

FCC TEST REPORT

for

47 CFR Part 15 Subpart C

Equipment : Neo 1973
Trade Name : FIC
Model No. : GTA01BV4
FCC ID : EUNGTA01BV4
Filing Type : Certification
Applicant : FIC (First International Computer, Inc.)
No. 300, Yang Guang, NeiHu, Taipei, Taiwan, 114

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- The data shown in this test report were carried out on Jun. 15, 2007 at **Sporton International Inc. LAB.**
- Report No.: FR721310, Report Version: Rev. 01.



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Rev. 01



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History of this test report

Report Issue Date: Jun. 29, 2007

Report No.	Description



1. General Description of Equipment under Test

1.1. Applicant

FIC (First International Computer, Inc.)

No. 300, Yang Guang, NeiHu, Taipei, Taiwan, 114

1.2. Manufacturer

FIC (First International Computer, Inc.)

No. 300, Yang Guang, NeiHu, Taipei, Taiwan, 114

1.3. Basic Description of Equipment under Test

Equipment : Neo 1973
Trade Name : FIC
Model No. : GTA01BV4
FCC ID : EUNGTA01BV4
Power Supply Type : Switching
AC Power code : AC120V, Wall-mount, 1.6 meter, 2 pin
Adapter : SEMDICAR, TC-FU-USB
Battery : FIC, GTC-01 / GTA-01
Earphone : SEMDITECH, HP-GTA01-MP3JS-G

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)	1.85 dBm		
7. Type of Antenna Connector	N/A		
8. Antenna Type	Fixed Internal		
9. Antenna Gain	0.1 dBi		
10. Function Type	Transmitter		Transceiver V
11. DUT Stage	Production Unit		

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.

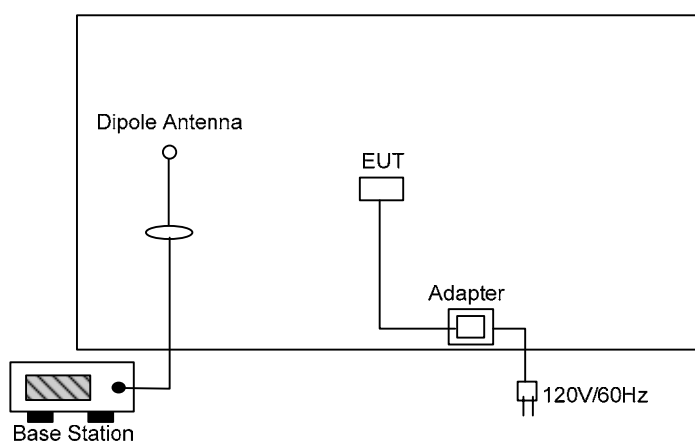
2.2. Test Mode

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: PCS Idle + BT Link + GPS Rx + MP3 + Earphone + Adapter Mode 2: PCS Idle + BT Link + GPS Rx + MP3 + Earphone + USB Link

2.3. Ancillary Equipment List

Item	Equipment	Model No.	FCC ID	Serial No.
1.	Base Station (R&S)	CMU200	N/A	N/A

2.4. Connection Diagram of Test System





3. RF Utility

The EUT is in BT Link mode with mobile phone 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

AC120V / 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

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	Description of Test	Result	Section
15.247(a)(1)	Hopping Channel Separation	Pass	5.2
15.247(a)(1)(iii)	Number of Hopping Frequency Used	Pass	5.3
15.247(a)(1)	Hopping Channel Bandwidth	Pass	5.4
15.247(a)(1)(iii)	Dwell Time of Each Frequency	Pass	5.5
15.247(b)(1)	Output Power	Pass	5.6
15.247(c)	100kHz Bandwidth of Frequency Band Edges	Pass	5.7
15.207	Conducted Emission	Pass	5.8
15.209	Radiated Emission	Pass	5.9
15.203	Antenna Requirement	Pass	5.10

5.2. Hopping Channel Separation

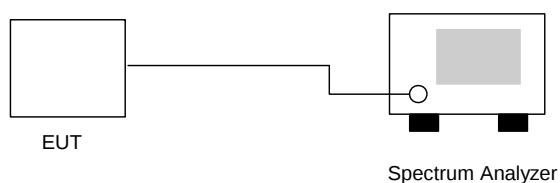
5.2.1. Measuring Instruments :

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: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : Tony

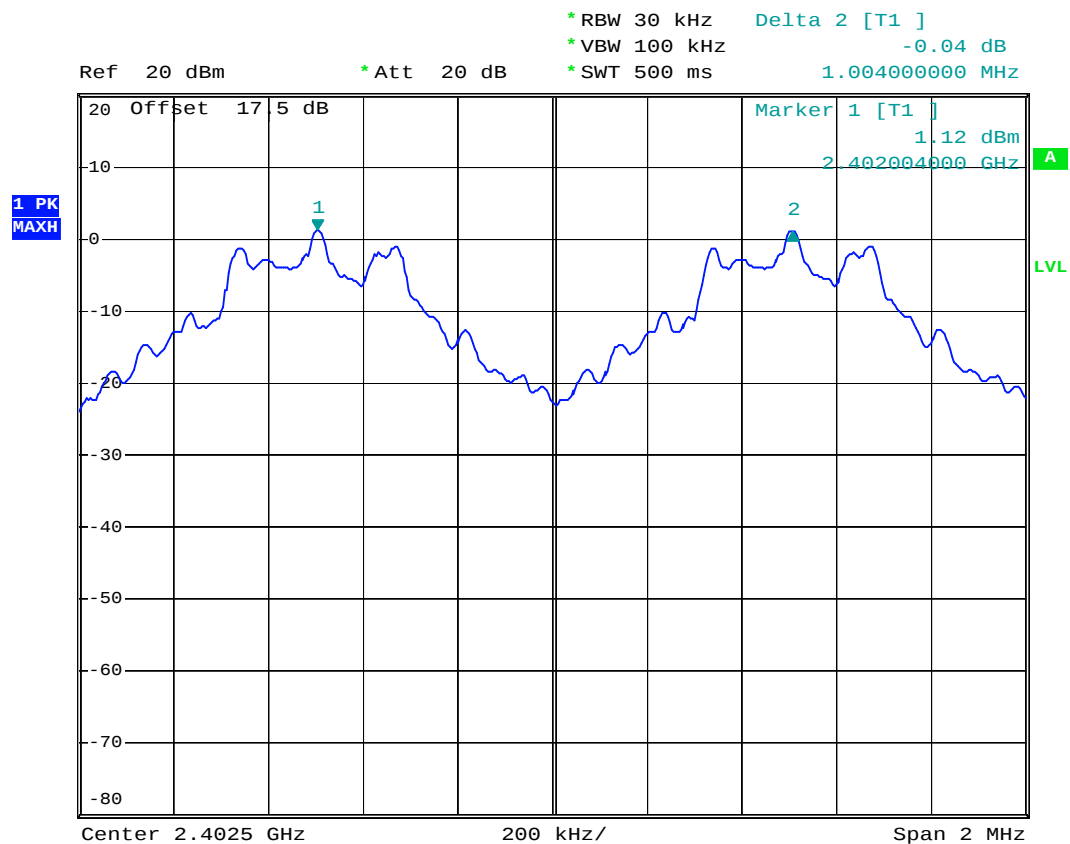
Channel	Frequency (MHz)	Hopping Channel Separation (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	1.004	0.824	Mode 1
39	2441	1.004	0.826	Mode 2
78	2480	1.004	0.824	Mode 3

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



5.2.5 Hopping Channel Separation

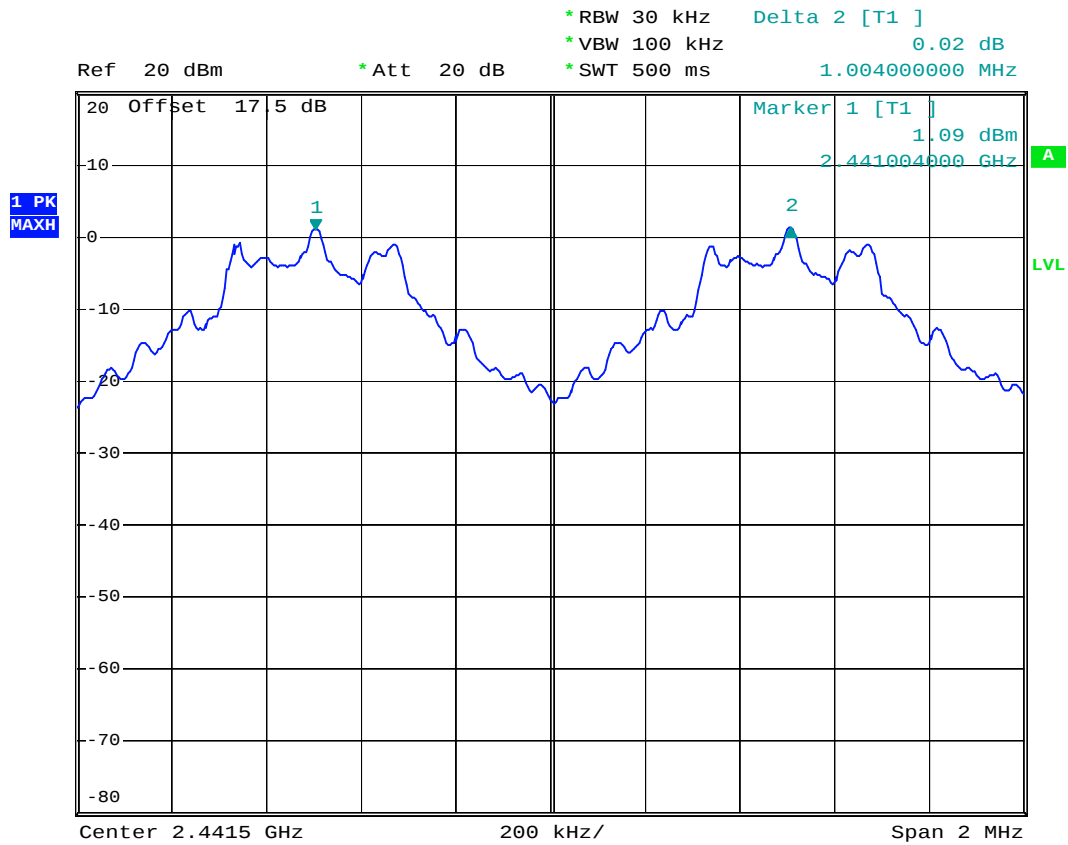
Mode 1: CH00 (2402MHz)



Date: 12.JUN.2007 12:18:39



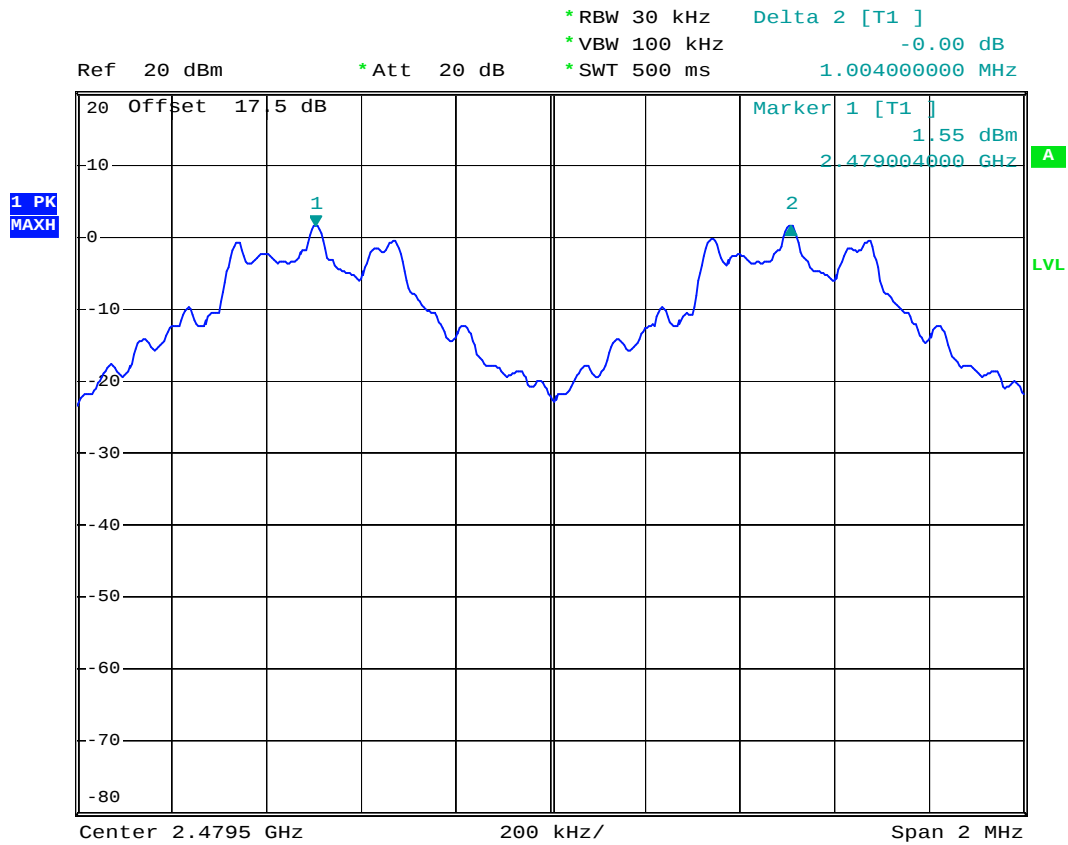
Mode 2: CH39 (2441MHz)



Date: 12.JUN.2007 12:19:24



Mode 3: CH78 (2480MHz)



Date: 12.JUN.2007 12:23:17

5.3. Number of Hopping Frequency

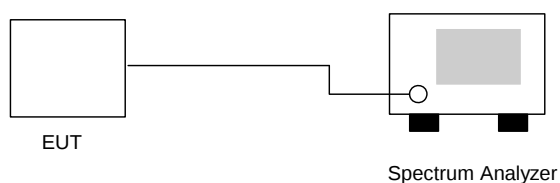
5.3.1. Measuring Instruments :

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 :



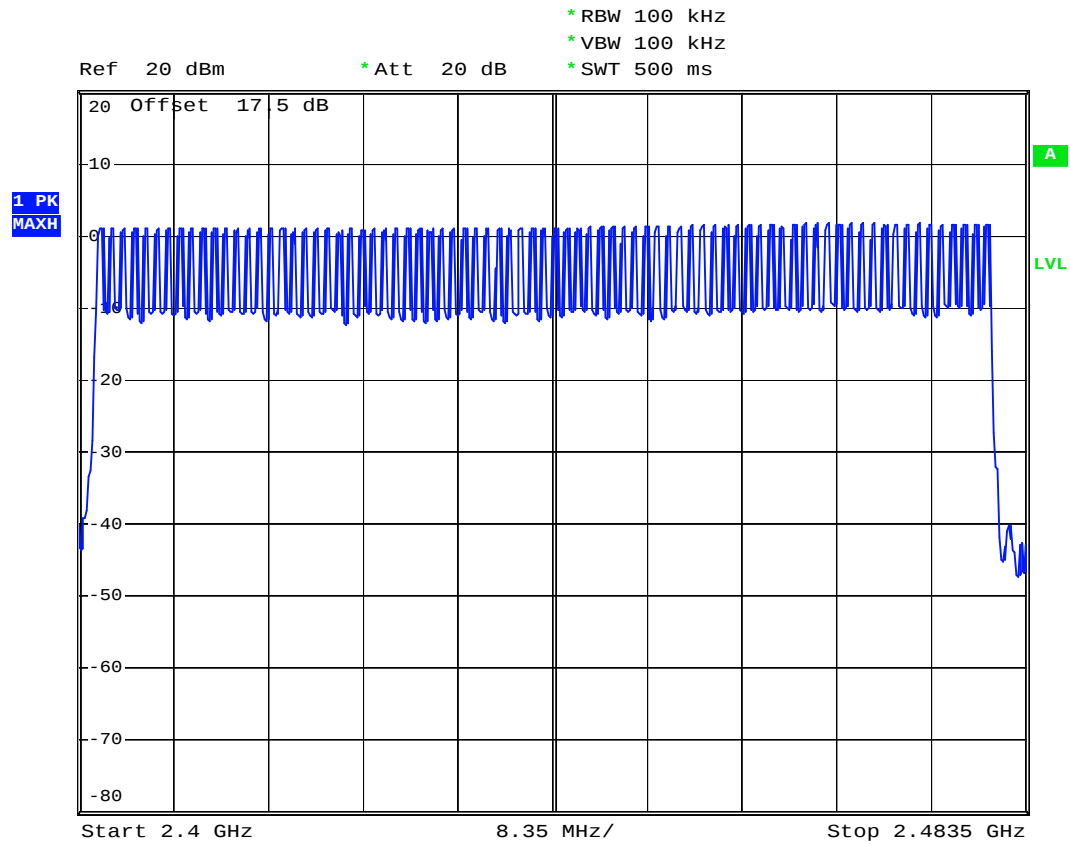
5.3.4. Test Result : See spectrum analyzer plots below

- Temperature: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : Tony

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



5.3.5 Number of Hopping Frequency



Date: 12.JUN.2007 14:32:54

5.4 Hopping Channel Bandwidth

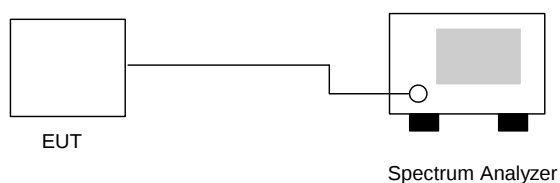
5.4.1 Measuring Instruments :

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 30 kHz and VBW to 300 kHz.
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

