

Sample Approved Sheet

Hetuo (BT0032-V10) Acknowledgment

Customer Name Jinshang Technology (Shenzhen) Co., Ltd

Client Type BS531Z2L-1

Brand HT-BT0032-V10

Hetuo Judgment Audit Team

Formulate	Check	Ratify	Acknowledge the book completion time
Zhongxiaomin g	Huxuewen	Daitingting	2023.08.07

Zhenchen (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



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:

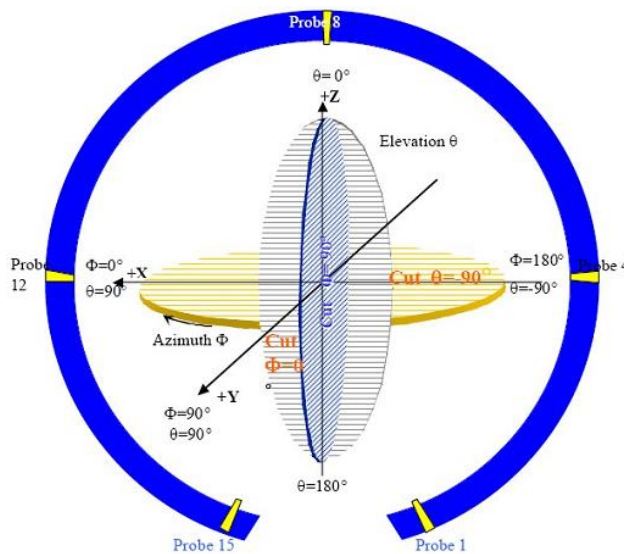


图 4 3D 微波暗室测试坐标系 (back view)

