



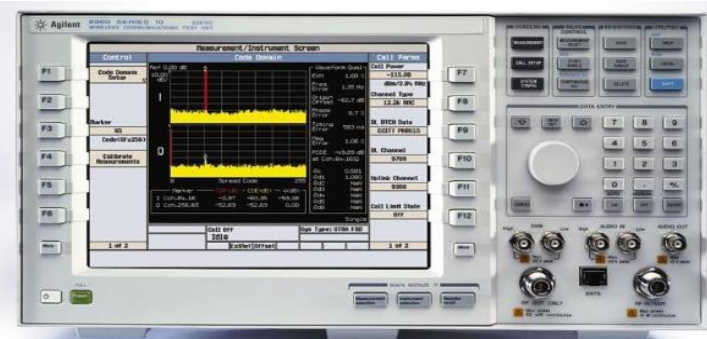
Customer	天翼
Project	KH1870
Antenna Revision	A0
Prepared by	18814303605
Checked by	
Date :	2025. 06. 09

2. Test System

Shenzhen Helixun Technology Co., LTD

Address: Room 1004, Jinhuanu Building, No. 56, Tiezi Road, Xixiang Sub-district, Bao 'an District, Shenzhen City, Guangdong Province

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 **KH1870** The antenna operating frequency at 2400MHz-2500MHz 。 All test data are showed as below.

