



2023

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：L012H

03 立项编号/Project NO：XBY230405

04 工程师/Engineer：何国荣
电话/Phone：18123875607

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
2023-10-16			天线测试数据 Antenna test data

PART 2

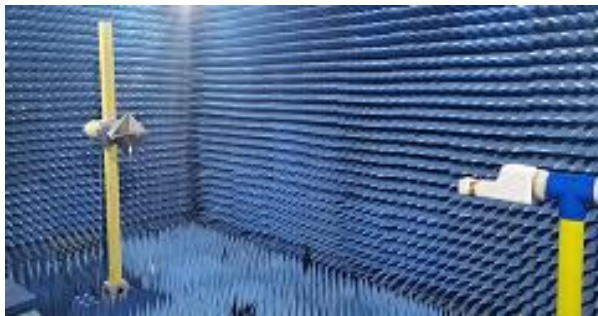
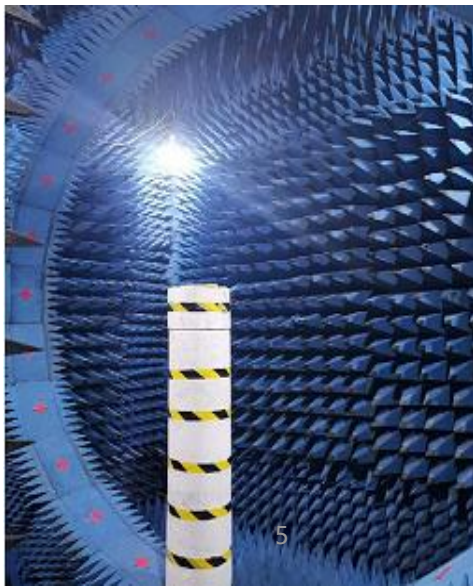
项目信息/Project brief

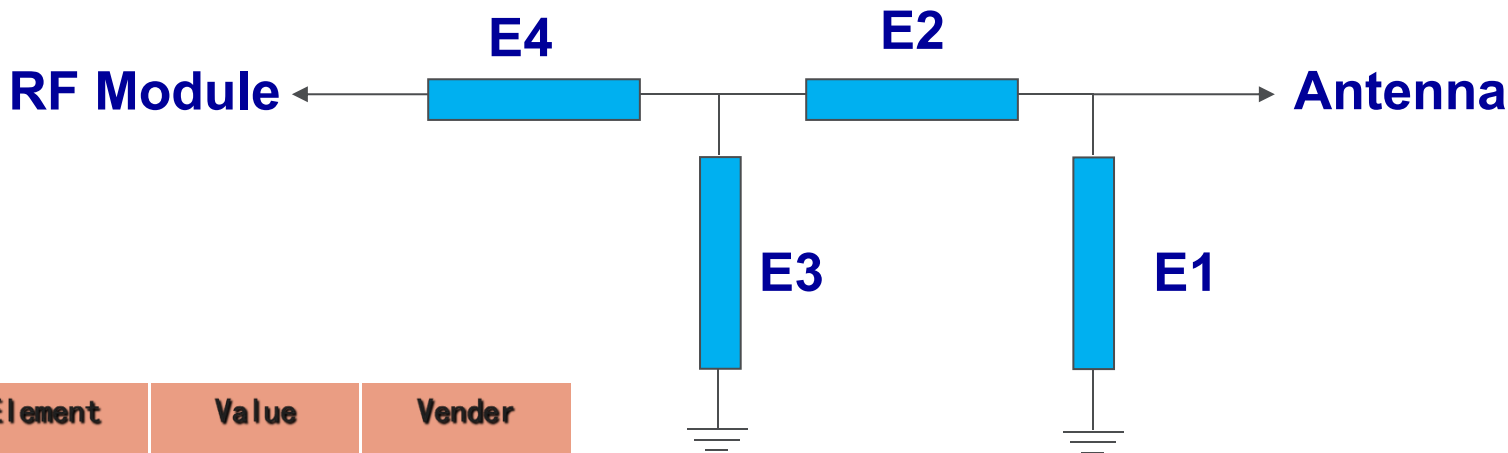
NO	ITEMS	DETAILS
1	频率范围 Frequency band	2400-2500MHz; 5000-6000MHz
2	天线类型 Antenna type	Internal Antenna

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





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

Original match unchanged.

