



Antenna Sample Confirmation From

Shenzhen kenhaitong antenna technology co, ltd

Antenna Sample Confirmation From

供应商名称 Vendor Name	Shenzhen kenhaitong antenna technology co, ltd				
客户名称 Customer Name	Wells Electronic Technology Ltd.				
样品名称 Sample Name	WIFI ANT				
产品型号 Part Number	TVBOX-X3-WIFI ANT				
样品规格 Specification	50.8*29.69mm、B-PC、80mm				
检验项目 Inspection Item	性能测试 Performance	外观检查 Total Appearance	结构 structure	其它 Others	检验结果 Inspection Result
	OK	OK		OK	OK
备注 Remark					
品质审核 QA Audit		工程审核 Engineer Audit		业务确认 Sales Confirm	黄金灵
以下由客户填写 The following are filled by Customer					
客户意见 Customer Evaluation					
客户签字/盖章 Signation/ Chapter by Customer	日期/date:				



Antenna Test Report

Test by: Shenzhen kenhaitong antenna technology co, ltd

材料 Material	FPC		
天线类型 Antenna Type	MonopoleType	极化方式 Polarization mode	Linear
应用场景 Application			
工作频段 Band	2.4G MAIN/AUX	VSWR	≤2.0
工作频段 Band	5.8G MAIN/AUX	VSWR	≤2.0
功率 Power	Max: 50W	阻抗 Impedance	50Ω
增益 dBi	2.4GHz- Main ANT:3.99dBi; AUX ANT: 2.9dBi 5.8GHz- Main ANT:4.63dBi; AUX ANT: 4.67dBi		
测试设备 Test Equipment	HPE5071C、Shielding Room、3D automatic turntable		

Antenna Description::

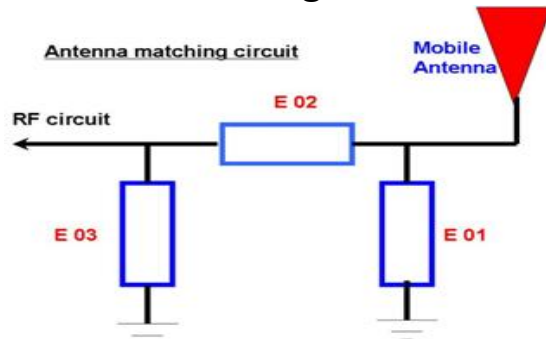
1. Grounding processing and picture description: no

2. Need to change the motherboard to match: no

- Test voltage: 3.6V, check the antenna contact is good before testing.
- The RF cable of the integrated tester is kept in a natural state and can not be curled.

Specification: test the specified power level, all indicators must conform to the specifications.

1、Antenna Matching Circuit



Modify

E01	E02	E03
No	No	No

2、Dark room test equipment and data

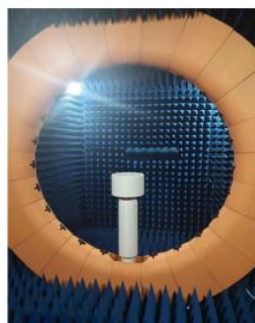
2.0 test equipment

Test system: shielding darkroom

Testing environment: temperature $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$, humidity 50% $\pm$ 15%

Testing equipment: When testing passive data, use network analyzer AgilentE5071C.

When testing active data, use the comprehensive tester CMW500.

