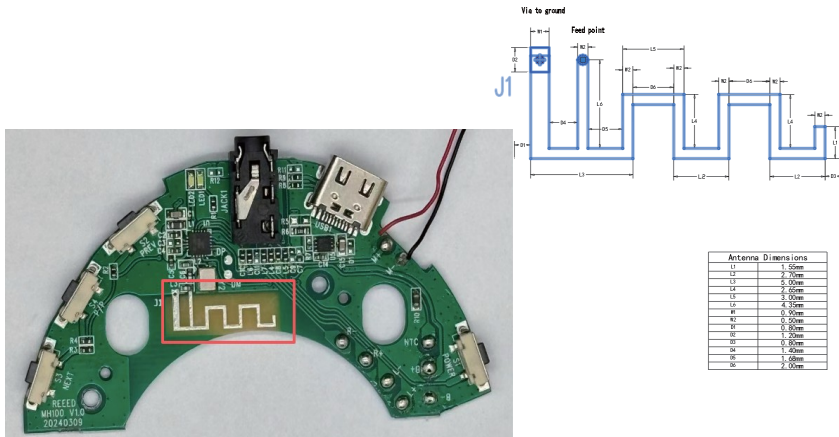


Requirement for Antenna test report

Manufacture : ZHUHAI JIELI TECHNOLOGY CO.,LTD

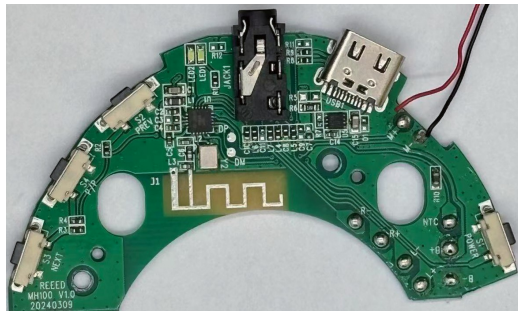
PCB Antenna should provide an Antenna test report(Antenna parameters tested in the laboratory)



测试报告必须包含如下内容/The test report must include the following content:

1：测试样品照片（如果涉及保密，可以单独文件提供）/ Test sample photos (if confidentiality is involved, a separate document can be provided)

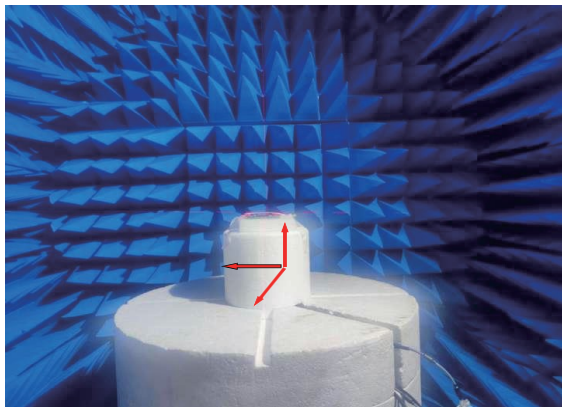
参考如下/ The reference is as follows:



2：测试设置照片（如果涉及保密，可以单独文件提供）/Test setup photos (if confidentiality is involved, a separate file can be provided)

参考如下/ The reference is as follows:

测试环境：中科国技暗室测试系统



3：测试标准/Test standard:

参考如下/ The reference is as follows:

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

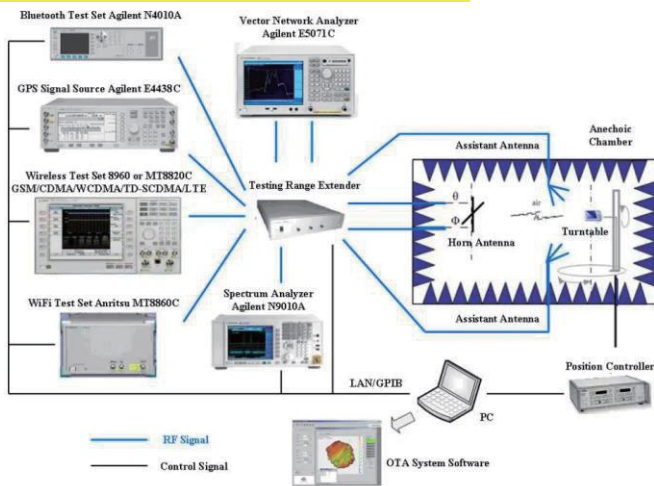
4：设备清单/Equipment list and calibration date:

参考如下/ The reference is as follows:

Equipment	Manufacturer	Model No.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071C	2024. 06. 27	2024. 06. 27

5：测试配置图/ Test configuration diagram:

参考如下/ The reference is as follows:



6: 使用的商业测试软件及软件版本号/ Commercial testing software and software

version number used

Test software being used: Please provide the antenna testing software used in the darkroom of the testing site (请提供测试场地暗室使用的天线测试软件)

Software Version: Please provide the software version number of the testing software (请提供测试软件的软件版本号)

7: 测试程序/ Test Procedure

参考如下/ The reference is as follows:

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

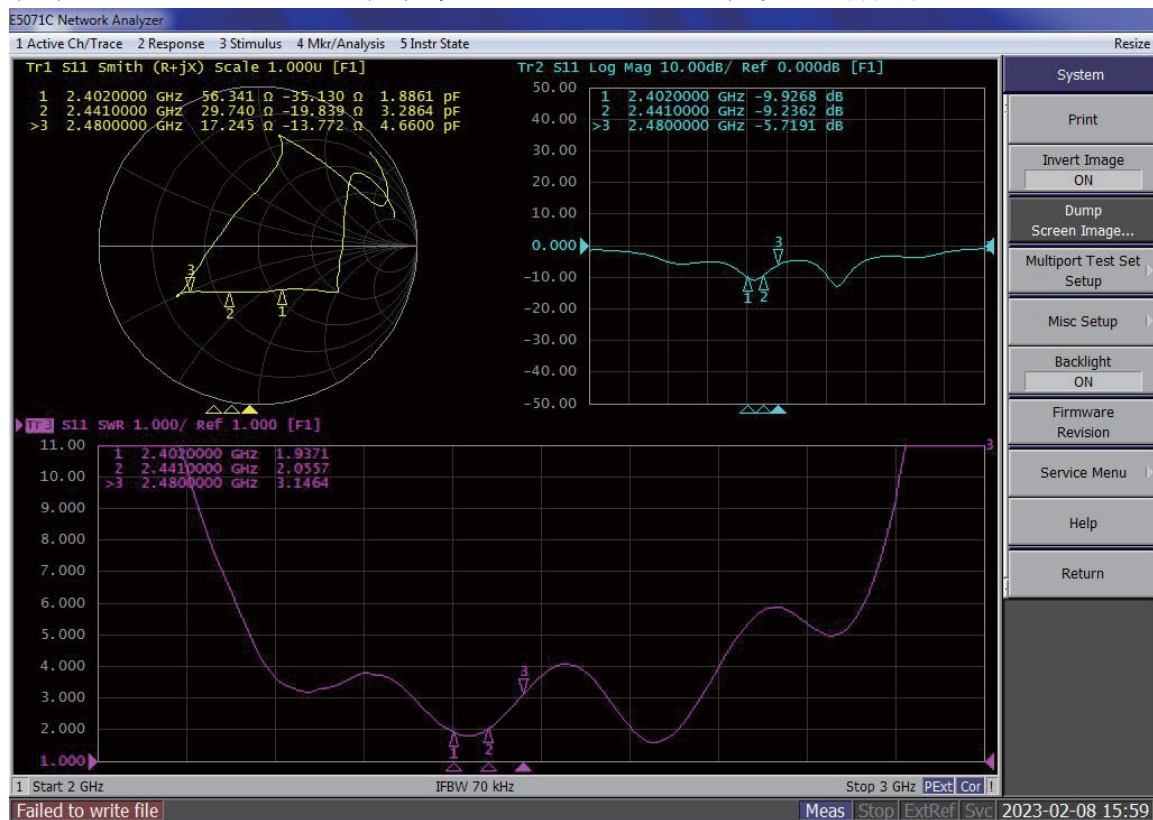
The test principle can be seen in accordance with the standard ANSI/IEEE std 149-2021

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

天线无源S 参数:

驻波比 (VSWR)、回波损耗 (Return Loss) 及史密斯圆图

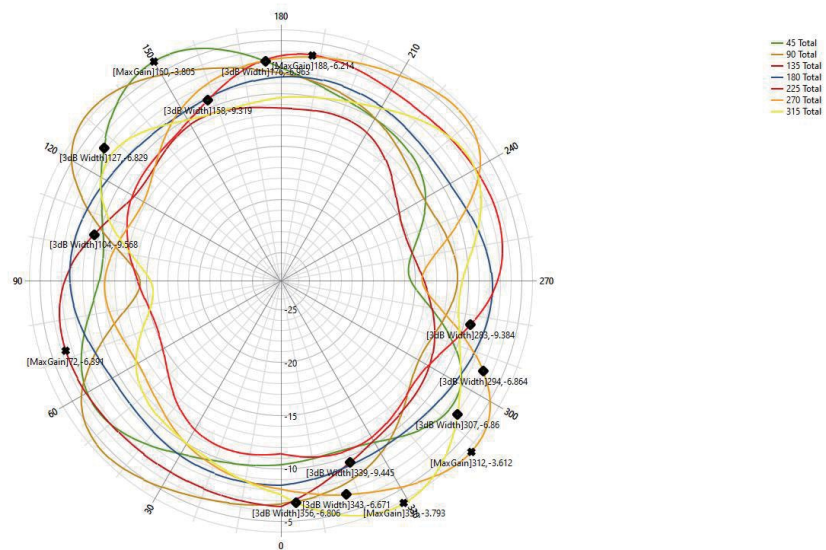


天线效率及增益

Frequency (MHz)	Efficiency (%)	Gain (dBi)	Efficiency (dB)
2400	59.329%	-2.717	-2.267
2410	51.861%	-3.416	-2.852
2420	52.112%	-3.166	-2.831
2430	49.299%	-3.258	-3.072
2440	50.672%	-3.144	-2.952
2450	53.067%	-2.735	-2.752
2460	59.423%	-2.276	-2.260
2470	56.680%	-2.438	-2.466
2480	61.727%	-2.112	-2.095
Average	54.908%	-2.806	-2.616
Peak	61.727%	-2.112	-2.095

天线 2440MHz 2D-Theta Pattern

2D-Theta 2DLine-Theta 2D-Phi 2DLine-Phi DataLine HeatMap 3D



天线 2440MHz 2D-Phi Pattern

2D-Theta 2DLine-Theta 2D-Phi 2DLine-Phi DataLine HeatMap 3D

