



SHENZHEN YINGJIACHUANG ELECTRONIC TECHNOLOGY CO., LTD

<http://www.szsyjc.com>

APPROVAL SHEET

承认书

CUSTOMER NAME	poor handwriting	
CUSTOMER P/N		
PART NAME	2.4G black FPC built-in antenna	
P/ N	YJC-6N050-B92	
APPROVAL REV.	A0	
DELIVERY DATE	March 03, 2025	
PREPARED BY	Huang Teng	
CHECKED BY	Peng Huang	
APPROVED BY	(Xiao Han)	
Customer Approved		
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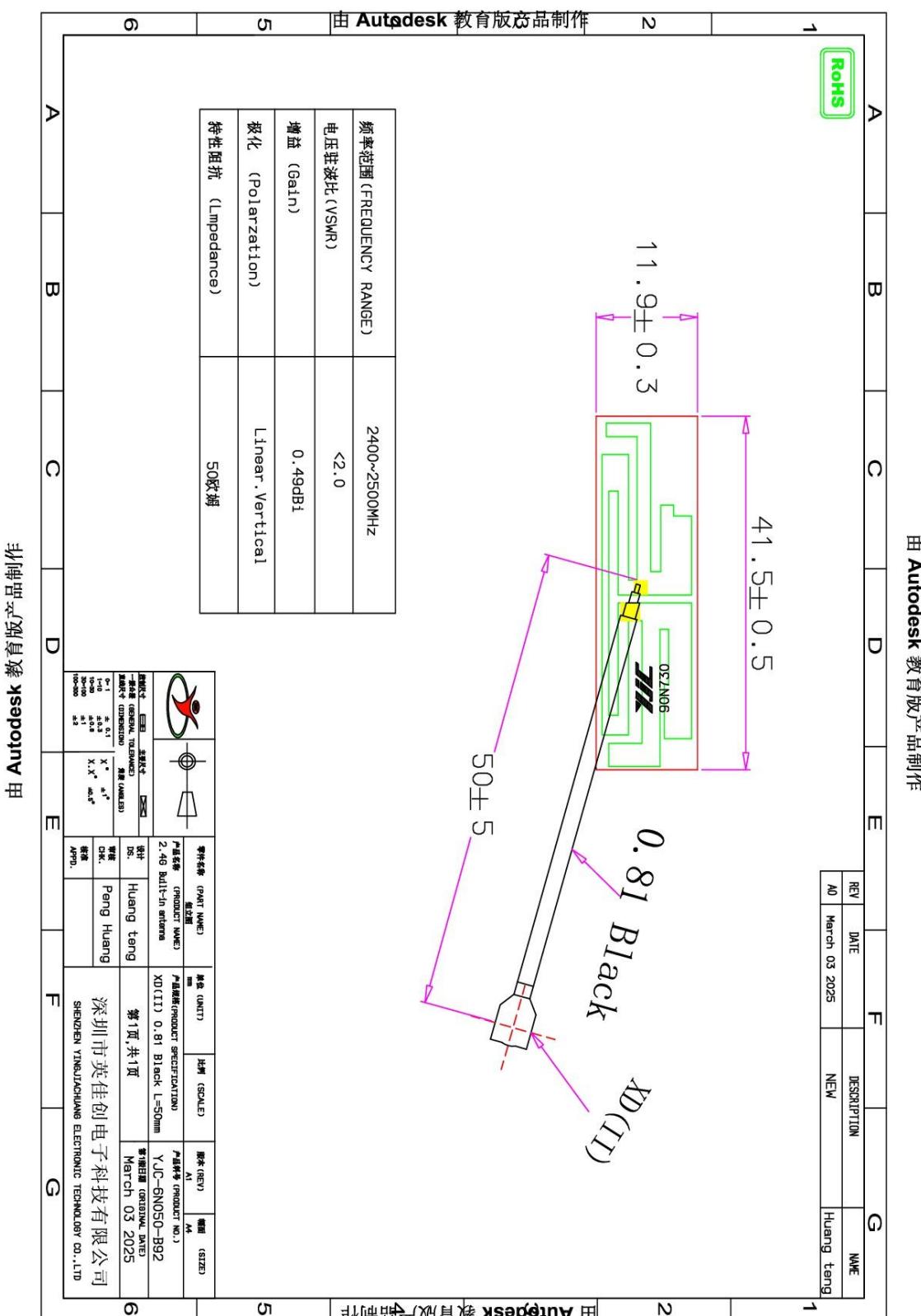
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Revised resume:

Antenna plan:



**Instrumentation:**

	Test items	Test equipment
S Parameter	1. Return Loss 2. VSWR	Network analyzer (Agilent E5071B) (Calibration date: November 21, 2024 - November 20, 2025)
Passive test	1. Frequency 2. Gain 3. Radiation Pattern	1. 3D microwave darkroom (5m*4m*4m) 2. Network analyzer (Agilent E5071B) (Calibration date: December 18, 2024 - December 17, 2025)
Active test	1. TRP 2. TIS	1. 3D microwave darkroom (5m*4m*4m) 2. Comprehensive test instrument (CMW500) (Calibration date: December 16, 2024 - December 15, 2025)

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



Antenna technical parameters and environmental test:

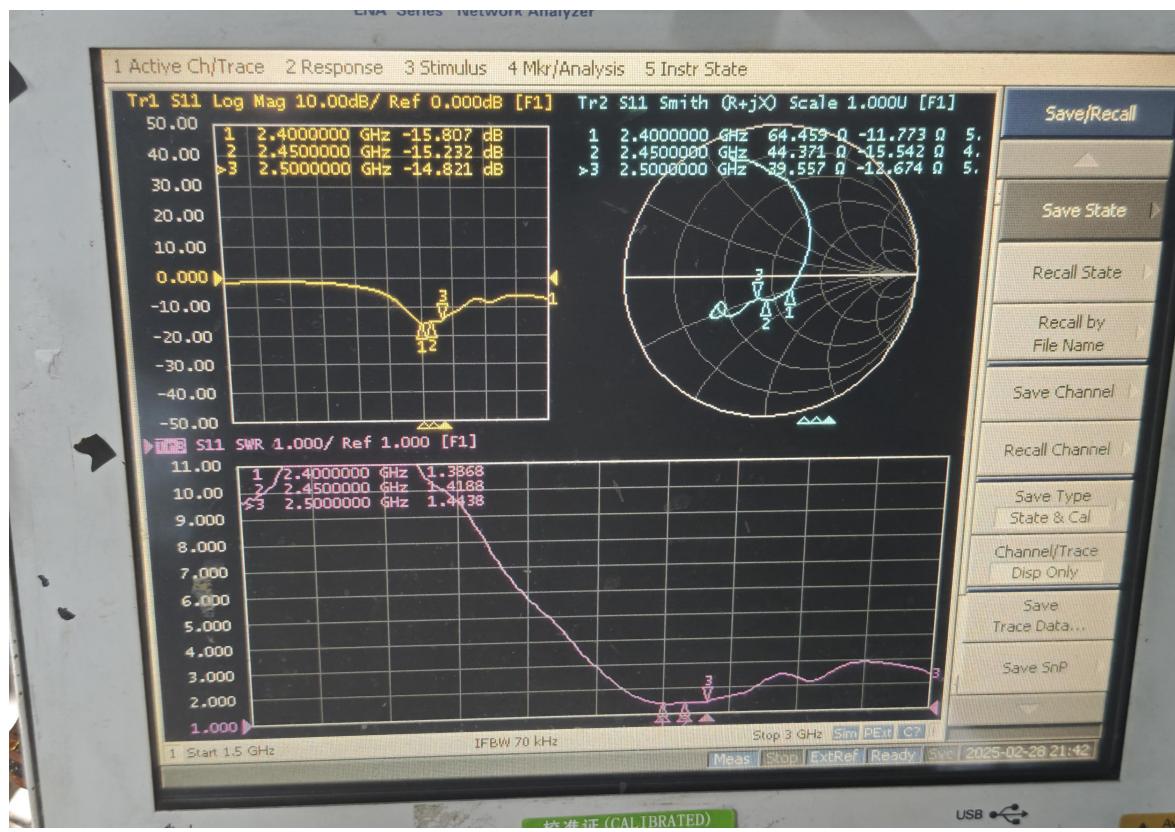
Electrical technical parameters			
Electrical Specifications		Mechanical Specifications	
Frequency Range	2400–2500MHz	Antenna Color	Black
VSWR	<2.0	Working Temperature	-20°C ~ +70°C
Input Impedance	50 Ω	Working Humidity	20% ~ 80%
Direction	Omnidirectional	Gain	0.49dBi
Interface form	XD-II	Antenna type	dipole

