Shenzhen Hetuo Technology Co., Ltd

Sample Approved Sheet

Hetuo（R1303T）Acknowledgment

Customer Name Shenzhen Xinzhongxin Technology Co., Ltd

Client Type R1303T

Brand HT-R1303T-R-V6

Hetuo Judgment Audit Team

Formulate	Check	Ratify	Acknowledge the book completion time
Liyaona	Huxuewen	Daitingting	2023.11.3

（Client）Judgment Audit Team

Acknowledgement Number_____ Proving time

acknowledge	check	ratify	Acknowledge the book completion time
Project Review ☐Three acknowledgements☐Specifications/drawings ☐examining report ☐Specimen PCS ☐Safety standard ☐HSF			
Appraisal report☐Accept ☐Conditional acceptance ☐Refuse			

1. Antenna picture

The report mainly provides the test status of the electrical properties parameters of R1303T. The R1303Tantenna is a 2.4-2.5GHz Band . The antenna Picture and assembly are shown below.

Antenna picture & assembly picture

2.Antenna Test Equipment Introduction

Test of antenna input characteristics using Agilent E5071C and Agilent 5062A vector network analyzer; The radiation pattern of the antenna are tested using the Satimo starlab 3D near field Anechoic Chamber , and the instrument is used to agilent8960 E5515 and Agilent E4438C. The test coordinates of the darkroom are as follows:

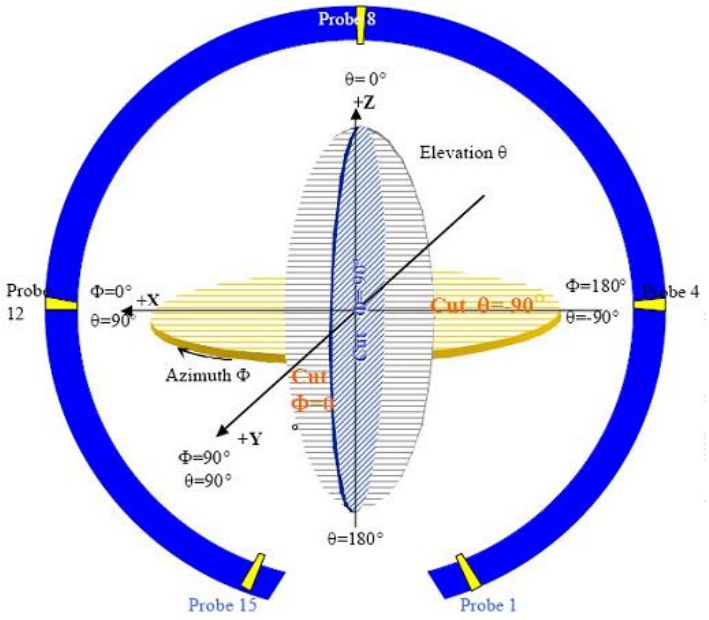


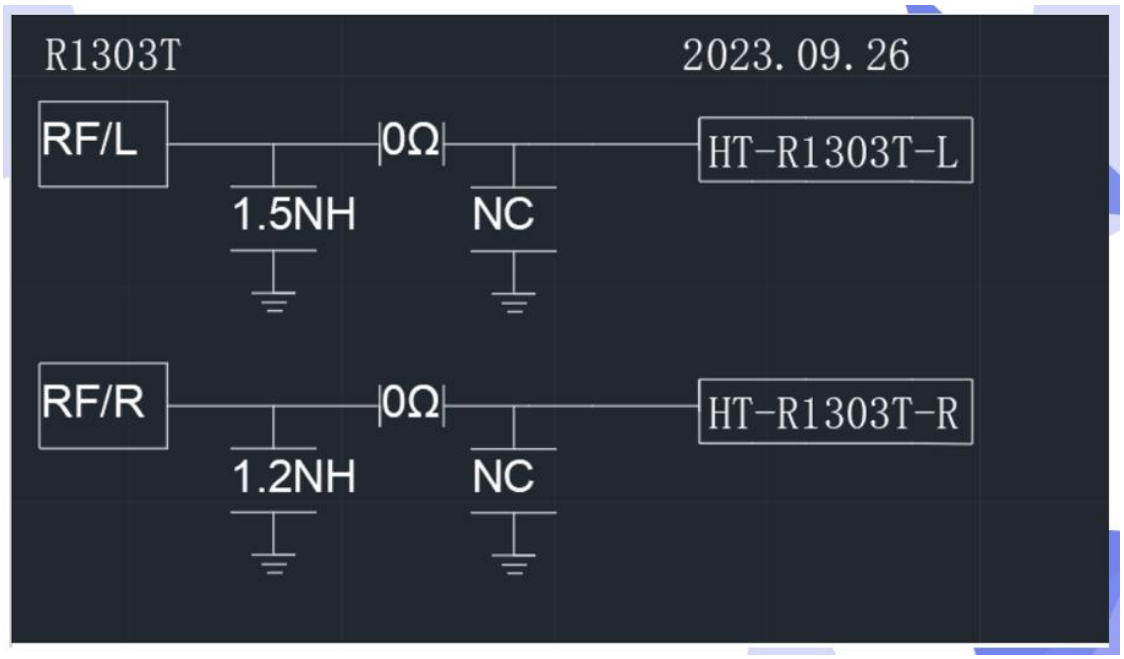
图 4 3D 微波暗室测试坐标系(back view)

3. Electrical Specification

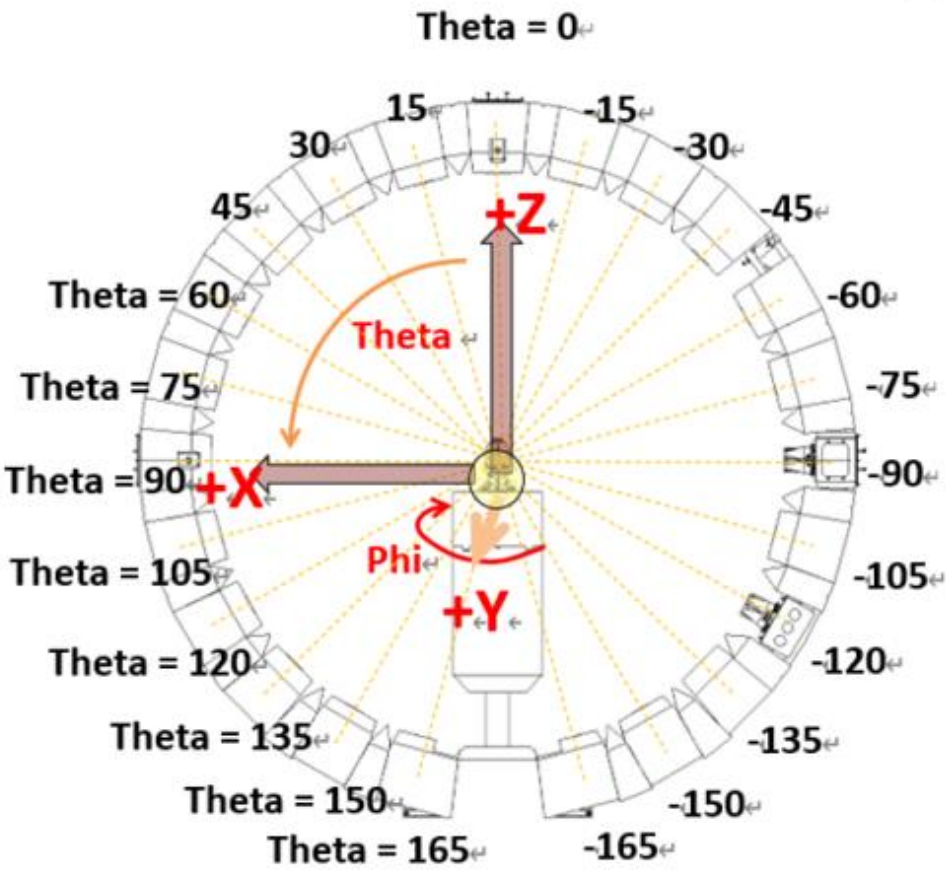
3-2 Passive S11 parameter

Measuring Method is a 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the S11 parameter, Keeping this fixture away from metal at least 20cm.

