

Appendix D. Attachment of Report

according to

47 CFR FCC Part 15 Subpart C § 15.247

Equipment : **Portable Navigation Device**
Model No. : **R700t**
Brand Name : **ASUS**
Filing Type : **Existing Change**
Applicant : **ASUSTeK Computer Inc.**
4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
FCC ID : **MSQR700T**
Manufacturer : **ASUSTeK Computer Inc.**
No. 5, Shing Yeh Street, 333 Kwei Shan Hsiang, Taoyuan
Hsien, Taiwan
ASUS SHANGHAI PARK Protek (ShangHai) Limited
NO. 3668 Xiu Yan Rd. Kang Qiao Town, Nan Hui Dist,
Shang Hai P.C: 201319
Received Date : May 30, 2008
Final Test Date : Jun. 03, 2008
Report No. : FR7O2618-02
Issue Date : Jun. 12, 2008
Attachment Info. : Please refer to section 1.1

Statement

Test result included is only for the Bluetooth part of the product.

The test result in this report refers exclusively to the presented test model / sample.

Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.

The measurements and test results shown in this test report were made in accordance with the procedures and found in compliance with the limit given in **ANSI C63.4-2003** and **47 CFR FCC Part 15 Subpart C**.

The test equipment used to perform the test is calibrated and traceable to NML/ROC.

SPORTON International Inc.

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

Table of Contents

CERTIFICATE OF COMPLIANCE.....	1
1. GENERAL INFORMATION.....	2
1.1. Table for Existing Change Listing	2
1.2. Table for Carrier Frequencies	2
1.3. Table for Test Modes	2
1.4. Table for Testing Locations.....	3
1.5. Table for Supporting Units	3
1.6. Table for Parameters of Test Software Setting	3
2. TEST RESULT.....	4
2.1. Maximum Peak Output Power Measurement.....	4
2.2. Hopping Channel Separation Measurement	6
2.3. Number of Hopping Frequency Measurement	11
2.4. Dwell Time Measurement	13
2.5. Radiated Emissions Measurement	20
2.6. Band Edge Emissions Measurement.....	28
3. LIST OF MEASURING EQUIPMENTS	31
4. PHOTOGRAPHS OF RADIATED EMISSIONS TEST CONFIGURATION.....	32

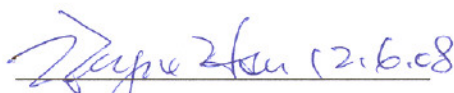
CERTIFICATE OF COMPLIANCE

according to

47 CFR FCC Part 15 Subpart C § 15.247

Equipment : Portable Navigation Device
Model No. : R700t
Brand Name : ASUS
Applicant : ASUSTeK Computer Inc.
4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Sporton International as requested by the applicant to evaluate the EMC performance of the product sample received on May 30, 2008 would like to declare that the tested sample has been evaluated and found to be in compliance with the tested rule parts. The data recorded as well as the test configuration specified is true and accurate for showing the sample's EMC nature.


Wayne Hsu

SPORTON International Inc.

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

1. GENERAL INFORMATION

1.1. Table for Existing Change Listing

Appendix D. Attachment of report has further modification made to update the Bluetooth version from version 1.0 to 2.0. This modification is only to update Bluetooth version; neither circuit design nor main function has been changed. The equipment of this attachment is the same as the Equipment under Test of original test report, whose report no, is FR7O2618. This attachment should be filed together with original test report.

1.2. Table for Carrier Frequencies

Frequency Band	Channel No.	Frequency
2400 ~ 2483.5MHz	0	2402 MHz
	1	2403 MHz
	:	:
	38	2440 MHz
	39	2441 MHz
	40	2442 MHz
	:	:
	77	2479 MHz
	78	2480 MHz

1.3. Table for Test Modes

The following table is a list of the test modes shown in this test report.

Test Items	Mode	Data Rate	Channel	Antenna
Max. Conducted Output Power	GFSK / $\pi/4$ -DQPSK	1/2 Mbps	0/39/78	NA
Hopping Channel Separation	$\pi/4$ -DQPSK	2 Mbps	0~1/39~40/77~78	NA
Number of Hopping Frequency	$\pi/4$ -DQPSK	2 Mbps	0~78	NA
Dwell Time	DH1/DH3/DH5	2 Mbps	0/39/78	NA
Radiated Emissions Above 1GHz	$\pi/4$ -DQPSK	2 Mbps	0/39/78	1
Band Edge Emissions	$\pi/4$ -DQPSK	2 Mbps	0/78	1

1.4. Table for Testing Locations

Test Site No.	Site Category	Location	FCC Reg. No.	IC File No.	VCCI Reg. No
03CH03-HY	SAC	Hwa Ya	101377	IC 4086B-1	-
TH01-HY	OVEN Room	Hwa Ya	-	-	-

1.5. Table for Supporting Units

The EUT was tested alone.

1.6. Table for Parameters of Test Software Setting

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Power Parameters of Bluetooth V 1.0

Test Software Version	Bluetest		
Frequency	2402 MHz	2441 MHz	2480 MHz
Power Parameters	63	63	63

Power Parameters of Bluetooth V 2.0

Test Software Version	ANRITSU MT8852B.		
Frequency	2402 MHz	2441 MHz	2480 MHz
Power Parameters	Default	Default	Default

2. TEST RESULT

2.1. Maximum Peak Output Power Measurement

2.1.1. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, the limit for peak output power is 30dBm. The limit has to be reduced by the amount in dB that the gain of the antenna exceeds 6dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

2.1.2. Measuring Instruments and Setting

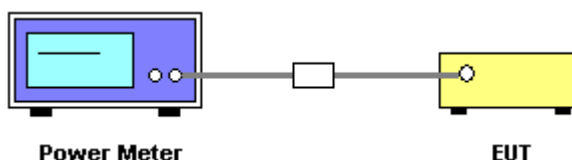
Please refer to section 3 of equipments list in this report. The following table is the setting of the power meter.

Power Meter Parameter	Setting
Filter No.	Auto
Measurement time	0.135 s ~ 26 s
Used Peak Sensor	NRV-Z32 (model 04)

2.1.3. Test Procedures

1. The transmitter output (antenna port) was connected to the power meter.
2. Turn on the EUT and power meter and then record the peak power value.
3. Repeat above procedures on all channels needed to be tested.

2.1.4. Test Setup Layout



2.1.5. Test Deviation

There is no deviation with the original standard.

2.1.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.1.7. Test Result of Maximum Peak Output Power

Test Date	May 30, 2008	Test Site	TH01-HY
Temperature	28°C	Humidity	58%
Test Engineer	Tom	Configurations	GFSK / $\pi/4$ -DQPSK

Bluetooth V 1.0 (GFSK)

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
0	2402 MHz	5.01	30.00	Complies
39	2441 MHz	5.20	30.00	Complies
78	2480 MHz	5.11	30.00	Complies

Bluetooth V 2.0 ($\pi/4$ -DQPSK)

Channel	Frequency	Conducted Power (dBm)	Max. Limit (dBm)	Result
0	2402 MHz	-2.40	30.00	Complies
39	2441 MHz	-2.57	30.00	Complies
78	2480 MHz	-2.74	30.00	Complies

2.2. Hopping Channel Separation Measurement

2.2.1. Limit

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

2.2.2. Measuring Instruments and Setting

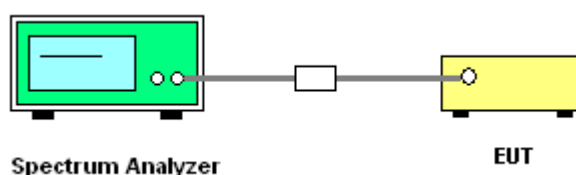
Please refer to section 3 of equipments list in this report. The following table is the setting of spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

2.2.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
2. The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for 20 dB bandwidth measurement.
3. The resolution bandwidth of 100 kHz and the video bandwidth of 300 kHz were utilised for channel separation measurement.

2.2.4. Test Setup Layout



2.2.5. Test Deviation

There is no deviation with the original standard.

2.2.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

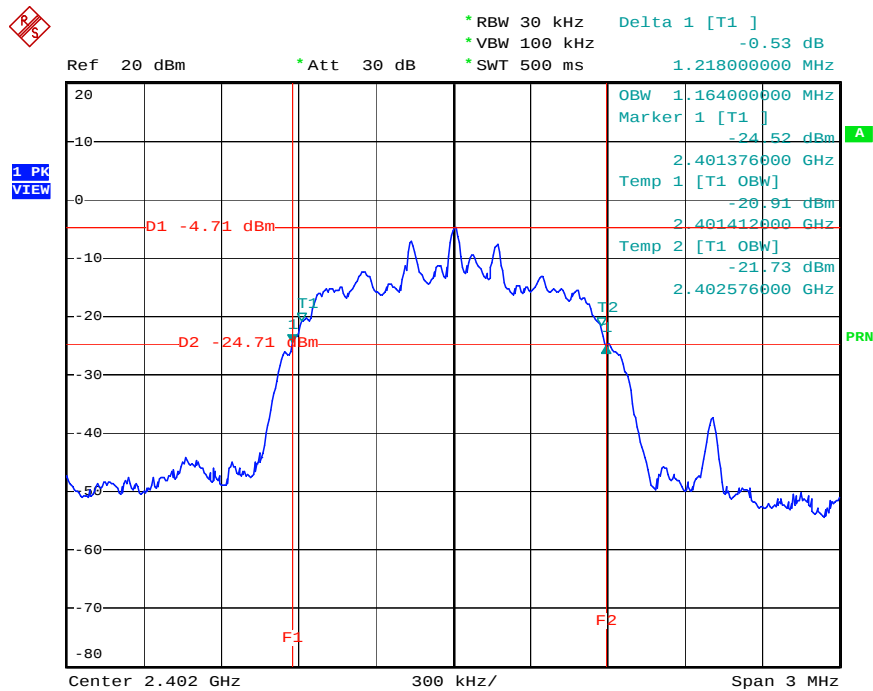
2.2.7. Test Result of Hopping Channel Separation

