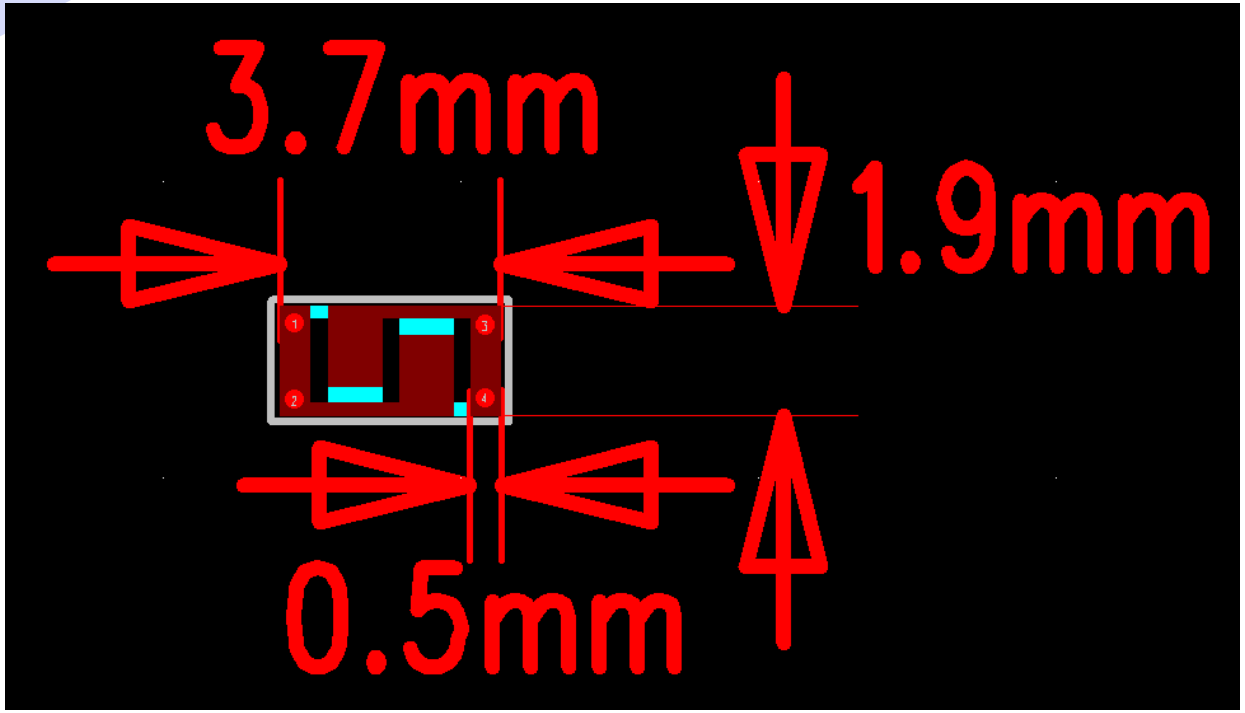
深圳市合拓科技有限公司
Shenzhen Hetuo Technology Co., LTD
1202B, Building C6, Hengfeng Industrial City,
Xixiang, Baoan District, Shenzhen

BT Antenna Test Report

Customer	Shenzhen Distar Technology Co., Ltd.
Project	L1
Antenna Revision	A1
Product Description	2.4GHz Antenna
Product No	
DATE	2023.12.04

Antenna shape



Purpose

This report is to measure the performance of BT antenna for CBS01.The antenna operating frequency at 2.4~2.5GHz, All test data are showed as below.

