

SPECIFICATION

SHEET FOR APPROVAL

(Revision: R: A0)

	CUSTOMER	Hesung	
	CS P/N		
	TEST MODEL	HHM009S	
	PART NAME	WIFI antenna module	
	FREQUENCY	2400~2500MHz	
	ZTX NO.	2.00001494	
	DATE	2024-11-08	

CUSTOMER			
QA CHECKED	ME CHECKED	RF CHECKED	MANAGER CHECKED

Remark:

Sign:

Shenzhen ZTX Communication Technology Co., Ltd				
MANAGER CHECKED	MANAGER CHECKED	ME CHECKED	RF CHECKED	LISTER
		覃乐	黄琼	



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ANTENNA SPECIFICATION

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Revision history

versions	DATE	STATE
A0	2024-11-08	first edition

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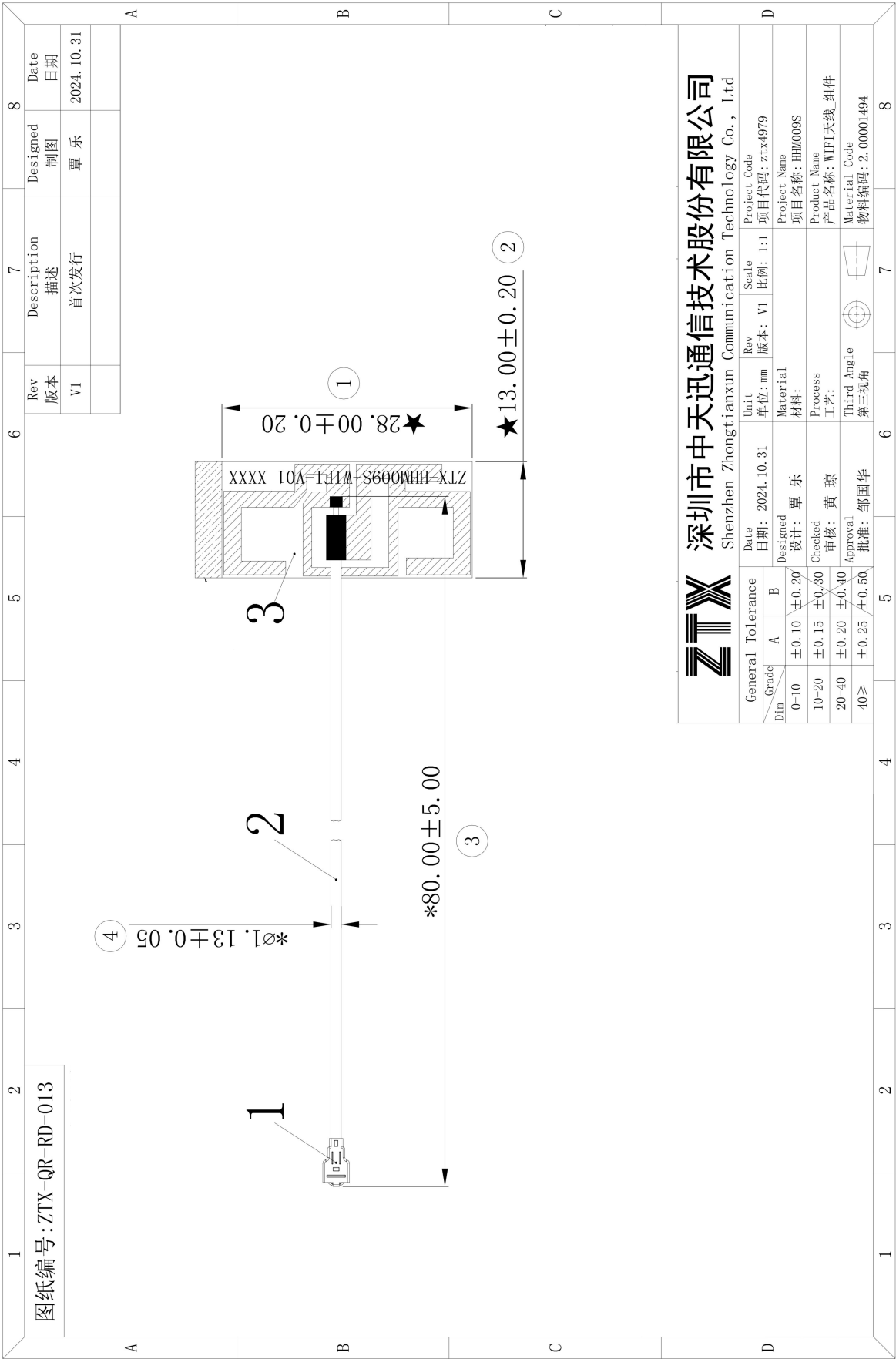
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ANTENNA SPECIFICATION