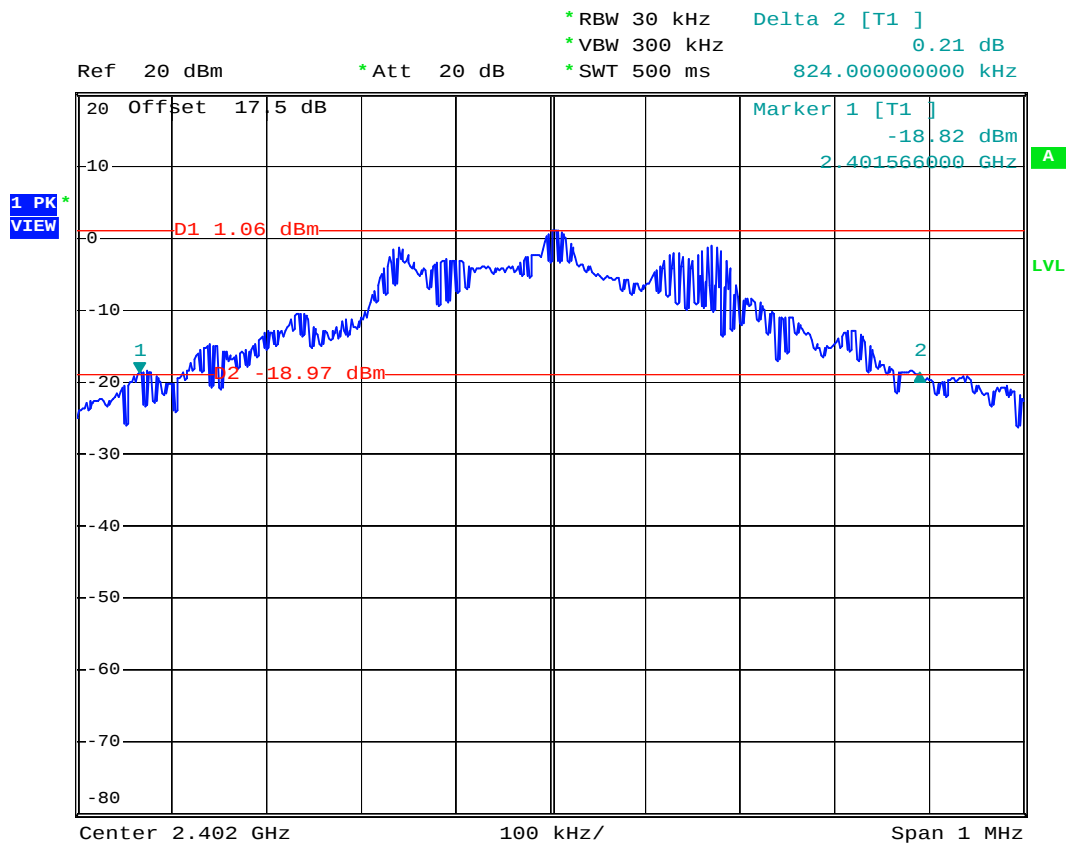
- Temperature: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : Tony

Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	0.824	1.0	Mode 1
39	2441	0.826	1.0	Mode 2
78	2480	0.824	1.0	Mode 3



5.4.5 Hopping Channel Bandwidth

Mode 1: CH00 (2402MHz)



Date: 12.JUN.2007 12:07:22



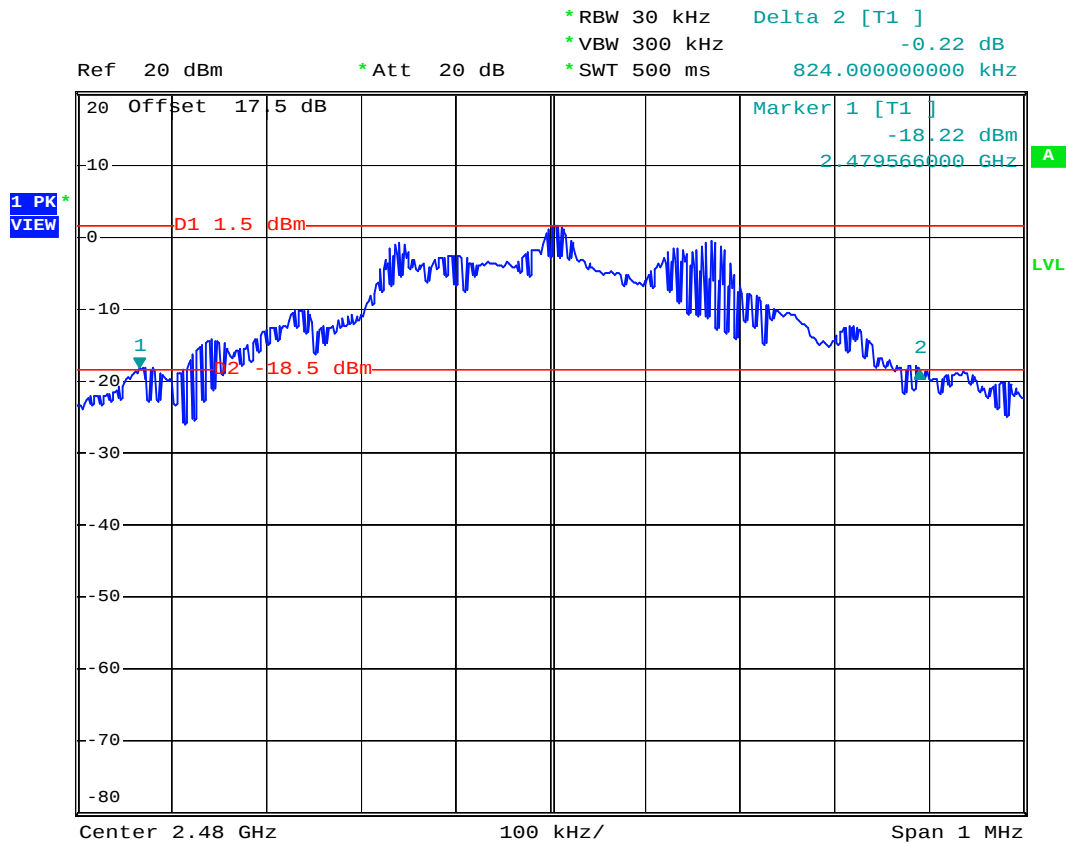
Mode 2: CH39 (2441MHz)



Date: 12.JUN.2007 12:08:13



Mode 3: CH78 (2480MHz)



Date: 12.JUN.2007 12:09:22

5.5 Dwell Time of Each Frequency within a 30 Seconds Period

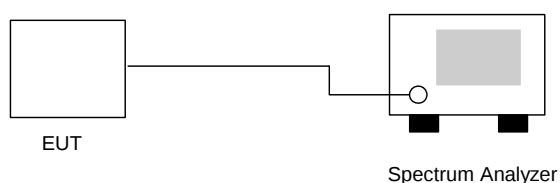
5.5.1 Measuring Instruments :

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: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : Tony

Ch00

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.2	468.00	0.136	0.4
DH3	5.2	1750.00	0.288	0.4
DH5	3.8	3060.00	0.367	0.4

**CH39**

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.4	468.00	0.139	0.4
DH3	5	1750.00	0.277	0.4
DH5	3.3	3000.00	0.313	0.4

CH78

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	9.5	460.00	0.138	0.4
DH3	5.3	1740.00	0.291	0.4
DH5	3.9	3040.00	0.375	0.4

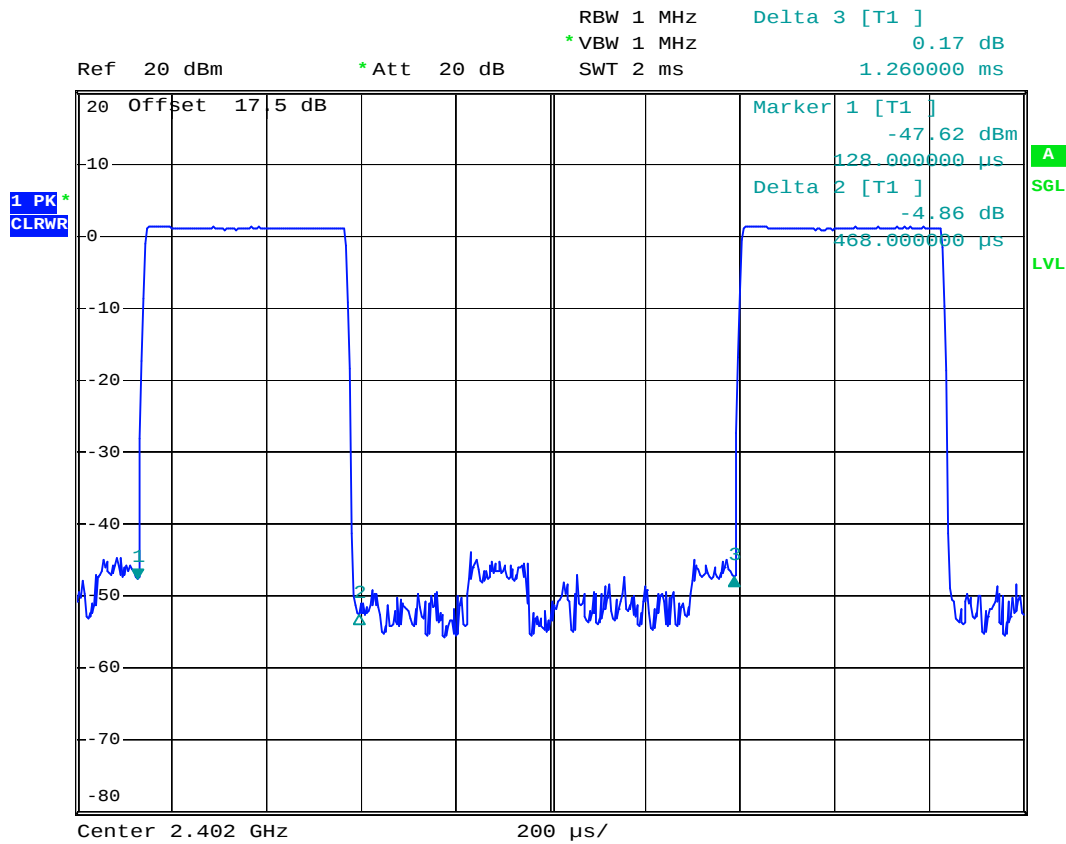
Remark:

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)

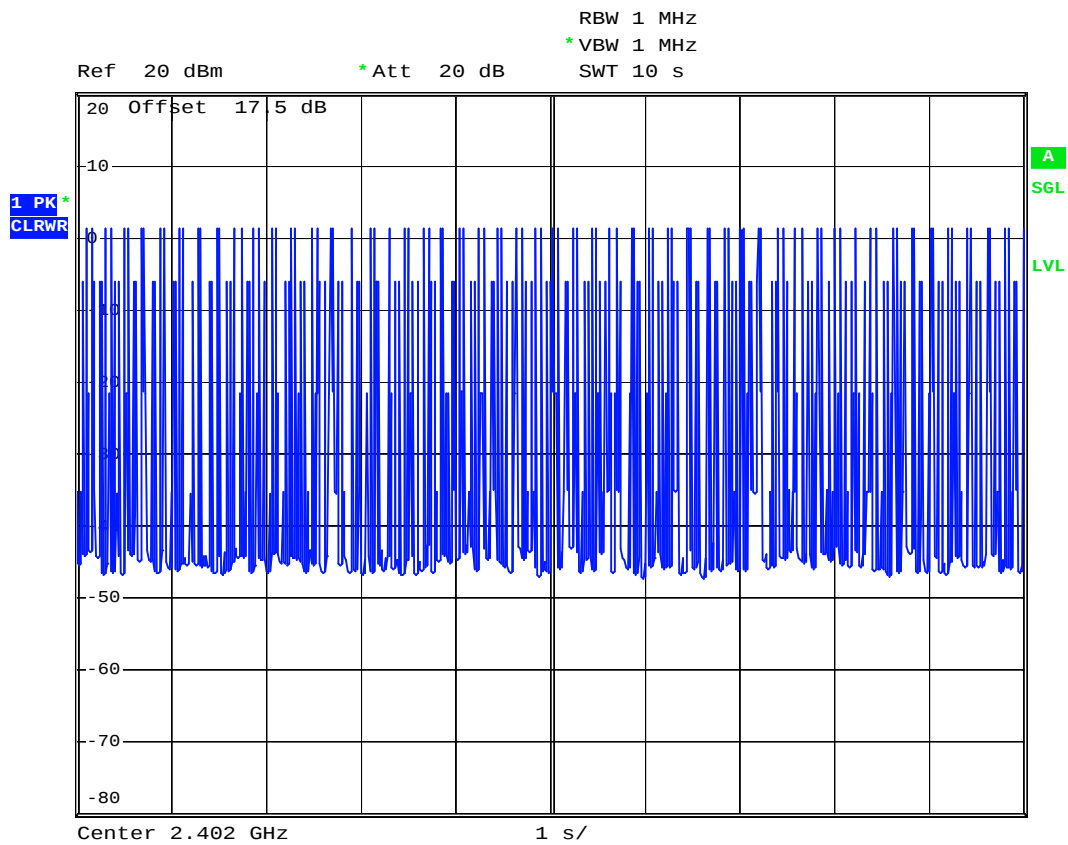


5.5.5 Dwell Time

DH1 (CH00)



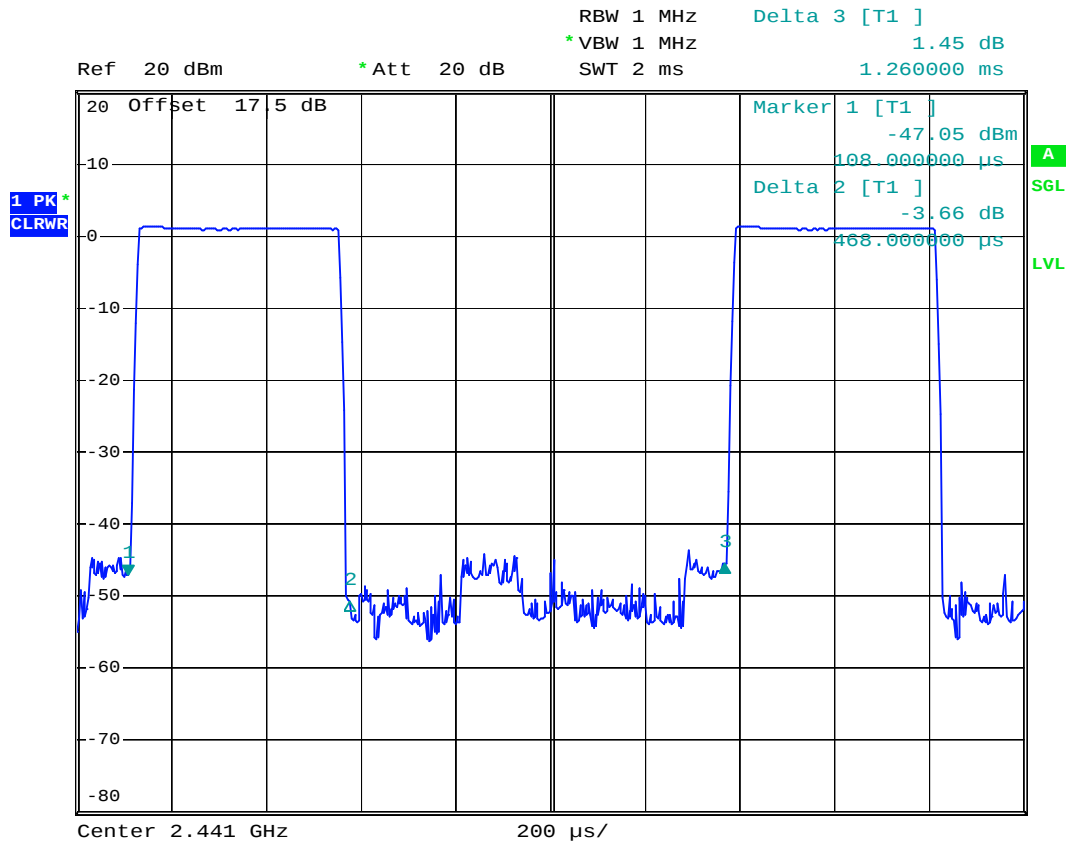
Date: 12.JUN.2007 12:24:51



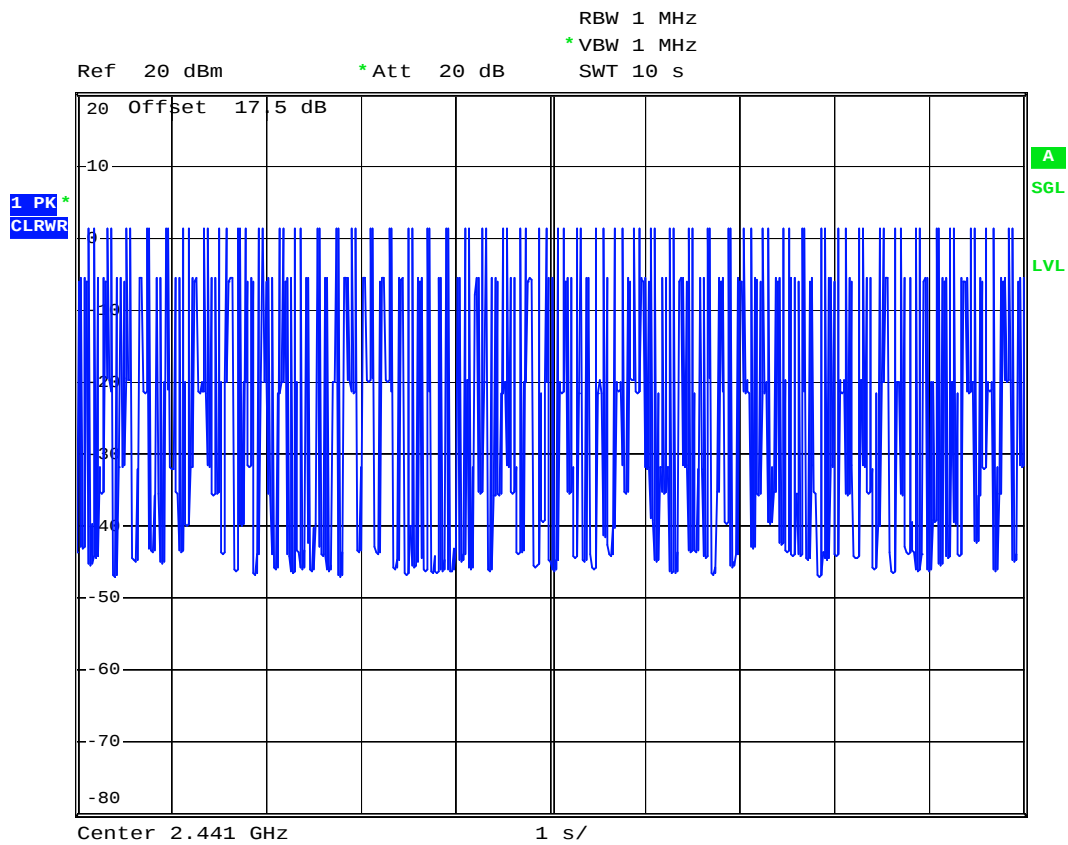
Date: 12.JUN.2007 12:37:49



DH1 (CH39)



