

Shenzhen Qixin Tongda Technology Co., Ltd

Antenna test data report

Client: TIAN RUI XIANG

project: R01

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-38/40/41

Engineering: Horsemen (134 1821 8312)

date: 2025-04-25

Factory address: Bao'an District, Shenzhen, Shajing Street, Shayi North

Yongfa Science and Technology Park, the first third floor

1. Test Project

	Test Project	Equipment
1. S Parameter	1. Return Loss (RL) 2. VSWR	Network Analyzer: Agilent 5071B
2. RF Test (2/3/4G)	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)

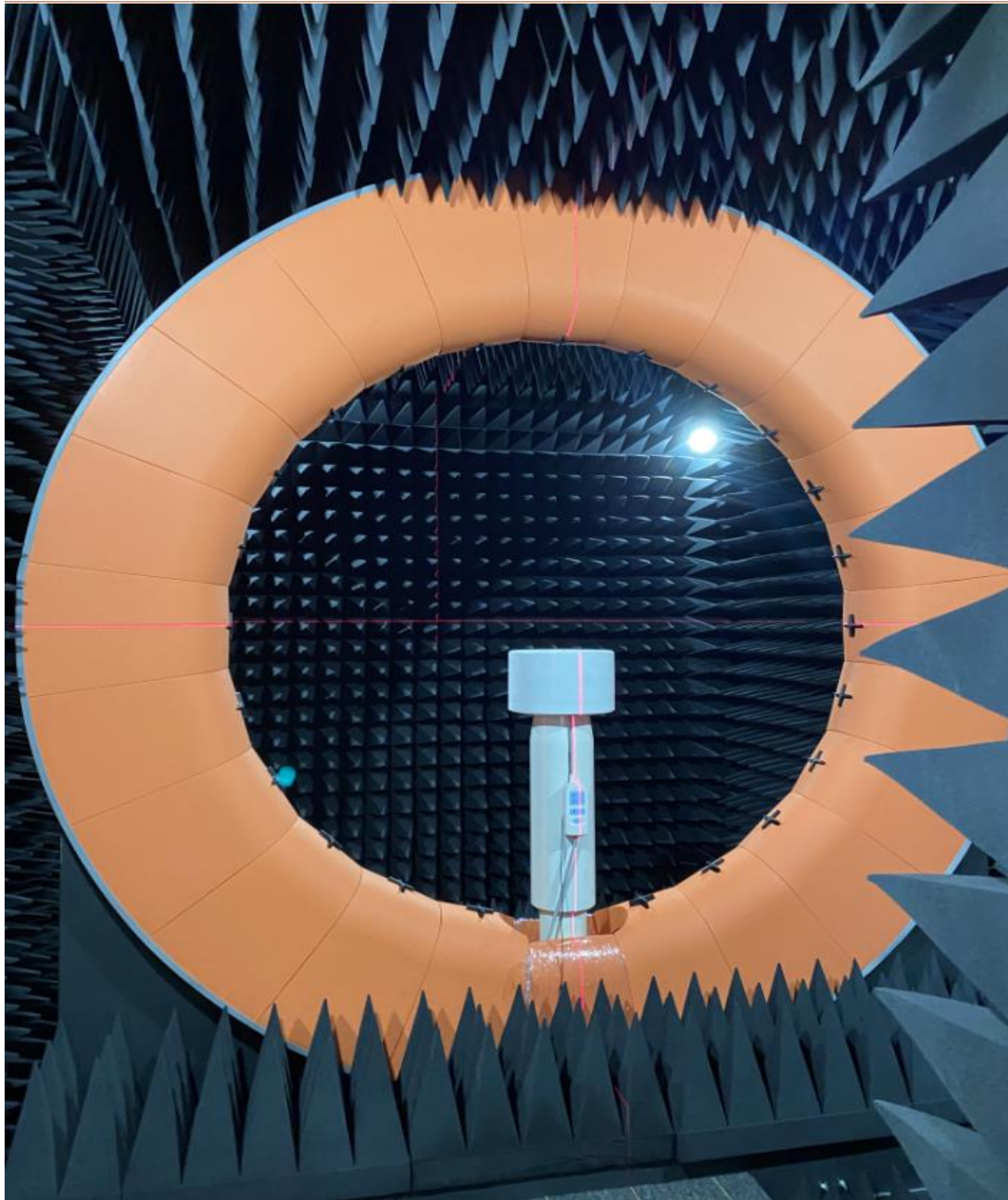


CMW 500 (2G/3G/4G Test Equipment)



SP9500 (5G Test Equipment)

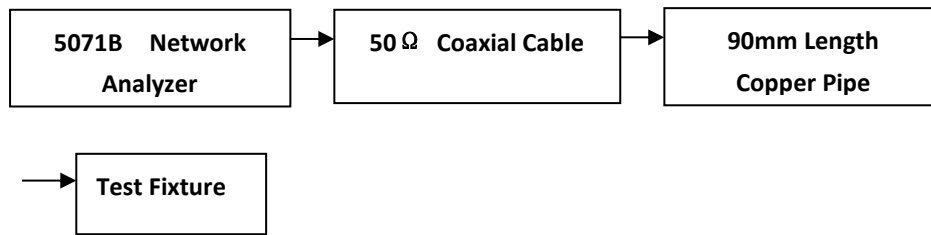
3. TestEnvironment



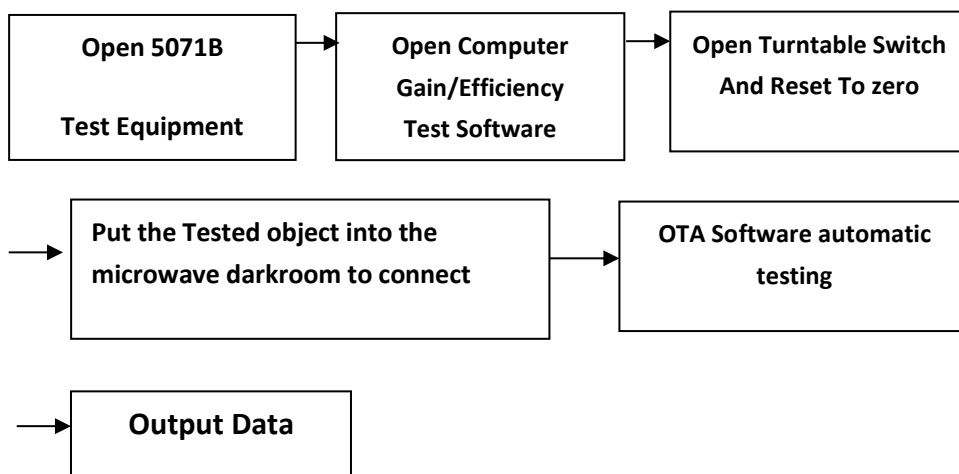
Microwave Anechoic Chamber

4.Test Steps

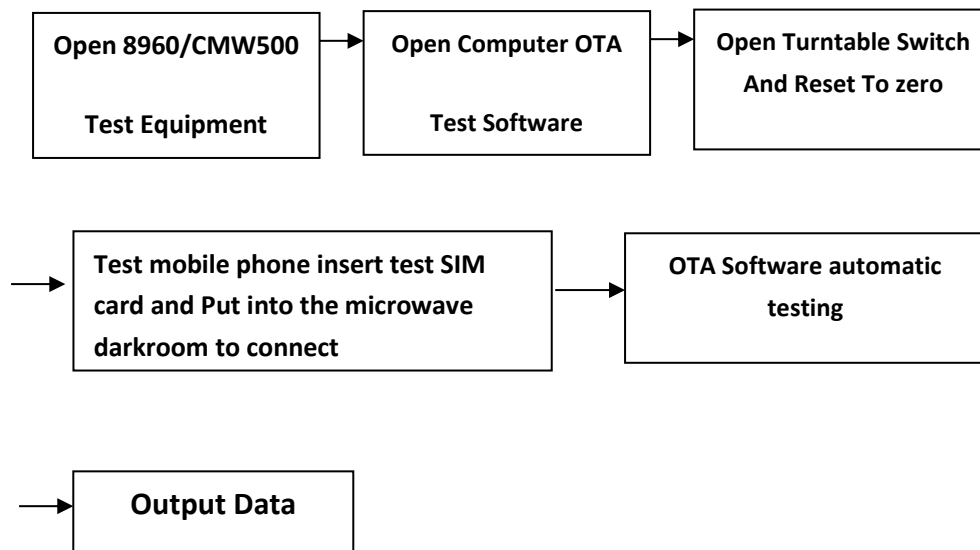
Passive VSWR/RL Test Steps:



Gain/Efficiency Test Steps:



Active TRP/TIS Test Steps:



5. Antenna distribution diagram

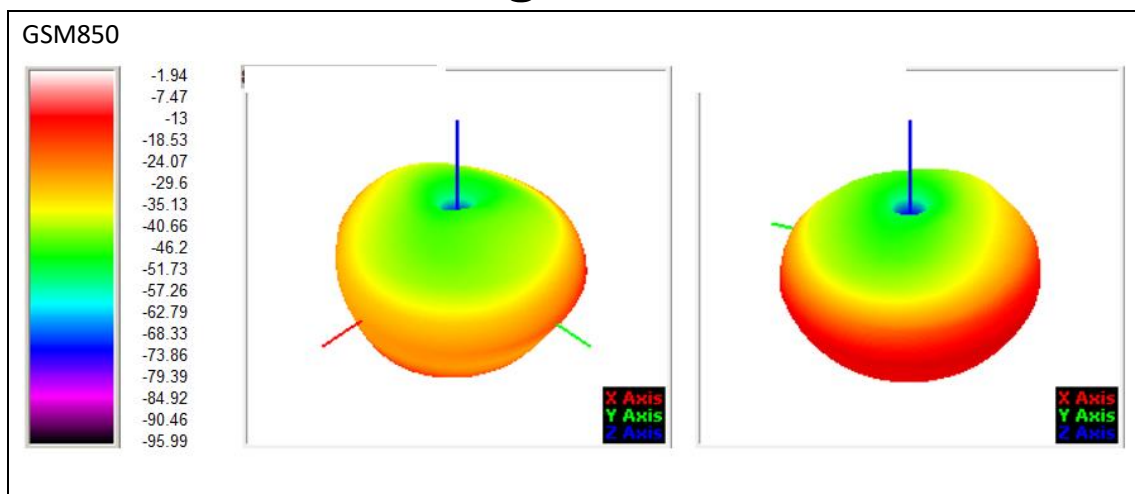


1		2		3		4																									
				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 25%; height: 20px;"></td><td style="width: 25%; height: 20px;"></td><td style="width: 25%; height: 20px;"></td><td style="width: 25%; height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>																											
A					A																										
antenna assembly				LDS antenna																											
B					B																										
C					C																										
Note: 1. Check the incoming materials of the horn according to the drawings, and ensure that there are no appearance issues such as excessive glue, lack of glue, dirt, cloak, etc. 2. The incoming materials must meet the material requirements. Plastic material Shabik: 11354. 3. Laser engraving cannot break wires, and chemical plating cannot produce overflow plating and dust. 4. If the customer has a punched grid requirements, then inspect according to the requirements. 5. Full inspection is required before shipping the route.																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2"></th> <th colspan="2">BLACK</th> <th colspan="2">Shenzhen Qixin Tongda Technology Co., Ltd</th> </tr> </thead> <tbody> <tr> <td colspan="2"></td> <td colspan="2">11354</td> <td colspan="2"> units: mm Name: R01 LDS </td> </tr> <tr> <td colspan="2"></td> <td colspan="2">Shabik</td> <td colspan="2"> general tolerance: I ±0.5 .X ±0.25 .XX ±0.15 .XXX ±0.05 ANGULAR ≤ 0.5° M E; R F; Surface treatment: Cleaning confirm; </td> </tr> <tr> <td>NO.</td> <td>name</td> <td>quantity</td> <td>material</td> <td colspan="2"> colour: proportion: 1:1 version: A </td> </tr> </tbody> </table>										BLACK		Shenzhen Qixin Tongda Technology Co., Ltd				11354		units: mm Name: R01 LDS				Shabik		general tolerance: I ±0.5 .X ±0.25 .XX ±0.15 .XXX ±0.05 ANGULAR ≤ 0.5° M E; R F; Surface treatment: Cleaning confirm;		NO.	name	quantity	material	colour: proportion: 1:1 version: A	
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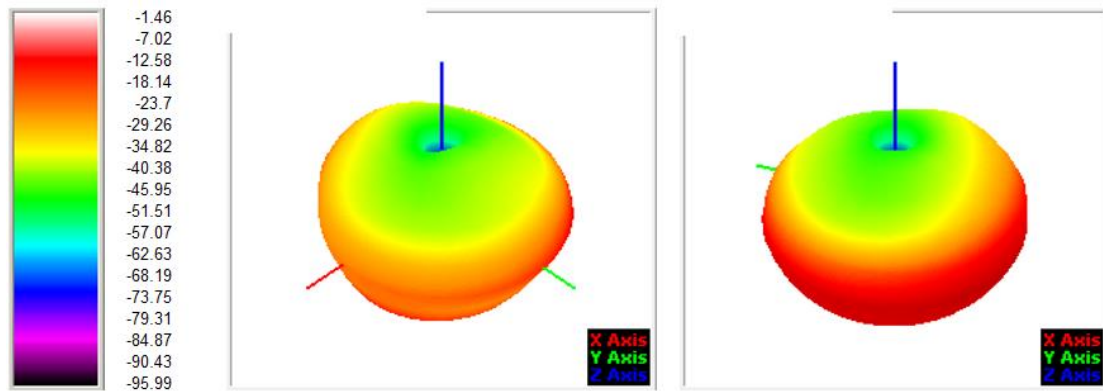
Band	Efficiency (%)	Gain (dBi)
GSM850 (824-894MHZ)	25.3	-1.94
GSM900 (880-960MHZ)	27.6	-1.46
DCS1800 (1710-1880MHZ)	34.1	-0.65
PCS1900 (1850-1990MHZ)	32.5	-1.02
WCDMA1 (1920-2170MHZ)	37.8	0.33
WCDMA2 (1950-1990MHZ)	32.5	-1.02
WCDMA4 (1710-2155MHZ)	34.1	-0.65
WCDMA5 (824-894MHZ)	25.3	-1.94
WCDMA8 (880-960MHZ)	27.6	-1.46
LTE-B1 (1920-2170MHZ)	37.8	0.33
LTE-B2 (1850-1990MHZ)	32.5	-1.02
LTE-B3 (1710-1880MHZ)	34.1	-0.65
LTE-B4 (1710-2155MHZ)	34.1	-0.65

