

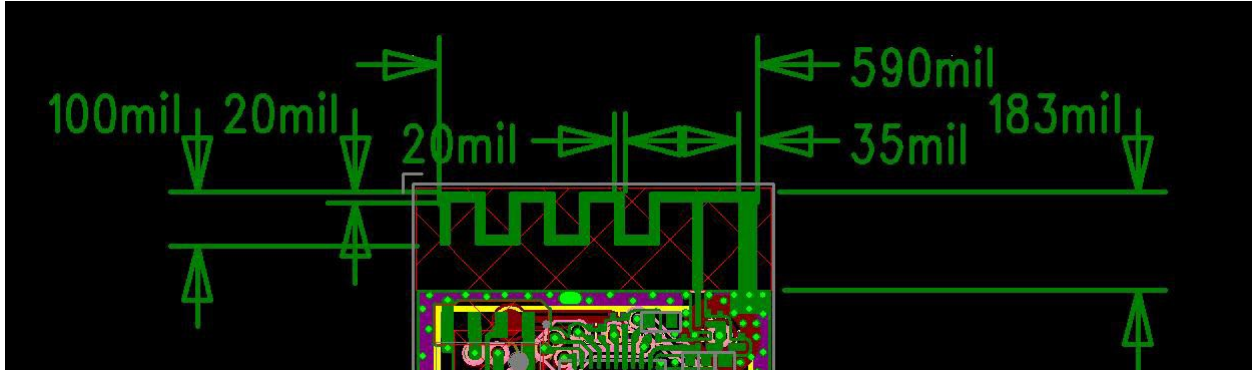
# 天线性能测试报告

## Antenna Performance Test Report

<b>Model</b>	MR2EHKB
<b>Antenna Type</b>	<input checked="" type="checkbox"/> PCB Printed Antenna <input type="checkbox"/> PCB Plug-in Integrated Antenna <input type="checkbox"/> Enclosure Mounted Integrated Antenna
<b>Frequency Band in Use</b>	<input checked="" type="checkbox"/> 2.4~2.5GHz <input checked="" type="checkbox"/> 5.15~5.85GHz <input type="checkbox"/> 2.4~2.5GHz&5.15~5.85GHz Dual Band
<b>Manufacturer</b>	Chengdu Meross Technology Co., Ltd. Floor 3, Building A5, Shijicheng Road No 1129, Gaoxin, Free Trade Trial Zone, Chengdu, Sichuan, China.

## 1. Overview of Antenna

The tested antenna is a printed antenna on the PCB, used for the WiFi module, operating in the frequency range of 2.4GHz to 2.5GHz. The dimensions of the PCB antenna are as follows:



## 2. 测试方法及标准 Testing method and standard

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

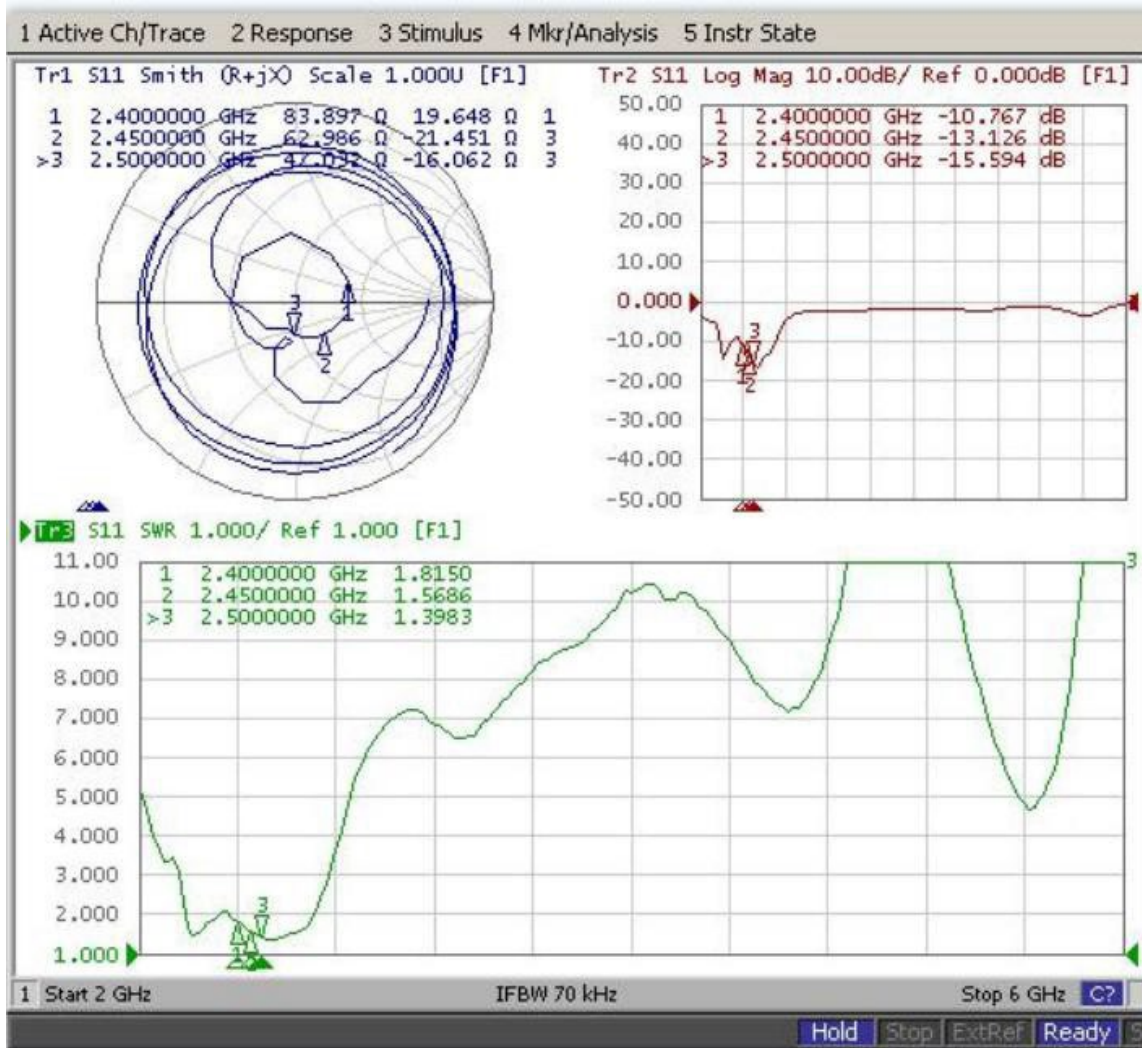
## 3. 仪器列表及校准日期 Equipment list and calibration date

Equipment	Manufacturer	Model No.	Internal no.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071C	EC 3044-1	2022/12/15	2023/12/14
Chamber	GTS	Rayzone1800	EC 5818-2	2022/11/23	2023/11/22
2G/3G综测仪	Agilent	8960	EC 5818-4	2022/10/5	2023/10/4
LTE综测仪	Anritsu	MT8820	EC 3044-7	2022/12/23	2023/12/22
TD综测仪	StarPoint	SP6010	EC5881	2022/10/8	2023/10/7
WIFI综测仪	Anritsu	MT8860	EC5818-1	2023/3/15	2024/3/14
GPS信号源	Agilent	E4438C	EC5818-3	2022/12/15	2023/12/14

