



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：路知音

02 项目名称/Project: CP82

03 立项编号/Project NO:

04 工程师/Engineer: 杨小文
电话/Phone: 15820795642

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
2023-04-25			天线无源测试数据 Passive antenna test data

PART 2

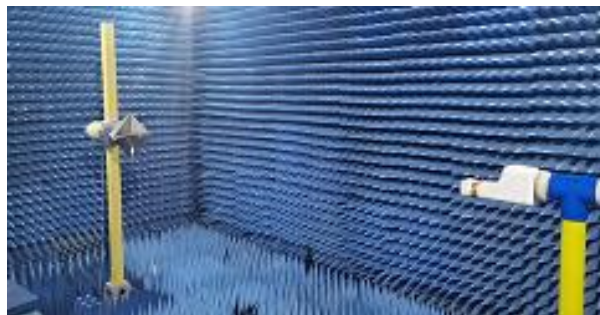
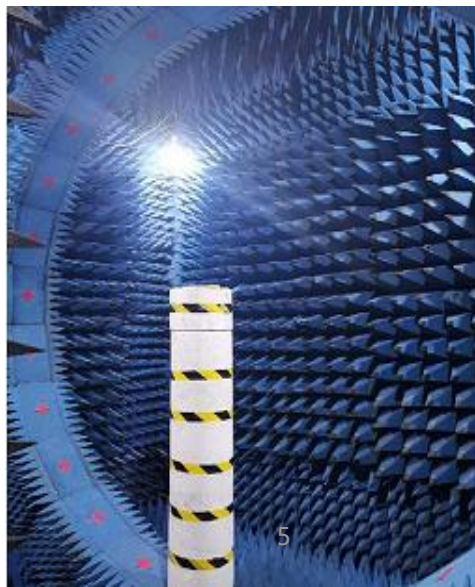
项目信息/Project brief

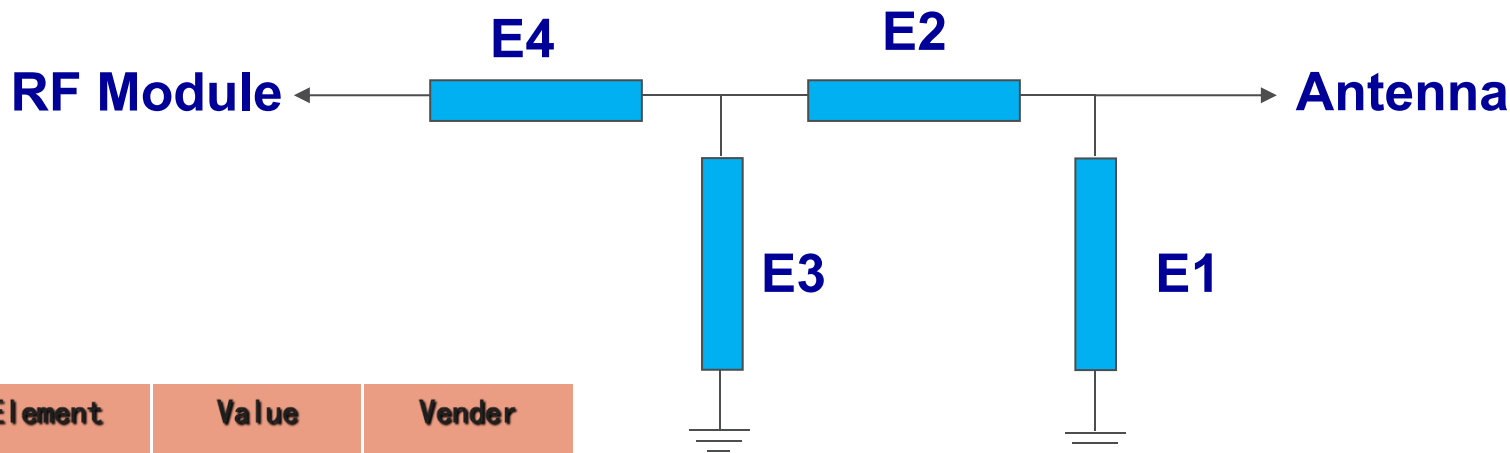
NO	ITEMS	DETAILS
1	工作频段 Operating band	WIFI:5G BT:2.4G
2	频率范围 Frequency band	2400-2480Mhz ;5150-5250Mhz
3	天线类型 Antenna type	monopole
4	天线材质及实现形状 Material and implementation shape	板载天线 On-board antenna

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 Ohm	
E3 (0402)	NA	
E4 (0402)	0 Ohm	

Original match unchanged.

