FCC TEST REPORT

Report No.

: FR681418

for

47 CFR Part 15 Subpart C

Equipment : GAM900/DCS1800/PCS1900/Bluetooth/WLAN Mobile Phone

Trade Name : GIGABYTE

Model No. : Stealth

Marketing Name: Xda Stealth

FCC ID : UJU9QSTEAL000

Filing Type : Certification

Applicant : GIGA-BYTE Communications Inc.

8F, No.43, Fu-Hsin Road, Hsin-Tien, Taipei Hsien, Taiwan, R.O.C.

- The test result refers exclusively to the test presented test model / sample.
- Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.
- Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsement by NVLAP or any agency of U.S. government.
- The data shown in this test report were carried out on Aug. 19, 2006 at Sporton International Inc. LAB.
- Report No.: FR681418, Report Version: Rev. 02

Roy Wu Deputy Manager

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 Report Version: Rev. 02

Table of Contents

		of this test report	
1.		al Description of Equipment under Test	
		Applicant	
		Manufacturer	
		Basic Description of Equipment under Test	
		Feature of Equipment under Test	
2		Configuration of Equipment under Test	
		Test Manner	
		Test Mode	
		Connection Diagram of Test System	
		Ancillary Equipment List	
		ility	
4.		al Information of Test	
		Test Voltage	
	4.2	Standard for Methods of Measurement	7
	4.3	Test in Compliance with	
	4.4	Frequency Range Investigated	7
		Test Distance	
5.	Test E	Data and Test Result	
	5.1	List of Measurements and Examinations	8
	5.2	6dB Bandwidth Measurement	0
	5.3	Power Spectral Density Measurement	7
	5.4	Band Edges Measurement	25
	5.5	Hopping Channel Separation	34
	5.6	Number of Hopping Frequency	8
	5.7	Hopping Channel Bandwidth4	0
	5.8	Dwell Time of Each Frequency	4
	5.9	Peak Output Power Measurement	64
	5.10	Conducted Emission	9
	5.11	Radiated Emission Measurement	'6
		Antenna Requirements	
6	List o	f Measuring Equipments Used12	5
7	Uncer	tainty Evaluation12	6
Αp	pendi	ix A. Photographs of EUT External	
Αp	pendi	ix B. Photographs of EUT Internal	
Αp	pendi	ix C. Photographs of Setup	
		ix D. Band Edge Radiation Data	

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

History of this test report

Report No.

: FR681418

Report Issue Date: Sep. 07, 2006

Report issue Date.	Report Issue Date. Sep. 07, 2000						
Report No.	Description						

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : ii

Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

1. General Description of Equipment under Test

1.1 Applicant

GIGA-BYTE Communications Inc.

8F, No.43, Fu-Hsin Road, Hsin-Tien, Taipei Hsien, Taiwan, R.O.C.

1.2 Manufacturer

GIGA-BYTE TECHNOLOGY CO., LTD.

No. 215, Nan-Ping Road, Pin-Jan City, Taoyuan, Taiwan, R.O.C.

1.3 Basic Description of Equipment under Test

Equipment : GAM900/DCS1800/PCS1900/Bluetooth/WLAN Mobile Phone

Report No.

: FR681418

Trade Name : GIGABYTE

Model No. : Stealth

Marketing Name : Xda Stealth

FCC ID : UJU9QSTEAL000

Power Supply Type : Switching, From battery 3.7V

AC Power Cord : AC 120V, Wall-mount, 1.8 meter, 2 pin

Adapter : Phihong, PSC05R-050 PH

Battery : Welldone, XP-04

Earphone : Coson Tech, EE-564B-37EN

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 1 of 127
Report Issued Date : Sep. 07, 2006

Report Version : Rev. 02

1.4 Feature of Equipment under Test

	Product Feature & Specification					
1.	DUT Type	GAM900/DCS1800/PCS1900/Bluetooth/WLAN Mobile Phone				
2.	Trade Name	GIGABYTE				
3.	Model Name	Stealth				
4.	Marketing Name	Xda Stealth				
5.	FCC ID	UJU9QSTEAL000				
6.	Tx Frequency	PCS1900 : 1850 ~1910 MHz Bluetooth : 2400~2483.5 MHz 802.11b / 802.11g : 2400 ~ 2483.5 MHz				
7.	Rx Frequency	PCS1900 : 1930 ~ 1990 MHz Bluetooth : 2400~2483.5 MHz 802.11b / 802.11g : 2400 ~ 2483.5 MHz				
8.	Number of Channels	Bluetooth : 79 WLAN : 11				
9.	Carrier Frequency of Each Channel	Bluetooth : 2402+n*1 MHz; n=0~78 WLAN : 2412+(n-1)*5 MHz; n=1~11				
10.	Antenna Connector	N/A				
11.	Antenna Type	PCS1900 : PIFA Antenna Bluetooth : Chip Antenna 802.11b / 802.11g : Chip Antenna				
12.	Antenna Gain	PCS1900 : -2 dBi Bluetooth : -3 dBi 802.11b / 802.11g : -3 dBi				
13.	HW Version	Version 0.2				
14.	SW Version	B02.003				
15.	Maximum Output Power	PCS1900 : 29.70 dBm Bluetooth : -0.6 dBm 802.11b : 17.28 dBm / 802.11g : 19.30 dBm				
16.	Type of Modulation	PCS1900 : GMSK Bluetooth : GFSK 802.11b / 802.11g : DSSS / OFDM				
17.	DUT Stage	Identical Prototype				
18.	Application Type	Certification				

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 2 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Report No. : FR681418

2 Test Configuration of Equipment under Test

2.1 Test Manner

a. The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Report No.

: FR681418

- b. For spurious emission below 1GHz, only one channel of each application was tested because it is not related to channel selection.
- c. The EUT is programmed to transmit signal continuously for all testings.
- d. Frequency range investigated: conduction 150 kHz to 30 MHz, radiation 30 MHz to 25000MHz.

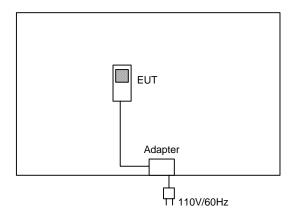
2.2 Test Mode

Application							
	802.11b	802.11g	вт				
Radiated	Mode 1: Tx_CH01_2412 MHz	Mode 4: Tx_CH01_2412 MHz	Mode 7: Tx_CH00_2402 MHz				
Emission	Mode 2: Tx_CH06_2437 MHz	Mode 5: Tx_CH06_2437 MHz	Mode 8: Tx_CH39_2441 MHz				
	Mode 3: Tx_CH11_2462 MHz	Mode 6: Tx_CH11_2462 MHz	Mode 9: Tx_CH78_2480 MHz				
Conducted	Mode 1: PCS Idle Mode + BT Link + WLAN Link + Earphone + Adapter + Camera						
Emission	Mode 2: PCS Idle Mode + BT Link + WLAN Link + Earphone + Adapter + MPEG 4						
E1111551011	Mode 3: PCS Idle Mode + BT Link + WLAN Link + Earphone + USB Link + MPEG 4						

2.3 Connection Diagram of Test System

<Radiated Emission>

For WLAN



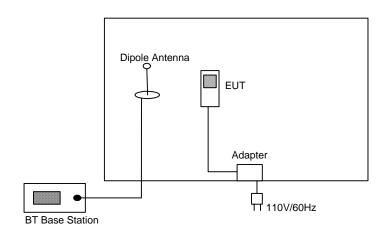
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000

: 3 of 127 Page No. Report Issued Date : Sep. 07, 2006 Report Version

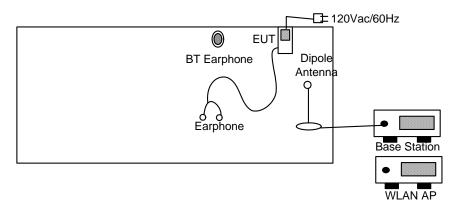
: Rev. 02

For Bluetooth

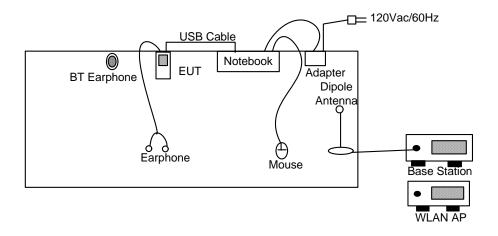


<Conducted Emission>

Mode 1-2



Mode 3



SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 4 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02



2.4 Ancillary Equipment List

Item	Asset	Model Name	Power Cord
1.	Base Station (R&S)	CMU 200	N/A
2.	Notebook (DELL)	D400	N/A
3.	USB Mouse (Microsoft)	B75-00093	Non-shielded, 1.8 m
4.	BT Earphone (Engotech)	ET-BH111	N/A
5.	WLAN AP (SMC)	SMC-100	N/A

Report No.

: FR681418

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 5 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

3. RF Utility

The EUT is in BT link mode with BT earphone and in WLAN link mode with WLAN AP for conducted emission or in BT continuous Tx mode controlled by RF utility and base station simulator or in WLAN continuous Tx mode controlled by RF utility for radiation emission and other conducted tests.

Report No.

: FR681418

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 6 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

4. General Information of Test

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,

Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

Report No.

: FR681418

TEL: 886-3-327-3456

FAX: 886-3-318-0055
Test Site No : CO01-HY, 03CH06-HY

4.1 Test Voltage

120V/60Hz

4.2 Standard for Methods of Measurement

ANSI C63.4-2003

4.3 Test in Compliance with

47 CFR Part 15 Subpart C

4.4 Frequency Range Investigated

a. Radiation: from 30 MHz to 25000 MHz

4.5 Test Distance

The test distance of radiated emission from antenna to EUT is 3 m.

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 7 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5. Test Data and Test Result

5.1 List of Measurements and Examinations

The Emission Mode: Wireless LAN

FCC Rule	Description of Test	Result
15.207	Conducted Emission	Pass
15.247(a)(2)	6dB & 20dB Bandwidth	Pass
15.247(b)	Maximum Peak Output Power	Pass
15.209(a)	Radiated Emission	Pass
15.247 (c)	100kHz Bandwidth of Frequency Band Edges	Pass
15.247(d)	Power Spectral Density	Pass
15.203 15.247(b)(4)	Antenna Requirement	Pass

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 8 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Report No. : FR681418

The Emission Mode: Bluetooth

FCC Rule	Description of Test	Result				
15.207	Conducted Emission	Pass				
15.247(a) (1)	Hopping Channel Bandwidth	Pass				
15.247(a)(1)	Hopping Channel Separation	Pass				
15.247(a)(1)(iii)	Number of Hopping Frequency Used	Pass				
15.247(a)(1)(iii)	Dwell Time of Each Frequency	Pass				
<u>15.247(b)</u>	Output Power	Pass				
15.247(c)	100kHz Bandwidth of Frequency Band Edges	Pass				
15.209(a)	Radiated Emission	Pass				
15.203 15.247(b)(4)	Antenna Requirement	Pass				

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 9 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.2 6dB Bandwidth Measurement

5.2.1 Measuring Instruments:

As described in chapter 6 of this test report.

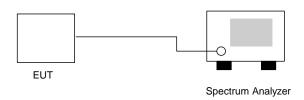
5.2.2 Test Procedure:

- 1. The transmitter output was connected to the spectrum analyzer directly.
- 2. Set RBW of spectrum analyzer to 100kHz and VBW to 100kHz.
- 3. The 6 dB bandwidth is defined as the frequency range where the power is higher than the peak power minus 6dB.

Report No.

: FR681418

5.2.3 Test Setup Layout:



5.2.4 Test Result:

Application Type: WLAN 802.11b/g

Temperature : 26°CRelative Humidity : 53%Test Enginner : <u>Jay</u>

802.11b

Channel	Frequency	6dB Emission bandwidth	Limits	Plot
	(MHz)	(MHz)	(MHz)	Ref. No.
01	2412	9.28	> 0.5MHz	Mode 1
06	2437	9.80	> 0.5MHz	Mode 2
11	2462	9.96	> 0.5MHz	Mode 3

802.11g

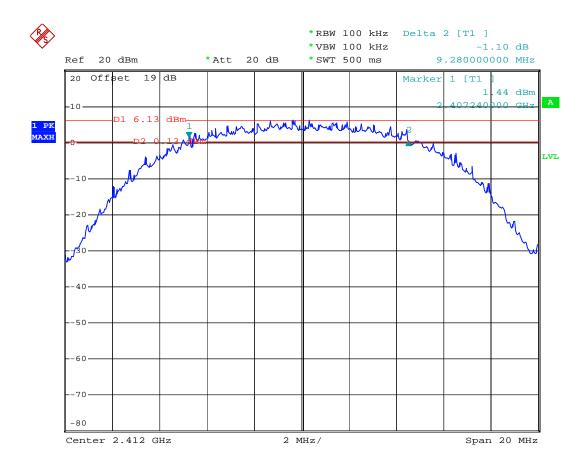
Channel	Frequency 6dB Emission bandwidth		Limits	Plot
	(MHz)	(MHz)	(MHz)	Ref. No.
01	2412	15.96	> 0.5MHz	Mode 4
06	2437	16.36	> 0.5MHz	Mode 5
11	2462	16.36	> 0.5MHz	Mode 6

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 10 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.2.5 6dB Bandwidth

Mode 1



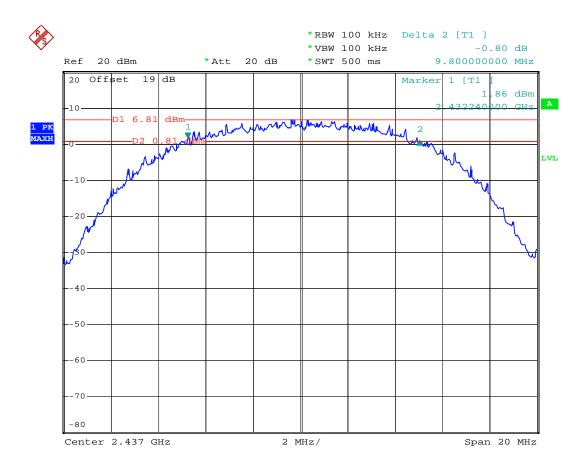
Date: 19.AUG.2006 04:11:06

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 11 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

C TEST REPORT Report No. : FR681418

Mode 2

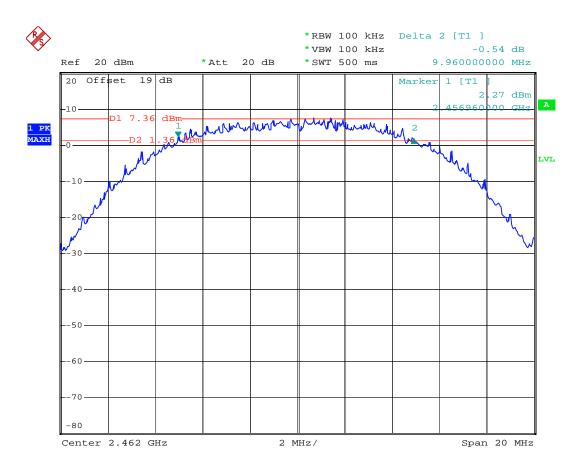


Date: 19.AUG.2006 04:06:45

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 12 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

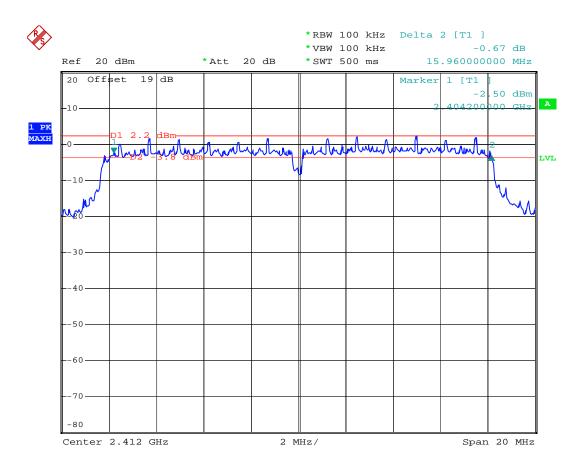
Mode 3



Date: 19.AUG.2006 04:03:16

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 13 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 4



Date: 19.AUG.2006 03:08:53

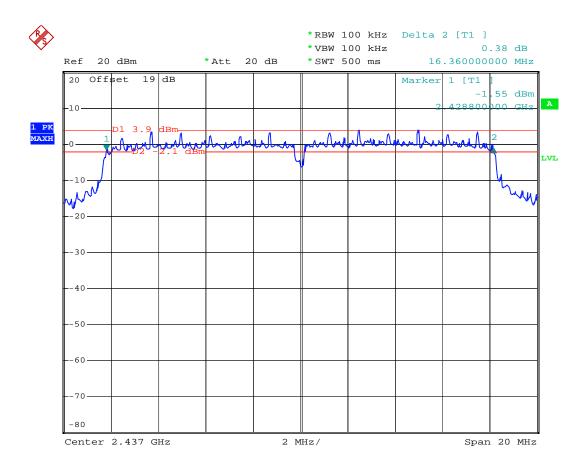
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000

: 14 of 127 Page No. Report Issued Date : Sep. 07, 2006

Report Version : Rev. 02

Mode 5



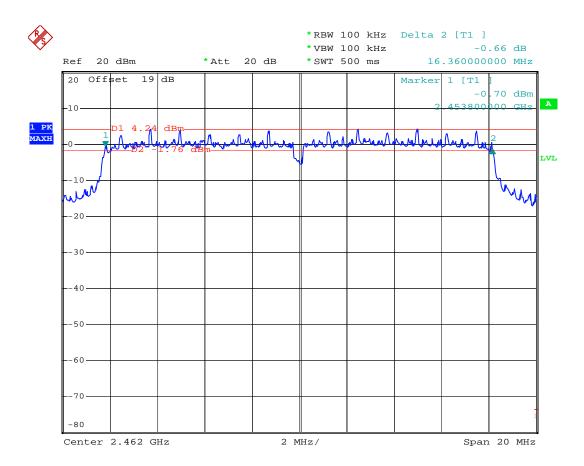
Date: 19.AUG.2006 03:06:51

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 15 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

CC TEST REPORT Report No. : FR681418

Mode 6



Date: 19.AUG.2006 03:57:35

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 16 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.3 Power Spectral Density Measurement

5.3.1 Measuring Instruments:

As described in chapter 6 of this test report.

