
Shenzhen Hongde Zhixin Technology Co., Ltd

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Subdistrict, Bao'an District, Shenzhen City

WiFi Antenna Specs

Customer name: Pipo Technology Co.,Ltd		Model name: AF01
Frequency: 2.4G	Date: 2026-5-18	Version No: R1

Antnna Model No: HDZX-2707-WiFi-V3

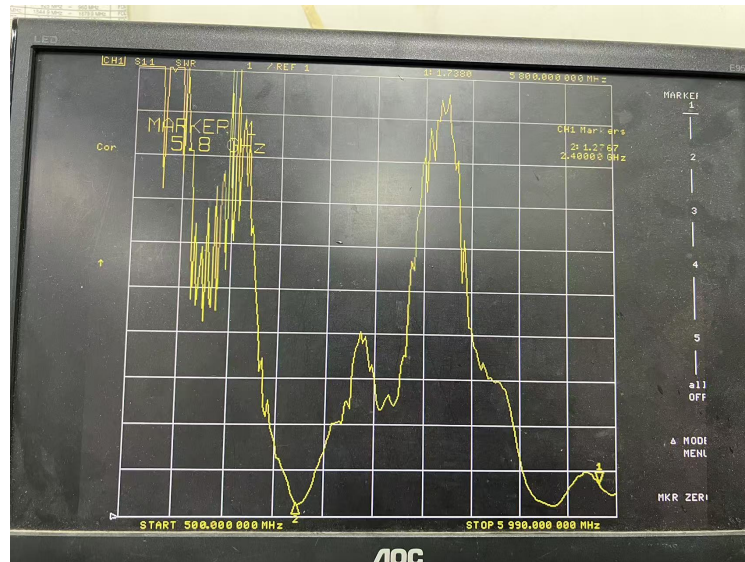
Antenna Length and color: 130MM,black with the first generation terminal

1. Project information and Electrical Specification

Those specifications were specially defined for WIFI model, and all characteristics were measured under the model's handset testing jig .

1-1 Project picture





1-2 Frequency Band:

Frequency Band	MHz
WiFi/BT frequency	2380-2500
Antenna gain	1.6db
The max antenna power	16.88dbi
Type	Coaxial line+FPC
Wireless communication standard	802.11

2.VSWR

2-1 Measuring Method:

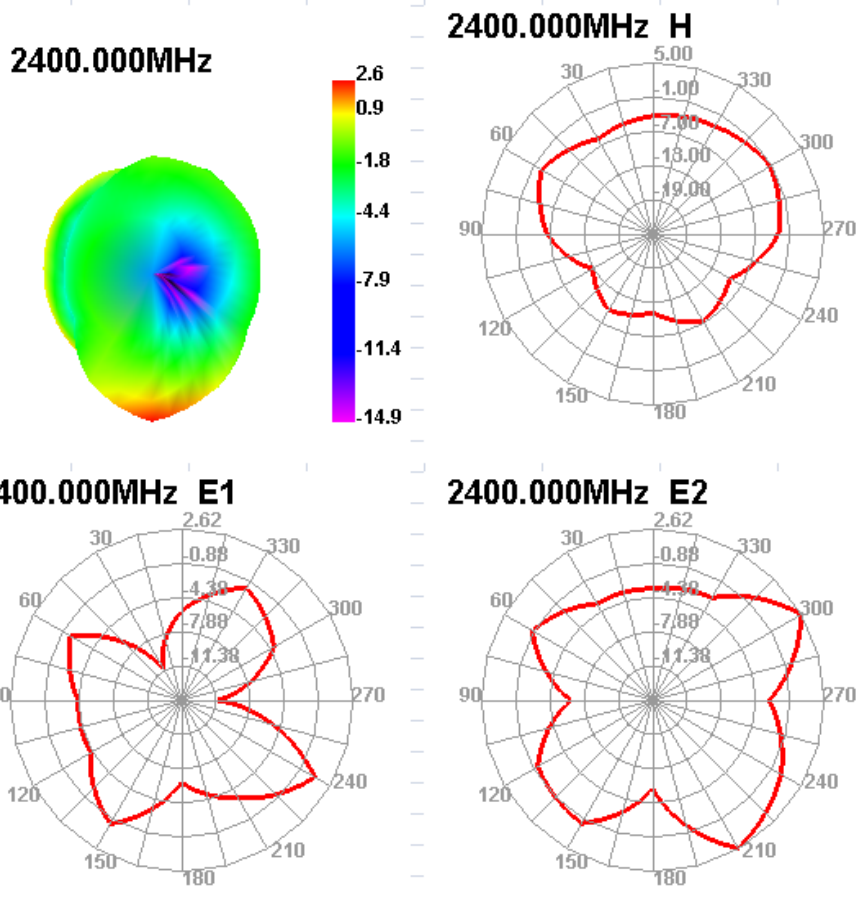
1. A 50 Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR,
2. Keeping this jig away from metal at least 20cm.

