

# ShenZhen QiXinTongDa Technology Co.,Ltd.

## Antenna Test Report

### QXTD-312A LTE-F Specification

#### 1.Explanation of part number:

Supplier: QXTD

Frequency: 699-960Hz, 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:T312A

Frequency Band: GSM B2/3/5/8+WCDMA-B1/2/4/  
5/8+FDD B1/2/3/4/5/7/8/13/28-TDD B40

Date: 2023/09/20

ADD: Room 503,Building 211,Tairan 9th Road,Tairan  
Industrial Zone, Chegongmiao, Futian,Shenzhen

## 1.Test Project

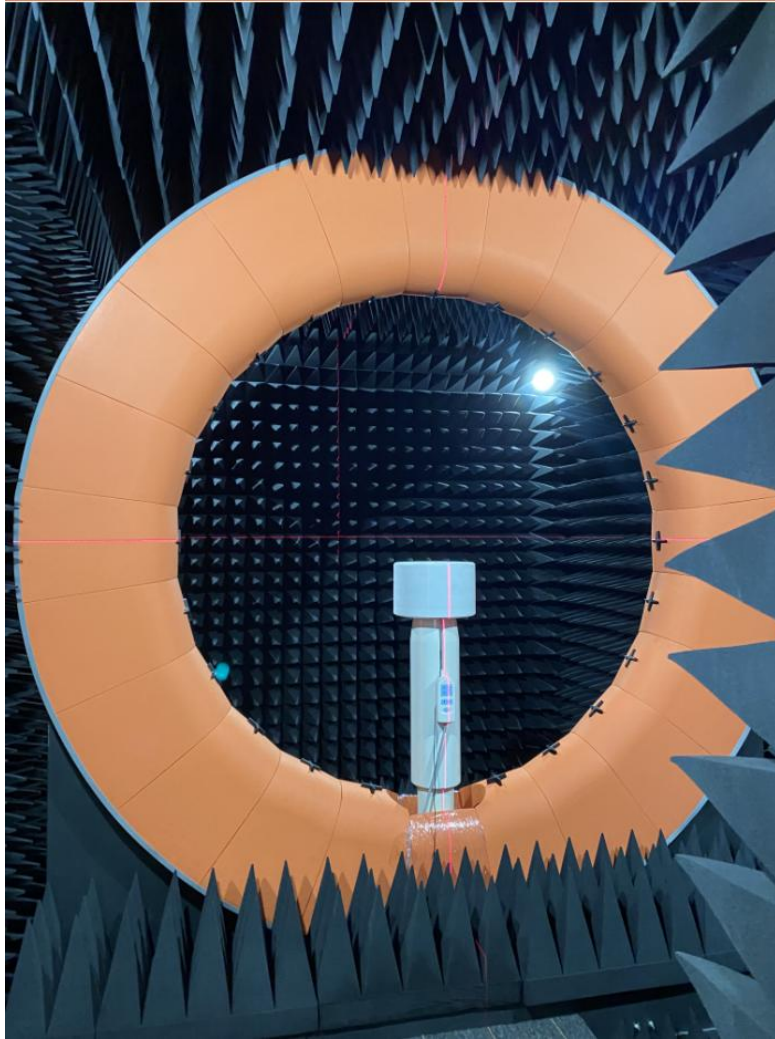
	Test Project	Equipment
1. S Parameter	1. Return Loss (RL)  2. VSWR	Network Analyzer:  Agilent 5071B
2. RF Test  (2G+3G+4G)	1. power  2. level  3. TRP/TIS	Comprehensive Test:  CMW500/8960  Test Environment:  Anechoic Chamber

