

ShenZhen QiXinTongDa Technology Co.,Ltd.

Antenna Test Report

Client: OQI

Project: S137

GSM: B2/B3/B5/B8

WCDMA: B1/B2/B4/B5/B6/B8/B19

TDD: B34/B38/B39/B40/B41F(HPUE)

FDD: B1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28AB/66/71

NR: n1/2/3/5/7/8/12/20/25/28/38/40/41/66/71/77/78/79GSM:

B2/B3/B5/B8

WCDMA: B1/B2/B4/B5/B8/B19

TDD:B34/B38/B39/B40/B41F

FDD:B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B18/B19/B20/B25/B26/B28AB/

B66/B71

5G:n1/n2/n3/n5/n7/n8/n20/n28/n38/n40/n41/n66/n71/n77/n78

Engineering: Engineer Fu (187 1893 6792)

Date: 2025-3-3

ADDRESS: Room503-505,Building211,

TairanIndustrialandTradePark,Chegongmiao,FutianDistrict,Shenzhen

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

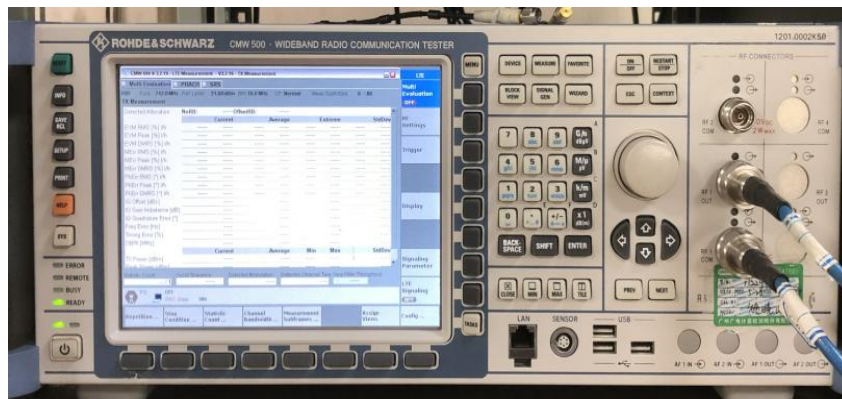
2. Test Equipment



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



Agilent 8960 (2G/3GTest Equipment)

