



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: 万汇芯源

MN: S31

RF: 戴进平

MD: 黄清清

MP: 19918388579

Date: 2022. 12. 2

REV :V1. 0



测试信息

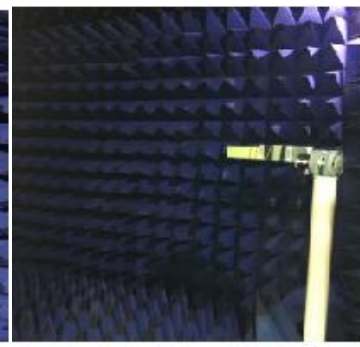
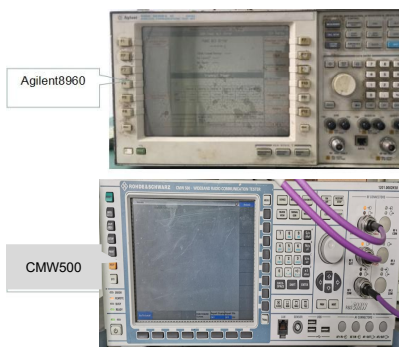
Test information

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

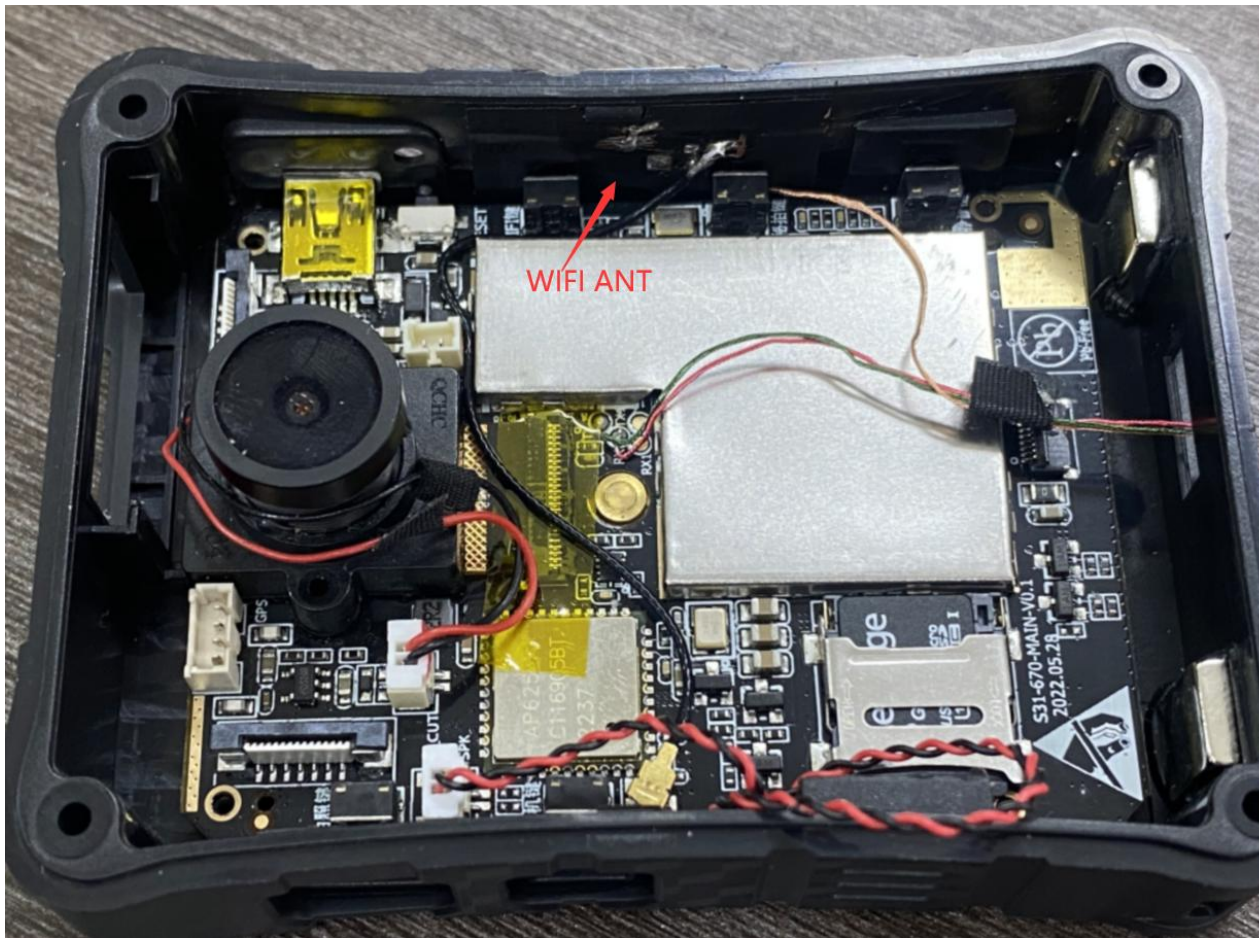
测试环境

Test environment

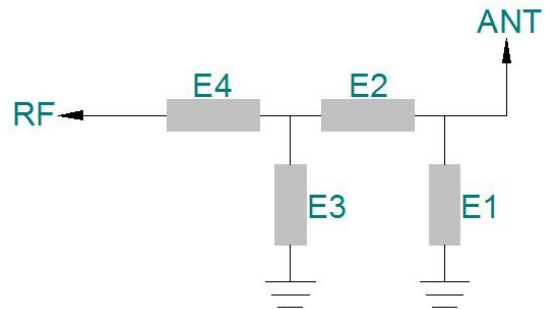
	测试项目	测试设备
S参数 (S-parameter)	1. 电压驻波比 (VSWR) 2. 回波损耗 (Rrtun Loss)	网络分析仪: Agilent8753ES
2. 有源测试 (Active)	1. 发射功率 (TRP) 2. 接收灵敏度 (TIS) 3. 屏灭/屏亮	1. 暗室: 5*3*3m (3D) Chamber 2. 综测仪: Agilent8960 CMW500
3. 无源测试 (Passive)	1. 天线增益 (Gain) 2. 天线效率 (Efficiency)	1. 暗室: 5*3*3m (3D) Chamber 2. 网络分析仪: Agilent 8753ES



