

Huizhou Hexinda Electronics Co., Ltd

SPECIFICATION FOR APPROVAL

Customer Name	
Product name	WIFI ant
Product number	
Prepared By	
Checked By	NULL
Approved By	
Apply Date	2020.11.10

CUSTOMER SIGNATURE		
Prepared By	Checked By	Approved By
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頻率範圍 Frequency range	2400MHz~2500MHz
駐波比係數 VSWR	<2.0
增益 Gain	5.98dBi
輸入阻抗 Input Impedance	50±5 (Ω)
極化方式 Polarization	

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Revision History

Date	Revision	Description of Changes
2020-11-10	RA	Measured with 2.4G WIFI Antenna sample.

1 Technical Summary

This report summarizes the electrical results of the proposed antenna to support the 2.4G WIFI Antenna 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 300 MHz through 3 GHz and an 18" diameter spherical quiet zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

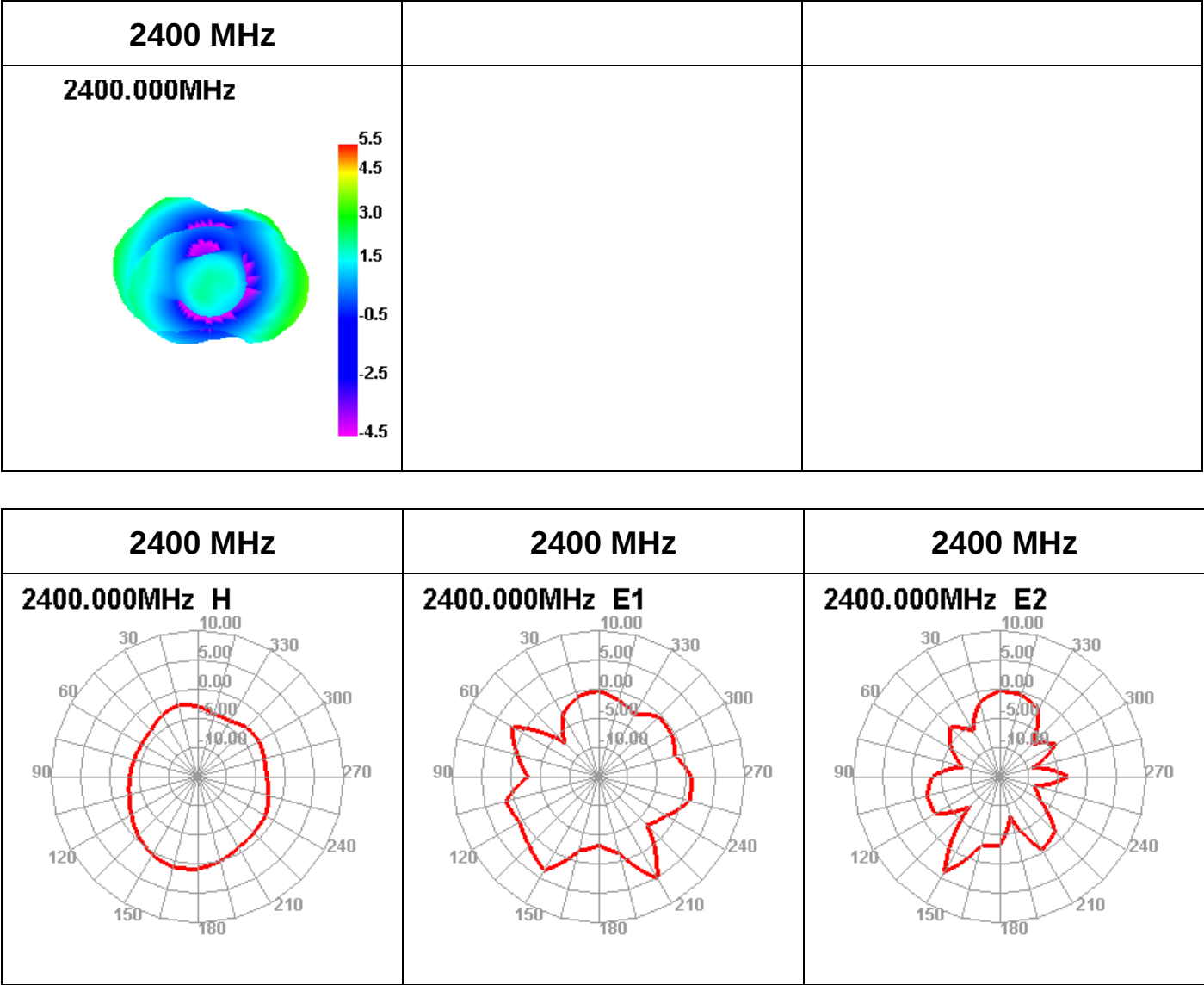
4.1.3 Matching Circuit Description

No changed..

