

Shenzhen Lxc Electronics Technology Co ., Ltd

深圳市连兴创电子科技有限公司

2DB 天线 project

Antenna componentst

频率范围 Frequency range	2400~2500 (MHz)
驻波比系数 VSWR	<3.0
输入阻抗 Input Impedance	50 ± 5 (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			

Project:2DB-天线		Author:Wang	File Name: 2DB-天线
Date: 2020-03-09			
TEST:	Language:	Check: Zhong	
A	English		
地址:深圳市龙华新区东环一路柏佳润工业区 3 栋 2 楼 电话: 0755-29195258 传真: 0755-29590286 Shenzhen Lxc Electronics Technology Co ., Ltd			

Revision History

Date	Revision	Description of Changes
2020-03-09	RA	Measured with PCB sample.

1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the **2DB-天线** 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

No changed..

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4.2 Measurement Data

4.2.1 Active result

Passive Test For wifi		
Freq (MHz)	Effi (%%)	Gain (dBi)
2400	55.8	2.34
2410	58.57	2.4
2420	60.26	2.66
2430	61.87	2.93
2440	60.32	2.03
2450	61.59	2.77
2460	62.43	3.01
2470	58.44	2.4
2480	58.6	2.3
2490	57.74	2.21
2500	57.98	2.25

注：2.45G 的 WIFI 效率标准是 40-50%。（数值越大性能越好）

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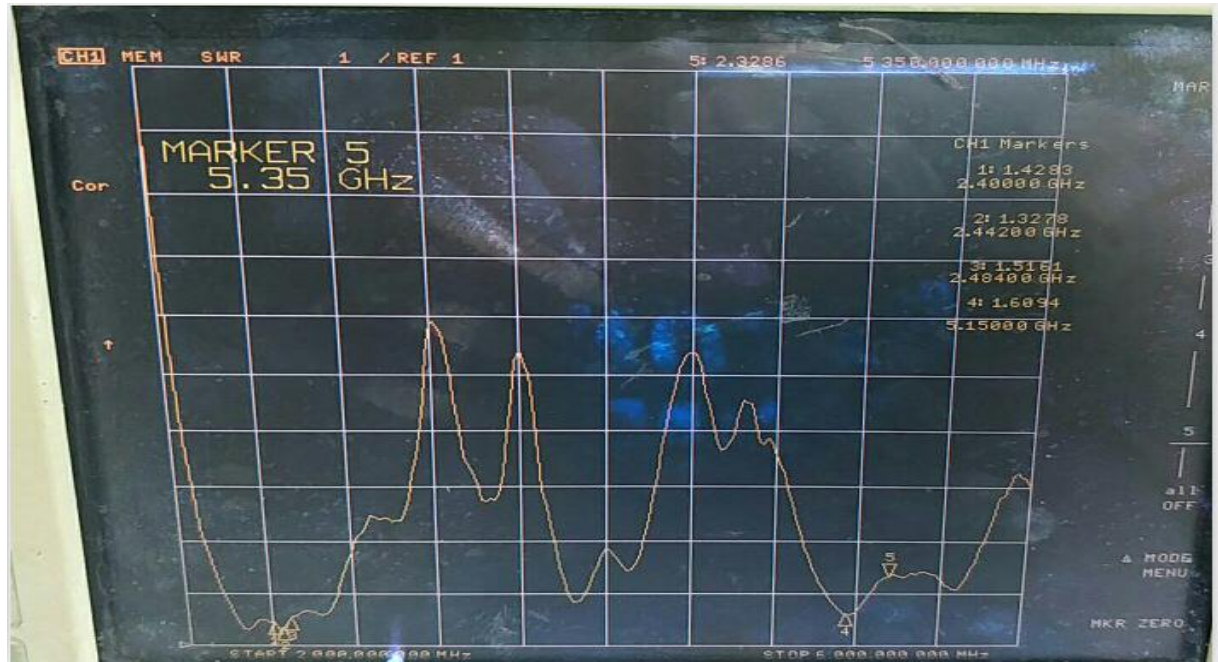
5

6 Plots

6.1 VSWR

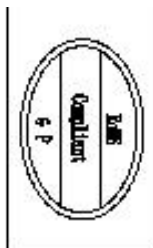


注：驻波系数的标准值为 1.5. (数值越小性能越好)

