

Shenzhen Kuruijie Communication Technology Co., LTD

Antenna Test Report

1.Explanation of part number:

Supplier: **Kuruijie**

Frequency: 699-960Hhz, 1710-2170Mhz,2300-2690Mhz

Antenna Material: FPC

Antenna model: PIFA

2.Electrical Specification:

2-1. Frequency Band:

Frequency	MHz
LTE	703-960MHz , 1710-2170MHz , 2300-2690MHz

Project model:T322E

Frequency Band: GSM B2/3/5/8+WCDMA-B1/2/4/
5/8+FDD B1/2/3/4/5/7/8/13/20/26/28-TDD
B38/40/41

Bluetooth: 2.4GHZ

Date: 2025/03/07

ADD: 5C Building, Units 407-409, Huaqiang Creative
Industry Park, Biyan Community, Guangming Street,

1.Test Project

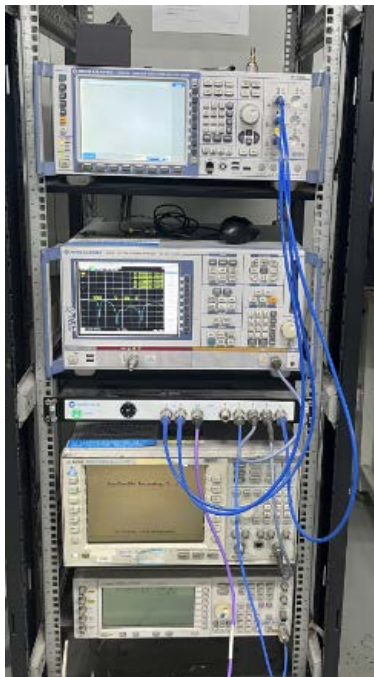
	Test Project	Equipment
1. S Parameter	1. Return Loss (RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2G+3G+4G+BT)	1. power 2. level 3. TRP/TIS	Comprehensive Test: CMW500/8960 Test Environment: Anechoic Chamber

2.Test Equipment

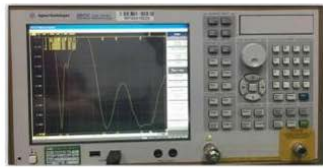


CMW 500 (2G/3G/4G Test Equipment)

