

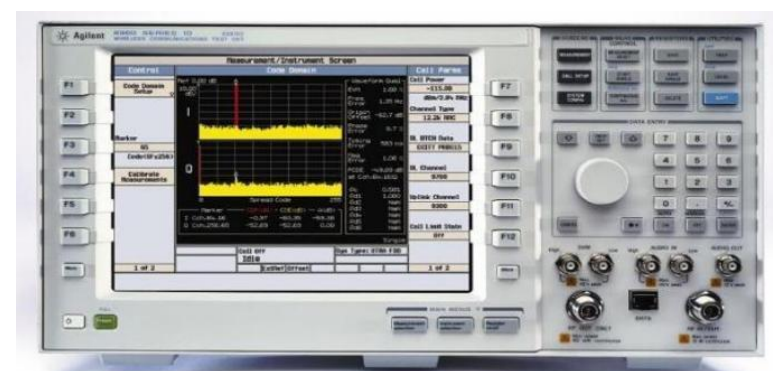
HELIX 合立讯 Antenna Test Report



Customer	Shenzhen Dinghefeng Technology Co., Ltd.
Address	Room 302, Building C, No. 202, Pu'an Road, Liuyue North Community, Henggang Street, Longgang District, Shenzhen
Project	IBT-63ANC
Antenna Revision	A0
Prepared by	18814303605
Date :	2026. 06. 05

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 (IBT-63ANC)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