5.3.2 Test Procedure:

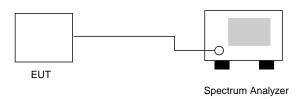
- 1. The transmitter output was connected to spectrum analyzer directly.
- The spectrum analyzer's resolution bandwidth was set at 3kHz RBW and 30kHz VBW as that of the fundamental frequency. Set the sweep time=span/3kHz.

Report No.

: FR681418

- 3. The power spectral density was measured and recorded.
- 4. The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

5.3.3 Test Setup Layout:



SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 17 of 127 Report Issued Date : Sep. 07, 2006

Report Version : Rev. 02



FCC TEST REPORT Report No. : FR681418

5.3.4 Test Result:

Application Type: 802.11b/gTemperature: 26°CRelative Humidity: 53%

802.11b

Channel	Frequency Power Spectral Density		Limits	Plot
	(MHz)	(dBm)	(dBm)	Ref. No.
01	2412	4.70	8	Mode 1
06	2437	5.08	8	Mode 2
11	2462	6.02	8	Mode 3

802.11g

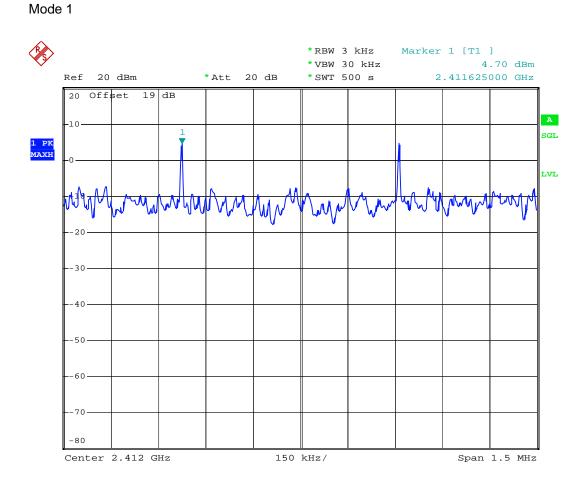
Channel Frequency		Power Spectral Density	Limits	Plot
	(MHz)	(dBm)	(dBm)	Ref. No.
01	2412	-12.61	8	Mode 4
06	2437	-12.01	8	Mode 5
11	2462	-11.58	8	Mode 6

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 18 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

CC TEST REPORT Report No. : FR681418

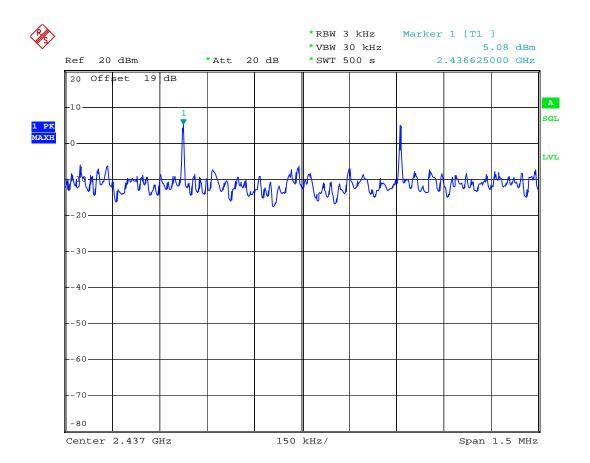
5.3.5 Power Spectral Density



Date: 19.AUG.2006 04:53:17

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 19 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 2

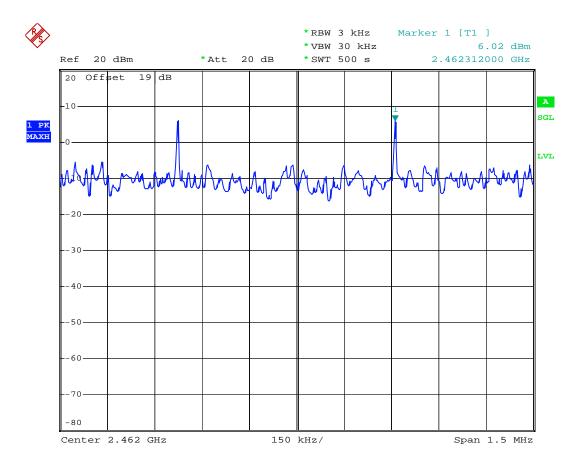


Date: 19.AUG.2006 04:42:53

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 20 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 3

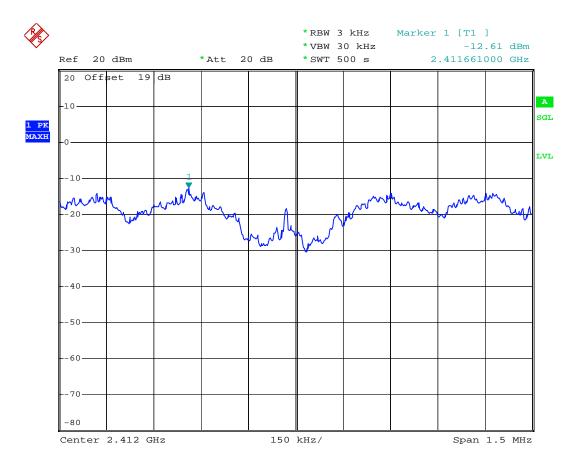


Date: 19.AUG.2006 04:33:27

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 21 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 4

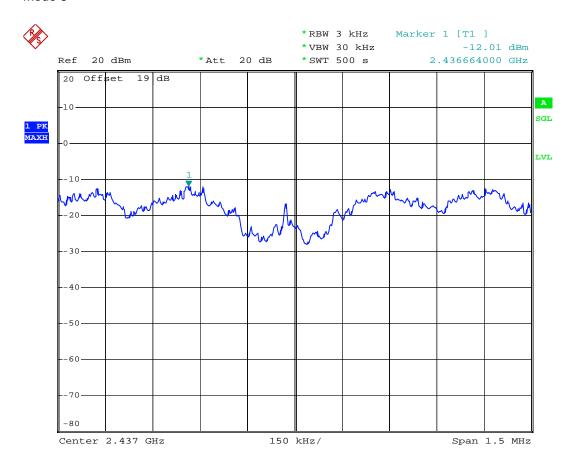


Date: 19.AUG.2006 05:05:37

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 22 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 5

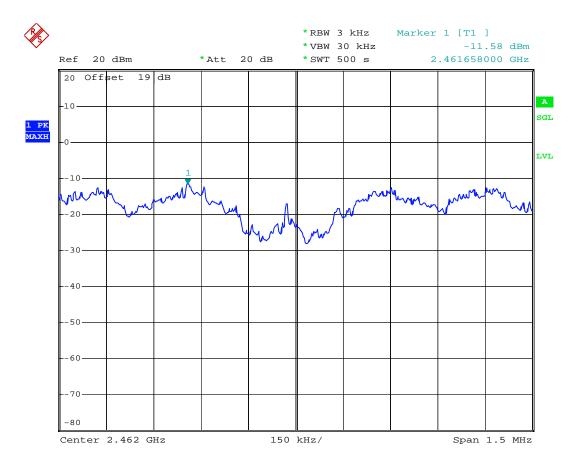


Date: 19.AUG.2006 05:16:07

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 23 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 6



Date: 19.AUG.2006 05:36:05

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 24 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.4 Band Edges Measurement

5.4.1 Measuring Instruments:

As described in chapter 6 of this test report.

5.4.2 Test Procedure:

- 1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
- Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100 kHz bandwidth from band edge.

Report No.

: FR681418

3. The band edges was measured and recorded.

5.4.3 Test Result:

Application Type: WLAN 802.11b/g and BT

Temperature : 26°CRelative Humidity : 53%Test Enginner : <u>Jay</u>

Test Result in WLAN lower band (Channel 1)
 Test Result in WLAN higher band (Channel 11)
 Test Result in BT lower band (Channel 00)
 Test Result in BT higher band (Channel 78)
 PASS

5.4.4 Note on Band Edge Emission:

➤WLAN 802.11b

CH01 (Horizontal)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2386.00	58.23	-15.77	74.00	59.17	30.26	4.26	35.46	100	360	Peak
2386.00	42.85	-11.15	54.00	43.80	30.26	4.23	35.44	100	159	Average

CH01 (Vertical)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2386.00	51.24	-22.76	74.00	52.18	30.26	4.26	35.46	100	360	Peak
2386.00	39.93	-14.07	54.00	40.88	30.26	4.23	35.44	108	28	Average

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 25 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02



FCC TEST REPORT

CH11 (H	Horizontal)									
Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Rema
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2488.00	42.11	-11.89	54.00	42.96	30.30	4.36	35.51	100	156	Avera
2488.00	55.26	-18.74	74.00	56.11	30.30	4.36	35.51	100	360	Pea
CH11 (\	/ertical)									
Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Rema
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2488.00	40.37	-13.63	54.00	41.22	30.30	4.36	35.51	104	76	Avera
2488.00	52.55	-21.45	74.00	53.41	30.29	4.36	35.51	100	360	Pea
Frequency	Level	Over Limit	Limit Line	Read Level	Abtebba Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Rem
Frequency	l evel	Over	Limit	Read	Ahtebba	Cable	Preamn	Δnt	Table	Rem
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2390.00	69.78	-4.22	74.00	70.72	30.26	4.26	35.46	100	0	Pea
2390.00	46.98	-7.02	54.00	47.92	30.26	4.23	35.46	100	160	Avera
CH01 (\	/ertical)									
Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Rema
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(N 41 1)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
(MHz)		-15.42	74.00	50.50				100	360	Pea
2390.00	58.58	-13.42	74.00	59.52	30.26	4.26	35.46	100		
	58.58 41.57	-12.43	74.00 54.00	42.51	30.26 30.26	4.26 4.26	35.46 35.46	100	351	Avera
2390.00 2390.00										Avera
2390.00 2390.00	41.57 Horizontal)									
2390.00 2390.00 CH11 (H	41.57 Horizontal)	-12.43	54.00	42.51	30.26	4.26	35.46	100	351	
2390.00 2390.00 CH11 (H	41.57 Horizontal)	-12.43 Over	54.00 Limit	42.51 Read	30.26 Abtebba	4.26 Cable	35.46 Preamp	100 Ant	351	Avera Rema
2390.00 2390.00 CH11 (F	41.57 Horizontal) Level	-12.43 Over Limit	54.00 Limit Line	42.51 Read Level	30.26 Abtebba Factor	4.26 Cable Loss	35.46 Preamp Factor	Ant Pos	Table Pos	

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 26 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Report No. : FR681418



FCC TEST REPORT

CH11 (Vertical)												
Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark		
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos			
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)			
2484.00	55.19	-18.81	74.00	56.05	30.29	4.36	35.51	100	0	Peak		
2484.00	38.97	-15.03	54.00	39.83	30.29	4.36	35.51	100	153	Average		

Report No.

: FR681418

≽BT

CH00 (Horizontal)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2386.00	51.21	-22.79	74.00	52.16	30.26	4.23	35.44	100	360	Peak
2386.00	39.23	-14.77	54.00	40.18	30.26	4.23	35.44	100	348	Average

CH00 (Vertical)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2387.00	56.12	-17.88	74.00	57.07	30.26	4.23	35.44	100	0	Peak
2387.00	40.12	-13.88	54.00	41.07	30.26	4.23	35.44	100	325	Average

CH78 (Horizontal)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2483.50	57.06	-16.94	74.00	57.92	30.29	4.36	35.51	100	0	Peak
2483.50	40.50	-13.50	54.00	41.36	30.29	4.36	35.51	100	106	Average

CH78 (Vertical)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2488.00	64.38	-9.62	74.00	65.24	30.29	4.36	35.51	100	360	Peak
2488.00	50.07	-3.93	54.00	50.92	30.29	4.36	35.51	100	260	Average

SPORTON International Inc.

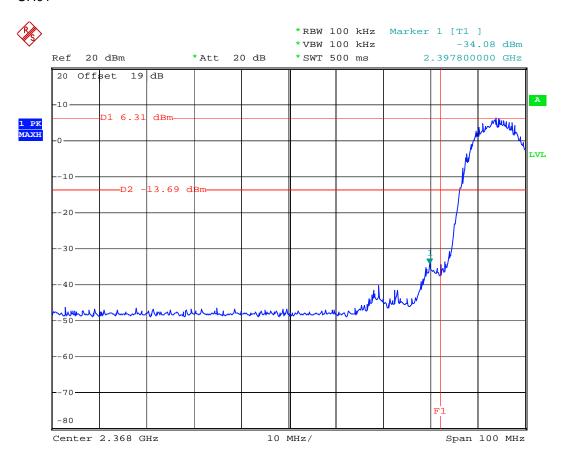
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 27 of 127
Report Issued Date : Sep. 07, 2006

Report Version : Rev. 02

5.4.4 20dB Band Edge

WLAN 802.11b

CH01

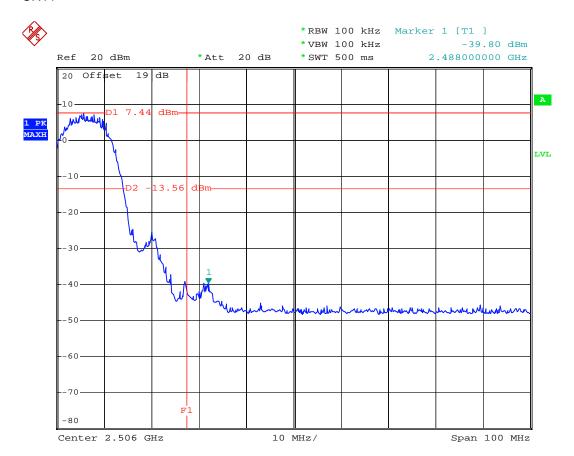


Date: 19.AUG.2006 04:13:06

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 28 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

CH11



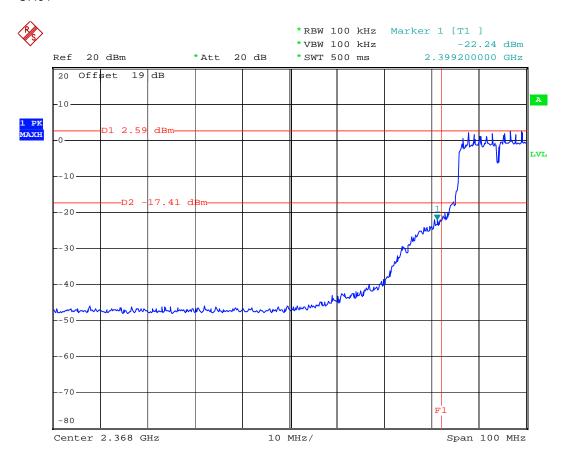
Date: 19.AUG.2006 04:15:39

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 29 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

WLAN 802.11g

CH01

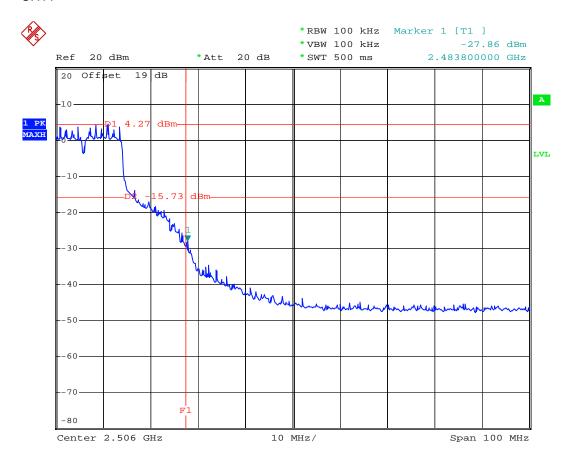


Date: 19.AUG.2006 03:53:41

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 30 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

CH11



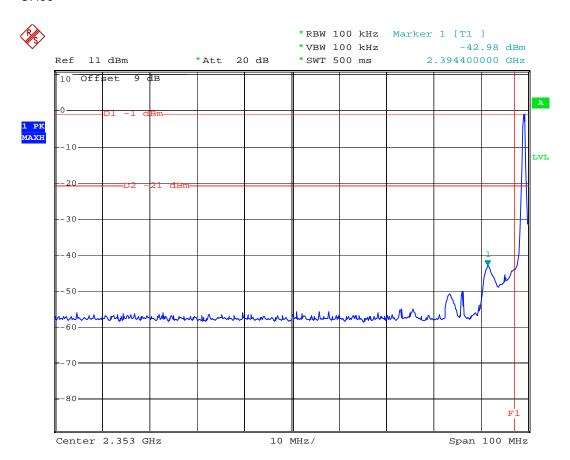
Date: 19.AUG.2006 03:55:58

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 31 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Bluetooth

CH00

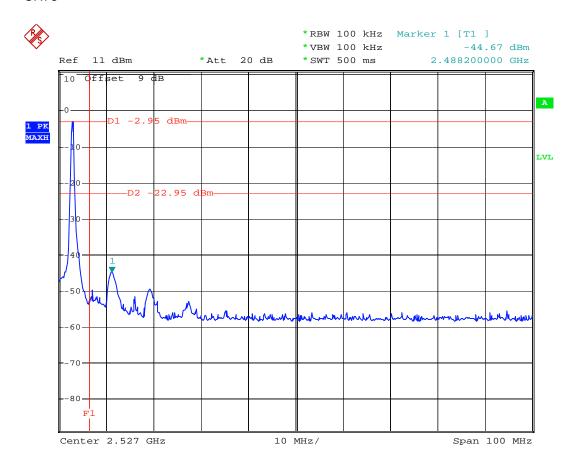


Date: 18.AUG.2006 23:42:17

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 32 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

CH78



Date: 18.AUG.2006 23:43:37

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 33 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.5 Hopping Channel Separation

5.5.1 Measuring Instruments:

As described in chapter 9 of this test report.

