Product Specifications Approval

DEWEIMA Antenna Laboratory

Shenzhen R&D Center

Mobile communication terminal antenna

Customer: SHUN YI YUAN DONG

Product: 853-928MHz Pole Antenna

Material Code:

Contractor		Date: June 27, 2023	
RF	structure	Audit	quality
李军	段燕林	余奇学	高春彦

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研发专用章

1. Purpose

Standardize the product specifications and test methods of mobile communication terminal antennas produced by Shenzhen Deweima Communication Equipment Co., Ltd. to avoid errors caused by different test conditions and methods.

2. Overview of product categories and model numbers

2.1 Category

This mobile communication terminal antenna is Monopole Antenna

2.2 Product Model Overview

This report summarizes the electrical results of the antenna designed for the 853-928MHz Rod Antenna project.

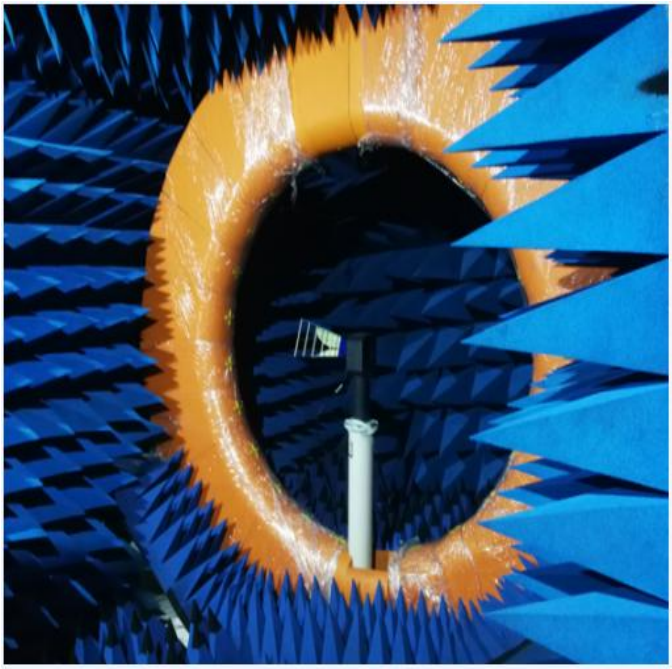
This antenna is designed for the 853MHz-928/MHz frequency band.

3. Technical indicators and equipment

3.1 Technical indicators

Product electrical performance indicators	
Operating frequency range	853MHz~928MHz
VSWR	853MHz~928MHz＜**1.5**
Antenna gain	853MHz~928MHz:1±1dBi
Antenna efficiency	853MHz~928MHz＞65%
impedance	50 ohm
Product Environmental Description	
Operating temperature	- 30˚C ~ + 80 ˚C
Storage temperature	- 30˚C ~ + 80 ˚C

3.2 仪器设备



24-probe microwave chamber

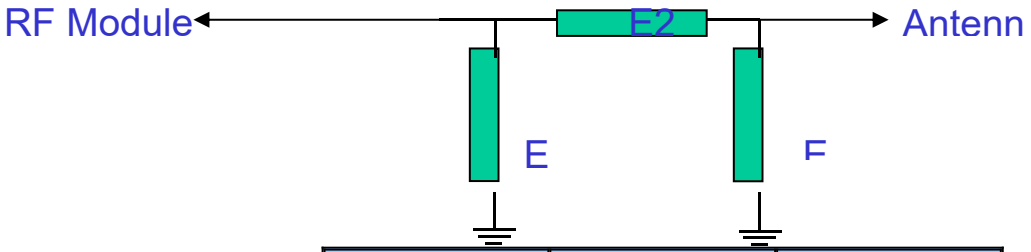
R&S CMW500

Agilent E4405B 频谱仪

Agilent Technologies E5071B

4.Matching circuit description:

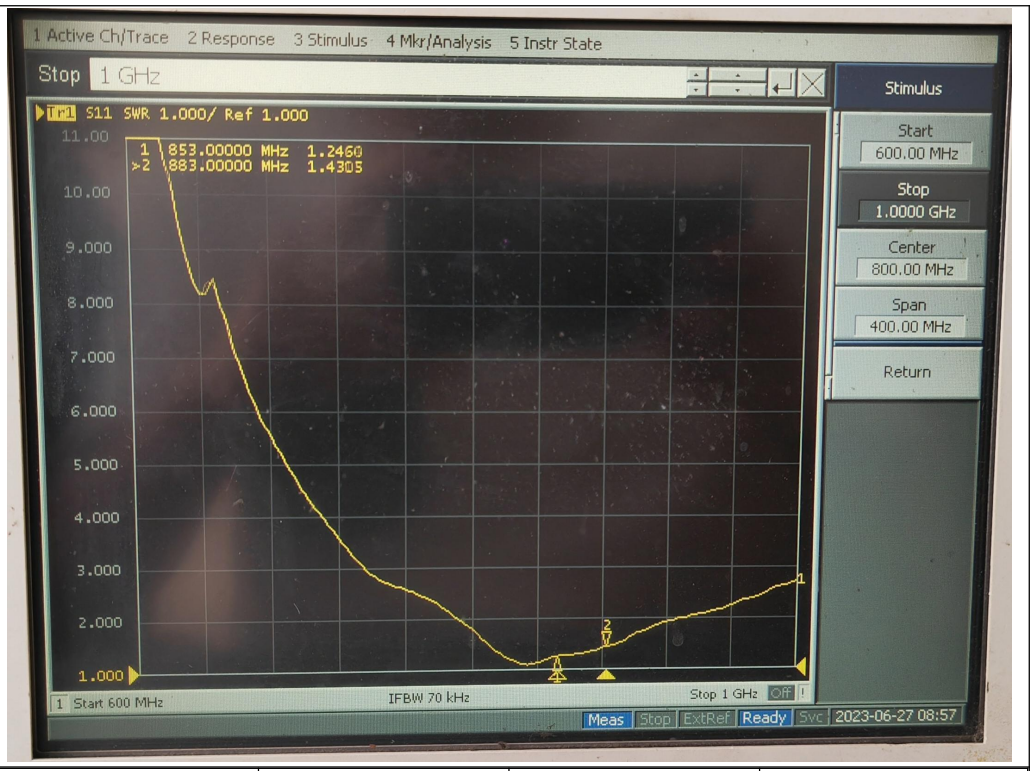
Our company has not modified the original matching circuit of the antenna



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

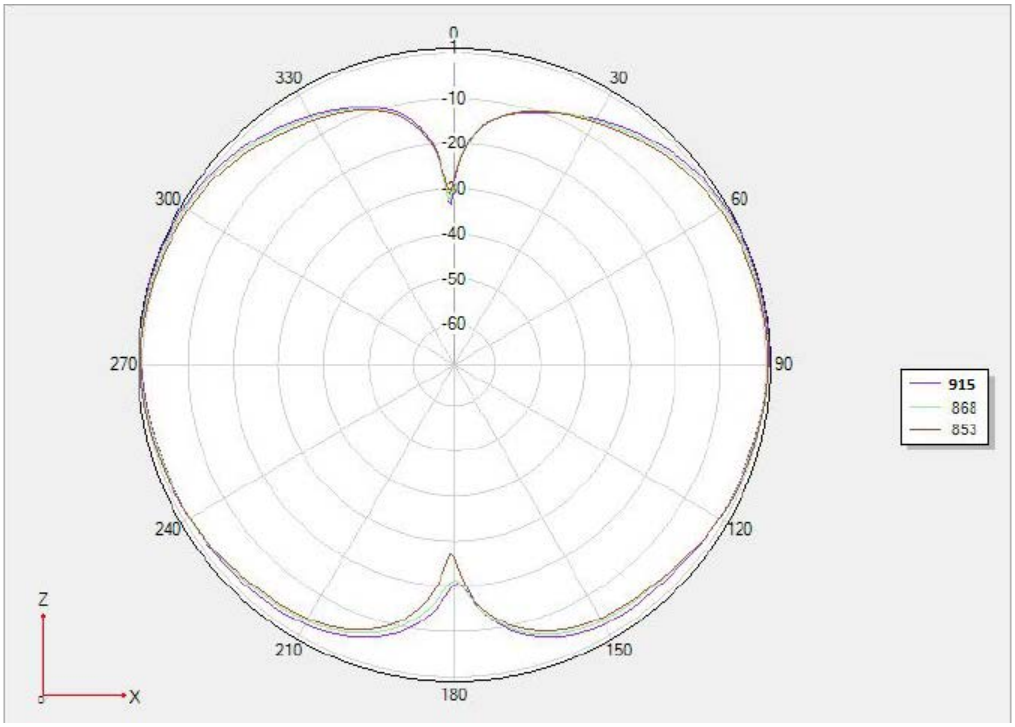
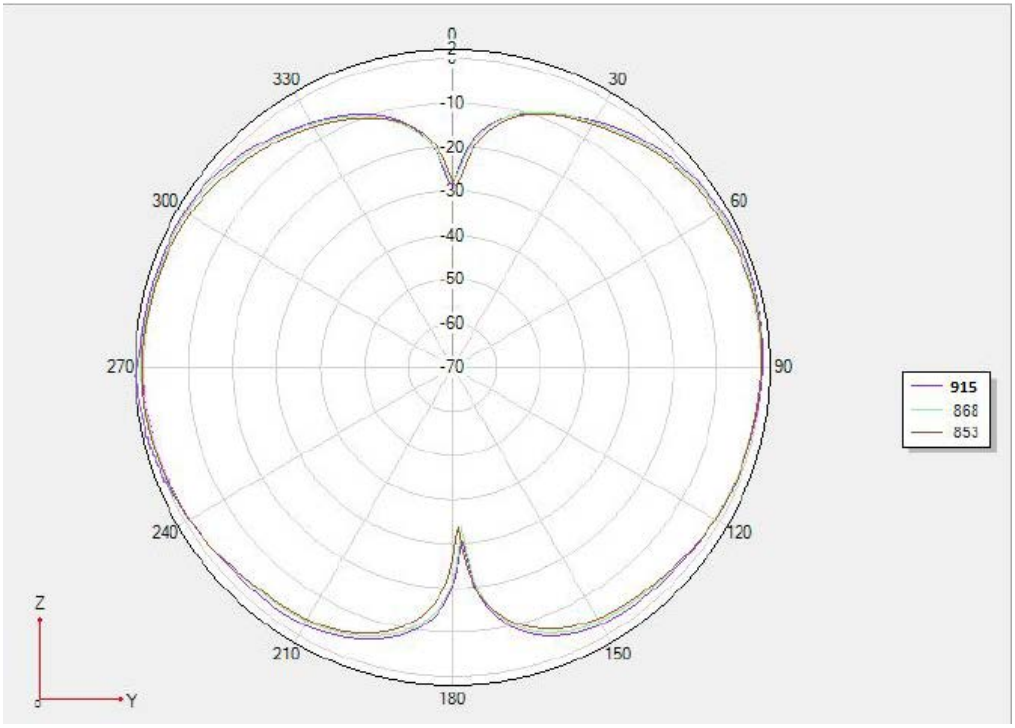
5. Antenna electrical performance parameters (standing wave ratio, gain, efficiency, radiation pattern)

