FCC TEST REPORT

for

47 CFR Part 15 Subpart C

Equipment	:	**GSM900/DCS1800/PCS1900 Tri Band Mobile Phone**
Trade Name	:	**BenQ-Siemens**
Model No.	:	**CL71**
FCC ID	:	**JVPCL71**
BenQ Ref. No.	:	**KH-5674**
Filing Type	:	**Certification**
Applicant	:	**BenQ Corporation** 157 Shan-Ying Road, Gueishan Taoyuan 333, Taiwan

- The test result refers exclusively to the test presented test model / sample.
- Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.
- **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 Jan. 23, 2006 at **Sporton International Inc. LAB.**
- Report No.: FR610306, Report Version: Rev. 01.

Dr. Daniel Lee
EMC/SAR Director

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

Table of Contents

History of this test report

Report Issue Date: Mar. 01, 2006

Report No.	Description

1. General Description of Equipment under Test

1.1. Applicant

BenQ Corporation
157 Shan-Ying Road, Gueishan Taoyuan 333, Taiwan

1.2. Manufacturer

1. BenQ Corporation
157 Shan-Ying Road, Gueishan Taoyuan 333, Taiwan
2. BenQ (IT) Co., Ltd.
No. 169, Zhujiang Road, New District, Suzhou, Jiangsu, P.R., China

1.3. Basic Description of Equipment under Test

Equipment	: GSM900/DCS1800/PCS1900 Tri Band Mobile Phone
Trade Name	: BenQ-Siemens
Model No.	: CL71
FCC ID	: JVPCL71
Power Supply Type	: Switching
AC Power Cord	: AC 120V, Wall-mount, 1.8 meter, 2 pin
Battery	: BenQ-Siemens, 2C.2G0S0.XXX (X=0~9, A~Z, or Blank)
Adapter	: BenQ-Siemens, JSP054070UU

1.4. Feature of Equipment under Test

Product Feature & Specification				
1. Modulation Type/Data Rate	GFSK			
2. Frequency Range.	2400 MHz ~ 2483.5 MHz			
Number of Channels	79			
3. Carrier Frequency of each channel	2402+ n*1 MHz, n= 0~78			
4. Channel Spacing	1 MHz			
5. Maximum Output Power to Antenna (Normal condition)	0.32 dBm			
6. Type of Antenna Connector	N/A			
7. Antenna Type	PIFA			
8. Antenna Gain	2 dBi			
9. HW Version	LPR3			
10. SW Version	V0.07			
11. Function Type	Transmitter		Transceiver	V
12. Power Rating (DC/AC , Voltage)	2.8V / 40mA			
13. DUT Stage	Identical Prototype			

2. Test Configuration of Equipment under Test

2.1. Test Manner

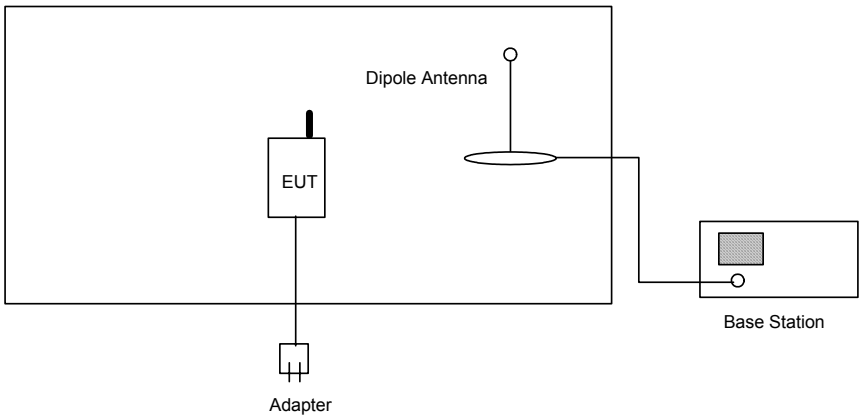
a. The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
b. For spurious emission below 1GHz, only one channel of each application was tested because it is not related to channel selection.
c. The EUT is programmed to transmit signal continuously for all testings.
d. Frequency range investigated: conduction 150 kHz to 30 MHz, radiation 30 MHz to 25000MHz.

2.2. Test Mode

Application	Bluetooth
Radiated Emission and conducted test items	Mode 1: Tx_CH00_2402 MHz Mode 2: Tx_CH39_2441 MHz Mode 3: Tx_CH78_2480 MHz
Conducted Emission	Mode 1: PCS1900 Idle + BT Link + MP3 Player Mode 2: PCS1900 Idle + BT Link + Camera Mode 3: PCS1900 Idle + USB Link

2.3. Connection Diagram of Test System

<Radiation Emission>



2.4. Ancillary Equipment List

Item	Asset	Model Name	Power Cord
1.	Base Station (R&S)	CMU 200	N/A
2.	Bluetooth Earphone (Free Style)	JD-100	N/A
3.	Earphone	HES-105	N/A

3. RF Utility

The EUT is in BT Link for conducted emission or in BT continuous Tx Mode controlled by RF utility and base station simulator for radiation emission and other conducted tests.

4. General Information of Test

Test Site Location	:	No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL : 886-3-327-3456 FAX : 886-3-318-0055
Test Site No	:	CO01-HY, 03CH06-HY

4.1. Test Voltage

AC 120V

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

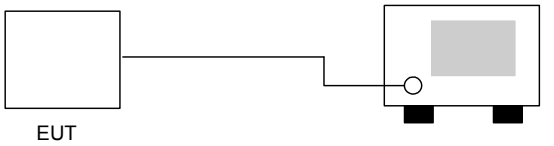
5.2.1. Measuring Instruments：

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

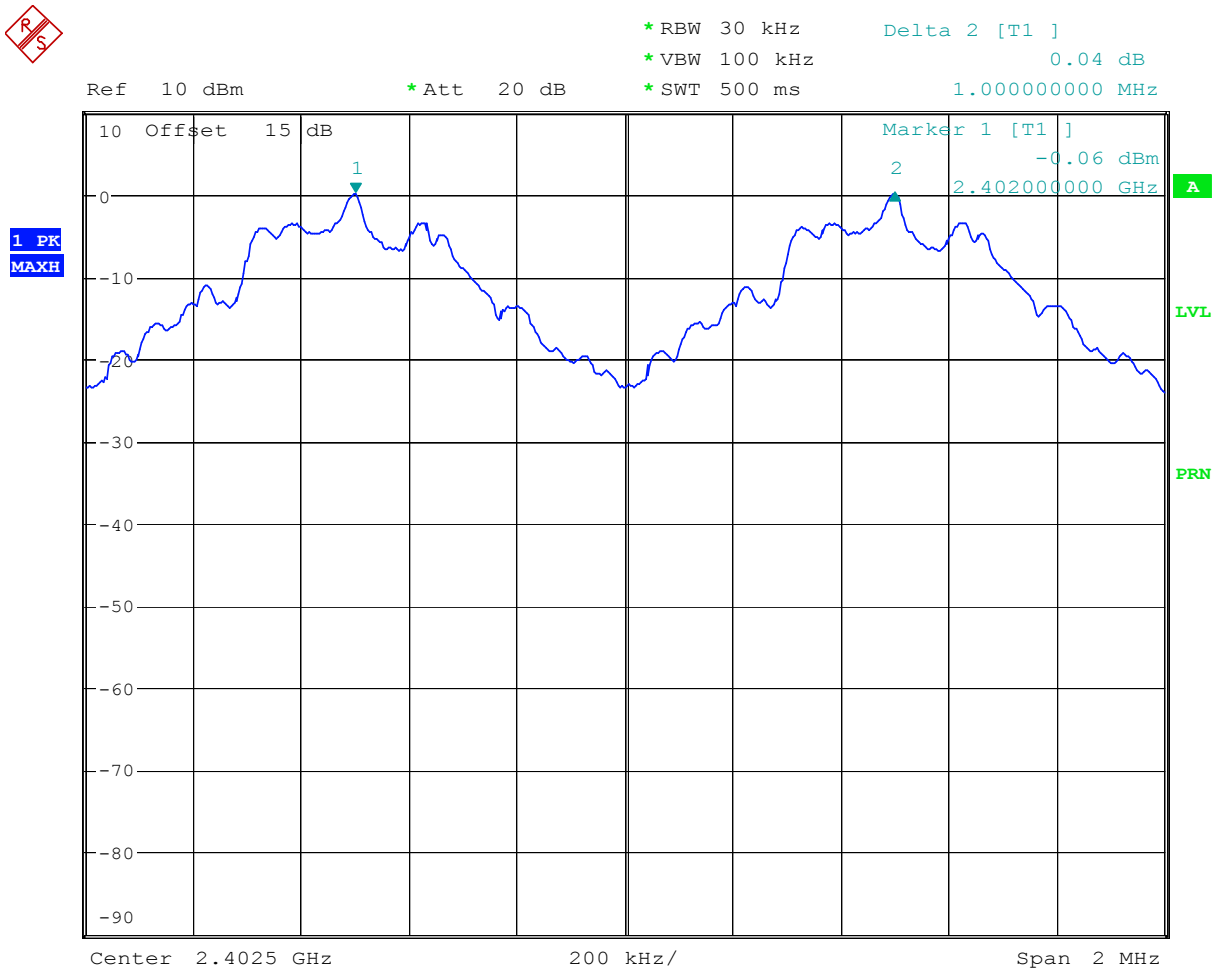
- Temperature: 26°C
- Relative Humidity: 54%
- Test Engineer : Jay

Channel	Frequency (MHz)	Hopping Channel Separation (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	1.000	0.880	Mode 1
39	2441	1.006	0.878	Mode 2
78	2480	1.000	0.883	Mode 3

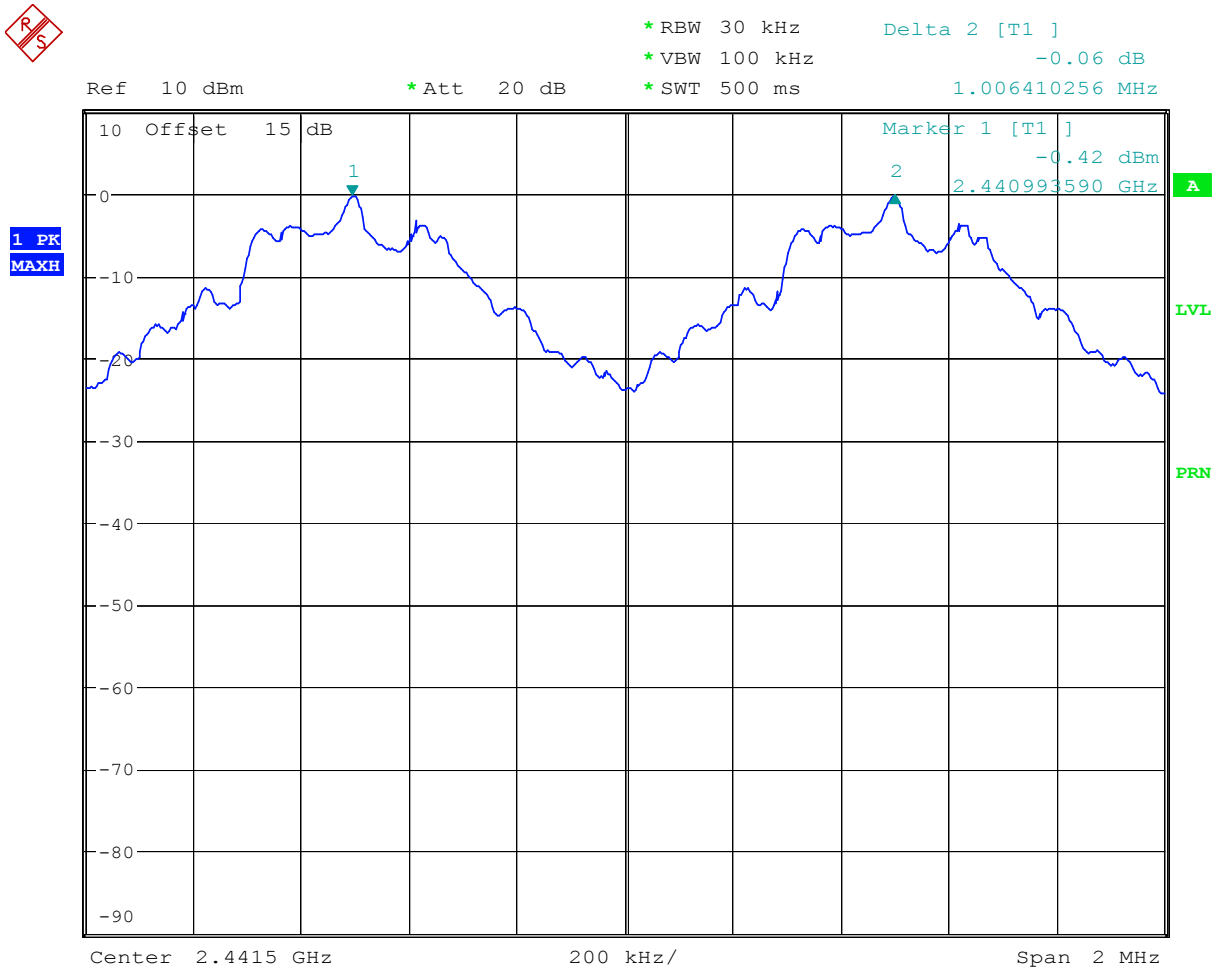
Remark: Limit is the greater one of 25kHz or the 20dB bandwidth of the hopping channel.

5.2.5 Hopping Channel Separation

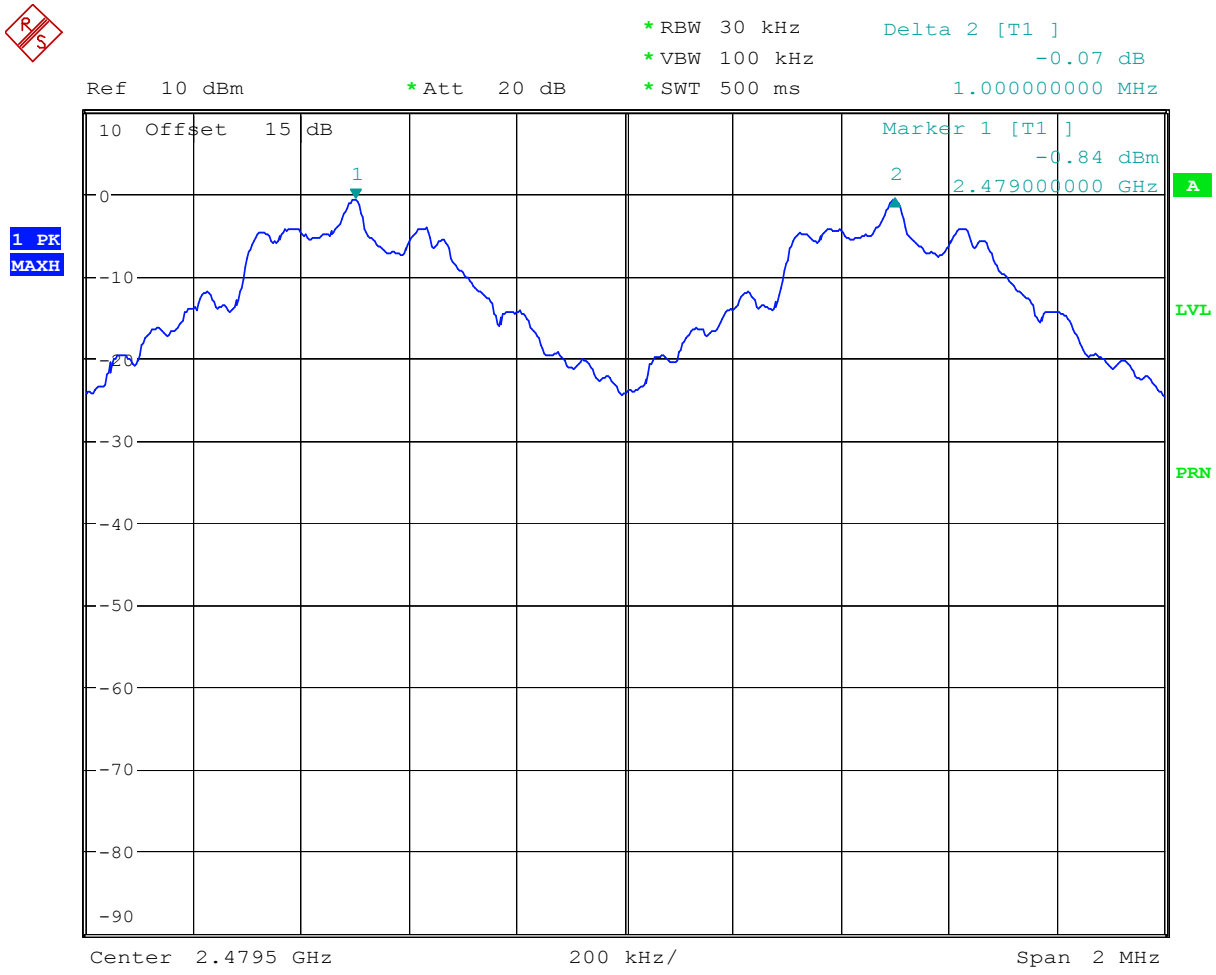
Mode 1: CH00 (2402MHz)



Mode 2: CH39 (2441MHz)



Mode 3: CH78 (2480MHz)



5.3. Number of Hopping Frequency

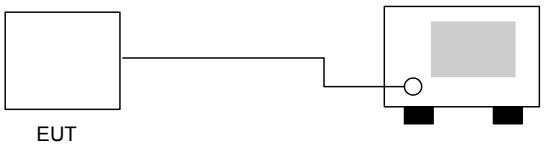
5.3.1. Measuring Instruments：

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：

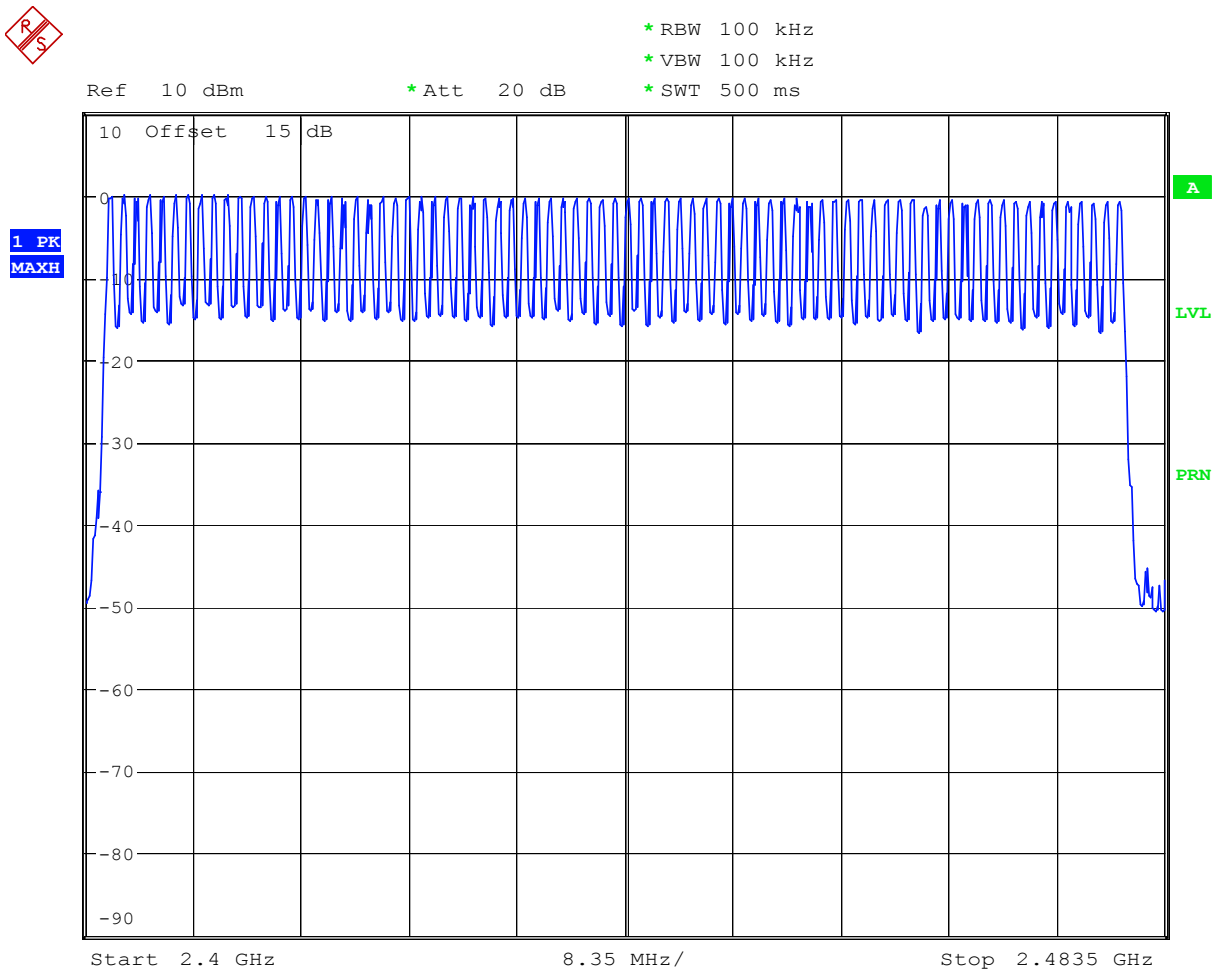


5.3.4. Test Result：See spectrum analyzer plots below

- Temperature: 26°C
- Relative Humidity: 54%
- Test Engineer : Jay

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

5.3.5 Number of Hopping Frequency



Date: 20.JAN.2006 11:41:07

5.4 Hopping Channel Bandwidth

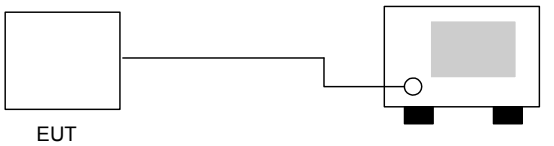
5.4.1 Measuring Instruments：

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：



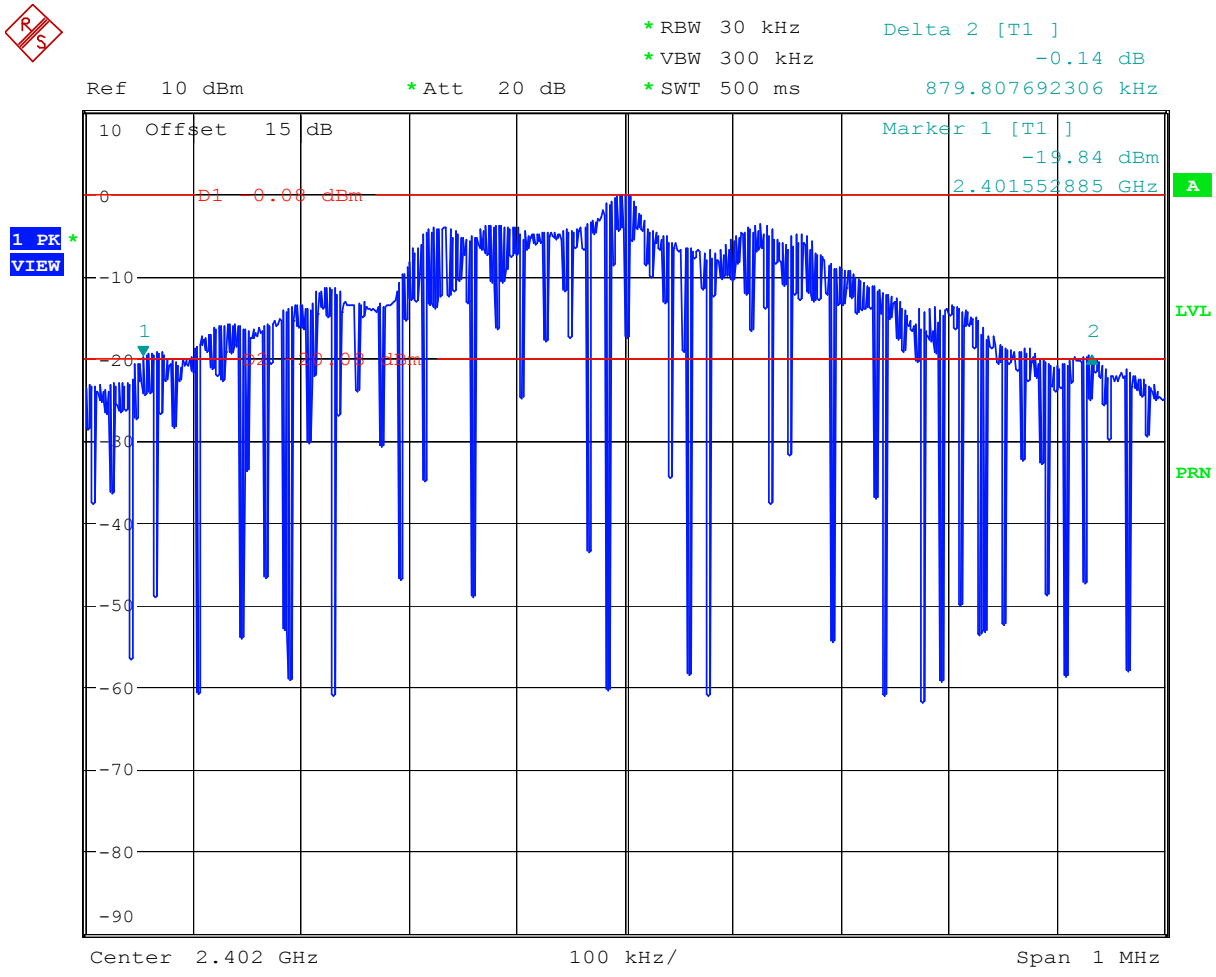
5.4.4 Test Result：See spectrum analyzer plots below

