

Antenna Specification Document

Project Name: P70

FrequencyBand:

2G: 850/900/1800/1900

3G: W1/2/4/5/8

4G: B1/2/3/4/5/7/8/12/13/17/18/19/20/26/28AB/66/38/40/41

Company Name: ShenZhen QiXinTongDa Technology Co.,Ltd.

Address: Room 503, Building 211, Tairan 9th Road, Chegongmiao Tairan
Industrial Zone, Futian District, Shenzhen

DATE: 2025-6-26

1.Test Project

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

2.Test Equipment



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

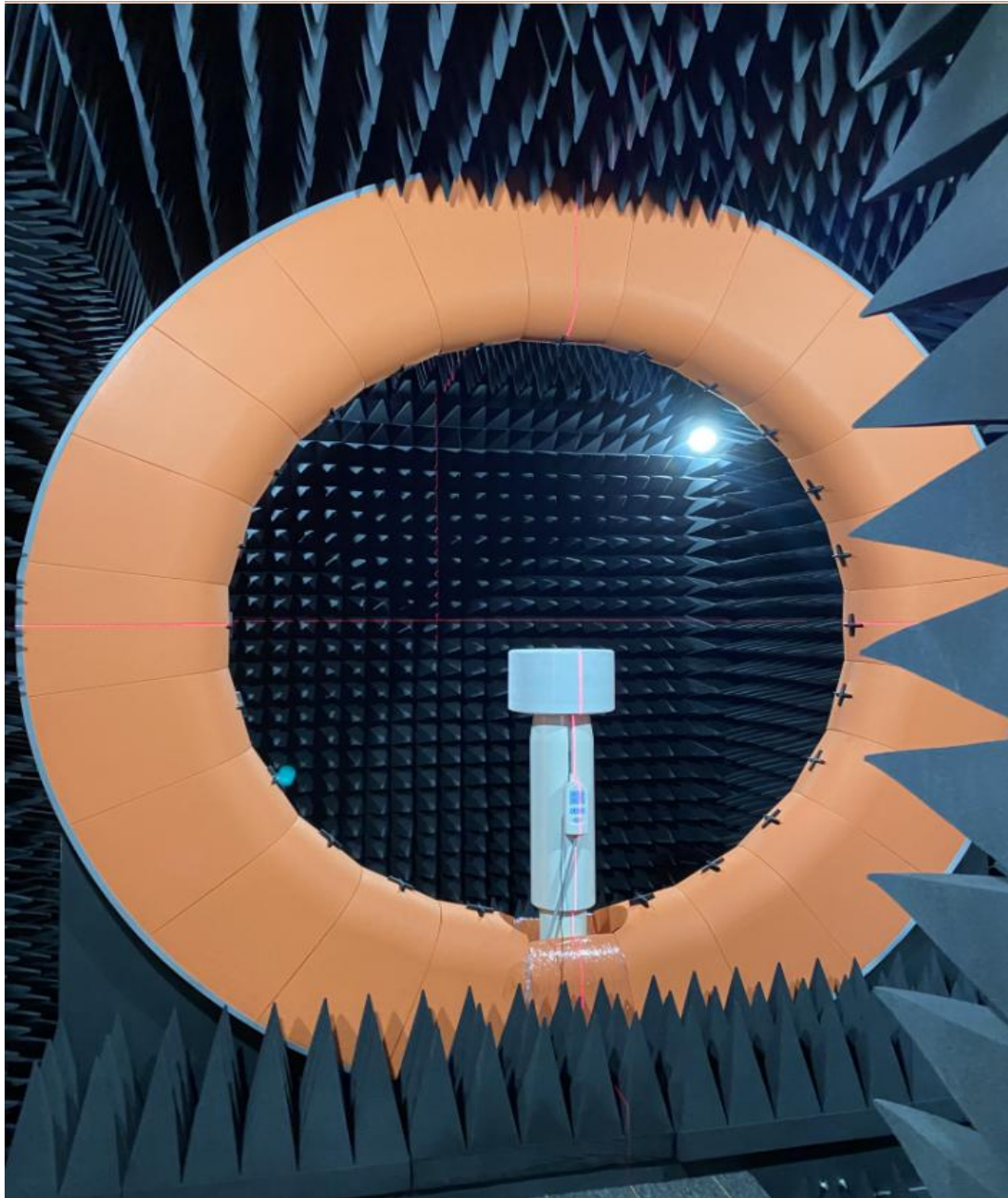


Agilent 8960 (2G/3G Test Equipment)



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

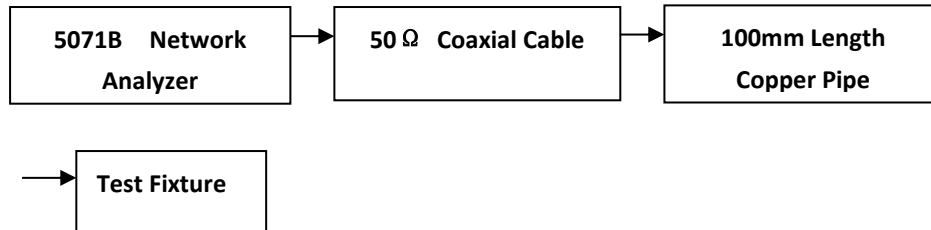
3. TestEnvironment



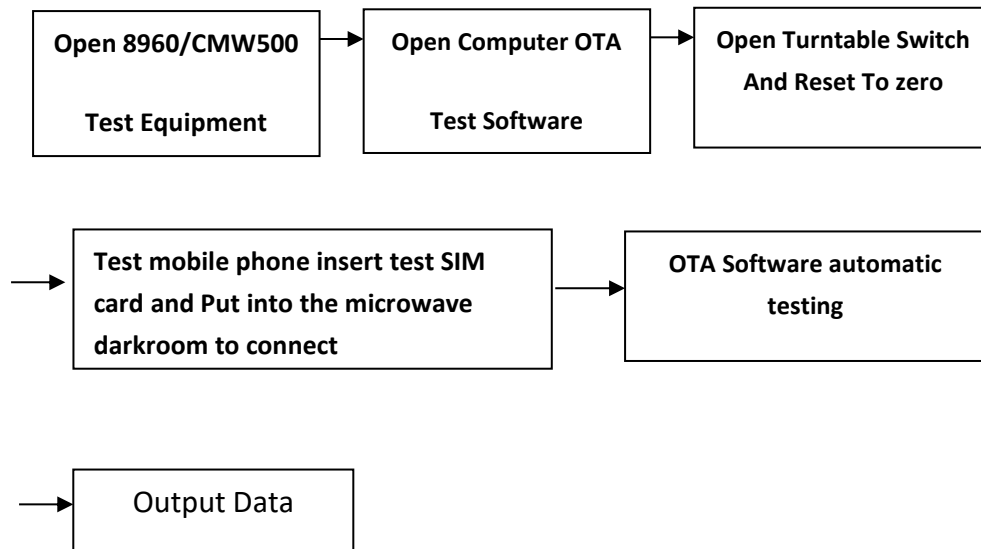
Microwave Anechoic Chamber

4. Test Steps

Passive VSWR/RL Test Steps:



Active TRP/TIS Test Steps:



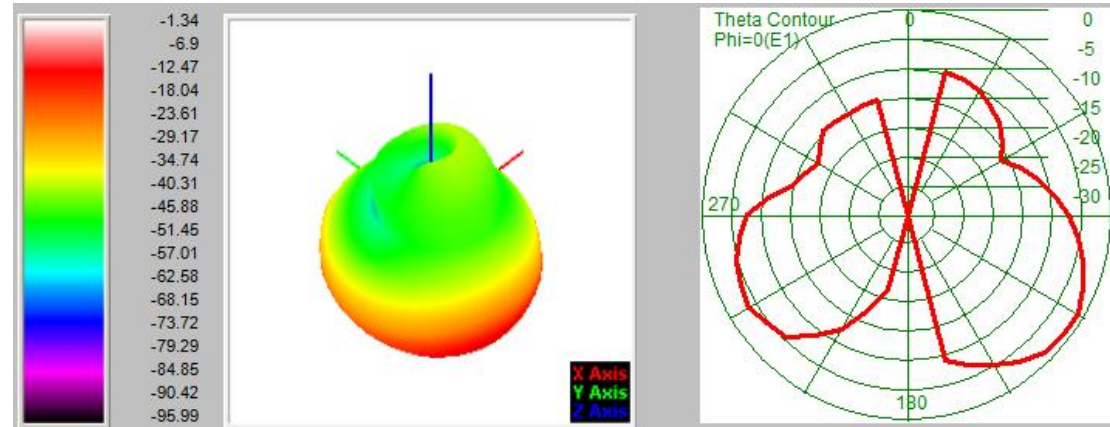
5. Antenna size diagram

6. Antenna Gain

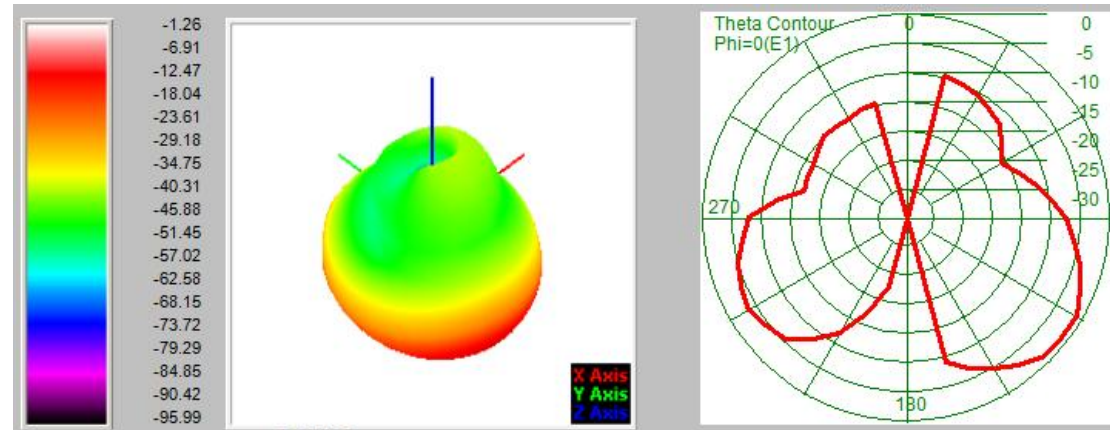
Band	Max Gain	Band	Max Gain
GSM850 (824-894MHZ)	-1.34	Bluetooth (2400-2483.5MHZ)	2.58
GSM900 (880-960MHZ)	-1.26	WIFI-2.4G (2400-2495MHZ)	2.58
DCS1800 (1710-1880MHZ)	0.72	WIFI-5.2G (5.17-5.33GHZ)	0.07
PCS1900 (1850-1990MHZ)	1.37	WIFI-5.8G (5.490-5.835GHZ)	-1.83
WCDMA1 (1920-2170MHZ)	2.10	GPS (1575.4MHZ)	2.46
WCDMA2(1850-1990MHz)	1.37	LTE-B18(815-875MHZ)	-1.28
WCDMA4(1712-2153MHz)	0.72	LTE-B19(830-890MHZ)	-1.3
WCDMA5(826-892MHz)	-1.34	LTE-B26(814-894MHZ)	-1.34
WCDMA8 (880-960MHZ)	-1.26		
CDMA-BC0(815-894MHZ)	-1.34		
CDMA-BC1(1850-1990MHZ)	1.37		
LTE-B1 (1920-2170MHZ)	2.10		
LTE-B2(1850-1990MHZ)	1.37		
LTE-B3 (1710-1880MHZ)	0.72		
LTE-B4(1710-2155MHZ)	0.72		
LTE-B5 (824-894MHZ)	-1.34		
LTE-B7 (2500-2690MHZ)	2.15		
LTE-B8 (880-960MHZ)	-1.26		
LTE-B12(699-746MHZ)	-1.47		
LTE-B13(746-787MHZ)	-1.34		
LTE-B17(704-746MHZ)	-1.47		
LTE-B20 (791-862MHZ)	-1.34		
LTE-B28(703-803MHZ)	-1.47		
LTE-B38 (2570-2620MHZ)	2.95		
LTE-B40(2300-2400MHZ)	2.12		
LTE-B41 (2496-2690MHZ)	2.95		
LTE-B66(1710-2200MHZ)	0.72		