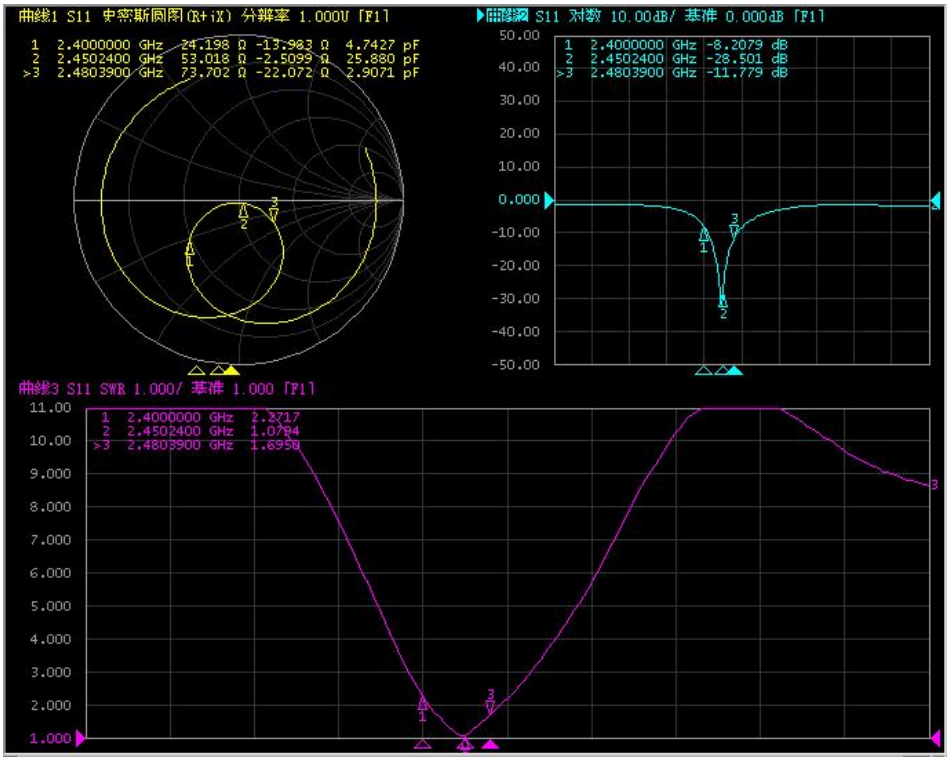
VSWR—**R**



Sample status & coordinates



S11—R(BT ANT)

