

Elgin Engineering LLC

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Antenna Test Report

Customer	博微威
Project	S1
Antenna Revision	A0
Prepared by	15993920520
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Date	2024. 06. 24

Purpose

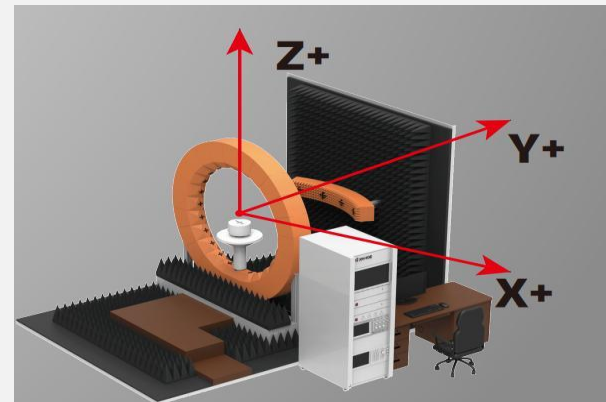
This report is to measure the performance of antenna for **S1** The antenna operating frequency at 2400-2500MHz, All test data are showed as below.

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2. Product Overview & Dimension
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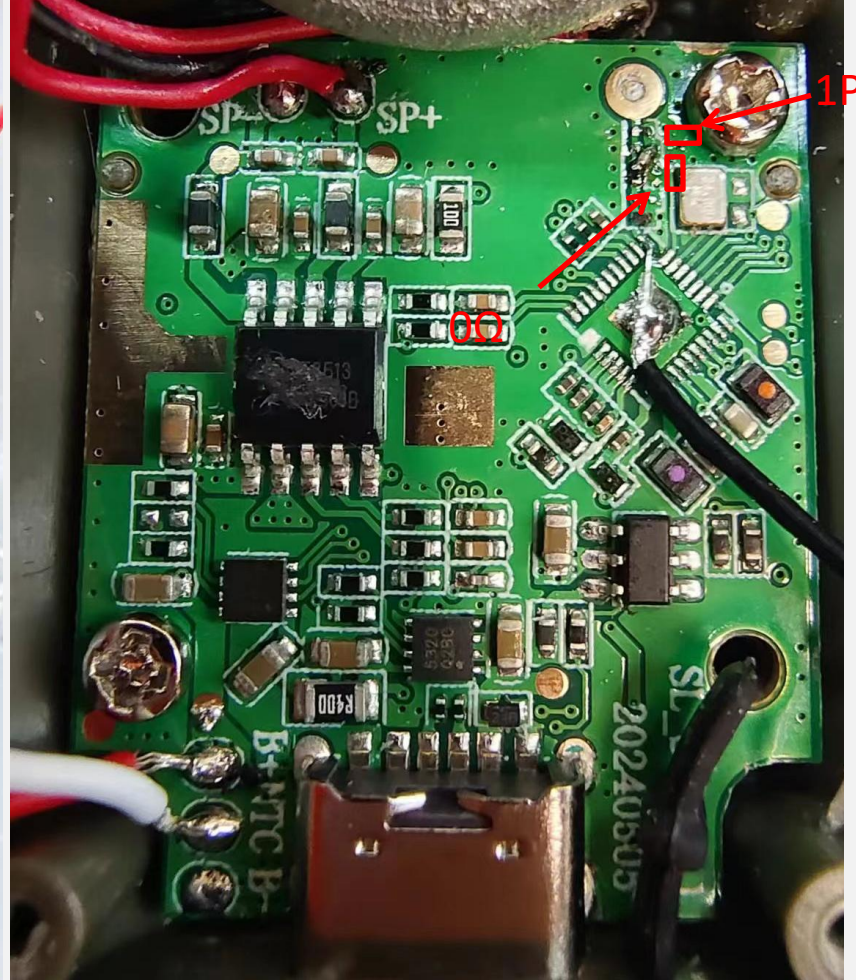
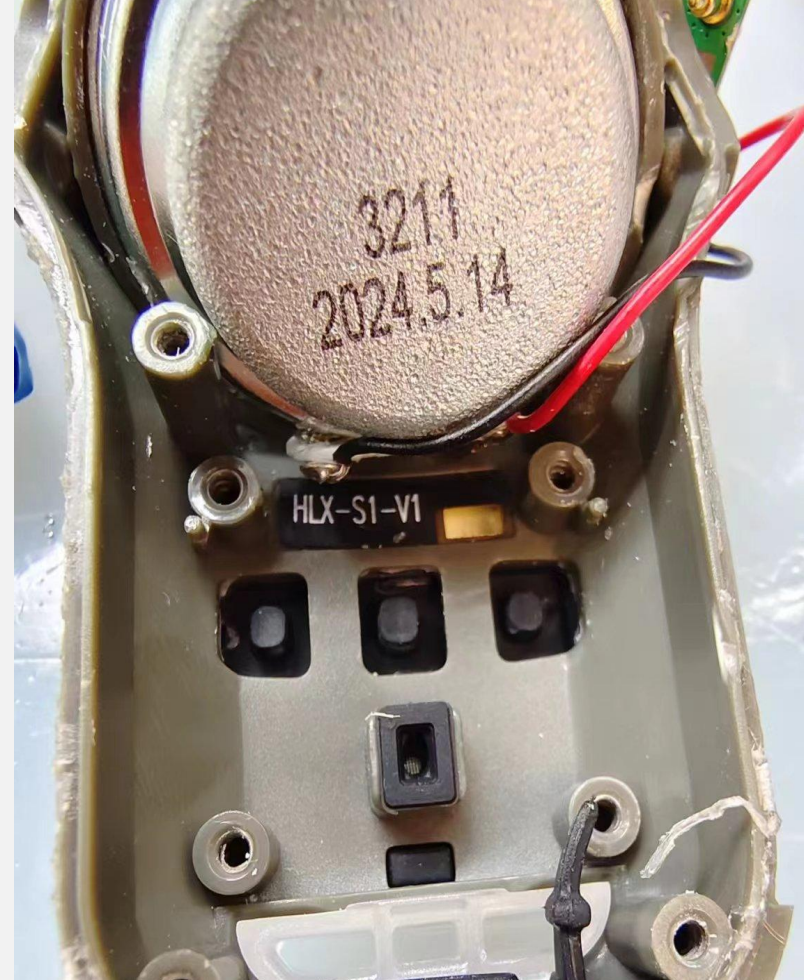
1.TestSystem