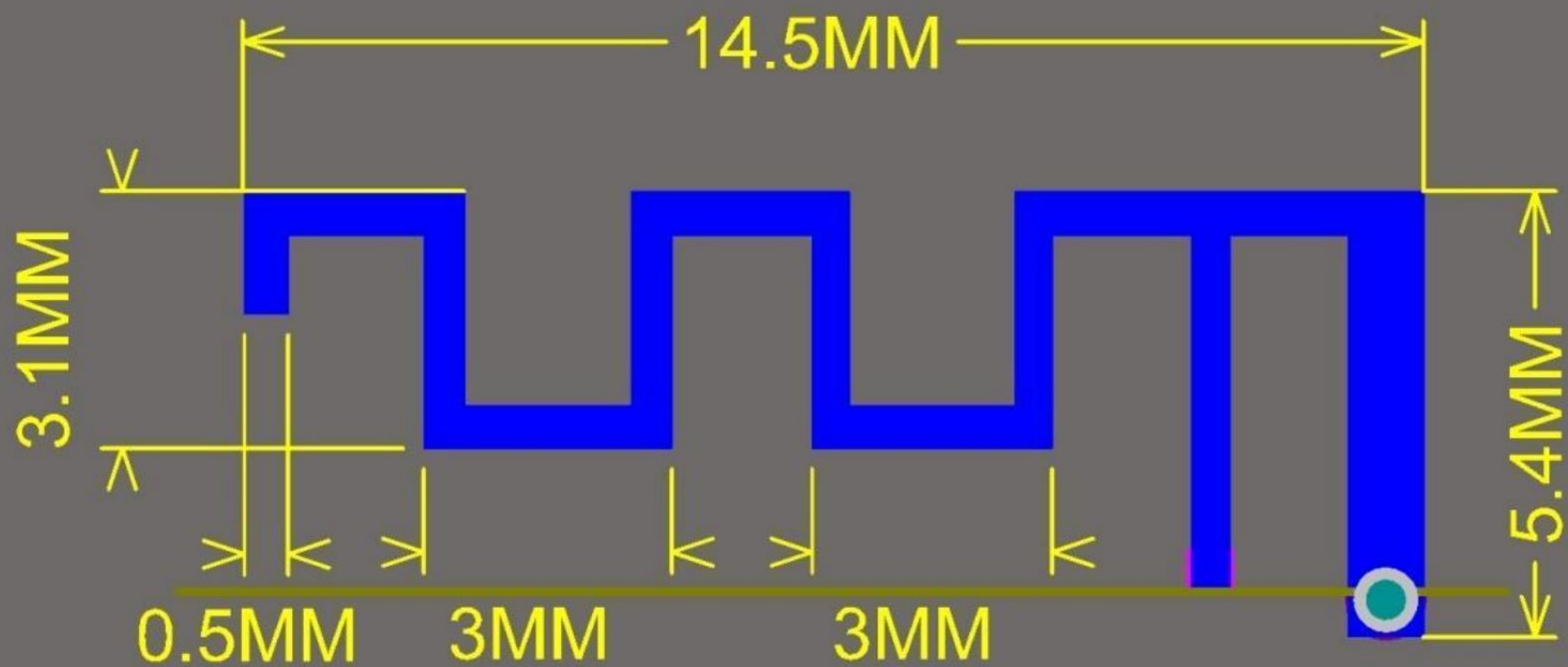
3.2 Gain & Efficiency

3.3 2D Pattern

4. OTA

4.1Test Result

4.2 2D Pattern



3. 1Test Result

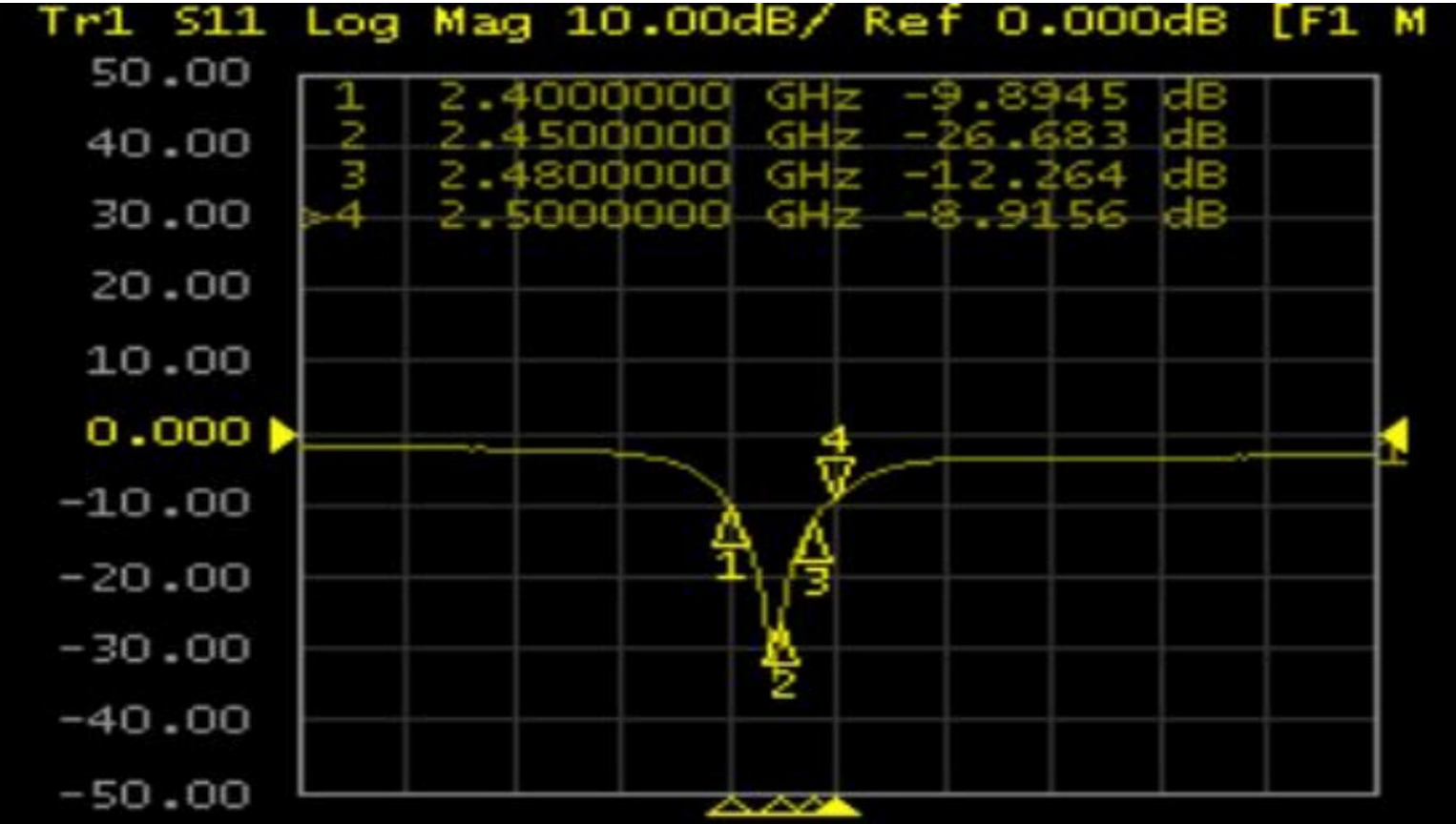
1 .S11 Parameter-VSWR



Frequency (MHz)	2400	2450	2480	2500
VSWR	1.92	1.10	1.64	2.11