3. Electrical Specification

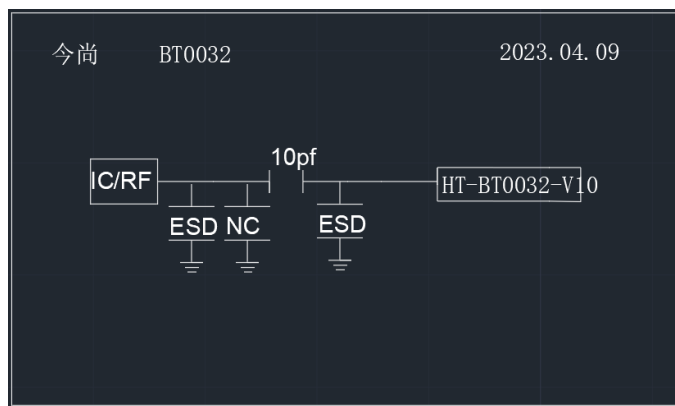
3-2 Passive S11 parameter

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



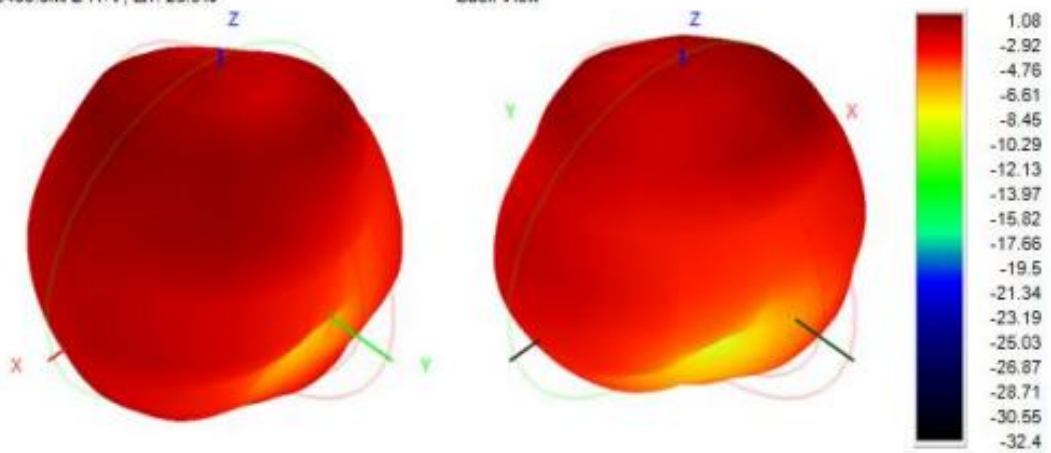
3-3 Antenna Matching Network



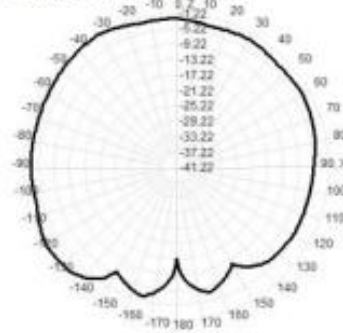
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	25.87	1.08
2410	27.61	1.32
2420	28.32	1.29
2430	29.67	1.35
2440	31.92	1.43
2450	32.40	1.26
2460	30.91	1.24
2470	29.45	1.31
2480	28.49	1.34
2490	27.18	1.27
2500	26.41	1.38

