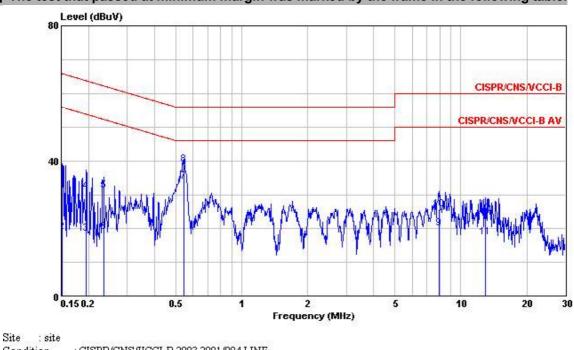
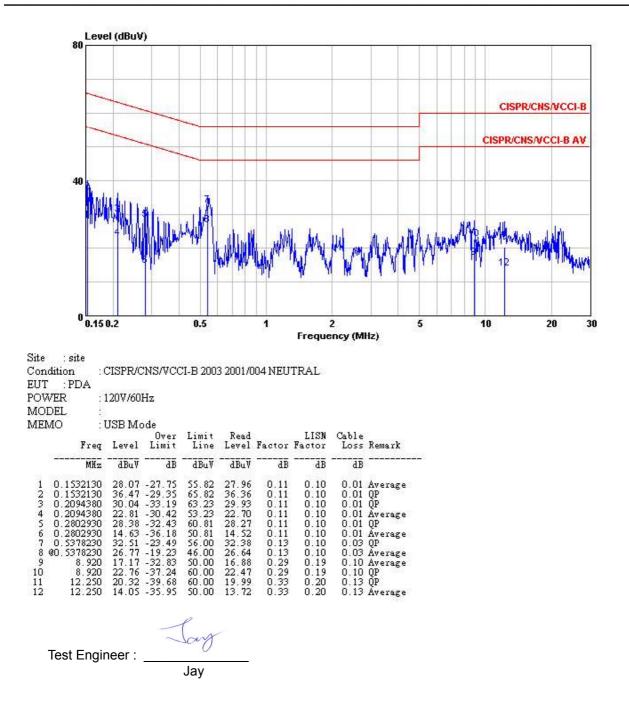
6.3.4 Frequency Range of Test : 150kHz to 30 MHz

- Test Mode : Mode 4 USB Mode .
- Temperature : 26°C

Relative Humidity : 53 %
 The test that passed at minimum margin was marked by the frame in the following table.



WER :	1207/60	Hz						
DDEL :								
EMO :	USB Mo	ode						
Freq	Level	Over Limit	Limit Line	Read Level		LISN Factor	Cable Loss	Remark
MXz	₫₿uΫ	dB	₫₿uΫ	₫₿uΫ	dB	dB	dB	
1 0.1507970	36.48	-29.48	65.96	36.37	0.11	0.10	0.01	QP
2 0.1507970		-37.06	55.96	18.79				Average
3 0.1954980		-35.43	53.80	18.26				Average
4 0.1954980 5 0.2340870		-32.72	63.80	30.97			0.01	
5 0.2340870 6 0.2340870		-31.09	62.30 52.30	31.10 18.94	0.11	$0.10 \\ 0.10$	0.01	QP Average
7 @0.5464400		-12.06	46.00	33.81	0.13	0.10		Average
8 @0.5464400		-17.15	56.00	38.72	0.13	0.10	0.03	
9 7.980	20.11	-29.89	50.00	19.91	0.20	0.10		Average
0 7.980		-34.22	60.00	25.58			0.10	
1 12.920		-32.55	50.00	17.15	0.30			Average
2 12.920	24.57	-35.43	60.00	24.27	0.30	0.16	0.14	ŪΡ.



# 7. Test of Radiated Emission

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defined in ANSI C63.4-2001. The EUT was placed, 0.8 meter above the ground plane, as shown in section 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions

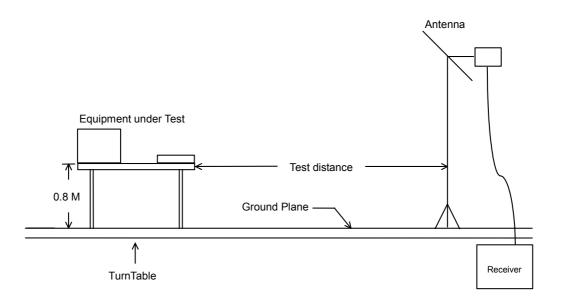
### 7.1 Major Measuring Instruments

Amplifier	(MITEQ AFS44)					
RF Gain	40 dB					
Signal Input	100 MHz to 26.5 GHz					
Amplifier	(HP8447D)					
RF Gain	30 dB					
Signal Input	100 MHz to 1.3 GHz					
<ul> <li>Spectrum analyzer</li> </ul>	( R&S FSP40 )					
Attenuation	10 dB					
Start Frequency	1 GHz					
Stop Frequency	25 GHz					
Resolution Bandwidth	1 MHz					
Video Bandwidth	1 MHz					
Signal Input	9 kHz to 40 GHz					
<ul> <li>Spectrum analyzer</li> </ul>	( R&S FSP40 )					
Attenuation	10 dB					
Start Frequency	30MHz					
Stop Frequency	1 GHz					
Resolution Bandwidth	120 KHz					
Video Bandwidth	300KHz					
Signal Input	9 kHz to 40 GHz					

