

Antenna Testing Report

Customer: apical Technology

Project Name: 4512

Report Number: SZ24046IB03

Manufacturer: Sunnyway Technology(CHINA)

Address: Floor 6, Building 5, Nam Tai Inno Park, Guangming District, Shenzhen

Report version: May. 31, 2024

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Version	Report date	Remark
A0	2024.5.31	Latest test data
A1		
A2		
A3		
A4		
A5		
A6		
A7		
A8		
A9		

1. Record... .. 2

2. Project Overview 4

3. Equipment List... .. 5

4. Project pictures and Passive fixturs... .. 6

5. Version Information 7

6. Matching Circuit 7

7. Passive parameters 1 2

8. Passive efficiency 1 6

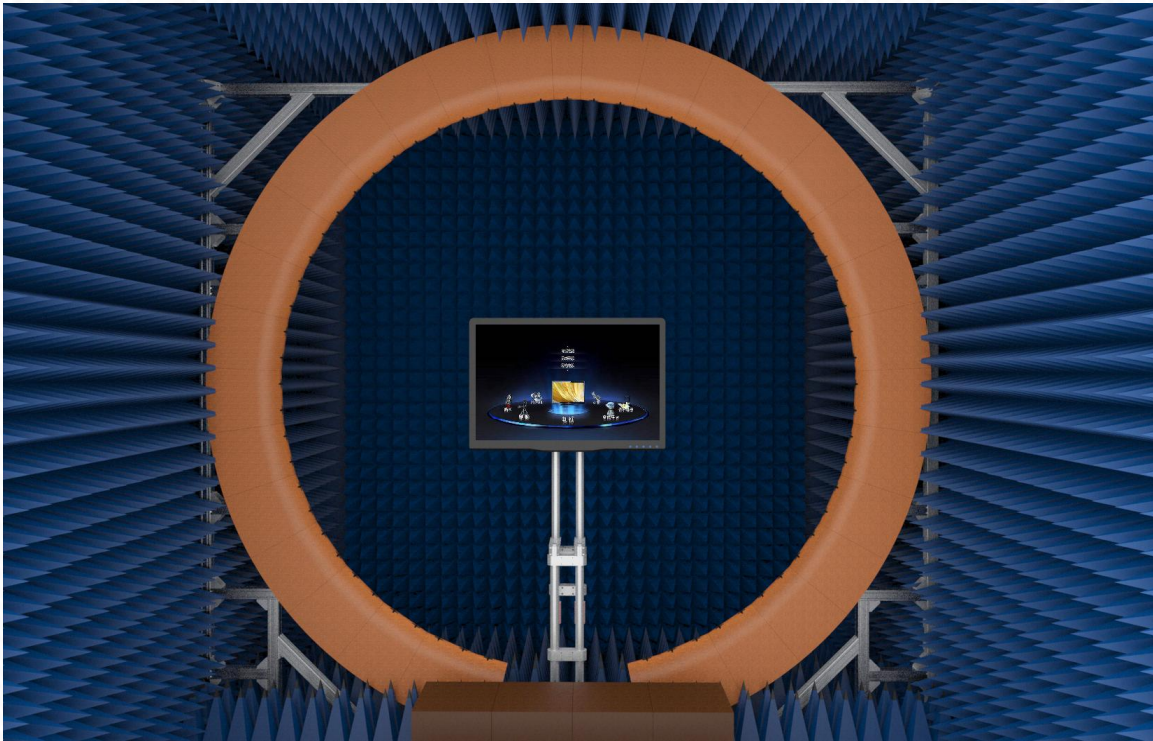
9. Active data 1 9

10.Environment Specification... .. 2 3

11. Directional pattern 2 4

12. Summary 2 8

Prototype status	Debugging machine
Device type	car recorder
Number of antennas	WIFI antenna
Frequency band	802.11b/g/n
Structural style	FPC
Environment adjustment	No change
Matching modification	No change



