



ShenzhenXingtongWieressTechnologyCo ., Ltd

深圳市星通无线技术有限公司

For

深圳市九洲智和科技有限公司

R1000Z - WIFI/BT-ANT

产品承认书

客户料号/Part No. : 00. ZH. 1. 301. 0142. 97005

产品型号/STYLE: R1000Z-WIFI/BT-FPC天线

规格书编号/Specification No.:20230407-A

客户 Client	
承认 Approved	

核准 Approved by	审核 Checked by	设计 Designed by
徐根	吴延龙	黄加俊

Project:R1000Z		Author: HUANG	File Name: R1000Z-APP-RA
Date: 2023-04-07			
TEST:	Language:	Check: XIE	
A	English		
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Revision History

Date	Revision	Description of Changes
2023-04-07	RA	Measured with FPC sample.

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1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the R1000 program. We test the antenna with the latest version handset. And it seems to be acceptable.

2 General Description

2.1 Components/Part revisions

VSWR: Voltage Standing Wave Rate.

3 Mechanical Description



4 Electrical Performance

4.1 Set-up

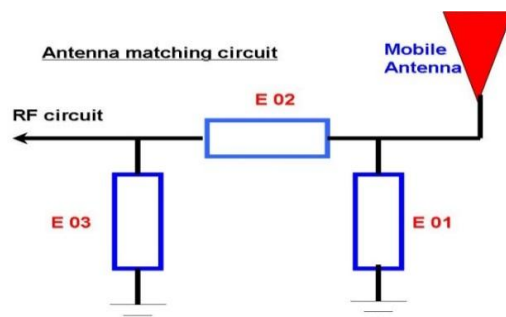
4.1.1 VSWR

VSWR measurements (S21) were performed using an Agilent 8753D Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

4.1.2 Gain & Radiation Patterns

The gain of the antenna was measured in the Xingtong's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than -30 dB reflectivity from 2 GHz through 6 GHz and an 18" diameter spherical quiet zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

4.1.3 Matching Circuit Description



匹配无修改

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4.2 Measurement Data

4.2.1 WIFI-OTA

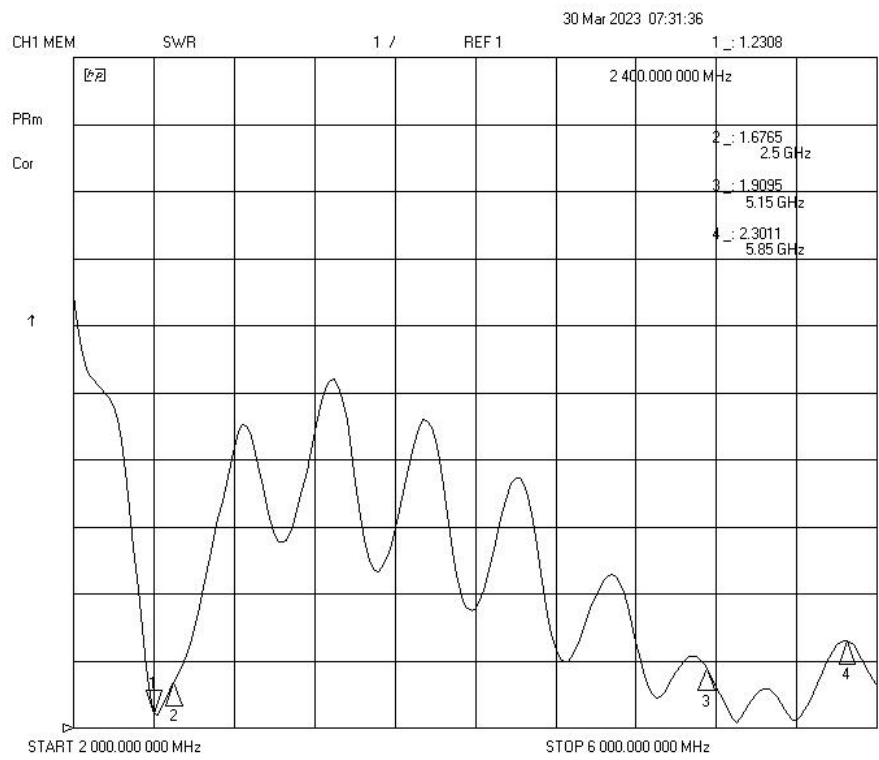
Cell	Band	Channel	TRP	Cell	Band	Channel	TIS
WIFI/2.4G/TRP	802.11b (11M)	1	9.68	WIFI/2.4G/TIS	802.11b (11M)	1	-80.35
		6	9.81			6	-81.21
		11	10.52			11	-80.31
	802.11g (54M)	1	8.35		802.11g (54M)	1	-67.28
		6	8.48			6	-67.39
		11	9.11			11	-68.11
	802.11gn (MCS7)	1	7.58		802.11gn (MCS7)	1	-64.59
		6	7.69			6	-64.57
		11	8.12			11	-65.15
WIFI/5G/TRP	802.11a (54M)	36	10.38	WIFI/5G/TIS	802.11a (54M)	36	-70.69
		149	10.25			149	-70.25
		165	10.36			165	-70.68
	802.11an (MCS0, HT20)	36	9.28		802.11an (MCS0, HT20)	36	-68.28
		149	9.39			149	-68.47
		165	9.28			165	-67.86
	802.11ac (MCS0, HT20)	36	7.68		802.11ac (MCS0, HT20)	36	-63.52
		149	7.39			149	-63.48
		165	7.29			165	-63.29
BT/TRP/2LE	2402	0	5.36	BT/TIS/2LE	2402	0	-83.28
	2441	39	5.14		2441	39	-83.27
	2480	78	5.19		2480	78	-83.41

