
Acknowledgment

Client: Dazhou		Project Name: Digital Photo Frame	
Frequency band:WIFI/2.4G		date: 2026.3.5	Version: R:A
R & D	Structure:	Reviewed by:	Approved by: Chen Qinmin
	Wang Gong	Wei Chunyan	
	Reviewed by:	Reviewed by:	
	Wei Chunyan	Wei Chunyan	
HDZX-J 2066 BLACK LINE LENGTH 120mm generation terminal 2.4G WIFI antenna			
Customer Review:		Customer Approval:	

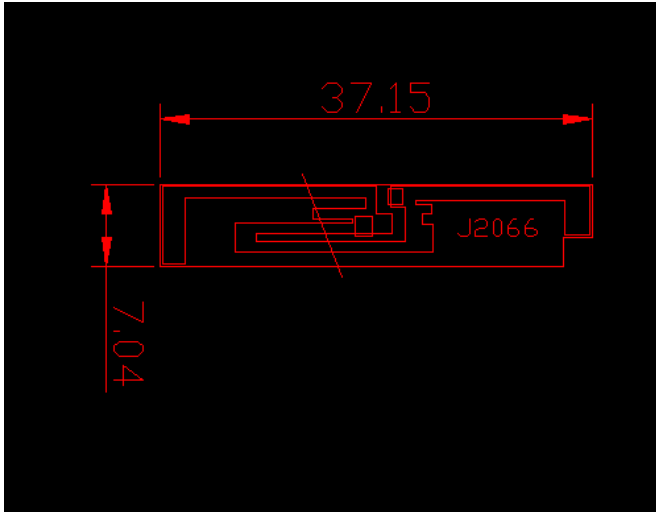
Manufacturer: Shenzhen shi zhi long tao ke ji you xian gong si
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Shenzhenshi baoanqu guang dong sheng 518000 China

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Physical diagram corresponding to antenna model
HDZX-J 2066 BLACK LINE LENGTH 120mm generation
terminal 2.4G WIFI antenna





1. Project information and Electrical Specification

Those specifications were specially defined for WIFI/BT 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	2400-2500
Antenna gain	1.5db
cable loss	0.5dbm

1-3 Impedance matching

Antenna original matching

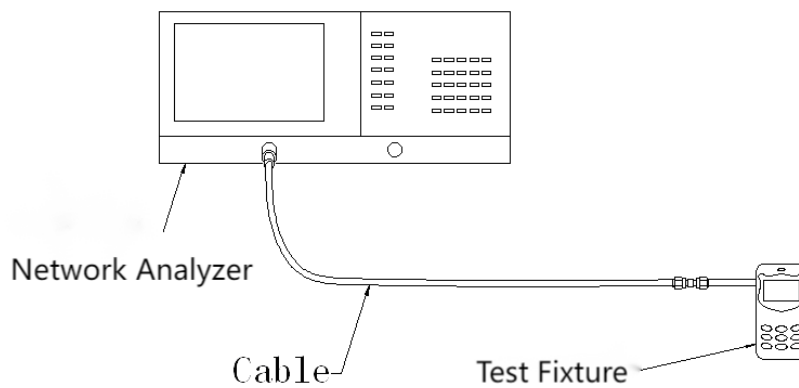
2.VSWR

2-1 Measuring Method:

1. A 50 Ω coaxial cable is connected to the antenna. Then this cable

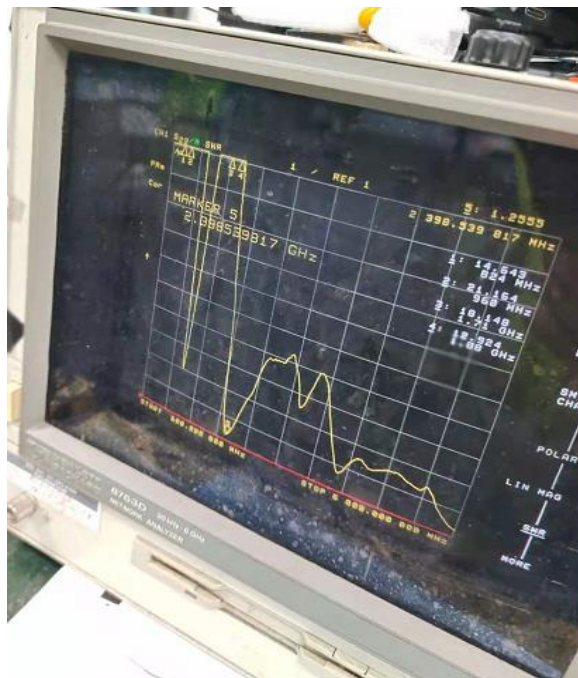
- is connected to a network analyzer to measure the VSWR,*
2. *Keeping this jig away from metal at least 20cm.*

Test schematic shown below:



2-2 S11 parameter values

Frequency (MHZ)	2400	2500
Standing wave	1.3	1.4



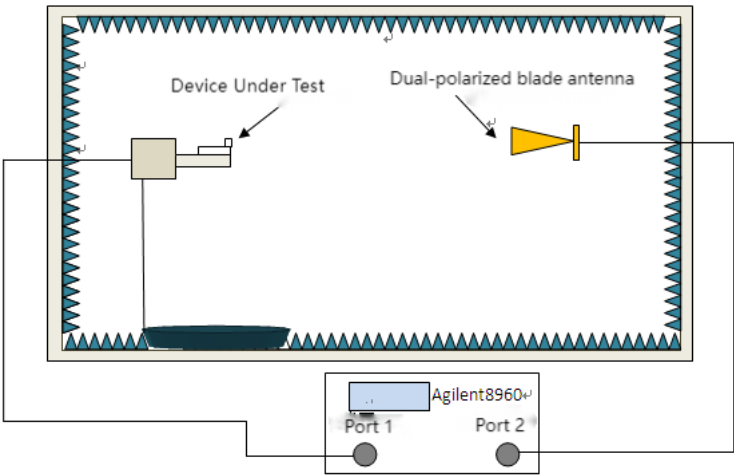
2. Efficiency and Gain

3. *measuring and test instruments:

Microwave anechoic chamber, Agilent network analyzer, Agilent spectrum analyzer, 8960 integrated tester, standard antenna

***test method:**

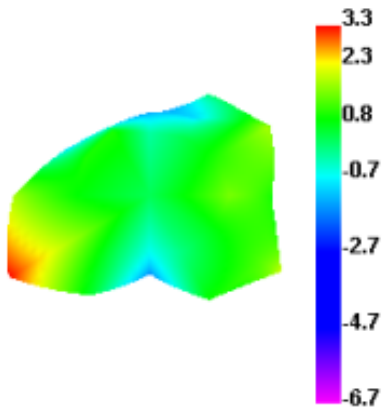
Equipment the H plane is placed at the center of the turntable and fixed on the same horizontal line with the center of the horn antenna.



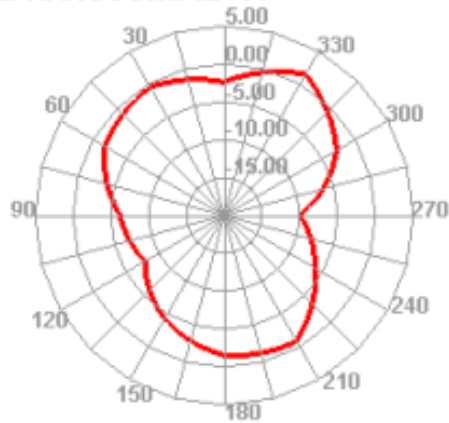
3-1 Efficiency/Peak Gain- WIFI

Passive Test For WIFI2.4									
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	irectivity (dBi)
2400	53.85	-2.45	1.5	-0.78	25.212	31.64	1.37	-9.76	3.82
2410	55.52	-2.18	1.55	-0.6	26.983	33.54	1.55	-9.89	3.73
2420	57.05	-2.44	1.26	-0.89	25.56	31.491	1.26	-10.39	3.69
2430	54.82	-2.61	0.92	-1.23	24.707	30.109	0.92	-11.48	3.53
2440	57.04	-2.44	1.06	-1.09	25.763	31.276	1.06	-12.18	3.5
2450	56.51	-2.48	0.86	-1.29	25.667	30.84	0.86	-12.6	3.34
2460	58	-2.37	0.91	-1.24	26.474	31.523	0.91	-12.12	3.28
2470	56.03	-2.52	0.73	-1.42	25.757	30.276	0.73	-11.7	3.25

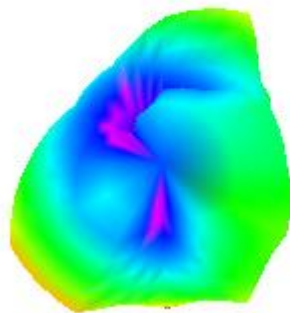
2400.000MHz



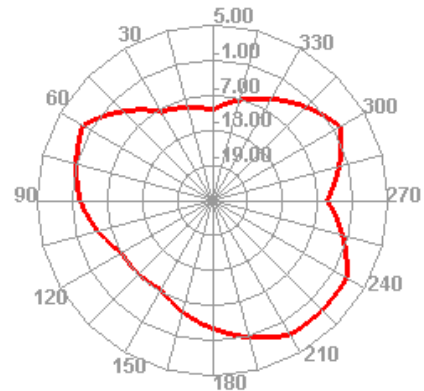
2400.000MHz H



2450.000MHz



2450.000MHz H



4. The production index

During mass production of antenna, the standing wave ratio is taken as the mass production test standard. According to the difference of the project itself, the following standards are given:

Frequency mass	production standard
WIFI /BT(2400-2500MHZ)	VSWR (mass production) < VSWR (design sample) + +0.5