

FCC/IC TEST REPORT

for

47 CFR Part 15 Subpart C and IC RSS-210

Equipment : Palm® Centro™ smartphone

Trade Name : Palm

Model No. : Centro 690

FCC ID : O8F-747

IC ID : 3905A-747

Filing Type : Certification

Applicant : Palm Inc.

950 W Maude Avenue MS 22L02 Sunnyvale, CA 94085-2801

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- **Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsement by NVLAP or any agency of U.S. government.**
- The data shown in this test report were carried out on May 09, 2007 at **Sporton International Inc. LAB.**
- Report No.: FR750806, Report Version: Rev. 01.



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Rev. 01



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History of this test report

Report Issue Date: Jun. 08, 2007

Report No.	Description



1. General Description of Equipment under Test

1.1. Applicant

Palm Inc.

950 W Maude Avenue MS 22L02 Sunnyvale, CA 94085-2801

1.2. Manufacturer

Palm Inc.

950 W Maude Avenue MS 22L02 Sunnyvale, CA 94085-2801

1.3. Basic Description of Equipment under Test

Equipment : Palm® Centro™ smartphone
Trade Name : Palm
Model No. : Centro 690
FCC ID : O8F-747
IC ID : 3905A-747
Power Supply Type : Switching, From Battery 3.7V
AC Power Cord : AC 120V, Wall-mount, 1.8 meter, 2 pin
Adapter 1 : Netbit, DCS-51FL-52P US
Adapter 2 : PIE, P005WA05YY
Battery : Samsung, DS22784

1.4. Feature of Equipment under Test

Product Feature & Specification			
1. Modulation Type/Data Rate	GFSK		
2. Frequency Range.	2400 MHz ~ 2483.5 MHz		
3. Number of Channels	79		
4. Carrier Frequency of each channel	2402+ n*1 MHz, n= 0~78		
5. Channel Spacing	1 MHz		
6. Maximum Output Power to Antenna (Normal condition)	1.9 dBm		
7. Type of Antenna Connector	N/A		
8. Antenna Type	Fixed Internal		
9. Antenna Gain	-3 dBi		
10. Function Type	Transmitter		Transceiver V
11. DUT Stage	Identical Prototype		

2. Test Configuration of Equipment under Test

2.1. Test Manner

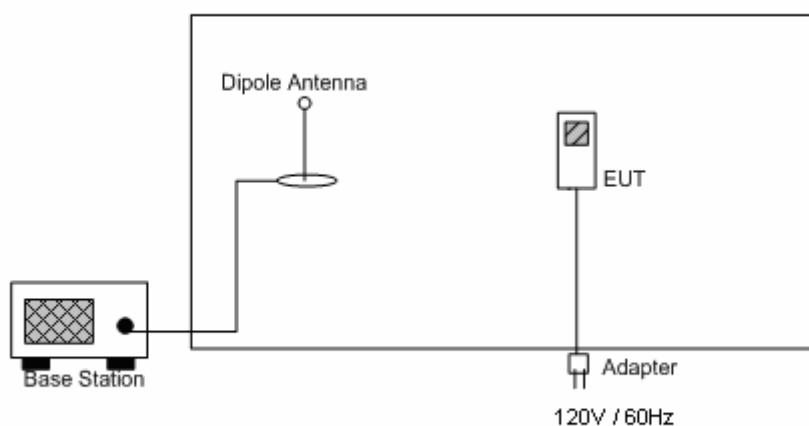
- The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
- For spurious emission below 1GHz, only one channel of each application was tested because it is not related to 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.

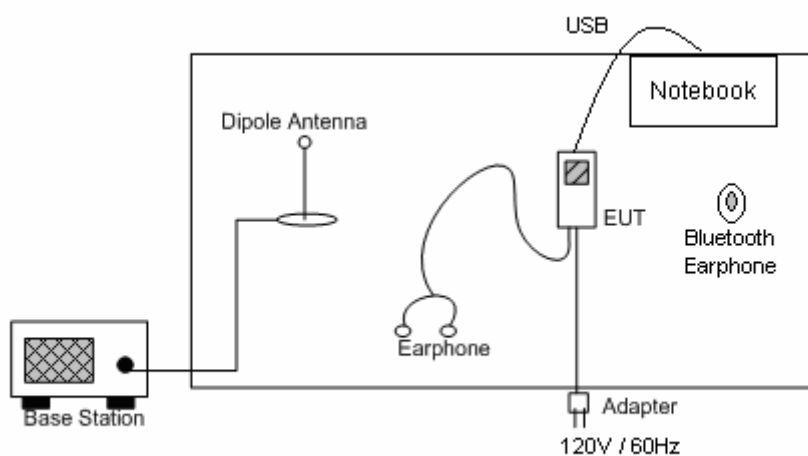
2.2. Test Mode

Application	Bluetooth
Radiated Emission	Mode 1: Tx_CH00_2402 MHz Mode 2: Tx_CH39_2441 MHz Mode 3: Tx_CH78_2480 MHz
Conducted Emission	Mode 1: CDMA2000 Cellular 850 Idle Mode + BT Link + USB Link + Earphone + H Pattern + Adapter 1 Mode 2: CDMA2000 Cellular 850 Idle Mode + BT Link + USB Link + Earphone + H Pattern + Adapter 2 Mode 3: CDMA2000 PCS 1900 Idle Mode + BT Link + USB Link + Earphone + H Pattern + Adapter 1

2.3. Connection Diagram of Test System

<Radiated Emission>



<Conducted Emission>

2.4. Ancillary Equipment List

Item	Asset	Model Name	FCC ID	Power Cord
1.	Base Station (R&S)	CMU200	N/A	N/A
2.	Notebook (DELL)	D400	E2K24GBRL	N/A
4.	Bluetooth Earphone	WDT-JD-100	PQY471087	N/A
5.	Dipole Antenna (Sporton)	N/A	N/A	N/A



3. RF Utility

The EUT is in BT Link mode with bluetooth earphone for conducted emission or in BT continuous Tx Mode controlled by base station simulator for radiation emission.



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

AC 120V / 60 Hz

4.2. Standard for Methods of Measurement

ANSI C63.4-2003

4.3. Test in Compliance with

47 CFR Part 15 Subpart C and IC RSS-210 Issued 6

4.4. Frequency Range Investigated

Conduction: from 150 kHz to 30 MHz

Radiation: from 30 MHz to 25000MHz

4.5. Test Distance

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

5. Report of Measurements and Examinations

5.1. List of Measurements and Examinations

FCC Rule	IC Rule	Description of Test	Result	Section
15.247(a)(1)	A8.1 (2)	Hopping Channel Separation	Pass	5.2
15.247(a)(1)(iii)	A8.1 (4)	Number of Hopping Frequency Used	Pass	5.3
15.247(a)(1)	A8.1 (1)	Hopping Channel Bandwidth	Pass	5.4
15.247(a)(1)(iii)	A8.1 (4)	Dwell Time of Each Frequency	Pass	5.5
15.247(b)(1)	A8.4 (2)	Output Power	Pass	5.6
15.247(c)	A8.5	100kHz Bandwidth of Frequency Band Edges	Pass	5.7
15.207	RSS-Gen 7.2.2	Conducted Emission	Pass	5.8
15.209	2.6	Radiated Emission	Pass	5.9
15.203	A8.4 (6)	Antenna Requirement	Pass	5.10

5.2. Hopping Channel Separation

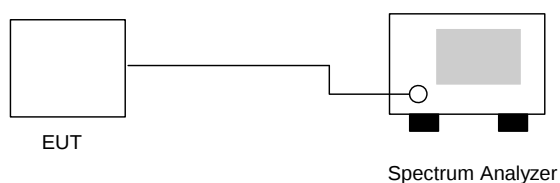
5.2.1. Measuring Instruments :

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 30kHz and VBW to 100kHz.
3. The Hopping Channel Separation is defined as the channel is separated with the next channel.

5.2.3. Test Setup Layout :



5.2.4. Test Result : The spectrum analyzer plots are attached as below

- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : Tony

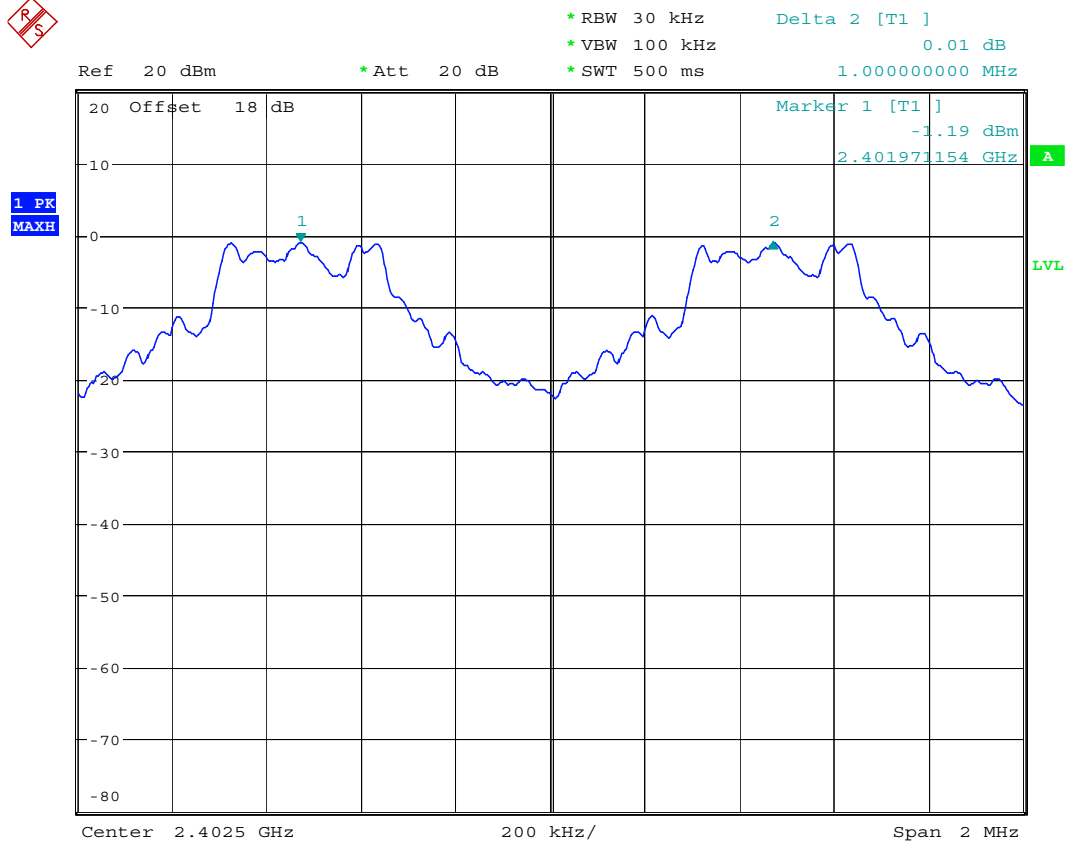
Channel	Frequency (MHz)	Hopping Channel Separation (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	1.000	0.938	Mode 1
39	2441	1.003	0.936	Mode 2
78	2480	1.000	0.938	Mode 3

Remark: Limit is the greater one of 25kHz or the 20dB bandwidth of the hopping channel.



5.2.5 Hopping Channel Separation

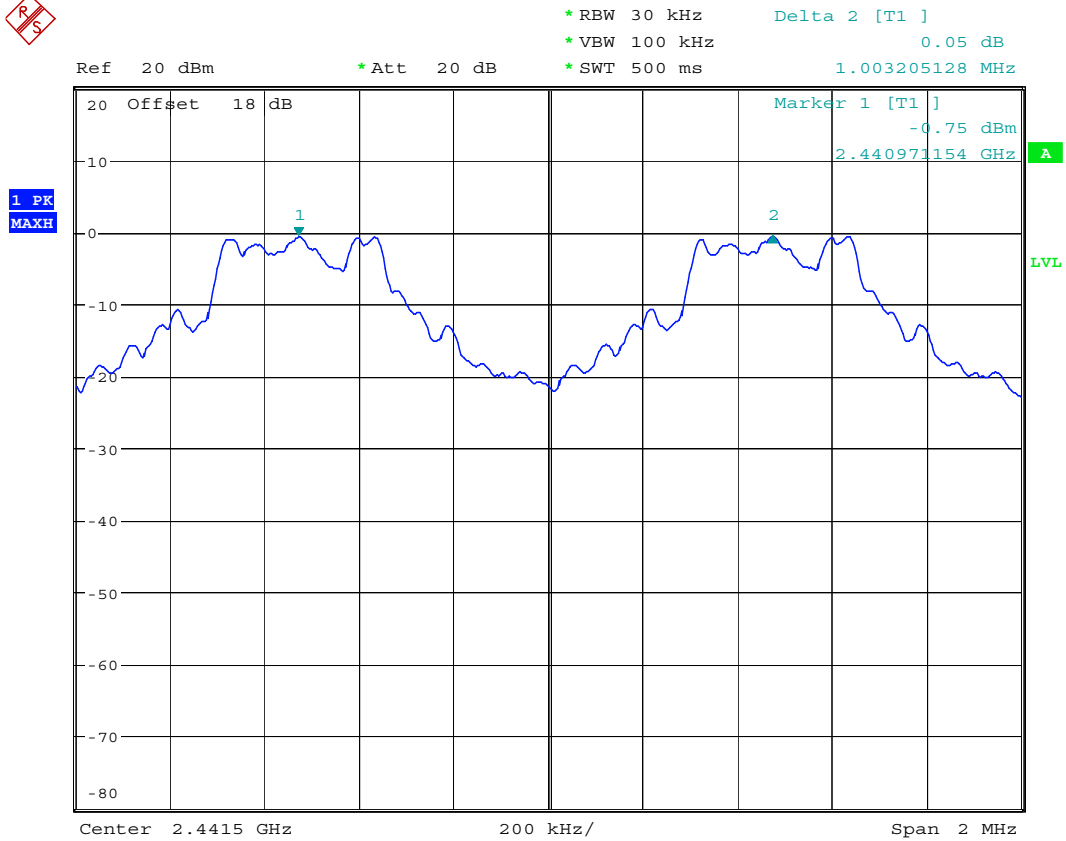
Mode 1: CH00 (2402MHz)



Date: 14.MAR.2007 11:04:03



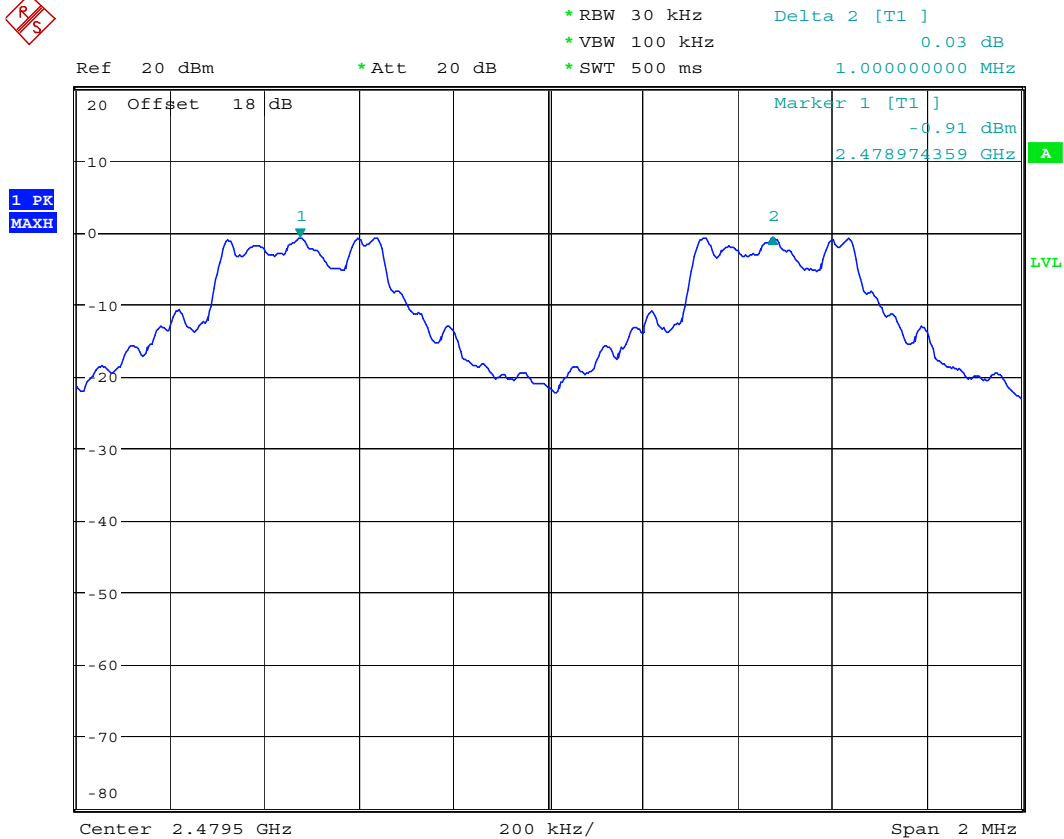
Mode 2: CH39 (2441MHz)



Date: 14.MAR.2007 12:19:03



Mode 3: CH78 (2480MHz)



Date: 14.MAR.2007 12:20:41

5.3. Number of Hopping Frequency

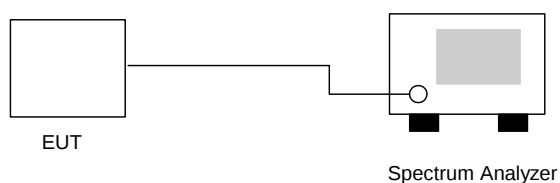
5.3.1. Measuring Instruments :

As described in chapter 6 of this test report.

