Shenzhen Kexintongda Technology Co., Ltd.

Antenna Specifications

Customer: Polanvold

Project: BST15

GSM: B2/B3/B5/B8

WCDMA: B1/B2/B4/B5/B8

TDD:B38/B40/B41

FDD:B1/B2/B3/B4/B5/B7/B8/B20/B28/B66

Engineering：Xiong（187 1893 6792）

Date：2025-05-29

Address：Room 503, Building 211, Tairan Science and Technology Park, Chegongmiao, Futian District, Shenzhen Qixin Tongda Technology Co., Ltd.

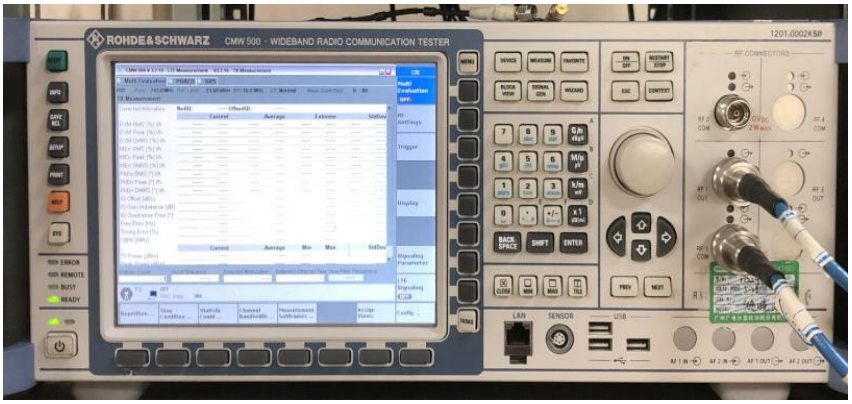
1. Test Project

	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