### 7.2 Test Procedures

- 1. The EUT was placed on a rotatable table top 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- 5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- 6. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- 7. For testing below 1GHz, If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the quasi-peak method and reported.
- 8. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

## 7.3 Typical Test Setup Layout of Radiated Emission



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### 7.4 Test Result of Radiated Emission

7.4.1 Test Mode: Mode 1 TX- BT CH00 (2402 MHz), WLAN CH01 (2412MHz)

- Test Distance : 3 m
- Temperature : 26 °C
- Relative Humidity :53 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level Preamp Factor = Level
   The test that passed at minimum margin was marked by the frame in the following table.

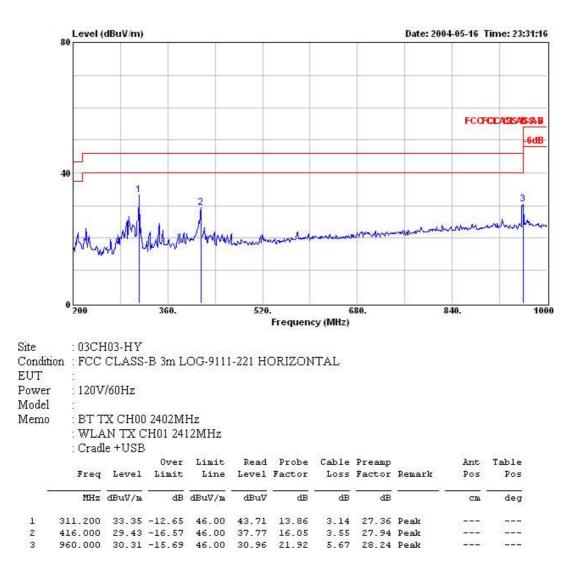
Level (dBuV/m) Date: 2004-05-16 Time: 23:01:03 FCC CLASS-B 40 -6dB 3 2 maple 30 64. 132. 166. 200 98 Frequency (MHz) Site :03CH03-HY Condition : FCC CLASS-B 3m BIC-9124--301 HORIZONTAL EUT : 120V/60Hz Power Model BT TX CH00 2402MHz Memo : WLAN TX CH01 2412MHz : Cradle +USB Over Limit Read Probe Cable Preamp Ant. Table Line Level Factor Freq Level Limit Loss Factor Remark Pos Pos MHz dBuV/m dB dBuV/m dBuV dB dB dB cm deg 36.630 18.73 -21.27 40.00 33.17 12.56 90.350 21.55 -21.95 43.50 38.55 9.30 1.03 28.03 Peak 1 \_\_\_\_ 1.62 27.92 Peak \_\_\_\_ 2 ----

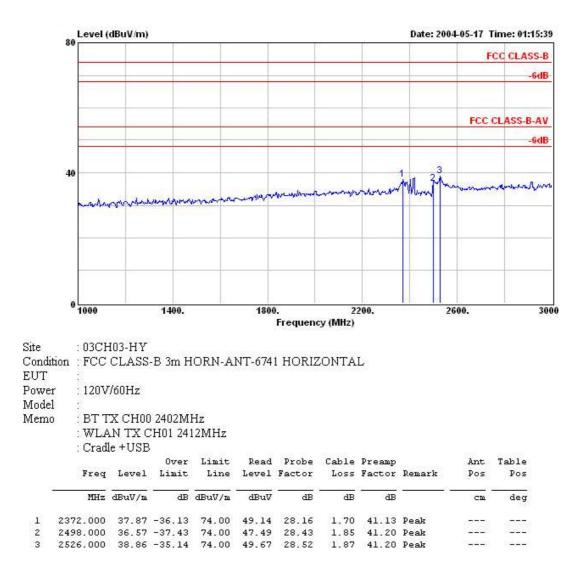
173.310 24.57 -18.93 43.50 36.58 13.36 2.38 27.75 Peak

