

Bluetooth / WIFI Antenna Test Report



Customer	明弘
Project	YD118
Antenna Revision	A0
Product Description	FPC+ CABLE
Product No	

Prepared by : tongbin xu
18620300278

Checked by : Grant_Dou

2016.11.17

www.surbaner.com.cn

Purpose

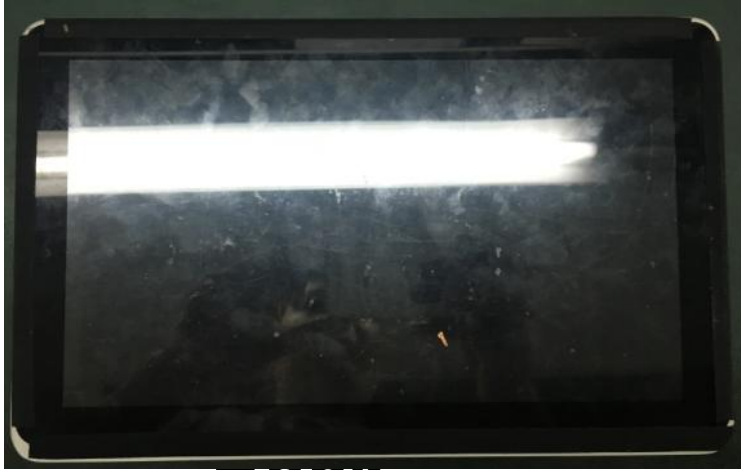
This report is to measure the performance of *Surbaner* FPC Bluetooth / WIFI antenna for 明弘-YD118.
All test data are shown as below.

Content

- 1: Product Overview & Dimension
- 2: Test Result
 - 2.1 Test System
 - 2.2 Antenna Matching Network
 - 2.3 VSWR
 - 2.4 Gain & Efficiency
 - 2.5 3D Data
 - 2.6 OTA Active Test Value
- 3 : Conclusion
- 4 : Antenna Assembly Method

1. Product Overview & Dimension

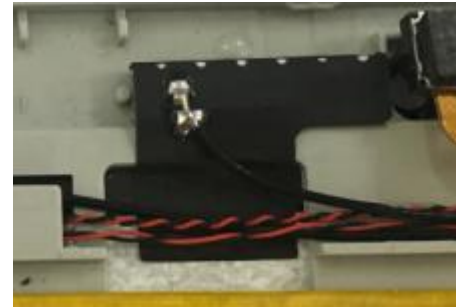
Front



Back

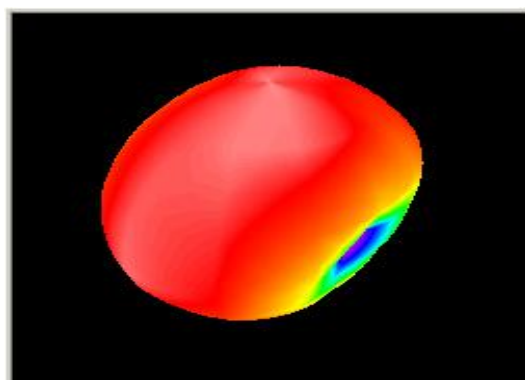
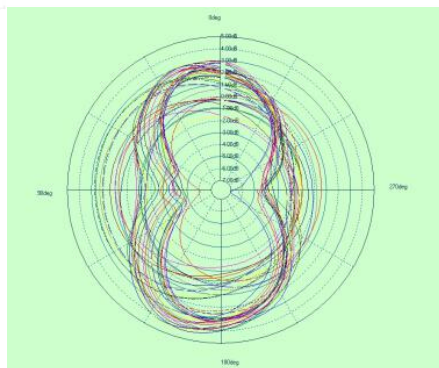
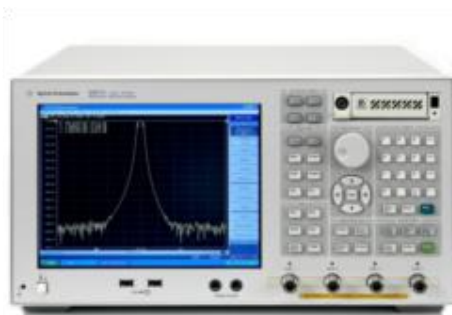