3. TestEnvironment



Antenna debugging equipment



E5071C



HP8753D



ROHDE&SCHWARZ-ZVL



ROHDE&SCHWARZ



HP885046A

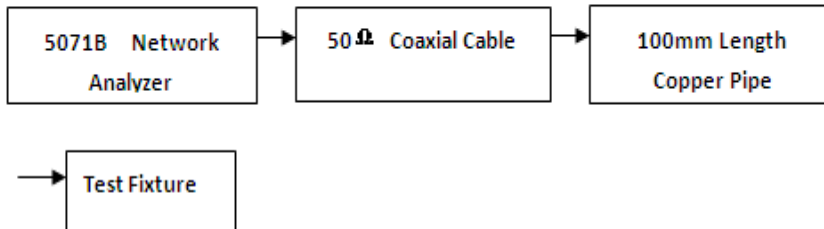


CMU200

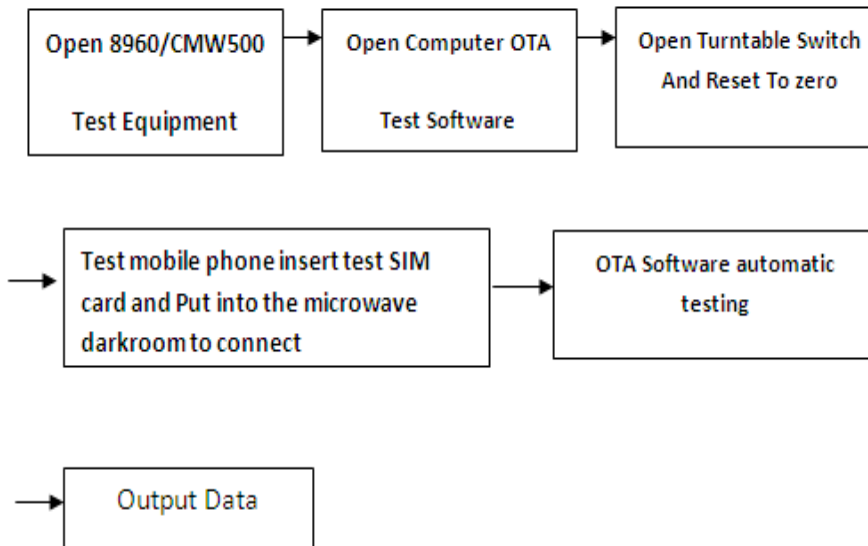
Our company has a number of OTA test darkrooms, ranging from 400MHz to 8.5ghz, which can provide passive test and active test (including OTA overall 2G,3G,4G,5GFR test, WiFi multi-mode