

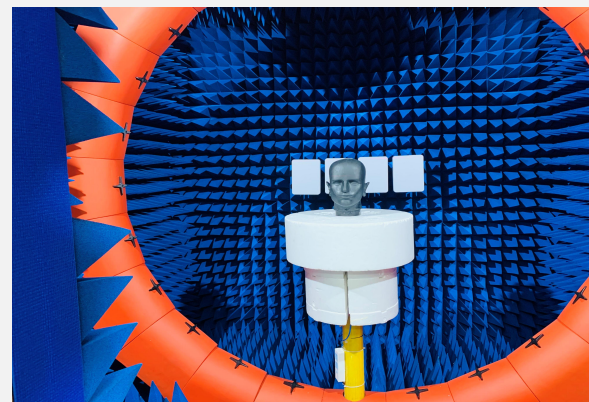
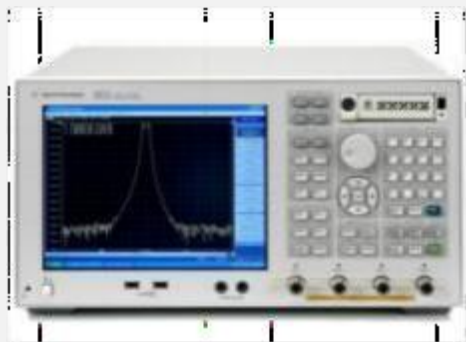
HELIX 合立讯 Antenna Test Report



Customer	深羽
Project	F90-7006D
Antenna Revision	A1
Prepared by	15993920520
Checked by	18814303605
Date:	2023. 6. 05

2. Test System

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C & Agilent 4438C & CMW500 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



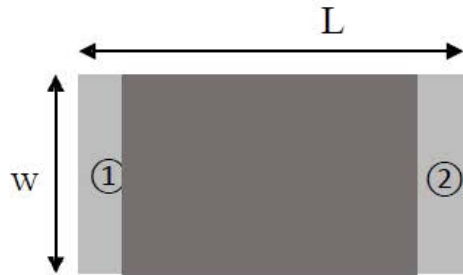
Purpose

This report is to measure the performance of antenna for **F90-7006D** The antenna operating frequency at 2400MHz-2500MHz 。 All test data are showed as below.

Content

1. Product Overview & Dimension
2. Test system
3. Test Result
4. Test Result
 - 4.1 S11 Parameter-VSWR**
 - 4.2 Gain & Efficiency**
 - 4.3** Test coordinate
 - 4.4 2D Pattern

Dimensions (Unit: mm)



(Top View)



(Bottom View)

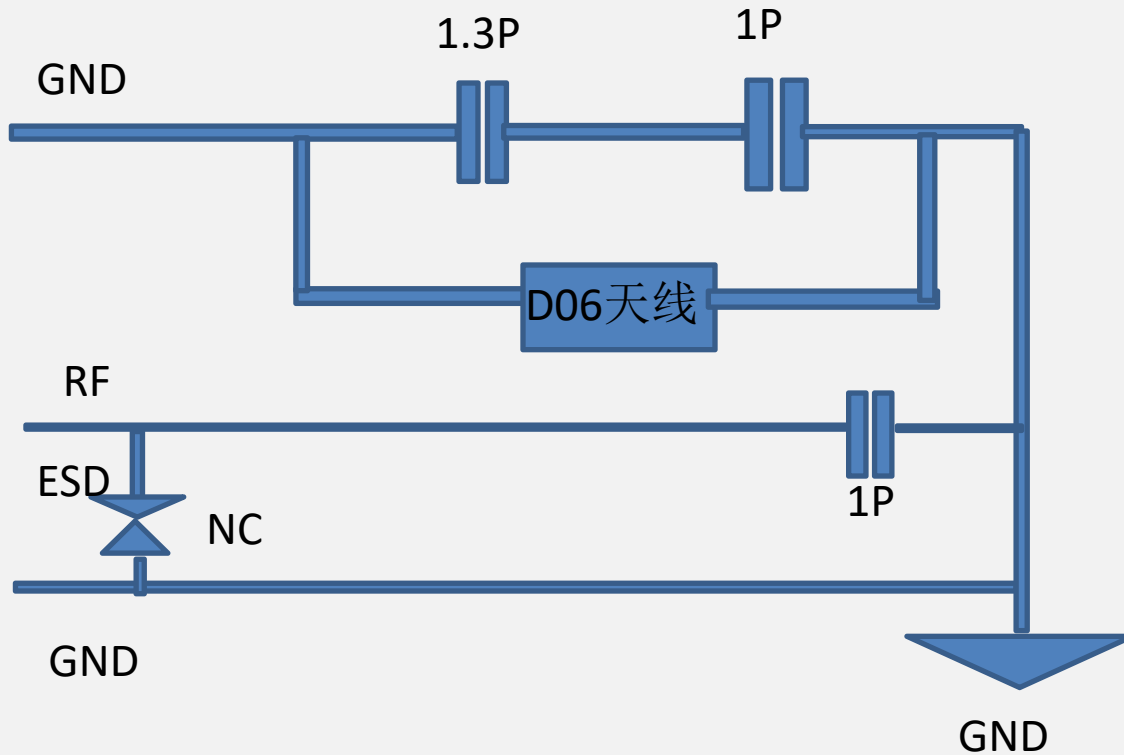
Number	Terminal Name
①	INPUT
②	NC



(Side View)