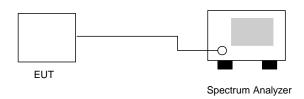
5.5.2 Test Procedure:

- 1. The output of EUT was connected to the spectrum analyzer by a low loss cable..
- 2. Set RBW of spectrum analyzer to 100kHz and VBW to 100kHz.
- 3. The Hopping Channel Separation is defined as the channel is separated with the next channel.

Report No.

: FR681418

5.5.3 Test Setup Layout:



5.5.4 Test Result: The spectrum analyzer plots are attached as below

Channel	Carrier Frequency Frequency Separation		Limits	Plot
Gridinio	(MHz)	(MHz)	(MHz)	Ref. No.
00	2402	1.000	0.900	Mode 7
39	2441	1.004	0.904	Mode 8
78	2480	1.000	0.898	Mode 9

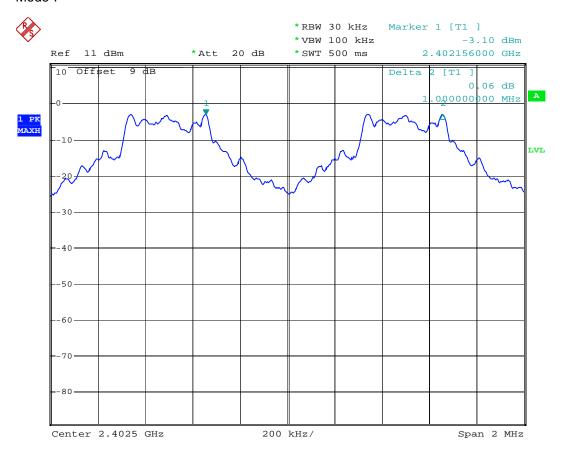
Note: Limits =25kHz or the 20dB bandwidth of the hopping channel, which ever is greater

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 34 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.5.5 Hopping Channel Seperation

Mode 7

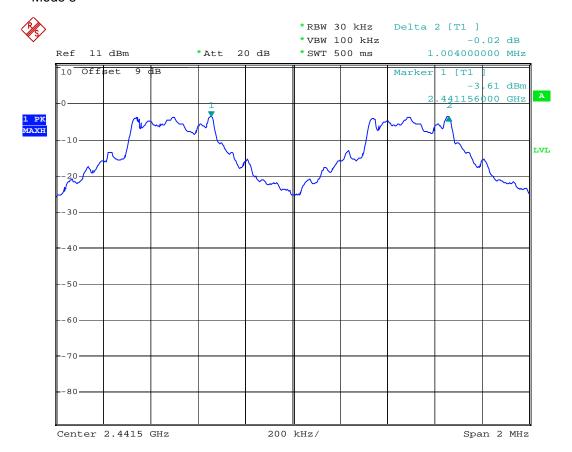


Date: 18.AUG.2006 23:49:34

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 35 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 8

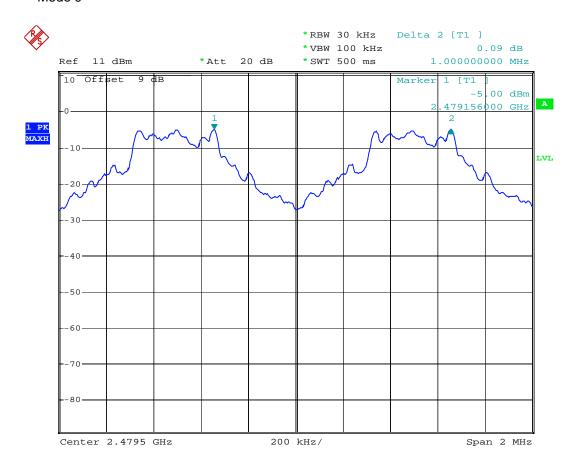


Date: 18.AUG.2006 23:47:30

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 36 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 9



Date: 18.AUG.2006 23:45:55

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 37 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.6 Number of Hopping Frequency

5.6.1 Measuring Instruments:

As described in chapter 9 of this test report.

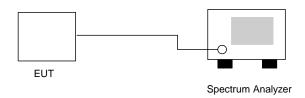
5.6.2 Test Procedure:

- 1. The output of EUT was connected to the spectrum analyzer by a low loss cable.
- 2. Set RBW of spectrum analyzer to 100kHz and VBW to 100kHz.
- 3. The number of hopping frequency used is defined as the device has the numbers of total channel.

Report No.

: FR681418

5.6.3 Test Setup Layout:



5.6.4 Test Result: See spectrum analyzer plots below

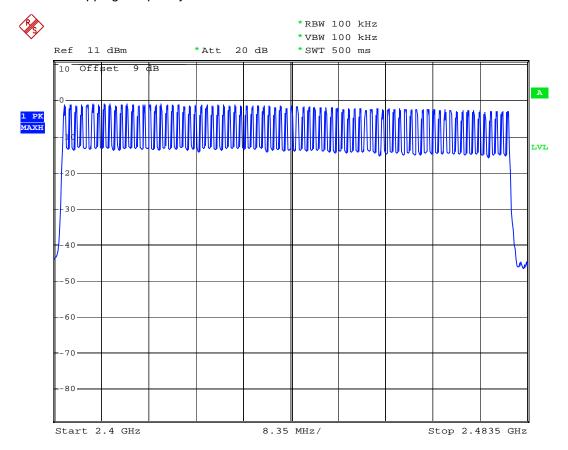
Application Type: BT
Temperature: 26°C
Relative Humidity: 53%
Test Enginner: Jay

Number of Hopping Frequency	Limits
(Channel)	(Channel)
79	15

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 38 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.6.5 Number of Hopping Frequency



Date: 19.AUG.2006 00:18:42

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 39 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.7 Hopping Channel Bandwidth

5.7.1 Measuring Instruments:

As described in chapter 9 of this test report.

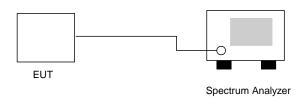
5.7.2 Test Procedure:

- 1. The transmitter output was connected to the spectrum analyzer by a low loss cable.
- 2. Set RBW of spectrum analyzer to 30kHz and VBW to 300kHz.
- 3. The Hopping Channel bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20 dB.

Report No.

: FR681418

5.7.3 Test Setup Layout:



5.7.4 Test Result: See spectrum analyzer plots below

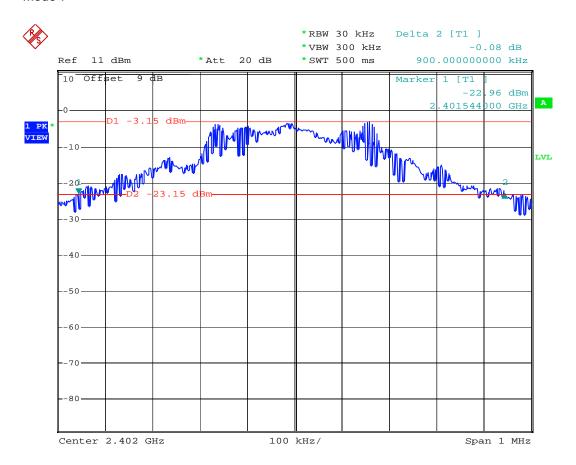
Channel	Frequency	Hopping Channel Bandwidth	Limits	Plot
	(MHz)	(MHz)	(MHz)	Ref. No.
00	2402	0.900	1.000	Mode 7
39	2441	0.904	1.000	Mode 8
78	2480	0.898	1.000	Mode 9

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 40 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.7.5 Hopping Channel Bandwidth

Mode 7

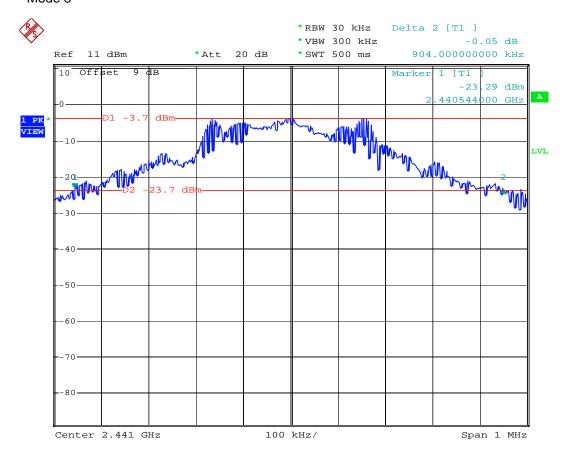


Date: 18.AUG.2006 23:40:13

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 41 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Mode 8



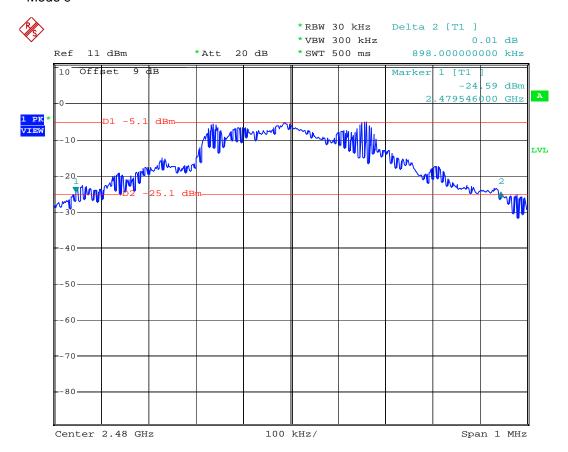
Date: 18.AUG.2006 23:38:52

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 42 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

CC TEST REPORT Report No. : FR681418

Mode 9



Date: 18.AUG.2006 23:37:29

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 43 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.8 Dwell Time of Each Frequency

5.8.1 Measuring Instruments:

As described in chapter 9 of this test report.

5.8.2 Test Procedure:

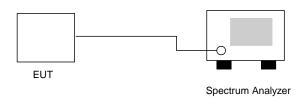
- 1. The transmitter output was connected to the spectrum analyzer by a low loss cable.
- 2. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- 3. Set the center frequency on any frequency would be measure and set the frequency span to zero span.

Report No.

: FR681418

4. The calculate =79 * 0.4 * (1600/79) * t (t = the time duration of one single pulse)

5.8.3 Test Setup Layout:



5.8.4 Test Result: See spectrum analyzer plots below

Ch00

Package Mode	Average Hopping Channel	Package Transfer Time	Dwell Time	Limit
		(us)	(s)	(s)
DH1	8.9	404	0.114	0.4
DH3	4.9	1680	0.260	0.4
DH5	3.9	2940	0.362	0.4

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 44 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02



FCC TEST REPORT Report No. : FR681418

CH39				
Package Mode	Average Hopping Channel	Package Transfer Time	Dwell Time	Limit
_		(us)	(s)	(s)
DH1	9.1	400	0.115	0.4
DH3	4.7	1670	0.248	0.4
DH5	3.5	2960	0.327	0.4

CH78

Package Mode	Average Hopping Channel	Package Transfer Time	Dwell Time	Limit
		(us)	(s)	(s)
DH1	8.7	400	0.110	0.4
DH3	5.8	1680	0.308	0.4
DH5	3.6	2940	0.334	0.4

Remark:

- 1. Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
- 2. 79channels come from the Hopping Channel number.
- 3. Average Hopping Channel = hops/sweep time
- 4. t: Package Transfer Time(us)

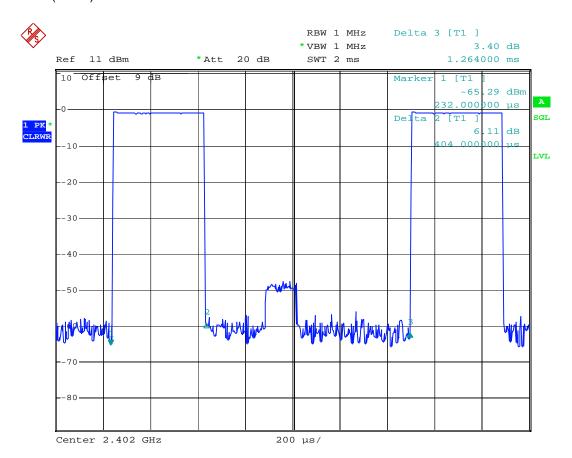
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 45 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

TEST REPORT Report No. : FR681418

5.8.5 Dwell Time

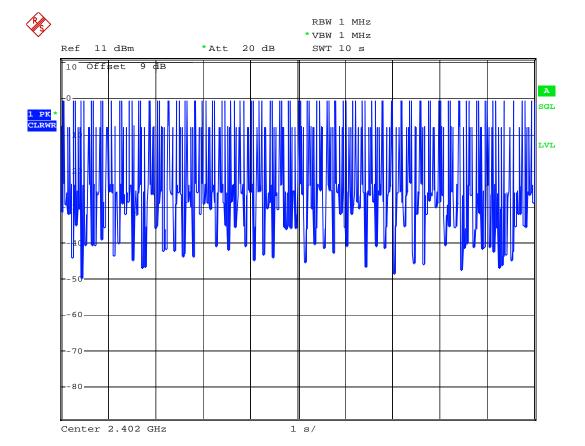
DH1 (CH00)



Date: 18.AUG.2006 23:51:14

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 46 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

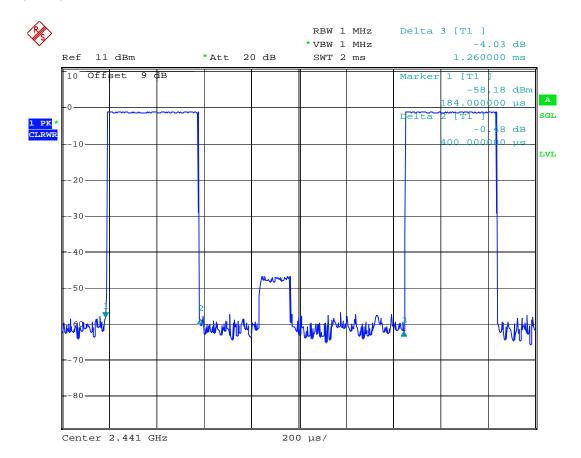


Date: 19.AUG.2006 00:01:40

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 47 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

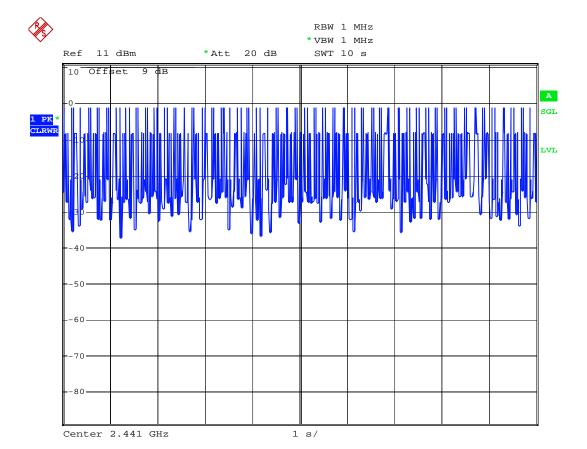
DH1 (CH39)



Date: 18.AUG.2006 23:52:12

SPORTON International Inc.

