Manufacturer： ShenzhenKejinmingElectronicCo., Ltd

Antenna specification

Antenna Sample Confirmation From

Name of supplier	ShenzhenKejinmingElectronicCo., Ltd				
Customer name	Dan Mamane				
Sample name	Multi-function projector				
model	NeoPix 110				
Sample size	NPX110-WIFI-AH Line length; 160 mm, (1.13) generation				
Inspection item	**Performance test**	**Visual inspection**	**Structure**	**In the news**	**Test results**
Notes					
Quality Audit		Project Audit		Business confirmation	

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The following is to be completed by the client	
Customer feedback	
Customer signature/seal	date:

Antenna Test Report

Test Unit: Shenzhen Aihui Technology Co. , Ltd.			
Materials	**FPC**		
Antenna form	**FPC**	Polarization mode	**Linear**
Application scenario	**Wifi /BT**		

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Working band	**2400Mhz-2500Mhz 5100Mhz-5850Mhz**	**VSWR**	**≤2**
Power	**Max：2W**	**Impedance**	**50Ω**
dBi	2412MHz~2462MHz: 2.57dBi;5180MHz~5240MHz:4.42dBi 5745MHz~5825MHz: 3.53dBi		
Test Equipment	**HPE5071C、Shielding Room、3D automatic turntable**		

Antenna Description:：
1. Grounding processing and picture description: no
2. Need to change the motherboard to match: no

- Test voltage: 3.6V, check the antenna contact is good before testing.
- The RF cable of the integrated tester is kept in a natural state and can not be curled.

Specification:test the specified power level, all indicators must conform to the specifications.

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1.Project Image

2.Test Fixture

3.Antenna matching circuit

4.S11 test

5.Antenna passive efficiency and gain

6.Darkroom test equipment and data

7.Schematic diagram of antenna assembly

8.Antenna environment handling

9.Antenna mass production index

10.Structural drawing

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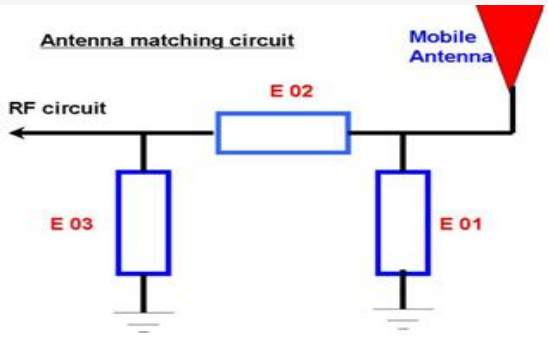
1.Project Image

The final verification antenna performance prototype in our company for at least one year, easy to analyze and solve the problem of antenna mass production, to ensure the quality of antenna shipment

2.Test Fixture

Objective: to test the passive parameters of antenna as accurately as possible. Making Method: the handset is made of a 50 ohm coaxial cable, one end of which is connected to the test point of the back end of the matching circuit of the handset motherboard (front end of the RF test hole) , and the other end is connected to the SMA joint. The diagram is as follows:

3、Antenna matching circuit



Modify

E01	E02	E03
No	No	No

Note: The match is unmodified.

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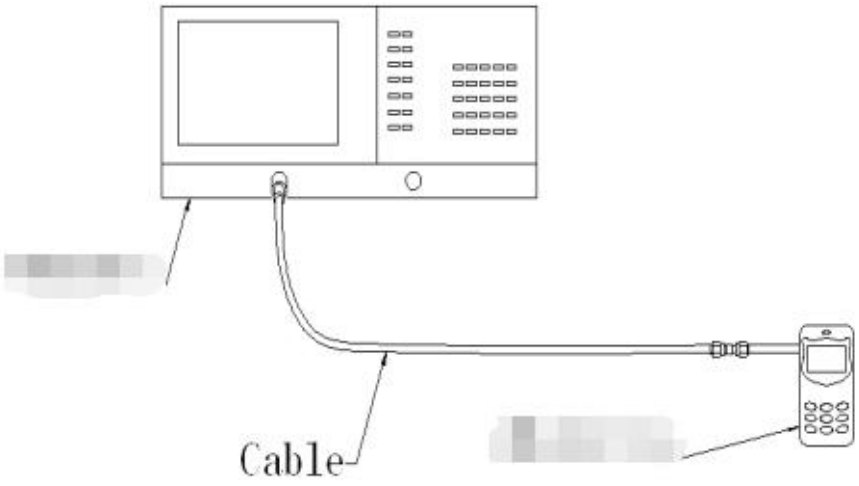
4.S11 test

4.0 4.0s11 test method description of test equipment: Network Analyzer (E5071C) test method: a 50 ohm CABLE is used to export from the instrument test port. The SMA connector for connecting the handset is calibrated using a calibration piece, record the echo loss and standing wave ratio corresponding to the relevant frequency points. The test schematic is as follows:



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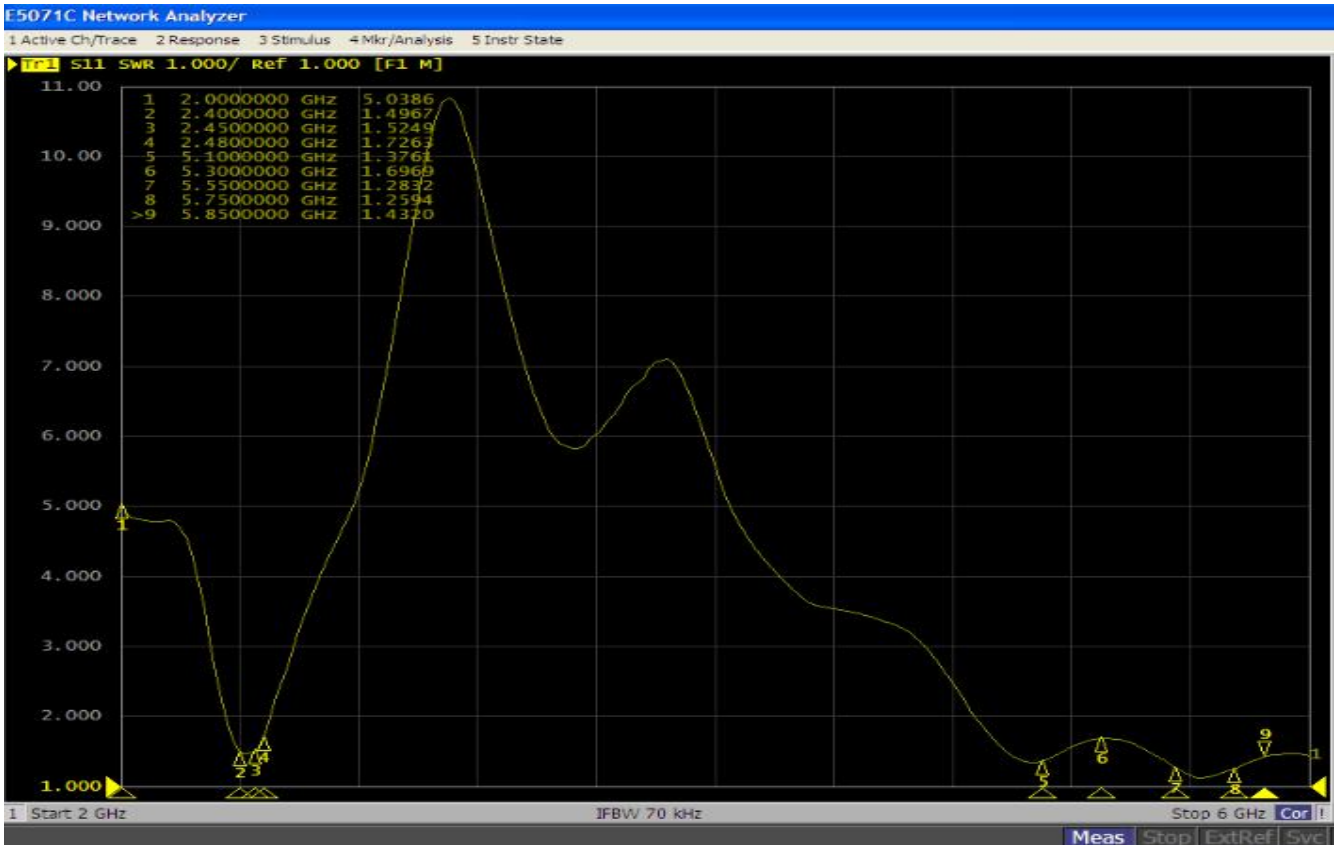
5.Darkroom test equipment and data



