E-ANT2-900120-0001

Shenzhen Lxc Electronics Technology Co ., Ltd

深圳市连兴创电子科技有限公司

APPROVAL SHEET

承认书

客户（Customer）：富斯

产品（Product）：868-915MHz 天线(L=120MM)

型号（Model）：T型天线

料号（Part Number）：ANT2-900120-0001

制作人（Written By）：唐红交

签发时间（Issued Date）：2024-04-26

客户 CUSTOMER

频率范围 Frequency range	(863-928GHz)
驻波比系数 VSWR	<3.0
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

RF by		**Checked by**	
ME by		**Date**	
Customer Confirm			

8Project:		Author:Wang	File Name:
Date: 2024-04-26			**ANT2-900120-0001**
TEST:	Language:	Check: Zhong	
A	English		

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Revision History

Date	Revision	Description of Changes
2024-04-26	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

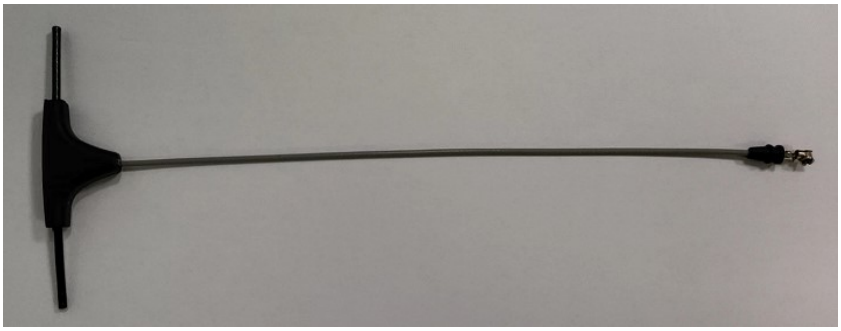
4.1.1 VSWR

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

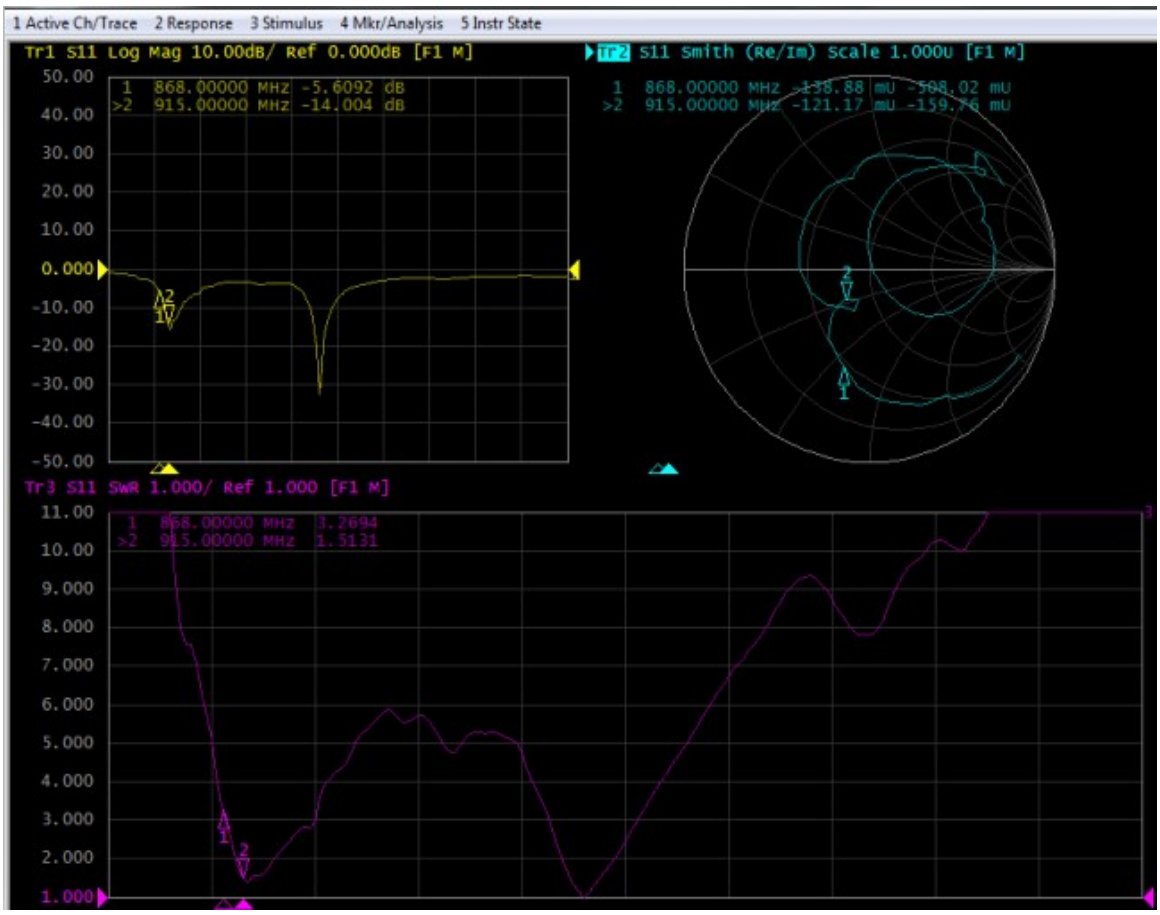
The gain of the antenna was measured in the Lxc's anechoic chamber. Coaxial chokes on the feed cable were used to mitigate surface currents. The chamber provides less than –30 dB reflectivity from 800 MHz through 3 GHz and an 18" diameter spherical quite zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

