

Product Specification Approval Document
DeWeima Antenna Laboratory
Shenzhen R&D Center

Mobile communication terminal antenna

Customer Name : 斐音科技

Product Name : WIFI rod antenna

Material Code:

Manufacturer			
日期: 2026 年 3 月 13 日			
Radio frequency	structure	review	quality
Su Junming	Chenyadong	Wing Qian	Qingzhong

clientside		
日期: 年 月 日		
Conclusion	Person Confirmer	reviewer

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1. Purpose

Standardize the specifications and test methods for mobile communication terminal antennas manufactured by Shenzhen Deweima Communication Equipment Co., Ltd., so as to avoid errors caused by inconsistent test conditions and methods.

2. Overview of Product Categories and Product Models

2.1 Category

This mobile communication terminal antenna is a dipole antenna.

2.2 Overview of Product Models

This report mainly summarizes the electrical test results of the antennas developed for the WiFi antenna project.

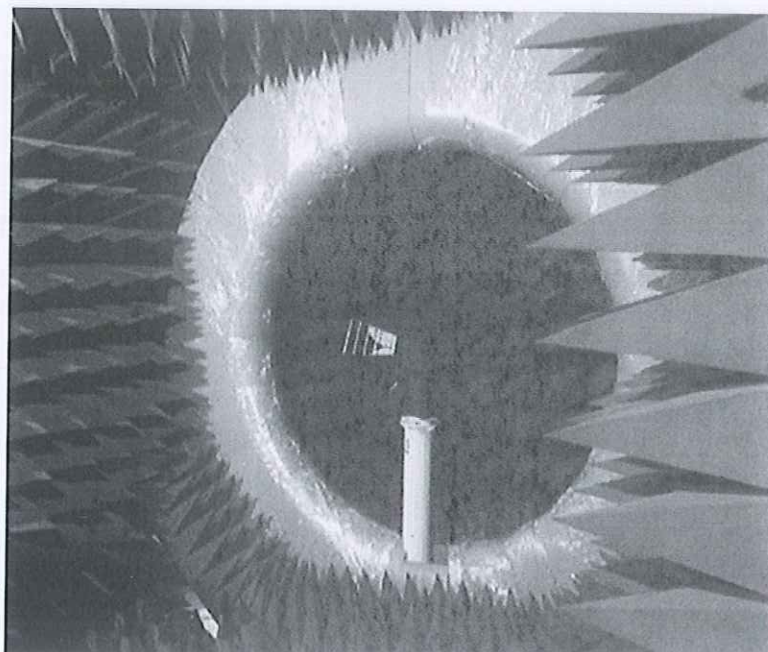
The designed frequency bands of this antenna are: 2400-2500MHz, 5100-5900MHz.

3. Technical Specifications and Test Equipment

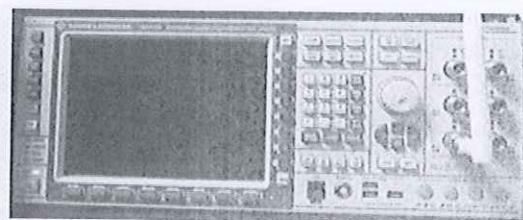
3.1 Technical Specifications

Electrical Performance Indicators of Product	
Operating Frequency Range	2400~2500MHz 5100 ~ 5900MHz
Voltage Standing Wave Ratio	2400~2500MHZ<2.0 5100 ~ 5900MHz < 2.0
Antenna Gain	2400-2500MHZ>5dBi 5100 ~ 5900MHz >5dBi
Efficiency	2400~2500MHZ>60% 5100 ~ 5900MHz >60%
Impedance	50 ohm
Product Material Description	
1.78 同轴线+大 S 母头+PCB+弹簧	
Product Environmental Specifications	
Operating Temperature	- 30℃ ~ + 85 ℃
Storage Temperature	- 30℃ ~ + 85 ℃

