

Antenna Testing Report

Customer : Matatalab Co., Ltd.

Product Name : Solvia ED 8×32 AI Binoculars

Product Model: BN8x32

Manufacturer: Sunnyway Technology(CHINA)

Report version: December 10,2025

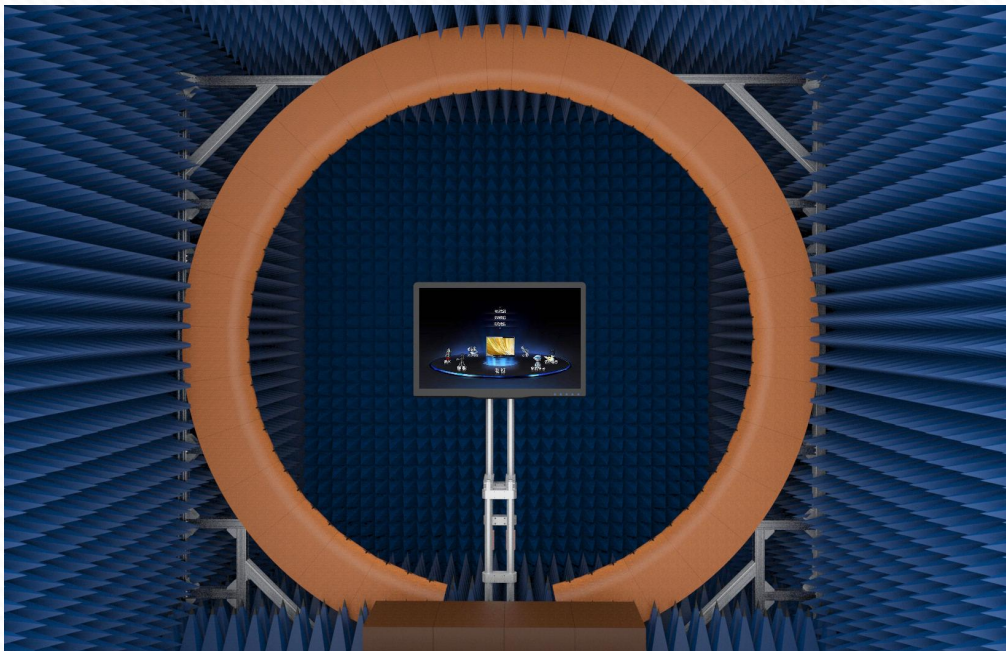
Author: HuangZhinan

Version	Report date	Remark
A0	2025.12.03	Initial Passive Debug Data
A1	2025.12.10	Sample test data
A2		
A3		
A4		
A5		
A6		
A7		
A8		
A9		

Project Overview

Prototype status	Passive machine
Device type	Telescope
Number of antennas	wifi
Frequency band	N/A
	N/A
	N/A
	N/A
	WIFI2.4/5.8
Structural style	FPC+Copper axis
Environment adjustment	No change
Matching modification	No change

