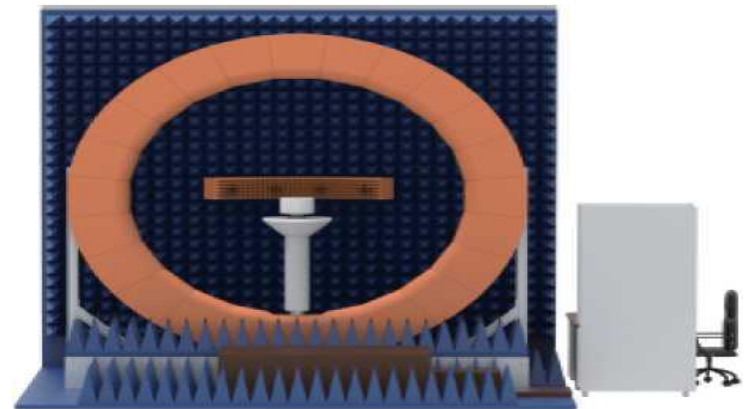
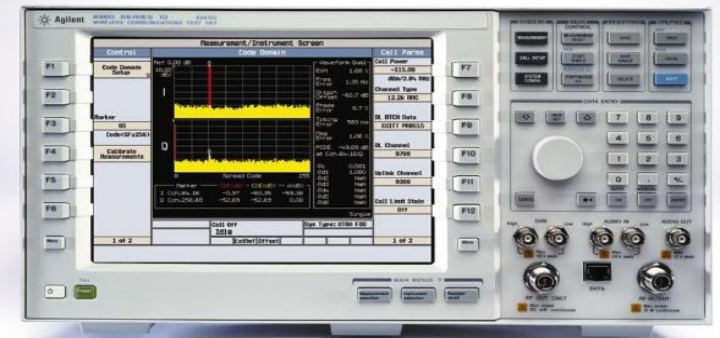




Customer	美师傅
Project	S5178
Antenna Revision	A0
Prepared by	18814303605
Checked by	
Date :	2024. 11. 21

2. 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



Purpose

This report is to measure the performance of antenna for **S5178** 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 2D Pattern