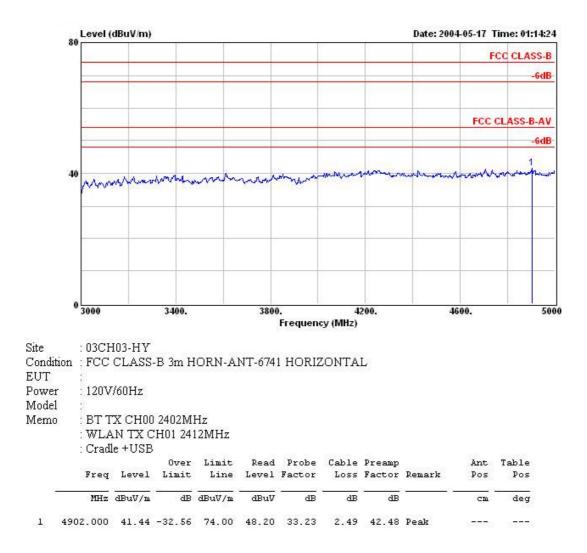
3

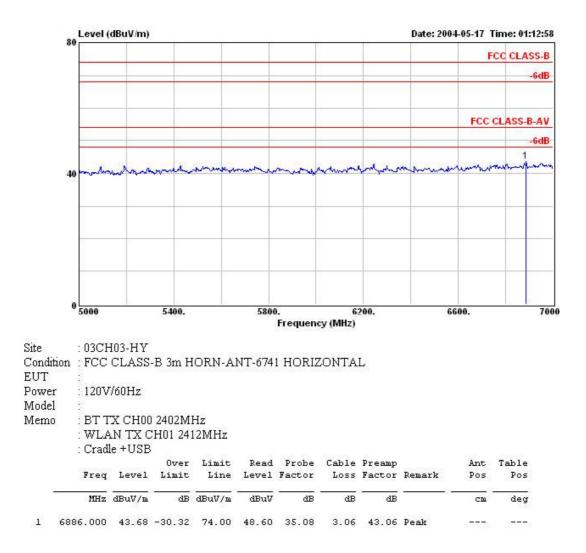
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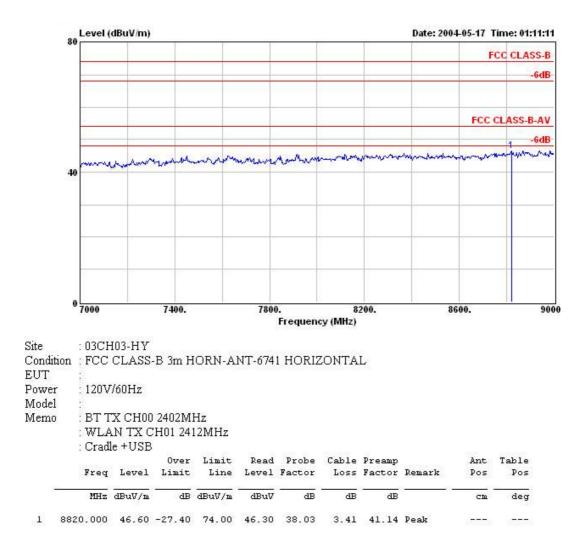
\_\_\_\_

