

Sample Approved Sheet

Customer Name **Shenzhen Zhenchen Electronic Technology Co.,**

Client Type ZC07

Brand HT-ZC07-V4

Formulate	Check	Ratify	Acknowledge the book completion time
Zhongxiaoming	Huxuewen	Daitingting	2023.01.09

Zhenchen (Client) Judgment Audit Team Acknowledgement Number

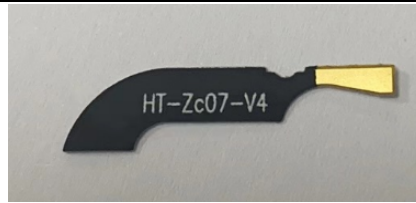
acknowledge	check	ratify	Acknowledge the book completion time

Project Review ☐ **Three acknowledgements** ☐ **Specifications/drawings**
☐ **examining report** ☐ **Specimen** **PCS** ☐ **Safety standard** ☐ **HSF**

Appraisal report ☐ **Accept** ☐ **Conditional acceptance** ☐ **Refuse**

[illegible]

Page 2



FPC 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:

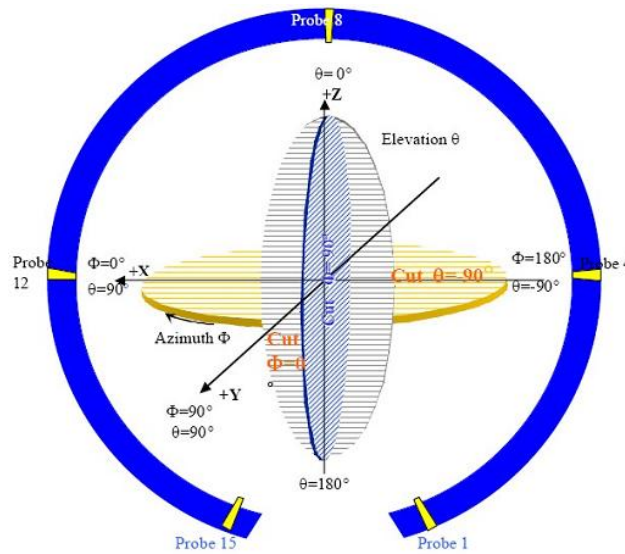
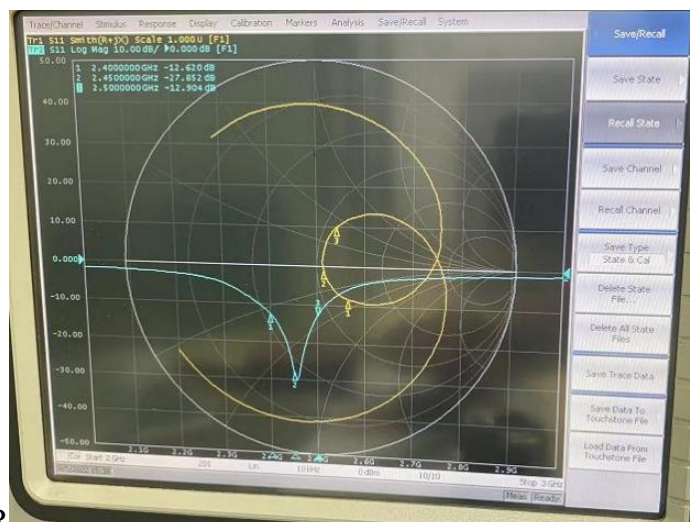


图 4 3D 微波暗室测试坐标系 (back view)

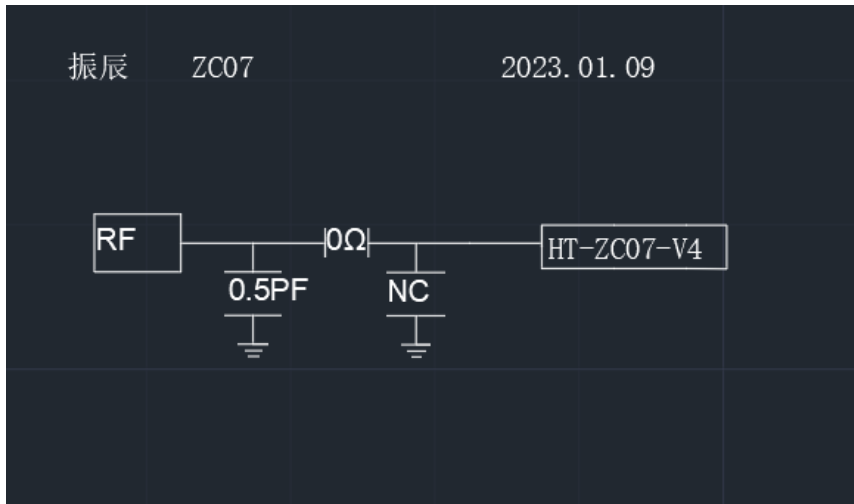
3. Electrical Specification 3-2 Passive S11 parameter

Measuring Method is a $50\ \Omega$ 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.

