



Antenna Test Report

MN: CF-102P-TEQ

Manufacturer: SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

***Address: 1506 Tangwei Stock Business Building, Tangwei Community,
Fuhai Street, Baoan District, Shenzhen***

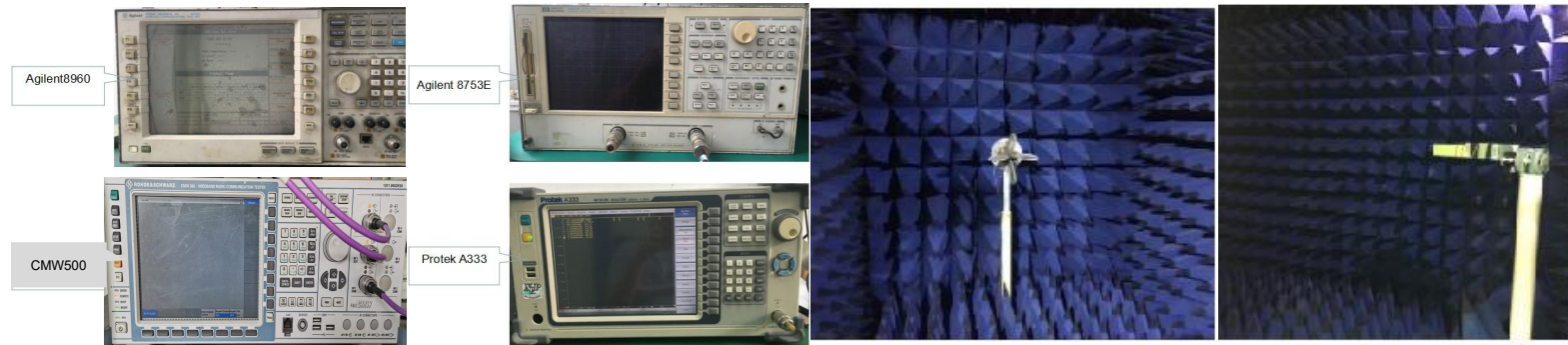
***Date: 2025. 1. 13.
REV : V1. 0***

Test information

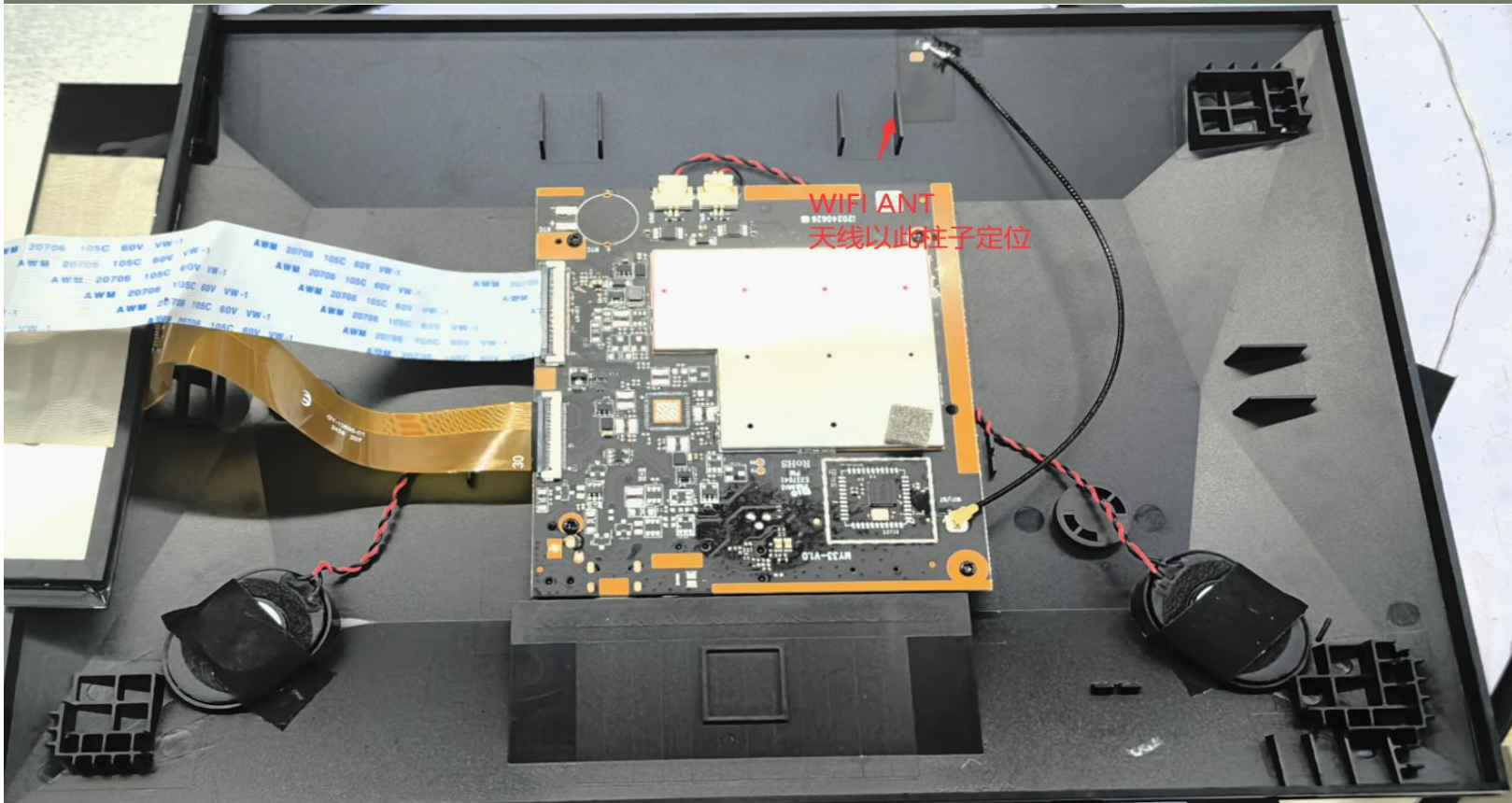
Antenna band		Antenna state	Antenna form	Match changes	Note
Main ANT	2G			NO	
	3G				
	4G				
AUX ANT	BT/WIFI	2.4G	FPC	PIFA	NO
	GPS		FPC	PIFA	NO
	DIV				NO

Test environment

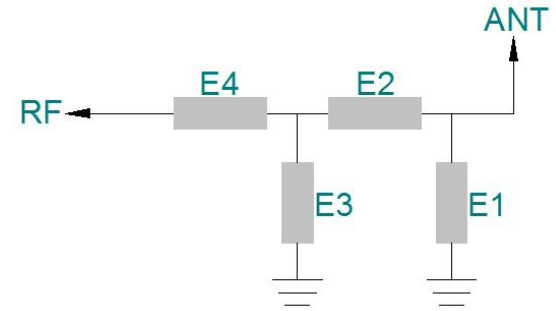
	Test item	Test equipment
1. (S-parameter)	1. VSWR 2. Rrtun Loss	Agilent8753ES
2. (Active)	1. TRP 2. TIS	1. 5*3*3m (3D) Chamber 2. Agilent8960 CMW500
3 (Passive)	1. Gain 2. Efficiency	1. 5*3*3m (3D) Chamber 2. Agilent 8753ES



Antenna position



Matching circuit



	PF	NH
E1(0402)		
E2(0402)		
E3(0402)		
E4(0402)		

Active test data

802.11b	Frequency	TRP		TIS	
	2412	CH1 11Mbps	14.27	CH1 11Mbps	-81.44
	2437	CH6 11Mbps	14.38	CH6 11Mbps	-81.76
	2467	CH11 11Mbps	13.5	CH11 11Mbps	-81.22
802.11g	Frequency	TRP		TIS	
	2412	CH1 6Mbps	13.77	CH1 54Mbps	-73.15
	2437	CH6 6Mbps	14.38	CH6 54Mbps	-72.02
	2467	CH11 6Mbps	13.5	CH11 54Mbps	-74.22
802.11n	Frequency	TRP		TIS	
	2412	CH1 MCS7	13.3	CH1 MCS7	-68.83
	2437	CH6 MCS7	13.9	CH6 MCS7	-68.54
	2467	CH11 MCS7	13.26	CH11 MCS7	-68.2

