

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:

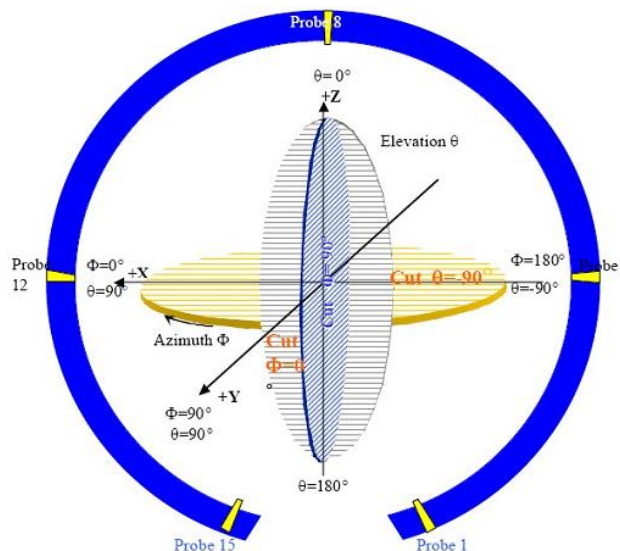


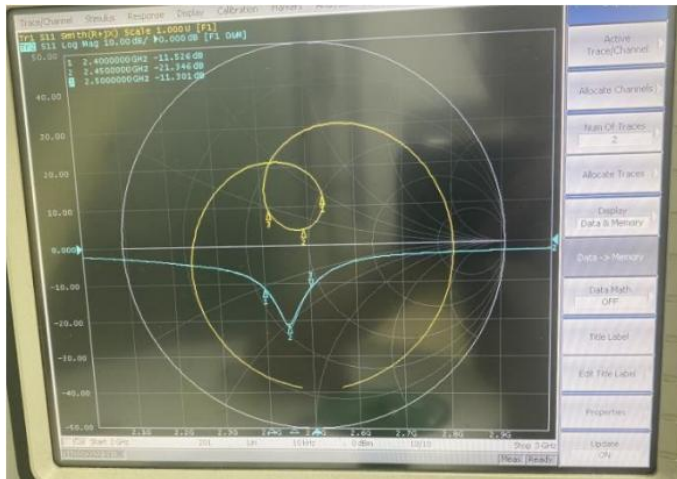
图 4 3D 微波暗室测试坐标系 (back view)

3. Electrical Specification

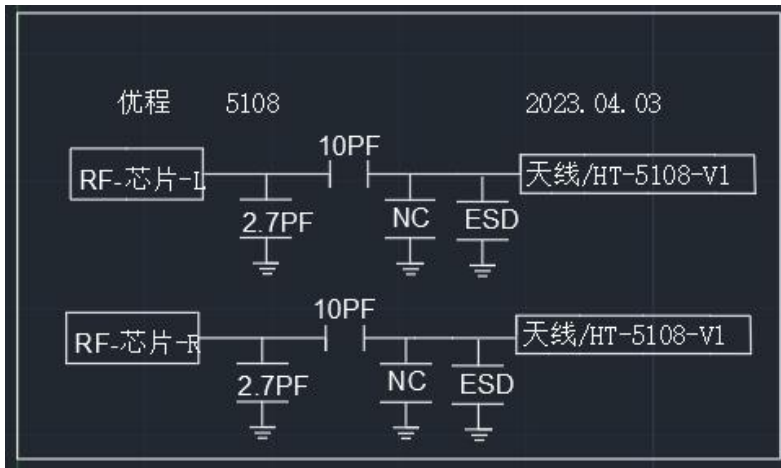
3-2 Passive S11 parameter

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



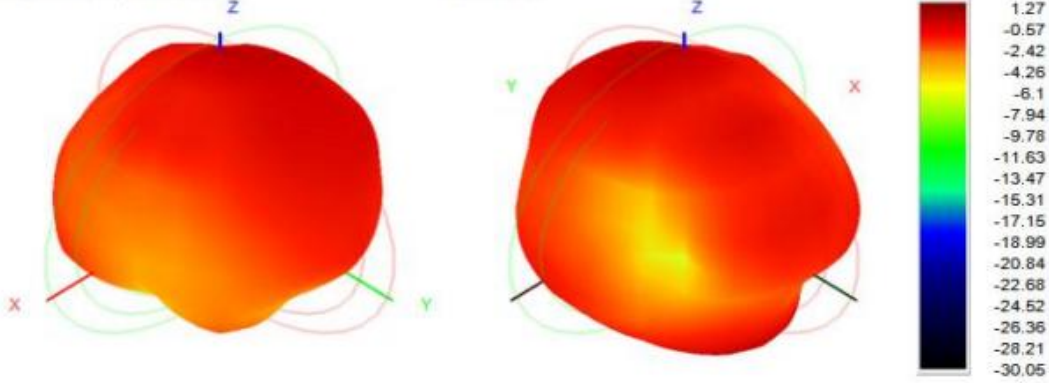
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	28.59	1.27
2410	29.70	1.29
2420	30.72	1.40
2430	32.38	1.70
2440	32.84	1.71
2450	32.75	1.94
2460	33.77	2.22
2470	33.37	2.30
2480	32.76	2.50
2490	31.96	2.44
2500	29.78	2.10