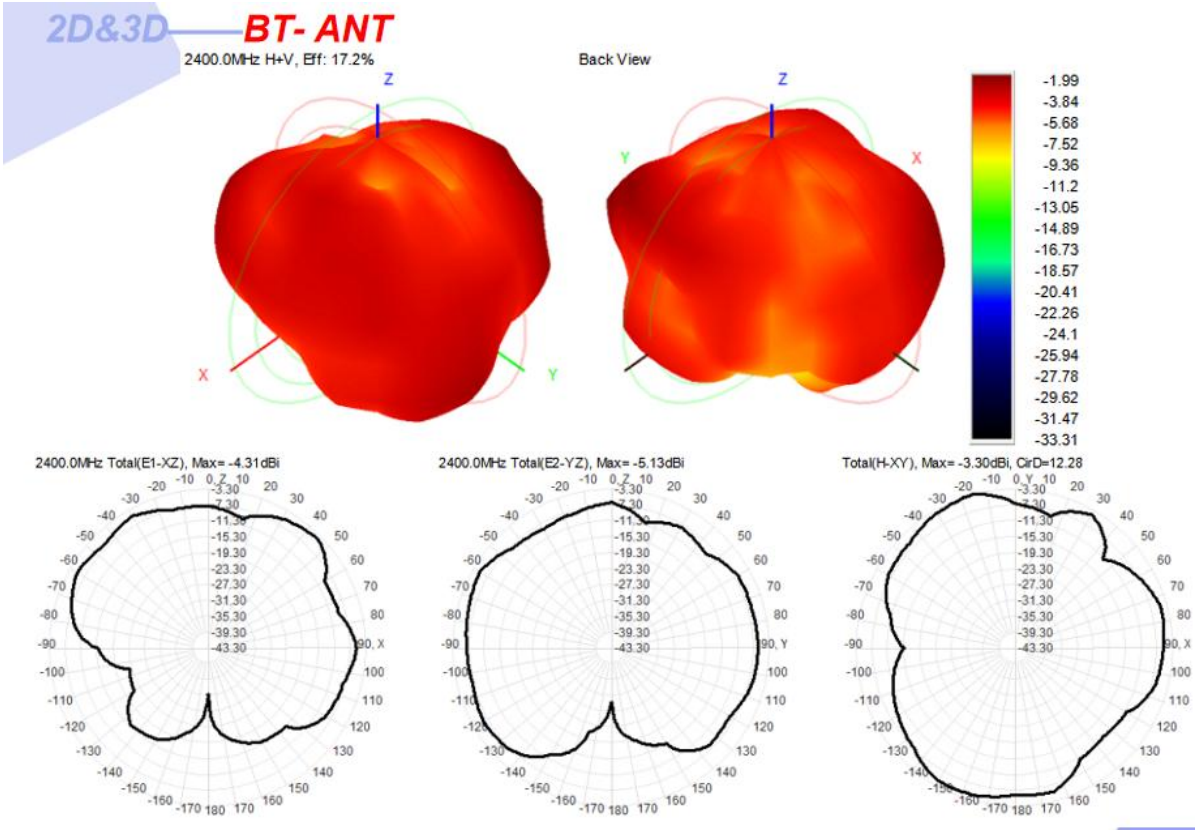


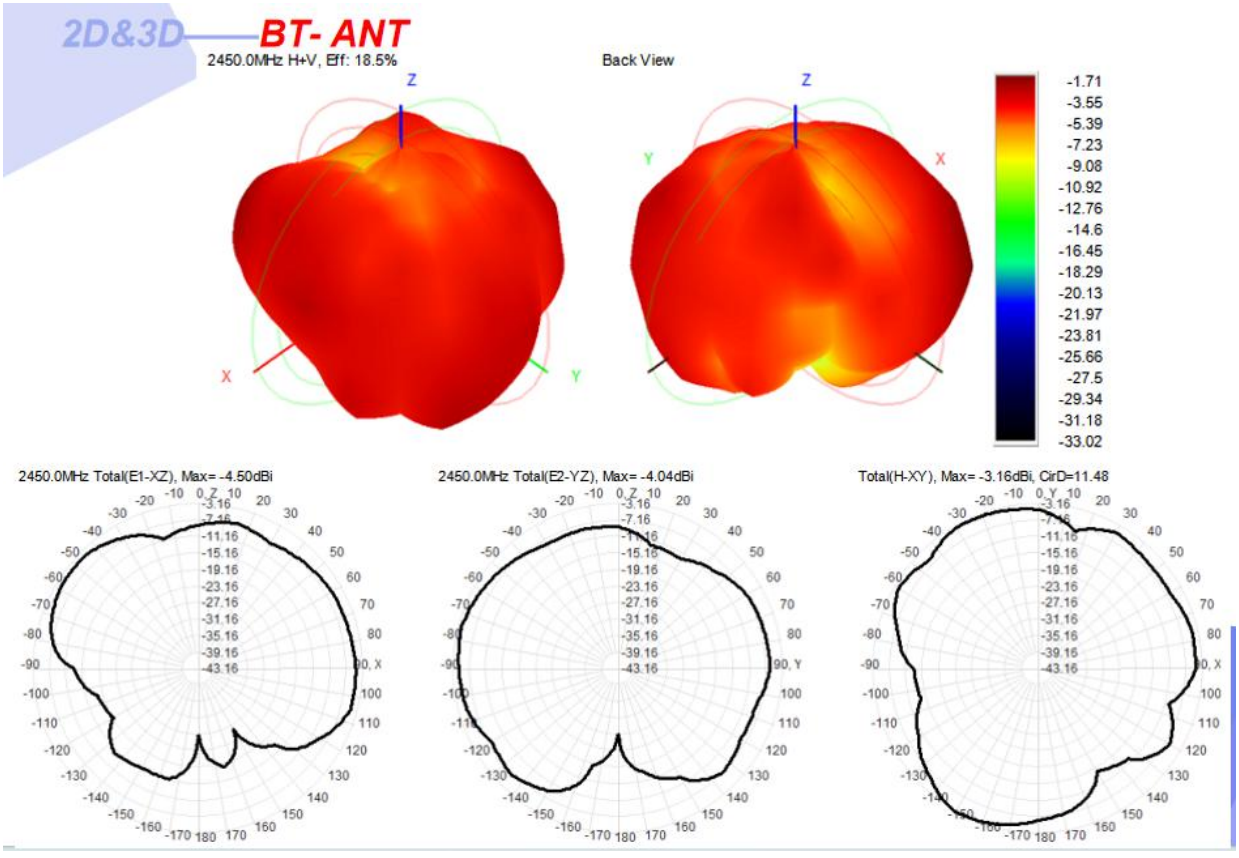
3-3 Antenna Matching Network

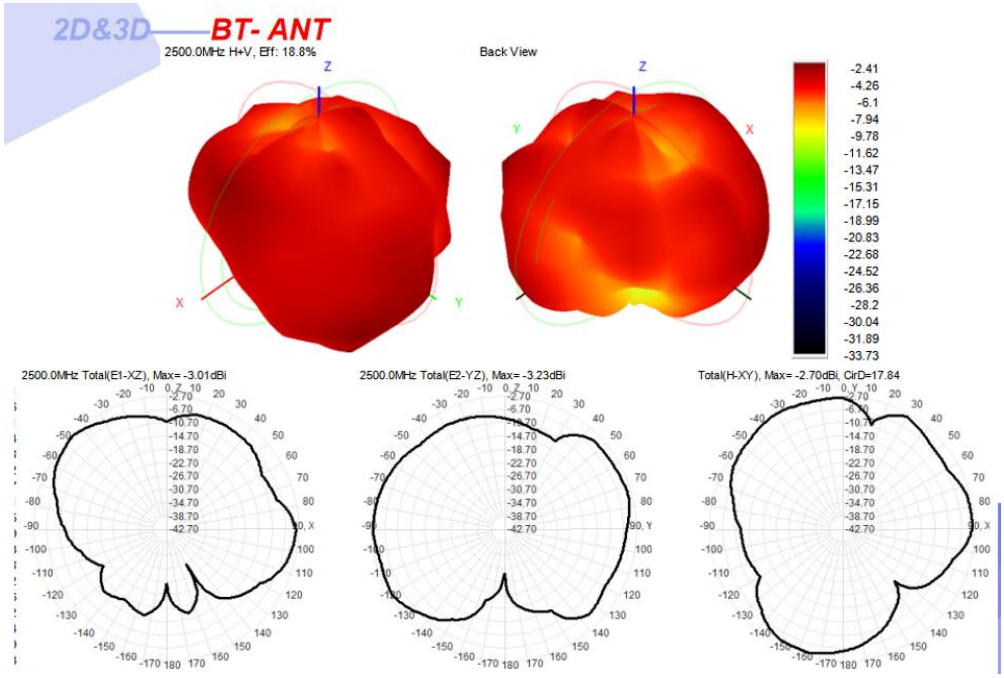
Gain & Efficiency—BT-ANT-R

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	**17.19**	**-1.99**
2410	**17.92**	**-2.46**
2420	**18.11**	**-1.91**
2430	**19.06**	**-1.81**
2440	**19.07**	**-2.03**
2450	**18.54**	**-1.71**
2460	**18.74**	**-2.01**
2470	**19.02**	**-2.52**
2480	**18.97**	**-2.59**
2490	**18.91**	**-2.28**
2500	**18.79**	**-2.41**

