



深圳市天逸源电子科技有限公司
Shenzhen Tianyiyuan Elec&Technology CO.,Ltd

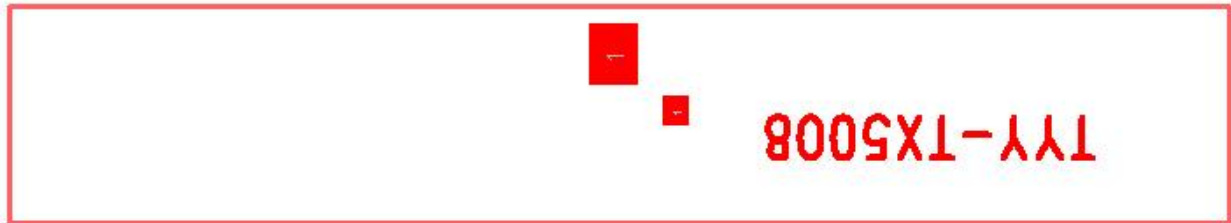
地址：深圳市宝安区福海街道凤塘大道 50 号鑫龙欣工业园 A 栋六层
Adress: Xinlongxin Industrial Park, Building A, No. 50 Fengtang Avenue, Fuhai Subdistrict, Bao'an District, Shenzhen City

WIFI Specification

The finished product features

电 性 能 指 标		Electrical Specifications	
频率范围	2400-2500MHz	Frequency Range	2400-2500MHz
电压驻波比	≤ 1.5	VSWR	≤ 1.5
最大增益	2.51DBI	Max GAIN	2.51DBI
输入阻抗	50 Ω	Input Impedance	50 Ω
机 械 指 标		Mechanical Specifications	
天线颜色	黑色	Antenna Color	BLACK
接口形式	IPEX-1	Input connector	IPEX-1
线长度	95mm	Cable length	95mm
工作温度	-40°C~+85°C	Working Temperature	-40°C~+85°C
工作湿度	20~80%	Working Humidity	20~80%

Figure1: TYY-TX5008 dimensional drawing



**Figure 2: TYY-TX5008 Antenna finished product(length: 95mm
The first generation terminals)**

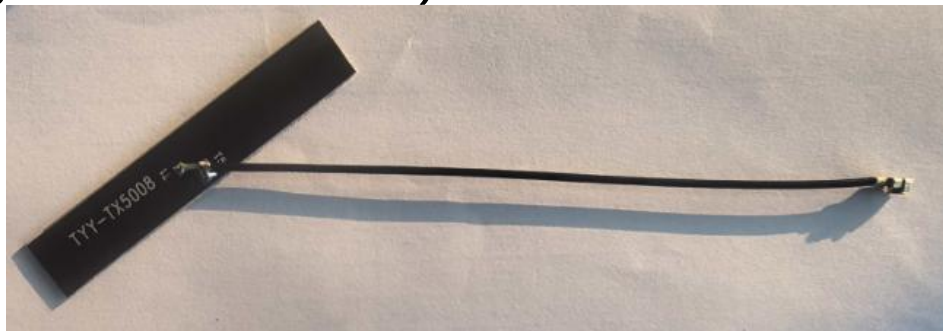
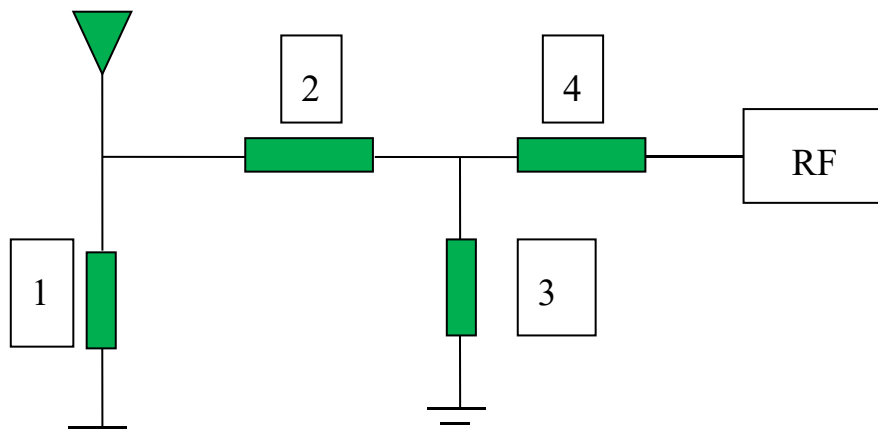