1. Mechanical Specification

1-1 Mechanical Configuration (WIFI antenna module)



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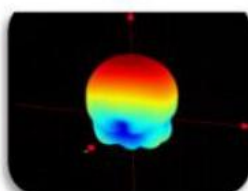
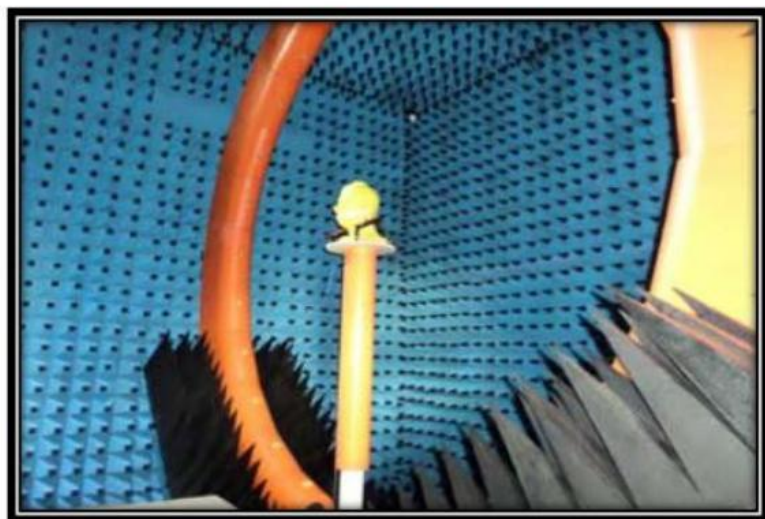
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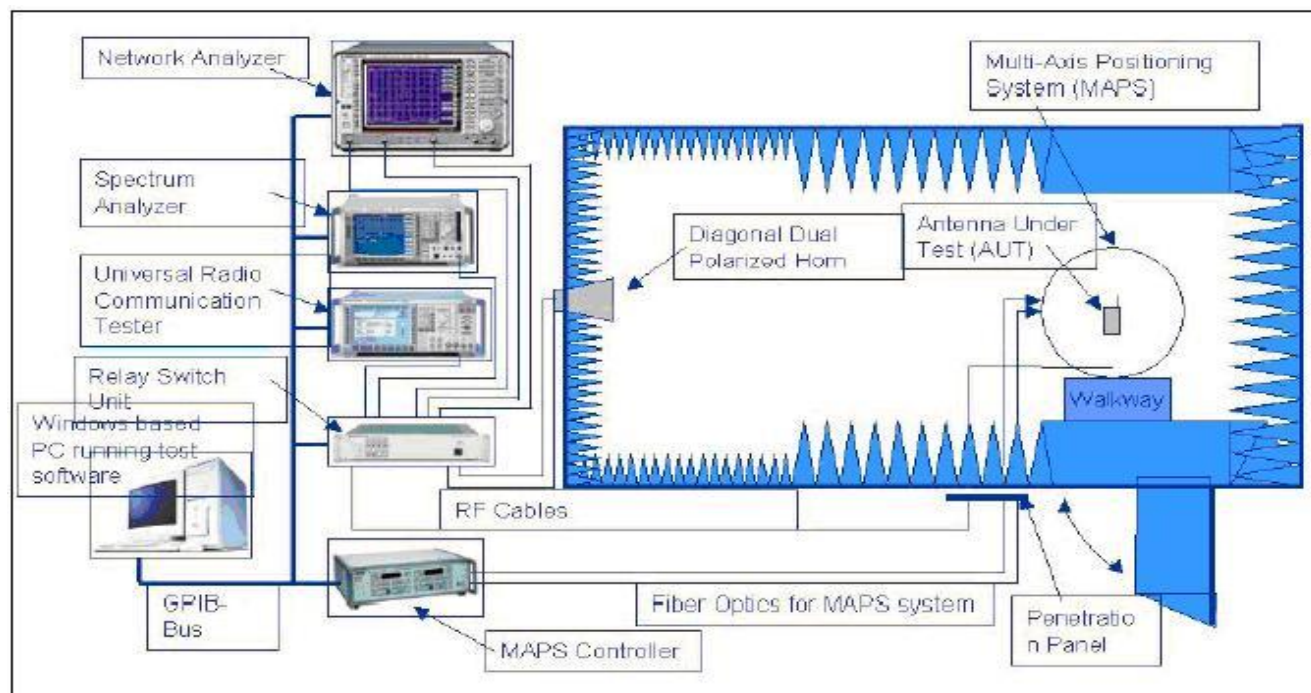
2. Test equipment