LTE-B5 (824-894MHZ)	25.3	-1.94
LTE-B7 (2500-2690MHZ)	33.1	-0.27
LTE-B8 (880-960MHZ)	27.6	-1.46
LTE-B12 (699-746MHZ)	23.8	-2.41
LTE-B17 (704-746MHZ)	23.8	-2.41
LTE-B18 (815-875MHZ)	25.3	-1.94
LTE-B19 (830-8790MHZ)	25.3	-1.94
LTE-B20 (791-862MHZ)	25.3	-1.94
LTE-B25 (1850-1995MHZ)	32.5	-1.02
LTE-B26 (814-894MHZ)	25.3	-1.94
LTE-B28 (703-803MHZ)	23.8	-2.41
LTE-B66 (1715-2170MHZ)	34.1	-0.65
LTE-B38 (2570-2620MHZ)	33.1	-0.27
LTE-B40 (2300-2400MHZ)	36.5	0.08
LTE-B41 (2496-2690MHZ)	33.1	-0.27
GPS (1575.4MHZ)	38.1	1.08
Bluetooth (2400-2483.5MHZ)	35.5	0.3
WIFI-2.4G (2400-2495MHZ)	35.5	0.3
WIFI-5G (5.17-5.84GHZ)	36.8	0.77

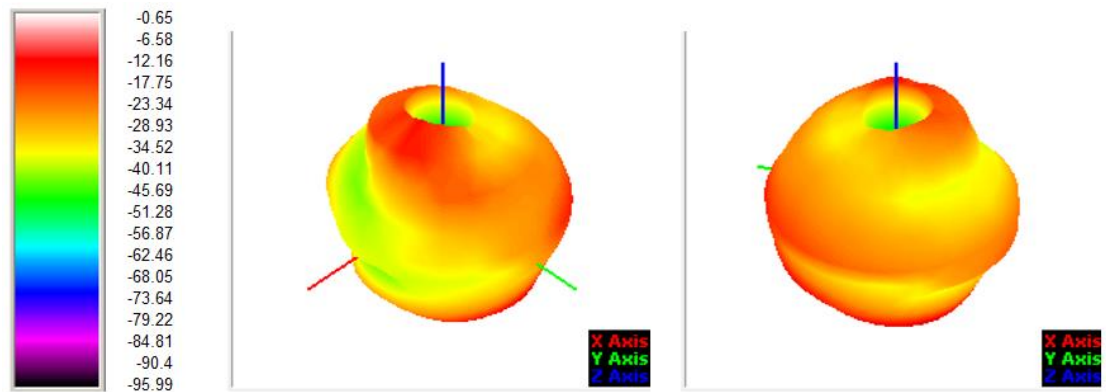
8.2D&3D Lobe Diagram



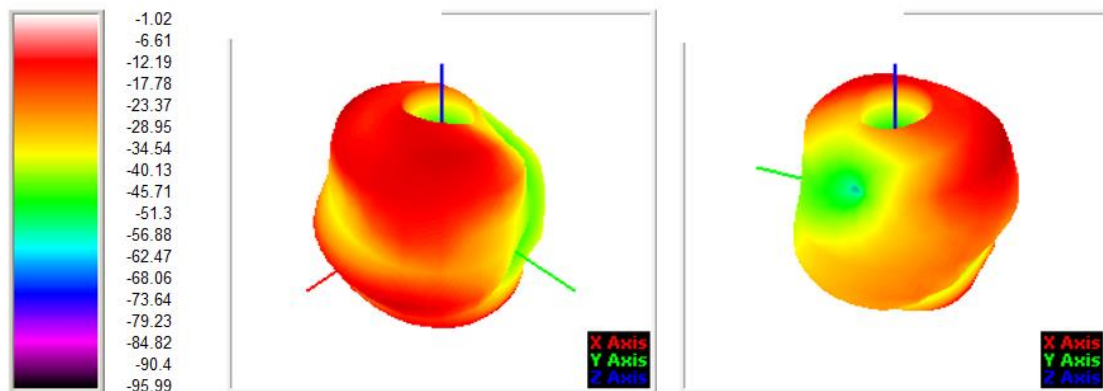
GSM900



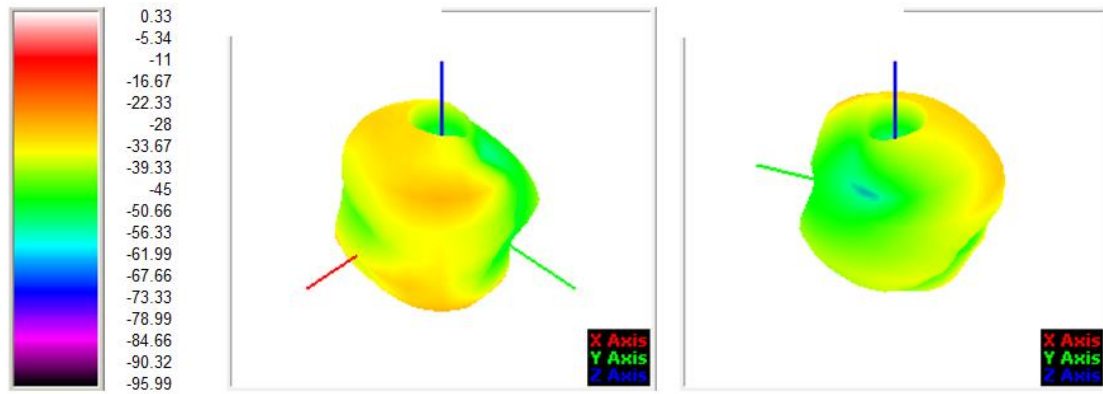
DSC1800



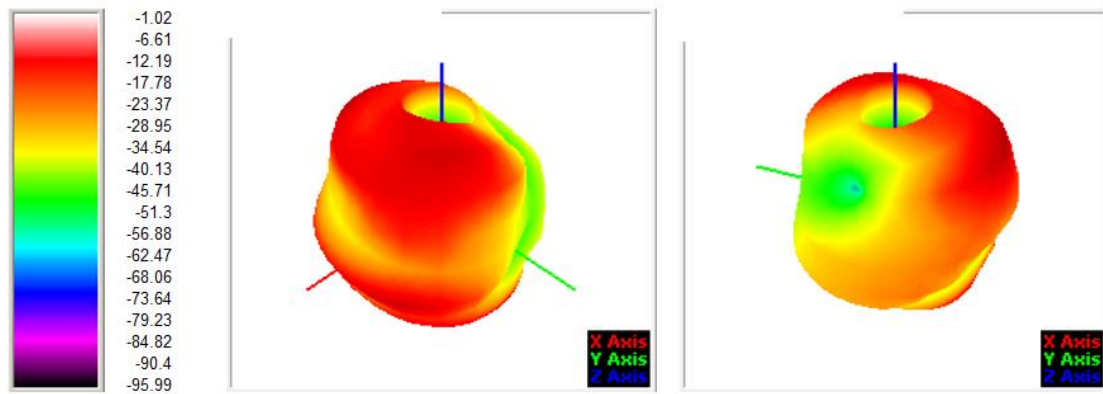
PCS1900



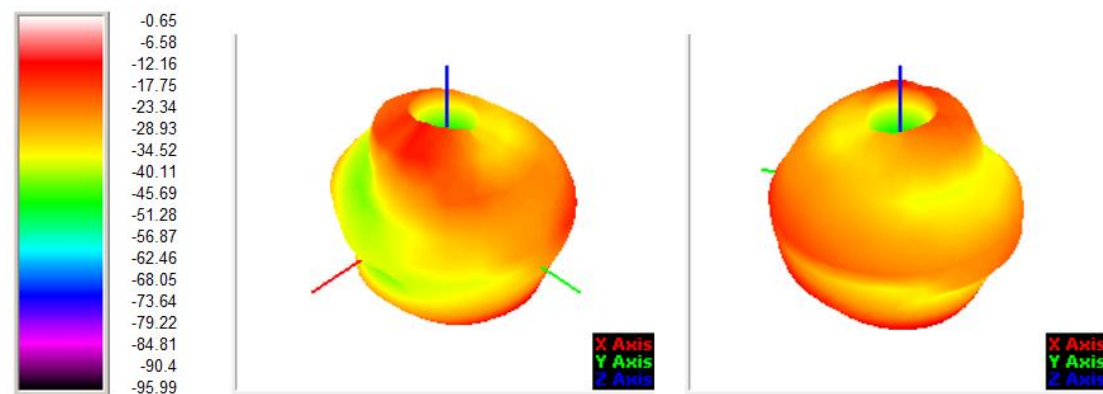
W1



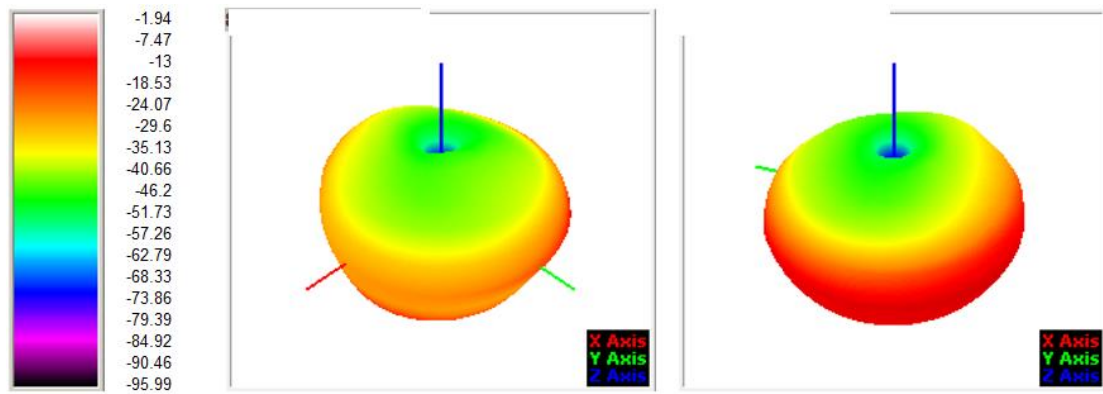
W2



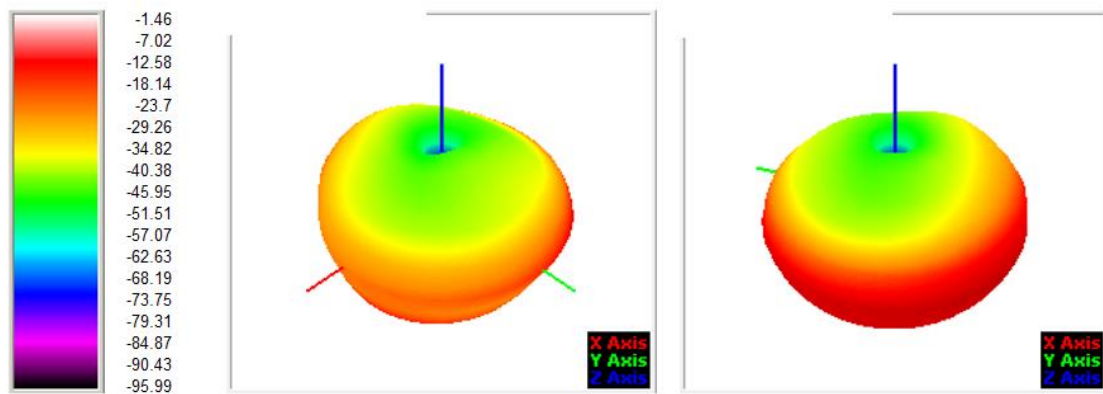
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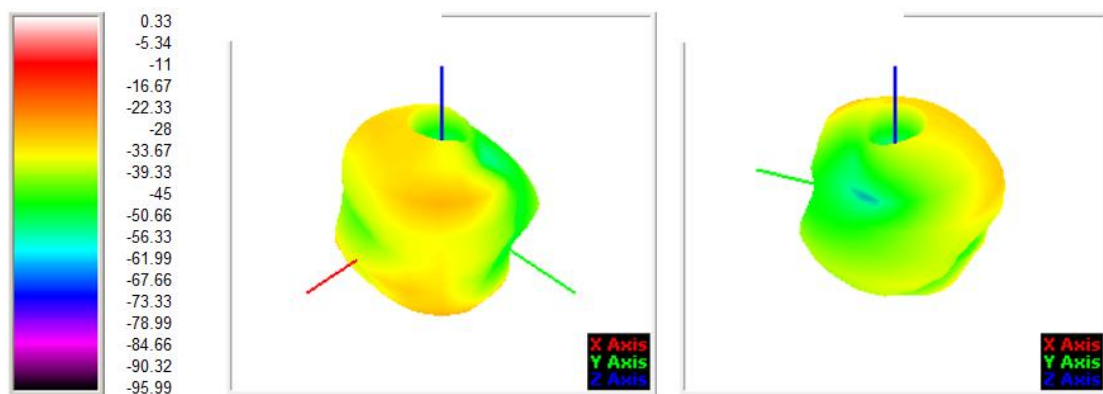
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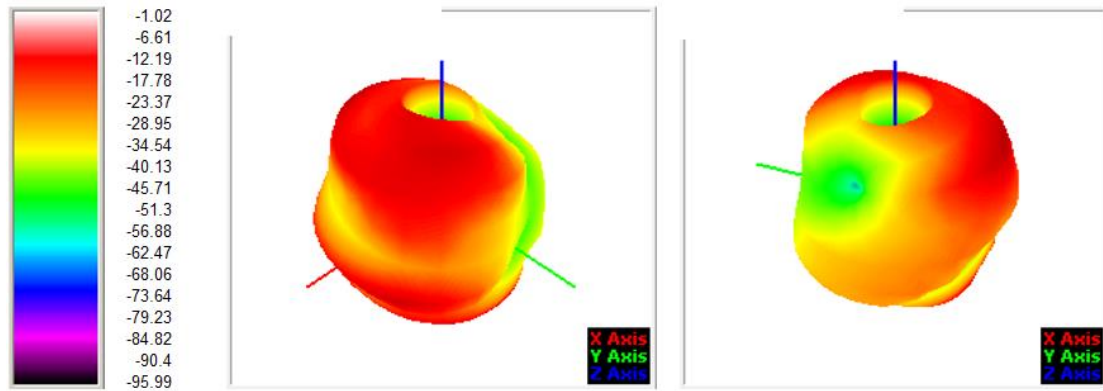
W8