Equipment List



The industry's top 64 sensors OTA chamber

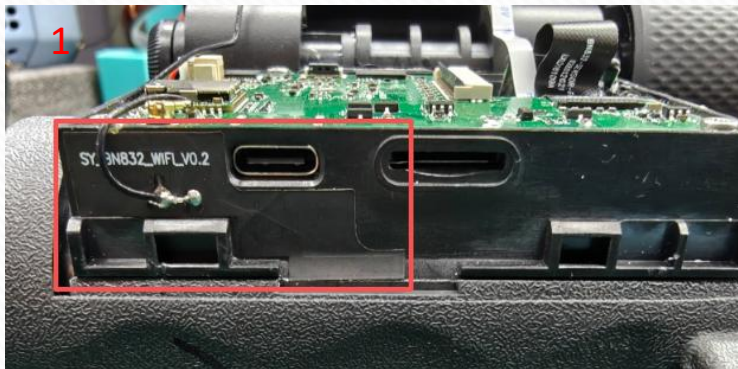
Frequency range: 400MHz-11GHz

Device Limitation: 2M

Load-bearing limitation:100KG

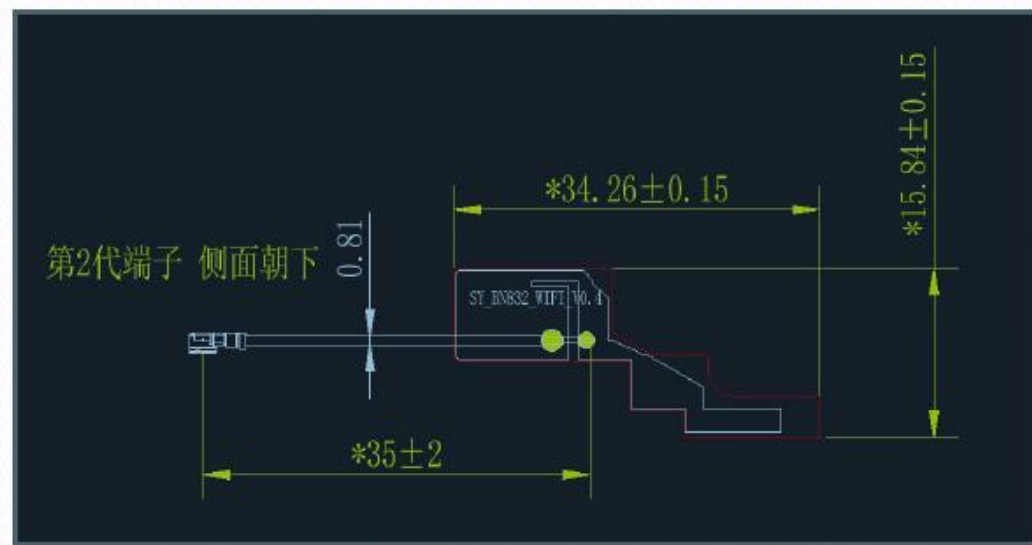
Equipments Items	Total Quantity	Quantity for Shanghai R&D	Quantity for Shenzhen R&D	Quantity for ChongQing R&D
OTA chamber	10	4	5	1
5G Tester (SP9500-CTS)	3	1	1	1
R&S Tester (high configuration CMW500)	6	3	2	1
Japan Anritsu Tester (Dual Channel 8820)	4	2	2	--
NB-IoT Tester (SP8315)	3	1	1	1
Agilent Tester (8960)	9	4	4	--
Agilent Network Analyzer (E5062A)	7	3	3	1
Agilent Network Analyzer (E5071C 8.5GHZ)	11	5	5	1
Agilent Network Analyzer (E5071B 8.5GHZ)	7	3	3	1
R&S Network Analyzer (ZND)	9	4	4	1
R&S Network Analyzer (ZVB)	3	1	1	1
OTA head hand / ear hand / arm hand	5	2	2	1
GPS/WIFI active test equipment	5	2	2	1

