Development case number: 202410180001
Date: 2024.10.18
Edition: A2

Specification book

The name of customer: SHENZHENG langpai

Customer part Number:

Sunshow part Number: SX0000759-09

Specification description : 2.4G BUILT-IN FPC ANTENNA 1.13 LINES 1ST GENERATION TERMINAL WIRE 60 mm LENGTH

Factory signature :

Written	Audit	Approve
Guochun Jiang	Guobing An	tusheng Huang

The customer acknowledges the signature:

Check	Audit	Ratification

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1. Antenna debugging design requirements frequency bands

frequency	Band
WIFI	WIFI-2.4G

2. Antenna diagram

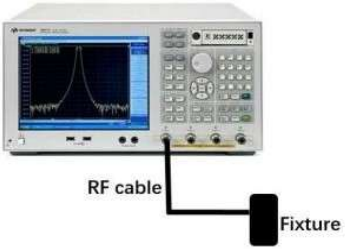
3. Electrical properties

3.1 Test Method Description and Data

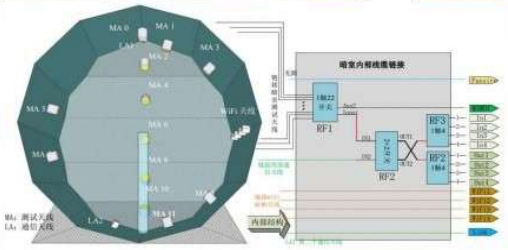
The nameof the device	Purposes
Vector Network Analyzer	S11/Impedance/ Passive Test
Agilent 8960 SP6010 R&S CMU200	Contain GSM、 GPRS、 EDGE、 CDMA2000、 1xEV-DO、 TD-SCDMA、 WCDMA、HSDPA Mobile phone mobile communication device test
R&S CMW500 MT8820C	包含 TD-SCDMA、 WCDMA、 HSDPA、LTE、WIFI、GPS 的手机移动通信设备测试
Agilent E4438C	测试有源 GPS
MVG Chamber	Passive Test / OTA active Test / Efficiency/Gain

Test&OTA test system

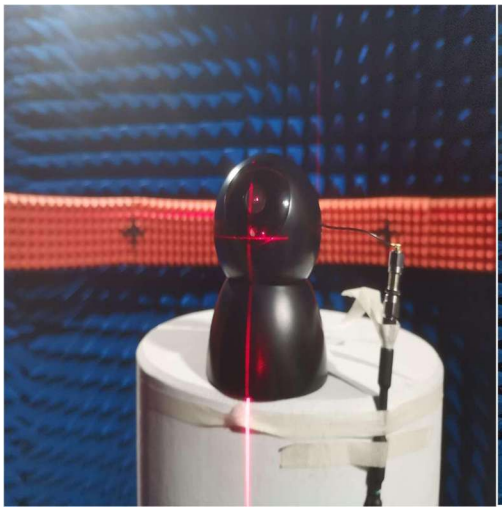
S11测试

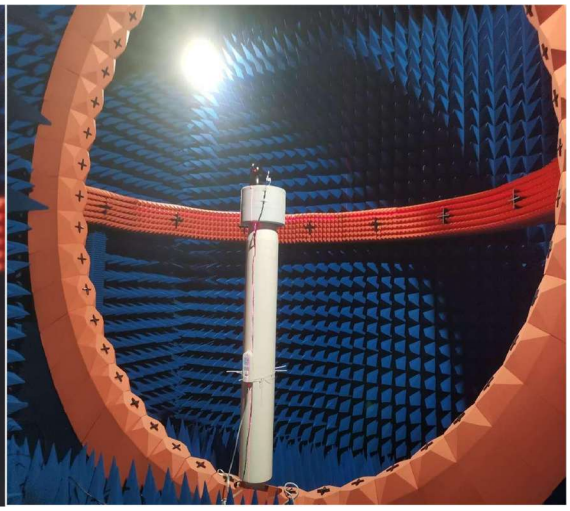


OTA测试系统:



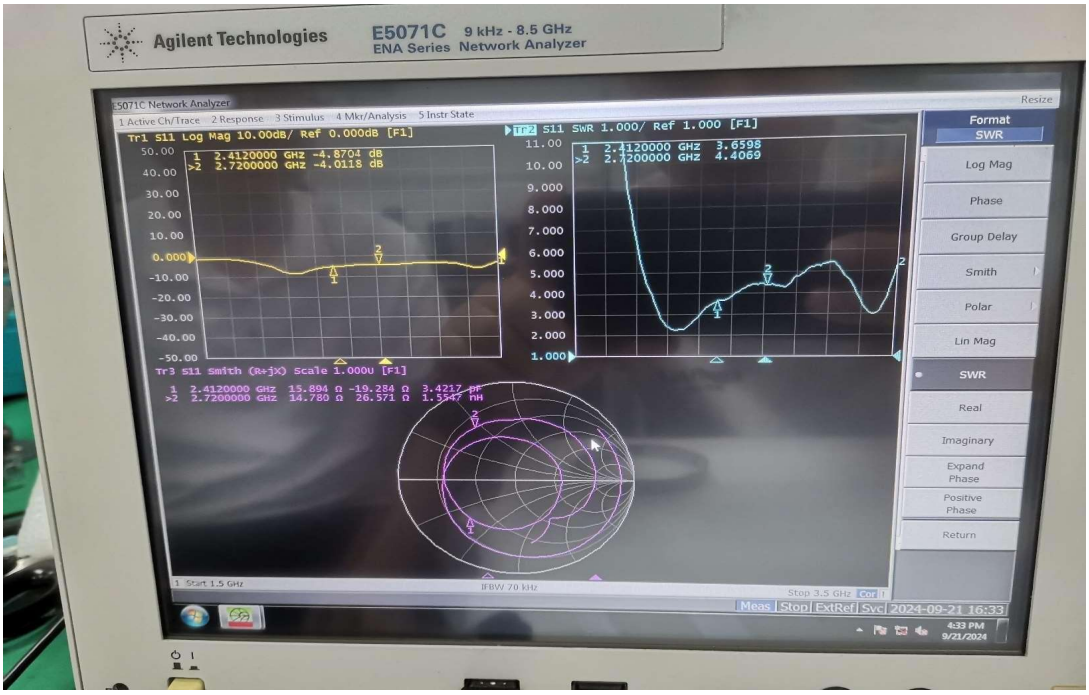
OTA Test the Test the scenario





S11-TEST

Log Mag/SWR/Smith Date



机器自带天线 WiFi 2.4

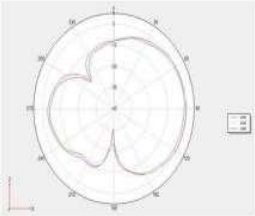
频段Fre(GHz)	回波损耗 Return loss(dB)	驻波比SWR
2.4	-4.87	3.65
2.7	-4	4.4

Passive test data

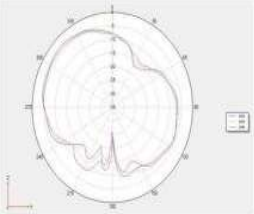
机器自带天线 WiFi 2.4

频段 Frequency/Mhz	效率 Efficiency / %	增益值 MaxGain/dBi
2400	38.02	1.34
2410	39.63	1.61
2420	38.55	1.59
2430	38.02	1.57
2440	36.31	1.35
2450	36.14	1.22
2460	32.66	0.66
2470	30.62	0.38
2480	31.99	0.52
2490	32.43	0.43
2500	33.27	0.38

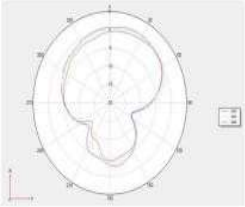
2D 辐射图 Radition pattern



Phi 0 2D

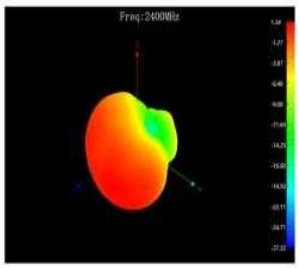


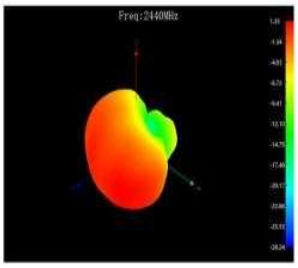
Phi 90 2D

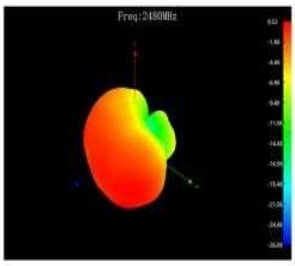


Theta 90 2D

3D 辐射图 Radition pattern







5.Tips

1、About the performance and structure confirmation section

★ Please confirm the appearance and performance of the product before signing the confirmation form.

★ Please be sure to provide the final mass production trial machine to our company or take it back to our company for verification before mass production.

★ Since the product of this certificate is a high-sensitivity object, please be sure to keep the test gold machine for subsequent traceability.

★ Because this product is a customized object, the use of a strong target, customers in the material replacement or for non-specified projects, please be sure to change the materials or non-specified items of the machine sent back to our company to verify the RF performance, otherwise, it may lead to the use of the state and the design state is inconsistent with the serious hidden dangers, our company to seal the debugging prototype to confirm the function, to ensure that our debugging sample function is completely normal, to prevent abnormal function of the antenna performance caused by the antenna performance error.

2、On the issue of product storage

★ Due to the printing ink on the surface of this product, adhesive backing pasted on the back, and electroplating objects, please be sure to confirm that the temperature is between 23° C-27° C, the relative humidity is below 60%, and there is no strong acid, sulfur, or oxygen during storage or transportation.

★ Due to the harsh environmental requirements of the adhesive backing of this product, please be sure to assemble the product within the product quality assurance period after receiving the product to ensure the reliability of the product.

3、Tips on how to use the product

★ Due to the special structure of this product, please be sure to have full contact with the pasted object when using this product, and the pasted object must not have chemical residues (release agent, etc.) or try not to use raw materials with mold release agent, in order to ensure the use of the product, please clean the surface of the pasted object before using this product to ensure that there is no chemical residue on the surface of the pasted object.

4、Quality Assurance Statement about this product

★ The quality assurance period of this product is 12 months, if your use and storage environment meets the above requirements, any quality problems occur during the effective warranty period, and it is judged that our products are abnormal, our company can provide free replacement services, after 12 months, our products provide lifelong consultation and paid replacement services.

★ This product is a special customized device, please be sure to confirm the number of products within 3 working days after receiving the product.