4.1.3 Matching Circuit Description

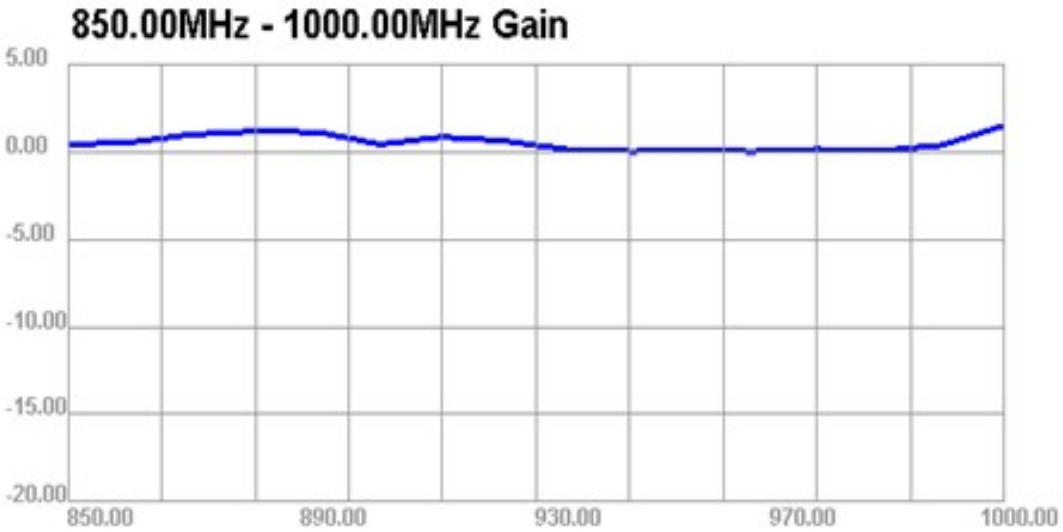


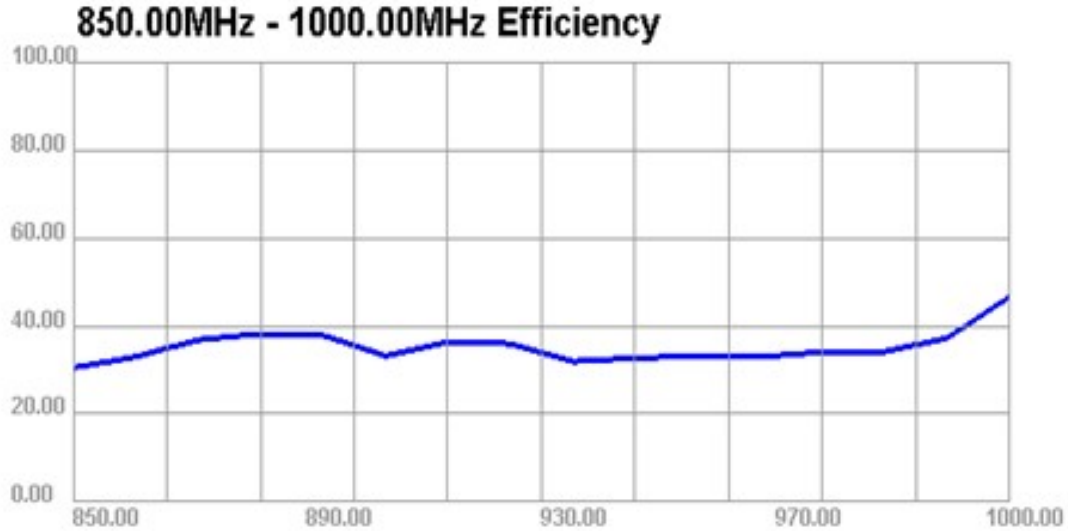
4.2 Measurement Data

4.2.1 Active result（915）



Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	irectivit (dBi)
850	30.54	-5.15	0.41	-1.74	13.607	16.936	0.41	-16.66	5.56
860	32.99	-4.82	0.55	-1.6	15.043	17.949	0.55	-16.43	5.36
870	36.87	-4.33	0.99	-1.16	17.09	19.779	0.99	-14.84	5.32
880	38.25	-4.17	1.17	-0.98	17.686	20.568	1.17	-14.32	5.35
890	37.91	-4.21	1.12	-1.03	17.425	20.484	1.12	-14.27	5.34
900	33.25	-4.78	0.43	-1.72	15.22	18.026	0.43	-14.59	5.21
910	36.36	-4.39	0.84	-1.31	16.506	19.857	0.84	-13.52	5.23