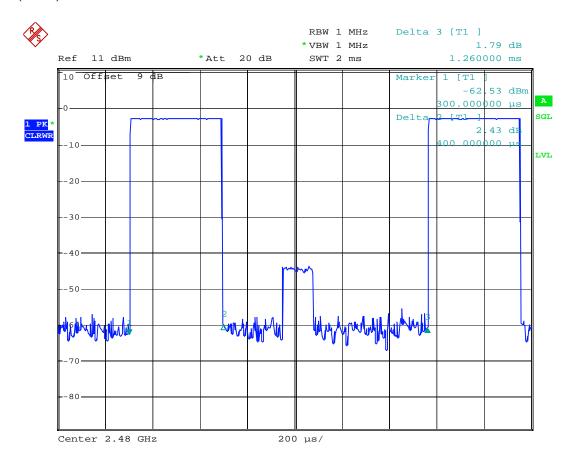
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 48 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02



Date: 19.AUG.2006 00:03:02

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 49 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

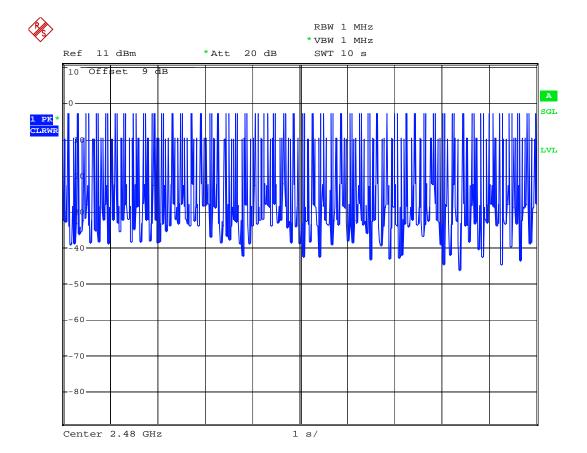
DH1 (CH78)



Date: 18.AUG.2006 23:53:10

SPORTON International Inc.

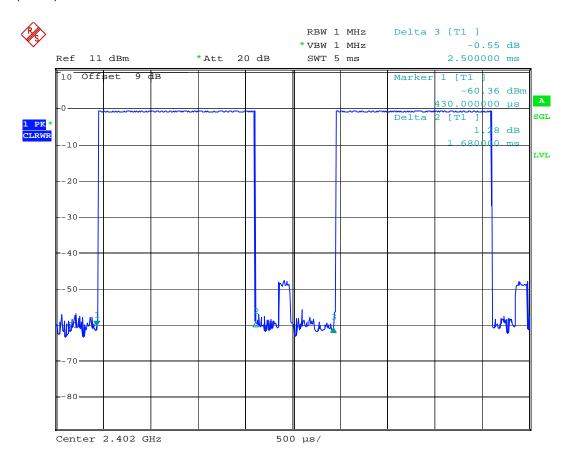
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 50 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02



Date: 19.AUG.2006 00:04:14

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 51 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

DH3 (CH00)

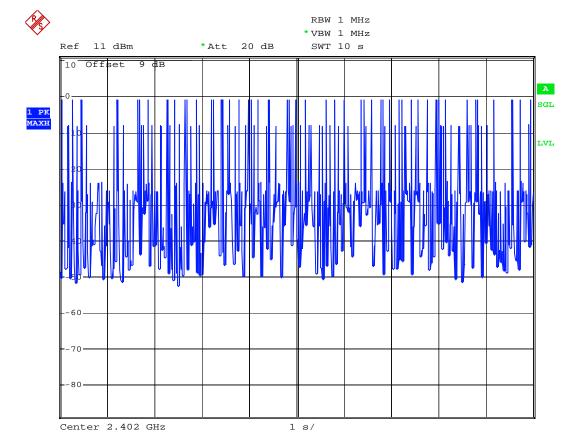


Date: 18.AUG.2006 23:55:40

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 52 of 127 Report Issued Date : Sep. 07, 2006

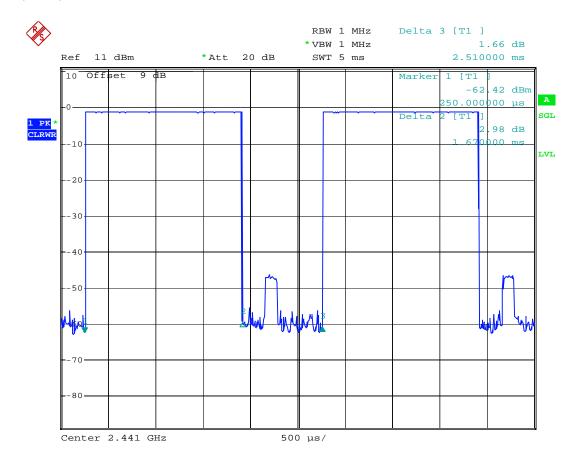
Report Version : Rev. 02



Date: 19.AUG.2006 01:19:55

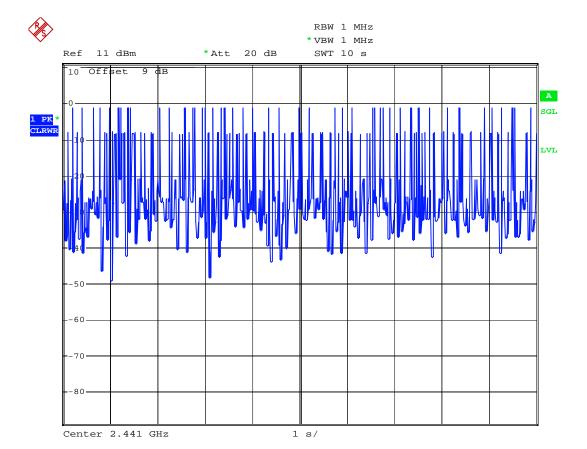
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 53 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

DH3 (CH39)



Date: 18.AUG.2006 23:54:49

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 54 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

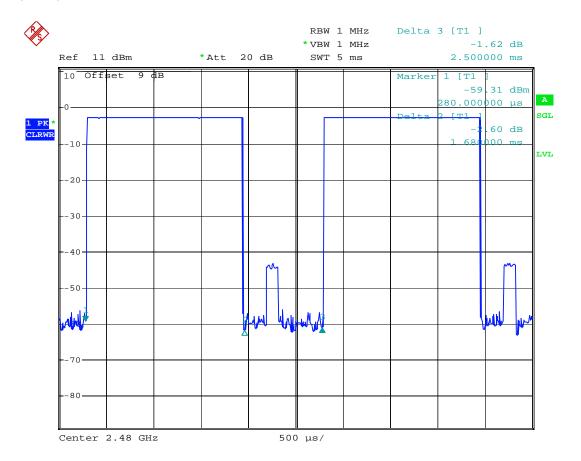


Date: 19.AUG.2006 00:06:33

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 55 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

CTEST REPORT Report No. : FR681418

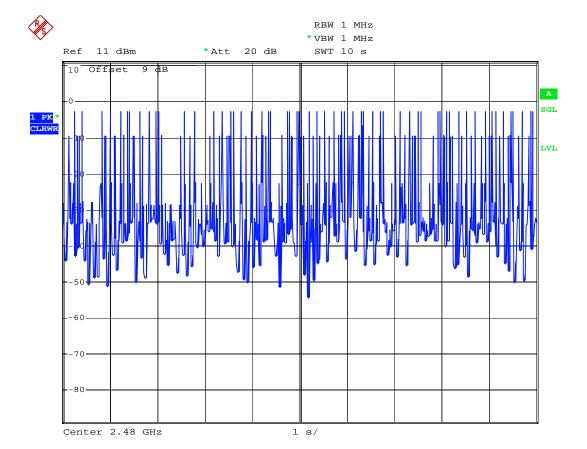
DH3 (CH78)



Date: 18.AUG.2006 23:53:59

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 56 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

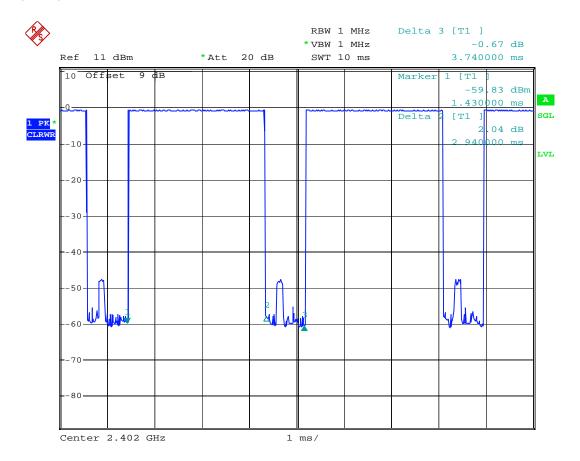


Date: 19.AUG.2006 00:05:55

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 57 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

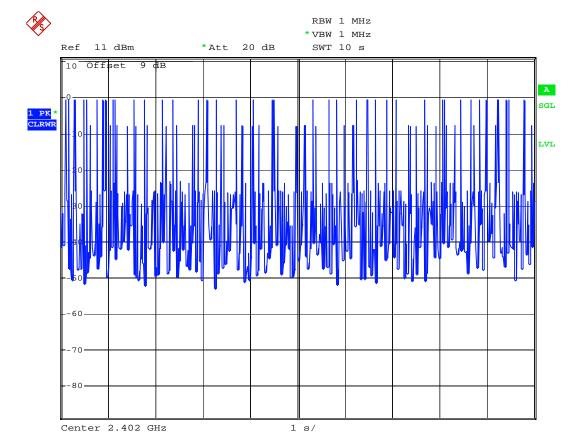
CTEST REPORT Report No. : FR681418

DH5 (CH00)



Date: 18.AUG.2006 23:56:38

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 58 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

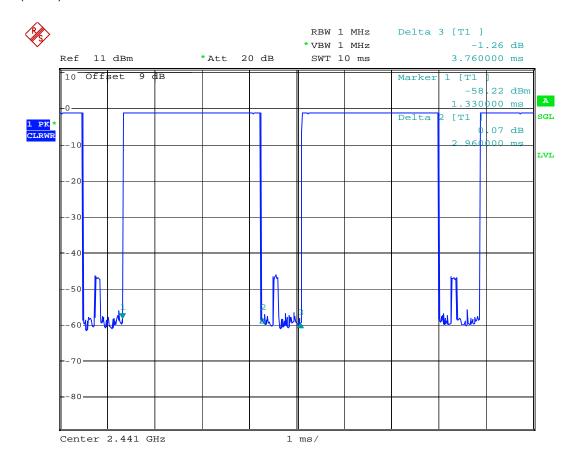


Date: 19.AUG.2006 00:00:55

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 59 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

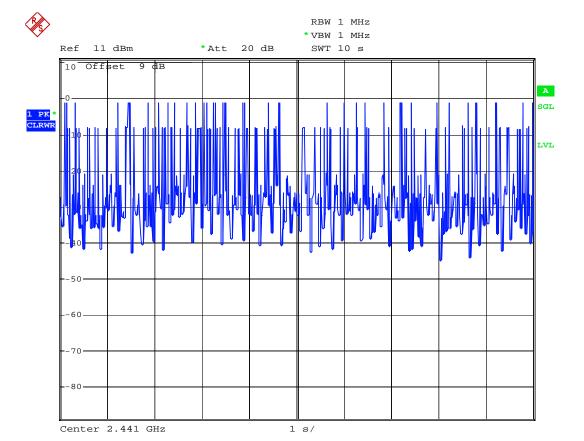
DH5 (CH39)



Date: 18.AUG.2006 23:57:37

SPORTON International Inc.

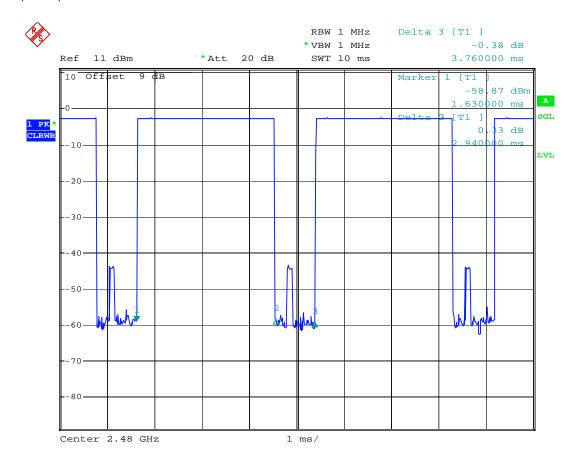
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 60 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02



Date: 19.AUG.2006 00:00:12

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 61 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

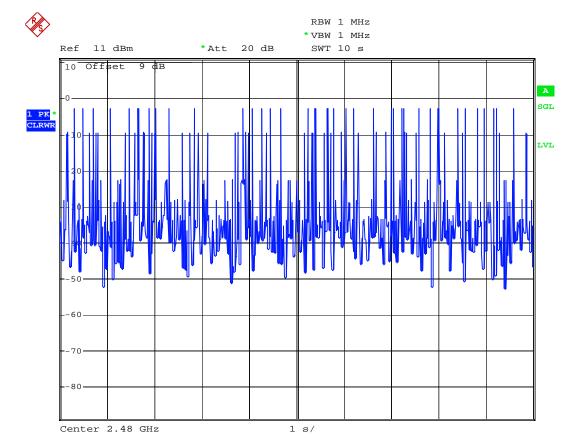
DH5 (CH78)



Date: 18.AUG.2006 23:58:36

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 62 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02



Date: 18.AUG.2006 23:59:37

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 63 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.9 Peak Output Power Measurement

5.9.1 Measuring Instruments:

As described in chapter 6 of this test report.

5.9.2 Test Procedure:

1. The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter for WLAN measurement. The power is equal to the reading level on power meter plus cable loss at the EUT antenna terminal.

Report No.

: FR681418

2. The antenna port(RF output) of the EUT was connected to the input (RF input) of a spectrum analyzer for BT measurement. The cable loss has been offset before testing.

5.9.3 Test Setup Layout:



5.9.4 Test Result:

Application Type: WLAN 802.11b/g and BT

Temperature : 26°CRelative Humidity : 53 %Test Enginner : Jay

WLAN 802.11b

Channel	Frequency	Measured Output Power	Limits
	(MHz)	(dBm)	(Watt/dBm)
01	2412	16.00	1W/30 dBm
06	2437	16.61	1W/30 dBm
11	2462	17.28	1W/30 dBm

WLAN 802.11g

Channel	Frequency	Measured Output Power	Limits
	(MHz)	(dBm)	(Watt/dBm)
01	2412	17.20	1W/30 dBm
06	2437	18.80	1W/30 dBm
11	2462	19.30	1W/30 dBm

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 64 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Bluetooth

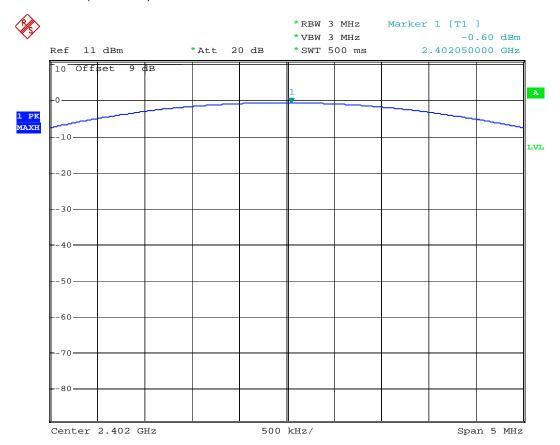
Channel	Frequency	Measured Output Power	Limits
	(MHz)	(dBm)	(Watt/dBm)
00	2402	-0.6	1W/30 dBm
39	2441	-0.98	1W/30 dBm
78	2480	-2.41	1W/30 dBm

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 65 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

C TEST REPORT Report No. : FR681418

5.9.5 Output Power

BT Mode: CH00 (2402MHz)



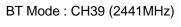
Date: 18.AUG.2006 23:33:46

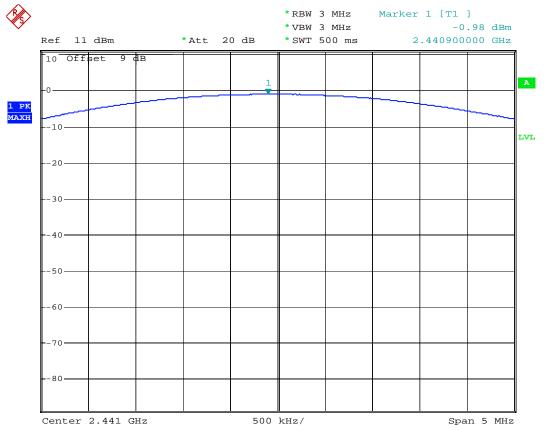
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 66 of 127 Report Issued Date : Sep. 07, 2006

Report Version : Rev. 02

FCC TEST REPORT Report No. : FR681418





Date: 18.AUG.2006 23:33:11

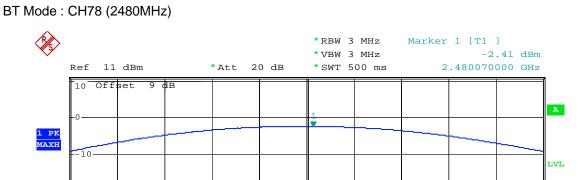
SPORTON International Inc.

