



SPECIFICATION FOR APPROVAL

Date 2025/10/14
File No 25101401
Revision 1.0

CUSTOMER: _____

CUSTOMER NO: 3170300338

PART NAME: WIFI Antenna

SUPPLIER NO: YJW01.076.317.303A

Date: _____ Q'TY: _____

CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR

SUPPLIER SIGNATURE		
APPROVAL	CHECK	DESIGN
 ChenGuoqiang	XieLi	ChenXingyi

YJ-RD-F04-A





Spec Item

NO	Contents	Number of Page	Page Code
1	Spec Cover	1	1
2	Spec Item	1	2
3	Drawing	1	3
4	Antenna Specification	1	4
5	S Parameter	1	5
6	Passive Test	3	6 ~ 8
7	Radiation Pattern	2	9 ~ 10
8	Active Test	2	11 ~ 12
9	Antenna Profile	5	13 ~ 17
10	Material Certificate	25	18 ~ 42
11	RoHS Test Report	**	**
12	N/A	N/A	N/A
13	-	-	-



RoHS

Compatible

REV.

DESCRIPTION

DATE

A

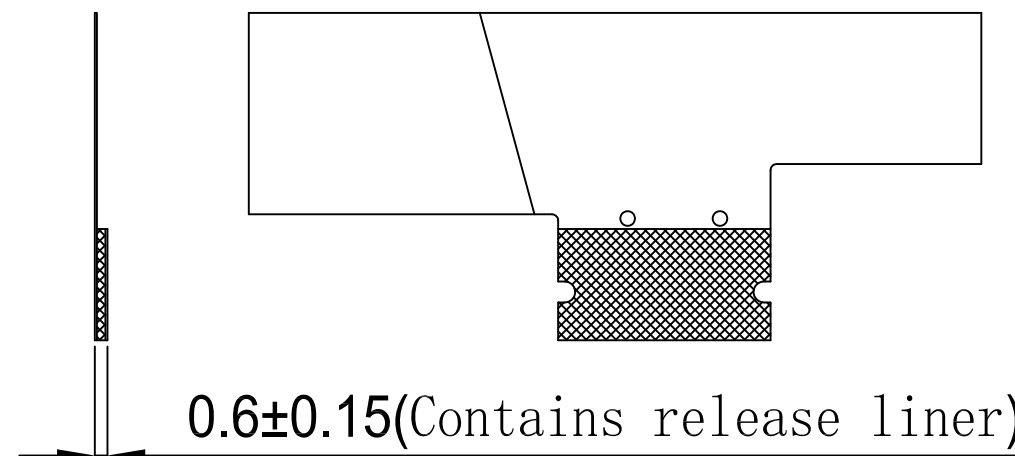
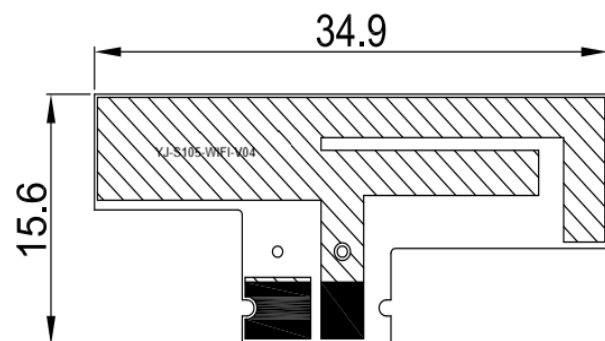
Initial release

2025-01-09

B

Modify appearance

2025-05-10



Wiring Area Solder joint Area Reinforcement Area (PI)

Notes:

- Material: a pair and a half of substrate; FPC thickness: 0.1mm.
- Color/surface treatment: gold plating of solder joints; 3M tape split line on the back
Color: black ink, white silk screen.
- Size: Belt * is the key size.
- Tolerance: Tolerance is not marked with reference to standard tolerance.
- Packing: Ship with micro-adhesive packaging.



