

维海德 M2000S WiFi 天线规格承认书

Product Specifications for Approval

物料编号: WF4528B-1131R-240 (灰)

Customer Name: Vihade

机型: M2000S

Antenna Frequency Band:

Model: M2000S

WIFI 2.4G/5.8G

Version: R-A

制作日期: 2024-6-17

Production date: June 17, 2024

深圳锐锋电子技术有限公司研发			
Shenzhen Ruifeng Electronic Technology Co., Ltd. Research and Development			
结构: structure:	陈巍	射频: RF	符学荣
审核: check:	陈强	批准: ratify	陈华明
客户确认			
客户审核: client audit		客户批准: customer approval	

公司地址:深圳市宝安区福永镇重庆路新福工业园 B5 栋 4 楼

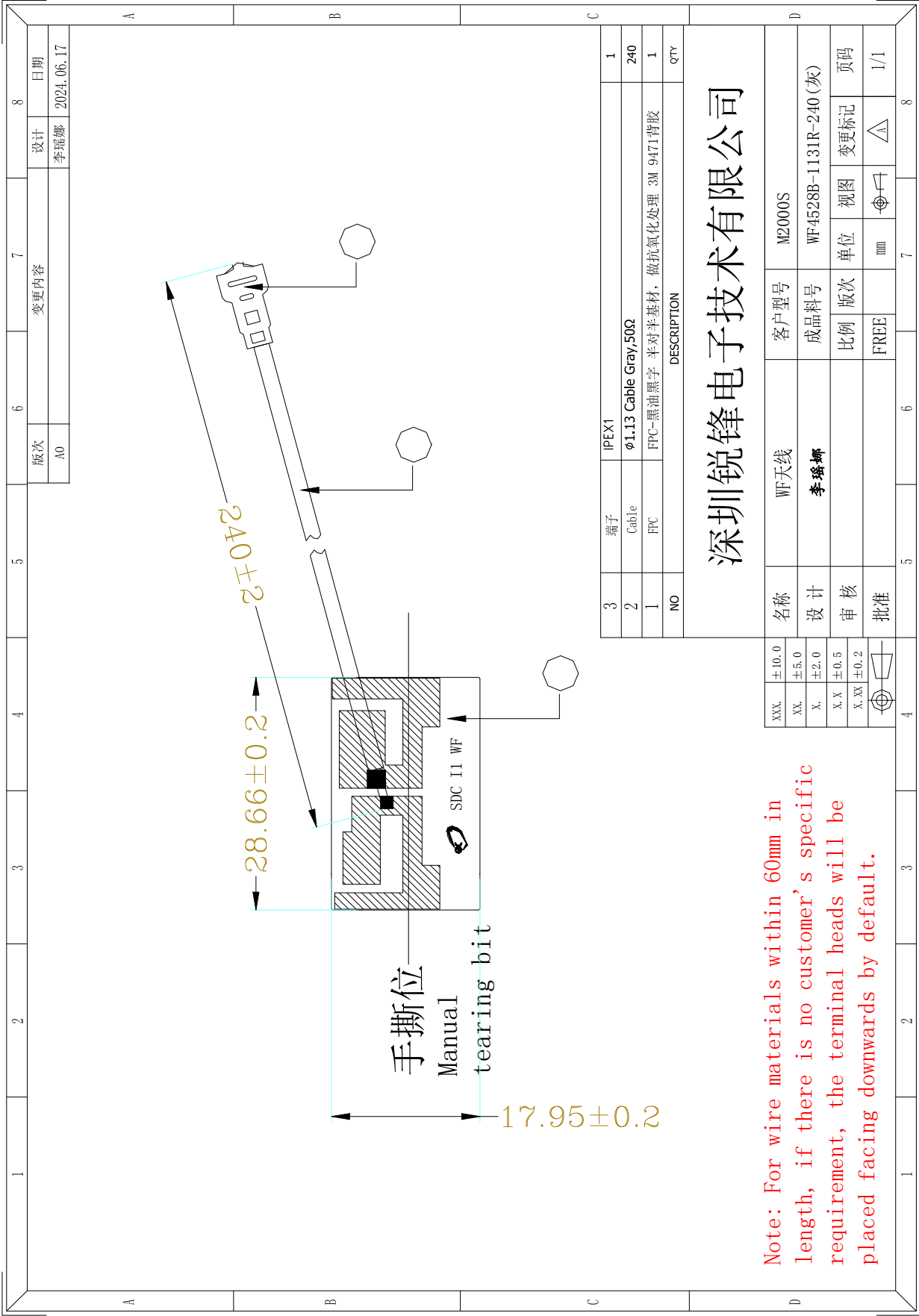
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1. Project information and Electrical Specification

