



FCC TEST REPORT

for

47 CFR Part 15 Subpart C

Equipment : 3.5G HSDPA/UMTS/GSM900/DCS1800/PCS1900
PDA Phone
Trade Name : O₂
Model No. : Xda Denim
FCC ID : UJU9QDENIM000
Filing Type : Certification
Applicant : GIGA-BYTE Communications Inc.
8F., No.43, Fu-Hsin Road, Hsin-Tien, Taipei Hsien, Taiwan,
R.O.C.

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- The data shown in this test report were carried out on Jun. 15, 2007 at **Sporton International Inc. LAB.**
- Report No.: FR760116-01, Report Version: Rev. 02.

Roy Wu
Deputy Manager

SPORTON International Inc.

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History of this test report

Report Issue Date: Jul. 10, 2007

Report No.	Description



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.18, Gongye 1st Rd., Pingjhen City, Taoyuan County 324, Taiwan (R.O.C.)

1.3 Basic Description of Equipment under Test

Equipment	: 3.5G HSDPA/UMTS/GSM900/DCS1800/PCS1900 PDA Phone
Trade Name	: O ₂
Model No.	: Xda Denim
FCC ID	: UJU9QDENIM000
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	: Simplo, XP-13
Earphone	: Xu Sheng, EE-624P-8EN
USB cable	: L&K, 12CBL-037-0011

1.4 Feature of Equipment under Test

Product Feature & Specification				
1. Type of Modulation	WLAN: DSSS / OFDM Bluetooth: GFSK			
2. Number of Channels	WLAN: 11 Channels Bluetooth : 79 Channels			
3. Frequency Band	WLAN: 2400MHz~2483.5MHz Bluetooth: 2400MHz~2483.5MHz			
4. Carrier Frequency of each channel	WLAN: $2412+(n-1) * 5\text{MHz}$; $n=1-11$ Bluetooth: $2402+ n*1\text{ MHz}$, $n= 0\sim78$			
5. Channel Spacing	WLAN: 5MHz Bluetooth: 1MHz			
6. Maximum Output Power to Antenna (Normal Condition)	802.11b : 15.02 dBm / 802.11g: 18.74 dBm Bluetooth: 1.16 dBm			
7. HW Version	V0.5			
8. SW Version	WWE_B01.010			
9. Type of Antenna Connector	N/A			
10. Antenna Type	Chip Antenna			
11. Antenna Gain	802.11b/g : -8 dBi BT : -7 dBi			
12. 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.
- For spurious emission below 1GHz, only one channel of each application was tested because it is not related to channel selection.
- 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			
	802.11b	802.11g	BT
Radiated Emission	Mode 1: CH01_2412 MHz	Mode 4: CH01_2412 MHz	Mode 7: CH00_2402 MHz
	Mode 2: CH06_2437 MHz	Mode 5: CH06_2437 MHz	Mode 8: CH39_2441 MHz
	Mode 3: CH11_2462 MHz	Mode 6: CH11_2462 MHz	Mode 9: CH78_2480 MHz
Conducted Emission	Mode 1: PCS1900 Idle Mode + BT Link + WLAN Link + Earphone + Camera + MPEG4 + Adapter		
	Mode 2: PCS1900 Idle Mode + BT Link + WLAN Link + Earphone + Camera + MPEG4 + USB Link		

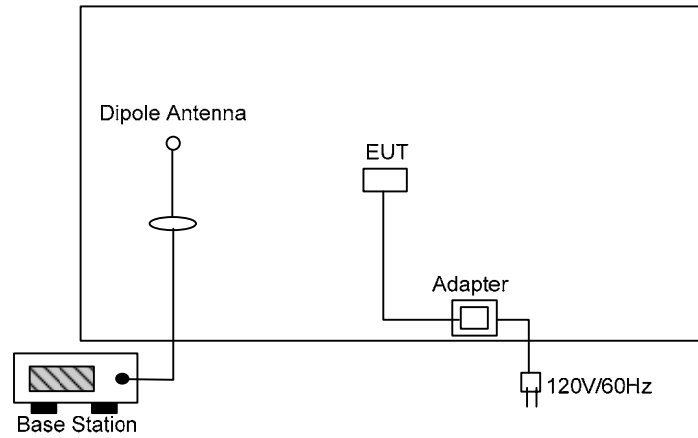
2.3 Ancillary Equipment List

Item	Asset	Model Name	FCC ID	Power Cord
1.	Notebook	D400	E2K24GBRL	1.2m
2.	WLAN AP (SMC)	SMC-100	HEDWG4005ACC	1.8m
3.	Bluetooth Earphone	WDT-JD-100	N/A	N/A
4.	Base Station (R&S)	CMU200	N/A	N/A
5.	BT Base Station (Anritus)	8852A	N/A	N/A
6.	RS-232 (State)	MS-30S	N/A	1.8 meter

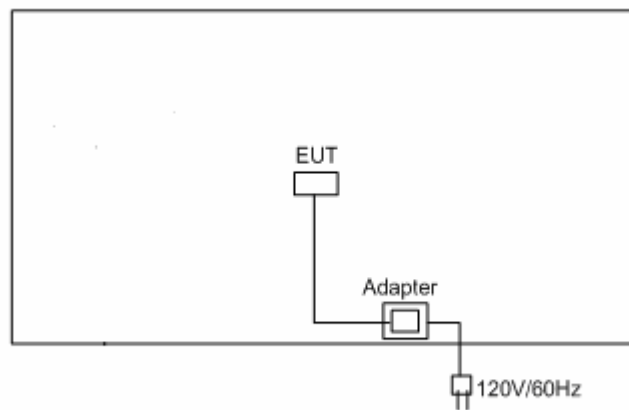
2.4 Connection Diagram of Test System

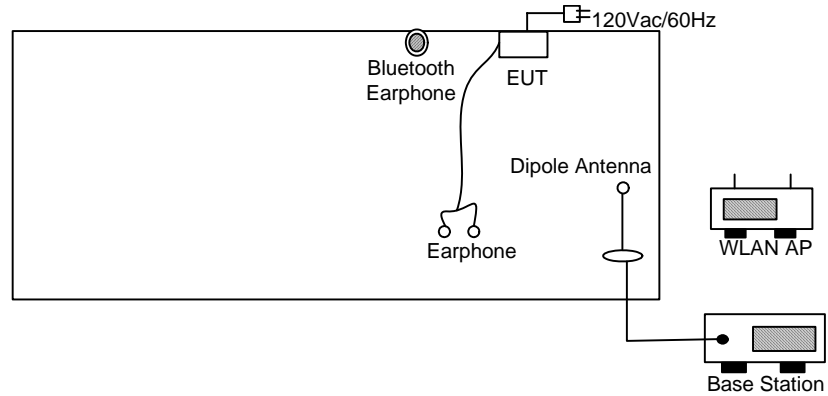
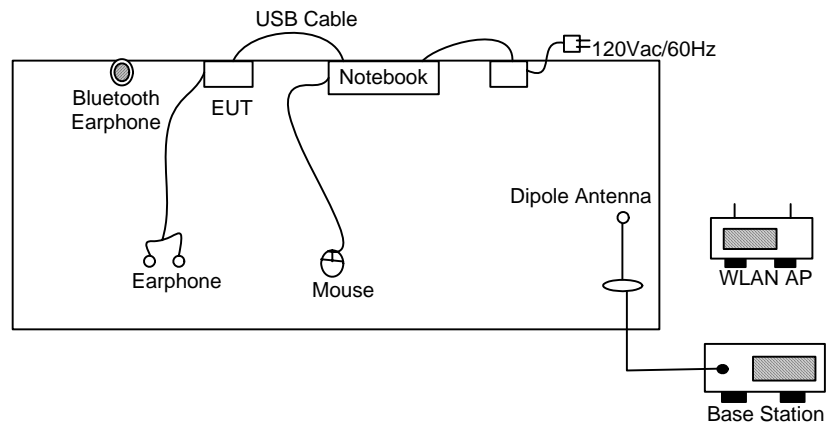
<Radiated Emission >

Bluetooth



WLAN



<Conducted Emission>
Mode 1

Mode 2




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 : 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. 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 & 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

**The Emission Mode: Bluetooth**

FCC Rule	Description of Test	Result
15.207	Conducted Emission	Pass
<u>15.247(a) (1)</u>	Hopping Channel Bandwidth	Pass
<u>15.247(a)(1)</u>	Hopping Channel Separation	Pass
<u>15.247(a)(1)(iii)</u>	Number of Hopping Frequency Used	Pass
<u>15.247(a)(1)(iii)</u>	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
<u>15.203</u> 15.247(b)(4)	Antenna Requirement	Pass

5.2 6dB Bandwidth Measurement

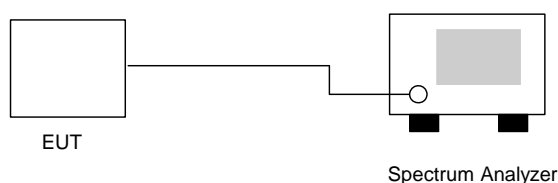
5.2.1 Measuring Instruments :

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 and 20 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 : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony

802.11b

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	9.52	> 0.5MHz	Mode 1
06	2437	9.52	> 0.5MHz	Mode 2
11	2462	9.52	> 0.5MHz	Mode 3

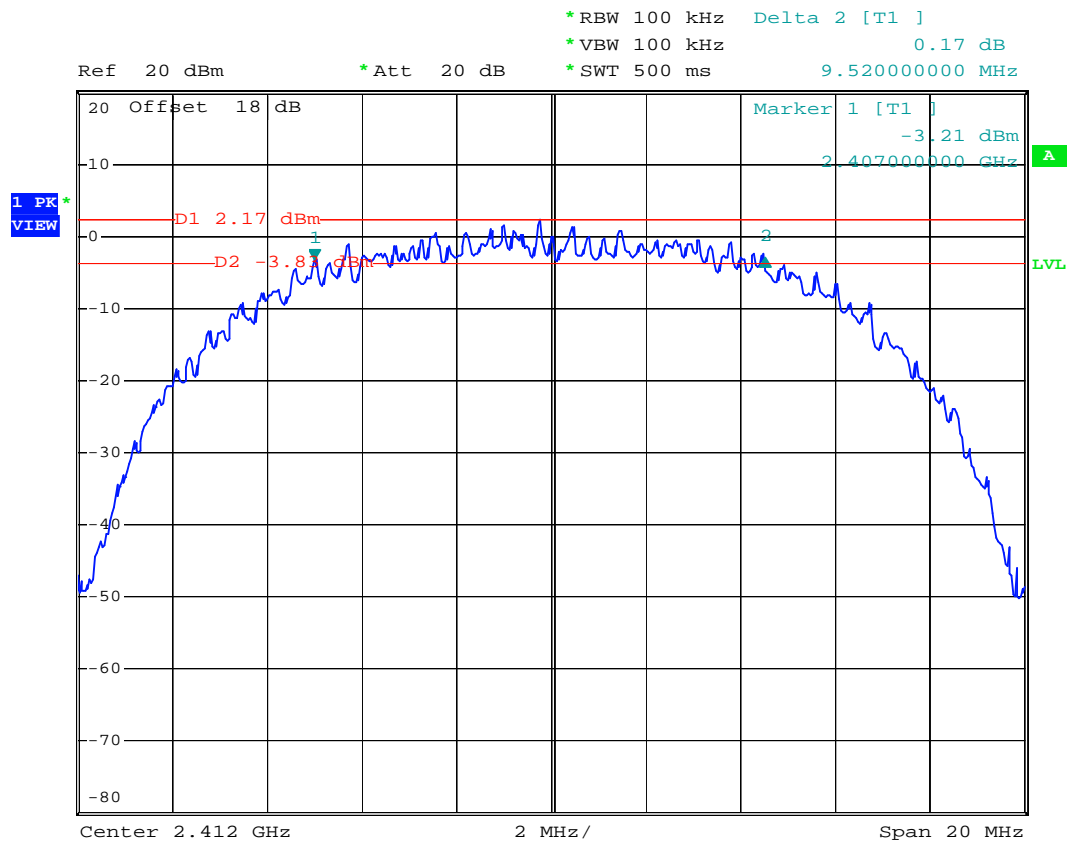
802.11g

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	16.52	> 0.5MHz	Mode 4
06	2437	16.48	> 0.5MHz	Mode 5
11	2462	16.48	> 0.5MHz	Mode 6



5.2.5 6dB Bandwidth

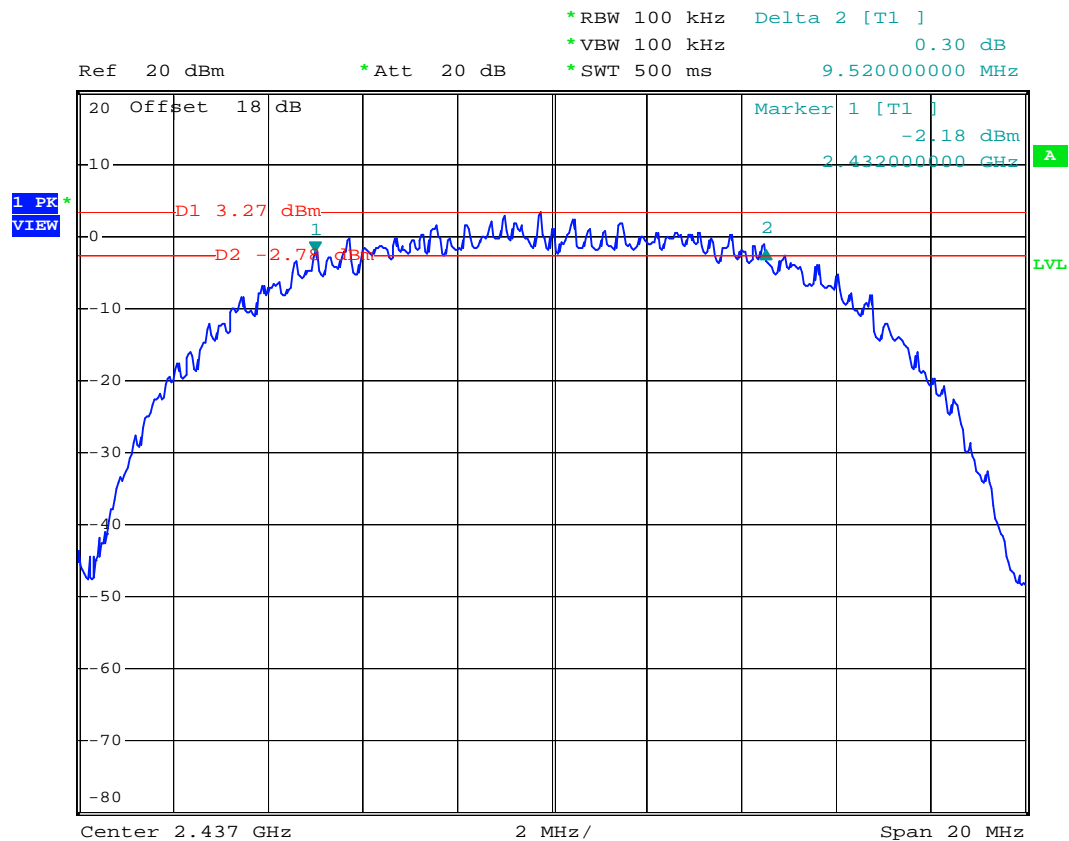
Mode 1



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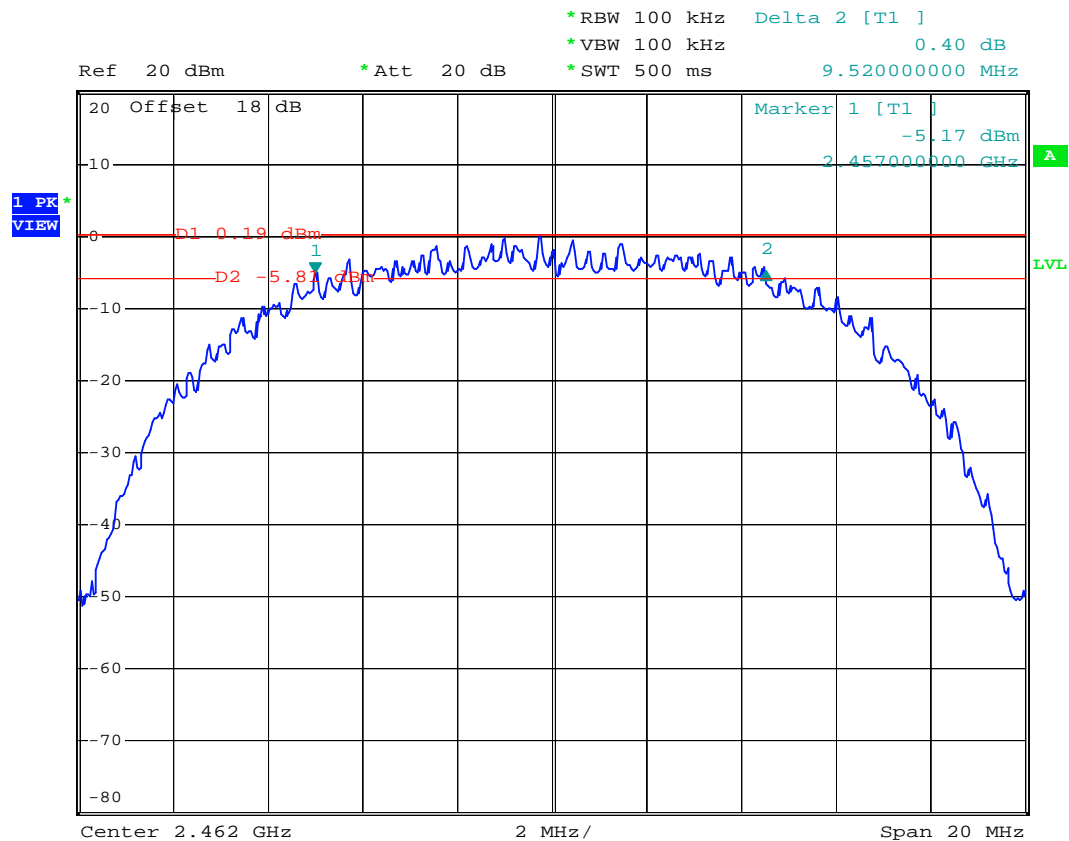
Mode 2



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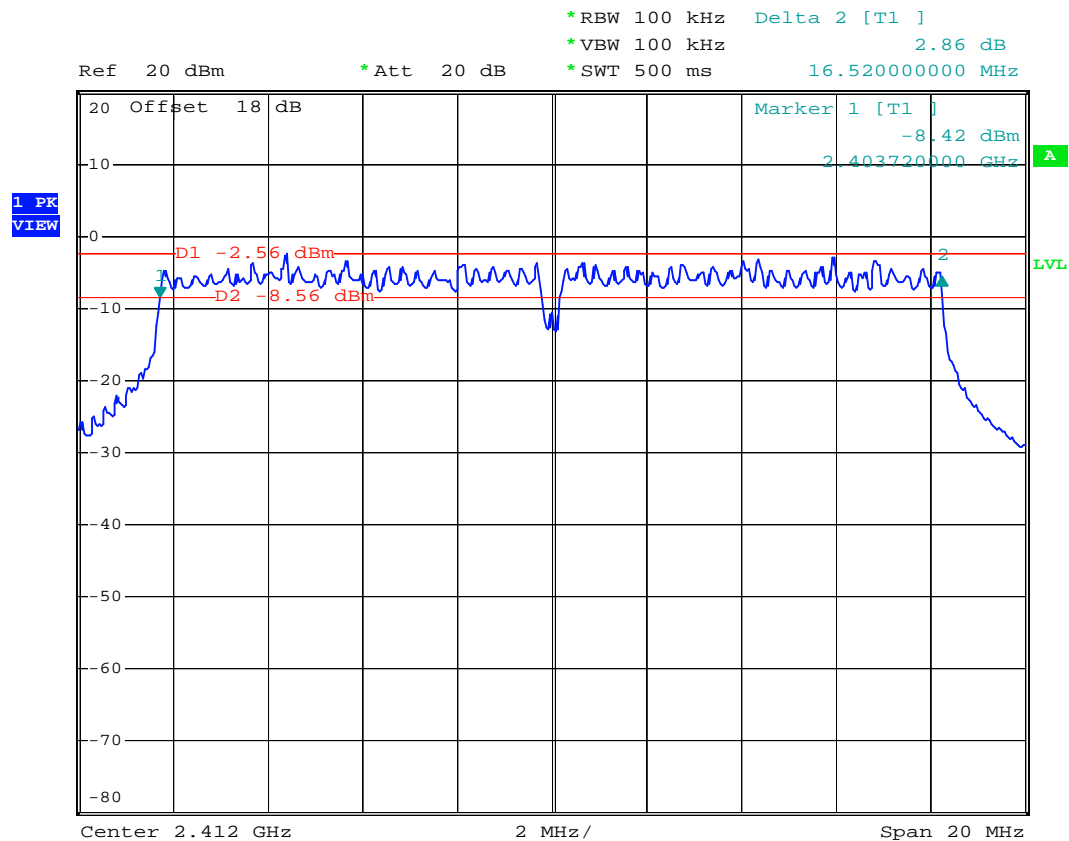
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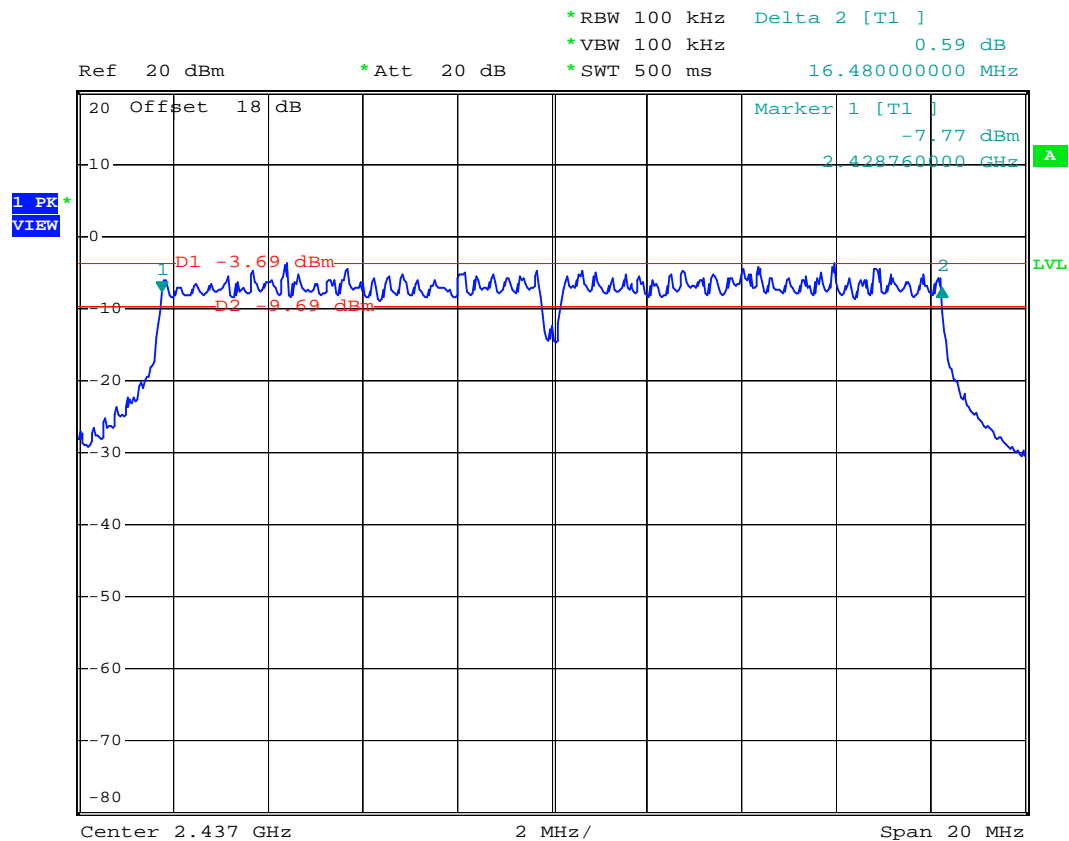
Mode 4



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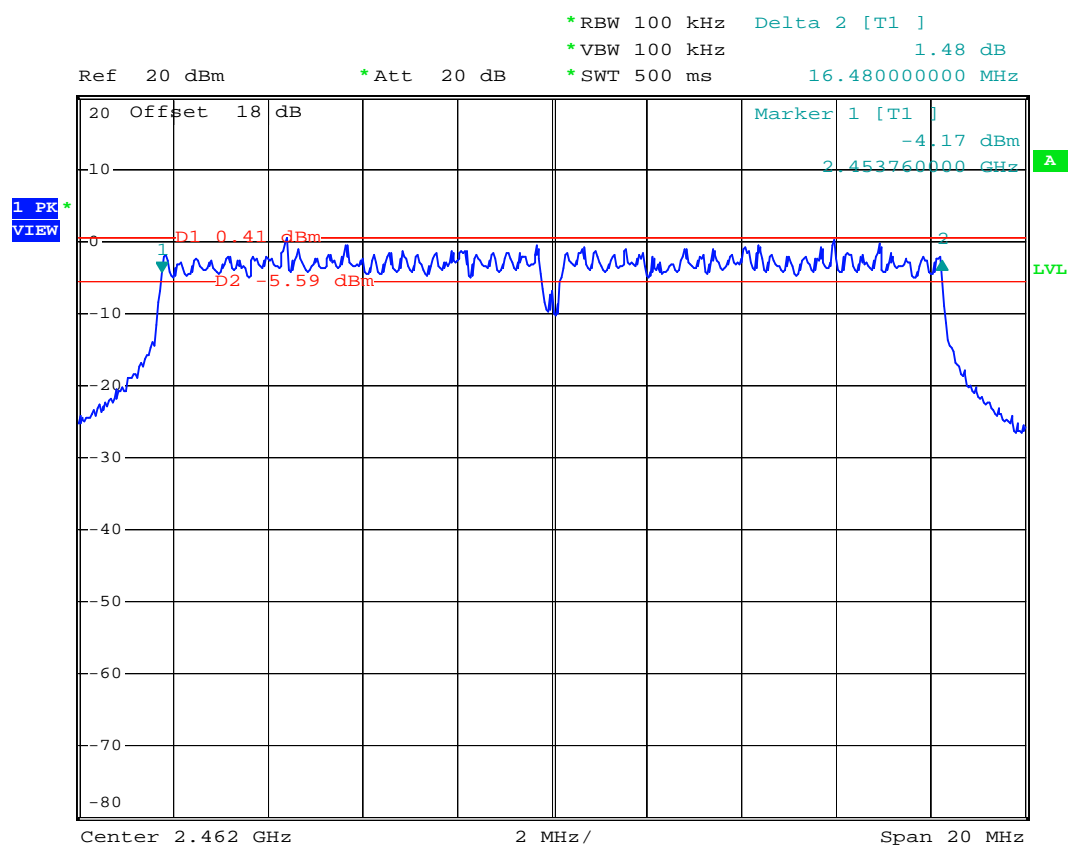
Mode 5



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Mode 6



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5.3 Power Spectral Density Measurement

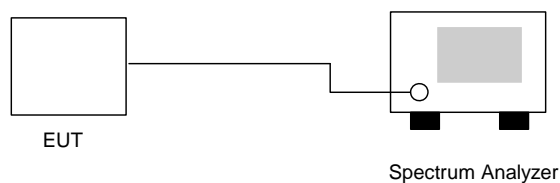
5.3.1 Measuring Instruments :

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 : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony

802.11b

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-13.83	8	Mode 1
06	2437	-10.67	8	Mode 2
11	2462	-13.17	8	Mode 3

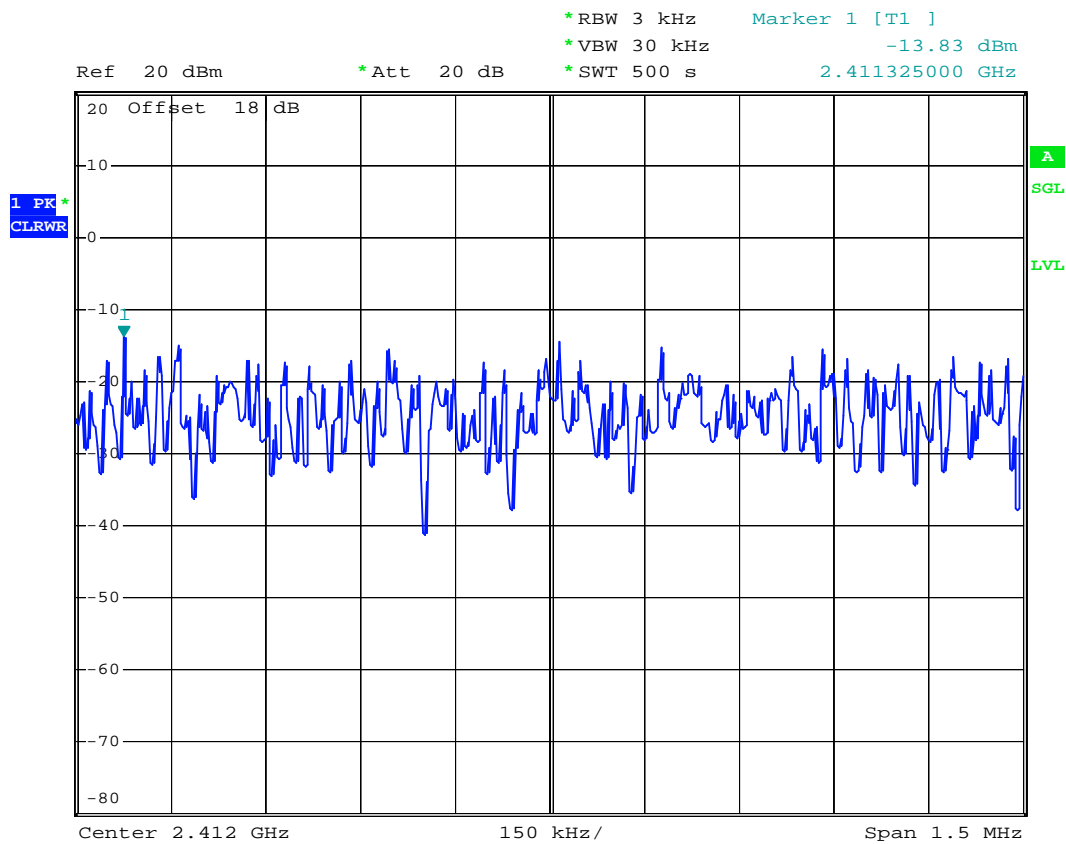
802.11g

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-17.26	8	Mode 4
06	2437	-8.04	8	Mode 5
11	2462	-13.83	8	Mode 6



