



FCC TEST REPORT

for

47 CFR Part 15 Subpart C

Equipment : 2G/3GPDA phone with GPRS, EDGE, Wi-Fi & Bluetooth

Trade Name : O₂

Model No. : Apollo

FCC ID : HFS-APOLLO

Filing Type : Certification

Applicant : Quanta Computer Inc.

No. 211, Wen Hwa 2nd Road, Kuei Shan Hsiang Tao Yuan Shen, Taiwan

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- The data shown in this test report were carried out on Oct. 28, 2006 at **Sporton International Inc. LAB.**
- Report No.: FR682525, Report Version: Rev. 02

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History of this test report

Report Issue Date: Nov. 09, 2006

Report No.	Description



1. General Description of Equipment under Test

1.1 Applicant

Quanta Computer Inc.

No. 211, Wen Hwa 2nd Road, Kuei Shan Hsiang Tao Yuan Shen, Taiwan

1.2 Manufacturer

Quanta Computer Inc.

No. 211, Wen Hwa 2nd Road, Kuei Shan Hsiang Tao Yuan Shen, Taiwan

1.3 Basic Description of Equipment under Test

Equipment	: 2G/3GPDA phone with GPRS, EDGE, Wi-Fi & Bluetooth
Trade Name	: O ₂
Model No.	: Apollo
FCC ID	: HFS-APOLLO
Power Supply Type	: Switching, From battery 3.7V
AC Power Cord	: AC 120V, Wall-mount, 1.8 meter, 2 pin
Adapter	: Phihong, PSC05R-050PH
Battery	: Foxlink, XP-09
Earphone	: Merry, 85C212005001

**1.4 Feature of Equipment under Test**

Product Feature & Specification	
1. DUT Type	2G/3GPDA phone with GPRS, EDGE, Wi-Fi & Bluetooth
2. Trade Name	O ₂
3. Model Name	Apollo
4. FCC ID	HFS-APOLLO
5. Tx Frequency	PCS1900 : 1850 ~1910 MHz Bluetooth : 2400~2483.5 MHz 802.11b / 802.11g : 2400 ~ 2483.5 MHz
6. Rx Frequency	PCS1900 : 1930 ~ 1990 MHz Bluetooth : 2400~2483.5 MHz 802.11b / 802.11g : 2400 ~ 2483.5 MHz
7. Number of Channels	Bluetooth : 79 WLAN : 11
8. Carrier Frequency of Each Channel	Bluetooth : 2402+n*1 MHz; n=0~78 WLAN : 2412+(n-1)*5 MHz; n=1~11
9. Antenna Connector	N/A
10. Antenna Type	PCS1900 : Fixed Internal Bluetooth : Dipole Antenna 802.11b / 802.11g : PIFA Antenna
11. Antenna Gain	Bluetooth : 0 dBi 802.11b / 802.11g : -3dBi
12. HW Version	D2D
13. SW Version	AL1-KLRNC-2.3.25CT-20060922-1
14. Maximum Output Power	Bluetooth : -0.19 dBm 802.11b : 12.98 dBm 802.11g : 16 dBm
15. Type of Modulation	PCS1900 : GMSK Bluetooth : GFSK 802.11b / 802.11g : DSSS / OFDM
16. DUT Stage	Production Unit
17. Application Type	Certification

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.

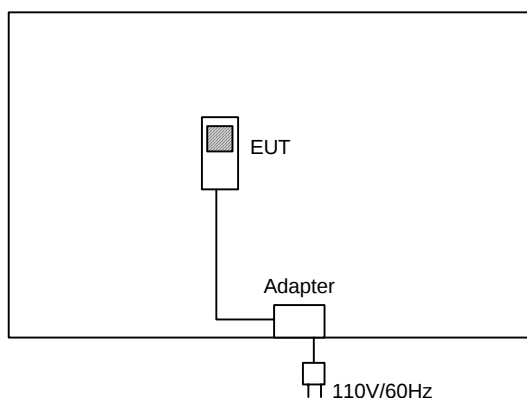
2.2 Test Mode

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

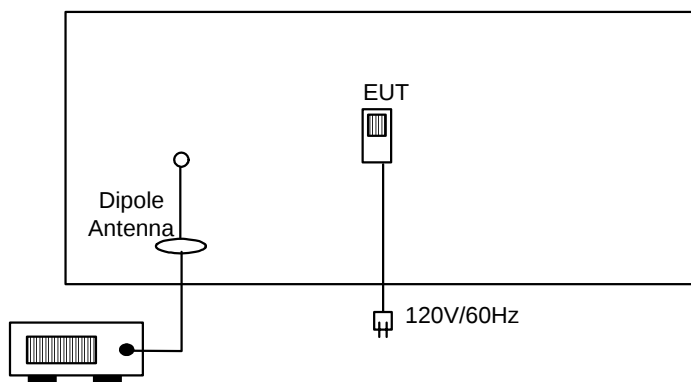
2.3 Connection Diagram of Test System

<Radiated Emission>

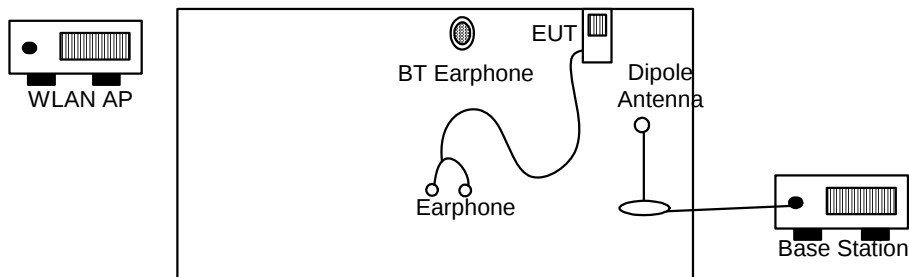
Mode 1-6



Mode 7-9



<Conducted Emission>



2.4 Ancillary Equipment List

Item	Asset	Model Name	Power Cord
1.	Base Station (R&S)	CMU 200	N/A
5.	WLAN AP (SMC)	SMC-100	N/A
6.	BT Base Station (Anritus)	8852A	N/A



3. RF Utility

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



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. Conducted Emission : from 150 KHz to 30 MHz
- b. Radiated Emission : 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

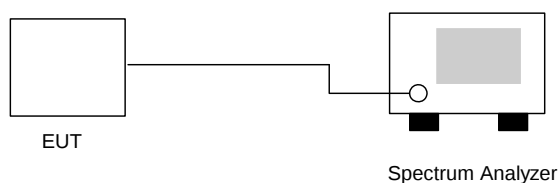
5.2.1 Measuring Instruments :

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 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°C
- Relative Humidity : 46%
- Test Enginner : James

802.11b

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	10.20	> 0.5MHz	Mode 1
06	2437	9.84	> 0.5MHz	Mode 2
11	2462	10.24	> 0.5MHz	Mode 3

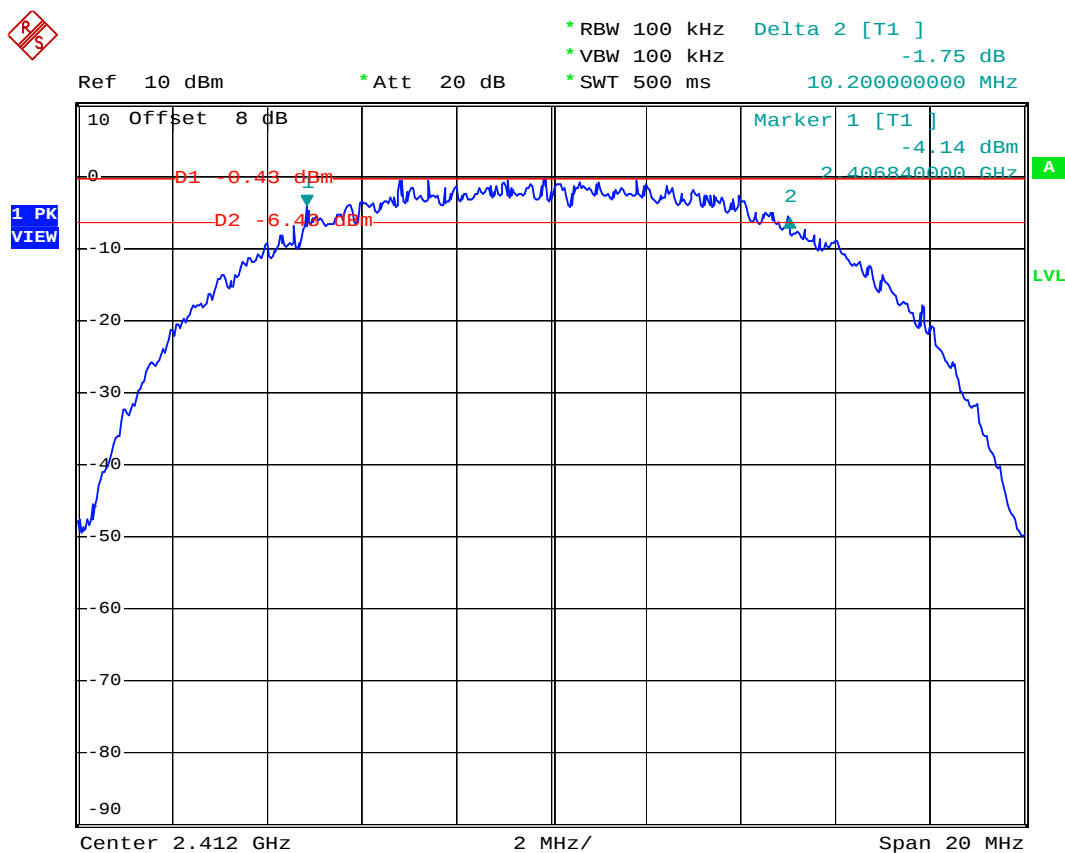
802.11g

Channel	Frequency (MHz)	6dB Emission bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
01	2412	16.36	> 0.5MHz	Mode 4
06	2437	16.36	> 0.5MHz	Mode 5
11	2462	16.32	> 0.5MHz	Mode 6



5.2.5 6dB Bandwidth

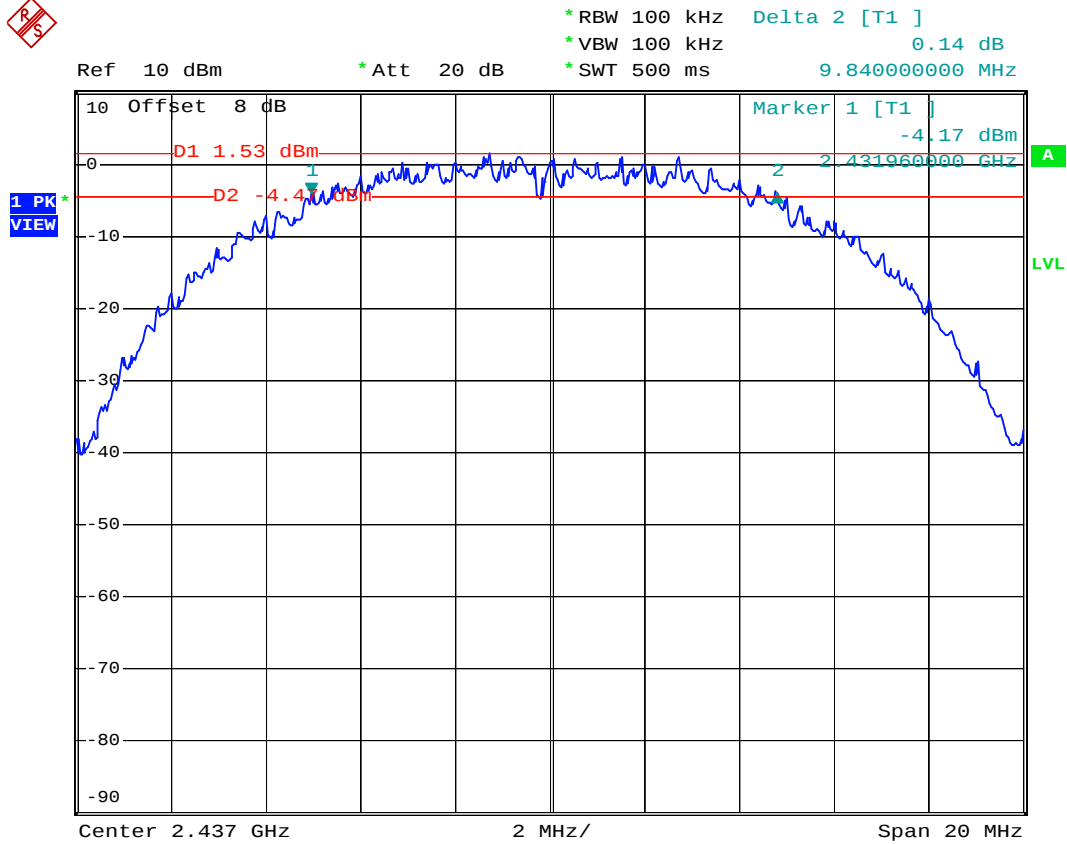
Mode 1



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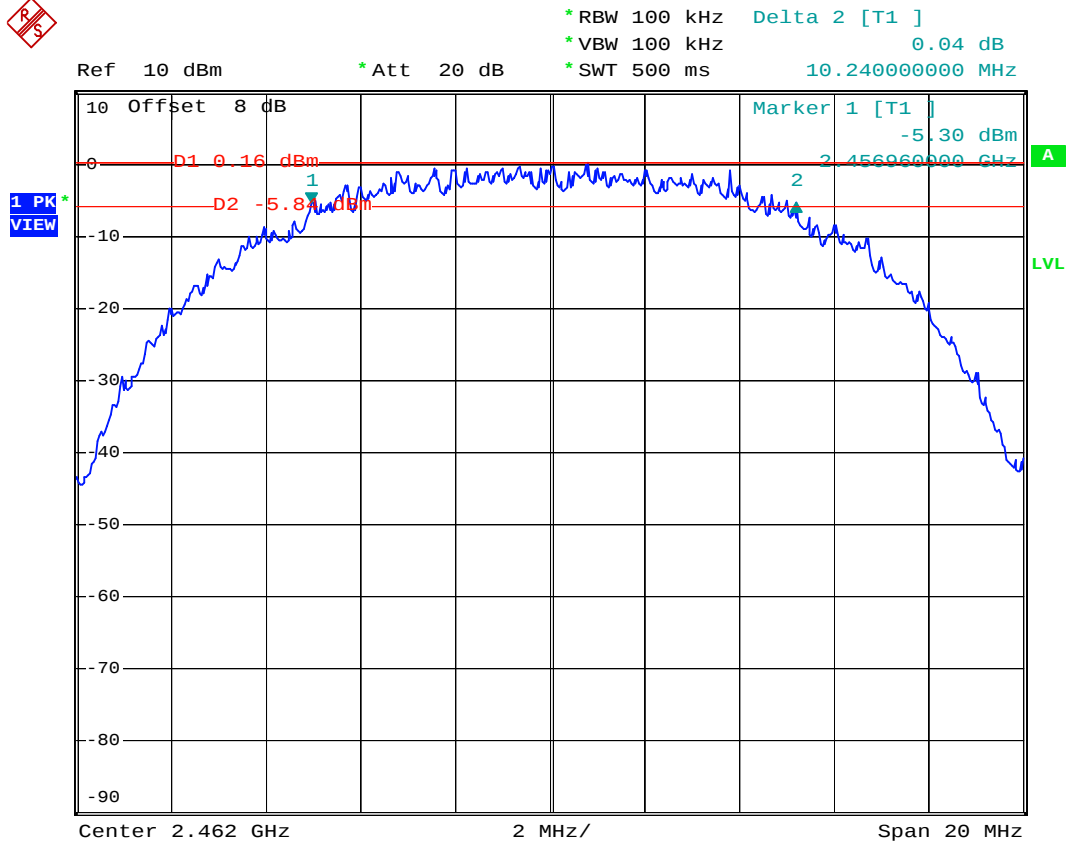
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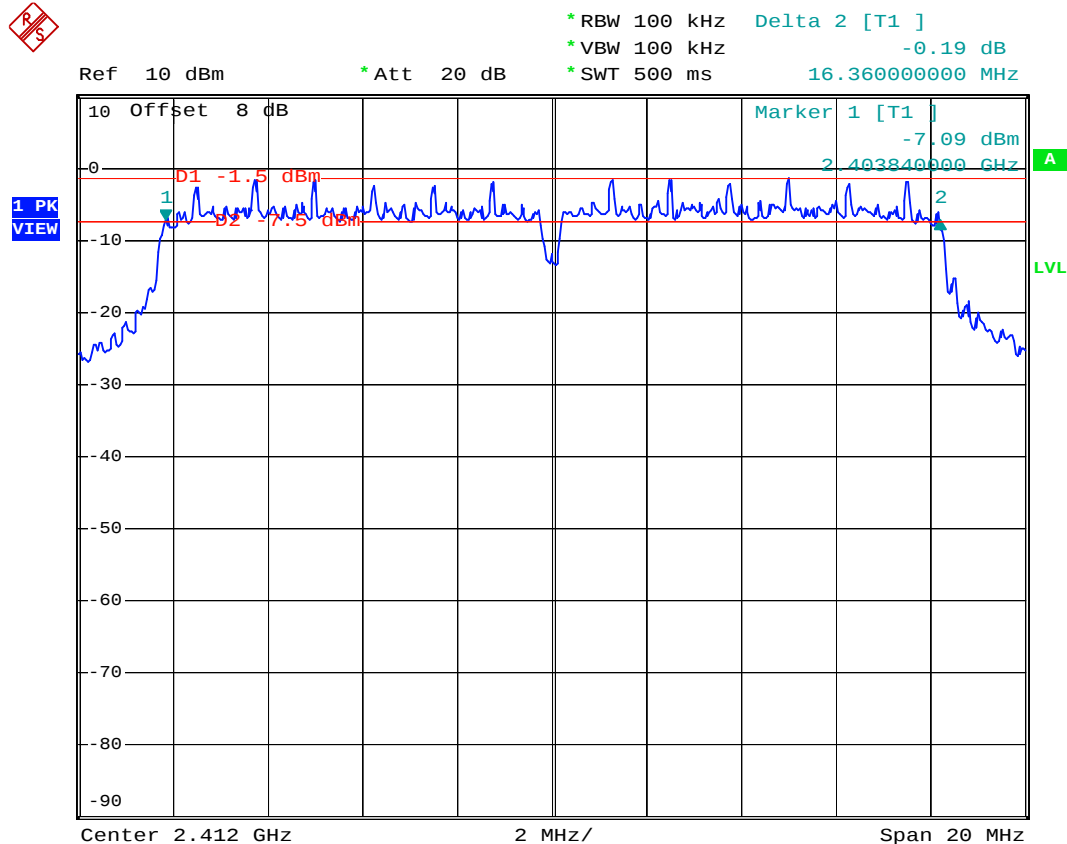
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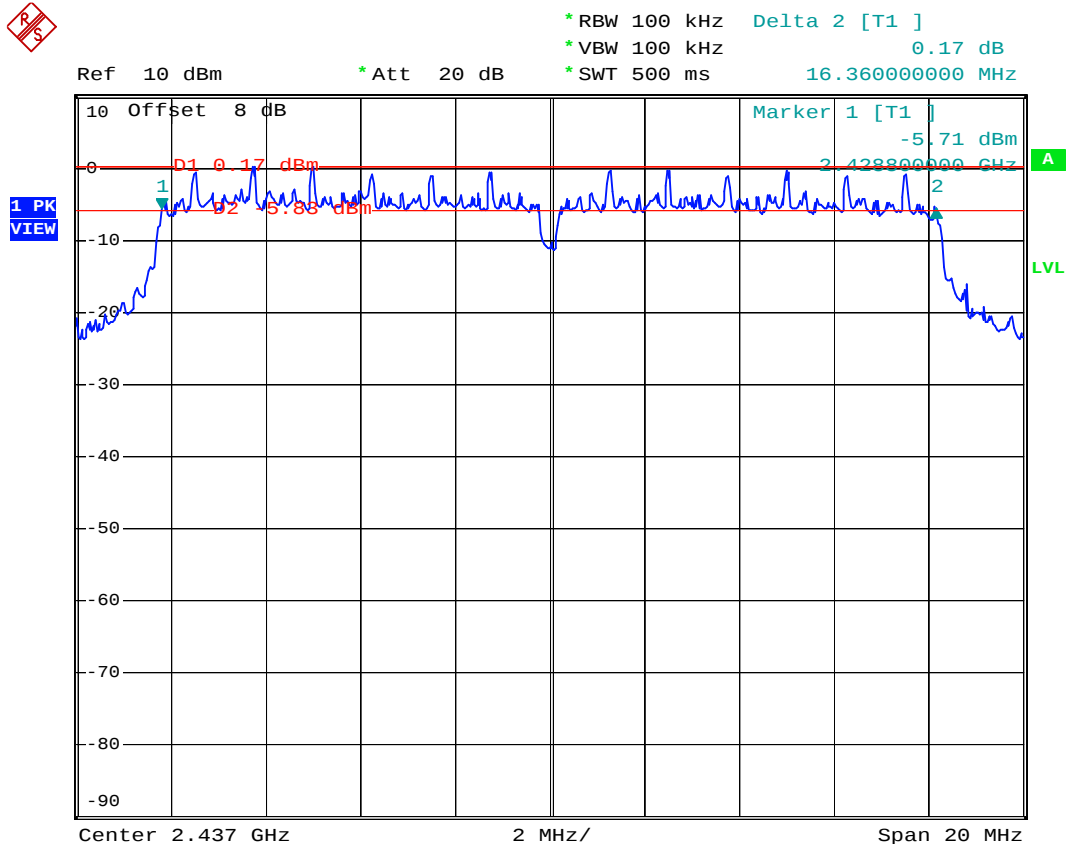
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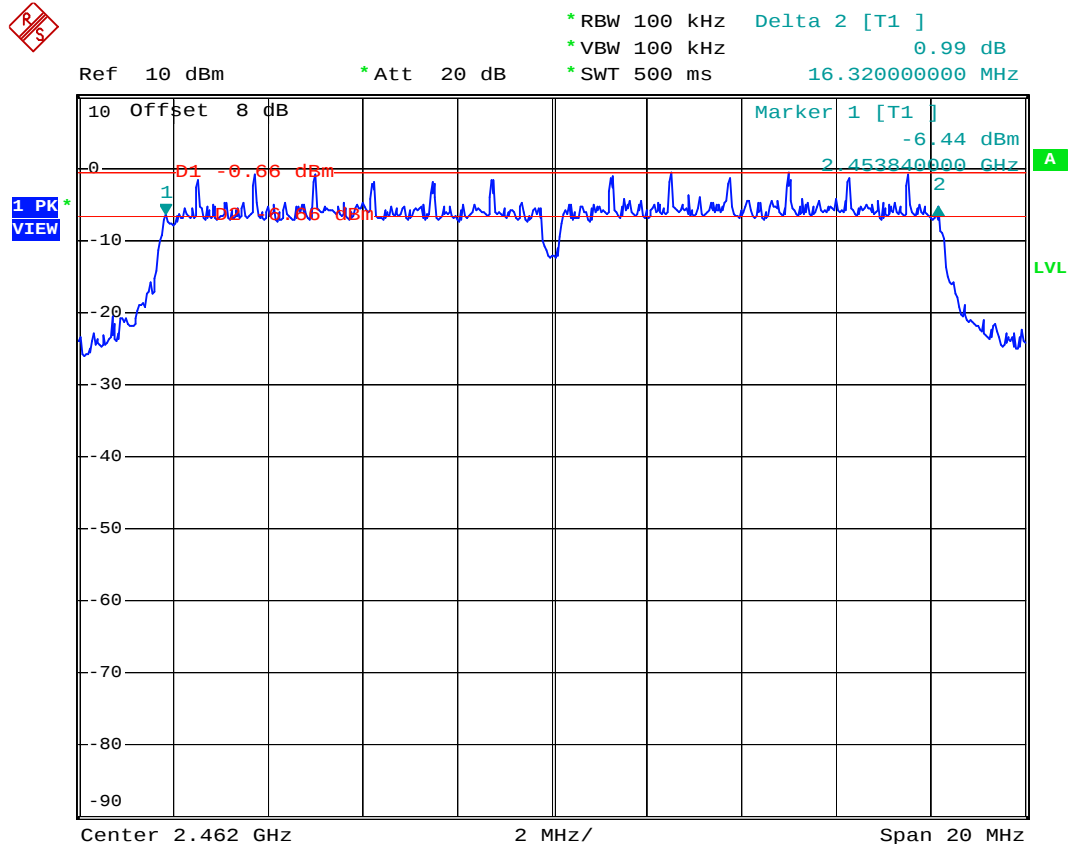
Mode 5



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Mode 6



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5.3 Power Spectral Density Measurement

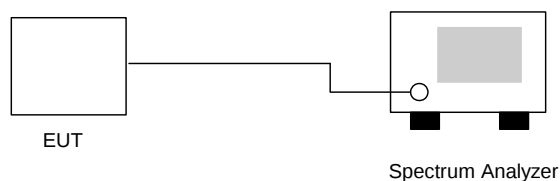
5.3.1 Measuring Instruments :

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°C
- Relative Humidity : 46%
- Test Enginner : James

802.11b

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-9.93	8	Mode 1
06	2437	2.36	8	Mode 2
11	2462	0.91	8	Mode 3

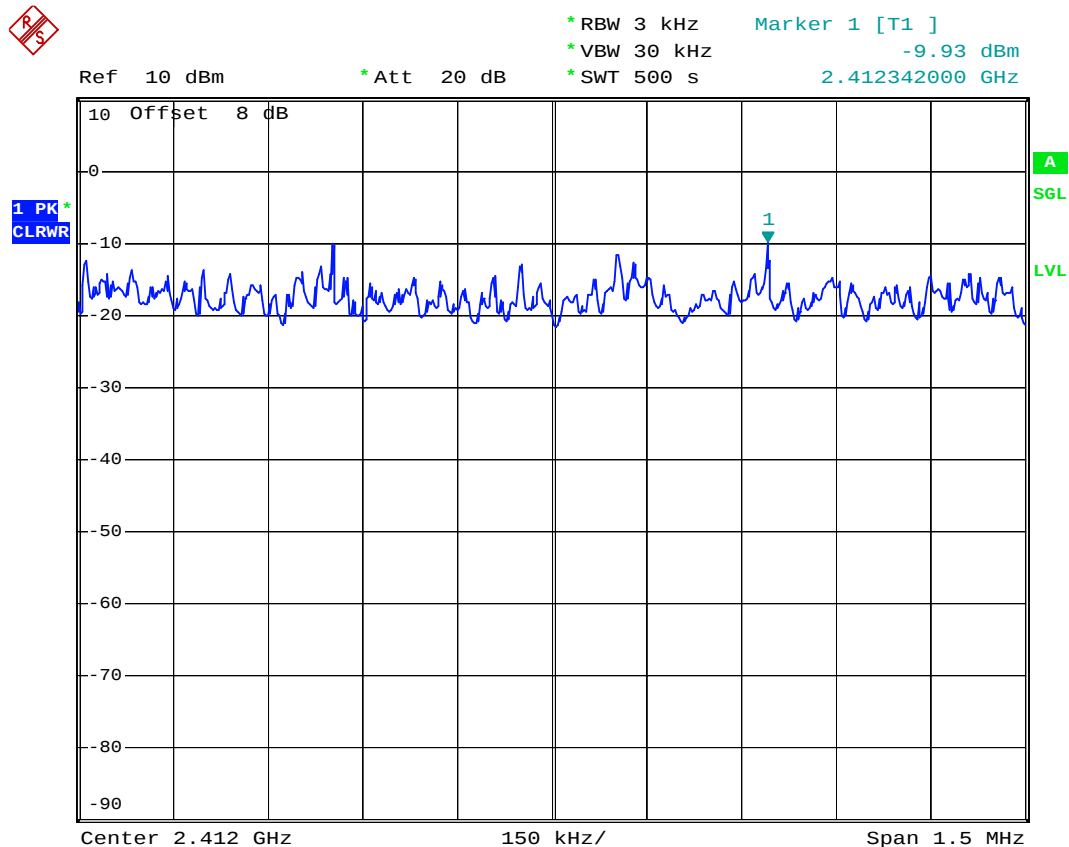
802.11g

Channel	Frequency (MHz)	Power Spectral Density (dBm)	Limits (dBm)	Plot Ref. No.
01	2412	-16.81	8	Mode 4
06	2437	-15.63	8	Mode 5
11	2462	-15.41	8	Mode 6



5.3.5 Power Spectral Density

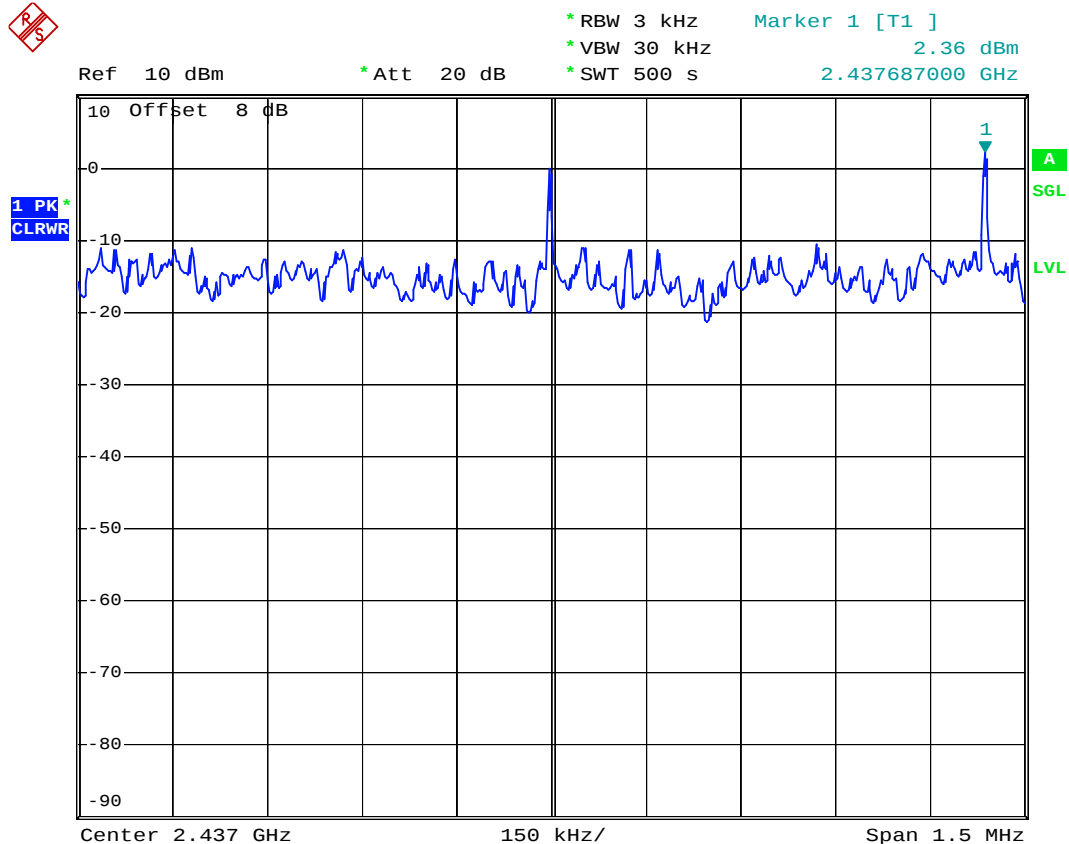
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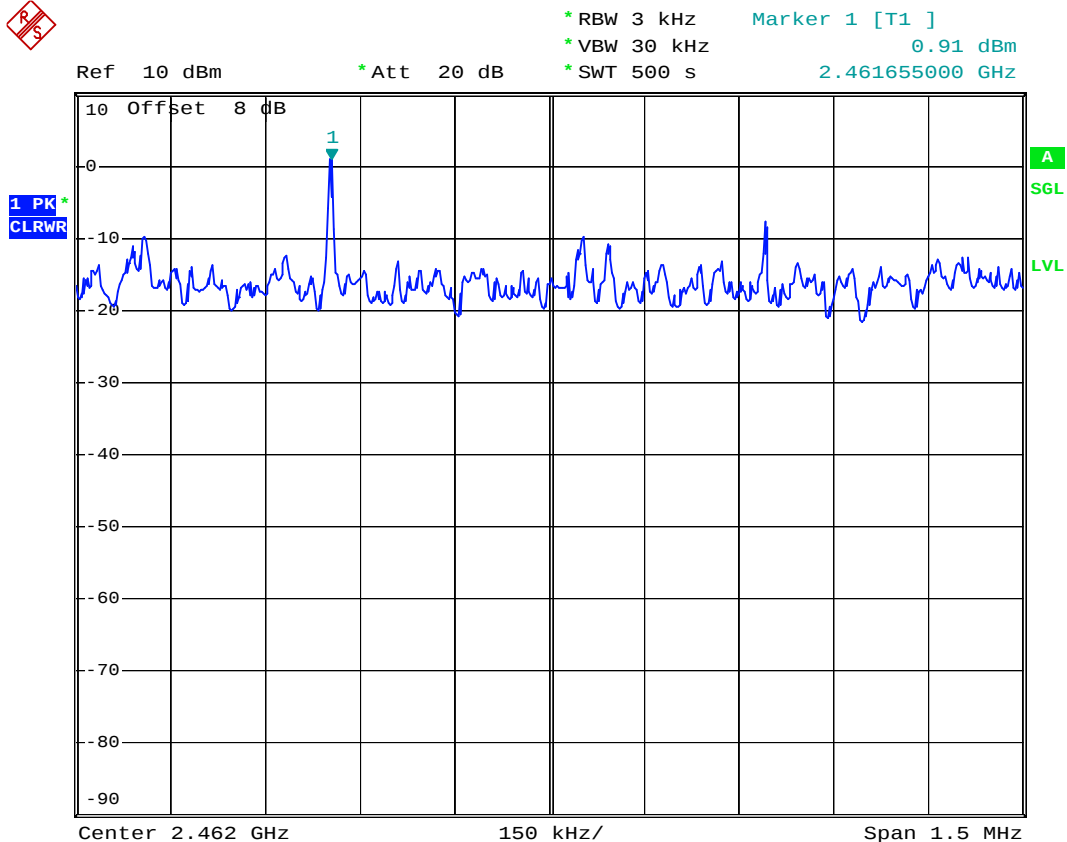
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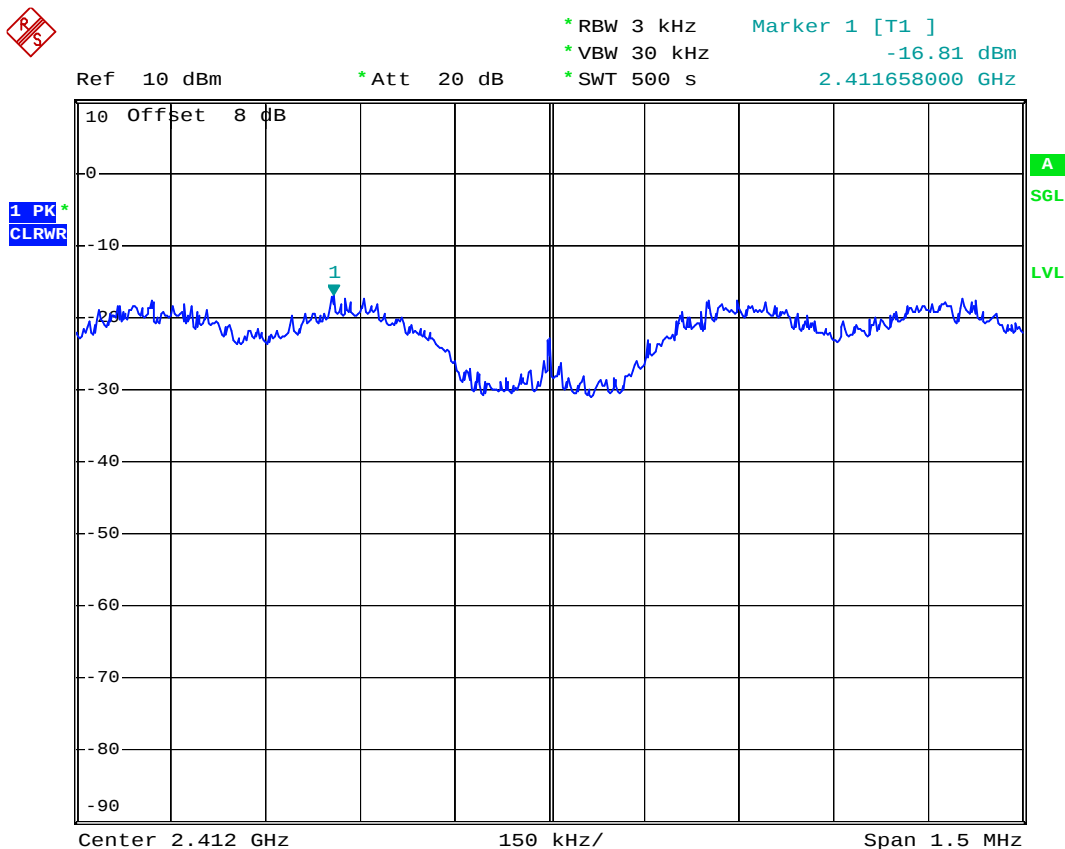
Mode 3



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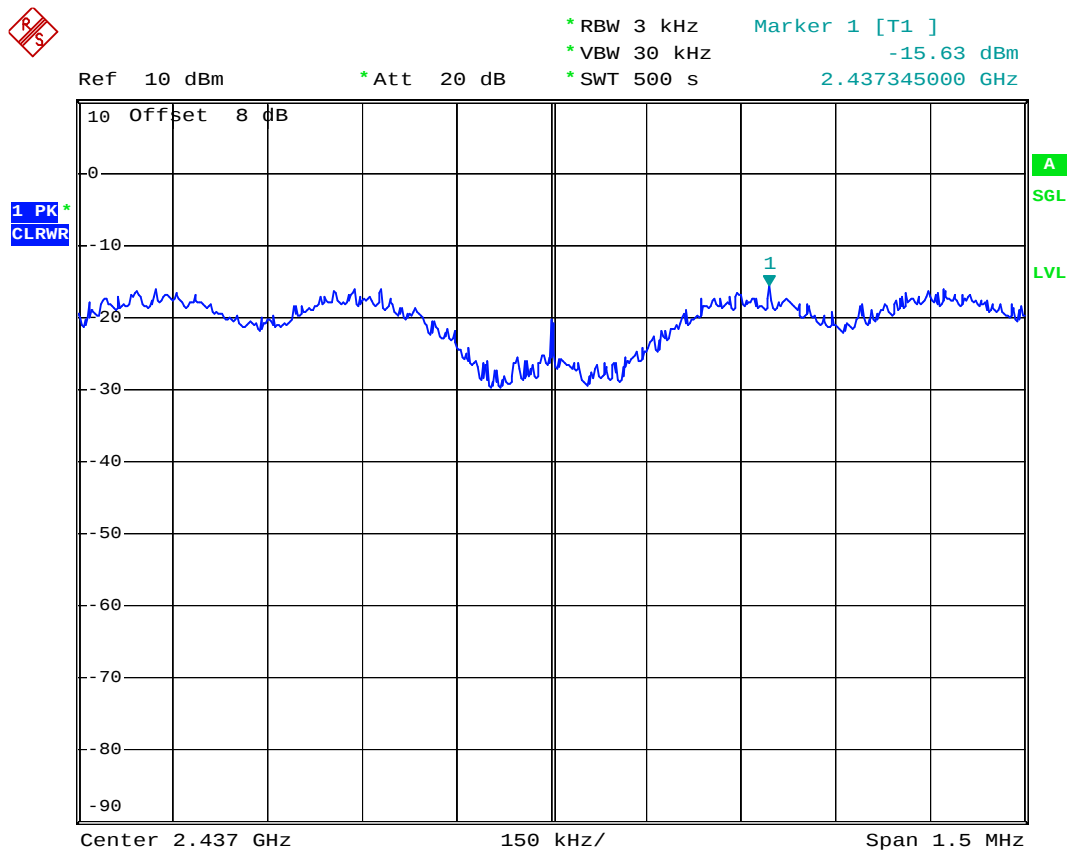
Mode 4



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Mode 5



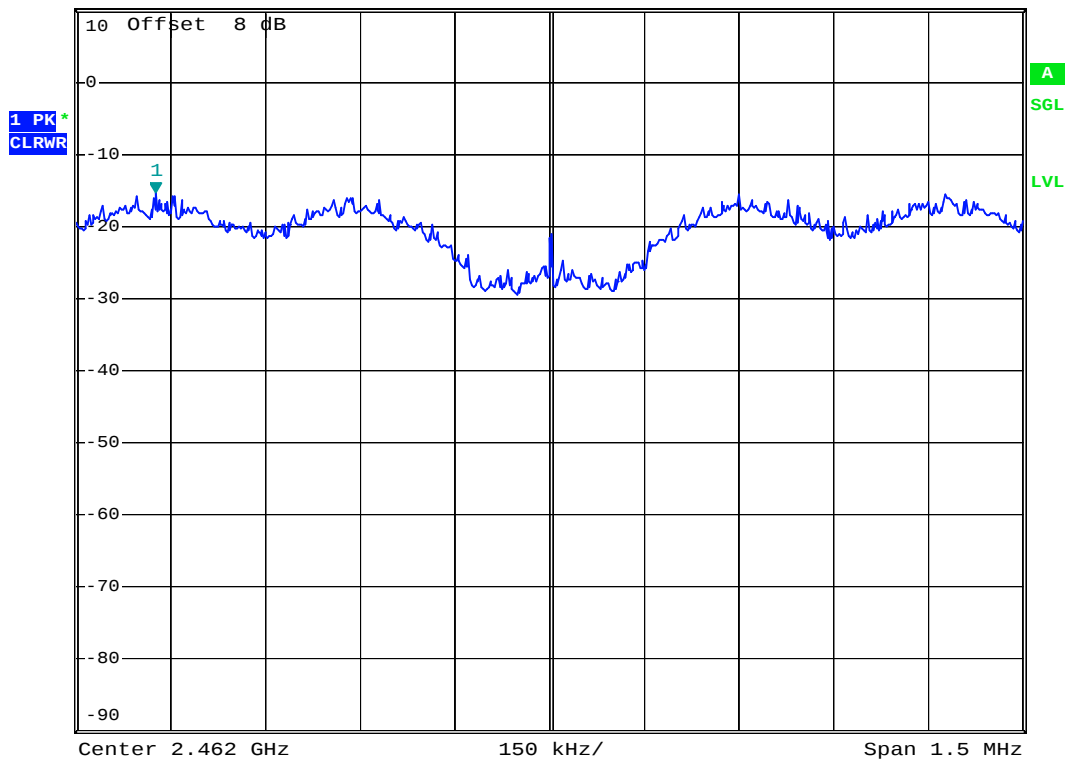
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Mode 6



Ref 10 dBm *Att 20 dB *RBW 3 kHz Marker 1 [T1]
*VBW 30 kHz -15.41 dBm
*SWT 500 s 2.461376000 GHz



Date: 17.OCT.2006 21:34:38

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°C
- Relative Humidity : 46%
- Test Enginner : James

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

5.4.4 Note on Band Edge Emission :

➤WLAN 802.11b

CH01 (Horizontal)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2355.1	50.66	-23.34	74.00	51.27	30.26	4.59	35.46	100	0	Peak
2335.1	40.07	-13.93	54.00	40.69	30.24	4.54	35.40	100	340	Average

CH01 (Vertical)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2387.5	50.54	-23.46	74.00	51.15	30.26	4.59	35.46	100	0	Peak
2387.5	40.39	-13.61	54.00	40.98	30.26	4.59	35.44	104	156	Average

**CH11 (Horizontal)**

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2484.6	50.21	-23.79	74.00	50.75	30.29	4.67	35.51	100	0	Peak
2484.6	39.50	-14.50	54.00	40.04	30.29	4.67	35.51	100	350	Average

CH11 (Vertical)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2483.7	50.30	-23.70	74.00	50.84	30.30	4.69	35.53	100	0	Peak
2483.7	39.44	-14.56	54.00	39.98	30.29	4.67	35.51	100	43	Average

➤WLAN 802.11g**CH01 (Horizontal)**

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2390.0	55.93	-18.07	74.00	56.54	30.26	4.59	35.45	100	0	Peak
2390.0	42.64	-11.36	54.00	43.25	30.26	4.59	35.46	100	338	Average

CH01 (Vertical)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2390.0	55.40	-18.60	74.00	56.01	30.26	4.59	35.46	100	0	Peak
2390.0	42.62	-11.38	54.00	43.23	30.26	4.59	35.46	100	84	Average

CH11 (Horizontal)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2483.5	54.13	-19.87	74.00	54.67	30.29	4.67	35.51	100	0	Peak
2483.5	41.43	-12.57	54.00	41.97	30.29	4.67	35.51	100	350	Average

**CH11 (Vertical)**

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2483.5	54.28	-19.72	74.00	54.82	30.29	4.67	35.51	100	0	Peak
2483.5	41.42	-12.58	54.00	41.96	30.29	4.67	35.51	105	83	Average

➤BT**CH00 (Horizontal)**

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2385.8	41.15	-12.85	54.00	41.74	30.26	4.59	35.44	100	149	Average
2385.8	51.94	-22.06	74.00	52.53	30.26	4.59	35.44	100	0	Peak

CH00 (Vertical)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2386.2	39.74	-14.26	54.00	40.33	30.26	4.59	35.44	100	198	Average
2386.2	50.56	-23.44	74.00	51.15	30.26	4.59	35.44	100	0	Peak

CH78 (Horizontal)

Frequency	Level	Over	Limit	Read	Abtebba	Cable	Preamp	Ant	Table	Remark
		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2483.5	63.42	-10.58	74.00	63.96	30.29	4.67	35.51	100	0	Peak
2483.5	46.91	-7.09	54.00	47.45	30.29	4.67	35.51	104	39	Average

CH78 (Vertical)

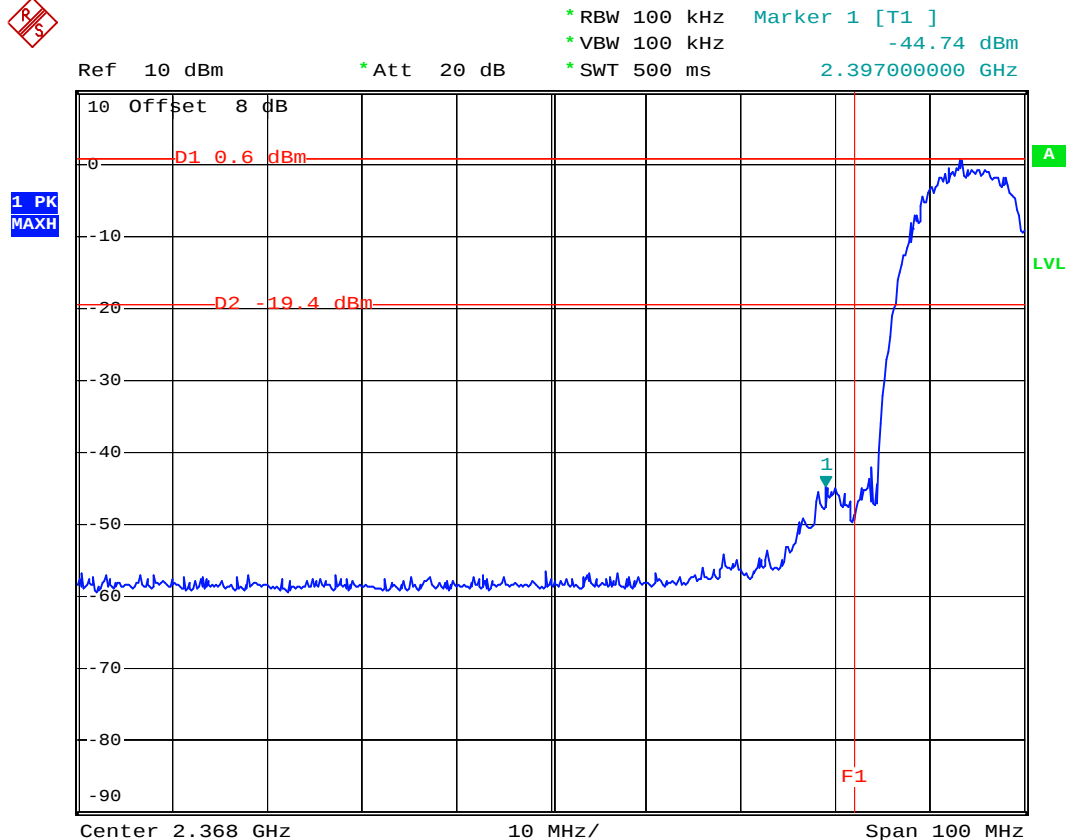
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		Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	
2483.5	56.80	-17.20	74.00	57.34	30.29	4.67	35.51	100	0	Peak
2483.5	43.63	-10.37	54.00	44.17	30.29	4.67	35.51	109	359	Average



