

Shenzhen Qixin Tongda Technology Co., Ltd

Antenna test data report

Client: United Tiantong

project: V100

G2/3/5/8+W1/2/5/8

Engineering: Horsemen (134 1821 8312)

date: 2025-04-07

Factory address: Bao'an District, Shenzhen, Shajing Street, Shayi North

Yongfa Science and Technology Park, the first third floor

1. Test Project

	Test Project	Equipment
1. S Parameter	1. Return Loss (RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2/3G)	1. power 2. level 3. TRP/TIS	Comprehensive Test: SP9500/CMW500/8960 Test Environment: Anechoic Chamber

2. Test Equipment



Agilent 5071B (S Parameter (RL/VSWR) Test Equipment)



Agilent 8960 (2G/3G Test Equipment)

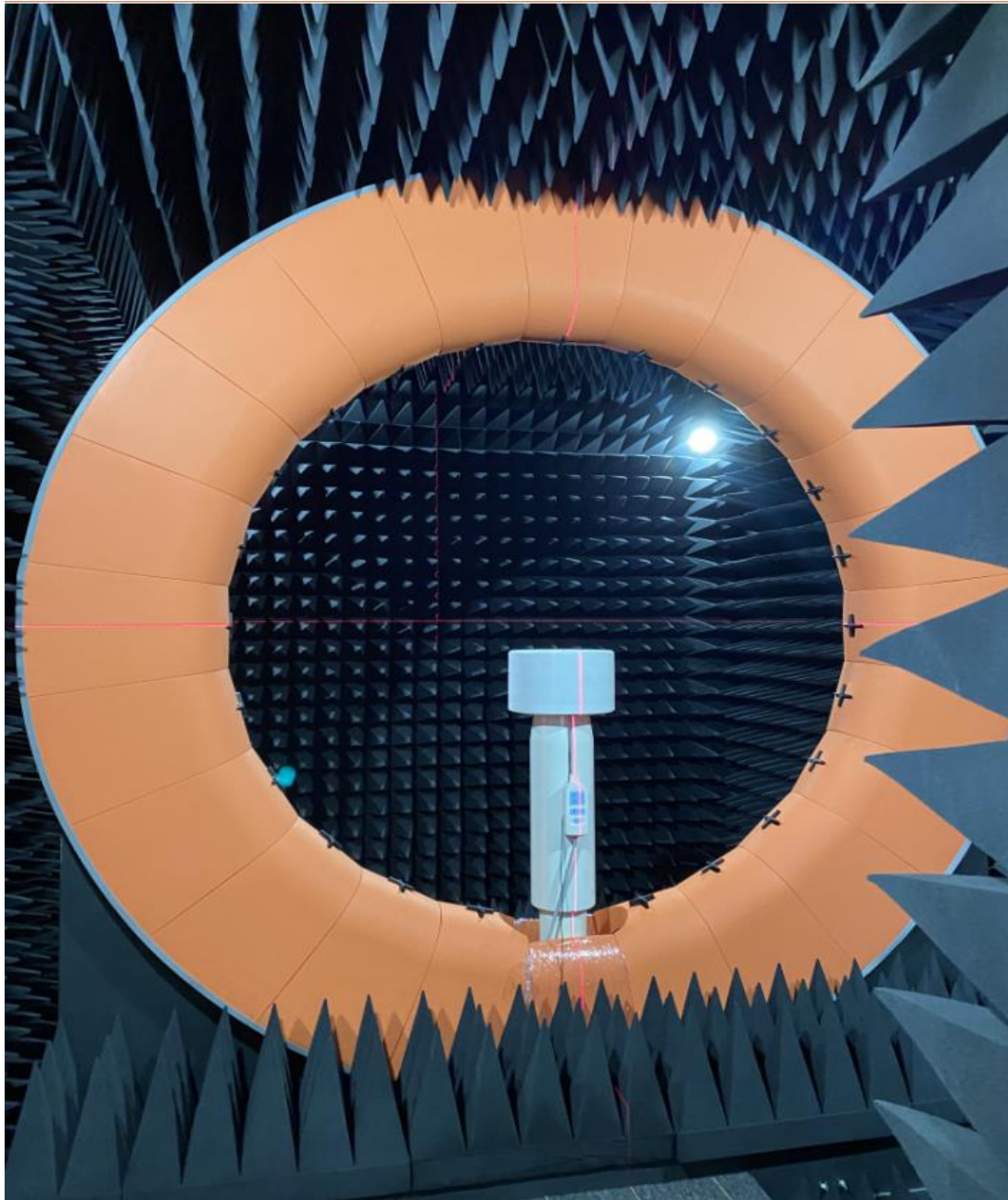


CMW 500 (2G/3G/4G Test Equipment)



SP9500 (5G Test Equipment)

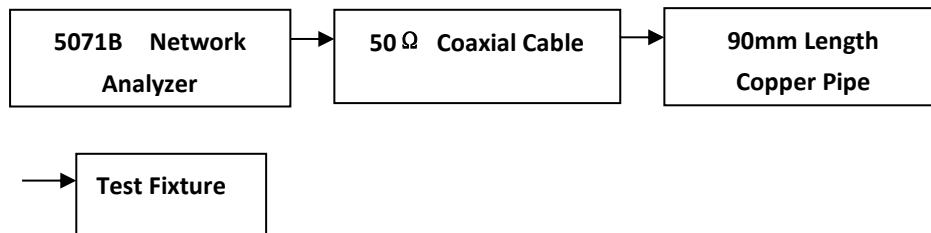
3. TestEnvironment



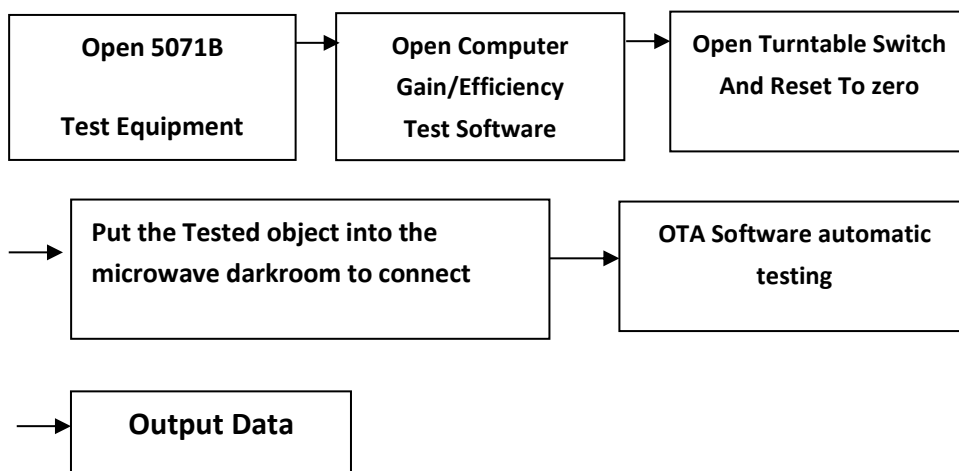
Microwave Anechoic Chamber

4.Test Steps

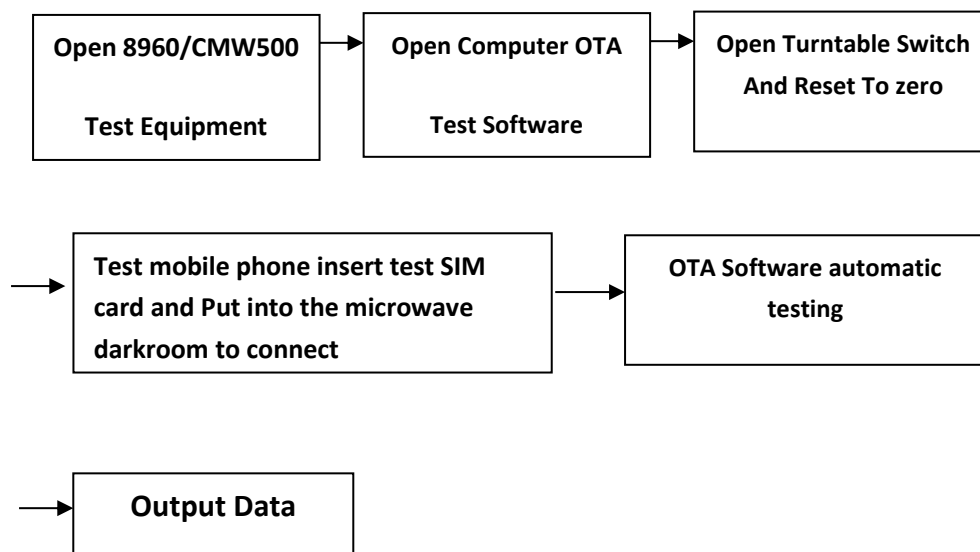
Passive VSWR/RL Test Steps:



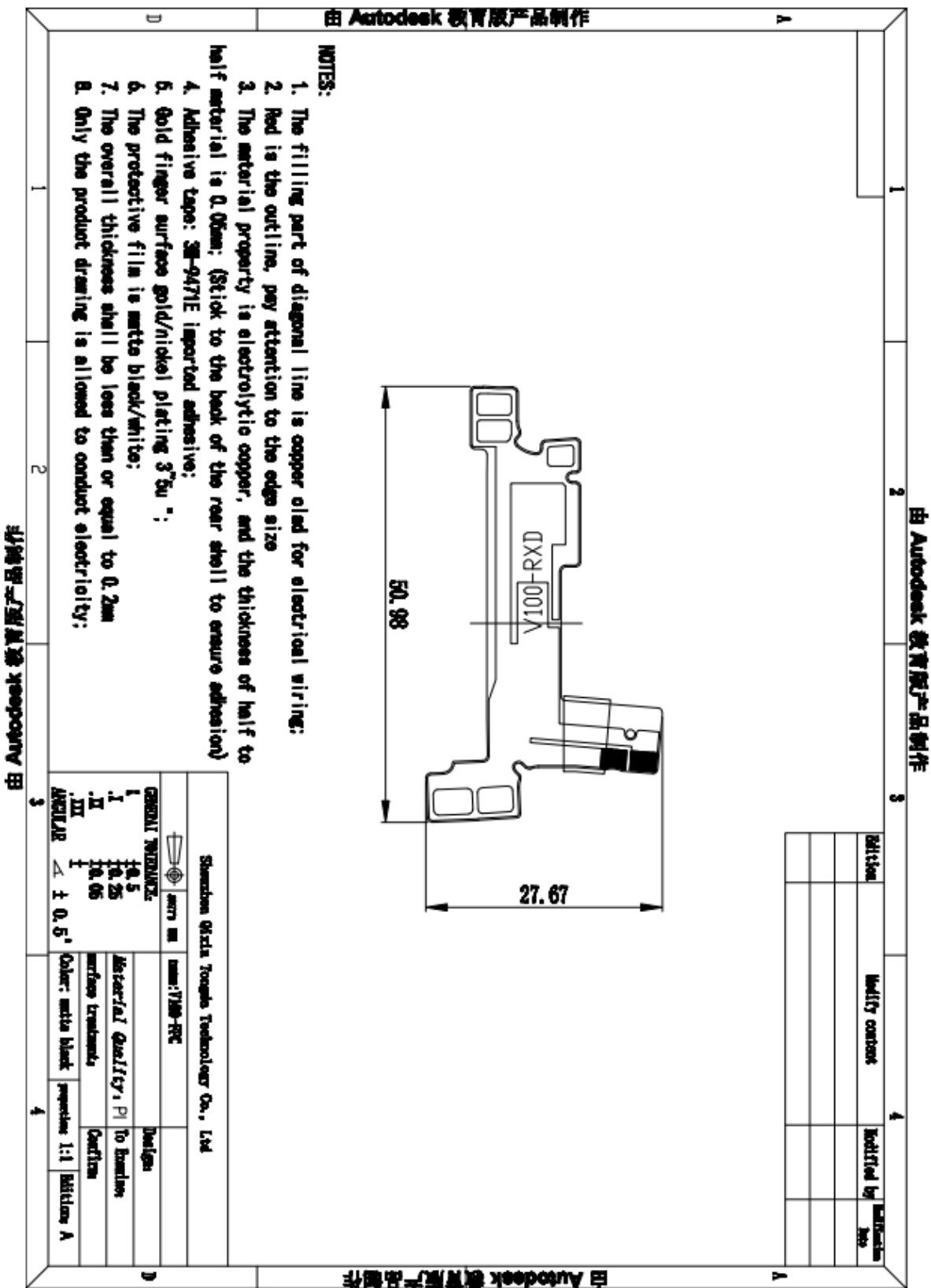
Gain/Efficiency Test Steps:



Active TRP/TIS Test Steps:



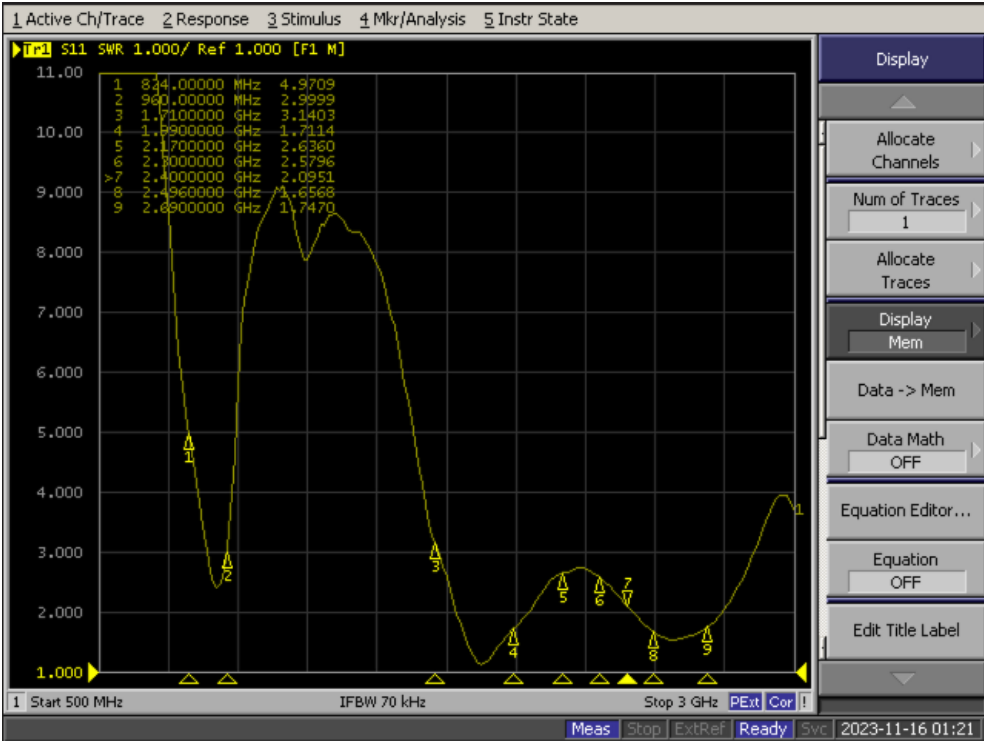
5. Antenna size diagram



6.Antenna Gain

Band	Max Gain
GSM850 (824-894MHZ)	-1.07
GSM900 (880-960MHZ)	-0.65
DCS1800 (1710-1880MHZ)	0.47
PCS1900 (1850-1990MHZ)	0.63
WCDMA1 (1920-2170MHZ)	0.56
WCDMA2 (1950-1990MHZ)	0.63
WCDMA5 (824-894MHZ)	-1.07
WCDMA8 (880-960MHZ)	-0.65
Bluetooth (2400-2483.5MHZ)	1.04

