



深圳市智遠互聯科技有限公司

Customer: **Novella Labs Limited**

Manufacturer: **Shenzhen Zrone Link Technology Co., Ltd.**

Part Name: **WIFI Antenna**

Part Number: **WF03A.C113.100B.321**

Issue Date: **July 23rd, 2025**

Specification:

Electrical Characteristics	
Frequency	2400MHZ-2500MHZ
Return Loss	<-5
Efficiency	31%~35%
Maximum Gain	2.08 dbi
Impedance	50 Ohms
Polarization Mode	Linear Polarization
Material and Mechanical Characteristics	
Material	FPC
Wire type	Wire Diameter 1.13mm
Terminal Type	Generation 1
Drawing Dimensions:	Refer to Detailed Drawings
Environmental Characteristics	
Storage Temperature	- 30 °C ~ + 85 °C
PC Soldering Temperature	280±5°C Immersion Time:10 seconds
RF Cable Soldering Temperature	320±5°C 2-3 seconds

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Test Equipments and Conditions:

1.

1.1 Network Analyzers

Agilent 8753D

Agilent 5071B

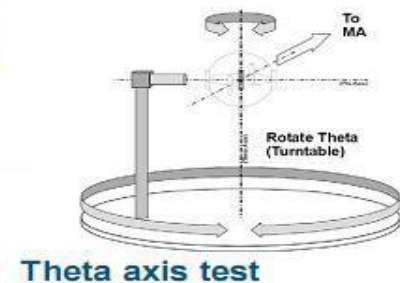
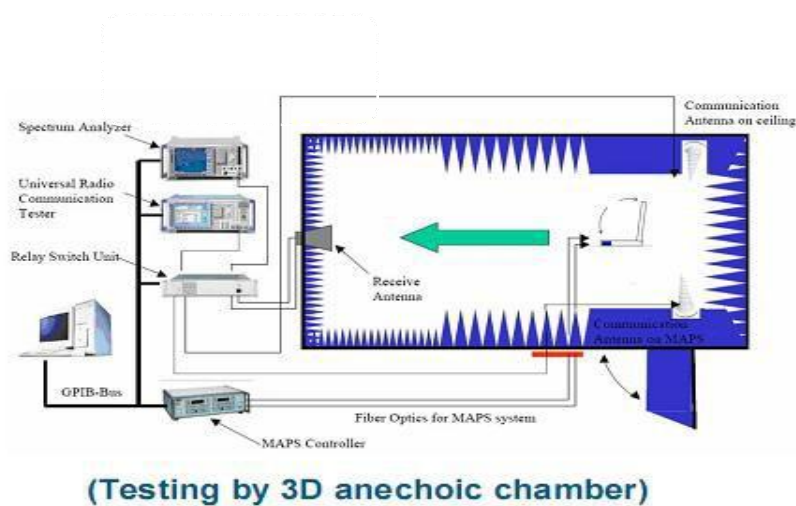
1.2 Communication Test Equipment

Agilent E5515C

R&S

CMW500

2. 3D Test System



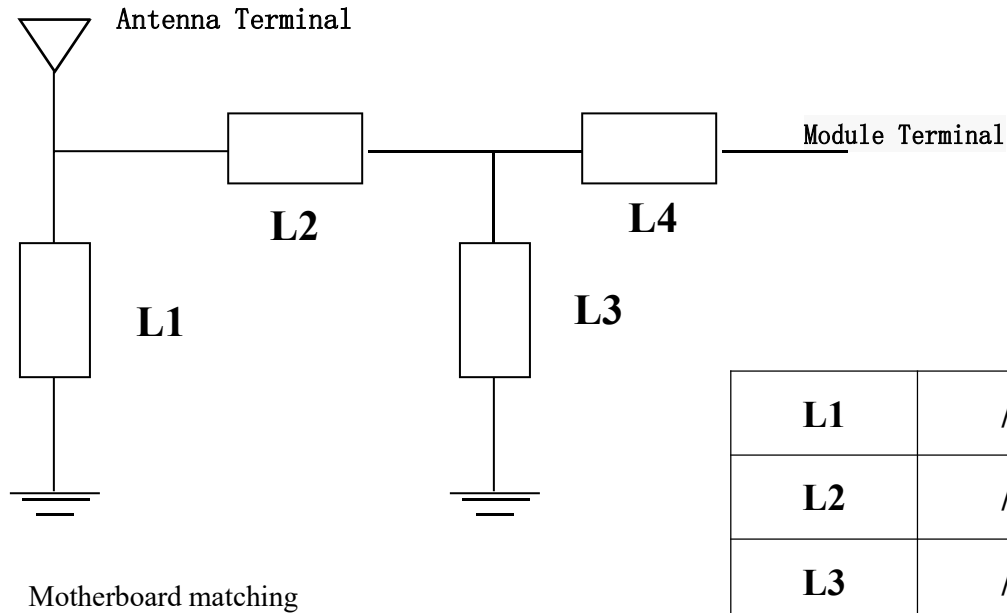
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Matching circuit



