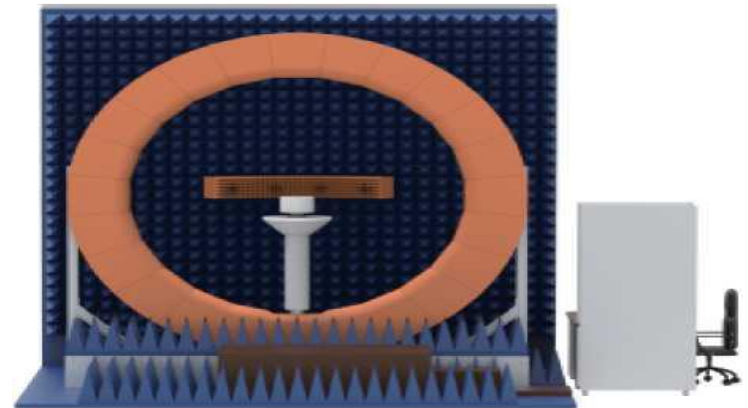
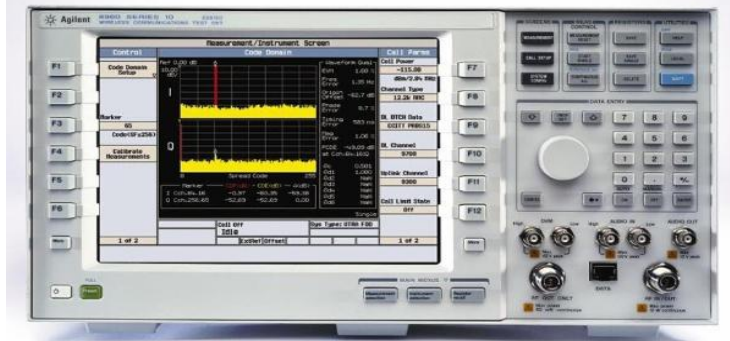




Customer	佳利得
Project	991pro
Antenna Revision	A0
Prepared by	18814303605
Checked by	
Date :	2026. 02. 03

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



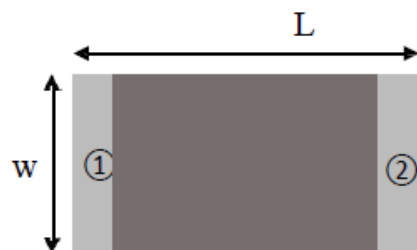
Purpose

This report is to measure the performance of antenna for **LR119A** The antenna operating frequency at 2400MHz0-2500MHz 。 All test data are showed as below.

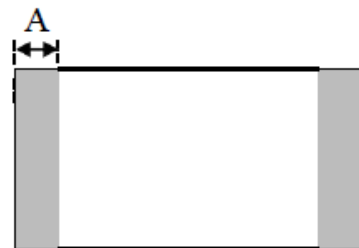
Content

1. Product Overview & Dimension
2. Test system
3. Test Result
 - 3.1 *S11 Parameter***
 - 3.2 *Gain & Efficiency***
 - 3.3 *2D Pattern***
4. OTA
 - 4.1 *Test Result***
 - 4.2 *2D Pattern***

Dimensions (Unit: mm)



(Top View)



(Bottom View)

Number	Terminal Name
①	INPUT
②	NC

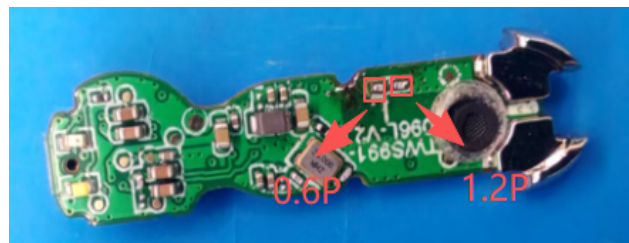
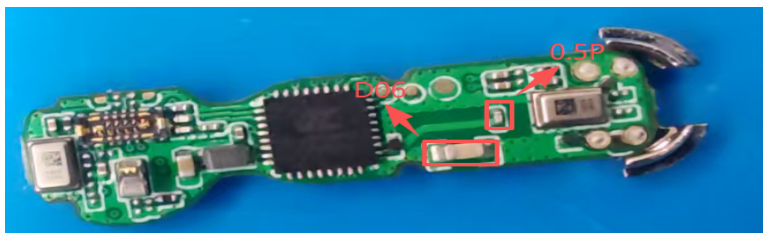


(Side View)

