

小方V3pro天线调试报告

Innovation never end.....

Outline Summary

- **Purpose**

Antenna design and test Result as following.

- **Agenda**

- Test Environment and Equipment

- Antenna Positions

Test Result : VSWR & Isolation

Test Result : Efficiency & PeakGain

Test Result : 2D Radiation Pattern

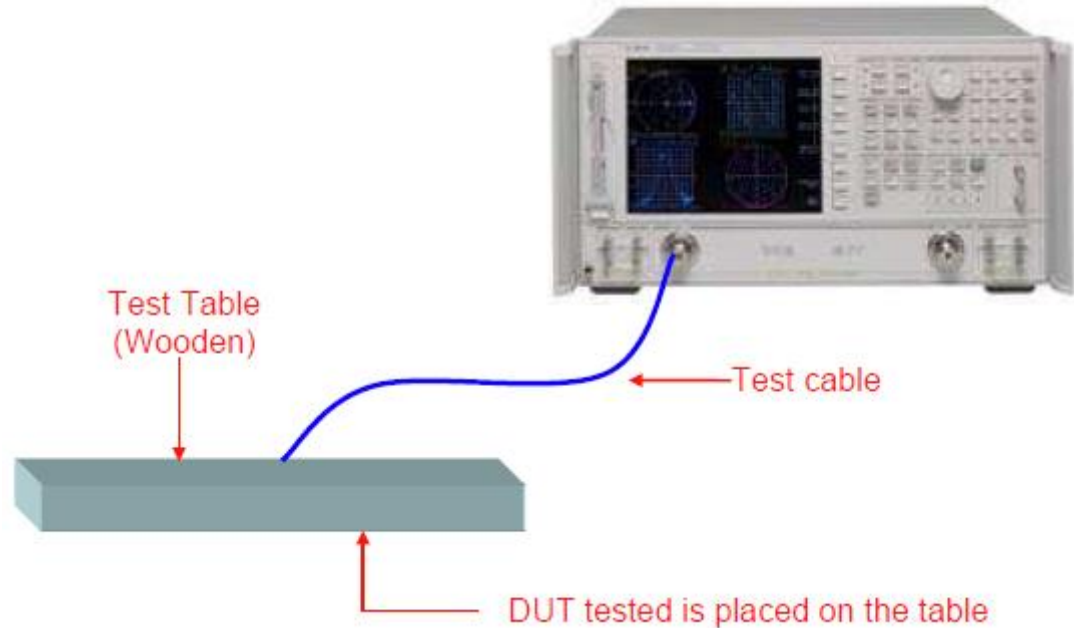
Test Result : 3D Radiation Pattern

- **Result & Suggestions**

Test Environment and Equipments

S-Parameter test

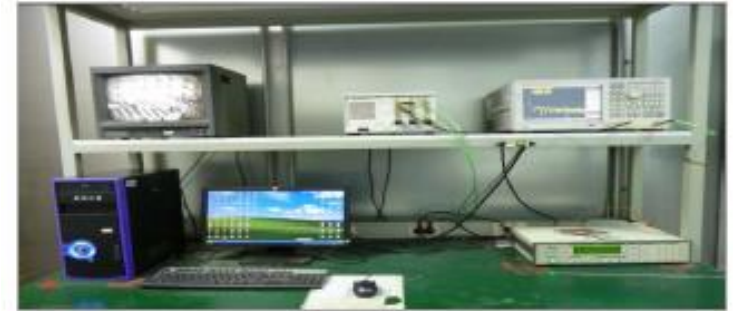
- Testing range from 9KHz to 8.5GHz
- Network Analyzer(Agililent-E5071C or R&S ZVL)



Test Environment and Equipments

The Gain, Efficiency, Directivity and 2/3D Pattern

- 3D Anechoic Chamber
- Testing range from 700MHz to 6GHz
- Chamber Room Size: $L*W*H=9*4.7*4.7$ M



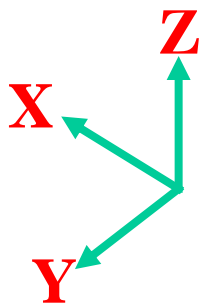
VSWR

- Testing range from 9KHz to 8.5GHz or 300KHz~6.5GHz
- Network Analyzer(Agilent-E5071C or R&S ZVL)

