



FCC TEST REPORT

for

47 CFR Part 15 Subpart C

Equipment : Express
Trade Name : Dash
Model No. : HXD8
FCC ID : EUNHXD8V2
Filing Type : Certification
Applicant : **FIC (First International Computer, Inc.)**
No.300, Yang Guang St., NeiHu, Taipei, 114, Taiwan,
R.O.C.

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- The data shown in this test report were carried out on Oct. 09, 2007 at **Sporton International Inc. LAB.**
- Report No.: FR791006, Report Version: Rev.01

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History of this test report

Report Issue Date: Oct. 11, 2007

Report No.	Description



1. General Description of Equipment under Test

1.1 Applicant

FIC (First International Computer, Inc.)

No.300, Yang Guang St., NeiHu, Taipei, 114, Taiwan, R.O.C.

1.2 Manufacturer

FIC (First International Computer, Inc.)

No. 300, Yang Guang St., NeiHu, Taipei 114, Taiwan, R.O.C.

Export Processing Zone, No. 200 Central SuHong Road, SuZhou Industrial Park, China

1.3 Basic Description of Equipment under Test

Equipment		Express
Trade Name		Dash
Model No.		HXD8
FCC ID		EUNHXD8V2
AC Adapter	Brand Name	AKII
	P/N	A10P1-05MP
	Power Rating	I/P:100-240V, 47~63Hz, 10.3A
	AC Power Cord Type	1.5 meter shielded cable without ferrite core
Car Charger	Brand Name	Protop
	P/N	CLA-1000
	Power Rating	AC12V
	Power Cord Type	1.8 meter non-shielded cable without ferrite core
Battery	Brand Name	HL
	P/N	PL-HL-0002-B
	Rating	3.7~4.2Vdc,
	Type	Li-ion
USB Cable	Brand Name	N/A
	P/N	N/A
	AC Power Cord Type	1.8 meter shielded cable without ferrite core

Remark: Above EUT's information was declared by manufacturer. Please refer to the specifications of manufacturer or User's Manual for more detailed features description.

**1.4 Feature of Equipment under Test**

Type of Modulation	DSSS / OFDM			
Number of Channels	11 Channels			
Frequency Band	2400MHz ~ 2483.5MHz			
Carrier Frequency of each channel	2412MHz + (n - 1) * 5 MHz, n=1~11			
Channel Spacing	5 MHz			
Maximum Output Power to Antenna (Normal Condition)	802.11b : 18.65 dBm 802.11g : 21.17 dBm			
HW Version :	HXD8-001-99-98			
SW Version :	HXD80 REV:023			
Type of Antenna Connector	N/A			
Antenna Type	Patch Antenna			
Antenna Gain	5 dBi			
Function Type	Transmitter		Transceiver	V

2. Test Configuration of Equipment under Test

2.1 Test Manner

- 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.
- Power Table as below:

802.11b

Channel	Frequency (MHz)	Data Rate			
		1 Mbps	2 Mbps	5.5 Mbps	11 Mbps
CH 01	2412 MHz	18.51	18.65	18.40	18.39
CH 06	2437 MHz	17.53	17.35	17.56	17.38
CH 11	2462 MHz	17.16	17.09	17.14	17.55

802.11g

Channel	Frequency (MHz)	Data Rate							
		6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
CH 01	2412 MHz	19.7	20.90	21.07	20.80	21.08	20.78	21.17	20.86
CH 06	2437 MHz	20.0	20.01	20.24	20.08	20.23	20.52	20.12	20.21
CH 11	2462 MHz	19.99	19.96	19.73	19.94	19.32	19.68	19.65	19.85

- The 802.11b/g data rate were set in 2Mbps and 48Mbps, due to the highest RF output power.
- The EUT is programmed to transmit signal continuously for all testings.
- Frequency range investigated: conduction 150 kHz to 30 MHz, radiation 30 MHz to 25000MHz.

2.2 Test Mode

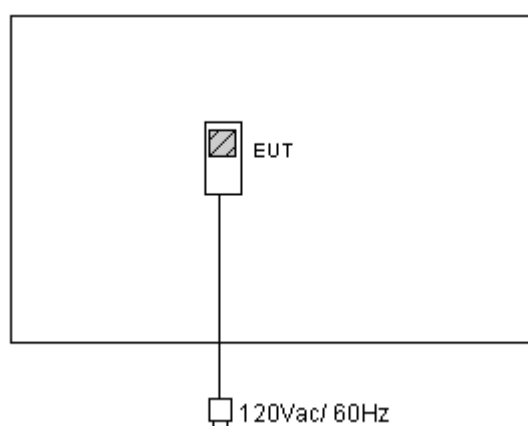
Application		
Radiated Emission	802.11b	802.11g
	Mode 1: CH01_2412 MHz	Mode 4: CH01_2412 MHz
	Mode 2: CH06_2437 MHz	Mode 5: CH06_2437 MHz
	Mode 3: CH11_2462 MHz	Mode 6: CH11_2462 MHz
Conducted Emission	Mode 1: GSM850 Idle + GPS Rx + WLAN Link + Adapter	
	Mode 2: GSM850 Idle + GPS Rx + WLAN Link + USB Link	
	Mode 3: PCS1900 Idle + GPS Rx + WLAN Link + Adapter	

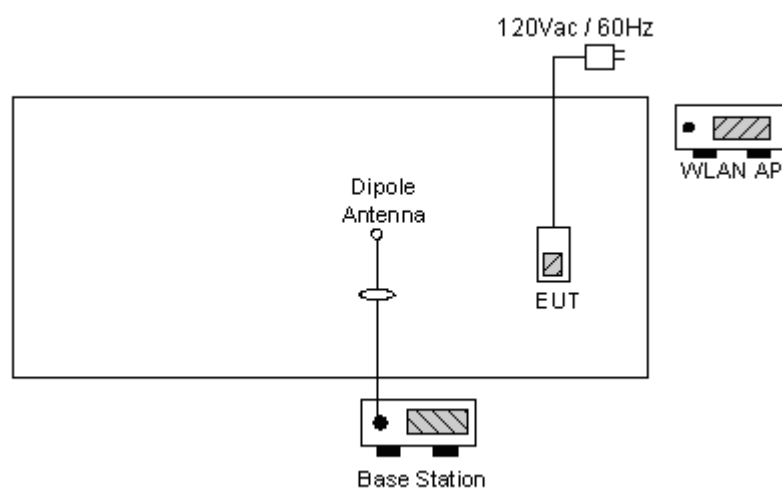
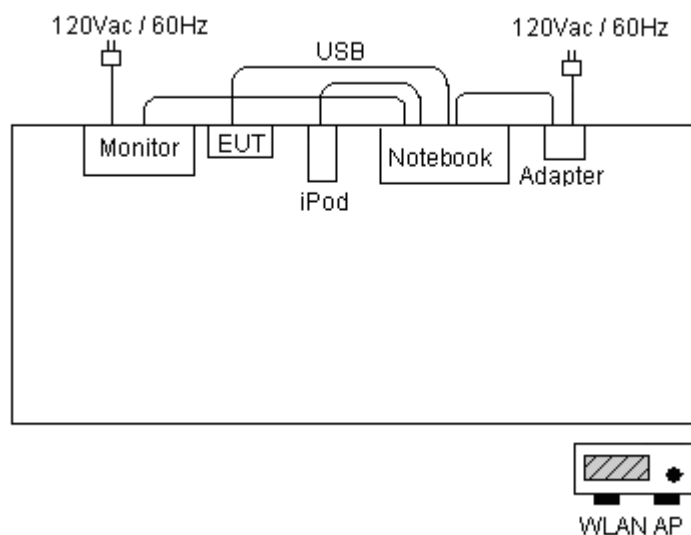
2.3 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Power Cord / Cable
1.	Notebook	ASUS	M5000	PD9WM3B2100	N/A
2.	Base Station	R&S	CMU200	N/A	Unshielded,1.8m
3.	WLAN AP	SMC	SMC-100	HEDWG4005ACC	Unshielded,1.8m
4.	Monitor	VIEWSONIC	VCDTS21553-3P	DoC	Unshielded,1.8m
5.	iPod	Apple	A1199	DoC	shielded,1.2m

2.4 Connection Diagram of Test System

<Radiated Emission>



<Conducted Emission >
EUT with Adapter Mode

EUT with USB Link Mode




3. RF Utility

The programmed RF Utility is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testings.



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.
TEL : 886-3-327-3456
FAX : 886-3-318-0055

Test Site No : CO04-HY, 03CH06-HY

4.1 Test Voltage

AC 120V / 60Hz

4.2 Standard for Methods of Measurement

ANSI C63.4-2003

4.3 Test Compliance

47 CFR Part 15 Subpart C

4.4 Frequency Range

- a. Conduction: from 150 kHz to 30 MHz
- b. Radiation: from 30 MHz to 25000 MHz

4.5 Test Distance

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



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 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

5.2 6dB Bandwidth Measurement

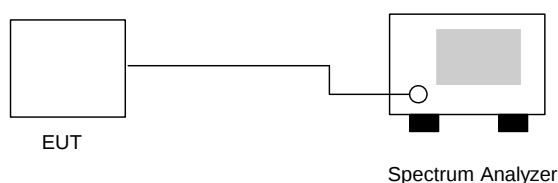
5.2.1 Measuring Instruments :

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.

5.2.3 Test Setup Layout :



5.2.4 Test Result :

Application Type : WLAN 802.11b/g

Temperature : 24~27°C

Relative Humidity : 51~53%

Test Enginner : Sun

802.11b

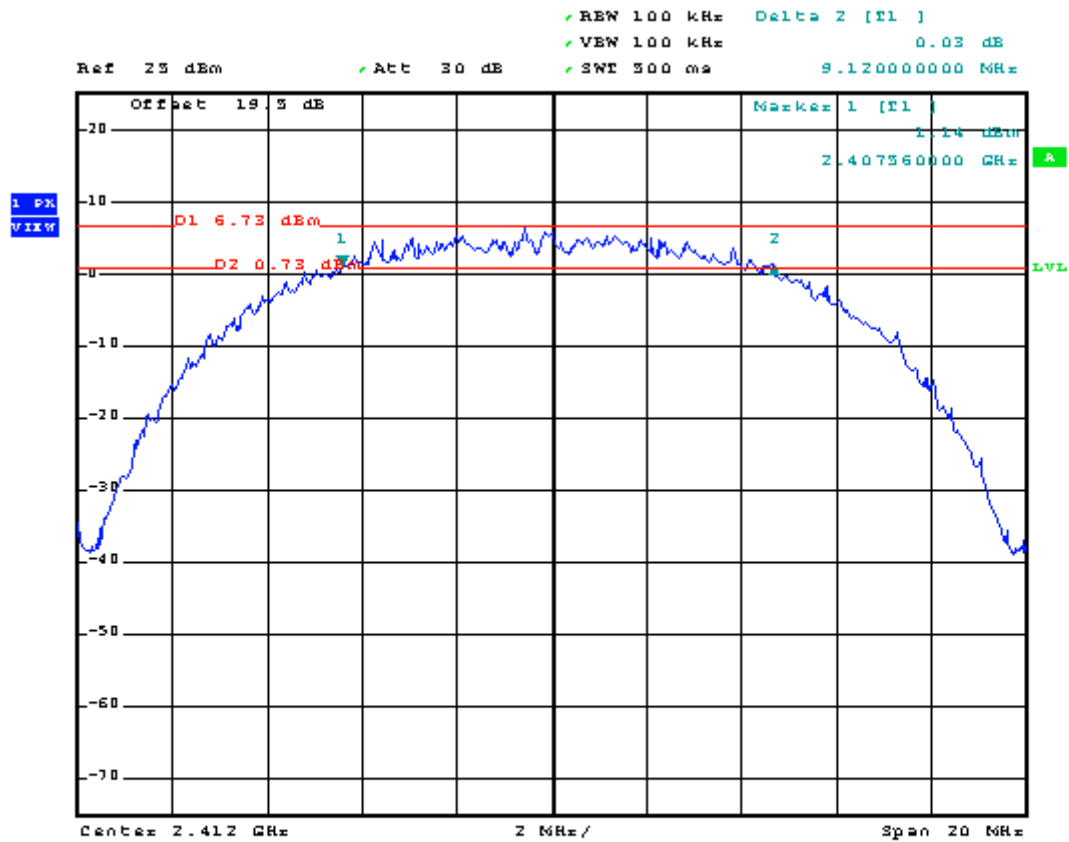
Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	9.12	> 0.5MHz	Mode 1
06	2437	9.12	> 0.5MHz	Mode 2
11	2462	9.64	> 0.5MHz	Mode 3

802.11g

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	16.48	> 0.5MHz	Mode 4
06	2437	16.44	> 0.5MHz	Mode 5
11	2462	15.08	> 0.5MHz	Mode 6

