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# 深圳市泓德致新科技有限公司

## JINSON X7 WIFI Dual frequency antenna specification

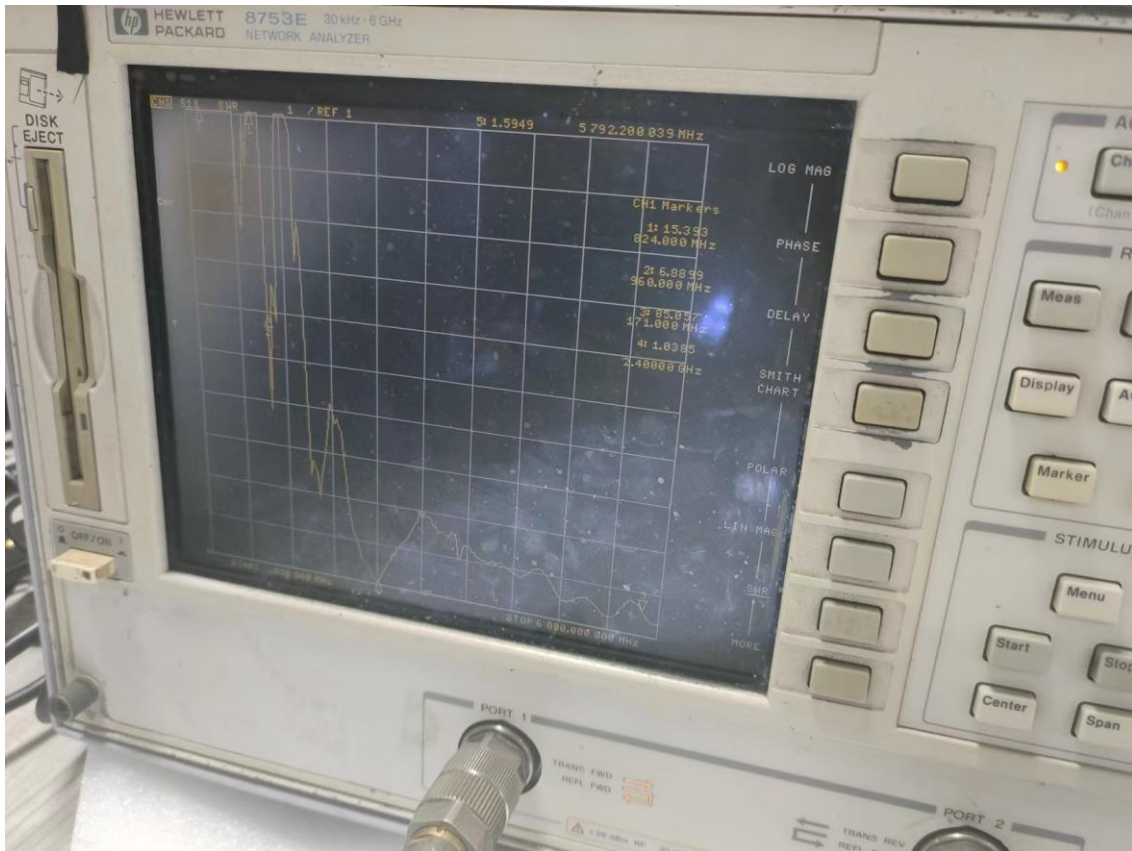
Customer: Jinson		Item no.: X7	
frequency band : 2.4G/5G	Date: 2023.08.23	Version: R:A	
research and develop ment	structure : Xiao Chenxi	audit: WuWan	approve:
	radio frequency: ZhangWan	audit: Xugong	
Customer Audit:		customer approval:	

# 1. Project information and Electrical Specification

2.

*Those specifications were specially defined for 2.4G/5G model, and all characteristics were measured under the model's handset testing jig .*

1-1Antenna picture



1-2 Frequency Band:

Frequency Band	MHz
2.4G/5G	2400-2500/4950-5850

1-3 Impedance matching

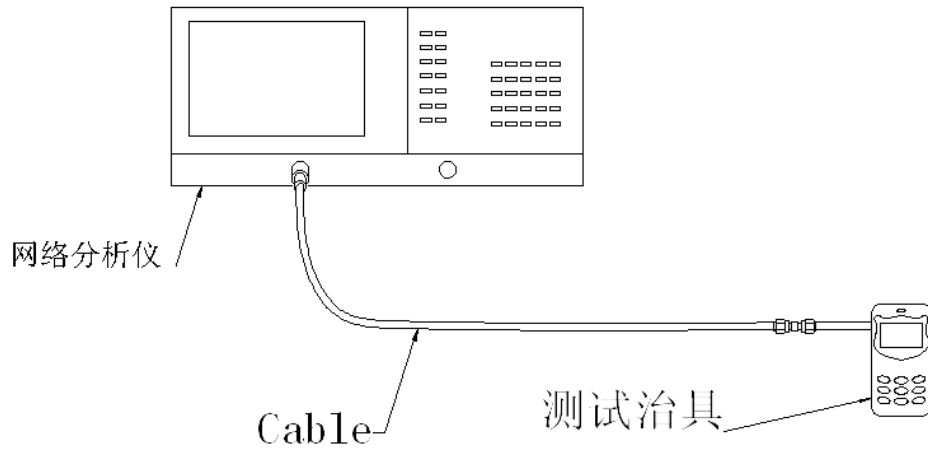
Antenna primary matching

## 2.VSWR

### 2-1 Measuring Method:

- 1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,*
- 2. Keeping this jig away from metal at least 20cm.*

