深圳市麒鑫通达科技有限公司

天线测试数据报告

客户：欧奇

项目：**S138**

G2/3/5/8+W1/2/4/5/8+

FDD-1/2/3/4/5/7/8/12/17/18/19/20/25/26/28/66+TDD-34/38/39/40/41+

NR-N1/N3/N7/N8/N28/N38/N41/N77/N78

工程：马工（**134 1821 8312**）

日期：**2024-12-09**

1. Test Project

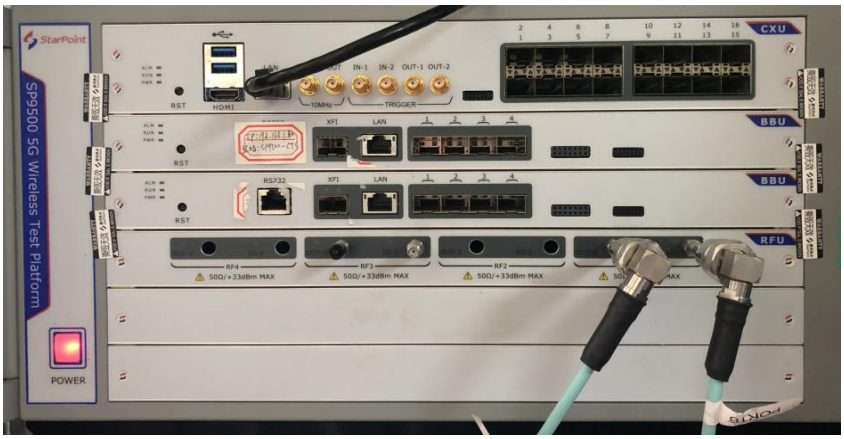
	Test Project	Equipment
1. S Parameter	1. Return Loss(RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2/3/4/5G)	1. power 2. level 3.TRP/TIS	Comprehensive Test: SP9500/CMW500/8960 Test Environment: Anechoic Chamber

2.Test Equipment

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

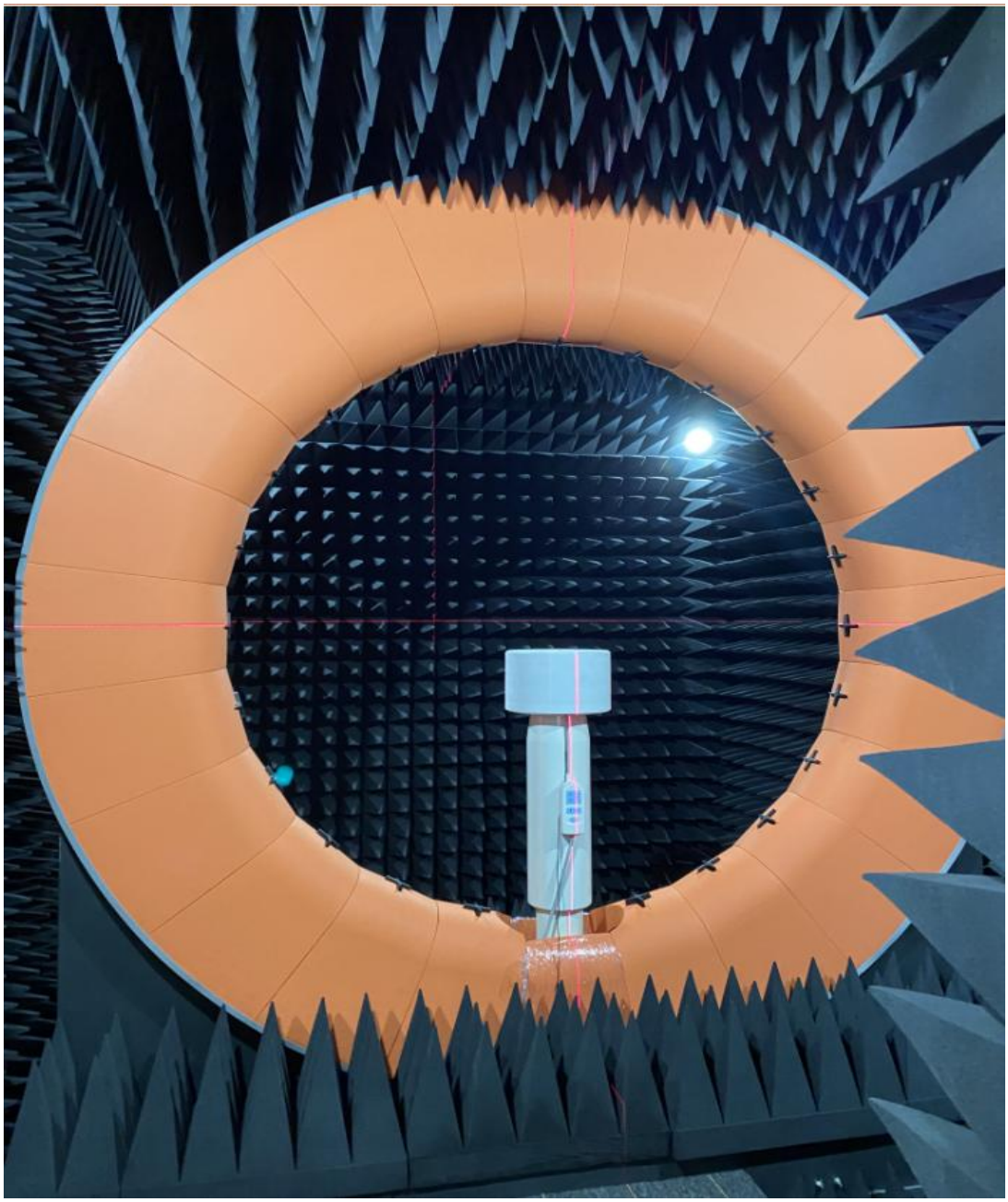
Agilent 8960 （2G/3GTest Equipment）

CMW 500 （2G/3G/4GTest Equipment）



SP9500 （5GTest Equipment）

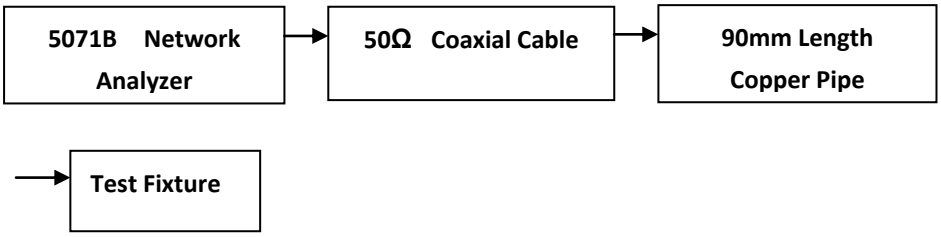
3. TestEnvironment



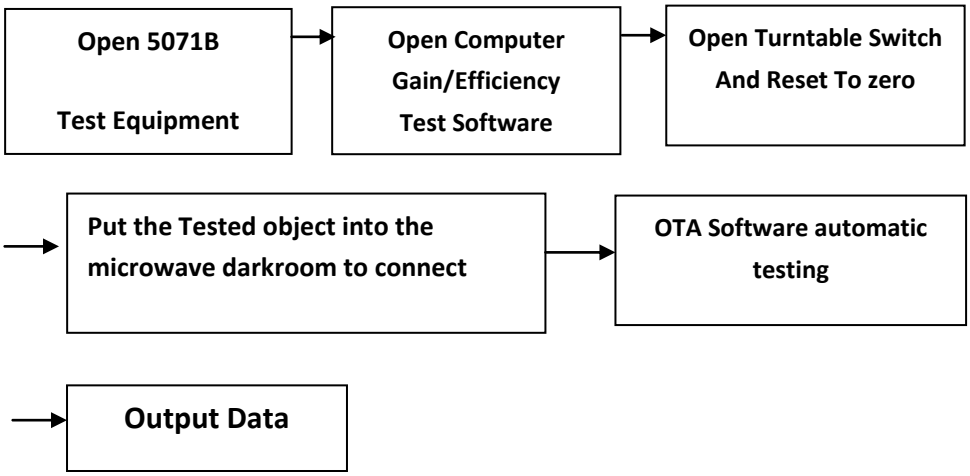
Microwave Anechoic Chamber

4.Test Steps

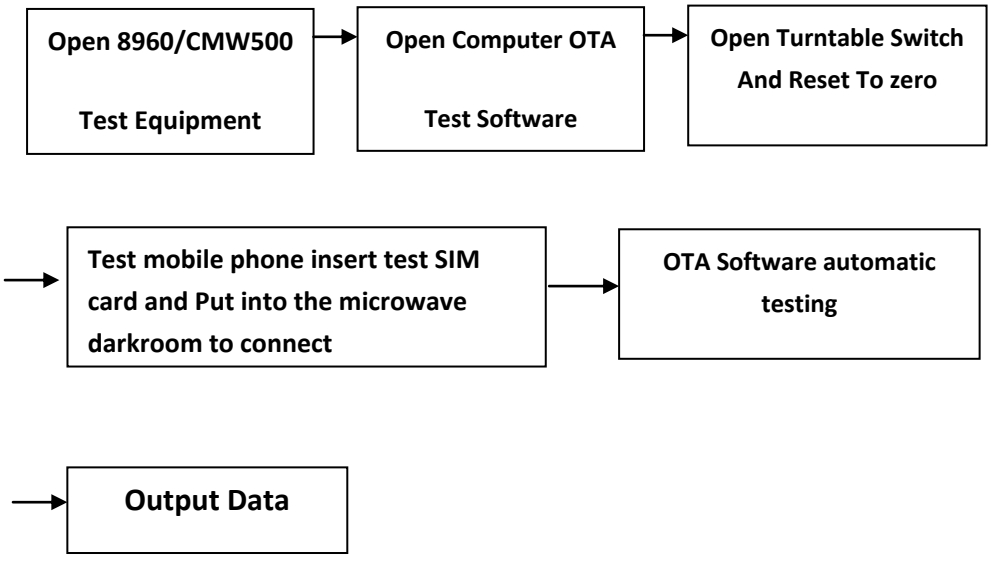
Passive VSWR/RL Test Steps:



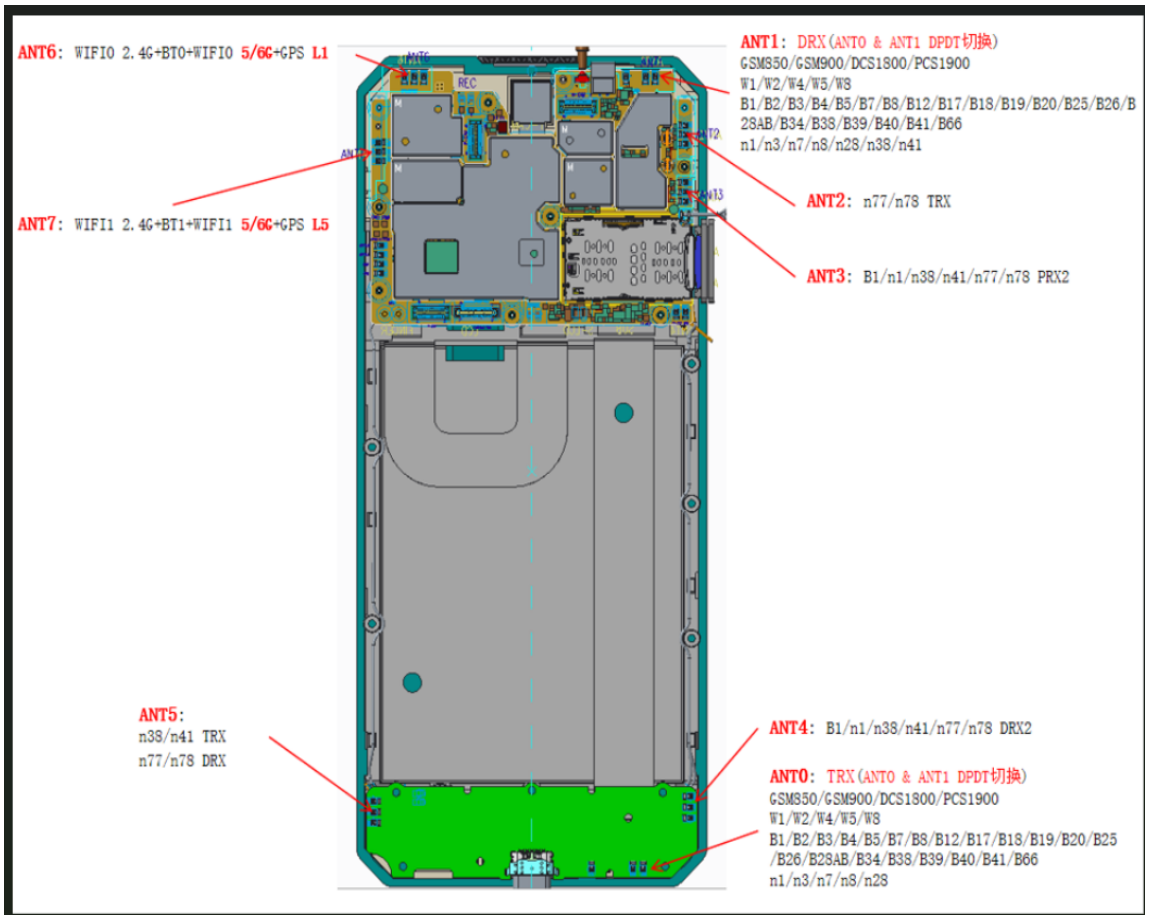
Gain/Efficiency Test Steps:



Active TRP/TIS Test Steps：



5. Antenna distribution diagram



6. Antenna size diagram

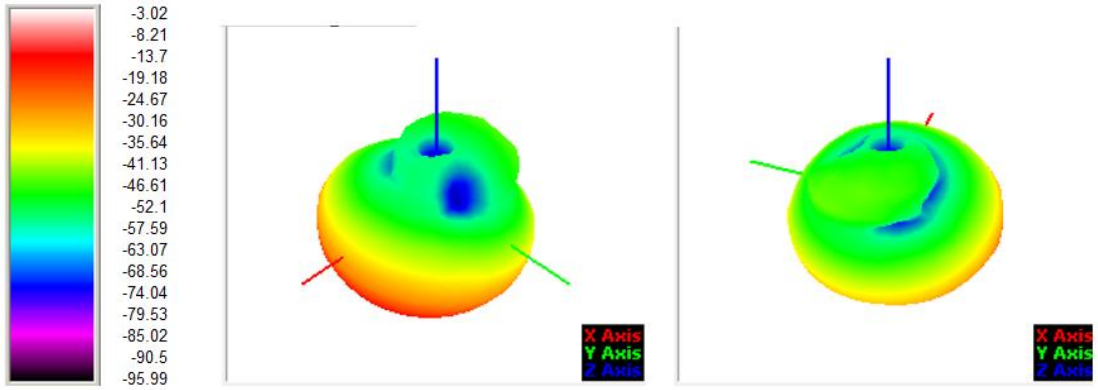
7.Antenna Gain

Band	Max Gain	Band	Max Gain
GSM850 (824-894MHZ)	-3.02	LTE-B40 (2300-2400MHZ)	0.6
GSM900 (880-960MHZ)	-2.57	LTE-B41 (2496-2690MHZ)	1.04
DCS1800 (1710-1880MHZ)	-0.65	NR-N1(1920-2170MHZ)	0.13
PCS1900 (1850-1990MHZ)	-0.3	NR-N3(1710-1880MHZ)	-0.65
WCDMA1 (1920-2170MHZ)	0.13	NR-N7(2500-2690MHZ)	1.04

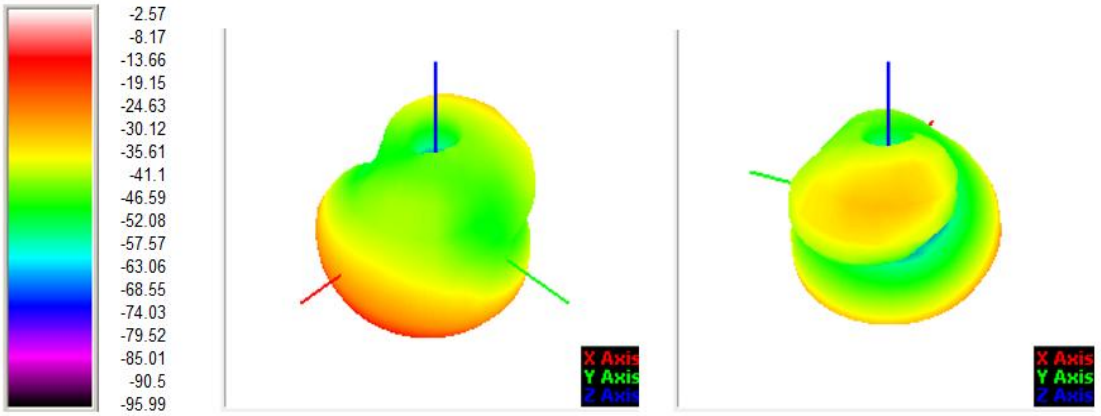
WCDMA2 (1950-1990MHZ)	-0.3	**NR-N8(880-960MHZ)**	-2.57
WCDMA4 (1710-2155MHZ)	-0.65	**NR-N28(703-803MHZ)**	-3.27
WCDMA5 (824-894MHZ)	-3.02	**NR-N38(2570-2620MHZ)**	1.04
WCDMA8 (880-960MHZ)	-2.57	**NR-N41(2496-2690MHZ)**	1.04
LTE-B1 (1920-2170MHZ)	0.13	**NR-N77(3300-4200MHZ)**	0.82
LTE-B2 (1850-1990MHZ)	-0.3	**NR-N78(3300-3800MHZ)**	0.47
LTE-B3 (1710-1880MHZ)	-0.65	**Bluetooth (2400-2483.5MHZ)**	0.75
LTE-B4 (1710-2155MHZ)	-0.65	**WIFI-2.4G (2400-2495MHZ)**	0.75
LTE-B5 (824-894MHZ)	-3.02	**WIFI-5.2G (5.17-5.33GHZ)**	-1.84
LTE-B7 (2500-2690MHZ)	1.04	**WIFI-5.8G (5.490-5.835GHZ)**	-1.33
LTE-B8 (880-960MHZ)	-2.57	**GPS -L1(1575.4MHZ)**	0.35
LTE-B12 (699-746MHZ)	-3.27	**GPS -L5(1176.4MHZ)**	-0.87
LTE-B17 (704-746MHZ)	-3.27		
LTE-B18 (815-875MHZ)	-3.02		
LTE-B19 (830-8790MHZ)	-3.02		
LTE-B20 (791-862MHZ)	-3.02		
LTE-B25 (1850-1995MHZ)	-0.3		
LTE-B26 (814-894MHZ)	-3.02		
LTE-B28 (703-803MHZ)	-3.27		
LTE-B66 (1715-2170MHZ)	-0.65		
LTE-B34 (2010-2025MHZ)	0.13		
LTE-B38 (2570-2620MHZ)	1.04		
LTE-B39 (1880-1920MHZ)	-0.3		