Owned 6 microwave dark room, equipped 2 sets world leading France Satimo SG24 OTA certification test systems (one in SHENZHEN, another one in Shanghai), ETS OTA Standard test system, Blue test reverberation test system which is High repeatability, high accuracy and high resolution. It can quickly provide accurate test reports, fully meet the CTIA standards.

Testing range:

Support active, passive testing of GSM/CDMA/WCDMA/TD-SCDMA/LTE/WIFI/WLAN/WiMax/BT/GPS/MIMO/UWB within 0.4-6G.



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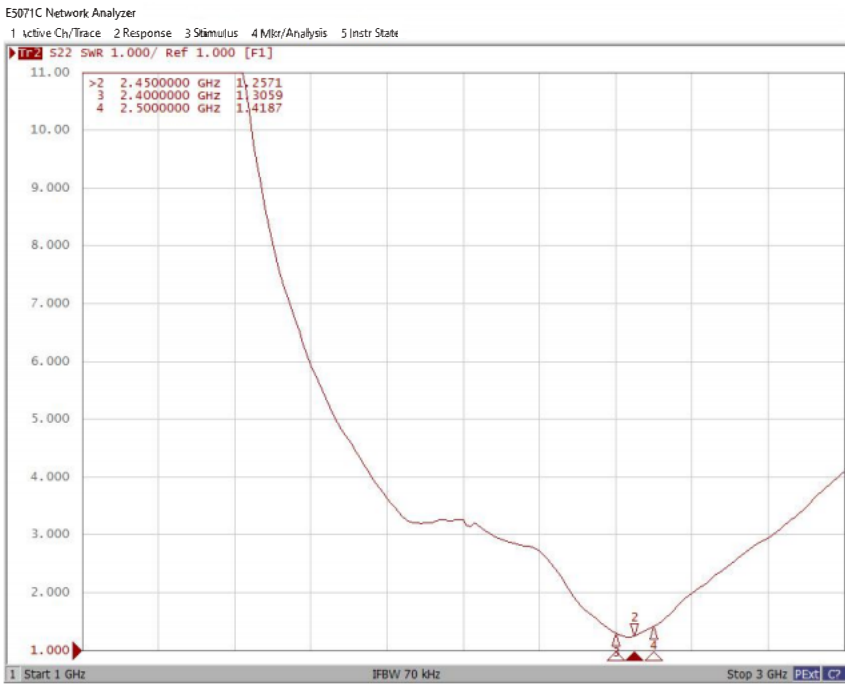
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3.Test Results Summary