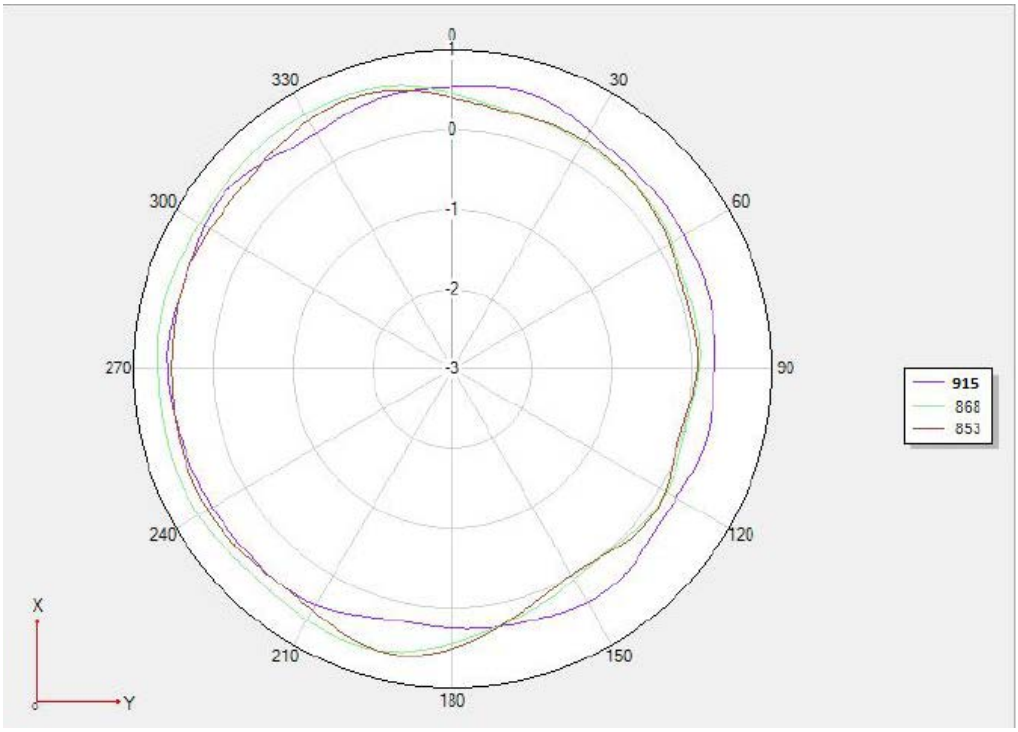
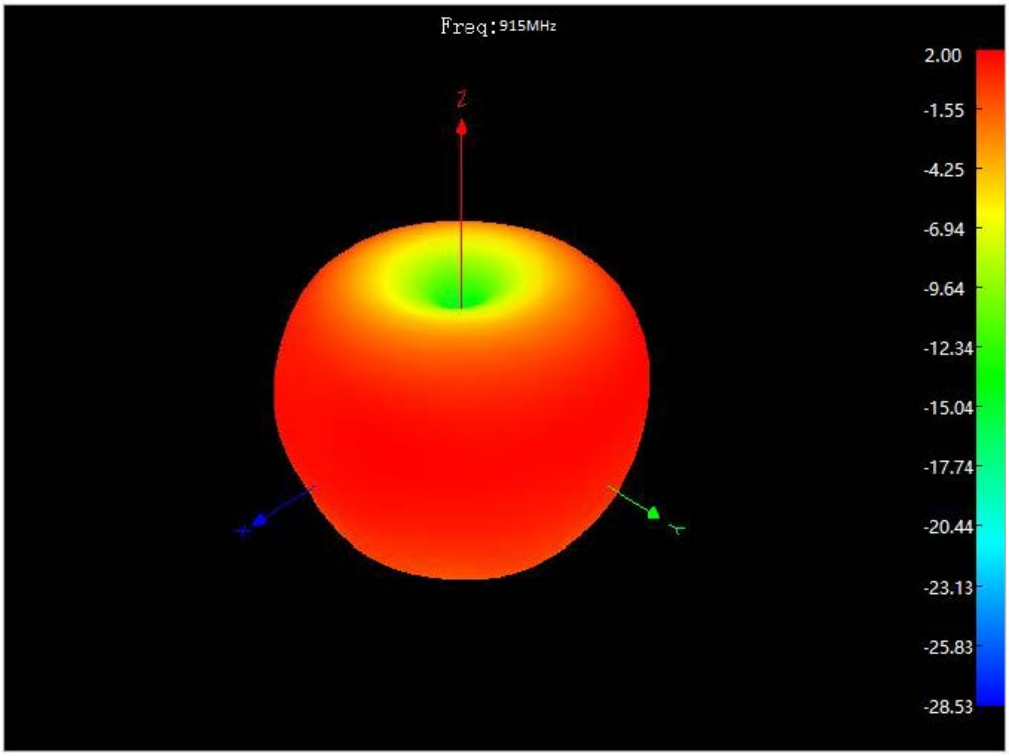
5.1Antenna Passive VSWR