## 2. Test Equipment



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

### 3. TestEnvironment



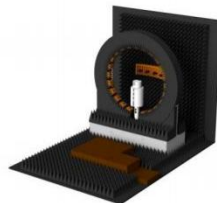
5G antenna debugging /darkroom



SP9500-CTS 5G COMPREHENSIVE TESTER



5G ATS300 Dark



Antenna debugging equipment



SATIMO darkroom



ETS darkroom



Human head and hand



Pyramid



Agilent8960

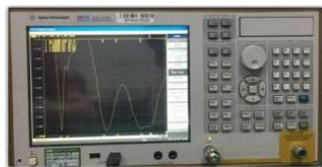


MT8820C



E5071B

Antenna debugging equipment



E5071C



HP8753D



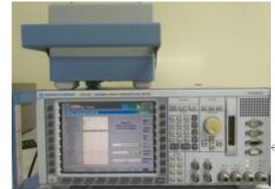
ROHDE&SCHWARZ-ZVL



ROHDE&SCHWARZ



HP885046A

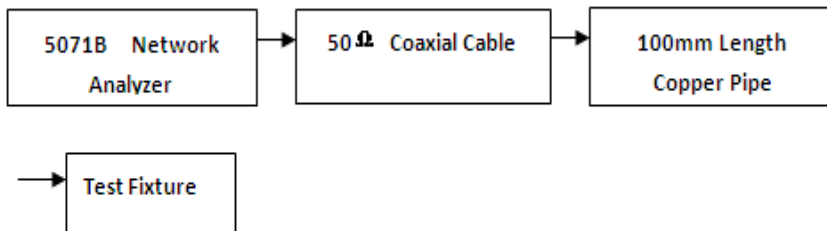


CMU200

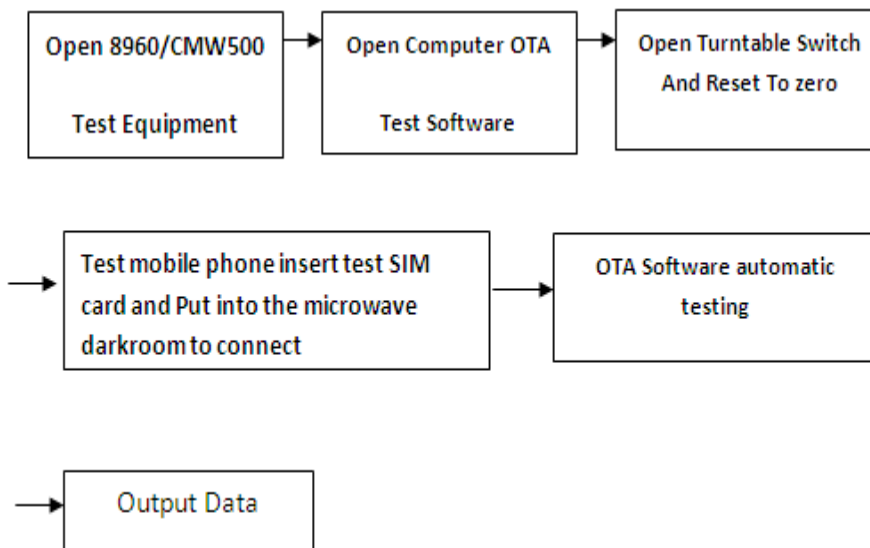
Our company has a number of OTA test darkrooms, ranging from 400MHz to 8.5ghz, which can provide passive test and active test (including OTA overall 2G,3G,4G,5GFR test, WiFi multi-mode test, GPS active test, Bluetooth active test, which can provide antenna gain and efficiency. 2D orientation and apple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