6.Test Equipment

Test system: shielded darkroom

The temperature was 22 ° C ± 3 ° C and the humidity was 50% ± 15%

Test equipment: when testing passive data, use the Network analyzer AGILENTE5071C to test active data, use the omnibus CMW500

nce and

Shenzhen

7.Active antenna test data

Frequency Band	2.4G-WIFI B模			2.4G-WIFI G模		
channel	L	M	H	L	M	H
TRP	14.36	14.05	14.54	12.68	12.89	12.87
TIS			-80.32			-68.61
Frequency Band	2.4G-WIFI N模			5.8G-WIFI A模		
channel	L	M	H	L	M	H
TRP	12.16	12.75	12.61	13.44	13.16	13.73
TIS			-67.88			-72.32

TEST DATA:		
WIFI 2.4G		
Freq(MHz)	Efficiency (%)	Gain (dBi)
2400	58.7	1.37
2410	57.8	1.69
2420	59.5	2.07
2430	56.3	2.29
2440	57.5	2.57
2450	54.5	2.42
2460	52.6	2.44
2470	55.6	2.20
2480	54.9	1.93

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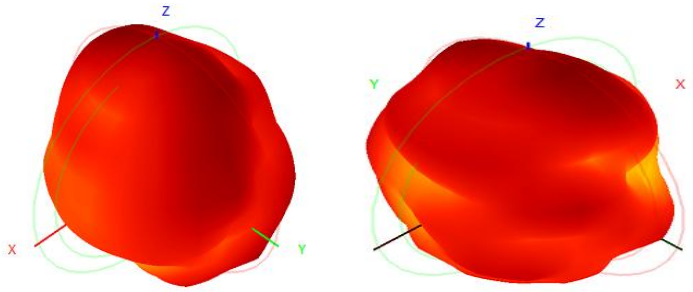
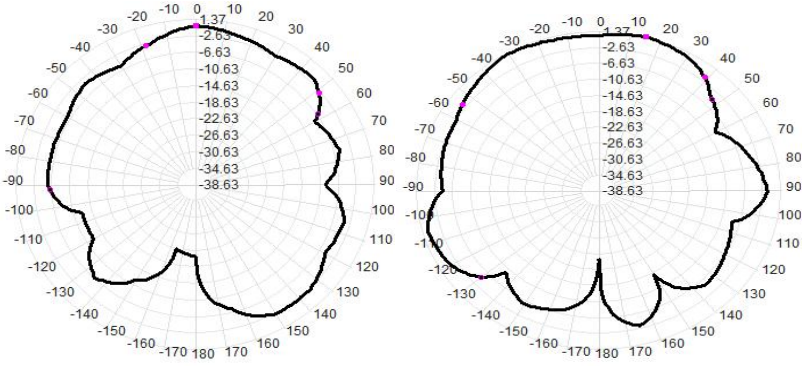
TEST DATA:		
WIFI 5G		
Freq(MHz)	Efficiency (%)	Gain (dBi)
5150	54.5	3.20
5200	55.1	4.42
5250	56.5	2.75
5300	57.1	2.69
5350	53.4	1.47
5400	52.9	1.95
5450	53.8	0.84
5500	58.3	1.97
5550	57.5	2.20
5600	56.3	3.52
5650	51.9	3.18
5700	50.5	2.77
5750	50.6	2.53
5800	51.9	2.66
5850	52.6	3.53

2400





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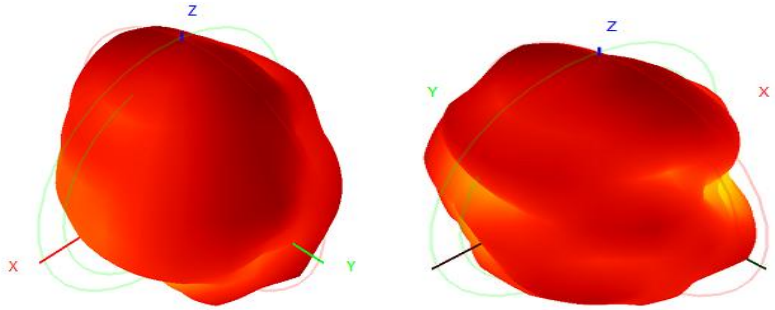

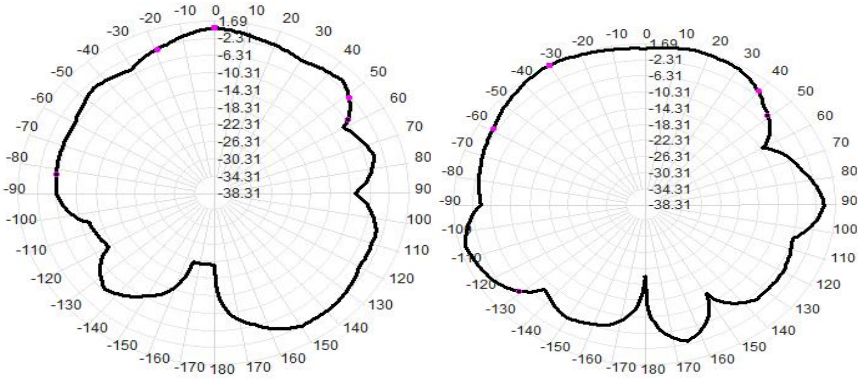

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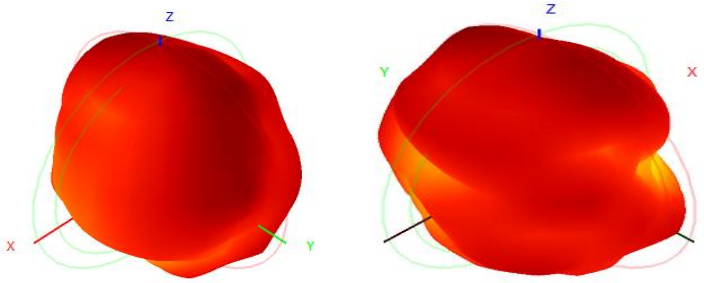

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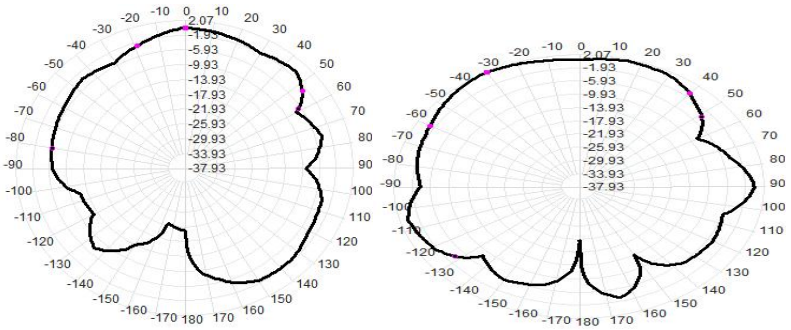

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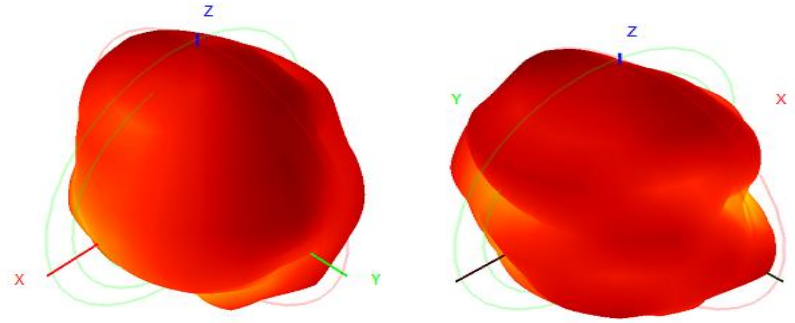

