SHENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO.,LTD

Snap B32F
antenna commissioning report

DELIVERY DATE：23 January 2026

PREPARED BY: Huang Teng
CHECKED BY : Peng Huang
APPROVED BY: Xiao Han

(Company address: building C, guangming valley, hongyu guangming valley, no. 11, jiangyou magang, shiwei community, matantian office, guangming district, shenzhen
(Dongguan Branch: No.2 Xinjia Industrial Park, No.3, Yinhe Road, Qiaotou Town, Dongguan City)
(Hangzhou Office: Room 509, Building 1, Binrun Science and Technology Innovation Park, No.5, Ren Street, Puyan Street, Binjiang District, Hangzhou)
(Guangzhou Office: 112-113, No.1, Haitong 4th Street, Nansha Street, Nansha District, Guangzhou)

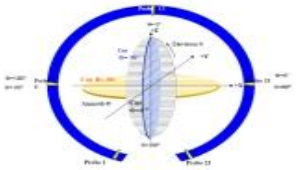
Phone + 86-0755-2781006; Fax: 0755-27810057

Company website: http://szsyjc.com； E-mail: yjc@szsyjc.com

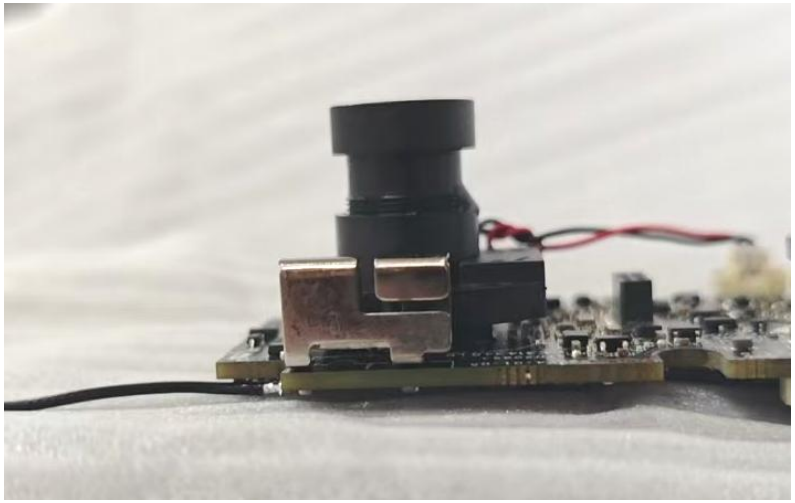
Instrumentation：

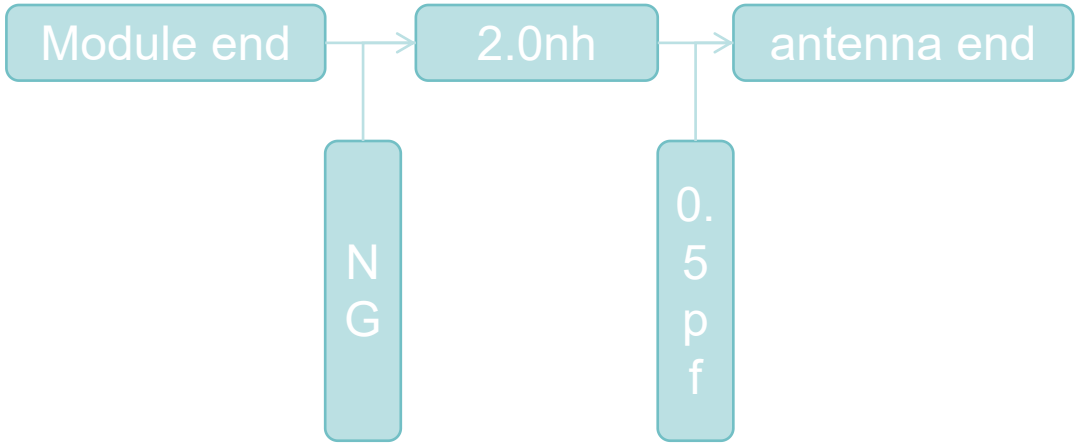
	Test itens	Test equipment
S Parameter	1.Retum Loss 2.VSWR	Network analyzer （Agilent E5071B） (Calibration date:November10, 2025-November 09, 2026)
Passive test	1.Frequency 2.Gain 3.Radiation Pattern	1.3Dmicrowave darkroom （5m*4m*4m） 2.Network analyzer （Agilent E5071B） (Calibration date:November10, 2025-November 09, 2026)
Active test	1.TRP 1.TIS	1.3Dmicrowave darkroom （5m*4m*4m） 2.Comprehensive test instrument (CMW500) (Calibration date: November09, 2025-November08, 2026)

