

TAPPIV1

Antenna Test Report



Shenzhen Ruixi Yun Communication Technology Co., LTD
Date: June 25, 2025

Antenna information

Model number of the antenna : AA055U

Antenna brand : Unictron

Name of the antenna manufacturer :Unictron Technologies Corporation

**Address of the antenna manufacturer : No. 41, Shuikeng, Datong Village,Guanshi Town,
Hsinchu County, Taiwan**

Name of testing manufacturer : Shenzhen Ruixi Yun Communication Technology Co., LTD

**Address of the testing manufacturer: Building B, No. 5, Nanke Yue Valley, Dalong Subdistrict,
Longhua District, Shenzhen City**

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1.Project Commissioning Introduction

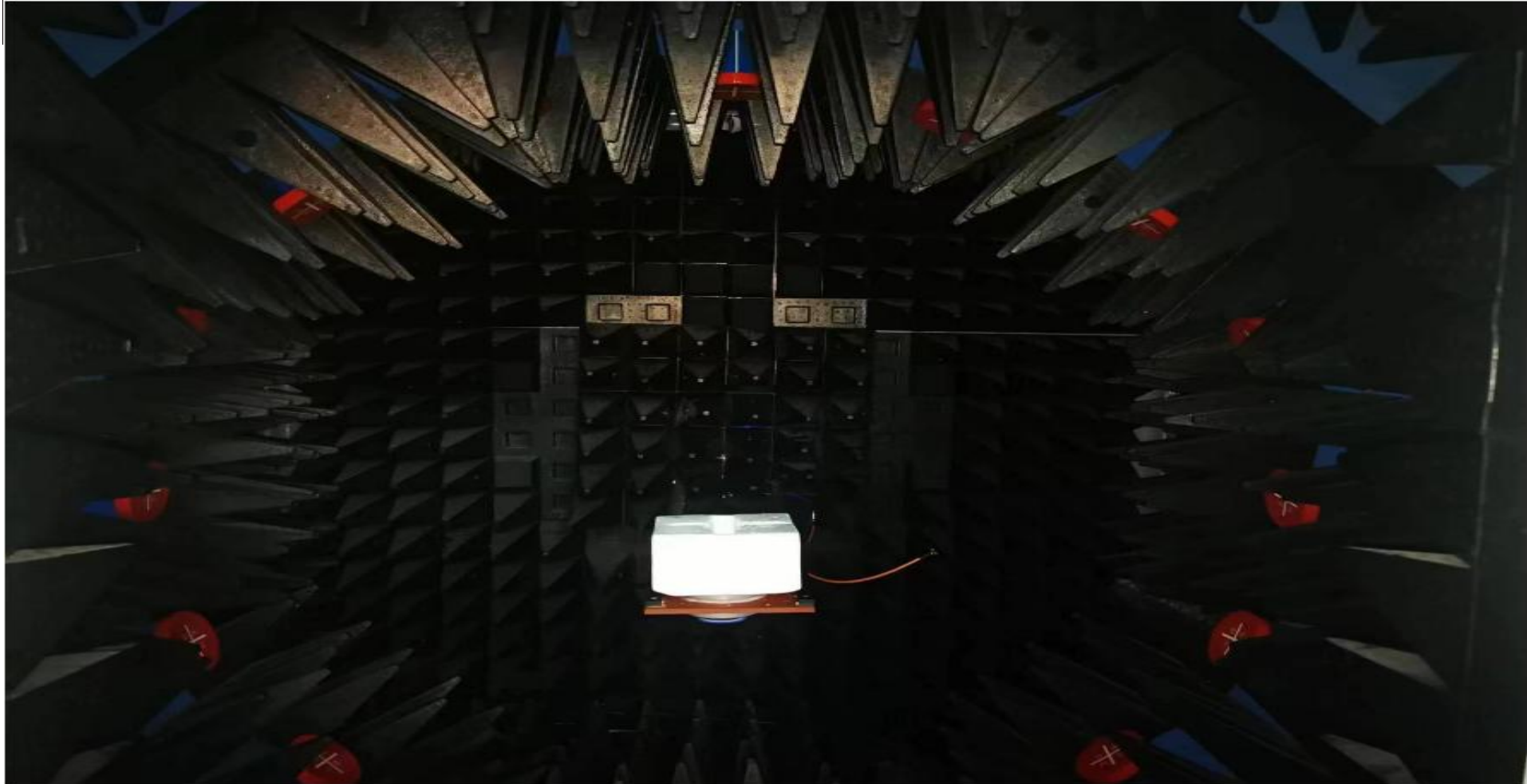
Customer Name		Shenzhen Lezhi Education		Project Name		TAPPIV1	
Model		Point-and-read pen		Antenna material		Ceramic	
Antenna Overview	Main antenna	Antenna frequency band		Antenna status	Antenna area	Antenna form	Antenna model
		2G					
		3G					
		4G					
	antenna	WIFI	2400MHz-2500MHz	Sample	Motherboard	Attach to the motherboard	AA055U
		GPS					
		Diversity					