Antenna

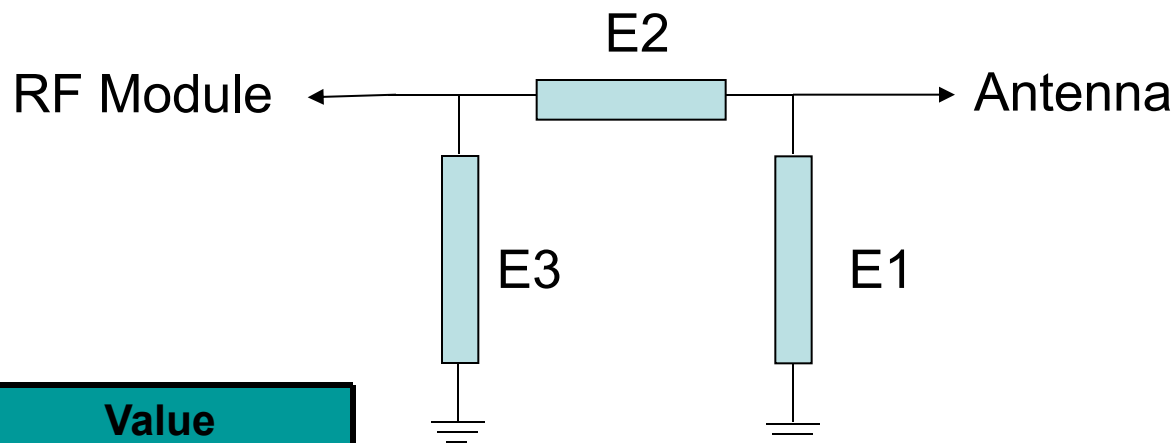


2. Test System

Sequence Number	Test Item	equipment
1. S parameter	VSWR	Agilent 5071C & Agilent 5062A
2. OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW270 ETS&SATIMO
3. Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



2.1 Antenna Matching Network



Element	Value
E1(0402)	NC
E2(0402)	NC
E3(0402)	NC

PCB board end matching circuit is not changed

2. Test Result

2.1 VSWR



Frequency (MHz)	2400	2450	2500	4900	5150	5850
VSWR	2.23	1.25	1.22	1.40	1.19	1.25

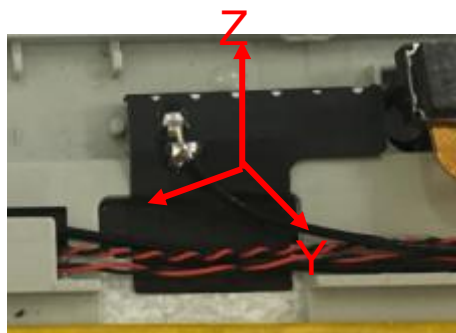
2. Test Result

2.3 *GAIN & Efficiency*

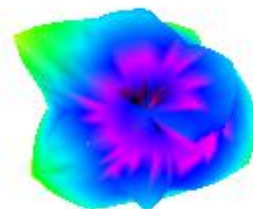
Frequency(MHz)	Efficiency (%)	Average GAIN(dB)	Peak GAIN (dBi)
2400	49.44	-3.06	3.86
2450	49.18	-3.08	2.64
2500	47.9	-2.93	2.36
5800	43.53	-1.97	2.59

