

Sample Acknowledgment Letter

Sample Approved Sheet

Yaxin Communications (M23-BT-V1) Admission Statement

Customer Name: Guangzhou Actioner Technology Co., Ltd.

Customer Name: Guangzhou Actioner Technology Co., Ltd.

Customer Model M23

Customer Model M23

Brand: M23-BT-V1, manufactured by Yaxin Communications

Yaxin Communications Assessment and Review Team

work out	examine and verify	ratify	Time of completion for the acknowledgment letter
Jiang Yanan	Wu Shouping	Wu Shoulan	2025.10.15

Actor (Customer) Identifies Review Team

Admission Letter Number_____Time for submitting the acknowledgment letter

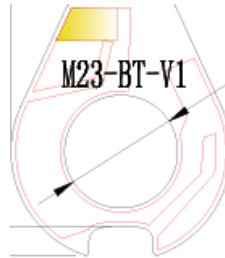
admit	examine and verify	ratify	Recognition Date
Items to be reviewed: ☐ Three letters of recognition ☐ Specifications/drawings ☐ Test reports ☐ Sample parts (PCS) ☐ Safety compliance documents ☐ HSF documentation			
Review Result: ☐ Accepted ☐ Conditionally Accepted ☐ Rejected			

Confidential Information

Item Number	date	order of the edition	revision note	remarks
1	2025.10.15	A0	initial issue	

1. Antenna picture

The report mainly provides the test status of the electrical properties parameters of **M23-BT-V1**. The **M23-BT-V1** 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:

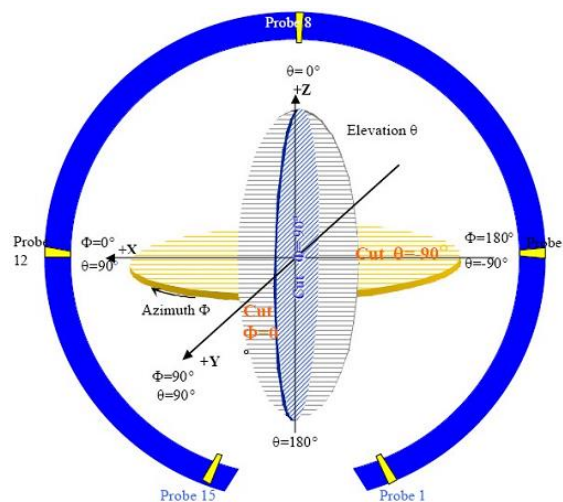


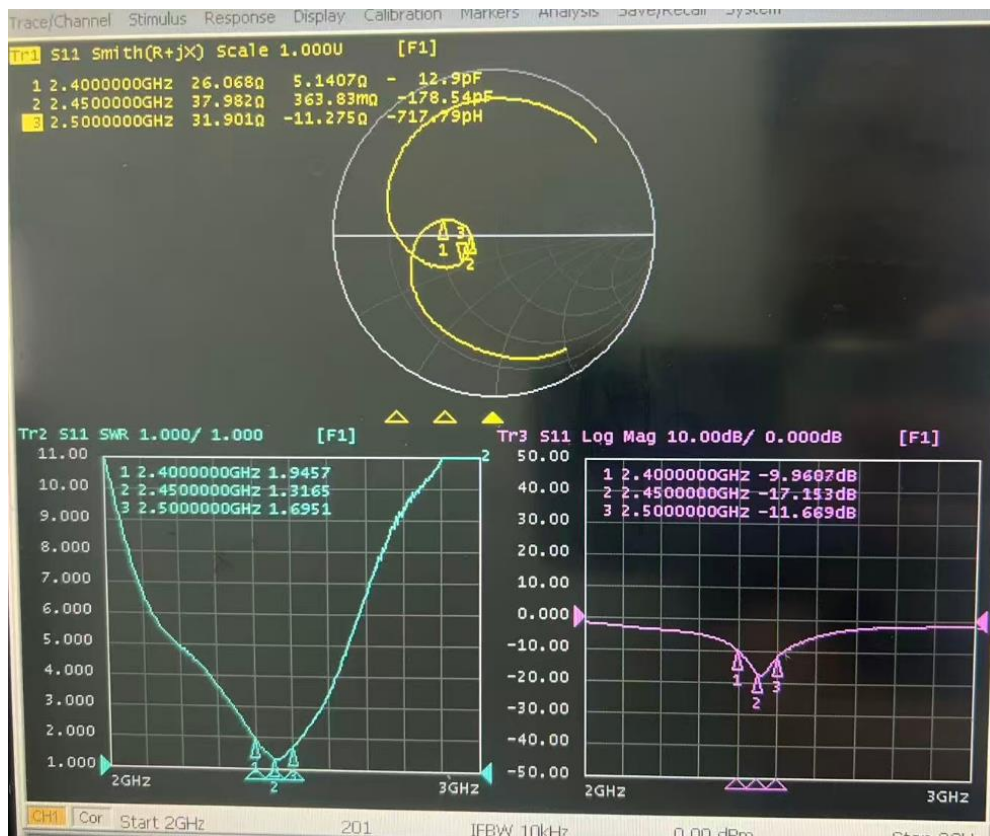
图4 3D 微波暗室测试坐标系(back view)

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.