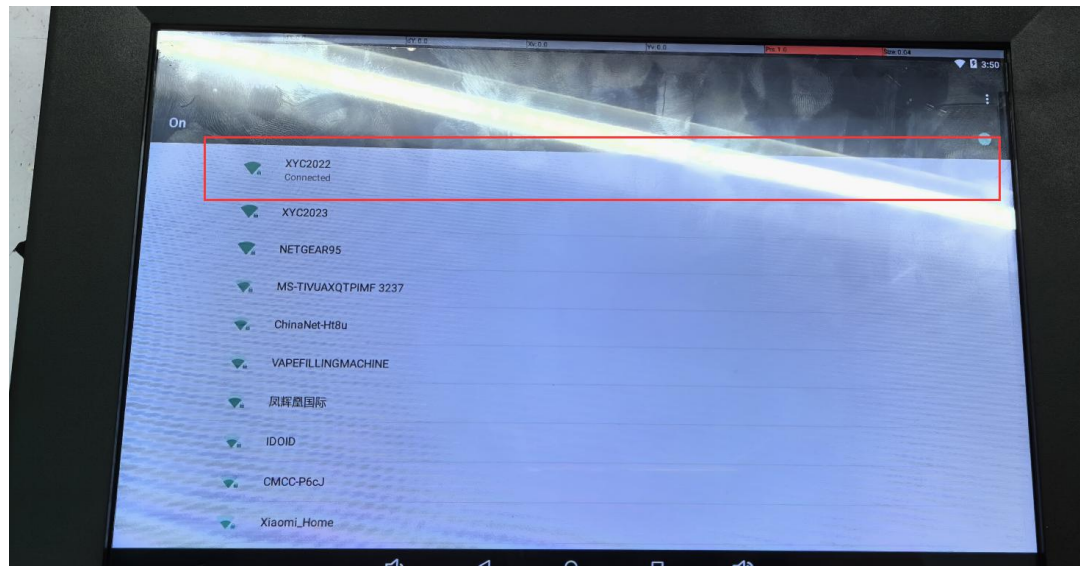
Wifi Antenna test

WIFI

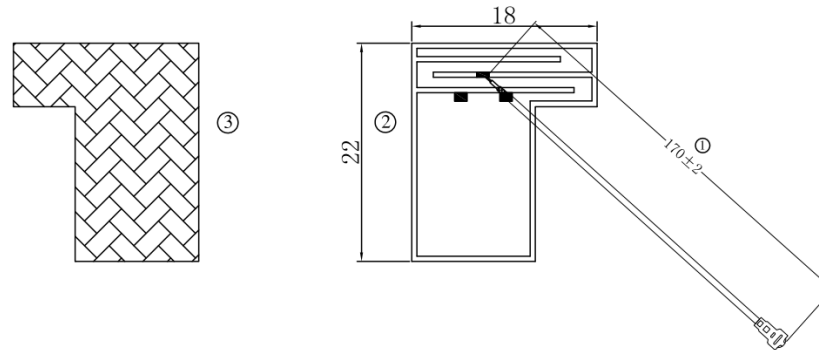
Test environment: Open space

Test distance: 10m

The test results are shown on the right



Antenna position and size(mm)