8.2D&3D Lobe Diagram

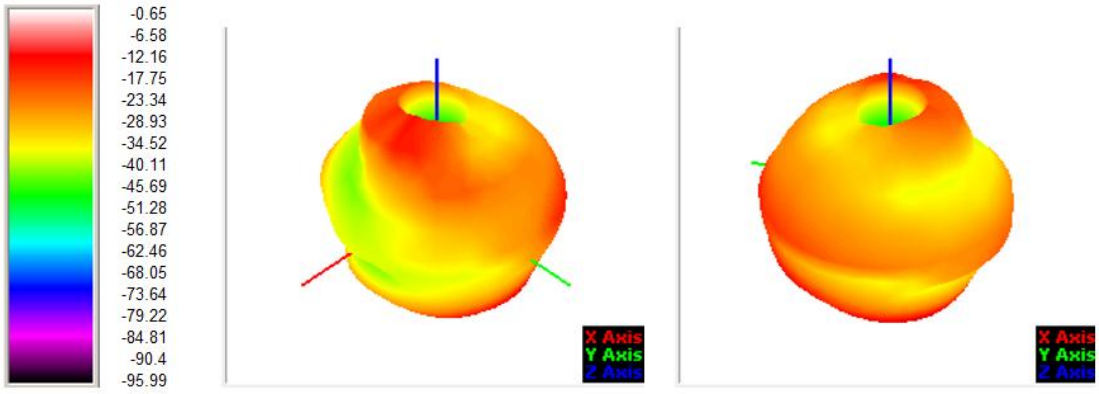
GSM850



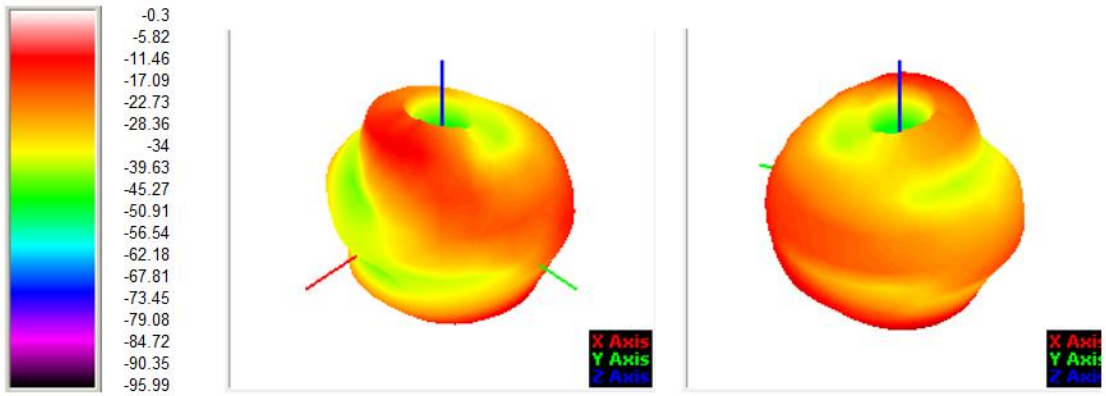
GSM900



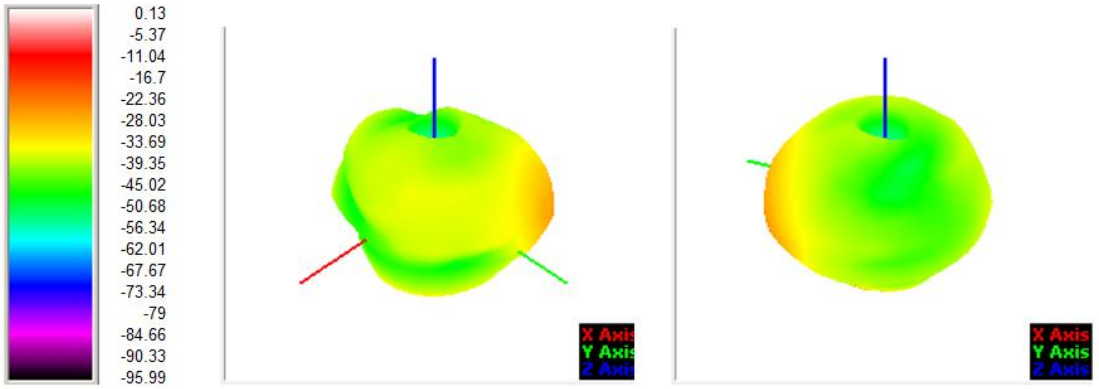
DSC1800



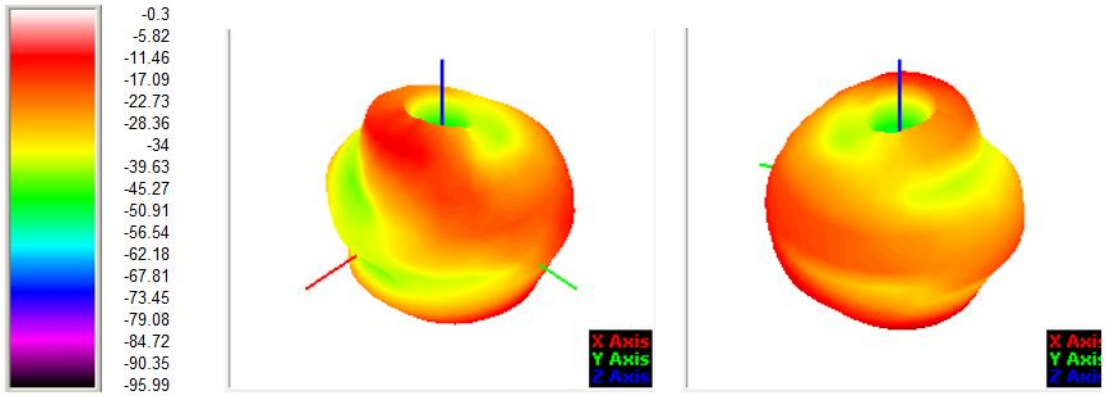
PCS1900



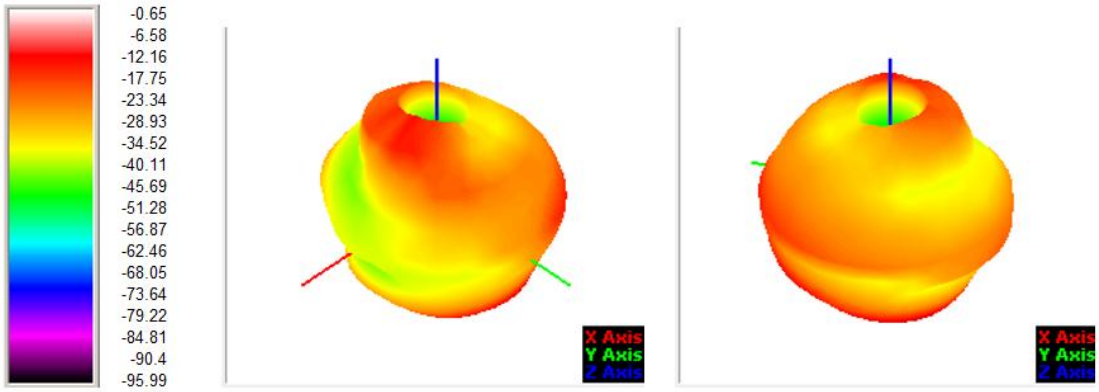
W1



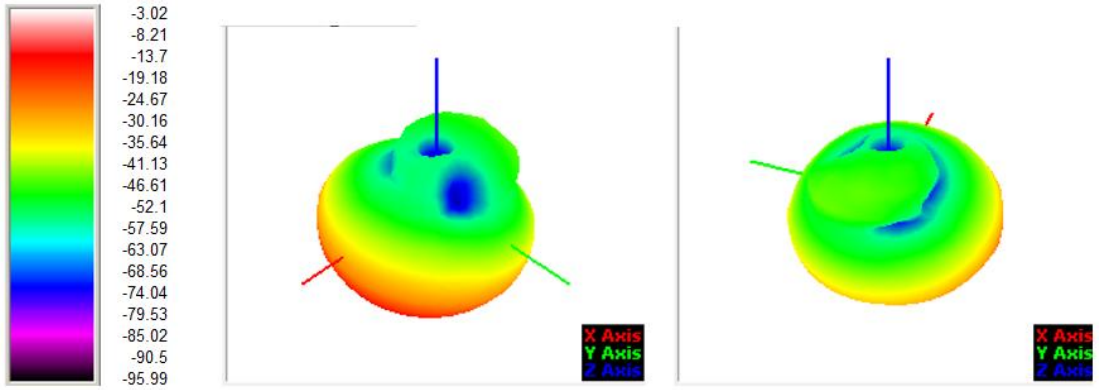
W2



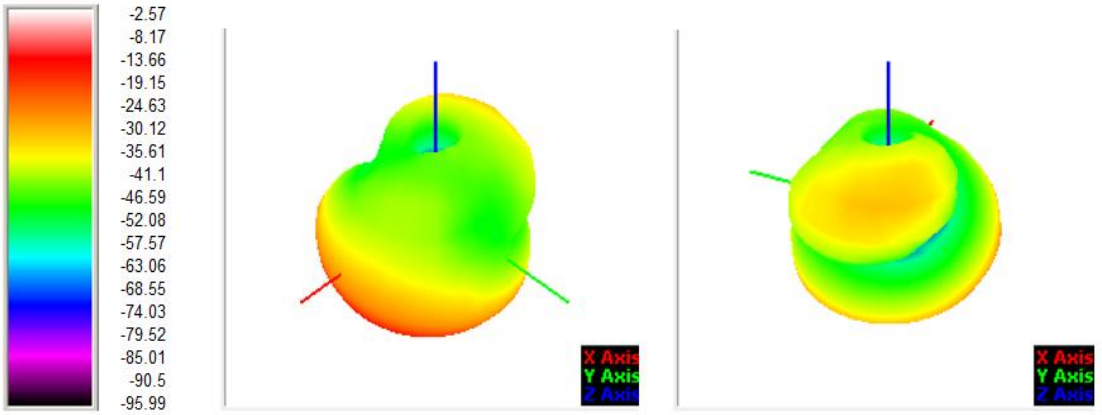
W4


-0.65
-6.58
-12.16
-17.75
-23.34
-28.93
-34.52
-40.11
-45.69
-51.28
-56.87
-62.46
-68.05
-73.64
-79.22
-84.81
-90.4
-95.99
X Axis
Y Axis
Z Axis
X Axis
Y Axis
Z Axis

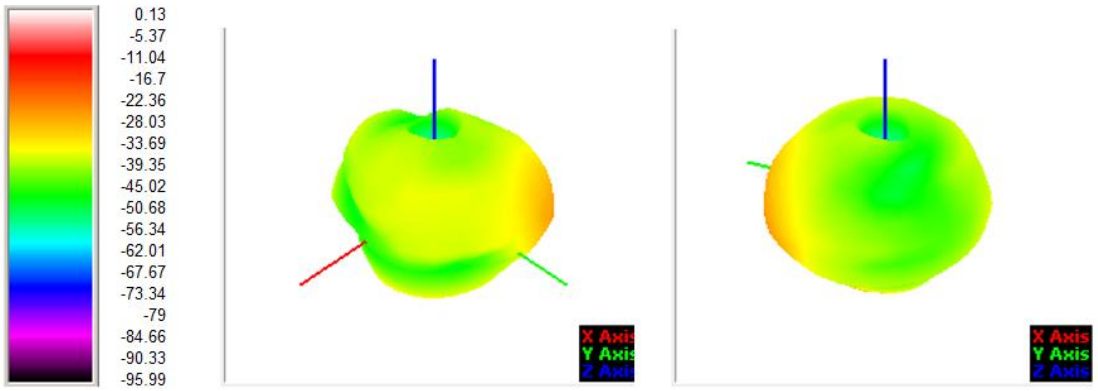
W5


-3.02
-8.21
-13.7
-19.18
-24.67
-30.16
-35.64
-41.13
-46.61
-52.1
-57.59
-63.07
-68.56
-74.04
-79.53
-85.02
-90.5
-95.99
X Axis
Y Axis
Z Axis
X Axis
Y Axis
Z Axis