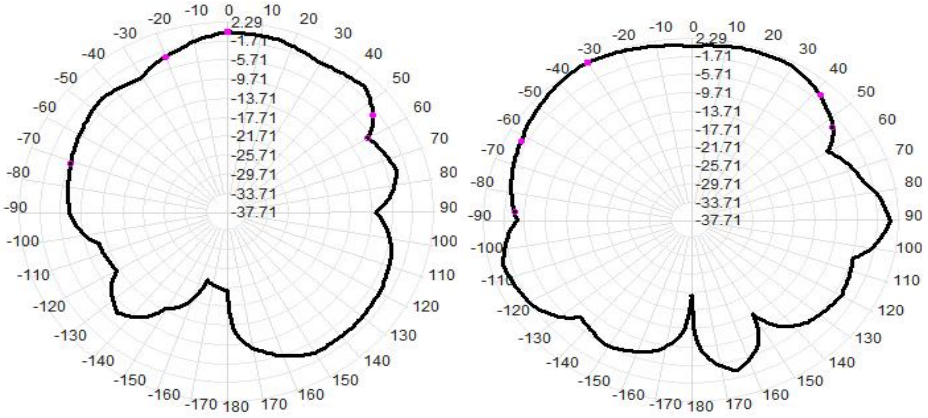

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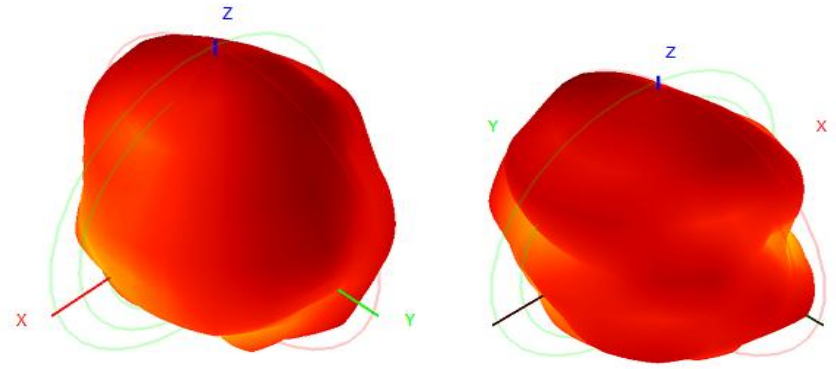

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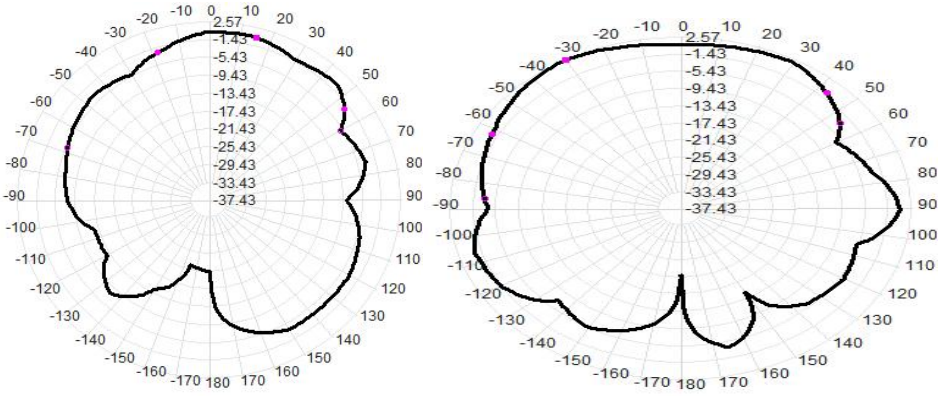

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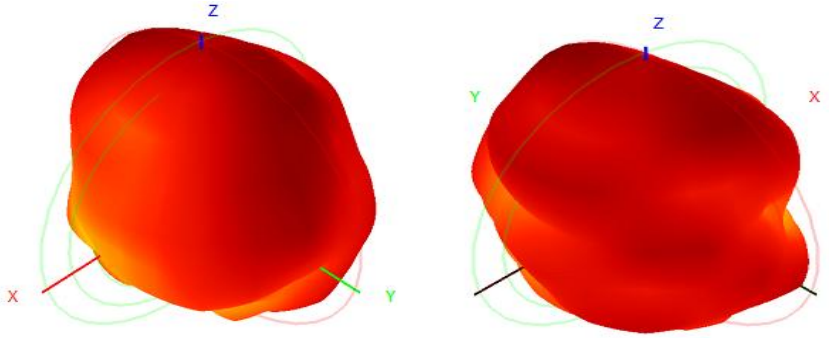

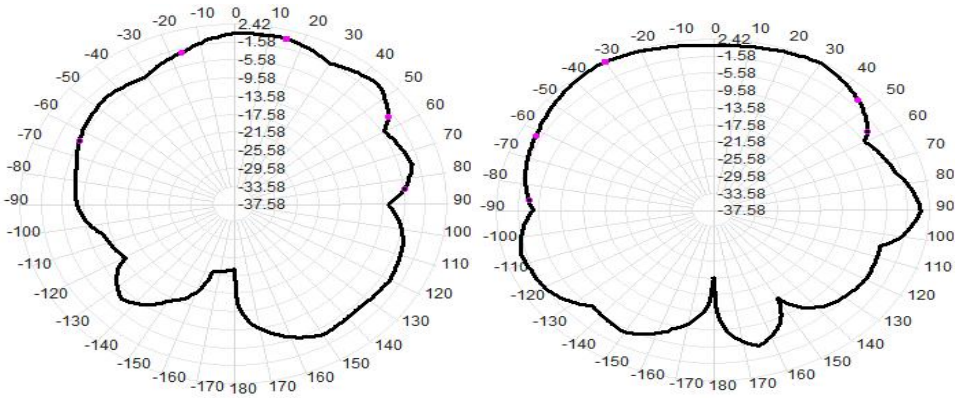

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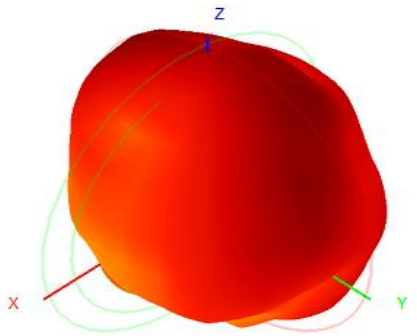

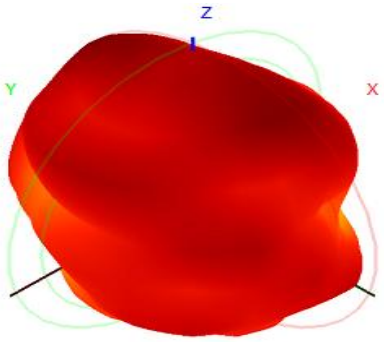

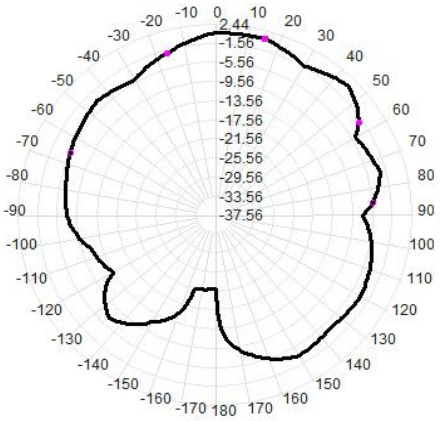

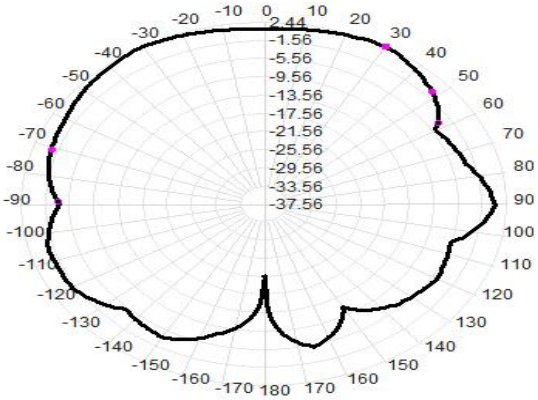

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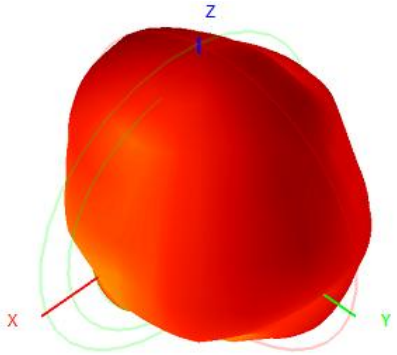