5.4.4 20dB Band Edge

WLAN 802.11b

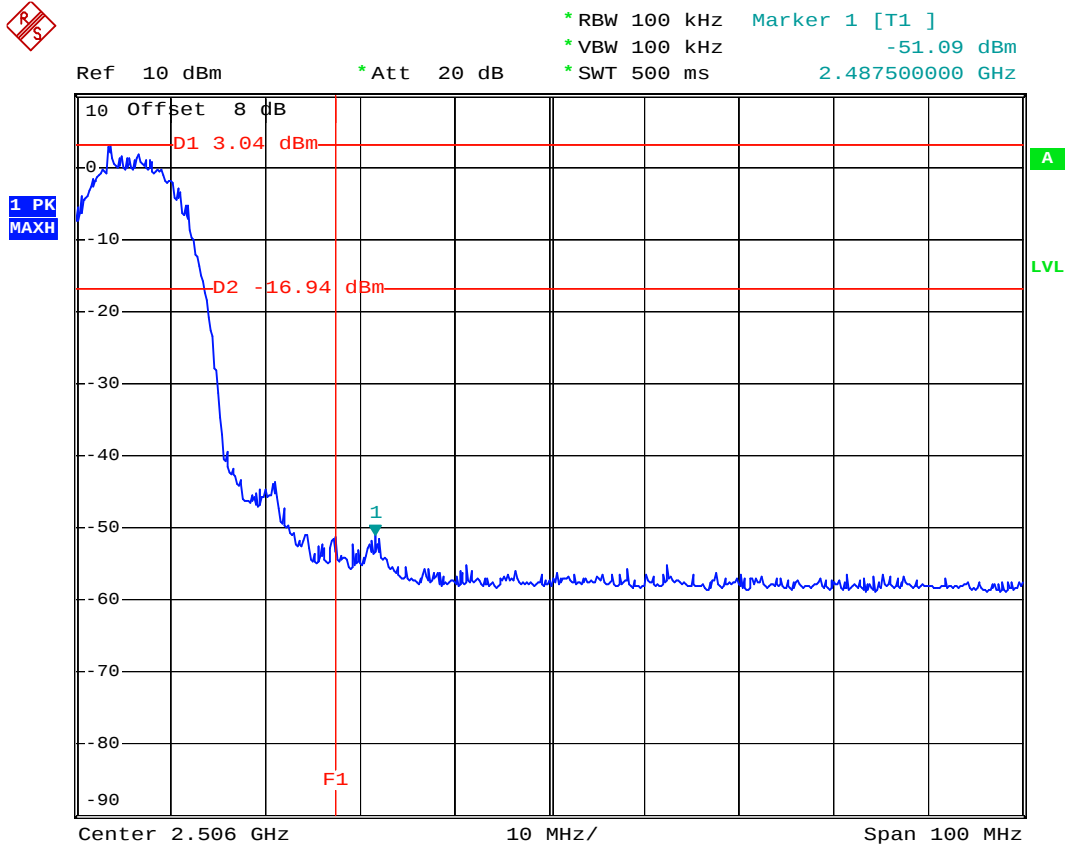
CH01



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CH11

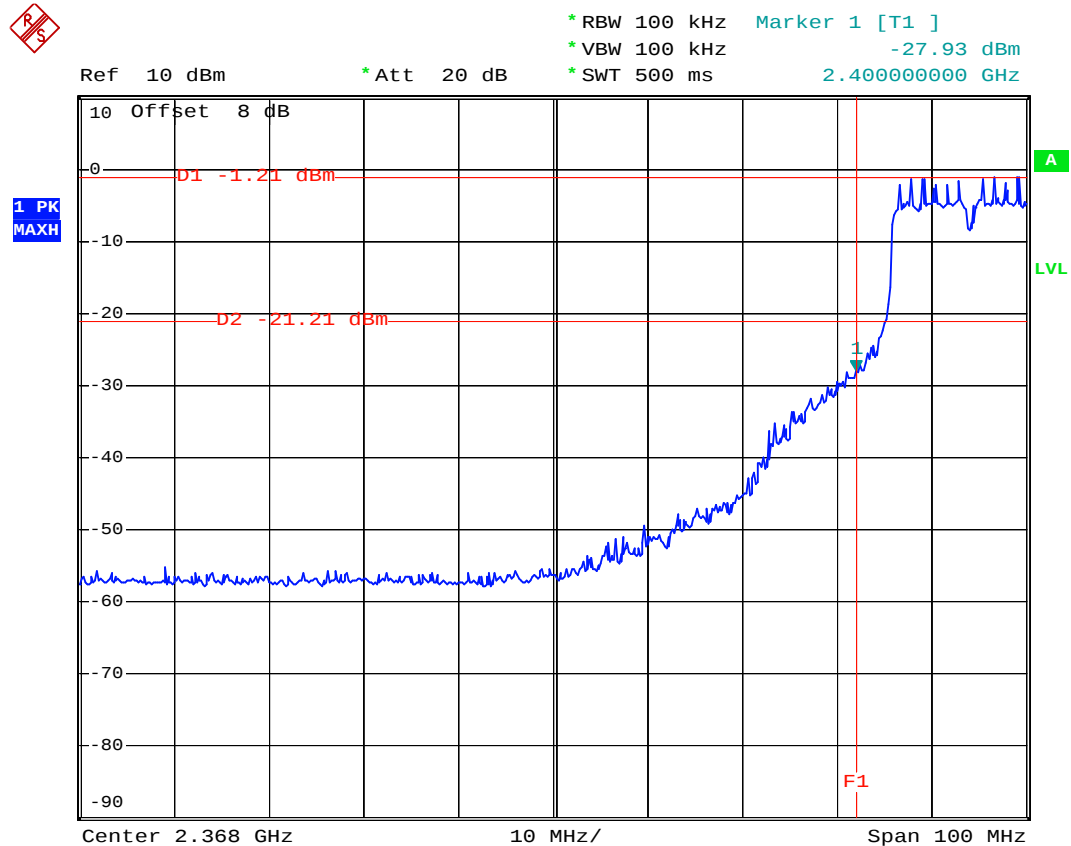


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WLAN 802.11g

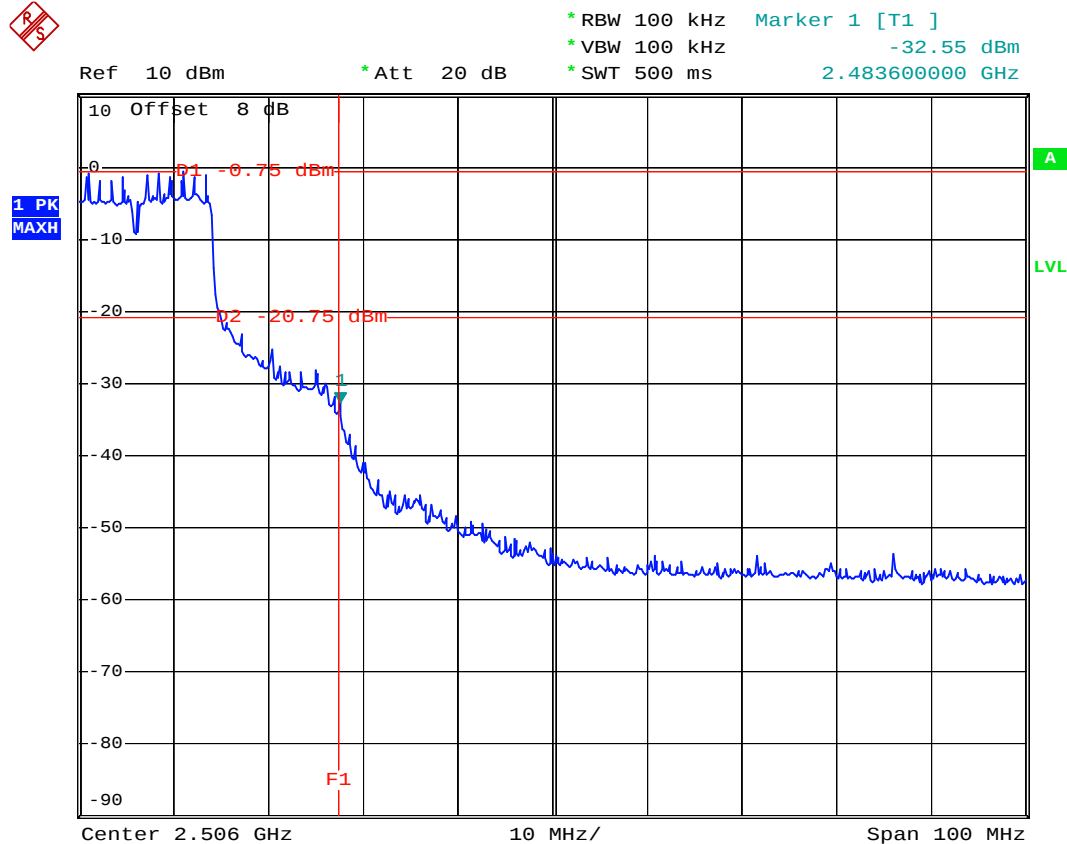
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CH11

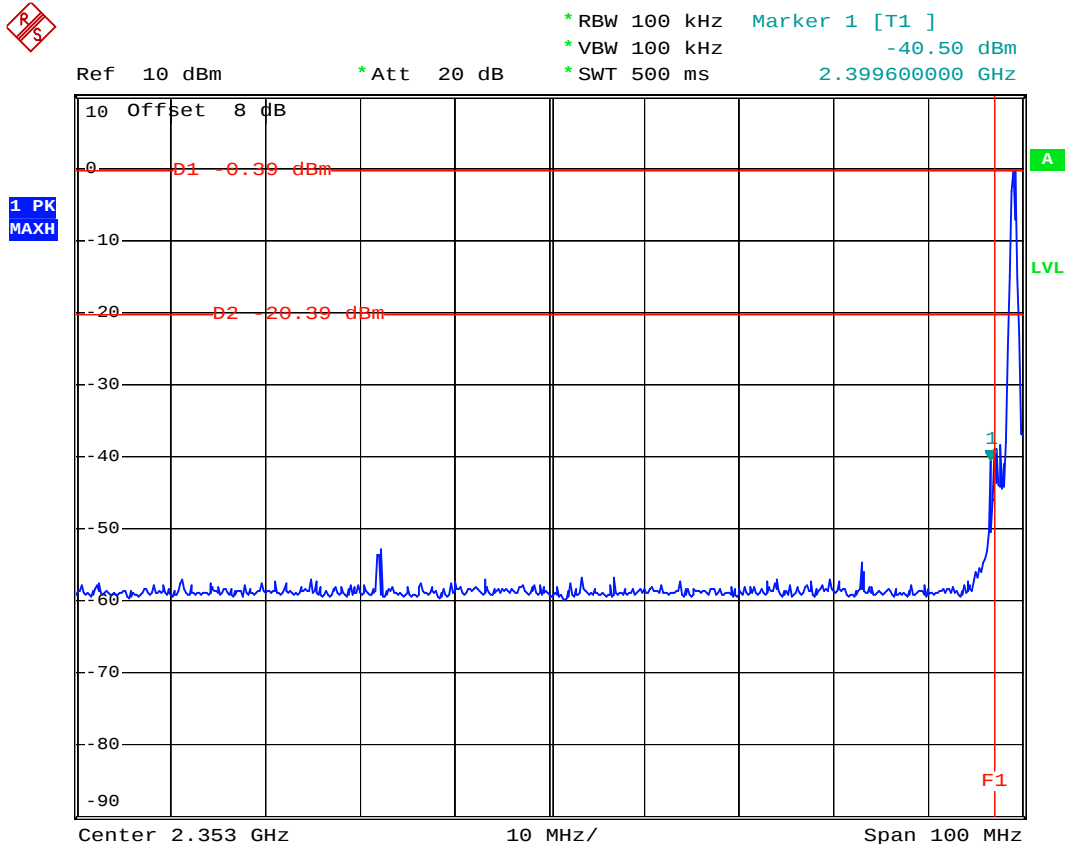


Date: 17.OCT.2006 20:09:02



Bluetooth

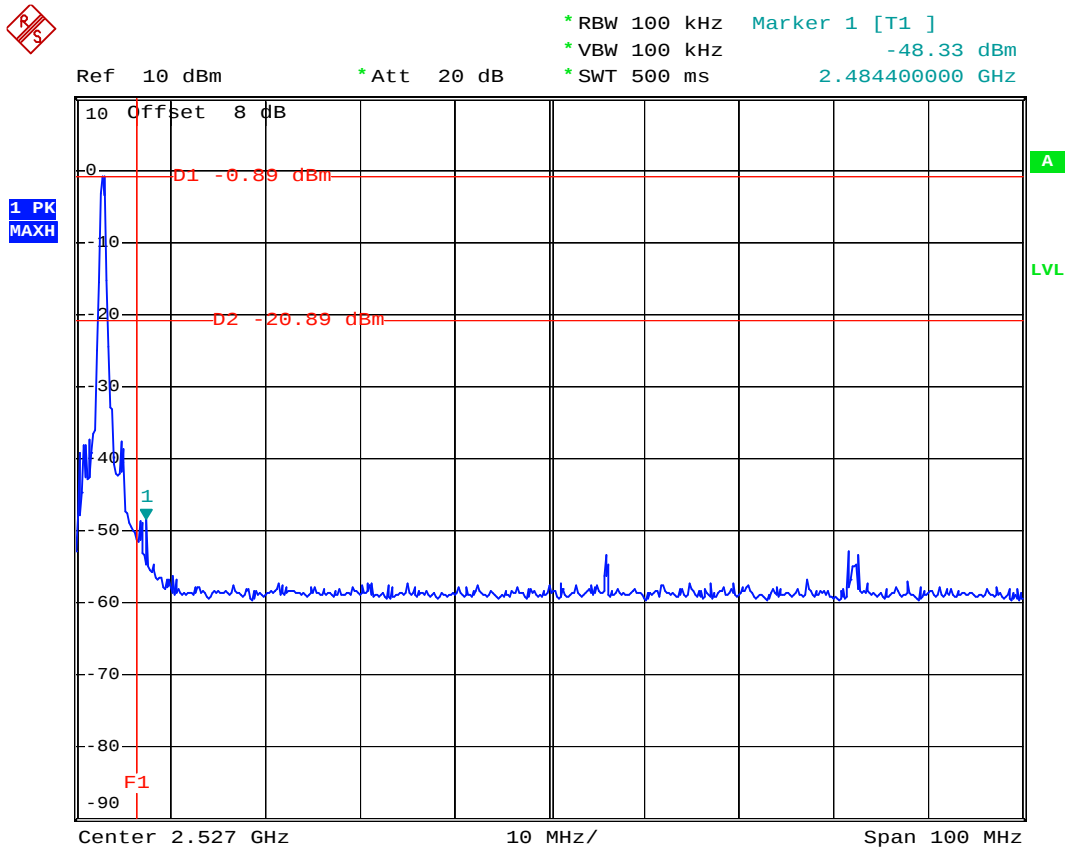
CH00



Date: 17.OCT.2006 17:11:29



CH78



Date: 17.OCT.2006 17:10:47

5.5 Hopping Channel Separation

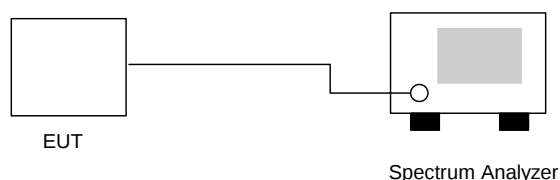
5.5.1 Measuring Instruments :

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°C
- Relative Humidity : 46%
- Test Enginner : James

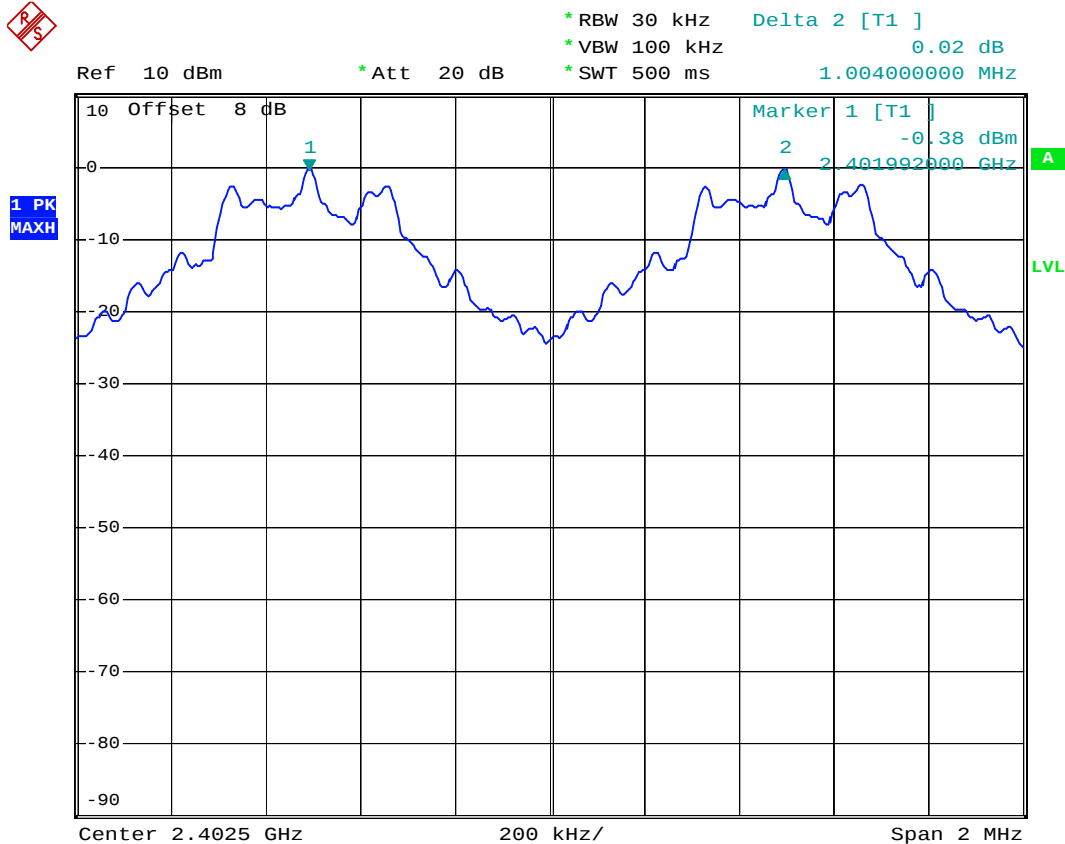
Channel	Carrier Frequency		Limits	Plot
	Frequency (MHz)	Separation (MHz)		
00	2402	1.004	0.820	Mode 7
39	2441	1.004	0.818	Mode 8
78	2480	1.000	0.828	Mode 9

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



5.5.5 Hopping Channel Separation

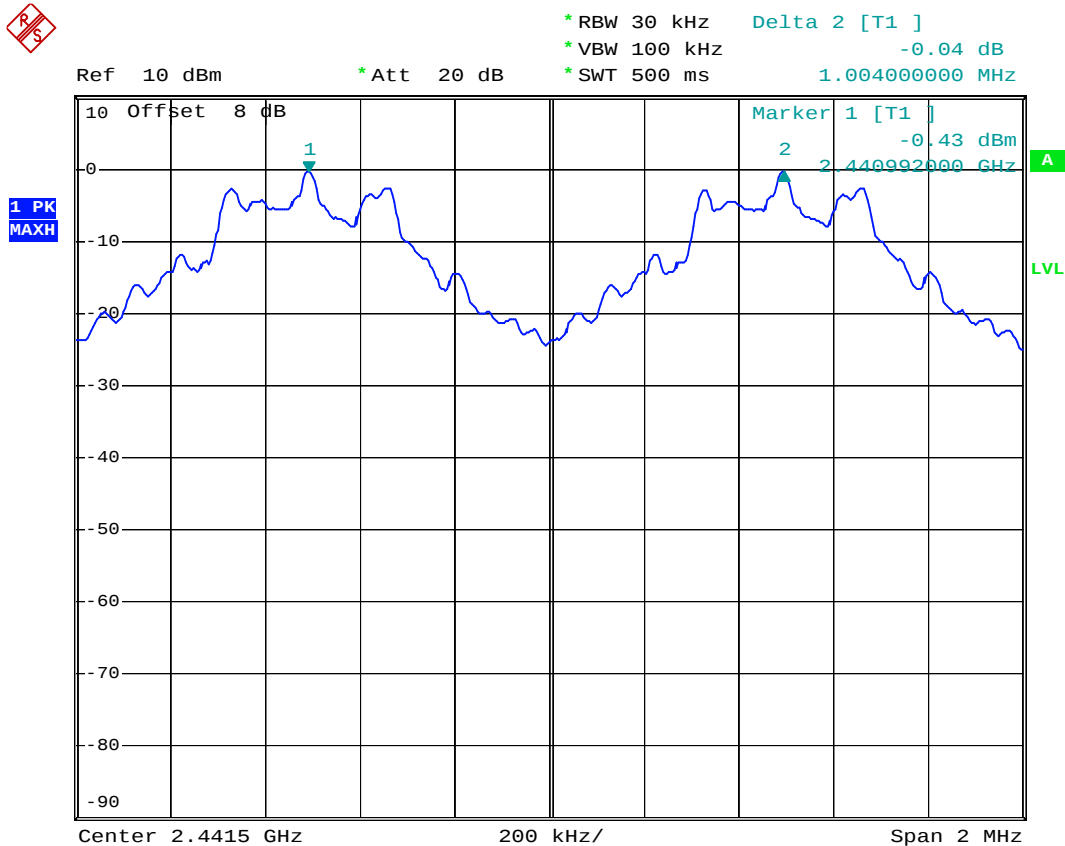
Mode 7



Date: 17.OCT.2006 17:12:11



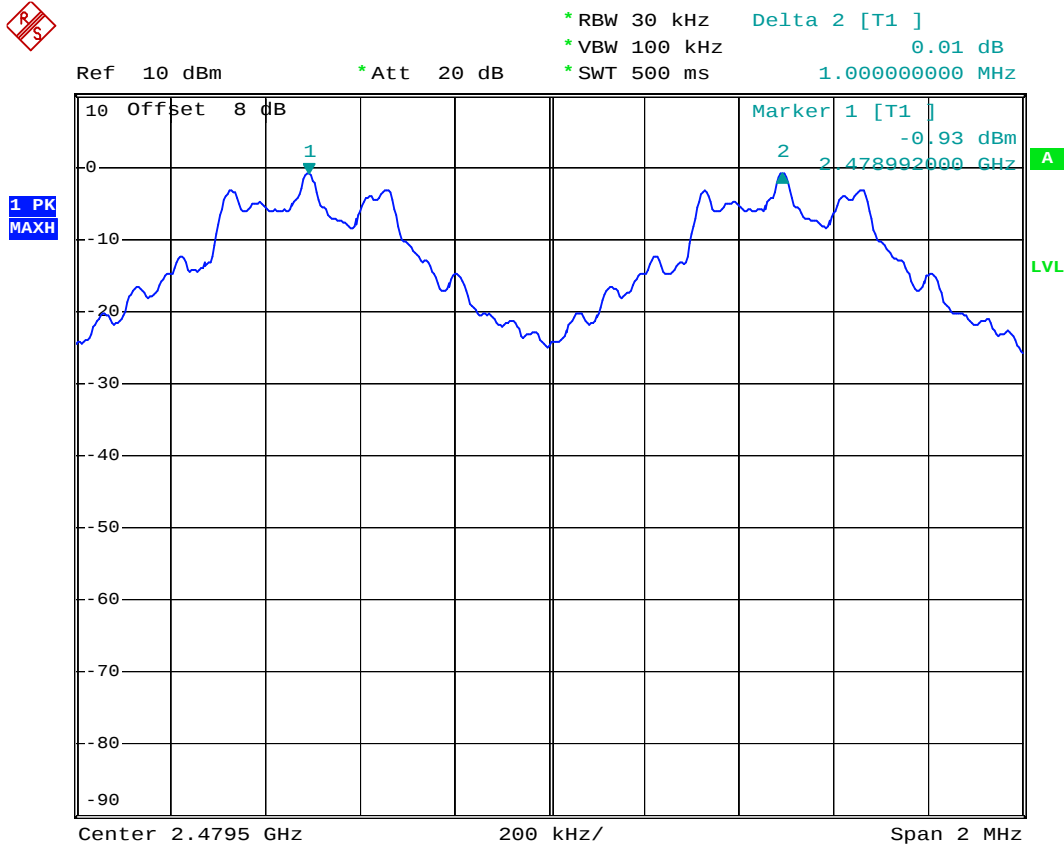
Mode 8



Date: 17.OCT.2006 17:12:37



Mode 9



Date: 17.OCT.2006 17:13:04

5.6 Number of Hopping Frequency

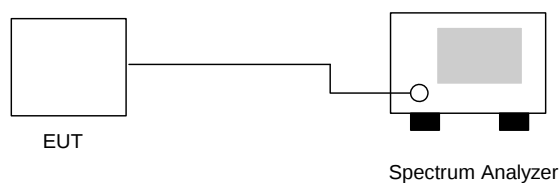
5.6.1 Measuring Instruments :

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 :



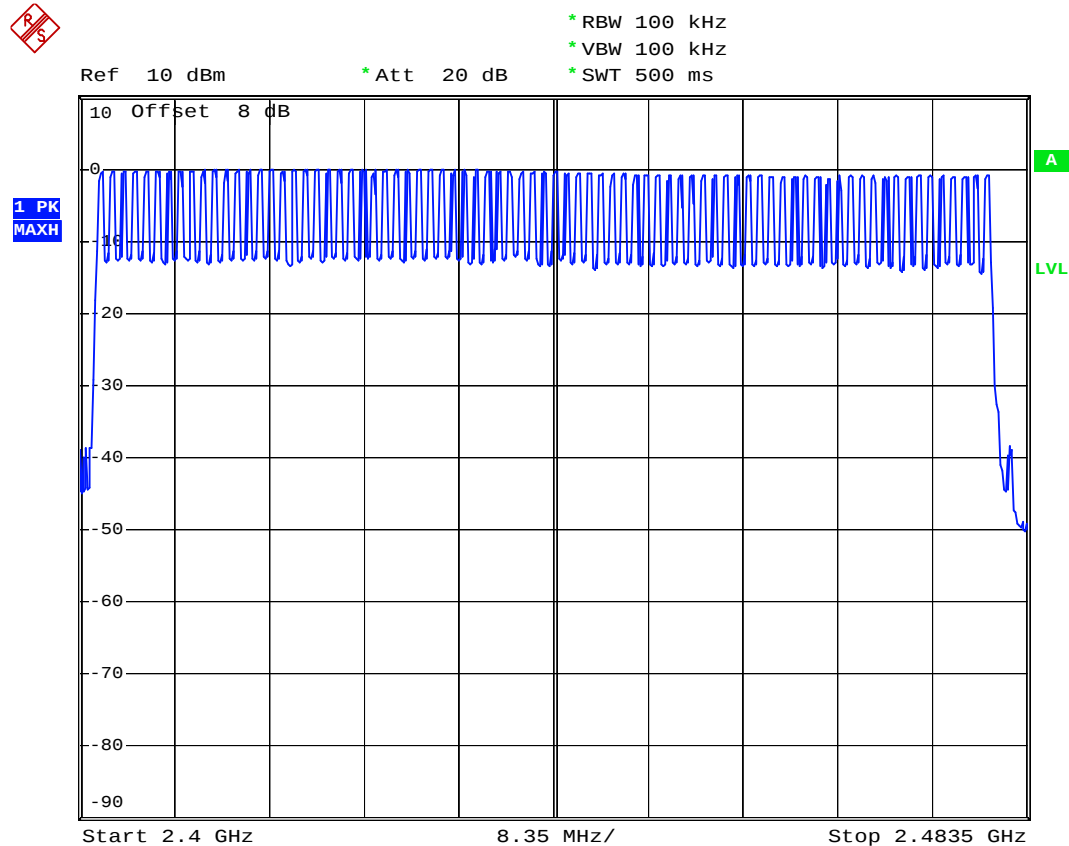
5.6.4 Test Result : See spectrum analyzer plots below

- Application Type : BT
- Temperature : 26°C
- Relative Humidity : 46%
- Test Enginner : Andy

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



5.6.5 Number of Hopping Frequency



Date: 17.OCT.2006 18:09:52

5.7 Hopping Channel Bandwidth

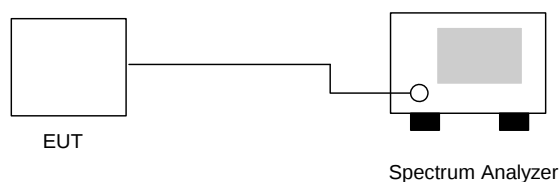
5.7.1 Measuring Instruments :

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

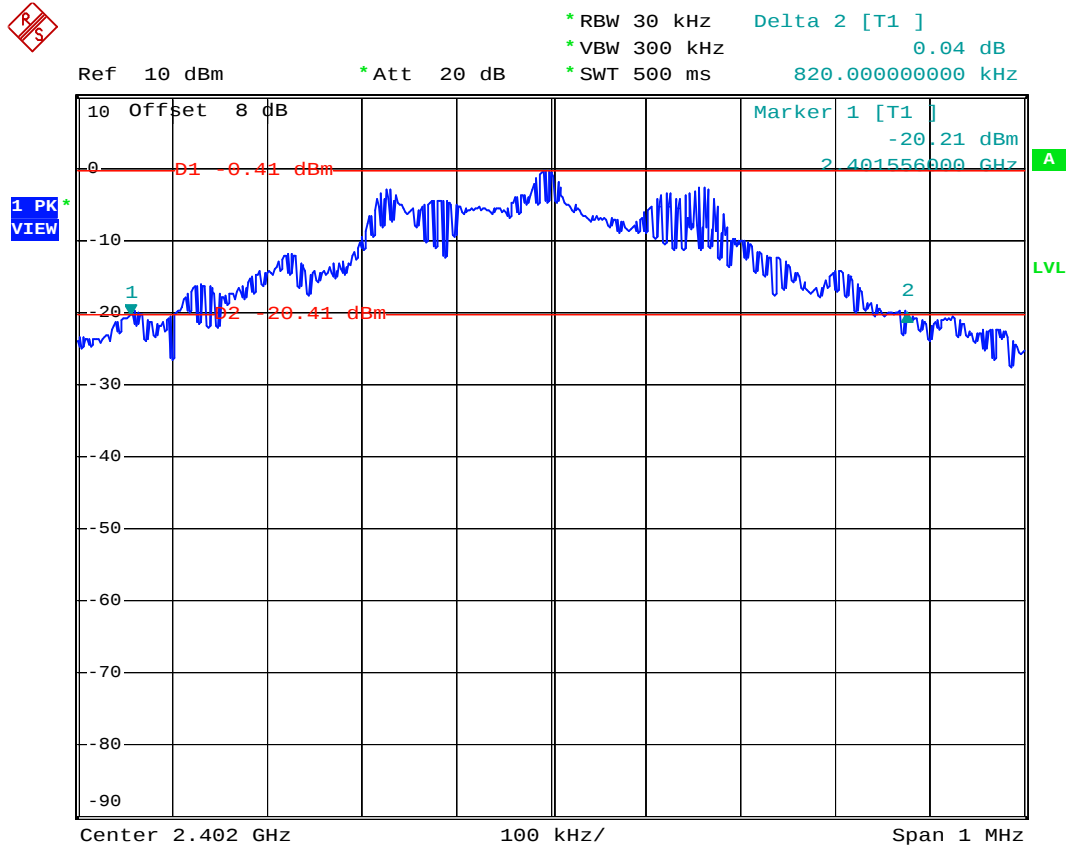
- Application Type : BT
- Temperature : 26°C
- Relative Humidity : 46%
- Test Enginner : James

Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	0.820	1.000	Mode 7
39	2441	0.818	1.000	Mode 8
78	2480	0.828	1.000	Mode 9



5.7.5 Hopping Channel Bandwidth

Mode 7



Date: 17.OCT.2006 17:08:00



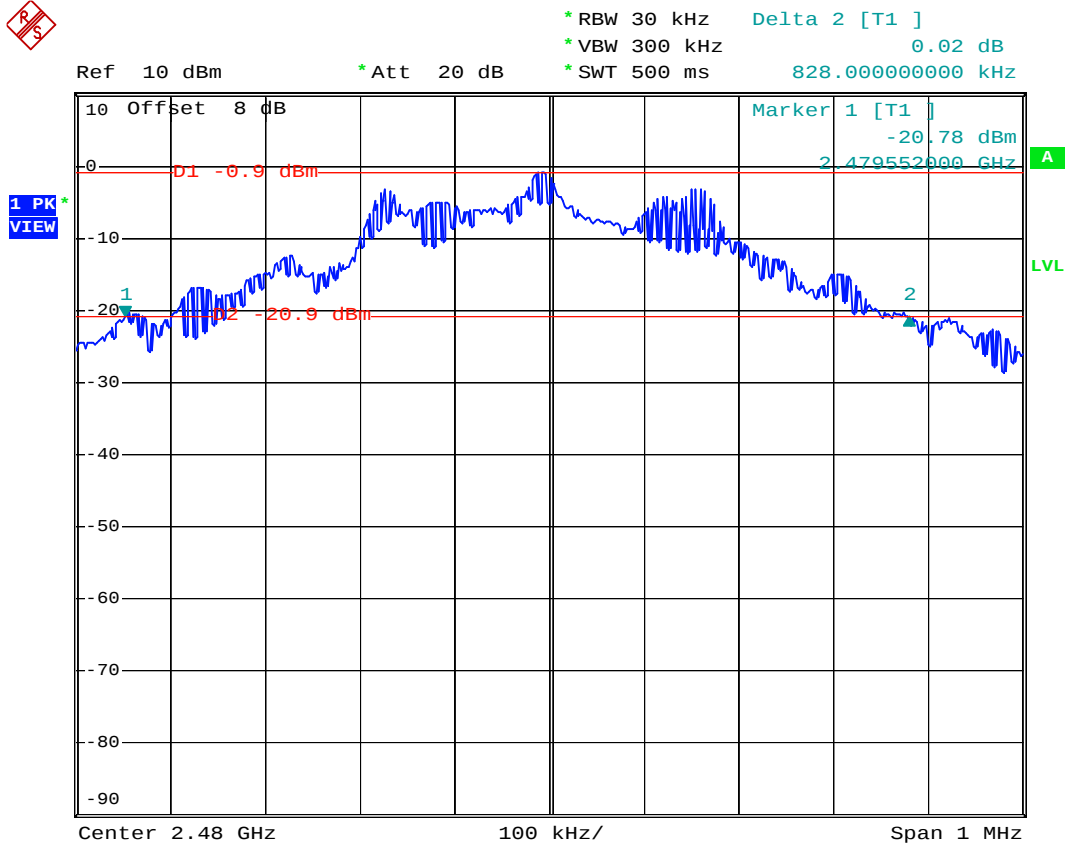
Mode 8



Date: 17.OCT.2006 17:08:58



Mode 9



Date: 17.OCT.2006 17:09:52

5.8 Dwell Time of Each Frequency

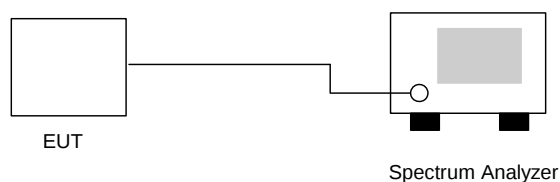
5.8.1 Measuring Instruments :

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°C
- Relative Humidity : 46%
- Test Enginner : James

Ch00

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	8.3	556	0.146	0.4
DH3	4.9	1840	0.285	0.4
DH5	3.3	3140	0.327	0.4

**CH39**

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	8.1	556	0.142	0.4
DH3	4.8	1830	0.278	0.4
DH5	3.2	3080	0.311	0.4

CH78

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	8.8	556	0.155	0.4
DH3	4.5	1820	0.259	0.4
DH5	3.5	3120	0.345	0.4

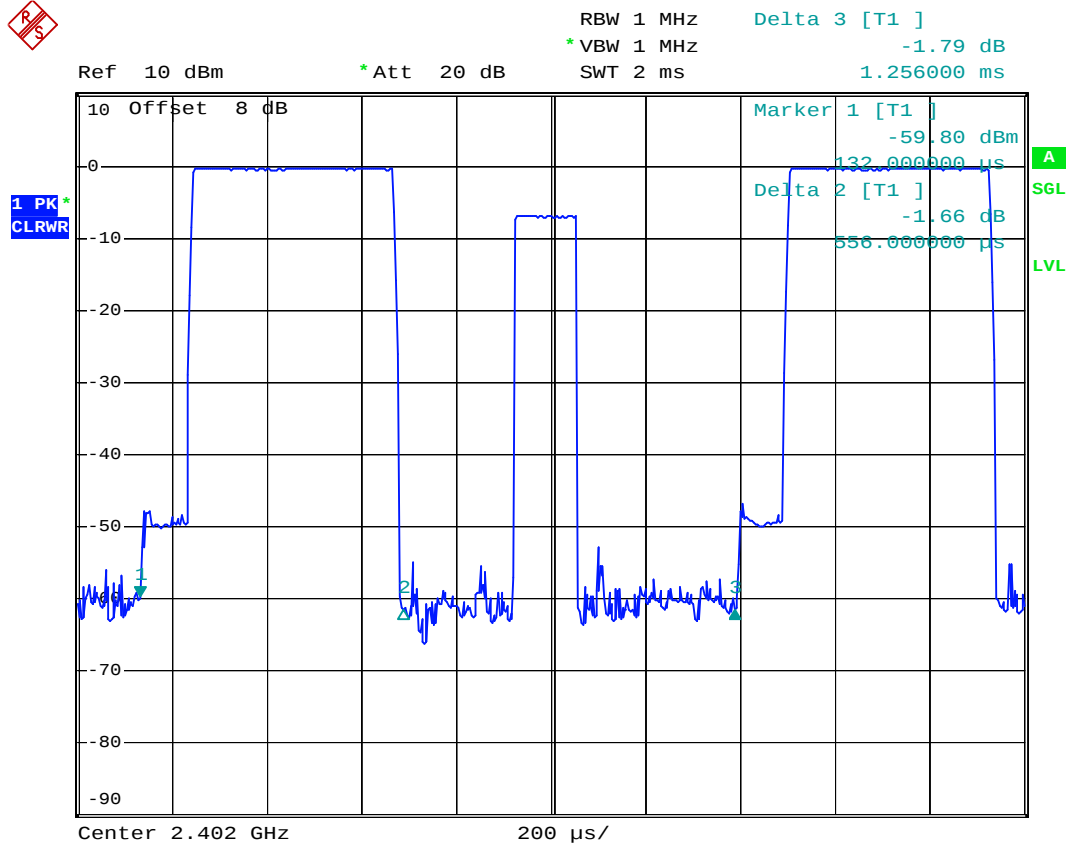
Remark:

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)

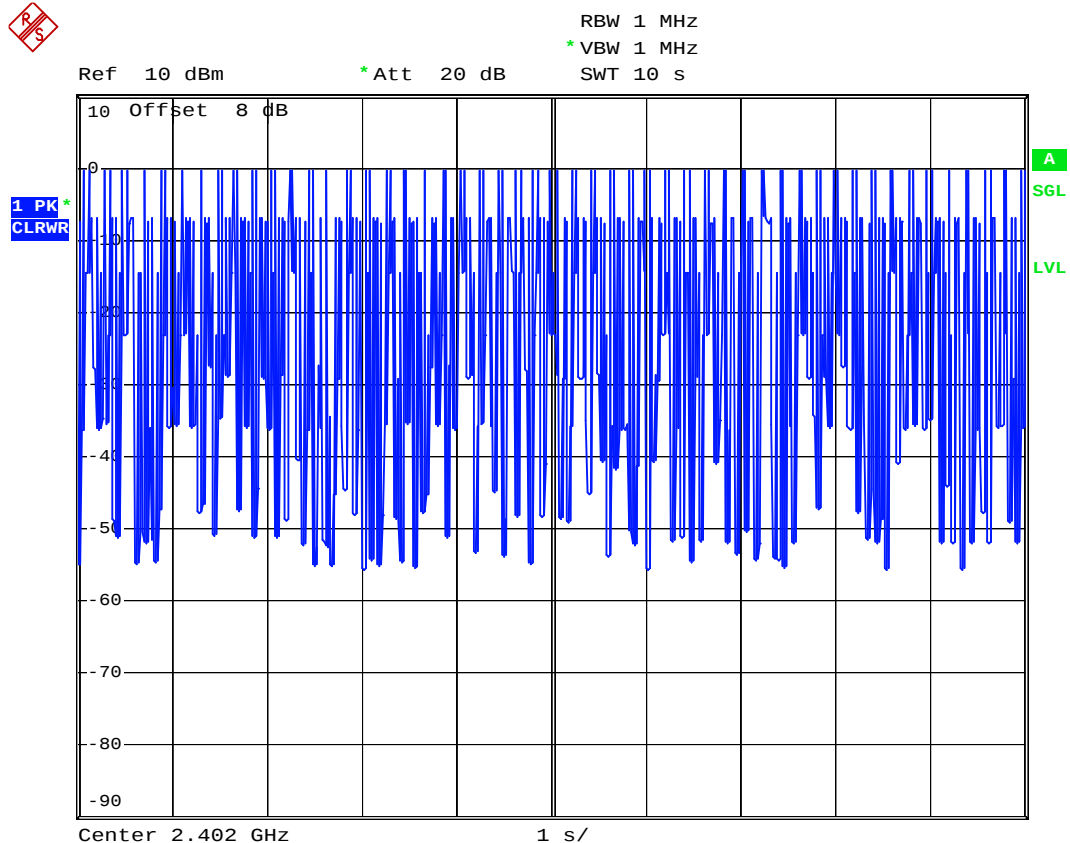


Date: 17.OCT.2006 17:15:10



FCC TEST REPORT

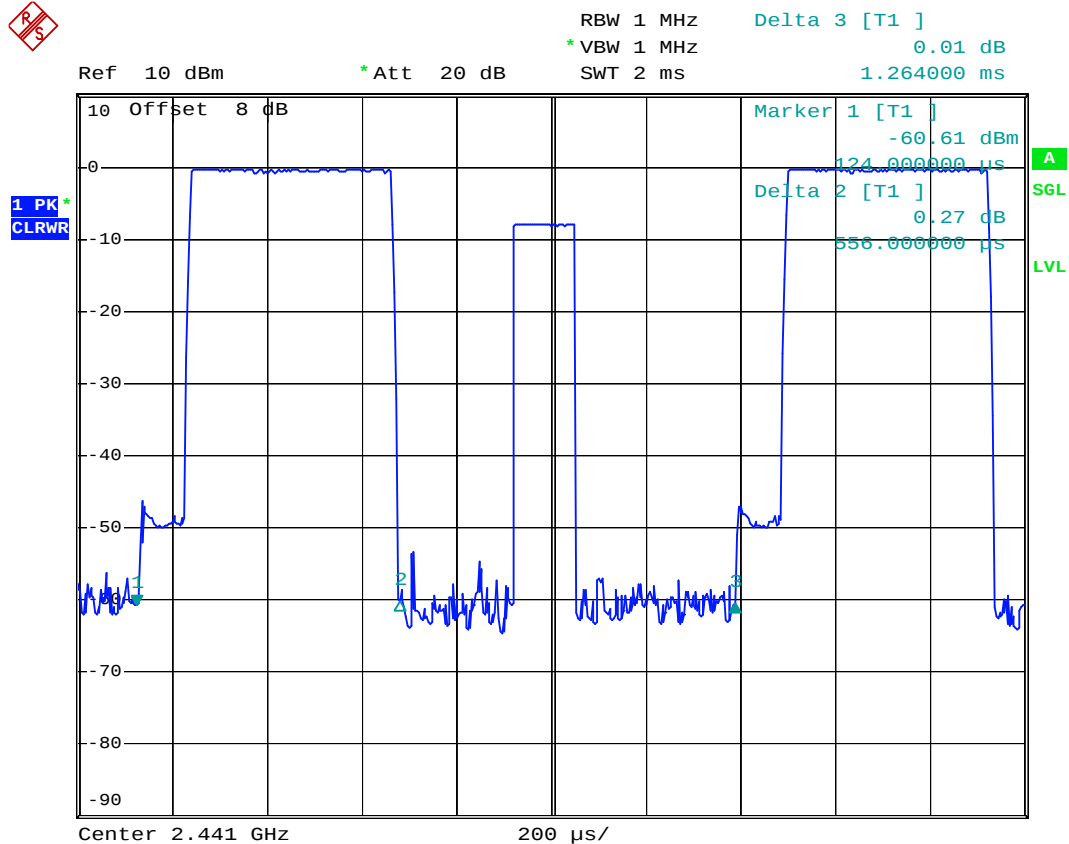
Report No. : FR682525



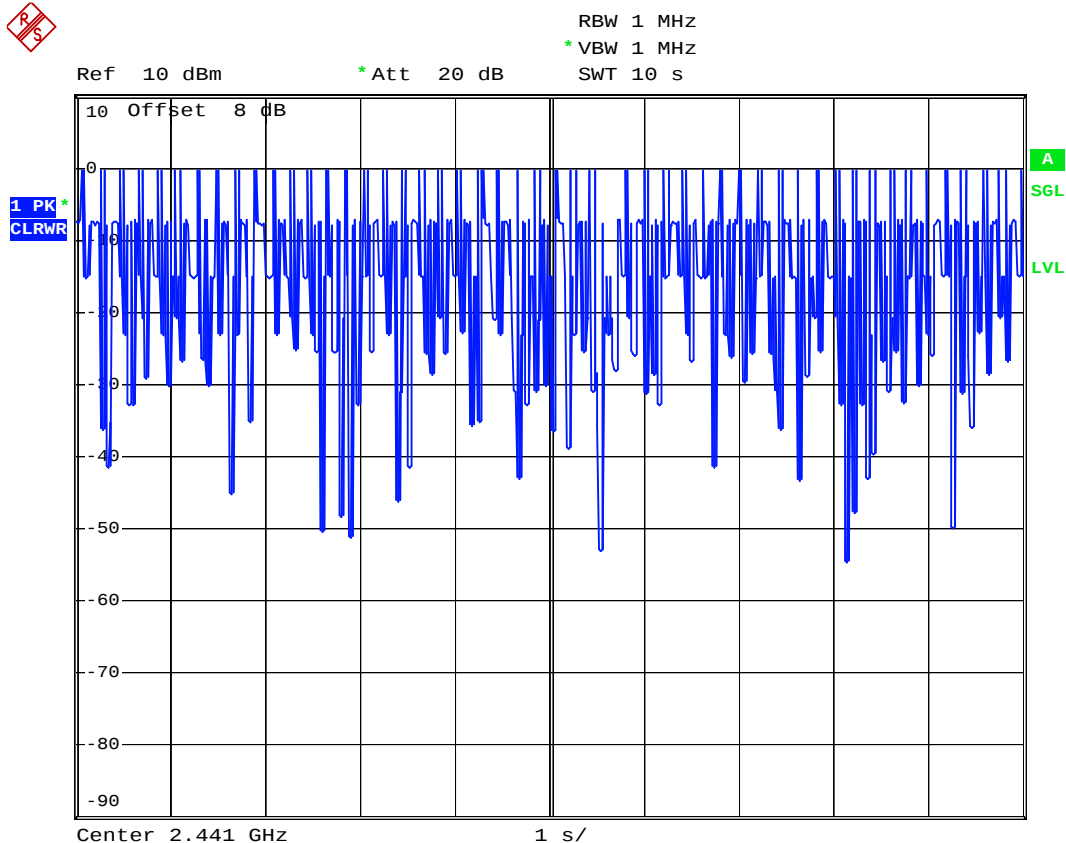
Date: 17.OCT.2006 17:23:18



DH1 (CH39)



