

Antenna Specifications

CUSTOMER		佳维视	
CS P/N		2.4G 外置天线(长度 37.7mm)	
HX P/N		<u>A20-003 (长度 37.7mm)</u>	
Checked by(RF)	Checked by(ME)	Checked by(QA)	Approval led by
Customer Approval			

客户料号: WIFI 连接线 36.001.0000023
WIFI 天线 36.001.0000028



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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 Hengxiangtong 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.

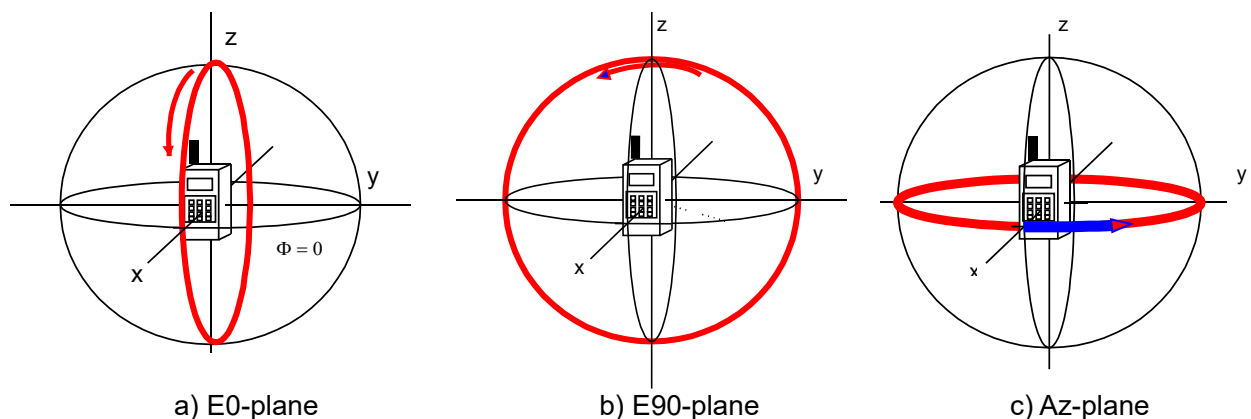


Figure 1-1 The coordinate system for the phone



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2. Specifications

This report mainly provides the testing conditions of various electric and structural performance parameters for cell phone antenna ---- 2.4G. Figure 2-1 shows the antenna designed by HX & The fixturing of 2.4G



Figure 2-1 The antenna designed by HX & The fixturing of 2.4G



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2.1 Frequency Band

Band	Frequency(MHz)
2.4G	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.

无

Figure 2-2: Matching circuit

2.3 Passive Measurements

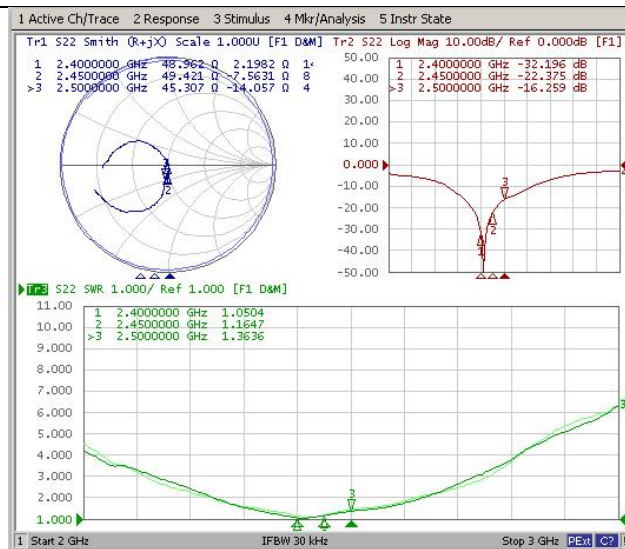
2.3.1 VSWR & Gain Specifications

VSWR		GAIN	
Freq. Band	SPEC	Freq. Band	SPEC
2400-2500MHz	≤ 2.0	2400-2500	$\geq 0\text{dBi}$

