

Shenzhen Saiwei Communication Technology Co., Ltd

SY3T-S37A-F Antenna Specification Sheet

Customer Name: Tai Lefeng

Project name: S37

Reporting time: 20241225

Saiwei - Sai is far away, and Wei is eternal!

Catalogue

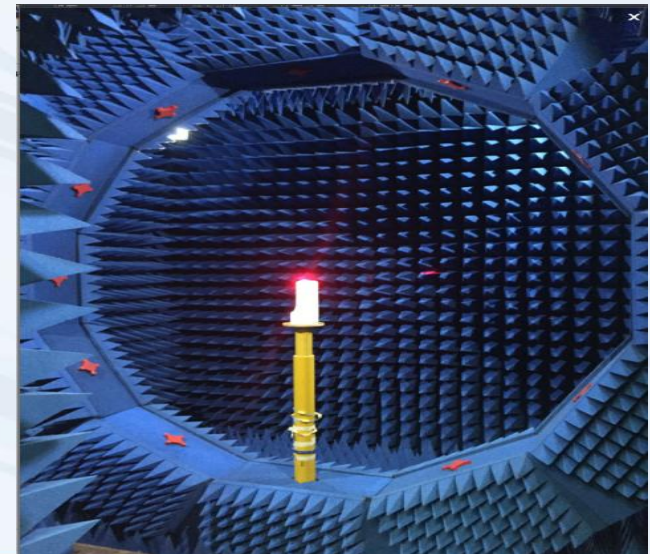
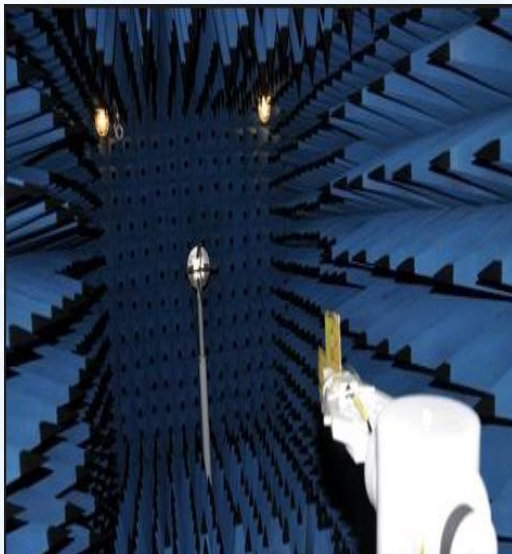
- Introduction to project debugging
- Report version feed
- Test environment
- Main antenna matching circuit
- Main antenna dark room data
- Additional instructions

