



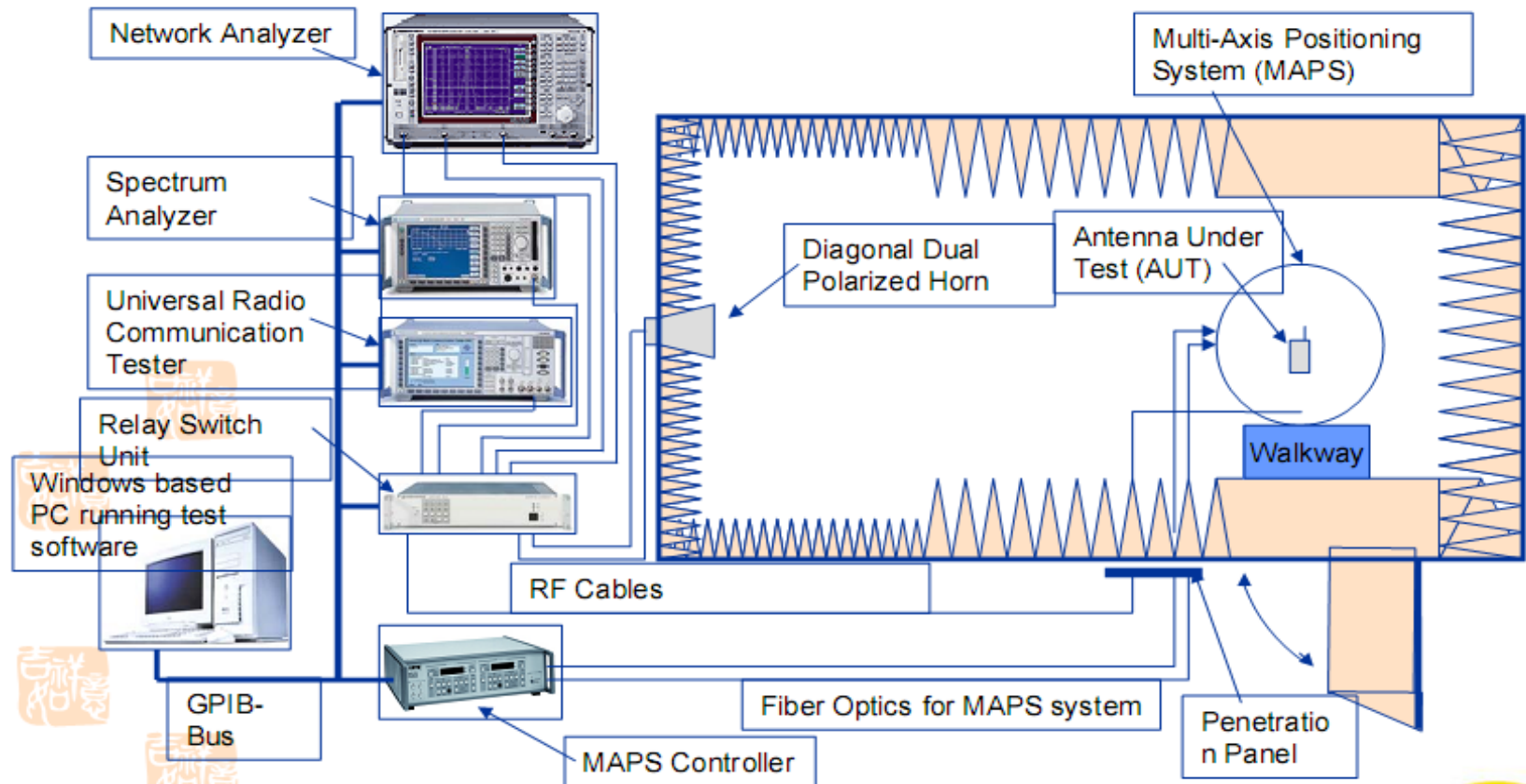
DONGGUAN TENGXIANG ELECTRONICS CO., LTD.

2. 4G/5G/6G Antenna Testing Parameters

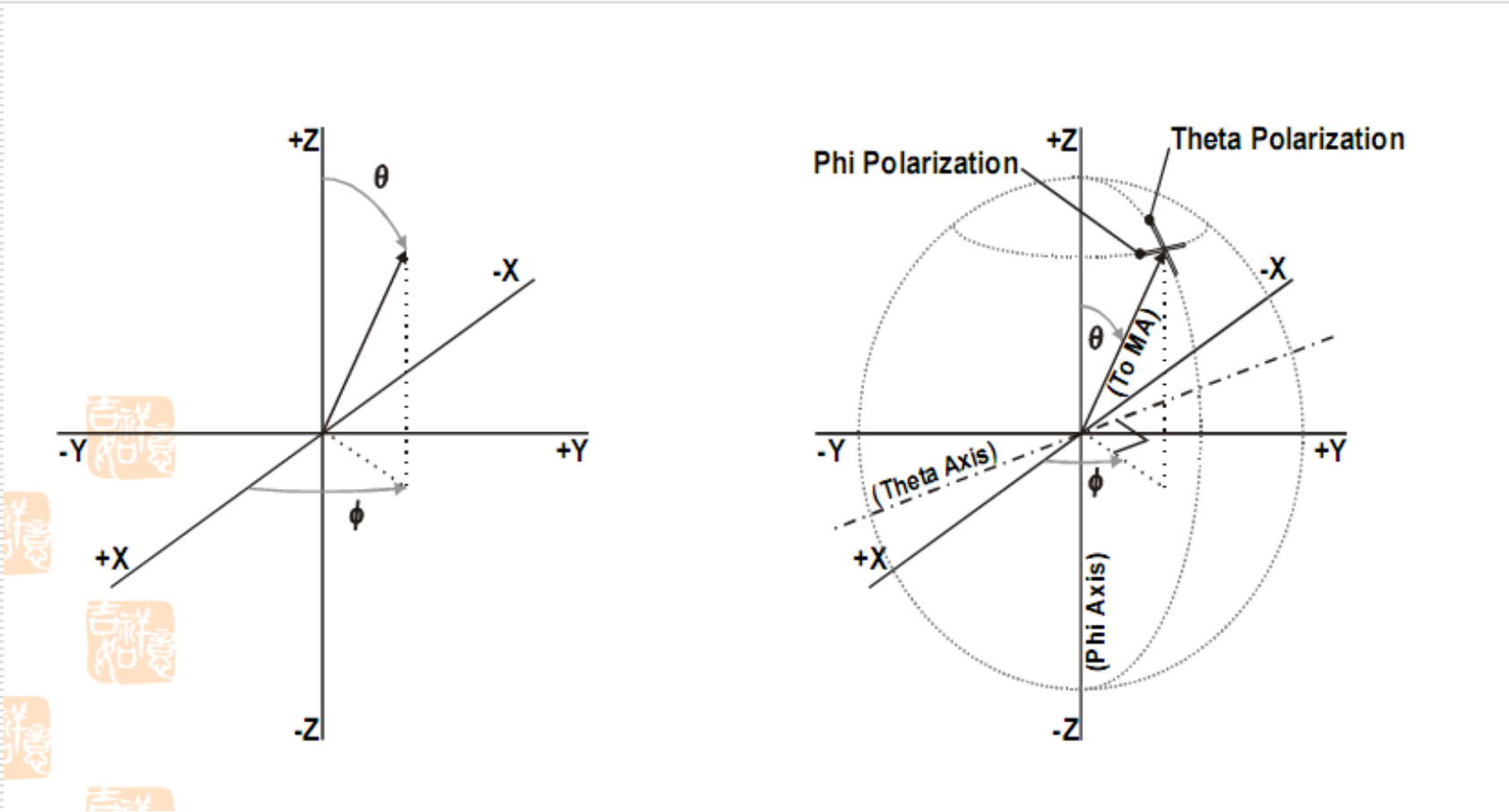
- Customers:
- Antenna Specification:
 - 2400-2500MHz
 - 5150-5850MHz
 - 5900-7215MHz
- Versions: V1.0
- Prepare by: Wang Yan
- Approve by: Wei Jia

