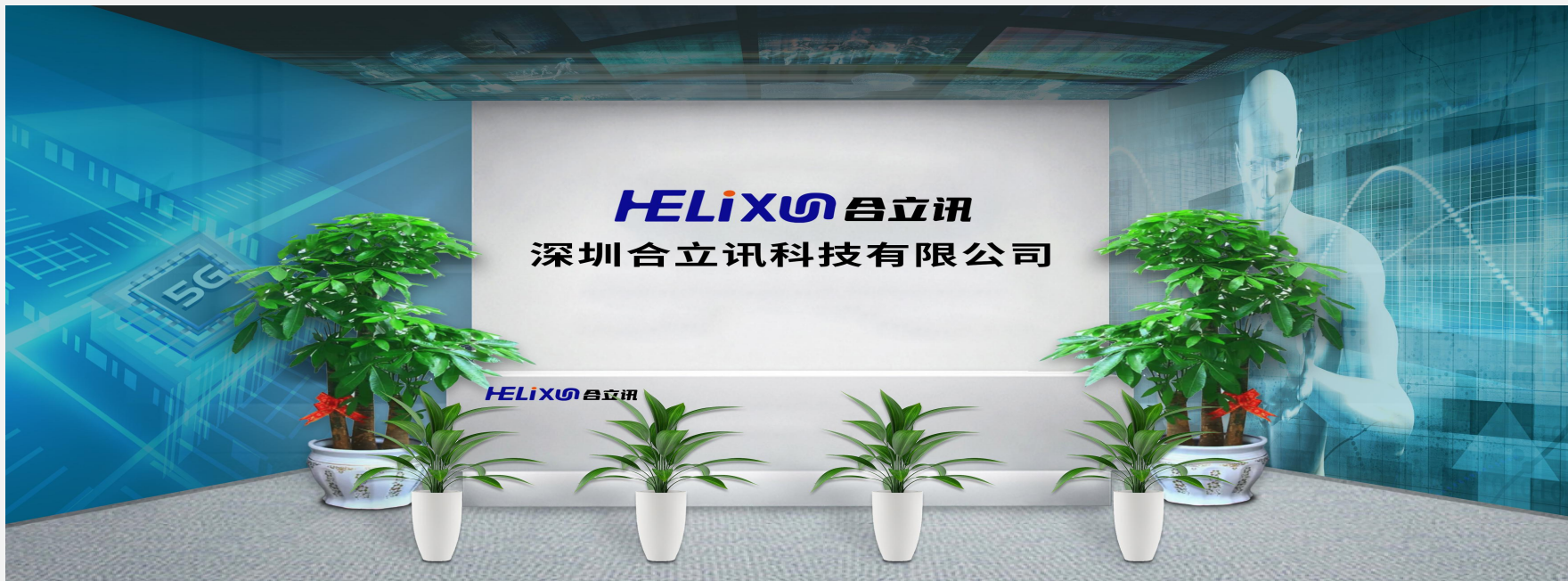




Project	T16
Antenna Revision	A0
Manufacturer	Shenzhen Helixun Technology Co., LTD
Address	1905, Building 2, Jiufang Square, Tiezai Road, Gongle Community, Xixiang Street, Baoan District, Shenzhen
Checked by	17279710721

Purpose

This report is to measure the performance of antenna for **T16** The antenna operating frequency at 2400-2500MHz, All test data are showed as below.

Content

1. est system
- 2.Product Overview &Dimension
- 3.OTA

1. Test System

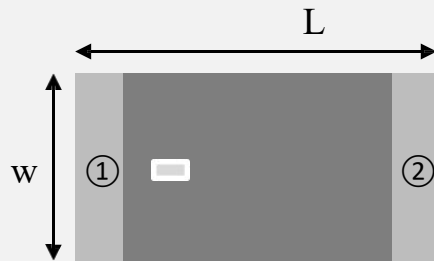
Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5071B
OTA Test	TRP&TIS	Agilent 8960 & CMW500 STIMO
Gain & Efficiency	Gain & Efficiency	SATIMO Agilent 5071C



2.Product Overview & Dimension

Antenna Type: SMD Antenna

Dimensions (Unit: mm)



(Top View)

①	INPUT
②	GND



(Bottom View)