DONGGUAN YIJIA ELECTRONICS COMMUNICATION TECHNOLOGY CO., LTD

PART NAME: WIFI Antenna

PART NO.: YJW01.076.317.303A

DATE: 2025-05-10

APPROVED BY

CHECKED BY

DESIGNED BY



Tolerance
X.X ±0.50
X.XX±0.15
X° ±3°

Qin Jianyu

Deng Lei

Liao Guangxi

UNITS: mm

SCALE: 1/1

REVISION: B



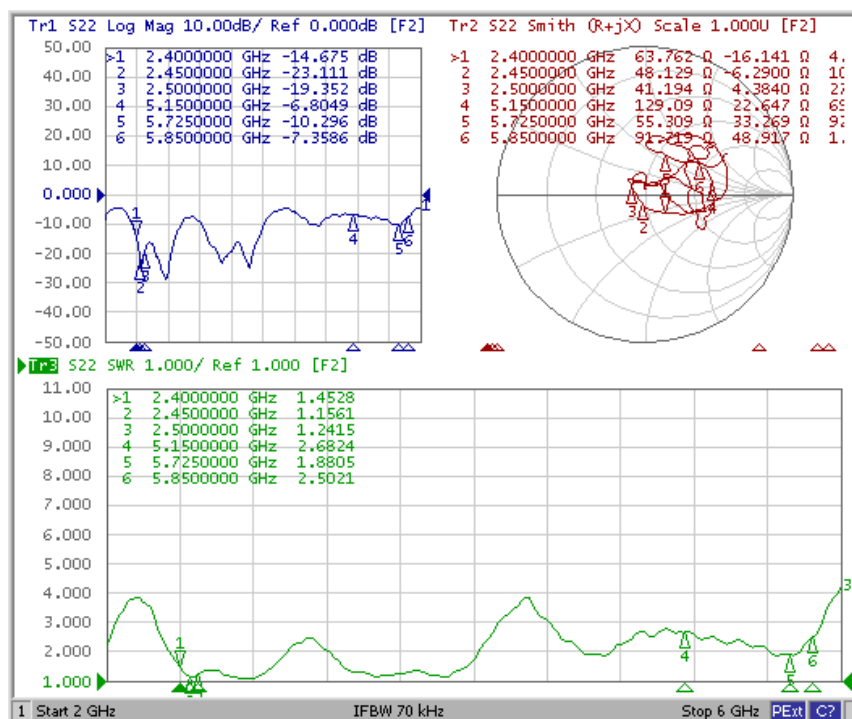
Antenna Specification

Electrical Properties	
Frequency	2.4-2.5GHz 5.15-5.85GHz
Impedance	50 Ohm Nominal
V.S.W.R	2.0 Max@2.4-2.5GHz 3.0 Max@5.15-5.85GHz
Gain	0.6 dBi@2.4-2.5GHz 2.1 dBi@5.15-5.85GHz
Radiation	Omni-directional
Polarization	Linear
Physical Properties	
Connector	None
Cable Type	None
Cable Length	None
Cable Color	None
Operating Temp.	-40 ~ +85 °C
Storage Temp / Humidity	25±5°C / <70%