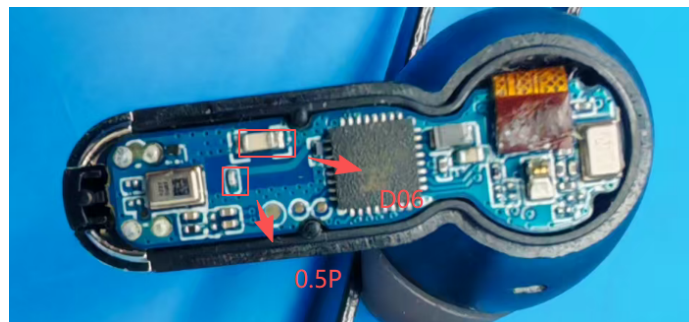
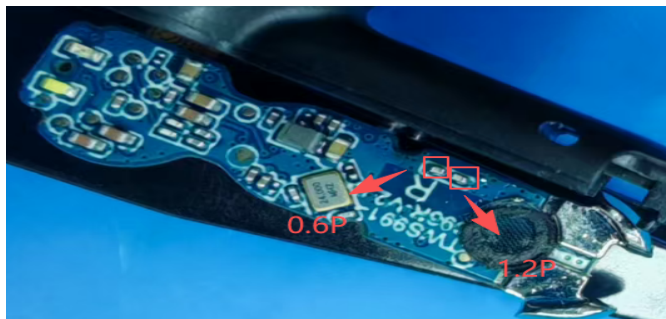
Symbols	L	W	T	A
Dimensions	1.60±0.20	0.80±0.20	0.80±0.20	0.30±0.10