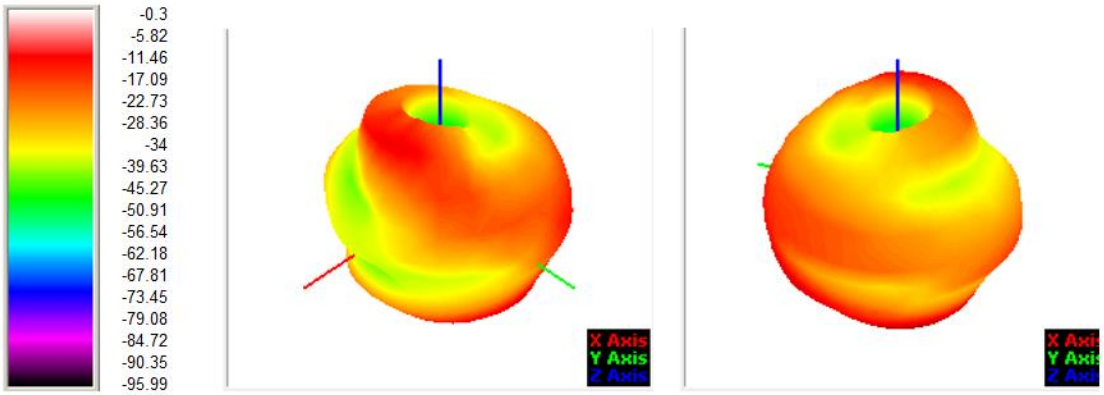
W8


-2.57
-8.17
-13.66
-19.15
-24.63
-30.12
-35.61
-41.1
-46.59
-52.08
-57.57
-63.06
-68.55
-74.03
-79.52
-85.01
-90.5
-95.99
X Axis
Y Axis
Z Axis
X Axis
Y Axis
Z Axis

