



Antenna Data Sheet

CUSTOMER			
CS P/N		520	
HX P/N		A41-112-520	
Checked by(RF)	Checked by(ME)	Checked by(QA)	Approval led by
Customer Approval			

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1. General Description

This document provides the antenna specifications on electric, mechanic and reliability. The testing conditions and related pictures are also included.

1.1 Print Acceptance

Samples and Antenna Specifications are to be sent to customer. When they are approved, the approval form should be completed, signed, and sent back to HX before further mass production batches can be delivered.

1.2 Coordinate System

The coordinate system for the phone is defined as follows:

- Origin in center of gravity.
- Positive X axis is perpendicular to, and directed from, front plane.
- Positive Y axis is perpendicular to, and directed from, right side plane (as seen from front).
- Positive Z axis is perpendicular to, and directed from, top plane.

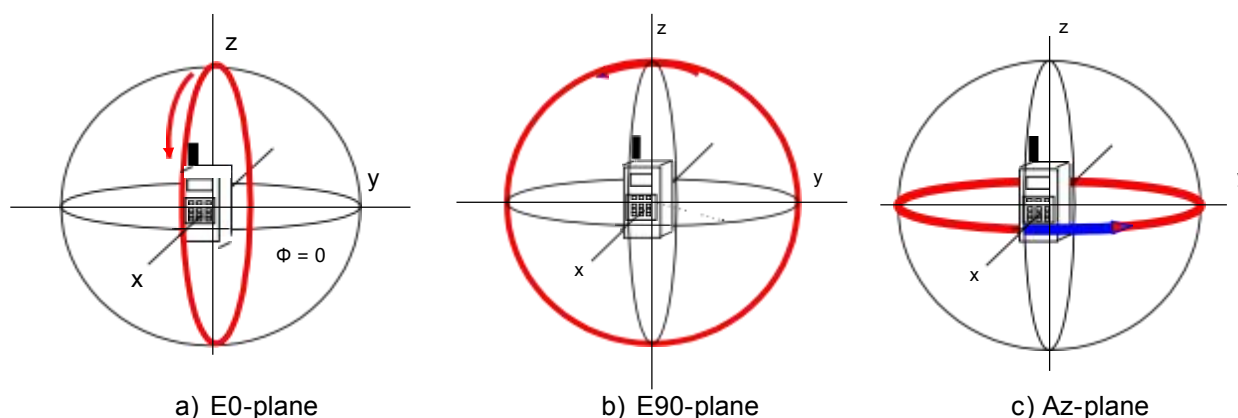


Figure 1-1 The coordinate system for the phone

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2. Specifications

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ---520 Figure 2-1 shows the antenna designed by HX & The fixturing of 520

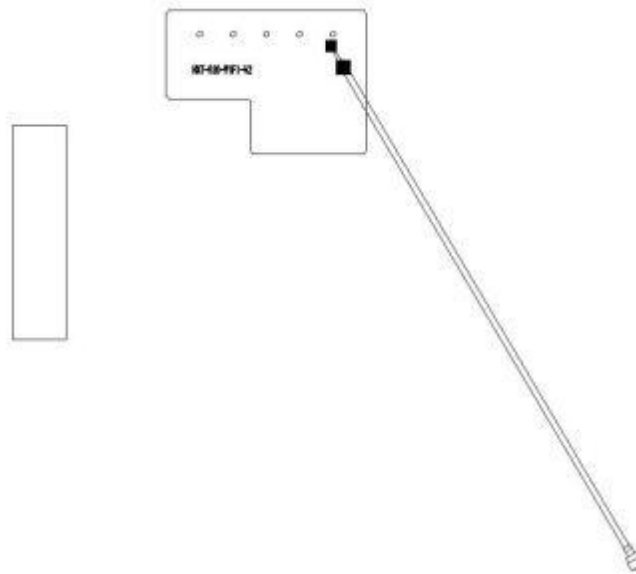


Figure 2-1 The antenna designed by HX & The fixturing of 520

2.1 Frequency Band

Band		
2.4G-WiFi	WiFi	2400-2500

2.2 Impedance

2.2.1 Nominal

Nominal Impedance(including matching circuit) : 50 ohms

2.2.2 Matching Circuit

The matching circuit is as Figure 2-2.