匹配图

L

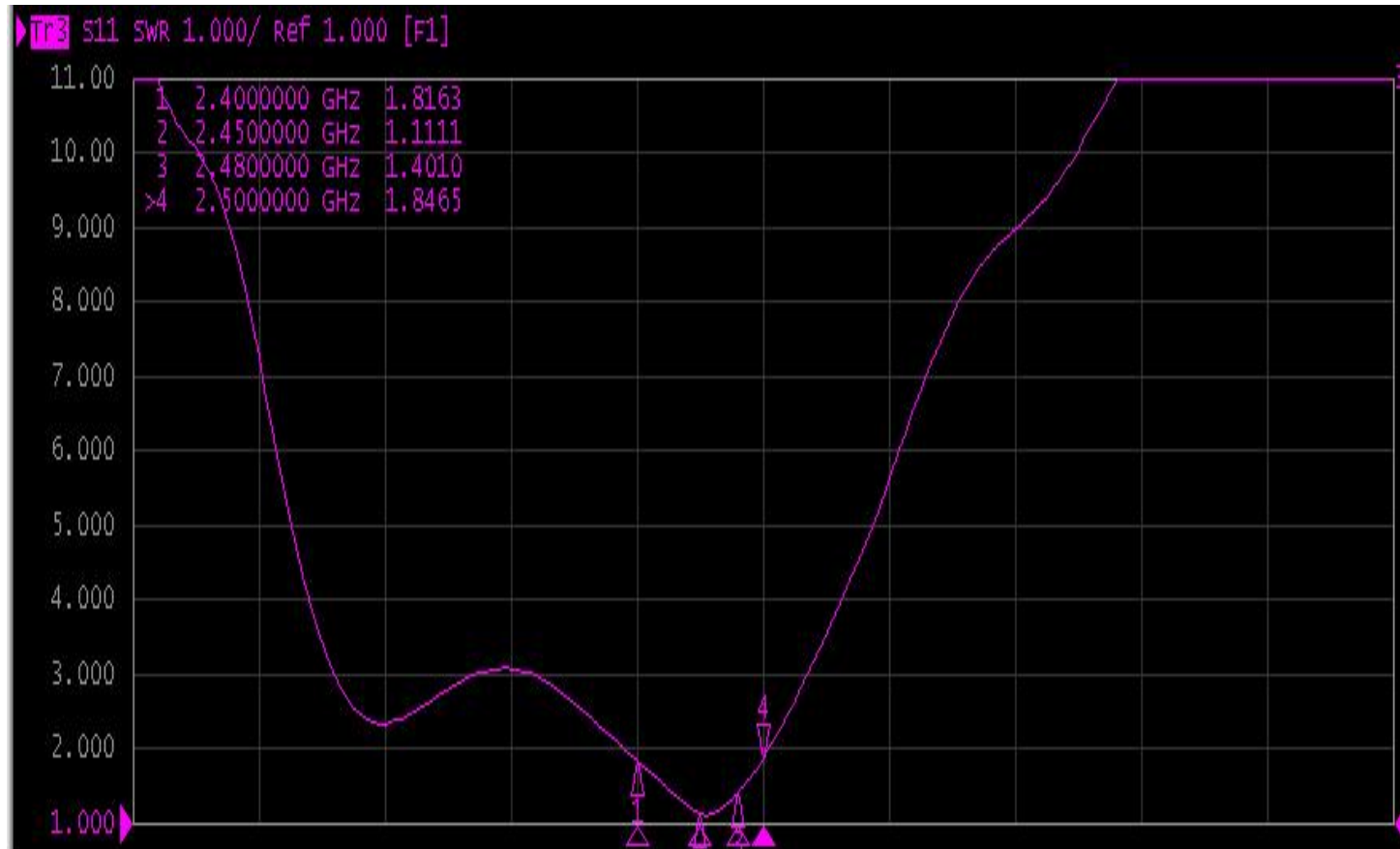


R



3.1 Test Result

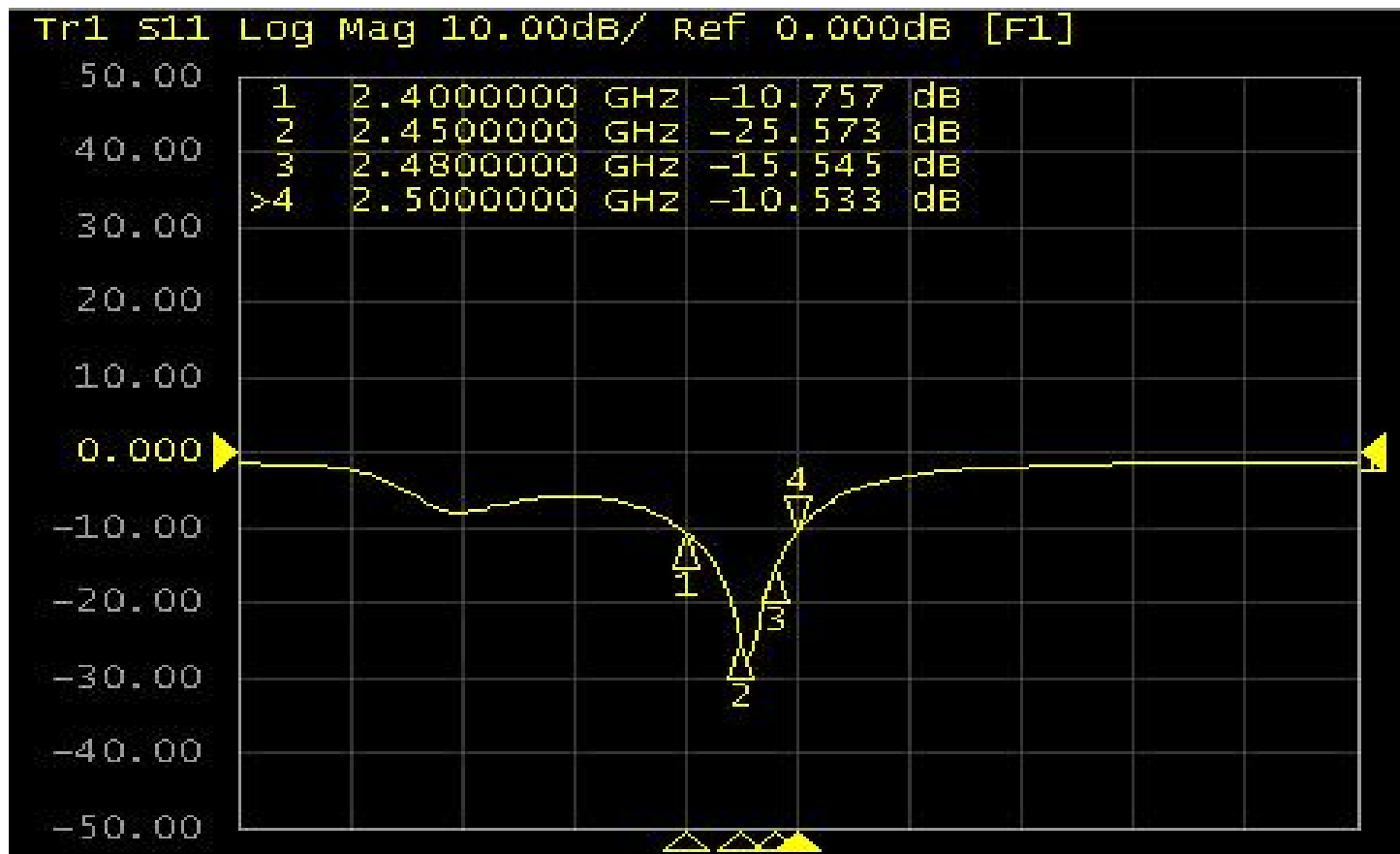
1 .S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
VSWR	1.81	1.11	1.40	1.84

