

森沛（深圳）有限公司

零件承认书

产品信息	供应商	深圳市连兴创电子科技有限公司		
	物料名称	180mm Wifi 天线 for Intel 7265		
	供应商料号	LXC-202312210001		
	森沛适用机型	MGS101-05B		
	森沛料号	928-C180400-L45		
	森沛物料描述	Cable WiFi antenna, for Intel 7265, 2.4G+5G, 线长 180mm , 500hm/OD 0.81mm, 银锡灰线 , FPC type, 25.98×16.81mm, KCC 四代端子, 含 40×21mm 导电布, RoHS		
硬件确认	产品电气性能	确认人/日期		
测试确认	测试可靠性	确认人/日期		
结构确认	结构认定	确认人/日期		
系统确认	系统认定	确认人/日期		
品质确认	产品可靠性/外观	确认人/日期		
此份分发以下部门:		☐ 品质部 ☐ 采购部 ☐ 系统结构部 ☐ 硬件部 ☐ 供应商 本样品: ☐ 限量采购 ☐ 限定应用机型 ☐ 部分承认 ☐ 完全承认 ☐ 其他		
		签 发 供应商审核 (森沛) 总经理签署		

8Project:		Author:Wang	File Name: 928-C180400-L45
Date: 2023-12-29			
TEST:	Language:	Check: Zhong	
A	English		
Address: 4th Floor, Building C, Jinruihua Industrial Park, No. 12 Huafang Road, Dalang Street, Longhua District, Shenzhen, China Phone: +86-755-29195258 Fax: +86-755-29590286 Shenzhen Lxc Electronics Technology Co., Ltd			

频率范围 Frequency range	WIFI:(2.4/5.8MHz)
驻波比系数 VSWR	<2.0
输入阻抗 Input Impedance	50 (Ω)
极化方式 Polarization	垂直极化 Vertical Polarization
半功率波束 (3dB) HPW	180° H-plane 120° E-plane

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Revision History

Date	Revision	Description of Changes
2023-12-29	RA	Measured with SUS301 sample.

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1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the 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

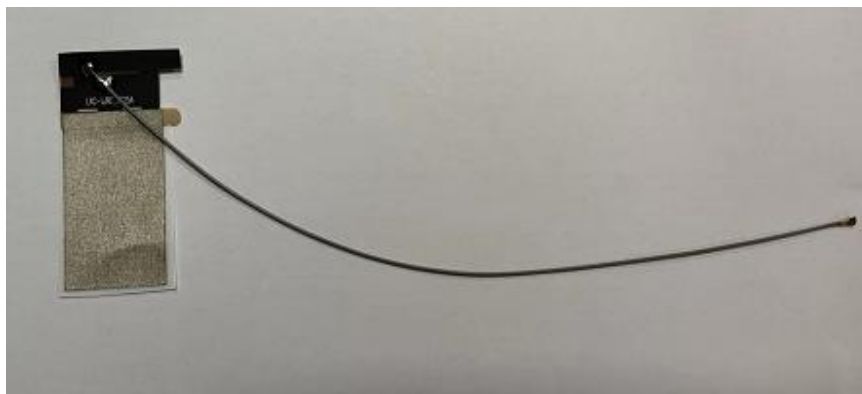
4.1.1 VSWR

VSWR measurements (S11) 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.