5.3.2. Test Procedure :

1. The transmitter output was connected to the spectrum analyzer directly.
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.

5.3.3. Test Setup Layout :

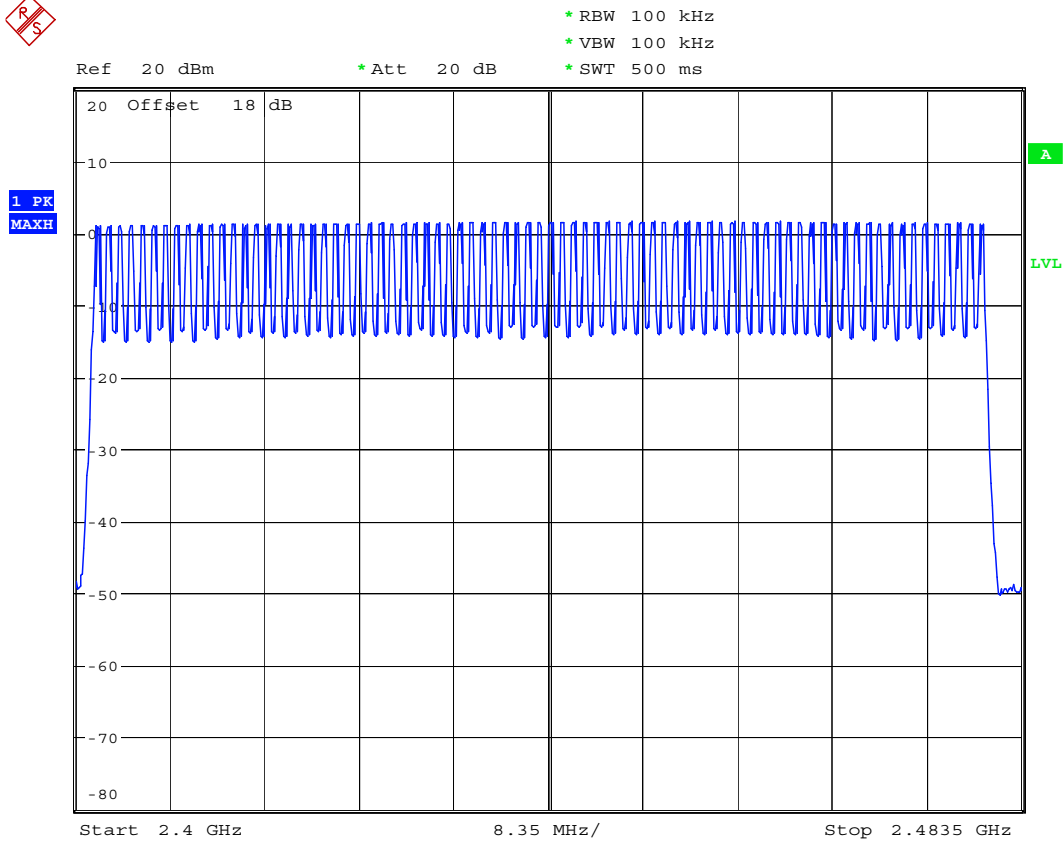


5.3.4. Test Result : See spectrum analyzer plots below

- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : Tony

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

5.3.5 Number of Hopping Frequency



Date: 14.MAR.2007 11:54:00

5.4 Hopping Channel Bandwidth

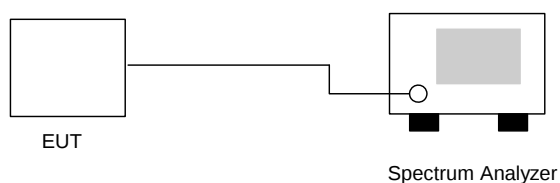
5.4.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.4.2 Test Procedure :

1. The transmitter output was connected to the spectrum analyzer directly.
2. Set RBW of spectrum analyzer to 30kHz and VBW to 300kHz.
3. The Hopping Channel bandwidth is defined as the frequency range where the power is higher than peak power minus 20dB.

5.4.3 Test Setup Layout :



5.4.4 Test Result : See spectrum analyzer plots below

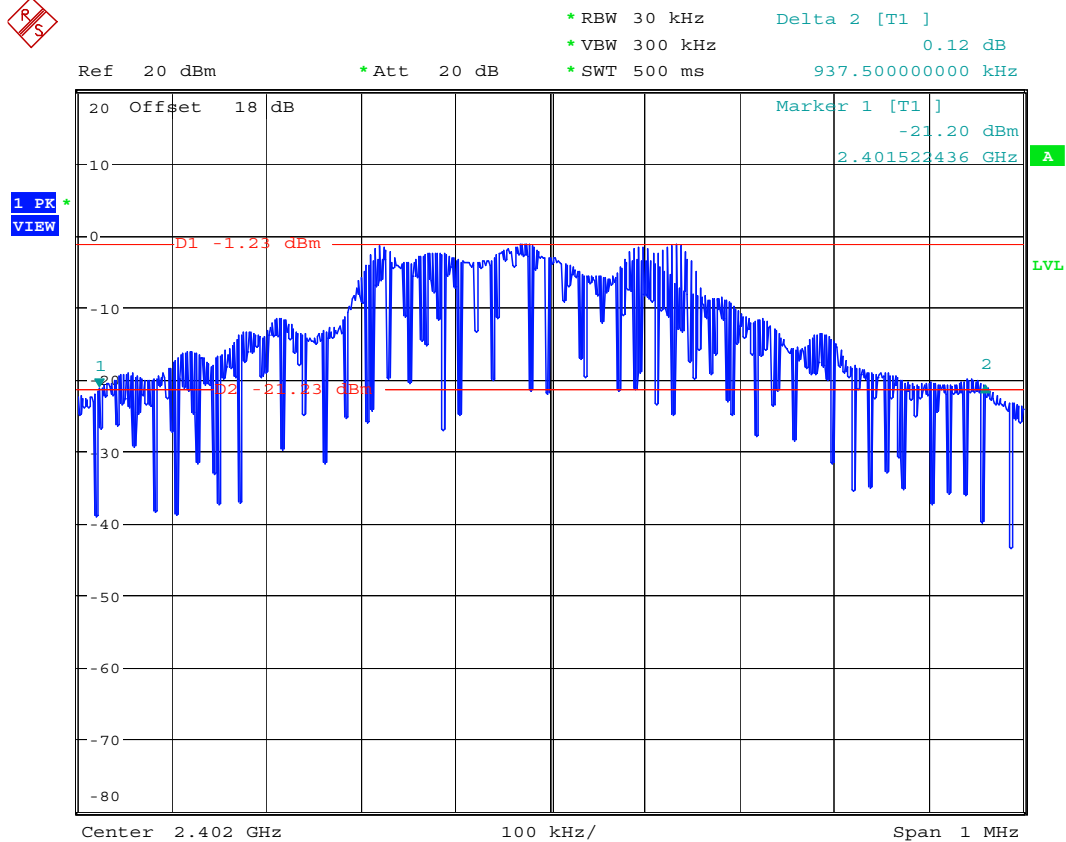
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : Tony

Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	0.938	1.0	Mode 1
39	2441	0.936	1.0	Mode 2
78	2480	0.938	1.0	Mode 3



5.4.5 Hopping Channel Bandwidth

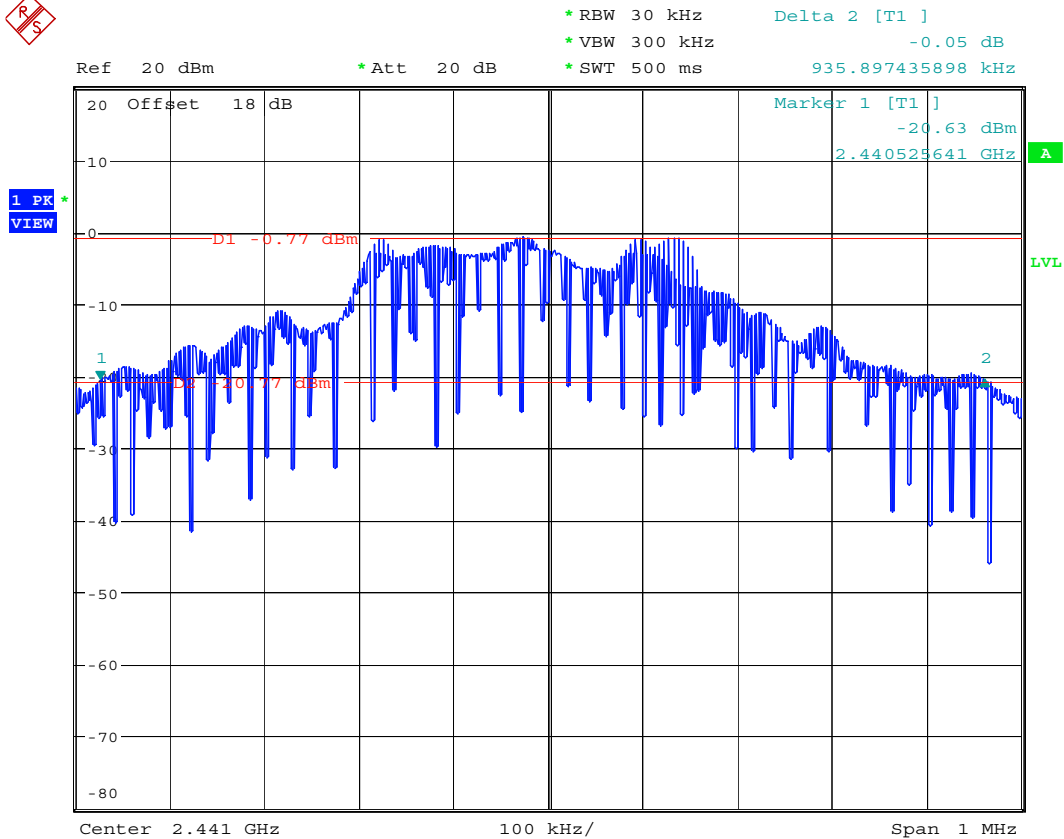
Mode 1: CH00 (2402MHz)



Date: 14.MAR.2007 11:58:55



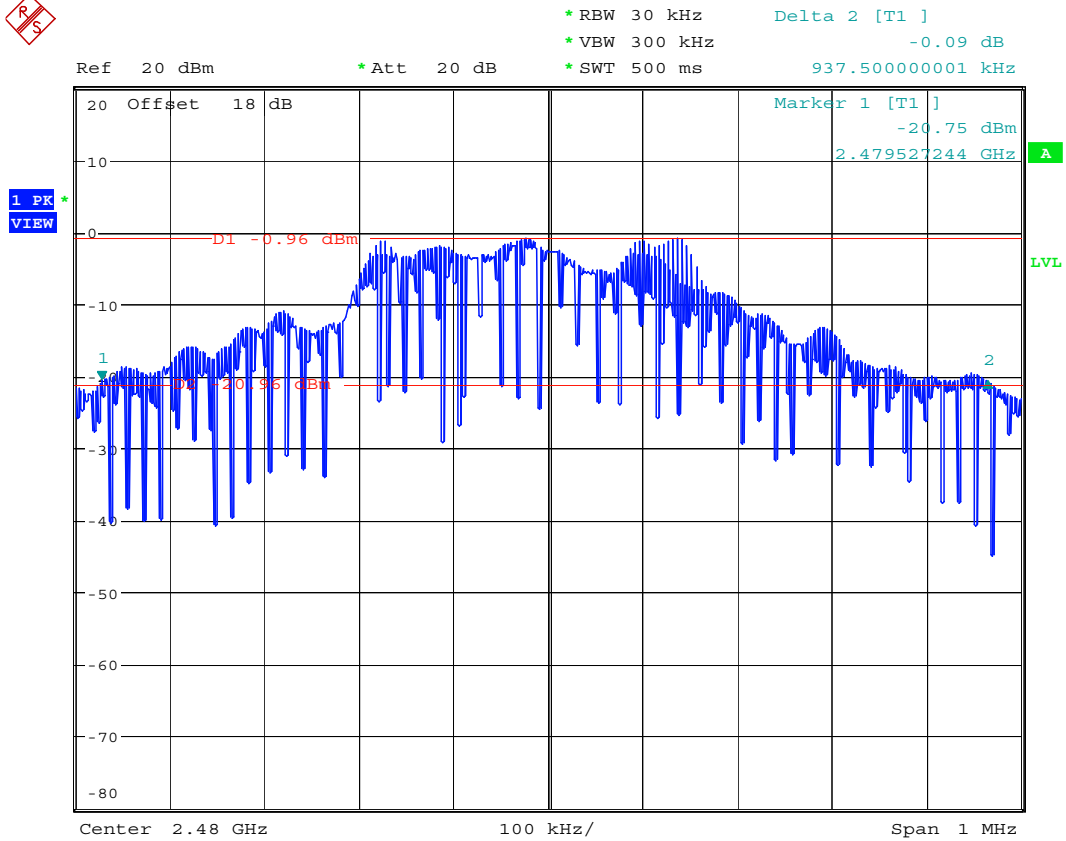
Mode 2: CH39 (2441MHz)



Date: 14.MAR.2007 10:52:02



Mode 3: CH78 (2480MHz)



Date: 14.MAR.2007 10:54:06

5.5 Dwell Time of Each Frequency within a 30 Seconds Period

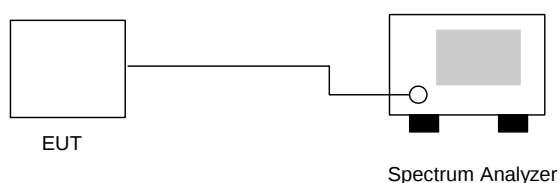
5.5.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.5.2 Test Procedure :