2.Contact information of the project leader

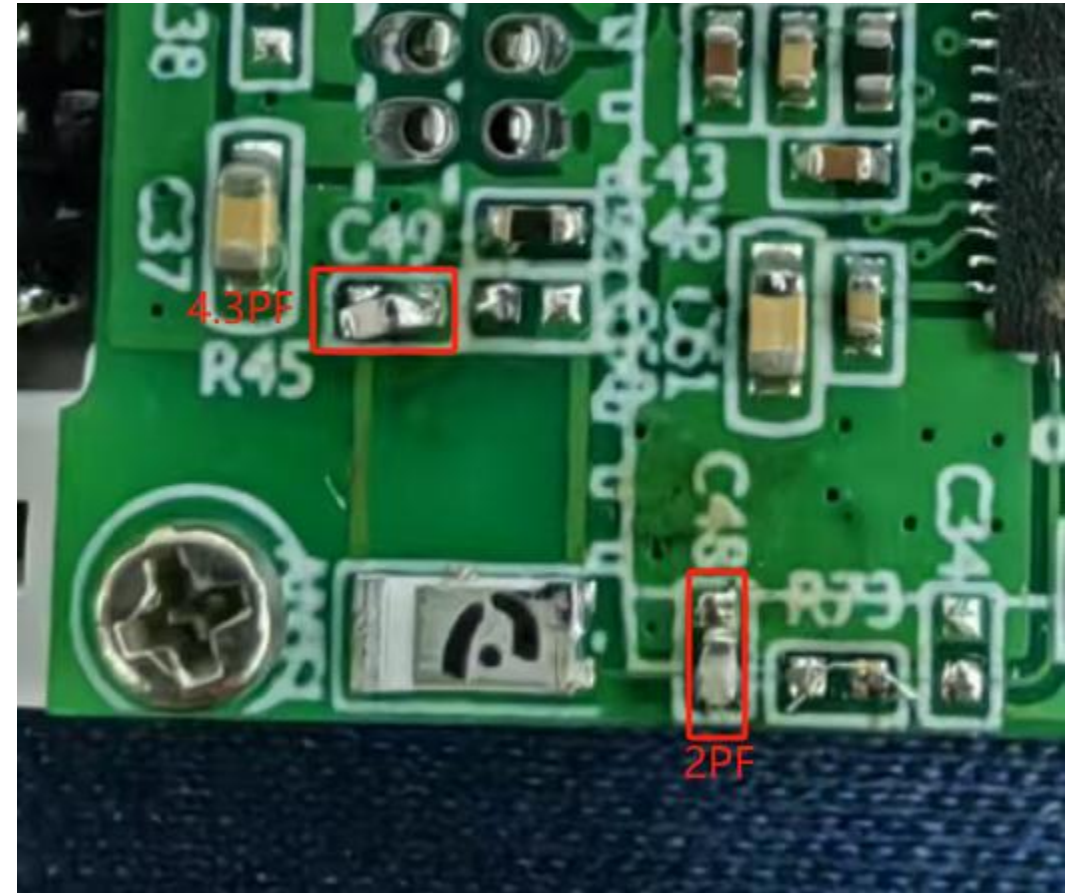
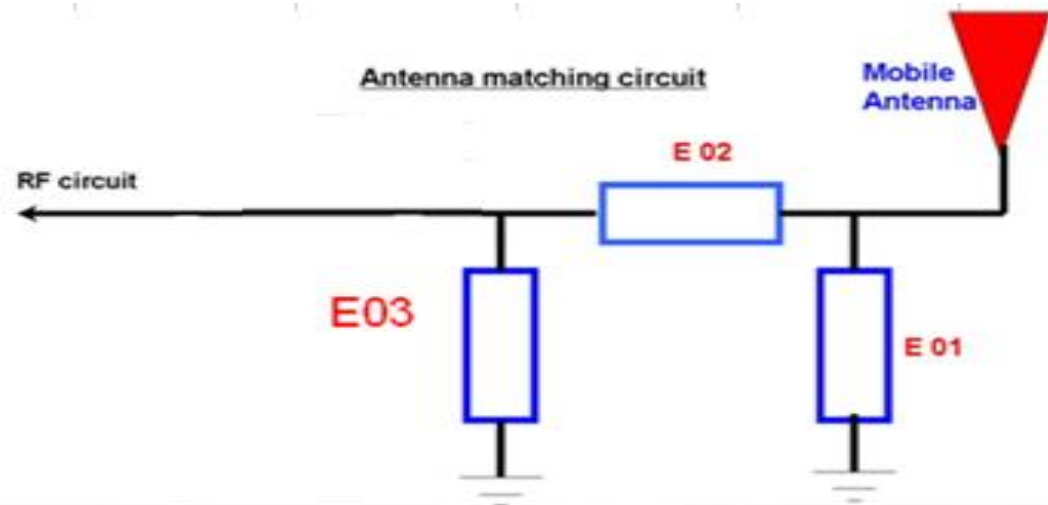
Sales Director	伍雄	15013792335	szjsj01@163.com
RF Engineer	周勇	13556806912	szjsj03@163.com