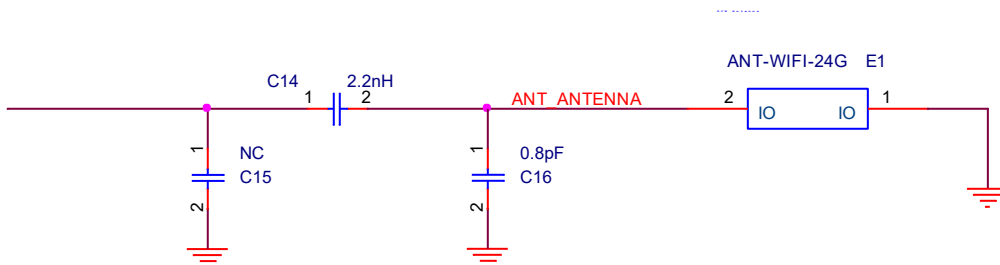
Tested by: zhangfutao

Date of Test Date: April. 25, 2023

## 4. 天线 S 参数 Antenna S parameters



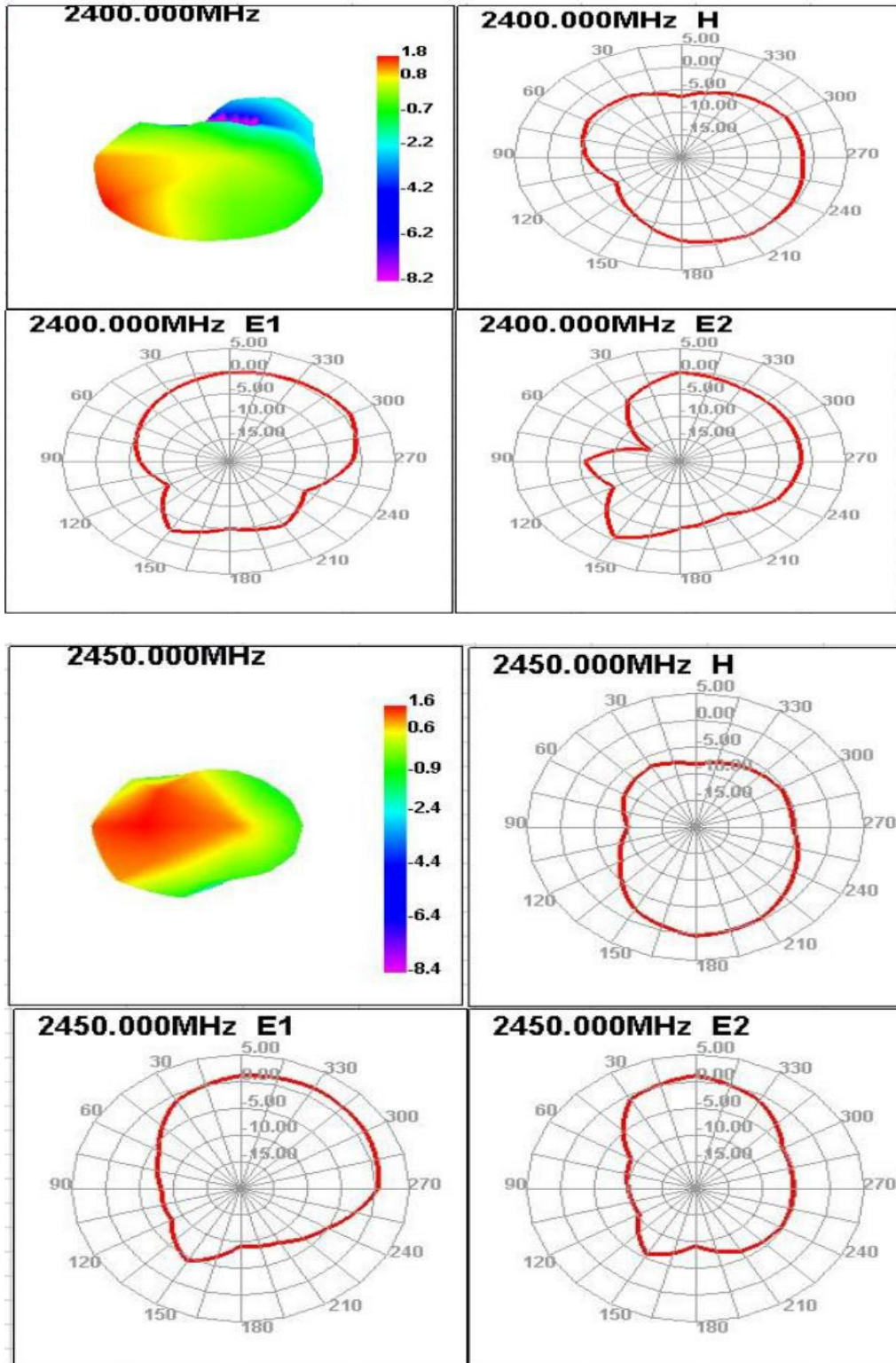
以上 S 参数带天线匹配，匹配电路参考电路如下：（实际连接 C14 为 1.8nH，C15 和 C16 不上件）