天线位置 Antenna position



匹配电路
Matching circuit

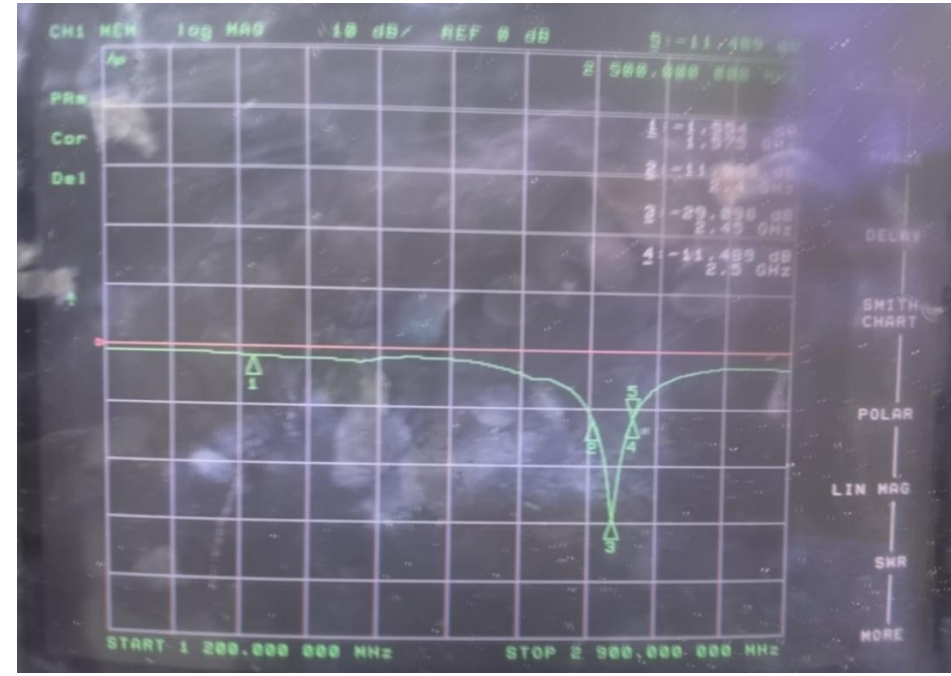
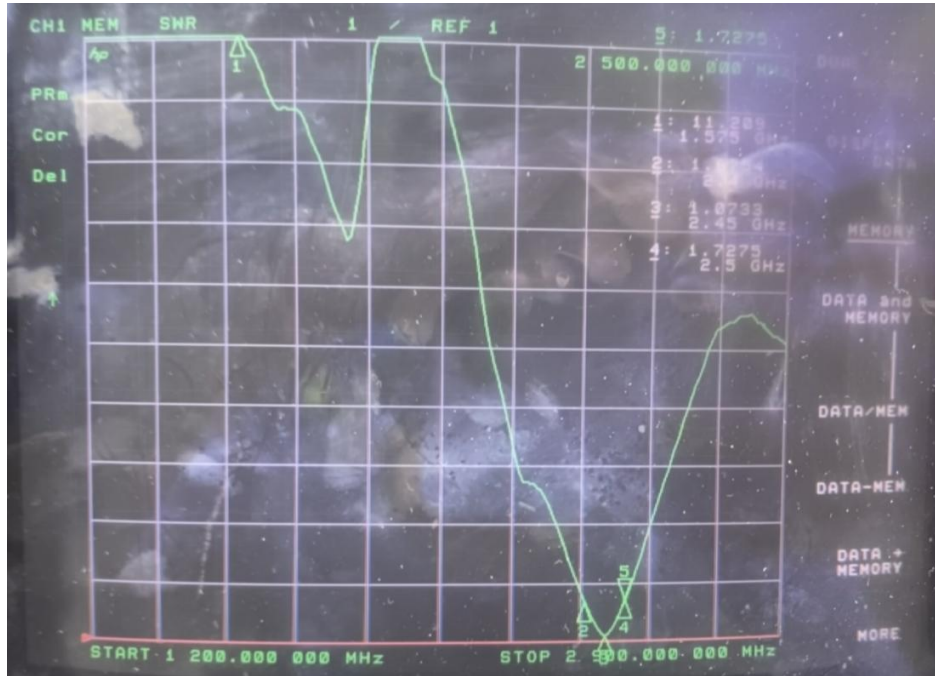


匹配电路原理图&位号图

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

无源测试数据 Passive test data

ANT1 S11-VSWR&Return Loss



Frequency (MHZ)	2400	2450	2500
VSWR	1.67	1.07	1.72
Return Loss (DB)	-11.9	-29.09	-11.48

无源测试数据

Passive test data

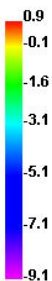
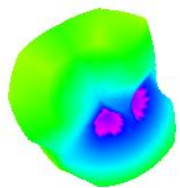
ANTI GAIN&Efficiency-WIFI2.4G/BT