920	36	-4.44	0.62	-1.53	16.101	19.894	0.62	-13.38	5.06
930	31.96	-4.95	0.13	-2.02	14.365	17.592	0.13	-13.72	5.08
940	32.75	-4.85	0.02	-2.13	14.694	18.06	0.02	-13.79	4.87
950	33.16	-4.79	0.06	-2.09	14.854	18.309	0.06	-14.72	4.85
960	32.99	-4.82	0.02	-2.13	15.037	17.948	0.02	-14.71	4.84
970	34.12	-4.67	0.14	-2.01	16.196	17.921	0.14	-13.45	4.81
980	34.21	-4.66	0.05	-2.1	16.812	17.399	0.05	-13.57	4.71
990	37.26	-4.29	0.37	-1.78	18.946	18.316	0.37	-12.27	4.66
1000	46.63	-3.31	1.5	-0.65	24.047	22.58	1.5	-13.86	4.82





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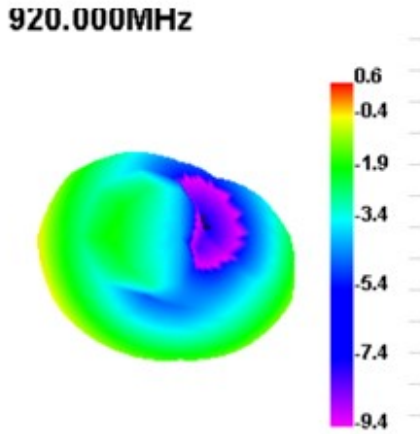

