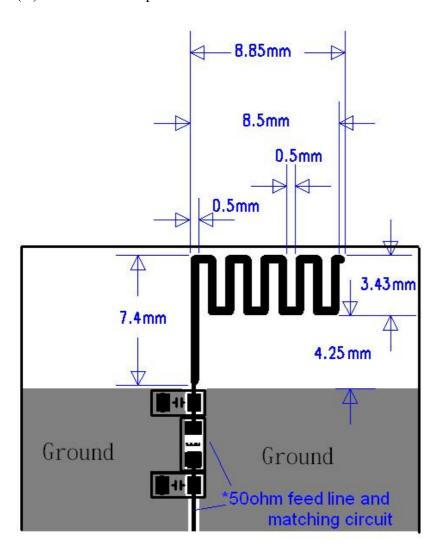
# Printed antenna test report

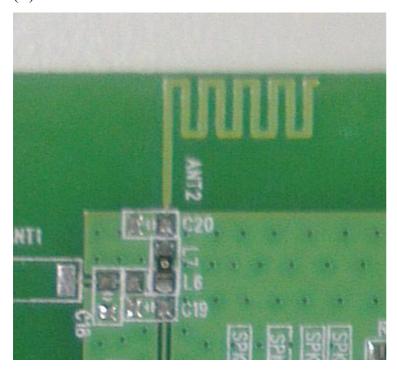
# (A).Printed antenna pattern:



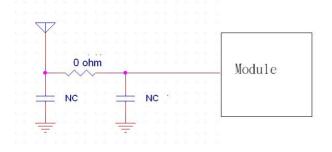
\* 50 ohm feed line should be designed to match  $50\Omega$  characteristic impedance, depending on PCB material and thickness

ITEM	ANT SPEC		
Model Name	2.4G ANT		
MAX. Gain	1.54 dBi		
Manufacturer	Hotel Technologies Inc.		
Address	1-47 Ochiai, Tama-shi, Tokyo, Japan		

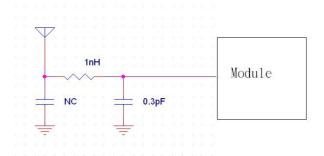
### (B)Test Board:



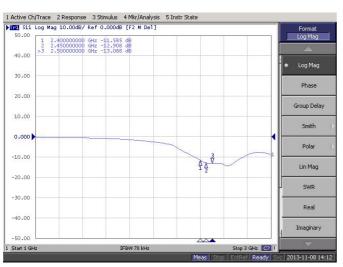
# (B1). Without matching circuit:

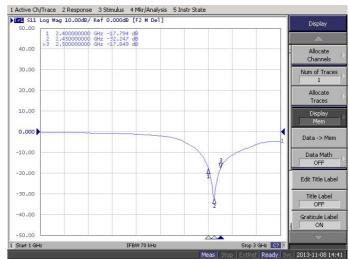


# (B2). With matching circuit:

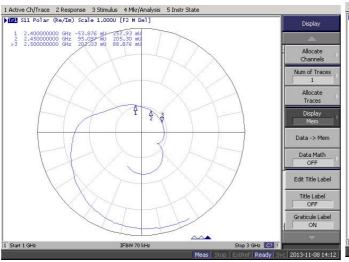


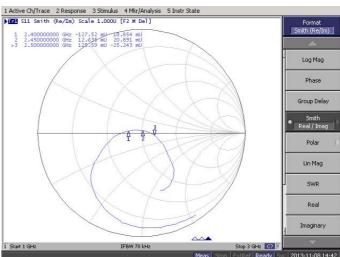
### Return loss



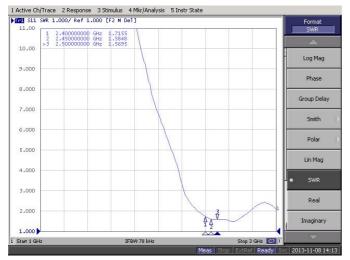


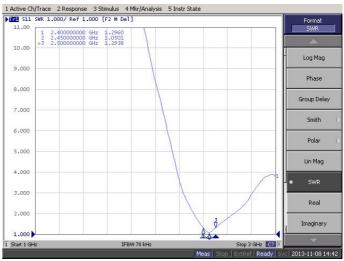
#### Smith chart



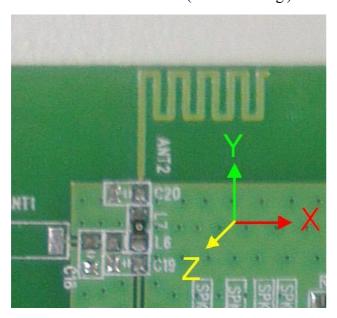


#### **VSWR**





# (C) Radiation Patterns of test board (with matching)



# Gain Table(Unit :dBi):

Peak	Avg. gain	
1.	-	
-	-	
-	-	
1.1	-	
-	-	
-	-	
	1.	