3. Test environment

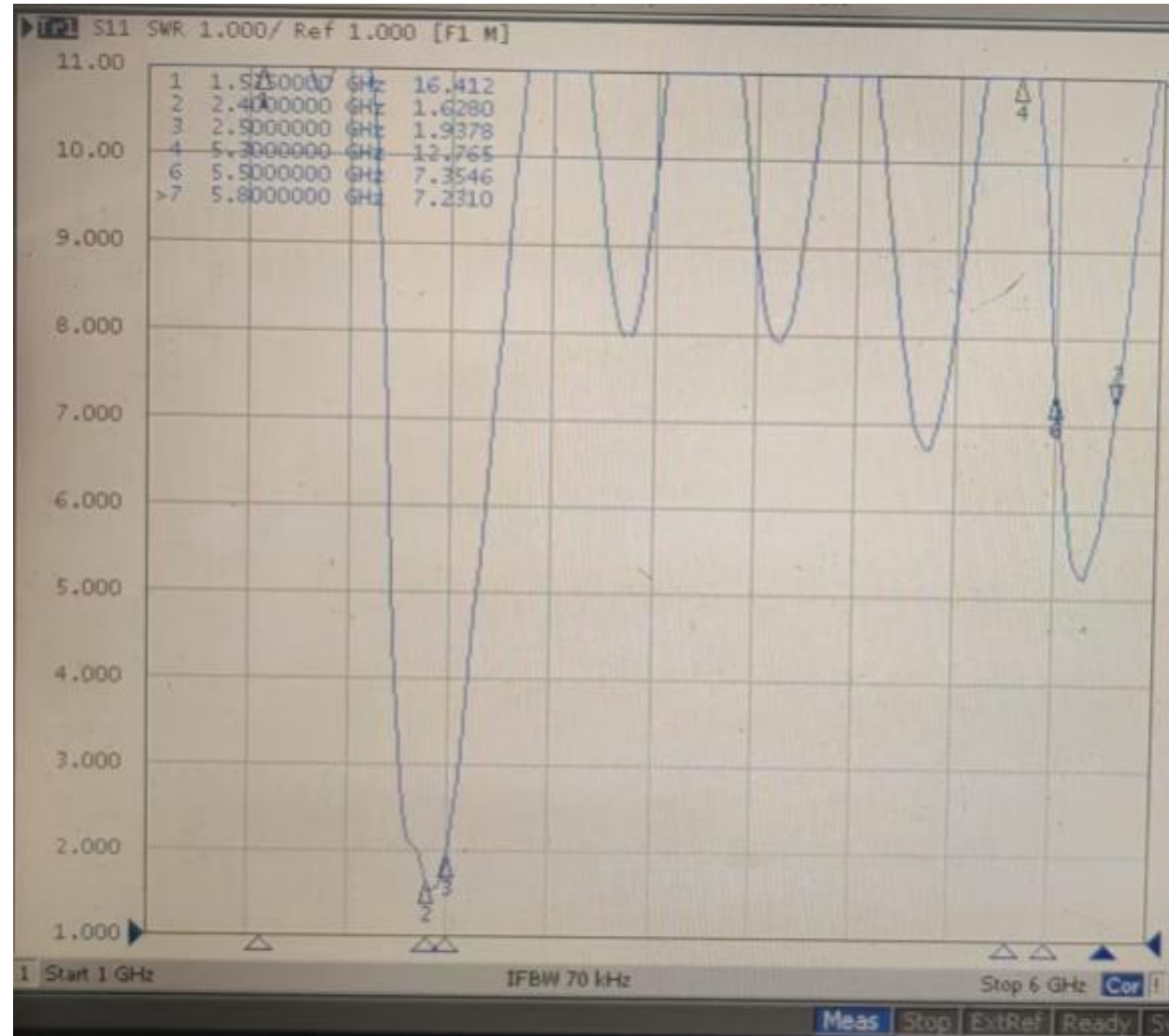
Comprehensive measuring instrumen	CMW500
OTA	Atenlab 5*3*3
Test Enginee	刘俊
Temperature	25°C