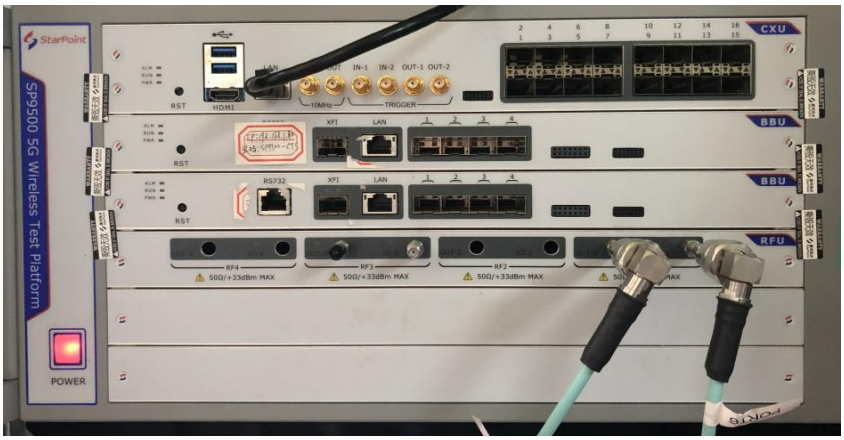
2.Test Equipment

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

Agilent 8960 （2G/3G Test Equipment）

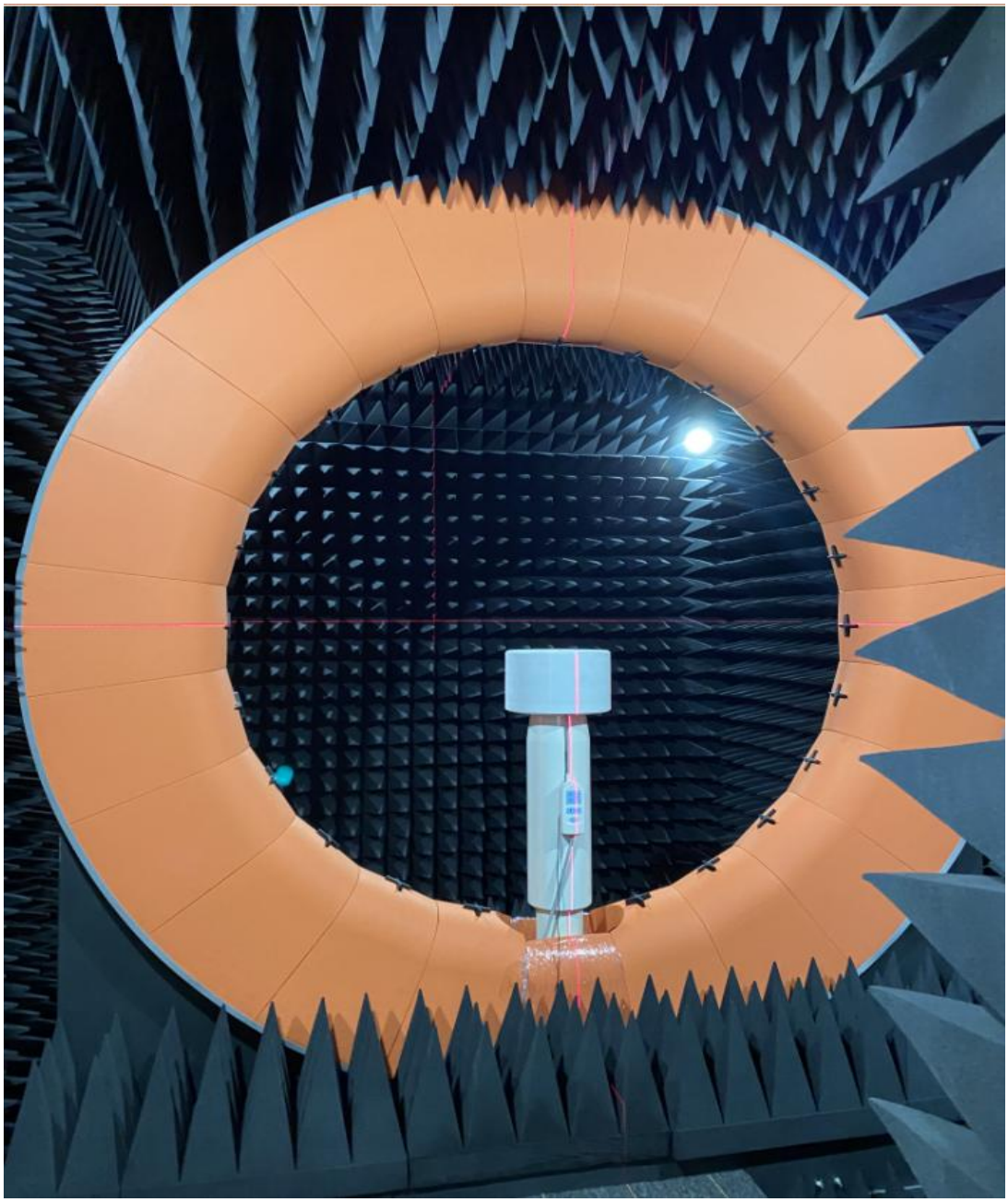


CMW 500 （2G/3G/4GTest Equipment）



SP9500 （5GTest Equipment）

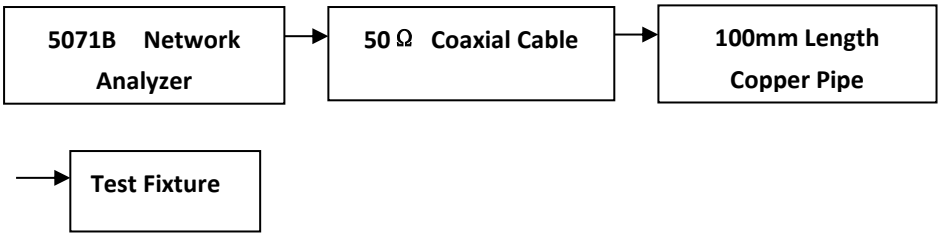
3. TestEnvironment



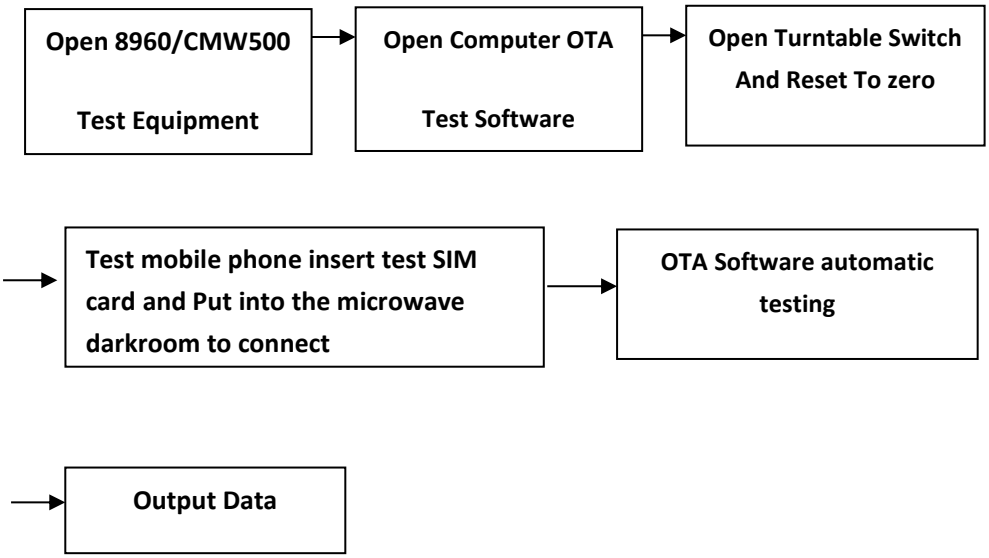
Microwave Anechoic Chamber

4.Test Steps

Passive VSWR/RL Test Steps:



Active TRP/TIS Test Steps：