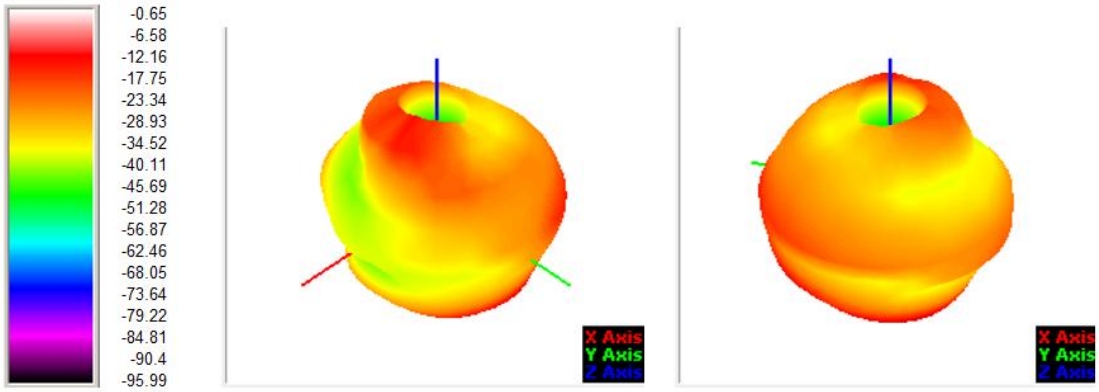
FDD-B1



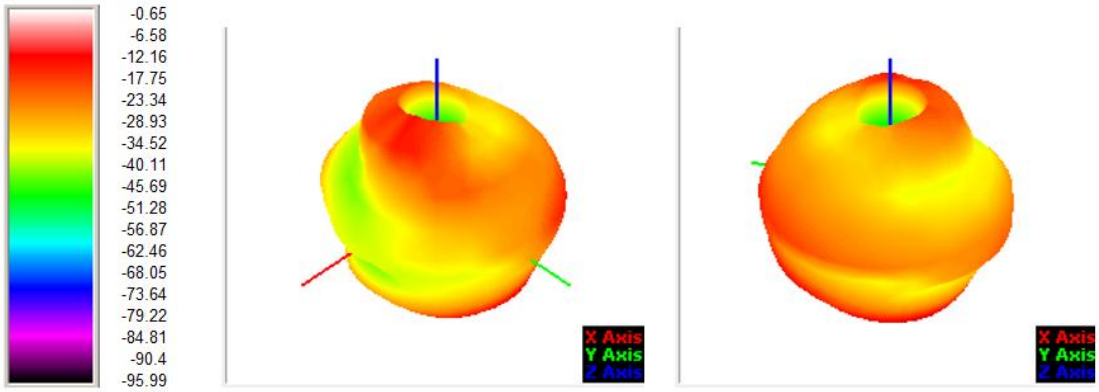
FDD-B2



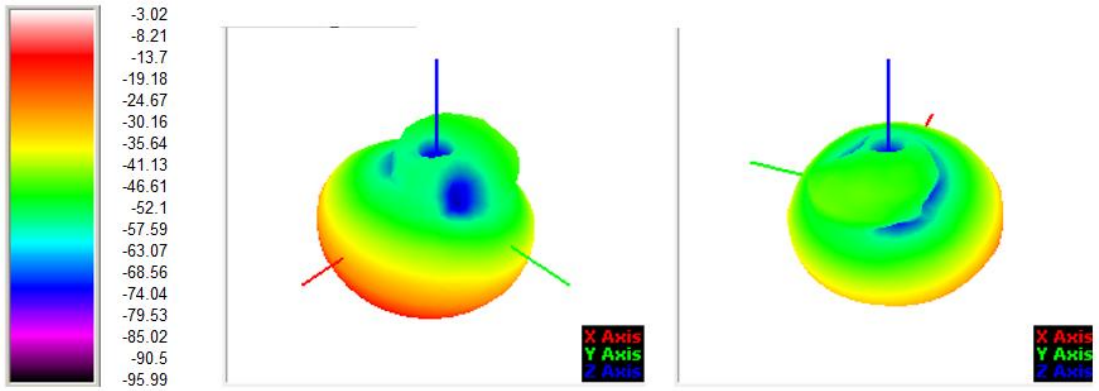
FDD-B3



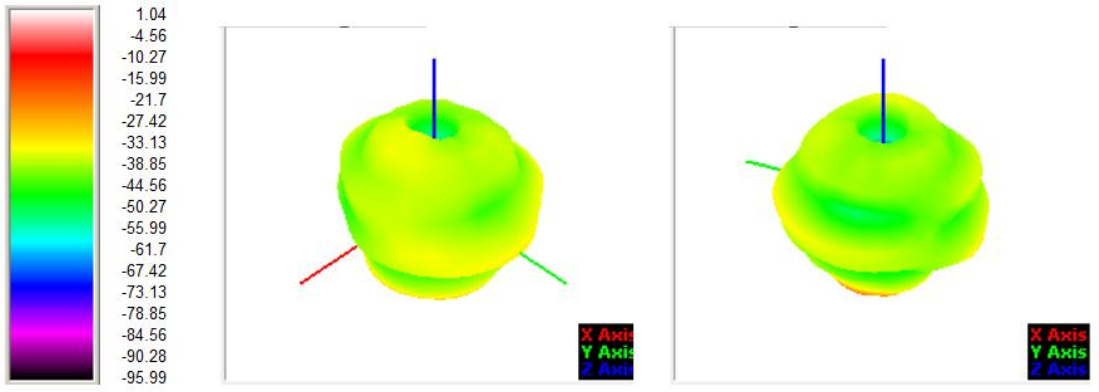
FDD-B4



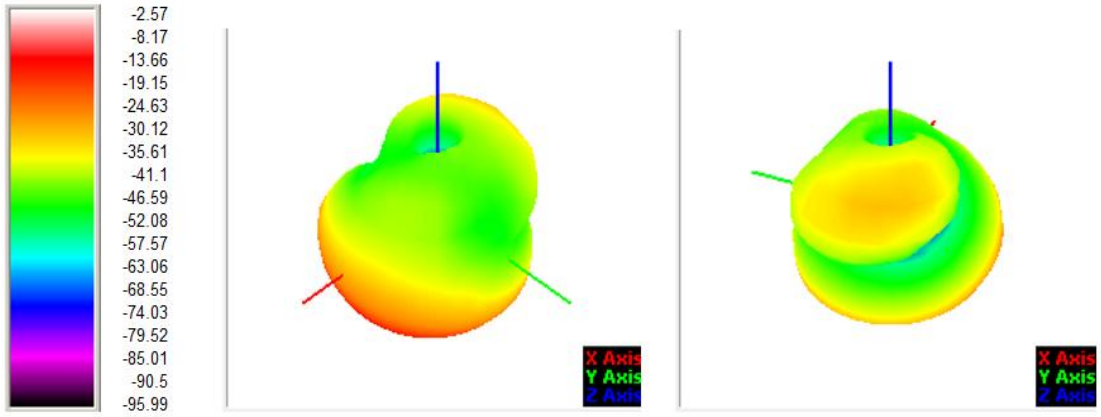
FDD-B5



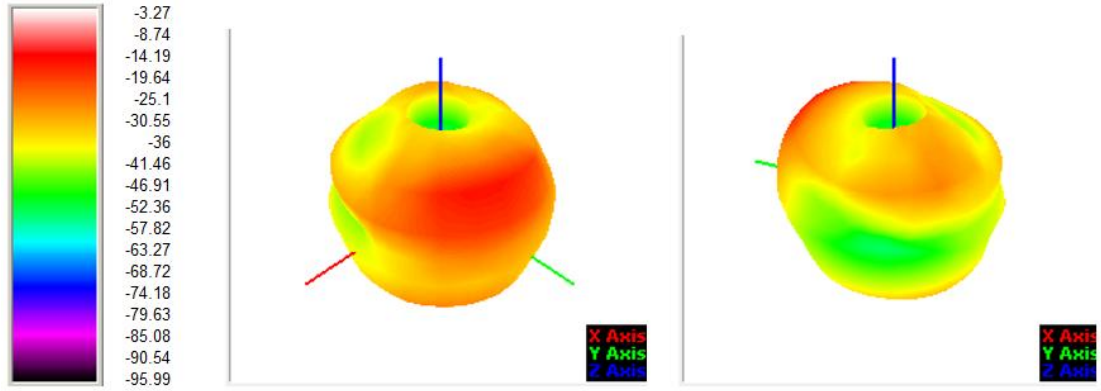
FDD-B7



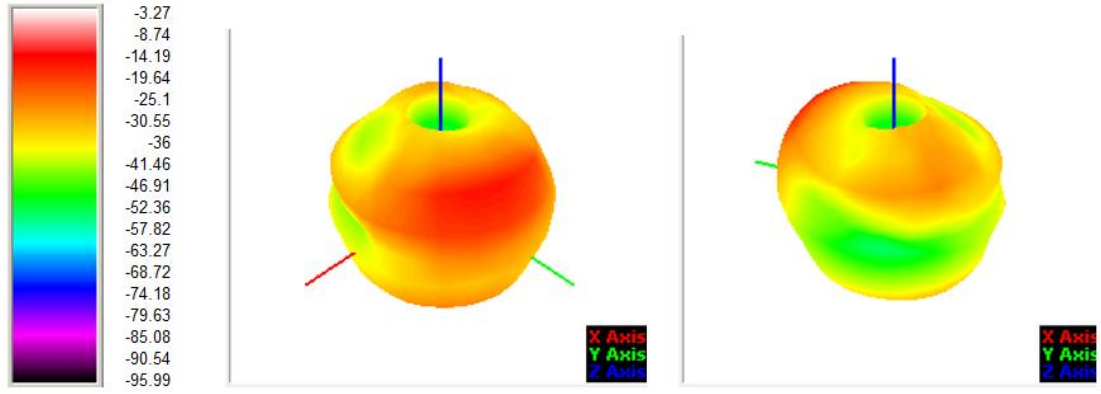
FDD-B8



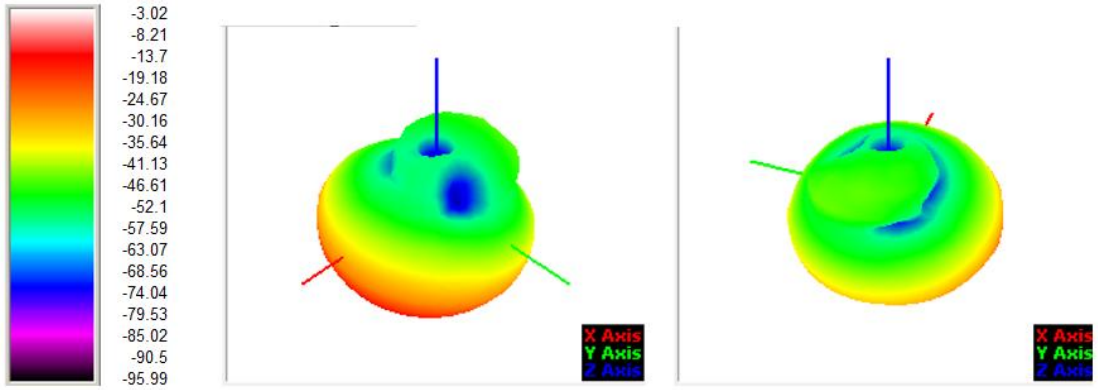
FDD-B12



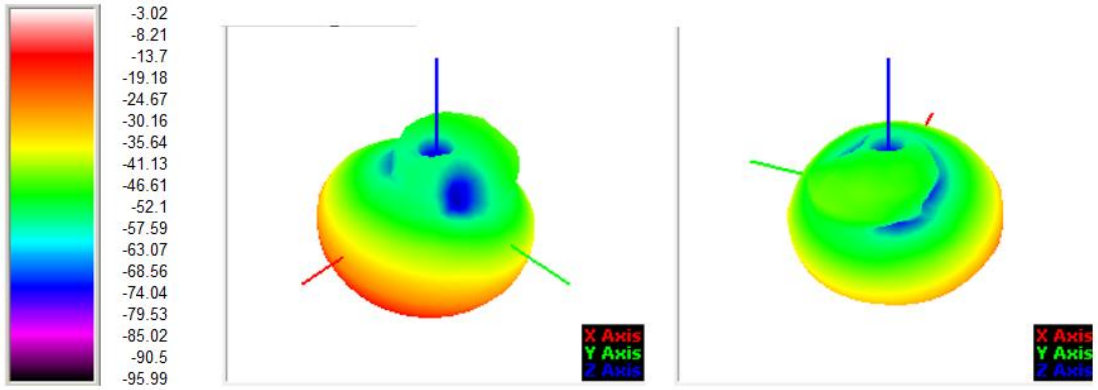
FDD-B17



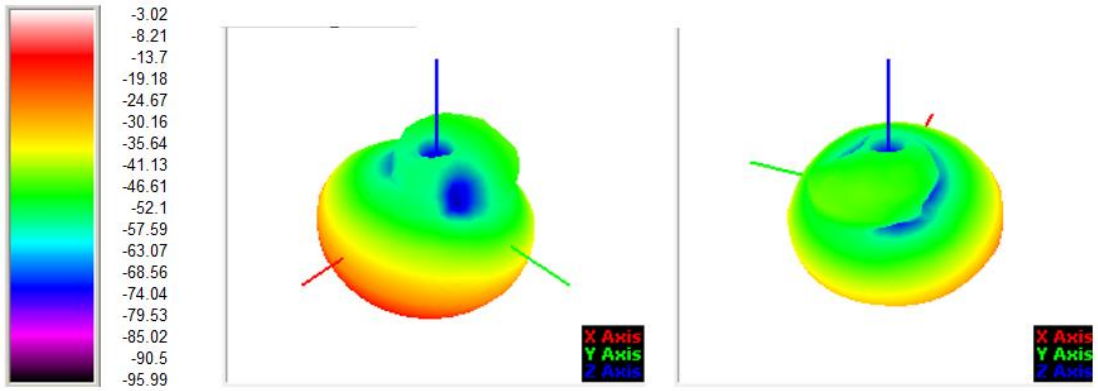
