

FCC/IC TEST REPORT

for

47 CFR Part 15 Subpart C and IC RSS-210

Equipment : PDA Phone

Trade Name : Palm

Model No. : Centro 685

FCC ID : O8F-728

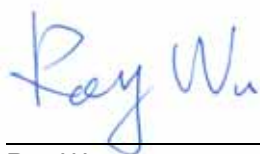
IC ID : 3905A-728

Filing Type : Certification

Applicant : Palm Inc.

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

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- The data shown in this test report were carried out on May 17, 2007 at **Sporton International Inc. LAB.**
- Report No.: FR750805, Report Version: Rev. 02.



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Rev. 02



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History of this test report

Report Issue Date: Jun. 11, 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 : PDA Phone
Trade Name : Palm
Model No. : Centro 685
FCC ID : O8F-728
IC ID : 3905A-728
Power Supply Type : Switching, From battery 3.7V
AC Power Cord : AC 120V, Wall-mount, 1.6 meter, 2 pin
Adapter 1 : Nibit / DCS-51FL-52P US
Adapter 2 : PIE / P005WA05YY
Battery : Samsung / DS22784
Earphone : Palm / EMC219-001-01

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	PIFA Antenna		
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

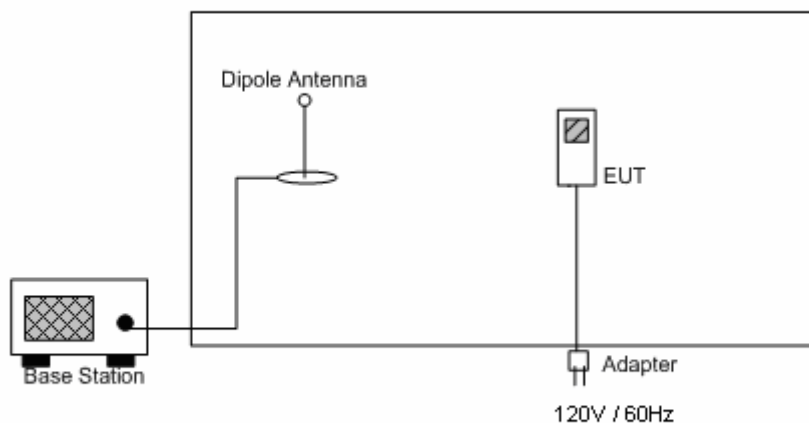
- The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
- For spurious emission below 1GHz, only one channel of each application was tested because it is not related to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

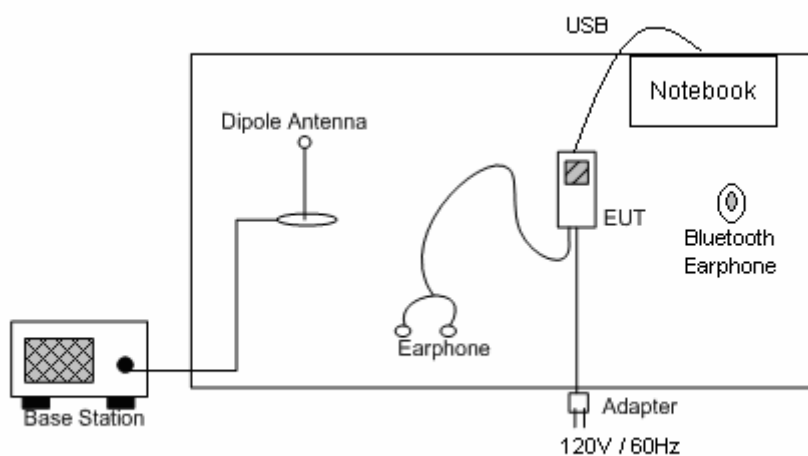
2.2. Test Mode

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: GSM850 Idle Mode + BT Link + USB Link + Earphone + H Pattern + Adapter 1 Mode 2: GSM850 Idle Mode + BT Link + USB Link + Earphone + H Pattern + Adapter 2 Mode 3: GSM850 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

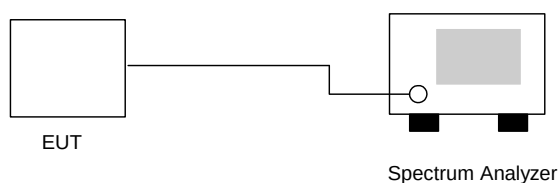
5.2.1. Measuring Instruments :

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

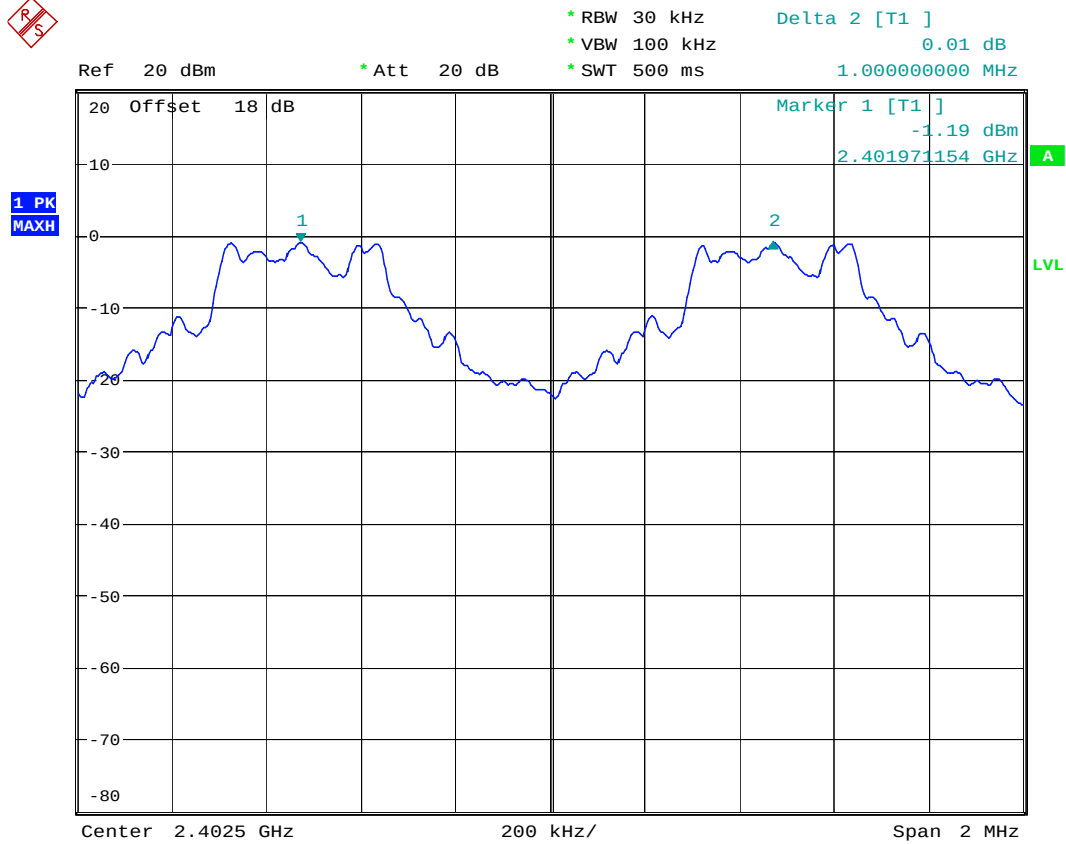
Channel	Frequency (MHz)	Hopping Channel Separation (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	1.000	0.938	Mode 1
39	2441	1.003	0.936	Mode 2
78	2480	1.000	0.938	Mode 3

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



5.2.5 Hopping Channel Separation

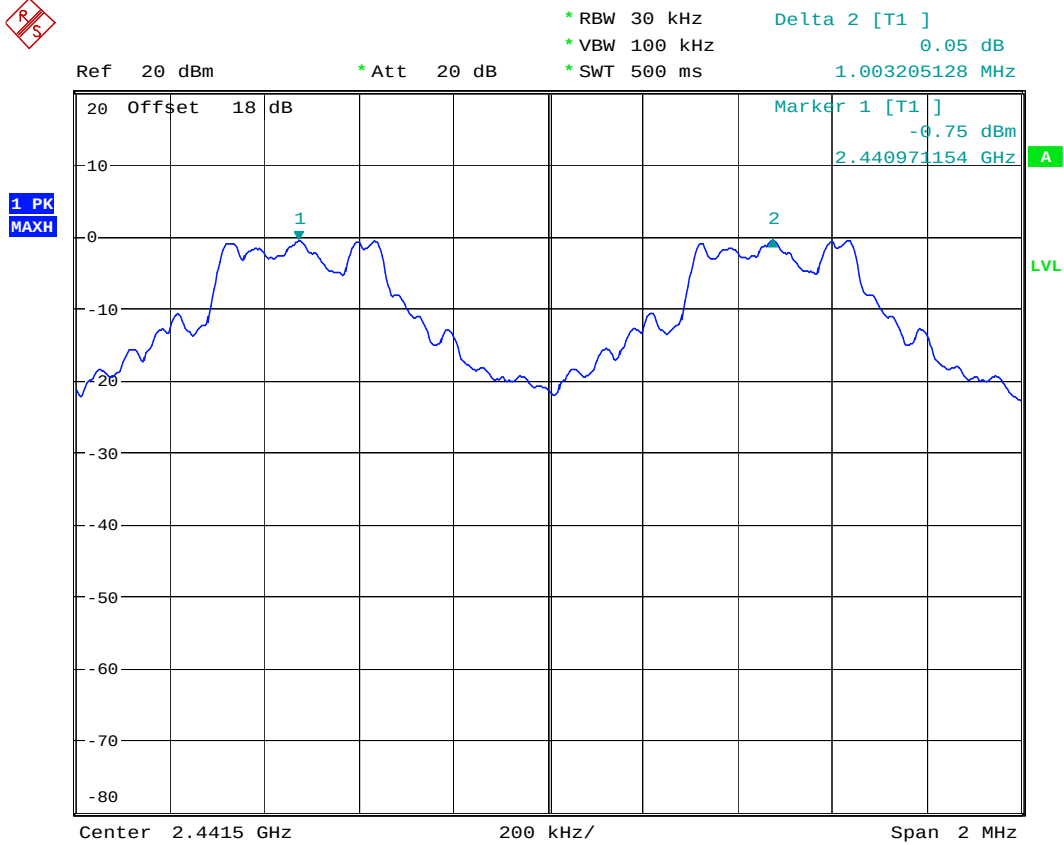
Mode 1: CH00 (2402MHz)



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



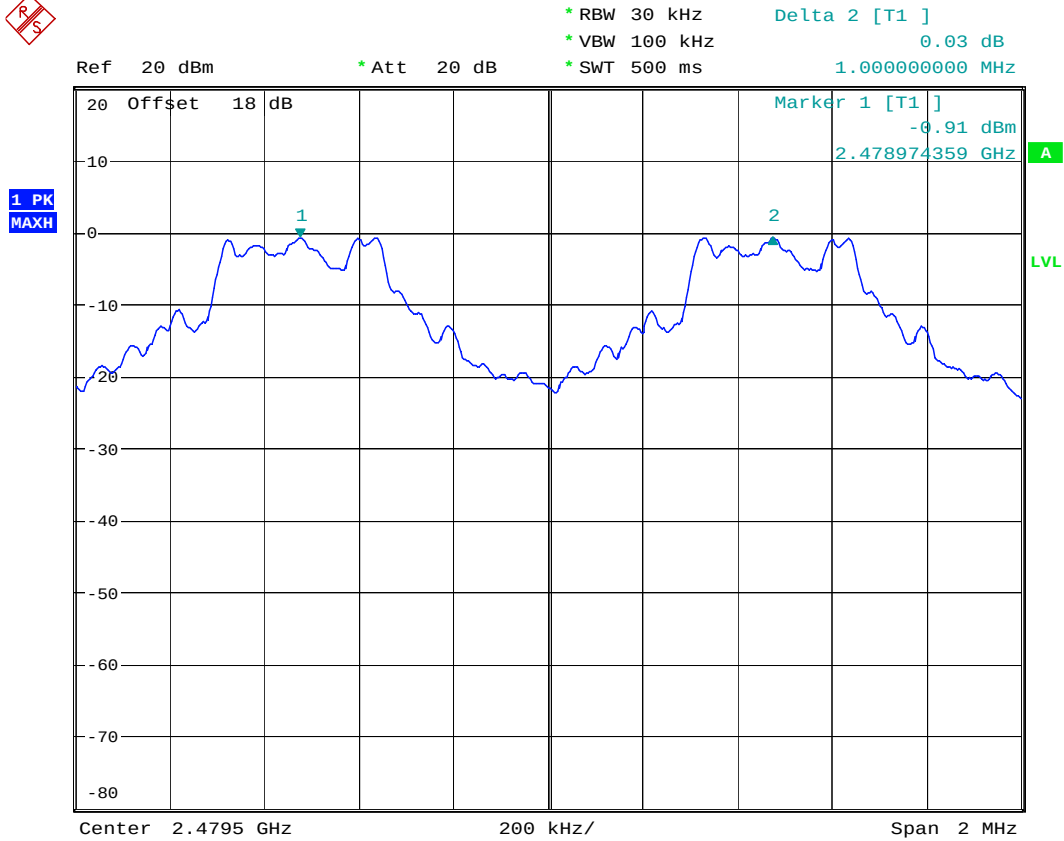
Mode 2: CH39 (2441MHz)



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



Mode 3: CH78 (2480MHz)



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

5.3. Number of Hopping Frequency

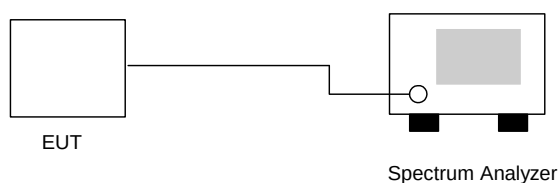
5.3.1. Measuring Instruments :

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 :

