

Shenzhen Xiangboyi Technology Co. Ltd

Antenna Specification

Customer	SHENZHEN FCAR TECHNOLOGY CO., LTD
Project	HD8000
Project NO	XBY230197



Customer confirmation			
Engineer	PM	Quality	Approval

Supplier confirmation			
ME	RF	Examine	Approval

Catalogue

一. 测试系统及设备 Test System and Equipment	- 4 -
二. 产品细节描述 Product Description	- 5 -
三. 设备描述 Device Description	- 6 -
四. 匹配电路 Matching Circuits	- 7 -
五. 无源测试数据 Passive test data	- 8 -
六. 有源测试数据 Active Test Data	- 10 -

Shenzhen Xiangboyi Technology Co. Ltd

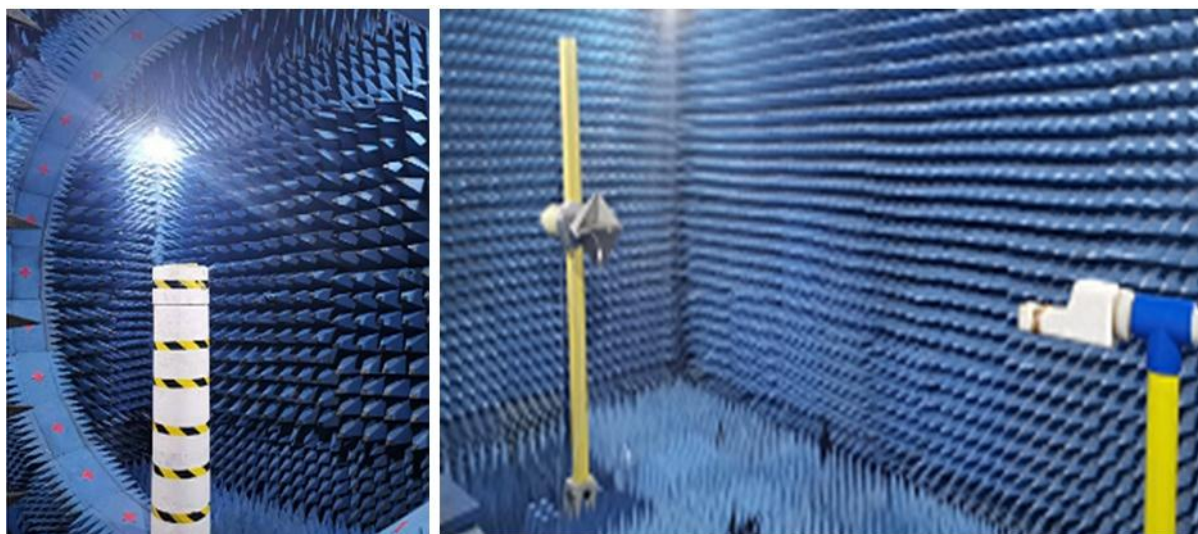
Tel: (+86)0755-29369912 Fax: (+86)0755-61624200

R & D Center: 101, floor 1, Wencheng building, Yousong Cultural Innovation Park, No. 95, Yousong Road, Longhua District, Shenzhen.

Production Base: 5 / F, building B, Huazhi chuangu, No. 7, Yuhua street, 138 Industrial Zone, Tangxia Town, Dongguan City.

一. 测试系统及设备 Test System and Equipment

	测试项目	设备
1 : S 参数	1. 回波损耗 2. 驻波比	网络分析仪: A338/A333 HP8753D
2 : 有源测试	1. TRP 2. TIS	综合测试仪: Agilent 8960/ CMW500
3 : 无源测试		1. 暗室: 5x3x3 m (ETS-3D) 2. 网络分析仪: HP 8753D



