Antenna report

Manufacturer Info.:

Beijing Roborock Technology Co., Ltd.
Room 1001, Floor 10, Building 3, Yard 17, Anju Road, Changping District, Beijing, P.R. China

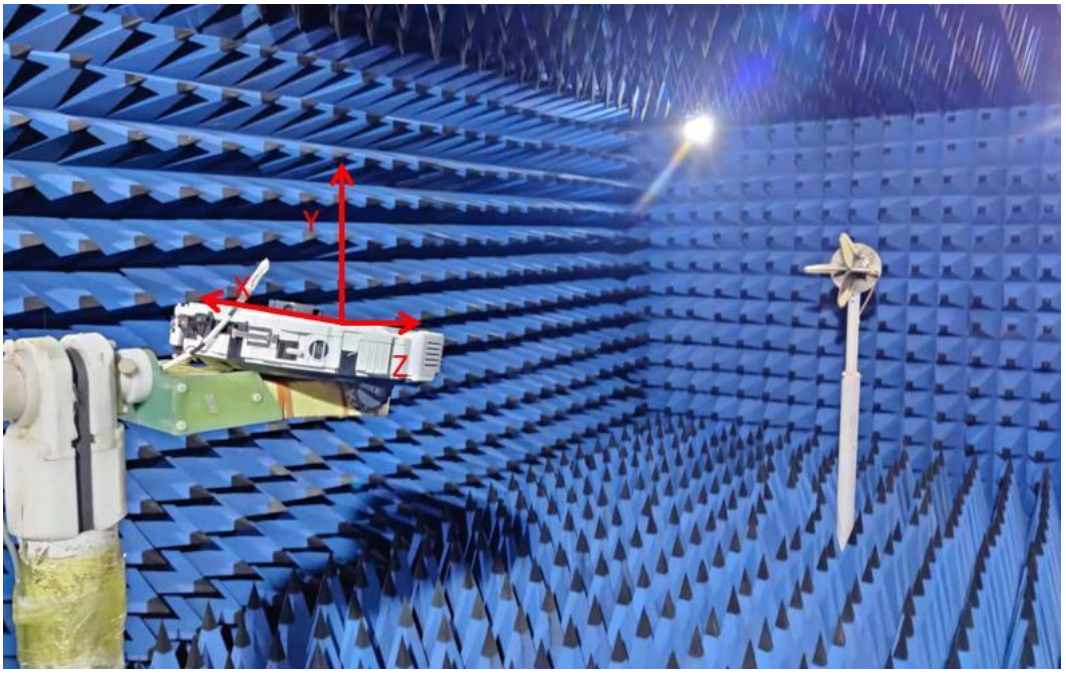
Antenna Type	Band(S)	Dimension（mm）
PCB antenna	2.4GHz - 2.5GHz	21.5*7

2：测试步骤程序 Test method and standard

Name	Parameter	Method	Standard no.
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSVIEEE Std 149-2021