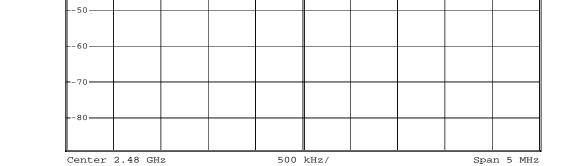
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 67 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

-20-

-30

FCC TEST REPORT Report No. : FR681418





Date: 18.AUG.2006 23:35:59

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 68 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

5.10 Conducted Emission

5.10.1 Measuring Instruments

As describ ed in chapter 6 of this test Report.

5.10.2 Test Procedures:

a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.

Report No.

: FR681418

- b. Connect EUT to the power port of a line impedance stabilization network (LISN).
- c. All the support units are connected to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 69 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

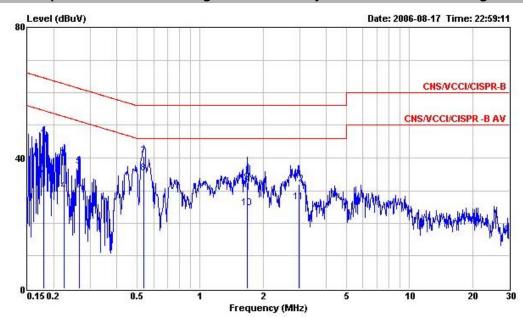
FCC TEST REPORT **Report No. : FR681418**

5.10.3 Test Data

Temperature: 26 °C Relating Humidity: 53 % Test Enginner: Louis

Test Mode: Mode 1

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



Site

: CO01-HY : CNS/VCCI/CISPR-B 2001/004 200604 LINE

Condition EUT Smart Phone Power : 120V/60Hz Model FR681418

Memo : PCS1900 Idle+BT Link+WLAN Link+Earphone

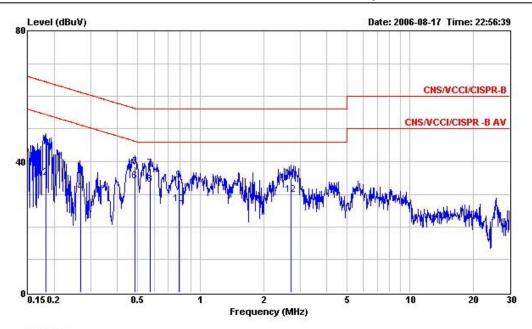
Memo : +Adaptor+Camera Memo

Over Limit Read Probe Cable Freq Level Limit Line Level Factor Loss Remark dB dBuV dBuV dBuV MHz dB dB 1 0.179 45.93 -18.58 64.51 45.81 0.10 0.02 QP 0.179 34.76 -19.75 54.51 34.64 0.223 39.67 -23.04 62.71 39.51 0.10 0.02 Average 0.10 0.06 QP 0.223 29.97 -22.74 52.71 29.81 0.10 0.06 Average 0.266 37.31 -23.93 61.24 37.08 0.10 0.266 30.04 -21.20 51.24 29.81 0.10 5 0.13 QP 6 0.13 Average 0.537 40.40 -15.60 56.00 40.08 0.10 0.22 QP 0.537 35.43 -10.57 46.00 35.11 0.10 0.22 Average 1.680 32.35 -23.65 56.00 32.04 0.10 0.21 QP 8 1.680 24.77 -21.23 46.00 24.46 0.10 0.21 Average 10 2.980 26.58 -19.42 46.00 26.17 2.980 31.99 -24.01 56.00 31.58 0.16 0.25 Average 11 0.16 0.25 QP

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 70 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418



: CO01-HY : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL : Smart Phone : 120V/60Hz : FR681418 : PCS1900 Idle+BT Link+WLAN Link+Earphone

Site Condition EUT Power Model Memo

Memo Memo : +Adaptor+Camera

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
-	MHz	dBuV	dB	dBuV	dBuV	——dB	dB	
1	0.182	44.71	-19.68	64.39	44.59	0.10	0.02	QP
2	0.182	35.01	-19.38	54.39	34.89	0.10	0.02	Average
3	0.268	35.76	-25.43	61.19	35.53	0.10	0.13	QP
4	0.268	30.63	-20.56	51.19	30.40	0.10	0.13	Average
5	0.486	38.32	-17.92	56.24	37.98	0.10	0.24	QP
6	0.486	33.91	-12.33	46.24	33.57	0.10	0.24	Average
7	0.573	37.98	-18.02	56.00	37.68	0.10	0.20	QP
8	0.573	33.01	-12.99	46.00	32.71	0.10	0.20	Average
9	0.790	34.26	-21.74	56.00	34.04	0.10	0.12	QP
10	0.790	26.91	-19.09	46.00	26.69	0.10	0.12	Average
11	2.710	34.75	-21.25	56.00	34.39	0.10	0.26	QP
12	2.710	29.77	-16.23	46.00	29.41	0.10	0.26	Average

SPORTON International Inc.

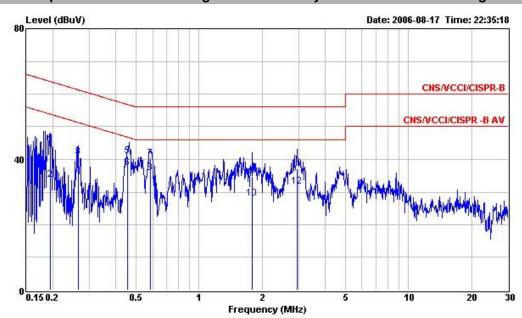
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 71 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

FCC TEST REPORT Report No. : FR681418

Temperature : 26 °CRelating Humidity : 53 %Test Enginner : Louis

Test Mode : Mode 2

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



Site : CO01 Condition : CNS/ EUT : Smart

CO01-HY CNS/VCCI/CISPR-B 2001/004 200604 LINE

EUT : Smart Phone Power : 120V/60Hz Model : FR681418

Memo : PCS1900 Idle+BT Link+WLAN Link+Earphone

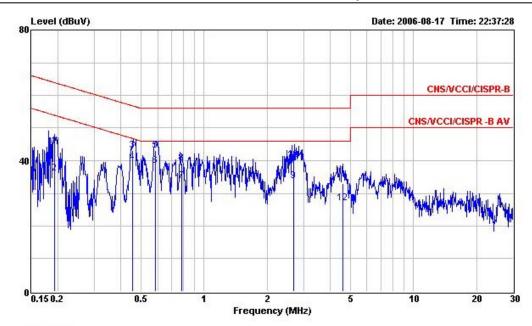
Memo : +Adaptor+Mpeg4 Memo :

Over Limit Read Probe Cable Freq Level Limit Line Level Factor Loss Remark dB dBuV dBuV MHz dBuV dB dB 1 0.195 44.39 -19.43 63.82 44.27 0.10 0.02 QP 0.195 33.87 -19.95 53.82 33.75 0.10 0.02 Average 0.264 40.68 -20.62 61.30 40.45 0.10 0.13 QP 0.264 34.71 -16.59 51.30 34.48 0.10 0.13 Average 0.456 41.08 -15.68 56.76 40.72 0.456 37.45 -9.31 46.76 37.09 0.10 0.26 QP 0.10 0.26 Average 0.585 40.23 -15.77 56.00 39.94 0.10 0.19 QP 0.585 35.81 -10.19 46.00 35.52 0.10 0.19 Average 1.800 34.90 -21.10 56.00 34.57 0.10 0.23 QP 8 9 1.800 28.12 -17.88 46.00 27.79 0.10 0.23 Average 10 11 2.930 37.08 -18.92 56.00 36.67 0.16 0.25 QP 2.930 31.65 -14.35 46.00 31.24 0.16 0.25 Average

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 72 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02





Site

: CO01-HY : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL : Smart Phone : 120V/60Hz

Condition
EUT
Power
Model
Memo

: FR681418 : PCS1900 Idle+BT Link+WLAN Link+Earphone

Memo Memo : +Adaptor+Mpeg4

			0ver	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
-	MHz	dBuV	dB	dBuV	dBuV	dB	dB	·
1	0.193	44.31	-19.60	63.91	44.19	0.10	0.02	QP
2	0.193	36.15	-17.76	53.91	36.03	0.10	0.02	Average
3	0.456	43.18	-13.58	56.76	42.82	0.10	0.26	QP
4	0.456	39.56	-7.20	46.76	39.20	0.10	0.26	Average
5	0.585	43.01	-12.99	56.00	42.72	0.10	0.19	QP
6	0.585	38.55	-7.45	46.00	38.26	0.10	0.19	Average
7	0.780	33.72	-12.28	46.00	33.50	0.10	0.12	Average
8	0.780	39.18	-16.82	56.00	38.96	0.10	0.12	QP
9	2.690	33.87	-12.13	46.00	33.51	0.10	0.26	Average
10	2.690	40.26	-15.74	56.00	39.90	0.10	0.26	QP
11	4.620	32.95	-23.05	56.00	32.58	0.12	0.25	QP
12	4.620	27.09	-18.91	46.00	26.72	0.12	0.25	Average

SPORTON International Inc.

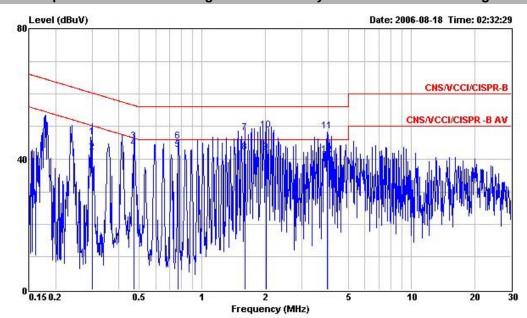
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 73 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418

Temperature: 26 °C Relating Humidity: 53 % Test Enginner: Louis

Test Mode: Mode 3

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



Site Condition EUT Power Model

CO01-HY
CNS/VCCI/CISPR-B 2001/004 200604 LINE
Smart Phone
120V/60Hz
FR681418
PCS1900 Idle+BT Link+WLAN Link+Earphone
+USB Link+MPEG4 Memo

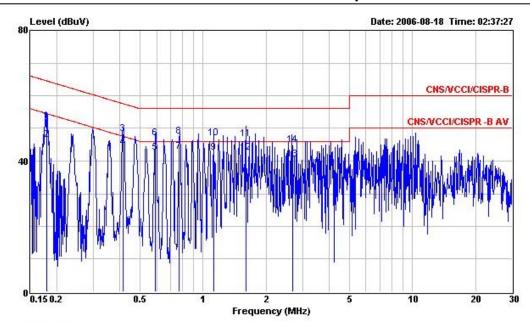
Memo Memo

Menno	200		2	200 865	8 2	420 07	N23232	
			0ver	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
_	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.299	46.79	-13.48	60.27	46.51	0.10	0.18	QP
2	0.299	42.10	-8.17	50.27	41.82	0.10	0.18	Average
3	0.474	45.57	-10.87	56.44	45.22	0.10	0.25	QP
4	0.474	43.37	-3.07	46.44	43.02	0.10	0.25	Average
- 5	0.771	42.98	-3.02	46.00	42.75	0.10	0.13	Average
6	0.771	45.54	-10.46	56.00	45.31	0.10	0.13	QP
7	1.601	47.99	-8.01	56.00	47.69	0.10	0.20	QP
8	1.601	42.19	-3.81	46.00	41.89	0.10	0.20	Average
9	2.016	42.16	-3.84	46.00	41.80	0.10	0.26	Average
10	2.016	48.87	-7.13	56.00	48.51	0.10	0.26	QP
11	3.979	48.59	-7.41	56.00	48.14	0.20	0.25	QP
12	3.979	41.18	-4.82	46.00	40.73	0.20	0.25	Average

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 74 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418



: CO01-HY : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL : Smart Phone : 120V/60Hz

Condition EUT Power

Model Memo Memo Memo Memo : FR681418 : PCS1900 Idle+BT Link+WLAN Link+Earphone : +USB Link+MPEG4

1101110	0.00,000,000		0ver	Limit	Read	Probe	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
_	MHz	dBuV	dB	dBu∀	dBuV	dB	dB	
1	0.179	52.21	-12.32	64.53	52.09	0.10	0.02	QP
2	0.179	46.62	-7.91	54.53	46.50	0.10	0.02	Average
3	0.415	48.19	-9.36	57.55	47.81	0.10	0.28	QP
4	0.415	44.15	-3.40	47.55	43.77	0.10	0.28	Average
5	0.592	42.58	-3.42	46.00	42.29	0.10	0.19	Average
6	0.592	47.02	-8.98	56.00	46.73	0.10	0.19	QP
7	0.771	42.86	-3.14	46.00	42.63	0.10	0.13	Average
8	0.771	47.43	-8.57	56.00	47.20	0.10	0.13	QP
9	1.127	42.68	-3.32	46.00	42.48	0.10	0.10	Average
10	1.127	47.07	-8.93	56.00	46.87	0.10	0.10	QP
11	1.600	46.64	-9.36	56.00	46.34	0.10	0.20	QP
12	1.600	42.72	-3.28	46.00	42.42	0.10	0.20	Average
13	2.666	40.52	-5.48	46.00	40.16	0.10	0.26	Average
14	2.666	44.91	-11.09	56.00	44.55	0.10	0.26	QP

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 75 of 127 Report Issued Date : Sep. 07, 2006

5.11 Radiated Emission Measurement

5.11.1 Measuring Instruments

As described in chapter 6 of this Report.

5.11.2 Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.

Report No.

: FR681418

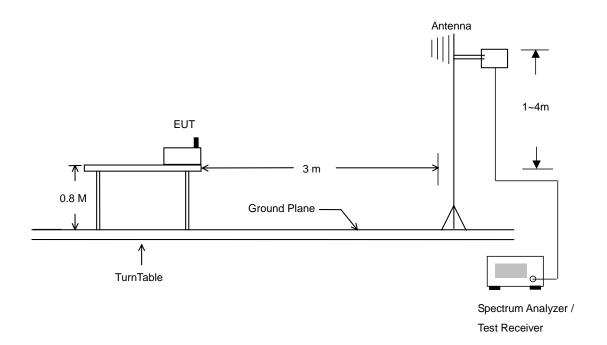
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- e. 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.
- f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- g. 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.
- h. 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.

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 76 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

Report No. : FR681418

5.11.3 Typical Test Setup Layout of Radiated Emission



SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 77 of 127
Report Issued Date : Sep. 07, 2006
Report Version : Rev. 02

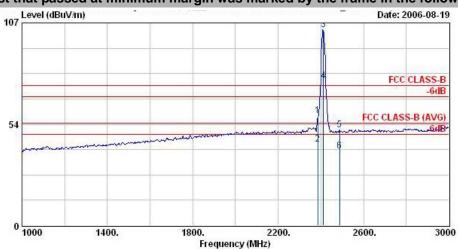
FCC TEST REPORT Report No. : FR681418

5.11.4 Test Data

 Temperature: 27°C Relating Humidity: 51% Test Enginner : Andrew

Test Mode : Mode 1 Polarization : Horizontal

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



Site : 03CH06-HY Condition : HF-ANT-060410 HORIZONTAL

EUT : Smart Phone : 120Vac/60Hz Power Model FR 681418

Memo : 11b Tx_CH01;2412MHz

Plane E2 Data Rate : 11

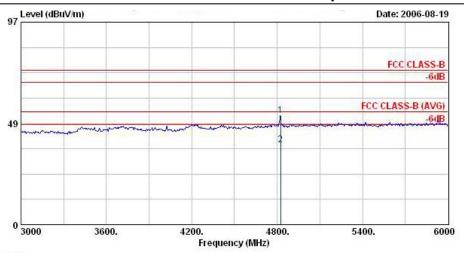
	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{I}\overline{m}$	\overline{dB}	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{I}\overline{m}$	$\overline{-}\overline{d}\overline{B}\overline{u}\overline{V}$	$-\overline{dB7m}$	<u>d</u> B	<u>d</u> B -	cm	deg	
1 2 3 @ 4 X 5	2386.00 2386.00 2412.00 2412.00 2488.00 2488.00	42.85 103.56 76.45 50.36	-15.77 -11.15 -23.64 -14.53	74.00	59.17 43.80 104.49 77.38 51.21 40.32	30.26 30.26 30.27 30.27 30.30 30.30	4.26 4.23 4.26 4.26 4.36 4.36	35.44 35.46 35.46 35.51	100 100 100 100 100 100	159 360 159 360	Peak Average Peak Average Peak Average

Remark: #3 and #4 Fundamental Signal

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 78 of 127 Report Issued Date : Sep. 07, 2006

: FR681418 Report No.