1. The transmitter output was connected to the spectrum analyzer directly.
2. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
3. Set the center frequency on any frequency would be measured and set the frequency span to zero span.
4. The equation = $30 \times (1600/79) \times t$ (t = the time duration of one single pulse)

5.5.3 Test Setup Layout :



5.5.4 Test Result : See spectrum analyzer plots below

- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : Tony

CH39

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	8.6	400.64	0.109	0.4
DH3	4.6	1661.85	0.242	0.4
DH5	3.1	2991.98	0.293	0.4

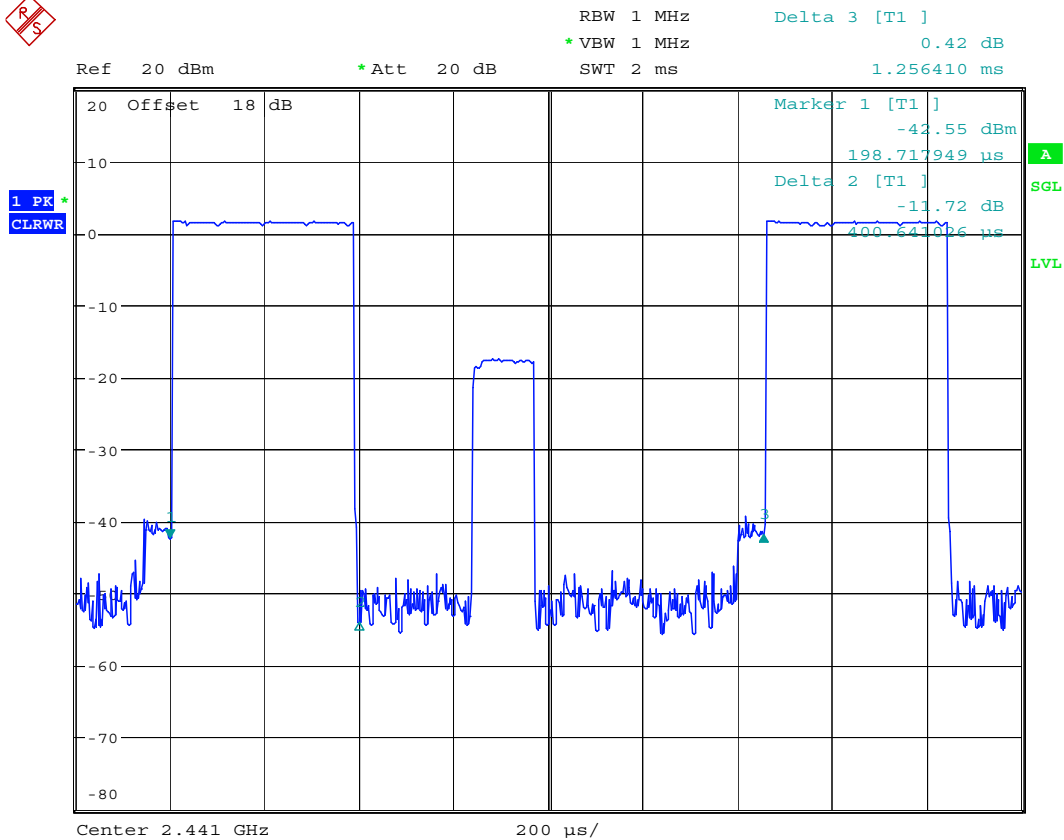
Remark:

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

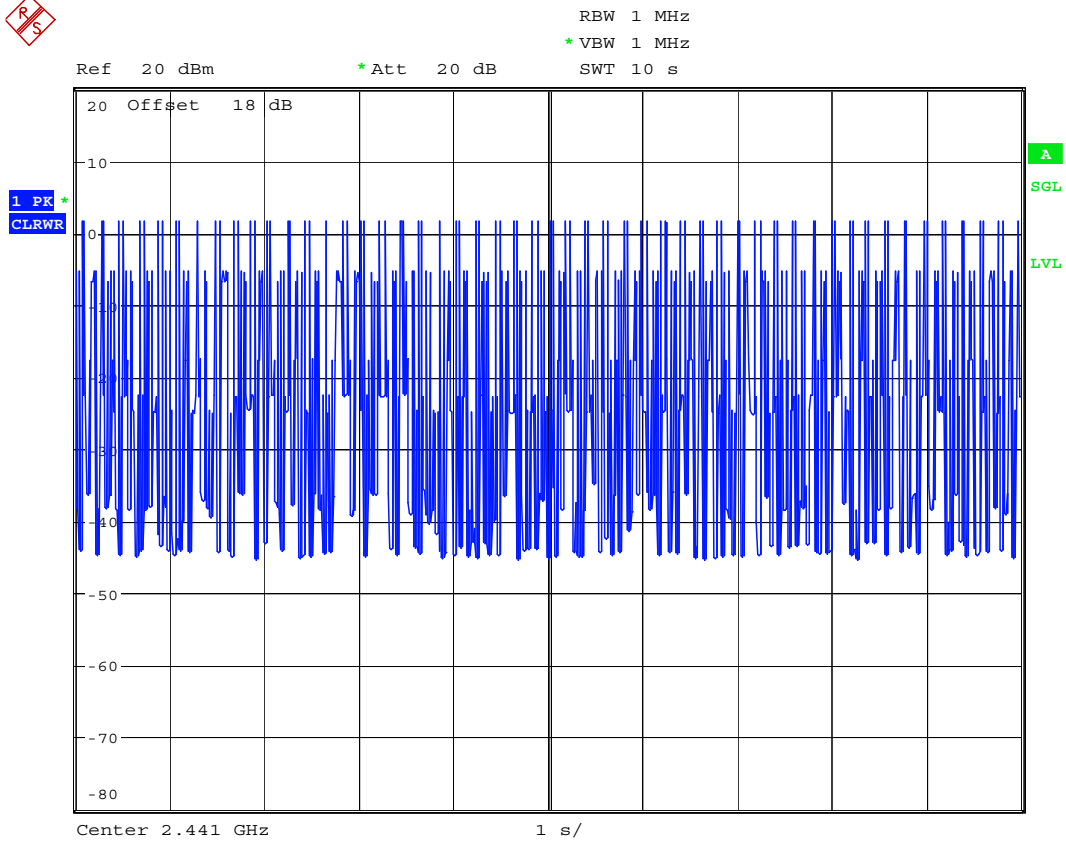


5.5.5 Dwell Time

DH1 (CH39)



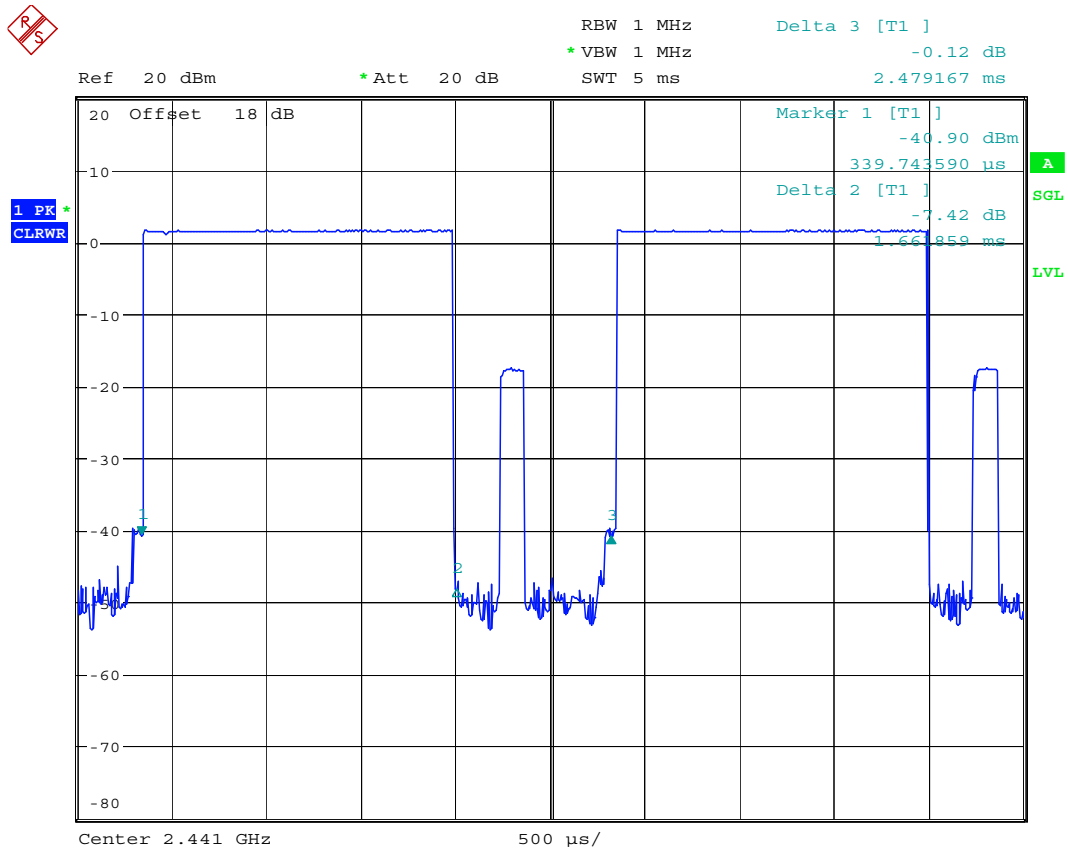
Date: 14.MAR.2007 12:22:38



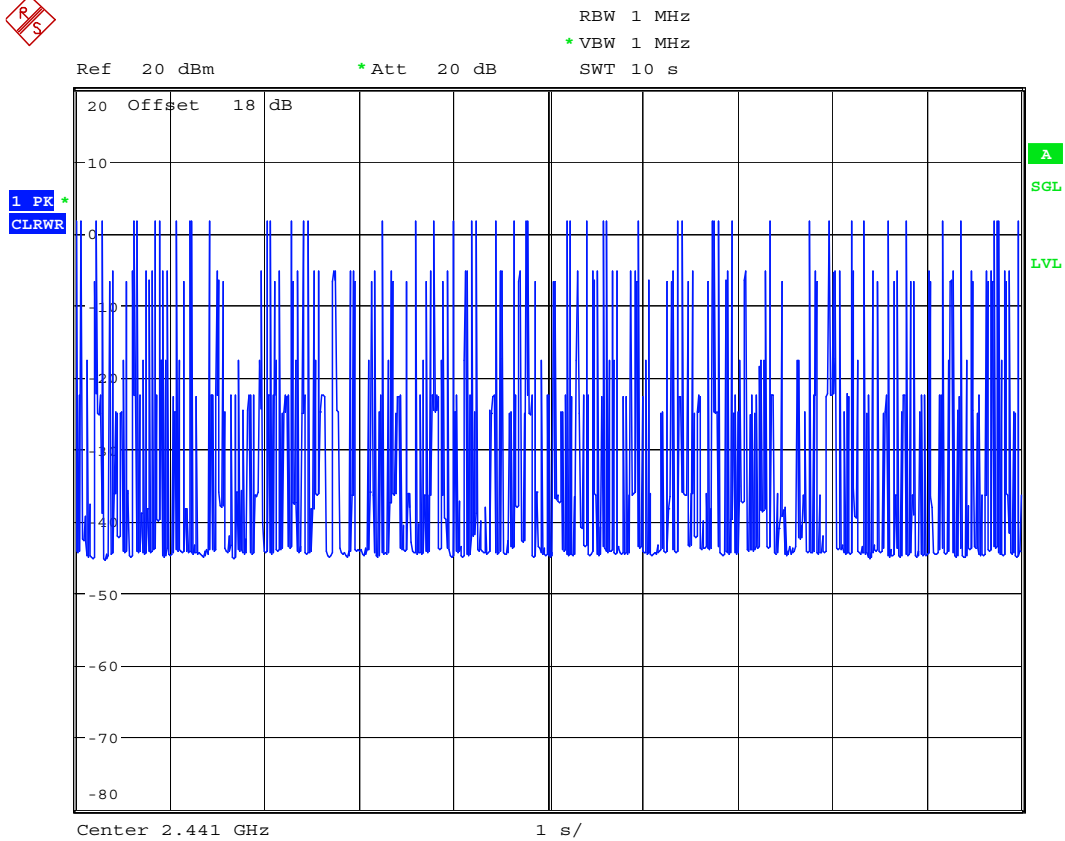
Date: 14.MAR.2007 11:26:26



DH3 (CH39)