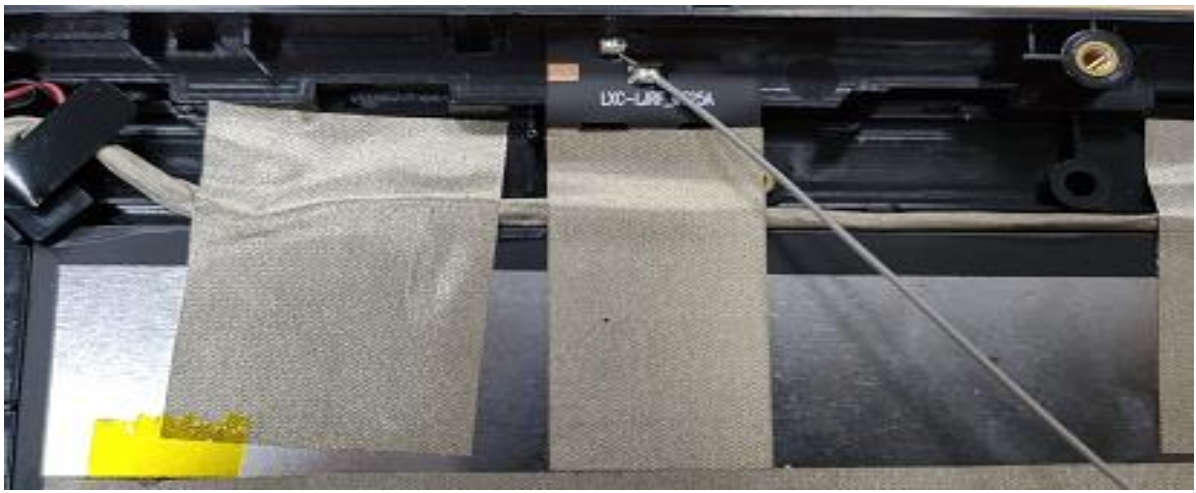
4.1.2 Gain & Radiation Patterns

The gain of the antenna was measured in the Lxc's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than -30 dB reflectivity from 800 MHz through 3 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

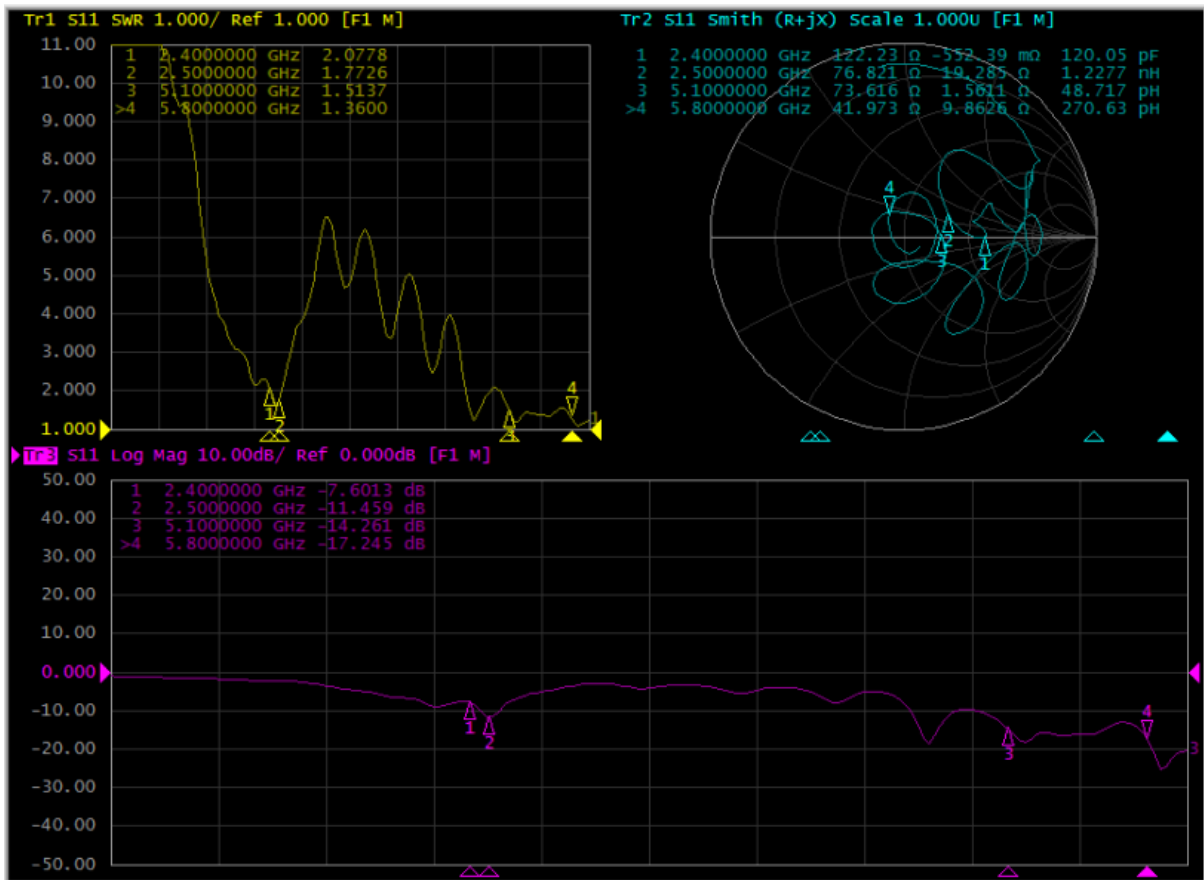


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4.2 Measurement Data

4.2.1 Active result (WIFI)



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WIFI测试数据:

WIFI 2.4G

Freq(MHz)	Efficiency (%)	Gain (dBi)
2400	52.6	2.13
2410	53.6	2.15
2420	51.4	2.11
2430	52.6	2.14
2440	52.8	2.18
2450	52.7	2.17
2460	53.6	2.21
2470	52.4	2.16
2480	52.6	2.14
2483	53.6	2.24

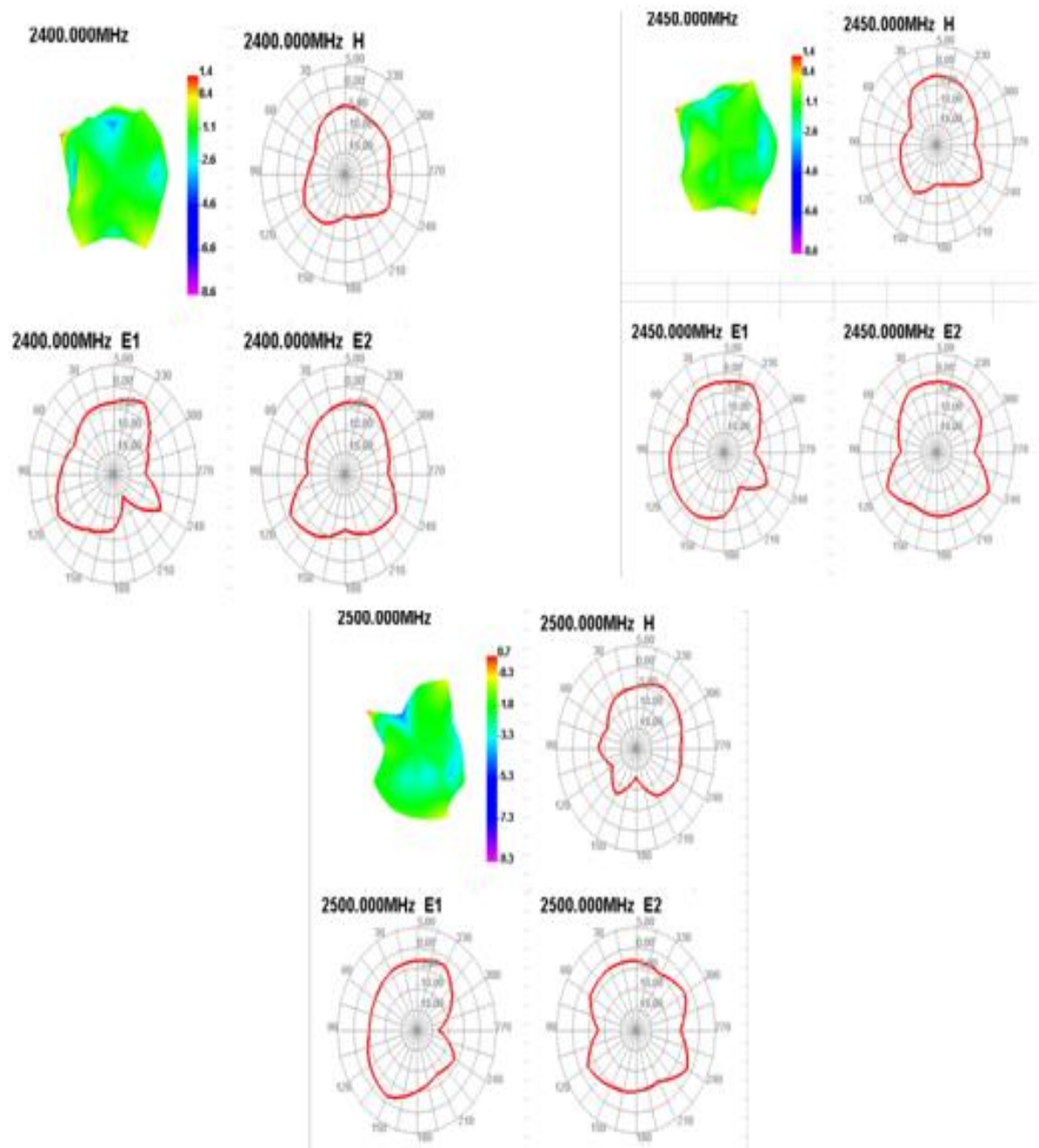