Test Date	May 30, 2008	Test Site	TH01-HY
Temperature	28°C	Humidity	58%
Test Engineer	Tom	Configurations	$\pi/4$ -DQPSK

Frequency	Ch. Separation (MHz)	20dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Result
2402 MHz	1.00	1.218	1.164	Complies
2441 MHz	1.00	1.230	1.164	Complies
2480 MHz	1.00	1.230	1.170	Complies

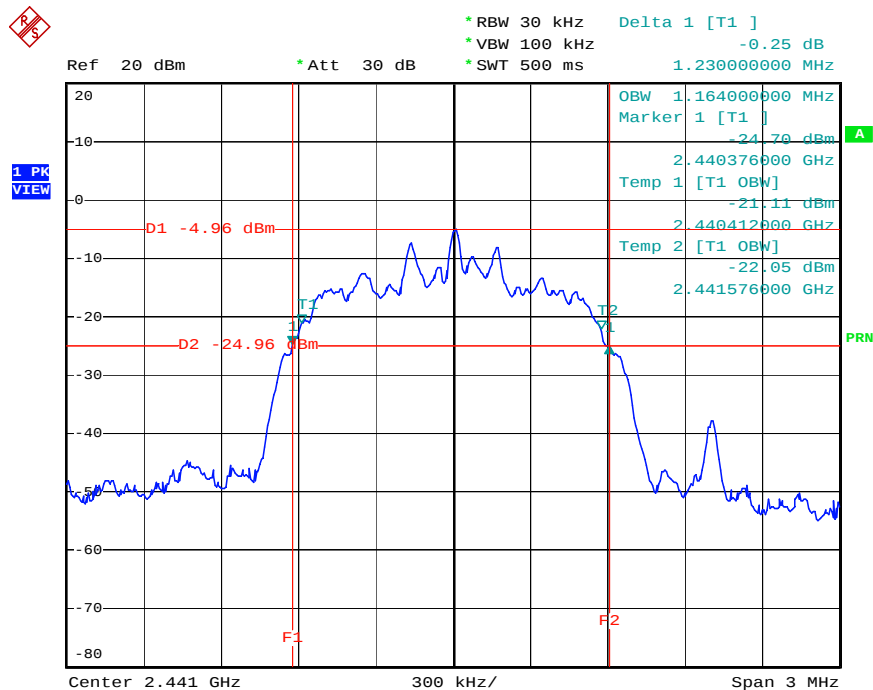
Ch. Separation Limits: >2/3 of 20dB bandwidth

20 dB Bandwidth Plot on Channel 0 / 2402 MHz



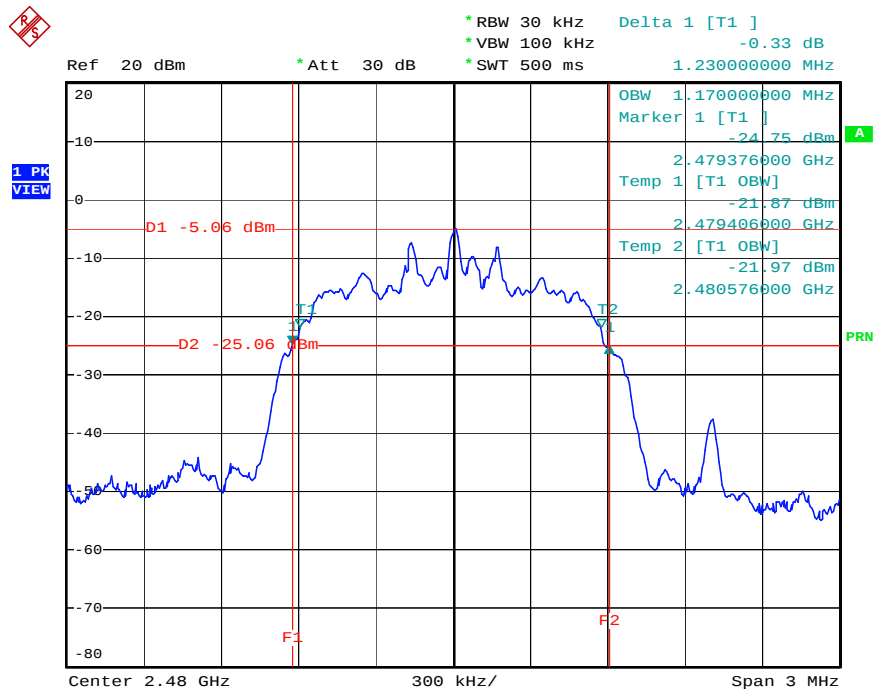
Date: 30.MAY.2008 12:07:31

20 dB Bandwidth Plot on Channel 39 / 2441 MHz



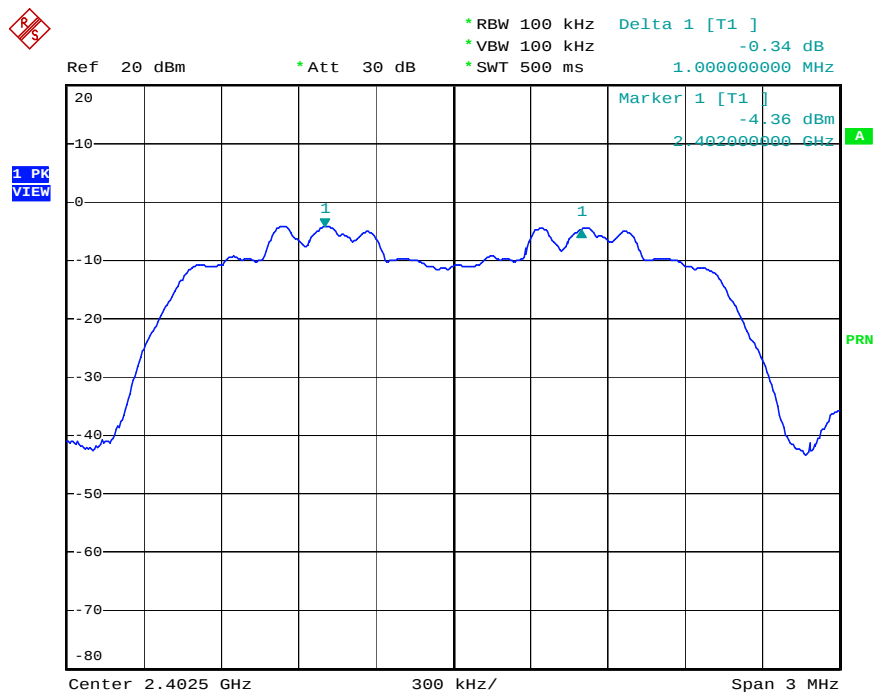
Date: 30.MAY.2008 12:08:26

20 dB Bandwidth Plot on Channel 78 / 2480 MHz



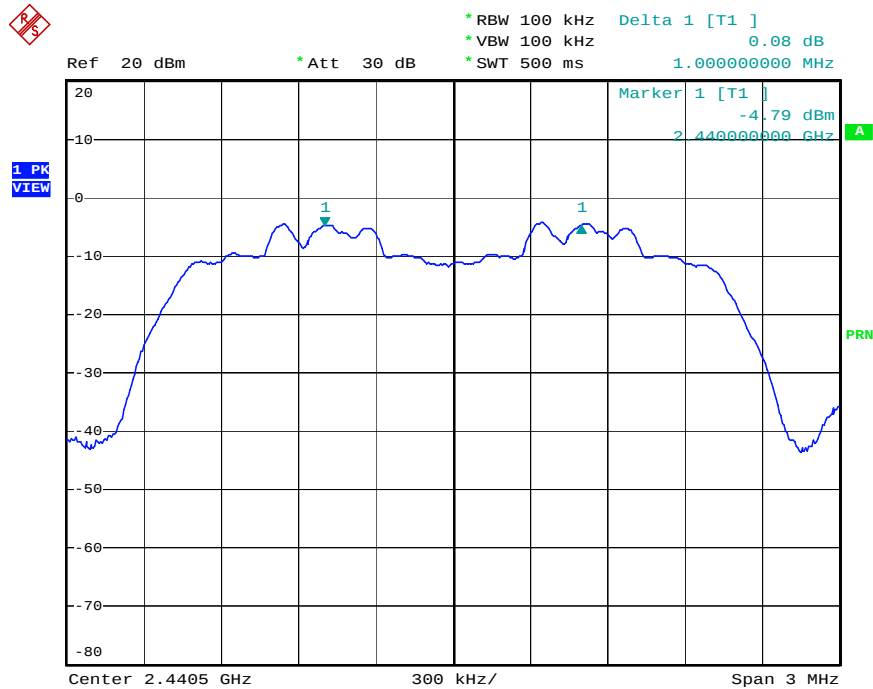
Date: 30.MAY.2008 12:09:26

Channel Separation Plot on Channel 0~1 / 2402 MHz ~ 2403 MHz



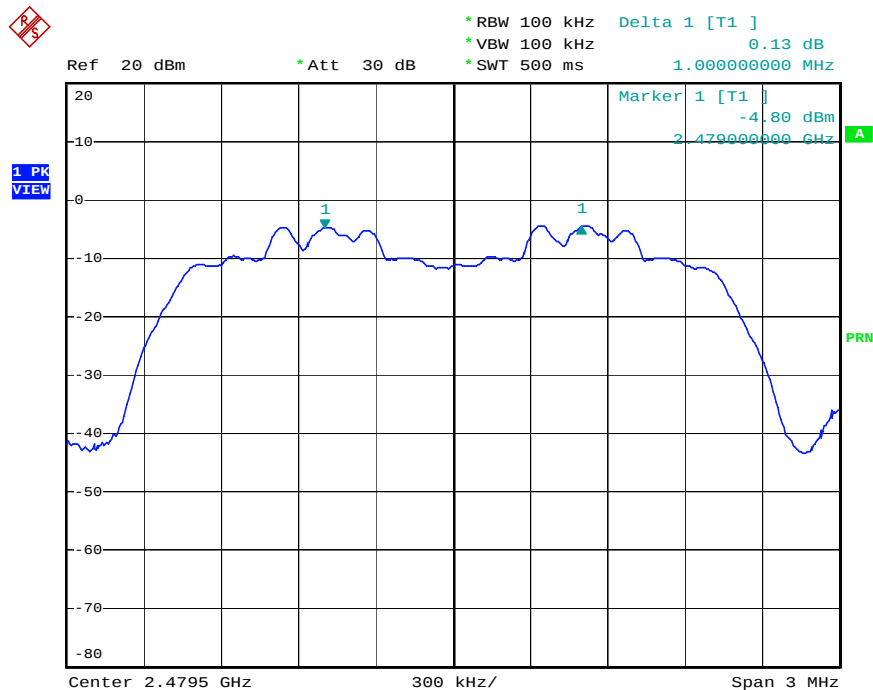
Date: 30.MAY.2008 12:12:41

Channel Separation Plot on Channel 39~40 / 2441 MHz ~ 2442 MHz



Date: 30.MAY.2008 12:13:43

Channel Separation Plot on Channel 77~78 / 2479 MHz ~ 2480 MHz



Date: 30.MAY.2008 12:14:57

2.3. Number of Hopping Frequency Measurement

2.3.1. Limit

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels.