Test Result

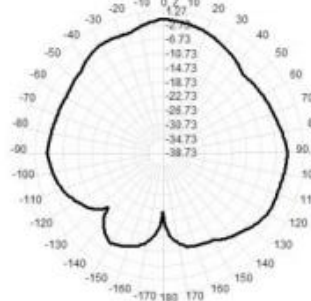
2D&3D — BT- ANT

2400.0MHz H+V, Eff: 28.6%

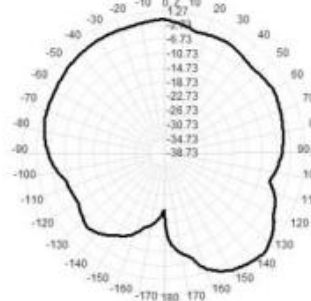
Back View



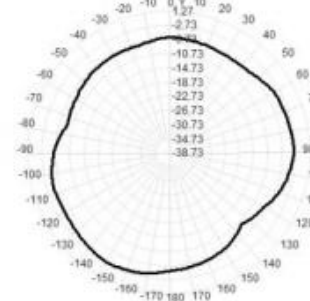
2400.0MHz Total(E1-XZ), Max=-1.05dBi



2400.0MHz Total(E2-YZ), Max=1.27dBi



Total(H-XY), Max=-3.27dBi, CrD=6.85

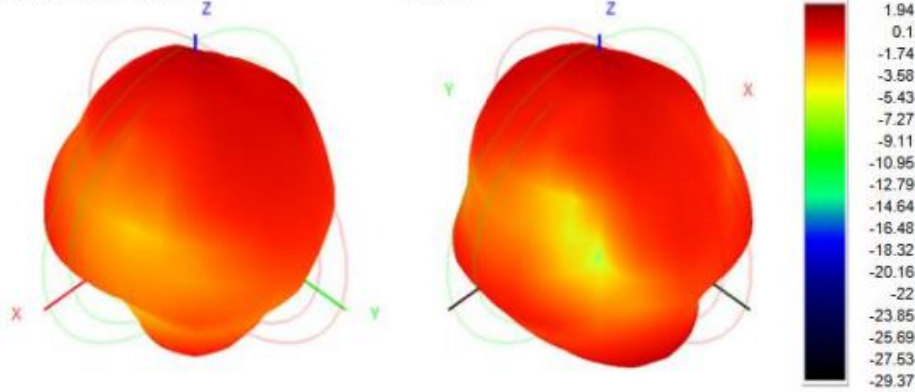


Test Result

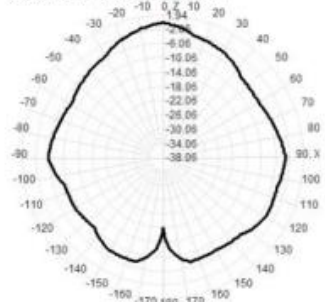
2D&3D — BT- ANT

2450.0MHz H+V, Eff: 32.8%

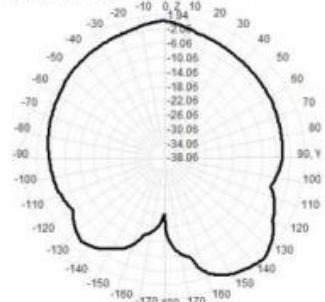
Back View



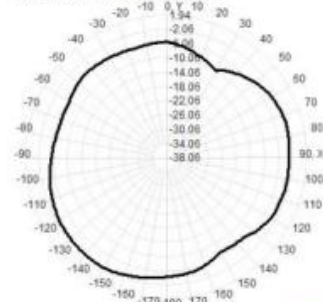
2450.0MHz Total(E1-XZ), Max=-0.18dBi



2450.0MHz Total(E2-YZ), Max=1.94dBi



Total(H-XY), Max=-2.44dBi, CrD=7.51

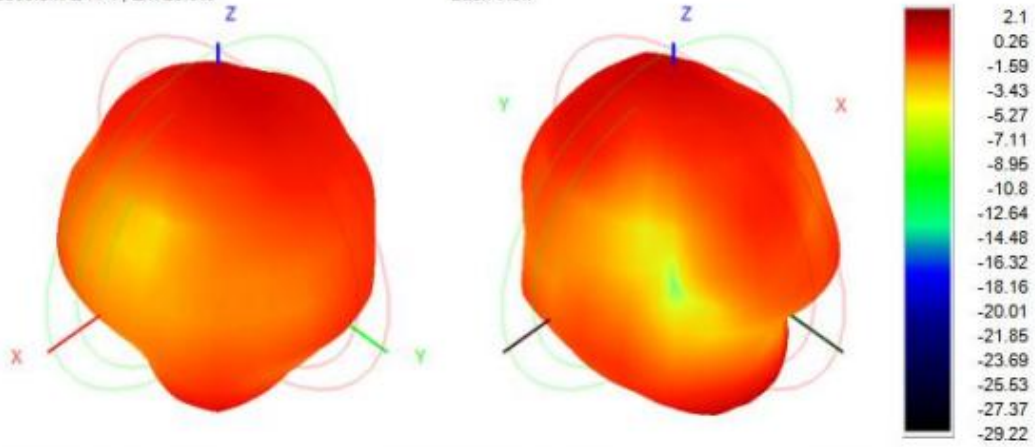


Test Result

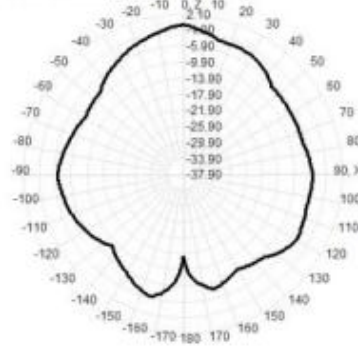
2D&3D — BT- ANT

2500.0MHz H+V, Eff: 29.8%