BT 无源测试效率和增益
BT Passive test efficiency and gain

Freq (MHz)	Effi (%)	Gain (dBi)
2400	31.01	-1.86
2440	37.96	-0.61
2480	36.31	-1.14

WiFi 无源测试效率和增益
WiFi Passive test efficiency and gain

Freq (MHz)	Effi (%)	Gain (dBi)
5150	36.75	-1.05
5200	28.7	-2.63
5250	31.79	-1.61

PART 6

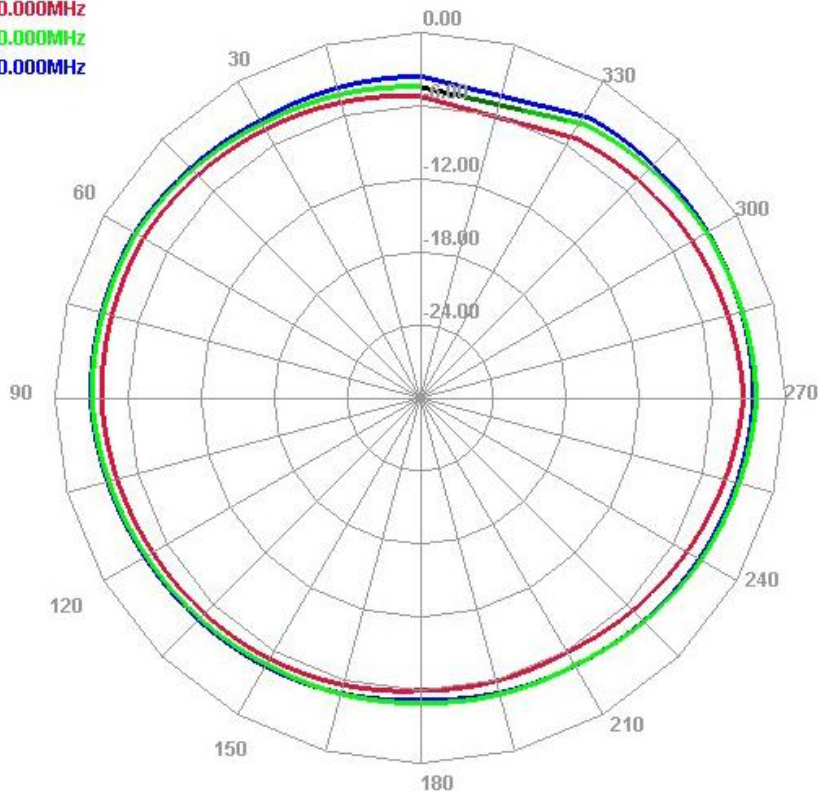
无源方向图/Passive directional graph

BT天线辐射方向图H面

The radiation pattern H-plane of BT antenna

