

Shenzhen Yunzhishang Electronics Co., Ltd

Antenna Testing Report

Customer	Yayu Technology	Specs	AH18901
Part Number	YZS006-AH189-021-A0	Frequency Band	BT2.4G
Color	black	Edition	REV:A0
Salesperson	JIANG TAO	Design	
Structure	QIN YUN LIN	Confirm	
Date	2025/08/21	Signing Date	
Customer confirmation:			
Join hands to create the future			

Catalogue

一、Product specifications

二、Electrical performance

1.Specification standards

2.Matching circuit of antenna

三、Parameter testing

1.Test settings

2.Test result

四、Settings for active testing

1.Testing site

2.Test result

3.Environmental treatment

五、Suggestion and Conclusion

六、Structural drawings

七、Packaging method

一、Product specifications

The report mainly provides parameter testing of AH18901 antenna performance. The AH18901 antenna is a Bluetooth antenna.(As shown in Figure 1 below)

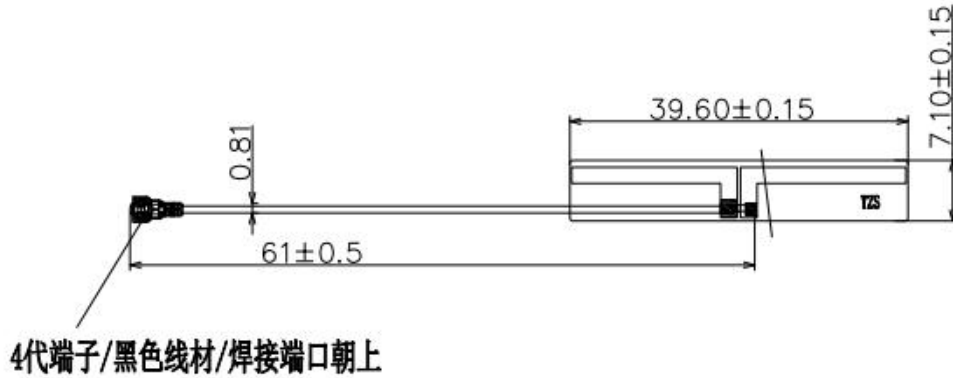


Figure 1 AH18901antenna

二、Electrical performance

1.Specification standards

The AH18901 antenna operates in the frequency range of 820-2700 MHz, where resonance occurs.

2.Matching circuit of antenna

Structure of antenna: FPC+coaxial line

(Matching circuit)

No changes made

三、Parameter testing

1.Test settings

VSWR 测试装置依次连接为:

E5071B 网络分析仪 → 50 欧姆的同轴 Cable → 110mm 长的铜管 → 测试治具

Processing of test fixture: Use a hard cable to lead out the SMA-J connector from the 50 ohm test

Company Address: 2nd Floor, East Block, Building 5, Yifenghua Industrial Zone, Huaning Road, Dalang Street, Longhua New District, Shenzhen

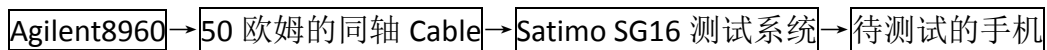
point of the antenna on the mobile phone PCB, connect it to a copper tube with a choke coil, and then connect other devices in sequence.

2.Test result

Business as usual。

四、Settings for active testing

The active testing device is sequentially connected as follows:



1.Testing site

Microwave darkroom: The testing frequency range is 400MHz-6GHz, the quiet zone range is 40cm circumference, and the reflectivity is less than -90 dB.