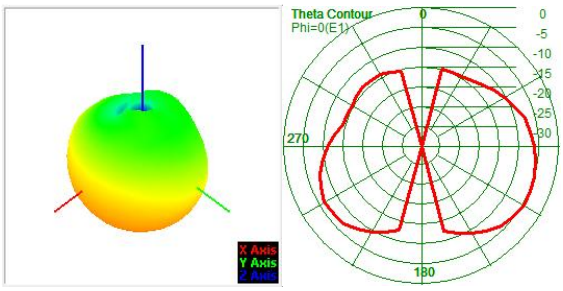


5.Antenna Gain

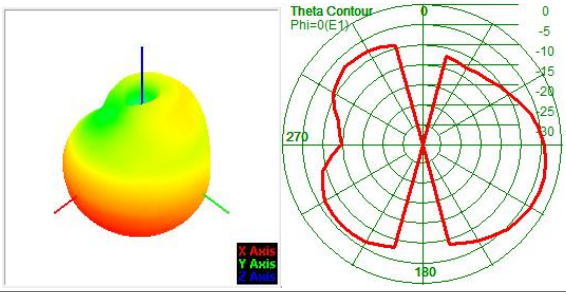
Band	Max Gain	Band	Max Gain
GSM850	-4.5		
GSM900	-3.3		
DCS1800	1.8		
PCS1900	1.1		
WCDMA1	-1.7		
WCDMA2	1.1		
WCDMA4	1.8		
WCDMA5	-4.5		
WCDMA8	-3.3		
LTE-B1	-1.7		
LTE-B2	1.1		
LTE-B3	1.8		
LTE-B4	1.8		
LTE-B5	-4.5		
LTE-B7	-0.2		
LTE-B8	-3.3		
LTE-B20	-4.5		
LTE-B28	-5.8	**Bluetooth**	-0.2
LTE-B66	1.8	**WIFI-2.4G**	-0.2
LTE-B38	-0.2	**WIFI-5.2G**	0.3
LTE-B40	-0.1	**WIFI-5.8G**	0.6
LTE-B41	-0.2	**GPS**	0.5

