

Antenna Test Report

TC: Lingtuo

MN: L-C5

RF: Cai linman

MD: Huang qingqing

MP: 19918388579

ANT P/N: F787B-13LB-030

Location: Room 1506, Tangwei

Business Stock Exchange Building,

Fuhai Street, Bao`an District, Shenzhen,

Guangdong Province, China

Date: 2023. 09. 24.

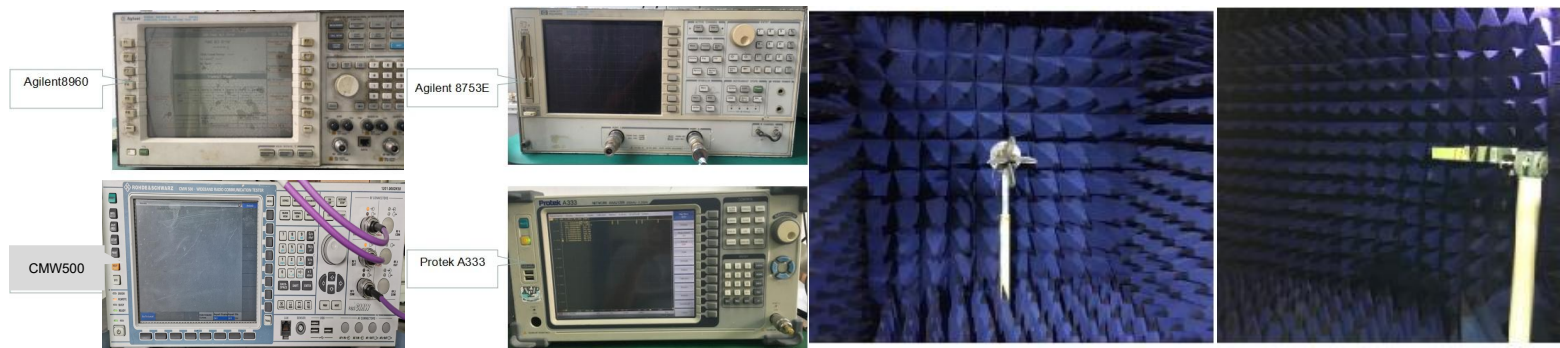
REV :V1. 0

Test information