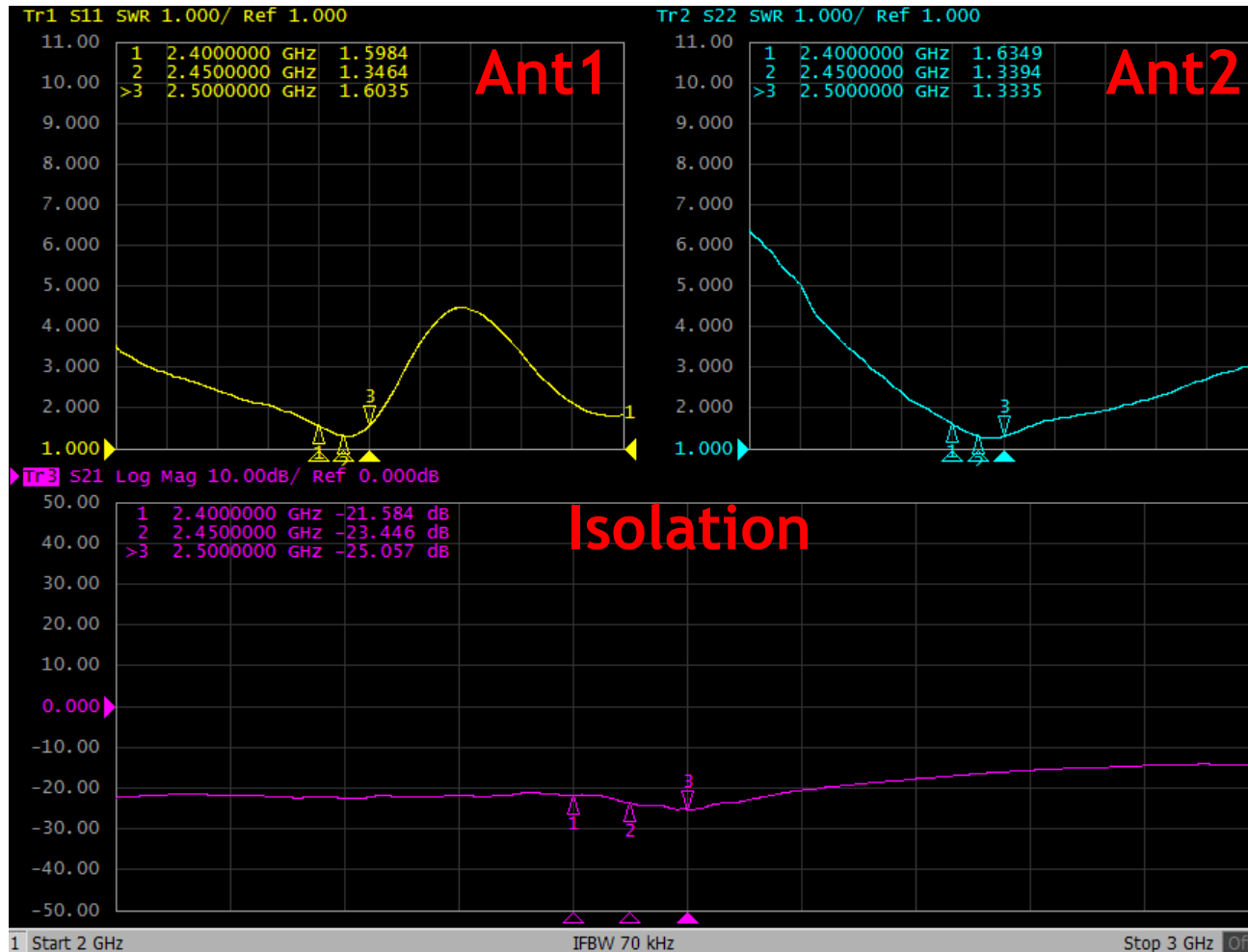


1. Benchmark

图示为被测物测试摆放示意



3.1. Antenna VSWR & Isolation



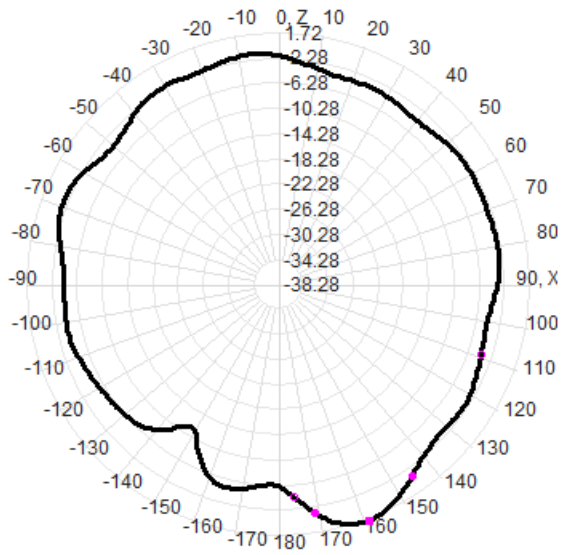
3.2. Antenna Efficiency & PeakGain

Frequency(MHz)	Ant1		Ant2	
	Gain (dBi)	Efficiency (%)	Gain (dBi)	Efficiency (%)
2400	2.02	48.80	2.65	47.25
2410	2.12	49.45	2.80	47.77