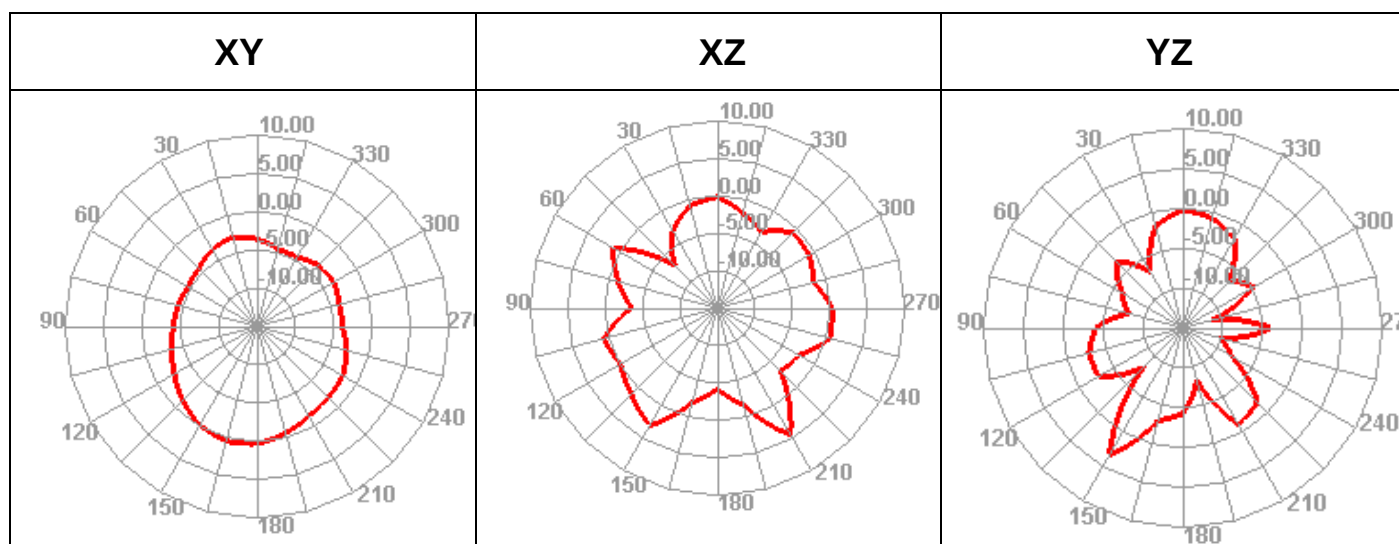
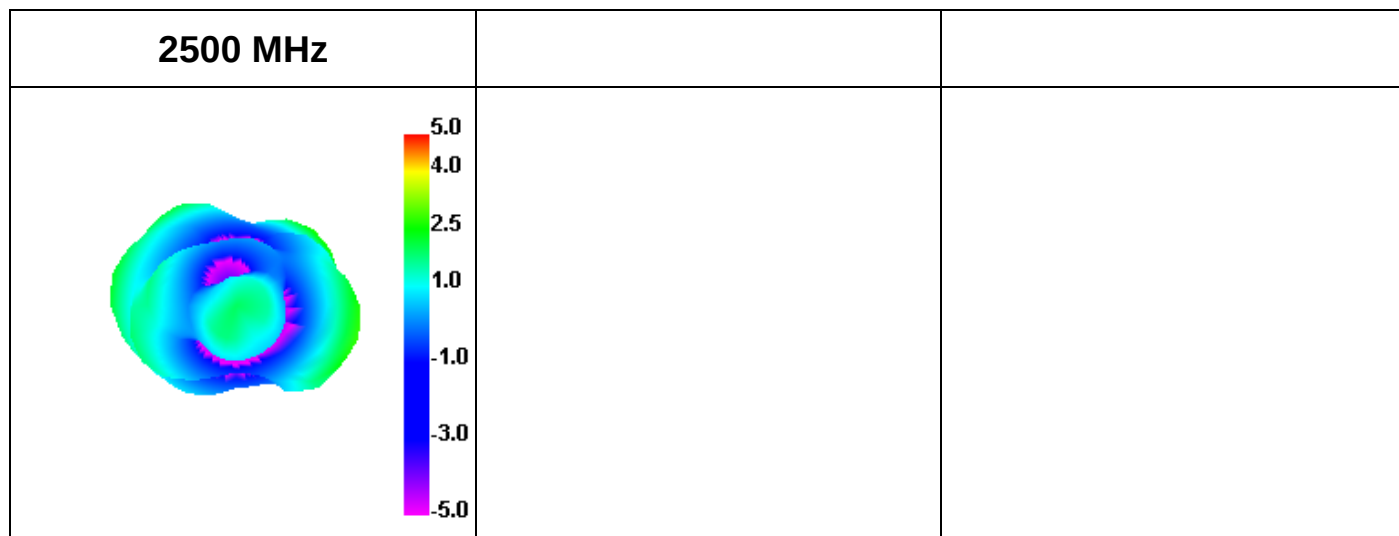
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4.2 Measurement Data