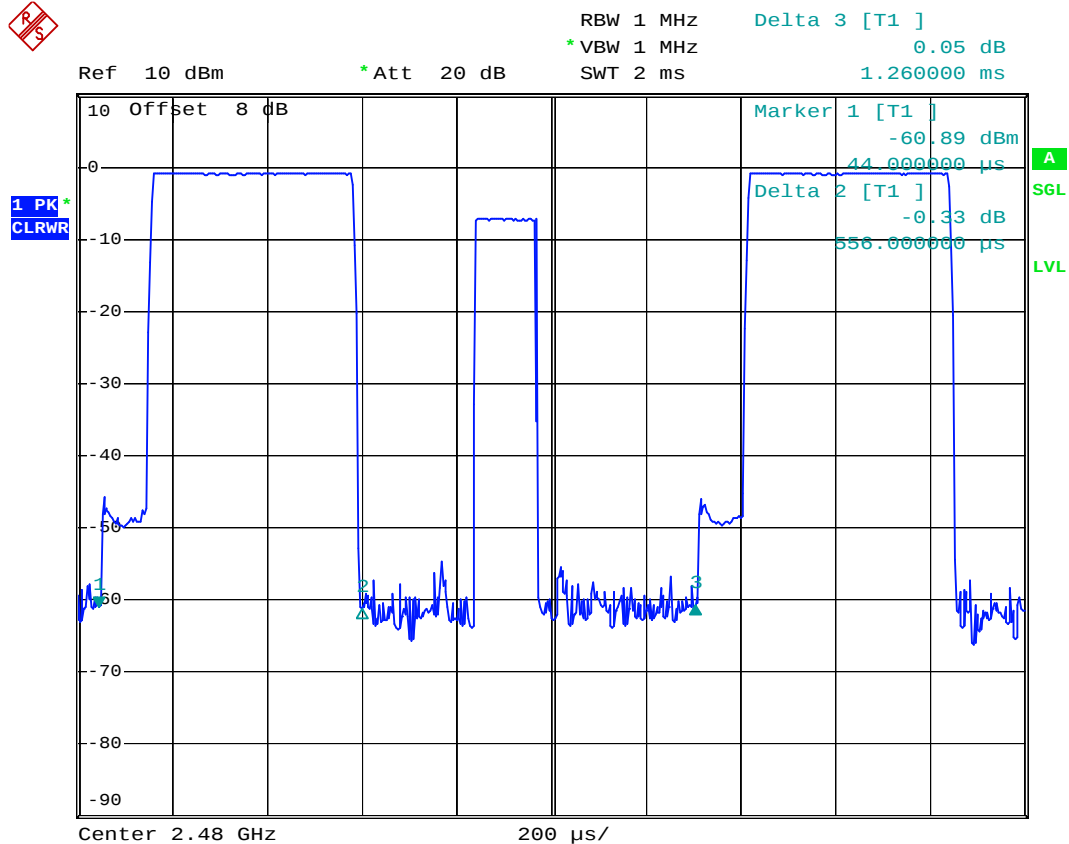
Date: 17.OCT.2006 17:15:37



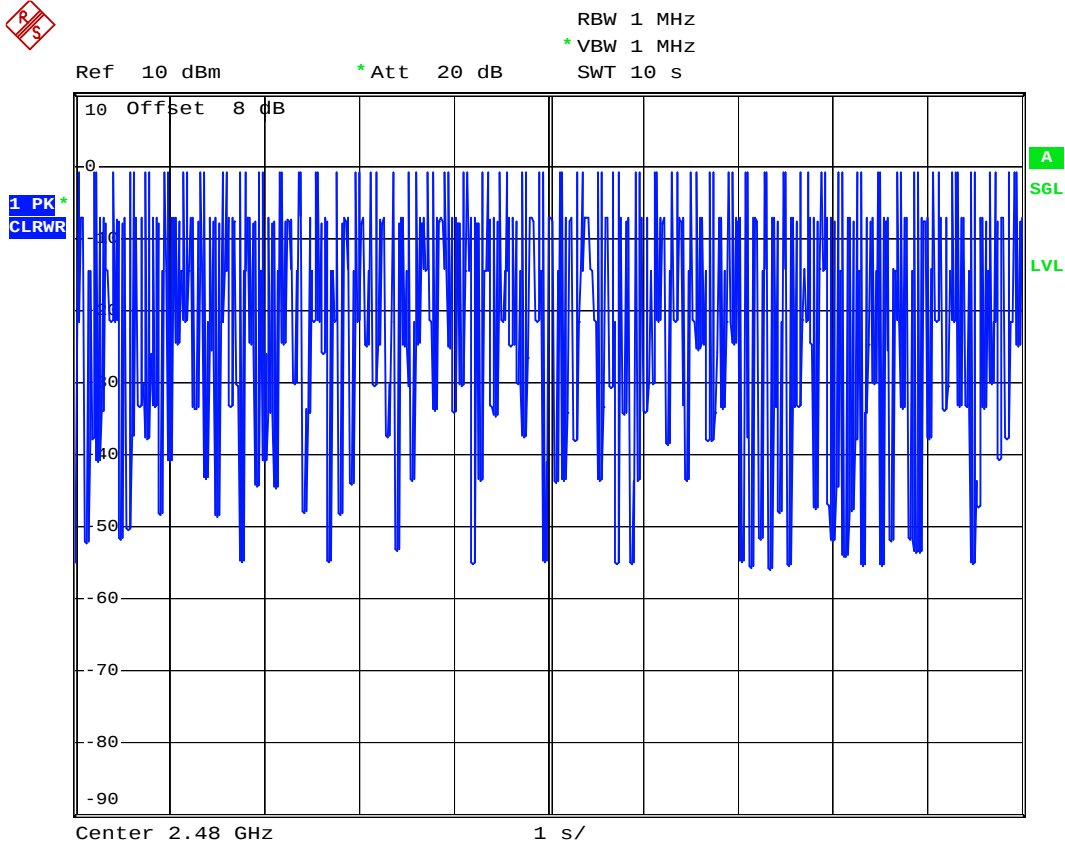
Date: 17.OCT.2006 17:25:58



DH1 (CH78)



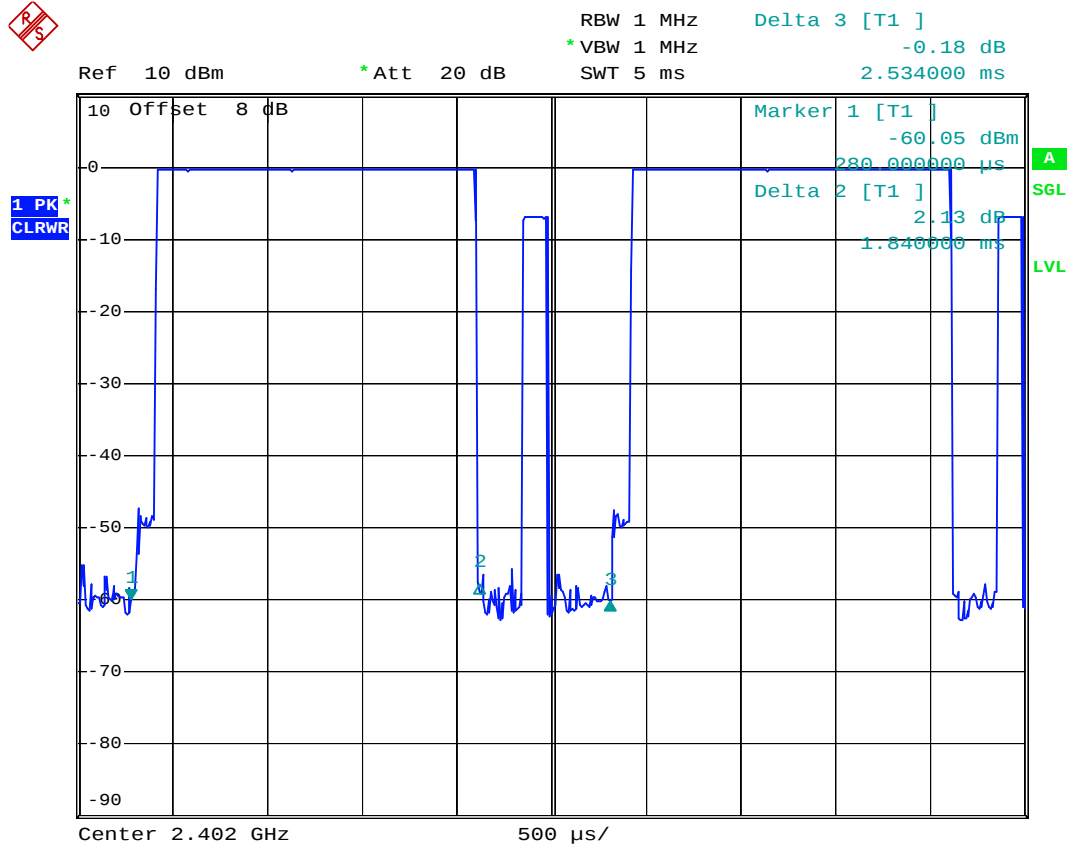
Date: 17.OCT.2006 17:16:31



Date: 17.OCT.2006 17:26:29



DH3 (CH00)

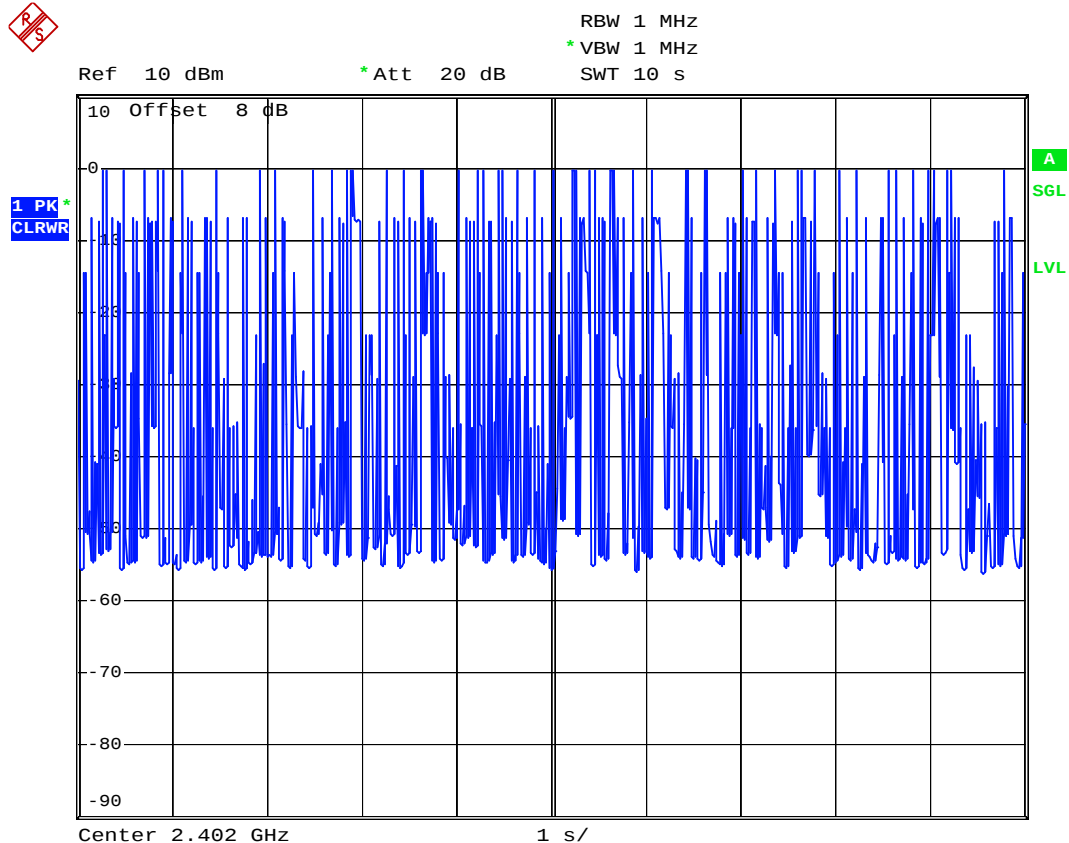


Date: 17.OCT.2006 17:17:04



FCC TEST REPORT

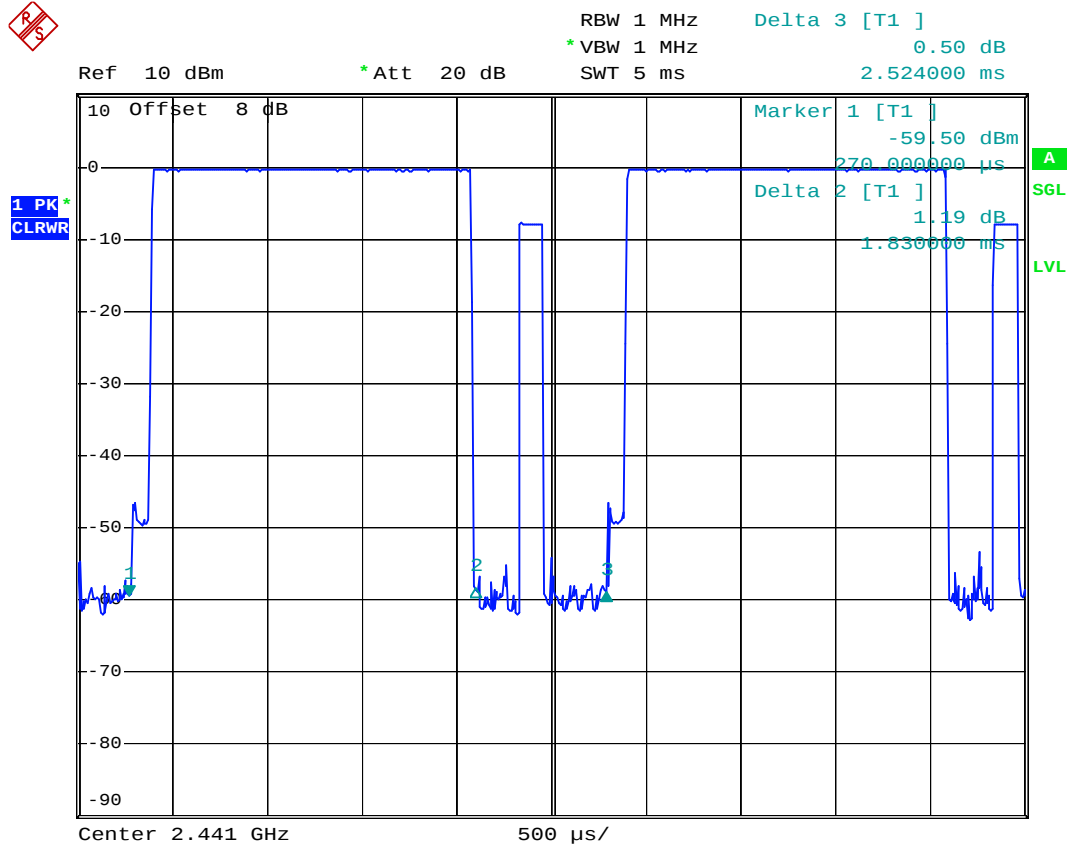
Report No. : FR682525



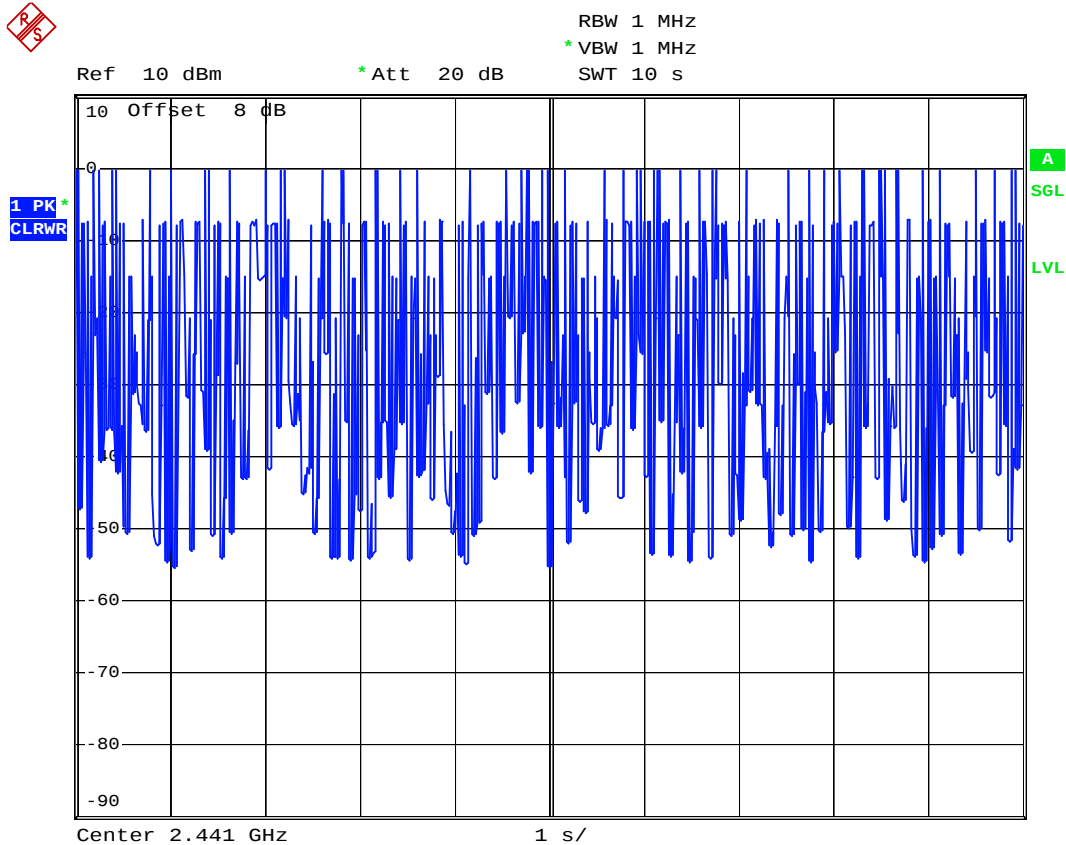
Date: 17.OCT.2006 17:27:10



DH3 (CH39)



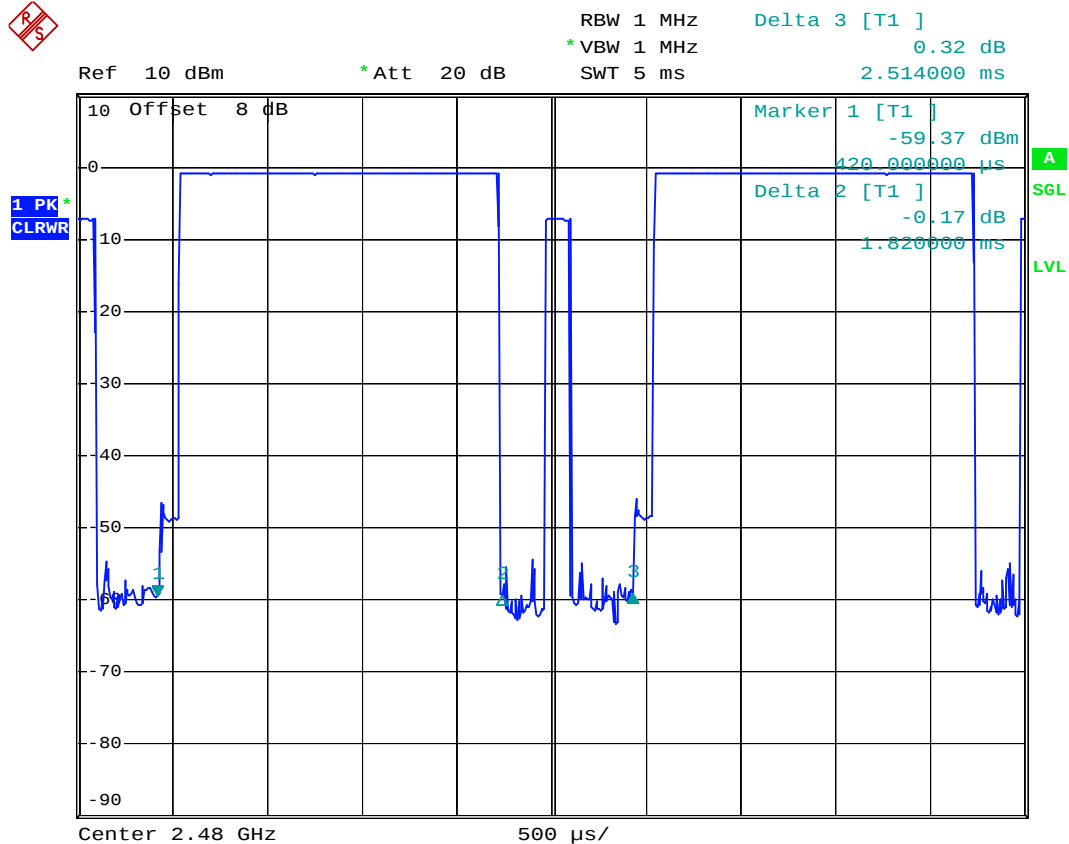
Date: 17.OCT.2006 17:17:27



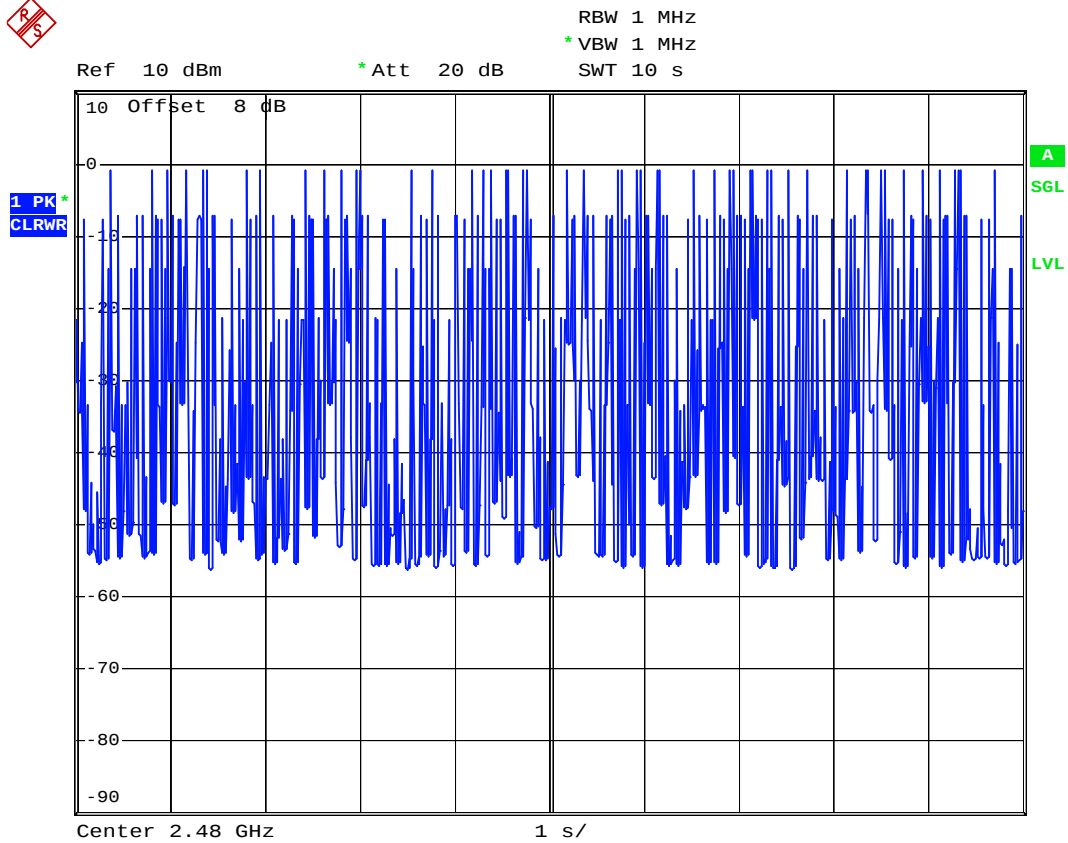
Date: 17.OCT.2006 17:27:28



DH3 (CH78)



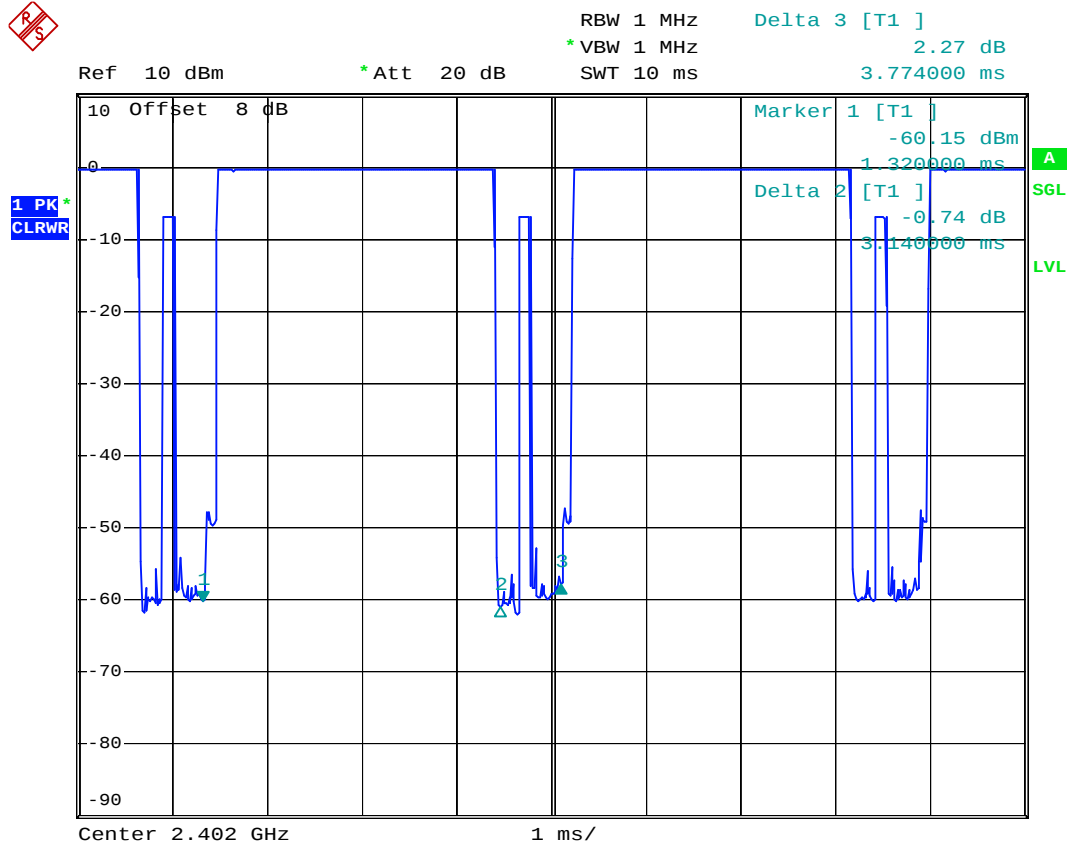
Date: 17.OCT.2006 17:20:39



Date: 17.OCT.2006 17:27:47



DH5 (CH00)

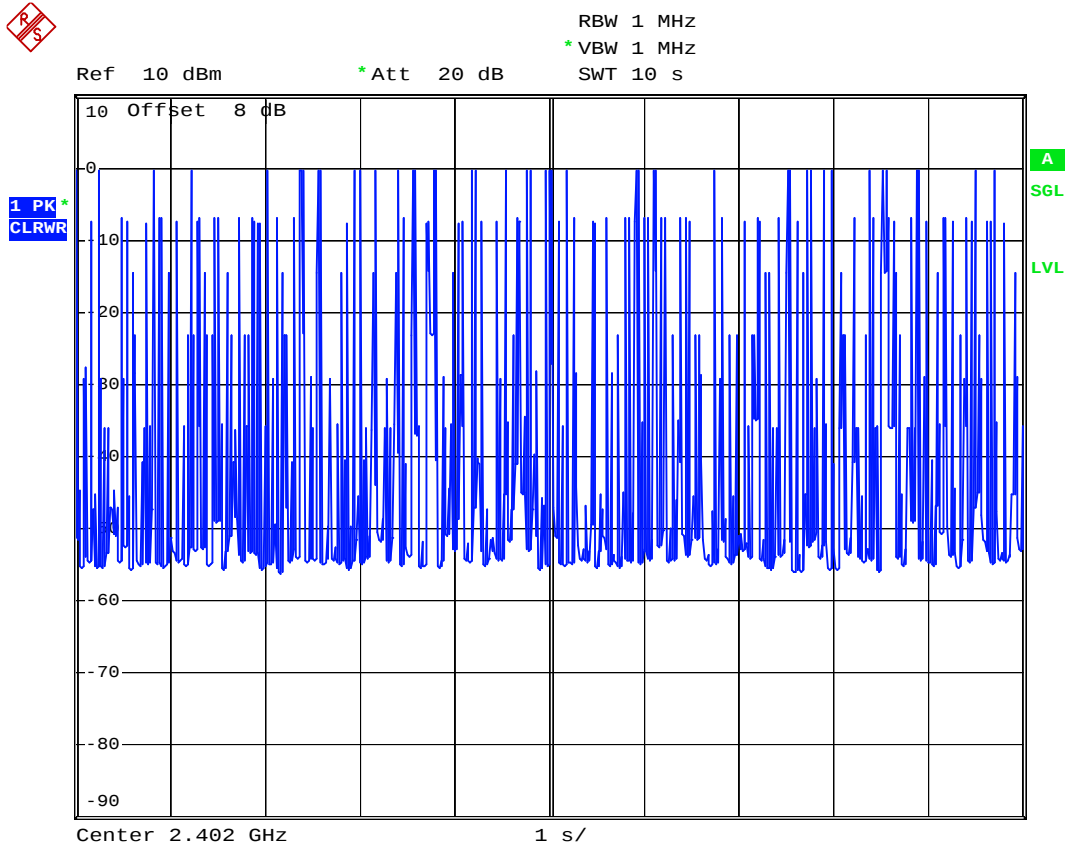


Date: 17.OCT.2006 17:21:28



FCC TEST REPORT

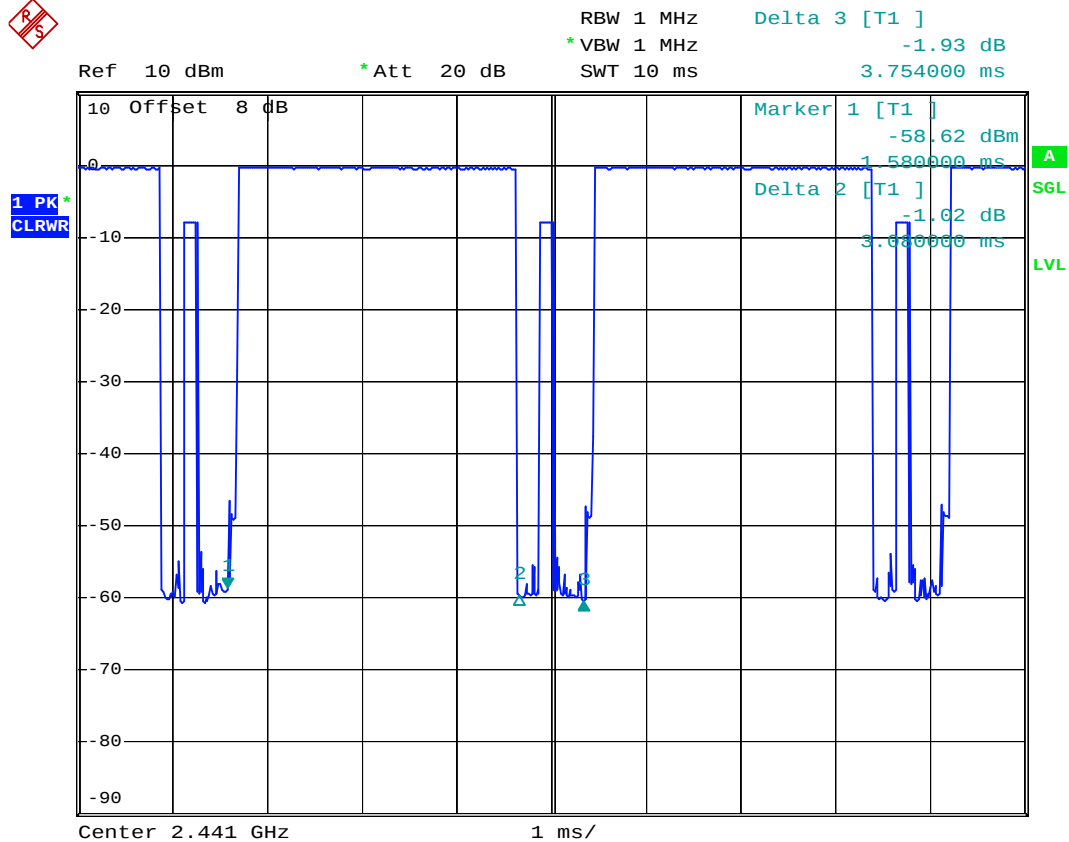
Report No. : FR682525



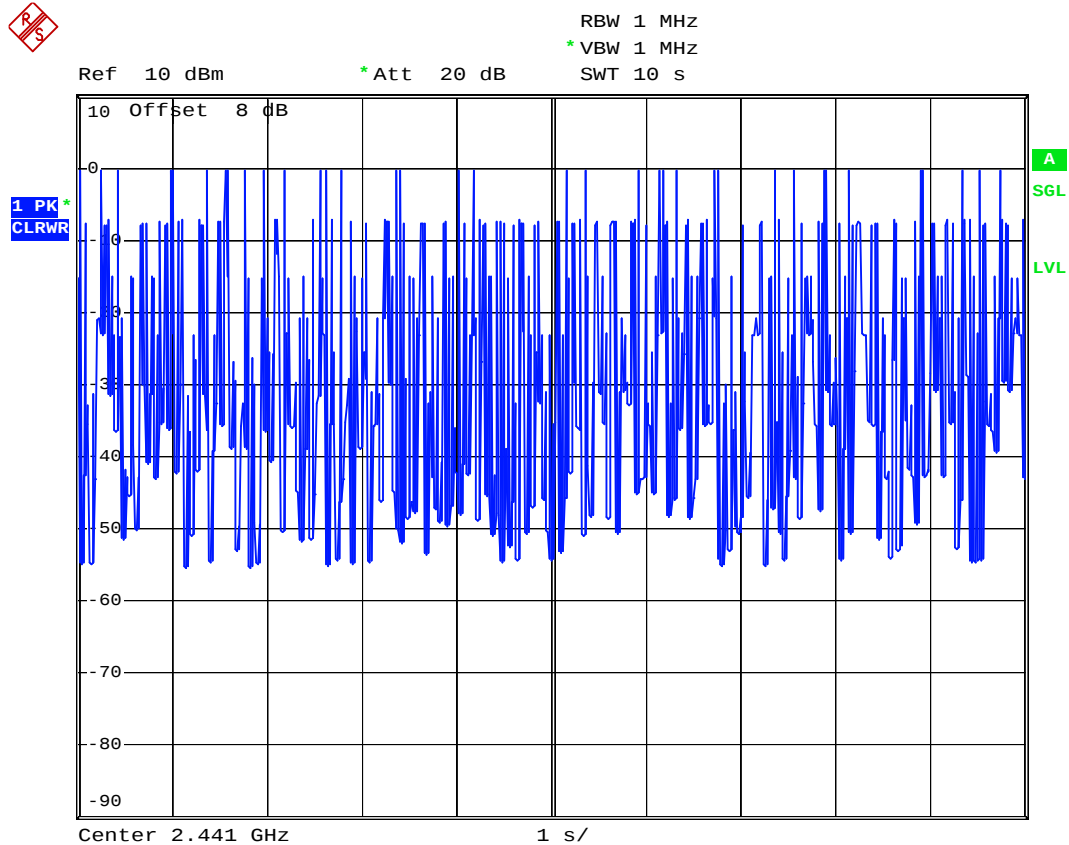
Date: 17.OCT.2006 17:28:53



DH5 (CH39)



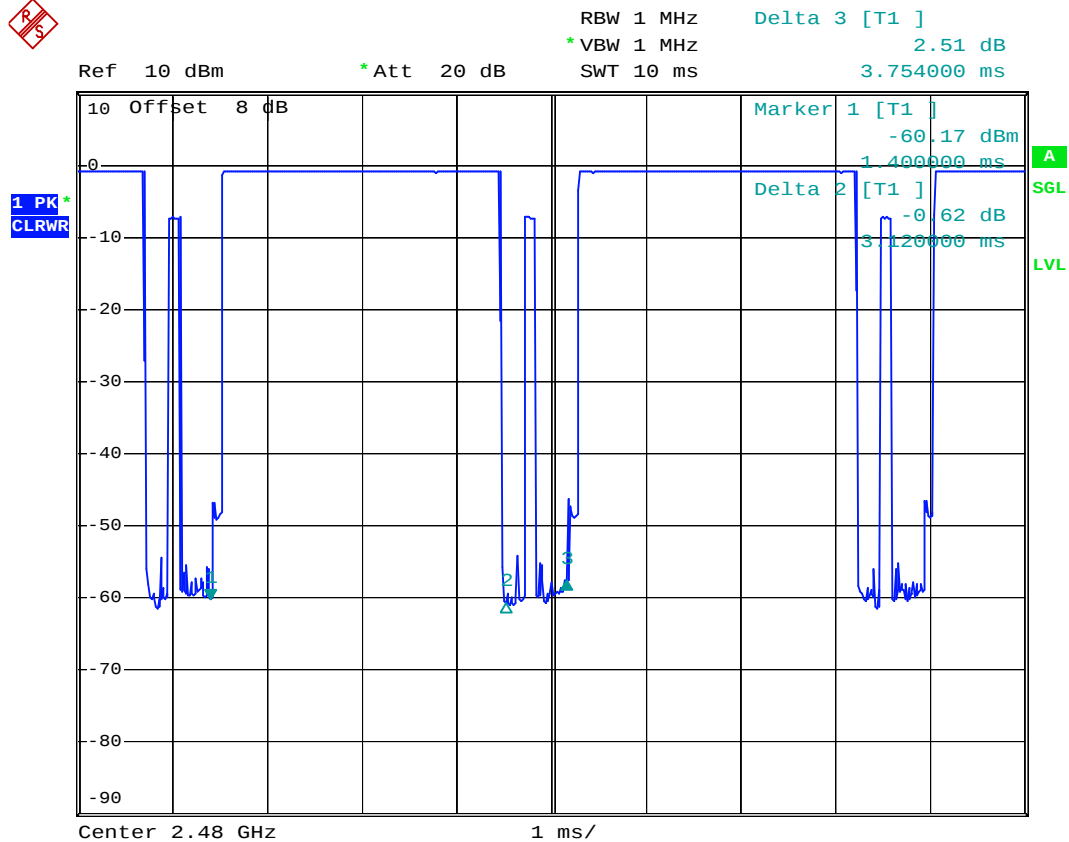
Date: 17.OCT.2006 17:21:48



Date: 17.OCT.2006 17:29:12



DH5 (CH78)

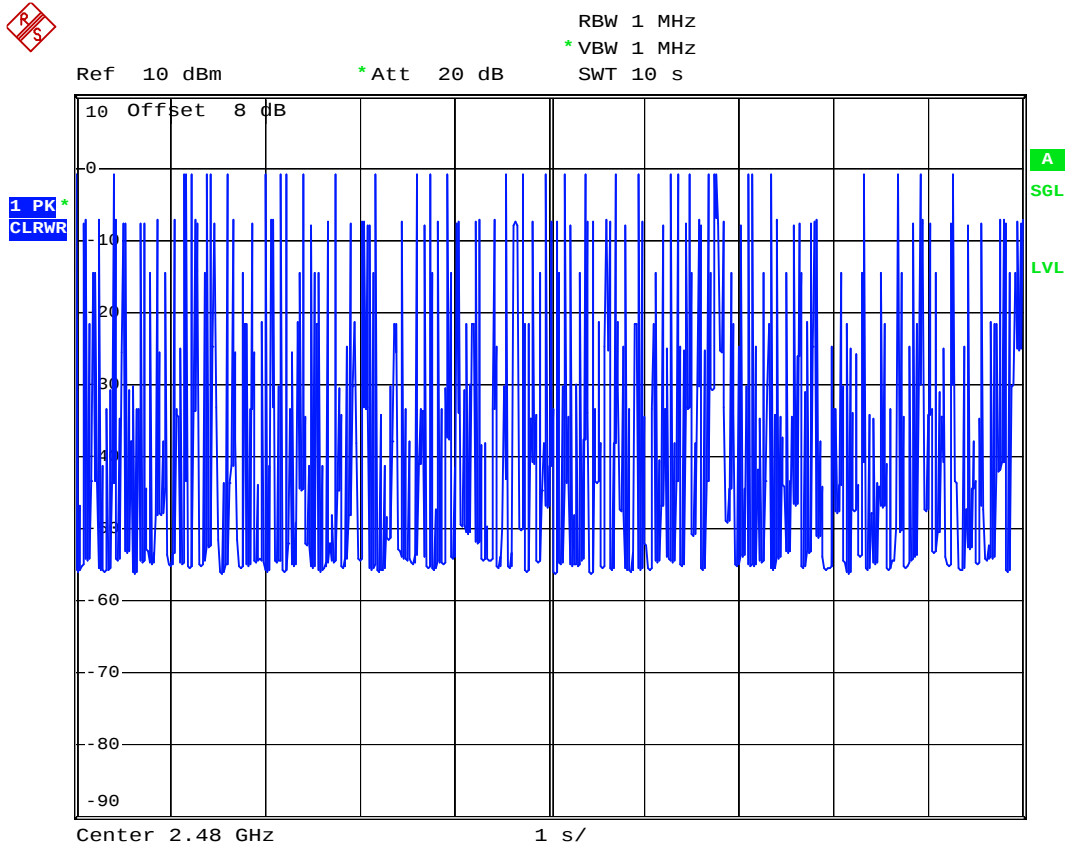


Date: 17.OCT.2006 17:22:11



FCC TEST REPORT

Report No. : FR682525



Date: 17.OCT.2006 17:30:01

5.9 Peak Output Power Measurement

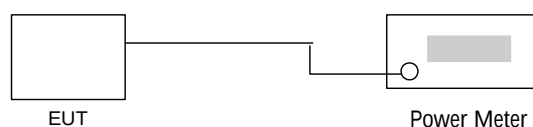
5.9.1 Measuring Instruments :

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°C
- Relative Humidity : 46%
- Test Enginner : James

WLAN 802.11b

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	12.01	1W/30 dBm
06	2437	12.98	1W/30 dBm
11	2462	12.54	1W/30 dBm

**WLAN 802.11g**

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
01	2412	15.59	1W/30 dBm
06	2437	16	1W/30 dBm
11	2462	15.57	1W/30 dBm

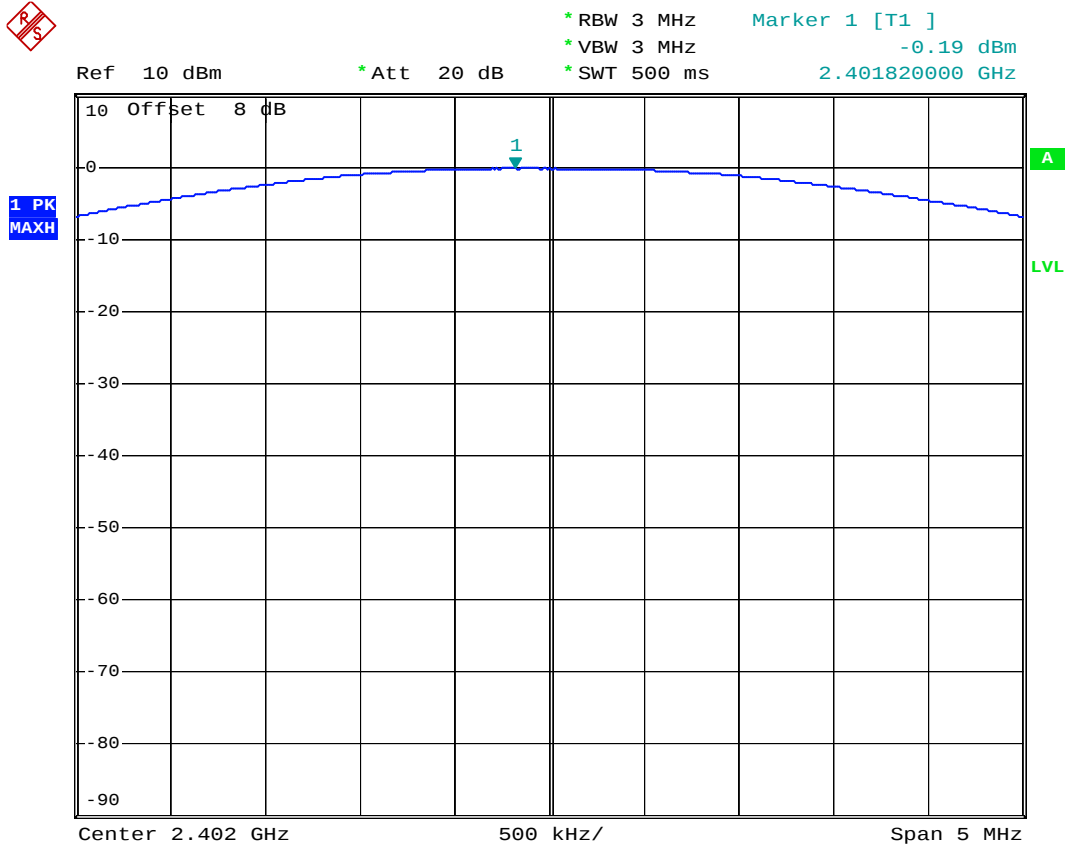
Bluetooth

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)
00	2402	-0.19	1W/30 dBm
39	2441	-0.22	1W/30 dBm
78	2480	-0.72	1W/30 dBm



5.9.5 Output Power

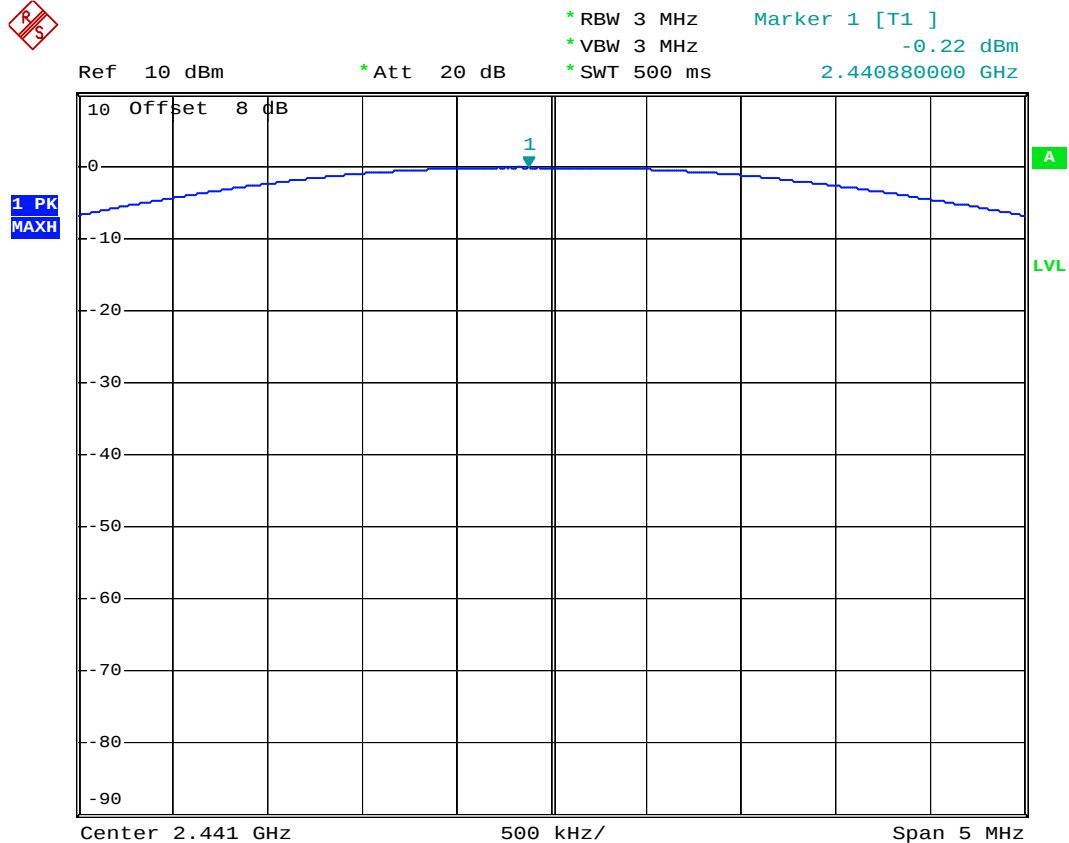
BT Mode : CH00 (2402MHz)



Date: 17.OCT.2006 17:05:28



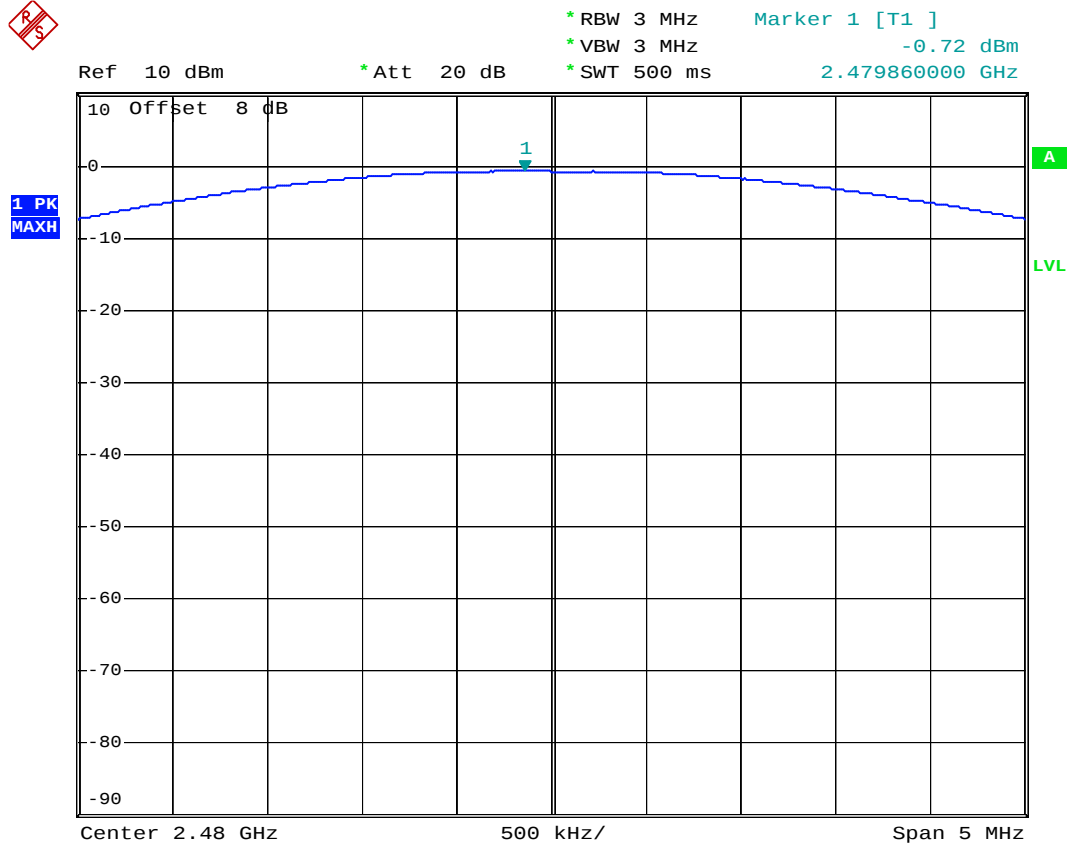
BT Mode : CH39 (2441MHz)



Date: 17.OCT.2006 17:05:56



BT Mode : CH78 (2480MHz)



Date: 17.OCT.2006 17:06:11



5.10 Conducted Emission

5.10.1 Measuring Instruments

As described in chapter 6 of this test Report.