2400.00MHz - 2500.00MHz Gain



2400.00MHz - 2500.00MHz Efficiency



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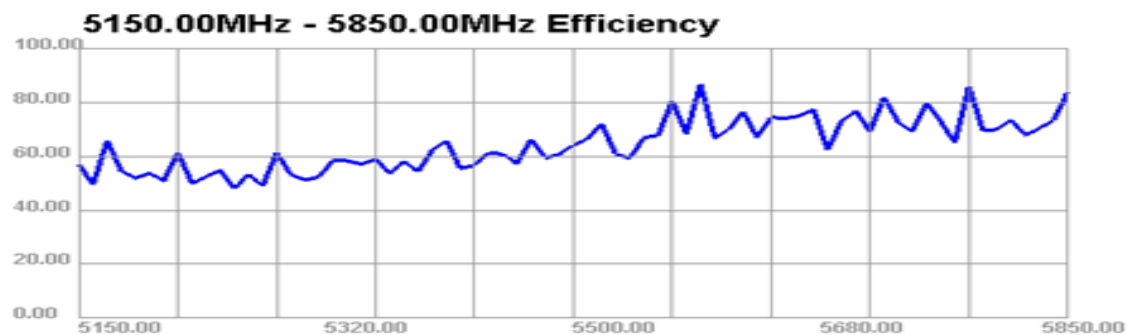
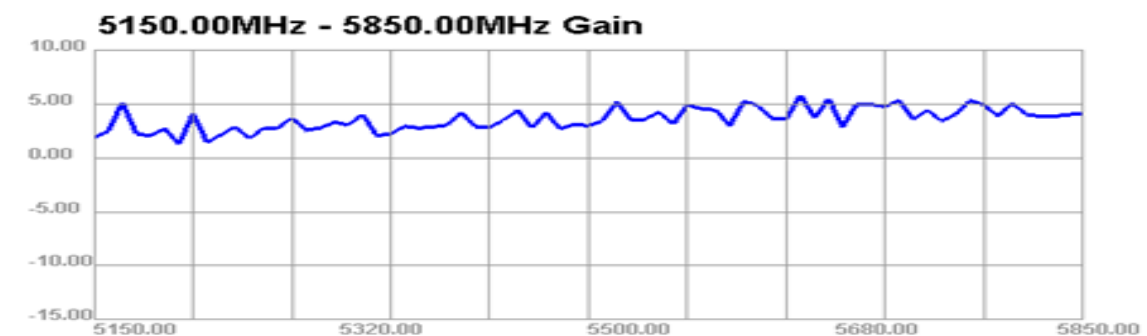