Introduction to project debugging

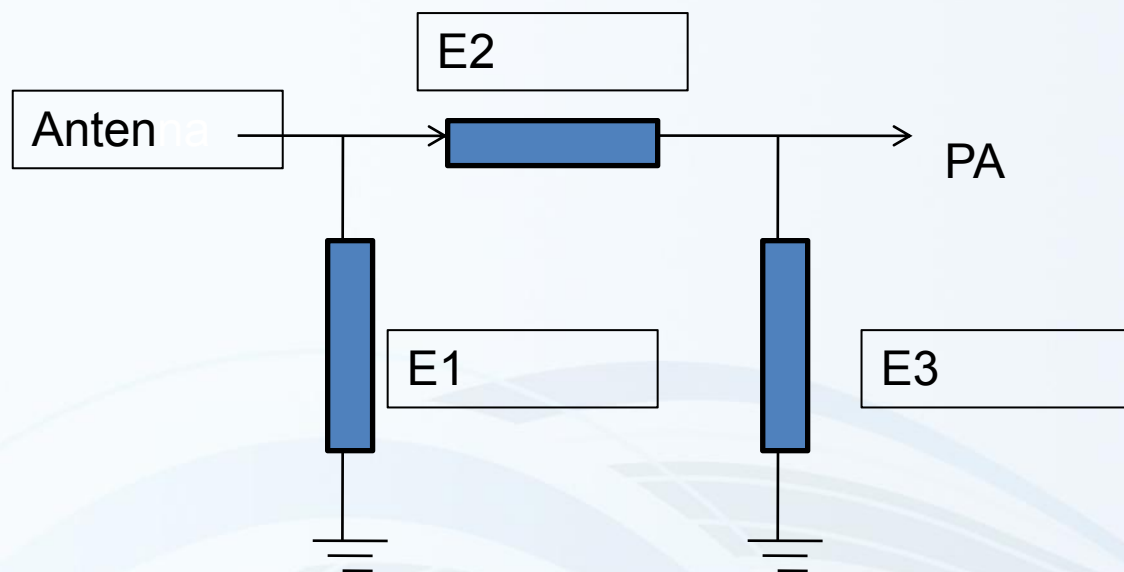
Type	Smart phone						
Plate type	Motherboard						
Antenna Overview	Main antenna	Frequency band		Premature line status	Yao line form	Design area	Matching changes
		2G	850/900/1800/ 1900	FPC	PIFA		
		3G	W4/2/5/8				
		4G					
	Other antennas	BT/WIFI	2. 4G		PIFA		
		GPS	1. 575G				
		Episodes			PIFA		
Prototype status			Environmental treatment				

Report version feed

Edition	Date	Overview of meat
V1	20241225	Test data



Main antenna matching circuit



Element	Value
E1 (0402)	N/A
E2 (0402)	N/A
E3 (0402)	N/A

2G OTA

2G	Channel	TRP (dBm)	TIS (dBm)
850	128	23.0	
	192	23.6	
	251	25.2	-102.3
900	1	26.2	
	62	25.5	
	124	24.5	-98.6
1800	512	22.4	
	698	22.2	
	885	22.4	-102.1
1900	512	23.1	
	661	24.0	
	810	23.4	-100.2

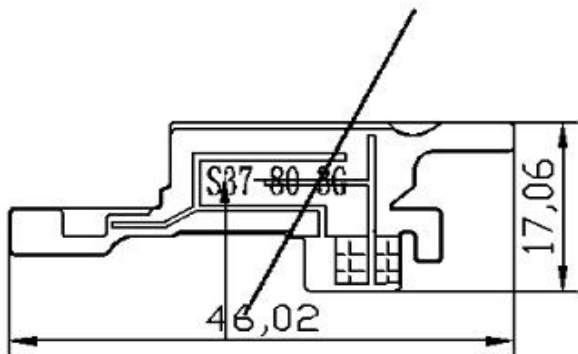
3G OTA

3G	Channel	TRP (dBm)	TIS (dBm)
W4	L	17.6	
	M	16.5	
	H	16.6	102.3
W2	L	16.7	
	M	15.5	
	H	16.1	-103.8
W5	L	14.2	
	M	14.1	
	H	15.4	-104.8
W8	L	16.3	
	M	15.6	
	H	15.4	-100.9

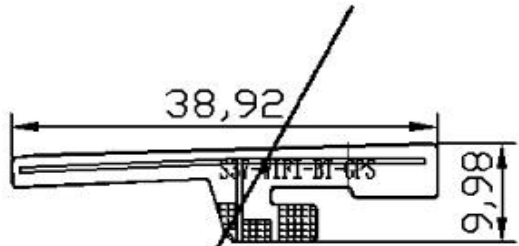
Antenna gain

Standard	Band	Gain(dbi)
GSM	850	-1.58
GSM	900	-1.36
GSM	1800	-0.72
GSM	1900	-0.13
WCDMA	W4	0.51
WCDMA	W2	-0.13
WCDMA	W5	-1.58
WCDMA	W8	-1.36
WIFI	2.4G	0.56
BT	2.4G	0.56
GPS	1.575G	-1.75