2.3.2. Measuring Instruments and Setting

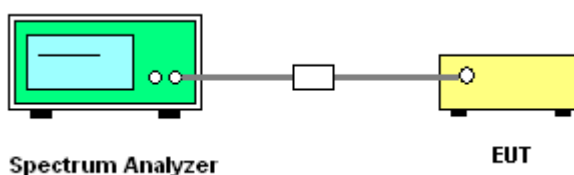
Please refer to section 3 of equipments list in this report. The following table is the setting of spectrum analyzer.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> Operating Frequency Range
RB	100 kHz
VB	100 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

2.3.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
2. The resolution bandwidth of 100 kHz and the video bandwidth of 100 kHz were utilised.
3. Observe frequency hopping in 2400MHz~2483.5MHz, there are at least 75 non-overlapping channels.

2.3.4. Test Setup Layout



2.3.5. Test Deviation

There is no deviation with the original standard.

2.3.6. EUT Operation during Test

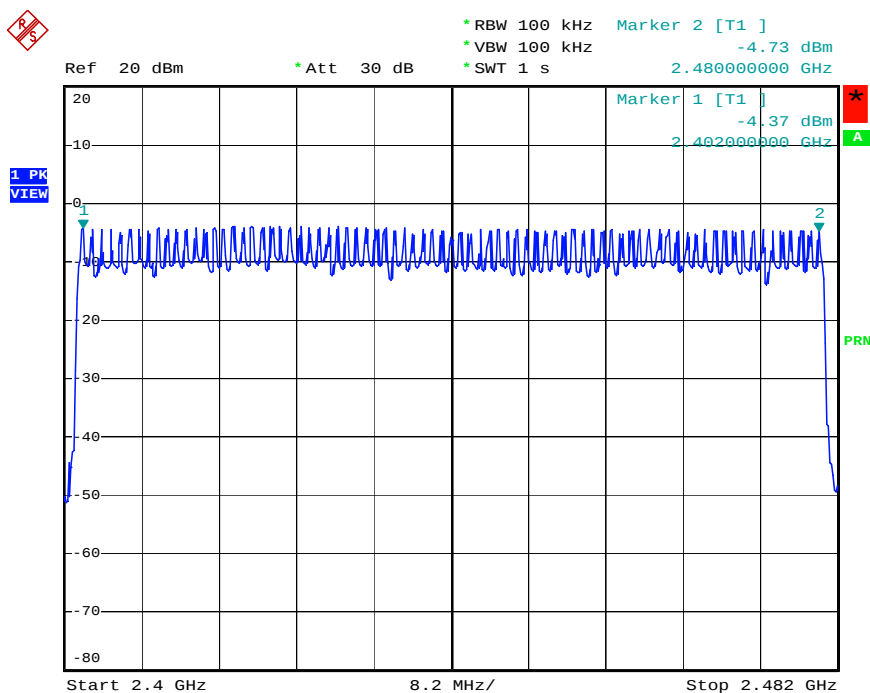
The EUT was programmed to be in continuously transmitting mode.

2.3.7. Test Result of Number of Hopping Frequency

Test Date	May 30, 2008	Test Site	TH01-HY
Temperature	28°C	Humidity	58%
Test Engineer	Nan	Configurations	$\pi/4$ -DQPSK

Modulation Type	Channel No.	Frequency (MHz)	Hopping Ch. (Channels)	Min. Limit (Channels)	Test Result
GFSK	0 ~ 78	2402 ~ 2480	79	75	Complies

Number of Hopping Channel Plot on Channel 0~78 / 2402 MHz ~ 2480 MHz



Date: 30.MAY.2008 12:19:07

2.4. Dwell Time Measurement

2.4.1. Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

2.4.2. Measuring Instruments and Setting

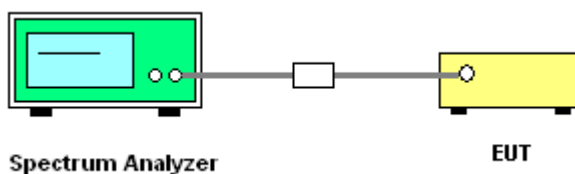
Please refer to section 3 of equipments list in this report. The following table is the setting of spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	0 MHz
RB	1000 kHz
VB	1000 kHz
Detector	Peak
Trace	Single Trigger

2.4.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyser
2. Set RBW of spectrum analyzer to 1000kHz and VBW to 1000kHz.
3. Use a video trigger with the trigger level set to enable triggering only on full pulses.
4. Sweep Time is more than once pulse time.
5. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
6. Measure the maximum time duration of one single pulse.
7. Set the EUT for DH5, DH3 and DH1 packet transmitting.
8. Measure the maximum time duration of one single pulse.
9. DH5 Packet permit maximum $1600 / 79 / 6 = 3.37$ hops per second in each channel (5 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $3.37 \times 31.6 = 106.6$ within 31.6 seconds
10. DH3 Packet permit maximum $1600 / 79 / 4 = 5.06$ hops per second in each channel (3 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $5.06 \times 31.6 = 160$ within 31.6 seconds.
11. DH1 Packet permit maximum $1600 / 79 / 2 = 10.12$ hops per second in each channel (1 time slot RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $10.12 \times 31.6 = 320$ within 31.6 seconds.

2.4.4. Test Setup Layout



2.4.5. Test Deviation

There is no deviation with the original standard.

2.4.6. EUT Operation during Test

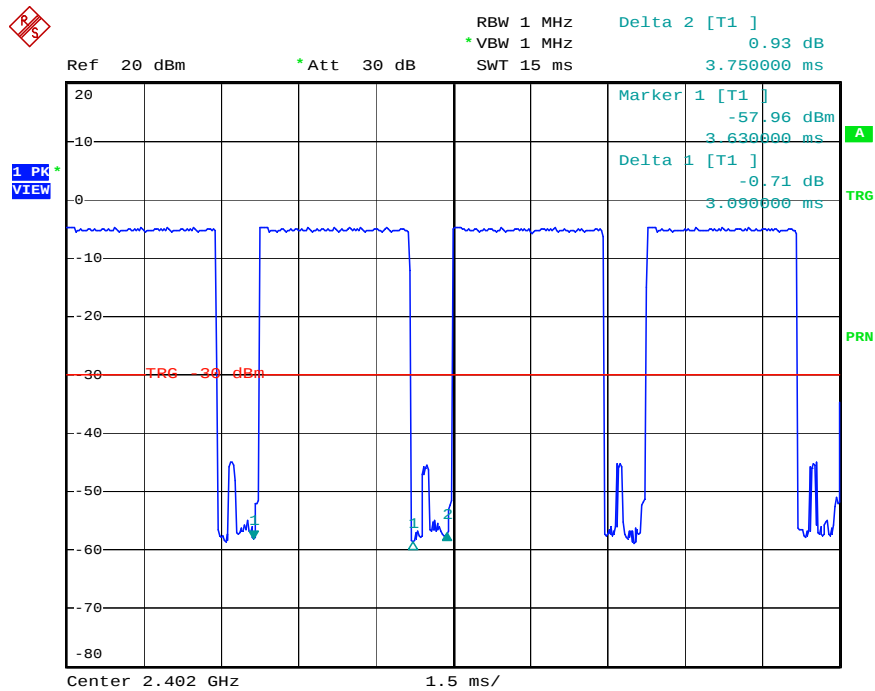
The EUT was programmed to be in continuously transmitting mode.

2.4.7. Test Result of Dwell Time

Test Date	May 30, 2008	Test Site	TH01-HY
Temperature	28°C	Humidity	58%
Test Engineer	Nan	Configurations	$\pi/4$ -DQPSK

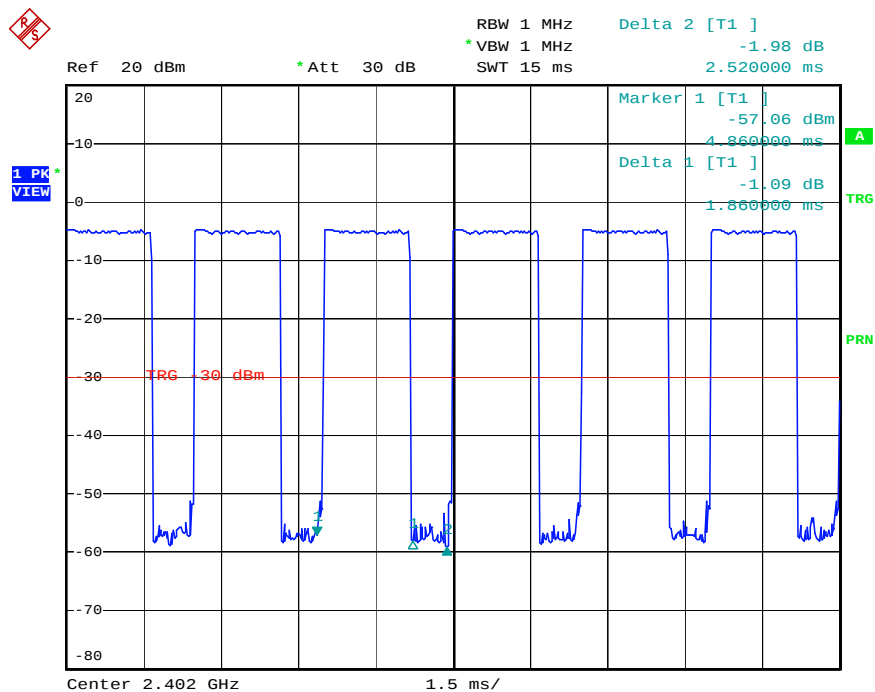
Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limits (s)	Test Result
DH5	2402 MHz	3.0900	0.3296	0.4000	Complies
DH3	2402 MHz	1.8600	0.2976	0.4000	Complies
DH1	2402 MHz	0.6300	0.2016	0.4000	Complies
DH5	2441 MHz	3.0900	0.3296	0.4000	Complies
DH3	2441 MHz	1.8600	0.2976	0.4000	Complies
DH1	2441 MHz	0.6000	0.1920	0.4000	Complies
DH5	2480 MHz	3.0900	0.3296	0.4000	Complies
DH3	2480 MHz	1.8300	0.2928	0.4000	Complies
DH1	2480 MHz	0.6000	0.1920	0.4000	Complies