6.3D Lobe Diagram

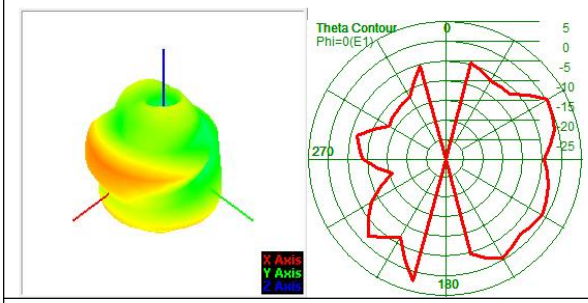
GSM850



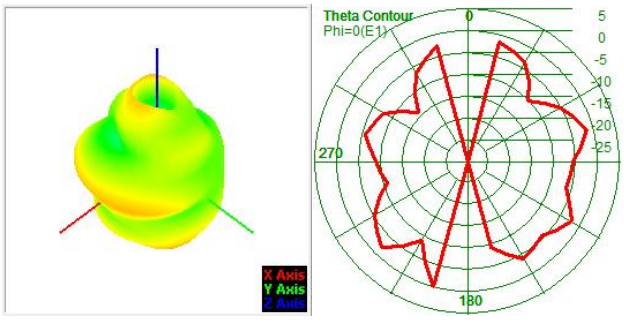
GSM900



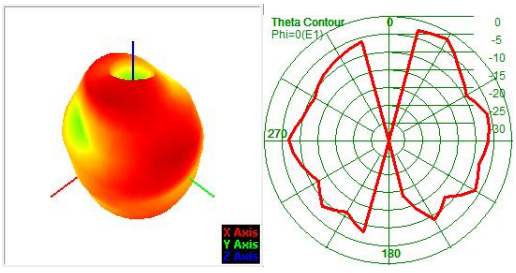
DSC1800



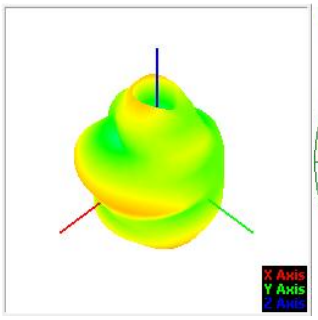
PCS1900

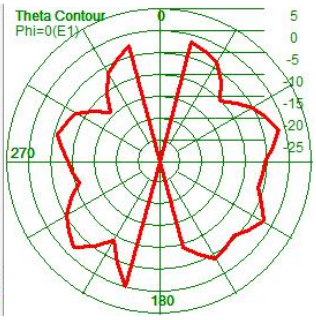


W1

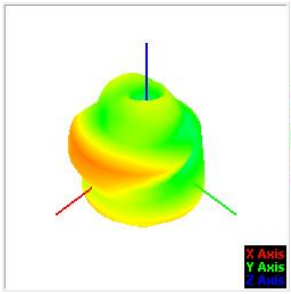


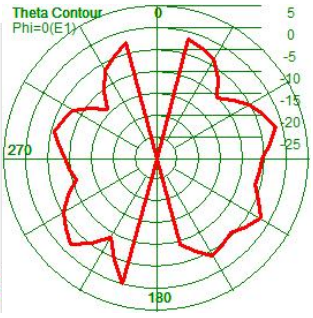
W2



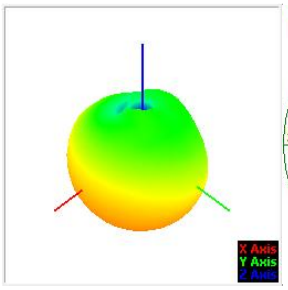


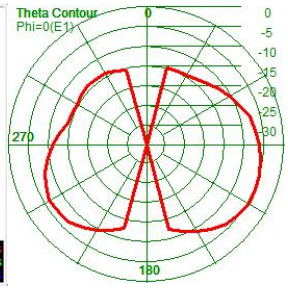
W4



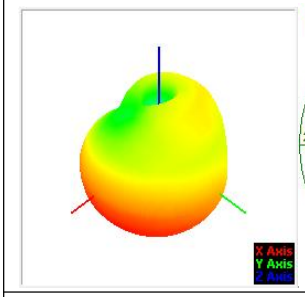


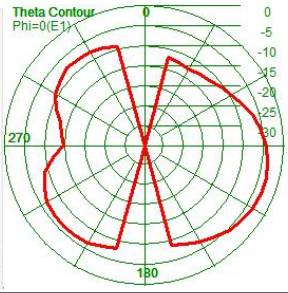
W5



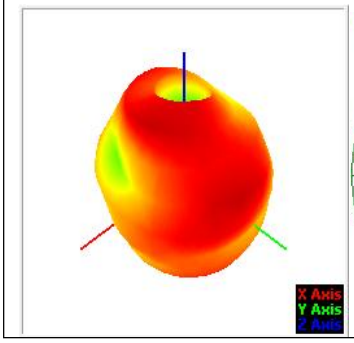