Horizontal

2400.000MHz
2440.000MHz
2480.000MHz



PART 6

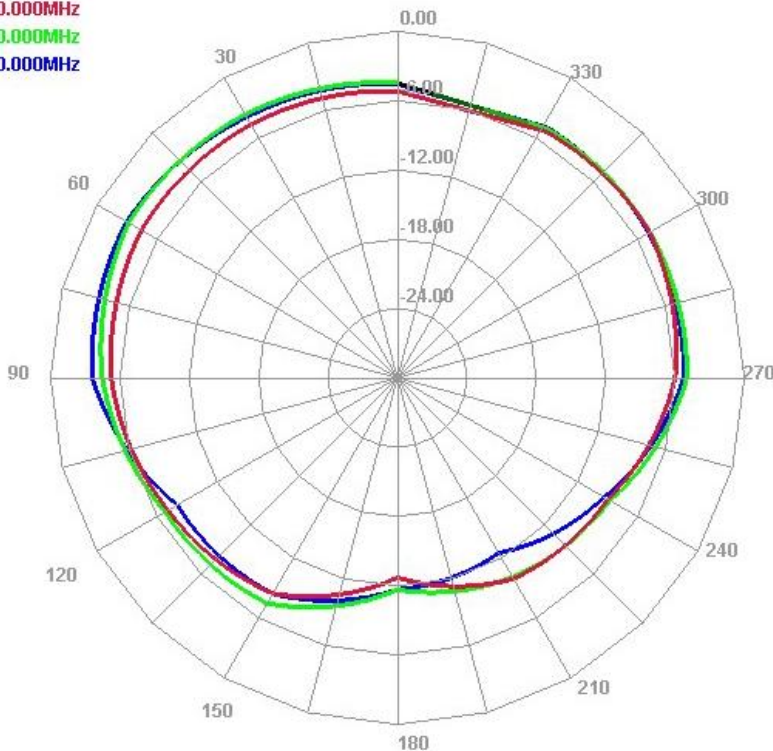
无源方向图/Passive directional graph

BT天线辐射方向图E1面

The radiation pattern E 1 of
BT antenna

E1 Face

2400.000MHz
2440.000MHz
2480.000MHz



PART 6

无源方向图/Passive directional graph

BT天线辐射方向图E2面

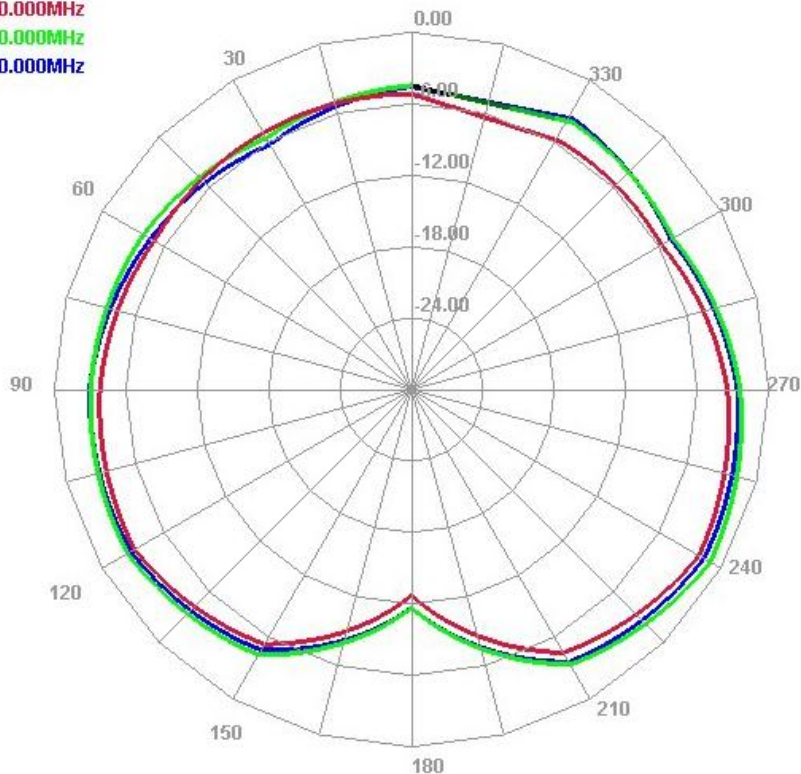
The radiation pattern E 2 of
BT antenna

E2 Face

2400.000MHz

2440.000MHz