DH5 Dwell Time Plot on Channel 0 / 2402 MHz



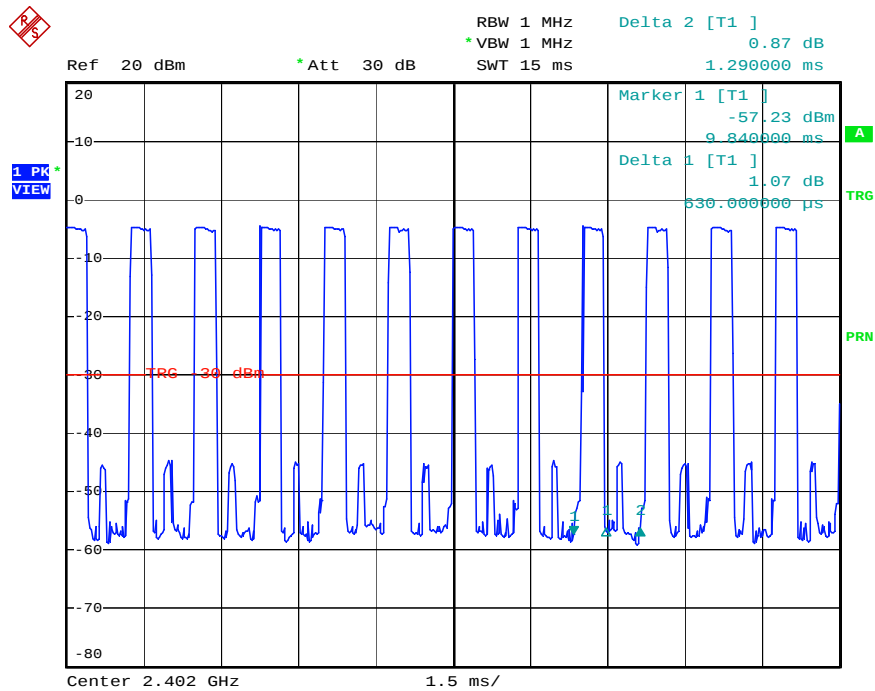
Date: 30.MAY.2008 12:21:31

DH3 Dwell Time Plot on Channel 0 / 2402 MHz



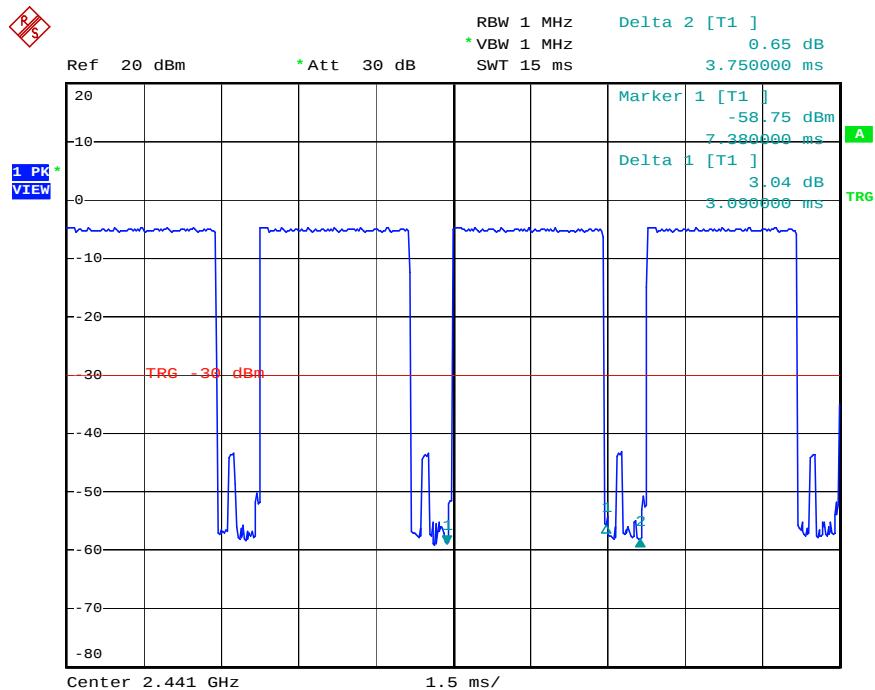
Date: 30.MAY.2008 12:20:54

DH1 Dwell Time Plot on Channel 0 / 2402 MHz



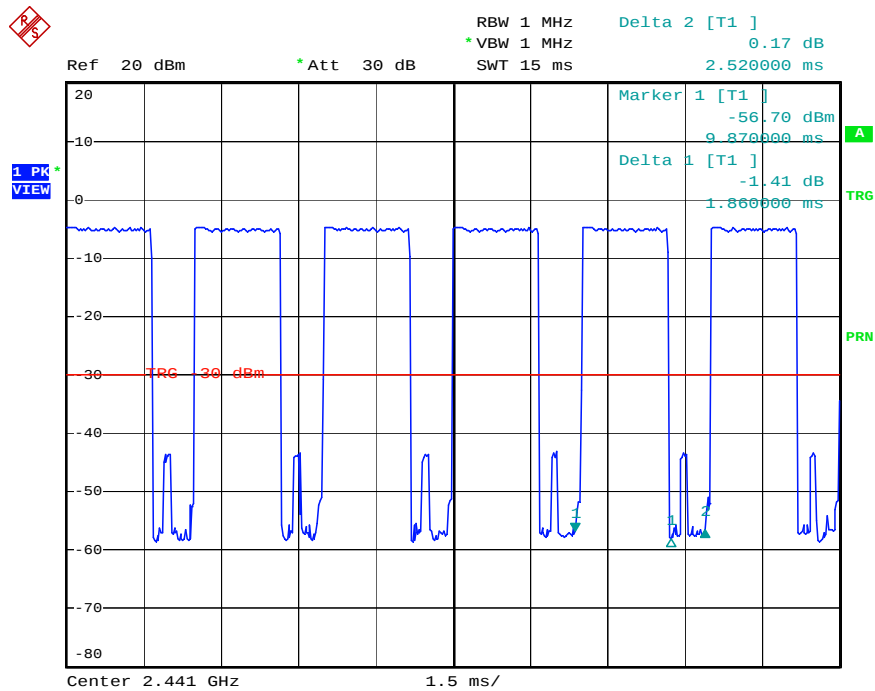
Date: 30.MAY.2008 12:20:21

DH5 Dwell Time Plot on Channel 39 / 2441 MHz



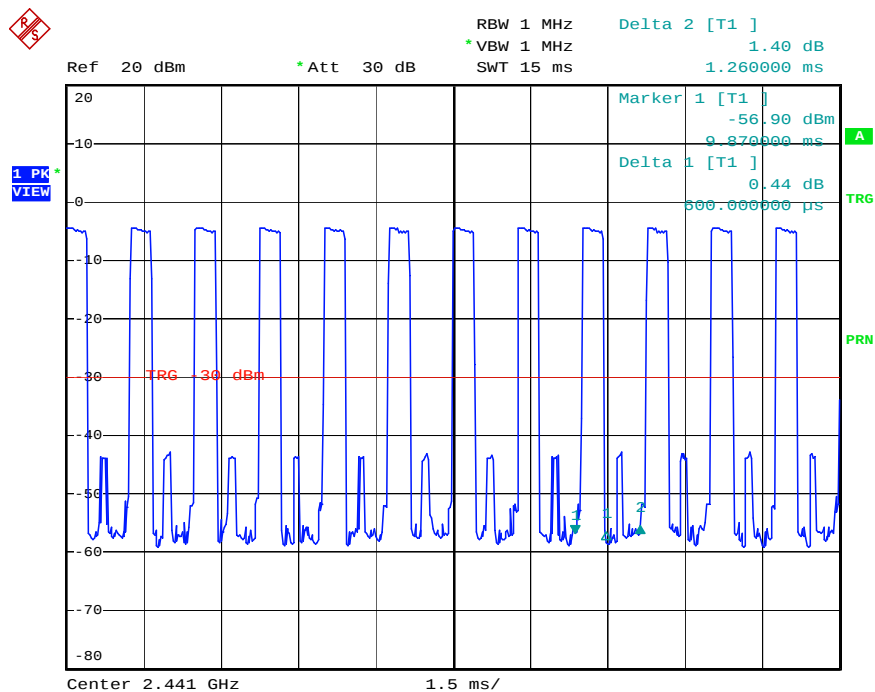
Date: 30.MAY.2008 13:58:10

DH3 Dwell Time Plot on Channel 39 / 2441 MHz



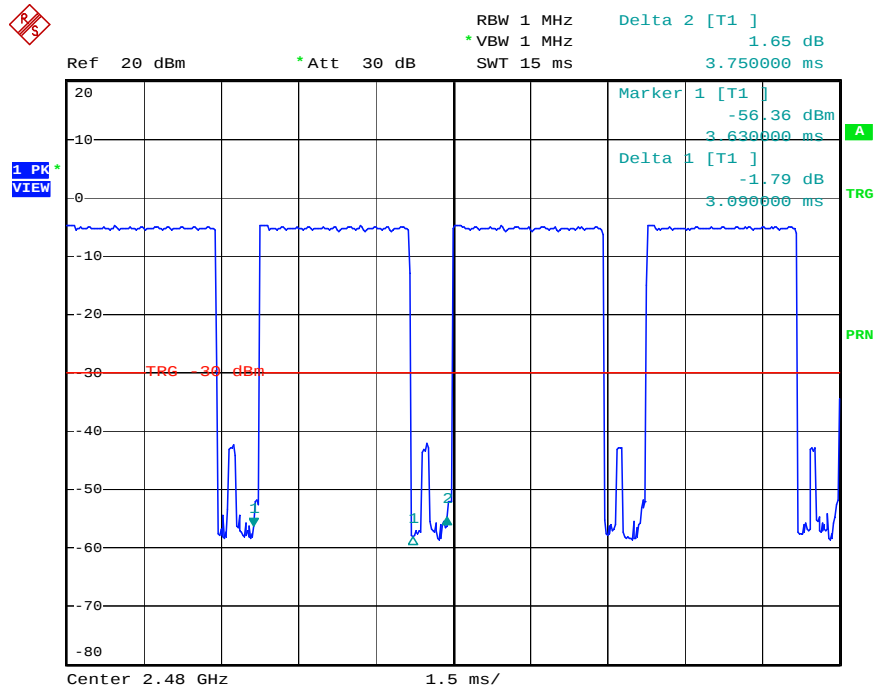
Date: 30.MAY.2008 13:55:28

DH1 Dwell Time Plot on Channel 39 / 2441 MHz



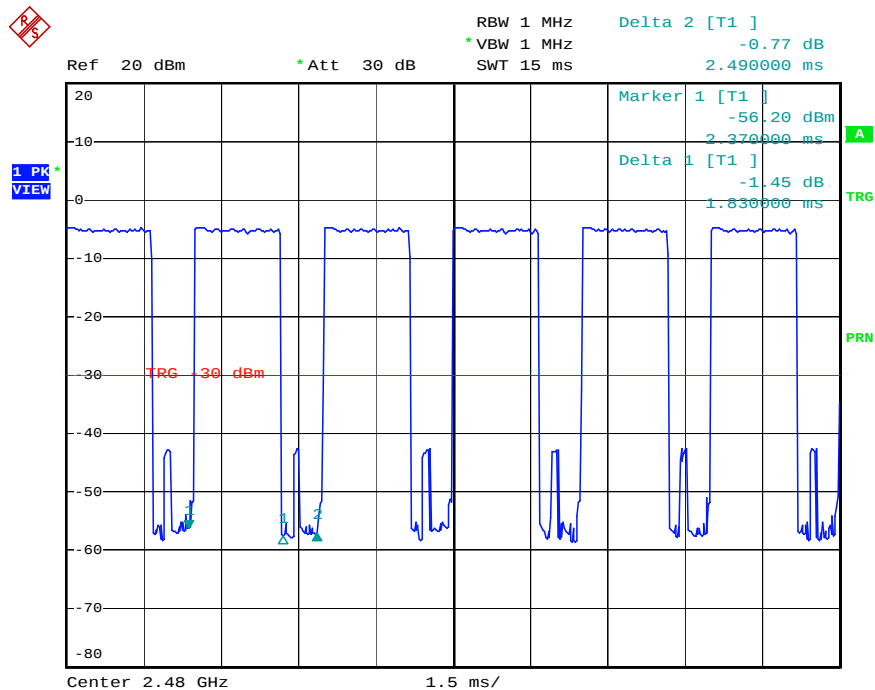
Date: 30.MAY.2008 13:55:00

DH5 Dwell Time Plot on Channel 78 / 2480 MHz



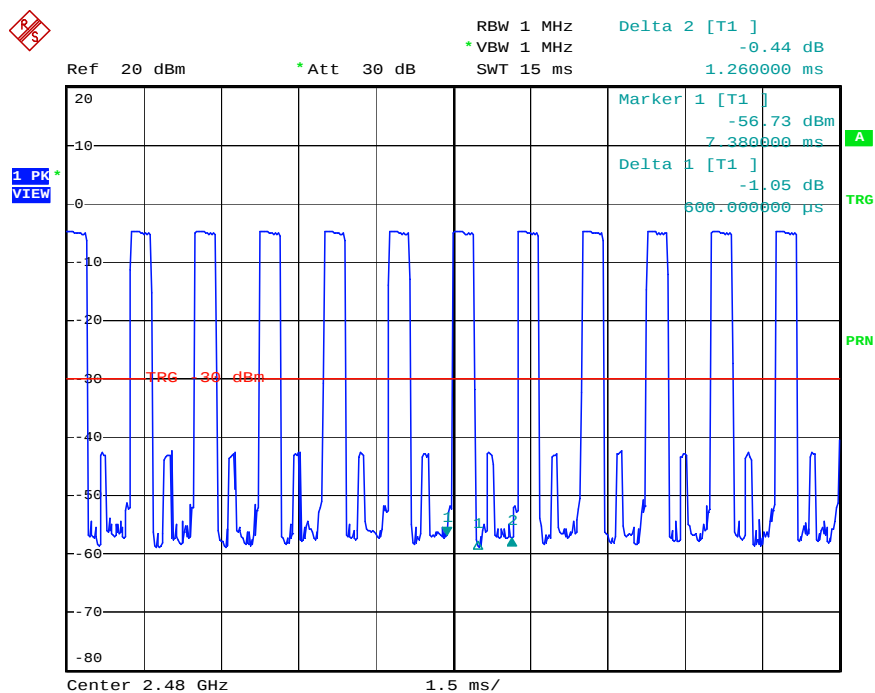
Date: 30.MAY.2008 14:00:15

DH3 Dwell Time Plot on Channel 78 / 2480 MHz



Date: 30.MAY.2008 13:59:47

DH1 Dwell Time Plot on Channel 78 / 2480 MHz



Date: 30.MAY.2008 13:58:57

2.5. Radiated Emissions Measurement

2.5.1. Limit