- Temperature: 26°C
- Relative Humidity: 54%
- Test Engineer : Jay

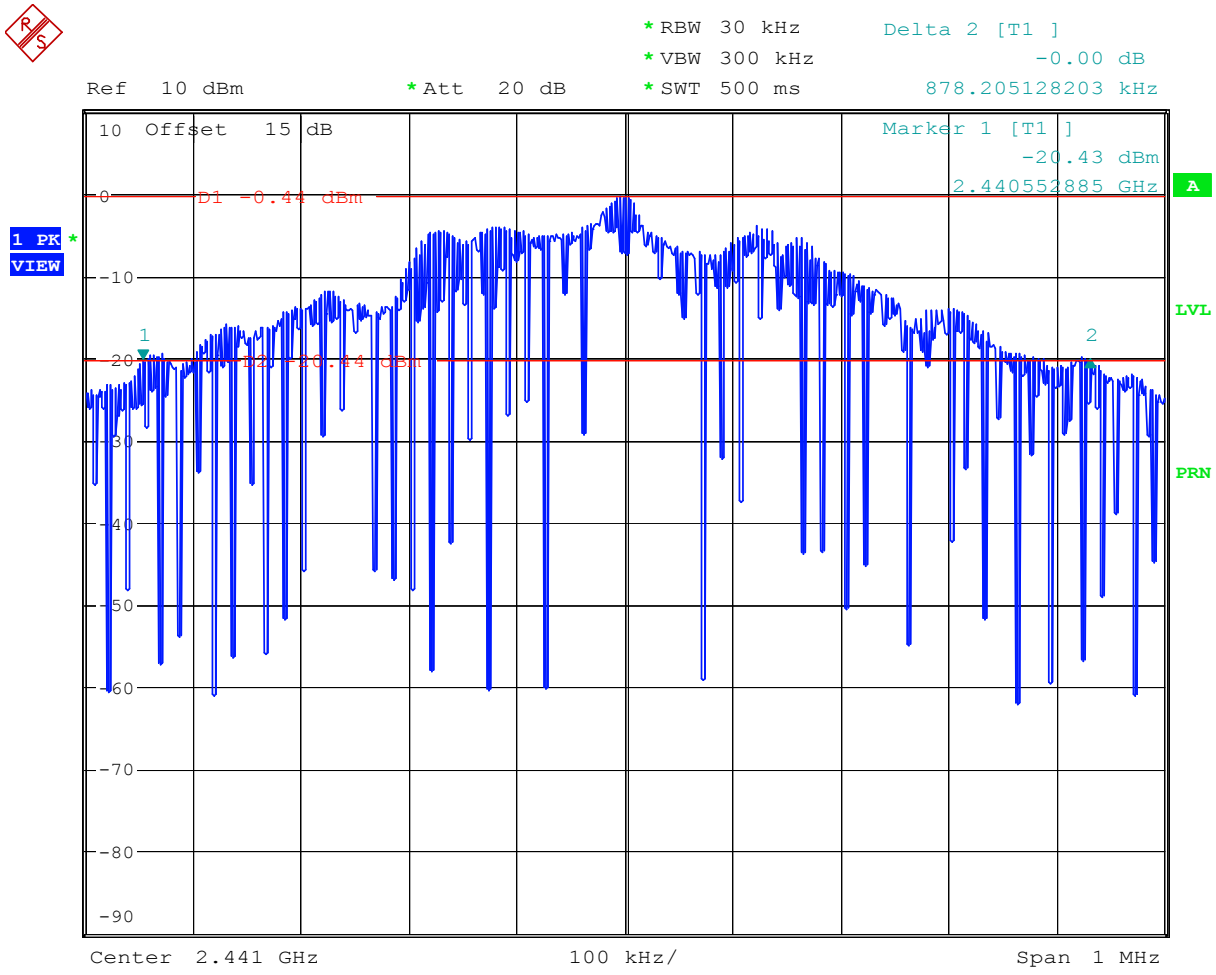
Channel	Frequency (MHz)	Hopping Channel Bandwidth (MHz)	Limits (MHz)	Plot Ref. No.
00	2402	0.880	1.0	Mode 1
39	2441	0.878	1.0	Mode 2
78	2480	0.883	1.0	Mode 3

5.4.5 Hopping Channel Bandwidth

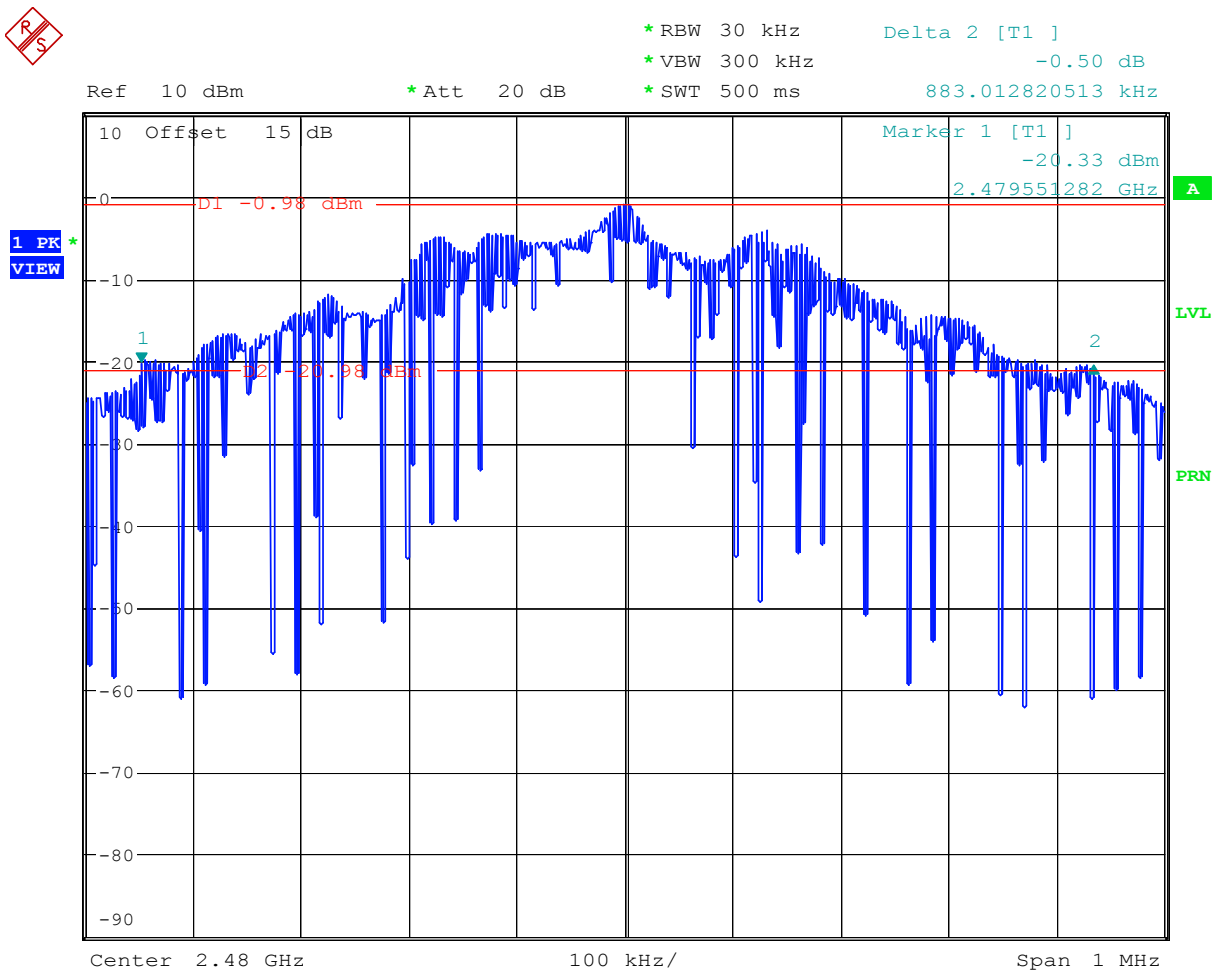
Mode 1: CH00 (2402MHz)



Mode 2: CH39 (2441MHz)



Mode 3: CH78 (2480MHz)



5.5 Dwell Time of Each Frequency

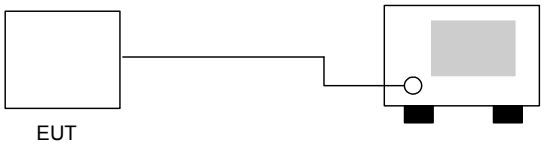
5.5.1 Measuring Instruments：

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 = 79*0.4*(1600/79)*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: 26°C
- Relative Humidity: 54%
- Test Engineer : Jay

Ch00

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	10.4	458.33	0.151	0.4
DH3	5.2	1729.16	0.284	0.4
DH5	3.9	2979.16	0.367	0.4

CH39

Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	10.1	455.12	0.145	0.4
DH3	5.4	1721.15	0.294	0.4
DH5	3.5	2995.19	0.331	0.4

CH78

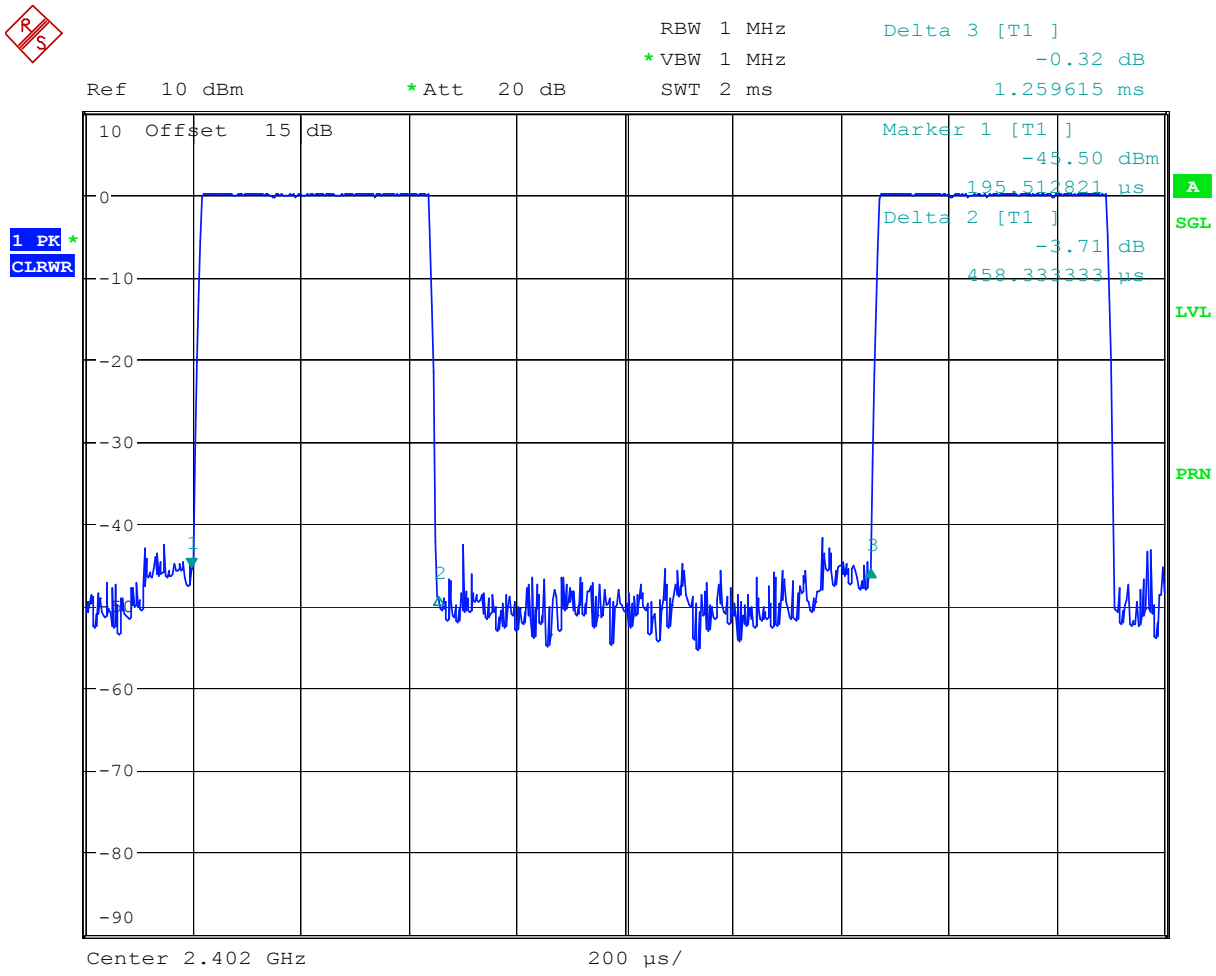
Package Mode	Average Hopping Channel	Package Transfer Time (us)	Dwell Time (s)	Limit (s)
DH1	10.2	455.12	0.147	0.4
DH3	4.8	1713.14	0.260	0.4
DH5	3.7	2979.16	0.348	0.4

※ Remark:

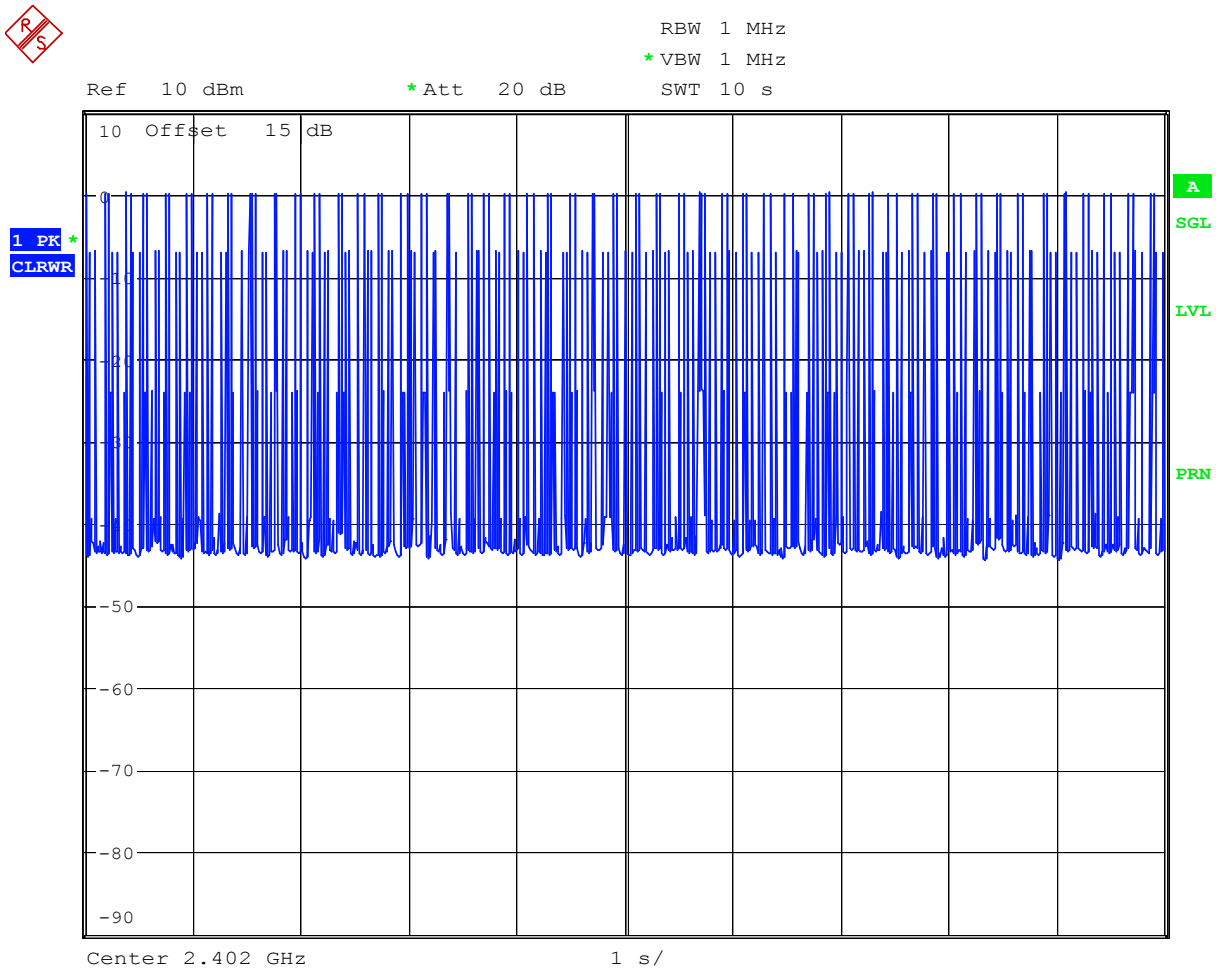
1. Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
2. 79channels come from the Hopping Channel number.
3. Average Hopping Channel = hops/sweep time
4. t: Package Transfer Time(us)

5.5.5 Dwell Time

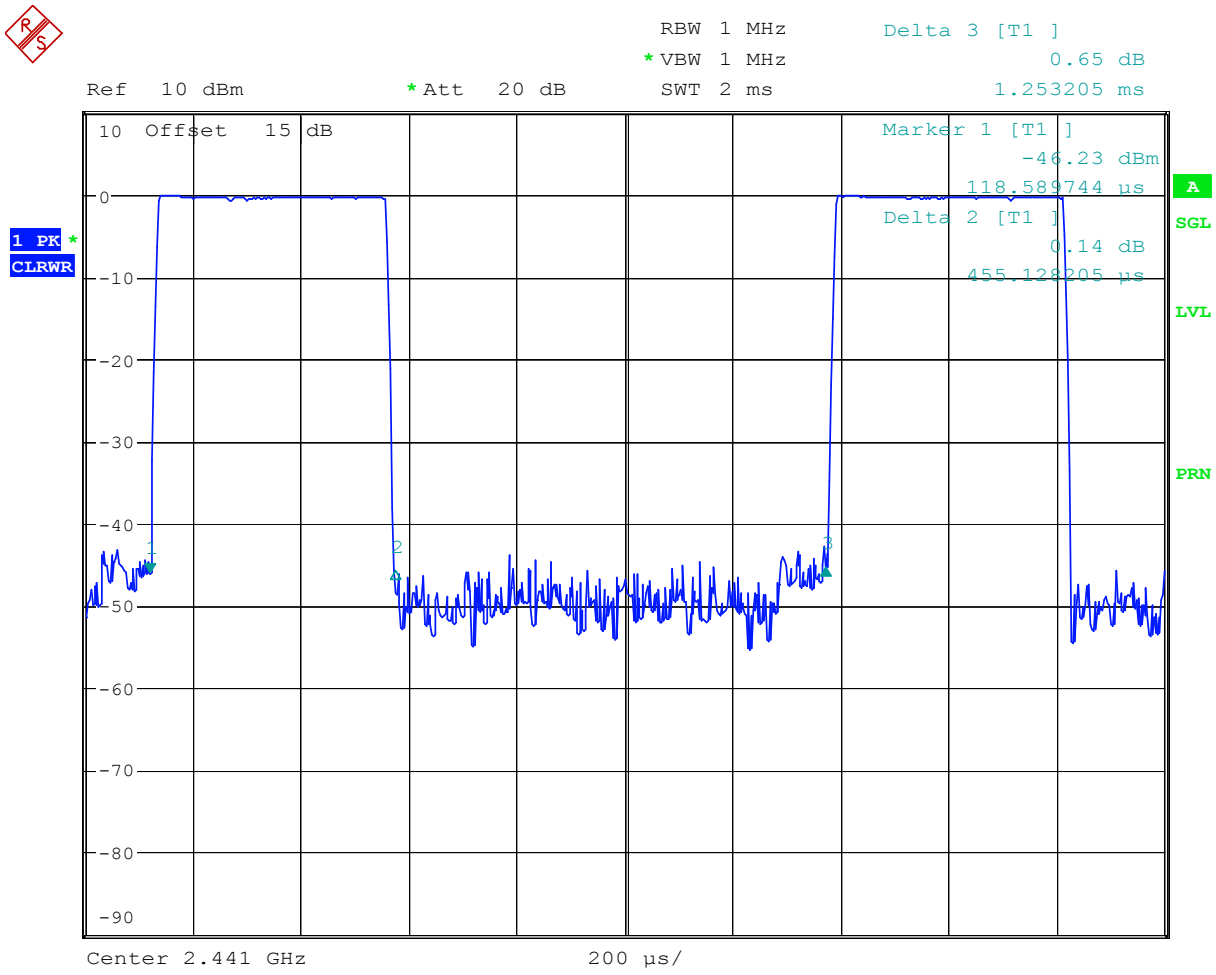
DH1 (CH00)



