

ShenZhen QiXinTongDa Technology Co.,Ltd.

Antenna Test Report

Project Name: F110 Pro

Frequency Band:

GSM: B2/B3/B5/B8

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

TDD: BB38/B40/B41

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

NR: n1/3/5/8/20/28/38/41/77/78

DATE: 2025-04-07

ADDRESS: Room503-505,Building211,

Tairan IndustrialandTradePark,Chegongmiao,FutianDistrict,Shenzhen

1.Test Project

	Test Project	Equipment
1. S Parameter	<ol style="list-style-type: none">1. Return Loss (RL)2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2G+3G+4G)	<ol style="list-style-type: none">1. power2. level3. TRP/TIS	Comprehensive Test: CMW500/8960 Test Environment: Anechoic Chamber

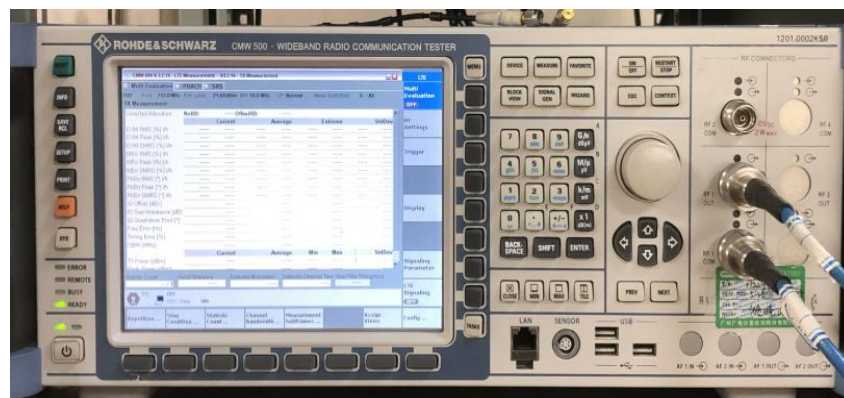
2. Test Equipment



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

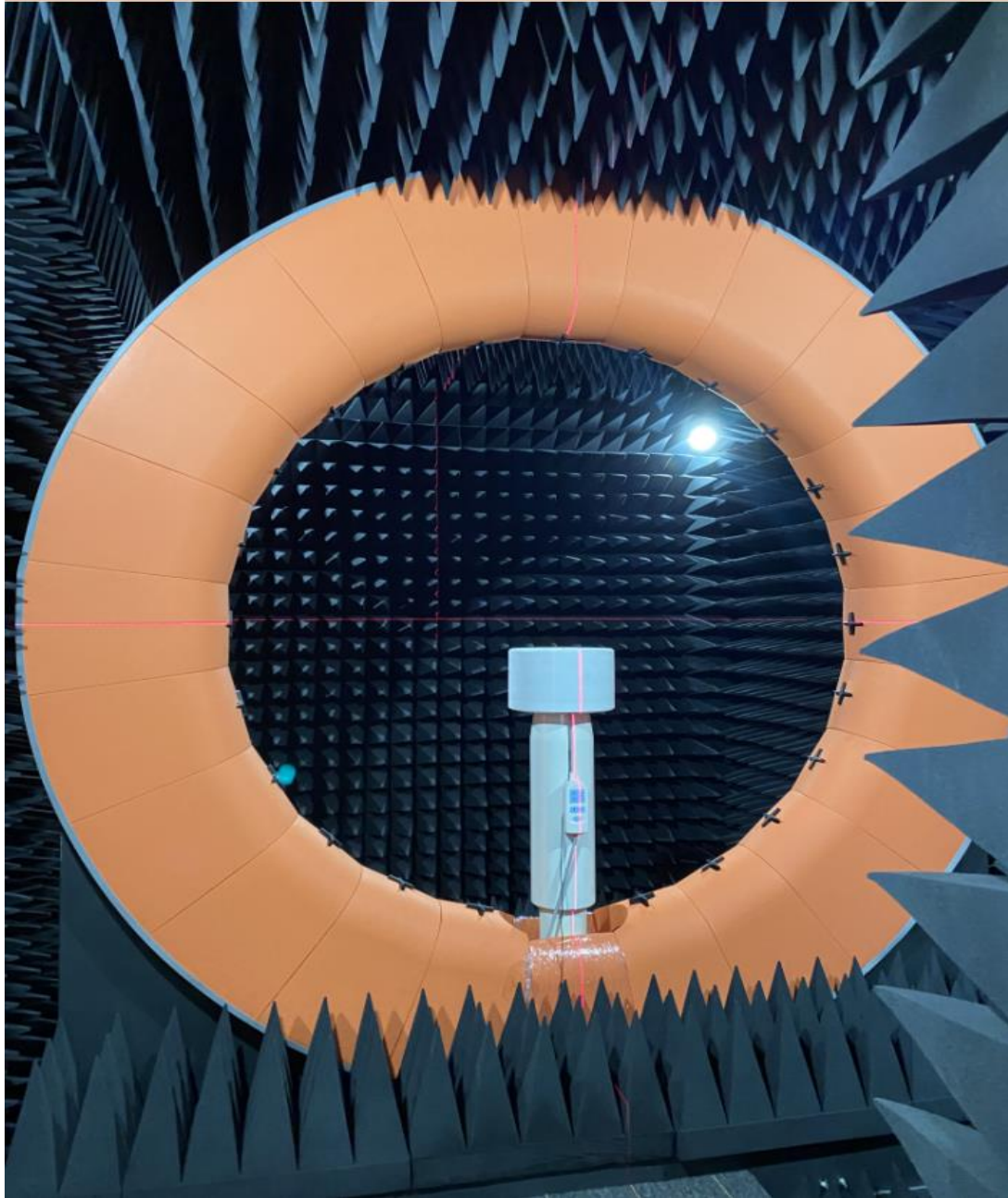


Agilent 8960 (2G/3G Test Equipment)



