SPECIFICATIONS FOR APPROVAL

Customer Name:

Product Name: 2.4GHz Antenna

Product Model:

Part Number: LJW01-17091602-R0A

Write By : Huxuwen

Issued Date: 2021-04-08

Manufacturer: Shenzhen Dahao Technology Co., Ltd
Address: 16D, Fuchun Pavilion, Haifu Garden, 1017 Shennan East Road, Wenhua Community, Huangbei Street, Luohu District, Shenzhen, China

REV	MODIFIED DESCRIPTION	DATE	REMARK
V1.0	Initial Draft Release	2021/04/08	

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Index

1. **Cover** • 1

2. **Index** • 2

3. **Product Specification** • 3

4. **Test Equipment & Conditions** • 3

5. **Test Report** • 4

6. **Reliability Test** • 5

7. **Assemble type** • 6

8. **Product Drawing** • 8

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3.Product Specification

A. Electrical Characteristics	
Frequency	**2400MHz ~2500 MHz**
Antenna Type	PIFA
VSWR	**<2.0**
Efficiency	**>40%**
Impedance	**50Ohm**
Polarization	**Linear**
Gain	**⩽1.71dBi**
B. Material & Mechanical Characteristics	
Material of Radiator	**Metal**
Cable Type	**N/A**
Connector Type	**N/A**
Dimension	Size: 8*40 mm, length: 80 mm
C. Environmental	
Operation Temperature	**- 20 ˚C ~ + 70 ˚C**
Storage Temperature	**- 30 ˚C ~ + 85 ˚C**
Humidity	**40%~95%**

4.Test Equipment & Conditions

1.Network Analyzers Agilent 8753D/5071C

2.HSPA and LTE protocol test set R&S CMW500 -PT

3.Communications Test Set Agilent 8960

4.3D Chamber Test System

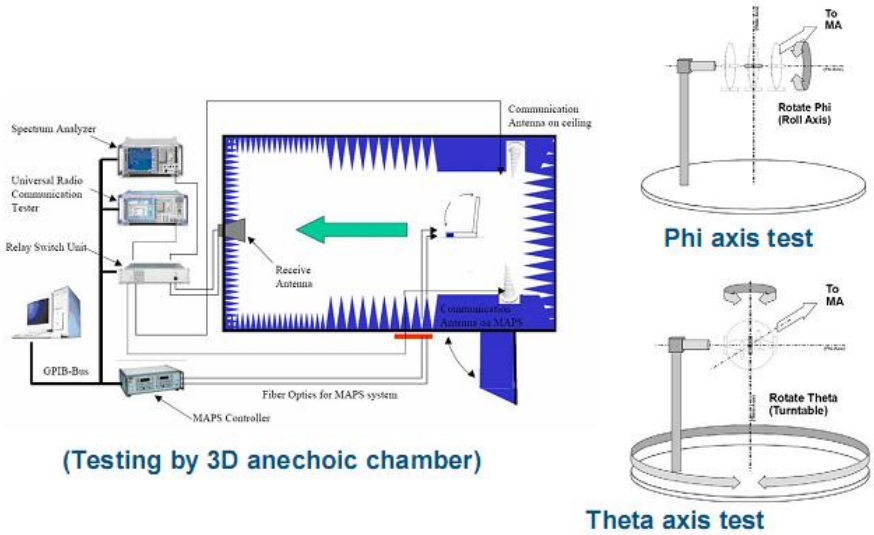

Chart 1 Test topology

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5.Test Report

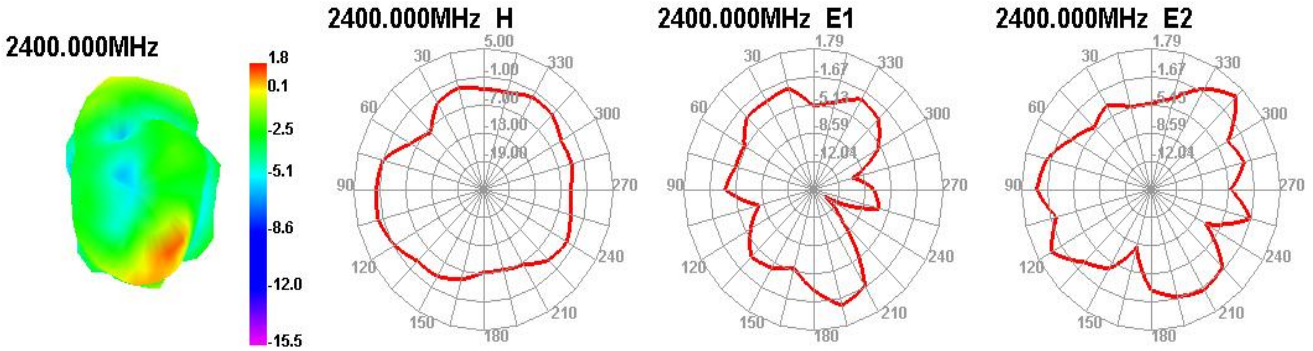
5.1 Voltage Standing Wave Ratio(VSWR).