3. 1Test Result

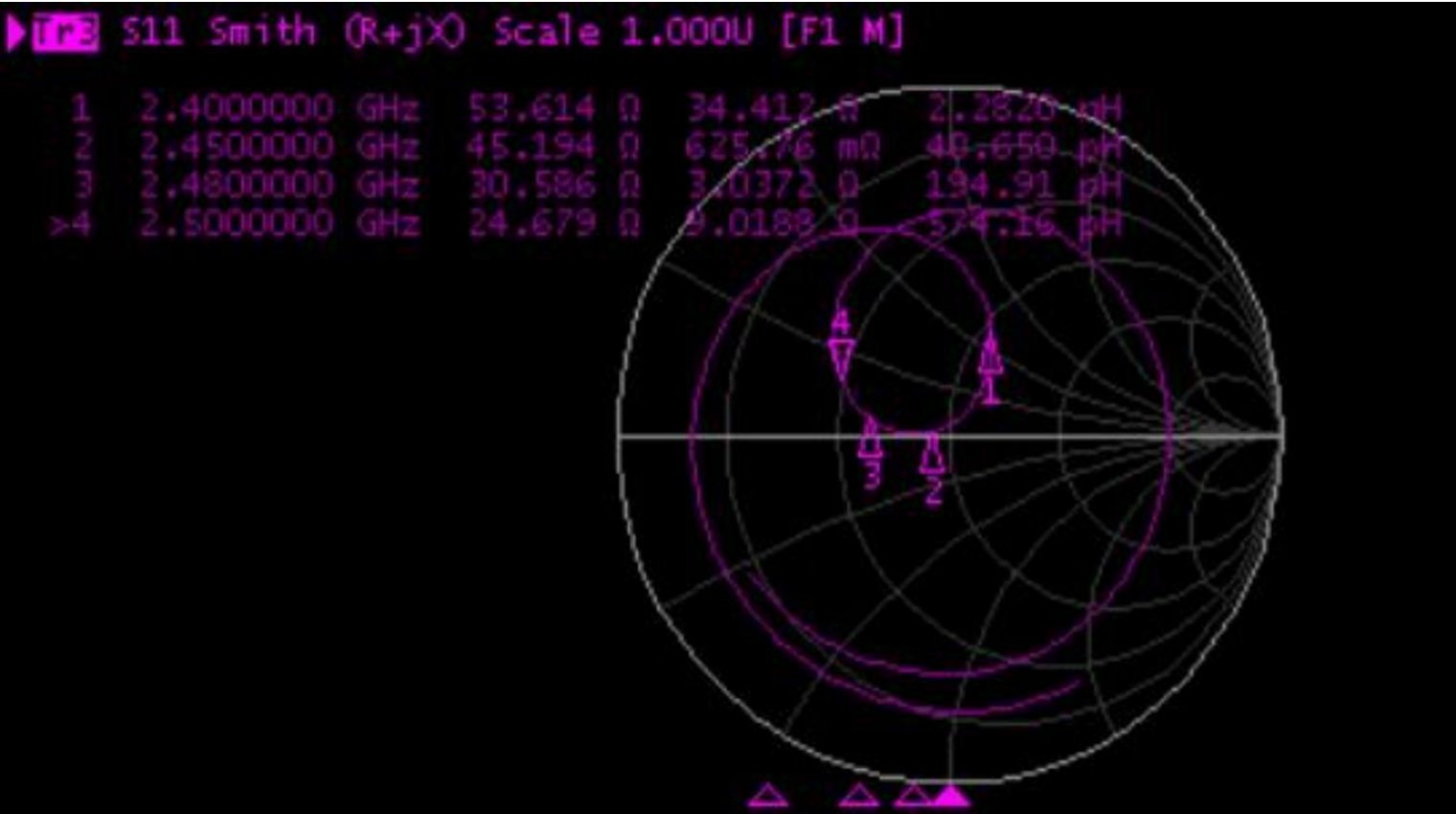
2. S11 Parameter-Log Mag



Frequency (MHz)	2400	2450	2480	2500
Log Mag	-9.89	-26.68	-12.26	-8.91

3. 1Test Result

3 .S11 Parameter-Smi th



Frequency (MHz)	2400	2450	2480	2500
Smi th(Ω)	53.61	45.19	30.58	24.67