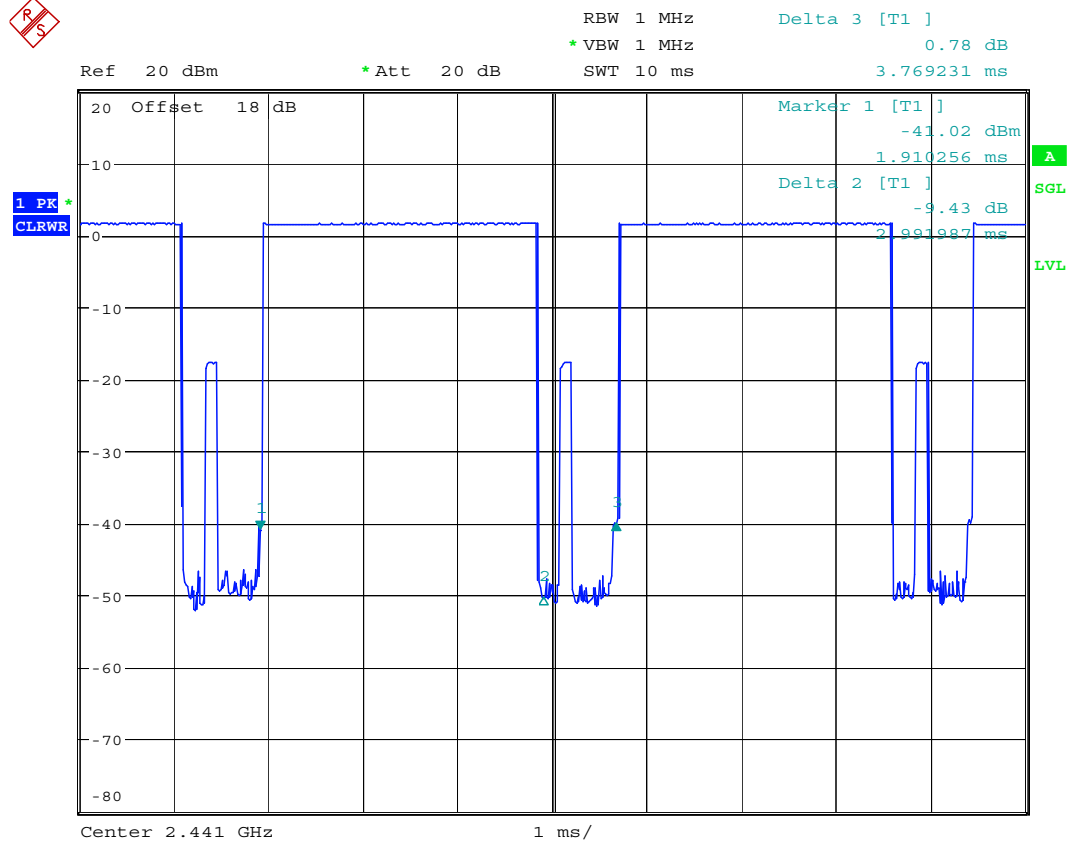
Date: 14.MAR.2007 11:15:30



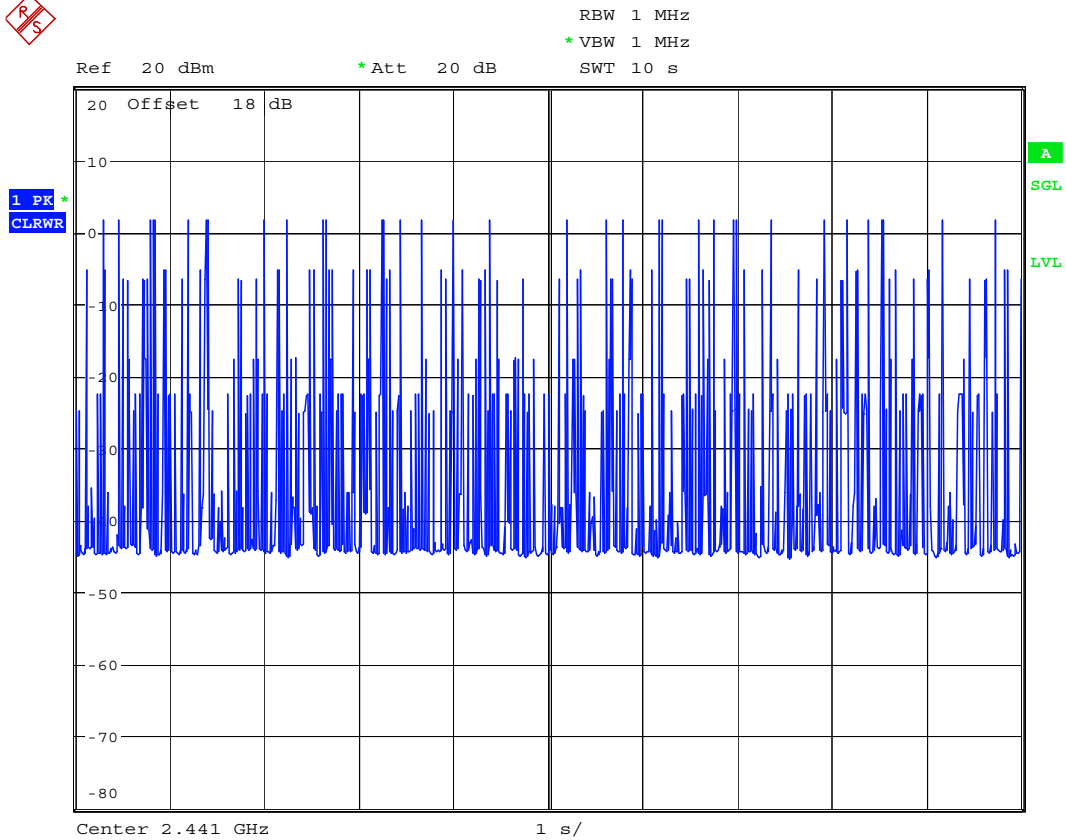
Date: 14.MAR.2007 11:28:15



DH5 (CH39)



Date: 14.MAR.2007 11:19:13



Date: 14.MAR.2007 11:29:58

5.6 Output Power

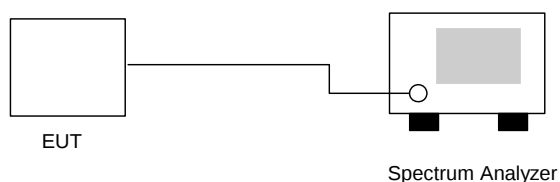
5.6.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.6.2 Test Procedure :

1. The transmitter output was connected to the spectrum analyzer directly.
2. The center frequency of the spectrum analyzer was set to the fundamental frequency and set RBW to 3MHz and VBW to 3MHz.

5.6.3 Test Setup Layout :



5.6.4 Test Result : See spectrum analyzer plots below

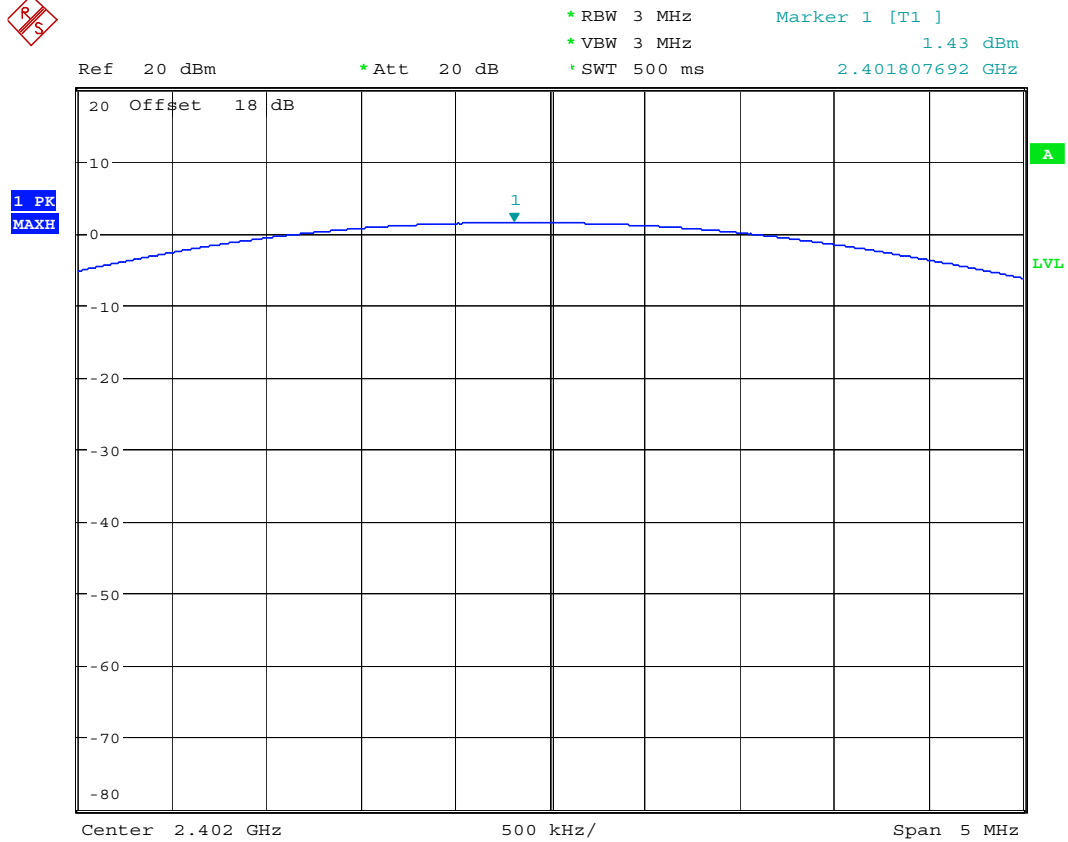
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : Tony

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)	Plot Ref. No.
00	2402	1.43	1W/30 dBm	Mode 1
39	2441	1.9	1W/30 dBm	Mode 2
78	2480	1.65	1W/30 dBm	Mode 3



5.6.5 Output Power

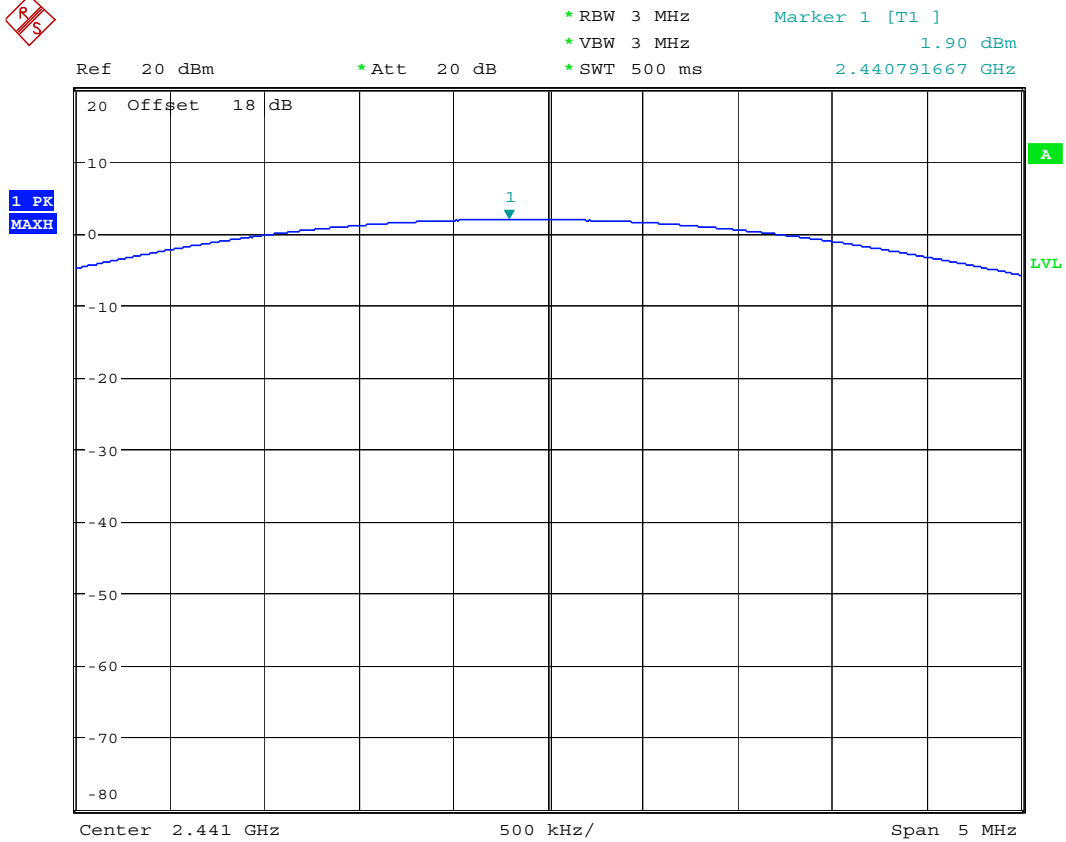
Mode 1: CH00 (2402MHz)



Date: 14.MAR.2007 10:43:56



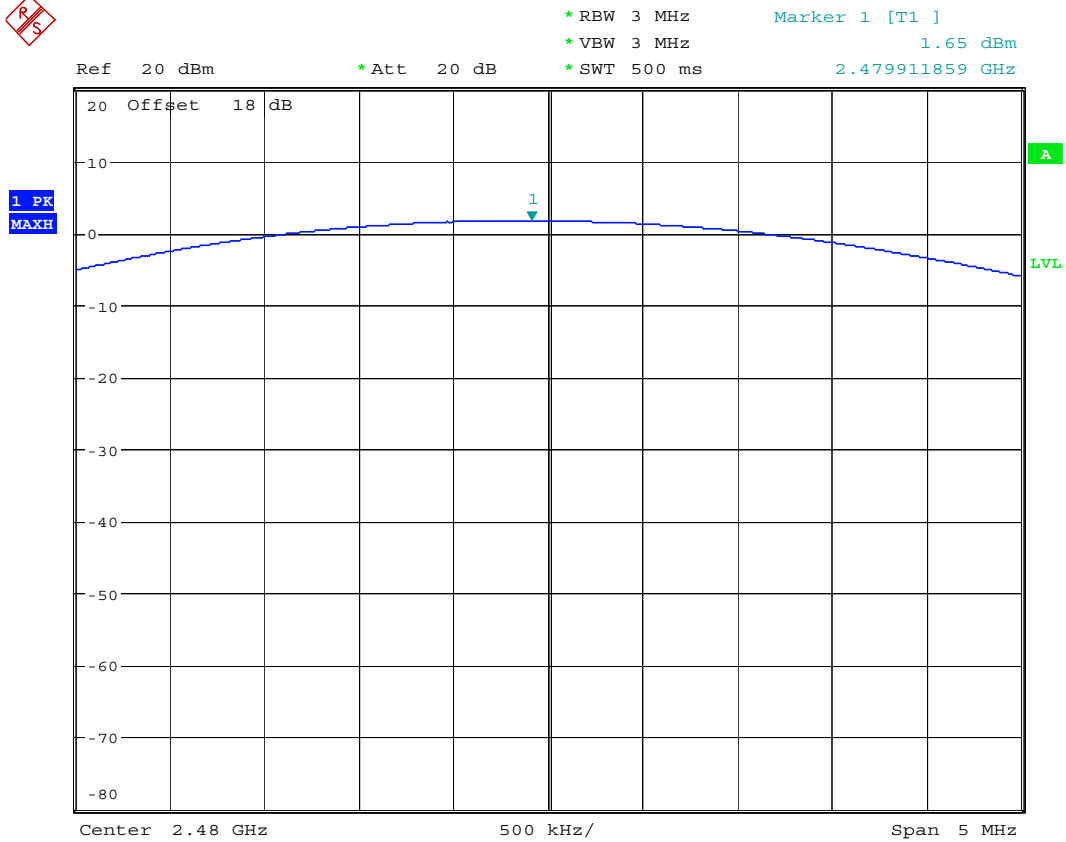
Mode 2: CH39 (2441MHz)



Date: 14.MAR.2007 10:44:38



Mode 3: CH78 (2480MHz)



Date: 14.MAR.2007 10:45:12



5.7 100 kHz Bandwidth of Frequency Band Edges

5.7.1 Measuring Instruments :

As described in chapter 6 of this test report.

5.7.2 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 100 kHz with suitable frequency span for the conducted measurement, and RBW/VBW=1MHz/1MHz for peak measurement and RBW/VBW=1MHz/10Hz for average measurement in the radiated measurement.
3. The band edges was measured and recorded.