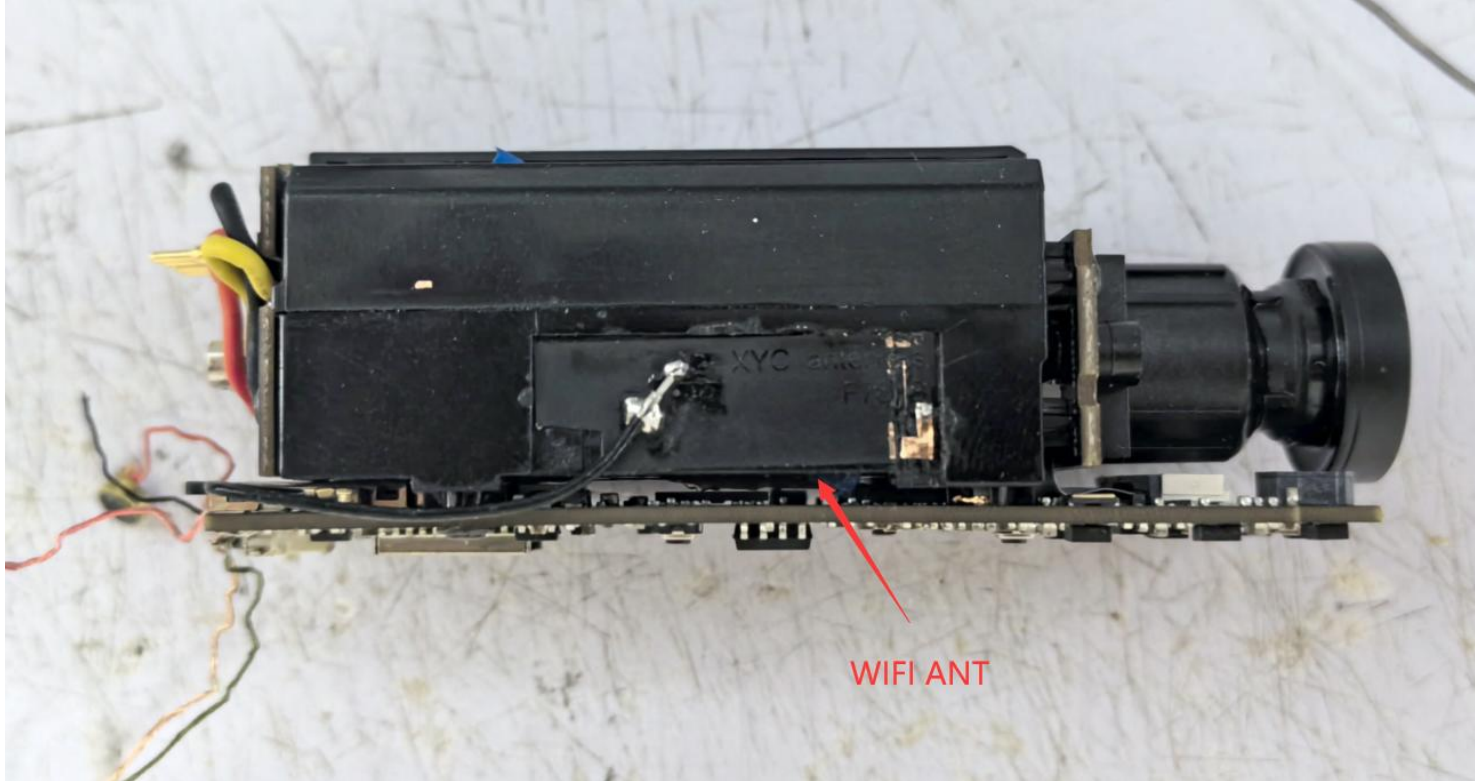
		Antenna band	Antenna state	Antenna form	Matchc hanges	Note
Main ANT	2G					
	3G					
	4G					
AUX ANT	BT/WIFI	2.4G	FPC	PIFA	NO	
	GPS					
	DIV					

Test environment

	Test items	Test equipment
1. S-parameter	1. VSWR 2. Rrtun Loss	Agilent8753ES
2. Active	1. TRP 2. TIS 3. LCD OFF/ON	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