7.3D Lobe Diagram

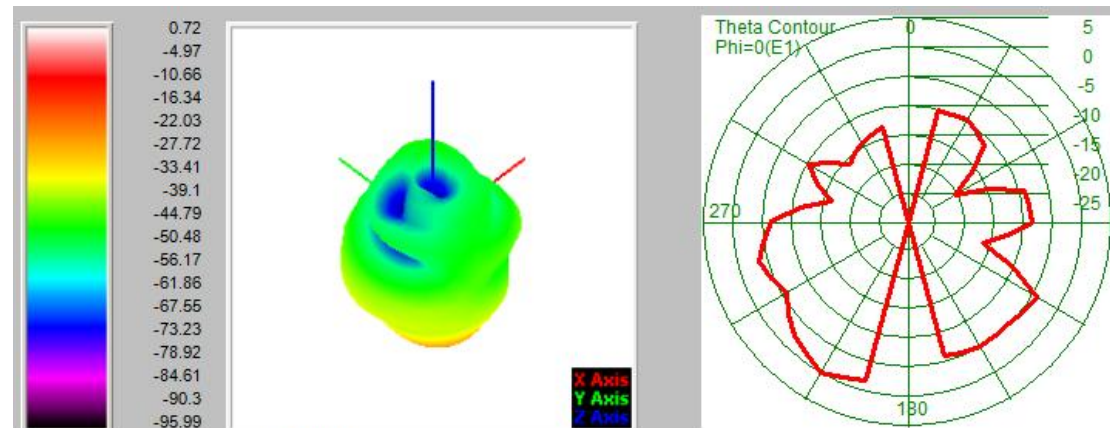
GSM850



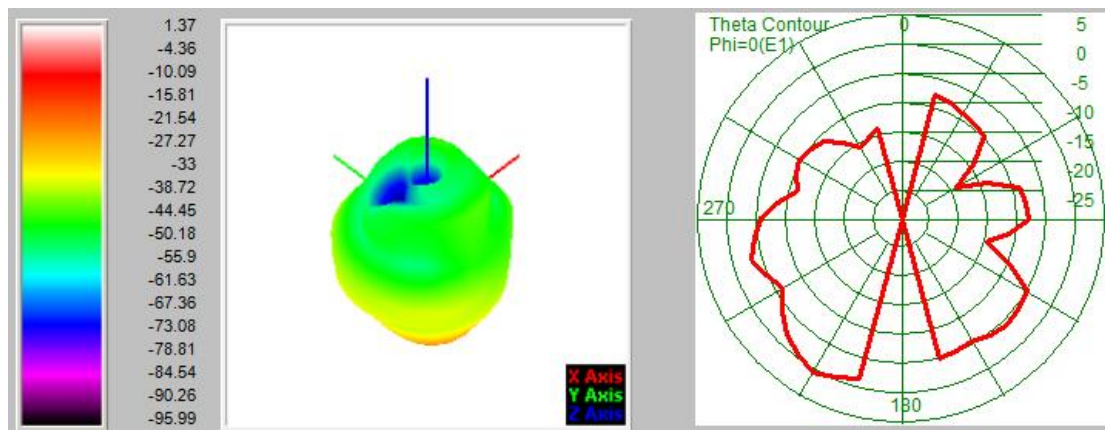
GSM900



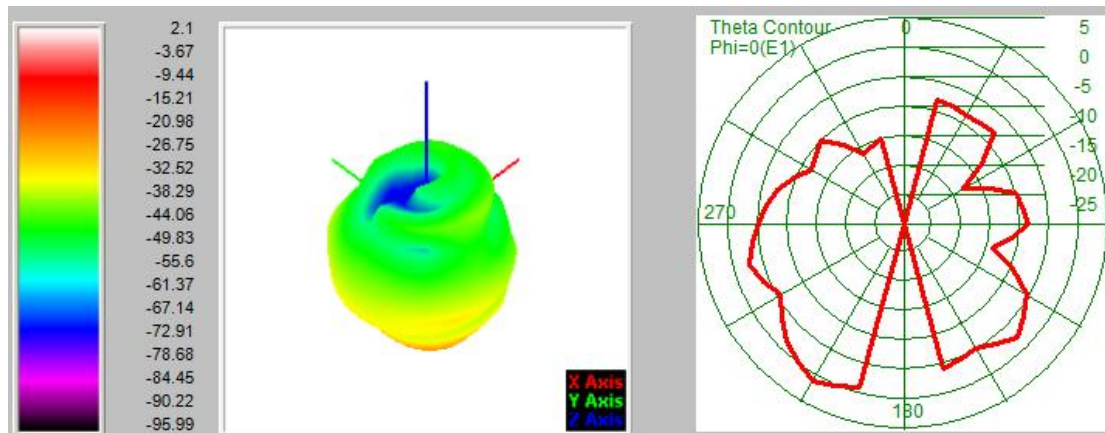
DSC1800



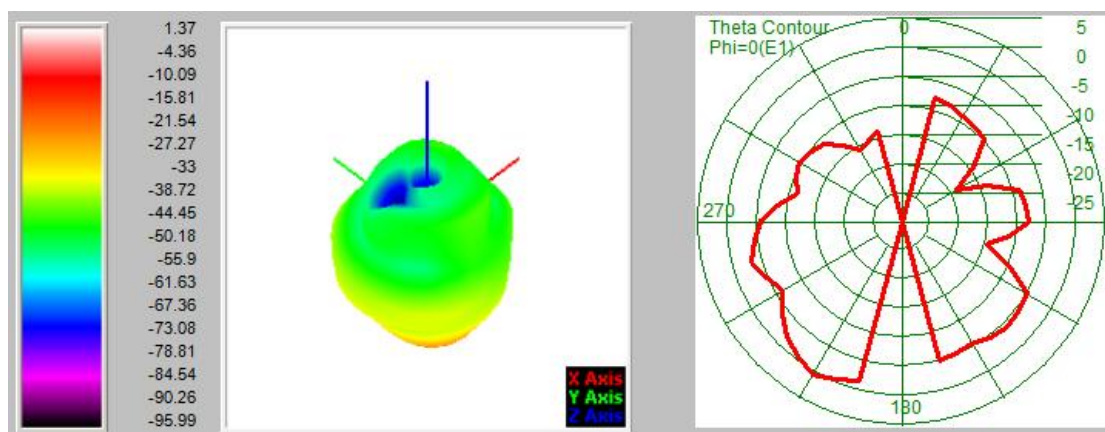
PCS1900



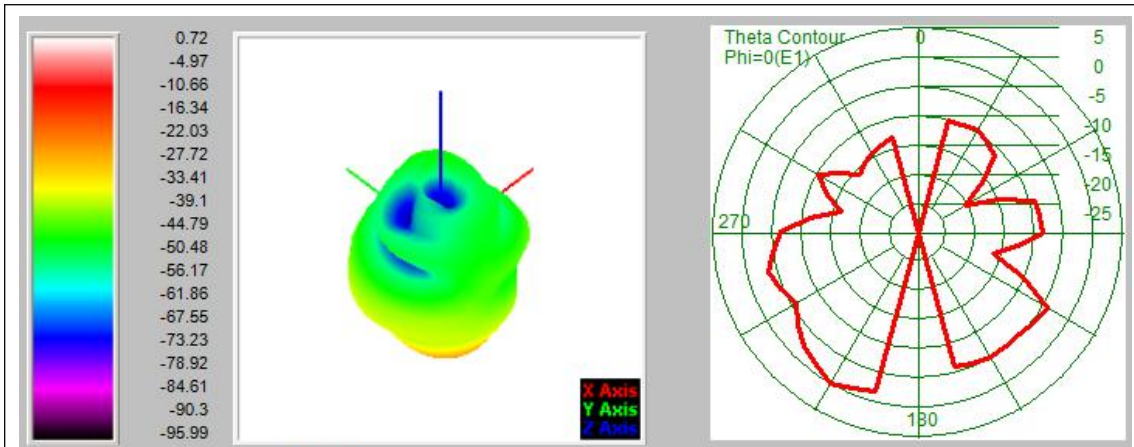
W1



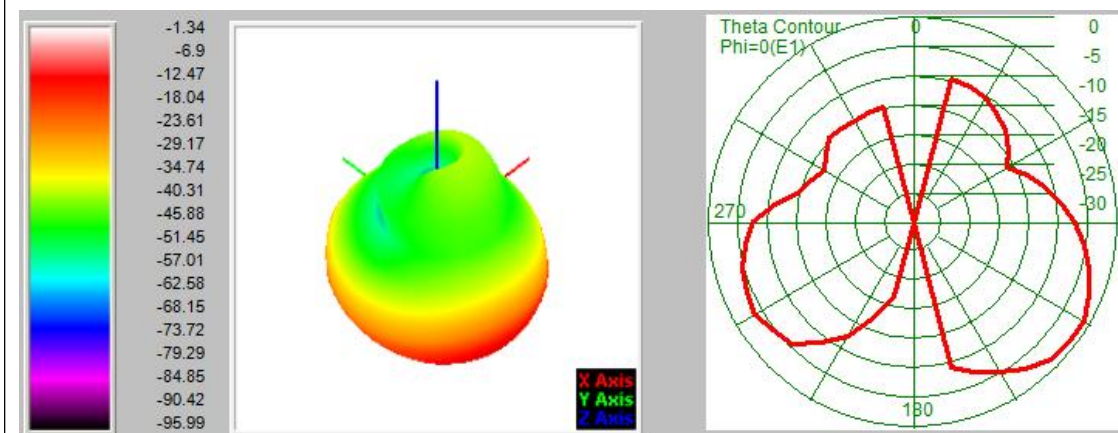
W2



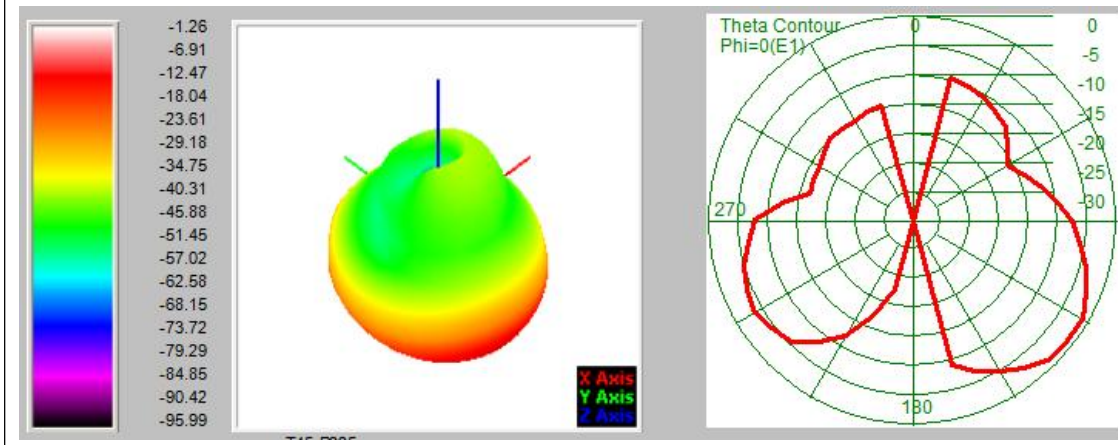
W4



