

Antenna Testing Report

Project Name : J20-BT V3.0 Base

Antenna Manufacturer: Sunnyway Technology(CHINA)

Address : The 6th floor, Building 5, Nantaiyun Innovation Valley Center, Guangming District, Shenzhen City

Report version: May. 24th, 2024 A0

Version	Report date	Remark
A0	2024.05.24	Preliminary Commissioning Report
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

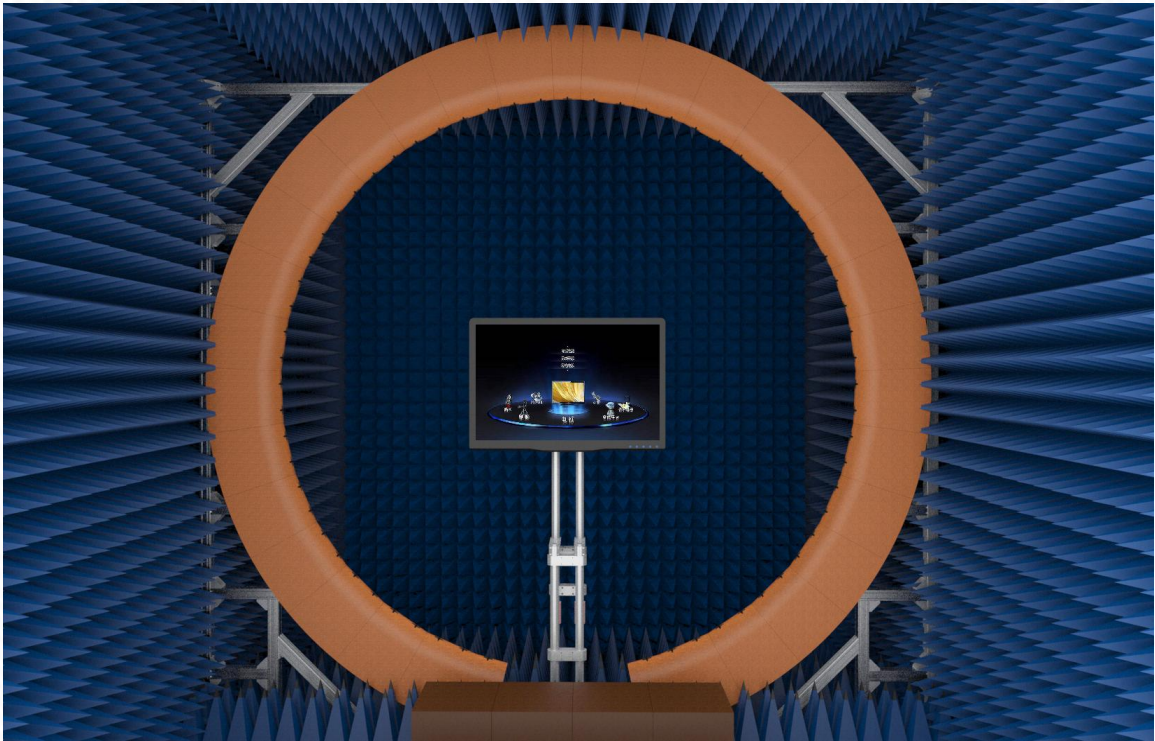
10.SAR test 1 9

11. Environment Specification... .. 2 3

12. Directional pattern 2 4

13. Summary 2 8

Prototype status	Debugging machine
Device type	POS
Number of antennas	BT antenna*2
Frequency band	
	BT/2.4GHZ
Structural style	FPC+cable
Environment adjustment	No change
Matching modification	No change