## 4. Test Steps

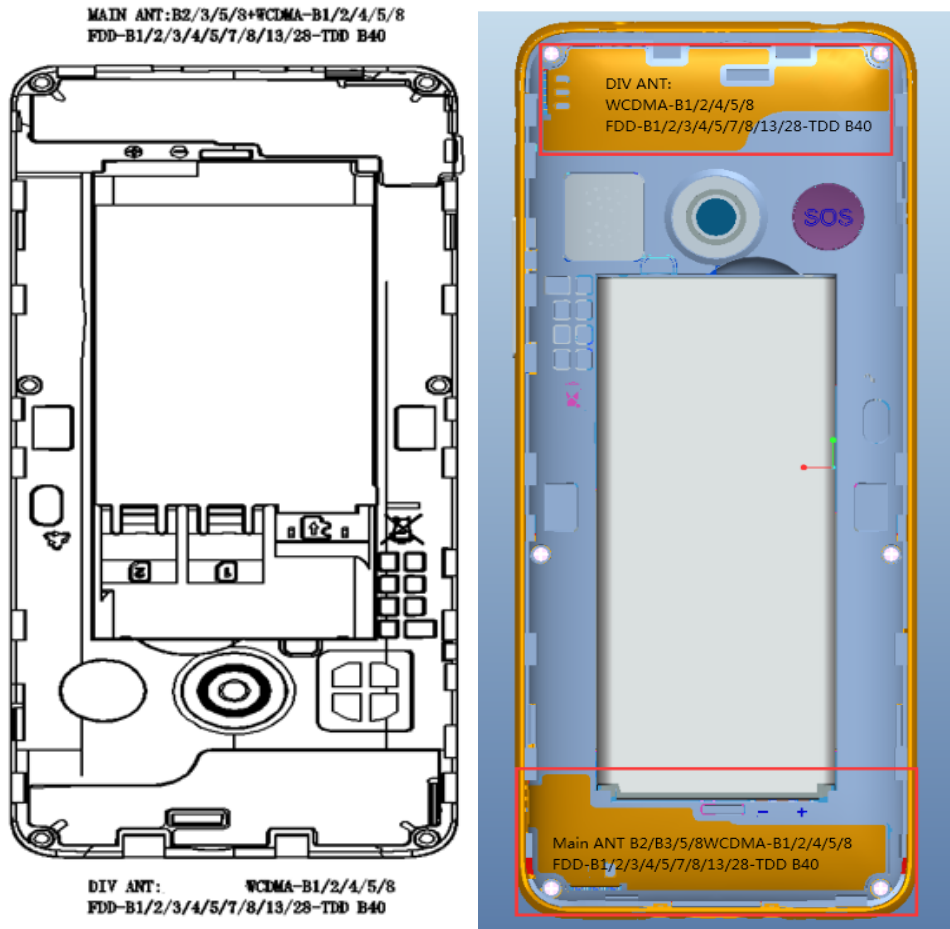
### Passive VSWR/RL Test Steps:



### Active TRP/TIS Test Steps:



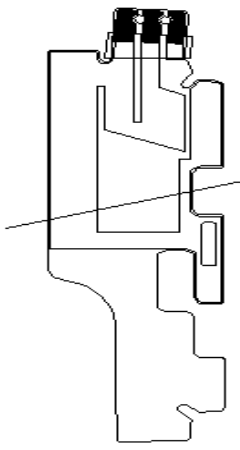
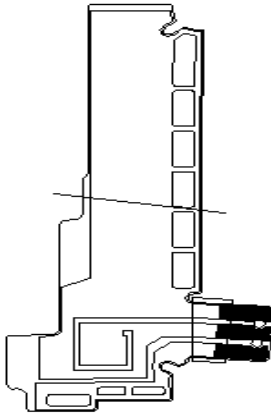
# 5. Antenna Placement



# 6. Antenna Dimensions

	2	3	4
		修改内容	修改者
			修改日期


  

**NOTES:**

1. The diagonal filling part is covered with copper for electrical wiring;
2. Red represents the outline, pay attention to the edge size
3. The material property is electrolytic copper, with a half to half material thickness of 0.05mm. (Stick to the back of the rear shell to ensure adhesion)
4. Adhesive tape: #9471B imported adhesive;
5. Gold finger surface is plated with gold/plated for 3-5 inches;
6. The protective film is white black/white film;
7. The overall thickness should be less than or equal to 0.2mm
8. Only allow the product diagram to conduct electricity;