7.VSWR

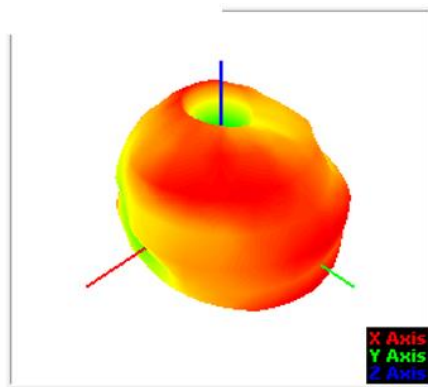


8.2D&3D Lobe Diagram

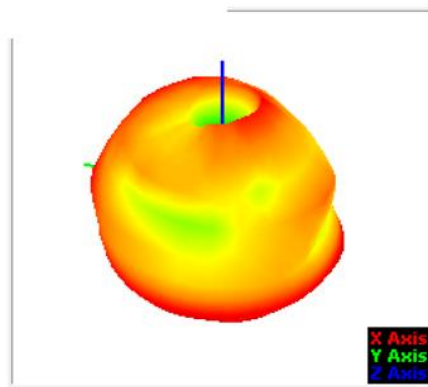
GSM850



-1.07
-6.74
-12.32
-17.89
-23.47
-29.05
-34.63
-40.21
-45.79
-51.36
-56.94
-62.52
-68.1
-73.68
-79.26
-84.83
-90.41
-95.99



X Axis
Y Axis
Z Axis

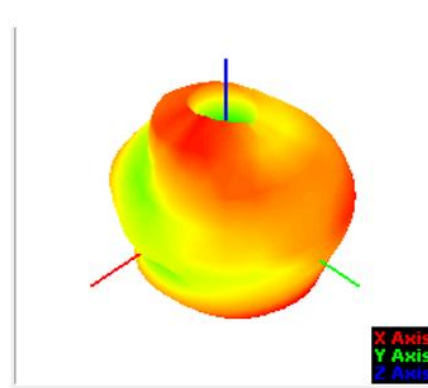


X Axis
Y Axis
Z Axis

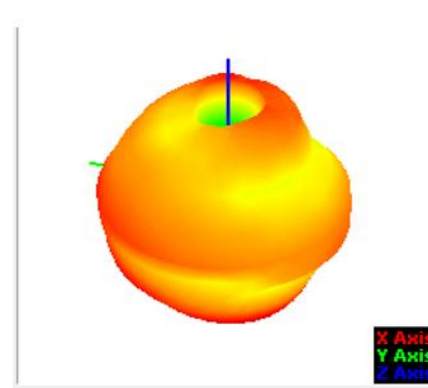
GSM900



-0.65
-6.58
-12.16
-17.75
-23.34
-28.93
-34.52
-40.11
-45.69
-51.28
-56.87
-62.46
-68.05
-73.64
-79.22
-84.81
-90.4
-95.99



X Axis
Y Axis
Z Axis

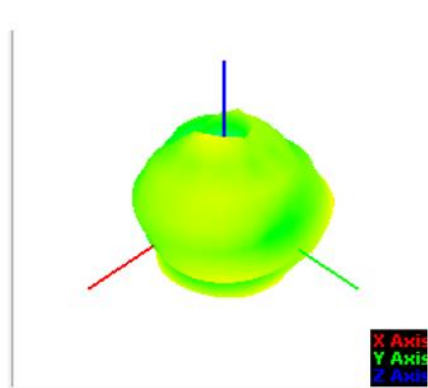


X Axis
Y Axis
Z Axis

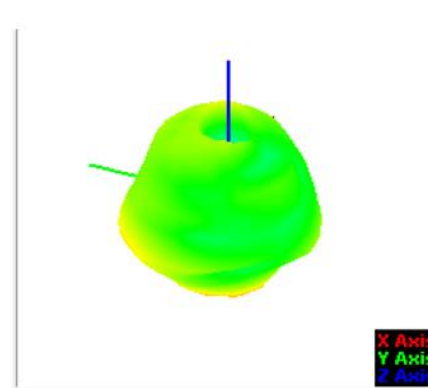
DSC1800



0.47
-5.23
-10.9
-16.57
-22.24
-27.92
-33.59
-39.26
-44.94
-50.61
-56.28
-61.95
-67.63
-73.3
-78.97
-84.64
-90.32
-95.99