3. 2 Test Result

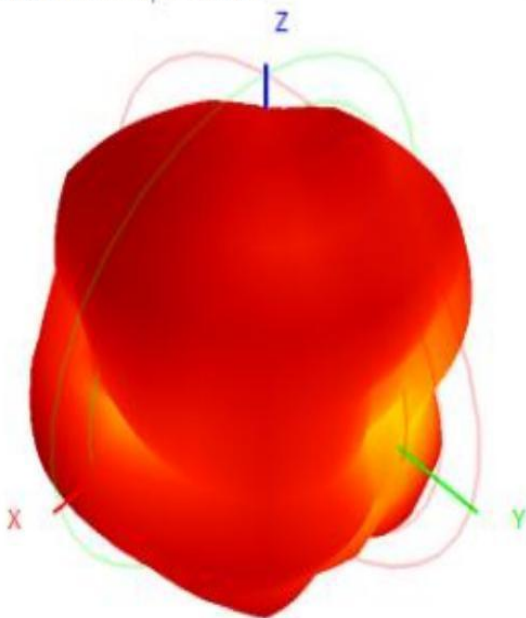
1 Gain & Efficiency——*ANT*

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	30.93	0.19
2410	32.86	0.23
2420	34.37	0.35
2430	35.94	0.41
2440	37.32	0.43
2450	38.52	0.58
2460	39.14	1.00
2470	39.47	1.36
2480	39.33	1.62