5.3.5 Power Spectral Density

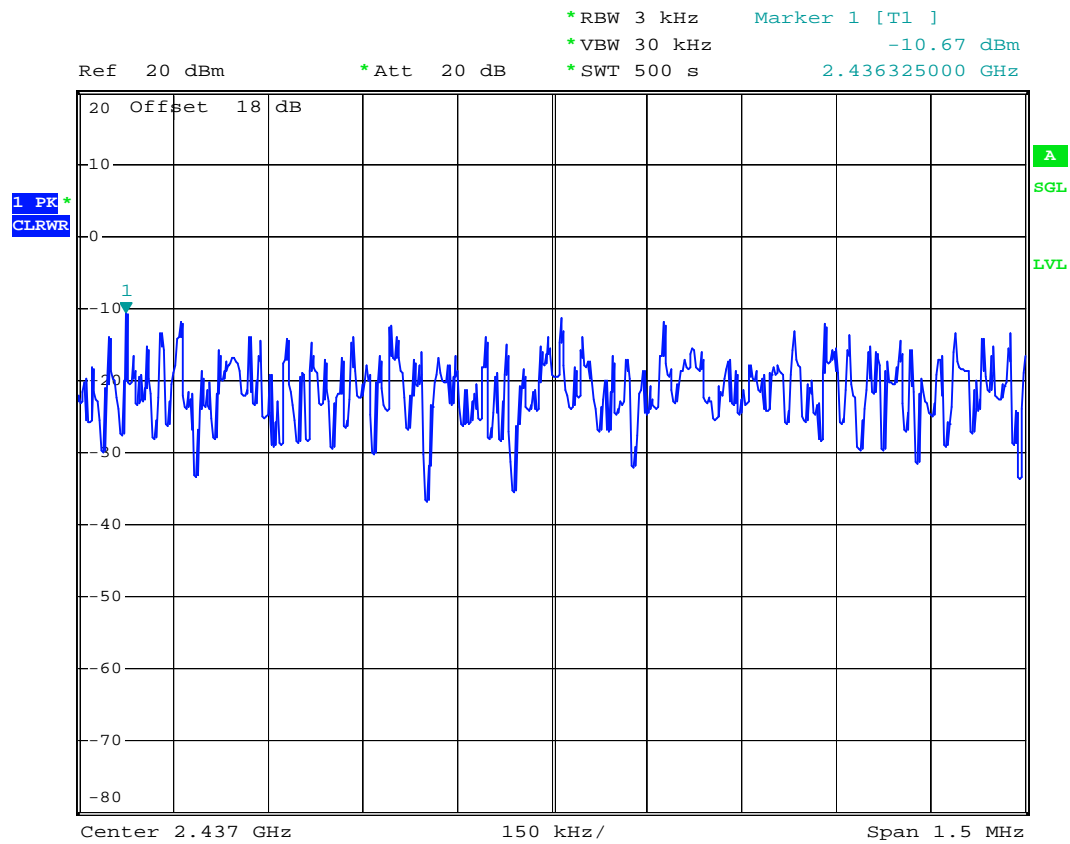
Mode 1



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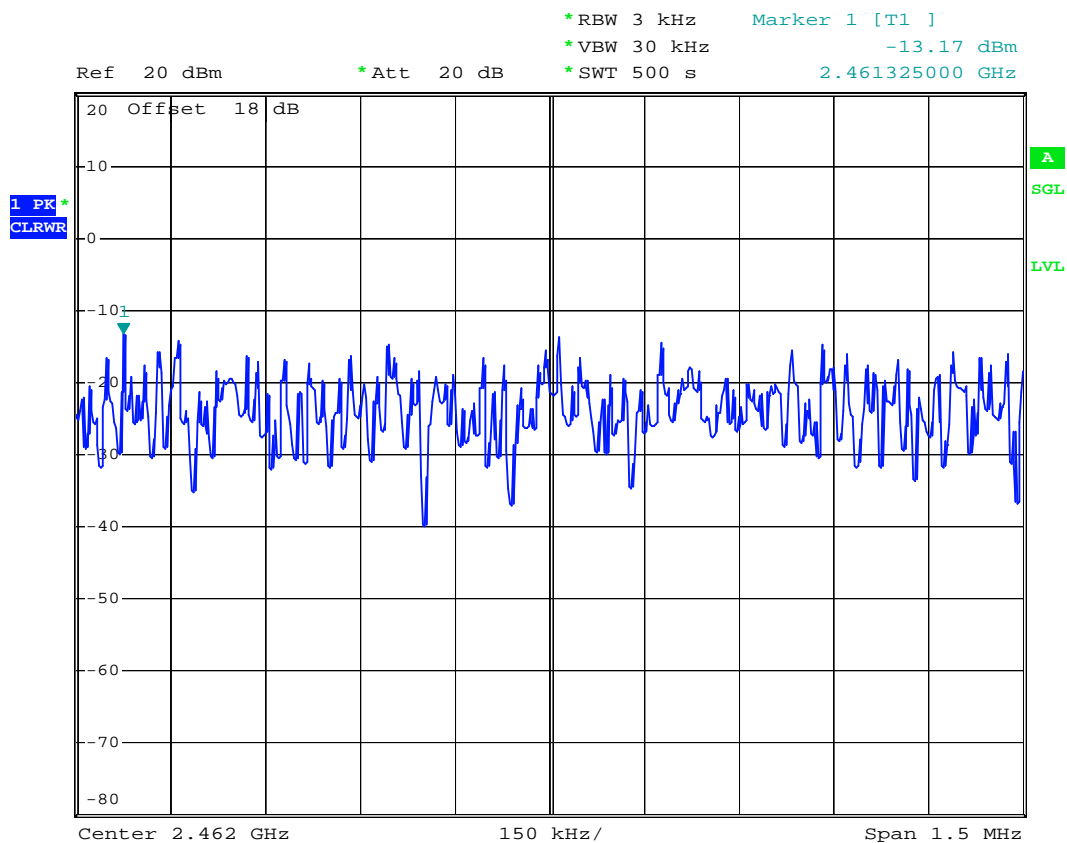
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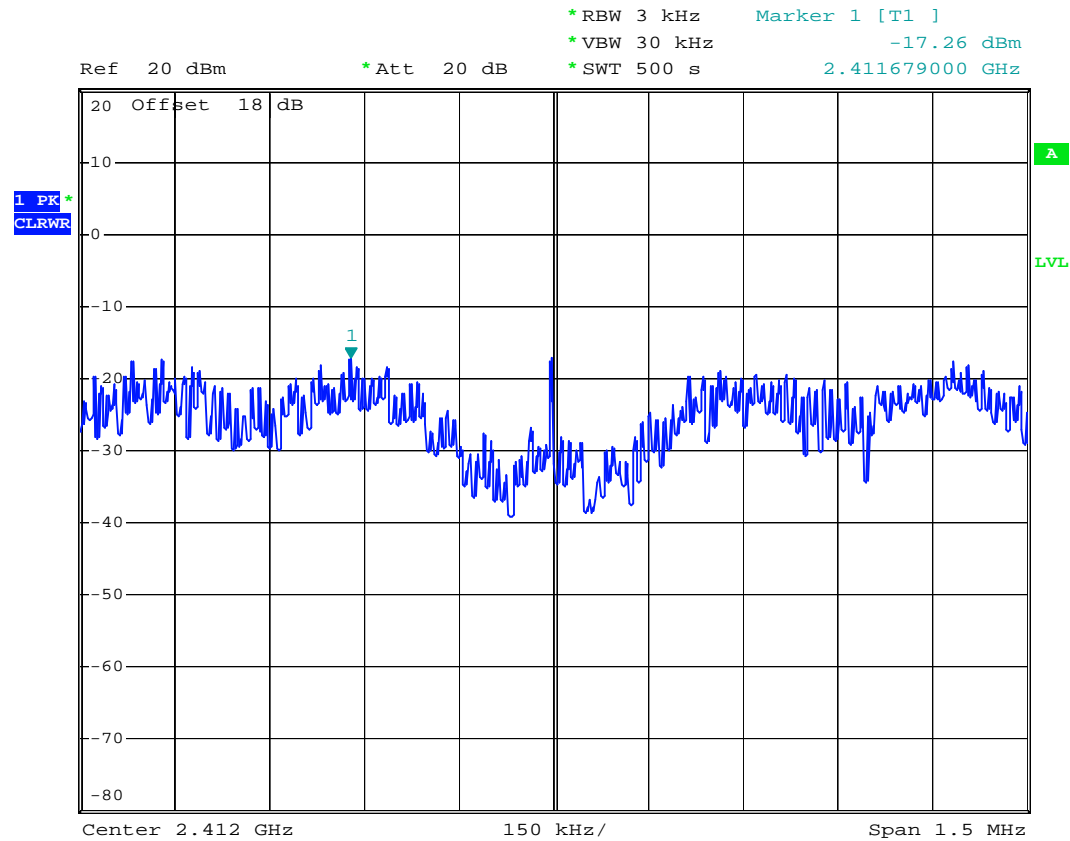
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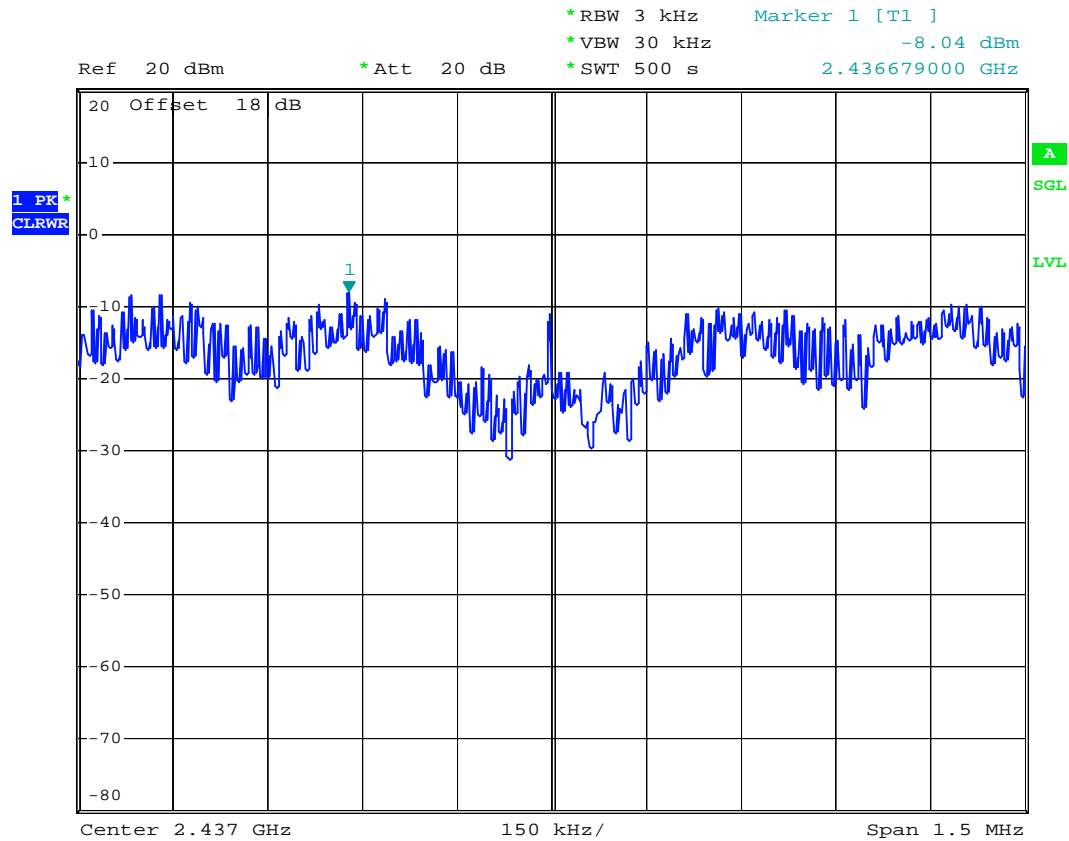
Mode 4



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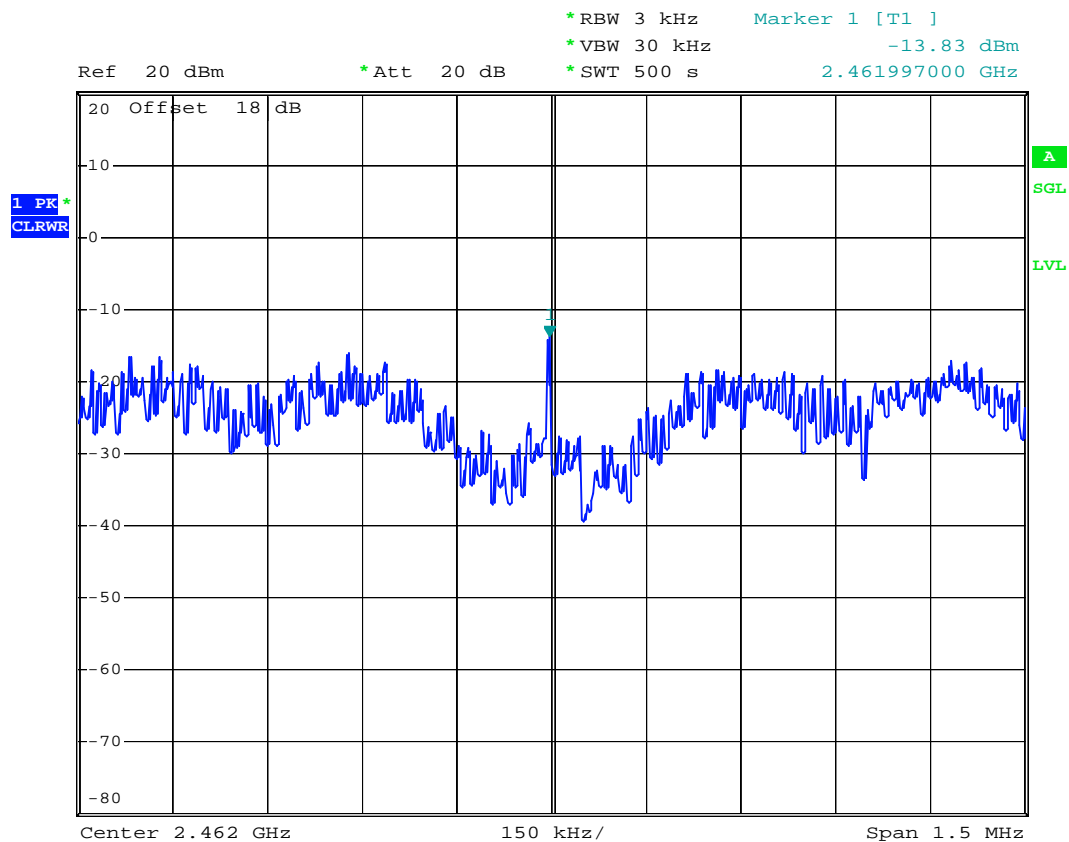
Mode 5



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Mode 6



Date: 18.JUN.2007 14:18:31

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 and BT
- Temperature : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony
- Test Result in WLAN lower band (802.11b/g) : PASS
- Test Result in WLAN higher band (802.11b/g) : PASS
- Test Result in BT lower band : PASS
- Test Result in BT higher band : PASS

5.4.4 Note on Band Edge Emission :

➤WLAN 802.11b

CH01 (Horizontal)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2388.56	50.74	-23.26	74.00	52.17	30.26	3.75	35.44	100	0	Peak
2388.56	41.76	-12.24	54.00	43.19	30.26	3.75	35.44	100	25	Average

CH01 (Vertical)

Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2387.76	49.77	-24.23	74.00	51.23	30.24	3.73	35.44	100	0	Peak
2387.76	39.23	-14.77	54.00	40.69	30.24	3.73	35.44	100	25	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)	
2499.46	52.97	-21.03	74.00	54.32	30.30	3.88	35.53	100	0	Peak
2499.46	41.28	-12.72	54.00	42.63	30.30	3.88	35.53	100	25	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)	
2492.15	48.90	-25.09	74.00	50.26	30.30	3.88	35.53	100	0	Peak
2492.15	38.89	-15.11	54.00	40.24	30.30	3.88	35.53	100	346	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	56.25	-17.75	74.00	57.02	30.26	4.42	35.46	100	0	Peak
2390.00	41.18	-12.82	54.00	41.95	30.26	4.42	35.46	100	173	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	51.95	-22.05	74.00	52.72	30.26	4.42	35.46	100	0	Peak
2390.00	39.60	-14.40	54.00	40.37	30.26	4.42	35.46	100	178	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	45.48	-8.52	54.00	46.21	30.29	4.49	35.51	100	172	Average
2483.50	64.63	-9.37	74.00	65.36	30.29	4.49	35.51	100	0	Peak

**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	57.63	-16.37	74.00	58.36	30.29	4.49	35.51	100	0	Peak
2483.50	41.46	-12.54	54.00	42.19	30.29	4.49	35.51	100	261	Average

➤BT

CH00 (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)	
2386.00	51.56	-22.44	74.00	52.34	30.26	4.40	35.44	100	0	Peak
2386.00	41.72	-12.28	54.00	42.50	30.26	4.40	35.44	100	5	Average

CH00 (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)	
2386.00	50.84	-23.16	74.00	51.62	30.26	4.40	35.44	100	0	Peak
2386.00	40.13	-13.87	54.00	40.91	30.26	4.40	35.44	108	210	Average

CH78 (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	53.46	-0.54	54.00	54.19	30.29	4.49	35.51	100	9	Average
2483.50	59.92	-14.08	74.00	60.65	30.29	4.49	35.51	100	0	Peak

CH78 (Vertical)

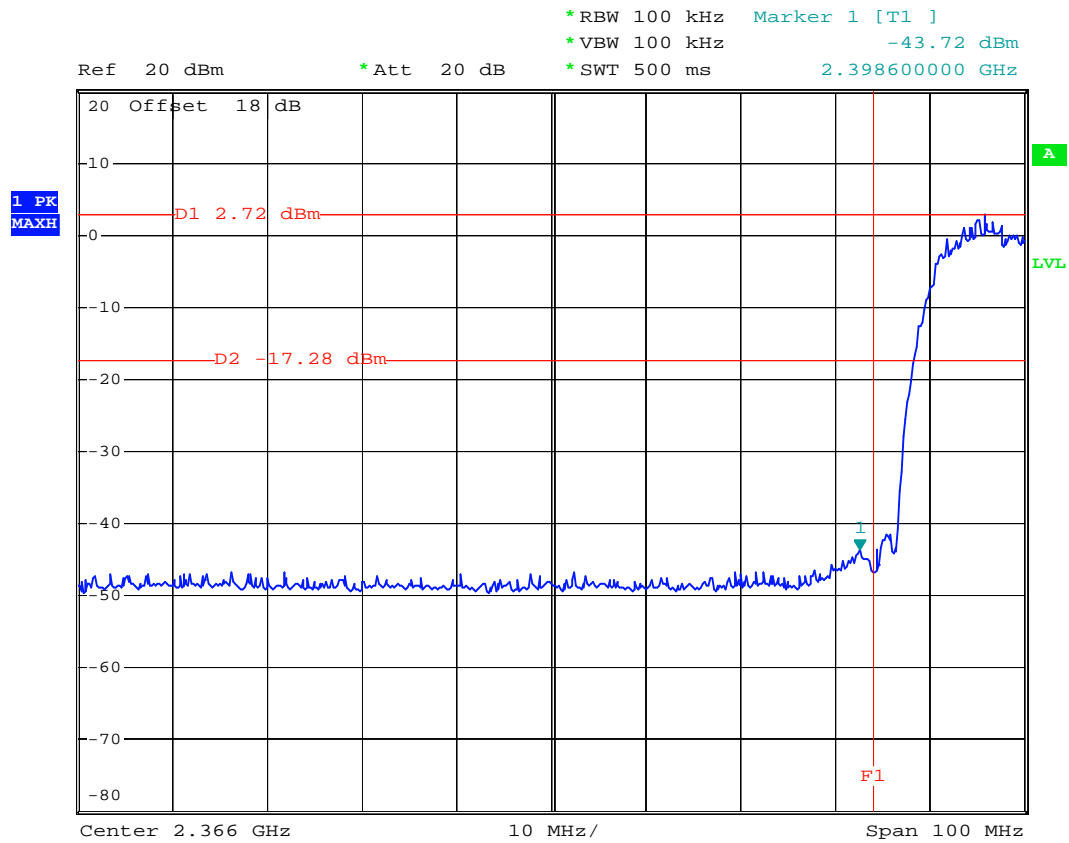
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		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2483.50	50.89	-3.11	54.00	54.62	30.29	4.49	35.51	100	213	Average
2483.50	57.43	-16.57	74.00	58.16	30.29	4.49	35.51	100	0	Peak



5.4.5 20dB Band Edge

WLAN 802.11b

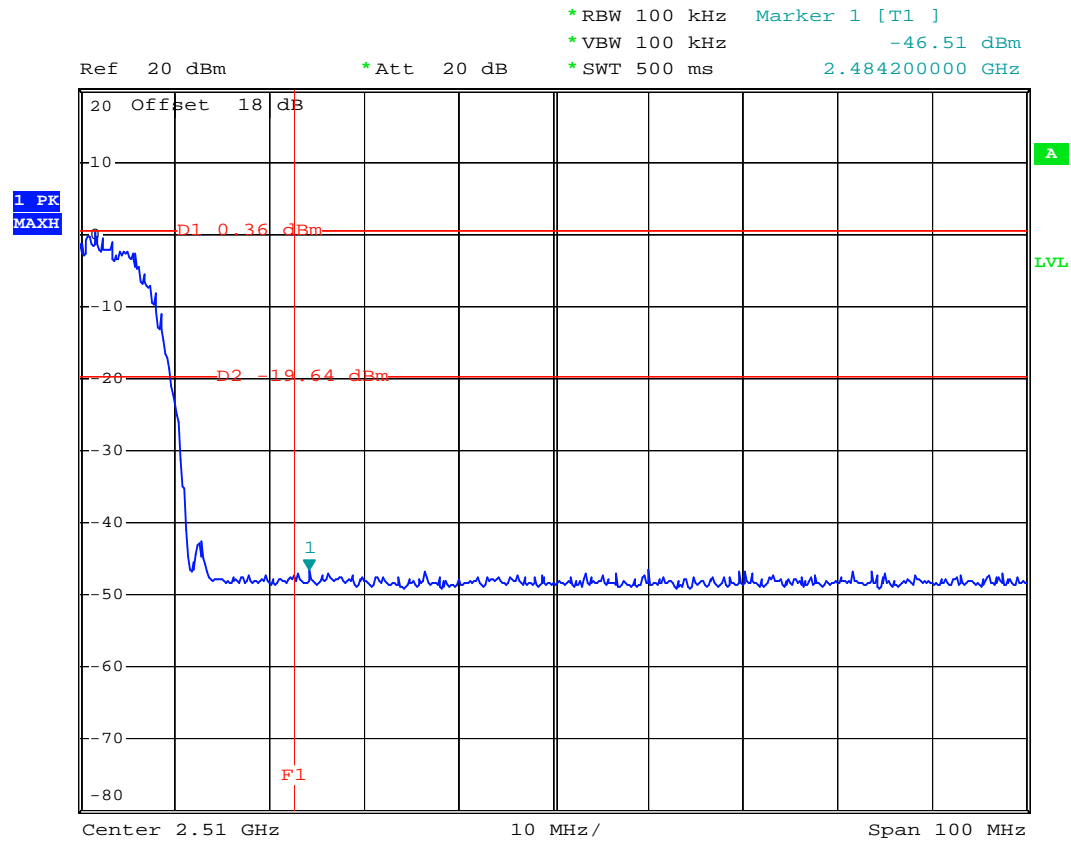
CH01



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CH11

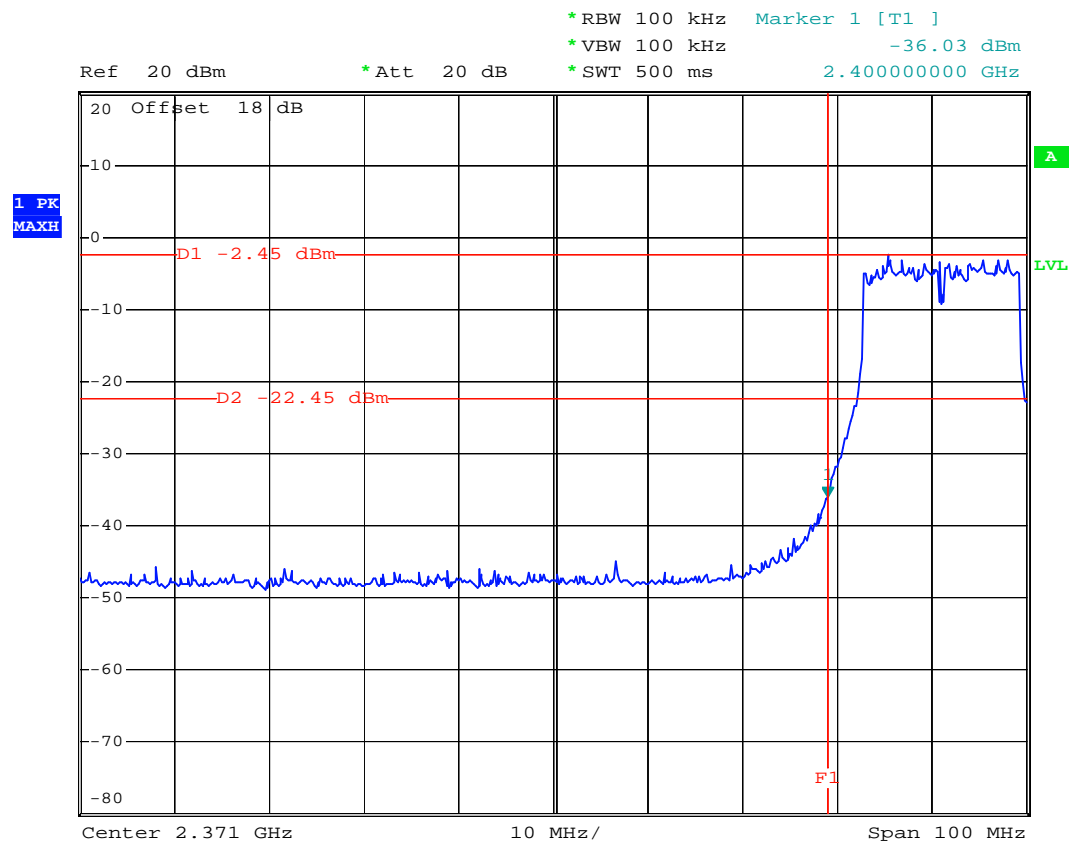


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WLAN 802.11g

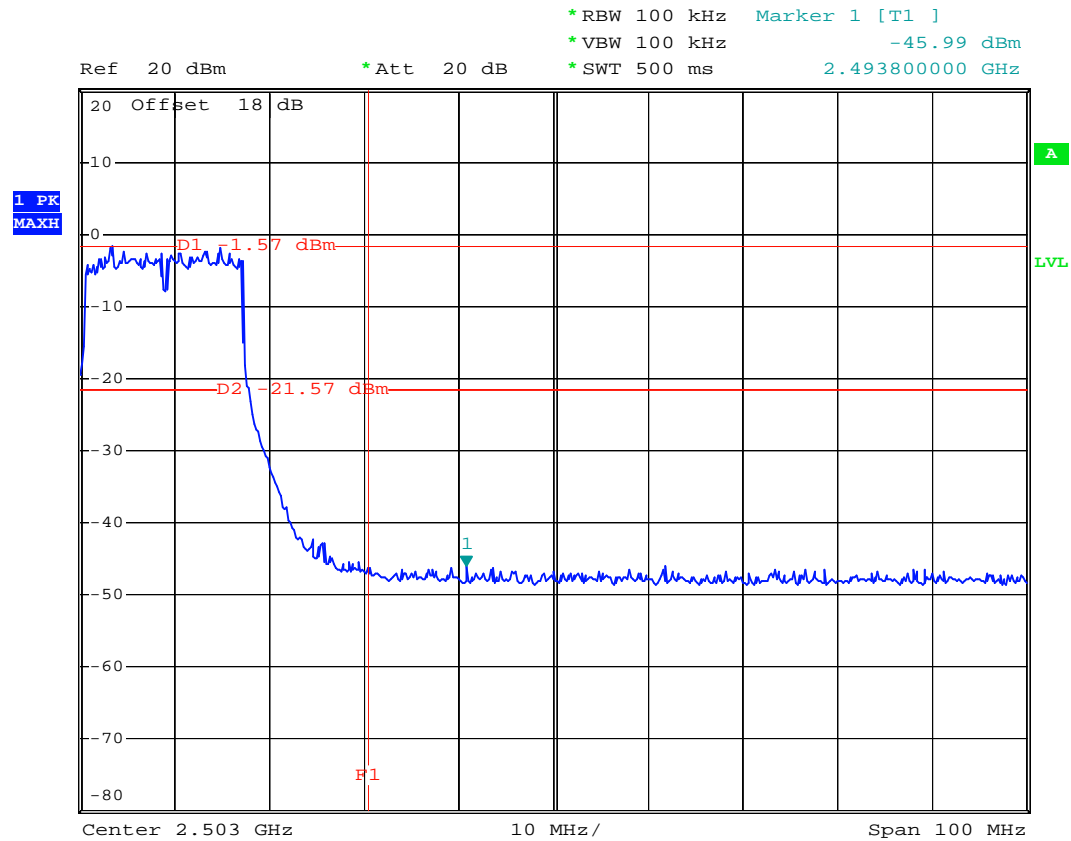
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CH11

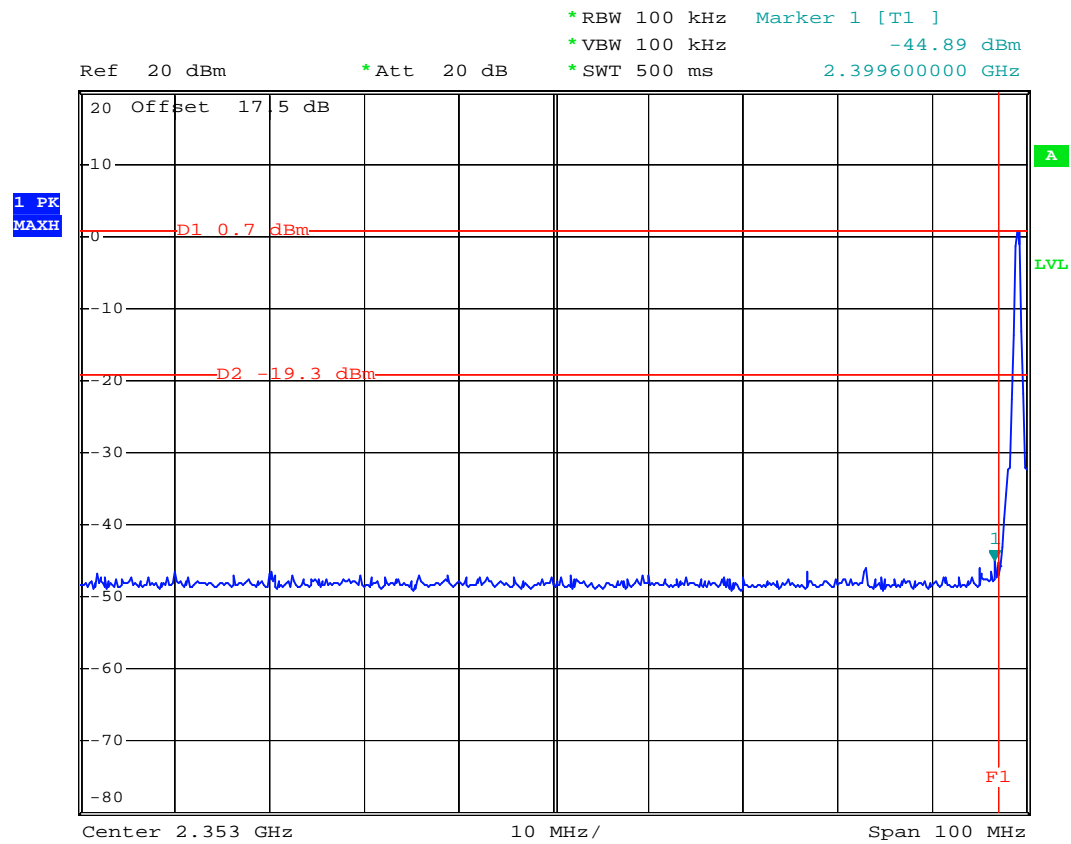


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Bluetooth

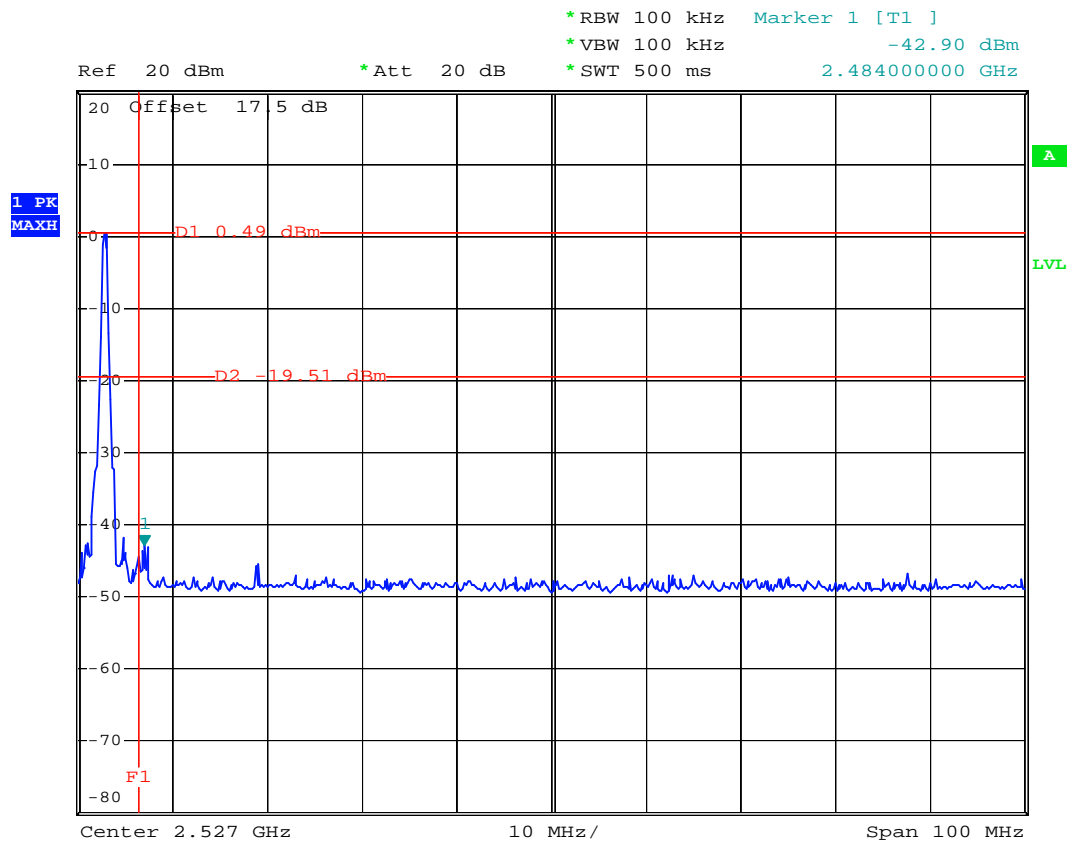
CH00



Date: 13.JUN.2007 15:19:58



CH78



Date: 13.JUN.2007 15:22:22

5.5 Hopping Channel Separation

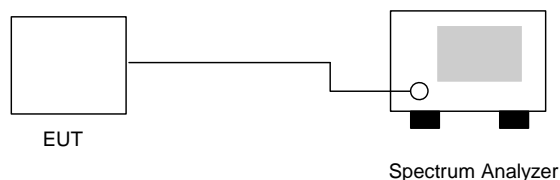
5.5.1 Measuring Instruments :

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.