Antenna specifications



2G/3G MAIN ANT



BT/WIFI/GPS ANT

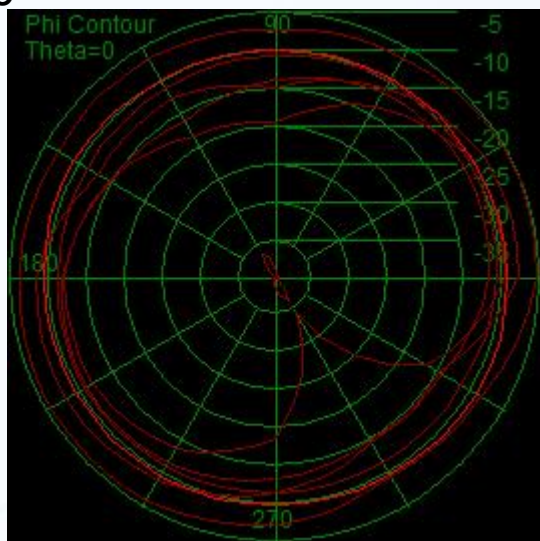
V.1
V.2
V.3
V.4
V.5

Shenzhen Saiwei Communication Technology Co., LTD									
第三角法				机 种	S37A	日期	2024-12-25	绘图	页码 1 of 1
0~10	±0.10	○	0.02	品 名	CSA天线	结构 射频	设计	审核	核准
10~20	±0.12	⊙	0.03	料 号	SPST-S37A-F				
20~40	±0.15	⊕	0.03	材 质	FPC130M9471				
40~	±0.20	⊖	0.04	模面处理					
请勿实测图纸 位 置				外观处理		单位	比例	1:1	版本 REV:A

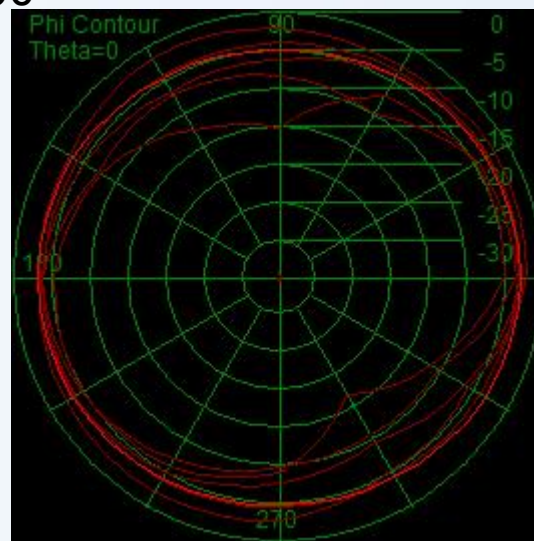
No.	Layer	Description(Thickness)	Manufacturer 8P/M
1	青 胶	3000SEMP (12 μm)	九江福来克斯
2	基 材	MM-800P NMG3<10 μm>	贝力
3	印 油	Cu(ED) <18 μm>+PI <12.5 μm>	航源