5.7.3 Test Result :

- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : Tony

Test Result in lower band (Channel 00) : PASS

Test Result in higher band(Channel 78) : PASS

5.7.4 Note on Band edge Emission

CH00 (Horizontal)

Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Detect Mode
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2379.36	38.11	-15.89	54.00	39.55	30.25	3.75	35.44	100	178	Average
2379.36	48.44	-25.56	74.00	49.91	30.24	3.71	35.42	100	0	Peak

CH00 (Vertical)

Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Detect Mode
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	
2378.32	38.08	-15.92	54.00	39.52	30.25	3.75	35.44	100	343	Average
2378.32	48.23	-25.77	74.00	49.68	30.24	3.73	35.42	100	0	Peak

**CH78 (Horizontal)**

Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Detect
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	Mode
2483.50	59.69	-14.31	74.00	61.02	30.29	3.86	35.51	100	0	Peak
2483.50	44.37	-9.63	54.00	45.73	30.29	3.86	35.51	100	195	Average

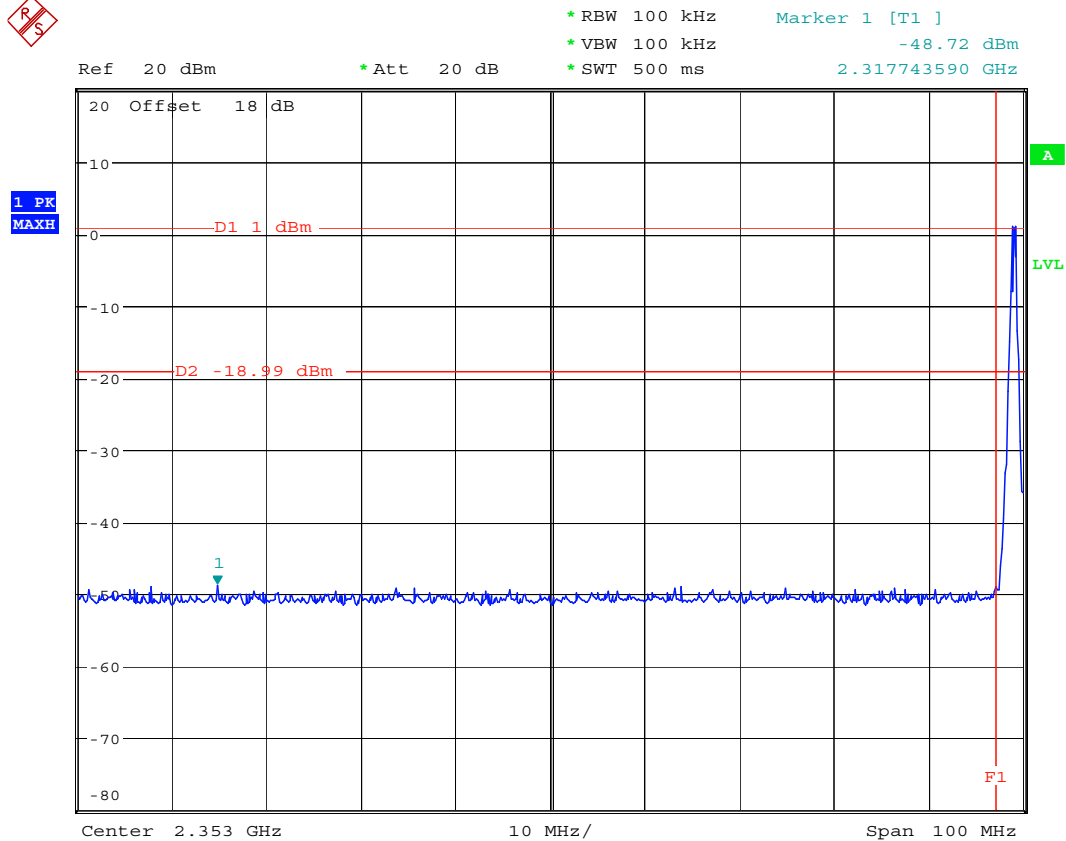
CH78 (Vertical)

Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Detect
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	Mode
2483.50	60.69	-13.31	74.00	32.05	30.29	3.86	35.51	100	0	Peak
2483.50	43.47	-10.53	54.00	44.83	30.29	3.86	35.51	100	328	Average



5.7.5 Frequency Band Edge

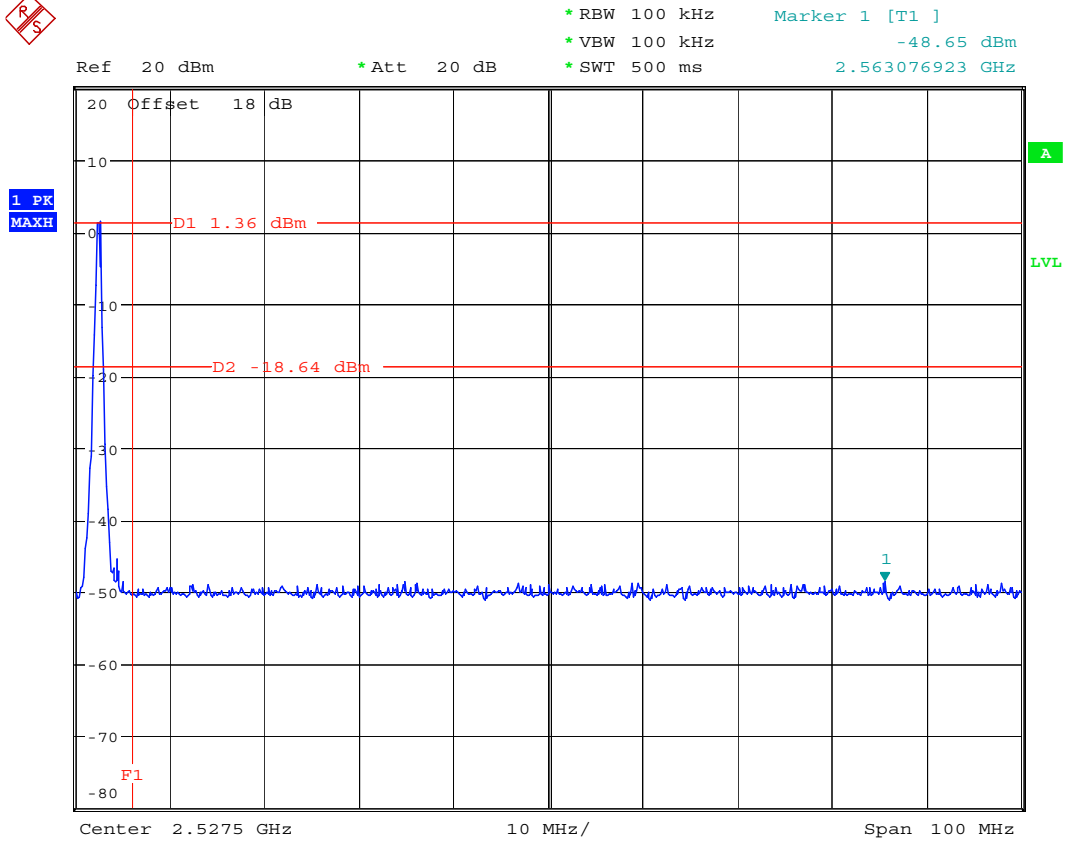
CH00 (2402 MHz)



Date: 14.MAR.2007 11:00:20



CH78 (2480 MHz)



Date: 14.MAR.2007 12:27:43



5.8 Conducted Emission

5.8.1 Measuring Instruments

As described in chapter 6 of this test Report.

5.8.2 Test Procedures :

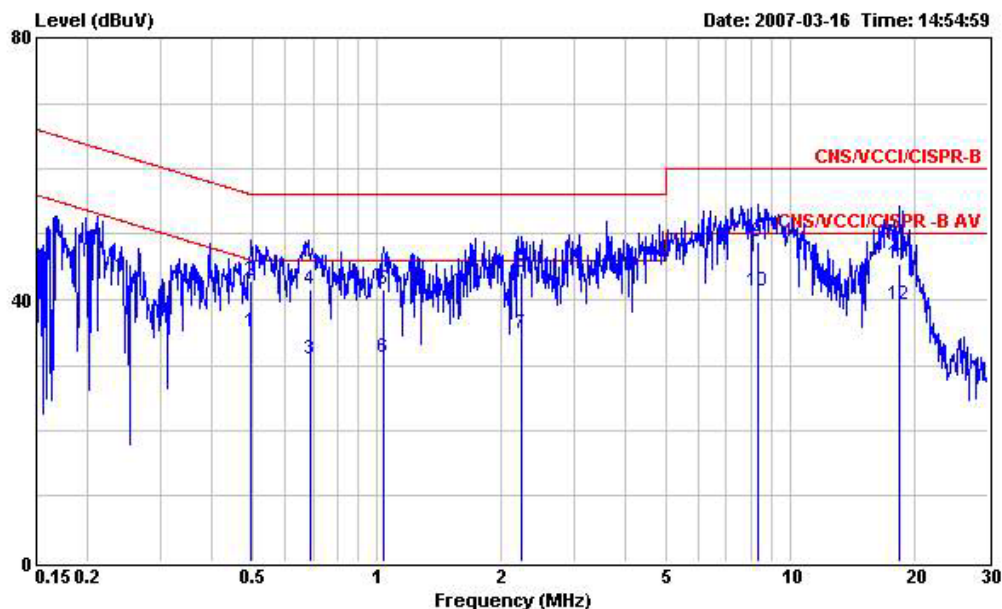
- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power port of a line impedance stabilization network (LISN).
- c. All the support units are connected to the other LISN.
- 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.



5.8.3 Test Data Test Mode 1

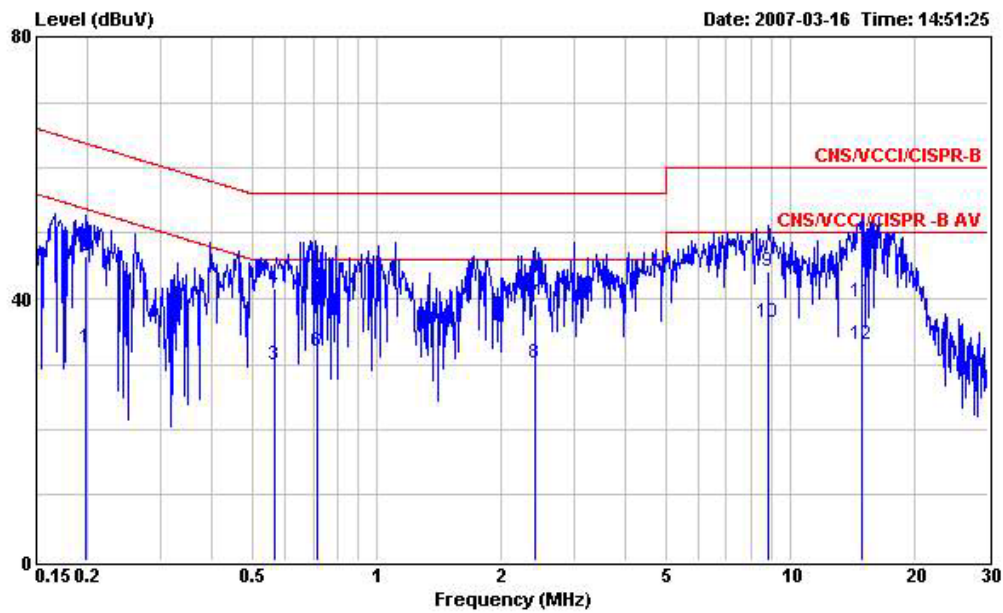
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : James

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



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
 EUT : PDA Phone
 Power : 120V/60Hz
 Model : FR750806
 Memo : CDMA 850 Idle+ BT Link+USB Link+
 Memo : Earphone+H pattern+Adapter1
 SAMPLE : B

	Freq	Level	Over	Limit	Read	Cable	Probe	
	MHz	dBuV	Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.495	35.00	-11.08	46.08	34.61	0.29	0.10	Average
2	0.495	42.80	-13.28	56.08	42.41	0.29	0.10	QP
3	0.692	30.87	-15.13	46.00	30.56	0.21	0.10	Average
4	0.692	41.49	-14.51	56.00	41.18	0.21	0.10	QP
5	1.041	41.46	-14.54	56.00	41.23	0.13	0.10	QP
6	1.041	31.12	-14.88	46.00	30.89	0.13	0.10	Average
7	2.240	34.71	-11.29	46.00	34.30	0.29	0.12	Average
8	2.240	44.27	-11.73	56.00	43.86	0.29	0.12	QP
9	8.331	48.94	-11.06	60.00	48.36	0.30	0.28	QP
10	8.331	41.33	-8.67	50.00	40.75	0.30	0.28	Average
11	18.364	45.36	-14.64	60.00	44.81	0.18	0.37	QP
12	18.364	39.17	-10.83	50.00	38.62	0.18	0.37	Average



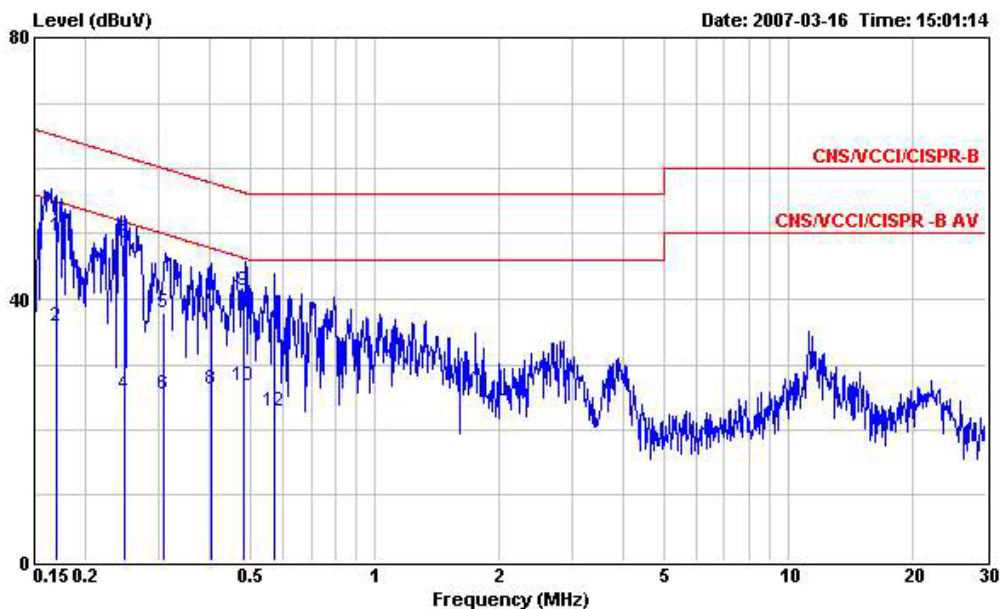
Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : PDA Phone
Power : 120V/60Hz
Model : FR750806
Memo : CDMA 850 Idle+ BT Link+USB Link+
Memo : Earphone+H pattern+Adapter1
SAMPLE : B

	Freq	Level	Over	Limit	Read	Cable	Probe	
	MHz	dBuV	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.197	32.59	-21.15	53.74	32.35	0.14	0.10	Average
2	0.197	46.56	-17.18	63.74	46.32	0.14	0.10	QP
3	0.567	29.78	-16.22	46.00	29.42	0.26	0.10	Average
4	0.567	41.62	-14.38	56.00	41.26	0.26	0.10	QP
5	0.718	42.86	-13.14	56.00	42.56	0.20	0.10	QP
6	0.718	31.91	-14.09	46.00	31.61	0.20	0.10	Average
7	2.410	39.24	-16.76	56.00	38.86	0.28	0.10	QP
8	2.410	30.24	-15.76	46.00	29.86	0.28	0.10	Average
9	8.870	44.18	-15.82	60.00	43.68	0.31	0.19	QP
10	8.870	36.37	-13.63	50.00	35.87	0.31	0.19	Average
11	14.860	39.37	-20.63	60.00	38.83	0.24	0.30	QP
12	14.860	32.87	-17.13	50.00	32.33	0.24	0.30	Average

5.8.4 Test Data Test Mode 2

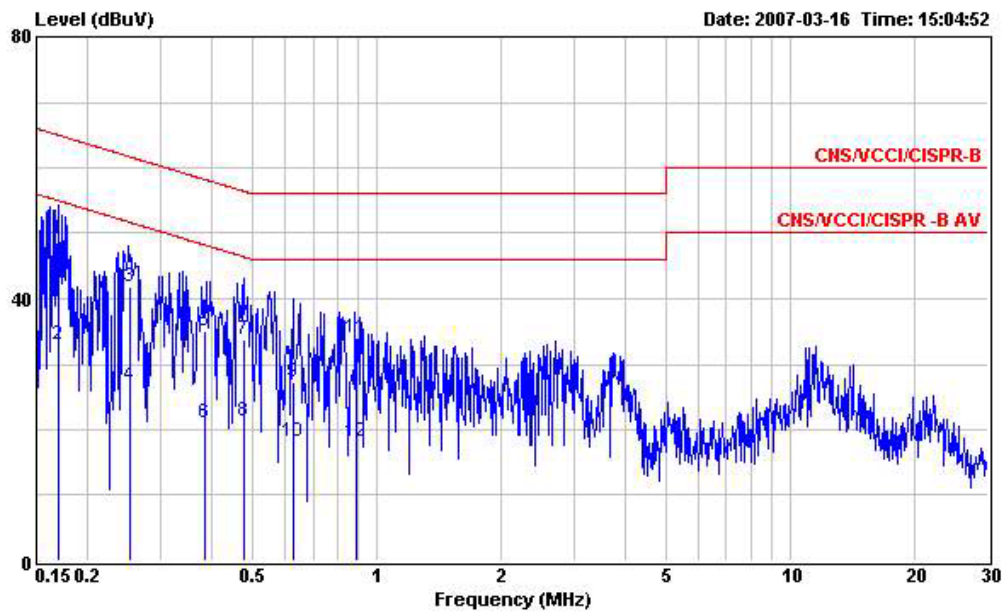
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : James