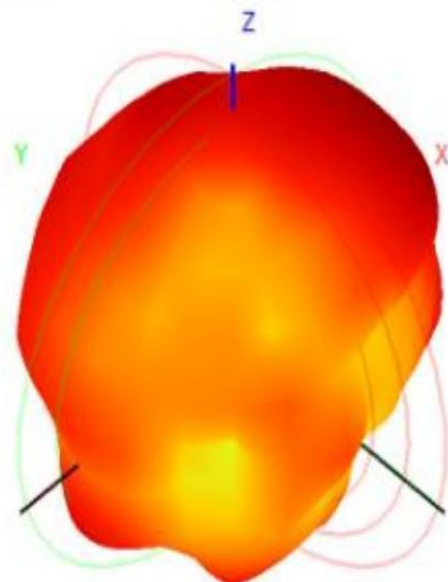
3.3 Test Result

1 2D Pattern——BTANT

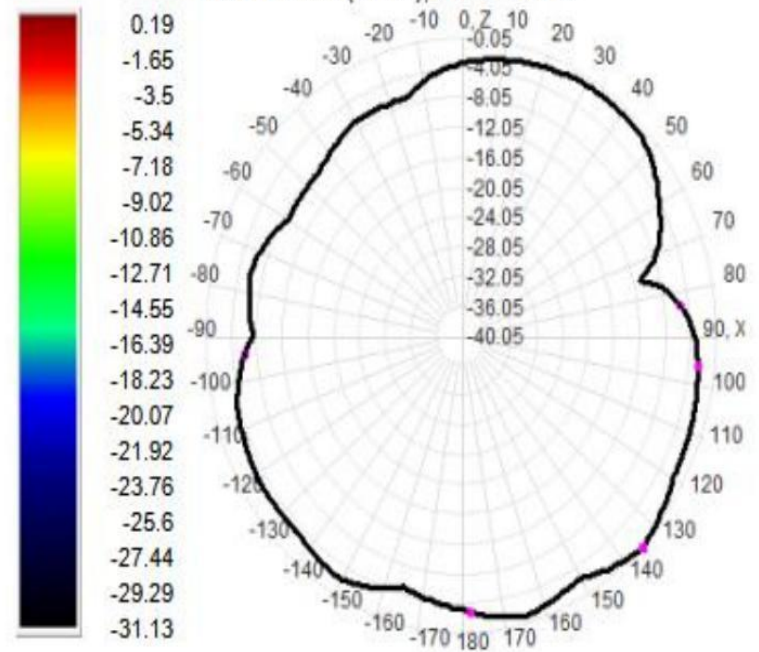
2400.0MHz Total, Eff: 30.9%



Back View



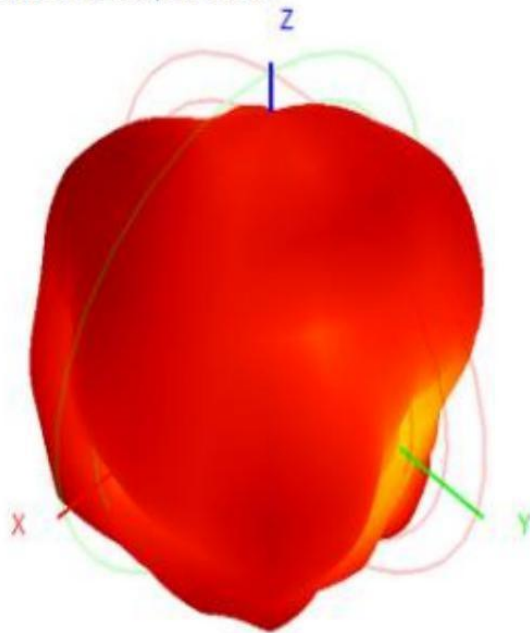
2400.0MHz Total(E1-XZ), Max=-0.05dBi



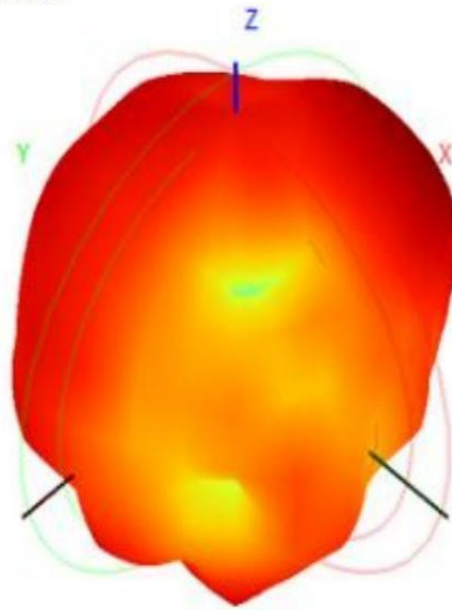
