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|---|---------------------------------|---|
|  | H57-R |  |
| Date of Issue: 2024-10-18 | | dipole antenna |
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Source Control Drawing

| Part Description: | Bluetooth TWS headset |
|----------------------|-----------------------|
| 客 户 料 号: | |
| 客户规格描述: | |
| iTD Part Number: | HT-H57-R-V3.0 |
| iTD Software version | |
| iTD Hardware version | HT-H57-R-V3.0 |

| | |
|---|--|
| Customer Approval (Please return this copy as a certification of your approval) | |
| Approved by: | |
| Approval Date: | |
| Company Seal: | |

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|----|----|----|------|----|
| 项次 | 日期 | 版次 | 修订说明 | 备注 |
|----|----|----|------|----|

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|---------------------------|---------------------------------|------------------------------------|
| 顶设科技 i-Top | H57-R | Pb RoHS Compliant |
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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:

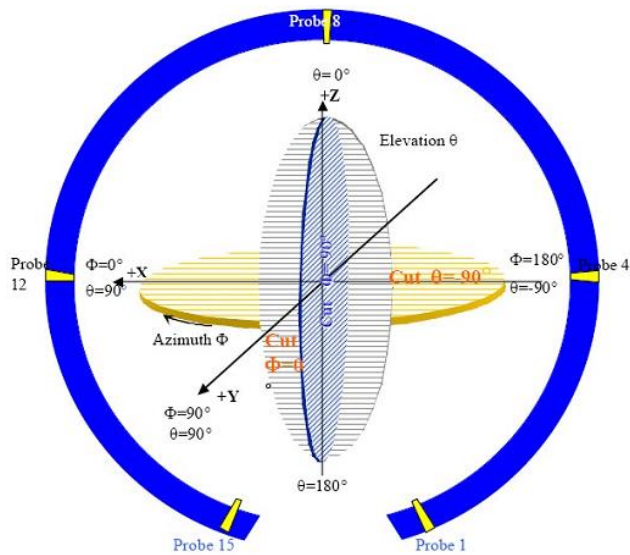


图 4 3D 微波暗室测试坐标系 (back view)

3. Electrical Specification

3-2 Passive S11 parameter

Measuring Method is a 50Ωcoaxial 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.

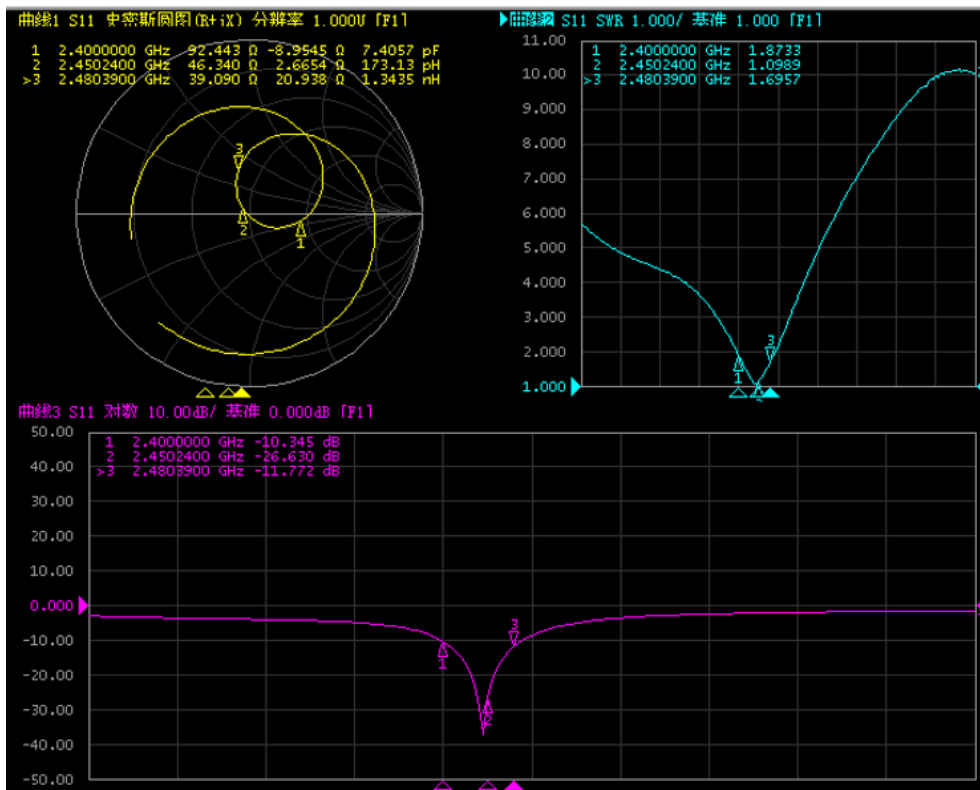
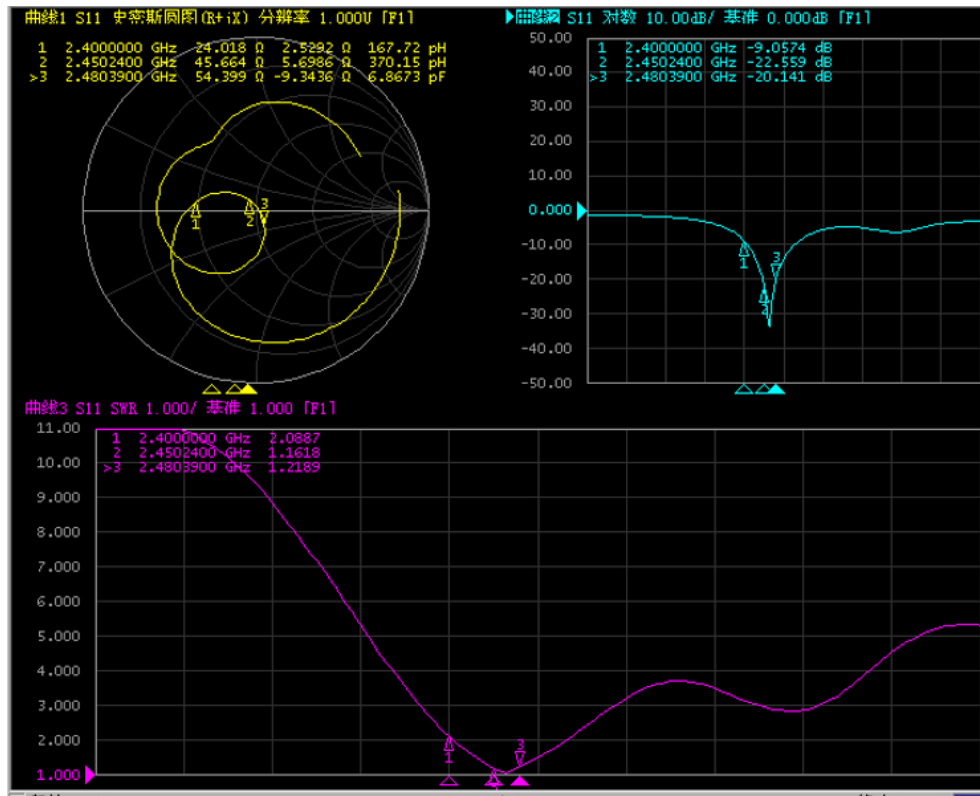
VSWR