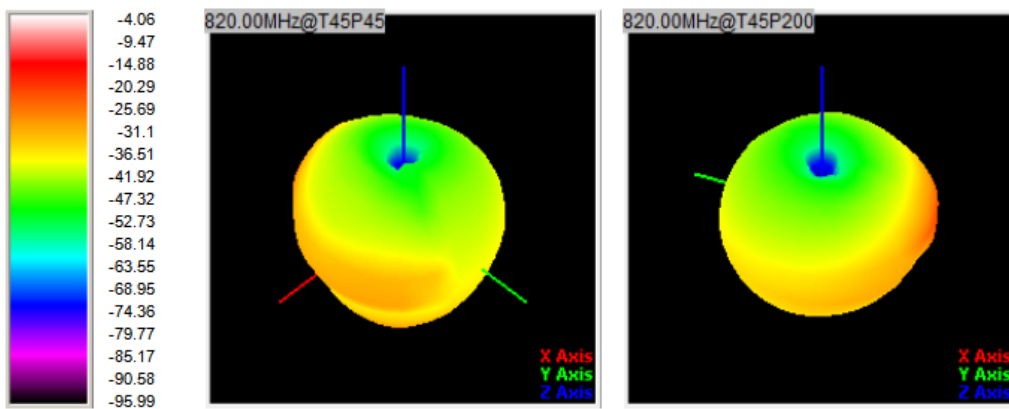
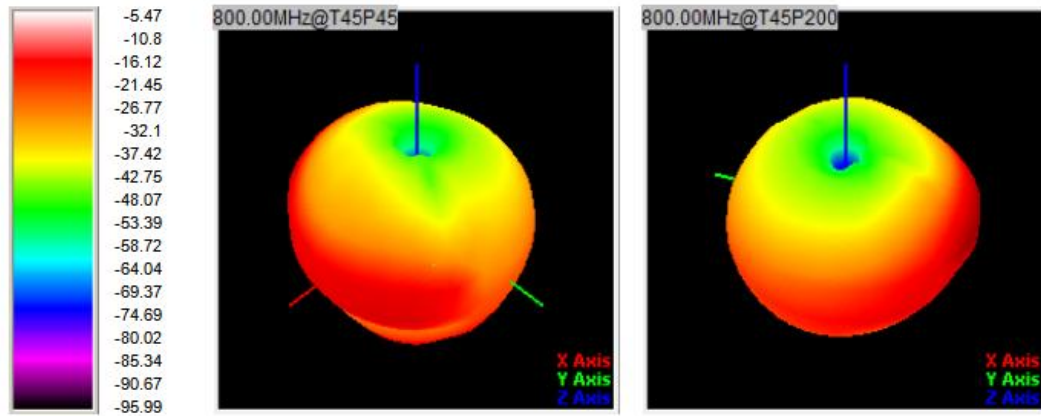
Shenzhen Qixin Tongda Technology Co., Ltd	
	Phone: 3881 1111
I	10.5
II	10.25
III	10.05
IV	1
ANTENNA	± 0.5'