Chart 2 VSWR

5.2 Efficient and gain.

Passive Test For WIFI 2.4G	Freq(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
	Effi(%)	42.62	46.84	51.47	55.07	53.54	48.06	51.80	49.38	44.21	42.77	40.64
	Gain(dBi)	1.71	1.44	1.56	1.65	1.54	1.31	1.62	1.59	1.62	1.37	0.36

5.3 Radiation pattern.



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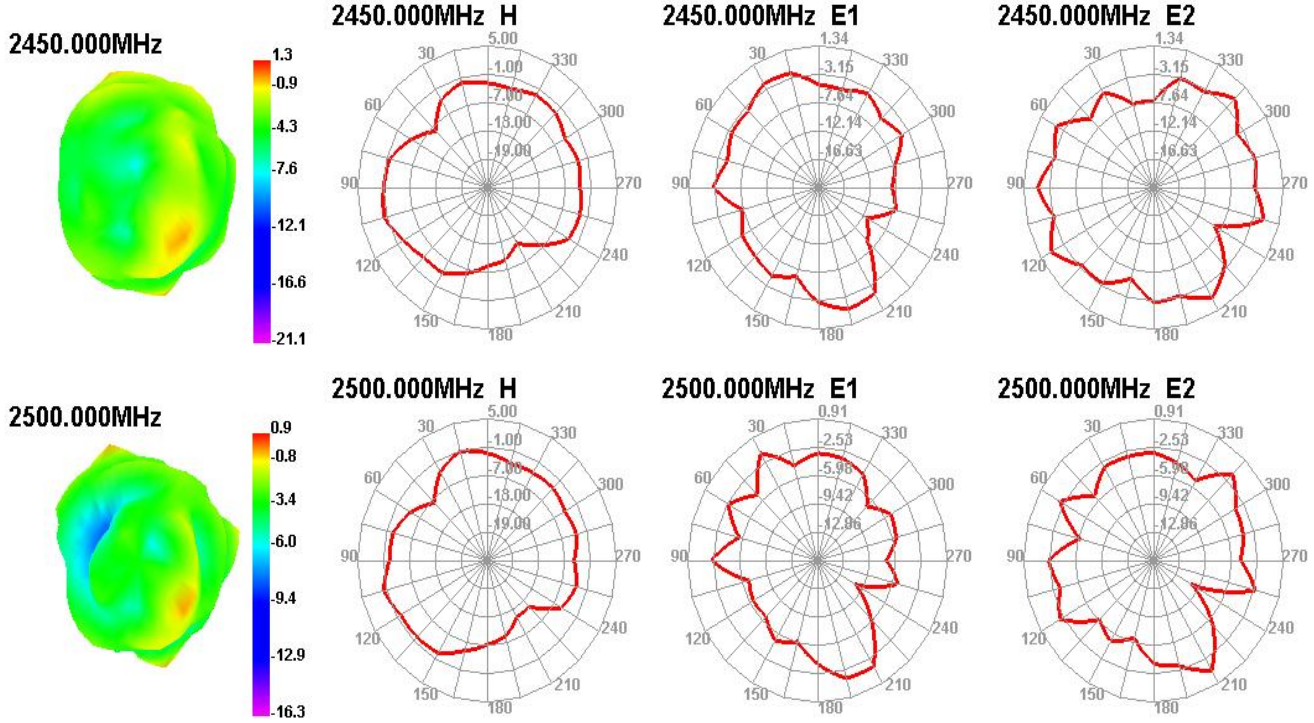

6.Reliability Test

Test Item		Test condition	Equipment	Specification	Result
1	Low Temp. Storage Test	Temperature: -30℃， Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25 ℃ and humidity is 65% for one hour, then step-down the temp. to -30℃ in one hour, store antenna for44 hours; step-up temp to 25℃,test antenna after 2 hours.	Temp.&Humi. Tester	No material deformation is allowed. Electronic Performance is ok .	PASS
2	High Temp./High Humid Storage Test	Temperature: 85℃ Humidity: 85% RH Time:48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25 ℃ and humidity is 65% for one hour, then step-up the temp. to 80℃ and the humidity up to 85% in one hour, store antenna for 44 hours; step-down tempto 25 ℃ ,test antenna after 2 hours.	Temp.&Humi. Tester	No material deformation is allowed. Electronic Performance is ok .	PASS
3	Salt-Spray 6 pray Test	Placing antenna in the Salt-Spray Tester ,set the test condition ， Temp: 35±2℃ Humidity: 85% NaCl salt spray :5±1%.PH value :6.5~7.2 Testtime:24hours	Salt-Spray Tester	No color change No appear rusting	PASS

7.Assemble type(omitted)

8.Product Drawing

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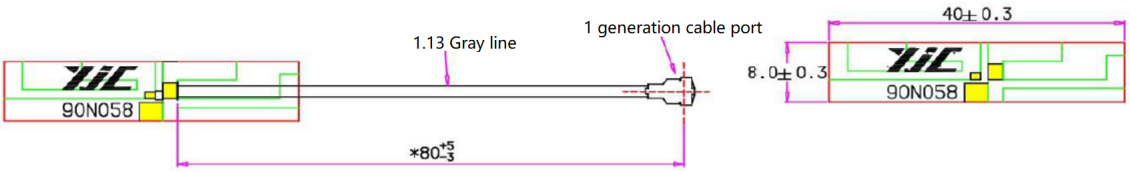

Unit: mm

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