Symbols	L	W	T	A
Dimensions	1.60±0.20	0.80±0.20	0.80±0.20	0.30±0.10

3.Product Overview & Dimension

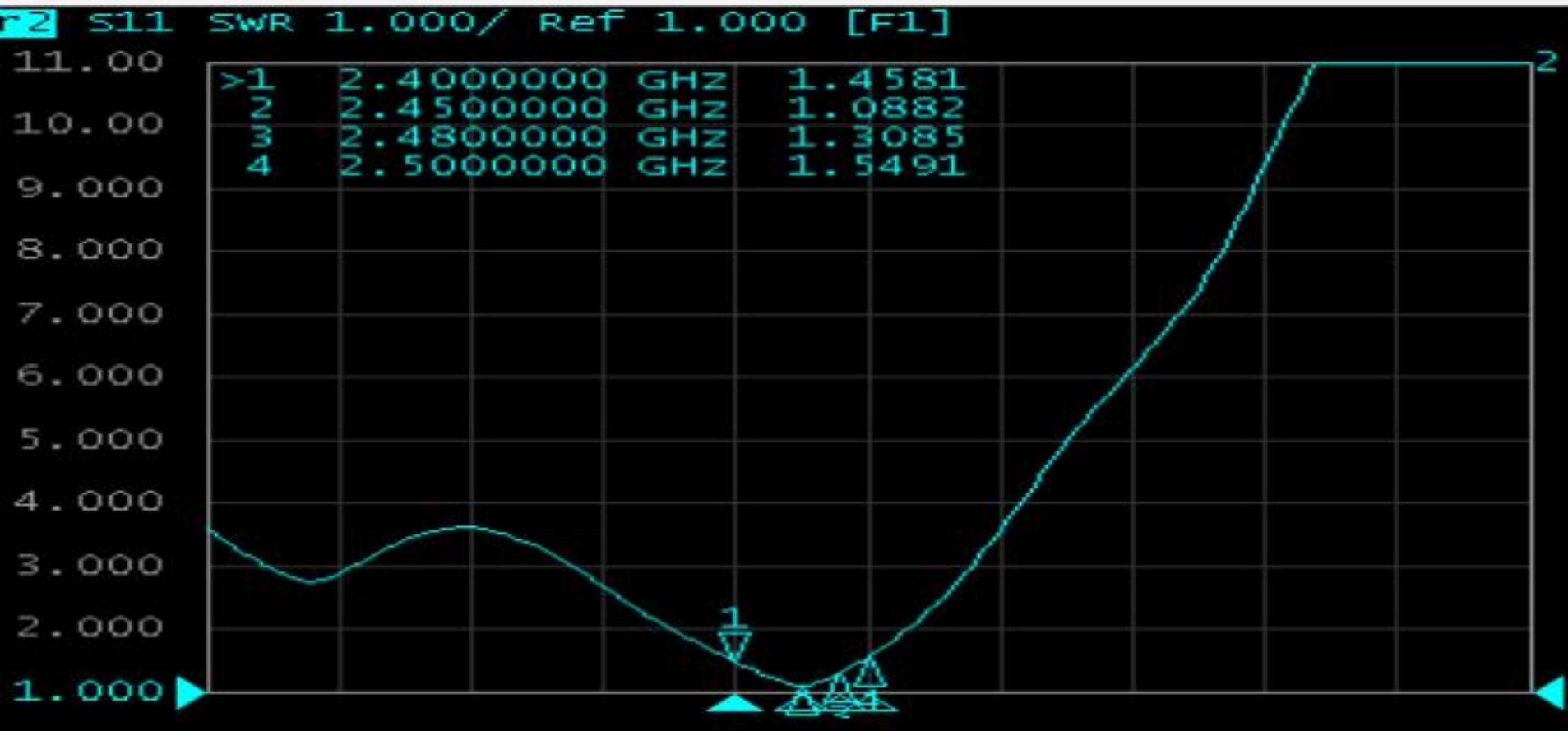


10UH合立讯绕线电感

匹配物料：B档1%物料 左右匹配一样

4. Test Result

4.1 S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
VSWR	1.45	1.08	1.30	1.54

4. Test Result

4.1 S11 Parameter-Log Mag

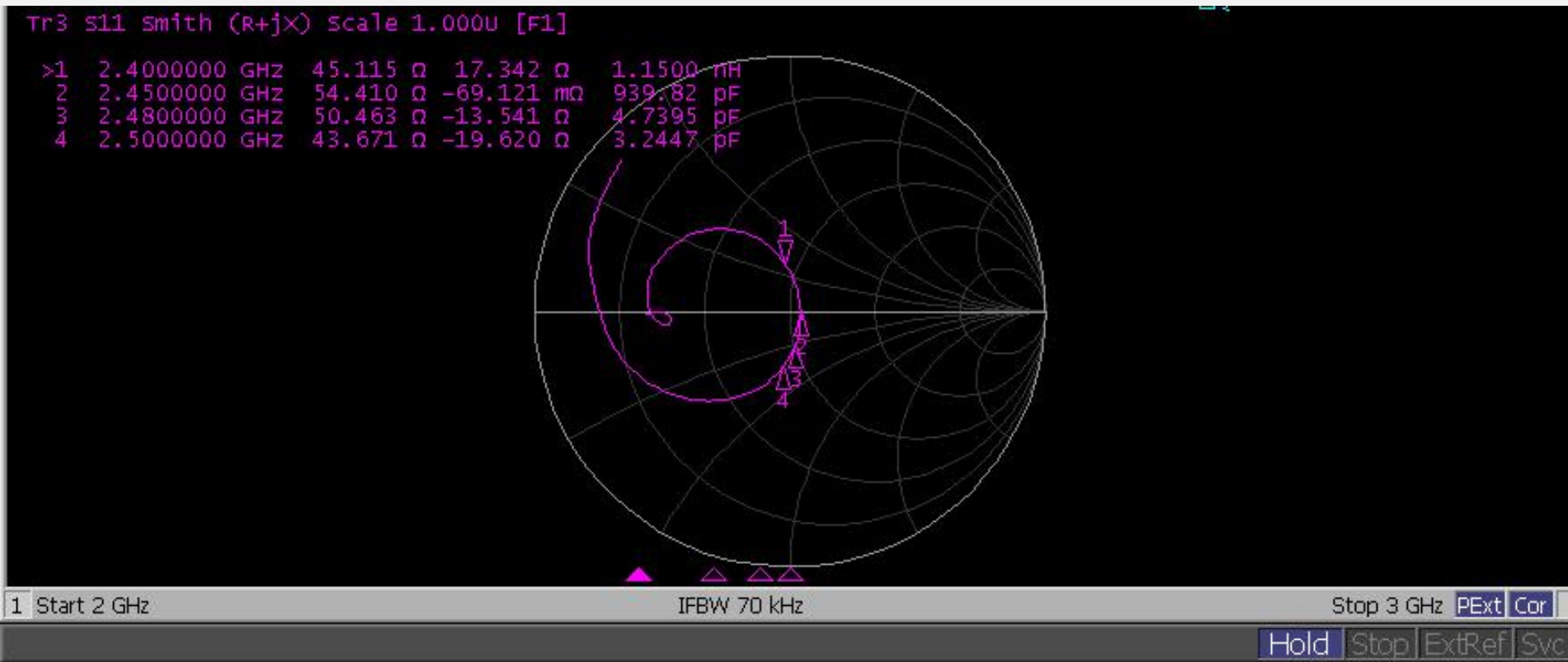
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F1]