2. Test Result

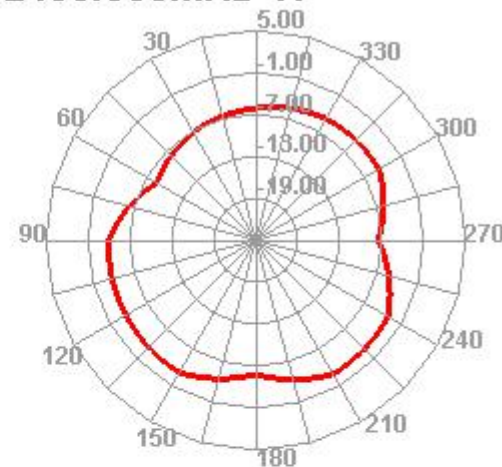
2.4 3D DATA



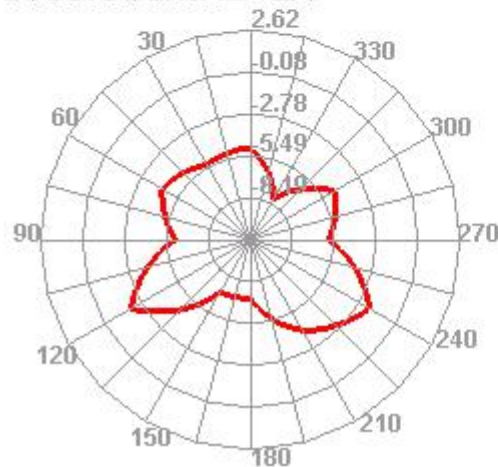
2450.000MHz



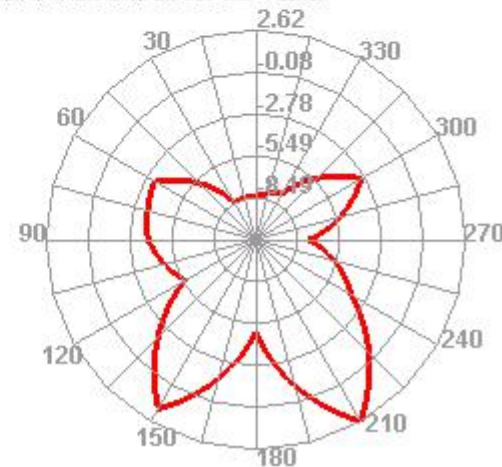
2450.000MHz H



2450.000MHz E1



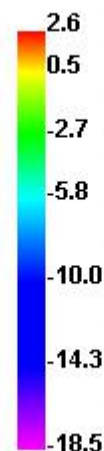
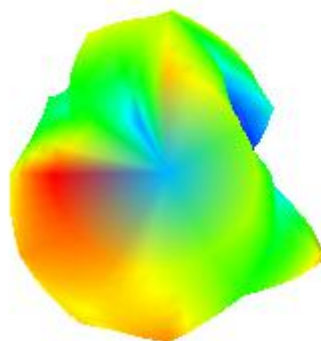
2450.000MHz E2



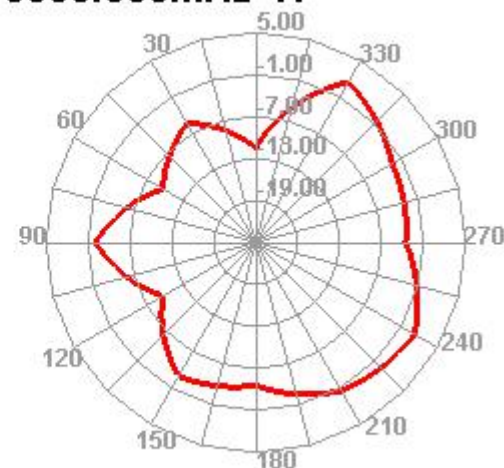
2. Test Result

5G 3D DATA

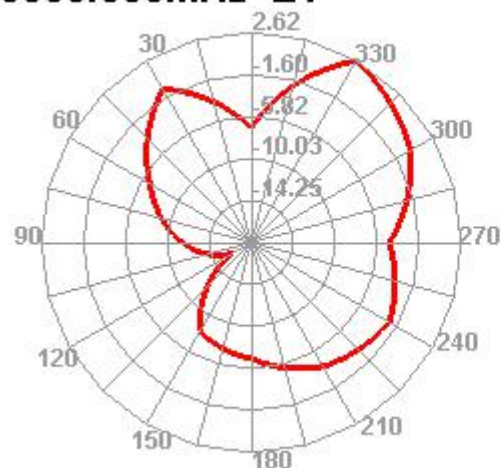
5800.000MHz



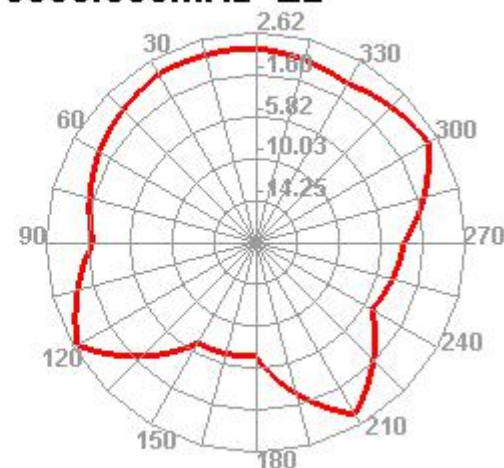
5800.000MHz H



5800.000MHz E1



5800.000MHz E2



2. Test Result

2.5 Boot measured

Test Environment: The effective distance between the AP and the test machine is 15M.



Front



Back

3. Conclusion

According to the passive test data, the passive performance of the antenna is good and the performance is OK in the field measurement.