

深圳市艾匯科技有限公司

天線規格書

Antenna Sample Confirmation From

供應商 supplier	東莞市信博聯電子有限公司 Dongguan Xinbolian Electronics Co., LTD				
製造商 Manufacturer	東莞市信博聯電子有限公司 Dongguan Xinbolian Electronics Co., LTD				
樣品名稱 Sample Name	FPC Antenna				
樣品規格 Specification	3代端子, 76mm, 0.81线径				
檢驗項目 Inspection Item	性能測試 Performance	外觀檢查 Total Appearance	結構 structure	其它 Others	檢驗結果 Inspection Result
	ZenDong	ZenDong	ZenDong		PASS
型號 Model	JSP-175680603-14BN				
品質審核 QA Audit	Jest	工程审核 Engineer Audit	ZenDong	業務確認 Sales Confirm	Feng Niu

Antenna Test Report

测试单位: 深圳市艾匯科技有限公司 Test by : ShenZhen Aihui Technology Co., Ltd			
材料 Material	FPC+同軸線		
天線類型 Antenna Type	MonopoleType	極化方式 Polarization mode	Linear
應用場景 Application			
工作頻段 Band	2400Mhz-2500Mhz	VSWR	≤2
功率 Power	Max : 2W	阻抗 Impedance	50Ω
增益 dBi	≥1dBi		
測試設備 Test Equipment	HPE5071C、Shielding Room、3D automatic turntable		

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Antenna Description: :

1. Grounding processing and picture description: no

2. Need to change the motherboard to match: no

- Test voltage: 3.6V, check the antenna contact is good before testing.
- The RF cable of the integrated tester is kept in a natural state and can not be curled.

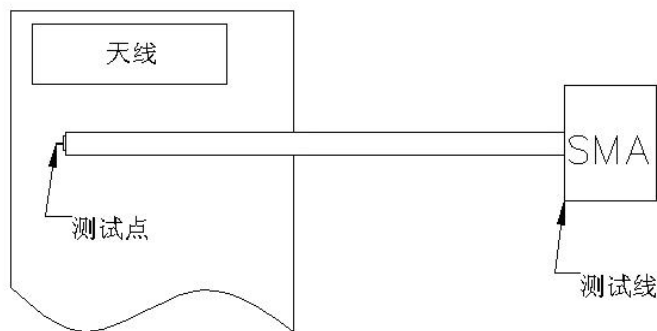
Specification: test the specified power level, all indicators must conform to the specifications.

1.Project picture

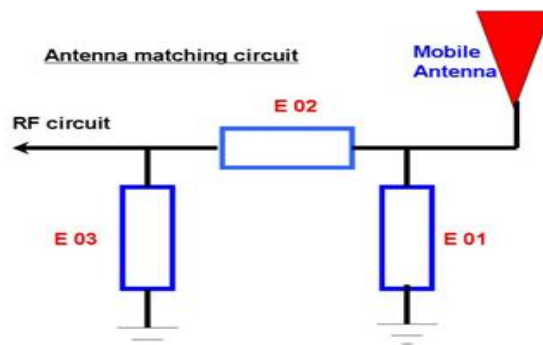
Note: The customer's final verification antenna performance prototype is retained in our company for at least one year to facilitate the analysis and solution of antenna mass production

2.Test tool

Objective: To test the passive parameters of antenna as accurately as possible.