3.3 Test Result

2 2D Pattern—BTANT

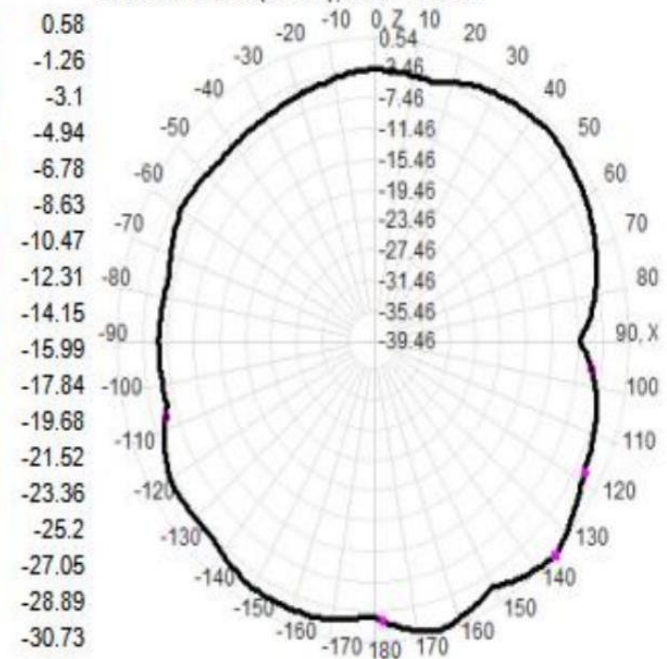
2450.0MHz Total, Eff: 38.5%



Back View



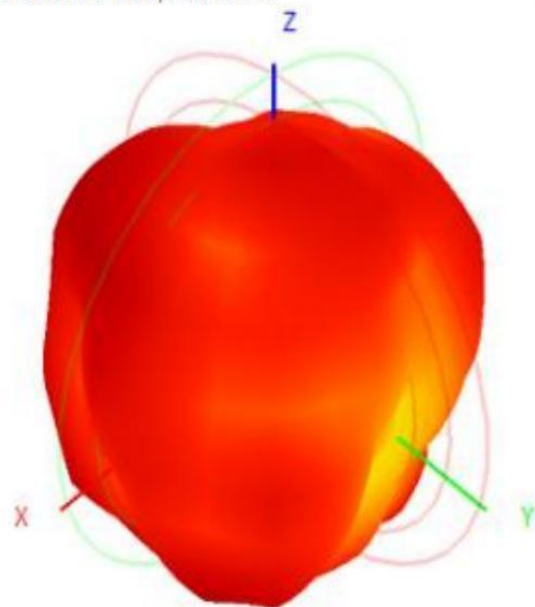
2450.0MHz Total(E1-XZ), Max= 0.54dBi



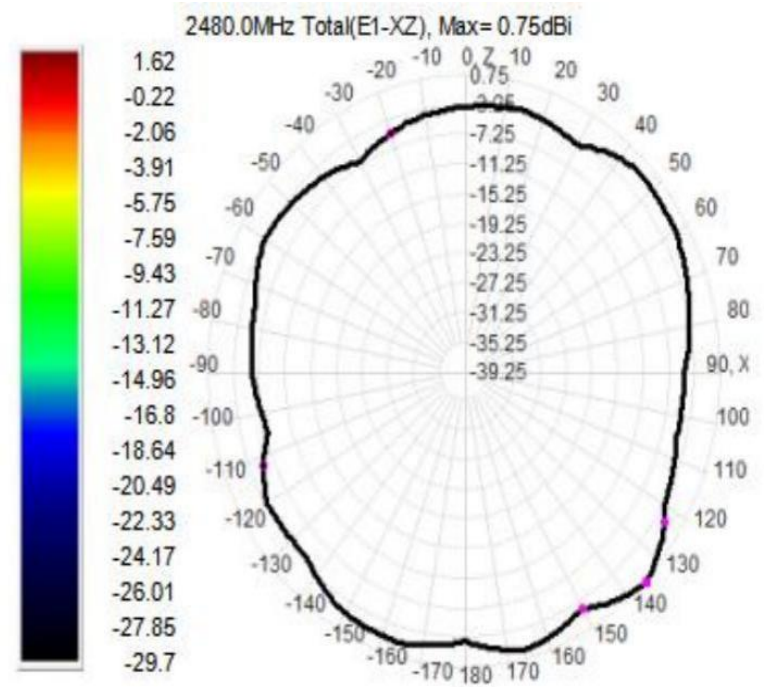
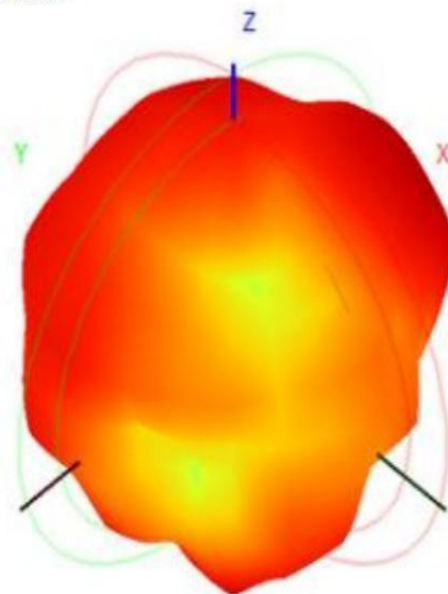
3.3 Test Result