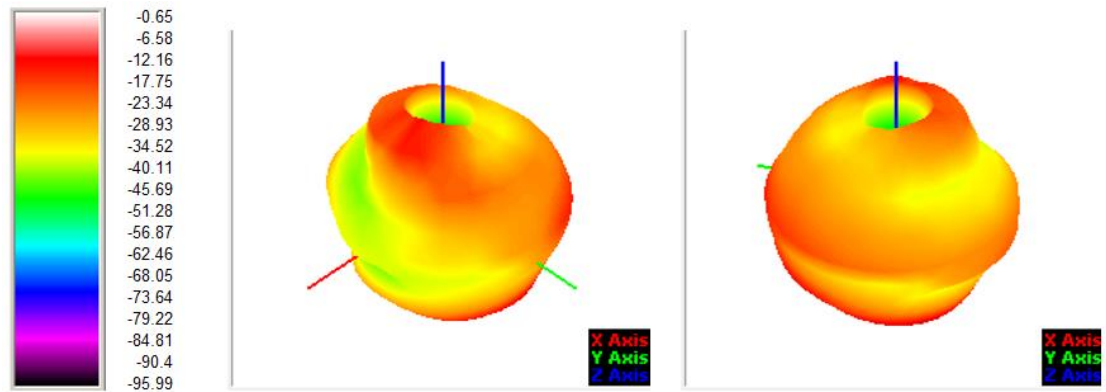
FDD-B1



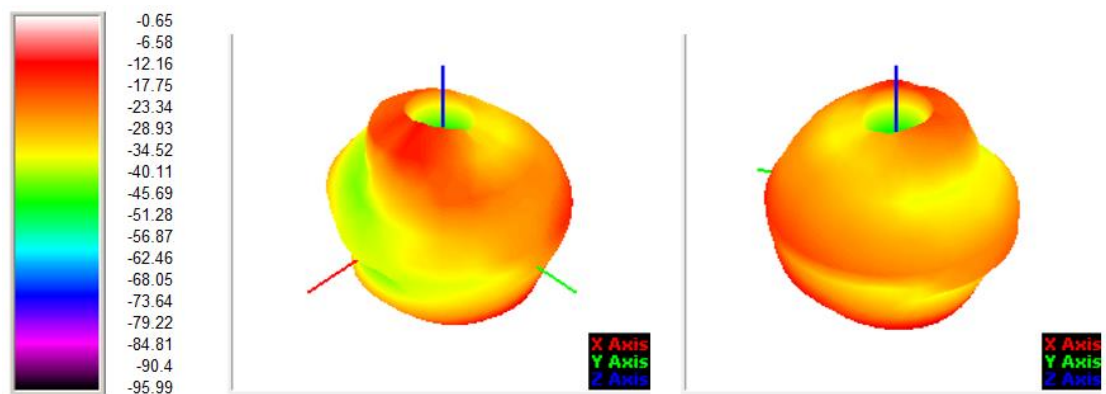
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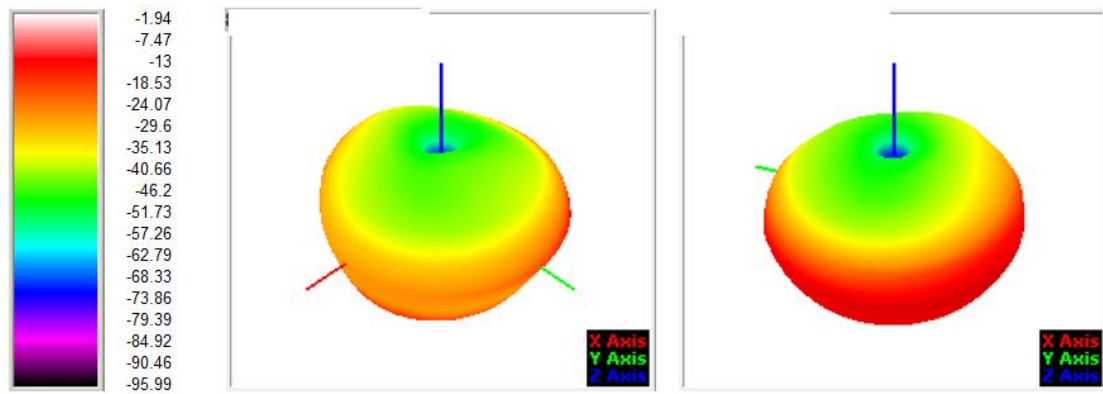
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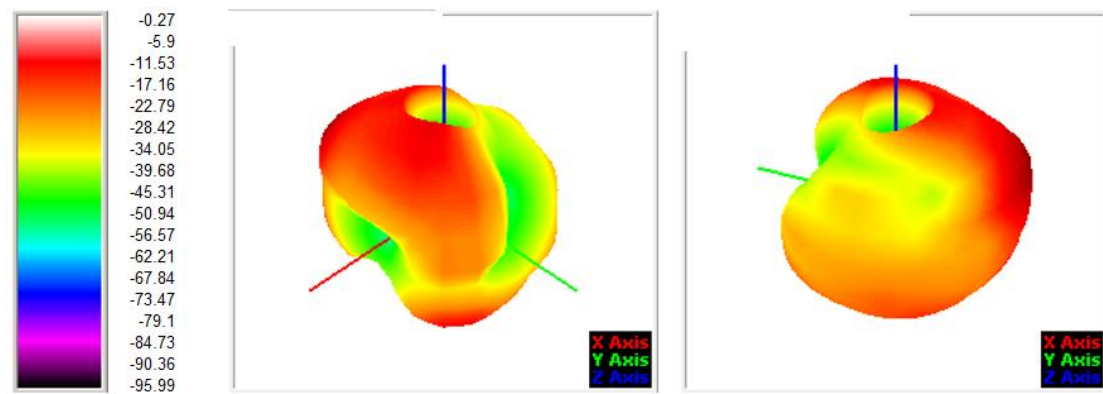
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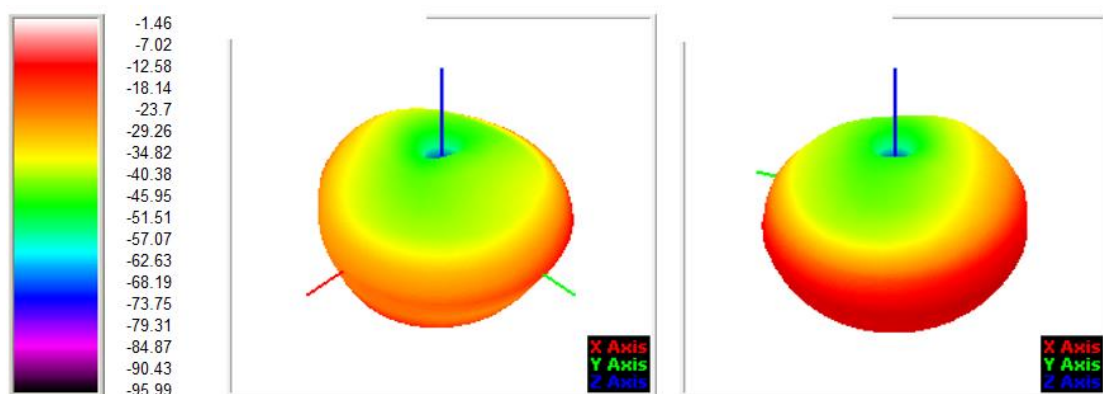
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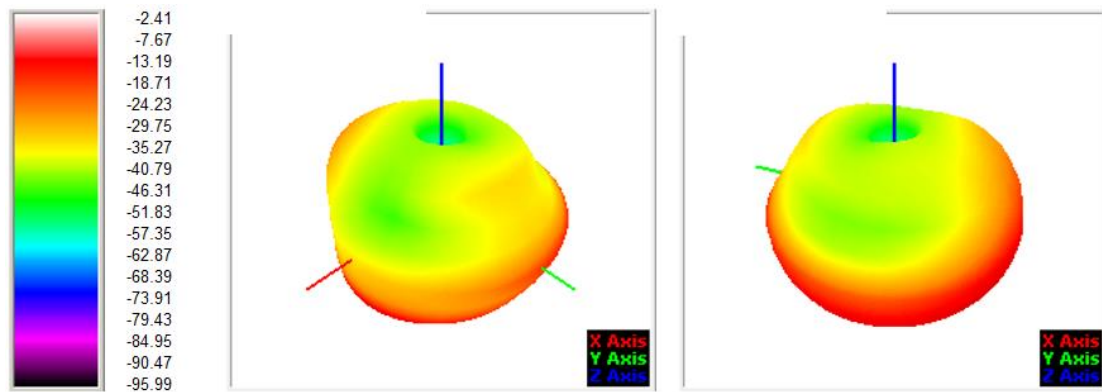