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5071B
OTA Test	TRP&TIS	Agilent 8960 & CMW500 STIMO
Gain & Efficiency	Gain & Efficiency	SATIMO Agilent 5071C

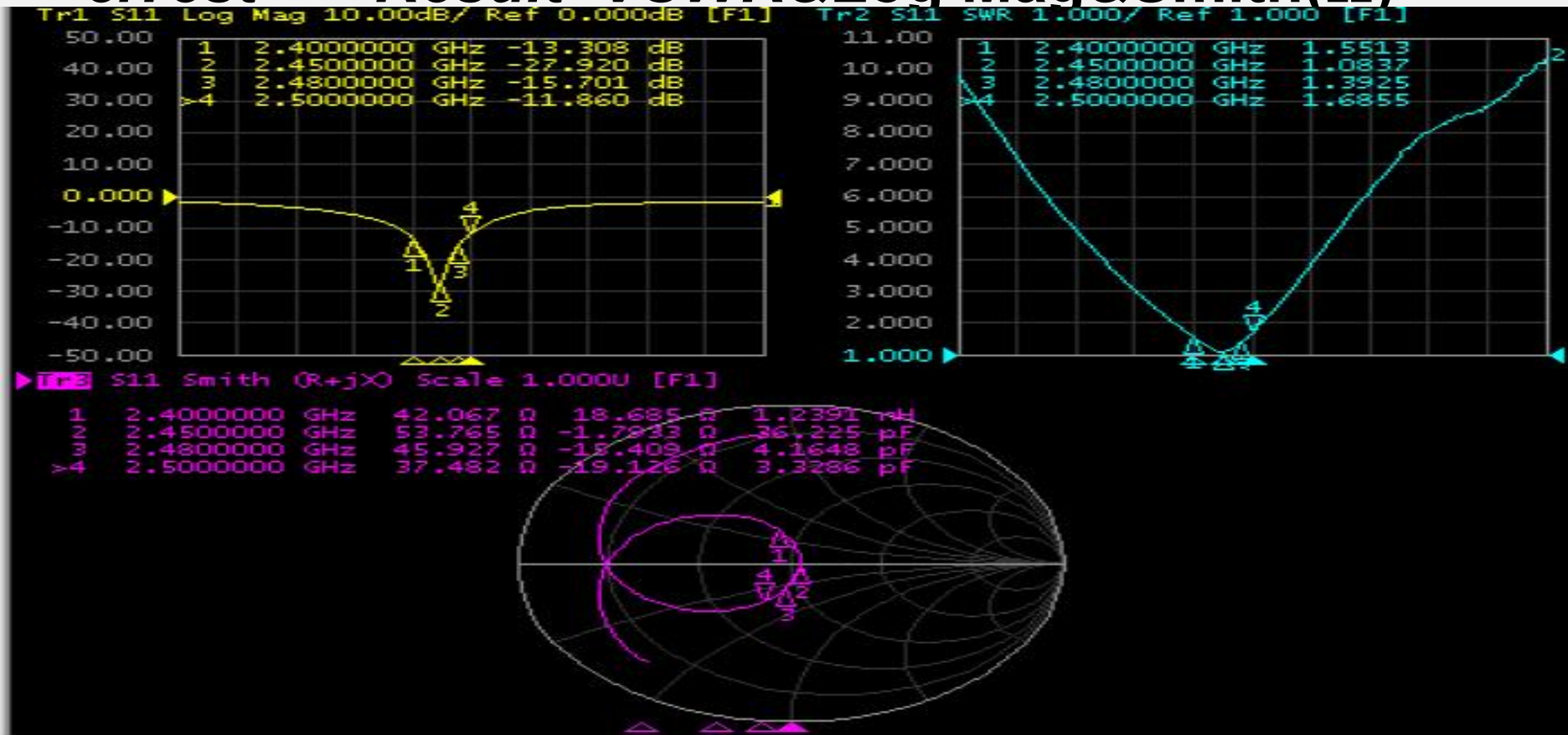


2.Product Overview & Dimension





3.Test Result VSWR&Log Mag&Smith(Ω)