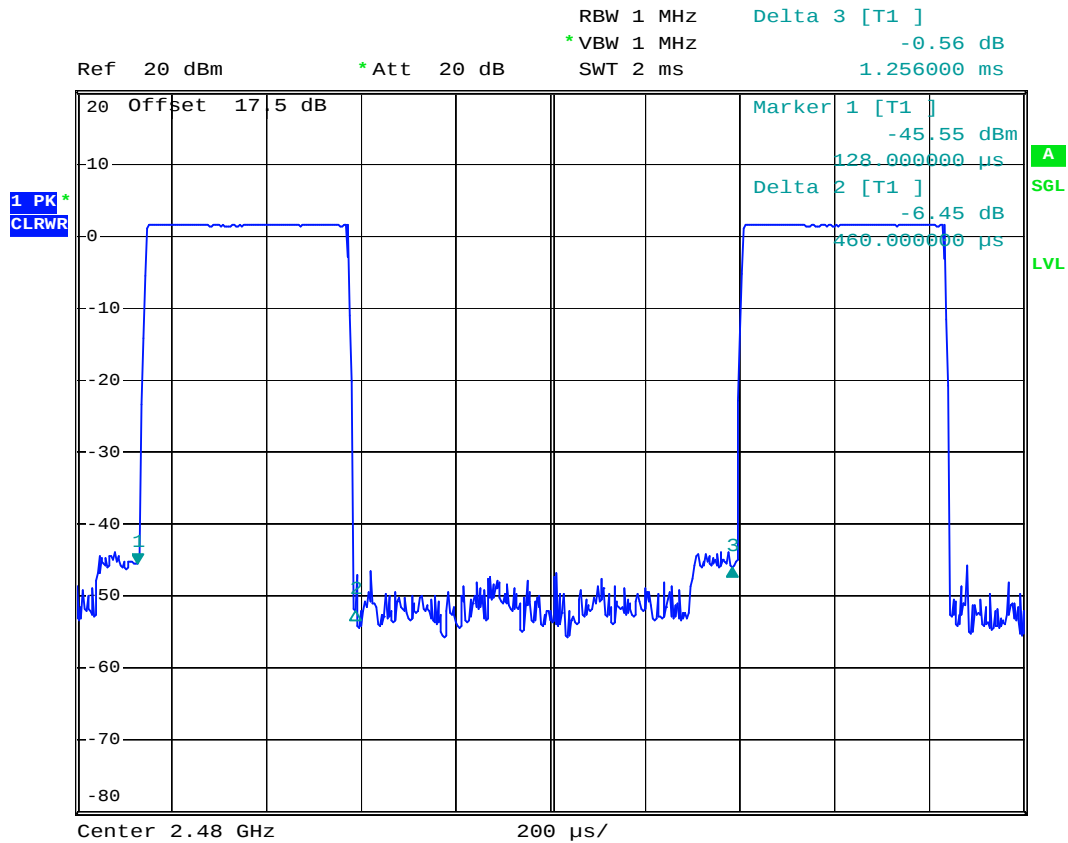
Date: 12.JUN.2007 12:27:51



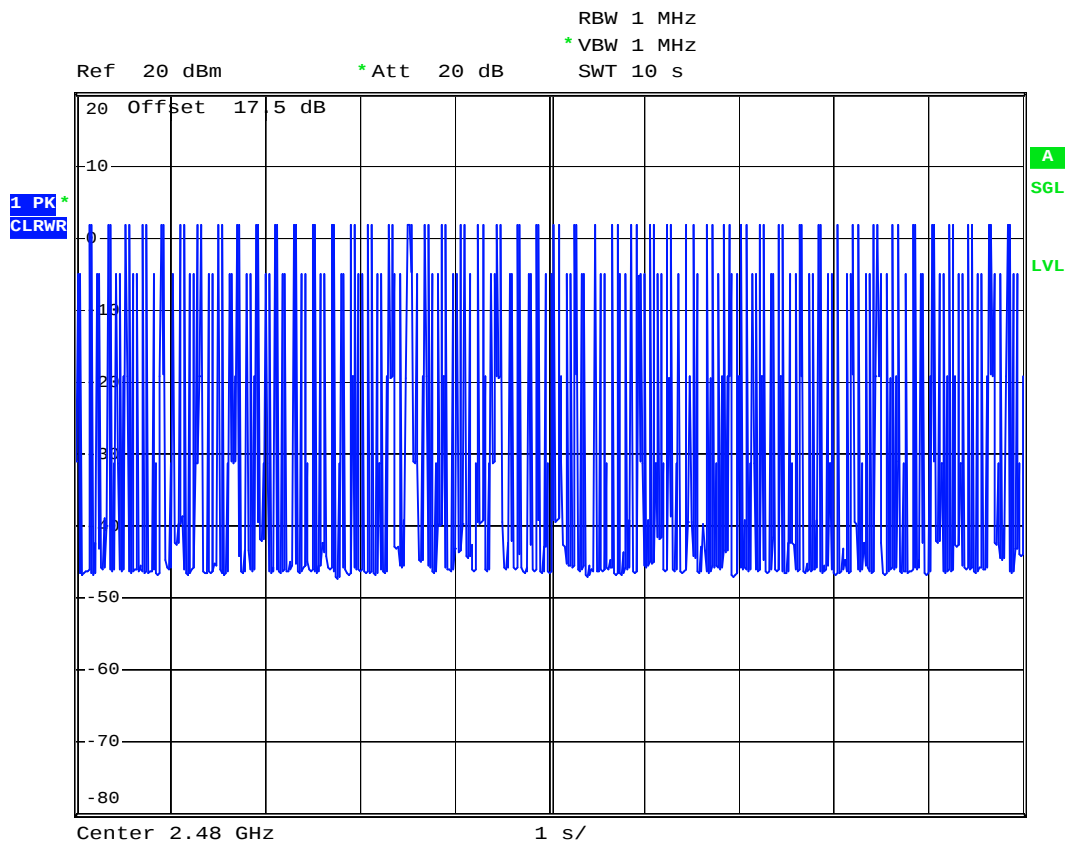
Date: 12.JUN.2007 12:38:32



DH1 (CH78)



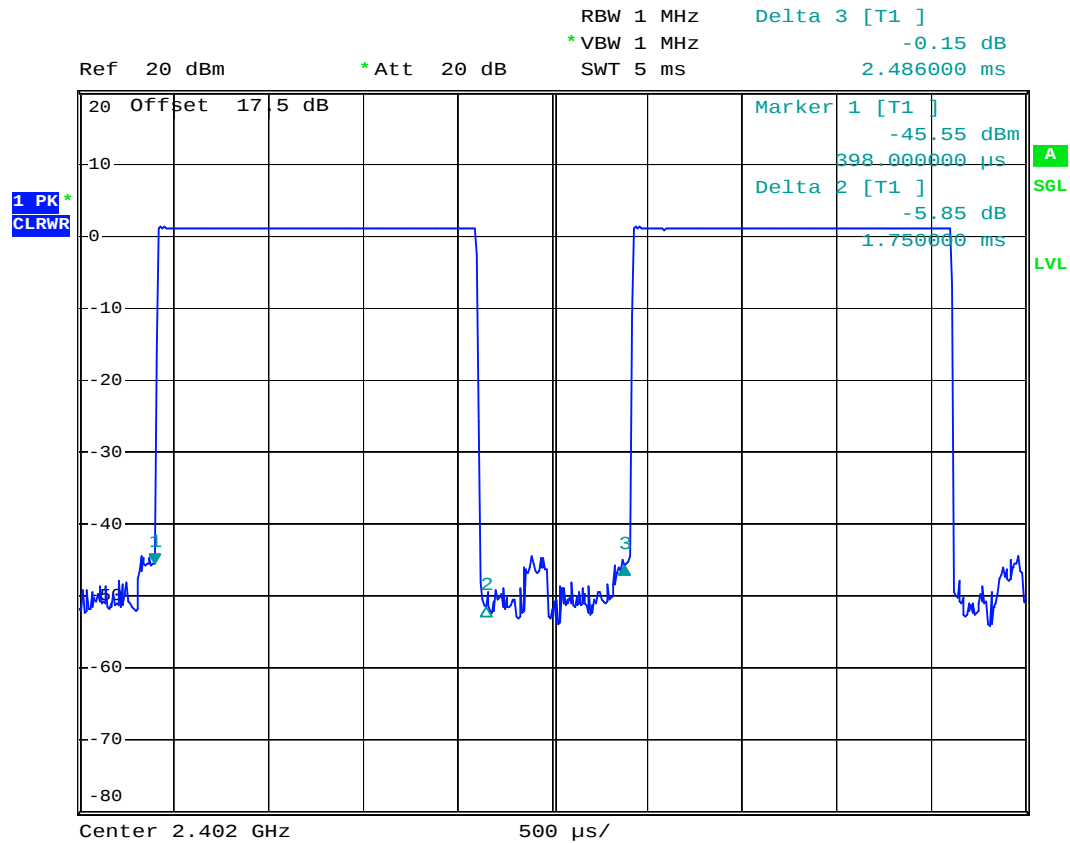
Date: 12.JUN.2007 12:28:50



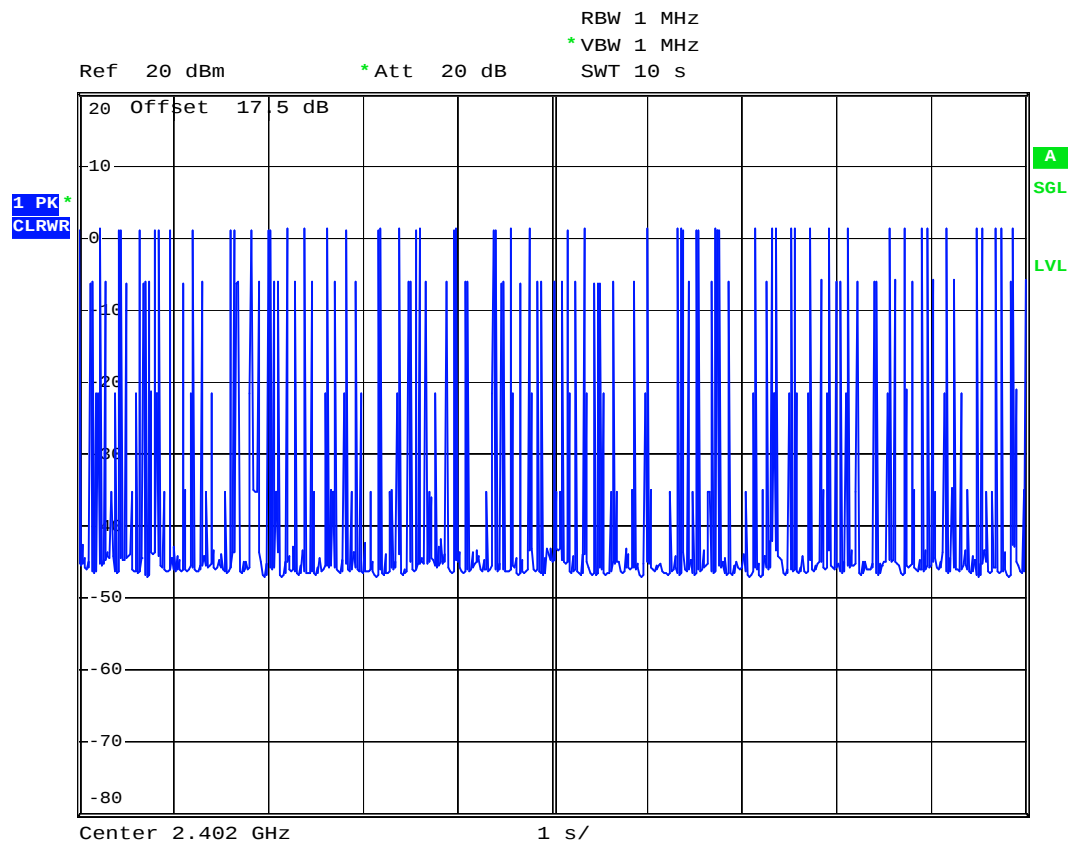
Date: 12.JUN.2007 12:39:06



DH3 (CH00)



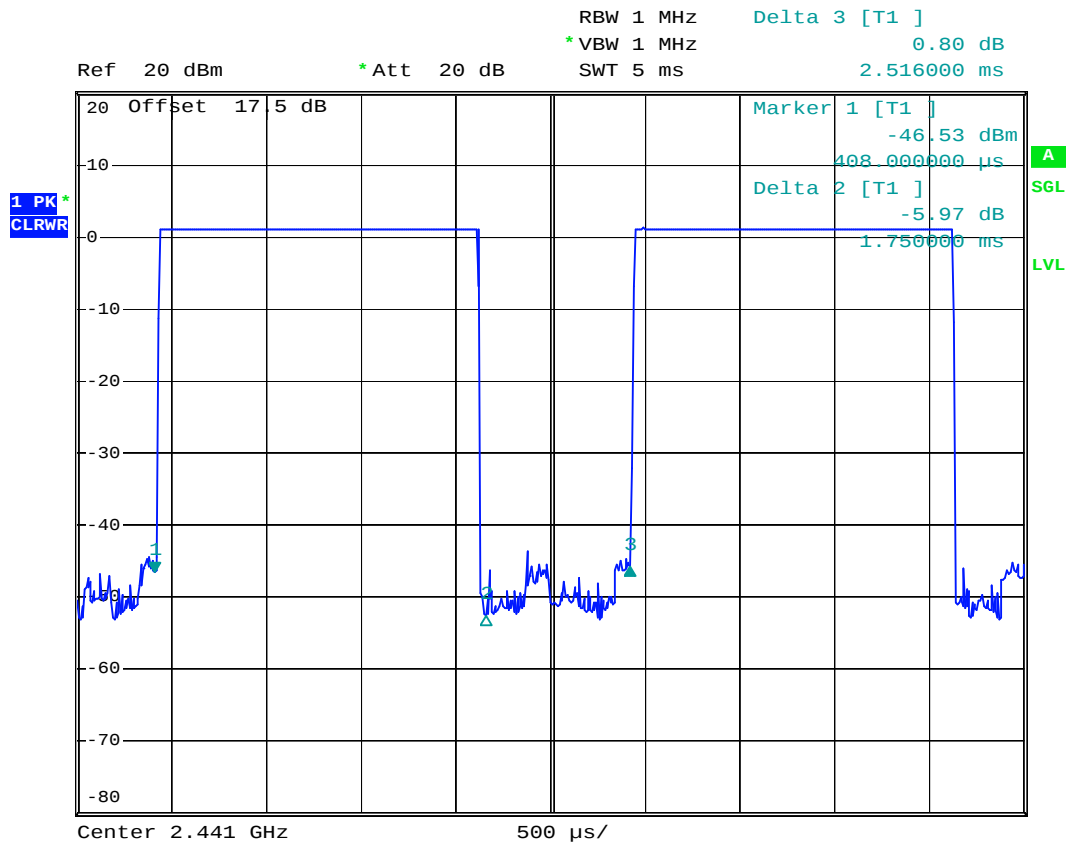
Date: 12.JUN.2007 12:30:14



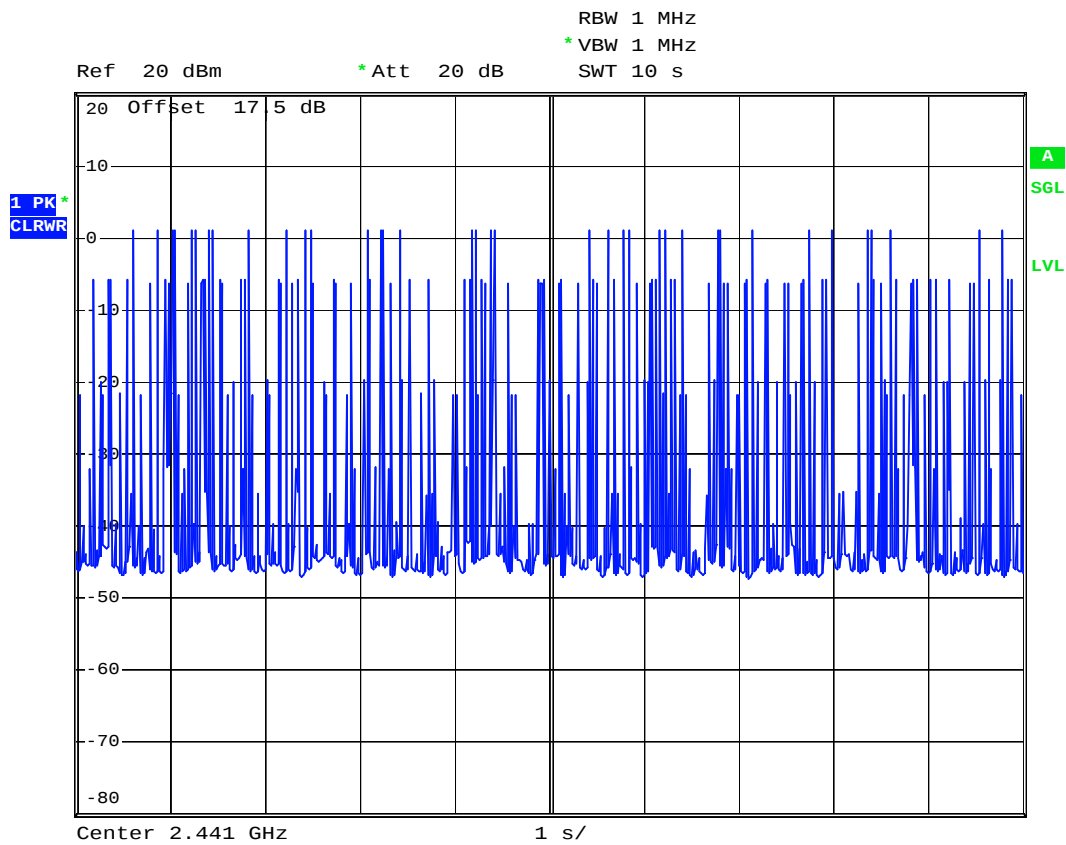
Date: 12.JUN.2007 12:40:22



DH3 (CH39)



