
WiFi Antenna

Specification

Custome : Dongda Charm Technology

Product Name: WiFi Antenna

Product specifications: FPC+0.81 Cable+RFIV

Date of issue: 2023-06-30

Manufacturer Recognition Column:

Proposed	Operations	Structure	Ratification

Customer Recognition Column:

Confirmation	Audit	Ratification

Directory

1、Product Description.....	3
2、Product Picture.....	3
3、Product Specifications.....	3
4、Test environment.....	4
5、Environmental Performance	5
6、Test data.....	5-8
7、Engineering drawings.....	9

1 Product Description

The antenna is designed for superior performance , and can be widely used for wireless applications.
We provide comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs.

2 Product Picture



3 Product Specifications

Passive Electrical Specifications	
Frequency Range (MHz)	2400-2500MHz
Input Impedence (Ω)	50
VSWR	≤ 3
Gain (dBi)	1.60
Polarization Type	Linear
Mechanical Specifications	
Height (mm)	44.1*7mm
Cable Length (mm)	60mm 0.81 Cable
Radiator	Cuprum
Connect Type	RF IV
Working Temperature ($^{\circ}\text{C}$)	-40 ~ +85
Radome Color	Black

4 Test environment

Network Analyzer: Agilent 5071 B

Comprehensive tester: R&S CMW500(2/3/4G/NB-IoT/WIFI/BT); Anritsu MT8820C

Microwave darkroom :3*3*3 ETS Chamber