2420	2.27	49.48	2.91	48.33
2430	2.21	49.12	2.80	48.25
2440	2.34	50.73	2.60	47.88
2450	2.39	51.02	2.39	47.47
2460	2.36	50.78	2.29	47.50
2470	2.50	52.04	2.33	47.61
2480	2.58	52.92	2.39	47.76
2490	2.35	53.21	2.38	48.34
2500	2.40	52.91	2.53	49.32

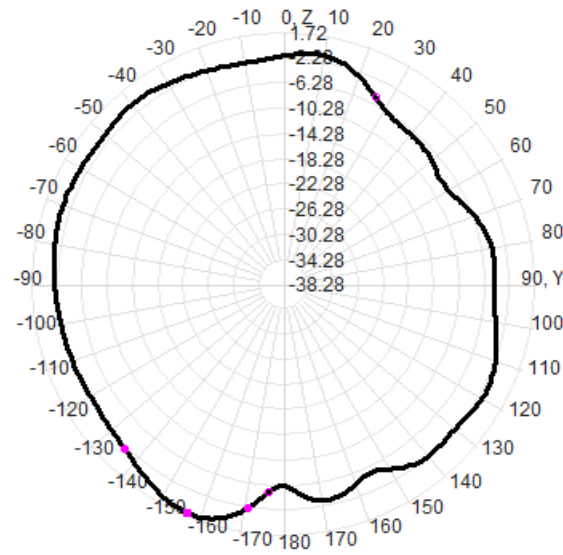
4.1 Antenna—2D(2400MHz)

