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Antenna components

Frequency range	WIFI:(2.4GHz)
VSWR	<4.0
Input Impedance	50 (Ω)
Polarization	Vertical Polarization
3dB) HPW	180° H-plane 120° E-plane

Model: 2.4G wifi Antenna

Revision History

Date	Revision	Description of Changes
2020-7-3	RA	Measured with PCB 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.

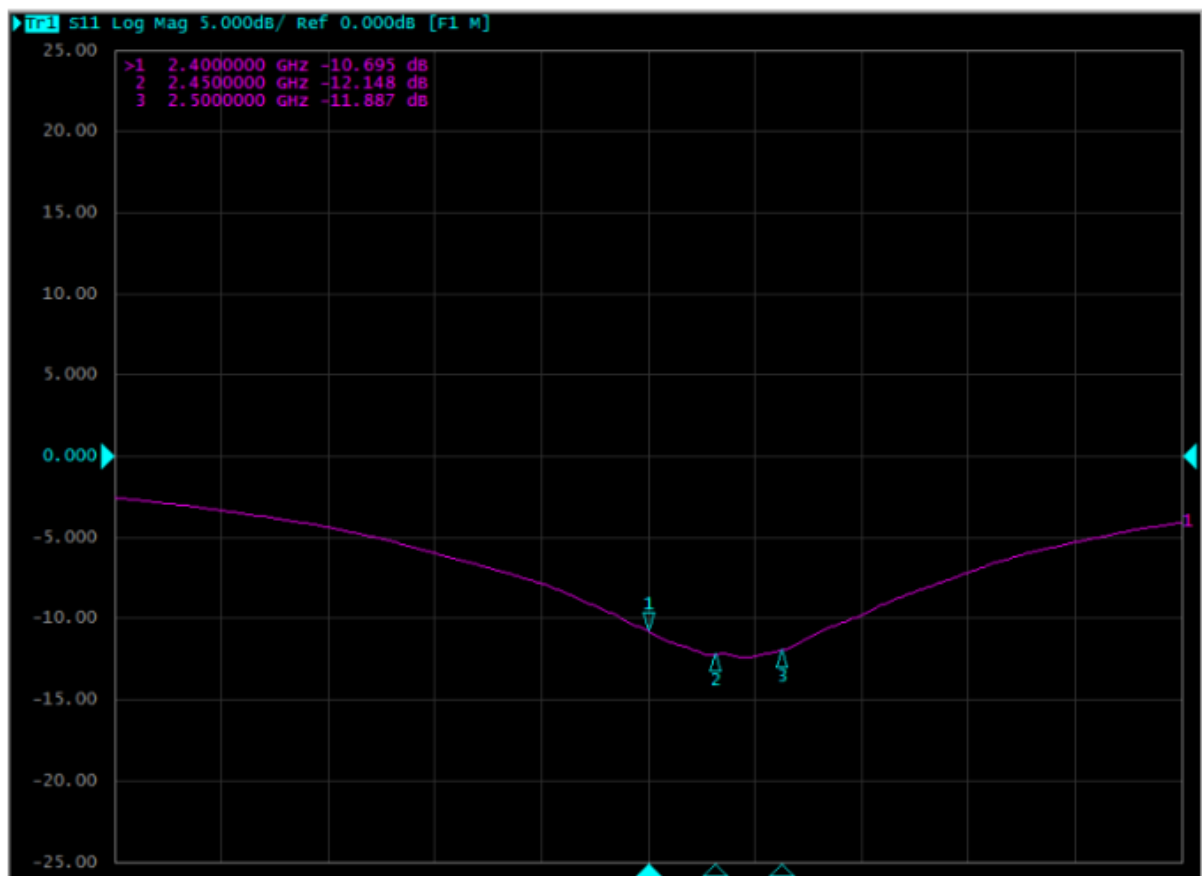
4.1.2 Gain & Radiation Patterns

The gain of the antenna was measured in the Hongying'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

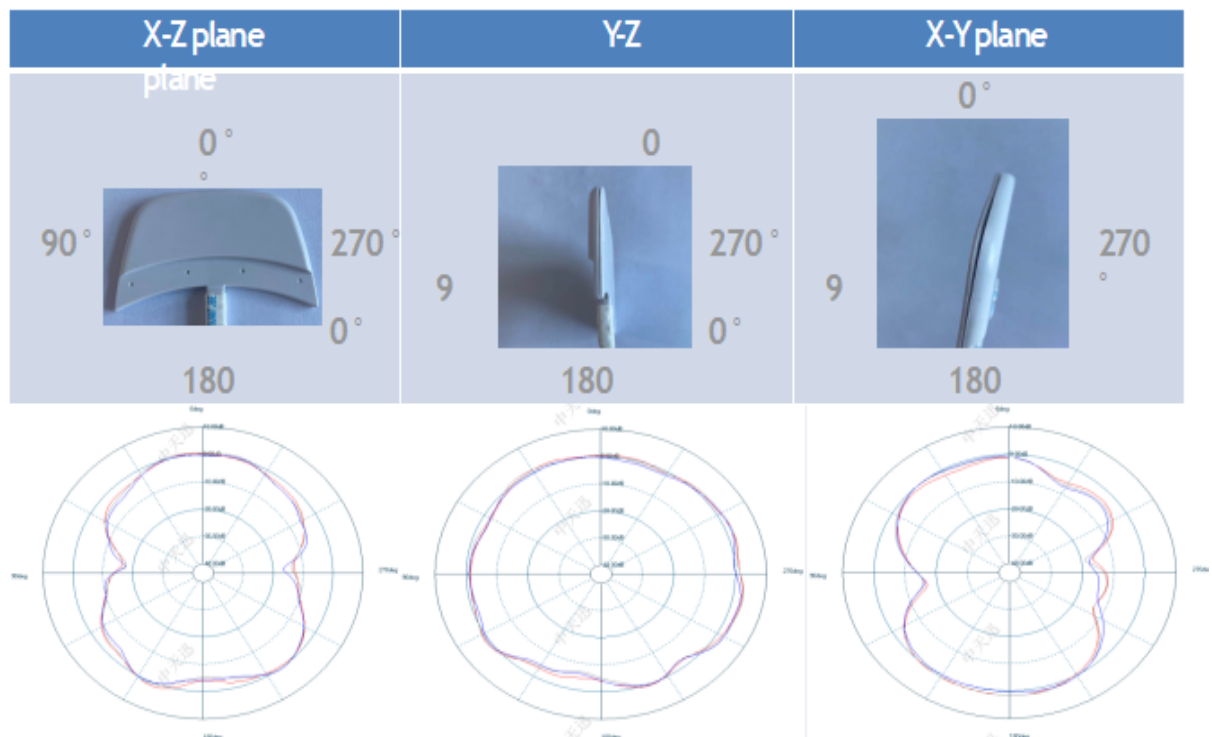
4.1.3 Photo and Dimension



	Antenna dimension	Cable length
ANT	35x9x0.6	110mm



Antenna radiation pattern



4.2 Measurement Data

4.2.1 Active result

Freq (MHz)	Effi	Effi	Antenna Gain
	(%)	(dB)	
2400	65%	-1.85	2.97
2410	68%	-1.71	3.37
2420	70%	-1.52	3.70
2430	68%	-1.66	3.61
2440	71%	-1.47	3.68
2450	67%	-1.77	3.23
2460	67%	-1.74	3.13
2470	70%	-1.57	3.21
2480	68%	-1.70	3.15
2490	66%	-1.79	3.15
2500	61%	-2.12	2.82