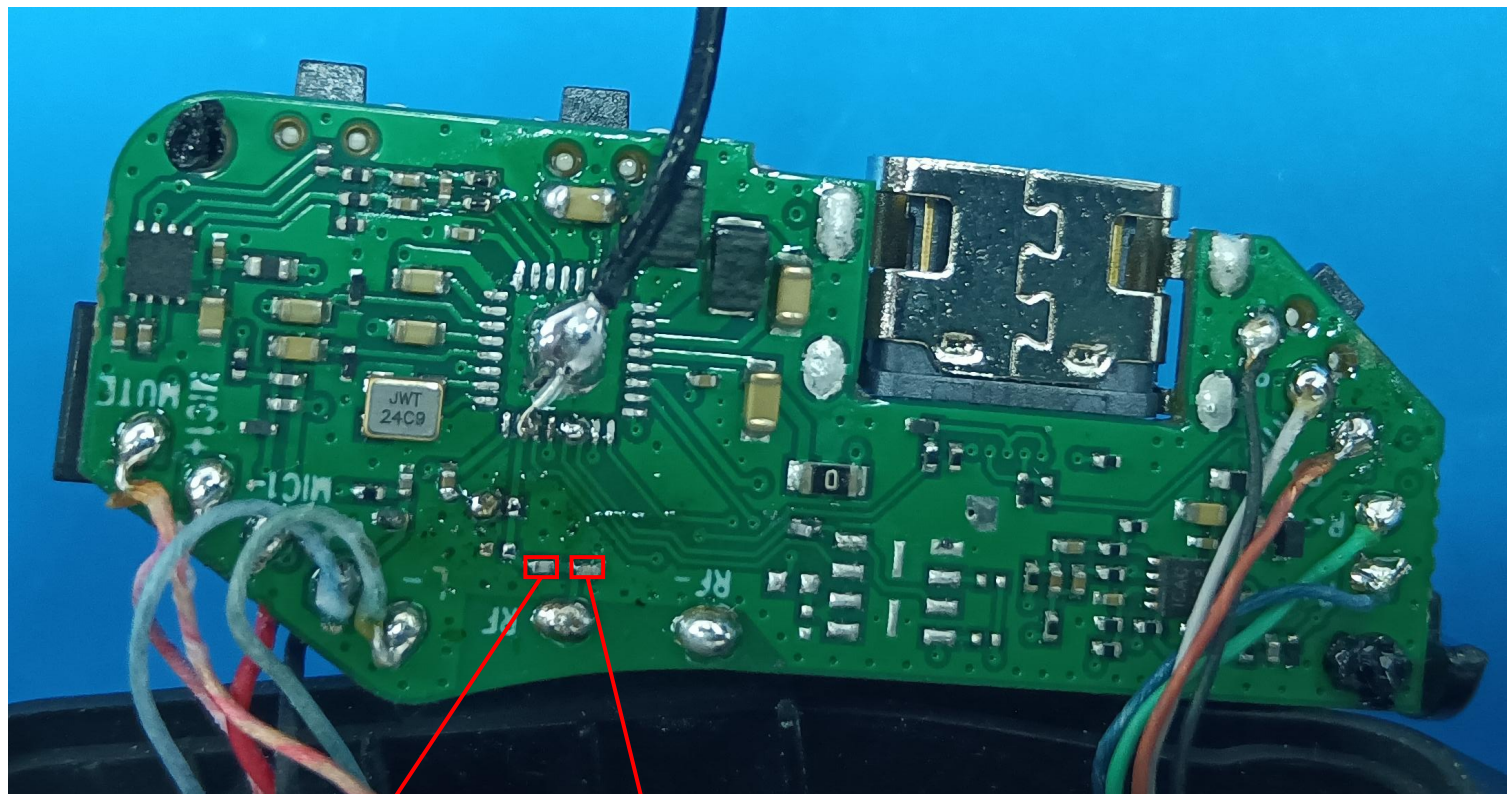
Content

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



KH1870

匹配图



1.5P

0.5P

3.1 Test Result

1 .S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
VSWR	4.14	1.91	2.23	2.99