X Axis
Y Axis
Z Axis

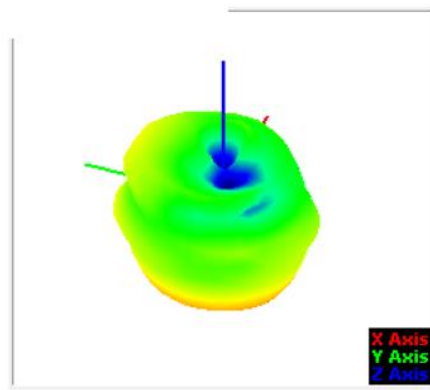
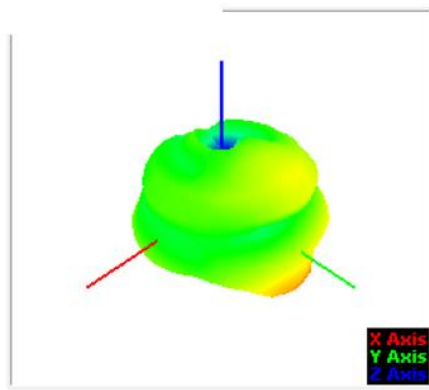


X Axis
Y Axis
Z Axis

PCS1900



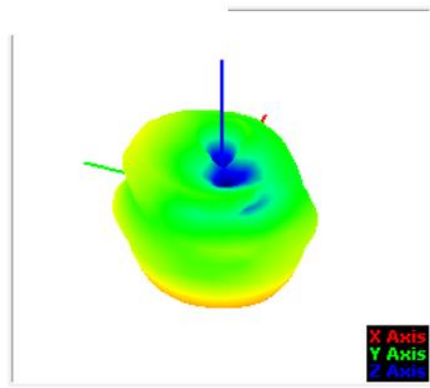
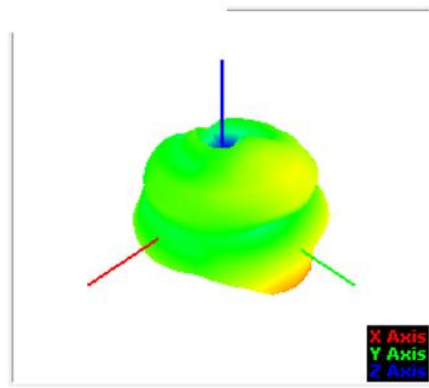
0.63
-5.12
-10.79
-16.47
-22.15
-27.83
-33.51
-39.19
-44.87
-50.55
-56.23
-61.91
-67.59
-73.27
-78.95
-84.63
-90.31
-95.99



W1



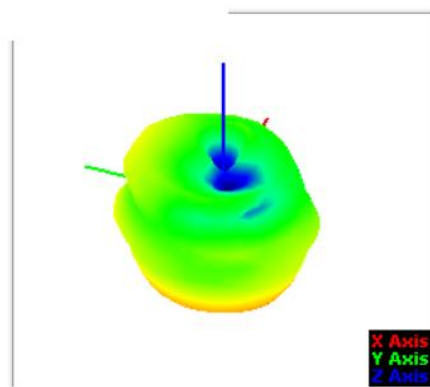
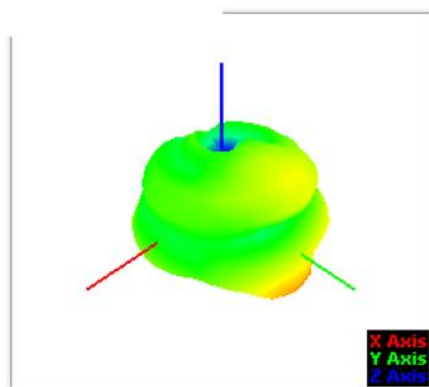
0.56
-5.12
-10.79
-16.47
-22.15
-27.83
-33.51
-39.19
-44.87
-50.55
-56.23
-61.91
-67.59
-73.27
-78.95
-84.63
-90.31
-95.99