2D&3D BT- ANT

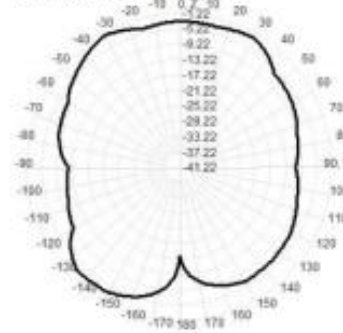
2400.0MHz H+V, Eff: 25.9%



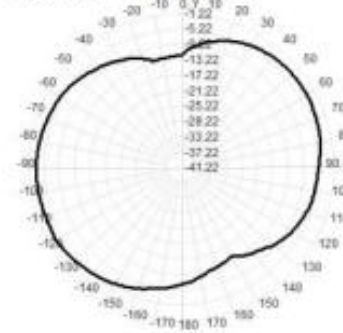
2400.0MHz Total(E1-XZ), Max=-1.22dBi



2400.0MHz Total(E2-YZ), Max=-1.83dBi

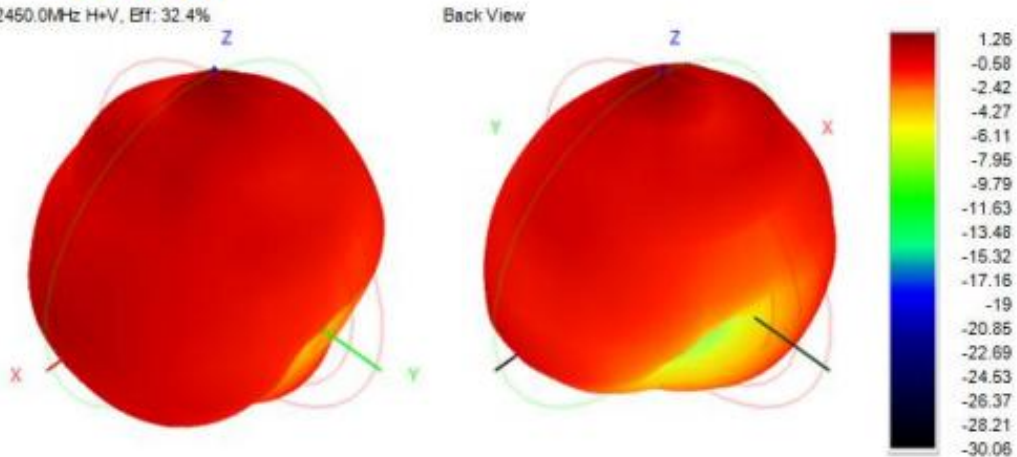


Total(H-XY), Max=-3.21dBi, CrD=11.52

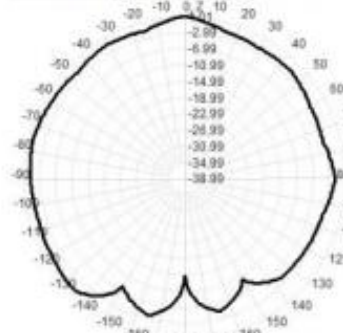


2D&3D BT- ANT

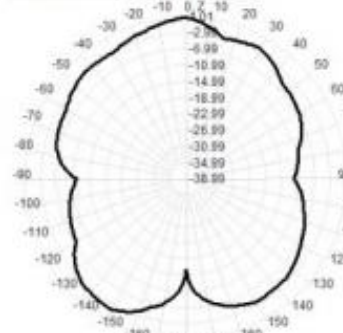