#### 者港南立韓國際商品試验有限公司級國分公司

Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch [Bureau Veritas ADT]

www.aadl.com.lkv Hwa Ya Lab & Head O'Nice, Tel+595-3-3153232 / Unkou BMC/RF Lab, Tel+595-2-25052150 / Hsinchu BMC/RF Lab, Tel+595-3-5905343

Brand / Model : Printed Antenna Remark : TX Mode, EUT X-Y , 2450 MHz Sample No. 01 Tested by : CS(LOOK)

者港南立德國際商品試验有限公司德國分公司

有法則 V-45 目に対象 外域 7 年 とって、 1 大阪 日 7 とって Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch [ Bureau Veritas ADT] wall.com. No. Hwo Ya Lab & Read Office, Tel + 389-3935222 / Unkou BNO/RF Lab, Tel + 389-29352132 / Hsinchu BNO/RF Lab, Tel + 389-3935333

Brand / Model : Printed Antenna Remark : TX Mode, EUT X-Y , 2450 MHz Sample No. 01 Tested by : CS(LOOK)

Location: RF Chamber C Date: 2013/11/27 Time: 下午 03:06:04 Location: RF Chamber C Date: 2013/11/27 Time: 下午 03:07:55 Temperature (℃): 25 Humidity (%): **75** Approved by: Temperature (℃): 25 Humidity (%): **75** Approved by: 90 90 \_ 20 20 10 10 - 0 0 -10 -20 -20 -30 -30 -40 -40 -50 -50 -60 180 180 -60

\* Unit : dBi

- : Max. deg

Frequency (MHz): 2450.00 Antenna Polarity: Horizontal Average Value (dBi): -3.43 Maximum Value (dBi): 1.54 Maximum Value (degree): 270 Minimum Value (dBi): -32.08 Minimum Value (degree): 322

Frequency (MHz): 2450.00 Antenna Polarity: Vertical Maximum Value (dBi): -10.16 Maximum Value (degree): 293

Minimum Value (dBi): -54.18 Minimum Value (degree): 226

270

\* Unit: dBi

V6.2

Average Value (dBi): -17.17

D:測試程式\Antenna Pattern V6.1\Graph\1127\11270007.png

- : Max. deg

D:训腻程式\Antenna Pattern V6.1\Graph\1127\11270008.png



#### 者港南立德國際南品試验有限公司提圖分公司

waad Loom, w Hwa Ya Lab & Head Office, Tel +886-3-3183232 / Unkou BNC/RF Lab, Tel +886-2-26052130 / Hainchu BNC/RF Lab, Tel +886-3-5935343

Date: 2013/11/29

Brand / Model : Printed Antenna Remark: 2450MHz , EUT X-Z Sample No. 1 Tested by: Gary

Location: RF Chamber C



#### 香港商立德國際商品试验有限公司提關分公司

🔳 Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch [ Bureau Veritas ADT ] Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch [ Bureau Veritas ADT]

Brand / Model : Printed Antenna Remark : 2450MHz , EUT X-Z Sample No. 1 Tested by : Gary

Location: RF Chamber C

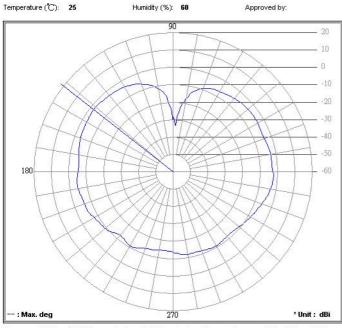
Temperature (°C): 25

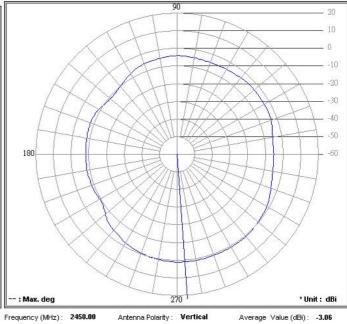
Time: 上午 11:04:29

Date: 2013/11/29 Humidity (%): 60

Time: 上午 11:06:25

Approved by:





Frequency (MHz): 2450.00 Antenna Polarity: Horizontal Average Value (dBi): -6.09 Maximum Value (dBi): -1.95 Maximum Value (degree): 142 Minimum Value (dBi): -33.41 Minimum Value (degree): 87

Maximum Value (dBi): 1.10

V6.2

Antenna Polarity: Vertical

Average Value (dBi): -3.06

Maximum Value (degree): 274

Minimum Value (dBi): -10.94 Minimum Value (degree): 139

V6.2

D:训試程式\Antenna Pattern V6.1\Graph\1129\11290005.png

D:训試程式\Antenna Pattern V6.1\Graph\1129\11290006.png



Brand / Model : Printed Antenna Remark : 2450MHz , EUT Y-Z Sample No. 1 Tested by : Gary

Brand / Model : Printed Antenna Remark : 2450MHz , EUT Y-Z Sample No. 1 Tested by : Gary

2	22/32/2000	164.60 <u>/2014 (200</u> 6) (2006)	I .	N-100-000-000	10 202.003/00/00/00/00
ocation: RF Chamber C	Date: 2013/11/29	Time: 下午 12:15:15	Location: RF Chamber C	Date: 2013/11/29	Time: 上午 11:10:08
nperature (℃): 25	Humidity (%): 60	Approved by:	Temperature (℃): 25	Humidity (%): 60	Approved by:
180	90	20 10 0 -10 -20 -30 -40 -50 -60	180 : Max. deg	90	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
equency (MHz): 2450.00	Antenna Polarity: Horizontal	Average Value (dBi): -6.94	Frequency (MHz): 2450.00	Antenna Polarity: Vertical	Average Value (dBi): -3.54
ximum Value (dBi): -1.56	Maximum Value (degree): 156		Maximum Value (dBi): -1.40	Maximum Value (degree): 131	
nimum Value (dBi): -28.60	Minimum Value (degree): 282	V6.2	Minimum Value (dBi): -7.75	Minimum Value (degree): 239	
D:测試程式\Antenna Pattern V6.1\Graph\1129\11290010.png			D:划腻程式\Antenna Pattern	V6.1\Graph\1129\11290007.png	