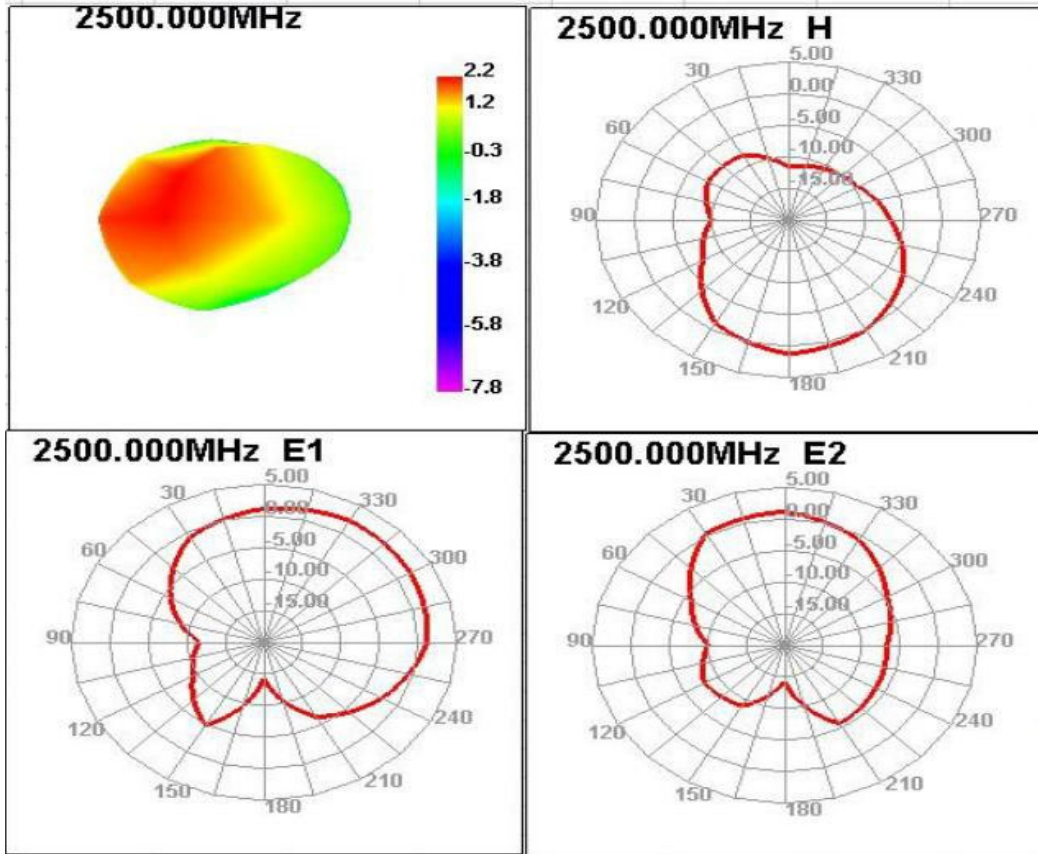


## 5. 增益和效率 Gain and Efficiency

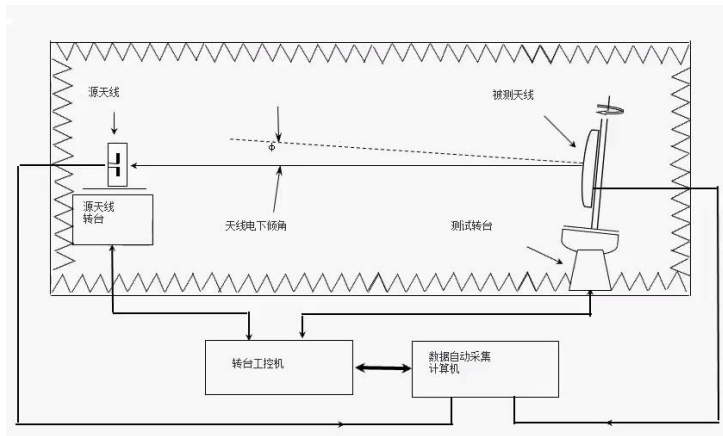
Freq. (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	1.84	1.46	1.14	0.81	1.2	1.65	1.58	1.73	1.95	2.24	2.23
Efficiency	47.66	44.87	42.8	40.11	40.43	41.79	40.16	40.74	43.08	46.18	46.78

## 6. 方向图 Directional pattern





## 7. 测试配置图 Test configuration diagram



## 8. 测试环境 Test set up photo