L1	/
L2	/
L3	/
L4	/

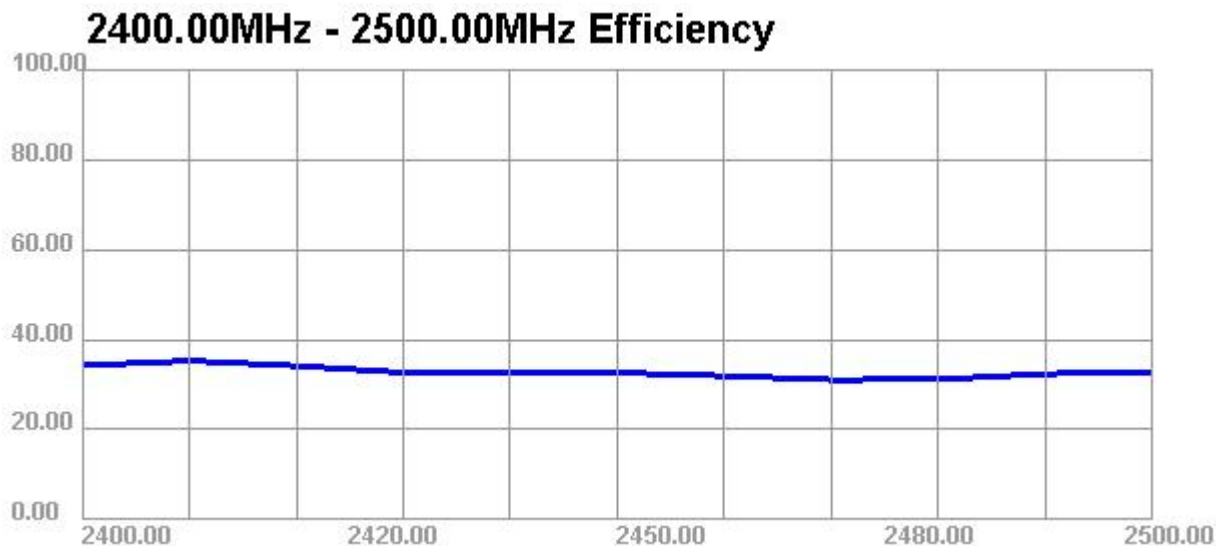
Passive test report

Passive Test For WiFi2.4												
Freq	Effi	Effi	Gain	Gain	UHS	DHS	Max	Min	Directivity	Beamwidth	AttH	AttV
(MHz)	(%)	(dB)	(dBi)	(dBd)	(%)	(%)	(dB)	(dB)	(dBi)	(3dB)	(dB)	(dB)
2400	34.26	-4.65	2.01	-0.14	16.989	17.27	2.01	-20.16	6.66	15	45.86	46.02
2410	35.31	-4.52	1.93	-0.22	17.53	17.776	1.93	-19.67	6.45	15	46.04	46.37
2420	34.18	-4.66	1.53	-0.62	16.847	17.336	1.53	-20.61	6.19	15	45.95	46.25
2430	32.72	-4.85	1.27	-0.88	15.808	16.91	1.27	-21.56	6.13	15	45.92	46.3
2440	32.9	-4.83	1.45	-0.7	15.358	17.545	1.45	-25.24	6.27	15	45.94	46.38
2450	32.65	-4.86	1.59	-0.56	14.679	17.974	1.59	-23.54	6.45	15	45.94	46.47
2460	31.96	-4.95	1.75	-0.4	13.944	18.012	1.75	-22.46	6.71	15	45.88	46.51
2470	31.1	-5.07	1.85	-0.3	13.358	17.746	1.85	-22.66	6.93	15	45.86	46.49
2480	31.19	-5.06	1.95	-0.2	13.348	17.84	1.95	-31.44	7.01	15	45.98	46.69
2490	32.42	-4.89	2.08	-0.07	13.949	18.47	2.08	-27.47	6.97	15	46.39	46.87
2500	32.83	-4.84	1.95	-0.2	14.237	18.591	1.95	-20.76	6.79	15	46.23	47.02