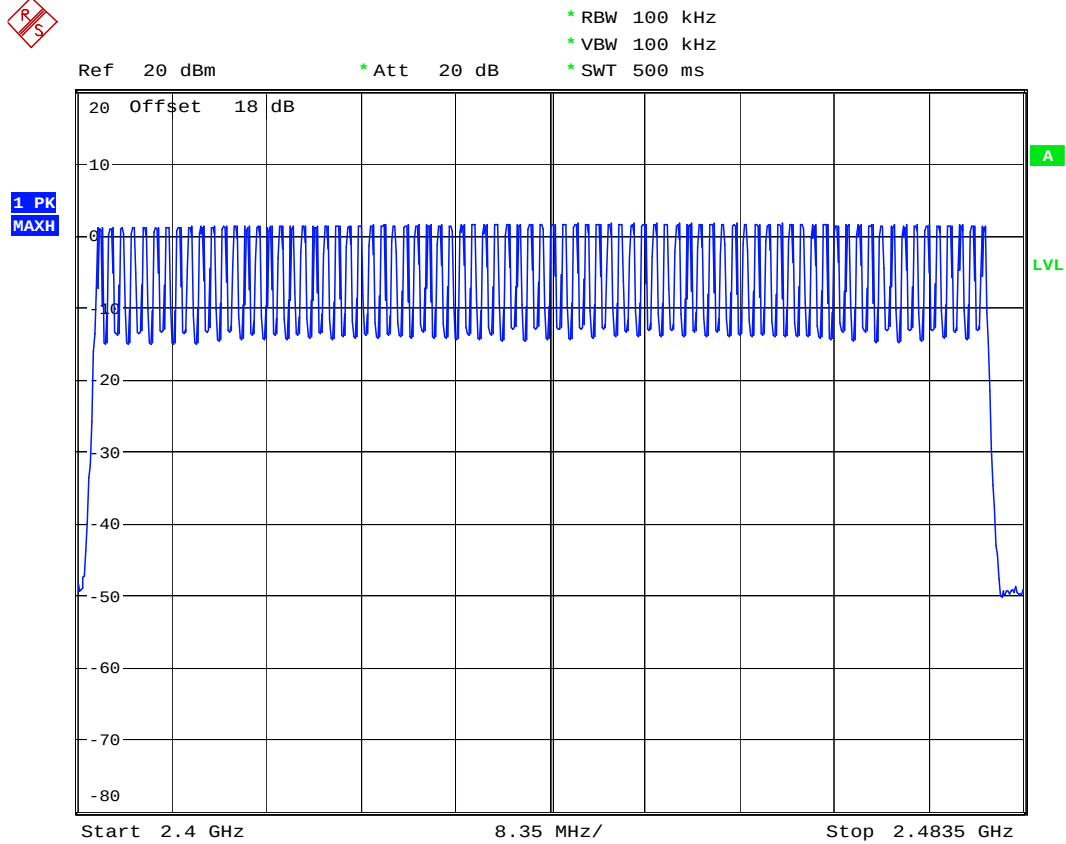


5.3.4. Test Result : See spectrum analyzer plots below

- 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

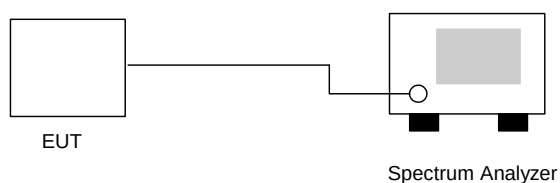
5.4.1 Measuring Instruments :

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

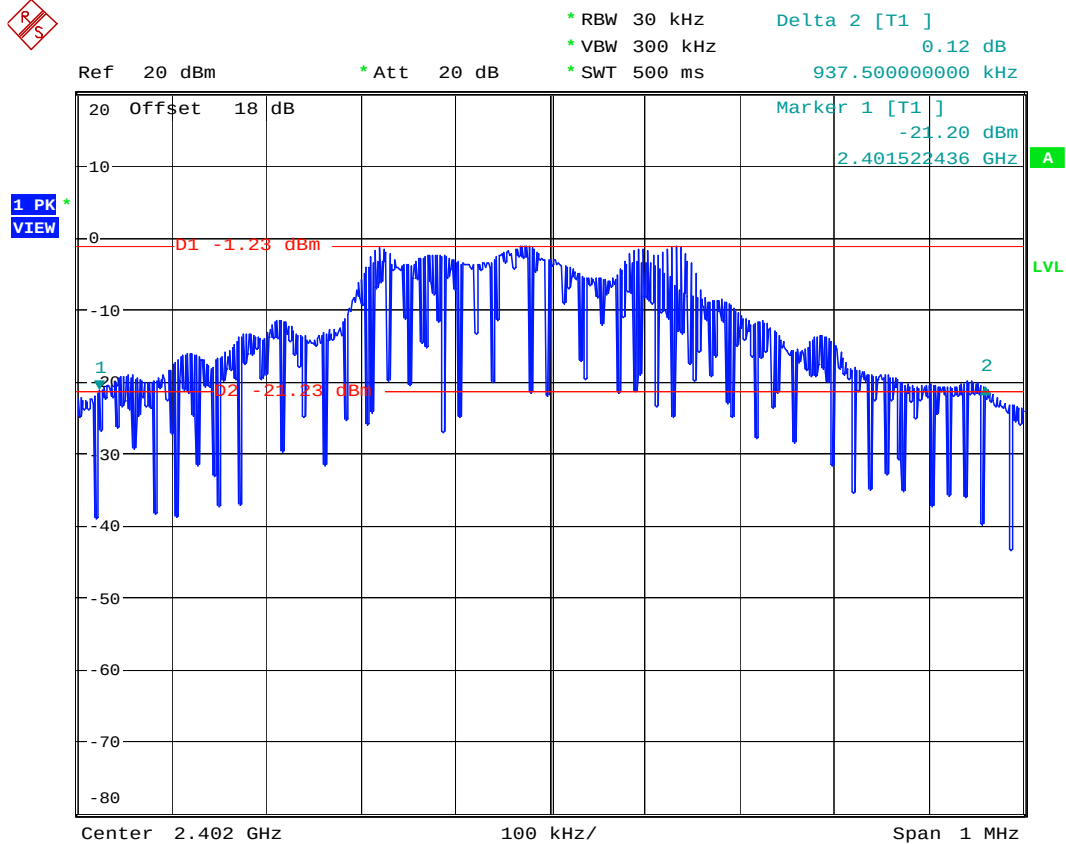
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : Tony

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

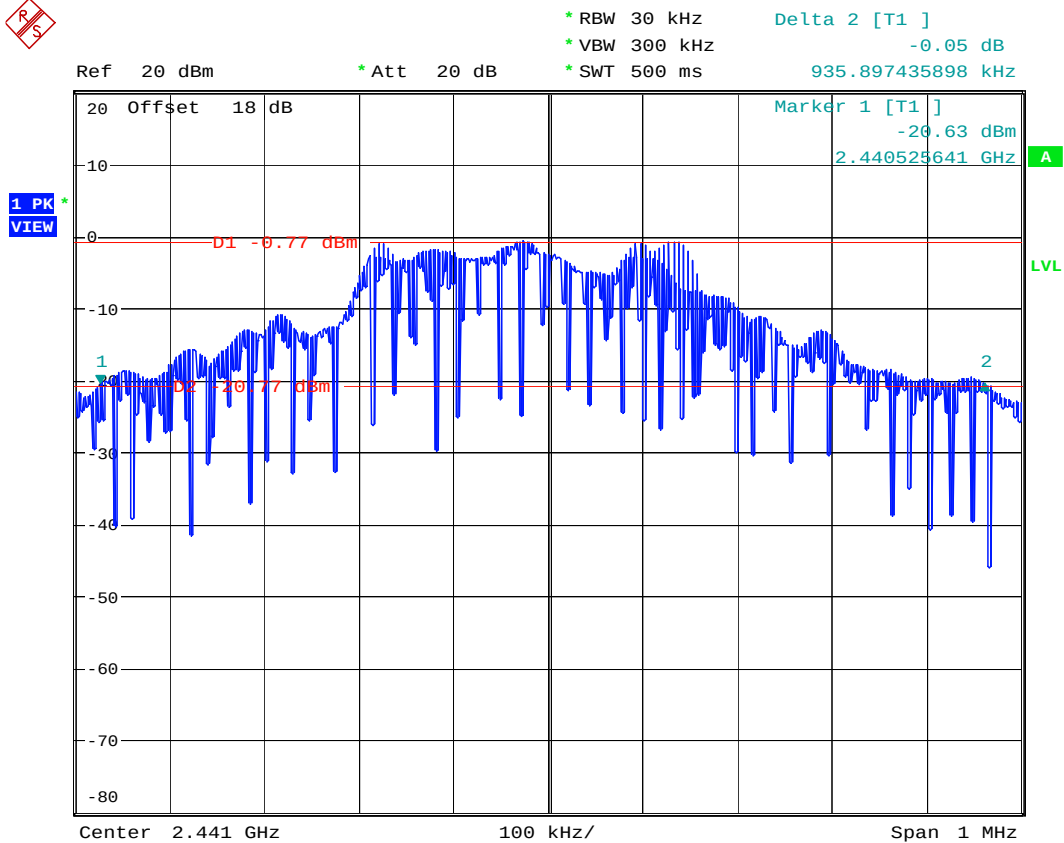
Mode 1: CH00 (2402MHz)



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

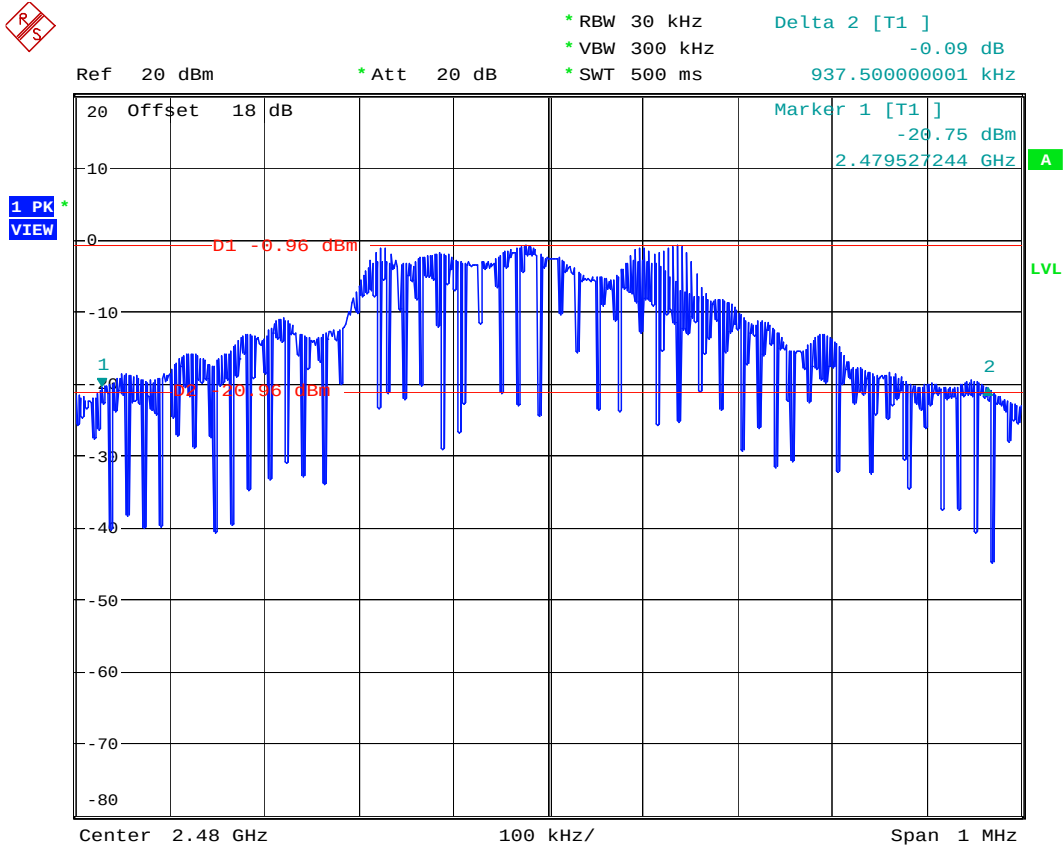


Mode 2: CH39 (2441MHz)



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

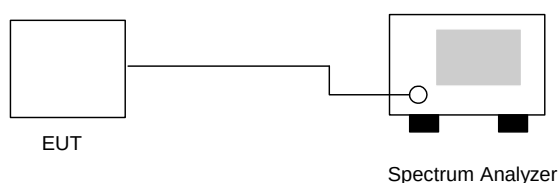
5.5.1 Measuring Instruments :

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

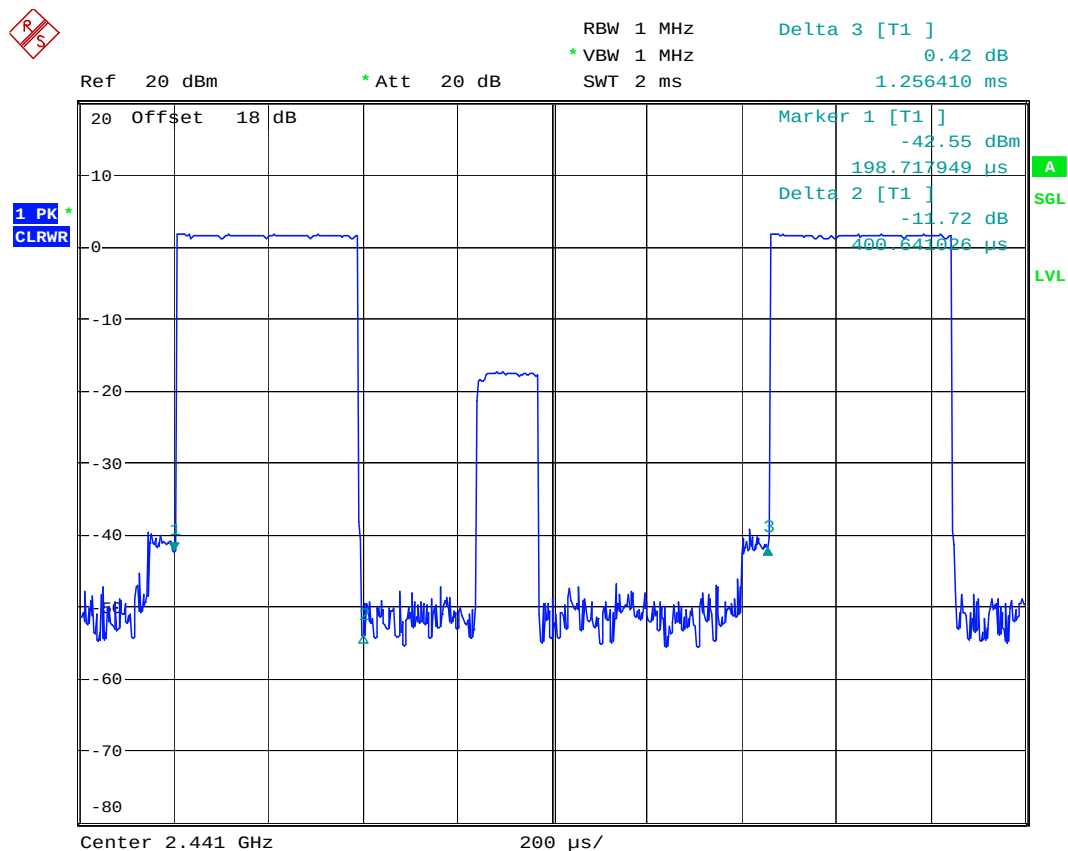
Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	8.6	400	0.109	0.4
DH3	4.6	1662	0.242	0.4
DH5	3.1	2992	0.293	0.4

※ Remark:

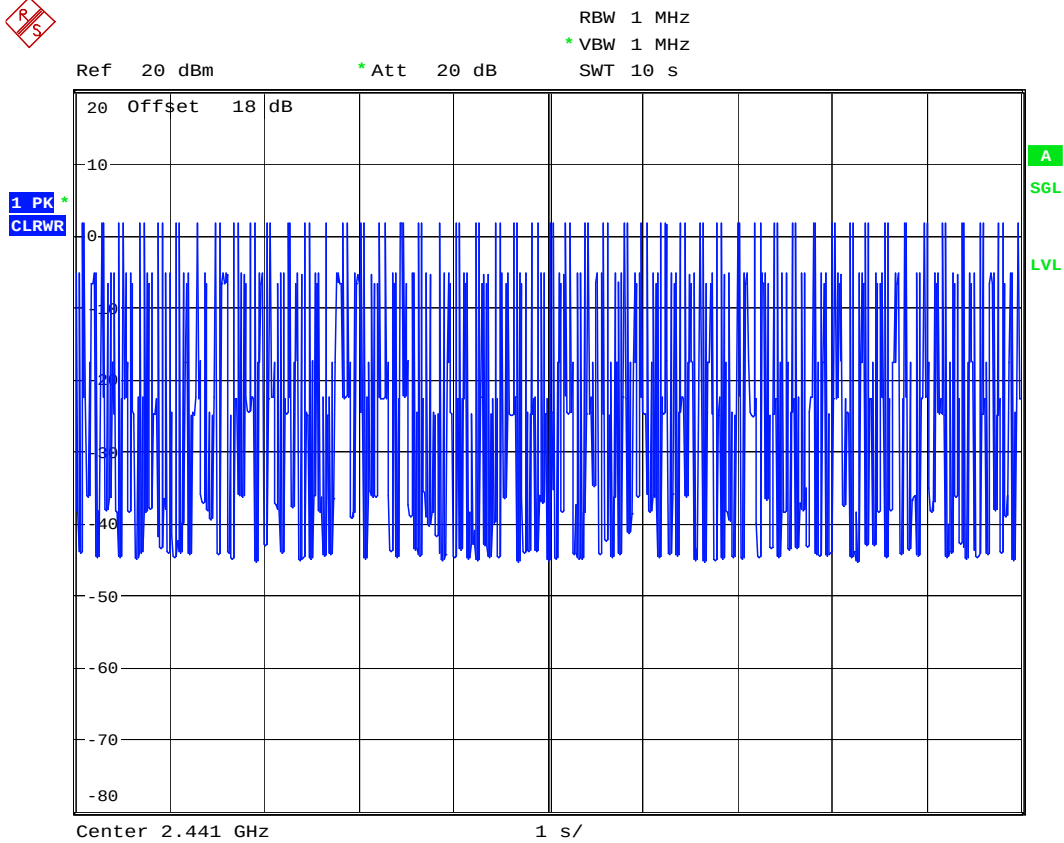
1. Dwell Time = $79(\text{channels}) \times 0.4(\text{s}) \times \text{average hopping channel} \times \text{package transfer time}$
2. 79channels come from the Hopping Channel number.
3. Average Hopping Channel = hops/sweep time
4. t: Package Transfer Time(us)



DH1 (CH39)



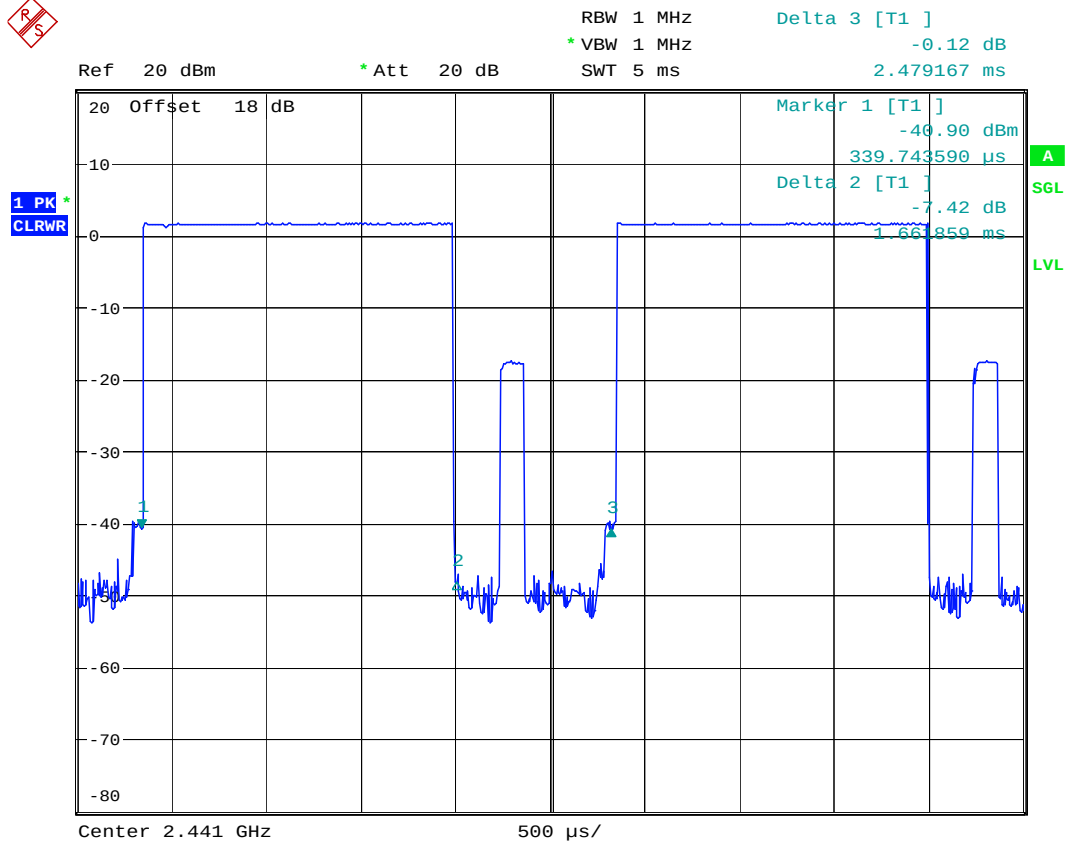
Date: 14.MAR.2007 12:22:38



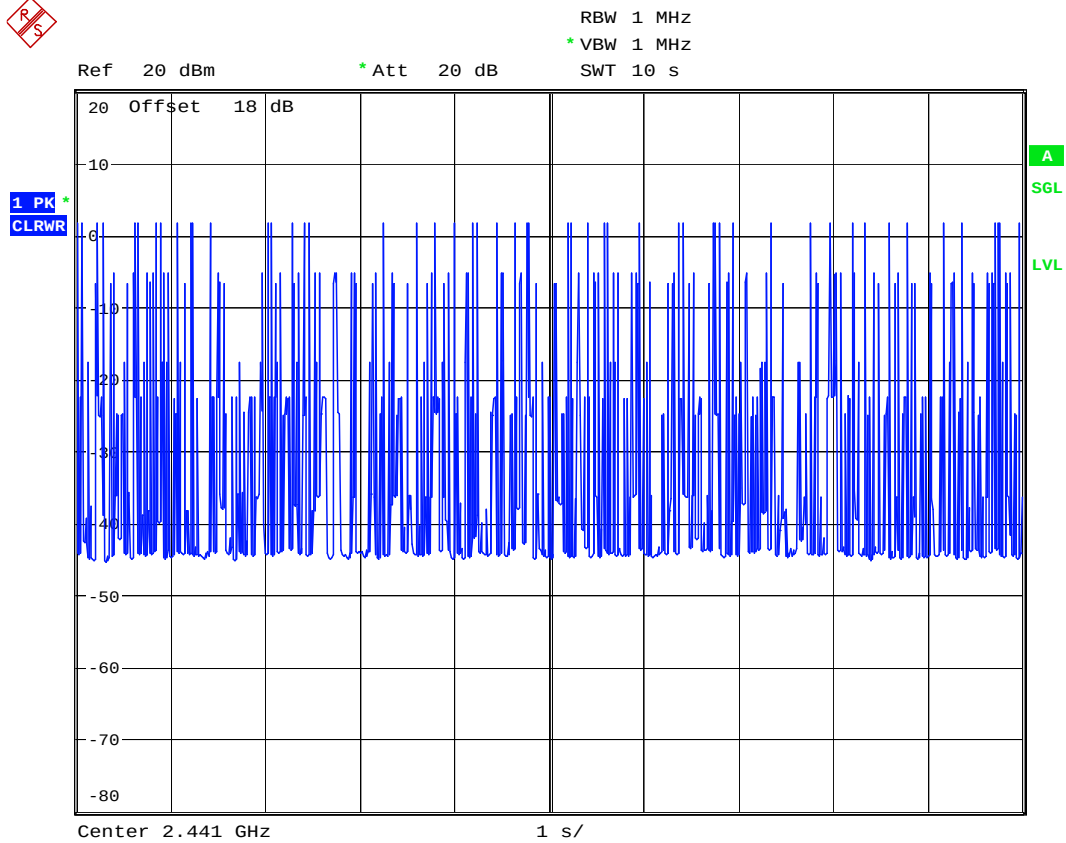
Date: 14.MAR.2007 11:26:26



DH3 (CH39)



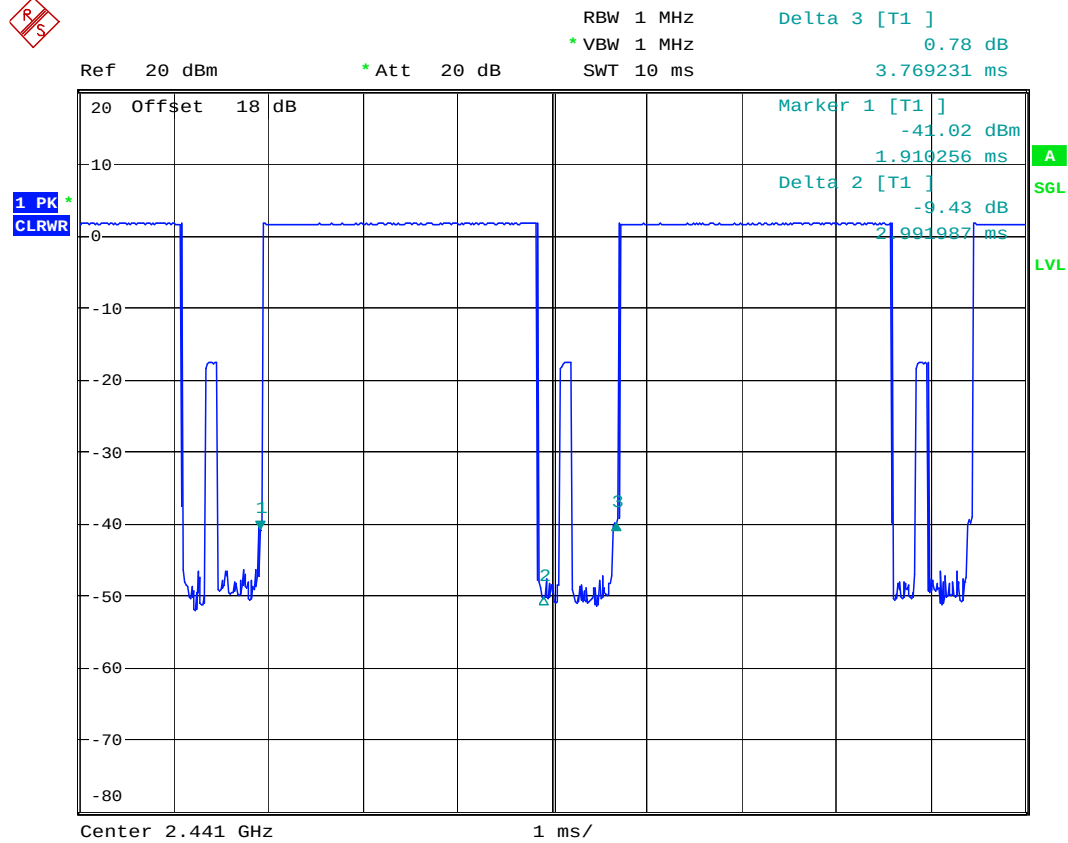
Date: 14.MAR.2007 11:15:30



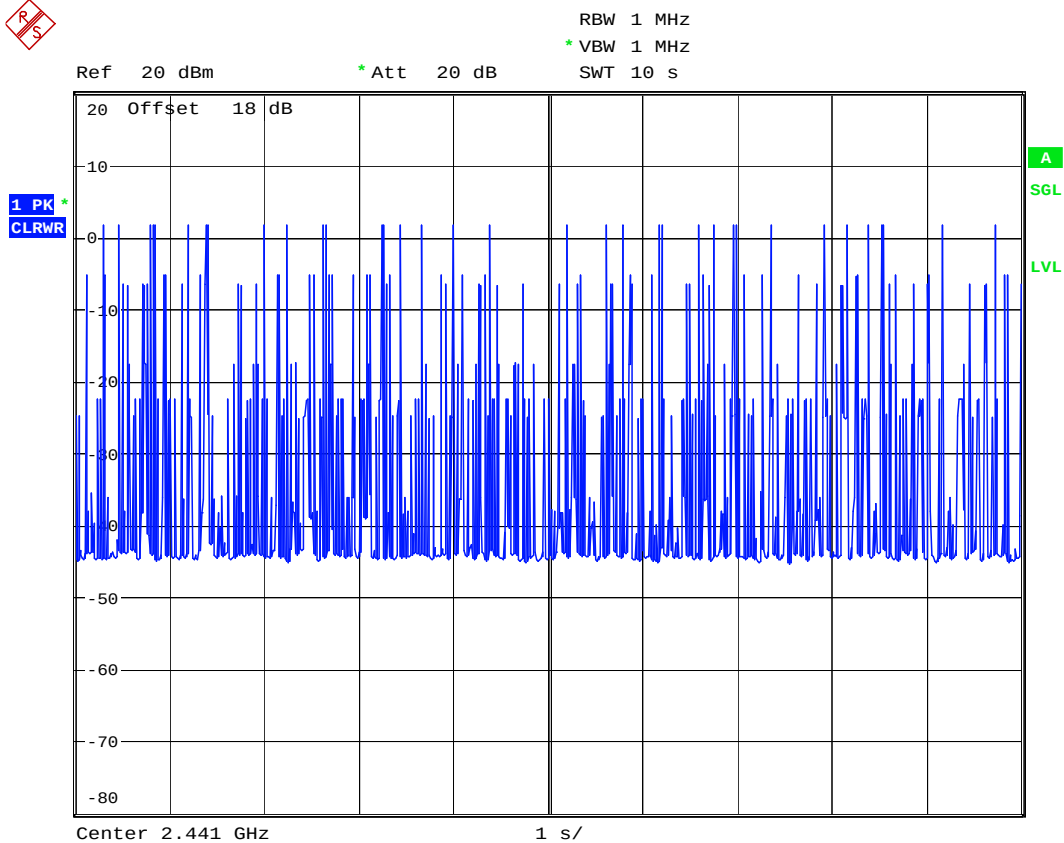
Date: 14.MAR.2007 11:28:15



DH5 (CH39)