3-1 Active Test

50%_water			90%_water		
WIFI B	TRP	TIS	WIFI B	TRP	TIS
1	14.78	-82.45	1	14.65	-82.11
6	15.21	-81.74	6	15.11	-81.42
11	14.63	-81.05	11	14.82	-81.05
WIFI G	TRP	TIS	WIFI G	TRP	TIS
1	12.36	-69.87	1	12.18	-69.69
6	12.05	-69.61	6	12.22	-69.47
11	12.47	-70.19	11	12.31	-70.08
WIFI N	TRP	TIS	WIFI N	TRP	TIS
1	12.15	-64.57	1	12.04	-64.25
6	11.78	-64.33	6	11.59	-64.15
11	12.08	-63.92	11	11.89	-63.85

3-2 VSWR



3-3 No-source test data

Frequency	Efficiency	Efficiency	Gain . dB
2.4E+09	65%	-1.90	3.36
2.41E+09	66%	-1.83	3.46
2.42E+09	66%	-1.83	3.53
2.43E+09	67%	-1.77	3.86
2.44E+09	67%	-1.75	4.20
2.45E+09	68%	-1.68	4.20
2.46E+09	67%	-1.75	4.11
2.47E+09	67%	-1.74	4.12
2.48E+09	66%	-1.80	4.10
2.49E+09	65%	-1.84	3.84
2.5E+09	65%	-1.85	3.85

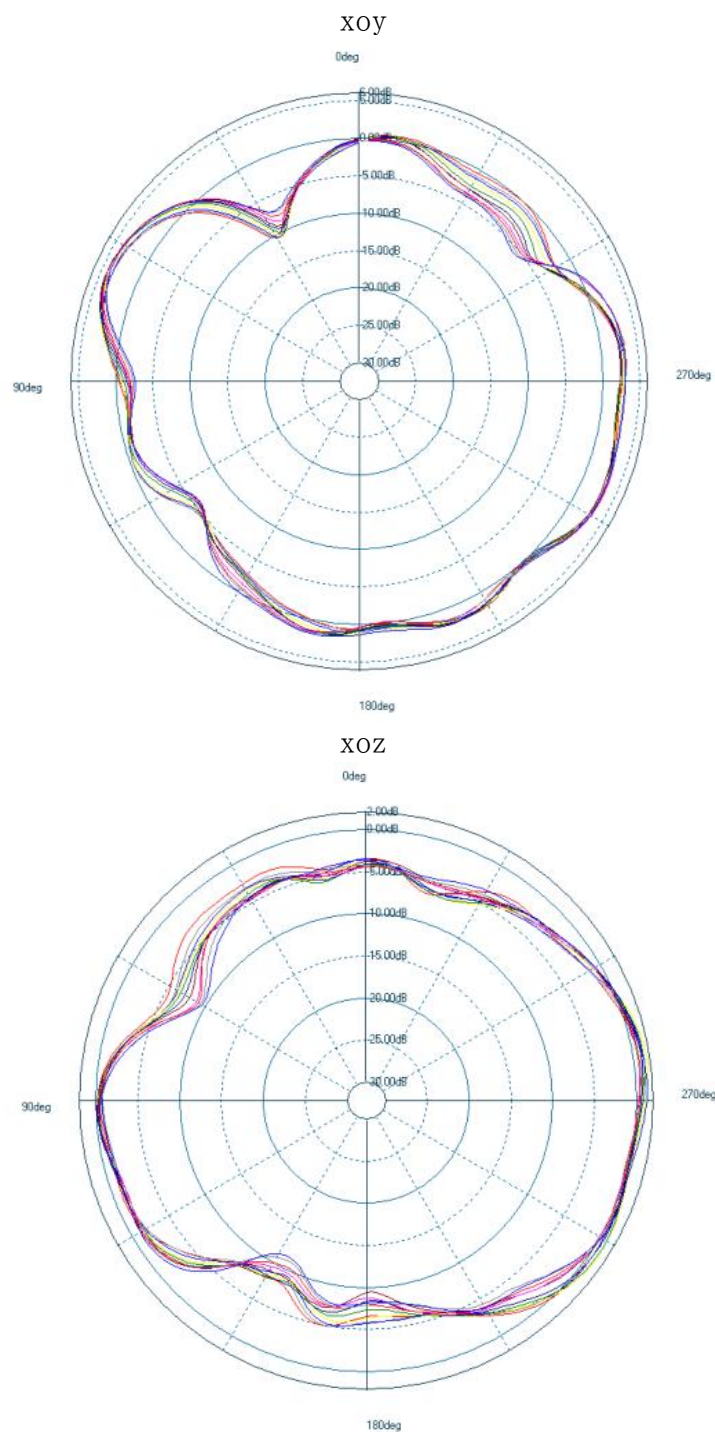
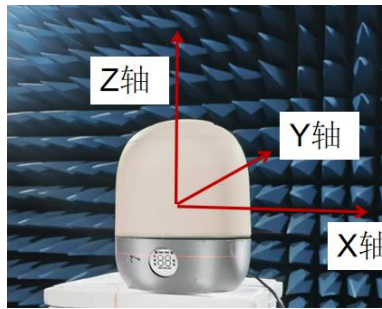
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3-4 2D/3D Radiation Pattern Results