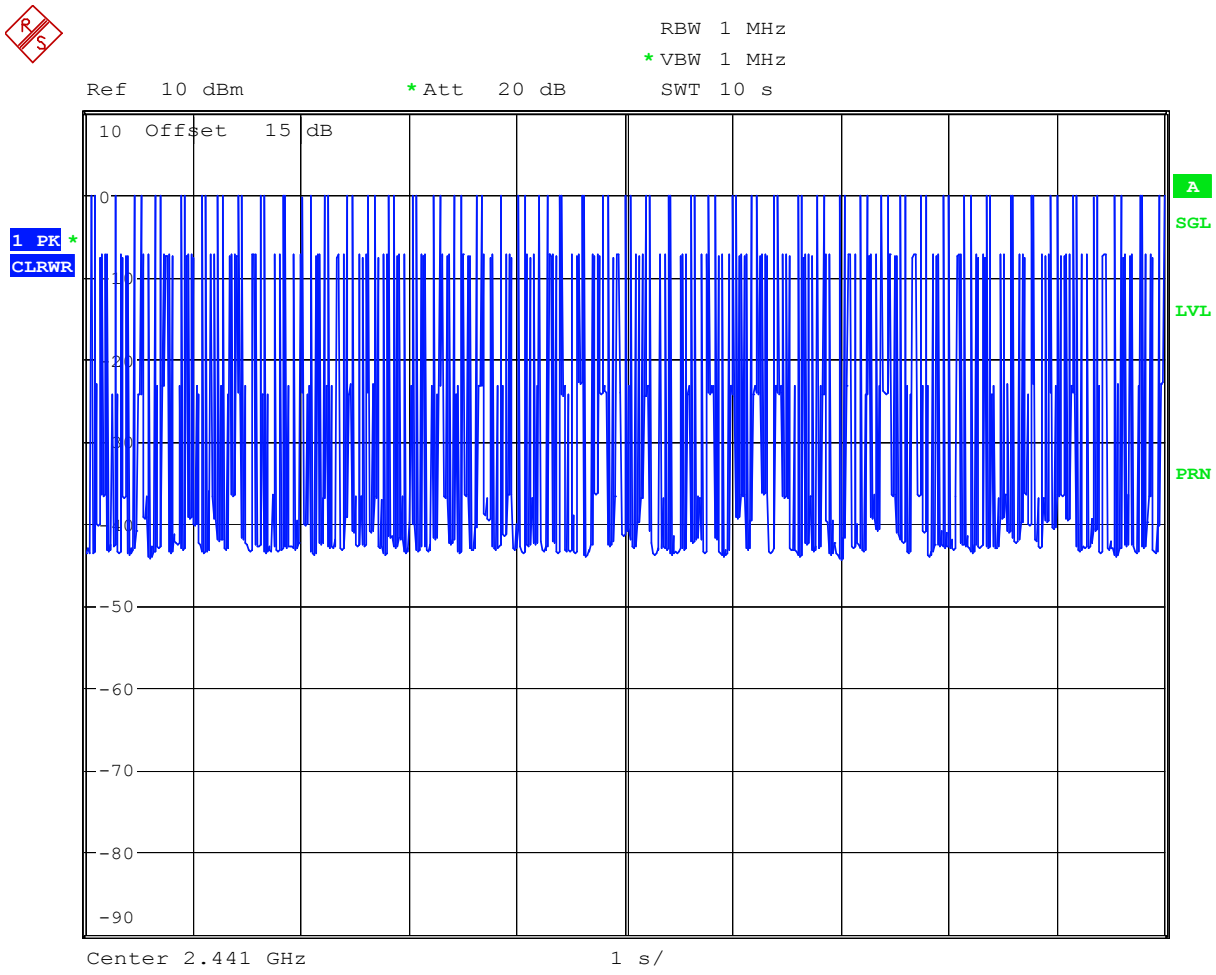
Date: 20.JAN.2006 13:33:16


RBW 1 MHz
*VBW 1 MHz
Ref 10 dBm
*Att 20 dB
SWT 10 s
10 Offset 15 dB
1 PK *
CLRWR
A
SGL
LVL
PRN
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
Center 2.402 GHz
1 s/
Date: 20.JAN.2006 11:46:55

DH1 (CH39)

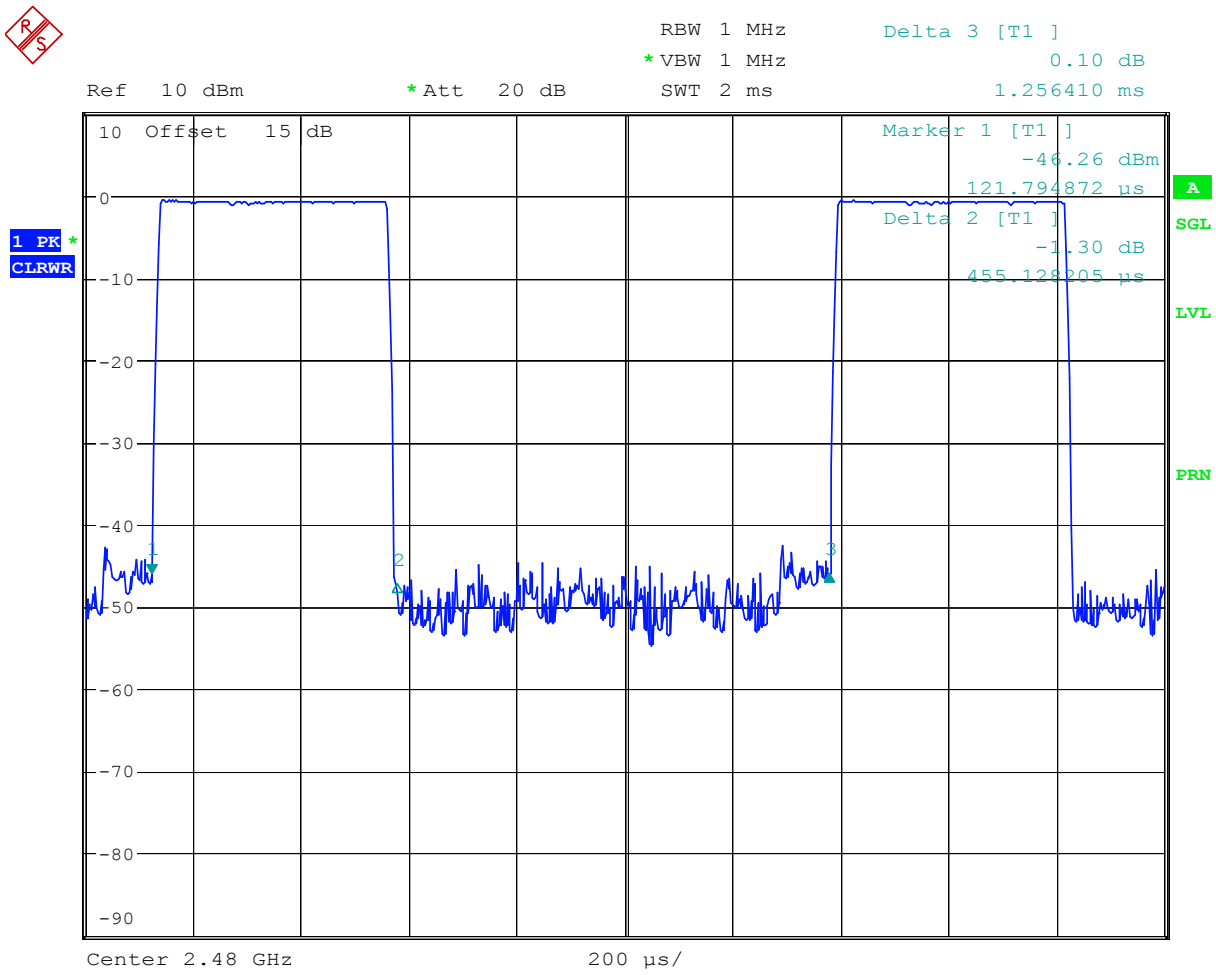


Date: 20.JAN.2006 11:17:01

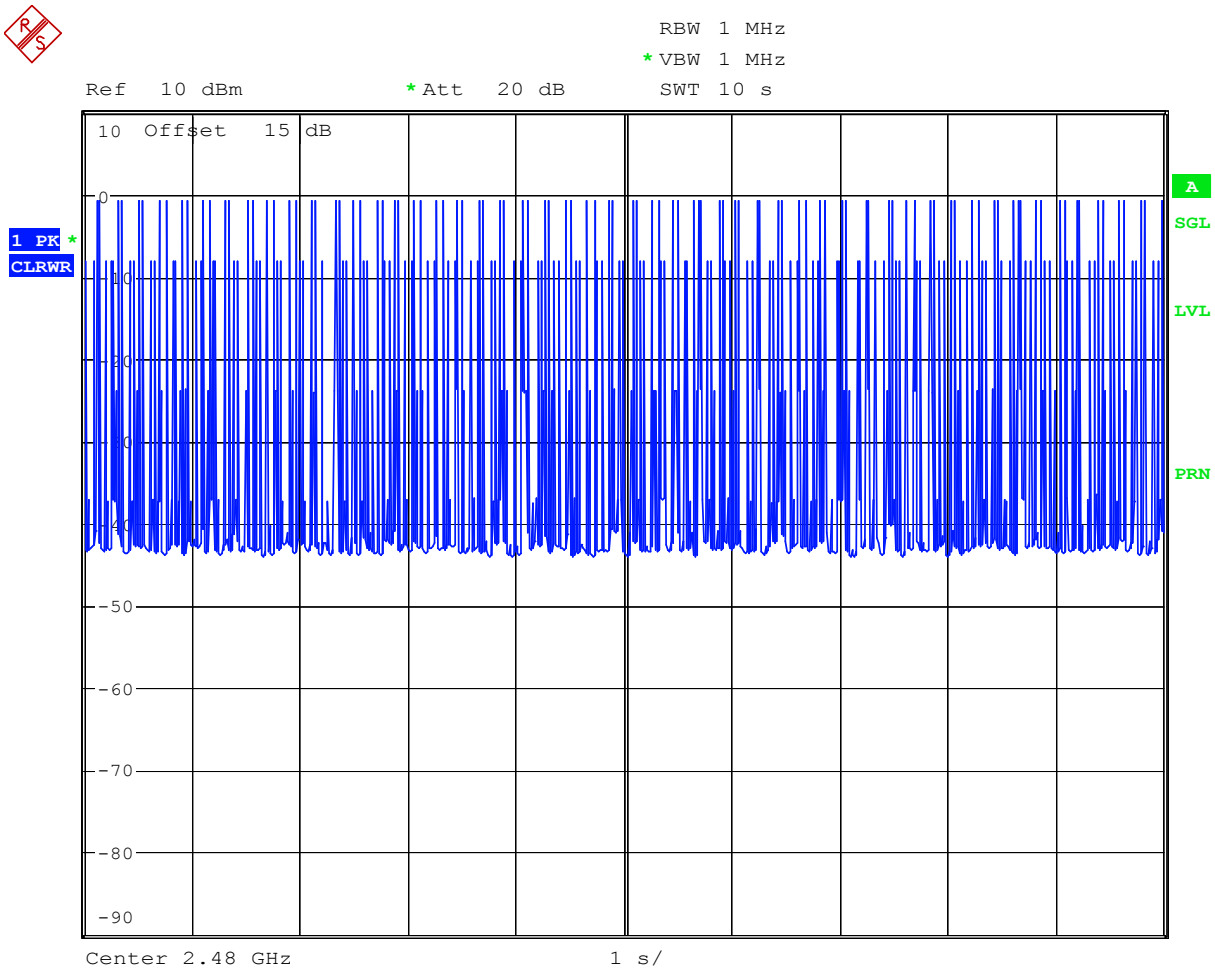


Date: 20.JAN.2006 11:47:30

DH1 (CH78)

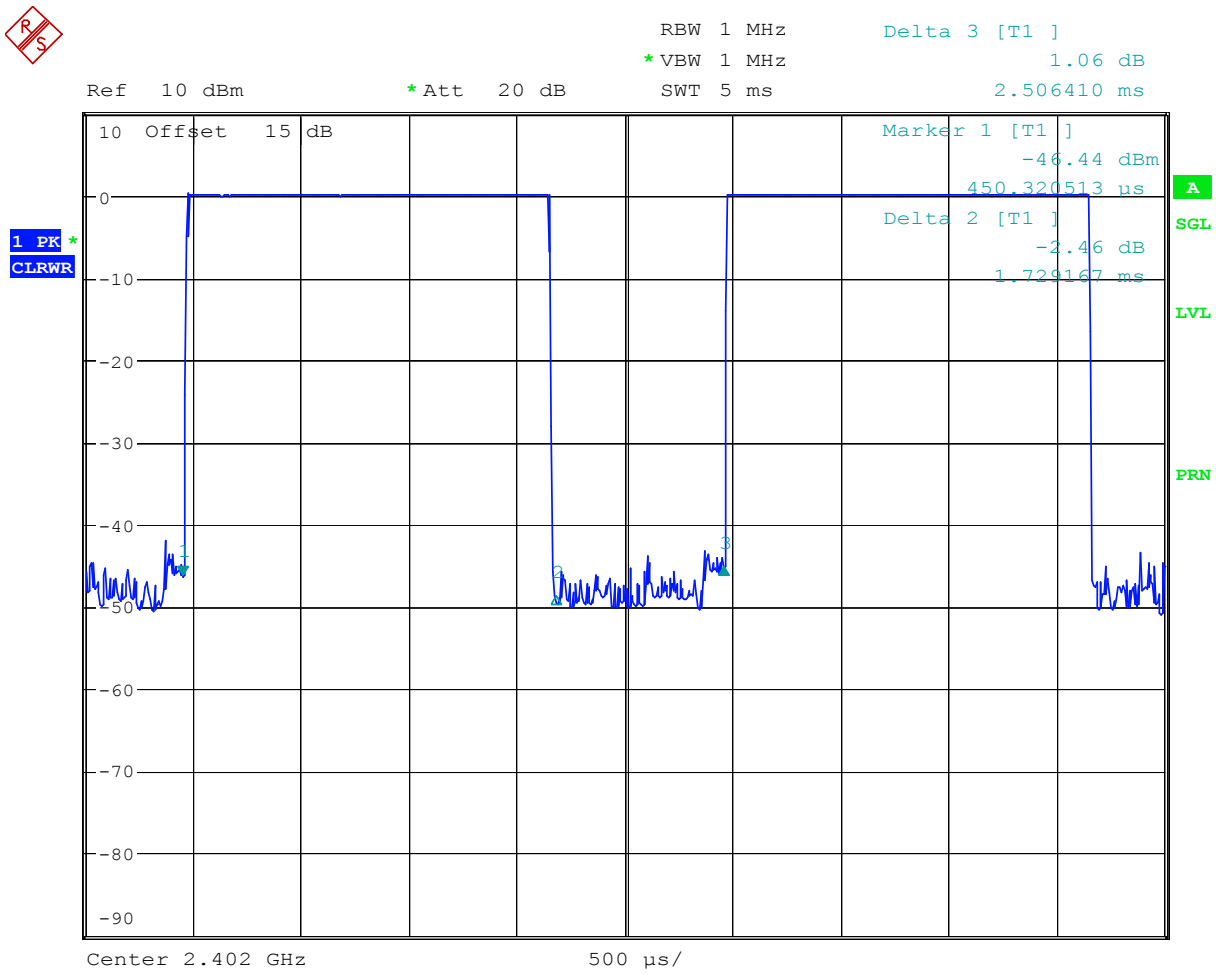


Date: 20.JAN.2006 11:17:46

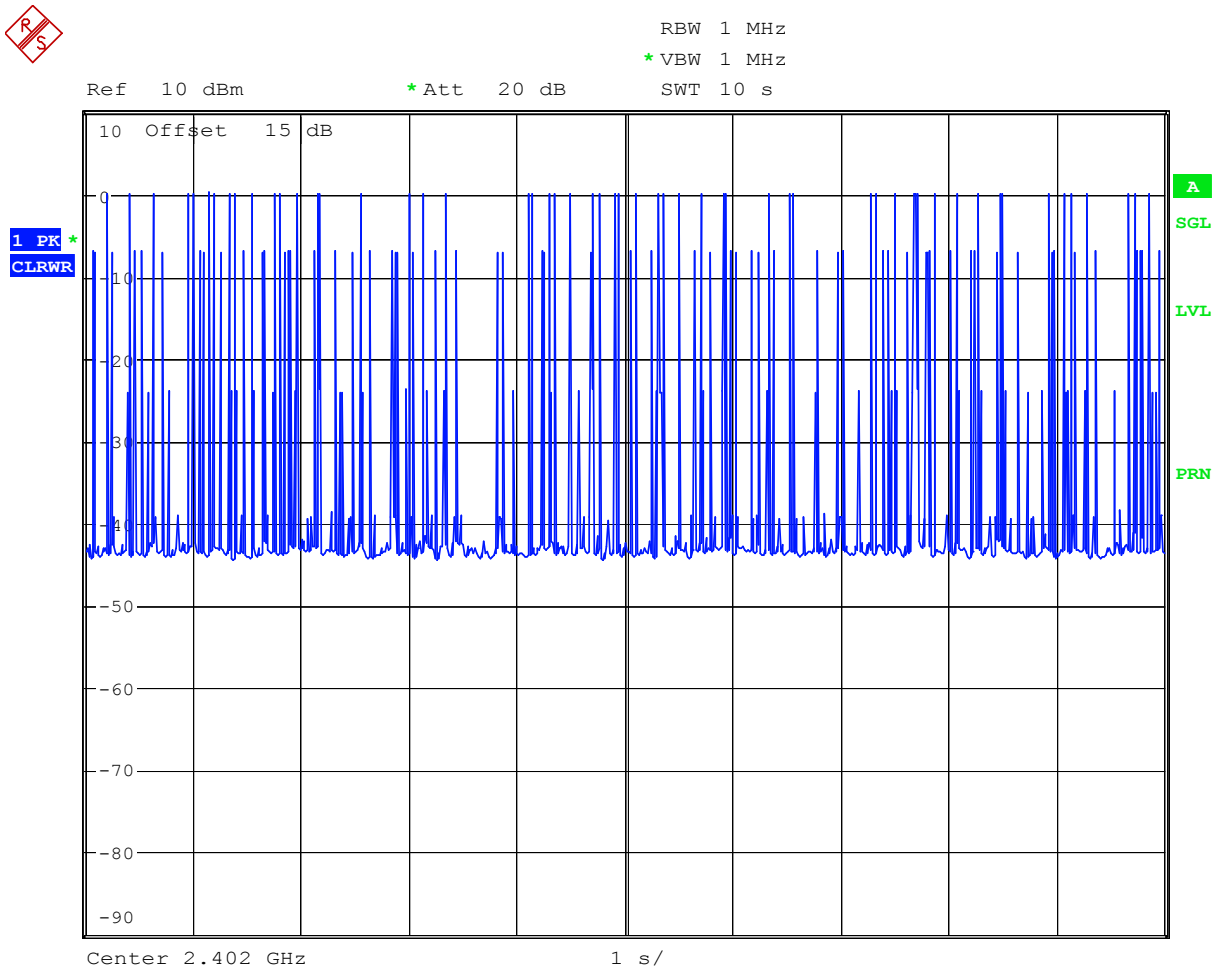


Date: 20.JAN.2006 11:48:00

DH3 (CH00)