The test diagram is as follows:



## 2-2 S11 parameter values

<b>frequency (MHZ)</b>	<b>2400</b>	<b>2500</b>	<b>4950</b>	<b>5400</b>	<b>5850</b>
<b>standing wave</b>	<b>1.3</b>	<b>1.2</b>	<b>1.78</b>	<b>1.63</b>	<b>1.23</b>

## Ant1

Freq(MHz)	Gain(dBi)
2400	2.43
2410	2.23
2420	1.81
2430	1.72
2440	1.55
2450	2.70
2460	1.68
2470	1.95
2480	2.27
2490	1.94
2500	2.35
5150	-0.15
5240	0.17
5750	2.43
5850	2.96

## Ant2

Freq(MHz)	Gain(dBi)
2400	1.51
2410	2.01
2420	1.33
2430	1.58
2440	0.71
2450	1.64
2460	1.45
2470	1.57
2480	1.86
2490	1.96
2500	2.40
5150	-0.63
5240	-0.45
5750	1.62
5850	2.69

## and Gain

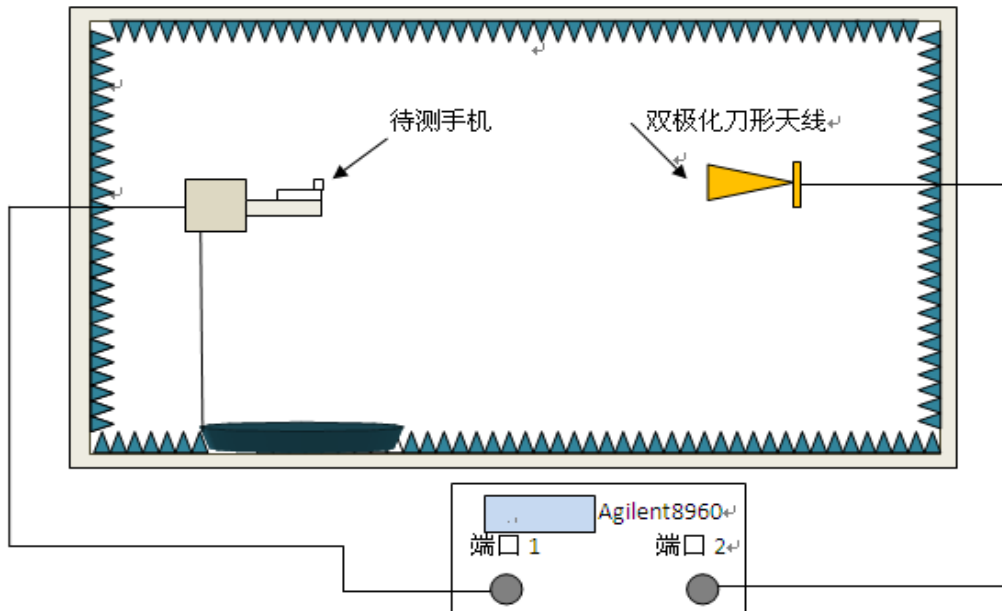
### \*measuring and test instruments:

anechoic chamber, Agilent network analyzer

, Agilent spectrum analyzer, 8960 general-purpose tester, standard antenna

### \*test method:

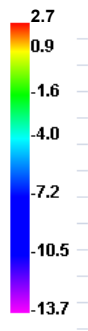
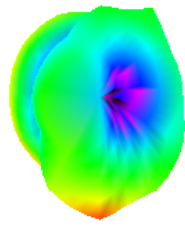
equipment Fixed in the center position of the turntable with H plane, It is at the same level as the center of the horn antenna.