2480.000MHz



PART 6

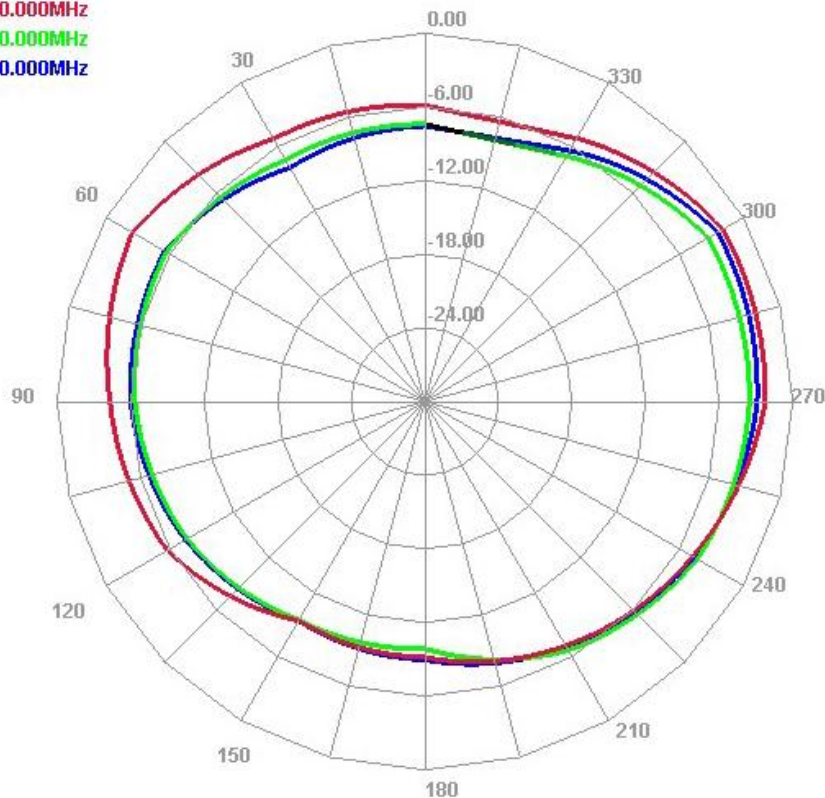
无源方向图/Passive directional graph

WiFi天线辐射方向图H面

H-plane of radiation pattern
of WiFi antenna

Horizontal

5150.000MHz
5200.000MHz
5250.000MHz



PART 6

无源方向图/Passive directional graph

WiFi 天线辐射方向图E1面

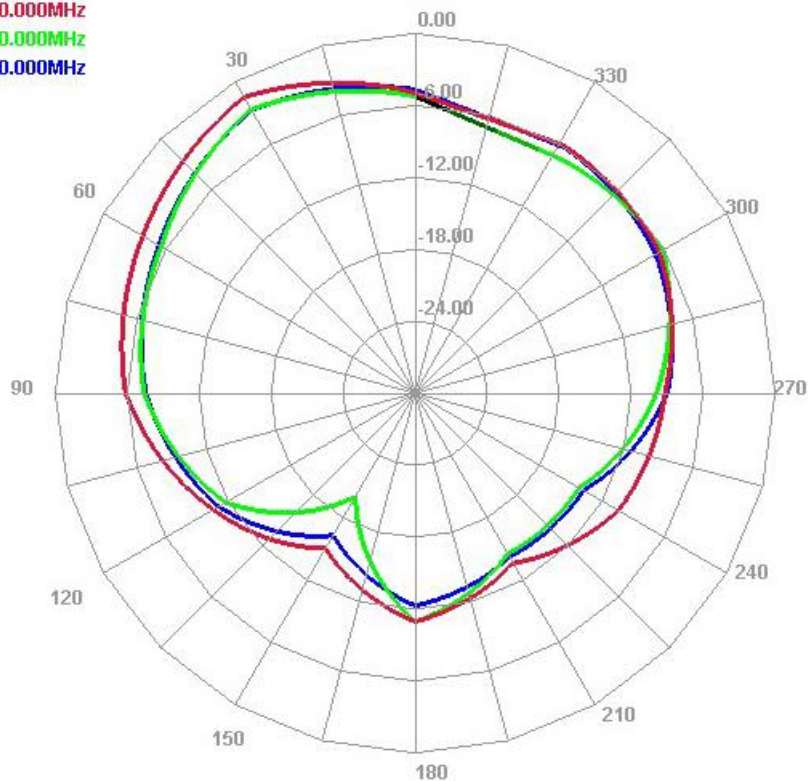
WiFi antenna radiation
pattern e 1 side

E1 Face

5150.000MHz

5200.000MHz

5250.000MHz



PART 6