3.1 Test Result

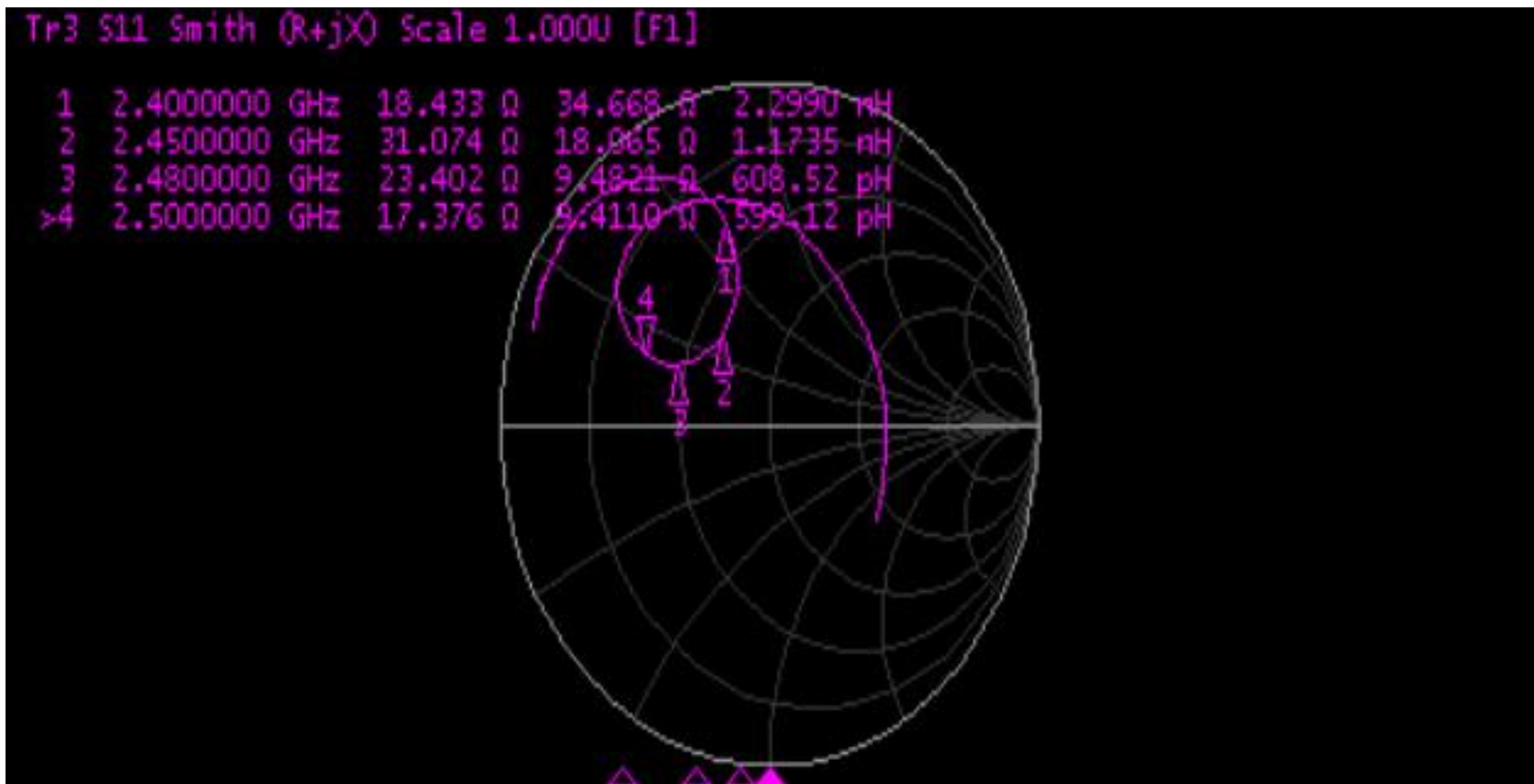
2. S11 Parameter-Log Mag



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-4.27	-10.03	-8.36	-6.03

3.1 Test Result

3.S11 Parameter-Smith



Frequency (MHz)	2400	2450	2480	2500
Smi th(Ω)	18.43	31.07	23.40	17.37

3.2 Test Result

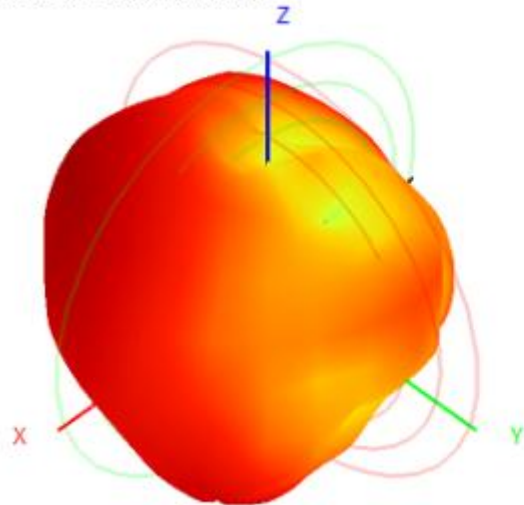
1 Gain & Efficiency—**ANT**

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	18.67	-0.93
2410	19.47	-0.73
2420	19.55	-0.75
2430	19.99	-0.67
2440	20.07	-0.46
2450	20.38	-0.39
2460	19.39	-1.15
2470	20.87	-1.25
2480	21.67	-0.09

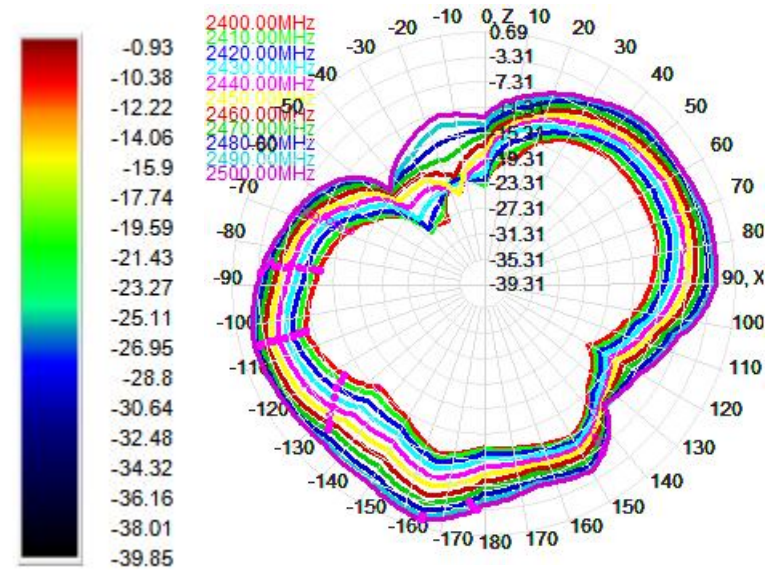
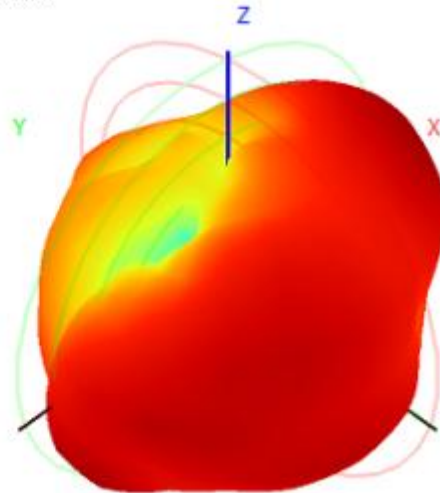
3.3 Test Result