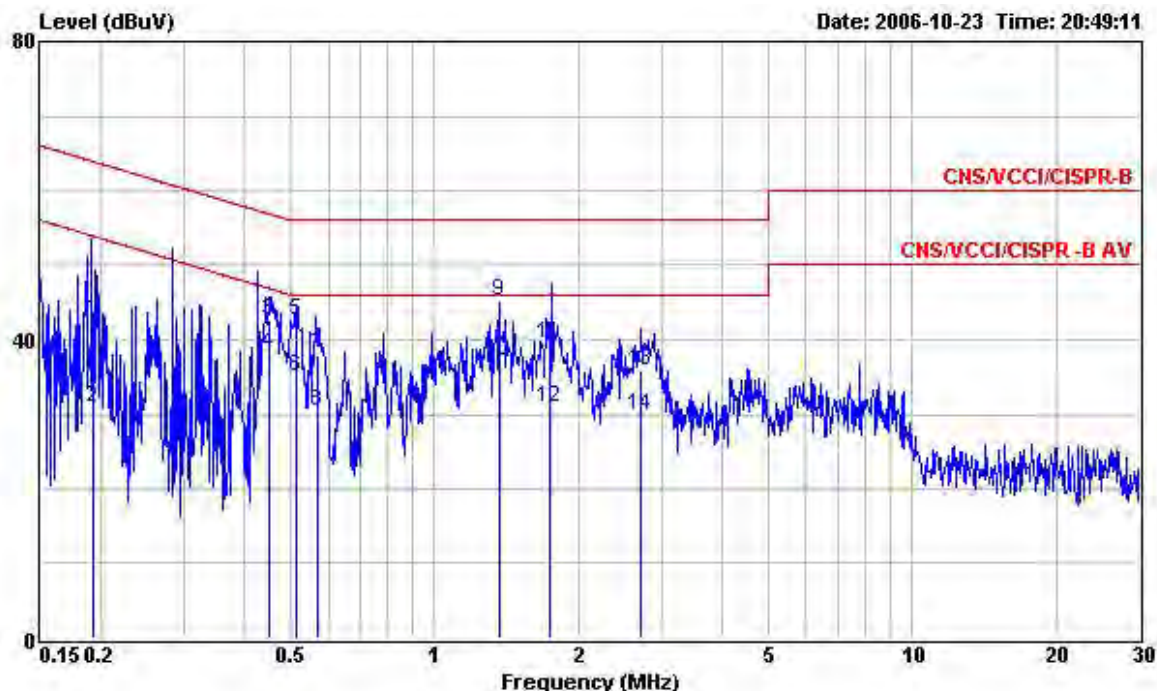
5.10.2 Test Procedures :

- 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

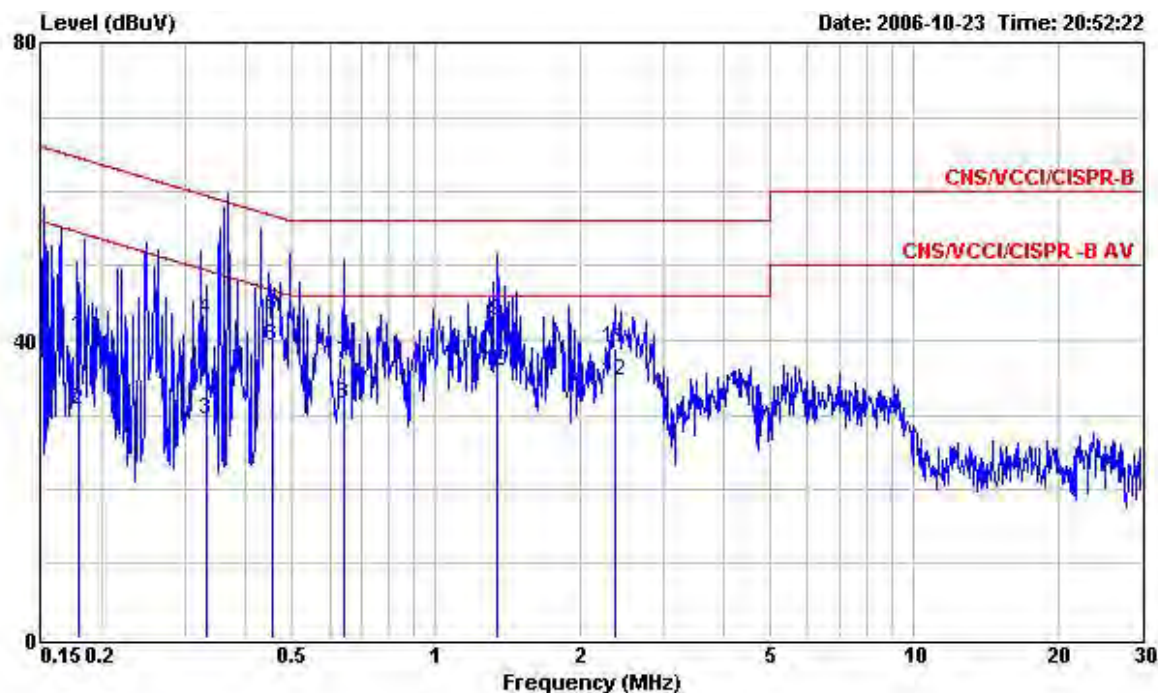
- Temperature : 24°C
- Relative Humidity : 52%
- Test Enginner : Andy
- Test Mode : Mode 1

■ 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 : MOBILE PHONE
Power : 120V/60Hz
Model : FR682525
Memo : PCS 1900 IDLE+BT LINK+WLAN LINK
Memo : +EARPHONE+ADAPTOR+MPEG4
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV		dBuV	dBuV		dB	
1	0.192	42.69	-21.25	63.94	42.55	0.10	0.04	QP
2	0.192	30.82	-23.12	53.94	30.68	0.10	0.04	Average
3	0.452	42.57	-14.27	56.84	42.30	0.10	0.17	QP
4	0.452	38.09	-8.75	46.84	37.82	0.10	0.17	Average
5	0.516	42.48	-13.52	56.00	42.23	0.10	0.15	QP
6	0.516	34.94	-11.06	46.00	34.69	0.10	0.15	Average
7	0.572	37.83	-18.17	56.00	37.59	0.10	0.14	QP
8	0.572	30.43	-15.57	46.00	30.19	0.10	0.14	Average
9	1.370	45.16	-10.84	56.00	44.96	0.10	0.10	QP
10	1.370	37.13	-8.87	46.00	36.93	0.10	0.10	Average
11	1.750	39.46	-16.54	56.00	39.23	0.10	0.13	QP
12	1.750	30.97	-15.03	46.00	30.74	0.10	0.13	Average
13	2.711	35.76	-20.24	56.00	35.36	0.14	0.26	QP
14	2.711	29.99	-16.01	46.00	29.59	0.14	0.26	Average

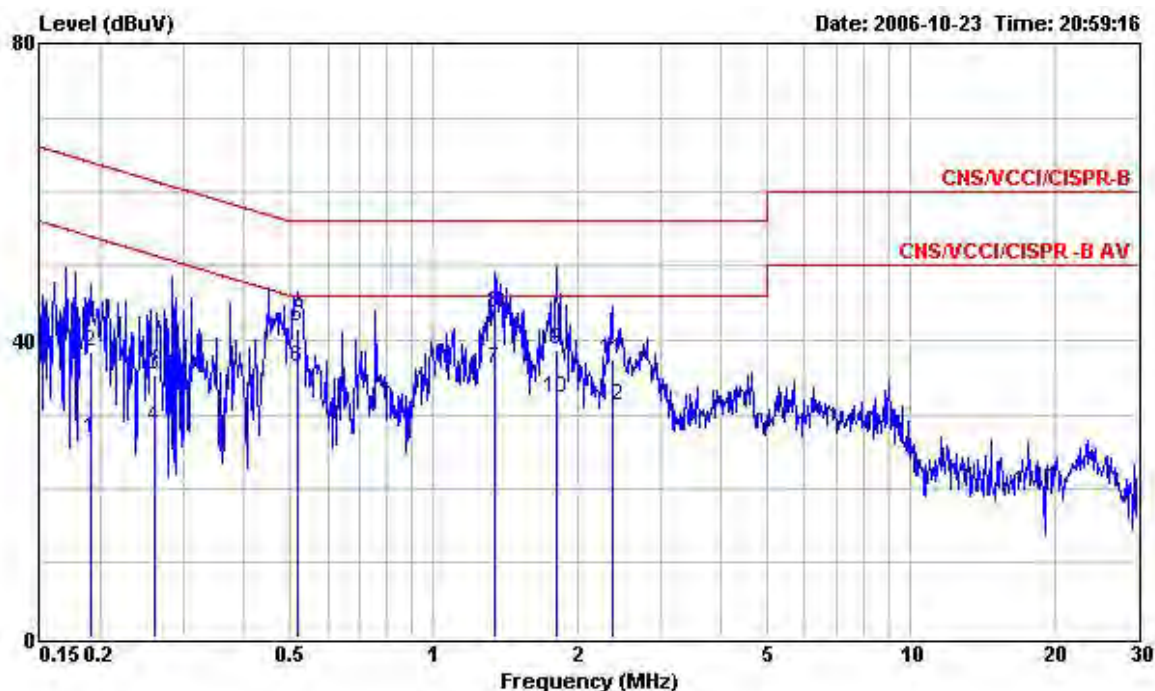


Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : MOBILE PHONE
Power : 120V/60Hz
Model : FR682525
Memo : PCS 1900 IDLE+BT LINK+WLAN LINK
Memo : +EARPHONE+ADAPTOR+MPEG4
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.179	40.62	-23.92	64.54	40.48	0.10	0.04	QP
2	0.179	30.55	-23.99	54.54	30.41	0.10	0.04	Average
3	0.330	29.42	-20.03	49.45	29.18	0.10	0.14	Average
4	0.330	42.81	-16.64	59.45	42.57	0.10	0.14	QP
5	0.456	43.50	-13.27	56.77	43.24	0.10	0.16	QP
6	0.456	39.22	-7.55	46.77	38.96	0.10	0.16	Average
7	0.641	36.77	-19.23	56.00	36.55	0.10	0.12	QP
8	0.641	31.51	-14.49	46.00	31.29	0.10	0.12	Average
9	1.340	42.72	-13.28	56.00	42.52	0.10	0.10	QP
10	1.340	35.77	-10.23	46.00	35.57	0.10	0.10	Average
11	2.370	38.98	-17.02	56.00	38.67	0.10	0.21	QP
12	2.370	34.45	-11.55	46.00	34.14	0.10	0.21	Average

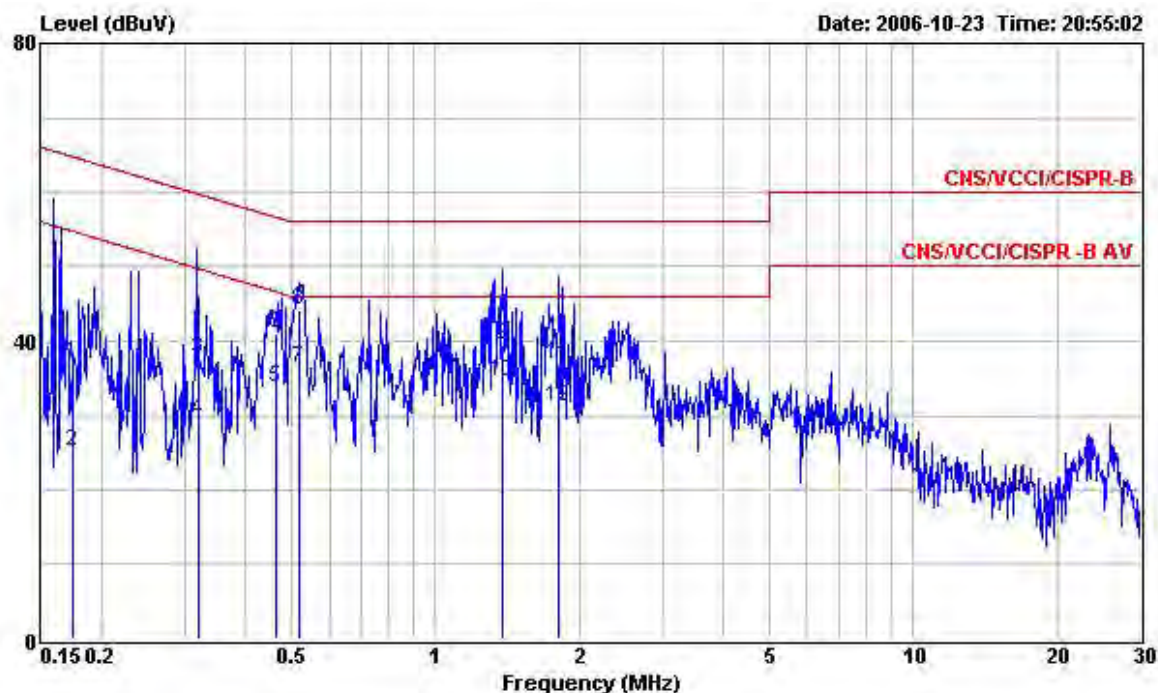
- Temperature : 26°C
- Relative Humidity : 52%
- Test Enginner : Andy
- Test Mode : Mode 2

■ 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 LINE
EUT : MOBILE PHONE
Power : 120V/60Hz
Model : FR682525
Memo : PCS 1900 IDLE+BT LINK+WLAN LINK
Memo : +EARPHONE+ADAPTOR+CAMERA
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.191	26.71	-27.28	53.99	26.57	0.10	0.04	Average
2	0.191	38.49	-25.50	63.99	38.35	0.10	0.04	QP
3	0.260	35.36	-26.07	61.43	35.17	0.10	0.09	QP
4	0.260	28.33	-23.10	51.43	28.14	0.10	0.09	Average
5	0.517	41.89	-14.11	56.00	41.64	0.10	0.15	QP
6	0.517	36.33	-9.67	46.00	36.08	0.10	0.15	Average
7	1.345	36.17	-9.83	46.00	35.97	0.10	0.10	Average
8	1.345	43.57	-12.43	56.00	43.37	0.10	0.10	QP
9	1.805	38.77	-17.23	56.00	38.54	0.10	0.13	QP
10	1.805	32.15	-13.85	46.00	31.92	0.10	0.13	Average
11	2.373	37.28	-18.72	56.00	36.95	0.12	0.21	QP
12	2.373	31.16	-14.84	46.00	30.83	0.12	0.21	Average



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
 EUT : MOBILE PHONE
 Power : 120V/60Hz
 Model : FR682525
 Memo : PCS 1900 IDLE+BT LINK+WLAN LINK
 Memo : +EARPHONE+ADAPTOR+CAMERA
 Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.174	37.24	-27.51	64.75	37.10	0.10	0.04	QP
2	0.174	25.23	-29.52	54.75	25.09	0.10	0.04	Average
3	0.319	37.74	-22.00	59.74	37.51	0.10	0.13	QP
4	0.319	29.22	-20.52	49.74	28.99	0.10	0.13	Average
5	0.466	33.67	-12.92	46.59	33.41	0.10	0.16	Average
6	0.466	41.15	-15.44	56.59	40.89	0.10	0.16	QP
7	0.518	36.42	-9.58	46.00	36.17	0.10	0.15	Average
8	0.518	44.18	-11.82	56.00	43.93	0.10	0.15	QP
9	1.379	39.60	-16.40	56.00	39.40	0.10	0.10	QP
10	1.379	34.42	-11.58	46.00	34.22	0.10	0.10	Average
11	1.810	36.89	-19.11	56.00	36.66	0.10	0.13	QP
12	1.810	31.07	-14.93	46.00	30.84	0.10	0.13	Average

5.11 Radiated Emission Measurement

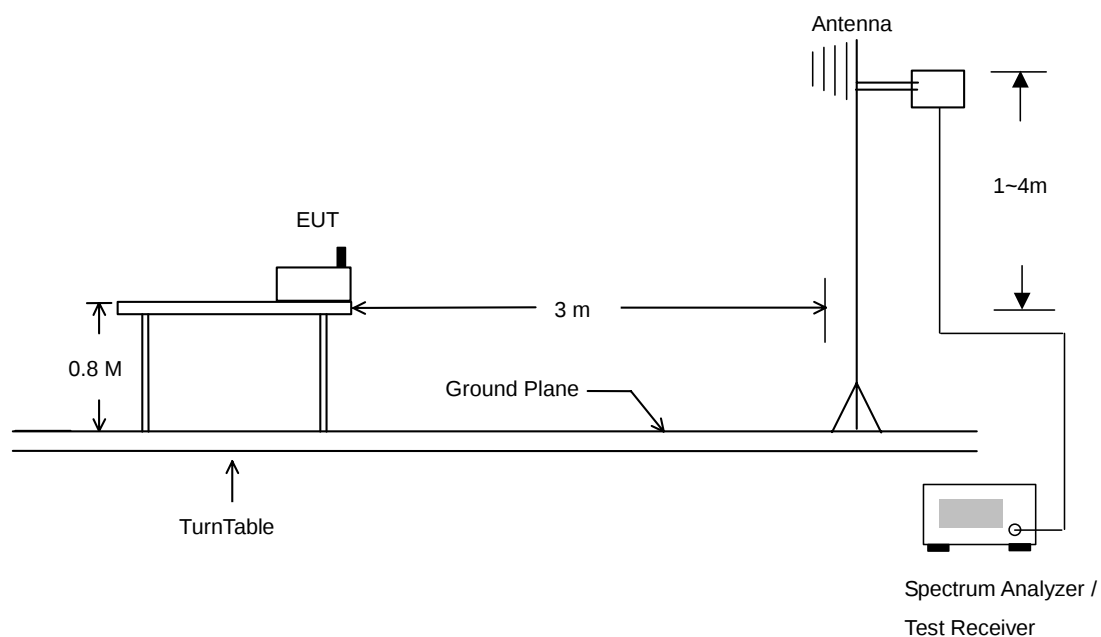
5.11.1 Measuring Instruments

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

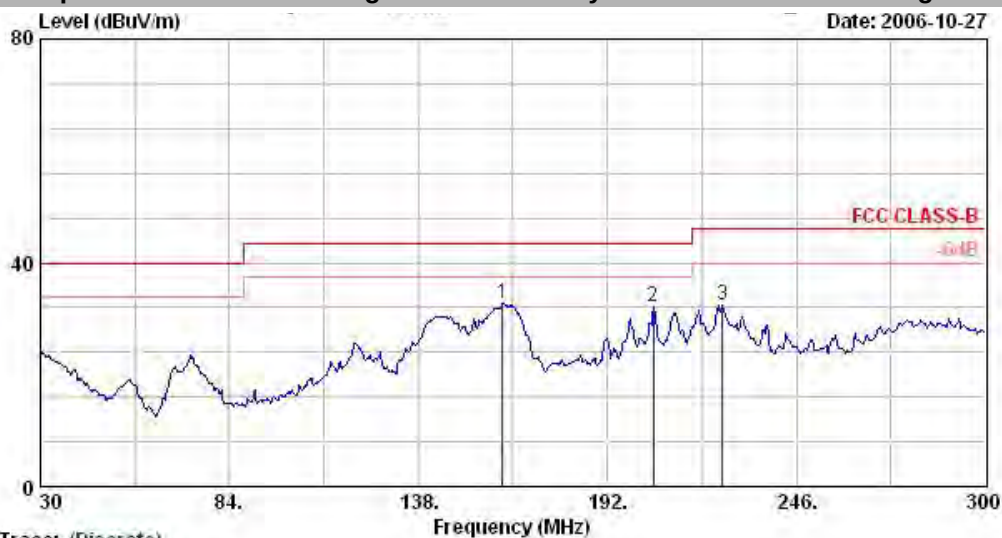




5.11.4 Test Data

- Temperature : 26°C
- Relative Humidity : 46%
- Test Enginner : Sam
- Test Mode : Mode 1
- Polarization : Horizontal

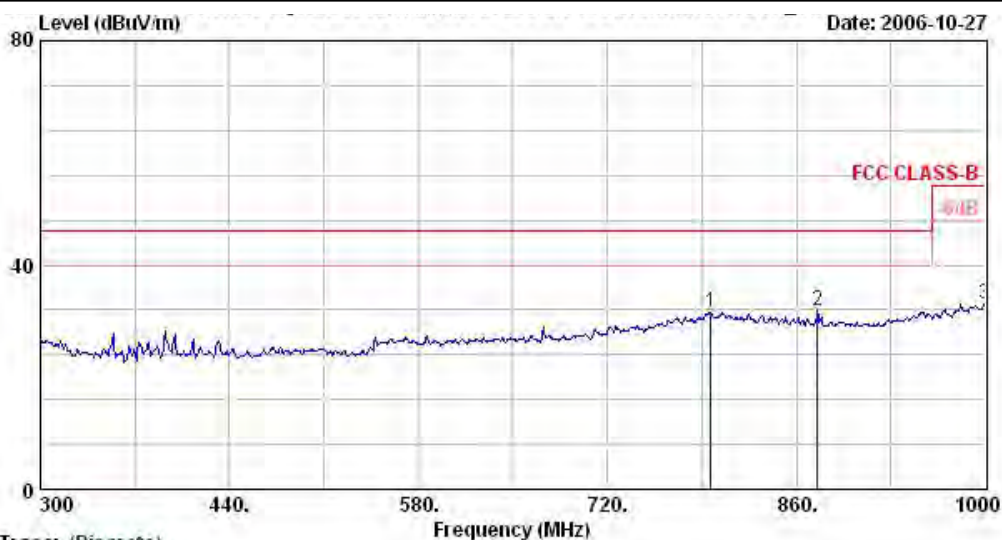
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

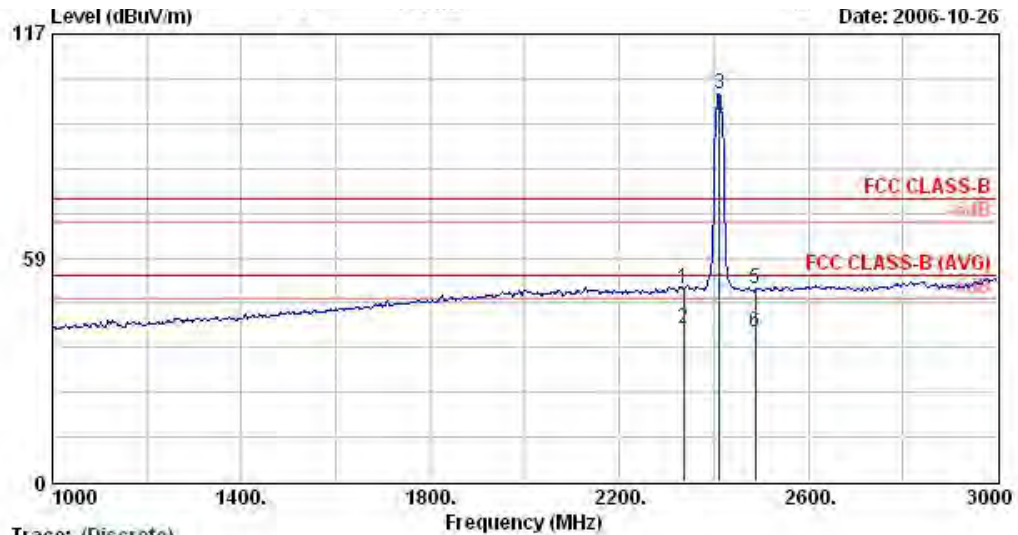
Site : 08CH06-HY
 Condition : BI-LOG-2004-1122 HORIZONTAL
 EUT : Mobile Phone
 Power : 120Wac/60Hz
 Model : FR 682525
 Mode : 11b Tx_Ch01;2412MHz
 Plane : E2
 Data Rate : 11

	Freq	Level	Over	Limit	ReadAntenna	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 @	162.0	32.68	-10.82	43.50	49.08	10.23	2.22	28.85	100	251 Peak
2 @	205.2	32.01	-11.49	43.50	48.29	9.81	2.63	28.72	---	---
3 @	224.9	32.40	-13.60	46.00	48.67	9.86	2.71	28.84	---	---



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_CM01;2412MHz
Plane : E2
Data Rate : 11

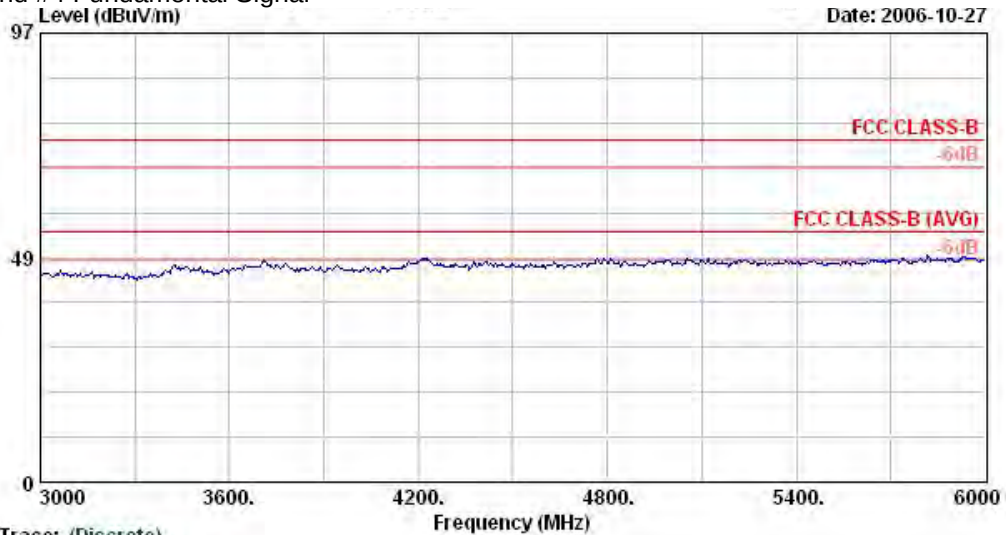
	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	796.3	31.67	-14.33	46.00	33.18	21.79	5.57	28.87	---	---
2	875.4	31.81	-14.19	46.00	34.65	20.42	5.65	28.91	---	---
3	1000.0	33.13	-20.87	54.00	32.70	22.97	6.24	28.79	---	---



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_CM01;2412MHz
Plane : E2
Data Rate : 11

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2335.1	50.66	-23.34	74.00	51.27	30.26	4.59	35.46	100	0 Peak
2	2335.1	40.07	-13.93	54.00	40.69	30.24	4.54	35.40	100	340 Average
3 @	2412.0	101.53			102.11	30.27	4.61	35.46	100	0 Peak
4 @	2412.0	94.69			95.27	30.27	4.61	35.46	100	340 Average
5	2488.0	50.54	-23.46	74.00	51.06	30.30	4.69	35.51	100	0 Peak
6	2488.0	39.05	-14.95	54.00	39.57	30.30	4.69	35.51	100	340 Average

Remark: #3 and #4 Fundamental Signal



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_CM01;2412MHz
Plane : E2
Data Rate : 11



- Polarization : Vertical

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



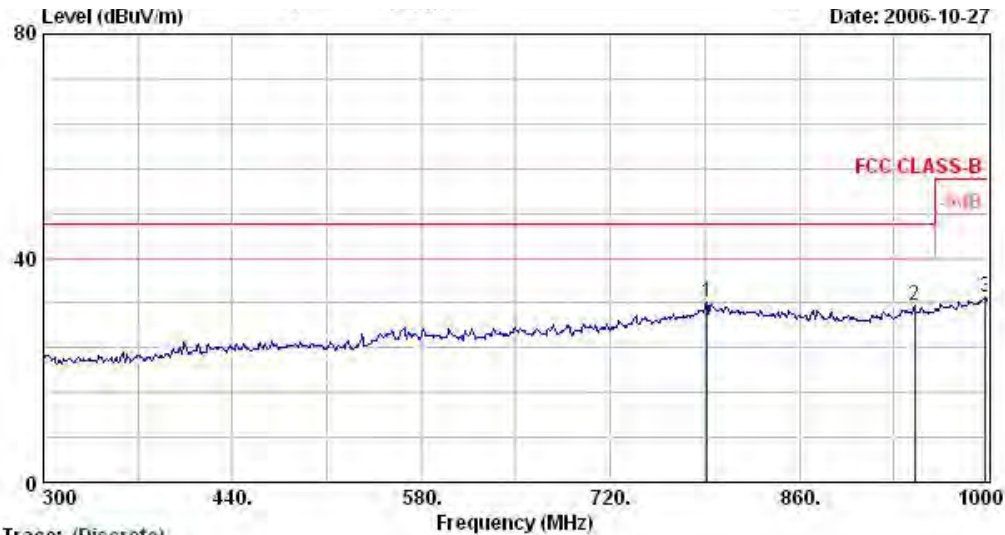
Trace: (Discrete)
 Site : 08CH06-HY
 Condition : EI-LOG-2004-1122 VERTICAL
 EUT : Mobile Phone
 Power : 120Wac/60Hz
 Model : FR 682525
 Mode : 11b Tx_Ch01;2412MHz
 Plane : E2
 Data Rate : 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	33.2	33.49	-6.51	40.00	43.38	17.73	1.01	28.63	---	---
2 @	40.5	34.24	-5.76	40.00	47.41	14.28	1.20	28.65	100	289
3 @	160.7	37.70	-5.80	43.50	54.04	10.30	2.20	28.84	---	---



FCC TEST REPORT

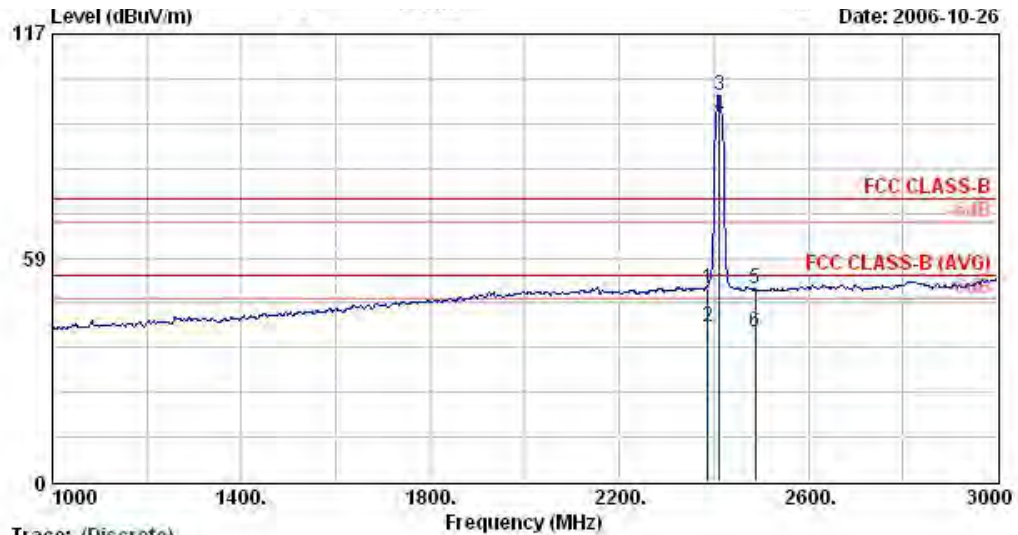
Report No. : FR682525



Trace: (Discrete)

Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11b Tx_Ch01;2412MHz
Plane : E2
Data Rate : 11

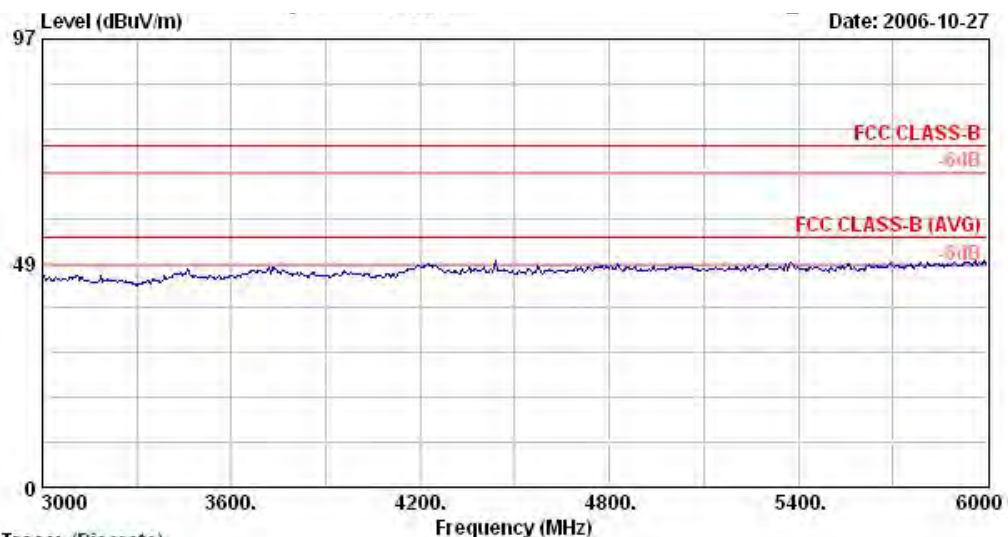
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	791.4	32.02	-13.98	46.00	33.74	21.65	5.51	28.88	---	---	Peak
2	945.4	31.66	-14.34	46.00	33.10	21.32	6.10	28.86	---	---	Peak
3	997.9	33.01	-20.99	54.00	32.67	22.91	6.22	28.79	---	---	Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_Cho1;2412MHz
Plane : E2
Data Rate : 11

	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	2387.5	50.54	-23.46	74.00	51.15	30.26	4.59	35.46	100	0 Peak
2	2387.5	40.39	-13.61	54.00	40.98	30.26	4.59	35.44	104	156 Average
3 @	2412.0	100.93			101.51	30.27	4.61	35.46	100	0 Peak
4 @	2412.0	95.25			95.83	30.27	4.61	35.46	104	156 Average
5	2488.0	50.63	-23.37	74.00	51.15	30.30	4.69	35.51	100	0 Peak
6	2488.0	39.12	-14.88	54.00	39.64	30.30	4.69	35.51	104	156 Average

Remark: #3 and #4 Fundamental Signal



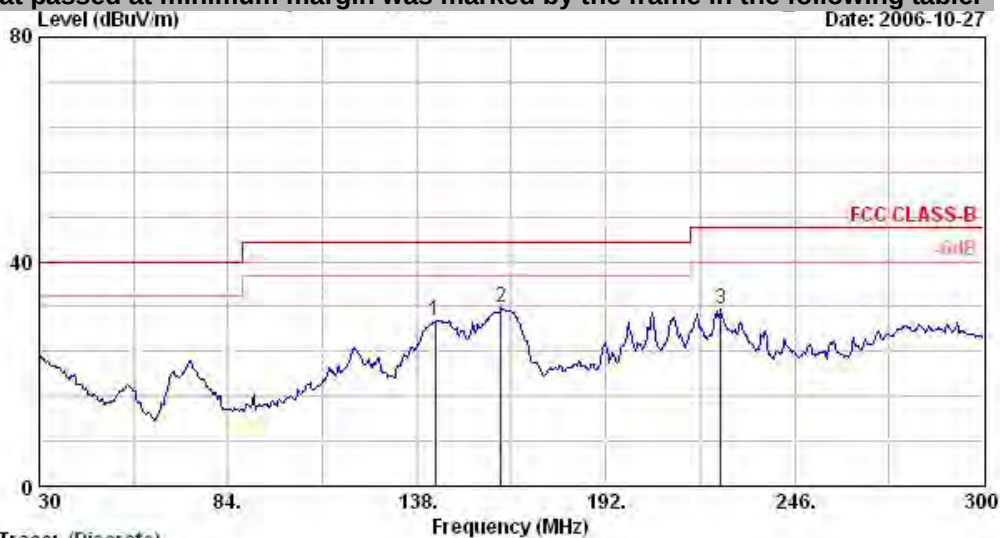
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_Cho1;2412MHz
Plane : E2
Data Rate : 11

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



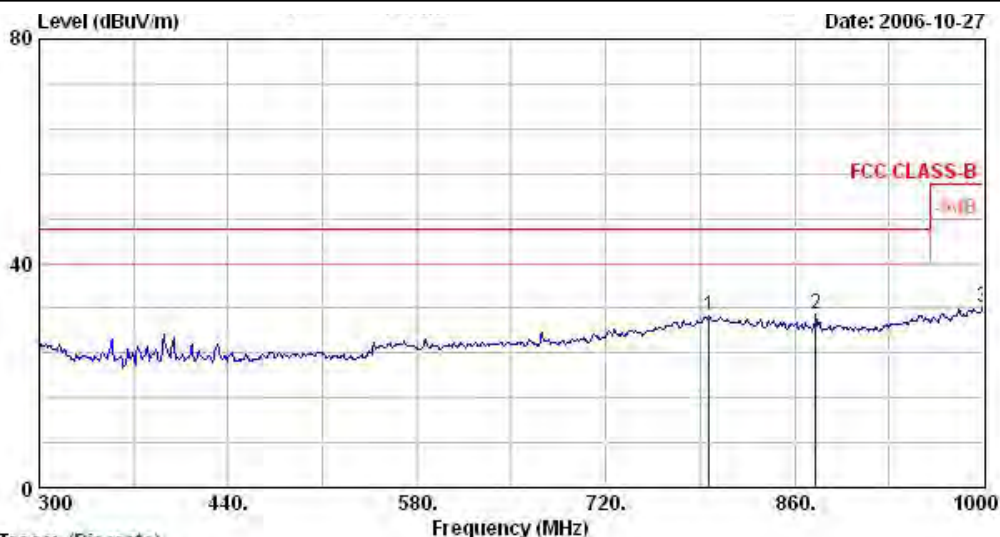
- Test Mode : Mode 2
- Polarization : Horizontal

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



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ao}/60Hz
Model : FR 682525
Mode : 11b Tx_CH06;2437MHz
Plane : E2
Data Rate : 11

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Preamp Loss Factor	Ant Pos	Table Pos	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	143.1	29.43	-14.07	43.50	45.81	10.24	2.21	28.83	---	---	Peak
2 @	162.0	31.68	-11.82	43.50	48.08	10.23	2.22	28.85	100	187	Peak
3 @	224.9	31.40	-14.60	46.00	47.67	9.86	2.71	28.84	---	---	Peak



Trace: (Discrete)

Frequency (MHz)

Site : 08CH06-HY

Condition : BI-LOG-2004-1122 HORIZONTAL

EUT : Mobile Phone

Power : 120Vac/60Hz

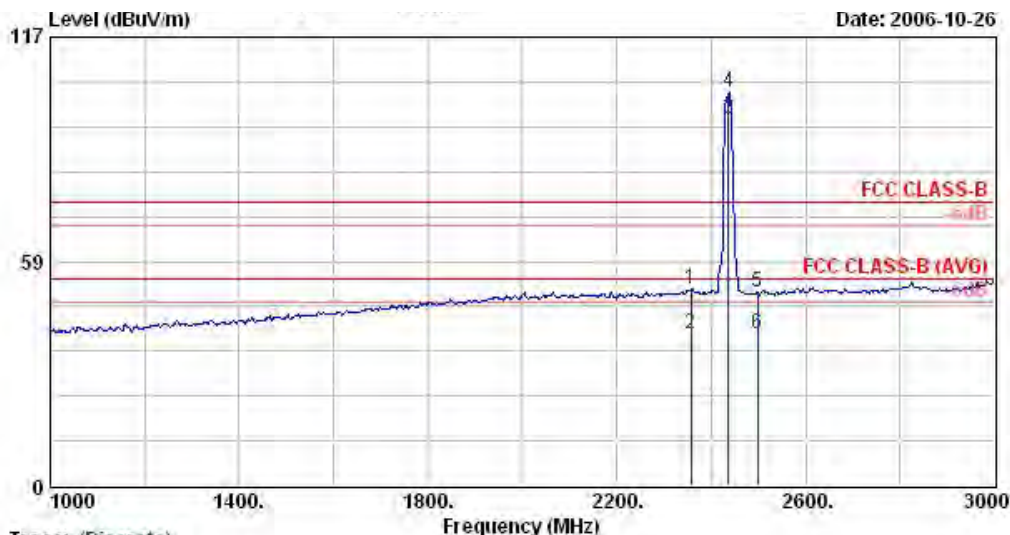
Model : FR 682525

Mode : 11b Tx_C06;2437MHz

Plane : E2

Data Rate : 11

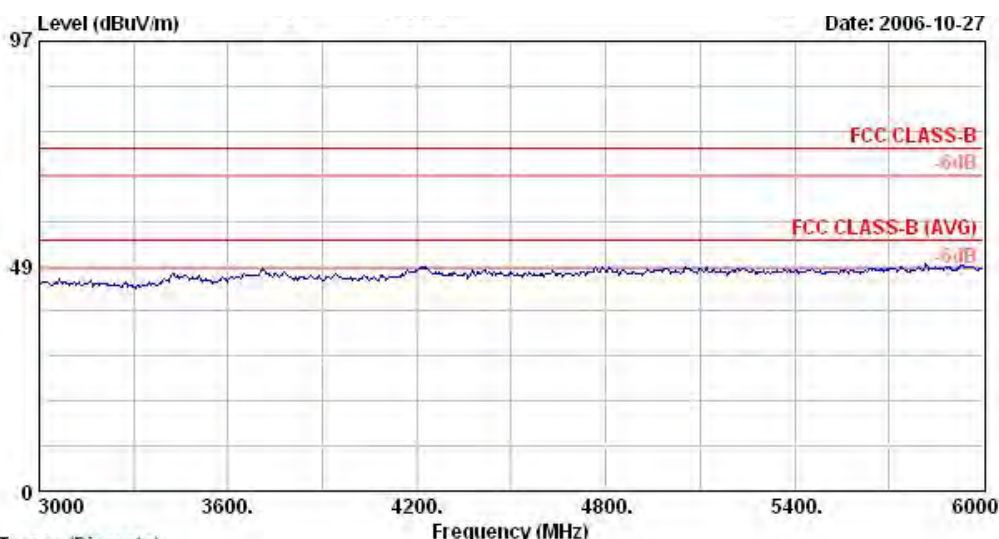
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	796.3	30.67	-15.33	46.00	32.18	21.79	5.57	28.87	---	---	Peak
2 @	875.4	30.81	-15.19	46.00	33.65	20.42	5.65	28.91	---	---	Peak
3 @	1000.0	32.13	-21.87	54.00	31.70	22.97	6.24	28.79	---	---	Peak



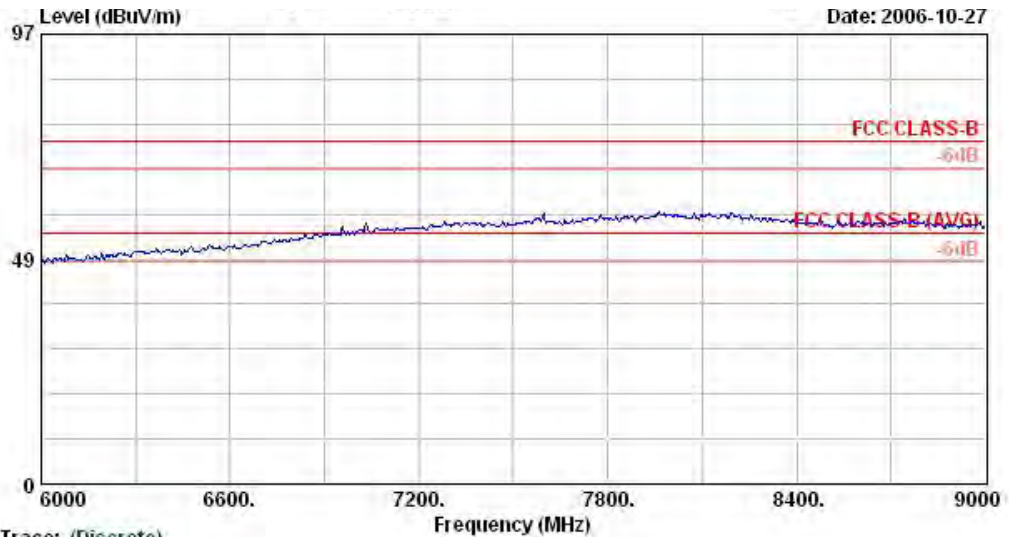
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : 11b Tx_Ch06:2437MHz
Plane : E2
Data Rate : 11

	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 @	2358.0	51.36	-22.64	74.00	51.98	30.24	4.56	35.42	100	0 Peak
2 @	2358.0	39.77	-14.23	54.00	40.39	30.24	4.56	35.42	100	350 Average
3 @	2437.0	95.67			96.22	30.28	4.64	35.47	100	350 Average
4 @	2437.0	102.53			103.08	30.28	4.64	35.47	100	0 Peak
5 @	2498.0	50.66	-23.34	74.00	51.20	30.30	4.69	35.53	100	0 Peak
6 @	2498.0	39.39	-14.61	54.00	39.93	30.30	4.69	35.53	100	350 Average

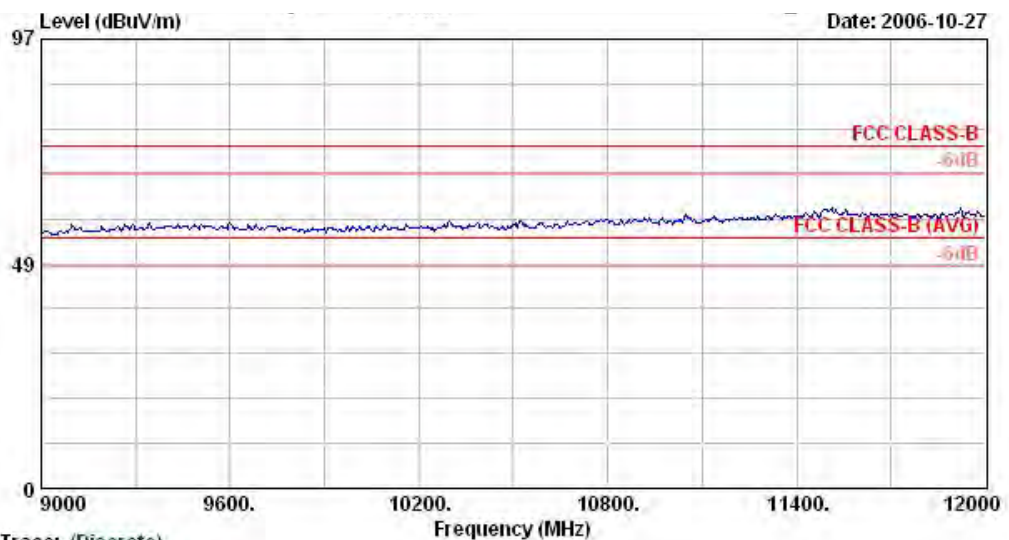
Remark: #3 and #4 Fundamental Signal



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : 11b Tx_Ch06:2437MHz
Plane : E2
Data Rate : 11



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ao}/60Hz
Model : FR 682525
Mode : 11b Tx_CH06;2437MHz
Plane : E2
Data Rate : 11