test, GPS active test, Bluetooth active test, which can provide antenna gain and efficiency. 2D orientation and apple chart analysis and upper and lower hemisphere efficiency values, mutual disturbance correlation coefficient test items

4.Test Steps

Passive VSWR/RL Test Steps:



Active TRP/TIS Test Steps:

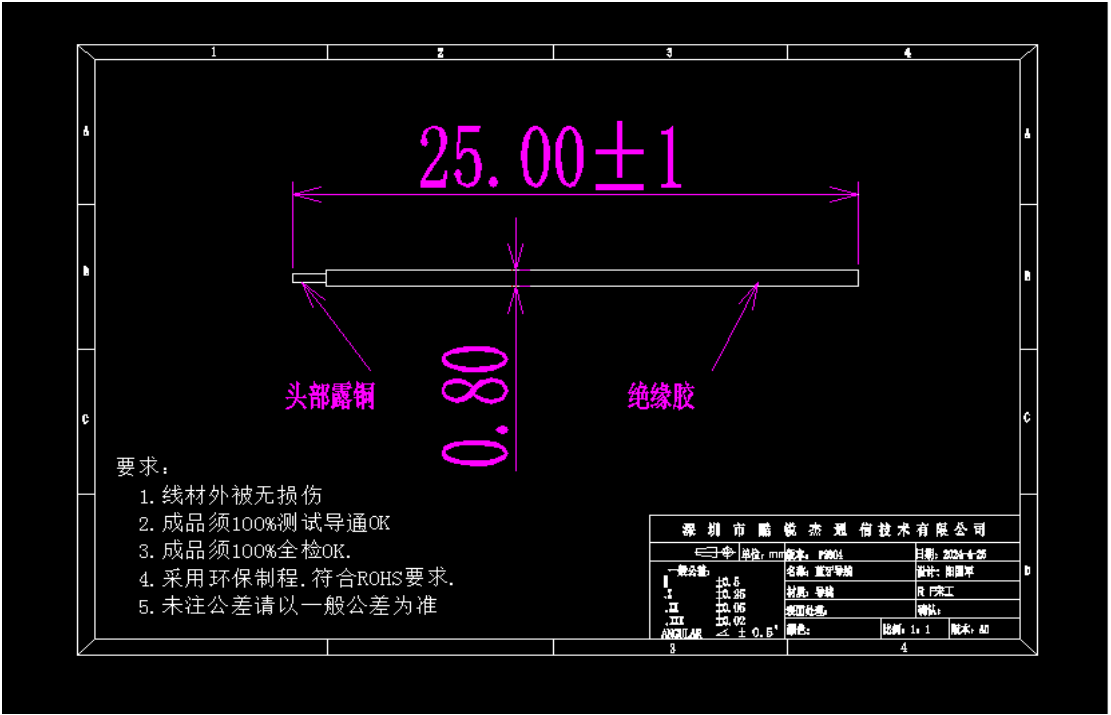
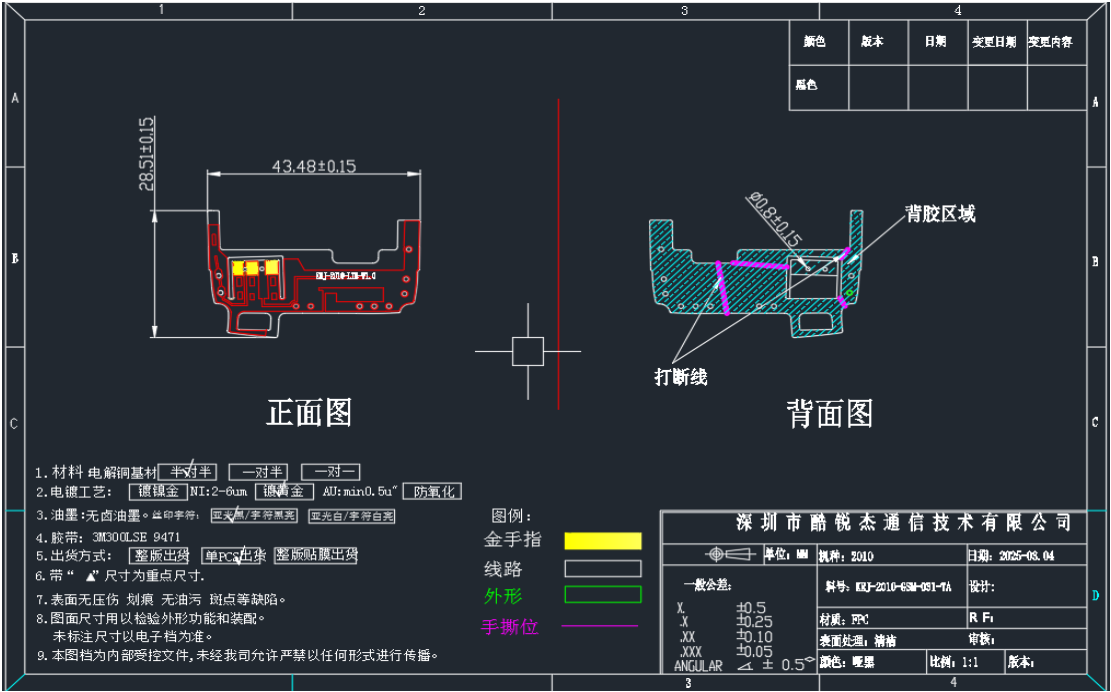