无源方向图/Passive directional graph

WiFi 天线辐射方向图E2面

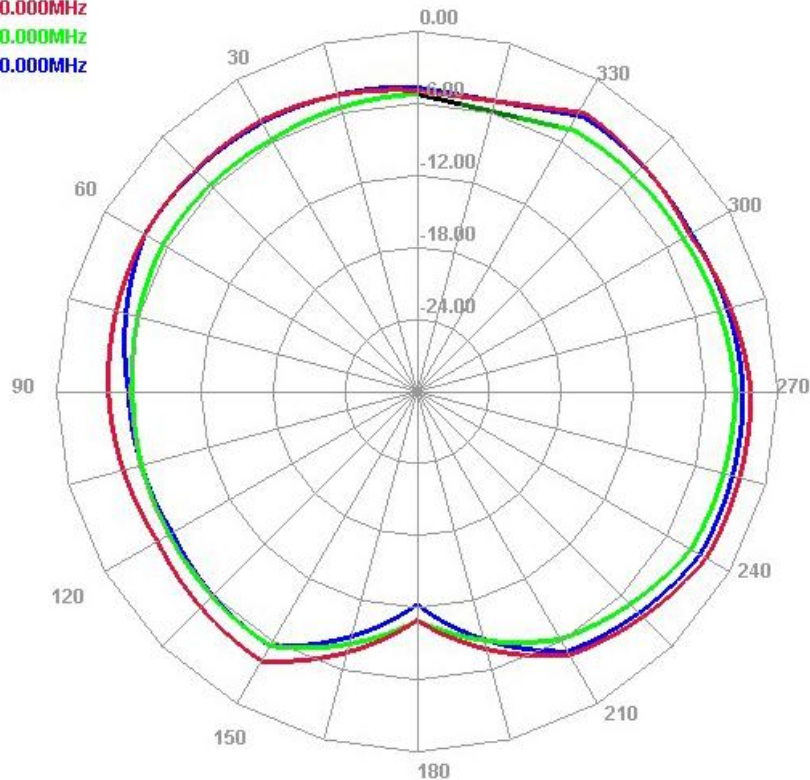
WiFi antenna radiation
pattern e 2 side

E2 Face

5150.000MHz

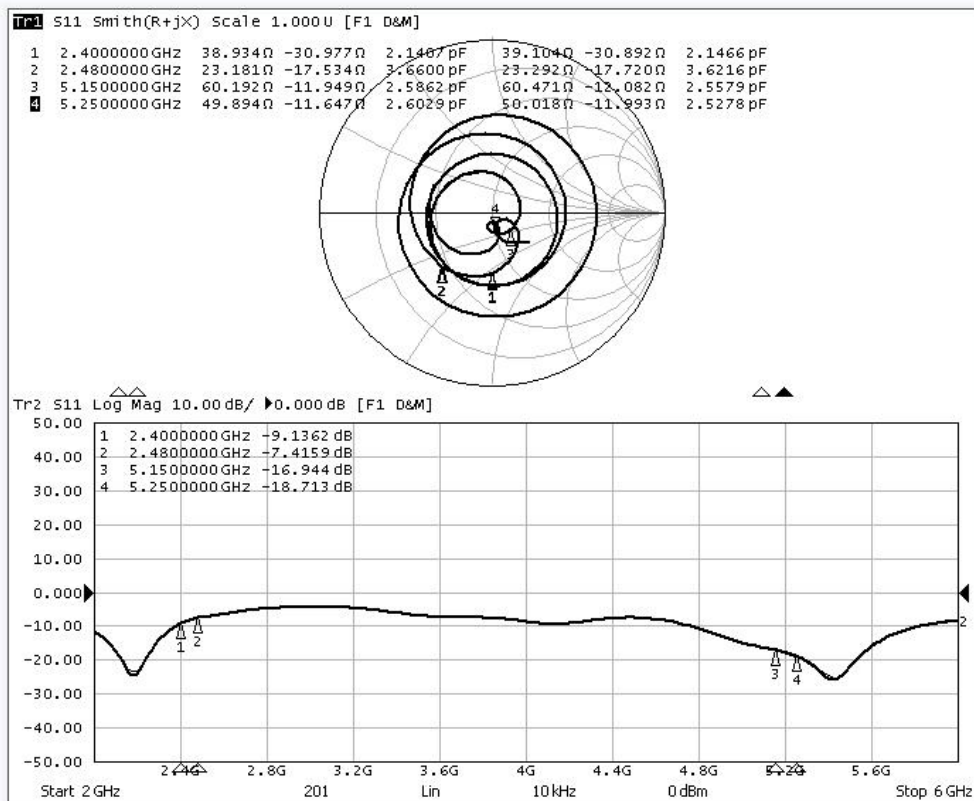
5200.000MHz

5250.000MHz



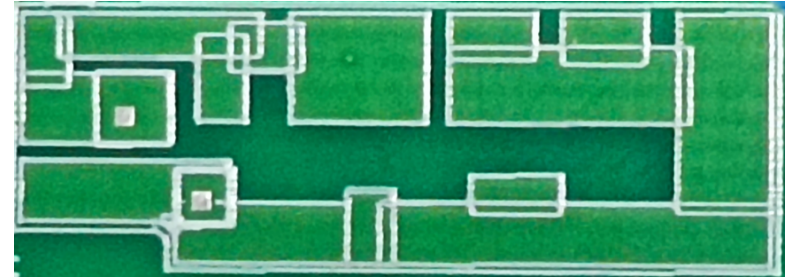
PART 7

无源驻波图/Passive Standing Wave Diagram



PART 8

wifi/BT-ANT Picture of complete machine





2023

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