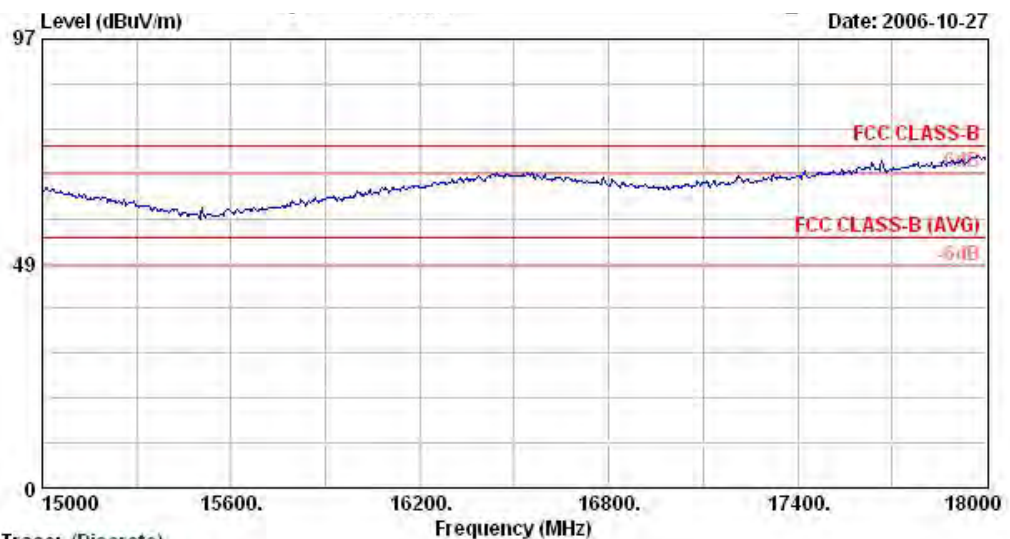
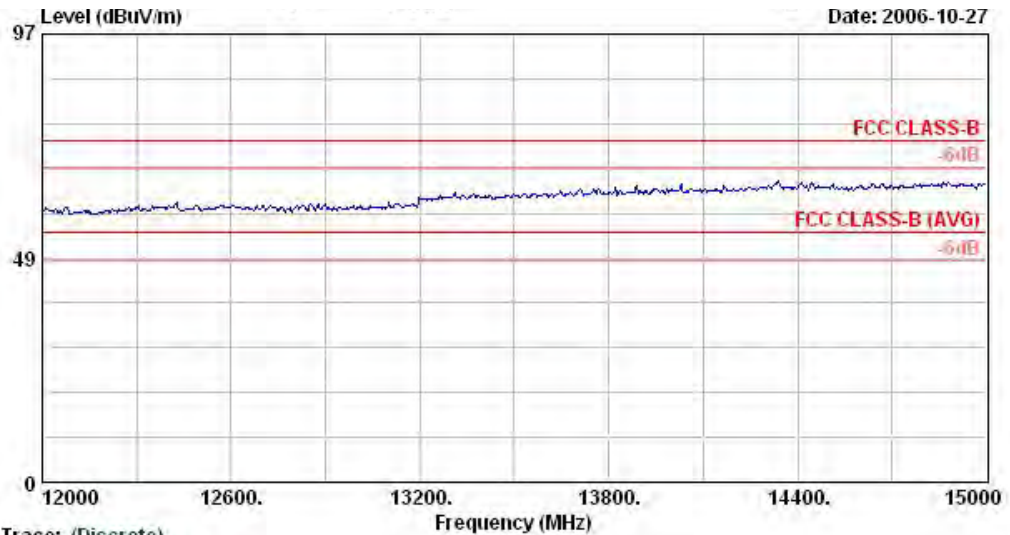


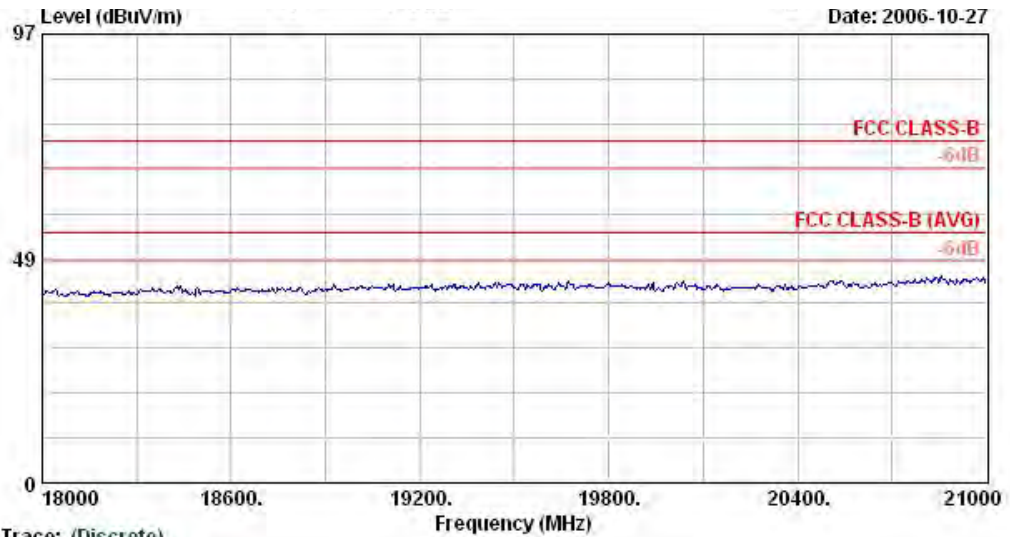
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ao}/60Hz
Model : FR 682525
Mode : 11b Tx_CH06;2437MHz
Plane : E2
Data Rate : 11



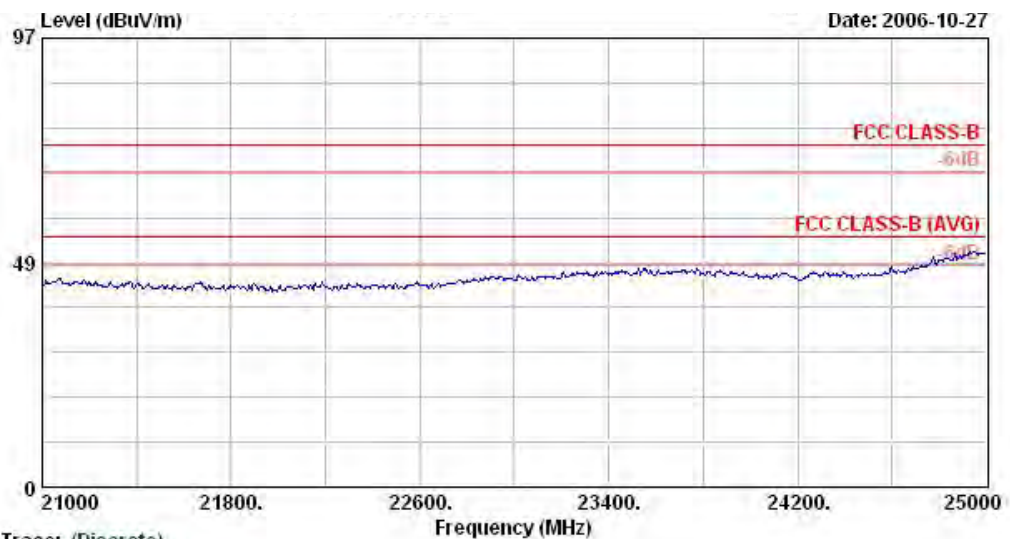
FCC TEST REPORT

Report No. : FR682525



**Trace: (Discrete)**

Site : 08CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : 11b Tx_CH06;2437MHz
Plane : E2
Data Rate : 11

**Trace: (Discrete)**

Site : 08CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : 11b Tx_CH06;2437MHz
Plane : E2
Data Rate : 11



- Polarization : Vertical

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

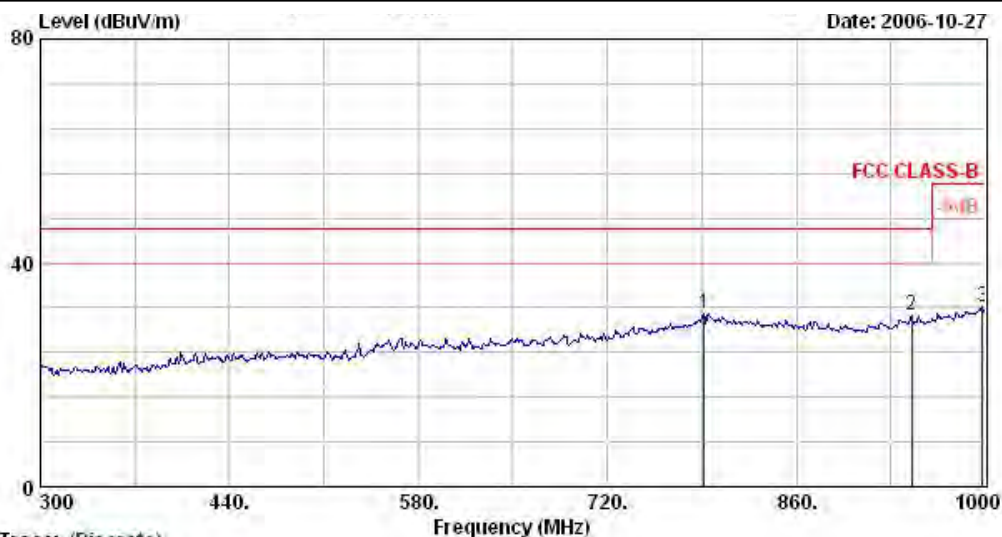


	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level	Loss	Factor	Pos	Pos	Remark
					dBuV	dB/m	dB	dB	cm	deg
1 @	33.2	32.49	-7.51	40.00	42.38	17.73	1.01	28.63	---	---
2 @	40.5	33.24	-6.76	40.00	46.41	14.28	1.20	28.65	100	344
3 @	160.7	36.70	-6.80	43.50	53.04	10.30	2.20	28.84	---	---



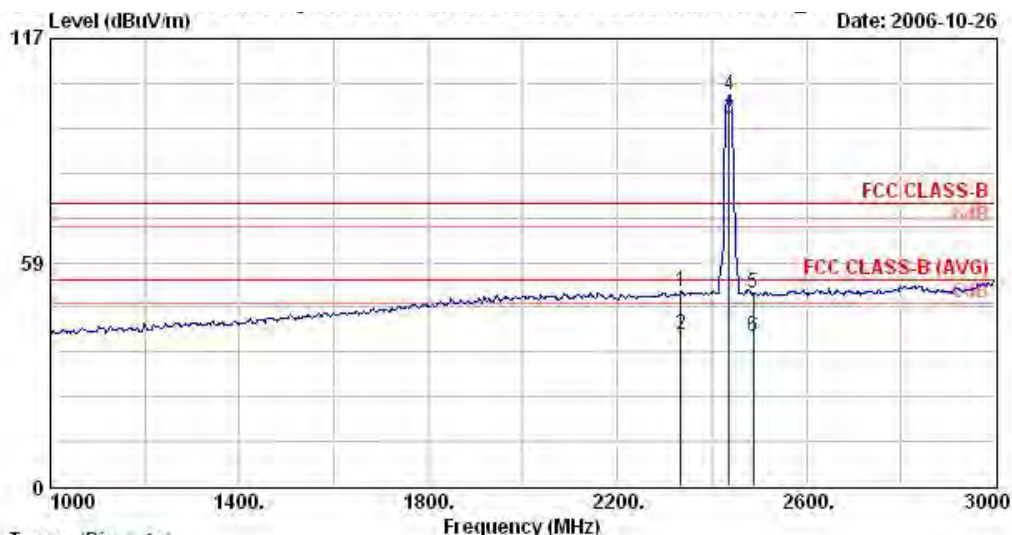
FCC TEST REPORT

Report No. : FR682525



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11b Tx_CM06;2437MHz
Plane : E2
Data Rate : 11

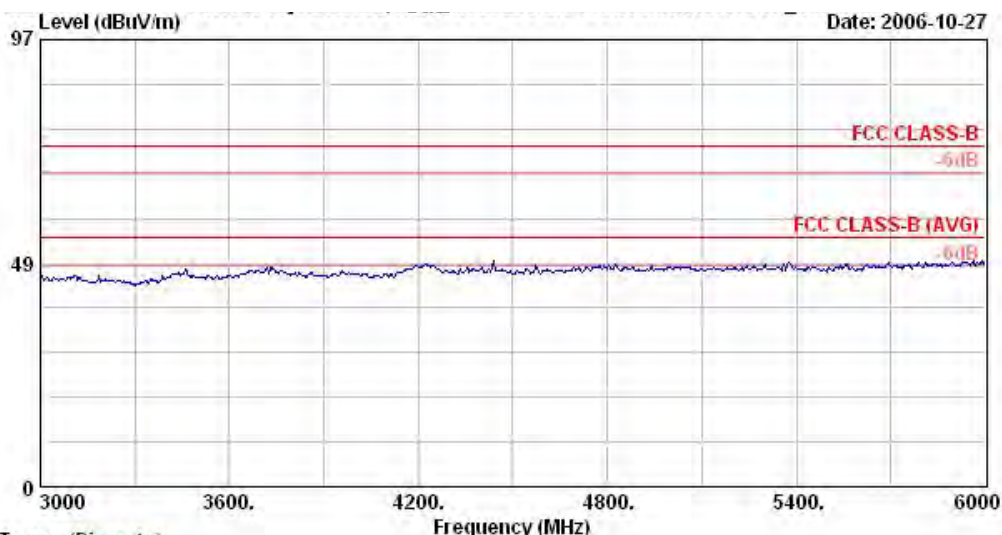
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	791.4	31.02	-14.98	46.00	32.74	21.65	5.51	28.88	---	---	Peak
2 @	945.4	30.66	-15.34	46.00	32.10	21.32	6.10	28.86	---	---	Peak
3 @	997.9	32.01	-21.99	54.00	31.67	22.91	6.22	28.79	---	---	Peak



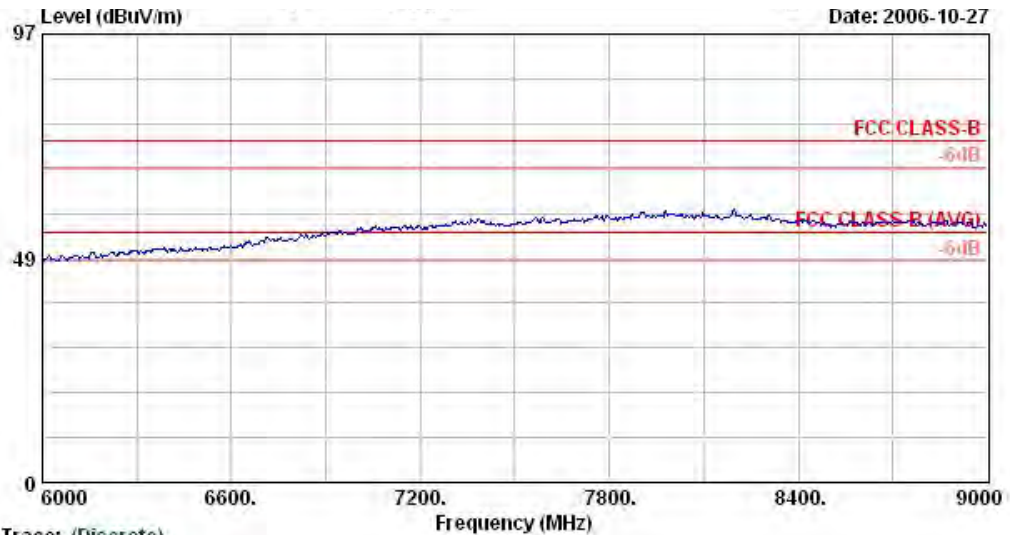
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_Ch06;2437MHz
Plane : E2
Data Rate : 11

	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 @	2334.0	50.72	-23.28	74.00	51.37	30.23	4.52	35.40	100	0 Peak
2 @	2334.0	39.68	-14.32	54.00	40.33	30.23	4.52	35.40	106	86 Average
3 @	2437.0	96.15			96.70	30.28	4.64	35.47	106	86 Average
4 @	2437.0	102.15			102.73	30.27	4.62	35.47	100	0 Peak
5 @	2488.0	50.59	-23.41	74.00	51.10	30.30	4.69	35.51	100	0 Peak
6 @	2488.0	39.28	-14.72	54.00	39.80	30.30	4.69	35.51	106	86 Average

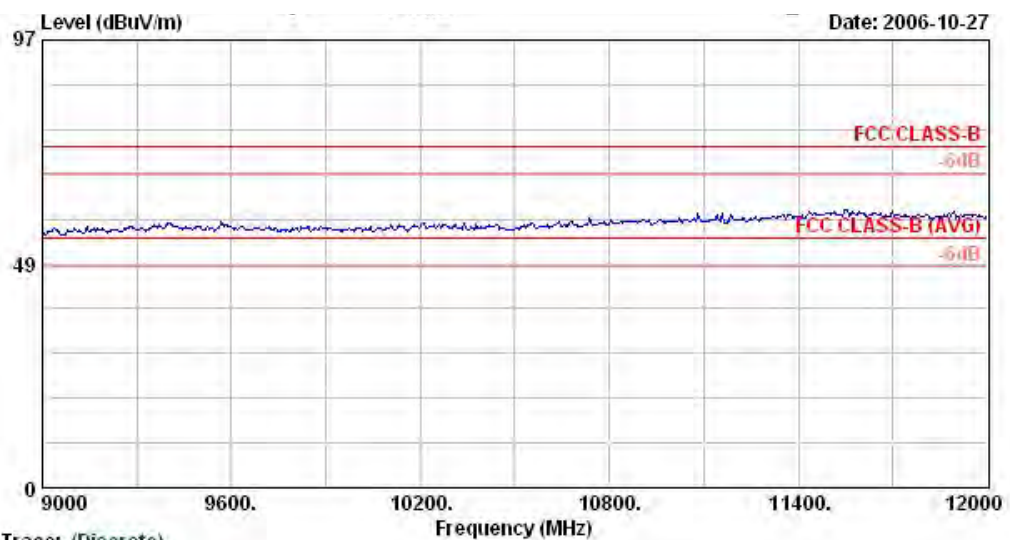
Remark: #3 and #4 Fundamental Signal



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_Ch06;2437MHz
Plane : E2
Data Rate : 11



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : 11b Tx_CM06;2437MHz
Plane : E2
Data Rate : 11

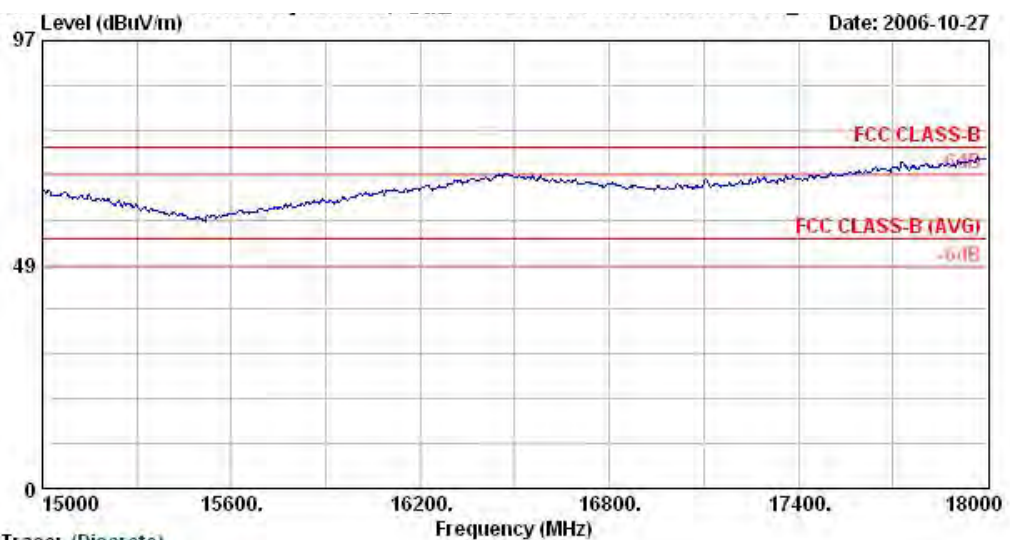
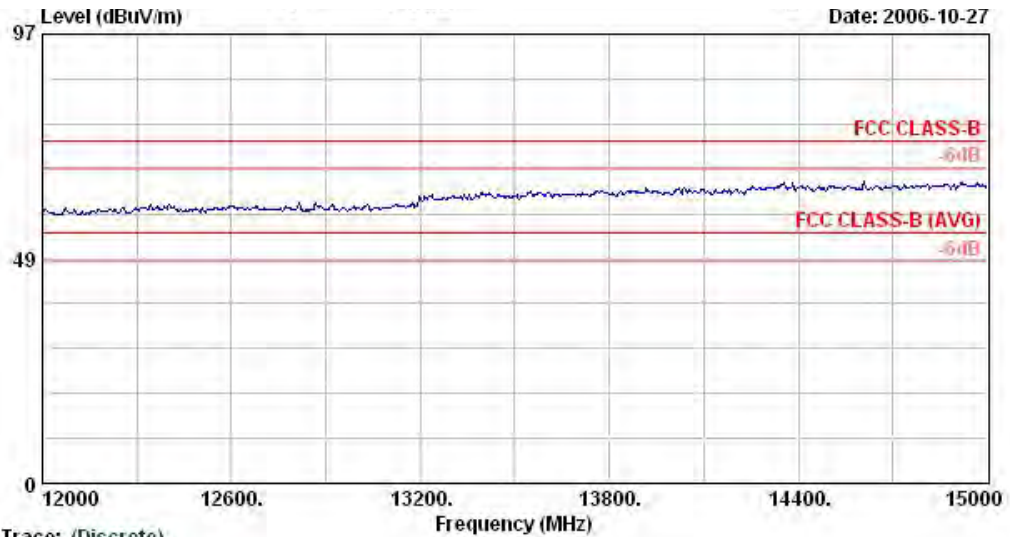


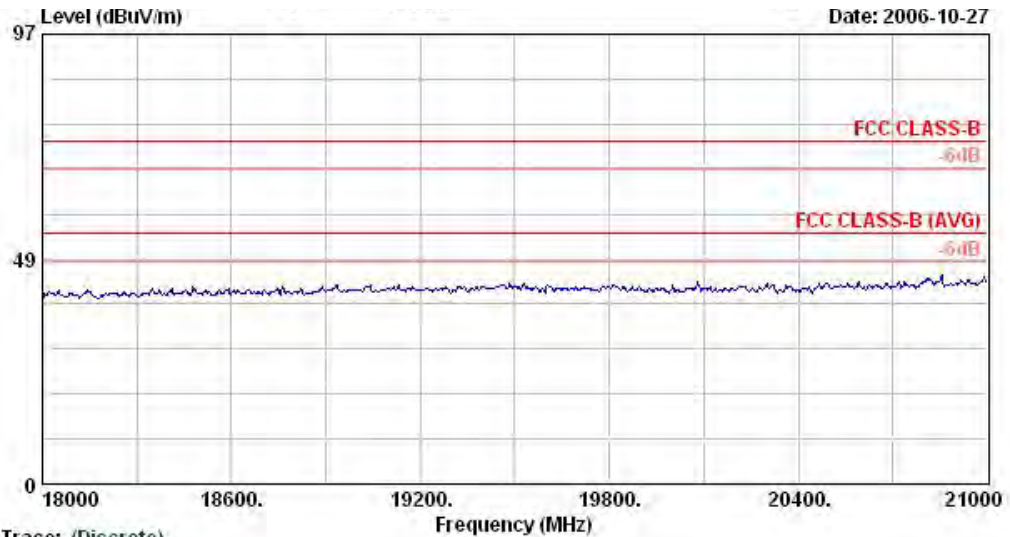
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : 11b Tx_CM06;2437MHz
Plane : E2
Data Rate : 11



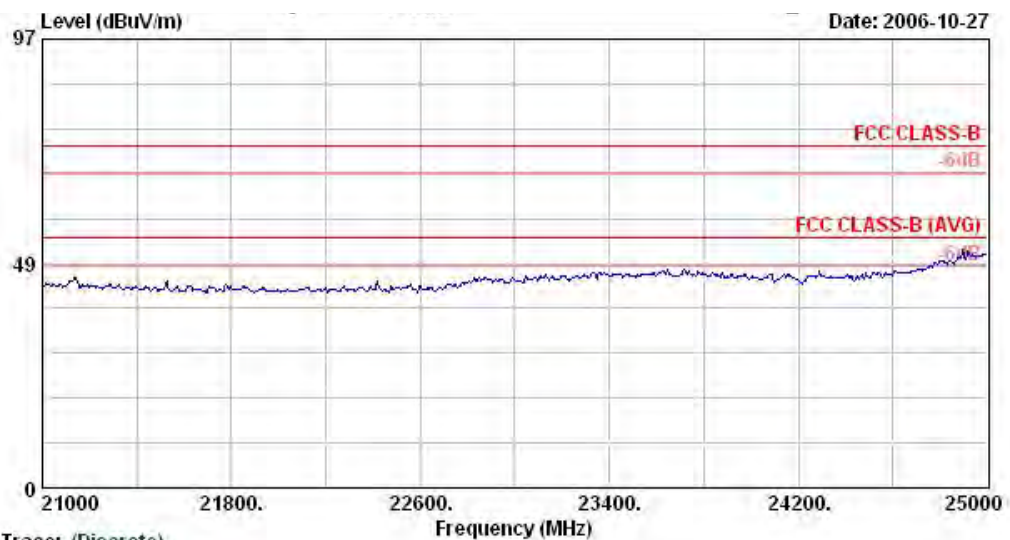
FCC TEST REPORT

Report No. : FR682525





Trace: (Discrete)
Site : 08CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : Mobile Phone
Power : 120Wac/50Hz
Model : FR 682525
Mode : 11b Tx_Channel:2437MHz
Plane : E2
Data Rate : 11



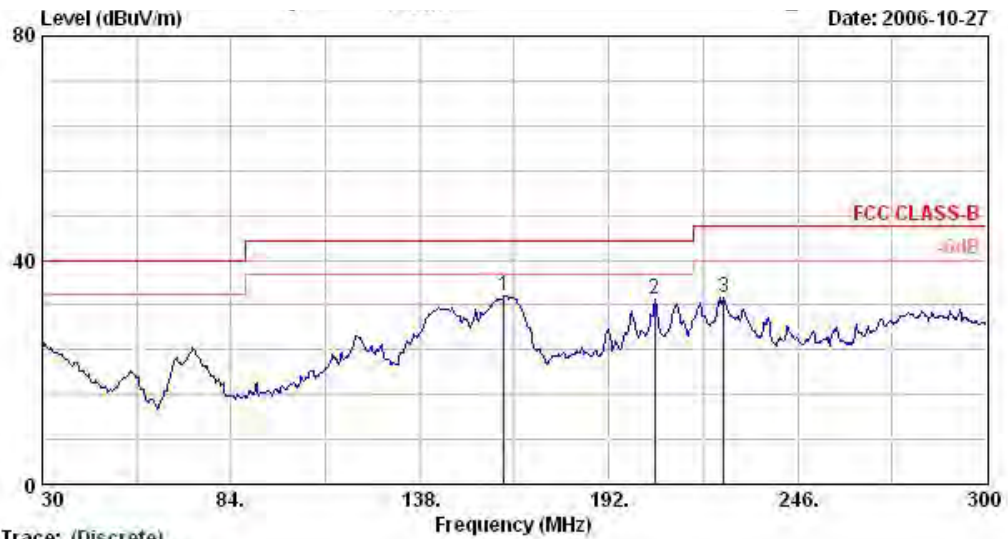
Trace: (Discrete)
Site : 08CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : Mobile Phone
Power : 120Wac/50Hz
Model : FR 682525
Mode : 11b Tx_Channel:2437MHz
Plane : E2
Data Rate : 11

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



- Test Mode : Mode 3
- Polarization : Horizontal

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



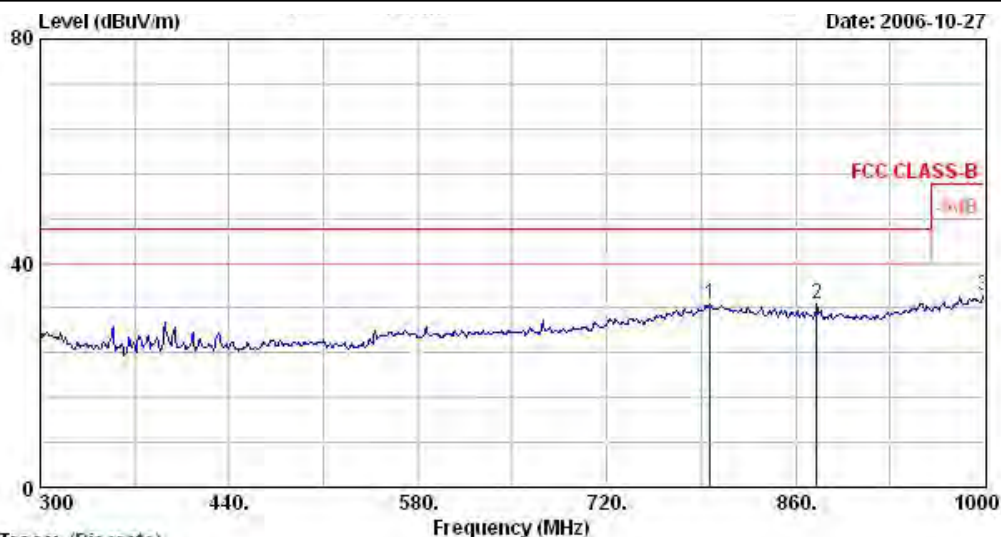
Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_CM11;2462MHz
Plane : E2
Data Rate : 11

	Freq	Level	Over	Limit	ReadAntenna	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 @	162.0	33.68	-9.82	43.50	50.08	10.23	2.22	28.85	100	204 Peak
2 @	205.2	33.01	-10.49	43.50	49.29	9.81	2.63	28.72	---	---
3 @	224.9	33.40	-12.60	46.00	49.67	9.86	2.71	28.84	---	---



FCC TEST REPORT

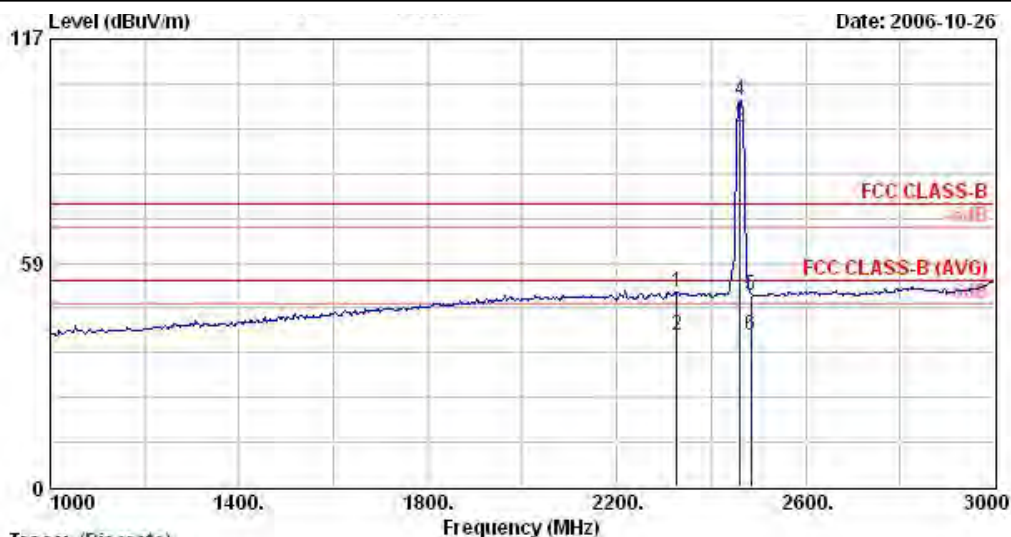
Report No. : FR682525



Trace: (Discrete)

Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11b Tx_Ch11;2462MHz
Plane : E2
Data Rate : 11

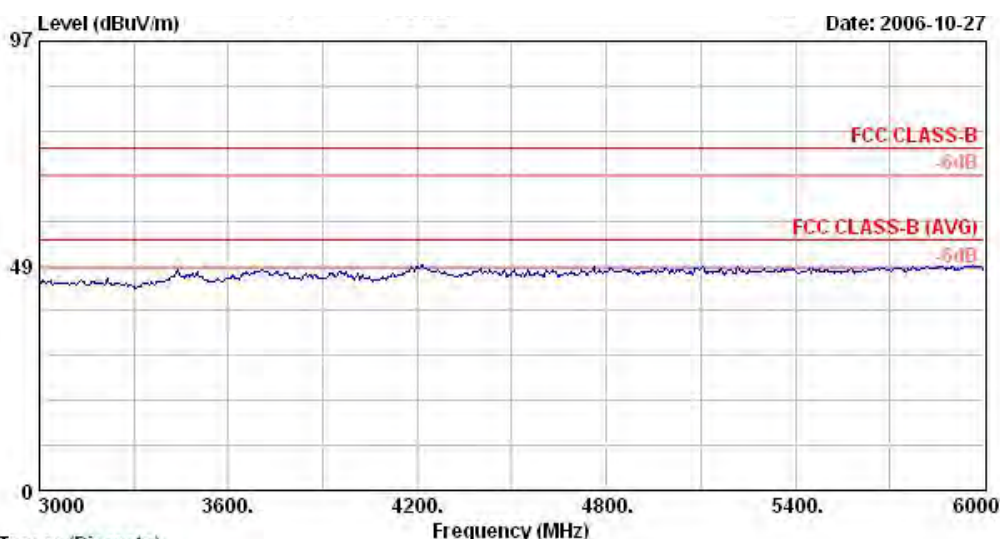
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	796.3	32.67	-13.33	46.00	34.18	21.79	5.57	28.87	---	---
2 @	875.4	32.81	-13.19	46.00	35.65	20.42	5.65	28.91	---	---
3	1000.0	34.13	-19.87	54.00	33.70	22.97	6.24	28.79	---	---
										Peak
										Peak
										Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11b Tx_CH11;2462MHz
Plane : E2
Data Rate : 11

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2328.0	51.02	-22.98	74.00	51.67	30.23	4.52	35.40	100	0
2 @	2328.0	39.46	-14.54	54.00	40.11	30.23	4.52	35.40	100	350
3 @	2462.0	93.97			94.52	30.29	4.66	35.49	100	350
4 @	2462.0	100.96			101.51	30.29	4.66	35.49	100	0
5	2484.6	50.21	-23.79	74.00	50.75	30.29	4.67	35.51	100	0
6 @	2484.6	39.50	-14.50	54.00	40.04	30.29	4.67	35.51	100	350

Remark: #3 and #4 Fundamental Signal

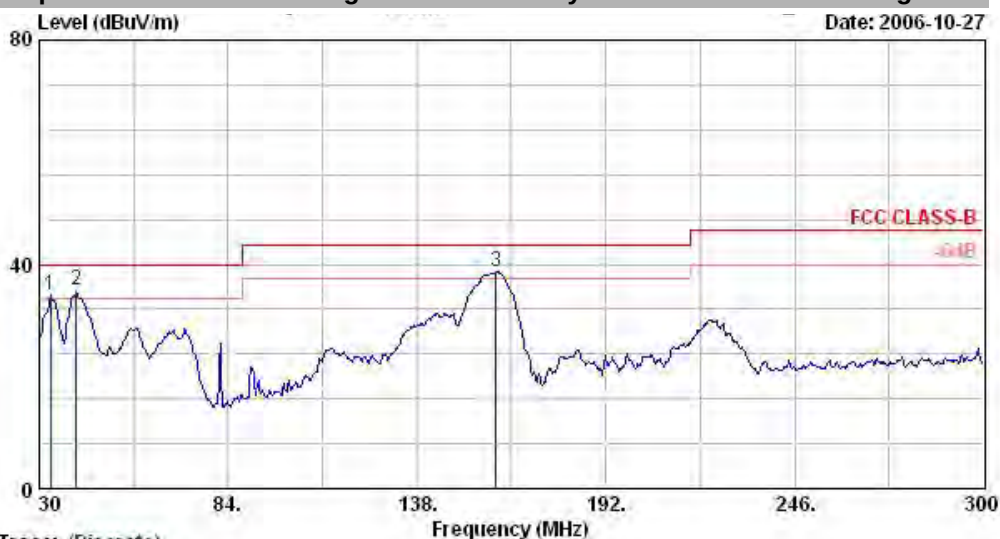


Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11b Tx_CH11;2462MHz
Plane : E2
Data Rate : 11



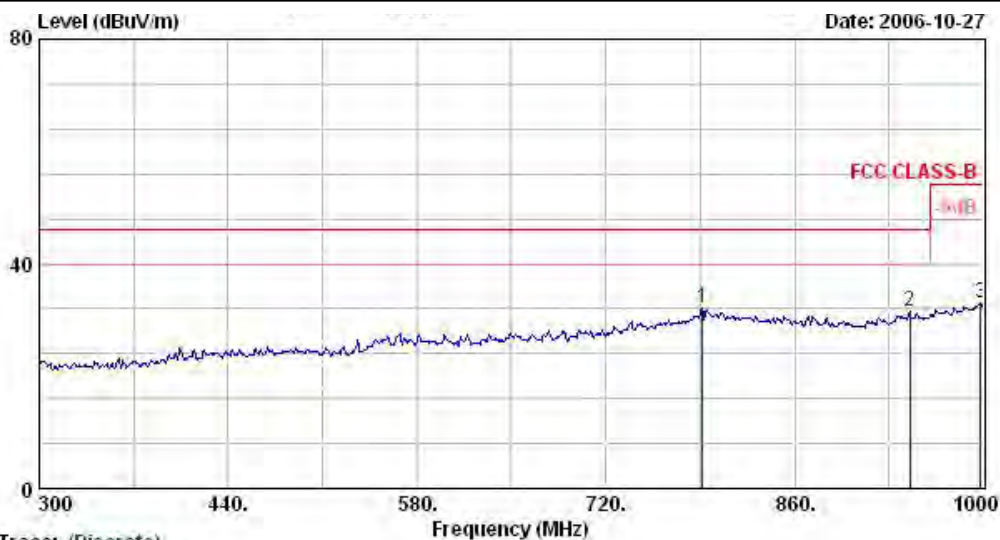
- Polarization : Vertical

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



Trace: (Discrete)
 Site : 08CH06-HY
 Condition : BI-LOG-2004-1122 VERTICAL
 EUT : Mobile Phone
 Power : 120V_{ac}/60Hz
 Model : FR 682525
 Mode : 11b Tx Ch11, 2462MHz
 Plane : E2
 Data Rate : 11

	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 @	33.2	34.49	-5.51	40.00	44.38	17.73	1.01	28.63	---	---	Peak
2 @	40.5	35.34	-4.66	40.00	48.51	14.28	1.20	28.65	100	304	Peak
3 @	160.7	38.70	-4.80	43.50	55.04	10.30	2.20	28.84	---	---	Peak



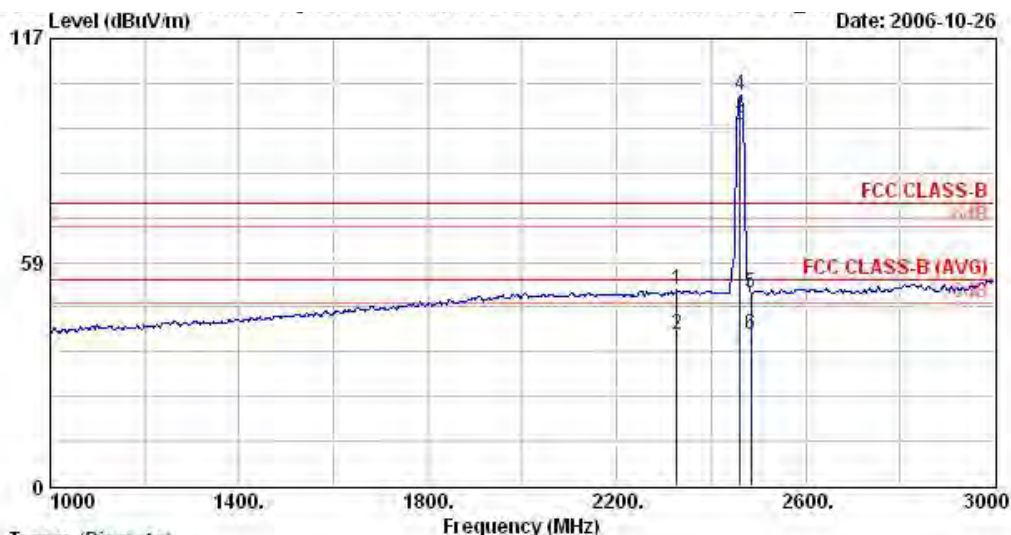
Trace: (Discrete)

Site : 08CHO6-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : 11b Tx, Ch11, 2462MHz
Plane : E2
Data Rate : 11

	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 @	791.4	32.02	-13.98	46.00	33.74	21.65	5.51	28.88	---	---	Peak
2 @	945.4	31.66	-14.34	46.00	33.10	21.32	6.10	28.86	---	---	Peak
3	997.9	33.01	-20.99	54.00	32.67	22.91	6.22	28.79	---	---	Peak



Date: 2006-10-26

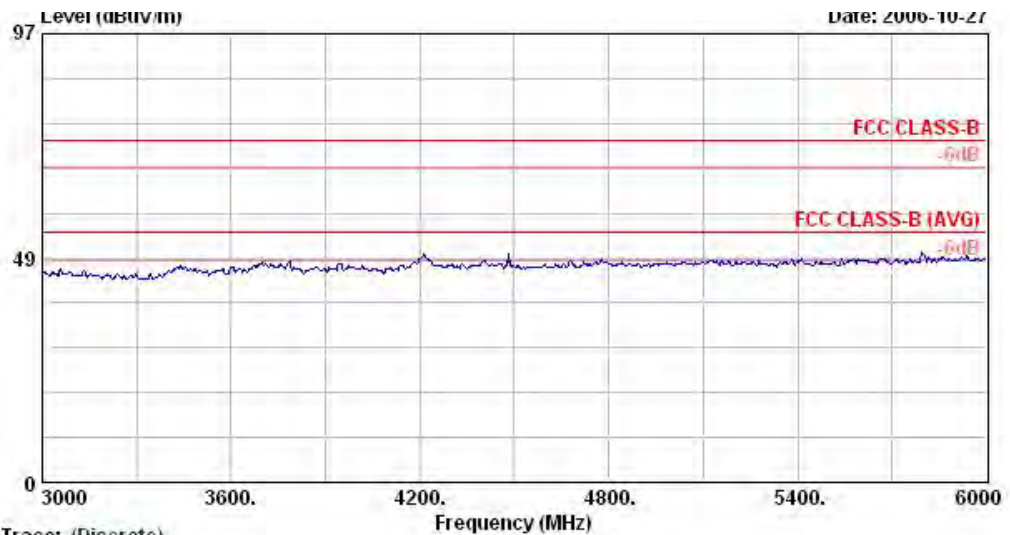


Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : 11b Tx_CH11;2462MHz
Plane : E2
Data Rate : 11

	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	2328.0	51.13	-22.87	74.00	51.78	30.23	4.52	35.40	100	0 Peak
2 @	2328.0	39.54	-14.46	54.00	40.19	30.23	4.52	35.40	100	43 Average
3 @	2462.0	94.53			95.08	30.29	4.66	35.49	100	43 Average
4 @	2462.0	102.13			102.68	30.29	4.66	35.49	100	0 Peak
5	2483.7	50.30	-23.70	74.00	50.84	30.30	4.69	35.53	100	0 Peak
6 @	2483.7	39.44	-14.56	54.00	39.98	30.29	4.67	35.51	100	43 Average

Remark: #3 and #4 Fundamental Signal



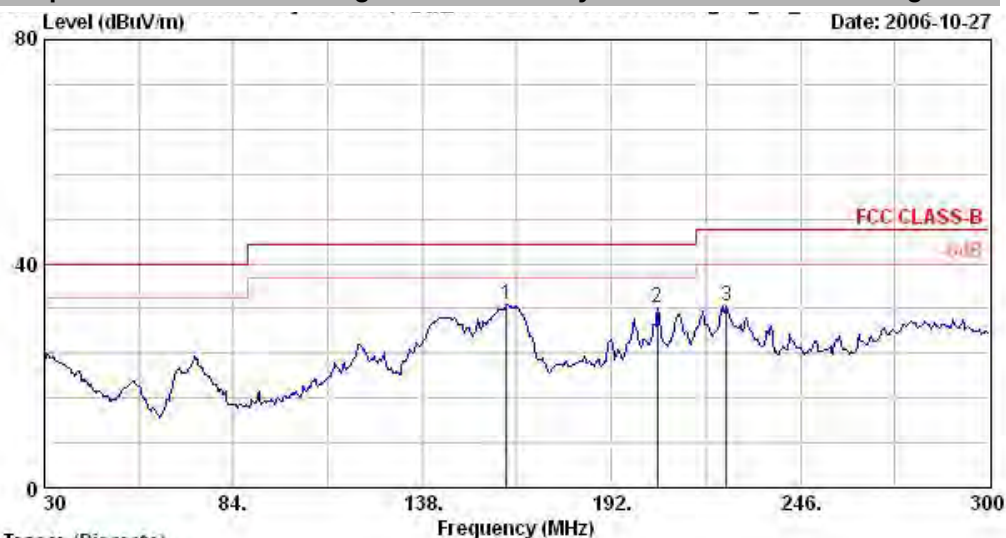
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11b Tx_Ch11,2462MHz
Plane : E2
Data Rate : 11

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



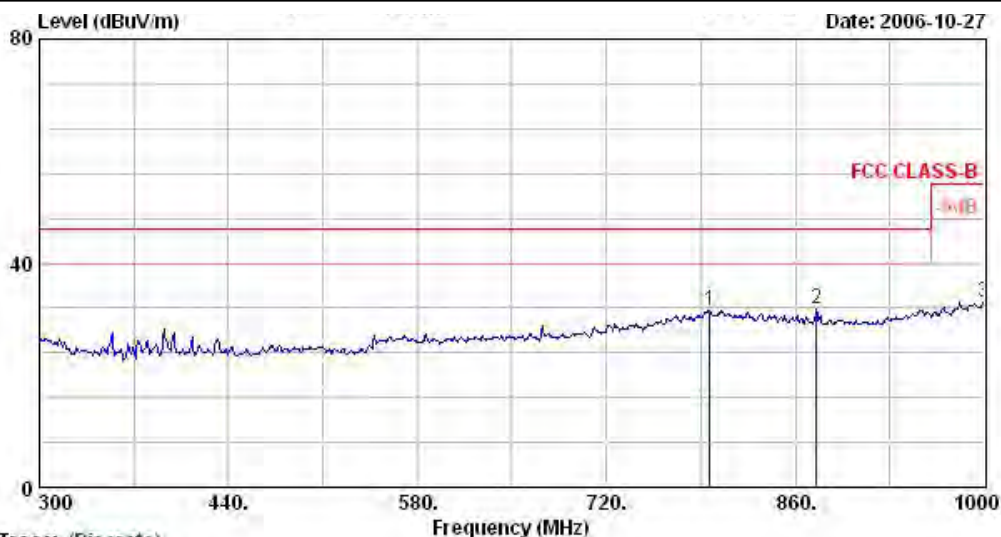
- Test Mode : Mode 4
- Polarization : Horizontal

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



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_CW01;2412MHz
Plane : E2
Data Rate : 54

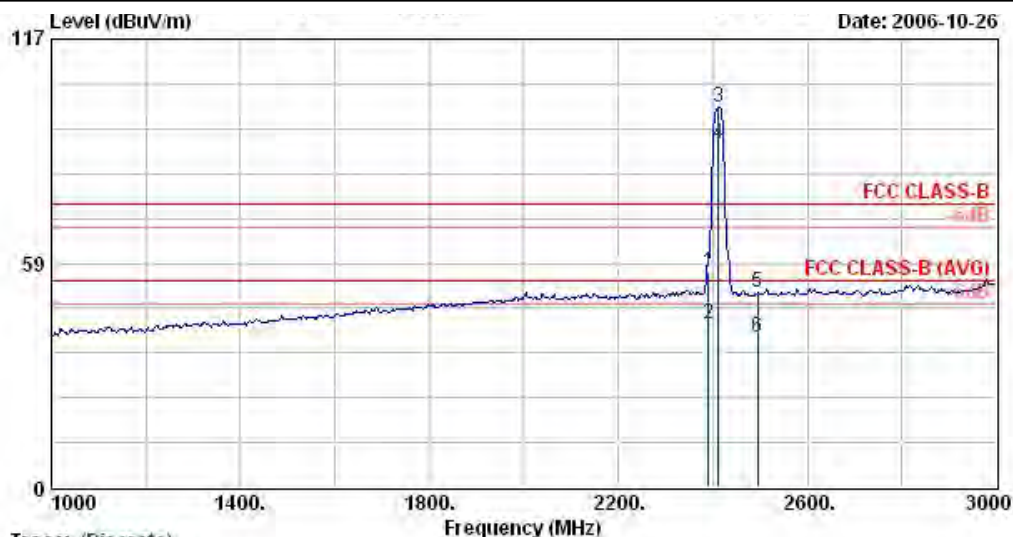
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	162.0	32.68	-10.82	43.50	49.08	10.23	2.22	28.85	100	188 Peak
2 @	205.2	32.01	-11.49	43.50	48.29	9.81	2.63	28.72	---	--- Peak
3 @	224.9	32.40	-13.60	46.00	48.67	9.86	2.71	28.84	---	--- Peak



Trace: (Discrete)

Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_CM01,2412MHz
Plane : E2
Data Rate : 54

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	796.3	31.67	-14.33	46.00	33.18	21.79	5.57	28.87	---	---
2 @	875.4	31.81	-14.19	46.00	34.65	20.42	5.65	28.91	---	---
3 @	1000.0	33.13	-20.87	54.00	32.70	22.97	6.24	28.79	---	---
										Remark
										Peak
										Peak
										Peak