深圳祥博一科技有限公司

电话: 0755-29369912 传真: 0755-61624200

研发中心: 深圳市龙华区油松路 95 号油松文创园文成楼一楼 101

生产基地: 东莞市塘厦镇 138 工业区裕华街 7 号华智创谷 B 栋 5 楼

二. 产品细节描述 Product Description

技术要求 Technical requirements	技术指标 Technical index	备注
工作频段 Band	WIFI: B/G/N/A 模	
频率范围 Range Of Frequency	WIFI: 2400-2500Mhz 5000-5800Mhz	
驻波比 VSWR	2400-2500Mhz < 3.0	中心频率 Center Frequency
输出阻抗 Impedance	50 Ω	
极化方式 Polarization	线极化 Linear polarization	
工作温度 operating temperature	-20℃ / +55℃	
存储温度 storage temperature	-25℃ / +65℃	
盐雾 Salt Fog	24 小时 (24 小时干湿交替) 24h (24h alternating wet & dry)	
无铅认证 RoHS Compliant	是 yes	

深圳祥博一科技有限公司

电话: 0755-29369912 传真: 0755-61624200

研发中心: 深圳市龙华区油松路 95 号油松文创园文成楼一楼 101

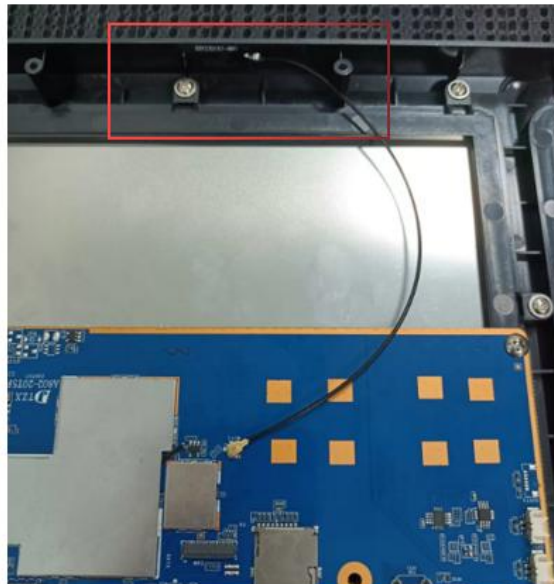
生产基地: 东莞市塘厦镇 138 工业区裕华街 7 号华智创谷 B 栋 5 楼

三. 设备描述 Device Description

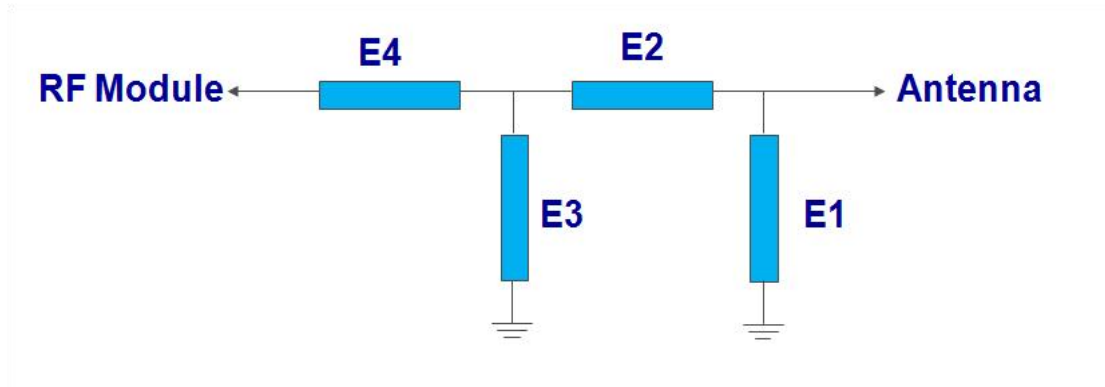
整机照片



天线照片及安装位置



四. Matching Circuits



匹配电路

Element	Value	Vender
E1(0201)	NA	
E2(0201)	0Ω	
E3(0201)	NA	
E4(0201)	0Ω	

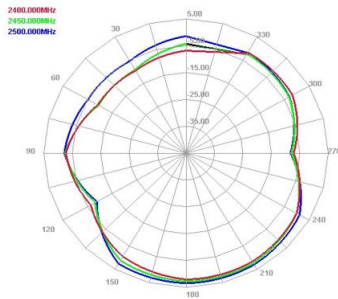
天线匹配没有做改动。

五. Passive test data

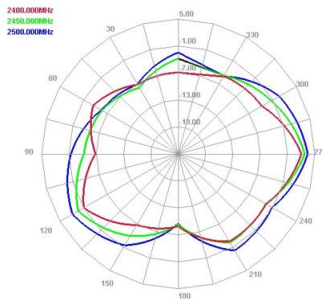
Freq (MHz)	Effi (%)	Gain (dBi)
2400	42.51	2.09
2450	47.31	1.69
2500	47.41	2.63

Freq (MHz)	Effi (%)	Gain (dBd)
5000	38.28	2.64
5100	39.75	2.97
5200	40.67	2.99
5300	38.33	0.91
5400	39.56	1.63
5500	41.55	2.89
5600	42.04	3.3
5700	40.67	1.34
5800	41.51	2.47
5900	42.31	1.63
6000	42.41	0.05