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



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
 EUT : PDA Phone
 Power : 120V/60Hz
 Model : FR750806
 Memo : CDMA 850 Idle+ BT Link+USB Link+
 Memo : Earphone+H pattern+Adapter2
 SAMPLE : B

	Freq	Level	Over	Limit	Read	Cable	Probe	
	MHz	dBuV	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.170	49.50	-15.46	64.96	49.27	0.13	0.10	QP
2	0.170	35.81	-19.15	54.96	35.58	0.13	0.10	Average
3	0.248	48.50	-13.32	61.82	48.20	0.20	0.10	QP
4	0.248	25.38	-26.44	51.82	25.08	0.20	0.10	Average
5	0.309	37.81	-22.19	60.00	37.44	0.27	0.10	QP
6	0.309	25.37	-24.63	50.00	25.00	0.27	0.10	Average
7	0.401	39.35	-18.48	57.83	38.91	0.34	0.10	QP
8	0.401	26.13	-21.70	47.83	25.69	0.34	0.10	Average
9	0.481	41.26	-15.06	56.32	40.86	0.30	0.10	QP
10	0.481	26.79	-19.53	46.32	26.39	0.30	0.10	Average
11	0.572	37.70	-18.30	56.00	37.35	0.25	0.10	QP
12	0.572	22.98	-23.02	46.00	22.63	0.25	0.10	Average



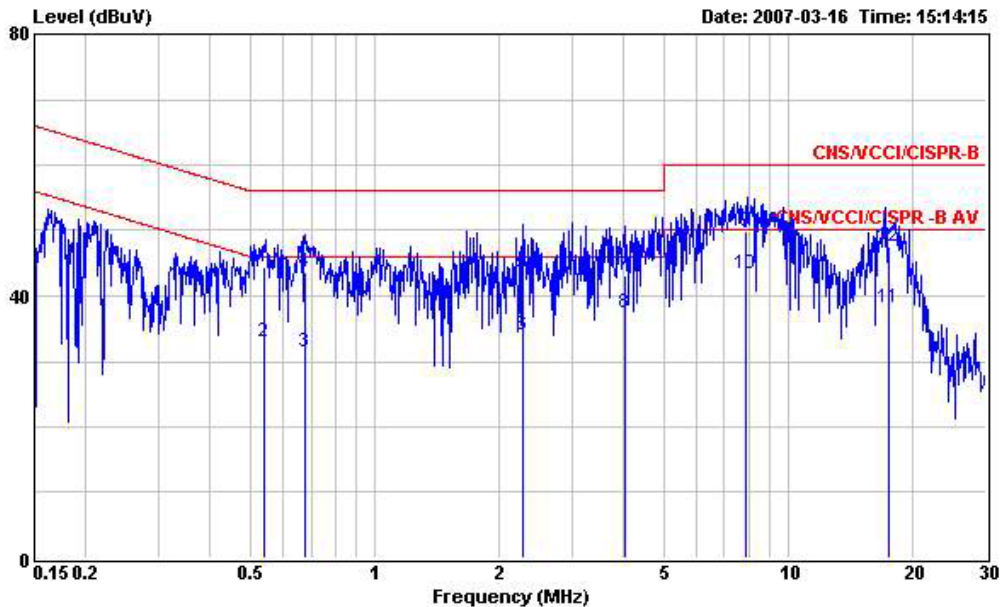
Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : PDA Phone
Power : 120V/60Hz
Model : FR750806
Memo : CDMA 850 Idle+ BT Link+USB Link+
Memo : Earphone+Hpattern+Adapter2
SAMPLE : B

	Freq	Level	Over	Limit	Read	Cable	Probe	
	MHz	dBuV	Limit	Line	Level	Loss	Factor	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.169	49.11	-15.90	65.01	48.88	0.13	0.10	QP
2	0.169	32.87	-22.14	55.01	32.64	0.13	0.10	Average
3	0.254	41.79	-19.85	61.64	41.48	0.21	0.10	QP
4	0.254	26.71	-24.93	51.64	26.40	0.21	0.10	Average
5	0.384	34.98	-23.22	58.20	34.55	0.33	0.10	QP
6	0.384	20.93	-27.27	48.20	20.50	0.33	0.10	Average
7	0.475	33.78	-22.65	56.43	33.38	0.30	0.10	QP
8	0.475	21.34	-25.09	46.43	20.94	0.30	0.10	Average
9	0.628	27.21	-28.79	56.00	26.88	0.23	0.10	QP
10	0.628	18.29	-27.71	46.00	17.96	0.23	0.10	Average
11	0.888	34.09	-21.91	56.00	33.84	0.15	0.10	QP
12	0.888	18.31	-27.69	46.00	18.06	0.15	0.10	Average

5.8.5 Test Data Test Mode 3

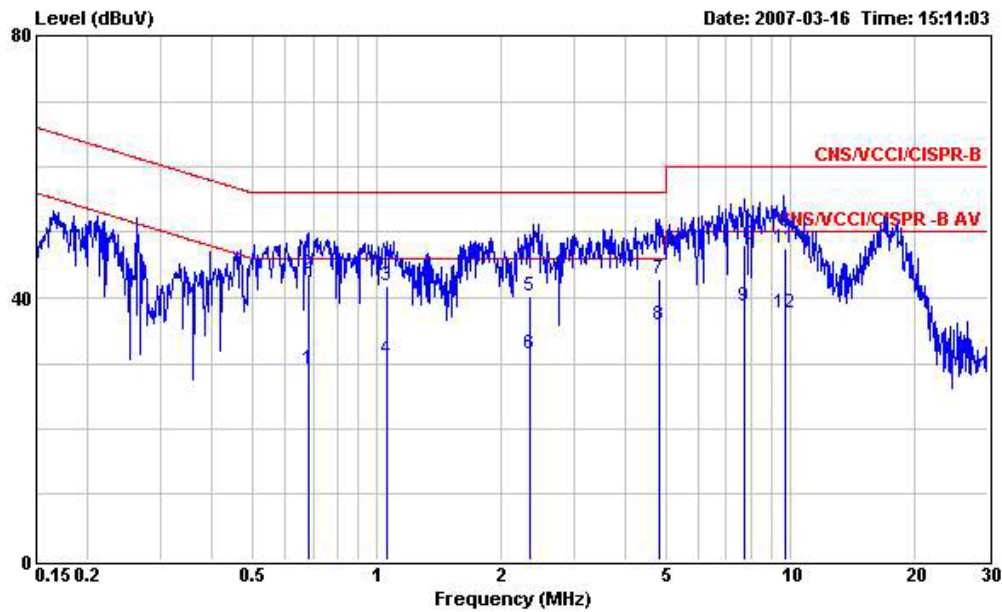
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : James

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



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 LINE
 EUT : PDA Phone
 Power : 120V/60Hz
 Model : FR750806
 Memo : CDMA 1900 Idle+ BT Link+USB Link+
 Memo : Earphone+Hpattern+Adapter1
 SAMPLE : B

	Freq	Level	Over	Limit	Read	Cable	Probe	
	MHz	dBuV	Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.540	44.46	-11.54	56.00	44.09	0.27	0.10	QP
2	0.540	33.05	-12.95	46.00	32.68	0.27	0.10	Average
3	0.674	31.53	-14.47	46.00	31.22	0.21	0.10	Average
4	0.674	43.71	-12.29	56.00	43.40	0.21	0.10	QP
5	2.276	43.49	-12.51	56.00	43.08	0.29	0.12	QP
6	2.276	34.11	-11.89	46.00	33.70	0.29	0.12	Average
7	4.010	43.05	-12.95	56.00	42.65	0.20	0.20	QP
8	4.010	37.34	-8.66	46.00	36.94	0.20	0.20	Average
9	7.850	49.92	-10.08	60.00	49.35	0.30	0.27	QP
10	7.850	43.30	-6.70	50.00	42.73	0.30	0.27	Average
11	17.483	38.15	-11.85	50.00	37.60	0.20	0.35	Average
12	17.483	47.45	-12.55	60.00	46.90	0.20	0.35	QP



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
EUT : PDA Phone
Power : 120V/60Hz
Model : FR750806
Memo : CDMA 1900 Idle+ BT Link+USB Link+
Memo : Earphone+H pattern+Adapter1
SAMPLE : B

		Over	Limit	Read	Cable	Probe	
		Limit	Line	Level	Loss	Factor	Remark
	MHz	dBuV	dB	dBuV	dB	dB	
1	0.684	29.06	-16.94	46.00	28.75	0.21	0.10 Average
2	0.684	43.54	-12.46	56.00	43.23	0.21	0.10 QP
3	1.060	41.90	-14.10	56.00	41.66	0.14	0.10 QP
4	1.060	30.62	-15.38	46.00	30.38	0.14	0.10 Average
5	2.343	40.14	-15.86	56.00	39.76	0.28	0.10 QP
6	2.343	31.43	-14.57	46.00	31.05	0.28	0.10 Average
7	4.820	42.76	-13.24	56.00	42.41	0.23	0.12 QP
8	4.820	35.95	-10.05	46.00	35.60	0.23	0.12 Average
9	7.730	38.69	-11.31	50.00	38.23	0.29	0.17 Average
10	7.730	48.08	-11.92	60.00	47.62	0.29	0.17 QP
11	9.718	47.59	-12.41	60.00	47.06	0.33	0.20 QP
12	9.718	37.63	-12.37	50.00	37.10	0.33	0.20 Average



5.9 Radiated Emission Measurement

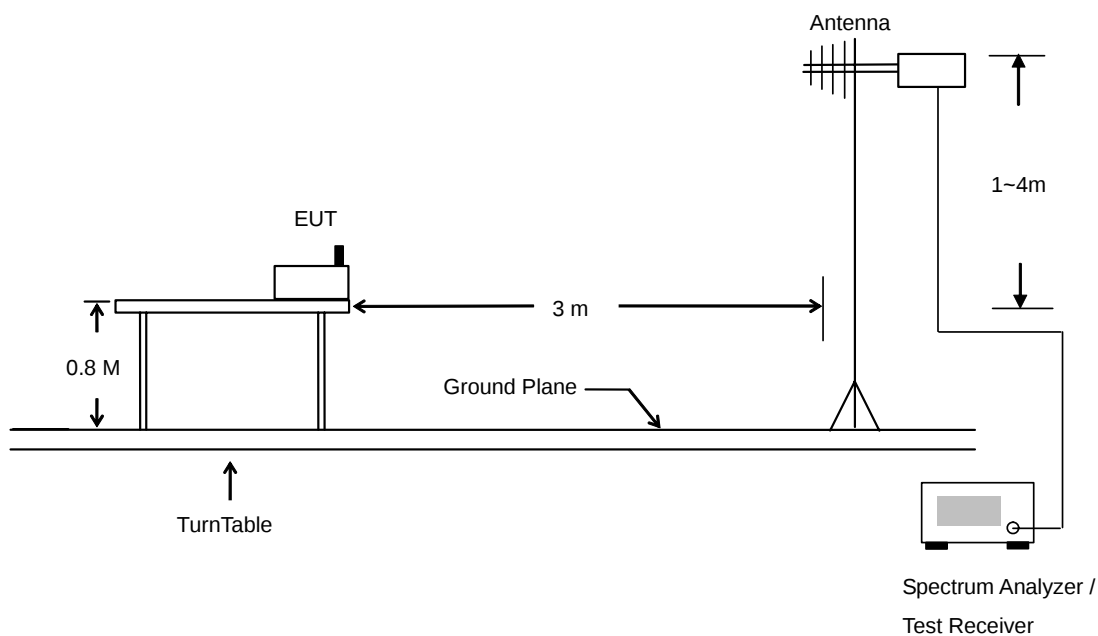
5.9.1 Measuring Instruments

As described in chapter 6 of this Report.

5.9.2 Test Procedures

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

5.9.3 Typical Test Setup Layout of Radiated Emission

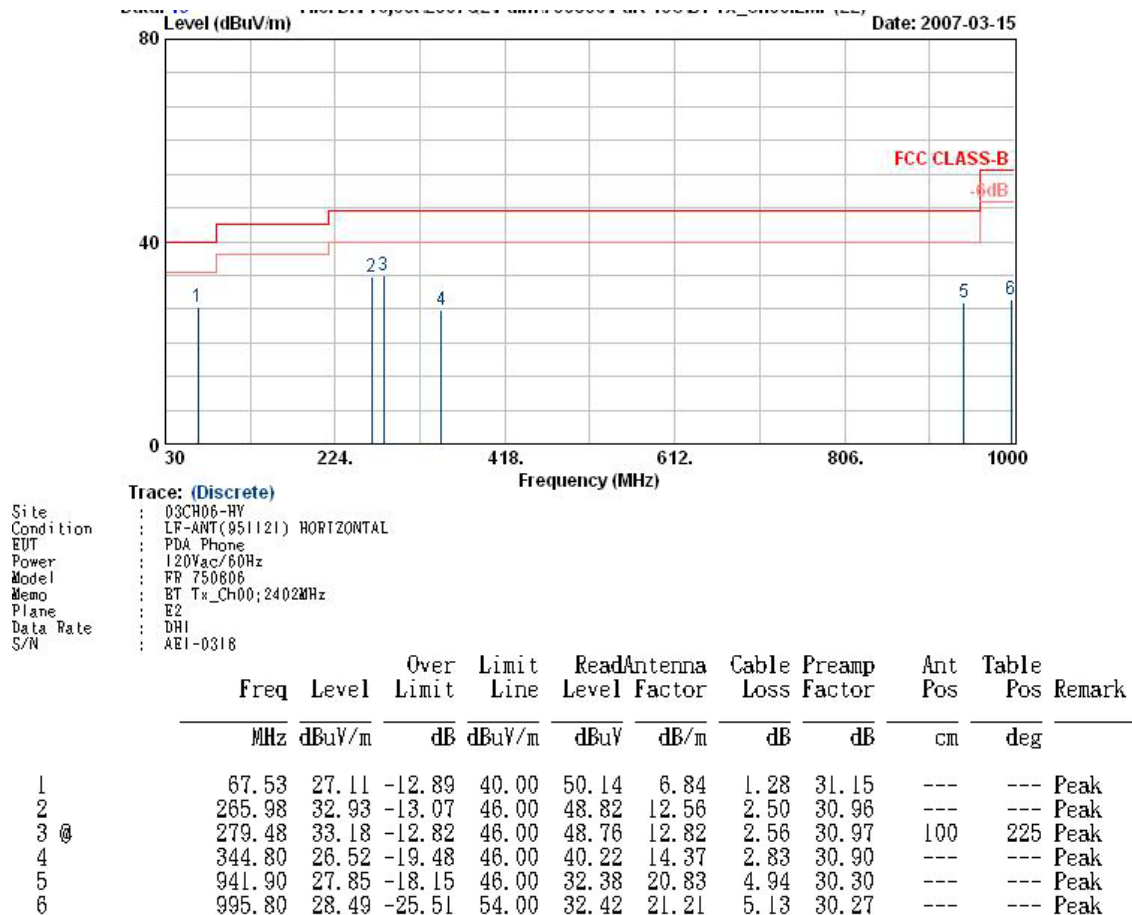


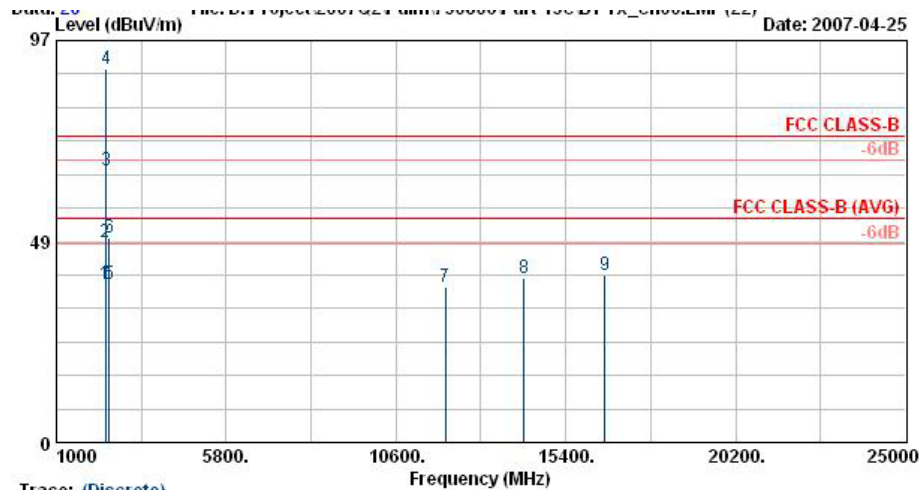


5.9.4 Test Data

- Temperature : 26°C
- Relative Humidity : 56%
- Test Engineer : Anderson
- Test Mode : Mode 1
- Polarization : Horizontal