Address: Dongguan City Chang'an Town sand head community shacong Road 53#
Call US: 0769-81873081/0769-81873082

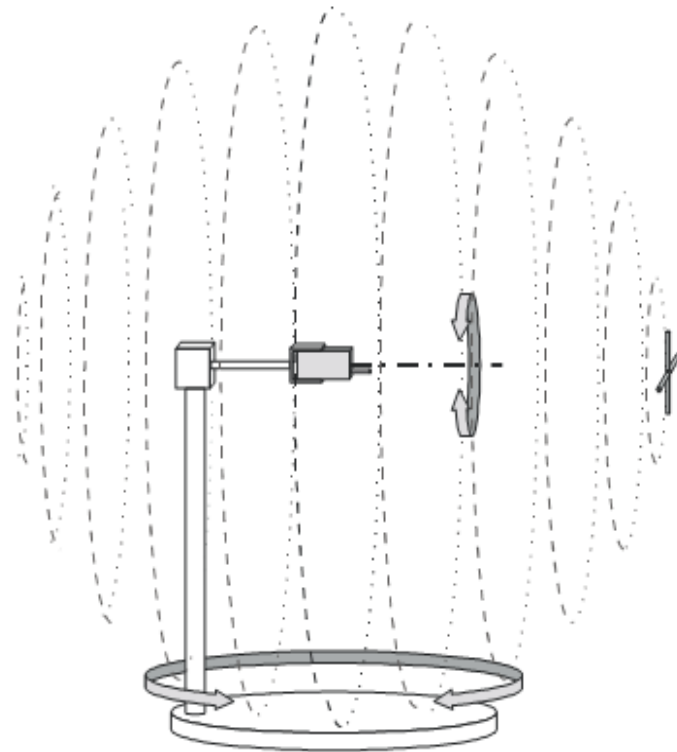
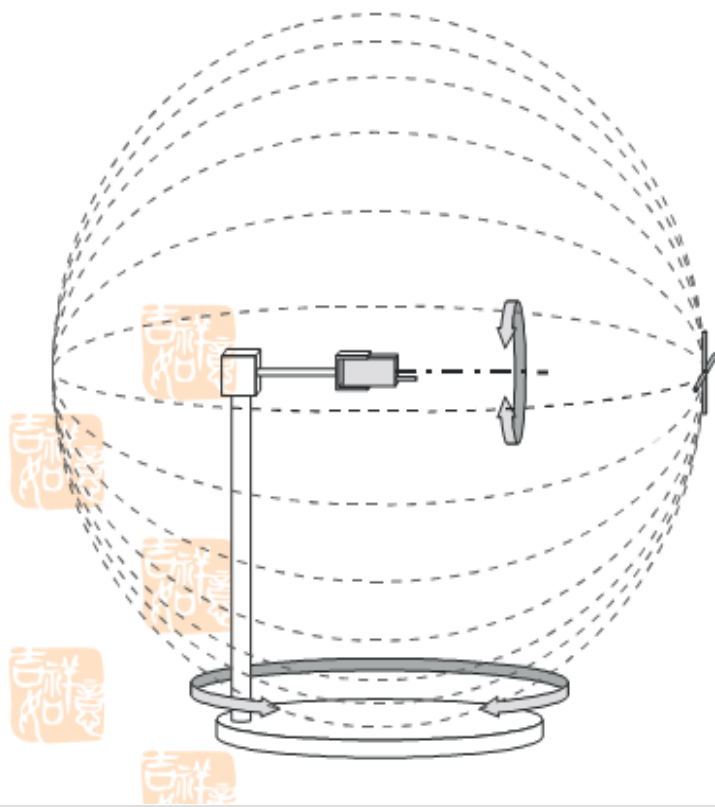
1. CTIA OTA Test System