Ant1

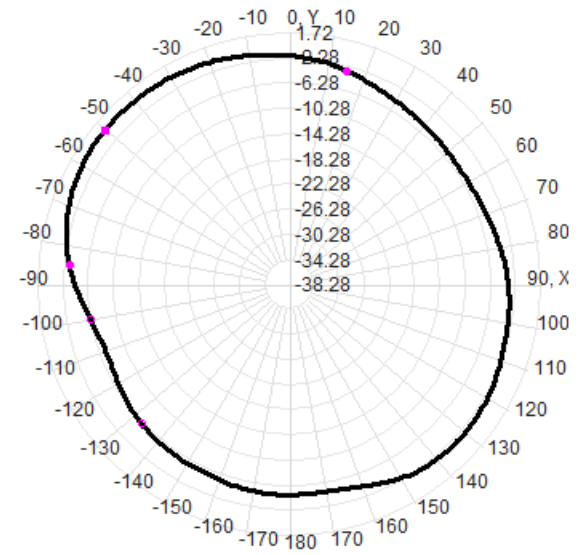
XZ



YZ



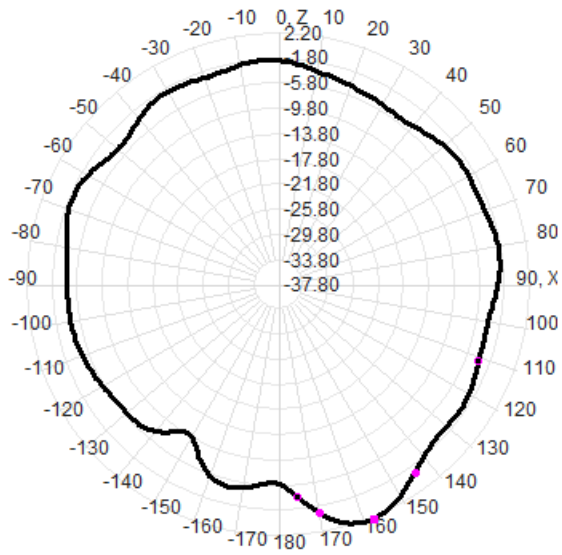
XY



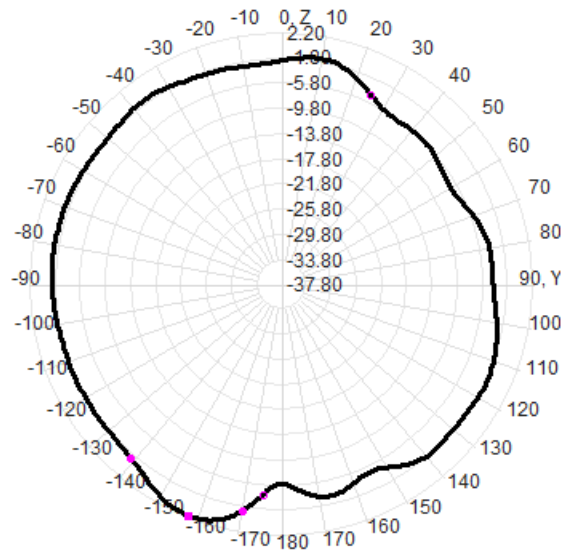
4.1 Antenna—2D(2450MHz)

Ant1

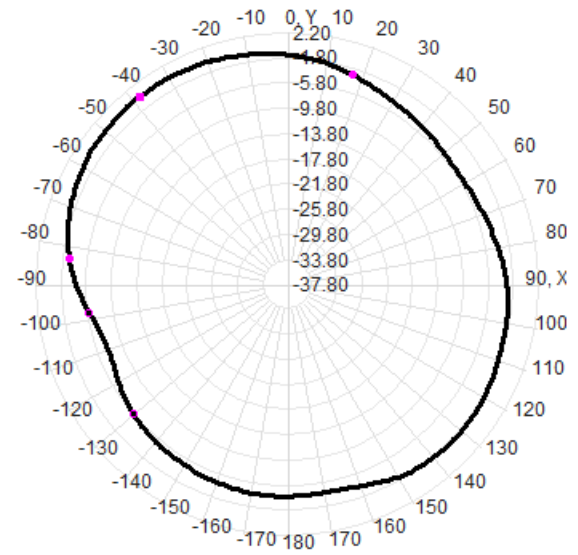
XZ



YZ



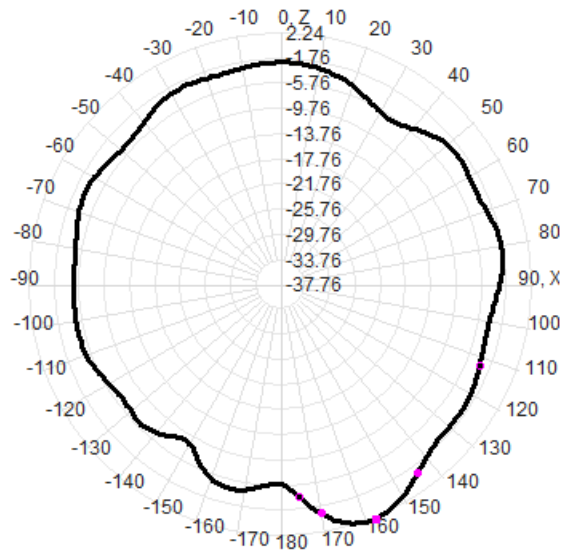
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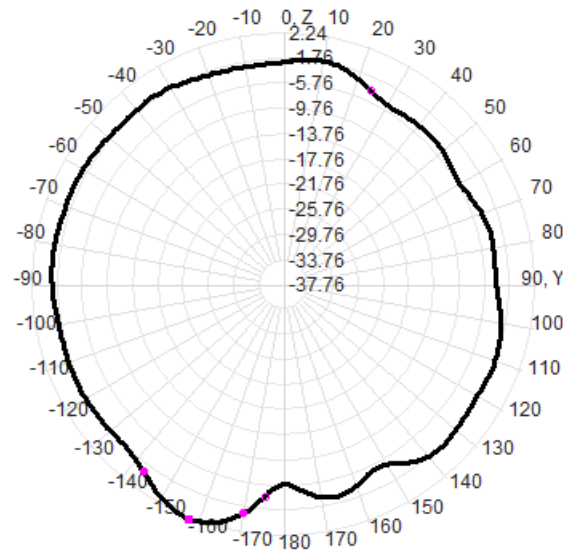
4.1 Antenna—2D(2500MHz)