4.4 Test coordinate

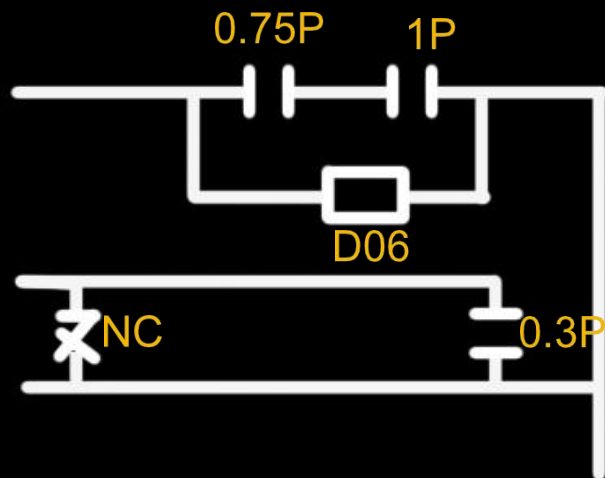
4.5 2D Pattern



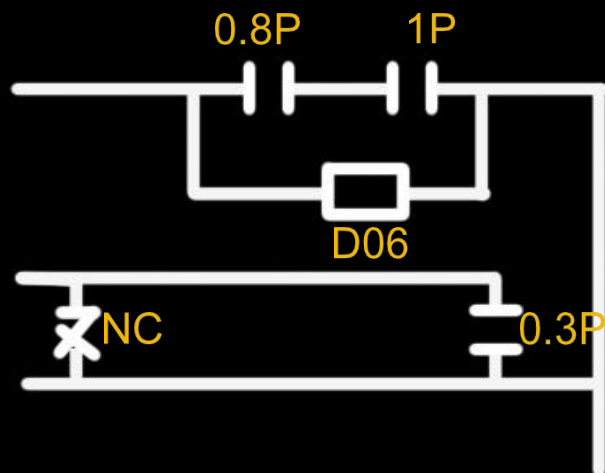
S5178

匹配图

L



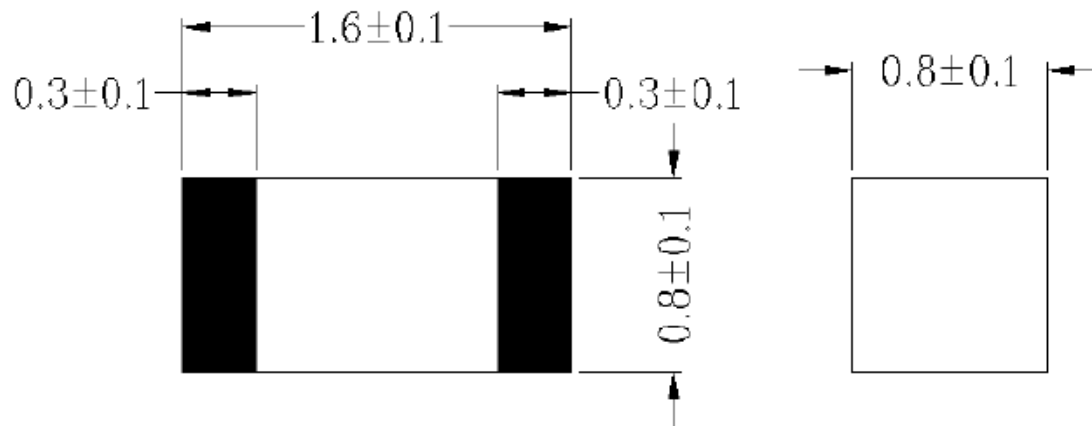
R



Antenna size diagram

产品规格 Product Specification

尺寸规格 (mm) Specification: Unit (mm)



装配图



棉靠近喇叭线位，粘住多余空间使电池稳定摆放，电池不拧压在下方。

The cotton is close to the speaker line, sticking the excess space so that the battery is placed stably, and the battery is not screwed underneath.