测试人员 test person	Wangdongyang
测试日期test date	2022-10-12

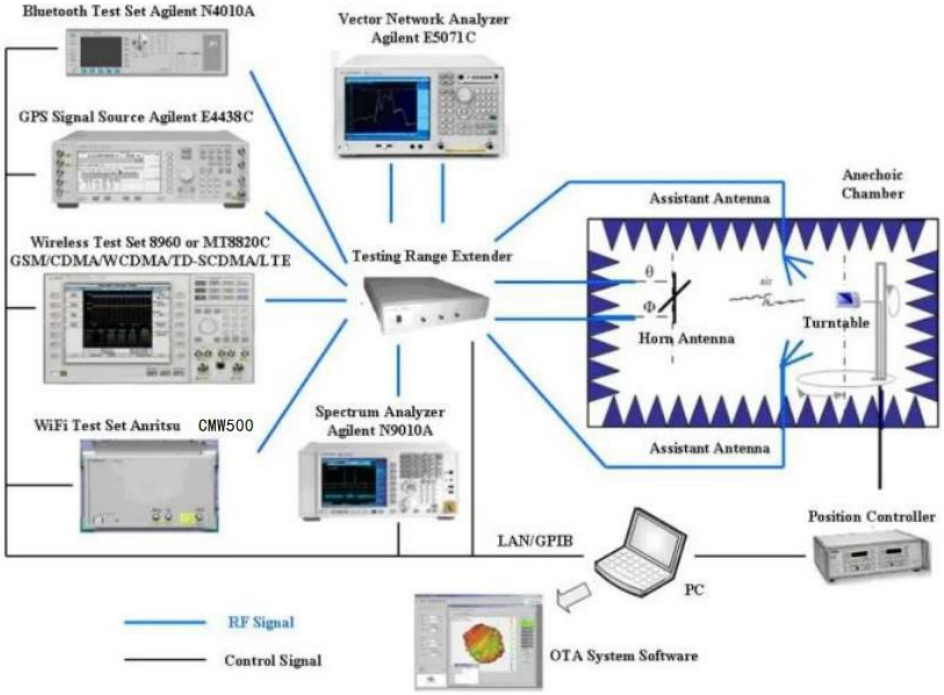
3：测试设置照片 test set up



4：设备清单 test equipment list

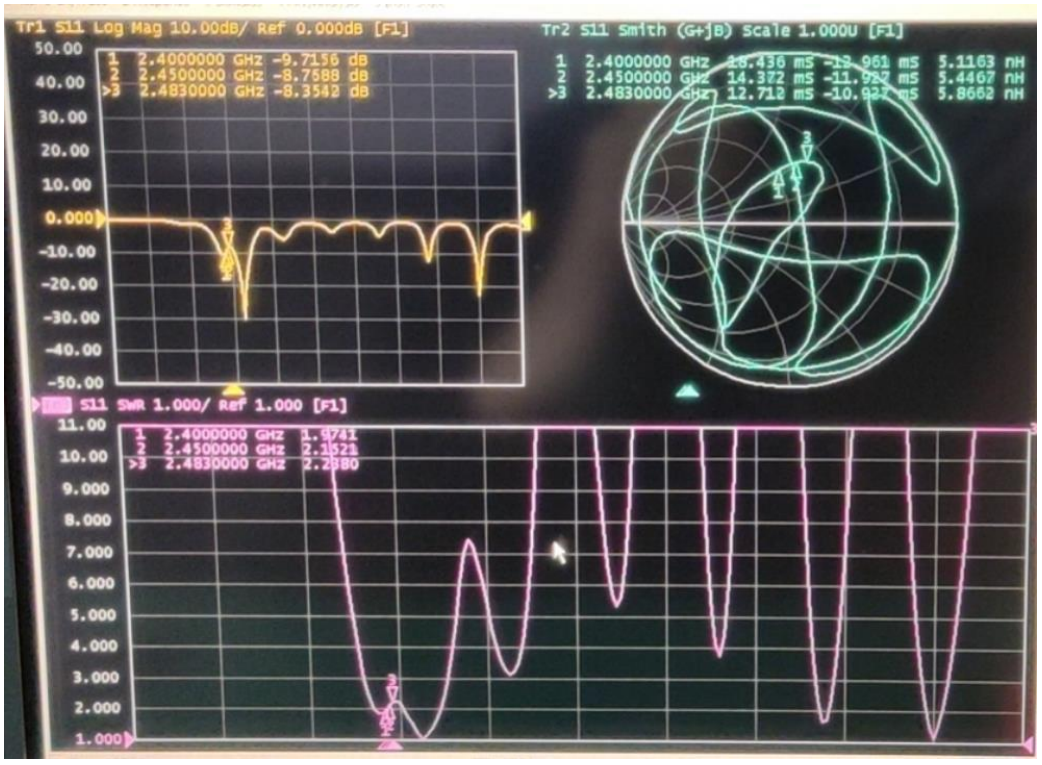
序号	设备名称	型号	生产厂家	出产编号	校准日期	校准有效期
1	全电波暗室	AMS-8923	ETS -Lindgren	5421	2022/7/23	2023/7/22
2	转台拉制器	EMCO2090	ETS -Lindgren	125967	/	/
3	开关单元	OSP120	Rohde & Schwarz	100939	/	/
4	网络分析仪	Agilent E5071C	Agilent	101539	2022/2/01	2023/1/31
5	综测仪器	R&S CMW500	Rohde & Schwarz	130259	2022/5/11	2023/5/10

5：测试配置图



6：天线增益测试图及数据 antenna gain test graph and datas

Passive Test For WIFI Antennna			
Freq(Mhz)	Effi(%)	Effi(dB)	Gain(dBi)
2400	48.0	-3.1	1.64
2410	47.1	-3.3	2.33
2420	46.7	-3.3	2.04
2430	44.5	-3.5	2.04
2440	44.4	-3.5	2.35
2455	44.4	-3.5	2.54
2450	46.8	-3.3	2.09
2460	46.3	-3.3	1.96
2470	46.3	-3.3	2.08
2480	45.2	-3.4	1.56
2490	46.0	-3.4	1.89
2500	45.8	-3.4	1.40



7：测试步骤 Test Procedure

Test Step Flow

1. Maintain the test ambient temperature of 23t2 C, the instrument is powered on and preheated for more than 30 minutes
2. Tum on the darkroom power supply, connect the test cable, and set up the sample according to the standard
3. Outline sets the test content objectives and conducts calibration tests
4. Run the EMQuest OTA software, the test is complete, export the corresponding test diagram and test data, and save to the corresponding directory