2D picture display

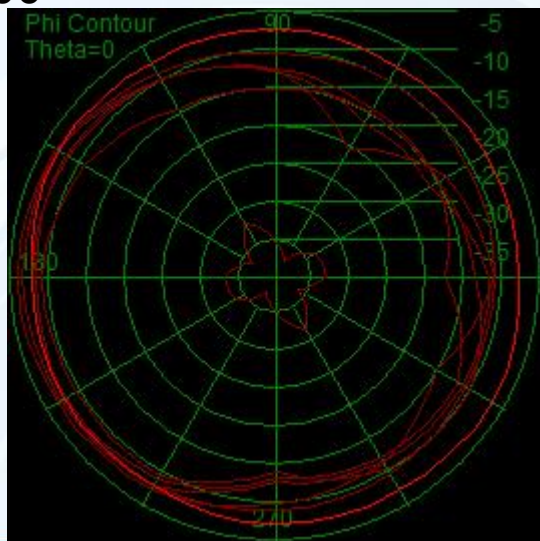
850



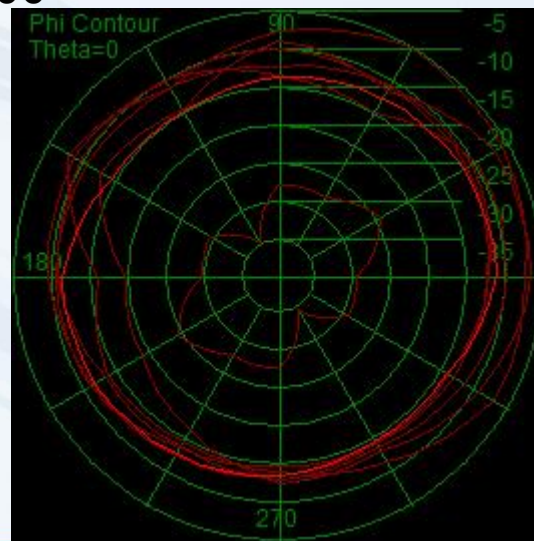
900



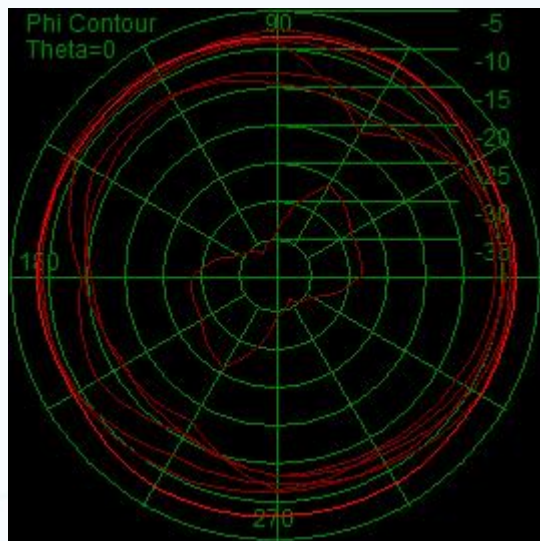
1800



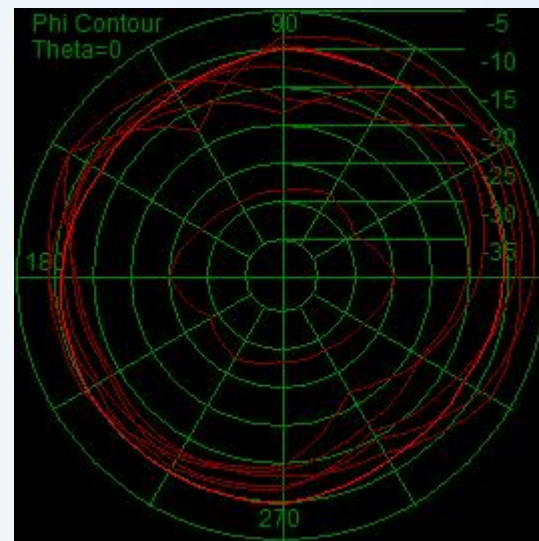
1900



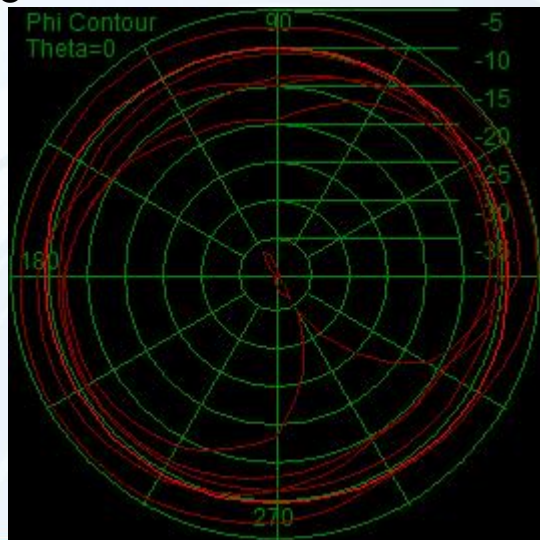
W4



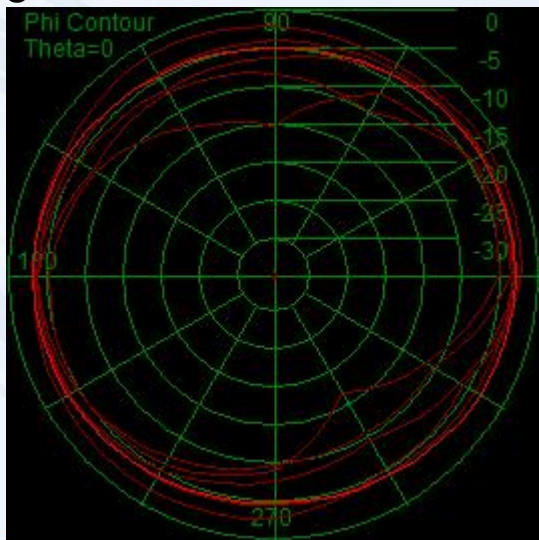
W2



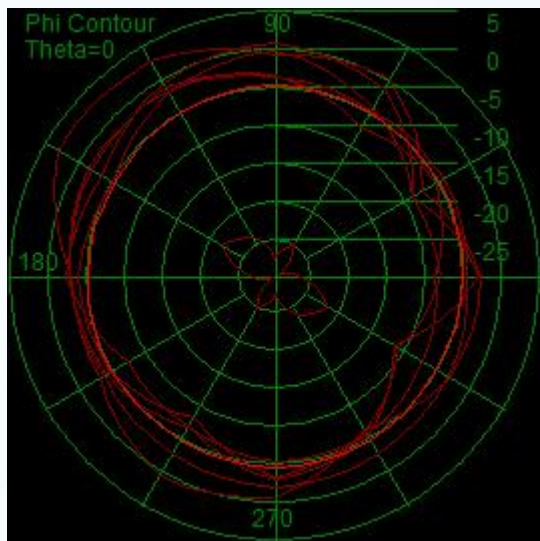
W5



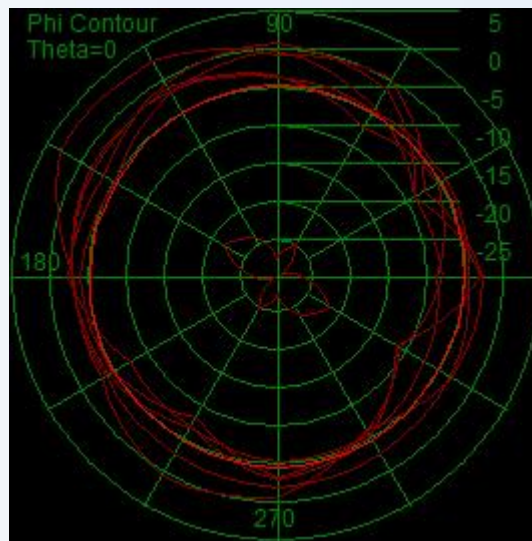
W8