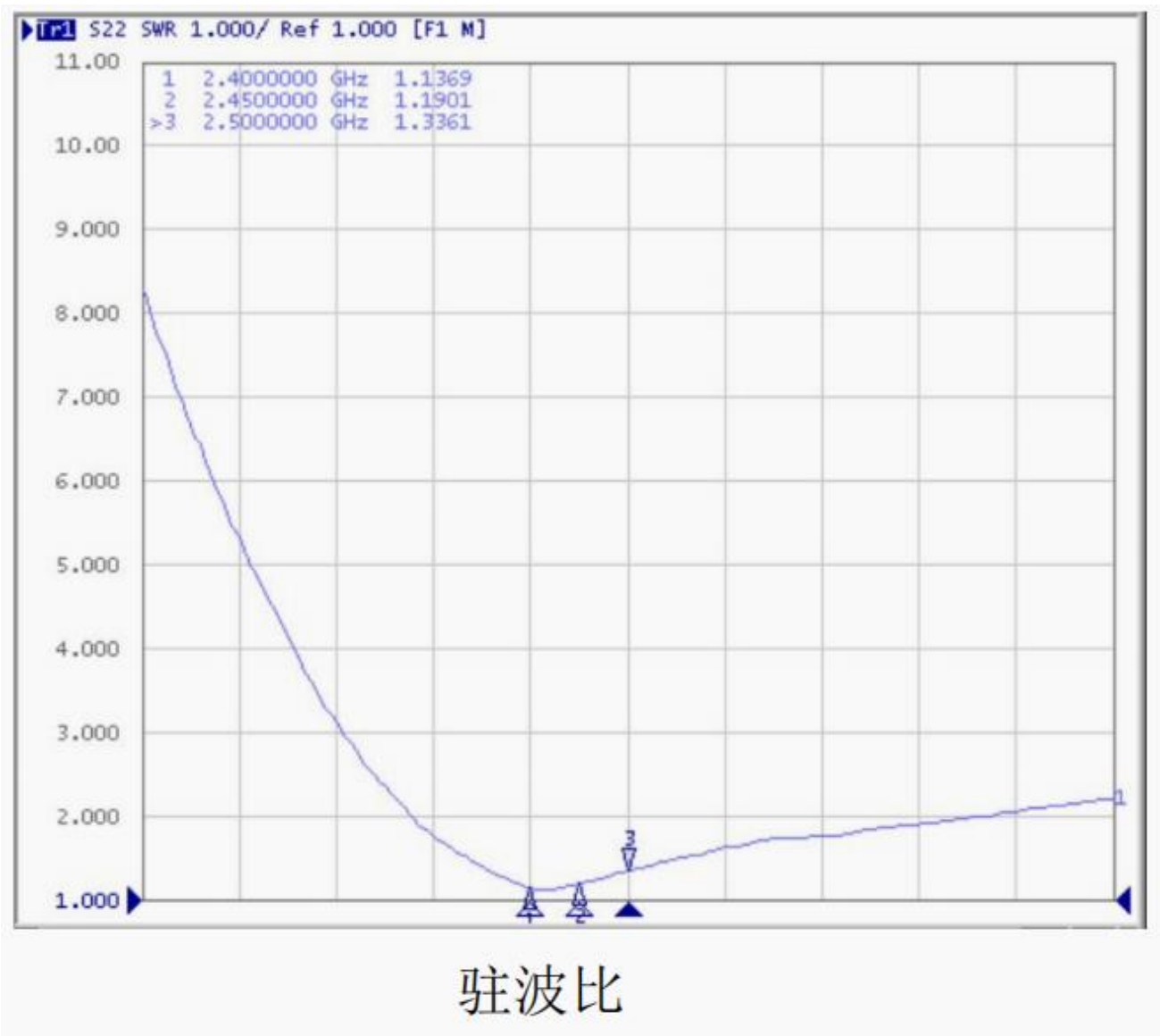
5 Environmental Performance

Environmental Performance		
Test Description	Test Procedures & Condition	Requirements
Salt Spray Test	In a $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$ airtight environment, humidity > 85%, PH in the range 6.5-7.2, with $5\% \pm 1\%$ NaCl solution Duration	1, No evidence of damage 2, The electrical performances should meet the spec. specified
High temperature test	Decay Test Conditions: Temperature: 85°C , Duration : 24 hours	1. No evidence of damage 2. The electrical performances should meet the spec. specified
Low Temperature test	Decay Test Conditions: Temperature: $-40 \pm 2^{\circ}\text{C}$, Duration : 10 Minute	1.No evidence of damage 2.The electrical performances should meet the spec.specified



6 Test data

👉 VSWR

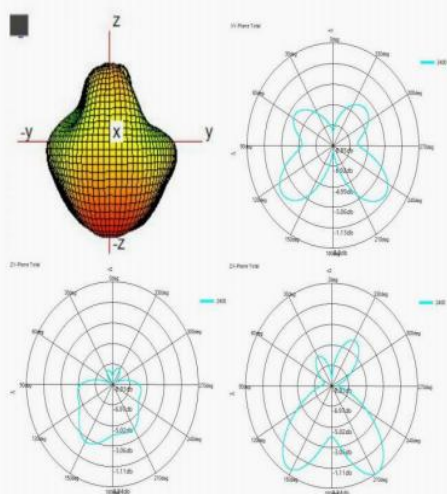


Frequency(MHz)	2400	2450	2500
VSWR	1.14	1.19	1.34

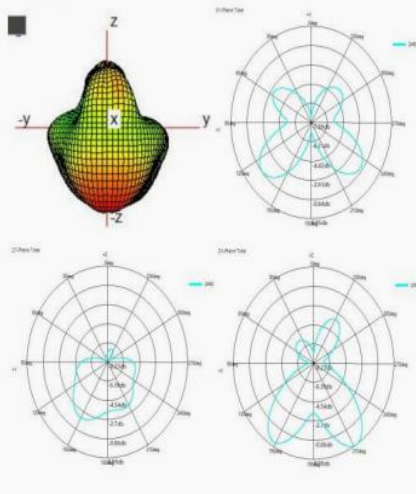
Efficiency&Gain

Freq(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	0.80	-3.77	41.93
2410	0.66	-3.85	41.25
2420	0.59	-3.78	41.83
2430	0.65	-3.64	43.29
2440	0.85	-3.40	45.76
2450	0.95	-3.25	47.30
2460	1.05	-3.17	48.14
2470	1.16	-3.13	48.69
2480	1.28	-3.03	49.83
2490	1.41	-2.90	51.32
2500	1.60	-2.68	53.90