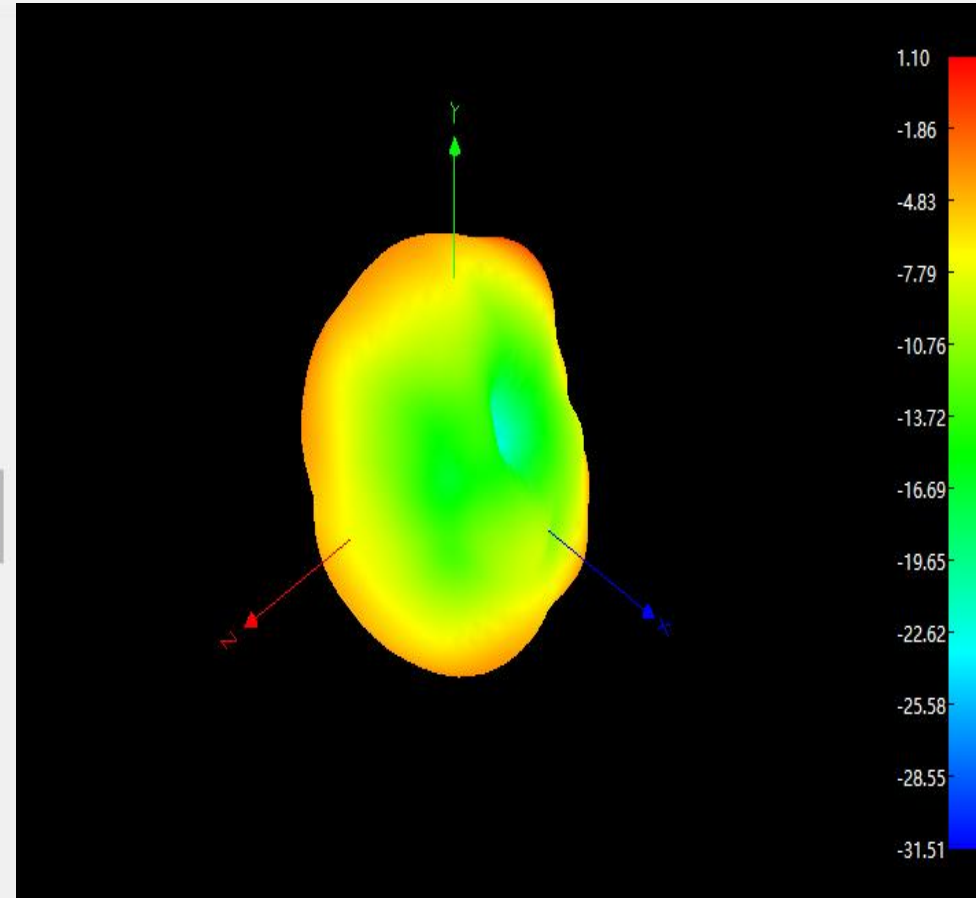
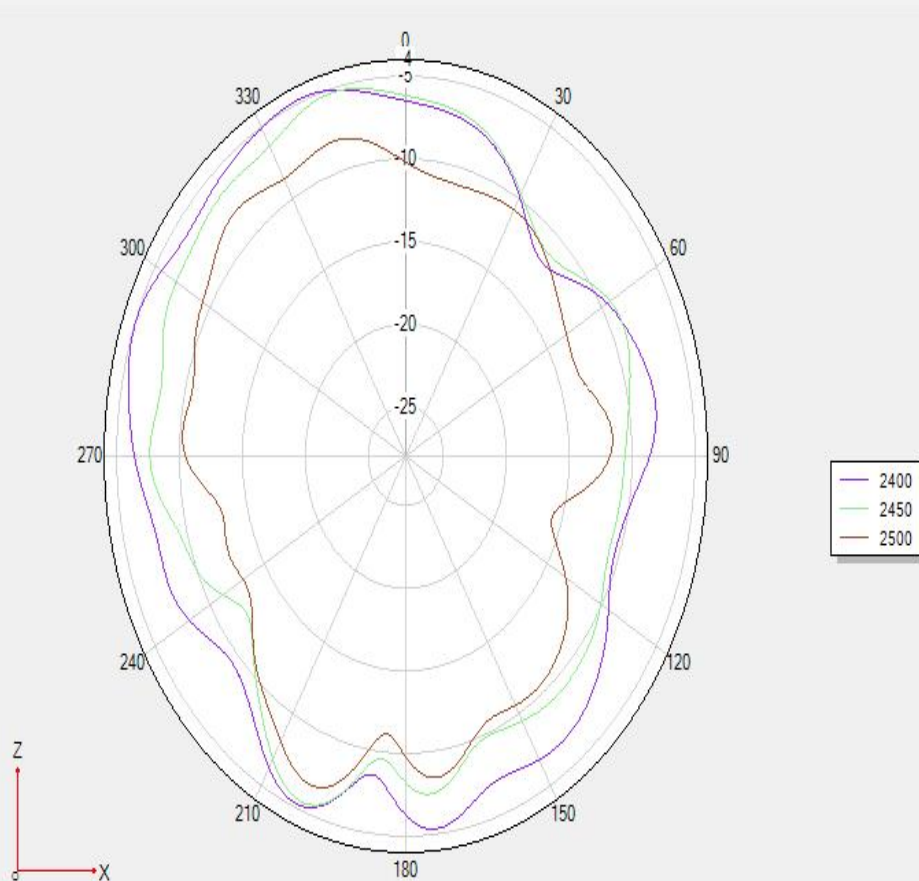
Frequency (MHz)	2400	2450	2480	2500
Log Mag	-13.30	-27.92	-15.70	-11.86
VSWR	1.55	1.08	1.39	1.68
Smith(Ω)	42.06	53.76	45.92	37.48