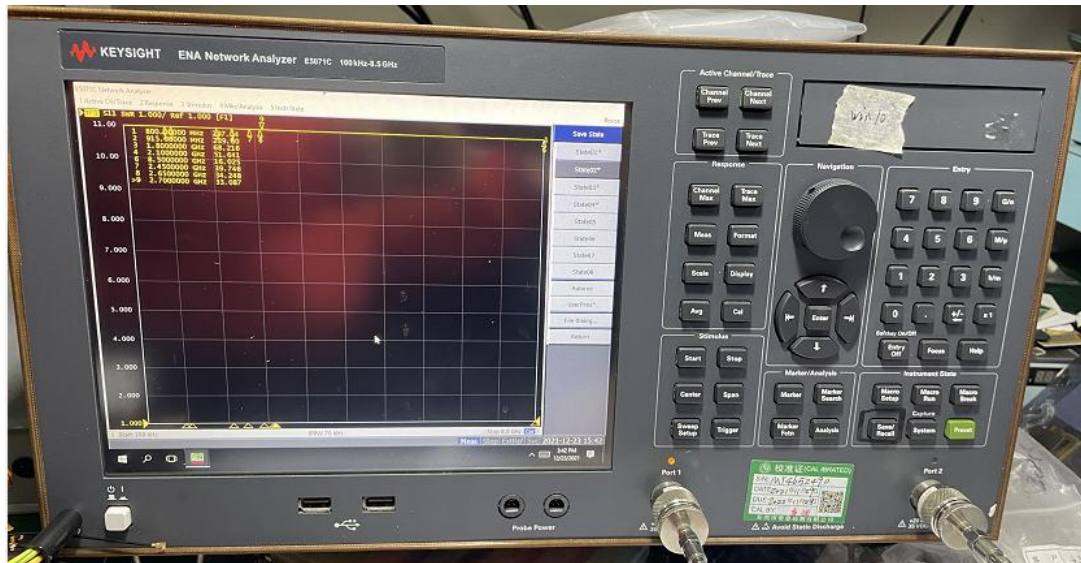
Figure 3 assembly drawing

Antenna matching circuit



Component number	1	2	3	4
Best	NC	0 Ω	NC	
original(spare)	50 Ω			

Figure 4 Agilent E5071C network analyzer



OTA anechoic chamber : Frequency: 800MHz—6GHz

2.4.2 Test instrumentation

Agilent E 5071 Network analyzer, logarithmic periodic antenna, computer, transmitting platform, receiving antenna, printer, external choke coil (to reduce the loss of signal connection lines).