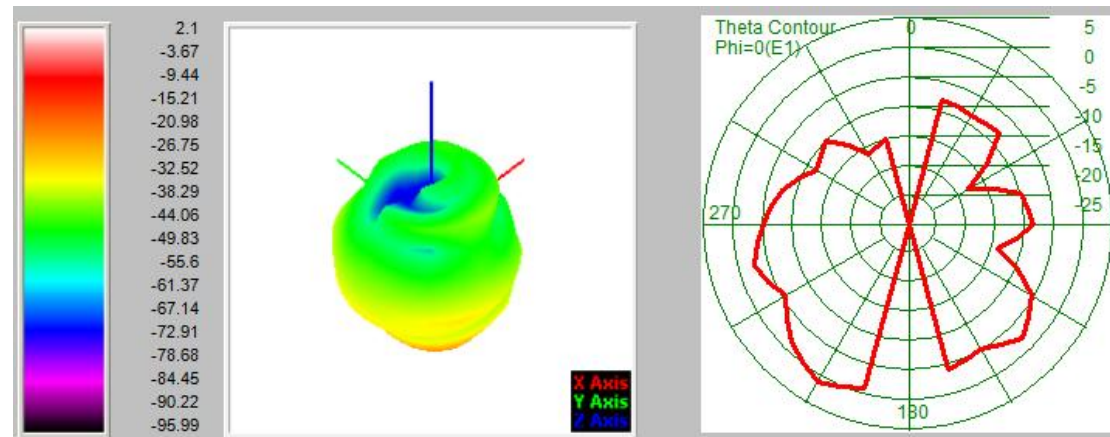
W5



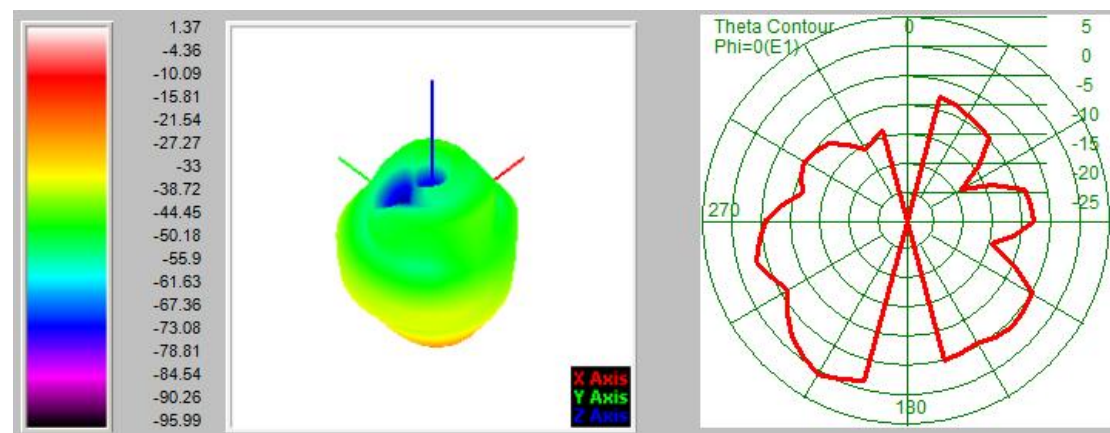
W8



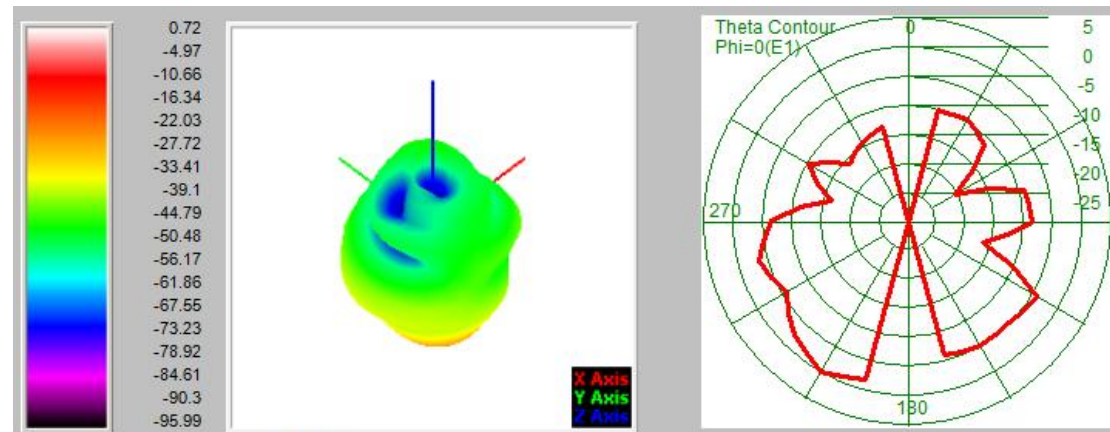
FDD-B1



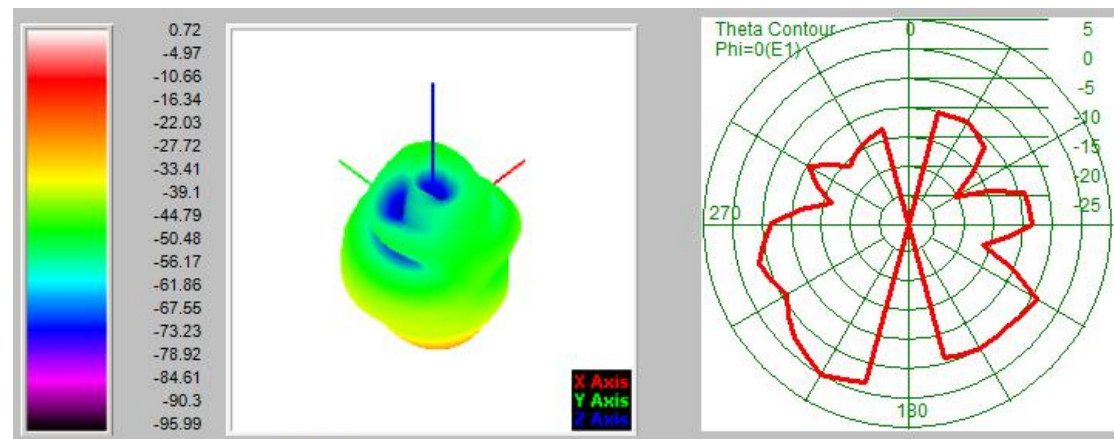
FDD-B2



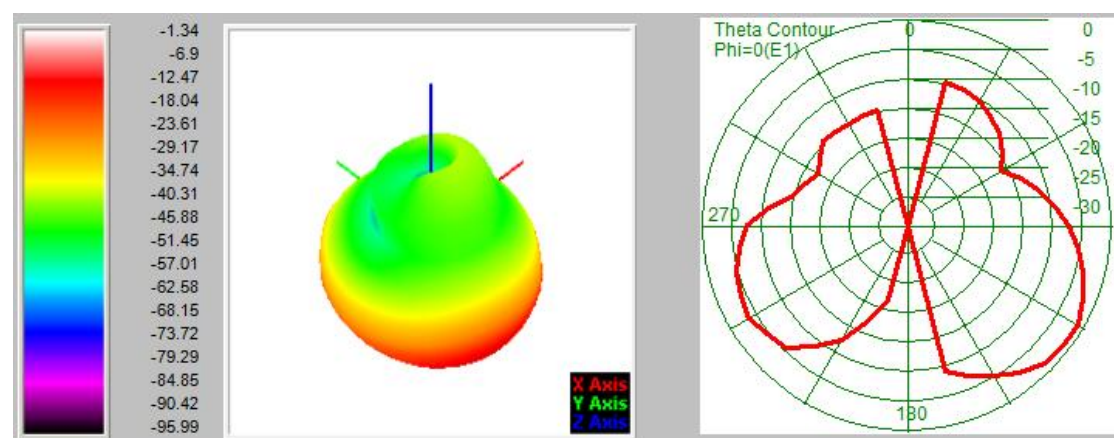
FDD-B3



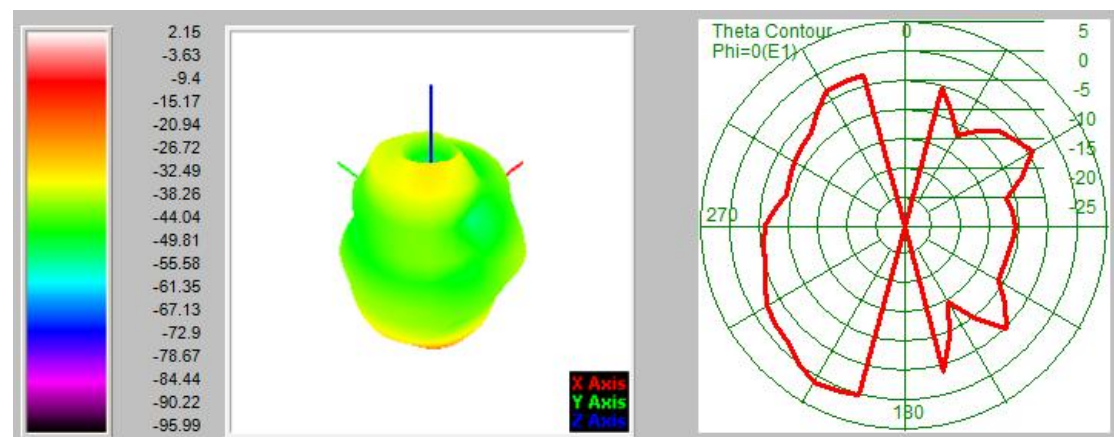
FDD-B4



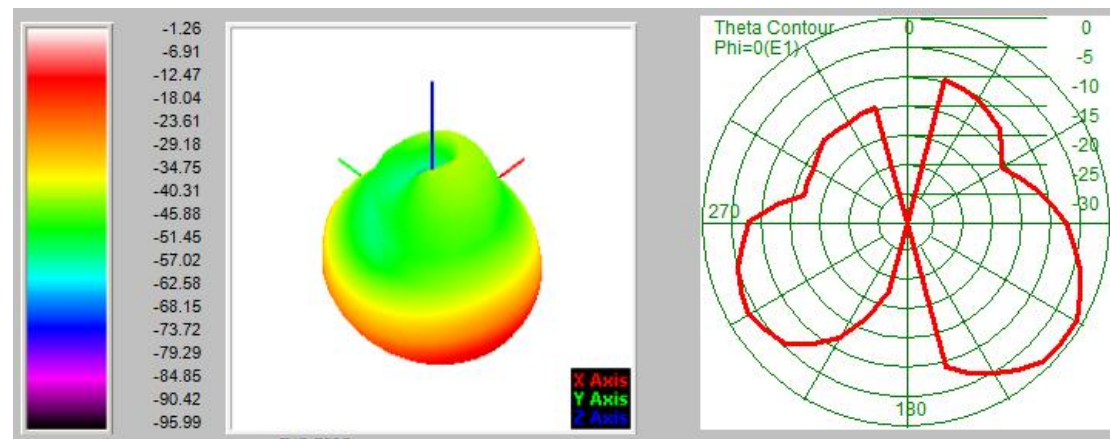
FDD-B5



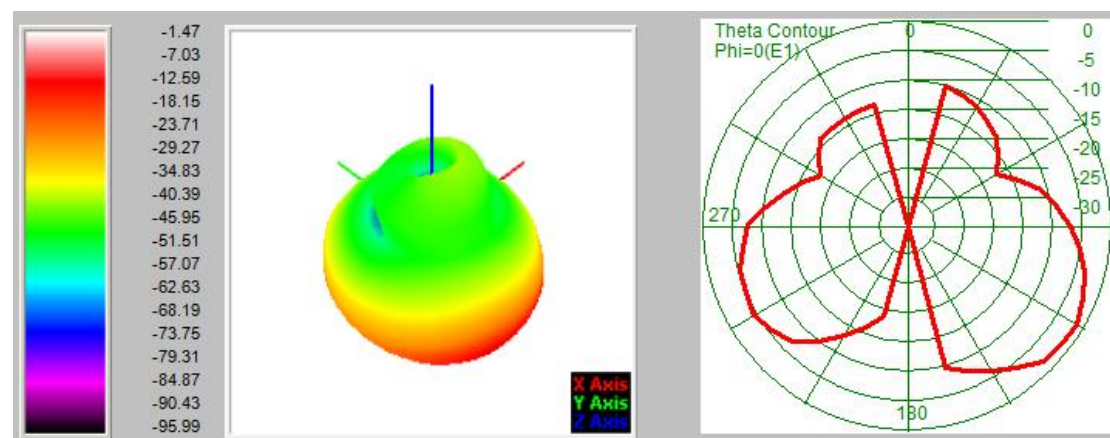