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

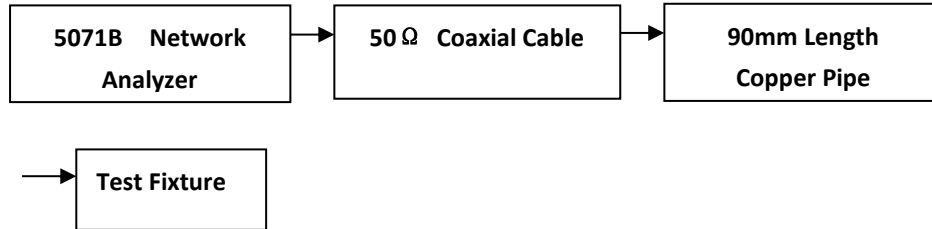
3. TestEnvironment



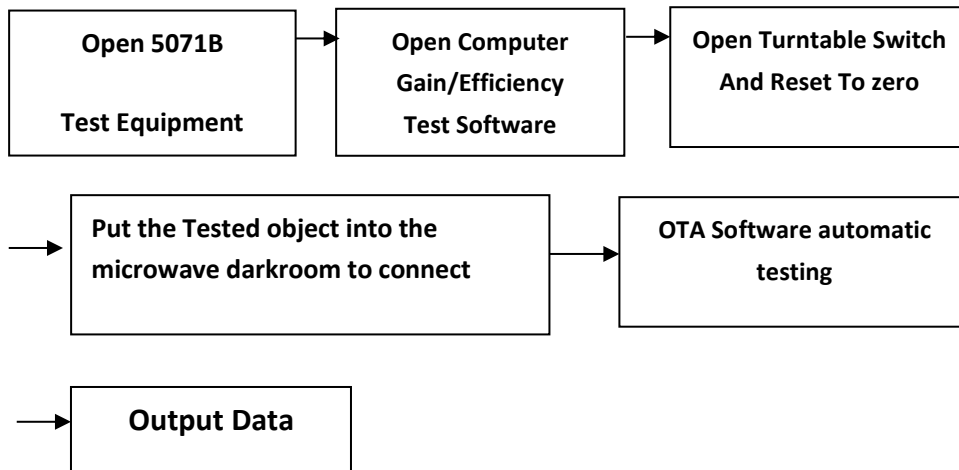
Microwave Anechoic Chamber

4. Test Steps

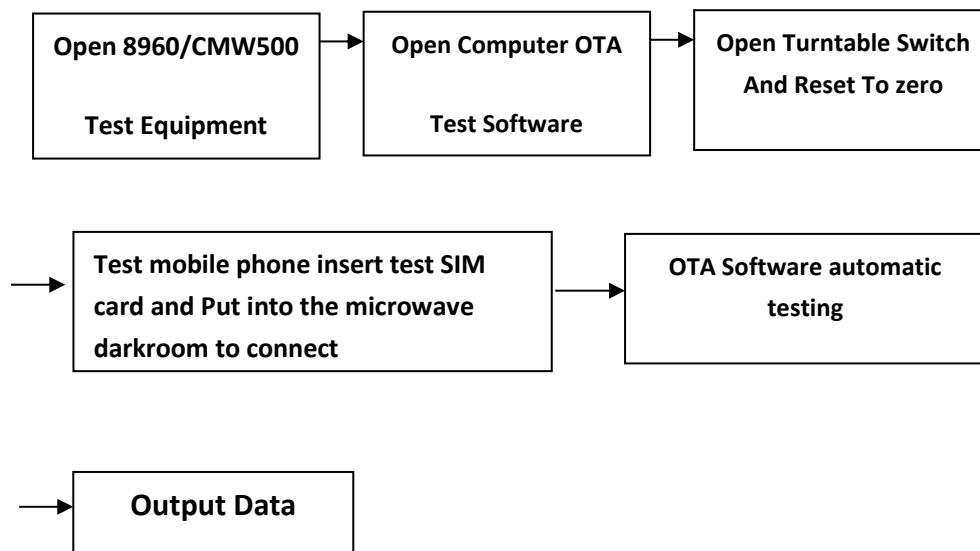
Passive VSWR/RL Test Steps:



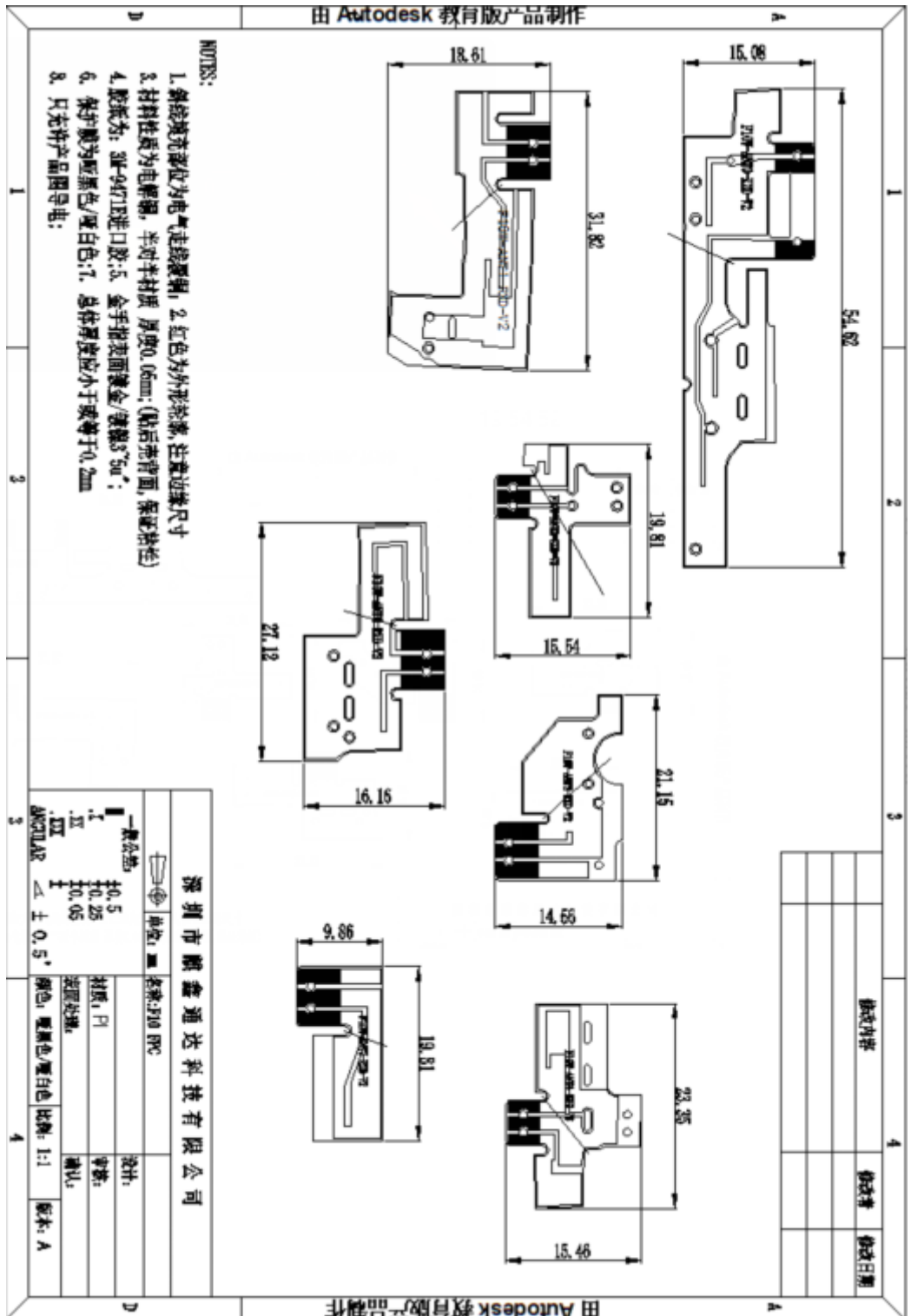
Gain/Efficiency Test Steps:



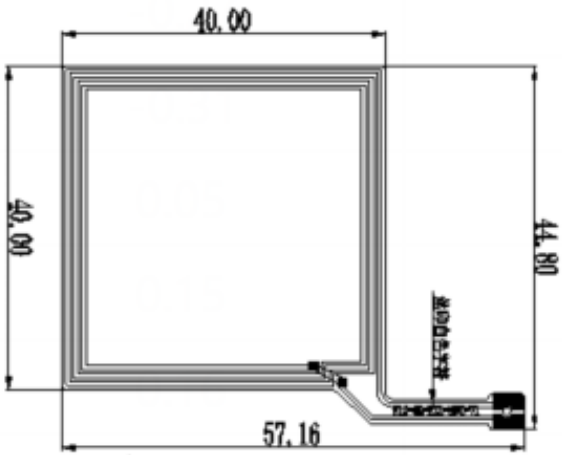
Active TRP/TIS Test Steps:



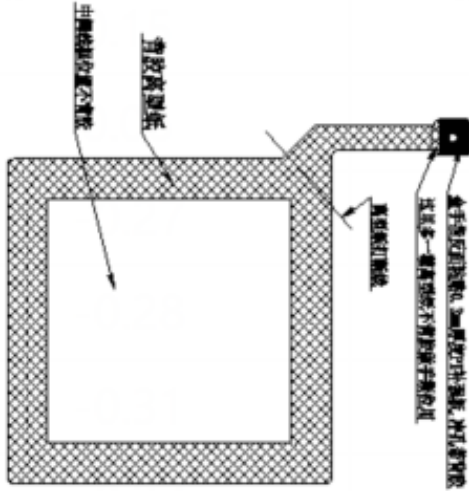
5. Antenna Dimensions



样品正面



样品反面 (背胶面)