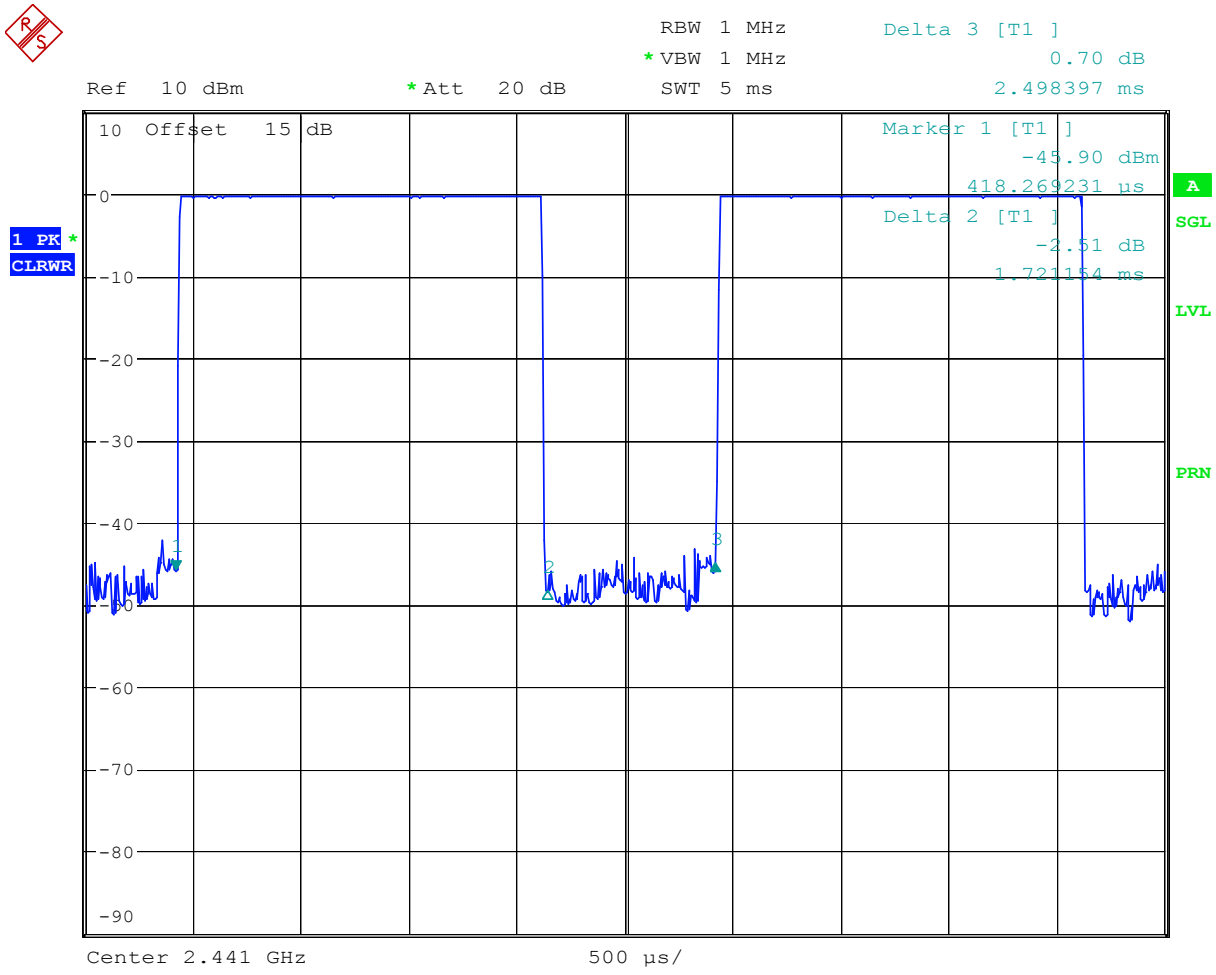


Date: 20.JAN.2006 11:19:55

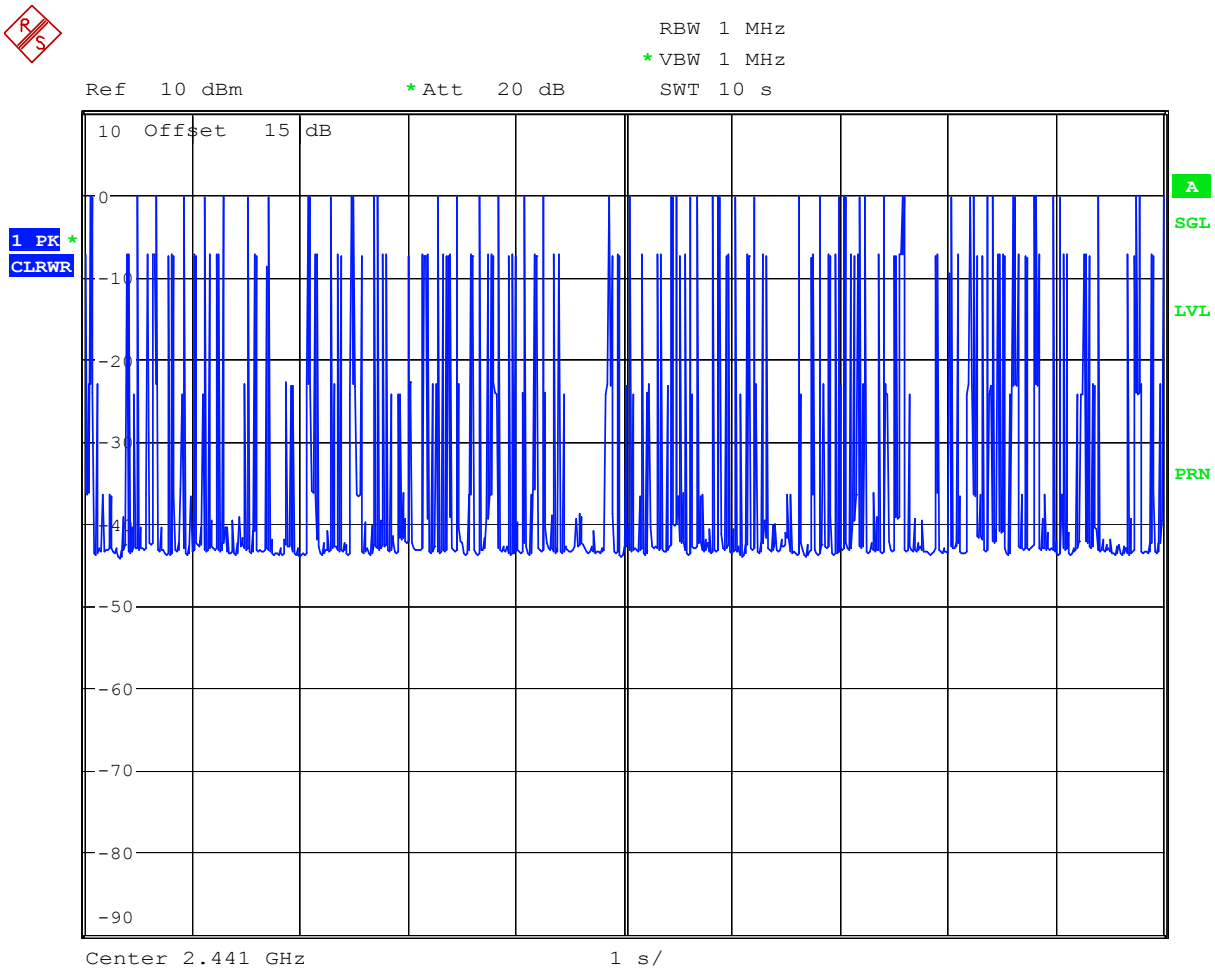


Date: 20.JAN.2006 11:50:06

DH3 (CH39)

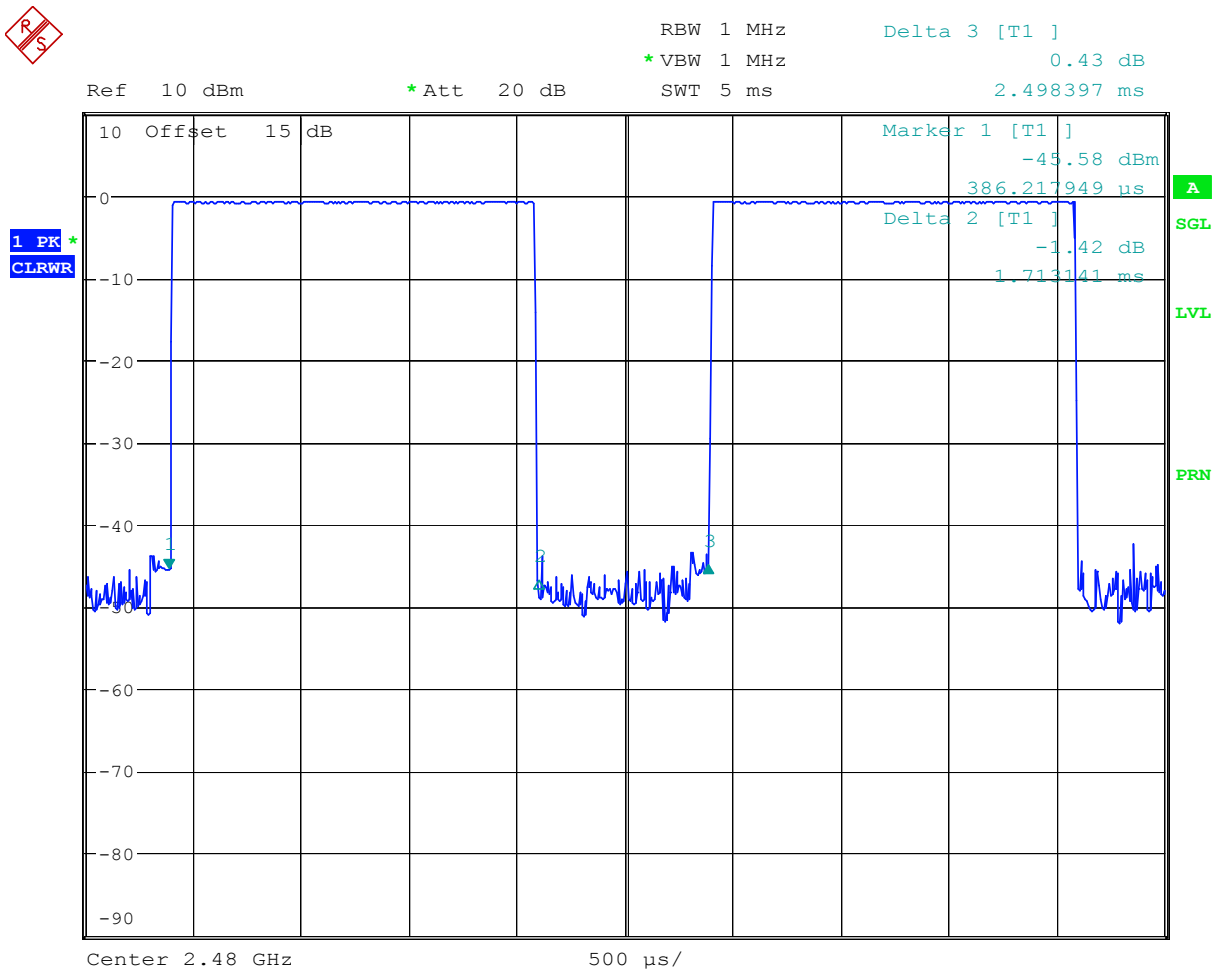


Date: 20.JAN.2006 11:19:08

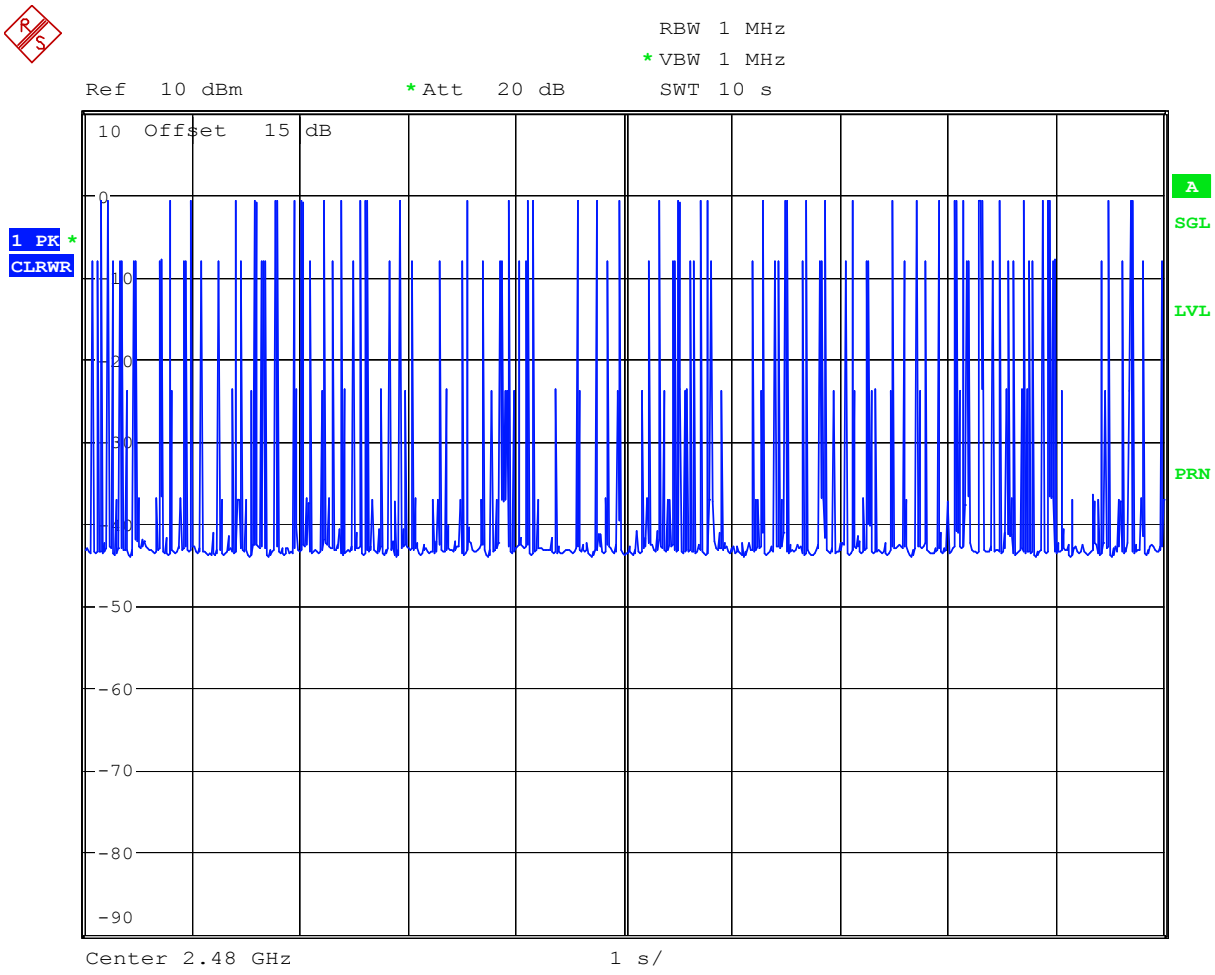


Date: 20.JAN.2006 11:49:36

DH3 (CH78)

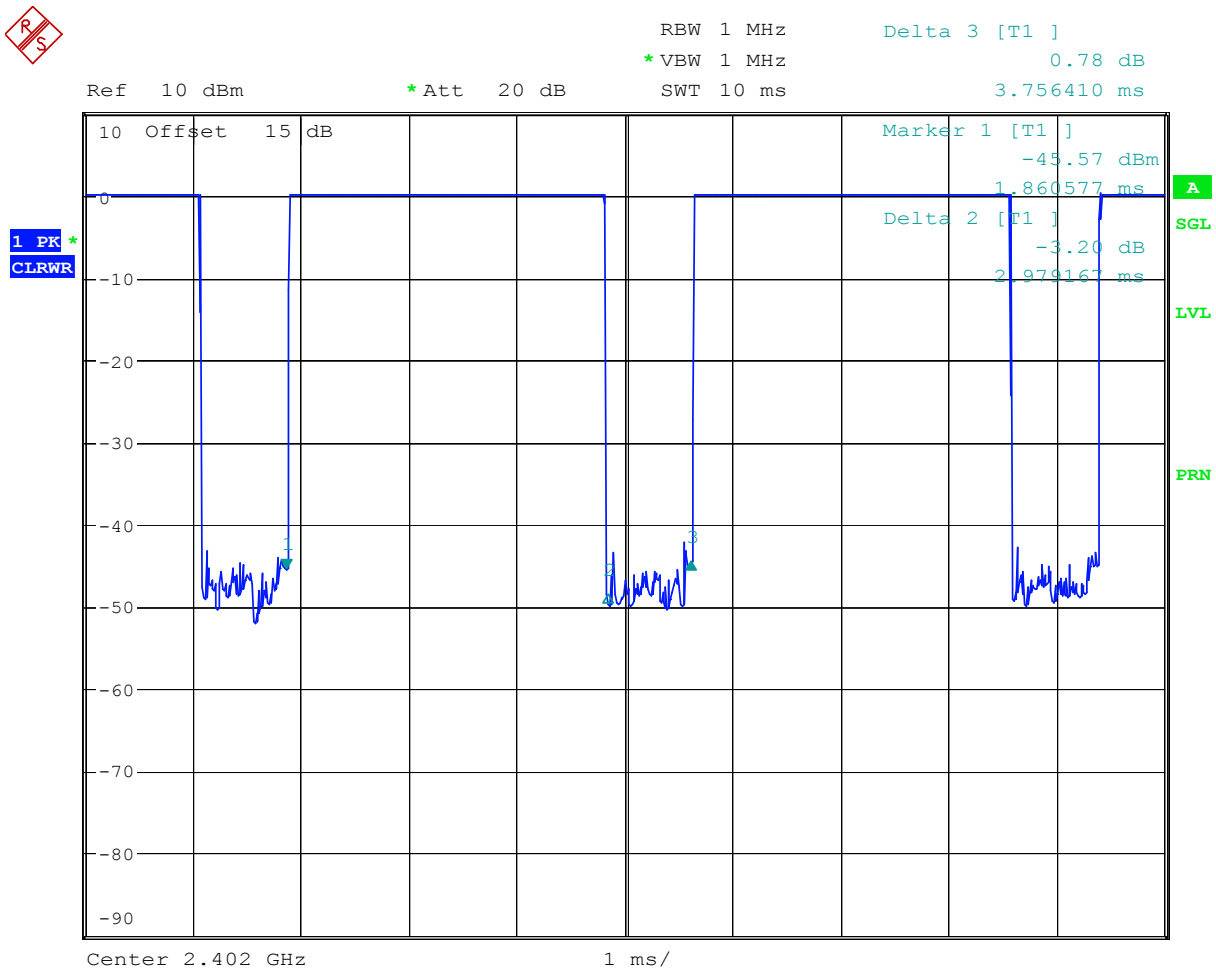


Date: 20.JAN.2006 11:18:38

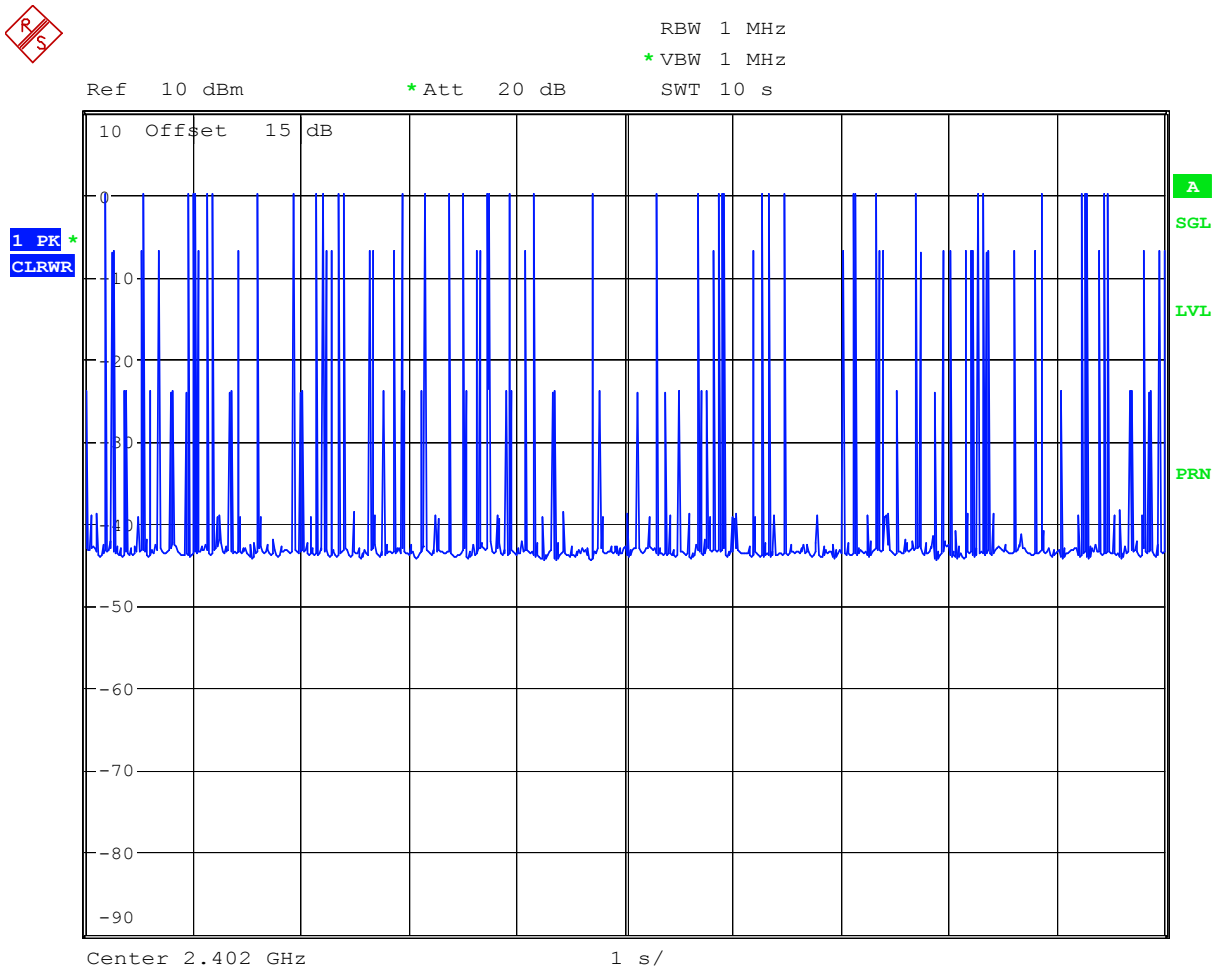


Date: 20.JAN.2006 11:49:01

DH5 (CH00)

