Test Report

Product Name	Notebook
Model No.	MS-1441, MS-14212, MS-1422, MS-1431, PR400, EX400, VR420
FCC ID.	I4L-MS6837D4

Applicant	MICRO-STAR INTL Co., LTD.
Address	No. 69, Li-De St., Jung-He City, Taipei Hsien, Taiwan, R.O.C.

Date of Receipt	Dec. 10, 2007
Issued Date	Dec. 27, 2007
Report No.	07C095R-RFUSP06V01

Test Report Certification

Issued Date: Dec. 27, 2007
Report No.: 07C095R-RFUSP06V01

Accredited by NIST (NVLAP)
NVLAP Lab Code: 200533-0

Product Name	Notebook
Applicant	MICRO-STAR INTL Co., LTD.
Address	No. 69, Li-De St., Jung-He City, Taipei Hsien, Taiwan, R.O.C.
Manufacturer	MICRO-STAR INTL Co., LTD.
Model No.	MS-1441, MS-14212, MS-1422, MS-1431, PR400, EX400, VR420
FCC ID.	I4L-MS6837D4
Rated Voltage	AC 120V/60Hz
Working Voltage	DC 5V
Trade Name	MSI
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2006 ANSI C63.4: 2003
Test Result	Complied

NVLAP Lab Code: 200533-0

The Test Results relate only to the samples tested.
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This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented By : Genie Chang
(Adm. Specialist /Genie Chang)

Tested By : Tim Sung
(Senior Engineer /Tim Sung)

Approved By :
(Deputy Manager /Vincent Lin)

Testing Laboratory
0914

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Notebook
Trade Name	MSI
FCC ID.	I4L-MS6837D4
Model No.	MS-1441, MS-14212, MS-1422, MS-1431, PR400, EX400, VR420
Frequency Range	2402 – 2480MHz
Channel Number	79
Type of Modulation	FHSS (GFSK)
Antenna Type	Connector
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”
Power Adapter	MFR: LI-SHIN, M/N: LSE020C1990 Cable Out: Non-Shielded, 1.8m with one ferrite core bonded. Power Cord: Shielded, 1.8m

Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	HIGH-TEK	S79-1800500-H39	0.26 dBi for 2.4 GHz

Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00:	2402 MHz	Channel 20:	2422 MHz	Channel 40:	2442 MHz	Channel 60:	2462 MHz
Channel 01:	2403 MHz	Channel 21:	2423 MHz	Channel 41:	2443 MHz	Channel 61:	2463 MHz
Channel 02:	2404 MHz	Channel 22:	2424 MHz	Channel 42:	2444 MHz	Channel 62:	2464 MHz
Channel 03:	2405 MHz	Channel 23:	2425 MHz	Channel 43:	2445 MHz	Channel 63:	2465 MHz
Channel 04:	2406 MHz	Channel 24:	2426 MHz	Channel 44:	2446 MHz	Channel 64:	2466 MHz
Channel 05:	2407 MHz	Channel 25:	2427 MHz	Channel 45:	2447 MHz	Channel 65:	2467 MHz
Channel 06:	2408 MHz	Channel 26:	2428 MHz	Channel 46:	2448 MHz	Channel 66:	2468 MHz
Channel 07:	2409 MHz	Channel 27:	2429 MHz	Channel 47:	2449 MHz	Channel 67:	2469 MHz
Channel 08:	2410 MHz	Channel 28:	2430 MHz	Channel 48:	2450 MHz	Channel 68:	2470 MHz
Channel 09:	2411 MHz	Channel 29:	2431 MHz	Channel 49:	2451 MHz	Channel 69:	2471 MHz
Channel 10:	2412 MHz	Channel 30:	2432 MHz	Channel 50:	2452 MHz	Channel 70:	2472 MHz
Channel 11:	2413 MHz	Channel 31:	2433 MHz	Channel 51:	2453 MHz	Channel 71:	2473 MHz
Channel 12:	2414 MHz	Channel 32:	2434 MHz	Channel 52:	2454 MHz	Channel 72:	2474 MHz
Channel 13:	2415 MHz	Channel 33:	2435 MHz	Channel 53:	2455 MHz	Channel 73:	2475 MHz
Channel 14:	2416 MHz	Channel 34:	2436 MHz	Channel 54:	2456 MHz	Channel 74:	2476 MHz
Channel 15:	2417 MHz	Channel 35:	2437 MHz	Channel 55:	2457 MHz	Channel 75:	2477 MHz
Channel 16:	2418 MHz	Channel 36:	2438 MHz	Channel 56:	2458 MHz	Channel 76:	2478 MHz
Channel 17:	2419 MHz	Channel 37:	2439 MHz	Channel 57:	2459 MHz	Channel 77:	2479 MHz
Channel 18:	2420 MHz	Channel 38:	2440 MHz	Channel 58:	2460 MHz	Channel 78:	2480 MHz
Channel 19:	2421 MHz	Channel 39:	2441 MHz	Channel 59:	2461 MHz		

The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals

Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. The transmitter is presented with a continuous data stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its 79 channels and over the minimum number of hopping channels (75 channels).

The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hopsets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

Note:

1. This device is a Notebook with a built-in 2.4GHz BluetoothVer.2.0+EDR transceiver.
2. These tests were conducted on a sample for the purpose of demonstrating compliance of bluetooth transmitter with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
4. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

1.2. Operational Description

The EUT is a Notebook with built-in 2.4GHz BluetoothVer.2.0+EDR transceiver. The number of the channels is 79 in 2402-2480MHz. The device adapts the frequency hopping spread spectrum modulation. The antenna is connector-type and provides diversity function to improve the receiving function.

This device provides wireless technology that revolutionizes personal connectivity. It is the solution for the seamless integration of Bluetooth technology into personal computer enabling short-range wireless connections between desktop/laptop computers, Bluetooth-enabled peripherals, and portable handheld devices.

Test Mode	Mode 1: Transmitter - 1Mbps Mode 2: Transmitter - 3Mbps

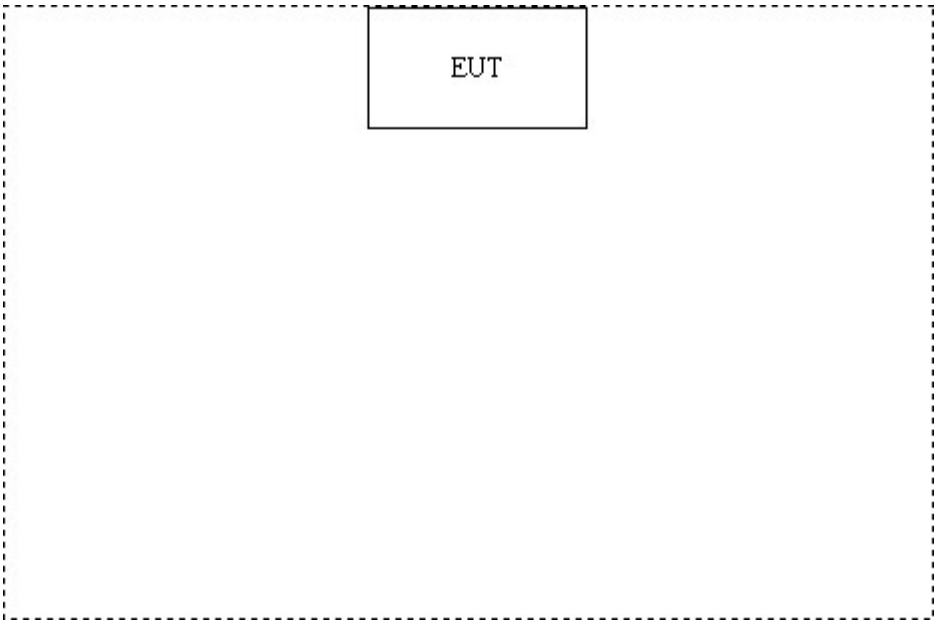
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	Power Cord
(1)	N/A	N/A	N/A	N/A	N/A

Signal Cable Type		Signal cable Description
2.	N/A	N/A

2.1. Configuration of Tested System



2.2. EUT Exercise Software

1 Setup the EUT and simulators as shown on 1.4.

2 Turn on the power of all equipment.

3 Messages will be transmitted and received through EUT.

4 Test is based on the mandatory continuous transmitter.

5 Repeat the above procedure (3) to (4).

2.3. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	30-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046
Reference 31040/SIT1300F2

Accreditation on NVLAP
NVLAP Lab Code: 200533-0

Site Name: Quietek Corporation
Site Address: No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,
Lin-Kou Shiang, Taipei,
Taiwan, R.O.C.
TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

3. Conducted Emission

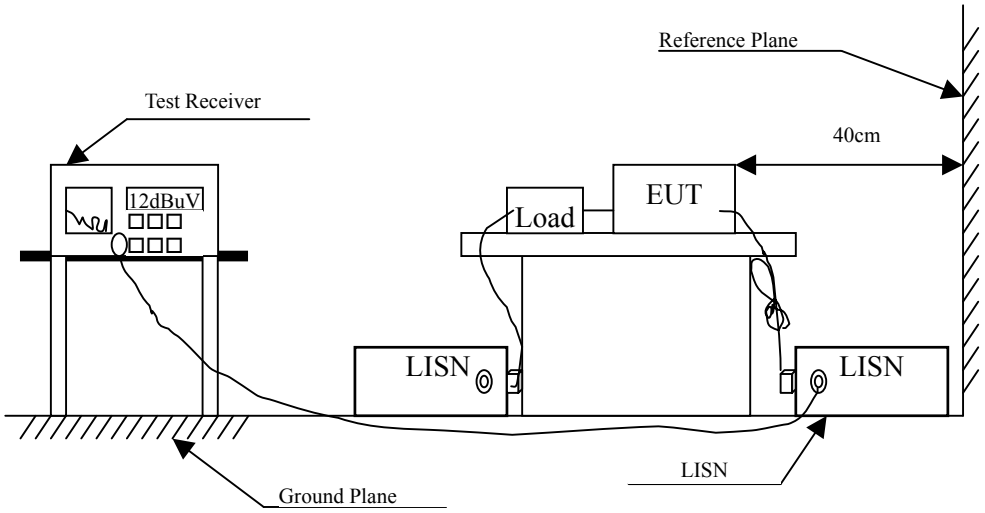
3.1. Test Equipment

The following test equipment are used during the conducted emission test:

Item	Instrument	Manufacturer	Type No./Serial No	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/014	Feb., 2007	
2	L.I.S.N.	R & S	ESH3-Z5/825562/002	Feb., 2007	EUT
3	L.I.S.N.	R & S	ENV4200/848411/010	Feb., 2007	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2/100410	July, 2007	
5	No.1 Shielded Room			N/A	

Note: All instruments are calibrated every one year.

3.2. Test Setup



3.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit		
Frequency MHz	Limits	
	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks: In the above table, the tighter limit applies at the band edges.

