

Antenna report

1: 天线样品 antenna photo

Please check antenna photo.

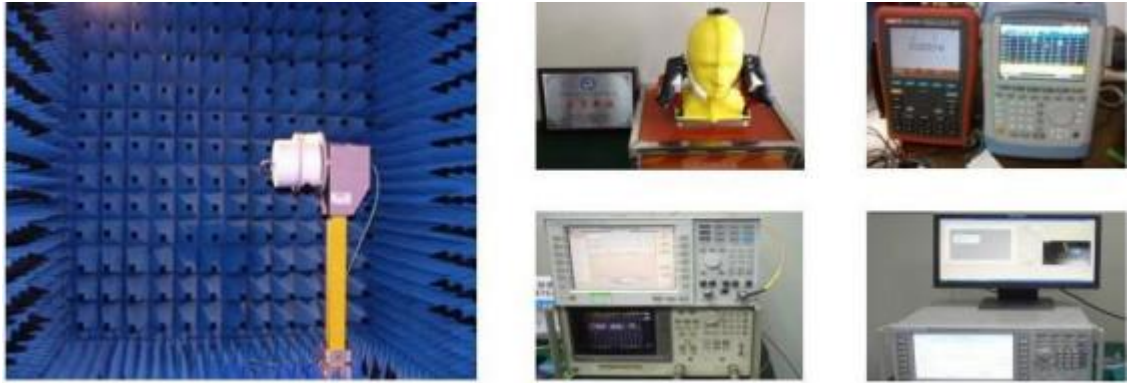
Antenna Type	Band(S)	Dimension (mm)
PCB antenna	2.4GHz - 2.5GHz	21.4*7

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

测试地点 test location	Dongguan South Star Technology Co., Ltd No. 3, Nanfang 1st Road, Chigang, Humen Town, Dongguan City
测试人员 test person	Wangdongyang
测试日期 test date	2023-09-18

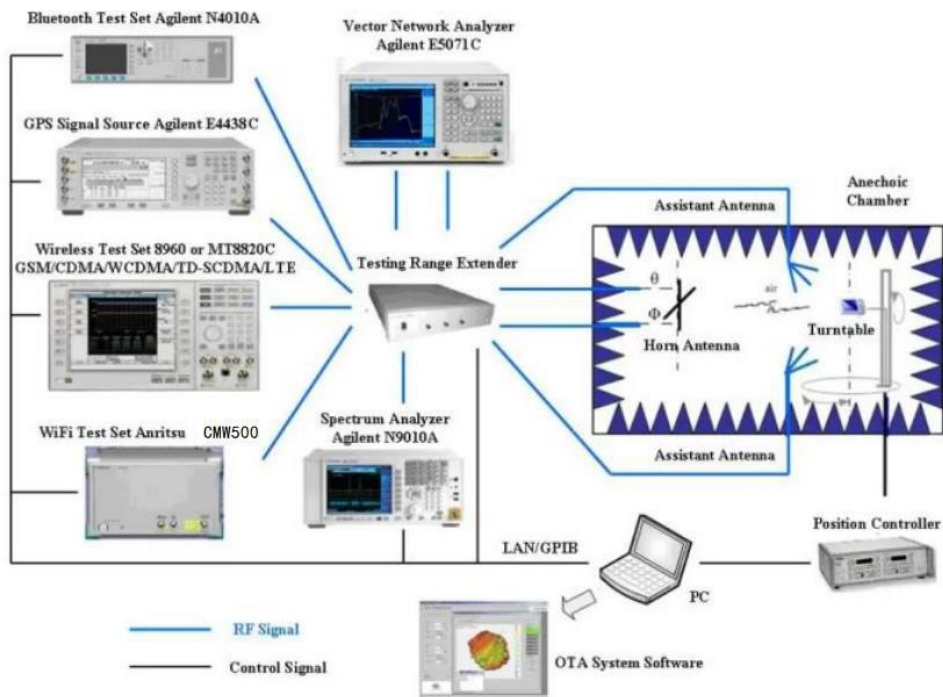
3: 测试设置照片 test set up



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	2023/4/13	2024/4/12
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	2023/4/13	2024/4/12
5	综测仪器	R&S CMW500	Rohde & Schwarz	130259	2023/4/13	2024/4/12