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-14.59	-27.48	17.48	-13.33

4. Test Result

4.1 S11 Parameter-Smith



Frequency (MHz)	2400	2450	2480	2500
Smith (Ω)	45.11	54.41	50.46	43.67

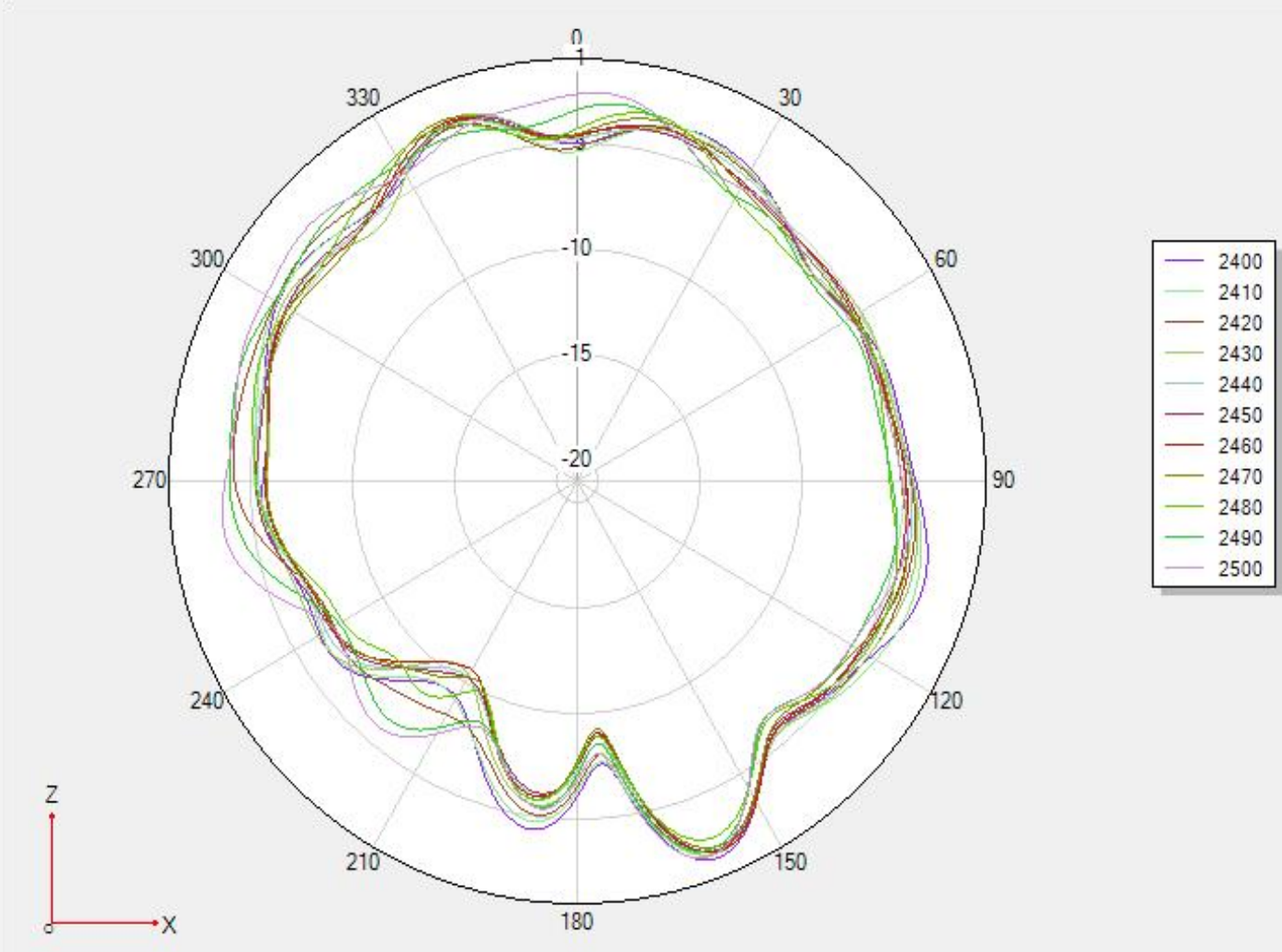
4. Test Result

4.2 Gain & Efficiency——ANT

Frequency (MHz)	Efficiency (%)	Max Gain (dBi)
2400	36.9%	1.03
2410	36.39%	0.62
2420	36.14%	0.25
2430	35.89%	0.52
2440	35.24%	0.34
2450	34.83%	0
2460	35.08%	0.42
2470	34.28%	0.38
2480	33.81%	0.53
2490	34.28%	0.35
2500	35.4%	0.59