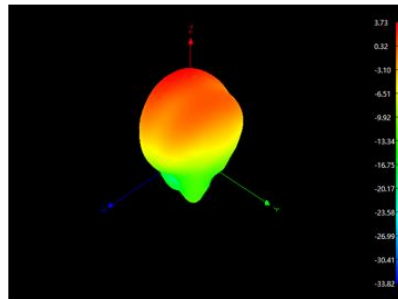
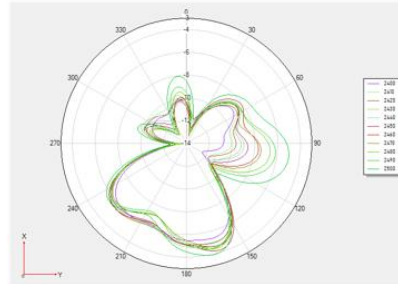


2.1 test date

MAIN天线 2.4G



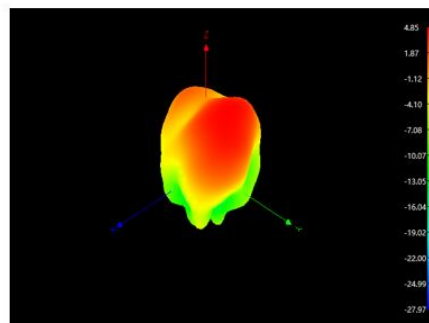
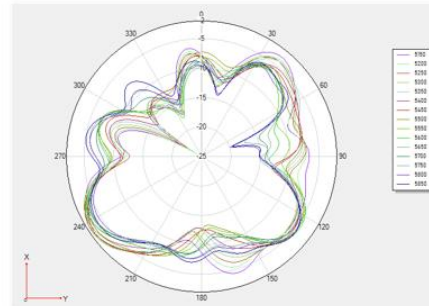
Frequency / MHz	Efficiency / %	Gain/ dB
2400	42.9	3.73
2410	42.69	3.04
2420	42.56	3.99
2430	42.95	3.1
2440	41.3	3.8
2450	44.78	3.8
2460	43.4	3.81
2470	42.55	3.41
2480	42.64	3.28
2490	41.28	3.28
2500	40.64	3.75



MAIN天线 5.8G

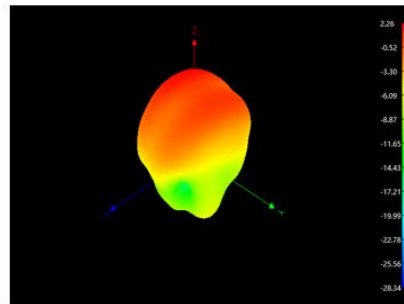
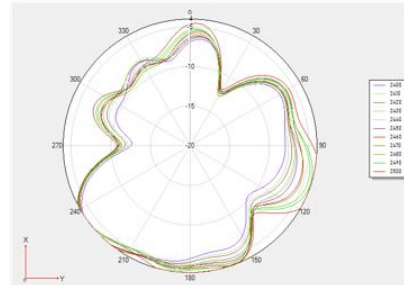


Frequency / MHz	Efficiency / %	Gain/ dB
5150	53.21	4.85
5200	49.43	4.58
5250	49.09	4.62
5300	49.2	4.41
5350	47.64	4.14
5400	52.24	4.74
5450	53.46	3.9
5500	54.08	4.33
5550	46.24	4.43
5600	47.21	4.84
5650	41.88	4.04
5700	42.46	4.09
5750	50.12	4.63
5800	46.67	4.34
5850	48.64	4.61



AUX天线 2.4G

Frequency / MHz	Efficiency / %	Gain/ dB
2400	40.18	2.26
2410	41.5	2.59
2420	43.75	2.68
2430	44.67	2.9
2440	43.85	2.69
2450	44.98	2.7
2460	45.29	2.76
2470	43.15	2.45
2480	42.46	2.53
2490	44.16	2.5
2500	44.36	2.75



AUX天线 5.8G

Frequency / MHz	Efficiency / %	Gain/ dB
5150	43.45	3.93
5200	44.57	4.18
5250	43.75	4.12
5300	44.16	4.19
5350	45.6	4.64
5400	46.88	4.44
5450	46.88	4.21
5500	51.17	4.85
5550	49.66	4.09
5600	51.17	4.43
5650	50.7	4.42
5700	51.64	4.67
5750	47.32	4.39
5800	49.09	4.6
5850	46.77	4.43