**5.2.5 6dB Bandwidth**

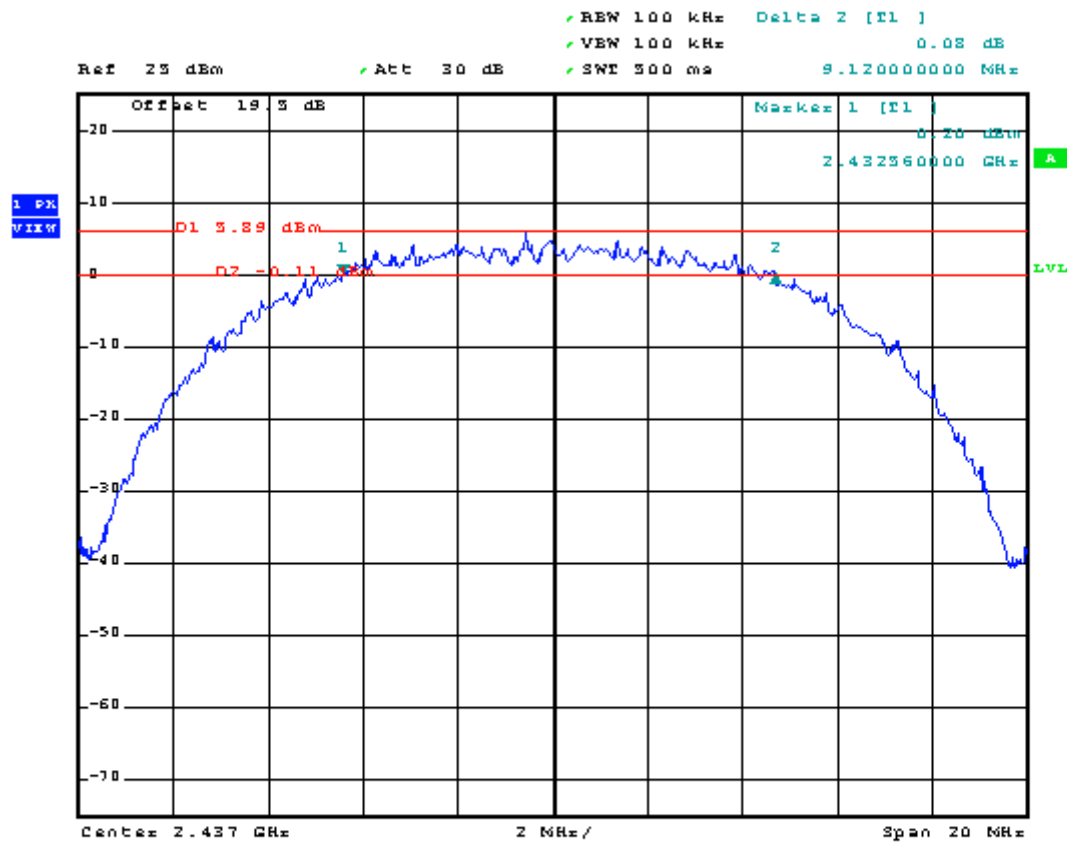
Mode 1



Date: 30.AUG.2007 21:01:01



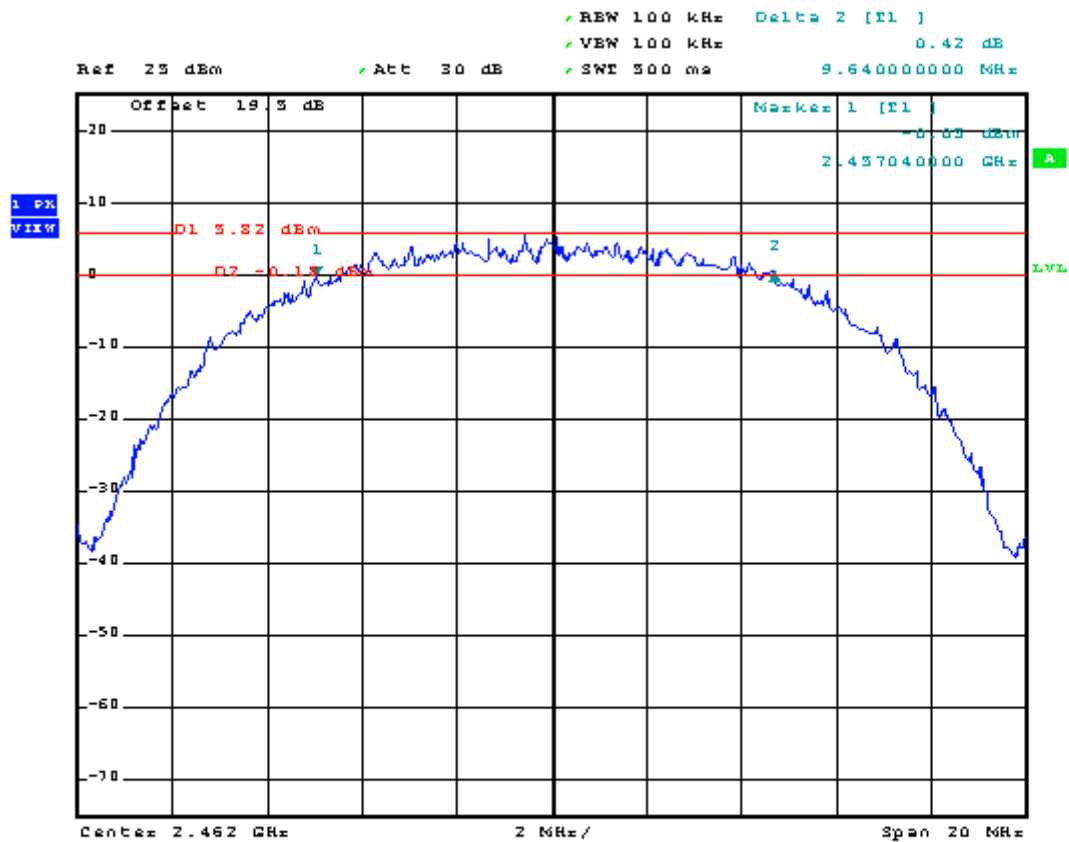
Mode 2



Date: 30.AUG.2007 22:41:04



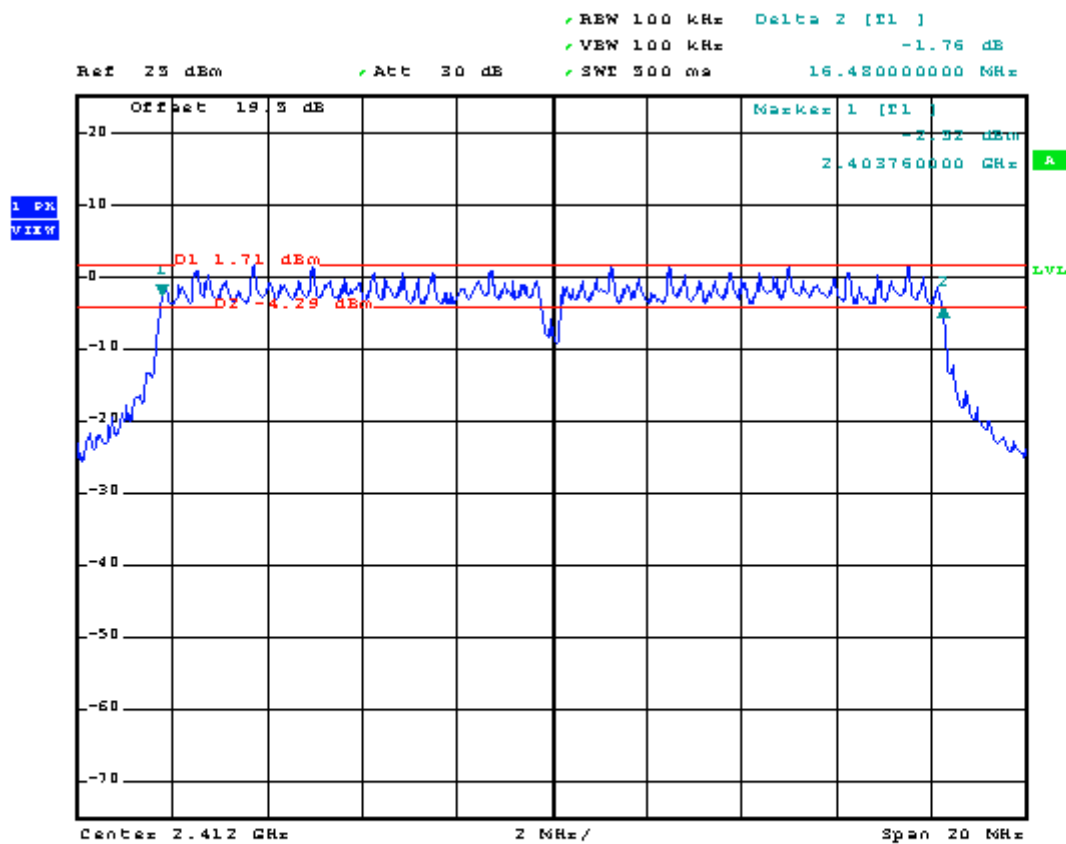
Mode 3



Date: 30.AUG.2007 22:46:49



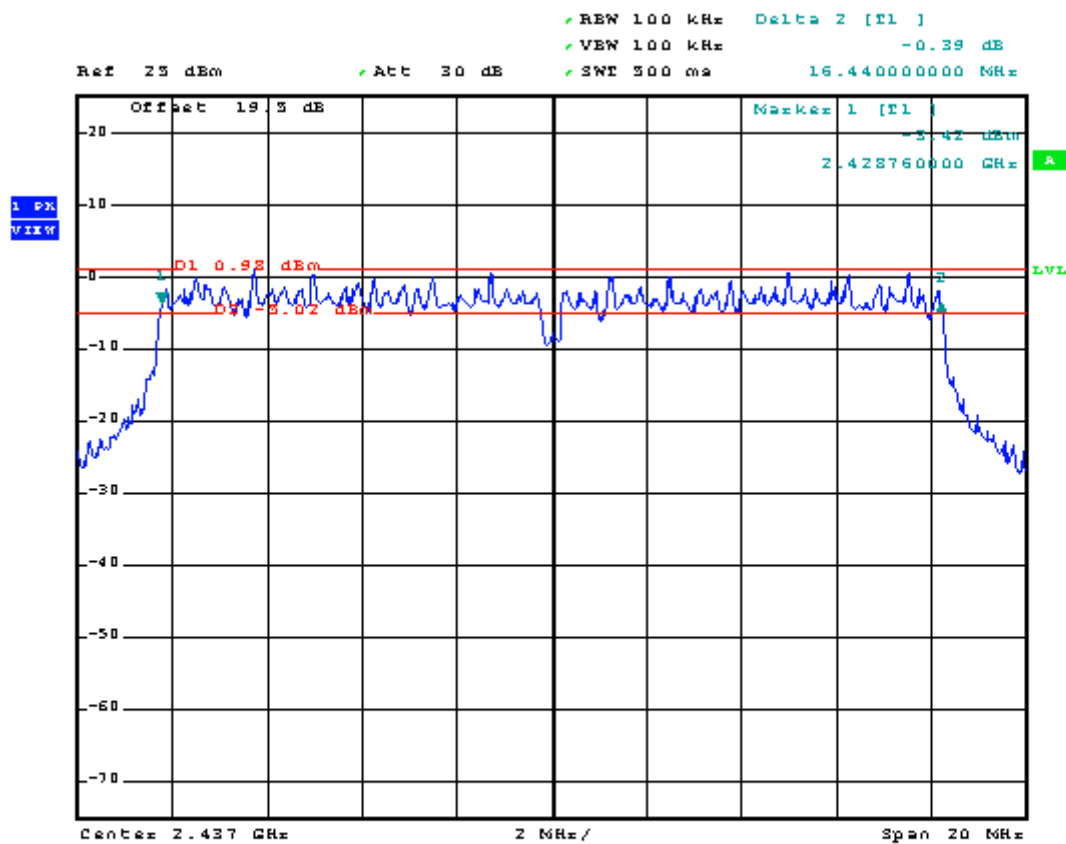
Mode 4



Date: 30.AUG.2007 20:32:04



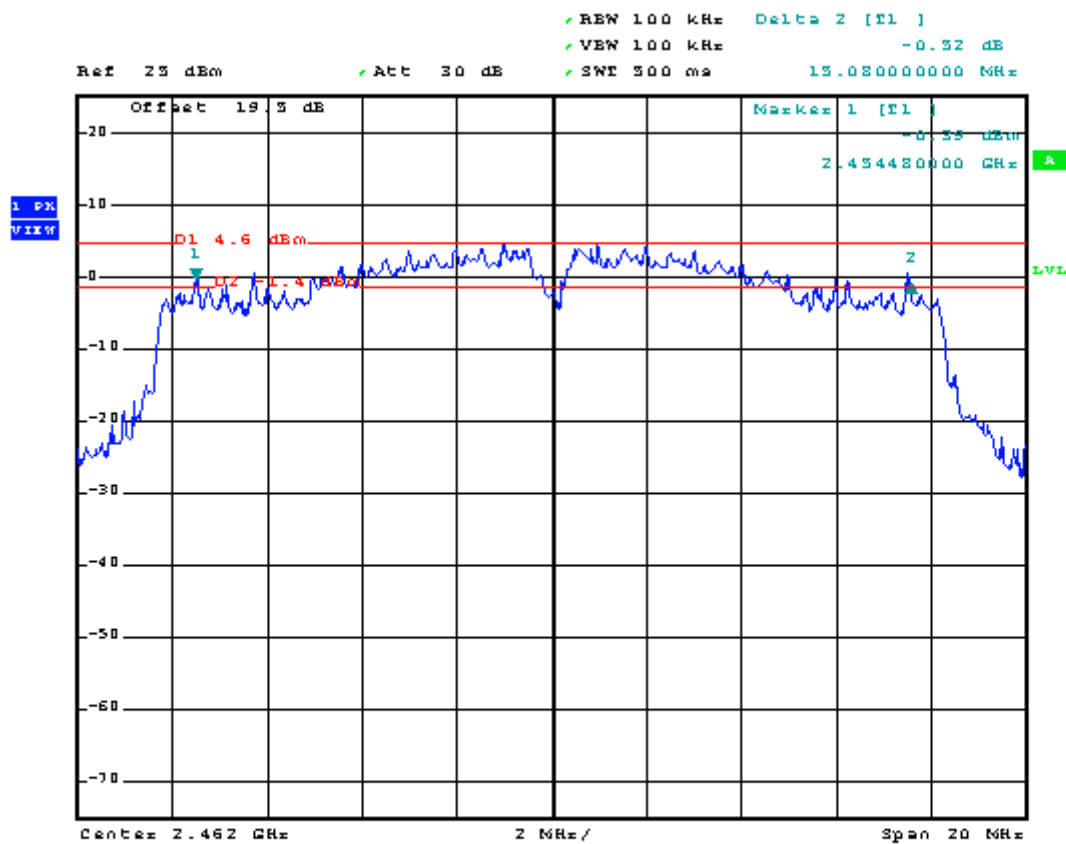
Mode 5



Date: 30.AUG.2007 20:34:25



Mode 6



Date: 30.AUG.2007 20:38:44

5.3 Power Spectral Density Measurement

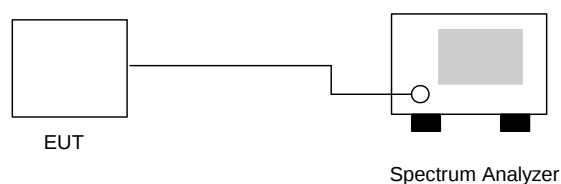
5.3.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.3.2 Test Procedure :

1. The transmitter output was connected to spectrum analyzer directly.
2. 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.
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 :



**5.3.4 Test Result :**

Application Type : 802.11b/g

Temperature : 24~27°C

Relative Humidity : 51~53%

Test Enginner : Sun**802.11b**

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	2.80	8	Mode 1
06	2437	2.09	8	Mode 2
11	2462	2.03	8	Mode 3

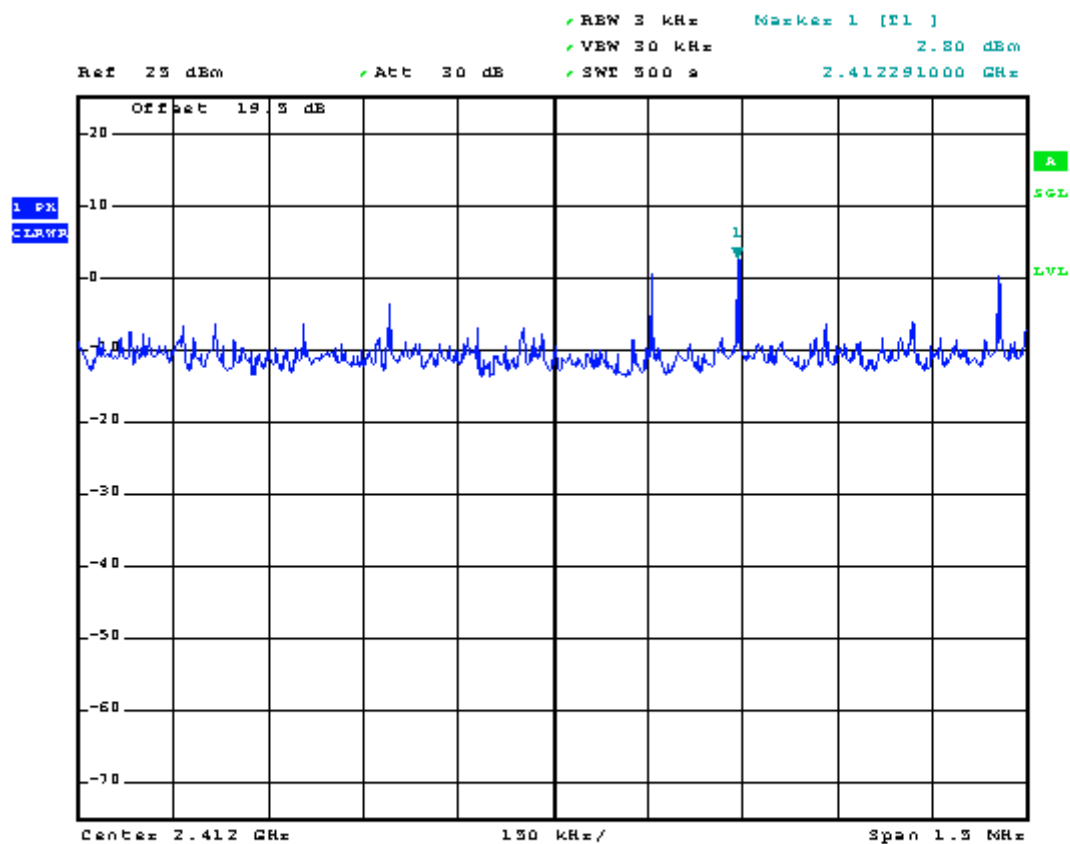
802.11g

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-8.86	8	Mode 4
06	2437	-9.87	8	Mode 5
11	2462	-8.80	8	Mode 6