5.5.3 Test Setup Layout :



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

- Application Type : BT
- Temperature : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony

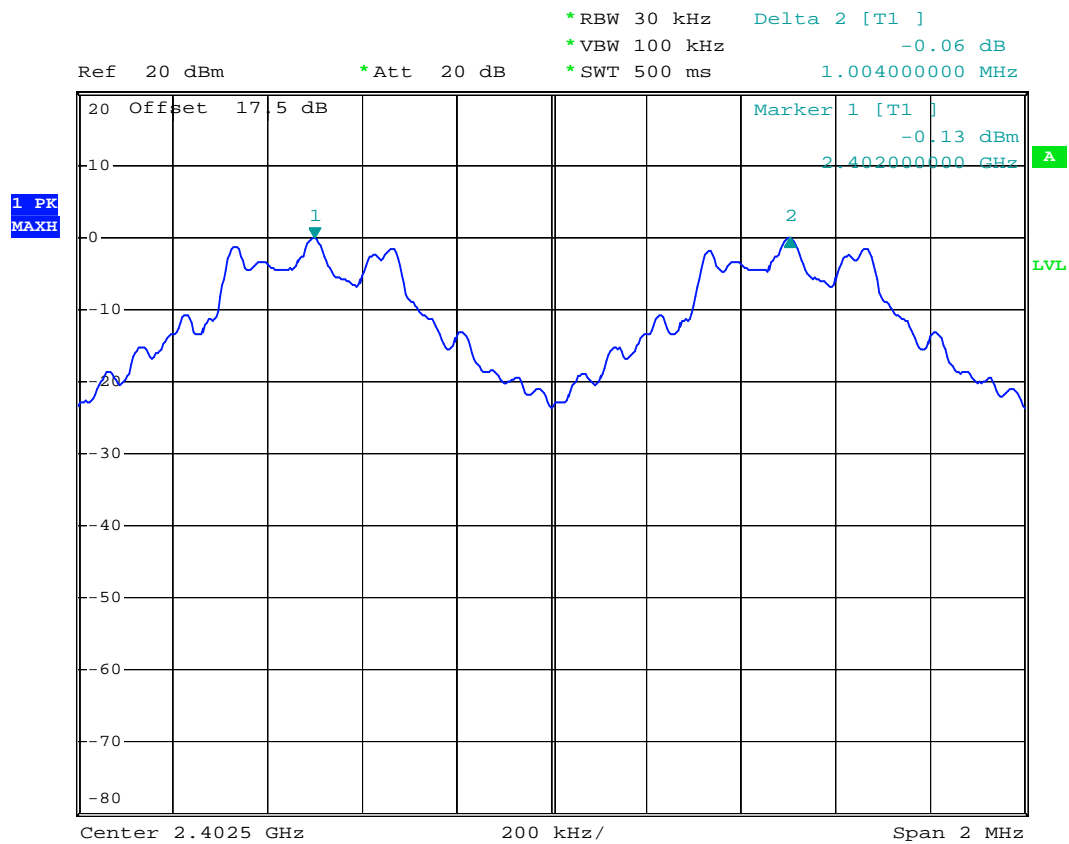
Channel	Carrier Frequency		Limits	Plot
	Frequency (MHz)	Separation (MHz)		
00	2402	1.004	0.882	Mode 7
39	2441	1.004	0.882	Mode 8
78	2480	1.004	0.882	Mode 9

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



5.5.5 Hopping Channel Separation

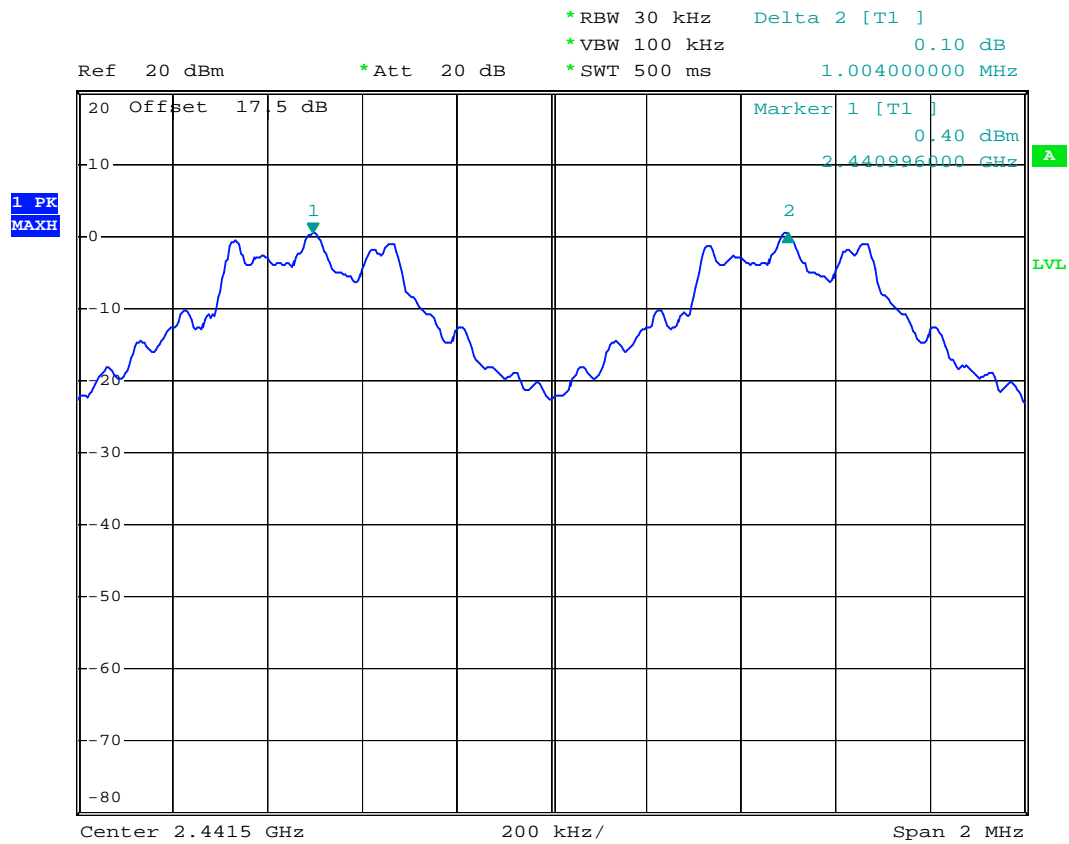
Mode 7



Date: 13.JUN.2007 16:07:06



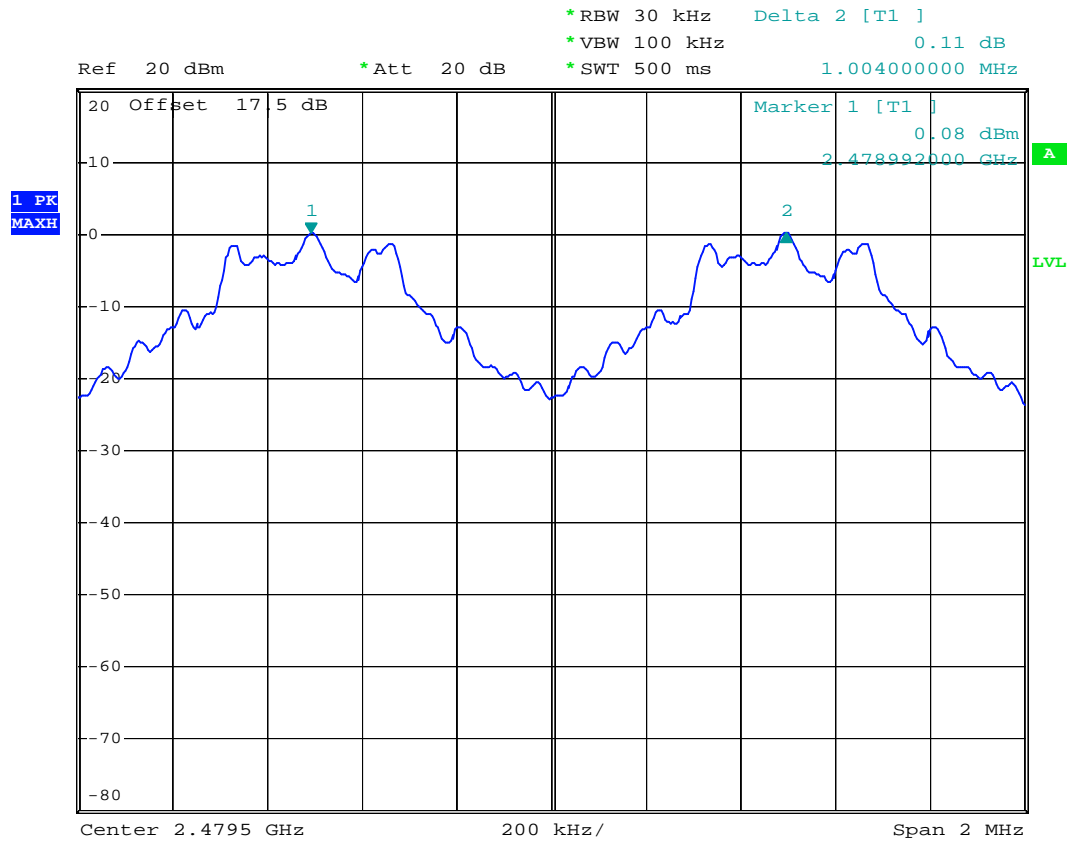
Mode 8



Date: 13.JUN.2007 16:09:14



Mode 9



Date: 13.JUN.2007 16:12:49

5.6 Number of Hopping Frequency

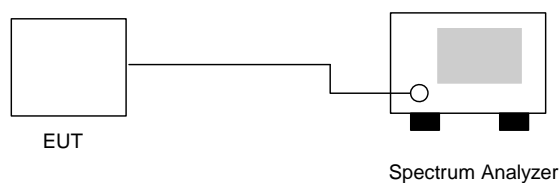
5.6.1 Measuring Instruments :

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.

5.6.3 Test Setup Layout :



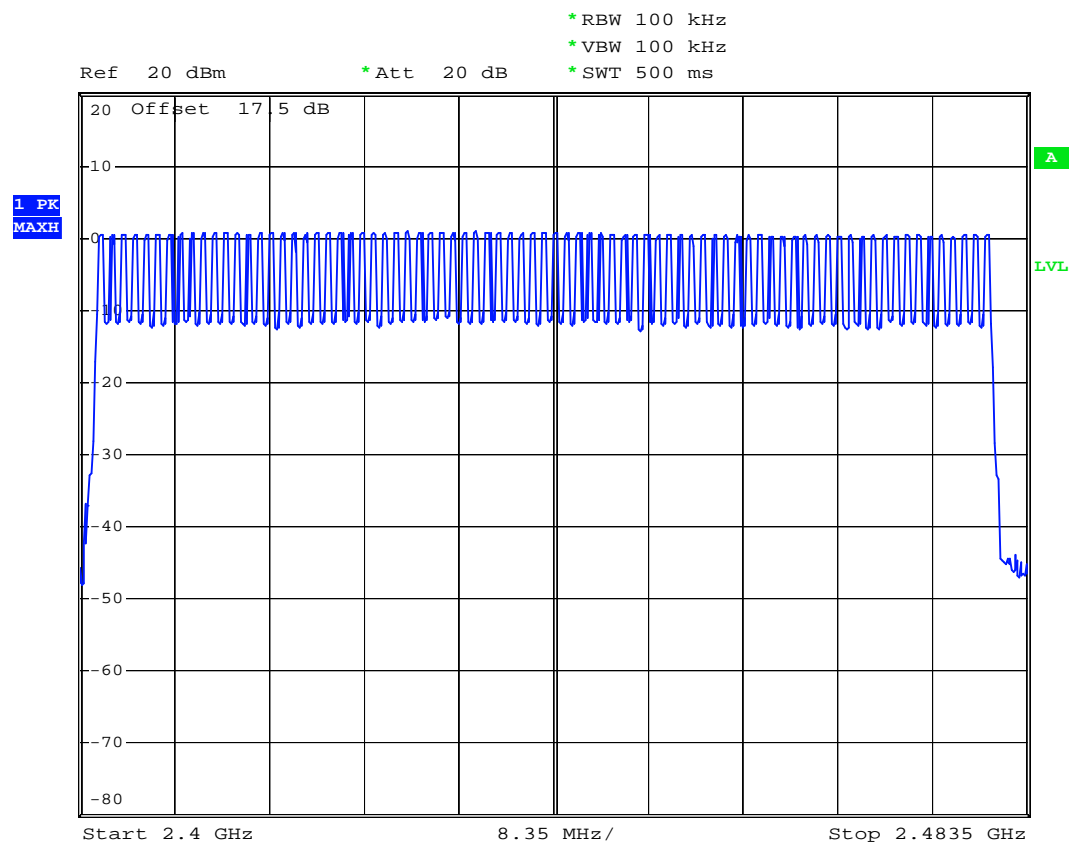
5.6.4 Test Result : See spectrum analyzer plots below

- Application Type : BT
- Temperature : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony

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



5.6.5 Number of Hopping Frequency



Date: 13.JUN.2007 17:57:53

5.7 Hopping Channel Bandwidth

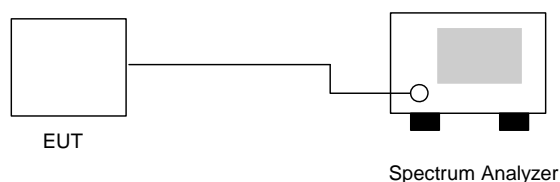
5.7.1 Measuring Instruments :

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.

5.7.3 Test Setup Layout :



5.7.4 Test Result : See spectrum analyzer plots below

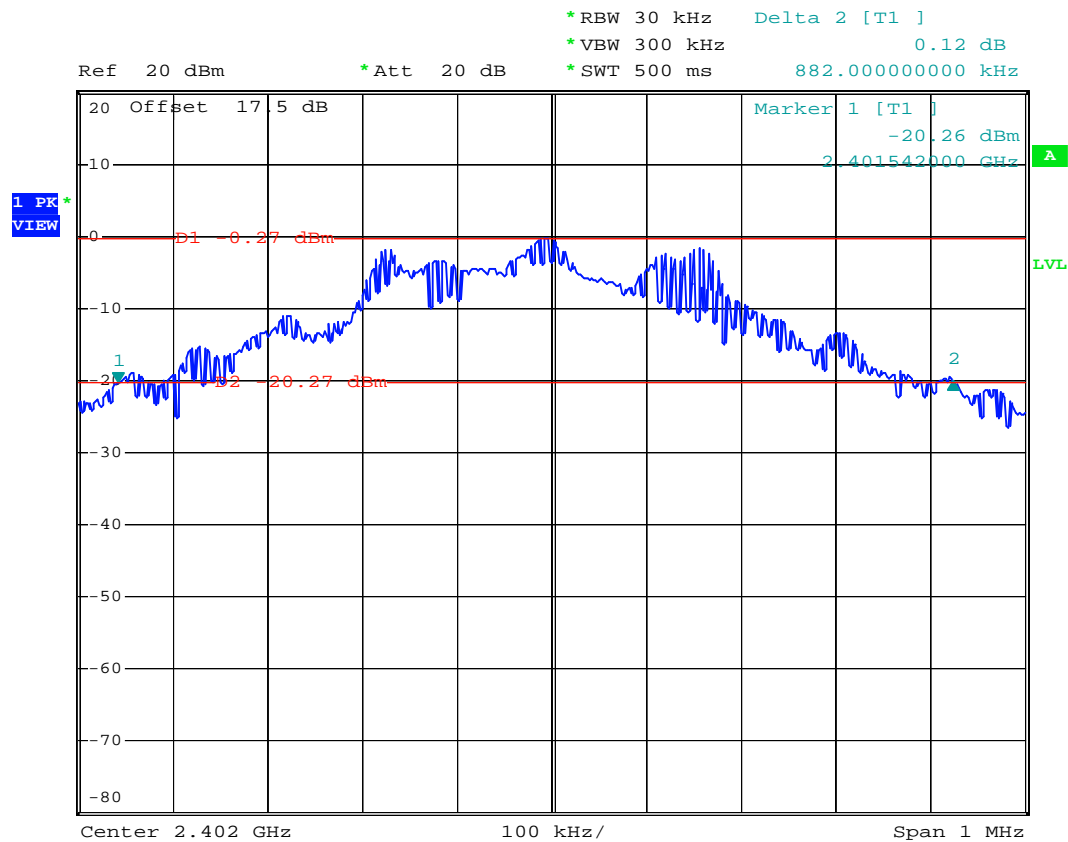
- Application Type : BT
- Temperature : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony

Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	0.882	1.000	Mode 7
39	2441	0.882	1.000	Mode 8
78	2480	0.882	1.000	Mode 9



5.7.5 Hopping Channel Bandwidth

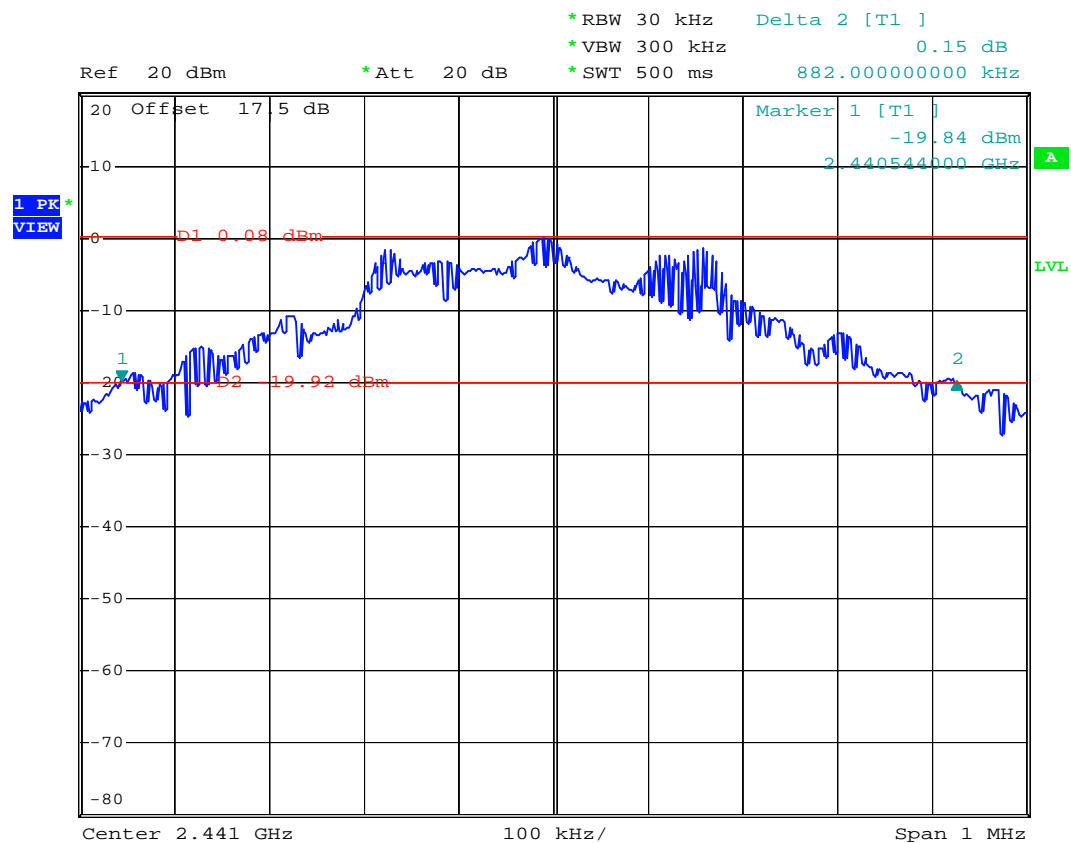
Mode 7



Date: 13.JUN.2007 18:21:46



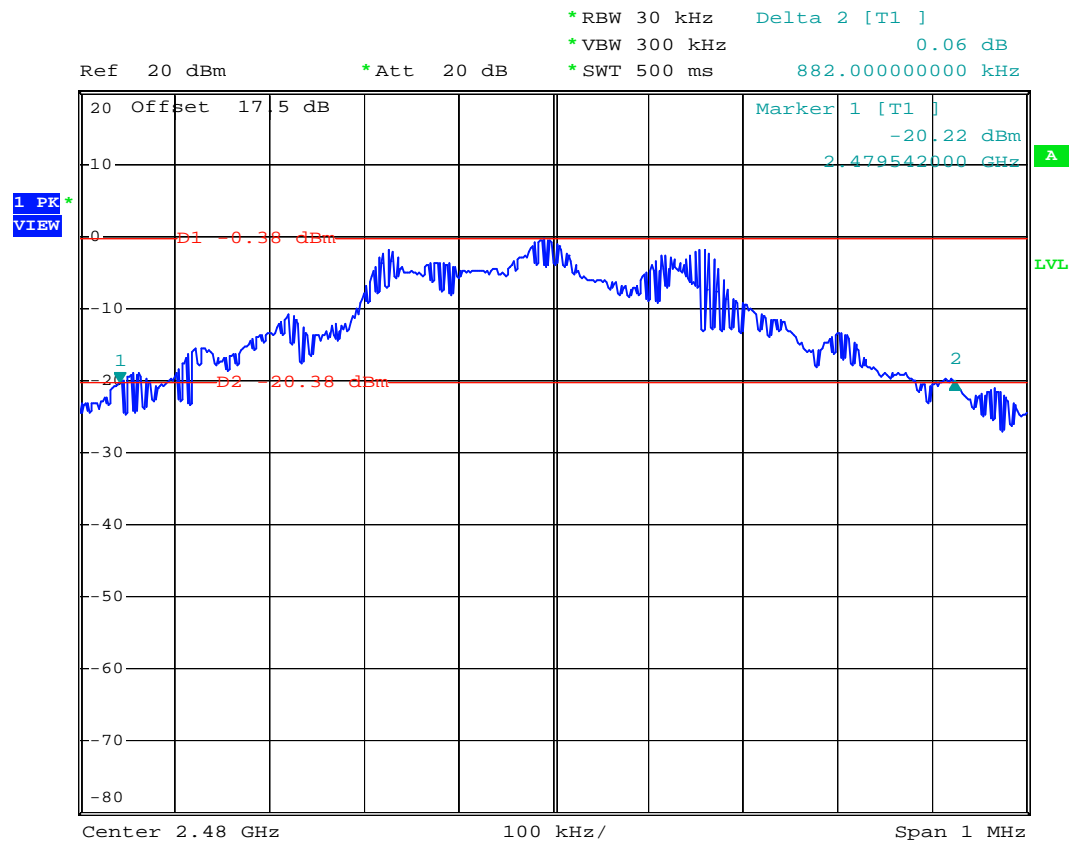
Mode 8



Date: 13.JUN.2007 18:10:27



Mode 9



Date: 13.JUN.2007 18:13:23

5.8 Dwell Time of Each Frequency

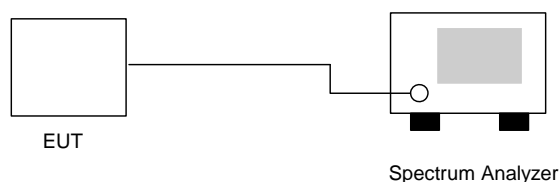
5.8.1 Measuring Instruments :

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.
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

- Application Type : BT
- Temperature : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony

Ch00

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.1	444.00	0.128	0.4
DH3	5.6	1726.00	0.305	0.4
DH5	3.8	3000.00	0.360	0.4

**CH39**

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.2	440.00	0.128	0.4
DH3	5.9	1736.00	0.324	0.4
DH5	3.9	3020.00	0.372	0.4

CH78

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.3	436.00	0.128	0.4
DH3	5.8	1736.00	0.318	0.4
DH5	3.1	2980.00	0.292	0.4

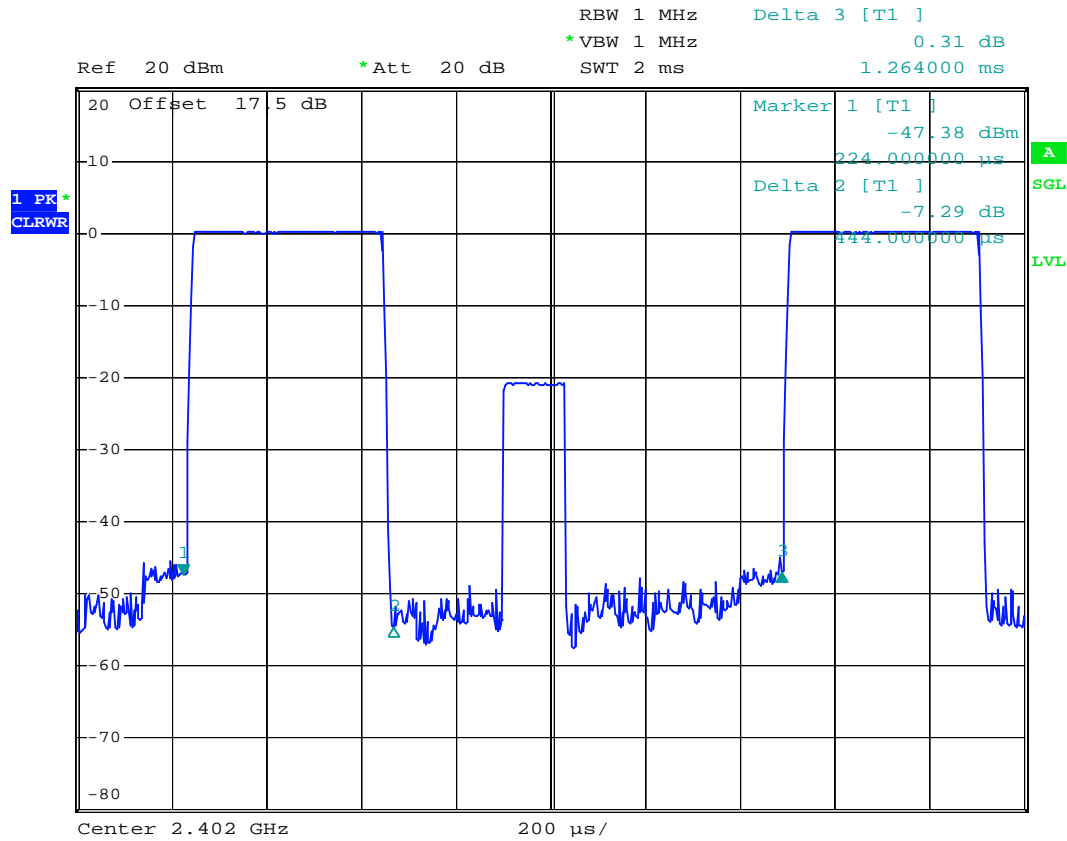
Remark:

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)



5.8.5 Dwell Time

DH1 (CH00)