Test Principle

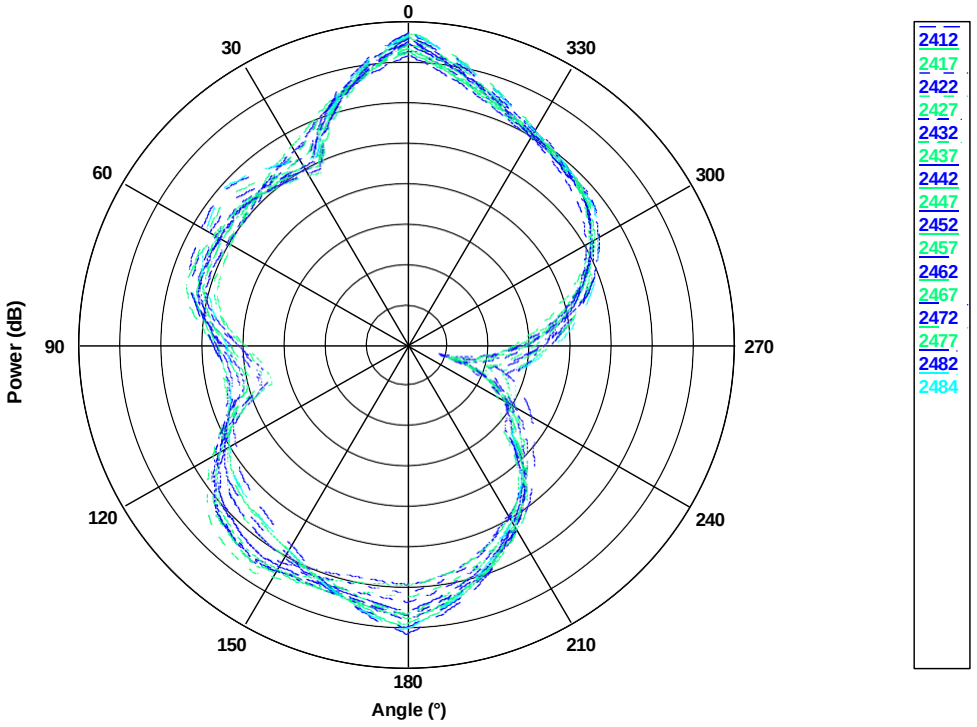
The test principle can be seen in accordance with the standard ANSI/IEEE std 149-2021

Test Conditions

1.The analyte, the network analyzer for testing, the test equipment and the test cable connector should have good reliability, stability, dynamic range and measurement accuracy to ensure the correctness of the measurement accuracy
2. The measuring instrument should have a certificate of conformity and be within the effective calibration period
3. The analyte should be complete and undamaged, and the test environment should be kept clean

8：测试软件 Test Software

Test software being used: EMQuest
Software Version: 1.08.01



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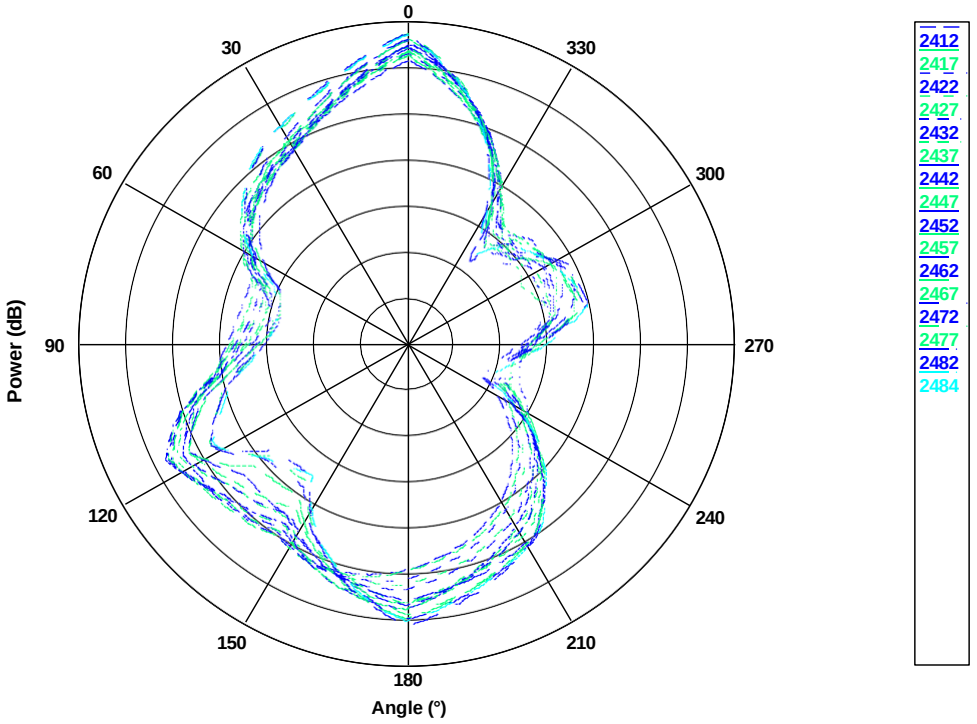
Scale: 2/div

H-PlaneCut



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