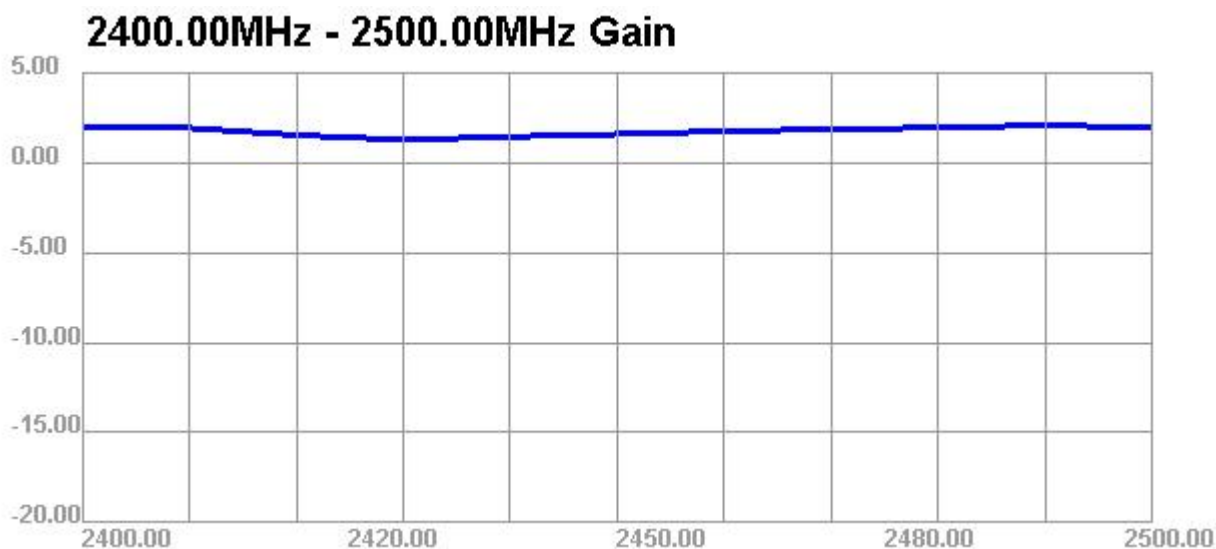
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■ Efficiency test report



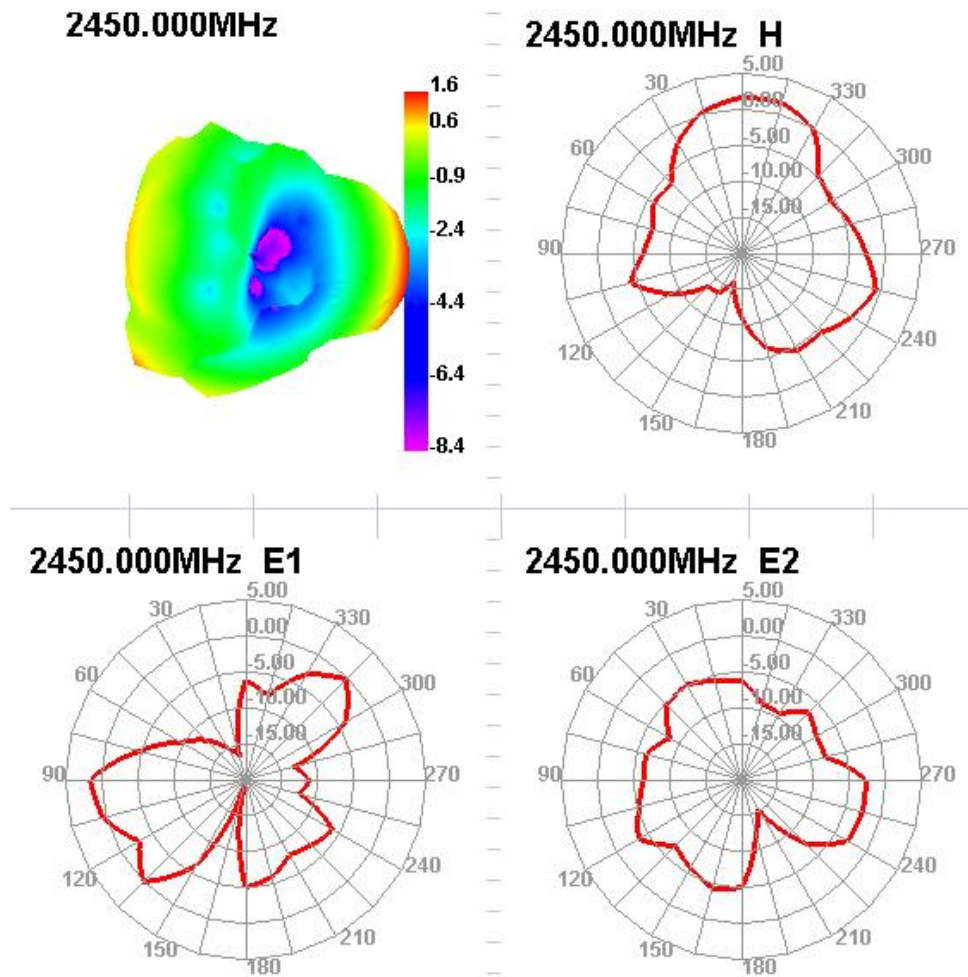
■ Gain test report



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■ Radiation pattern



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