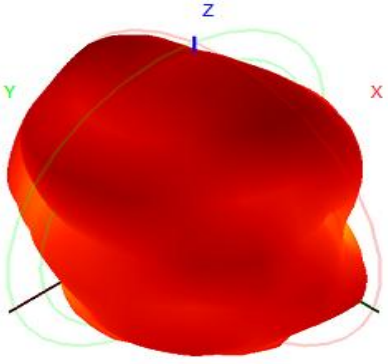

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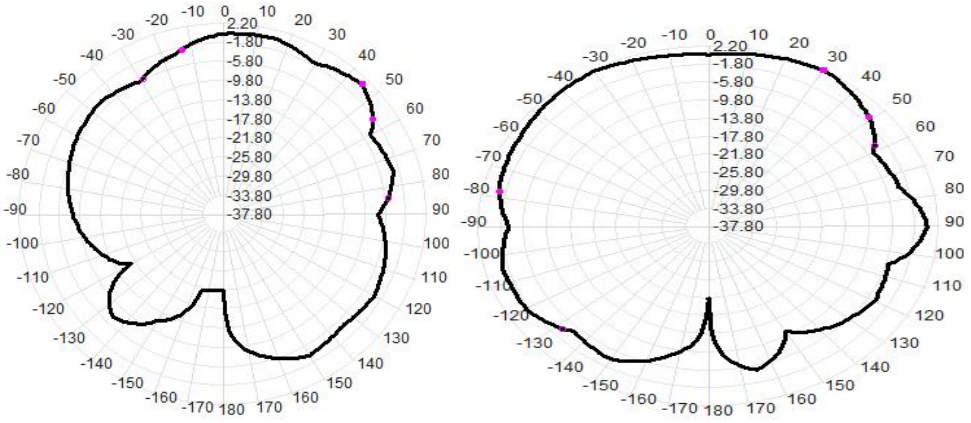

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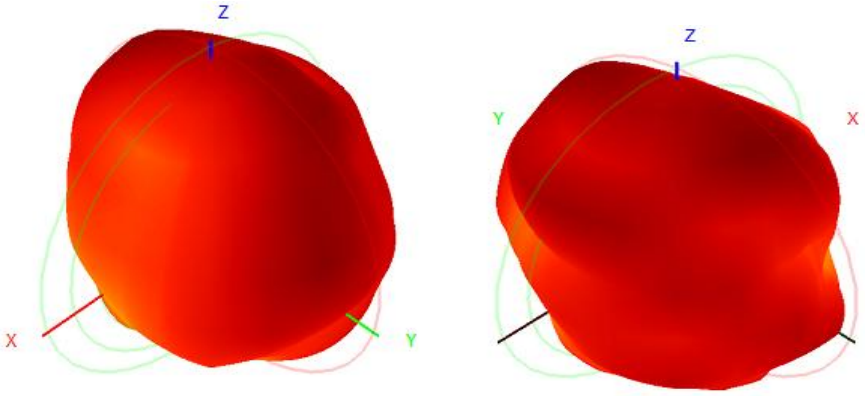

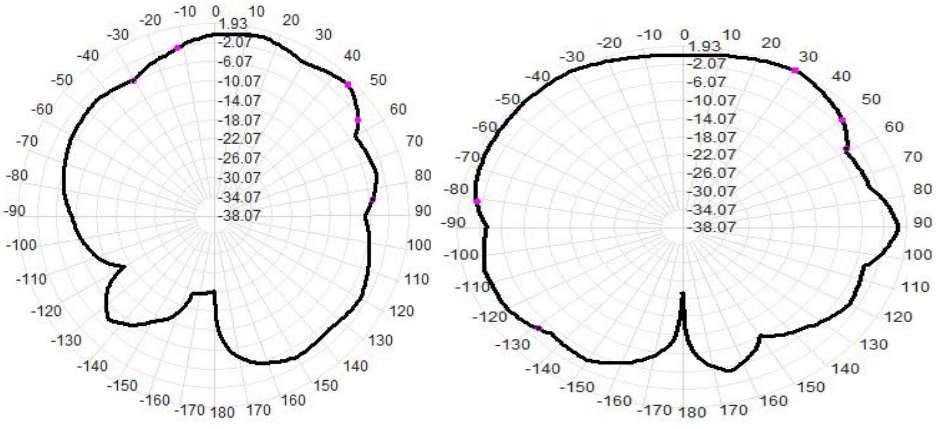

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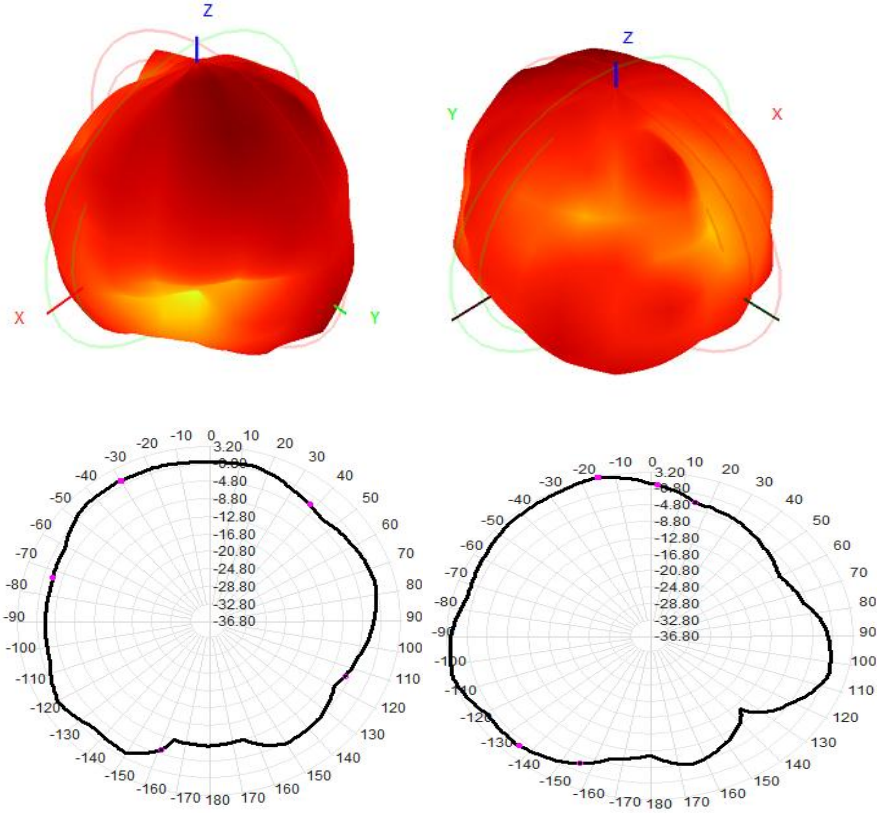

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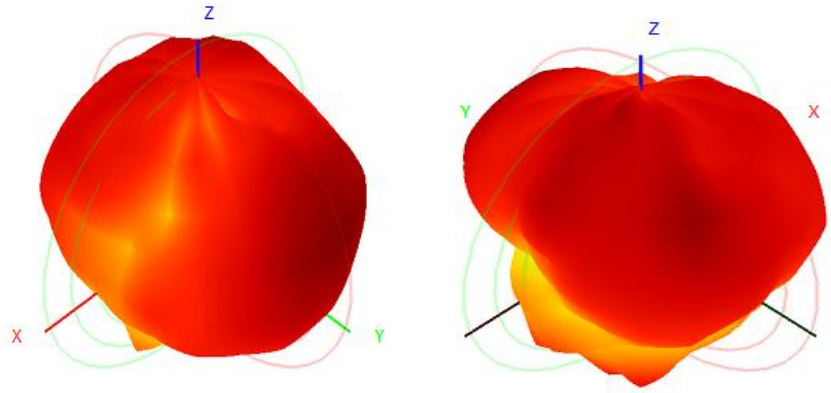

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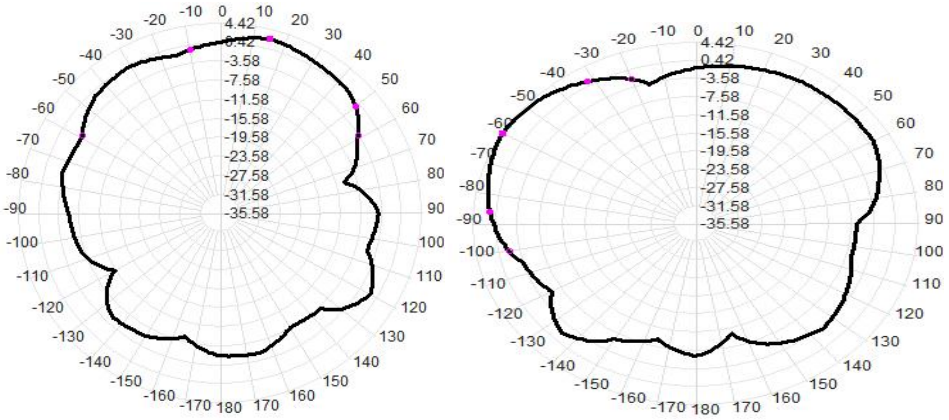