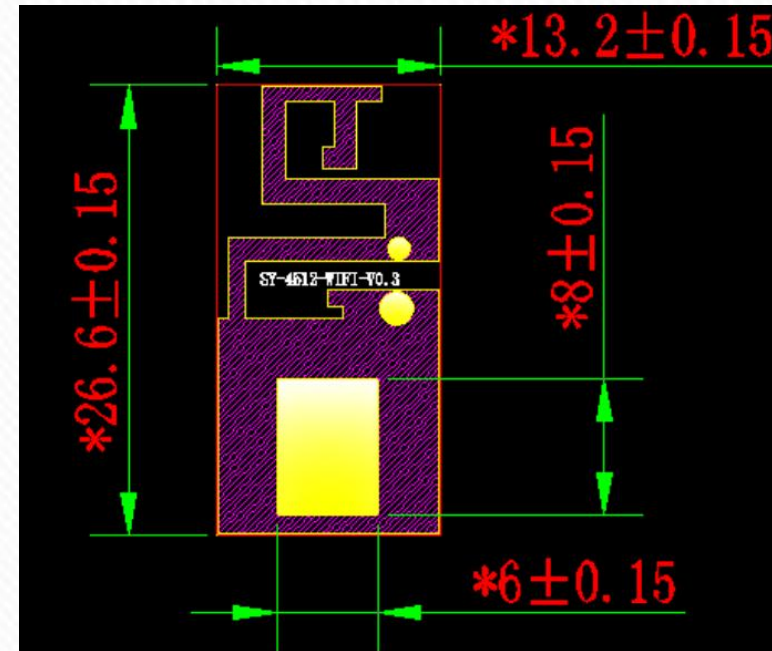
The industry's top 64 sensors OTA chamber