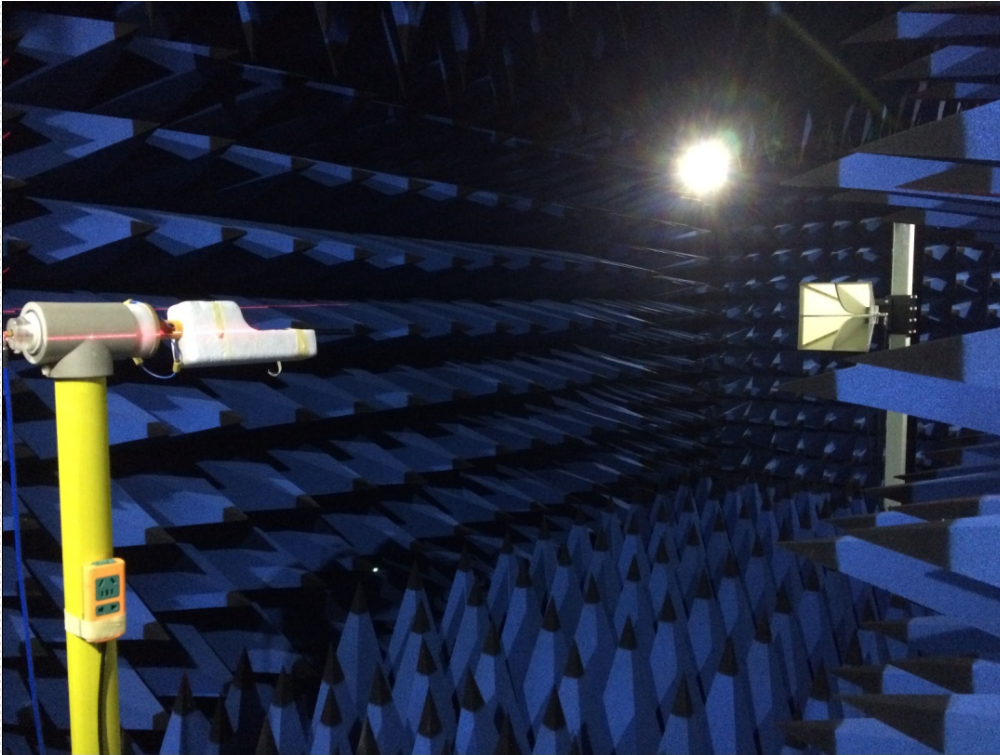
1.1 Test Coordinates



1.2 Turntable



1.3 ETS Test System In TengXiang



Size:7m*3m*3m

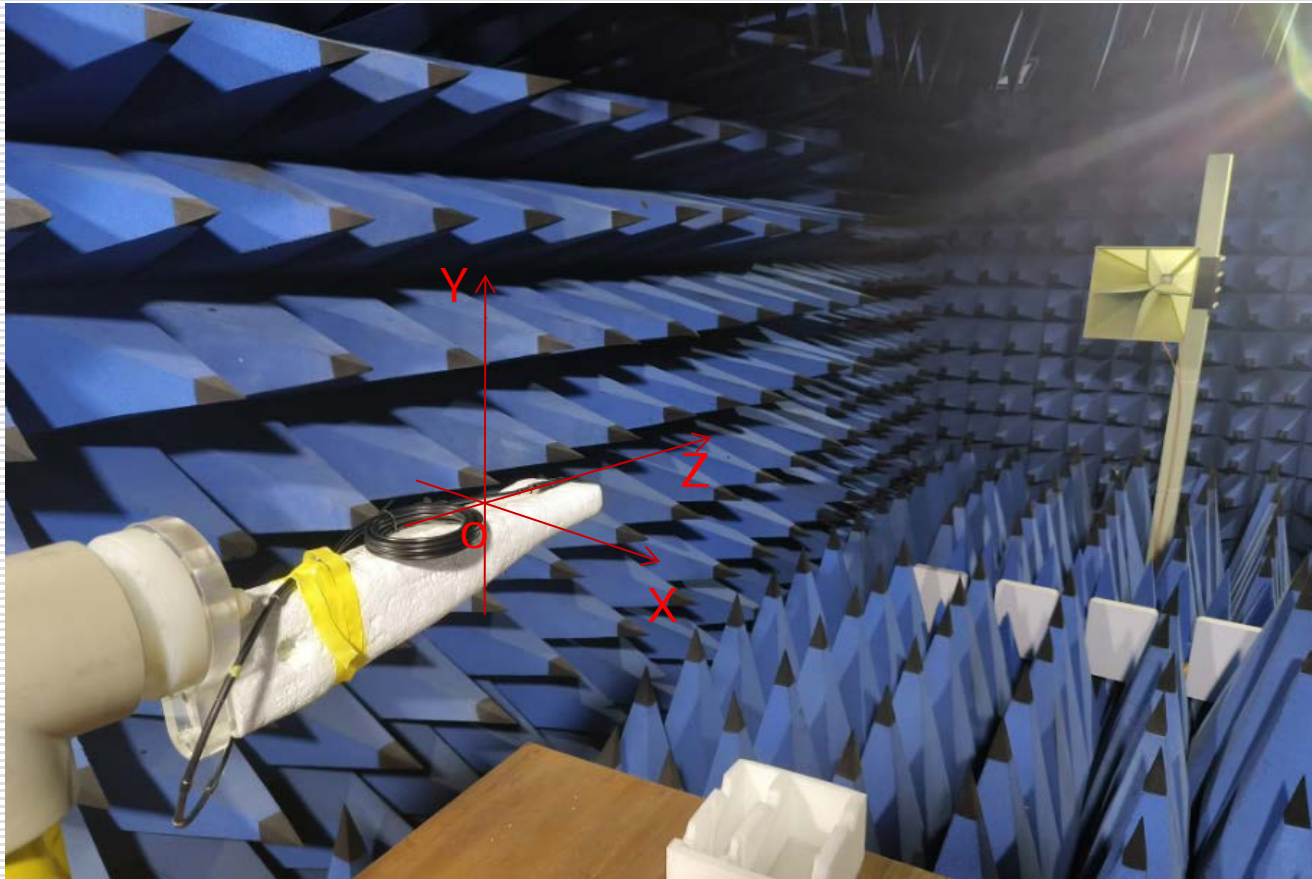
Electromagnetic Shield: ≥ 100 dB

Test Tolerance : ± 0.5 dBi

Test Project:

- 700MHz-6GHz Passive Test
- 2G/3G/4G OTA Test

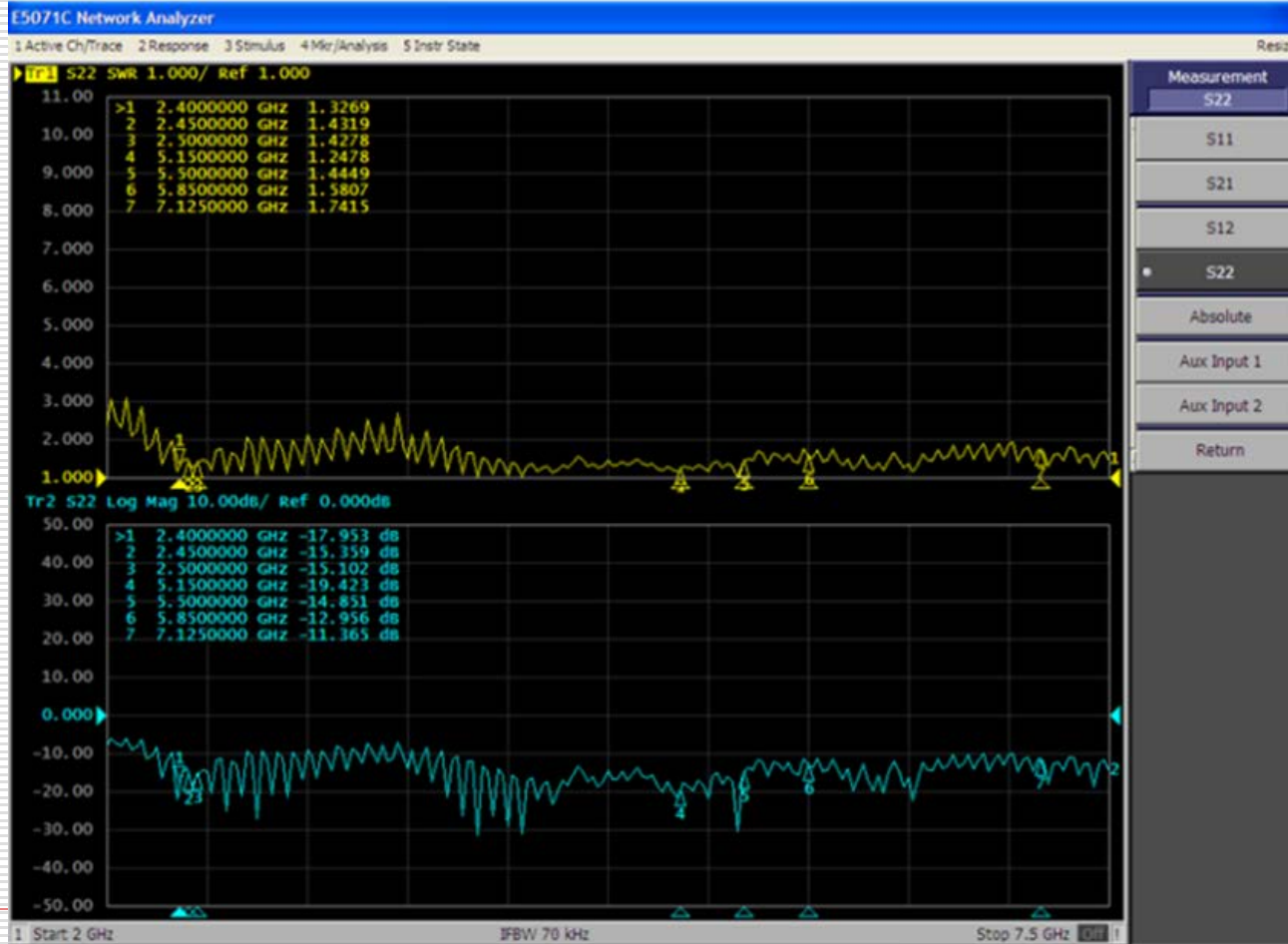
2. Testing Picture



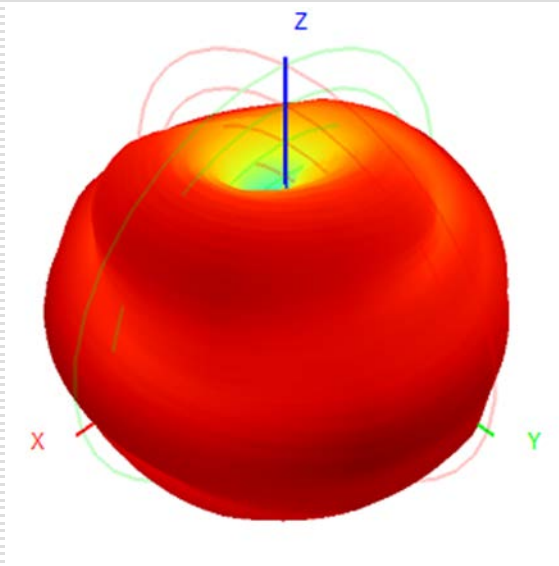
3. Testing Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	5150.0	5345.0	5500.0	5850.0	5930.0	6125.0	6320.0	6515.0	6710.0	6905.0	7100.0	7125.0
Gain (dBi)	0.83	1.06	1.18	1.54	1.59	1.13	0.55	0.60	1.02	1.34	1.58	-0.62	-0.89	-0.59	-0.56	-0.56	-0.77	-0.64	-0.25	-0.48	-1.19	-1.81	-1.85
Efficiency (%)	41.69	43.09	43.97	44.22	46.08	45.38	44.67	43.08	43.54	44.61	46.06	30.95	29.52	31.18	32.29	28.22	27.83	27.11	29.22	26.36	23.51	21.23	20.19