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



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

5.6 Output Power

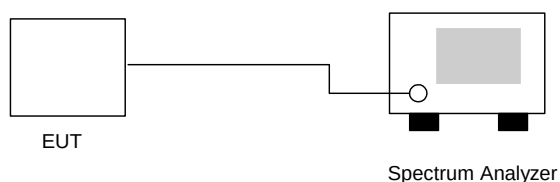
5.6.1 Measuring Instruments :

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

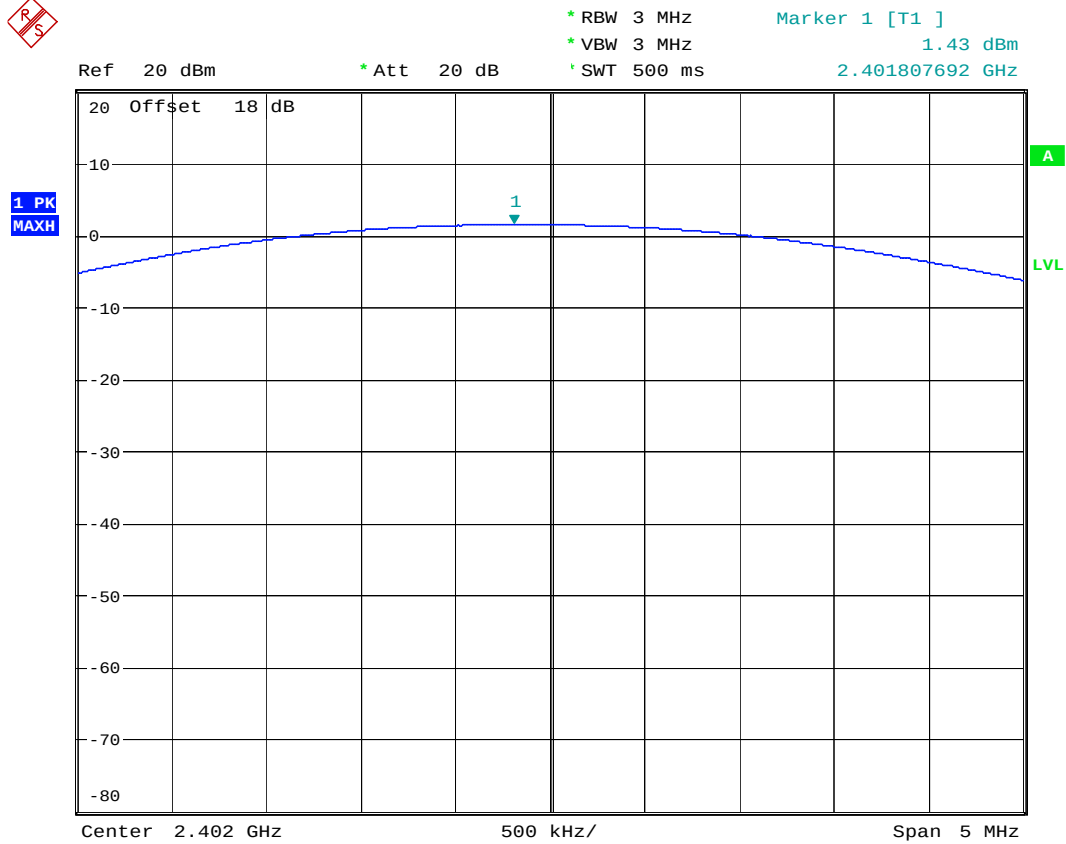
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : Tony

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

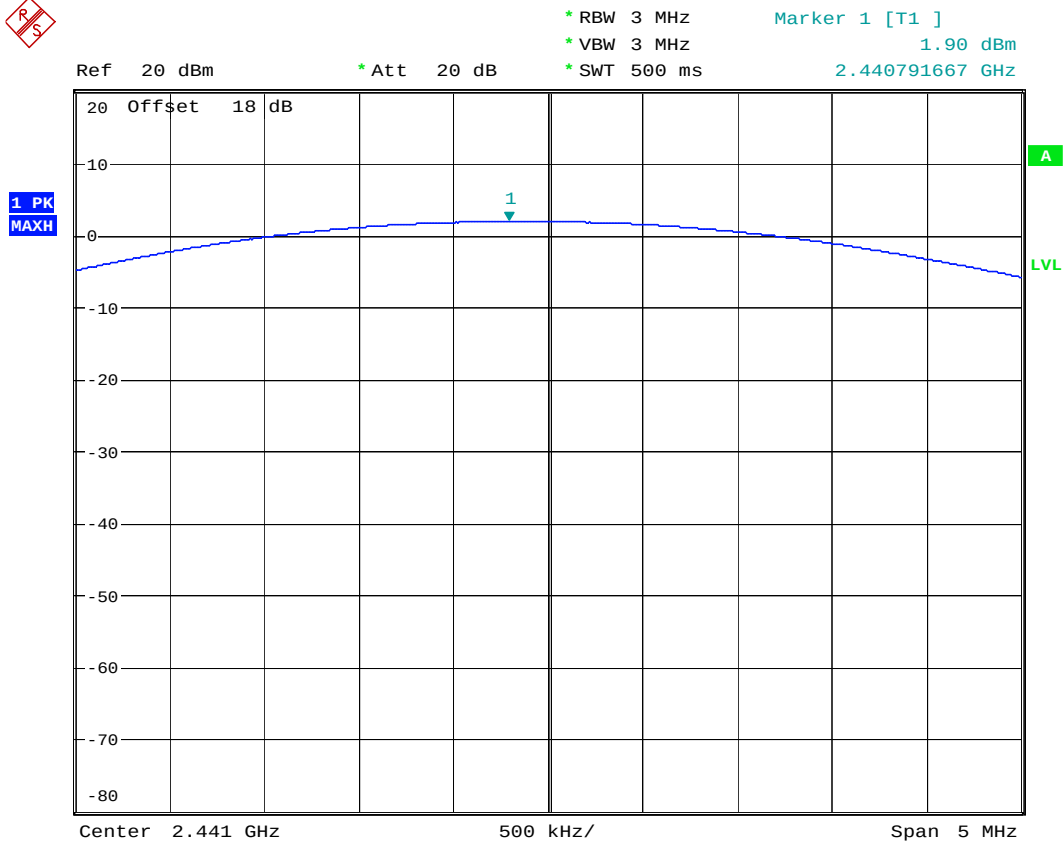
Mode 1: CH00 (2402MHz)



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



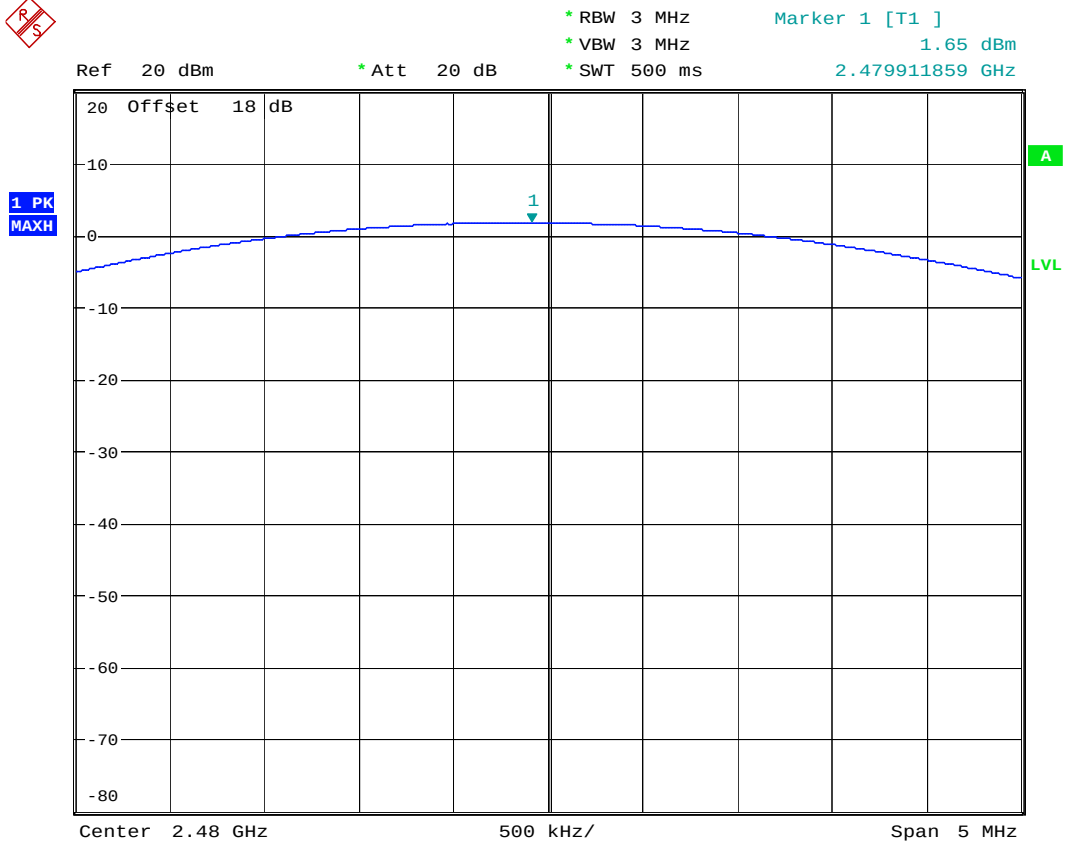
Mode 2: CH39 (2441MHz)



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)	
2384.72	50.52	-23.48	74.00	51.96	30.25	3.75	35.44	100	0	Peak
2384.72	39.04	-14.96	54.00	40.48	30.25	3.75	35.44	100	4	Average

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)	
2339.92	49.41	-24.59	74.00	50.88	30.24	3.71	35.42	100	0	Peak
2339.92	38.57	-15.43	54.00	40.05	30.24	3.71	35.42	100	211	Average

**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
2483.53	61.98	-12.02	74.00	63.34	30.29	3.86	35.51	100	0	Peak
2483.53	44.73	-9.27	54.00	46.09	30.29	3.86	35.51	100	9	Average

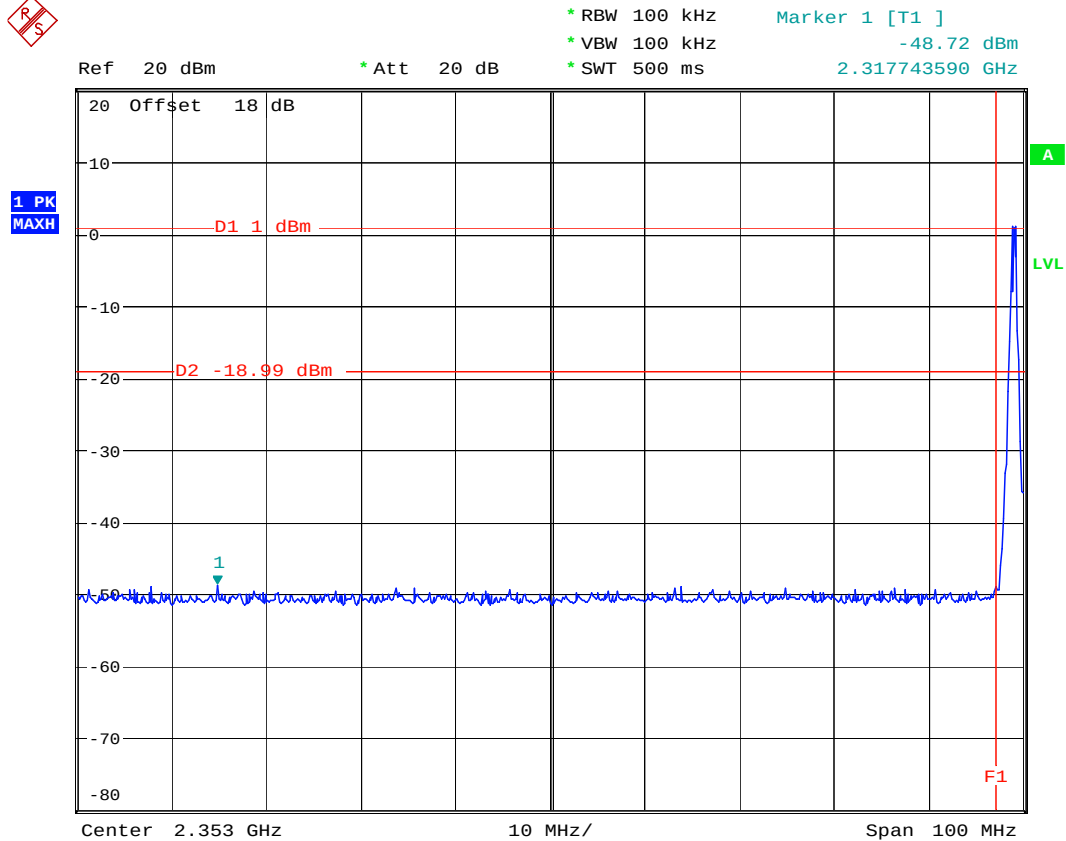
CH78 (Vertical)

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	53.93	-20.07	74.00	55.29	30.29	3.86	35.51	100	0	Peak
2483.50	42.14	-11.86	54.00	43.50	30.29	3.86	35.51	100	337	Average



5.7.5 Frequency Band Edge

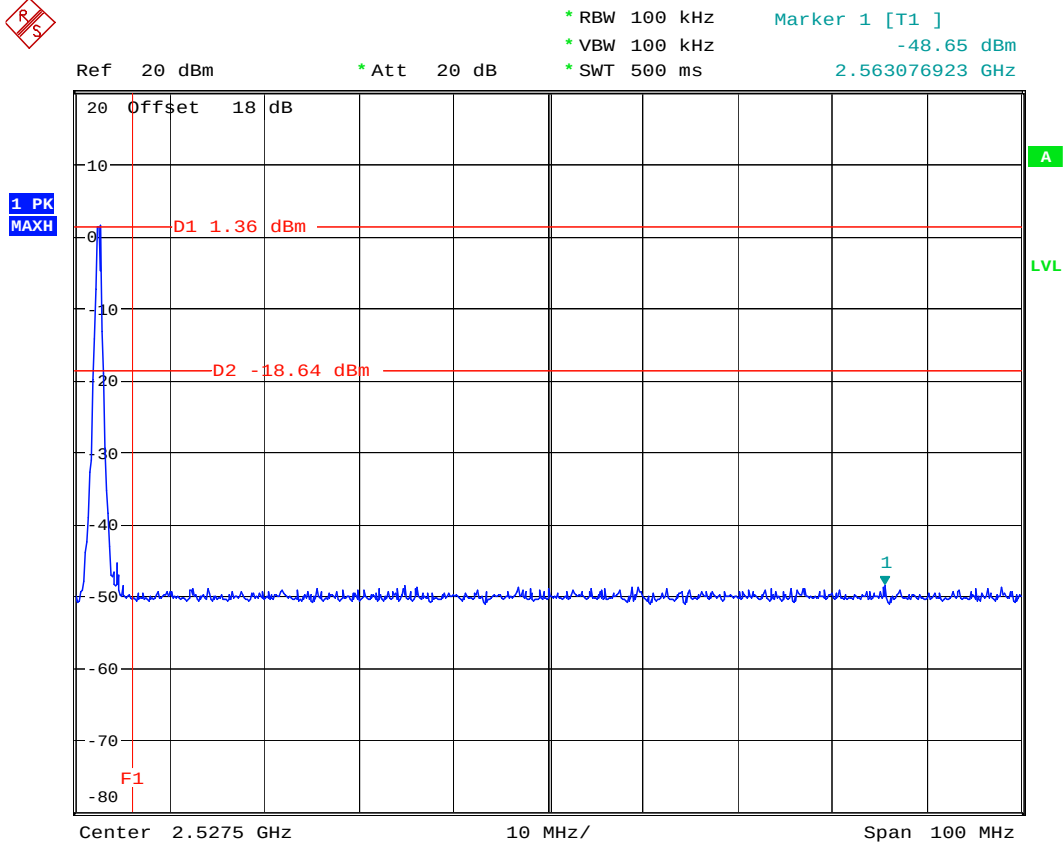
CH00 (2402 MHz)



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.