4.1 Test Result

1 S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
VSWR	4.60	2.34	1.73	1.83

4.1 Test Result

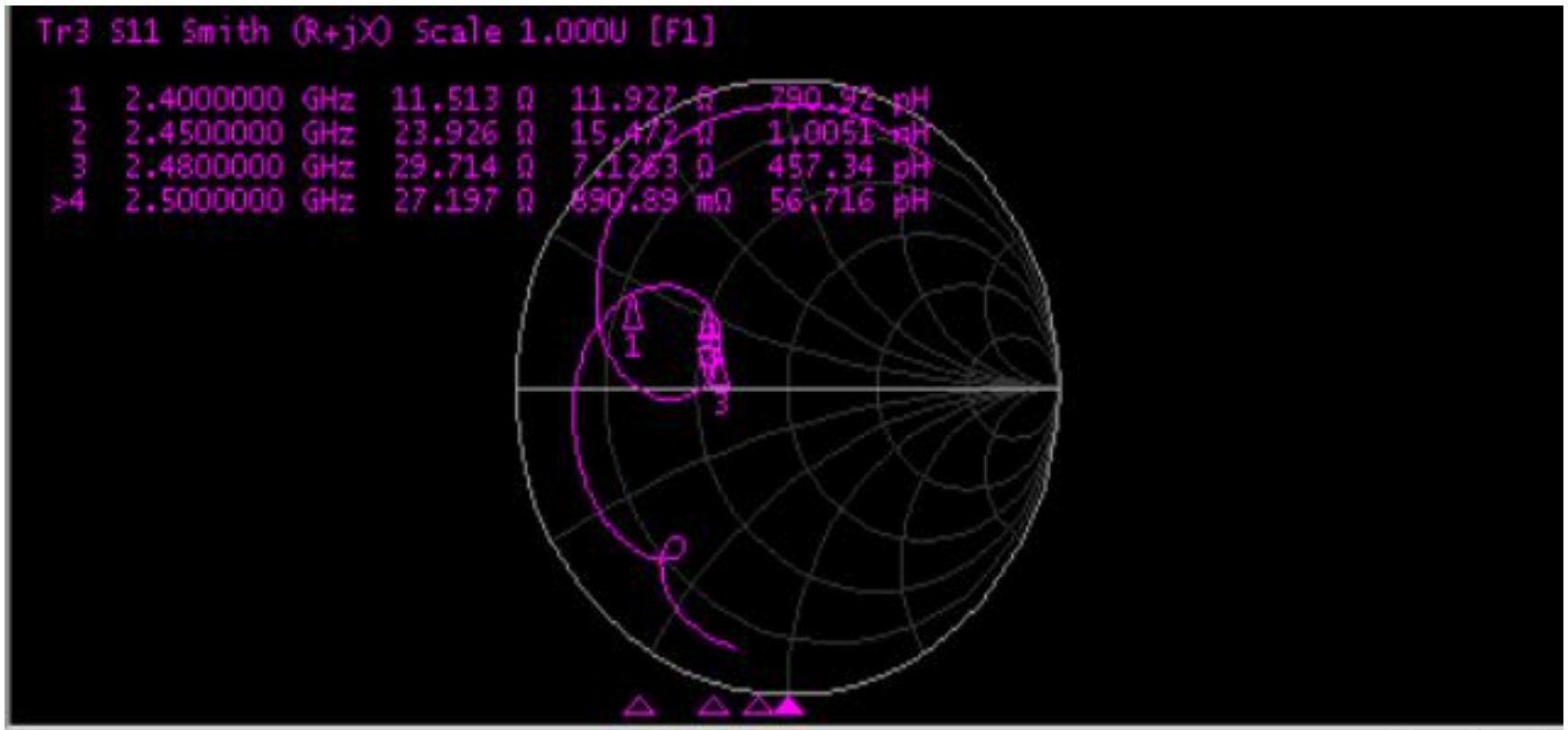
2 S11 Parameter-Log Mag



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-3.83	-7.92	-11.41	-10.58

4.1 Test Result

3 S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
Smi th(Ω)	11.51	23.92	29.71	27.19

4.2 Test Result

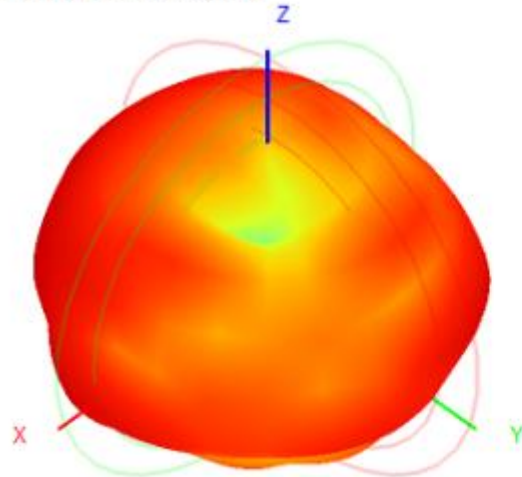
1 Gain & Efficiency—**ANT**

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	20.08	-1.72
2410	21.94	-1.31
2420	23.92	-0.89
2430	25.81	-0.50
2440	27.52	-0.13
2450	29.85	0.40
2460	31.35	0.86
2470	32.90	1.01
2480	34.02	1.20