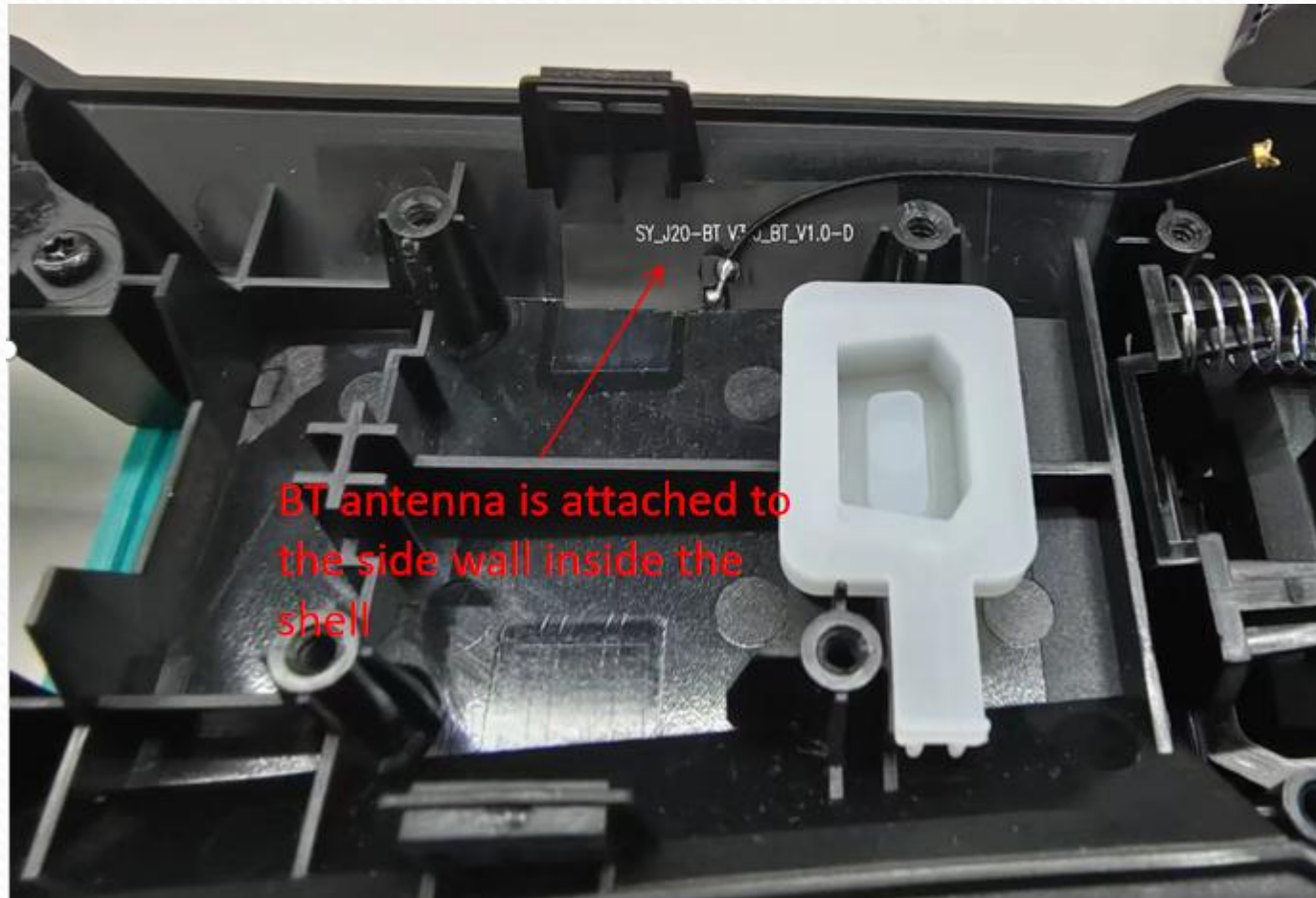
The industry's top 64 sensors OTA chamber