5. Antenna Placement



MIAN:GSM:GSM、EGSM、DCS、PCS
WCDMA:B1/2/4/5/8
LTE:B1/2/3/4/5/7/8/13/20/26/28/38/40/41
BT: 2.4GHZ

6.Antenna Dimensions

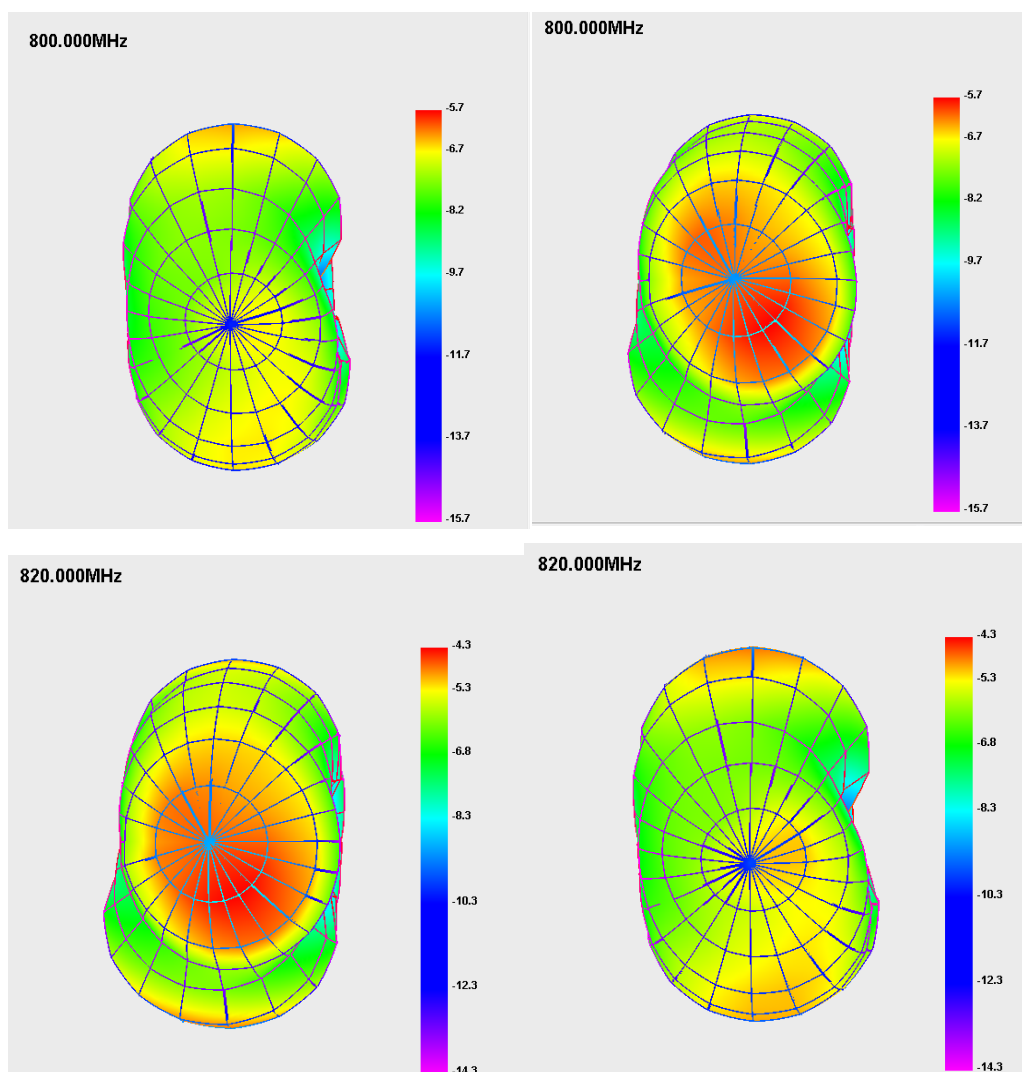


6. Antenna Gain

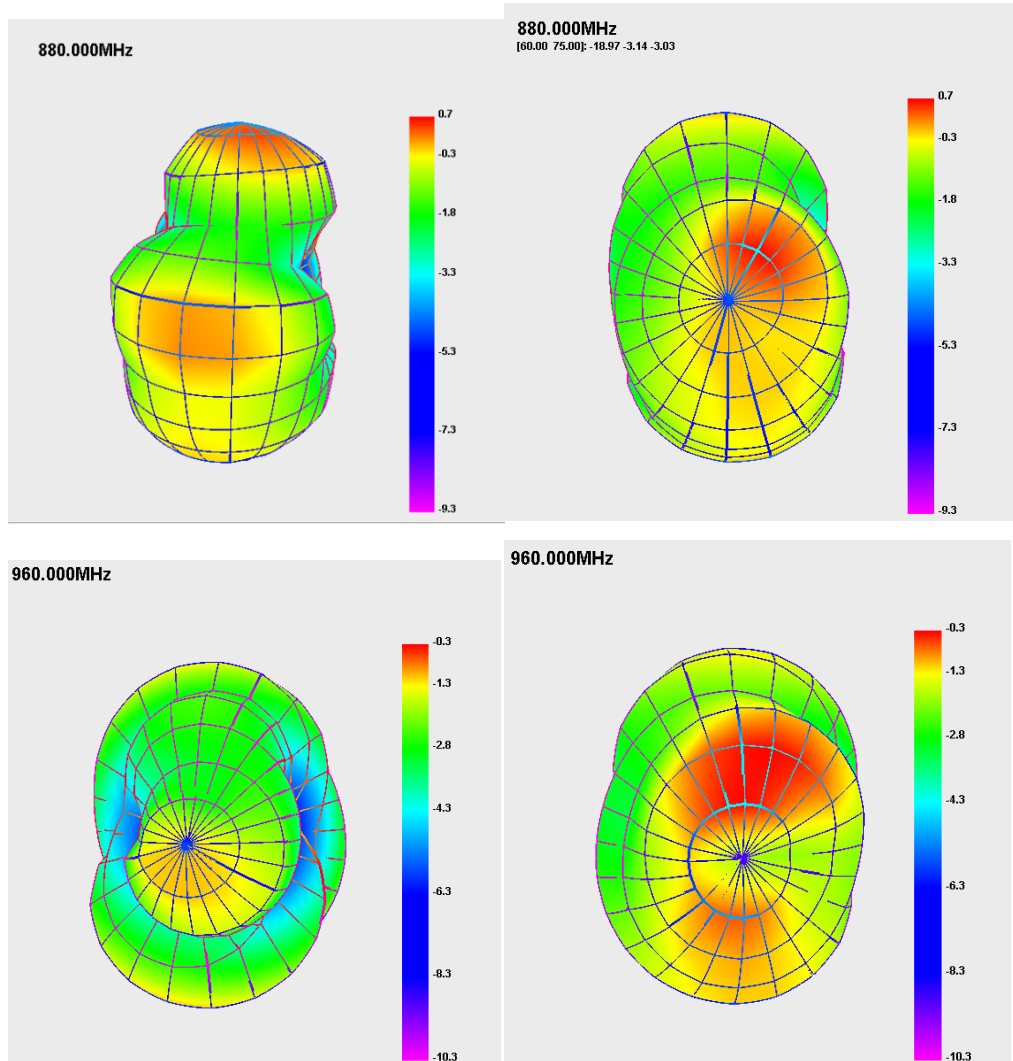
Frequency	Gain(dBi)
GSM850	0.45
EGSM900	0.5
DCS1800	0.6
PCS1900	0.7
WCDMA B1	0.7
WCDMA B2	0.6
WCDMA B4	0.6
WCDMA B5	0.5
WCDMA B8	0.5
FDD B1	0.8
FDD B2	0.6
FDD B3	0.7
FDD B4	0.6
FDD B5	0.5
FDD B7	1.2
FDD B8	0.5
FDD B13	-0.4
FDD B20	0.3
FDD B26	0.3