FDD-B18



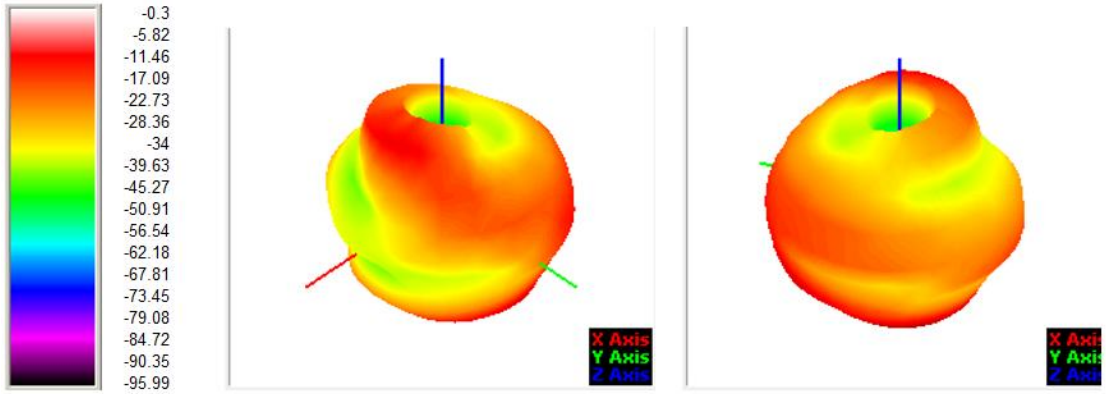
FDD-B19



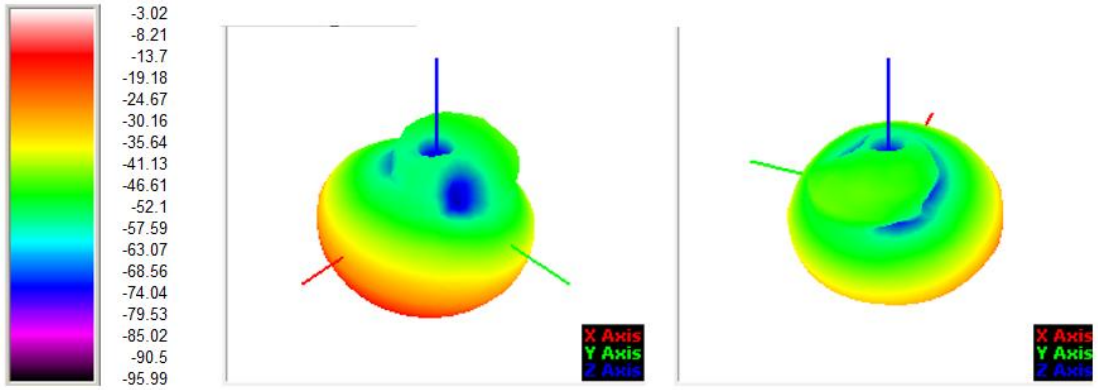
FDD-B20



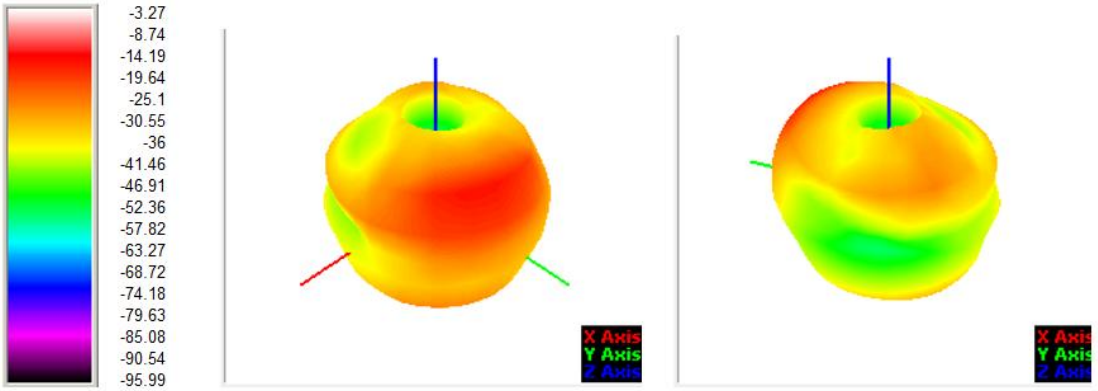
FDD-B25



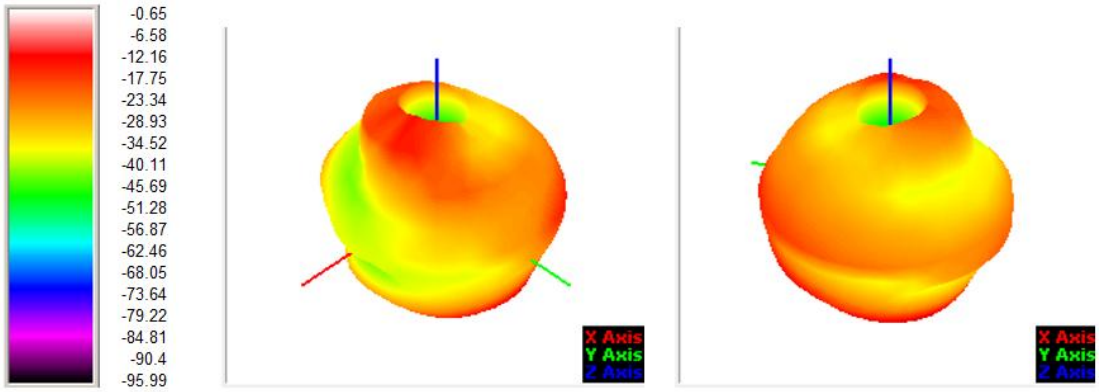
FDD-B26



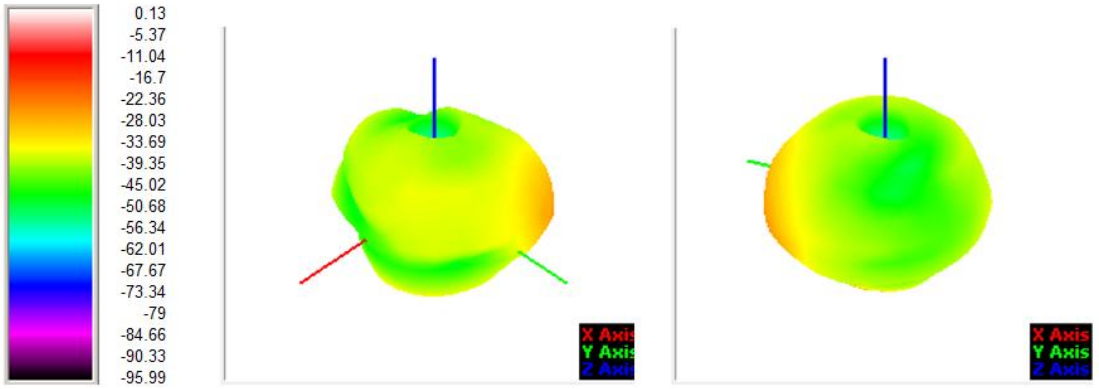
FDD-B28



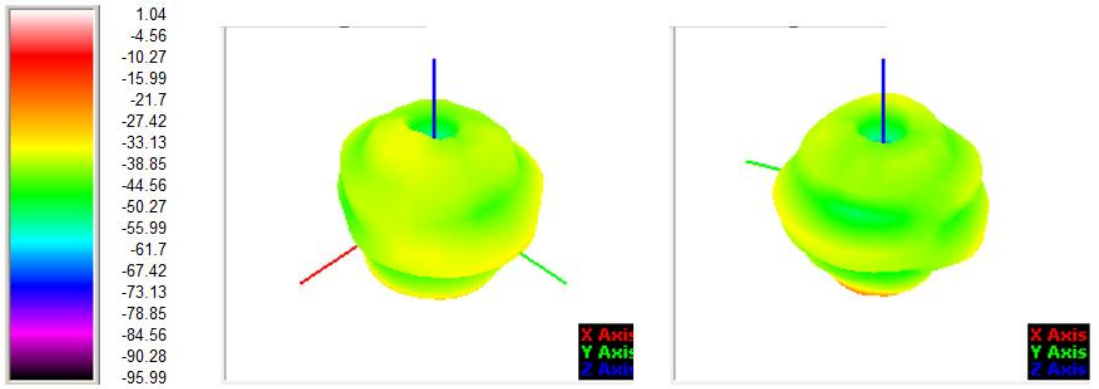
FDD-B66



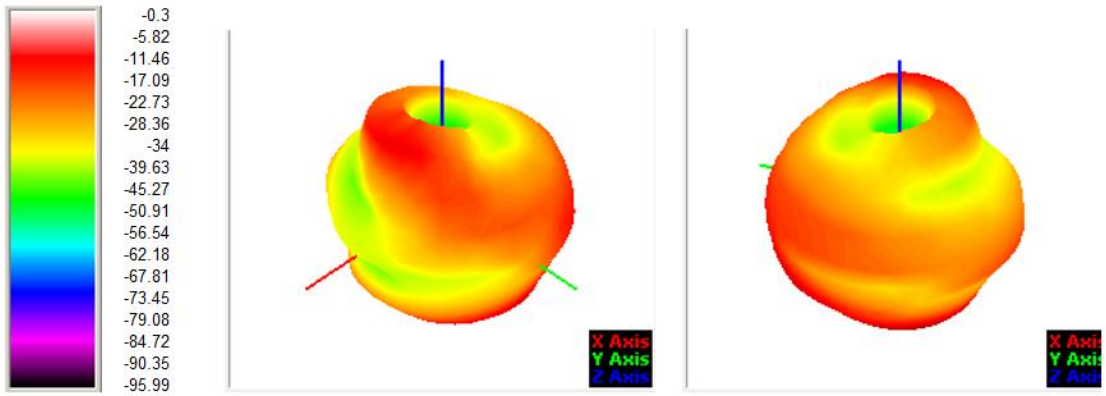
TDD-B34



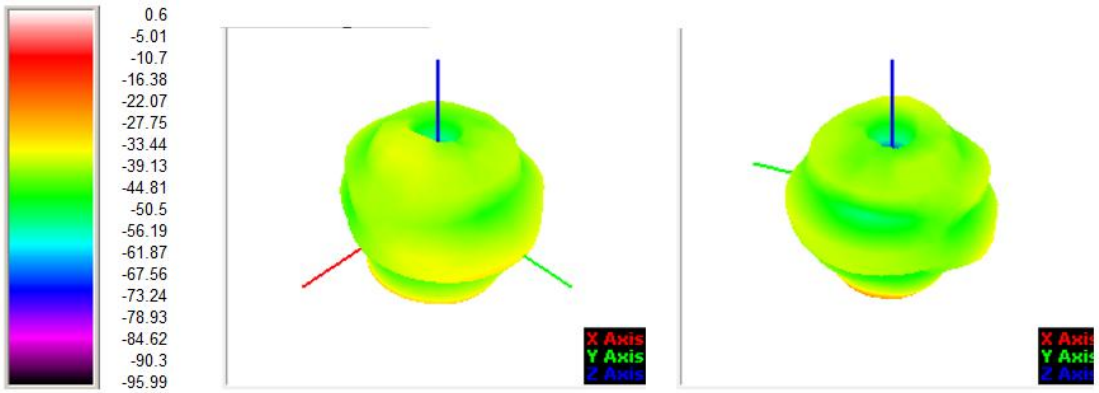
TDD-B38



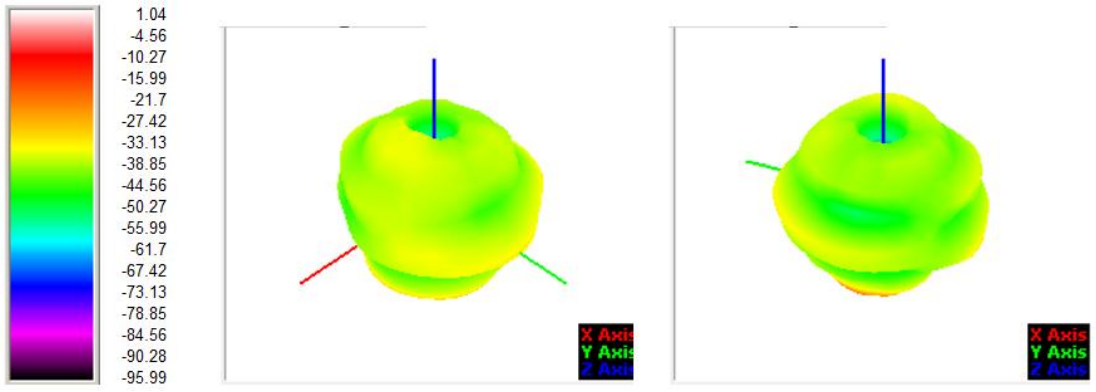
TDD-B39