Passive is to collect DUT spherical near-field data through multi-probe, and then the direction map of DUT is calculated by the near-far-field conversion formula. Finally, the gain and efficiency are calculated by the directionality coefficient on the direction map

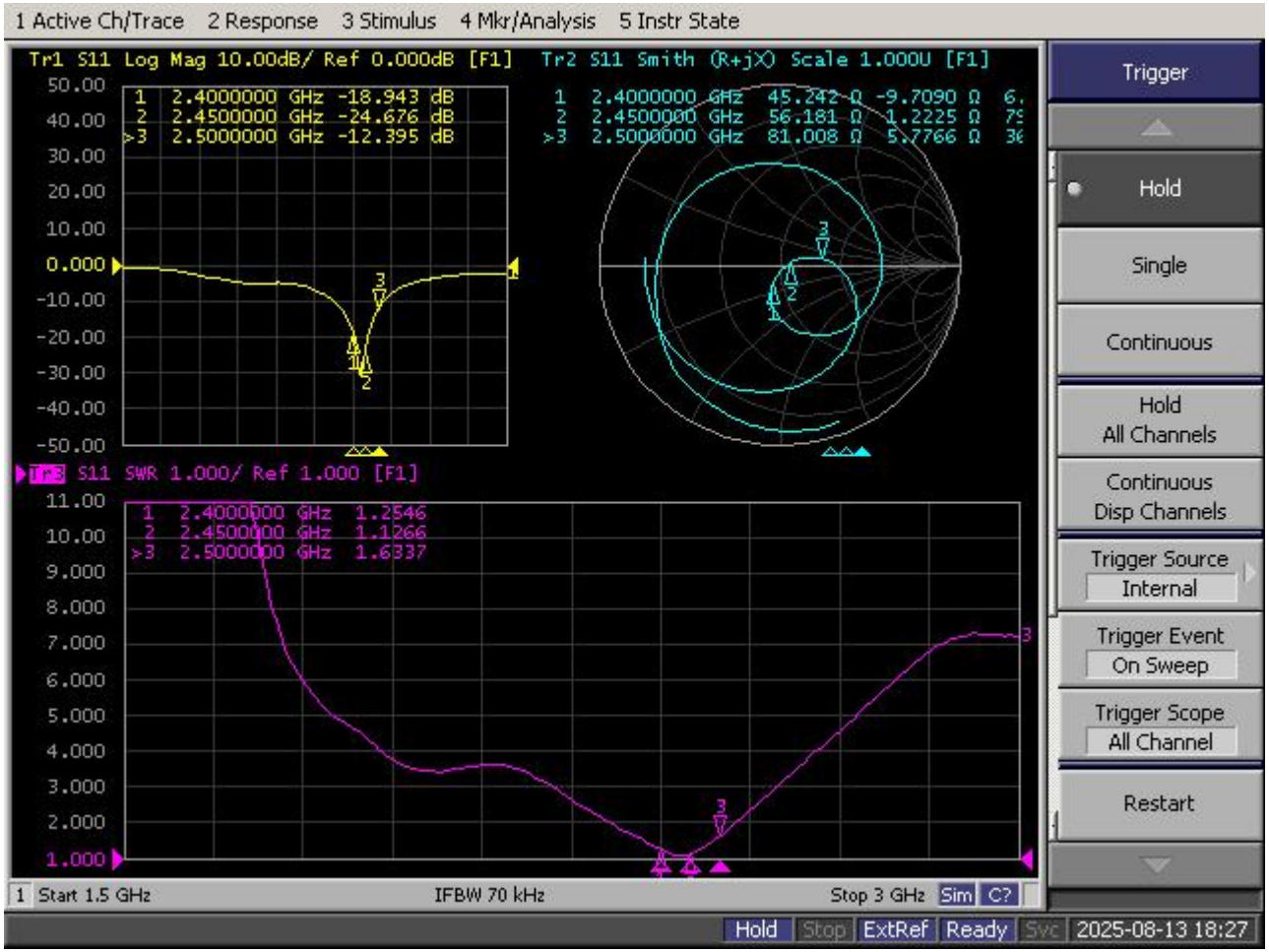
Dark room coordinates	test mode
	
CMW500	Agilent E5071B
	

A picture of the antenna in action：





S11：


1 Active Ch/Trace
2 Response
3 Stimulus
4 Mkr/Analysis
5 Instr State
Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F1]
1 2.4000000 GHz -18.943 dB
2 2.4500000 GHz -24.676 dB
>3 2.5000000 GHz -12.395 dB
Tr2 S11 Smith (R+jX) Scale 1.000U [F1]
1 2.4000000 GHz 45.242 Ω -9.7090 Ω
2 2.4500000 GHz 56.181 Ω 1.2225 Ω
>3 2.5000000 GHz 81.008 Ω 5.7766 Ω
Tr3 S11 SWR 1.000/ Ref 1.000 [F1]
1 2.4000000 GHz 1.2546
2 2.4500000 GHz 1.1266
>3 2.5000000 GHz 1.6337
1 Start 1.5 GHz
IFBW 70 kHz
Stop 3 GHz
Sim
C?
Trigger
Hold
Single
Continuous
Hold All Channels
Continuous Disp Channels
Trigger Source
Internal
Trigger Event
On Sweep
Trigger Scope
All Channel
Restart
Hold
Stop
ExtRef
Ready
Svc
2025-08-13 18:27

OTA active test data：

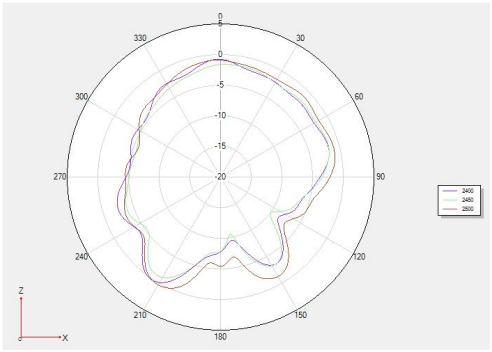
Item	Measurement	Standard	Band	Channel	Frequency	Total