Measurements shall be made with a quasi-peak measuring receiver in the frequency range 30 MHz to 5th harmonic of highest frequency. The quasi-peak measuring receiver shall be in accordance with clause 2 of CISPR 16-1. Receivers with peak detectors shall be in accordance with clause 3 of CISPR 16-1, and shall have a 6 dB bandwidth in accordance with clause 2 of CISPR 16-1.

Frequency of Emission (MHz)	Field Strength QP Limit (dBuV/m) at 3m
30~88	40
88~216	43.5
216~960	46
Above 960	54

2.5.2. Measuring Instruments and Setting

Please refer to section 3 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

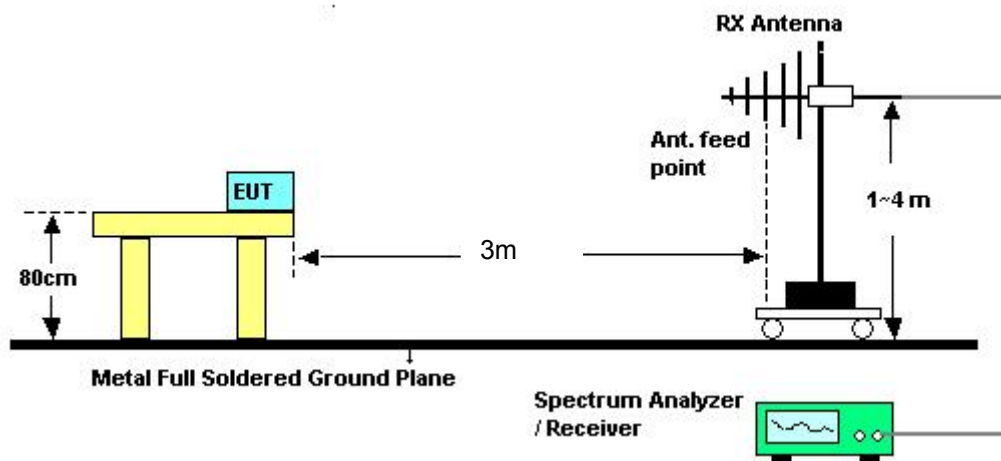
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

Spectrum Parameter	Setting
Start Frequency	1000 MHz
Stop Frequency	5th harmonic of highest frequency
RB / VB	1 MHz / 1MHz for Peak ; 1 MHz / 10Hz for Average

2.5.3. Test Procedures

1. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.

2.5.4. Test Setup Layout



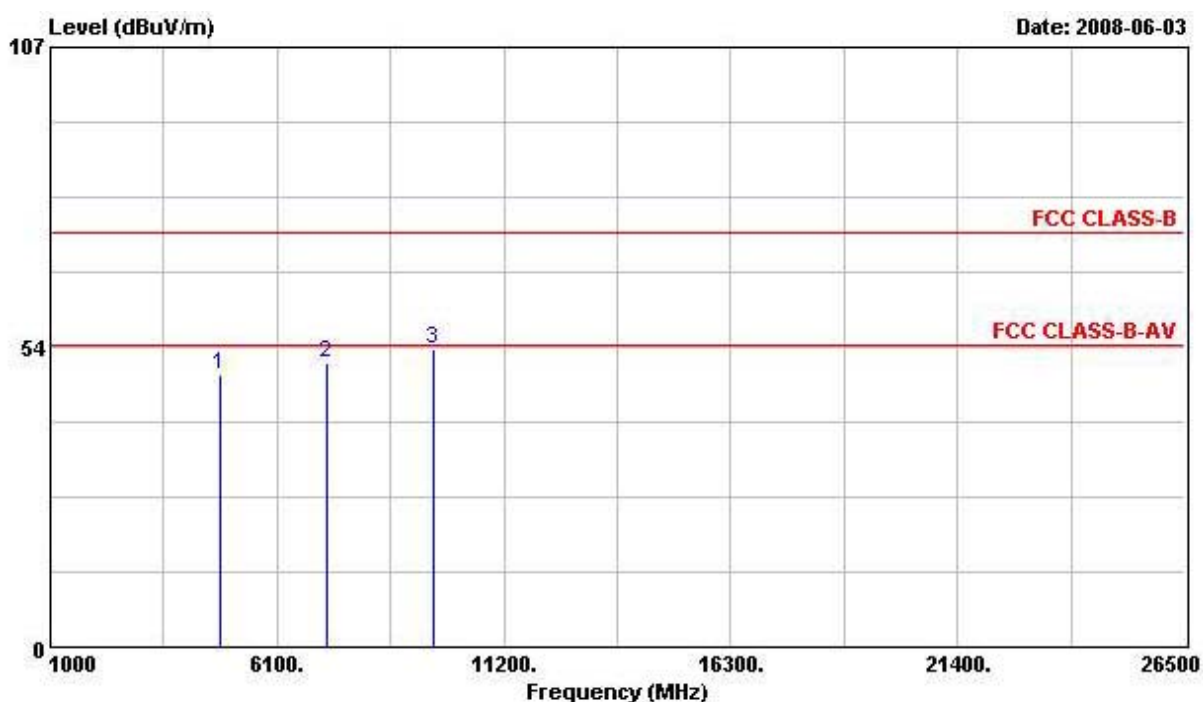
2.5.5. Test Deviation

There is no deviation with the original standard.