Ant1

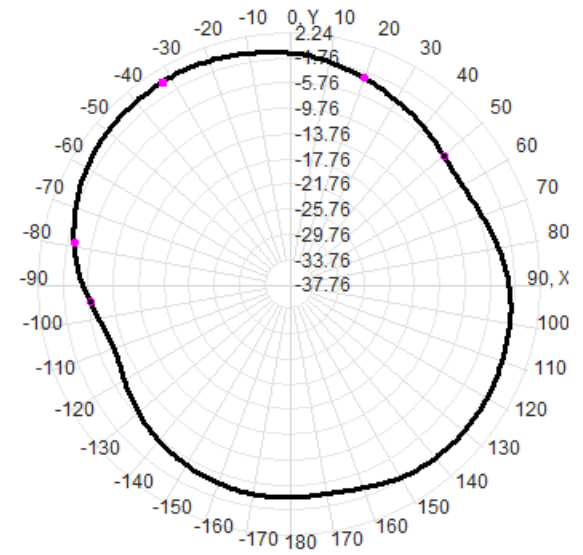
XZ



YZ



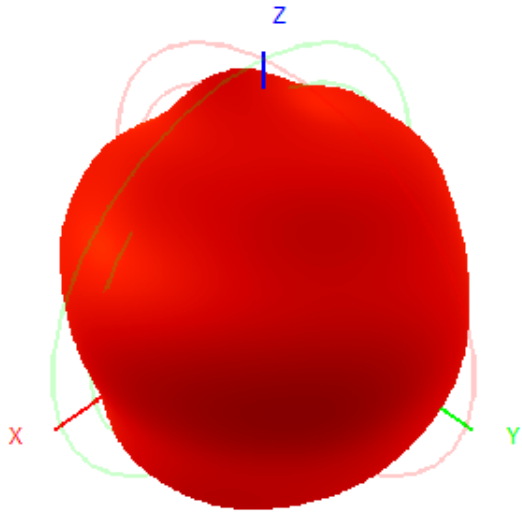
XY



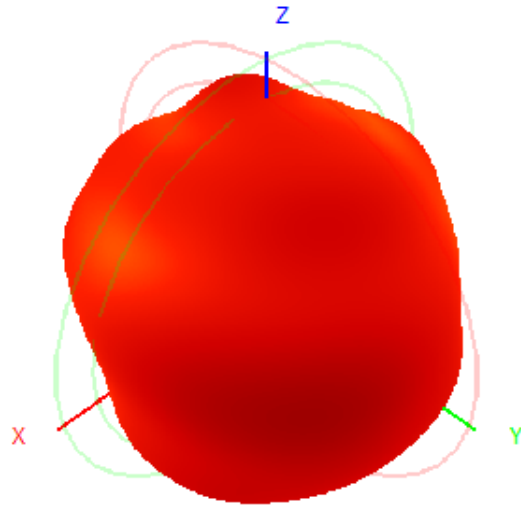
5.1 Antenna—3D

Ant1

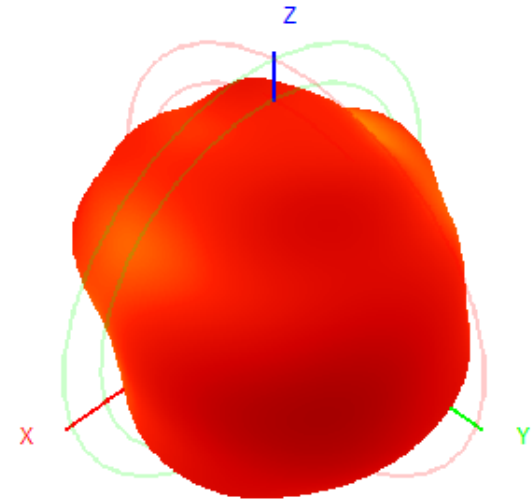
2400



2450



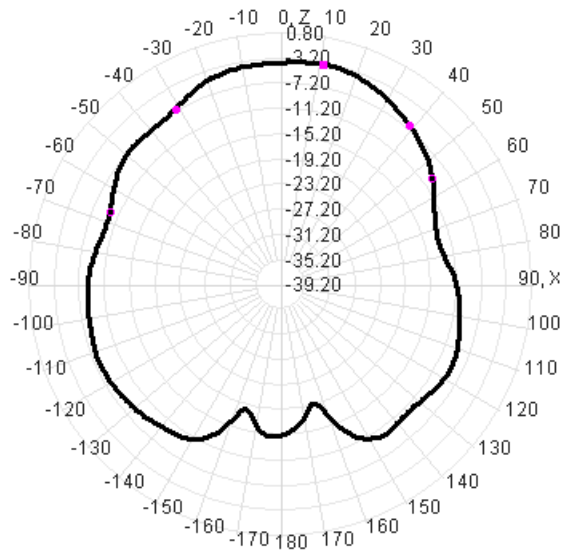
2500



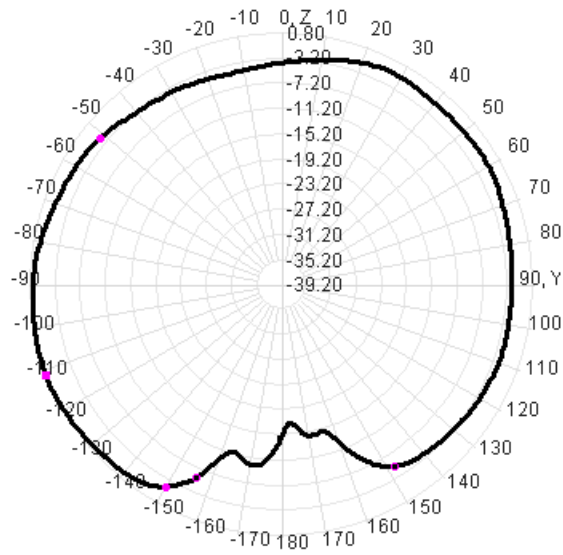
4.1 Antenna—2D(2400MHz)