A picture of the antenna in action:





Antenna performance test diagram:



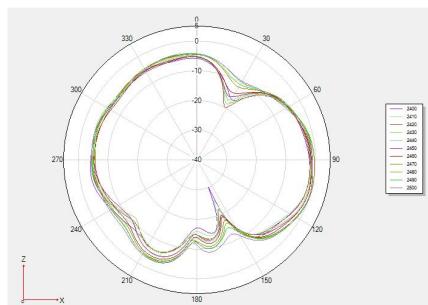
OTA active test data

Item	Measurement	Standard	Band	Channel	Frequency	Total
1	TRP	WIFI (AP)	WIFI_B (11M)	1	2412	18.34
2	TRP	WIFI (AP)	WIFI_B (11M)	6	2437	18.38
3	TRP	WIFI (AP)	WIFI_B (11M)	11	2462	17.93
4	TIS(EIRP)	WIFI (AP)	WIFI_B (11M)	1	2412	-87.37
5	TIS(EIRP)	WIFI (AP)	WIFI_B (11M)	6	2437	-86.56
6	TIS(EIRP)	WIFI (AP)	WIFI_B (11M)	11	2462	-85.81

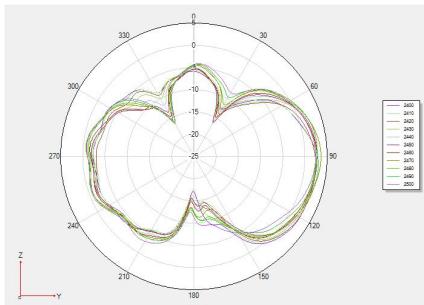
2D,3D test data:

Frequency	Efficiency (%)	Gain. (dBi)
2400MHz	56.75	0.14
2410MHz	60.39	0.21
2420MHz	59.29	-0.08
2430MHz	59.43	0.12
2440MHz	60.95	0.22
2450MHz	61.09	0.12
2460MHz	59.98	0.16
2470MHz	57.02	0.49
2480MHz	54.89	0.22
2490MHz	55.15	0.34
2500MHz	54.89	0.25

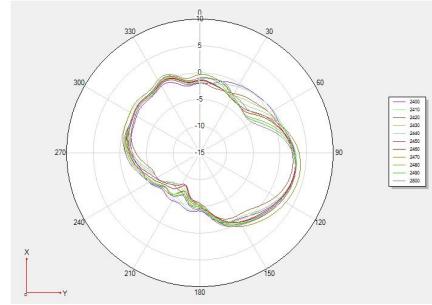
Phi 0 2D



Phi 90 2D

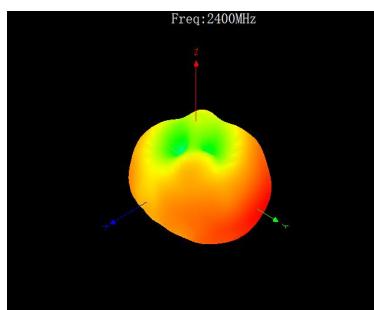


Theta 90 2D

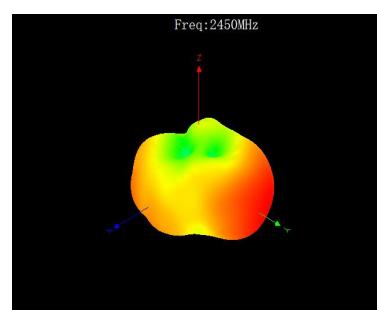


3D test data:

3D 2400MHz



3D 2450MHz



3D 2500MHz