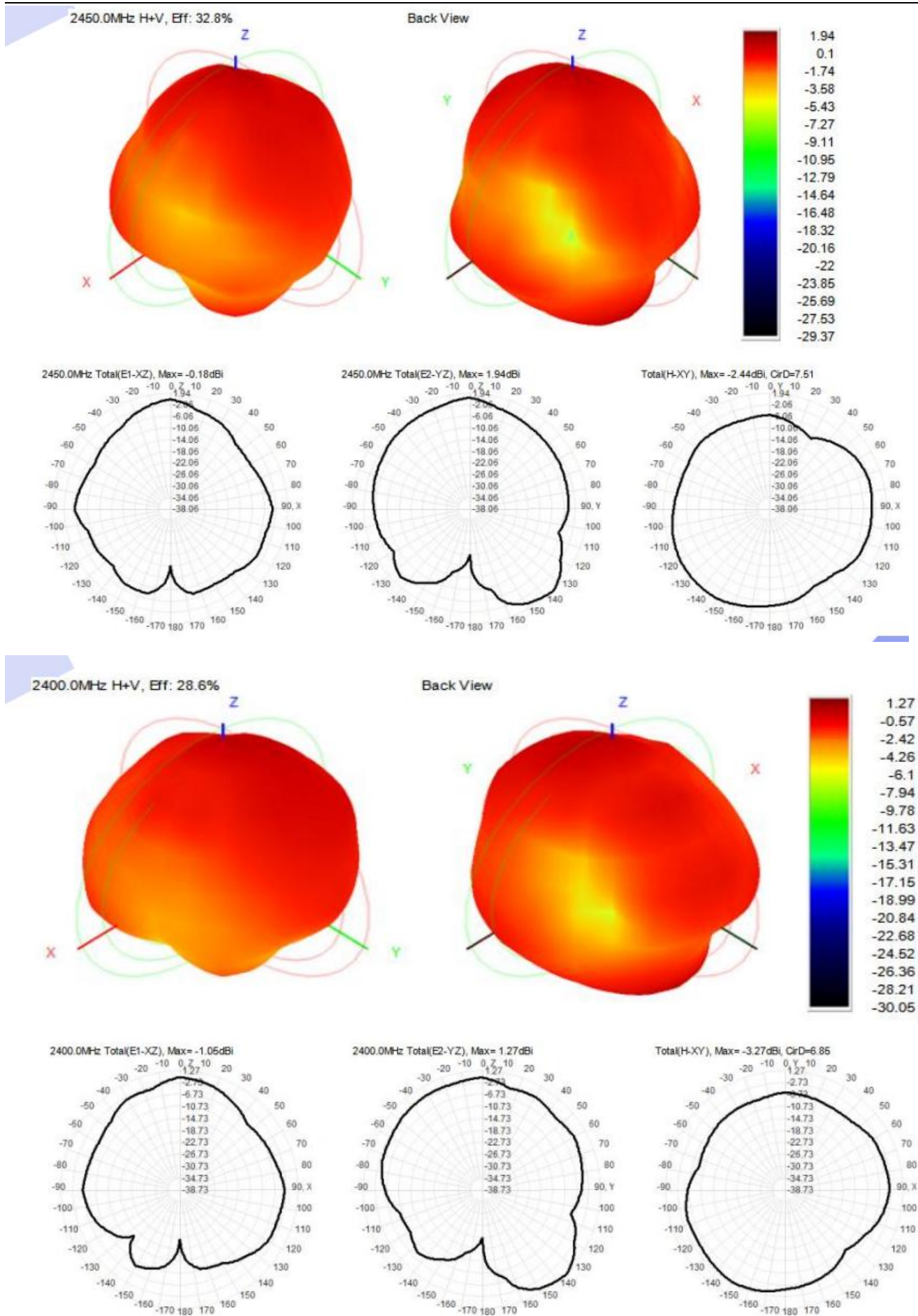


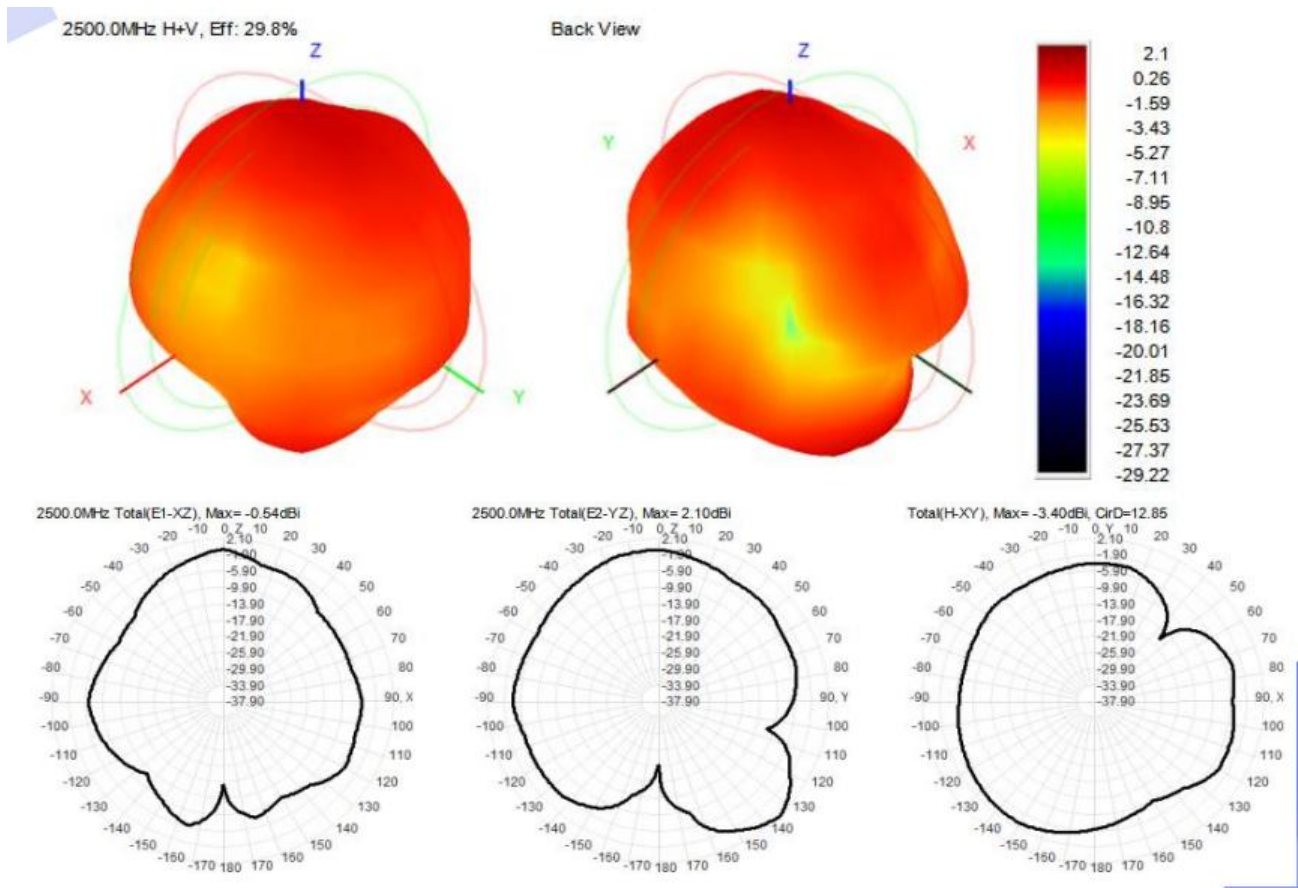
VSWR

3-3 Antenna Matching Network



Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	28.59	1.27
2410	29.70	1.29
2420	30.72	1.40
2430	32.38	1.70
2440	32.84	1.71
2450	32.75	1.94
2460	33.77	2.22
2470	33.37	2.30
2480	32.76	2.50
2490	31.96	2.44
2500	29.78	2.10





4. Mechanical Specification:

Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 8

Technical drawing of a mechanical part. The drawing shows a cross-section of a component with a curved left side and a stepped right side. The material is specified as HT-Zc07-V4. The dimensions are indicated by blue arrows: a horizontal dimension of 22.88 ± 0.2 and a vertical dimension of 5.68 ± 0.1 . The part is divided into two regions: a hatched region on the left and a yellow region on the right.

Tape cutting position

1. It shall comply with EU RoHS and REACH, see the appendix for details;
2. Single machine consumption: 1 PCS
3. For the part of FPC copper wiring on surface A, surface B represents 3M 9448A T=0.1mm
4. The total thickness of FPC is 0.11~0.15 mm (excluding the adhesive backed release paper, and the contact point needs to be subject to the 3 mil gliding process
5. Please use P11 to 1 material, electrolytic copper; Screen printed white characters with black ink on the surface
6. The ink does not contain carbon or metal particles, and the surface is UV resistant and UV resistant;
7. High temperature oxidation resistance: after 40 minutes at 200 ° C, a small amount of oxidation points are allowed on the smooth surface of copper foil, within each 300mm * 300mm area, the number of oxidation points shall not exceed 2, which shall be made into a whole row and cannot be single;

Glue surface area

SHEN ZHEN HETUO TECHNOLOGY Co., LTD										Drawn	
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HETUO COMMUNICATION CO., LTD. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OF DEVICES WITHOUT PERMISSION.										Designed	
TITLE: HT-20C30109001-ZC07										Approved	
DIMENSIONS UNIT: mm TOLERANCE: mm SURFACE: Ra 3.2 FINISH: 100% MATERIAL: 6061-T6 TREATMENT: Anodize COATING: 100% PAINT: 100% COLOR: 100% SCALE: 1:1 SHEET: 1 OF 1										PART NAME: HT-20C30109001-ZC07 Customer Name: ZC07 Version: 1.0	
DRAWN: 2023/10/09										DATE: 2023/10/09	