Figure 5: OTA anechoic chamber

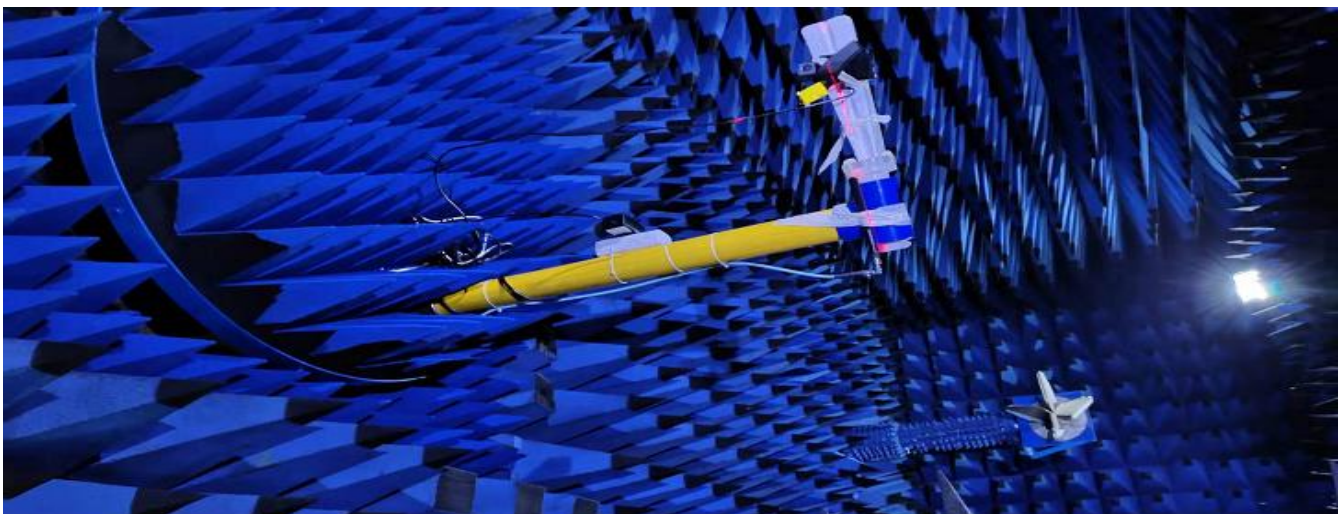
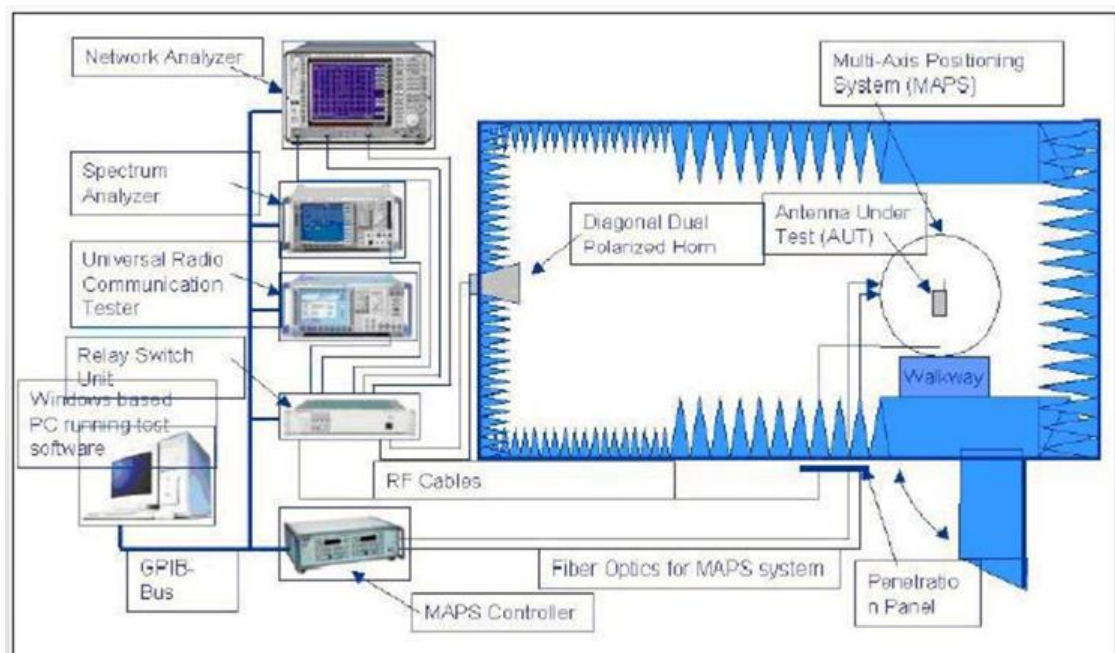
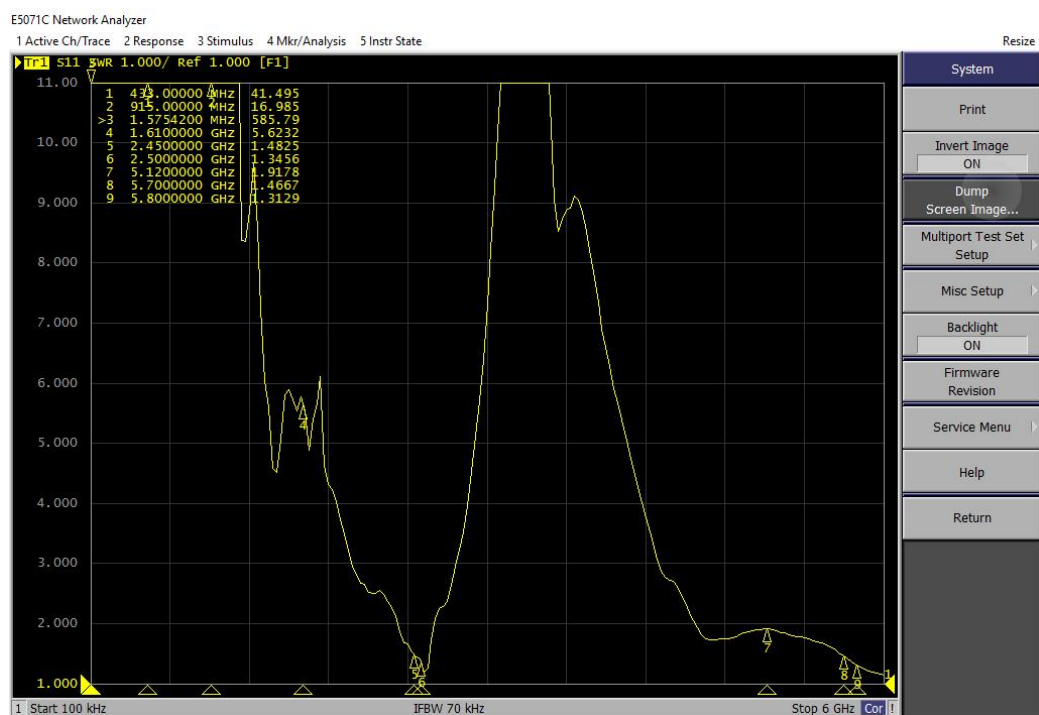