*Those specifications were specially defined for 维海德 M2000S ,
WIFI2.4G/5.8G, and all characteristics were measured under the model's handset
testing jig .*

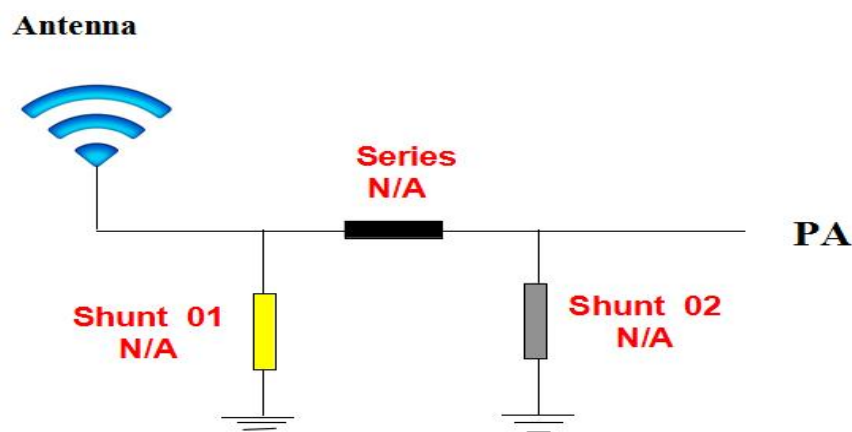
1-1 Antenna picture



1-2 Frequency Band:

Frequency Band	MHz
WIFI2. 4G/5. 8G	2400-5850 (MHz)

1-3 Impedance matching

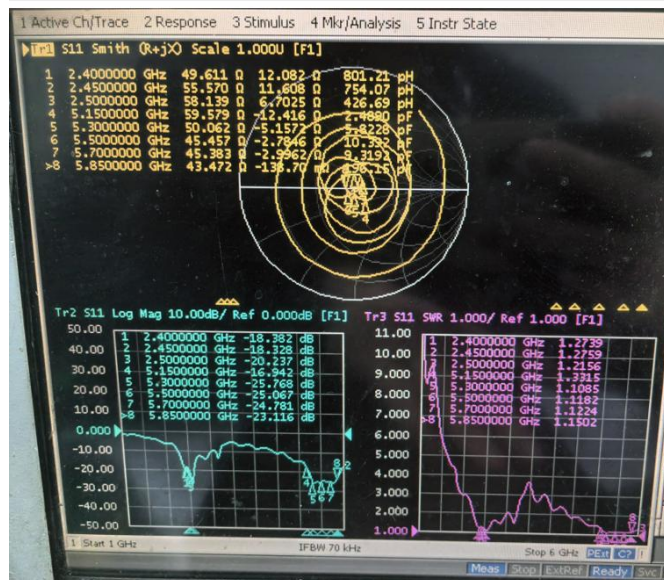


2. VSWR

Measuring Method:

1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,
2. Keeping this jig away from metal at least 20cm. VSWR parameter value