3.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

3.5. Uncertainty

± 2.26 dB

3.6. Test Result of Conducted Emission

Product : Notebook
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 1: Transmitter - 1Mbps

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.197	0.670	44.780	45.450	-19.207	64.657
0.330	0.300	36.140	36.440	-24.417	60.857
0.390	0.300	35.670	35.970	-23.173	59.143
0.460	0.300	40.590	40.890	-16.253	57.143
0.520	0.300	28.020	28.320	-27.680	56.000
0.590	0.300	36.610	36.910	-19.090	56.000
Average					
0.197	0.670	44.230	44.900	-9.757	54.657
0.330	0.300	32.290	32.590	-18.267	50.857
0.390	0.300	32.360	32.660	-16.483	49.143
0.460	0.300	39.840	40.140	-7.003	47.143
0.520	0.300	23.270	23.570	-22.430	46.000
0.590	0.300	35.600	35.900	-10.100	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Notebook
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 1: Transmitter - 1Mbps

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.197	0.300	45.060	45.360	-19.297	64.657
0.327	0.300	35.620	35.920	-25.023	60.943
0.397	0.310	38.890	39.200	-19.743	58.943
0.457	0.310	38.430	38.740	-18.489	57.229
0.527	0.310	35.030	35.340	-20.660	56.000
0.587	0.310	32.400	32.710	-23.290	56.000
Average					
0.197	0.300	44.390	44.690	-9.967	54.657
0.327	0.300	31.960	32.260	-18.683	50.943
0.397	0.310	36.930	37.240	-11.703	48.943
0.457	0.310	37.190	37.500	-9.729	47.229
0.527	0.310	32.260	32.570	-13.430	46.000
0.587	0.310	30.640	30.950	-15.050	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Notebook
Test Item : Conducted Emission Test
Power Line : Line 1
Test Mode : Mode 2: Transmitter - 3Mbps

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					
Quasi-Peak					
0.197	0.670	45.410	46.080	-18.577	64.657
0.397	0.300	39.170	39.470	-19.473	58.943
0.457	0.300	38.290	38.590	-18.639	57.229
0.527	0.300	39.820	40.120	-15.880	56.000
0.587	0.300	32.120	32.420	-23.580	56.000
0.657	0.310	31.760	32.070	-23.930	56.000
Average					
0.197	0.670	44.880	45.550	-9.107	54.657
0.397	0.300	38.540	38.840	-10.103	48.943
0.457	0.300	36.820	37.120	-10.109	47.229
0.527	0.300	33.710	34.010	-11.990	46.000
0.587	0.300	30.080	30.380	-15.620	46.000
0.657	0.310	28.200	28.510	-17.490	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Notebook
Test Item : Conducted Emission Test
Power Line : Line 2
Test Mode : Mode 2: Transmitter - 3Mbps

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.197	0.300	45.550	45.850	-18.807	64.657
0.397	0.310	39.230	39.540	-19.403	58.943
0.457	0.310	37.680	37.990	-19.239	57.229
0.527	0.310	40.250	40.560	-15.440	56.000
0.587	0.310	32.590	32.900	-23.100	56.000
0.657	0.310	30.060	30.370	-25.630	56.000
Average					
0.197	0.300	44.930	45.230	-9.427	54.657
0.397	0.310	38.480	38.790	-10.153	48.943
0.457	0.310	36.290	36.600	-10.629	47.229
0.527	0.310	35.290	35.600	-10.400	46.000
0.587	0.310	30.490	30.800	-15.200	46.000
0.657	0.310	27.010	27.320	-18.680	46.000

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

4. Peak Power Output

4.1. Test Equipment

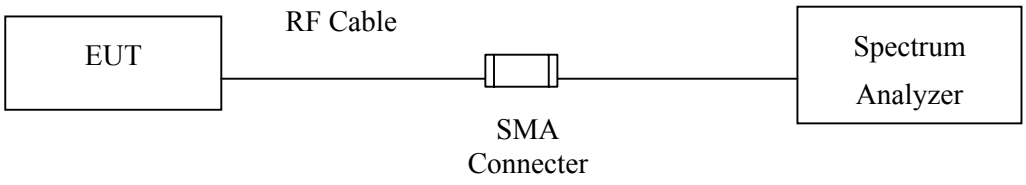
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R & S	ESI 26 / 838786/004	May, 2007

Note: 1. All equipments are calibrated every one year.

2. The test instruments marked by "X" are used to measure the final test results.

4.2. Test Setup



4.3. Limit

The maximum peak power shall be less 1Watt.

4.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

4.5. Uncertainty

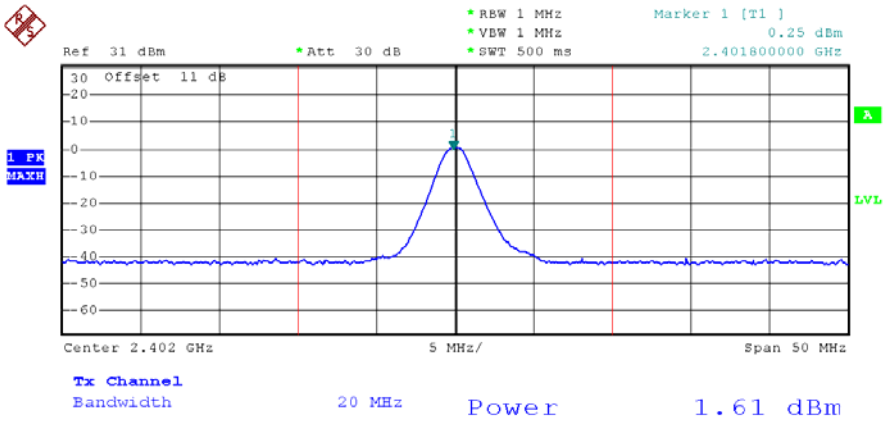
± 1.27 dB

4.6. Test Result of Peak Power Output

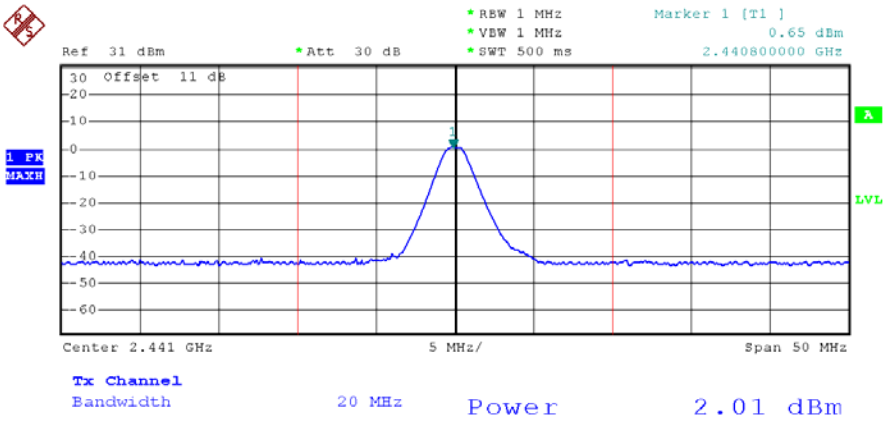
Product : Notebook
Test Item : Peak Power Output
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps

Channel No.	Frequency (MHz)	Channel Power (dBm)	Required Limit	Result
00	2402.00	1.61 dBm	1Watt= 30 dBm	Pass
39	2441.00	2.01 dBm	1Watt= 30 dBm	Pass
78	2480.00	2.46 dBm	1Watt= 30 dBm	Pass

Channel 00



Channel 39



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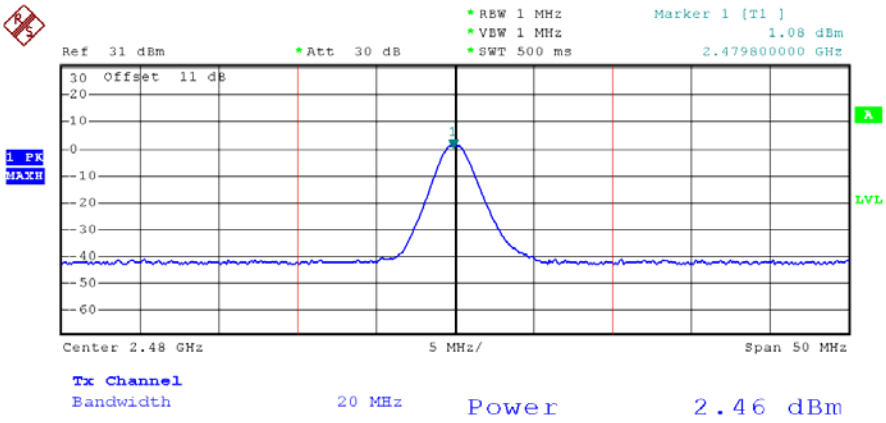
Channel 78



PN1

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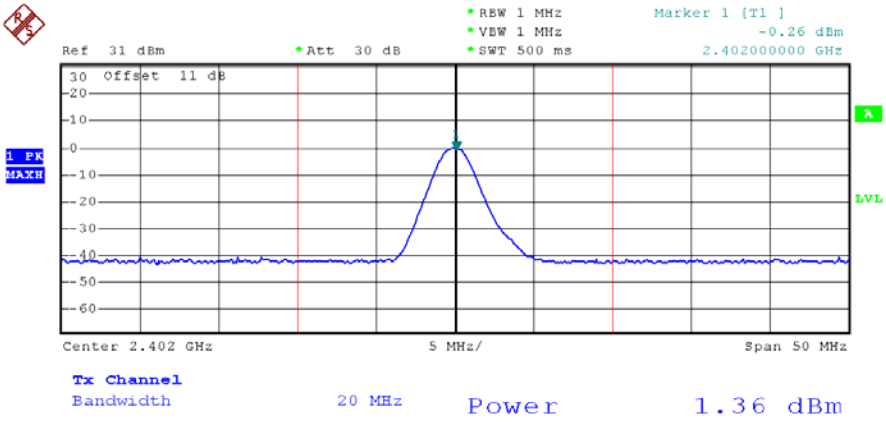
Product : Notebook
Test Item : Peak Power Output
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps

Channel No.	Frequency (MHz)	Channel Power (dBm)	Required Limit	Result
00	2402.00	1.36 dBm	1Watt= 30 dBm	Pass
39	2441.00	1.63 dBm	1Watt= 30 dBm	Pass
78	2480.00	1.88 dBm	1Watt= 30 dBm	Pass

Channel 00



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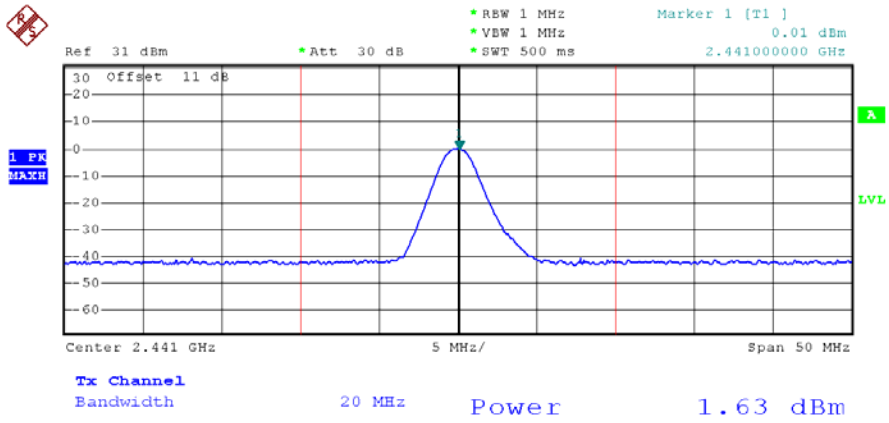
Channel 39



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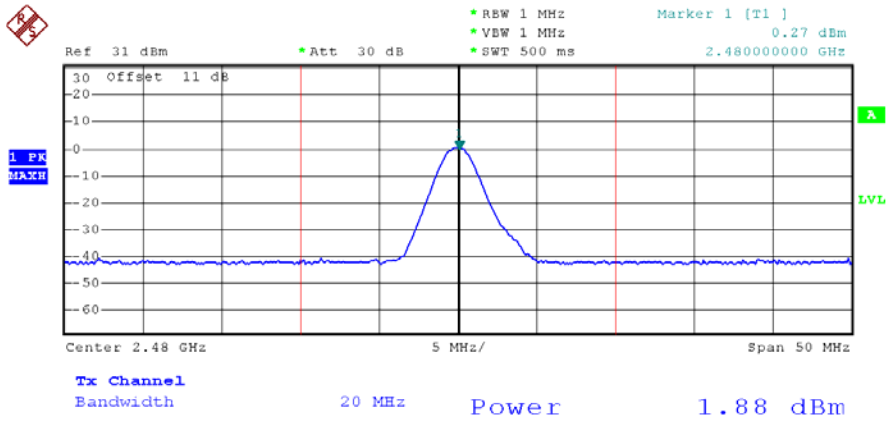
Date: 7.MAY.2007 11:09:37