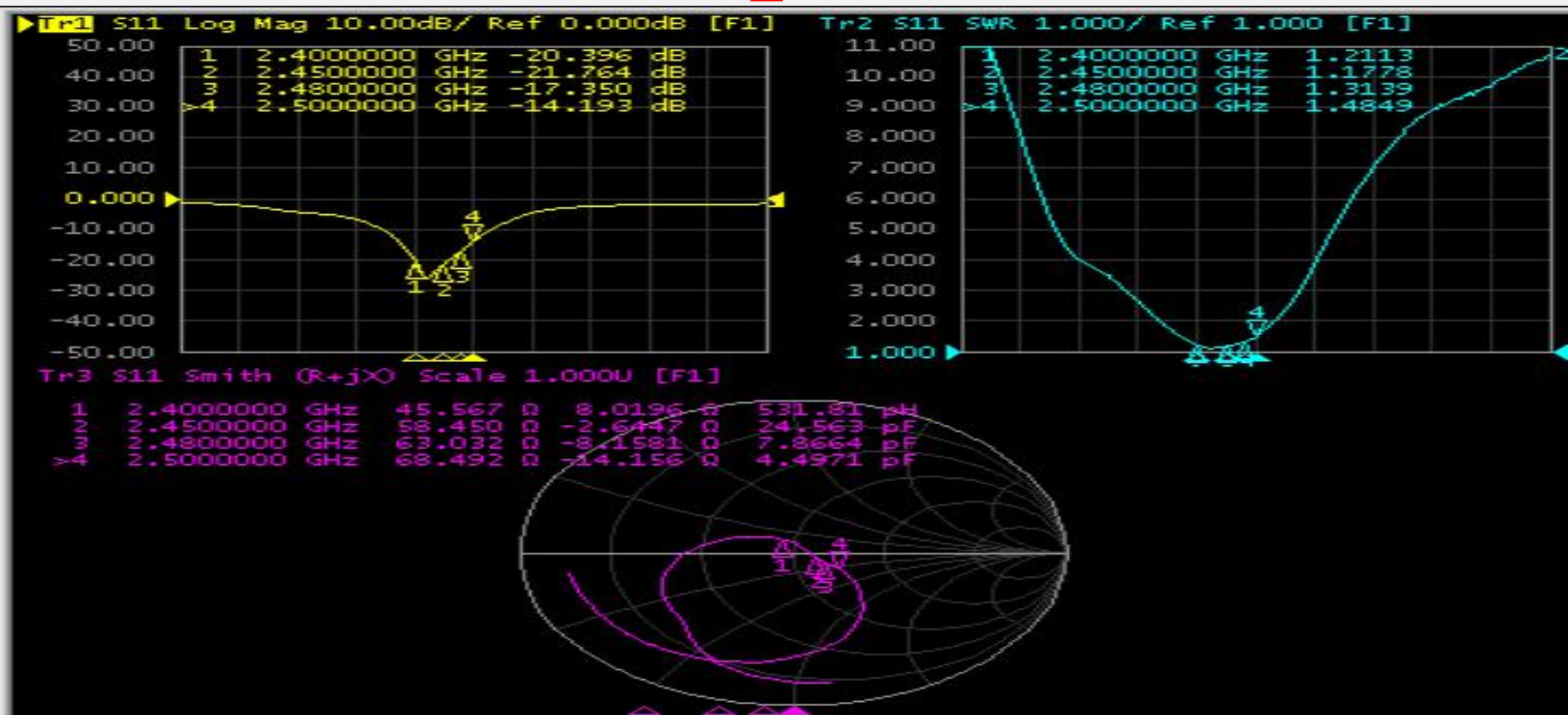


(Side View)

Symbols	L	W	T	A
Dimensions	2.0+/-0.2	1.25+/-0.2	0.6+/-0.1	0.6+/-0.1

3.Test Result

3.1 S11 Parameter-VSWR L



requeency (MHz)	2400	2450	2480	2500
VSWR	1.21	1.17	1.31	1.48

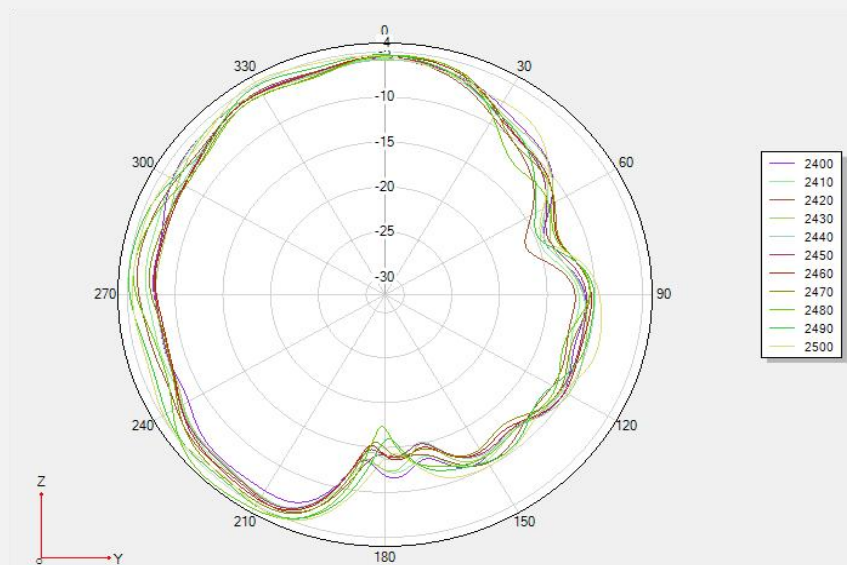
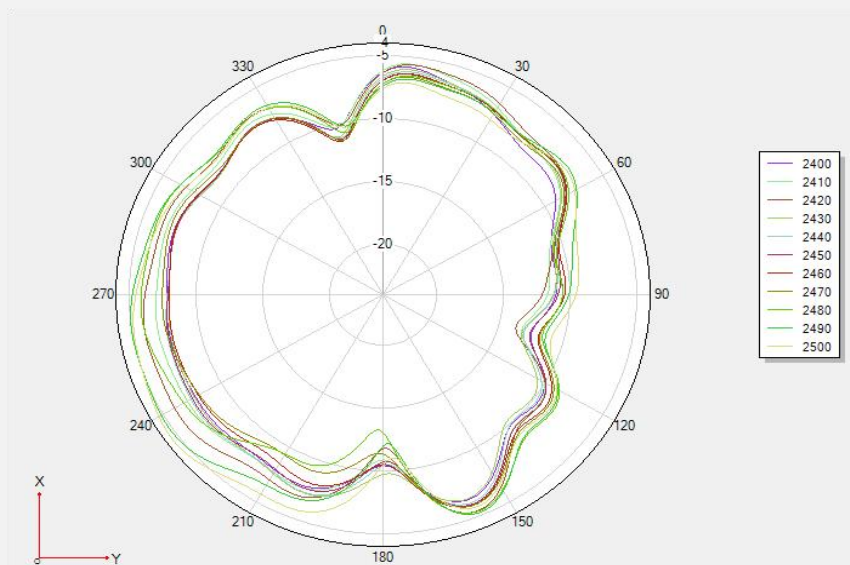
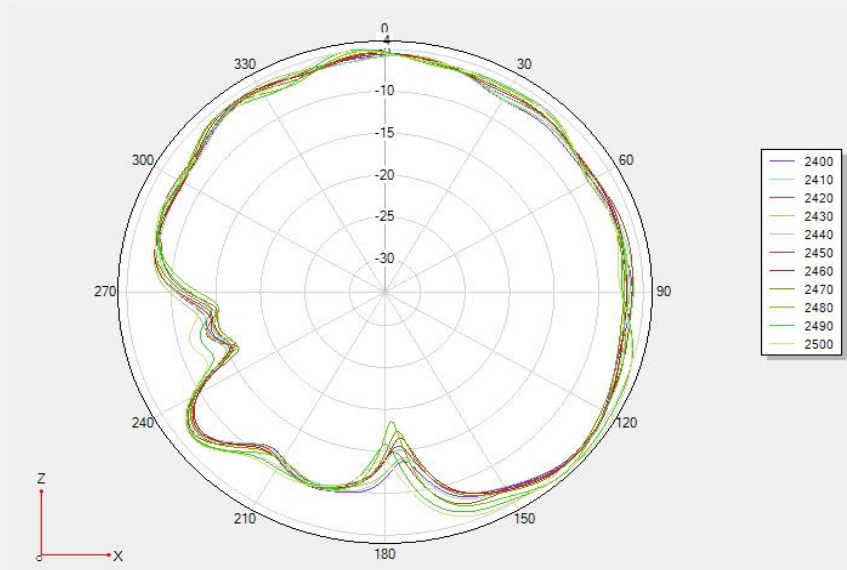
3. Test Result-L