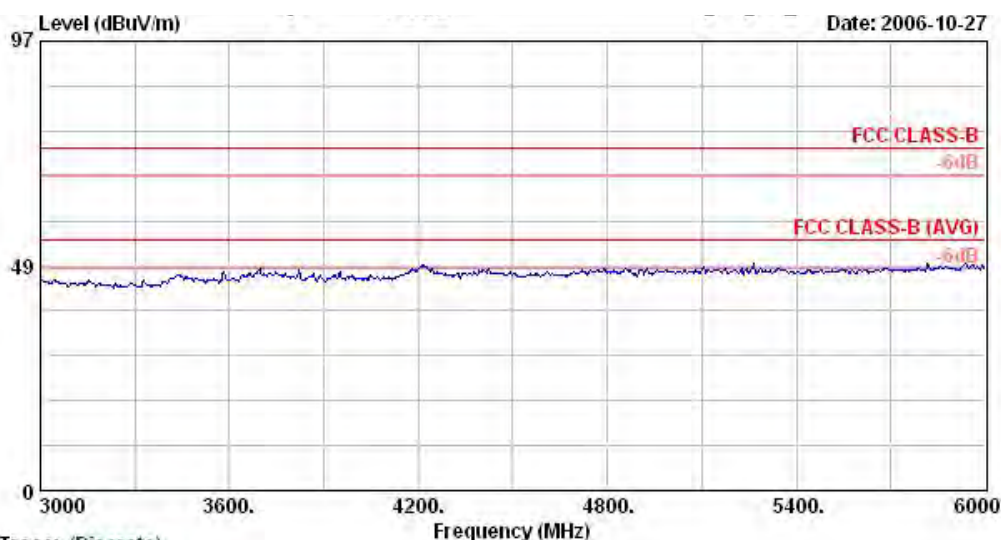


Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_Cho1;2412MHz
Plane : E2
Data Rate : 54

	Freq	Level	Over	Limit	ReadAntenna	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 @	2390.0	55.93	-18.07	74.00	56.54	30.26	4.59	35.46	100	0 Peak
2 @	2390.0	42.64	-11.36	54.00	43.25	30.26	4.59	35.46	100	338 Average
3 @	2412.0	99.19			99.78	30.27	4.61	35.46	100	0 Peak
4 @	2412.0	89.45			90.03	30.27	4.61	35.46	100	338 Average
5 @	2494.0	50.79	-23.21	74.00	51.33	30.30	4.69	35.53	100	0 Peak
6 @	2494.0	39.03	-14.97	54.00	39.57	30.30	4.69	35.53	100	338 Average

Remark: #3 and #4 Fundamental Signal



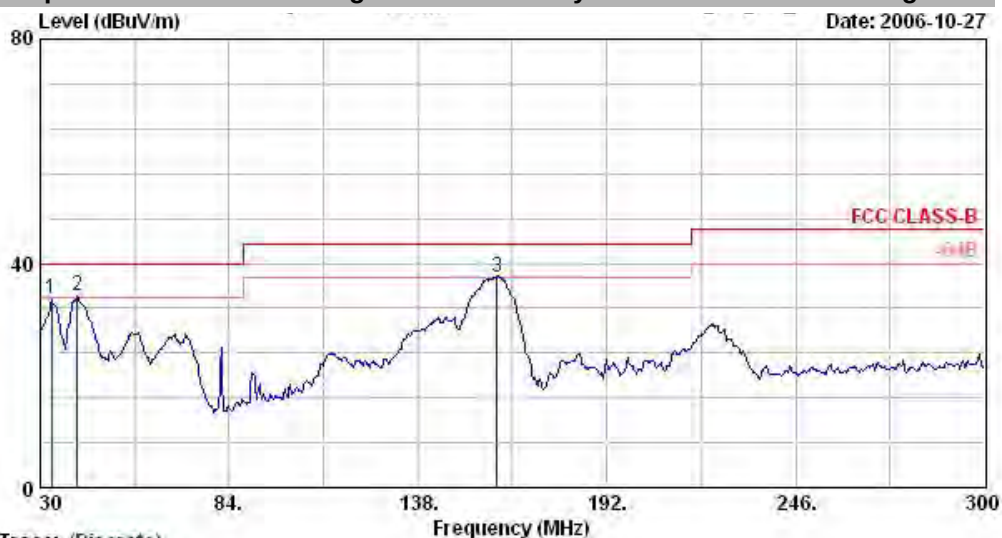
Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_Cho1;2412MHz
Plane : E2
Data Rate : 54

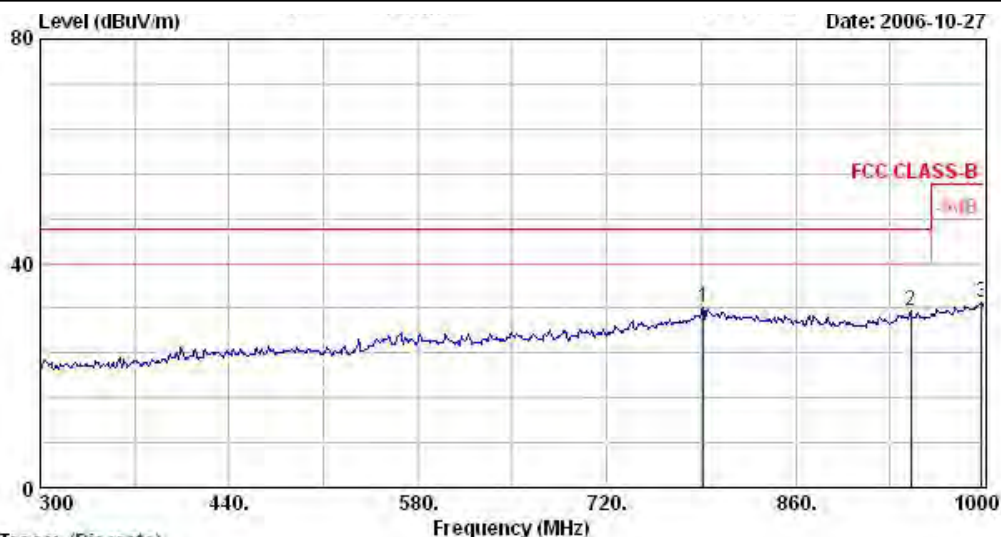


- Polarization : Vertical

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

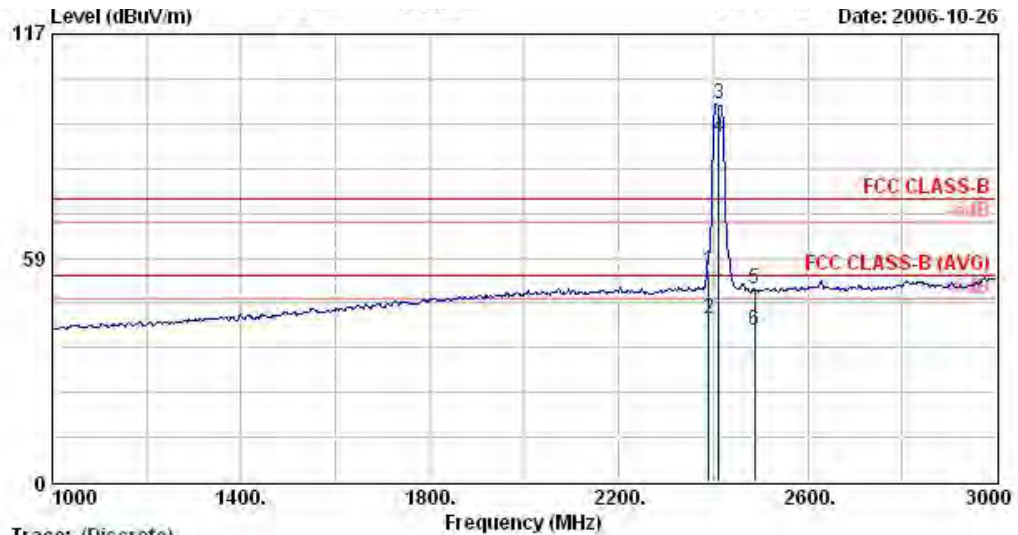


	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	33.2	33.49	-6.51	40.00	43.38	17.73	1.01	28.63	---	---	Peak
2 @	40.5	34.14	-5.86	40.00	47.31	14.28	1.20	28.65	100	305	Peak
3 @	160.7	37.60	-5.90	43.50	53.94	10.30	2.20	28.84	---	---	Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : 11g Tx_Channel:2412MHz
Plane : E2
Data Rate : 54

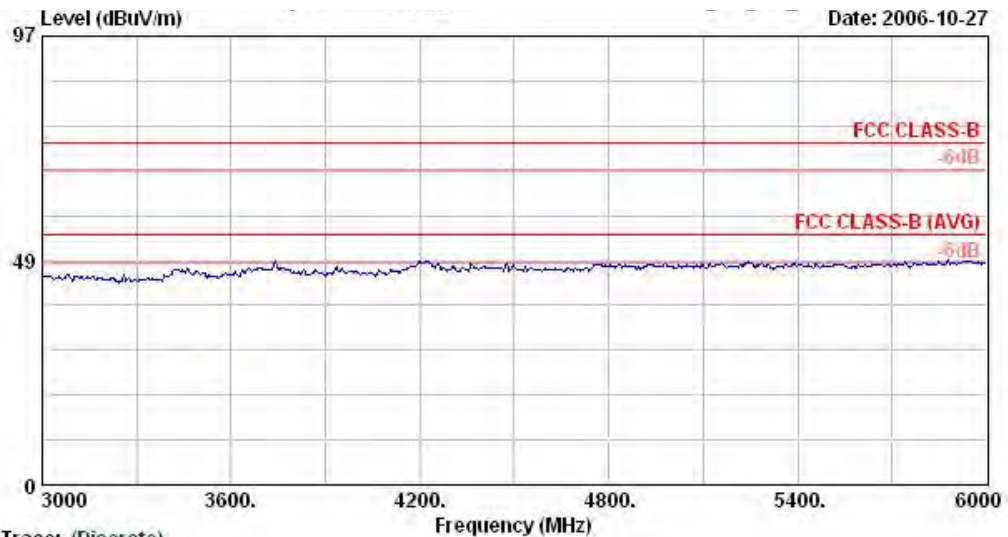
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	791.4	32.02	-13.98	46.00	33.74	21.65	5.51	28.88	---	---	Peak
2 @	945.4	31.66	-14.34	46.00	33.10	21.32	6.10	28.86	---	---	Peak
3 @	997.9	33.01	-20.99	54.00	32.67	22.91	6.22	28.79	---	---	Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : 11g Tx_CM01;2412MHz
Plane : E2
Data Rate : 54

	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 @	2390.0	55.40	-18.60	74.00	56.01	30.26	4.59	35.46	100	0 Peak
2 @	2390.0	42.62	-11.38	54.00	43.23	30.26	4.59	35.46	100	84 Average
3 @	2412.0	98.78	24.78	74.00	99.37	30.27	4.61	35.46	100	0 Peak
4 @	2412.0	90.05	16.05	74.00	90.63	30.27	4.61	35.46	100	84 Average
5 @	2488.0	50.62	-23.38	74.00	51.14	30.30	4.69	35.51	100	0 Peak
6 @	2488.0	39.42	-34.58	74.00	39.94	30.30	4.69	35.51	100	84 Average

Remark: #3 and #4 Fundamental Signal



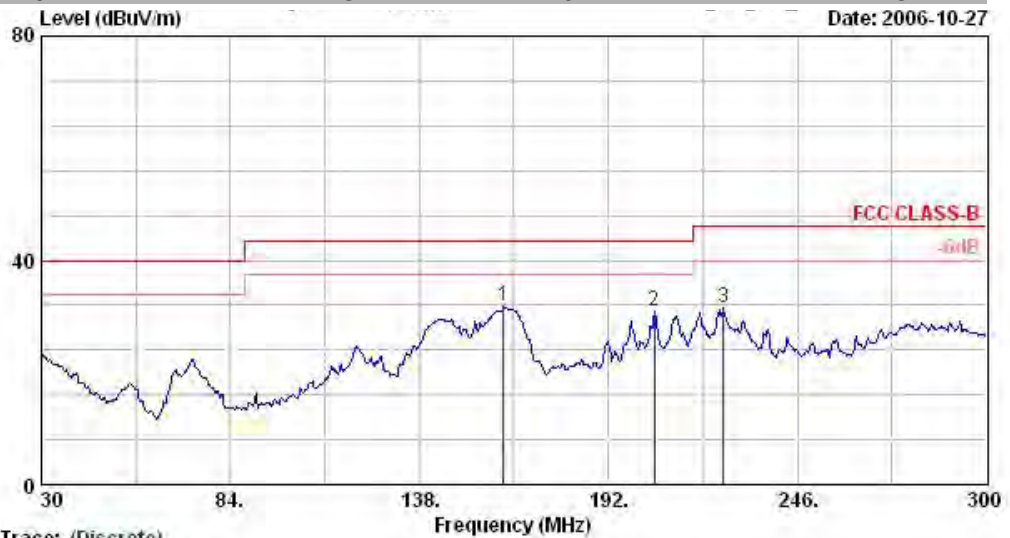
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : 11g Tx_CM01;2412MHz
Plane : E2
Data Rate : 54

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



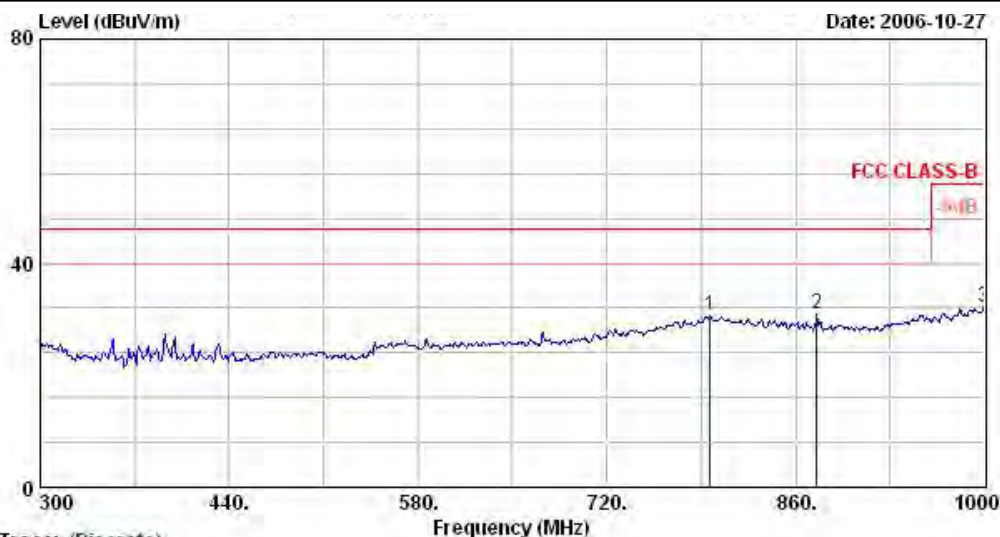
- Test Mode : Mode 5
- Polarization : Horizontal

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



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11g Tx_CM06;2437MHz
Plane : E2
Data Rate : 54

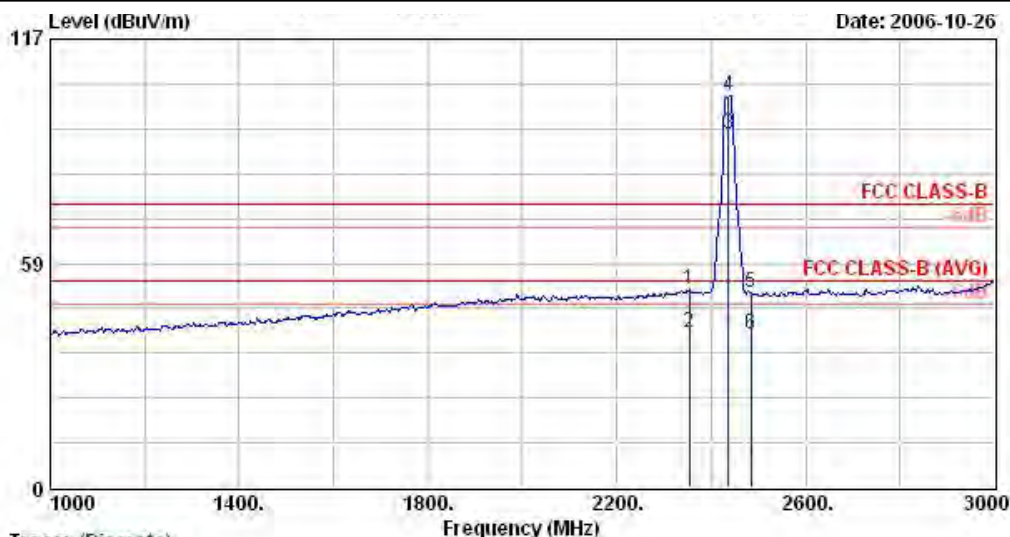
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	162.0	31.68	-11.82	43.50	48.08	10.23	2.22	28.85	100	254	Peak
2 @	205.2	31.01	-12.49	43.50	47.29	9.81	2.63	28.72	---	---	Peak
3 @	224.9	31.40	-14.60	46.00	47.67	9.86	2.71	28.84	---	---	Peak



Trace: (Discrete)

Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch06:2437MHz
Plane : E2
Data Rate : 54

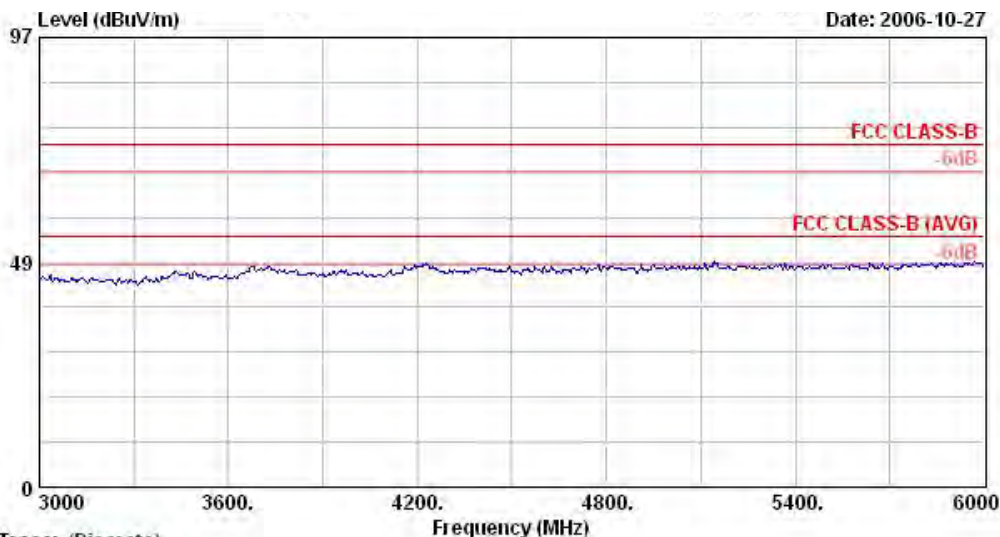
	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	796.3	30.67	-15.33	46.00	32.18	21.79	5.57	28.87	---	---
2 @	875.4	30.81	-15.19	46.00	33.65	20.42	5.65	28.91	---	---
3 @	1000.0	32.13	-21.87	54.00	31.70	22.97	6.24	28.79	---	---



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch06:2437MHz
Plane : E2
Data Rate : 54

	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 @	2354.0	51.59	-22.41	74.00	52.21	30.24	4.56	35.42	100	0	Peak
2 @	2354.0	40.44	-13.56	54.00	41.06	30.24	4.56	35.42	100	347	Average
3 @	2437.0	92.39			92.94	30.28	4.64	35.47	100	347	Average
4 @	2437.0	102.01			102.57	30.28	4.64	35.47	100	0	Peak
5 @	2484.0	50.78	-23.22	74.00	51.33	30.29	4.67	35.51	100	0	Peak
6 @	2484.0	39.92	-14.08	54.00	40.46	30.29	4.67	35.51	100	347	Average

Remark: #3 and #4 Fundamental Signal

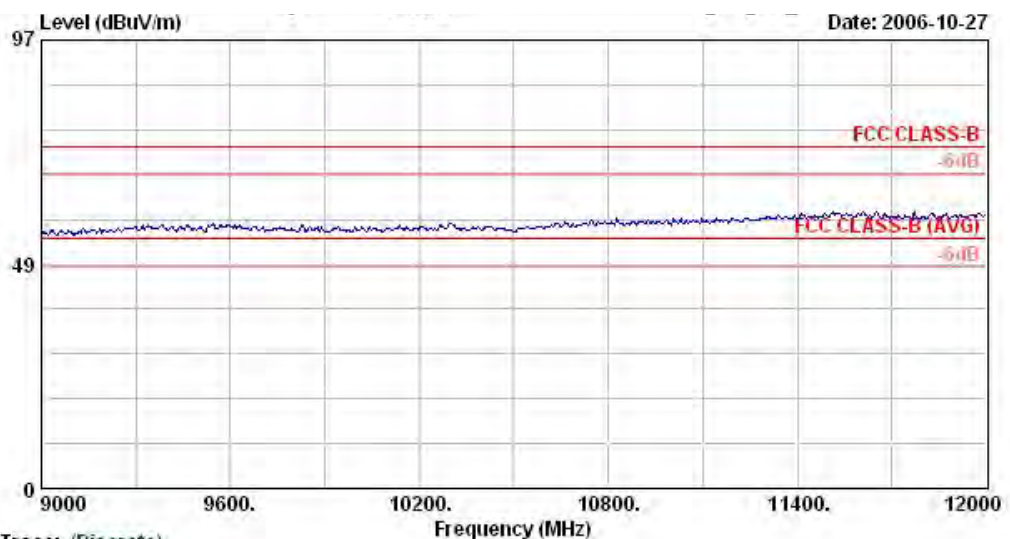
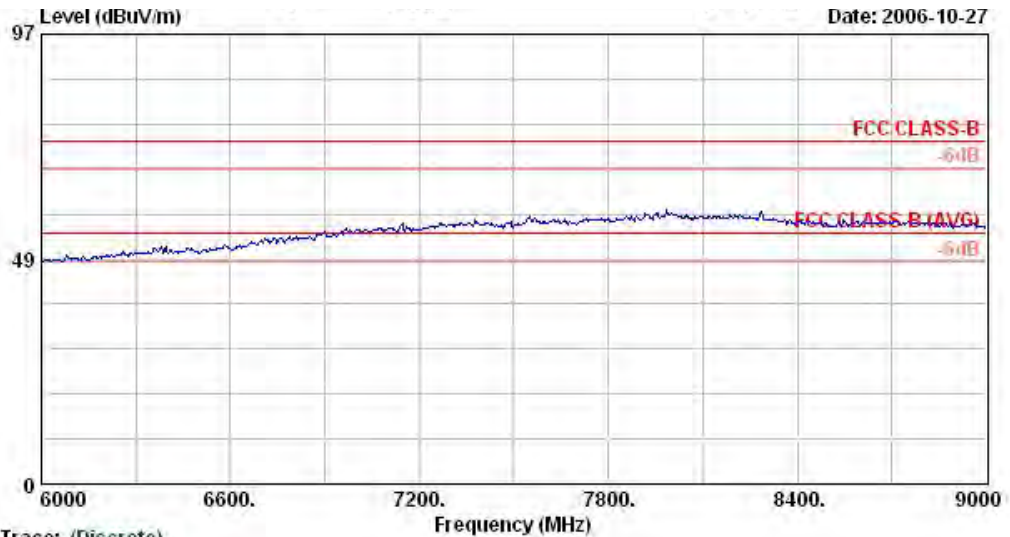


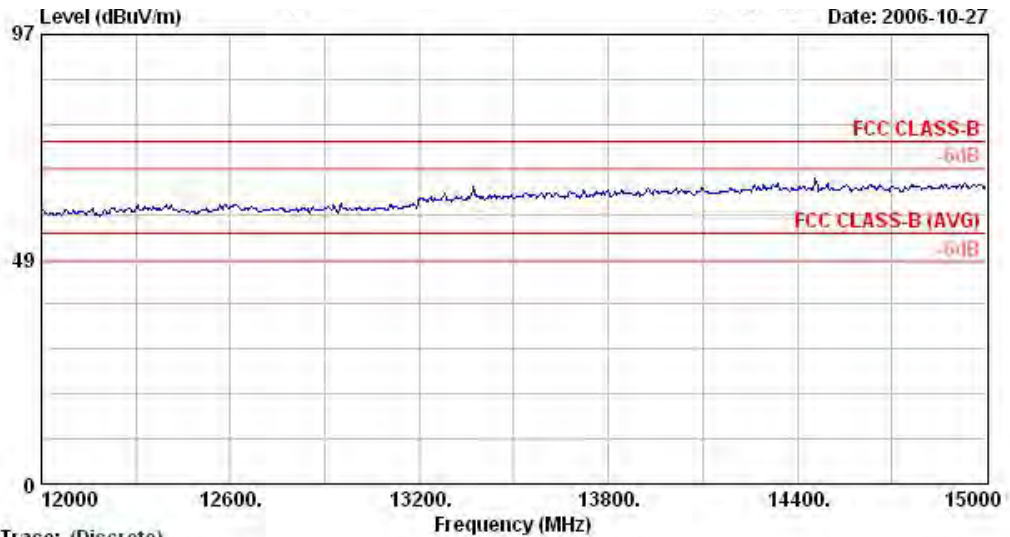
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch06:2437MHz
Plane : E2
Data Rate : 54



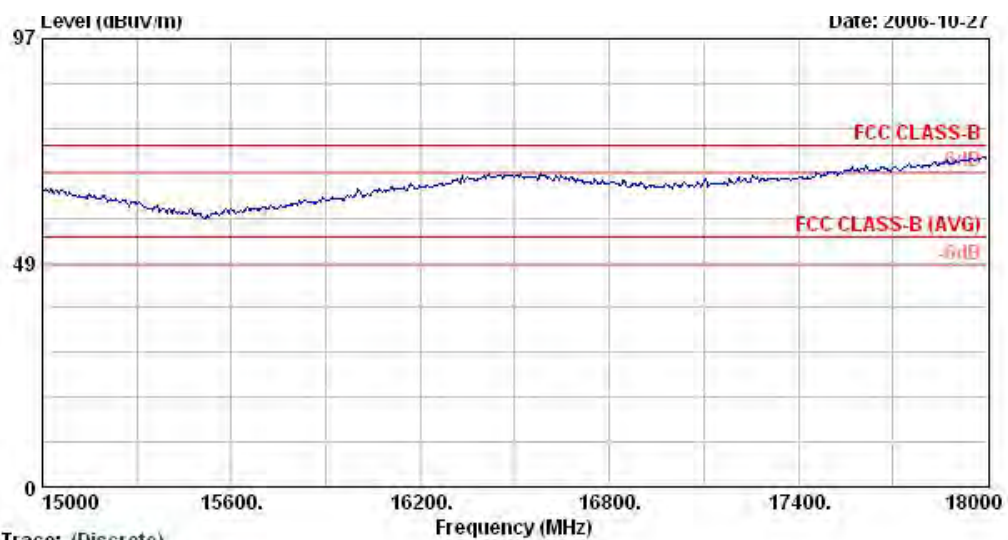
FCC TEST REPORT

Report No. : FR682525

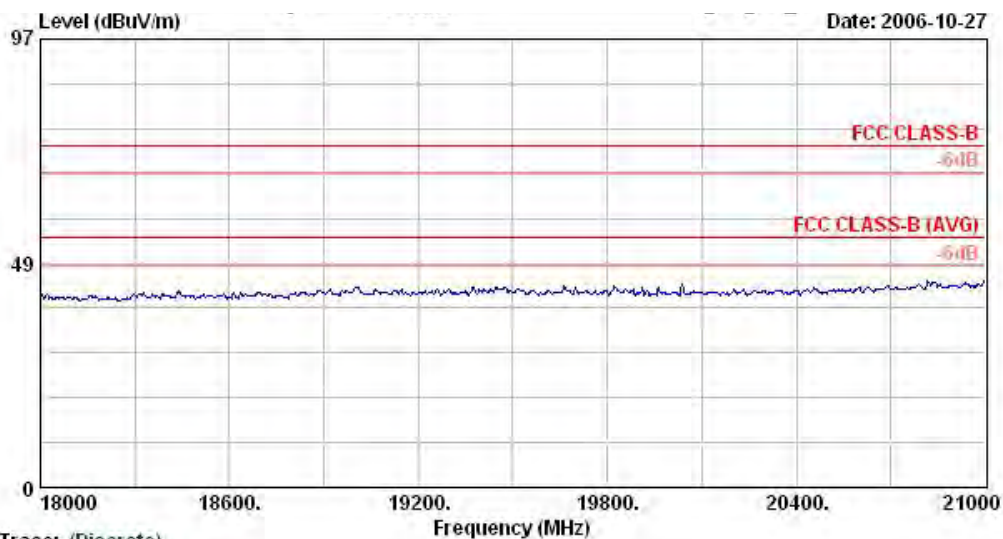




Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch06;2437MHz
Plane : E2
Data Rate : 54

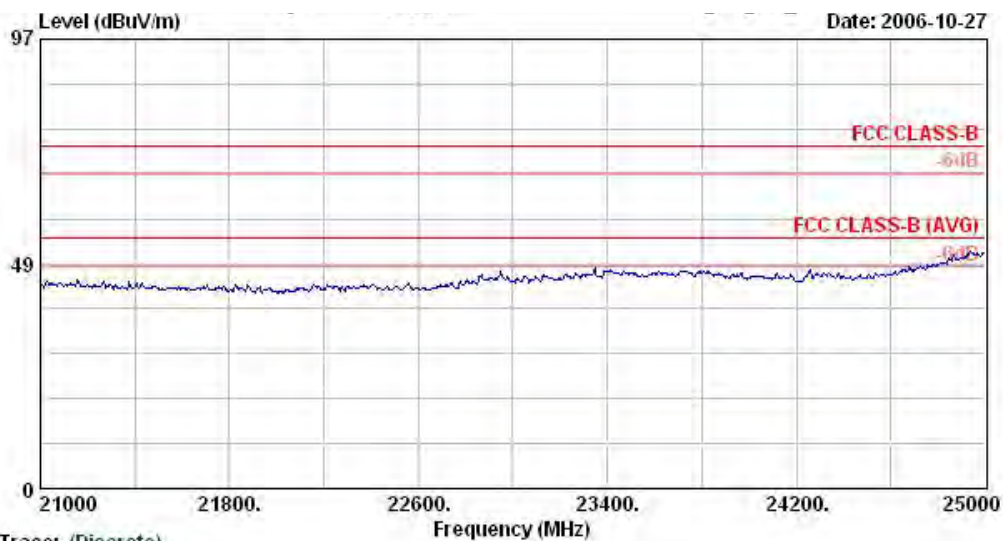


Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch06;2437MHz
Plane : E2
Data Rate : 54



Trace: (Discrete)

Site : 08CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch06;2437MHz
Plane : E2
Data Rate : 54



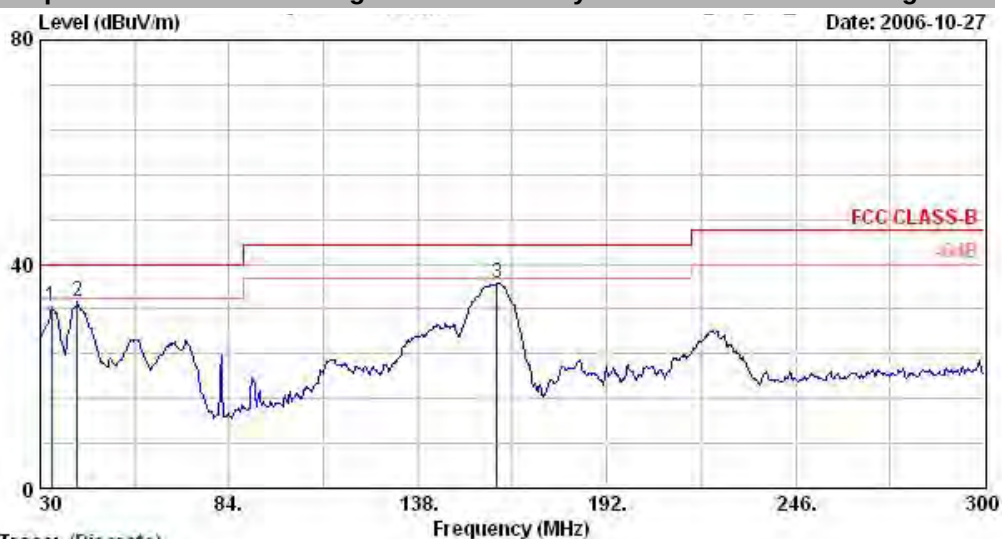
Trace: (Discrete)

Site : 08CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch06;2437MHz
Plane : E2
Data Rate : 54



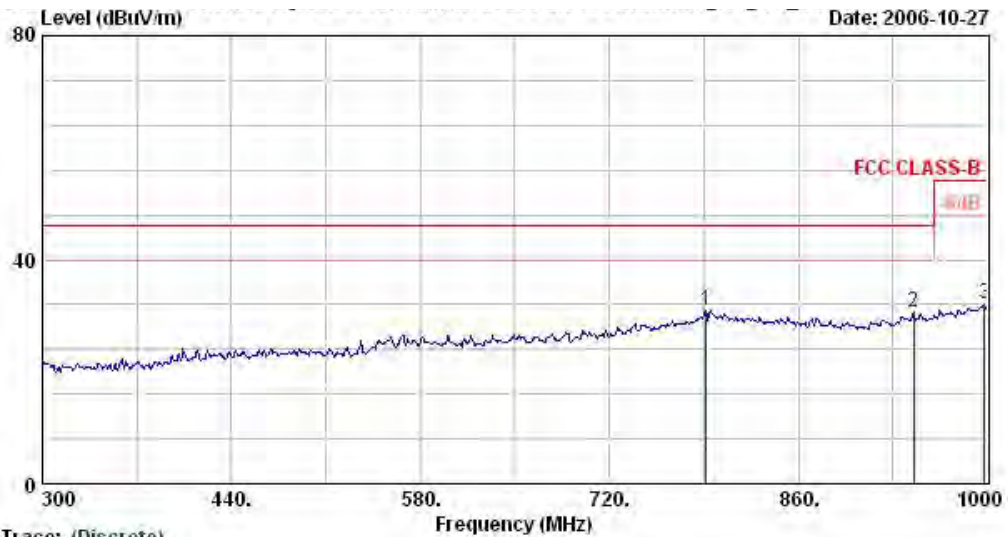
- Polarization : Vertical

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



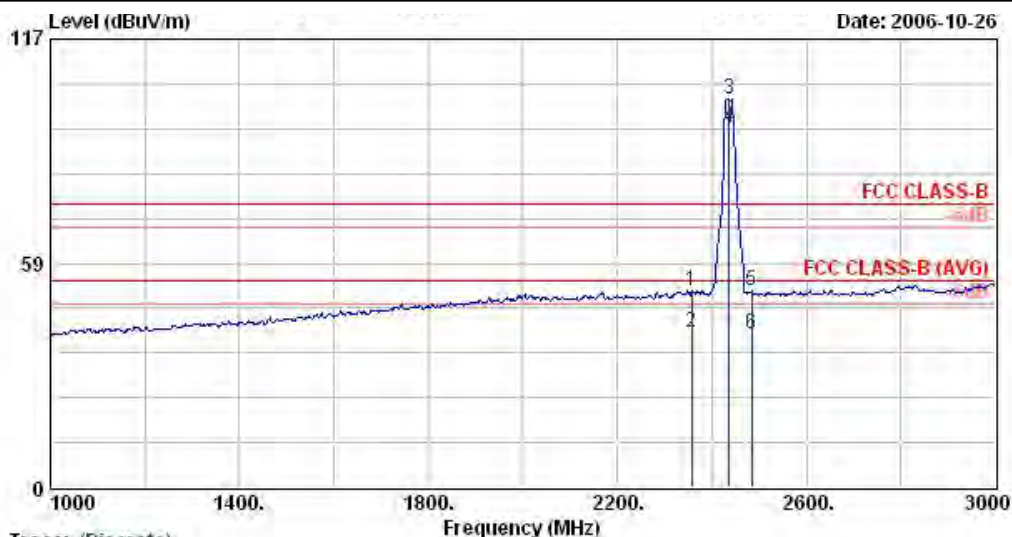
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_CND6;2437MHz
Plane : E2
Data Rate : 54

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level	Loss	Factor	Pos	Pos	Remark
					dBuV	dB/m	dB	cm	deg	
1 @	33.2	32.49	-7.51	40.00	42.38	17.73	1.01	28.63	---	Peak
2 @	40.5	33.24	-6.76	40.00	46.41	14.28	1.20	28.65	100	Peak
3 @	160.7	36.70	-6.80	43.50	53.04	10.30	2.20	28.84	---	Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_CM06;2437MHz
Plane : E2
Data Rate : 54

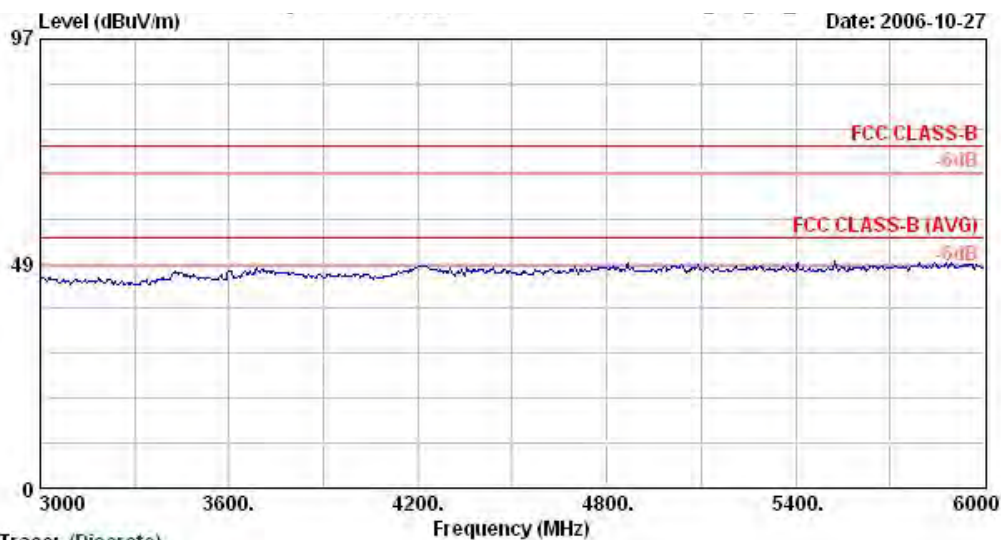
	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	791.4	31.02	-14.98	46.00	32.74	21.65	5.51	28.88	---	---
2 @	945.4	30.66	-15.34	46.00	32.10	21.32	6.10	28.86	---	---
3 @	997.9	32.01	-21.99	54.00	31.67	22.91	6.22	28.79	---	---



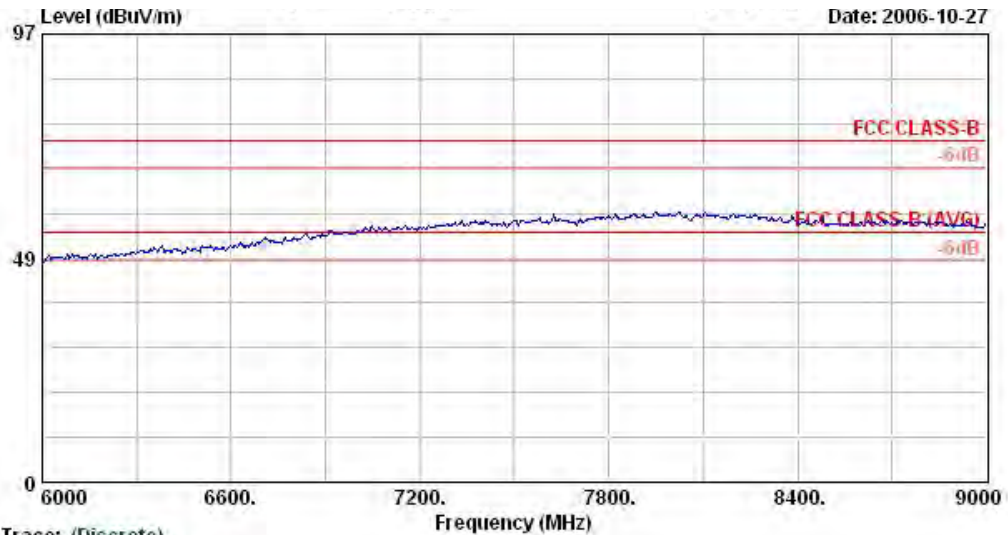
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_CM06;2437MHz
Plane : E2
Data Rate : 54

	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 @	2358.0	51.27	-22.73	74.00	51.89	30.24	4.56	35.42	100	0 Peak
2 @	2358.0	40.40	-13.60	54.00	41.02	30.24	4.56	35.42	106	84 Average
3 @	2437.0	101.37			101.95	30.27	4.62	35.47	100	0 Peak
4 @	2437.0	93.85			94.40	30.28	4.64	35.47	106	84 Average
5 @	2484.0	51.12	-22.88	74.00	51.67	30.29	4.67	35.51	100	0 Peak
6 @	2484.0	39.84	-14.16	54.00	40.38	30.29	4.67	35.51	106	84 Average

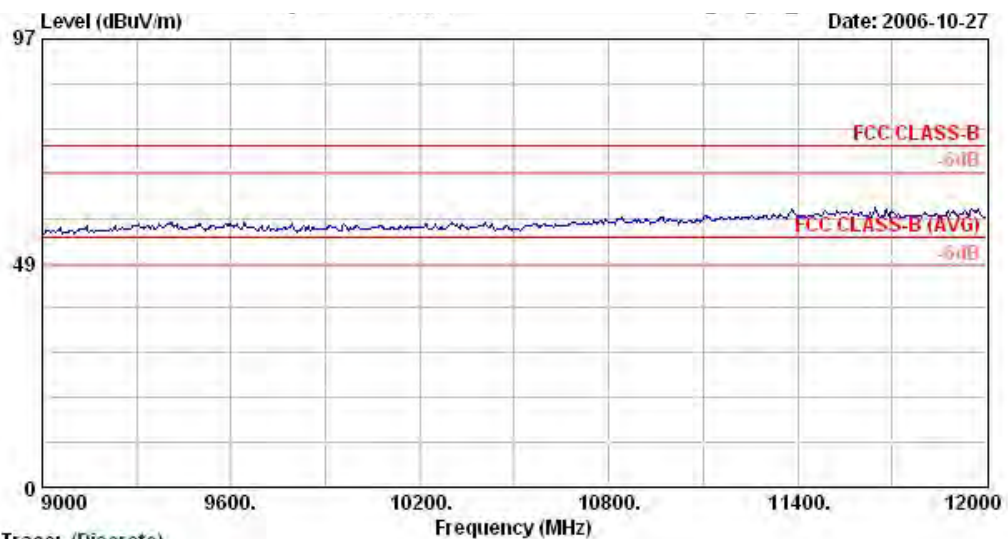
Remark: #3 and #4 Fundamental Signal



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_CM06;2437MHz
Plane : E2
Data Rate : 54



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_CN06;2437MHz
Plane : E2
Data Rate : 54

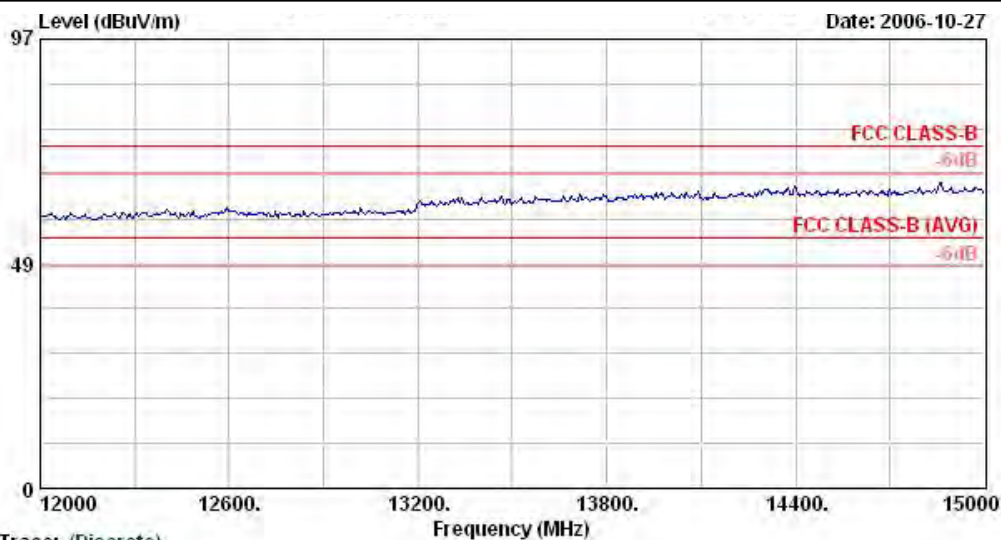


Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_CN06;2437MHz
Plane : E2
Data Rate : 54

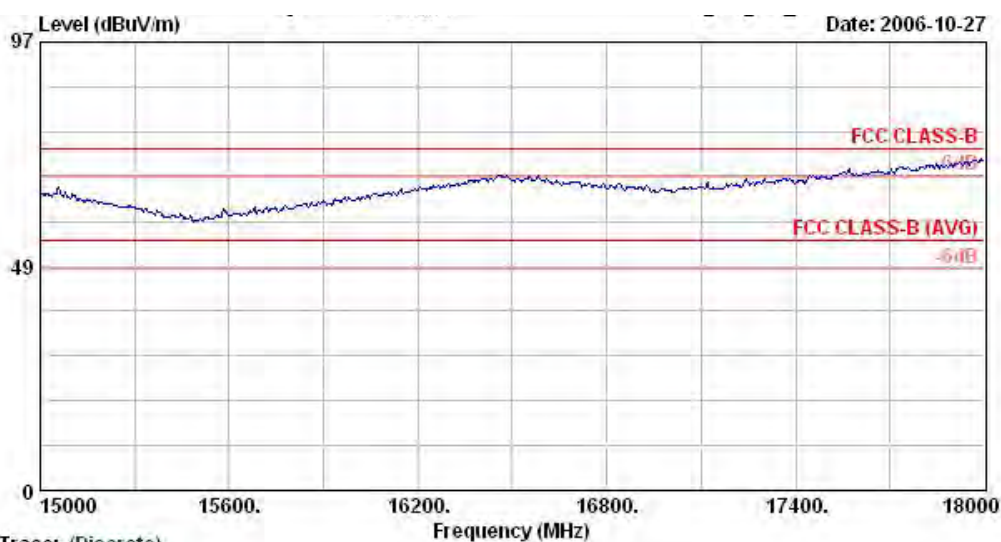


FCC TEST REPORT

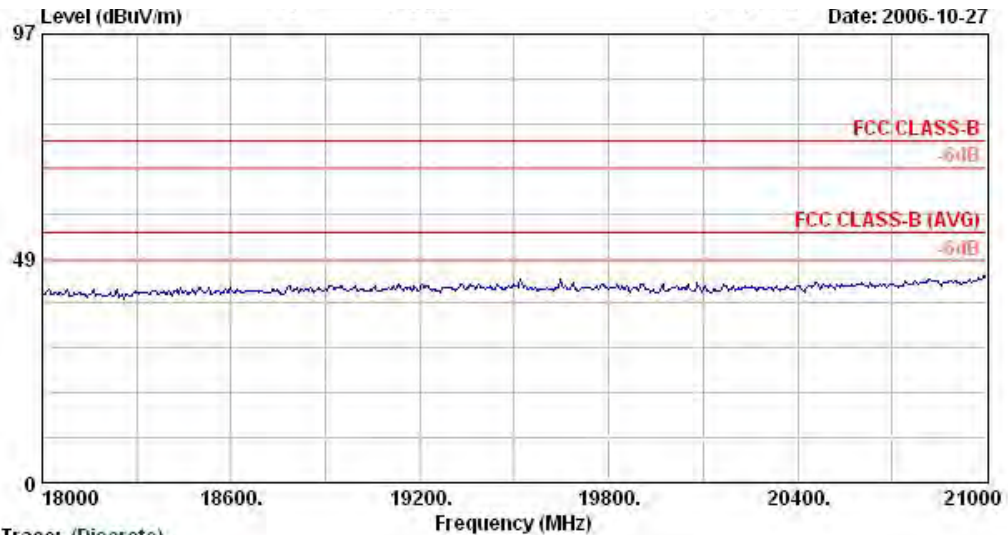
Report No. : FR682525



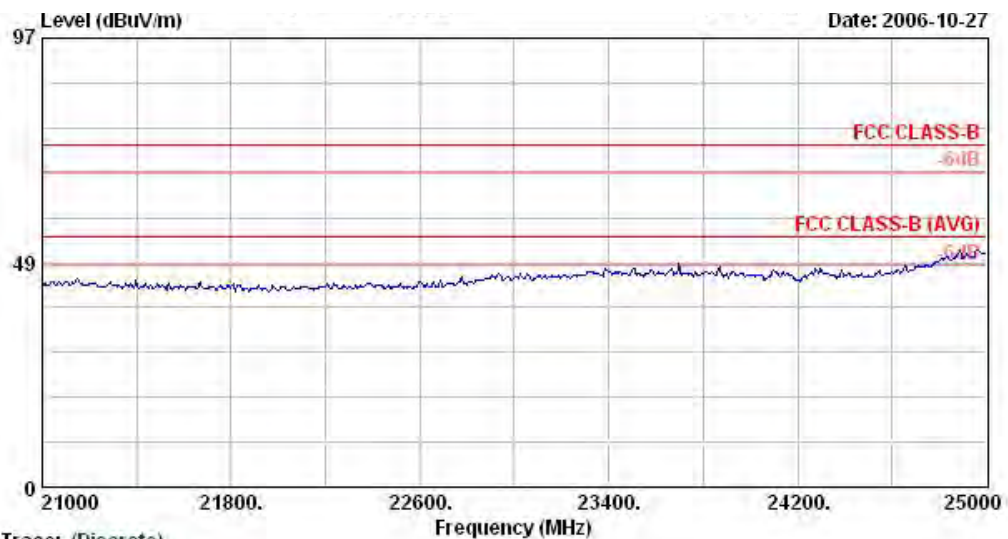
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_Channel:2437MHz
Plane : E2
Data Rate : 54