Ant2

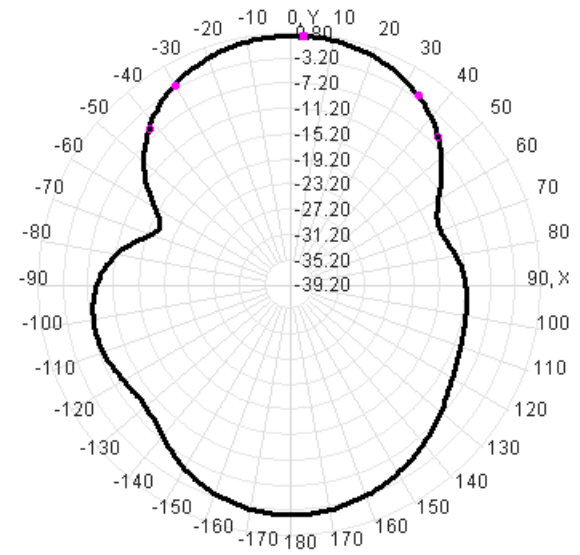
XZ



YZ



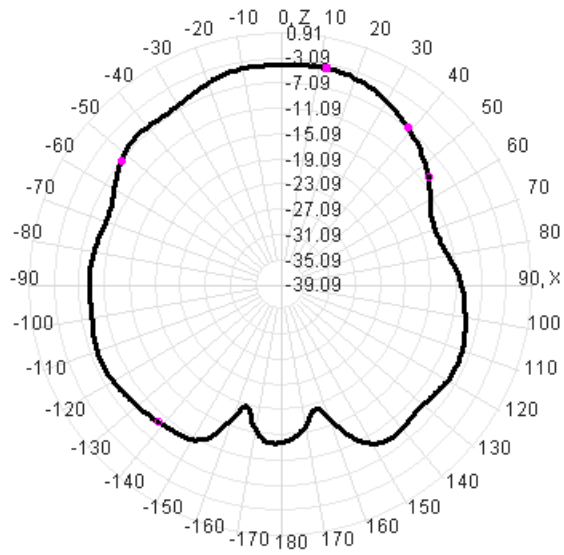
XY



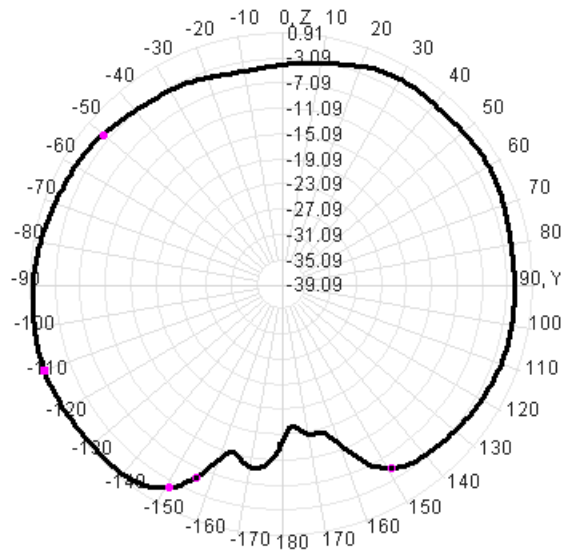
4.1 Antenna—2D(2450MHz)