3 2D Pattern——BTANT

2480.0MHz Total, Eff: 39.3%



Back View



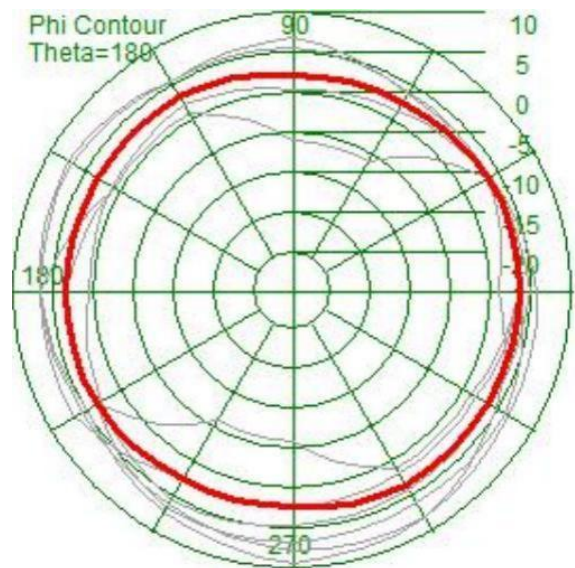
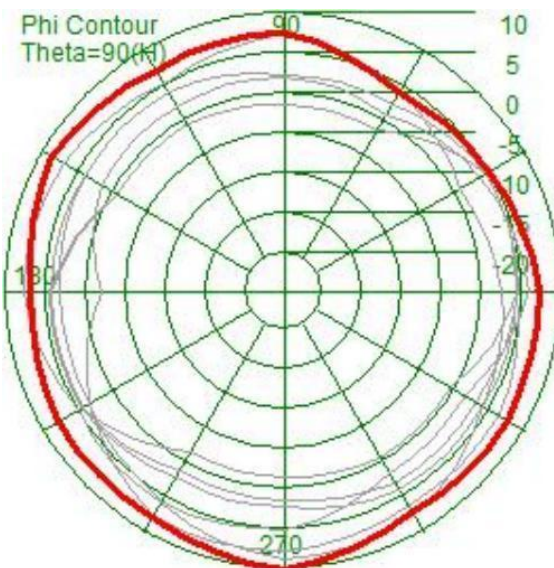
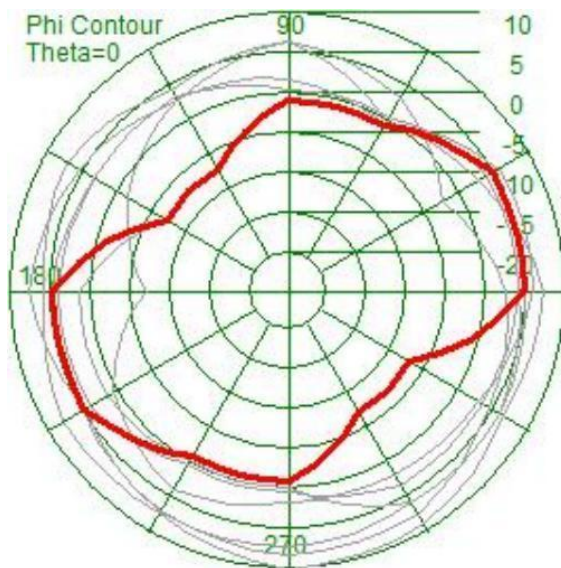
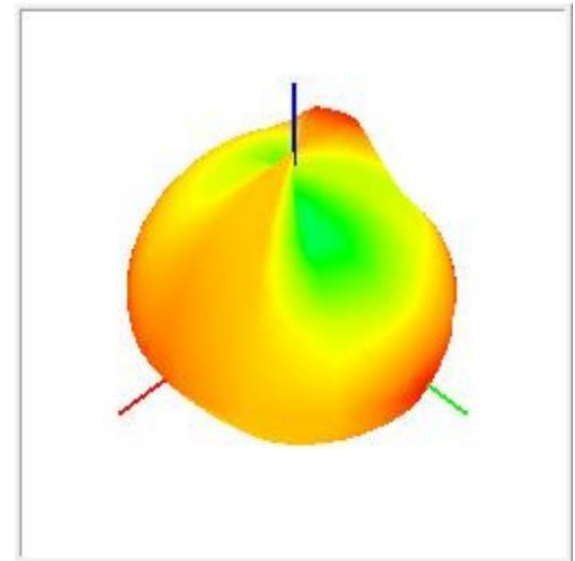
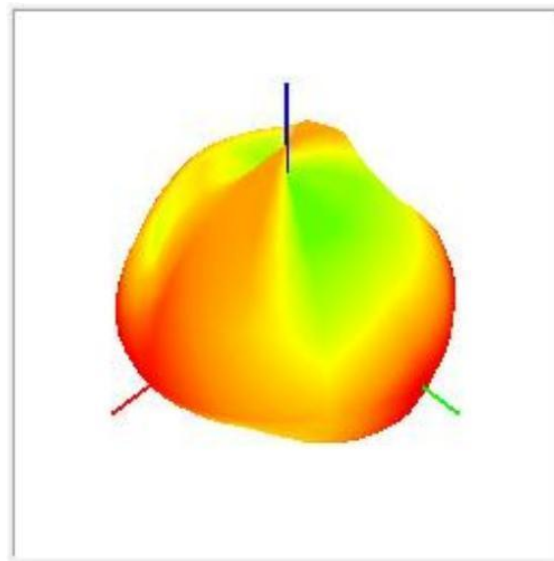
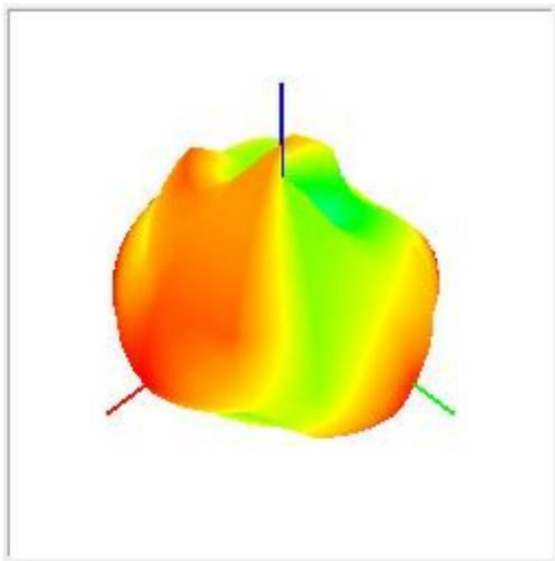
4. 1 OTA Data

