

1. Antenna picture

The report mainly provides the test status of the electrical properties parameters of the antenna is a BT Band . The antenna Picture and assembly are shown below.

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:

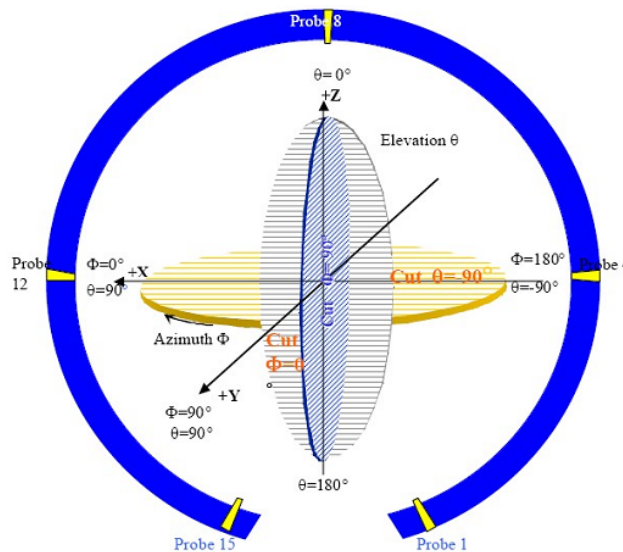


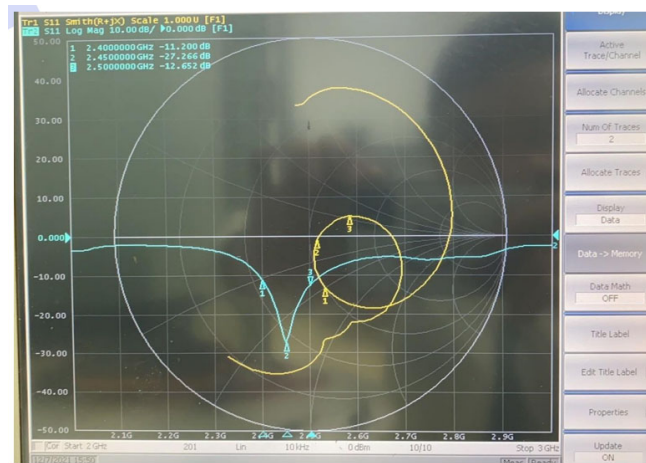
图 4 3D 微波暗室测试坐标系 (back view)

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



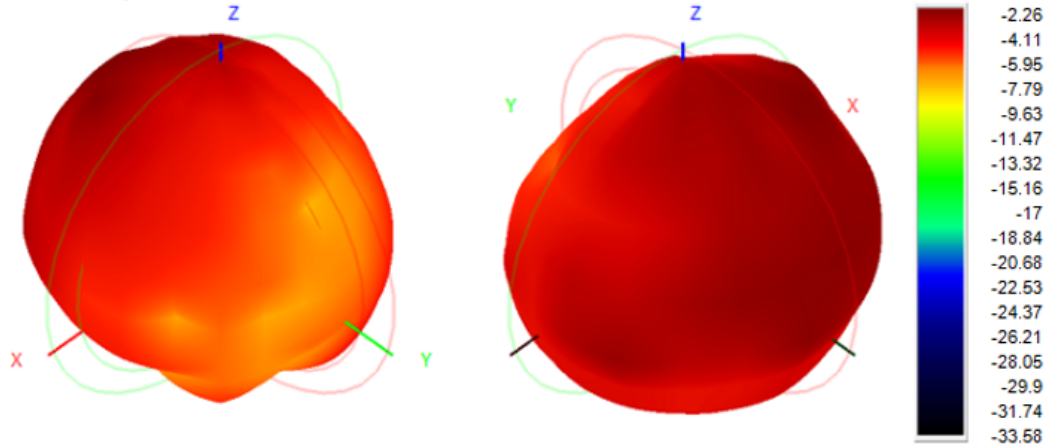
3-3 Antenna Matching Network

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	22.51	1.35
2410	24.90	1.28
2420	26.79	1.32
2430	29.40	1.48
2440	30.32	1.58
2450	31.15	1.56
2460	29.86	1.38
2470	29.30	1.42
2480	25.82	1.52
2490	25.62	1.37
2500	23.17	1.29