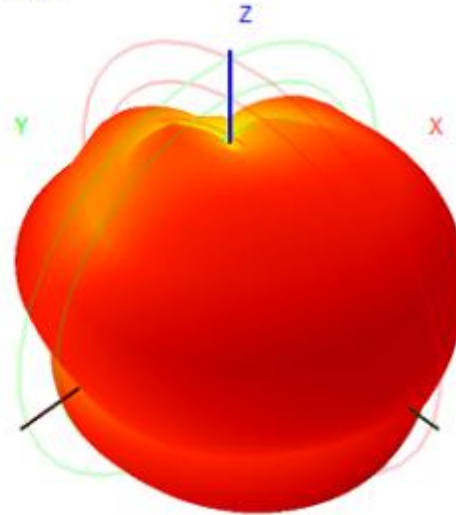
4.3 Test Result

1 2D Pattern——BTANT

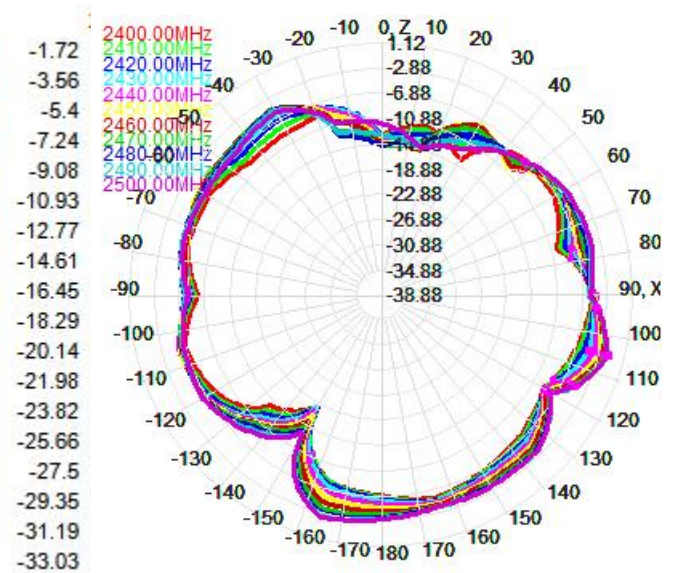
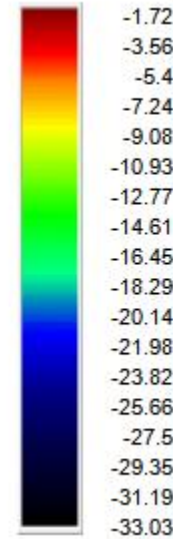
2400.0MHz Total, Eff: 20.1%