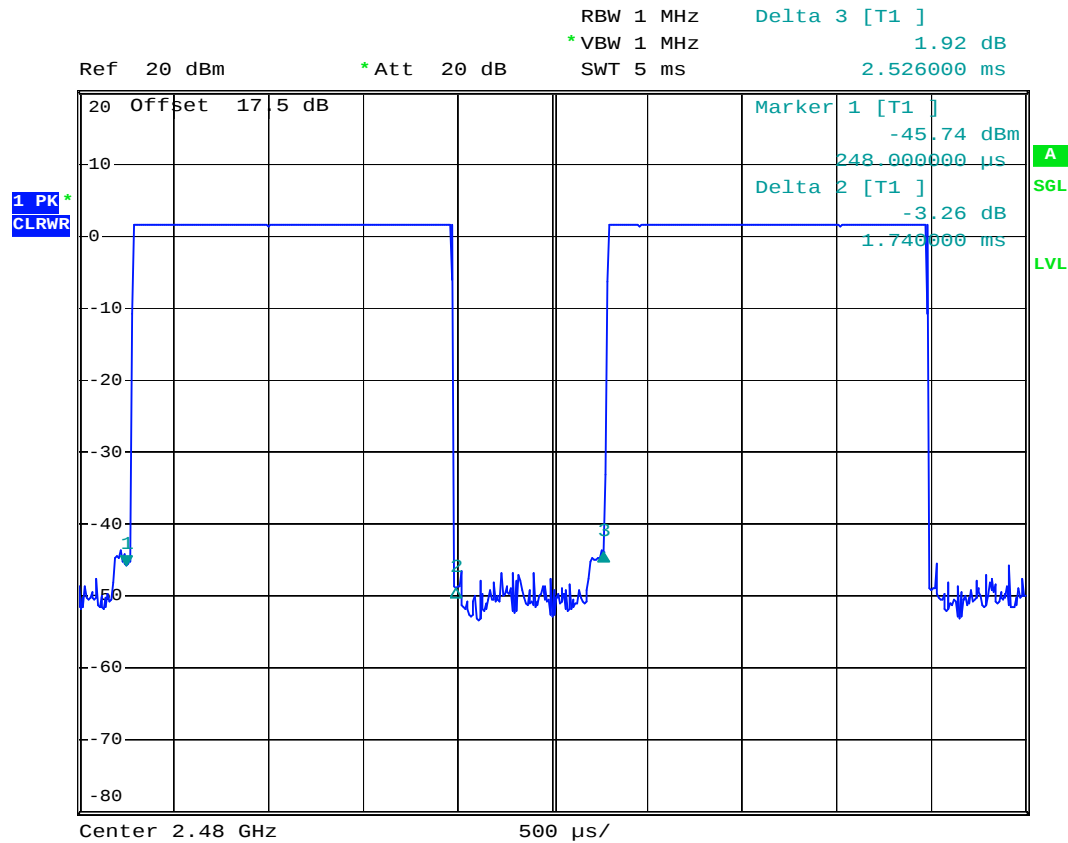
Date: 12.JUN.2007 12:31:42



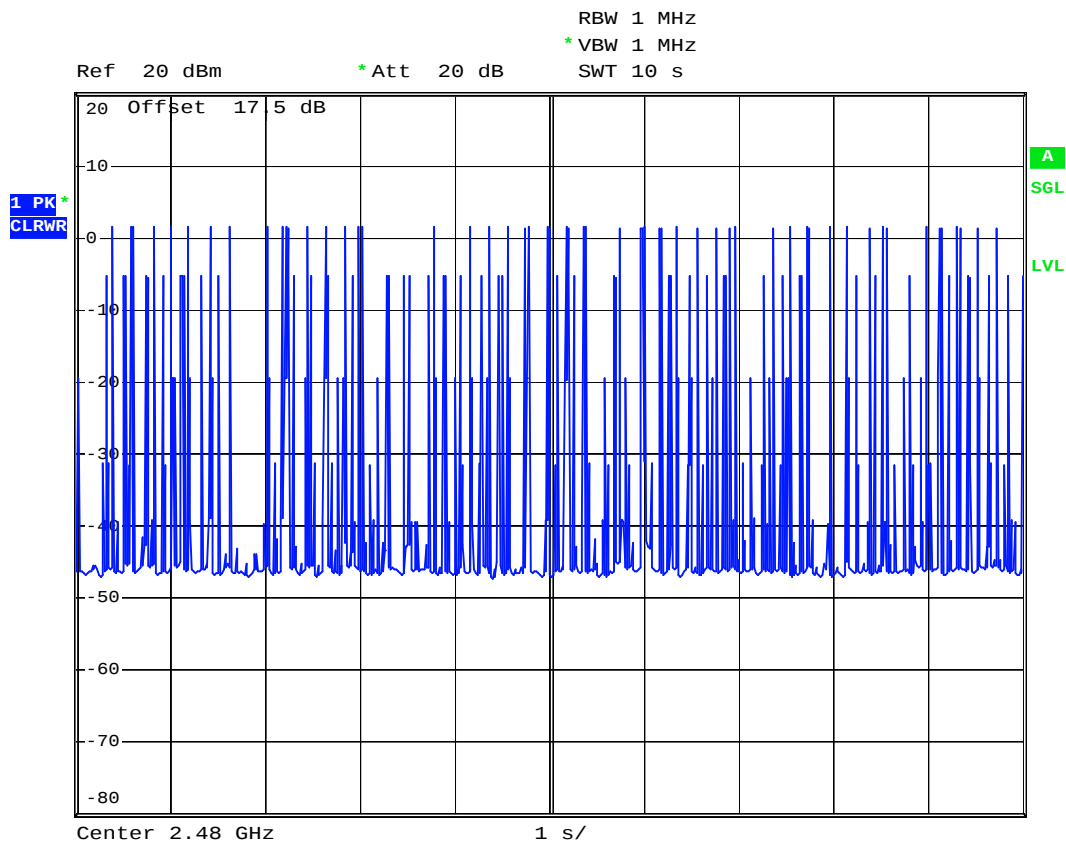
Date: 12.JUN.2007 14:00:53



DH3 (CH78)



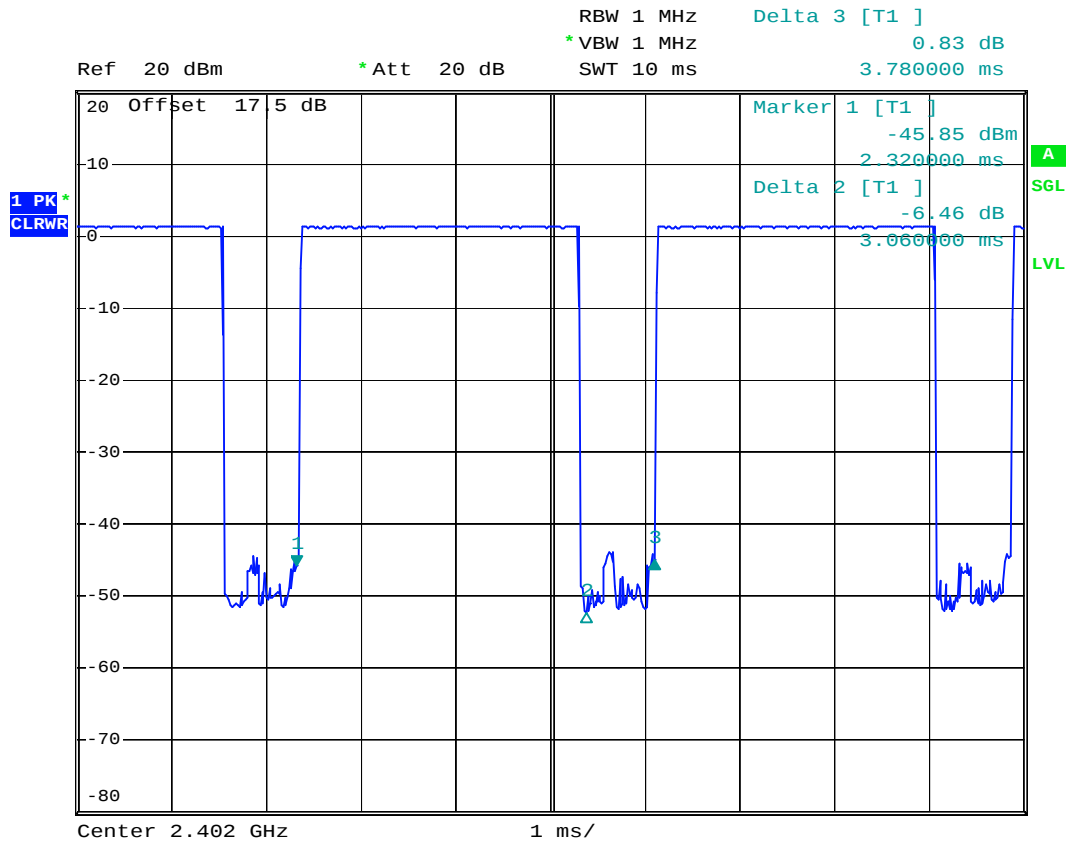
Date: 12.JUN.2007 12:32:36



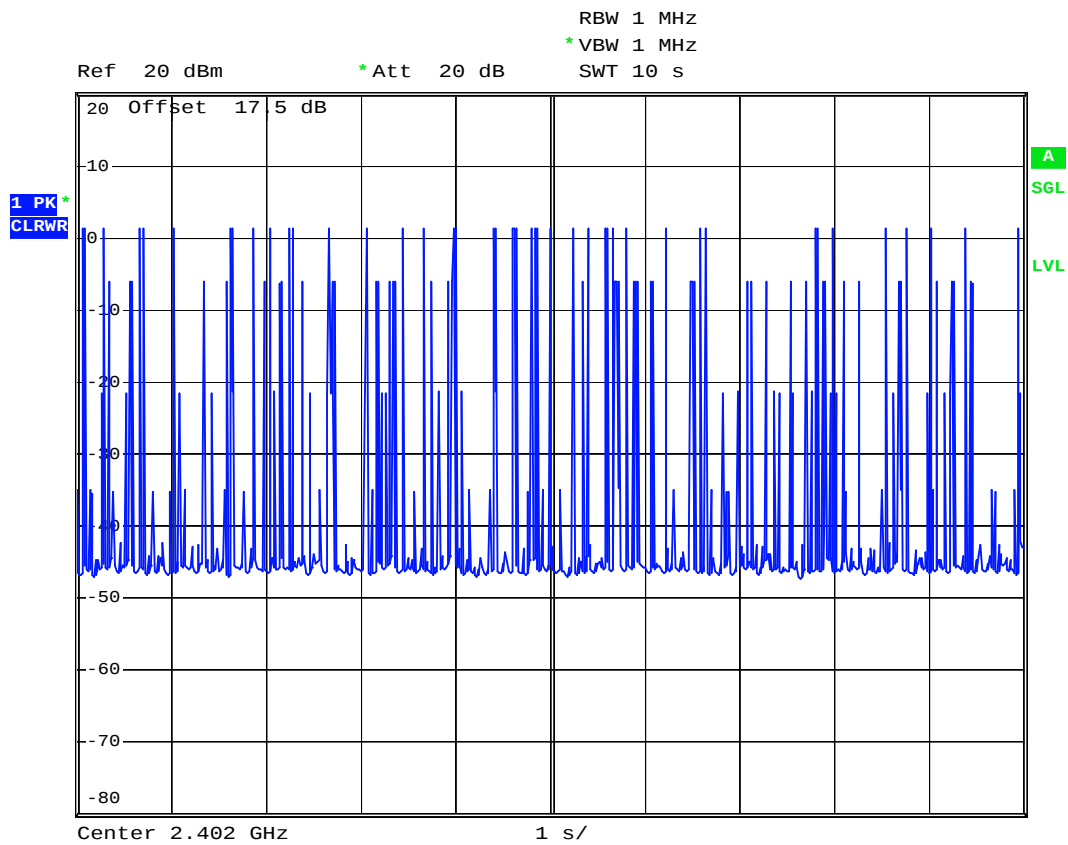
Date: 12.JUN.2007 14:01:45



DH5 (CH00)



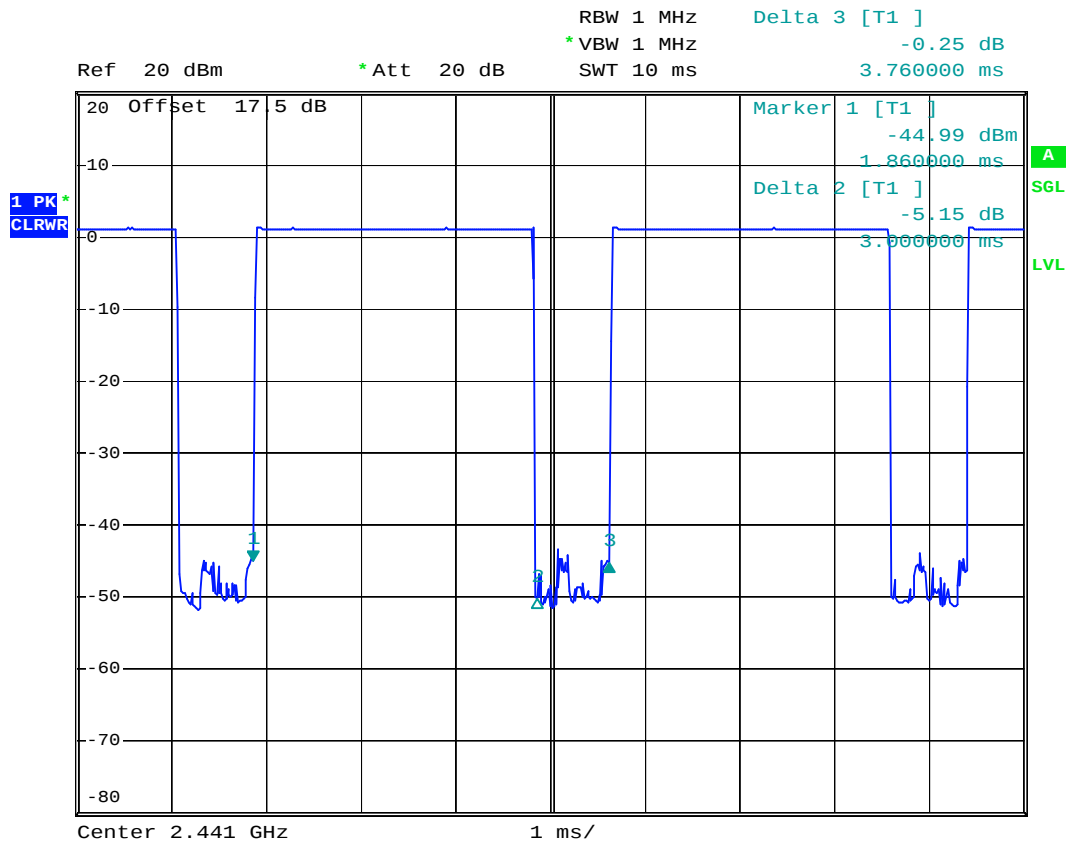
Date: 12.JUN.2007 14:03:53



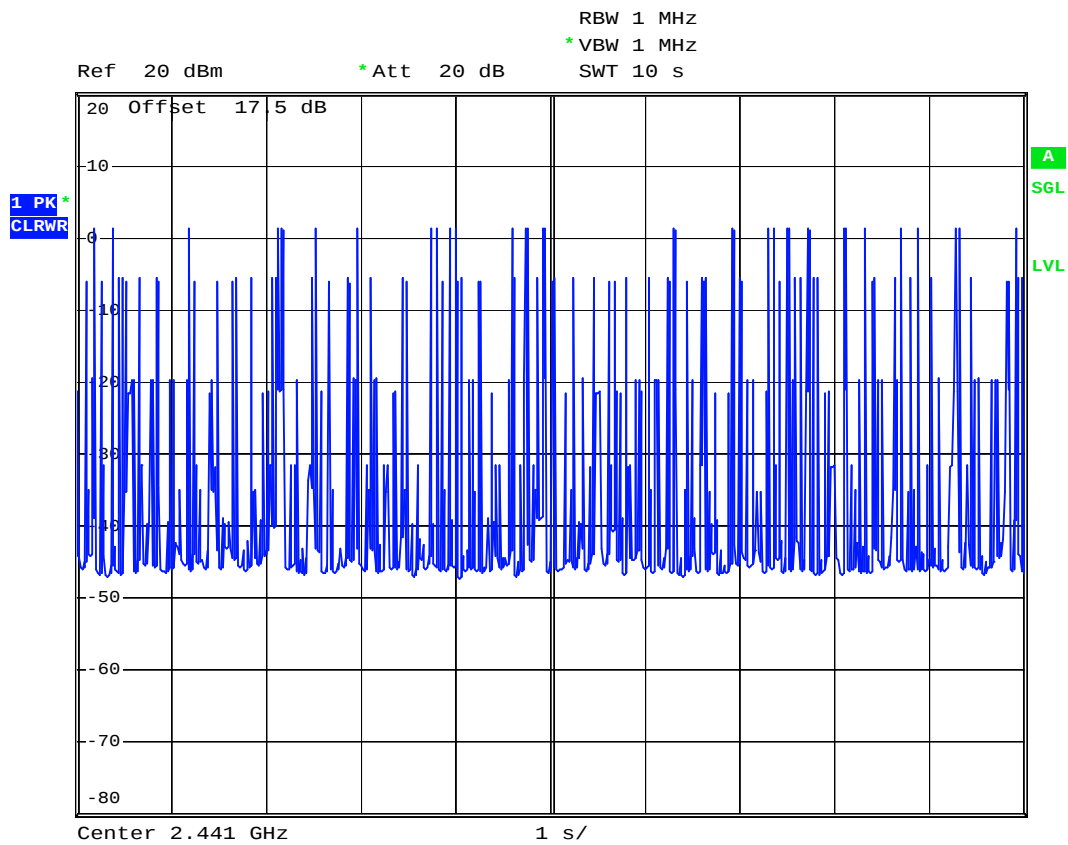
Date: 12.JUN.2007 14:02:11



DH5 (CH39)



