顶设科技 i-Top	H57-L	RoHS Compliant
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-L-V3.0
iTD Software version	
iTD Hardware version	HT-H57-L-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
1	2024. 8. 28	V1.0	首次发行	
2	2024. 10. 12	V3.0	优化天线走线	

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1. Antenna picture

The report mainly provides the test status of the electrical properties parameters of HT-H57-L-V3

The HT-H57-L-V3 antenna is a BT Band. The antenna Picture and assembly are shown below.

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:

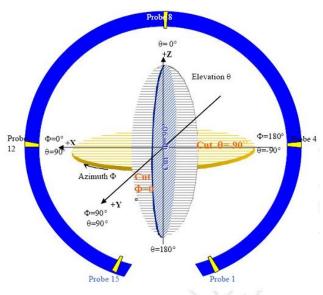


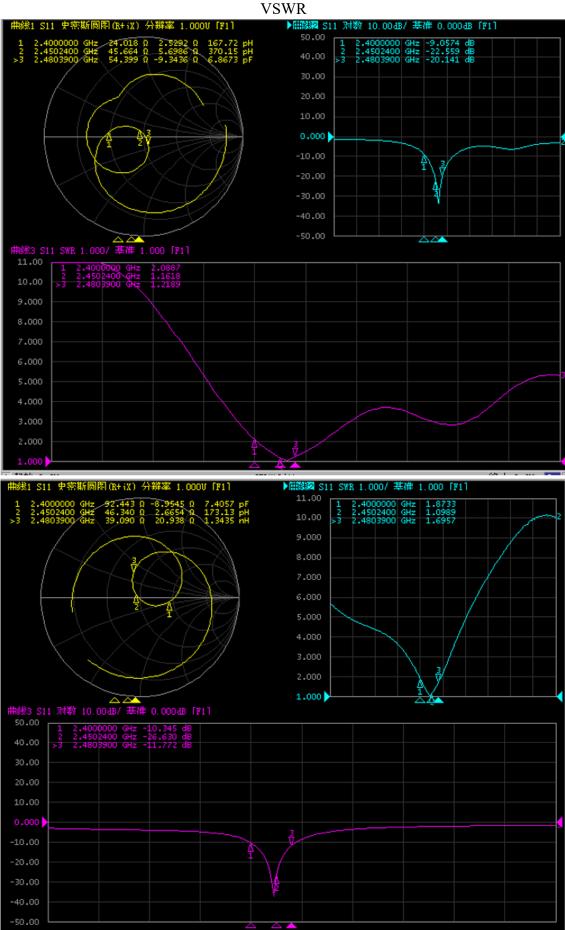
图 4 3D 微波暗室测试坐标系(back view)

3. Electrical Specification

3-2 Passive S11 parameter

Measuring Method is a 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.

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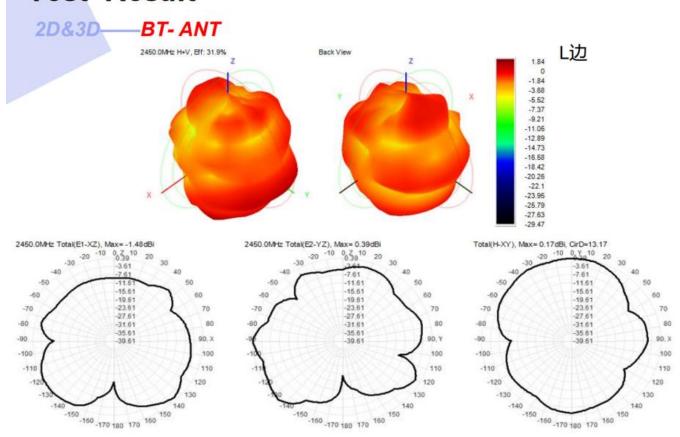


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Gain & Efficiency—BT- ANT(L)

Frequenc y (MHz)	Peak GAIN (dBi)	Efficiency (%)		
2400	-1.83	15.32		
2410	-1.15	17.82		
2420	-0.32	21.17		
2430	0.31	25.84		
2440	0.90	28.88		
2450	1.84	31.87		
2460	1.23	32.76		
2470	1.28	33.33		
2480	1.00	33.58		
2490	0.38	31.76		
2500	0.66	30.10		

Test Result



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FS自	由空间		BH 头	模测试	
BT 1	Гest	L			L
CH	TRP	TIS	CH	TRP	TIS
0	10.43	-94.59	0	8.16	-93.41
39	9.96	-92.39	39	8.09	-90.84
78	9.99	-91.26	78	8.64	-90.5

4. Mechanical Specification:

Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 10 报价 4.5 ± 0.2 开模 检测 技术要求: 1.需符合欧盟RoHs,REACH, 具体详见附录; 2.单机用量: 1 PCS 3.A面FPC铺铜走线部分,B面代表 3M 9471 胶纸部分; 深圳合拓科技有限公司 4.FPC总厚度为0.11~1.15mm(不包括背胶离型纸,接触点需做沉金工艺 MESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF ARIMA COMMUNICATION. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFAL 5.请使用PI1对半基材, 电解铜; 表面黑色油墨 丝印白色字符 6.油墨不含碳或金属粒子,表面UV耐磨康紫外线; 7.高温抗氧化性: 200°C、40分钟后,铜箔光面允许有少量氧化点, 每300mm*300mm面积内,氧化点个数不超过2个,做成整排,不可单个;