



深圳市星源创科技有限公司

SHENZHEN Xingyuanchuang TECHNOLOGY CO., LTD

天线测试报告

Antenna Test Report

TC: SHENZHEN KINSTONE D&T DEVELOP CO. LTD.

MN: 102SA-L

RF: Kingping Dai

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MP: 19918388579

Date: 2022. 10. 25.

REV :V1. 0



ANTENNA

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测试信息

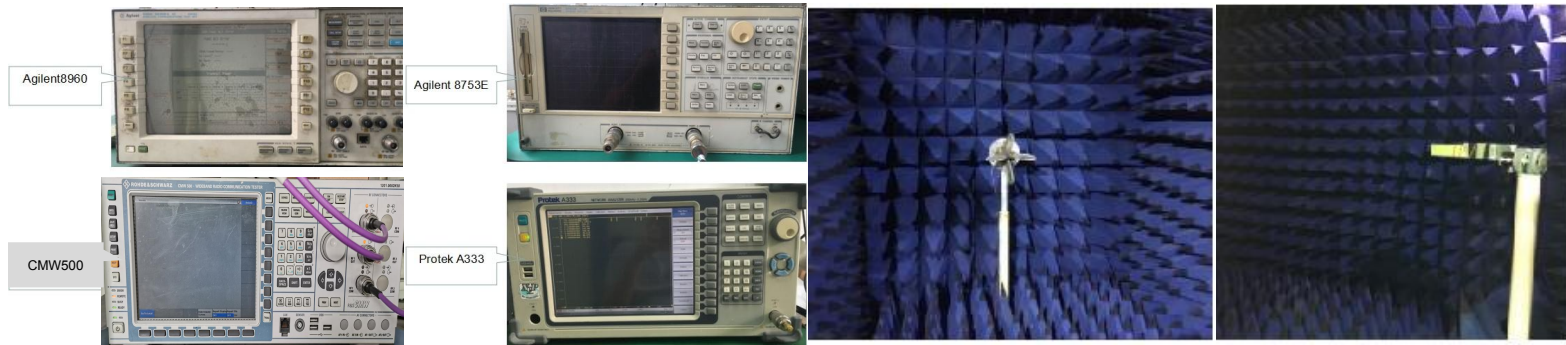
Test information

	Antenna band	Antenna state	Antenna form	Match changes	Note
AUX ANT	BT/WIFI	2.4/5G	PIFA	PIFA	NO
	GPS	1.575G			NO
	DIV				NO