FDD-B7



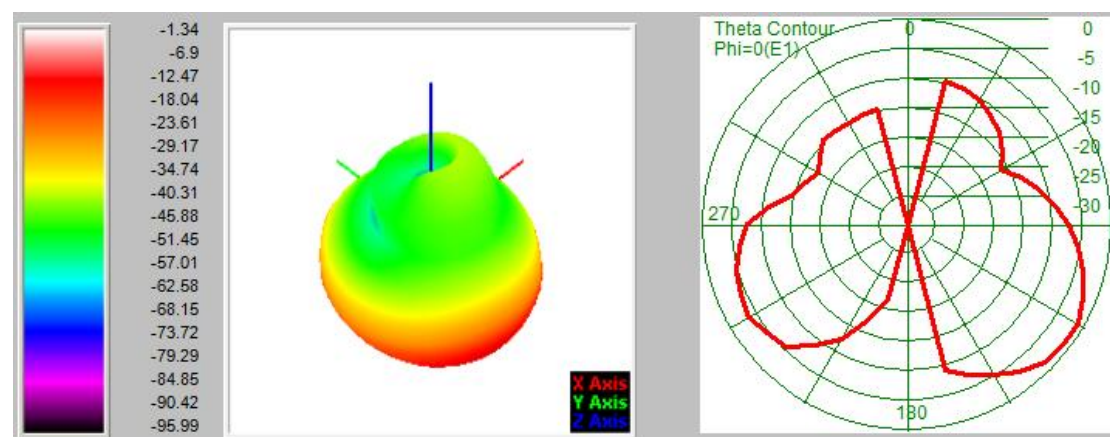
FDD-B8



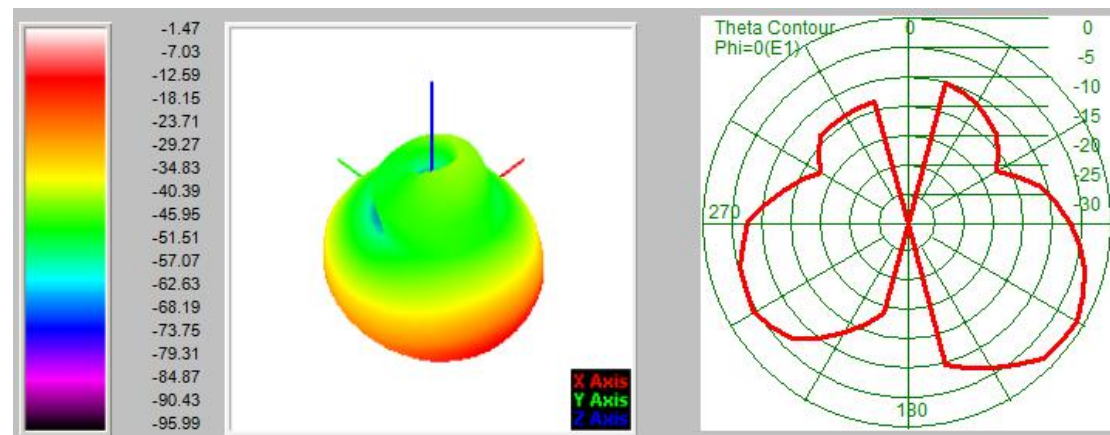
FDD-B12



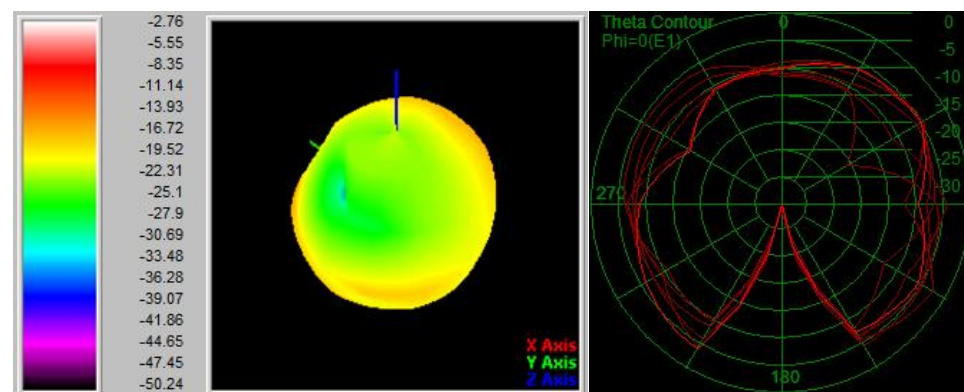
FDD-B13



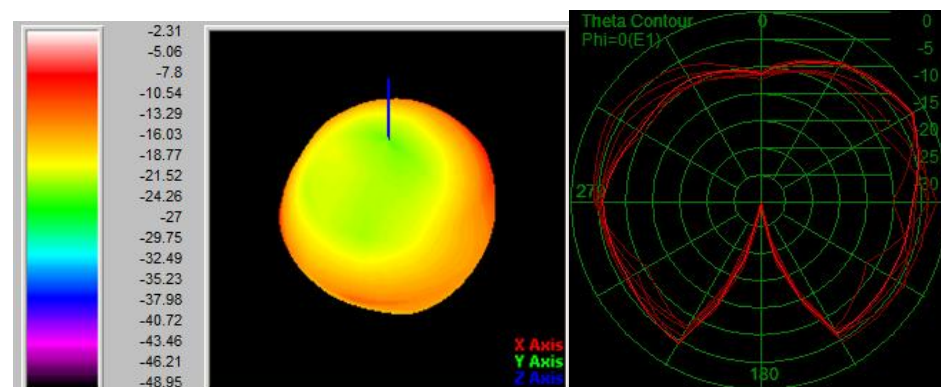
FDD-B17



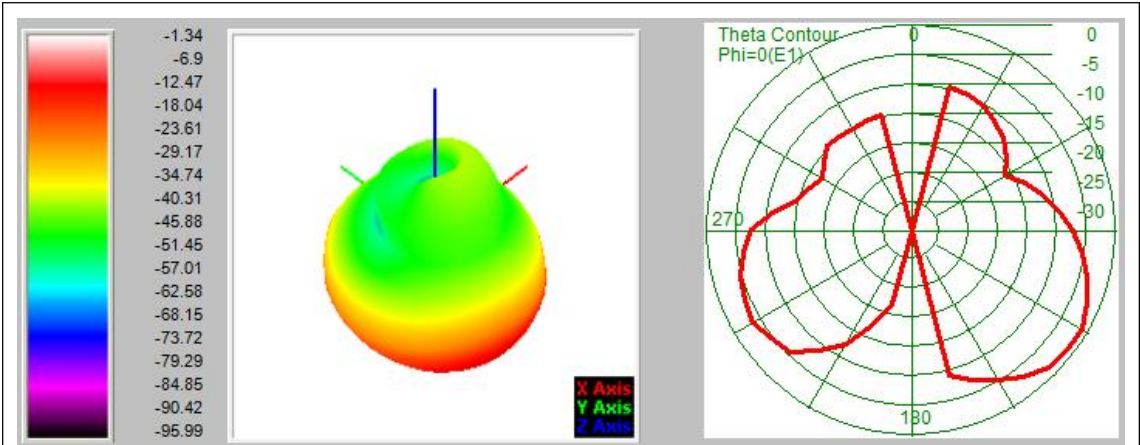
FDD-B18



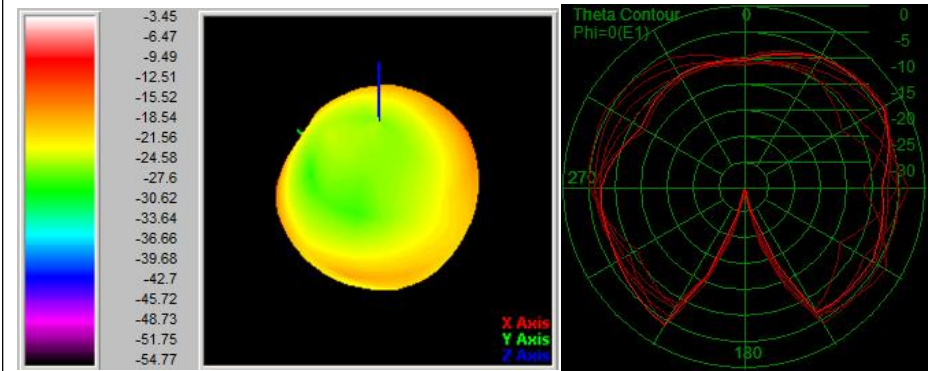
FDD-B19



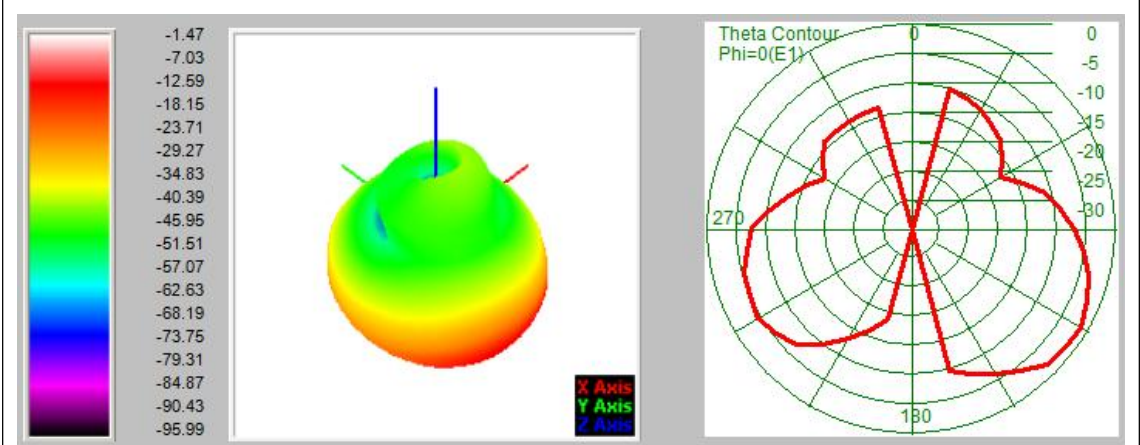
FDD-B20