Site

: 03CH06-HY : HF-ANT-060410 HORIZONTAL Condition

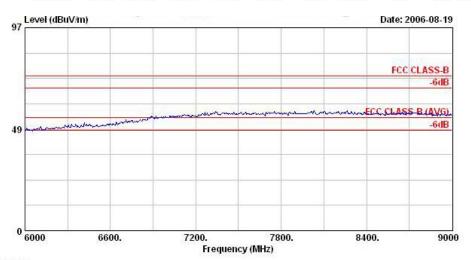
EUT Smart Phone Power 120Vac/60Hz Model

: FR 681418 : 11b Tx_CH01;2412MHz Memo

Plane E2 Data Rate

12

Freq	Level				Antenna Factor			Table Pos	Remark
MHz	$\overline{\mathtt{d}B\mathtt{u}V7m}$	<u>dB</u>	$\overline{\mathtt{d} \mathtt{B} \mathtt{u} \mathtt{V} /m}$	dBu∀	$-\frac{1}{dB/m}$	<u>dB</u>	<u>dB</u>	 deg	
4824.00 4824.00									Peak Average



Site

: 03CH06-HY : HF-ANT-060410 HORIZONTAL Condition

EUT Smart Phone Power 120Vac/60Hz ModelFR 681418

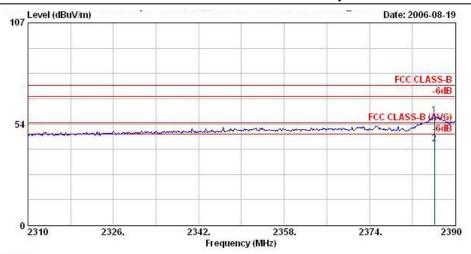
: 11b Tx_CH01;2412MHz Memo

Plane : E2 Data Rate : 11

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 79 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418



: 03CH06-HY : HF-ANT-060410 HORIZONTAL

Site Condition EUT Smart Phone Power Model : 120Vac/60Hz : FR 681418 : 11b Tx_CH01;2412MHz

Memo

Plane E2 Data Rate : 11

	Freq	Level						Preamp Factor			
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{/m}}$	\overline{dB}	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	-dBuV	$-\overline{dB/m}$	$ \overline{d}\overline{B}$	\overline{dB}	cm	deg	
1 2	2386.16 2386.16								100 100		Peak Average

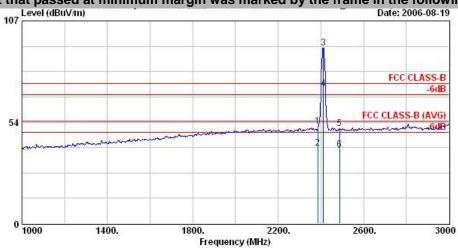
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 80 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418

Polarization: Vertical

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



Site

: 03CH06-HY : HF-ANT-060410 VERTICAL Condition

: Smart Phone : 120Vac/60Hz : FR 681418 EUT Power Model

: 11b Tx_CH01;2412MHz Memo

Plane : E2

Data Rate : 11

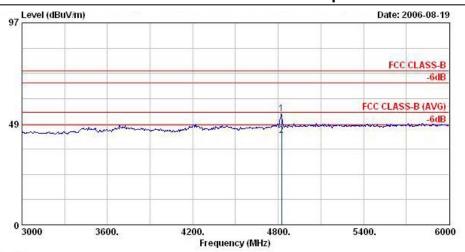
	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/m}$	<u>dB</u>	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	dBuV	<u>dB</u> /m	<u>dB</u>	<u>dB</u>	cm	deg	
1 2 3 X 4 X 5	2386.00 2386.00 2412.00 2412.00 2488.00 2488.00		-14.07 -24.05	74.00 54.00 74.00 54.00	52.18 40.88 93.66 72.14 50.81 39.95	30.26 30.26 30.27 30.27 30.30 30.30	4.26 4.23 4.26 4.26 4.36 4.36	35.44 35.46 35.46 35.51	100 108 100 108 100 108	28 360 28 360	Peak Average Peak Average Peak Average

Remark: #3 and #4 Fundamental Signal

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 81 of 127 Report Issued Date : Sep. 07, 2006

: FR681418 Report No.



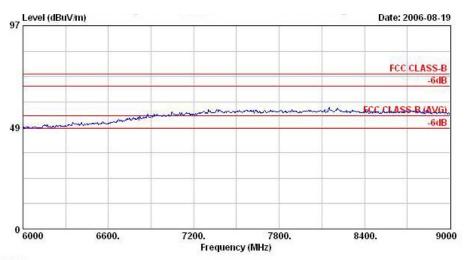
Site

: 03CH06-HY : HF-ANT-060410 VERTICAL Condition

EUT : Smart Phone : 120Vac/60Hz Power Model FR 681418 : 11b Tx_CH01;2412MHz Memo

Plane E2 Data Rate : 11

	Freq	Level	Over Limit	Limit Line	Read. Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}/\overline{\mathtt{m}}$	\overline{dB}	$\overline{\mathtt{dBuV/m}}$	dBuV	−dB/m	dB	\overline{dB}	cm	deg	
1	4824.00	53.45	-20.55	74.00	50.38	32.94	6.24	36.12	200	0	Peak
2	4824.00	42.90	-11.10	54.00	39.83	32.94	6.24	36.12	100	335	Average



: 03CH06-HY Site

Condition : HF-ANT-060410 VERTICAL

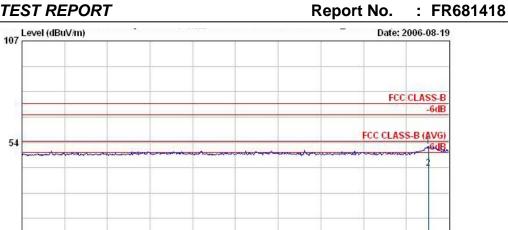
: Smart Phone : 120Vac/60Hz : FR 681418 EUT Power Model

: 11b Tx_CH01;2412MHz Memo

Plane Data Rate : 11

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 82 of 127 Report Issued Date : Sep. 07, 2006



Frequency (MHz)

2374.

Site : 03CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Smart Phone

2310

2326.

Power 120Vac/60Hz Model: FR 681418

: 11b Tx_CH01;2412MHz Memo

Plane : E2 Data Rate : 11

	Freq	Level				Antenna Factor					Remark
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/m}$	\overline{dB}	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	dBuV	−dB/m	m dB	\overline{dB}	cm	deg	
1 2	2386.16 2386.16								100 108		Peak Average

Remark: There is no more obvious spurious emission except the listings above.

SPORTON International Inc.

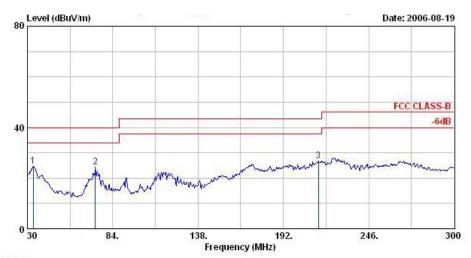
TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000

: 83 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418

Test Mode : Mode 2 Polarization : Horizontal

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



: 03CH06-HY : BI-LOG-2004-1122 HORIZONTAL Condition

Smart Phone 120Vac/60Hz EUT Power Model FR 681418

Memo : 11b Tx_CH06;2437MHz

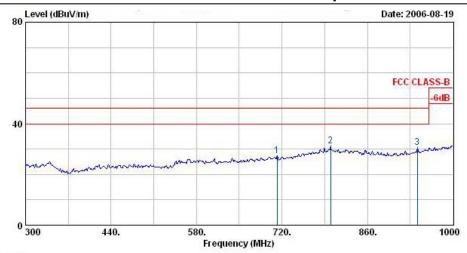
Plane : E2 Data Rate : 11

	Freq	Level		Limit Line					Ant Pos	Table Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}/\overline{\mathtt{m}}$	<u>dB</u>	$\overline{\tt dBuV/m}$	dBuV	$-\overline{dB/m}$	<u>dB</u>	\overline{dB}	cm	deg	
1 @ 2 3	72.93	24.30	-15.70	40.00 40.00 43.50	45.11	6.48	1.41	28.70	100 100 100	0	Peak Peak Peak

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 84 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418



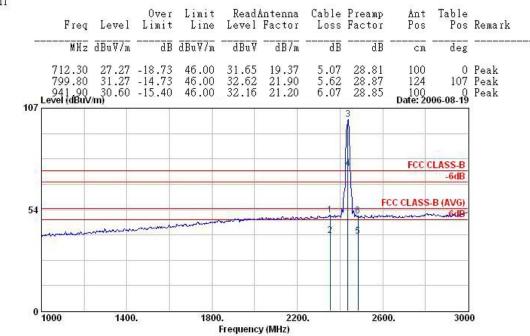
Site : 03CH06-HY

Condition : BI-LOG-2004-1122 HORIZONTAL

EUT : Smart Phone Power : 120Vac/60Hz Model : FR 681418

Memo : 11b Tx_CH06;2437MHz

Plane : E2 Data Rate : 11



Site : 03CH06-HY

Condition : HF-ANT-060410 HORIZONTAL

EUT: Smart Phone Power: 120Vac/60Hz Model: FR 681418

Memo : 11b Tx_CH06;2437MHz

Plane : E2 Data Rate : 11

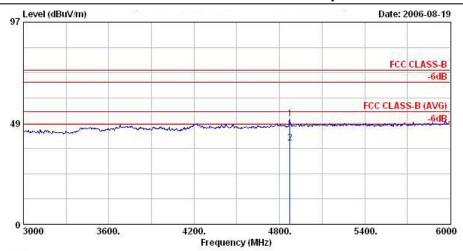
Over Limit ReadAntenna Freq Level Limit Line Level Factor ReadAntenna Cable Preamp Ant Table Pos Remark Loss Factor Pos MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 2354.00 50.56 2354.00 39.96 2437.00 101.07 2437.00 75.05 4.20 4.20 4.29 4.29 4.36 35.42 35.42 35.47 35.47 35.51 1 2 @ 3 @ 4 @ 5 @ 50.56 -23.44 39.96 -14.04 30.24 30.24 360 Peak 157 Average 74.00 100 54.00 40.94 100 101.97 30.28 100 360 Peak 157 Average 157 Average 30.28 30.29 75.95 100 2484.00 39.40 -14.60 54.00 2484.00 50.25 -23.75 74.00 40.26 100 360 Peak 51.11 30.29 4.36 100

Remark: #3 and #4 Fundamental Signal

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 85 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418



Site : 03CH06-HY

Condition : HF-ANT-060410 HORIZONTAL

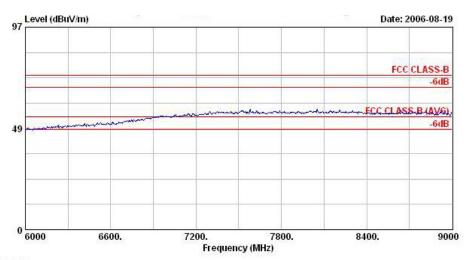
EUT : Smart Phone Power : 120Vac/60Hz Model : FR 681418

Memo : 11b Tx_CH06;2437MHz

Plane : E2 Data Rate : 11

1 2

	Freq	Level				Antenna Factor		Preamp Factor		Table Pos	Remark
	MHz	MHz dBuV/m	$\overline{dBuV/m}$ \overline{dB}	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}/\overline{\mathtt{m}}$	7m dBuV	$-\overline{dB/m}$	$\overline{d}\overline{B}$	 dB	cm	deg	
. @	4874.00 4874.00								200 100		Peak Average



Site : 03CH06-HY

Condition : HF-ANT-060410 HORIZONTAL

EUT : Smart Phone
Power : 120Vac/60Hz
Model : FR 681418

Model : FR 681418 Memo : 11b Tx_CH06;2437MHz

Plane : E2 Data Rate : 11

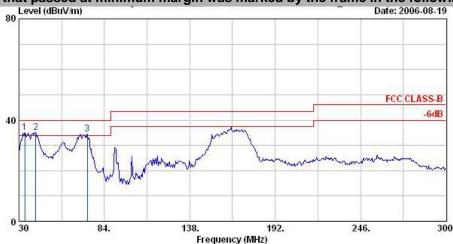
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 86 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418

Polarization: Vertical

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



: 03CH06-HY Site

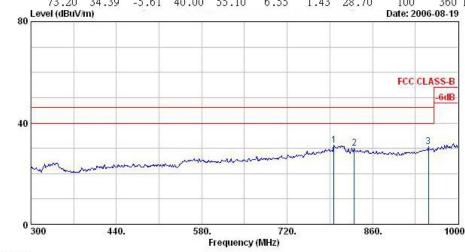
Condition : BI-LOG-2004-1122 VERTICAL

EUT Smart Phone : 120Vac/60Hz Power Model FR 681418

: 11b Tx_CH06;2437MHz Memo

Plane E2 Data Rate : 11

Cable Preamp Over Limit ReadAntenna Ant Table Freq Level Limit Line Level Factor Loss Factor Pos Pos Remark MHz dBuV/m dBuV dB/m dB dBuV/m dB cm deg 35.01 35.03 40.00 45.20 100 360 Peak 28.65 -4.97 40.00 48.20 112 234 Peak 73.20 34.39 360 Peak -5.61 40.00 55.10 6.55 1.43 28.70 100



: 03CH06-HY Site

Condition : BI-LOG-2004-1122 VERTICAL

EUT Smart Phone 120Vac/60Hz Power Model FR 681418

: 11b Tx_CH06;2437MHz Memo

Plane : E2 Data Rate : 11

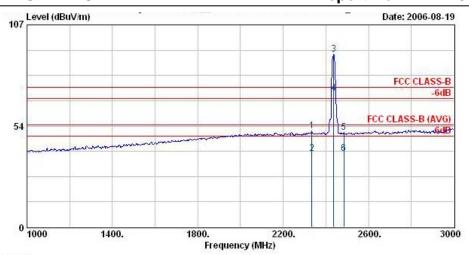
> Over Limit ReadAntenna Cable Preamp Table Ant Freq Level Limit Line Level Factor Loss Factor Pos Pos Remark dB dBuV/m MHz dBuV/m dBuV dB/m deg CM 5.57 5.54 6.10 46.00 46.00 46.00 32.62 32.22 31.99 21.79 21.31 21.50 28.87 29.03 28.88 1 @ 796.30 31.11 -14.90 100 0 Peak 829.90 951.70 30.04 -15.96 30.72 -15.28 23 0 Peak 100 100 0 Peak

SPORTON International Inc.