S11 SWR /Smith/ Log Mag--WIFI 1



频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
驻波比	1.27	1.27	1.21	1.33	1.1	1.11	1.12	1.15

频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
阻抗	49.6 Ω	55.5 Ω	58.1 Ω	59.5 Ω	50 Ω	45.4 Ω	45.3 Ω	45.4 Ω

频率 (MHZ)	2400	2450	2500	5150	5300	5500	5700	5850
回损	-18.3	-18.3	-20.2	-16.9	-25.7	-25	-24.7	-23.1

3. Efficiency and Gain*measuring and test instruments:

微波暗室, Agilent 网络分析仪, Agilent 频谱分析仪, 8960 综合测试仪, 标准天线*test method: equipment 以 H 面放于转台中心位置固定, 与喇叭天线中心位置在同一个水平线上。

Efficiency/Gain- WIFI2.4G/5.8G/BT

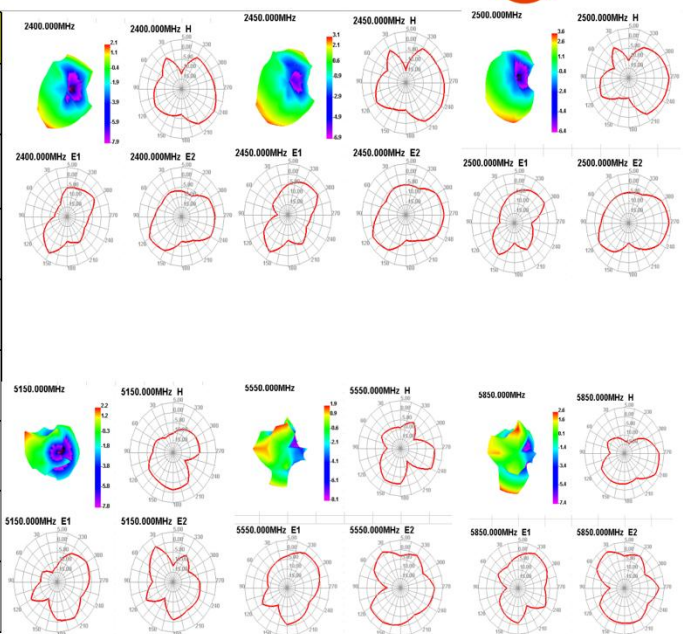
Microwave anechoic chamber, Agilent network analyzer, Agilent spectrum analyzer, 8960 comprehensive tester, standard antenna * Test method: The equipment is placed with its H surface at the center position of the turntable and is fixed there, and it is on the same horizontal line as the center position of the horn antenna.

Efficiency/Gain - WIFI 2.4G/5.8G/BT

增益&效率-WiFi 1



Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
2400	54.46	2.14
2450	60.37	3.12
2500	61.14	3.65
5150	41.89	2.19
5350	43.23	2.19
5550	47.28	1.88
5750	57.94	3.21
5850	53.6	2.56



4. WIFI OTA Data

WIFI OTA Data



2.4G WIFI	TRP			TIS		
Channel	CH1	CH6	CH12	CH1	CH6	CH12
802.11b, 11M	13.21	14.34	14.13	-82.92	-82.27	-82.76
802.11g, 54M	13.56	13.58	13.41	-70.59	-70.53	-69.36
802.11n, MCS7 (65M)	13.21	13.65	13.88	-68.42	-69.72	-69.71