测试环境

Test environment

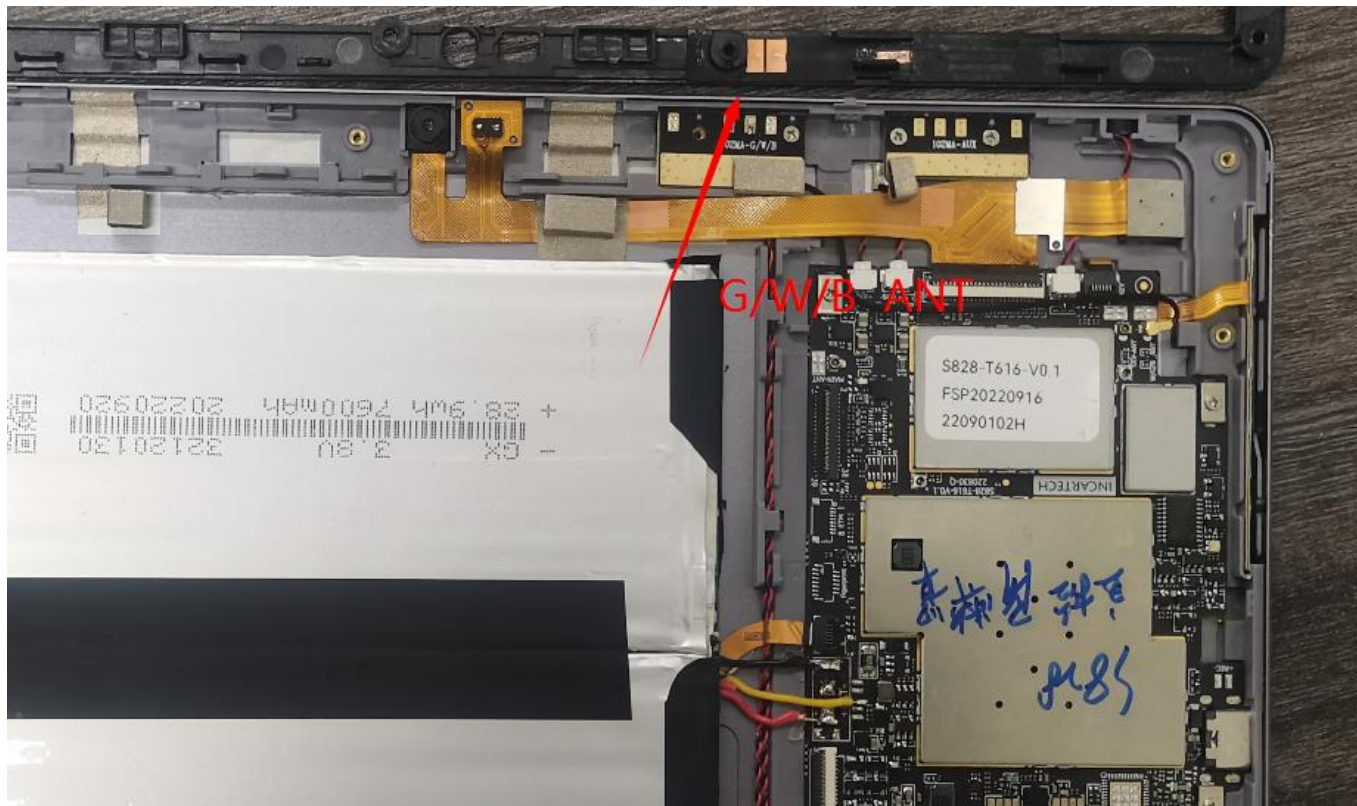
	测试项目	测试设备
S参数 (S-parameter)	1. 电压驻波比 (VSWR) 2. 回波损耗 (Rrtun Loss)	网络分析仪: Agilent8753ES
2. 有源测试 (Active)	1. 发射功率 (TRP) 2. 接收灵敏度 (TIS) 3. 屏灭/屏亮	1. 暗室: 5*3*3m (3D) Chamber 2. 综测仪: Agilent8960 CMW500
3. 无源测试 (Passive)	1. 天线增益 (Gain) 2. 天线效率 (Efficiency)	1. 暗室: 5*3*3m (3D) Chamber 2. 网络分析仪: Agilent 8753ES





天线位置

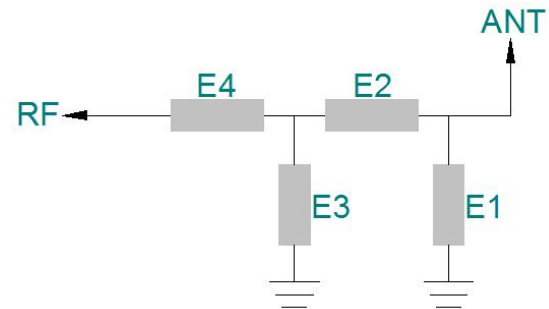
Antenna position





匹配电路
Matching circuit

Matching circuit schematic
diagram & tag diagram



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



有源测试数据 Active test data

802.11b	Frequency	TRP		TIS	
	2412	CH1 11Mbps	12.66	CH1 11Mbps	-80.84
2437	CH6 11Mbps	12.50	CH6 11Mbps	-80.57	
2467	CH11 11Mbps	11.44	CH11 11Mbps	-79.60	
802.11a		TRP		TIS	
	5180	CH36 6Mbps	6.53	CH36 54Mbps	-68.04
	5300	CH60 6Mbps	7.80	CH60 54Mbps	-66.91
	5805	CH161 6Mbps	2.02	CH161 54Mbps	-62.10