4.Test Result

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	31.10	1.03
2410	31.41	1.13
2420	32.24	1.24
2430	32.31	1.65
2440	32.35	1.57
2450	33.42	1.87
2460	32.36	1.62
2470	31.27	1.30
2480	32.42	1.54
2490	33.26	1.83
2500	32.16	1.49

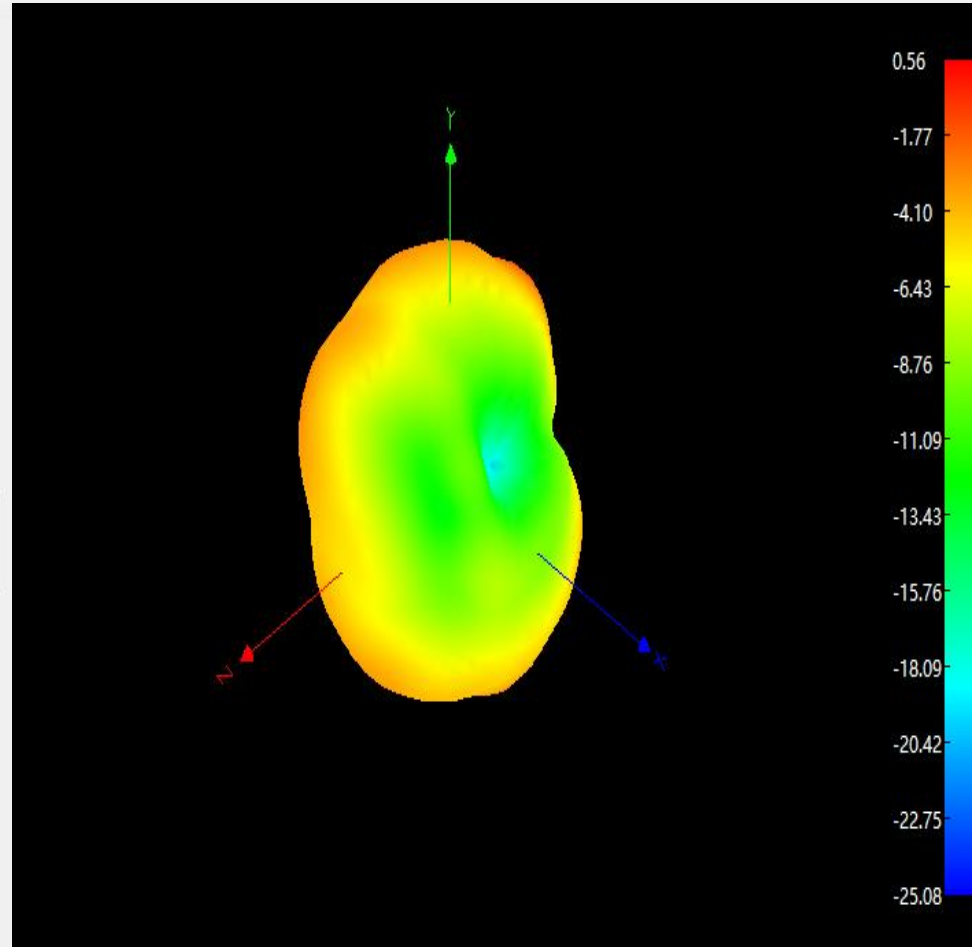
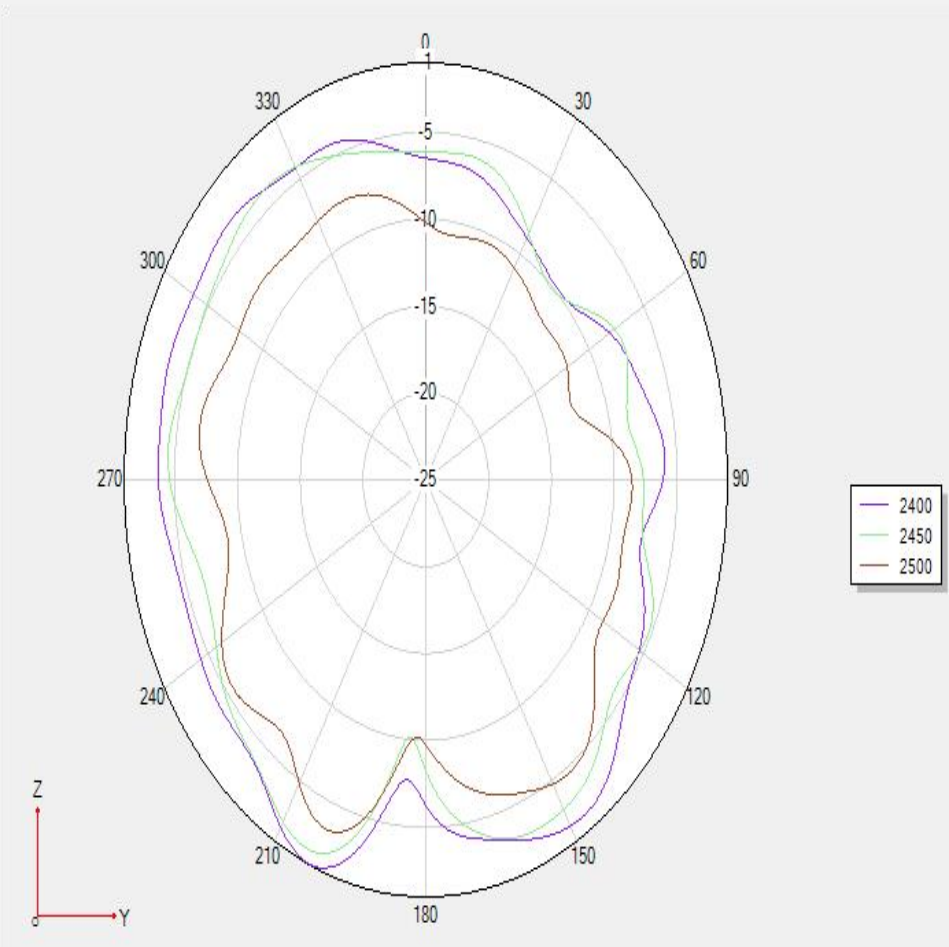
4. Test Result