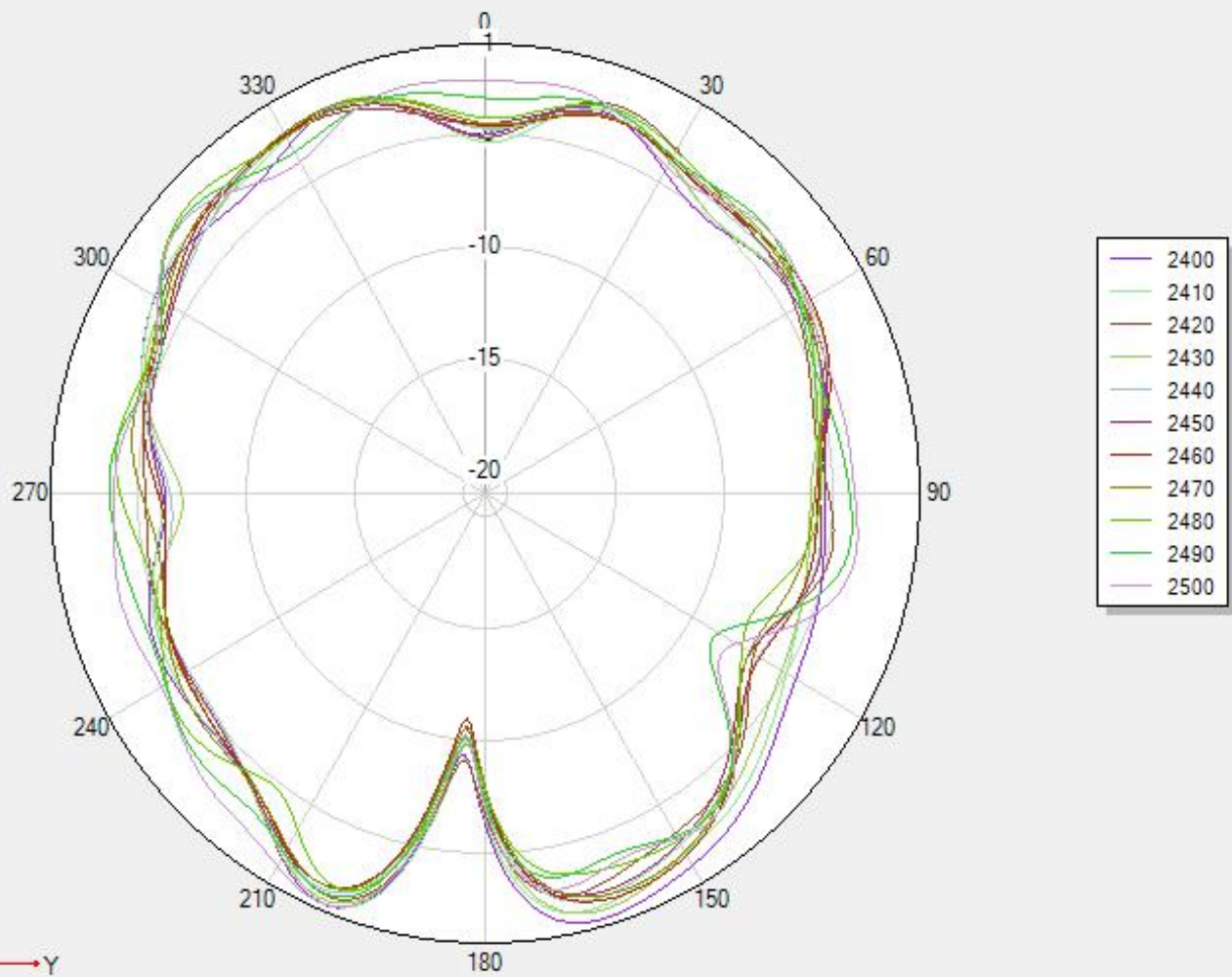
4. Test Result

4.3 2D Pattern — BT ANT



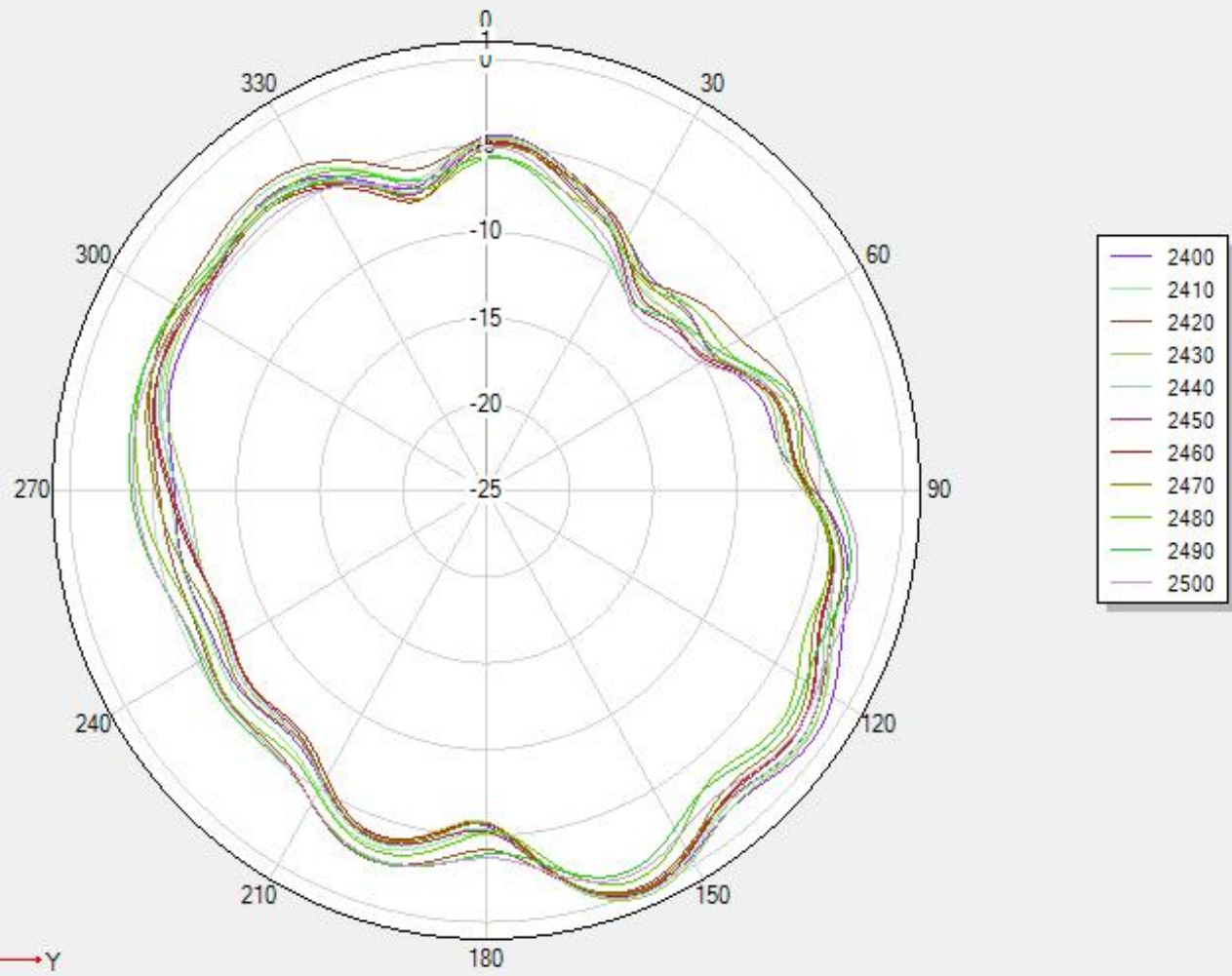
4. Test Result

4.3 2D Pattern — BT ANT



4. Test Result

4.3 2D Pattern — BT ANT