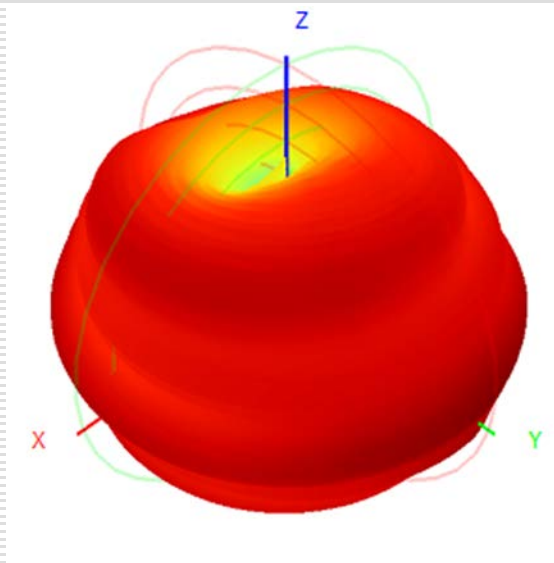
3.1.1 VSWR Test



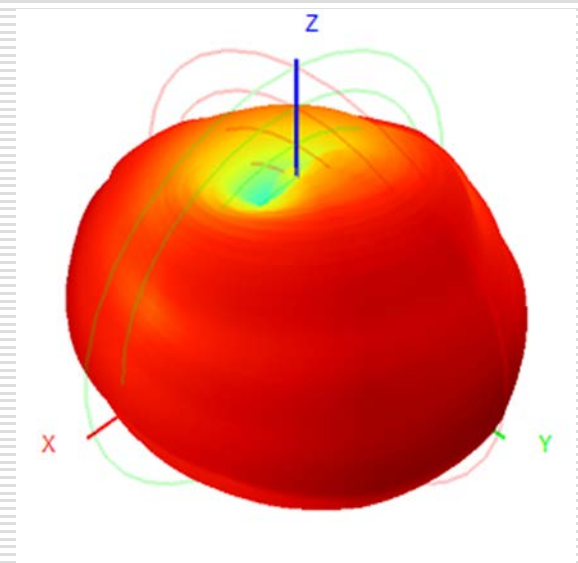
3.2.1 3D_Radiation Pattern



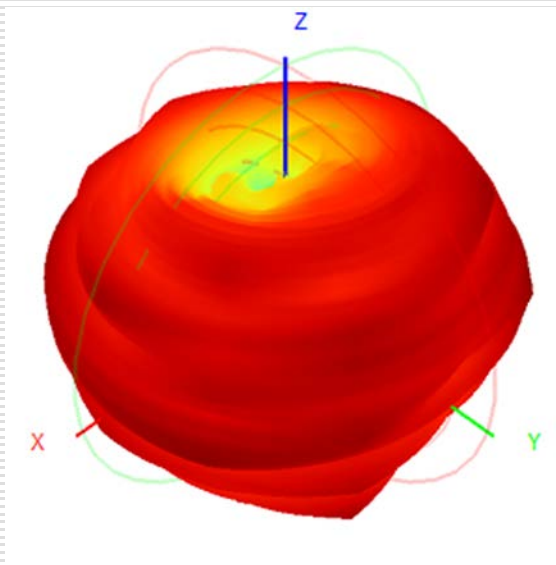
2400MHz



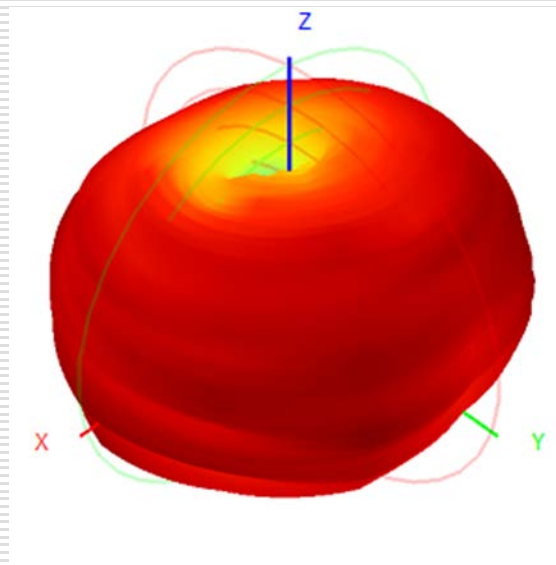
2450MHz



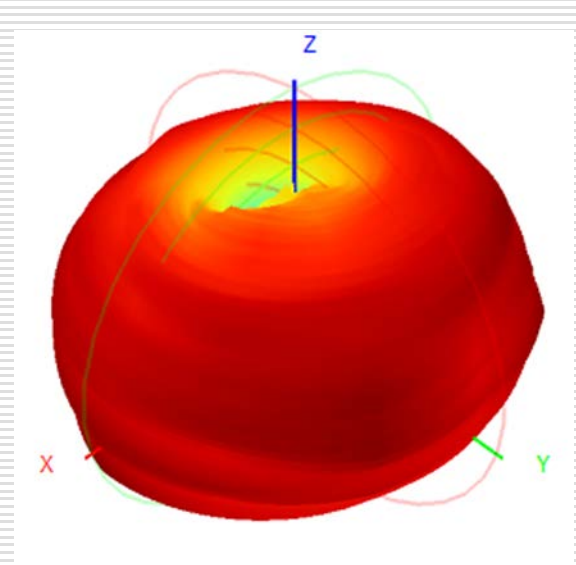
2500MHz



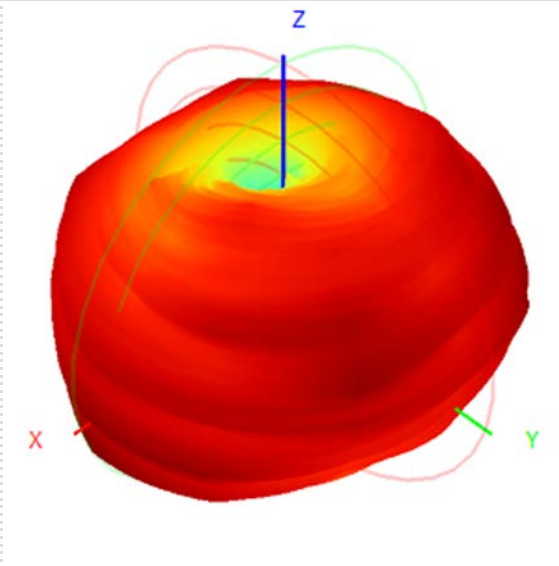
5150MHz



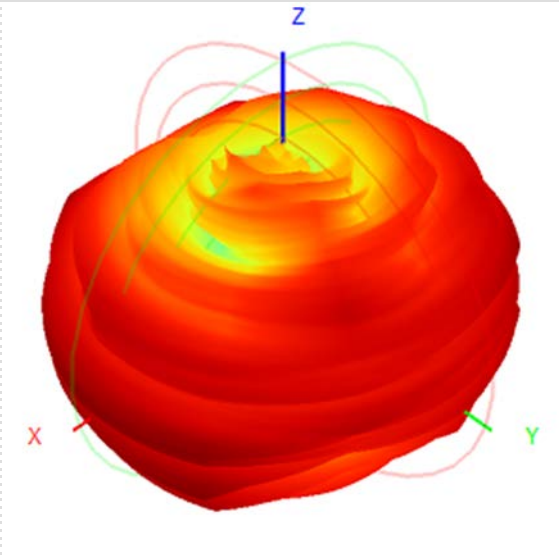
5500MHz



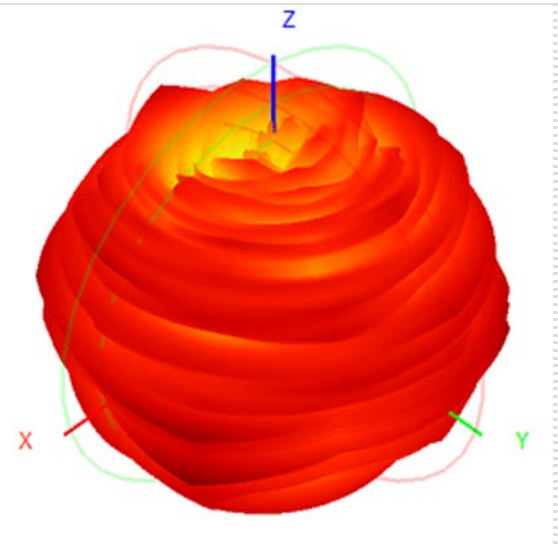
5850MHz