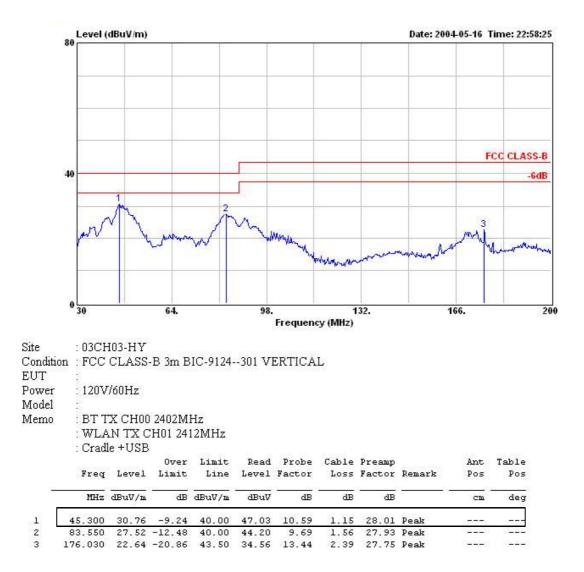


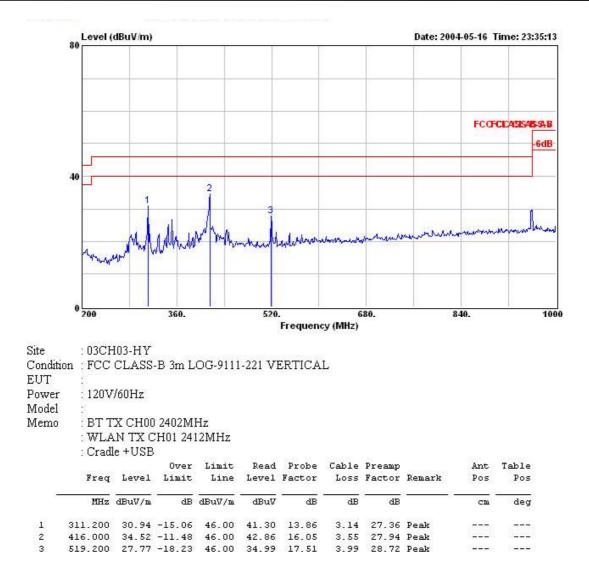


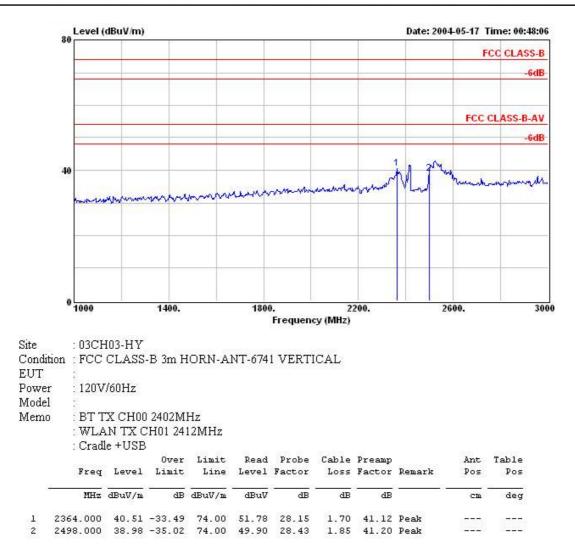


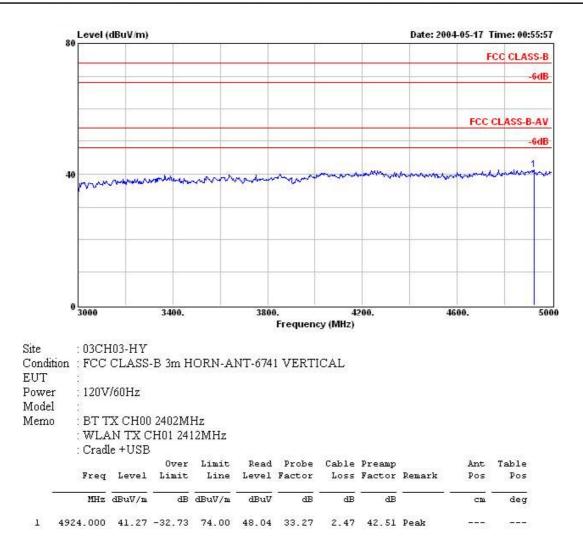


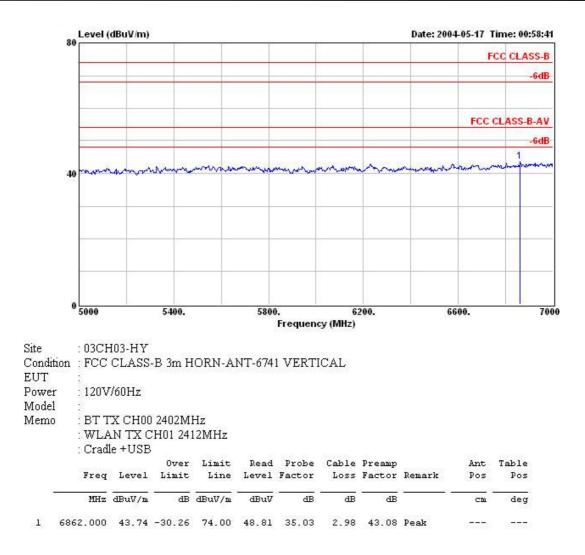


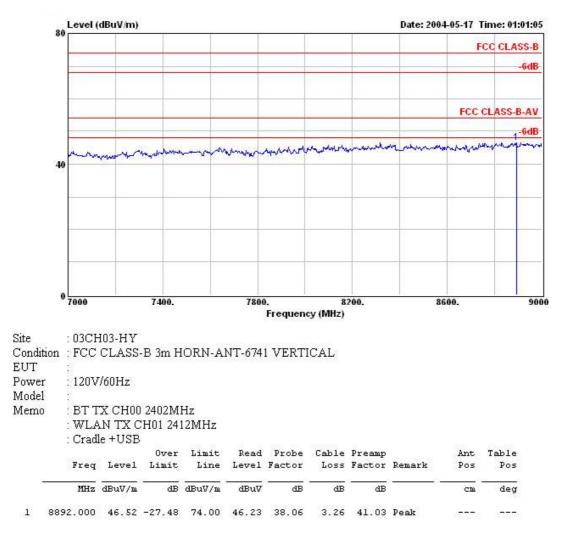