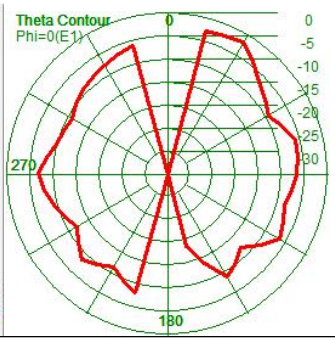
W8



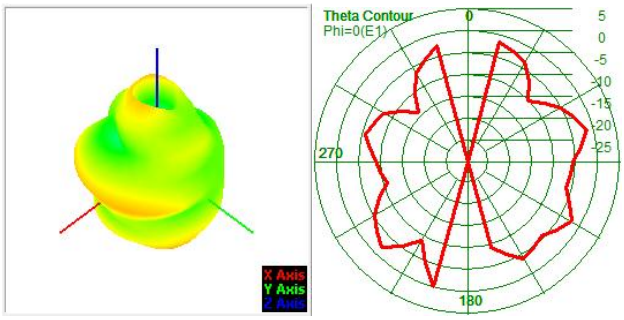


FDD-B1

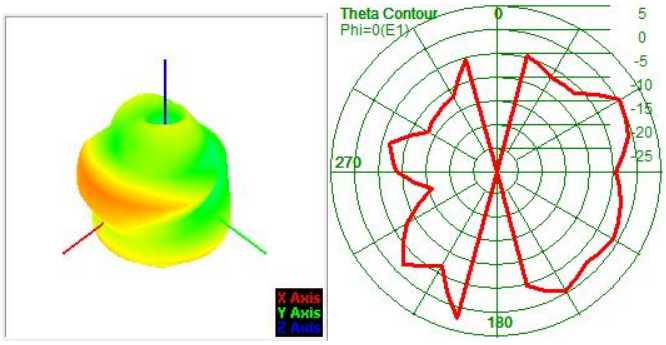




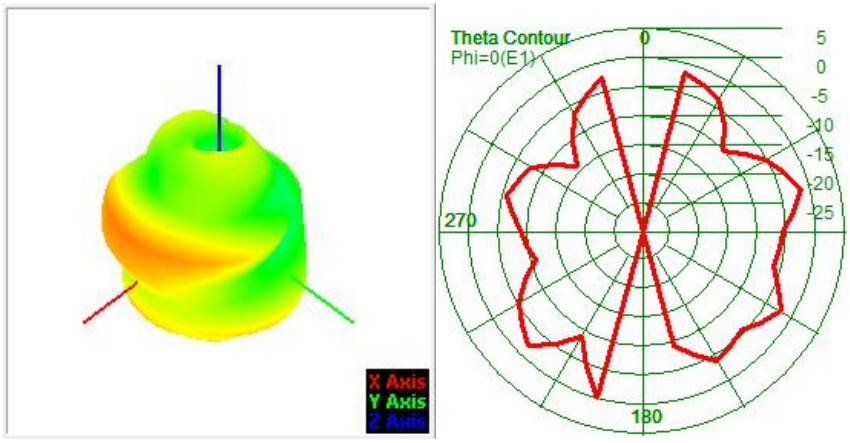
FDD-B2



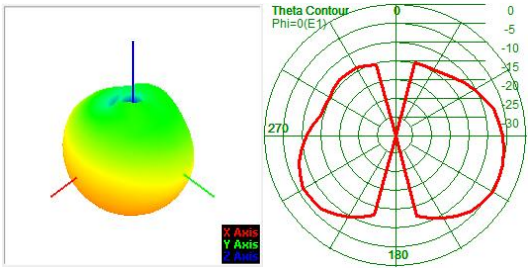
FDD-B3



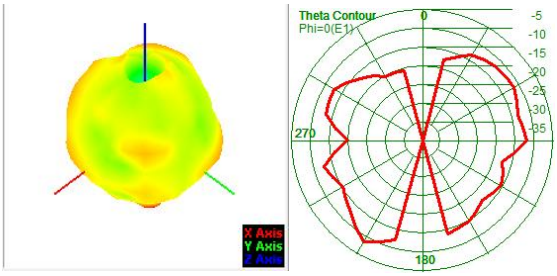
FDD-B4



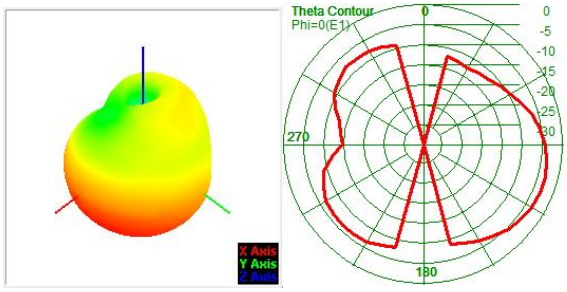
FDD-B5



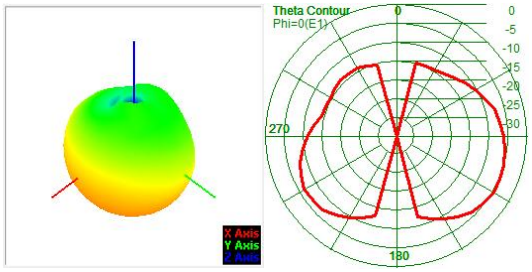
FDD-B7



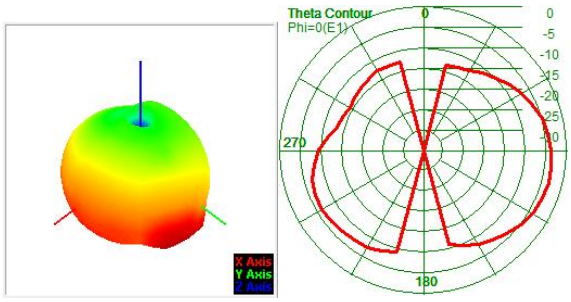
FDD-B8



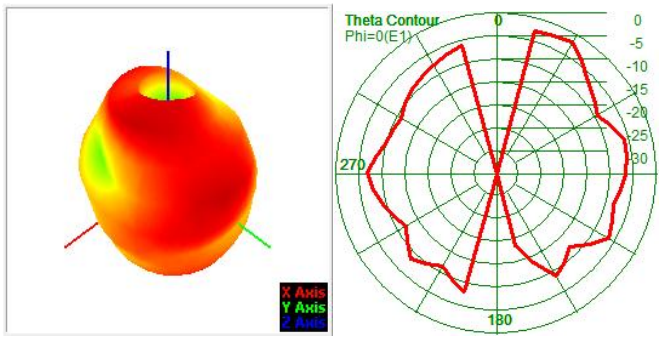
FDD-B20



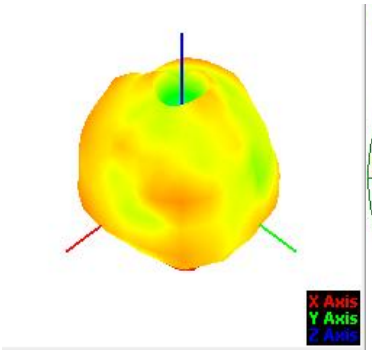
FDD-B28

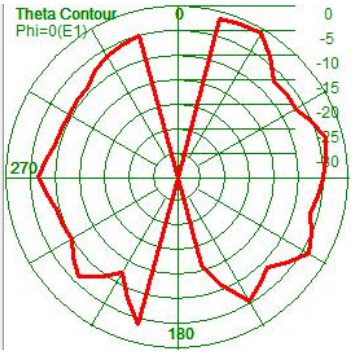


FDD-B66