Channel 78



PN1

Date: 7.MAY.2007 11:10:28

5. Radiated Emission

5.1. Test Equipment

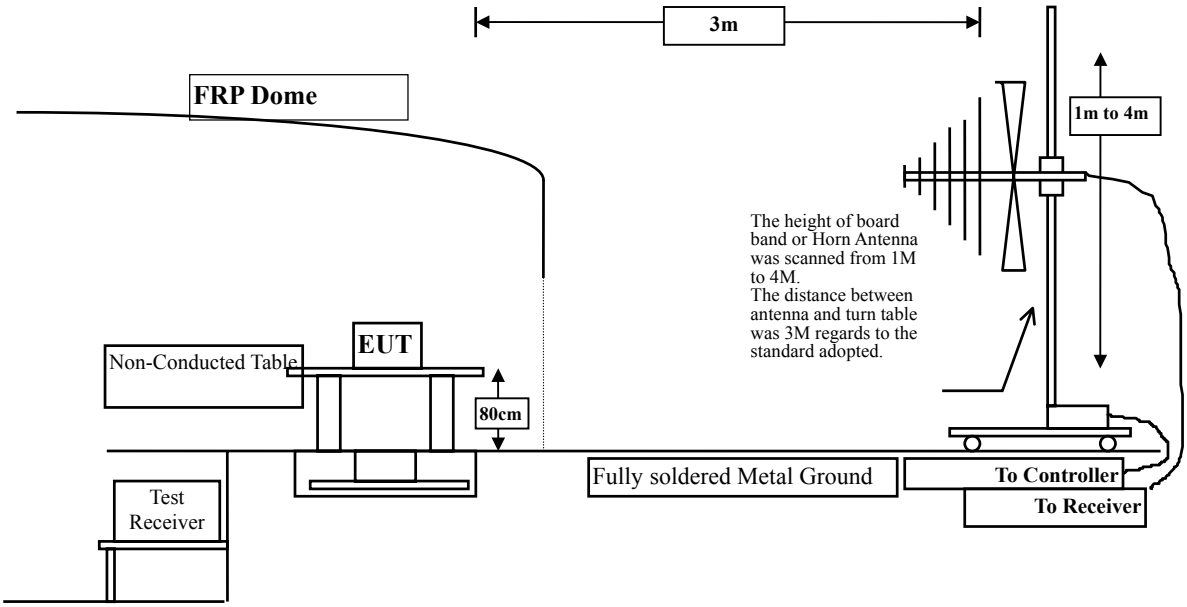
The following test equipments are used during the radiated emission test:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2007
	X	Pre-Amplifier	HP	8447D/2944A09549	Sep., 2007
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2007
	X	Spectrum Analyzer	Advantest	R3162/91700283	Oct., 2007
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2007
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated every one year.

2. The test instruments marked by "X" are used to measure the final test results.

5.2. Test Setup



5.3. Limits

➢ **General Radiated Emission Limits**

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m @3m	dBuV/m@3m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks: 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

5.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.
The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field dtrength of harmonics measurement.
The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.
The frequency range from 30MHz to 10th harminics is checked.
The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

5.5. Uncertainty

± 3.9 dB above 1GHz
± 3.8 dB below 1GHz

5.6. Test Result of Radiated Emission

Product : Notebook
Test Item : Harmonic Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps(2402MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4804.000	3.663	37.650	41.313	-32.687	74.000
7206.000	9.357	36.660	46.016	-27.984	74.000
9608.000	11.842	34.120	45.962	-28.038	74.000
Average					
Detector:					
--					
Vertical					
Peak Detector:					
4804.000	3.663	42.500	46.163	-27.837	74.000
7206.000	9.357	34.880	44.236	-29.764	74.000
9608.000	11.842	34.120	45.962	-28.038	74.000
Average					
Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz。
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz。
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook
Test Item : Harmonic Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps(2441MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4882.000	3.921	34.970	38.891	-35.109	74.000
7323.000	9.657	32.810	42.467	-31.533	74.000
9764.000	11.798	34.390	46.188	-27.812	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4882.000	3.921	39.060	42.981	-31.019	74.000
7323.000	9.657	34.290	43.947	-30.053	74.000
9764.000	11.798	35.240	47.038	-26.962	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz。
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz。
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook
Test Item : Harmonic Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps(2480MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4960.000	4.197	37.030	41.226	-32.774	74.000
7440.000	9.951	33.990	43.941	-30.059	74.000
9920.000	11.856	35.740	47.596	-26.404	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4960.000	4.197	41.030	45.226	-28.774	74.000
7440.000	9.951	35.000	44.951	-29.049	74.000
9920.000	11.856	36.420	48.276	-25.724	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz。
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz。
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook
Test Item : Harmonic Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps(2402MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
4804.000	3.663	37.630	41.293	-32.707	74.000
7206.000	9.357	36.020	45.376	-28.624	74.000
9608.000	11.842	36.850	48.692	-25.308	74.000
Average Detector:					
--					
Vertical					
Peak Detector:					
4804.000	3.663	36.710	40.373	-33.627	74.000
7206.000	9.357	36.410	45.766	-28.234	74.000
9608.000	11.842	35.320	47.162	-26.838	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz。
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz。
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook
Test Item : Harmonic Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps (2441MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4882.000	3.921	36.060	39.981	-34.019	74.000
7323.000	9.657	35.820	45.477	-28.523	74.000
9764.000	11.798	37.150	48.948	-25.052	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4882.000	3.921	36.890	40.811	-33.189	74.000
7323.000	9.657	37.110	46.767	-27.233	74.000
9764.000	11.798	36.950	48.748	-25.252	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz。
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz。
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook
Test Item : Harmonic Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps (2480MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal Peak Detector:					
4960.000	4.197	36.380	40.576	-33.424	74.000
7440.000	9.951	35.470	45.421	-28.579	74.000
9920.000	11.856	37.080	48.936	-25.064	74.000
Average Detector:					
--					
Vertical Peak Detector:					
4960.000	4.197	36.690	40.886	-33.114	74.000
7440.000	9.951	36.120	46.071	-27.929	74.000
9920.000	11.856	36.370	48.226	-25.774	74.000
Average Detector:					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz。
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz。
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Notebook
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps(2441MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
229.820	10.843	22.668	33.511	-12.489	46.000
299.660	14.132	26.941	41.073	-4.927	46.000
423.820	17.743	14.120	31.863	-14.137	46.000
532.460	18.666	19.234	37.900	-8.100	46.000
800.180	21.764	11.773	33.537	-12.463	46.000
912.700	22.319	14.588	36.907	-9.093	46.000
Vertical					
101.780	10.890	26.263	37.153	-6.347	43.500
299.660	13.749	21.379	35.128	-10.872	46.000
355.920	15.887	18.137	34.024	-11.976	46.000
497.540	18.301	15.265	33.566	-12.434	46.000
532.460	19.230	18.757	37.987	-8.013	46.000
945.680	23.823	11.062	34.885	-11.115	46.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

Product : Notebook
Test Item : General Radiated Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
229.820	10.843	22.486	33.329	-12.671	46.000
299.660	14.132	26.940	41.072	-4.928	46.000
352.040	14.857	17.977	32.834	-13.166	46.000
423.820	17.743	16.929	34.672	-11.328	46.000
532.460	18.666	18.361	37.027	-8.973	46.000
800.180	21.764	12.539	34.303	-11.697	46.000
Vertical					
183.260	9.639	21.332	30.971	-12.529	43.500
299.660	13.749	19.322	33.071	-12.929	46.000
355.920	15.887	17.849	33.736	-12.264	46.000
497.540	18.301	14.973	33.274	-12.726	46.000
532.460	19.230	18.388	37.618	-8.382	46.000
951.500	23.462	13.242	36.704	-9.296	46.000

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. " " means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

6. Band Edge

6.1. Test Equipment

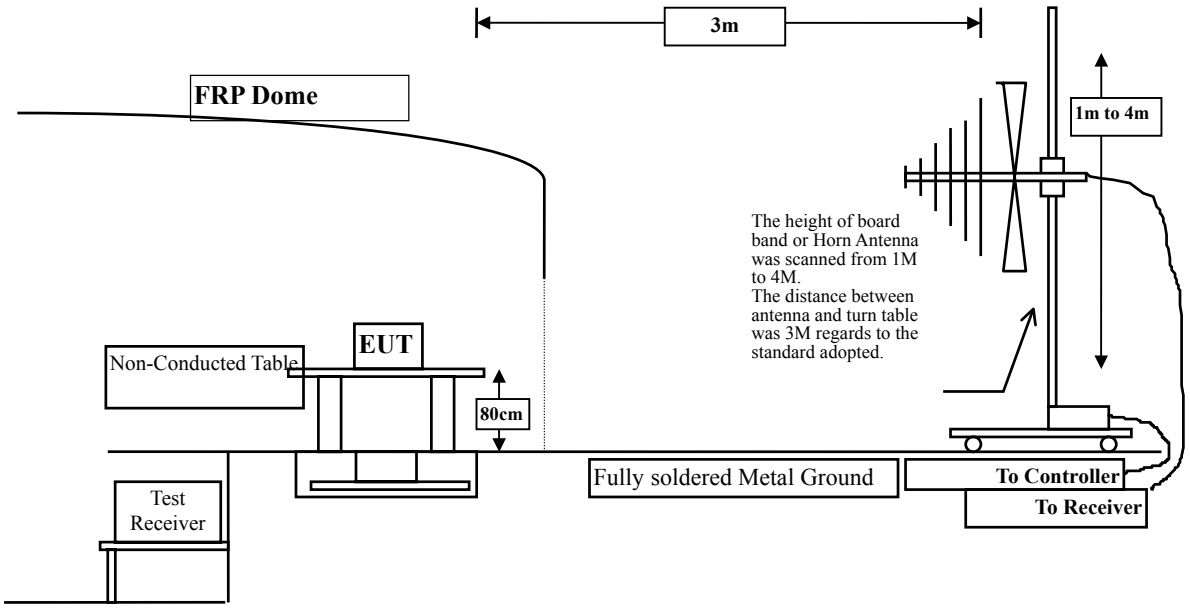
The following test equipments are used during the band edge tests:

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒Site # 3	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2007
	X	Pre-Amplifier	HP	8447D/2944A09549	Sep., 2007
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2007
	X	Spectrum Analyzer	Advantest	R3162/91700283	Oct., 2007
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2007
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup

RF Radiated Measurement:



6.3. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

6.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.
The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.
The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