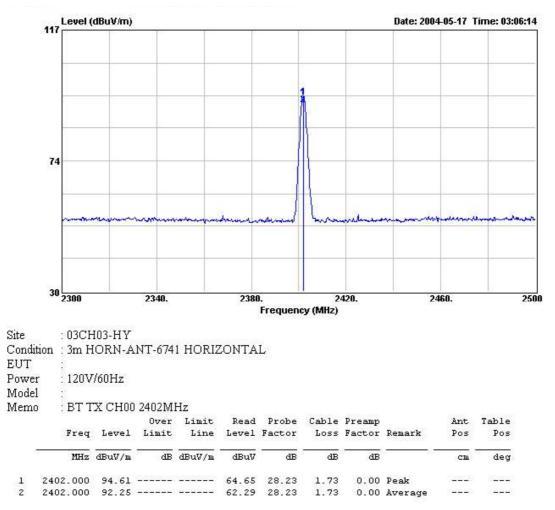


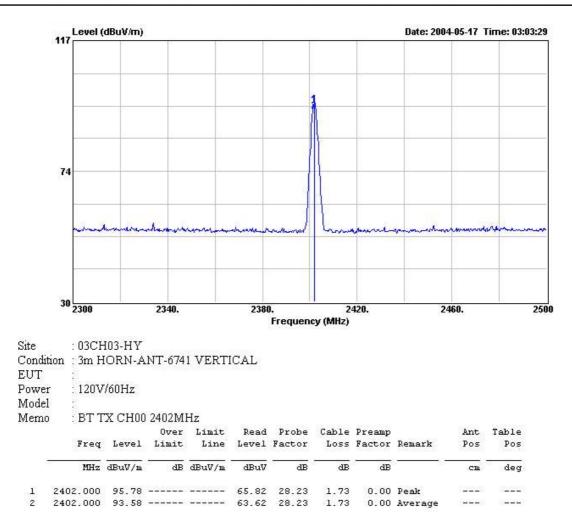


#### Mark:

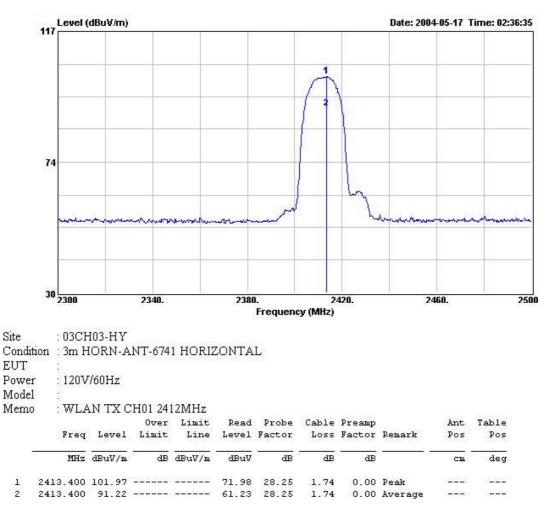
Frequency from 9000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured.

