

核 准	主 辦
洪國倫	蕭智仁

DVT 測試報告

機種: A40

6525A0041300

ANTENNA PLATE 21.7*9.5*7.2mm (A) LFP

日期: 2016/11/18

版次: 1.00

神準科技股份有限公司

Embedded Dual-Band Antenna

Ant_1/2 : 6525A0041300 ANTENNA PLATE 21.7*9.5*7.2mm (A) LFP



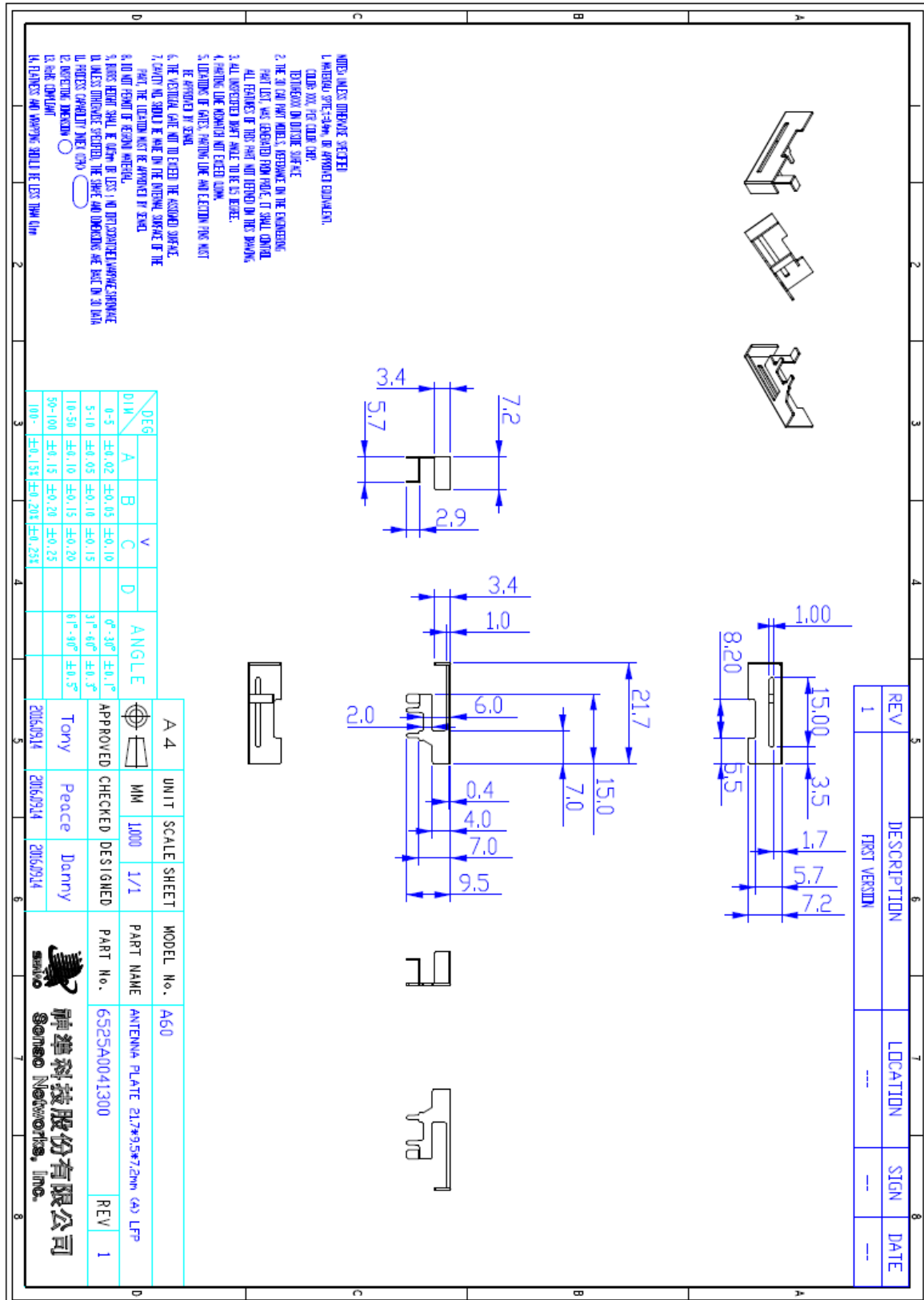
1. Summary :

Antenna No.	1	2
Frequency (MHz)	2400 ~ 2500 / 5150 ~ 5850	
Peak Gain (dBi)	4.6 / 4.7	3.3 / 4.8
Efficiency (%)	77.3 / 74.4	70.1 / 68.3
Return loss(VSWR)	<2	
Isolation (dB)	<-20	
Dimension (mm)	21.7*7.2*7mm	
Cable Color	White	Gray
Cable Length(mm)	67	91

Mechanical Specification:

2-1. Mechanical Configuration:

The appearance of the antenna (6525A0041300) is according to the following drawing.