Content

1. Product Overview & Dimension
2. Test system
3. Antenna Matching Network
4. Test Result
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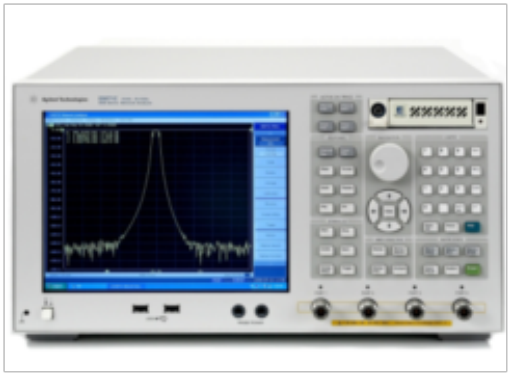
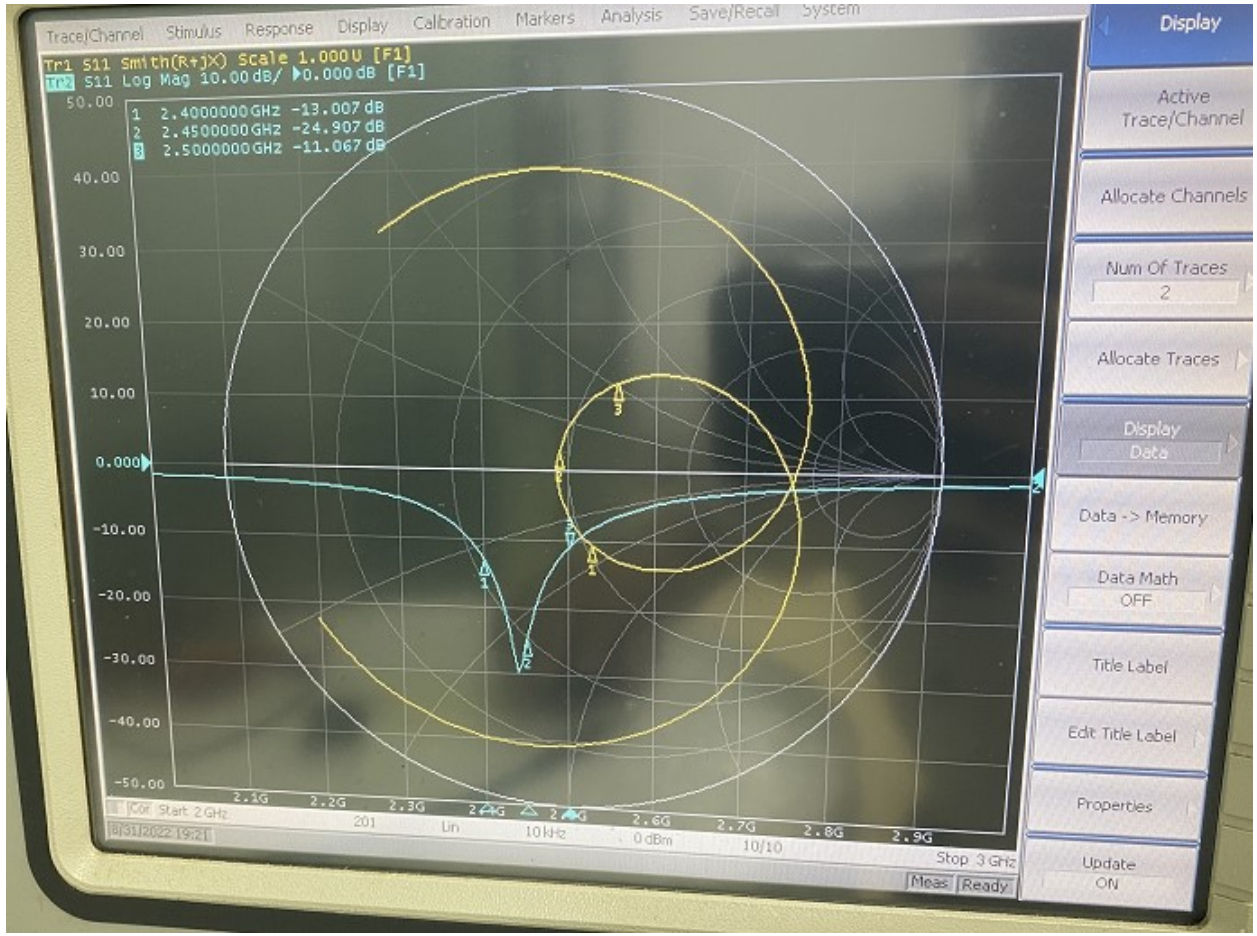
   - 4.2 Test coordinate
   - 4.3 2D Pattern
   - 4.4 OTA Data
   - 4.5 BT Boot measured
5. Antenna Assembly & environmental processing