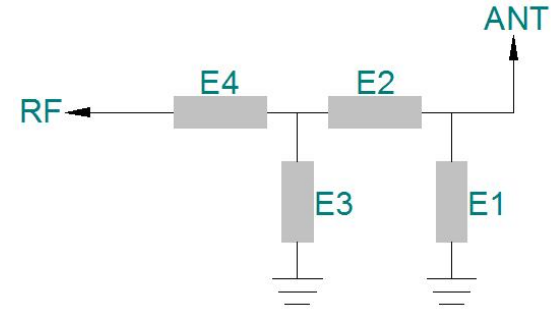




ANTENNA

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

Matching circuit



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

Matching circuit schematic & Bitmap

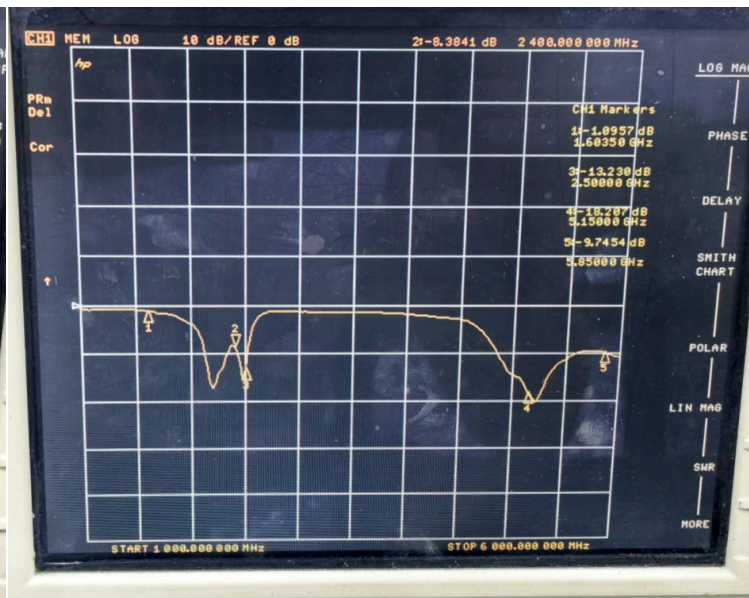


ANTENNA

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

Main ANT Passive test data

ANT S11-VSWR&Return Loss



Frequency(MHZ)	2400	2500	5150	5850
VSWR	2.23	1.55	1.28	1.96
Return Loss(DB)	-8.38	-13.23	-18.20	-9.74



ANTENNA

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

Passive test data

ANT 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)
2400	34.56	-4.61	-0.23	-2.38	15.876	18.683	-0.23	-10.99
2410	32.66	-4.86	-0.61	-2.76	14.971	17.688	-0.61	-11.66
2420	37.4	-4.27	-0.15	-2.3	17.085	20.319	-0.15	-11.86
2430	37.65	-4.24	-0.29	-2.44	17.163	20.491	-0.29	-12.57
2440	37.2	-4.29	-0.47	-2.62	17.018	20.182	-0.47	-13
2450	38.75	-4.12	-0.08	-2.23	17.879	20.871	-0.08	-12.01
2460	40.26	-3.95	0.24	-1.91	18.849	21.41	0.24	-10.62
2470	39.84	-4	0.32	-1.83	18.846	20.997	0.32	-10.65
2480	39.83	-4	0.39	-1.76	18.976	20.852	0.39	-10.91
2490	39.94	-3.99	0.49	-1.66	18.799	21.145	0.49	-10.22
2500	32.3	-4.91	-0.32	-2.47	14.815	17.483	-0.32	-11.39

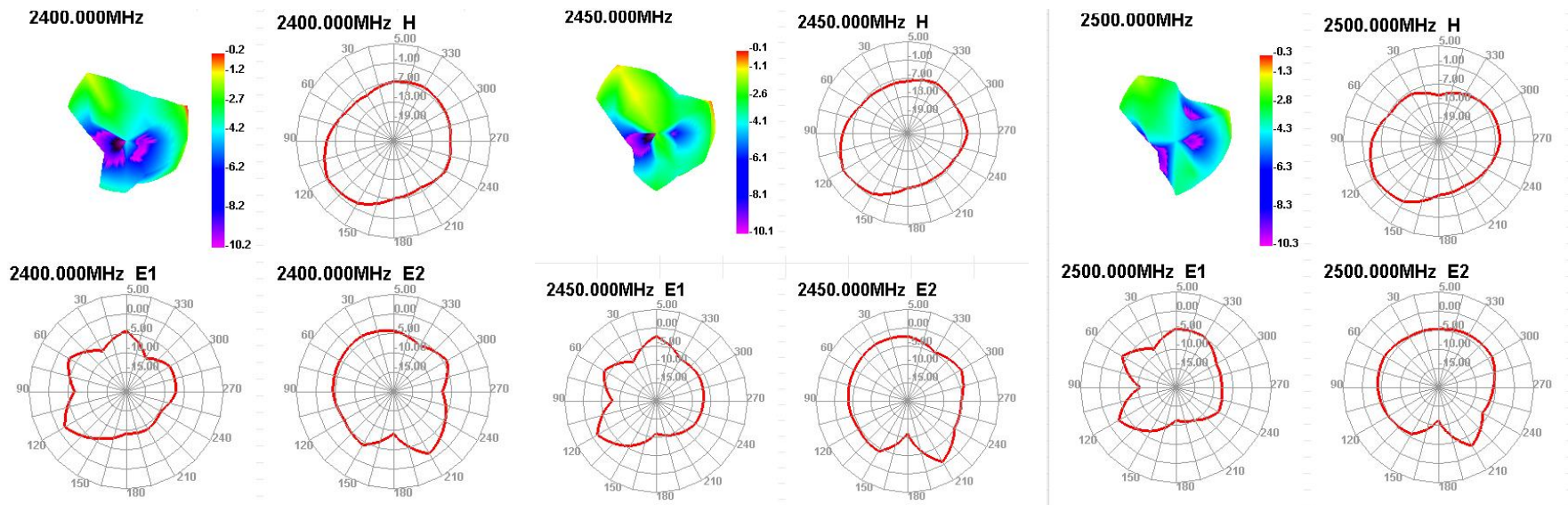


ANTENNA

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

Passive test data

ANT Direction of figure(2.4/BT)