2.5.6. Results for Radiated Emissions (1GHz~10th Harmonic)

Test Date	Jun. 03, 2008	Test Site	03CH03-HY
Temperature	25.9°C	Humidity	48%
Test Engineer	Eddie	Configurations	Channel 0

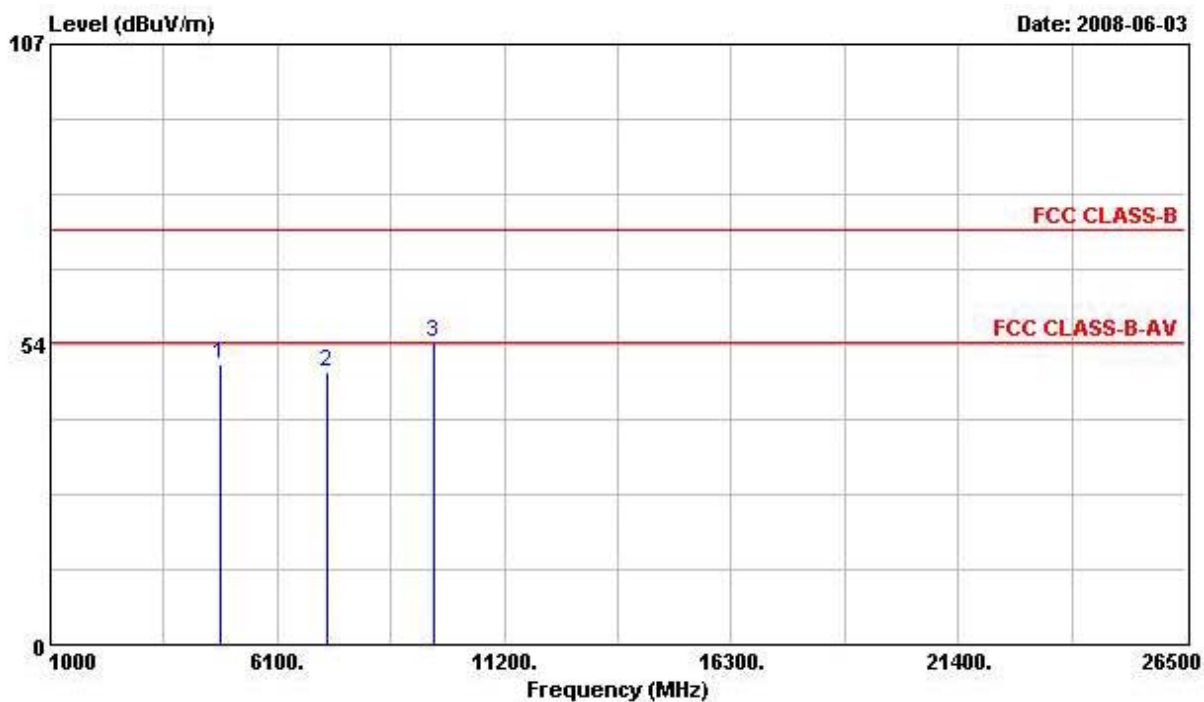
Horizontal



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	4808.000	48.41	-5.59	54.00	46.75	33.02	1.38	32.74 PK
2	7202.000	50.69	-23.31	74.00	43.85	35.70	4.08	32.94 Peak
3	9612.000	53.24			42.87	38.34	5.42	33.40 PEAK

Note: Items 3 is on un-restricted band, so the limit is -20dBc for the field strength of the fundamental emissions (see section 2.6.7.).

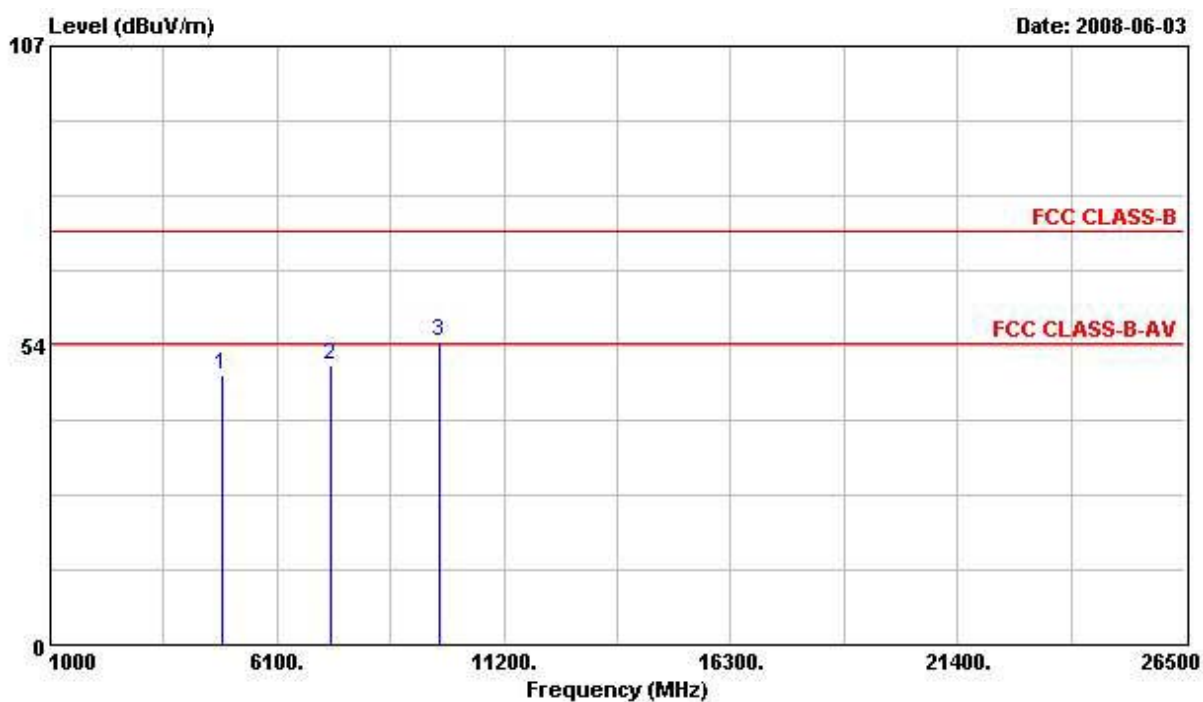
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4804.000	49.91	-4.09	54.00	48.24	33.02	1.38	32.74	PK
2	7202.000	48.70	-25.30	74.00	41.86	35.70	4.08	32.94	Peak
3	9604.000	53.88			43.55	38.31	5.42	33.40	PEAK

Note: Items 3 is on un-restricted band, so the limit is -20dBc for the field strength of the fundamental emissions (see section 2.6.7.).

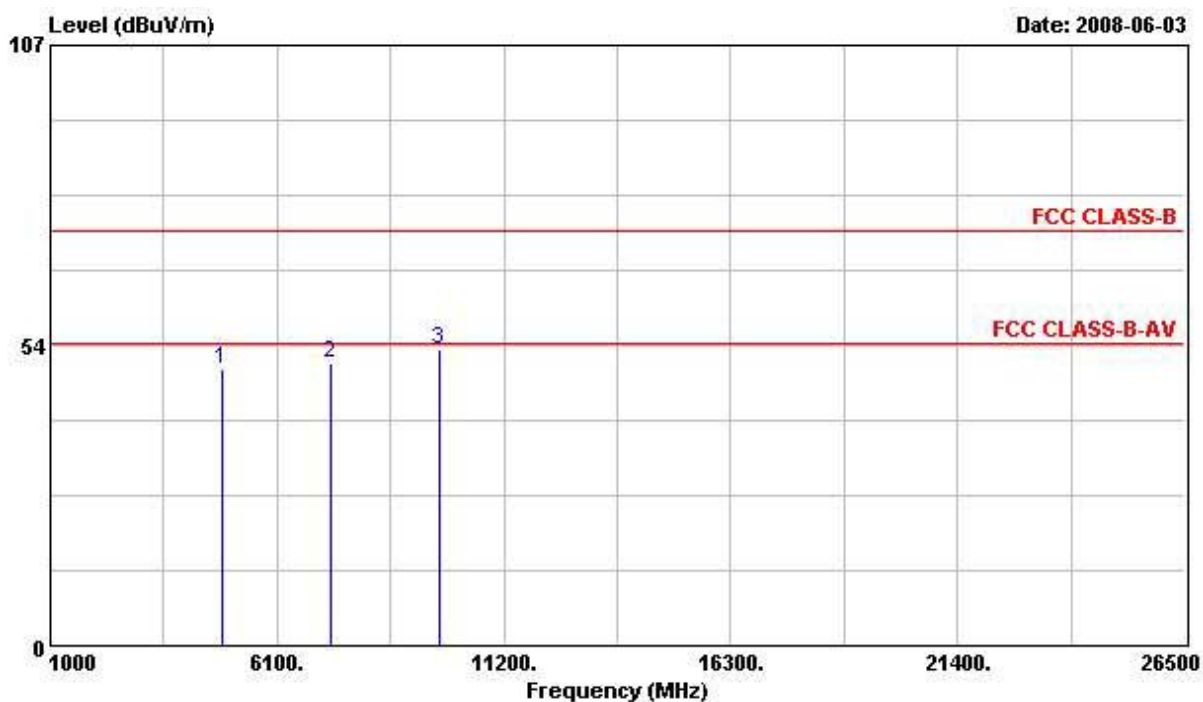
Test Date	Jun. 03, 2008	Test Site	03CH03-HY
Temperature	25.9°C	Humidity	48%
Test Engineer	Eddie	Configurations	Channel 39

Horizontal

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB
1	4884.000	48.36	-5.64	54.00	46.75	33.16	1.17	32.73 PK
2 @	7319.000	50.15	-3.85	54.00	42.87	35.99	4.26	32.97 PK
3	9764.000	54.30			43.42	38.65	5.62	33.40 PEAK

Note: Items 3 is on un-restricted band, so the limit is -20dBc for the field strength of the fundamental emissions (see section 2.6.7.).