Frequency (MHz)	Eff (%)	Eff (dB)	Gain (dBi)
2400.00	36.32	-7.32	1.36
2410.00	31.79	-8.62	1.34
2420.00	31.17	-8.32	1.23
2430.00	33.36	-8.12	0.84
2440.00	31.25	-8.63	0.88
2450.00	32.64	-8.61	1.50
2460.00	33.06	-7.21	1.25
2470.00	32.06	-8.01	1.35
2480.00	32.64	-9.03	1.35
2490.00	35.99	-9.14	1.30
2500.00	32.41	-9.04	1.28
5100.00	48.52	-8.21	1.05
5150.00	45.76	-9.31	1.20
5200.00	49.25	-8.62	1.17
5250.00	46.64	-6.31	1.50
5300.00	51.77	-5.63	1.43
5350.00	48.60	-7.62	1.43
5400.00	51.30	-8.63	1.42
5450.00	48.15	-7.63	1.08
5500.00	50.26	-8.62	1.36
5550.00	46.52	-8.62	1.28
5600.00	45.16	-7.82	1.35
5650.00	50.07	-8.63	1.28
5700.00	45.55	-9.12	1.34
5750.00	50.33	-8.52	1.42
5800.00	46.64	-10.61	1.48
5850.00	51.04	-8.36	1.41

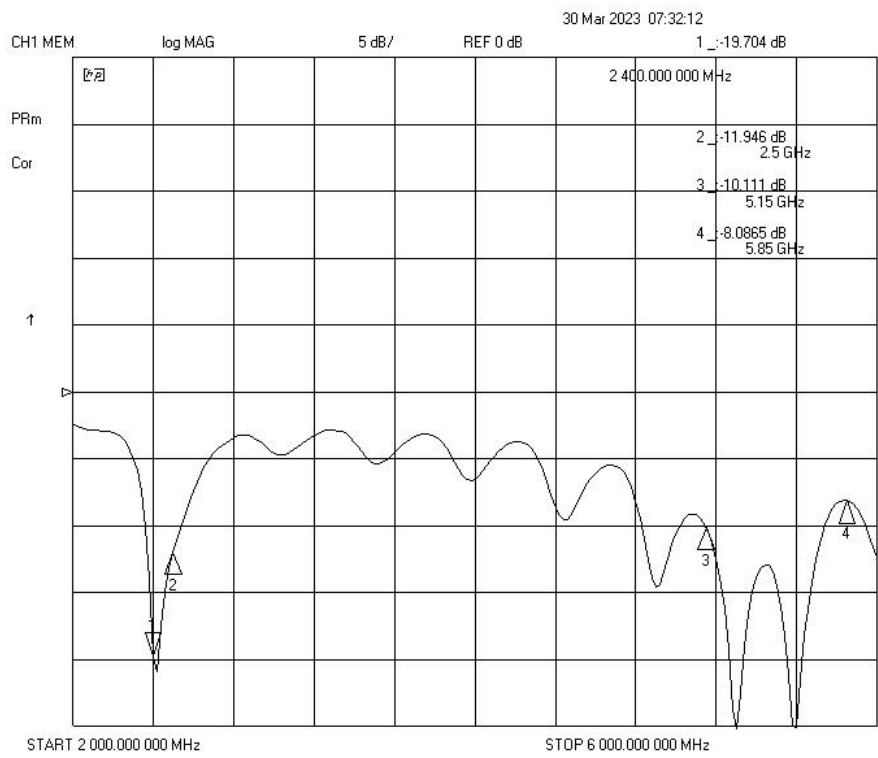
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5 Plots

