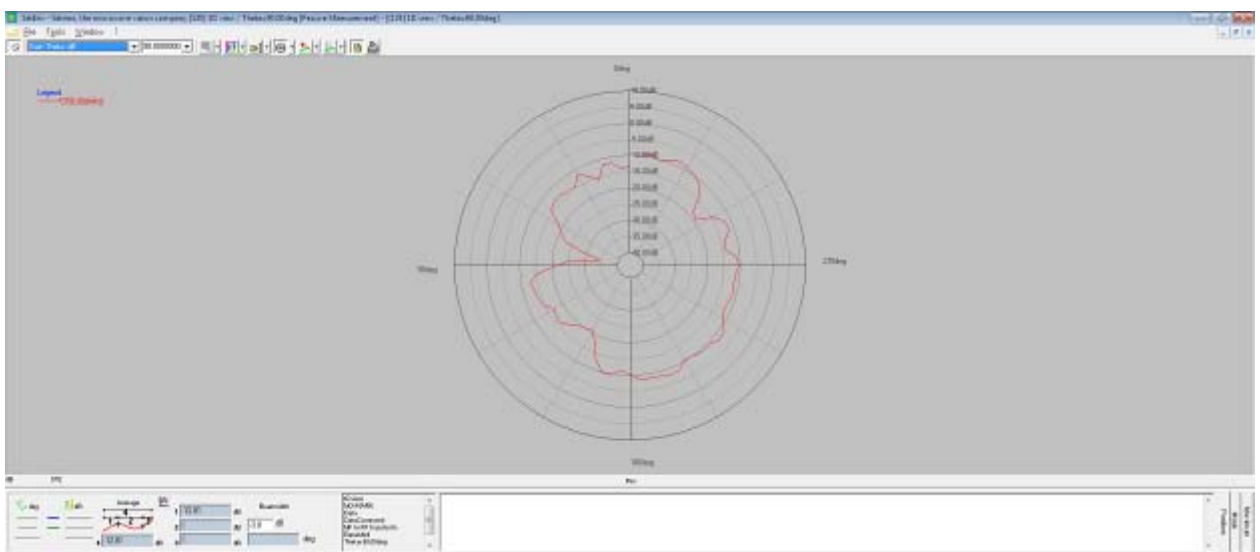
XZ-Phi



XZ-Theta

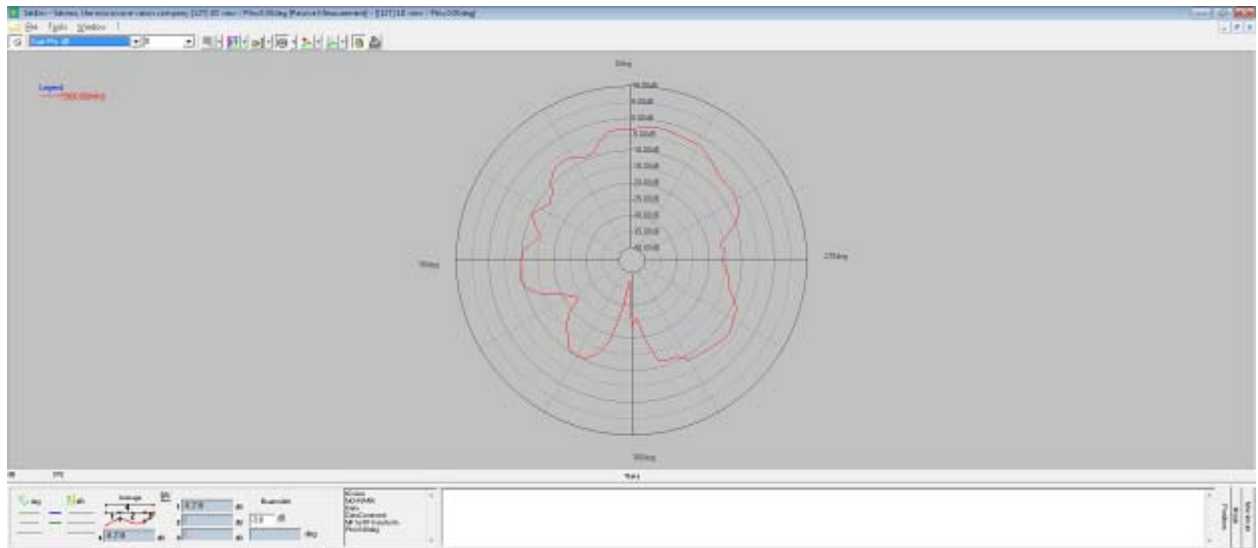


XY-Phi

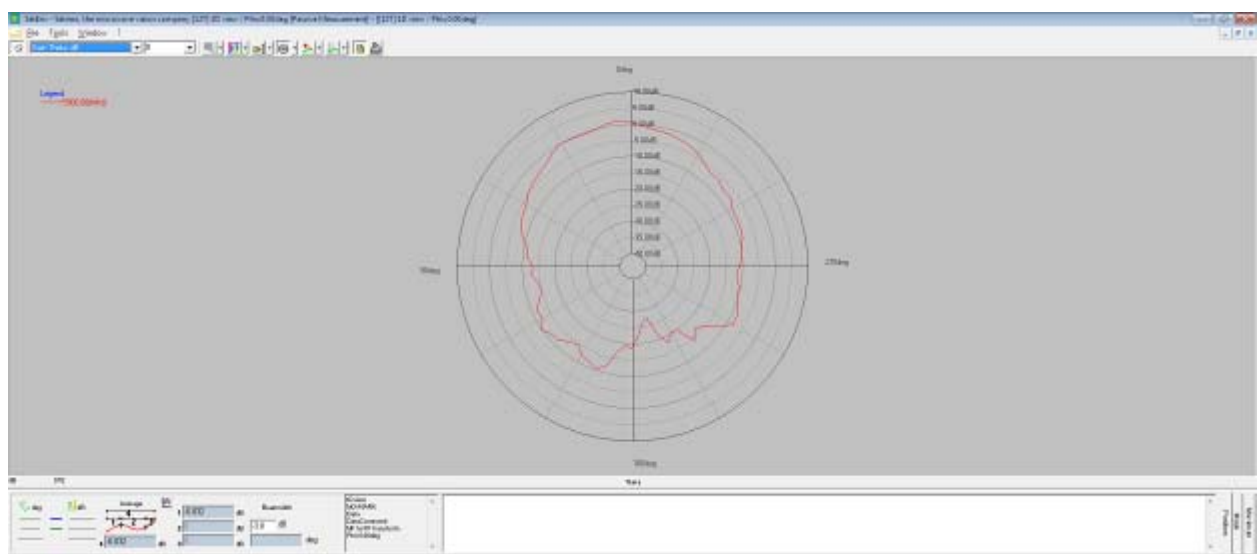


XY-Theta

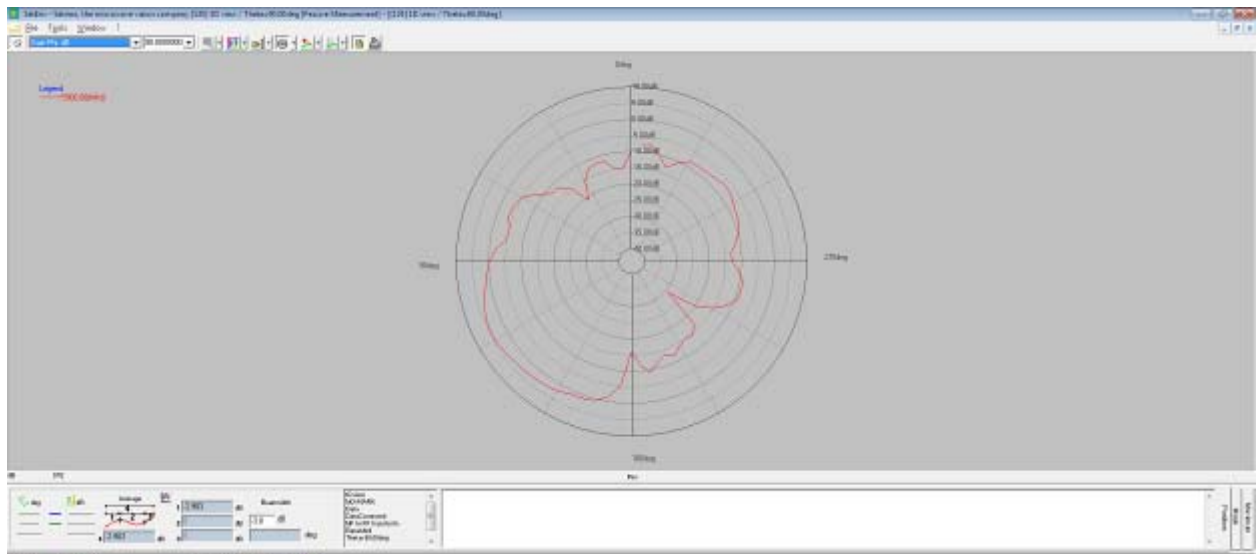
4.4.9 5900MHz



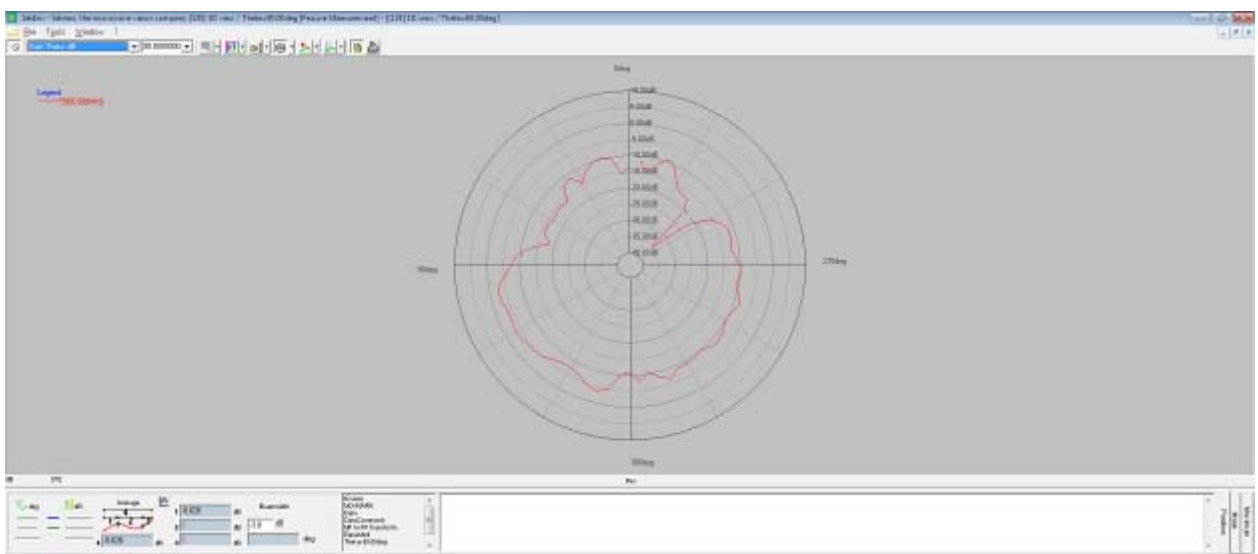
XZ-Phi



XZ-Theta



XY-Phi



XY-Theta

3D total Peak Gain & Efficiency

Frequency	Ant_1 (dB)	Ant_2 (dB)
2400 MHz	-15.2	-13.3
2450 MHz	-12.9	-16.0
2500 MHz	-14.1	-16.5
4900 MHz	-22.9	-17.1
5150 MHz	-23.1	-22.3
5350 MHz	-16.8	-26.6
5550 MHz	-15.4	-22.8
5750 MHz	-12.3	-12.9
5900 MHz	-10.2	-14.2

Frequency	Ant 1		Ant 2	
	Peak Gain (dBi)	Efficiency (%)	Peak Gain (dBi)	Efficiency (%)
2400MHz	2.1	61%	2.5	64%
2450MHz	1.6	62%	1.9	61%
2500MHz	1.7	63%	1.9	64%
4900MHz	4.1	71%	5.0	55%
5150MHz	4.4	73%	4.2	55%
5350MHz	4.5	72%	5.7	61%
5550MHz	4.4	66%	4.8	55%
5750MHz	4.9	63%	4.1	48%
5900MHz	4.5	63%	5.2	45%