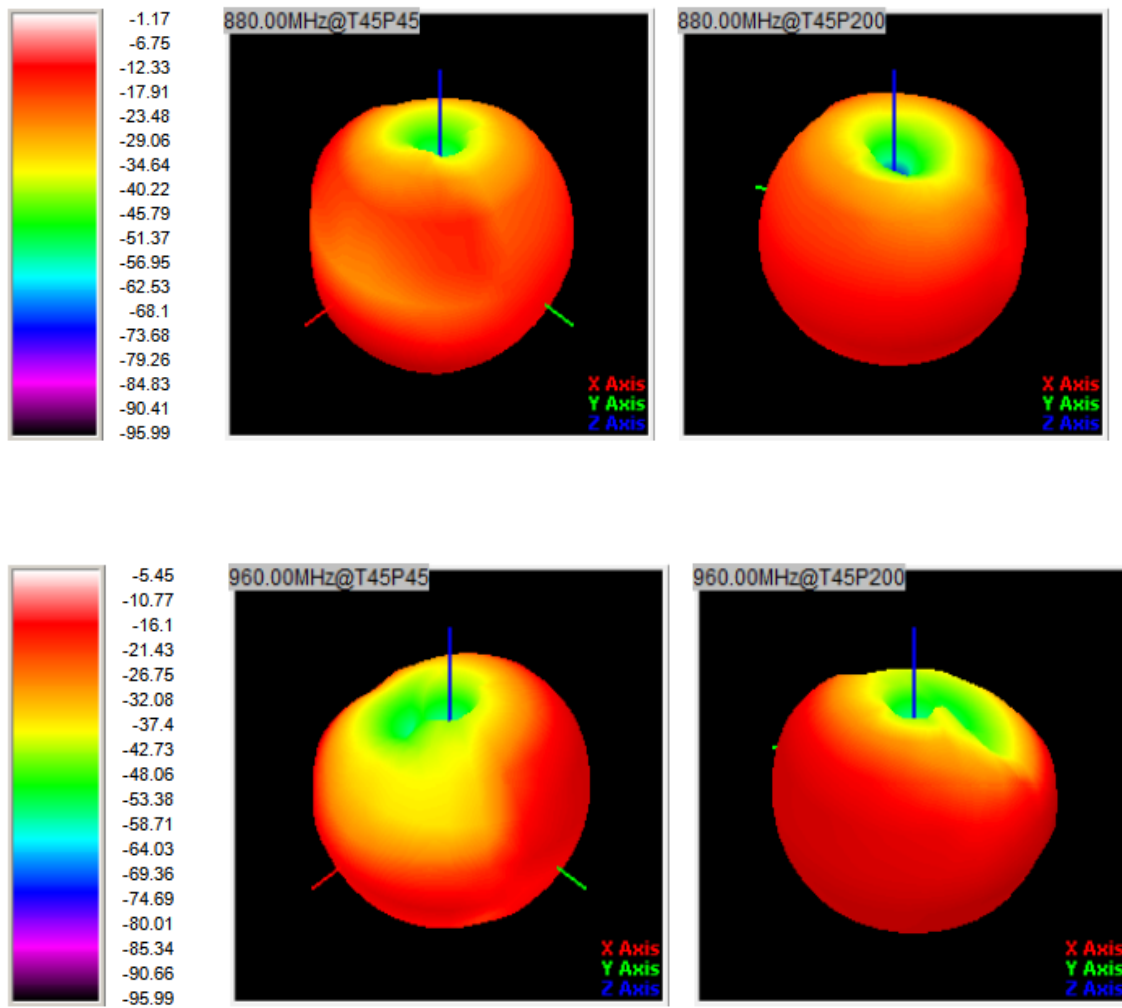
## 6. Antenna Gain

Frequency	Gain (dBi)
GSM850	0.35
EGSM900	0.4
DCS1800	0.6
PCS1900	0.7
WCDMA B1	0.85
WCDMA B2	0.6
WCDMA B4	0.55
WCDMA B5	0.5
WCDMA B8	0.4
FDD B1	0.8
FDD B2	0.55
FDD B3	0.6
FDD B4	0.55
FDD B5	0.3
FDD B7	1.3
FDD B8	0.4
FDD B13	0.2
FDD B28	0.2
TDD B40	0.9
BT	0.8