3.2 Instrument and Equipment



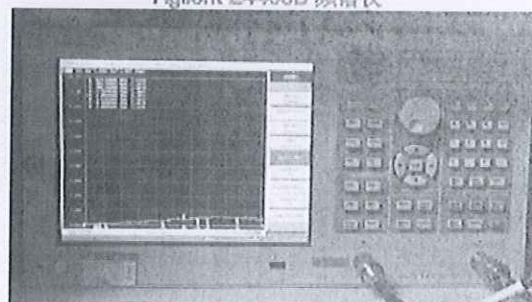
24-probe microwave chamber



R&S CMW500



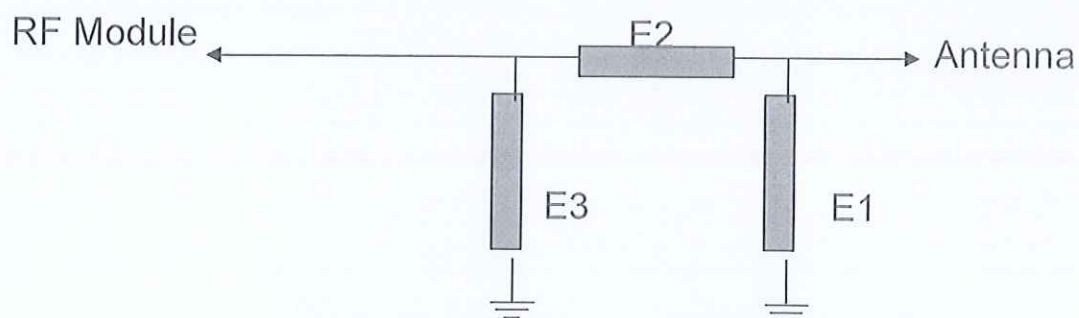
Agilent E4405B 频谱仪



Agilent Technologies E5071B

4. Matching Circuit Description:

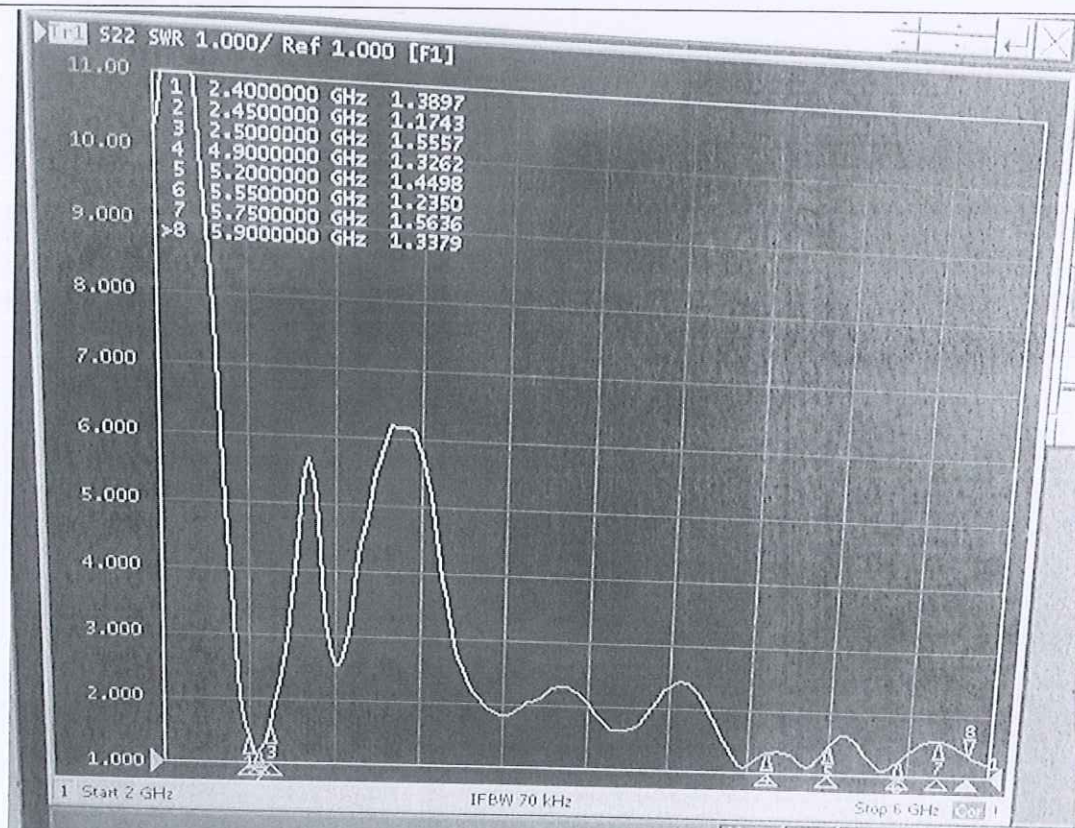
Our company has not modified the original matching circuit of the antenna.