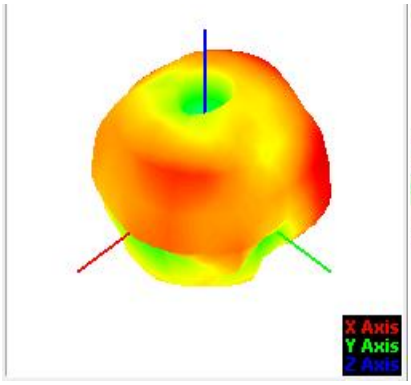


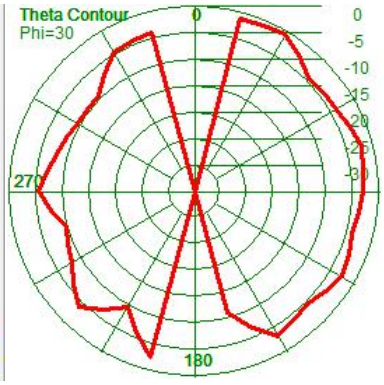
TDD-B38



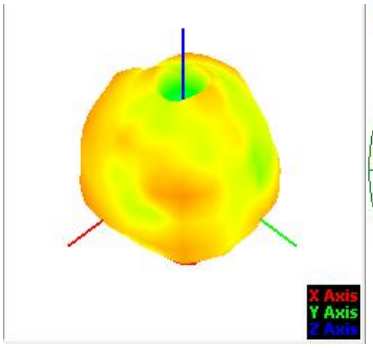


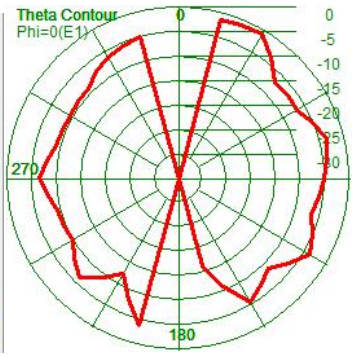
TDD-B40



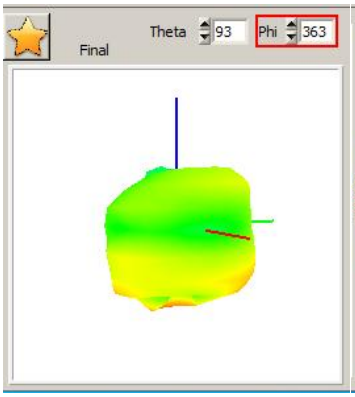


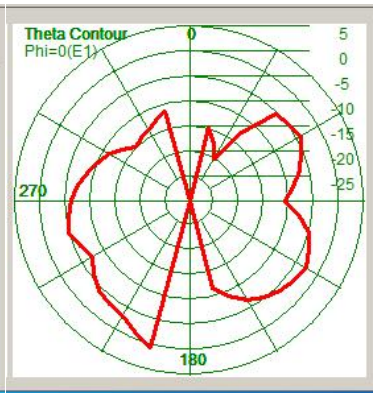
TDD-B41



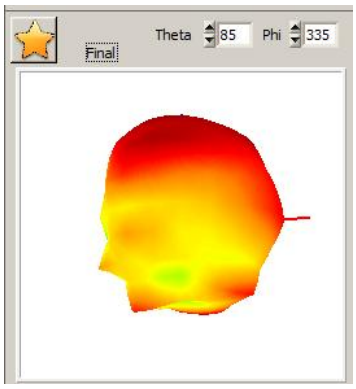


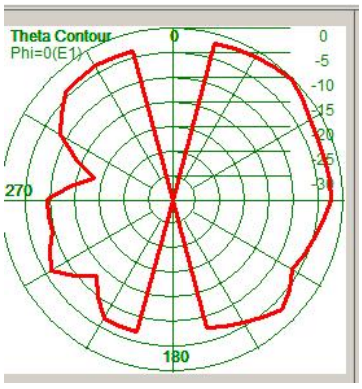
GPS



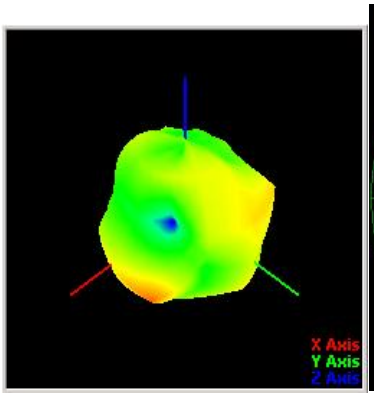


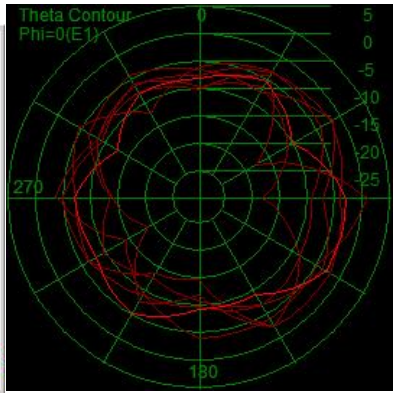
BT/WIFI-2.4



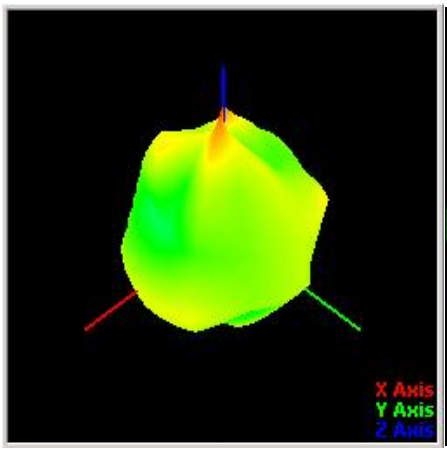


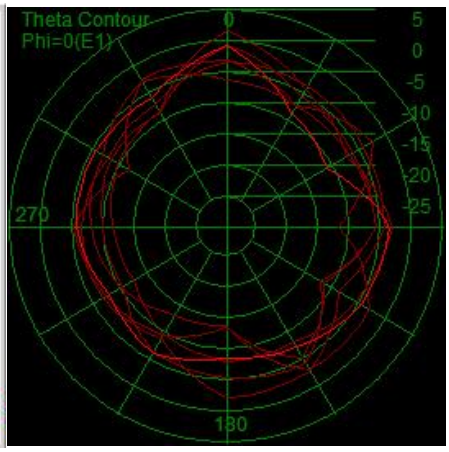
5.2G-WIFI





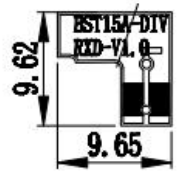
