



2022

深圳祥博一科技有限公司

Shenzhen Xiangboyi Technology Co. Ltd

天线测试报告
Antenna report



TEST REPORT

01 客户名称/Customer：和天创

02 项目名称/Project：D062

03 立项编号/Project NO：XBY220420

04 工程师/Engineer：魏道发
电话/Phone：18123850014

PART 1

测试报告版本/Report version

日期 Date	天线版本 Antenna version	主板版本 PCB version	变更描述 Description of Change
2022-08-30			样品天线测试数据

PART 2

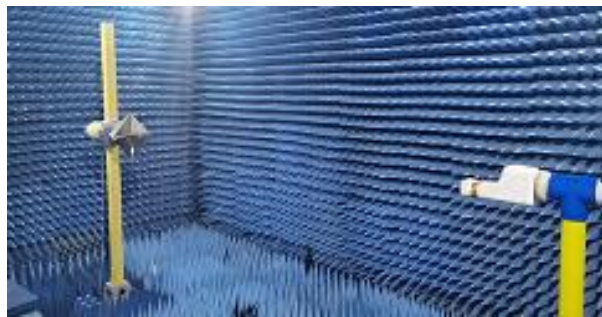
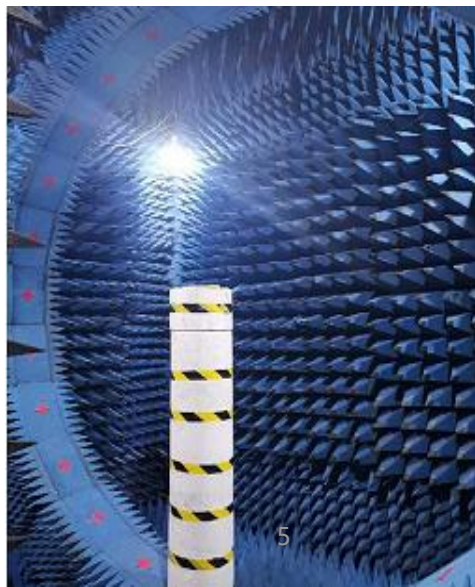
项目信息/Project brief

NO	ITEMS	DETAILS
1	工作频段 Operating band	WIFI:2.4G; 5.8G
2	频率范围 Frequency band	WIFI: 2400-2500Mhz; 5180-5850Mhz
3	天线类型 Antenna type	MAIN:
4	天线材质及实现形状 Material and implementation shape	FPC+焊线