1	TRP	WIFI (AP)	WIFI_B (11M)	1	2412	13.74
2	TRP	WIFI (AP)	WIFI_B (11M)	6	2437	13.85
3	TRP	WIFI (AP)	WIFI_B (11M)	11	2462	13.51
4	TIS(EIRP)	WIFI (AP)	WIFI_B (11M)	1	2412	-84.14
5	TIS(EIRP)	WIFI (AP)	WIFI_B (11M)	6	2437	-83.48
6	TIS(EIRP)	WIFI (AP)	WIFI_B (11M)	11	2462	-84.16
7	TRP	WIFI (AP)	WIFI_B (1M)	1	2412	13.71
8	TRP	WIFI (AP)	WIFI_B (1M)	6	2437	13.83
9	TRP	WIFI (AP)	WIFI_B (1M)	11	2462	13.6
10	TRP	WIFI (AP)	WIFI_G (6M)	1	2412	15.72
11	TRP	WIFI (AP)	WIFI_G (6M)	6	2437	15.84
12	TRP	WIFI (AP)	WIFI_G (6M)	11	2462	15.45
13	TIS(EIRP)	WIFI (AP)	WIFI_G (54M)	1	2412	-70.21
14	TIS(EIRP)	WIFI (AP)	WIFI_G (54M)	6	2437	-70.99
15	TIS(EIRP)	WIFI (AP)	WIFI_G (54M)	11	2462	-71.11
16	TRP	WIFI (AP)	WIFI_G (54M)	1	2412	15.71
17	TRP	WIFI (AP)	WIFI_G (54M)	6	2437	15.85
18	TRP	WIFI (AP)	WIFI_G (54M)	11	2462	15.38
19	TRP	WIFI (AP)	WIFI_N_ISM (6.5M)	1	2412	15.73
20	TRP	WIFI (AP)	WIFI_N_ISM (6.5M)	6	2437	15.91
21	TRP	WIFI (AP)	WIFI_N_ISM (6.5M)	11	2462	15.52
22	TIS(EIRP)	WIFI (AP)	WIFI_N_ISM (65M)	1	2412	-68.32
23	TIS(EIRP)	WIFI (AP)	WIFI_N_ISM (65M)	6	2437	-69.55
24	TIS(EIRP)	WIFI (AP)	WIFI_N_ISM (65M)	11	2462	-70.54
25	TRP	WIFI (AP)	WIFI_N_ISM (65M)	1	2412	15.69
26	TRP	WIFI (AP)	WIFI_N_ISM (65M)	6	2437	15.85
27	TRP	WIFI (AP)	WIFI_N_ISM (65M)	11	2462	15.36