3.2 Gain & Efficiency—ANT

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	26.74	-1.56
2410	27.29	-1.47
2420	27.87	-1.21
2430	27.03	-1.75
2440	27.11	-1.84
2450	27.41	-1.55
2460	27.41	-1.55
2470	26.81	-1.18
2480	27.79	-0.51
2490	29.28	-0.31
2500	29.84	-0.17

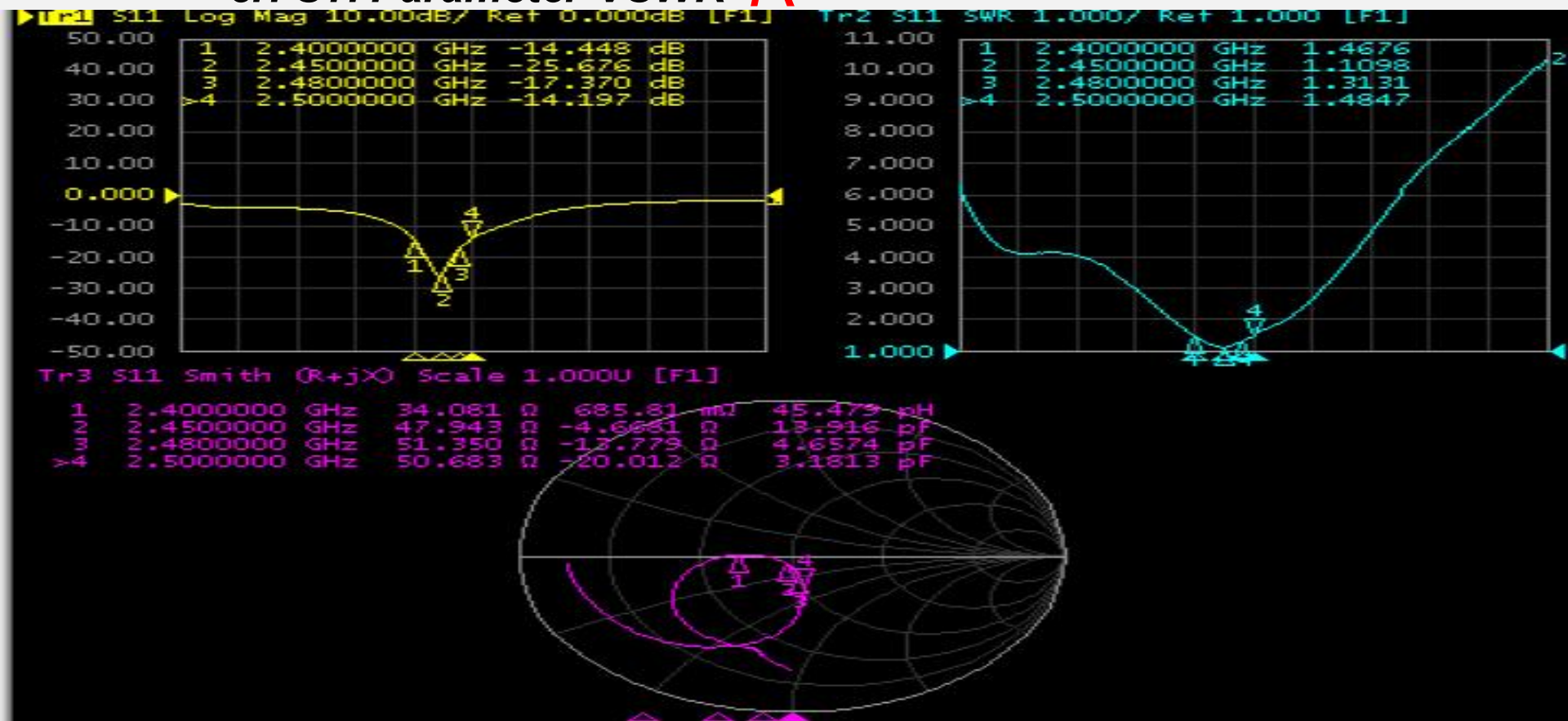
3. Test Result-L

3.3 2D Pattern—BT ANT



3.Test Result

3.1 S11 Parameter-VSWR R



requeency (MHz)	2400	2450	2480	2500
VSWR	1.46	1.10	1.31	1.48

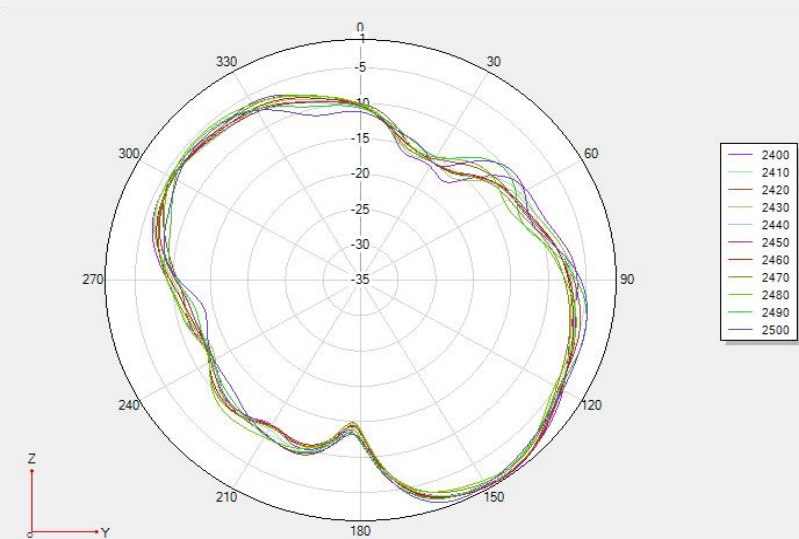
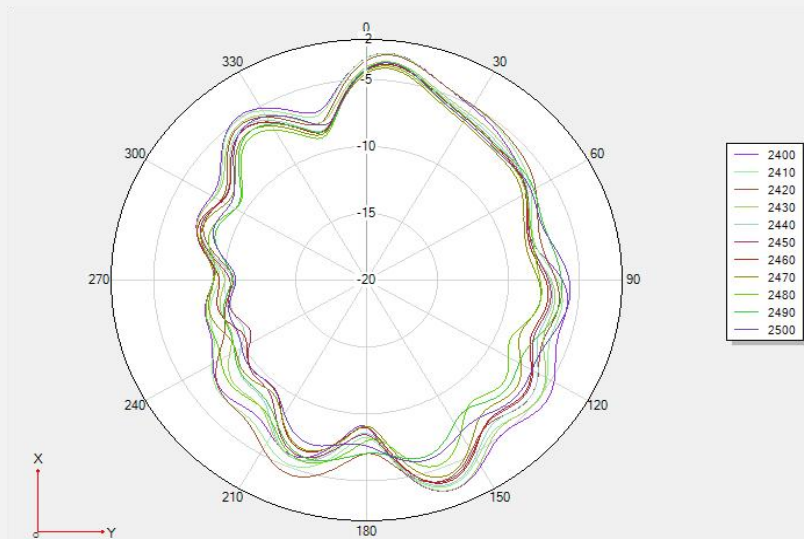
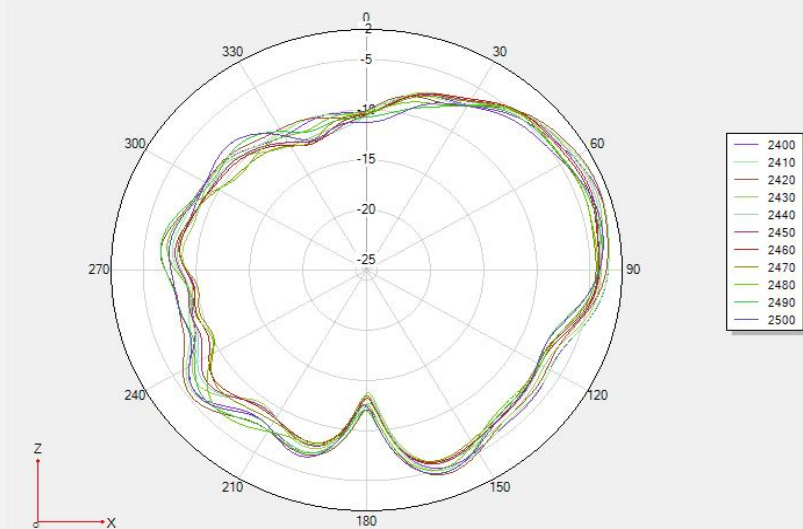
3. Test Result-**R**

3.2 Gain & Efficiency—**ANT**

Frequency (MHz)	Efficiency (%)	Max GAIN (dBi)
2400	29.59	-0.73
2410	29.54	-1.04
2420	29.18	-1.31
2430	29.43	-1.11
2440	28.81	-1.33
2450	28.61	-1.32
2460	28.32	-1.18
2470	26.54	-1.49
2480	26.45	-1.48
2490	26.54	-1.27
2500	26.32	-0.92