Element	Value	Vender
E1(0201)		
E2(0201)		
E3(0201)		

5. Electrical Performance Test Report (Parameters, Gain, Efficiency, Radiation Pattern)

驻波比
(VSWR)

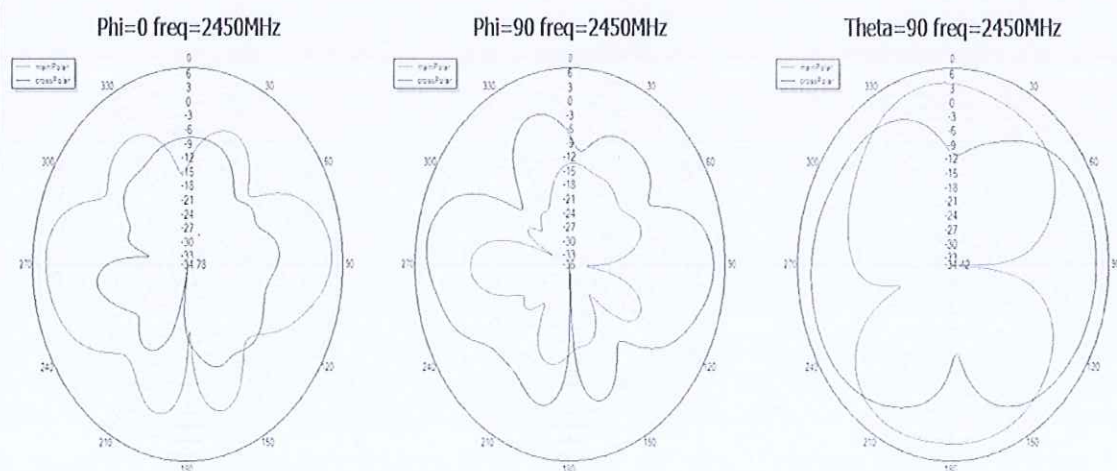


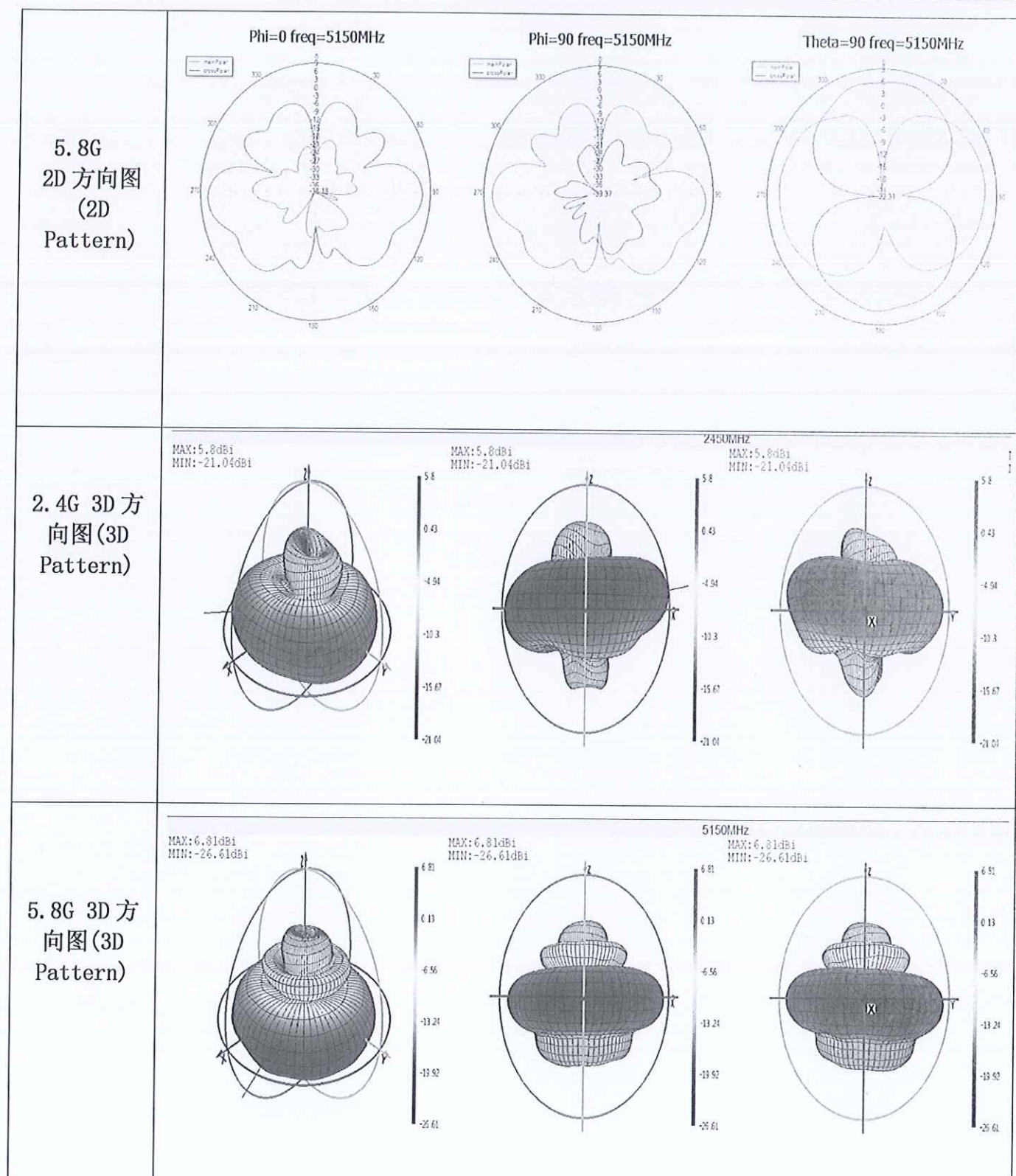
效率与增益
(Efficiency & Gain)

Frequency 频率(MHz)	Gain 增益(dBi)	Efficiency 效率(%)
2400.00	5.47	84.47
2410.00	5.72	86.77
2420.00	5.63	87.06
2430.00	5.46	84.10
2440.00	5.77	87.68
2450.00	5.80	87.09
2460.00	5.84	87.77
2470.00	5.70	86.56
2480.00	5.20	81.85
2490.00	5.31	81.85
2500.00	5.11	76.65