5.3.5 Power Spectral Density

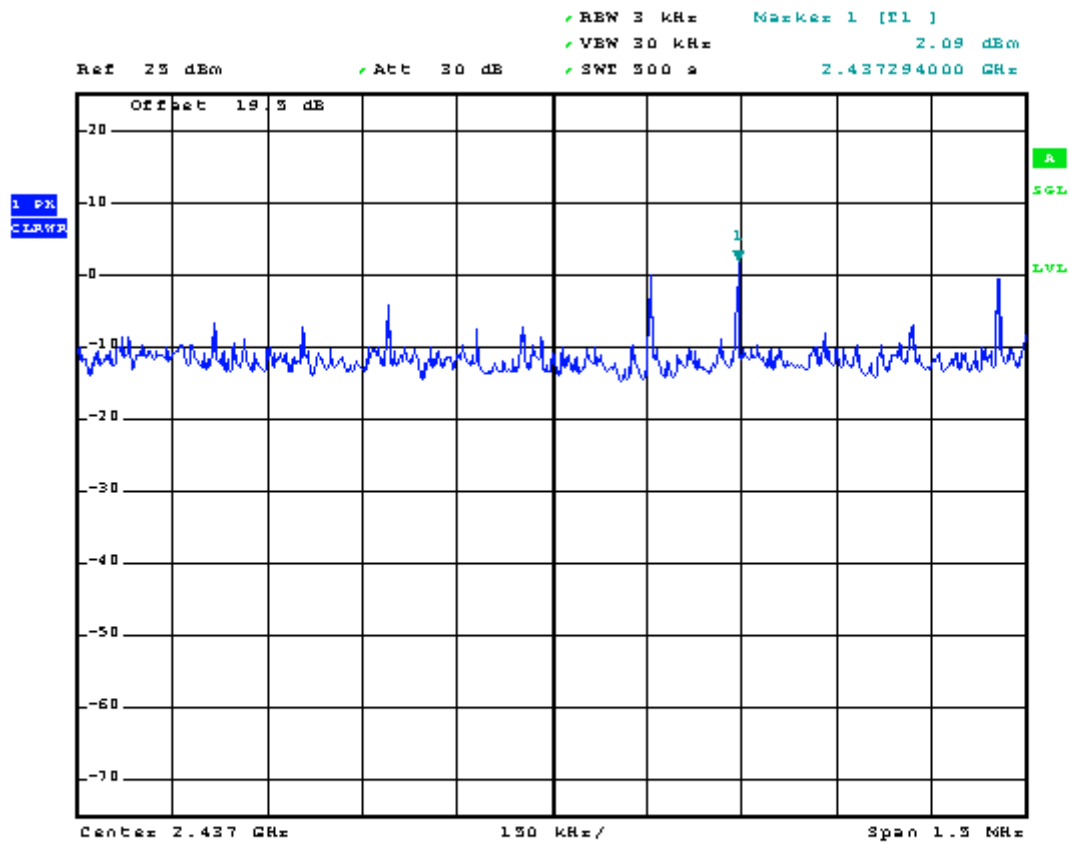
Mode 1



Date: 30.AUG.2007 21:18:49



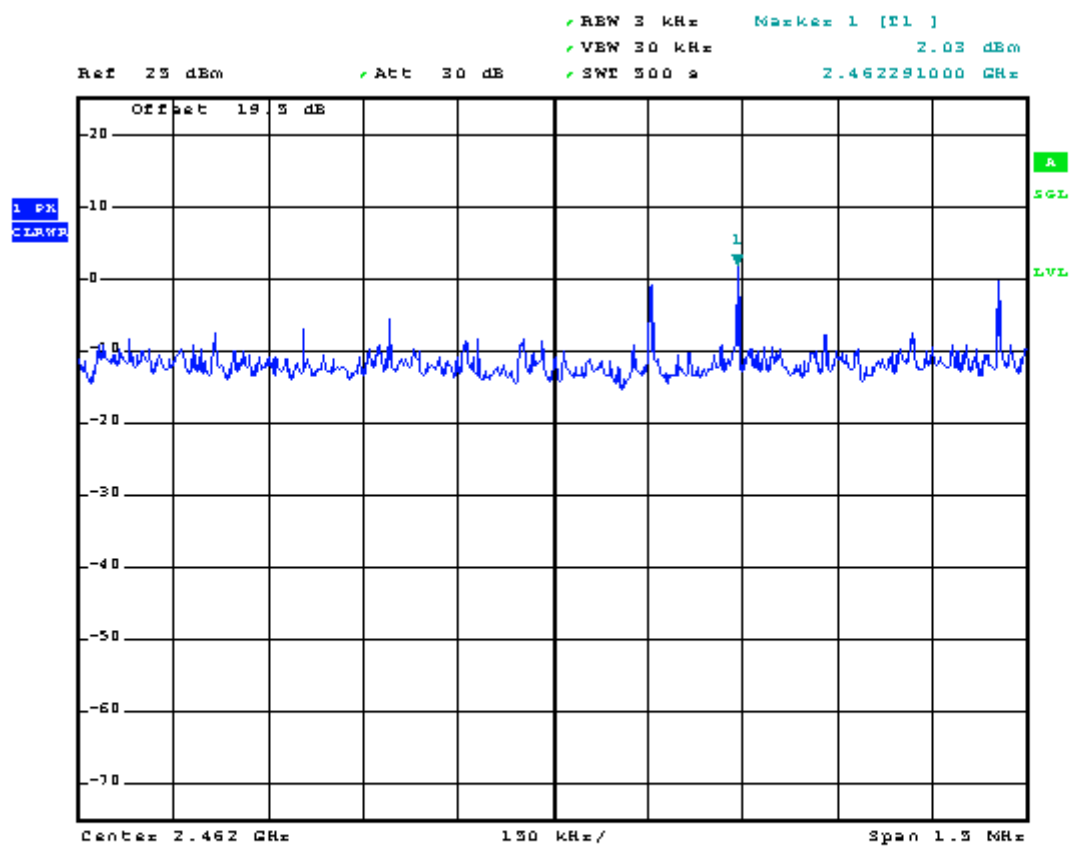
Mode 2



Date: 30.AUG.2007 21:53:34



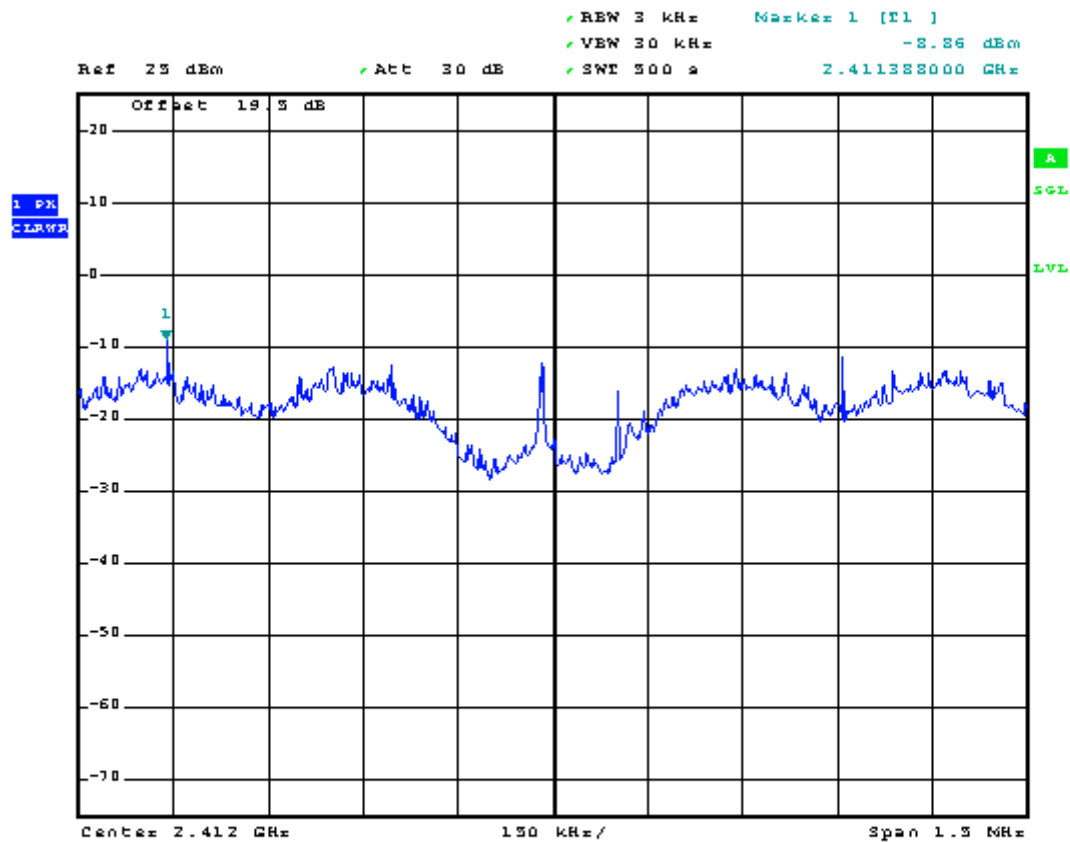
Mode 3



Date: 30.AUG.2007 22:14:47



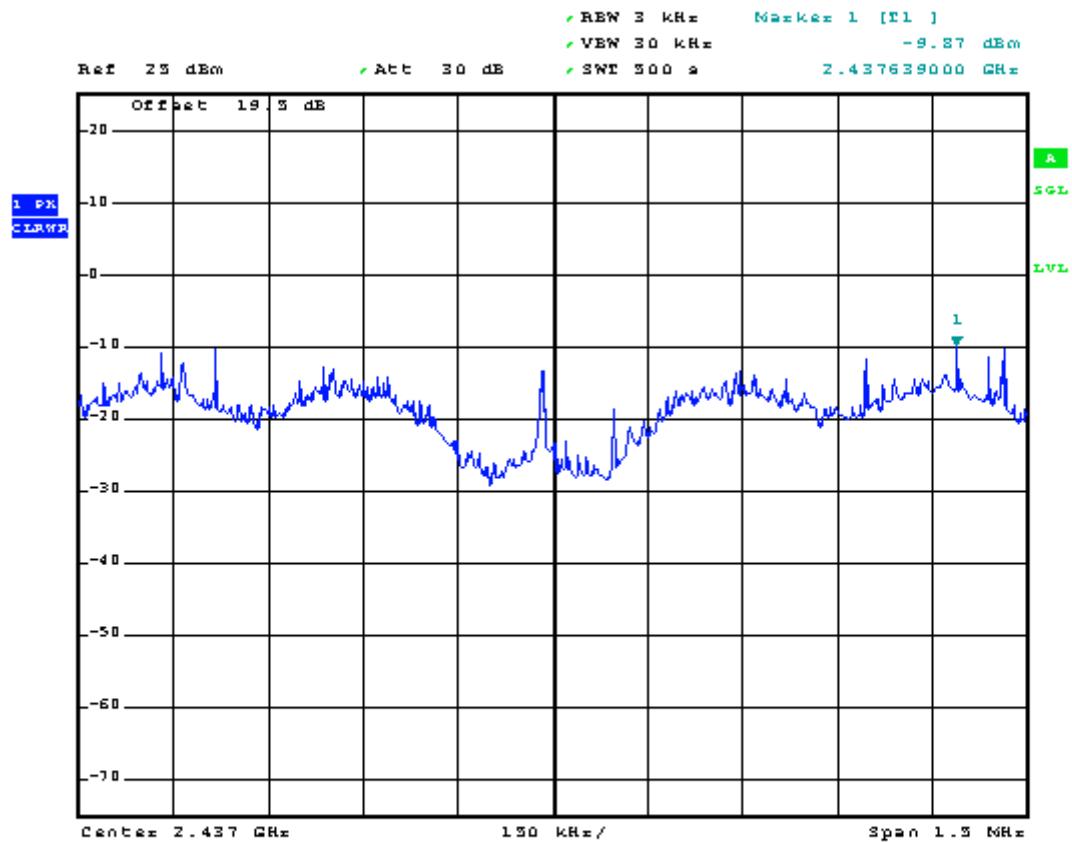
Mode 4



Date: 30.AUG.2007 21:29:02



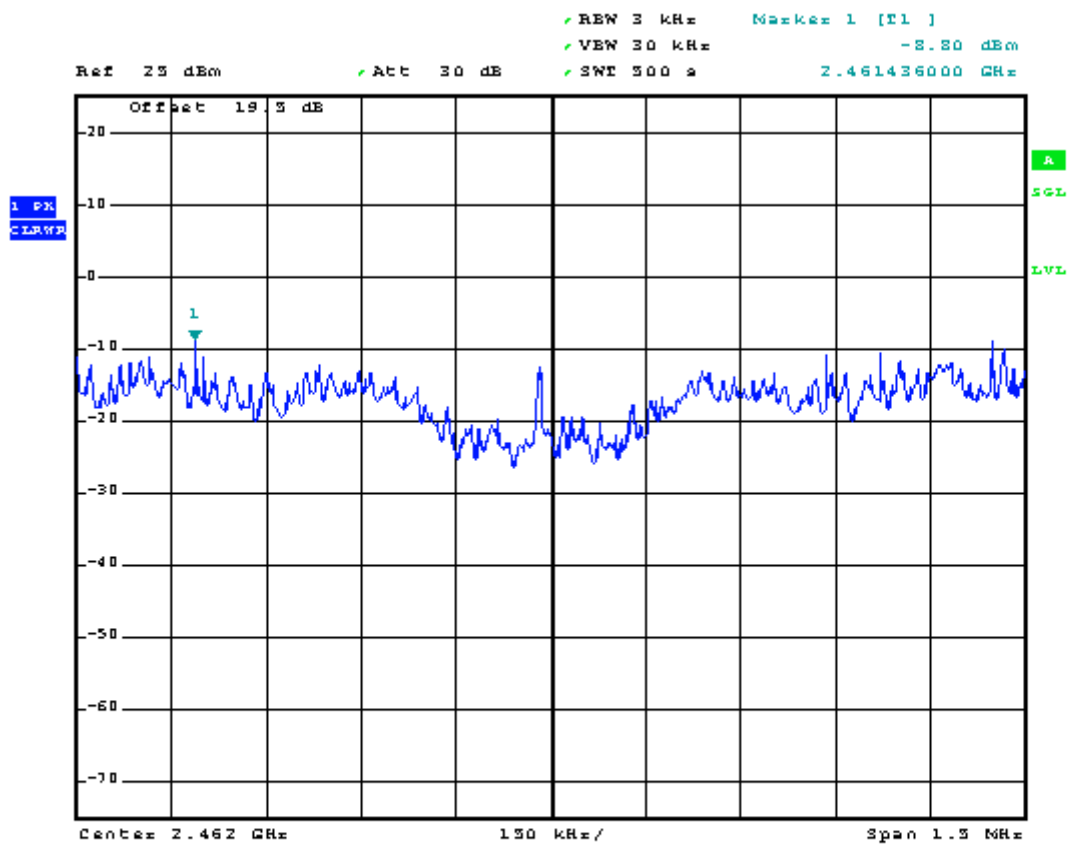
Mode 5



Date: 30.AUG.2007 21:42:37



Mode 6



Date: 30.AUG.2007 22:04:42



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.
2. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100 kHz bandwidth from band edge.
3. The band edges was measured and recorded.

5.4.3 Test Result :

Application Type : WLAN 802.11b/g

Temperature : 24~27°C

Relative Humidity : 51~53%

Test Enginner : Sun

Test Result in WLAN lower band (802.11b/g) : PASS

Test Result in WLAN higher band (802.11b/g) : PASS

**5.4.4 Note on Band Edge Emission :****➤WLAN 802.11b****CH01 (Horizontal)**

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2374.03	64.37	-9.63	74.00	65.83	30.25	3.73	35.44	100	0	Peak
2374.03	50.87	-3.13	54.00	52.33	30.25	3.73	35.44	160	221	Average

CH01 (Vertical)

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2389.61	64.90	-9.10	74.00	66.33	30.26	3.75	35.44	100	0	Peak
2389.61	50.58	-3.42	54.00	52.01	30.26	3.75	35.44	100	147	Average

CH11 (Horizontal)

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2483.50	55.06	-18.94	74.00	56.42	30.29	3.86	35.51	100	0	Peak
2483.50	43.26	-10.74	54.00	44.62	30.29	3.86	35.51	154	226	Average

CH11 (Vertical)

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2483.50	63.63	-10.37	74.00	64.99	30.29	3.86	35.51	100	0	Peak
2483.50	50.02	-3.98	54.00	51.38	30.29	3.86	35.51	100	147	Average



➤WLAN 802.11g

CH01 (Horizontal)

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2390.00	67.51	-6.49	74.00	68.96	30.26	3.75	35.46	100	0	Peak
2390.00	44.45	-9.55	54.00	45.90	30.26	3.75	35.46	162	223	Average

CH01 (Vertical)

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2390.00	68.87	-5.13	74.00	70.32	30.26	3.75	35.46	100	0	Peak
2390.00	45.85	-8.15	54.00	47.30	30.26	3.75	35.46	100	360	Average

CH11 (Horizontal)

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2483.50	61.05	-12.95	74.00	62.41	30.29	3.86	35.51	100	0	Peak
2483.50	39.56	-14.44	54.00	40.92	30.29	3.86	35.51	154	224	Average

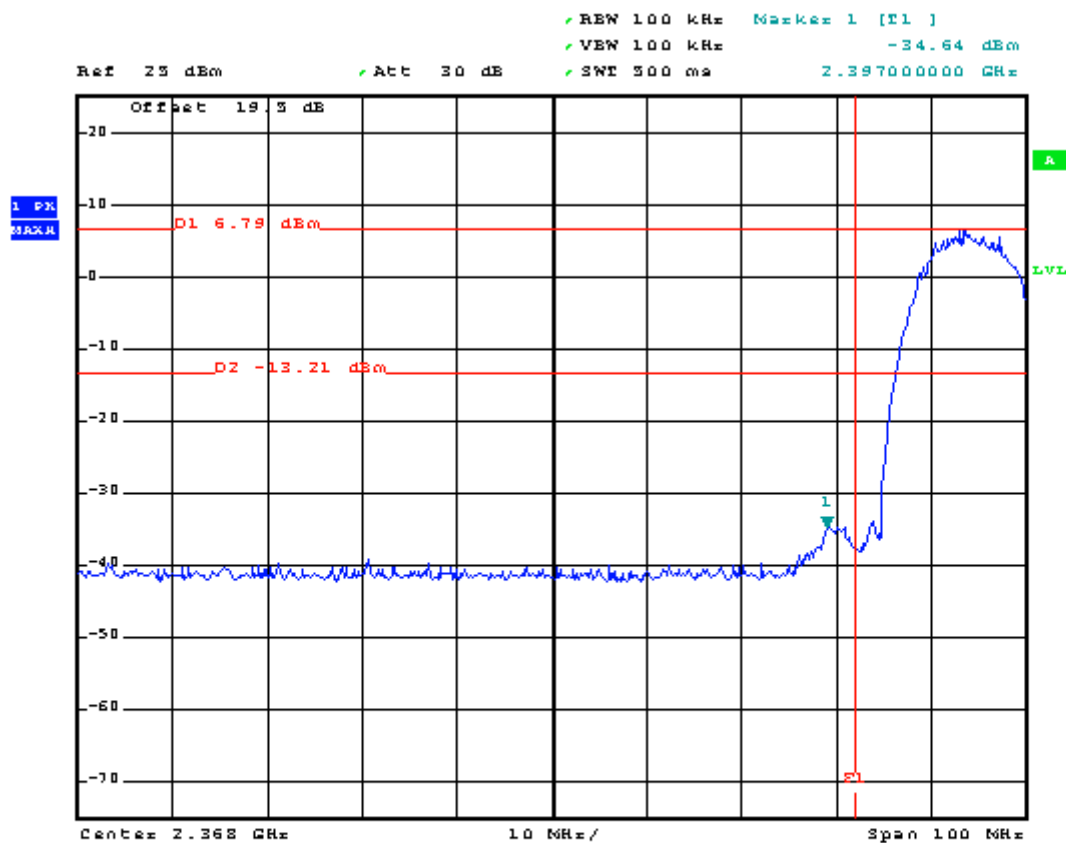
CH11 (Vertical)

Frequency	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2483.50	60.34	-13.66	74.00	61.70	30.29	3.86	35.51	100	0	Peak
2483.50	45.16	-8.84	54.00	46.52	30.29	3.86	35.51	100	360	Average