FDD B28	-0.7
TDD B38	1.1
TDD B40	0.9
TDD B41	1.1
BT	0.4

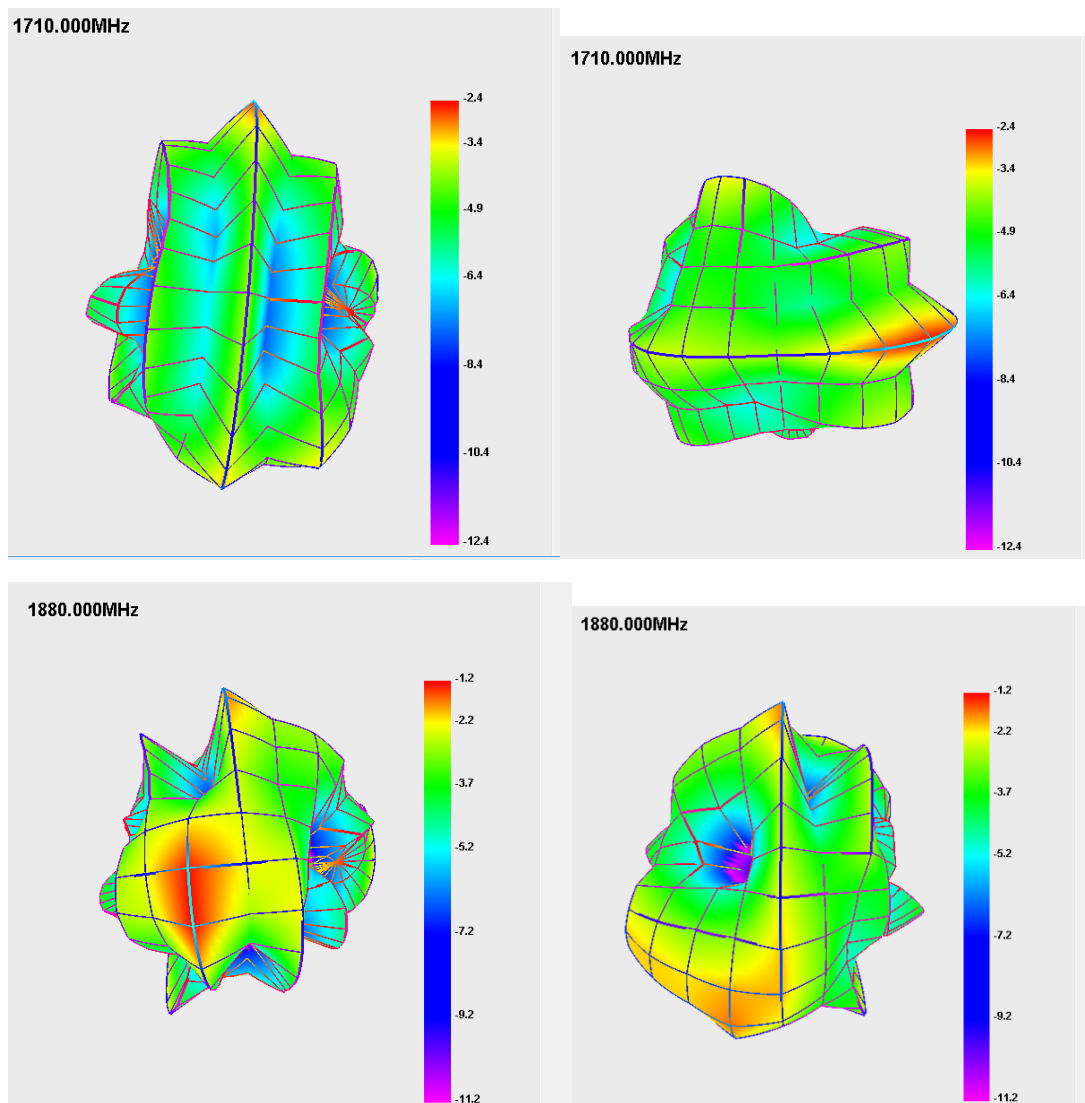
7. 3D Lobe Diagram (1)