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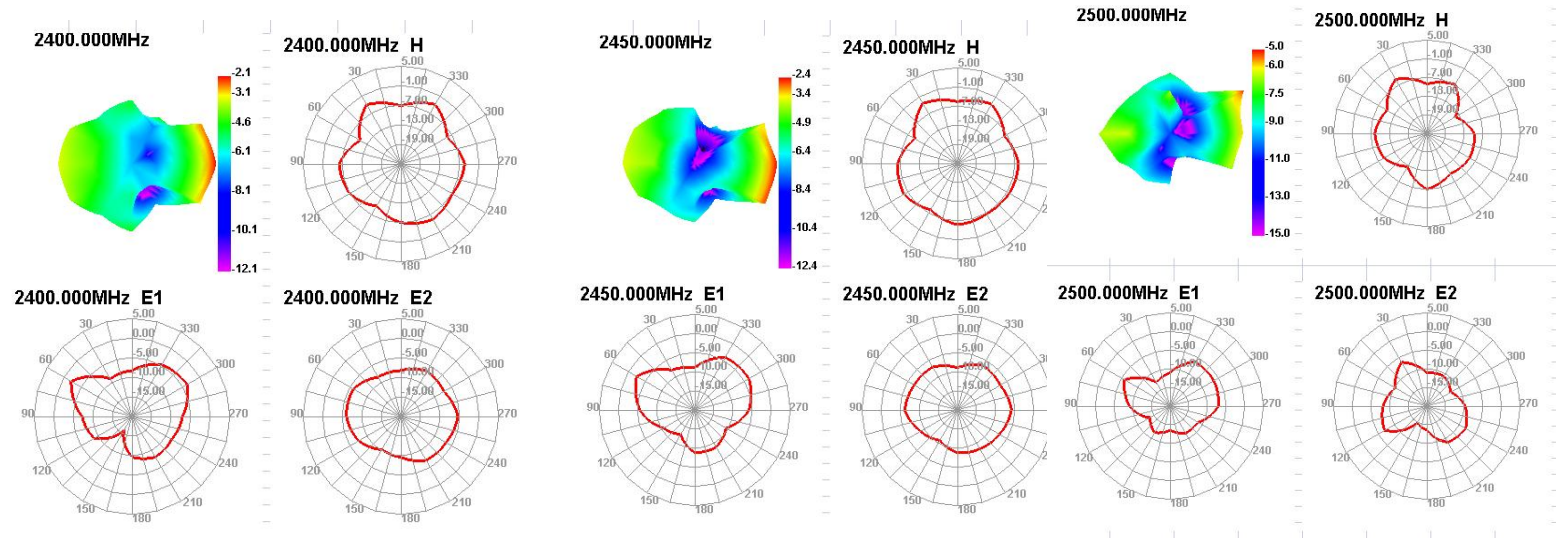
无源测试数据
Passive test data

ANT1 GAIN&Efficiency-WIFI2.4G/BT

Passive Test For WIFI2.4							
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)
2400	31.42	-6.69	-2.09	-4.24	18.761	12.662	-2.09
2410	29.78	-7.04	-2.48	-4.63	17.981	11.798	-2.48
2420	32.11	-6.55	-2.09	-4.24	19.382	12.731	-2.09
2430	34.12	-6.18	-1.76	-3.91	20.807	13.318	-1.76
2440	33.77	-6.24	-1.85	-4	20.929	12.837	-1.85
2450	31.37	-6.7	-2.45	-4.6	19.542	11.826	-2.45
2460	30.58	-6.86	-2.88	-5.03	18.855	11.729	-2.88
2470	30.88	-6.8	-2.66	-4.81	18.919	11.962	-2.66
2480	29.34	-7.14	-2.69	-4.84	17.676	11.665	-2.69
2490	25.97	-7.97	-3.4	-5.55	15.419	10.549	-3.4
2500	21.51	-9.39	-4.96	-7.11	12.584	8.93	-4.96