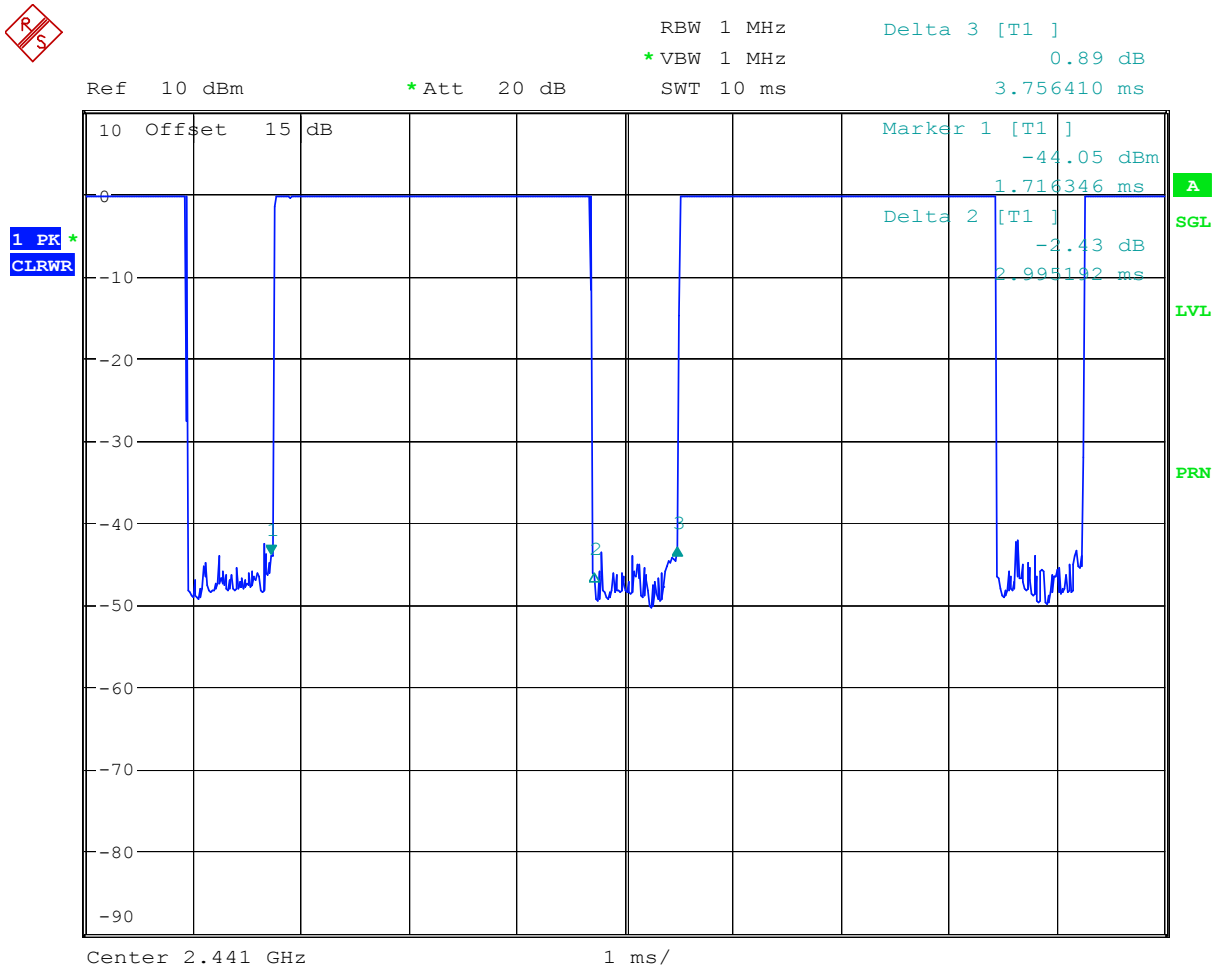


Date: 20.JAN.2006 11:21:20

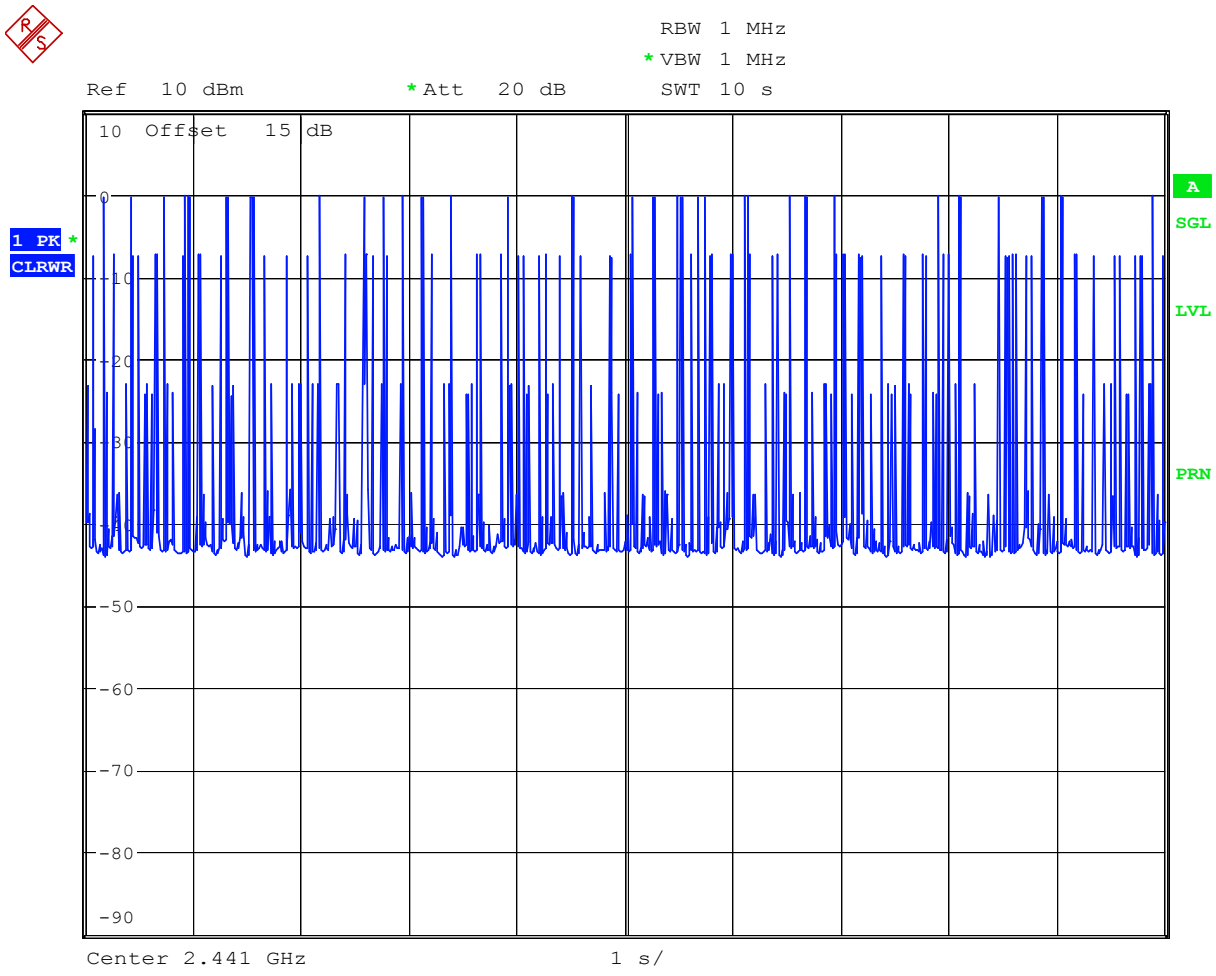


Date: 20.JAN.2006 11:50:56

DH5 (CH39)

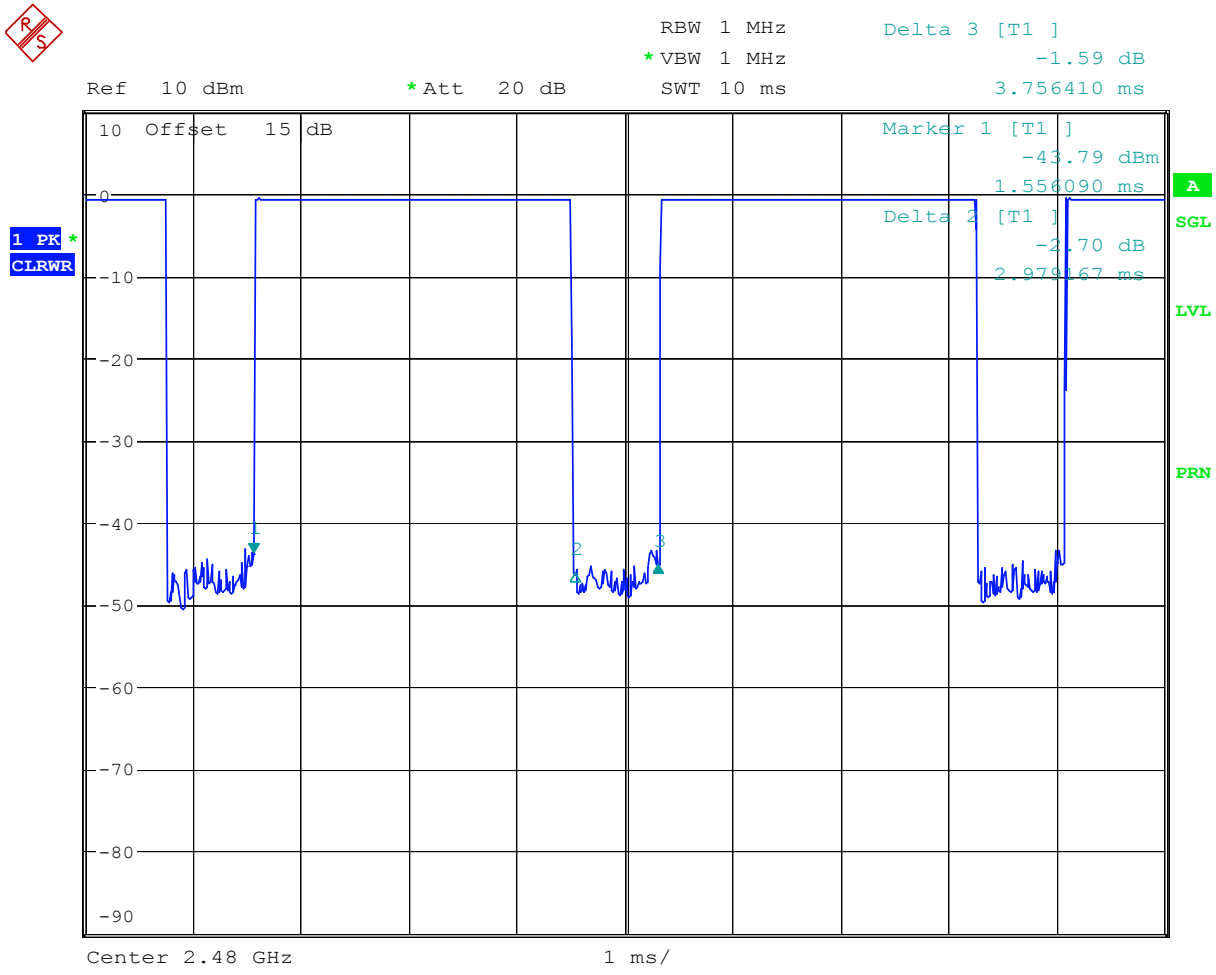


Date: 20.JAN.2006 11:22:06

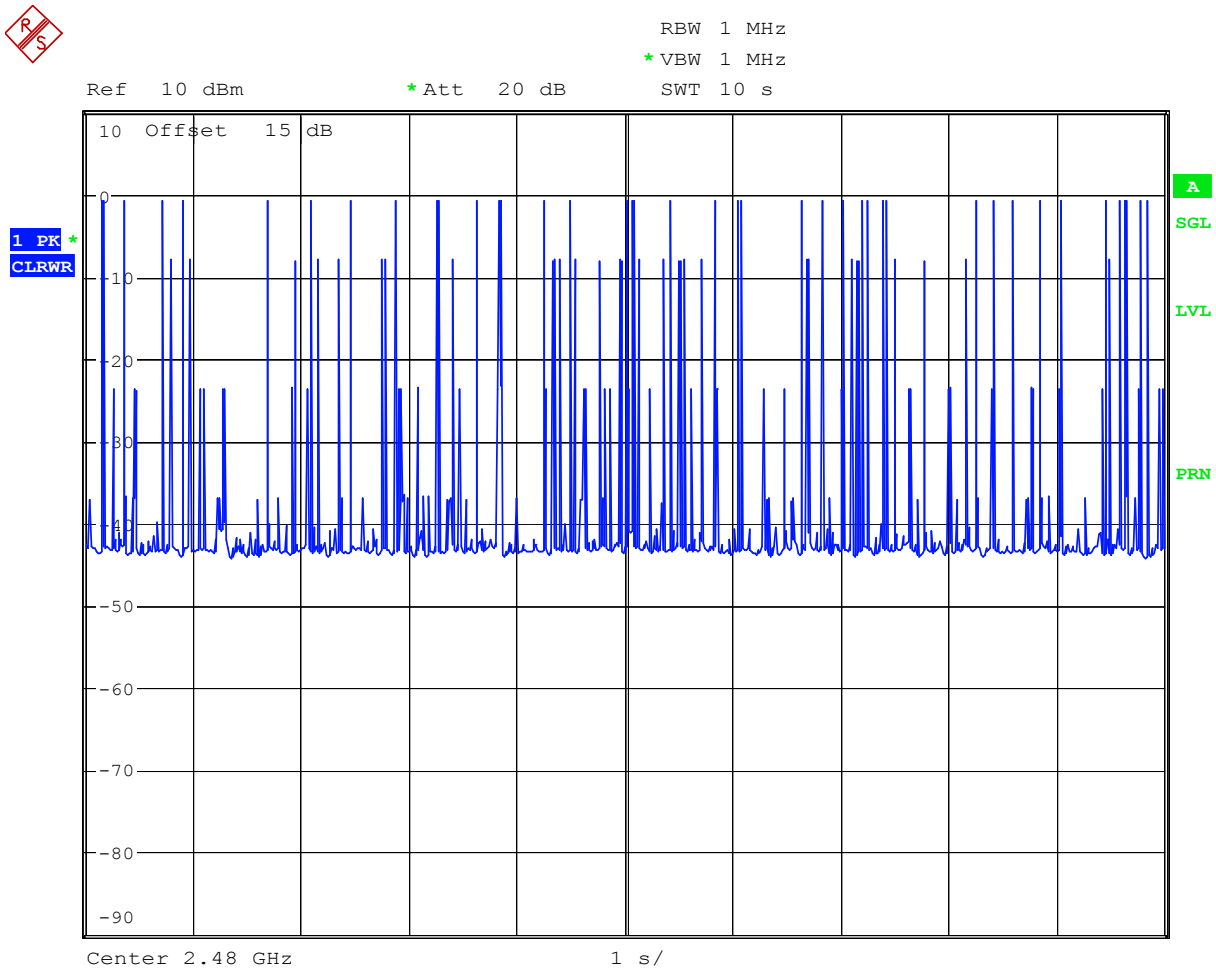


Date: 20.JAN.2006 11:51:26

DH5 (CH78)



Date: 20.JAN.2006 11:22:47



Date: 20.JAN.2006 11:52:16

5.6 Output Power

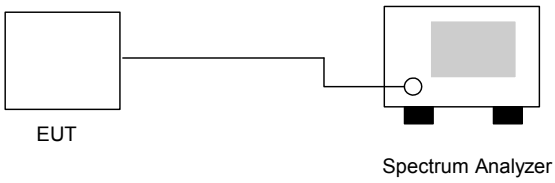
5.6.1 Measuring Instruments：

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：



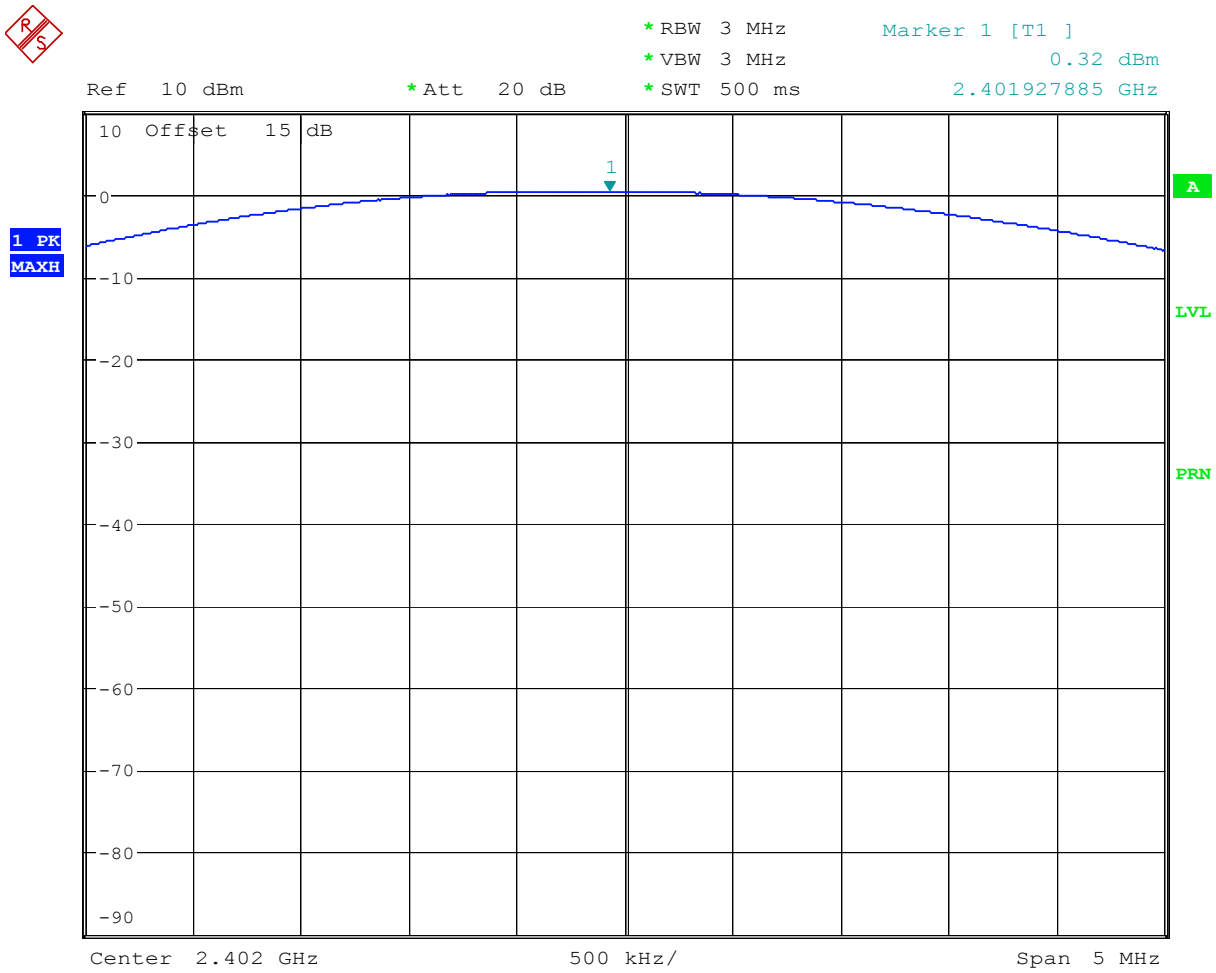
5.6.4 Test Result：See spectrum analyzer plots below

- Temperature: 26°C
- Relative Humidity: 54%
- Test Engineer : Jay

Channel	Frequency (MHz)	Measured Output Power (dBm)	Limits (Watt/dBm)	Plot Ref. No.
00	2402	0.32	1W/30 dBm	Mode 1
39	2441	-0.12	1W/30 dBm	Mode 2
78	2480	-0.59	1W/30 dBm	Mode 3

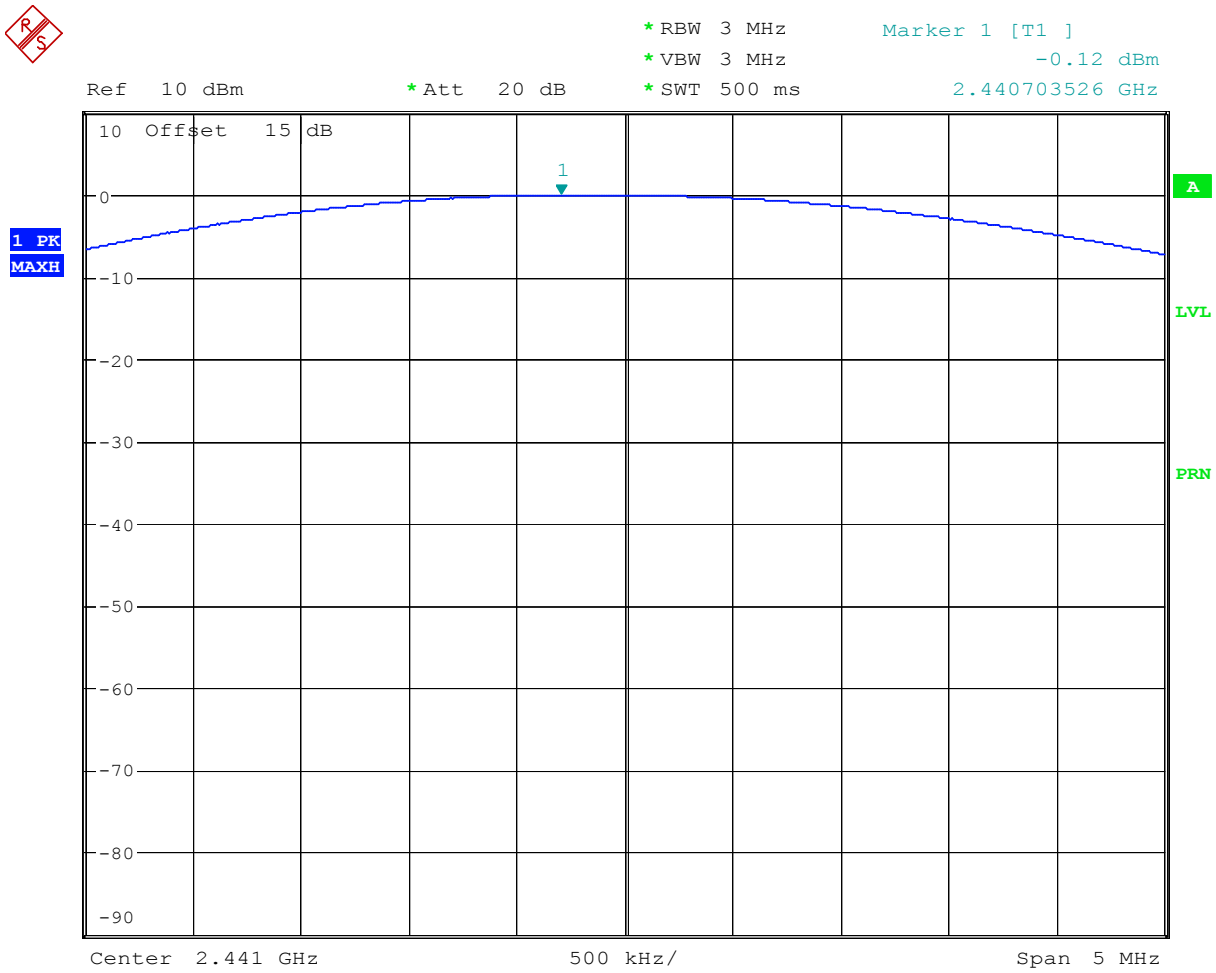
5.6.5 Output Power

Mode 1: CH00 (2402MHz)



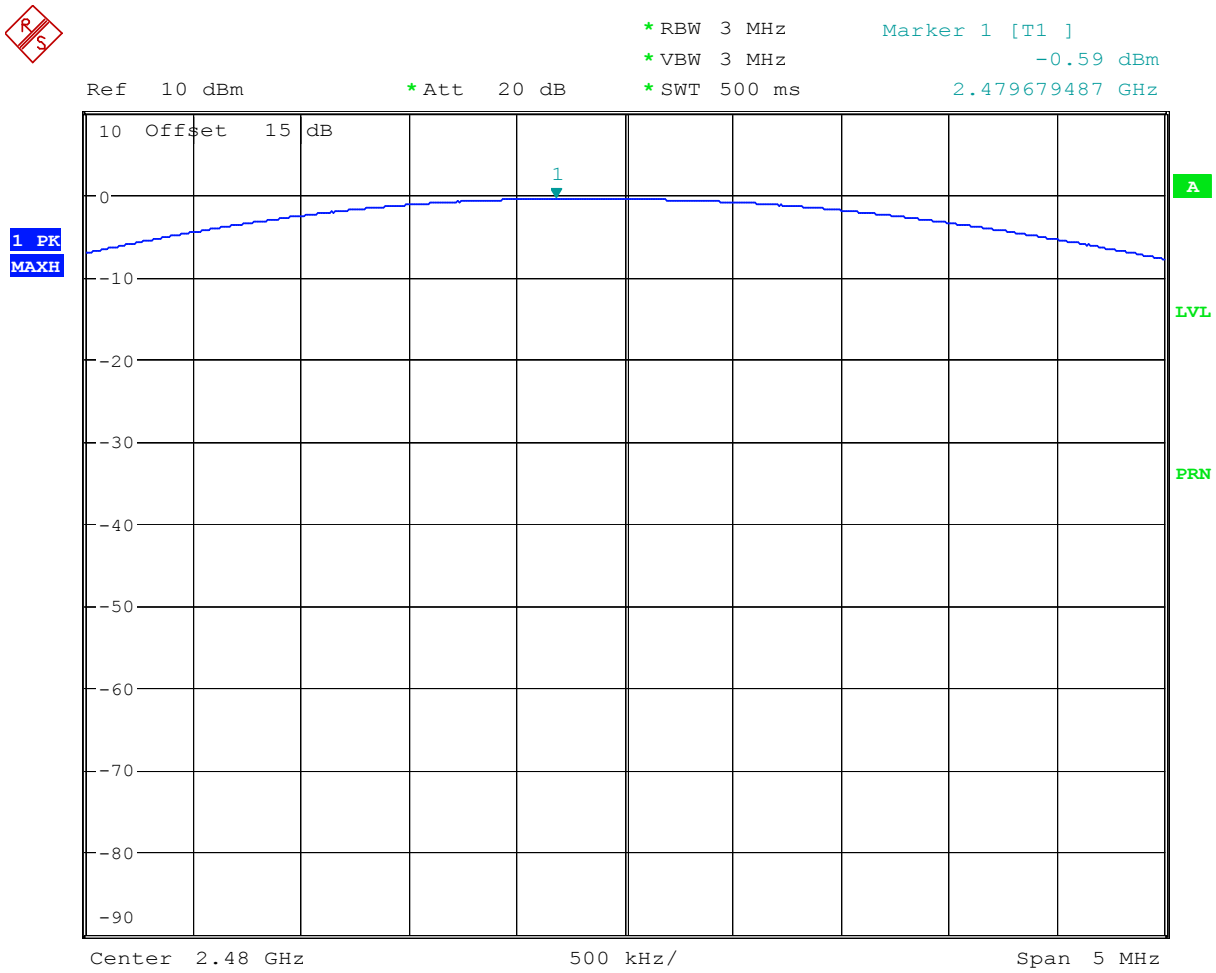
Date: 20.JAN.2006 10:45:48

Mode 2: CH39 (2441MHz)