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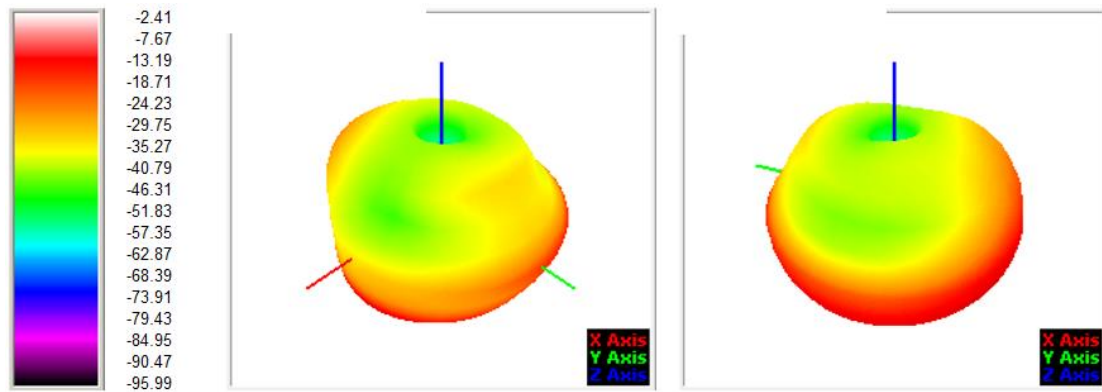
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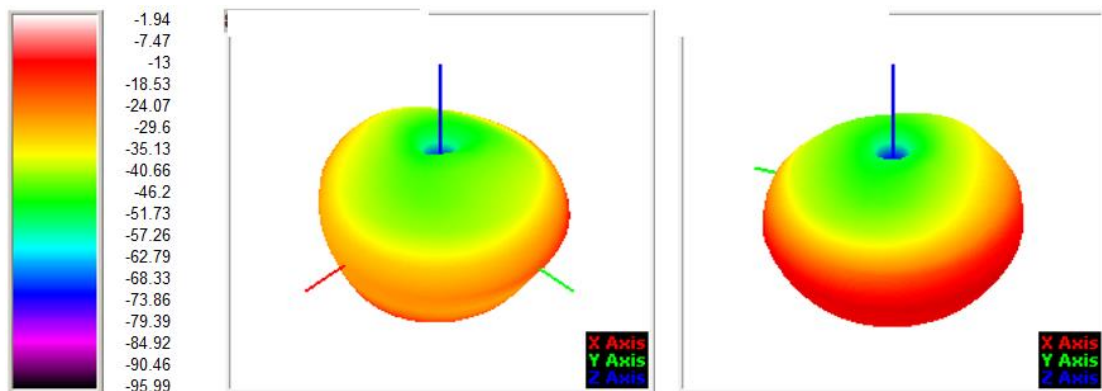
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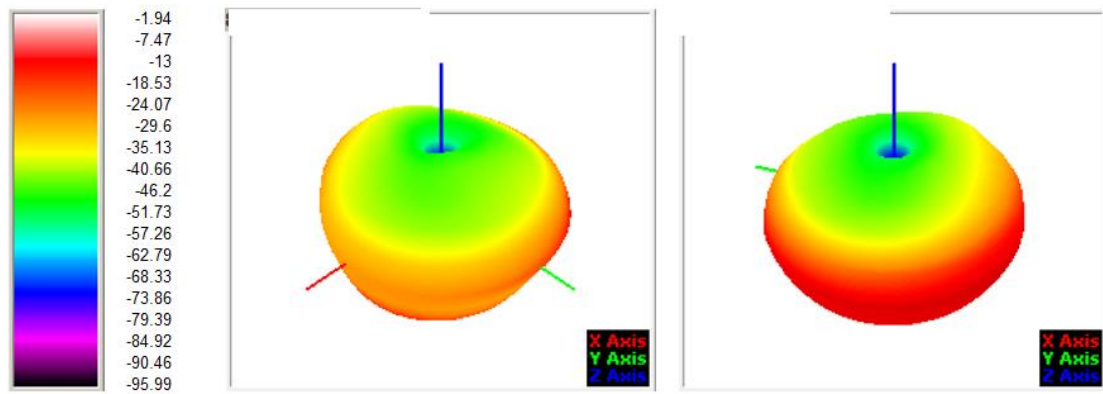
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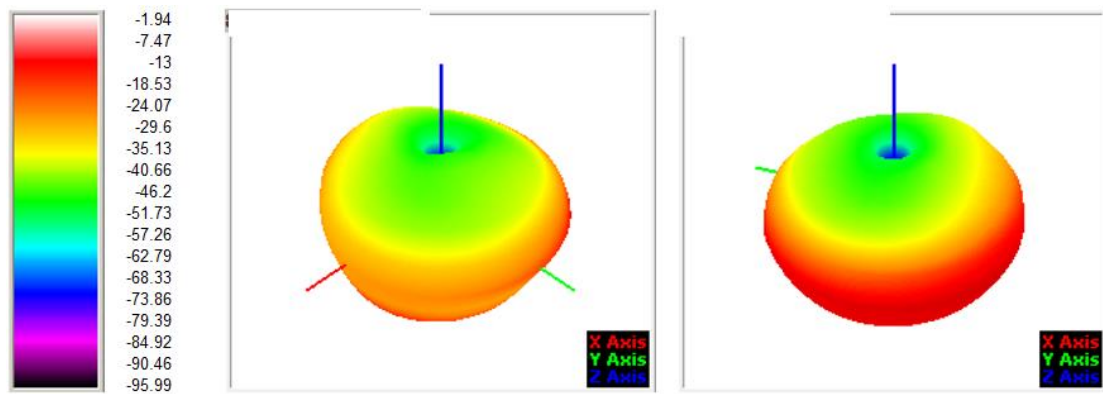
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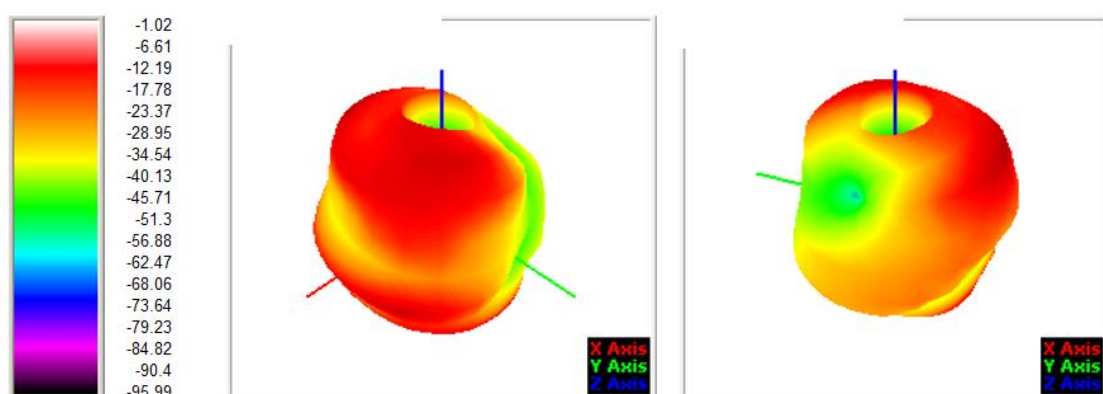
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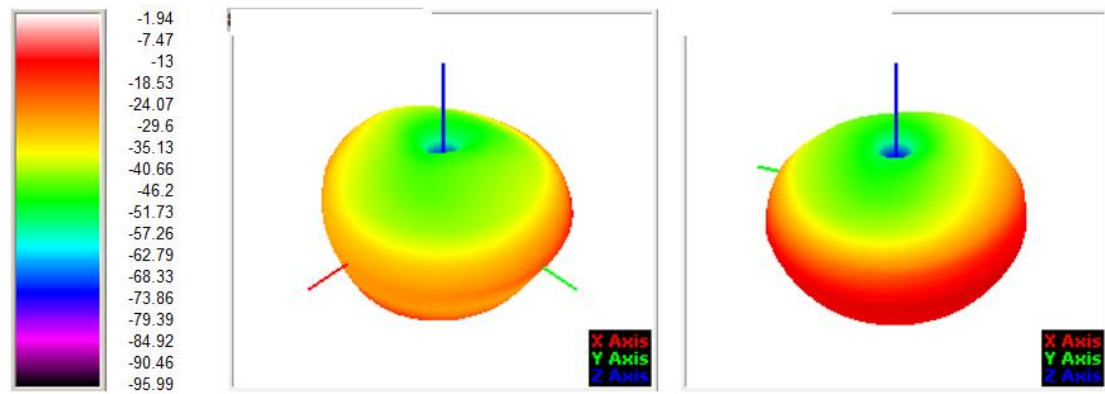