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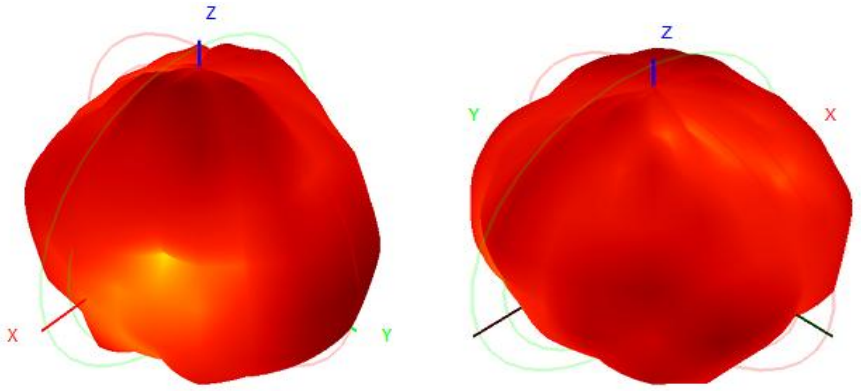

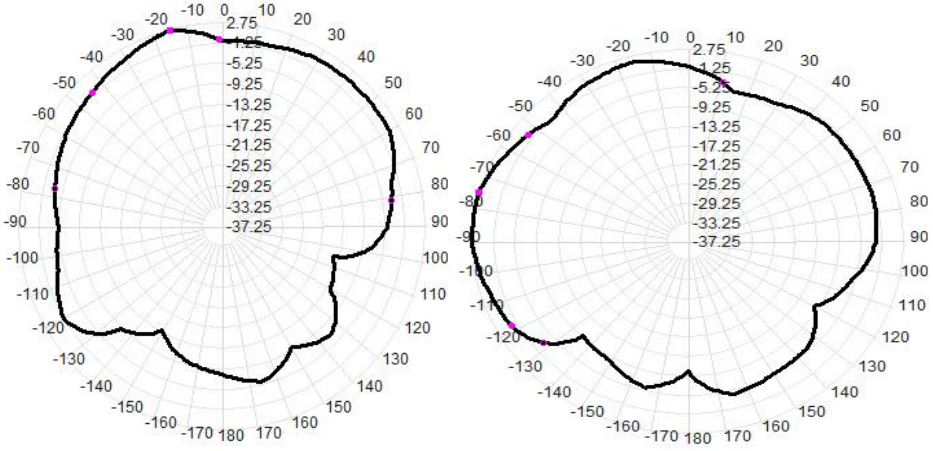

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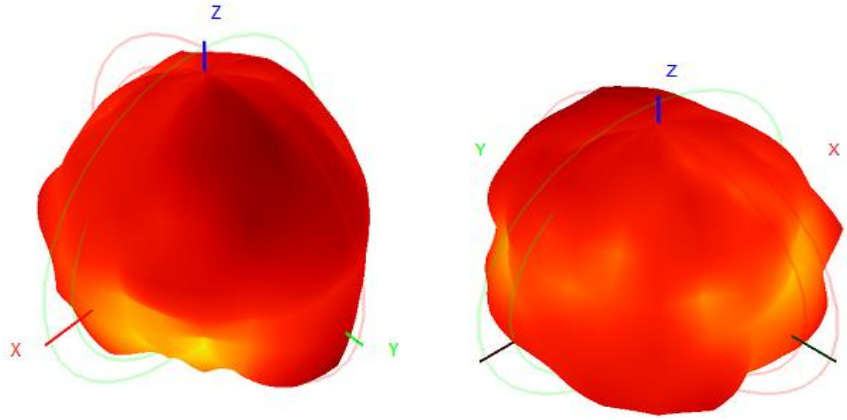

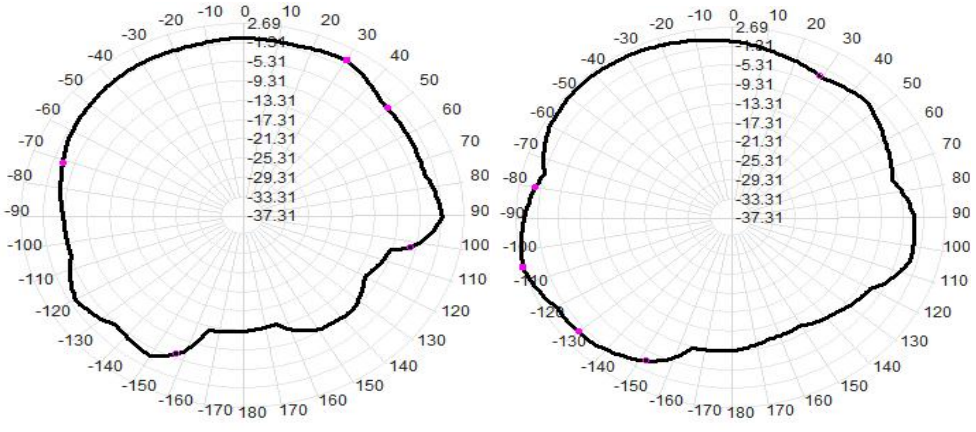

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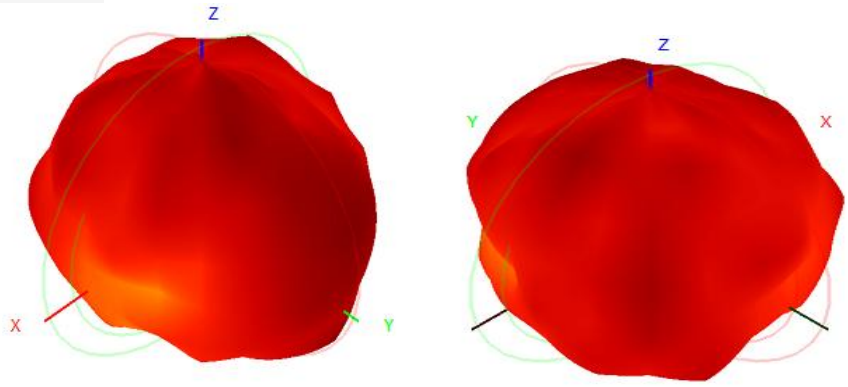

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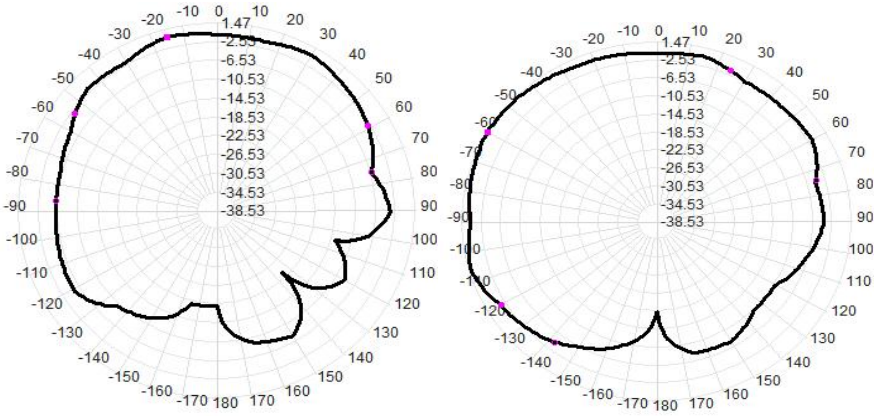

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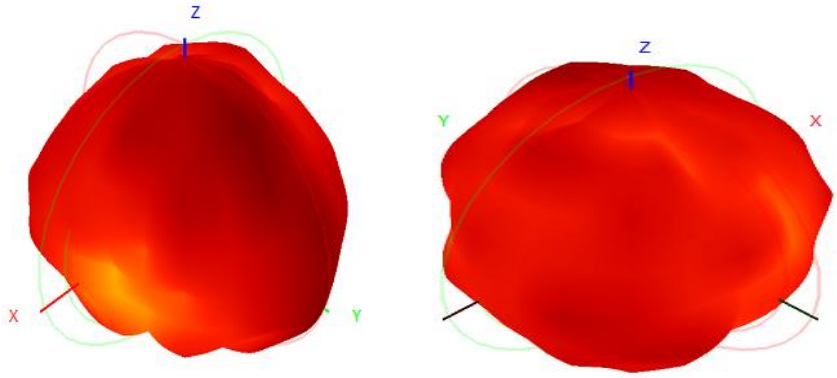