Passive test data

ANT GAIN&Efficiency-WIFI 5G

Passive Test For WIFI5G								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
5150	39.69	-4.01	2.39	0.24	25.308	14.384	2.39	-20.53
5170	46.58	-3.32	3.05	0.9	29.135	17.445	3.05	-17.84
5190	43.1	-3.65	2.69	0.54	26.7	16.404	2.69	-16.2
5210	51.99	-2.84	3.51	1.36	32.203	19.786	3.51	-15.81
5230	46.14	-3.36	3.09	0.94	28.332	17.803	3.09	-16.02
5250	53.44	-2.72	3.73	1.58	32.051	21.389	3.73	-14.89
5270	52.84	-2.77	3.48	1.33	31.182	21.655	3.48	-14.5
5290	56.98	-2.44	3.8	1.65	33.671	23.306	3.8	-13.43
5310	53.32	-2.73	3.57	1.42	31.344	21.975	3.57	-14.22
5330	54.34	-2.65	3.58	1.43	31.449	22.891	3.58	-15.56
5350	57.77	-2.38	3.75	1.6	33.109	24.659	3.75	-13.36
5370	56.82	-2.45	3.63	1.48	32.788	24.035	3.63	-12.36
5390	52.87	-2.77	3.33	1.18	30.934	21.936	3.33	-13.12
5410	62.5	-2.04	4.1	1.95	36.661	25.844	4.1	-12.89
5430	57.9	-2.37	3.89	1.74	33.826	24.075	3.89	-13.8
5450	62.53	-2.04	4.38	2.23	36.451	26.075	4.38	-13.24
5470	56.94	-2.45	4.19	2.04	33.504	23.438	4.19	-13.64
5490	56.05	-2.51	4.27	2.12	32.994	23.06	4.27	-13.9
5510	59.59	-2.25	4.5	2.35	34.648	24.941	4.5	-14.57
5530	58.19	-2.35	4.39	2.24	33.639	24.554	4.39	-15.48
5550	62.06	-2.07	4.8	2.65	36.015	26.047	4.8	-14.12
5570	51.7	-2.86	4.08	1.93	29.88	21.825	4.08	-14.34
5590	58.07	-2.36	4.38	2.23	32.957	25.115	4.38	-13.21
5610	46.31	-3.34	3.35	1.2	26.035	20.273	3.35	-15.87
5630	56.1	-2.51	4.28	2.13	31.474	24.622	4.28	-16.03
5650	43.1	-3.65	3.11	0.96	24.179	18.924	3.11	-15.61
5670	51.88	-2.85	3.73	1.58	28.686	23.191	3.73	-15.82
5690	42.61	-3.71	2.59	0.44	23.305	19.303	2.59	-18.95
5710	44.65	-3.5	2.88	0.73	24.382	20.268	2.88	-20.49
5730	48.79	-3.12	3.23	1.08	26.546	22.239	3.23	-21.12
5750	42.64	-3.7	2.34	0.19	22.937	19.7	2.34	-24.91
5770	49.41	-3.06	2.83	0.68	26.383	23.027	2.83	-32.31
5790	43.06	-3.66	2.47	0.32	23.236	19.825	2.47	-26.09
5810	48.32	-3.16	3.16	1.01	26.04	22.283	3.16	-20.47
5830	46.56	-3.32	3.05	0.9	24.899	21.662	3.05	-20.4
5850	54.26	-2.65	3.75	1.6	28.889	25.376	3.75	-18.39



ANTENNA

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

Passive test data

ANT Direction of figure(5G)