3.1 Test Result

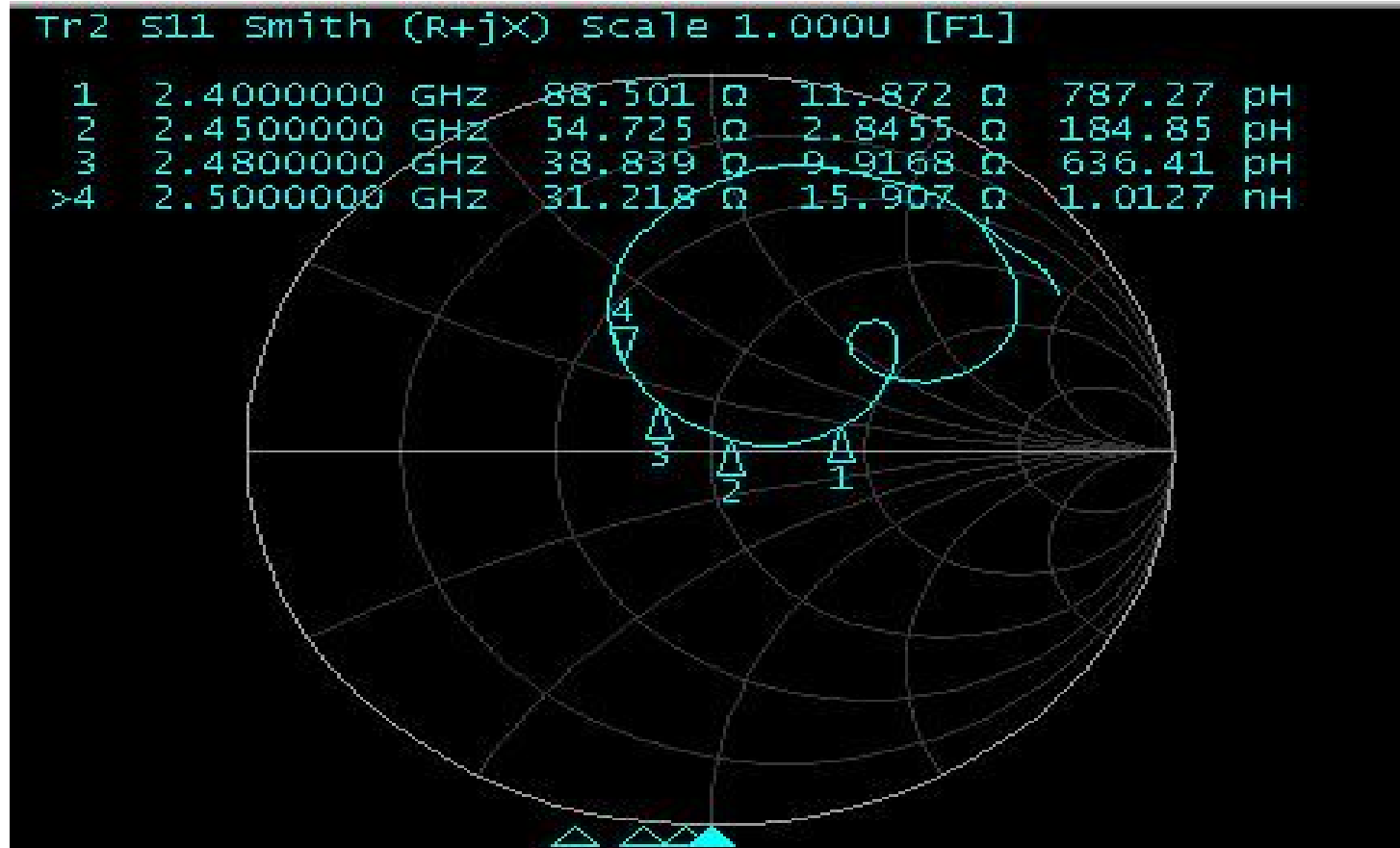
2. S11 Parameter-Log Mag



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-10.75	-25.57	-15.54	-10.53

3.1 Test Result

3.S11 Parameter-Smith



Frequency (MHz)	2400	2450	2480	2500
Smith(Ω)	88.50	54.72	38.83	31.21

3.2 Test Result

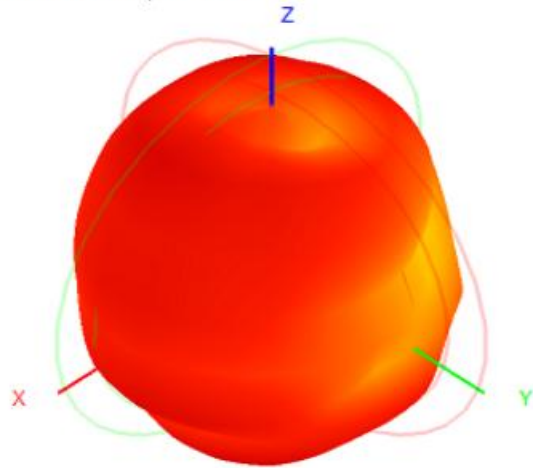
1 Gain & Efficiency—**ANT**

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	30.82%	1.60
2410	32.45%	1.80
2420	33.96%	2.03
2430	34.47%	2.45
2440	35.77%	2.96
2450	35.65%	3.44
2460	36.75%	3.79
2470	37.27%	3.83
2480	37.37%	3.92