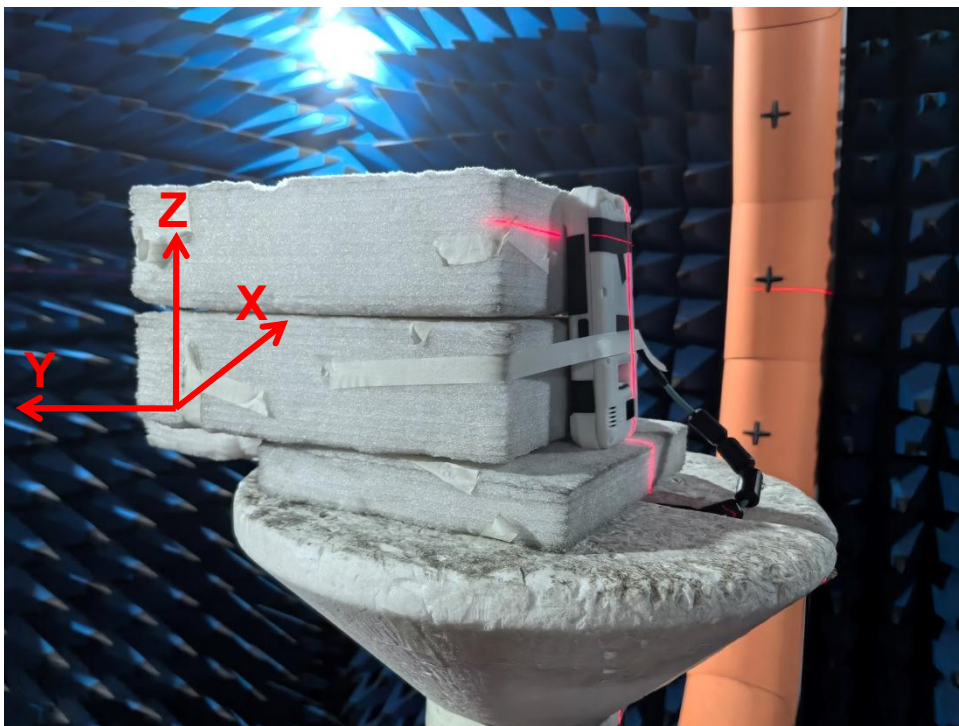


*Agilent
E5071C
S
Parameter
Test //
WiFi
Antenna*





Antenna Passive Test





Passive Test For WiFi Antenna(2.4G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	40.6	-3.9	-0.4
2410	40.8	-3.9	-0.4
2420	41.2	-3.9	-0.5
2430	41.9	-3.8	-0.6
2440	42.7	-3.7	-0.8
2450	44.9	-3.5	-0.5
2460	45.0	-3.5	-0.4
2470	47.3	-3.3	0.2
2480	47.7	-3.2	0.3
2490	45.3	-3.4	0.6
2500	43.1	-3.7	0.3





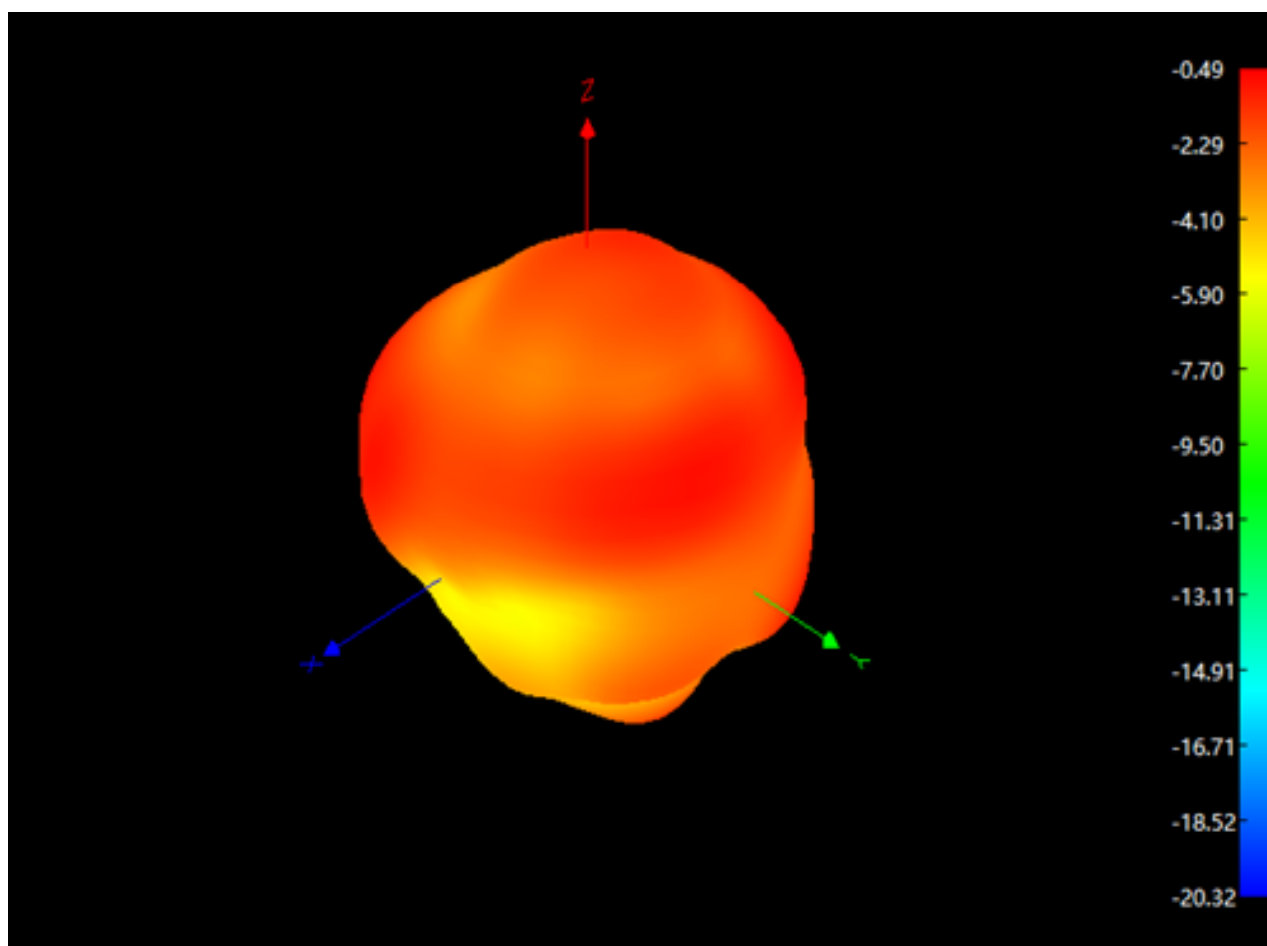
Passive Test For WiFi Antenna(5.8G)