Figure 6: testing environment:



2.3 Test of VSWR

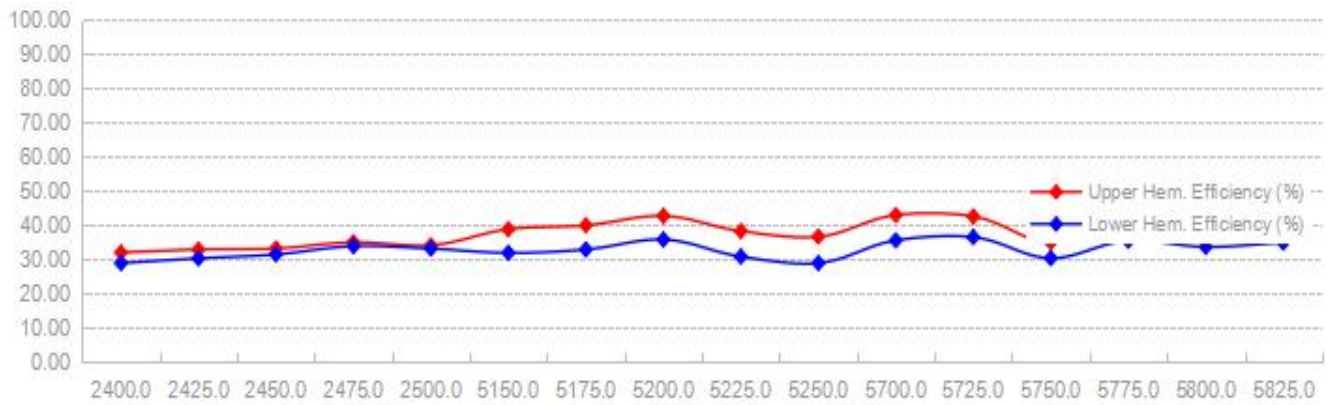
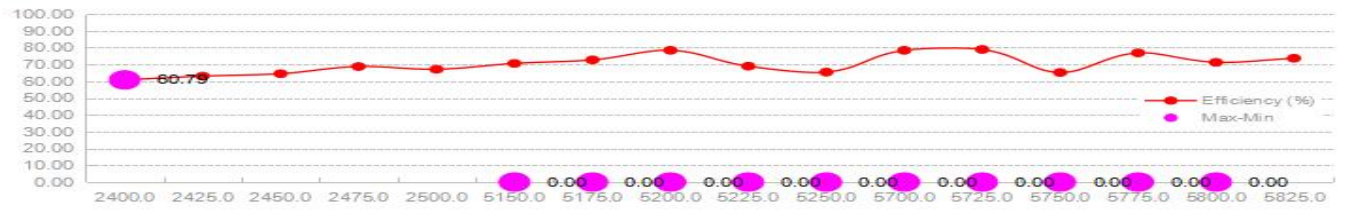