6.5. Uncertainty

± 3.9 dB above 1GHz
± 3.8 dB below 1GHz

6.6. Test Result of Band Edge

Product : Notebook
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps

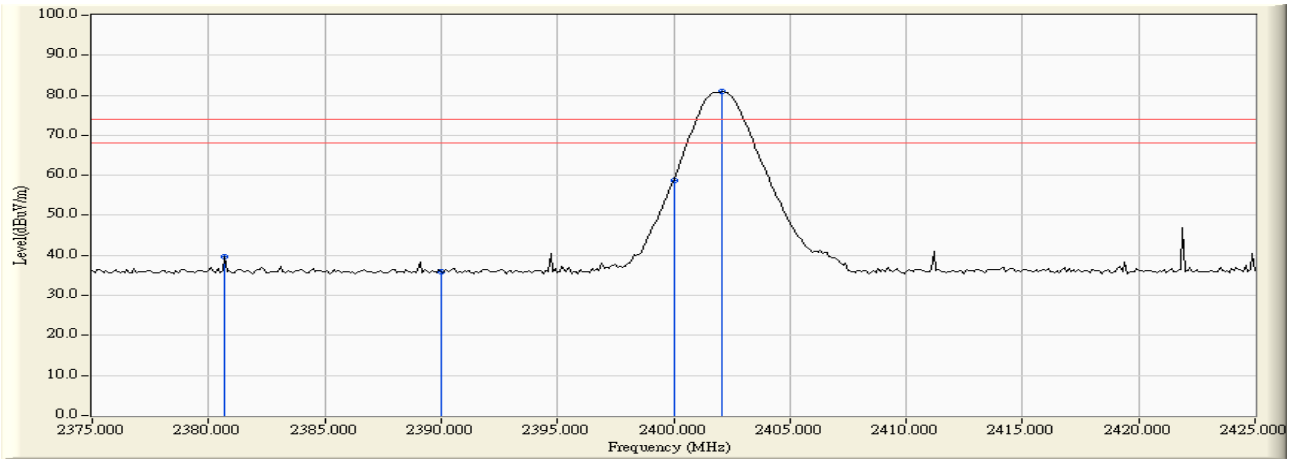
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
00 (Horizontal)	<2400	>20	Pass

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
00 (Peak)	2380.700	-2.422	41.995	39.573	74.00	54.00	Pass
00 (Peak)	2390.000	-2.378	38.408	36.031	74.00	54.00	Pass
00 (Peak)	2400.000	-2.328	61.094	58.766	74.00	54.00	Pass
00 (Peak)	2402.100	-2.317	83.166	80.849	74.00	54.00	Pass

Figure Channel 00: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps

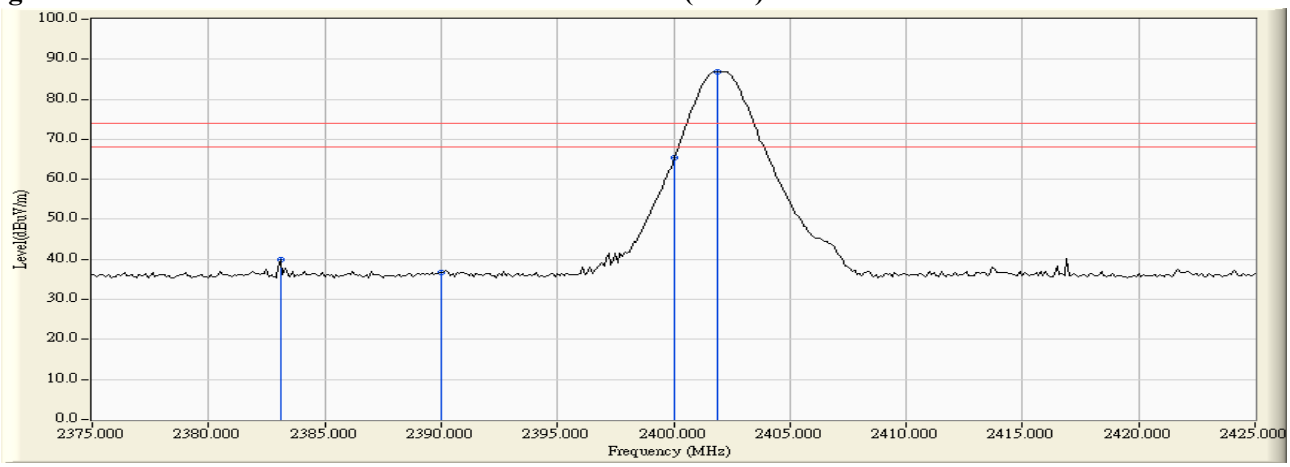
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
00 (Vertical)	<2400	>20	Pass

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
00 (Peak)	2383.100	-2.411	42.489	40.078	74.00	54.00	Pass
00 (Peak)	2390.000	-2.378	39.101	36.724	74.00	54.00	Pass
00 (Peak)	2400.000	-2.328	67.746	65.418	74.00	54.00	Pass
00 (Peak)	2401.900	-2.319	89.301	86.983	74.00	54.00	Pass

Figure Channel 00: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps

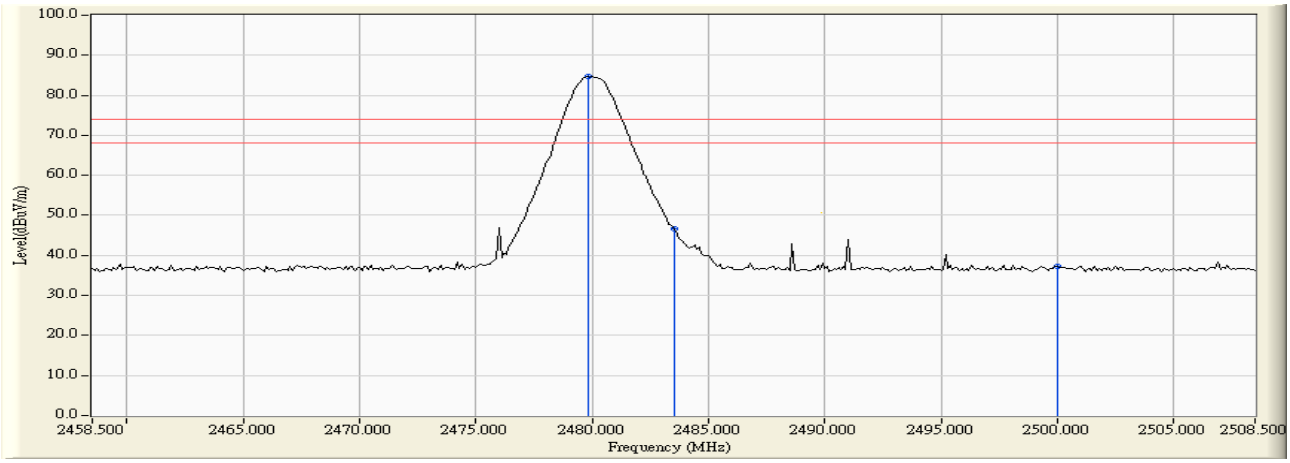
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
78 (Horizontal)	>2483.5	>20	Pass

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
78 (Peak)	2479.800	-1.952	86.604	84.652	74.00	54.00	Pass
78 (Peak)	2483.500	-1.937	48.664	46.727	74.00	54.00	Pass
78 (Peak)	2500.000	-1.886	39.175	37.289	74.00	54.00	Pass

Figure Channel 78: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps

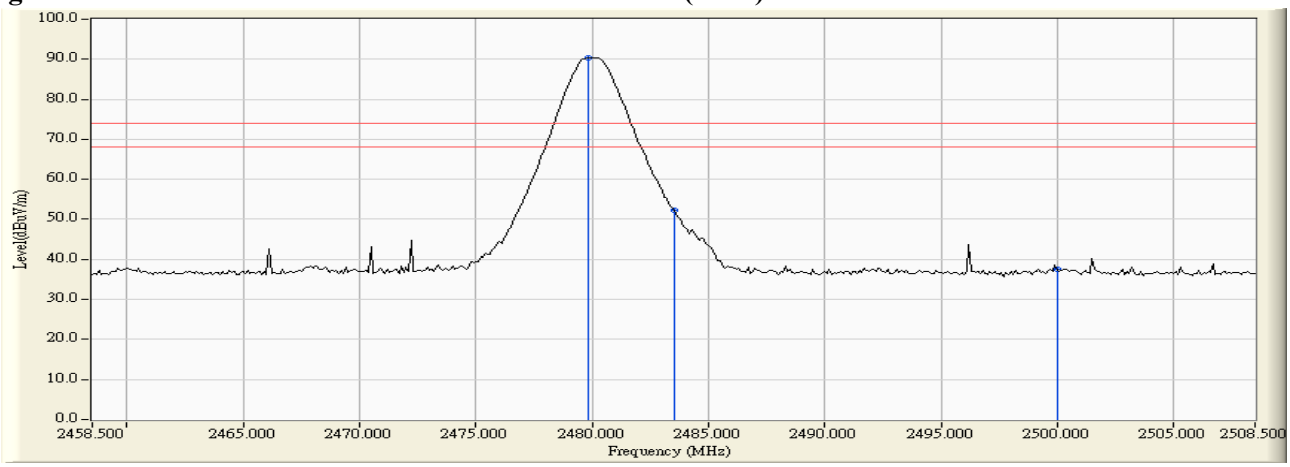
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
78 (Vertical)	>2483.5	>20	Pass

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
78 (Peak)	2479.800	-1.952	92.428	90.476	74.00	54.00	Pass
78 (Peak)	2483.500	-1.937	54.179	52.242	74.00	54.00	Pass
78 (Peak)	2500.000	-1.886	39.309	37.423	74.00	54.00	Pass

Figure Channel 78: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps

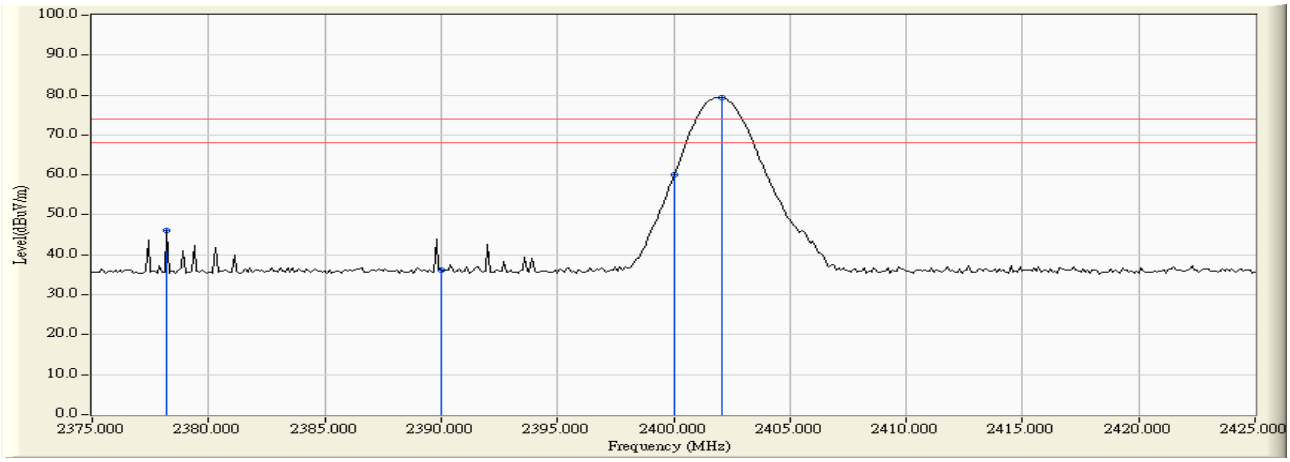
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
00 (Horizontal)	<2400	>20	Pass

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
00(Peak)	2378.200	-2.433	48.488	46.055	74.00	54.00	Pass
00(Peak)	2390.000	-2.378	38.696	36.319	74.00	54.00	Pass
00(Peak)	2400.000	-2.328	62.276	59.948	74.00	54.00	Pass
00(Peak)	2402.100	-2.317	81.672	79.355	74.00	54.00	Pass