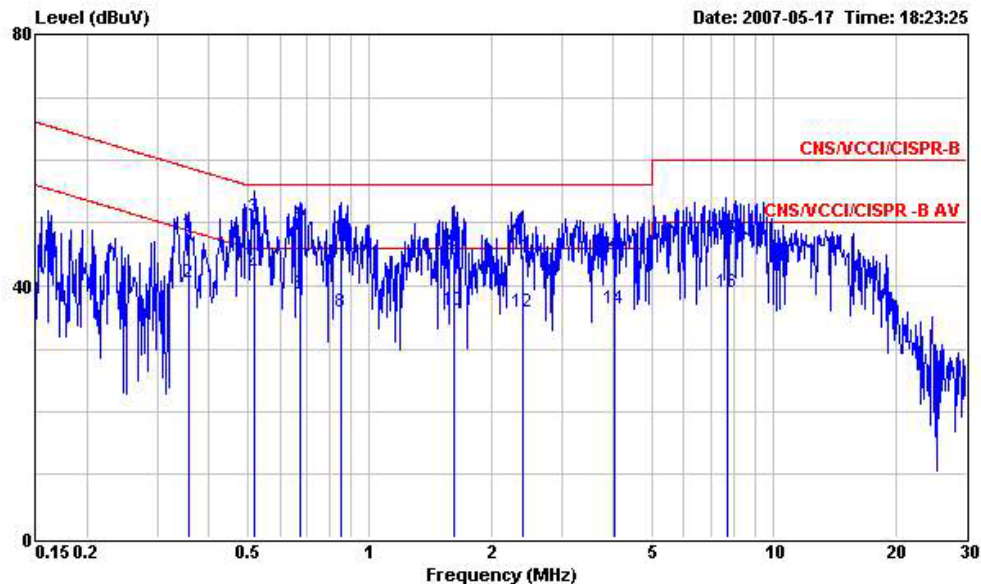
5.8.2 Test Procedures :

- 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

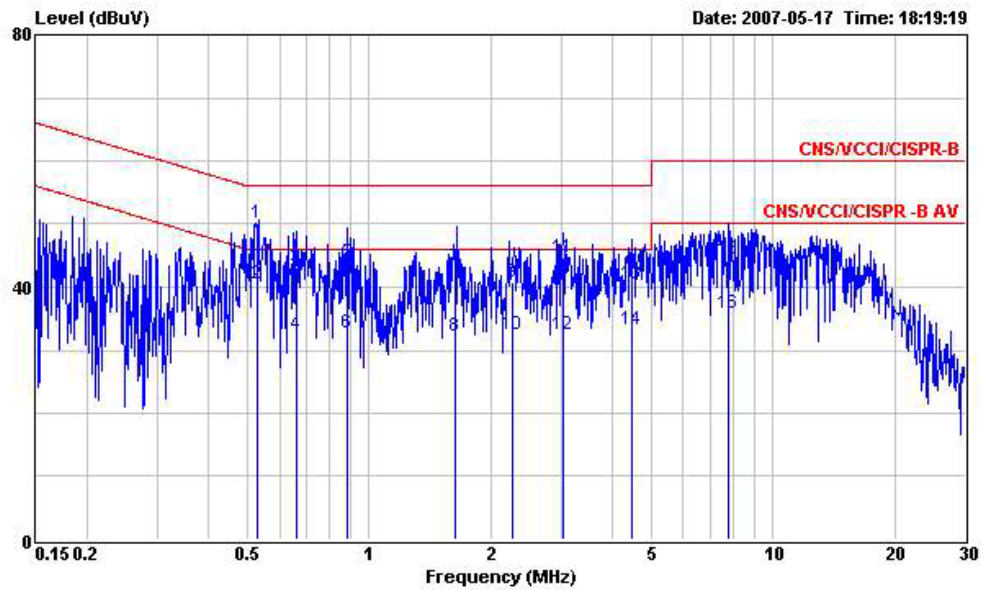
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : James

■ 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/50Hz
 Model : FD750805
 Memo : GSM 850 IDLE+BT IDLE+H PATTERN
 Memo : +USB LINK+EARPHONE+ADAPTOR1
 SAMPLE : A

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.356	48.28	-10.54	58.82	48.15	0.10	0.03	QP
2	0.356	40.64	-8.18	48.82	40.51	0.10	0.03	Average
3	0.518	50.80	-5.20	56.00	50.67	0.10	0.03	QP
4	0.518	41.88	-4.12	46.00	41.75	0.10	0.03	Average
5	0.675	49.62	-6.38	56.00	49.48	0.10	0.04	QP
6	0.675	38.82	-7.18	46.00	38.68	0.10	0.04	Average
7	0.848	47.22	-8.78	56.00	47.07	0.10	0.05	QP
8	0.848	35.84	-10.16	46.00	35.69	0.10	0.05	Average
9	1.620	45.44	-10.56	56.00	45.25	0.10	0.09	QP
10	1.620	36.14	-9.86	46.00	35.95	0.10	0.09	Average
11	2.400	44.90	-11.10	56.00	44.65	0.13	0.12	QP
12	2.400	35.88	-10.12	46.00	35.63	0.13	0.12	Average
13	4.043	44.88	-11.12	56.00	44.52	0.20	0.16	QP
14	4.043	36.32	-9.68	46.00	35.96	0.20	0.16	Average
15	7.650	47.47	-12.53	60.00	47.00	0.27	0.20	QP
16	7.650	39.00	-11.00	50.00	38.53	0.27	0.20	Average



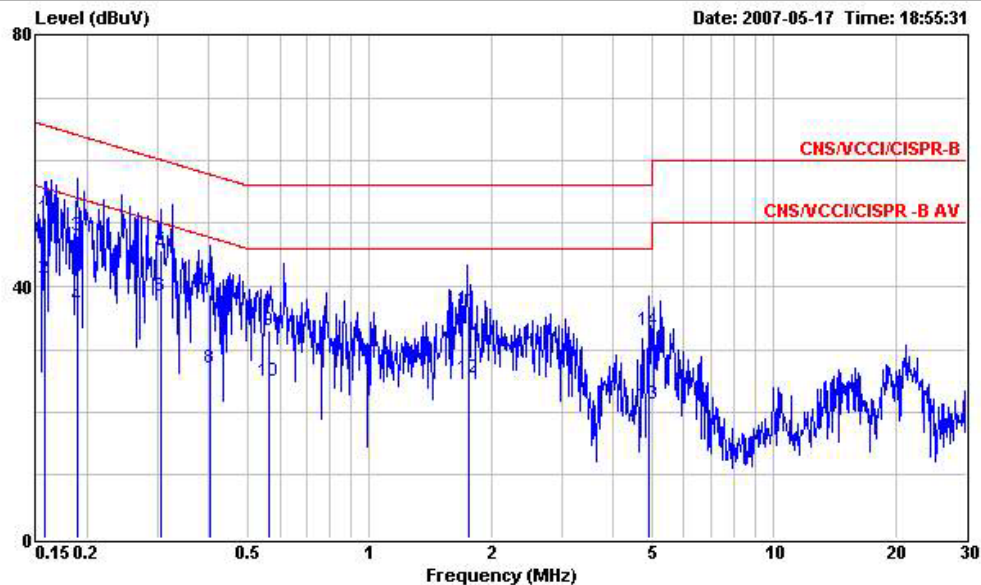
Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
 EUT : PDA PHONE
 Power : 120V/60Hz
 Model : FD750805
 Memo : GSM 850 IDLE+BT IDLE+H PATTERN
 Memo : +USB LINK+EARPHONE+ADAPTOR1
 SAMPLE : A

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.527	50.23	-5.77	56.00	50.10	0.10	0.03	QP
2	0.527	40.43	-5.57	46.00	40.30	0.10	0.03	Average
3	0.661	43.06	-12.94	56.00	42.92	0.10	0.04	QP
4	0.661	32.43	-13.57	46.00	32.29	0.10	0.04	Average
5	0.885	43.94	-12.06	56.00	43.79	0.10	0.05	QP
6	0.885	32.63	-13.37	46.00	32.48	0.10	0.05	Average
7	1.640	43.24	-12.76	56.00	43.05	0.10	0.09	QP
8	1.640	32.08	-13.92	46.00	31.89	0.10	0.09	Average
9	2.268	40.88	-15.12	56.00	40.67	0.10	0.11	QP
10	2.268	32.49	-13.51	46.00	32.28	0.10	0.11	Average
11	3.030	44.57	-11.43	56.00	44.33	0.10	0.14	QP
12	3.030	32.60	-13.40	46.00	32.36	0.10	0.14	Average
13	4.480	40.61	-15.39	56.00	40.33	0.11	0.17	QP
14	4.480	33.17	-12.83	46.00	32.89	0.11	0.17	Average
15	7.770	44.55	-15.45	60.00	44.18	0.17	0.20	QP
16	7.770	35.87	-14.13	50.00	35.50	0.17	0.20	Average

5.8.4 Test Data Test Mode 2

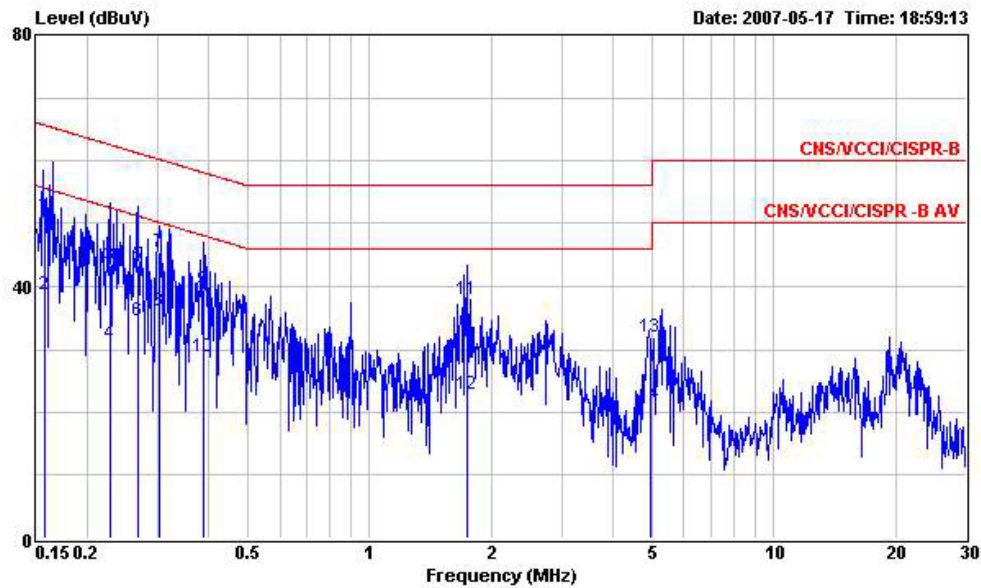
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : James

■ 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 : FD750805
 Memo : GSM 850 IDLE+BT IDLE+H PATTERN
 Memo : +USB LINK+EARPHONE+ADAPTOR2
 SAMPLE : A

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.158	50.90	-14.68	65.58	50.73	0.10	0.07	QP
2	0.158	41.28	-14.30	55.58	41.11	0.10	0.07	Average
3	0.189	47.98	-16.10	64.08	47.82	0.10	0.06	QP
4	0.189	36.99	-17.09	54.08	36.83	0.10	0.06	Average
5	0.304	45.61	-14.54	60.15	45.47	0.10	0.04	QP
6	0.304	38.45	-11.70	50.15	38.31	0.10	0.04	Average
7	0.404	38.72	-19.05	57.77	38.60	0.10	0.02	QP
8	0.404	26.98	-20.79	47.77	26.86	0.10	0.02	Average
9	0.564	33.03	-22.97	56.00	32.90	0.10	0.03	QP
10	0.564	25.06	-20.94	46.00	24.93	0.10	0.03	Average
11	1.753	36.37	-19.63	56.00	36.18	0.10	0.09	QP
12	1.753	25.48	-20.52	46.00	25.29	0.10	0.09	Average
13	4.933	21.24	-24.76	46.00	20.85	0.22	0.17	Average
14	4.933	32.98	-23.02	56.00	32.59	0.22	0.17	QP



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
 EUT : PDA PHONE
 Power : 120V/60Hz
 Model : FD750805
 Memo : GSM 850 IDLE+BT IDLE+H PATTERN
 Memo : +USB LINK+EARPHONE+ADAPTOR2
 SAMPLE : A

