



SPECIFICATIONS FOR APPROVAL

official version

The specification data is the sample antenna data. Due to factors such as the product not being glued to the shell, there may be differences between the trial production machine and the specification data. However, after correction with the trial production machine, the data can remain consistent with the specification data

Customer Name: Shenzhen Jiuzhou Yunhai Technology Co., Ltd.

Product Name: WIFI 2.4G+5G_ANT_MAIN

Product Model: XU160

Part Number: LJF02-230705002M-R1A

Write By : SiHeng Peng

Issued Date: 2023/7/5

CUSTOMER

ENGINEER R&D DEPT	BUSSINESS DEPT	APPROVED BY	DATE	Edition/Part number

LEJIN

R&D DEPT	ENGINEER R&D DEPT	APPROVAL	DATE	Edition/Part number

ECN/ECR			



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Electrical Characteristics

Frequency	VSWR	Efficiency	Impedance	Polarization	Gain
2400 MHz ~2500 MHz	<1.6	>35%	50 Ohm	Linear	$\geq 2\text{DB}$
5100MHz--5900 MHz	<2.5	>35%	50 Ohm	Linear	$\geq 3\text{ DB}$

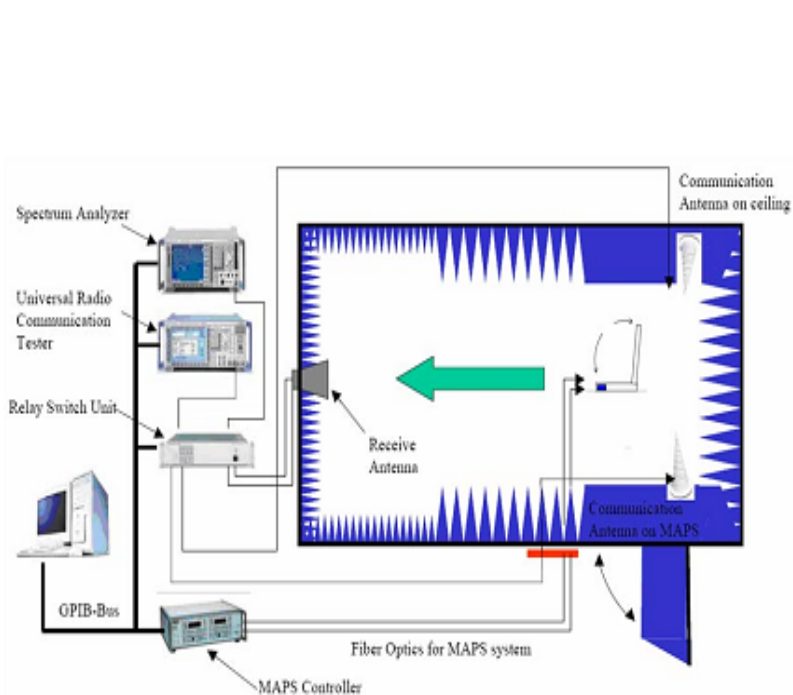
Material & Mechanical Characteristics

Environmental

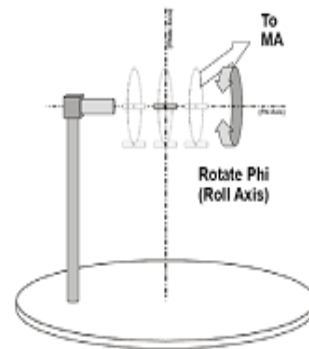
Material of Radiator	Cable Type	Connector Type	Dimension	Operation Temperature	Storage Temperature
BLACK	1.13	IPX_4		- 20 °C ~ + 50 °C	- 30 °C ~ + 80 °C

Test Equipment & Conditions

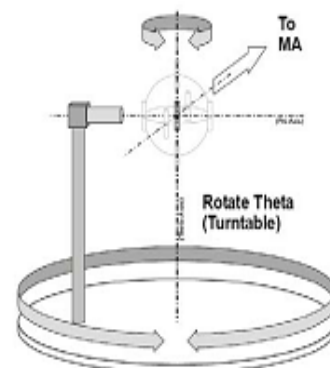
1. **Network Analyzers** :Agilent 8753SE 5071C
2. **Communications Test Set**:Agilent E5515C/CMW500
3. **3D Chamber Test System**(ETS743)



(Testing by 3D anechoic chamber)



Phi axis test



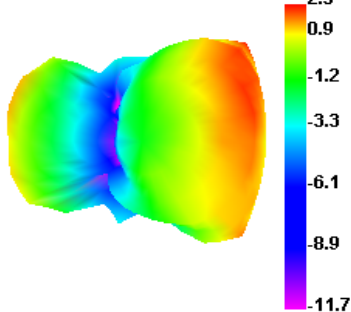
Theta axis test

Antenna Impedance: WIFI ANT M:

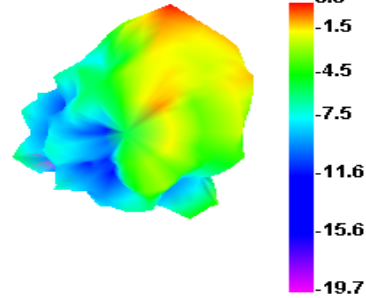


2.4G (Wifi/BT)	Freq (MHz)	2400	2410	2420	2430	2450	2460	2470	2480	2490	2500	ANT M
	Effi (%)	39.5	39.2	39.9	40.5	41.2	41.5	42.1	40.9	42.1	43	
	Gain (dBi)	1.75	1.55	1.89	2.27	2.25	1.96	2.23	2.44	2.56	2.08	
5G WIFI	Freq (MHz)	5150	5250	5350	5450	5550	5650	5750	5850	5950	6000	
	Effi (%)	37.2	37.9	38.6	38.9	38.5	39.1	38.1	39.5	40.2	41	
	Gain (dBi)	2.05	1.89	2.49	2.1	2.43	2.5	2.44	2.52	2.49	2.45	

2450.000MHz



5150.000MHz



OTD_DATA:(The following OTD_DATA was tested by assembling the antenna according to the requirements of this specification. If the antenna is replaced or the installation method of the antenna is changed, the following OTD_DATA will become invalid. During the test, the BT needs to be turned off and the system should set the module to a non sleep state.)