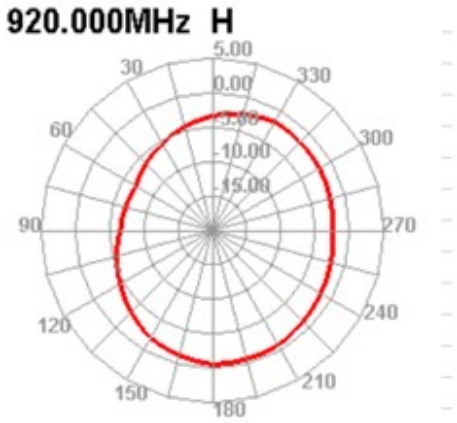

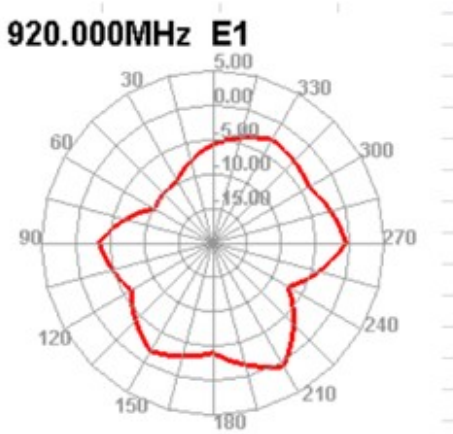

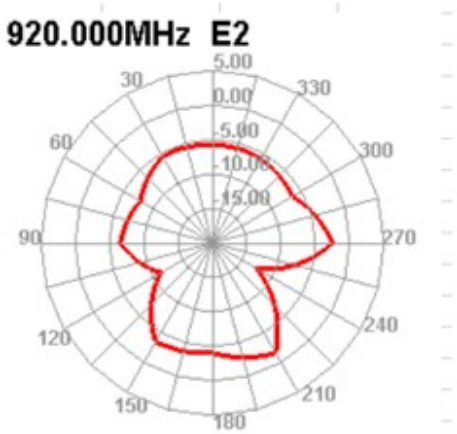

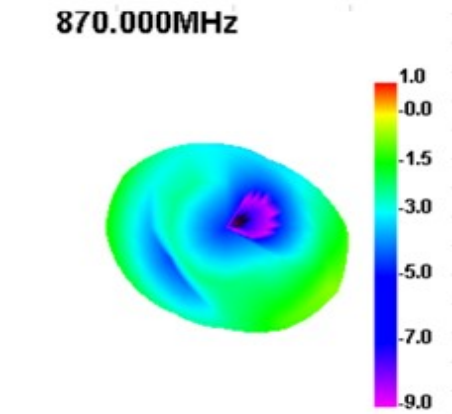

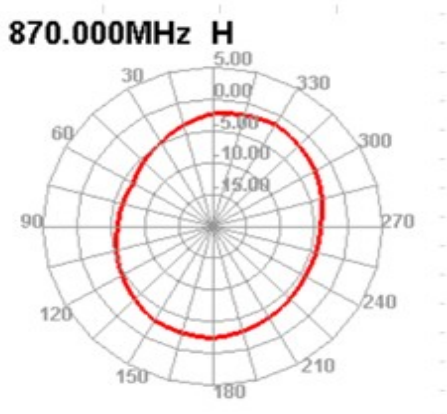

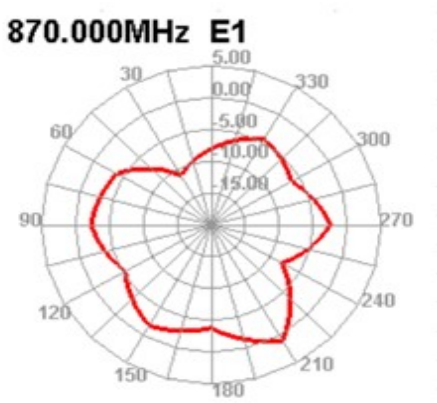

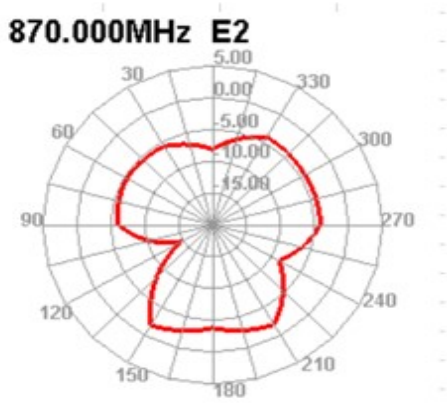