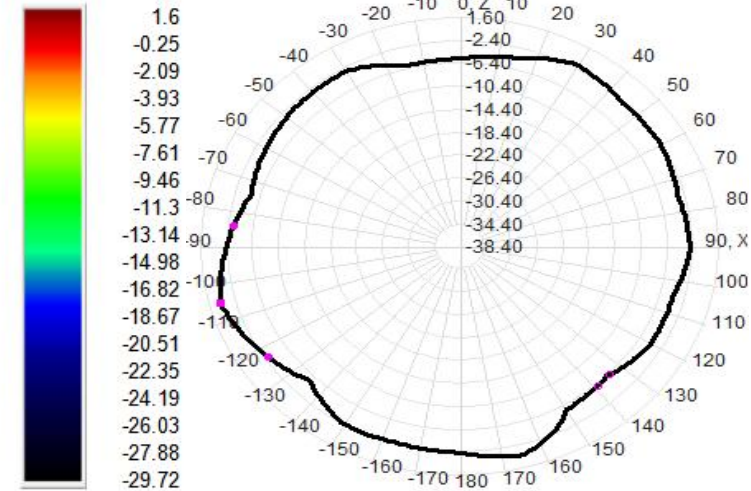
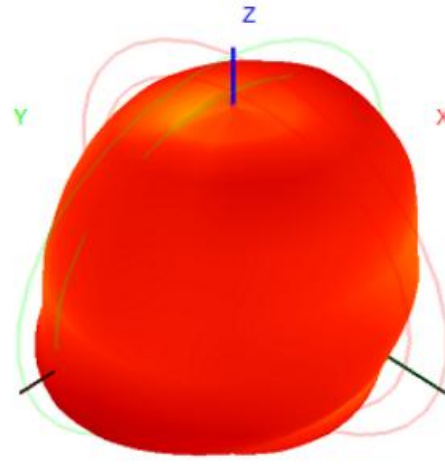
3.3 Test Result

1 2D Pattern—BTANT

2400.0MHz Total, Eff. 30.8%



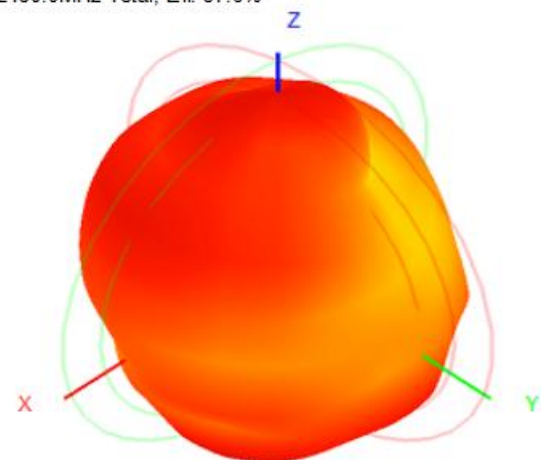
Back View



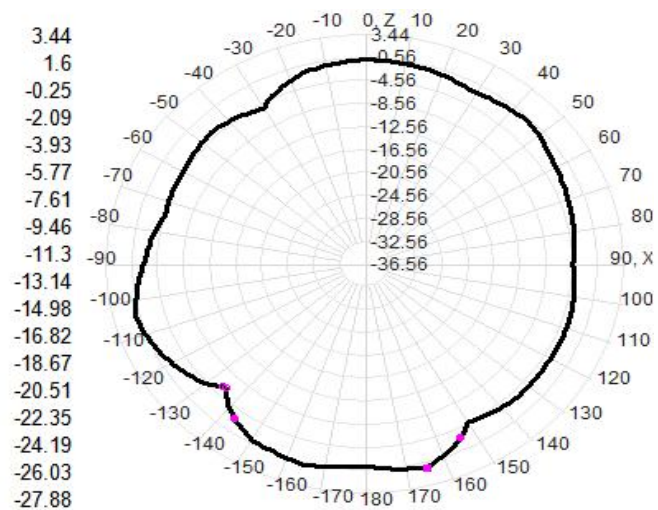
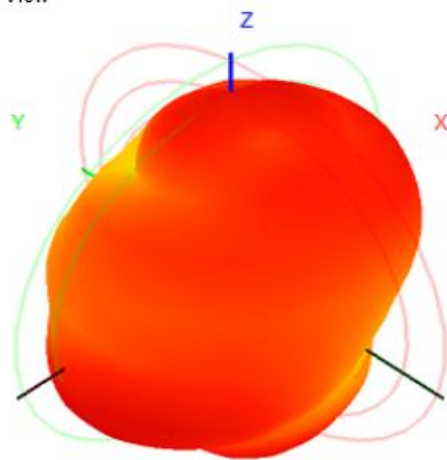
3.3 Test Result