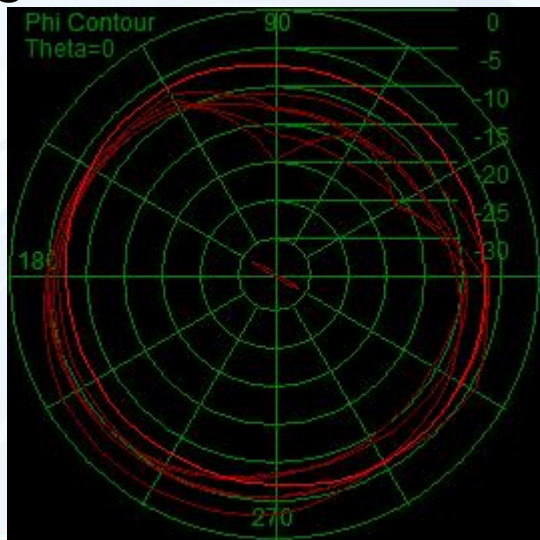
WIFI



BT

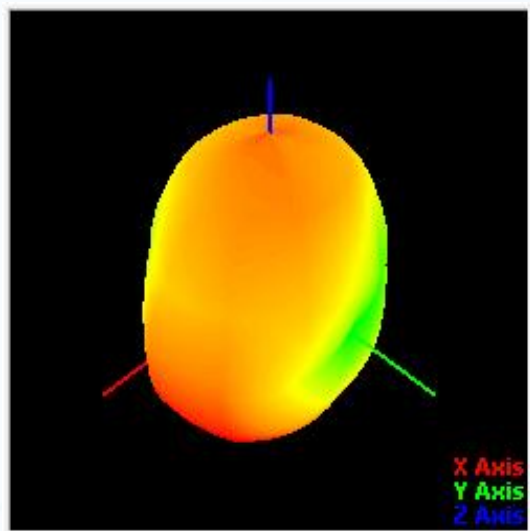


GPS

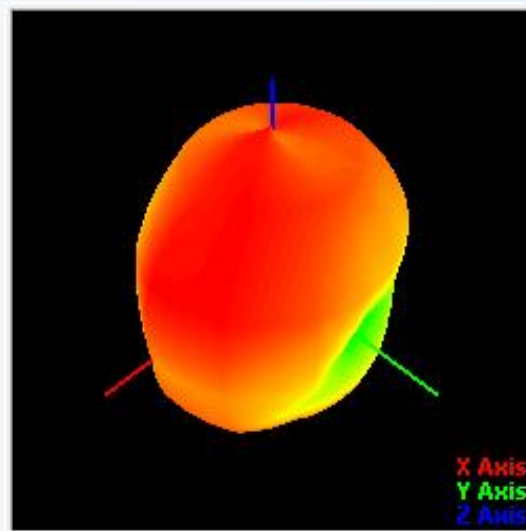


3D picture display

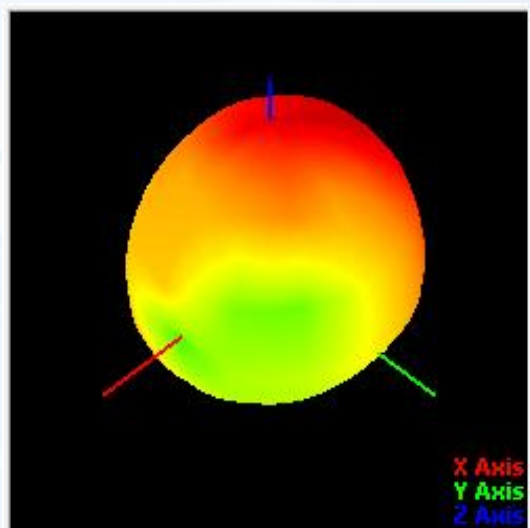
850



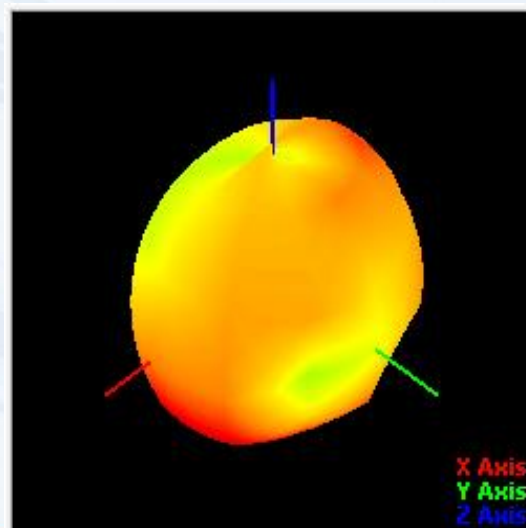
900



1800

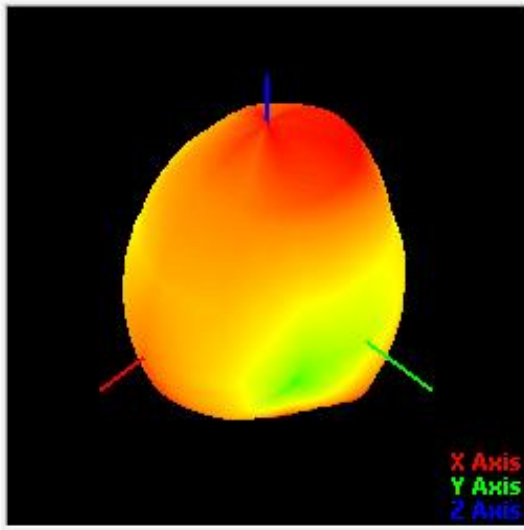


1900

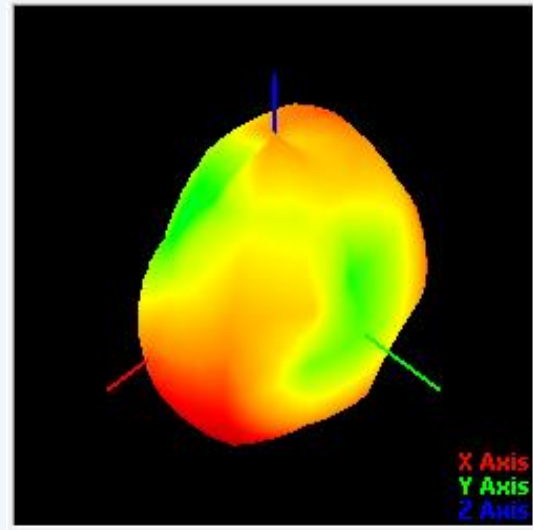


3D picture display

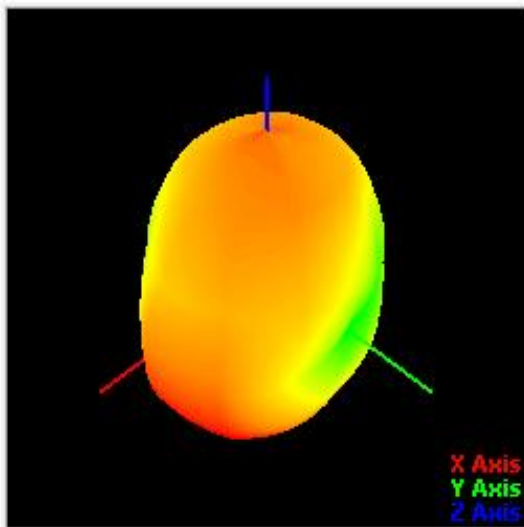