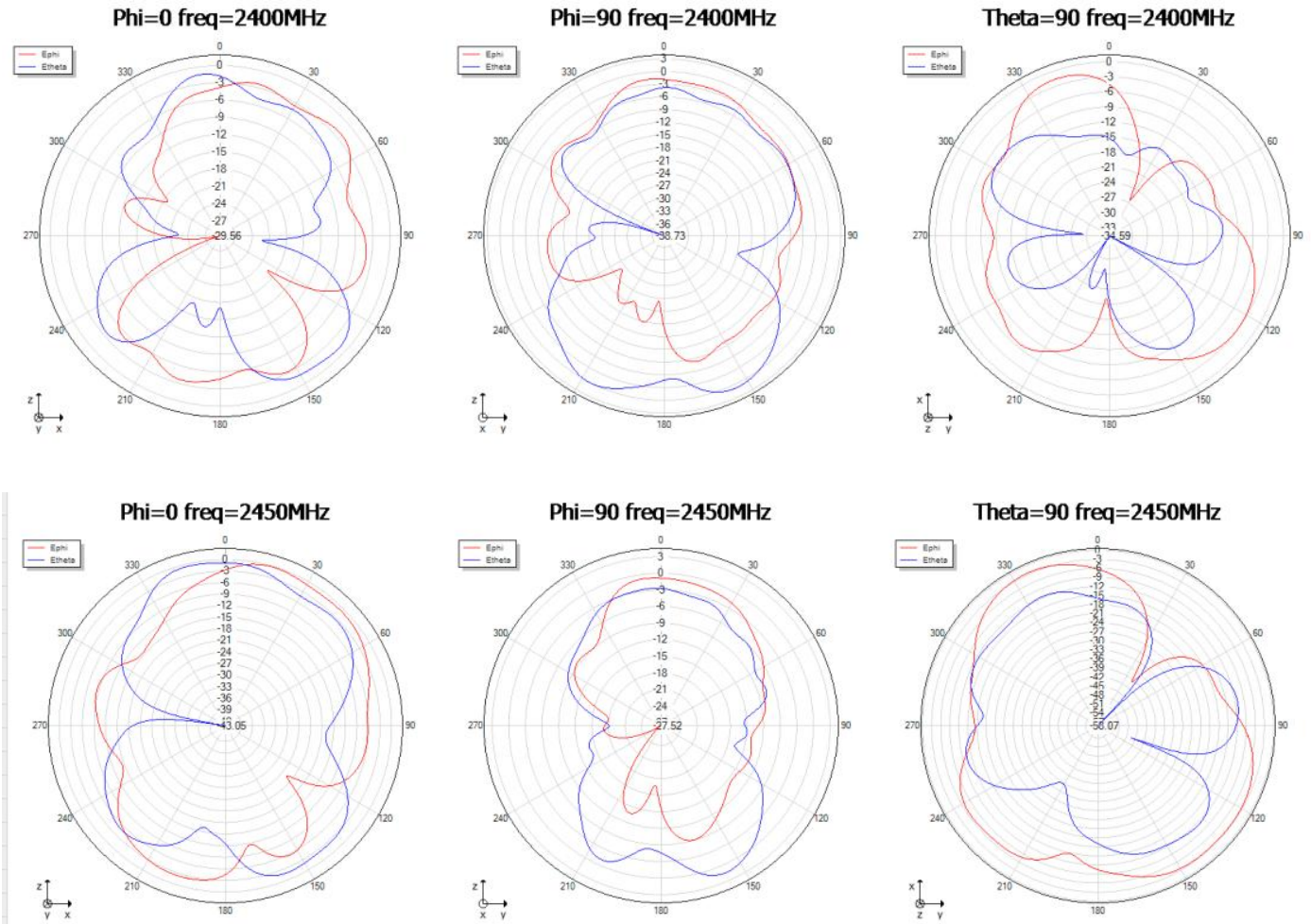
2.Test resul

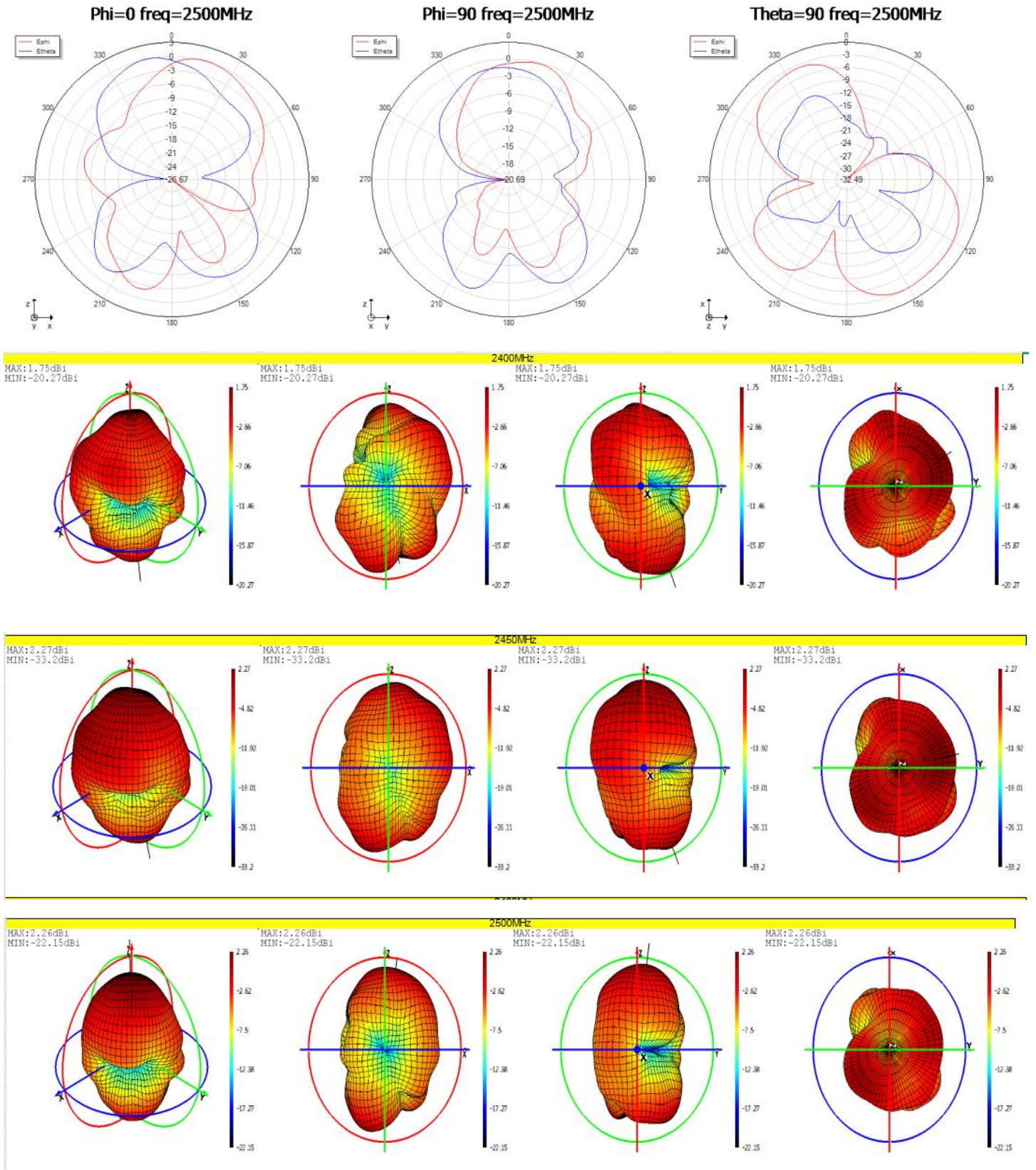
The maximum radiated power and maximum receiving sensitivity reflect the maximum power radiation value and optimal receiving performance of the antenna in the entire radiation space. TRP and TIS reflect the average radiated power and average receiving sensitivity of the antenna, which reflects the overall receiving performance of the antenna.