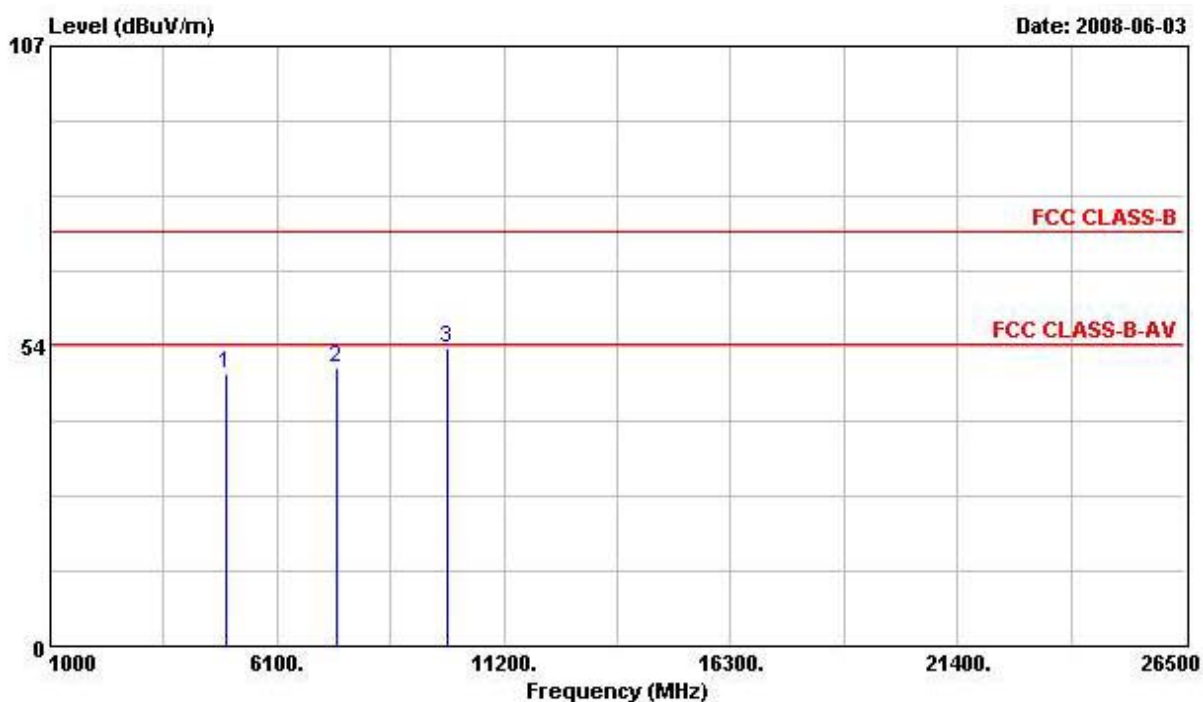
Vertical



	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Cable Preamp Loss Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB
1	4884.000	49.29	-4.71	54.00	47.68	33.16	1.17 32.73 PK
2	7327.000	50.16	-3.84	54.00	42.88	35.99	4.26 32.97 PK
3	9760.000	52.63			41.79	38.62	5.62 33.40 PEAK

Note: Items 3 is on un-restricted band, so the limit is -20dBc for the field strength of the fundamental emissions (see section 2.6.7.).

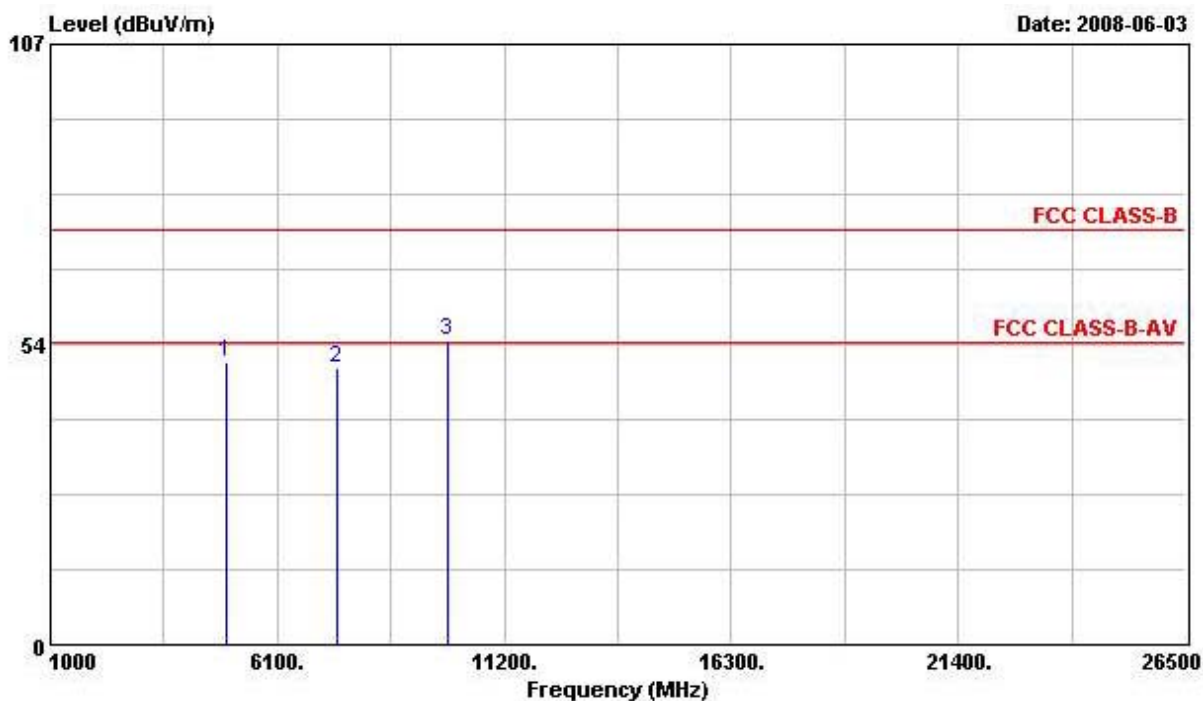
Test Date	Jun. 03, 2008	Test Site	03CH03-HY
Temperature	25.9°C	Humidity	48%
Test Engineer	Eddie	Configurations	Channel 78

Horizontal

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	4960.000	48.44	-5.56	54.00	46.86	33.33	0.96	32.71	PK
2	7440.000	49.55	-4.45	54.00	41.83	36.28	4.44	32.99	PK
3	9920.000	53.14			41.76	38.96	5.82	33.40	PEAK

Note: Items 3 is on un-restricted band, so the limit is -20dBc for the field strength of the fundamental emissions (see section 2.6.7.).

Vertical



	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor
			dB	dBuV/m	dBuV	dB/m	dB	dB
1	4960.000	50.33	-3.67	54.00	48.75	33.33	0.96	32.71 PK
2	7440.000	49.28	-4.72	54.00	41.56	36.28	4.44	32.99 PK
3	9924.000	54.07			42.69	38.96	5.82	33.40 PEAK

Note: Items 3 is on un-restricted band, so the limit is -20dBc for the field strength of the fundamental emissions (see section 2.6.7.).

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

2.6. Band Edge Emissions Measurement

2.6.1. Limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a),, then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

2.6.2. Measuring Instruments and Setting

Please refer to section 3 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	100 KHz /100 KHz for Peak

2.6.3. Test Procedures

1. The test procedure is the same as section 3.5.3, only the frequency range investigated is limited to 100MHz around bandedges.
2. In case the emission is fail due to the used RB/VB is too wide, marker-delta method of FCC Public Notice DA00-705 will be followed.

2.6.4. Test Setup Layout

This test setup layout is the same as that shown in section 3.6.4.

2.6.5. Test Deviation

There is no deviation with the original standard.