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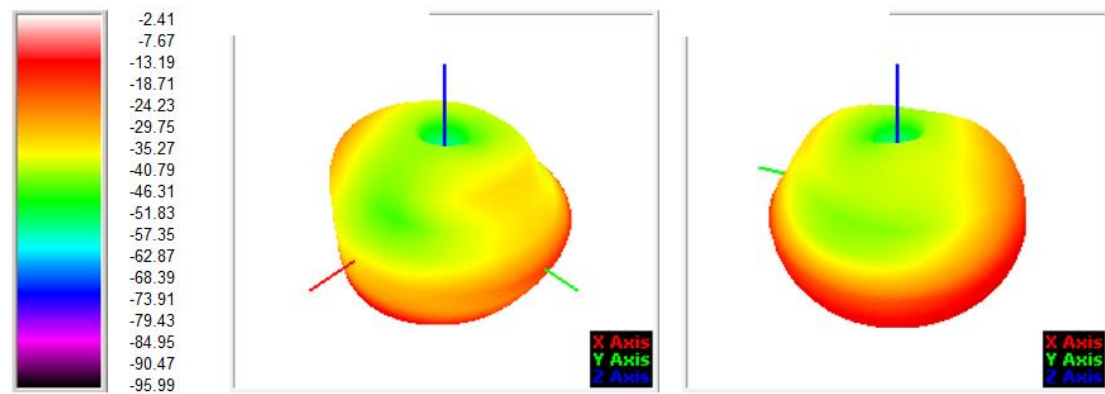
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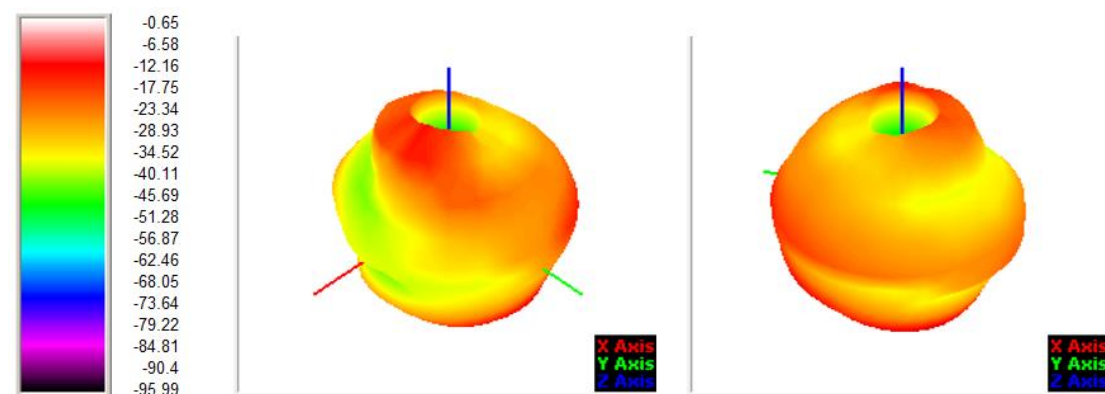
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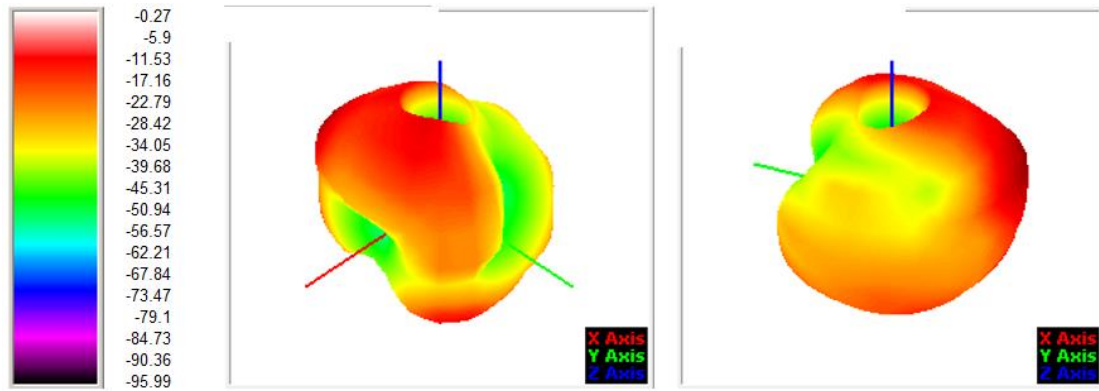
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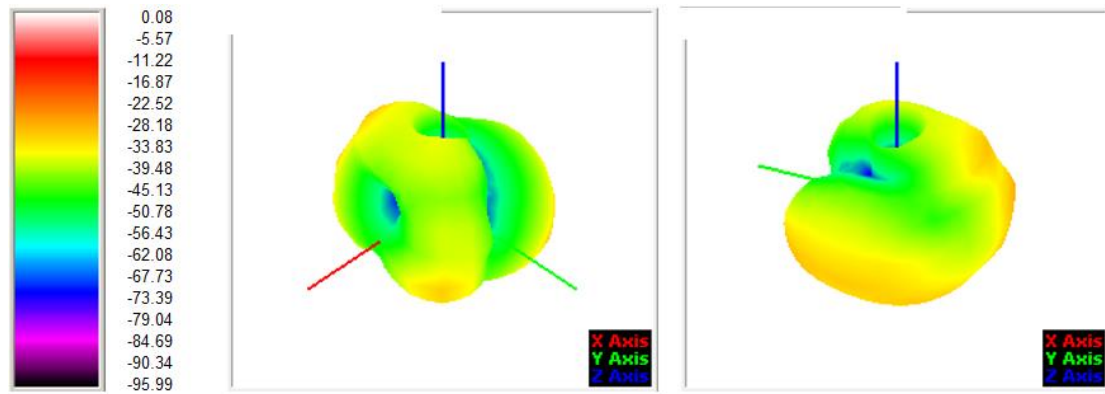
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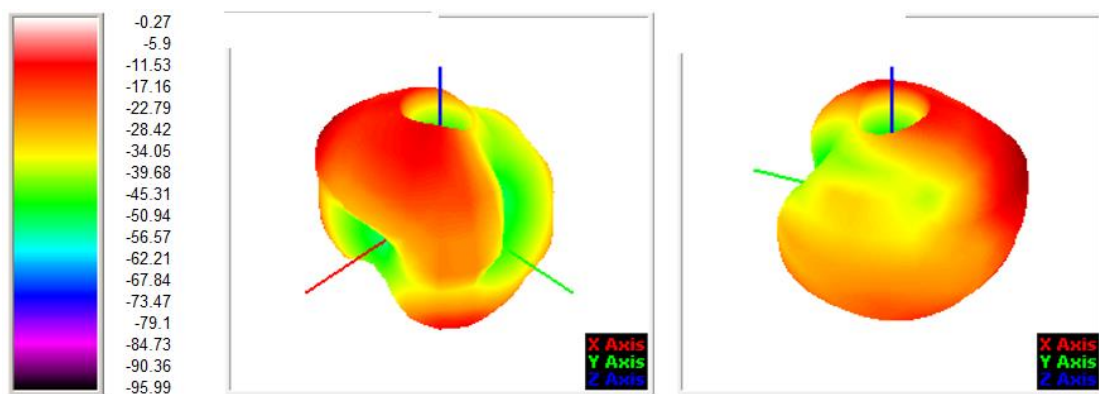
TDD-B38



