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1. Antenna picture

The report mainly provides the test status of the electrical properties parameters of **TRD-QCC-BT**. The **TRD-QCC-BT** antenna is a **BT/2. 4G/2400-2500MHz** 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:

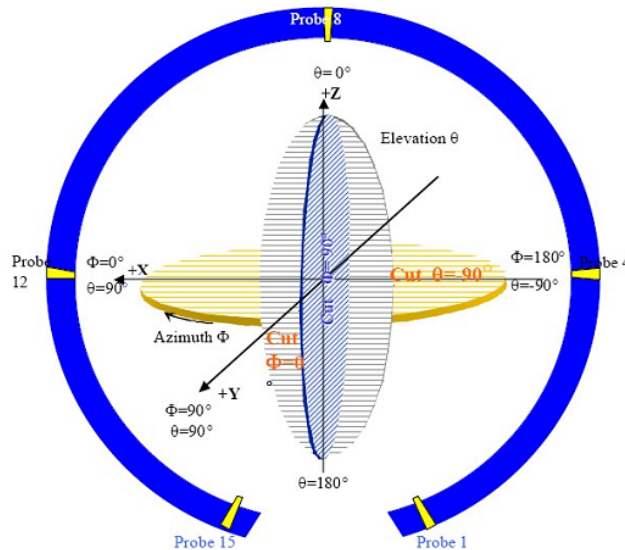
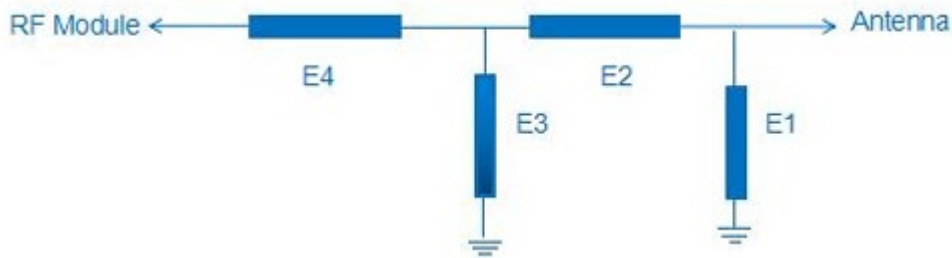


图 4 3D 微波暗室测试坐标系 (back view)