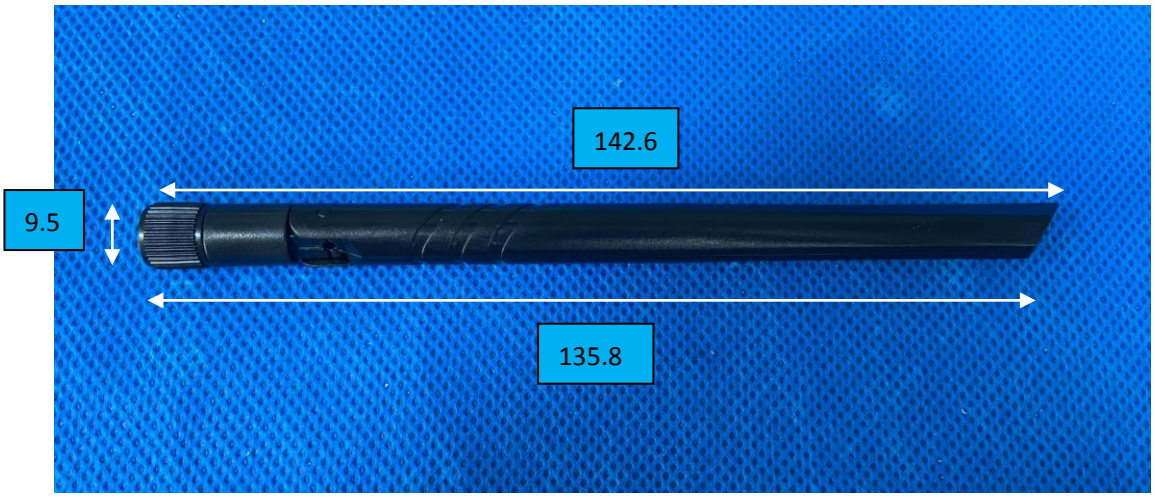
5.2 Antenna Efficiency and Gain

Frequency/Mhz	Efficiency / dB	Efficiency / %	MaxGain/dBi
853	-1.34	73.45	1.15
856	-1.42	72.11	1.05
859	-1.53	70.31	1.08
862	-1.22	75.51	1.3
865	-1.46	71.45	1.07
868	-1.62	68.87	0.85
871	-1.1	77.62	1.1
874	-1.29	74.3	0.99
905	-1.43	71.94	1.79
915	-1.38	72.78	2.00
925	-1.58	69.5	1.66

Phi0° 2D pattern	
Phi90° 2D pattern	

Theta90° 2D pattern	
3D pattern (3D Pattern)	

6.Physical picture

7.Packing method: shipped in bags

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