W4



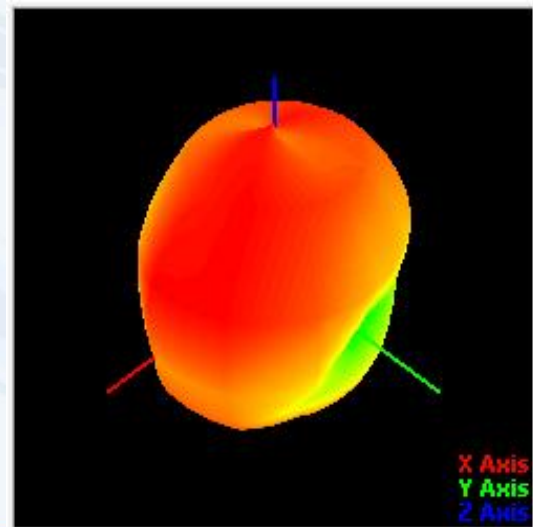
W2



W5

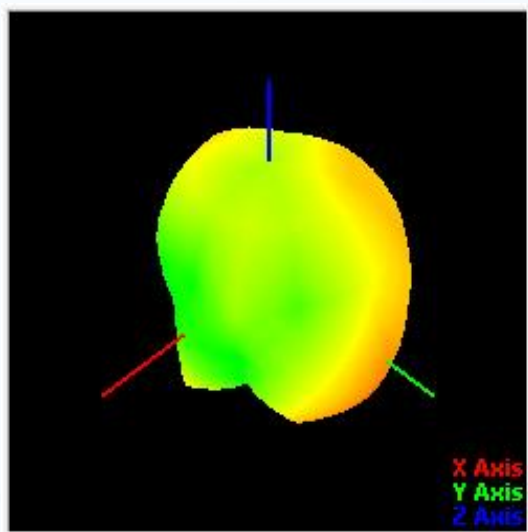


W8

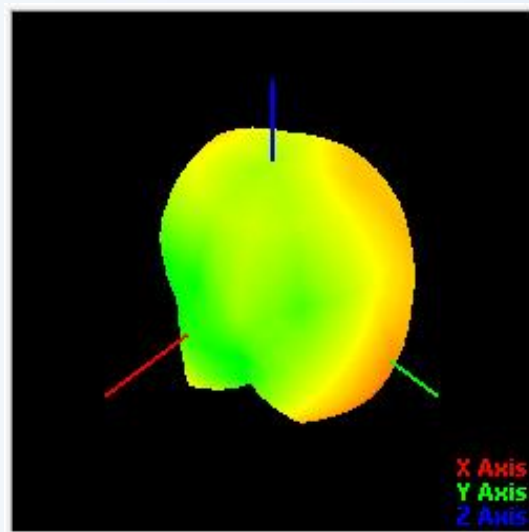


3D picture display

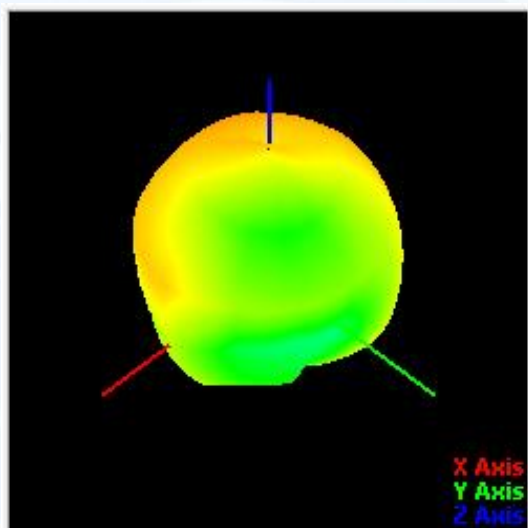
WIFI



BT



GPS



- △ Please carefully confirm whether the matching circuit mentioned in the report is modified and whether the environmental processing is conductive, which will directly affect the antenna performance.
- △ The parameters provided in this report are only for the reference given by customers to our demo.
- △ If your company has a prototype with the latest trial production or update status (replacement of materials, update software, replacement of environment processing, etc.), please submit it to our company for verification as soon as possible to confirm whether the antenna performance has been affected.。
- △ If you need to send it to a third party for retest or send it to the customer for testing, please be sure to hand over the machine that needs to be tested by our company for testing and confirmation, because of the consistency of the motherboard, the consistency of assembly, and the difference in antenna assembly, etc. All factors may lead to the deviation of antenna parameters.

THANKS!