3. Test Result-R

3.3 2D Pattern—BT ANT

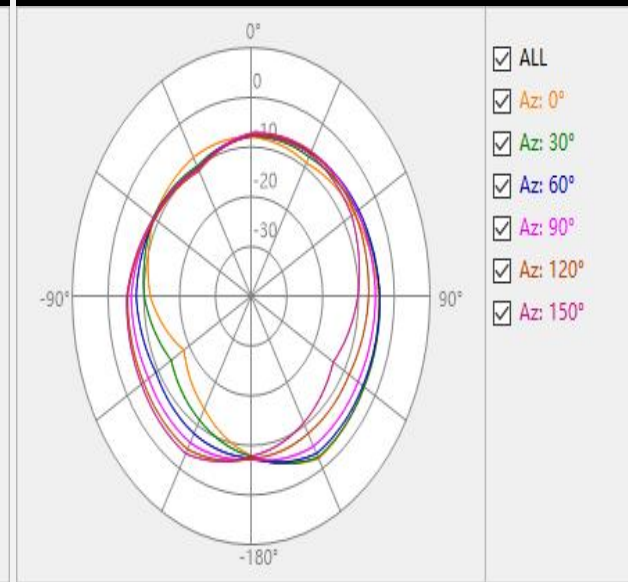
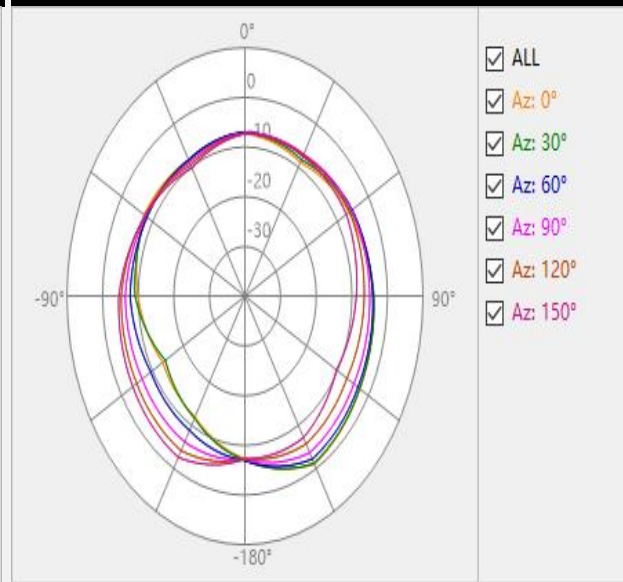
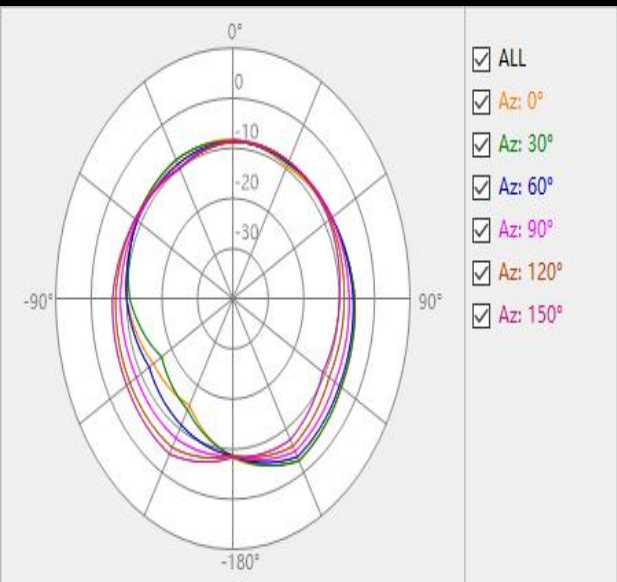
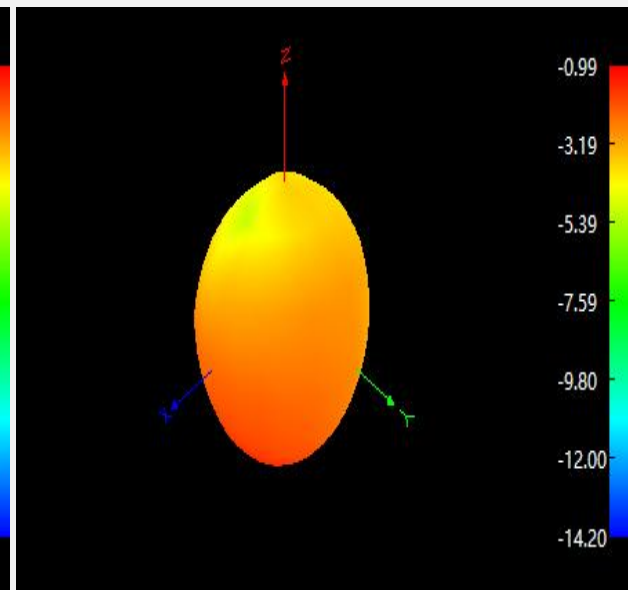
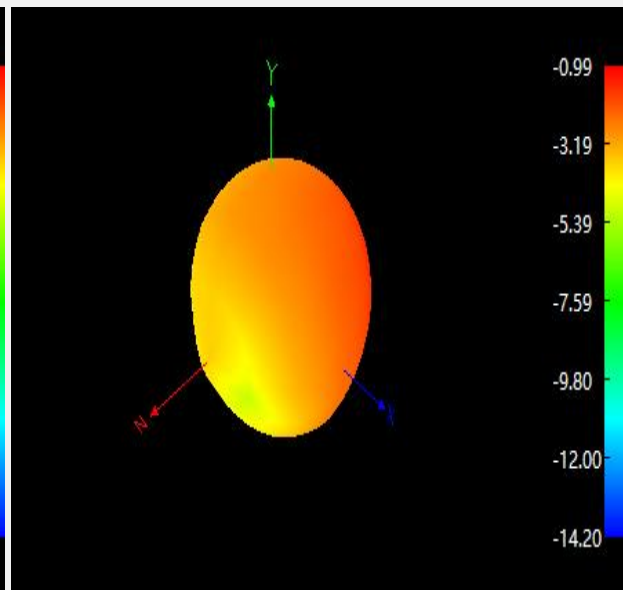
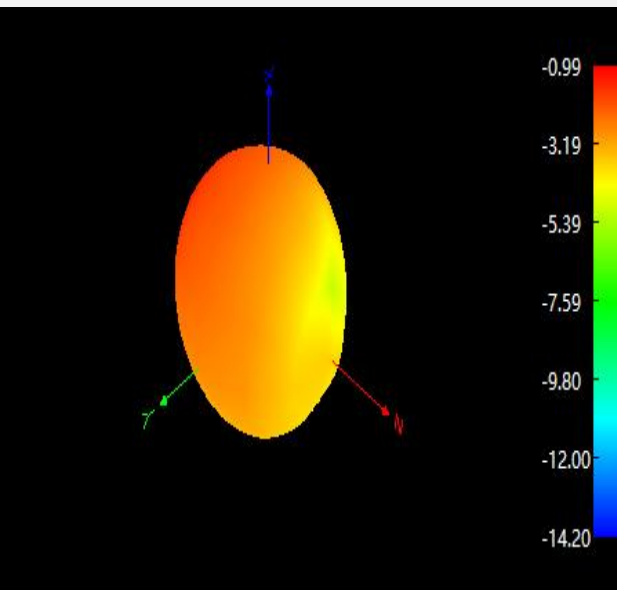


3.OTA Data

Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band		Channel	TRP(dBm)	TIS(dBm)
BT	L	0	-4.05	-77.88
		39	-3.55	-77.45
		78	-3.49	-78.08
BT	R	0	-2.41	-78.77
		39	-2.51	-77.92
		78	-3.22	-77.26