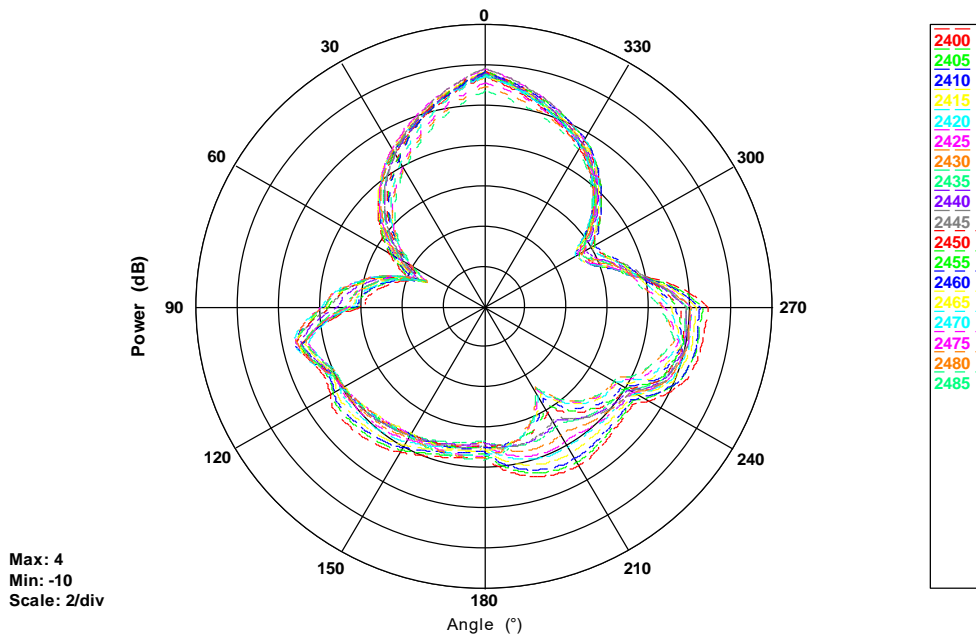
5: 测试配置图



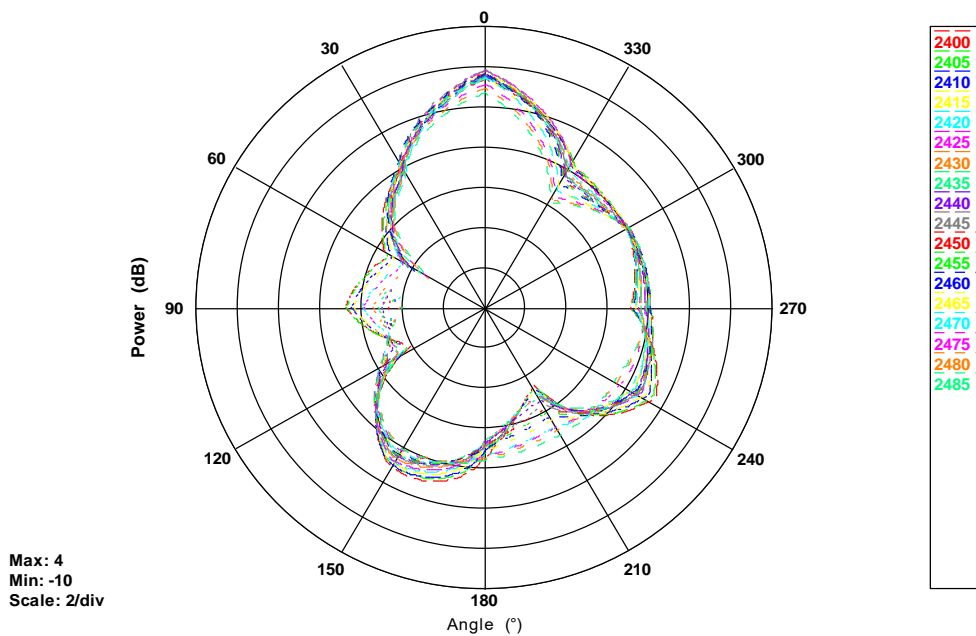
6: 天线增益测试图及数据 antenna gain test graph and datas

Freq(Mhz)	Effi(%)	Gain(dBi)
2400	56.35	1.35
2410	54.86	1.43
2420	52.56	1.41
2430	52.34	1.57
2440	52.02	1.55
2445	53.79	1.78
2450	52.59	1.62
2460	52.56	1.59
2470	52.71	1.38
2480	49.09	0.88
2490	51.76	0.99
2500	55.05	1.42

H_PlanceCut



E_PlanceCut



7 : 测试步骤 Test Procedure

Test Step Flow

1. Maintain the test ambient temperature of 23 ± 2 C, the instrument is powered on and preheated for more than 30 minutes
2. Turn 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: EMT-OTA
Software Version: V2.0