3. Electrical Specification

3.1 Antenna Matching Circuit

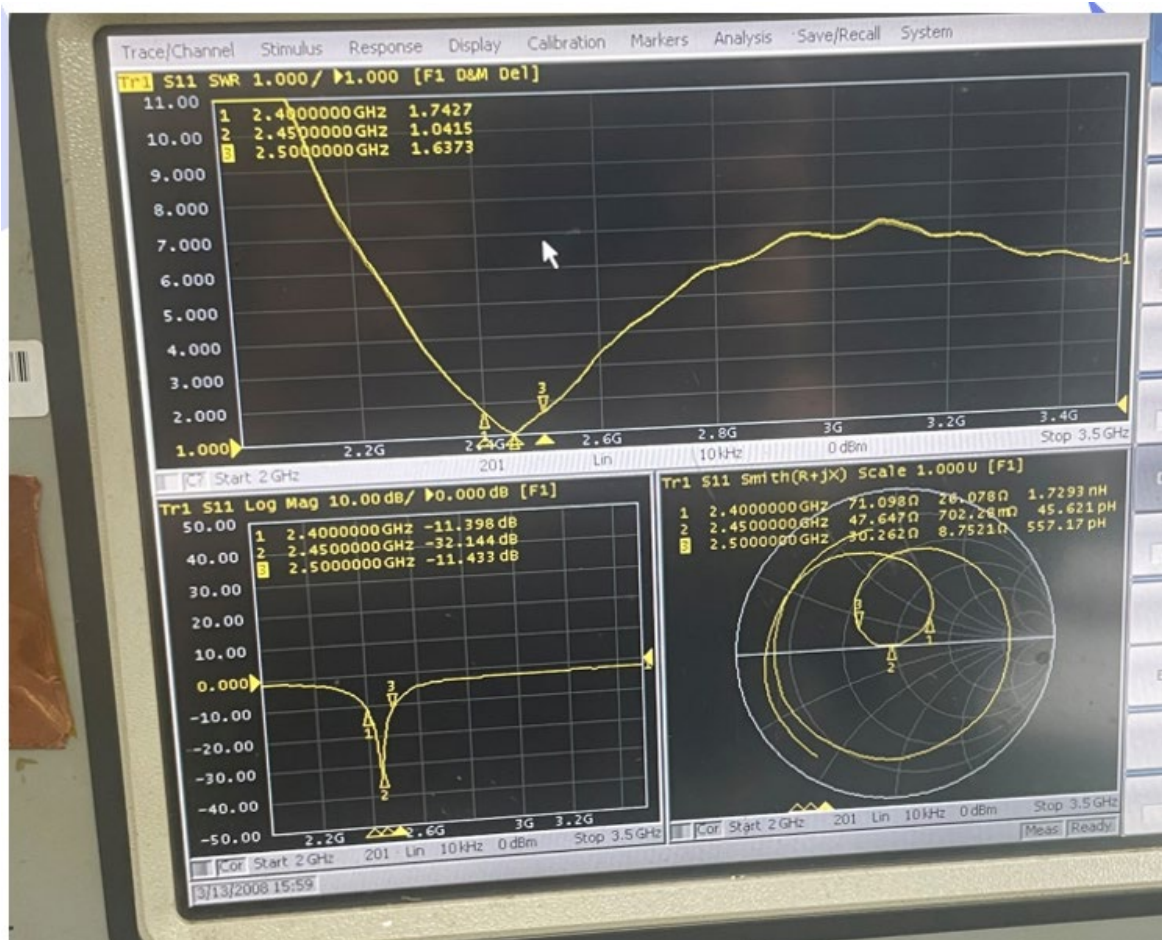


The antenna matching circuit is the original one on the motherboard and has not been modified.

3-2 Passive S11 parameter

Measuring Method is a 50 Ω 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.

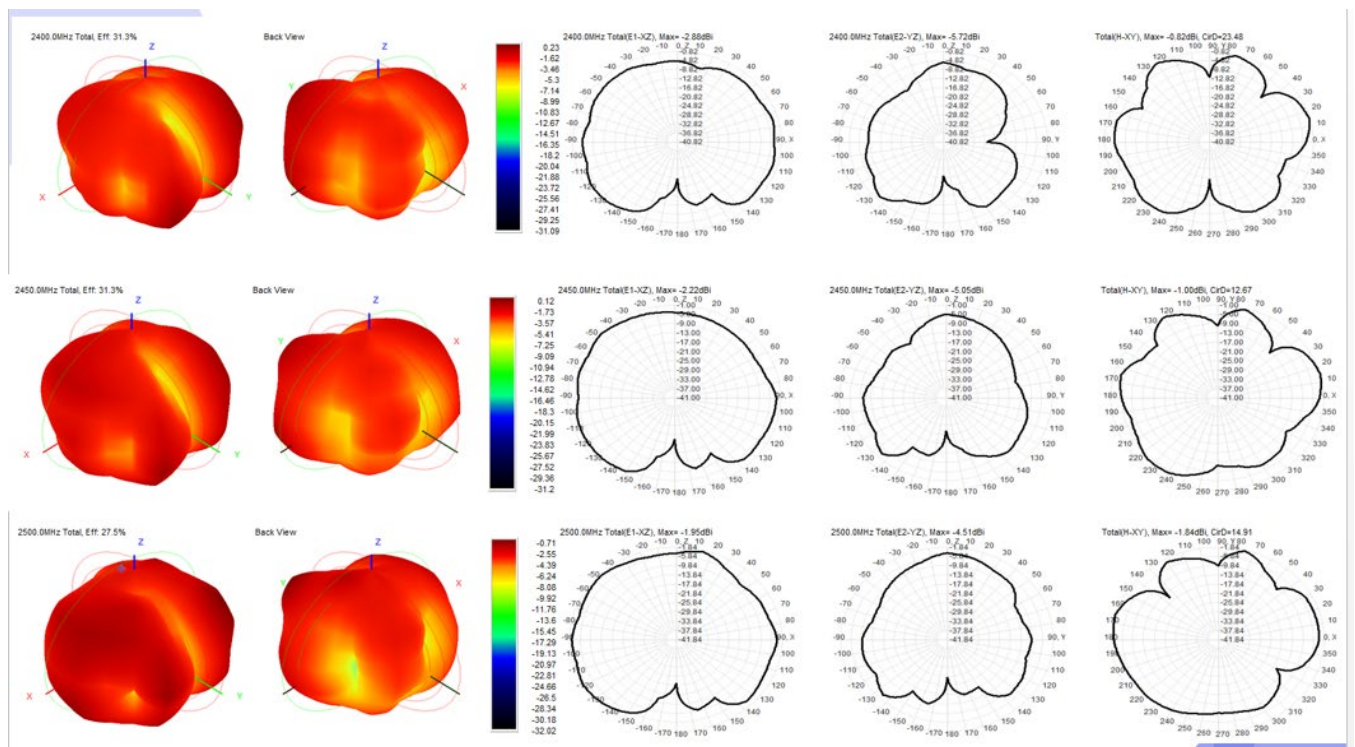
3-3 Antenna Matching VSWR



4 Antenna Test

4.1 Antenna Efficiency

BT											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	0.23	0.42	0.26	0.26	0.06	0.12	-0.38	-0.46	-0.67	-0.96	-0.71
Efficiency (%)	36.27	35.95	35.77	35.93	34.84	35.26	34.15	33.27	32.78	32.06	32.48



5. Mechanical Specification:

Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure

5.1 Antenna Components

The BT antenna mainly consists of an FPC antenna and a coaxial cable.

5.2 Engineering Drawings