VSWR

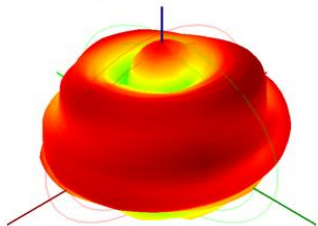
	2.4~2.5GHz	
Frequency(MHz)	2450	2500
VSWR	1.48	1.34

WIFI 测试报告

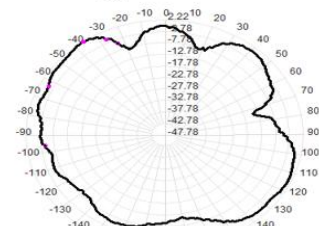
FETUKEJI					
Frequency ID	1	2	3	4	5
Frequency (MHz)	2400.0	2425.0	2450.0	2475.0	2500.0
Efficiency (dBi)	-2.16	-2.00	-1.91	-1.63	-1.73
Gain (dBi)	2.22	2.24	2.28	2.51	2.47
Efficiency (%)	60.79	63.03	64.48	68.74	67.12
Directivity (dB)	4.08	4.20	4.29	4.74	4.70
Peak Gain Position (Theta)	79.00	79.00	40.00	44.00	44.00
Peak Gain Position (Phi)	330.00	330.00	30.00	30.00	30.00
Efficiency ThetaPol (%)	46.42	47.51	48.72	51.70	50.50
Efficiency PhiPol (%)	14.37	15.52	15.76	17.04	16.62
Upper Hem. Efficiency (%)	31.95	32.81	33.10	34.94	34.05
Lower Hem. Efficiency (%)	28.83	30.22	31.38	33.80	33.07



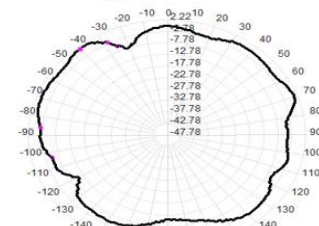
2400.0MHz H+V, Eff: 57.0%



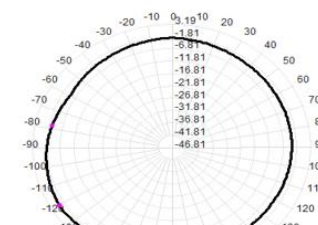
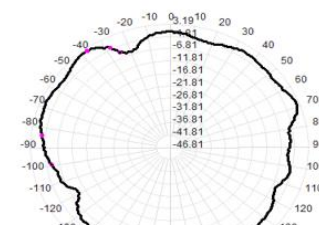
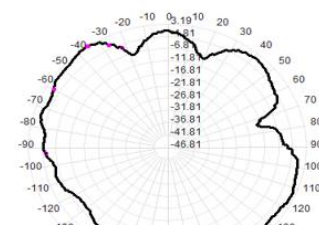
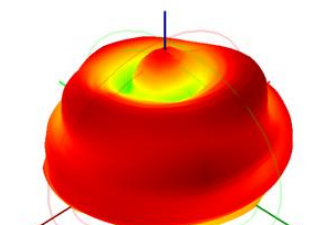
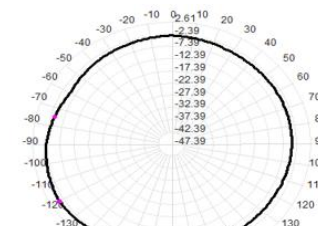
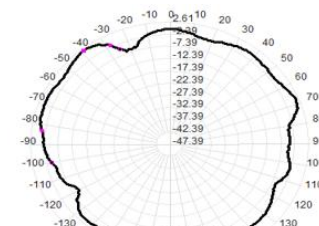
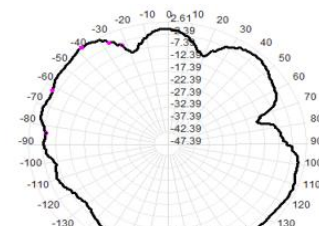
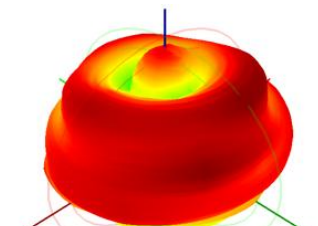
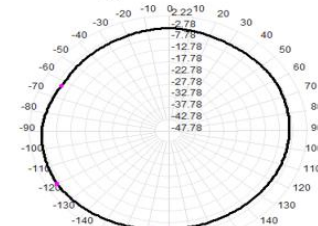
2400.0MHz Total(E1), Max= 2.22dBi