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_Channel:2437MHz
Plane : E2
Data Rate : 54



Trace: (Discrete)
Site : 08CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_C06;2437MHz
Plane : E2
Data Rate : 54



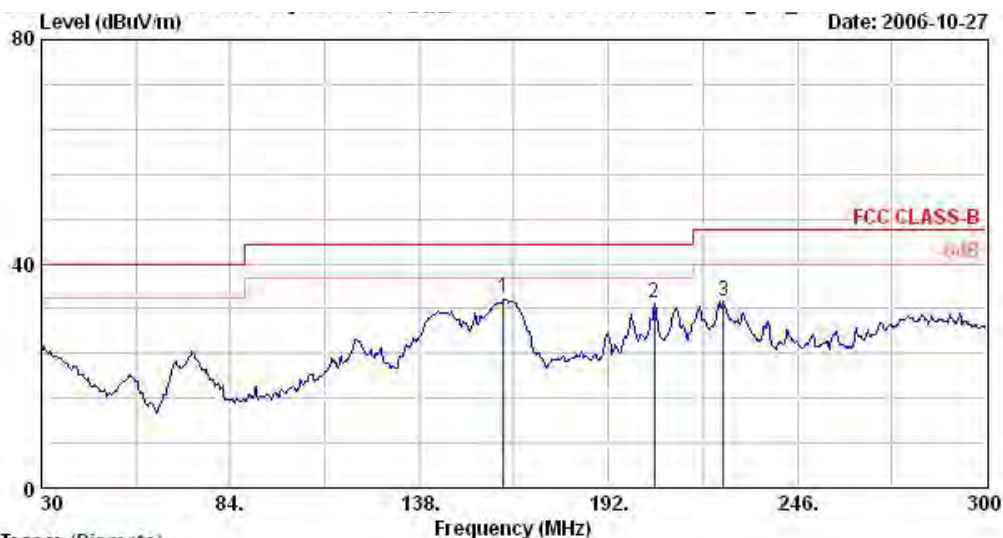
Trace: (Discrete)
Site : 08CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_C06;2437MHz
Plane : E2
Data Rate : 54

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



- Test Mode : Mode 6
- Polarization : Horizontal

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



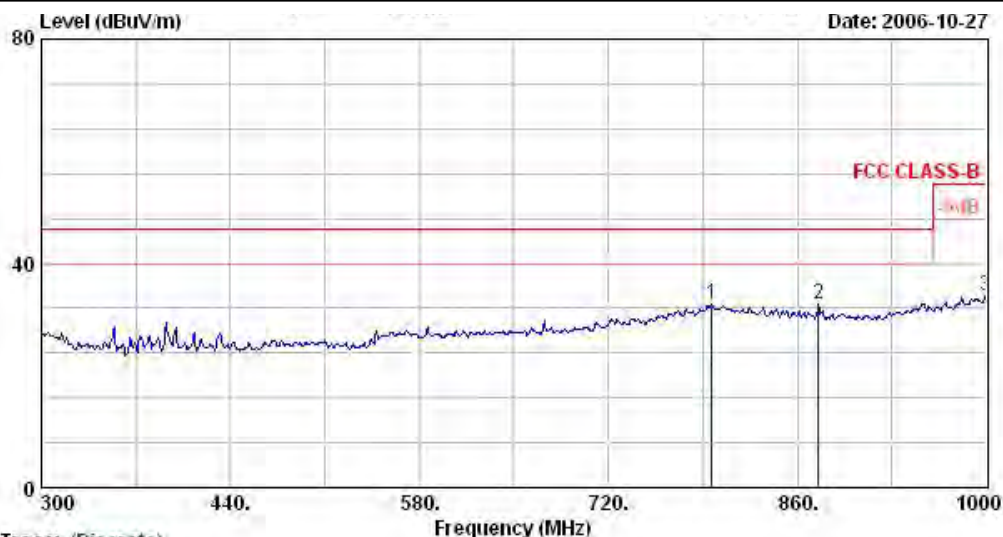
Trace: (Discrete)
 Site : 08CH06-HY
 Condition : BI-LOG-2004-1122 HORIZONTAL
 EUT : Mobile Phone
 Power : 120Wac/60Hz
 Model : FR 682525
 Mode : 11g Tx_Ch11;2462MHz
 Plane : E2
 Data Rate : 54

	Freq	Level	Over	Limit	ReadAntenna	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 @	162.0	33.78	-9.72	43.50	50.18	10.23	2.22	28.85	100	233 Peak
2	205.2	33.01	-10.49	43.50	49.29	9.81	2.63	28.72	---	--- Peak
3	224.9	33.40	-12.60	46.00	49.67	9.86	2.71	28.84	---	--- Peak



FCC TEST REPORT

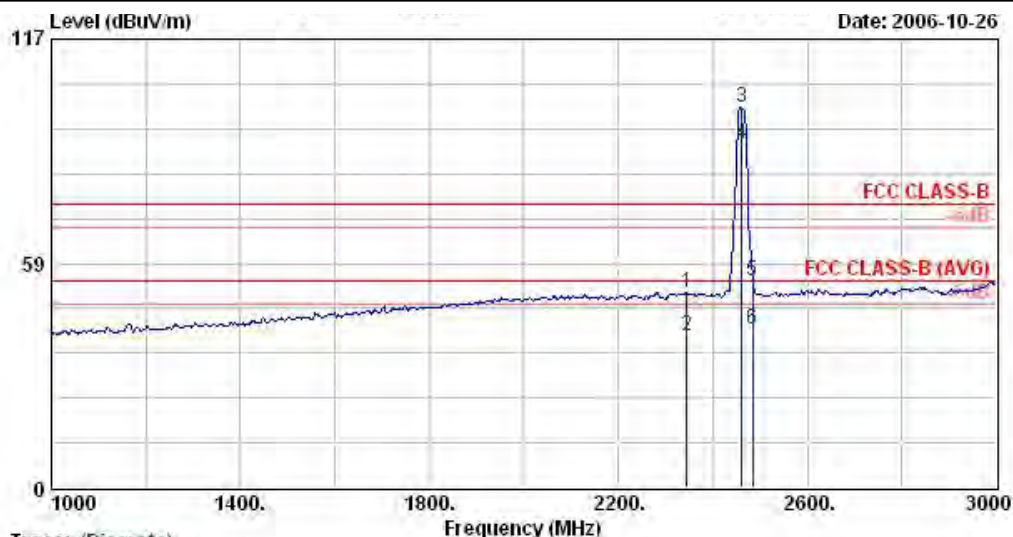
Report No. : FR682525



Trace: (Discrete)

Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch11,2462MHz
Plane : E2
Data Rate : 54

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	796.3	32.67	-13.33	46.00	34.18	21.79	5.57	28.87	---	---
2	875.4	32.81	-13.19	46.00	35.65	20.42	5.65	28.91	---	---
3	1000.0	34.13	-19.87	54.00	33.70	22.97	6.24	28.79	---	---
										Remark
										Peak
										Peak
										Peak

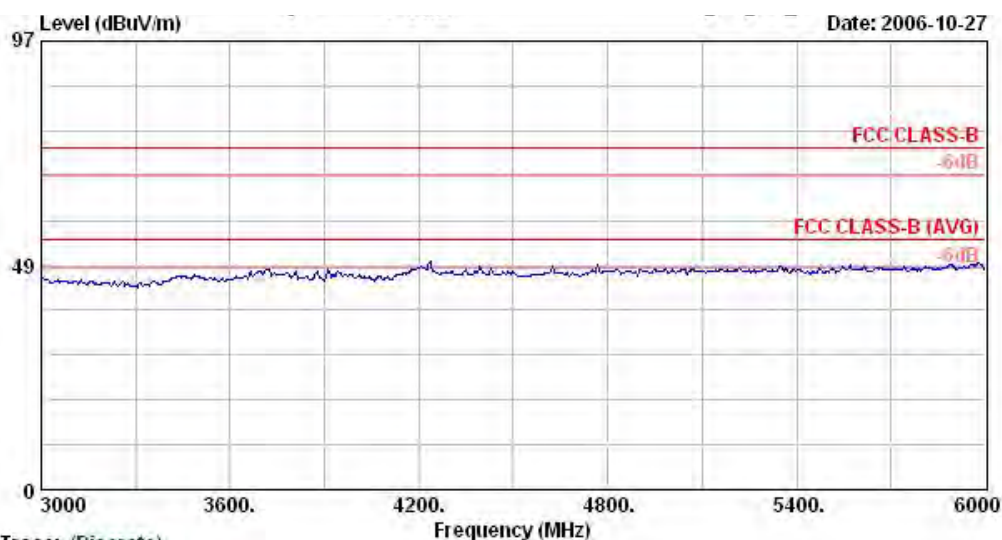


Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch11,2462MHz
Plane : E2
Data Rate : 54

	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	2344.0	50.94	-23.06	74.00	51.58	30.24	4.54	35.42	100	0 Peak
2	2344.0	39.69	-14.31	54.00	40.33	30.24	4.54	35.42	100	350 Average
3 @	2462.0	99.09			99.64	30.29	4.66	35.49	100	0 Peak
4 @	2462.0	89.45			90.00	30.29	4.66	35.49	100	350 Average
5	2483.5	54.13	-19.87	74.00	54.67	30.29	4.67	35.51	100	0 Peak
6	2483.5	41.43	-12.57	54.00	41.97	30.29	4.67	35.51	100	350 Average

Remark: #3 and #4 Fundamental Signal



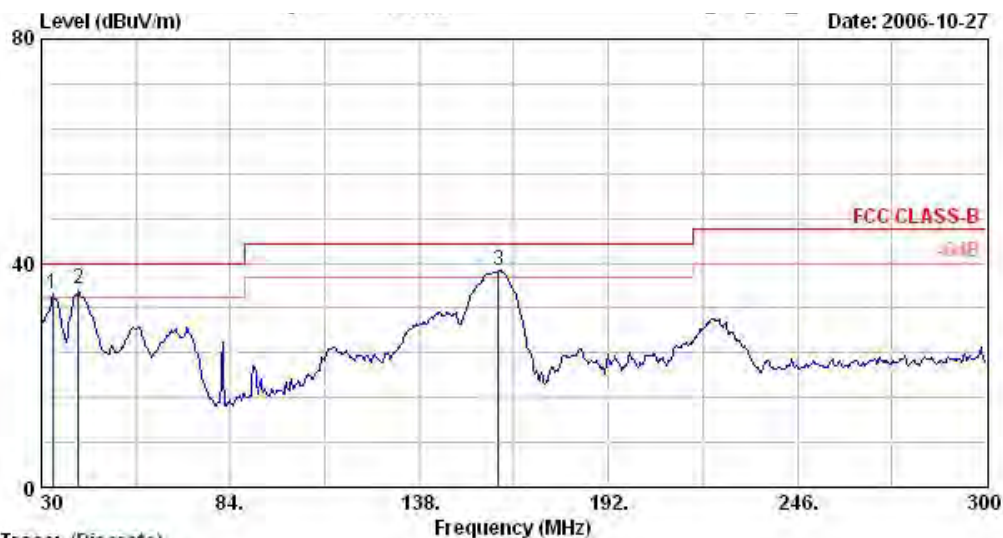
Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch11,2462MHz
Plane : E2
Data Rate : 54



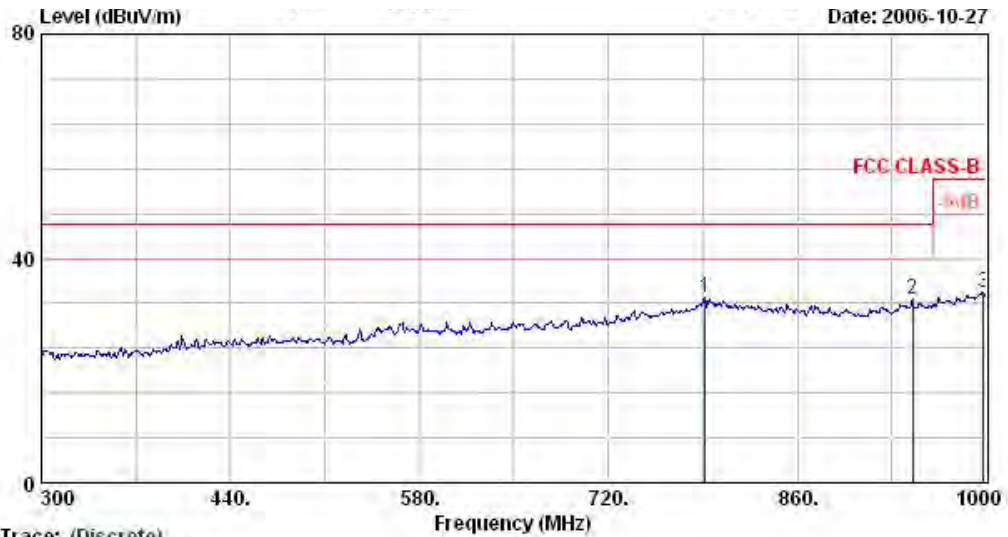
- Polarization : Vertical

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



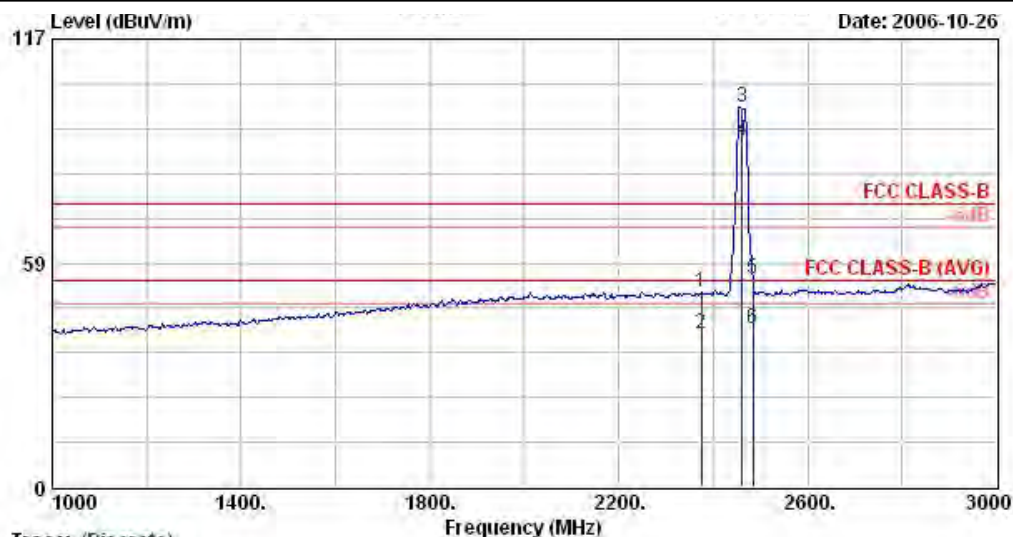
Trace: (Discrete)
 Site : 08CH06-HY
 Condition : BI-LOG-2004-1122 VERTICAL
 EUT : Mobile Phone
 Power : 120Wac/60Hz
 Model : FR 682525
 Mode : 11g Tx_CM11;2462MHz
 Plane : E2
 Data Rate : 54

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level Factor	Loss Factor	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1 @	33.2	34.49	-5.51	40.00	44.38	17.73	1.01	28.63	---	Peak
2 @	40.5	35.34	-4.66	40.00	48.51	14.28	1.20	28.65	100	314 Peak
3 @	160.7	38.80	-4.70	43.50	55.14	10.30	2.20	28.84	---	Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : 11g Tx_Ch11,2462MHz
Plane : E2
Data Rate : 54

	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	791.4	33.02	-12.98	46.00	34.74	21.65	5.51	28.88	---	---	Peak
2	945.4	32.66	-13.34	46.00	34.10	21.32	6.10	28.86	---	---	Peak
3	997.9	34.01	-19.99	54.00	33.67	22.91	6.22	28.79	---	---	Peak



Trace: (Discrete)
Site : 03CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : 11g Tx_CH11;2462MHz
Plane : E2
Data Rate : 54

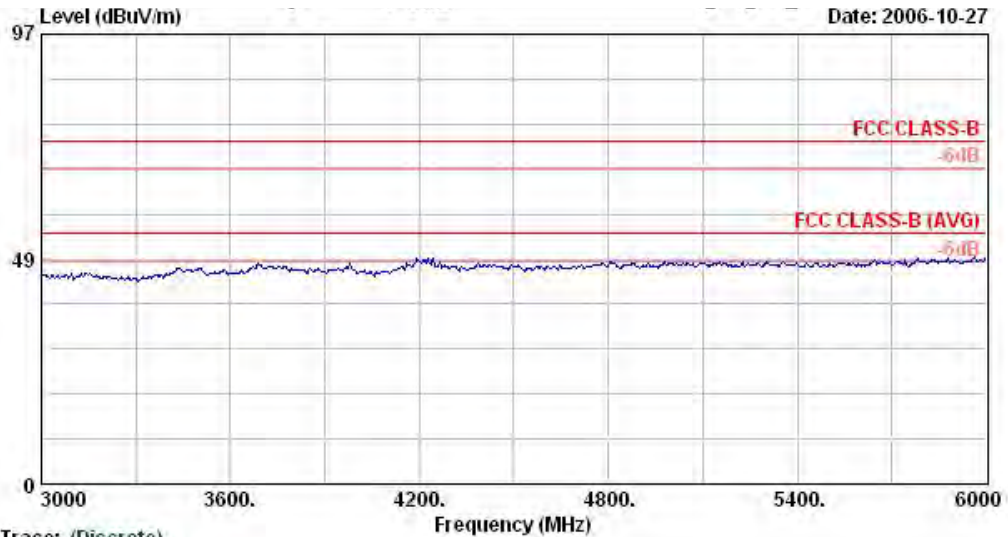
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2374.0	50.88	-23.12	74.00	51.49	30.25	4.57	35.44	100	0 Peak
2	2374.0	39.85	-14.15	54.00	40.46	30.25	4.57	35.44	105	83 Average
3 @	2462.0	99.23			99.78	30.29	4.66	35.49	100	0 Peak
4 @	2462.0	90.57			91.12	30.29	4.66	35.49	105	83 Average
5	2483.5	54.28	-19.72	74.00	54.82	30.29	4.67	35.51	100	0 Peak
6	2483.5	41.42	-12.58	54.00	41.96	30.29	4.67	35.51	105	83 Average

Remark: #3 and #4 Fundamental Signal



FCC TEST REPORT

Report No. : FR682525



Trace: (Discrete)

Site : 08CH06-HY

Condition : HF-ANT-060410 VERTICAL

EUT : Mobile Phone

Power : 120Wac/60Hz

Model : FR 682525

Mode : 11g Tx_Ch11;2462MHz

Plane : E2

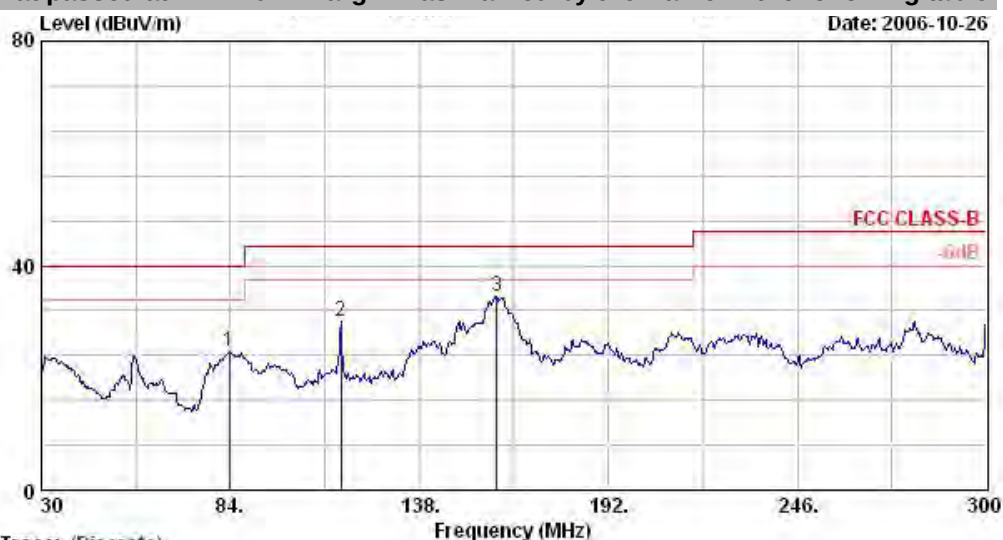
Data Rate : 54

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



- Test Mode : Mode 7
- Polarization : Horizontal

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

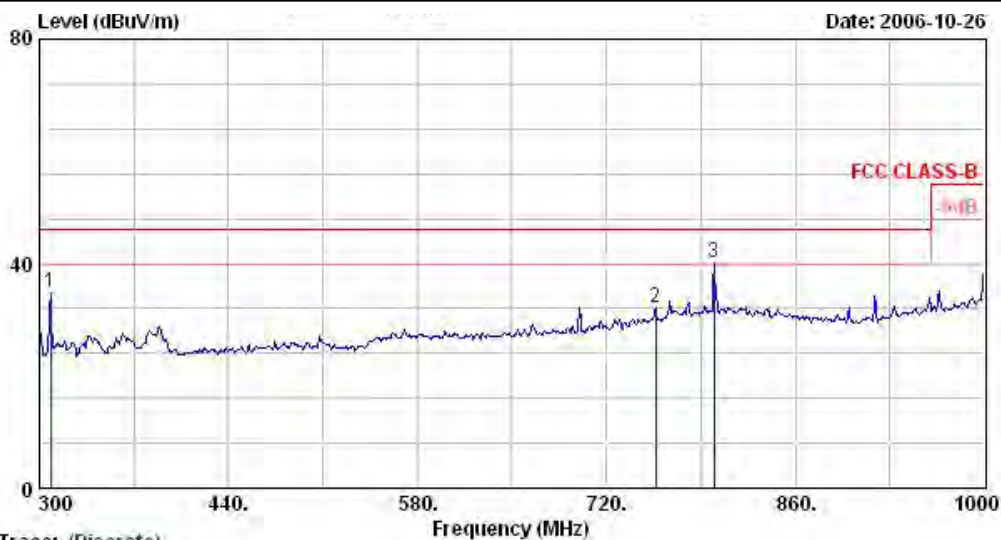


	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	83.7	24.70	-15.30	40.00	44.19	7.66	1.61	28.76	100	0 Peak
2 @	115.6	30.13	-13.37	43.50	44.88	12.27	1.88	28.89	100	0 Peak
3 @	160.1	34.60	-8.90	43.50	50.88	10.37	2.19	28.84	100	0 Peak



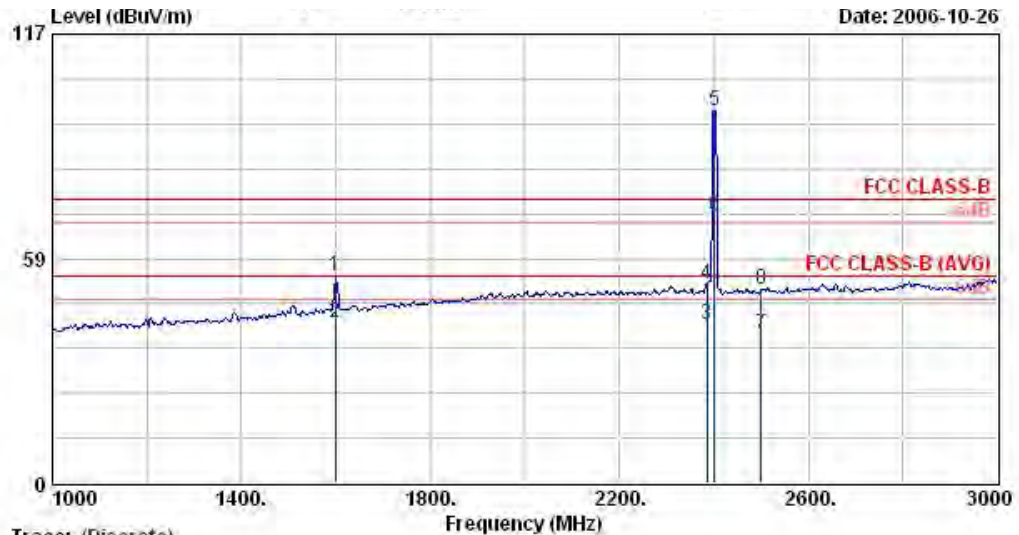
FCC TEST REPORT

Report No. : FR682525



Trace: (Discrete)
 Site : 08CH06-HY
 Condition : BI-LOG-2004-1122 HORIZONTAL
 EUT : Mobile Phone
 Power : 120W_{ac}/60Hz
 Model : FR 682525
 Mode : BT Tx_CH00:2402MHz
 Plane : E2
 Data Rate : DH1

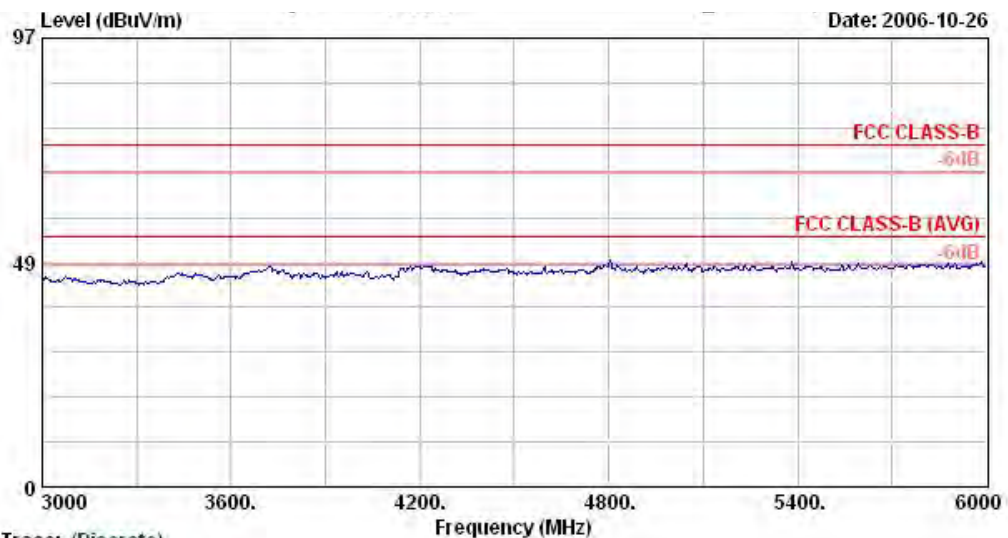
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	308.4	34.91	-11.09	46.00	47.47	13.20	3.16	28.91	100	0 Peak
2 @	756.4	32.26	-13.74	46.00	35.35	20.65	5.23	28.96	100	0 Peak
3 @	799.8	40.19	-5.81	46.00	41.54	21.90	5.62	28.87	100	75 Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_CM00:2402MHz
Plane : E2
Data Rate : DH1

	Freq	Level	Over	Limit	ReadAntenna	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	1598.0	54.14	-19.86	74.00	59.20	26.90	3.66	35.62	100	0 Peak
2 @	1598.0	41.97	-12.03	54.00	47.03	26.90	3.66	35.62	100	112 Average
3 @	2385.8	41.15	-12.85	54.00	41.74	30.26	4.59	35.44	100	149 Average
4	2385.8	51.94	-22.06	74.00	52.53	30.26	4.59	35.44	100	0 Peak
5 @	2402.0	97.17			97.78	30.26	4.59	35.46	100	0 Peak
6 @	2402.0	69.78			70.39	30.26	4.59	35.46	100	149 Average
7	2500.0	38.55	-15.45	54.00	39.09	30.30	4.69	35.53	100	149 Average
8	2500.0	50.24	-23.76	74.00	50.78	30.30	4.69	35.53	100	0 Peak

Remark: #3 and #4 Fundamental Signal

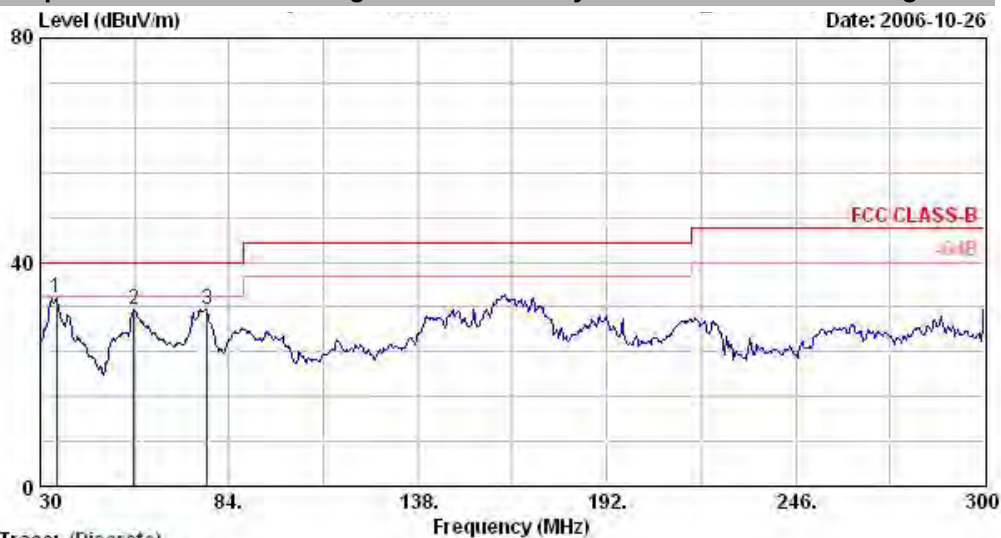


Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_CM00:2402MHz
Plane : E2
Data Rate : DH1



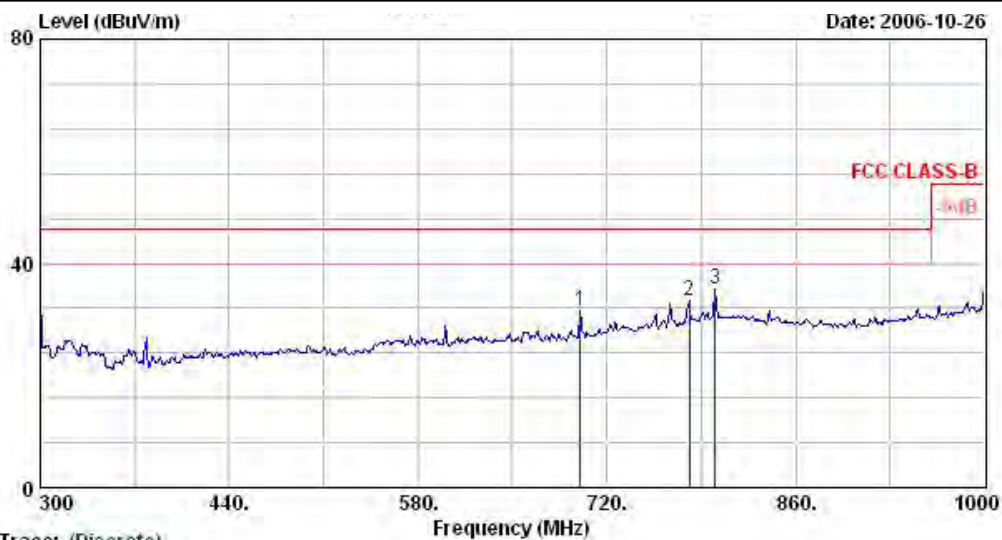
- Polarization : Vertical

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



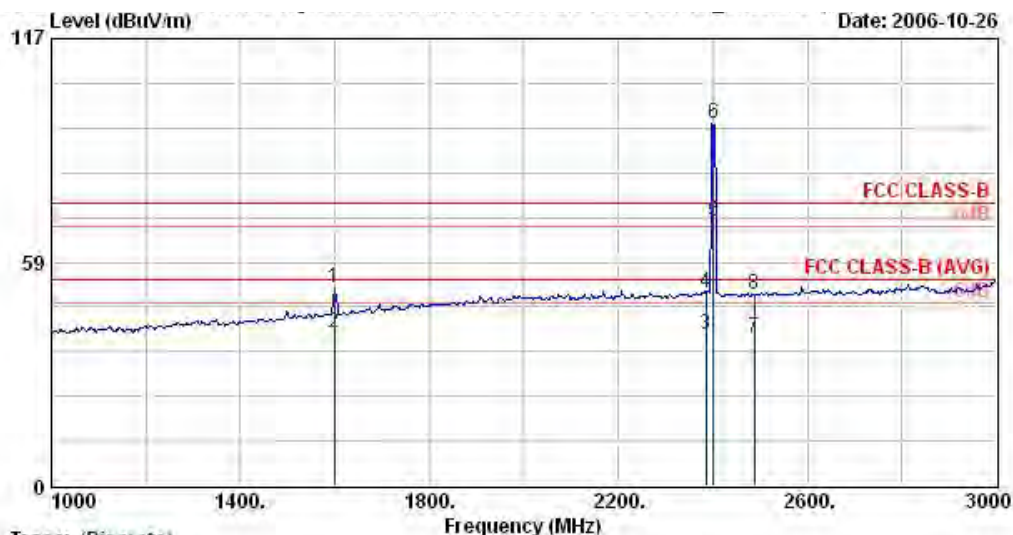
Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ck39;2441MHz
Plane : E2
Data Rate : DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	34.6	33.66	-6.34	40.00	44.15	17.07	1.08	28.64	100	189
2 @	56.7	31.50	-8.50	40.00	51.42	7.54	1.18	28.64	100	0
3 @	77.8	31.47	-8.53	40.00	51.83	6.85	1.51	28.72	100	0



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ch39;2441MHz
Plane : E2
Data Rate : DH1

	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	700.4	31.40	-14.60	46.00	36.00	19.04	5.13	28.76	100	0 Peak
2 @	780.9	33.39	-12.61	46.00	35.59	21.34	5.36	28.91	100	0 Peak
3 @	800.5	35.26	-10.74	46.00	36.61	21.90	5.62	28.87	100	0 Peak

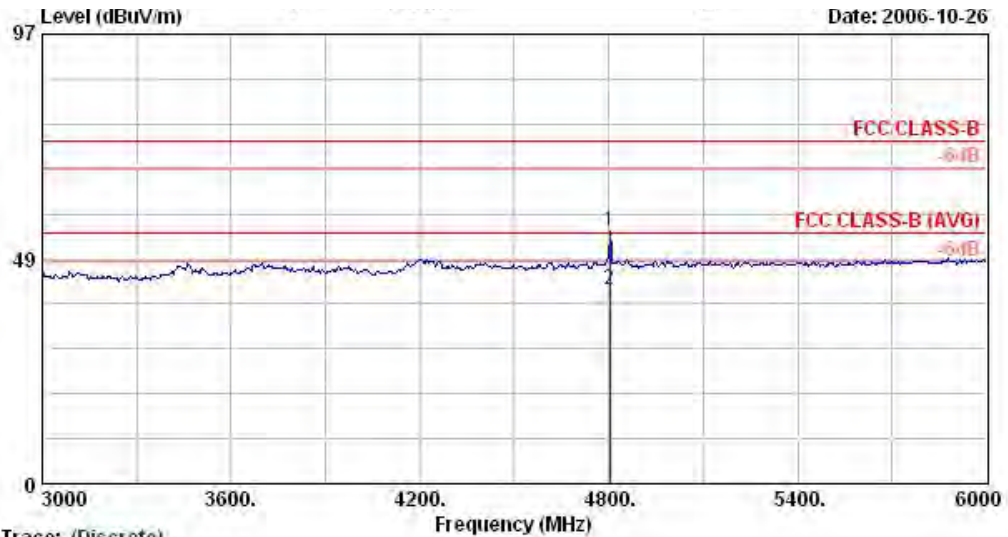


Trace: (Discrete)

Site : 08CH06-HY
Condition : HP-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : ET Tx_Ch00:2402MHz
Plane : E2
Data Rate : DH1

	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	1598.0	51.85	-22.15	74.00	56.91	26.90	3.66	35.62	100	0 Peak
2 @	1598.0	40.08	-13.92	54.00	45.14	26.90	3.66	35.62	100	123 Average
3 @	2386.2	39.74	-14.26	54.00	40.33	30.26	4.59	35.44	100	198 Average
4	2386.2	50.56	-23.44	74.00	51.15	30.26	4.59	35.44	100	0 Peak
5 @	2402.0	69.23			69.84	30.26	4.59	35.46	100	198 Average
6 @	2402.0	94.69			95.30	30.26	4.59	35.46	100	0 Peak
7	2488.0	38.74	-15.26	54.00	39.26	30.30	4.69	35.51	100	198 Average
8	2488.0	50.17	-23.83	74.00	50.69	30.30	4.69	35.51	100	0 Peak

Remark: #3 and #4 Fundamental Signal



Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_CM00:2402MHz
Plane : E2
Data Rate : DH1

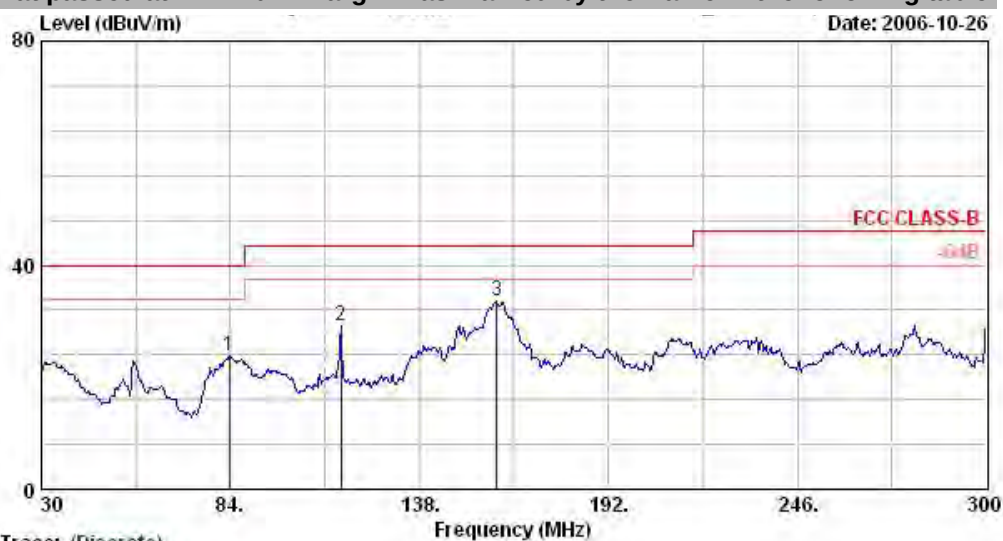
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1	4804.0	54.28	-19.72	74.00	51.10	32.88	6.39	36.10	100	0 Peak
2 @	4804.0	41.68	-12.32	54.00	38.50	32.88	6.39	36.10	100	3 Average

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



- Test Mode : Mode 8
- Polarization : Horizontal

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



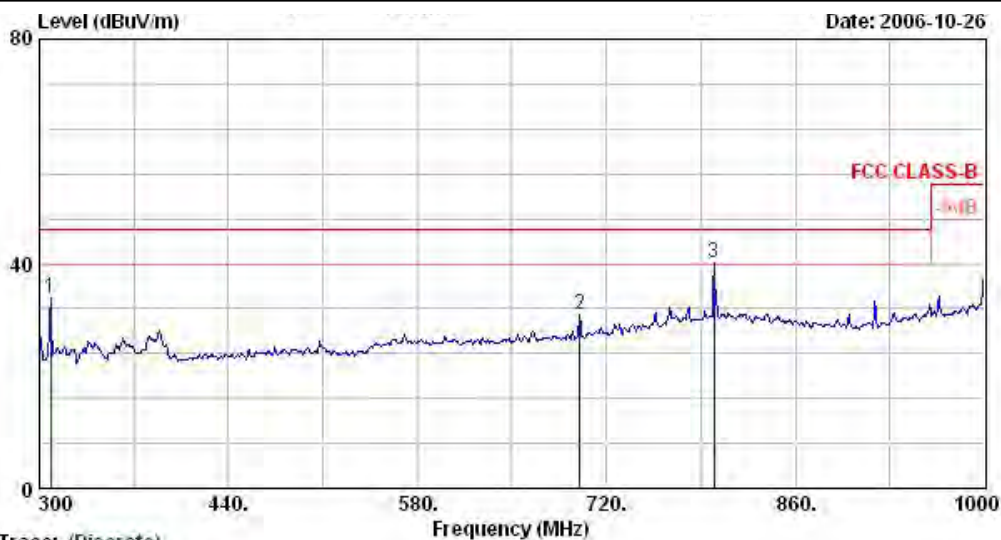
Trace: (Discrete)
Site : USCH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : BT Tx_Ch39/2441MHz
Plane : E2
Data Rate : DH1

	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	83.7	23.70	-16.30	40.00	43.19	7.66	1.61	28.76	100	0 Peak
2	115.6	29.13	-14.37	43.50	43.88	12.27	1.88	28.89	100	0 Peak
3 @	160.1	33.60	-9.90	43.50	49.88	10.37	2.19	28.84	100	0 Peak



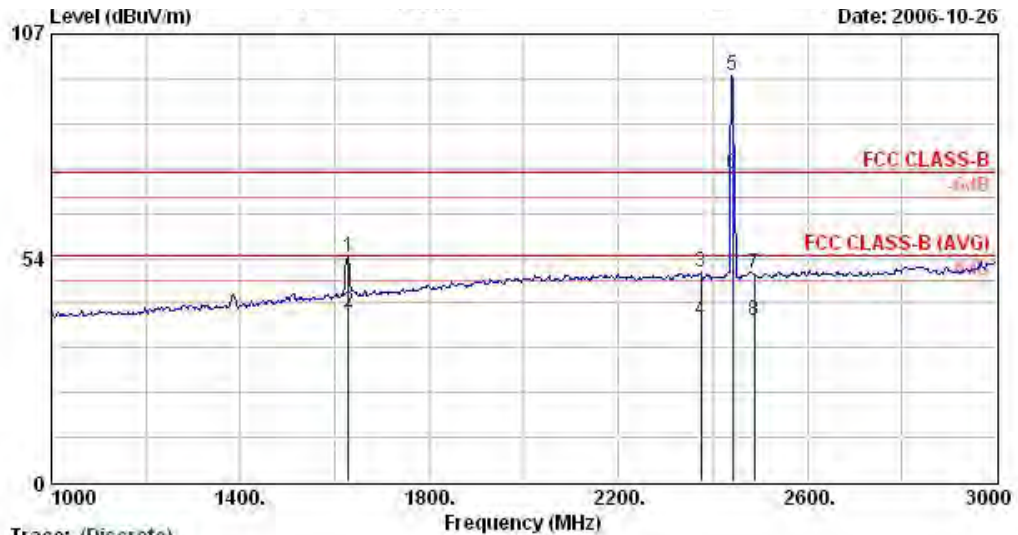
FCC TEST REPORT

Report No. : FR682525



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ch39:2441MHz
Plane : E2
Data Rate : DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1 @	308.4	33.91	-12.09	46.00	46.47	13.20	3.16	28.91	100	0
2	700.4	31.06	-14.94	46.00	35.66	19.04	5.13	28.76	100	0
3 @	799.8	40.19	-5.81	46.00	41.54	21.90	5.62	28.87	100	175

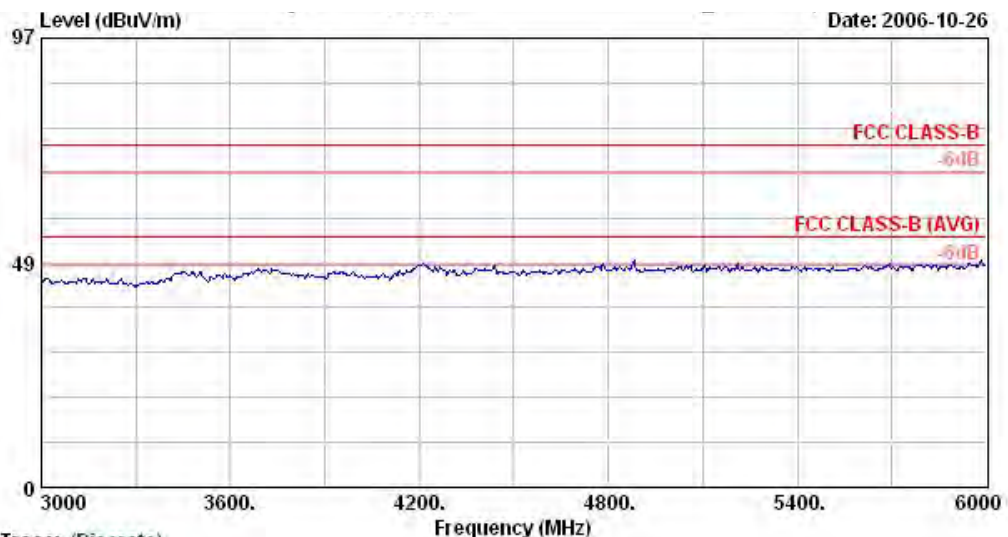


Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ch39;2441MHz
Plane : E2
Data Rate : DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1628.0	53.73	-20.27	74.00	58.42	27.17	3.70	35.56	100	0
2	1628.0	40.59	-13.41	54.00	45.28	27.17	3.70	35.56	109	154
3	2374.0	49.95	-24.05	74.00	50.56	30.25	4.57	35.44	100	0
4	2374.0	38.59	-15.41	54.00	39.20	30.25	4.57	35.44	109	154
5 @	2441.0	96.87			97.42	30.28	4.64	35.47	100	0
6 @	2441.0	73.54			74.11	30.28	4.64	35.49	109	154
7	2488.0	49.86	-24.14	74.00	50.38	30.30	4.69	35.51	100	0
8	2488.0	38.56	-15.44	54.00	39.08	30.30	4.69	35.51	109	154

Remark: #3 and #4 Fundamental Signal



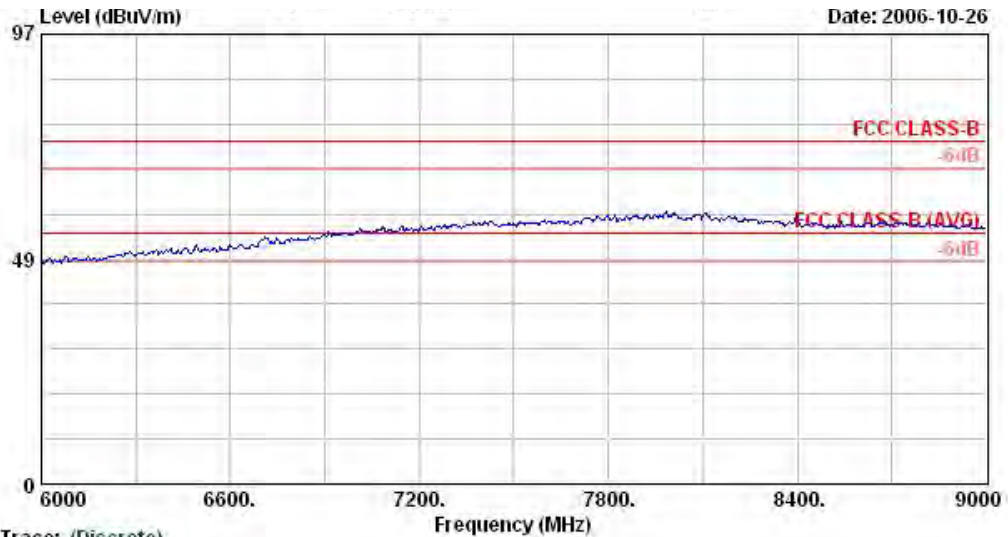
Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ch00;2402MHz
Plane : E2
Data Rate : DH1