2. Electrical Specification :

Those specifications were specially defined for **A40** model, and all characteristics were measured under the model's handset testing jig .

3-1. Frequency Band:

Frequency Band	MHz	
WLAN	2400 ~ 2500	5150 ~ 5850

3-2. Impedance

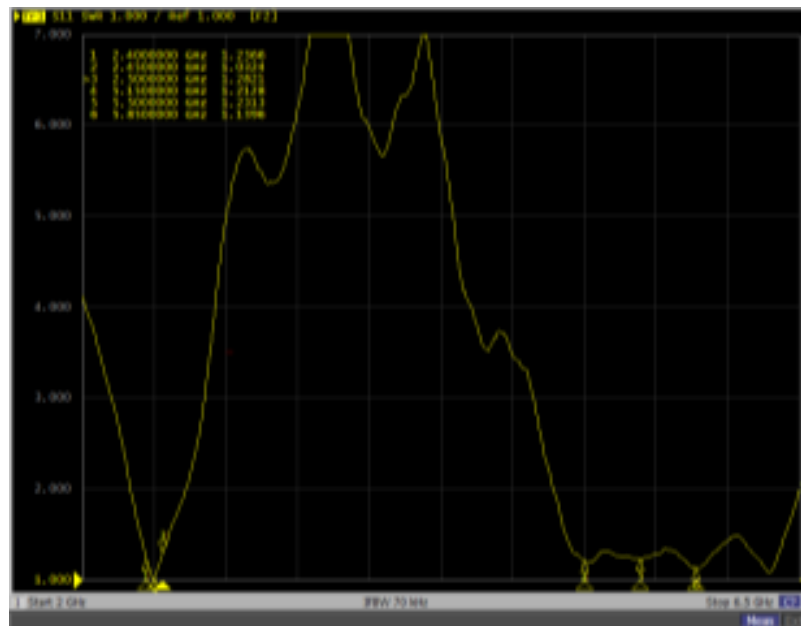
50 ohm nominal

3-3. Matching circuit:

None

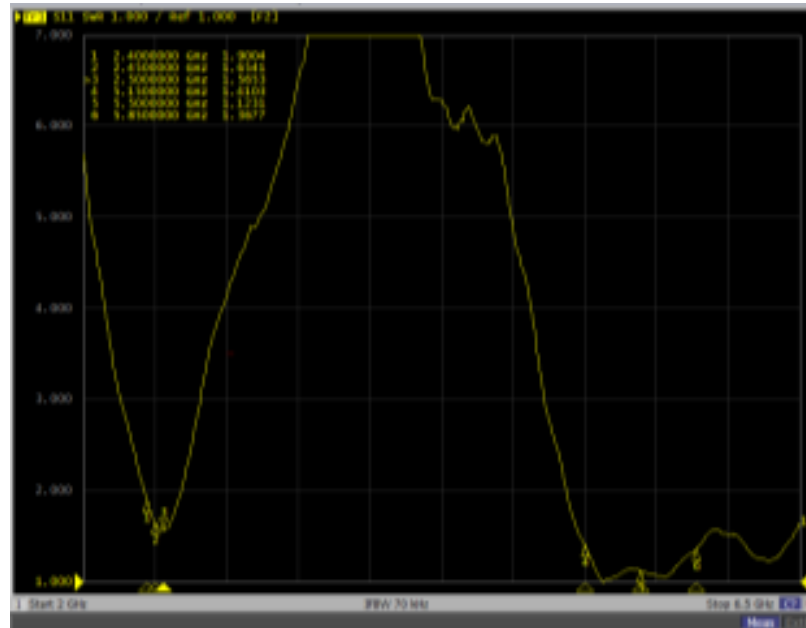
3-4. VSWR & Isolation :

Ant_1:



Frequency (MHz)	2400	2450	2500	5150	5500	5850
VSWR	1.2	1.1	1.2	1.2	1.2	1.1

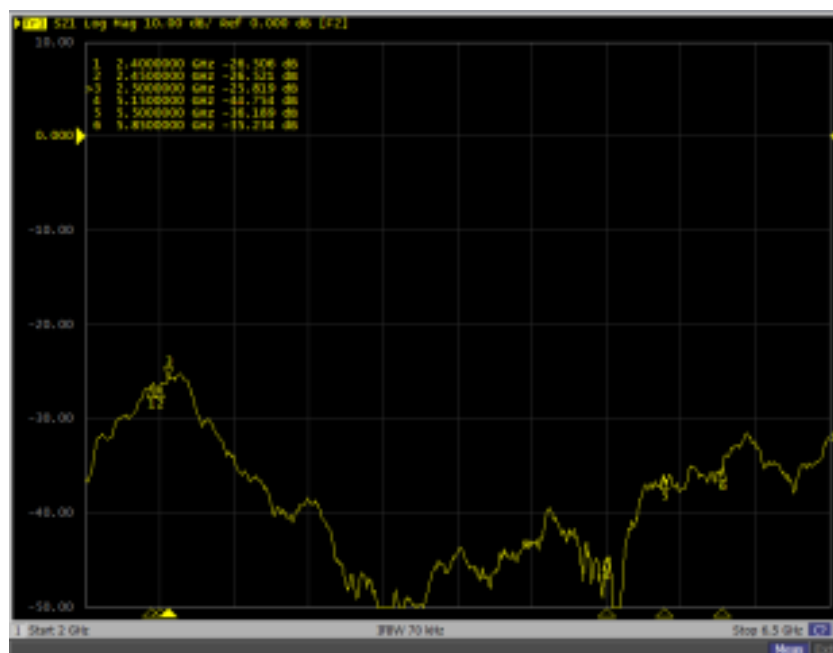
Ant_2:



Frequency (MHz)	2400	2450	2500	5150	5500	5850
VSWR	1.9	1.6	1.5	1.4	1.2	1.3

Isolation :

Ant_1 to Ant_2 :



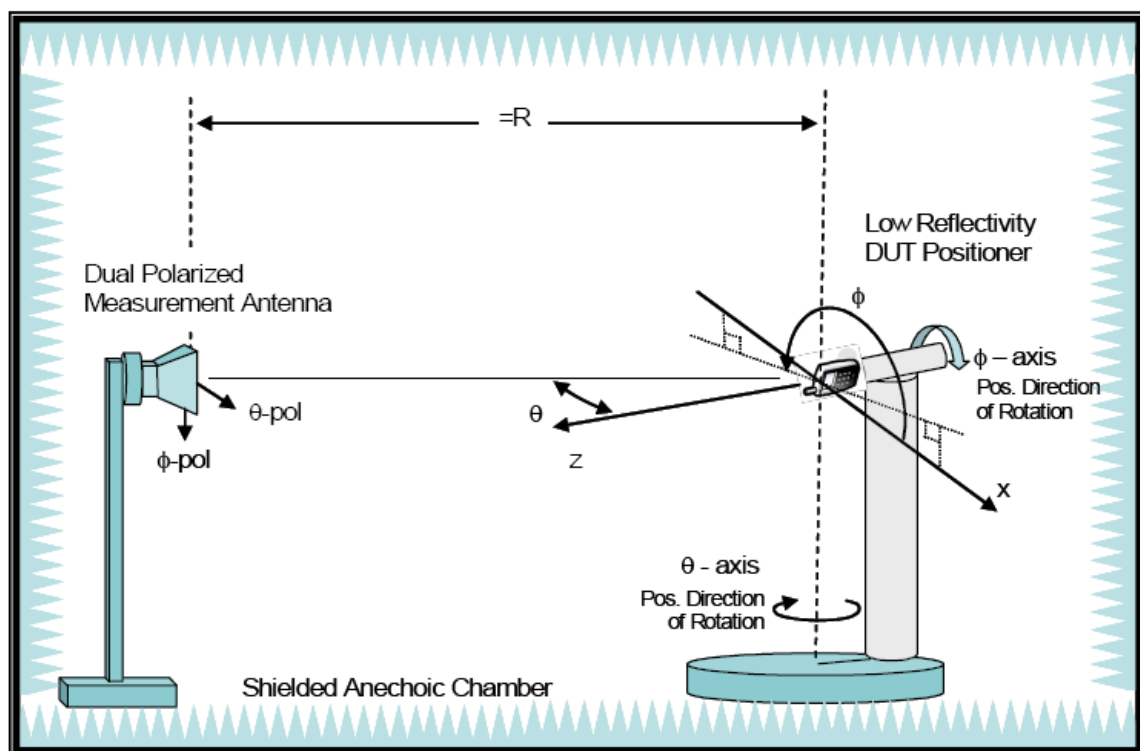
Frequency (MHz)	2400	2450	2500	5150	5500	5850
Ant_1 to Ant_2 (dB)	-29	-29	-31	-37	-40	-40