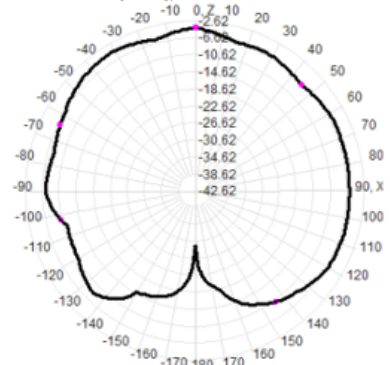
2D&3D BT- ANT

2400.0MHz H+V, Eff: 22.5%

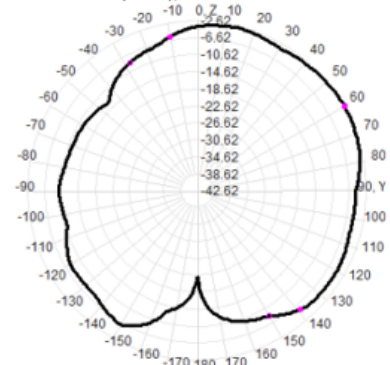
Back View



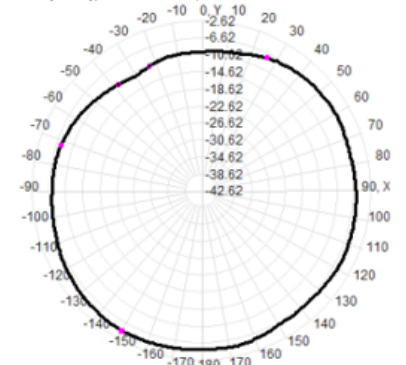
2400.0MHz Total(E1-XZ), Max=-4.31dBi



2400.0MHz Total(E2-YZ), Max=-2.62dBi



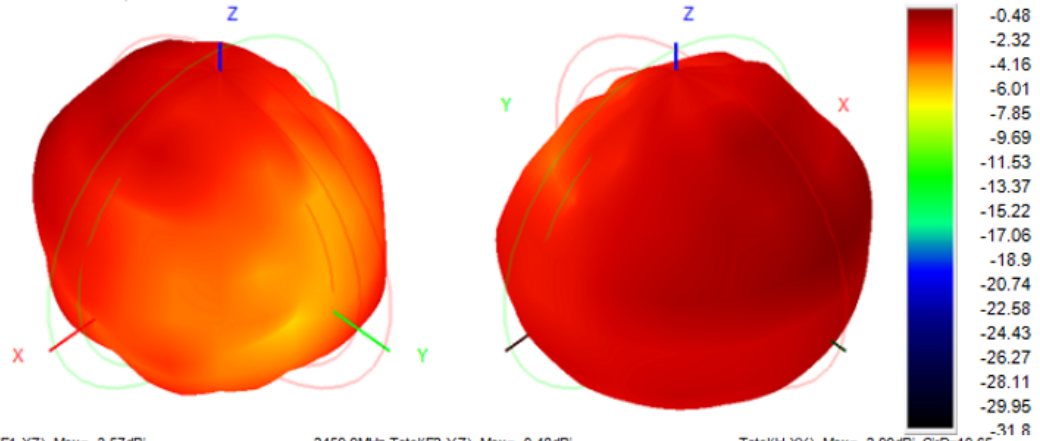
Total(H+XY), Max=-4.83dBi, CirD=6.76



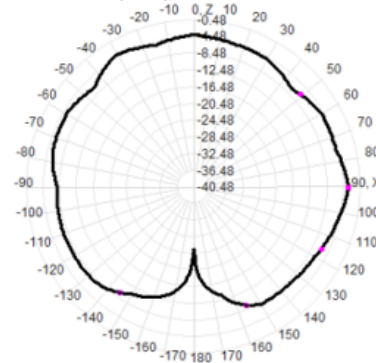
2D&3D BT- ANT

2450.0MHz H+V, Eff: 31.2%