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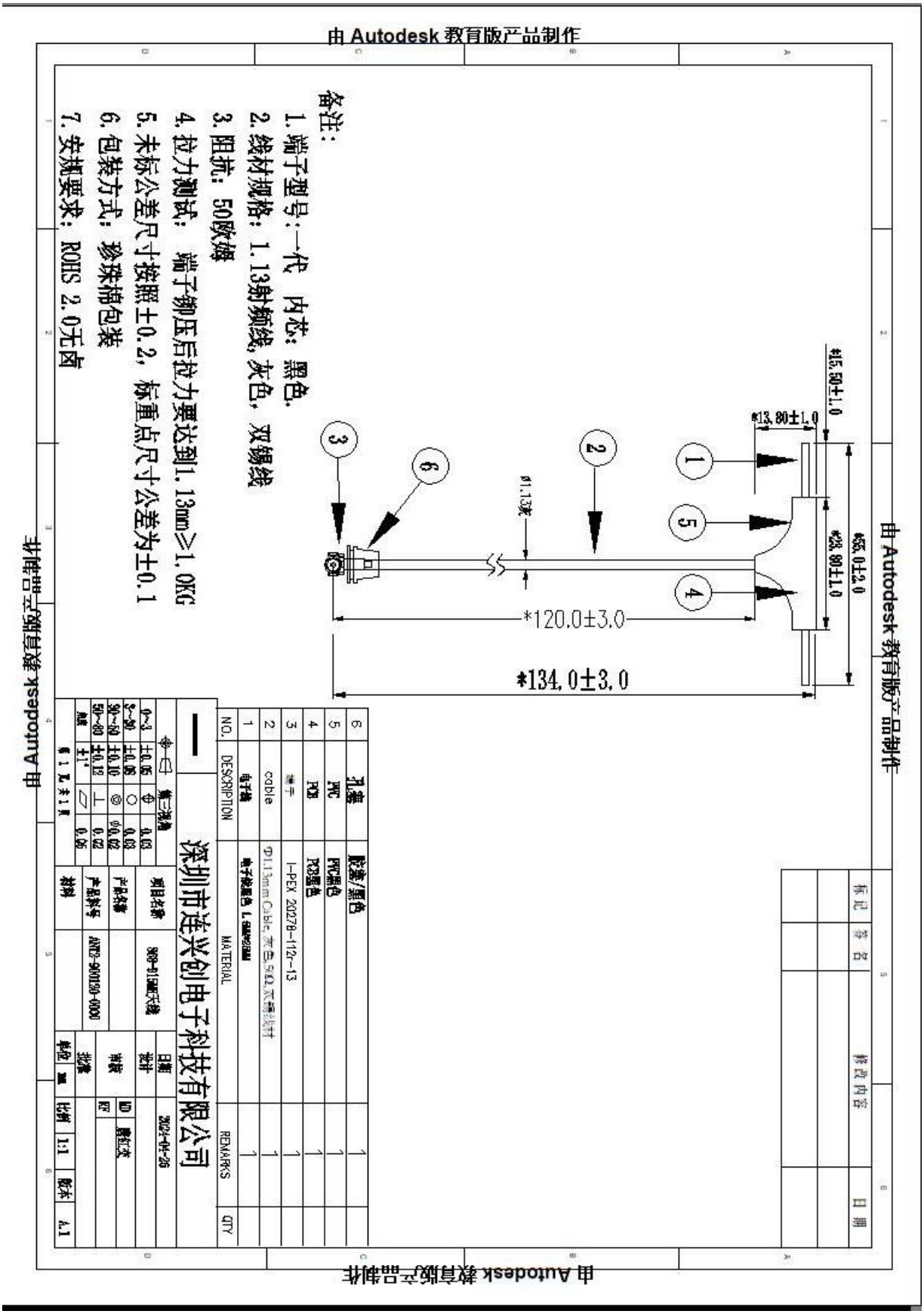
6 Mechanical drawing



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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

8Conclusion

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！