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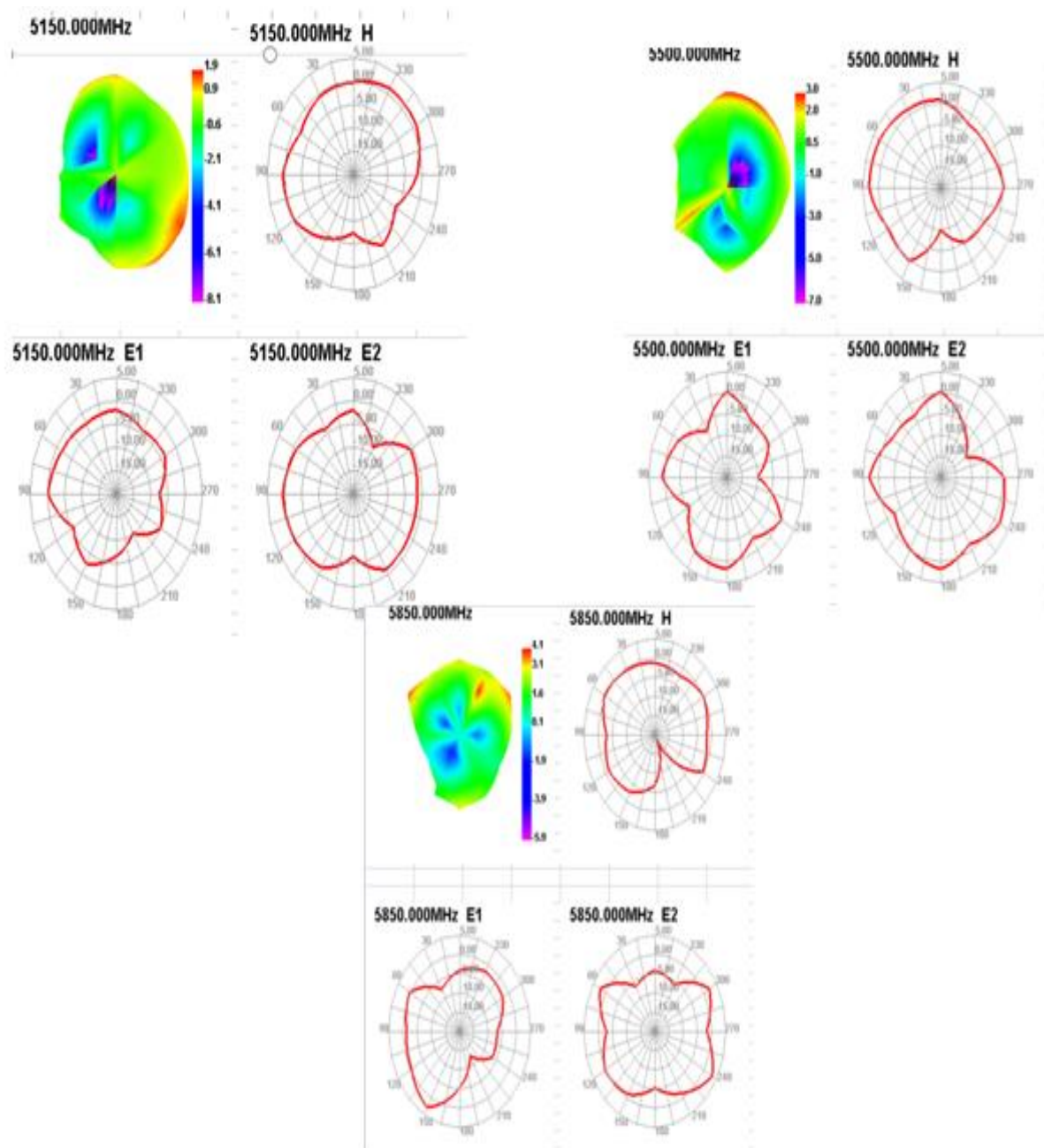
WIFI测试数据:

WIFI: 5.8G

Freq(MHz)	Efficiency (%)	Gain (dBi)
5100	56.2	2.43
5150	56.8	2.47
5200	57.4	2.54
5250	58.3	2.56
5300	58.4	2.51
5350	58.8	2.58
5400	56.4	2.44
5450	57.2	2.53
5500	57.9	2.51
5550	58.5	2.54
5600	56.3	2.47
5650	56.8	2.46
5700	57.4	2.53
5725	57.6	2.56
5750	56.9	2.49
5800	58.2	2.54
5850	58.1	2.58



