

Lestina International LTD (SZ office)

Product Approved Sheet (NY-MBD3251-BT-V1)

(MBD3251)

Customer Name MAXMADE

Customer Model MBD3251

Brand Self-produced NY-MBD3251-BT-V1

Type explanation PIFA antenna

Approval Team

Formulate	Check	Ratify	Acknowledge the book completion time
Zhong ming	Hu Zhilin	D0ting	2026.01.26

(MAXMADE) Judgment Audit Team

Acknowledgement Number Proving time

acknowledge	check	ratify	Acknowledge the book completion time
Project Review ☐ Three acknowledgements ☐ Specifications/drawings ☐ examining report ☐ Specimen PCS ☐ Safety standard ☐ HSF			
Appraisal report ☐ Accept ☐ Conditional acceptance ☐ Refuse			

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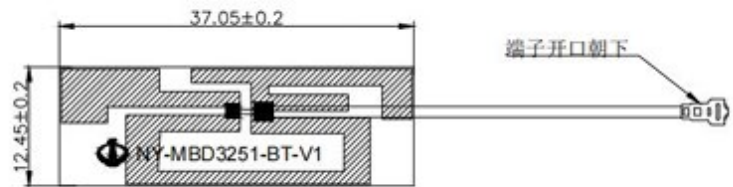
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Items	Date	Version	The revised notes	Notes
1	2026.01.26	A0	For the first time	

1. Antenna picture

The report mainly provides the test status of the electrical properties parameters of **NY-MBD3251-BT-V1**. The **NY-MBD3251-BT-V1** 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:

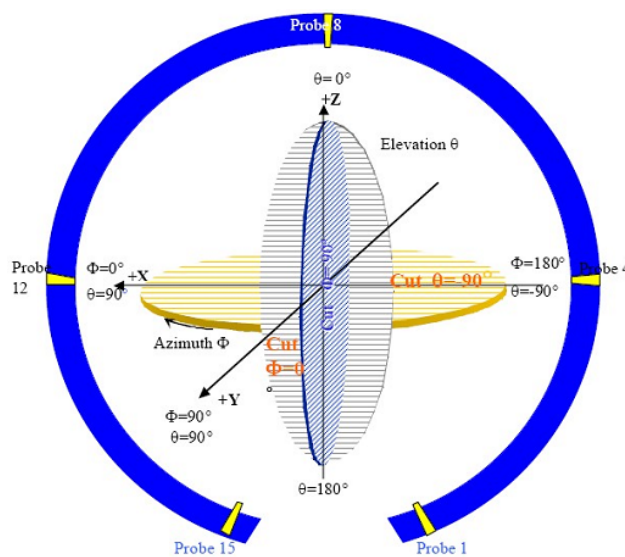
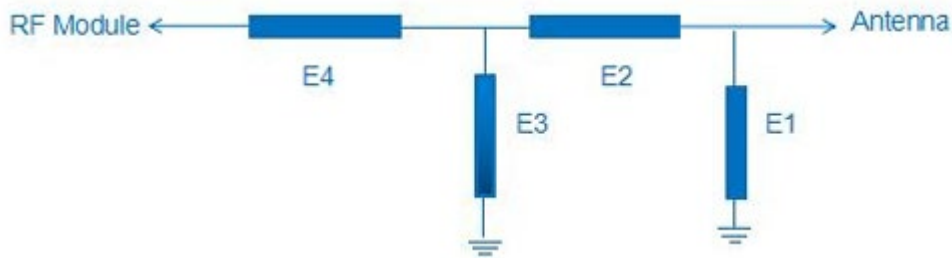


图 4 3D 微波暗室测试坐标系 (back view)

