1.Objective

The specifications and test methods of mobile communication terminal antennas produced by Shenzhen Tianding Microwave Technology Co., Ltd. are standardized to avoid errors caused by different test conditions and methods.

2.Overview of product categories and product models

2.1 Product model overview

This report provides an overview of the design of the C01-Q3M01 project Electrical results of the antenna.
This antenna is designed in the frequency band: 2400-2480 MHZ.

3.Technical indicators and experimental equipment

3.1 Technical indicators

Product electrical performance indicators	
Operating frequency range	2400-2480MHZ
VSWR	<2
Gain	2.4dBi
Radiation efficiency	> 35 %
Impedance	50 ohm
Product material description	
FPC	**Electrolytic copper +PI**
Product environment description	

Operating temperature	- 30˚C ~ + 85 ˚C
Storage temperature	- 30˚C ~ + 85 ˚C

3.2Description of the experimental equipment

List	Testing project	Equipment
1. S Parameters	1.Return loss 2. VSWR at	Network analyzer: Agilent 8753ES
2. Coupling power test	1. Transmission power 2. Receiving sensitivity	Comprehensive tester: Agilent 8960 E5515C
3. Radiation pattern and gain	1. Radiation pattern 2. Antenna gain	1. Darkroom： 7x4x3 m (3D) 2. Network analyzer ： Agilent 8753ES

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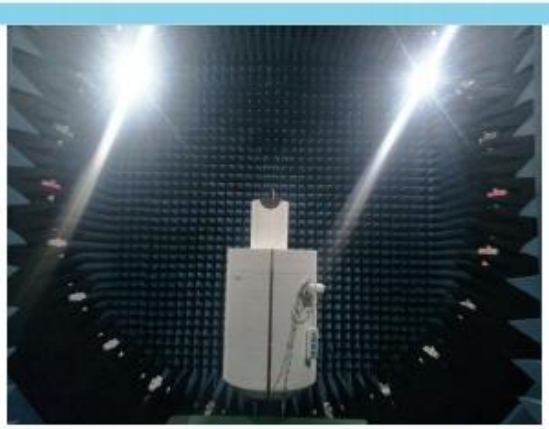
Test the environment



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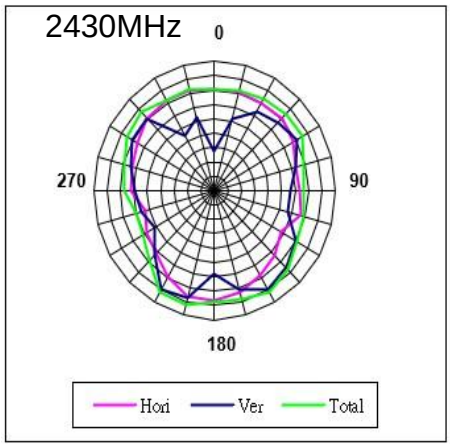
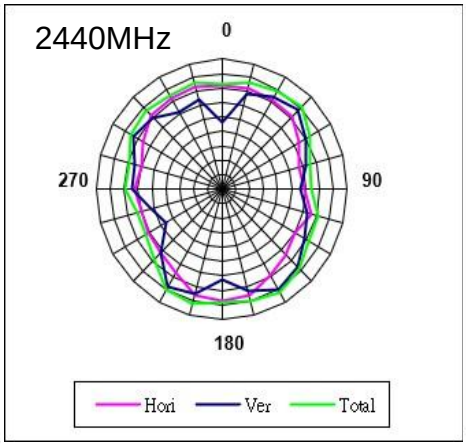
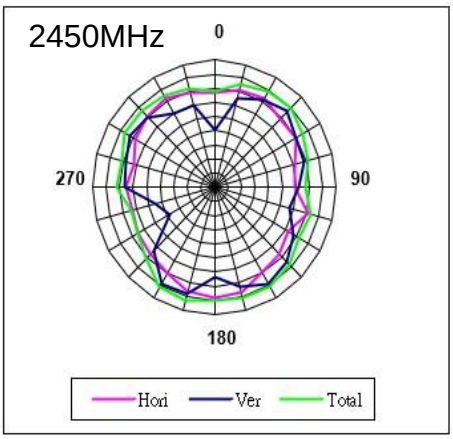
2.4G Passive source test data

		-90	-5.58	-1.98	-7.22	-7.26	-2.54	-4.54	-6.8
		-60	-0.13	-1.49	-4.22	-9.69	-1.83	-2.53	-7.9
		-30	-0.62	-2.06	-4.37	-5.84	-5.60	-5.69	-5.4
		0	-3.58	-4.53	-4.15	-2.83	-1.96	-2.15	-3.5
		30	-5.48	-3.97	-3.21	-2.08	-1.05	-0.22	-0.6
		60	-7.99	-8.17	-1.14	-0.72	-0.76	0.11	-0.1
		90	-6.87	-7.96	-2.94	-1.21	-2.99	-4.56	-5.5
		120	-0.67	-1.91	-3.29	-1.33	-1.13	-2.56	-6.5
		150	0.89	-0.30	-2.85	-7.01	-8.61	-7.02	-8.9
		180	-1.69	-2.79	-4.30	-4.31	-3.02	-2.24	-1.6
Total	Point Values	Ant. Port Input Pwr. (dBm)	Tot. Rad. Pwr. (dBm)	Peak EIRP (dBm)	Directivity (dBi)	Efficiency (dB)	Efficiency (%)	Gain (dBi)	NHPRP 最 i/4 (dBm
	Frequency (MHz)								
	2400	0	-3.11655	1.3183	4.43485	-3.11655	48.7916	1.3183	-4.6711
	2410	0	-2.77571	1.55493	4.33064	-2.77571	52.7751	1.55493	-4.3150
	2420	0	-2.35325	1.79762	4.15087	-2.35325	58.1668	1.79762	-3.8870
	2430	0	-1.87905	2.13726	4.01631	-1.87905	64.8776	2.13726	-3.4030
	2440	0	-1.70516	2.42295	4.12812	-1.70516	67.5279	2.42295	-3.2219
	2450	0	-1.80118	2.29948	4.10066	-1.80118	66.0514	2.29948	-3.326
	2460	0	-2.114	1.97634	4.09034	-2.114	61.4611	1.97634	-3.6516
	2470	0	-2.57914	1.52172	4.10085	-2.57914	55.2187	1.52172	-4.1160
	2480	0	-2.93219	0.890088	3.82228	-2.93219	50.9074	0.890088	-4.4545