铁氧体粘贴在NFC天线正面



- NOTES:
1. 铜线宽度单位为电气走线规则, 2. 红色为外形轮廓, 注意边缘尺寸
 3. 材料性质为电绝缘, 半对半材质, 厚度0.05mm, (贴片背面, 保证粘性)
 4. 胶纸为: 3M-9471E进口胶; 5. 金手指表面镀金/镀镍3"50";
 6. 保护层为覆黑色/覆白色; 7. 总体厚度应小于或等于0.2mm
 8. 只允许产品图导电;

修改内容	修改者	修改日期

深圳市顺鑫通达科技有限公司

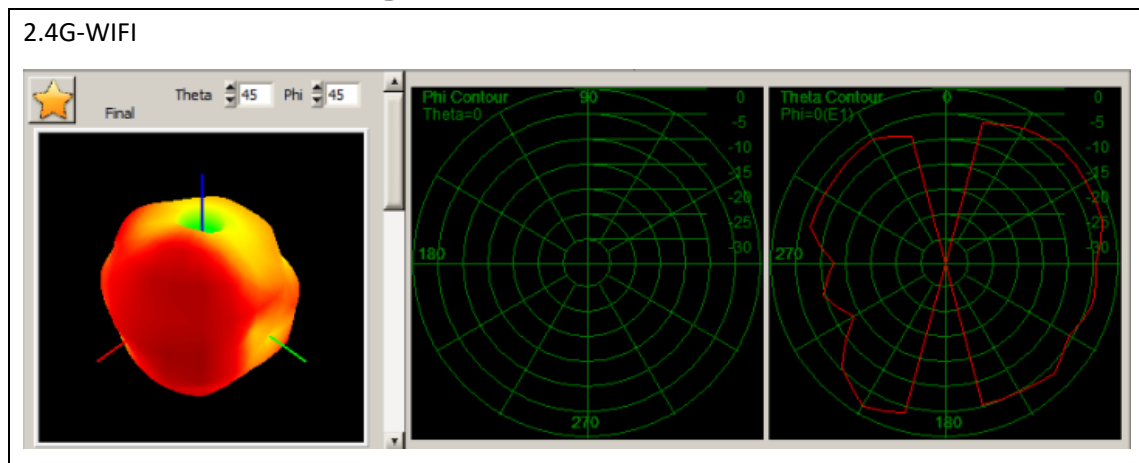
图例	名称: P10 NFC	设计:
I. ±0.5	材料: PI	审核:
II. ±0.05	表面处理:	输入:
III. ±0.05	颜色: 覆黑色/覆白色	版本: A
IV. ±0.5°	比例: 1:1	
APPENDIX		

6. Antenna Gain

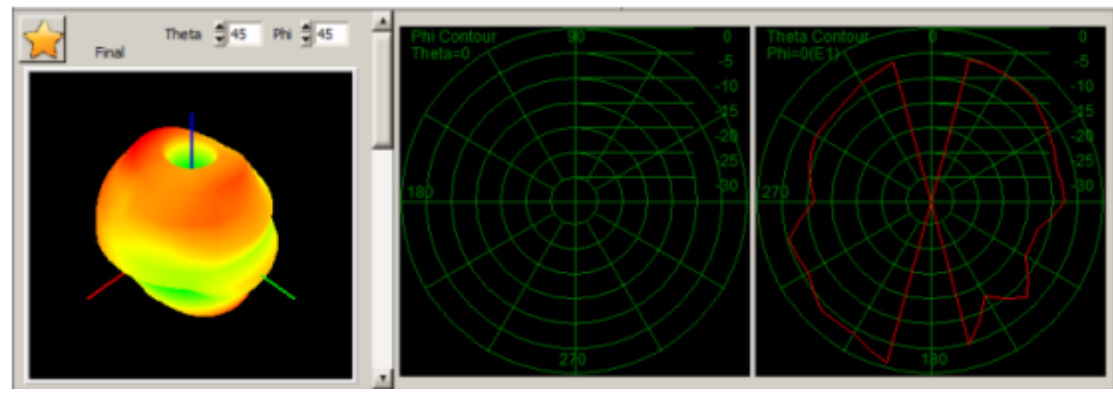
WIFI2.4G/BT													
2400-2500MHZ	Frequency ID	1	2	3	4	5	6	7	8	9	10	11	
	Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0	
	Efficiency (%)	31.00	33.20	35.60	35.80	36.60	37.10	35.60	35.20	35.10	35.00	34.20	
	Gain (dBi)	-0.40	-0.38	-0.19	-0.15	0.15	0.22	-0.16	-0.23	-0.25	-0.30	-0.35	