4. Matching circuits for each antenna



5. Passive standing wave diagram



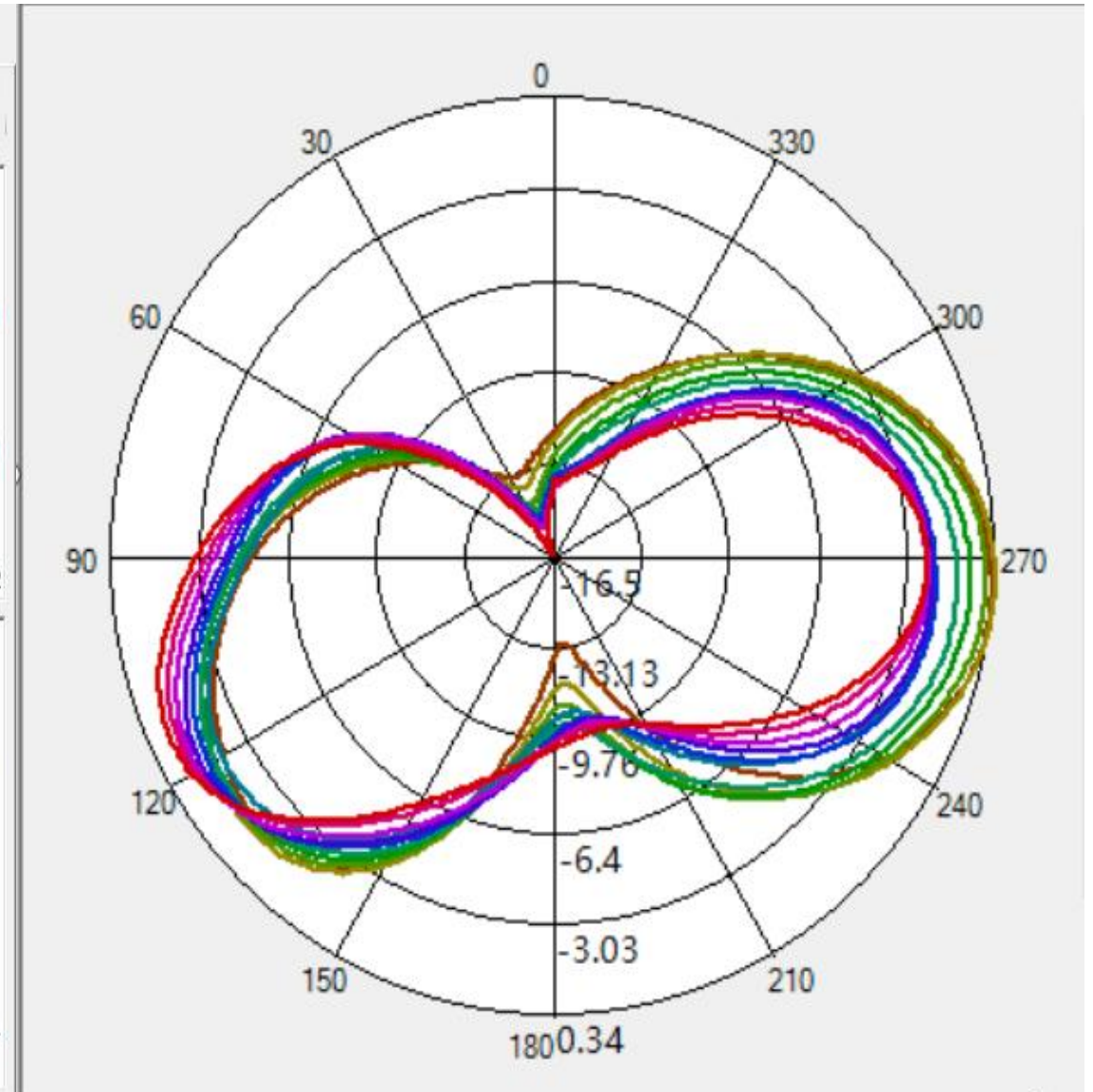
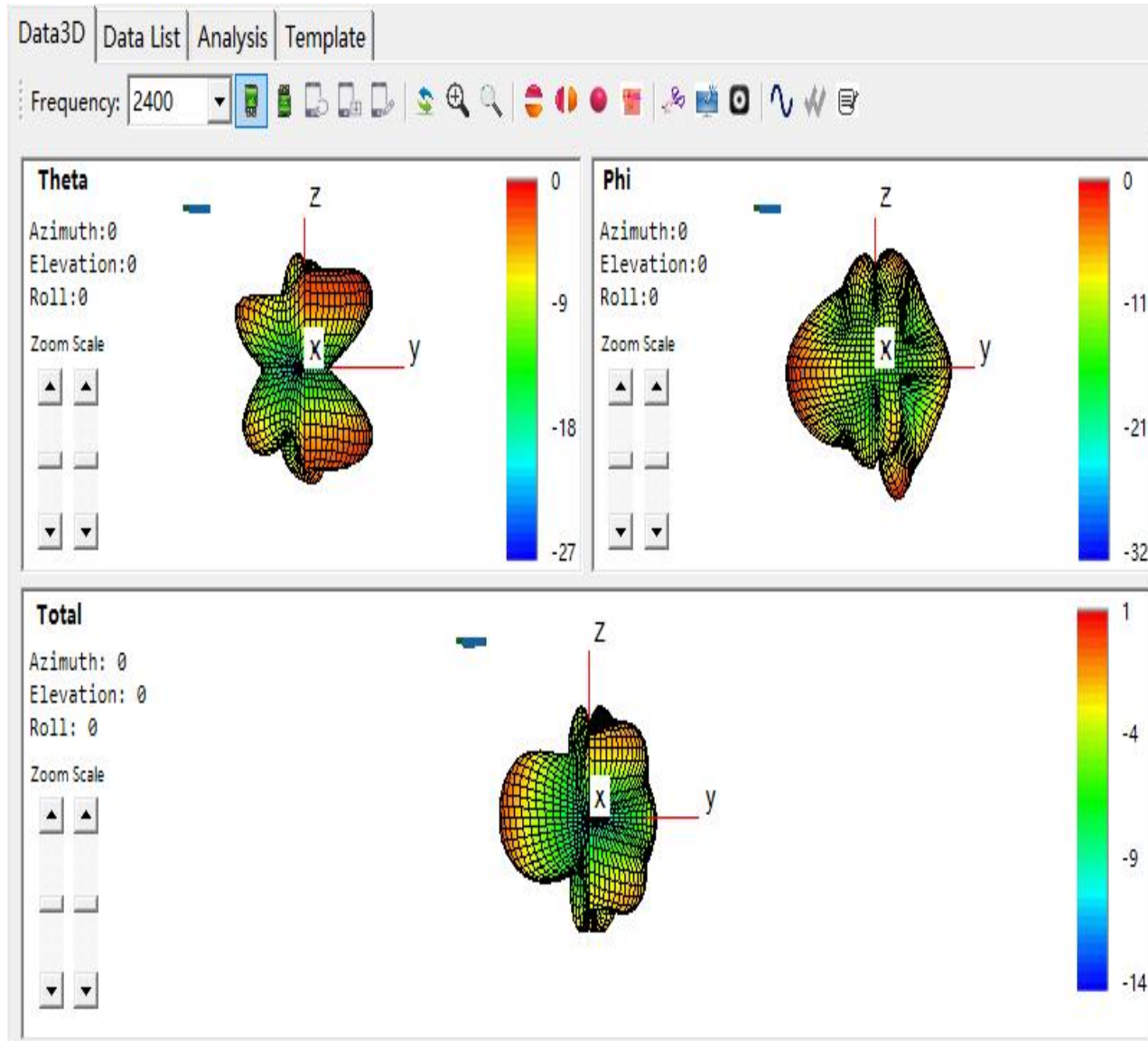
6.Passive efficiency