2.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.6.7. Test Result of Band Edge

Test Date	Jun. 03, 2008	Test Site	03CH03-HY
Temperature	25.9°C	Humidity	48%
Test Engineer	Eddie	Configurations	Channel 0, 39, 78

Channel 0

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1	2378.210	55.46	-18.54	74.00	25.05	28.26	2.16	0.00	Peak
2 @	2401.770	93.33			62.85	28.29	2.19	0.00	Peak
1	2381.060	43.88			13.47	28.26	2.16	0.00	Average
2 @	2401.770	90.28	36.28	54.00	59.80	28.29	2.19	0.00	Average

Channel 78

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	2441.100	93.75			63.14	28.40	2.22	0.00	Peak
1 @	2441.100	90.52			59.91	28.40	2.22	0.00	Average

Channel 78

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	
1 @	2479.860	95.08			64.37	28.47	2.25	0.00	Peak
2	2483.500	62.08	-11.92	74.00	31.37	28.47	2.25	0.00	Peak
1 @	2480.050	92.18			61.47	28.47	2.25	0.00	Average
2	2483.500	26.61	-27.39	54.00	-4.10	28.47	2.25	0.00	Average

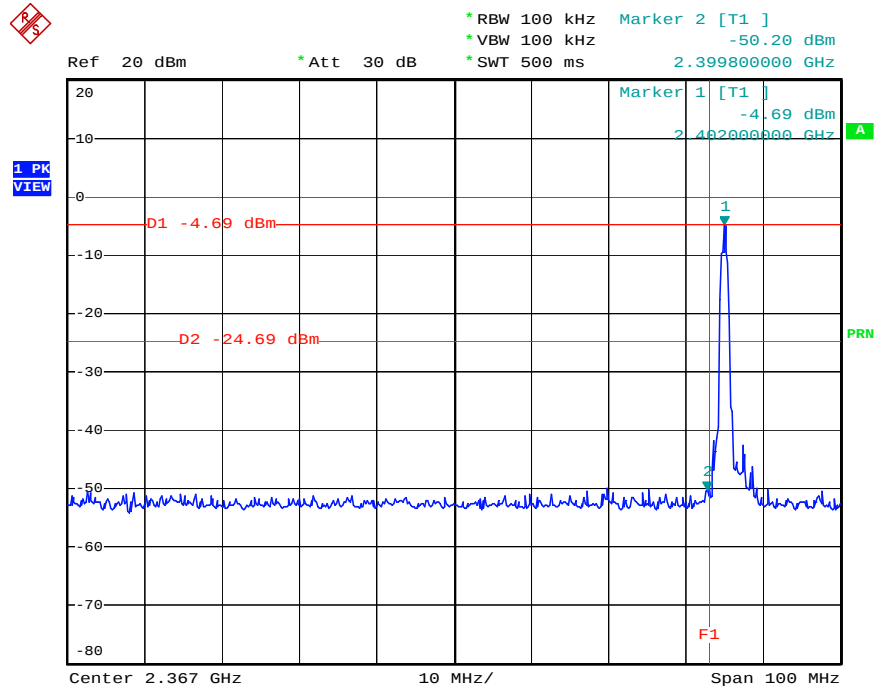
Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

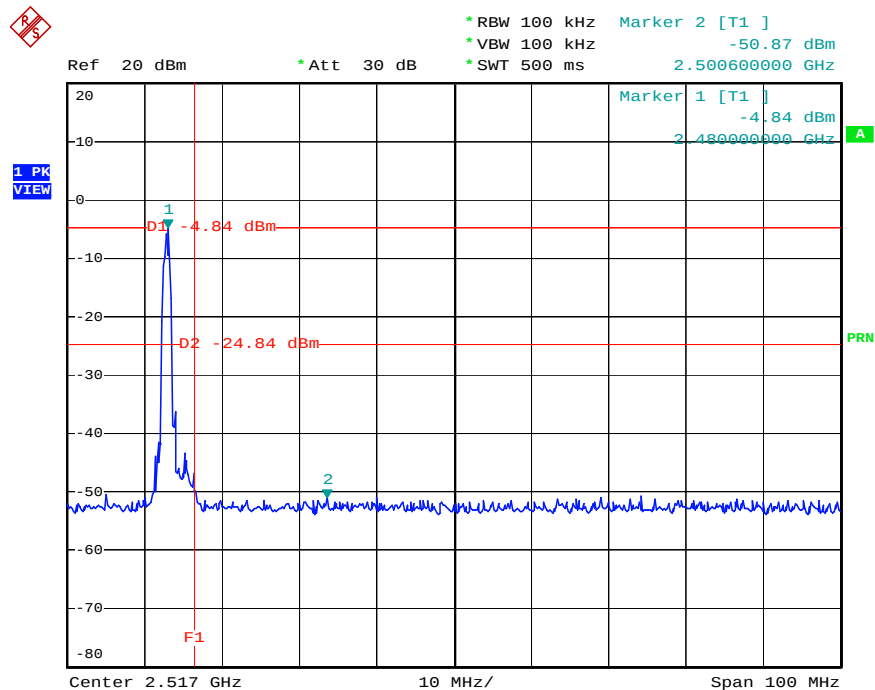
For Emission not in Restricted Band

Low Band Edge Plot on Channel 0 / 2402 MHz



Date: 30.MAY.2008 12:11:11

High Band Edge Plot on Channel 78 / 2480 MHz



Date: 30.MAY.2008 12:10:25

3. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSP30	100023	9kHz ~ 30GHz	Jan. 10, 2008	Conducted (TH01-HY)
Power Meter	R&S	NRVS	100444	DC ~ 40GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z51	100458	DC ~ 30GHz	Jun. 27, 2007	Conducted (TH01-HY)
Power Sensor	R&S	NRV-Z32	100057	30MHz ~ 6GHz	Jun. 27, 2007	Conducted (TH01-HY)
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	Mar. 13, 2008	Conducted (TH01-HY)
Temp. and Humidity Chamber	KSON	THS-C3L	612	N/A	Oct. 01, 2007	Conducted (TH01-HY)
RF CABLE-1m	Jye Bao	RG142	CB034-1m	20MHz ~ 7GHz	Dec. 01, 2007	Conducted (TH01-HY)
RF CABLE-2m	Jye Bao	RG142	CB035-2m	20MHz ~ 1GHz	Dec. 01, 2007	Conducted (TH01-HY)
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	Nov. 14, 2007	Conducted (TH01-HY)
Signal Generator	R&S	SMR40	100116	10MHz ~ 40GHz	Mar. 10, 2008	Conducted (TH01-HY)

Note: Calibration Interval of instruments listed above is one year.

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30 MHz - 1 GHz 3m	Jun. 14, 2007	Radiation (03CH03-HY)
Amplifier	SCHAFFNER	COA9231A	18667	9 kHz - 2 GHz	Jan. 14, 2008	Radiation (03CH03-HY)
Amplifier	Agilent	8449B	3008A02120	1 GHz - 26.5 GHz	Jun. 07, 2007	Radiation (03CH03-HY)
Spectrum Analyzer	R&S	FSP40	100305	9 kHz - 40 GHz	Sep. 27, 2007	Radiation (03CH03-HY)
Bilog Antenna	SCHAFFNER	CBL 6112D	22237	30 MHz - 1 GHz	Jul. 21, 2007	Radiation (03CH03-HY)
Horn Antenna	EMCO	3115	6741	1GHz ~ 18GHz	Mar. 04, 2008	Radiation (03CH03-HY)
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	15 GHz - 40 GHz	Jan. 18, 2008	Radiation (03CH03-HY)
RF Cable-R03m	Jye Bao	RG142	CB021	30 MHz - 1 GHz	Dec. 03, 2007	Radiation (03CH03-HY)
RF Cable-HIGH	SUHNER	SUCOFLEX 106	03CH03-HY	1 GHz - 40 GHz	Dec. 03, 2007	Radiation (03CH03-HY)
Turn Table	HD	DS 420	420/650/00	0 - 360 degree	N/A	Radiation (03CH03-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	Radiation (03CH03-HY)

Note: Calibration Interval of instruments listed above is one year.

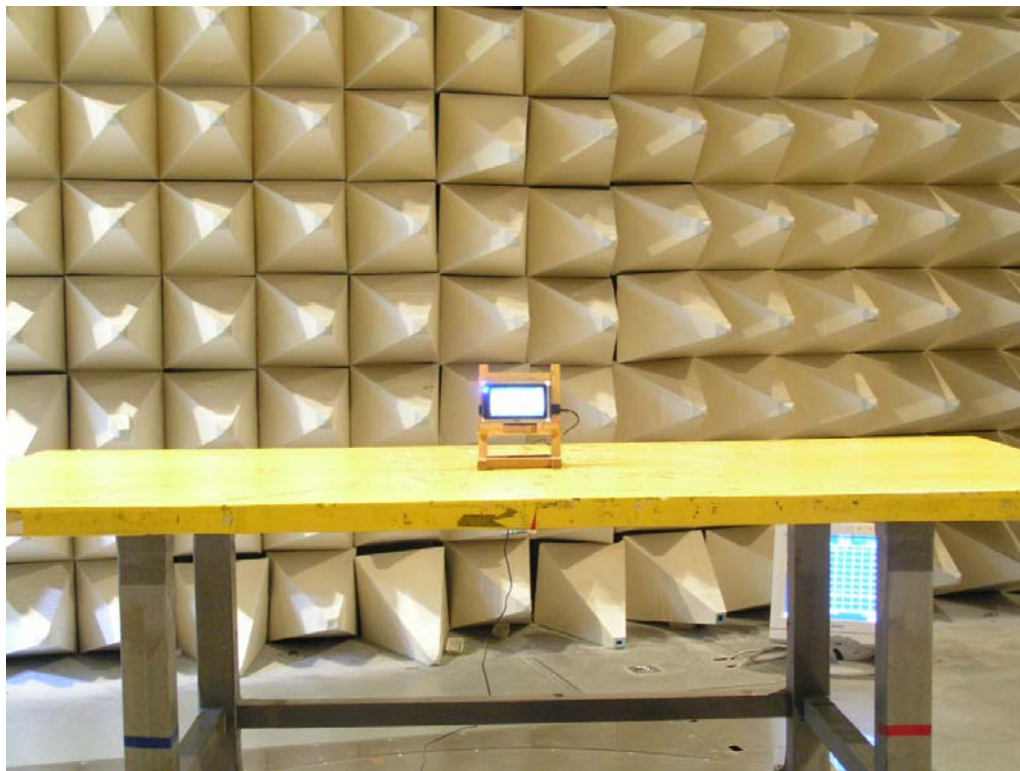
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
AC Power Source	HPC	HPA-500W	HPA-9100024	AC 0 ~ 300V	May 04, 2007*	Conducted (TH01-HY)
Amplifier	MITEQ	AMF-6F-260400	9121372	26.5 GHz - 40 GHz	Jan. 22, 2007*	Radiation (03CH03-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 kHz - 30 MHz	May 22, 2008*	Radiation (03CH03-HY)

Note: Calibration Interval of instruments listed above is two year.

4. PHOTOGRAPHS OF RADIATED EMISSIONS TEST CONFIGURATION

For radiated emissions above 1GHz

FRONT VIEW



REAR VIEW