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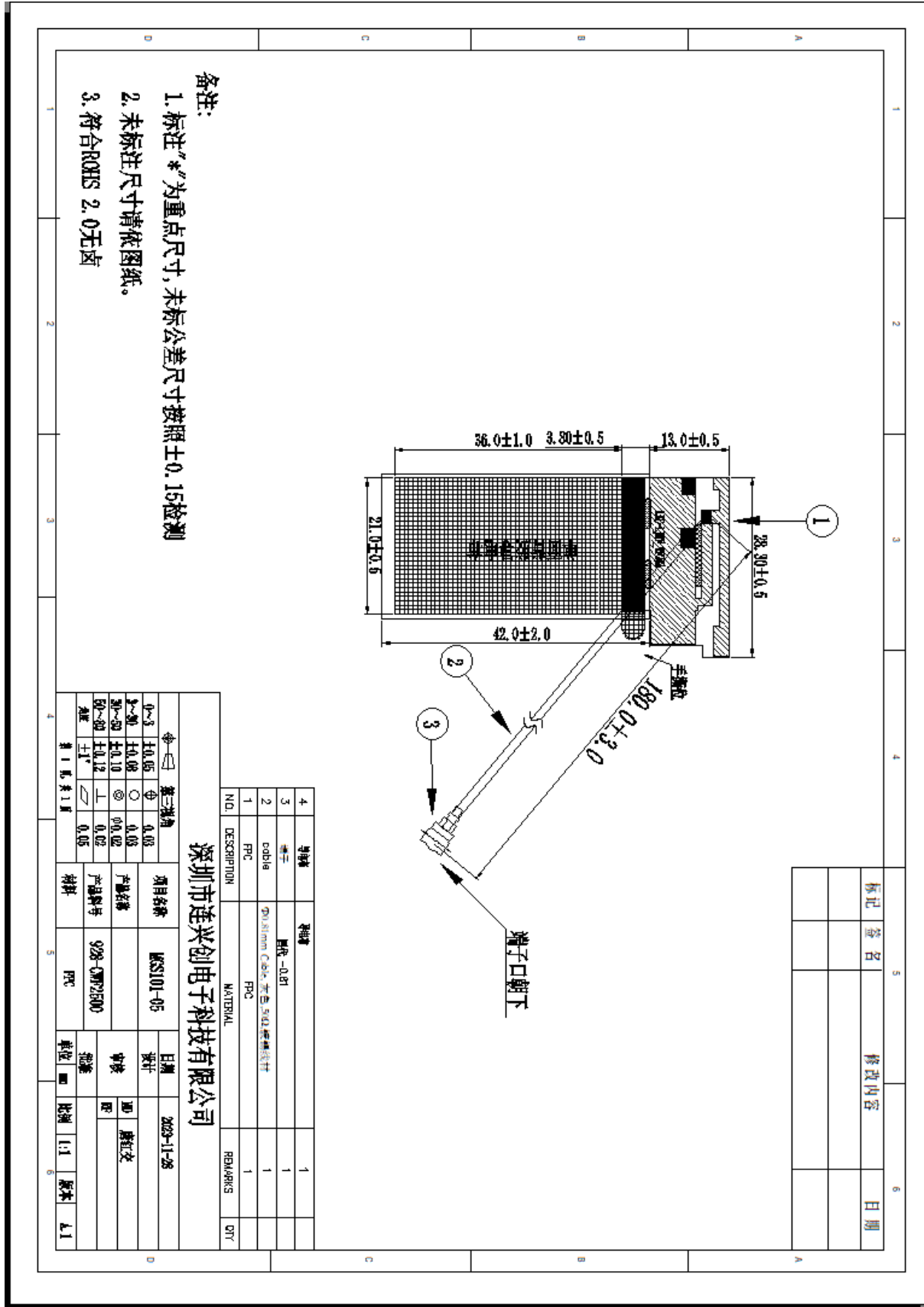
WiFi有源测试数据

天线测试报告	802.11B Antenna Performance Table			802.11G Antenna Performance Table		
Channel	CH 1	CH 6	CH11	CH 1	CH 6	CH 11
Max Power (dBm)	10.6	10.5	10.8	9.8	10.4	9.7
TRP(dBm)	7.6	7.3	7.1	6.5	7.8	6.8
Sensitivity(dBm)	-78.5	-78.6	-78.5	-68.2	-68.4	-68.7
TIS(dBm)	-75.3	-75.6	-75.8	-65.2	-65.8	-65.4
天线测试报告	802.11N Antenna Performance Table			802.11A Antenna 5.8 Performance Table		
Channel	CH1	CH6	CH11	CH36	CH100	CH149
Max Power (dBm)	8.3	8.4	9.7	16.3	16.2	16.8
TRP(dBm)	5.3	5.6	6.4	13.2	13.6	13.4
Sensitivity(dBm)	-63.8	-63.7	-63.1	-73.6	-73.5	-73.8
TIS(dBm)	-60.8	-60.8	-60.4	-70.6	-70.8	-70.4

802.11AC

Item	Measurement	Azimuth	Elevation	Standard	Band	Channel	Frequency	Max	Min	Total
1	TRP	Every30	Every30	WIFI (AP)	WIFI_AC	36	5180	14.97	3.58	11.19
2	TRP	Every30	Every30	WIFI (AP)	WIFI_AC	64	5320	15.79	4.63	11.15
3	TRP	Every30	Every30	WIFI (AP)	WIFI_AC	165	5825	16.15	-3.4	9.8
4	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_AC	36	5180	-59.1	-70.4	-66.8
5	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_AC	64	5320	-60.95	-71.97	-67.13
6	TIS(EIRP)	Every30	Every30	WIFI (AP)	WIFI_AC	165	5825	-52.59	-72.15	-65.77

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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 腐蚀面积不能过大

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	48 小时	OK	技术等级为 9 级 腐蚀<0.4mm

8 Conclusion

From the above test results, we can know the electrical performance of the antenna is seems good.

Shenzhen Lxc Electronics Technology Co., Ltd., look forward to your confirmation, thank you for your cooperation!

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