PART 5

有源测试数据/Active Test data

WIFI BAND	802.11a : 54MBps (5G)					
Channel	CH36	CH149	CH161			
TRP	12.35	13.74	13.96			
TIS			-71.92			

WIFI BAND	802.11b : 11MBps (2.4G)			802.11g : 54MBps (2.4G)		
Channel	CH1	CH6	CH11	CH1	CH6	CH11
TRP	16.71	16.46	16.21	15.08	14.81	14.12
TIS			-83.56			-69.38

WIFI BAND	802.11n : MCS7 (2.4G)					
Channel	CH1	CH6	CH11			
TRP	14.16	14.31	14.47			
TIS			-75.64			

PART 6

无源测试效率/Passive test efficiency

WiFi 2.4G

Freq (MHz)	Effi (%)	Effi (dB)
2400	41.47	1.5
2450	43.47	2.00
2500	40.25	1.31

WiFi 5G

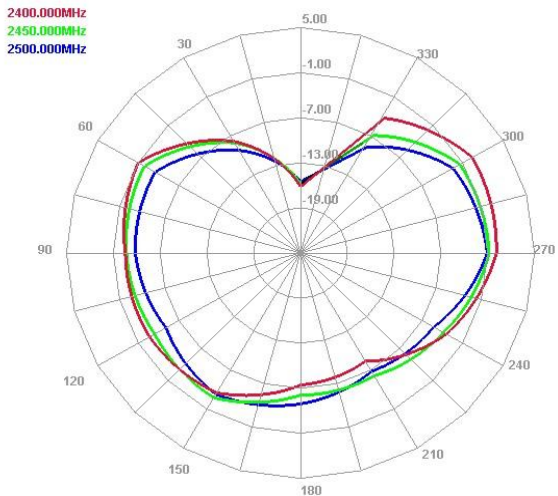
Freq (MHz)	Effi (%)	Gain (dBi)
5000	44.49	1.63
5100	45.83	1.57
5200	41.23	2.00
5300	44.15	1.26
5400	46.93	2.00
5500	42.78	1.64
5600	44.34	1.47
5700	39.73	1.34
5800	38.42	1.53
5900	38.92	0.73
6000	37.54	0.46