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dipole antenna

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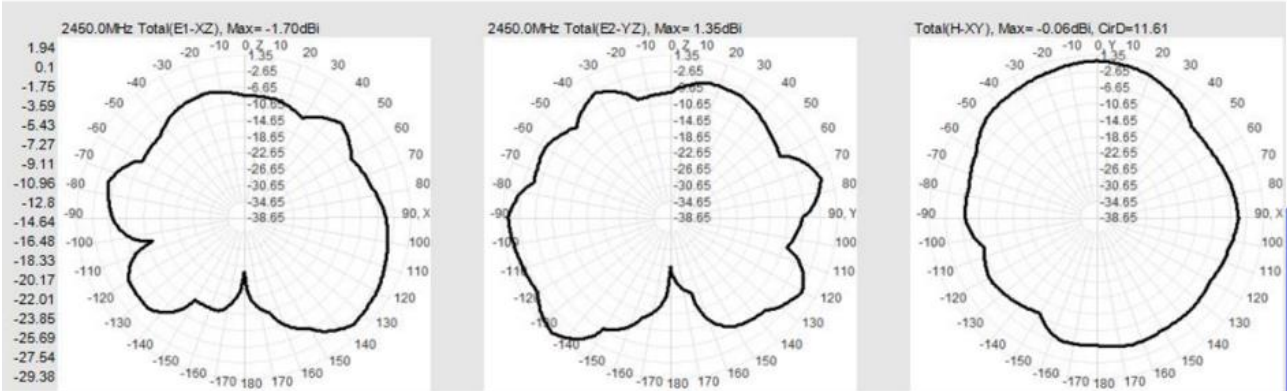
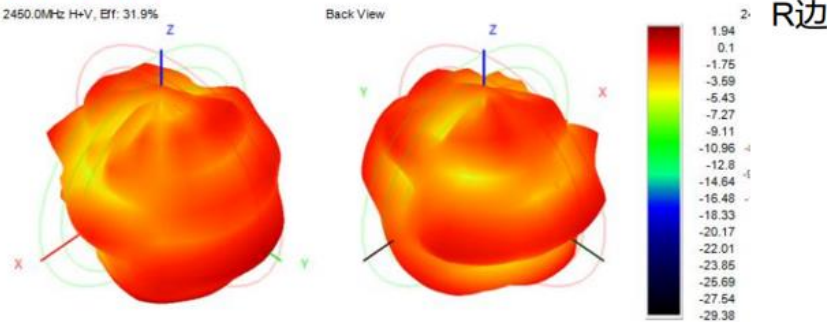
| | | |
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Gain & Efficiency——BT- ANT(R)

| Frequency (MHz) | Peak GAIN (dBi) | Efficiency (%) |
|-----------------|-----------------|----------------|
| 2400 | -0.20 | 20.54 |
| 2410 | 0.08 | 22.39 |
| 2420 | 1.69 | 25.43 |
| 2430 | 2.39 | 29.22 |
| 2440 | 2.09 | 30.41 |
| 2450 | 1.94 | 31.90 |
| 2460 | 1.89 | 31.32 |
| 2470 | 1.49 | 30.47 |
| 2480 | 1.09 | 28.22 |
| 2490 | 0.71 | 26.33 |
| 2500 | 0.42 | 23.76 |

Test Result

2D&3D——BT- ANT



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| FS 自由空间 | | | | BH 头模测试 | | |
|---------|-------|--------|--|---------|------|--------|
| BT Test | | R | | | | R |
| CH | TRP | TIS | | CH | TRP | TIS |
| 0 | 11.5 | -93.94 | | 0 | 8.58 | -93.44 |
| 39 | 11.34 | -93.34 | | 39 | 8.7 | -91.2 |
| 78 | 11.35 | -93.06 | | 78 | 8.64 | -90.23 |
| | | | | | | |

4. Mechanical Specification:

Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 10