2 2D Pattern—BTANT

2450.0MHz Total, Eff. 37.6%



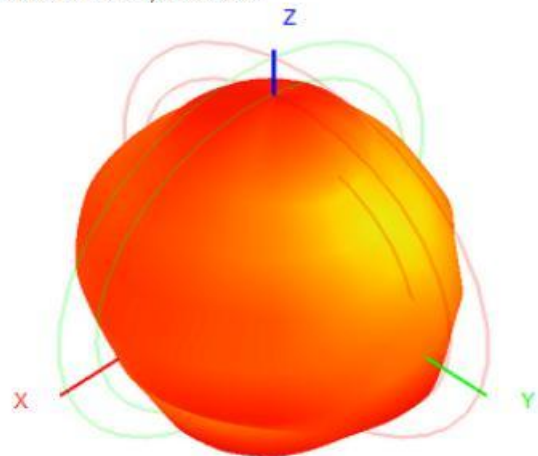
Back View



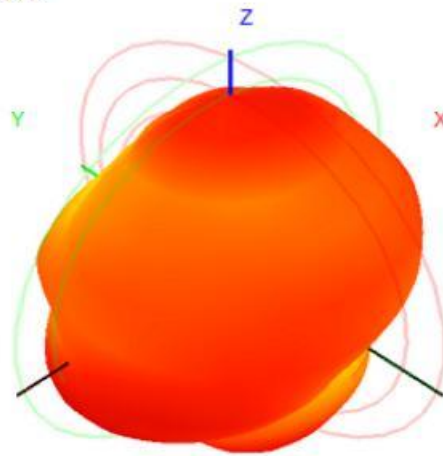
3.3 Test Result

3 2D Pattern—BTANT

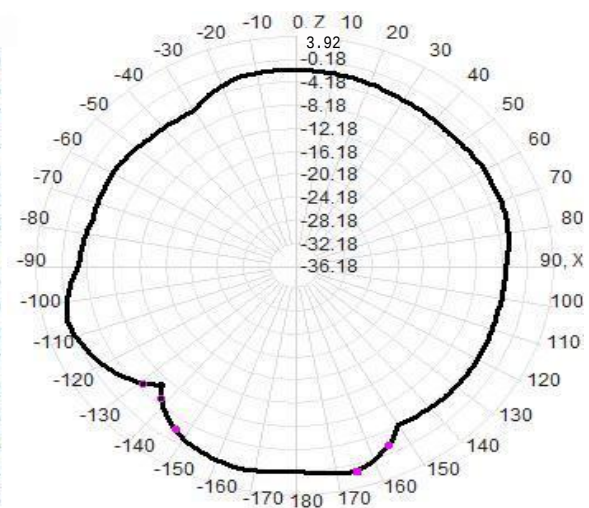
2480.0MHz Total, Eff. 39.4%



Back View



3.92
1.99
0.15
-1.7
-3.54
-5.38
-7.22
-9.06
-10.91
-12.75
-14.59
-16.43
-18.27
-20.12
-21.96
-23.8
-25.64
-27.48