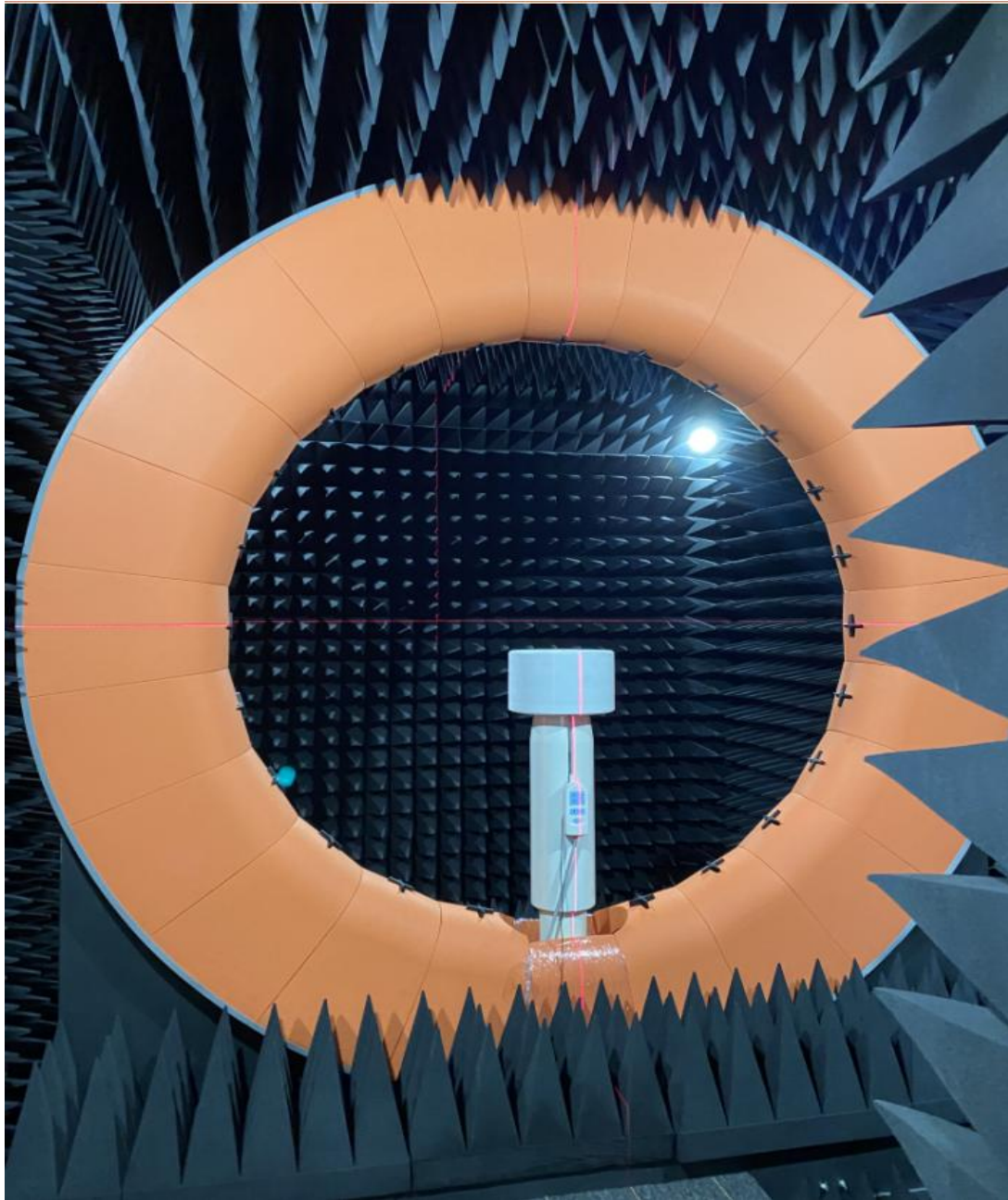


CMW 500 (2G/3G/4GTest Equipment)



SP9500 (5GTest Equipment)

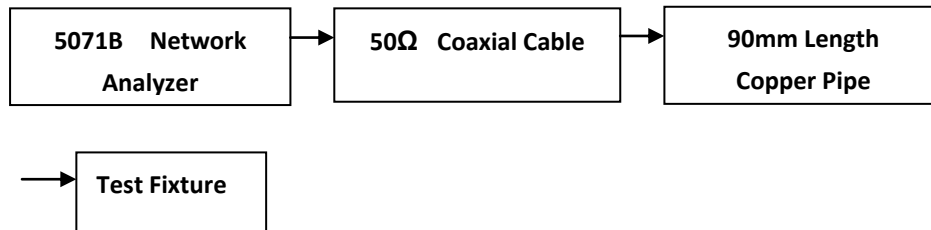
3. TestEnvironment



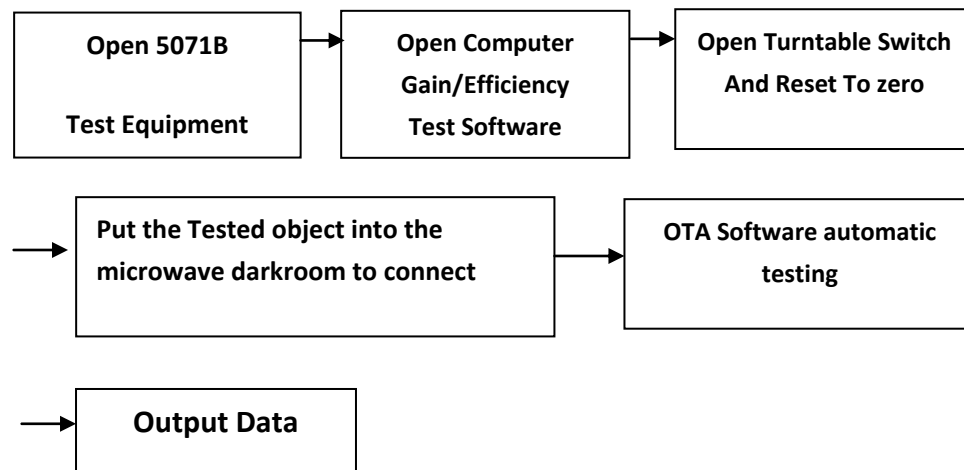
Microwave Anechoic Chamber

4.Test Steps

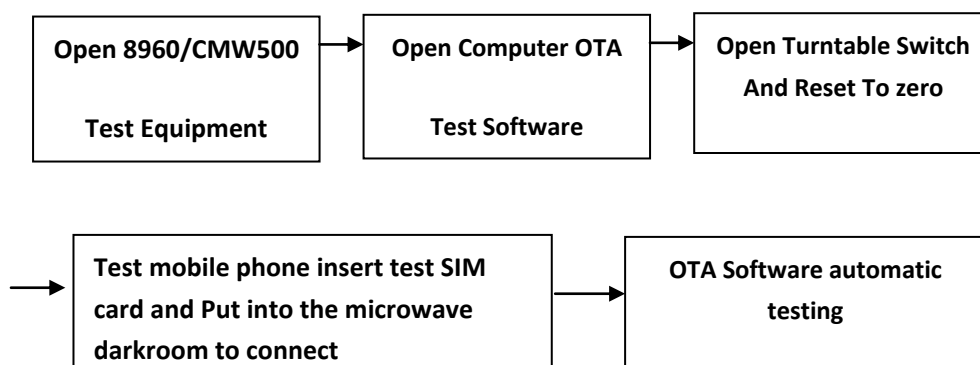
Passive VSWR/RL Test Steps:



Gain/Efficiency Test Steps:



Active TRP/TIS Test Steps:



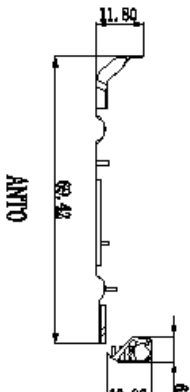
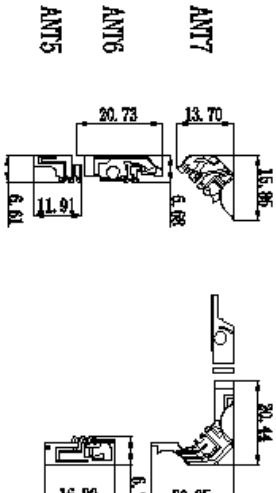
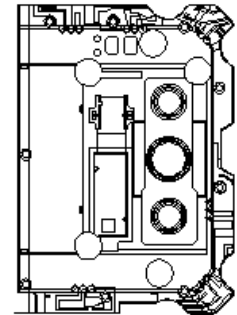
5. Antenna frequency band distribution

■172		ANT0	ANT1	ANT2	ANT3	ANT4	ANT5	ANT6	ANT7
LMBB 172R	GSM: B2/3/5/8 WCDMA: B1/2/4/5/6/8/19 CDMA: BC0/BC1/BC10 TDD: B34/38/39/40/41 FDD: B1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28AB/66/71 NR SA: N2/3/5/7/8/12/20/25/28/40/66/71	T_P	DRX 与ANT0 DPDT	/	/	/	/	/	/
MEB 174R	4G: B38/B41	T_P	DRX 与ANT0 DPDT		DRX2	PRX2		/	/
MEB 174R	5G-NR : N1	T_P	DRX 与ANT0 DPDT		DRX2	PRX2		/	/
MEB 174R	5G-NR : N38/N41		DRX	/	DRX2	PRX2	T_P	/	/
SUB6 174R	5G-NR : N77/N78/79	/	/	T_P	DRX2 与ANT2 DPDT	DRX 与ANT2 DPDT	PRX2 与ANT2 DPDT	/	/
WCH		/	/	/	/	/	/	/	/
		703-960 1710-2690	703-960 1710-2690	3300-5000	2110-2690 3300-5000	2110-2690 3300-5000	2406-2690 3300-5000	L1 (1.56/2.46/56-7.126G)	L5 (1.26/2.46/56-7.126G)

6. Antenna distribution diagram



版本	修改内容
T:8	



7. Antenna Dimensions

喇叭来料素材，素材不能有，披风等外观问题。按照材质要求。				深圳市顺鑫通达科技有			
3		1	黑色	一般公差:			
2		1	11354	单位: mm			
1		1	沙比克	名称: S137 USB天线组件			
序号	名称	数量	材质	材料: 铜镀+化液			
2				表面处理: 清洗			
3				颜色:			
2				比例			

喇叭来料素材，素材不能有，披风等外观问题。按照材质要求。

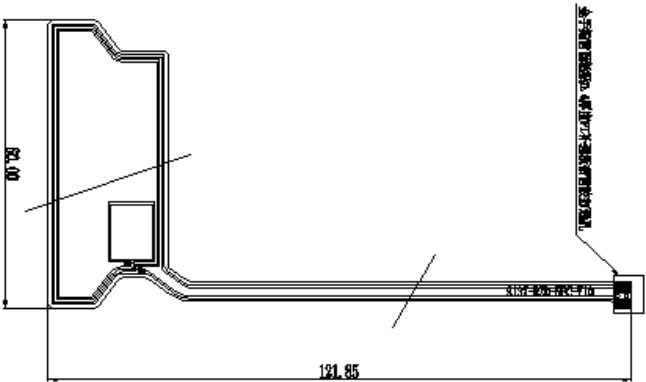
11354。

，化镀不能产生溢镀与粉尘。

需求，再根据要求检验。

全检。

样品正面



1.为电气走线覆铜; 2.红色为外形轮廓, 注意边缘尺寸
1.解铜, 半对半材质 厚度0.05mm; (贴)后壳背面, 保证粘性)
3.471E进口胶; 5. 金手指表面镀金/镀镍3'5u';
黑色/覆白色; 7. 总体厚度应小于或等于0.2mm
图导电;