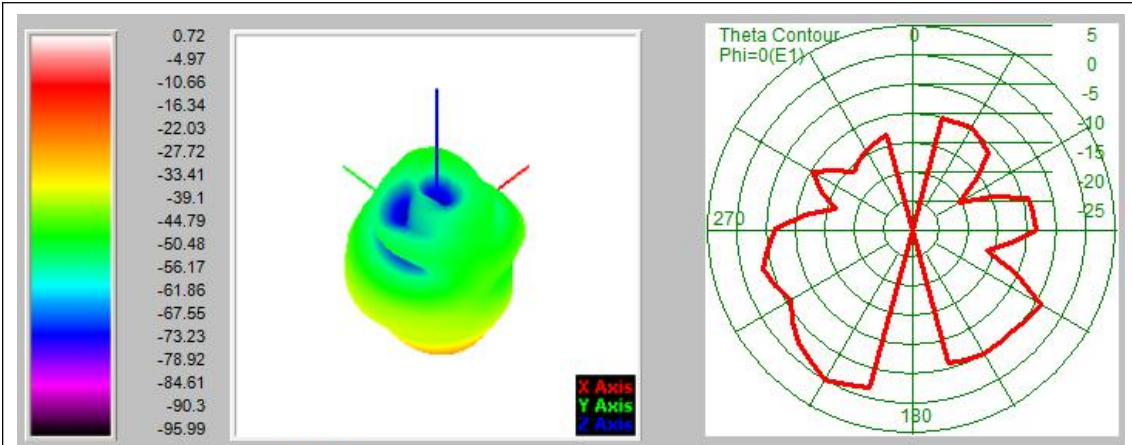
FDD-B26



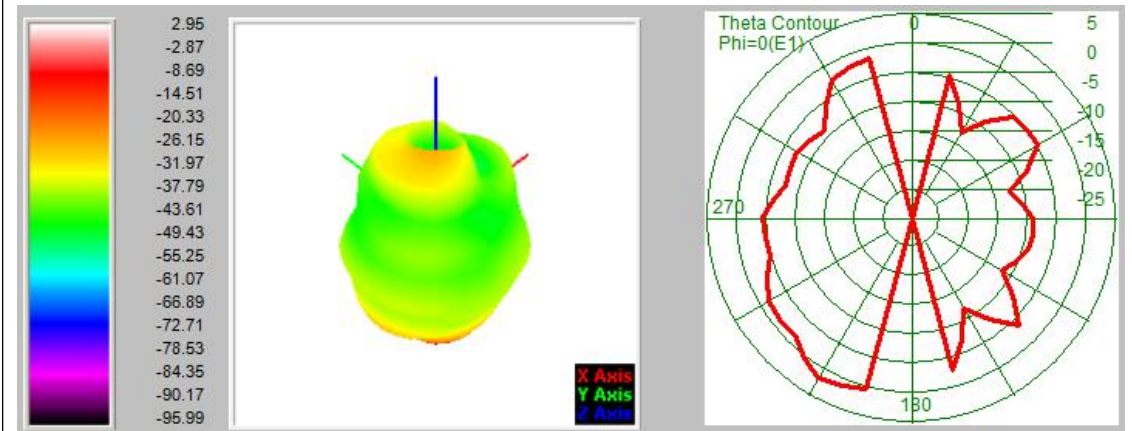
FDD-B28



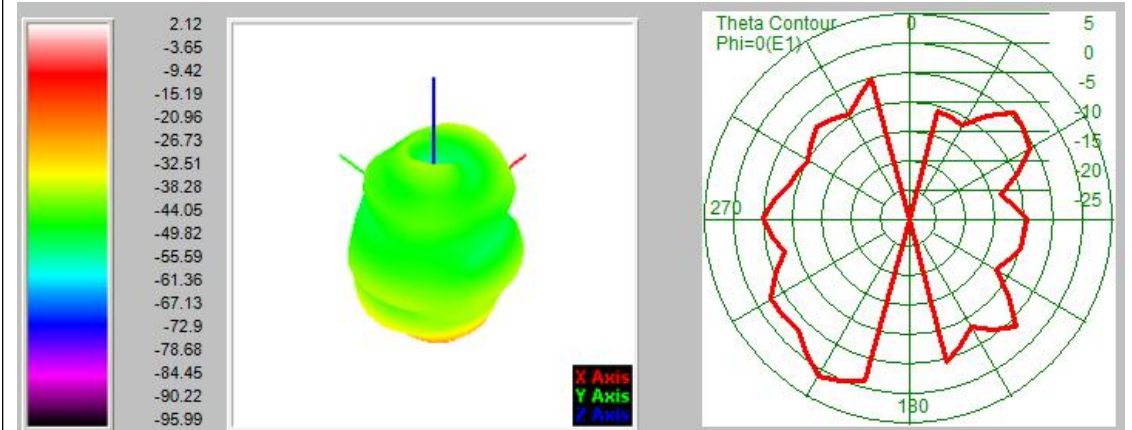
FDD-B66



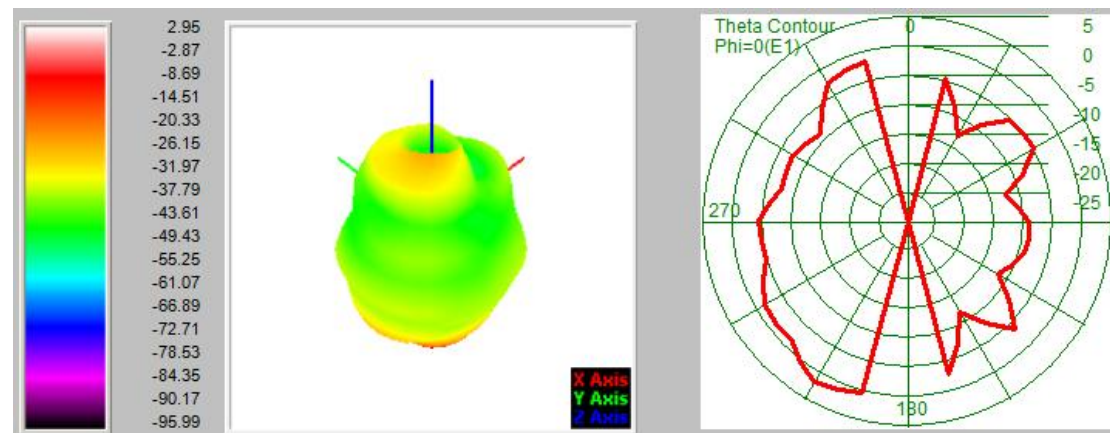
TDD-B38



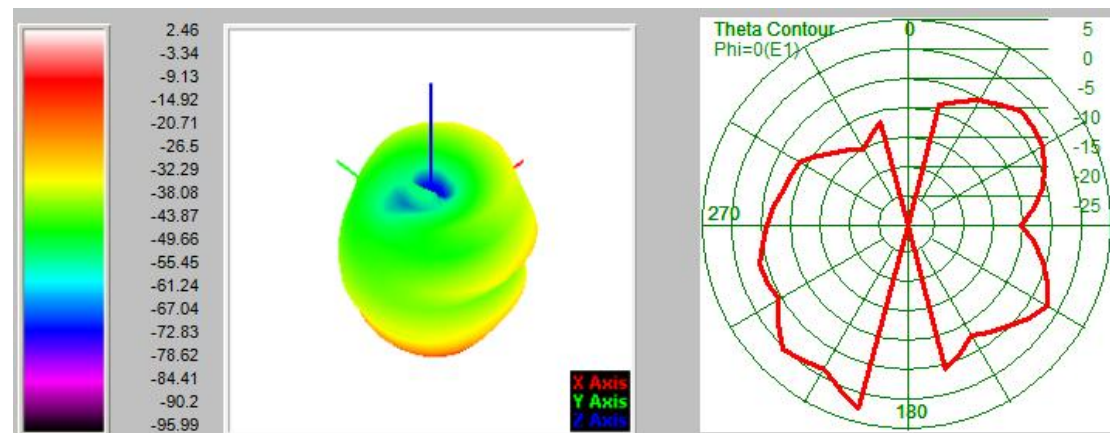
TDD-B40



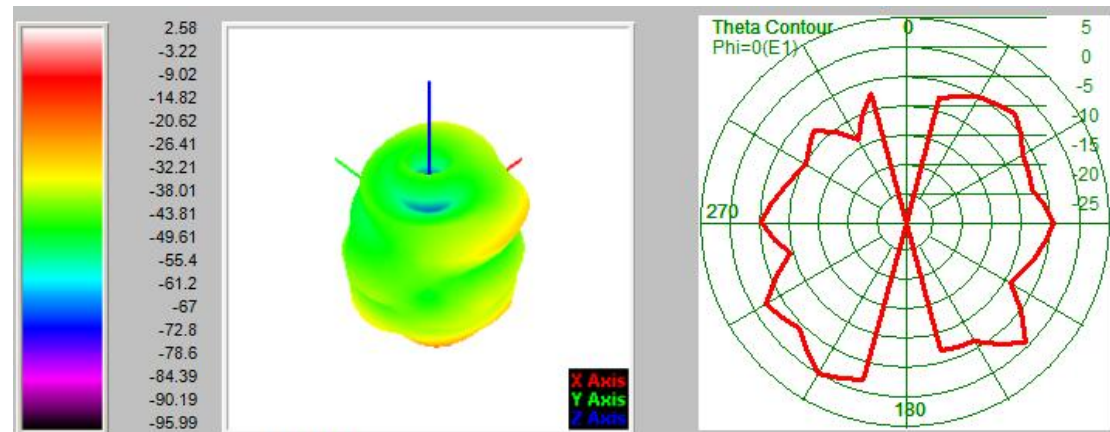
TDD-B41



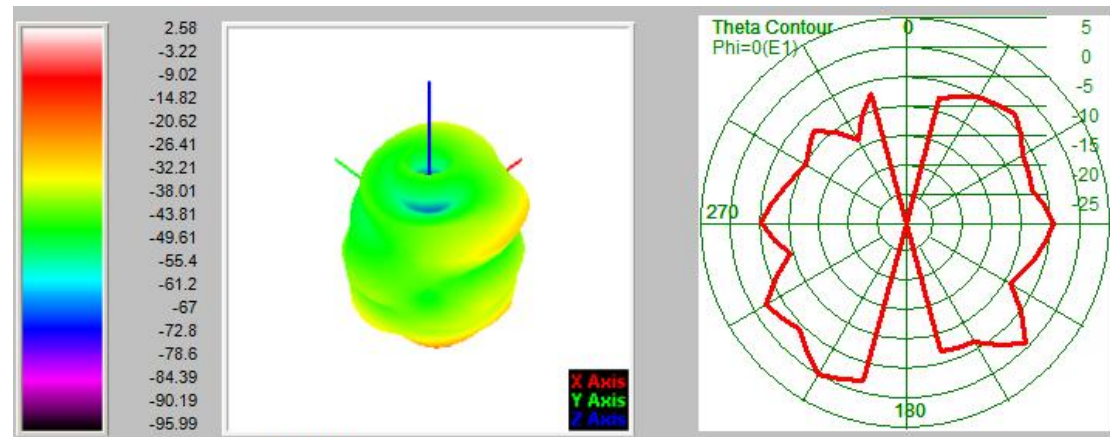
GPS



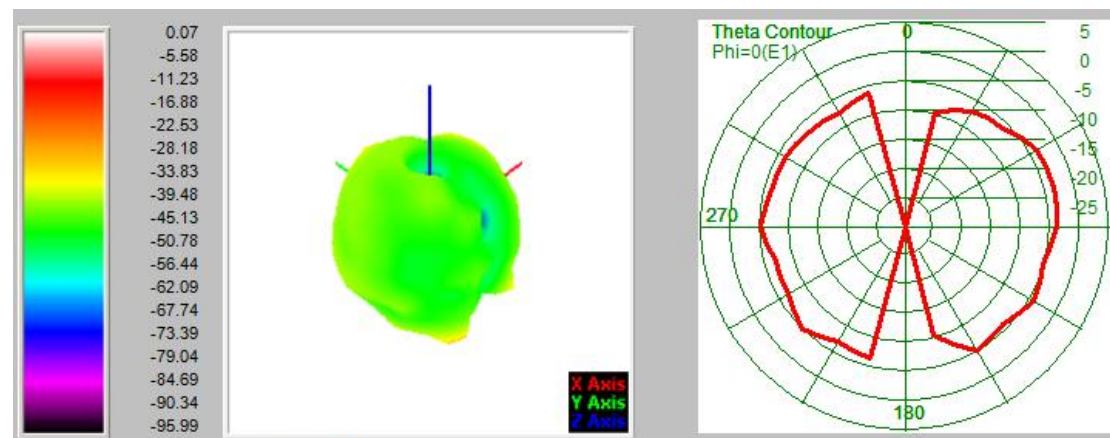