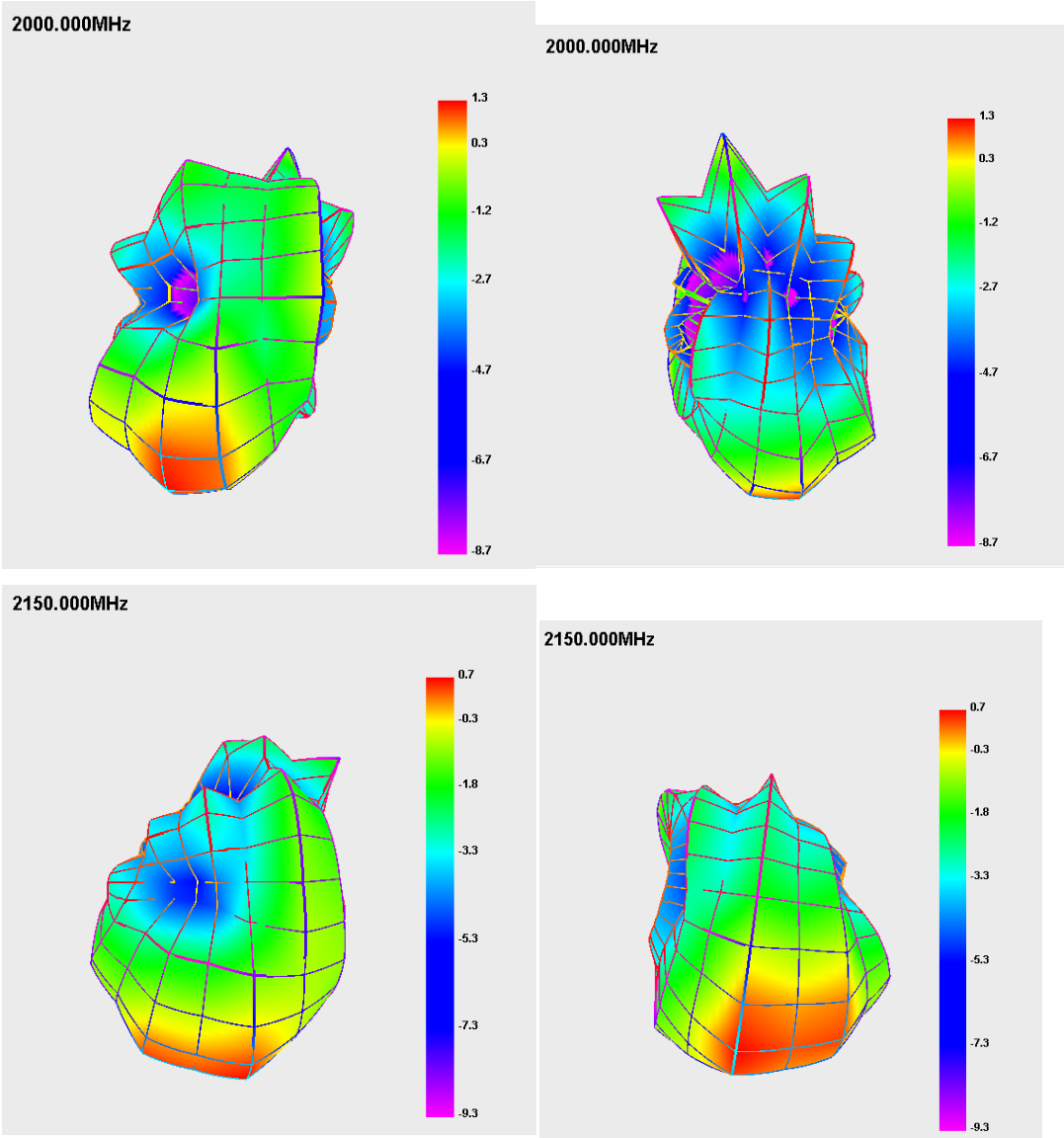
8. 3D Lobe Diagram (2)