PART 7

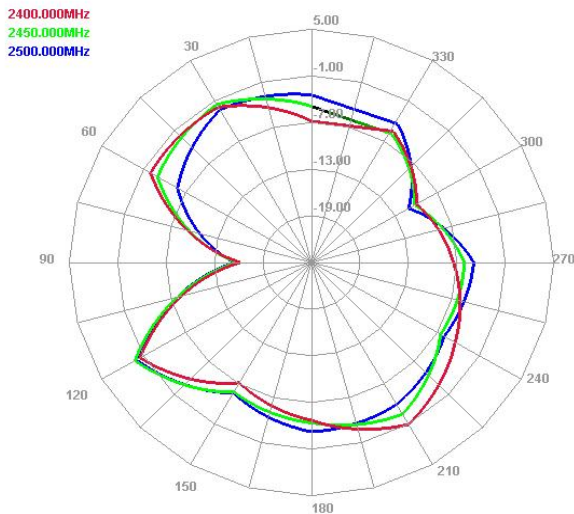
无源方向图/Passive directional graph

WiFi 2.4G

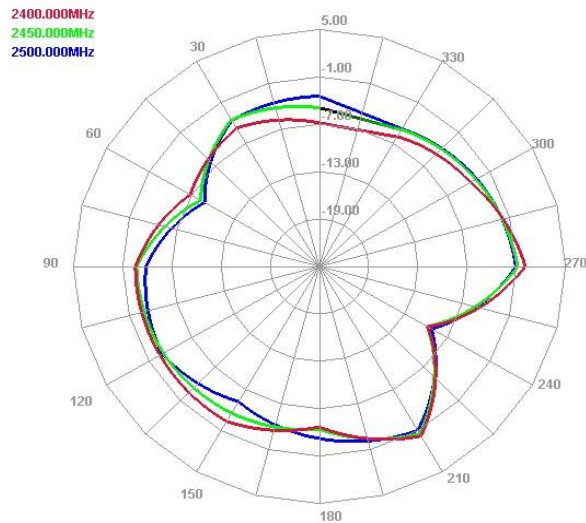
Horizontal



E1 Face



E2 Face

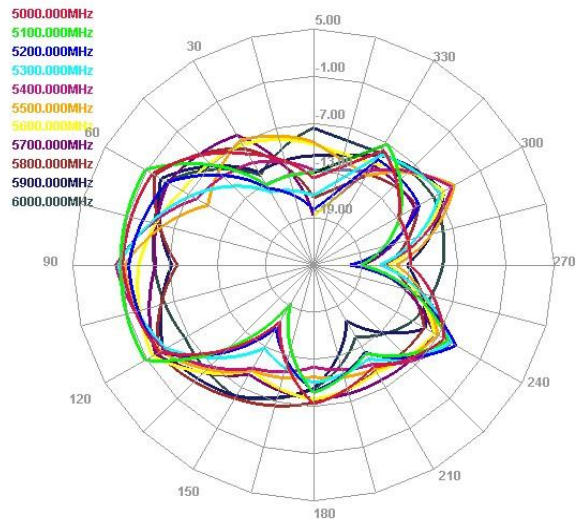


PART 7

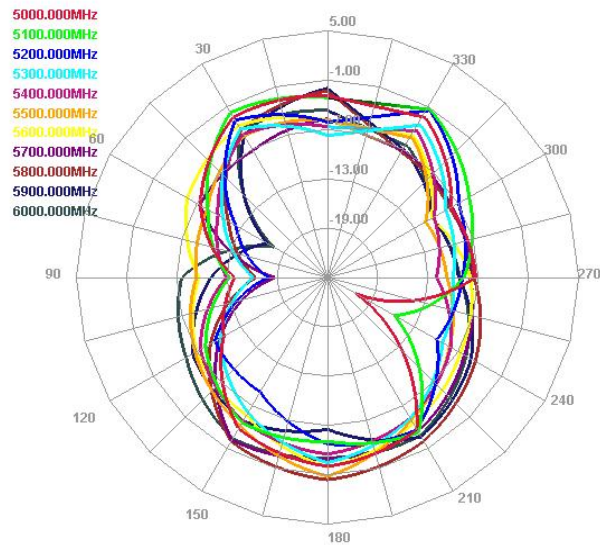
无源方向图/Passive directional graph

WiFi 5G

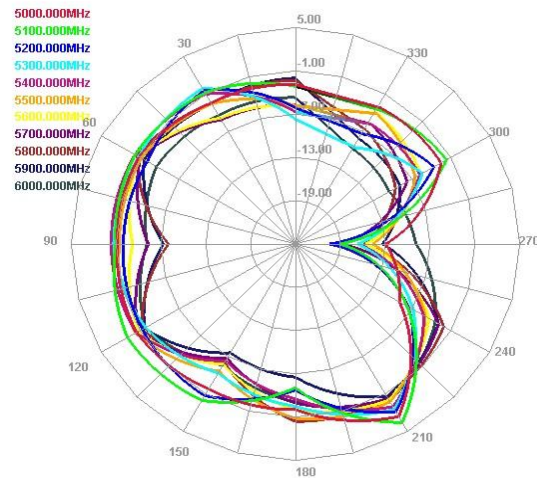
Horizontal



E1 Face

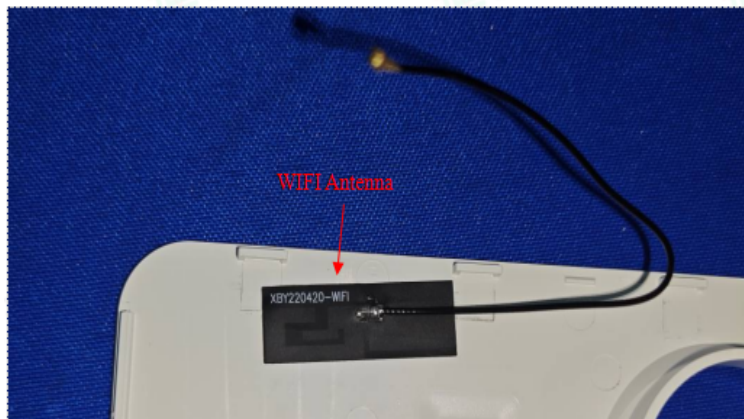
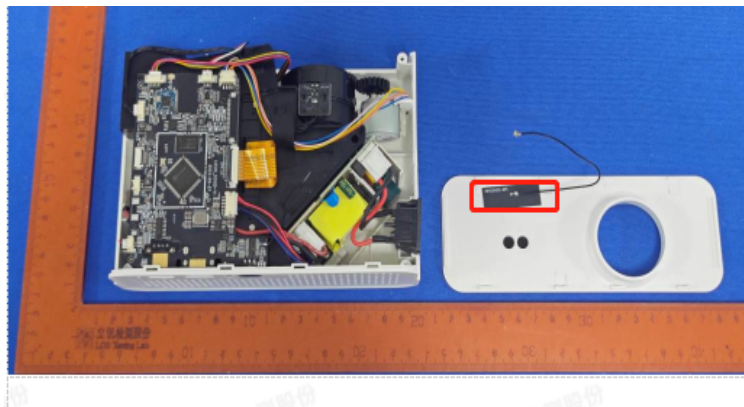


E2 Face



PART 8

Dimension figure





2023

Thanks!

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