4.1 2D Pattern—BT ANT



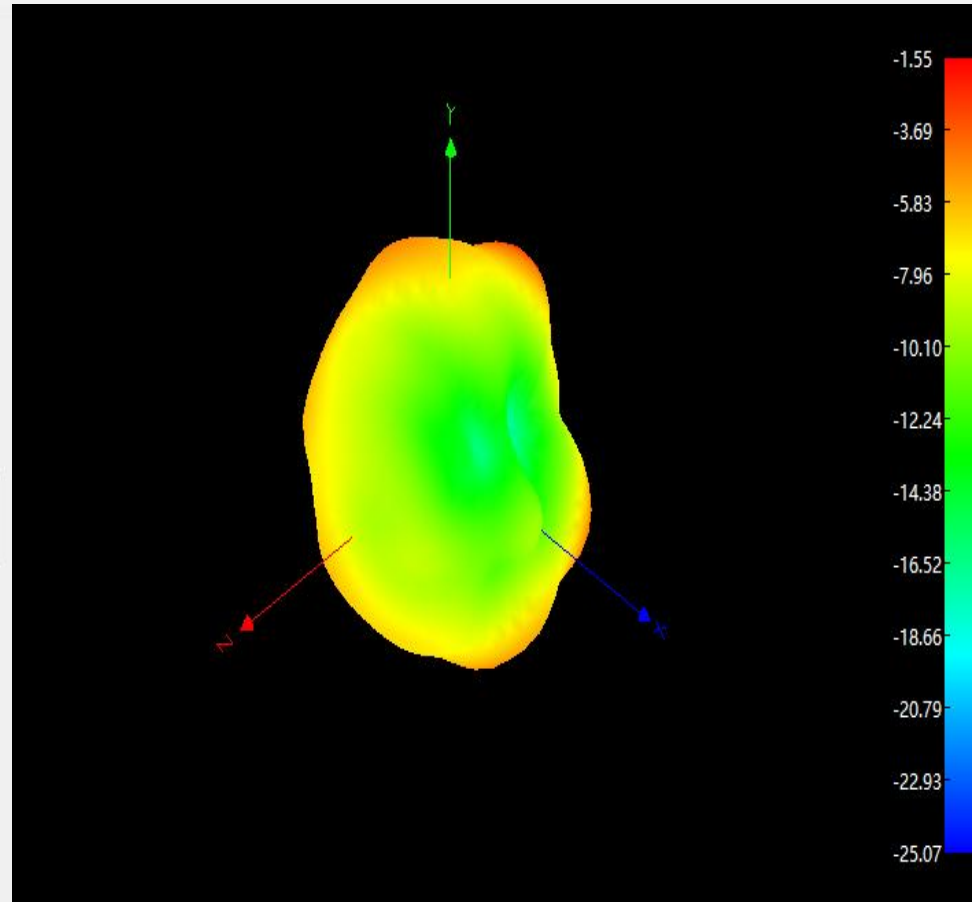
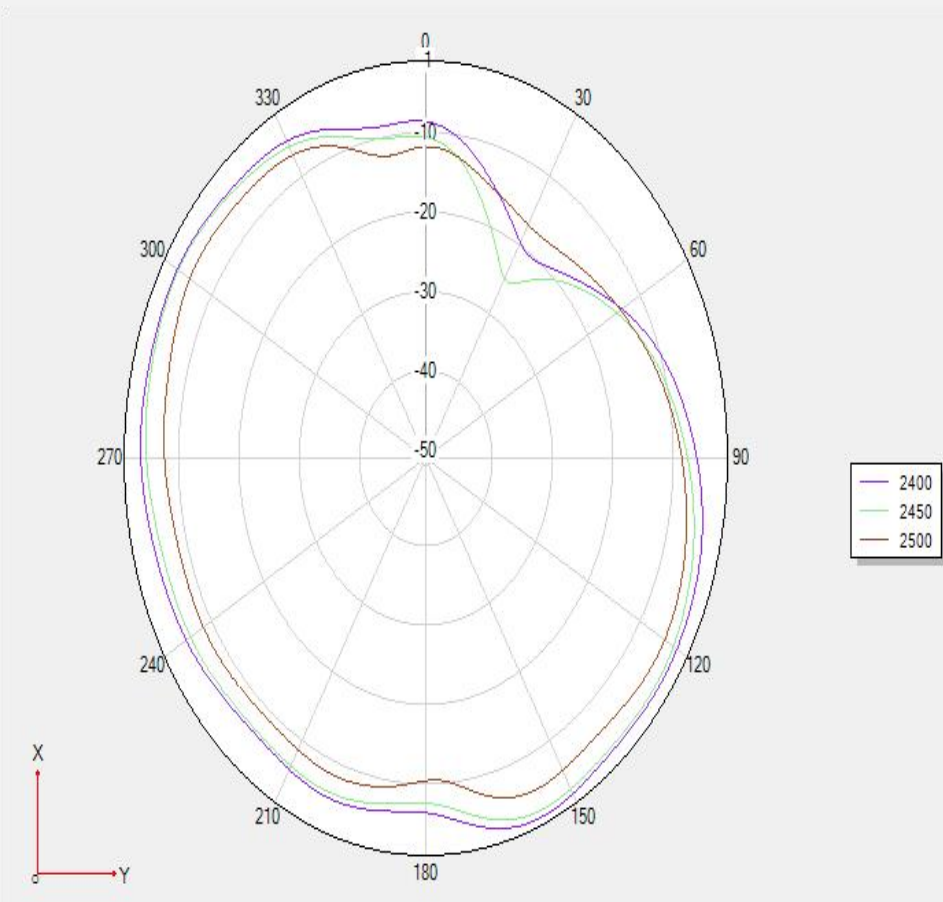
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4.1 2D Pattern—BT ANT