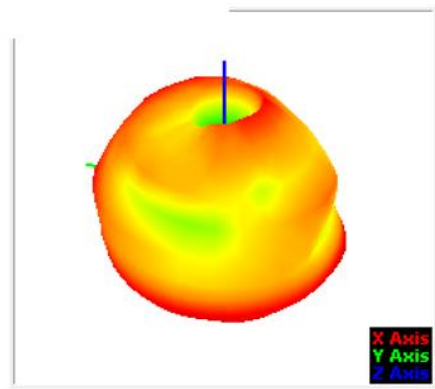
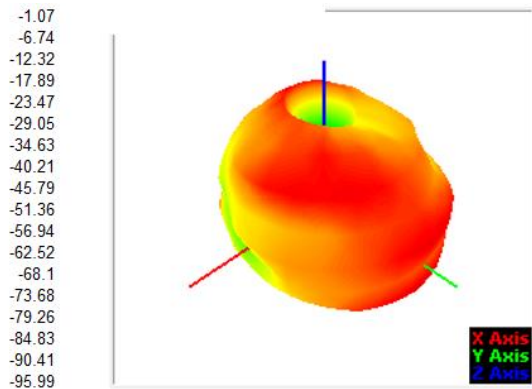
W2



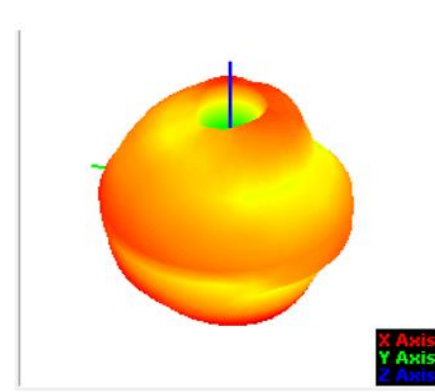
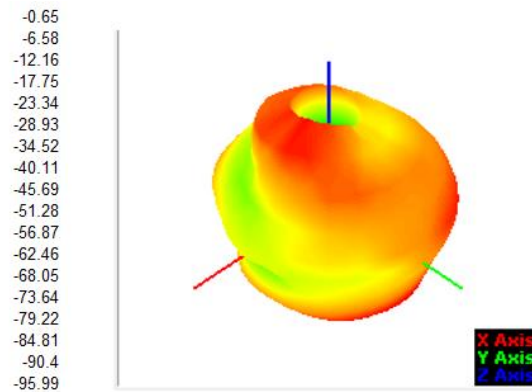
0.63
-5.12
-10.79
-16.47
-22.15
-27.83
-33.51
-39.19
-44.87
-50.55
-56.23
-61.91
-67.59
-73.27
-78.95
-84.63
-90.31
-95.99



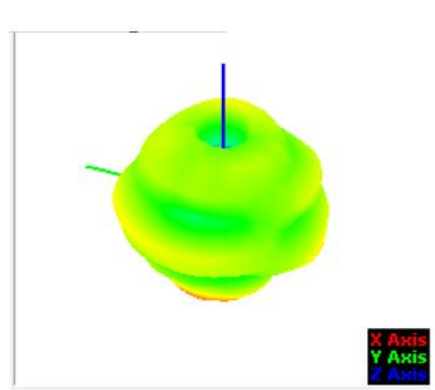
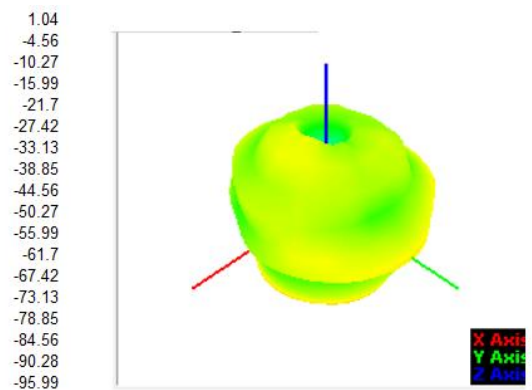
W5



W8



BT



9.Introduction to Antenna Information

V100	
Antenna type and frequency band	MAIN ANTENNA(<u>PIFA</u>):2G/3G BT ANTENNA(<u>LEAD</u>):BT
Antenna materia	FPC