5.8G WIFI	TRP			TIS		
Channel	CH36	CH60	CH165	CH36	CH161	CH165
802.11A, 54M	12.8	10.11	12.29	-68.42	-68.55	-69.71

5.The production index

天线量产时，以驻波比作为量产测试标准。

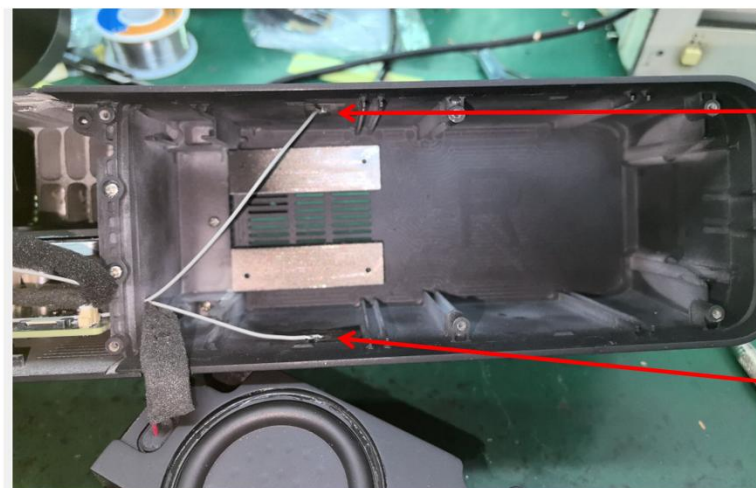
根据项目本身的差异,给出如下标准:

频率	量产标准
WIFI2.4G/5.8G/BT	VSWR (量产产品) < VSWR(设计样品) +/- 0.5

6.天线安装位置图

Antenna Installation Location Diagram

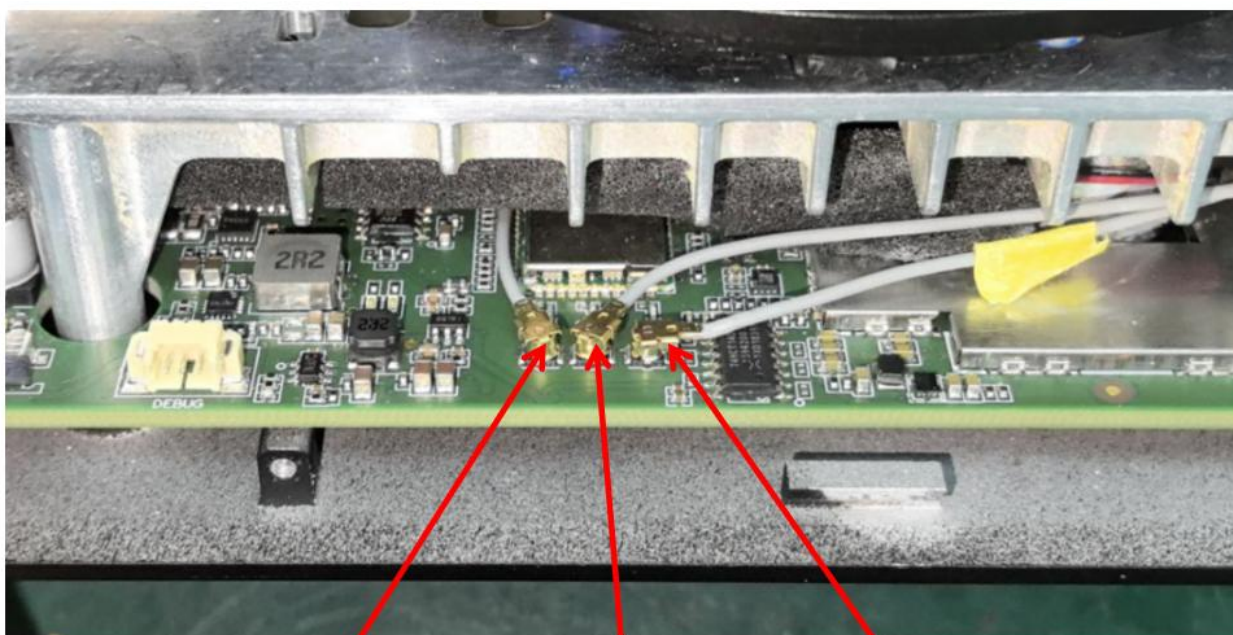
天线位置安装图



BT



WiFi1



WiFi 2

WiFi 1

BT