Date: 20.JAN.2006 10:47:25

Mode 3: CH78 (2480MHz)



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: 26°C
- Relative Humidity: 54%
- Test Engineer : Jay

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	Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Detect
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	Mode
2390.00	49.24	-24.76	74.00	49.95	30.48	4.26	35.46	200	0	Peak
2390.00	39.36	-14.64	54.00	40.07	30.48	4.26	35.46	171	330	Average

CH00 (Vertical)

Frequency	Level	Over Limit	Limit Line	Read Level	Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Detect
(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV)	(dB)	(dB)	(dB)	(cm)	(deg)	Mode
2390.00	49.48	-24.52	74.00	50.19	30.48	4.26	35.46	100	0	Peak
2390.00	39.34	-14.66	54.00	40.05	30.48	4.26	35.46	100	277	Average

CH78 (Horizontal)

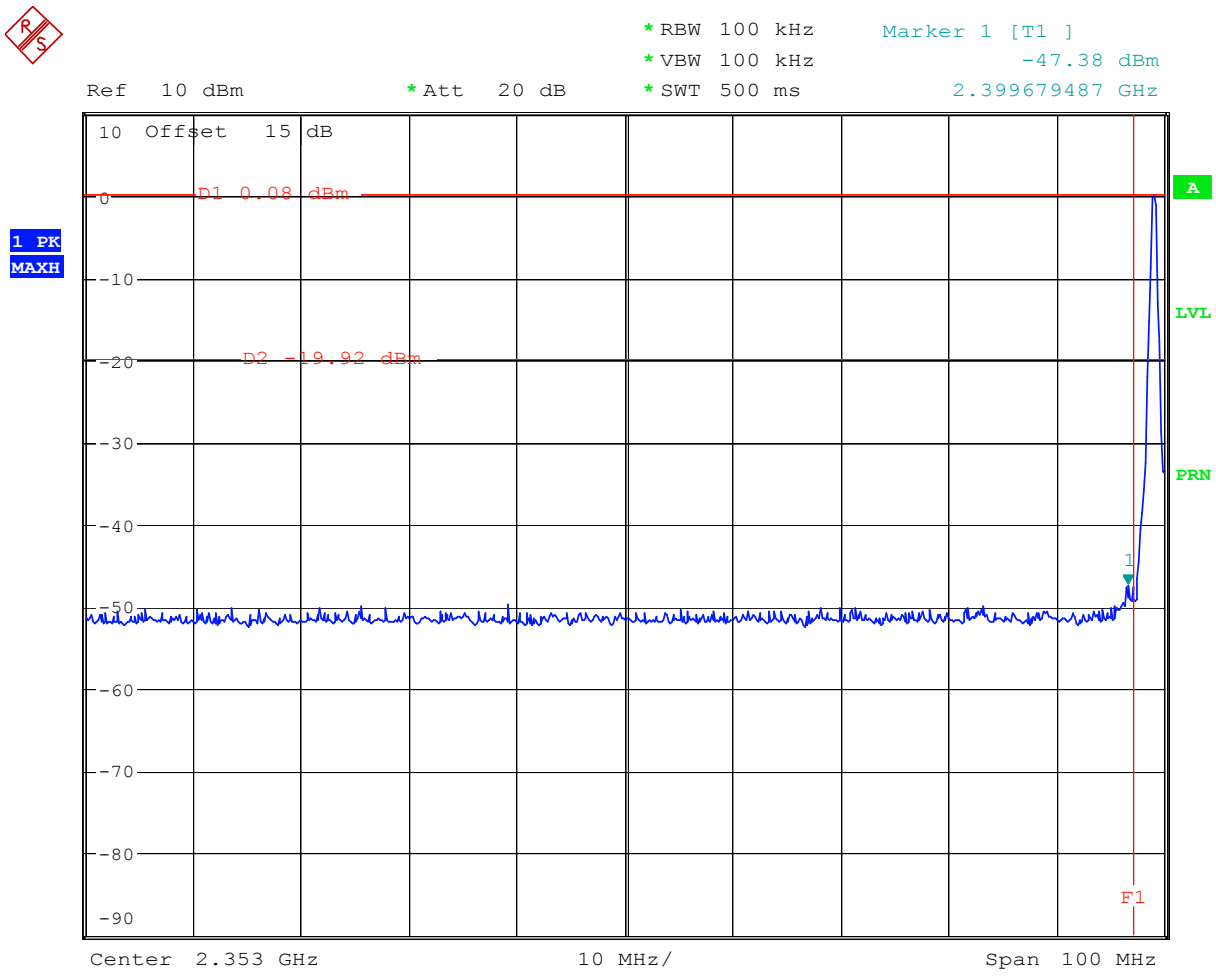
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Detect Mode
2483.50	47.98	-6.02	54.00	48.72	30.41	4.36	35.51	186	188	Average
2483.50	61.75	-12.25	74.00	62.49	30.41	4.36	35.51	200	0	Peak

CH78 (Vertical)

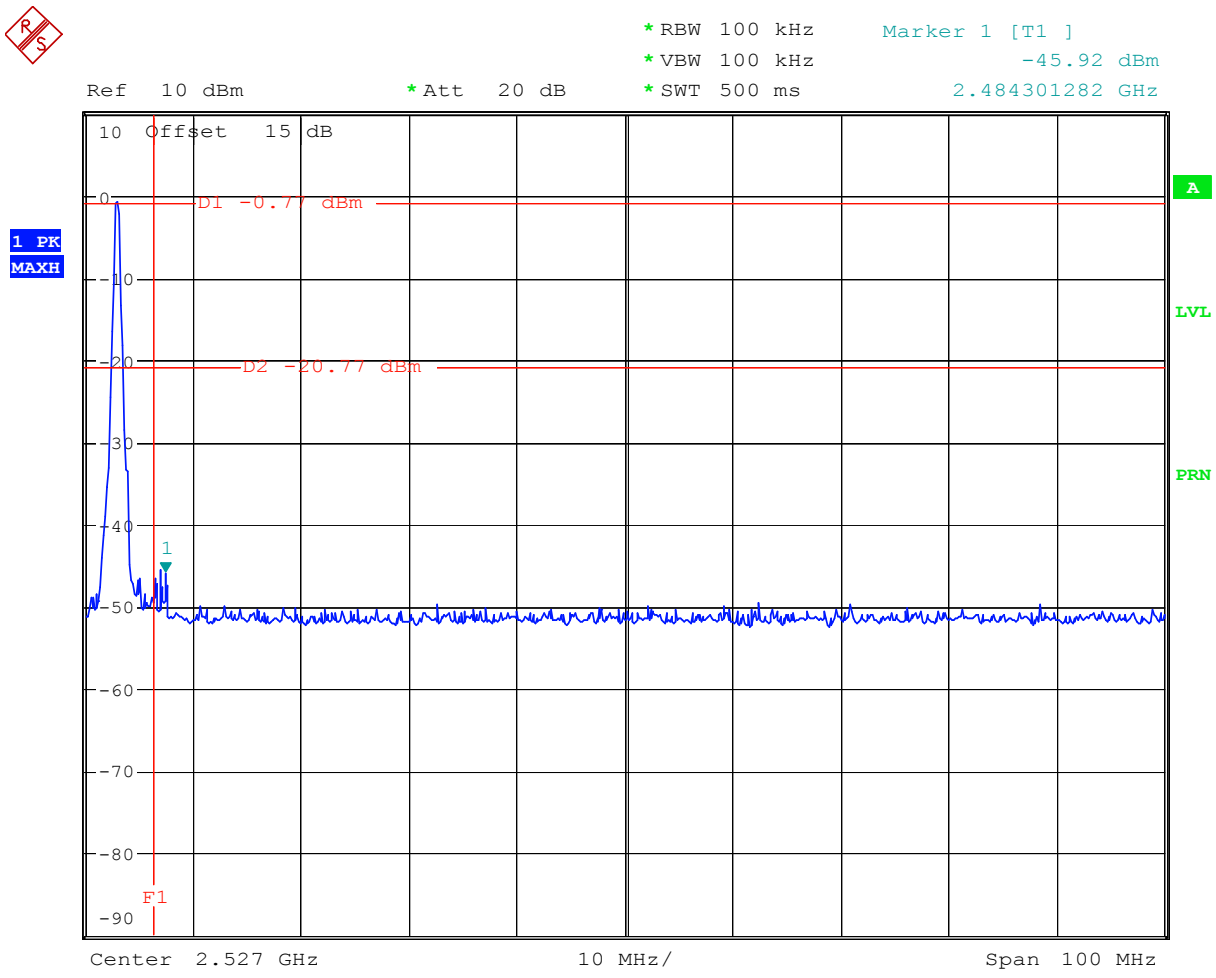
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Detect Mode
2483.50	45.16	-8.84	54.00	45.90	30.41	4.36	35.51	104	286	Average
2483.50	71.19	-2.81	74.00	71.93	30.41	4.36	35.51	100	0	Peak

5.7.5 Frequency Band Edge

Mode 1: CH00 (2402 MHz)



Mode 3: CH78 (2480 MHz)



Date: 20.JAN.2006 11:05:35

5.8 Conducted Emission

5.8.1 Measuring Instruments

As described in chapter 6 of this test Report.

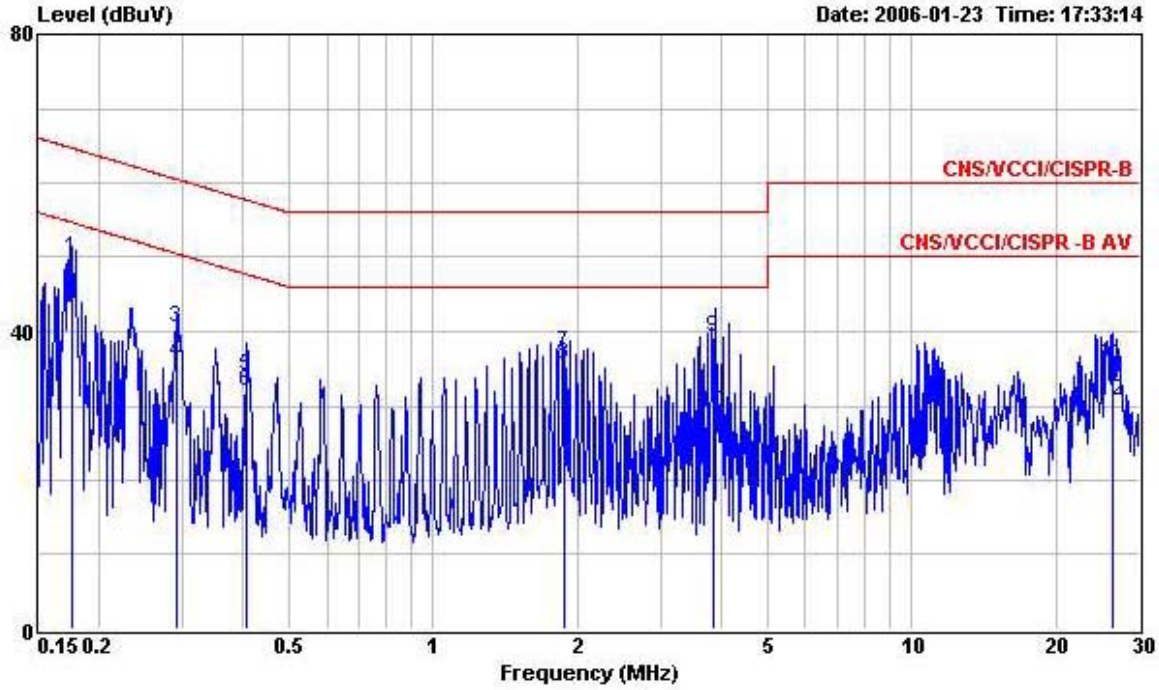
5.8.2 Test Procedures：

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

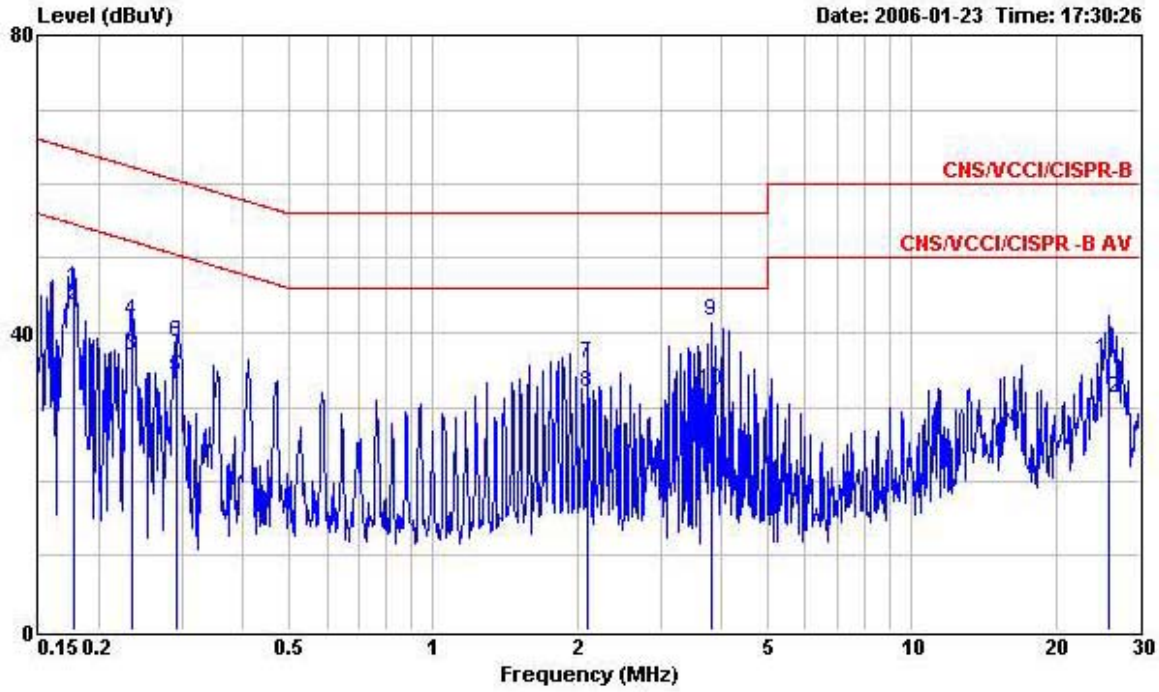
- Temperature: 24℃
- Relative Humidity: 52%
- Test Engineer : Jay
- Test Mode : Mode 1

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



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200505 LINE
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120V/60Hz
Model :
Memo : PCS 1900 IDLE+BT Link+MP3
Memo :
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.176	49.79	-14.88	64.67	49.62	0.06	0.11	QP
2	0.176	43.74	-10.93	54.67	43.57	0.06	0.11	Average
3	0.291	40.64	-19.86	60.50	40.50	0.06	0.08	QP
4	0.291	35.90	-14.60	50.50	35.76	0.06	0.08	Average
5	0.408	34.03	-23.66	57.69	33.91	0.06	0.06	QP
6	0.408	31.97	-15.72	47.69	31.85	0.06	0.06	Average
7	1.871	37.19	-18.81	56.00	36.98	0.11	0.10	QP
8	1.871	35.69	-10.31	46.00	35.48	0.11	0.10	Average
9	3.861	39.16	-16.84	56.00	38.80	0.20	0.16	QP
10	3.861	29.01	-16.99	46.00	28.65	0.20	0.16	Average
11	26.280	35.53	-24.47	60.00	34.77	0.36	0.40	QP
12	26.280	30.77	-19.23	50.00	30.01	0.36	0.40	Average



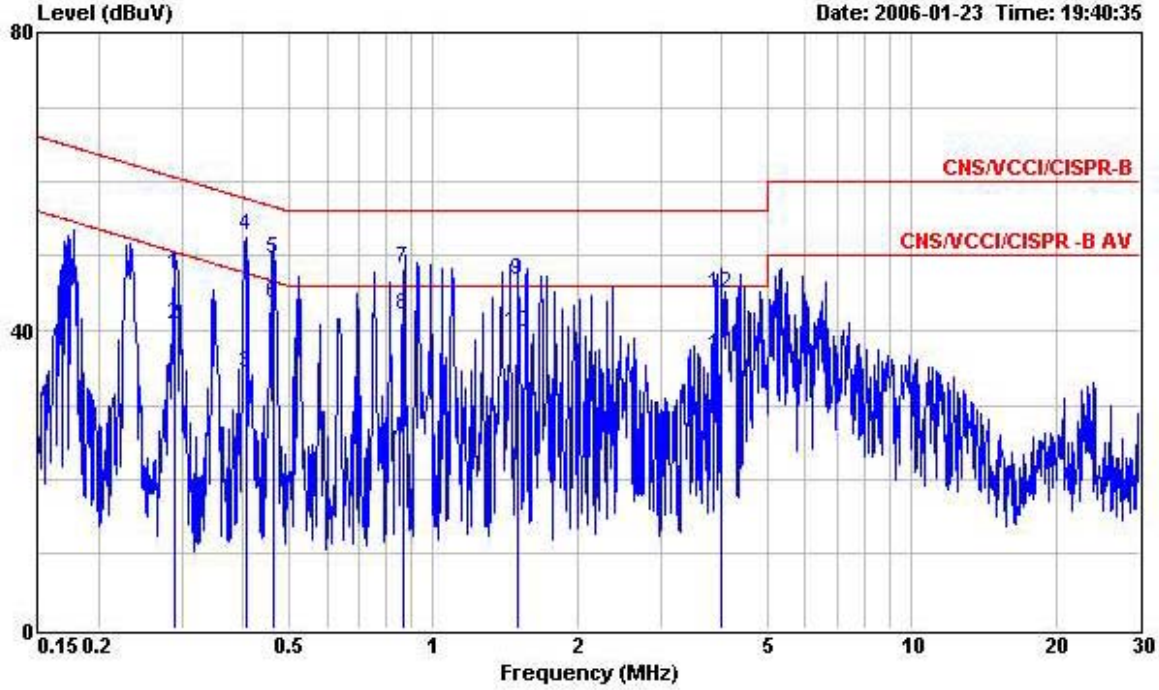
Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200505 NEUTRAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120V/60Hz
Model :
Memo : PCS 1900 IDLE+BT Link+MP3
Memo :
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.177	45.96	-18.67	64.63	45.74	0.11	0.11	QP
2	0.177	43.60	-11.03	54.63	43.38	0.11	0.11	Average
3	0.235	36.88	-15.39	52.27	36.67	0.11	0.10	Average
4	0.235	41.47	-20.80	62.27	41.26	0.11	0.10	QP
5	0.292	34.09	-16.38	50.47	33.90	0.11	0.08	Average
6	0.292	38.60	-21.87	60.47	38.41	0.11	0.08	QP
7	2.109	35.86	-20.14	56.00	35.53	0.23	0.10	QP
8	2.109	32.01	-13.99	46.00	31.68	0.23	0.10	Average
9	3.804	41.69	-14.31	56.00	41.30	0.23	0.16	QP
10	3.804	32.19	-13.81	46.00	31.80	0.23	0.16	Average
11	25.860	36.32	-23.68	60.00	35.36	0.57	0.39	QP
12	25.860	31.13	-18.87	50.00	30.17	0.57	0.39	Average

5.8.4 Test Data Test Mode 2

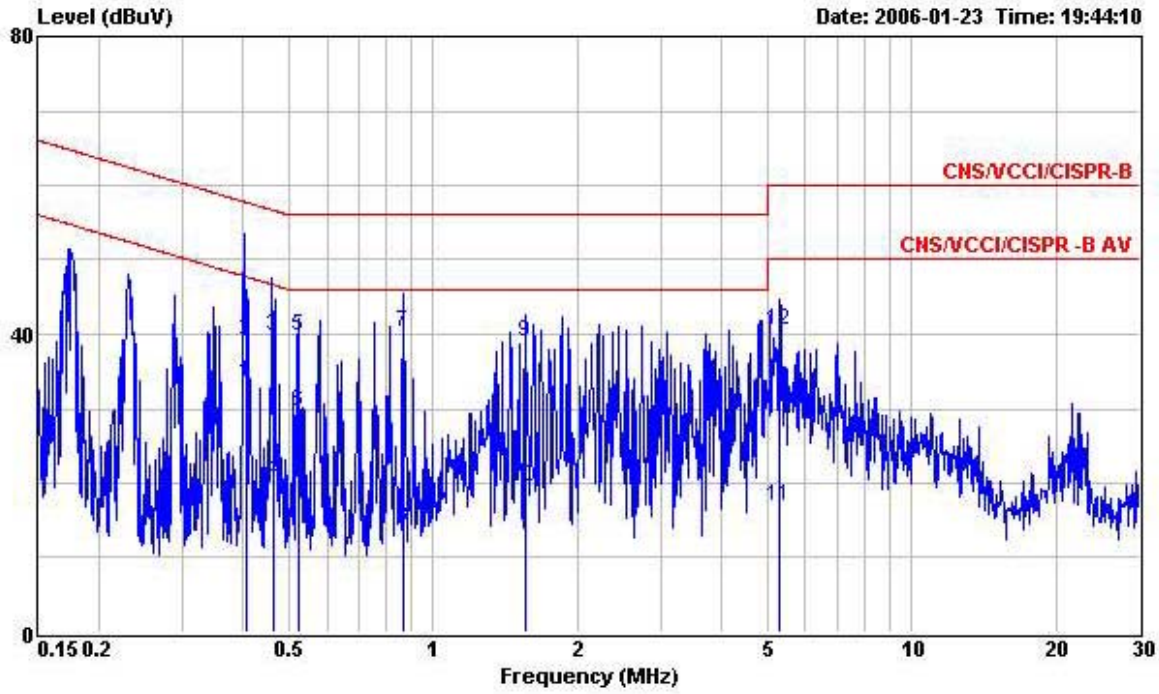
- Temperature: 24℃
- Relative Humidity: 52%
- Test Engineer : Jay
- Test Mode : Mode 1