Figure Channel 00: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps

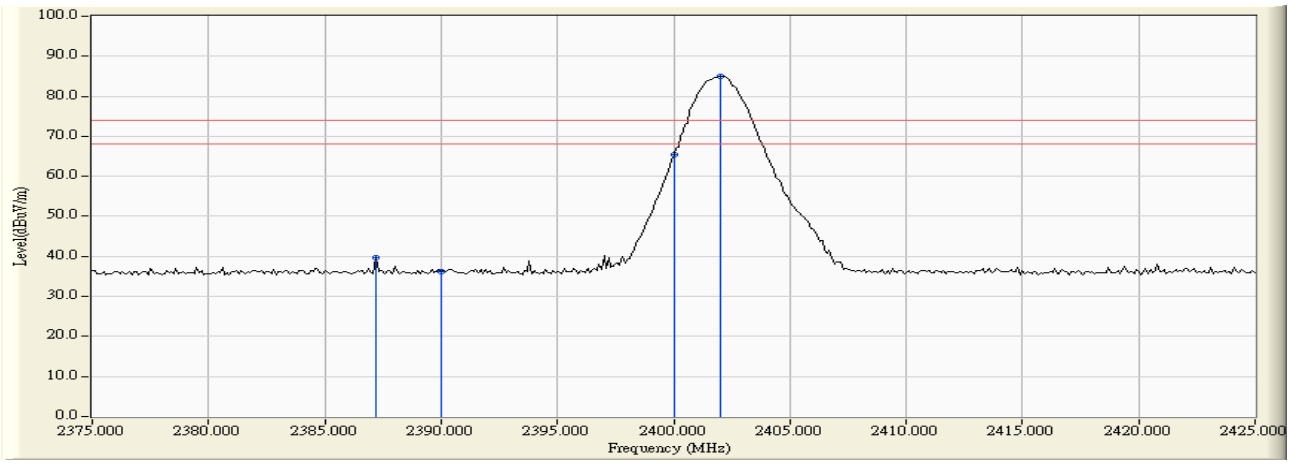
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
00 (Vertical)	<2400	>20	Pass

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
00(Peak)	2387.200	-2.391	42.151	39.760	74.00	54.00	Pass
00(Peak)	2390.000	-2.378	38.470	36.093	74.00	54.00	Pass
00(Peak)	2400.000	-2.328	67.694	65.366	74.00	54.00	Pass
00(Peak)	2402.000	-2.318	87.415	85.097	74.00	54.00	Pass

Figure Channel 00: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps

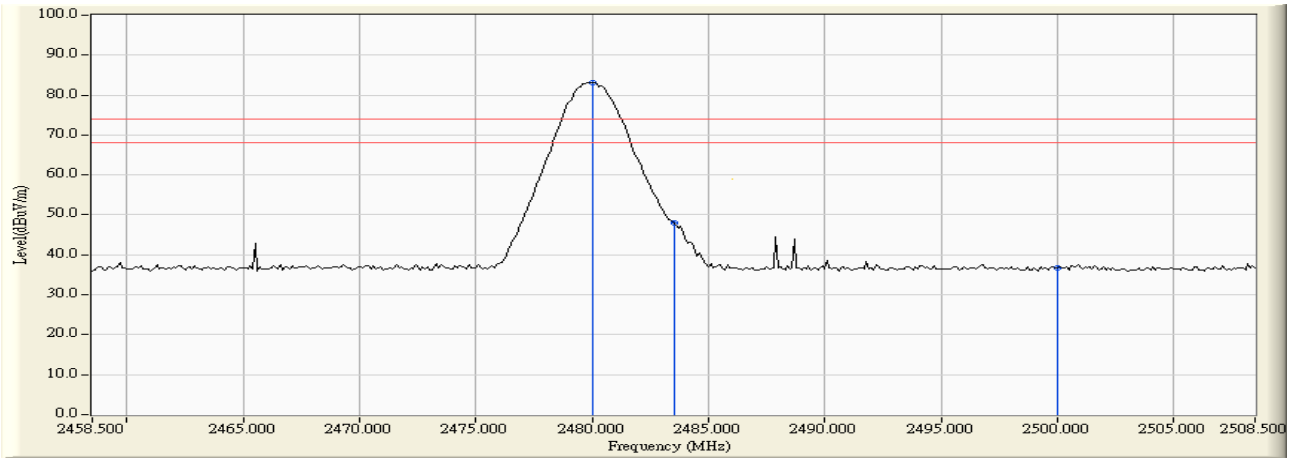
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
78 (Horizontal)	>2483.5	>20	Pass

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
78(Peak)	2480.000	-1.952	85.187	83.236	74.00	54.00	Pass
78(Peak)	2483.500	-1.937	49.925	47.988	74.00	54.00	Pass
78(Peak)	2500.000	-1.886	38.745	36.859	74.00	54.00	Pass
78(Average)	2483.500	-1.937	41.486	39.549	74.00	54.00	Pass

Figure Channel 78: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook
Test Item : Band Edge
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps

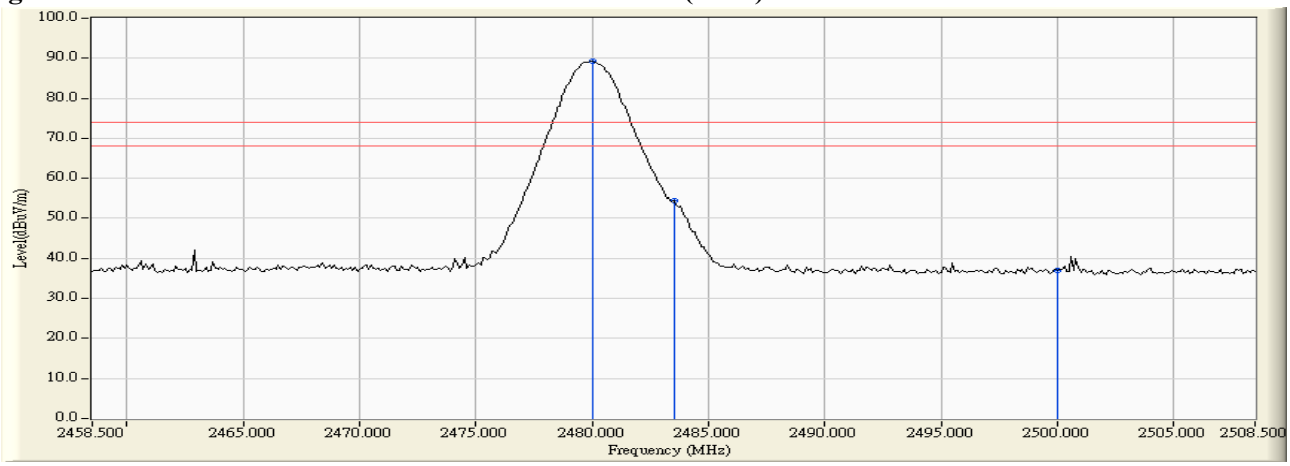
RF Radiated Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
78 (Vertical)	>2483.5	>20	Pass

RF Radiated Measurement (Vertical):

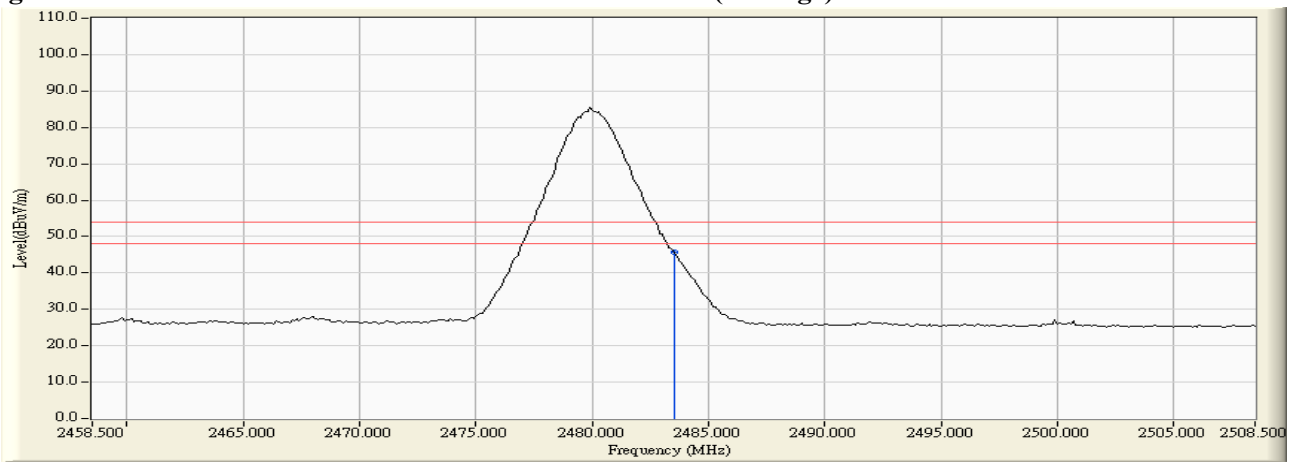
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Arerage Limit (dBuV/m)	Result
78(Peak)	2480.000	-1.952	91.165	89.214	74.00	54.00	Pass
78(Peak)	2483.500	-1.937	56.448	54.511	74.00	54.00	Pass
78(Peak)	2500.000	-1.886	38.900	37.014	74.00	54.00	Pass
78 (Average)	2483.500	-1.937	47.756	45.819	74.00	54.00	Pass

Figure Channel 78: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Figure Channel 78: Vertical (Average)



Note: RBW=1MHz, VBW=30Hz, Sweep=500ms

7. Channel Number

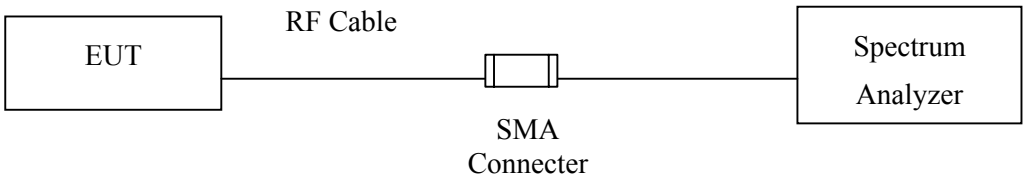
7.1. Test Equipment

The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R & S	ESI 26 / 838786/004	May, 2007

Note: 1. All equipments are calibrated every one year.
2. The test instruments marked by "X" are used to measure the final test results.

7.2. Test Setup



7.3. Limit

Frequency hopping systems operating in the 2400-2483.5 MHz bands shall use at least 75 hopping frequencies.