PART 3

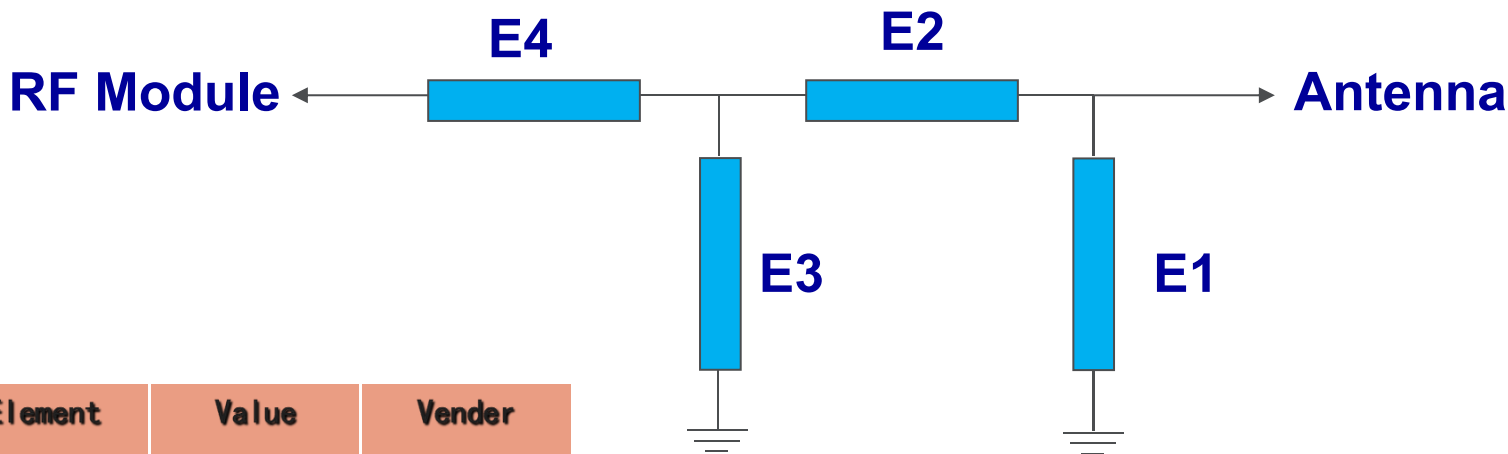
Test system and equipment

	测试项目/Test items	设备/equipment
1: S参数 S parameter	1. 回波损耗 Return loss 2. 驻波比 VSWR	网络分析仪/Network analyzer: A338/A333
2: 耦合功率测试 Active test	1. 发射功率 Transmitting power 2. 接收灵敏度 Receiving sensitivity	综合测试仪/Comprehensive test instrument: Agilent 8960/ CMW500
3: 辐射模式与增益 Radiation mode and gain	1. 辐射模式 Radiation mode 2. 天线增益 Gain	1. 暗室/Shielding room: 7x4x3 m (ETS-3D) 2. 网络分析仪/Network analyzer: HP 8753D



PART 4

匹配电路/Matching Circuits



Element	Value	Vender
E1 (0402)	NA	
E2 (0402)	0 0hm	
E3 (0402)	NA	
E4 (0402)	0 0hm	

Original match unchanged.

PART 5

测试数据/RF Report

WIFI BAND	802.11a : 54Mbps (5G)					
Channel	CH36	CH149	CH161			
TRP	8.86	8.75	8.81			
TIS			-67.46			

WIFI BAND	802.11b : 11Mbps (2.4G)			802.11g : 54Mbps (2.4G)		
Channel	CH1	CH6	CH11	CH1	CH6	CH11
TRP	13.71	13.19	13.18	10.82	10.11	10.23
TIS			-72.5			-67.28

WIFI BAND	802.11n : MCS7 (2.4G)					
Channel	CH1	CH6	CH11			
TRP	11.96	11.62	11.26			
TIS			-67.33			