2.Test System

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	CMW500 &CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C

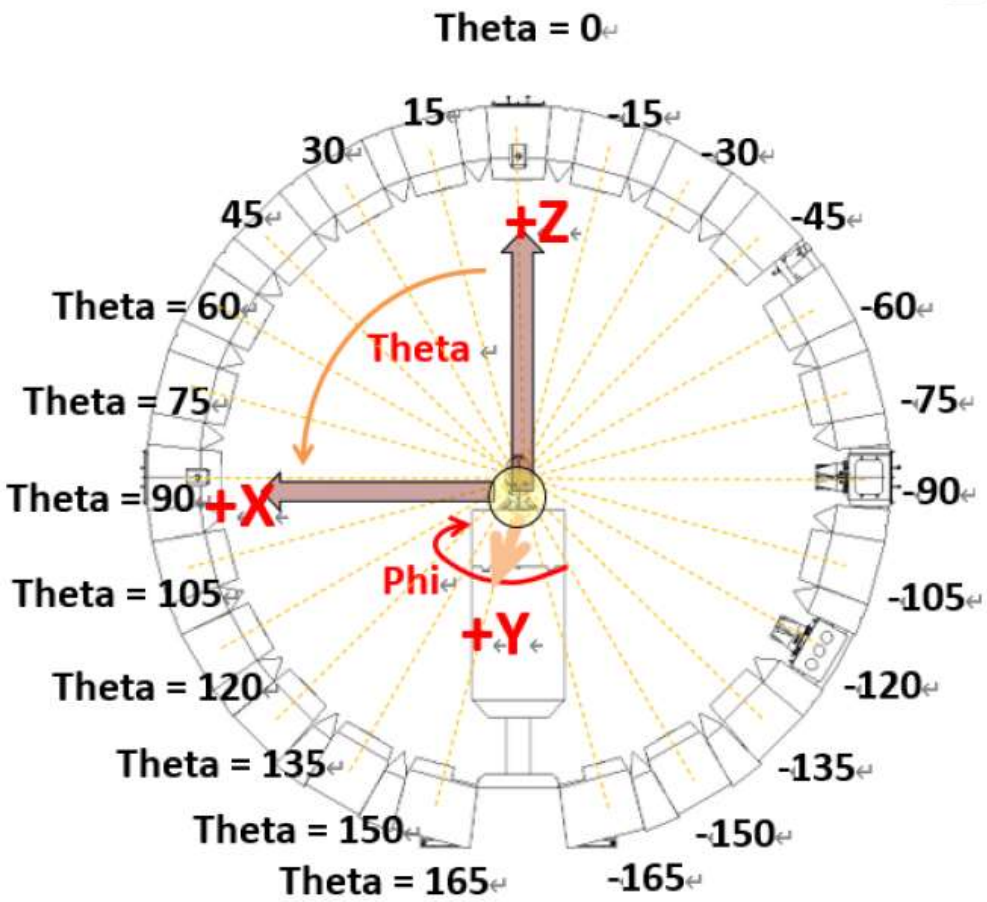


无源S11—(BT ANT)


