

深圳市麒鑫通达科技有限公司

SHENZHEN QXTD Technology Co., Ltd

天线测试数据报告

Antenna test data report

Client: Ucloudlink

Project: X110

TDD:B38/B41

FDD:B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/

B18/B19/B20/B25/B26/B28AB/B66

Wifi/BT/GPS

Date: 2025-05-07

SHENZHEN QXTD Technology Co., Ltd

The west side of the first floor and the third floor of Building 1, Yongfa Science and Technology Park,
North of Shayi, Xinhe Road, Gonghe Community, Shajing Street, Bao 'an District, Shenzhen City,
China

1. Test Project

	Test Project	Equipment
1. S Parameter	1. Return Loss (RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2/3/4/5G)	1. power 2. level 3. TRP/TIS	Comprehensive Test: SP9500/CMW500/8960 Test Environment: Anechoic Chamber

2. Test Equipment

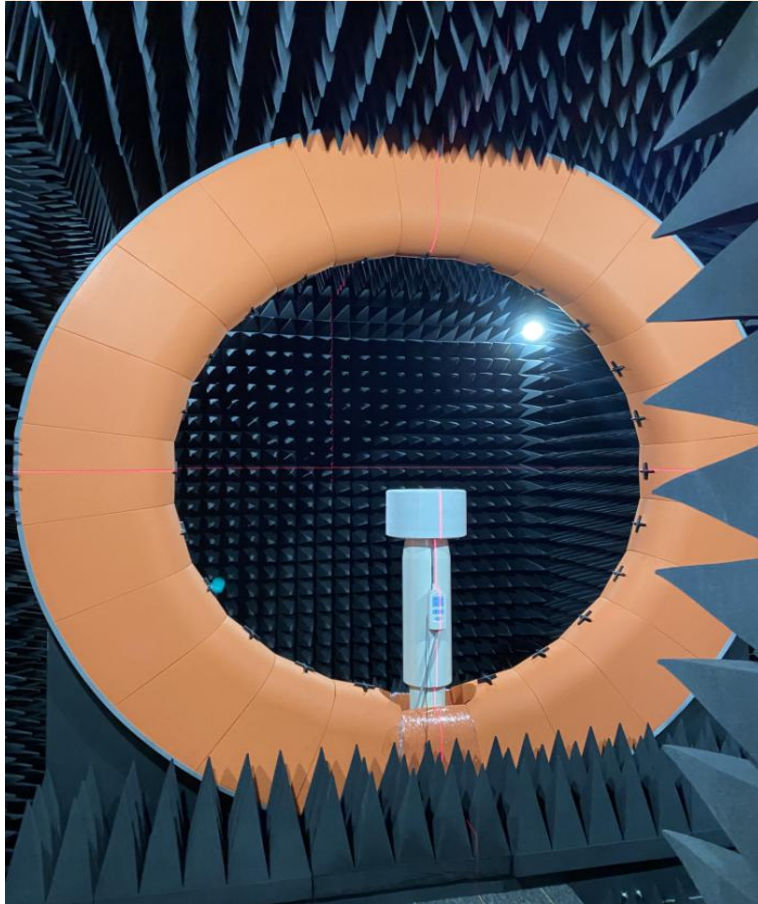


Agilent 5071B (S Parameter (RL/VSWR) Test Equipment)