7.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

7.5. Uncertainty

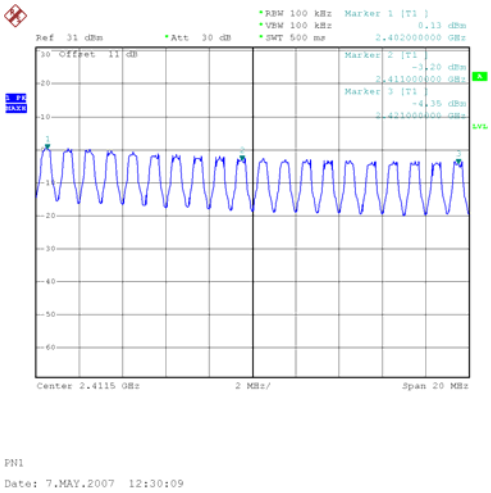
N/A

7.6. Test Result of Channel Number

Product : Notebook
Test Item : Channel Number
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps

Frequency Range (MHz)	Measurement (Hopping Channel)	Required Limit (Hopping Channel)	Result
2402 ~ 2480	79	>75	Pass

2402-2421MHz



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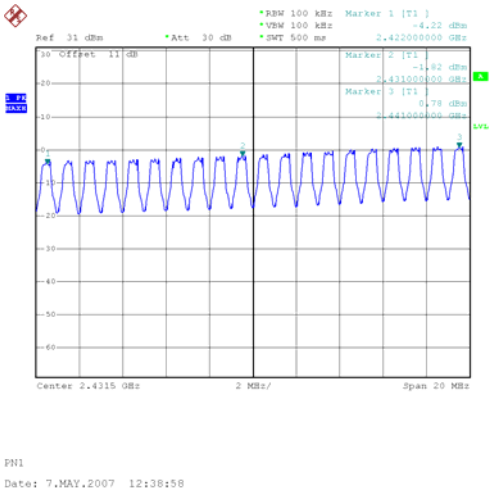
2422-2441MHz



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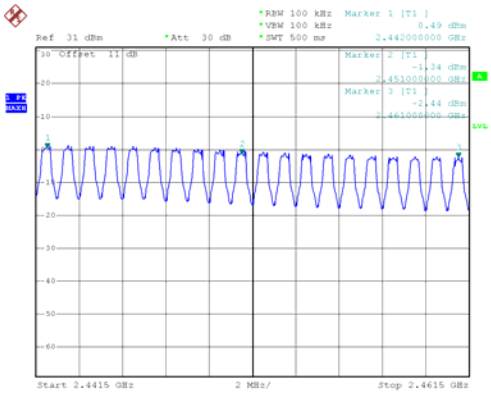
Date: 7.MAY.2007 12:38:58

2442-2461MHz



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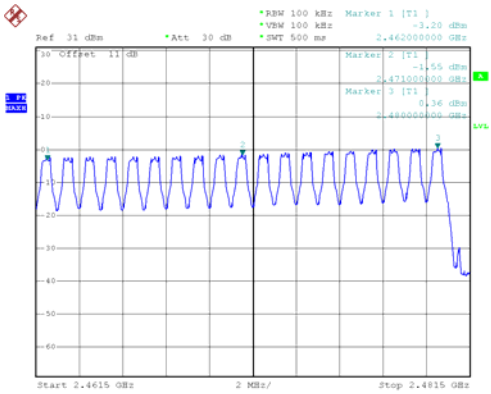
2462-2480MHz

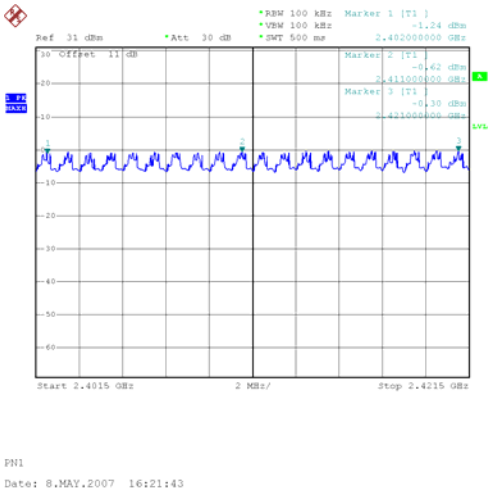


PN1
Date: 7.MAY.2007 12:50:28

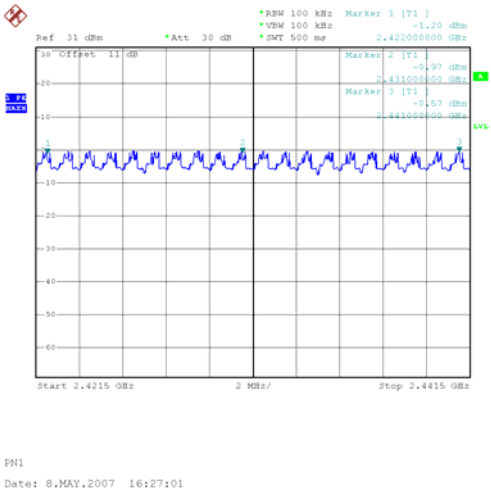
Product : Notebook
Test Item : Channel Number
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps

Frequency Range (MHz)	Measurement (Hopping Channel)	Required Limit (Hopping Channel)	Result
2402 ~ 2480	79	>75	Pass

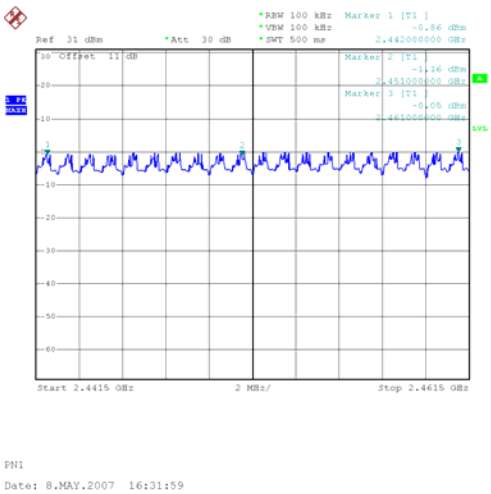
2402-2421MHz



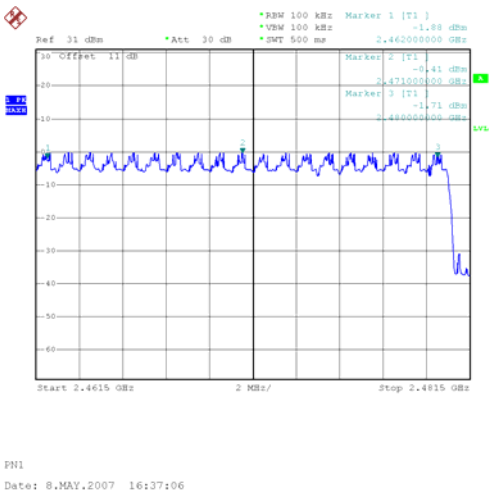
2422-2441MHz



2442-2461MHz



2462-2480MHz



8. Channel Separation

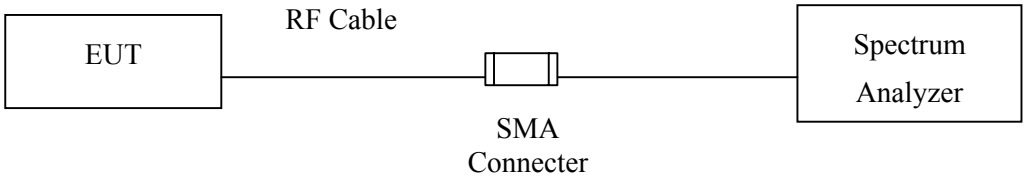
8.1. Test Equipment

The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007

Note: 1. All equipments are calibrated every one year.
2. The test instruments mark by "X" are used to measure the final test results.

8.2. Test Setup



8.3. 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.

8.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

8.5. Uncertainty

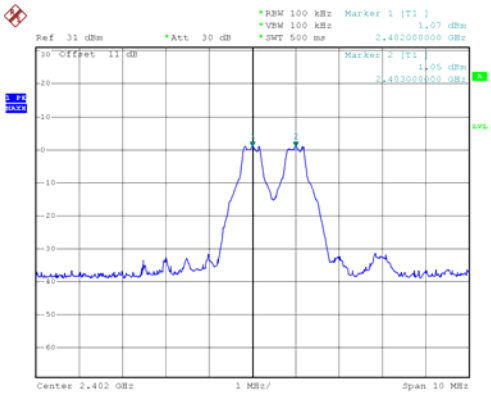
± 150Hz

8.6. Test Result of Channel Separation

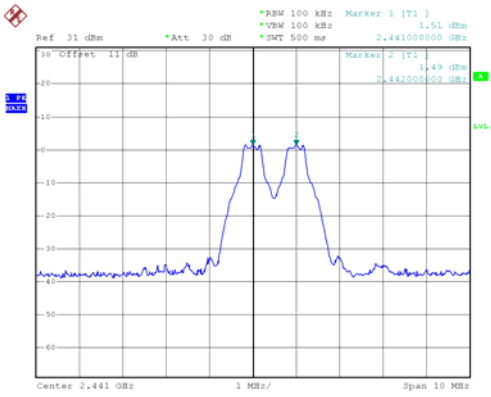
Product : Notebook
Test Item : Channel Separation
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps

Frequency (MHz)	Measurement Level (MHz)	Required Limit	Result
2402	1.00	>25 kHz or 2/3 * 20 dB BW	Pass
2441	1.00	>25 kHz or 2/3 * 20 dB BW	Pass
2480	1.00	>25 kHz or 2/3 * 20 dB BW	Pass

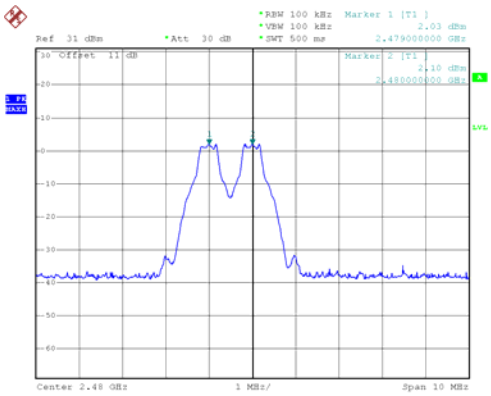
Channel 00-01



Channel 39-40



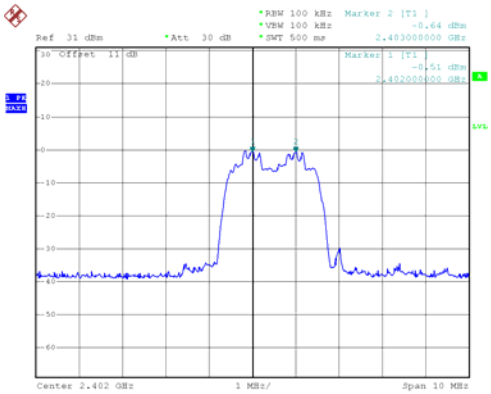
Channel 77-78



Product : Notebook
Test Item : Channel Separation
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps

Frequency (MHz)	Measurement Level (MHz)	Required Limit	Result
2402	1.00	>25 kHz or 2/3 * 20 dB BW	Pass
2441	1.00	>25 kHz or 2/3 * 20 dB BW	Pass
2480	1.00	>25 kHz or 2/3 * 20 dB BW	Pass

Channel 00-01



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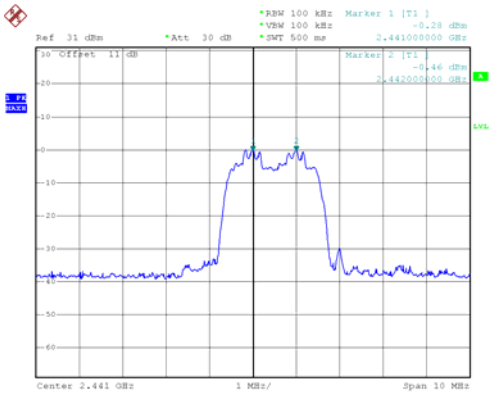
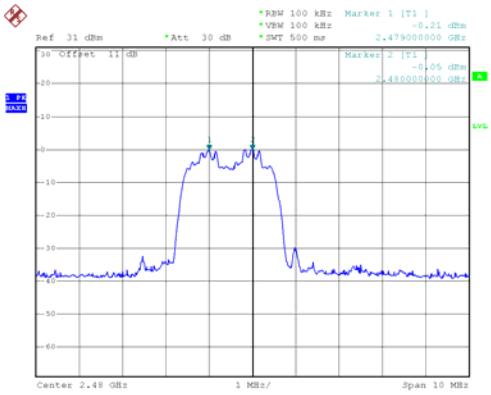
Channel 39-40



PN1
Date: 7.MAY.2007 11:39:39

Channel 77-78



PN1
Date: 7.MAY.2007 11:40:51

9. Dwell Time

9.1. Test Equipment

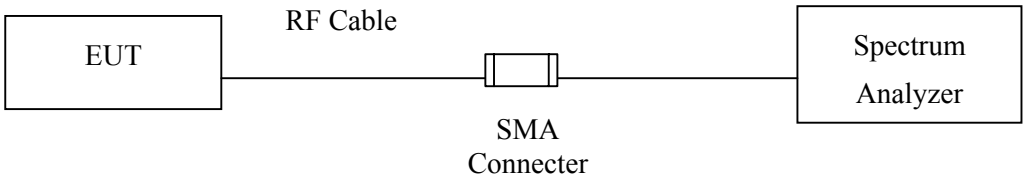
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R & S	ESI 26 / 838786/004	May, 2007

Note: 1. All equipments are calibrated every one year.