passive test data：

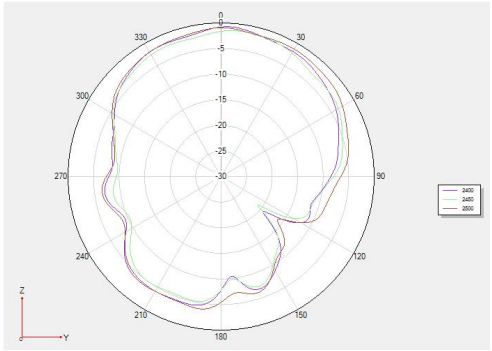
Frequency/Mhz	Efficiency / %	Gain.(dBi)
2400	45.15	0.75
2410	49.69	0.54
2420	53.39	1.06
2430	50.56	0.36
2440	47.17	0.18
2450	47.63	-0.22
2460	51.25	0.85
2470	50.56	1.50
2480	50.17	1.61
2490	47.63	0.49
2500	49.88	1.15

2D、3Dtest diagram

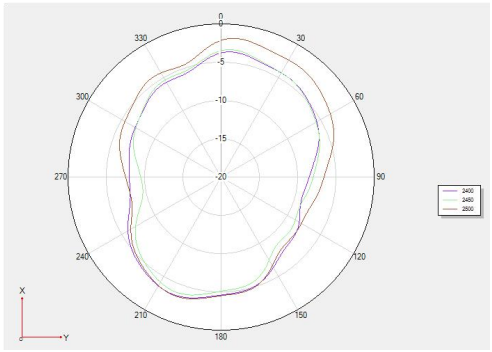
(Phi 0 2D graph)



(Phi 90 2D graph)

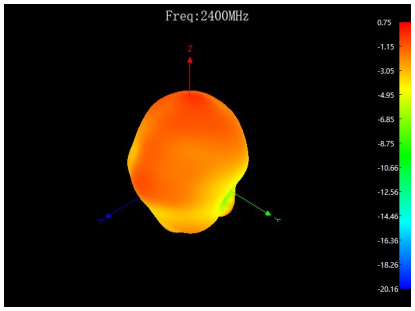


Theta 90 2D graph

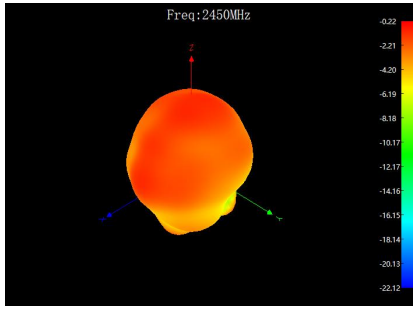


3D

3D 2400MHz



3D 2450MHz



3D 2500MHz