5900MHz



6500MHz



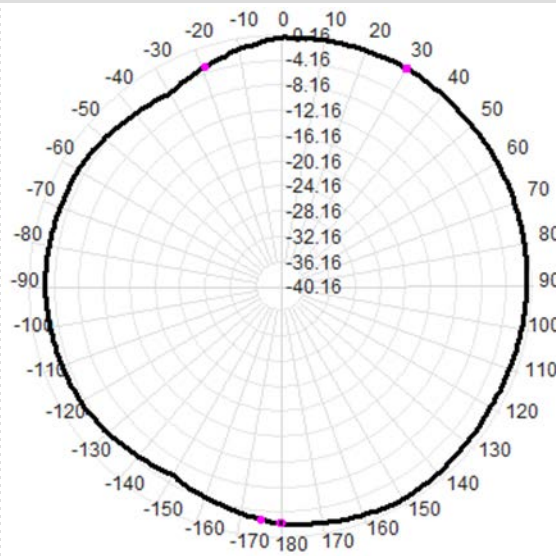
7125MHz



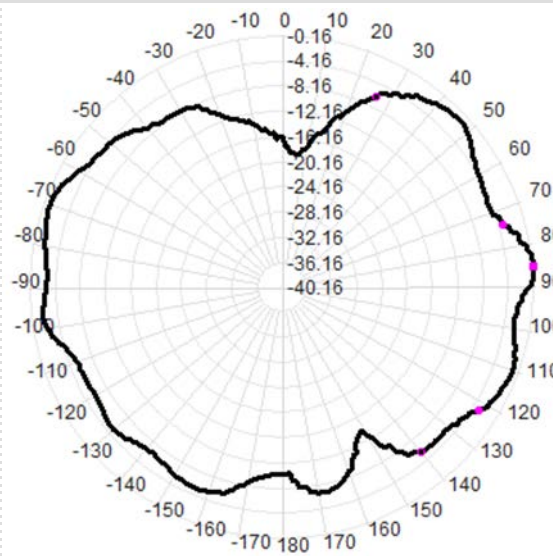
3.2.2 2D_Radiation Pattern

2400MHz

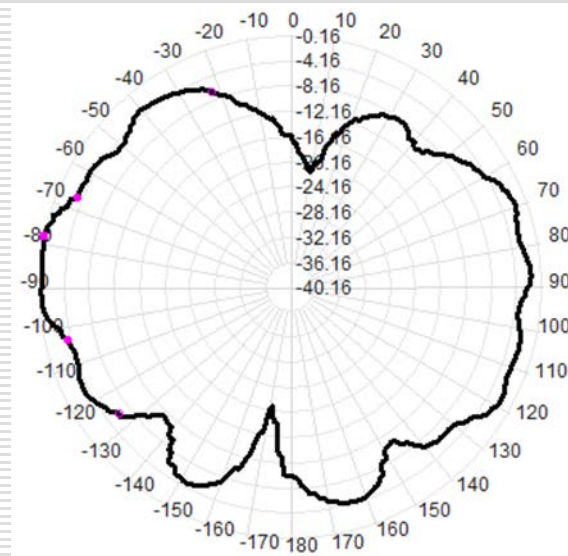
XY_Plane



XZ_Plane



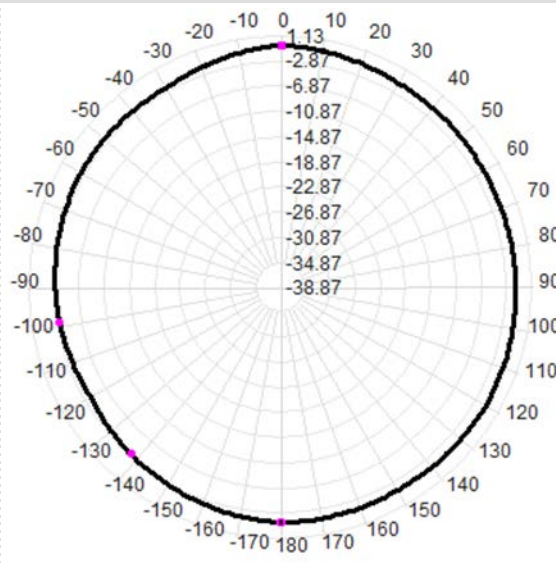
YZ_Plane



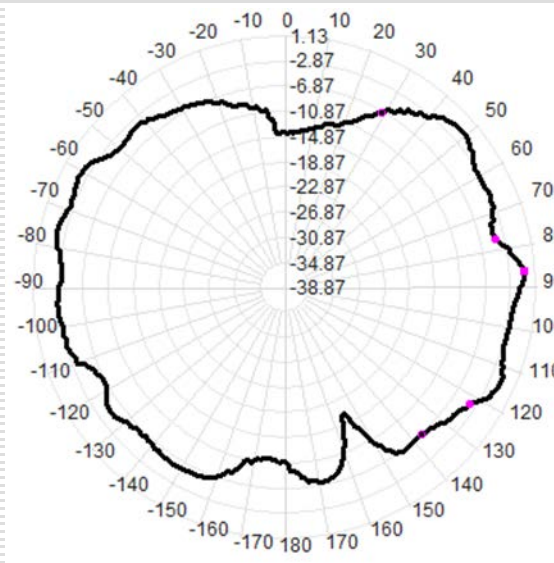
3.2.2 2D_Radiation Pattern

2450MHz

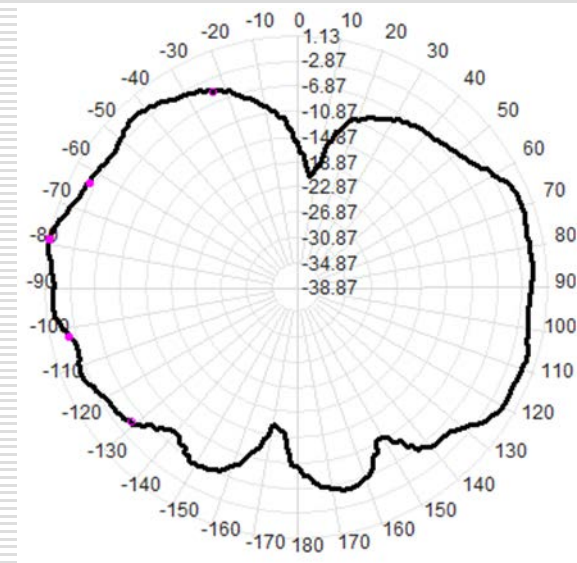
XY_Plane



XZ_Plane



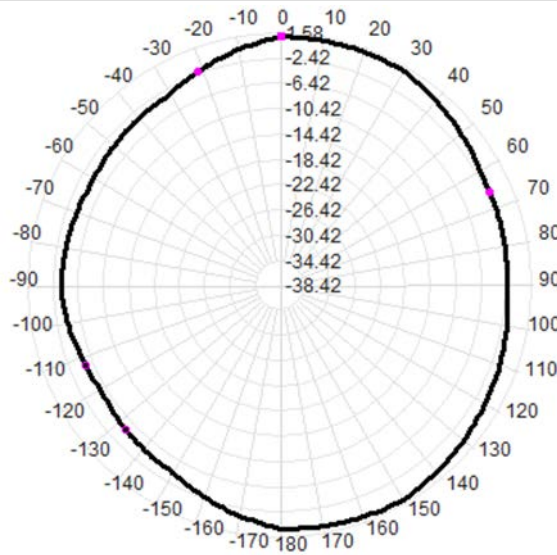