3-5. Gain and Radiation Pattern

3-5.1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

3-5.2 Chamber definition

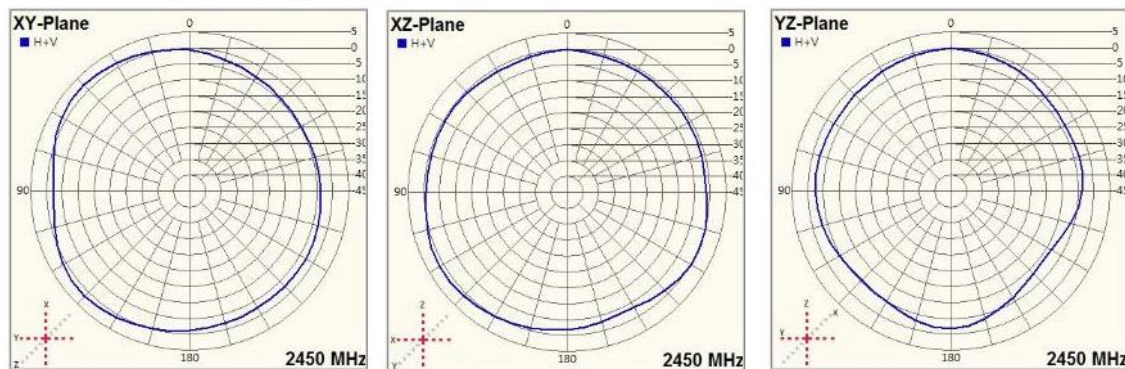
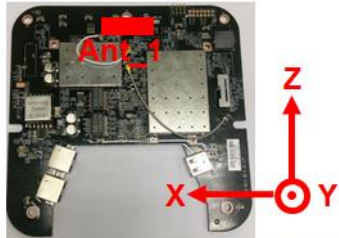


1. An anechoic chamber (8m x4m x4m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quiet zone region is 40cm x40cm x40cm at the center of rotator
3. The distance between DUT and standard antenna is 5 m
4. Standard gain horn antenna (700MHz ~6GHz)

3-5.3 Gain data and radiation pattern

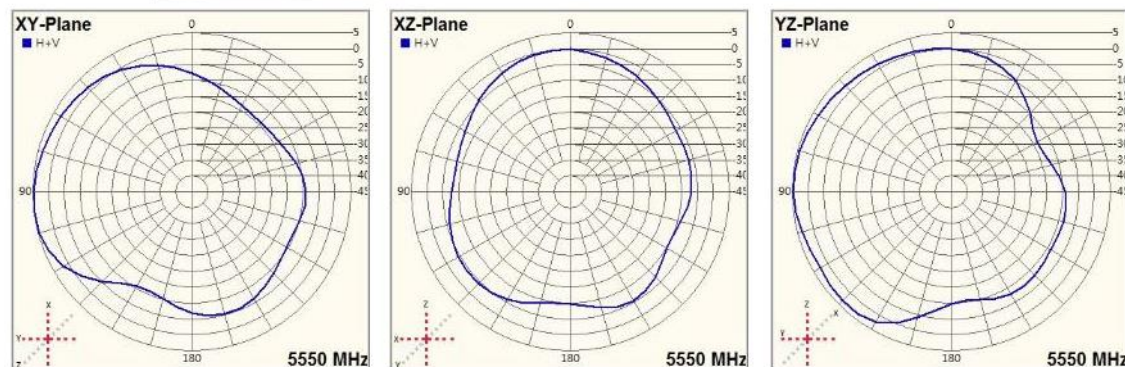
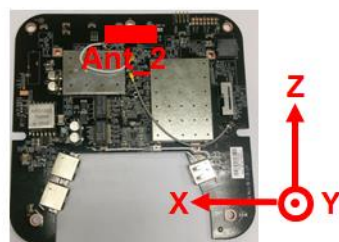
Antenna gain is marked [dBi] and is based on STANDARD HORN antenna.
 The data shows Peak-Gain and Average-Gain.