**5.4.5 20dB Band Edge**

WLAN 802.11b

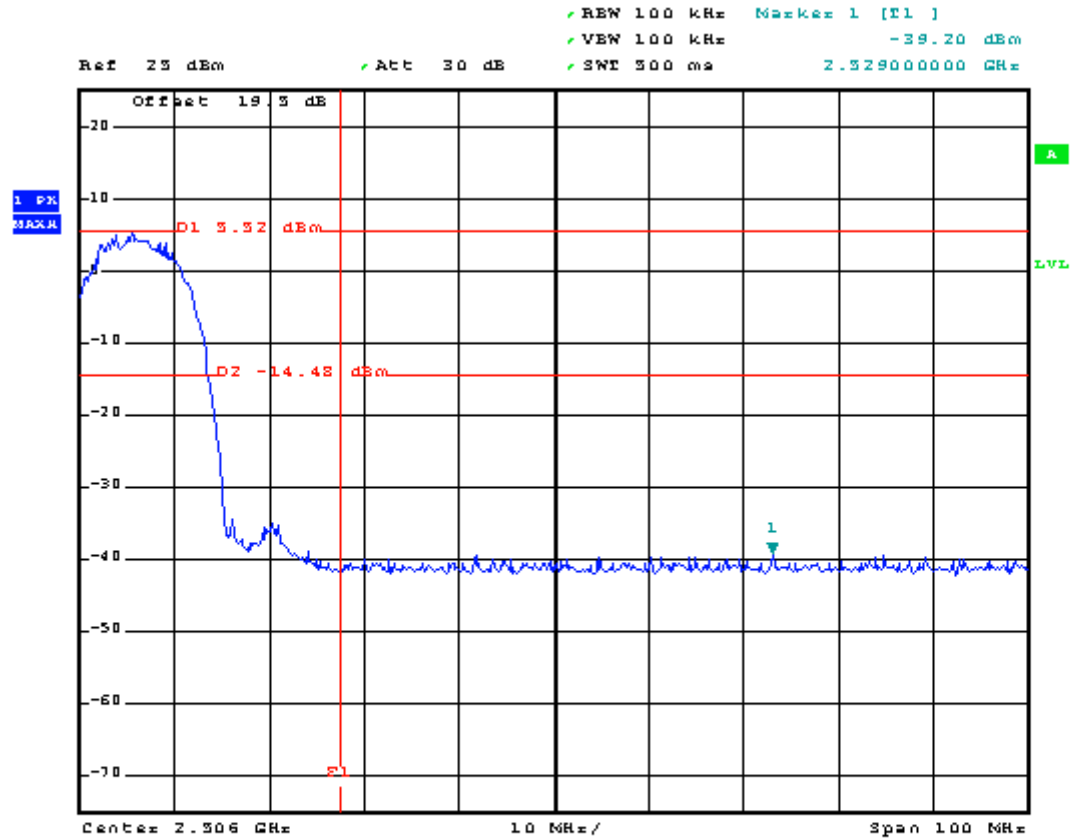
CH01



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CH11

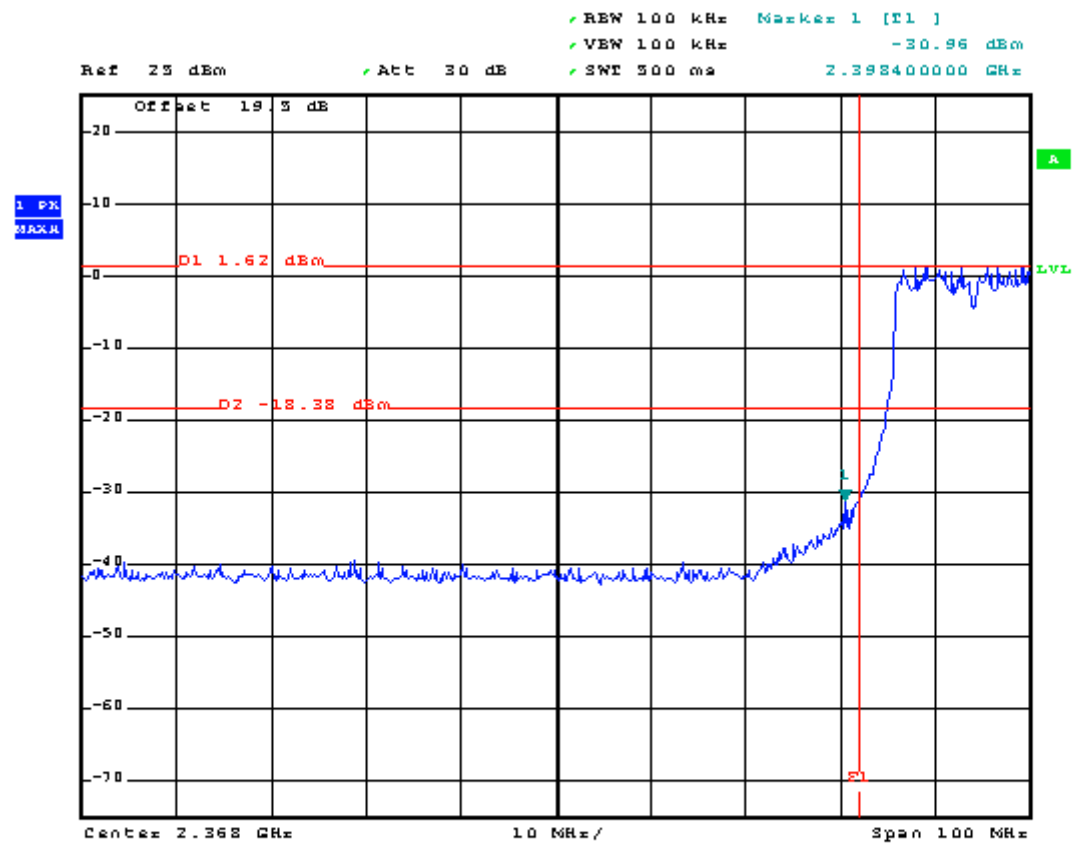


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WLAN 802.11g

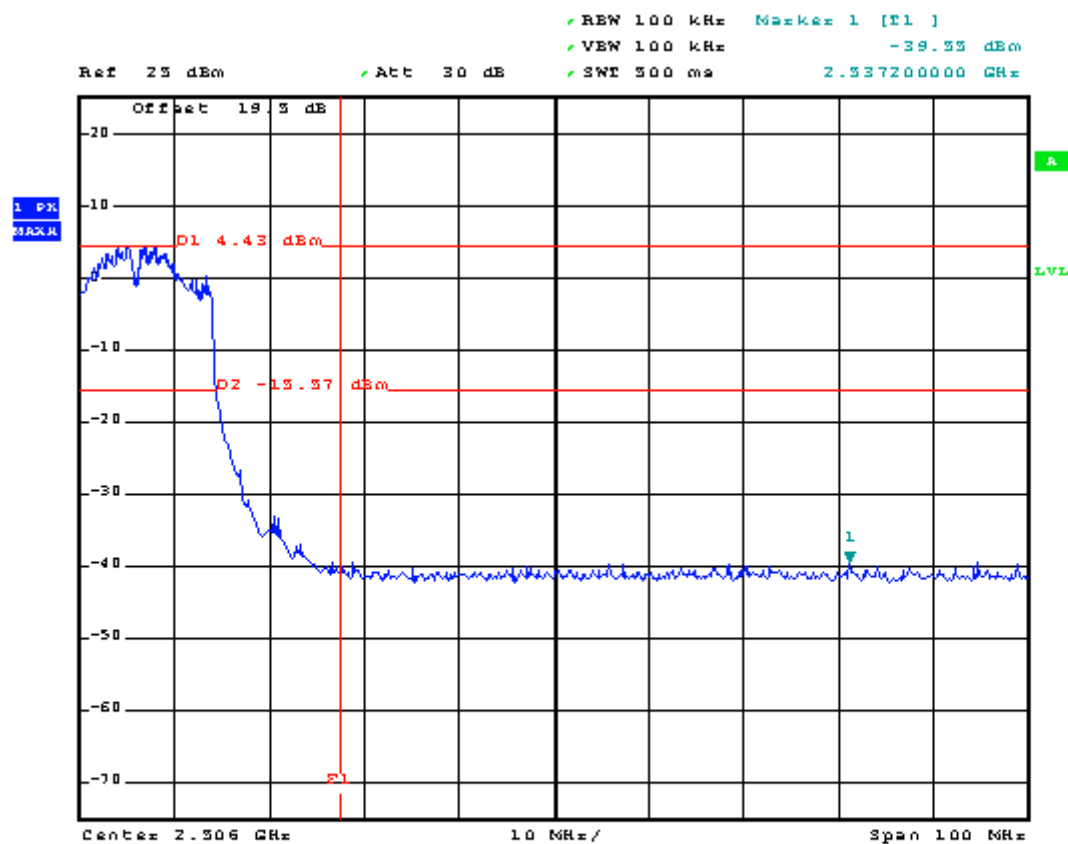
CH01



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CH11



Date: 30.AUG.2007 20:42:39

5.5 Peak Output Power Measurement

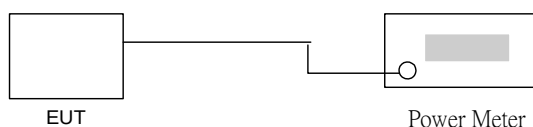
5.5.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.5.2 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.
2. The antenna port (RF output) of the EUT was connected to the input (RF input) of a spectrum analyzer for BT measurement. RBW and VBW are set to 3MHz. The cable loss has been offset before testing.

5.5.3 Test Setup Layout :



5.5.4 Test Result :

Application Type : WLAN 802.11b/g

Temperature : 24~27°C

Relative Humidity : 51~53%

Test Enginner : Sun

WLAN 802.11b

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	18.65	1W/30 dBm
06	2437	17.35	1W/30 dBm
11	2462	17.09	1W/30 dBm

WLAN 802.11g

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	21.17	1W/30 dBm
06	2437	20.12	1W/30 dBm
11	2462	19.65	1W/30 dBm



5.6 Conducted Emission

5.6.1 Measuring Instruments

As described in chapter 6 of this test Report.

5.6.2 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.
- 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.



5.6.3 Test Data

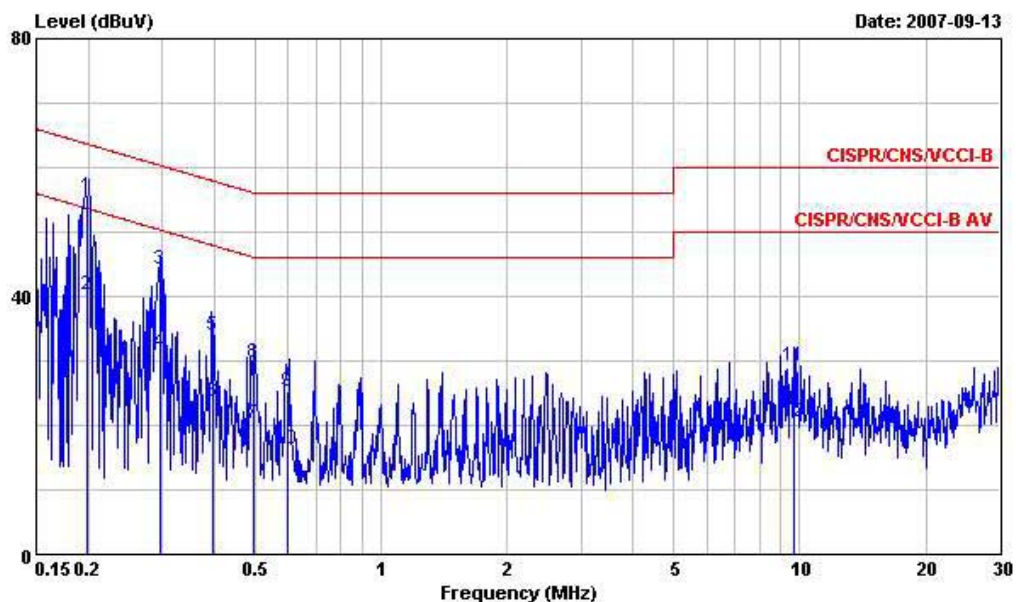
Temperature : 24~27°C

Relative Humidity : 51~53%

Test Enginner : Win

Test Mode : Mode 1

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



Site : C004-HY

Condition : CISPR/CNS/VCCI-B LISN 200704 99041 LINE

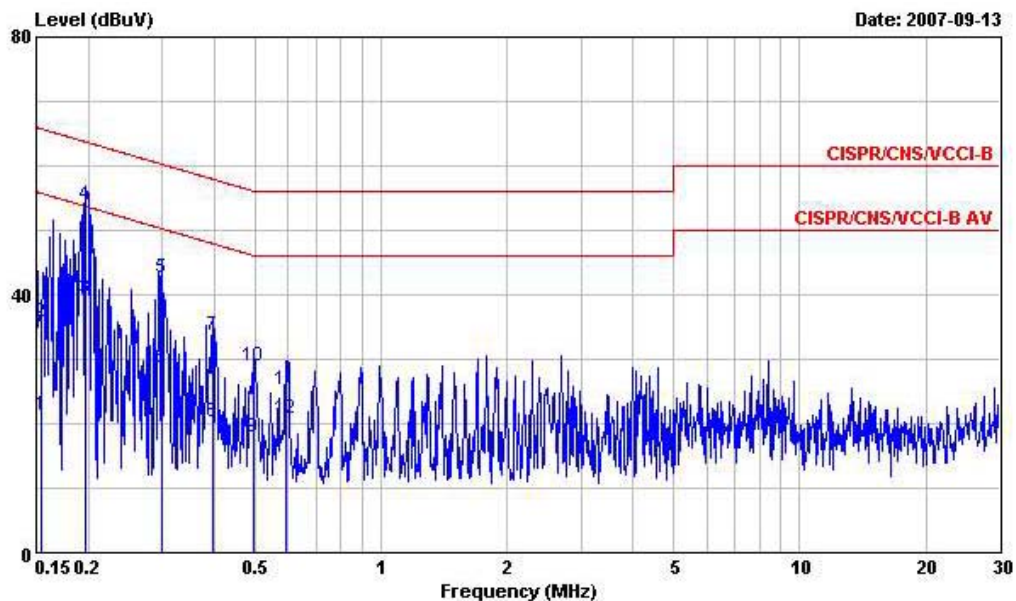
EUT : AGPS

POWER: 120Vac/60Hz

Model : FR 791006

Memo : GSM850 Idle+GPS RX+WLAN Link+Adaptor

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.1982360	55.42	-8.26	63.68	55.18	0.10	0.14	QP
2	0.1982360	40.16	-13.52	53.68	39.92	0.10	0.14	Average
3	0.2971150	44.22	-16.10	60.32	43.64	0.10	0.48	QP
4	0.2971150	31.25	-19.07	50.32	30.67	0.10	0.48	Average
5	0.3947300	33.97	-23.99	57.96	33.15	0.10	0.72	QP
6	0.3947300	23.58	-24.38	47.96	22.76	0.10	0.72	Average
7	0.4941090	20.18	-25.92	46.10	19.42	0.10	0.66	Average
8	0.4941090	29.72	-26.38	56.10	28.96	0.10	0.66	QP
9	0.5998400	25.16	-30.84	56.00	24.46	0.10	0.60	QP
10	0.5998400	16.43	-29.57	46.00	15.73	0.10	0.60	Average
11	9.650	29.21	-30.79	60.00	28.79	0.20	0.22	QP
12	9.650	20.60	-29.40	50.00	20.18	0.20	0.22	Average



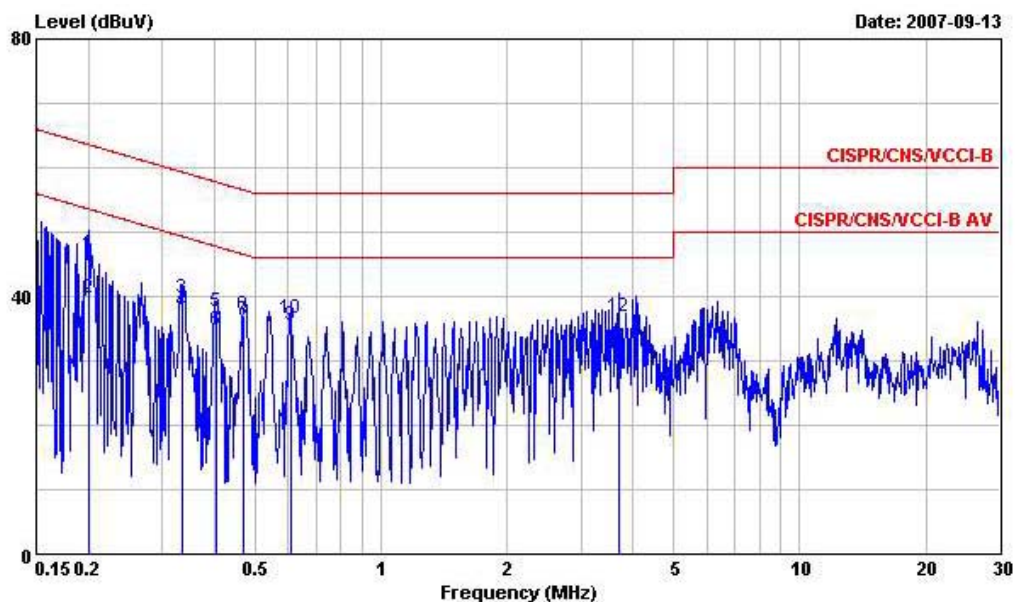
Site : CO04-HY
Condition : CISPR/CNS/VCCI-B LISN 200704 99041 NEUTRAL
EUT : AGPS
POWER: 120Vac/60Hz
Model : FR 791006
Memo : GSM850 Idle+GPS RX+WLAN Link+Adaptor

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
1	0.1539680	21.43	-34.35	55.78	21.19	0.10	0.14	Average
2	0.1539680	35.80	-29.98	65.78	35.56	0.10	0.14	QP
3	0.1973510	39.45	-14.27	53.72	39.21	0.10	0.14	Average
4	0.1973510	53.82	-9.90	63.72	53.58	0.10	0.14	QP
5	0.2986930	42.67	-17.61	60.28	42.09	0.10	0.48	QP
6	0.2986930	28.61	-21.67	50.28	28.03	0.10	0.48	Average
7	0.3971220	33.63	-24.28	57.91	32.81	0.10	0.72	QP
8	0.3971220	20.32	-27.59	47.91	19.50	0.10	0.72	Average
9	0.4941090	17.92	-28.18	46.10	17.16	0.10	0.66	Average
10	0.4941090	28.85	-27.25	56.10	28.09	0.10	0.66	QP
11	0.5916410	25.15	-30.85	56.00	24.44	0.10	0.61	QP
12	0.5916410	20.75	-25.25	46.00	20.04	0.10	0.61	Average



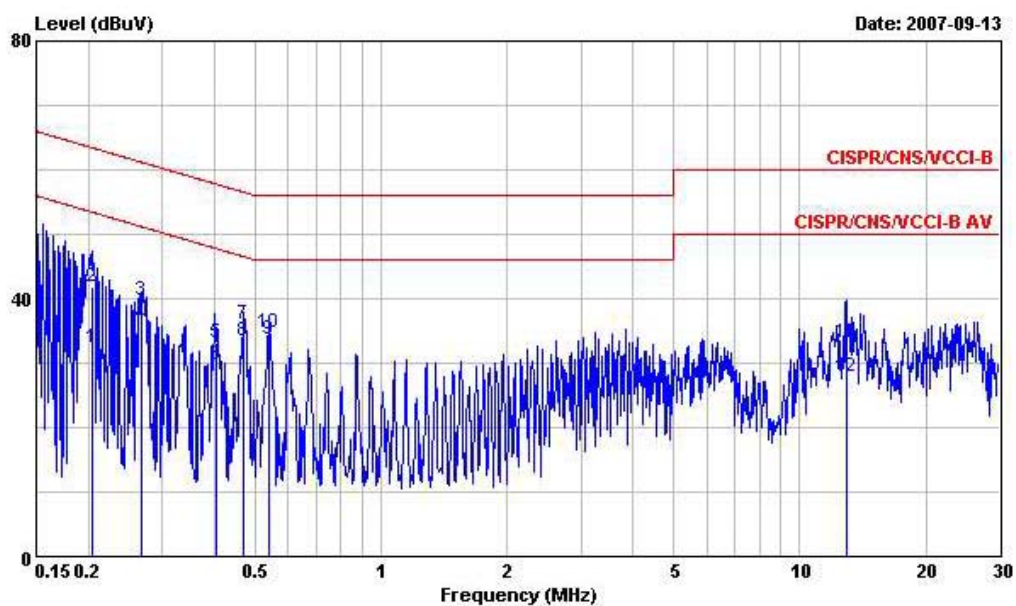
Temperature : 24~27°C
 Relative Humidity : 51~53%
 Test Enginner : Win
 Test Mode : Mode 2

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



Site : C004-HY
 Condition : CISPR/CNS/VCCI-B LISN 200704 99041 LINE
 EUT : AGPS
 POWER: From System
 Model : FR 791006
 Memo : GSM850 Idle+GPS RX+WLAN Link+USB Link
 : +Core

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.1996860	46.55	-17.07	63.62	46.31	0.10	0.14	QP
2	0.1996860	39.69	-13.93	53.62	39.45	0.10	0.14	Average
3	0.3356200	39.82	-19.49	59.31	39.14	0.10	0.58	QP
4	0.3356200	37.54	-11.77	49.31	36.86	0.10	0.58	Average
5	0.4040020	37.64	-20.13	57.77	36.81	0.10	0.73	QP
6	0.4040020	34.62	-13.15	47.77	33.79	0.10	0.73	Average
7	0.4710390	36.30	-10.20	46.50	35.52	0.10	0.68	Average
8	0.4710390	37.23	-19.27	56.50	36.45	0.10	0.68	QP
9	0.6075240	35.53	-10.47	46.00	34.83	0.10	0.60	Average
10	0.6075240	36.59	-19.41	56.00	35.89	0.10	0.60	QP
11	3.700	32.07	-13.93	46.00	31.64	0.10	0.33	Average
12	3.700	36.81	-19.19	56.00	36.38	0.10	0.33	QP