Trace/Channel
Stimulus
Response
Display
Calibration
Markers
Analysis
Save/Recall
System
Tr1 S11 Smith(R+jX) Scale 1.000U [F1]
Tr2 S11 Log Mag 10.00 dB/ ▶0.000 dB [F1]
1 2.4000000GHz -13.007 dB
2 2.4500000GHz -24.907 dB
3 2.5000000GHz -11.067 dB
50.00
40.00
30.00
20.00
10.00
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
2.1G
2.2G
2.3G
2.4G
2.5G
2.6G
2.7G
2.8G
2.9G
Start 2 GHz
201
Lin
10 kHz
0 dBm
10/10
Stop 3 GHz
Meas
Ready
Display
Active Trace/Channel
Allocate Channels
Num Of Traces
2
Allocate Traces
Display
Data
Data -> Memory
Data Math
OFF
Title Label
Edit Title Label
Properties
Update
ON

Test Result

Sample status & coordinates



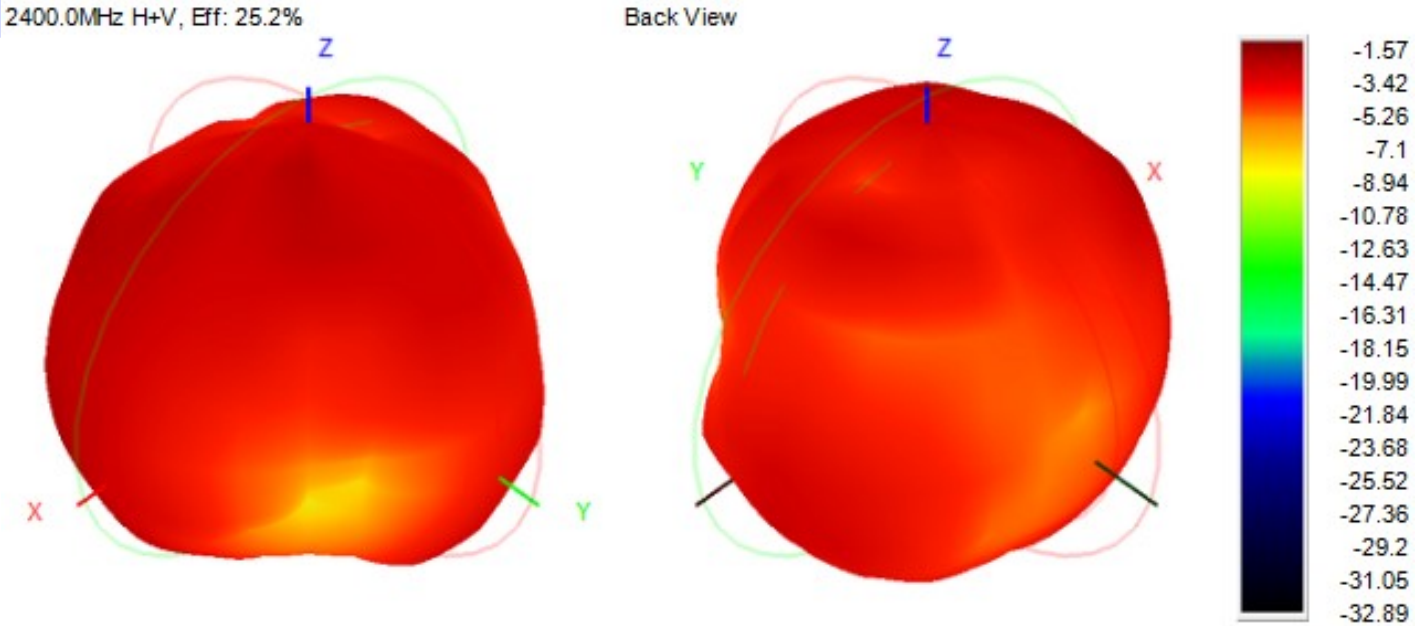
Test Result

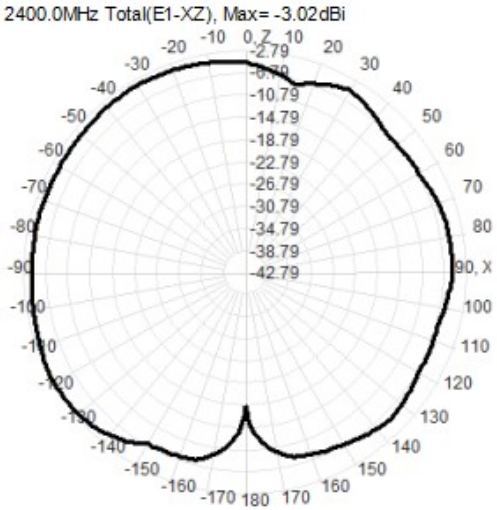
Gain & Efficiency——BT- ANT

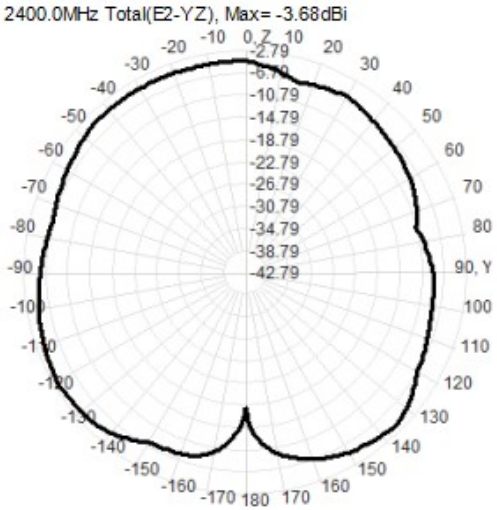
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	25.25	-1.57
2410	26.57	-1.06
2420	26.52	-1.09
2430	29.04	-0.67
2440	29.29	-0.66
2450	29.57	-0.57
2460	29.96	-0.42
2470	30.62	-0.63
2480	29.30	-0.83
2490	28.31	-0.83
2500	28.01	-0.64