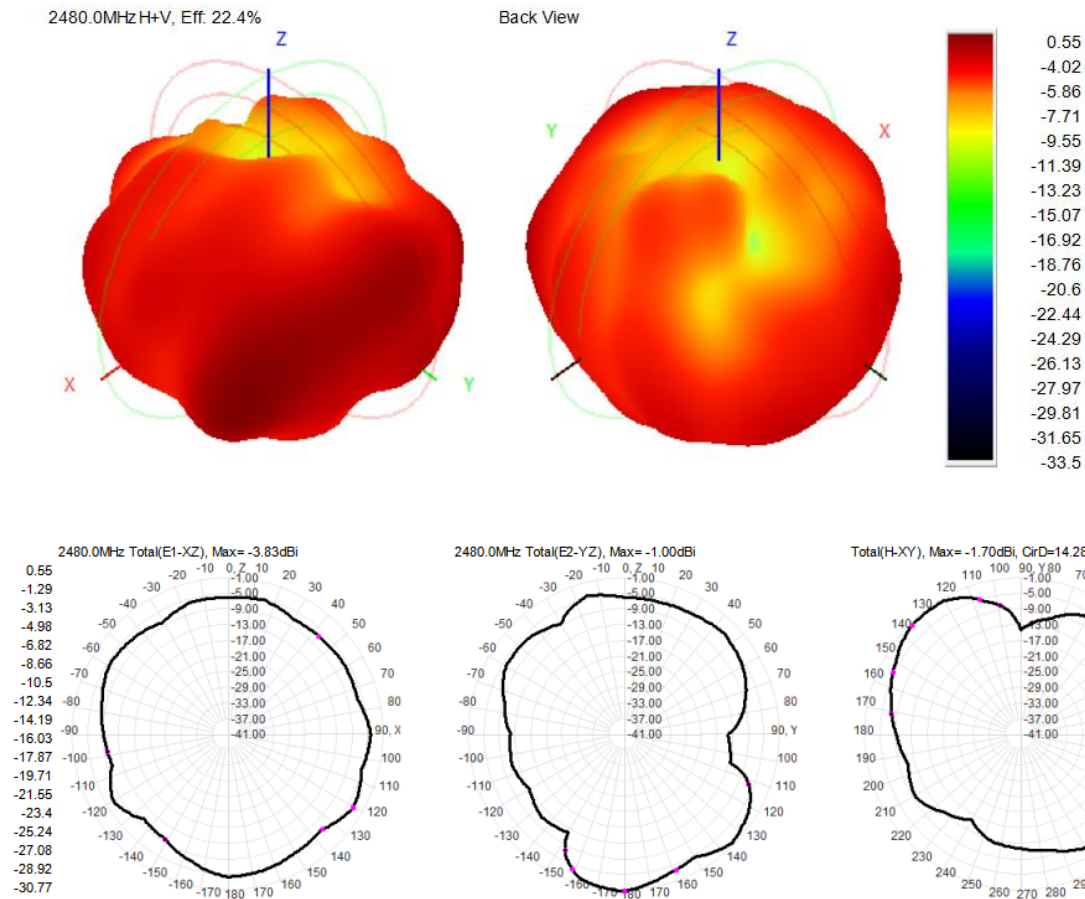


VSWR

Matching Circuit: Common Matching and Common Antenna on Both Left and Right Sides



3-3 2D/3D field pattern diagram Unit:dBi



3-4 Passive efficiency & Gain

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
Efficiency (dBi)	-8.65	-8.16	-7.35	-6.70	-6.20	-5.73	-5.60	-5.32	-5.27	-5.38	-5.47
Gain (dBi)	-2.00	-1.45	-0.71	-0.21	0.13	0.41	0.35	0.52	0.55	0.41	0.22
Efficiency (%)	13.66	15.29	18.40	21.36	23.96	26.71	27.52	29.36	29.73	29.00	28.39
Directivity (dB)	6.65	6.71	6.64	6.49	6.33	6.15	5.95	5.85	5.82	5.78	5.68
Peak Gain Position (Theta)	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Peak Gain Position (Phi)	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00
Efficiency ThetaPol (%)	4.79	5.53	6.69	7.67	8.31	8.97	8.98	9.46	9.67	9.73	9.85
Efficiency PhiPol (%)	8.86	9.75	11.72	13.69	15.65	17.75	18.55	19.89	20.07	19.27	18.54
Upper Hem. Efficiency (%)	6.01	6.75	8.08	9.31	10.40	11.60	12.02	12.87	12.99	12.68	12.51
Lower Hem. Efficiency (%)	7.64	8.54	10.32	12.05	13.56	15.11	15.51	16.49	16.74	16.31	15.88