Unit:dBi
Max:4Min:-14Scale:2/div

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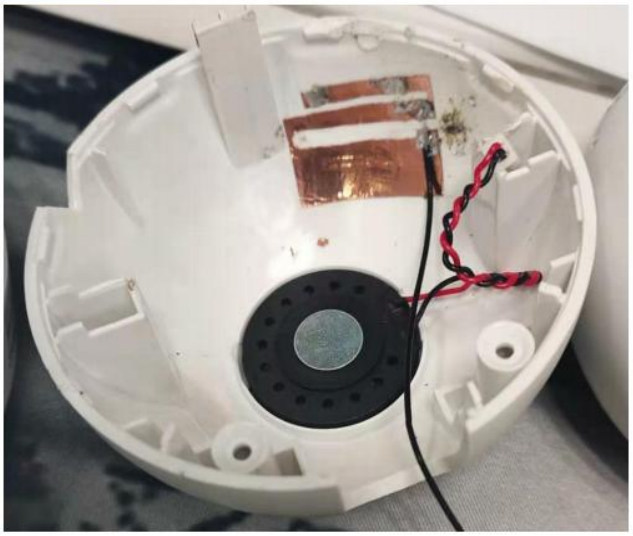
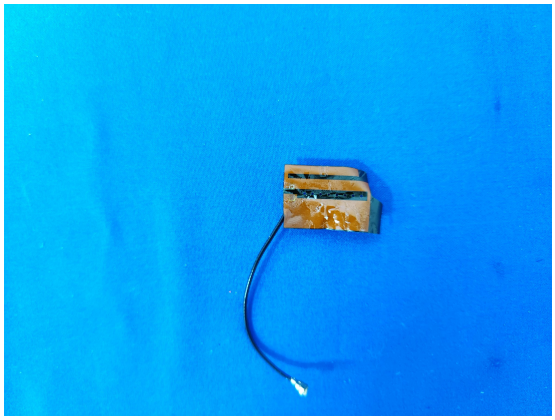
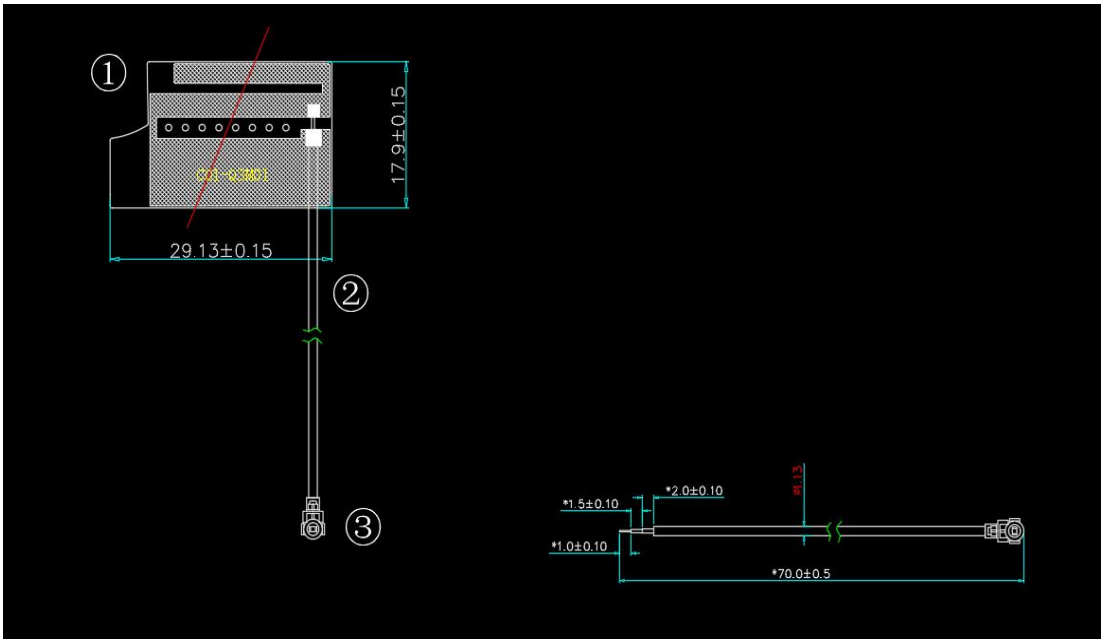
Antenna assembly drawing





结构图



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