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

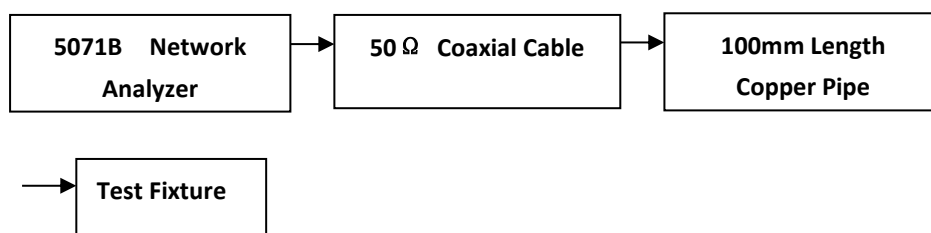
3. Test Environment



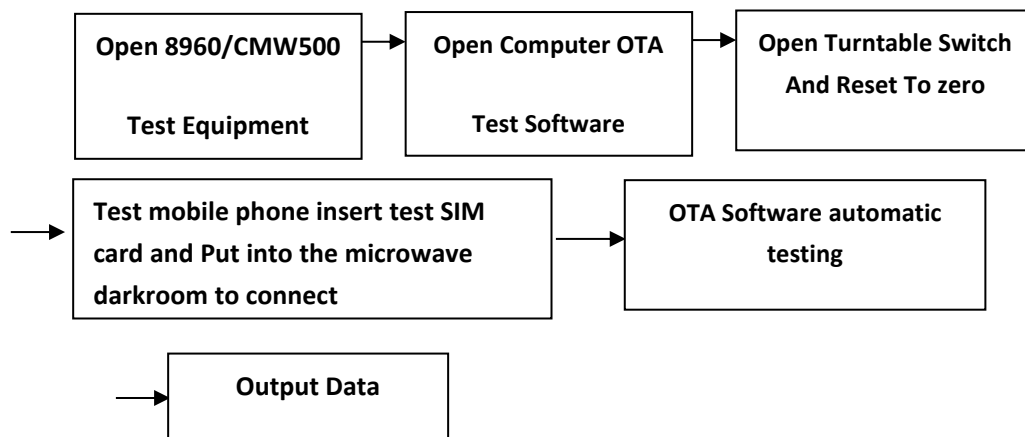
Microwave Anechoic Chamber

4. Test Steps

Passive VSWR/RL Test Steps:

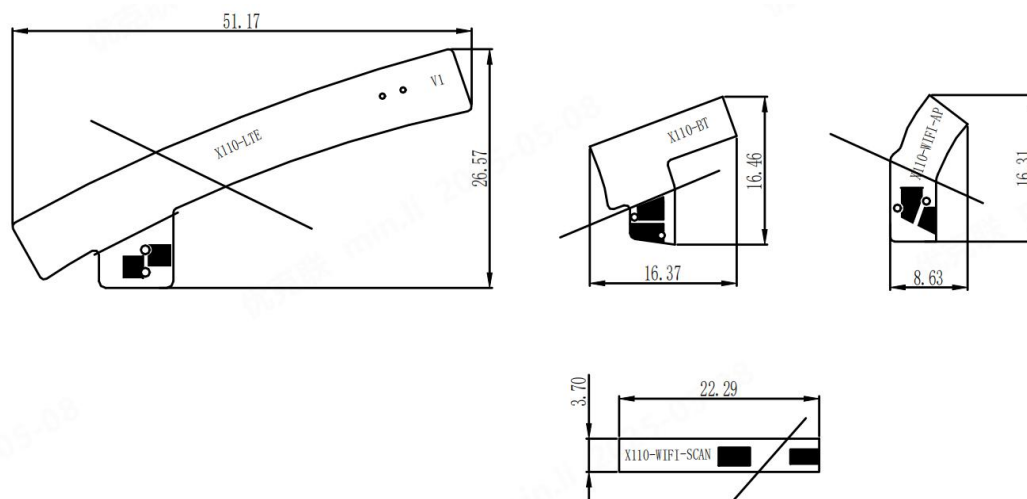


Active TRP/TIS Test Steps:



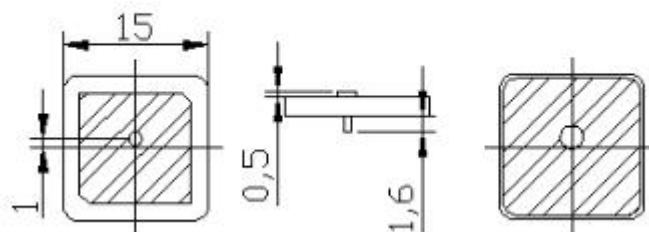
5. Antenna Size

5.1 4G/WIFI/BT Size



5.2 GPS Size

1、L: 15.0±0.2mm W: 15.0±0.2mm H: 2.0±0.1mm



6. Antenna Gain

6.1 4G Band Gain

Band	Max Gain	Band	Max Gain
LTE-B1	-0.17	LTE-B18	-0.87
LTE-B2	0.47	LTE-B19	-0.89
LTE-B3	0.85	LTE-B20	-0.87
LTE-B4	0.54	LTE-B25	0.47
LTE-B5	-0.87	LTE-B26	-0.87
LTE-B7	-0.47	LTE-B28	-1.33
LTE-B8	-0.74	LTE-B66	0.58
LTE-B12	-1.22	LTE-B38	-0.78
LTE-B13	-1.45	LTE-B41	-0.79
LTE-B17	-1.25		

6.2 WIFI/BT Gain

WIFI-AP			WIFI-SCAN			BT		
Frequ ency	Efficie ncy(%)	Gain(dBi)	Frequ ency	Efficie ncy(%)	Gain(dBi)	Frequ ency	Efficie ncy(%)	Gain(dBi)
2400MHz	28.7	0.19	2400MHz	28.7	-0.17	2400MHz	33.8	0.21
2450MHz	34.8	0.27	2450MHz	30.4	0.21	2450MHz	35.3	0.36
2500MHz	36.2	0.40	2500MHz	27.5	-0.34	2500MHz	35.5	0.44

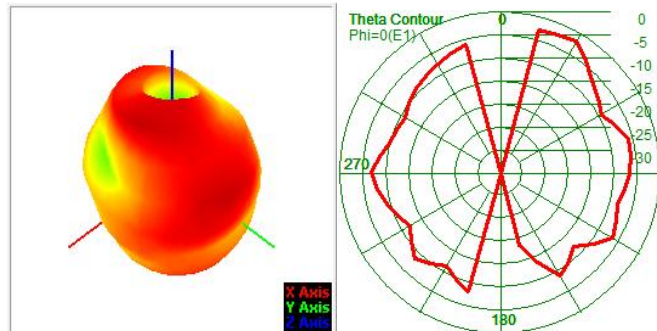
6.3 GPS Gain

No.	项目 Item	特性
1	中心频率 (70×70mm ² 地) Center Frequency(70×70mm ² Ground)	1580±3MHz
2	带宽 Bandwidth	6MHz min(Return loss≤-10dB)
3	驻波比 V.S.W.R(in Bandwidth)	1.5 max
4	阻抗 Impedance	50Ω
5	轴比 Axial Ratio	3dB max
6	增益 Gain	4dB Min. (7×7cm ground plane)
7	极化方式 Polarization	右旋圆极化 Right-Handed Circularly Polarized