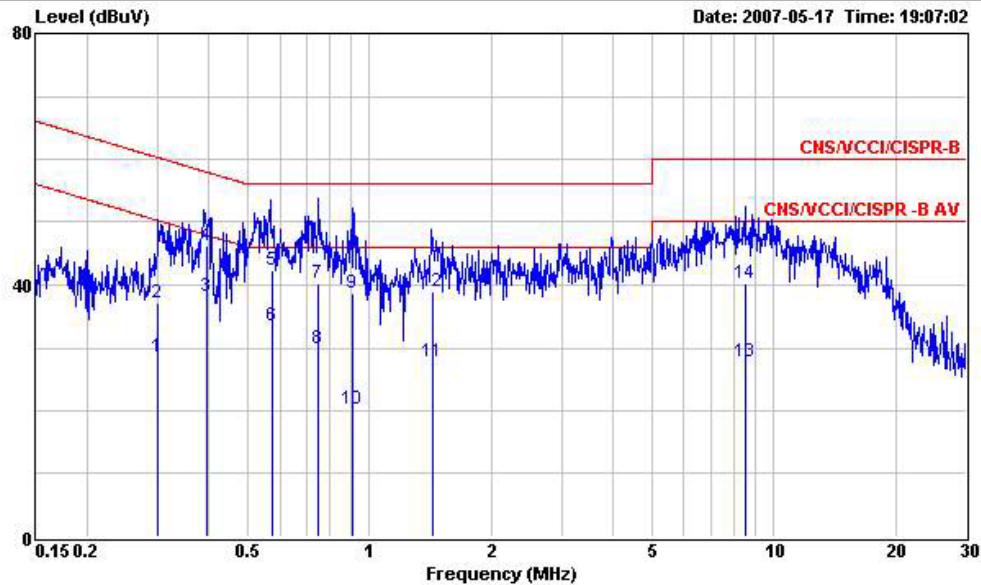
	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.158	51.39	-14.20	65.59	51.22	0.10	0.07	QP
2	0.158	38.64	-16.95	55.59	38.47	0.10	0.07	Average
3	0.229	43.43	-19.06	62.49	43.28	0.10	0.05	QP
4	0.229	30.90	-21.59	52.49	30.75	0.10	0.05	Average
5	0.267	43.32	-17.89	61.21	43.18	0.10	0.04	QP
6	0.267	34.62	-16.59	51.21	34.48	0.10	0.04	Average
7	0.302	45.47	-14.72	60.19	45.33	0.10	0.04	QP
8	0.302	36.15	-14.04	50.19	36.01	0.10	0.04	Average
9	0.387	39.46	-18.67	58.13	39.34	0.10	0.02	QP
10	0.387	28.75	-19.38	48.13	28.63	0.10	0.02	Average
11	1.740	37.98	-18.02	56.00	37.79	0.10	0.09	QP
12	1.740	22.84	-23.16	46.00	22.65	0.10	0.09	Average
13	4.970	31.85	-24.15	56.00	31.56	0.12	0.17	QP
14	4.970	21.41	-24.59	46.00	21.12	0.12	0.17	Average



5.8.5 Test Data Test Mode 3

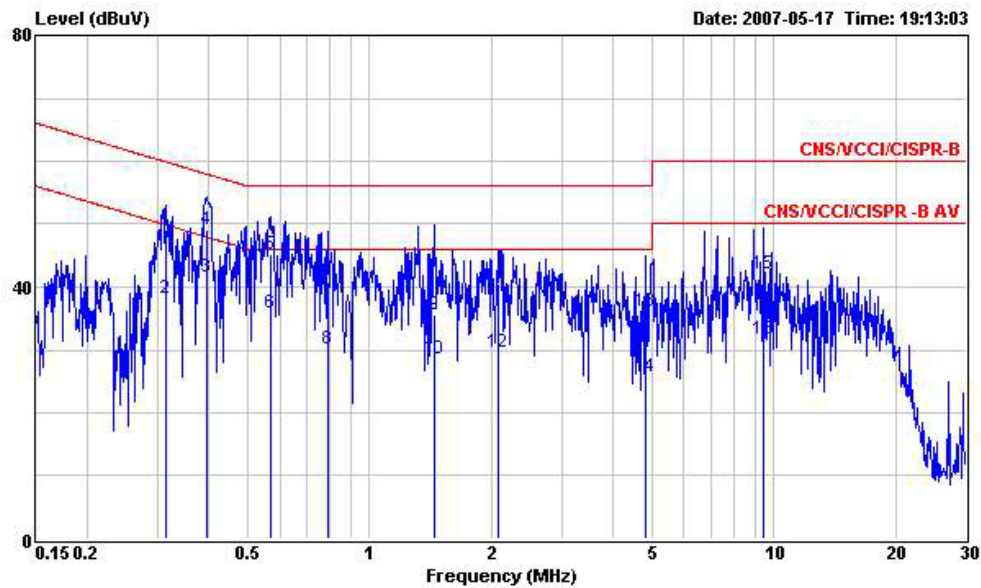
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : James

■ 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 : FD750805
 Memo : PCS1900 IDLE+BT IDLE+H PATTERN
 Memo : +USB LINK+EARPHONE+ADAPTOR1
 SAMPLE : A

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.300	28.63	-31.61	60.24	28.49	0.10	0.04	Average
2	0.300	37.25	-22.99	60.24	37.11	0.10	0.04	QP
3	0.398	38.09	-19.82	57.91	37.97	0.10	0.02	Average
4	0.398	46.30	-11.61	57.91	46.18	0.10	0.02	QP
5	0.575	42.41	-13.59	56.00	42.27	0.10	0.04	QP
6	0.575	33.42	-22.58	56.00	33.28	0.10	0.04	Average
7	0.747	40.32	-15.68	56.00	40.17	0.10	0.05	QP
8	0.747	29.85	-26.15	56.00	29.70	0.10	0.05	Average
9	0.904	38.74	-17.26	56.00	38.58	0.10	0.06	QP
10	0.904	20.27	-35.73	56.00	20.11	0.10	0.06	Average
11	1.430	27.79	-28.21	56.00	27.61	0.10	0.08	Average
12	1.430	39.07	-16.93	56.00	38.89	0.10	0.08	QP
13	8.500	27.87	-32.13	60.00	27.38	0.28	0.21	Average
14	8.500	40.17	-19.83	60.00	39.68	0.28	0.21	QP



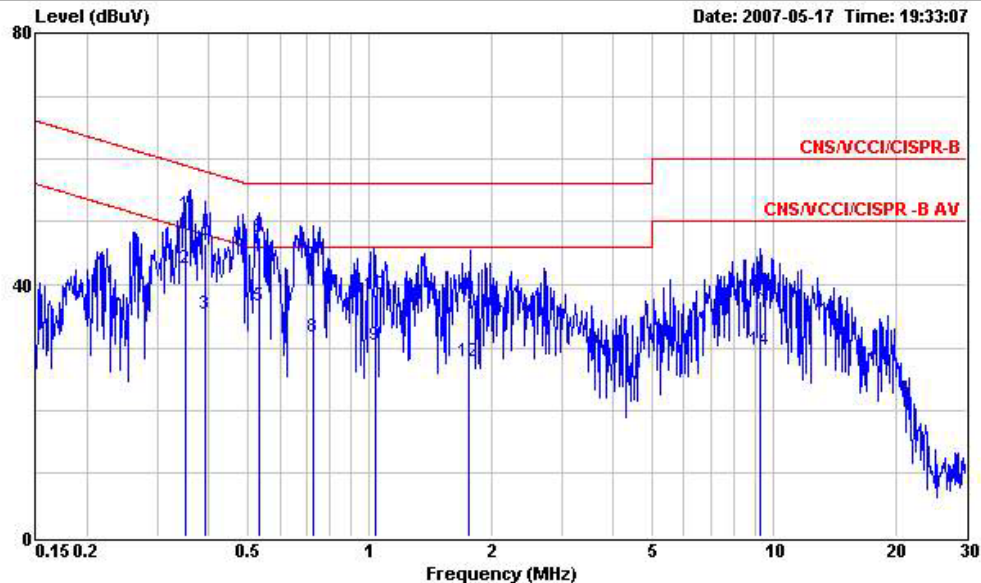
Site : C001-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
 EUT : PDA PHONE
 Power : 120V/60Hz
 Model : FD750805
 Memo : PCS1900 IDLE+BT IDLE+H PATTERN
 Memo : +USB LINK+EARPHONE+ADAPTOR1
 SAMPLE : A

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.313	49.18	-10.71	59.89	49.05	0.10	0.03	QP
2	0.313	38.14	-21.75	59.89	38.01	0.10	0.03	Average
3	0.395	41.57	-16.39	57.96	41.45	0.10	0.02	Average
4	0.395	49.02	-8.94	57.96	48.90	0.10	0.02	QP
5	0.567	45.19	-10.81	56.00	45.05	0.10	0.04	QP
6	0.567	35.79	-20.21	56.00	35.65	0.10	0.04	Average
7	0.788	40.72	-15.28	56.00	40.57	0.10	0.05	QP
8	0.788	30.21	-25.79	56.00	30.06	0.10	0.05	Average
9	1.450	35.62	-20.38	56.00	35.44	0.10	0.08	QP
10	1.450	28.58	-27.42	56.00	28.40	0.10	0.08	Average
11	2.090	40.53	-15.47	56.00	40.33	0.10	0.10	QP
12	2.090	29.70	-26.30	56.00	29.50	0.10	0.10	Average
13	4.820	36.05	-19.95	56.00	35.76	0.12	0.17	QP
14	4.820	25.83	-30.17	56.00	25.54	0.12	0.17	Average
15	9.400	42.09	-17.91	60.00	41.68	0.19	0.22	QP
16	9.400	31.66	-28.34	60.00	31.25	0.19	0.22	Average

5.8.6 Test Data Test Mode 4

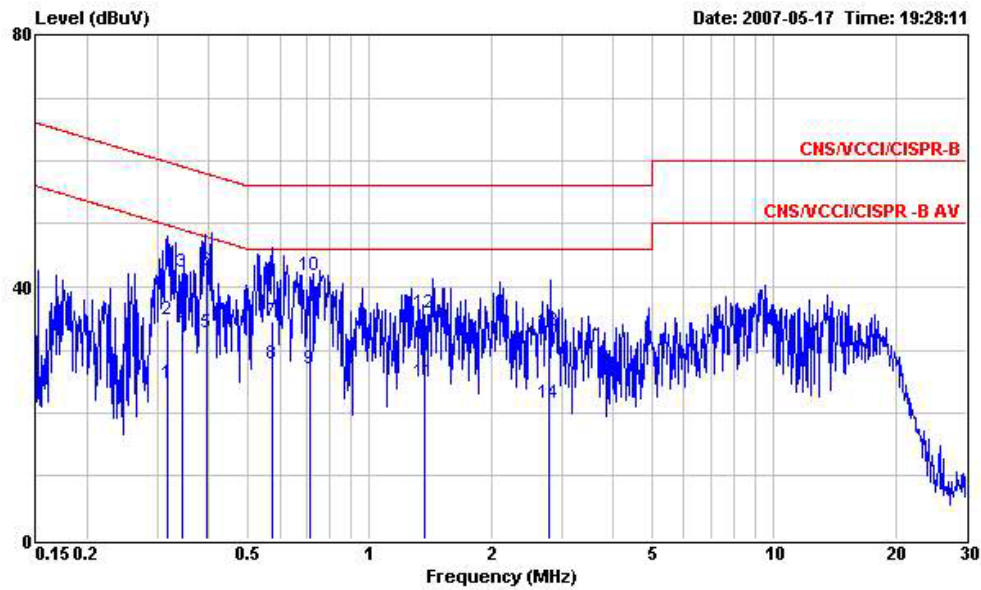
- Temperature: 27°C
- Relative Humidity: 58%
- Test Engineer : James

■ 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 : FD750805
Memo : GSM850 IDLE+BT IDLE+H PATTERN
Memo : +USB LINK+EARPHONE+ADAPTOR1
SAMPLE : B

	Freq	Level	Over	Limit	Read	Probe	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.352	51.28	-7.65	58.93	51.15	0.10	0.03	QP
2	0.352	42.51	-6.42	48.93	42.38	0.10	0.03	Average
3	0.393	35.37	-12.63	48.00	35.25	0.10	0.02	Average
4	0.393	46.62	-11.38	58.00	46.50	0.10	0.02	QP
5	0.535	36.74	-9.26	46.00	36.61	0.10	0.03	Average
6	0.535	47.64	-8.36	56.00	47.51	0.10	0.03	QP
7	0.727	43.03	-12.97	56.00	42.88	0.10	0.05	QP
8	0.727	31.63	-14.37	46.00	31.48	0.10	0.05	Average
9	1.030	30.29	-15.71	46.00	30.13	0.10	0.06	Average
10	1.030	38.47	-17.53	56.00	38.31	0.10	0.06	QP
11	1.753	37.59	-18.41	56.00	37.40	0.10	0.09	QP
12	1.753	27.89	-18.11	46.00	27.70	0.10	0.09	Average
13	9.300	37.45	-22.55	60.00	36.94	0.29	0.22	QP
14	9.300	29.63	-20.37	50.00	29.12	0.29	0.22	Average



Site : CO01-HY
 Condition : CNS/VCCI/CISPR-B 2001/004 200604 NEUTRAL
 EUT : PDA PHONE
 Power : 120V/60Hz
 Model : FT0750805
 Memo : GSM850 IDLE+BT IDLE+H PATTERN
 Memo : +USB LINK+EARPHONE+ADAPTOR1
 SAMPLE : B

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.315	24.61	-35.23	59.84	24.48	0.10	0.03	Average
2	0.315	34.71	-25.13	59.84	34.58	0.10	0.03	QP
3	0.344	42.34	-16.78	59.12	42.21	0.10	0.03	QP
4	0.344	33.67	-25.45	59.12	33.54	0.10	0.03	Average
5	0.395	32.68	-25.29	57.97	32.56	0.10	0.02	Average
6	0.395	42.57	-15.40	57.97	42.45	0.10	0.02	QP
7	0.573	34.61	-21.39	56.00	34.47	0.10	0.04	QP
8	0.573	27.69	-28.31	56.00	27.55	0.10	0.04	Average
9	0.713	27.02	-28.98	56.00	26.87	0.10	0.05	Average
10	0.713	41.76	-14.24	56.00	41.61	0.10	0.05	QP
11	1.368	25.03	-30.97	56.00	24.85	0.10	0.08	Average
12	1.368	35.84	-20.16	56.00	35.66	0.10	0.08	QP
13	2.790	33.08	-22.92	56.00	32.85	0.10	0.13	QP
14	2.790	21.56	-34.44	56.00	21.33	0.10	0.13	Average