2D/3D—BT-R


2D&3D BT- ANT
2400.0MHz H+V, Eff: 17.2%
Back View
-1.99
-3.84
-5.68
-7.52
-9.36
-11.2
-13.05
-14.89
-16.73
-18.57
-20.41
-22.26
-24.1
-25.94
-27.78
-29.62
-31.47
-33.31
2400.0MHz Total(E1-XZ), Max= -4.31dBi
2400.0MHz Total(E2-YZ), Max= -5.13dBi
Total(H-XY), Max= -3.30dBi, CirD=12.28


2D&3D BT- ANT
2450.0MHz H+V, Eff: 18.5%
Back View
-1.71
-3.55
-5.39
-7.23
-9.08
-10.92
-12.76
-14.6
-16.45
-18.29
-20.13
-21.97
-23.81
-25.66
-27.5
-29.34
-31.18
-33.02
2450.0MHz Total(E1-XZ), Max= -4.50dBi
2450.0MHz Total(E2-YZ), Max= -4.04dBi
Total(H-XY), Max= -3.16dBi, CirD=11.48



OTA DATA(R)--FS

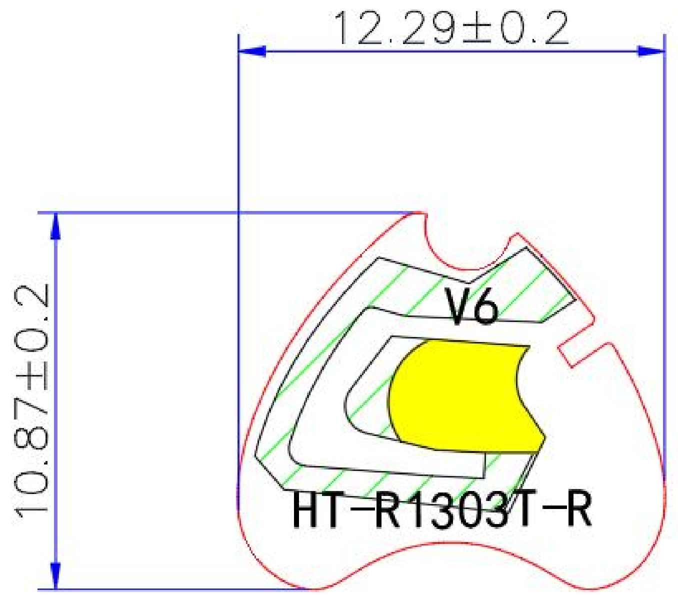
Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
BT		0	3.64	-87.71
		39	3.29	-86.86
		78	3.15	-85.47

OTA DATA(R)--BH

Test Equipment:	R&S CMW500			
Test Condition:	3D chamber			
Band	Wireless Protocol	Channel	TRP(dBm)	TIS(dBm)
BT		0	2.82	-84.82
		39	2.22	-84.66
		78	1.52	-83.53

报价	FOR QUOTATION
开模	FOR TOOLING
检测	FOR EVALUATION
出图	APPROVED DWG.
参考	REFERENCE

MODIFICATION			
VER	DESCRIPTION	DATE	ENGINEER



Technical requirements:

1. It must comply with EU RoHs and REACH, as detailed in the appendix;
2. Single machine usage: 2PCS
3. FPC copper wiring section on side A, while side B represents the use of 3M 9471 adhesive backing
4. The total thickness of FPC is 0.11-1.15mm (excluding adhesive release paper), and the contact point needs to be processed with gold deposition process
5. Please use PI1 half substrate, electrolytic copper; Surface black ink line printed in white
6. The ink does not contain carbon or metal particles, and the surface is UV resistant and UV resistant;

Shenzhen Hetuo Technology Co., Ltd

PART NAME: 007.0008

R1303T-FPC-R

SCALE 1:1 | UNITS MM | USED ON | SIZE A4 | SHEET 1 OF 1

DRAWING NAME 8812M-ANT-FPC-INSTANT | DWG NO. 8812M-ANT-FPC-INSTANT | DATE 2023.02.27