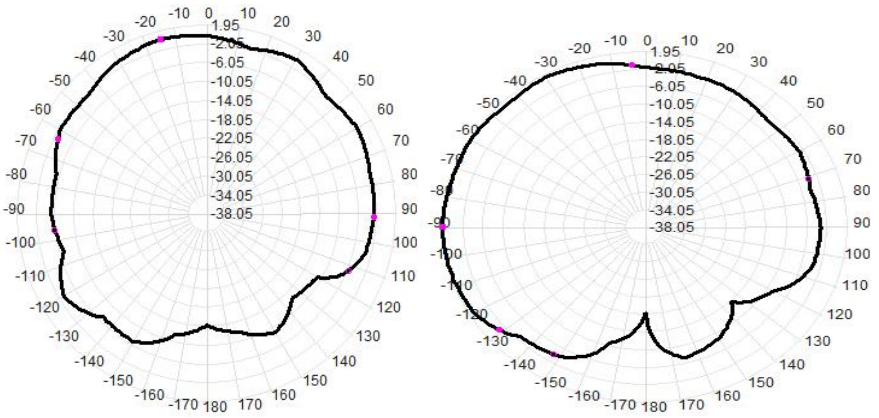

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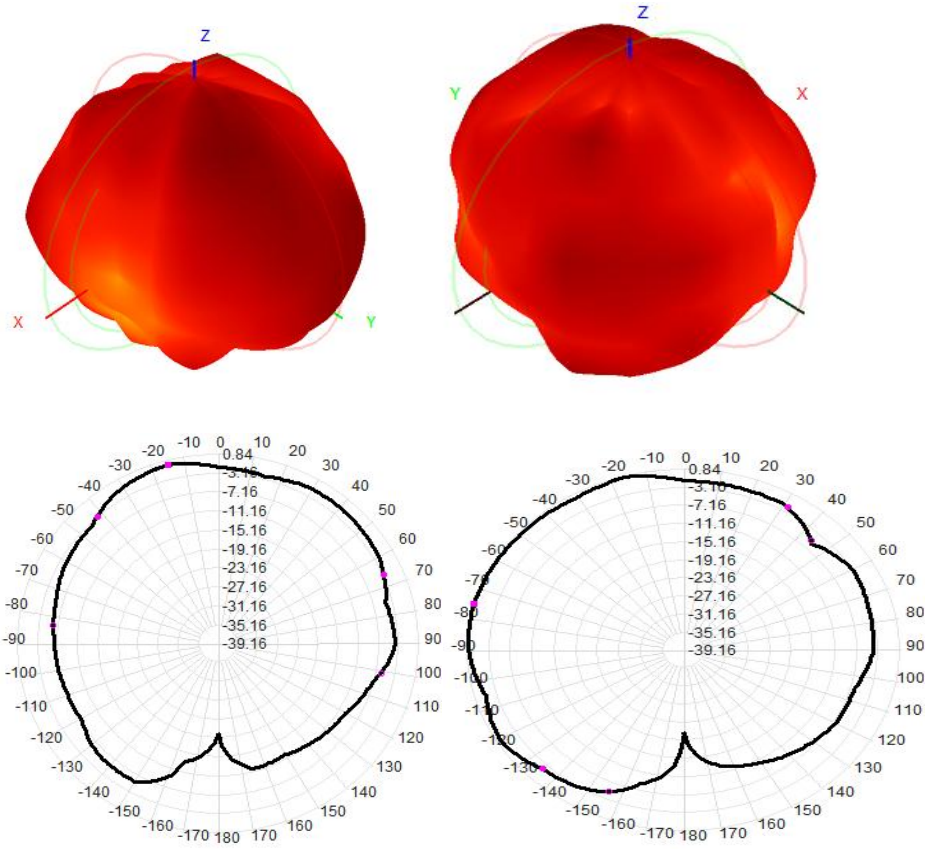

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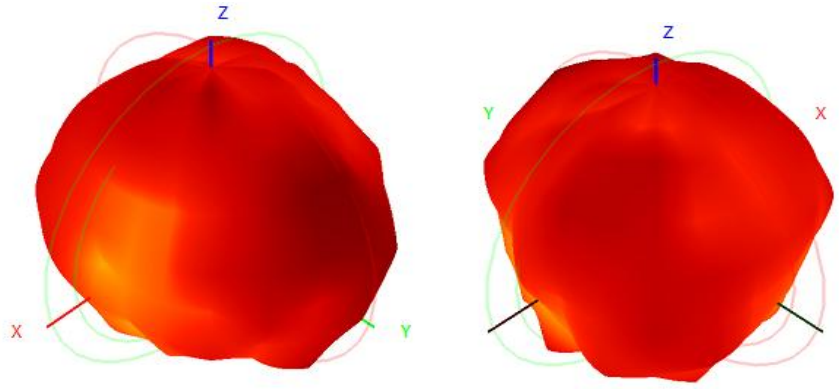

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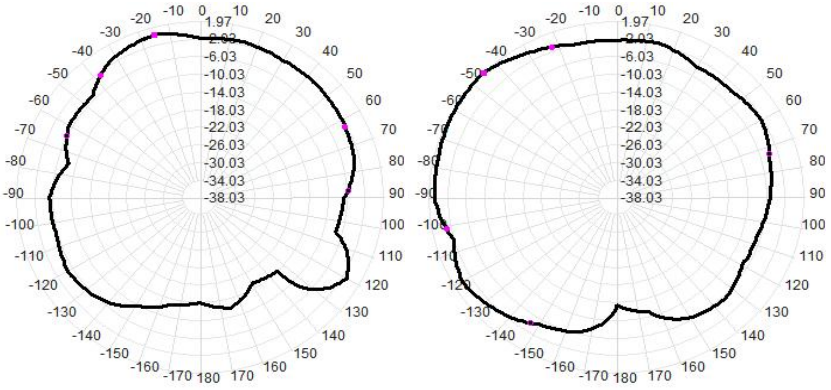

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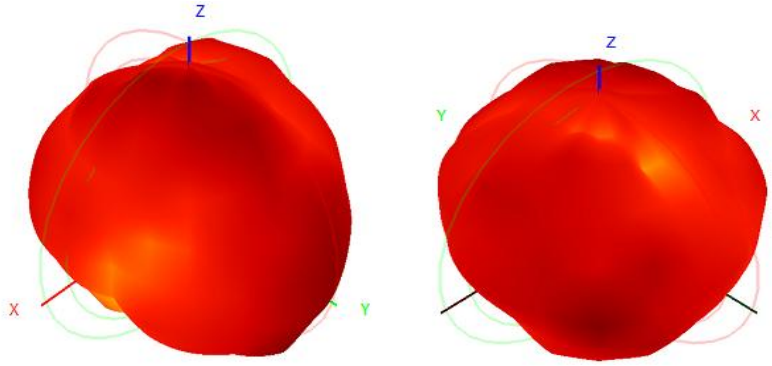

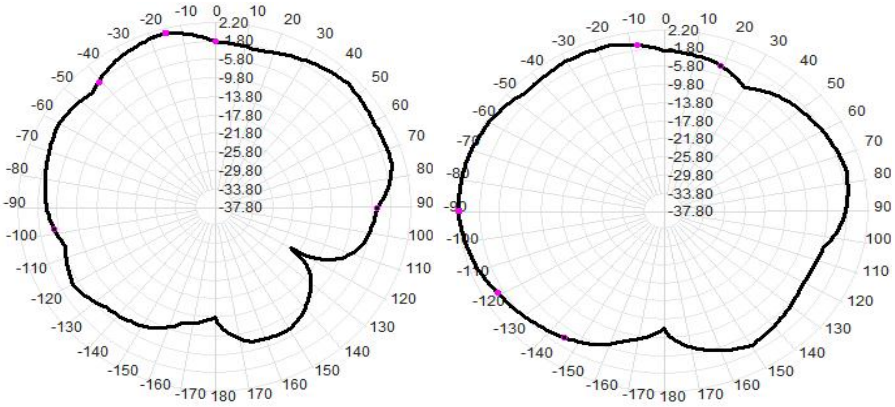

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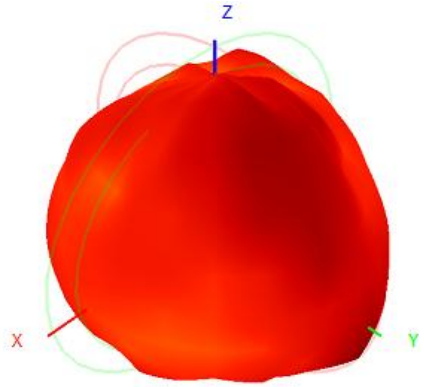