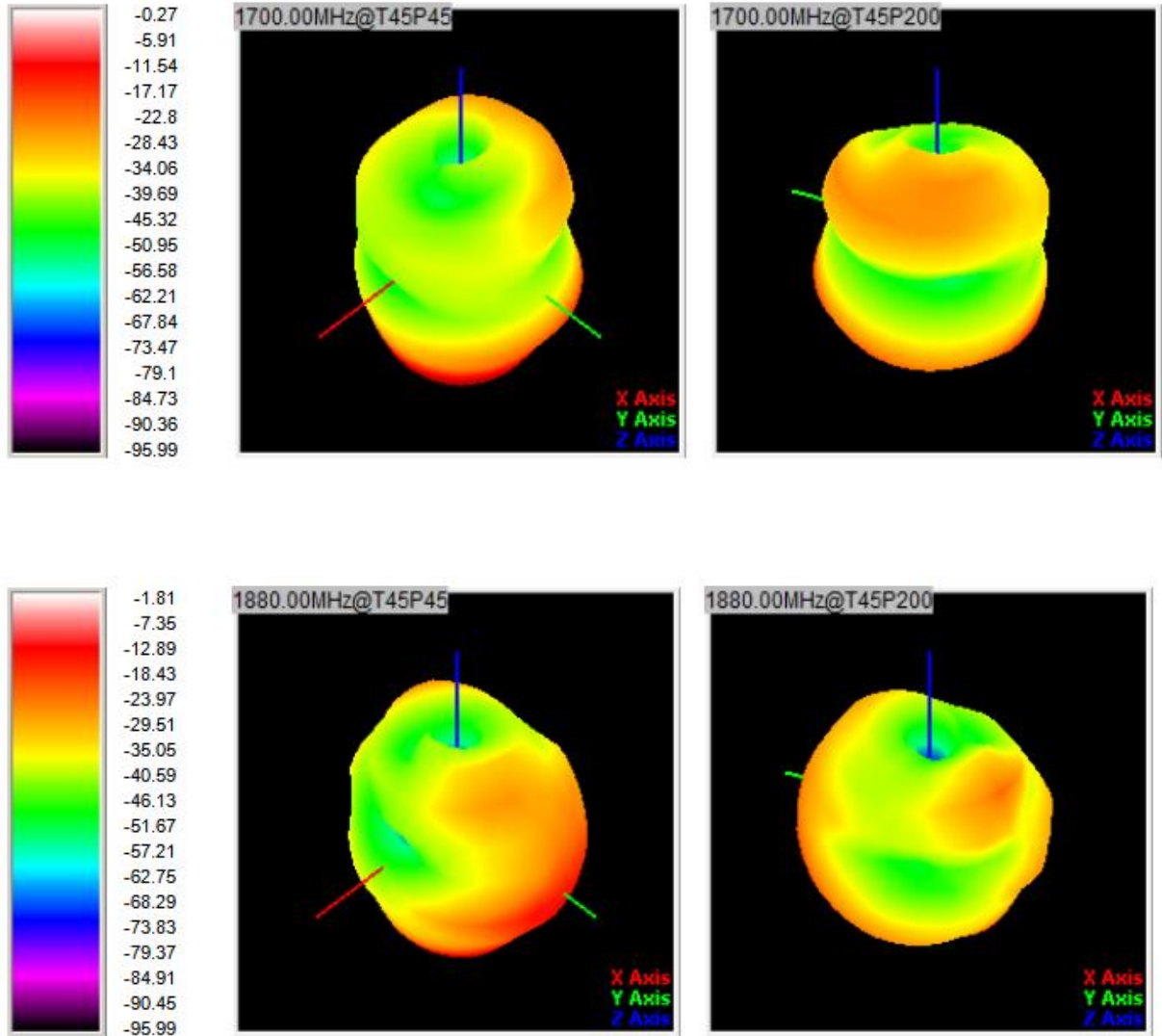
## 7. 3D Lobe Diagram (1)