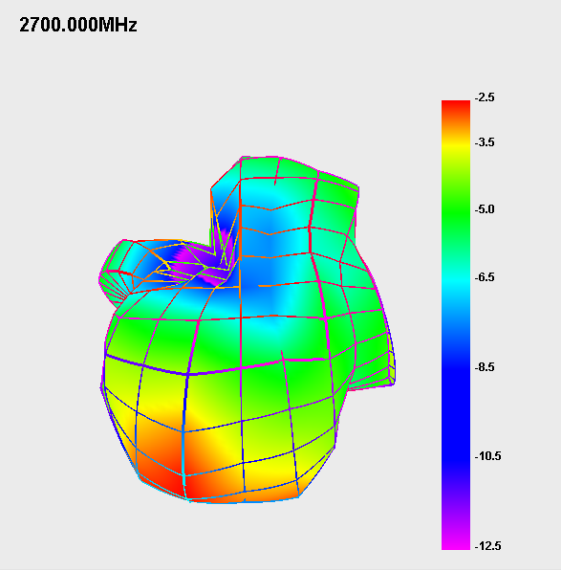
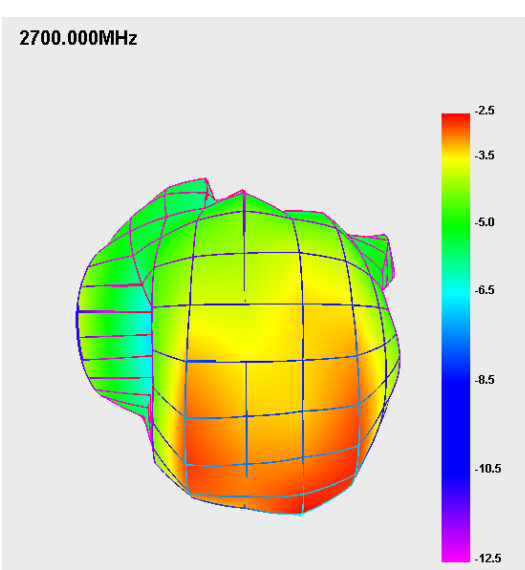
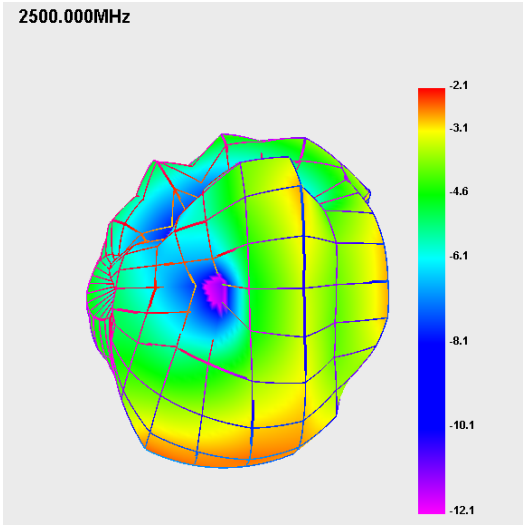
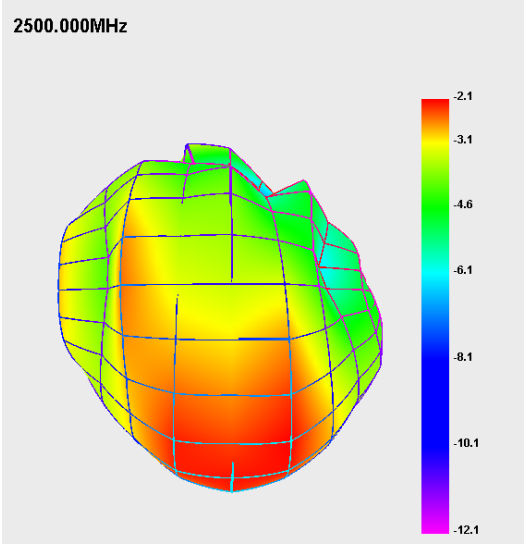
9. 3D Lobe Diagram (3)