深圳市麒麟通达科技有限			
一般公差:		名称: S127 MC	
±0.5			
±0.25		材质: PI	
±0.05		表面处理:	
±		颜色: 哑黑色/覆白色	
ANGULAR		比例: 1	
± 0.5°			
3		4	

1		2		3		4	
---	--	---	--	---	--	---	--

图导电;

黑色/覆白色;.7. 总体厚度应小于或等于0.2mm

3. 7178进口胶;.5. 金手指表面镀金/镀镍3"5u";

1. 解槽, 半对半材质 厚度0.05mm;(贴后壳背面, 保证粘性)

2. 红色为外形轮廓, 注意边缘尺寸

3. 为电气走线覆铜;

修改内容

8.Antenna Gain

Band	Max Gain	Band	Max Gain
GSM850(824-894MHz)	-1.71	LTE-B28(703-803)	-3.18
GSM900(880-960MHz)	-1.54	LTE-B66(1710-2200)	-0.72
DCS1800(1710-1880MHz)	-0.72	LTE-B71(617-698)	-4.01
PCS1900(1850-1990MHz)	-0.21	LTE-B34(2010-2024)	-1.44
WCDMA1(1920-2170MHz)	-0.43	LTE-B38(2570-2620)	0.59
WCDMA2(1850-1990MHz)	-0.21	LTE-B39(1880-1920)	-0.21
WCDMA4(1712-2153MHz)	-0.72	LTE-B40(2300-2400)	0.08
WCDMA5(826-892MHz)	-1.71	LTE-B41(2496-2690)	0.59
WCDMA6(832-883MHz)	-1.71	NR-B1(1920-2170)	-0.43
WCDMA8(882-958MHz)	-1.54	NR-B2(1850-1990)	-0.21
WCDMA19(832-888MHz)	-1.71	NR-B3(1710-1880)	-0.72

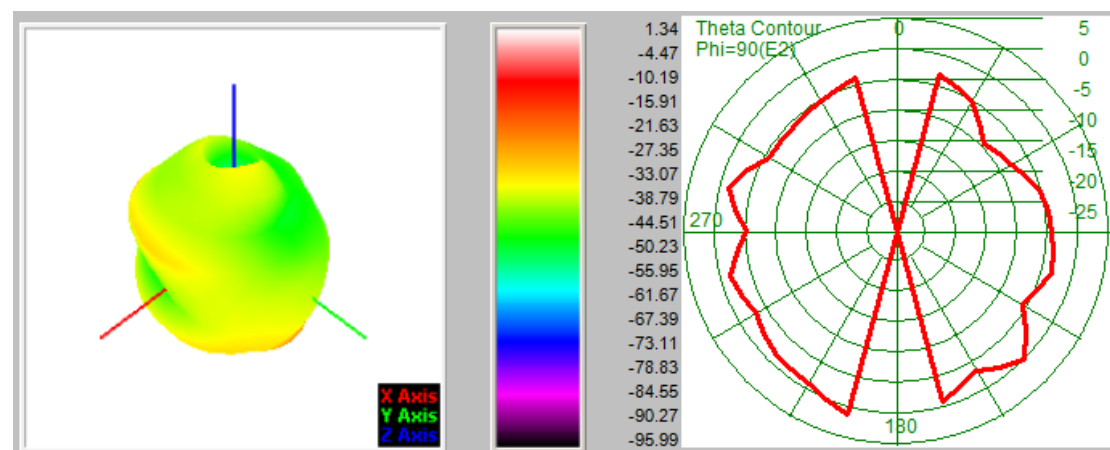
LTE-B1(1920-2170)	-0.43	NR-B5(824-894)	-1.71
LTE-B2(1850-1990)	-0.21	NR-B7(2500-2690)	0.59
LTE-B3(1710-1880)	-0.72	NR-B8(880-960)	-1.54
LTE-B4(1710-2155)	-0.72	NR-B12(699-746)	-3.18
LTE-B5(824-894)	-1.71	NR-B20(791-862)	-1.71
LTE-B7(2500-2690)	0.59	NR-B25(1850-1995)	-0.21
LTE-B8(880-960)	-1.54	NR-B28(703-803)	-3.18
LTE-B12(699-746)	-3.18	NR-B38(2570-2620)	1.55
LTE-B13(746-787)	-3.10	NR-B40(2300-2400)	0.08
LTE-B17(704-746)	-3.18	NR-B41(2496-2690)	1.55
LTE-B18(815-875)	-1.71	NR-B66(1710-2200)	-0.72
LTE-B19(830-890)	-1.71	NR-B71(617-698)	-4.01
LTE-B20(791-862)	-1.71	NR-B77(3300-4200)	0.12
LTE-B25(1850-1995)	-0.21	NR-B78(3300-3800)	0.19
LTE-B26(814-894)	-1.71	NR-B79(4400-5000)	0.73