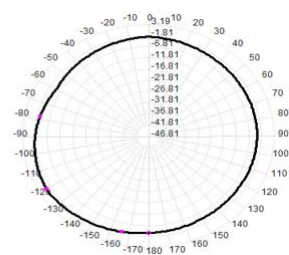
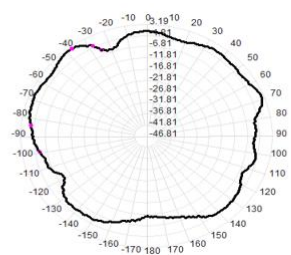
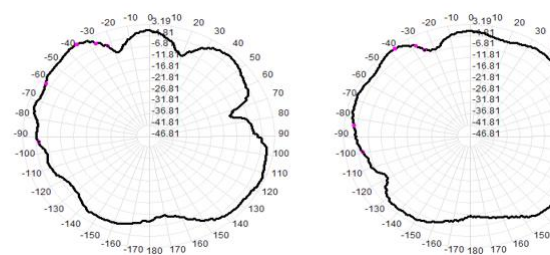
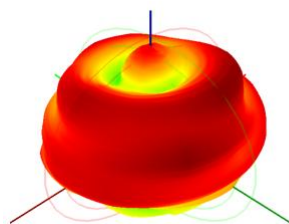
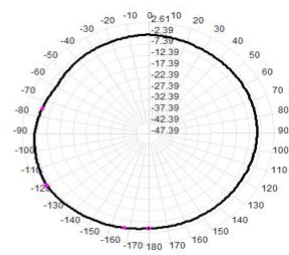
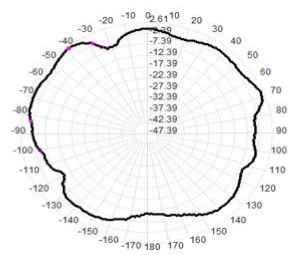
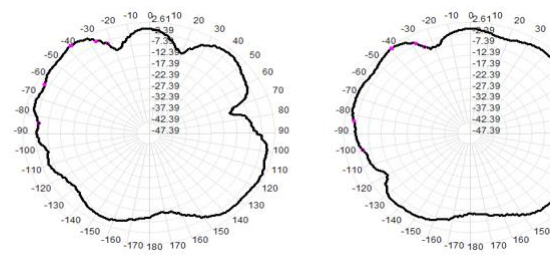
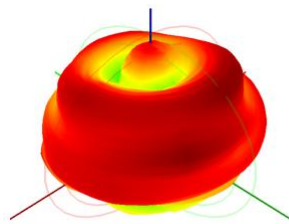
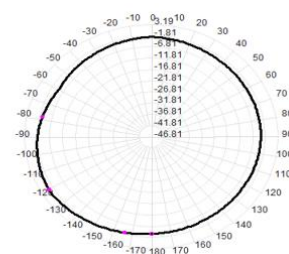
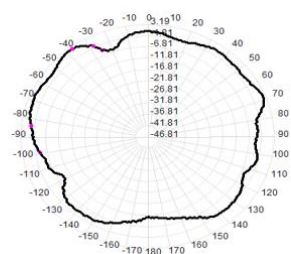
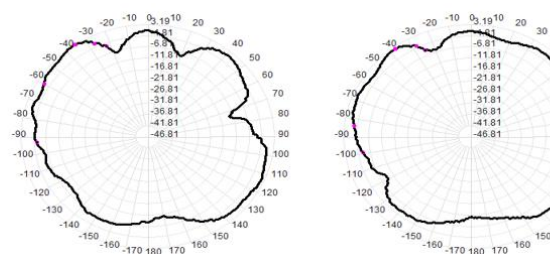
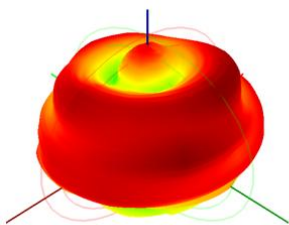