The following are the test results of AH18901:

 新益技术		深圳市新益技术有限公司 Tel：0755-82997688									
测试数据报告		地址：深圳市龙华区大浪街道颐丰华创新产业园5栋2楼									
软件版本：SNF V2.4.2 导出时间：2025/8/12 11:27:14											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	1.75	1.38	1.60	2.77	2.12	2.27	1.85	2.59	2.27	2.26	2.26
Efficiency (dB)	-3.62	-4.04	-4.48	-3.88	-4.18	-3.77	-4.20	-3.49	-3.63	-3.46	-3.50
Efficiency (%)	43.45	39.47	35.63	40.96	38.21	42.01	38.06	44.80	43.38	45.07	44.68
Plane: Phi=0	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Plane: Phi=90	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Plane: Theta=90	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500

2D/3D test chart:



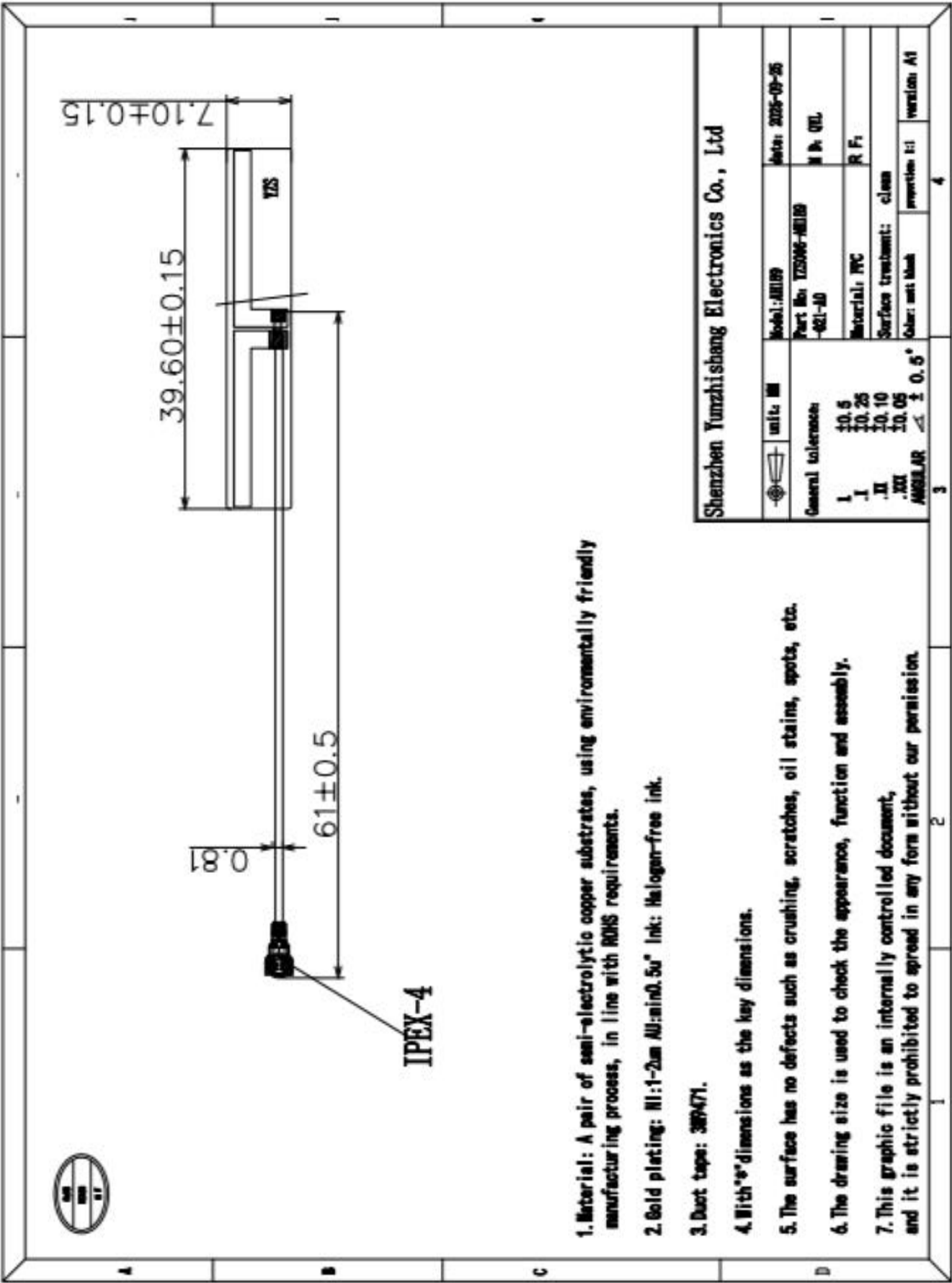


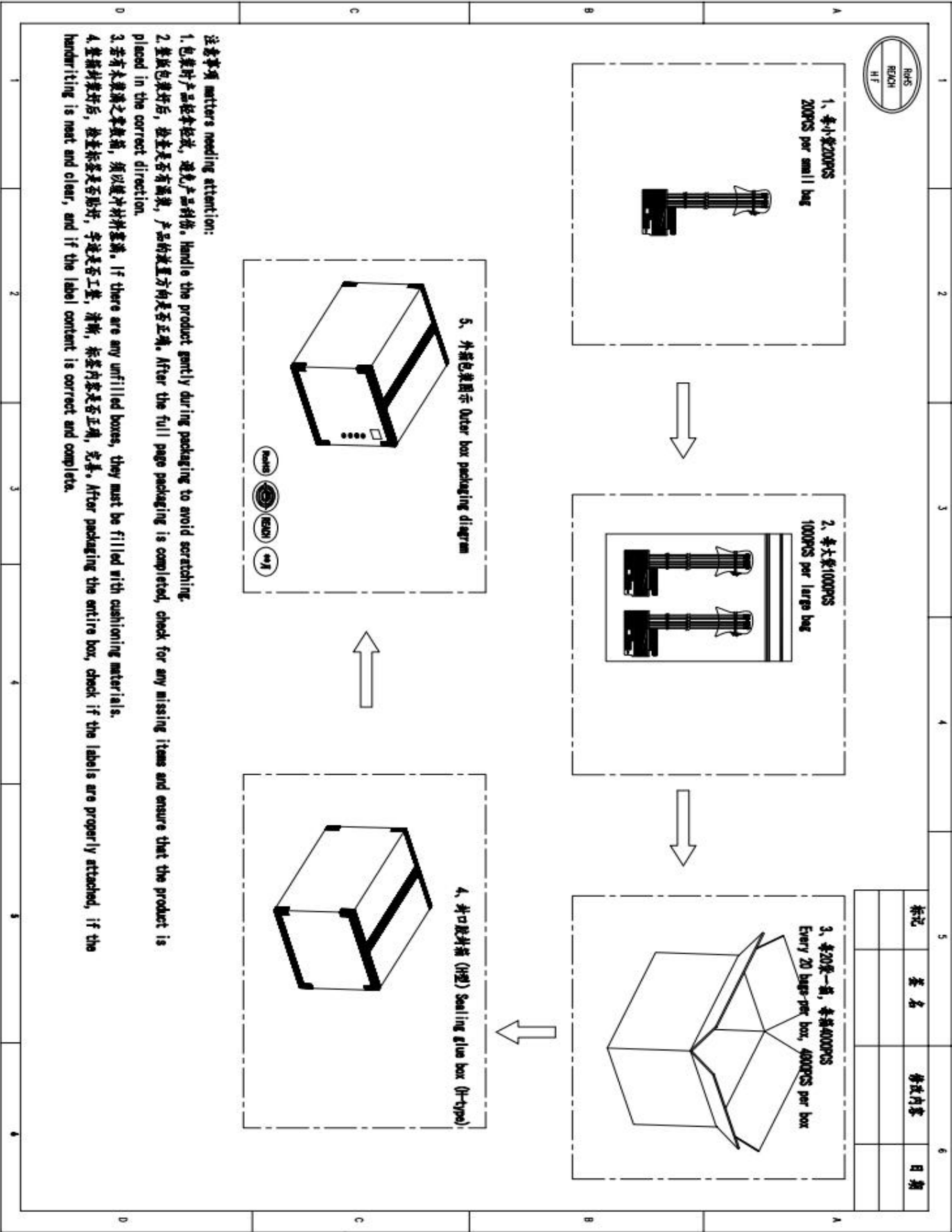
3. Environmental treatment

五、Suggestion and Conclusion

This report is based on the antenna electrical performance measured by the machine provided by the customer. Please carefully review it.

六、Structural drawings





Join Hands To Create The Future