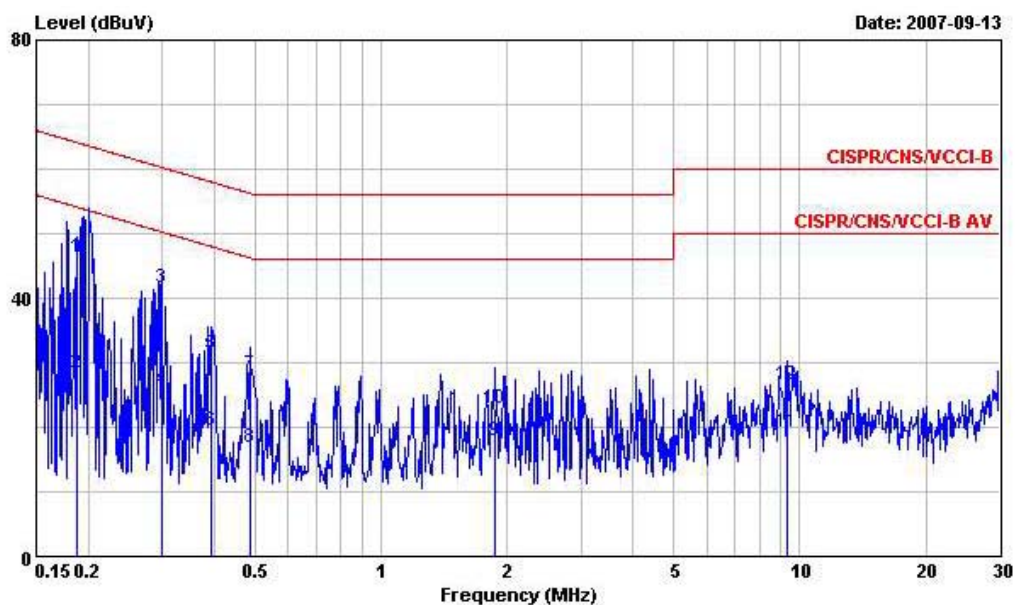
Site : C004-HY
Condition : CISPR/CNS/VCCI-B LISN 200704 99041 NEUTRAL
EUT : AGPS
POWER: From System
Model : FR 791006
Memo : GSM850 Idle+GPS RX+WLAN Link+USB Link
 :+Core

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.2050460	32.30	-21.10	53.40	32.04	0.10	0.16	Average
2	0.2050460	41.88	-21.52	63.40	41.62	0.10	0.16	QP
3	0.2686610	39.78	-21.38	61.16	39.29	0.10	0.39	QP
4	0.2686610	36.00	-15.16	51.16	35.51	0.10	0.39	Average
5	0.4056780	33.14	-24.60	57.74	32.31	0.10	0.73	QP
6	0.4056780	29.65	-18.09	47.74	28.82	0.10	0.73	Average
7	0.4711010	35.96	-20.53	56.49	35.18	0.10	0.68	QP
8	0.4711010	33.38	-13.11	46.49	32.60	0.10	0.68	Average
9	0.5379400	33.65	-12.35	46.00	32.91	0.10	0.64	Average
10	0.5379400	34.85	-21.15	56.00	34.11	0.10	0.64	QP
11	12.926	33.14	-26.86	60.00	32.67	0.30	0.17	QP
12	12.926	28.00	-22.00	50.00	27.53	0.30	0.17	Average



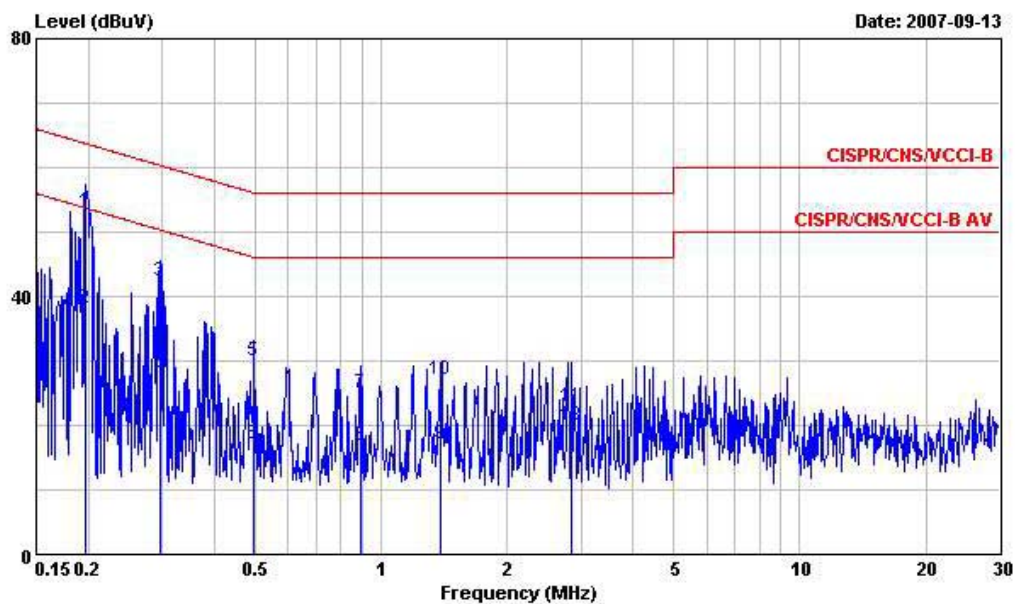
Temperature : 24~27°C
 Relative Humidity : 51~53%
 Test Enginner : Win
 Test Mode : Mode 3

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



Site : C004-HY
 Condition : CISPR/CNS/VCCIB LISN 200704 99041 LINE
 EUT : AGPS
 POWER: 120Vac/60Hz
 Model : FR 791006
 Memo : PCS1900 Idle+GPS RX+WLAN Link+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1883860	46.26	-17.85	64.11	46.02	0.10	0.14	QP
2	0.1883860	28.49	-25.62	54.11	28.25	0.10	0.14	Average
3	0.2986930	41.58	-18.70	60.28	41.00	0.10	0.48	QP
4	0.2986930	25.86	-24.42	50.28	25.28	0.10	0.48	Average
5	0.3934400	31.30	-26.69	57.99	30.48	0.10	0.72	QP
6	0.3934400	19.53	-28.46	47.99	18.71	0.10	0.72	Average
7	0.4863180	28.07	-28.16	56.23	27.30	0.10	0.67	QP
8	0.4863180	16.81	-29.42	46.23	16.04	0.10	0.67	Average
9	1.870	18.00	-28.00	46.00	17.47	0.10	0.43	Average
10	1.870	22.92	-33.08	56.00	22.39	0.10	0.43	QP
11	9.346	19.21	-30.79	50.00	18.79	0.19	0.23	Average
12	9.346	26.48	-33.52	60.00	26.06	0.19	0.23	QP



Site : C004-HY
 Condition : CISPR/CNS/VCCI-B LISN 200704 99041 NEUTRAL
 EUT : AGPS
 POWER: 120Vac/60Hz
 Model : FR 791006
 Memo : PCS1900 Idle+GPS RX+WLAN Link+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1975810	53.20	-10.51	63.71	52.96	0.10	0.14	QP
2	0.1975810	38.17	-15.54	53.71	37.93	0.10	0.14	Average
3	0.2955450	42.32	-18.05	60.37	41.75	0.10	0.47	QP
4	0.2955450	27.55	-22.82	50.37	26.98	0.10	0.47	Average
5	0.4967340	30.09	-25.96	56.05	29.33	0.10	0.66	QP
6	0.4967340	17.18	-28.87	46.05	16.42	0.10	0.66	Average
7	0.8896870	25.13	-30.87	56.00	24.55	0.10	0.48	QP
8	0.8896870	16.80	-29.20	46.00	16.22	0.10	0.48	Average
9	1.391	17.03	-28.97	46.00	16.49	0.10	0.44	Average
10	1.391	26.98	-29.02	56.00	26.44	0.10	0.44	QP
11	2.850	22.95	-33.05	56.00	22.43	0.15	0.37	QP
12	2.850	20.10	-25.90	46.00	19.58	0.15	0.37	Average

5.7 Radiated Emission Measurement

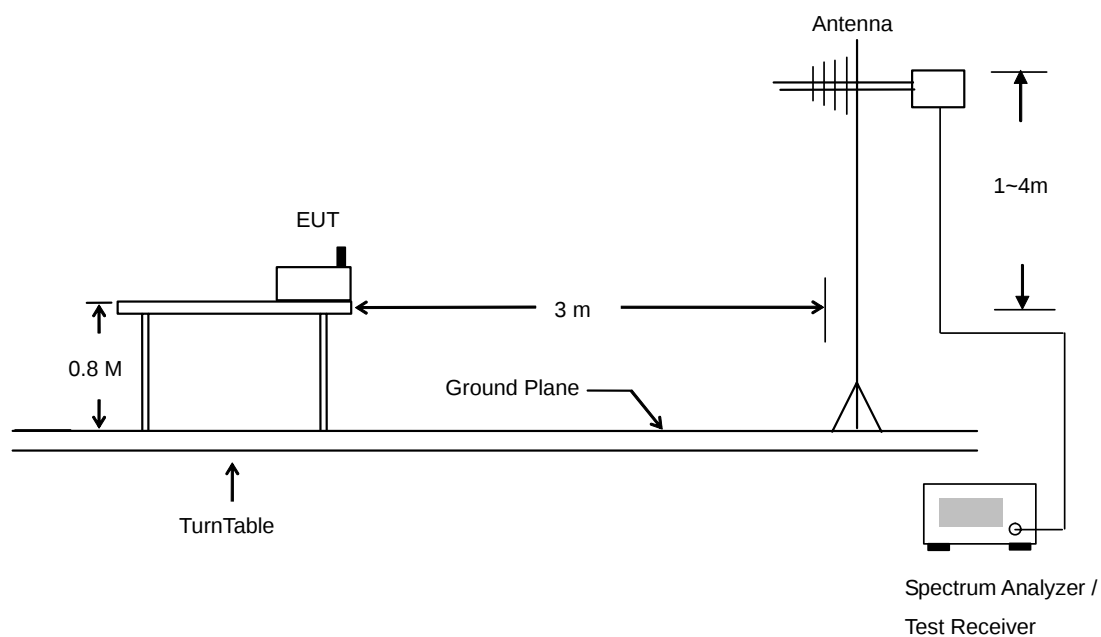
5.7.1 Measuring Instruments

As described in chapter 6 of this Report.

5.7.2 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.
- 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.

5.7.3 Typical Test Setup Layout of Radiated Emission





5.7.4 Test Data

Temperature : 25~26°C

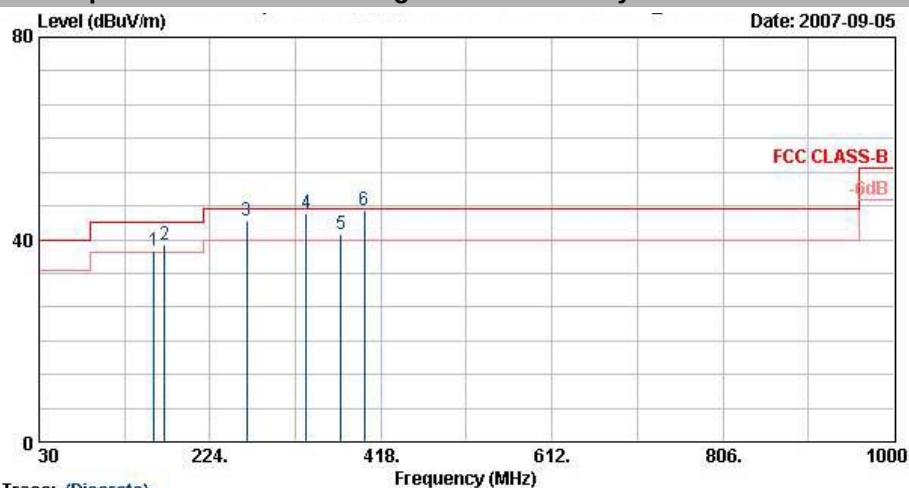
Relative Humidity : 52~54%

Test Engineer : Andrew

Test Mode : Mode 1

Polarization : Horizontal (30MHz-1GHz)

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



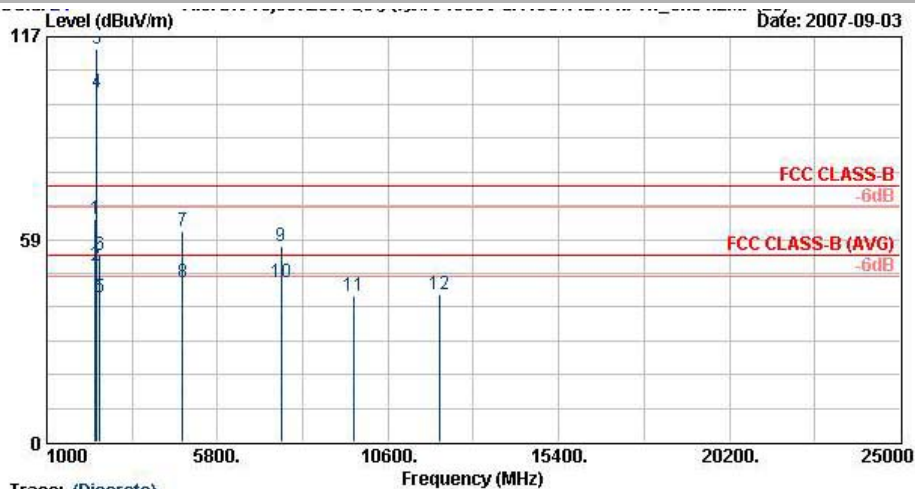
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11b Tx_Ch01;2412MHz
 Plane : E1
 Data Rate : 2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	160.14	37.79	-5.71	43.50	57.30	10.13	1.39	31.03	162	291	QP
2 !	172.83	39.07	-4.43	43.50	58.78	9.86	1.44	31.01	---	---	Peak
3 !	265.98	43.60	-2.40	46.00	60.20	12.56	1.80	30.96	100	309	QP
4 !	332.90	45.29	-0.71	46.00	60.10	14.05	2.04	30.91	100	315	QP
5 !	372.80	41.04	-4.96	46.00	54.70	15.07	2.16	30.88	100	325	QP
6 @	399.40	45.83	-0.17	46.00	58.70	15.76	2.23	30.86	100	65	QP



Polarization : Horizontal (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HV
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11b Tx_Ch01; 2412MHz
 Plane : E1
 Data Rate : 2

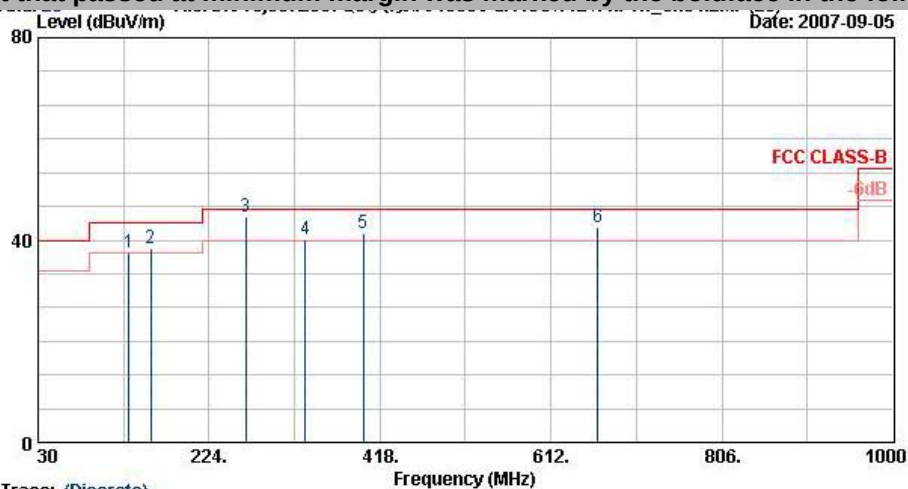
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2374.03	64.37	-9.63	74.00	65.83	30.25	3.73	35.44	100	0	Peak
2	2374.03	50.87	-3.13	54.00	52.33	30.25	3.73	35.44	160	221	Average
3	2412.00	113.73			115.15	30.27	3.77	35.46	100	0	Peak
4	2412.00	100.80			102.22	30.27	3.77	35.46	160	221	Average
5	2488.00	41.67	-12.33	54.00	43.02	30.30	3.86	35.51	160	221	Average
6	2488.00	54.00	-20.00	74.00	55.35	30.30	3.86	35.51	100	0	Peak
7	4824.00	60.82	-13.18	74.00	58.15	32.94	5.84	36.12	100	0	Peak
8	4824.00	46.10	-7.90	54.00	43.43	32.94	5.84	36.12	194	260	Average
9	7587.00	56.69	-17.31	74.00	46.05	39.02	7.64	36.02	100	0	Peak
10	7587.00	46.24	-7.76	54.00	35.60	39.02	7.64	36.02	100	257	Average
11	9648.00	42.15	-31.85	74.00	79.80	-10.09	9.12	36.68	100	0	Peak
12	12060.00	42.56	-31.44	74.00	78.28	-9.80	10.65	36.56	100	0	Peak

Remark:

1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Polarization : Vertical (30MHz-1GHz)

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

Trace: (Discrete)

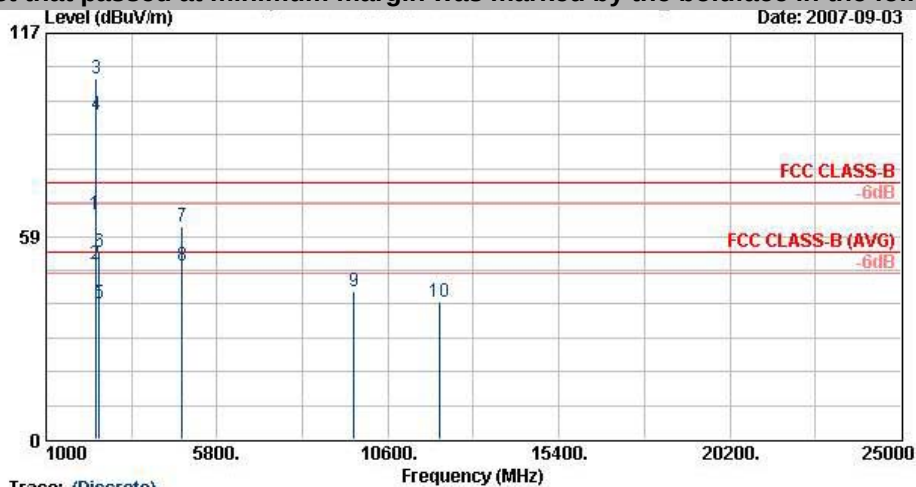
Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
EUT : AGPS
Power : 120Vac/60Hz
Model : FR 791006
Mode : 11b Tx_Ch01;2412MHz
Plane : E1
Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1 !	133.14	37.55	-5.95	43.50	56.00	11.37	1.25	31.08	100	0 QP
2 !	157.98	38.35	-5.15	43.50	57.83	10.18	1.38	31.04	---	Peak
3 !	265.98	44.60	-1.40	46.00	61.20	12.56	1.80	30.96	187	360 QP
4 !	332.90	40.09	-5.91	46.00	54.90	14.05	2.04	30.91	100	323 QP
5 !	399.40	41.42	-4.58	46.00	54.29	15.76	2.23	30.86	---	Peak
6 !	665.40	42.55	-3.45	46.00	51.29	18.74	3.15	30.63	---	Peak