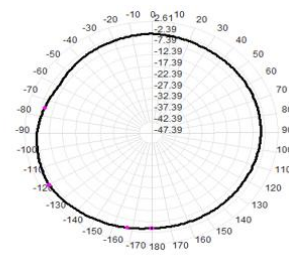
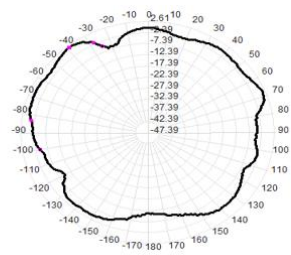
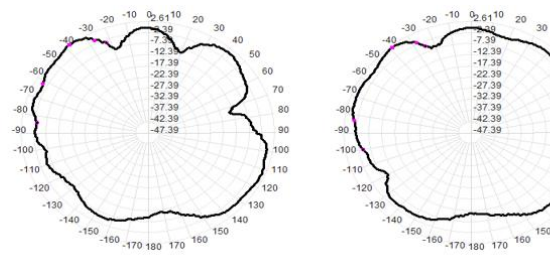
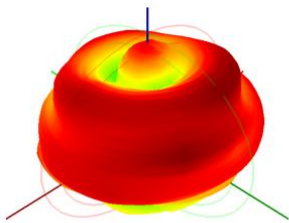
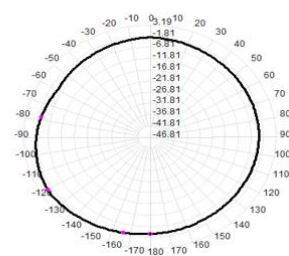
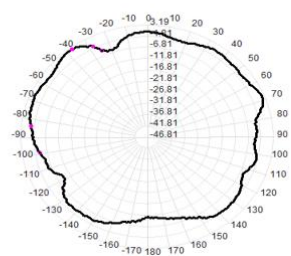
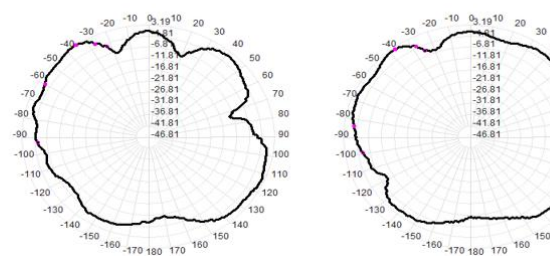
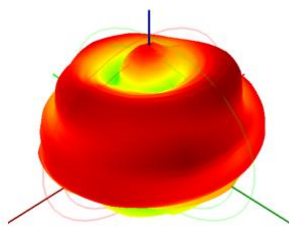
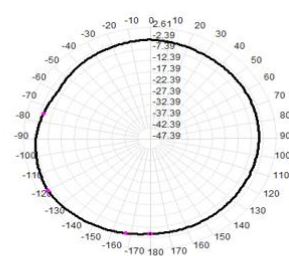
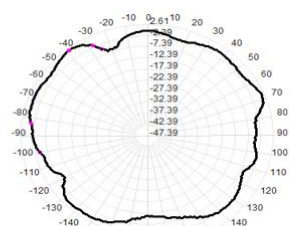
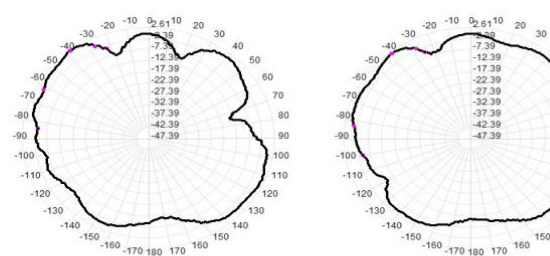
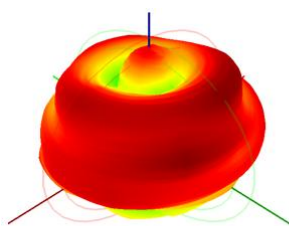