Ant2

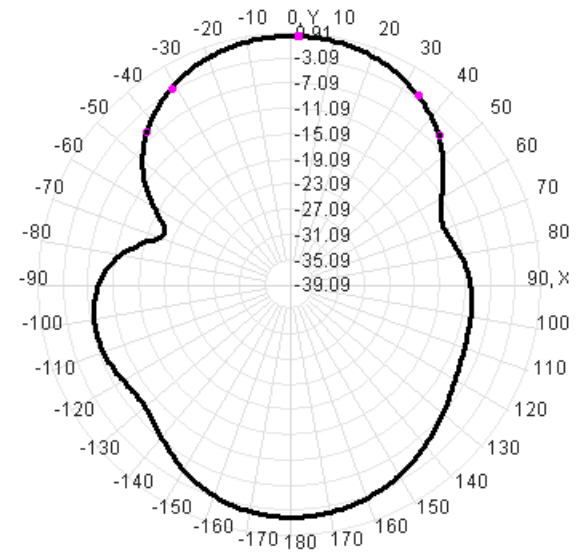
XZ



YZ



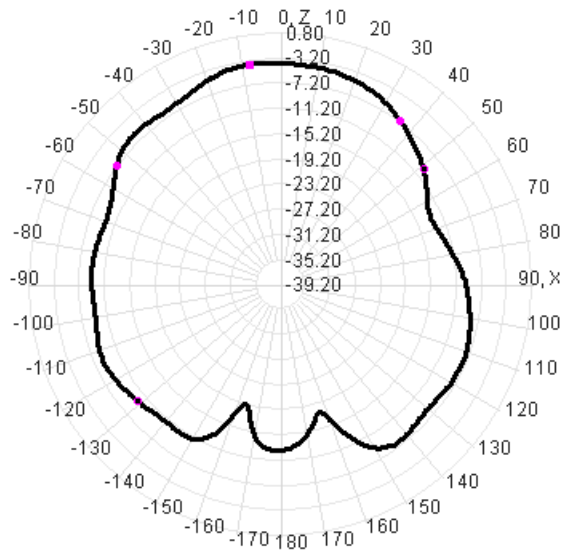
XY



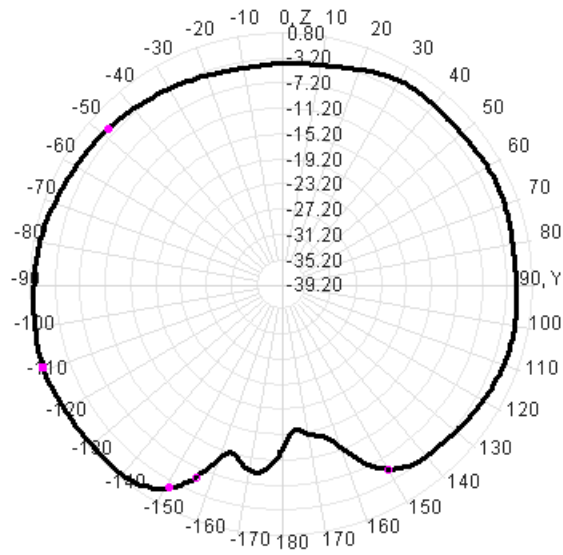
4.1 Antenna—2D(2500MHz)