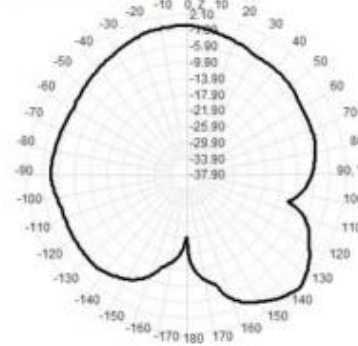
Back View



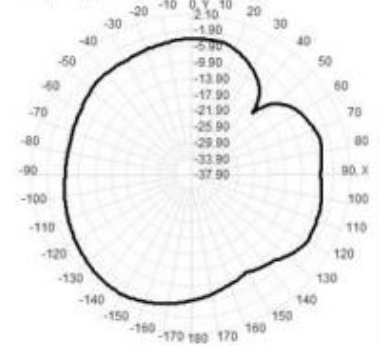
2500.0MHz Total(E1-XZ), Max=-0.54dBi



2500.0MHz Total(E2-YZ), Max=2.10dBi



Total(H-XY), Max=-3.40dBi, CrD=12.86



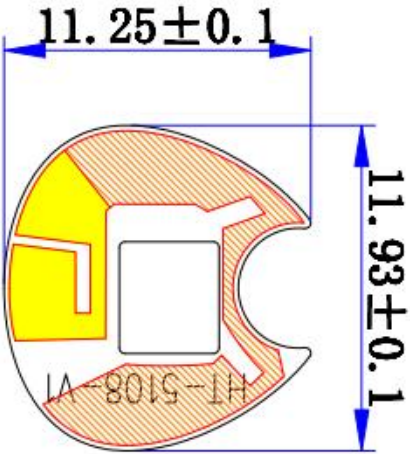
4. Mechanical Specification:

Mechanical Configuration (Unit: mm)

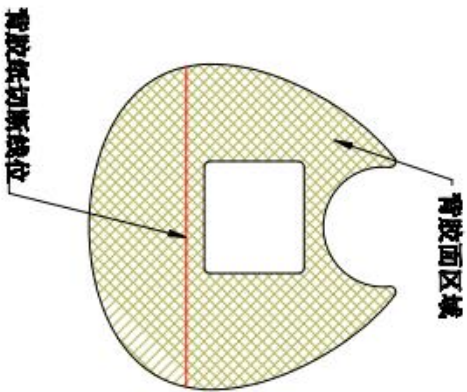
The appearance of the antenna is according to drawing Figure 8

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

正面



反面



- 技术要求**
1. 需符合欧盟RoHS, REACH, 具体详见附录;
 2. 单轨用量: 1 PCS

3. A面PC铜箔走线部分, B面代表 3M 9471 胶纸部分;
4. FPC 总厚度为0.11~0.15mm(不包括背胶离型纸, 胶纸点需做沉金3 μm工艺)
5. 请使用P11对半基材, 电解铜, 表面黑色油墨, 丝印白色字符
6. 油墨不含银或金属离子, 表面UV耐摩擦紫外光;
7. 高温抗氧化性: 200°C、40分钟后, 铜箔表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;