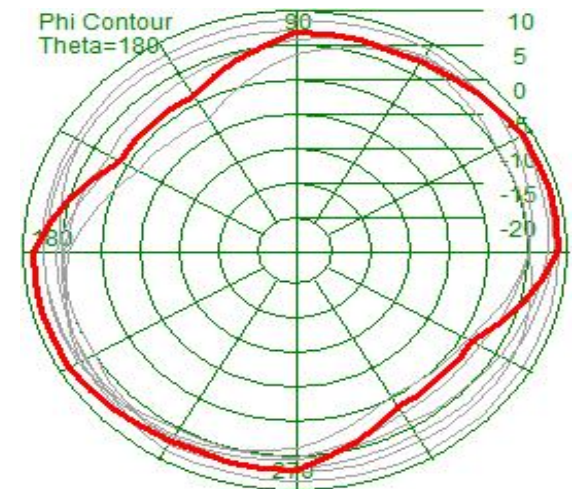
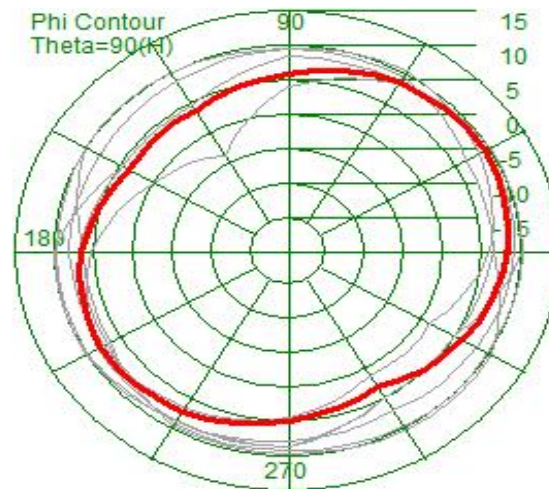
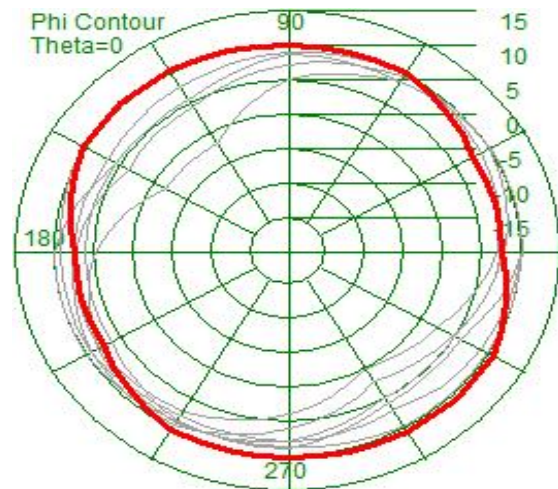
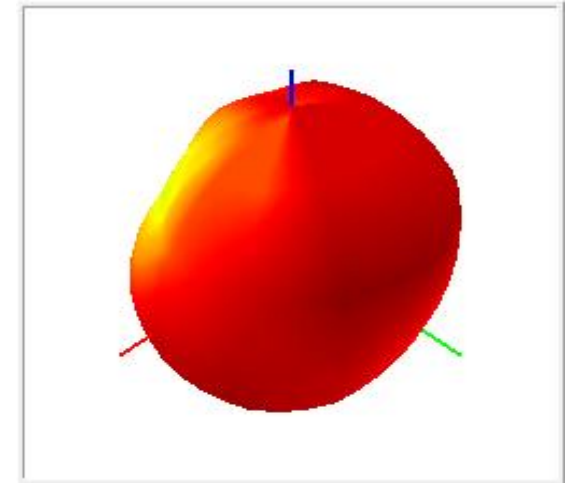
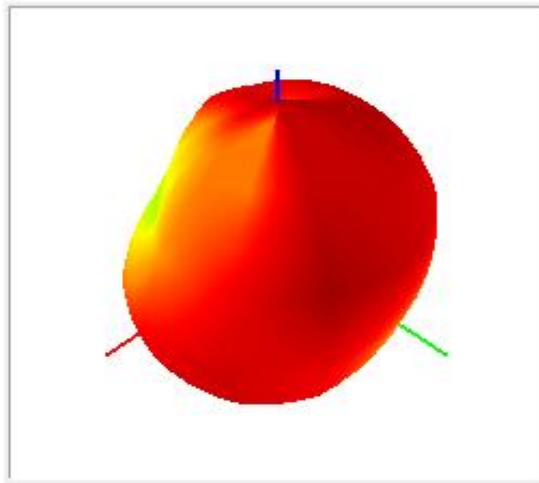
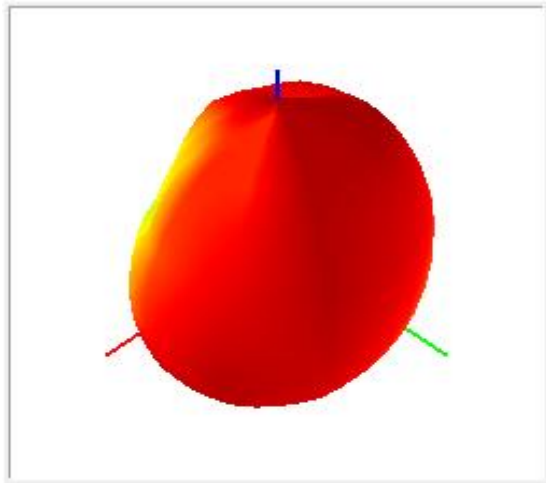
4.1 OTA Data

Test Equipment:	R&S CMW500		
Test Condition:	2 D chamber		
Band	Channel	TRP(dBm)	TIS(dBm)
BT-L	0	-2.40	-90.72
	39	1.89	-91.73
	78	5.03	-93.13