Basic situation

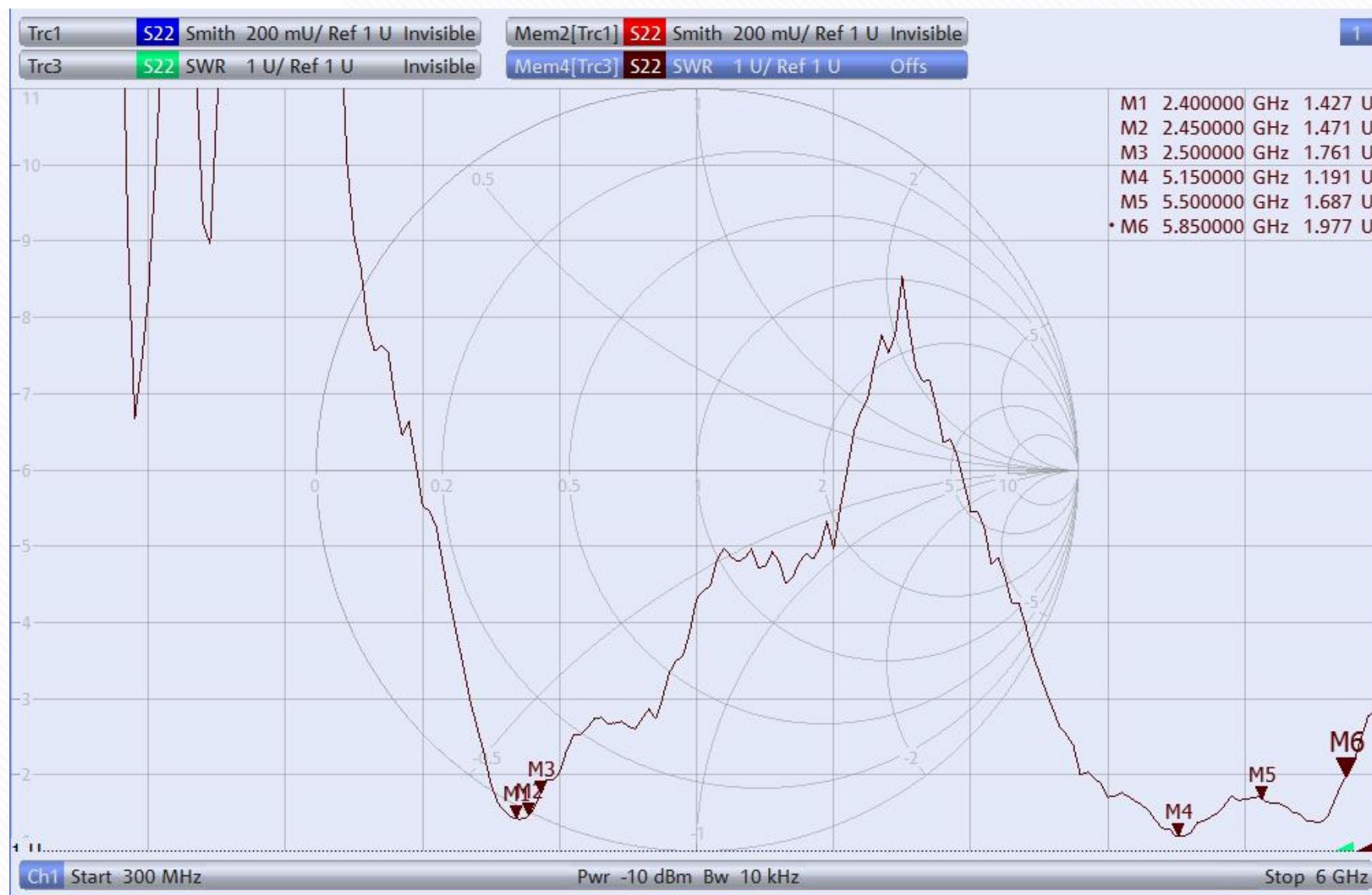


1. This project is in the form of fpc + copper axis, as shown in the Fig. 1

2. Copper axis placement is shown in Fig. 2



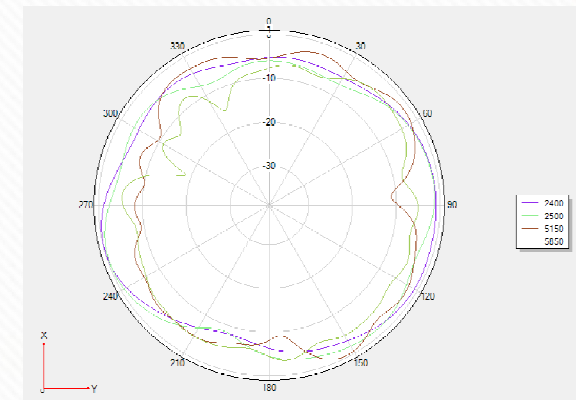
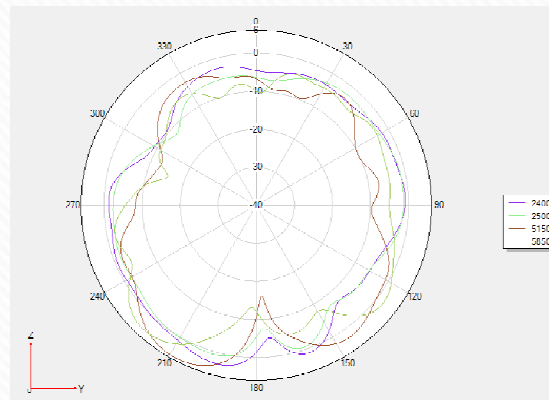
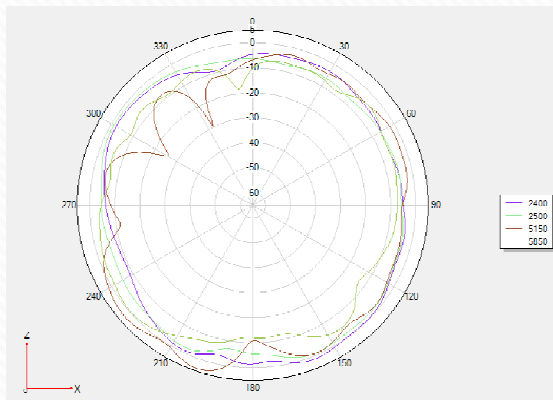
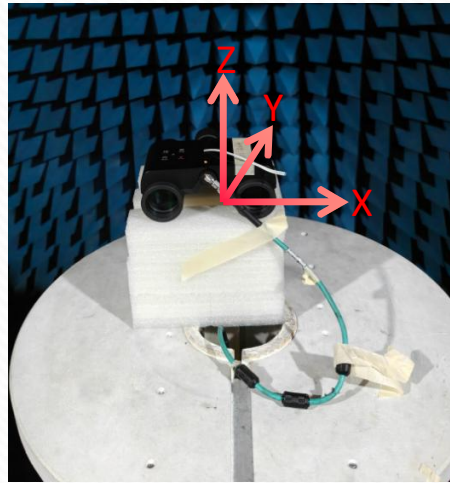
S11-WIFI Antenna