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



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200505 LINE
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120V/60Hz
Model :
Memo : PCS 1900 IDLE+BT Link+CAMERA
Memo :
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.289	47.54	-13.01	60.55	47.40	0.06	0.08	QP
2	0.289	40.88	-9.67	50.55	40.74	0.06	0.08	Average
3	0.406	34.20	-13.53	47.73	34.08	0.06	0.06	Average
4	0.406	52.65	-5.08	57.73	52.53	0.06	0.06	QP
5	0.463	49.69	-6.95	56.64	49.56	0.07	0.06	QP
6	0.463	43.51	-3.13	46.64	43.38	0.07	0.06	Average
7	0.868	48.28	-7.72	56.00	48.10	0.10	0.08	QP
8	0.868	42.10	-3.90	46.00	41.92	0.10	0.08	Average
9	1.508	46.80	-9.20	56.00	46.60	0.11	0.09	QP
10	1.508	39.85	-6.15	46.00	39.65	0.11	0.09	Average
11	3.999	36.65	-9.35	46.00	36.28	0.21	0.16	Average
12	3.999	45.01	-10.99	56.00	44.64	0.21	0.16	QP



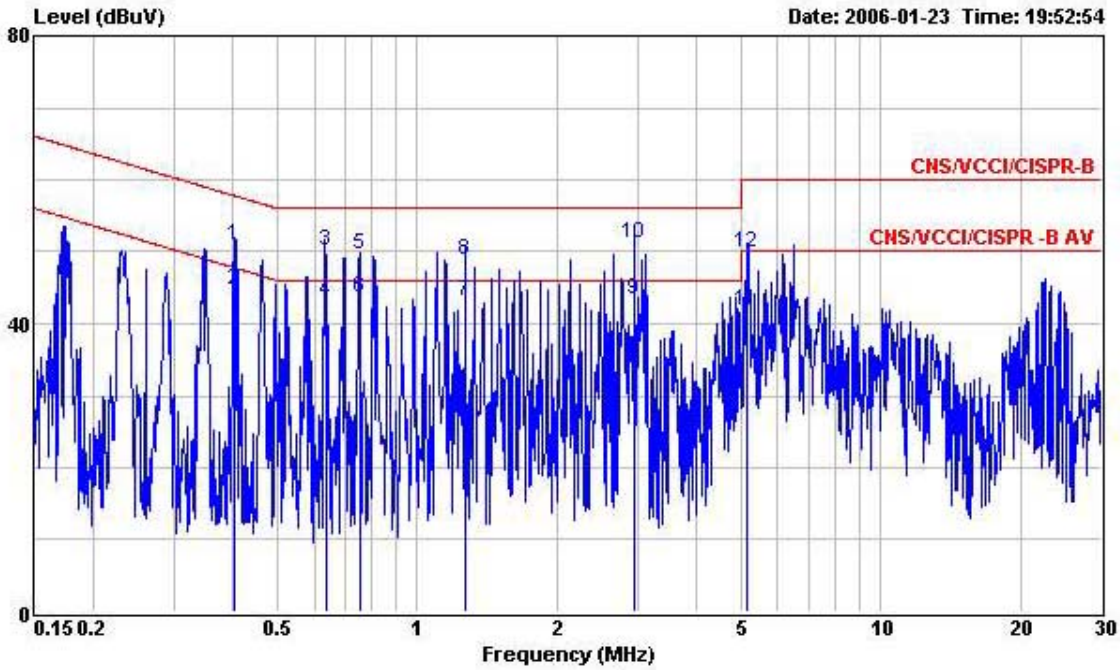
Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200505 NEUTRAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120V/60Hz
Model :
Memo : PCS 1900 IDLE+BT Link+CAMERA
Memo :
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.405	33.44	-24.30	57.74	33.27	0.11	0.06	QP
2	0.405	39.28	-8.46	47.74	39.11	0.11	0.06	Average
3	0.465	39.69	-16.92	56.61	39.50	0.13	0.06	QP
4	0.465	20.23	-26.38	46.61	20.04	0.13	0.06	Average
5	0.523	39.68	-16.32	56.00	39.46	0.15	0.07	QP
6	0.523	29.59	-16.41	46.00	29.37	0.15	0.07	Average
7	0.867	40.17	-15.83	56.00	39.88	0.21	0.08	QP
8	0.867	13.95	-32.05	46.00	13.66	0.21	0.08	Average
9	1.564	38.83	-17.17	56.00	38.51	0.23	0.09	QP
10	1.564	19.43	-26.57	46.00	19.11	0.23	0.09	Average
11	5.280	16.76	-33.24	50.00	16.32	0.26	0.18	Average
12	5.280	40.58	-19.42	60.00	40.14	0.26	0.18	QP

5.8.5 Test Data Test Mode 3

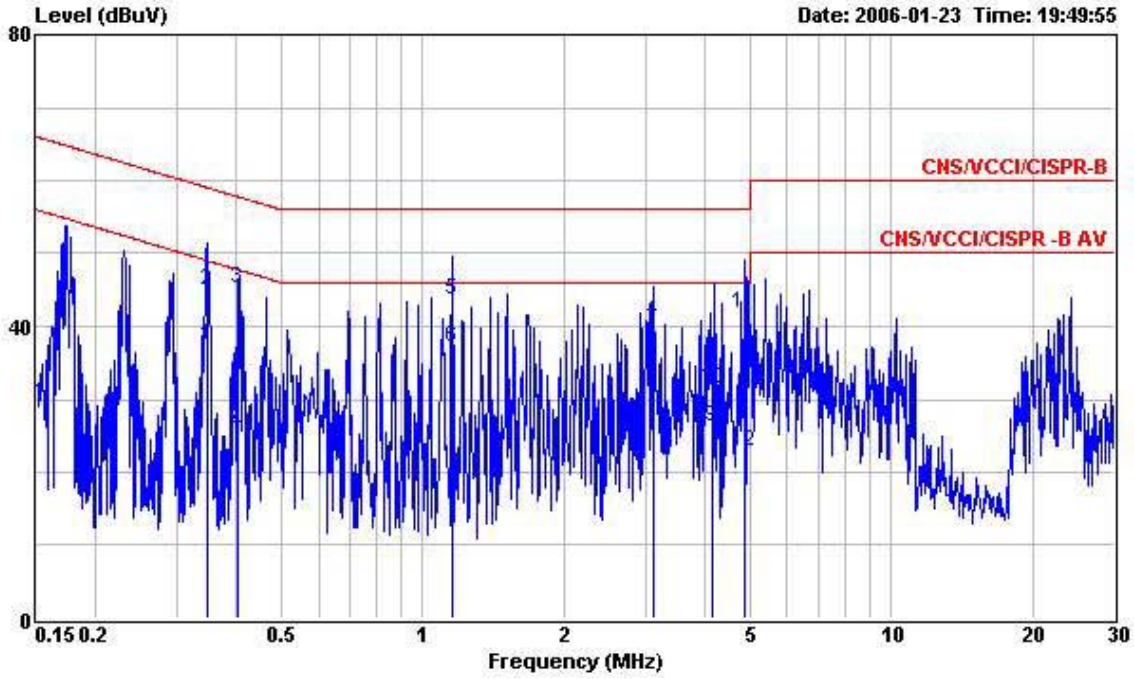
- Temperature: 24℃
- Relative Humidity: 52%
- Test Engineer : Jay
- Test Mode : Mode 1

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



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200505 LINE
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120V/60Hz
Model : FD610306
Memo :] DLE+USB LINK+CHARGER
Memo :
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.403	50.95	-6.83	57.78	50.83	0.06	0.06	QP
2	0.403	44.78	-3.00	47.78	44.66	0.06	0.06	Average
3	0.634	50.17	-5.83	56.00	50.02	0.08	0.07	QP
4	0.634	43.08	-2.92	46.00	42.93	0.08	0.07	Average
5	0.751	49.69	-6.31	56.00	49.53	0.09	0.07	QP
6	0.751	43.68	-2.32	46.00	43.52	0.09	0.07	Average
7	1.270	43.19	-2.81	46.00	42.99	0.11	0.09	Average
8	1.270	48.88	-7.12	56.00	48.68	0.11	0.09	QP
9	2.945	43.28	-2.72	46.00	42.98	0.17	0.13	Average
10	2.945	51.10	-4.90	56.00	50.80	0.17	0.13	QP
11	5.137	41.86	-8.14	50.00	41.47	0.21	0.18	Average
12	5.137	49.74	-10.26	60.00	49.35	0.21	0.18	QP



Site : CO01-HY
Condition : CNS/VCCI/CISPR-B 2001/004 200505 NEUTRAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120V/60Hz
Model : 1
Memo : PCS 1900 IDLE+USB LINK+CHARGER
Memo :
Memo :

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.348	37.47	-11.54	49.01	37.29	0.11	0.07	Average
2	0.348	45.02	-13.99	59.01	44.84	0.11	0.07	QP
3	0.404	45.25	-12.52	57.77	45.08	0.11	0.06	QP
4	0.404	25.56	-22.21	47.77	25.39	0.11	0.06	Average
5	1.155	43.64	-12.36	56.00	43.33	0.23	0.08	QP
6	1.155	37.10	-8.90	46.00	36.79	0.23	0.08	Average
7	3.120	39.42	-16.58	56.00	39.05	0.23	0.14	QP
8	3.120	36.41	-9.59	46.00	36.04	0.23	0.14	Average
9	4.159	26.28	-29.72	56.00	25.89	0.23	0.16	QP
10	4.159	31.45	-14.55	46.00	31.06	0.23	0.16	Average
11	4.852	41.93	-14.07	56.00	41.50	0.25	0.18	QP
12	4.852	22.87	-23.13	46.00	22.44	0.25	0.18	Average

5.9 Radiated Emission Measurement

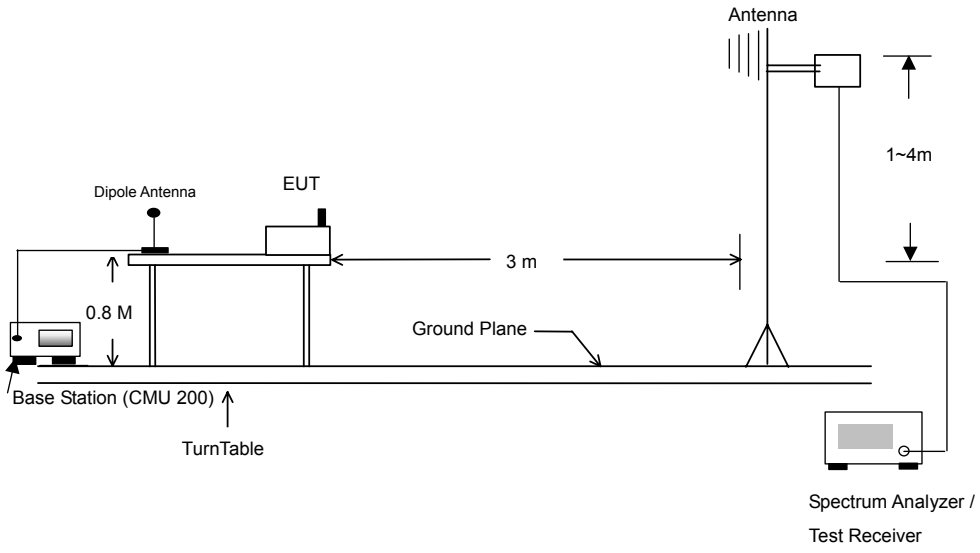
5.9.1 Measuring Instruments

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.

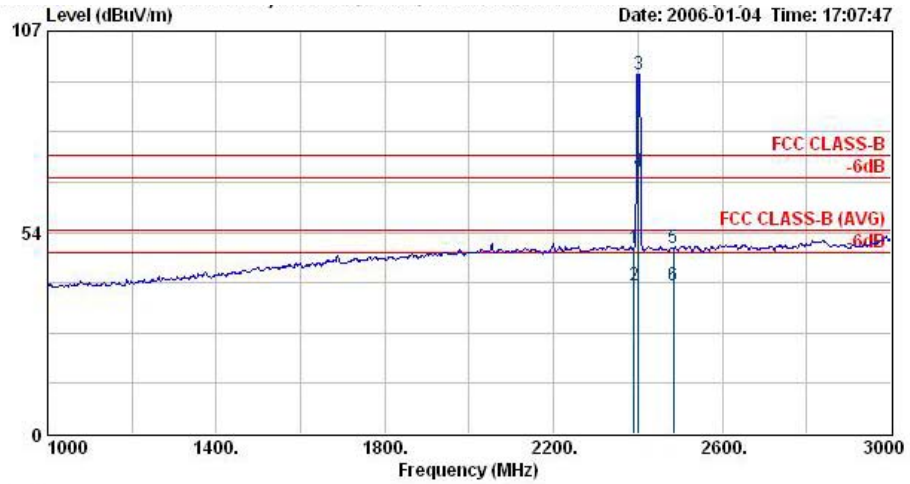
5.9.3 Typical Test Setup Layout of Radiated Emission



5.9.4 Test Data

- Temperature : 26 °C
- Relating Humidity : 54 %
- Test Enginner : Jay
- Test Mode : Mode 1
- Polarization : Horizontal

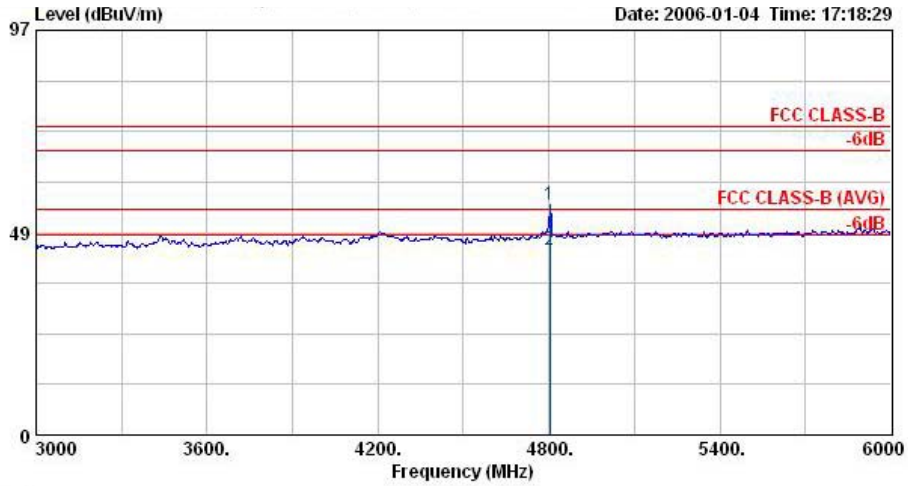
■ The test that passed at the minimum margin was marked by the frame in the following test record



Site : 03CH06-HY
Condition : HF-ANT-071025-940201 HORIZONTAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch00;2402MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	2390.00	49.24	-24.76	74.00	49.95	30.48	4.26	35.46	200	0	Peak
2	2390.00	39.36	-14.64	54.00	40.07	30.48	4.26	35.46	171	330	Average
3 @	2402.00	95.33			96.04	30.48	4.26	35.46	200	0	Peak
4 X	2402.00	69.75			70.46	30.48	4.26	35.46	171	330	Average
5	2483.50	49.14	-24.86	74.00	49.87	30.41	4.36	35.51	200	0	Peak
6	2483.50	39.26	-14.74	54.00	40.00	30.41	4.36	35.51	171	330	Average

Remark: #3 and #4 Fundamental Signal

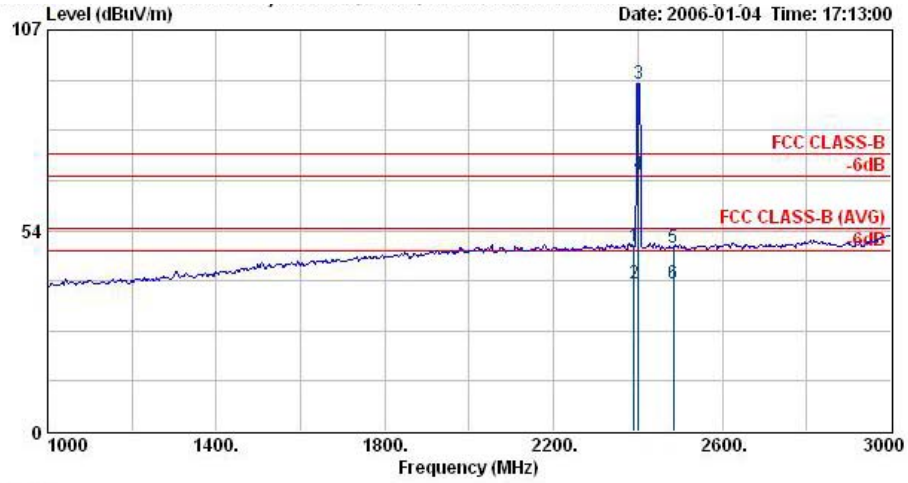


Site : 03CH06-HY
Condition : HF-ANT-071025-940201 HORIZONTAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch00;2402MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	4804.00	55.07	-18.93	74.00	51.80	33.16	6.21	36.10	200	0	Peak
2	4804.00	44.25	-9.75	54.00	40.98	33.16	6.21	36.10	160	25	Average

- Test Mode : Mode 1
- Polarization : Vertical

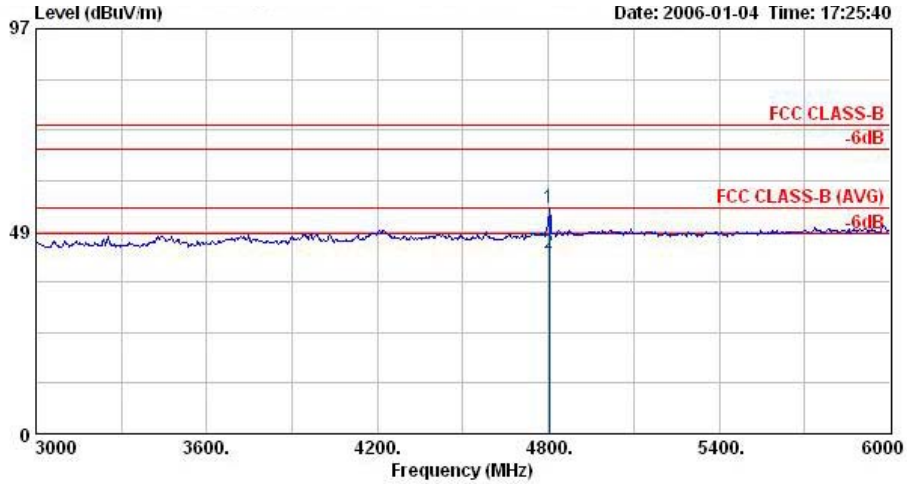
■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06-HY
Condition : HF-ANT-071025-940201 VERTICAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch00;2402MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	2390.00	49.48	-24.52	74.00	50.19	30.48	4.26	35.46	100	0	Peak
2	2390.00	39.34	-14.66	54.00	40.05	30.48	4.26	35.46	100	277	Average
3 X	2402.00	92.88			93.59	30.48	4.26	35.46	100	0	Peak
4 X	2402.00	68.59			69.30	30.48	4.26	35.46	100	277	Average
5	2483.50	48.75	-25.25	74.00	49.49	30.41	4.36	35.51	100	0	Peak
6	2483.50	39.41	-14.59	54.00	40.15	30.41	4.36	35.51	100	277	Average

Remark: #3 and #4 Fundamental Signal

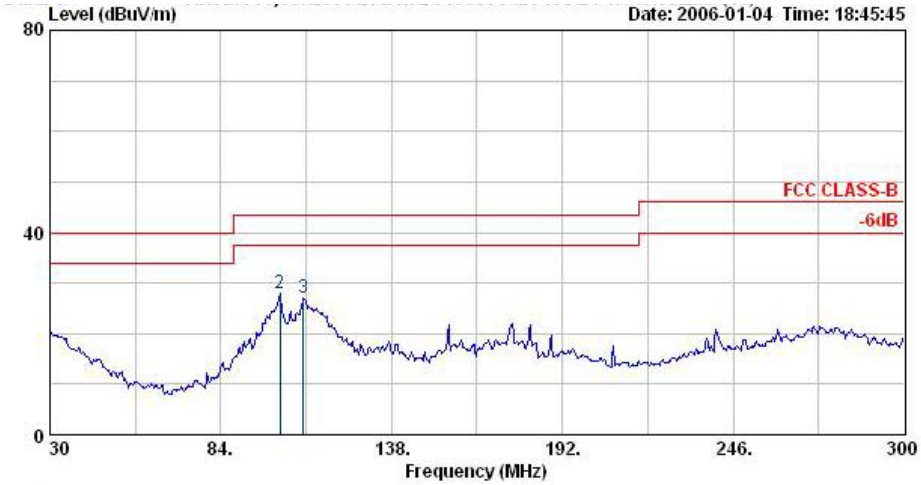


Site : 03CH06-HY
Condition : HF-ANT-071025-940201 VERTICAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch00;2402MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	4804.00	53.92	-20.08	74.00	50.65	33.16	6.21	36.10	200	360	Peak
2	4804.00	43.09	-10.91	54.00	39.82	33.16	6.21	36.10	100	201	Average

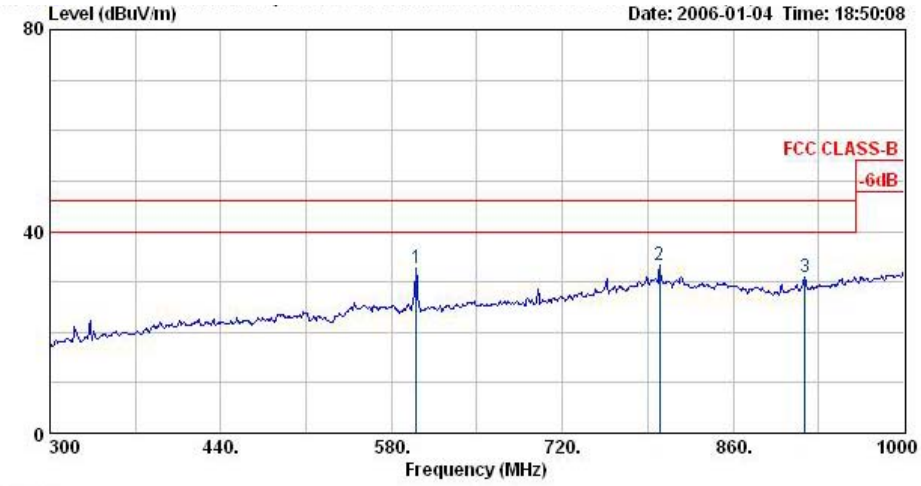
- Test Mode : Mode 2
- Polarization : Horizontal