2.3.2 S11 of the Typical Sample

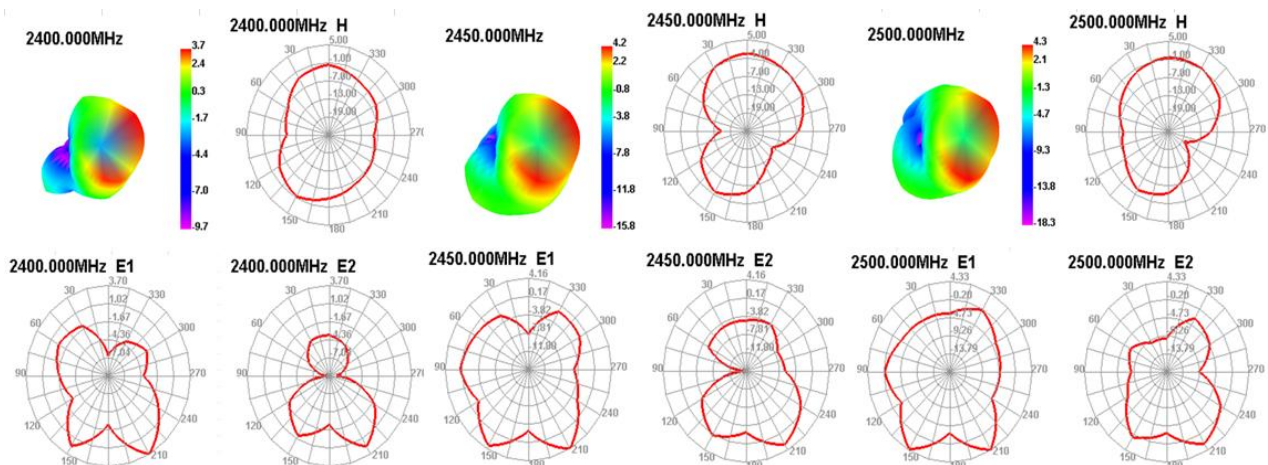
Freq (MHz)	2400	2450	2500
RL	-32.1	-22.3	-16.2
VSWR	1.05	1.16	1.36

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2.3.3 Gain Effi. & Ration Pattern of the Typical Sample

Passive Test For 2.4-2.5G			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	65.5	-1.84	3.7
2410	64.39	-1.91	3.87
2420	63.71	-1.96	3.81
2430	64.34	-1.92	3.81
2440	65.49	-1.84	3.91
2450	69.11	-1.6	4.16
2460	66.81	-1.75	4.28
2470	64.54	-1.9	4.23
2480	62.92	-2.01	4.27
2490	61.11	-2.14	4.25
2500	61.85	-2.09	4.33



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 Tel. +86-755-27657751 Fax +86-755-27599500