2450.0MHz H+V, Eff: 32.4%



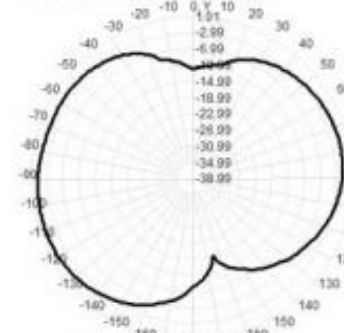
2450.0MHz Total(E1-XZ), Max= 1.01dBi

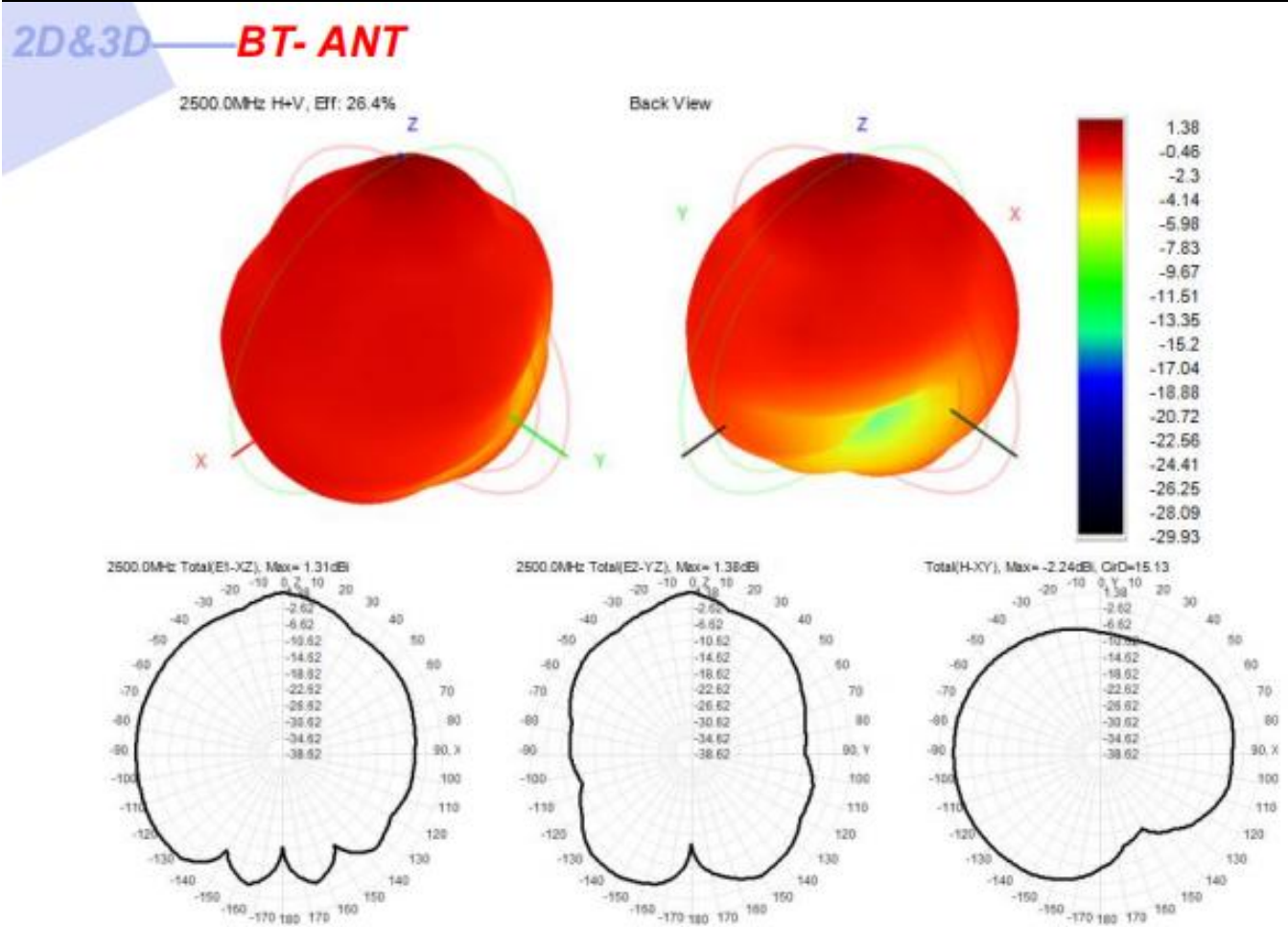


2450.0MHz Total(E2-YZ), Max= 0.76dBi



Total(H-XY), Max=-0.55dBi, CrD=18.83





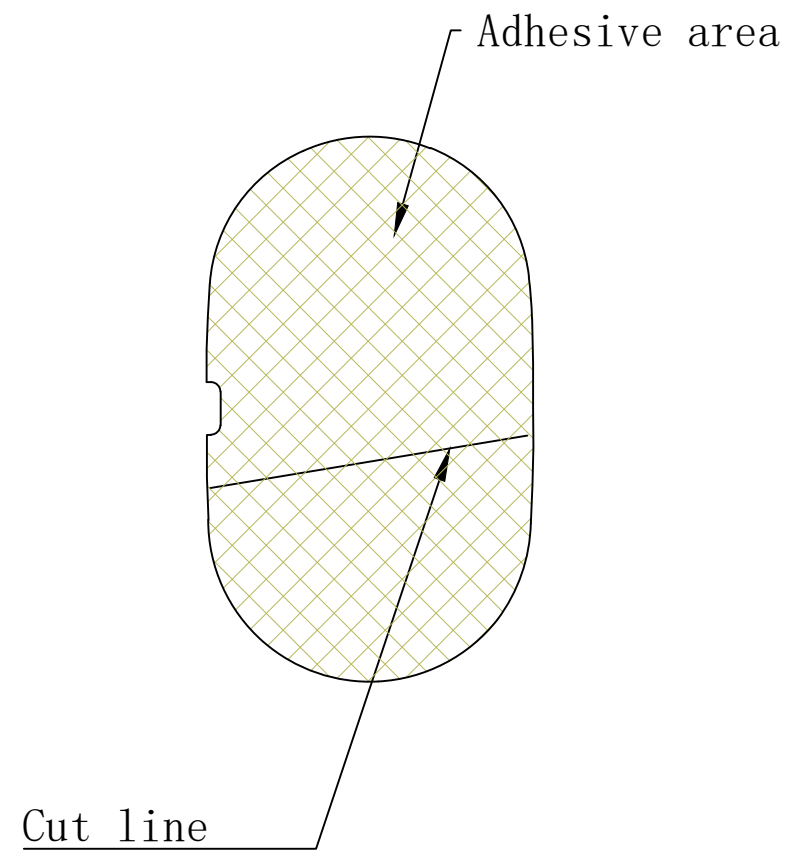
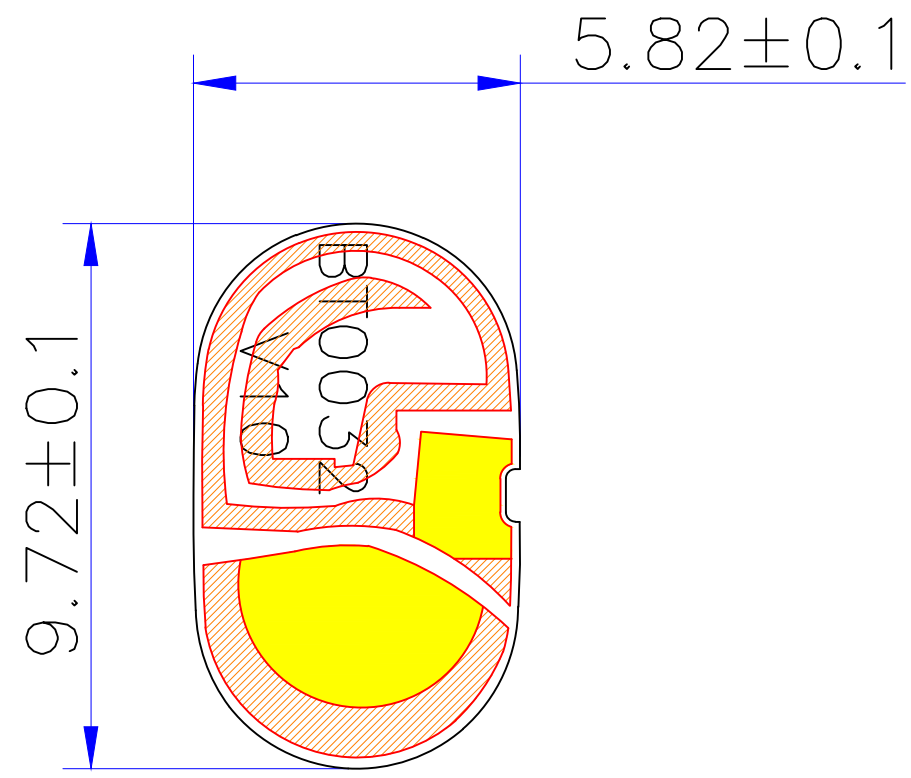
4. Mechanical Specification:

Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 8

MODIFICATION			
VER	DESCRIPTION	DATE	ENGINEER

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



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 a 3-mil 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										Drawn:																																																																													
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF ARIMA COMMUNICATION CORP. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR DEVICES WITHOUT PERMISSION.										Designed:																																																																													
<table border="1"> <thead> <tr> <th>DIMENSIONAL TOLERANCES±</th> <th>M1</th> <th>M2</th> <th>S1</th> <th>S2</th> <th>P1</th> <th>P2</th> <th>C</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>0-6</td> <td>0.05</td> <td>0.10</td> <td>0.15</td> <td>0.20</td> <td>0.05</td> <td>0.10</td> <td>0.5</td> <td></td> <td></td> <td></td> </tr> <tr> <td>6-30</td> <td>0.10</td> <td>0.20</td> <td>0.15</td> <td>0.25</td> <td>0.10</td> <td>0.15</td> <td>1.0</td> <td></td> <td></td> <td></td> </tr> <tr> <td>30-80</td> <td>0.15</td> <td>0.25</td> <td>0.20</td> <td>0.30</td> <td>0.20</td> <td>0.40</td> <td>2.0</td> <td></td> <td></td> <td></td> </tr> <tr> <td>80-180</td> <td>0.15</td> <td>0.30</td> <td>0.25</td> <td>0.45</td> <td>0.40</td> <td>0.80</td> <td>3.0</td> <td></td> <td></td> <td></td> </tr> <tr> <td>180-315</td> <td>0.20</td> <td>0.50</td> <td>0.40</td> <td>0.60</td> <td>0.60</td> <td>1.20</td> <td>3.0</td> <td></td> <td></td> <td></td> </tr> <tr> <td>315-800</td> <td>0.30</td> <td>0.80</td> <td>0.70</td> <td>1.10</td> <td>1.00</td> <td>1.50</td> <td>4.0</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										DIMENSIONAL TOLERANCES±	M1	M2	S1	S2	P1	P2	C				0-6	0.05	0.10	0.15	0.20	0.05	0.10	0.5				6-30	0.10	0.20	0.15	0.25	0.10	0.15	1.0				30-80	0.15	0.25	0.20	0.30	0.20	0.40	2.0				80-180	0.15	0.30	0.25	0.45	0.40	0.80	3.0				180-315	0.20	0.50	0.40	0.60	0.60	1.20	3.0				315-800	0.30	0.80	0.70	1.10	1.00	1.50	4.0				Approved:
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Treatment:										A4 SIZE																																																																													
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