ANT6(L1/BT/WIFI2.4/5-7.125G)	
Band	Max Gain
Bluetooth(2402-2480)	1.34
WIFI-2.4(2412-2484)	1.34
WIFI-5.1(5150-5350)	-0.08
WIFI-5.8(5725-5850)	-0.20
WIFI-6(5925-7125)	-0.77
GPS-L1(1575.42)	-0.27

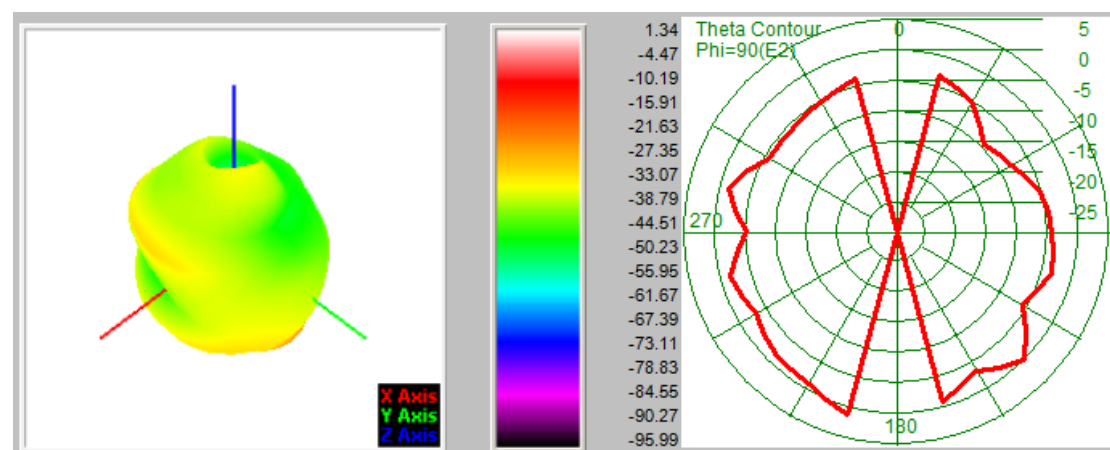
ANT7(L5/WIFI2.4/5-7.125G)	
Band	Max Gain
WIFI-2.4(2412-2484)	-0.15
WIFI-5.1(5150-5350)	-1.16
WIFI-5.8(5725-5850)	-0.86
WIFI-6(5925-7125)	-1.65
GPS-L5(1176.45)	-2.11