5.1-5.8GWifi											
2400-2500MHZ	Frequency ID	1	2	3	4	5	6	7	8	9	
	Frequency (MHz)	5000.0	5100.0	5200.0	5300.0	5400.0	5500.0	5600.0	5700.0	5800.0	
	Efficiency (%)	35.10	36.20	35.10	34.00	35.30	34.80	34.40	29.50	27.60	
	Gain (dBi)	-0.19	-0.12	-0.07	-0.21	0.22	0.40	-0.23	-0.82	0.03	

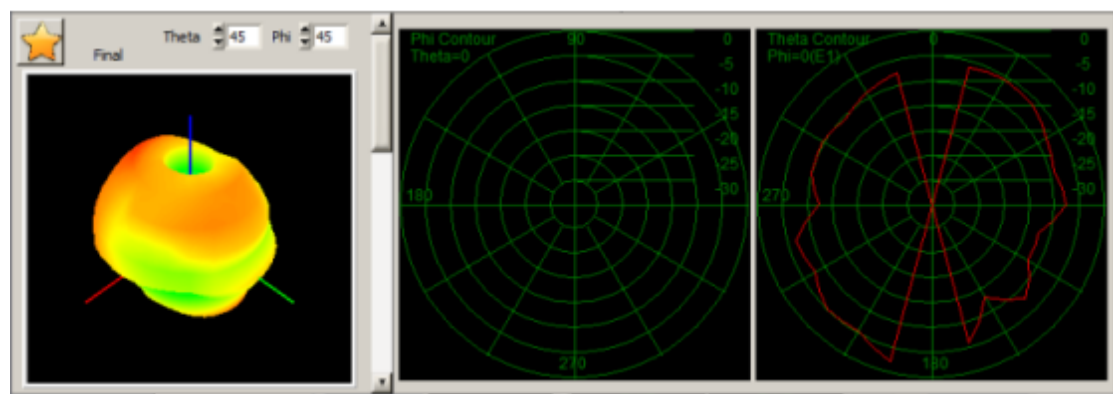
7.3D Lobe Diagram