4.2 Test Result

1 2D Pattern——**BTANT**

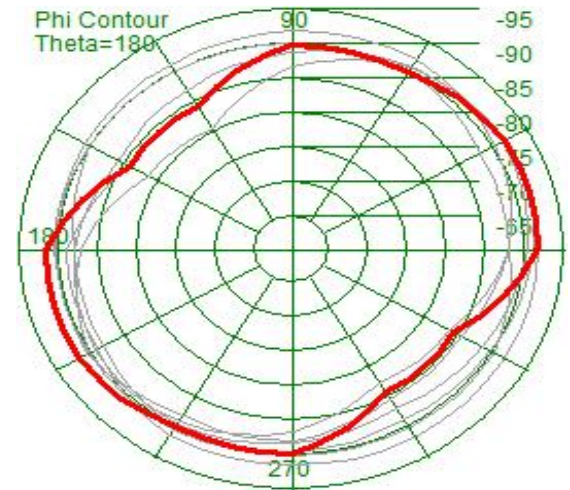
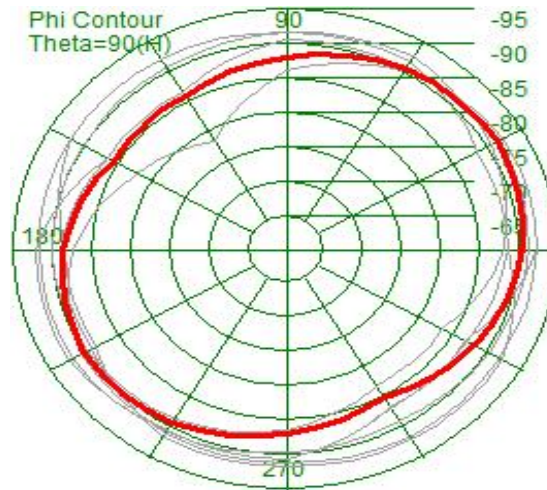
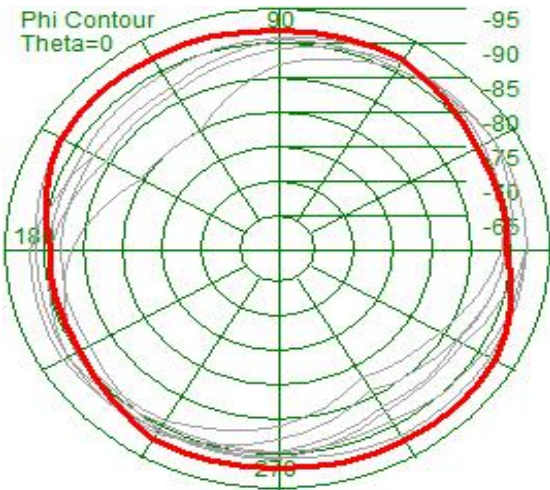
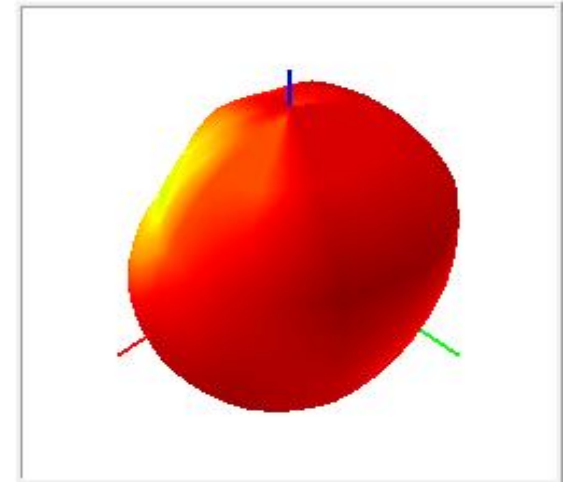
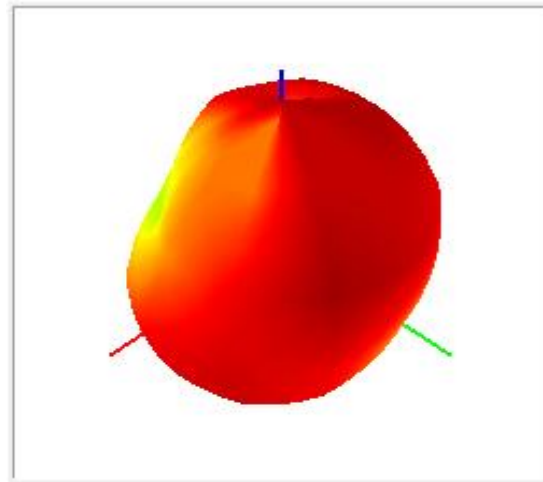
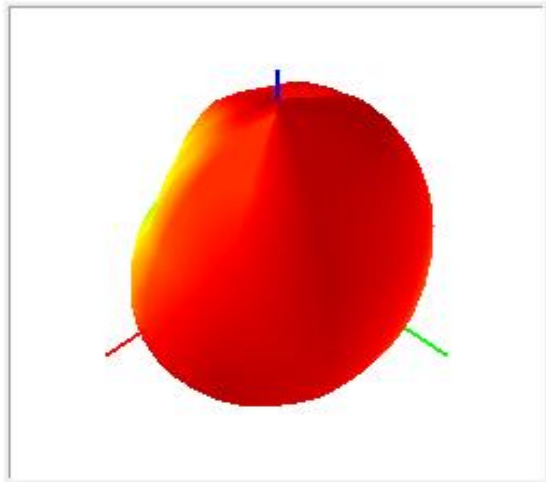
TRP



4.2 Test Result

2 2D Pattern——**BTANT**

TIS



Thank you!

Manufacturer: SHENZHEN HELIXUN TECHNOLOGY CO. LTD.

Address: Room 1905, Building 2, Jufang Plaza, Tiezai Road, GongleCommunity,
Xixiang Street, Bao'an District, Shenzhen