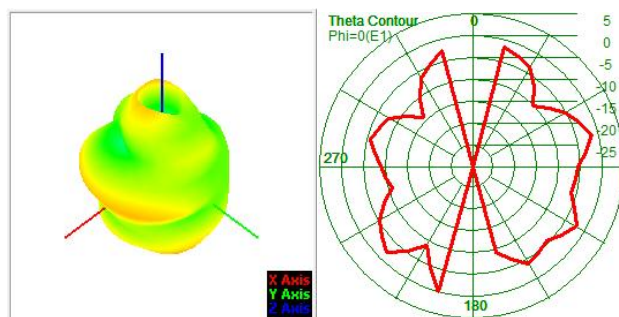
7. 3D Lobe Diagram

7.1 4G

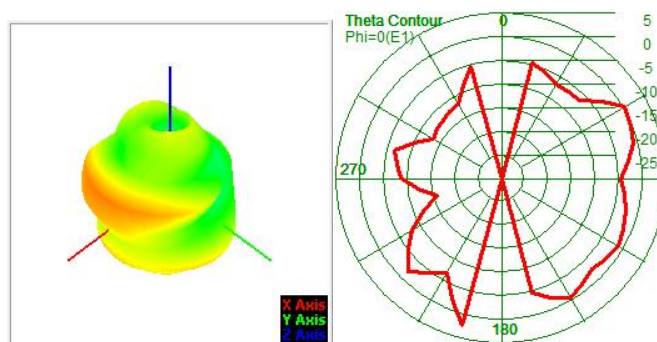
FDD-B1



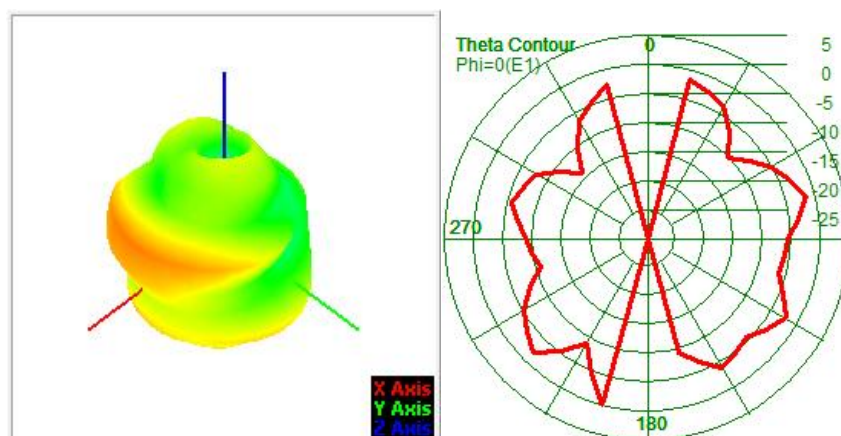
FDD-B2



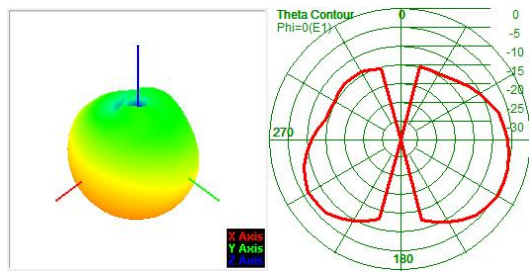
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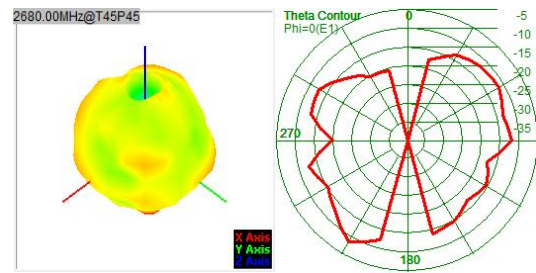
FDD-B4