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
5150	36.8	-4.4	0.5
5200	36.6	-4.4	0.4
5250	35.3	-4.5	0.1
5300	36.9	-4.3	0.5
5350	37.7	-4.2	0.6
5400	37.7	-4.2	1.0
5450	36.3	-4.4	0.6
5500	36.3	-4.4	0.6
5550	39.0	-4.1	1.1
5600	39.9	-4.0	1.3
5650	37.8	-4.2	1.1
5700	36.1	-4.4	1.1
5750	41.2	-3.9	1.8
5800	41.6	-3.8	2.1
5850	32.0	-4.9	1.0



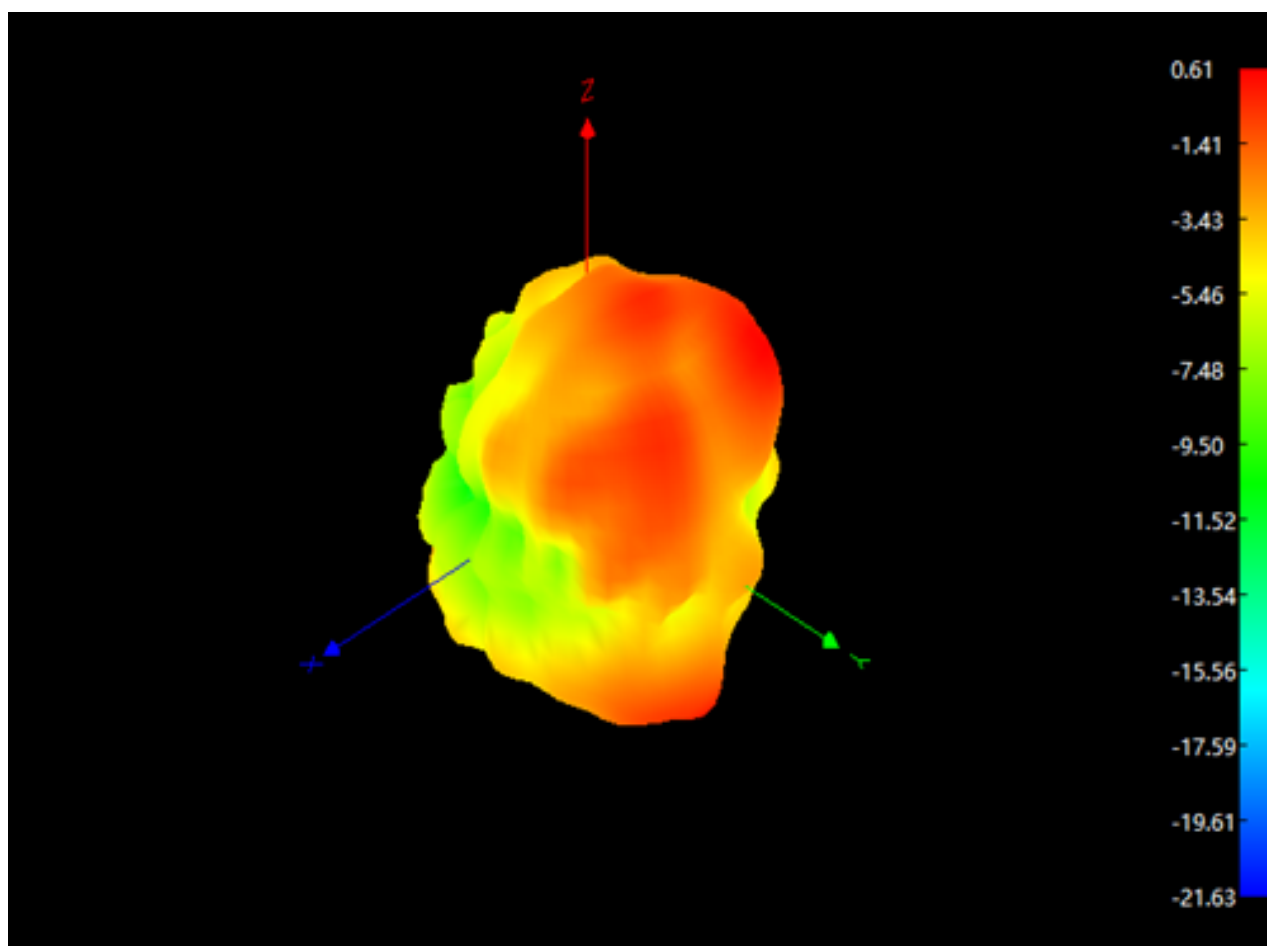


Radiation Pattern For WiFi Antenna (2450MHz)