Test way as followed:

2-2 S11 parameter values

Frequency (MHZ)	2400	2450	2500
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Standing wave	1.2		1.3		1.5		
Passive Test For WIFI2.4							
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)
2400	56.85	-2.45	1.6	-0.78	25.212	31.64	1.37
2410	55.52	-2.18	1.55	-0.6	26.983	33.54	1.55
2420	57.05	-2.44	1.26	-0.89	25.56	31.491	1.26
2430	57.82	-2.61	0.92	-1.23	24.707	30.109	0.92
2440	57.04	-2.44	1.06	-1.09	25.763	31.276	1.06
2450	56.51	-2.48	0.86	-1.29	25.667	30.84	0.86
2460	58	-2.37	0.91	-1.24	26.474	31.523	0.91
2470	56.03	-2.52	0.73	-1.42	25.757	30.276	0.73
2480	60.48	-2.18	1.07	-1.08	27.859	32.62	1.07
2490	60.58	-2.18	1.17	-0.98	28.028	32.548	1.17
2500	59.5	-2.25	1.08	-1.07	27.599	31.902	1.08



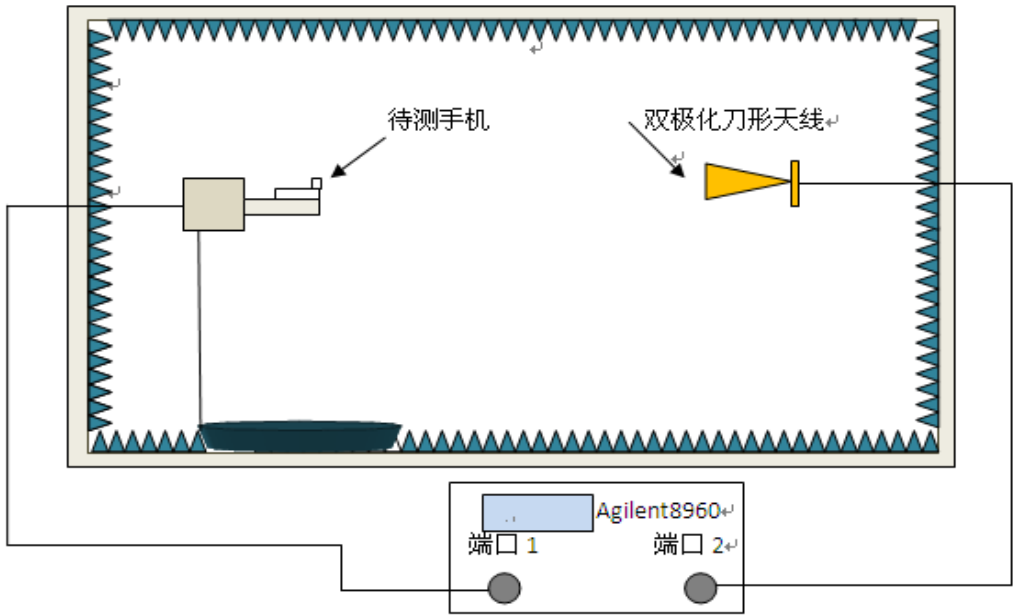
2. Efficiency and Gain

3. *measuring and test instruments:

Microwave darkroom, Agilent network analyzer, Agilent spectrum analyzer,

***test method:**

The equipment is fixed in the center position of the turntable with the H plane, and on the same horizontal line of the speaker and the antenna.



3-1 Efficiency/Peak Gain-

2. 4G

Test Result	802.11B, Wifi 2.4G 11M		
	12	6	1
Frequency (MHz)	2467	2437	2412
TRP (dBm)	13.91	14.36	13.99
TIS (dBm)	-83.21	-83.07	-83.32

4. The production index

When make mass production(MP), please refer to the SWR(standing-wave ration) as the standard,and the SWR difference as followed:

Frequency	MP standard
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WIFI /BT(2400-2500MHZ)	VSWR (MP one) <VSWR(Sample)+0.5
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