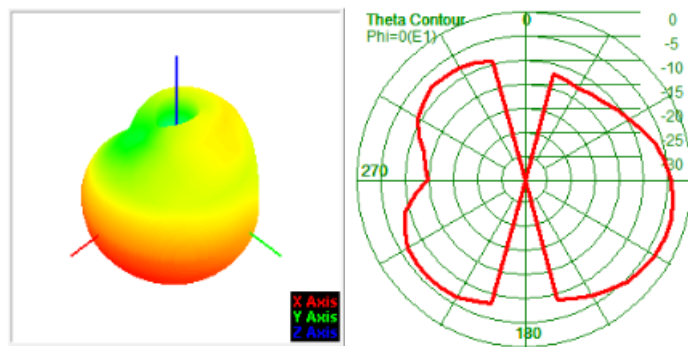
FDD-B5



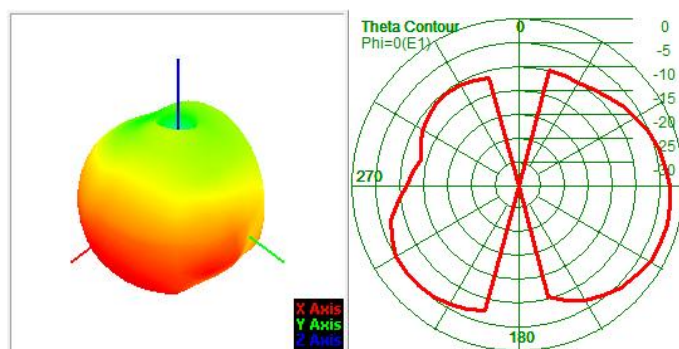
FDD-B7



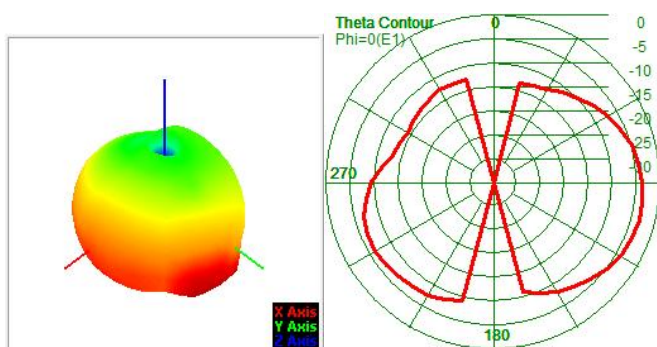
FDD-B8



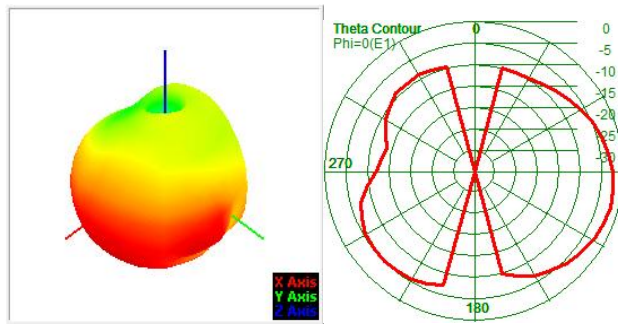
FDD-B12



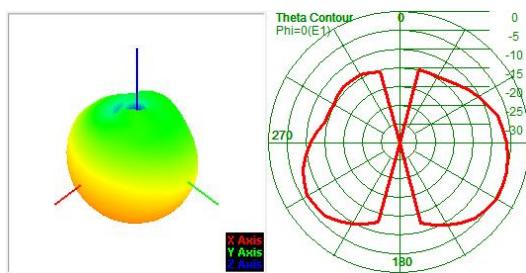
FDD-B13



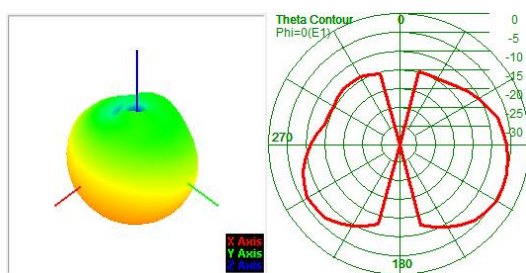
FDD-B17



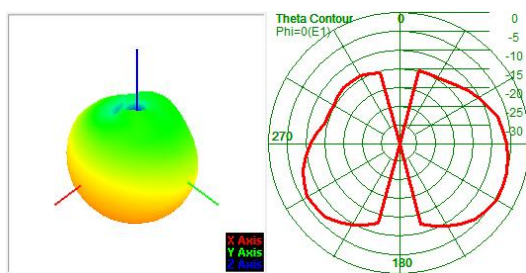
FDD-B18



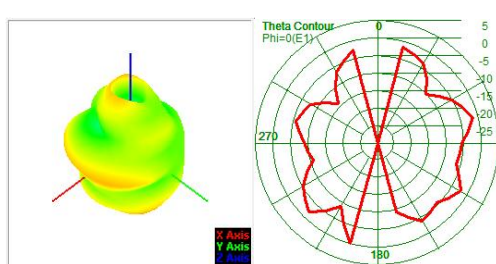
FDD-B19



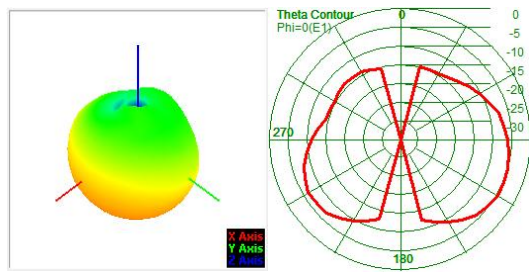
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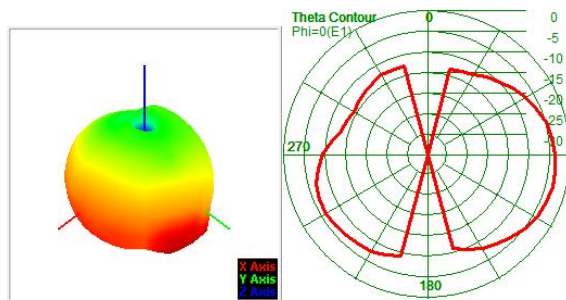
FDD-B25