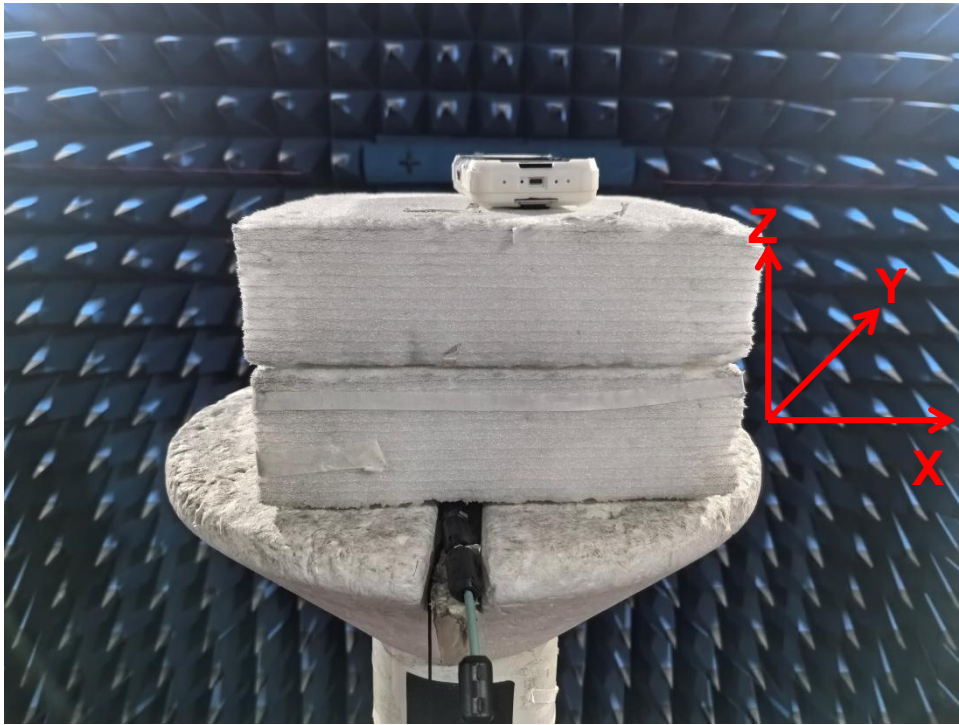


Radiation Pattern For WiFi Antenna (5850MHz)





Antenna Active Test





Active Test For WiFi Antenna							
Band	Channel	Data Rate	TRP	EIRP	Data Rate	TIS	EIS
WIFI 2.4G 802.11b	1	11Mbps	13.2	16.9	11Mbps	-82.7	-85.8
	7		13.2	16.3		-82.8	-85.2
	13		13.2	15.9		-82.6	-86.7
WIFI 5G 802.11a	149	54Mbps	12.0	15.2	54Mbps	-71.1	-75.2
	157		13.1	16.3		-71.3	-75.9
	165		13.1	16.8		-70.2	-75.3