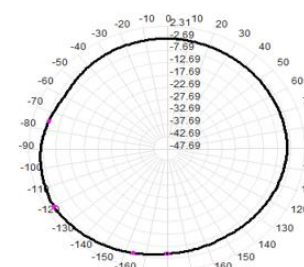
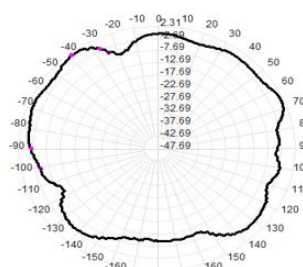
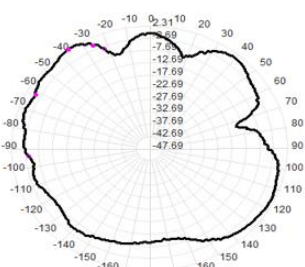
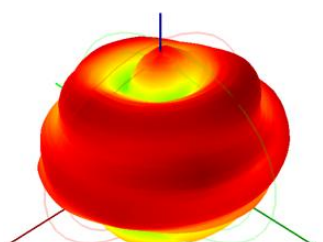
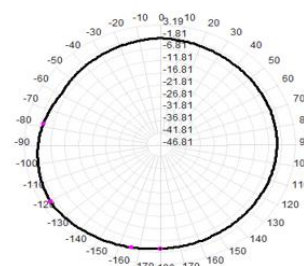
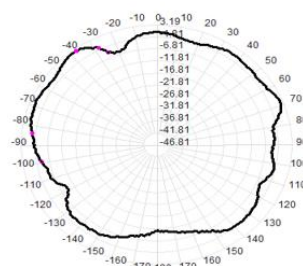
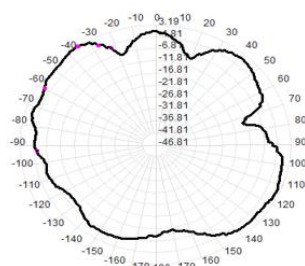
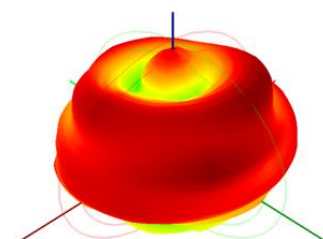
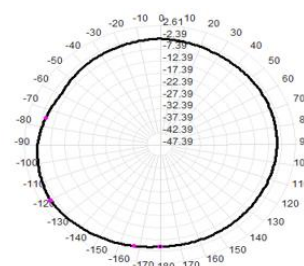
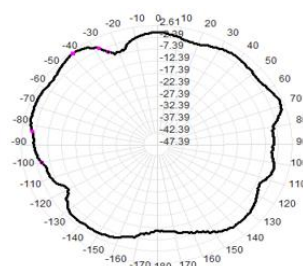
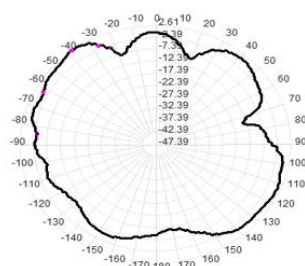
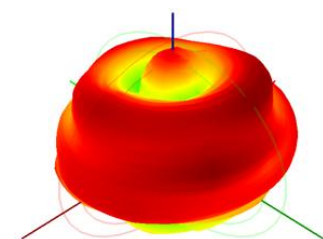
2400.0MHz Total(E2), Max= 1.02dBi



2400.0MHz Total(H), Max= -1.62dBi







Thank You !