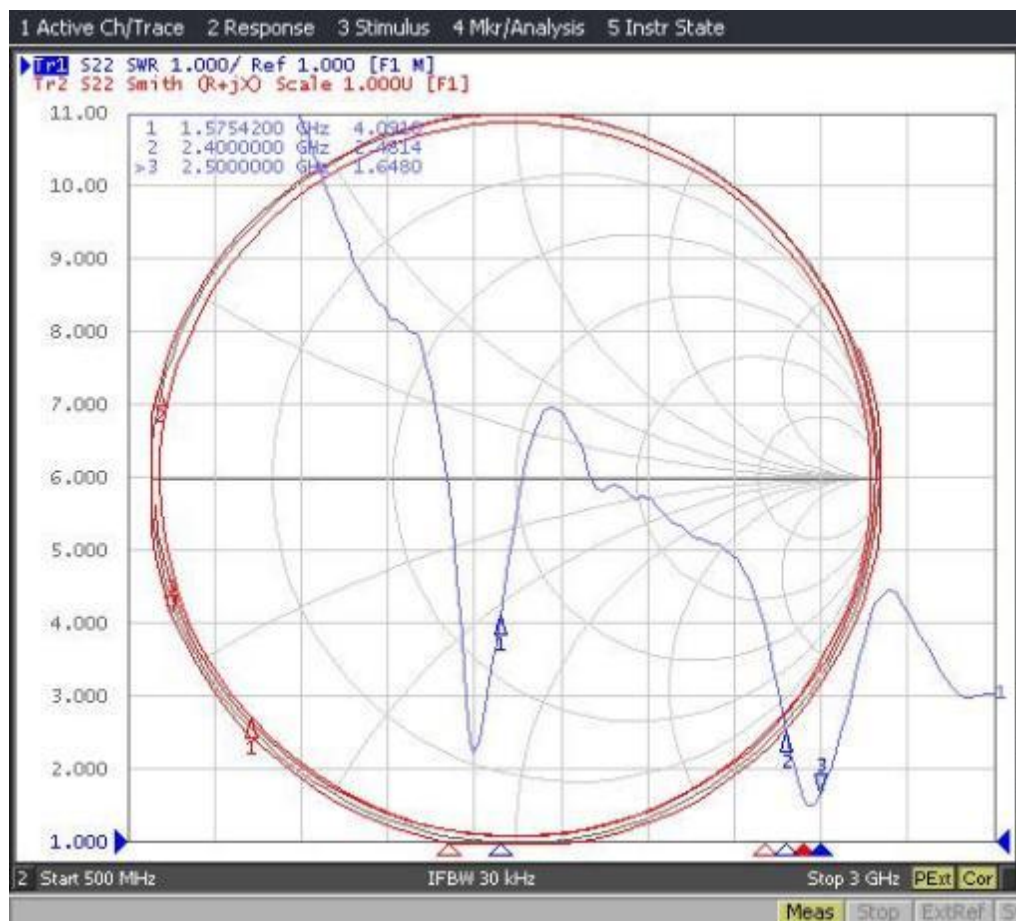
匹配无更改

Figure 2- 2: Matching circuit

2.3 Passive Measurements

2.3.1 S11 of the Typical Sample

Main antenna

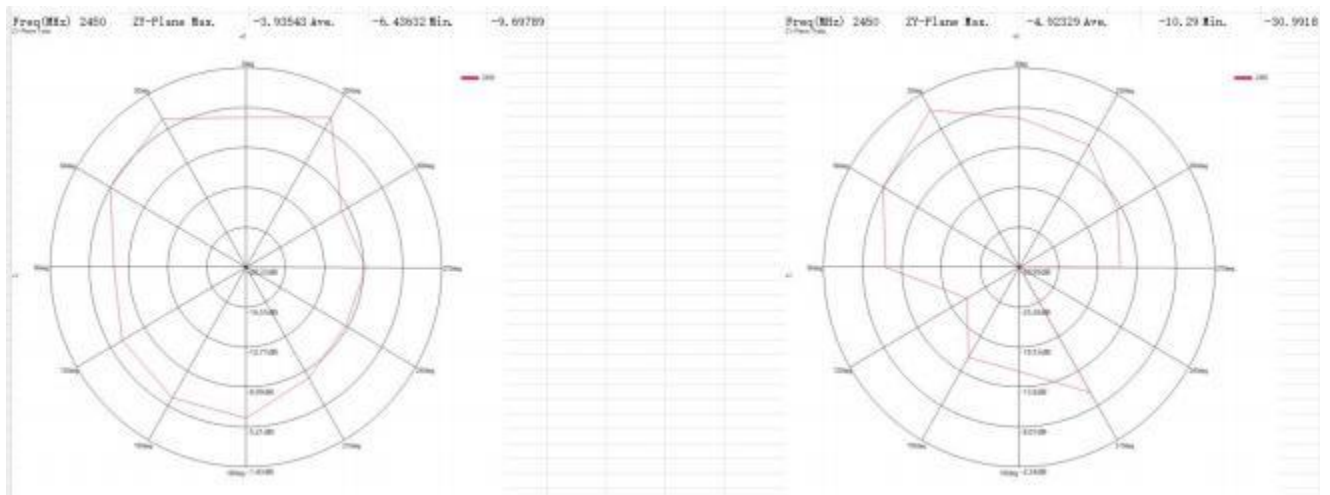


2.3.2 Passive efficiency of antenna

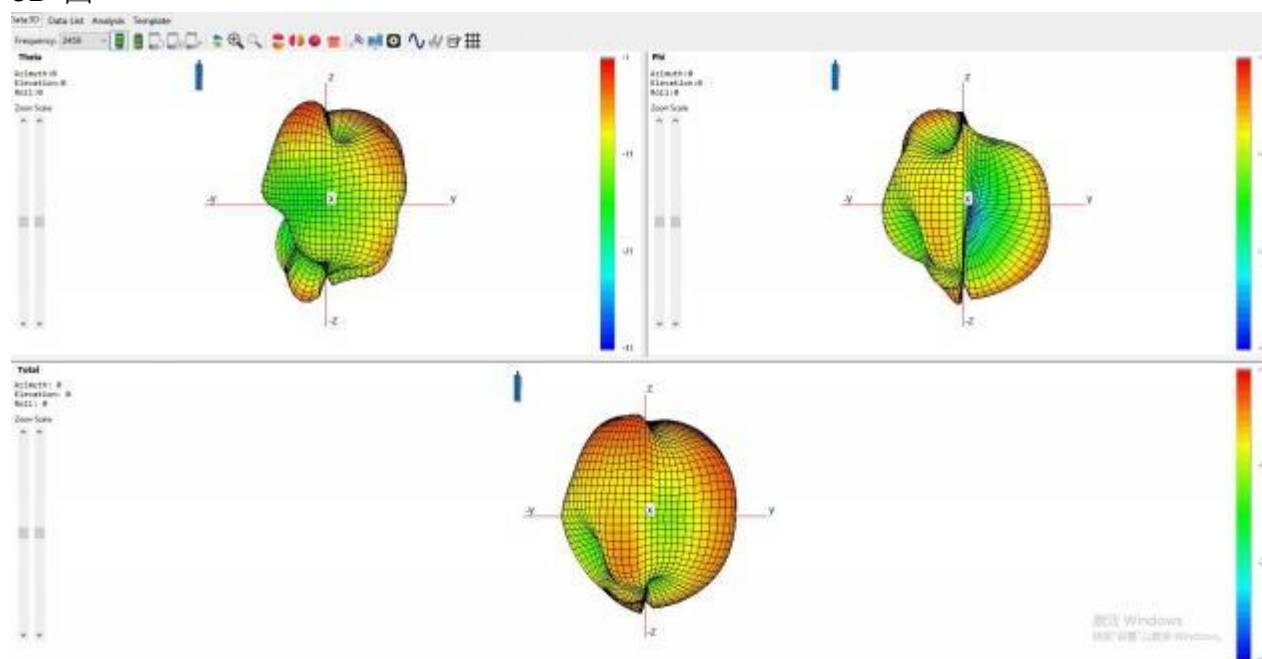
Main antenna

(MHz)	Ave Gain (dB)	Peak Gain (dBi)	Effi (%)
2400	-6.7	-1.11	21.39
2410	-6.6	-0.94	21.9
2420	-6.27	-0.55	23.63