Test Equipment:	R&S CMW500		
Test Condition:	2 D chamber		
Band	Channel	TRP(dBm)	TIS(dBm)
BT	0	4.79	-84.22
	39	5.31	-86.08
	78	4.82	-87.79

4.2 Test Result

1 2D Pattern BTANT

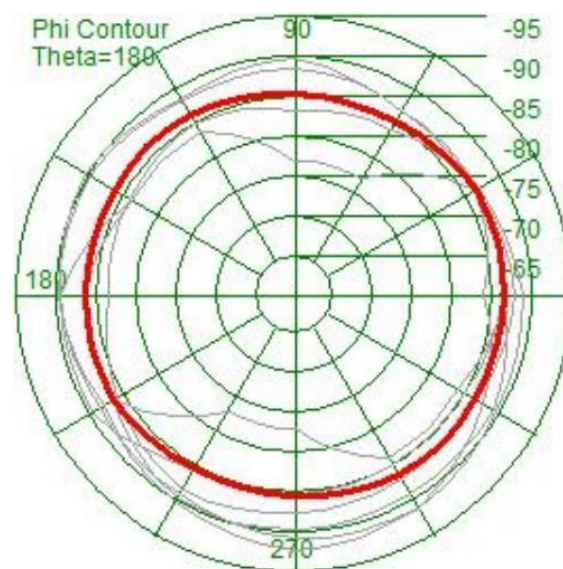
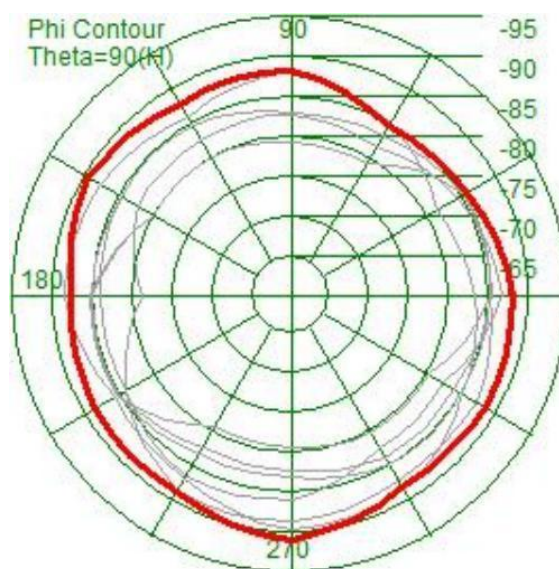
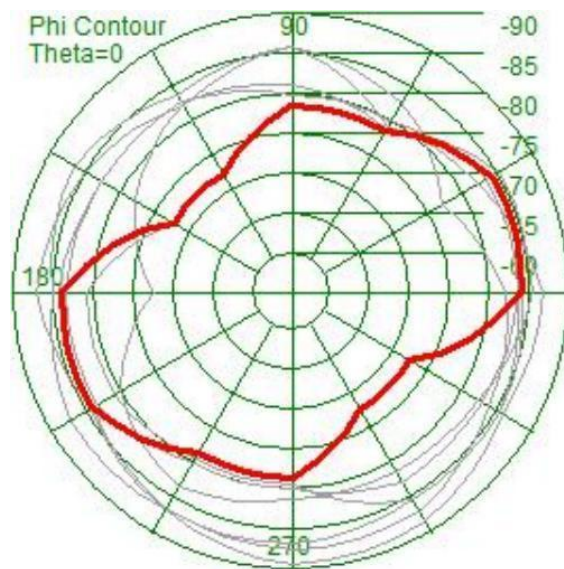
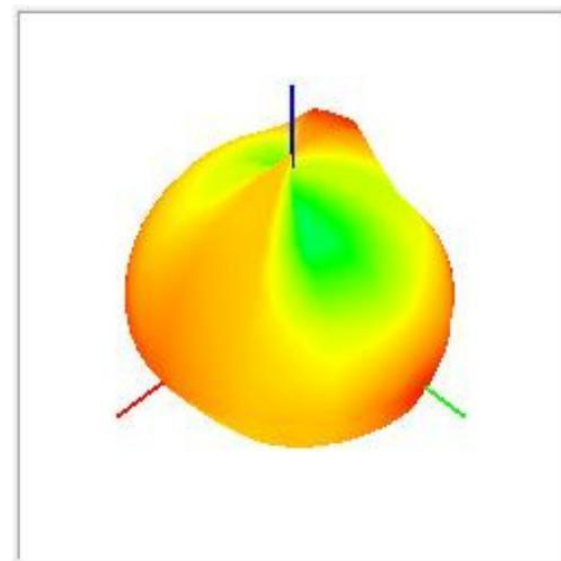
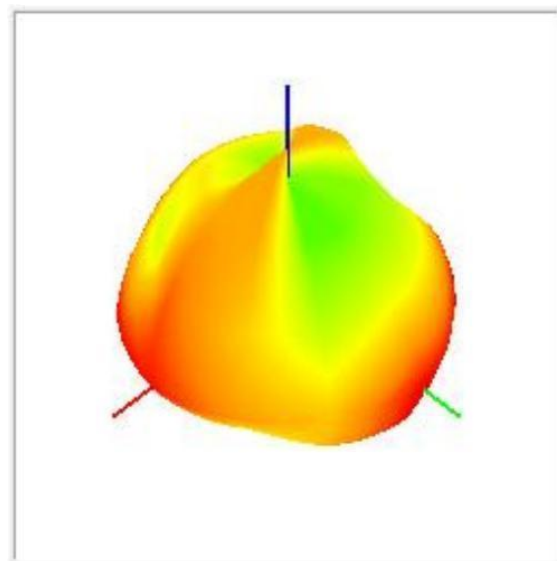
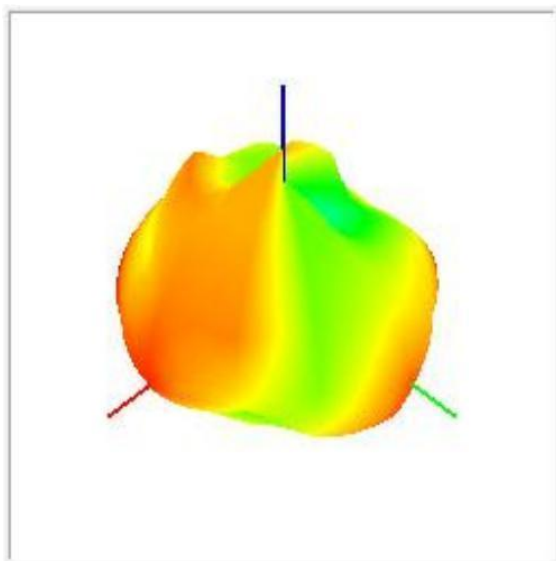
TRP



4.2 Test Result

2 2D Pattern____**BTANT**

TIS



4. 1 OTA Data

传导

Test Equipment:	R&S CMW500		
Test Condition:	2 D chamber		
Band	Channel	TRP(dBm)	TIS(dBm)
BT	0	9.91	-89
	39	9.71	-92
	78	9.13	-92

Thank you!