3-1 Efficiency/Gain- WIFI

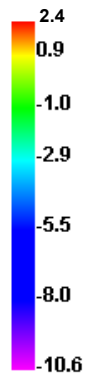
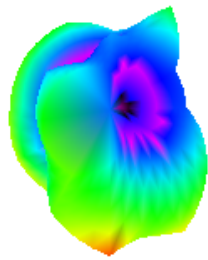
ANT 1

2450.000MHz



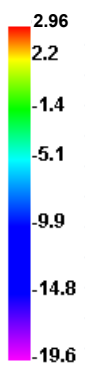
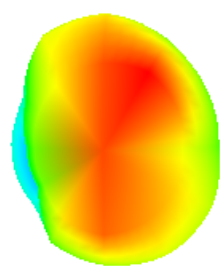
ANT 2

2500.000MHz



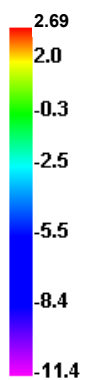
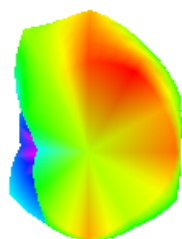
ANT 1

5850.000MHz

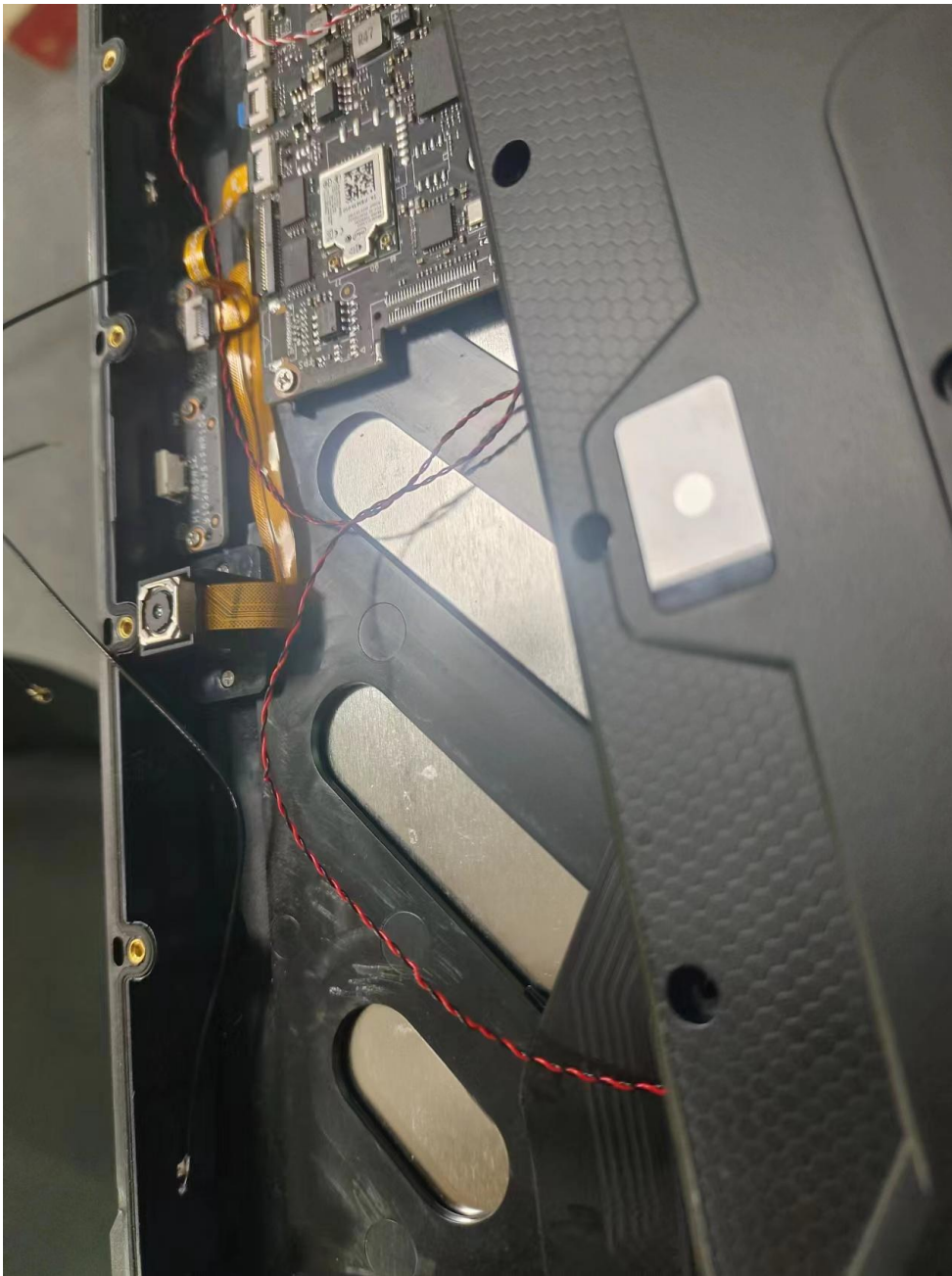


ANT 2

5850.000MHz



### 3. The production index



4.

When the antenna was mass produced, The standing wave ratio is used as the test standard for mass production

Depending on the project itself, The following criteria are given:

frequency	Standard Specification
WIFI (2400-2500Mhz/4950-5850M HZ)	VSWR (prodcuts for mass production) <VSWR(design sample )+0.5