9.2D&3D Lobe Diagram

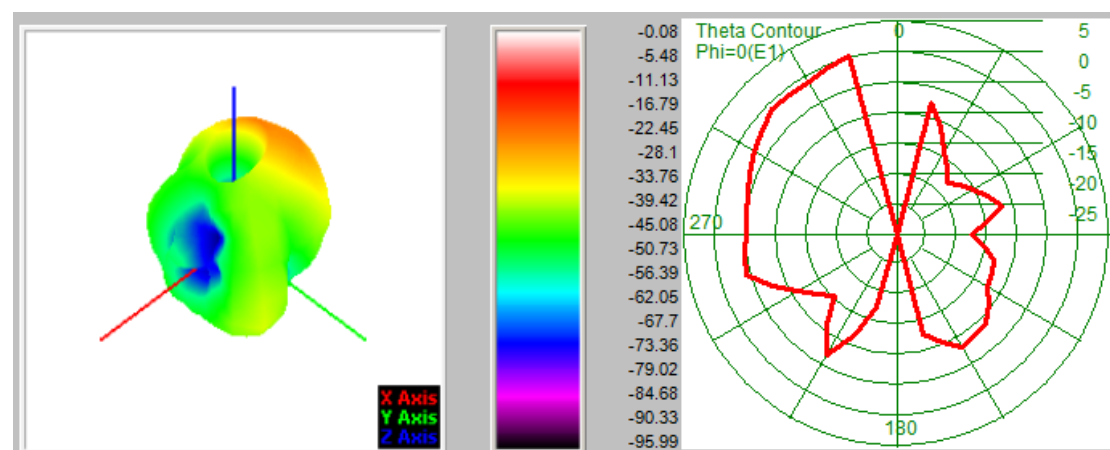
ANT6-BT



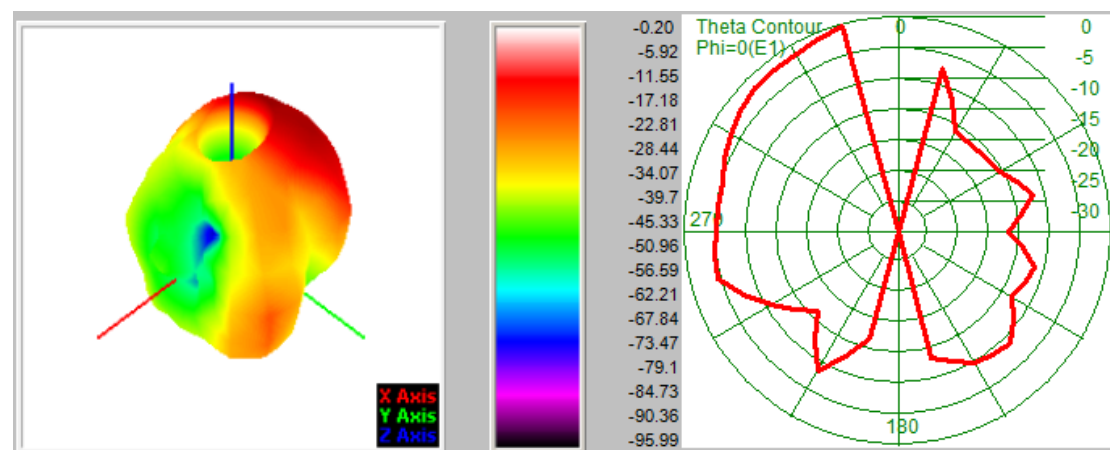
ANT6-2.4GWIFI



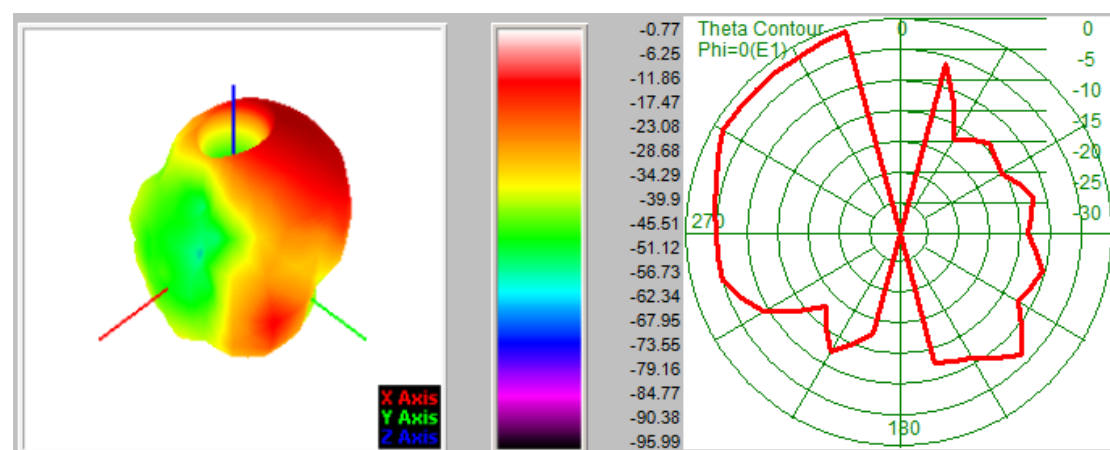
ANT6-5.1GWIFI



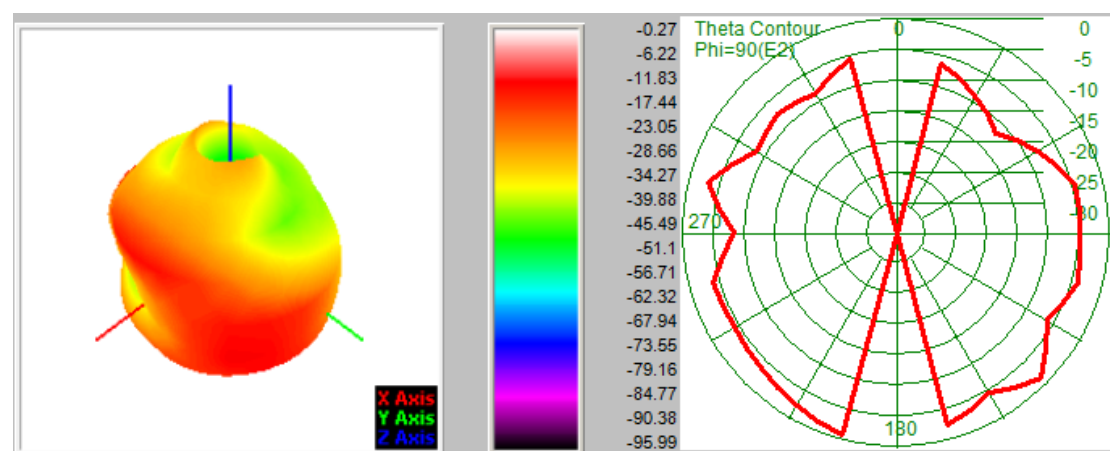
ANT6-5.8GWIFI