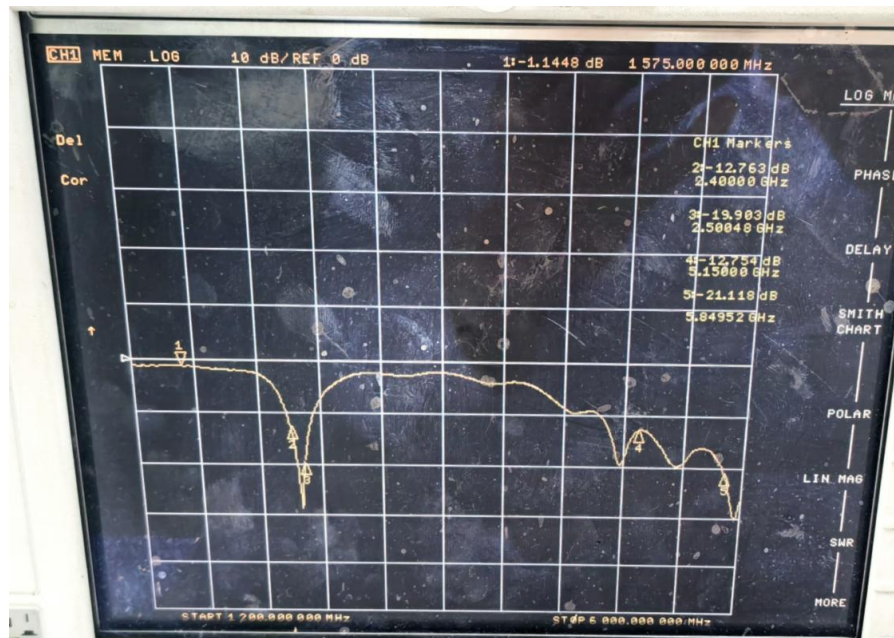
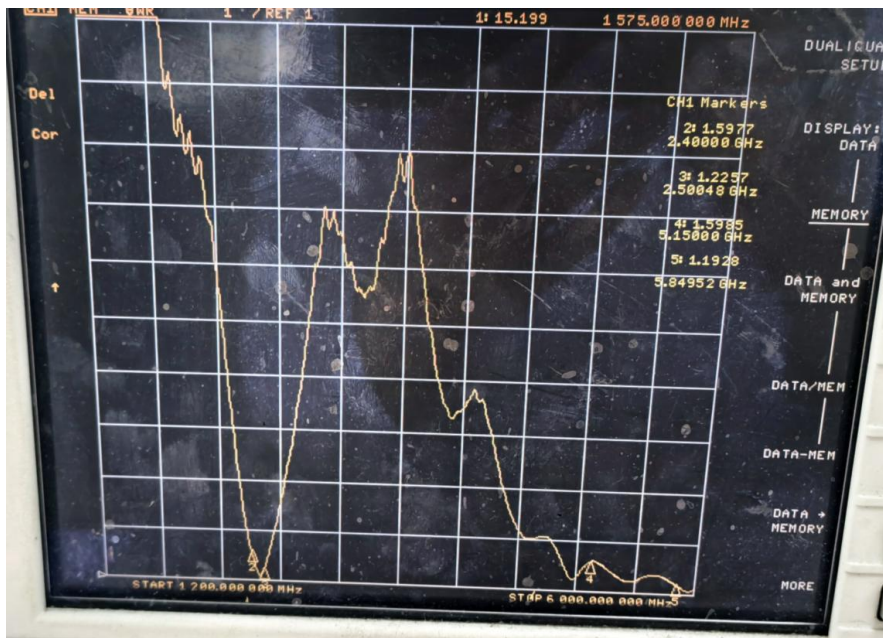


ANTENNA

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Passive test data

ANT1 S11-VSWR&Return Loss



Frequency (MHZ)	2400	2500
VSWR	1.59	1.22
Return Loss (DB)	-12.76	-19.90



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ANT1 GAIN&Efficiency-WIFI2.4G/BT

Passive test data

Passive Test For WIFI2.4						
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)
2400	47.7	-3.21	1.11	-1.04	30.368	17.334
2410	46.42	-3.33	0.89	-1.26	28.909	17.514
2420	49.45	-3.06	1.1	-1.05	30.181	19.27
2430	49.71	-3.04	1.1	-1.05	29.814	19.894
2440	50.25	-2.99	1.28	-0.87	29.58	20.673
2450	49.75	-3.03	1.03	-1.12	28.774	20.979
2460	48.18	-3.17	0.65	-1.5	27.351	20.828
2470	48.68	-3.13	0.71	-1.44	27.288	21.392
2480	50.93	-2.93	0.87	-1.28	27.831	23.098
2490	50.31	-2.98	0.94	-1.21	27.017	23.288
2500	43.22	-3.64	0.32	-1.83	22.918	20.306

ANT1 Direction of figure(2.4/BT)

Passive test data