2430	-6.25	-0.5	23.73
2440	-5.97	-0.3	25.28
2450	-5.93	-0.27	25.5
2460	-5.8	-0.05	26.28
2470	-5.63	0.1	27.32
2480	-5.45	0.57	28.53
2490	-5.49	0.64	28.25
2500	-5.43	0.86	28.63

2D 图



3D 图

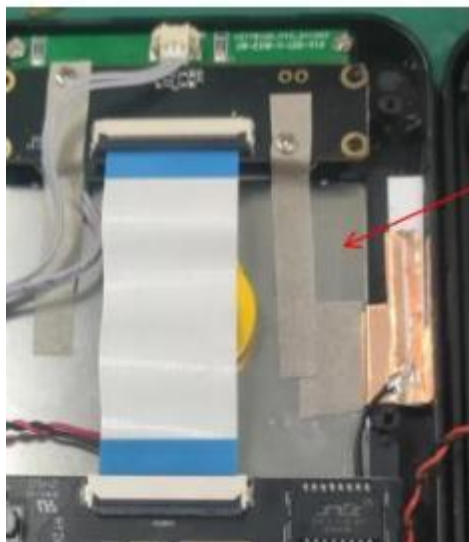


2.4 Active Measurement

2.4.1 OTA data of WiFi antenna

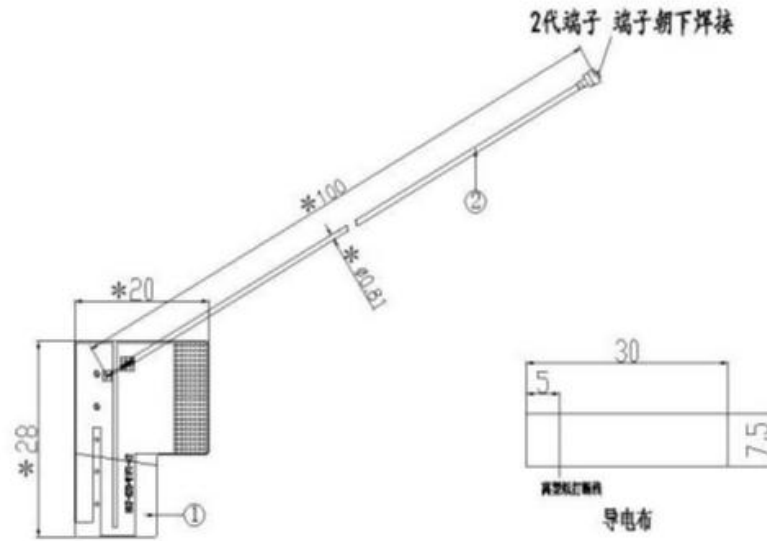
WiFi	测试带宽	channel	TRP	TIS
2.4G	11b	1	13.2	-74.62
		7	13.18	-74.25
		13	13.09	-73.92

3. Environmental treatment of the whole machine



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4. Specifications Drawings



5. Environmental Characteristic

Test Item	Test description
1. Low Temperature	Temp.: -20 °C Time: 24 hours
2. High Temperature	Temp.: 80°C Time: 24 hours
3. Salt Fog	5±0.1% Nad salt fog PH Value: 6.5-7.2 Temp: 35±1°C Time:24 hours