5.1 VSWR (S11)



5.2 LOG MAG (S11)



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WiFi 工程图

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7 Reliability tests

7.1 Test content

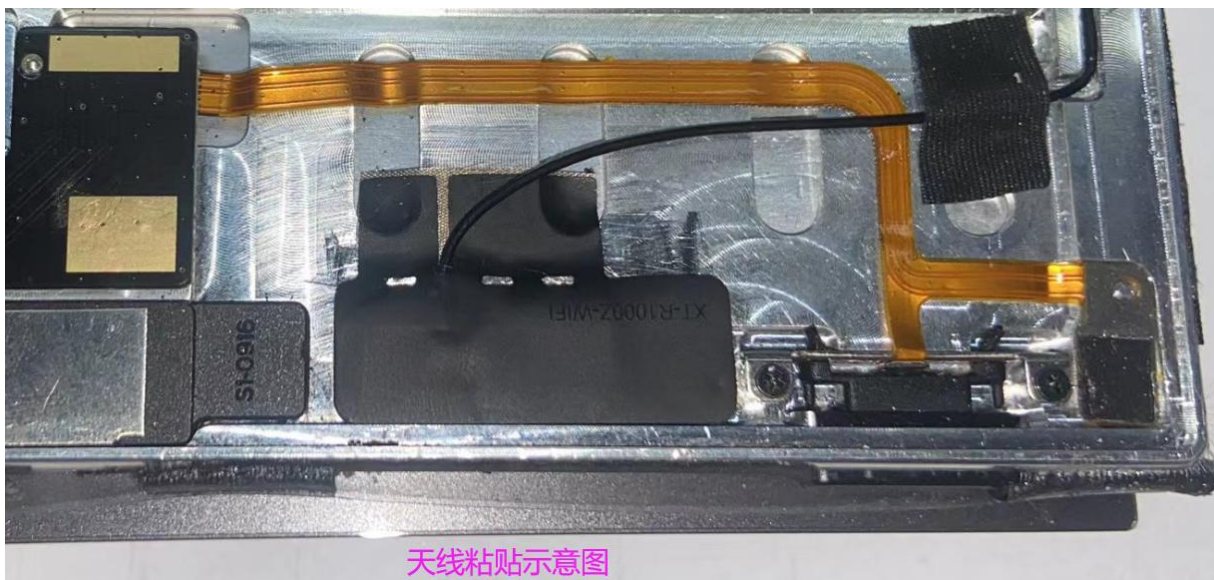
No	试验项目	试验方法	判定基准
1	盐水喷雾试验	把盐浓度 5%的溶液喷雾 48HR	不能有变色, 歪 (变形) 脱落等的缺点 无腐蚀面积
2	工作温度 (Operational Temperature)	-40℃~+65℃	
3	储存温度 (Storage Temperature)	-50℃~+85℃	
4	湿度 (Humidity)	40%~95%	

7.2 Test results

NO	样品数	试验期间	实验结果	备注
1	50	24 小时	OK	技术等级为 9 级 腐蚀<0.4mm
2	50	24 小时	OK	技术等级为 9 级 腐蚀<0.4mm

8 Conclusion

环境处理参考天线性能报告！



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