Back View



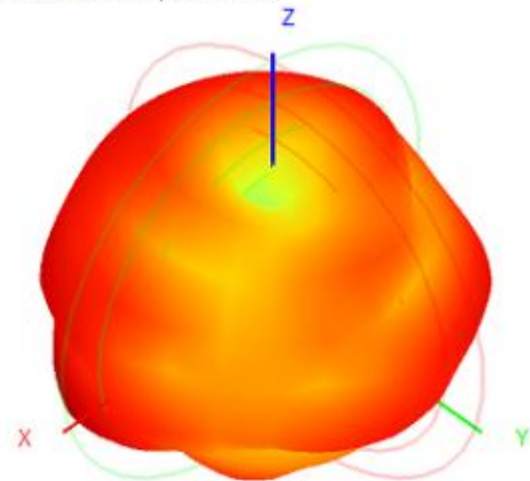
Unit:dBi



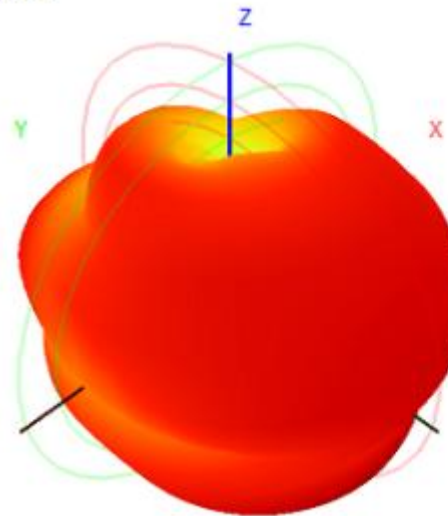
4.3 Test Result

2 2D Pattern—BTANT

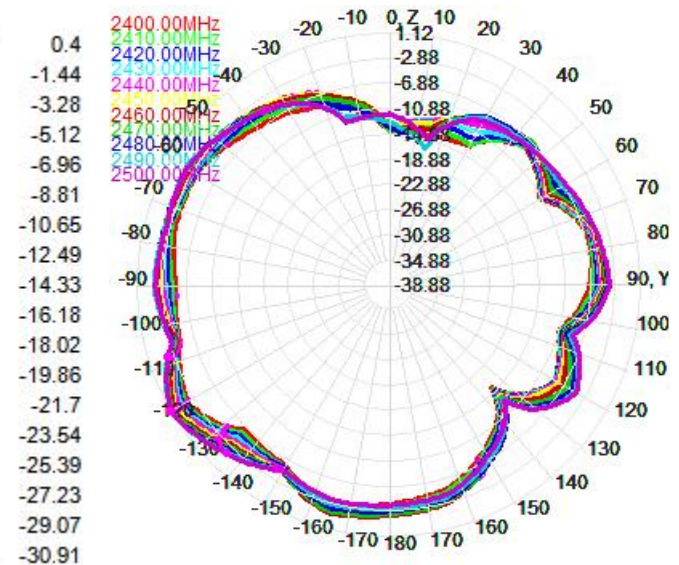
2450.0MHz Total, Eff: 29.6%



Back View