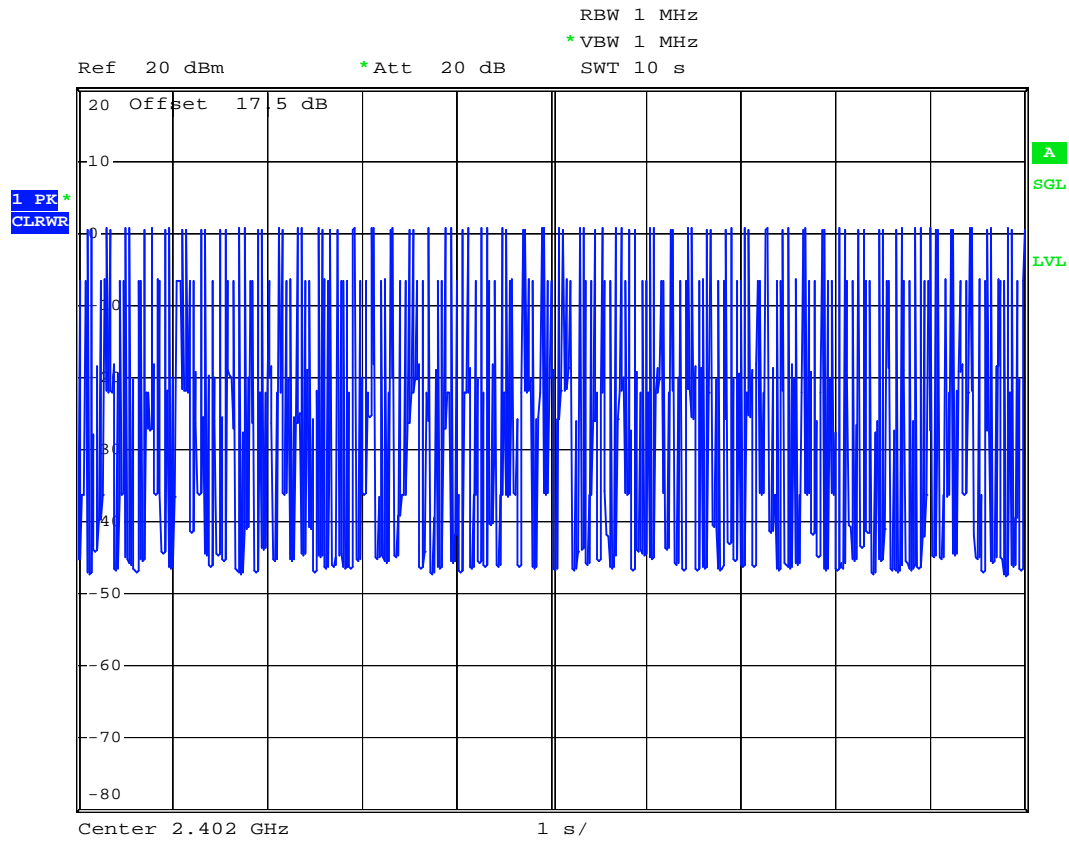


Date: 13.JUN.2007 18:27:39



FCC TEST REPORT

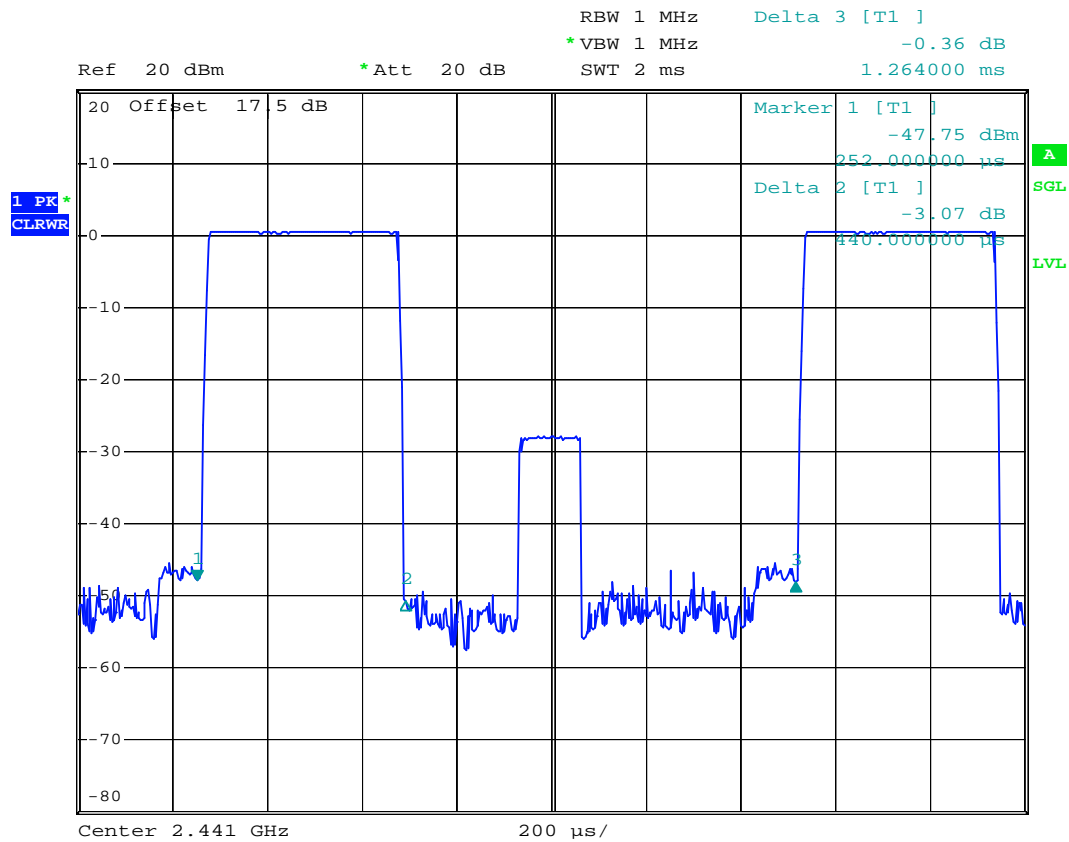
Report No. : FR760116-01



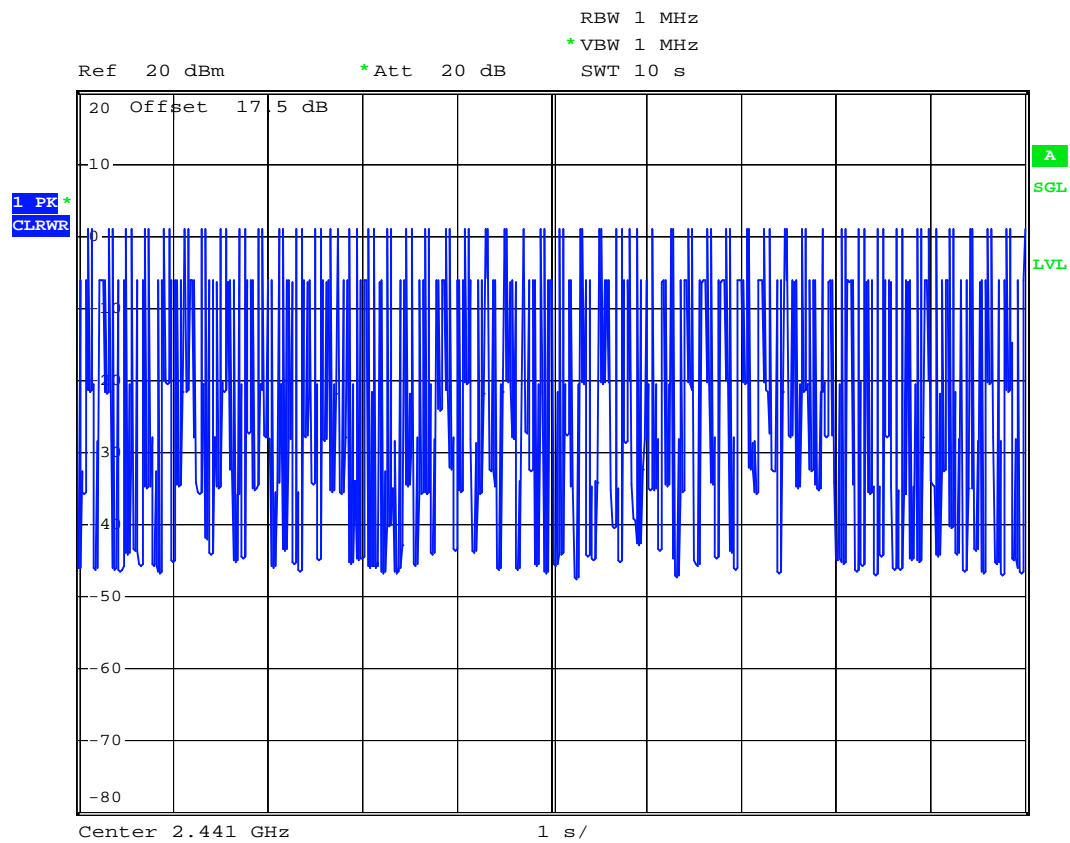
Date: 13.JUN.2007 17:17:27



DH1 (CH39)



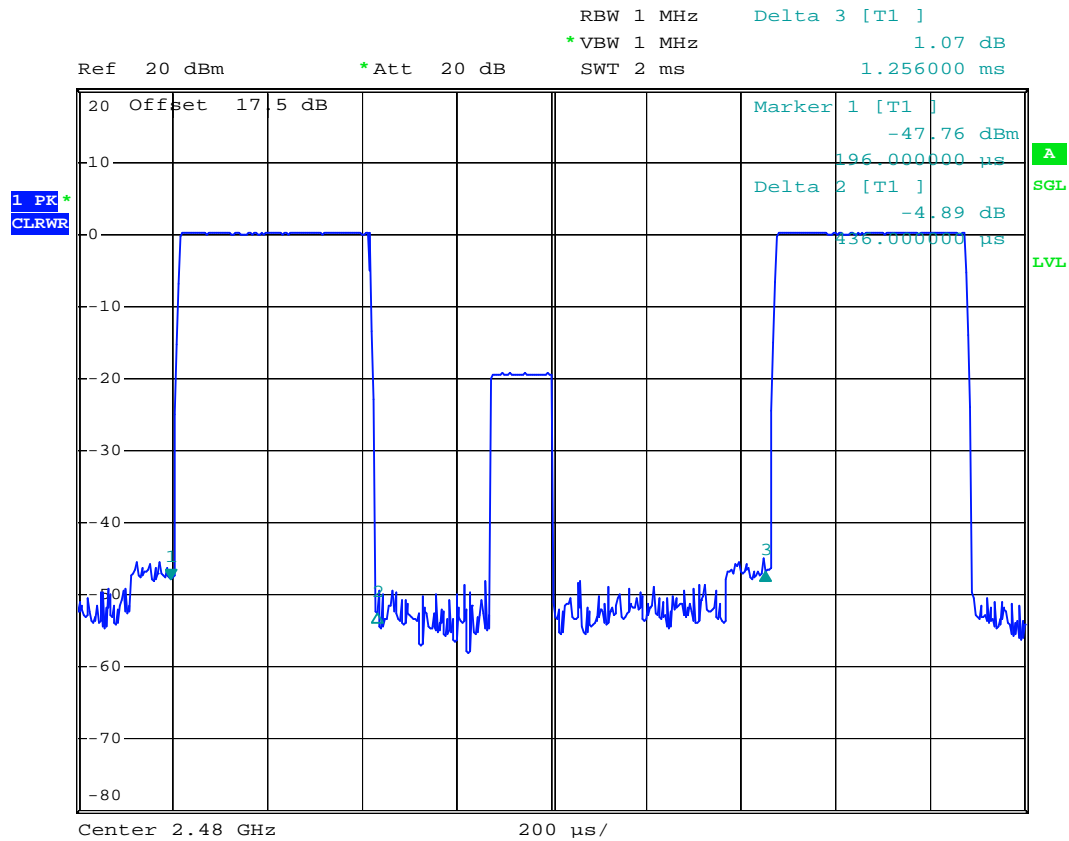
Date: 13.JUN.2007 18:30:19



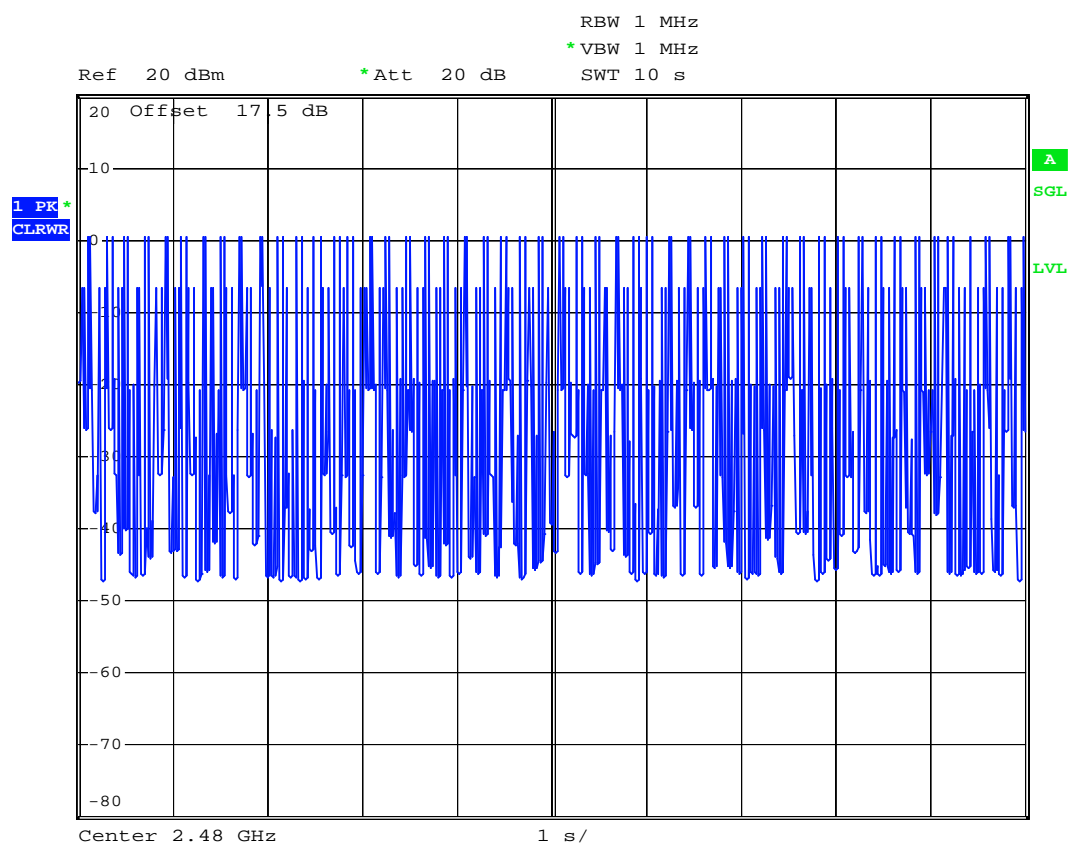
Date: 13.JUN.2007 17:23:35



DH1 (CH78)



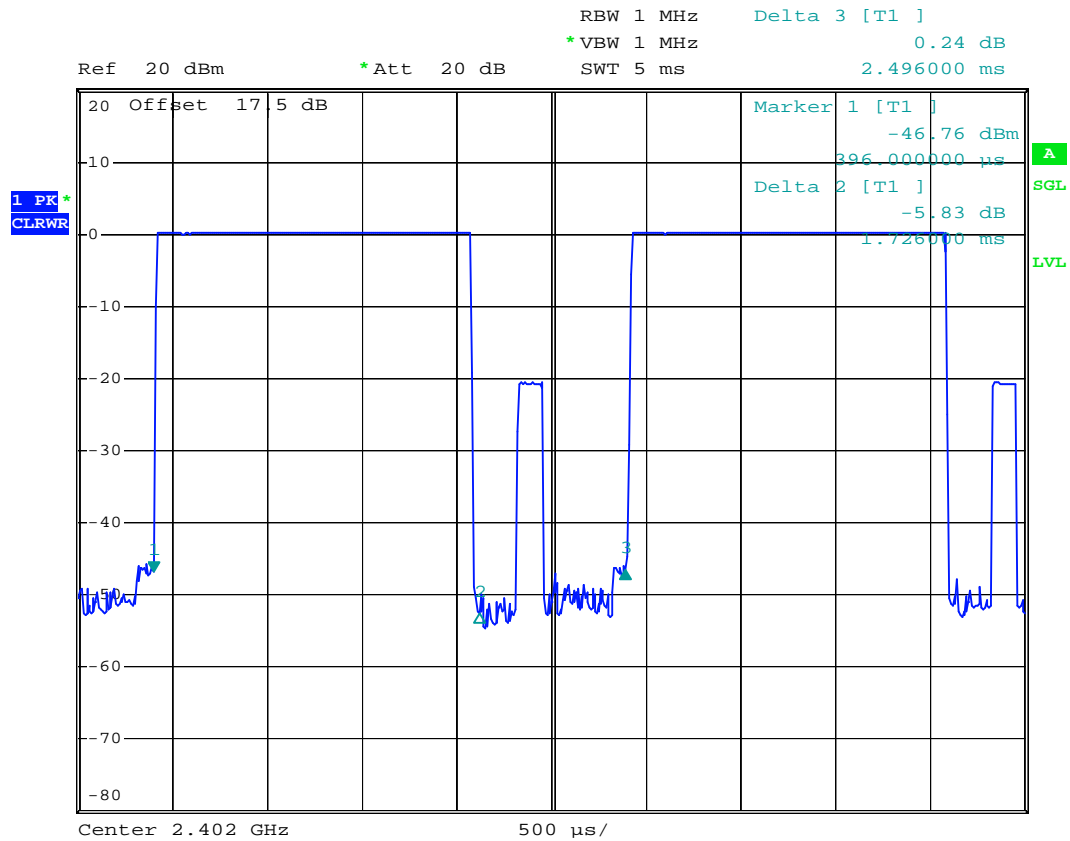
Date: 13.JUN.2007 18:32:26



Date: 13.JUN.2007 17:24:20



DH3 (CH00)

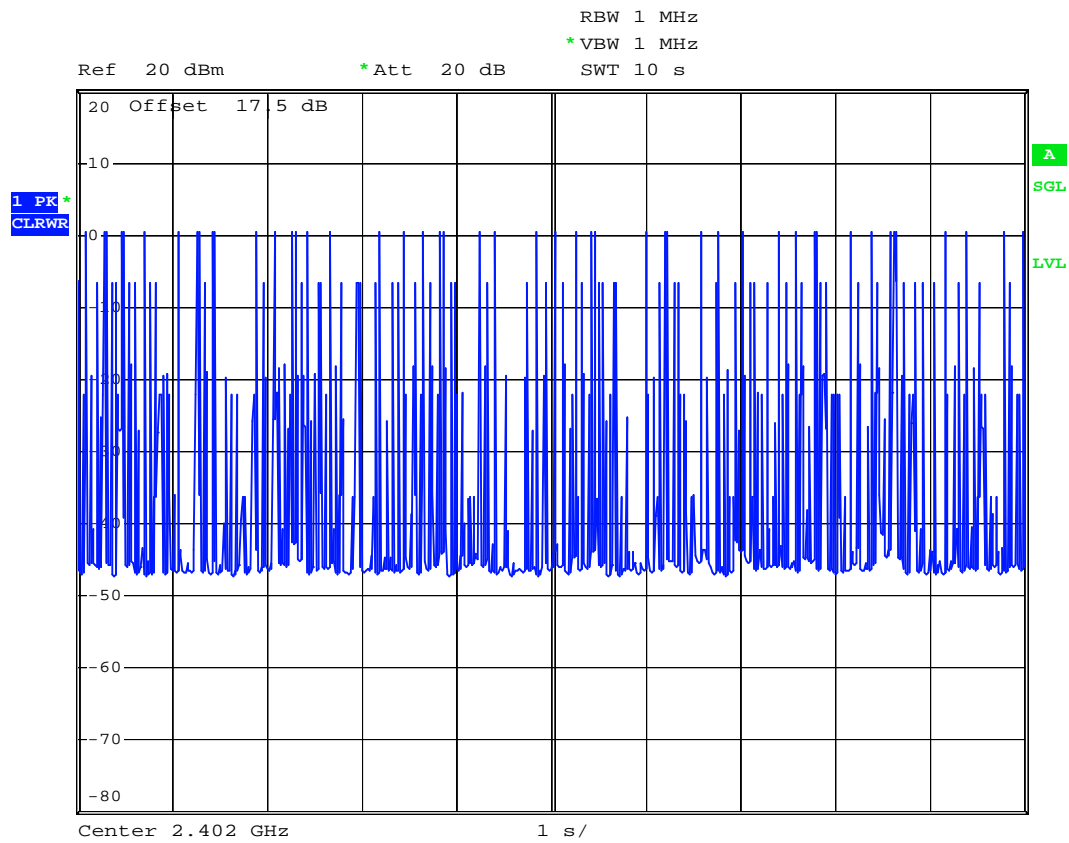


Date: 13.JUN.2007 18:34:19



FCC TEST REPORT

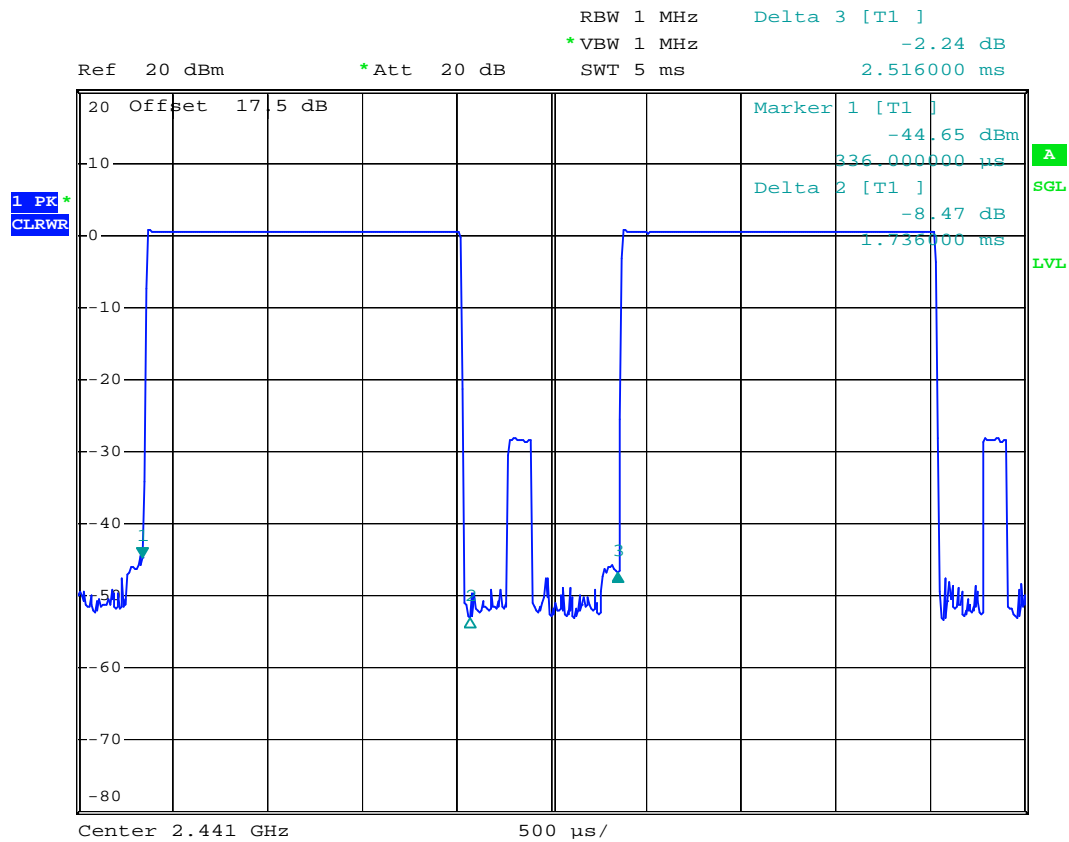
Report No. : FR760116-01



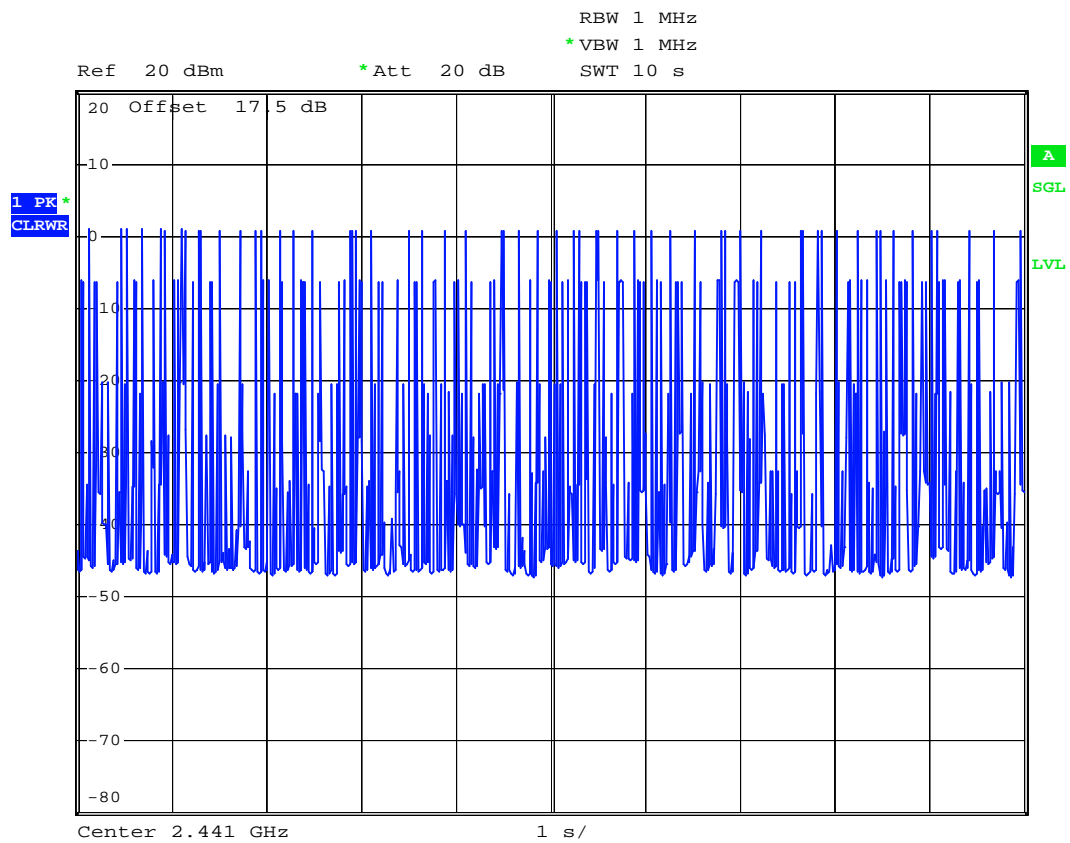
Date: 13.JUN.2007 17:25:17



DH3 (CH39)



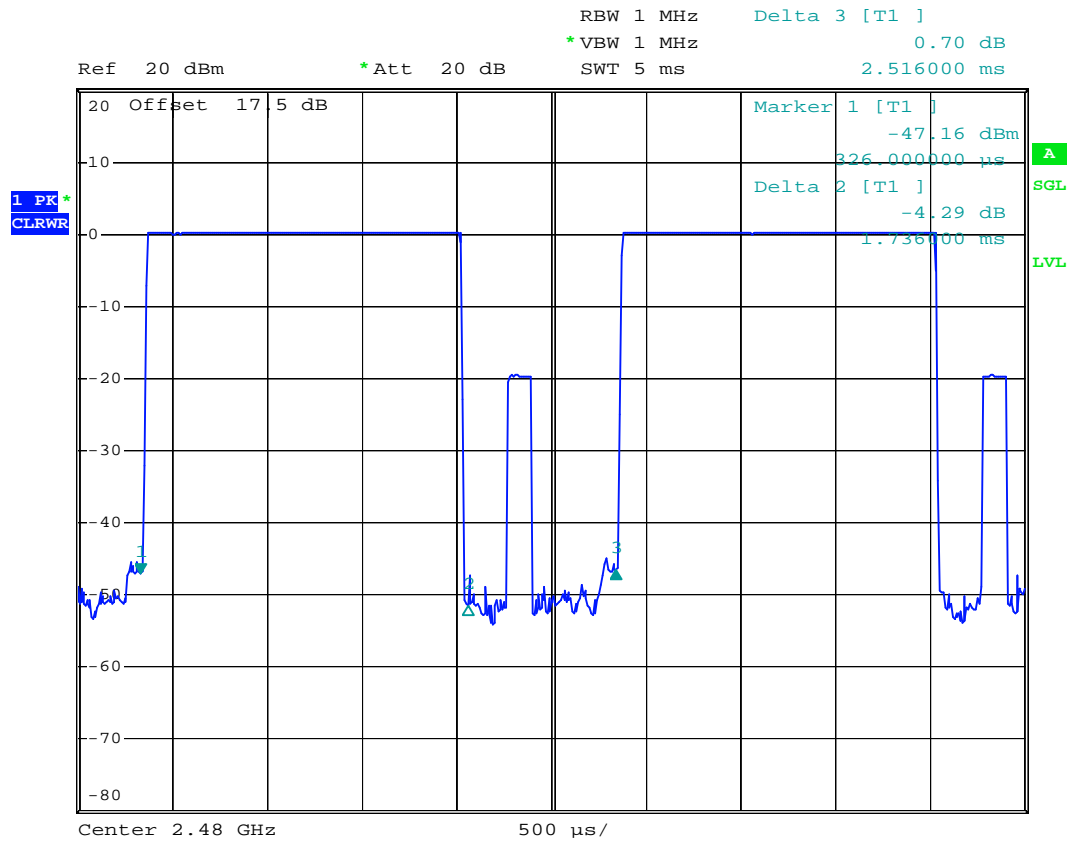
Date: 13.JUN.2007 18:36:13



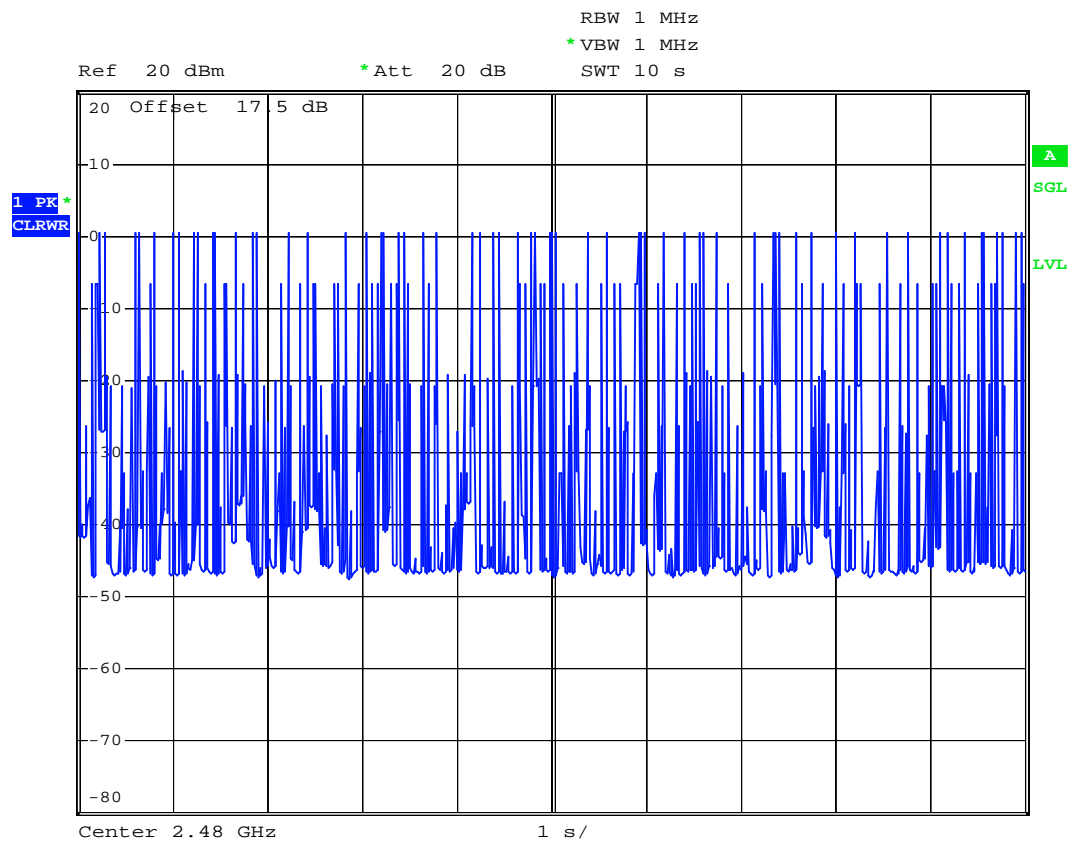
Date: 13.JUN.2007 17:25:53



DH3 (CH78)



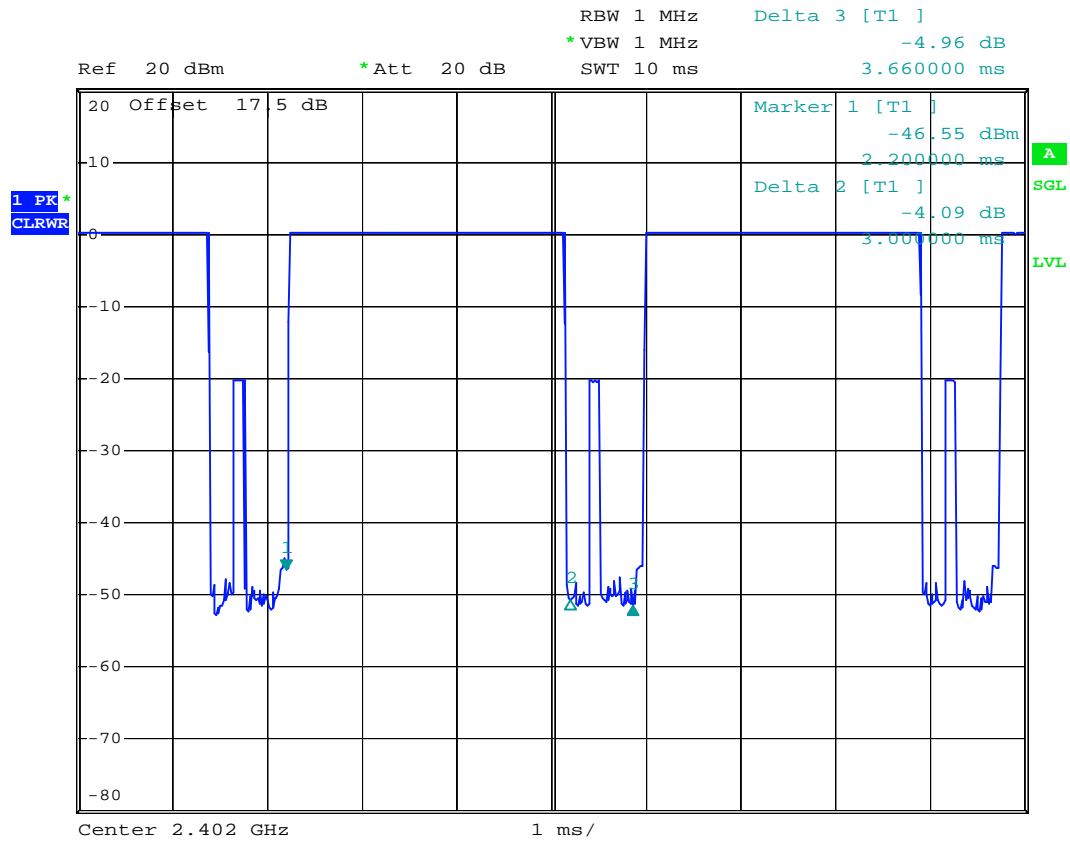
Date: 13.JUN.2007 18:37:50



Date: 13.JUN.2007 17:27:20



DH5 (CH00)