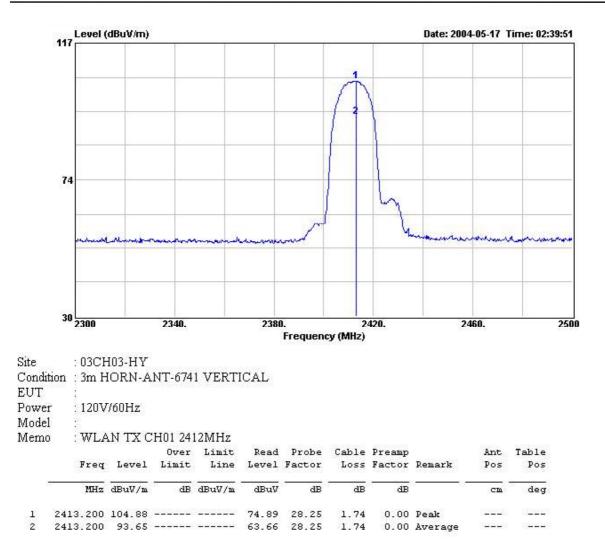
### BT TX CH00 2402MHz





### WLAN TX CH01 2412MHz





### Report No. :F451503

#### Field strength of fundamental and harmonics

Test Item	Frequency		Antenna	Cable	Reading	Preamp	Limits	Emission	Margin	Detect
		Polarity	Factor	Loss		Factor				
	(MHz)		( dB/m )	( dB )	(dBuV)	(dB)	(dBuV/m	)(dBuV/m)	( dB )	Mode
Bluetooth	2402.000	Н	28.23	1.73	64.65	0.00	-	94.61	-	Peak
	2402.000	V	28.23	1.73	65.82	0.00	-	95.78	-	AV
	4804.000	V/H	-	-	-	-	-	-	-	AV/Peak
	7206.000	V/H	-	-	-	-	-	-	-	AV/Peak
	9608.000	V/H	-	-	-	-	-	-	-	AV/Peak
	12010.000	V/H	-	-	-	-	-	-	-	AV/Peak
	14412.000	V/H	-	-	-	-	-	-	-	AV/Peak
	16814.000	V/H	-	-	-	-	-	-	-	AV/Peak
	19216.000	V/H	-	-	-	-	-	-	-	AV/Peak
	21618.000	V/H	-	-	-	-	-	-	-	AV/Peak
	24020.000	V/H	-	-	-	-	-	-	-	AV/Peak
WLAN	2413.400	Н	28.25	1.74	71.98	0.00	-	101.97	-	Peak
	2413.200	V	28.25	1.74	74.89	0.00	-	104.88	-	AV
	4824.000	V/H	-	-	-	-	-	-	-	AV/Peak
	7236.000	V/H	-	-	-	-	-	-	-	AV/Peak
	9648.000	V/H	-	-	-	-	-	-	-	AV/Peak
	12060.000	V/H	-	-	-	-	-	-	-	AV/Peak
	14472.000	V/H	-	-	-	-	-	-	-	AV/Peak
	16884.000	V/H	-	-	-	-	-	-	-	AV/Peak
	19296.000	V/H	-	-	-	-	-	-	-	AV/Peak
	21708.000	V/H	-	-	-	-	-	-	-	AV/Peak
	24120.000	V/H	-	-	-	-	-	-	-	AV/Peak

Remark:

1. The emission emitted by the EUT is too low to be measured except the emission listed above,

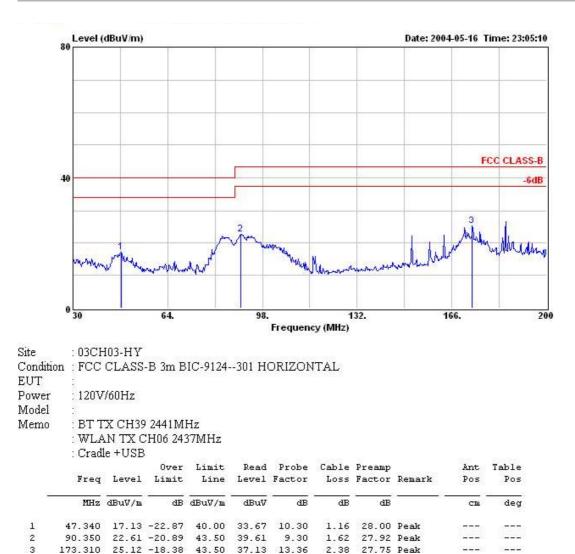
Jay Test Engineer :

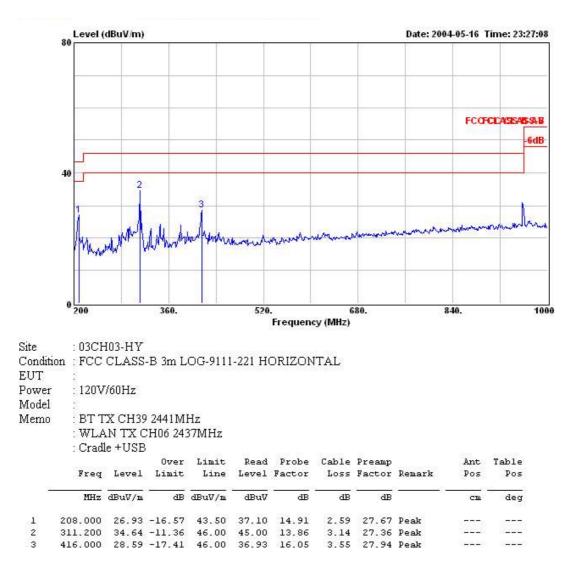
Jay

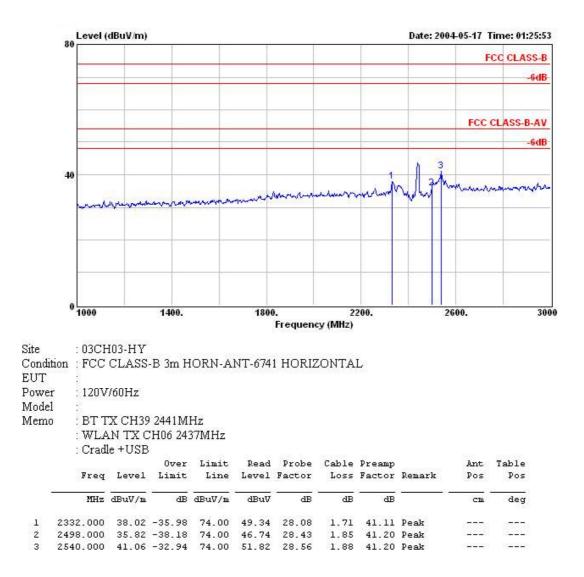
**SPORTON International Inc.** TEL : 886-2-2696-2468 FAX : 886-2-2696-2255 FCC ID : NM8BALI Page No. : 72 of 132 Issued Date : May 25, 2004