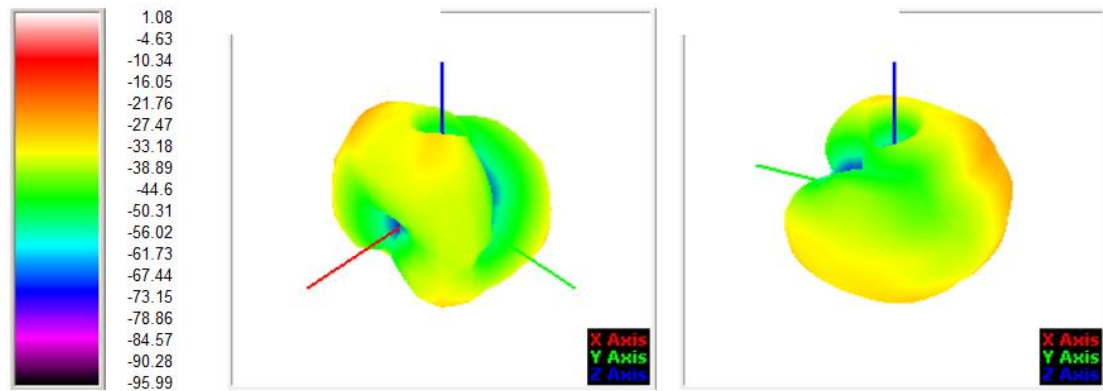
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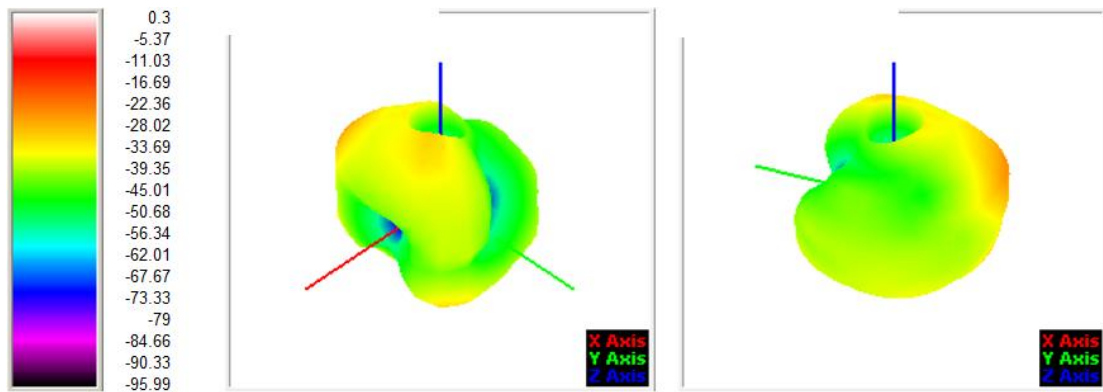
TDD-B41