Ant2

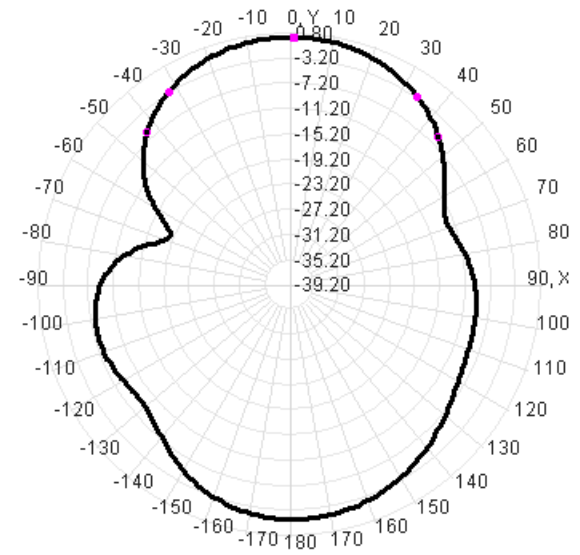
XZ



YZ



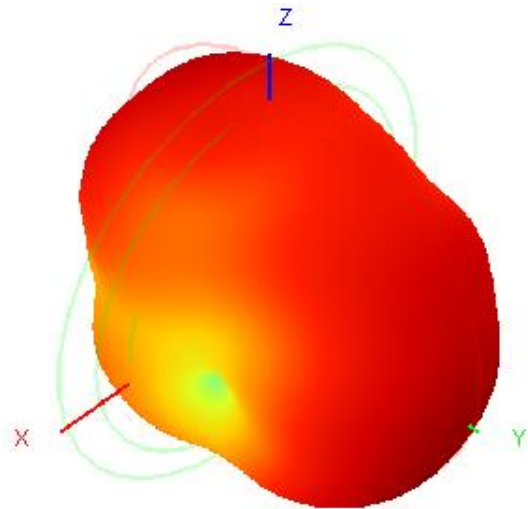
XY



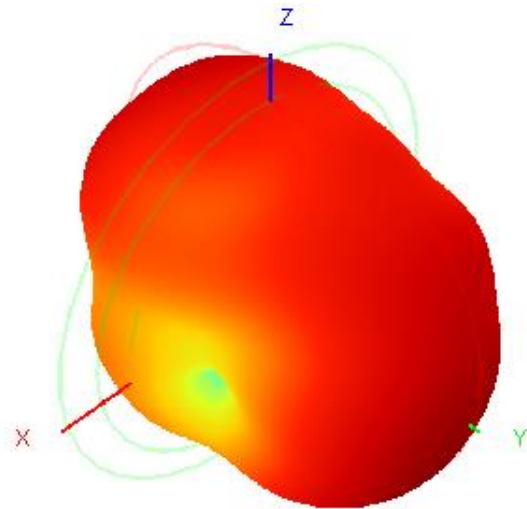
5.1 Antenna—3D

Ant2

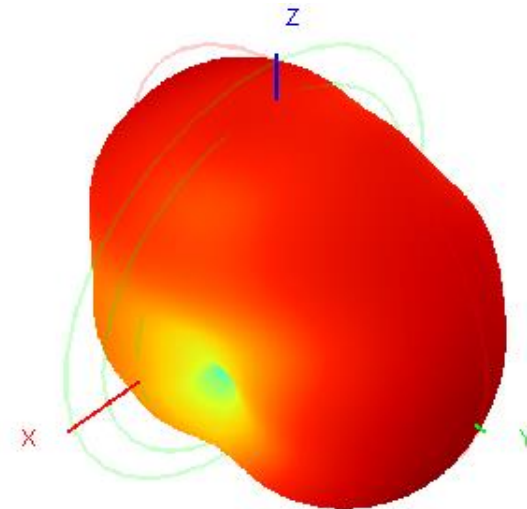
2400



2450



2500



THANK YOU