3.Test

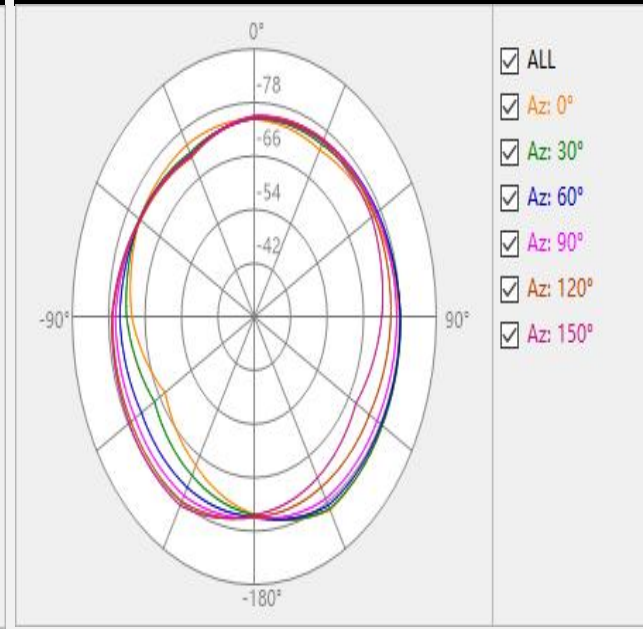
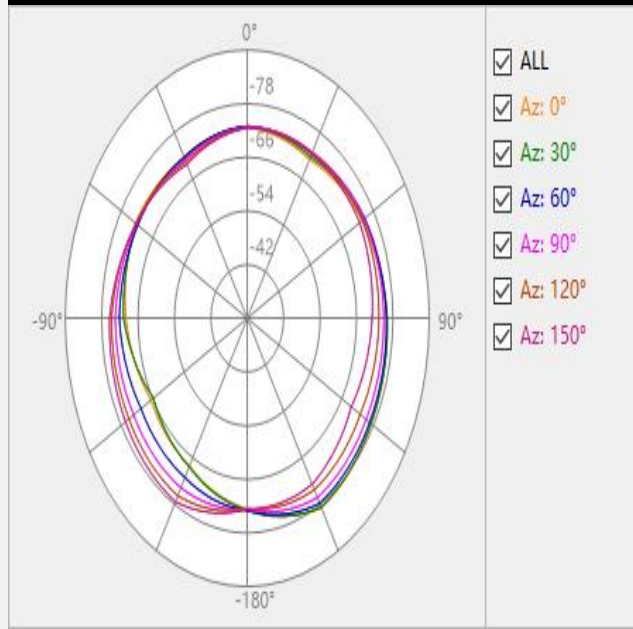
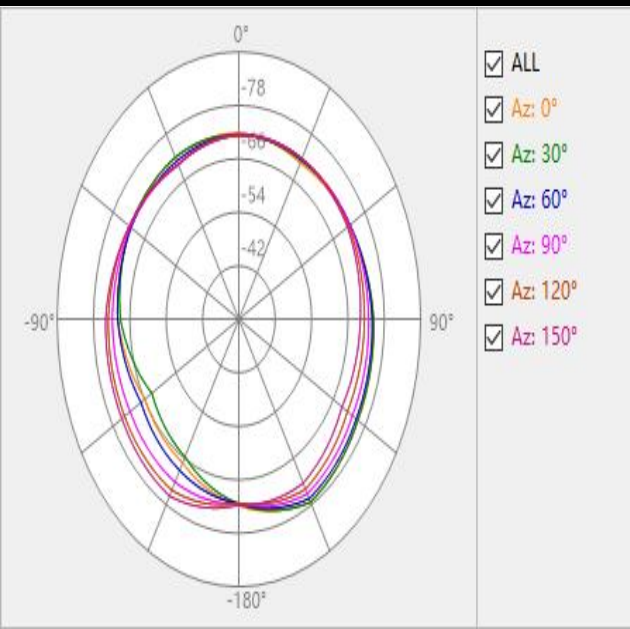
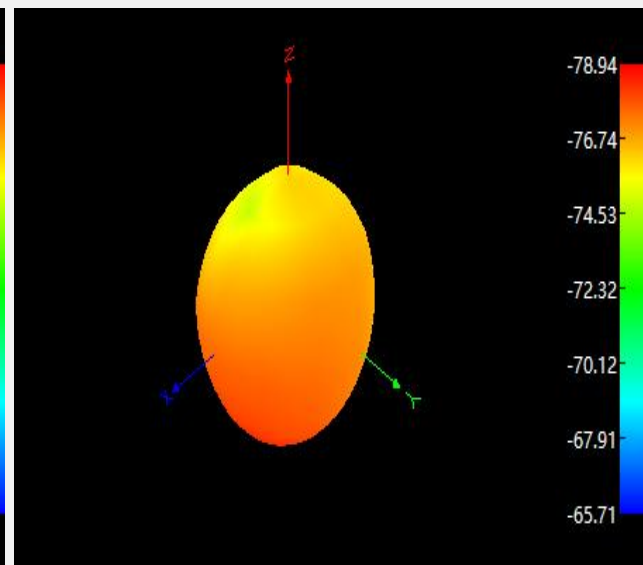
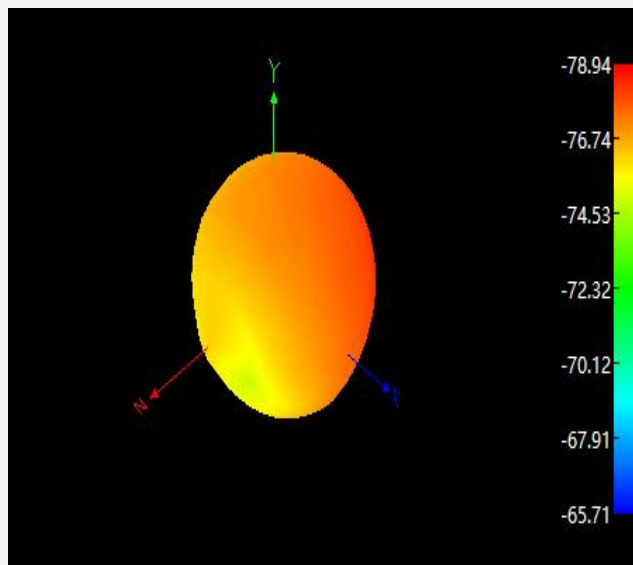
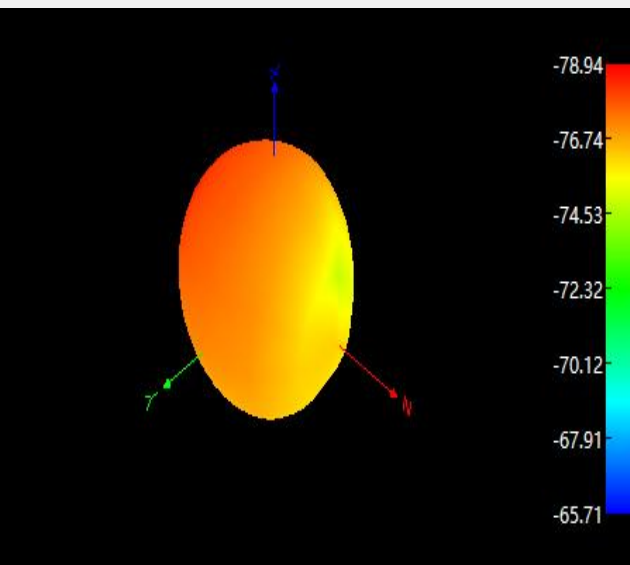
Result L-TRP