b模式传导功率 15 ± 1

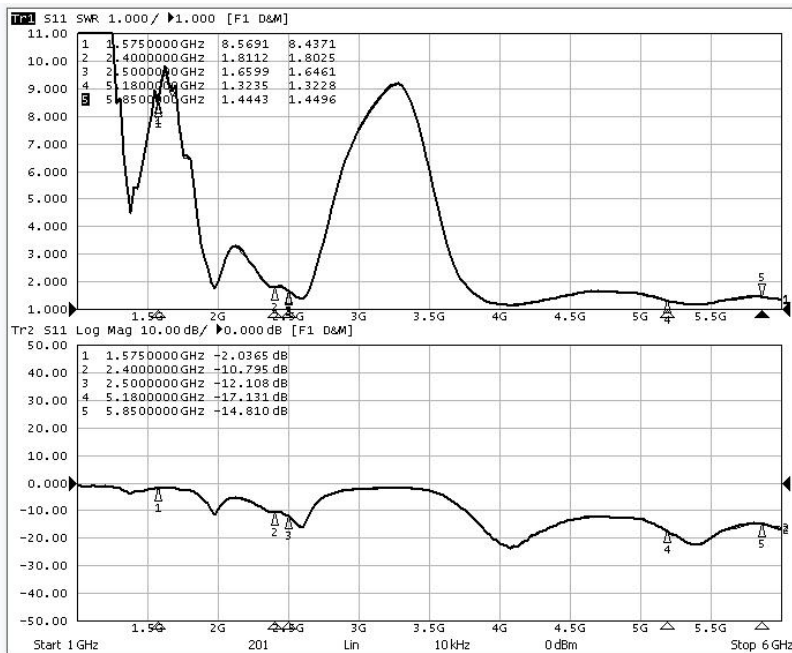
g模式传导功率 12 ± 1

n模式传导功率 12 ± 1

a模式传导功率 9 ± 1

PART 6

测试数据/RF Report



PART 6

测试数据/RF Report

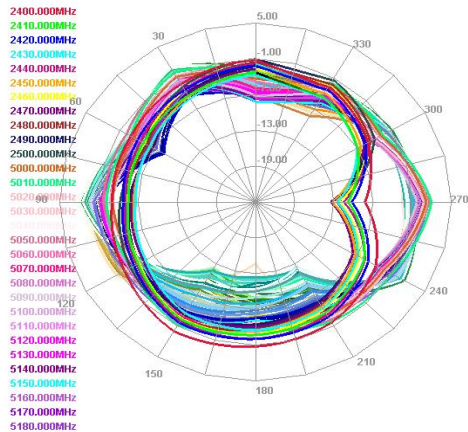
Passive Test For 2.4G		
Freq (MHz)	Effi (%)	Gain (dBi)
2400	44.94	2.18
2410	32.32	0.77
2420	36.08	1.51
2430	31.94	0.05
2440	41.56	1.16
2450	35.29	0.57
2460	42.1	1.51
2470	35.79	0.38
2480	37	0.55
2490	32.56	0.24
2500	42.9	1.15

Passive Test For D5		
Freq (MHz)	Effi (%)	Gain (dBi)
5000	51.12	1.2
5050	52.67	1.59
5100	48.73	1.12
5150	38.22	0.27
5200	44.38	0.56
5250	40.34	0.29
5300	41.48	0.32
5350	45.22	0.59
5400	40.92	0.17
5450	37.18	0.41
5500	42.11	0.4
5550	46.9	1.39
5600	55.36	1.74
5650	52.73	1.5
5700	51.99	1.36
5750	44.14	0.66
5800	43.44	0.66
5850	52.09	1.28
5900	53.54	1.91
5950	42.06	0.79
6000	35.45	0.27

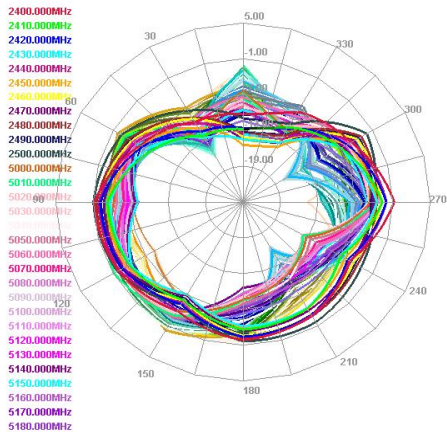
PART 6

测试数据/RF Report

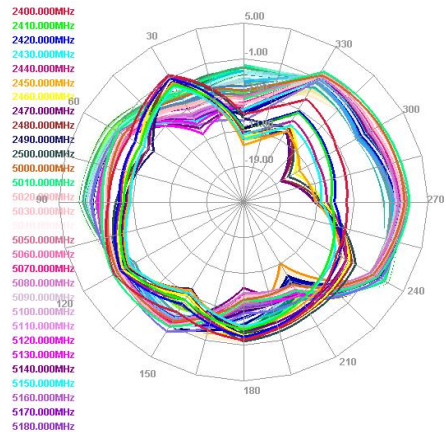
Horizontal



E1 Face



E2 Face



PART 7

组装方式/Assembly method



PART 8

整机图片 Picture of complete machine





2022

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