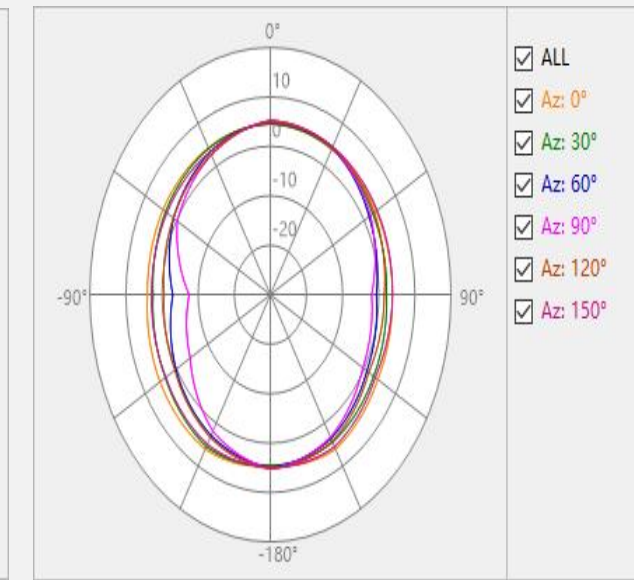
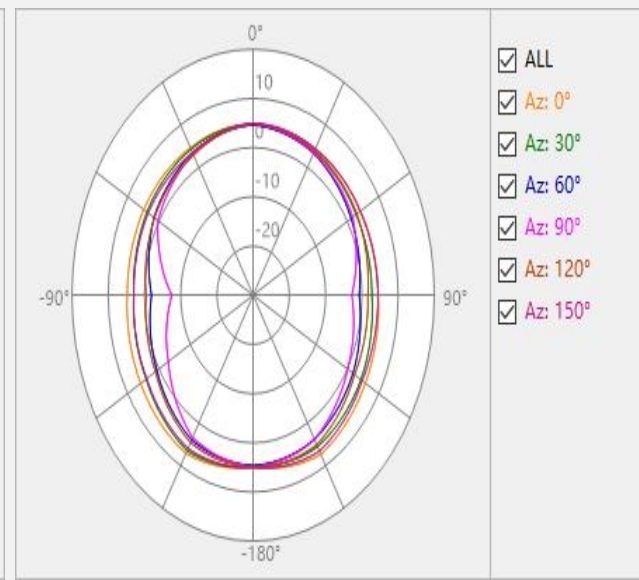
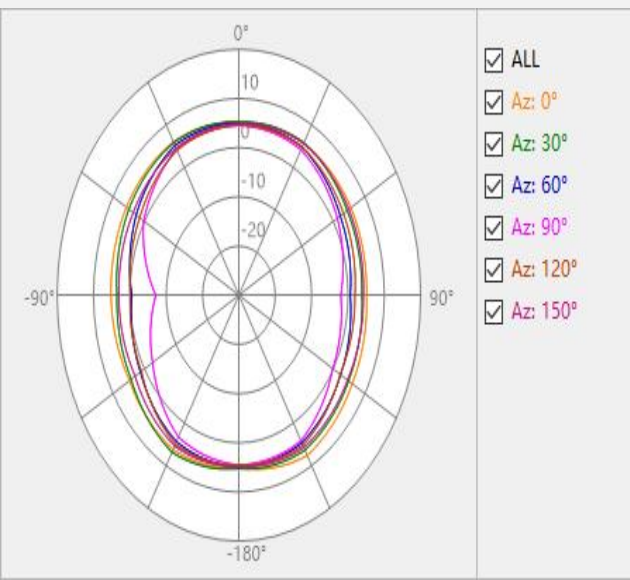
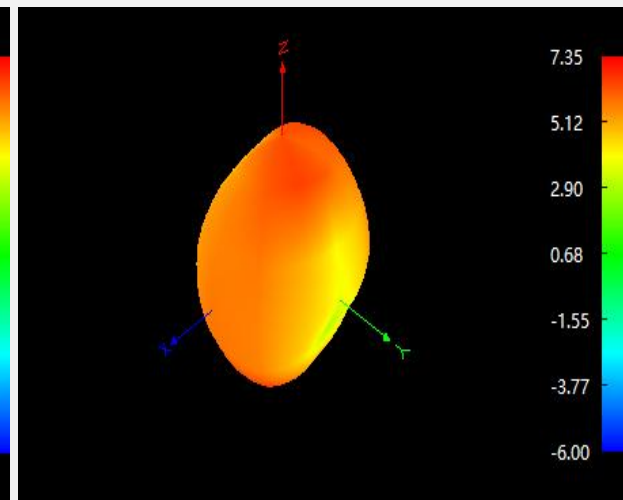
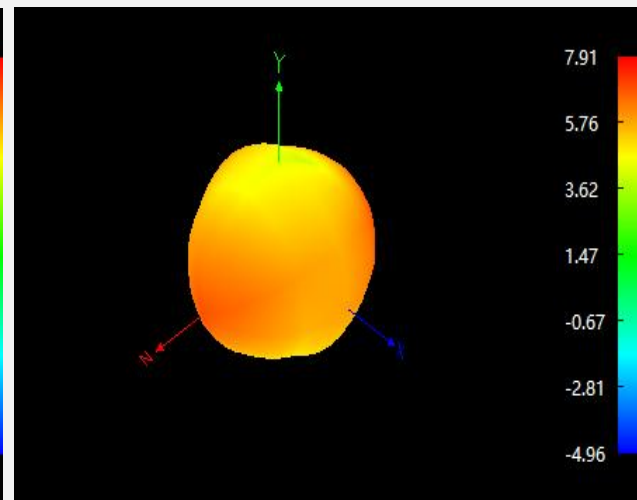
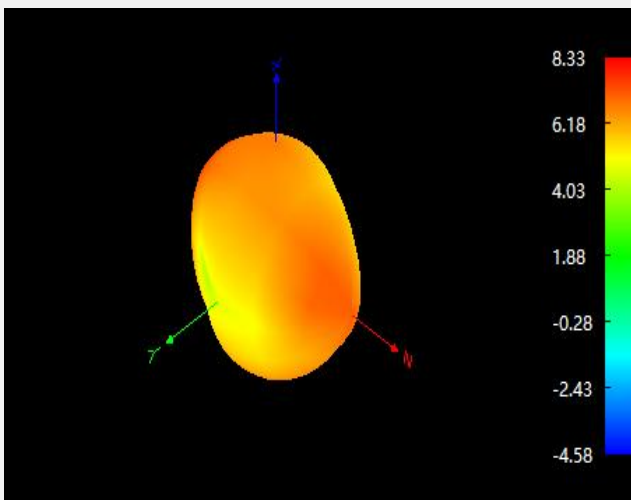