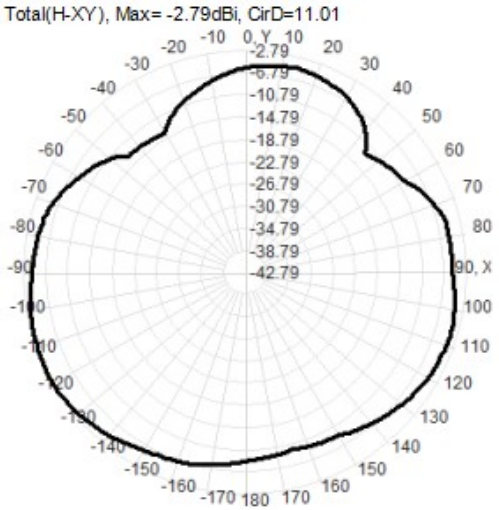
Test Result

2D&3D——BT- ANT



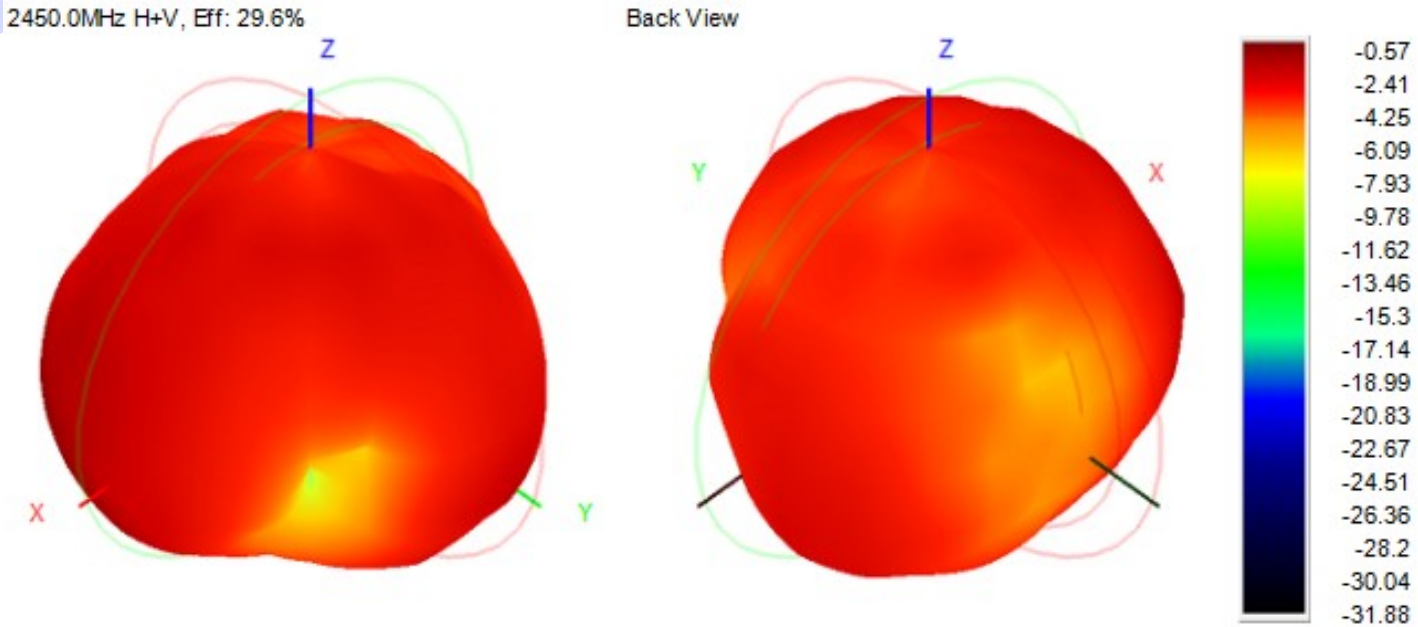


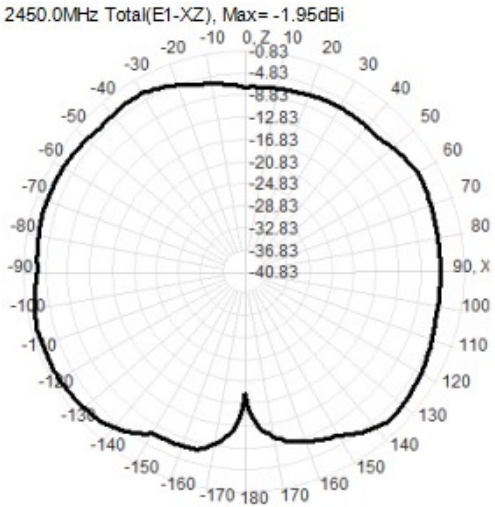


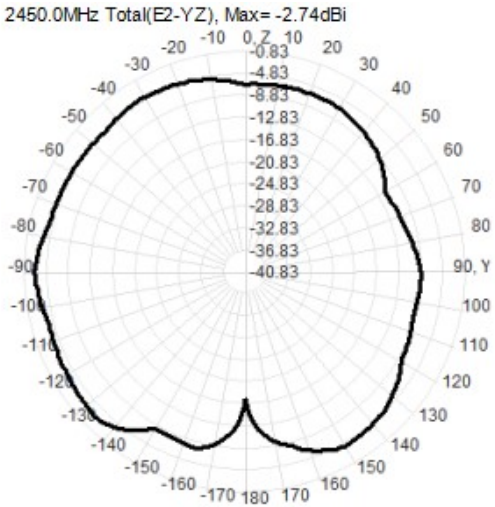


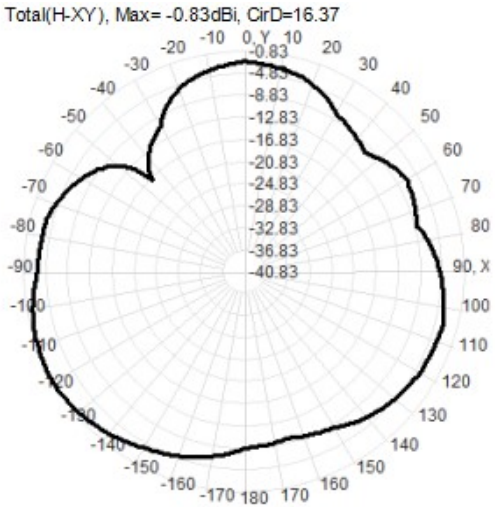
Test Result