Frequency range: 400MHz-11GHz

Device Llimitation: 2M

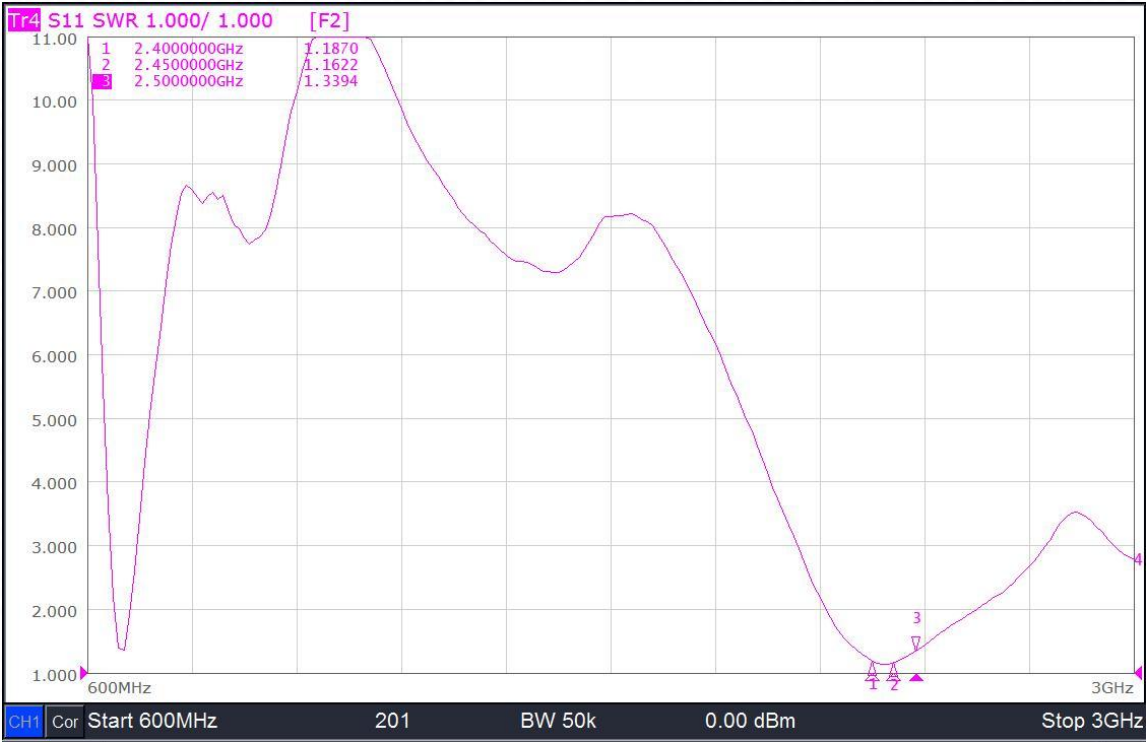
Load-bearing limitation:100KG

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

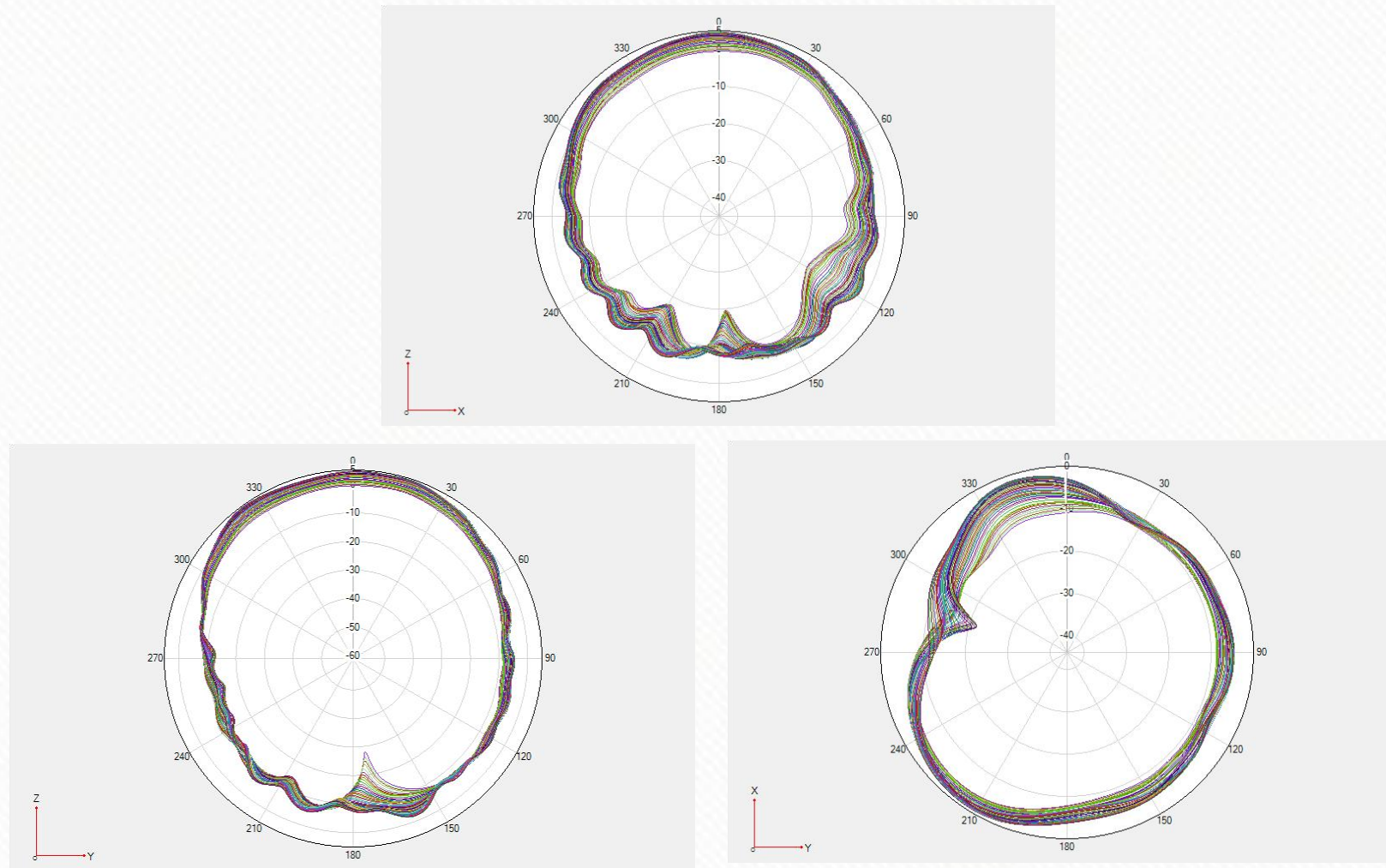


Frequency/Mhz	MaxGain/dBi	Efficiency / %
2400	2.69	50.65
2410	2.91	52.87
2420	2.98	54.56
2430	3.12	57.31
2440	3.26	60.24
2450	3.31	63.78
2460	3.6	66.56
2470	3.81	68.67
2480	3.91	65.24
2490	3.87	63.47
2500	3.74	61.56

S11-VSWR

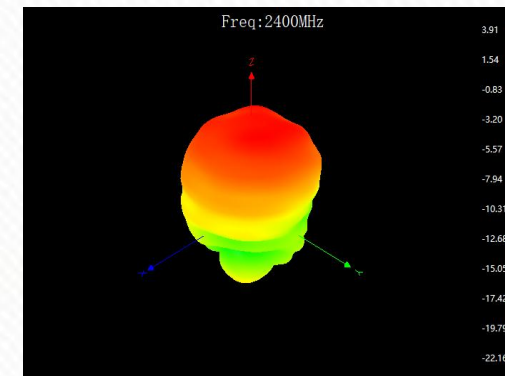