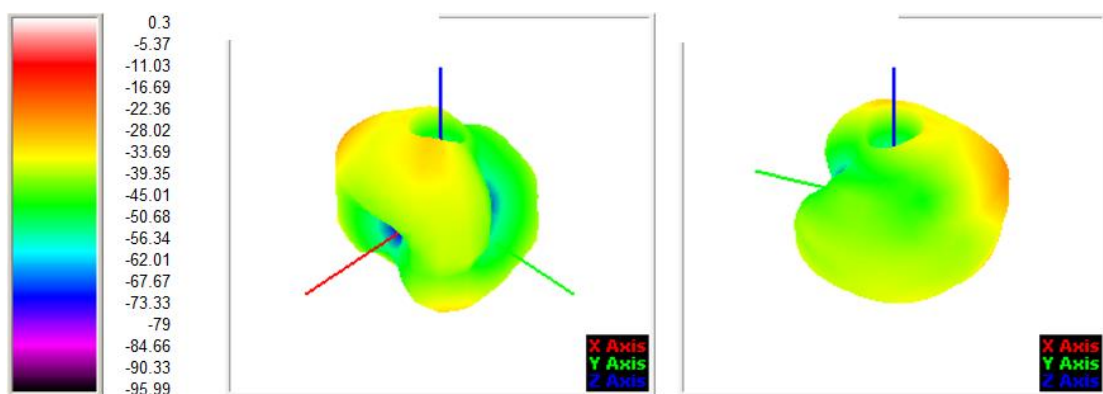
GPS-L5

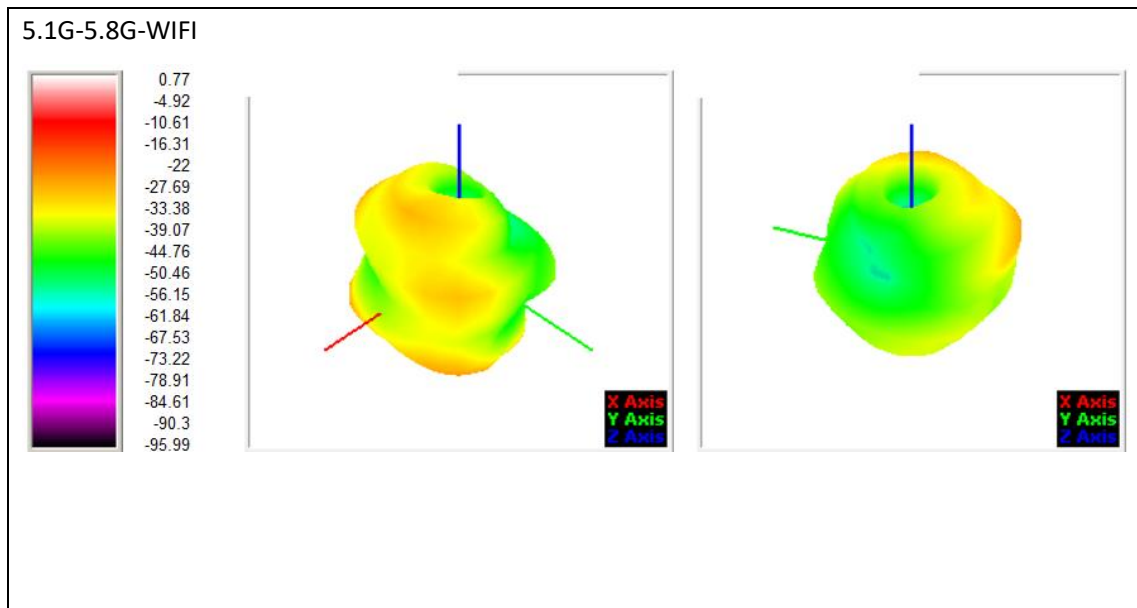


BT



2.4G-WIFI





9.Introduction to Antenna Information

R01	
Antenna type and frequency band	MAIN ANTENNA(PIFA):2G/3G/4G DIV ANTENNA(PIFA):2G/3G/4G GPS/WIFI/BT ANTENNA(PIFA):L5/2.4GWIFI/5G WIFI/BT
Antenna materia	Radium carving