Bluetooth



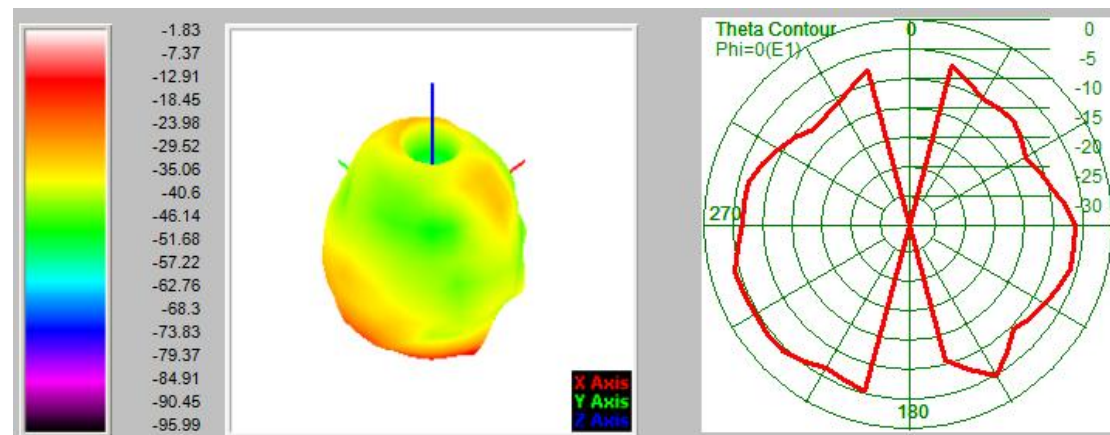
2.4G-WIFI



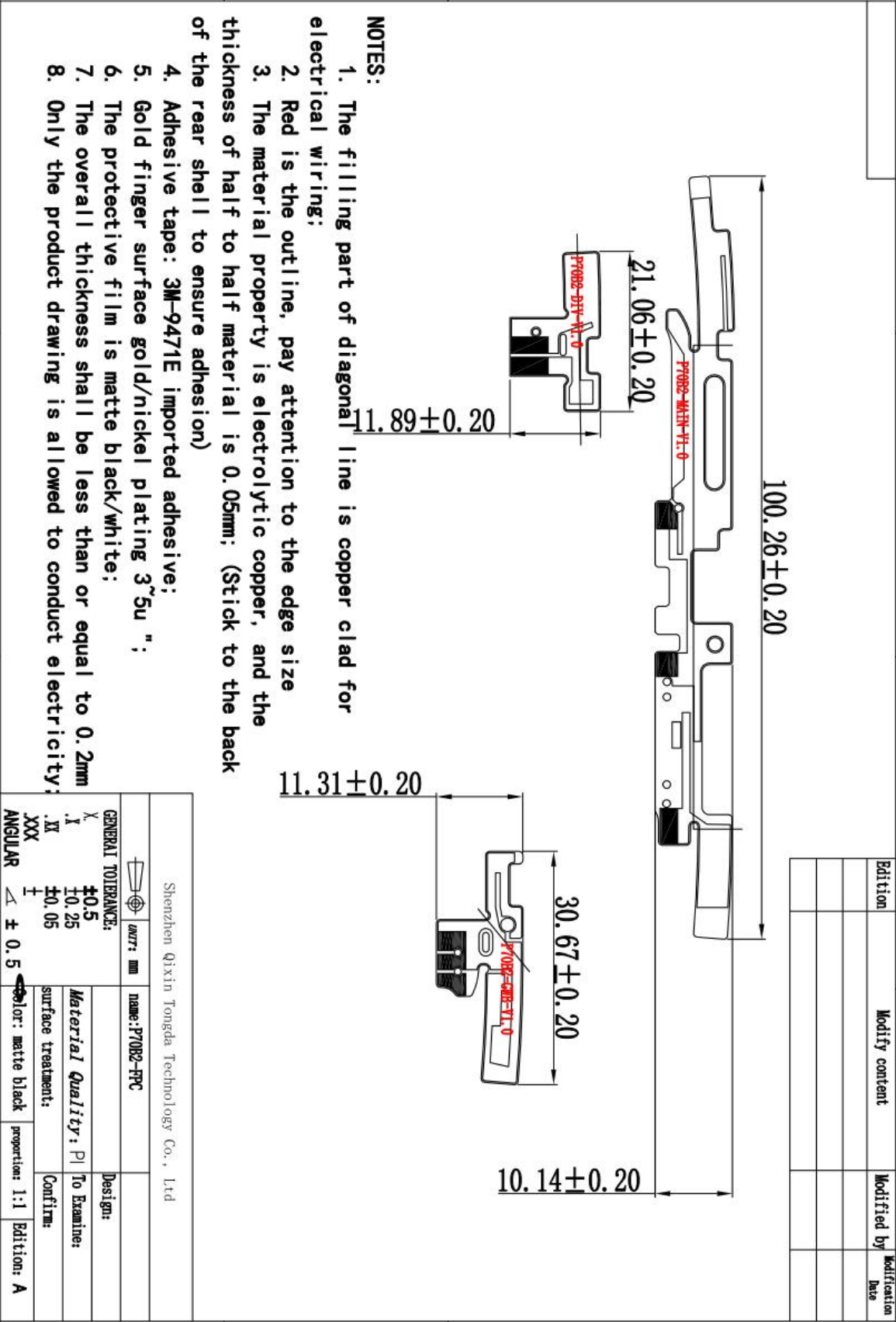
5.1G-WIFI



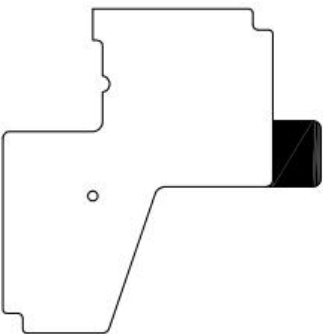
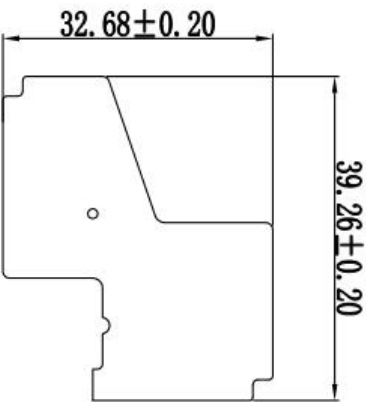
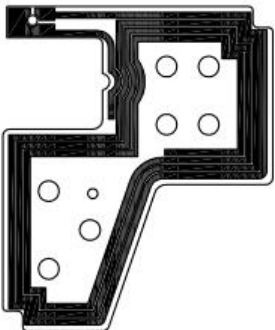
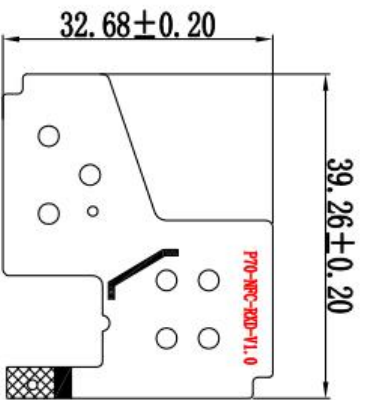
5.8G-WIFI



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:P70-B2-FPC		Design:	
GENERAL TOLERANCE:				Material Quality: P1 To Examine:	
λ	±0.5			Confirm:	
.λ	±0.25				
.XX	±0.05				
XXX	±				
ANGULAR	± 0.5°	Color: matte black		proportions: 1:1	Edition: A

8.Introduction to Antenna Information

P70	
Antenna type and frequency band	MAIN ANTENNA(FPC):2G/3G/4G DIV ANTENNA(FPC):2G/3G/4G GPS/WIFI/BT ANTENNA(FPC):L1/2.4GWIFI/5GW IFI/BT
Antenna materia	FPC