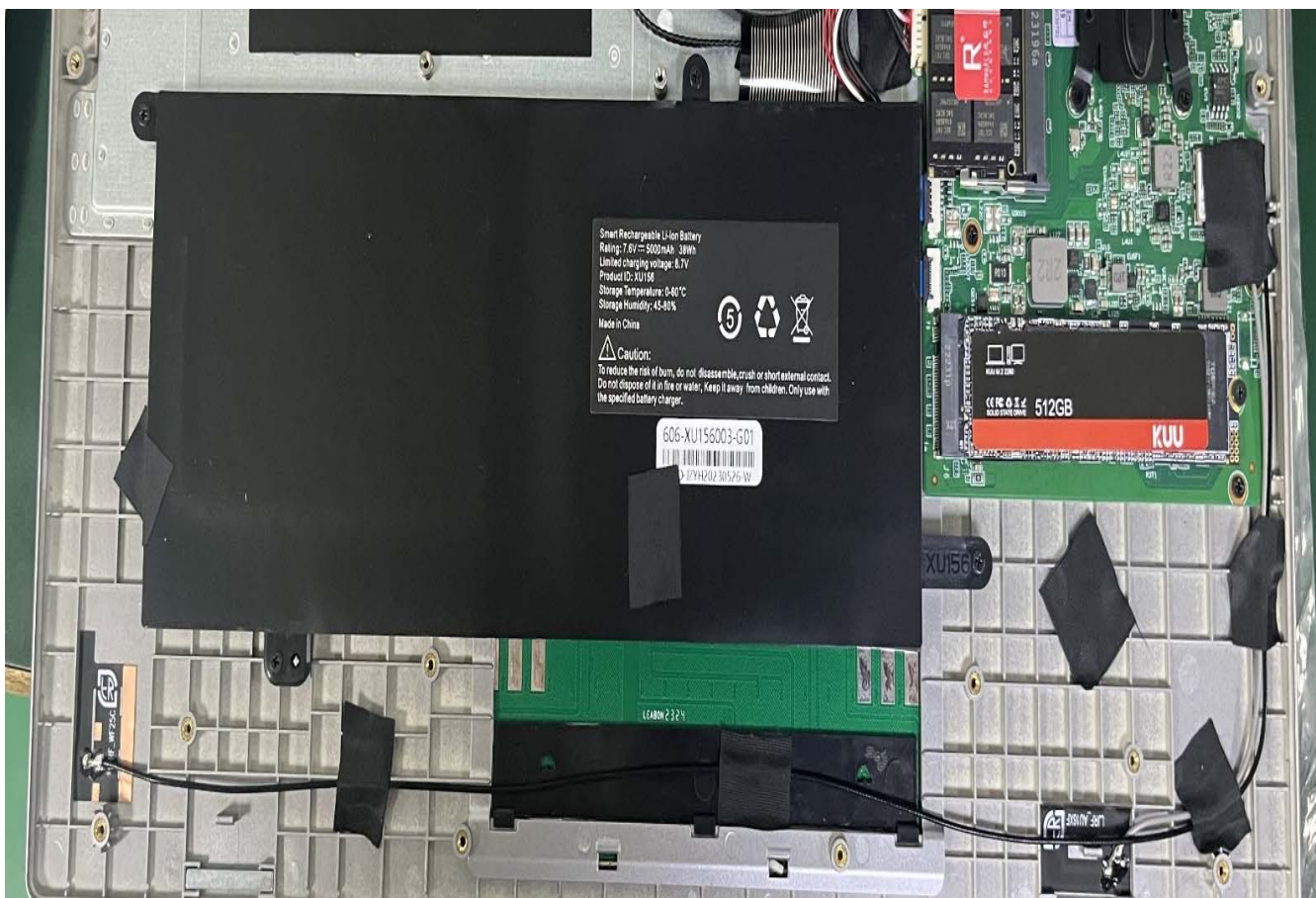
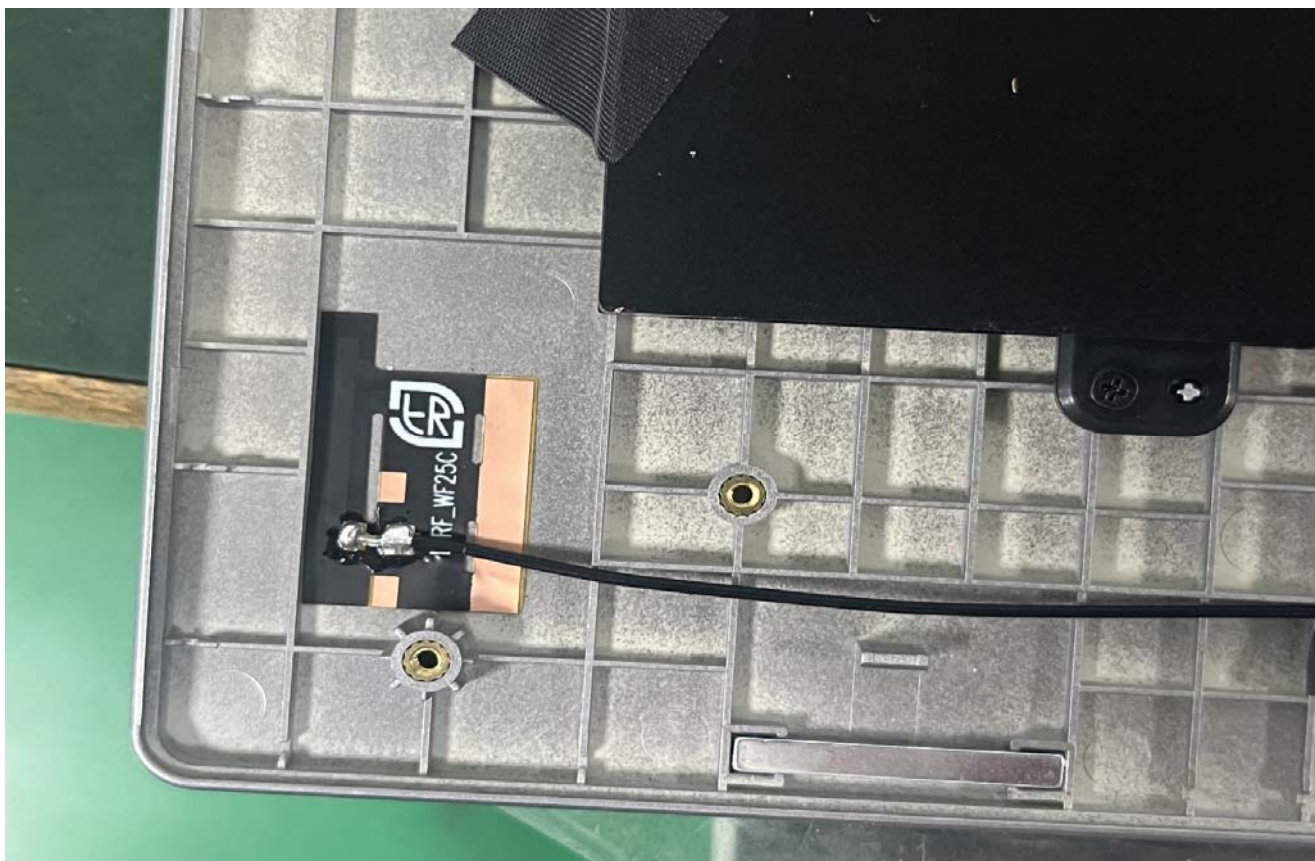
WIFI 2G	802.11B 11MB	
TRP(dBm)	TIS(dBm)	
CH1	12.29	-75
CH6	12.8	-75.3
CH11	13.16	-79.2

WIFI 2G	802.11G 54MB	
TRP(dBm)	TIS(dBm)	
CH1	11.25	-69.8
CH6	12.21	-69.2
CH11	11.1	-69.9

WIFI 5G	802.11A 54MB	
TRP(dBm)	TIS(dBm)	
CH36	14.44	-70
CH149	14.2	-70.8
CH161	14.5	-70.6

WIFI 5G	802.11AN MCS7	
TRP(dBm)	TIS(dBm)	
CH36	11.34	-65.6
CH149	13.73	-66.8
CH161	13.05	-67.7

Post antenna





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