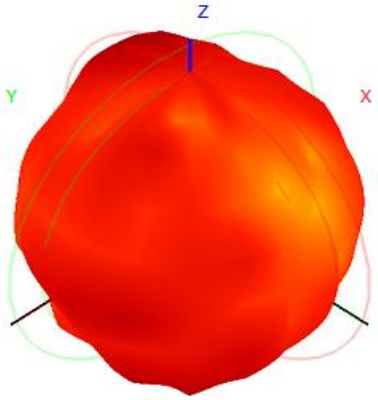

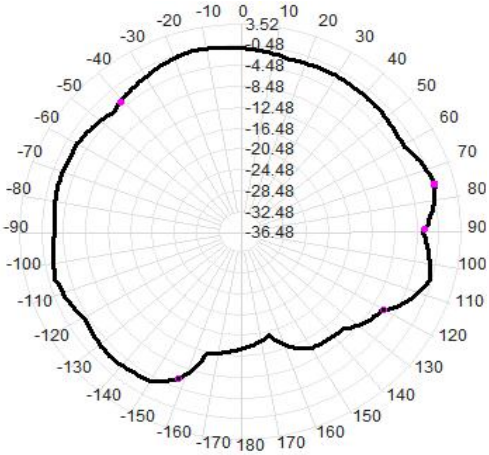

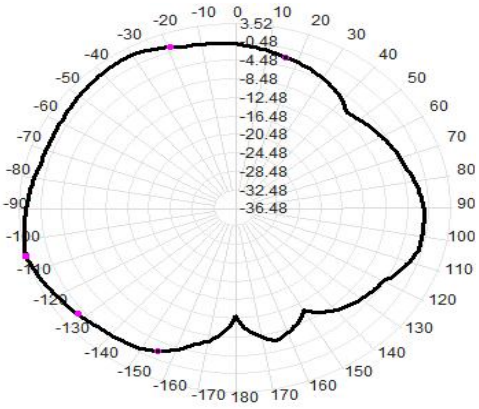

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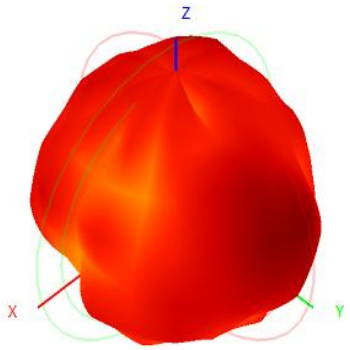

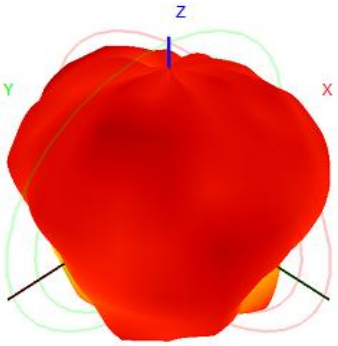

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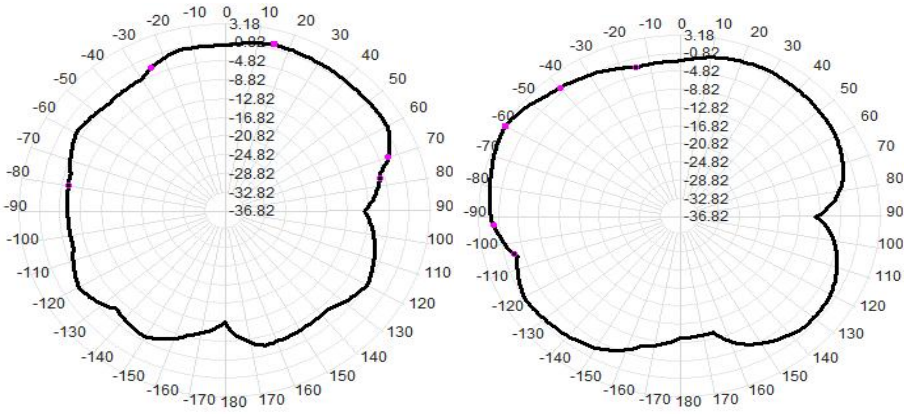

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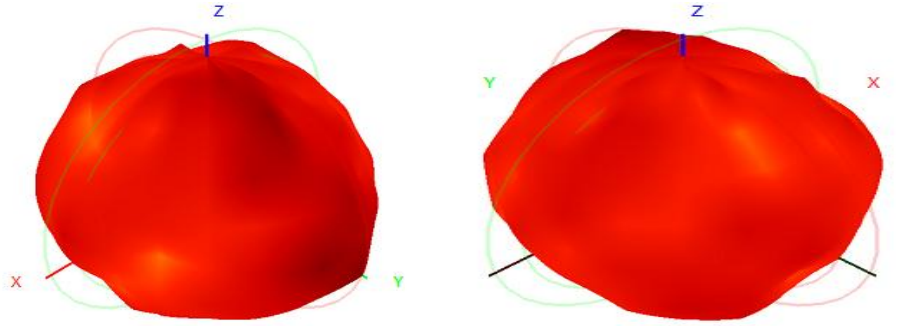

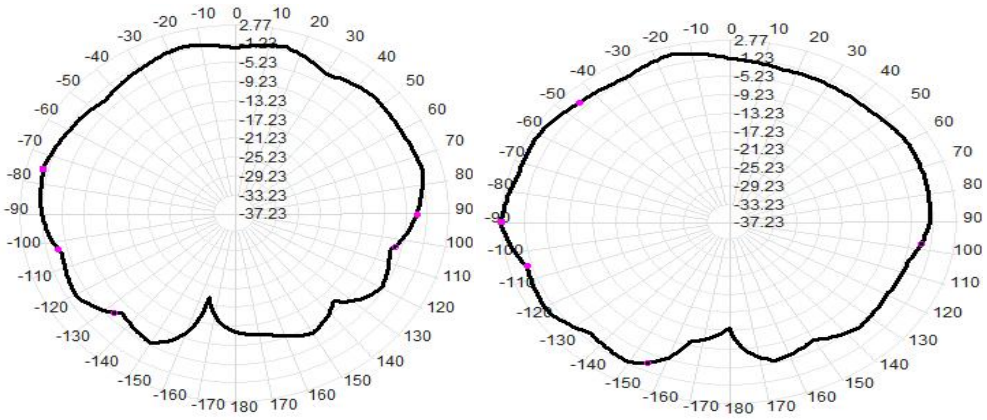

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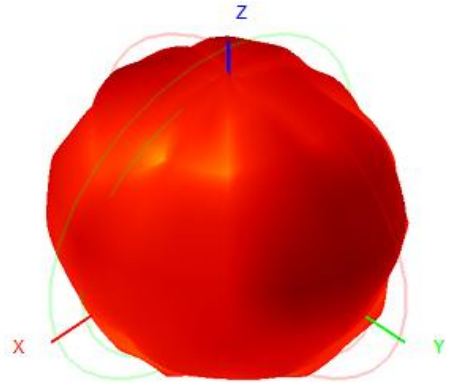

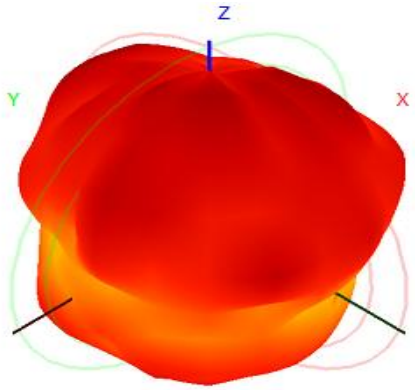

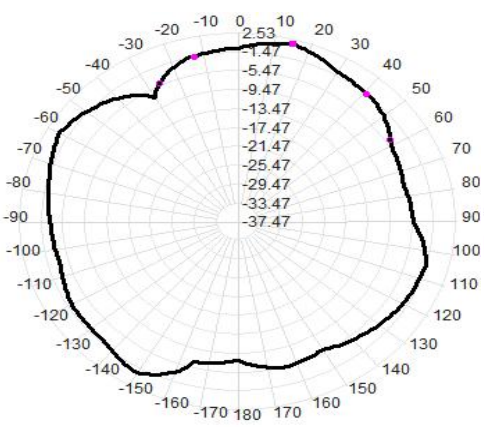

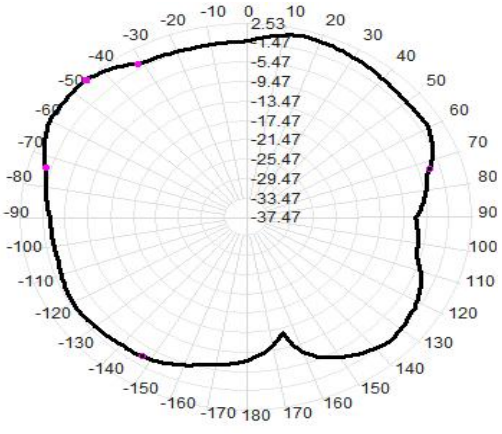

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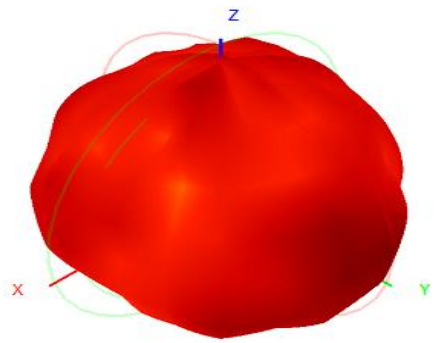