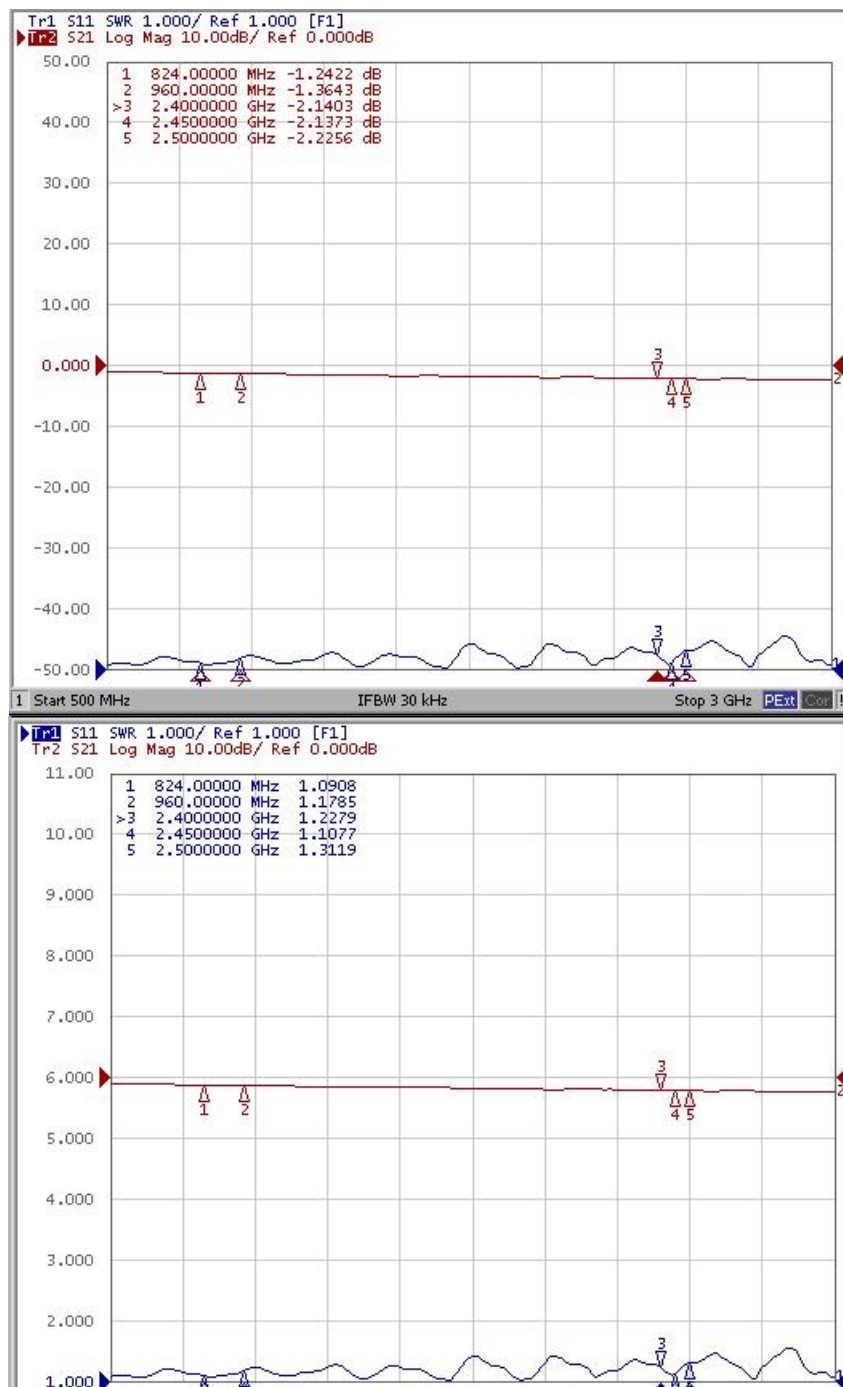
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2.3.4 S21&S11 of the Typical Sample

Length (mm)	400
S21-RL	-2.1~-2.2
S11-VSWR	1.22~1.31

400mm



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RoHS Compliant

DWG-A0301-01-0A

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注意:
1. 请仔细阅读本文件, 并遵守本文件中的规定。
2. 请仔细阅读本文件中的规定。
3. 请仔细阅读本文件中的规定。
4. 请仔细阅读本文件中的规定。
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SMA参数:
频率范围: 5000cycles min
电压驻波比: 1.10 max
功率损耗: 5000mW
外导体直径: 2.5mm OHM
内导体直径: 3mm OHM
阻抗: 1000V r.m.s
工作电压: 335V max
频率范围: 50 OHM
温度范围: -55~+155°C

IPEX参数:
频率范围: 5000cycles min
电压驻波比: 1.10+0.025 max
功率损耗: 5000mW
外导体直径: 2.0
内导体直径: 1.0
阻抗: AC 200V
工作电压: 60V max(峰值)
频率范围: DC~8GHz
温度范围: -40~+90°C

No.	Name	Description	Qty	Part No.
1	I-PEX端子	20278-112R-13	1	1301-0014
2	SMA	11*2.0*13-2-ZK	1	1101-0008
3	连接器	1.13-48-1-FEP L=405mm	1	1201-0015-1
4	连接器	2.0-BLACK 1-1 L=20mm	2	1201-0085-1
5	连接器	连接器-13SMA	1	1201-0018-1
6	PE-2	150*80*0.4 (材料: 铜)	1	1301-0001
7	PE-2	275*200*0.4 (材料: 铜)	1	1201-0017-1
8				

零件名称: 连接器
数量: 1
规格: 1.13-48-1-FEP L=405mm

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深圳市恒祥通天线技术有限公司



4. 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