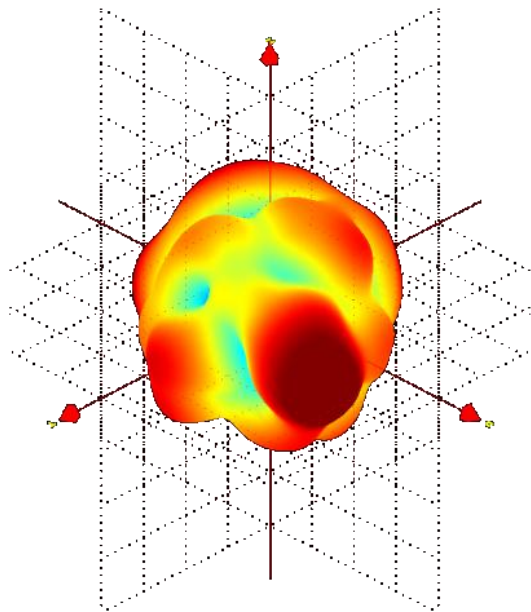
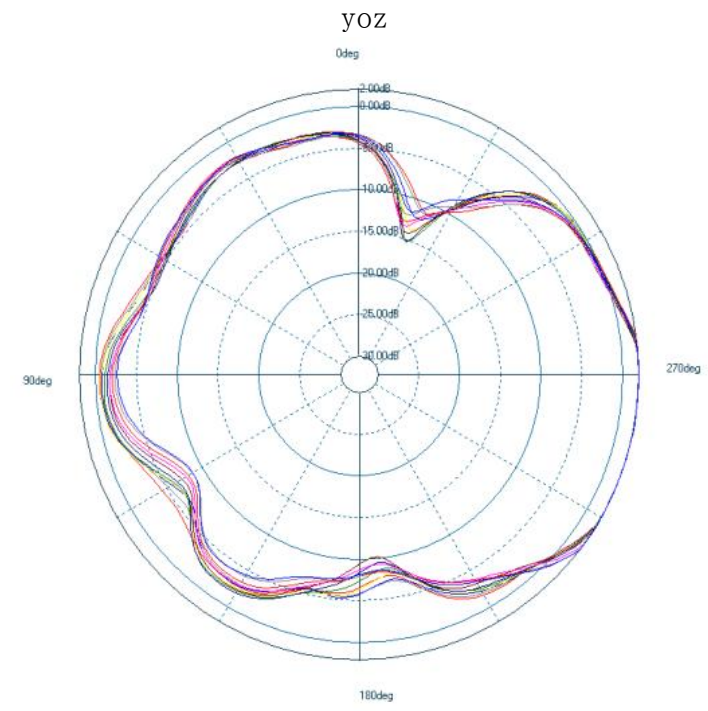


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3-5 Environmental treatment