YZ_Plane



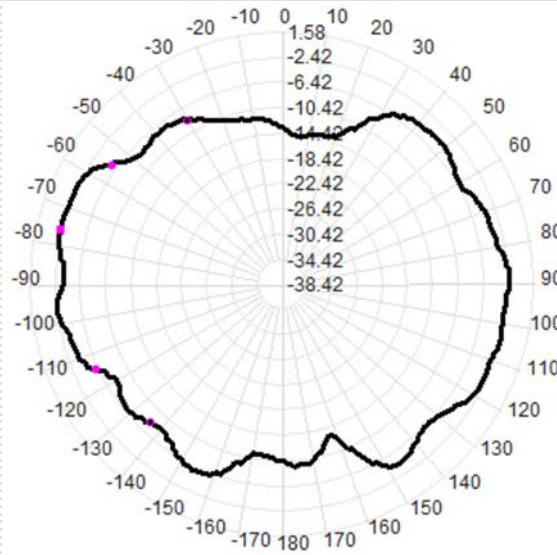
3.2.2 2D_Radiation Pattern

2500MHz

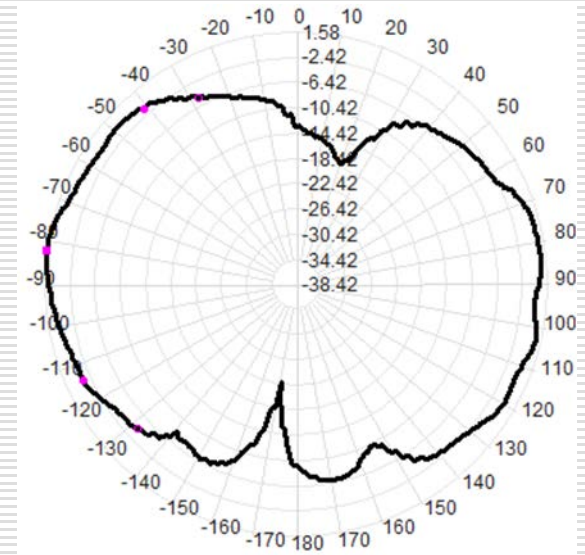
XY_Plane



XZ_Plane



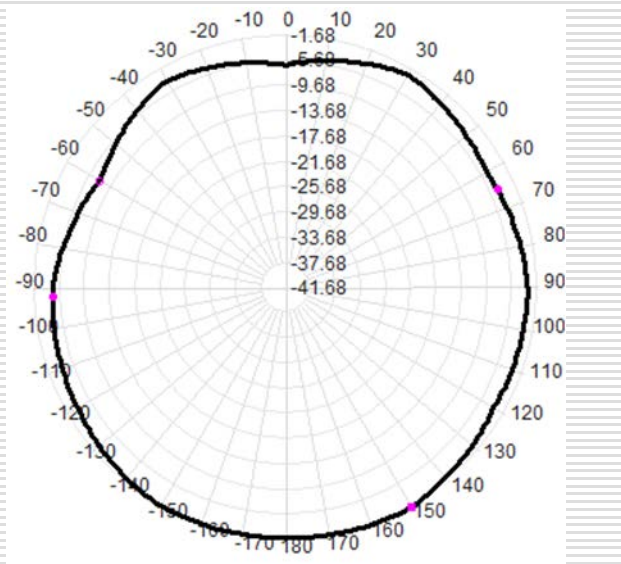
YZ_Plane



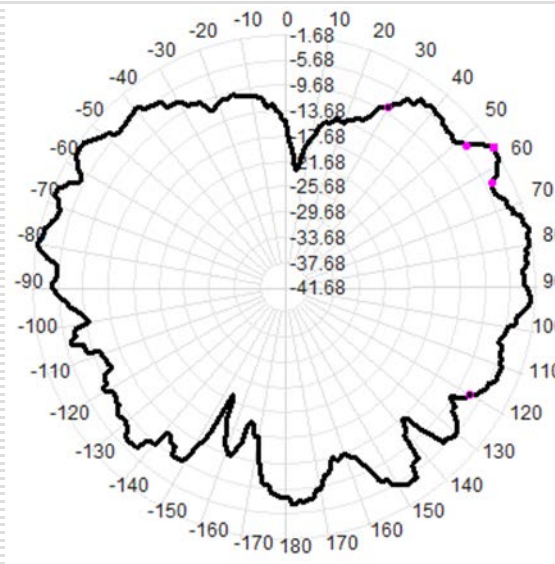
3.2.2 2D_Radiation Pattern

5150MHz

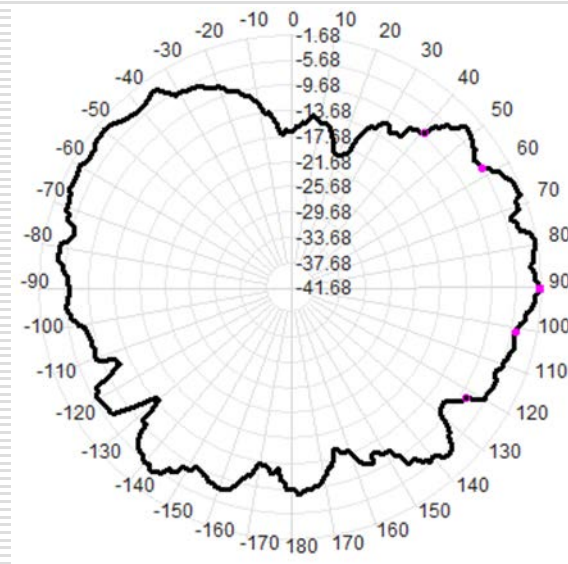
XY_Plane



XZ_Plane



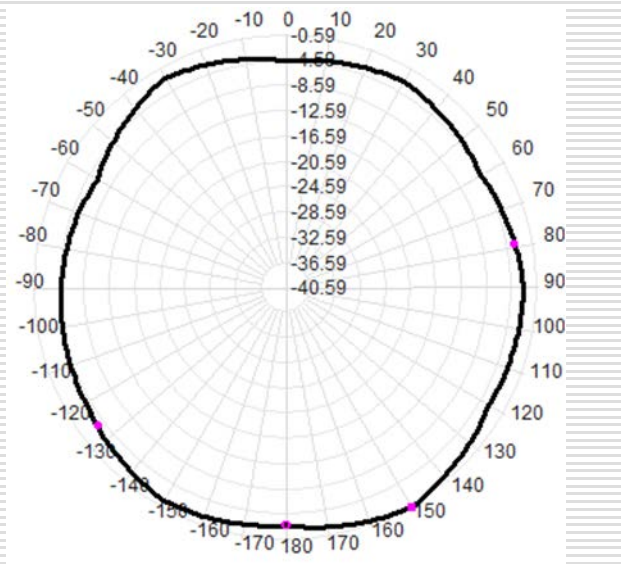
YZ_Plane