3.Test

Result

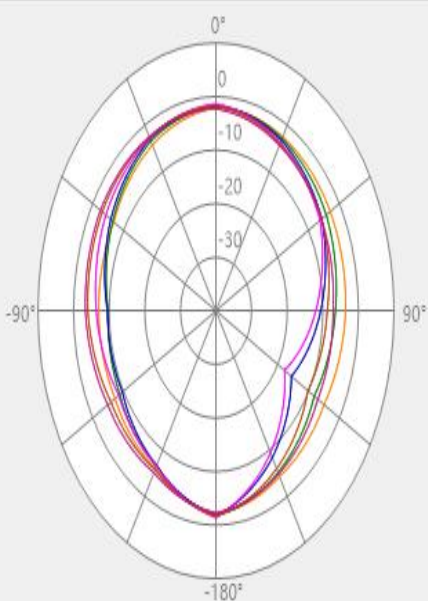
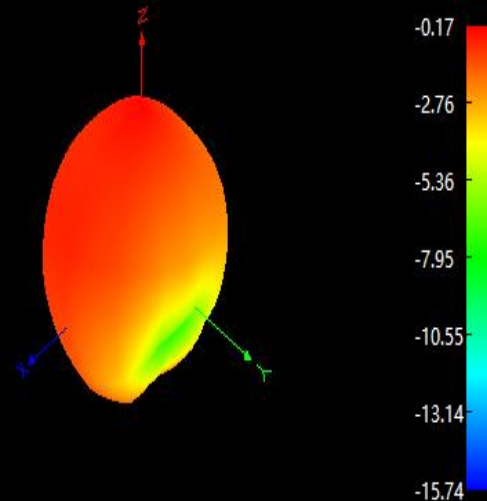
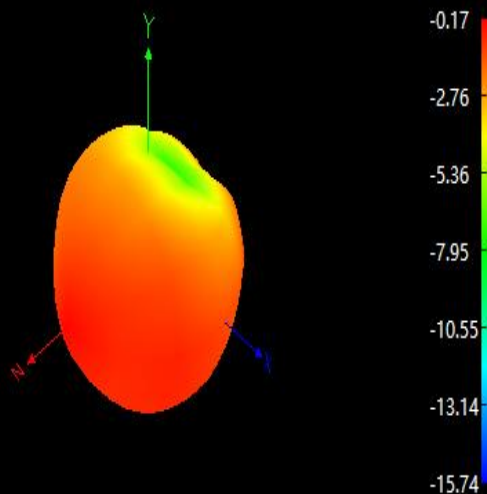
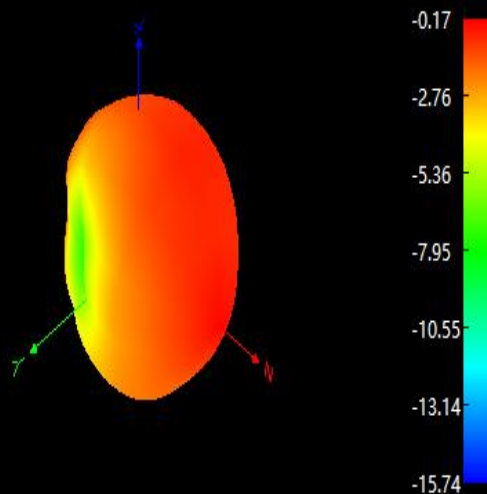
L-TIS