Ant_1 : 2.4GHz



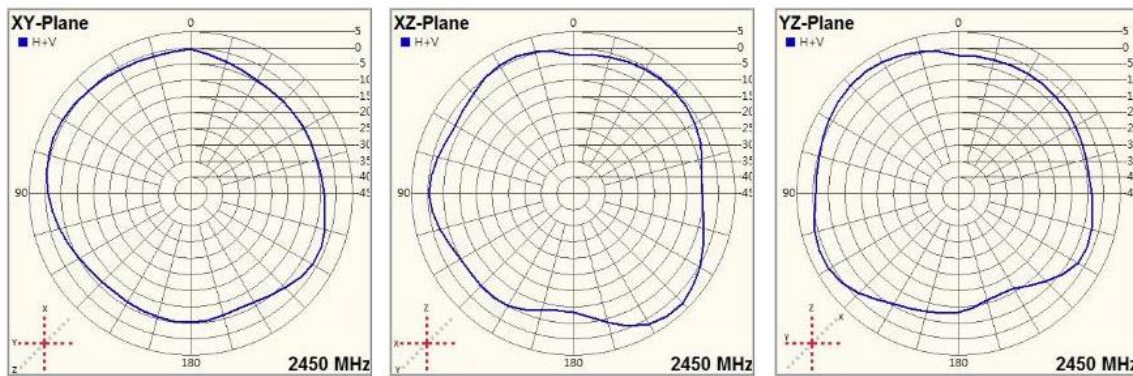
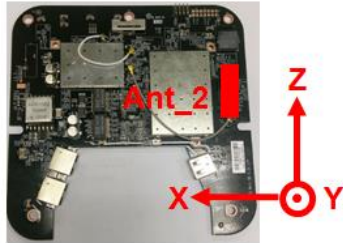
Frequency (MHz)	2400	2450	2500
Peak Gain (dBi)	3.7	4.3	4.6
Efficiency(%)	71.6	77.3	74.0

Ant_1 : 5GHz



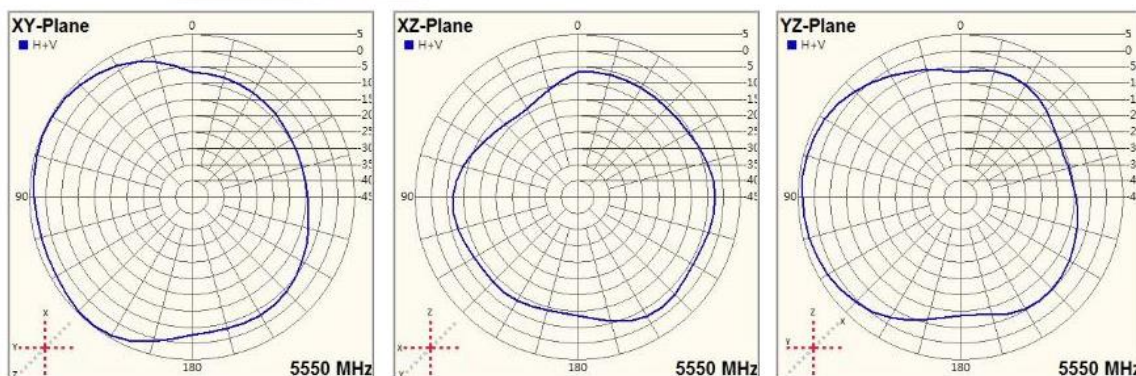
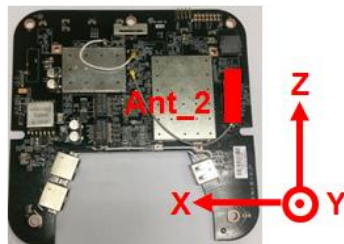
Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Peak Gain (dBi)	3.6	3.1	4.3	3.7	4.7	4.5	4.1	4.3
Efficiency(%)	62.5	57.2	59.1	65.3	69.6	74.4	67.4	67.3

Ant_2 : 2.4GHz



Frequency (MHz)	2400	2450	2500
Peak Gain (dBi)	3.0	3.2	3.3
Efficiency(%)	65.2	70.1	66.6

Ant_2 : 5GHz



Frequency (MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Peak Gain (dBi)	4.2	4.2	4.3	4.8	4.7	4.3	3.5	3.4
Efficiency(%)	59.1	60.2	59.6	68.3	68.3	66.1	57.2	54.8



Change history

Change history			
Date	Subject/Comment	Old	New
2016/11/18	Initial Release	N/A	1.00