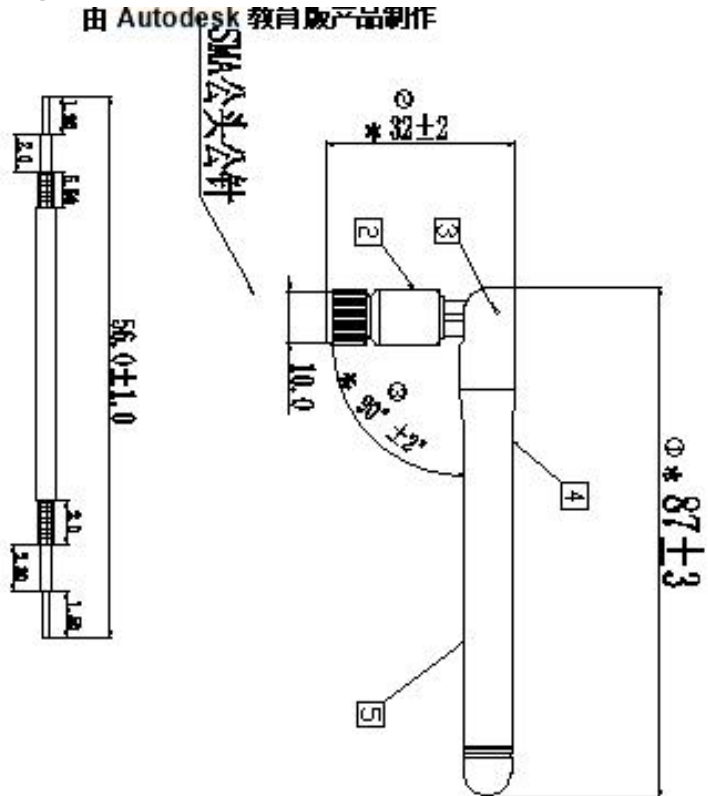


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6 Mechanical drawing



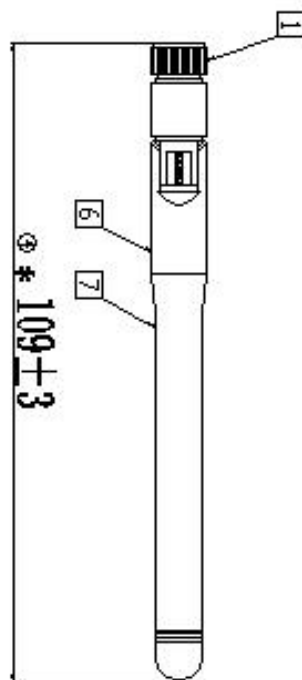
由 Autodesk 教育版产品制作



由 Autodesk 教育版产品制作

备注:

1. SMA 公称 1.78 棕色双横线 PCB, 弹簧
2. 未标注尺寸请按图纸。
3. 符合 RoHS2.0 无卤
4. 标注“*”为重点尺寸, 未标公差尺寸按照 ± 0.15 检测



NO	DESCRIPTION	QTY	REMARK
8	PCB	1	
7	彈簧	1	
6	Cable	1	
5	Connector	1	
4	Rivet	2	
3	Bottom Base	1	
2	Upper Base	1	
1	Antenna Cap	1	