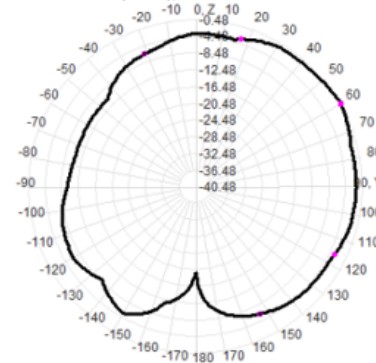
Back View



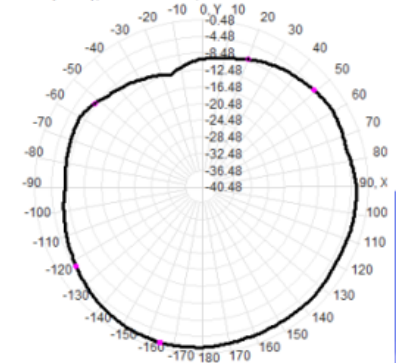
2450.0MHz Total(E1-XZ), Max=-3.57dBi

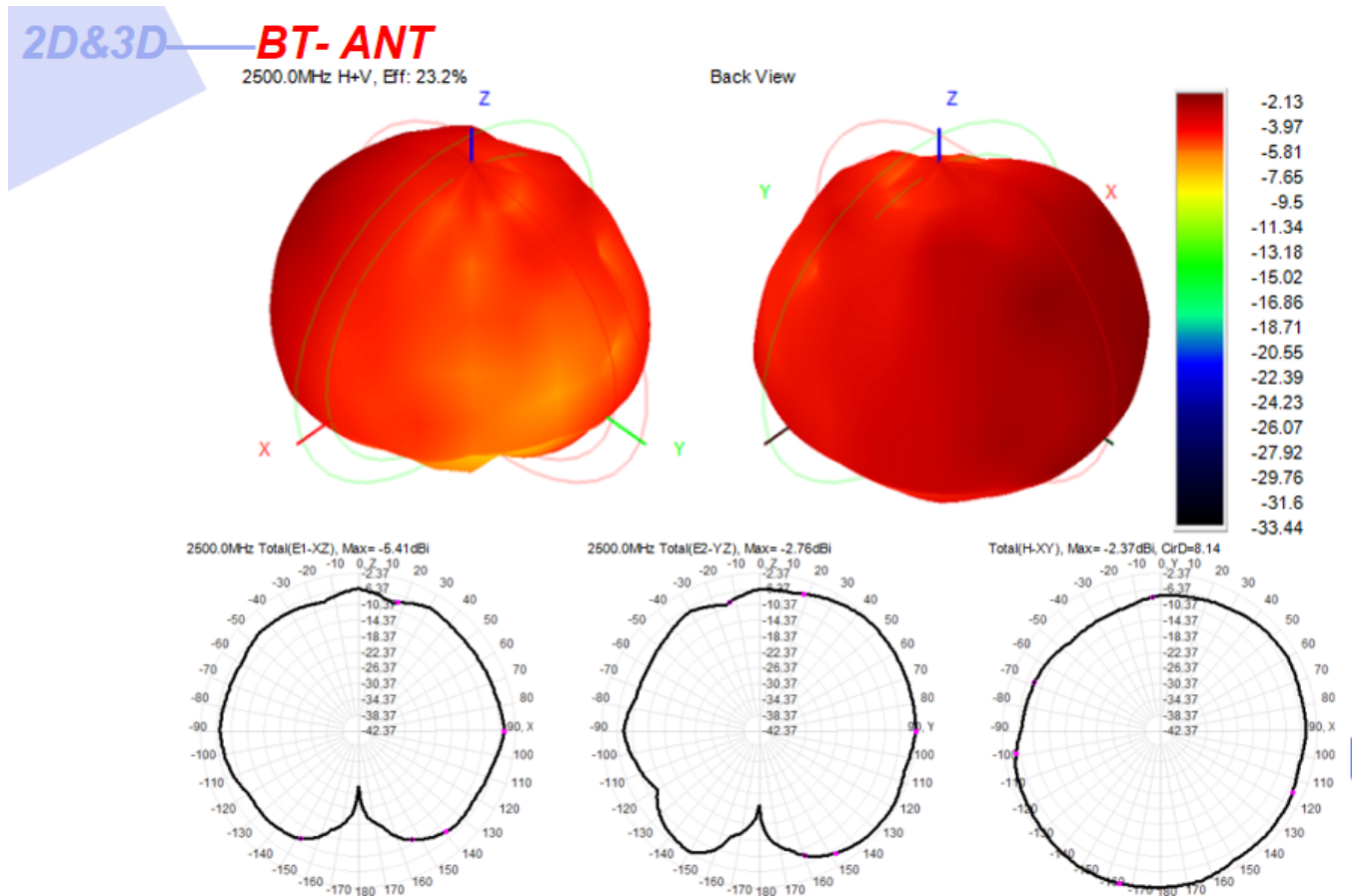


2450.0MHz Total(E2-YZ), Max=-0.48dBi



Total(H+XY), Max=-2.00dBi, CirD=10.65





4. Mechanical Specification:

Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 8

1	2	3	4	5	6	7	8
RoHS Reach 红 UL3302/26AWG 24.6±1 1.0±0.2 PVC OD=0.8 7*0.12TS							