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



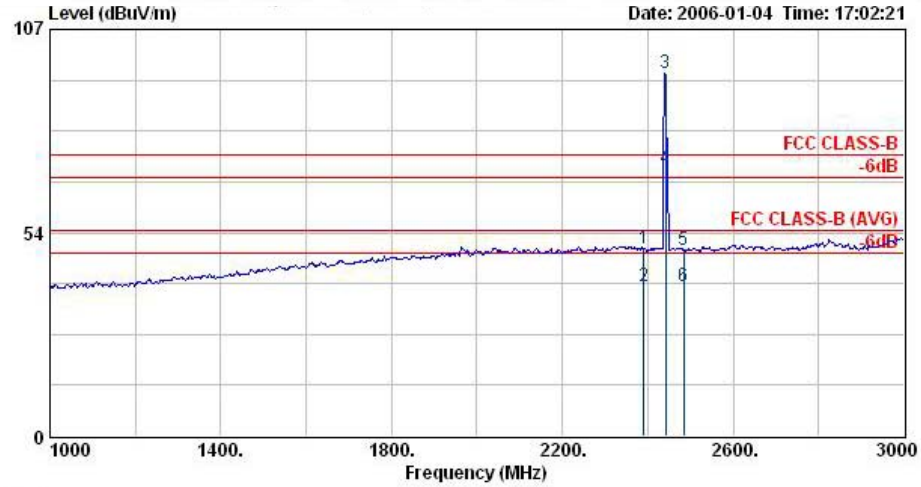
Site : 03CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch39;2441MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	20.93	-19.07	40.00	32.33	18.73	1.35	31.49	400	0	Peak
2 @	102.63	28.06	-15.44	43.50	45.99	10.80	2.47	31.20	400	0	Peak
3	110.19	27.15	-16.35	43.50	43.88	11.70	2.53	30.96	400	0	Peak



Site : 03CH06-HY
Condition : BI-LOG-2004-1122 HORIZONTAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch39;2441MHz
Plane : H

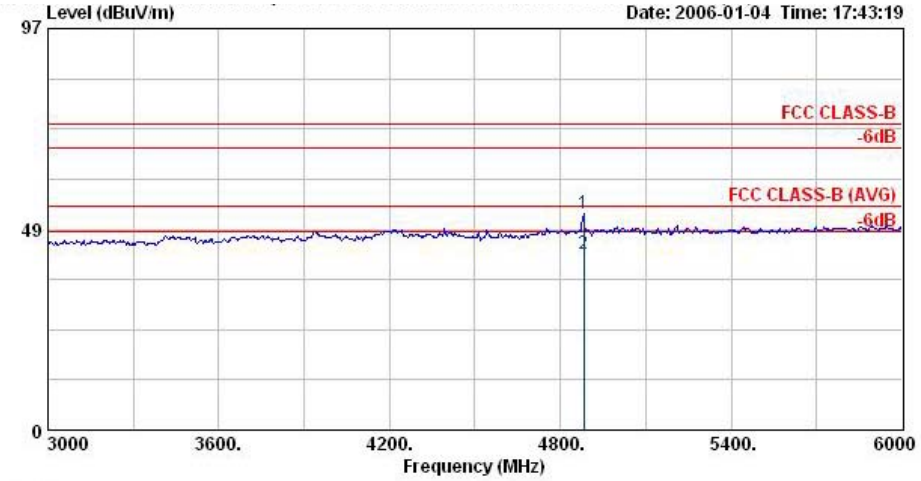
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	600.30	32.59	-13.41	46.00	38.94	17.94	6.35	30.64	100	0	Peak
2 @	799.80	33.19	-12.81	46.00	33.97	21.90	7.45	30.12	142	225	Peak
3 @	918.80	30.95	-15.05	46.00	32.49	20.50	8.12	30.15	100	0	Peak



Site : 03CH06-HY
Condition : HF-ANT-071025-940201 HORIZONTAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch39;2441MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	2390.00	49.50	-24.50	74.00	50.21	30.48	4.26	35.46	100	0	Peak
2 @	2390.00	39.37	-14.63	54.00	40.08	30.48	4.26	35.46	100	331	Average
3 @	2441.00	95.60			96.34	30.44	4.29	35.47	100	0	Peak
4 @	2441.00	70.54			71.27	30.44	4.33	35.49	100	331	Average
5	2483.50	49.08	-24.92	74.00	49.82	30.41	4.36	35.51	100	0	Peak
6 @	2483.50	39.39	-14.61	54.00	40.13	30.41	4.36	35.51	100	331	Average

Remark: #3 and #4 Fundamental Signal

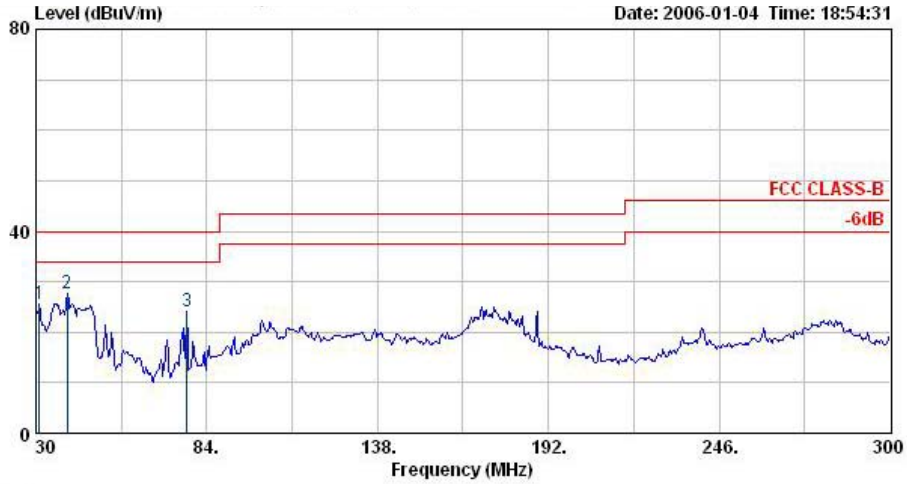


Site : 03CH06-HY
Condition : HF-ANT-071025-940201 HORIZONTAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch39;2441MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	4882.00	52.47	-21.53	74.00	48.94	33.39	6.30	36.16	200	0	Peak
2 @	4882.00	42.61	-11.39	54.00	39.08	33.39	6.30	36.16	159	325	Average

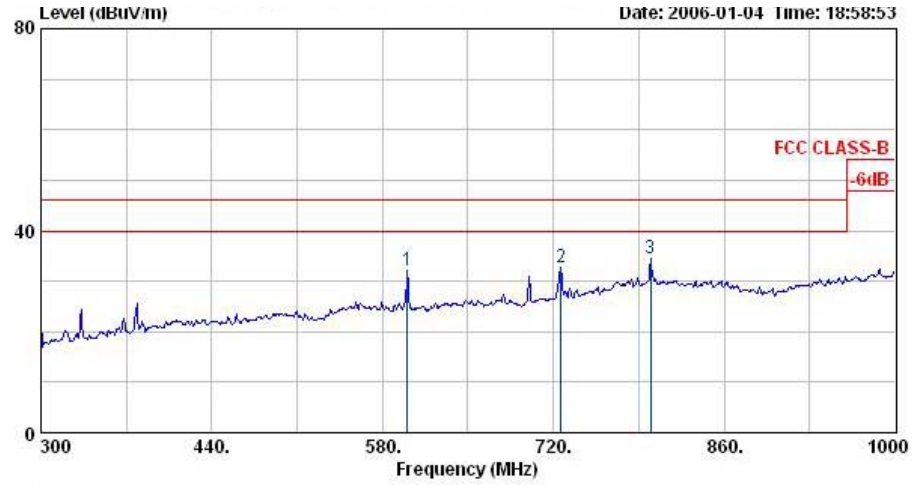
- Test Mode : Mode 2
- Polarization : Vertical

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



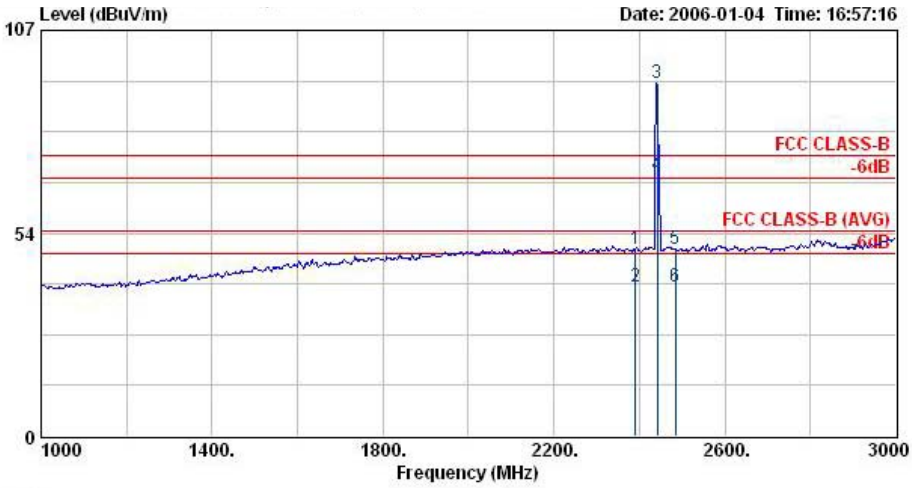
Site : 03CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch39;2441MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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 @	31.08	25.60	-14.40	40.00	37.35	18.40	1.37	31.52	400	0	QP
2 @	39.99	27.57	-12.43	40.00	42.97	14.83	1.51	31.74	400	0	QP
3	77.79	23.94	-16.06	40.00	46.57	6.85	2.13	31.61	400	0	QP



Site : 03CH06-HY
Condition : BI-LOG-2004-1122 VERTICAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch39;2441MHz
Plane : H

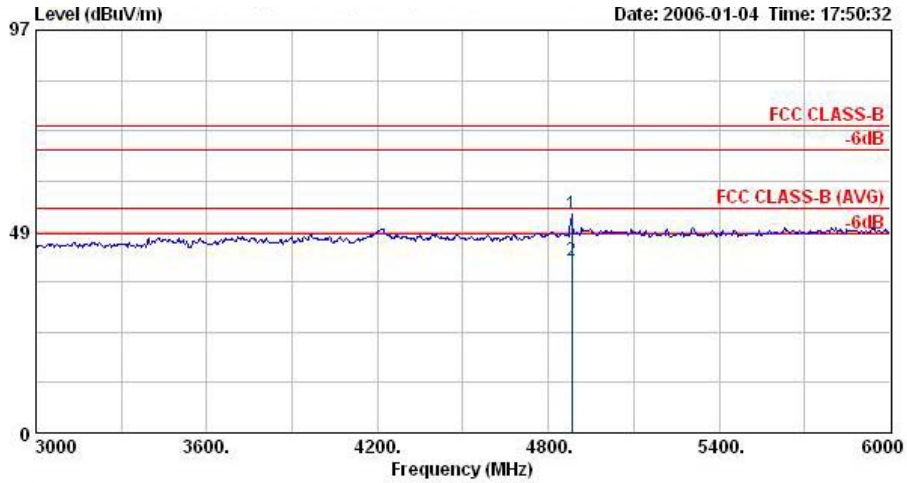
	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1 @	600.30	31.99	-14.01	46.00	38.34	17.94	6.35	30.64	100	0	QP
2 @	726.30	32.63	-13.37	46.00	36.34	19.79	7.03	30.53	100	0	QP
3 @	799.80	34.35	-11.65	46.00	35.13	21.90	7.45	30.12	137	204	QP



Site : 03CH06-HY
Condition : HF-ANT-071025-940201 VERTICAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch39;2441MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	2390.00	49.45	-24.55	74.00	50.16	30.48	4.26	35.46	200	0	Peak
2 @	2390.00	39.34	-14.66	54.00	40.05	30.48	4.26	35.46	123	322	Average
3 @	2441.00	93.15			93.88	30.44	4.29	35.47	200	0	Peak
4 @	2441.00	68.78			69.51	30.44	4.33	35.49	123	322	Average
5	2483.50	49.26	-24.74	74.00	49.99	30.41	4.36	35.51	200	0	Peak
6 @	2483.50	39.38	-14.62	54.00	40.12	30.41	4.36	35.51	123	322	Average

Remark: #3 and #4 Fundamental Signal

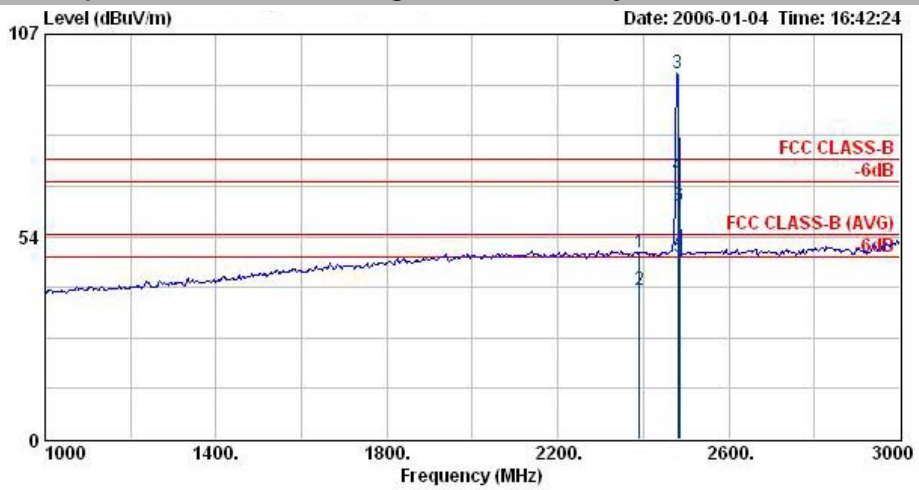


Site : 03CH06-HY
Condition : HF-ANT-071025-940201 VERTICAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch39;2441MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	4882.00	52.74	-21.26	74.00	49.21	33.39	6.30	36.16	200	360	Peak
2 @	4882.00	41.48	-12.52	54.00	37.95	33.39	6.30	36.16	100	185	Average

- Test Mode : Mode 3
- Polarization : Horizontal

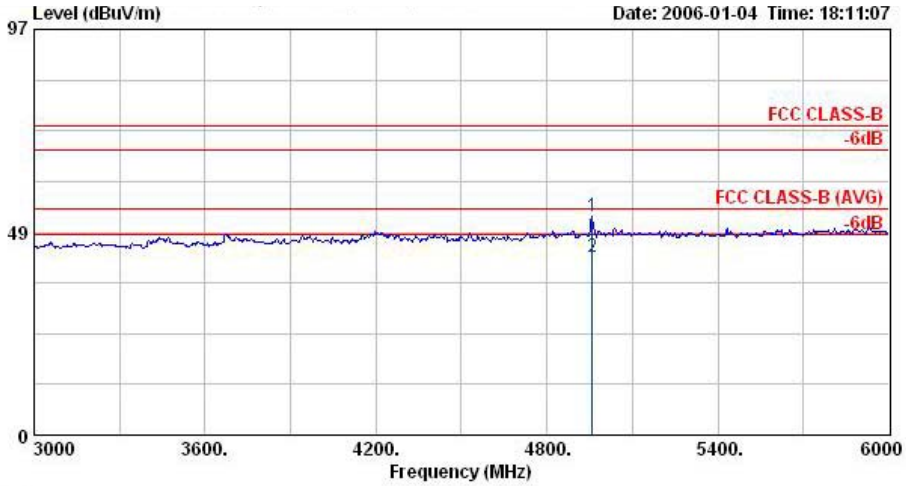
The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06-HY
Condition : HF-ANT-071025-940201 HORIZONTAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch78;2480MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	2390.00	49.16	-24.84	74.00	49.87	30.48	4.26	35.46	200	0	Peak
2	2390.00	39.34	-14.66	54.00	40.05	30.48	4.26	35.46	186	188	Average
3 @	2480.00	96.60			97.34	30.41	4.36	35.51	200	0	Peak
4 X	2480.00	69.74			70.48	30.41	4.36	35.51	186	188	Average
5	2483.50	47.98	-6.02	54.00	48.72	30.41	4.36	35.51	186	188	Average
6	2483.50	61.75	-12.25	74.00	62.49	30.41	4.36	35.51	200	0	Peak

Remark: #3 and #4 Fundamental Signal.

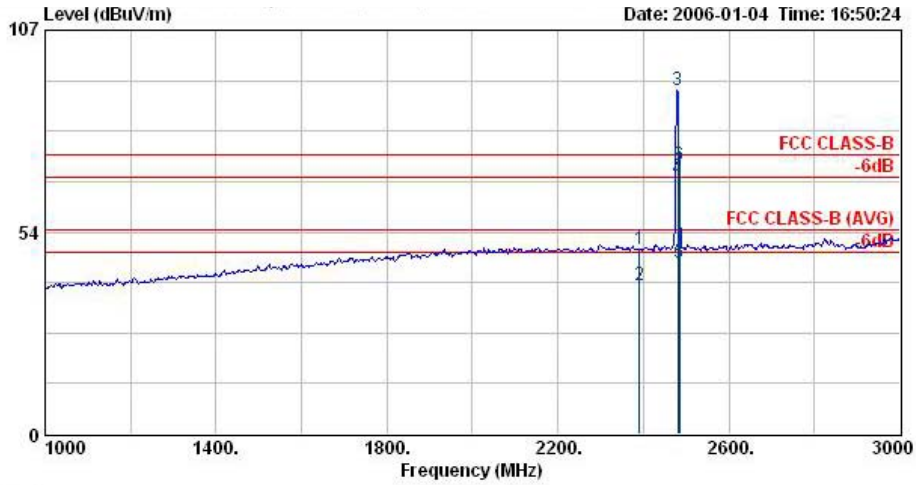


Site : 03CH06-HY
Condition : HF-ANT-071025-940201 HORIZONTAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch78;2480MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	4960.00	52.34	-21.66	74.00	48.49	33.68	6.39	36.23	200	0	Peak
2	4960.00	42.65	-11.35	54.00	38.80	33.68	6.39	36.23	155	323	Average

- Test Mode : Mode 3
- Polarization : Vertical

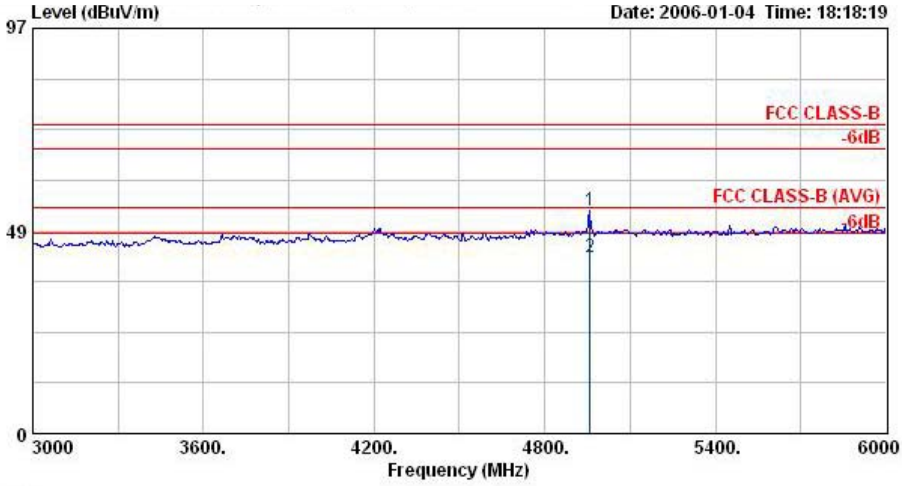
■ The test that passed at minimum margin was marked by the frame in the following table.



Site : 03CH06-HY
Condition : HF-ANT-071025-940201 VERTICAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch78;2480MHz
Plane : H

		Freq	Level	Over Limit	Limit Line	Read 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		2390.00	48.98	-25.02	74.00	49.69	30.48	4.26	35.46	100	0	Peak
2		2390.00	39.35	-14.65	54.00	40.06	30.48	4.26	35.46	104	286	Average
3	X	2480.00	90.94			91.68	30.41	4.36	35.51	100	0	Peak
4	X	2480.00	67.44			68.18	30.41	4.36	35.51	104	286	Average
5		2483.50	45.16	-8.84	54.00	45.90	30.41	4.36	35.51	104	286	Average
6	!	2483.50	71.19	-2.81	74.00	71.93	30.41	4.36	35.51	100	0	Peak

Remark: #3 and #4 Fundamental Signal



Site : 03CH06-HY
Condition : HF-ANT-071025-940201 VERTICAL
EUT : GSM Tri Band Mobile Phone(Bluetooth)
Power : 120Vac/60Hz
Model : FR610306
Memo : BT TX Ch78;2480MHz
Plane : H

	Freq	Level	Over Limit	Limit Line	Read 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	4960.00	53.28	-20.72	74.00	49.44	33.68	6.39	36.23	200	360	Peak
2	4960.00	42.25	-11.75	54.00	38.40	33.68	6.39	36.23	100	199	Average

Remark: There is 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 connecter 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	100174	9kHz – 2.75GHz	Oct. 19, 2005	Oct. 19, 2006	Conduction (CO01-HY)
LISN	MessTec	NNB-2/16Z	2001/009	9kHz – 30MHz	Apr. 26, 2005	Apr. 26, 2006	Conduction (CO01-HY)
LISN (Support Unit)	MessTec	NNB-2/16Z	2001/004	9kHz – 30MHz	Apr. 20, 2005	Apr. 20, 2006	Conduction (CO01-HY)
EMI Filter	LINDGREN	LRE-2060	1004	< 450Hz	N/A	N/A	Conduction (CO01-HY)
EMI Filter	LINDGREN	N6006	201052	0 – 60Hz	N/A	N/A	Conduction (CO01-HY)
RF Cable-CON	Suhner Switzerland	RG223/U	CB029	9kHz – 30MHz	Dec. 22, 2005	Dec. 22, 2006	Conduction (CO01-HY)
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Jul. 25, 2005	Jul. 24, 2006	Radiation (03CH06-HY)
Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jun. 28, 2005	Jun. 27, 2006	Radiation (03CH06-HY)
Controller	CT	SC100	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 22, 2004	Nov. 22, 2006	Radiation (03CH06-HY)
Horn Antenna	Com-Power	AH118	071025	1G-18G	Feb. 22, 2006	Feb. 22, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Jul. 21, 2005	Jul. 20, 2006	Radiation (03CH06-HY)
HF Amplifier	MITEQ	AFS44	973248	0.1G - 26.5G	Nov. 23, 2005	Nov. 22, 2006	Radiation (03CH06-HY)
Amplifier	MITEQ	AMF-6F	997165	26G - 40G	Jul. 21, 2005	Jul. 20, 2006	Radiation (03CH06-HY)
Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)

7. Uncertainty Evaluation

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

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

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch	+0.39/-0.41	U-shaped	0.28
combined standard uncertainty Uc(y)	**1.27**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.54**		

Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncertainty of x_i		$u(x_i)$	Ci	$Ci*u(x_i)$
	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 Γ1= 0.197 Antenna VSWR Γ2= 0.194 Uncertainty=20log(1-Γ1*Γ2*Γ3)	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty Uc(y)	**2.36**				
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	**4.72**				