2D&3D——BT- ANT



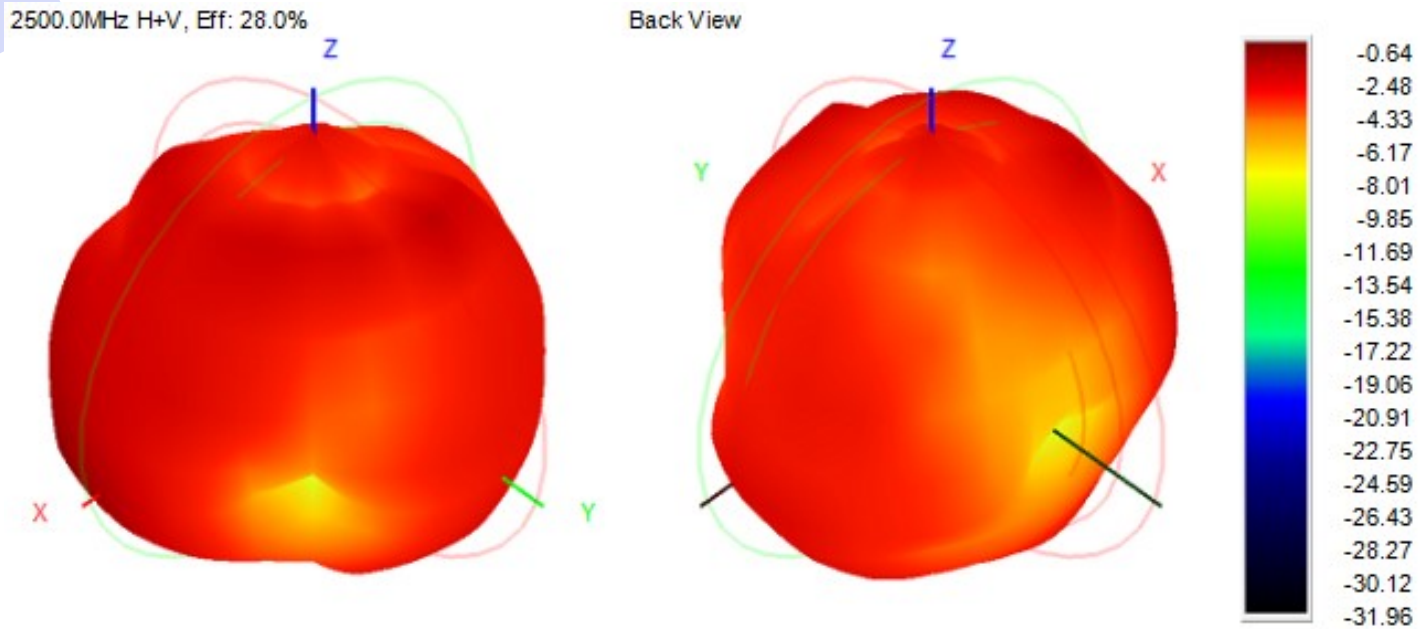


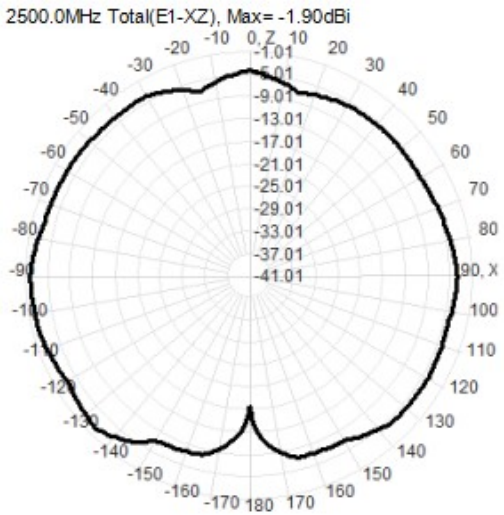


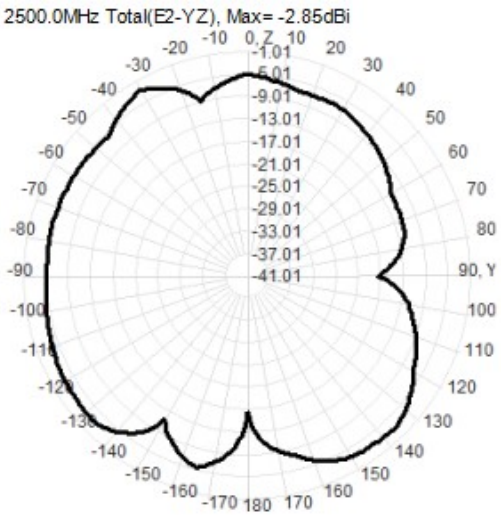


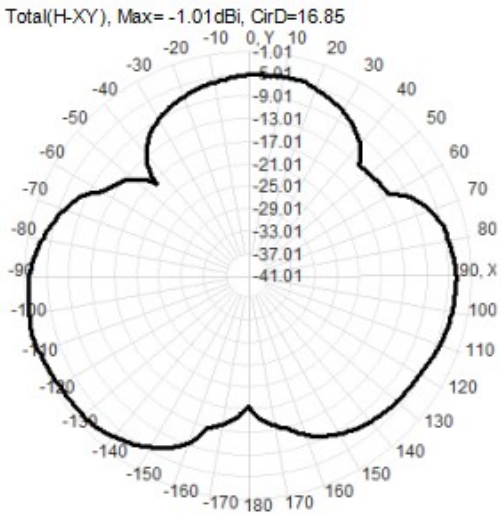
Test Result

2D&3D——BT- ANT



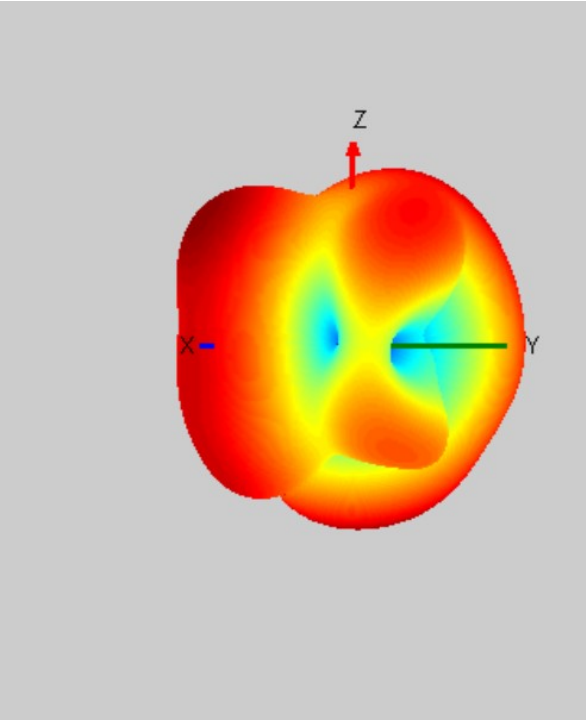






OTA DATA()--自由空间

Test Equipment：	R&S CMW500			
Test Condition：	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
BT		0	-1.20	-81.76
		39	-0.83	-81.35
		78	-0.36	-81.09



Thanks for your comment!

◈深圳市合拓科技有限公司

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