4.5 OTA Data-L

Test Equipment:	R&S CMW500		
Test Condition:	2D chamber		
Band	Channel	TRP(dBm)	TIS(dBm)
BT-L	0	3.45	-87.65
	39	3.87	-88.77
	78	3.12	-88.64

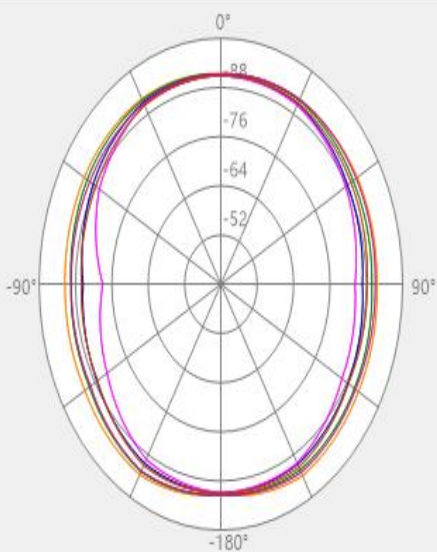
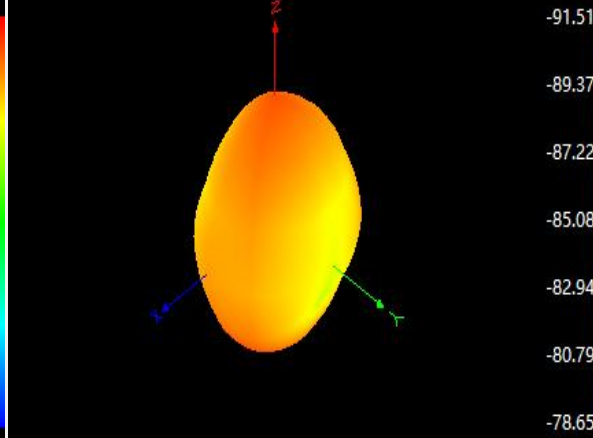
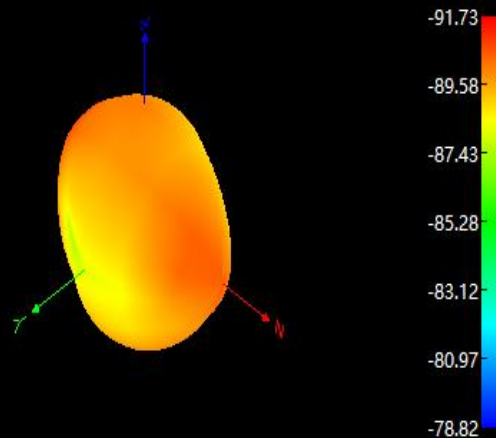
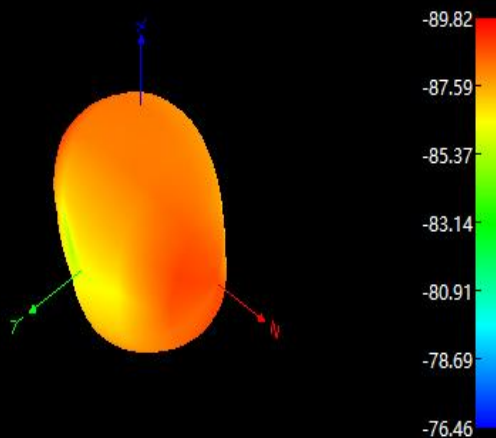
4. Test Result