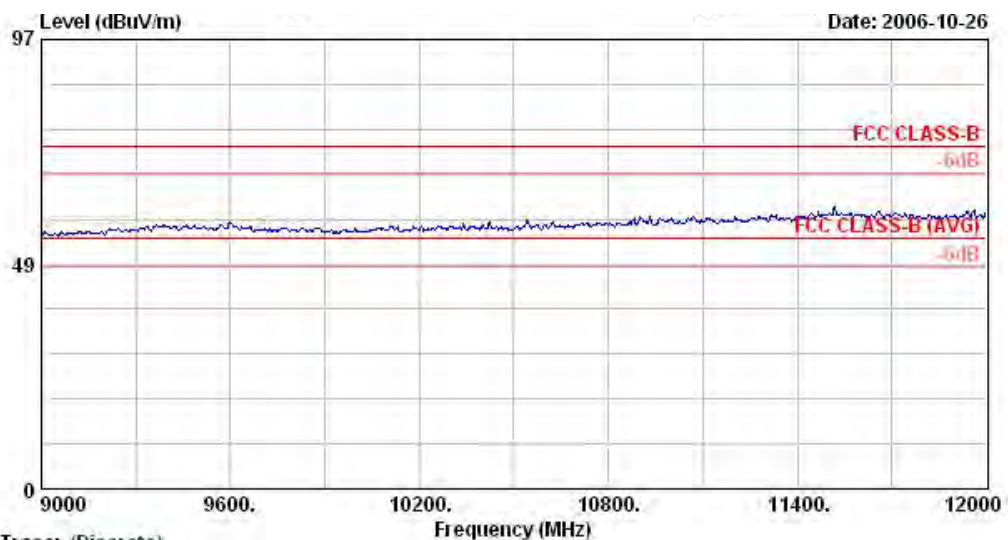


FCC TEST REPORT

Report No. : FR682525



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ch00;2402MHz
Plane : E2
Data Rate : DH1

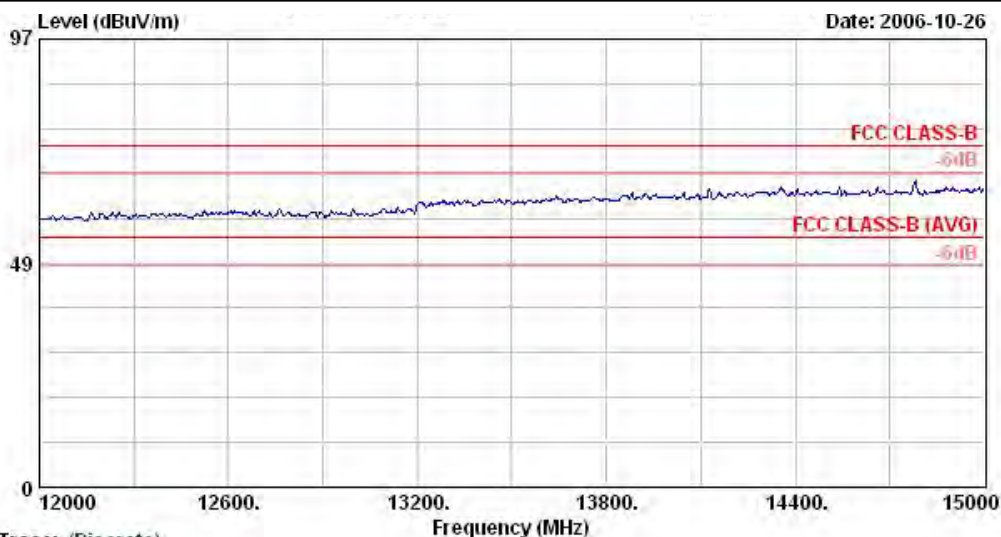


Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ch00;2402MHz
Plane : E2
Data Rate : DH1

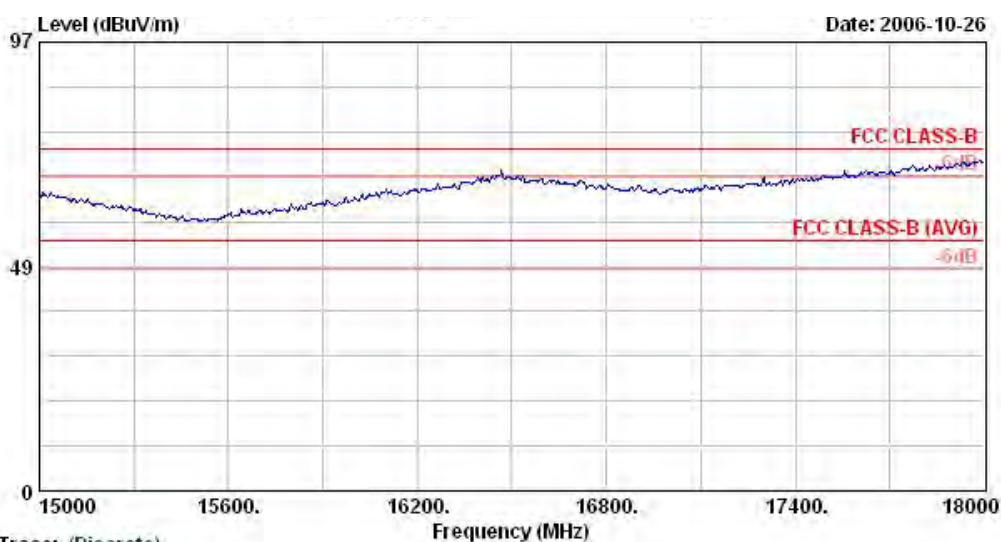


FCC TEST REPORT

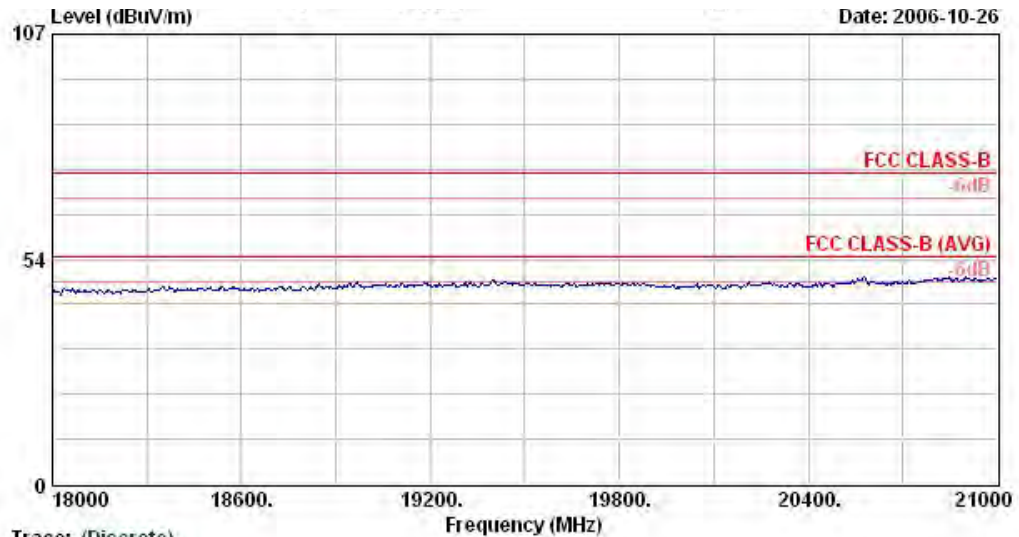
Report No. : FR682525



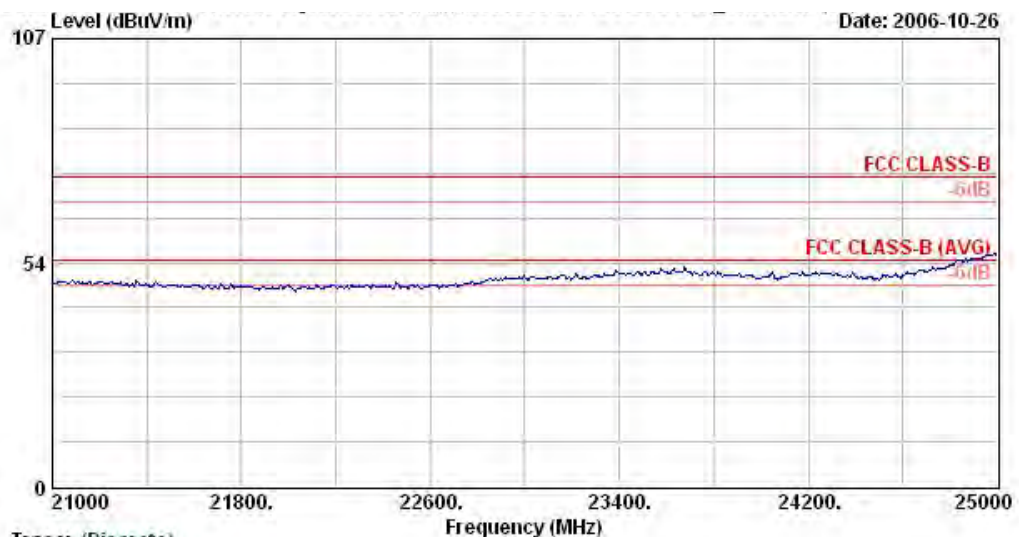
Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : BT Tx_Ch00;2402MHz
Plane : E2
Data Rate : DH1



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : BT Tx_Ch00;2402MHz
Plane : E2
Data Rate : DH1



Trace: (Discrete)
Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/80Hz
Model : FR 682525
Mode : BT Tx_Ch39;2441MHz
Plane : E2
Data Rate : DH1

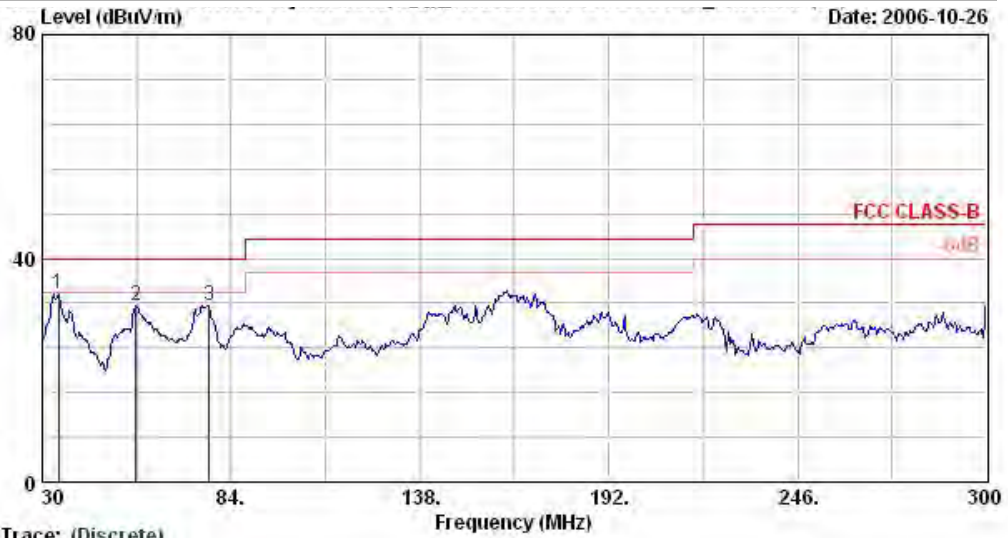


Trace: (Discrete)
Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : Mobile Phone
Power : 120Wac/80Hz
Model : FR 682525
Mode : BT Tx_Ch39;2441MHz
Plane : E2
Data Rate : DH1



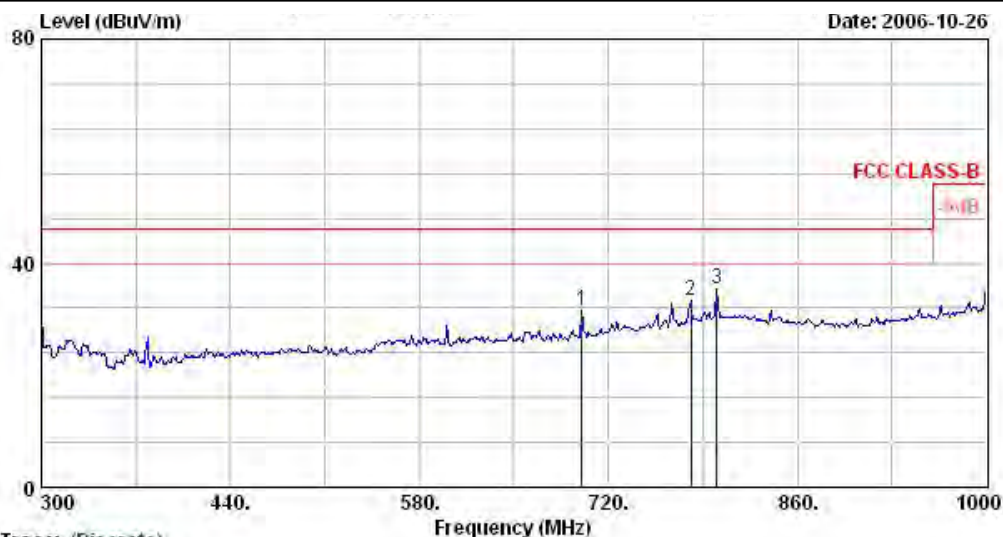
- Polarization : Vertical

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



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx Ch39;2441MHz
Plane : E2
Data Rate : DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV		dB	dB	cm	deg
1 @	34.6	33.66	-6.34	40.00	44.15	17.07	1.08	28.64	100	75 Peak
2 @	56.7	31.50	-8.50	40.00	51.42	7.54	1.18	28.64	100	0 Peak
3 @	77.8	31.47	-8.53	40.00	51.83	6.85	1.51	28.72	100	0 Peak



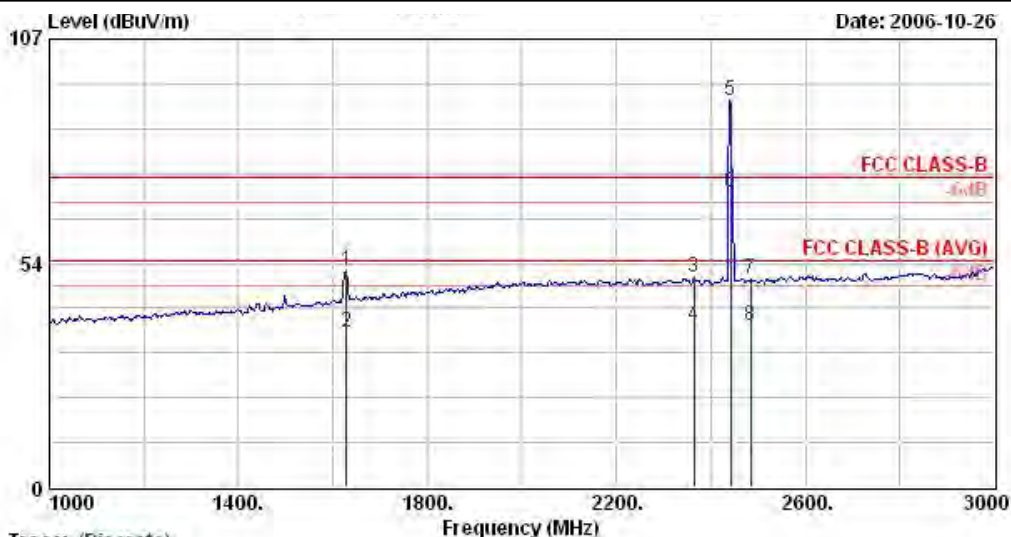
Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : ET Tx_Ch39;2441MHz
Plane : E2
Data Rate : DH1

	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	700.4	31.40	-14.60	46.00	36.00	19.04	5.13	28.76	100	0 Peak
2 @	780.9	33.39	-12.61	46.00	35.59	21.34	5.36	28.91	100	0 Peak
3 @	800.5	35.26	-10.74	46.00	36.61	21.90	5.62	28.87	100	0 Peak



FCC TEST REPORT

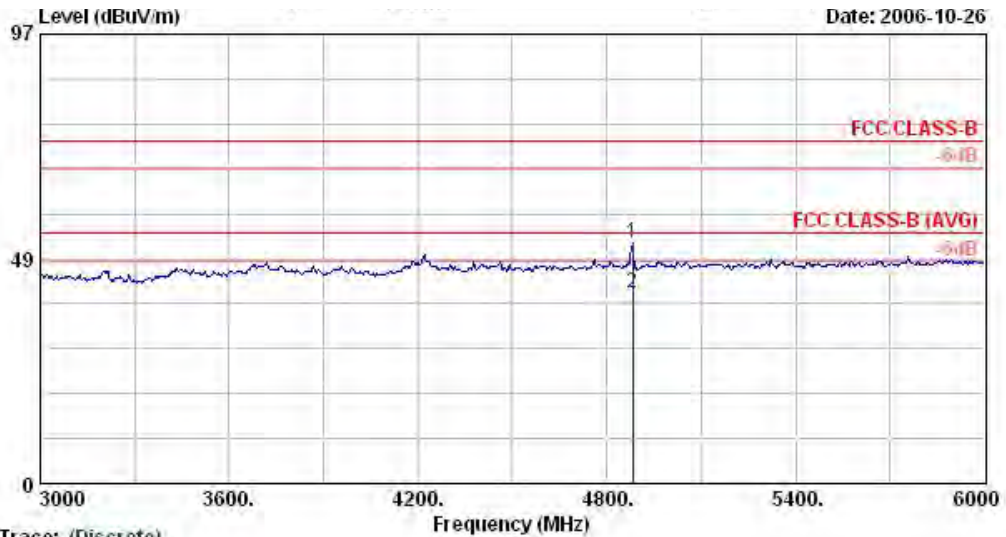
Report No. : FR682525



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : ET Tx_Ch39;2441MHz
Plane : E2
Data Rate : DH1

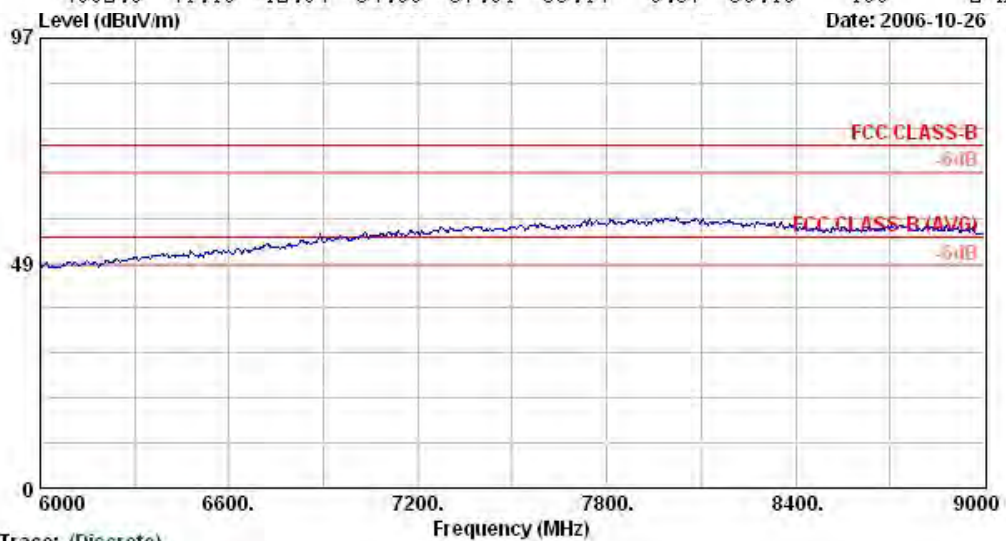
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	1628.0	51.75	-22.25	74.00	56.44	27.17	3.70	35.56	100	0 Peak
2	1628.0	37.04	-16.96	54.00	41.73	27.17	3.70	35.56	123	208 Average
3	2364.0	49.96	-24.04	74.00	50.58	30.24	4.56	35.42	100	0 Peak
4	2364.0	38.44	-15.56	54.00	39.06	30.24	4.56	35.42	123	208 Average
5 @	2441.0	92.30			92.86	30.28	4.64	35.47	100	0 Peak
6 @	2441.0	70.26			70.83	30.28	4.64	35.49	123	208 Average
7	2484.0	49.53	-24.47	74.00	50.07	30.29	4.67	35.51	100	0 Peak
8	2484.0	38.52	-15.48	54.00	39.06	30.29	4.67	35.51	123	208 Average

Remark: #3 and #4 Fundamental Signal

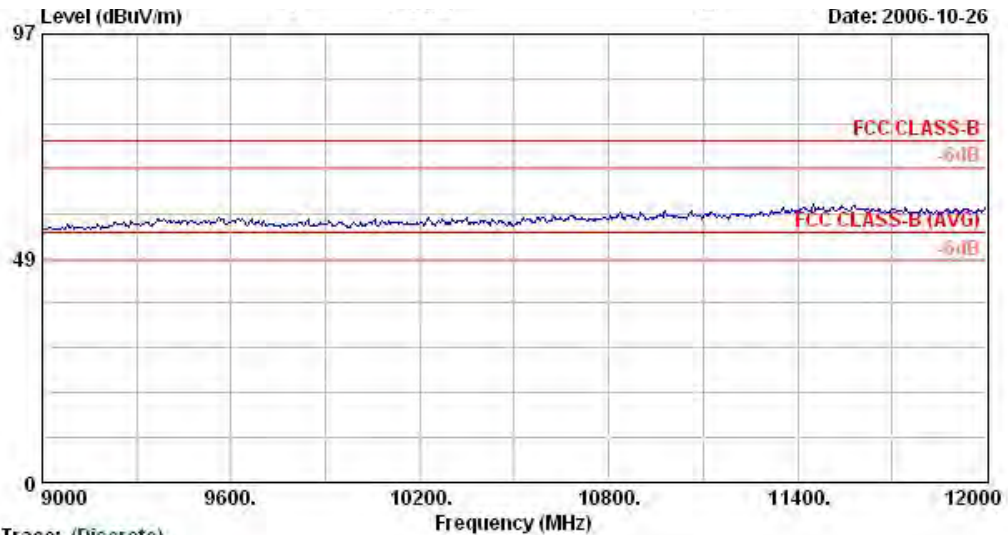


Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_CM00:2402MHz
Plane : E2
Data Rate : DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	4882.0	51.91	-22.09	74.00	48.57	33.14	6.37	36.16	100	0
2 @	4882.0	41.16	-12.84	54.00	37.81	33.14	6.37	36.16	100	2

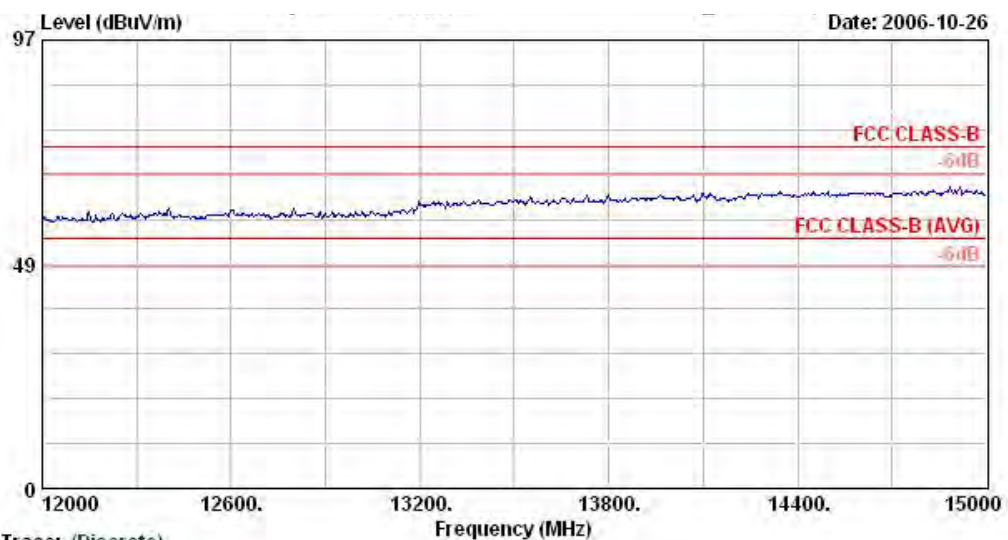


Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_CM00:2402MHz
Plane : E2
Data Rate : DH1



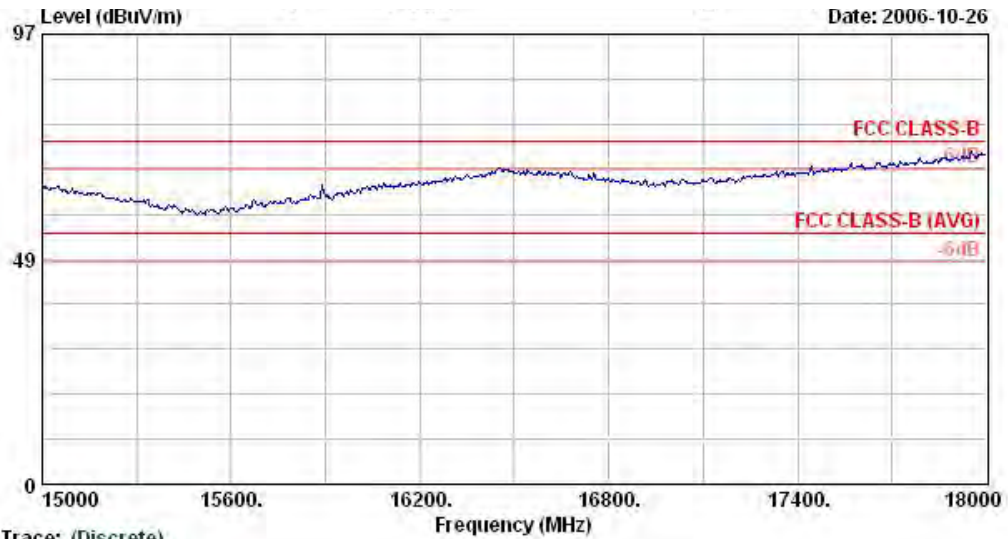
Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : BT Tx_CM00;2402MHz
Plane : E2
Data Rate : DH1

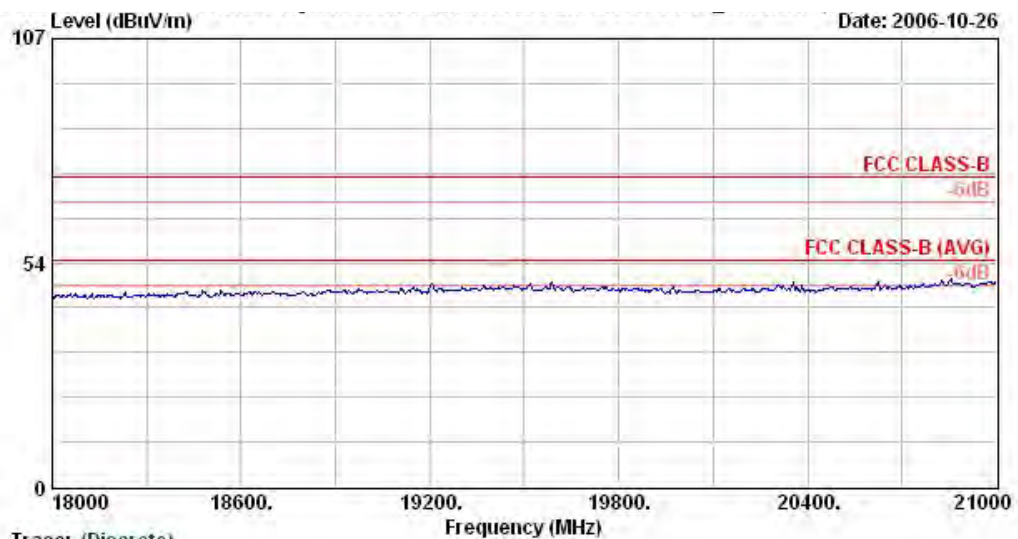


Trace: (Discrete)

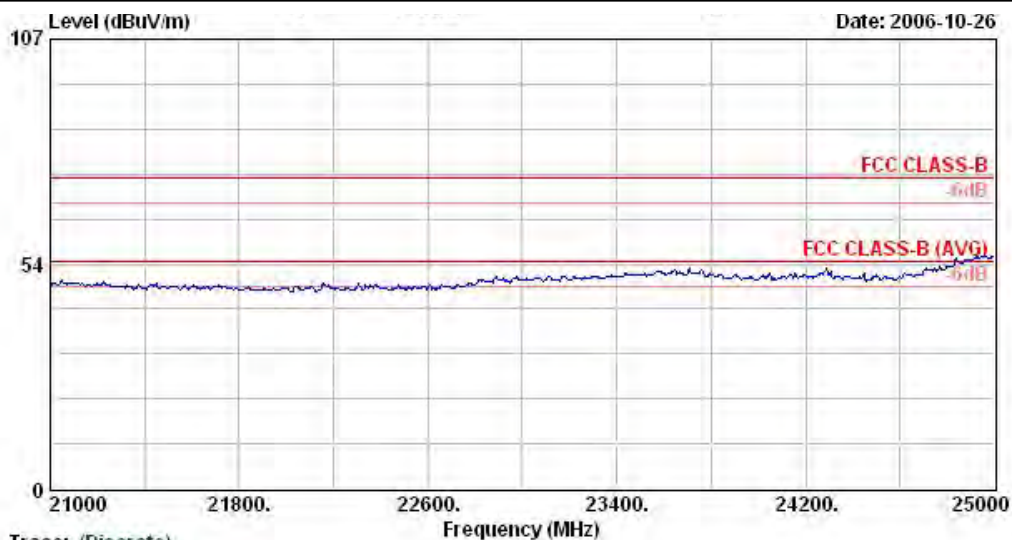
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120W_{ac}/60Hz
Model : FR 682525
Mode : BT Tx_CM00;2402MHz
Plane : E2
Data Rate : DH1



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_CM00;2402MHz
Plane : E2
Data Rate : DH1



Trace: (Discrete)
Site : 08CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ch39;2441MHz
Plane : E2
Data Rate : DH1



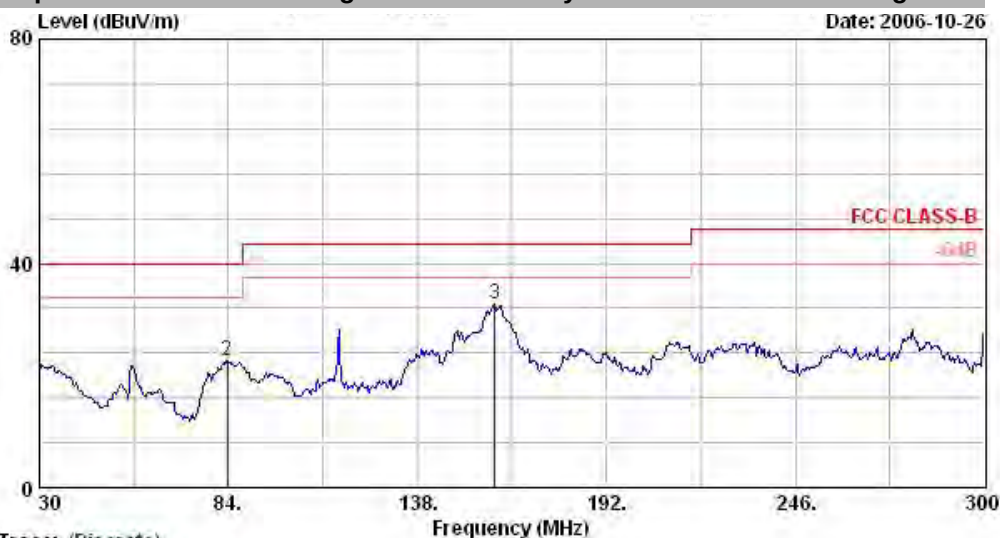
Site : 08CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : Mobile Phone
Power : 120W_{ac}/50Hz
Model : FR 682525
Mode : BT Tx_Ch39;2441MHz
Plane : E2
Data Rate : DH1

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



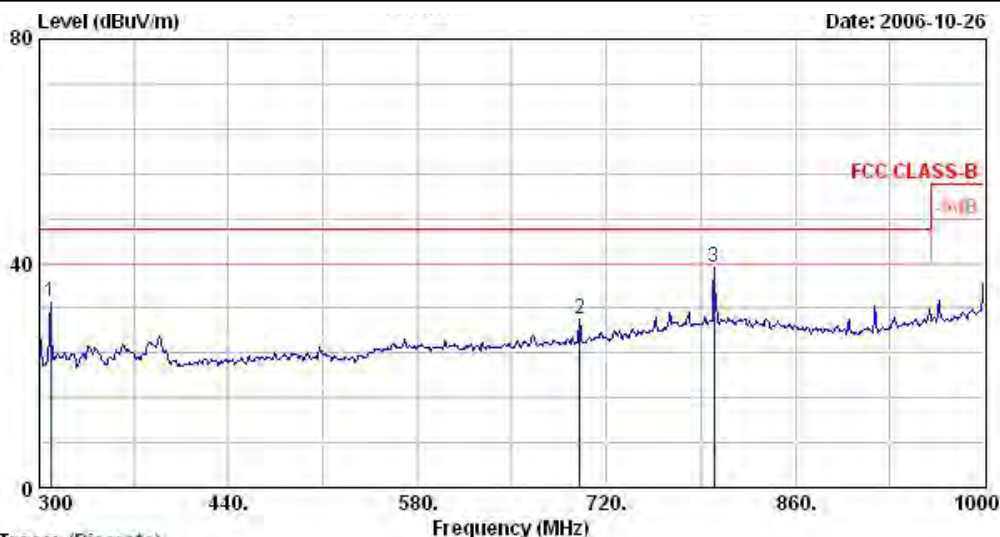
- Test Mode : Mode 9
- Polarization : Horizontal

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



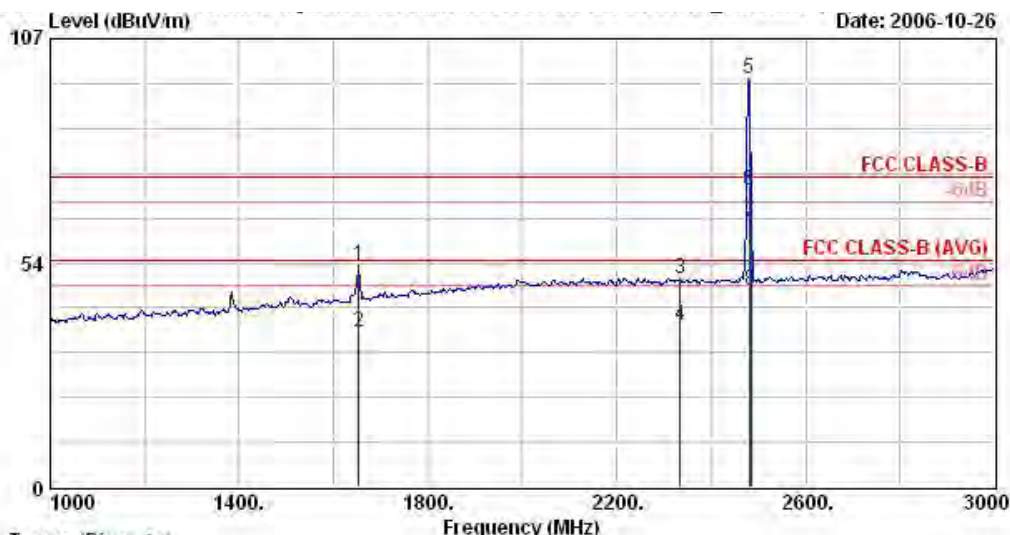
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : BT Tx Cl78.2480MHz
Plane : E2
Data Rate : DH1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	30.0	22.57	-17.43	40.00	31.56	18.73	0.90	28.62	100	0 Peak
2	83.7	22.70	-17.30	40.00	42.19	7.66	1.61	28.76	100	0 Peak
3 @	160.1	32.60	-10.90	43.50	48.88	10.37	2.19	28.84	100	0 Peak



Site : 08CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : Mobile Phone
Power : 120V_{ac}/60Hz
Model : FR 682525
Mode : BT Tx_Ck78;2480MHz
Plane : E2
Data Rate : DH1

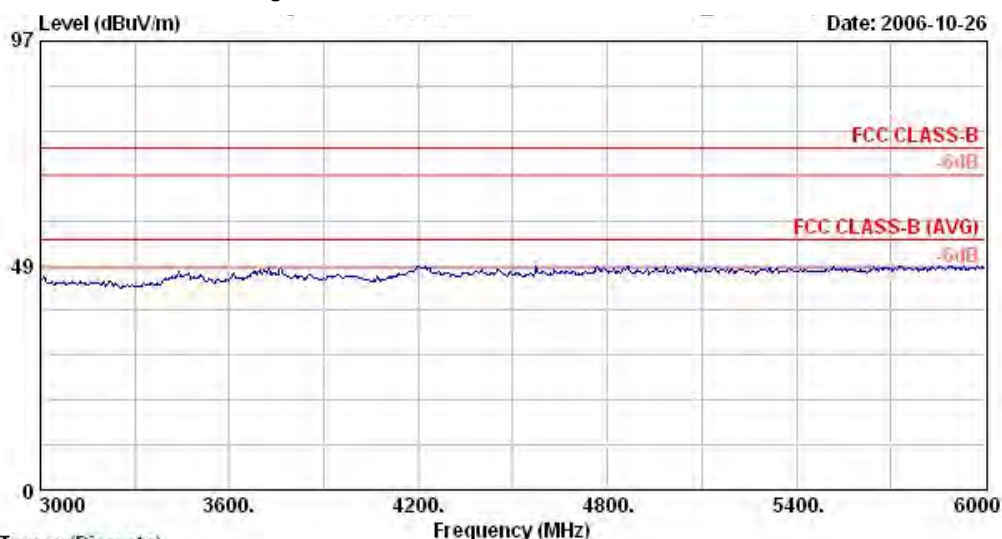
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	308.4	32.91	-13.09	46.00	45.47	13.20	3.16	28.91	100	0 Peak
2	700.4	30.06	-15.94	46.00	34.66	19.04	5.13	28.76	100	0 Peak
3 @	799.8	39.19	-6.81	46.00	40.54	21.90	5.62	28.87	100	15 Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : BT Tx_CK78;2480MHz
Plane : E2
Data Rate : DH1

	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	1654.0	52.89	-21.11	74.00	57.39	27.30	3.73	35.53	100	0 Peak
2	1654.0	37.07	-16.93	54.00	41.58	27.30	3.73	35.53	104	39 Average
3	2334.0	49.81	-24.19	74.00	50.45	30.23	4.52	35.40	100	0 Peak
4	2334.0	38.69	-15.31	54.00	39.34	30.23	4.52	35.40	104	39 Average
5 @	2480.0	97.64			98.18	30.29	4.67	35.51	100	0 Peak
6 @	2480.0	70.66			71.20	30.29	4.67	35.51	104	39 Average
7 @	2483.5	63.42	-10.58	74.00	63.96	30.29	4.67	35.51	100	0 Peak
8 @	2483.5	46.91	-7.09	54.00	47.45	30.29	4.67	35.51	104	39 Average

Remark: #3 and #4 Fundamental Signal

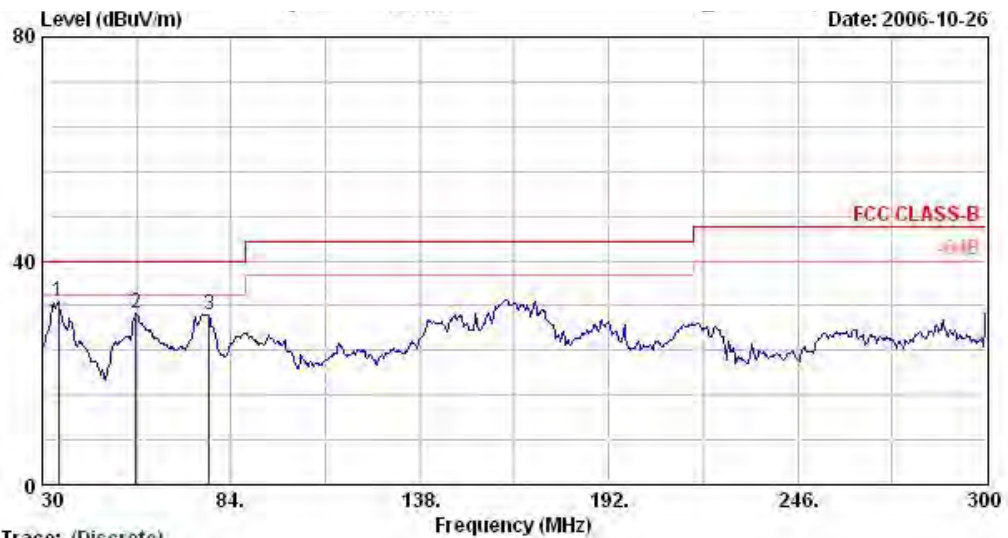


Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : Mobile Phone
Power : 120Vac/60Hz
Model : FR 682525
Mode : BT Tx_CK78;2480MHz
Plane : E2
Data Rate : DH1



- Polarization : Vertical

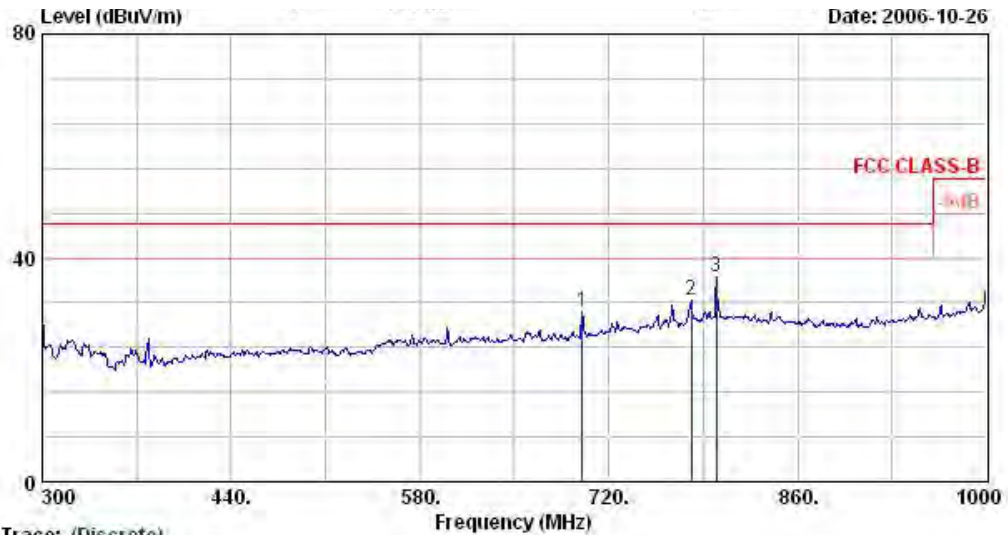
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

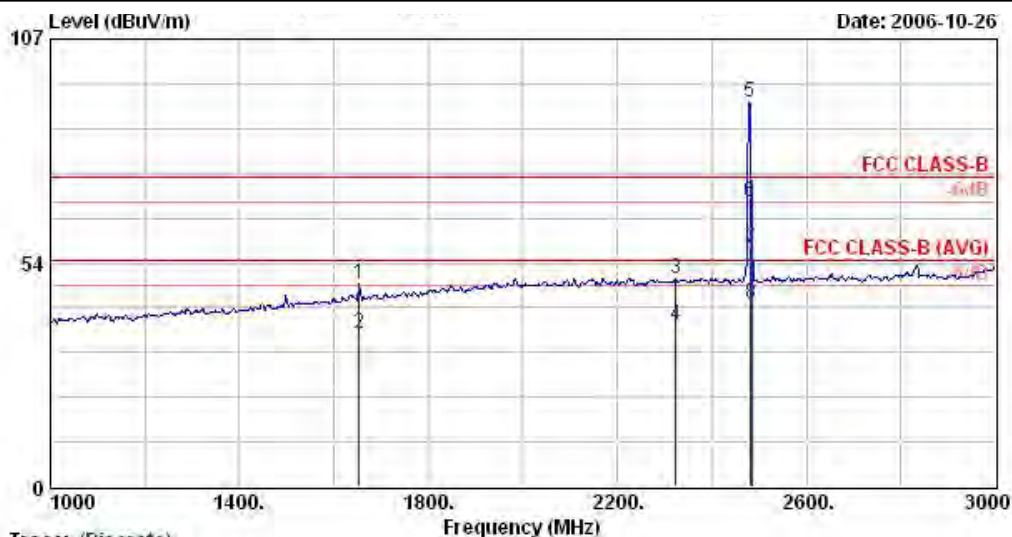
Site : 08CH06-HY
 Condition : BI-LOG-2004-1122 VERTICAL
 EUT : Mobile Phone
 Power : 120Wac/60Hz
 Model : FR 682525
 Mode : BT Tx_Ch78,2480MHz
 Plane : E2
 Data Rate : DH1

	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 @	34.6	32.66	-7.34	40.00	43.15	17.07	1.08	28.64	100	20 Peak
2 @	56.7	30.50	-9.50	40.00	50.42	7.54	1.18	28.64	100	0 Peak
3 @	77.8	30.47	-9.53	40.00	50.83	6.85	1.51	28.72	100	0 Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_Ch78;2480MHz
Plane : E2
Data Rate : DH1

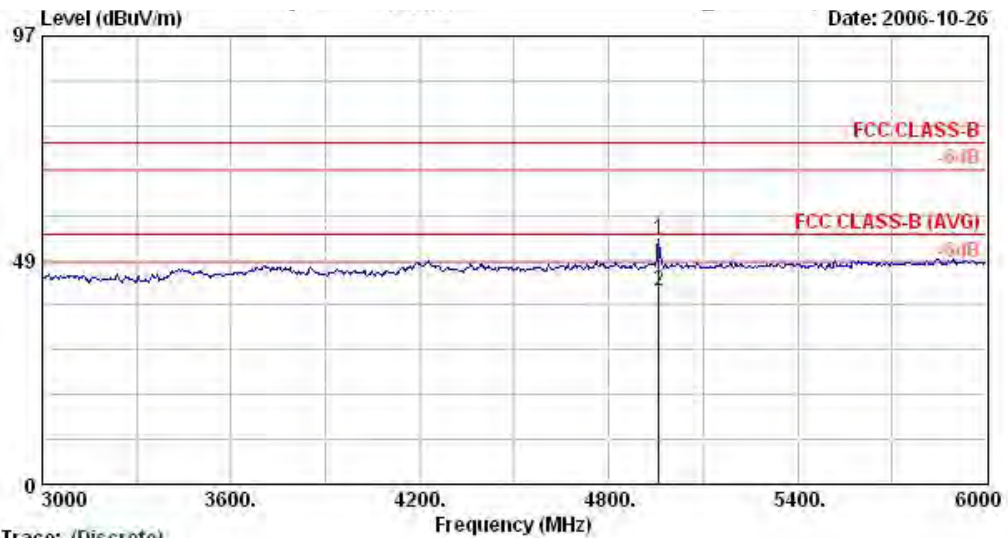
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	700.4	30.40	-15.60	46.00	35.00	19.04	5.13	28.76	100	0 Peak
2	780.9	32.39	-13.61	46.00	34.59	21.34	5.36	28.91	100	0 Peak
3 @	799.8	36.69	-9.31	46.00	38.04	21.90	5.62	28.87	100	0 Peak



Trace: (Discrete)
Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : ET Tx_Ch78,2480MHz
Plane : E2
Data Rate : DH1

	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	1654.0	48.39	-25.61	74.00	52.90	27.30	3.73	35.53	100	0 Peak
2	1654.0	36.70	-17.30	54.00	41.21	27.30	3.73	35.53	109	359 Average
3	2324.0	49.84	-24.16	74.00	50.48	30.23	4.52	35.40	100	0 Peak
4	2324.0	38.67	-15.33	54.00	39.32	30.23	4.52	35.40	109	359 Average
5 @	2480.0	91.79			92.33	30.29	4.67	35.51	100	0 Peak
6 @	2480.0	67.98			68.52	30.29	4.67	35.51	109	359 Average
7	2483.5	56.80	-17.20	74.00	57.34	30.29	4.67	35.51	100	0 Peak
8 @	2483.5	43.63	-10.37	54.00	44.17	30.29	4.67	35.51	109	359 Average

Remark: #3 and #4 Fundamental Signal



Site : 08CH06-HY
Condition : HF-ANT-060410 VERTICAL
EUT : Mobile Phone
Power : 120Wac/60Hz
Model : FR 682525
Mode : BT Tx_C178,2480MHz
Plane : E2
Data Rate : DH1

	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	4960.0	53.00	-21.00	74.00	49.42	33.47	6.34	36.23	100	0 Peak
2 @	4960.0	41.86	-12.14	54.00	38.28	33.47	6.34	36.23	100	345 Average

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



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 PIFA antenna for WLAN and Dipole antenna for BT without antenna 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	100174	9kHz – 2.75GHz	Feb. 22, 2006	Feb. 22, 2007	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/009	9kHz – 30MHz	Mar. 29, 2006	Mar. 29, 2007	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/004	9kHz – 30MHz	Apr. 19, 2006	Apr. 19, 2007	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. 22, 2005	Dec. 22, 2006	Conduction (CO01-HY)
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Jul. 25, 2006	Jul. 24, 2007	Radiation (03CH06-HY)
Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jun. 28, 2006	Jun. 27, 2007	Radiation (03CH06-HY)
Controller	CT	SC100	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 22, 2004	Nov. 22, 2006	Radiation (03CH06-HY)
Horn Antenna	Com-Power	AH118	071025	1G-18G	Feb. 1, 2005	Feb. 1, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Jul. 21, 2006	Jul. 20, 2007	Radiation (03CH06-HY)
Amplifier	MITEQ	AMF-6F	997165	26G - 40G	Jul. 21, 2006	Jul. 20, 2007	Radiation (03CH06-HY)
Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)
Power Meter	Agilent	E4416A	GB41292344	N/A	Jan. 23, 2006	Jan. 22, 2008	Radiation (03CH06-HY)
Power Sensor	Agilent	E9327A	US40441548	N/A	Feb. 06, 2006	Feb. 05, 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				