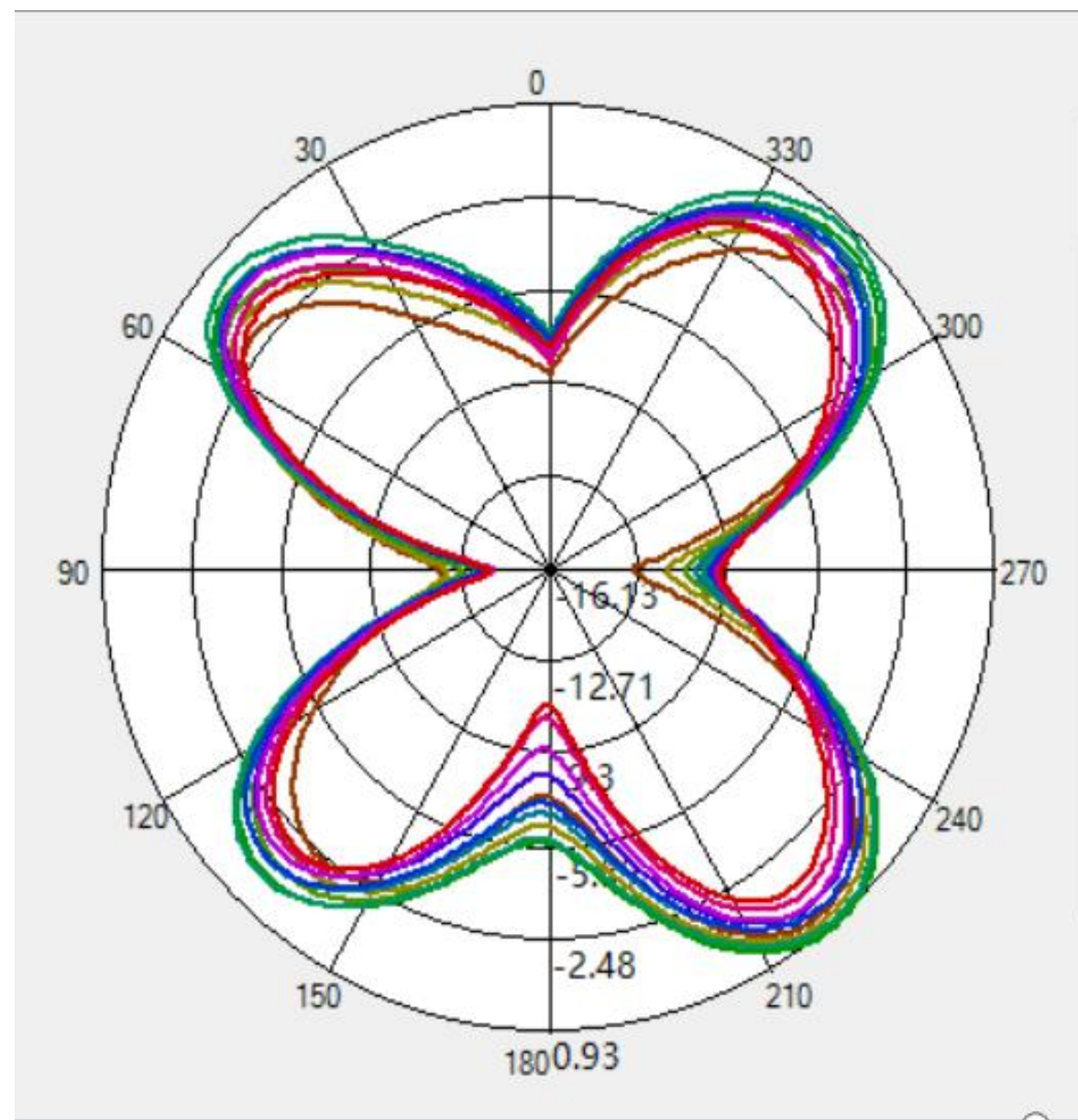
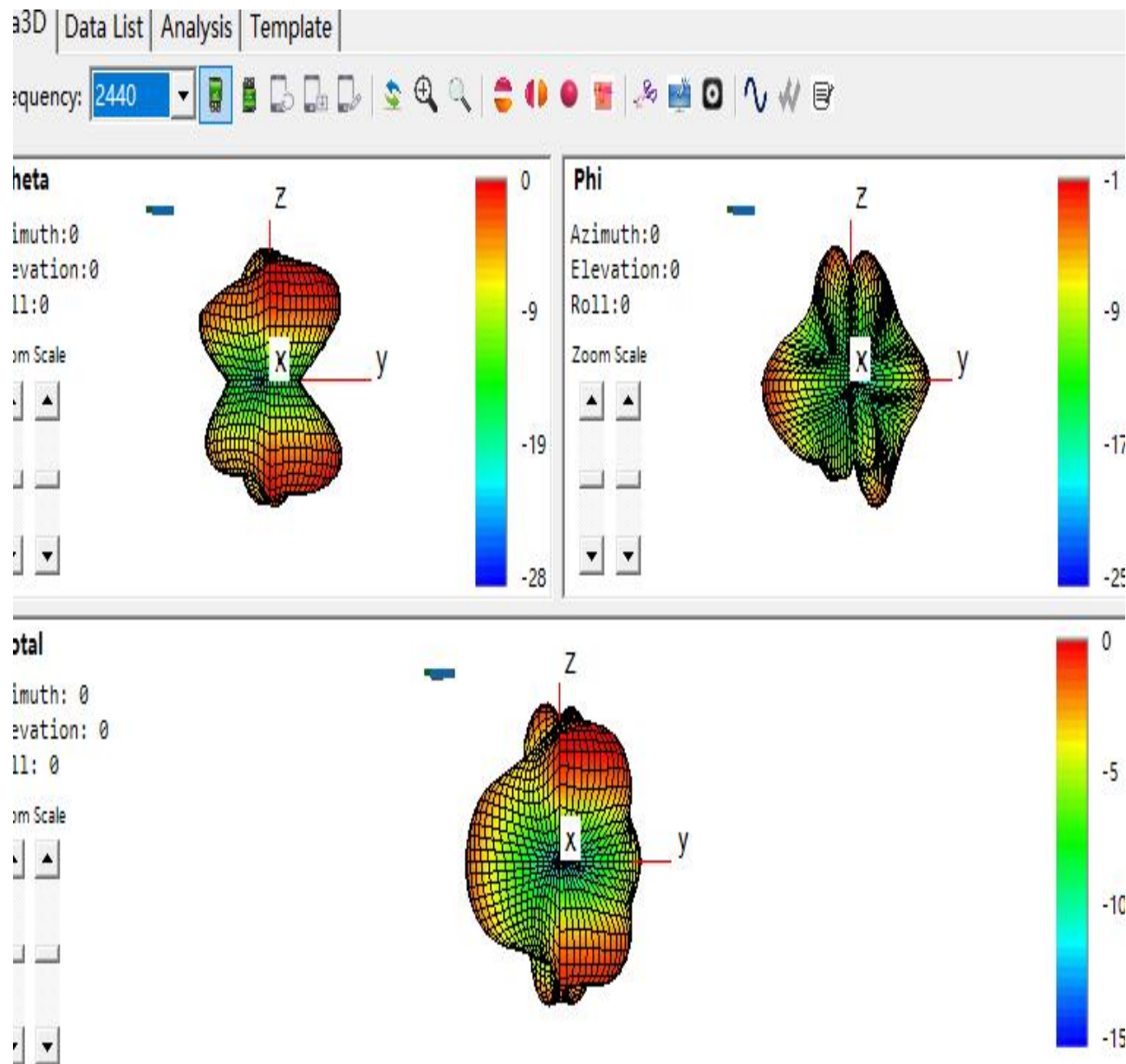
Freq (MHz)	Effi (%)	Gain (dBi)
2400	41.3	-0.82
2410	42.35	-0.62
2420	42.7	-0.47
2430	43.03	-0.38
2440	43.61	0.17
2450	44.17	0.55
2460	44.86	1.04
2470	44.5	0.64
2480	44.02	0.52
2490	41.43	-0.65
2500	40.21	-1.03