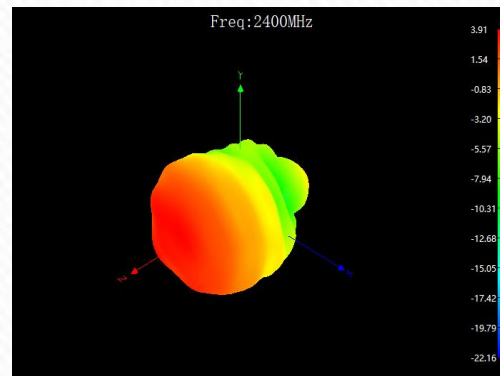
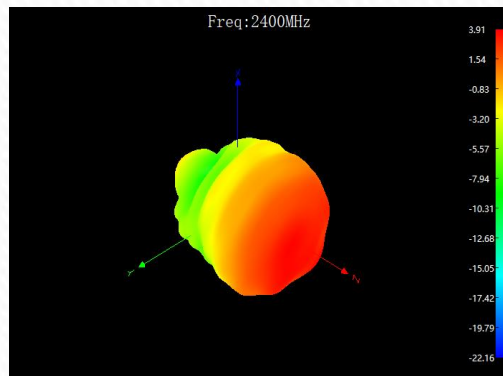


2D:



Three-in-one antenna directional pattern

3D:



- 1: For AD project, the antenna has good performance, and the parameters such as efficiency, gain and active test can achieve the use requirements
- 2: In terms of structure, the antenna is installed on the inside of the casing, which can well meet the requirements of production and assembly

Thank You

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