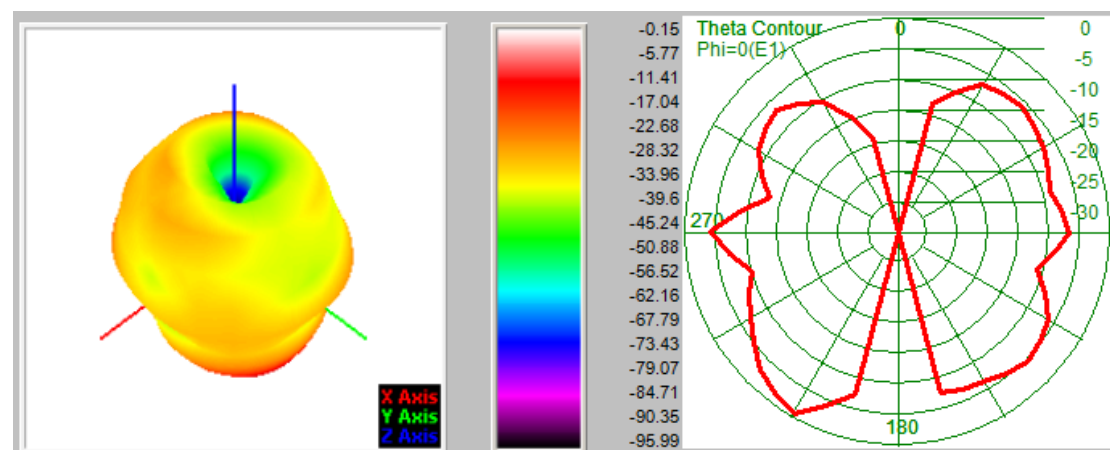
ANT6-6GWIFI



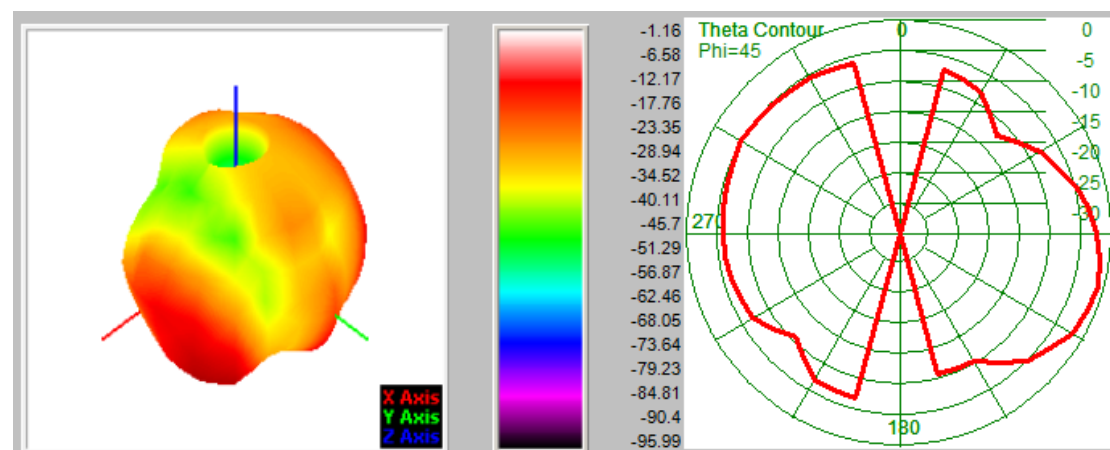
ANT6-GPS-L1



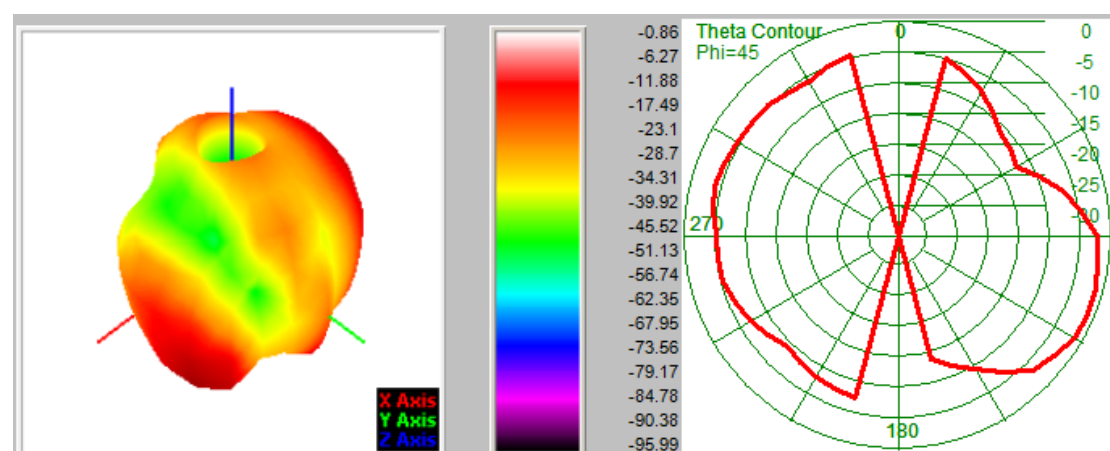
ANT7-2.4GWIFI



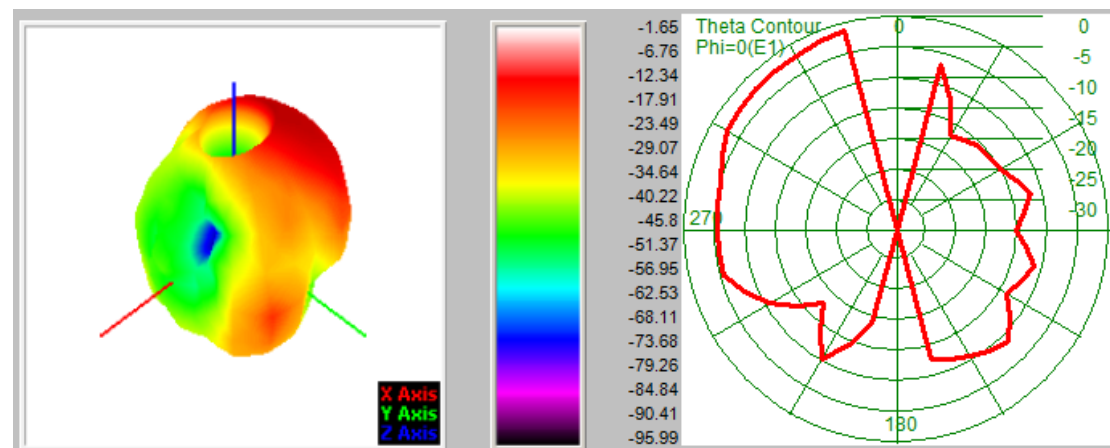
ANT7-5.1GWIFI



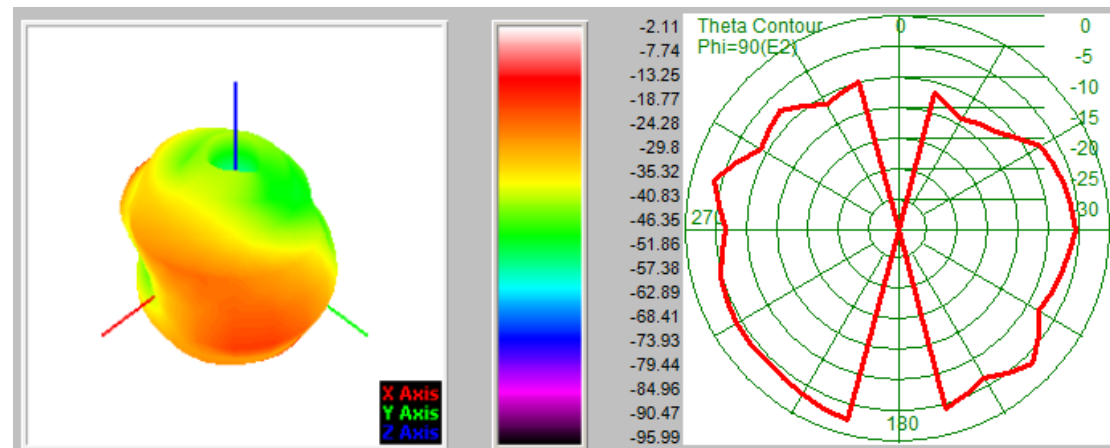
ANT7-5.8GWIFI



ANT7-6GWIFI



ANT7-GPS-L5



10.Introduction to Antenna Information

S137	
Antenna type and frequency band	MAIN ANTENNA(<u>PIFA</u>):2G/3G/4G/5G DIV ANTENNA(<u>PIFA</u>):2G/3G/4G/5G GPS/WIFI/BT ANTENNA(<u>PIFA</u>): L1/L5/WIFI(2.4G/5G/6G)/BT
Antenna materia	LDS