1	2	3	4	5	6
DATE	DATE	DATE	DATE	DATE	DATE

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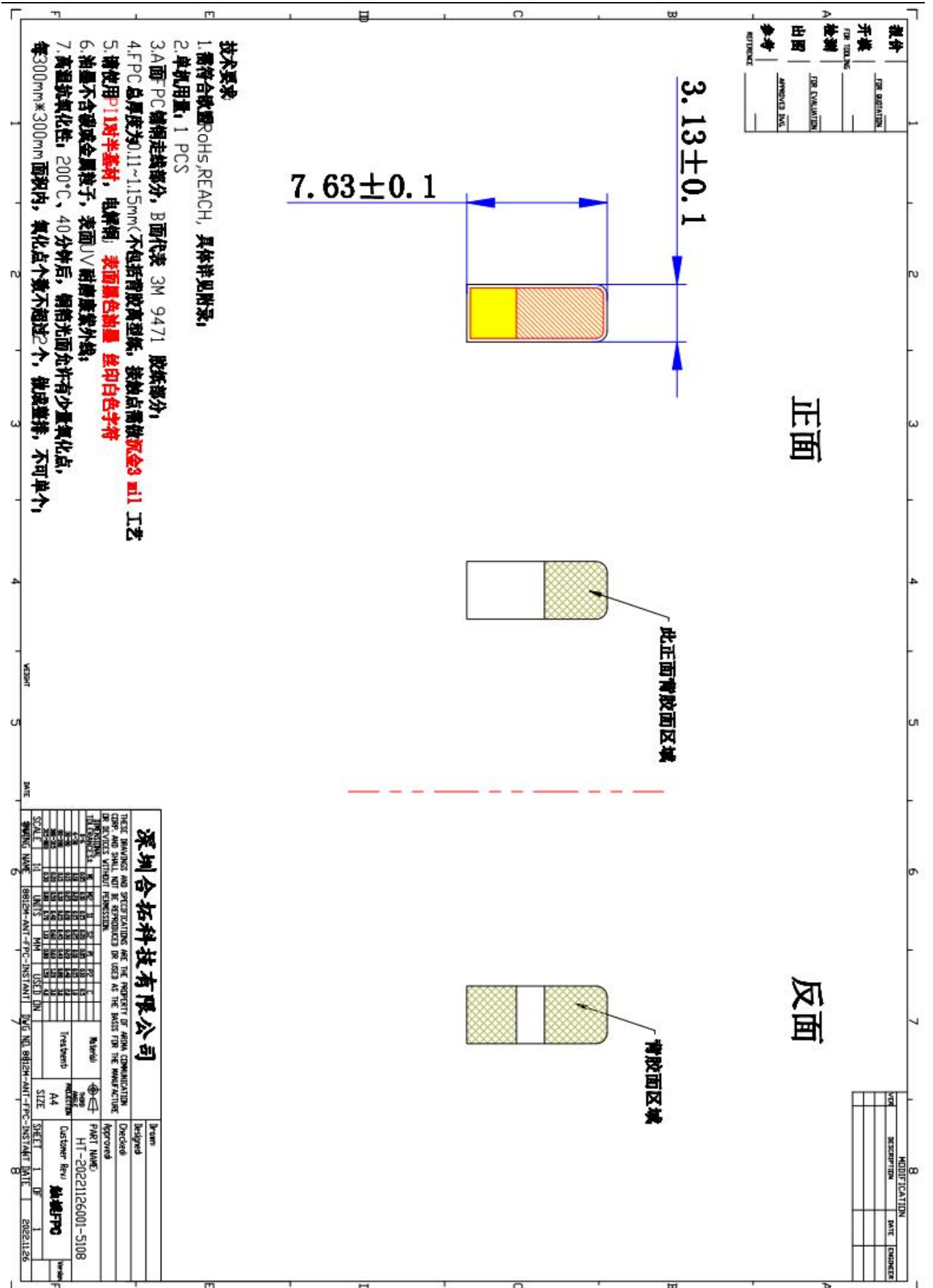
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REV	DESCRIPTION	DATE	ENGINEER

Material: **HT-20221126001-5108**

Customer Rev: **5108-ANT**

DATE: 2022.11.26



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PC铜箔走线部分, B面代表 3M 9471 胶纸部分;
4. FPC 总厚度为0.11~1.15mm(不包括背胶离型纸, 接触点需做镀金3 mil 工艺)
5. 请使用P1对半基材, 电镀铜, 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耐摩擦紫外光;
7. 高温抗氧化性: 200°C、40分钟后, 铜箔表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;