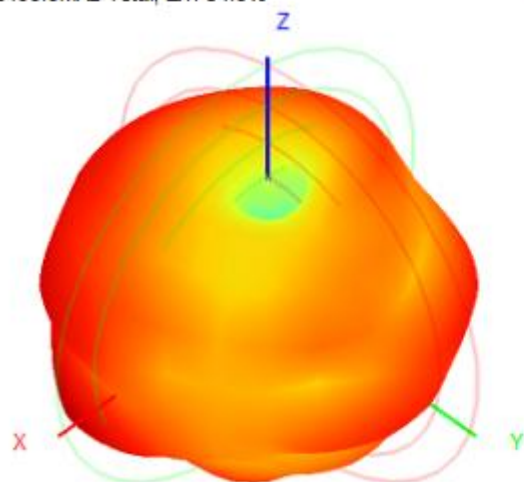
Unit:dBi



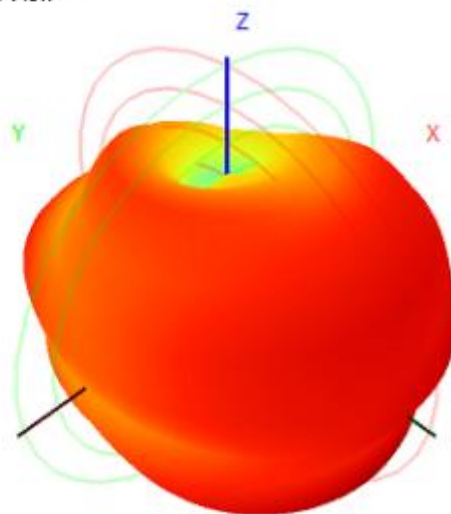
4.3 Test Result

3 2D Pattern——BTANT

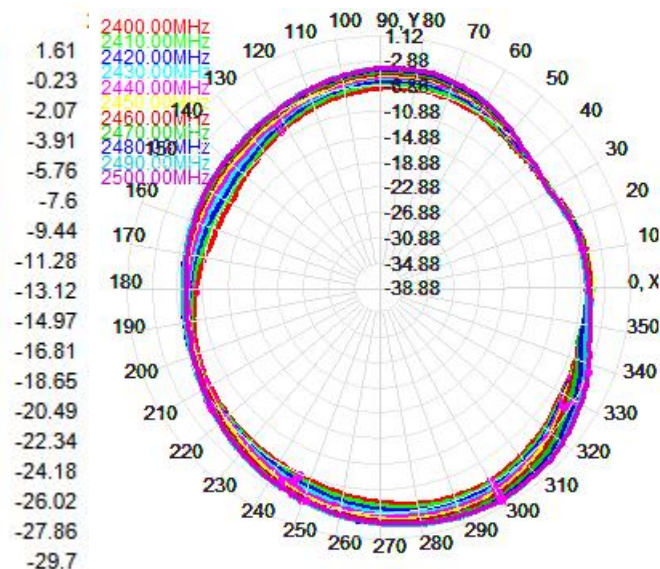
2480.0MHz Total, Eff: 34.0%



Back View



Unit:dBi



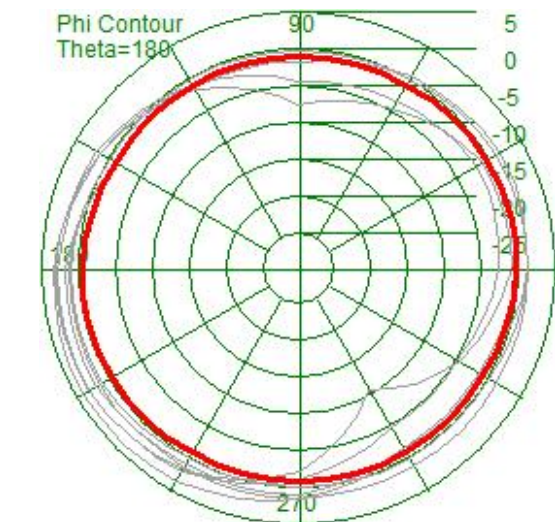