无源测试数据 Passive test data

ANT1 Direction of figure(2.4/BT)





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无源测试数据

Passive test data

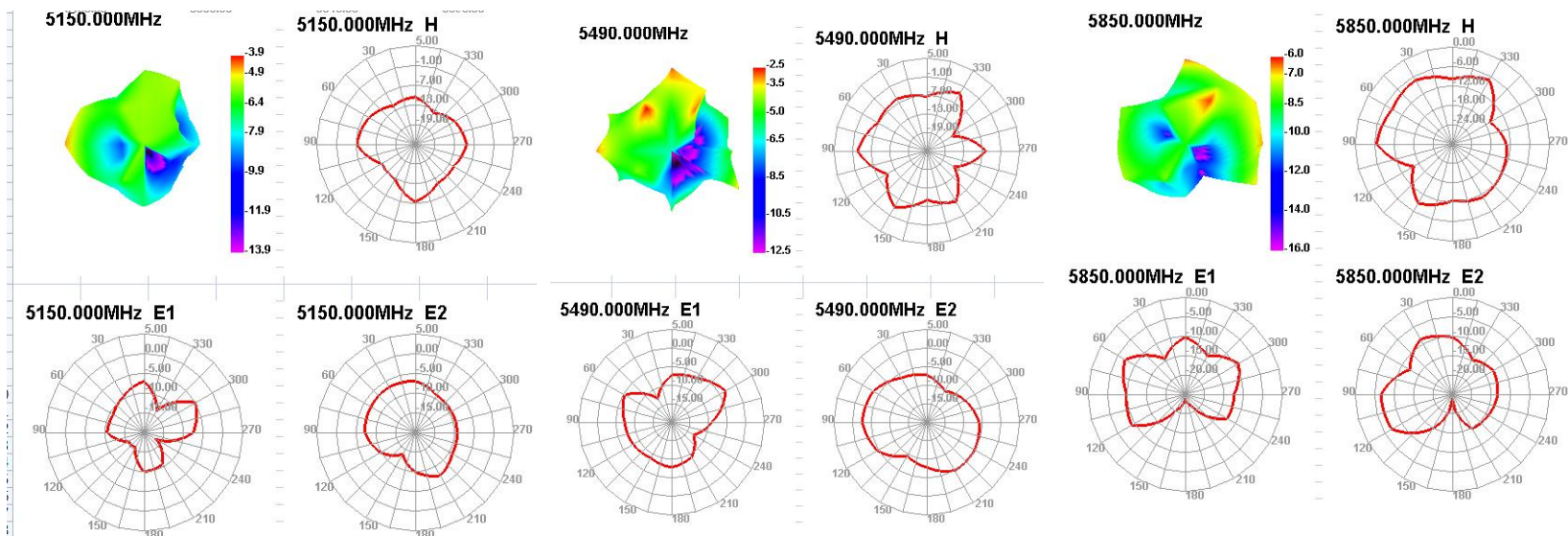
ANT1 GAIN&Efficiency-WIFI 5G

Passive Test For WIFI5G						
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dEd)	UHS (%)	DHS (%)
5150	18.96	-9.6	-3.93	-6.08	10.869	8.091
5170	17.38	-10.28	-4.66	-6.81	10.125	7.256
5190	19.88	-9.25	-3.32	-5.47	11.609	8.273
5210	17.98	-10.01	-4.09	-6.24	10.562	7.415
5230	20.75	-8.94	-3.79	-5.94	12.188	8.565
5250	19.14	-9.53	-4.87	-7.02	11.306	7.836
5270	23.08	-8.21	-3.22	-5.37	13.581	9.503
5290	20.94	-8.88	-3.65	-5.8	12.365	8.571
5310	22.5	-8.38	-3.28	-5.43	13.297	9.208
5330	22.76	-8.31	-3.19	-5.34	13.481	9.278
5350	25.83	-7.49	-2.44	-4.59	15.237	10.591
5370	25.71	-7.52	-2.7	-4.85	15.12	10.593
5390	25.96	-7.46	-2.4	-4.55	15.204	10.751
5410	28.81	-6.82	-1.56	-3.71	16.76	12.048
5430	29.78	-6.62	-1.56	-3.71	17.139	12.64