4.4 2D Pattern — BT ANT

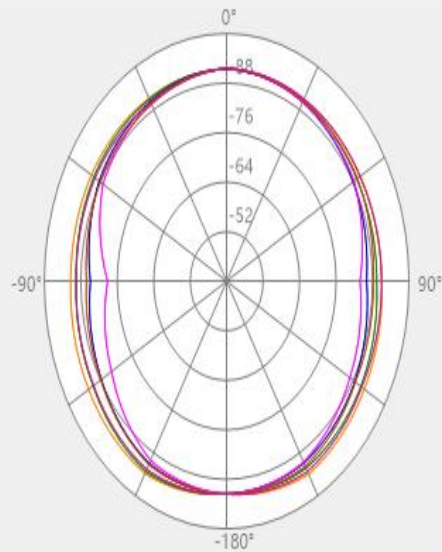


4. Test Result

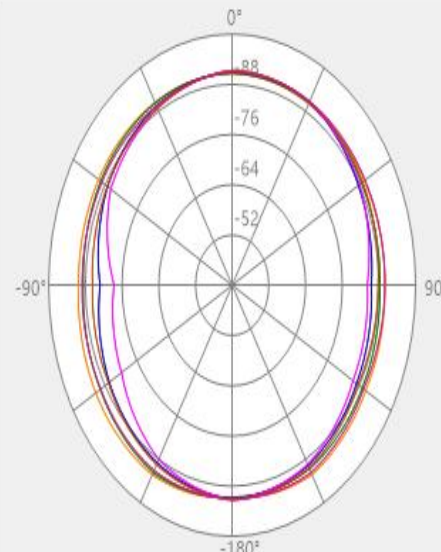
4.4 2D Pattern — BT ANT



- ALL
- Az: 0°
- Az: 30°
- Az: 60°
- Az: 90°
- Az: 120°
- Az: 150°



- ALL
- Az: 0°
- Az: 30°
- Az: 60°
- Az: 90°
- Az: 120°
- Az: 150°



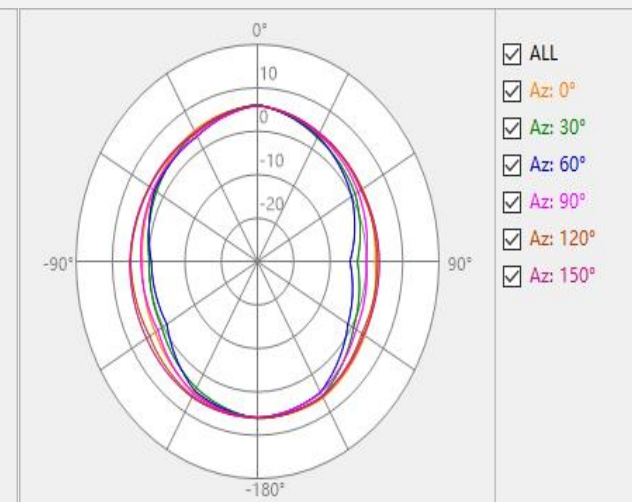
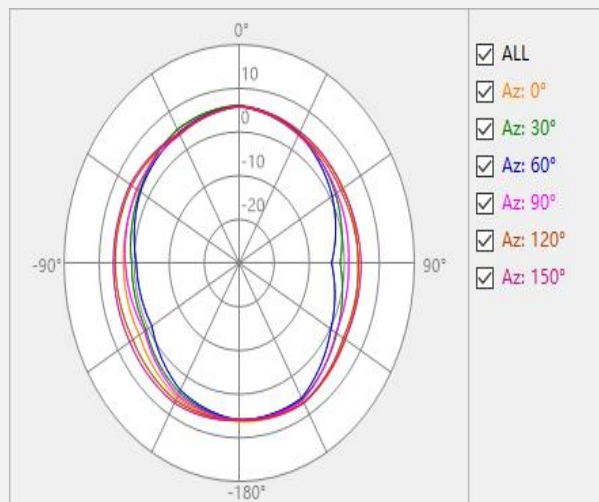
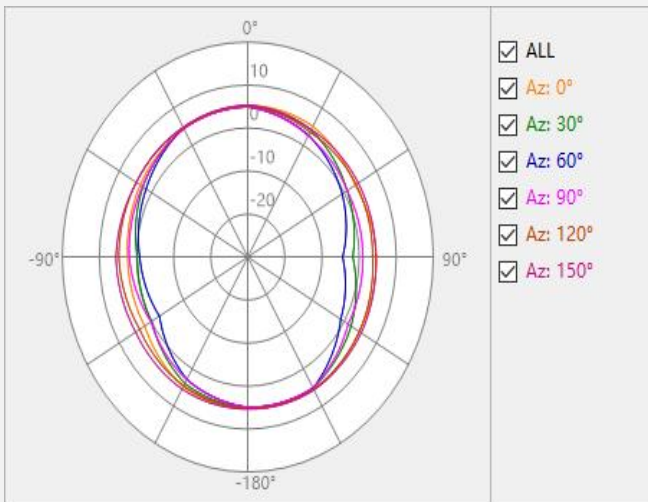
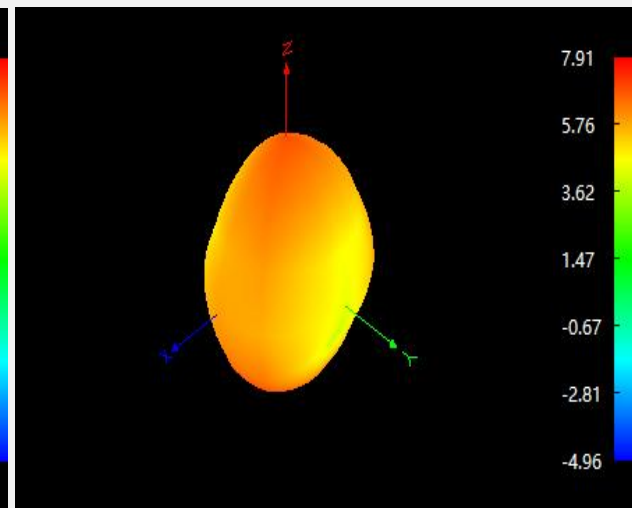
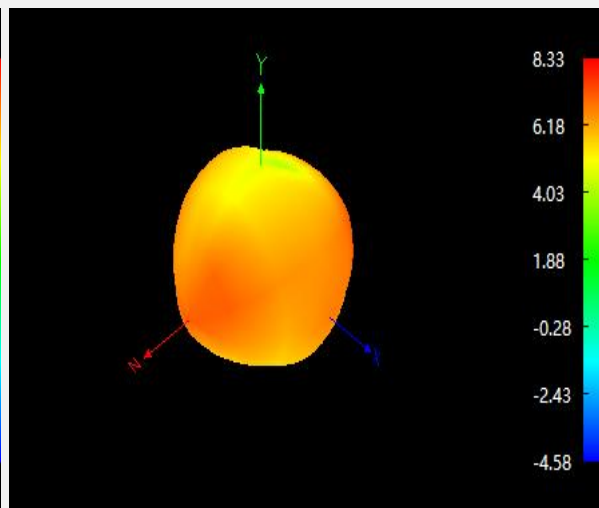
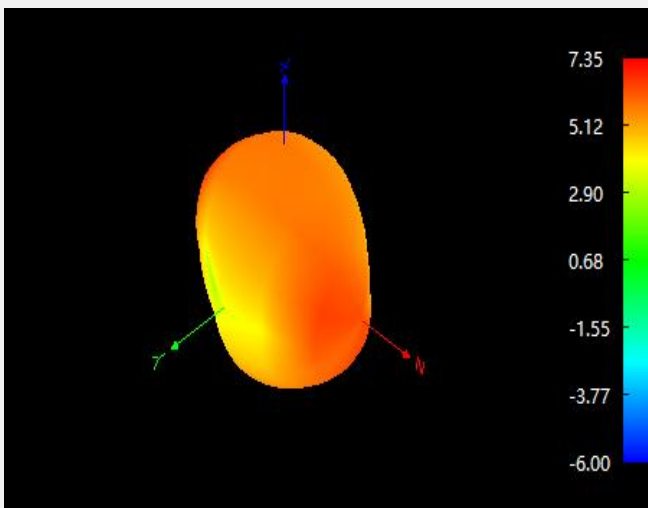
- ALL
- Az: 0°
- Az: 30°
- Az: 60°
- Az: 90°
- Az: 120°
- Az: 150°

4.5 OTA Data-R

Test Equipment:	R&S CMW500		
Test Condition:	2D chamber		
Band	Channel	TRP(dBm)	TIS(dBm)
BT-R	0	3.56	-87.58
	39	3.85	-88.86
	78	2.97	-88.85