FCC ID: UJU9QSTEAL000

Page No. : 87 of 127 TEL: 886-2-2696-2468 Report Issued Date : Sep. 07, 2006 FAX: 886-2-2696-2255 Report Version : Rev. 02

Report No. : FR681418



: 03CH06-HY Site

HF-ANT-060410 VERTICAL Condition

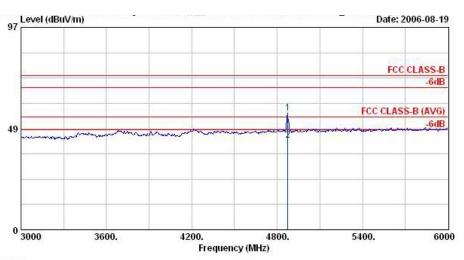
EUT Smart Phone Power 120Vac/60Hz Model : FR 681418

: 11b Tx_CH06;2437MHz Memo

Plane E2 Data Rate : 11

			0ver	Limit	Readi	Antenna	Cable	Preamp	Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
	MHz	$\overline{\tt d}\overline{\tt B}\overline{\tt u}\overline{\tt V}7\overline{\tt m}$	\overline{dB}	$\overline{\tt dBuV/m}$	dBuV	$-\overline{dB/m}$	dB	dB	cm	deg	
1	2334.00	50.89	-23.11	74.00	51.90	30.23	4.17	35.40	100	360	Peak
2 @	2334.00	39.06	-14.94	54.00	40.06	30.23	4.17	35.40	107	27	Average
3 @	2437.00	91.45			92.36	30.27	4.29	35.47	100	360	Peak
2 @ 3 @ 4 @	2437.00	70.93			71.83	30.28	4.29	35.47	107	27	Average
5	2484.00	49.93	-24.07	74.00	50.79	30.29	4.36	35.51	100		Peak
6 @	2484.00	39.08	-14.92	54.00	39.94	30.29	4.36	35.51	107	27	Average

Remark: #3 and #4 Fundamental Signal



Site

: 03CH06-HY : HF-ANT-060410 VERTICAL Condition

EUT Smart Phone 120Vac/60Hz Power Model FR 681418

: 11b Tx_CH06;2437MHz Memo

: E2 Plane Data Rate : 11

Over Limit ReadAntenna Cable Preamp Table Ant Freq Level Limit Line Level Factor Loss Factor Pos Pos Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB deg cm 4874.00 4874.00 55.82 -18.18 42.87 -11.13 74.00 54.00 52.54 39.59 33.14 33.14 6.30 6.30 36.16 36.16 360 Peak 200 344 Average 111

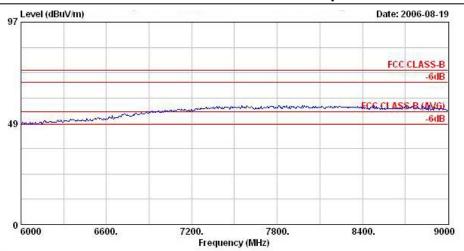
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000

1 2 @

Page No. : 88 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418



Site Condition : 03CH06-HY : HF-ANT-060410 VERTICAL

EUT Smart Phone Power : 120Vac/60Hz Model : FR 681418

Memo : 11b Tx_CH06;2437MHz

Plane E2 Data Rate : 11

Remark: There is no more obvious spurious emission except the listings above.

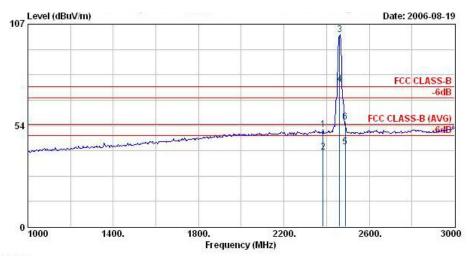
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 89 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418

Test Mode: Mode 3 Polarization: Horizontal

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



Site

: 03CH06-HY : HF-ANT-060410 HORIZONTAL Condition

EUT Smart Phone 120Vac/60Hz Power Model FR 681418

Memo : 11b Tx_CH11;2462MHz

Plane : E2 Data Rate : 11

Table Over Limit ReadAntenna Cable Preamp Ant Pos Remark Pos Freq Level Limit Level Factor Loss Factor Line MHz dBuV/m dB dBuV/m dB/m dBuV dB dB cm deg 4.23 4.23 4.33 4.33 4.36 2384.00 51.23 -22.77 2384.00 39.48 -14.52 2462.00 101.48 2462.00 75.22 35.44 35.49 35.49 35.51 35.51 30.25 30.25 30.29 30.29 74.00 54.00 52.19 40.44 102.36 360 Peak 156 Average 360 Peak 100 123456 100 0 100 Х 156 Average 76.10 100 2488.00 42.11 -11.89 54.00 2488.00 55.26 -18.74 74.00 156 Average 42.96 30.30 100 56.11 30.30 4.36 100 360 Peak

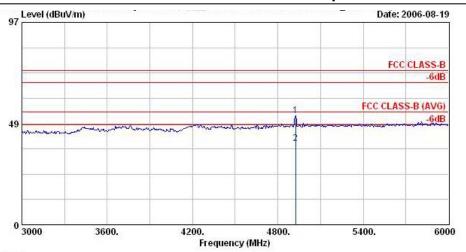
Remark: #3 and #4 Fundamental Signal

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000

: 90 of 127 Page No. Report Issued Date : Sep. 07, 2006

: FR681418 Report No.



Site

: 03CH06-HY : HF-ANT-060410 HORIZONTAL Condition

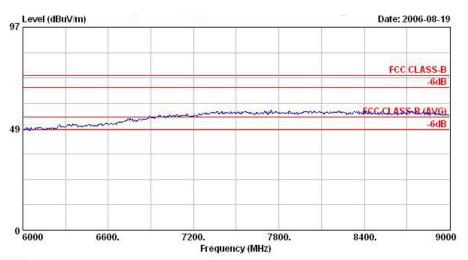
EUT Smart Phone Power 120Vac/60Hz Model

: FR 681418 : 11b Tx_CH11;2462MHz Memo

Plane E2 Data Rate

12

Freq	Level		Limit Line						Table Pos	Remark
MHz	$\overline{\tt d}\overline{\tt B}\overline{\tt u}\overline{\tt V}7\overline{\tt m}$	\overline{dB}	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	—dBu∀	$-\overline{dB/m}$	<u>dB</u>	$\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$	cm	deg	
4924.00 4924.00								200 100		Peak Average



Site Condition

: 03CH06-HY : HF-ANT-060410 HORIZONTAL

EUT Smart Phone 120Vac/60Hz Model

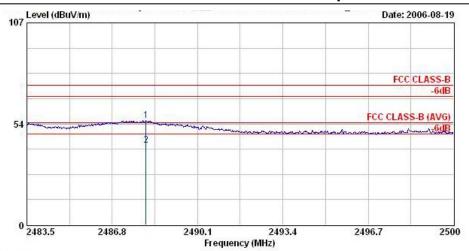
: FR 681418 : 11b Tx_CH11;2462MHz Memo

Plane : E2 Data Rate : 11

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 91 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418



Site Condition : 03CH06-HY : HF-ANT-060410 HORIZONTAL

EUT Smart Phone : 120Vac/60Hz : FR 681418 : 11b Tx_CH11;2462MHz Power Model

Memo

Plane E2 Data Rate : 11

	Freq	Level		Limit Line						Table Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}/\overline{\mathtt{m}}$	\overline{dB}	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	dBuV	$-\overline{dB/m}$	dB	\overline{dB}	cm	deg	
1 2	2488.10 2488.10									10,000,000	Peak Average

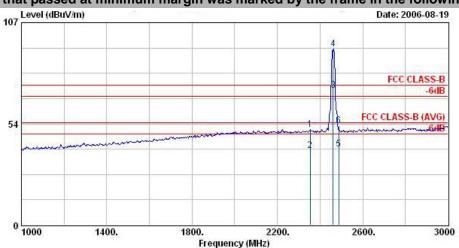
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 92 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418

Polarization : Vertical

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



Site : 03CH06-HY Condition : HF-ANT-060410 VERTICAL

EUT Smart Phone Power 120Vac/60Hz Model

: FR 681418 : 11b Tx_CH11;2462MHz Memo

Plane : E2 Data Rate : 11

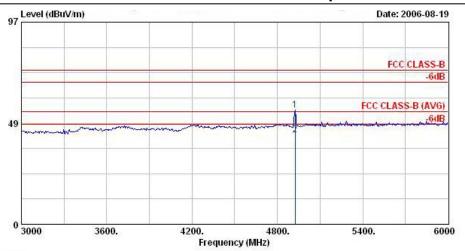
			0ver			Antenna		Preamp	Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{/}}\overline{\mathtt{m}}$	<u>dB</u>	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	dBu∀	$-\overline{dB/m}$	<u>dB</u>	\overline{dB}	cm	deg	
1	2354.00	50.52	-23.48	74.00	51.49	30.24	4.20	35.42	100	360	Peak
2	2354.00	39.18	-14.82	54.00	40.16	30.24	4.20	35.42	104	76	Average
3 X	2462.00	71.36			72.24	30.29	4.33	35.49	104	76	Average
3 X 4 X	2462.00	92.96			93.84	30.29	4.33	35.49	100		Peak
5	2488.00	40.37	-13.63	54.00	41.22	30.30	4.36	35.51	104	76	Average
6	2488.00	52.55	-21.45	74.00	53.41	30.29	4.36	35.51	100	360	Peak

Remark: #3 and #4 Fundamental Signal

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 93 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418



Site : 03CH06-HY

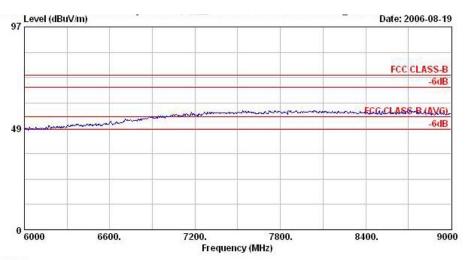
Condition : HF-ANT-060410 VERTICAL

EUT : Smart Phone Power : 120Vac/60Hz Model : FR 681418

Memo : 11b Tx_CH11;2462MHz

Plane : E2 Data Rate : 11

	Freq	Level				Antenna Factor				Table Pos	Remark
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}/\overline{m}$	$ \overline{d}\overline{B}$	$\overline{\tt dBuV/m}$	dBuV	$-\overline{dB}/m$	<u>dB</u>	<u>dB</u>	cm	deg	
_1	4924.00	54.73	-19.27	74.00	51.23	33.34	6.36	36.21	200	360	Peak
2	4924.00	42.96	-11.04	54.00	39.47	33.34	6.36	36.21	110	335	Average



Site : 03CH06-HY

Condition : HF-ANT-060410 VERTICAL

EUT : Smart Phone Power : 120Vac/60Hz Model : FR 681418

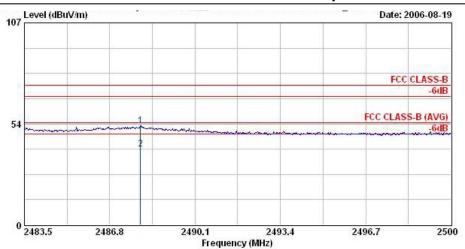
Model : FR 681418 Memo : 11b Tx_CH11;2462MHz

Plane : E2 Data Rate : 11

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 94 of 127 Report Issued Date : Sep. 07, 2006





Site

: 03CH06-HY : HF-ANT-060410 VERTICAL Condition

EUT Smart Phone Power Model 120Vac/60Hz FR 681418

: 11b Tx_CH11;2462MHz Memo

Plane Data Rate

	Freq	Level				Antenna Factor		Preamp Factor		Table Pos	Remark
	MHz	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	<u>dB</u>	$\overline{\tt d} \overline{\tt B} \overline{\tt u} \overline{\tt V} 7 \overline{\tt m}$	—dBu∇	$\overline{dB}7m$	<u>dB</u>	<u>dB</u>	cm	deg	
1 2	2487.99 2487.99								100 104		Peak Average

Remark: There is no more obvious spurious emission except the listings above.

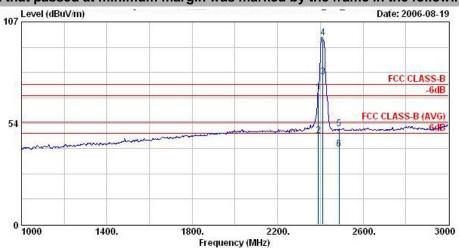
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 95 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

Report No. : FR681418

 Test Mode : Mode 4 Polarization : Horizontal

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



Site : 03CH06-HY

Condition : HF-ANT-060410 HORIZONTAL

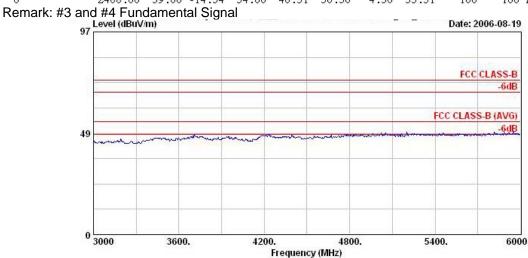
EUT Smart Phone Power Model : 120Vac/60Hz : FR 681418

: 11g Tx_CH01;2412MHz Memo

Plane

Data Rate : 6

	Freq	Level	Over Limit			Antenna Factor		Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	$\overline{\tt d} \overline{\tt B} \overline{\tt u} \overline{\tt V} \overline{\tt /m}$	\overline{dB}	$\overline{\mathtt{dBuV/m}}$	-dBuV	$-\overline{dB/m}$	<u>dB</u>	<u>dB</u>	cm	deg	
1 !	2390.00	69.78	-4.22	74.00	70.72	30.26	4.26	35.46	100	0	Peak
2 3 X 4 @	2390.00 2412.00 2412.00	78.07 98.65	-7.02		47.92 79.00 99.58	30.27 30.27	4.26 4.26 4.26	35.46 35.46	100 100 100	160 160	Average Average Peak
5 6	2488.00 2488.00	50.43 39.66		74.00 54.00	51.28 40.51	30.30 30.30	4.36 4.36	5050005000	100 100		Peak Average



: 03CH06-HY Site

Condition : HF-ANT-060410 HORIZONTAL

EUT : Smart Phone Power Model : 120Vac/60Hz FR 681418

Memo : 11g Tx_CH01;2412MHz

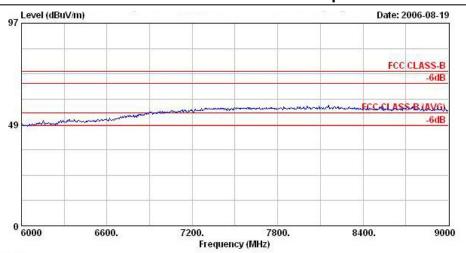
Plane : E2 Data Rate

FCC ID: UJU9QSTEAL000

SPORTON International Inc.

Page No. : 96 of 127 TEL: 886-2-2696-2468 Report Issued Date : Sep. 07, 2006 FAX: 886-2-2696-2255 Report Version : Rev. 02

: FR681418 Report No.



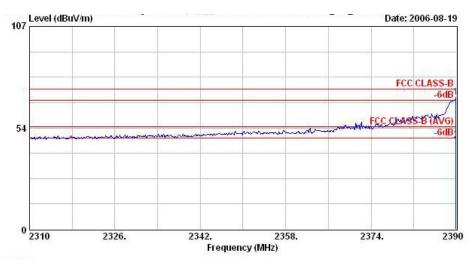
Site

: 03CH06-HY : HF-ANT-060410 HORIZONTAL Condition

EUT Smart Phone Power : 120Vac/60Hz Model : FR 681418

: 11g Tx_CH01;2412MHz Memo

Plane : E2 Data Rate : 6



Site : 03CH06-HY
Condition : HF-ANT-060410 HORIZONTAL

EUT : Smart Phone Power Model : 120Vac/60Hz : FR 681418

: 11g Tx_CH01;2412MHz Memo

Plane

Data Rate : 6

	Freq	Level				Antenna Factor		Preamp Factor		Table Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{J}}\overline{\mathtt{m}}$	<u>dB</u>	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	dBu∀	$-\overline{dB7m}$	−−−−dB	<u>dB</u>	cm	deg	
1 !	2389.92 2389.92								100 100	100000000000000000000000000000000000000	Peak Average

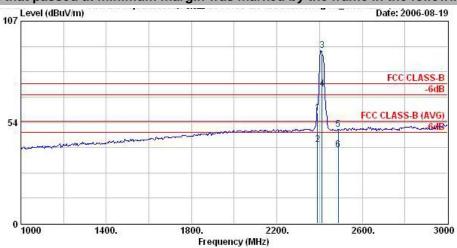
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 97 of 127 Report Issued Date : Sep. 07, 2006

FCC TEST REPORT Report No. : FR681418

Polarization : Vertical

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



Site : 03CH06-HY

Condition : HF-ANT-060410 VERTICAL

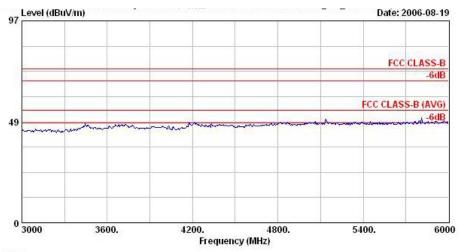
EUT : Smart Phone Power : 120Vac/60Hz Model : FR 681418

Memo : 11g Tx_CH01;2412MHz

Plane : E2 Data Rate : 6

			0ver	Limit	Read.	Antenna	Cable	Preamp	Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{J}}\overline{\mathtt{m}}$	\overline{dB}	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	-dBuV	$-\overline{dB/m}$	−−−−dB	dB	cm	deg	
1	2390.00	58.58	-15.42	74.00	59.52	30.26	4.26	35.46	100	360	Peak
2	2390.00	41.57	-12.43	54.00	42.51	30.26	4.26	35.46	100	351	Average
2 3 X	2412.00	91.52			92.45	30.27	4.26	35.46	100	360	Peak
4 X	2412.00	71.20			72.13	30.27	4.26	35.46	100	351	Average
5	2488.00	49.89	-24.11	74.00	50.74	30.30	4.36	35.51	100	360	Peak
б	2488.00	39.05	-14.95	54.00	39.90	30.30	4.36	35.51	100	351	Average

Remark: #3 and #4 Fundamental Signal



Site : 03CH06-HY

Condition : HF-ANT-060410 VERTICAL

EUT : Smart Phone Power : 120Vac/60Hz Model : FR 681418

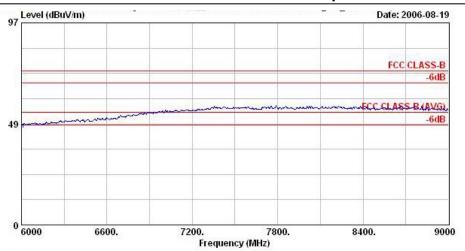
Memo : 11g Tx_CH01;2412MHz

Plane : E2 Data Rate : 6

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 98 of 127 Report Issued Date : Sep. 07, 2006

: FR681418 Report No.