4. Test Result

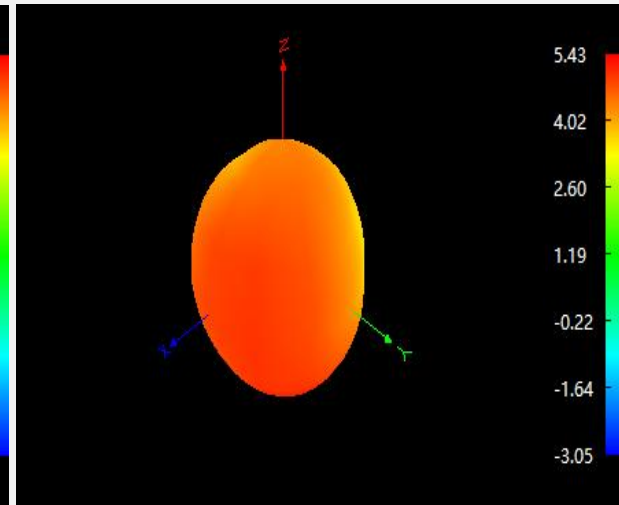
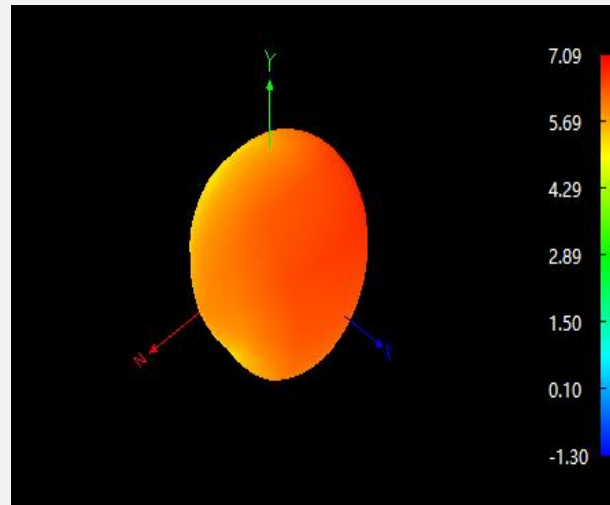
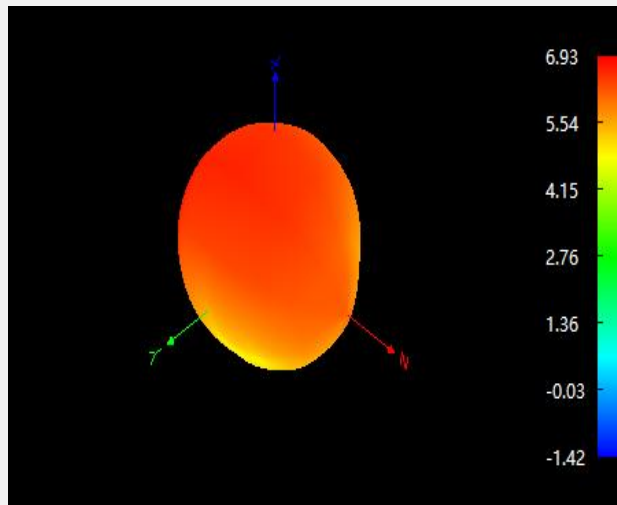
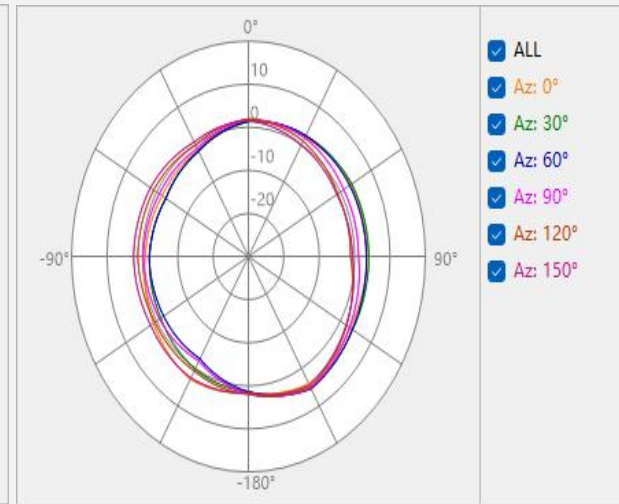
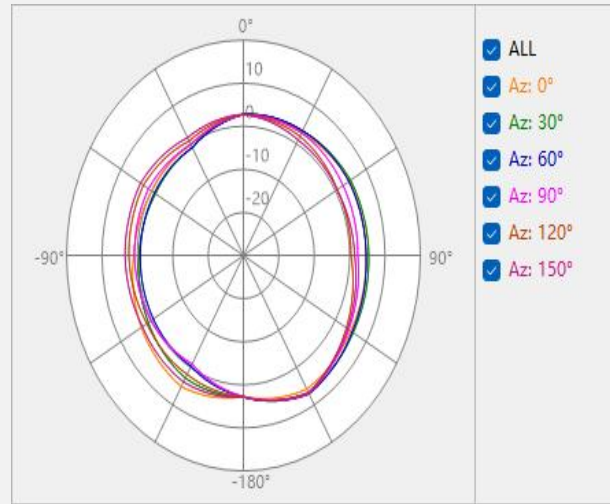
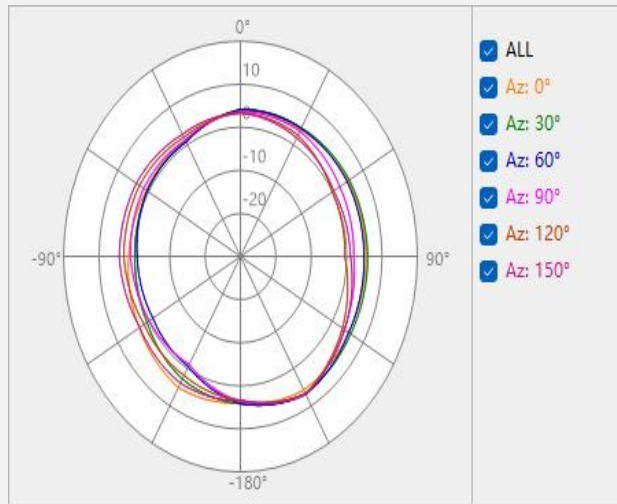
4.1 2D Pattern—BT ANT