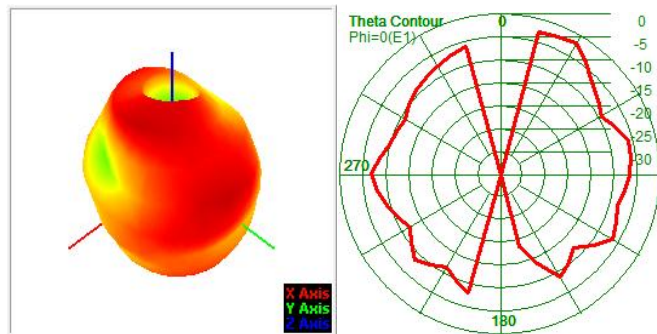
FDD-B26



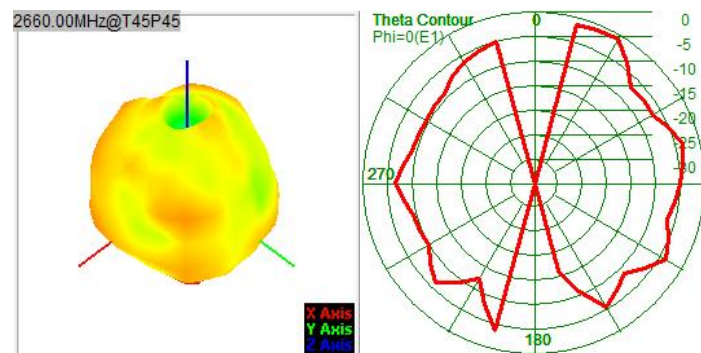
FDD-B28



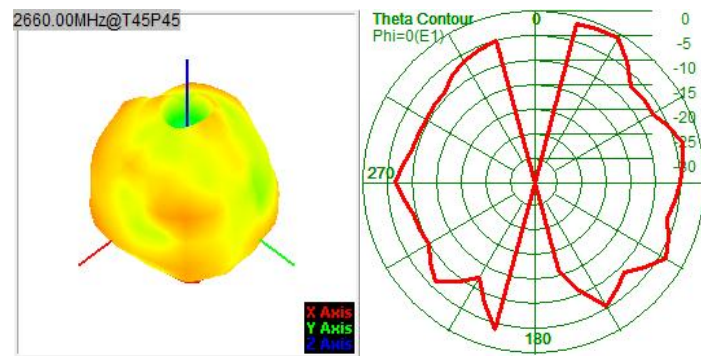
FDD-B66



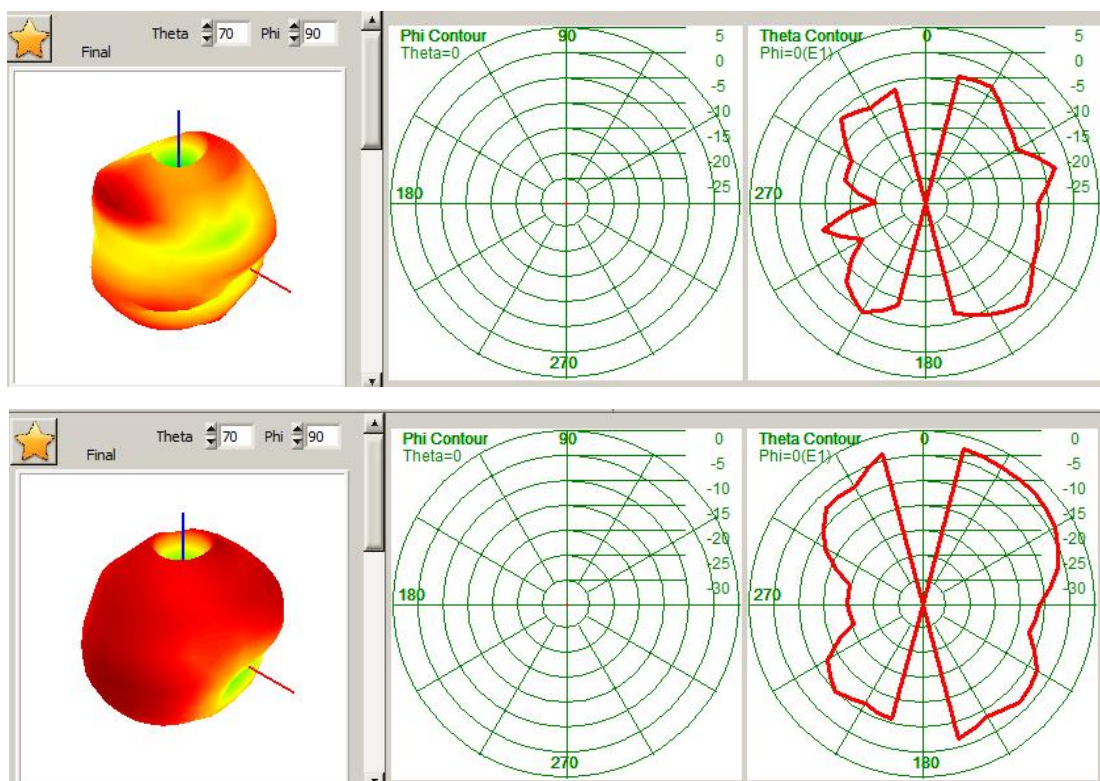