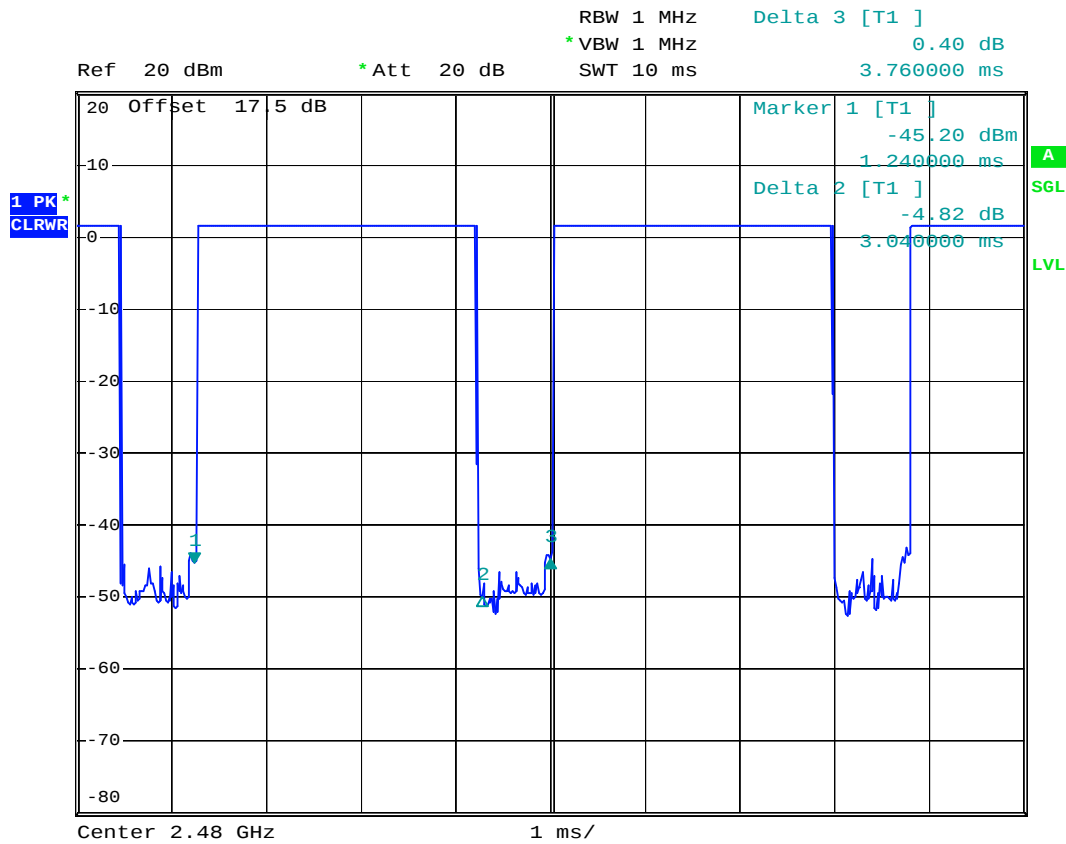
Date: 12.JUN.2007 14:04:26



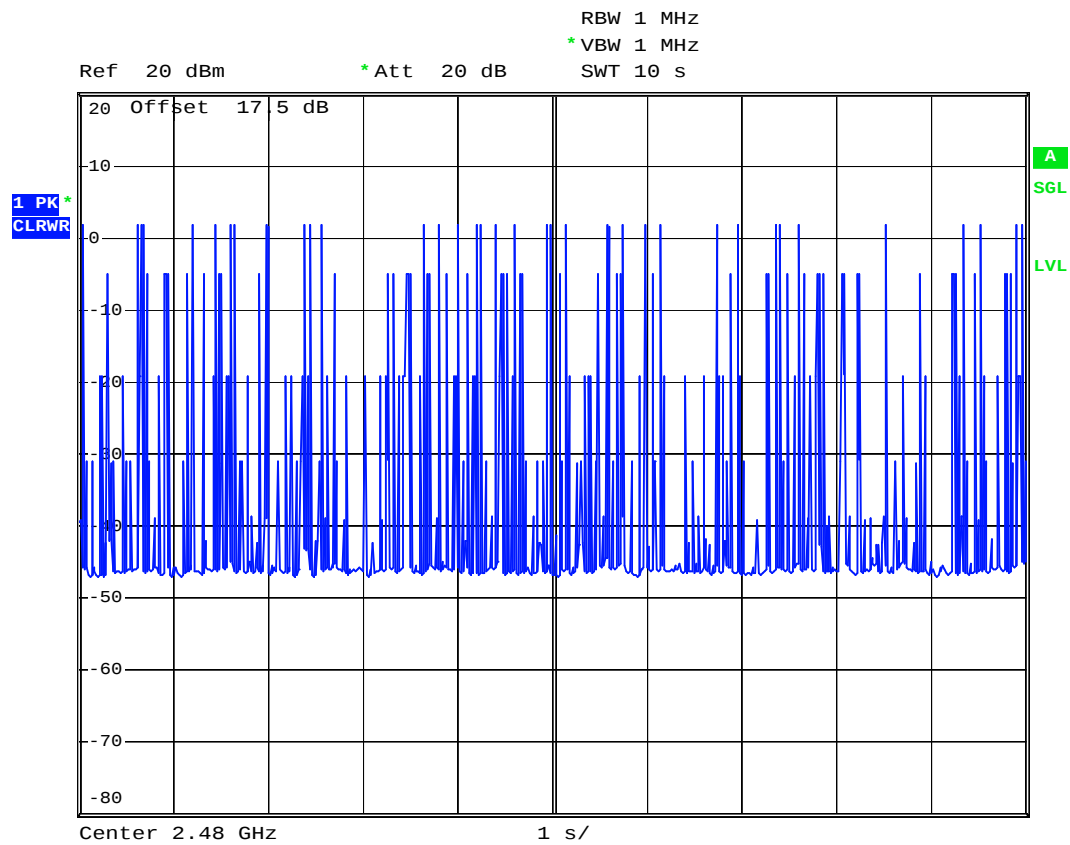
Date: 12.JUN.2007 14:02:31



DH5 (CH78)



Date: 12.JUN.2007 14:04:56



Date: 12.JUN.2007 14:02:56

5.6 Output Power

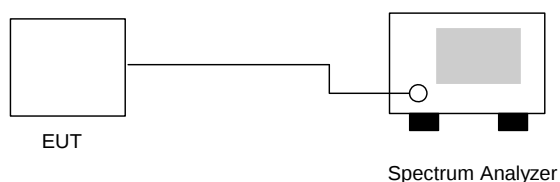
5.6.1 Measuring Instruments :

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

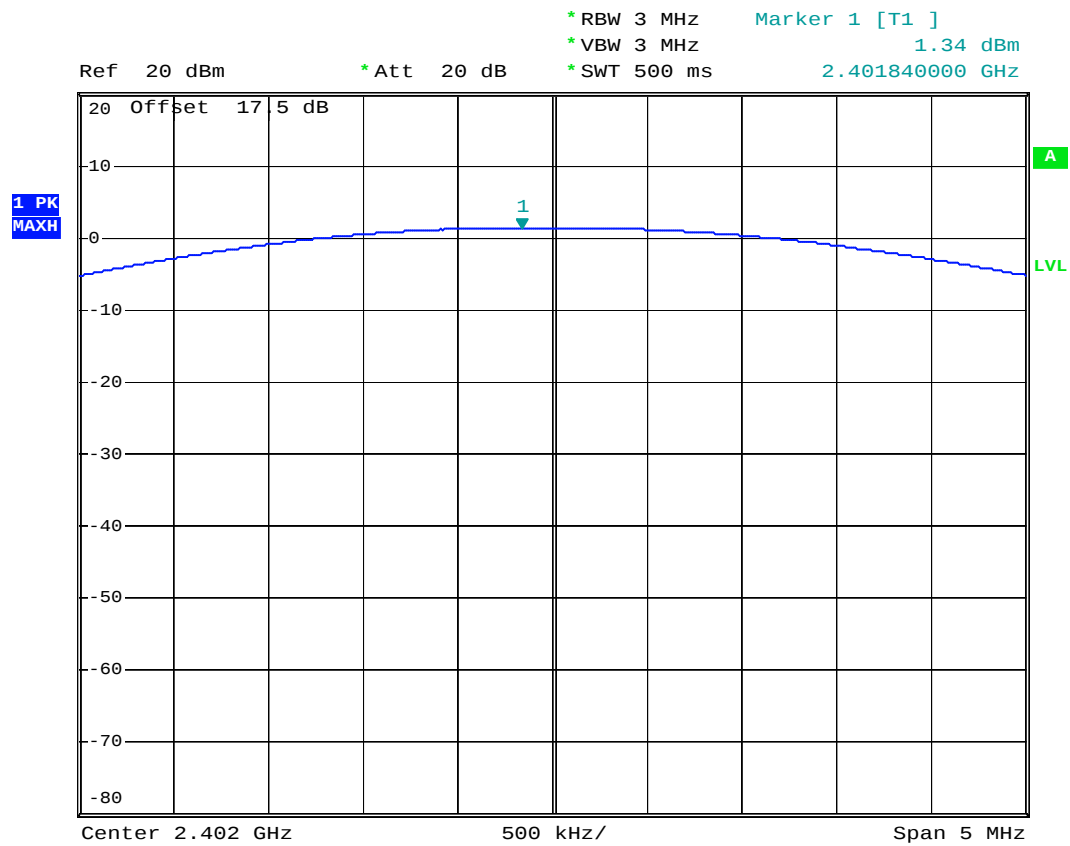
- Temperature: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : Tony

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)	Plot Ref. No.
00	2402	1.34	1W/30 dBm	Mode 1
39	2441	1.38	1W/30 dBm	Mode 2
78	2480	1.85	1W/30 dBm	Mode 3



5.6.5 Output Power

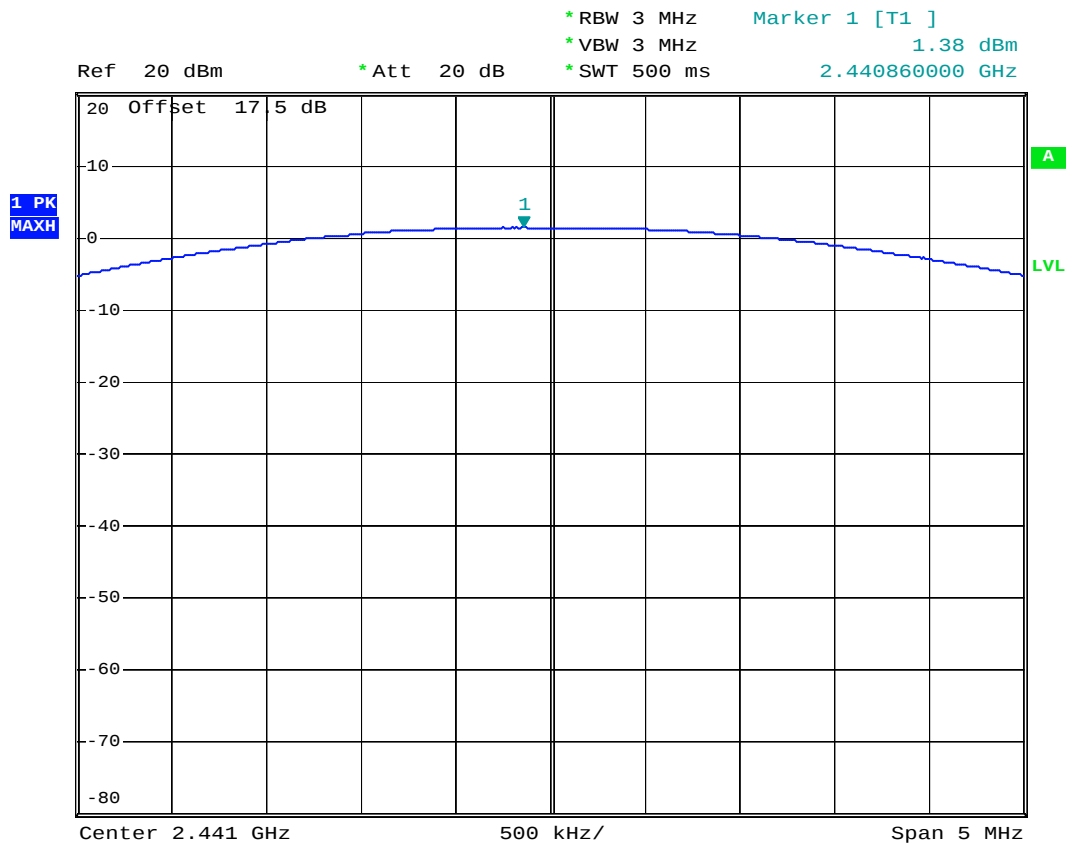
Mode 1: CH00 (2402MHz)



Date: 12.JUN.2007 11:48:47



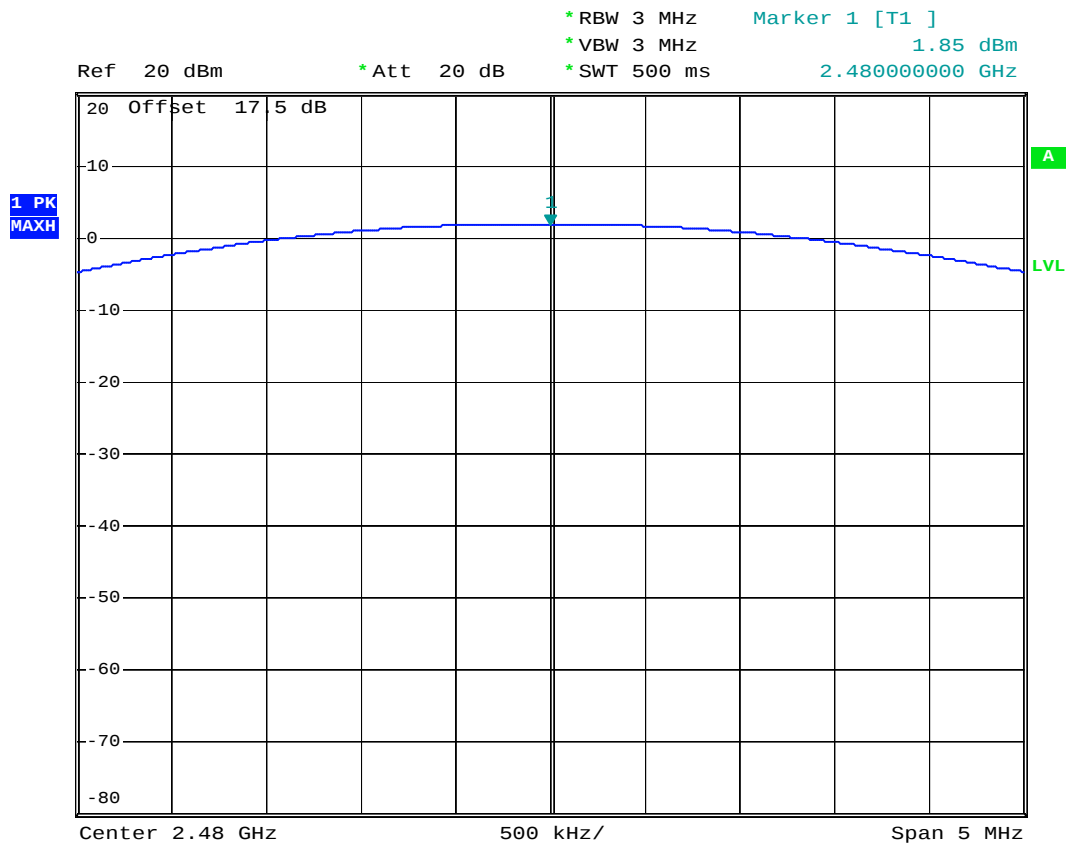
Mode 2: CH39 (2441MHz)



Date: 12.JUN.2007 11:49:06



Mode 3: CH78 (2480MHz)



Date: 12.JUN.2007 11:49:48



5.7 100kHz 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 100kHz with suitable frequency span for the conducted measurement, and RBW/VBW=1MHz/1MHz for peak measurement and RBW/VBW=1MHz/300Hz for average measurement in the radiated measurement.
3. The band edges was measured and recorded.

5.7.3 Test Result :

- Temperature: 25~27°C
- Relative Humidity: 59~61%
- 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)	
2382.16	48.59	-25.41	74.00	50.02	30.25	3.75	35.44	100	0	Peak
2382.16	38.00	-16.00	54.00	39.44	30.25	3.75	35.44	100	90	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)	
2376.16	48.44	-25.56	74.00	49.90	30.25	3.73	35.44	100	0	Peak
2376.16	39.03	-14.97	54.00	40.49	30.25	3.73	35.44	100	100	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
2483.50	49.25	-4.75	54.00	50.61	30.29	3.86	35.51	100	110	Average
2483.50	56.05	-17.95	74.00	57.41	30.29	3.86	35.51	100	0	Peak

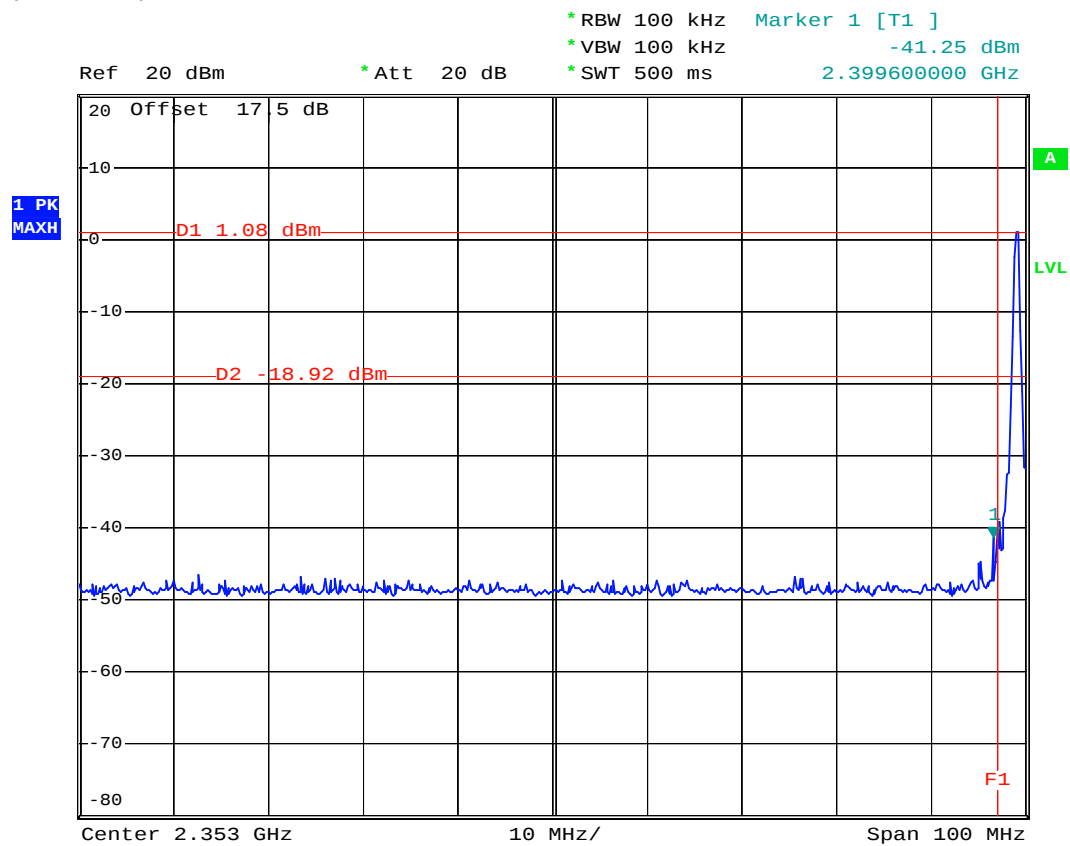
CH78 (Vertical)

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	53.12	-0.88	54.00	54.48	30.29	3.86	35.51	100	100	Average
2483.50	64.60	-9.40	74.00	65.96	30.29	3.86	35.51	100	360	Peak