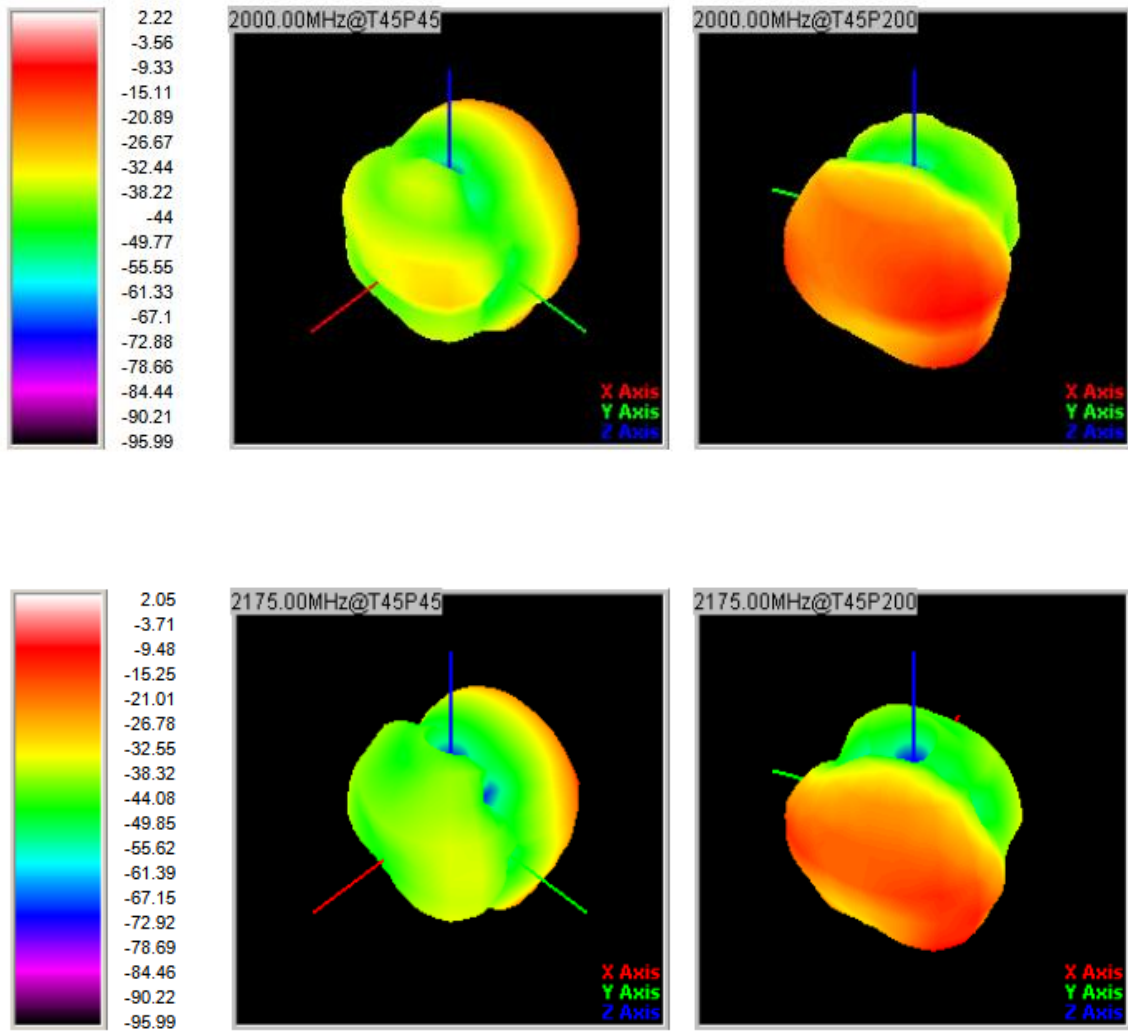
## 8. 3D Lobe Diagram (2)



# 9. 3D Lobe Diagram (3)



# 10. 3D Lobe Diagram (4)



# 11. 3D Lobe Diagram (5)