Antenna – Radiation Pattern Test Data



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Passive Test For 2.4												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	74.75	-1.26	5.49	3.34	30.023	44.723	5.49	-11.47	6.75	0	50.91	50.87
2410	66.9	-1.75	5	2.85	26.961	39.937	5	-11.93	6.75	0	51.03	50.97
2420	63.3	-1.99	4.61	2.46	25.655	37.649	4.61	-13.2	6.59	0	50.9	50.84
2430	60.26	-2.2	4.29	2.14	24.54	35.722	4.29	-14.66	6.49	0	51.06	51.01
2440	67.83	-1.69	4.81	2.66	27.521	40.313	4.81	-15.75	6.5	0	50.91	50.89
2450	68.29	-1.66	4.95	2.8	27.68	40.607	4.95	-16.22	6.6	0	51.1	51.09
2460	76.55	-1.16	5.64	3.49	30.97	45.576	5.64	-13.77	6.8	0	51.29	51.33
2470	75.6	-1.21	5.75	3.6	30.628	44.968	5.75	-11.47	6.97	0	51.23	51.27
2480	78.08	-1.07	5.98	3.83	31.673	46.405	5.98	-11.94	7.06	0	51.41	51.5
2490	72.87	-1.37	5.75	3.6	29.569	43.301	5.75	-14.4	7.13	0	51.67	51.77
2500	79.13	-1.02	5.68	4.03	31.949	47.184	6.18	-16.96	7.19	0	51.75	51.89

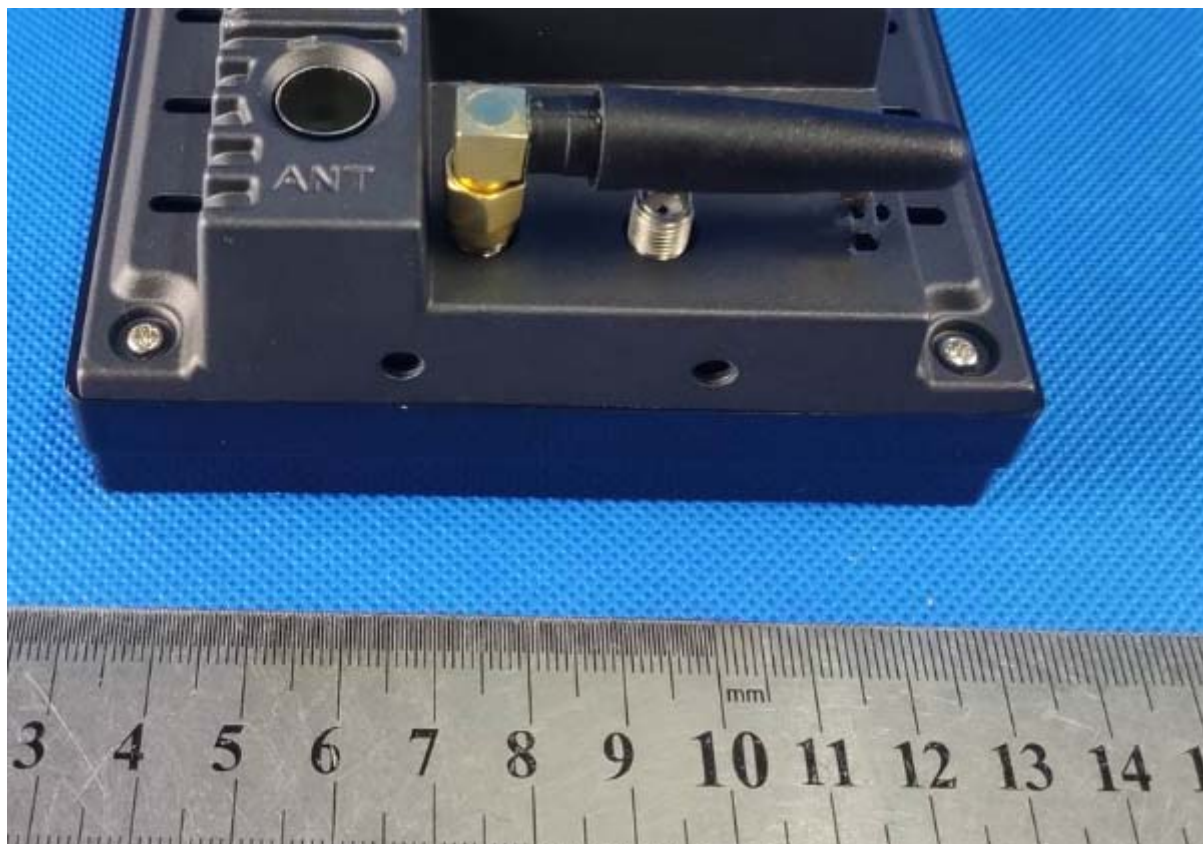
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5 Plots

5.1 VSWR



6 Mechanical drawing



7 Conclusion

From the above test results, we can know the electrical performance of the antenna is seems good. Shenzhen Yangyue Electronic Communication Technology Co., Ltd, look forward to your confirmation, thank you for your cooperation !