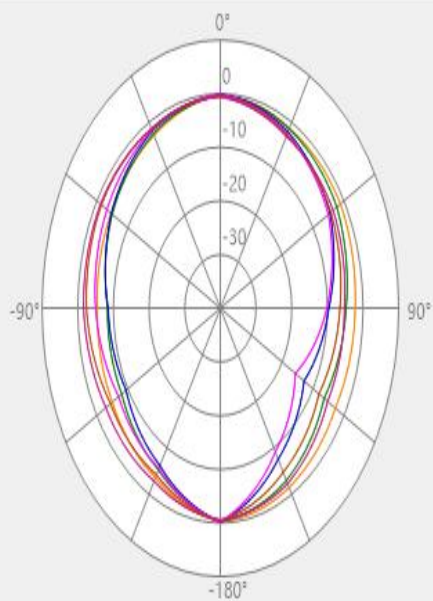
3.Test

Result

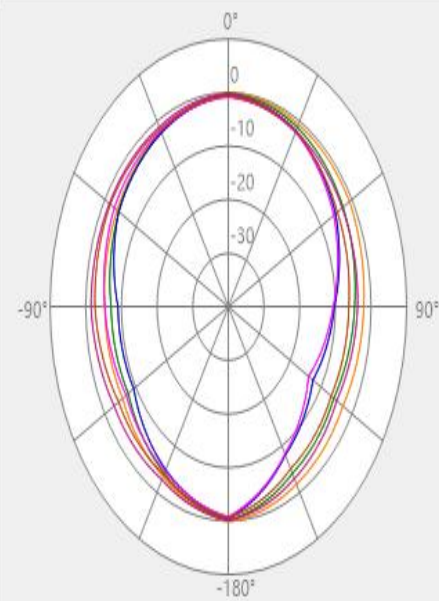
R-TRP



- ☒ 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°

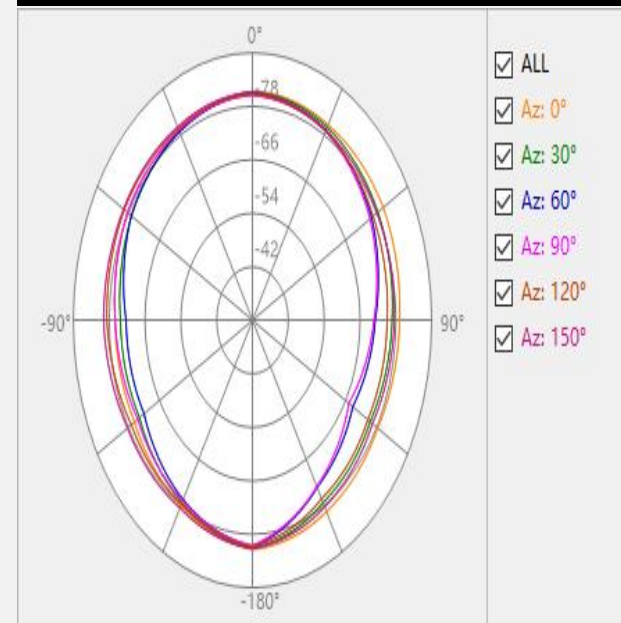
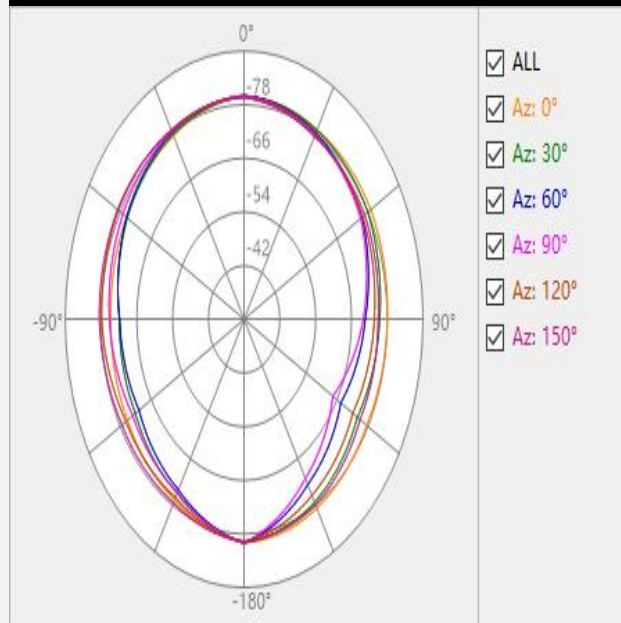