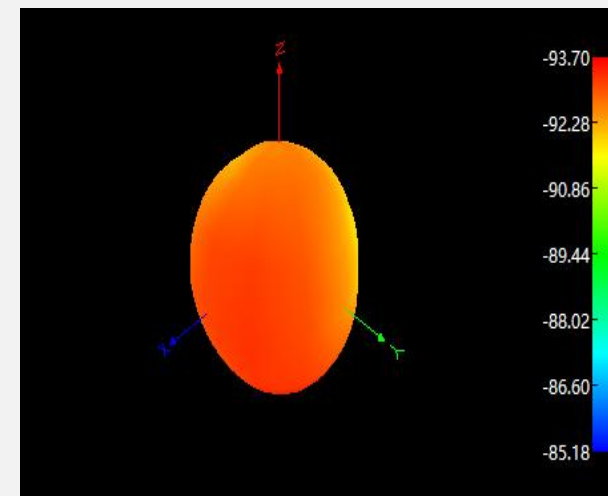
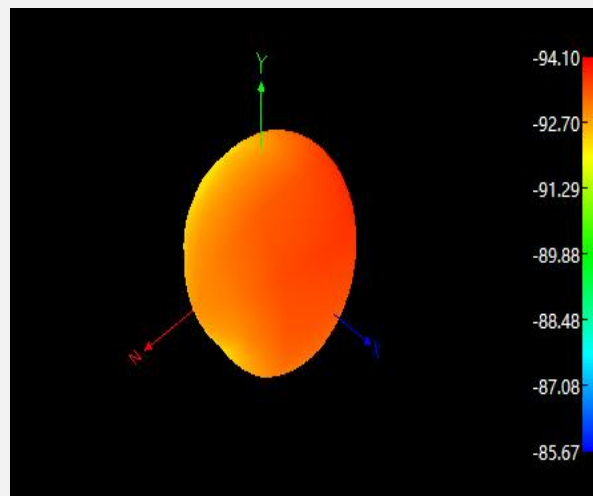
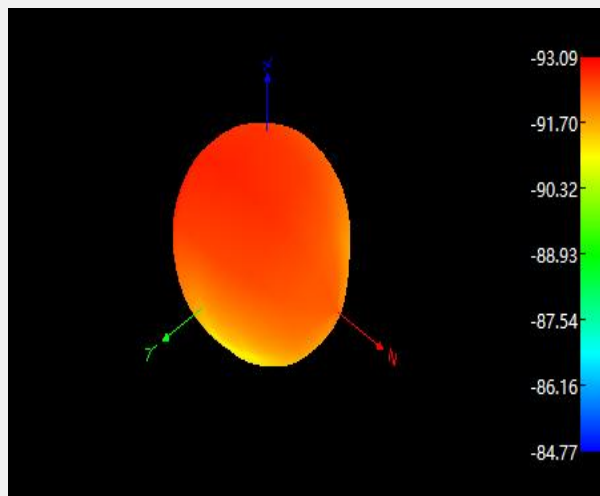
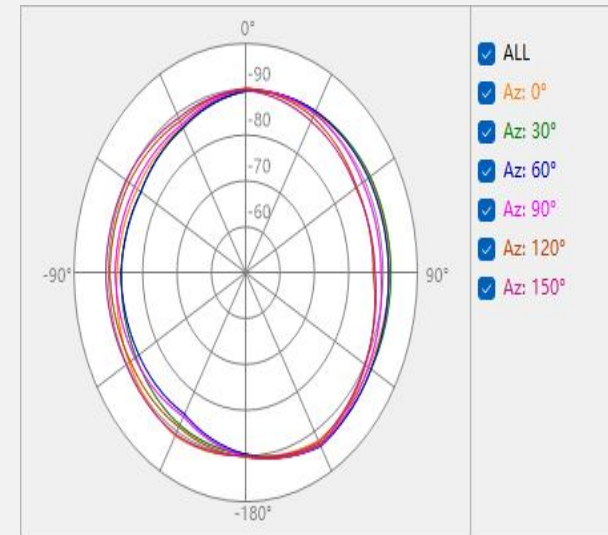
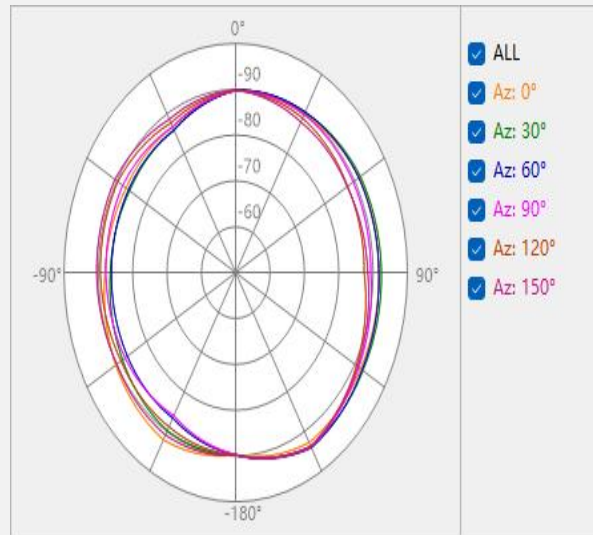
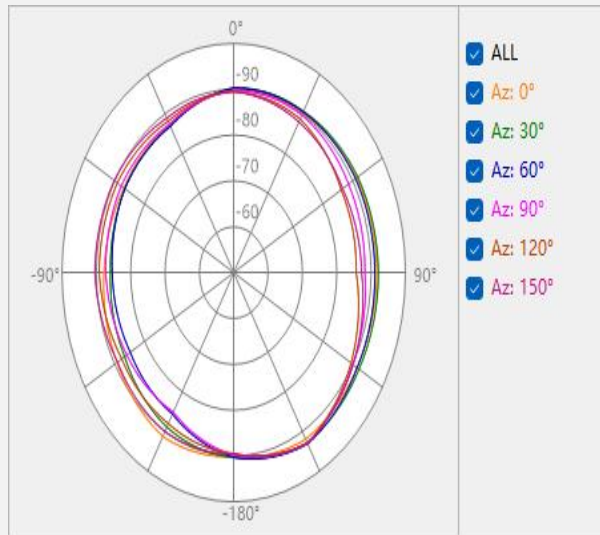
5.OTA Data

Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band		Channel	TRP(dBm)	TIS(dBm)
BT		0	4.01	-90.17
		39	3.76	-90.75
		78	2.24	-90.49

5.1 Test Result TRP



5.1 Test Result TIS



Thank you!