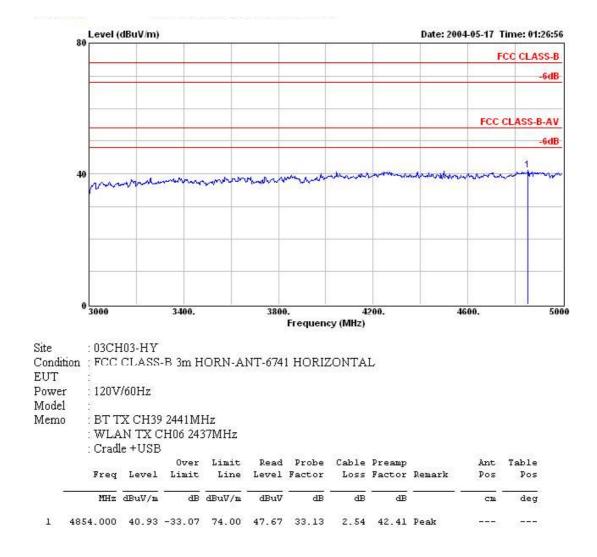
- 7.4.2 Test Mode: Mode 2 TX- BT CH39 (2441 MHz), WLAN CH06 (2437 MHz)
- Test Distance : 3 m
- Temperature : 26 °C
- Relative Humidity :53 %
- Emission level (dBuV/m) = 20 log Emission level (uV/m)
- Corrected Reading : Probe Factor + Cable Loss + Read Level Preamp Factor = Level

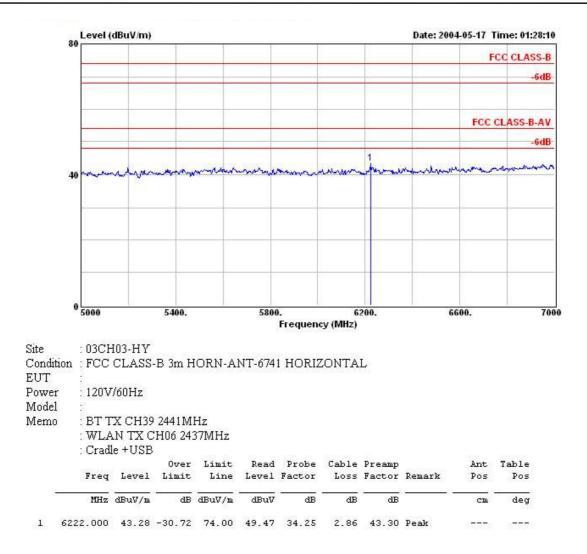
### The test that passed at minimum margin was marked by the frame in the following table.