5.7.5 Frequency Band Edge

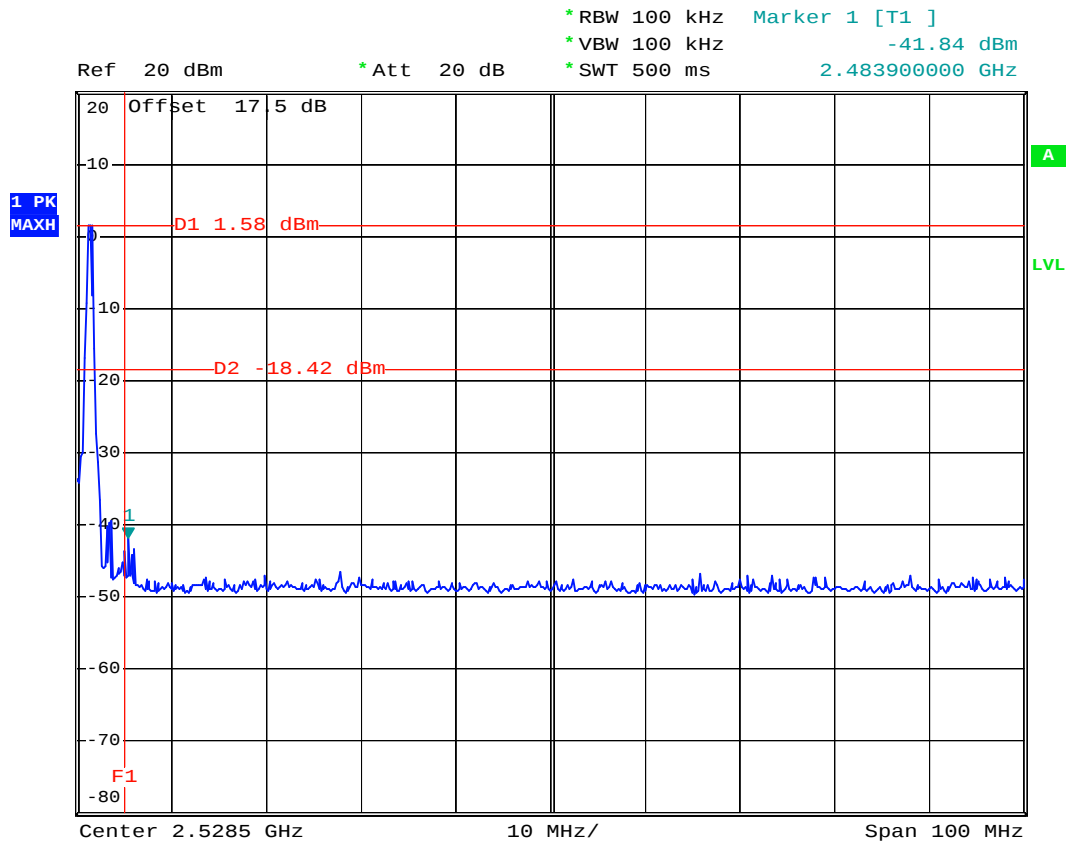
CH00 (2402 MHz)



Date: 12.JUN.2007 12:17:14



CH78 (2480 MHz)



Date: 12.JUN.2007 12:16:03

5.8 Conducted Emission

5.8.1 Measuring Instruments

As described in chapter 6 of this test Report.

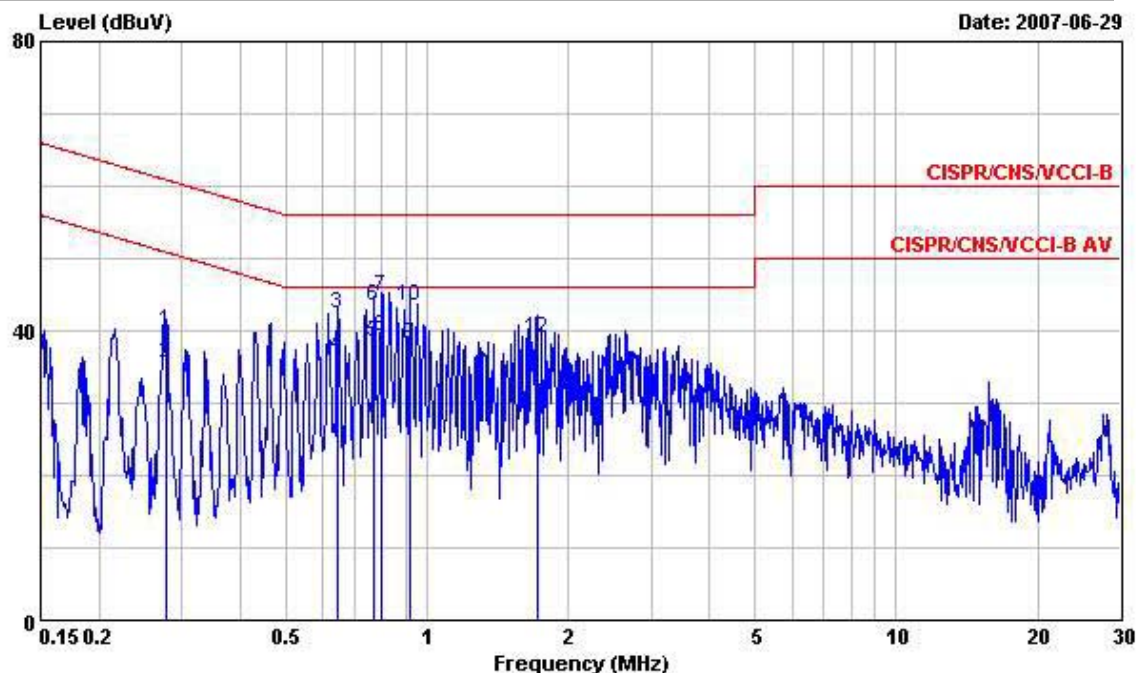
5.8.2 Test Procedures :

- 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: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : James

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

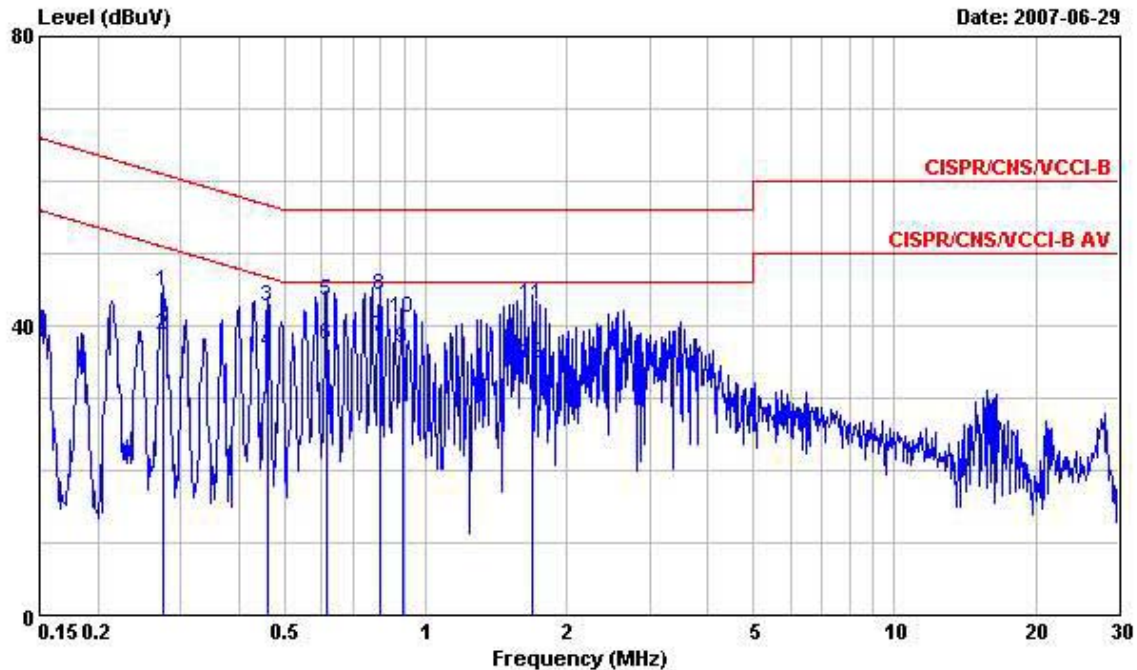


Site : CO04-HY
Condition : CISPR/CNS/VCCI-B LISN 200704 99041 LINE
EUT : Tri band Mobile Phone with GPS
POWER: AC 120V/60Hz
Model : FR721310
Memo : PCS 1900 Idle+BT Link+GPS Rx+Adaptor
Memo : +MP3+Earphone

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.2784830	40.08	-20.78	60.86	39.56	0.10	0.42	QP
2	0.2784830	35.41	-15.45	50.86	34.89	0.10	0.42	Average
3	0.6451040	42.39	-13.61	56.00	41.71	0.10	0.58	QP
4	0.6451040	36.53	-9.47	46.00	35.85	0.10	0.58	Average
5	0.7670230	38.48	-7.52	46.00	37.86	0.10	0.52	Average
6	0.7670230	43.51	-12.49	56.00	42.89	0.10	0.52	QP
7	0.7984700	44.71	-11.29	56.00	44.10	0.10	0.51	QP
8	0.7984700	39.33	-6.67	46.00	38.72	0.10	0.51	Average
9	0.9212040	38.20	-7.80	46.00	37.63	0.10	0.47	Average
10	0.9212040	43.38	-12.62	56.00	42.81	0.10	0.47	QP
11	1.721	29.94	-16.06	46.00	29.41	0.10	0.43	Average
12	1.721	39.07	-16.93	56.00	38.54	0.10	0.43	QP

- Temperature: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : James

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



Site : CO04-HY
 Condition : CISPR/CNS/VCCI-B LISN 200704 99041 NEUTRAL
 EUT : Tri band Mobile Phone with GPS
 POWER: AC 120V/60Hz
 Model : FR721310
 Memo : PCS 1900 Idle+BT Link+GPS Rx+Adaptor
 Memo : +MP3+Earphone

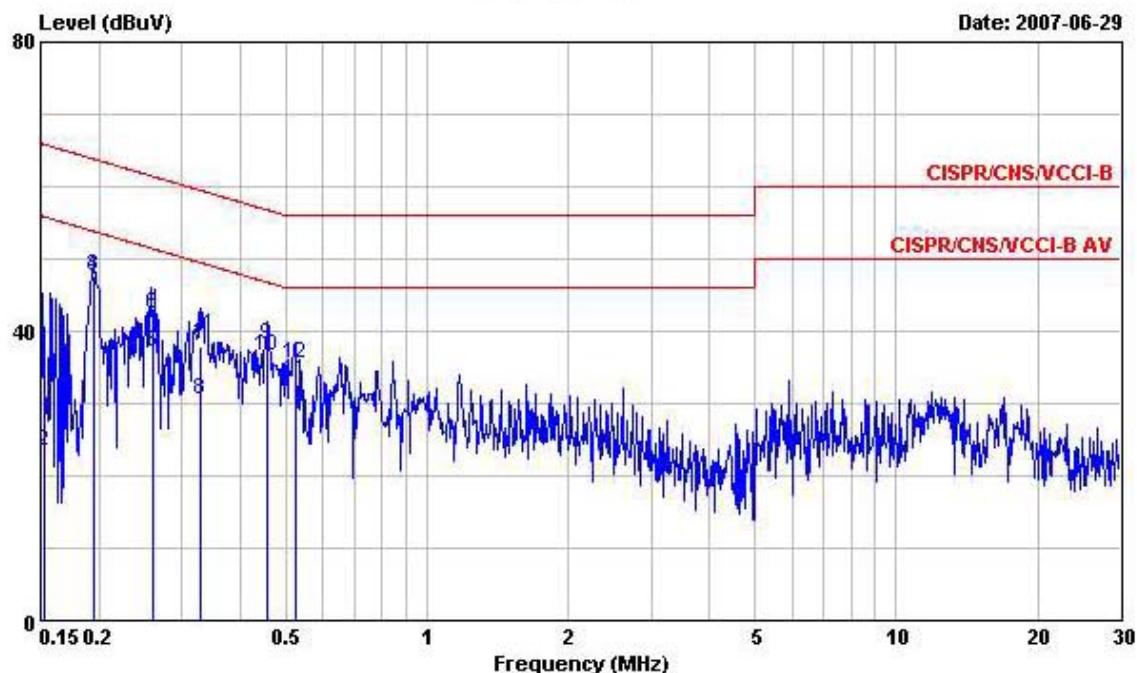
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.2759260	44.64	-16.30	60.94	44.13	0.10	0.41	QP
2	0.2759260	38.62	-12.32	50.94	38.11	0.10	0.41	Average
3	0.4609240	42.56	-14.12	56.68	41.77	0.10	0.69	QP
4	0.4609240	36.27	-10.41	46.68	35.48	0.10	0.69	Average
5	0.6142710	43.45	-12.55	56.00	42.76	0.10	0.59	QP
6	0.6142710	37.35	-8.65	46.00	36.66	0.10	0.59	Average
7	0.7978340	38.47	-7.53	46.00	37.86	0.10	0.51	Average
8	0.7978340	44.33	-11.67	56.00	43.72	0.10	0.51	QP
9	0.8896970	36.77	-9.23	46.00	36.19	0.10	0.48	Average
10	0.8896970	41.09	-14.91	56.00	40.51	0.10	0.48	QP
11	1.684	42.99	-13.01	56.00	42.46	0.10	0.43	QP
12	1.684	34.80	-11.20	46.00	34.27	0.10	0.43	Average



5.8.4 Test Data Test Mode 2

- Temperature: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : James

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

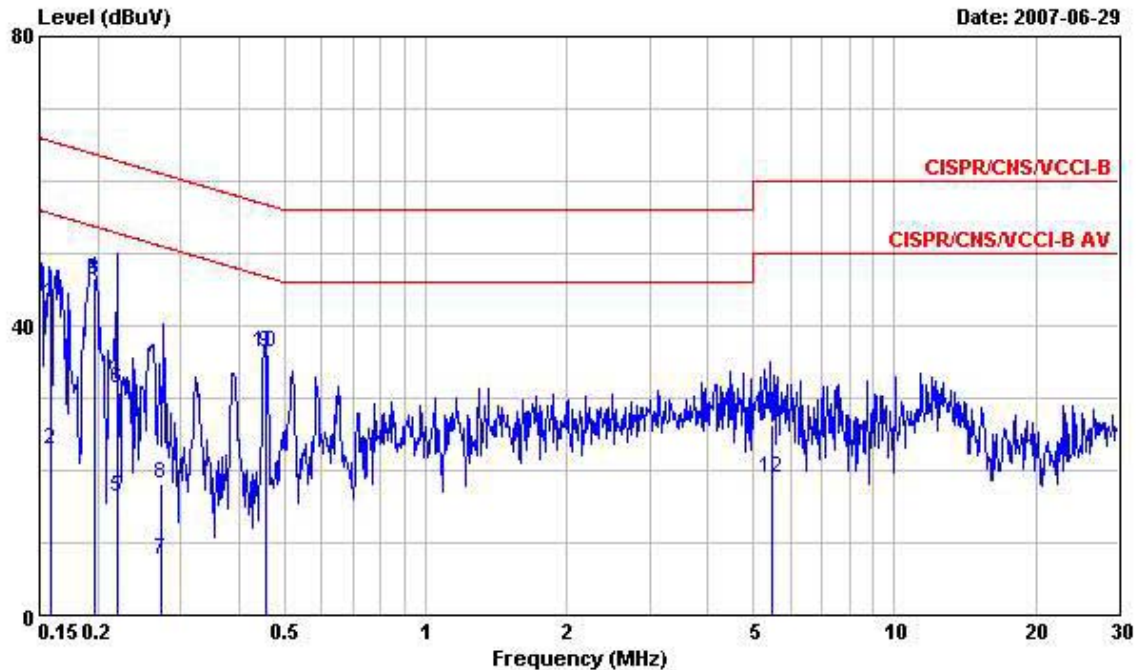


Site : CO04-HY
 Condition : CISPR/CNS/VCCI-B LISN 200704 99041 LINE
 EUT : Tri band Mobile Phone with GPS
 POWER: AC 120V/60Hz
 Model : FR721310
 Memo : PCS 1900 Idle+BT Link+GPS Rx+USB Link
 Memo : +MP3+Earphone

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1525950	40.91	-24.95	65.86	40.67	0.10	0.14	QP
2	0.1525950	23.38	-32.48	55.86	23.14	0.10	0.14	Average
3	0.1955900	47.55	-16.25	63.80	47.31	0.10	0.14	QP
4	0.1955900	47.55	-6.25	53.80	47.31	0.10	0.14	Average
5	0.2602540	37.12	-14.30	51.42	36.65	0.10	0.37	Average
6	0.2602540	42.35	-19.07	61.42	41.88	0.10	0.37	QP
7	0.3274530	38.01	-21.51	59.52	37.35	0.10	0.56	QP
8	0.3274530	30.48	-19.04	49.52	29.82	0.10	0.56	Average
9	0.4545700	38.28	-18.51	56.79	37.49	0.10	0.69	QP
10	0.4545700	36.50	-10.29	46.79	35.71	0.10	0.69	Average
11	0.5230870	33.15	-12.85	46.00	32.40	0.10	0.65	Average
12	0.5230870	35.43	-20.57	56.00	34.68	0.10	0.65	QP

- Temperature: 25~27°C
- Relative Humidity: 59~61%
- Test Engineer : James

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



Site : CO04-HY
 Condition : CISPR/CNS/VCCI-B LISN 200704 99041 NEUTRAL
 EUT : Tri band Mobile Phone with GPS
 POWER: AC 120V/60Hz
 Model : FR721310
 Memo : PCS 1900 Idle+BT Link+GPS Rx+USB Link
 Memo : +MP3+Earphone

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.1589760	43.14	-22.38	65.52	42.90	0.10	0.14	QP
2	0.1589760	22.81	-32.71	55.52	22.57	0.10	0.14	Average
3	0.1958990	46.32	-17.46	63.78	46.08	0.10	0.14	QP
4	0.1958990	46.54	-7.24	53.78	46.30	0.10	0.14	Average
5	0.2200370	16.41	-36.41	52.82	16.09	0.10	0.22	Average
6	0.2200370	31.23	-31.59	62.82	30.91	0.10	0.22	QP
7	0.2734510	7.60	-43.41	51.01	7.09	0.10	0.41	Average
8	0.2734510	18.28	-42.73	61.01	17.77	0.10	0.41	QP
9	0.4563600	36.34	-20.42	56.76	35.55	0.10	0.69	QP
10	0.4563600	36.28	-10.48	46.76	35.49	0.10	0.69	Average
11	5.455	26.19	-33.81	60.00	25.67	0.23	0.29	QP
12	5.455	18.99	-31.01	50.00	18.47	0.23	0.29	Average