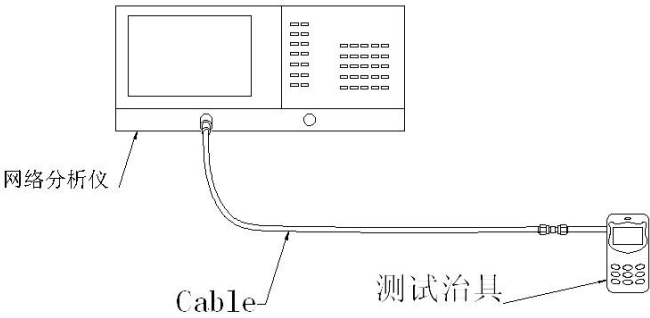


3、Antenna matching circuit



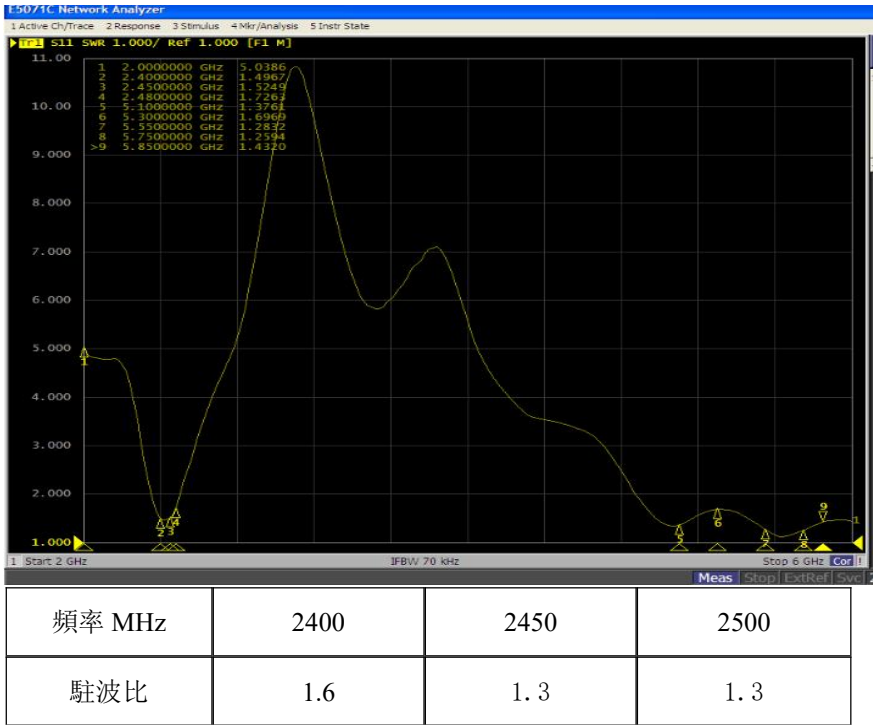
4. S11 Test

Test equipment: Network Analyzer (E5071C)
Test method: A 50 ohm CABLE is exported from the instrument test port, and the SMA connector of the hand mechanism is connected after calibration with the calibration component. The return loss and standing wave ratio corresponding to the relevant frequency points are recorded.



Test diagram

Main set antenna passive standing wave ratio



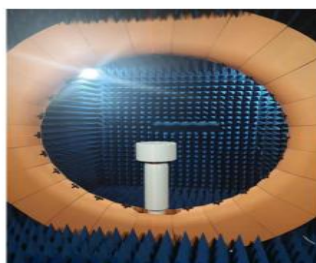
5、暗室測試設備和數據

Test system: shielded darkroom

Test environment: Temperature 22 ± 3 , humidity $50\%\pm15\%$

Test equipment: When testing passive data, use the network analyzer

AgilentE5071C



Active antenna test data

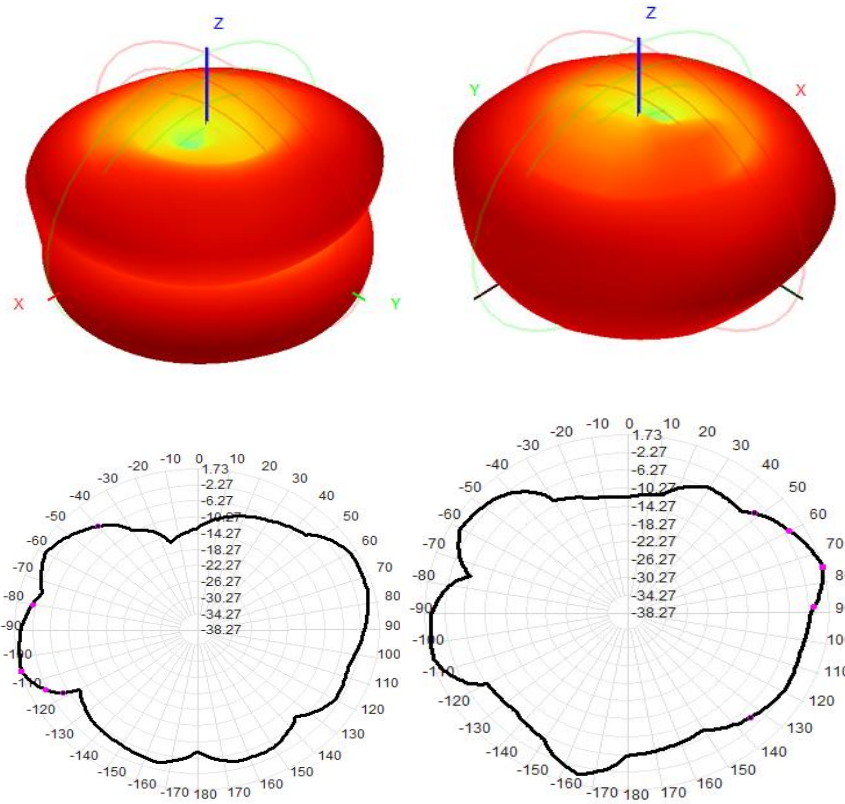
2.4G	11B Mode			11G Mode		
CH	1	6	12	1	6	12
TRP	11.5	12.3	11.7	10.5	10.6	11.4
TIS			-79.5			-69.7

2.4G	11N Mode			5 G		
信道	1	6	12	36	64	165
TRP	10.8	11.4	10.3	9.8	10.5	10.3
TIS	--	--	-65.5	--	--	165

Test Data

Gain&Efficiency			
frequency	gain	efficiency	efficiency
频率(Hz)	增益(dB)	效率(dB)	效率
2400M	46	-3.96	51.47%
2410M	32	-3.88	52.16%
2420M	1.54	-3.73	50.11%
2430M	1.61	-3.81	52.21%
2440M	48	-3.35	51.03%
2450M	1.39	-3.14	53.41%
2460M	1.73	-3.26	54.74%
2470M	1.68	-3.12	5
2480M	1.63	-3.31	52.37%
2490M	1.43	-3.76	51.28%
2500M	1.44	-3.84	50.66%
5050M	1.9	-3.47	54.54%
5100M	1.89	-3.43	54.15%
5150M	1.73	-3.86	56.25%
5200M	1.96	-3.17	56.38%
5250M	2.01	-2.97	57.23%
5300M	1.63	-3.13	56.66%
5350M	1.88	-3.55	55.73%
5400M	2.11	-3.02	57.62%
5450M	1.98	-3.34	56.38%
5500M	1.83	-3.43	54.83%
5550M	2.06	-3.24	56.52%
5600M	1.94	-3.61	56.71%
5650M	1.71	-3.88	54.10%
5700M	1.66	-3.79	54.83%
5750M	1.85	-4.1	52.19%
5800M	1.8	-4.22	51.24%
5850M	1.76	-4.31	50.28%

2.4G Directivity Diagram



5G Directivity Diagram