Polarization : Vertical (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : ACPS
Power : 120Vac/60Hz
Model : FR 791006
Mode : 11b Tx_Ch01; 2412MHz
Plane : E1
Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2389.61	64.90	-9.10	74.00	66.33	30.26	3.75	35.44	100	0 Peak
2 !	2389.61	50.58	-3.42	54.00	52.01	30.26	3.75	35.44	100	147 Average
3 @	2412.00	104.01			105.43	30.27	3.77	35.46	100	0 Peak
4 @	2412.00	93.63			95.05	30.27	3.77	35.46	100	147 Average
5	2484.00	39.15	-14.85	54.00	40.51	30.29	3.86	35.51	100	147 Average
6	2484.00	53.84	-20.16	74.00	55.20	30.29	3.86	35.51	100	0 Peak
7	4824.00	61.20	-12.80	74.00	58.53	32.94	5.84	36.12	100	0 Peak
8 !	4824.00	50.12	-3.88	54.00	47.45	32.94	5.84	36.12	122	212 Average
9	9648.00	42.70	-31.30	74.00	80.35	-10.09	9.12	36.68	100	0 Peak
10	12060.00	39.42	-34.58	74.00	75.13	-9.80	10.65	36.56	100	0 Peak

Remark:

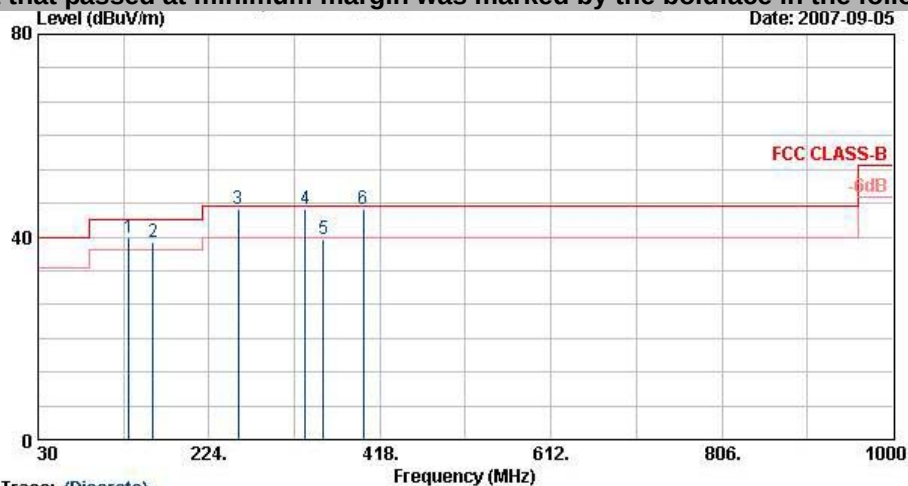
1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Test Mode : Mode 2

Polarization : Horizontal (30MHz-1GHz)

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



Trace: (Discrete)

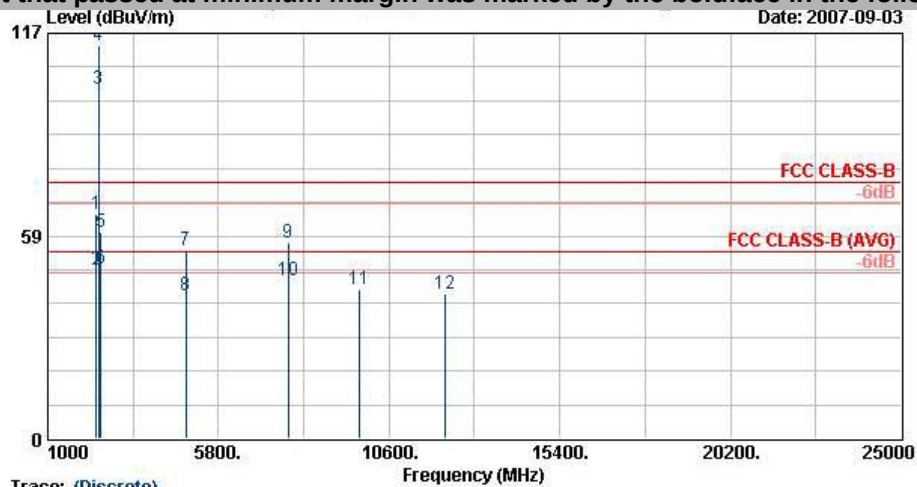
Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
 EUT : AGPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11b Tx_Ch06:2437MHz
 Plane : E1
 Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 !	133.14	39.90	-3.60	43.50	58.35	11.37	1.25	31.08	---	Peak
2 !	160.14	39.09	-4.41	43.50	58.60	10.13	1.39	31.03	200	77 QP
3 !	256.98	45.42	-0.58	46.00	62.20	12.40	1.76	30.94	100	303 QP
4 !	332.90	45.39	-0.61	46.00	60.20	14.05	2.04	30.91	100	313 QP
5	353.90	39.51	-6.49	46.00	53.70	14.60	2.11	30.89	100	307 QP
6 @	399.40	45.63	-0.37	46.00	58.50	15.76	2.23	30.86	100	54 QP



Polarization : Horizontal (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : AGPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11b Tx_Ch06;2437MHz
 Plane : E1
 Data Rate : 2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2364.00	64.70	-9.30	74.00	66.14	30.24	3.73	35.42	100	0	Peak
2 !	2364.00	48.57	-5.43	54.00	50.02	30.24	3.73	35.42	190	203	Average
3 @	2437.00	100.92			102.30	30.28	3.82	35.47	190	203	Average
4 @	2437.00	113.70			115.11	30.27	3.79	35.47	100	0	Peak
5	2483.50	59.38	-14.62	74.00	60.74	30.29	3.86	35.51	100	0	Peak
6 !	2483.50	48.99	-5.01	54.00	50.35	30.29	3.86	35.51	190	203	Average
7	4874.00	54.17	-19.83	74.00	51.32	33.14	5.88	36.16	100	0	Peak
8	4874.00	41.47	-12.53	54.00	38.61	33.14	5.88	36.16	140	269	Average
9	7752.00	56.47	-17.53	74.00	45.46	39.25	7.70	35.95	100	0	Peak
10	7752.00	45.50	-8.50	54.00	34.50	39.25	7.70	35.95	100	258	Average
11	9748.00	43.04	-30.96	74.00	80.35	-9.85	9.15	36.61	100	0	Peak
12	12185.00	41.81	-32.19	74.00	77.85	-10.25	10.66	36.46	100	0	Peak

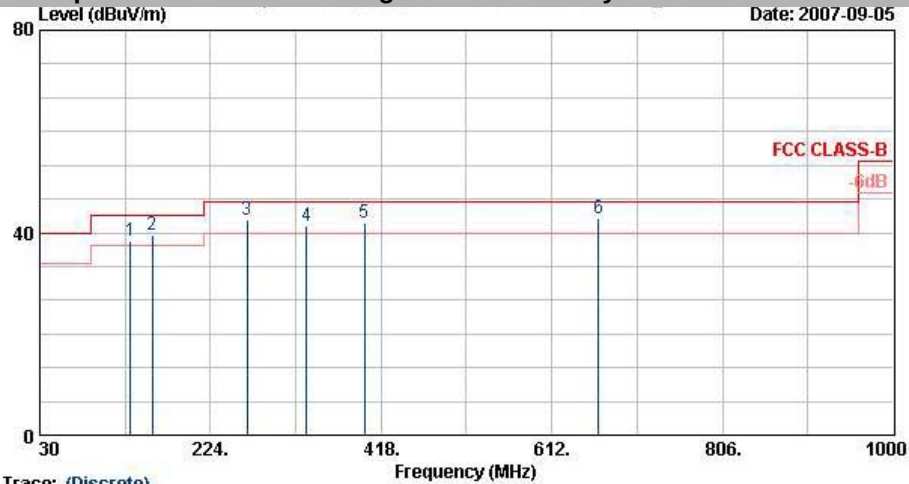
Remark:

1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Polarization : Vertical (30MHz-1GHz)

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



Trace: (Discrete)

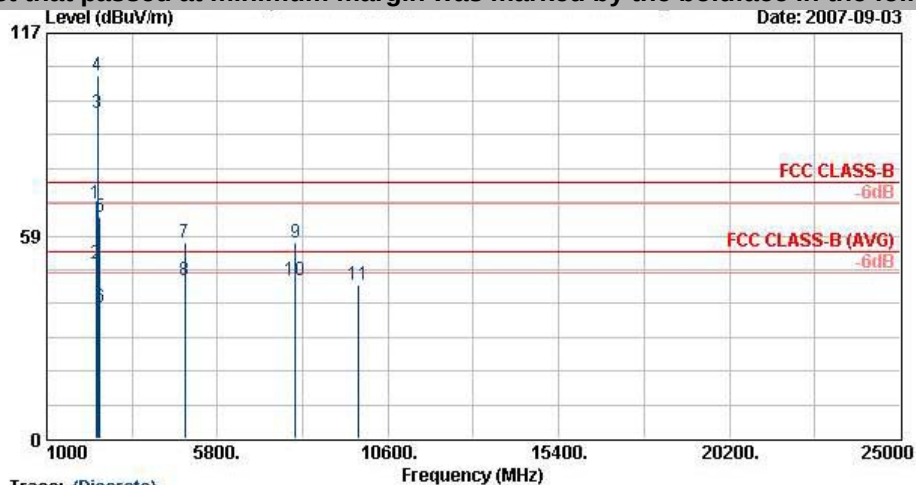
Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(051121) VERTICAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11b Tx_Ch06;2437MHz
 Plane : E1
 Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1 !	133.14	38.25	-5.25	43.50	56.70	11.37	1.25	31.08	100	327 QP
2 !	157.98	39.42	-4.08	43.50	58.90	10.18	1.38	31.04	---	Peak
3 !	265.98	42.60	-3.40	46.00	59.20	12.56	1.80	30.96	169	0 QP
4 !	332.90	41.39	-4.61	46.00	56.20	14.05	2.04	30.91	142	0 QP
5 !	399.40	41.94	-4.06	46.00	54.81	15.76	2.23	30.86	---	Peak
6 !	665.40	42.80	-3.20	46.00	51.54	18.74	3.15	30.63	---	Peak



Polarization : Vertical (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : ACPS
Power : 120Vac/60Hz
Model : FR 791006
Mode : 11b Tx_Ch06;2437MHz
Plane : E1
Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1	2384.00	67.77	-6.23	74.00	69.21	30.25	3.75	35.44	100	0 Peak
2 !	2384.00	50.44	-3.56	54.00	51.88	30.25	3.75	35.44	100	360 Average
3 @	2437.00	93.90			95.28	30.28	3.82	35.47	100	360 Average
4 @	2437.00	104.96			106.37	30.27	3.79	35.47	100	0 Peak
5	2483.50	64.01	-10.00	74.00	65.36	30.29	3.86	35.51	100	0 Peak
6	2483.50	37.76	-16.24	54.00	39.12	30.29	3.86	35.51	100	360 Average
7	4874.00	56.54	-17.46	74.00	53.68	33.14	5.88	36.16	100	0 Peak
8	4874.00	45.70	-8.30	54.00	42.84	33.14	5.88	36.16	122	212 Average
9	7992.00	56.76	-17.24	74.00	45.24	39.58	7.79	35.85	100	0 Peak
10	7992.00	45.72	-8.28	54.00	34.20	39.58	7.79	35.85	100	288 Average
11	9748.00	44.36	-29.64	74.00	81.67	-9.85	9.15	36.61	100	0 Peak

Remark:

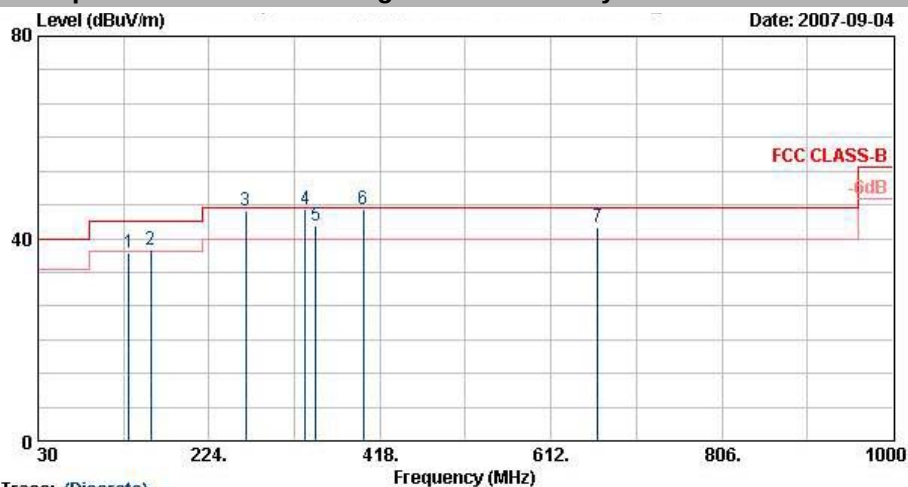
1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Test Mode : Mode 3

Polarization : Horizontal (30MHz-1GHz)

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



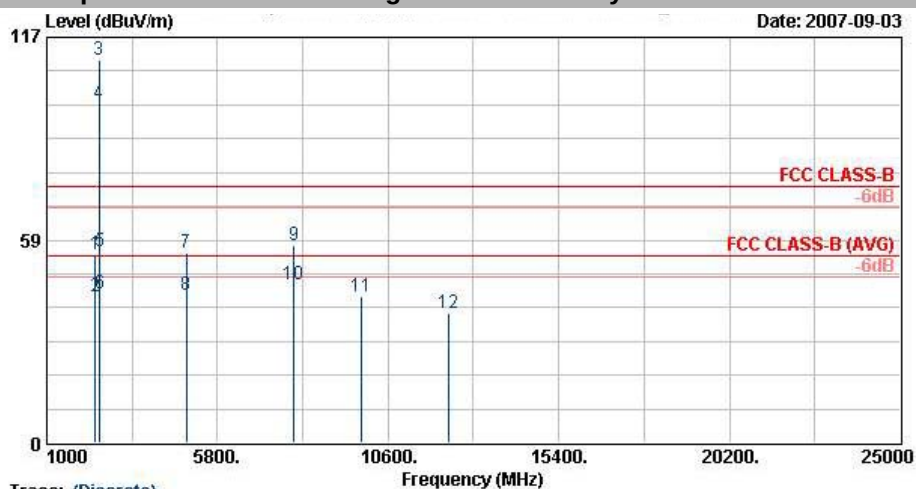
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11b Tx_Ch11;2462MHz
 Plane : E1
 Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	133.14	37.15	-6.35	43.50	55.60	11.37	1.25	31.08	100	269 QP
2 !	157.98	37.63	-5.87	43.50	57.10	10.18	1.38	31.04	140	83 QP
3 !	265.98	45.60	-0.40	46.00	62.20	12.56	1.80	30.96	100	307 QP
4 @	332.90	45.87	-0.13	46.00	60.68	14.05	2.04	30.91	100	310 QP
5 !	344.80	42.46	-3.54	46.00	56.90	14.37	2.08	30.90	100	321 QP
6 !	399.40	45.82	-0.18	46.00	58.69	15.76	2.23	30.86	100	193 QP
7 !	665.40	42.36	-3.64	46.00	51.10	18.74	3.15	30.63	121	334 QP



Polarization : Horizontal (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11b Tx_Ch11; 2462MHz
 Plane : E1
 Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB		deg	
1	2374.00	54.54	-19.46	74.00	55.99	30.25	3.73	35.44	100	0 Peak
2	2374.00	41.99	-12.01	54.00	43.45	30.25	3.73	35.44	154	226 Average
3 @	2462.00	110.53			111.89	30.29	3.84	35.49	100	0 Peak
4 @	2462.00	97.65			99.02	30.29	3.84	35.49	154	226 Average
5	2483.50	55.06	-18.94	74.00	56.42	30.29	3.86	35.51	100	0 Peak
6	2483.50	43.26	-10.74	54.00	44.62	30.29	3.86	35.51	154	226 Average
7	4924.00	54.97	-19.03	74.00	51.92	33.34	5.92	36.21	100	0 Peak
8	4924.00	42.44	-11.56	54.00	39.39	33.34	5.92	36.21	152	258 Average
9	7956.00	56.85	-17.15	74.00	45.40	39.53	7.78	35.86	100	0 Peak
10	7956.00	45.47	-8.53	54.00	34.02	39.53	7.78	35.86	100	290 Average
11	9848.00	42.24	-31.76	74.00	79.23	-9.63	9.18	36.54	100	0 Peak
12	12310.00	37.49	-36.51	74.00	73.82	-10.65	10.68	36.36	100	0 Peak

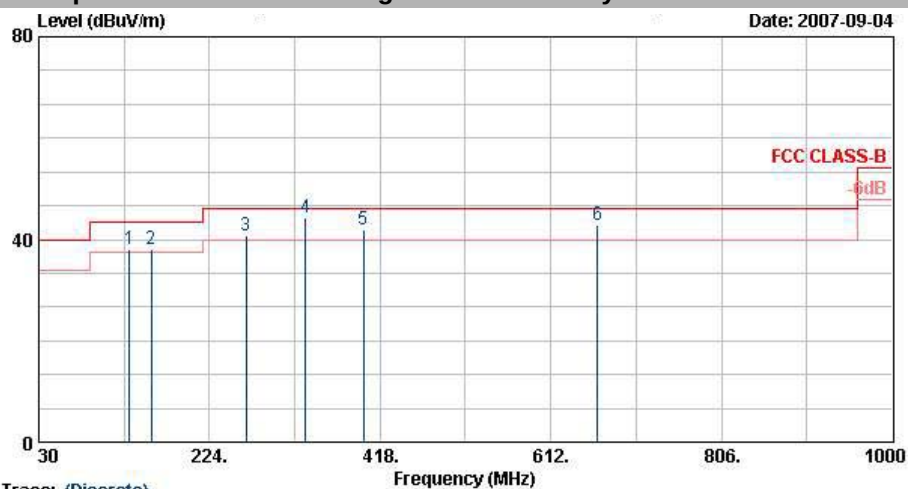
Remark:

1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Polarization : Vertical (30MHz-1GHz)

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

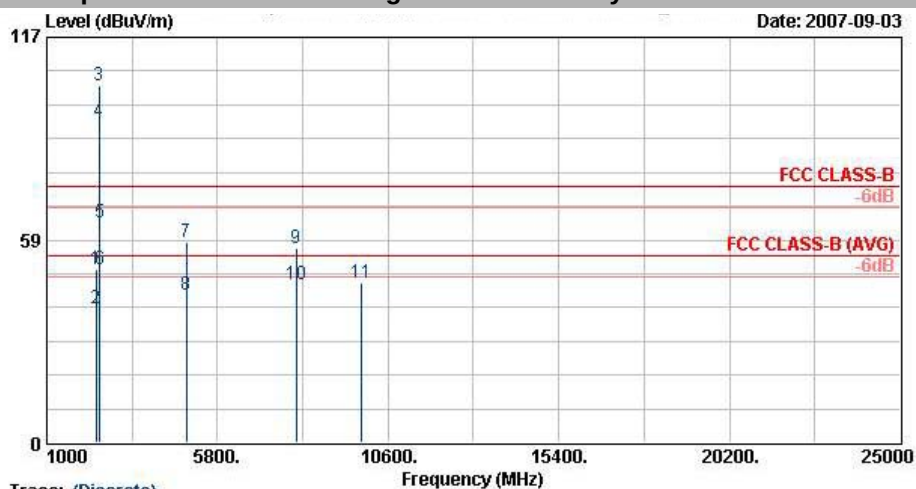


Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
 EUT : AGPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11b Tx_Ch11;2462MHz
 Plane : E1
 Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 !	133.14	38.15	-5.35	43.50	56.60	11.37	1.25	31.08	100	132 QP
2 !	157.98	38.03	-5.47	43.50	57.50	10.18	1.38	31.04	100	349 QP
3 !	265.98	40.70	-5.30	46.00	57.30	12.56	1.80	30.96	100	153 QP
4 !	332.90	44.19	-1.81	46.00	59.00	14.05	2.04	30.91	145	353 QP
5 !	399.40	42.03	-3.97	46.00	54.90	15.76	2.23	30.86	---	--- Peak
6 !	665.40	42.73	-3.27	46.00	51.47	18.74	3.15	30.63	---	--- Peak



Polarization : Vertical (1GHz-25GHz)

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

Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : ACPS
Power : 120Vac/60Hz
Model : FR 791006
Mode : 11b Tx_Ch11;2462MHz
Plane : E1
Data Rate : 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2384.00	50.10	-23.90	74.00	51.54	30.25	3.75	35.44	100	0 Peak
2	2384.00	38.72	-15.28	54.00	40.16	30.25	3.75	35.44	100	147 Average
3 @	2462.00	103.12			104.49	30.29	3.84	35.49	100	0 Peak
4 @	2462.00	92.62			93.99	30.29	3.84	35.49	100	147 Average
5	2483.50	63.63	-10.37	74.00	64.99	30.29	3.86	35.51	100	0 Peak
6 !	2483.50	50.02	-3.98	54.00	51.38	30.29	3.86	35.51	100	147 Average
7	4924.00	57.87	-16.13	74.00	54.82	33.34	5.92	36.21	100	0 Peak
8	4924.00	42.48	-11.52	54.00	39.43	33.34	5.92	36.21	105	9 Average
9	8022.00	56.21	-17.79	74.00	44.65	39.59	7.83	35.86	100	0 Peak
10	8022.00	45.66	-8.34	54.00	34.10	39.59	7.83	35.86	100	266 Average
11	9848.00	46.24	-27.76	74.00	83.23	-9.63	9.18	36.54	100	0 Peak

Remark:

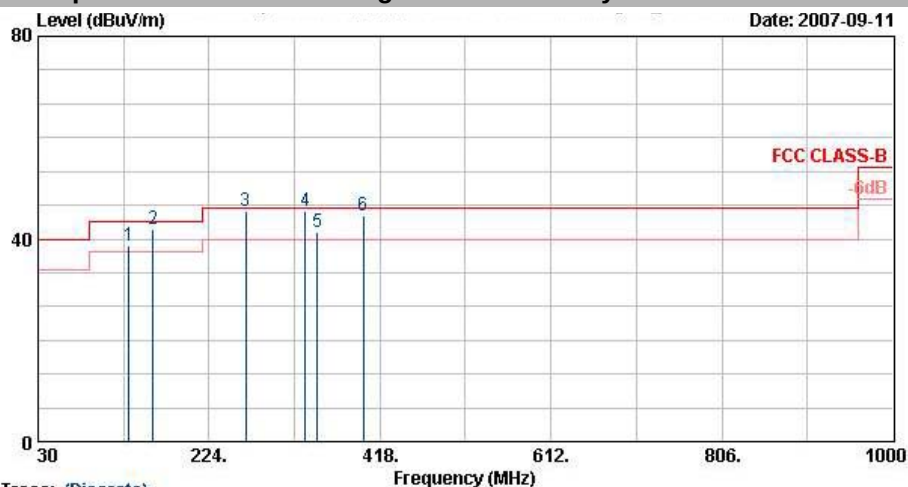
1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Test Mode : Mode 4

Polarization : Horizontal (30MHz-1GHz)

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



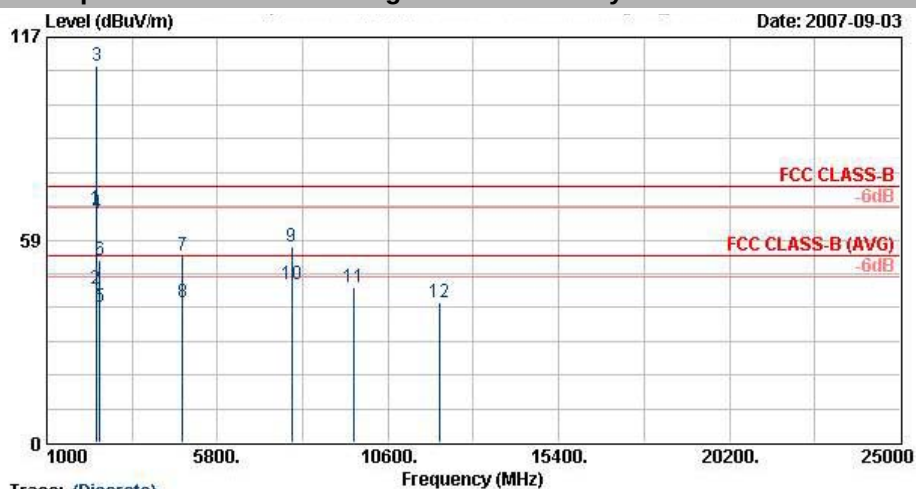
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
 EUT : ACP5
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11g Tx_Ch01; 2412MHz
 Plane : E1
 Data Rate : 48

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamplifier	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	133.14	38.51	-4.99	43.50	56.97	11.37	1.25	31.08	---	---	Peak
2 !	160.14	41.89	-1.61	43.50	61.40	10.13	1.39	31.03	224	84	QP
3 @	265.98	45.40	-0.60	46.00	62.00	12.56	1.80	30.96	100	311	QP
4 !	332.90	45.39	-0.61	46.00	60.20	14.05	2.04	30.91	100	71	QP
5 !	346.90	41.29	-4.71	46.00	55.68	14.42	2.09	30.90	---	---	Peak
6 !	399.40	44.53	-1.47	46.00	57.40	15.76	2.23	30.86	100	297	QP



Polarization : Horizontal (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : IIS Tx_Ch01; 2412MHz
 Plane : E1
 Data Rate : 48

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2390.00	67.51	-6.49	74.00	68.96	30.26	3.75	35.46	100	0	Peak
2	2390.00	44.45	-9.55	54.00	45.90	30.26	3.75	35.46	162	223	Average
3 @	2412.00	108.64			110.05	30.27	3.77	35.46	100	0	Peak
4 @	2412.00	65.96			67.38	30.27	3.77	35.46	162	223	Average
5	2488.00	39.11	-14.89	54.00	40.46	30.30	3.86	35.51	162	223	Average
6	2488.00	52.63	-21.37	74.00	53.98	30.30	3.86	35.51	100	0	Peak
7	4824.00	53.90	-20.10	74.00	51.24	32.94	5.84	36.12	100	0	Peak
8	4824.00	40.64	-13.36	54.00	37.97	32.94	5.84	36.12	200	267	Average
9	7881.00	56.41	-17.59	74.00	45.12	39.44	7.75	35.89	100	0	Peak
10	7881.00	45.79	-8.21	54.00	34.50	39.44	7.75	35.89	100	225	Average
11	9648.00	44.85	-29.15	74.00	82.50	-10.09	9.12	36.68	100	0	Peak
12	12060.00	40.56	-33.44	74.00	76.28	-9.80	10.65	36.56	100	0	Peak

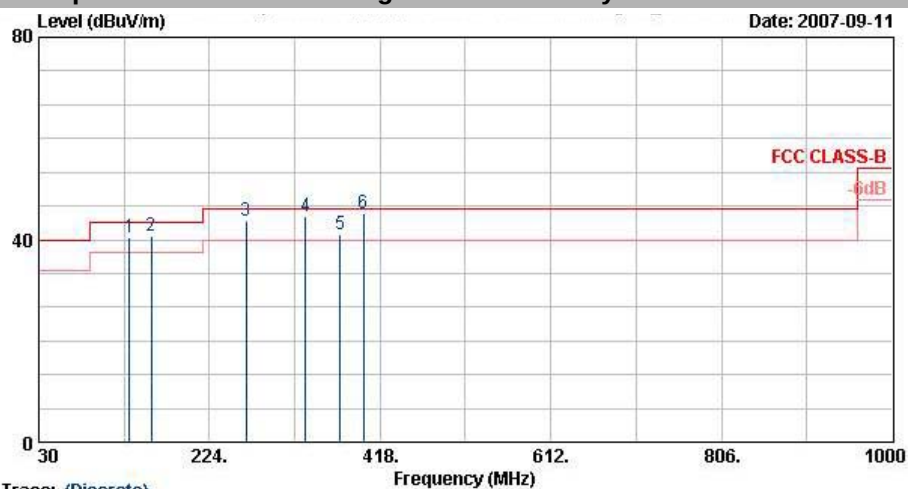
Remark:

1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Polarization : Vertical (30MHz-1GHz)

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



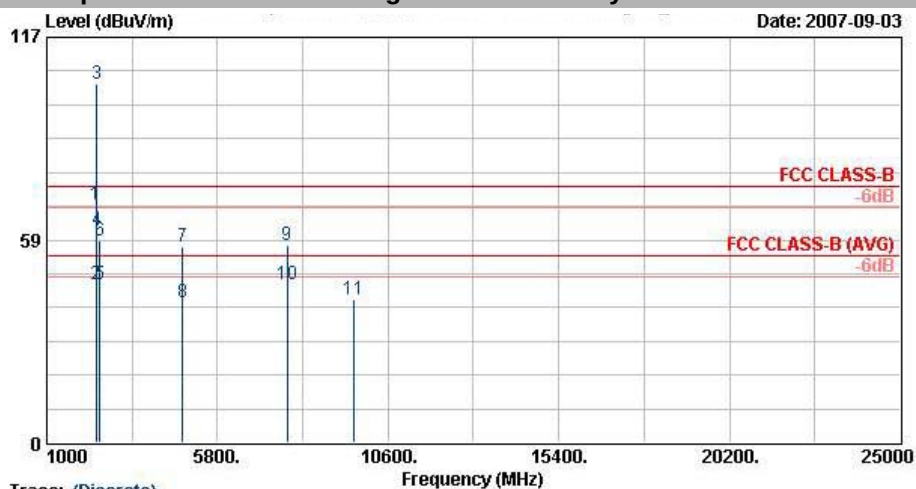
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
 EUT : AGPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11g Tx_Ch01;2412MHz
 Plane : E1
 Data Rate : 48

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	133.14	40.35	-3.15	43.50	58.80	11.37	1.25	31.08	100	89	QP
2 !	157.98	40.83	-2.67	43.50	60.30	10.18	1.38	31.04	100	82	QP
3 !	265.98	43.60	-2.40	46.00	60.20	12.56	1.80	30.96	100	114	QP
4 !	332.90	44.69	-1.31	46.00	59.50	14.05	2.04	30.91	117	82	QP
5 !	372.80	41.10	-4.90	46.00	54.76	15.07	2.16	30.88	---	---	Peak
6 !	399.40	45.13	-0.87	46.00	58.00	15.76	2.23	30.86	166	131	QP



Polarization : Vertical (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11g Tx_Ch01;2412MHz
 Plane : E1
 Data Rate : 48

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 !	2390.00	68.87	-5.13	74.00	70.32	30.26	3.75	35.46	100	0 Peak
2	2390.00	45.85	-8.15	54.00	47.30	30.26	3.75	35.46	100	360 Average
3 @	2412.00	103.33			104.74	30.27	3.77	35.46	100	0 Peak
4 @	2412.00	61.36			62.78	30.27	3.77	35.46	100	360 Average
5	2494.00	45.80	-8.20	54.00	47.15	30.30	3.88	35.53	100	360 Average
6	2494.00	58.12	-15.88	74.00	59.47	30.30	3.88	35.53	100	0 Peak
7	4824.00	56.46	-17.54	74.00	53.79	32.94	5.84	36.12	100	0 Peak
8	4824.00	40.27	-13.73	54.00	37.60	32.94	5.84	36.12	184	210 Average
9	7761.00	56.88	-17.12	74.00	45.85	39.27	7.71	35.95	100	0 Peak
10	7761.00	45.53	-8.47	54.00	34.50	39.27	7.71	35.95	100	266 Average
11	9648.00	41.47	-32.53	74.00	79.12	-10.09	9.12	36.68	100	0 Peak

Remark:

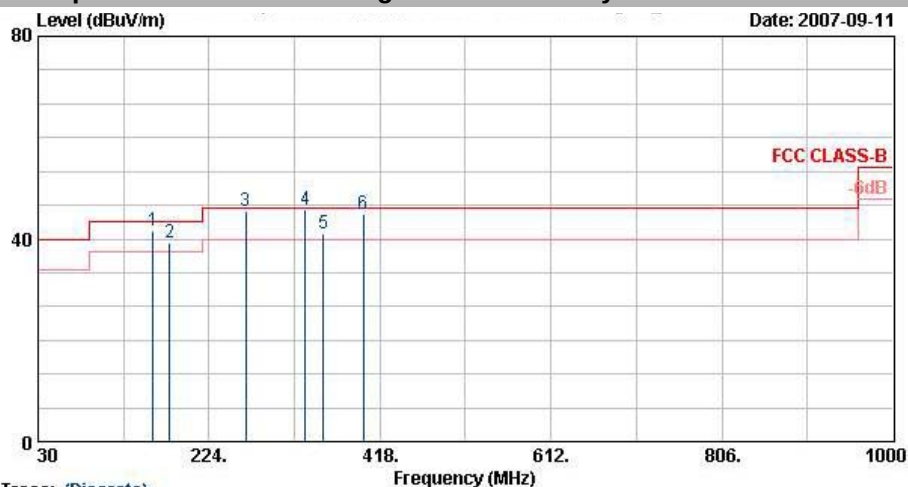
1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Test Mode : Mode 5

Polarization : Horizontal (30MHz-1GHz)

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



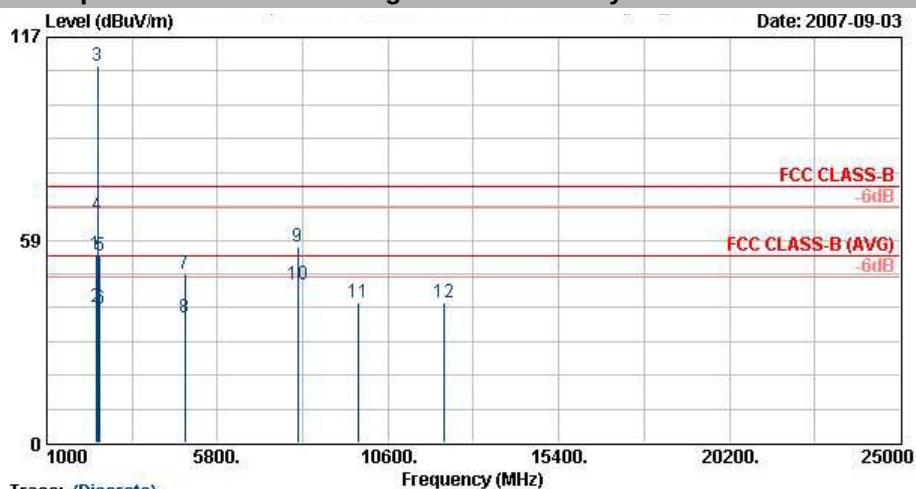
Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : ACP5
Power : 120Vac/60Hz
Model : FR 791006
Mode : I1g Tx_Ch06;2437MHz
Plane : E1
Data Rate : 48

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	160.14	41.59	-1.91	43.50	61.10	10.13	1.39	31.03	225	94	QP
2 !	179.04	39.32	-4.18	43.50	59.39	9.50	1.46	31.04	---	---	Peak
3 !	265.98	45.50	-0.50	46.00	62.10	12.56	1.80	30.96	100	303	QP
4 @	332.90	45.69	-0.31	46.00	60.50	14.05	2.04	30.91	100	311	QP
5 !	353.90	40.95	-5.05	46.00	55.13	14.60	2.11	30.89	---	---	Peak
6 !	399.40	45.03	-0.97	46.00	57.90	15.76	2.23	30.86	100	58	QP



Polarization : Horizontal (1GHz-25GHz)

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

Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
EUT : ACPS
Power : 120Vac/60Hz
Model : FR 791006
Mode : I1g T_u_Ch06;2437MHz
Plane : E1
Data Rate : 48

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2388.00	54.37	-19.63	74.00	55.80	30.26	3.75	35.44	100	0 Peak
2	2388.00	38.99	-15.01	54.00	40.42	30.26	3.75	35.44	153	225 Average
3 @	2437.00	108.52			109.93	30.27	3.79	35.47	100	0 Peak
4 @	2437.00	65.46			66.84	30.28	3.82	35.47	153	225 Average
5	2488.00	53.76	-20.24	74.00	55.12	30.30	3.86	35.51	100	0 Peak
6	2488.00	38.84	-15.16	54.00	40.19	30.30	3.86	35.51	153	225 Average
7	4874.00	48.62	-25.38	74.00	45.84	33.08	5.87	36.16	100	0 Peak
8	4874.00	36.00	-18.00	54.00	33.14	33.14	5.88	36.16	131	247 Average
9	8052.00	56.59	-17.41	74.00	45.07	39.56	7.85	35.89	100	0 Peak
10	8052.00	45.72	-8.28	54.00	34.20	39.56	7.85	35.89	100	256 Average
11	9748.00	40.51	-33.49	74.00	77.82	-9.85	9.15	36.61	100	0 Peak
12	12185.00	40.35	-33.65	74.00	76.35	-10.18	10.66	36.48	100	0 Peak