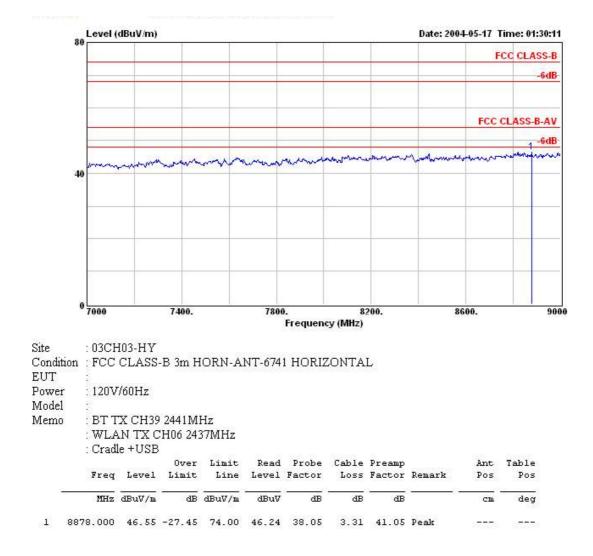


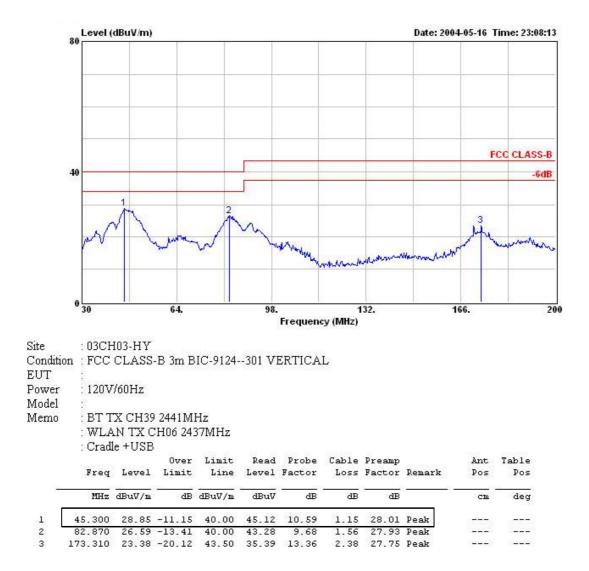


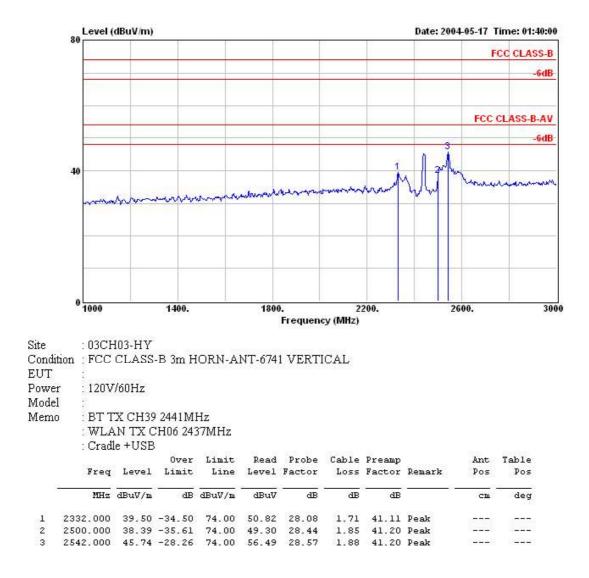


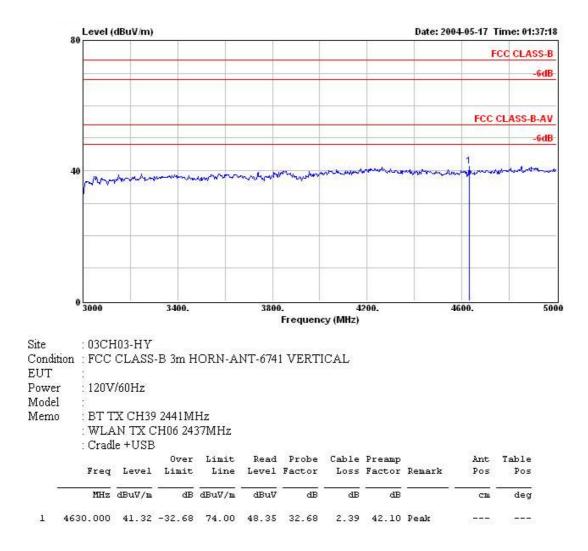


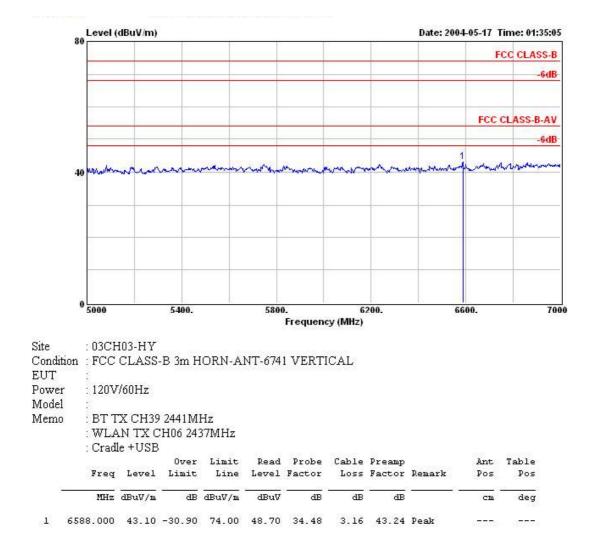


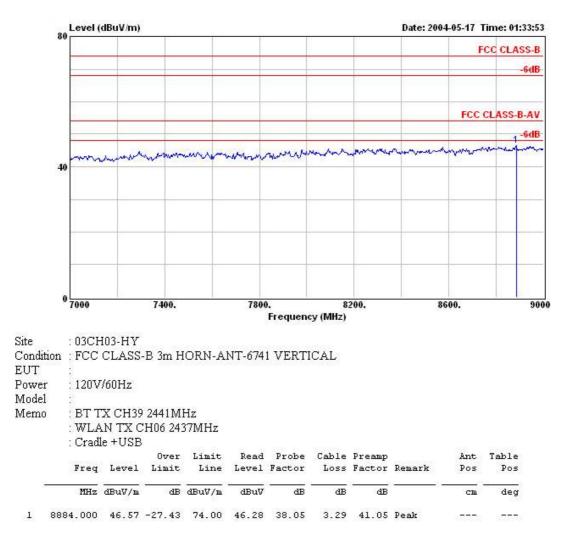












#### Mark:

Frequency from 9000MHz to 25000MHz, the emission emitted by the EUT is too low to be measured.