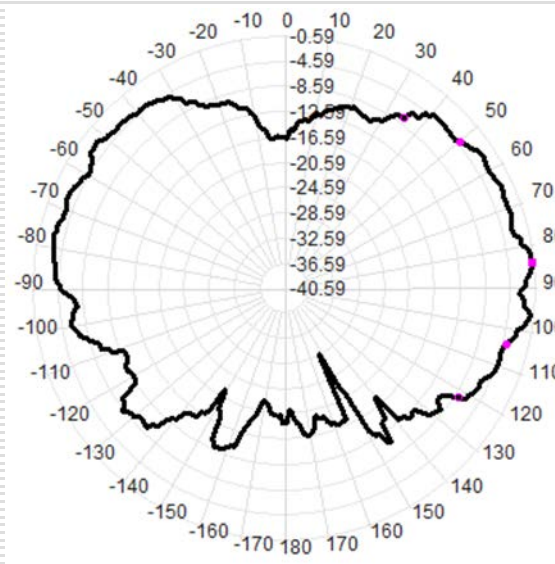
3.2.2 2D_Radiation Pattern

5500MHz

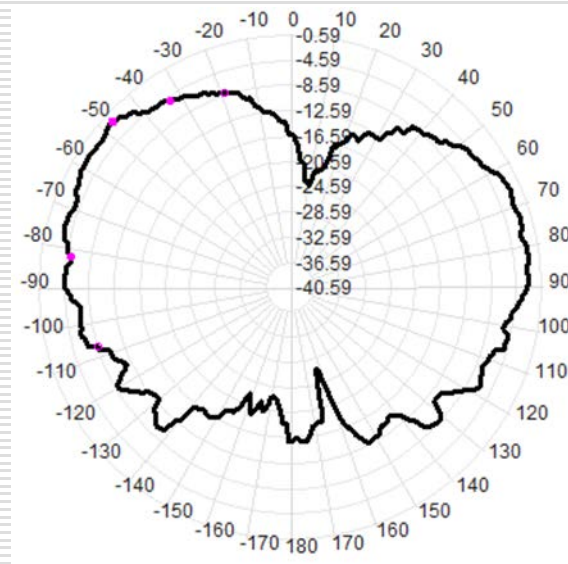
XY_Plane



XZ_Plane



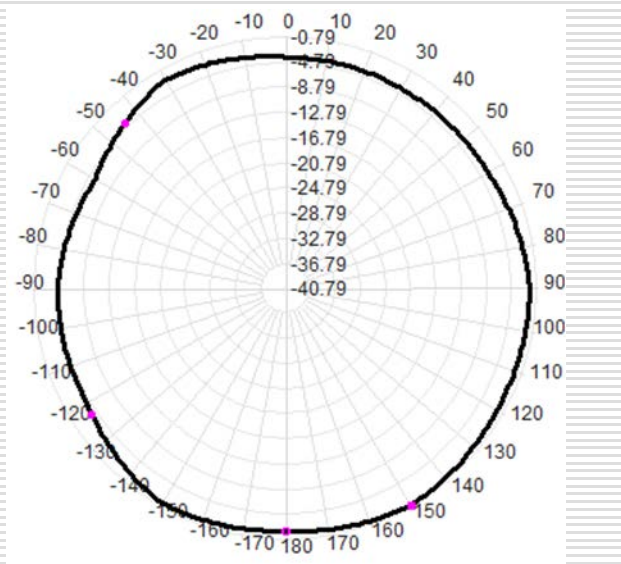
YZ_Plane



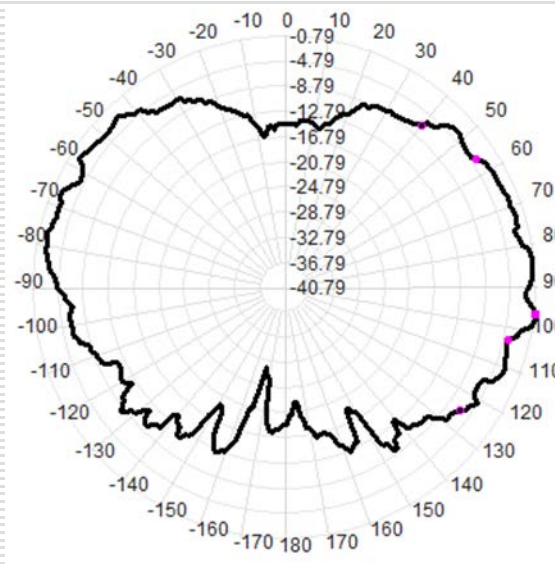
3.2.2 2D_Radiation Pattern

5850MHz

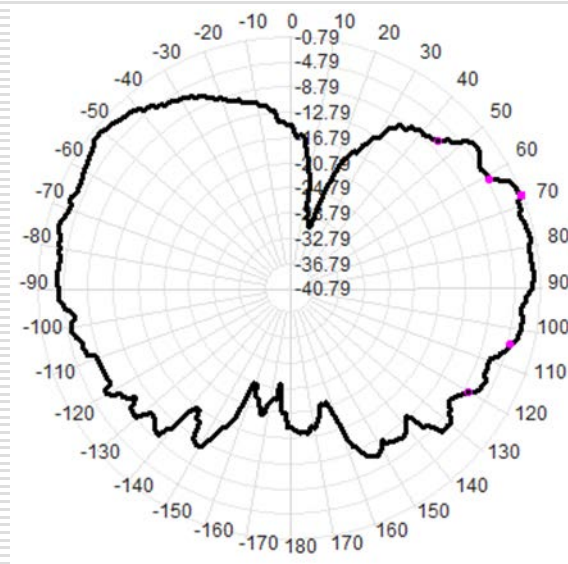
XY_Plane



XZ_Plane



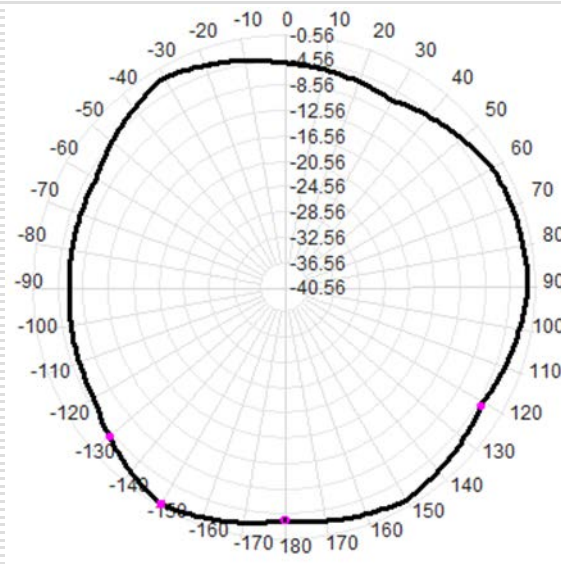
YZ_Plane



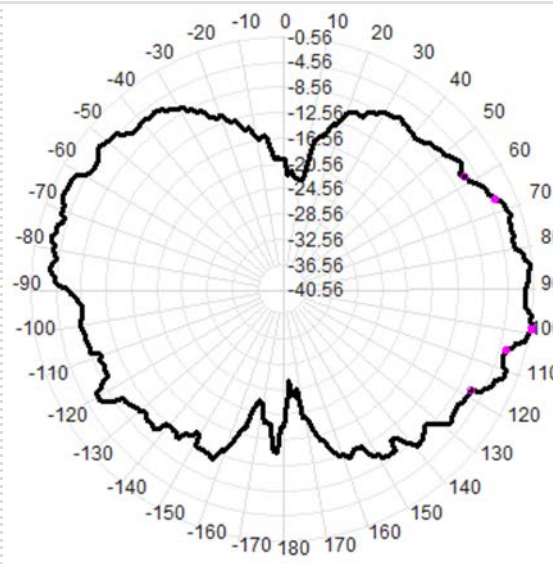
3.2.2 2D_Radiation Pattern