2. The test instruments marked by "X" are used to measure the final test results.

9.2. Test Setup



9.3. Limit

The dwell time shall be the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

9.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

9.5. Uncertainty

± 25msec

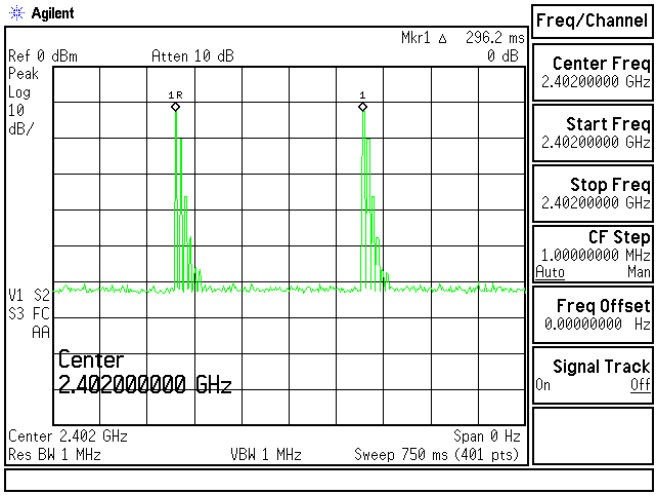
9.6. Test Result of Dwell Time

Product : Notebook
Test Item : Dwell Time
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps(Channel 00,39,78 –DH5)

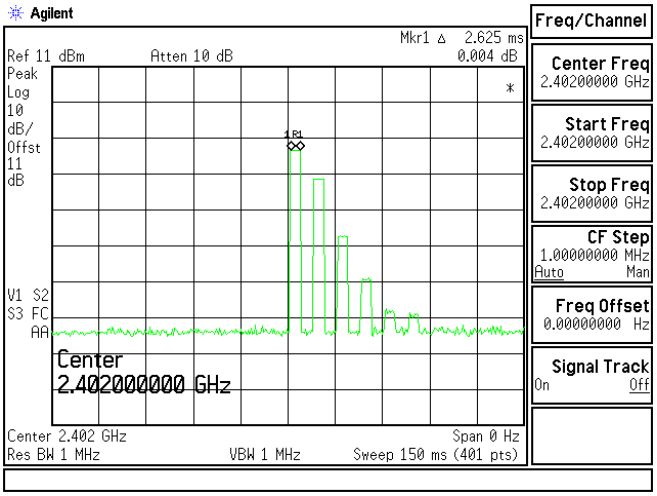
Channel No.	Frequency (MHz)	Time Interval between hops (ms)	Transmission Time (us)	Dwell Time (ms)	Limit (ms)	Result
00	2402	296.2	2625	280	400	Pass
39	2441	296.2	3000	320	400	Pass
78	2480	296.2	2750	293	400	Pass

Note: Dwell Time = 79 * 400 / Time Interval Between Hops * Transmission Time / 1000

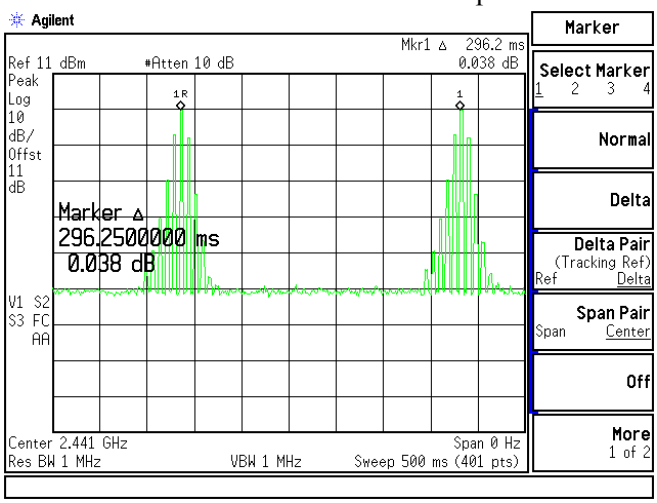
CH 2402MHz Time Interval between hops



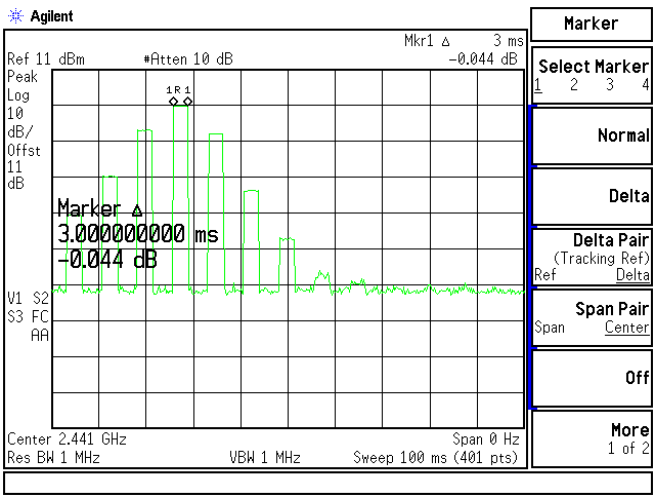
Transmission Time



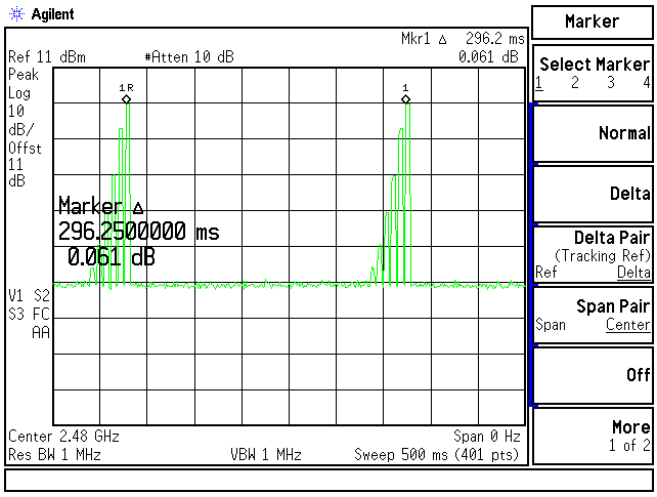
CH 2441MHz Time Interval between hops



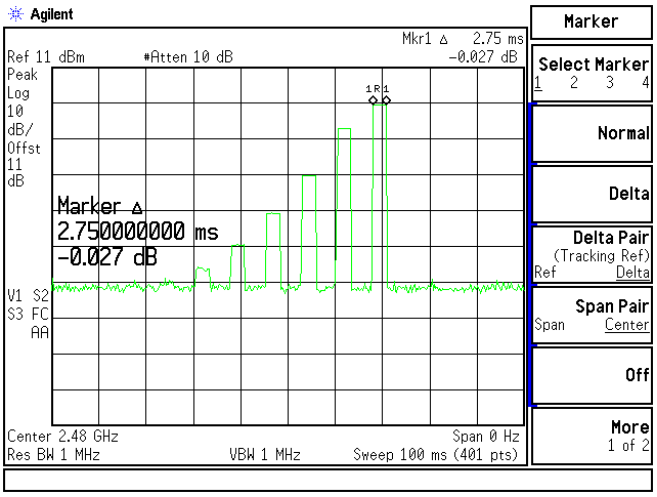
Transmission Time



CH 2480MHz Time Interval between hops



Transmission Time



Note:

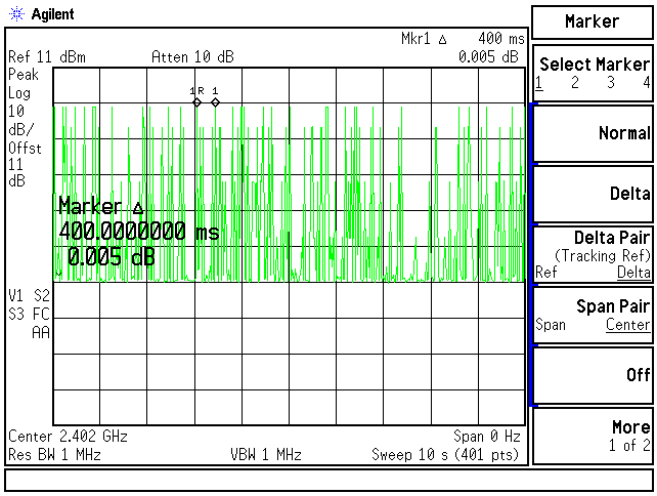
The dwell times of the packet type DH5 are tested.

Product : Notebook
Test Item : Dwell Time
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps(Channel 00,39,78 –DH5)

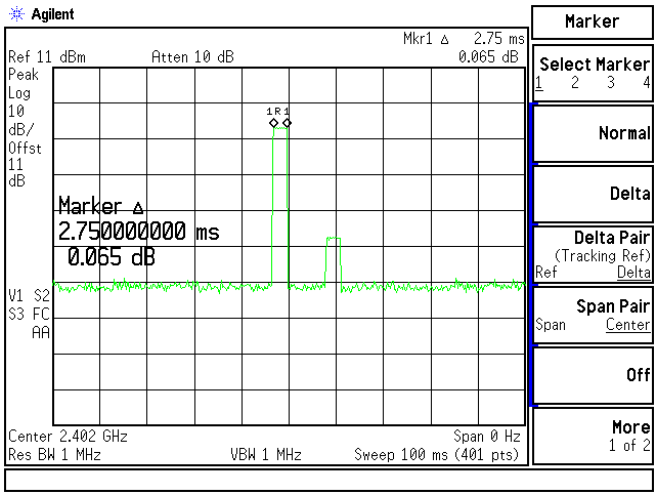
Channel No.	Frequency (MHz)	Time Interval between hops (ms)	Transmission Time (us)	Dwell Time (ms)	Limit (ms)	Result
00	2402	400	2750	217	400	Pass
39	2441	600	2750	145	400	Pass
78	2480	775	3000	122	400	Pass

Note: Dwell Time = 79 * 400 / Time Interval Between Hops * Transmission Time / 1000