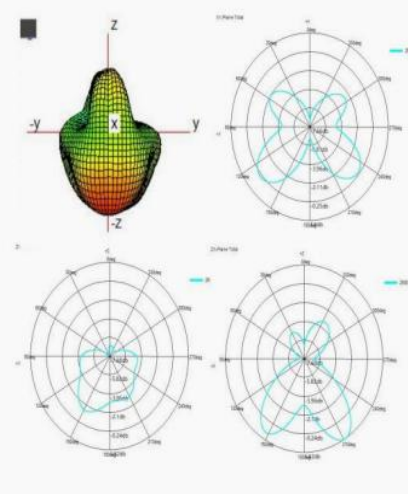
Frequency(MHz)	2400	2450	2500
Efficiency(dB)	41.93	47.30	53.90
Gain(dBi)	0.80	0.95	1.60



2400MHz

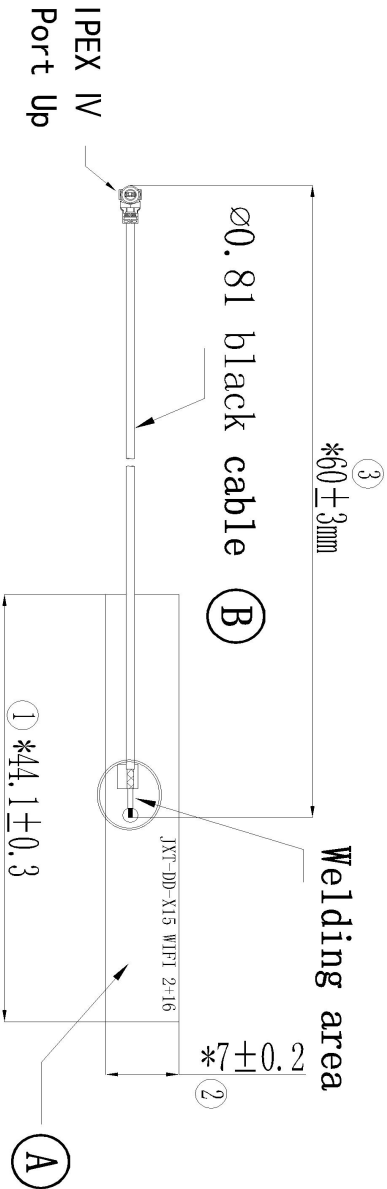


2450MHz



2500MHz

RoHS



technical requirement

PPC

1. The key control dimension is marked with *, and the unmarked chamfer is 0.2, and the process edge is 0.15mm;
 2. The surface of the copper pool is coated with black oil, and the screen is printed with matte white characters in Song typeface, with a height of 1.3mm;
 3. Use 3M 9471 adhesive for the back glue, with a thickness of 0.05mm;
 4. Base material P1+electrolytic copper one and a half, with a thickness of 0.05mm;
 5. The exposed copper area is nickel plated with a thickness of 3-6um. Please keep the electroplating area clean and free from stains, finger marks, etc;
 6. Unmarked tolerances shall be in accordance with the general tolerance table.
- Coaxial line
1. Key control dimensions with *:
 2. The total length tolerance of the wire stripping head is ± 0.3 mm. The wire stripping head should be coated with tin (lead-free) and comply with RoHS standards;
- D
1. The tin wire used must be lead-free and comply with RoHS standards;
 2. Please control the temperature of the soldering iron at 400 ± 50 °C;
 3. After welding, the height of the tin point shall not exceed 3.0mm;
 4. The welding effect shall be inspected and accepted according to the Welding Instructions.

Date	Modification content	Edition

Shenzhen JieXunTong Wireless Technology Co., Ltd.

Drawing No	Product code	Product name/Specification
B		Coaxial Cable
A		Shell
Shenzhen JieXunTong Wireless Technology Co., Ltd.		
0~9.99	± 0.05	$\varnothing$ 0.02
10~19.99	± 0.10	$\varnothing$ 0.03
20~39.99	± 0.15	$\varnothing$ 0.02
40~	± 0.20	$\varnothing$ 0.04
K.	± 0.10	0.02
.XX	± 0.05	
.X°	$\pm 2^\circ$	
Product Name:	WIFI Antenna	DATE: 2023.06.29
Project name:	DD-X15-2+16	Engineer:
Product Code:	20065013521	RF:
Material:	PPF+Cable	Assembly drawing
Color:		
UNIT:	mm	Proportion: 1:1
Page:		1/1
Edition:		R.A