1 2D Pattern——BTANT

2400.0MHz Total, Eff: 16.7%



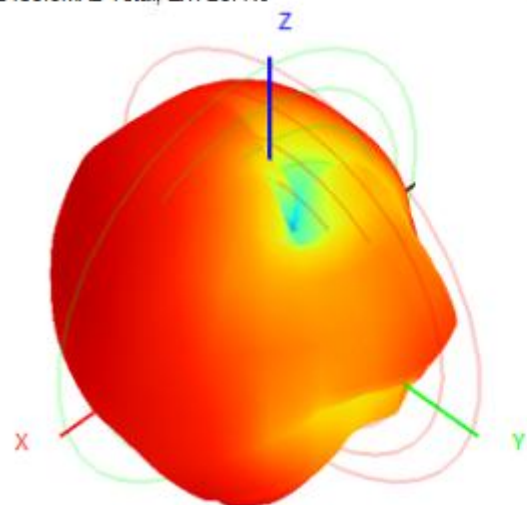
Back View



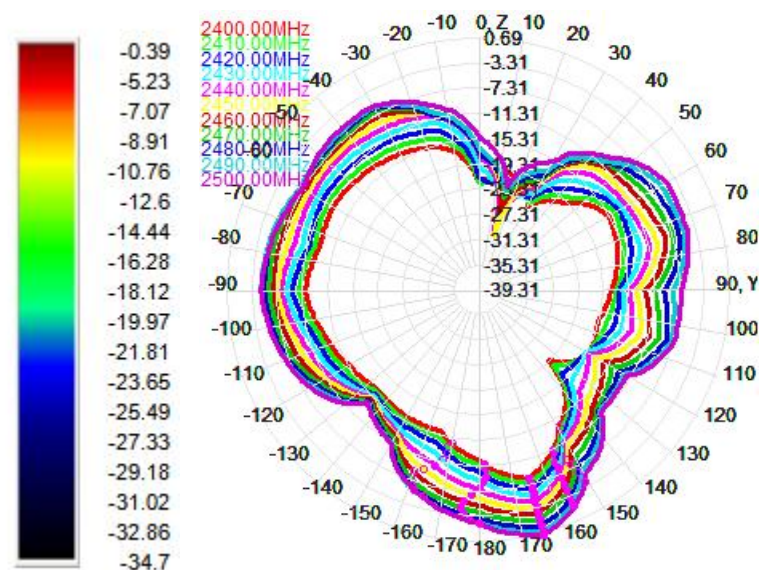
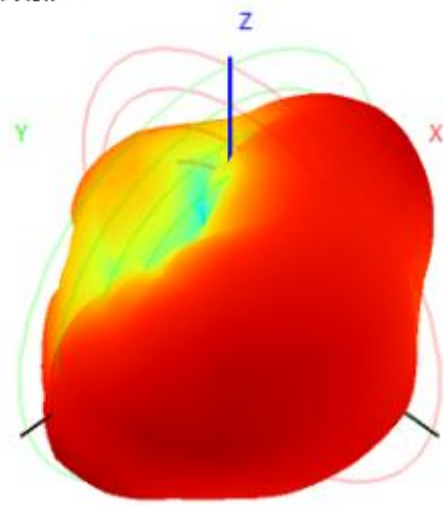
3.3 Test Result