5900MHz

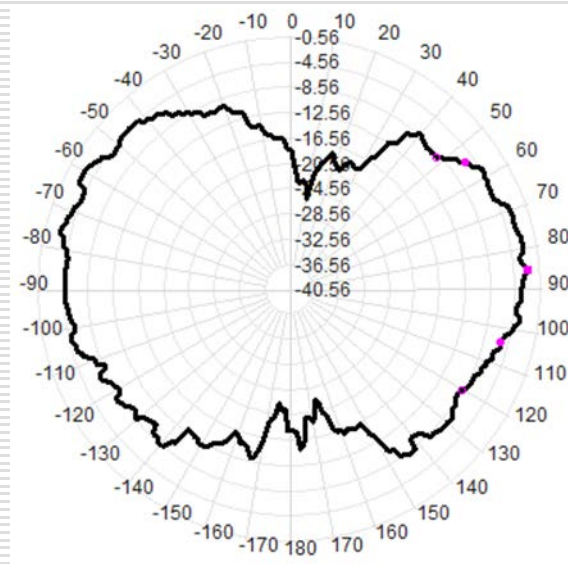
XY_Plane



XZ_Plane



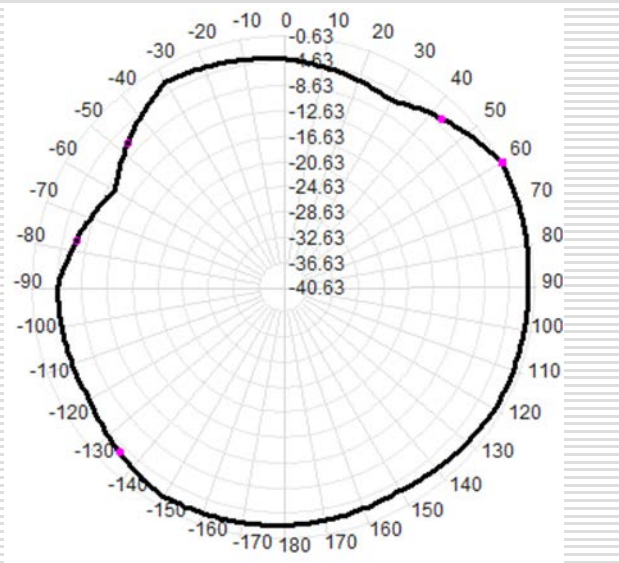
YZ_Plane



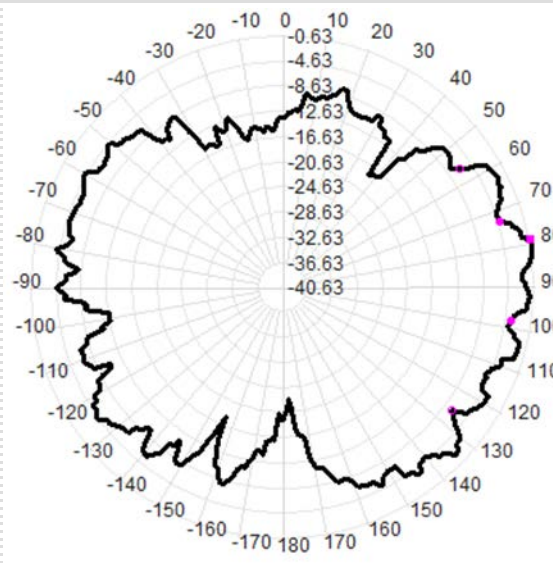
3.2.2 2D_Radiation Pattern

6500MHz

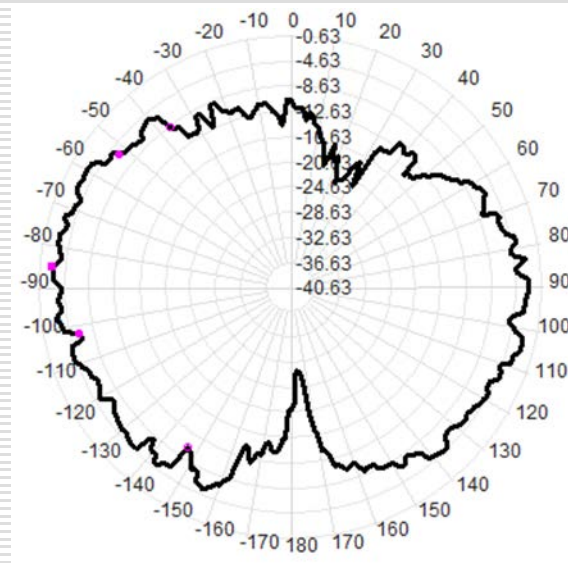
XY_Plane



XZ_Plane



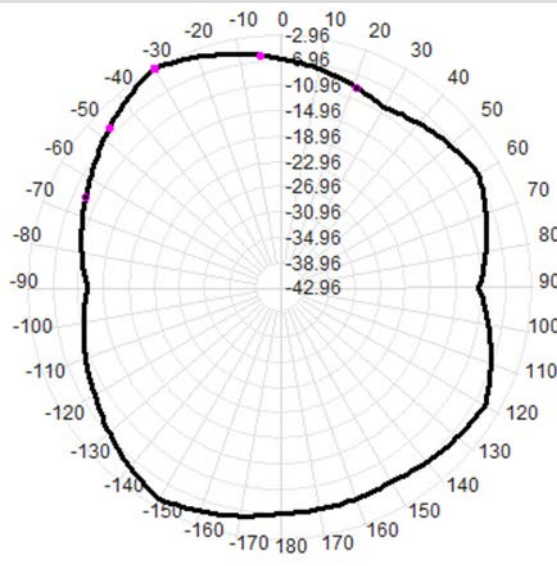
YZ_Plane



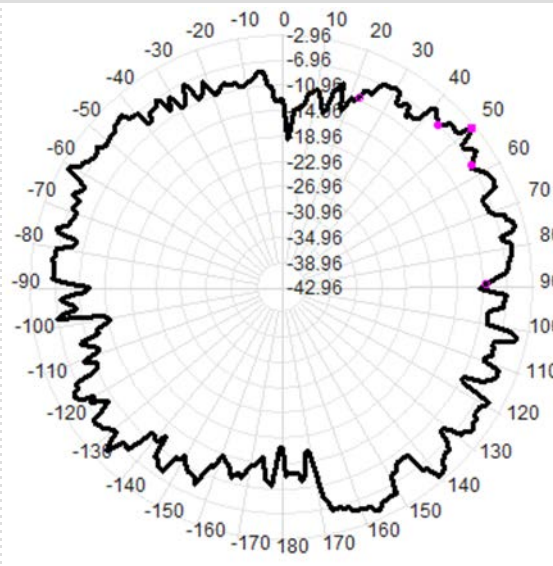
3.2.2 2D_Radiation Pattern

7125MHz

XY_Plane



XZ_Plane



YZ_Plane