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





Trace: (Discrete)

Site : 03CH06-HV
Condition : HF-ANT(8-16)-060918 HORIZONTAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : FR 750806
Memo : BT Tx_Ch00;2402MHz
Plane : E2
Data Rate : DHI
S/N : AEI-0318

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	Level	Factor	Loss	Factor	Pos	Pos	
					dBuV	dB/m	dB	dB	cm	deg	
1	2379.36	38.11	-15.89	54.00	39.55	30.25	3.75	35.44	100	178	Average
2	2379.36	48.44	-25.56	74.00	49.91	30.24	3.71	35.42	100	0	Peak
3 @	2402.00	65.51			66.94	30.26	3.77	35.46	100	178	Average
4 @	2402.00	90.14			91.57	30.26	3.77	35.46	100	0	Peak
5	2494.00	38.23	-15.77	54.00	39.58	30.30	3.88	35.53	100	178	Average
6	2494.00	49.31	-24.69	74.00	50.66	30.30	3.88	35.53	100	0	Peak
7	11991.00	37.38	-36.62	74.00	72.97	-9.64	10.63	36.58	---	---	Peak
8	14226.00	39.50	-34.50	74.00	69.14	-6.33	11.67	34.99	---	---	Peak
9	16512.00	40.52	-33.48	74.00	69.77	-10.10	11.88	31.04	---	---	Peak

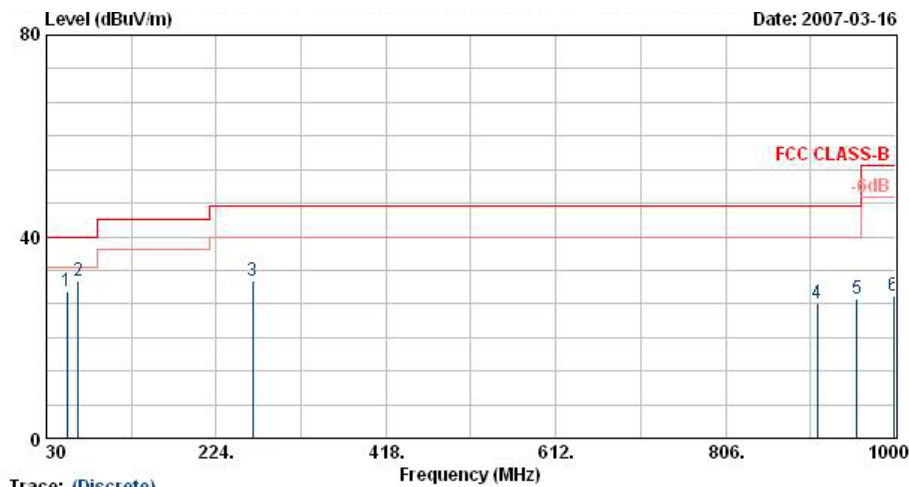
Remark: #3 and #4 Fundamental Signal

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



- Test Mode : Mode 1
- Polarization : Vertical

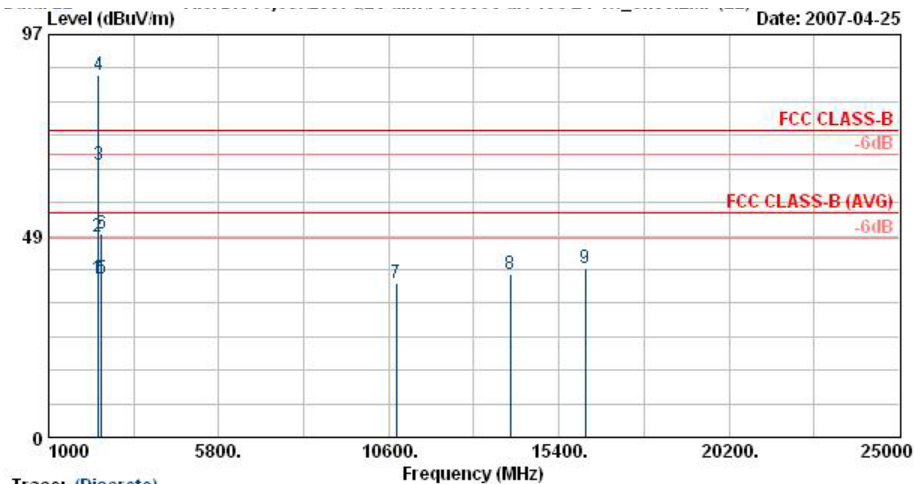
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY
 Condition : LF-ANT(951121) VERTICAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : FR 750806
 Memo : BT Tx_Ch00;2402MHz
 Plane : E2
 Data Rate : DHI
 S/N : AE1-0318

	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 @	53.49	29.04	-10.96	40.00	51.53	7.64	1.00	31.13	---	Peak
2 @	66.18	31.18	-8.82	40.00	54.28	6.78	1.24	31.13	100	198 Peak
3	265.98	31.11	-14.89	46.00	47.00	12.56	2.50	30.96	---	Peak
4	910.40	26.83	-19.17	46.00	31.72	20.61	4.85	30.35	---	Peak
5	955.90	27.64	-18.36	46.00	32.00	20.93	4.98	30.28	---	Peak
6	997.90	28.27	-25.73	54.00	32.19	21.23	5.13	30.27	---	Peak



Trace: (Discrete)

Site : D3CH06-HY
 Condition : HF-ANT(8-18)-060818 VERTICAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : FR 750806
 Memo : BT Tx_Ch00;2402MHz
 Plane : E2
 Data Rate : DHI
 S/N : AEI-0318

	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	2378.32	38.08	-15.92	54.00	39.52	30.25	3.75	35.44	100	343 Average
2	2378.32	48.23	-25.77	74.00	49.68	30.24	3.73	35.42	100	0 Peak
3 @	2402.00	65.46			66.89	30.26	3.77	35.46	100	343 Average
4 @	2402.00	87.24			88.66	30.26	3.77	35.46	100	0 Peak
5	2498.00	38.19	-15.81	54.00	39.54	30.30	3.88	35.53	100	343 Average
6	2498.00	48.98	-25.02	74.00	50.33	30.30	3.88	35.53	100	0 Peak
7	10806.00	37.31	-36.69	74.00	72.17	-8.38	9.72	36.21	---	--- Peak
8	14016.00	39.28	-34.72	74.00	68.30	-6.12	11.63	34.53	---	--- Peak
9	16146.00	40.80	-33.20	74.00	69.41	-5.76	11.80	34.65	---	--- Peak

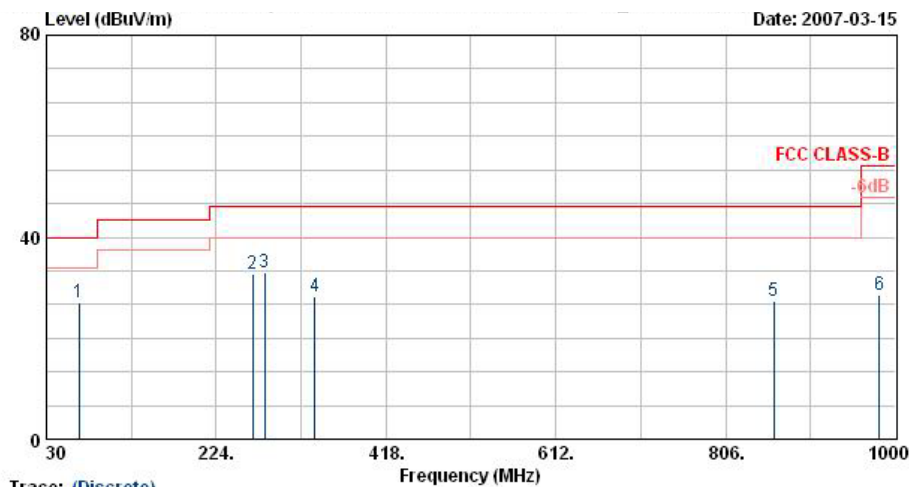
Remark: #3 and #4 Fundamental Signal

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



- Test Mode : Mode 2
- Polarization : Horizontal

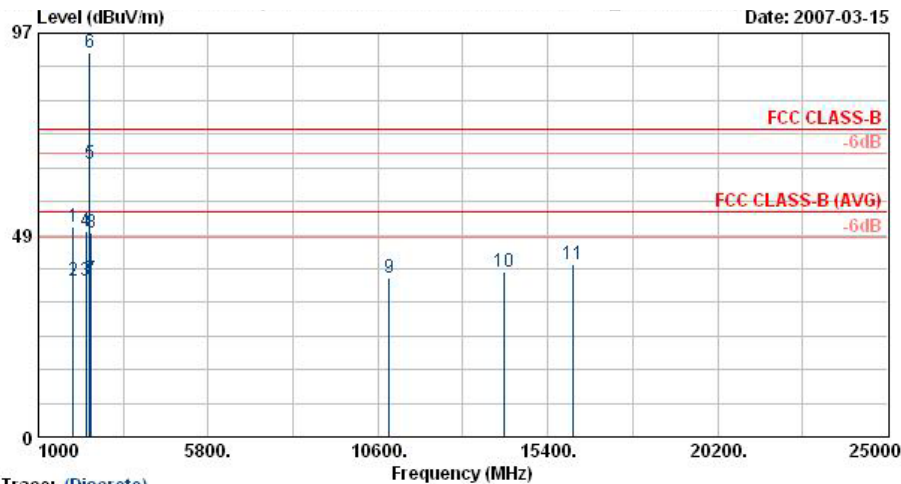
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY
 Condition : LF-ANT(951121) HORIZONTAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : FR 750806
 Memo : BT Tx_Ch39;2441MHz
 Plane : E2
 Data Rate : DHI
 S/N : AE1-0318

	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 @	66.99	27.10	-12.90	40.00	50.17	6.81	1.26	31.14	100	205
2	265.98	32.73	-13.27	46.00	48.62	12.56	2.50	30.96	---	---
3	279.48	33.04	-12.96	46.00	48.62	12.82	2.56	30.97	---	---
4	336.40	28.28	-17.72	46.00	42.22	14.15	2.81	30.90	---	---
5	861.40	27.38	-18.62	46.00	32.85	20.25	4.69	30.42	---	---
6	981.80	28.61	-25.39	54.00	32.70	21.11	5.07	30.27	---	---



Trace: (Discrete)

Site : 03CH06-HY
 Condition : SHF-EHF HORN HORIZONTAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : FR 750806
 Memo : BT Tx_Ch39; 2441MHz
 Plane : E2
 Data Rate : DHI
 S/N : AE1-0318

	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	1988.00	50.40	-23.60	74.00	52.30	29.97	3.30	35.17	100	0 Peak
2	1988.00	37.36	-16.64	54.00	39.26	29.97	3.30	35.17	100	255 Average
3	2344.00	37.66	-16.34	54.00	39.14	30.24	3.71	35.42	100	181 Average
4	2344.00	49.45	-24.55	74.00	50.93	30.24	3.71	35.42	100	0 Peak
5 @	2441.00	65.52			66.92	30.28	3.82	35.49	100	181 Average
6 @	2441.00	92.40			93.78	30.28	3.82	35.47	100	0 Peak
7	2494.00	37.75	-16.25	54.00	39.10	30.30	3.88	35.53	100	181 Average
8	2494.00	49.22	-24.78	74.00	50.56	30.30	3.88	35.53	100	0 Peak
9	10911.00	38.29	-35.71	74.00	72.89	-8.34	9.81	36.08	---	--- Peak
10	14166.00	39.50	-34.50	74.00	68.94	-6.27	11.66	34.84	---	--- Peak
11	16116.00	41.40	-32.60	74.00	69.94	-5.39	11.80	34.94	---	--- Peak

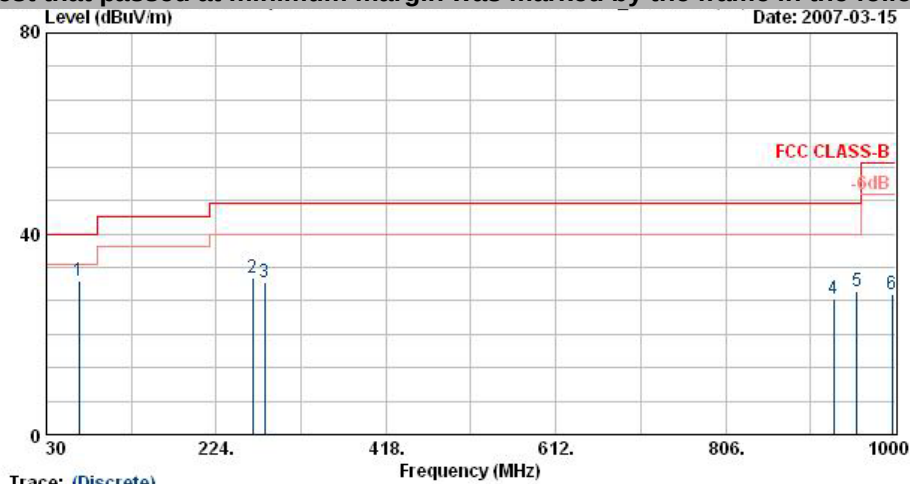
Remark: #5 and #6 Fundamental Signal

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



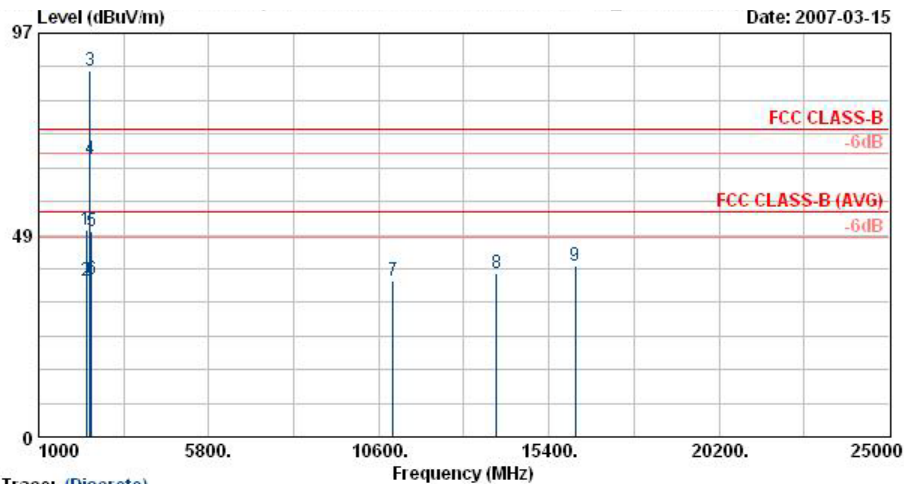
- Test Mode : Mode 2
- Polarization : Vertical