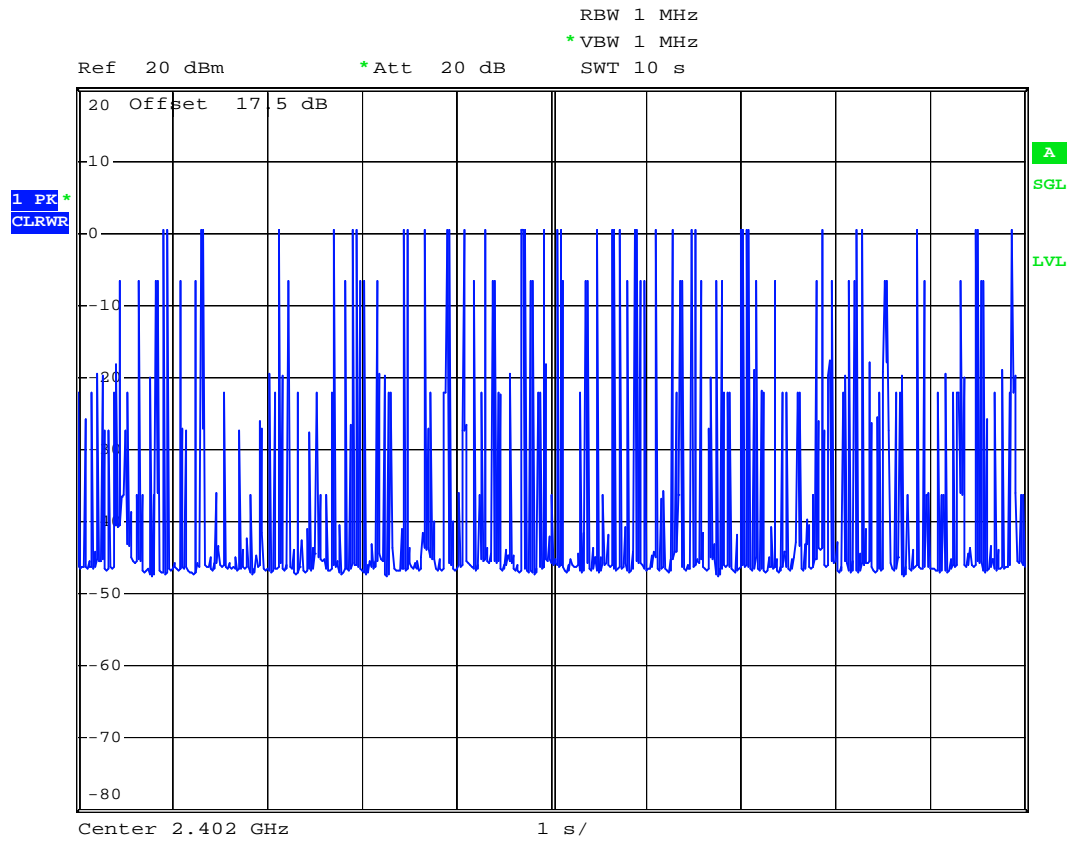


Date: 13.JUN.2007 19:00:59



FCC TEST REPORT

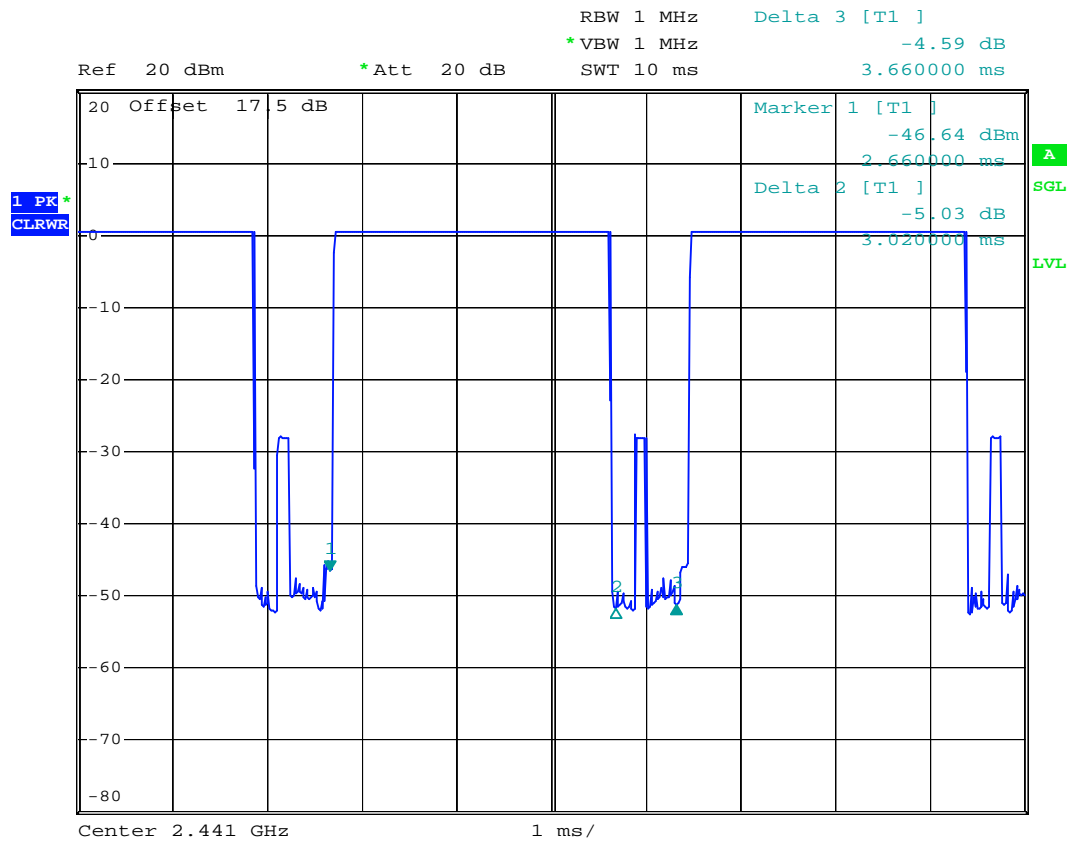
Report No. : FR760116-01



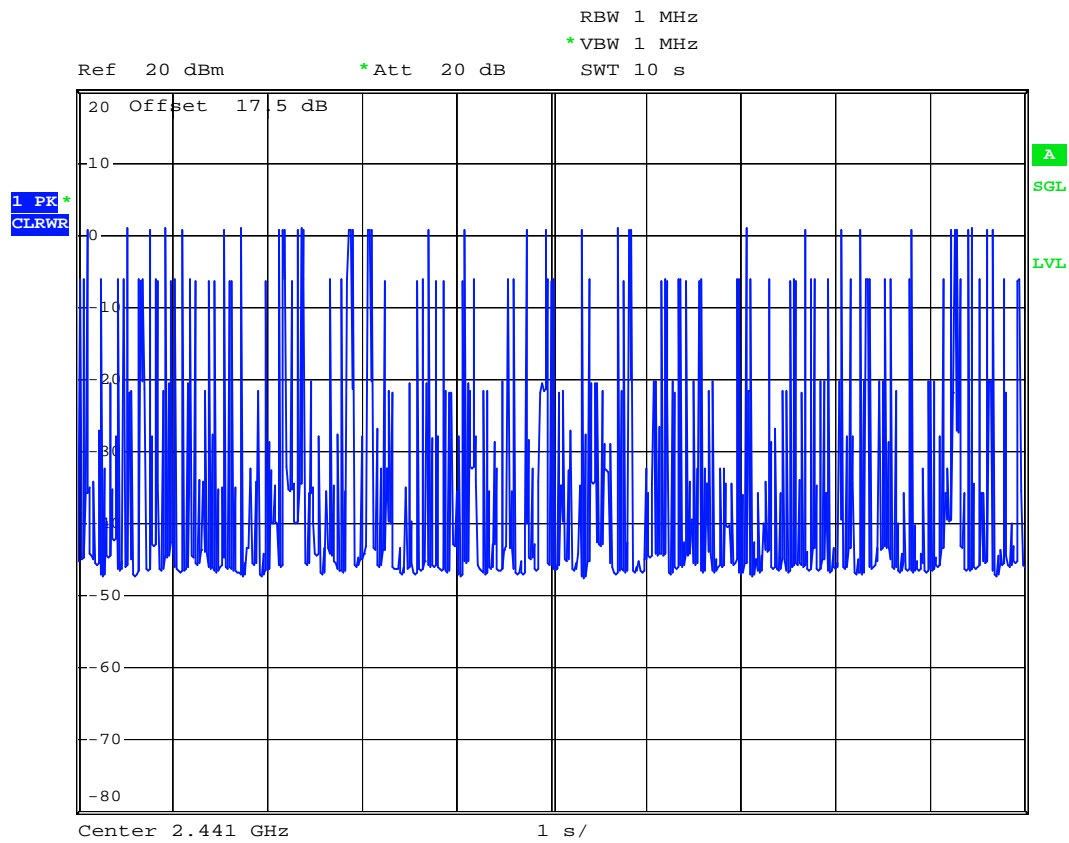
Date: 13.JUN.2007 17:28:23



DH5 (CH39)



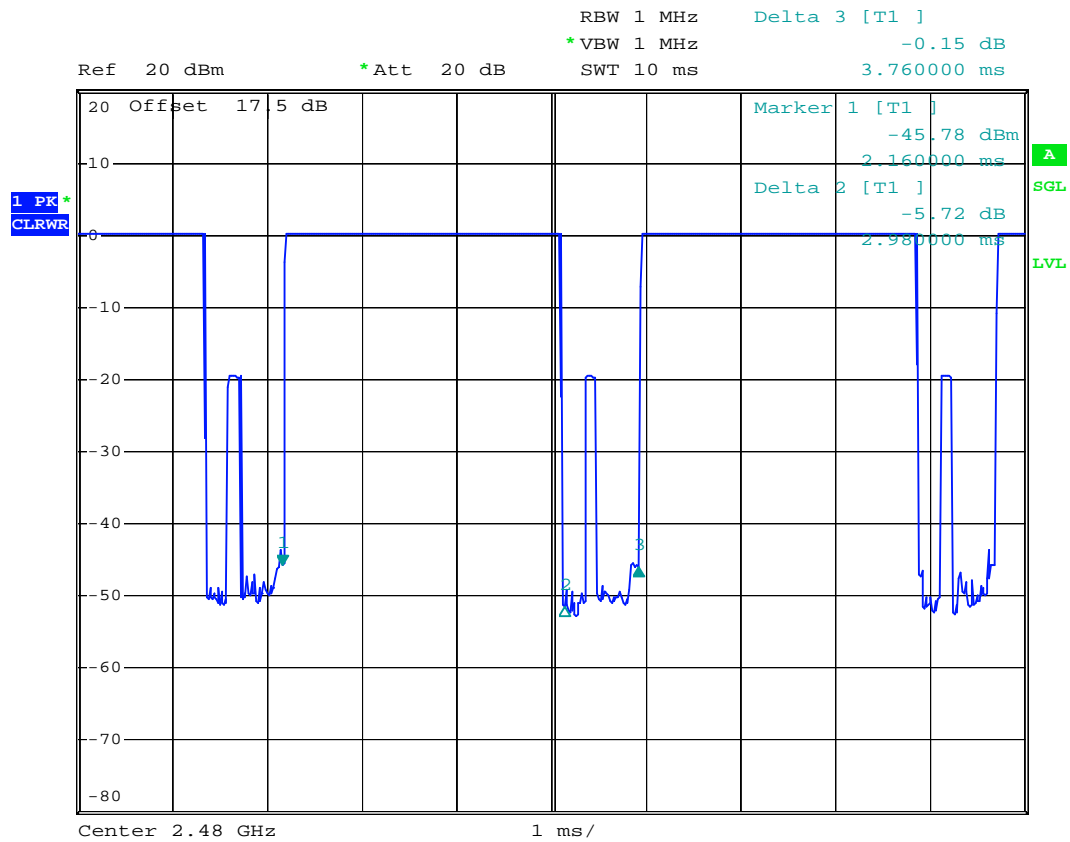
Date: 13.JUN.2007 19:02:15



Date: 13.JUN.2007 17:29:02



DH5 (CH78)

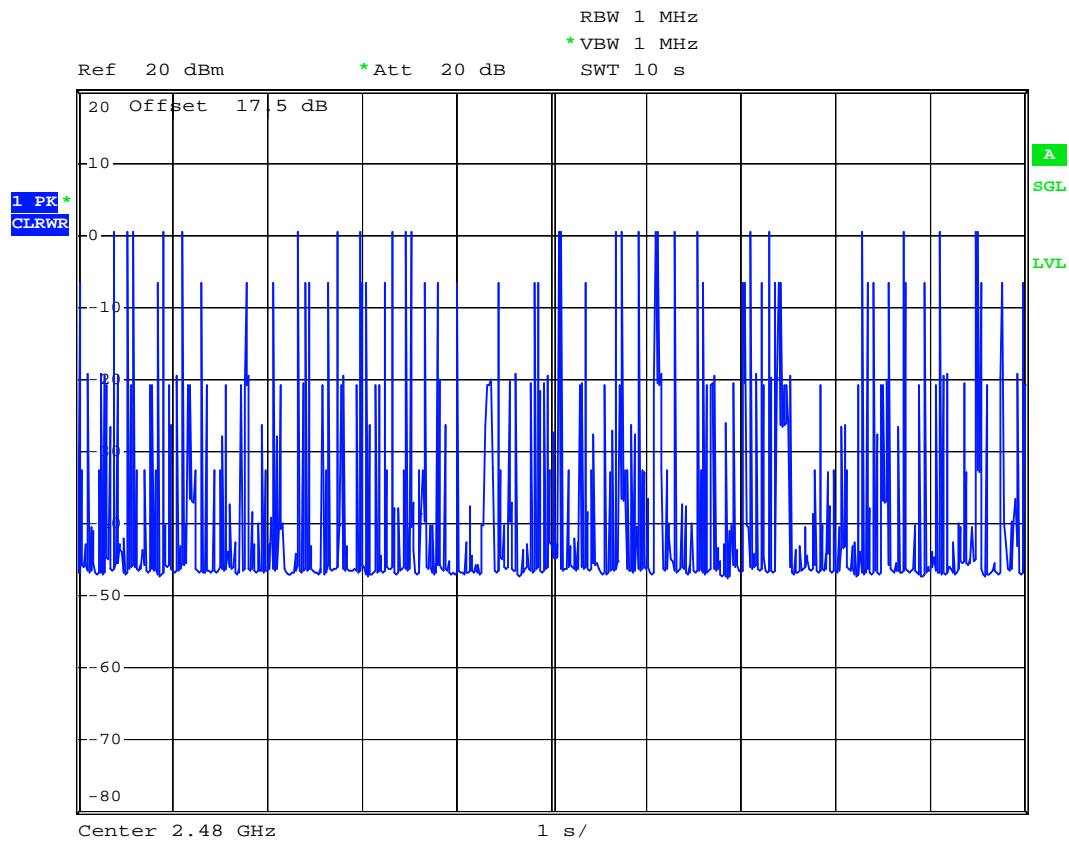


Date: 13.JUN.2007 19:03:19



FCC TEST REPORT

Report No. : FR760116-01



Date: 13.JUN.2007 17:30:09

5.9 Peak Output Power Measurement

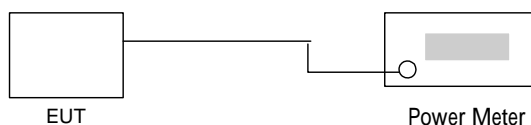
5.9.1 Measuring Instruments :

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.
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 : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony

WLAN 802.11b

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	15.02	1W/30 dBm
06	2437	14.84	1W/30 dBm
11	2462	13.63	1W/30 dBm

WLAN 802.11g

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	17.31	1W/30 dBm
06	2437	17.04	1W/30 dBm
11	2462	18.74	1W/30 dBm

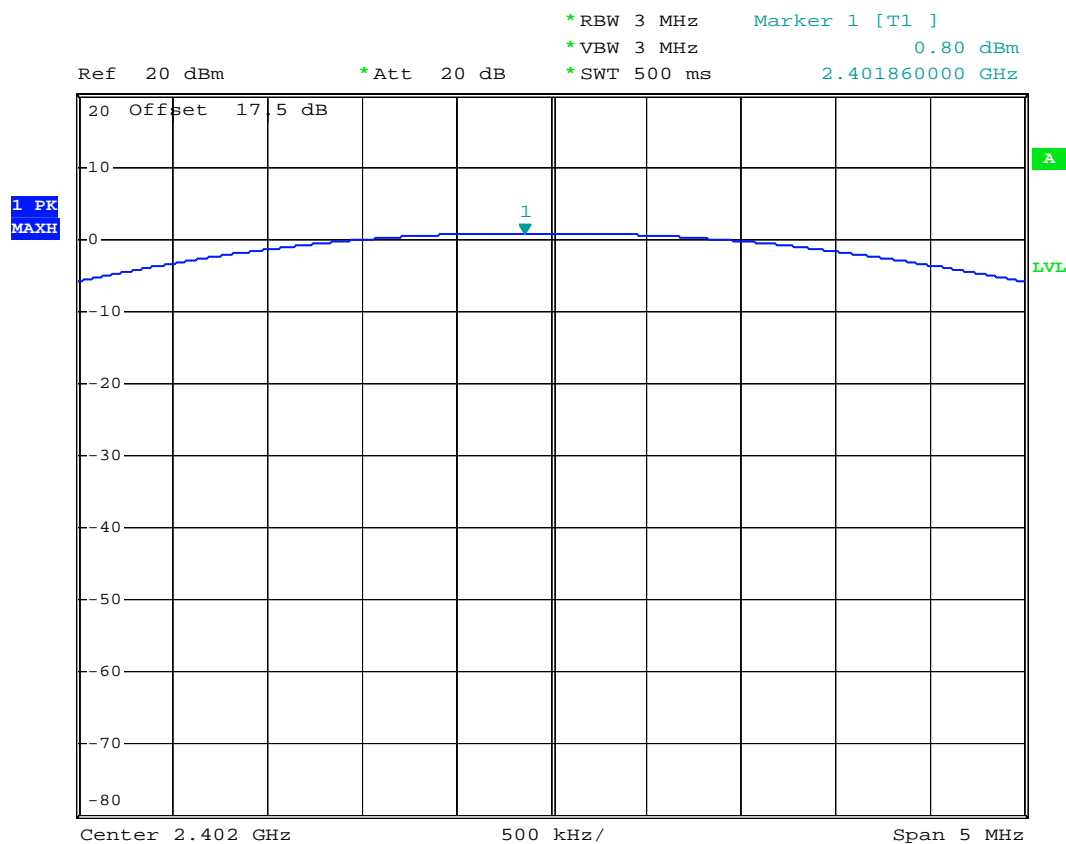
**Bluetooth**

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
00	2402	0.8	1W/30 dBm
39	2441	1.16	1W/30 dBm
78	2480	0.87	1W/30 dBm



5.9.5 Output Power

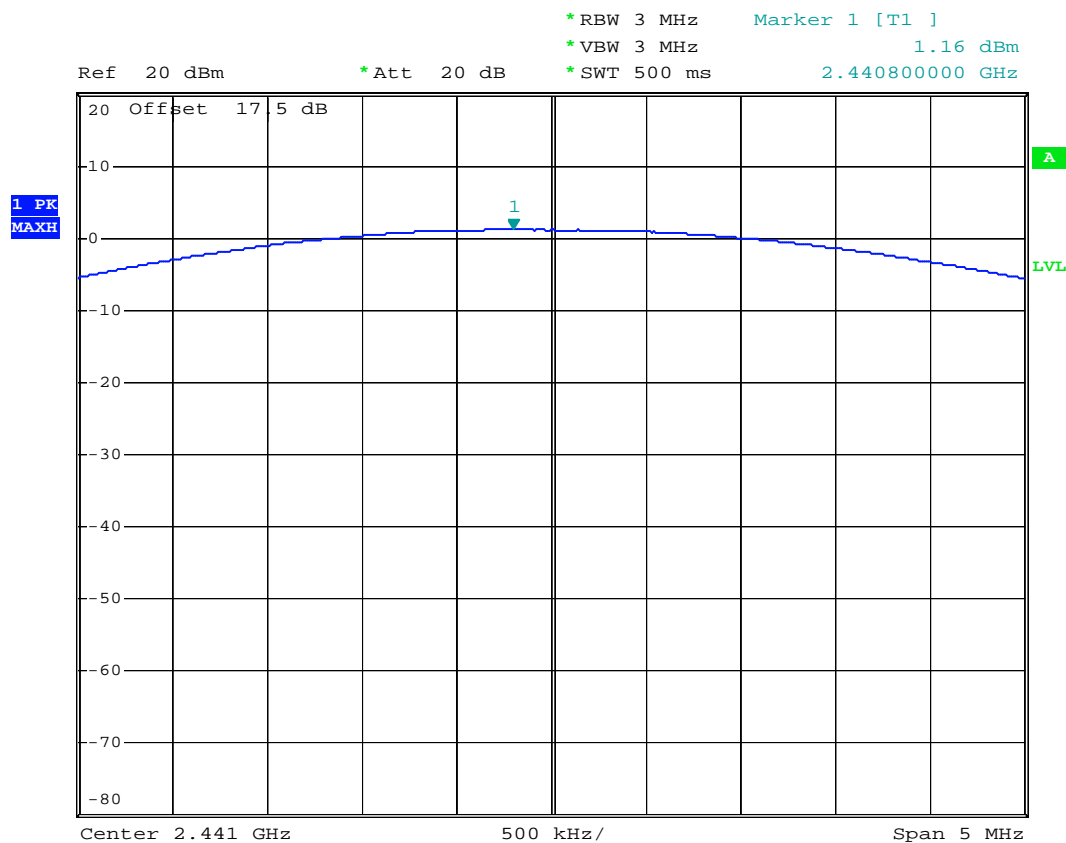
BT Mode : CH00 (2402MHz)



Date: 13.JUN.2007 15:11:57



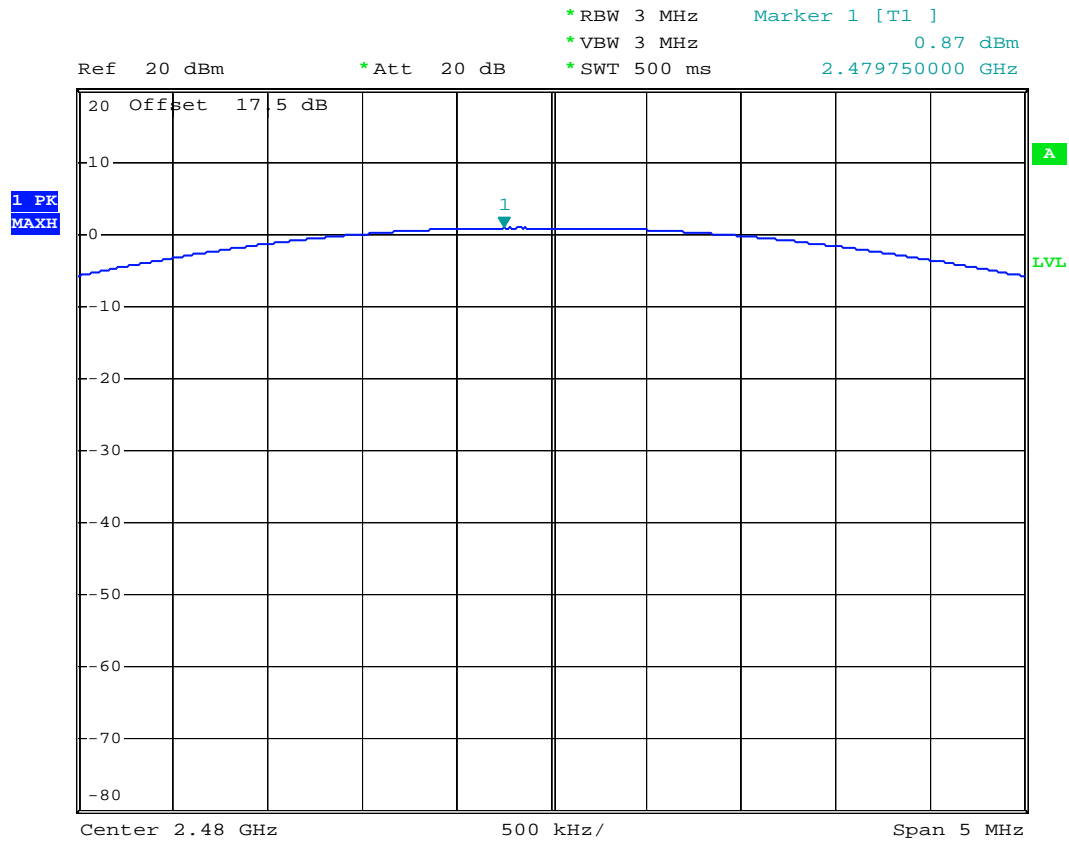
BT Mode : CH39 (2441MHz)



Date: 13.JUN.2007 15:12:49



BT Mode : CH78 (2480MHz)



Date: 13.JUN.2007 15:13:22



5.10 Conducted Emission

5.10.1 Measuring Instruments

As described in chapter 6 of this test Report.

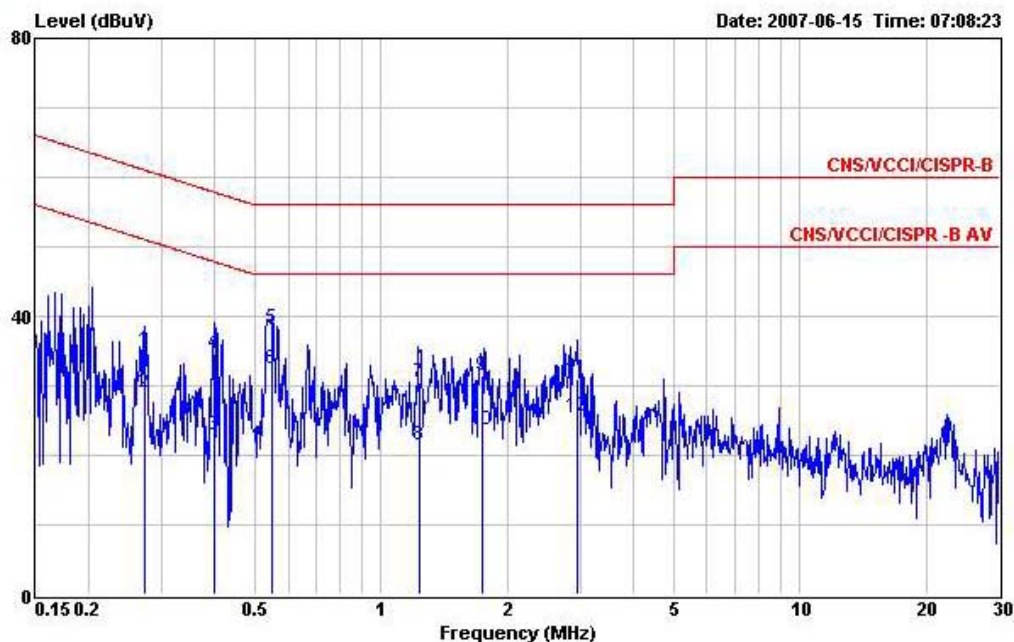
5.10.2 Test Procedures :

- 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.
- 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.

5.10.3 Test Data

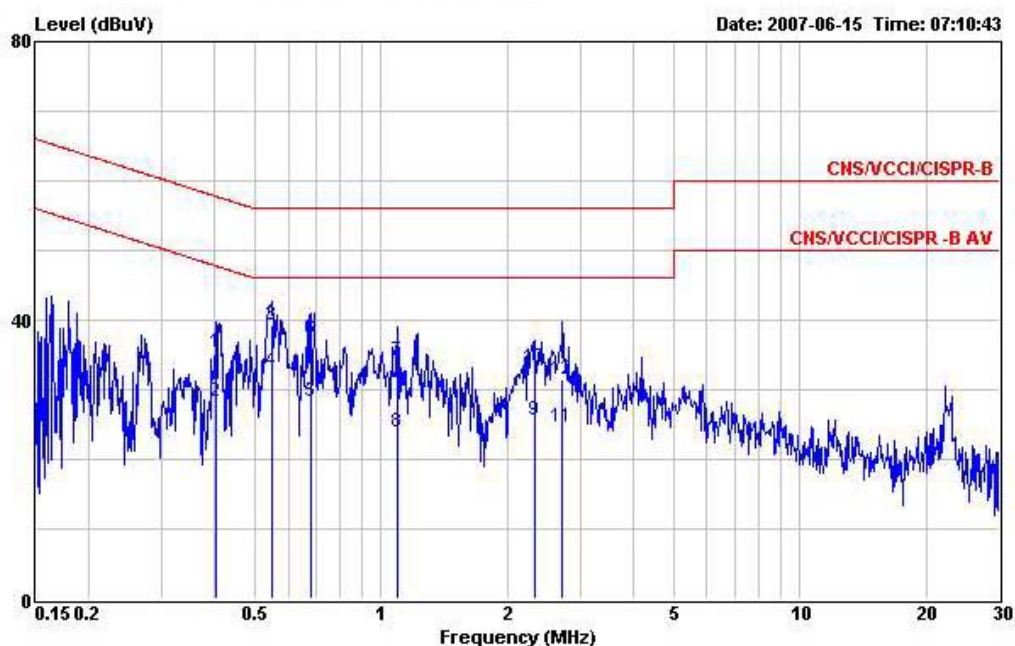
- Temperature : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony
- Test Mode : Mode 1

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



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
 EUT : PDA Phone
 Power : 120V/60Hz
 Model : FR 760116-01
 Memo : PCS1900 IDLE+Adapter+Earphone+CAMERA
 Memo : +MPEG4+WLAN LINK+BT LINK
 Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.272	35.12	-25.94	61.06	34.95	0.10	0.07	QP
2	0.272	29.10	-21.96	51.06	28.93	0.10	0.07	Average
3	0.400	23.02	-24.83	47.85	22.88	0.10	0.04	Average
4	0.400	34.65	-23.20	57.85	34.51	0.10	0.04	QP
5	0.546	38.31	-17.69	56.00	38.13	0.10	0.08	QP
6	0.546	32.44	-13.56	46.00	32.26	0.10	0.08	Average
7	1.230	30.55	-25.45	56.00	30.26	0.10	0.19	QP
8	1.230	21.56	-24.44	46.00	21.27	0.10	0.19	Average
9	1.750	31.35	-24.65	56.00	31.02	0.10	0.23	QP
10	1.750	23.78	-22.22	46.00	23.45	0.10	0.23	Average
11	2.950	31.02	-24.98	56.00	30.66	0.16	0.20	QP
12	2.950	25.61	-20.39	46.00	25.25	0.16	0.20	Average



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : PDA Phone
Power : 120V/60Hz
Model : FR 760116-01
Memo : PCS1900 IDLE+Adapter+Earphone+CAMERA
Memo : +MPEG4+WLAN LINK+BT LINK
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.404	35.34	-22.43	57.77	35.20	0.10	0.04	QP
2	0.404	28.20	-19.57	47.77	28.06	0.10	0.04	Average
3	0.546	39.27	-16.73	56.00	39.09	0.10	0.08	QP
4	0.546	32.71	-13.29	46.00	32.53	0.10	0.08	Average
5	0.679	28.33	-17.67	46.00	28.12	0.10	0.11	Average
6	0.679	37.21	-18.79	56.00	37.00	0.10	0.11	QP
7	1.090	34.12	-21.88	56.00	33.84	0.10	0.18	QP
8	1.090	23.88	-22.12	46.00	23.60	0.10	0.18	Average
9	2.320	25.70	-20.30	46.00	25.38	0.10	0.22	Average
10	2.320	33.26	-22.74	56.00	32.94	0.10	0.22	QP
11	2.710	24.73	-21.27	46.00	24.42	0.10	0.21	Average
12	2.710	31.44	-24.56	56.00	31.13	0.10	0.21	QP