5450	30.62	-6.45	-1.99	-4.14	17.532	13.088
5470	30.15	-6.55	-2.37	-4.52	17.24	12.907
5490	28.96	-6.79	-2.48	-4.63	16.565	12.4
5510	29.6	-6.65	-2.32	-4.47	16.969	12.636
5530	28.51	-6.88	-3.14	-5.29	16.413	12.093
5550	28.77	-6.83	-2.97	-5.12	16.662	12.109
5570	24.16	-7.91	-3.94	-6.09	14.151	10.012
5590	25.91	-7.47	-3.15	-5.3	15.191	10.714
5610	21.46	-8.71	-4.17	-6.32	12.688	8.768
5630	26.01	-7.44	-2.72	-4.87	15.353	10.662
5650	18.38	-9.84	-4.83	-6.98	10.929	7.449
5670	23.57	-8.08	-2.78	-4.93	13.847	9.725
5690	17.24	-10.35	-4.92	-7.07	10.2	7.035
5710	21.72	-8.63	-3.08	-5.23	12.58	9.143
5730	18.16	-9.93	-4.41	-6.56	10.59	7.574
5750	18.71	-9.7	-4.1	-6.25	10.854	7.856
5770	17.68	-10.14	-4.68	-6.83	10.286	7.391
5790	17.76	-10.11	-4.87	-7.02	10.32	7.44
5810	17.14	-10.39	-5.21	-7.36	9.965	7.176
5830	17.35	-10.29	-5.36	-7.51	10.114	7.241
5850	16.2	-10.86	-5.98	-8.13	9.466	6.73



无源测试数据 Passive test data

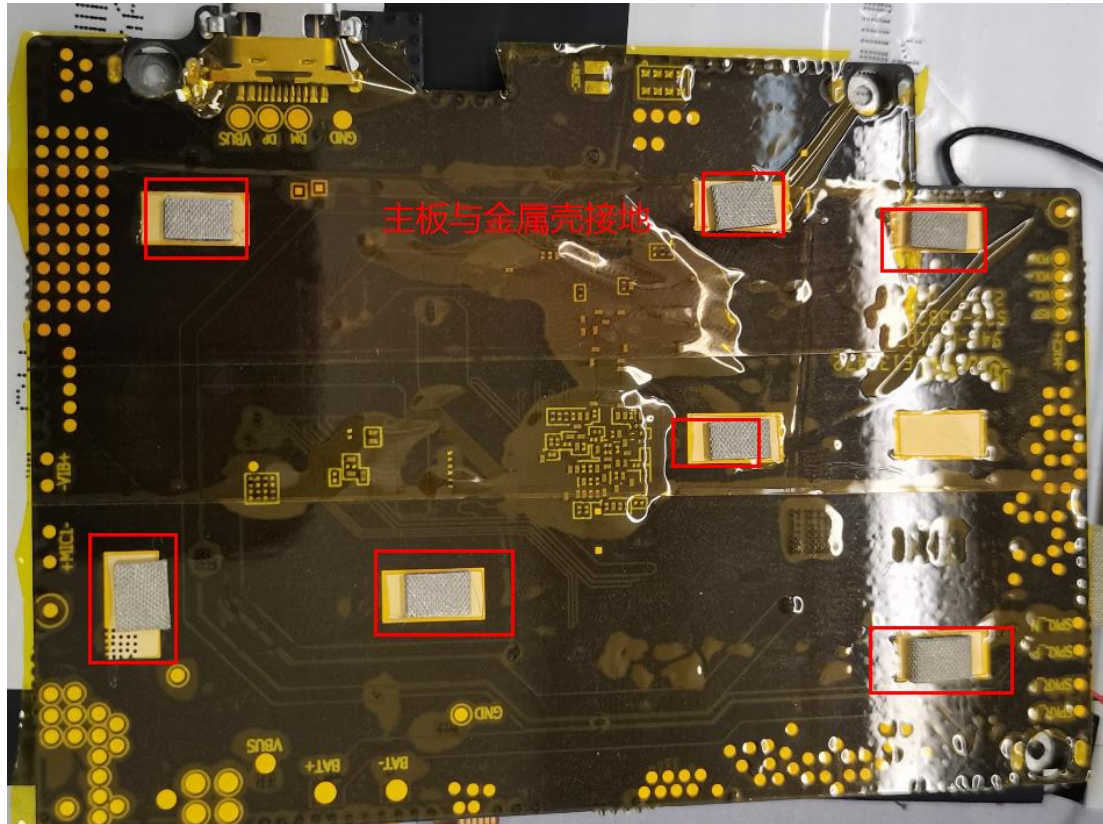
ANT1 Direction of figure (5G)