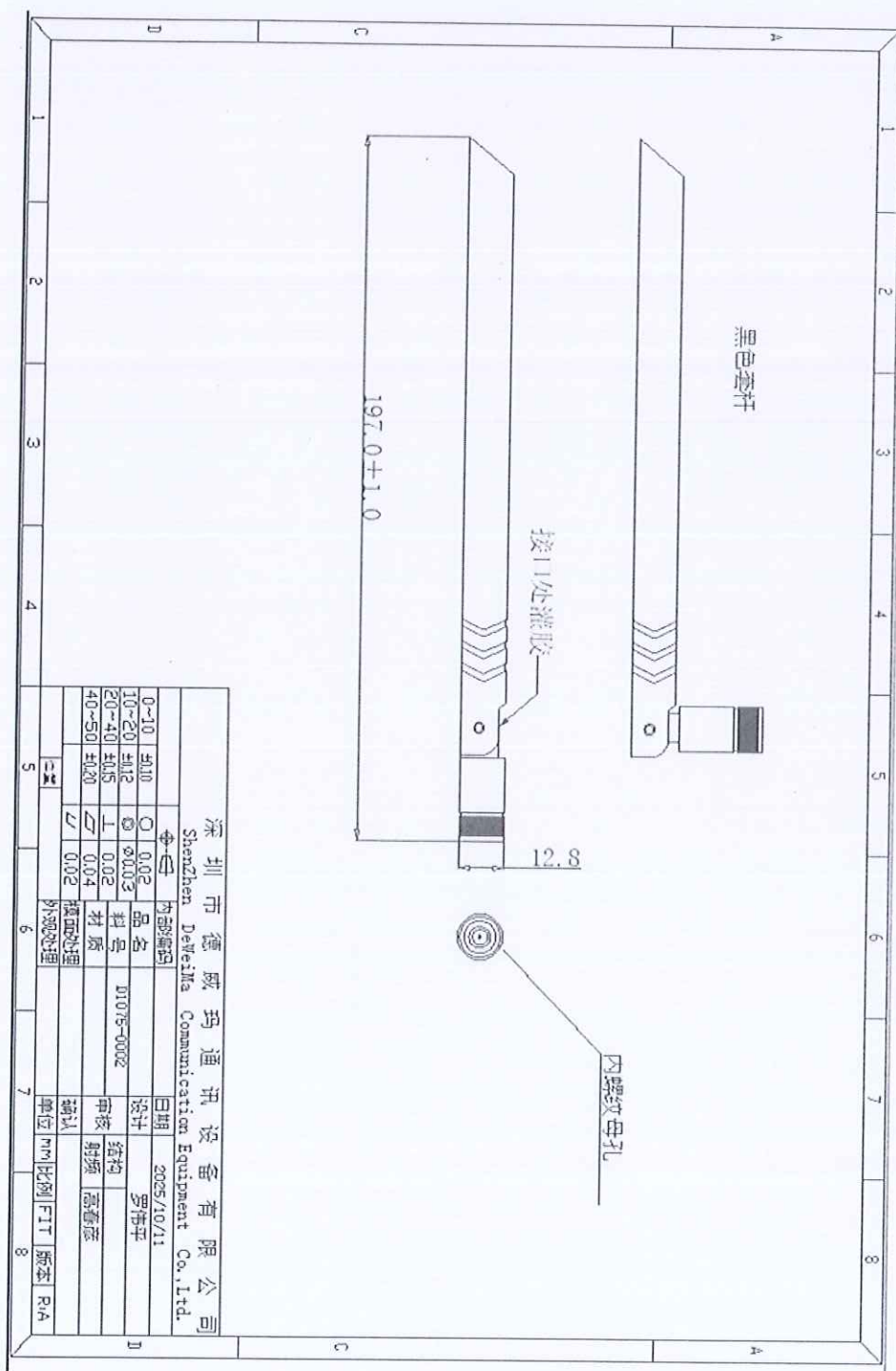
Frequency 频率(MHz)	Gain 增益(dBi)	Efficiency 效率(%)
4900.00	5.62	70.95
4950.00	5.74	71.42
5000.00	5.80	73.67
5050.00	5.96	75.05
5100.00	6.33	76.85
5150.00	6.81	82.10
5200.00	6.72	82.03
5250.00	5.92	65.35
5300.00	6.28	71.86
5350.00	6.88	84.77
5400.00	6.57	83.71
5450.00	6.23	82.60
5500.00	5.97	81.08
5550.00	5.81	78.39
5600.00	5.92	79.26
5650.00	5.73	74.69
5700.00	5.58	70.71
5750.00	6.00	80.04
5800.00	6.13	81.27
5850.00	5.58	72.10
5900.00	5.52	73.64

2. 4G
2D 方向图
(2D
Pattern)





6. Antenna Structure Diagram



7. Packaging Method:

Bag packaging