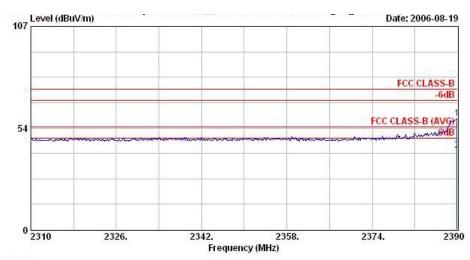
: 03CH06-HY Site

Condition : HF-ANT-060410 VERTICAL

EUT Smart Phone Power 120Vac/60Hz Model FR 681418

: 11g Tx_CH01;2412MHz Memo

Plane : E2 Data Rate



Site

: 03CH06-HY : HF-ANT-060410 VERTICAL Condition

EUT Smart Phone Power Model $120 \mathrm{Vac}/60 \mathrm{Hz}$: FR 681418

: 11g Tx_CH01;2412MHz Memo

Plane : E2 Data Rate : 6

	Freq	Level				Antenna Factor		Preamp Factor		Table Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}/\overline{\mathtt{m}}$	$ \overline{d}\overline{B}$	$\overline{d}\overline{B}\overline{u}\overline{V}7\overline{m}$	-dBuV	$-\overline{dB/m}$	$ \overline{dB}$	\overline{dB}	cm	deg	
1 2	2389.92 2389.92								100 100		Peak Average

Remark: There is no more obvious spurious emission except the listings above.

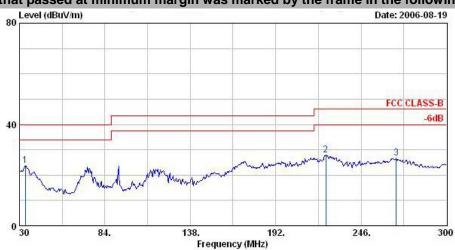
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 99 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418

Test Mode : Mode 5 Polarization : Horizontal

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



Site : 03CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Smart Phone

Power Model 120Vac/60Hz : FR 681418

: 11g Tx_CH06;2437MHz Memo

Plane : E2

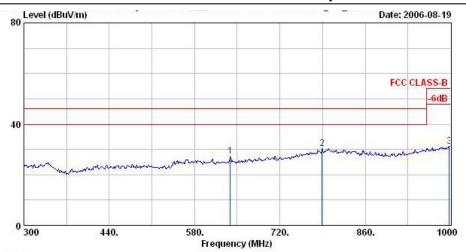
Data Rate : 6

	Freq	Level				Antenna Factor		Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	$\overline{\mathtt{d} B \mathtt{u} \mathtt{V} / \mathtt{m}}$	dB	$\overline{\tt dBuV/m}$	dBuV	$-\overline{dB/m}$	<u>dB</u>	\overline{dB}	cm	deg	
1 @ 2 @ 3 @	223.59	28.07	-17.93	46.00	44.41	17.40 9.79 12.91	2.70	28.83	100 100 100	0	Peak Peak Peak

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 100 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

: FR681418 Report No.



: 03CH06-HY Site

BI-LOG-2004-1122 HORIZONTAL Condition

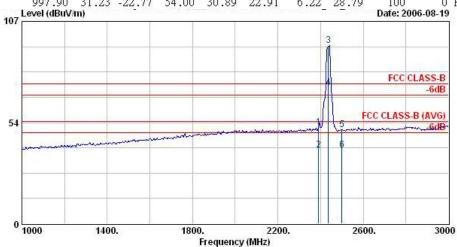
EUT Smart Phone Power 120Vac/60Hz Model FR 681418

: 11g Tx_CH06;2437MHz Memo

Plane : E2 Data Rate : 6

1 @ 2 @ 3 @

Remark
Peak
Peak
Peak



Site

: 03CH06-HY : HF-ANT-060410 HORIZONTAL : Smart Phone Condition EUT

120Vac/60Hz Power FR 681418

11gTx_CH06;2437MHz Memo

Plane : E2 Data Rate : 6

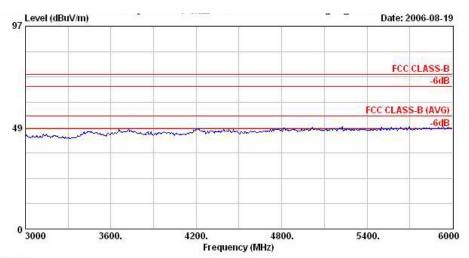
	Freq	Level	Over Limit			Antenna Factor		Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	$\overline{\tt dBuV/m}$	- dB	$\overline{dBuV/m}$	dBuV	<u>dB</u> /m	dB	<u>dB</u>	cm	deg	
1 @ 2 @ 3 @ 4 @ 5 @	2390.00 2390.00 2437.00 2437.00	39.16 94.10 71.99	-14.84		51.96 40.10 94.99 72.89	30.26 30.26 30.28 30.28	4.26 4.26 4.33 4.29	35.46 35.49 35.47	100 100 100 100	157 360 157	Peak Average Peak Average
5 @ 6 @	2500.00 2500.00		-24.23 -14.97	74.00 54.00	50.61 39.87	30.30 30.30	4.39 4.39	35.53 35.53	100 100		Peak Average

Remark: #3 and #4 Fundamental Signal

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 101 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02



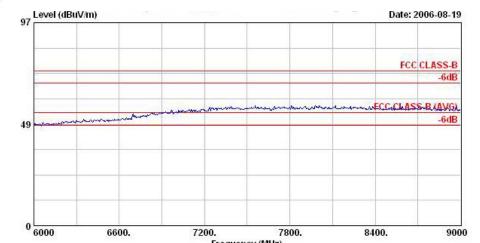


Site : 03CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Smart Phone

Power 120Vac/60Hz Model FR 681418

: 11g Tx_CH06;2437MHz Memo

Plane : E2 Data Rate : 6



Frequency (MHz)

7800.

7200.

: 03CH06-HY Site

HF-ANT-060410 HORIZONTAL Condition :

6600.

EUT Smart Phone Power Model 120Vac/60Hz : FR 681418

: 11g Tx_CH06;2437MHz Memo

Plane : E2 Data Rate : б

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 102 of 127 Report Issued Date : Sep. 07, 2006

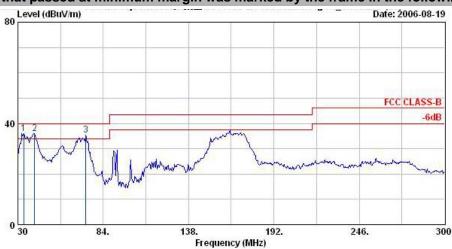
9000

8400.

Report No. FCC TEST REPORT : FR681418

· Polarization : Vertical

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



Site : 03CH06-HY

BI-LOG-2004-1122 VERTICAL Condition

Smart Phone 120Vac/60Hz EUT Power Model FR 681418

Memo : 11g Tx_CH06;2437MHz

Plane

ata Rate : 6		Freq	Level				Antenna Factor		Preamp Factor	Ant Pos		Remark
		MHz	$\overline{dBuV/m}$	dB	$\overline{dBuV/m}$	dBuV	$\overline{dB/m}$	\overline{dB}	\overline{dB}	cm	deg	
1 @ 2 @		33.78 40.53	36.03	-3.99 -3.97	40.00	46.20 49.20	14.28	1.04 1.20	28.65	100 100	188	Peak Peak
3 @	80 L	.evel (dBuV	35.44 //m)	-456	40.00	_56.24	6.48	1.41	_ 28.70	100 Date: 2	2006-08-19	Peak
										FCC	CLASS-B	
									3	100	-6dB	
	40								1		2 3	
		when	monana	· · · · · · · · · · · · · · · · · · ·	numan	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mount	any to do not the	and the same	are the second	- Franklinger	

580.

: 03CH06-HY

: BI-LOG-2004-1122 VERTICAL Condition

0 300

440.

Smart Phone 120Vac/60Hz EUT Power Model FR 681418 Memo : 11g Tx_CH06;2437MHz Plane E2

Data Rate : 6

	W. C.	Level		Limit Line					Ant Pos	Table Pos	Remark
		——————————————————————————————————————	MHz dBuV/m dE	\overline{dB}	$\overline{\tt d}\overline{\tt B}\overline{\tt u}\overline{\tt V}7\overline{\tt m}$	dBuV	$-\overline{dB7m}$	\overline{dB}	\overline{dB}	cm	deg
1 @ 2 @ 3 @	952.40	30.02	-15.98	46.00 46.00 54.00	31.28	21.53	6.10		100 100 100	0	Peak Peak Peak

Frequency (MHz)

720.

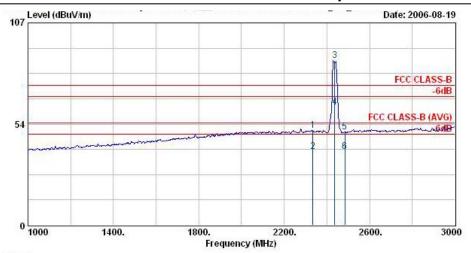
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 103 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02

1000

860.

Report No. : FR681418



Site

: 03CH06-HY : HF-ANT-060410 VERTICAL Condition

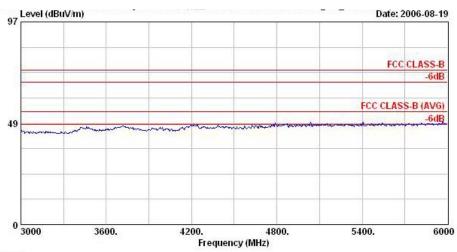
EUT Smart Phone 120Vac/60Hz Model: FR 681418

: 11g Tx_CH06;2437MHz Memo

Plane E2 Data Rate

7.31.7.21.31			0ver	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{/}}\overline{\mathtt{m}}$	$ \overline{dB}$	$\overline{d}\overline{B}\overline{u}\overline{V}\overline{/}\overline{m}$	dBuV	$-\overline{dB/m}$	<u>dB</u>	<u>dB</u> -	cm	deg	
1 @ 2 @ 3 @ 4 @ 5 @	2334.00	50.31	-23.69	74.00	51.32	30.23	4.17	35.40	100	0	Peak
2 @	2334.00	39.02	-14.98	54.00	40.02	30.23	4.17	35.40	100	87	Average
3 @	2437.00	86.99			87.90	30.27	4.29	35.47	100	0	Peak
4 @	2437.00	62.60			63.50	30.28	4.29	35.47	100	87	Average
5 @	2484.00	49.51	-24.49	74.00	50.37	30.29	4.36	35.51	100		Peak
6 @	2484.00	38.94	-15.06	54.00	39.80	30.29	4.36	35.51	100	87	Average

Remark: #3 and #4 Fundamental Signal



Site : 03CH06-HY Condition : HF-ANT-060410 VERTICAL

EUT Smart Phone Power 120Vac/60Hz : FR 681418 Model

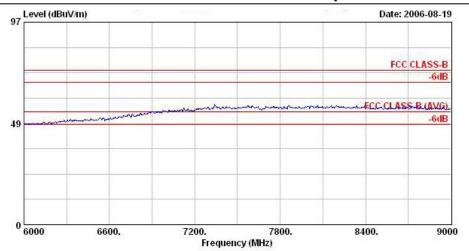
: 11g Tx_CH06;2437MHz Memo

Plane : E2 Data Rate : 6

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 104 of 127 Report Issued Date : Sep. 07, 2006





Site Condition : 03CH06-HY : HF-ANT-060410 VERTICAL

EUT Smart Phone Power 120Vac/60Hz Model

: FR 681418 : 11g Tx_CH06;2437MHz Memo

Plane E2 Data Rate

Remark: There is no more obvious spurious emission except thelistings above.

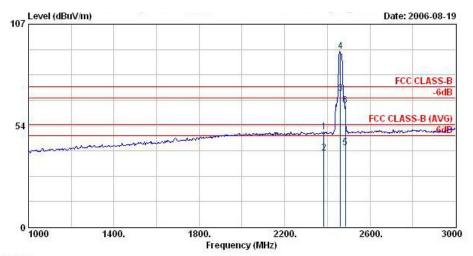
SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 105 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418

Test Mode : Mode 6 Polarization: Horizontal

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



Site : 03CH06-HY Condition : HF-ANT-060410 HORIZONTAL

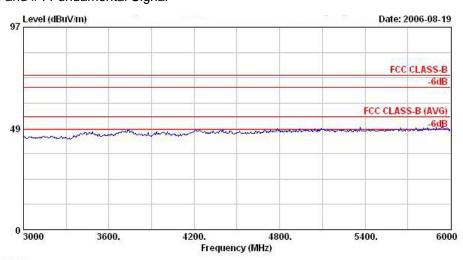
EUT : Smart Phone : 120Vac/60Hz Power Model : FR 681418

: 11g Tx_CH11;2462MHz Memo

Plane : E2 Data Rate : 6

	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{J}}\overline{\mathtt{m}}$	<u>dB</u>	$\overline{\mathtt{d}}\overline{\mathtt{B}}\overline{\mathtt{u}}\overline{\mathtt{V}}\overline{\mathtt{J}}\overline{\mathtt{m}}$	—dBu∀	$-\overline{dB7m}$	<u>dB</u>	$\overline{d}\overline{B}$	cm	deg	
1 2 @ 3 @ 4 @ 5 @	2384.00 2384.00 2462.00 2462.00 2484.00 2484.00	38.99 70.58 92.63 41.87	-24.00 -15.01 -12.13 -9.79		50.96 39.95 71.46 93.51 42.83 65.07	30.25 30.29 30.29	4.23 4.23 4.33 4.33 4.23 4.36	35.44 35.49 35.49 35.44	100 100 100 100 100 100	159 159 0 159	Peak Average Average Peak Average Peak

Remark: #3 and #4 Fundamental Signal



: 03CH06-HY Site

Condition : HF-ANT-060410 HORIZONTAL

EUT Smart Phone Power 120Vac/60Hz : FR 681418 Model

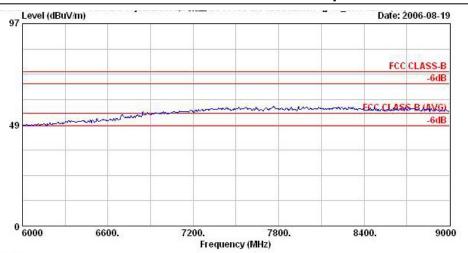
: 11g Tx_CH11;2462MHz Memo

Plane : E2

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000 Page No. : 106 of 127 Report Issued Date : Sep. 07, 2006

Report No. : FR681418



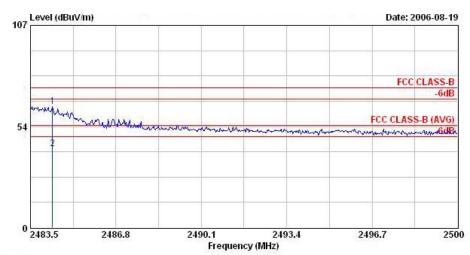
Site

: 03CH06-HY : HF-ANT-060410 HORIZONTAL Condition

EUT : Smart Phone Power : 120Vac/60Hz Model : FR 681418

: 11g Tx_CH11;2462MHz Memo

Plane : E2 Data Rate : 6



: 03CH06-HY Site

: HF-ANT-060410 HORIZONTAL Condition

EUT Smart Phone Power Model : 120Vac/60Hz : FR 681418

: 11g Tx_CH11;2462MHz Memo

Plane : E2 Data Rate : 6

	Freq	Level		Limit Line						Table Pos	Remark	
	MHz	MHz di	MHz dBuV/m	<u>dB</u> <u>d</u>	dBuV7m	dBuV	dB/m	<u>dB</u>	dB	cm	deg	
1 @	2484.36	64.21	-9.79	74.00	65.07	30.29	4.36	35.51	100	0	Peak	
2 @	2484.36	41.87	-12.13	54.00	42.73	30.29	4.36	35.51	100	159	Average	

SPORTON International Inc.

TEL: 886-2-2696-2468 FAX: 886-2-2696-2255 FCC ID: UJU9QSTEAL000

: 107 of 127 Report Issued Date : Sep. 07, 2006 Report Version : Rev. 02