5.9 Radiated Emission Measurement

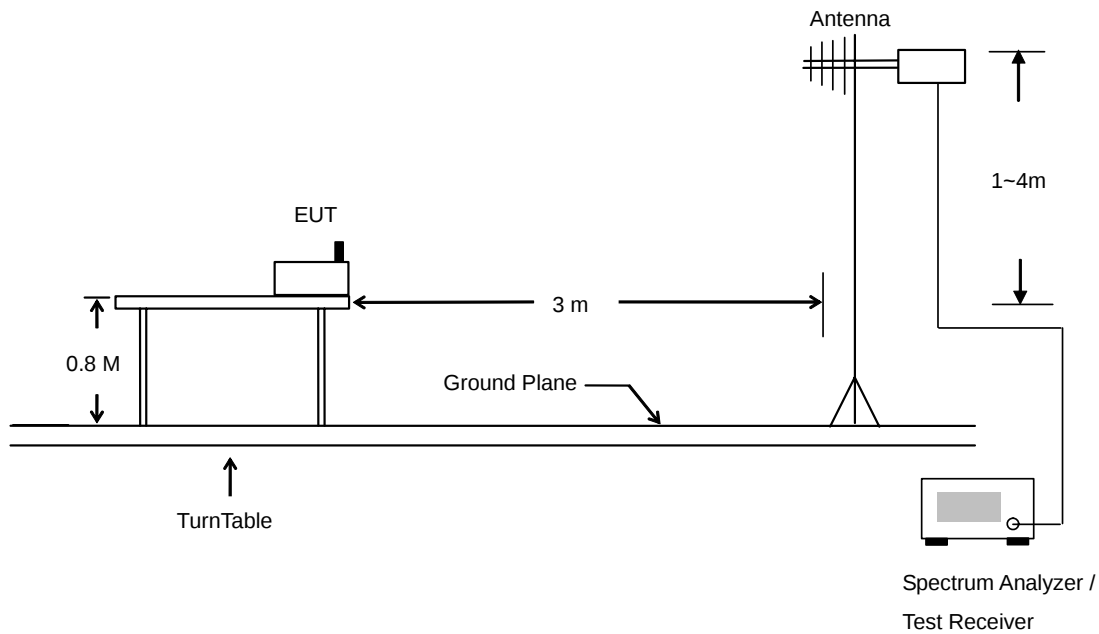
5.9.1 Measuring Instruments

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

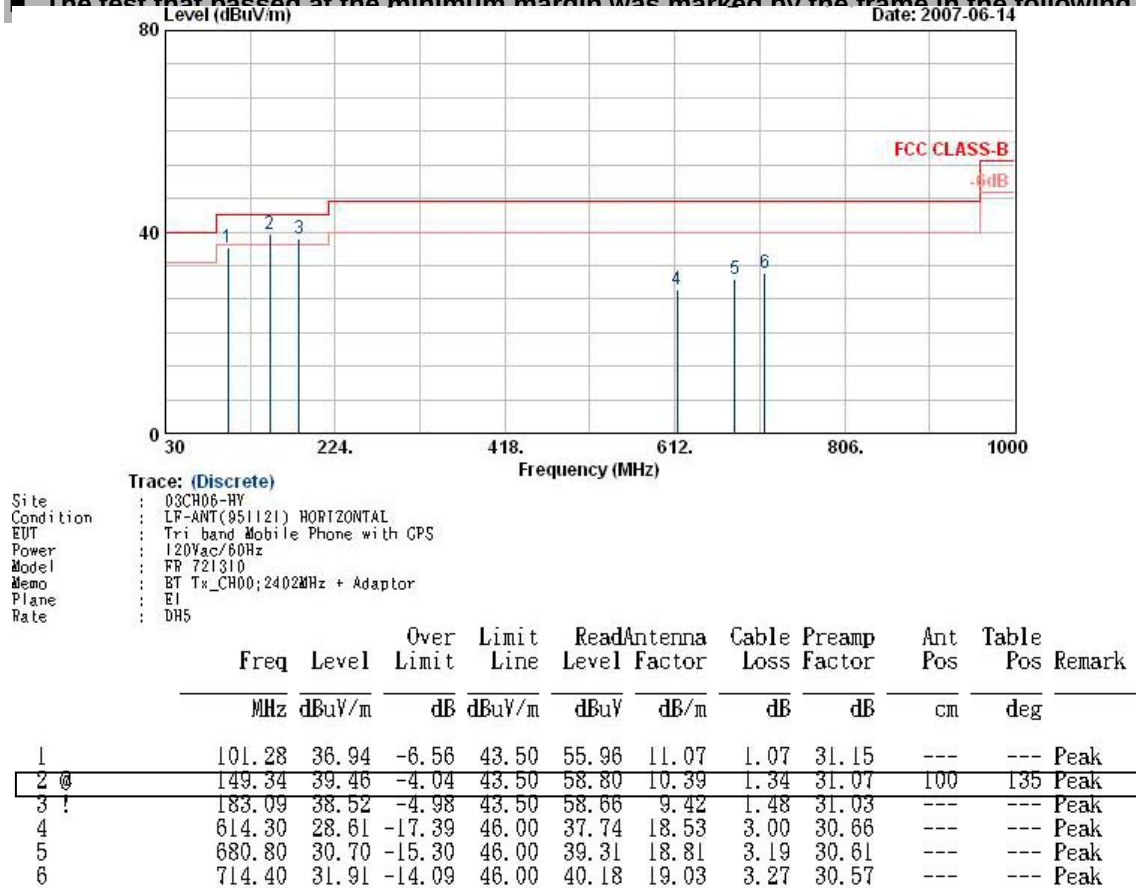


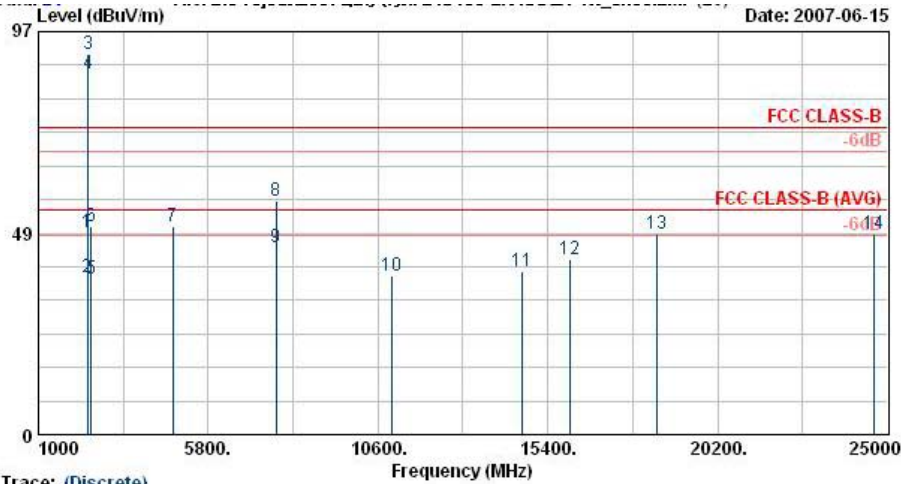


5.9.4 Test Data

- Temperature : 25~27°C
- Relating Humidity : 59~61%
- Test Engineer : Sam
- 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-RV
 Condition : SHF-EHF HORN HORIZONTAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH00;2402MHz + Adaptor
 Plane : E1
 Rate : DH5

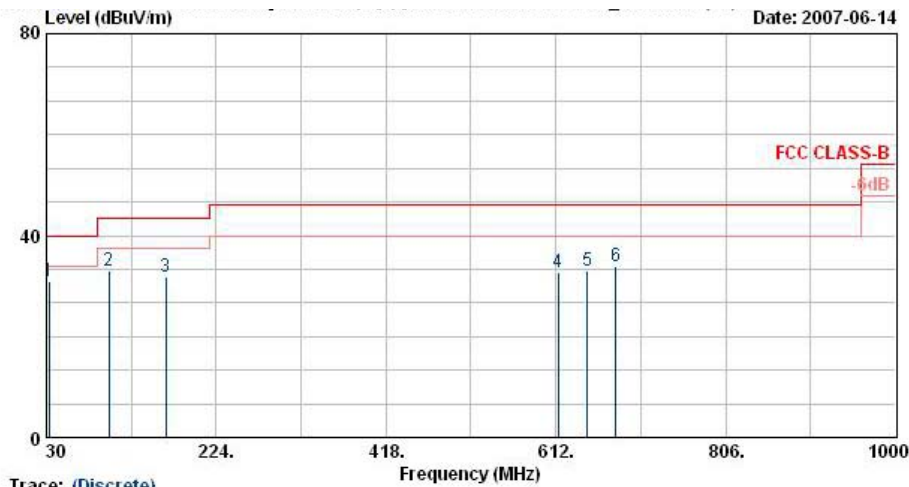
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2382.16	48.59	-25.41	74.00	50.02	30.25	3.75	35.44	100	0	Peak
2	2382.16	38.00	-16.00	54.00	39.44	30.25	3.75	35.44	100	90	Average
3 @	2402.00	91.60			93.03	30.26	3.77	35.46	100	0	Peak
4 @	2402.00	86.80			88.23	30.26	3.77	35.46	100	90	Average
5	2484.00	37.66	-16.34	54.00	39.02	30.29	3.86	35.51	100	90	Average
6	2484.00	50.23	-23.77	74.00	51.59	30.29	3.86	35.51	100	0	Peak
7	4806.00	50.05	-23.95	74.00	47.44	32.88	5.83	36.10	---	---	Peak
8	7716.00	56.30	-17.70	74.00	45.38	39.20	7.69	35.97	100	0	Peak
9	7716.00	45.08	-8.92	54.00	34.16	39.20	7.69	35.97	100	64	Average
10	11007.00	38.06	-35.94	74.00	72.52	-8.37	9.88	35.98	---	---	Peak
11	14676.00	39.26	-34.74	74.00	69.83	-6.46	11.56	35.68	---	---	Peak
12	16041.00	42.09	-31.91	74.00	70.54	-4.40	11.78	35.83	---	---	Peak
13	18492.00	48.31	-25.69	74.00	43.69	21.19	19.36	35.94	---	---	Peak
14	24608.00	48.22	-25.78	74.00	45.87	21.82	19.35	38.81	---	---	Peak

Remark: #3 and #4 Fundamental Signal.



- Test Mode : Mode 1
- Polarization : Vertical

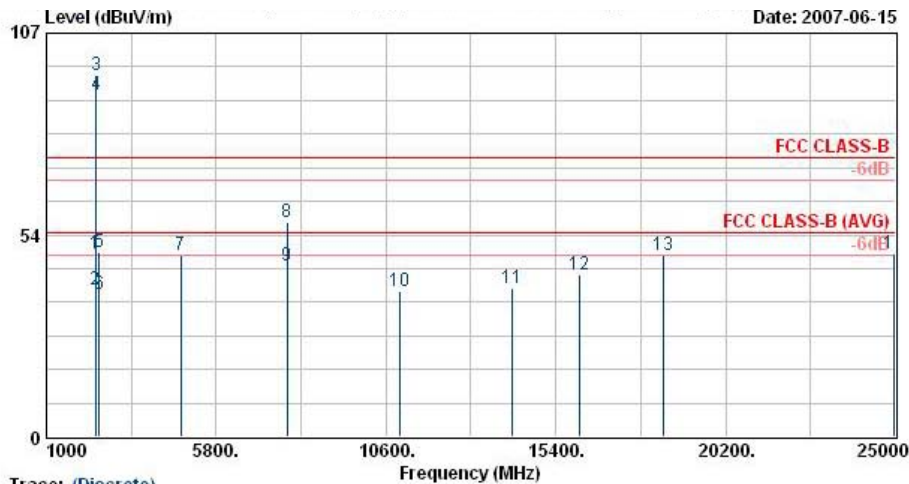
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY
 Condition : LF-ANT(951121) VERTICAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH00;2402MHz + Adaptor
 Plane : E1
 Rate : DH5

	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	33.24	31.05	-8.95	40.00	44.21	17.54	0.66	31.36	102	217 Peak
2	101.28	33.06	-10.44	43.50	52.07	11.07	1.07	31.15	---	---
3	166.08	31.86	-11.64	43.50	51.45	10.01	1.41	31.01	---	---
4	614.30	32.80	-13.20	46.00	41.93	18.53	3.00	30.66	---	---
5	647.90	33.07	-12.93	46.00	41.95	18.67	3.10	30.65	---	---
6	680.80	33.85	-12.15	46.00	42.46	18.81	3.19	30.61	---	---



Trace: (Discrete)

Site : 03CH06-HY
 Condition : SHF-EHF HORN VERTICAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH00;2402MHz + Adaptor
 Plane : E1
 Rate : DH5

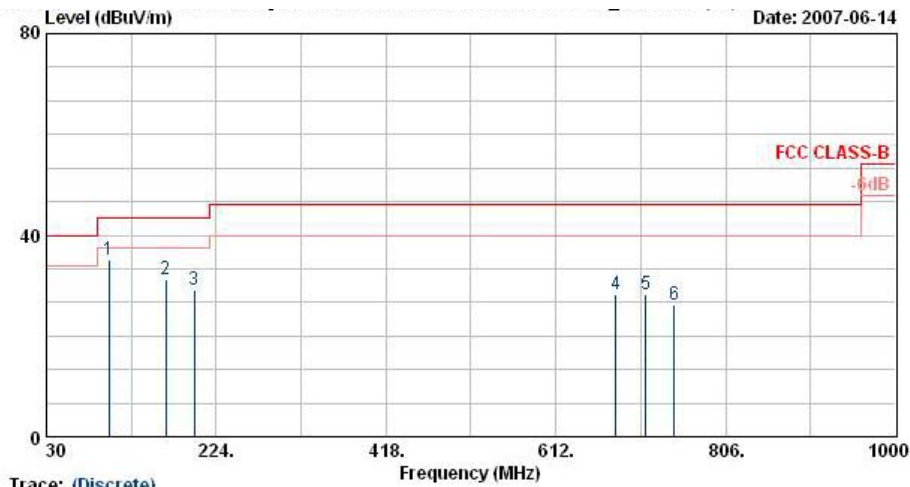
	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2376.16	48.44	-25.56	74.00	49.90	30.25	3.73	35.44	100	0	Peak
2	2376.16	39.03	-14.97	54.00	40.49	30.25	3.73	35.44	100	100	Average
3 @	2402.00	95.72			97.14	30.26	3.77	35.46	100	0	Peak
4 @	2402.00	90.85			92.28	30.26	3.77	35.46	100	100	Average
5	2494.00	48.76	-25.24	74.00	50.11	30.30	3.88	35.53	100	0	Peak
6	2494.00	37.86	-16.14	54.00	39.21	30.30	3.88	35.53	100	100	Average
7	4806.00	48.29	-25.71	74.00	45.68	32.88	5.83	36.10	---	---	Peak
8	7797.00	56.80	-17.20	74.00	45.68	39.32	7.72	35.92	100	360	Peak
9	7797.00	45.20	-8.80	54.00	34.08	39.32	7.72	35.92	100	181	Average
10	10977.00	38.58	-35.42	74.00	73.05	-8.31	9.86	36.01	---	---	Peak
11	14181.00	39.35	-34.65	74.00	68.85	-6.28	11.67	34.89	---	---	Peak
12	16062.00	42.79	-31.21	74.00	71.19	-4.64	11.79	35.53	---	---	Peak
13	18441.00	48.14	-25.86	74.00	44.05	21.19	18.87	35.97	---	---	Peak
14	24968.00	48.38	-25.62	74.00	46.51	21.79	18.58	38.51	---	---	Peak
15	24968.00	48.38	-25.62	74.00	46.51	21.79	18.58	38.51	---	---	Peak

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 2
- Polarization : Horizontal

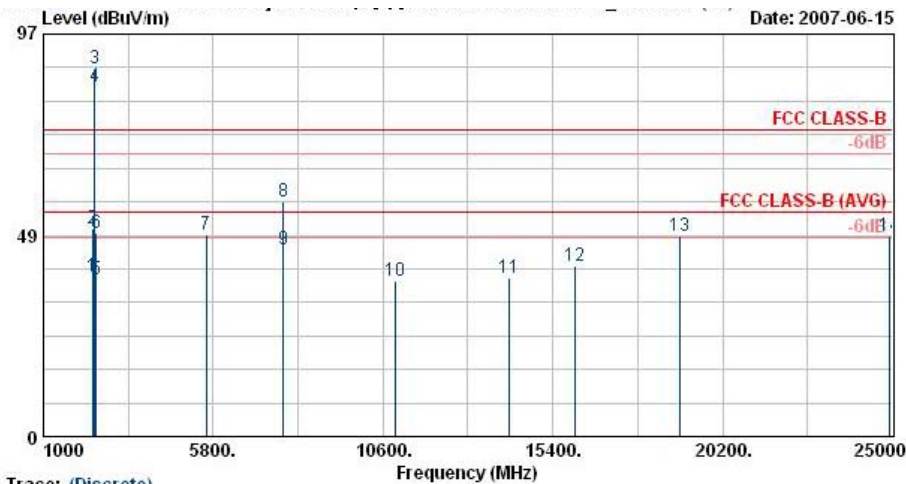
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY
 Condition : LF-ANT(951121) HORIZONTAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH39;2441MHz + Adaptor
 Plane : E1
 Rate : DH5

	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 @	101.28	34.99	-8.51	43.50	54.01	11.07	1.07	31.15	100	263 Peak
2	166.08	31.15	-12.35	43.50	50.74	10.01	1.41	31.01	---	Peak
3	199.29	29.24	-14.26	43.50	49.42	9.30	1.54	31.02	---	Peak
4	680.80	28.34	-17.66	46.00	36.95	18.81	3.19	30.61	---	Peak
5	714.40	28.32	-17.68	46.00	36.60	19.03	3.27	30.57	---	Peak
6	747.30	26.22	-19.78	46.00	34.10	19.32	3.32	30.53	---	Peak



Trace: (Discrete)

Site : 03CH06-HY
 Condition : SHF-EHF HORN HORIZONTAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH39; 2441MHz + Adaptor
 Plane : E1
 Rate : DH5