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



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-ANT(951121) VERTICAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : FR 750806
 Memo : BT Tx_Ch39;2441MHz
 Plane : E2
 Data Rate : DHI
 S/N : AEI-0318

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	67.53	30.73	-9.27	40.00	53.77	6.84	1.28	31.15	100	330	Peak
2	265.98	31.24	-14.76	46.00	47.12	12.56	2.50	30.96	---	---	Peak
3	279.48	30.42	-15.58	46.00	46.01	12.82	2.56	30.97	---	---	Peak
4	929.30	26.99	-19.01	46.00	31.67	20.74	4.90	30.32	---	---	Peak
5	955.90	28.59	-17.41	46.00	32.95	20.93	4.98	30.28	---	---	Peak
6	995.80	28.05	-25.95	54.00	31.98	21.21	5.13	30.27	---	---	Peak



Trace: (Discrete)

Site : 03CH06-RV
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : FR 750806
Memo : BT Tx_Ch39; 2441MHz
Plane : E2
Data Rate : DHI
S/N : AEI-0318

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2338.00	49.66	-24.34	74.00	51.14	30.24	3.69	35.40	100	0	Peak
2	2338.00	37.58	-16.42	54.00	39.06	30.24	3.69	35.40	108	339	Average
3 @	2441.00	87.86			89.24	30.28	3.82	35.47	100	0	Peak
4 @	2441.00	66.81			68.21	30.28	3.82	35.49	108	339	Average
5	2498.00	49.36	-24.64	74.00	50.71	30.30	3.88	35.53	100	0	Peak
6	2498.00	37.72	-16.28	54.00	39.07	30.30	3.88	35.53	108	339	Average
7	10992.00	37.42	-36.58	74.00	71.83	-8.30	9.87	35.98	---	---	Peak
8	13917.00	39.16	-34.84	74.00	68.72	-6.63	11.55	34.48	---	---	Peak
9	16146.00	41.19	-32.81	74.00	69.80	-5.76	11.80	34.65	---	---	Peak

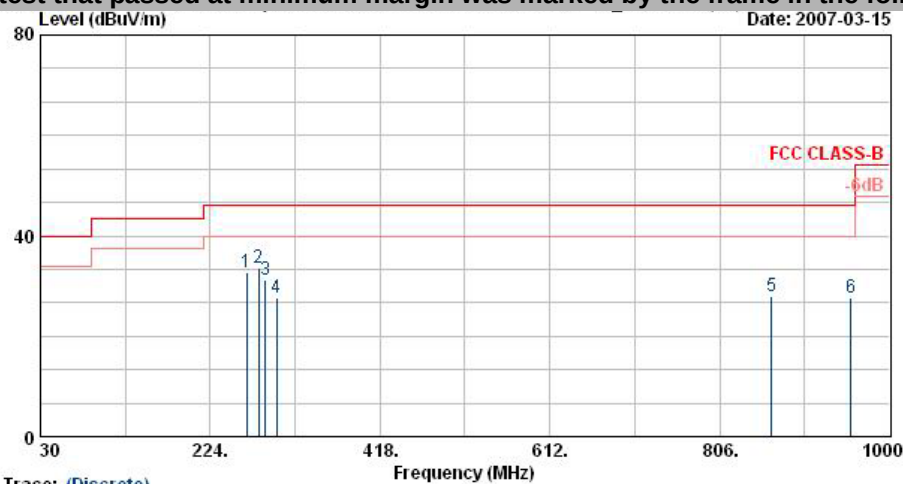
Remark: #3 and #4 Fundamental Signal

Remark: There's 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.

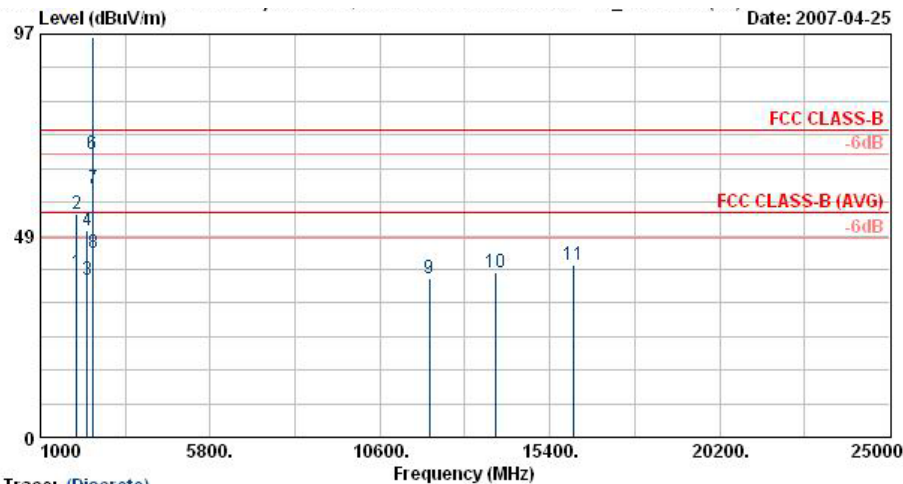


Trace: (Discrete)

```

Site      : 03CH06-HY
Condition : LF-ANT(951121) HORIZONTAL
EUT       : PDA Phone
Power     : 120Vac/60Hz
Model     : FR 750806
Memo      : BT Tx_Ch78;2480MHz
Plane     : E2
Data Rate : DHI
S/N       : AEI-0318
  
```

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1	265.98	32.81	-13.19	46.00	48.70	12.56	2.50	30.96	---	Peak
2 @	279.48	33.70	-12.30	46.00	49.28	12.82	2.56	30.97	100	Peak
3	287.04	31.29	-14.71	46.00	46.69	12.97	2.59	30.96	---	Peak
4	300.00	27.79	-18.21	46.00	42.88	13.21	2.63	30.93	---	Peak
5	864.90	27.85	-18.15	46.00	33.28	20.28	4.70	30.41	---	Peak
6	955.90	27.62	-18.38	46.00	31.98	20.93	4.98	30.28	---	Peak



Site : 03CH06-HY
 Condition : HF-ANT(8-16)-060918 HORIZONTAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : FR 750806
 Memo : BT Tx_Ch78;2480MHz
 Plane : E2
 Data Rate : DHI
 S/N : AEI-0318

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2028.00	39.56	-14.44	54.00	41.30	30.11	3.34	35.19	124	360	Average
2	2028.00	53.85	-20.15	74.00	55.60	30.11	3.34	35.19	100	0	Peak
3	2328.00	37.98	-16.02	54.00	39.47	30.23	3.69	35.40	100	195	Average
4	2328.00	49.83	-24.17	74.00	51.31	30.23	3.69	35.40	100	0	Peak
5 @	2480.00	96.36			97.72	30.29	3.86	35.51	100	0	Peak
6 @	2480.00	68.32			69.68	30.29	3.86	35.51	100	195	Average
7	2483.50	59.69	-14.31	74.00	61.05	30.29	3.86	35.51	100	0	Peak
8 @	2483.50	44.37	-9.63	54.00	45.73	30.29	3.86	35.51	100	195	Average
9	11991.00	38.28	-35.72	74.00	73.88	-9.64	10.63	36.58	---	---	Peak
10	13872.00	39.81	-34.19	74.00	69.75	-6.96	11.50	34.48	---	---	Peak
11	16071.00	41.44	-32.56	74.00	69.96	-4.77	11.79	35.53	---	---	Peak

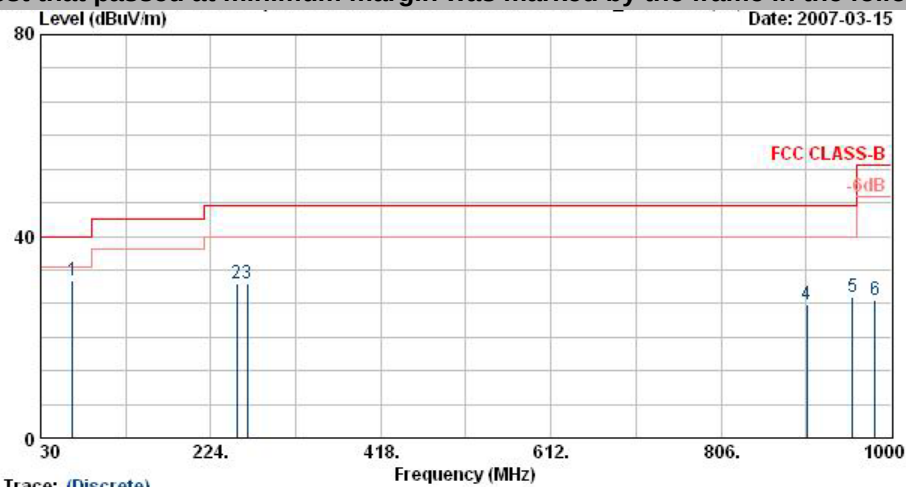
Remark: #5 and #6 Fundamental Signal

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



- Test Mode : Mode 3
- Polarization : Vertical

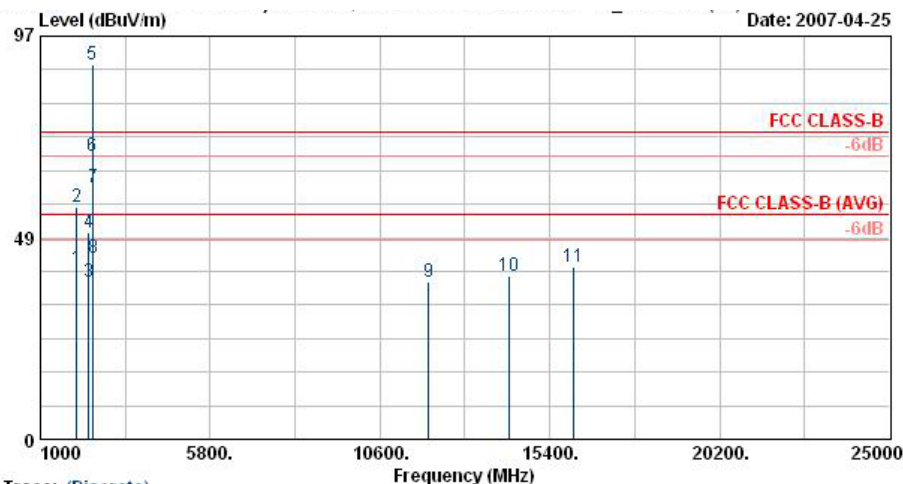
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-RV
Condition : LF-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : FR 750806
Memo : BT Tx_Ch78;2480MHz
Plane : E2
Data Rate : DHI
S/N : AEI-0318

	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 @	66.18	31.17	-8.83	40.00	54.28	6.78	1.24	31.13	100	301 Peak
2	253.29	30.75	-15.25	46.00	46.91	12.33	2.44	30.93	---	---
3	265.98	30.77	-15.23	46.00	46.65	12.56	2.50	30.96	---	---
4	903.40	26.56	-19.44	46.00	31.54	20.55	4.83	30.36	---	---
5	955.90	28.10	-17.90	46.00	32.46	20.93	4.98	30.28	---	---
6	981.80	27.49	-26.51	54.00	31.58	21.11	5.07	30.27	---	---



Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-ANT(8-18)-060918 VERTICAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : FR 750806
 Memo : BT Tx_Ch78;2480MHz
 Plane : E2
 Data Rate : DHI
 S/N : AEI-0318

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Preamp	Ant Table	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm deg
1	2028.00	41.22	-12.78	54.00	42.96	30.11	3.34	35.19	114 358 Average
2	2028.00	55.90	-18.10	74.00	57.65	30.11	3.34	35.19	100 0 Peak
3	2364.00	37.96	-16.04	54.00	39.41	30.24	3.73	35.42	100 328 Average
4	2364.00	49.59	-24.41	74.00	51.04	30.24	3.73	35.42	100 0 Peak
5 @	2480.00	90.15			91.51	30.29	3.86	35.51	100 0 Peak
6 @	2480.00	68.00			69.36	30.29	3.86	35.51	100 328 Average
7	2483.50	60.69	-13.31	74.00	62.05	30.29	3.86	35.51	100 0 Peak
8 @	2483.50	43.47	-10.53	54.00	44.83	30.29	3.86	35.51	100 328 Average
9	11976.00	37.89	-36.11	74.00	73.51	-9.69	10.63	36.56	--- --- Peak
10	14262.00	39.47	-34.53	74.00	69.18	-6.36	11.68	35.04	--- --- Peak
11	16056.00	41.34	-32.66	74.00	70.03	-4.64	11.78	35.83	--- --- Peak

Remark: #5 and #6 Fundamental Signal

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



5.10 Antenna Requirements

5.10.1 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.

5.10.2 Antenna Connected Construction

The antenna used in this product is a PIFA antenna without connector and it is considered to meet antenna requirement of FCC.

5.10.3 Antenna Gain

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



6. List of Measuring Equipments Used

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMC Receiver	R&S	ESCS 30	100132	9kHz – 2.75GHz	Jul. 04, 2006	Jul. 04, 2007	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/004	9kHz – 30MHz	Mar. 30, 2007	Mar. 30, 2008	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/009	9kHz – 30MHz	Mar. 30, 2007	Mar. 30, 2008	Conduction (CO01-HY)
EMI Filter	LINDGREN	LRE-2060	1004	< 450Hz	N/A	N/A	Conduction (CO01-HY)
EMI Filter	LINDGREN	N6006	201052	0 – 60Hz	N/A	N/A	Conduction (CO01-HY)
RF Cable-CON	Suhner Switzerland	RG223/U	CB029	9kHz – 30MHz	Dec. 04, 2006	Dec. 04, 2007	Conduction (CO01-HY)
Isolation Transformer	Erika Fiedler OHG	D-65396 Walluf	58	45MHz-2.15GHz	N/A	N/A	Conduction (CO01-HY)
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Oct. 05, 2006	Oct. 05, 2007	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 13, 2006	Jul. 13, 2007	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 20, 2006	Nov. 20, 2007	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	10094	1G~18G	Dec. 26, 2006	Dec. 26, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBEC K	BBHA 9170	9170-249	14G - 40G	Nov. 20, 2006	Nov. 20, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 15, 2006	Nov. 15, 2007	Radiation (03CH06-HY)
Pre Amplifier	Mini Circuits	ZKL-2	D092004-1	10~2500MHz	Nov. 15, 2006	Nov. 15, 2007	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	106656	WCDMA	Nov. 20, 2006	Nov. 20, 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 Evaluation (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.15	Normal(k=2)	0.08
Antenna factor calibration	1.12	Normal(k=2)	0.56
Cable loss calibration	0.12	Normal(k=2)	0.06
Pre Amplifier Gain calibration	0.13	Normal(k=2)	0.07
RCV/SPA specification	2.5	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1	Rectangular	0.29
Site imperfection	2.1	Rectangular	1.21
Mismatch	+0.39/-0.41	U-shaped	0.28
combined standard uncertainty Uc(y)	1.58		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	3.16		

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				