2 2D Pattern—BTANT

2450.0MHz Total, Eff: 20.4%



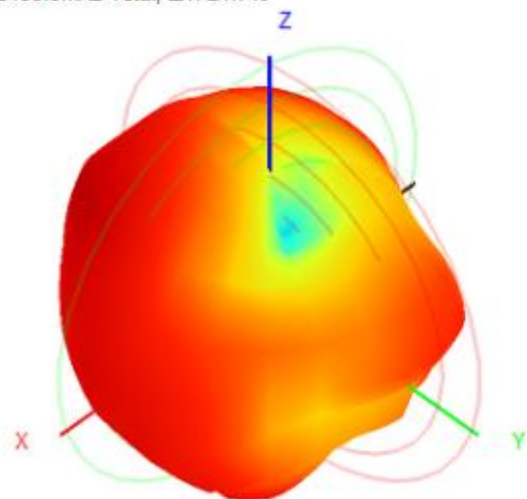
Back View



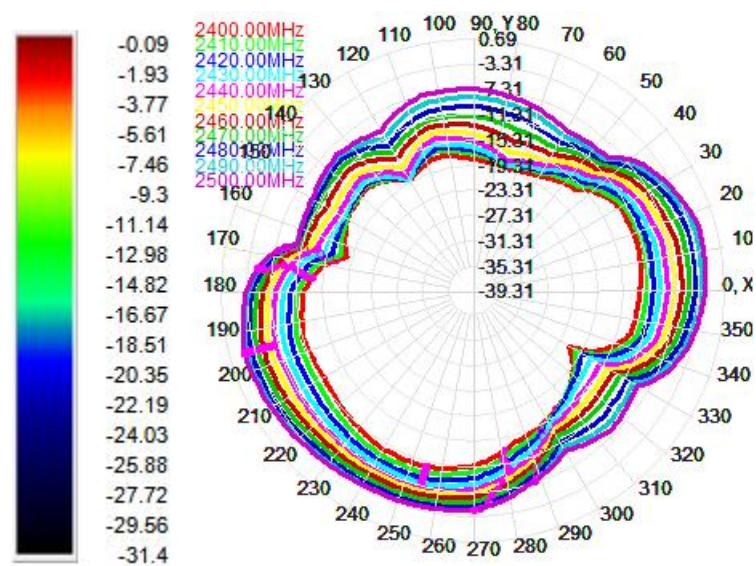
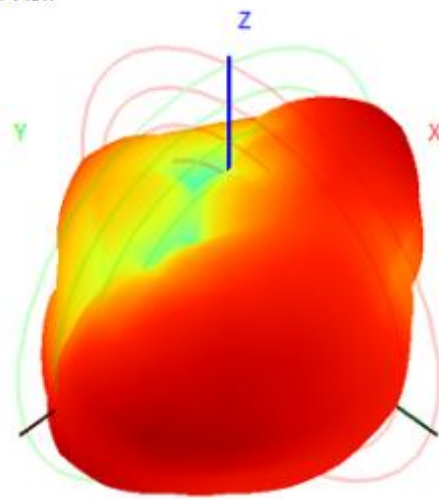
3.3 Test Result