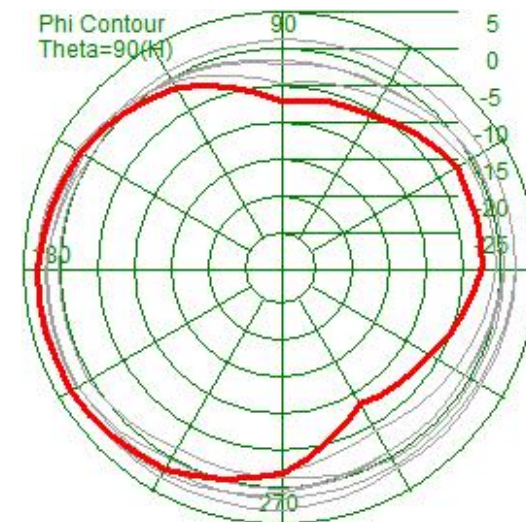
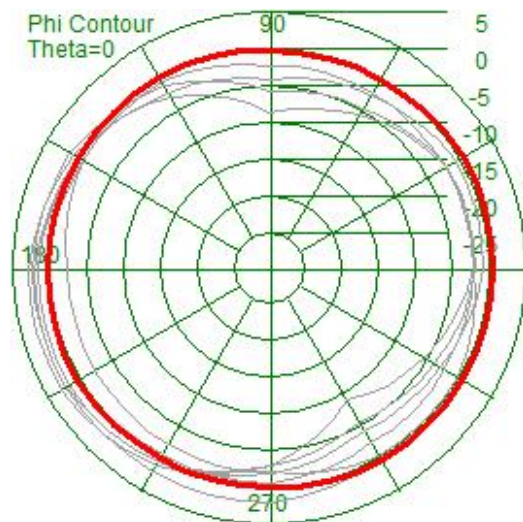
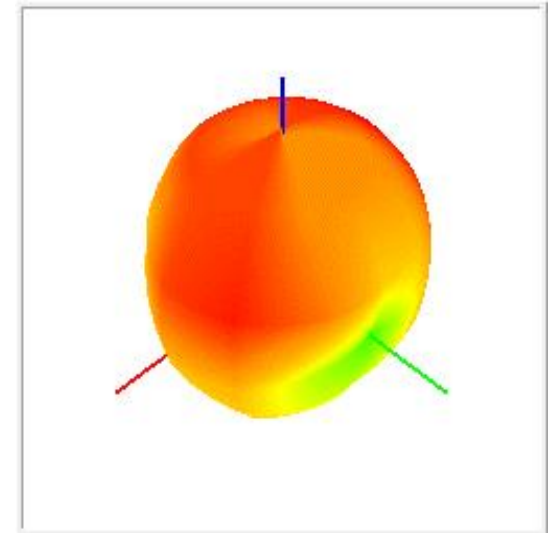
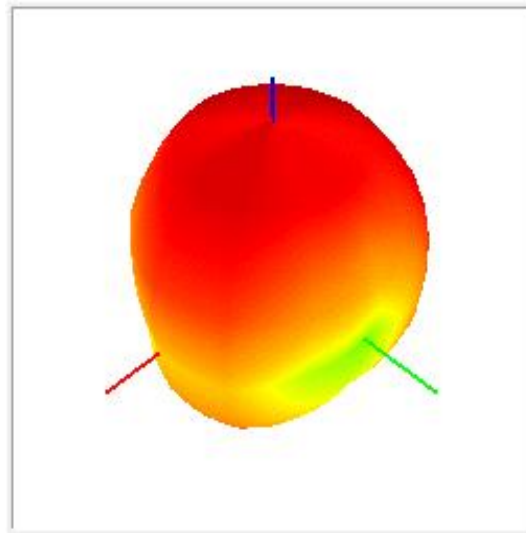
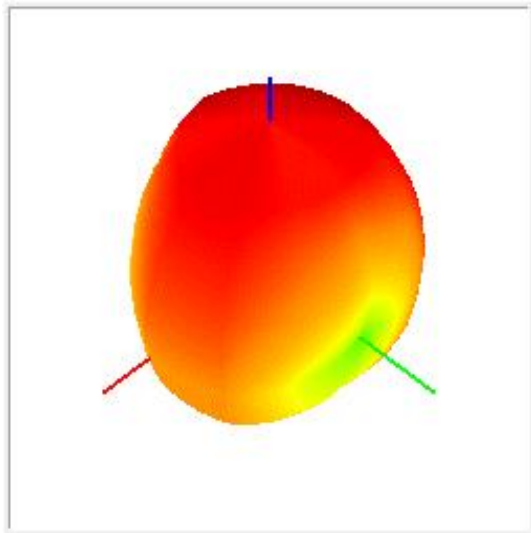
4.4 OTA Data