Frequency range: 400MHz-11GHz

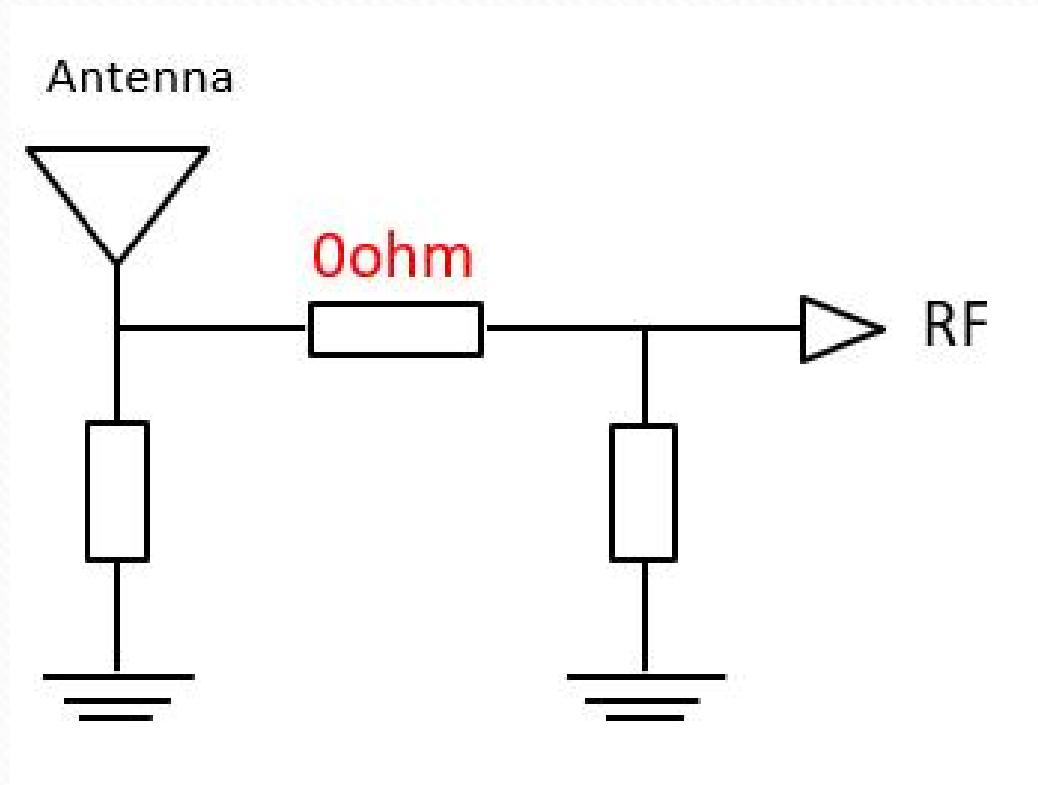
Device Llimitation: 2M

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



Antenna type: SZ24046IB03

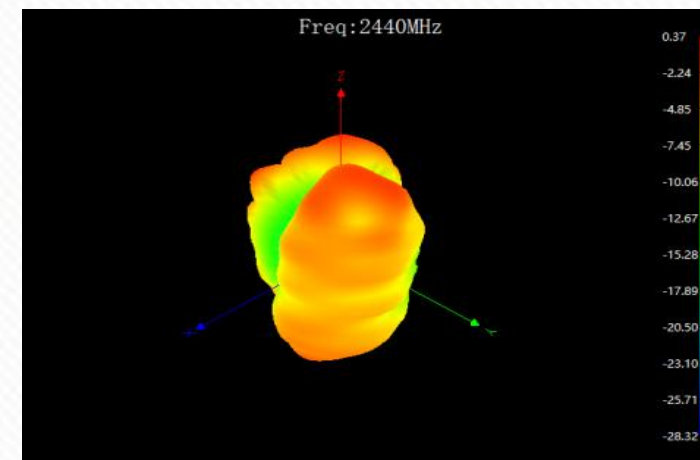
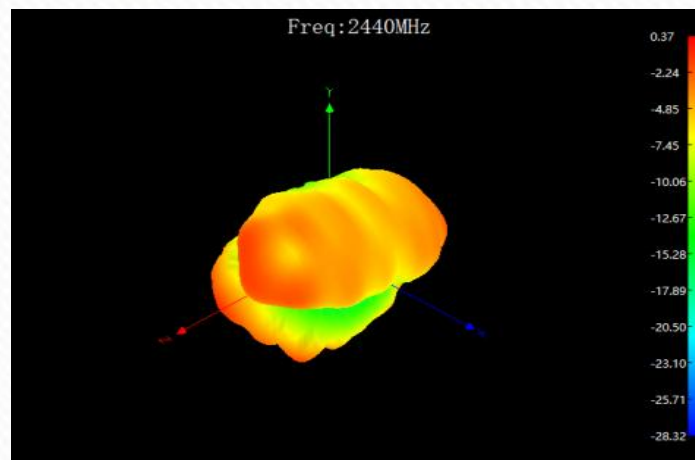
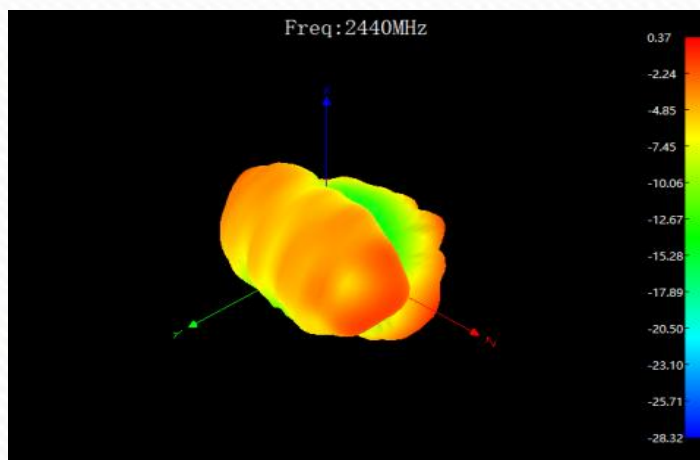