环境处理

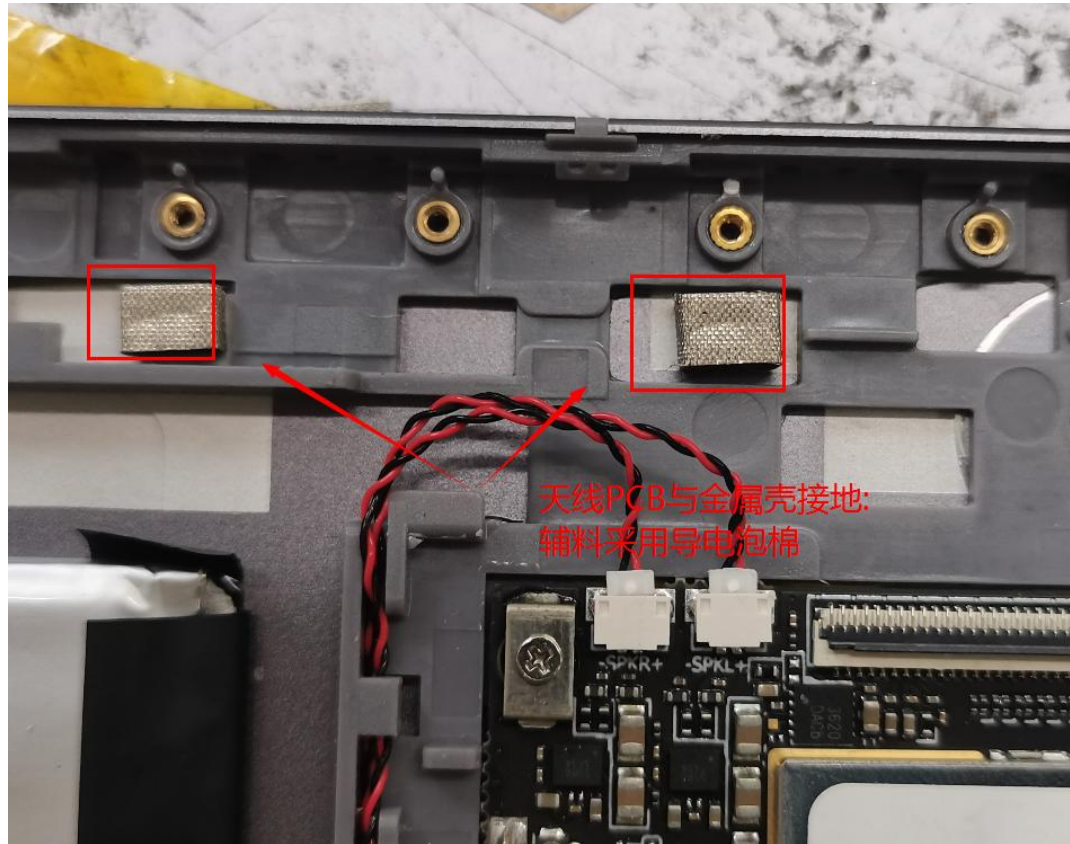
Environmental treatment





环境处理

Environmental treatment



环境处理

Environmental treatment