7.Active test data of WiFi

ANT TRP&TIS parameter Summary						
Frequency band	802.11B: 11Mbps (2.4G)			802.11G:54Mbps (2.4G)		
Channel	1	6	12	1	6	12
TRP(dBm)	13.08	13.33	13.71	9.75	10.06	10.52
TIS (dBm)	-82.63	-82.45	-83.63	-71.37	-70.93	-70.51
EIRP peak	16.34	16.68	17.21	13.33	13.66	14.23
ANT TRP&TIS parameter Summary						
Frequency band	802.11N:MCS7(2.4G)					
Channel	1	6	12			
TRP(dBm)	11.21	10.73	10.56			
TIS (dBm)	-70.88	-70.59	-70.09			
EIRP peak	14.68	14.15	13.98			

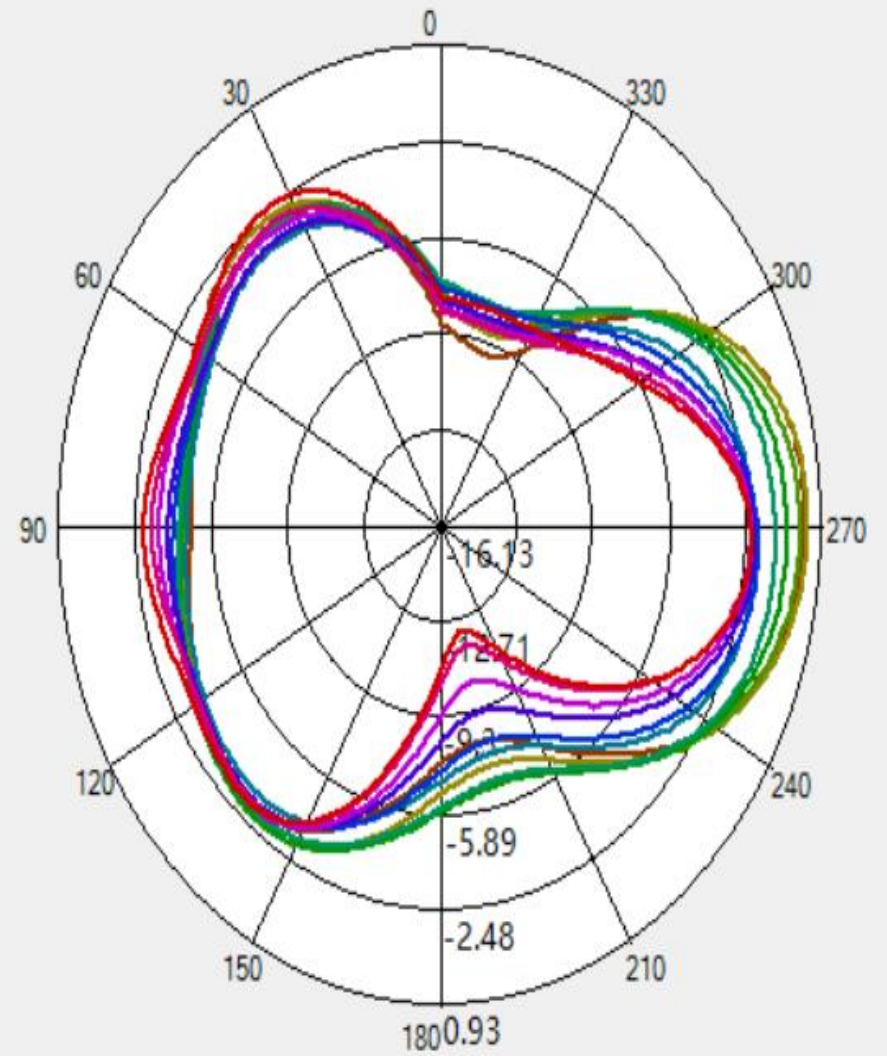
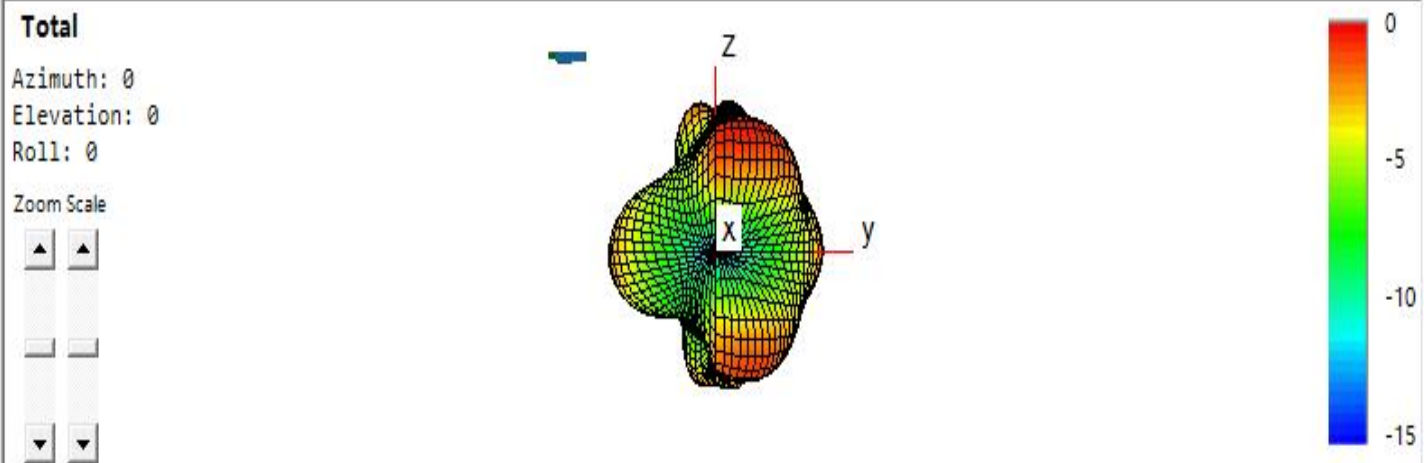
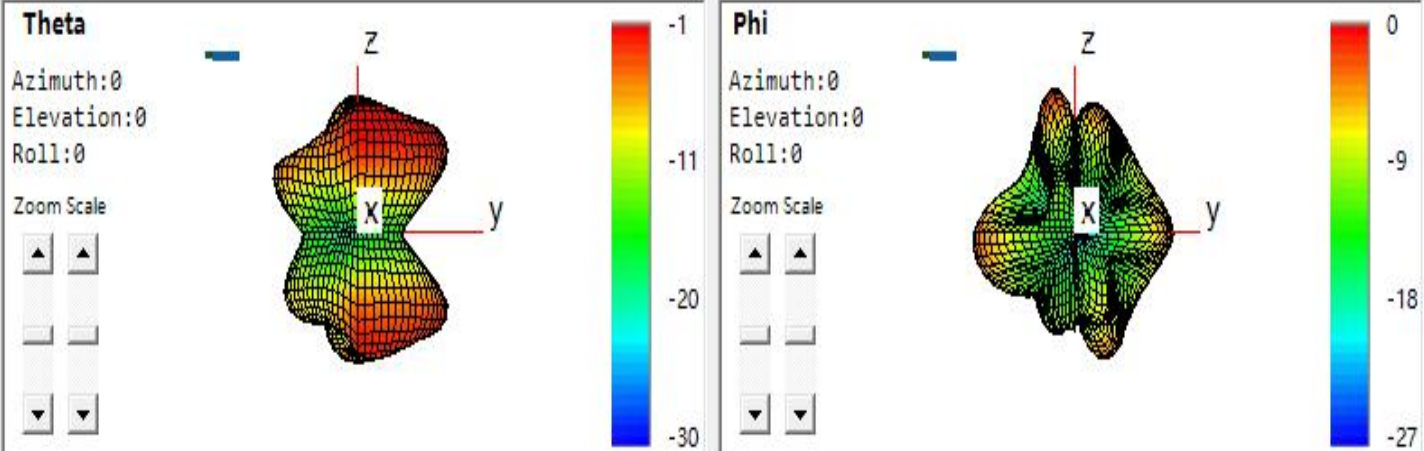
8. Antenna patterns(2D or 3D) preferred





Data3D | Data List | Analysis | Template

Frequency: 2480



9. Physical machine and antenna samples



Debug the machine



Ceramic antenna AA055U

THANK YOU