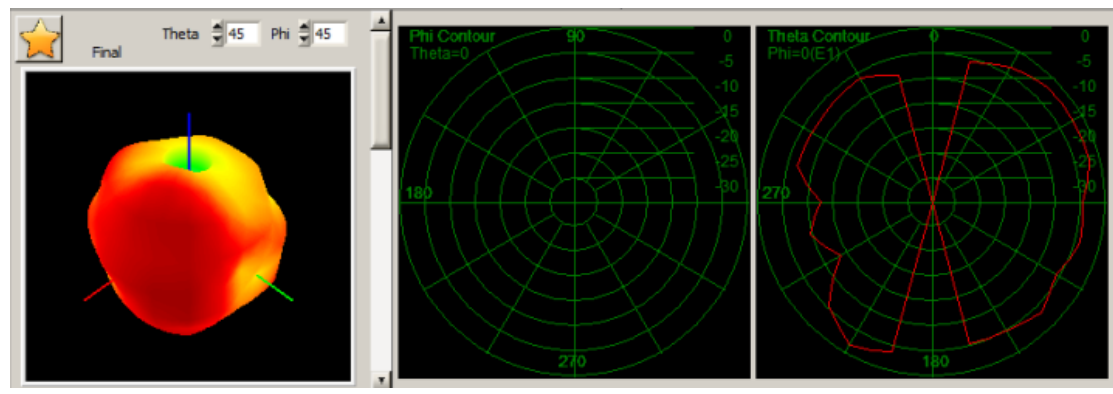
5.1G-WIFI



5.1G-WIFI



BT



GPS

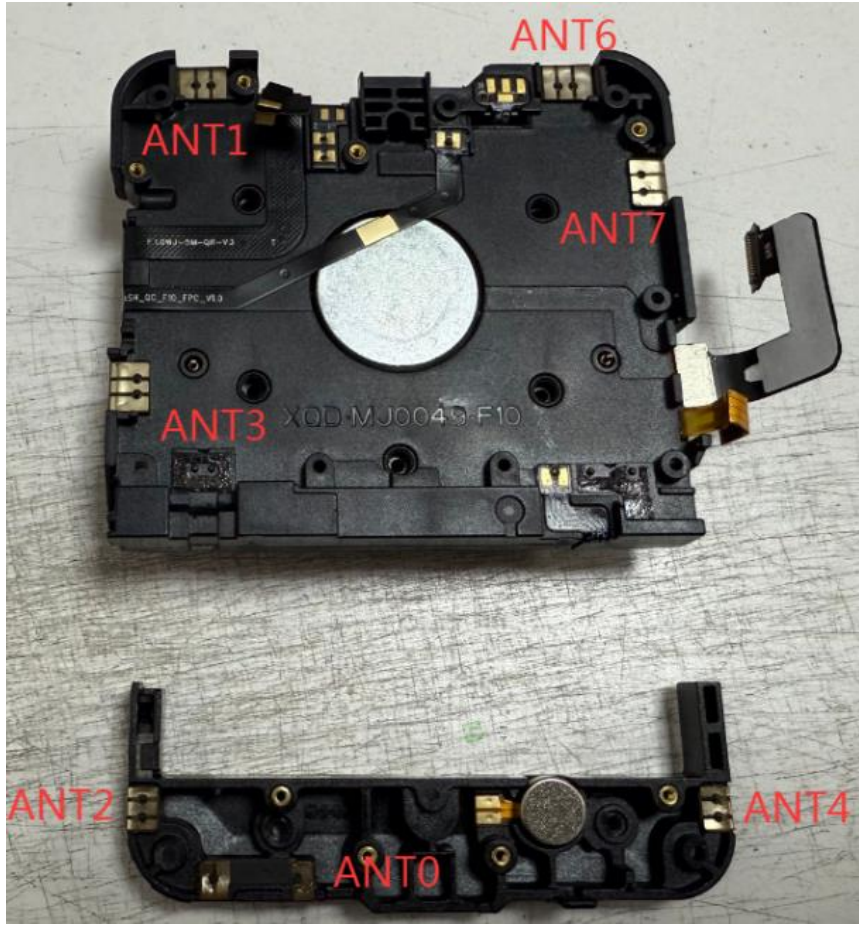


8. Antenna model and type

Band	Model	Type
BT	F10W-BWG	PIFA
2.4G WIFI	F10W-BWG	PIFA
5.1-5.8G WIFI	F10W-BWG	PIFA
GPS	F10W-BWG	PIFA
NFC	F10W-NFC	PIFA
Main Antenna	F10W-MAIN	PIFA
Diversity Antenna	F10W-LTE	PIFA