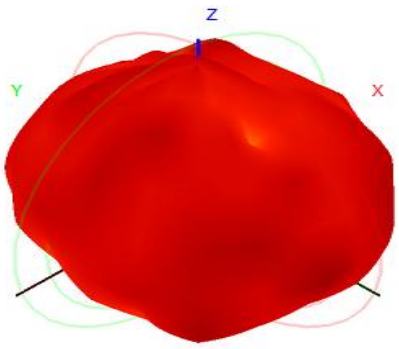

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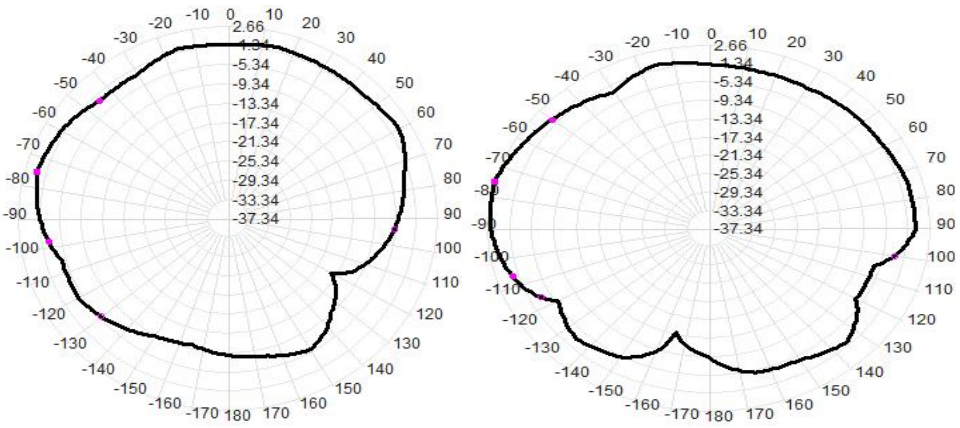

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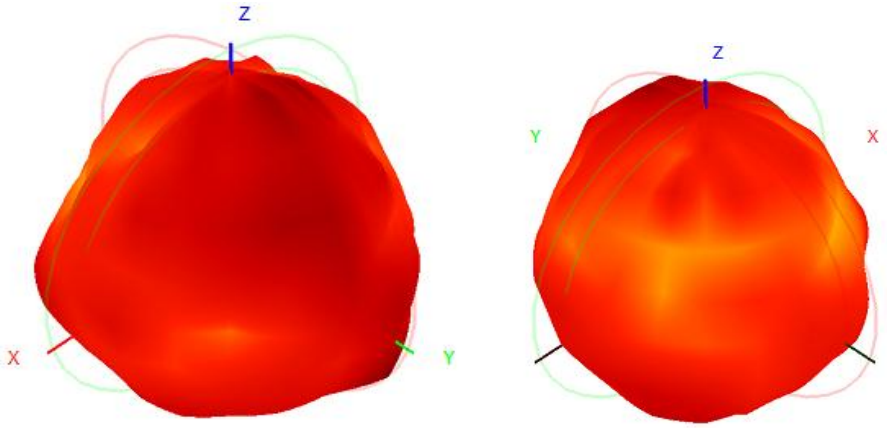

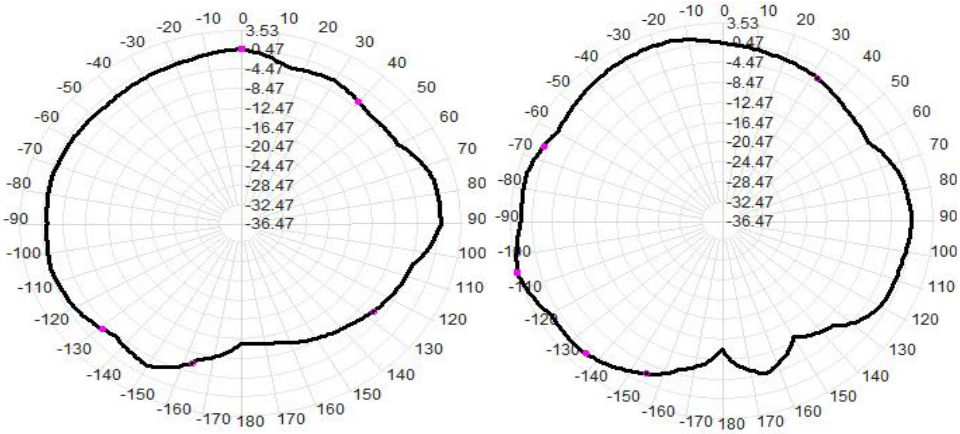

6.The panel matches the change schematic

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7.Antenna environment handling

The original environment, we do not do processing

8.Antenna mass production index

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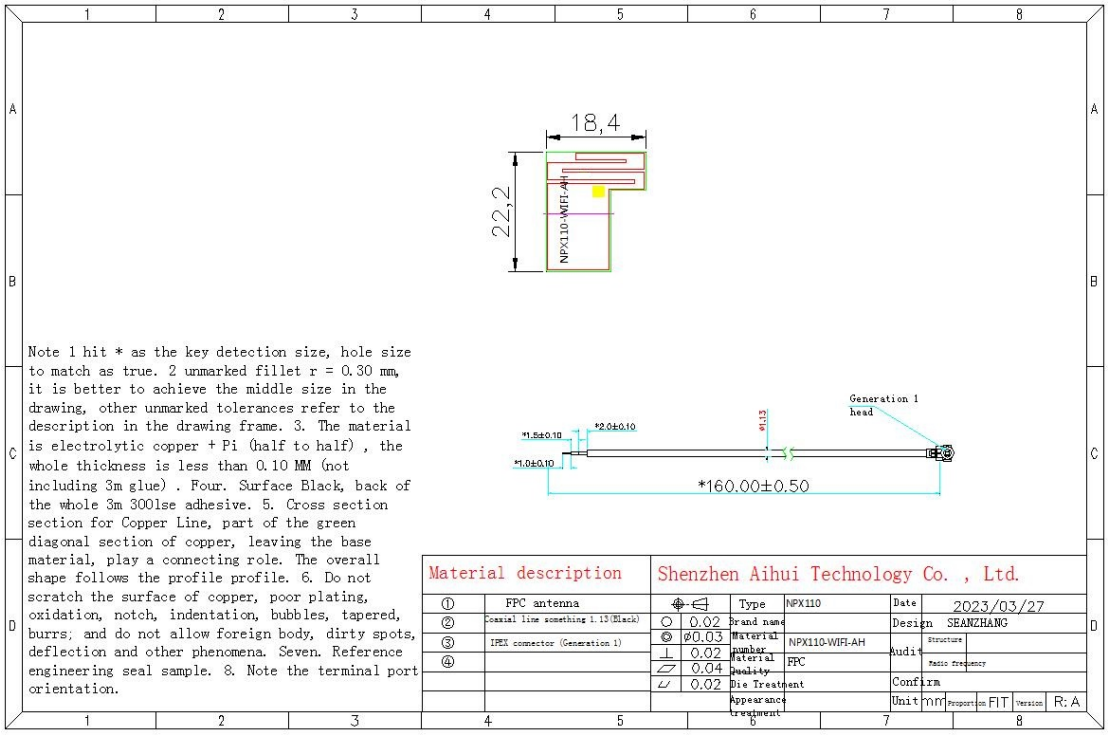
When the antenna is mass-produced, the standing wave ratio is taken as the mass-produced test standard.
Based on the differences of the project itself, the following criteria are given:

Frequency	Standard for volume production
2400 MHZ -2500MHZ	VSWR (Mass Production performance) & LT; VSWR(recognition performance) 0.5
5100 MHZ -5800MHZ	VSWR (Mass Production performance) & LT; VSWR(recognition performance) 0.5

9.Structural drawings

Shenzhen Aihui Technology Co. , Ltd.



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