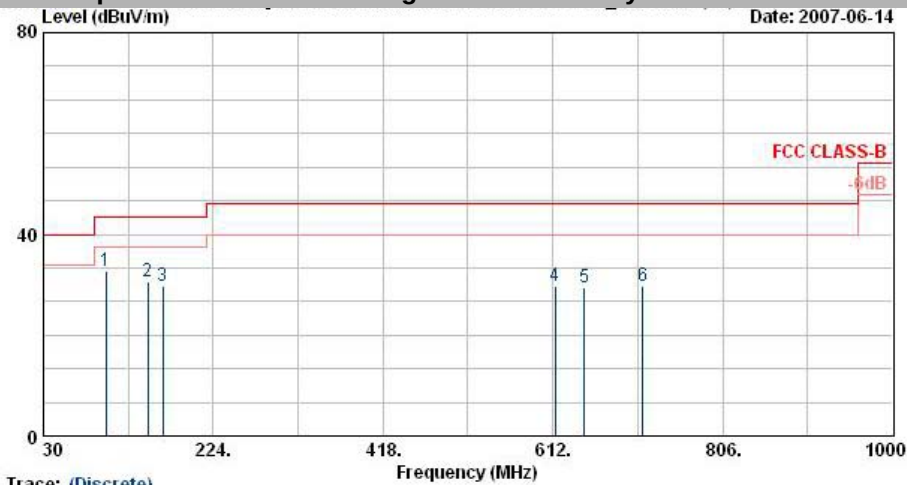
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2384.00	38.48	-15.52	54.00	39.92	30.25	3.75	35.44	153	131 Average
2	2384.00	50.03	-23.97	74.00	51.47	30.25	3.75	35.44	100	0 Peak
3 @	2441.00	88.68			90.06	30.28	3.82	35.47	100	0 Peak
4 @	2441.00	84.48			85.88	30.28	3.82	35.49	153	131 Average
5	2484.00	37.76	-16.24	54.00	39.12	30.29	3.86	35.51	153	131 Average
6	2484.00	49.21	-24.79	74.00	50.57	30.29	3.86	35.51	100	0 Peak
7	5607.00	48.84	-25.16	74.00	44.18	33.70	6.88	35.93	---	---
8	7776.00	56.68	-17.32	74.00	45.61	39.30	7.71	35.94	100	0 Peak
9	7776.00	45.02	-8.98	54.00	33.95	39.30	7.71	35.94	100	61 Average
10	10941.00	37.50	-36.50	74.00	72.04	-8.32	9.83	36.04	---	---
11	14181.00	38.09	-35.91	74.00	67.59	-6.28	11.67	34.89	---	---
12	16026.00	41.13	-32.87	74.00	69.74	-4.27	11.78	36.13	---	---
13	18996.00	48.23	-25.77	74.00	43.94	21.95	18.09	35.75	---	---
14	24916.00	48.17	-25.83	74.00	46.16	21.87	18.69	38.55	---	---

Remark: #3 and #4 Fundamental Signal



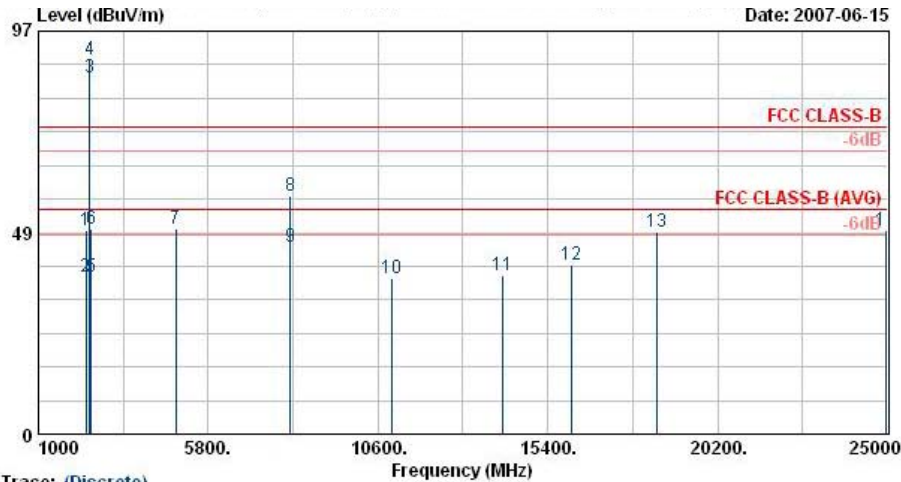
- Test Mode : Mode 2
- Polarization : Vertical

■ 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 : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH39;2441MHz + Adaptor
 Plane : E1
 Rate : DH5

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamplifier Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	101.28	32.86	-10.64	43.50	51.88	11.07	1.07	31.15	100	244	Peak
2	149.34	30.69	-12.81	43.50	50.03	10.39	1.34	31.07	---	---	Peak
3	166.08	29.68	-13.82	43.50	49.27	10.01	1.41	31.01	---	---	Peak
4	614.30	29.75	-16.25	46.00	38.88	18.53	3.00	30.66	---	---	Peak
5	647.90	29.39	-16.61	46.00	38.27	18.67	3.10	30.65	---	---	Peak
6	714.40	29.68	-16.32	46.00	37.95	19.03	3.27	30.57	---	---	Peak



Trace: (Discrete)

Site : 03CH06-HY
 Condition : SHF-EHF HORN VERTICAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH39;2441MHz + Adaptor
 Plane : E1
 Rate : DH5

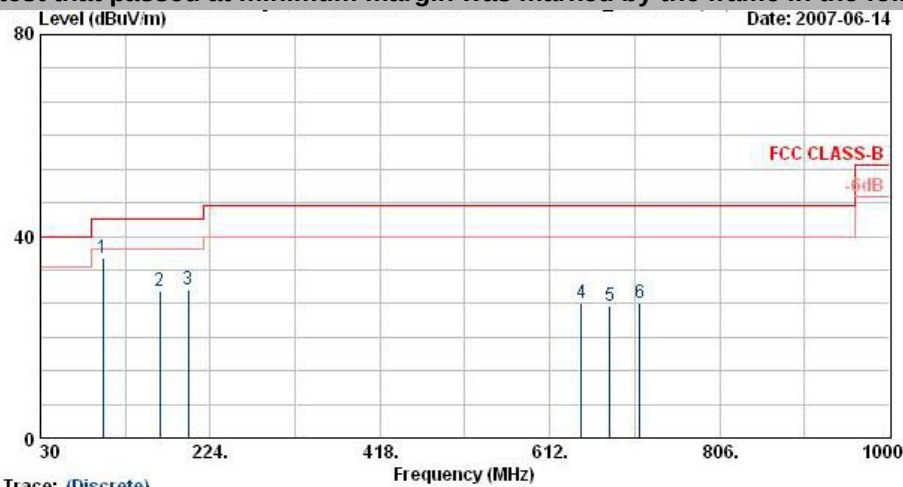
	Freq	Level	Over Limit	Limit Line	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2348.00	49.08	-24.92	74.00	50.56	30.24	3.71	35.42	100	0 Peak
2	2348.00	37.85	-16.15	54.00	39.33	30.24	3.71	35.42	100	147 Average
3 @	2441.00	85.87			87.27	30.28	3.82	35.49	100	147 Average
4 @	2441.00	90.30			91.68	30.28	3.82	35.47	100	0 Peak
5	2498.00	37.80	-16.20	54.00	39.15	30.30	3.88	35.53	100	147 Average
6	2498.00	49.43	-24.57	74.00	50.78	30.30	3.88	35.53	100	0 Peak
7	4881.00	49.29	-24.71	74.00	46.43	33.14	5.88	36.16	---	--- Peak
8	8121.00	57.25	-16.75	74.00	45.72	39.50	7.94	35.91	100	360 Peak
9	8121.00	44.97	-9.03	54.00	33.45	39.50	7.94	35.91	100	96 Average
10	10986.00	37.40	-36.60	74.00	71.81	-8.30	9.87	35.98	---	--- Peak
11	14142.00	38.25	-35.75	74.00	67.62	-6.24	11.66	34.79	---	--- Peak
12	16062.00	40.89	-33.11	74.00	69.28	-4.64	11.79	35.53	---	--- Peak
13	18477.00	48.58	-25.42	74.00	44.23	21.19	19.12	35.96	---	--- Peak
14	24956.00	49.05	-24.95	74.00	47.11	21.83	18.64	38.53	---	--- Peak

Remark: #3 and #4 Fundamental Signal



- Test Mode : Mode 3
- Polarization : Horizontal

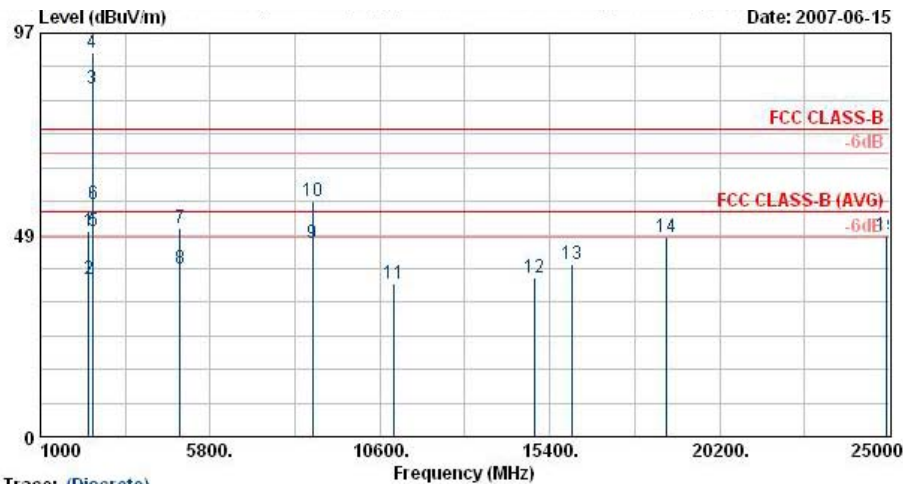
■ The test that passed at minimum margin was marked by the frame in the following table.



Trace: (Discrete)

Site : 03CH06-HY
 Condition : LF-ANT(951121) HORIZONTAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH78;2480MHz + Adaptor
 Plane : E1
 Rate : DH5

	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 @	101.28	35.70	-7.80	43.50	54.71	11.07	1.07	31.15	100	135
2	166.08	29.14	-14.36	43.50	48.73	10.01	1.41	31.01	---	---
3	199.29	29.49	-14.01	43.50	49.67	9.30	1.54	31.02	---	---
4	647.90	26.91	-19.09	46.00	35.79	18.67	3.10	30.65	---	---
5	680.80	26.17	-19.83	46.00	34.78	18.81	3.19	30.61	---	---
6	714.40	26.71	-19.29	46.00	34.99	19.03	3.27	30.57	---	---



Trace: (Discrete)

Site : 03CH06-HY
Condition : SHF-EHF HORN HORIZONTAL
EUT : Tri band Mobile Phone with GPS
Power : 120Vac/60Hz
Model : FR 721310
Memo : BT TX_CH78;2480MHz + Adaptor
Plane : E1
Rate : DH5

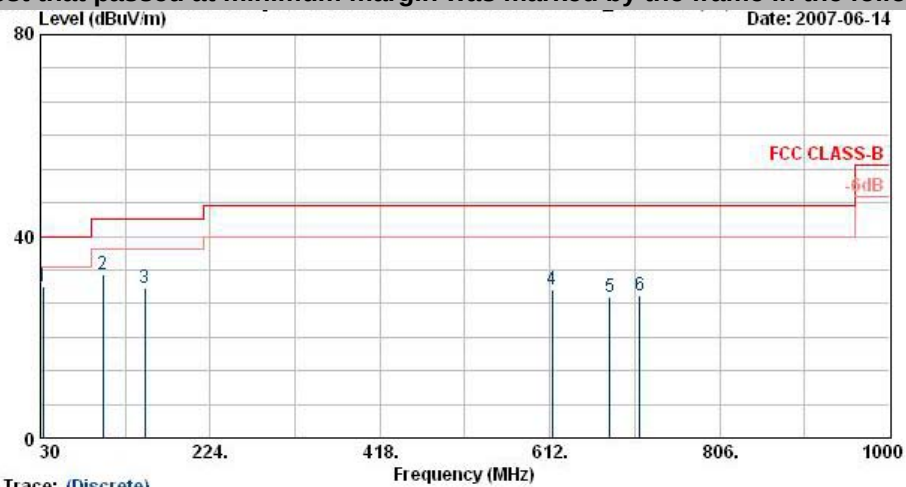
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB	dB	cm	deg	
1	2364.00	49.56	-24.44	74.00	51.00	30.24	3.73	35.42	100	0 Peak
2	2364.00	37.91	-16.09	54.00	39.36	30.24	3.73	35.42	100	110 Average
3 @	2480.00	83.54			84.90	30.29	3.86	35.51	100	110 Average
4 @	2480.00	92.45			93.81	30.29	3.86	35.51	100	0 Peak
5 @	2483.50	49.25	-4.75	54.00	50.61	30.29	3.86	35.51	100	110 Average
6	2483.50	56.05	-17.95	74.00	57.41	30.29	3.86	35.51	100	0 Peak
7	4956.00	50.26	-23.74	74.00	47.09	33.47	5.93	36.23	100	0 Peak
8	4956.00	40.26	-13.74	54.00	37.09	33.47	5.93	36.23	100	248 Average
9 @	8691.00	46.37	-7.63	54.00	35.03	38.94	8.66	36.26	100	0 Average
10	8691.00	56.67	-17.33	74.00	45.33	38.94	8.66	36.26	100	0 Peak
11	10971.00	36.92	-37.08	74.00	71.39	-8.31	9.86	36.01	---	--- Peak
12	14976.00	38.05	-35.95	74.00	69.00	-6.22	11.27	36.01	---	--- Peak
13	16026.00	41.57	-32.43	74.00	70.19	-4.27	11.78	36.13	---	--- Peak
14	18711.00	47.79	-26.21	74.00	43.57	21.28	18.79	35.85	---	--- Peak
15	24916.00	48.48	-25.52	74.00	46.47	21.87	18.69	38.55	---	--- Peak

Remark: #3 and #4 Fundamental Signal



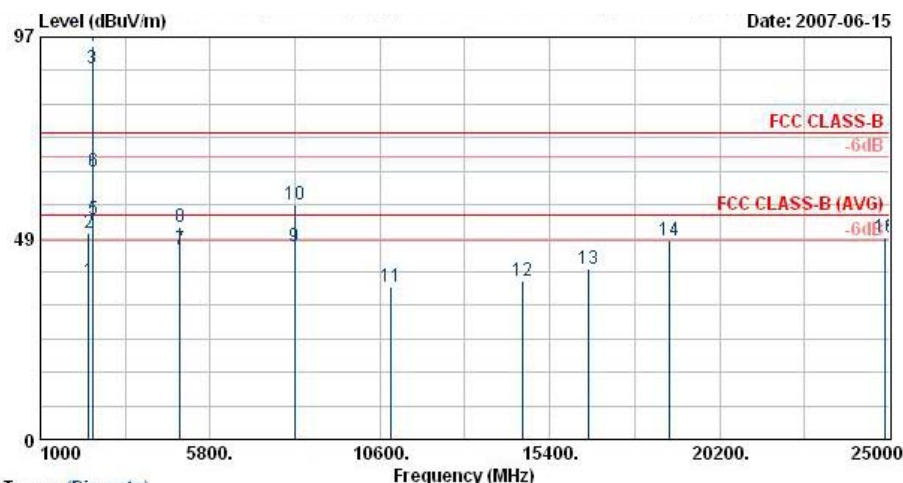
- Test Mode : Mode 3
- Polarization : Vertical

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



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : LF-ANT(951121) VERTICAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH78;2480MHz + Adaptor
 Plane : E1
 Rate : DH5

	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	33.24	29.90	-10.10	40.00	43.06	17.54	0.66	31.36	100	55 Peak
2	101.28	32.32	-11.18	43.50	51.34	11.07	1.07	31.15	---	---
3	149.34	29.68	-13.82	43.50	49.02	10.39	1.34	31.07	---	---
4	614.30	29.35	-16.65	46.00	38.48	18.53	3.00	30.66	---	---
5	680.80	27.99	-18.01	46.00	36.60	18.81	3.19	30.61	---	---
6	714.40	28.27	-17.73	46.00	36.55	19.03	3.27	30.57	---	---



Trace: (Discrete)

Site : 03CH06-HY
 Condition : SHF-EHF HORN VERTICAL
 EUT : Tri band Mobile Phone with GPS
 Power : 120Vac/60Hz
 Model : FR 721310
 Memo : BT Tx_CH78;2480MHz + Adaptor
 Plane : E1
 Rate : DH5

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2368.00	38.39	-15.61	54.00	39.85	30.24	3.73	35.44	100	100	Average
2	2368.00	49.69	-24.31	74.00	51.15	30.24	3.73	35.44	100	360	Peak
3 @	2480.00	89.34			90.70	30.29	3.86	35.51	100	100	Average
4 @	2480.00	94.76			96.11	30.29	3.86	35.51	100	360	Peak
5 @	2483.50	53.12	-0.88	54.00	54.48	30.29	3.86	35.51	100	100	Average
6	2483.50	64.60	-9.40	74.00	65.96	30.29	3.86	35.51	100	360	Peak
7	4956.00	45.72	-8.28	54.00	42.55	33.47	5.93	36.23	100	193	Average
8	4956.00	51.36	-22.64	74.00	48.19	33.47	5.93	36.23	100	0	Peak
9 @	8181.00	46.42	-7.58	54.00	34.92	39.46	8.00	35.96	100	0	Average
10	8181.00	56.62	-17.38	74.00	45.12	39.46	8.00	35.96	100	0	Peak
11	10896.00	36.83	-37.17	74.00	71.48	-8.34	9.80	36.11	---	---	Peak
12	14646.00	38.15	-35.85	74.00	68.68	-6.48	11.60	35.66	---	---	Peak
13	16482.00	41.25	-32.75	74.00	70.03	-9.85	11.88	30.81	---	---	Peak
14	18786.00	48.11	-25.89	74.00	43.93	21.35	18.66	35.83	---	---	Peak
15	24876.00	48.65	-25.35	74.00	46.50	21.94	18.80	38.59	---	---	Peak
16	24876.00	48.65	-25.35	74.00	46.50	21.94	18.80	38.59	---	---	Peak

Remark: #3 and #4 Fundamental Signal



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 chip 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. 04, 2007	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 13, 2006	Jul. 12, 2007	Radiation (03CH06-HY)
Controller	INN-CO	CO2000	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	10094	1G-18G	Dec. 26, 2006	Dec. 25, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Nov. 20, 2006	Nov. 19, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Pre Amplifier	Mini Circuits	ZKL-2	D092004-1	10~2500MHz	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	INN-CO	MM3000	114/8000604/L	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	106656	WCDMA	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Amplifier	MITEQ	AMF-6F-260400	923364	26.5 GHz - 40 GHz	Jan. 22, 2007	Jan. 22, 2008	Radiation (03CH06-HY)

7. Uncertainty Evaluation

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

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

Uncertainty of Radiated Emission 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 = $20 \log(1 - \Gamma_1^2 \Gamma_2^2)$	+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				