3 2D Pattern—BTANT

2480.0MHz Total, Eff: 21.7%



Back View



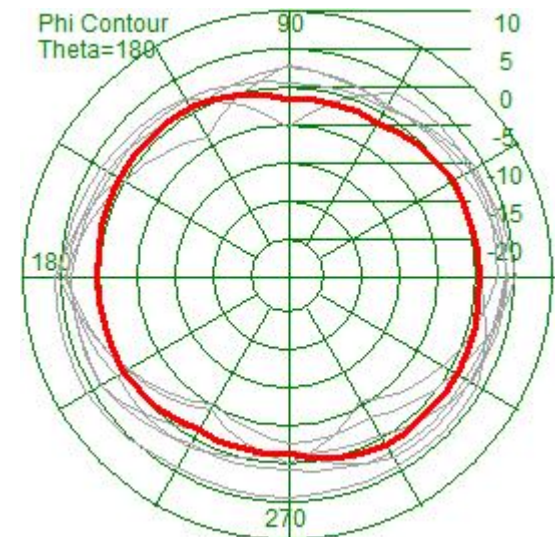
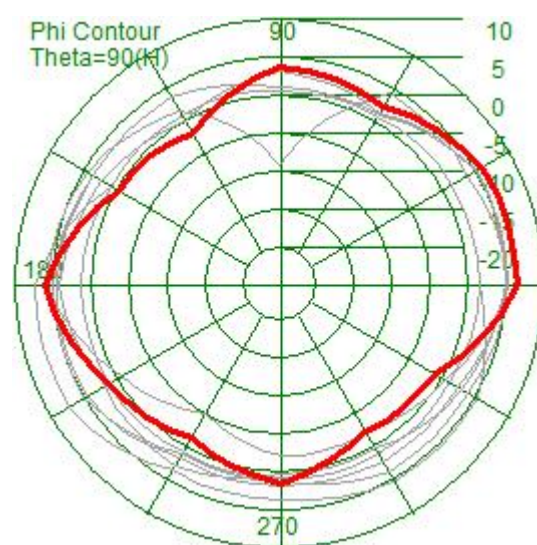
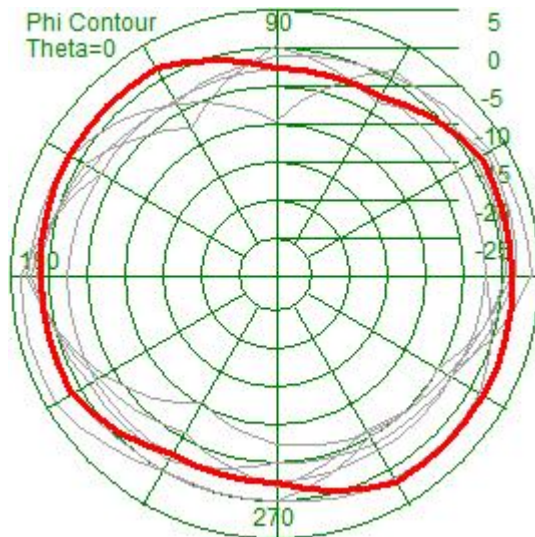
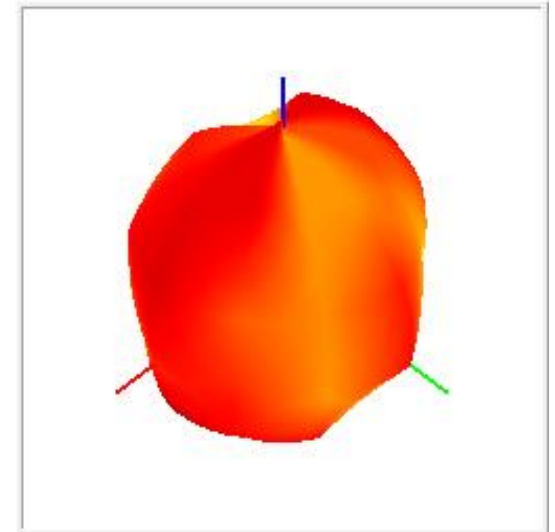
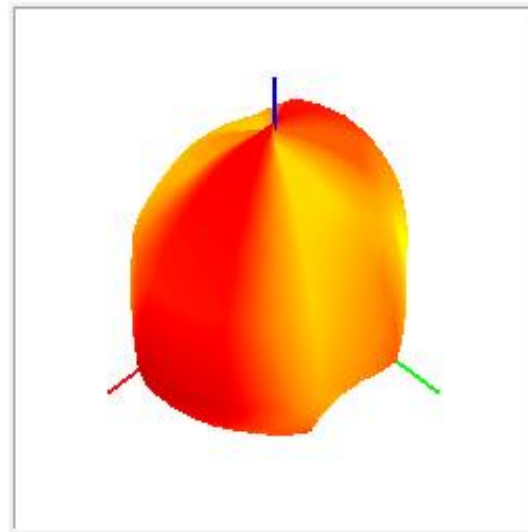
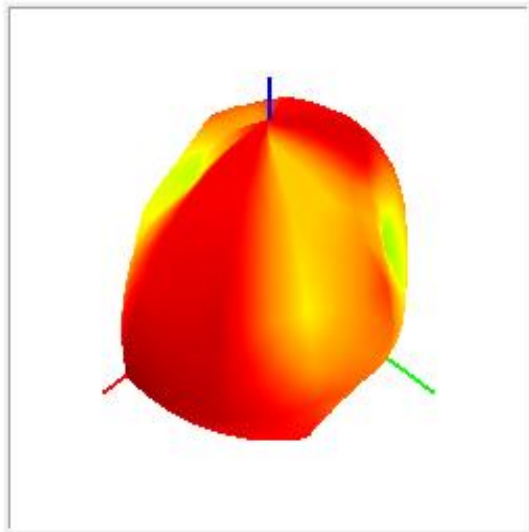
4.1 OTA Data

Test Equipment:	R&S CMW500		
Test Condition:	2 D chamber		
Band	Channel	TRP(dBm)	TIS(dBm)
BT	0	-0.78	-86.33
	39	2.67	-85.94
	78	1.68	-84.86

4.2 Test Result

1 2D Pattern——**BTANT**

TRP



4.2 Test Result

2 2D Pattern——**BTANT**

TIS