9. Antenna distribution map

GSM: B2/3/5/8 WCDMA: B1/2/4/5/6/8/19 TDD: 38/40/41 FDD: B1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28AB/66 5G: N1/2/3/5/8/20/28/71/38/41/77/78								
		ANT0	ANT1	ANT2	ANT3	ANT4	ANT6	ANT7
LB 1T2R	GSM: B5/8 WCDMA: B5/6/8/19 4G: FDD: 5/8/12/13/17/18/19/20/26/28AB 5G: N5/8/20/28/71	T_P	D与ANT0 DPDT	/	/	/	/	/
MHB 1T2R	GSM: B2/3 WCDMA: B1/2/4 4G: TDD: 40 4G: FDD: B1/2/3/4/7/25/66 5G: N1/2/3	T_P	D与ANT0 DPDT	/	/	/	/	/
MHB 4EX	FDD: B1/3/4/66	PRX	DRX	MEMO1	/	MEMO2	/	/
MHB 1T4R SRS	4G: TDD: 38/41 5G: N38/41	/	DRX	MEMO1	T_P	MEMO2	/	/
SUB6 1T4R SRS	5G: N77/N78	/	/	MEMO1	T_P	MEMO2	DRX	/
WCH		/	/	/	/	/	/	L1+BT+WIFI(2.4G/5G)



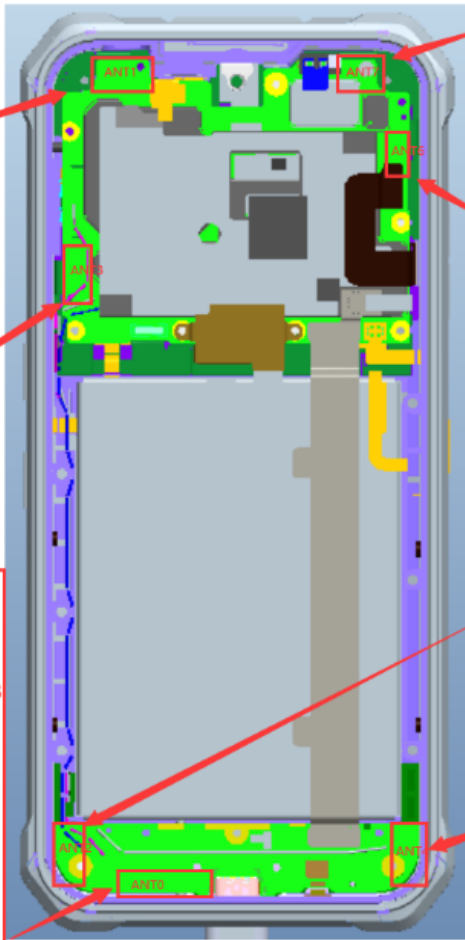
ANT1:TRX
GSM:B2/B3
WCDMA:B1/B2/B4
FDD:B1/B2/B3/B4/B7/B25/B66
TDD:B40
5G:N1/N2/N3

DRX:
GSM:B5/B8
WCDMA:B5/B6/B8/B19
FDD:B5/B8/B12/B13/B17/B28
5G:N5/N8/N28

ANT3:TRX
TDD:B38/B41
5G:N38/N41/N77/N78

ANT0:TRX
GSM:B5/B8
WCDMA:B5/B6/B8/B19
FDD:B5/B8/B12/B13/B17/B18/B19/B20/B26/B28
5G:N5/N8

DRX
GSM:B2/B3
WCDMA:B1/B2/B4
FDD:B1/B2/B3/B4/B7/B25/B66
TDD:B40/B41
5G:N1/N2/N3



ANT7:
(GPS-L1)+(BT-2.4G)+(WIFI-2.4G)
+(WIFI+5G)

ANT6:DRX
5G:N77/N78

ANT2:MIMO1
FDD:B1/B3/B4/B66
TDD:B38/B41
5G:N38/N41/N77/N78

ANT4:MIMO2
FDD:B1/B3/B4/B66
TDD:B38/B41
5G:N38/N41/N77/N78