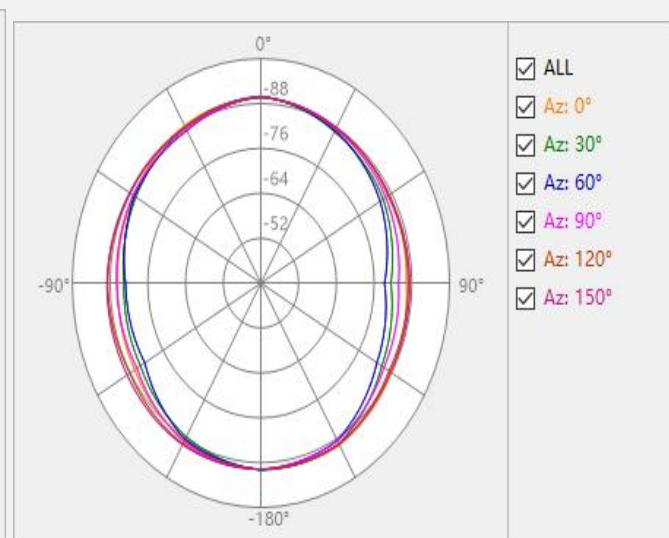
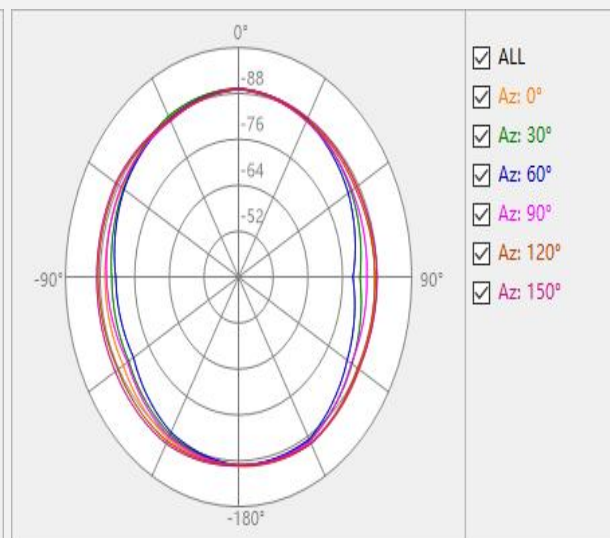
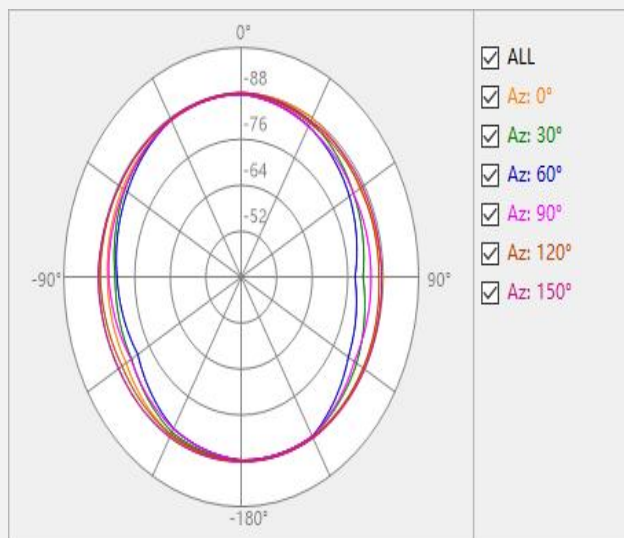
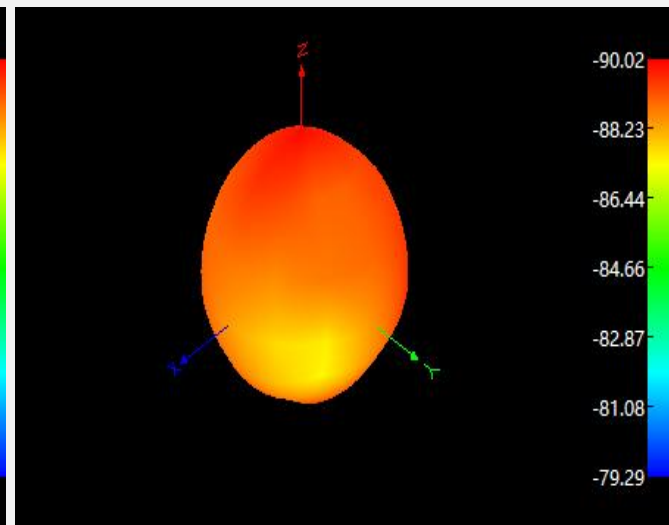
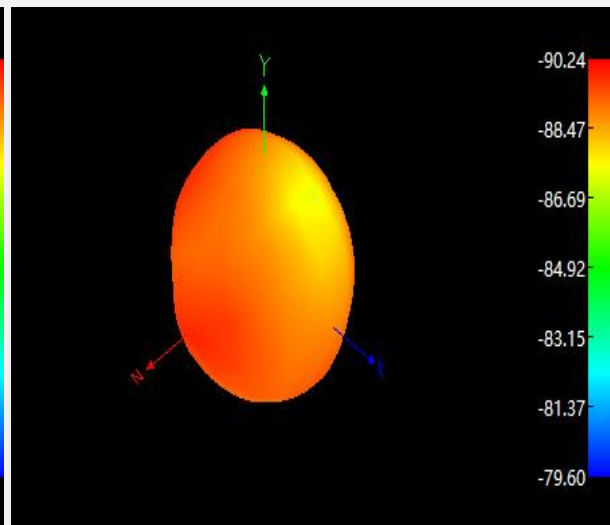
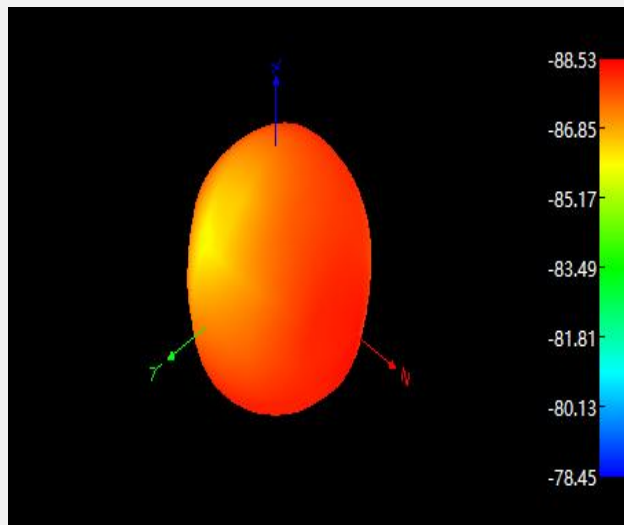
4. Test Result

4.4 2D Pattern——BT ANT



4. Test Result

4.4 2D Pattern — BT ANT



如有疑问请联系我们... ..

Thank you!