5.9 Radiated Emission Measurement

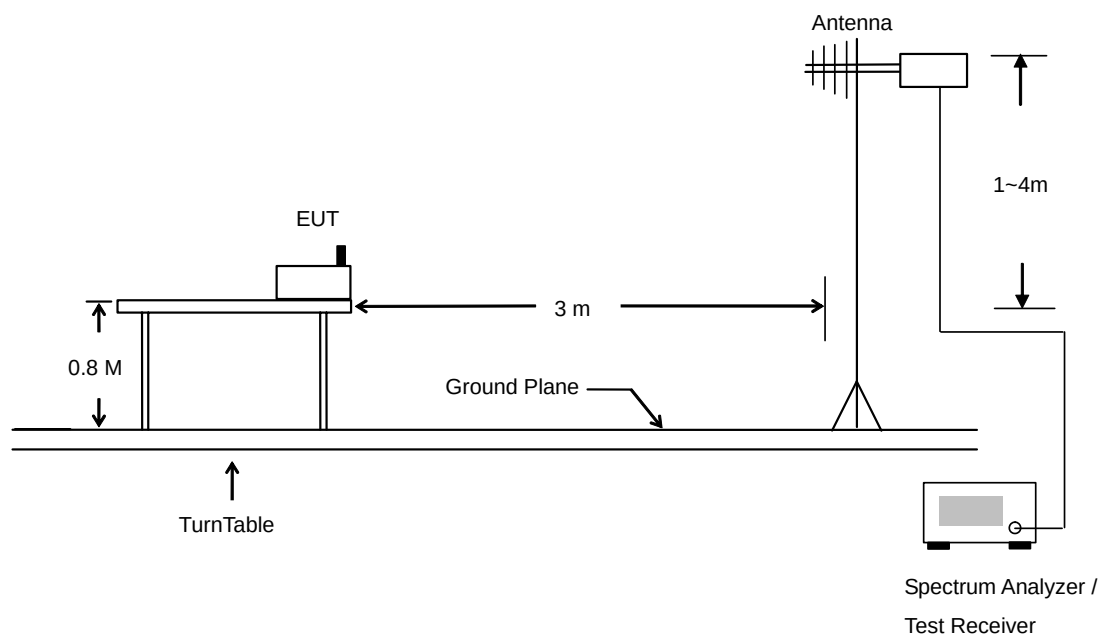
5.9.1 Measuring Instruments

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

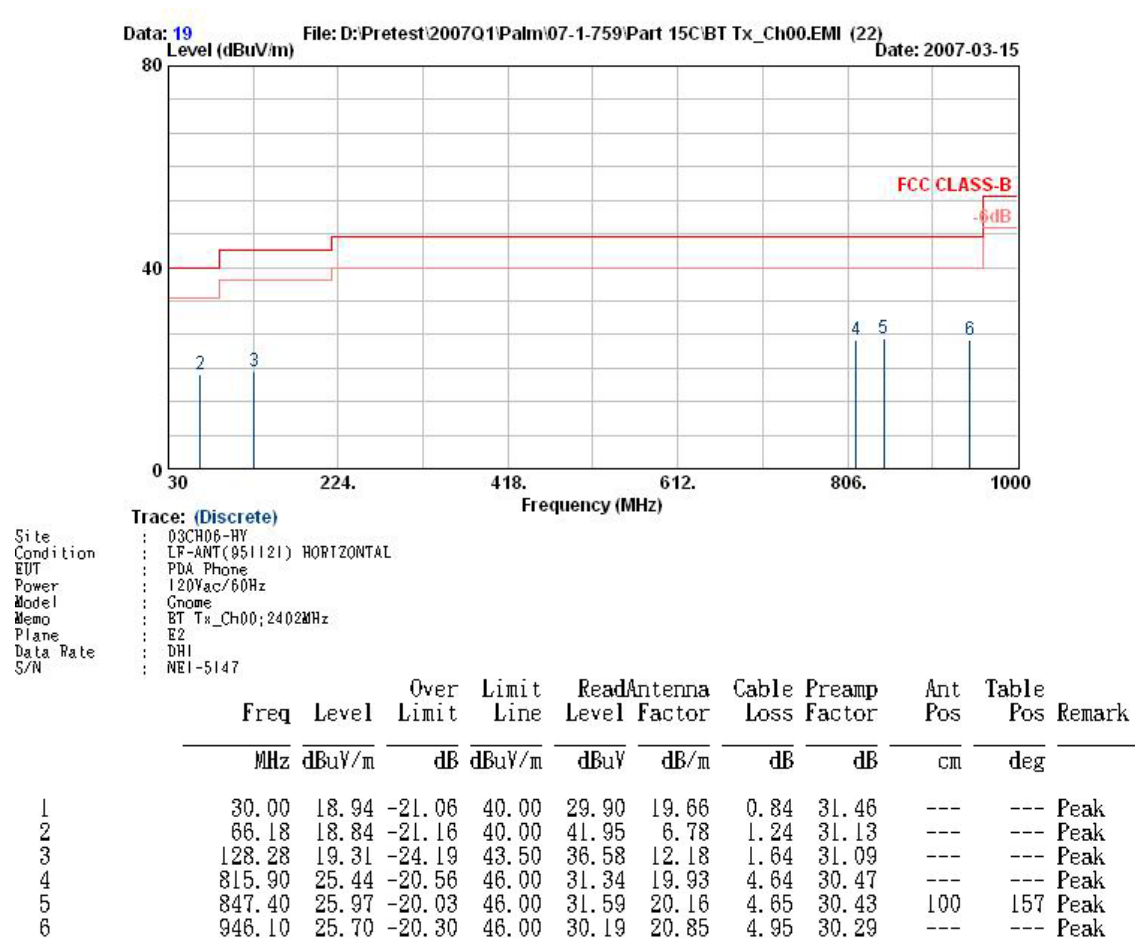


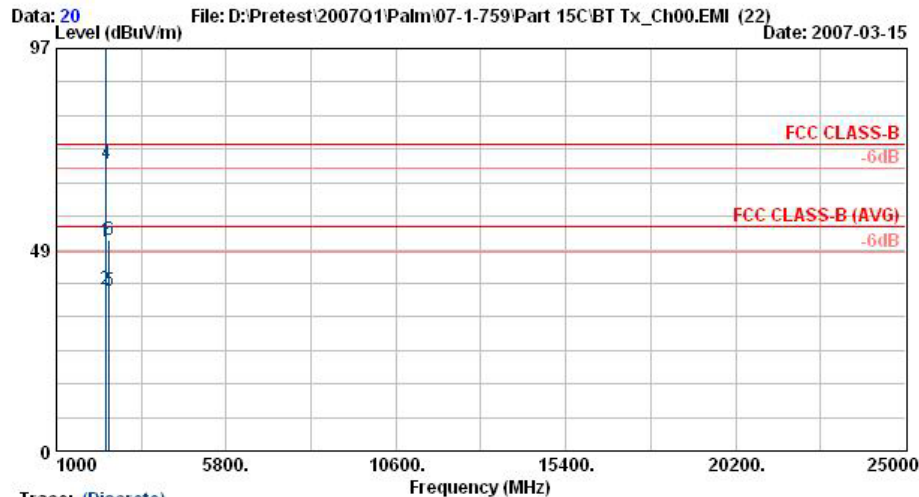


5.9.4 Test Data

- Temperature : 26°C
- Relating 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-HY
Condition : HF-ANT-060410 HORIZONTAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : Gnome
Memo : BT Tx_Ch00; 2402MHz
Plane : E2
Data Rate : DHI
S/N : NE1-5147

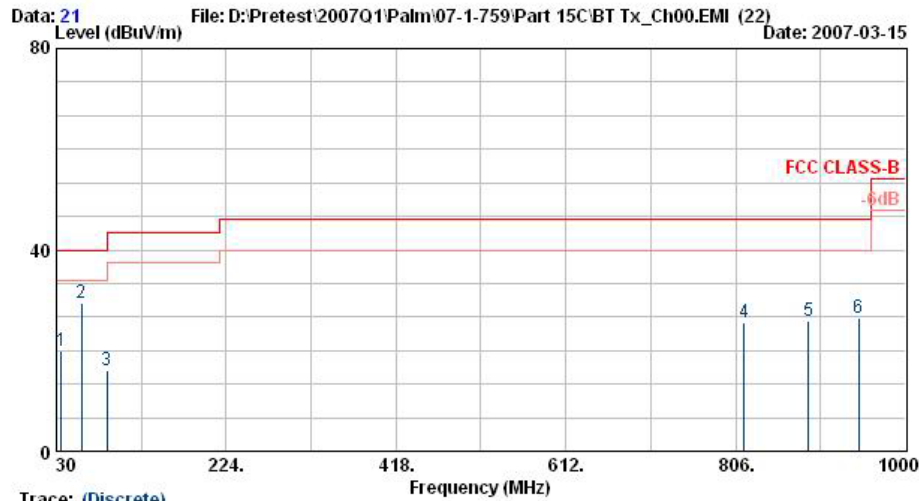
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2384.72	50.52	-23.48	74.00	51.96	30.25	3.75	35.44	100	0	Peak
2	2384.72	39.04	-14.96	54.00	40.48	30.25	3.75	35.44	100	4	Average
3 @	2402.00	97.12	--	--	98.55	30.26	3.77	35.46	100	0	Peak
4 @	2402.00	69.14	--	--	70.57	30.26	3.77	35.46	100	4	Average
5	2494.00	38.73	-15.27	54.00	40.08	30.30	3.88	35.53	100	4	Average
6	2494.00	50.77	-23.23	74.00	52.12	30.30	3.88	35.53	100	0	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

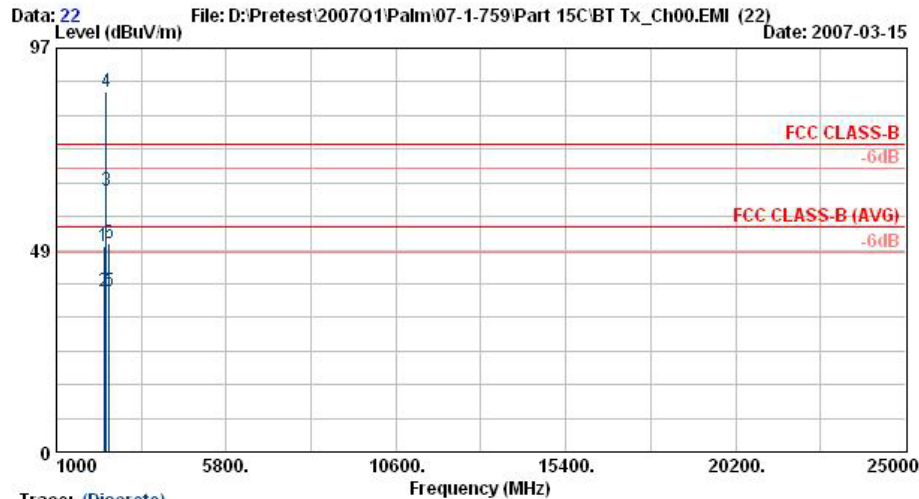
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-ANT(951121) VERTICAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : Gnome
Memo : BT Tx_Ch00;2402MHz
Plane : E2
Data Rate : DHI
S/N : NE1-5147

	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	35.94	20.01	-19.99	40.00	34.79	15.61	0.89	31.27	---	---
2	58.89	29.55	-10.45	40.00	52.91	6.77	1.11	31.23	100	23
3	87.78	16.15	-23.85	40.00	37.22	8.73	1.32	31.12	---	---
4	815.90	25.48	-20.52	46.00	31.39	19.93	4.64	30.47	---	---
5	889.40	25.90	-20.10	46.00	31.04	20.45	4.78	30.38	---	---
6	946.80	26.52	-19.48	46.00	30.99	20.86	4.95	30.29	---	---



Trace: (Discrete)

Site : 03CH06-HV
Condition : HF-ANT-060410 VERTICAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : Cnomo
Memo : BT Tx_Ch00;2402MHz
Plane : E2
Data Rate : DHI
S/N : NEI-5147

	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	2339.92	49.41	-24.59	74.00	50.88	30.24	3.71	35.42	100	0 Peak
2	2339.92	38.57	-15.43	54.00	40.05	30.24	3.71	35.42	100	211 Average
3 X	2402.00	62.81			64.24	30.26	3.77	35.46	100	211 Average
4 @	2402.00	86.66			88.08	30.26	3.77	35.46	100	0 Peak
5	2494.00	38.71	-15.29	54.00	40.06	30.30	3.88	35.53	100	211 Average
6	2494.00	50.15	-23.85	74.00	51.50	30.30	3.88	35.53	100	0 Peak

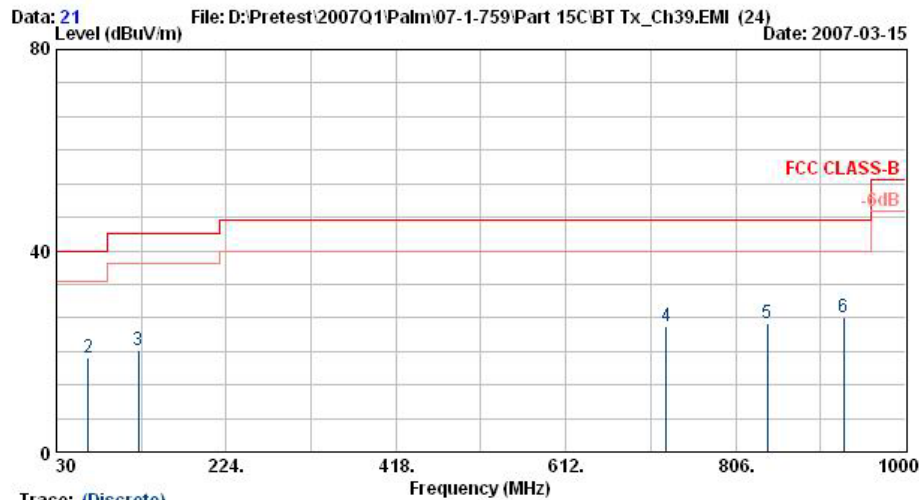
Remark: #3 and #4 Fundamental Signal

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



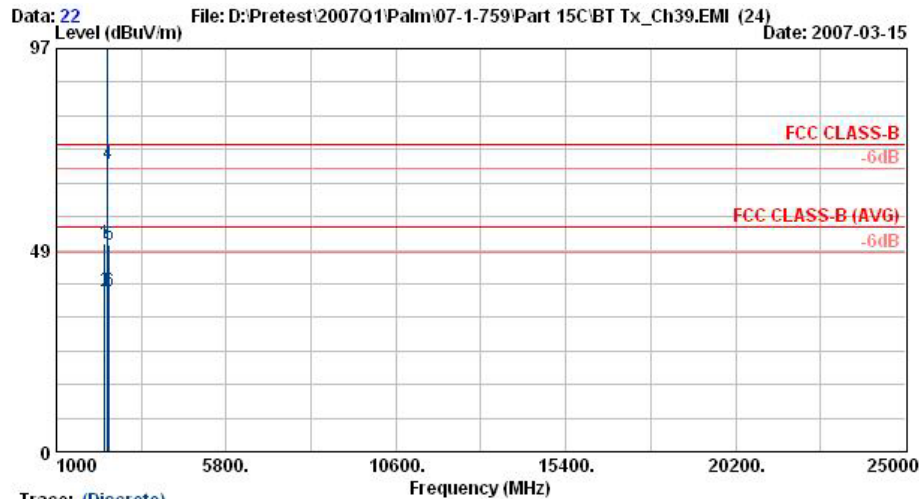
- Test Mode : Mode 2
- Polarization : Horizontal

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



Site : 03CH06-HV
Condition : LF-ANT(951121) HORIZONTAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : Gnome
Memo : BT Tx_Ch39; 2441MHz
Plane : E2
Data Rate : DHI
S/N : NEI-5147

	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	30.00	18.93	-21.07	40.00	29.89	19.66	0.84	31.46	---	---	Peak
2	66.18	18.85	-21.15	40.00	41.96	6.78	1.24	31.13	---	---	Peak
3	123.69	20.25	-23.25	43.50	37.05	12.64	1.64	31.08	---	---	Peak
4	726.30	24.85	-21.15	46.00	31.96	19.13	4.31	30.56	---	---	Peak
5	841.80	25.53	-20.47	46.00	31.21	20.12	4.65	30.44	---	---	Peak
6 @	929.30	26.63	-19.37	46.00	31.31	20.74	4.90	30.32	100	177	Peak



Site : 03CH06-RV
Condition : SHF-EHF HORN HORIZONTAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : Gnome
Memo : BT Tx_Ch39; 2441MHz
Plane : E2
Data Rate : DHI
S/N : NEI-5147