3. Electrical Specification

3.1 Antenna Matching Circuit

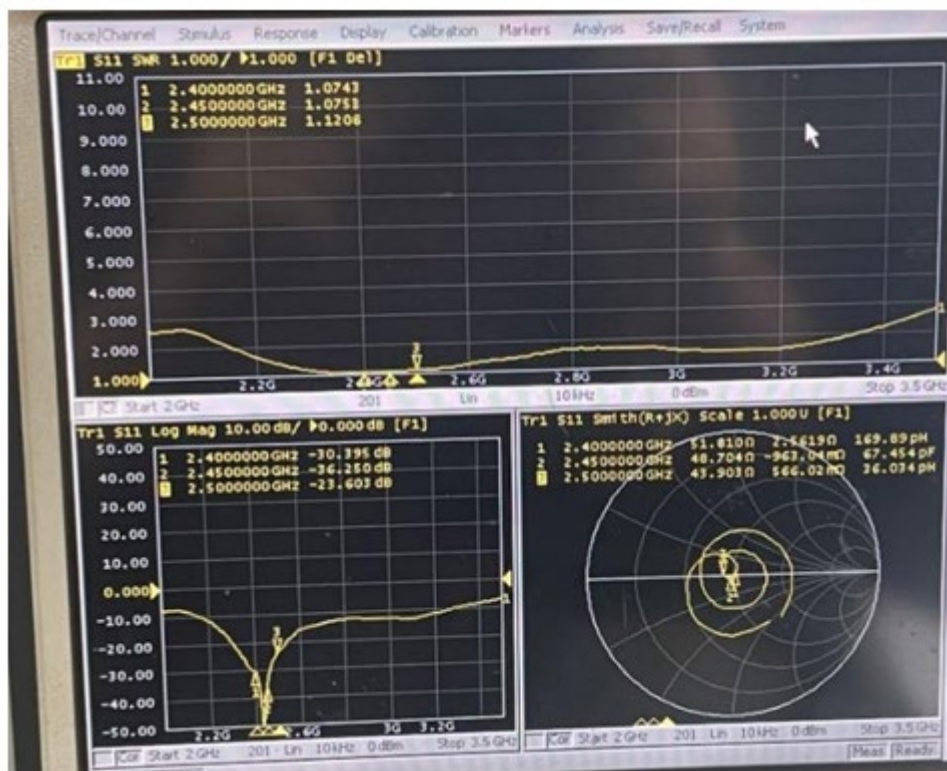


The antenna matching circuit is the original one on the motherboard and has not been modified.

3-2 Passive S11 parameter

Measuring Method is a 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.

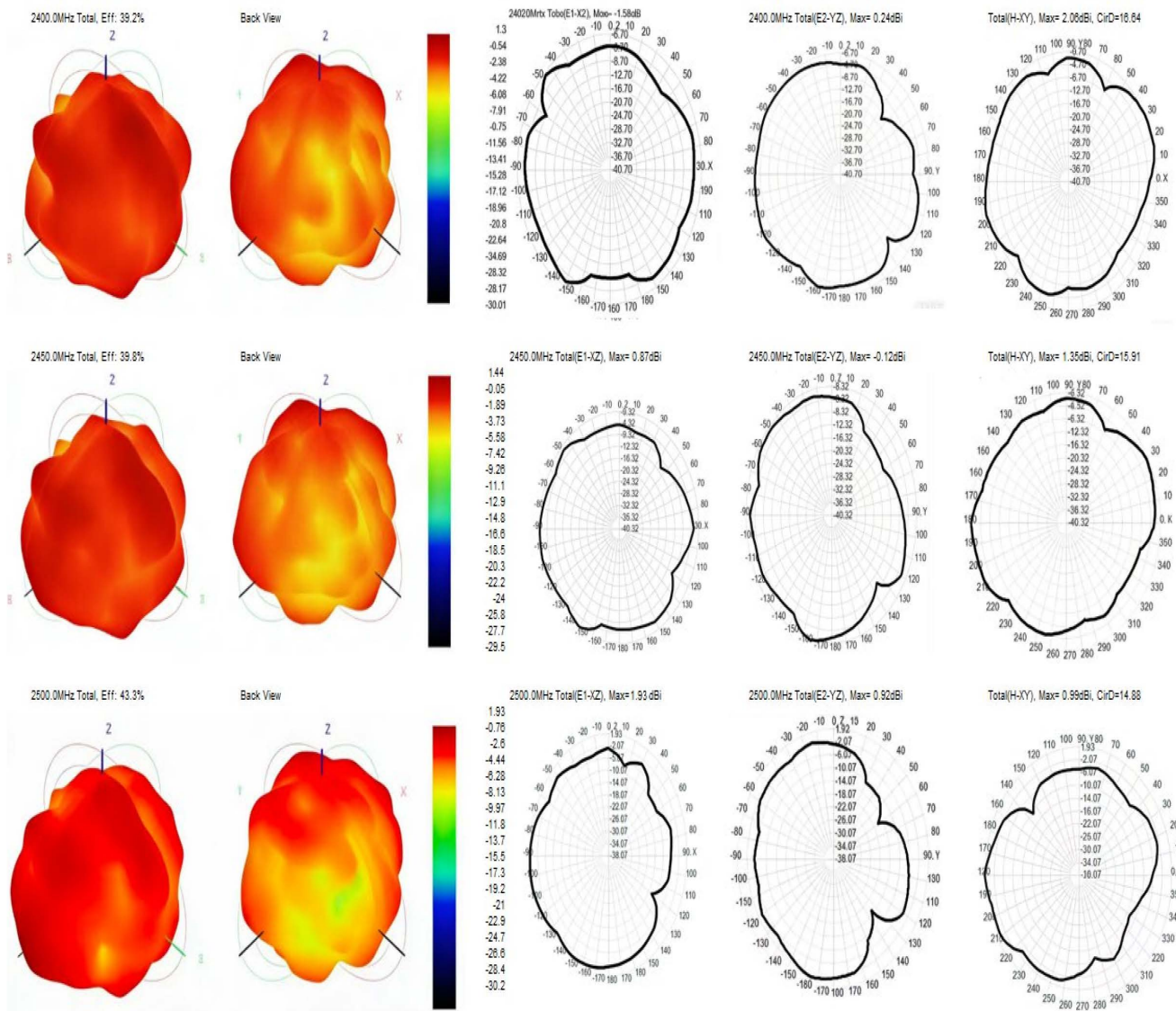
3-3 Antenna Matching VSWR



4 Antenna Test

4.1 Antenna Efficiency

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)	1.30	1.66	1.55	1.37	1.29	1.44	1.51	1.67	1.51	1.40	1.93
Efficiency (%)	39.29	40.13	39.46	39.26	39.23	39.82	40.25	40.42	39.11	40.83	43.31



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

