



SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

Antenna Test Report

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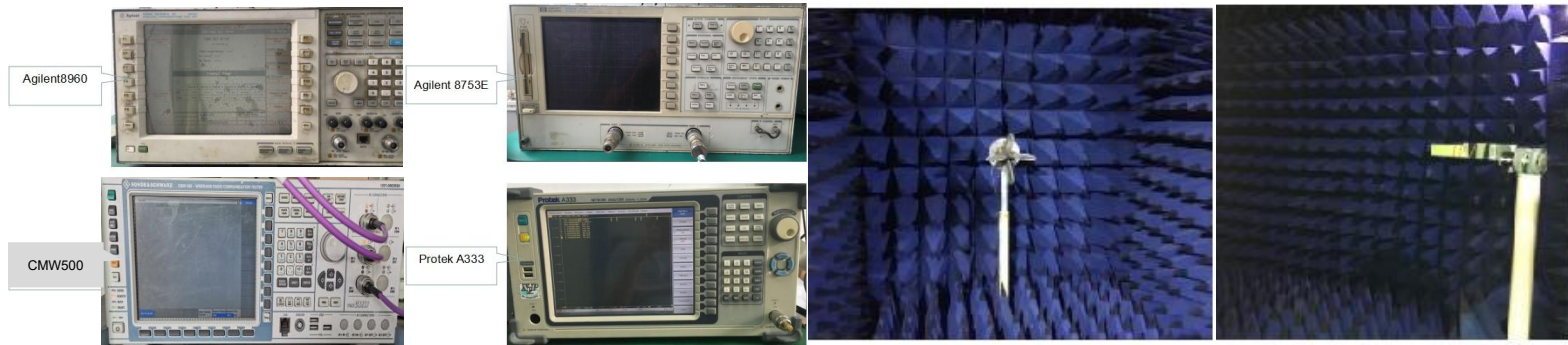
MP: 15112592483

Date: 2023. 06. 05.

REV :V1. 0

Test environment

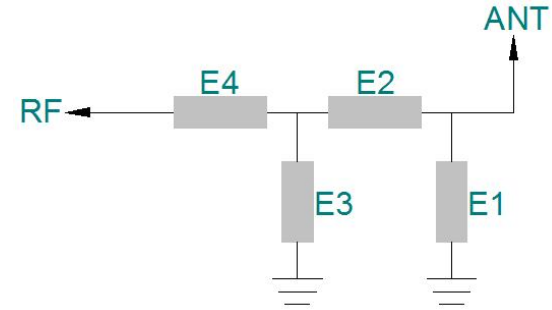
	Test Item	Test Equipment
1. S-parameter	1. Voltage standing wave ratio 2. Return Loss	Network analyzer: Agilent 8753ES
2. Active Test	1. Transmitted power (TRP) 2. Receiving sensitivity (TIS) 3. screen is off or on	1. Dark room: 5*3*3m (3D) Chamber 2. synthesizer: Agilent 8960 CMW500
3. Passive Test	1. Antenna gain 2. Antenna efficiency	1. Dark room: 5*3*3m (3D) Chamber 2. Network analyzer: Agilent 8753ES



Antenna position



Matching circuit



Matching circuit schematic &
bit number diagram

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

Passive test data

ANT1 S11-VSWR&Return Loss



Frequency(MHZ)		2400	2500
VSWR		1.65	1.64
Return Loss(DB)		-12.17	-12.25

Passive test data

ANT1 GAIN&Efficiency-WIFI2.4G/BT

Passive Test For WIFI2.4												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	Directivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	24.44	-6.12	0.3	-1.85	14.262	10.176	0.3	-14.34	6.42	30	45.78	46.01
2410	24.89	-6.04	0.44	-1.71	14.686	10.202	0.44	-14.75	6.48	30	46.01	46.29
2420	25.66	-5.91	0.65	-1.5	15.278	10.384	0.65	-14.76	6.56	30	45.73	46
2430	25.08	-6.01	0.64	-1.51	14.926	10.149	0.64	-15.32	6.65	30	46.01	46.36
2440	26.1	-5.83	0.9	-1.25	15.237	10.86	0.9	-14.97	6.73	30	46.12	46.48
2450	28.43	-5.46	1.42	-0.73	16.36	12.071	1.42	-14.3	6.88	30	46.12	46.54
2460	28.76	-5.41	1.55	-0.6	16.397	12.359	1.55	-14.23	6.96	30	46.14	46.52
2470	27.54	-5.6	1.49	-0.66	15.652	11.889	1.49	-14.23	7.09	30	46.4	46.8
2480	29.45	-5.31	1.8	-0.35	16.601	12.85	1.8	-13.68	7.11	30	46.26	46.64
2490	32.01	-4.95	2.00	0.01	17.887	14.121	2.00	-13.54	7.1	30	46.51	46.91
2500	29.12	-5.36	1.8	-0.35	16.327	12.793	1.8	-14.12	7.16	30	46.47	46.86

Passive test data

ANT1 Direction of figure (2.4/BT)