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Symbol	Unit	Project	2024-07-01
0~10	10.00	10.00	10.00
10~20	10.00	10.00	10.00
20~30	10.00	10.00	10.00
30~40	10.00	10.00	10.00
40~50	10.00	10.00	10.00
50~60	10.00	10.00	10.00
60~70	10.00	10.00	10.00
70~80	10.00	10.00	10.00
80~90	10.00	10.00	10.00
90~100	10.00	10.00	10.00
100~110	10.00	10.00	10.00
110~120	10.00	10.00	10.00
120~130	10.00	10.00	10.00
130~140	10.00	10.00	10.00
140~150	10.00	10.00	10.00
150~160	10.00	10.00	10.00
160~170	10.00	10.00	10.00
170~180	10.00	10.00	10.00
180~190	10.00	10.00	10.00
190~200	10.00	10.00	10.00
200~210	10.00	10.00	10.00
210~220	10.00	10.00	10.00
220~230	10.00	10.00	10.00
230~240	10.00	10.00	10.00
240~250	10.00	10.00	10.00
250~260	10.00	10.00	10.00
260~270	10.00	10.00	10.00
270~280	10.00	10.00	10.00
280~290	10.00	10.00	10.00
290~300	10.00	10.00	10.00
300~310	10.00	10.00	10.00
310~320	10.00	10.00	10.00
320~330	10.00	10.00	10.00
330~340	10.00	10.00	10.00
340~350	10.00	10.00	10.00
350~360	10.00	10.00	10.00
360~370	10.00	10.00	10.00
370~380	10.00	10.00	10.00
380~390	10.00	10.00	10.00
390~400	10.00	10.00	10.00
400~410	10.00	10.00	10.00
410~420	10.00	10.00	10.00
420~430	10.00	10.00	10.00
430~440	10.00	10.00	10.00
440~450	10.00	10.00	10.00
450~460	10.00	10.00	10.00
460~470	10.00	10.00	10.00
470~480	10.00	10.00	10.00
480~490	10.00	10.00	10.00
490~500	10.00	10.00	10.00
500~510	10.00	10.00	10.00
510~520	10.00	10.00	10.00
520~530	10.00	10.00	10.00
530~540	10.00	10.00	10.00
540~550	10.00	10.00	10.00
550~560	10.00	10.00	10.00
560~570	10.00	10.00	10.00
570~580	10.00	10.00	10.00
580~590	10.00	10.00	10.00
590~600	10.00	10.00	10.00
600~610	10.00	10.00	10.00
610~620	10.00	10.00	10.00
620~630	10.00	10.00	10.00
630~640	10.00	10.00	10.00
640~650	10.00	10.00	10.00
650~660	10.00	10.00	10.00
660~670	10.00	10.00	10.00
670~680	10.00	10.00	10.00
680~690	10.00	10.00	10.00
690~700	10.00	10.00	10.00
700~710	10.00	10.00	10.00
710~720	10.00	10.00	10.00
720~730	10.00	10.00	10.00
730~740	10.00	10.00	10.00
740~750	10.00	10.00	10.00
750~760	10.00	10.00	10.00
760~770	10.00	10.00	10.00
770~780	10.00	10.00	10.00
780~790	10.00	10.00	10.00
790~800	10.00	10.00	10.00
800~810	10.00	10.00	10.00
810~820	10.00	10.00	10.00
820~830	10.00	10.00	10.00
830~840	10.00	10.00	10.00
840~850	10.00	10.00	10.00
850~860	10.00	10.00	10.00
860~870	10.00	10.00	10.00
870~880	10.00	10.00	10.00
880~890	10.00	10.00	10.00
890~900	10.00	10.00	10.00
900~910	10.00	10.00	10.00
910~920	10.00	10.00	10.00
920~930	10.00	10.00	10.00
930~940	10.00	10.00	10.00
940~950	10.00	10.00	10.00
950~960	10.00	10.00	10.00
960~970	10.00	10.00	10.00
970~980	10.00	10.00	10.00
980~990	10.00	10.00	10.00
990~1000	10.00	10.00	10.00

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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

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8 Conclusion

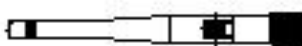
以上数据表明此 WIFI 天线参数均已达标。性能以装机后的实际使用效果为准。

产品包装规范

PPC1d1

产品名称: 天线	版本:
产品规格: 2DB天线	客户: 泰康

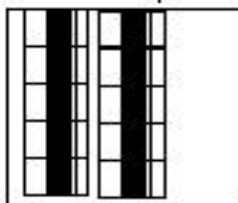
一、成品



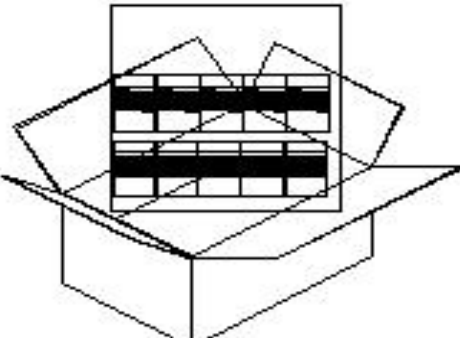
二、10PCS一扎



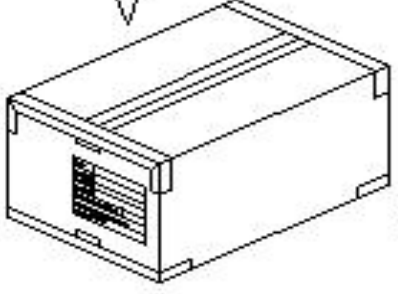
三、把每包的成品装入大袋内，每袋10扎，共100PCS



四、装箱。每100包装一箱，一箱100PCS 成品天线(以实际数量为准)



五、封箱。外箱贴我司生产标签和ROHS标签



批准: _____

确认: _____

拟制: 唐红文

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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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