Test Equipment:	R&S CMW500		
Test Condition:	2 D chamber		
Band	Channel	TRP(dBm)	TIS(dBm)
BT-L	0	-0.12	-84.06
	39	1.05	-88.93
	78	1.65	-89.07

4.5 Test Result

1 2D Pattern——**BTANT**

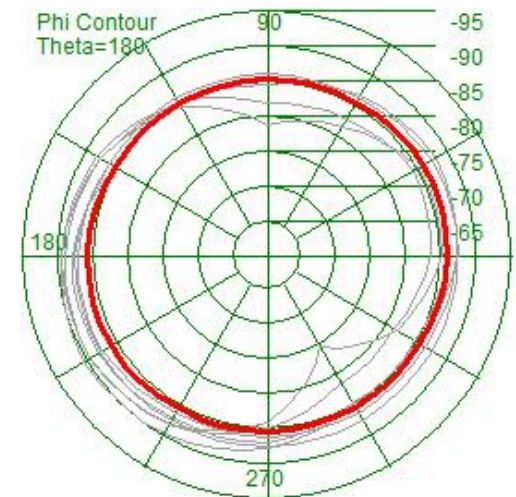
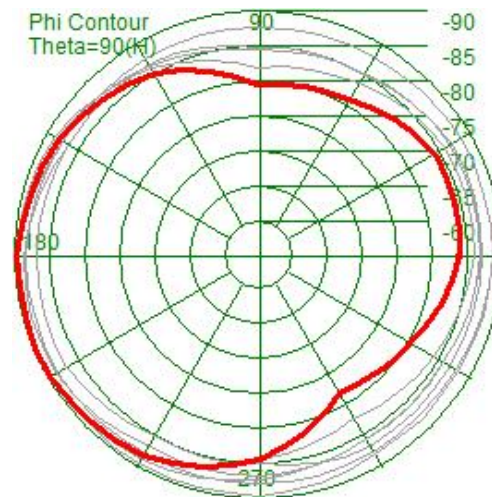
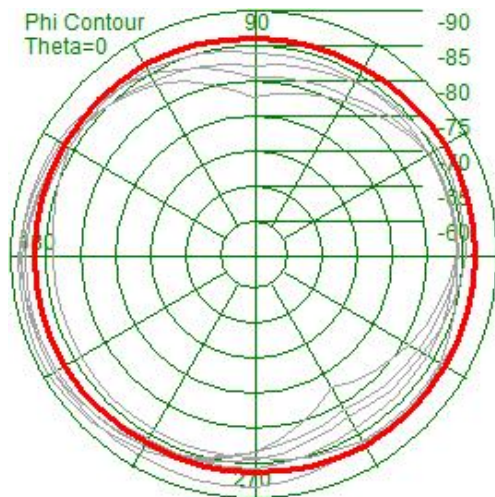
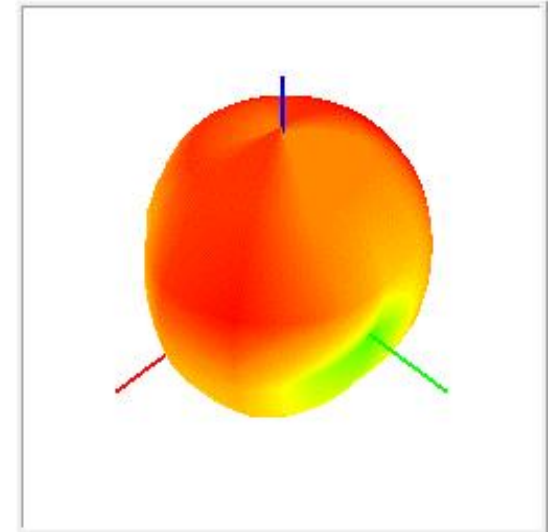
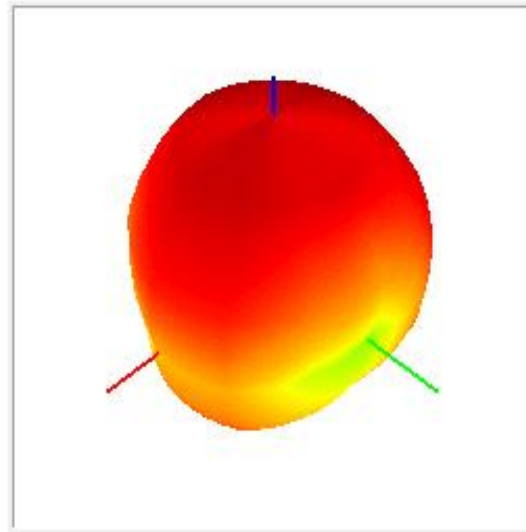
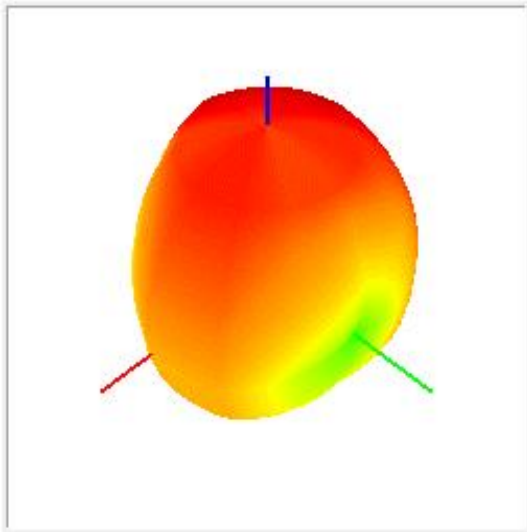
TRP



4.5 Test Result

2 2D Pattern——**BTANT**

TIS



Thank you!