S11-VSWR

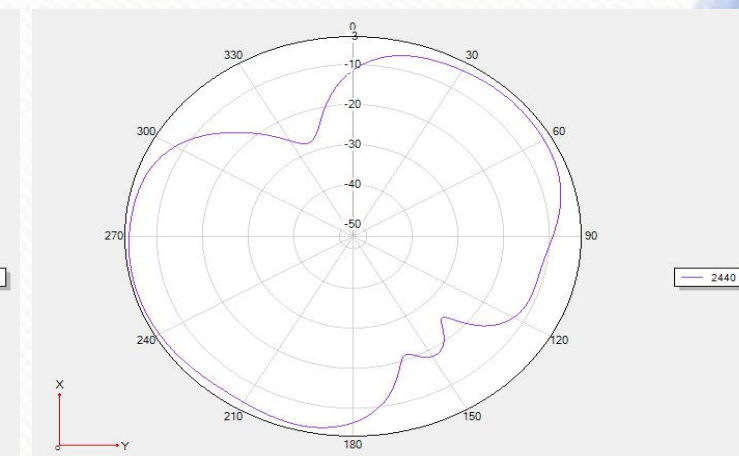
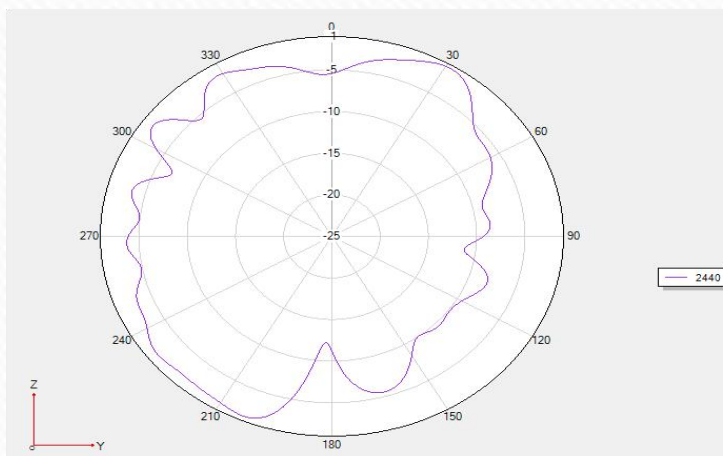
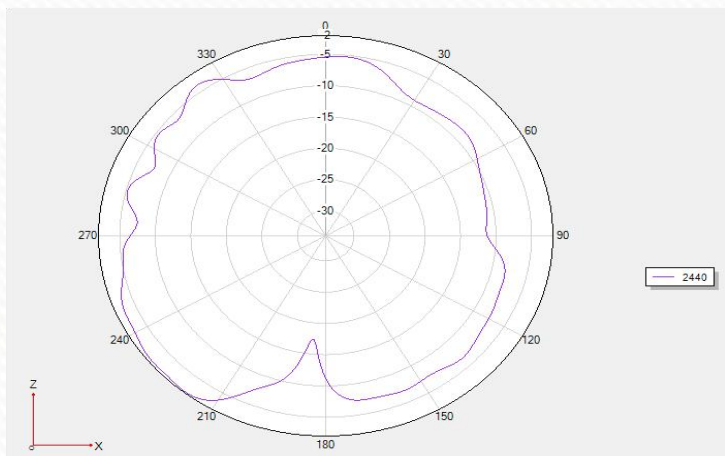


Frequency/Mhz	Efficiency / %	MaxGain/dBi
2400	27.42	0.59
2410	26.84	0.52
2420	25.18	0.06
2430	26.62	0.37
2440	27.16	0.15
2450	26.15	0.31
2460	25.82	0.22
2470	26.69	0.29
2480	26.85	0.17
2490	26.59	0.25
2500	26.18	-0.22

3D



2D



Measurement	Standard	Band	Channel	Total
TRP	WIFI (Station)	WIFI_B (1M)	1	14.71
TRP	WIFI (Station)	WIFI_B (1M)	7	14.54
TRP	WIFI (Station)	WIFI_B (1M)	13	14.69
TIS(EIRP)	WIFI (Station)	WIFI_B (11M)	13	-79.91
TRP	WIFI (Station)	WIFI_G (6M)	1	13.64
TRP	WIFI (Station)	WIFI_G (6M)	7	13.74
TRP	WIFI (Station)	WIFI_G (6M)	13	13.57
TIS(EIRP)	WIFI (Station)	WIFI_G (54M)	13	-65.86
TRP	WIFI (Station)	WIFI_N_ISM (6.5M)	1	12.67
TRP	WIFI (Station)	WIFI_N_ISM (6.5M)	7	11.12
TRP	WIFI (Station)	WIFI_N_ISM (6.5M)	13	12.48
TIS(EIRP)	WIFI (Station)	WIFI_N_ISM (65M)	13	-63.35

The above is the latest validation test data.

Thank You

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