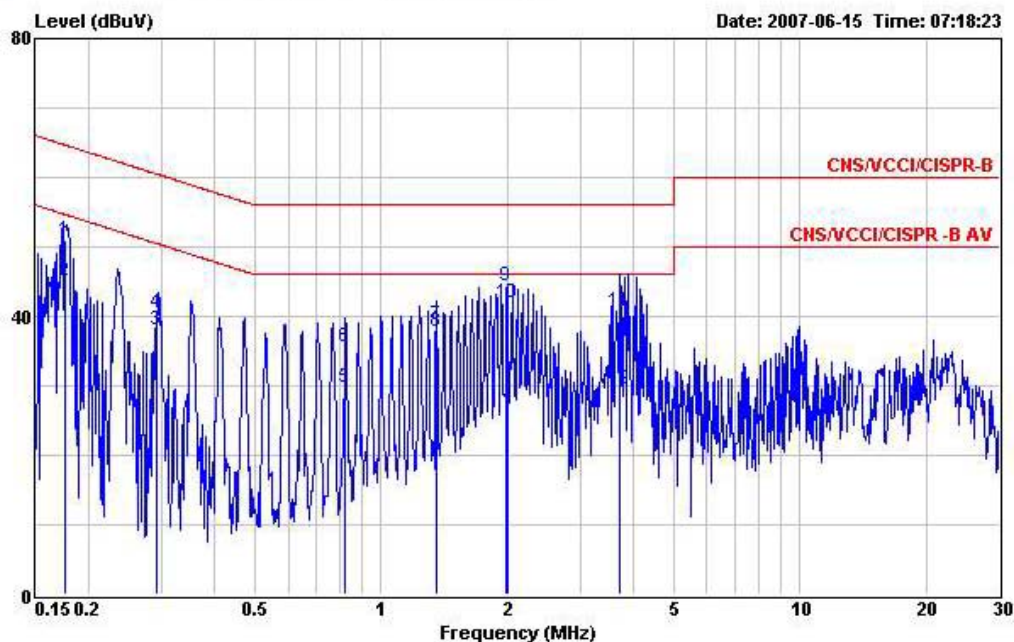


FCC TEST REPORT

Report No. : FR760116-01

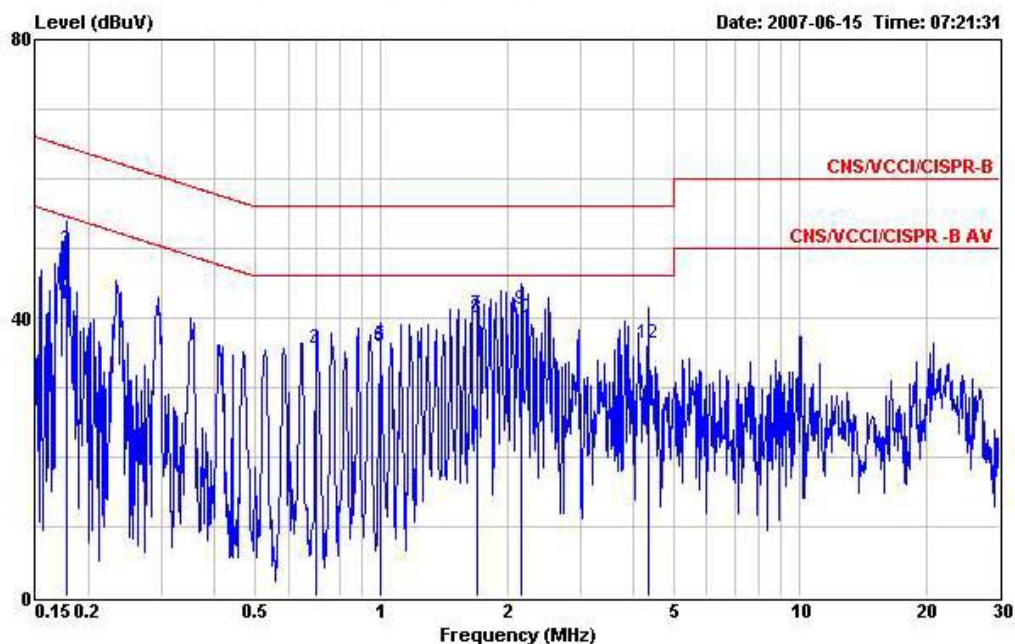
- Temperature : 26~27
- Relative Humidity : 51~53%
- Test Enginner : Tony
- Test Mode : Mode 2

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



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : PDA Phone
Power : 120V/60Hz
Model : FR 760116-01
Memo : PCS1900 IDLE+USB LINK+Earphone+CAMERA
Memo : +MPEG4+WLAN LINK+BT LINK
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.176	51.09	-13.57	64.66	50.90	0.10	0.09	QP
2	0.176	45.08	-9.58	54.66	44.89	0.10	0.09	Average
3	0.292	38.03	-12.44	50.47	37.86	0.10	0.07	Average
4	0.292	40.51	-19.96	60.47	40.34	0.10	0.07	QP
5	0.822	29.83	-16.17	46.00	29.59	0.10	0.14	Average
6	0.822	35.66	-20.34	56.00	35.42	0.10	0.14	QP
7	1.350	38.80	-17.20	56.00	38.50	0.10	0.20	QP
8	1.350	37.70	-8.30	46.00	37.40	0.10	0.20	Average
9	1.996	44.27	-11.73	56.00	43.93	0.10	0.24	QP
10	2.000	42.05	-3.95	46.00	41.71	0.10	0.24	Average
11	3.700	40.65	-15.35	56.00	40.38	0.10	0.17	QP
12	3.700	29.60	-16.40	46.00	29.33	0.10	0.17	Average



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
EUT : PDA Phone
Power : 120V/60Hz
Model : FR 760116-01
Memo : PCS1900 IDLE+USB LINK+Earphone+CAMERA
Memo : +MPEG4+WLAN LINK+BT LINK
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.178	41.83	-12.75	54.58	41.64	0.10	0.09	Average
2	0.178	49.87	-14.71	64.58	49.68	0.10	0.09	QP
3	0.701	35.61	-20.39	56.00	35.39	0.10	0.12	QP
4	0.701	35.09	-10.91	46.00	34.87	0.10	0.12	Average
5	0.994	36.12	-19.88	56.00	35.85	0.10	0.17	QP
6	0.994	35.93	-10.07	46.00	35.66	0.10	0.17	Average
7	1.700	40.55	-15.45	56.00	40.23	0.10	0.22	QP
8	1.700	40.02	-5.98	46.00	39.70	0.10	0.22	Average
9	2.170	41.23	-14.77	56.00	40.89	0.11	0.23	QP
10	2.170	39.99	-6.01	46.00	39.65	0.11	0.23	Average
11	4.335	28.95	-17.05	46.00	28.56	0.21	0.18	Average
12	4.335	36.25	-19.75	56.00	35.86	0.21	0.18	QP

5.11 Radiated Emission Measurement

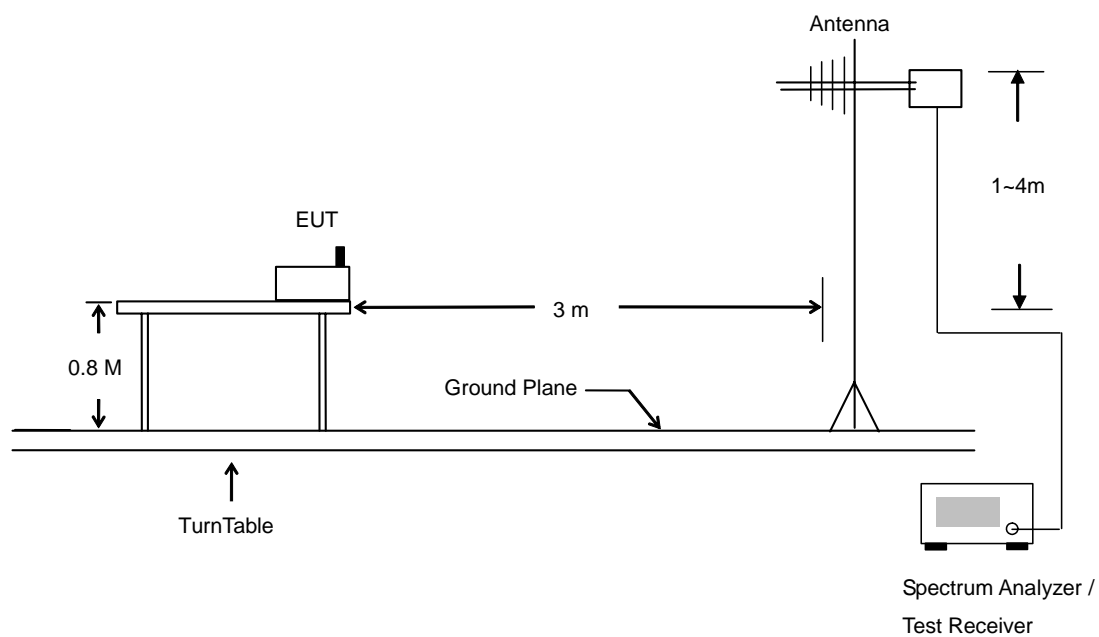
5.11.1 Measuring Instruments

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.
- 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.

5.11.3 Typical Test Setup Layout of Radiated Emission

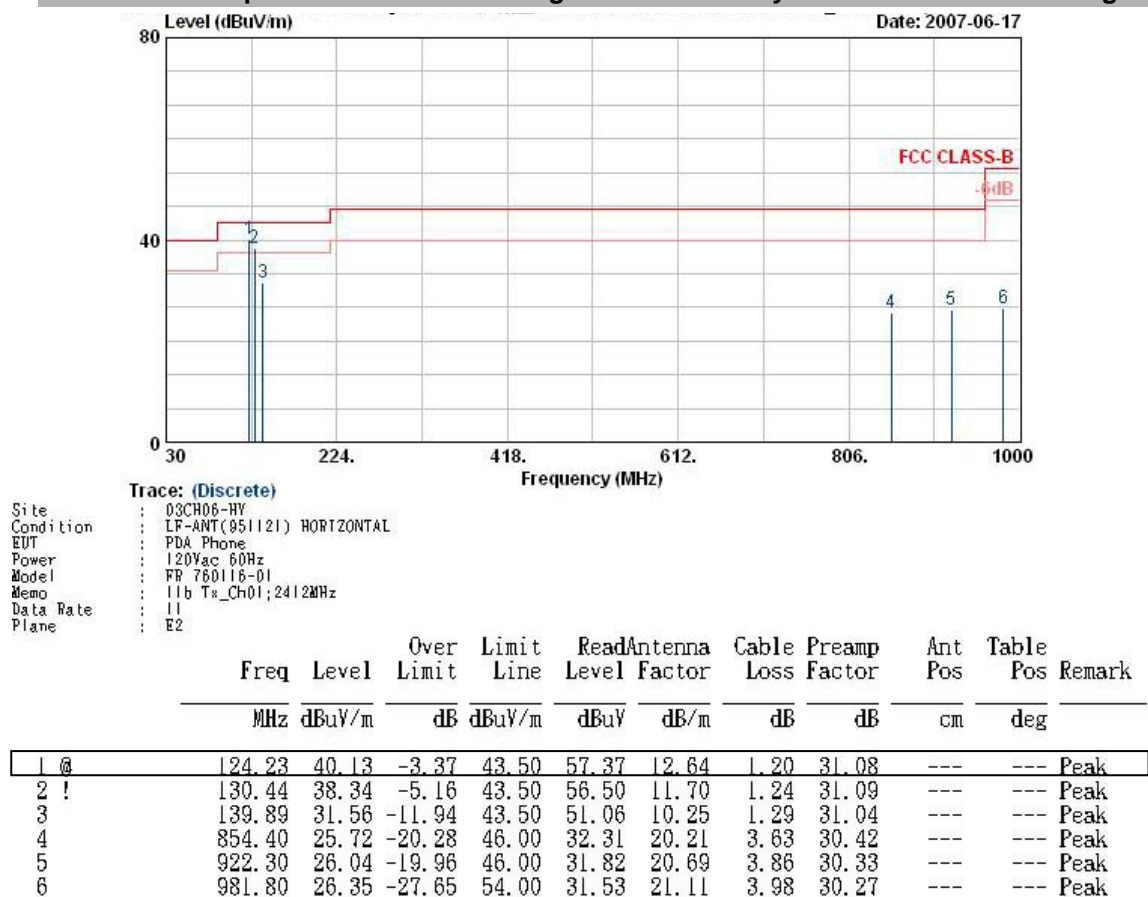




5.11.4 Test Data

- Temperature : 26~27
- Relative Humidity : 57~59%
- Test Engineer : Anderson
- Test Mode : Mode 1
- Polarization : Horizontal

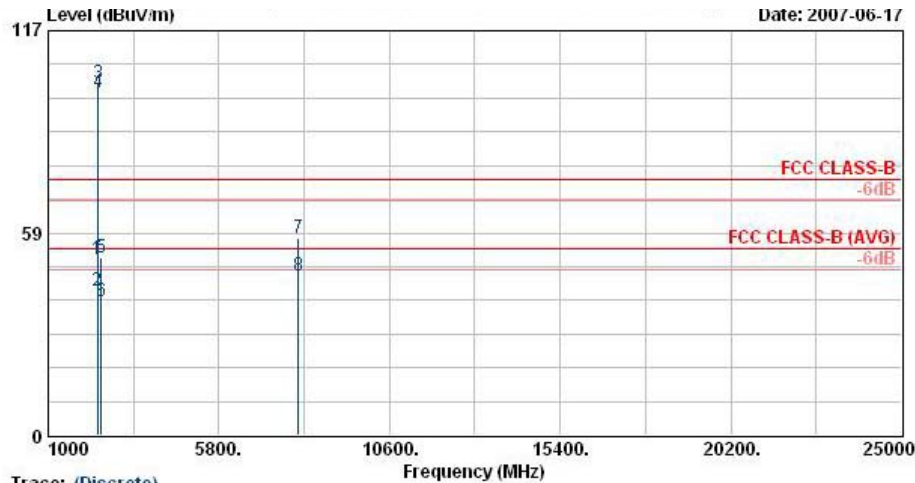
The test that passed at minimum margin was marked by the frame in the following table.





FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch01;2412MHz
Data Rate : 11
Plane : E2

	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	2388.56	50.74	-23.26	74.00	52.17	30.26	3.75	35.44	100	0	Peak
2	2388.56	41.76	-12.24	54.00	43.19	30.26	3.75	35.44	100	25	Average
3 @	2412.00	101.97			103.39	30.27	3.77	35.46	100	0	Peak
4 @	2412.00	98.98			100.40	30.27	3.77	35.46	100	25	Average
5	2494.00	51.26	-22.74	74.00	52.61	30.30	3.88	35.53	100	0	Peak
6	2494.00	38.59	-15.41	54.00	39.94	30.30	3.88	35.53	100	25	Average
7	8031.00	57.16	-16.84	74.00	45.63	39.57	7.83	35.87	100	0	Peak
8	8031.00	46.27	-7.73	54.00	34.74	39.57	7.83	35.87	100	35	Average

Remark: #3 and #4 Fundamental Signal

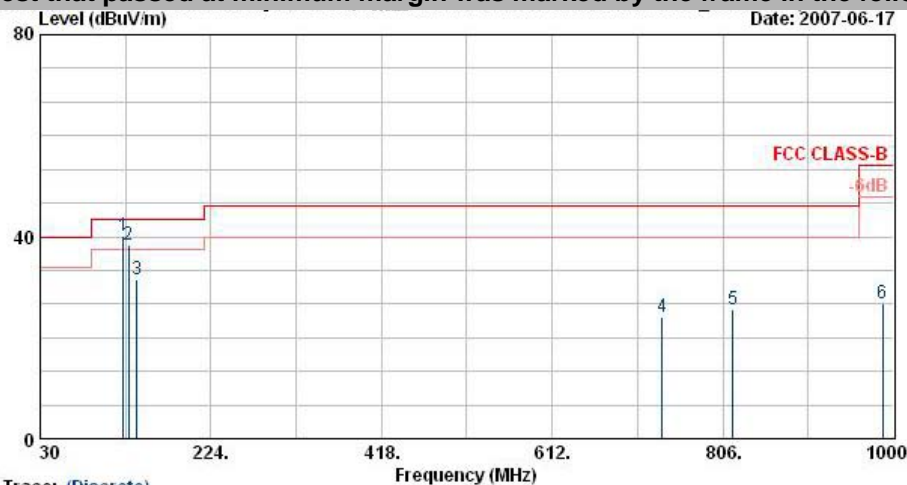


FCC TEST REPORT

Report No. : FR760116-01

- Polarization : Vertical

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



Trace: (Discrete)

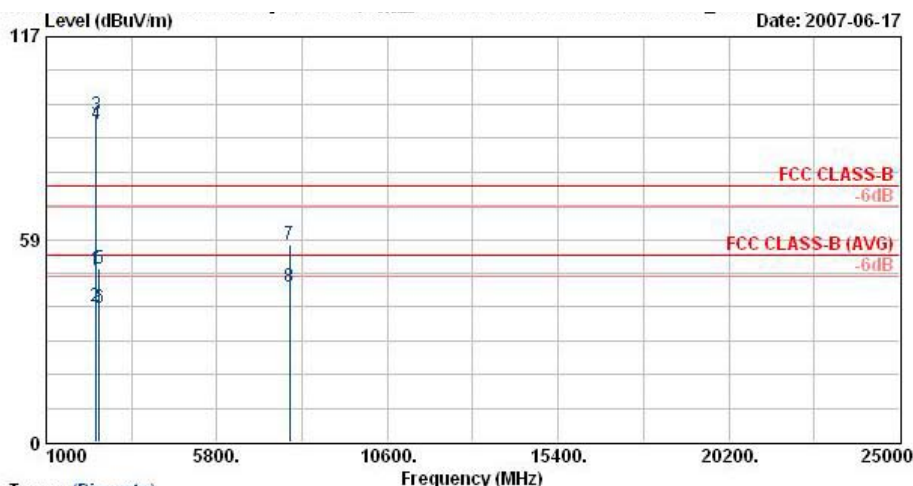
Site : 03CH06-HY
Condition : LP-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch01;2412MHz
Data Rate : 11
Plane : E2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	124.23	40.13	-3.37	43.50	57.37	12.64	1.20	31.08	---	Peak
2 !	130.44	38.34	-5.16	43.50	56.50	11.70	1.24	31.09	---	Peak
3	139.89	31.56	-11.94	43.50	51.06	10.25	1.29	31.04	---	Peak
4	736.80	24.00	-22.00	46.00	32.00	19.23	3.31	30.55	---	Peak
5	817.30	25.48	-20.52	46.00	32.52	19.94	3.48	30.47	---	Peak
6	987.40	26.74	-27.26	54.00	31.87	21.15	3.99	30.27	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch01;2412MHz
Data Rate : 11
Plane : E2

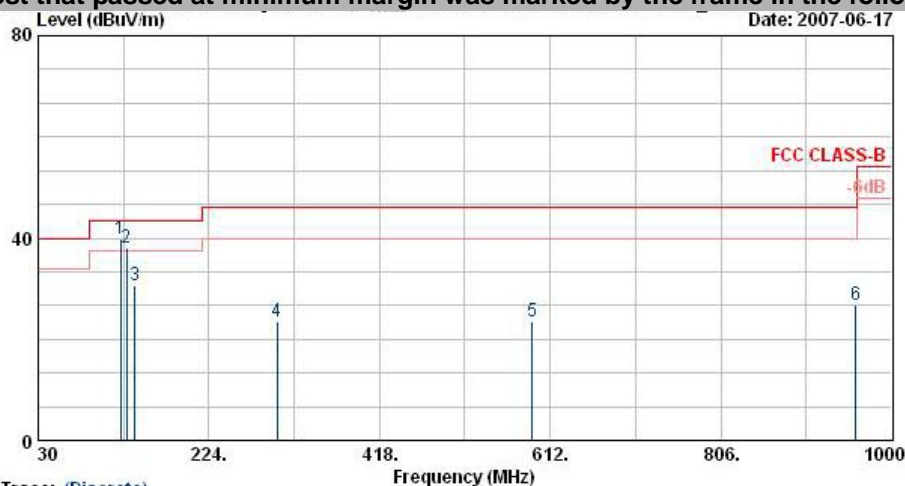
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2387.76	49.77	-24.23	74.00	51.23	30.24	3.73	35.44	100	0 Peak
2	2387.76	39.23	-14.77	54.00	40.69	30.24	3.73	35.44	100	25 Average
3 @	2412.00	94.24			95.66	30.27	3.77	35.46	100	0 Peak
4 @	2412.00	91.76			93.18	30.27	3.77	35.46	100	25 Average
5	2500.00	49.96	-24.04	74.00	51.31	30.30	3.88	35.53	100	0 Peak
6	2500.00	38.71	-15.29	54.00	40.06	30.30	3.88	35.53	100	25 Average
7	7842.00	56.77	-17.23	74.00	45.58	39.37	7.73	35.91	100	0 Peak
8	7842.00	44.97	-9.03	54.00	33.78	39.37	7.73	35.91	100	277 Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 2
- Polarization : Horizontal

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



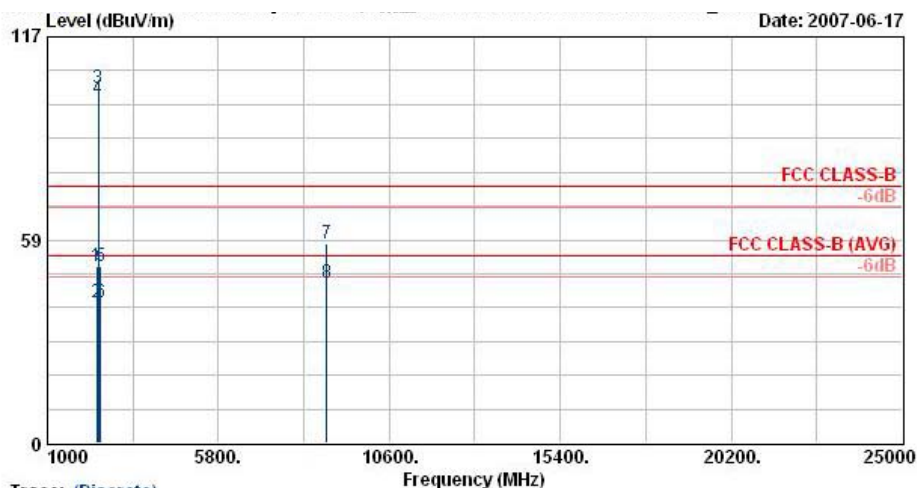
Trace: (Discrete)
Site : 03CH06-HY
Condition : LF-ANT(951121) HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch06;2437MHz
Data Rate : 11
Plane : E2

	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		deg	
1 !	123.69	39.97	-3.53	43.50	57.21	12.64	1.20	31.08	---	Peak
2 !	130.44	38.16	-5.34	43.50	56.32	11.70	1.24	31.09	---	Peak
3	139.89	30.67	-12.83	43.50	50.17	10.25	1.29	31.04	---	Peak
4	301.40	23.61	-22.39	46.00	39.33	13.26	1.95	30.93	---	Peak
5	591.90	23.42	-22.58	46.00	32.79	18.38	2.93	30.67	---	Peak
6	959.40	26.82	-19.18	46.00	32.21	20.95	3.94	30.28	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HV
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch06;2437MHz
Data Rate : 11
Plane : E2

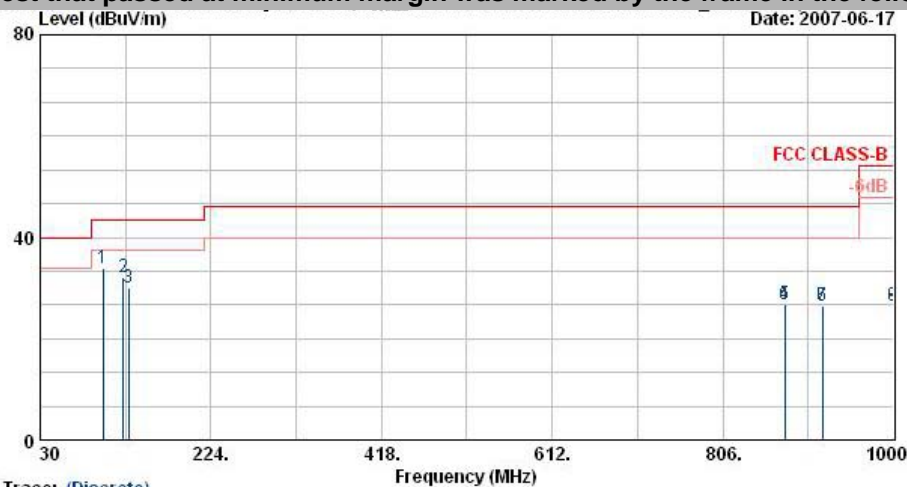
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2384.00	50.86	-23.14	74.00	52.29	30.25	3.75	35.44	100	0	Peak
2	2384.00	40.53	-13.47	54.00	41.97	30.25	3.75	35.44	100	24	Average
3 X	2437.00	102.43			103.81	30.28	3.82	35.47	100	0	Peak
4 @	2437.00	99.02			100.40	30.28	3.82	35.47	100	24	Average
5	2498.00	50.89	-23.11	74.00	52.23	30.30	3.88	35.53	100	0	Peak
6	2498.00	40.25	-13.75	54.00	41.60	30.30	3.88	35.53	100	24	Average
7	8847.00	57.20	-16.80	74.00	45.95	38.71	8.90	36.36	100	0	Peak
8	8847.00	45.94	-8.06	54.00	34.69	38.71	8.90	36.36	100	278	Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

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



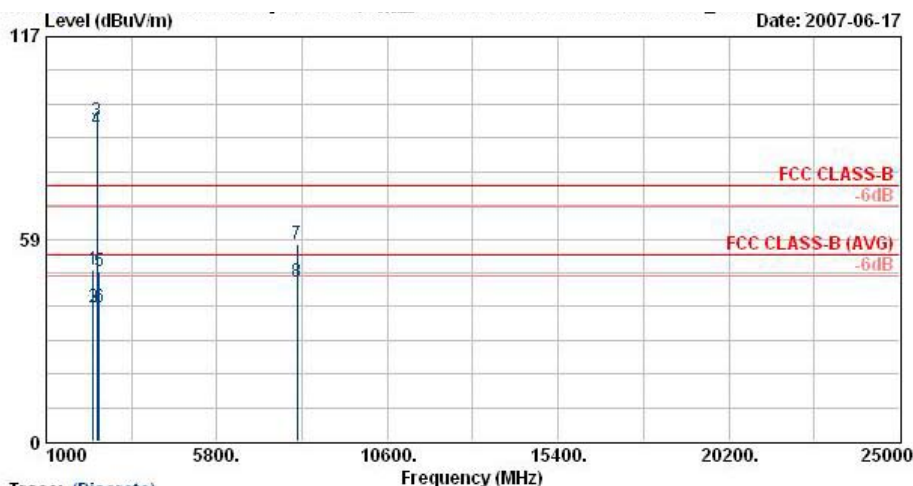
Site : 03CH06-HY
Condition : LF-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch06;2437MHz
Data Rate : 11
Plane : E2

	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	101.28	33.79	-9.71	43.50	52.81	11.07	1.07	31.15	---	Peak
2	124.23	32.15	-11.35	43.50	49.39	12.64	1.20	31.08	---	Peak
3	130.44	29.99	-13.51	43.50	48.15	11.70	1.24	31.09	---	Peak
4	876.80	26.83	-19.17	46.00	33.14	20.36	3.72	30.40	---	Peak
5	876.80	26.83	-19.17	46.00	33.14	20.36	3.72	30.40	---	Peak
6	918.80	26.36	-19.64	46.00	32.18	20.66	3.86	30.34	---	Peak
7	918.80	26.36	-19.64	46.00	32.18	20.66	3.86	30.34	---	Peak
8	1000.00	26.48	-27.52	54.00	31.49	21.24	4.02	30.27	---	Peak
9	1000.00	26.48	-27.52	54.00	31.49	21.24	4.02	30.27	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch06;2437MHz
Data Rate : 11
Plane : E2

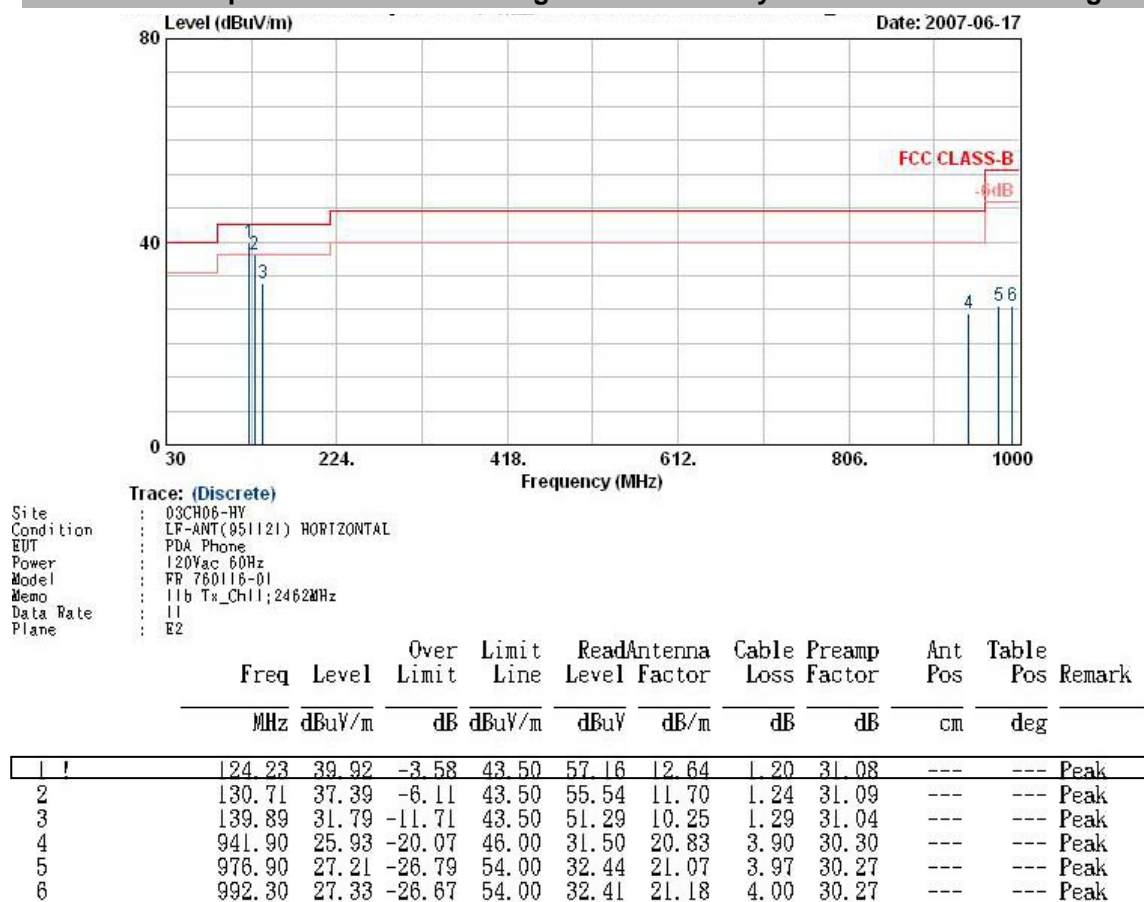
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV		dB		deg	
1	2324.00	49.43	-24.57	74.00	50.91	30.23	3.69	35.40	100	0 Peak
2	2324.00	38.62	-15.38	54.00	40.11	30.23	3.69	35.40	100	328 Average
3 X	2437.00	92.81			94.19	30.28	3.82	35.47	100	0 Peak
4 @	2437.00	90.12			91.50	30.28	3.82	35.47	100	328 Average
5	2500.00	49.08	-24.92	74.00	50.43	30.30	3.88	35.53	100	0 Peak
6	2500.00	38.68	-15.32	54.00	40.03	30.30	3.88	35.53	100	328 Average
7	8052.00	57.16	-16.84	74.00	45.64	39.56	7.85	35.89	100	0 Peak
8	8052.00	46.22	-7.78	54.00	34.70	39.56	7.85	35.89	100	39 Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 3
- Polarization : Horizontal

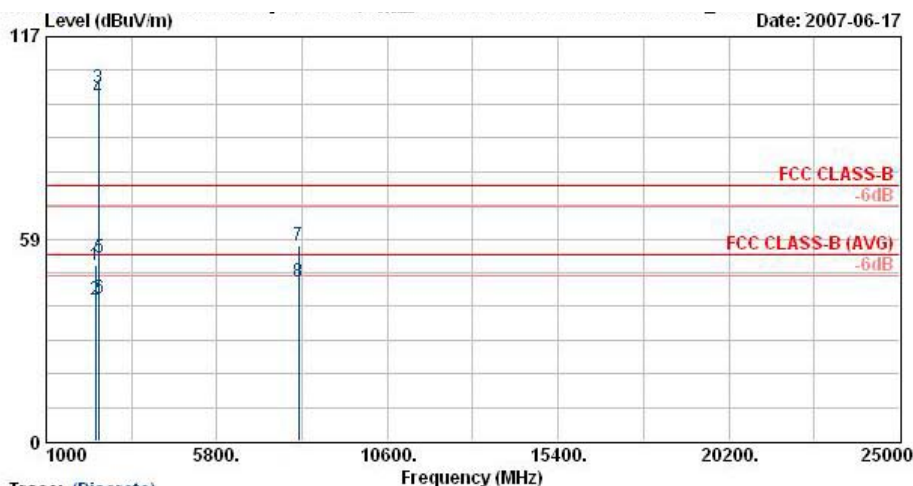
The test that passed at minimum margin was marked by the frame in the following table.





FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch11;2462MHz
Data Rate : 11
Plane : E2

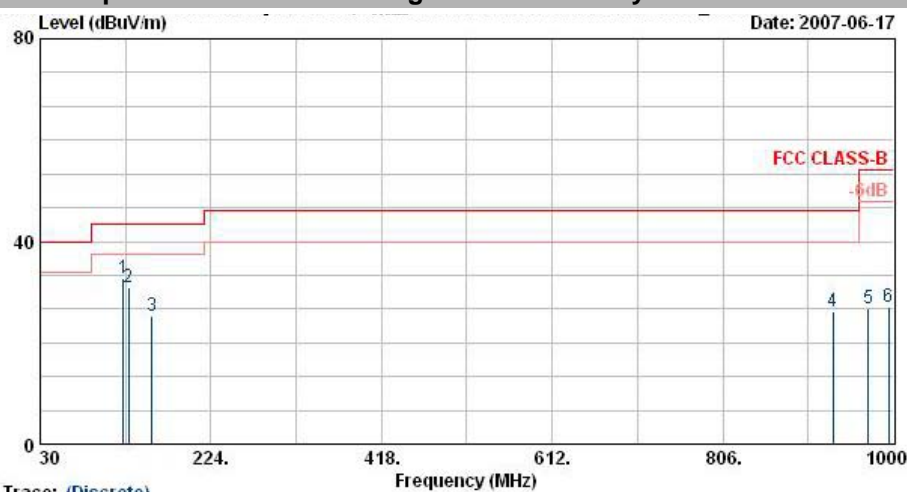
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2384.00	51.06	-22.94	74.00	52.49	30.25	3.75	35.44	100	0	Peak
2	2384.00	40.71	-13.29	54.00	42.15	30.25	3.75	35.44	100	25	Average
3 X	2462.00	102.24			103.61	30.29	3.84	35.49	100	0	Peak
4 @	2462.00	99.13			100.50	30.29	3.84	35.49	100	25	Average
5	2499.46	52.97	-21.03	74.00	54.32	30.30	3.88	35.53	100	0	Peak
6	2499.46	41.28	-12.72	54.00	42.63	30.30	3.88	35.53	100	25	Average
7	8091.00	56.68	-17.32	74.00	45.16	39.53	7.89	35.90	100	0	Peak
8	8091.00	46.21	-7.79	54.00	34.69	39.53	7.89	35.90	100	234	Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

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



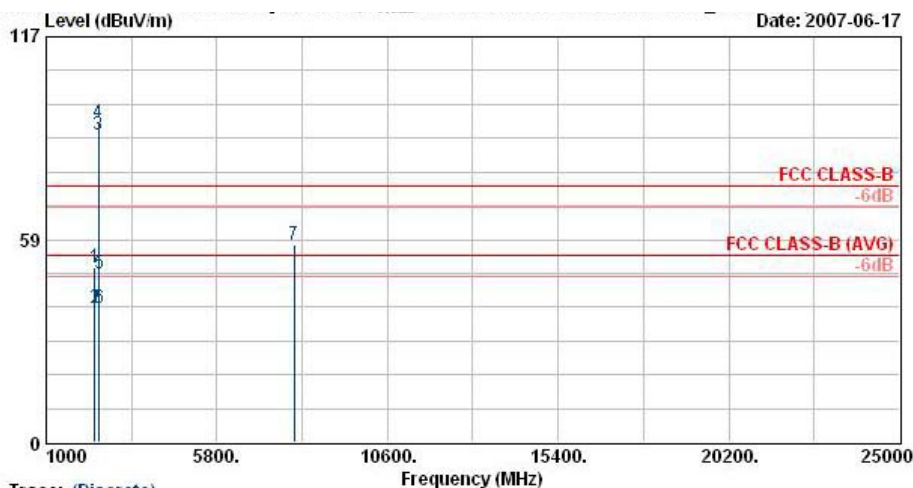
Trace: (Discrete)
Site : 03CH06-HY
Condition : LP-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch11; 2462MHz
Data Rate : 11
Plane : E2

	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		deg	
1	124.23	32.78	-10.72	43.50	50.02	12.64	1.20	31.08	---	Peak
2	130.44	30.85	-12.65	43.50	49.01	11.70	1.24	31.09	---	Peak
3	156.63	25.34	-18.16	43.50	44.80	10.21	1.38	31.04	---	Peak
4	931.40	26.25	-19.75	46.00	31.93	20.75	3.88	30.31	---	Peak
5	971.30	26.68	-27.32	54.00	31.96	21.03	3.96	30.28	---	Peak
6	994.40	26.95	-27.05	54.00	32.01	21.20	4.01	30.27	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11b Tx_Ch11;2462MHz
Data Rate : 11
Plane : E2

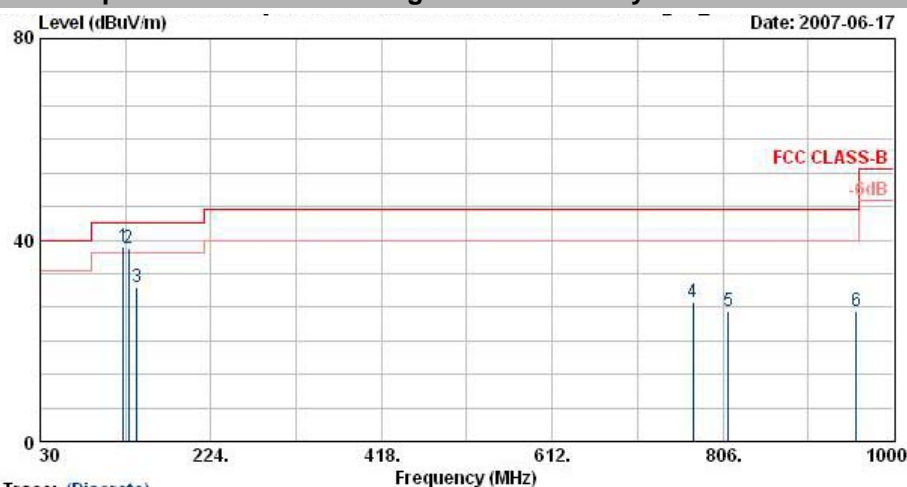
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2368.00	50.57	-23.43	74.00	52.03	30.24	3.73	35.44	100	0 Peak
2	2368.00	38.72	-15.28	54.00	40.18	30.24	3.73	35.44	100	346 Average
3 @	2462.00	88.66			90.03	30.29	3.84	35.49	100	346 Average
4 X	2462.00	92.07			93.44	30.29	3.84	35.49	100	0 Peak
5	2492.15	48.91	-25.09	74.00	50.26	30.30	3.88	35.53	100	0 Peak
6	2492.15	38.89	-15.11	54.00	40.24	30.30	3.88	35.53	100	346 Average
7	7977.00	57.11	-16.89	74.00	45.62	39.55	7.78	35.85	---	--- Peak

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 4
- Polarization : Horizontal

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

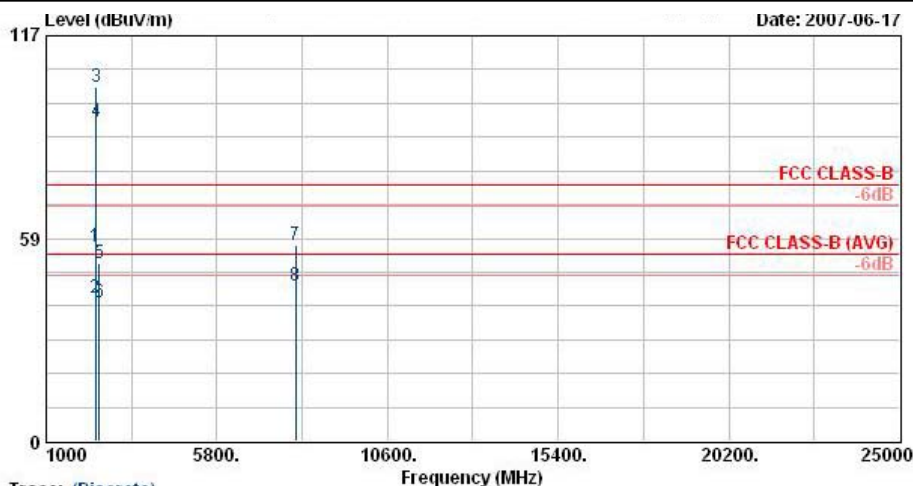


	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	124.23	38.69	-4.81	43.50	55.93	12.64	1.20	31.08	119	228 QP
2 !	130.44	38.44	-5.06	43.50	56.60	11.70	1.24	31.09	---	---
3	139.89	30.50	-13.00	43.50	50.01	10.25	1.29	31.04	---	---
4	771.80	27.59	-18.41	46.00	35.18	19.56	3.36	30.51	---	---
5	812.40	26.01	-19.99	46.00	33.12	19.91	3.46	30.47	---	---
6	957.30	26.01	-19.99	46.00	31.42	20.94	3.93	30.28	---	---



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11g Tx_Ch01;2412MHz
Data Rate : 54
Plane : E2

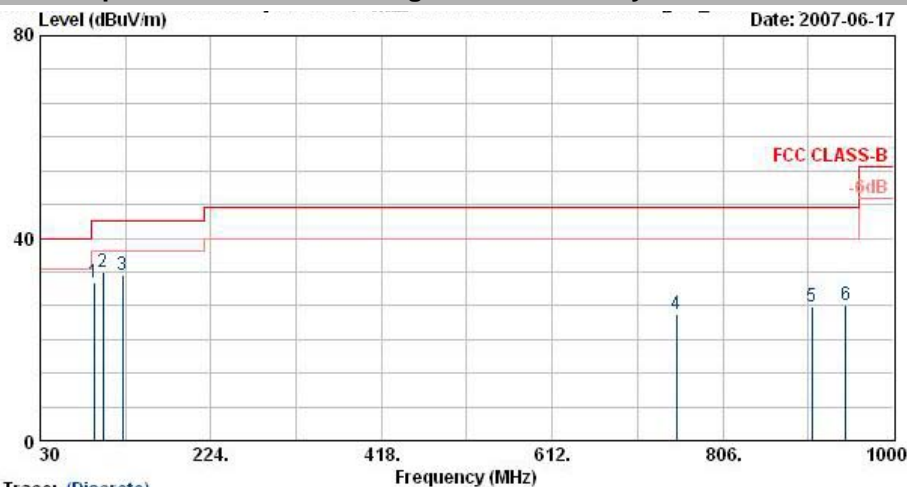
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2390.00	56.25	-17.75	74.00	57.02	30.26	4.42	35.46	100	0 Peak
2	2390.00	41.18	-12.82	54.00	41.95	30.26	4.42	35.46	100	173 Average
3 @	2412.00	102.09			102.86	30.27	4.42	35.46	100	0 Peak
4 @	2412.00	92.33			93.10	30.27	4.42	35.46	100	173 Average
5	2498.00	51.39	-22.61	74.00	52.11	30.30	4.51	35.53	100	0 Peak
6	2498.00	40.18	-13.82	54.00	40.90	30.30	4.51	35.53	100	173 Average
7	8007.00	56.59	-17.41	74.00	45.04	39.60	7.81	35.86	100	0 Peak
8	8007.00	44.76	-9.24	54.00	33.21	39.60	7.81	35.86	100	221 Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

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



Trace: (Discrete)

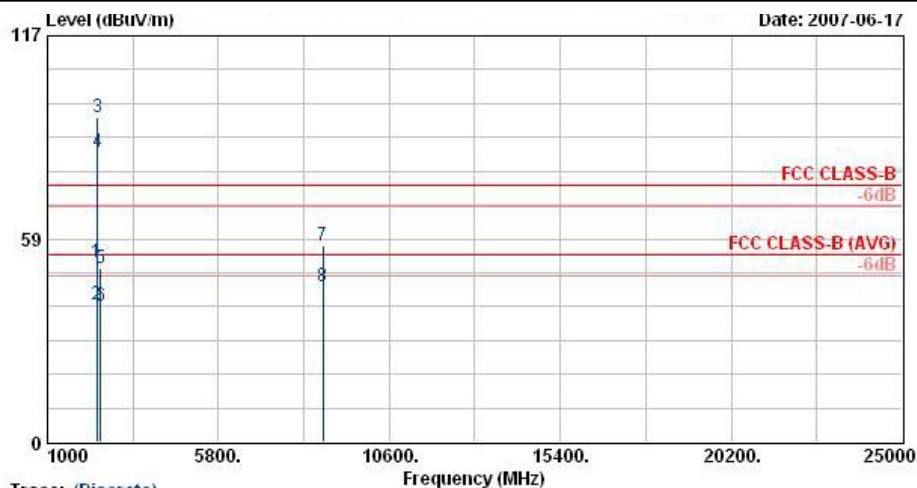
Site : 03CH06-HY
Condition : LR-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11g Tx_Ch01;2412MHz
Data Rate : 54
Plane : E2

	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	91.29	31.22	-12.28	43.50	52.08	9.23	1.04	31.12	---	Peak
2	101.28	33.25	-10.25	43.50	52.26	11.07	1.07	31.15	115	Peak
3	123.69	32.62	-10.88	43.50	49.86	12.64	1.20	31.08	---	Peak
4	752.90	24.93	-21.07	46.00	32.74	19.38	3.33	30.53	---	Peak
5	906.90	26.33	-19.67	46.00	32.27	20.58	3.83	30.36	---	Peak
6	945.40	26.78	-19.22	46.00	32.30	20.85	3.91	30.29	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HV
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11g Tx_Ch01;2412MHz
Data Rate : 54
Plane : E2

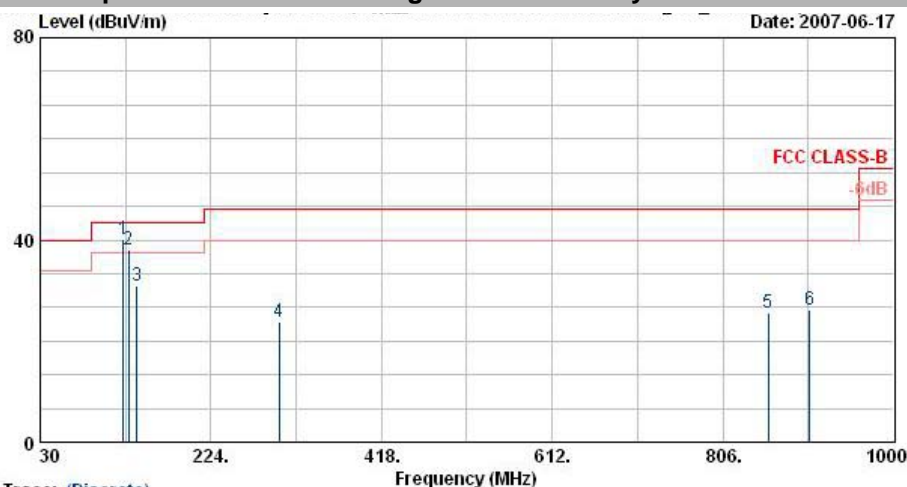
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2390.00	51.95	-22.05	74.00	52.72	30.26	4.42	35.46	100	0 Peak
2	2390.00	39.60	-14.40	54.00	40.37	30.26	4.42	35.46	100	178 Average
3 @	2412.00	93.52			94.29	30.27	4.42	35.46	100	0 Peak
4 @	2412.00	83.57			84.34	30.27	4.42	35.46	100	178 Average
5	2484.00	50.14	-23.86	74.00	50.86	30.29	4.49	35.51	100	0 Peak
6	2484.00	39.28	-14.72	54.00	40.01	30.29	4.49	35.51	100	178 Average
7	8736.00	56.60	-17.40	74.00	45.28	38.87	8.72	36.27	100	0 Peak
8	8736.00	44.81	-9.19	54.00	33.49	38.87	8.72	36.27	110	154 Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 5
- Polarization : Horizontal

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



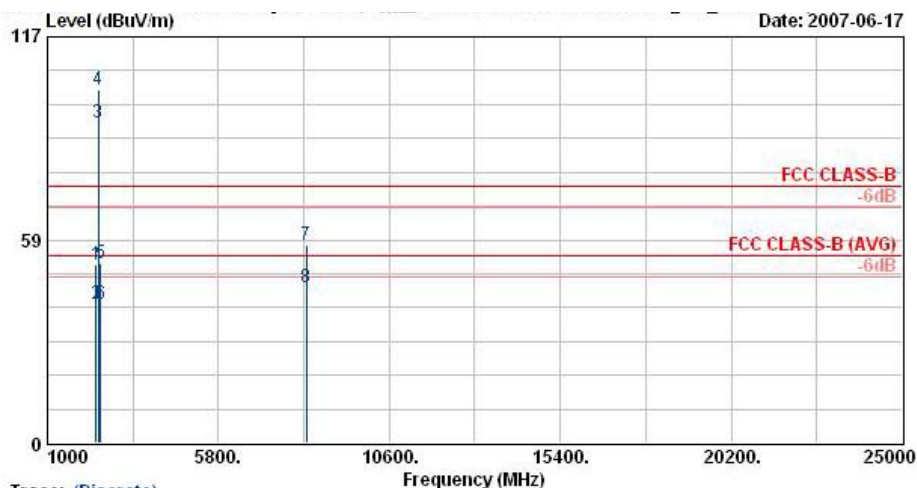
Trace: (Discrete)
Site : 03CH06-WY
Condition : LF-ANT(951121) HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11g Tx_Ch06;2437MHz
Data Rate : 54
Plane : E2

	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	124.23	40.08	-3.42	43.50	57.32	12.64	1.20	31.08	110	105	Peak
2	130.44	38.16	-5.34	43.50	56.32	11.70	1.24	31.09	---	---	Peak
3	139.89	30.97	-12.53	43.50	50.47	10.25	1.29	31.04	---	---	Peak
4	301.40	23.88	-22.12	46.00	39.60	13.26	1.95	30.93	---	---	Peak
5	857.90	25.67	-20.33	46.00	32.21	20.23	3.65	30.42	---	---	Peak
6	904.80	26.18	-19.82	46.00	32.15	20.56	3.83	30.36	---	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HV
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11g Tx_Ch06;2437MHz
Data Rate : 54
Plane : E2

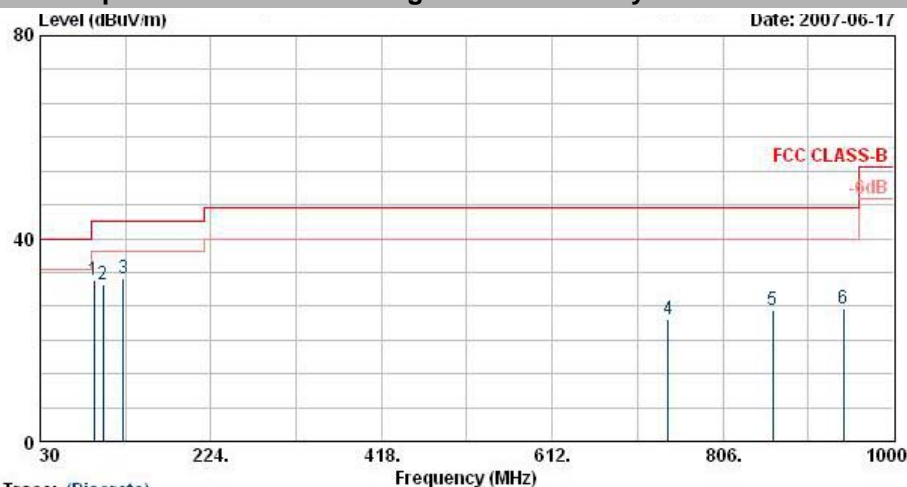
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2364.00	51.51	-22.49	74.00	52.30	30.24	4.38	35.42	100	0 Peak
2	2364.00	39.94	-14.06	54.00	40.74	30.24	4.38	35.42	100	173 Average
3 @	2437.00	92.37			93.12	30.28	4.45	35.47	100	173 Average
4 X	2437.00	101.63			102.39	30.27	4.45	35.47	100	0 Peak
5	2494.00	51.64	-22.36	74.00	52.36	30.30	4.51	35.53	100	0 Peak
6	2494.00	39.90	-14.10	54.00	40.62	30.30	4.51	35.53	100	173 Average
7	8271.00	56.79	-17.21	74.00	45.30	39.38	8.10	36.00	100	0 Peak
8	8271.00	44.86	-9.14	54.00	33.38	39.38	8.10	36.00	100	18 Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

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



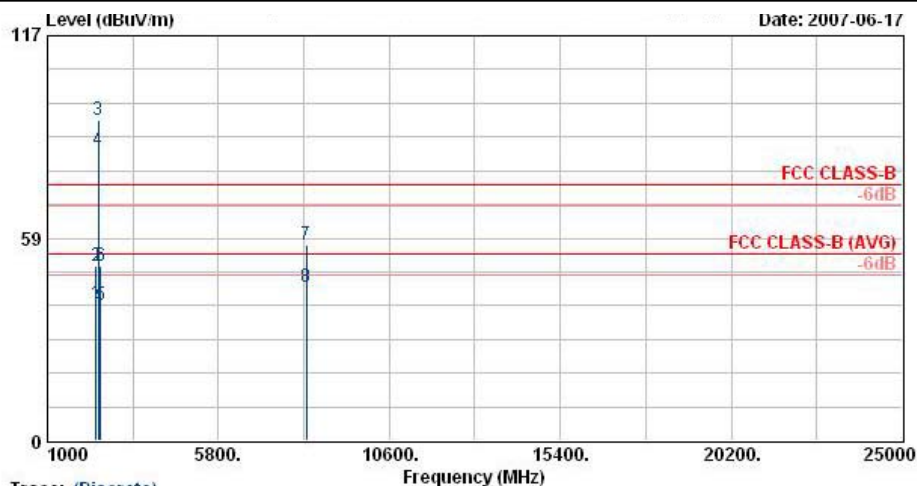
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-ANT(951121) VERTICAL
 EUT : PDA Phone
 Power : 120Vac 60Hz
 Model : FR 760116-01
 Memo : 11g Tx_Ch06;2437MHz
 Data Rate : 54
 Plane : E2

	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	91.29	31.72	-11.78	43.50	52.58	9.23	1.04	31.12	---	---	Peak
2	101.28	30.98	-12.52	43.50	49.99	11.07	1.07	31.15	---	---	Peak
3	124.23	32.00	-11.50	43.50	49.24	12.64	1.20	31.08	121	38	Peak
4	743.80	24.15	-21.85	46.00	32.07	19.30	3.32	30.54	---	---	Peak
5	862.80	25.79	-20.21	46.00	32.27	20.27	3.67	30.41	---	---	Peak
6	943.30	26.04	-19.96	46.00	31.59	20.84	3.91	30.29	---	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11g Tx_Ch06;2437MHz
Data Rate : 54
Plane : E2

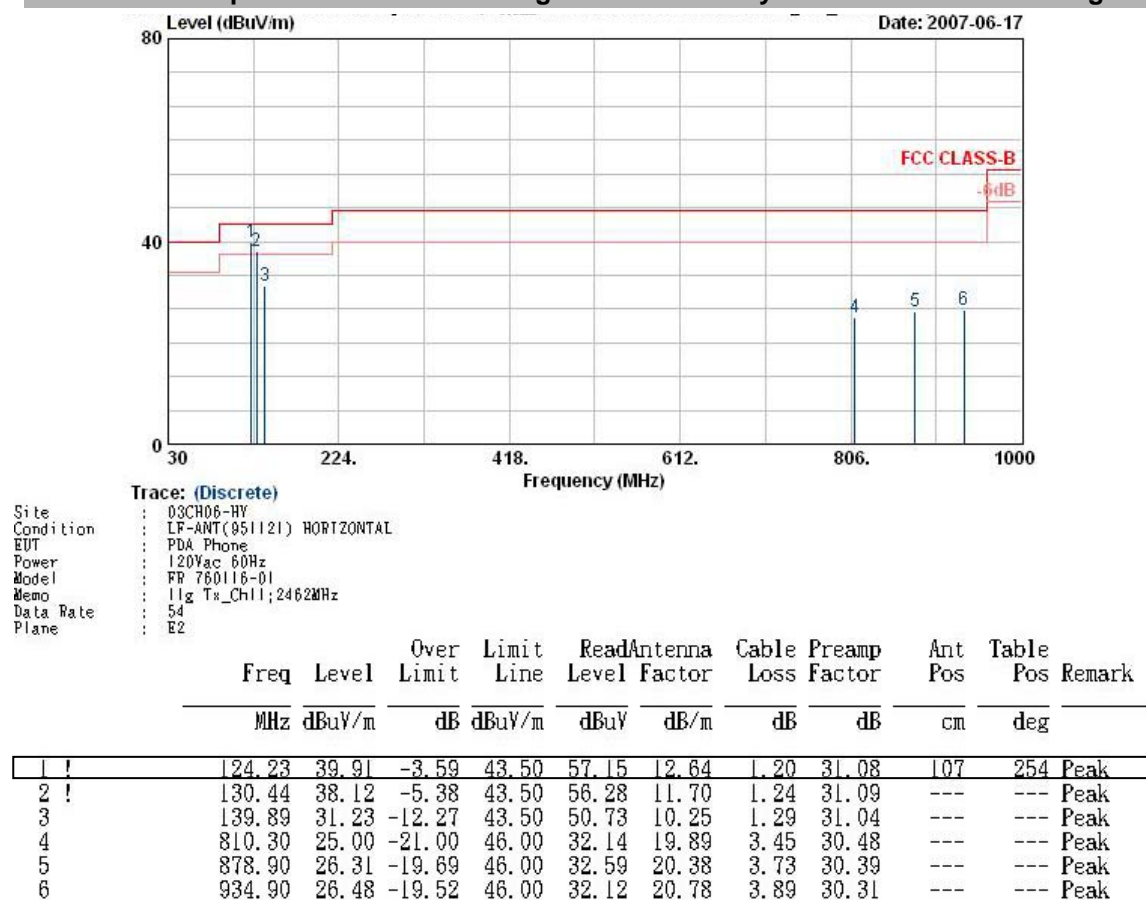
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2358.00	39.38	-14.62	54.00	40.18	30.24	4.38	35.42	100	178	Average
2	2358.00	50.46	-23.54	74.00	51.25	30.24	4.38	35.42	---	---	Peak
3 X	2437.00	92.56			93.31	30.27	4.45	35.47	100	0	Peak
4 @	2437.00	83.81			84.56	30.28	4.45	35.47	100	178	Average
5	2484.00	39.28	-14.72	54.00	40.01	30.29	4.49	35.51	100	178	Average
6	2484.00	50.42	-23.58	74.00	51.15	30.29	4.49	35.51	100	0	Peak
7	8262.00	56.37	-17.63	74.00	44.89	39.39	8.08	36.00	100	0	Peak
8	8262.00	44.52	-9.48	54.00	33.04	39.39	8.08	36.00	100	249	Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 6
- Polarization : Horizontal

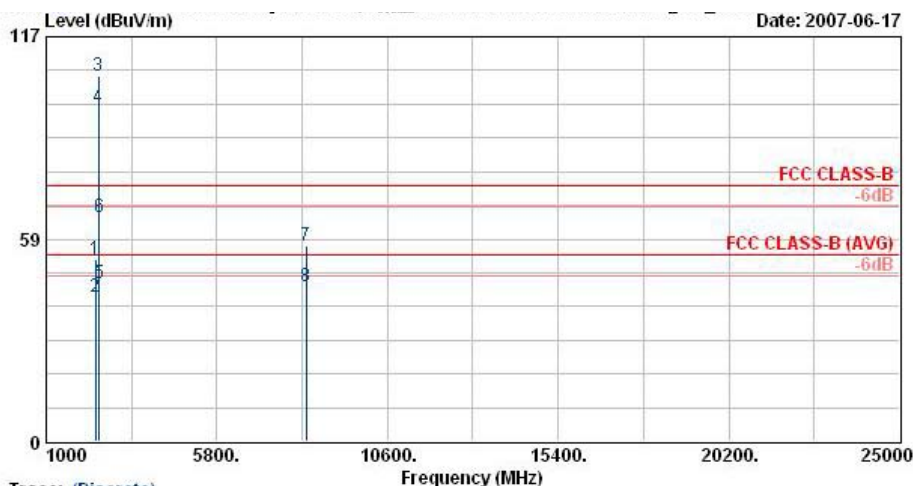
The test that passed at minimum margin was marked by the frame in the following table.





FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11g Tx_Ch11; 2462MHz
Data Rate : 54
Plane : E2

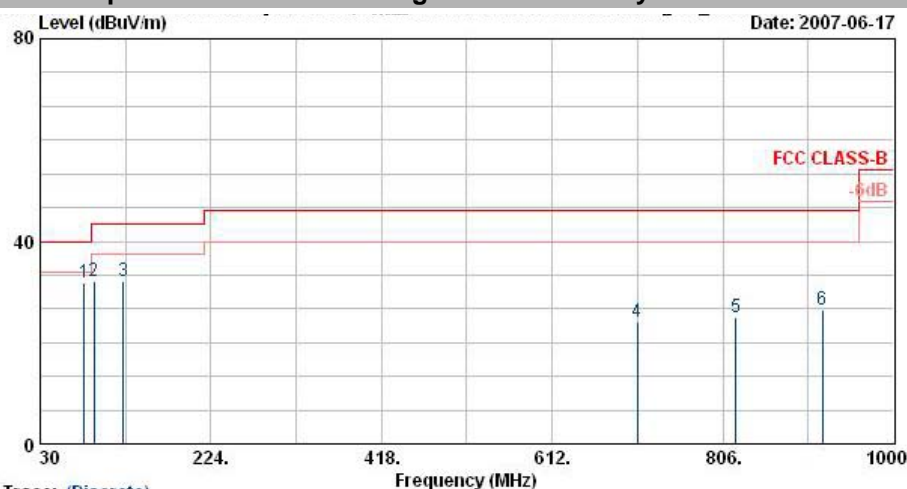
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV		dB		deg	
1	2384.00	52.68	-21.32	74.00	53.47	30.25	4.40	35.44	100	0 Peak
2	2384.00	41.84	-12.16	54.00	42.62	30.25	4.40	35.44	100	172 Average
3 X	2462.00	105.80			106.53	30.29	4.47	35.49	100	0 Peak
4 @	2462.00	96.55			97.29	30.29	4.47	35.49	100	172 Average
5	2483.50	45.48	-8.52	54.00	46.21	30.29	4.49	35.51	100	172 Average
6	2483.50	64.63	-9.37	74.00	65.36	30.29	4.49	35.51	100	0 Peak
7	8322.00	56.52	-17.48	74.00	45.06	39.34	8.14	36.02	100	0 Peak
8	8322.00	44.73	-9.27	54.00	33.27	39.34	8.14	36.02	100	72 Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

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



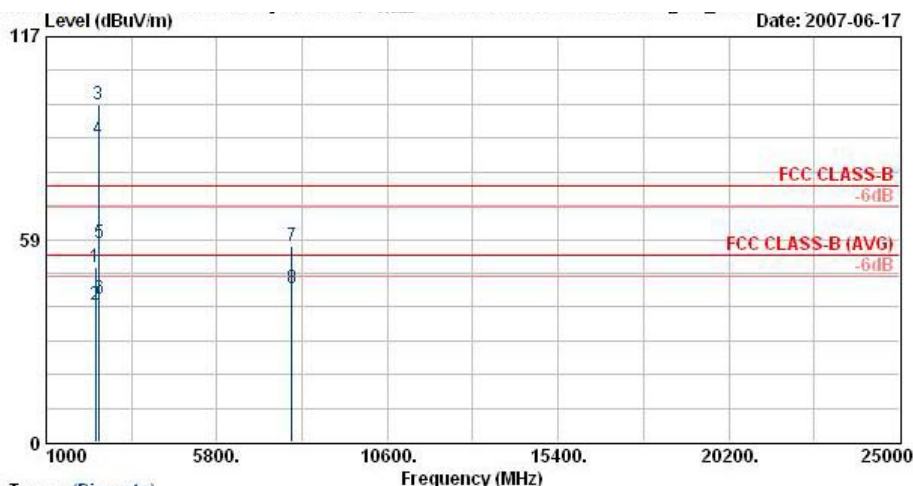
Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LP-ANT(951121) VERTICAL
 EUT : PDA Phone
 Power : 120Vac 60Hz
 Model : FR 760116-01
 Memo : 11g Tx_Ch11; 2462MHz
 Data Rate : 54
 Plane : E2

	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	79.68	31.89	-8.11	40.00	54.55	7.46	0.97	31.09	115	341	Peak
2	91.29	32.25	-11.25	43.50	53.11	9.23	1.04	31.12	---	---	Peak
3	124.23	32.21	-11.29	43.50	49.45	12.64	1.20	31.08	---	---	Peak
4	708.80	23.94	-22.06	46.00	32.29	18.97	3.26	30.58	---	---	Peak
5	820.80	24.91	-21.09	46.00	31.92	19.96	3.49	30.47	---	---	Peak
6	918.80	26.32	-19.68	46.00	32.14	20.66	3.86	30.34	---	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HV
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : 11g Tx_Ch11;2462MHz
Data Rate : 54
Plane : E2

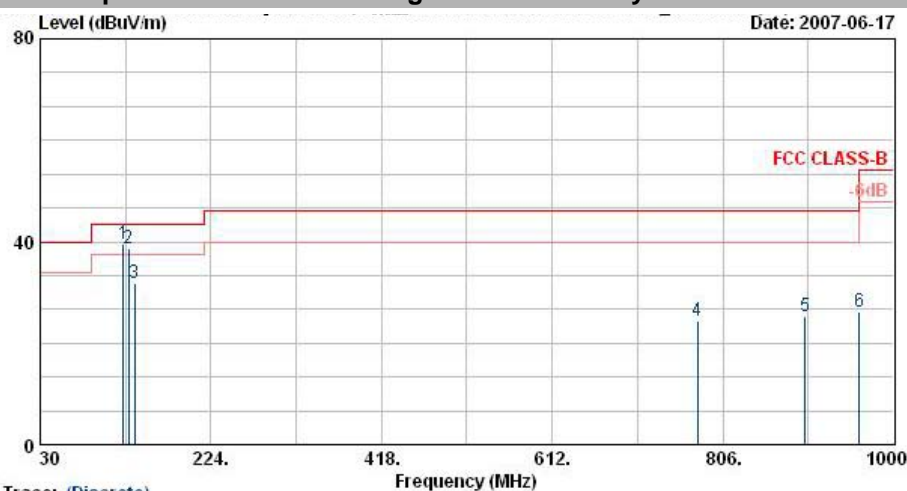
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2388.00	50.25	-23.75	74.00	51.03	30.26	4.40	35.44	100	0 Peak
2	2388.00	39.68	-14.32	54.00	40.46	30.26	4.40	35.44	100	261 Average
3 X	2462.00	97.28			98.02	30.29	4.47	35.49	100	0 Peak
4 @	2462.00	87.51			88.25	30.29	4.47	35.49	100	261 Average
5	2483.50	57.63	-16.37	74.00	58.36	30.29	4.49	35.51	100	0 Peak
6	2483.50	41.46	-12.54	54.00	42.19	30.29	4.49	35.51	100	261 Average
7	7911.00	56.72	-17.28	74.00	45.35	39.48	7.76	35.88	100	0 Peak
8	7911.00	44.51	-9.49	54.00	33.14	39.48	7.76	35.88	100	269 Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 7
- Polarization : Horizontal

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



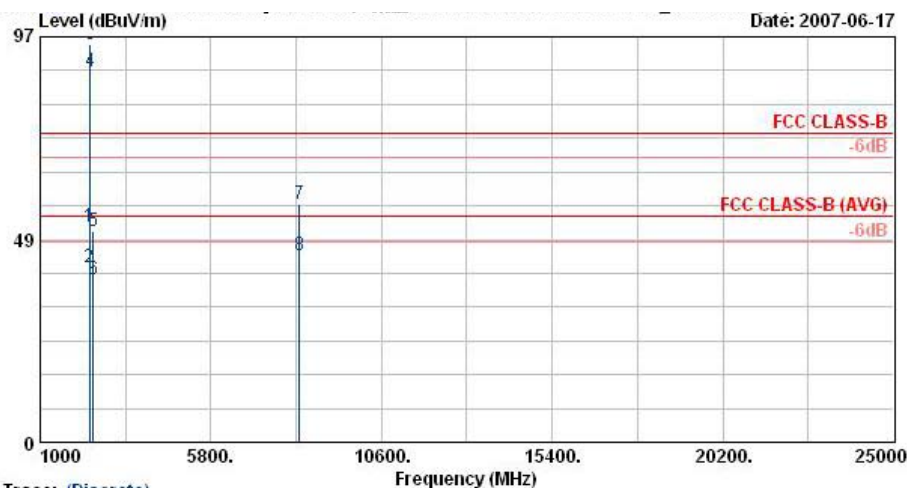
Site : 03CH06-HY
Condition : LF-ANT(951121) HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : BT Tx_Ch00;2402MHz
Data Rate : DH5
Plane : E2

	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	124.23	39.51	-3.99	43.50	56.75	12.64	1.20	31.08	121	237 QP
2	130.44	38.65	-4.85	43.50	56.81	11.70	1.24	31.09	---	Peak
3	137.19	31.84	-11.66	43.50	51.04	10.57	1.28	31.06	---	Peak
4	777.40	24.31	-21.69	46.00	31.84	19.61	3.37	30.51	---	Peak
5	899.90	25.35	-20.65	46.00	31.37	20.53	3.82	30.37	---	Peak
6	960.80	26.14	-27.86	54.00	31.51	20.96	3.94	30.28	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : BT Tx_Ch00;2402MHz
Data Rate : DH5
Plane : E2

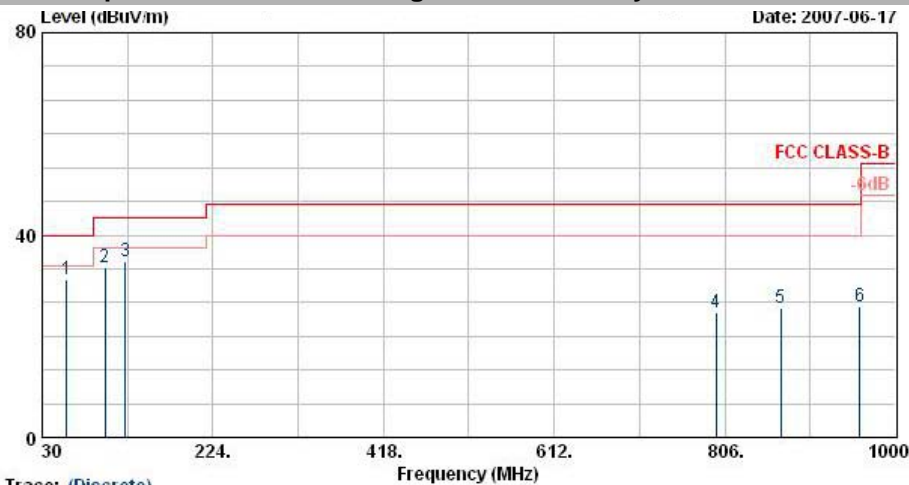
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2386.00	51.56	-22.44	74.00	52.34	30.26	4.40	35.44	100	0 Peak
2	2386.00	41.72	-12.28	54.00	42.50	30.26	4.40	35.44	100	5 Average
3 X	2402.00	95.37			96.15	30.26	4.42	35.46	100	0 Peak
4 @	2402.00	88.76			89.53	30.26	4.42	35.46	100	5 Average
5	2484.00	50.53	-23.47	74.00	51.26	30.29	4.49	35.51	100	0 Peak
6	2484.00	39.09	-14.91	54.00	39.82	30.29	4.49	35.51	100	5 Average
7	8292.00	56.98	-17.02	74.00	45.50	39.37	8.12	36.01	100	0 Peak
8	8292.00	44.75	-9.25	54.00	33.27	39.37	8.12	36.01	100	314 Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

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



Trace: (Discrete)

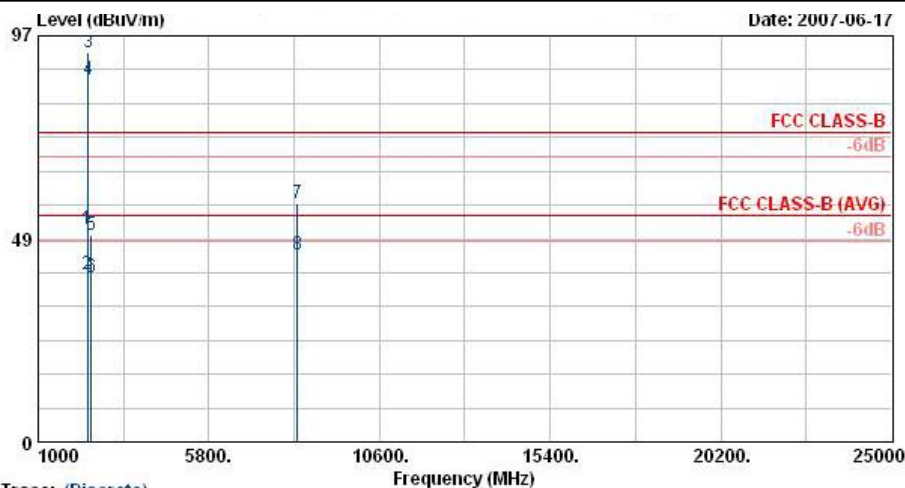
Site : 03CH06-WY
Condition : LF-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : ET Tx_Ch00;2402MHz
Data Rate : DH5
Plane : E2

	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	57.54	31.22	-8.78	40.00	54.51	7.06	0.84	31.18	---	Peak
2	101.28	33.47	-10.03	43.50	52.49	11.07	1.07	31.15	---	Peak
3	124.23	34.86	-8.64	43.50	52.10	12.64	1.20	31.08	117	308 Peak
4	796.30	24.70	-21.30	46.00	32.01	19.78	3.40	30.49	---	Peak
5	869.80	25.66	-20.34	46.00	32.05	20.32	3.70	30.41	---	Peak
6	959.40	25.79	-20.21	46.00	31.18	20.95	3.94	30.28	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : D3CH06-HV
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : BT Tx_Ch00;2402MHz
Data Rate : DH5
Plane : E2

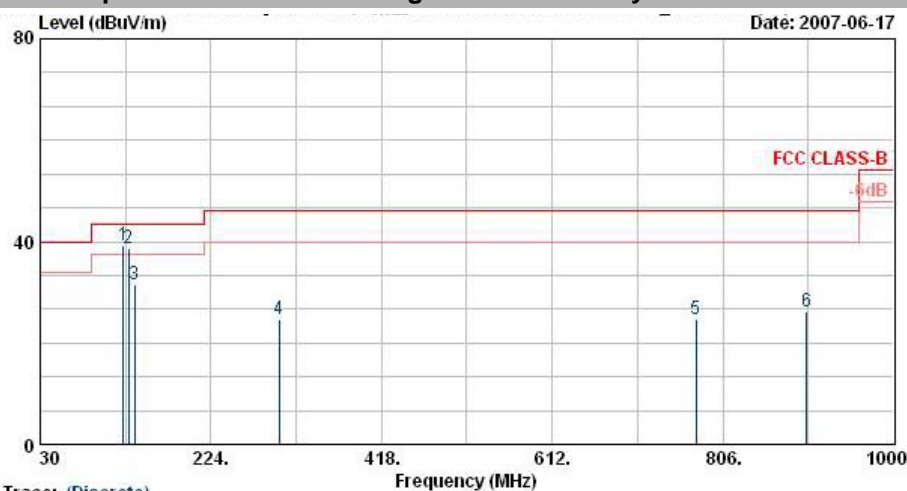
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2386.00	50.84	-23.16	74.00	51.62	30.26	4.40	35.44	100	0 Peak
2	2386.00	40.13	-13.87	54.00	40.91	30.26	4.40	35.44	108	210 Average
3 X	2402.00	92.88			93.66	30.26	4.42	35.46	100	0 Peak
4 @	2402.00	86.40			87.17	30.26	4.42	35.46	108	210 Average
5	2494.00	49.42	-24.58	74.00	50.13	30.30	4.51	35.53	100	0 Peak
6	2494.00	39.15	-14.85	54.00	39.87	30.30	4.51	35.53	108	210 Average
7	8292.00	56.98	-17.02	74.00	45.50	39.37	8.12	36.01	100	0 Peak
8	8292.00	44.75	-9.25	54.00	33.27	39.37	8.12	36.01	100	314 Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 8
- Polarization : Horizontal

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



Trace: (Discrete)

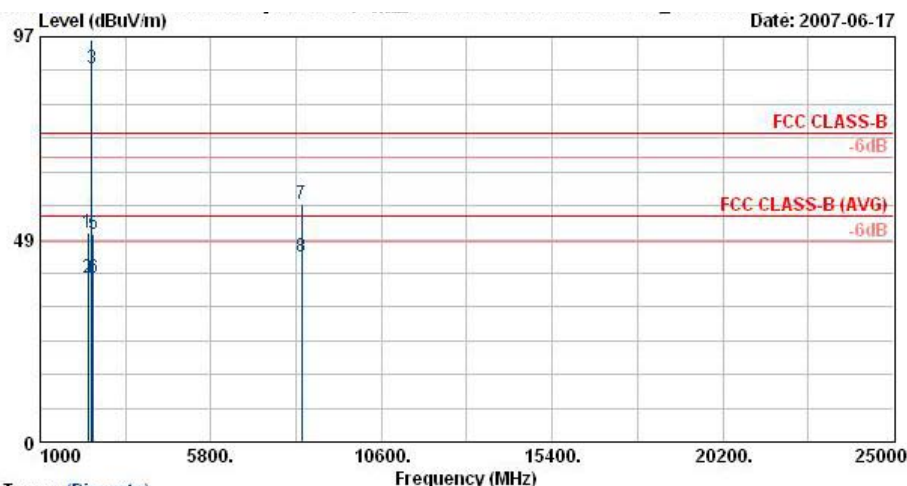
Site : 03CH06-WY
Condition : LF-ANT(951121) HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : ET Tx_Ch39;2441MHz
Data Rate : DH5
Plane : E2

	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 @	124.23	39.36	-4.14	43.50	56.60	12.64	1.20	31.08	125	258	QP
2 !	130.44	38.52	-4.98	43.50	56.68	11.70	1.24	31.09	---	---	Peak
3	137.19	31.41	-12.09	43.50	50.62	10.57	1.28	31.06	---	---	Peak
4	301.40	24.68	-21.32	46.00	40.40	13.26	1.95	30.93	---	---	Peak
5	775.30	24.80	-21.20	46.00	32.35	19.59	3.37	30.51	---	---	Peak
6	901.30	26.05	-19.95	46.00	32.06	20.54	3.82	30.37	---	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : BT Tx_Ch39;2441MHz
Data Rate : DH5
Plane : E2

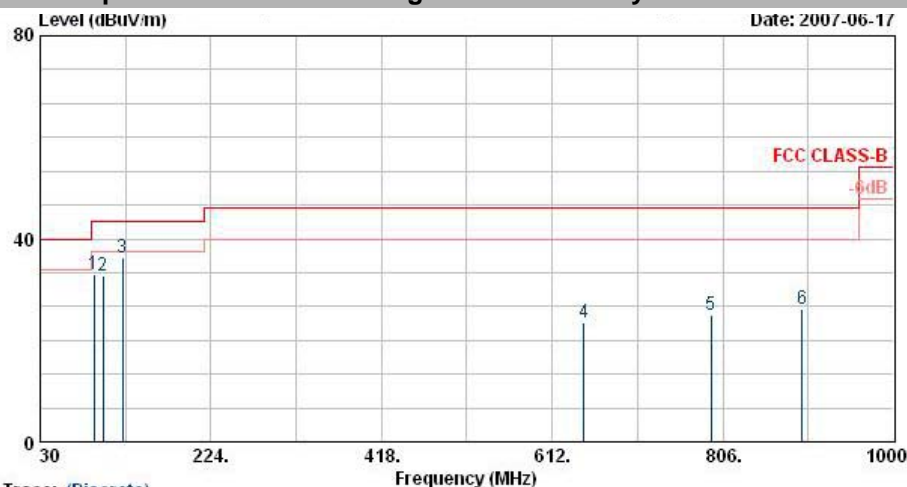
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2344.00	50.05	-23.95	74.00	50.85	30.24	4.38	35.42	100	0 Peak
2	2344.00	39.32	-14.68	54.00	40.12	30.24	4.38	35.42	100	9 Average
3 @	2441.00	89.50			90.25	30.28	4.47	35.49	100	9 Average
4 @	2441.00	96.31			97.06	30.28	4.45	35.47	100	0 Peak
5	2494.00	49.88	-24.12	74.00	50.60	30.30	4.51	35.53	100	0 Peak
6	2494.00	39.18	-14.82	54.00	39.90	30.30	4.51	35.53	100	9 Average
7	8346.00	56.94	-17.06	74.00	45.47	39.32	8.18	36.04	100	0 Peak
8	8346.00	44.38	-9.62	54.00	32.91	39.32	8.18	36.04	114	325 Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

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



Trace: (Discrete)

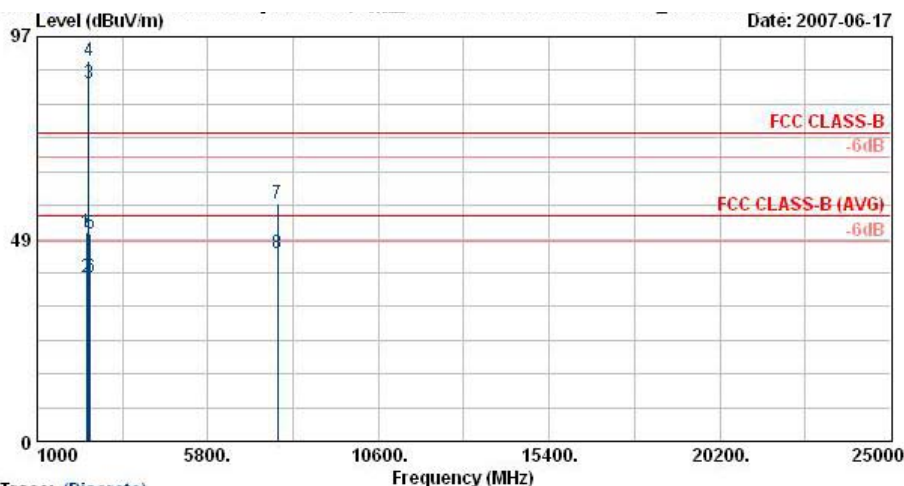
Site : 03CH06-HY
Condition : LF-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : BT Tx_Ch39;2441MHz
Data Rate : DH5
Plane : E2

	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	91.29	32.98	-10.52	43.50	53.83	9.23	1.04	31.12	---	---	Peak
2	101.28	32.64	-10.86	43.50	51.65	11.07	1.07	31.15	---	---	Peak
3	123.69	36.35	-7.15	43.50	53.59	12.64	1.20	31.08	104	312	QP
4	647.90	23.36	-22.64	46.00	32.24	18.67	3.10	30.65	---	---	Peak
5	792.80	25.08	-20.92	46.00	32.44	19.75	3.40	30.50	---	---	Peak
6	896.40	26.32	-19.68	46.00	32.39	20.50	3.80	30.37	---	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HV
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : BT Tx_Ch39;2441MHz
Data Rate : DH5
Plane : E2

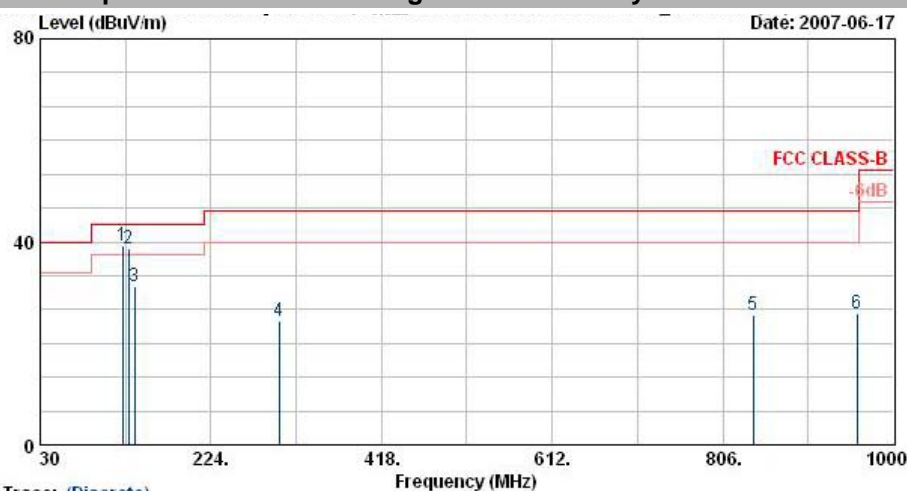
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2390.00	50.06	-23.94	74.00	50.84	30.26	4.42	35.46	100	0 Peak
2	2390.00	39.35	-14.65	54.00	40.12	30.26	4.42	35.46	108	353 Average
3 @	2441.00	85.70			86.45	30.28	4.47	35.49	108	353 Average
4 @	2441.00	91.17			91.92	30.28	4.45	35.47	100	0 Peak
5	2494.00	49.71	-24.29	74.00	50.43	30.30	4.51	35.53	100	0 Peak
6	2494.00	39.17	-14.83	54.00	39.89	30.30	4.51	35.53	108	353 Average
7	7752.00	57.15	-16.85	74.00	46.15	39.25	7.70	35.95	100	0 Peak
8	7752.00	45.09	-8.91	54.00	34.09	39.25	7.70	35.95	108	229 Average

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 9
- Polarization : Horizontal

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



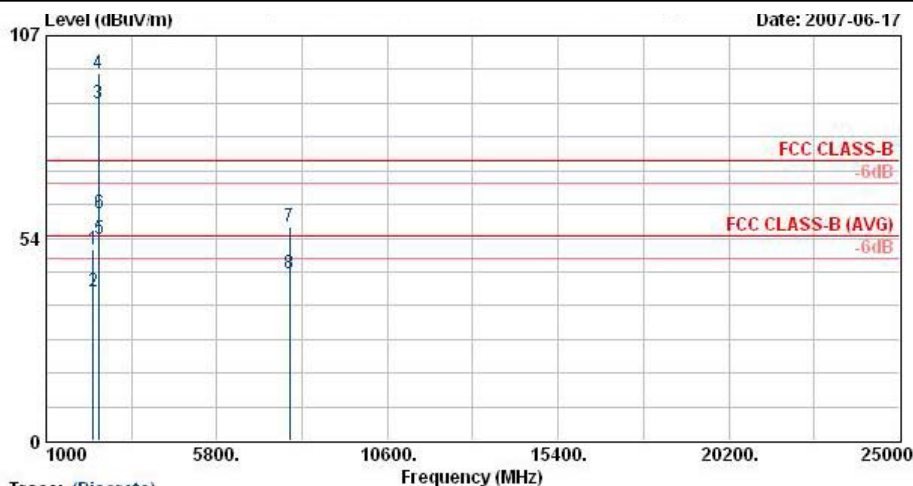
Trace: (Discrete)
Site : 03CH06-HY
Condition : LF-ANT(951121) HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : BT Tx_Ch78;2460MHz
Data Rate : DH5
Plane : E2

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 !	123.69	39.18	-4.32	43.50	56.42	12.64	1.20	31.08	131	253 QP	
2 !	130.44	38.63	-4.87	43.50	56.79	11.70	1.24	31.09	---	---	Peak
3	137.19	31.15	-12.35	43.50	50.35	10.57	1.28	31.06	---	---	Peak
4	301.40	24.33	-21.67	46.00	40.05	13.26	1.95	30.93	---	---	Peak
5	840.40	25.70	-20.30	46.00	32.47	20.10	3.57	30.44	---	---	Peak
6	958.70	26.01	-19.99	46.00	31.41	20.94	3.94	30.28	---	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : ET Tx_Ch78; 2480MHz
Data Rate : DH5
Plane : E2

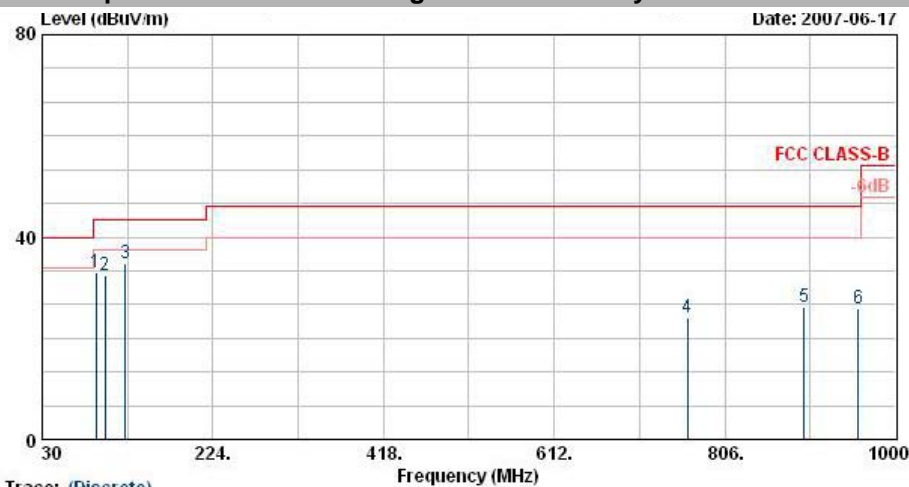
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2328.00	50.53	-23.47	74.00	51.34	30.23	4.36	35.40	100	0	Peak
2	2328.00	39.26	-14.74	54.00	40.07	30.23	4.36	35.40	100	9	Average
3 @	2480.00	89.03			89.76	30.29	4.49	35.51	100	9	Average
4 X	2480.00	96.98			97.70	30.29	4.49	35.51	100	0	Peak
5 !	2483.50	53.46	-0.54	54.00	54.19	30.29	4.49	35.51	100	9	Average
6	2483.50	59.92	-14.08	74.00	60.65	30.29	4.49	35.51	100	0	Peak
7	7842.00	56.51	-17.49	74.00	45.33	39.37	7.73	35.91	100	0	Peak
8	7842.00	44.32	-9.68	54.00	33.13	39.37	7.73	35.91	112	274	Average

Remark: #3 and #4 Fundamental Signal



- Polarization : Vertical

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



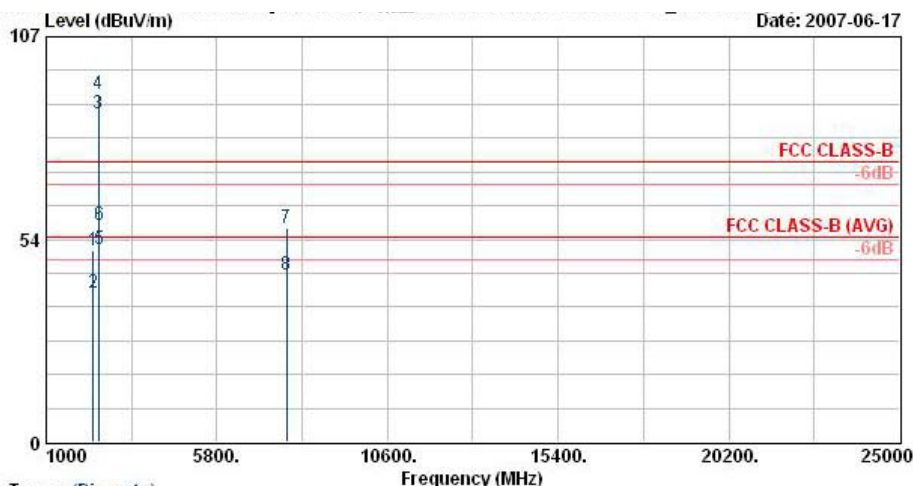
Site : 03CH06-WY
Condition : LF-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : ET Tx_Ch78;2480MHz
Data Rate : DH5
Plane : E2

	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	91.29	33.05	-10.45	43.50	53.91	9.23	1.04	31.12	---	Peak
2	101.28	32.32	-11.18	43.50	51.34	11.07	1.07	31.15	---	Peak
3	124.23	34.68	-8.82	43.50	51.92	12.64	1.20	31.08	105	271 Peak
4	763.40	24.09	-21.91	46.00	31.78	19.48	3.35	30.52	---	Peak
5	896.40	26.17	-19.83	46.00	32.24	20.50	3.80	30.37	---	Peak
6	957.30	25.90	-20.10	46.00	31.31	20.94	3.93	30.28	---	Peak



FCC TEST REPORT

Report No. : FR760116-01



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac 60Hz
Model : FR 760116-01
Memo : BT Tx_Ch78;2480MHz
Data Rate : DH5
Plane : E2

	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	dB	cm	deg
1	2328.00	50.42	-23.58	74.00	51.23	30.23	4.36	35.40	100	0 Peak
2	2328.00	39.25	-14.75	54.00	40.06	30.23	4.36	35.40	100	213 Average
3 @	2480.00	86.52			87.25	30.29	4.49	35.51	100	213 Average
4 X	2480.00	92.01			92.73	30.29	4.49	35.51	100	0 Peak
5 !	2483.50	50.89	-3.11	54.00	51.62	30.29	4.49	35.51	100	213 Average
6	2483.50	57.43	-16.57	74.00	58.16	30.29	4.49	35.51	100	0 Peak
7	7761.00	56.67	-17.33	74.00	45.64	39.27	7.71	35.95	100	0 Peak
8	7761.00	43.99	-10.01	54.00	32.96	39.27	7.71	35.95	100	58 Average

Remark: #3 and #4 Fundamental Signal



5.12 Antenna Requirements

5.12.1 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.

5.12.2 Antenna Connected Construction

The antennas used in this product are PIFAs for both WLAN and BT without connector and it is considered to meet antenna requirement of FCC.

5.12.3 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	100132	9kHz – 2.75GHz	Jul. 04, 2006	Jul. 04, 2007	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/004	9kHz – 30MHz	Mar. 30, 2007	Mar. 30, 2008	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/009	9kHz – 30MHz	Mar. 30, 2007	Mar. 30, 2008	Conduction (CO01-HY)
EMI Filter	LINDGREN	LRE-2060	1004	< 450Hz	N/A	N/A	Conduction (CO01-HY)
EMI Filter	LINDGREN	N6006	201052	0 – 60Hz	N/A	N/A	Conduction (CO01-HY)
RF Cable-CON	Suhner Switzerland	RG223/U	CB029	9kHz – 30MHz	Dec. 04, 2006	Dec. 04, 2007	Conduction (CO01-HY)
Isolation Transformer	Erika Fiedler OHG	D-65396 Walluf	58	45MHz-2.15GHz	N/A	N/A	Conduction (CO01-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. 13, 2006	Jul. 12, 2007	Radiation (03CH06-HY)
Controller	INN-CO	CO2000	N/A	N/A	N/A	N/A	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	10094	1G~18G	Dec. 26, 2006	Dec. 25, 2007	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)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	INN-CO	MM3000	114/8000604/L	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	106656	WCDMA	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Amplifier	MITEQ	AMF-6F-260400	923364	26.5 GHz - 40 GHz	Jan. 22, 2007	Jan. 22, 2008	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	0.11	Normal(k=2)	0.06
Antenna factor calibration	0.91	Normal(k=2)	0.46
Cable loss calibration	0.12	Normal(k=2)	0.06
Pre Amplifier Gain calibration	0.15	Normal(k=2)	0.08
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.52	Rectangular	0.88
Mismatch	+0.45/-0.48	U-shaped	0.33
combined standard uncertainty Uc(y)	1.30		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.60		

The measured result is : y dBuV ± U dB

for a level of confidence of approximately 95% , (k= 2)

**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				