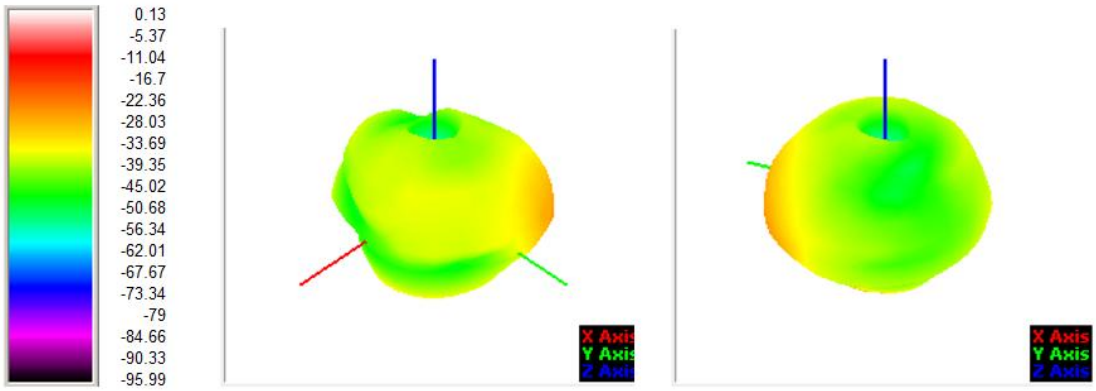
TDD-B40



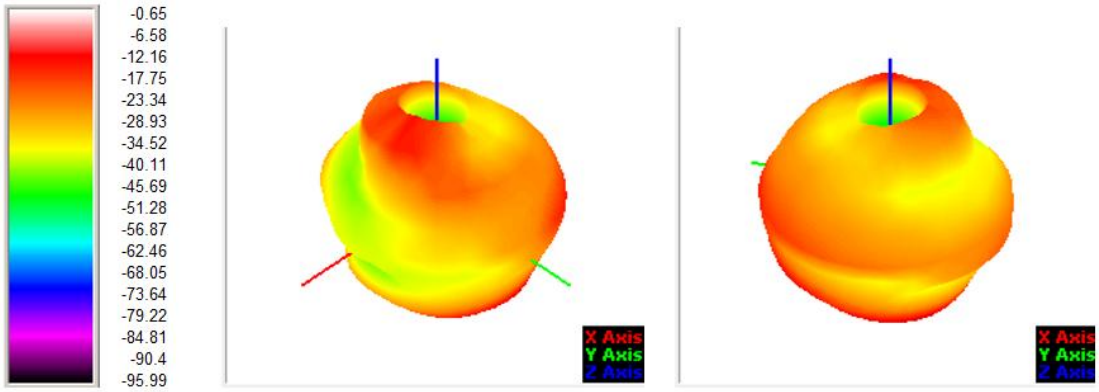
TDD-B41



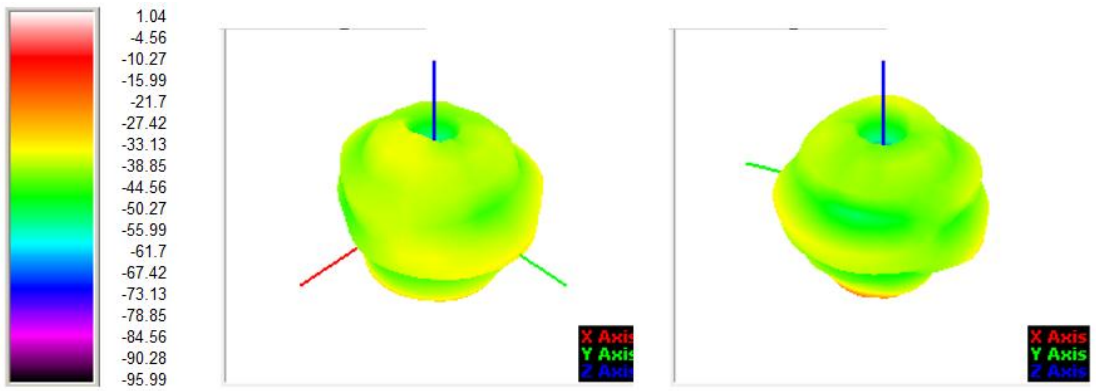
NR-N1



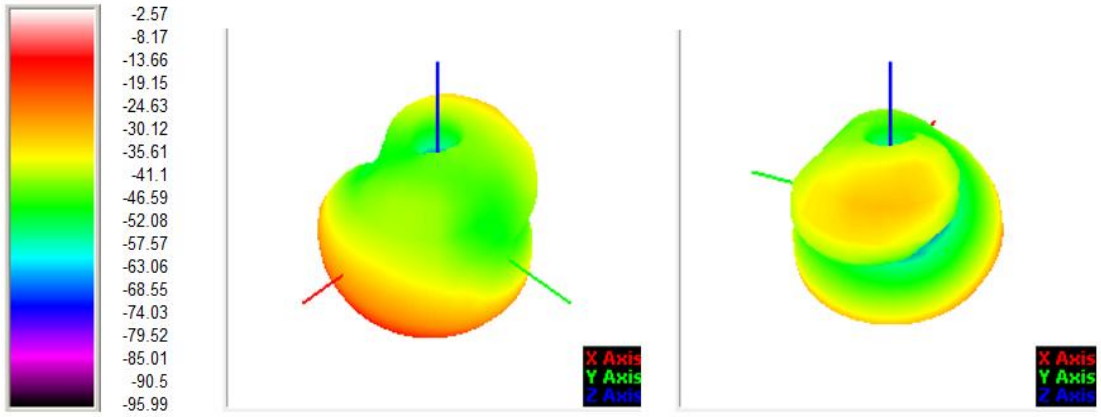
NR-N3



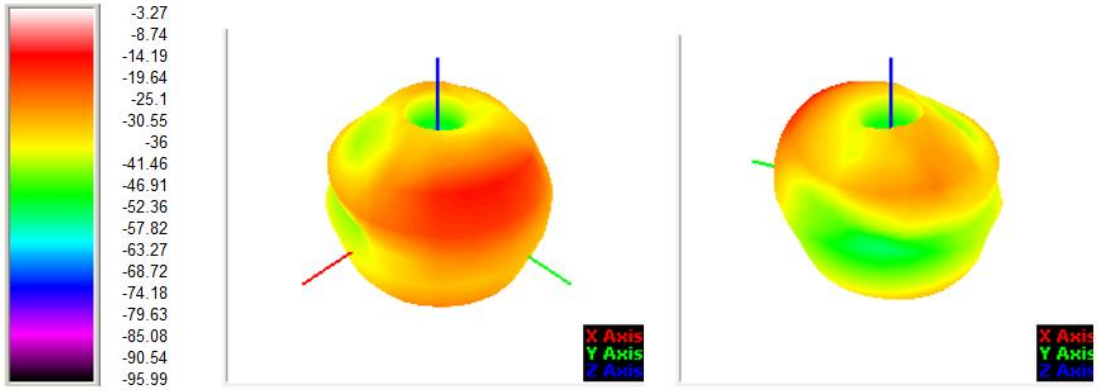
NR-N7



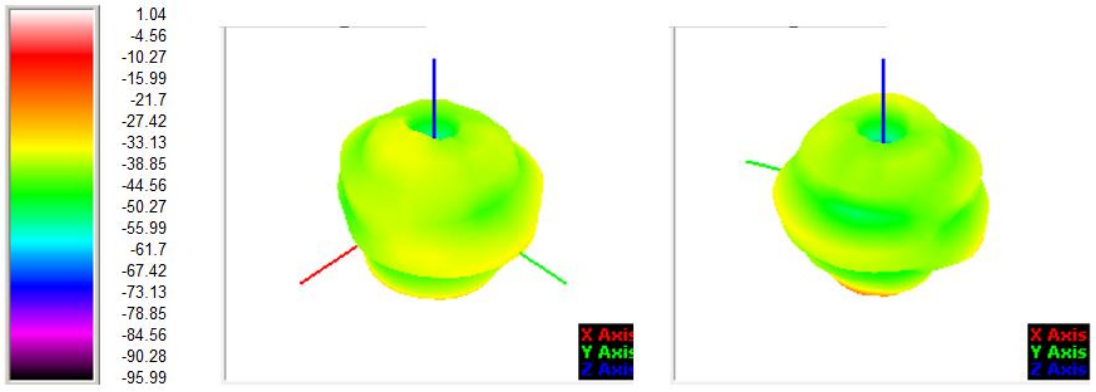
NR-N8



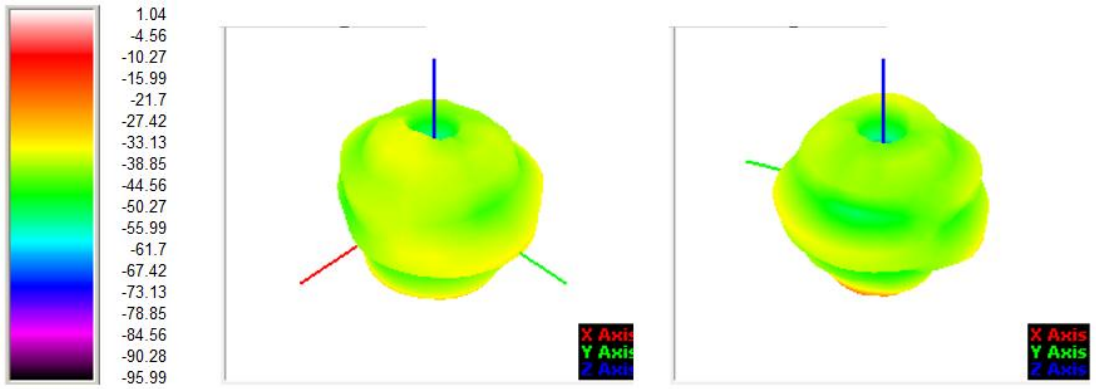
NR-N28



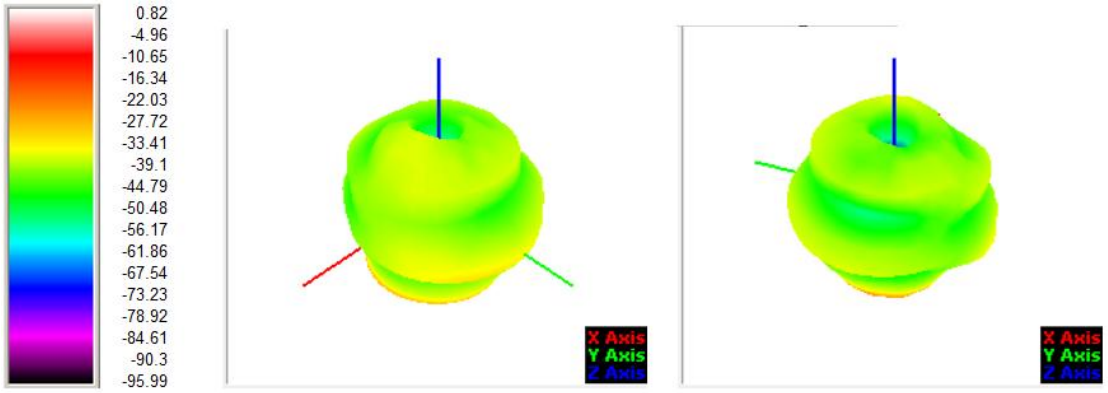
NR-N38



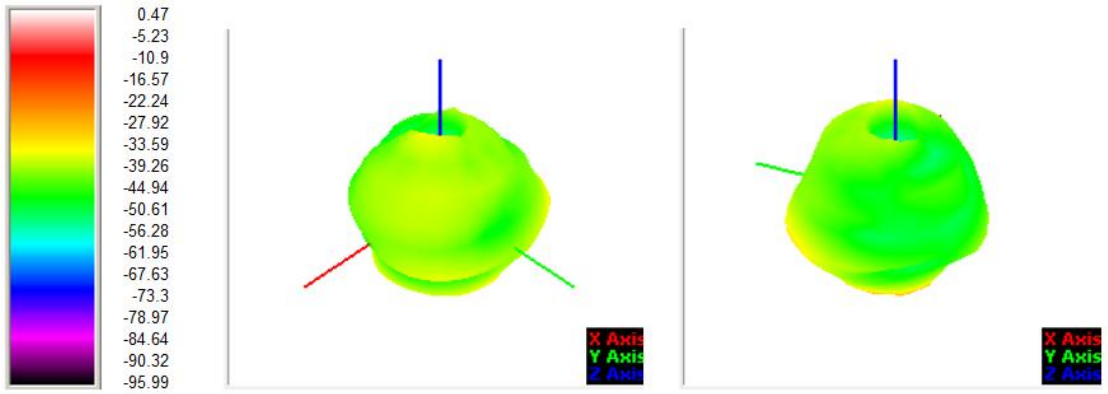
NR-N41



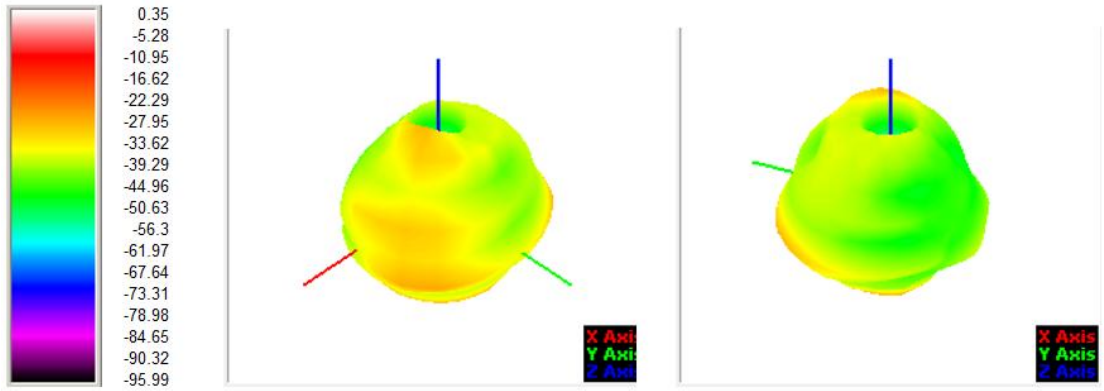