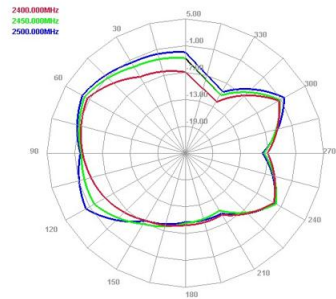
Horizontal



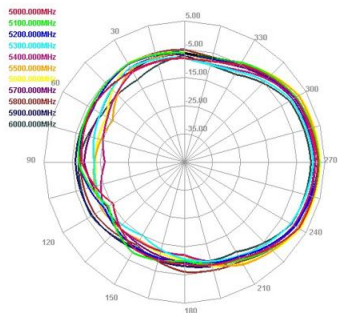
E1 Face



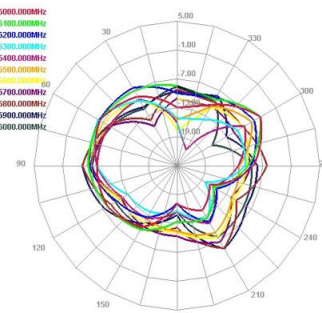
E2 Face



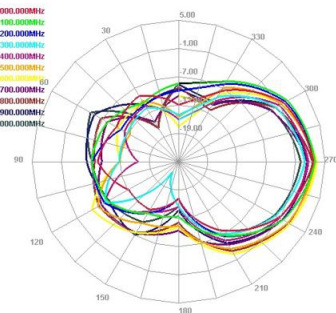
Horizontal



E1 Face



E2 Face



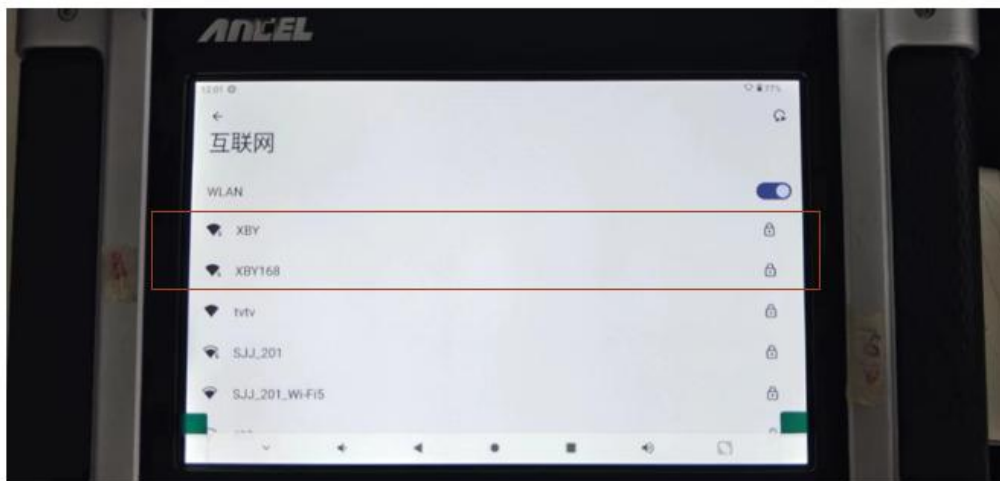
六. Active Test Data

WIFI BAND	802.11b : 11Mbps (2.4G)			802.11g : 54Mbps (2.4G)		
Channel	CH1	CH6	CH11	CH1	CH6	CH11
TRP	12.82	13.52	13.36	12.47	12.81	13.63
TIS			-80.56			-68.52

WIFI BAND	802.11n : MCS7 (2.4G)					
Channel	CH1	CH6	CH11			
TRP	12.26	12.52	13.08			
TIS			-69.30			

WIFI BAND	802.11a : 54Mbps (5G)					
Channel	CH36	CH149	CH161			
TRP	12.86	12.75	12.41			
TIS			-70.16			

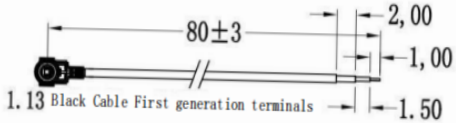
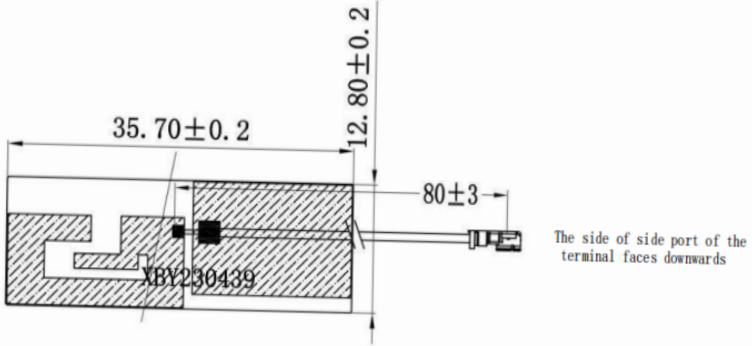
测试地点: 祥博一
 测试距离: 距路由器约14米
 WiFi信号: WiFi2.4G-XBY信号满格
 WiFi5.8G-XBY168信号满格



深圳祥博一科技有限公司

电话: 0755-29369912 传真: 0755-61624200
 研发中心: 深圳市龙华区油松路95号油松文创园文成楼一楼101
 生产基地: 东莞市塘厦镇138工业区裕华街7号华智创谷B栋5楼

Version	Changes	Date	Changed by	Confirmation



Process Requirements

1. Material: Single-sided electro-deposited copper (1/H)
2. Backing Adhesive:
3. Ink: Halogen-free ink, matte black
4. Character: Matte white character
5. Feeding point: Antioxidant
6. No surface defects such as squash, scratches, oil stain, spots, etc

Packaging requirements: After welding, it needs to be disassembled and packed into a sealing bag of 100 pieces. The sealing bag must have a label indicating the project approval number, date, quantity, and other information

Measuring tools: Calipers

Serial number	Name	Colour	Specification	Quantity
2	RF wire	Black	1.13	1
1	FPC	Black		1

LENGTH	A	B	C
L<=10	±0.05	±0.10	±0.15
10<L<=50	±0.10	±0.15	±0.20
50<L<=150	±0.15	±0.20	±0.30
L>150	±0.20	±0.25	±0.40
Angle Tolerance	±1°	Tolerance Grade	B

Shenzhen Xiangbo Yi Technology Co., Ltd.			
Material Code		Project	庄永根
XBY Material Code	XRY230439	Approved	
Version	1A	Date	2023.11.04
Unit	MM	Third View	

Material Code