5.8G-WIFI

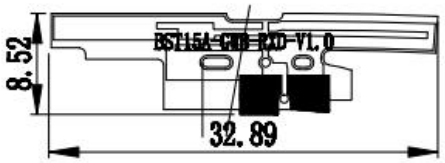


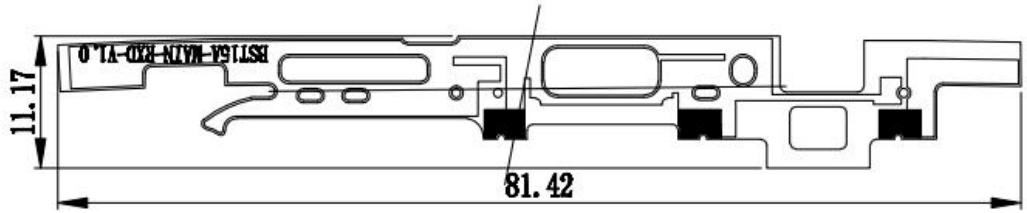


7. Antenna drawing

Edition	Modify content	Modified by	Modification Date







NOTES:

1. The filling part of diagonal line is copper clad for electrical wiring;
2. Red is the outline, pay attention to the edge size
3. The material property is electrolytic copper, and the thickness of half to half material is 0.05mm; (Stick to the back of the rear shell to ensure adhesion)
4. Adhesive tape: 3M-9471E imported adhesive;
5. Gold finger surface gold/nickel plating 3~5u ";
6. The protective film is matte black/white;
7. The overall thickness shall be less than or equal to 0.2mm
8. Only the product drawing is allowed to conduct electricity;

Shenzhen Qixin Tongda Technology Co., Ltd			
unit: mm		name:SC400-FPC	
GENERAL TOLERANCE:			Design:
I	±0.5	*Material Quality*: PI	To Examine:
.I	±0.25	surface treatment:	Confirm:
.II	±0.05		
.III	±		
ANGULAR	∠ ± 0.5°	Color: matte black	proportion: 1:1 Edition: A

8.Introduction to Antenna Information

BST15	
Antenna type and frequency band	MAIN ANTENNA:2G/3G/4G DIV ANTENNA:2G/3G/4G GPS/WIFI/BT ANTENNA:L1/2.4GWIFI/BT
Antenna materia	FPC