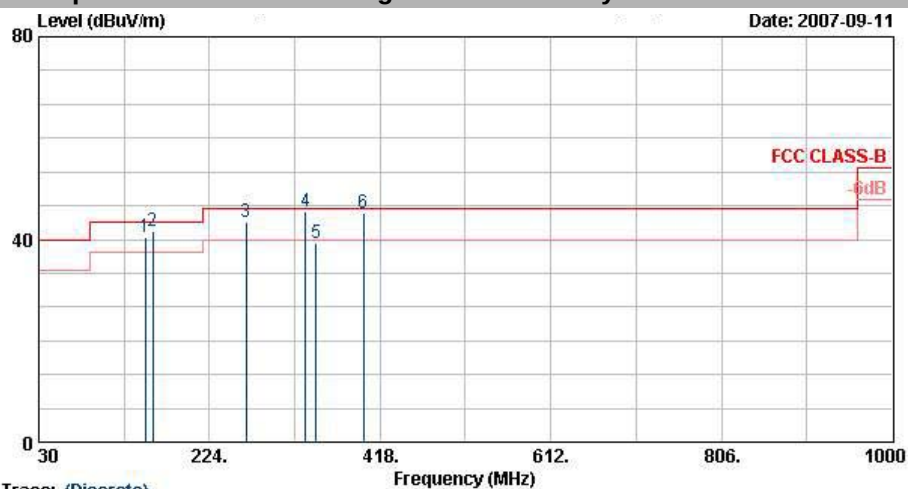
Remark:

1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Polarization : Vertical (30MHz-1GHz)

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



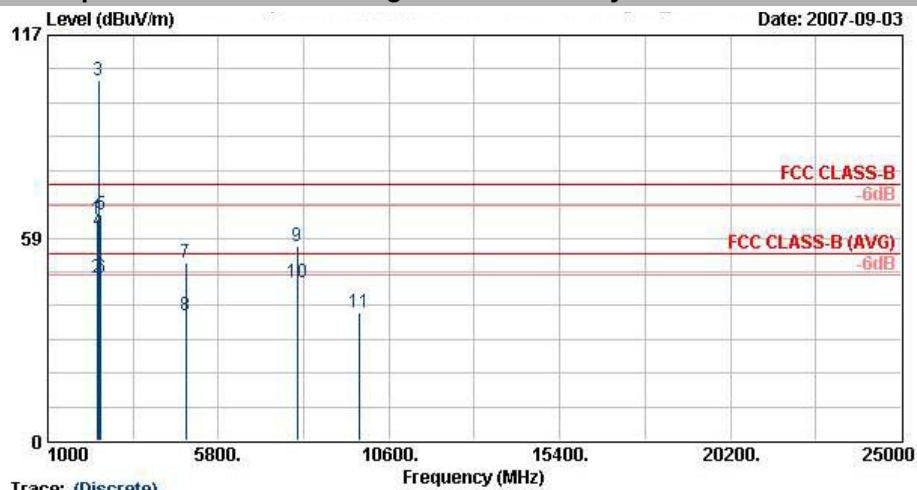
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LF-ANT(951121) VERTICAL
 EUT : AGPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11g Tx_Ch06;2437MHz
 Plane : E1
 Data Rate : 48

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	150.69	40.58	-2.92	43.50	59.90	10.40	1.35	31.07	100	79	QP
2 !	159.33	41.67	-1.83	43.50	61.16	10.16	1.38	31.03	100	77	QP
3 !	265.98	43.50	-2.50	46.00	60.10	12.56	1.80	30.96	100	110	QP
4 !	332.90	45.39	-0.61	46.00	60.20	14.05	2.04	30.91	126	345	QP
5	344.80	39.26	-6.74	46.00	53.70	14.37	2.08	30.90	---	---	Peak
6 !	399.40	45.13	-0.87	46.00	58.00	15.76	2.23	30.86	100	45	QP



Polarization : Vertical (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : ACPS
Power : 120Vac/60Hz
Model : FR 791006
Mode : 11g Tx_Ch06;2437MHz
Plane : E1
Data Rate : 48

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2378.00	64.11	-9.89	74.00	65.54	30.25	3.75	35.44	100	0	Peak
2	2378.00	46.87	-7.13	54.00	48.31	30.25	3.75	35.44	100	360	Average
3 @	2437.00	103.88			105.26	30.28	3.82	35.47	100	0	Peak
4 @	2437.00	60.27			61.65	30.28	3.82	35.47	100	360	Average
5	2488.00	65.42	-8.58	74.00	66.77	30.30	3.86	35.51	100	0	Peak
6	2488.00	46.81	-7.19	54.00	48.16	30.30	3.86	35.51	100	360	Average
7	4874.00	51.45	-22.55	74.00	48.67	33.08	5.87	36.16	100	0	Peak
8	4874.00	36.22	-17.78	54.00	33.36	33.14	5.88	36.16	100	318	Average
9	8022.00	56.30	-17.70	74.00	44.74	39.59	7.83	35.86	100	0	Peak
10	8022.00	45.66	-8.34	54.00	34.10	39.59	7.83	35.86	100	226	Average
11	9748.00	36.79	-37.22	74.00	74.10	-9.85	9.15	36.61	100	0	Peak

Remark:

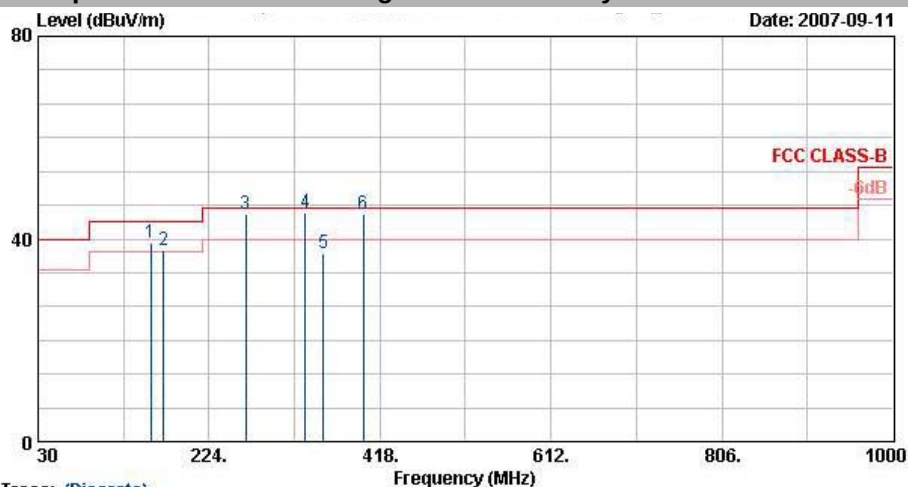
1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Test Mode : Mode 6

Polarization : Horizontal (30MHz-1GHz)

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



Trace: (Discrete)

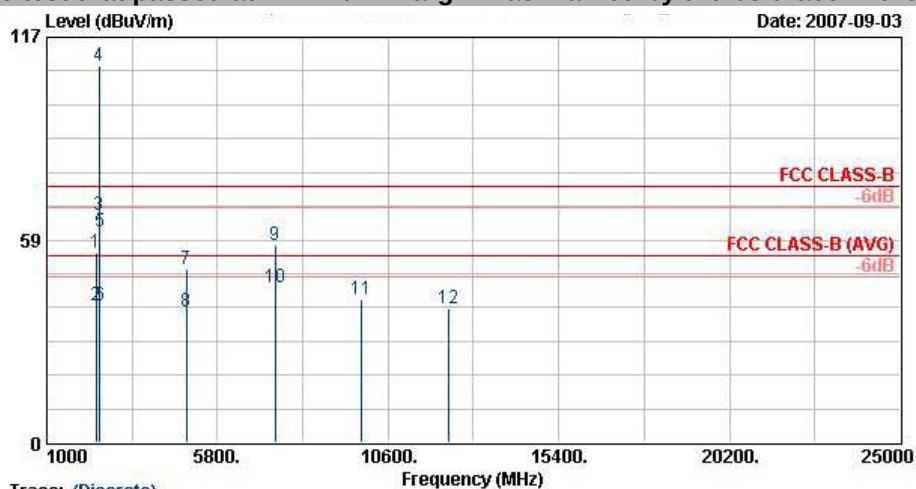
Site : 03CH06-HY
Condition : FCC CLASS-B 3m LF-ANT(951121) HORIZONTAL
EUT : ACP5
Power : 120Vac/60Hz
Model : FR 791006
Mode : IIS Tx_Ch11;2462MHz
Plane : E1
Data Rate : 48

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1 !	157.98	39.18	-4.32	43.50	58.66	10.18	1.38	31.04	---	Peak
2 !	172.83	37.73	-5.77	43.50	57.44	9.86	1.44	31.01	---	Peak
3 !	265.98	44.90	-1.10	46.00	61.49	12.56	1.80	30.96	---	Peak
4 @	332.90	45.29	-0.71	46.00	60.10	14.05	2.04	30.91	107	316 QP
5	353.90	37.15	-8.85	46.00	51.34	14.60	2.11	30.89	---	Peak
6 !	399.40	44.83	-1.17	46.00	57.70	15.76	2.23	30.86	100	58 QP



Polarization : Horizontal (1GHz-25GHz)

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



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11g Tx_Ch11;2462MHz
 Plane : E1
 Data Rate : 48

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2388.00	54.84	-19.16	74.00	56.27	30.26	3.75	35.44	100	0 Peak
2	2388.00	39.56	-14.44	54.00	40.99	30.26	3.75	35.44	154	224 Average
3 @	2462.00	65.57			66.94	30.29	3.84	35.49	154	224 Average
4 @	2462.00	108.87			110.24	30.29	3.84	35.49	100	0 Peak
5	2483.50	61.05	-12.95	74.00	62.41	30.29	3.86	35.51	100	0 Peak
6	2483.50	39.56	-14.44	54.00	40.92	30.29	3.86	35.51	154	224 Average
7	4924.00	50.21	-23.79	74.00	47.16	33.34	5.92	36.21	100	0 Peak
8	4924.00	37.74	-16.26	54.00	34.69	33.34	5.92	36.21	126	247 Average
9	7416.00	56.82	-17.18	74.00	46.49	38.71	7.66	36.04	100	0 Peak
10	7416.00	44.88	-9.12	54.00	34.55	38.71	7.66	36.04	100	269 Average
11	9846.00	41.25	-32.75	74.00	78.24	-9.63	9.18	36.54	---	--- Peak
12	12310.00	38.89	-35.11	74.00	75.24	-10.65	10.68	36.38	100	0 Peak

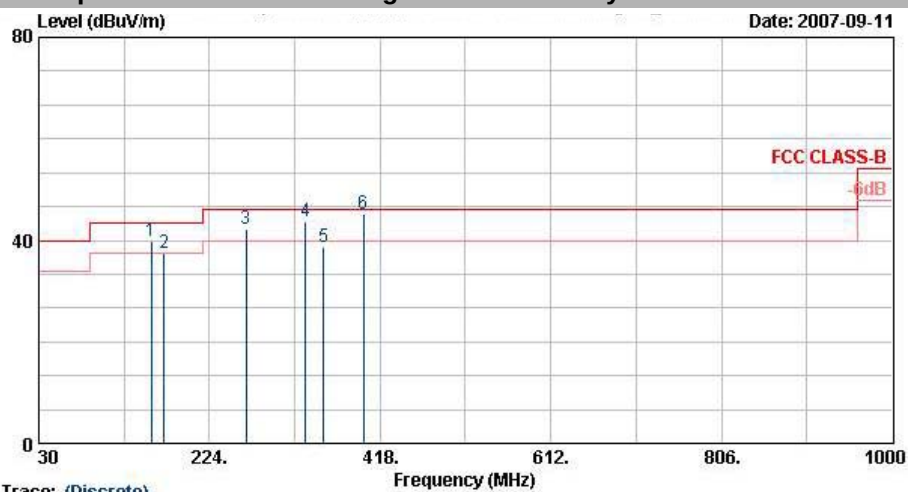
Remark:

1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



Polarization : Vertical (30MHz-1GHz)

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



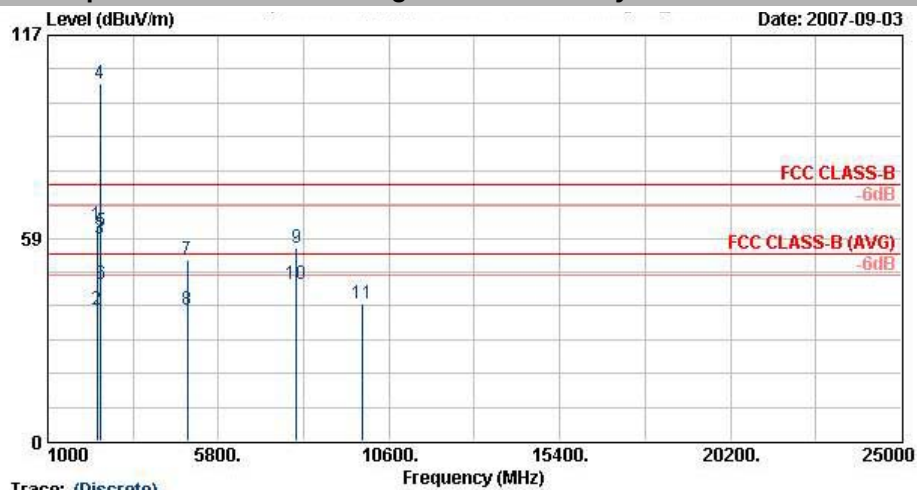
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m LP-ANT(951121) VERTICAL
 EUT : ACPS
 Power : 120Vac/60Hz
 Model : FR 791006
 Mode : 11g Tx_Ch11; 2462MHz
 Plane : E1
 Data Rate : 48

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1 !	157.98	39.88	-3.62	43.50	59.36	10.18	1.38	31.04	---	Peak
2 !	172.83	37.59	-5.91	43.50	57.31	9.86	1.44	31.01	---	Peak
3 !	265.98	42.33	-3.67	46.00	58.92	12.56	1.80	30.96	---	Peak
4 !	332.90	43.59	-2.41	46.00	58.40	14.05	2.04	30.91	156	18 QP
5	353.90	38.71	-7.29	46.00	52.89	14.60	2.11	30.89	---	Peak
6 @	399.40	45.33	-0.67	46.00	58.20	15.76	2.23	30.86	100	359 QP



Polarization : Vertical (1GHz-25GHz)

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



Trace: (Discrete)

Site : 03CH06-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
EUT : ACPS
Power : 120Vac/60Hz
Model : FR 791006
Mode : 11g Tx_Ch11; 2462MHz
Plane : E1
Data Rate : 48

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1	2388.00	62.29	-11.71	74.00	63.72	30.26	3.75	35.44	100	0 Peak
2	2388.00	38.04	-15.96	54.00	39.47	30.26	3.75	35.44	100	360 Average
3 @	2462.00	58.07			59.44	30.29	3.84	35.49	100	360 Average
4 @	2462.00	103.28			104.65	30.29	3.84	35.49	100	0 Peak
5	2483.50	60.34	-13.66	74.00	61.70	30.29	3.86	35.51	100	0 Peak
6	2483.50	45.16	-8.84	54.00	46.52	30.29	3.86	35.51	100	360 Average
7	4924.00	52.06	-21.94	74.00	49.09	33.27	5.91	36.21	100	0 Peak
8	4924.00	37.64	-16.36	54.00	34.59	33.34	5.92	36.21	108	349 Average
9	7992.00	55.84	-18.16	74.00	44.32	39.58	7.79	35.85	100	0 Peak
10	7992.00	45.22	-8.78	54.00	33.70	39.58	7.79	35.85	100	236 Average
11	9848.00	39.66	-34.34	74.00	76.65	-9.63	9.18	36.54	100	0 Peak

Remark:

1. "3" represents the Fundamental Signal
2. "4" represents the Fundamental Signal



5.8 Antenna Requirements

5.8.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no other antenna except assembled by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

5.8.2 Antenna Connected Construction

The antennas used in this product are patch antenna for WLAN with I-PEX connector and it is considered to meet antenna requirement of FCC.

5.8.3 Antenna Gain

The antenna gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



6. List of Measuring Equipments Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMC Receiver	R&S	ESCS 30	100359	9kHz – 2.75GHz	Mar. 01, 2007	Feb. 29, 2008	Conduction (CO04-HY)
LISN	MessTec	NNB-2/16Z	99079	9kHz – 30MHz	Mar. 31, 2007	Mar. 30, 2008	Conduction (CO04-HY)
LISN (Support Unit)	EMCO	3810/2NM	9703-1839	9kHz – 30MHz	Mar. 22, 2007	Mar. 21, 2008	Conduction (CO04-HY)
RF Cable-CON	UTIFLEX	3102-26886-4	CB049	9kHz – 30MHz	Apr. 20, 2007	Apr. 19, 2008	Conduction (CO04-HY)
ISN	SCHAFFNER	ISN T400	21653	9kHz –30MHz	Mar. 09, 2007	Mar. 08, 2008	Conduction (CO04-HY)
EMI Filter	LINDGREN	LRE-2030	2651	< 450 Hz	N/A	N/A	Conduction (CO04-HY)
Isolation Transformer	Erika Fiedler OHG	D-65396 Walluf	58	45MHz-2.15GHz	N/A	N/A	Conduction (CO04-HY)
Spectrum Analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Oct. 05, 2006	Oct. 04, 2007	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 26, 200	Jul. 25, 2008	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	071025	1G~18G	Jun. 04, 2007	Jun. 03, 2008	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Nov. 20, 2006	Nov. 19, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Pre Amplifier	Mini Circuits	ZKL-2	D092004-1	10~2500MHz	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	106656	WCDMA	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)

7. Uncertainty Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
Combined standard uncertainty Uc(y)	1.13		
Measuring uncertainty for a level of Confidence of 95% U=2Uc(y)	2.26		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch	+0.39/-0.41	U-shaped	0.28
Combined standard uncertainty Uc(y)	1.27		
Measuring uncertainty for a level of Confidence of 95% U=2Uc(y)	2.54		

**Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)**

Contribution	Uncertainty of x_i		$u(x_i)$	C_i	$C_i * u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20\log(1 - \Gamma_1 * \Gamma_2 * \Gamma_3)$	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty $U_c(y)$	2.36				
Measuring uncertainty for a level of Confidence of 95% $U = 2U_c(y)$	4.72				