	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	2364.00	50.28	-23.72	74.00	51.72	30.24	3.73	35.42	100	0 Peak
2 @	2364.00	38.72	-15.28	54.00	40.17	30.24	3.73	35.42	100	9 Average
3 @	2441.00	97.34			98.72	30.28	3.82	35.47	100	0 Peak
4 @	2441.00	69.06			70.46	30.28	3.82	35.49	100	9 Average
5	2494.00	49.87	-24.13	74.00	51.22	30.30	3.88	35.53	100	0 Peak
6 @	2494.00	38.76	-15.24	54.00	40.11	30.30	3.88	35.53	100	9 Average

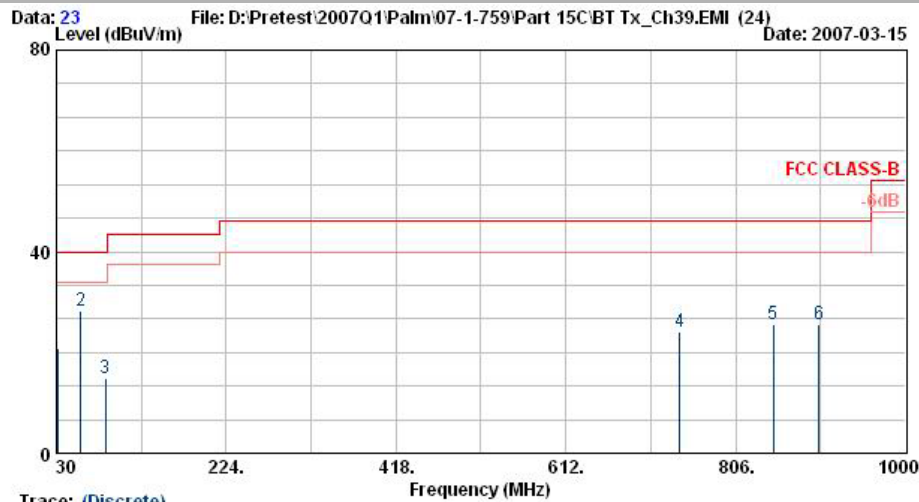
Remark: #5 and #6 Fundamental Signal

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-RY

Condition : LF-ANT(951121) VERTICAL

EUT : PDA Phone

Power : 120Vac/60Hz

Model : Gnome

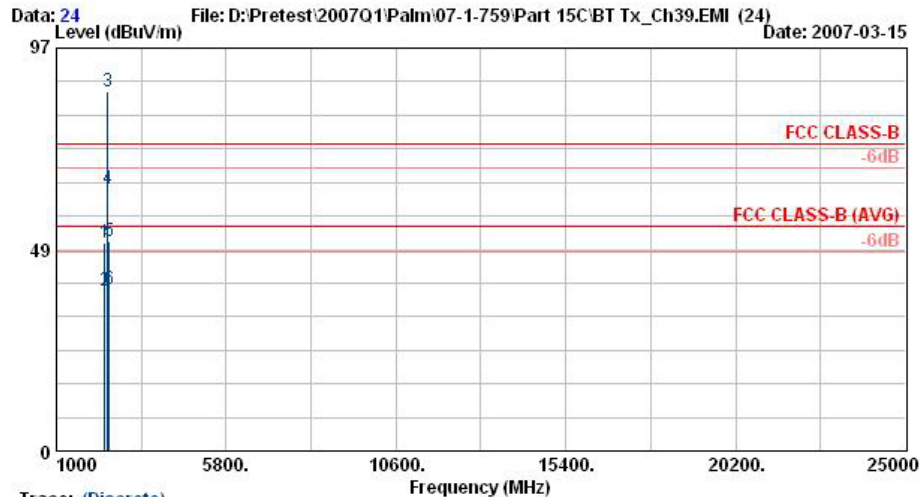
Memo : BT Tx_Ch39; 2441MHz

Plane : E2

Data Rate : DHI

S/N : NEI-5147

	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 @	31.08	20.70	-19.30	40.00	32.33	18.95	0.85	31.43	---	---
2 @	57.54	28.15	-11.85	40.00	51.20	7.06	1.07	31.18	100	85
3	86.43	14.93	-25.07	40.00	36.29	8.43	1.32	31.11	---	---
4	742.40	24.16	-21.84	46.00	31.07	19.28	4.35	30.54	---	---
5	848.80	25.49	-20.51	46.00	31.11	20.16	4.65	30.43	---	---
6	901.30	25.65	-20.35	46.00	30.66	20.54	4.82	30.37	---	---



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN VERTICAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : Cnomo
Memo : BT Tx_Ch39; 2441MHz
Plane : E2
Data Rate : DHI
S/N : NEI-5147

	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	2374.00	50.06	-23.94	74.00	51.52	30.25	3.73	35.44	100	0	Peak
2 @	2374.00	38.49	-15.51	54.00	39.95	30.25	3.73	35.44	100	340	Average
3 @	2441.00	86.44			87.82	30.28	3.82	35.47	100	0	Peak
4 @	2441.00	63.17			64.57	30.28	3.82	35.49	100	340	Average
5	2494.00	50.31	-23.69	74.00	51.66	30.30	3.88	35.53	100	0	Peak
6 @	2494.00	38.77	-15.23	54.00	40.12	30.30	3.88	35.53	100	340	Average

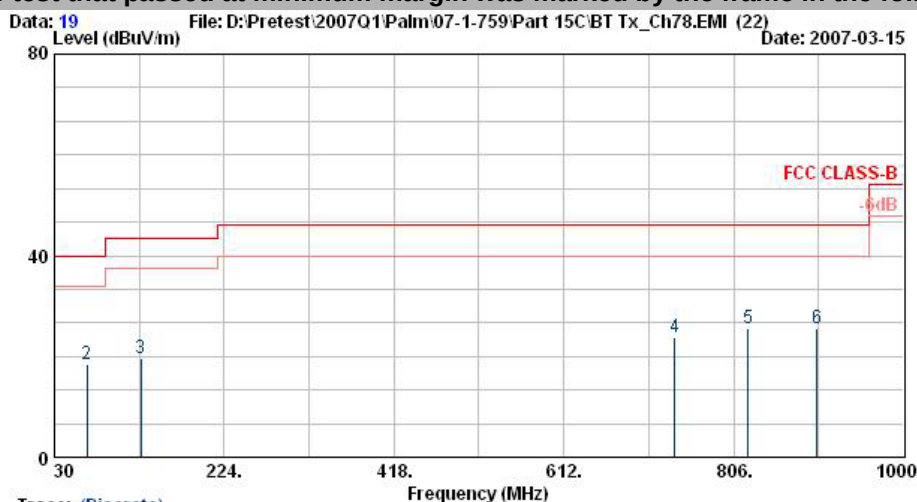
Remark: #3 and #4 Fundamental Signal

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



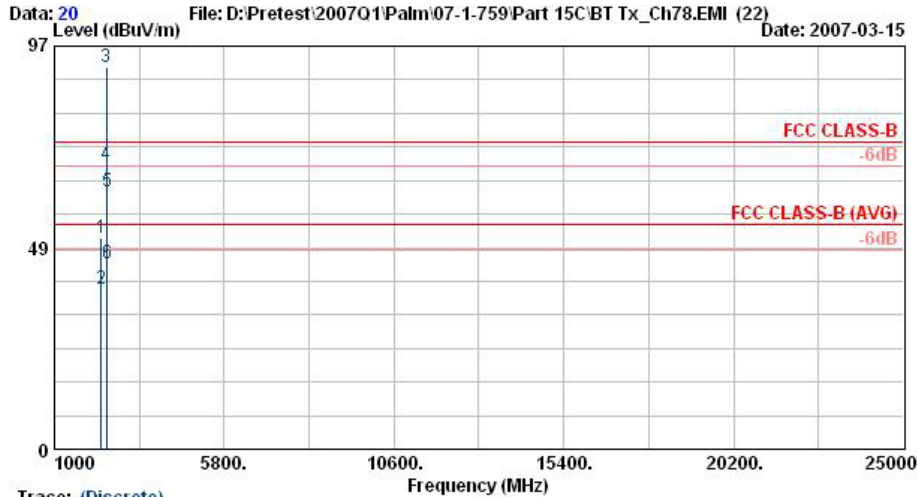
- Test Mode : Mode 3
- Polarization : Horizontal

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



Site : 03CH06-HY
 Condition : LF-ANT(951121) HORIZONTAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : Gnome
 Memo : BT Tx_Ch78; 2480MHz
 Plane : E2
 Data Rate : DHI
 S/N : NEI-5147

	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	30.00	18.74	-21.26	40.00	29.70	19.66	0.84	31.46	---	---	Peak
2	67.53	18.29	-21.71	40.00	41.33	6.84	1.28	31.15	---	---	Peak
3	129.09	19.76	-23.74	43.50	37.19	12.02	1.64	31.09	---	---	Peak
4	738.90	23.84	-22.16	46.00	30.78	19.25	4.34	30.54	---	---	Peak
5	822.90	25.64	-20.36	46.00	31.48	19.98	4.64	30.46	---	---	Peak
6 @	901.30	25.69	-20.31	46.00	30.69	20.54	4.82	30.37	100	85	Peak



Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-ANT-060410 HORIZONTAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : Gnome
 Memo : BT Tx_Ch78; 2480MHz
 Plane : E2
 Data Rate : DHI
 S/N : NEI-5147

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Factor	Preamp Loss	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	cm	deg	
1	2328.00	50.99	-23.01	74.00	52.48	30.23	3.69	35.40	100	0 Peak
2 @	2328.00	38.62	-15.38	54.00	40.11	30.23	3.69	35.40	100	9 Average
3 @	2480.00	91.79			93.15	30.29	3.86	35.51	100	0 Peak
4 @	2480.00	68.36			69.72	30.29	3.86	35.51	100	9 Average
5 @	2483.53	61.98	-12.02	74.00	63.34	30.29	3.86	35.51	100	0 Peak
6 @	2483.53	44.73	-9.27	54.00	46.09	30.29	3.86	35.51	100	9 Average

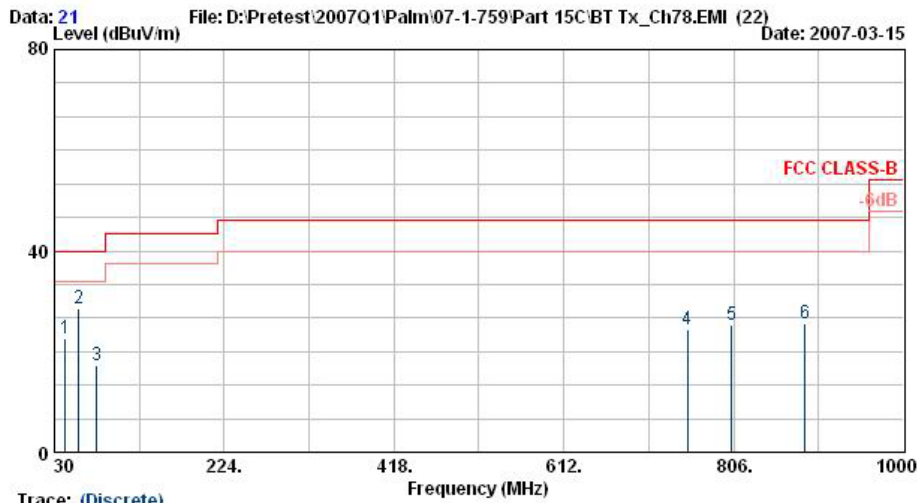
Remark: #5 and #6 Fundamental Signal

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



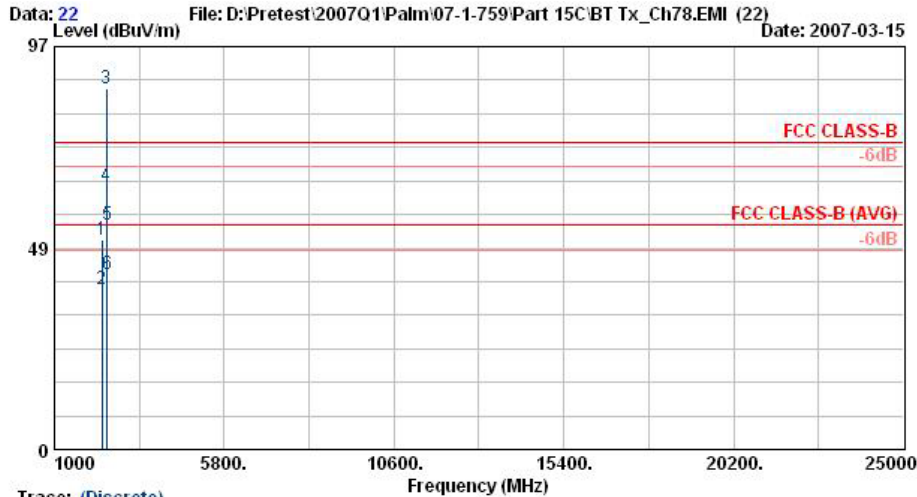
- Test Mode : Mode 3
- Polarization : Vertical

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



Site : 03CH06-HV
 Condition : LF-ANT(951121) VERTICAL
 EUT : PDA Phone
 Power : 120Vac/60Hz
 Model : Cnomo
 Memo : BT Tx_Ch78; 2480MHz
 Plane : E2
 Data Rate : DHI
 S/N : NEI-5147

	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 @	42.69	22.69	-17.31	40.00	40.91	12.02	0.93	31.16	---	Peak
2 @	58.08	28.62	-11.38	40.00	51.83	6.91	1.09	31.21	100	Peak
3	78.33	17.12	-22.88	40.00	39.51	7.41	1.31	31.10	---	Peak
4	752.90	24.30	-21.70	46.00	31.06	19.38	4.39	30.53	---	Peak
5	803.30	25.37	-20.63	46.00	31.39	19.84	4.63	30.49	---	Peak
6	887.30	25.65	-20.35	46.00	30.81	20.44	4.78	30.39	---	Peak



Site : 03CH06-RV
Condition : HF-ANT-060410 VERTICAL
EUT : PDA Phone
Power : 120Vac/60Hz
Model : Gnome
Memo : BT Tx_Ch78; 2480MHz
Plane : E2
Data Rate : DHI
S/N : NEI-5147

	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	2344.00	50.31	-23.69	74.00	51.78	30.24	3.71	35.42	100	0	Peak
2 @	2344.00	38.72	-15.28	54.00	40.20	30.24	3.71	35.42	100	337	Average
3 @	2480.00	86.80			88.16	30.29	3.86	35.51	100	0	Peak
4 @	2480.00	63.58			64.94	30.29	3.86	35.51	100	337	Average
5 @	2483.50	53.93	-20.07	74.00	55.29	30.29	3.86	35.51	100	0	Peak
6 @	2483.50	42.14	-11.86	54.00	43.50	30.29	3.86	35.51	100	337	Average

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				