TDD-B38



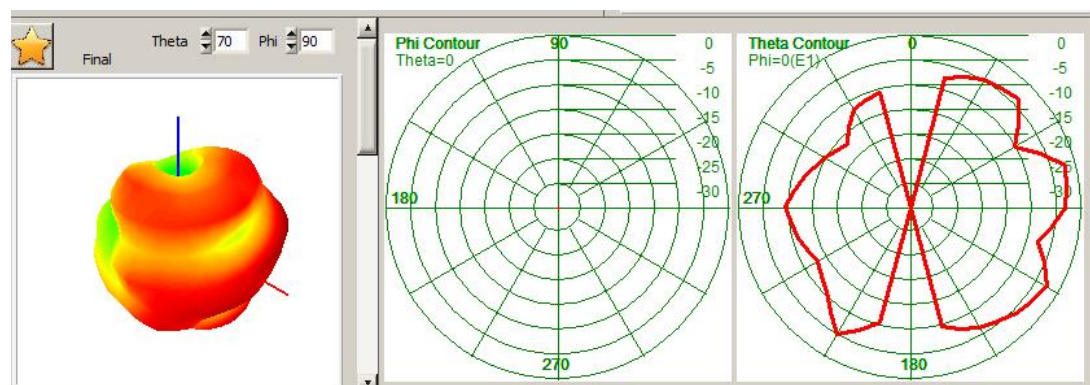
TDD-B41



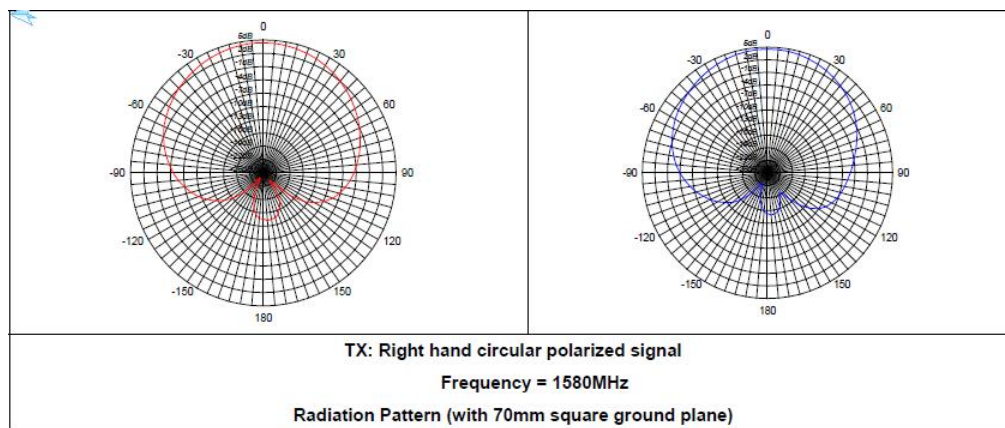
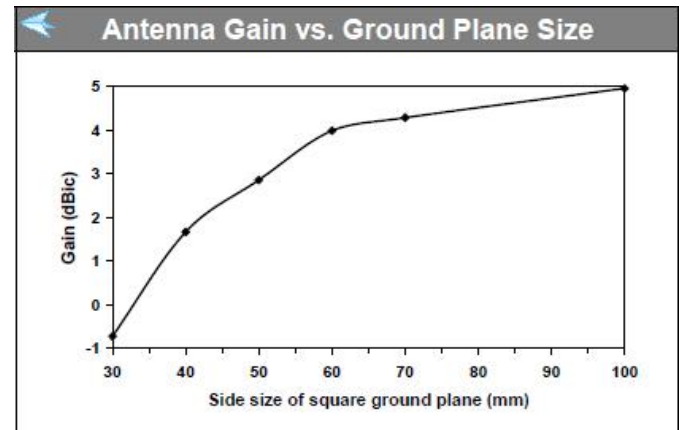
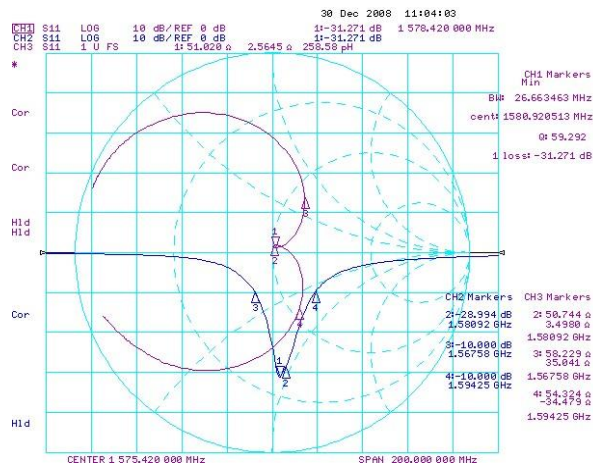
7.2 wifi



7.3 BT



7.4 GPS



8.Introduction to Antenna Information

X110	
Antenna type and frequency band	MAIN ANTENNA(PIFA):4G/WIFI/BT
Antenna materia	FPC
Antenna type and frequency band	GPS
Antenna materia	Ceramics