NR-N77



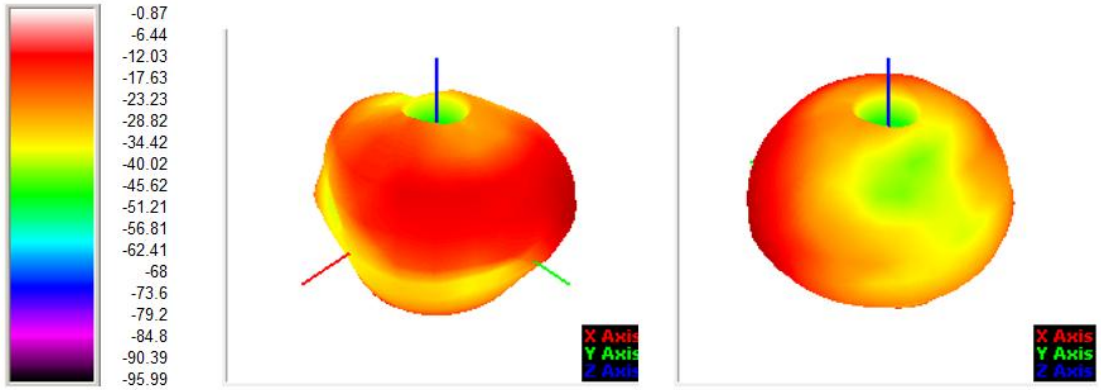
NR-N78



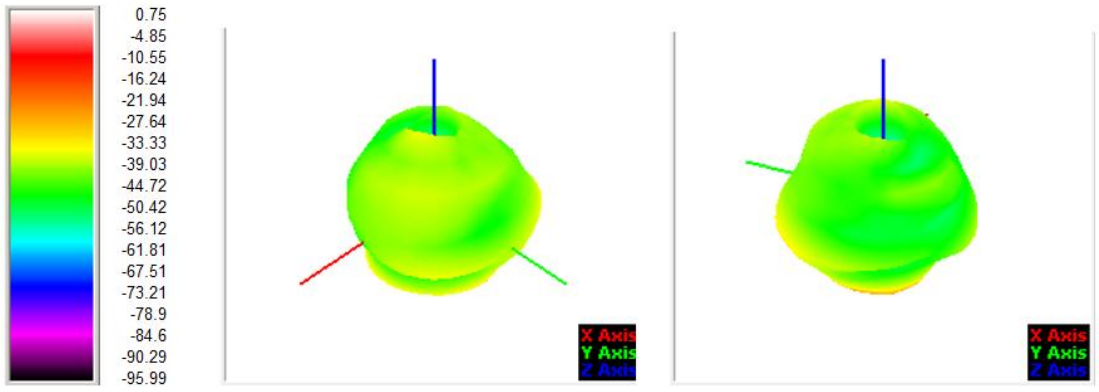
GPS-L1



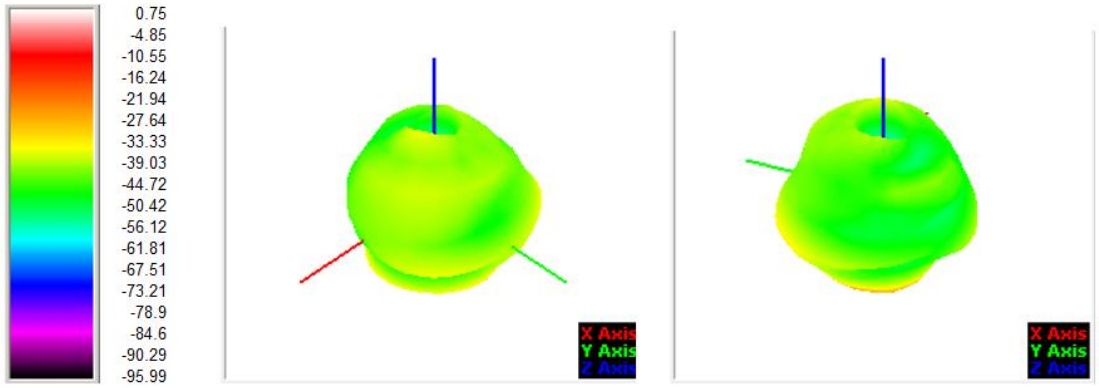
GPS-L5



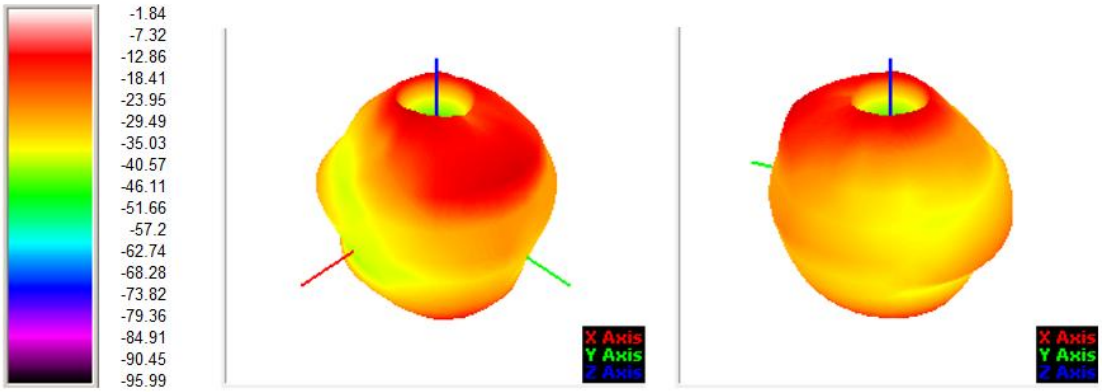
BT



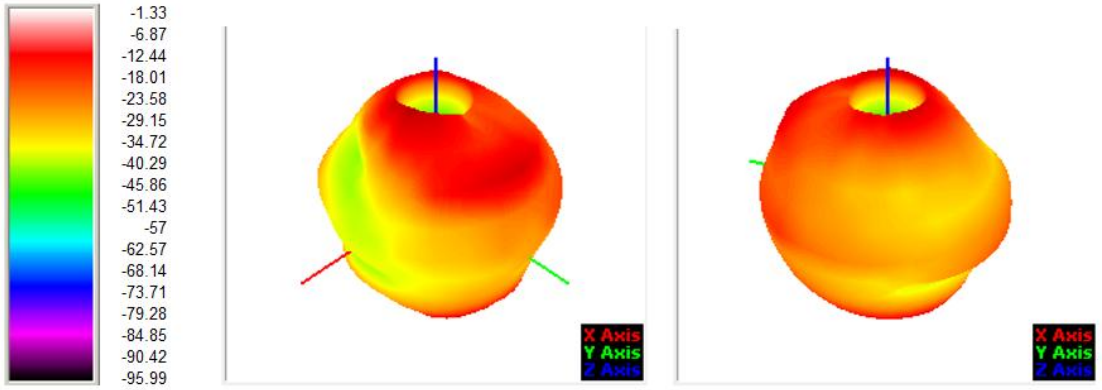
2.4G-WIFI



5.1G-WIFI



5.8G-WIFI



9.Introduction to Antenna Information

S138	
Antenna type and frequency band	MAIN ANTENNA(PIFA):2G/3G/4G/5G DIV ANTENNA(PIFA):2G/3G/4G/5G GPS/WIFI/BT ANTENNA(PIFA):L1/L5/2.4GWIFI/ 5GWIFI/BT
Antenna materia	FPC