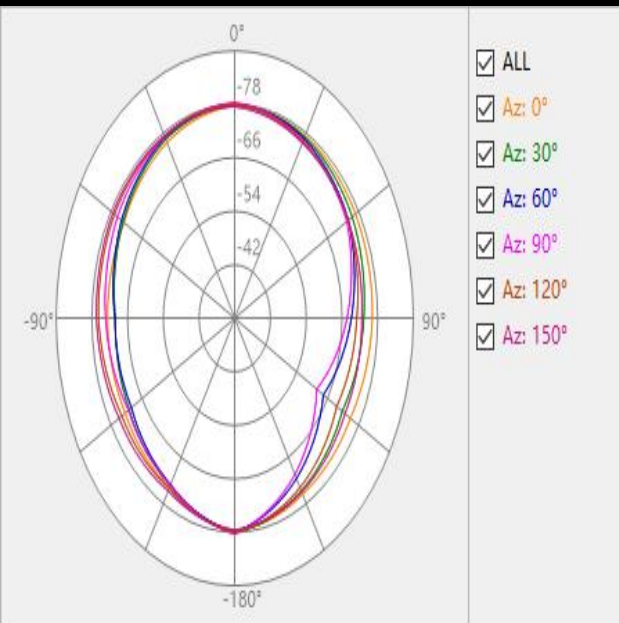
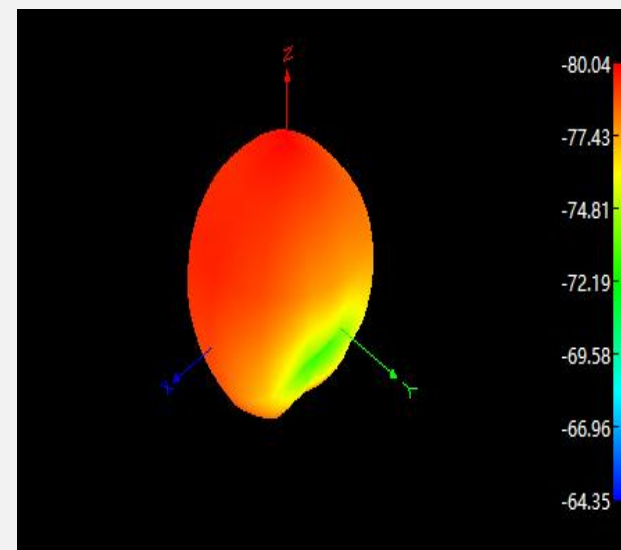
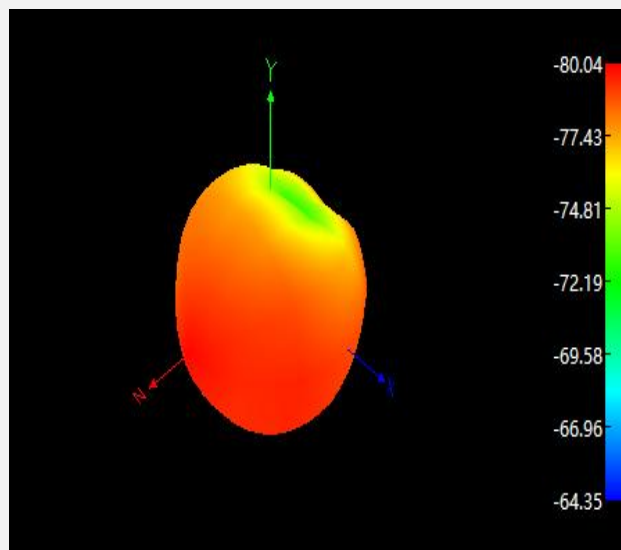
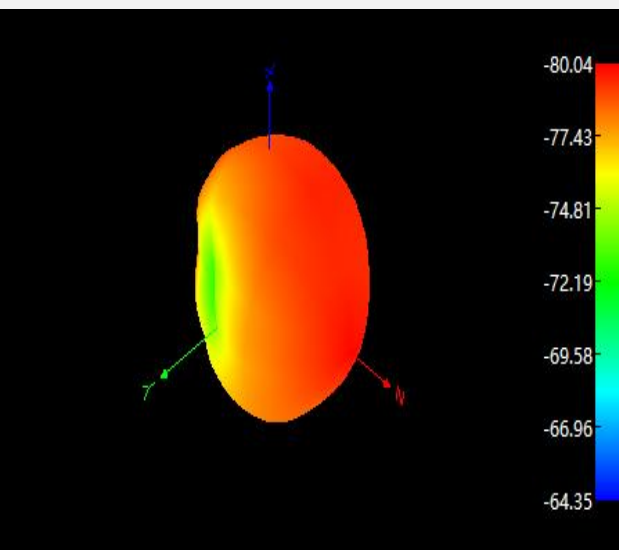


- ☒ ALL
- ☒ Az: 0°
- ☒ Az: 30°
- ☒ Az: 60°
- ☒ Az: 90°
- ☒ Az: 120°
- ☒ Az: 150°

3.Test

Result

R-TIS



Thank you!