10. 3D Lobe Diagram (4)



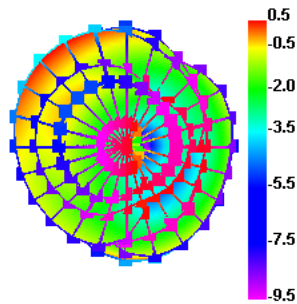
11. 3D Lobe Diagram (5)



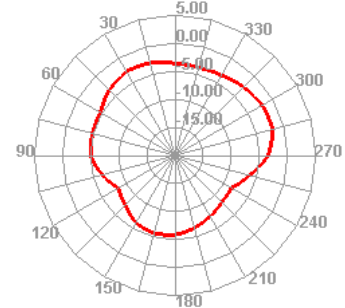
12. 3D Lobe Diagram (6)

BT:

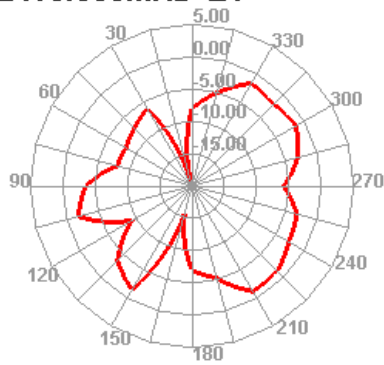
2460.000MHz



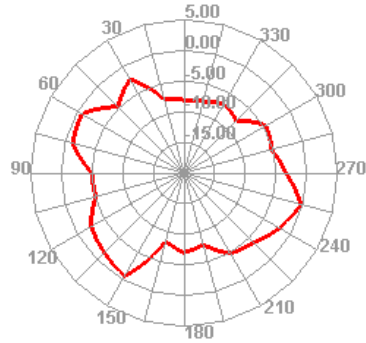
2460.000MHz H



2460.000MHz E1



2460.000MHz E2



Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	31.26	-2.13	0.3
2410	31.78	-2.86	0.31
2420	37.31	-2.42	0.45
2430	35.43	-2.26	0.33
2440	33.94	-2.99	0.40
2450	37.34	-2.42	0.47
2460	34.17	-2.55	0.41
2470	34.58	-2.51	0.44
2480	33.1	-2.75	0.37
2490	34.22	-2.54	0.42
2500	33.57	-2.71	0.32