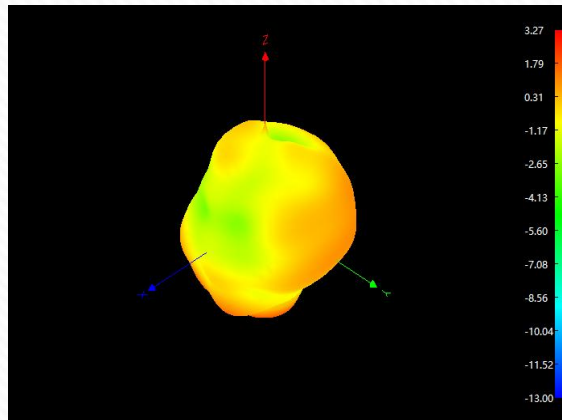
wifi Antenna

Frequency	Efficiency-%	Gain(dBi)	Frequency	Efficiency-%	Gain(dBi)
2400	63.92	4.05	5150	62.26	4.65
2410	62.87	3.93	5200	60.56	4.94
2420	62.55	3.83	5250	57.42	5.18
2430	62.05	3.81	5300	52.17	4.89
2440	60.95	3.81	5350	53.27	4.38
2450	60.21	3.72	5400	58.96	4.6
2460	59.46	3.66	5450	55.72	4.54
2470	58.77	3.6	5500	52.37	4.4
2480	59.55	3.62	5550	58.26	5.4
2490	58.49	3.46	5600	60.52	5.94
2500	57.74	3.36	5650	59.49	6.19
			5700	54.82	5.97
			5750	48.85	5.6
			5800	46.37	5.29
			5850	43.2	4.69

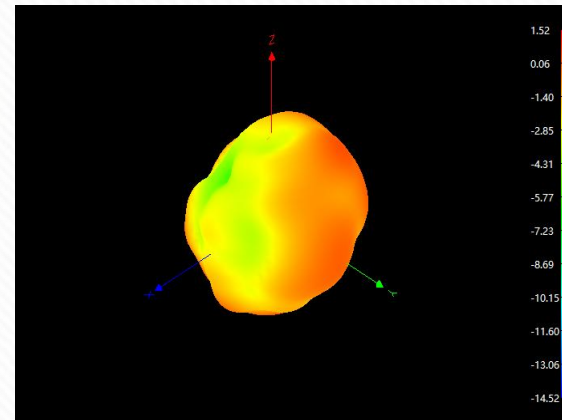
2D WIFI Antenna



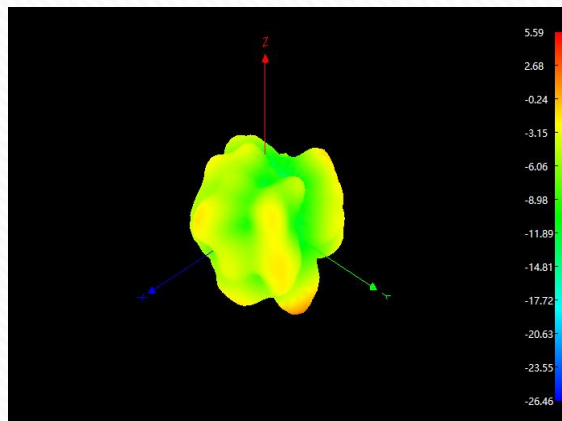
3D WIFI Antenna



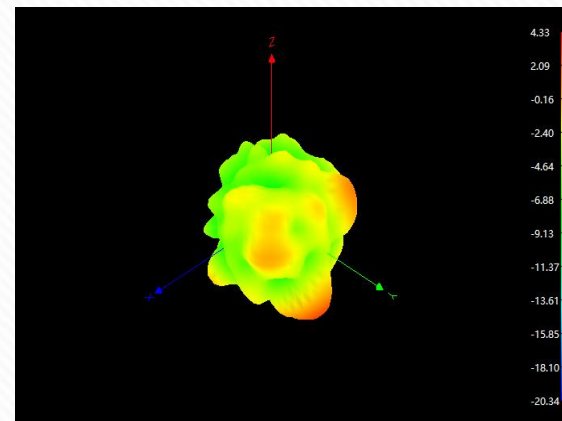
3D 2400



3D 2500



3D 5150



3D 5850

1: The antenna has good performance, and the parameters such as efficiency, gain can achieve the use requirements.