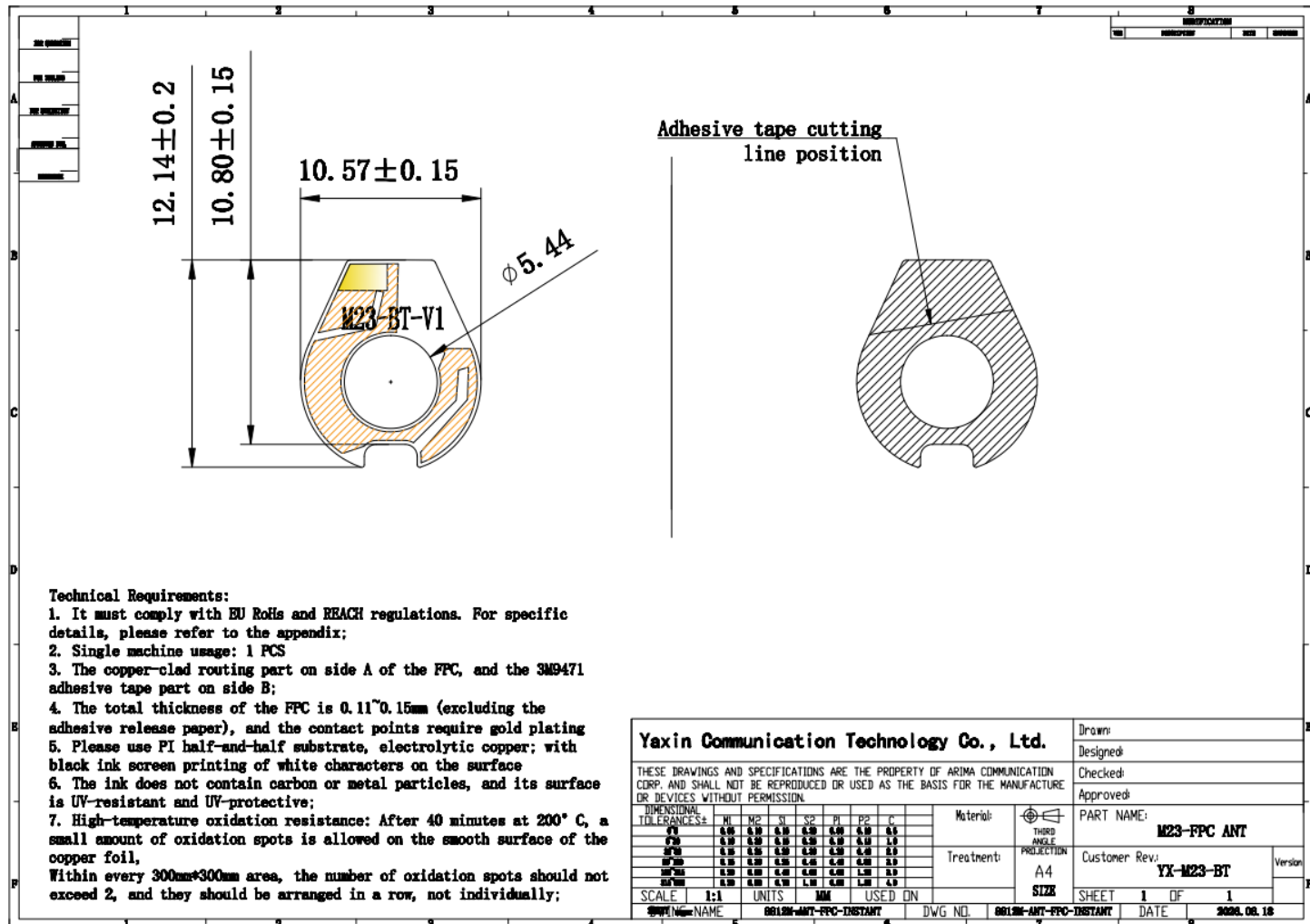
3-5 OTA active

FS			BT TEST		
L			FS		
BT TEST			L		
CH	TRP	TIS			
0	4.48	-88.41			
39	5.73	-89.25			
78	6.35	-89.78			
BH			BT TEST		
L			BH		
BT TEST			L		
CH	TRP	TIS			
0	2.05	-85.15			
39	2.21	-86.37			
78	3.62	-86.44			

FS			BT		
TEST			R		
FS			BT		
TEST			R		
CH	TRP	TIS			
0	5.12	-88.79			
39	6.25	-89.69			
78	6.89	-89.75			
BH			BT		
TEST			R		
BH			BT		
TEST			R		
CH	TRP	TIS			
0	2.38	-85.65			
39	2.96	-87.35			
78	3.75	-87.41			

4. Mechanical Specification:

Mechanical Configuration (Unit: mm) he appearance of the antenna is according to drawing Figure 10



Address:

Shenzhen Yaxin Communication Technology Co., Ltd.

309, Building B12, Yintian Industrial Zone, Xixiang Street, Bao'an District, Shenzhen City, Guangdong Province