Passive Test For WIFI2.4								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
2400	37.75	-4.23	0.94	-1.21	15.282	22.466	0.94	-17.97
2410	40.14	-3.96	1.3	-0.85	16.201	23.94	1.3	-17.97
2420	44.56	-3.51	1.69	-0.46	18.267	26.296	1.69	-18.11
2430	45.38	-3.43	1.61	-0.54	19.046	26.335	1.61	-19.22
2440	46.54	-3.32	1.85	-0.3	19.795	26.75	1.85	-20.23
2450	48.14	-3.18	1.94	-0.21	20.836	27.303	1.94	-21.69
2460	46.94	-3.28	1.78	-0.37	20.725	26.214	1.78	-22.26
2470	47.06	-3.27	1.7	-0.45	21.206	25.852	1.7	-24.56
2480	48.07	-3.18	1.69	-0.46	21.809	26.264	1.69	-26.18
2490	45.25	-3.44	1.47	-0.68	20.694	24.554	1.47	-24.66
2500	38.47	-4.15	0.73	-1.42	17.935	20.537	0.73	-22.65

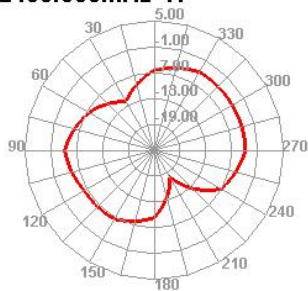
无源测试数据 Passive test data

ANT1 Direction of figure(2.4/BT)

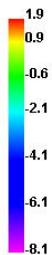
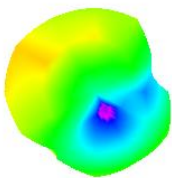
2400.000MHz



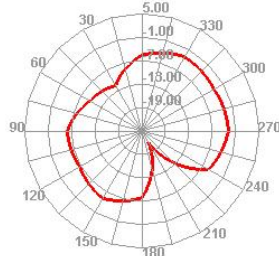
2400.000MHz H



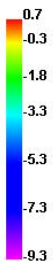
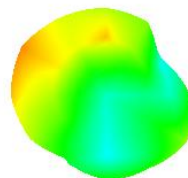
2450.000MHz



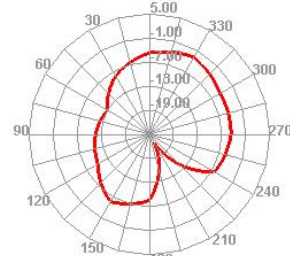
2450.000MHz H



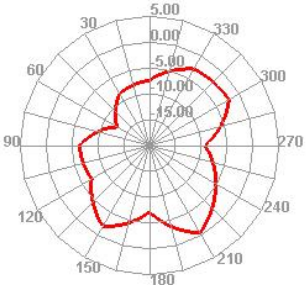
2500.000MHz



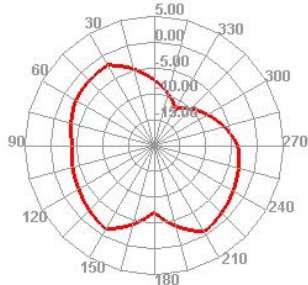
2500.000MHz H



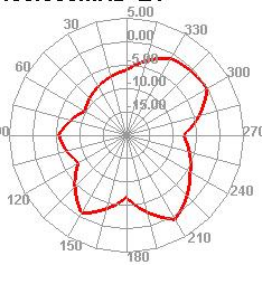
2400.000MHz E1



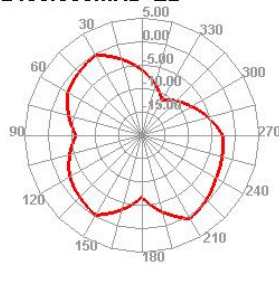
2400.000MHz E2



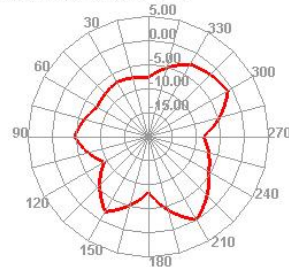
2450.000MHz E1



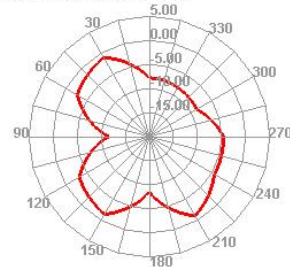
2450.000MHz E2



2500.000MHz E1



2500.000MHz E2



合作共赢