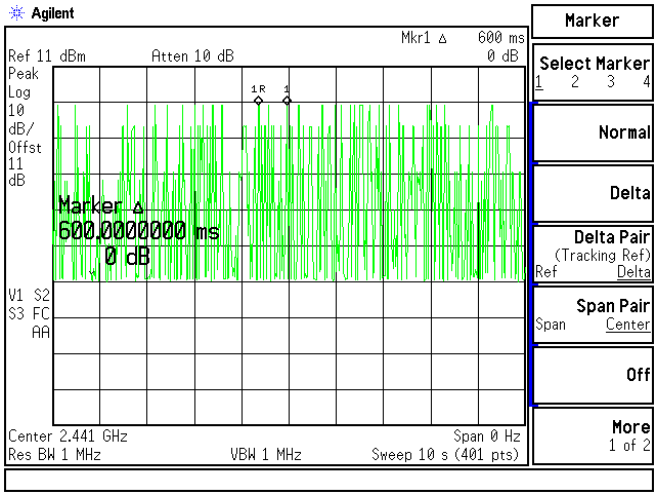
CH 2402MHz Time Interval between hops



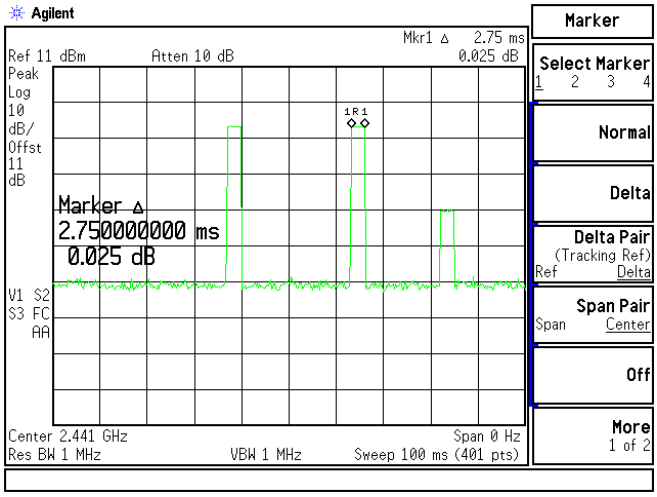
Transmission Time



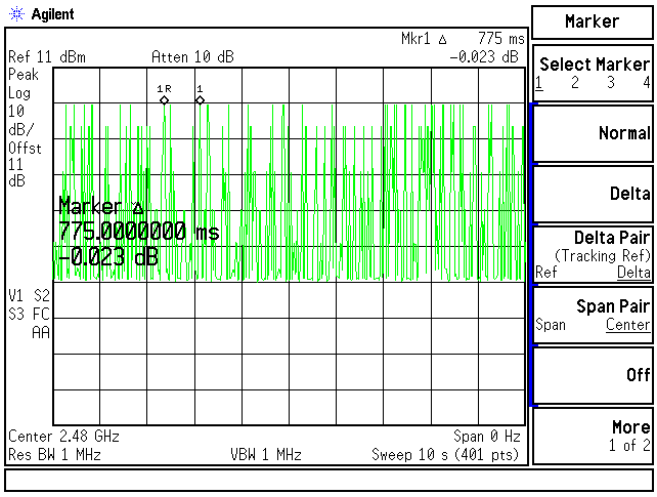
CH 2441MHz Time Interval between hops



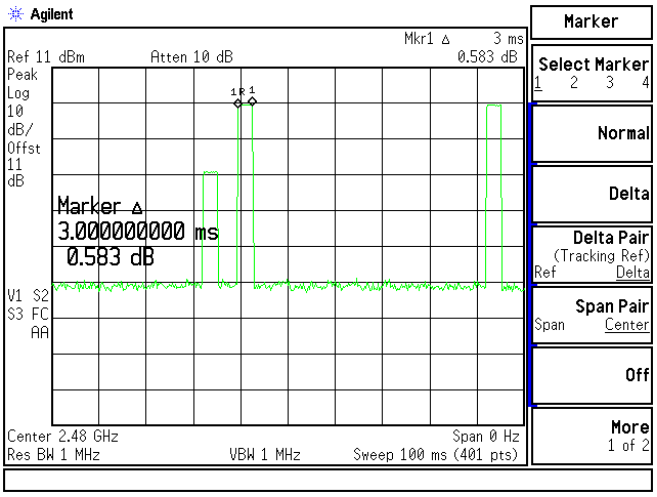
Transmission Time



CH 2480MHz Time Interval between hops



Transmission Time



Note:

The dwell times of the packet type DH5 are tested.

10. Occupied Bandwidth

10.1. Test Equipment

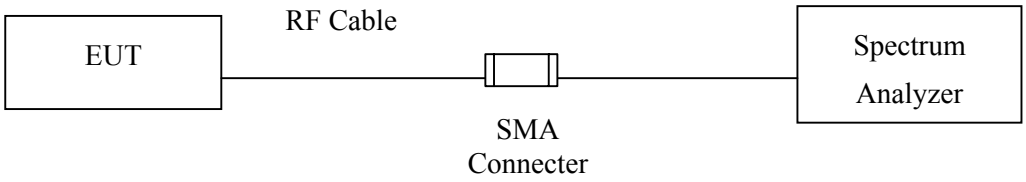
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R & S	ESI 26 / 838786/004	May, 2007

Note: 1. All equipments are calibrated every one year.

2. The test instruments marked by "X" are used to measure the final test results.

10.2. Test Setup



10.3. Limits

N/A

10.4. Test Procedure

The EUT was setup to ANSI C63.4, 2003; tested to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

10.5. Uncertainty

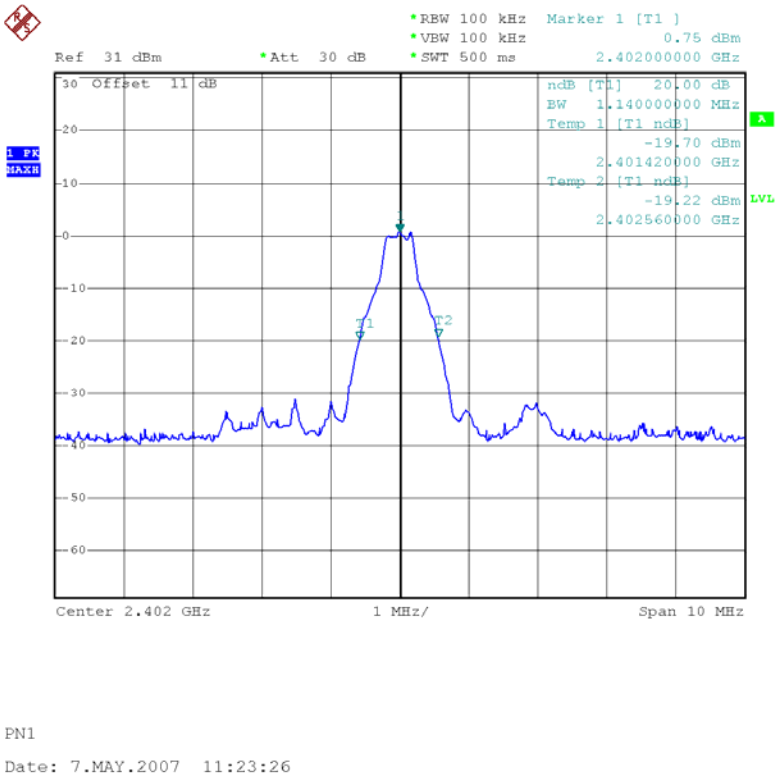
± 150Hz

10.6. Test Result of Occupied Bandwidth

Product : Notebook
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps(2402MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
00	2402	1140	--	NA

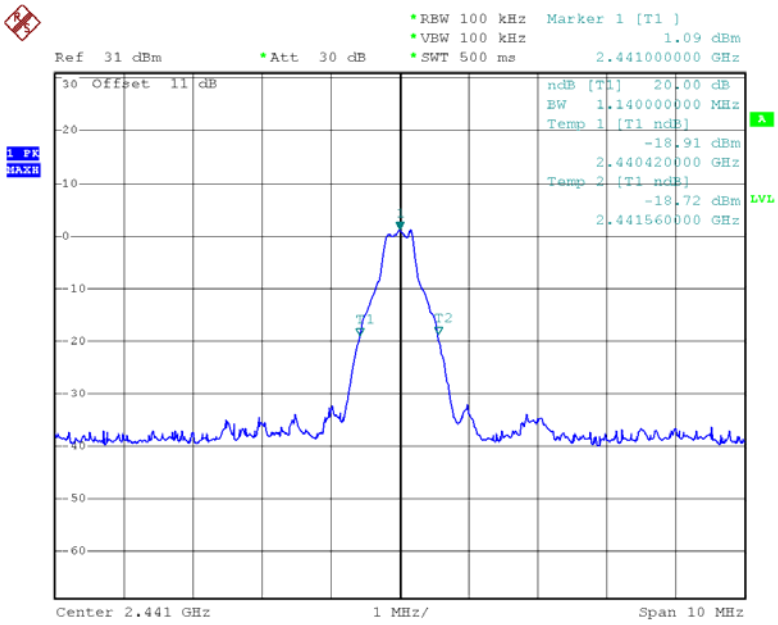
Figure Channel 00:



Product : Notebook
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps(2441MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
39	2441	1140	--	NA

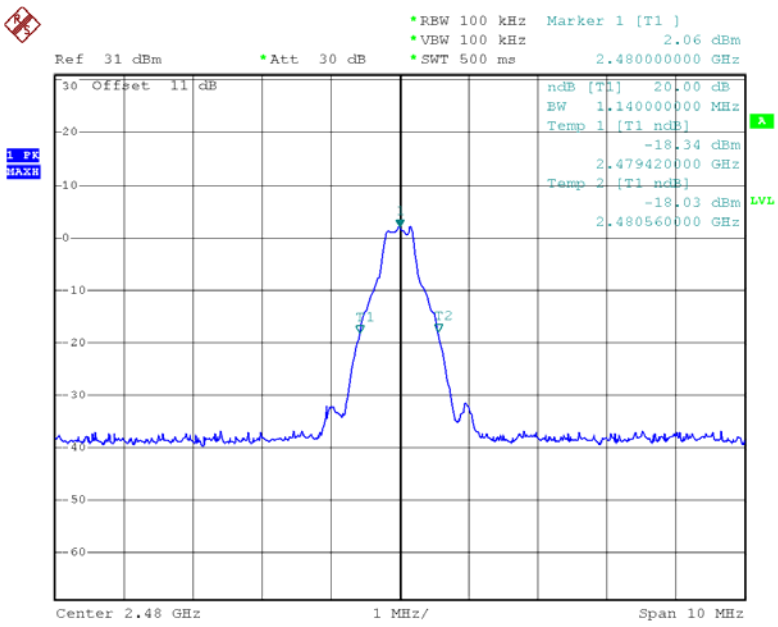
Figure Channel 39:



Product : Notebook
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter - 1Mbps(2480MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
78	2480	1140	--	NA

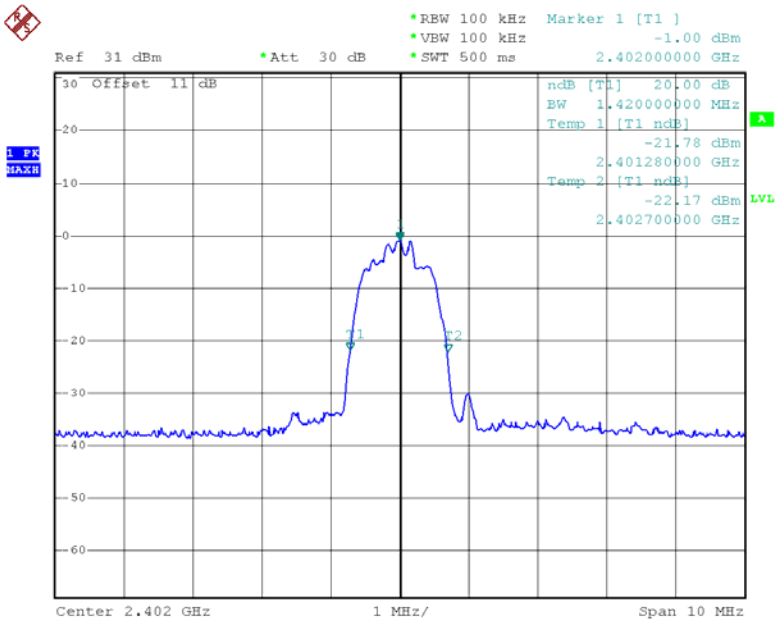
Figure Channel 78:



Product : Notebook
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps (2402MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
00	2402	1420	--	NA

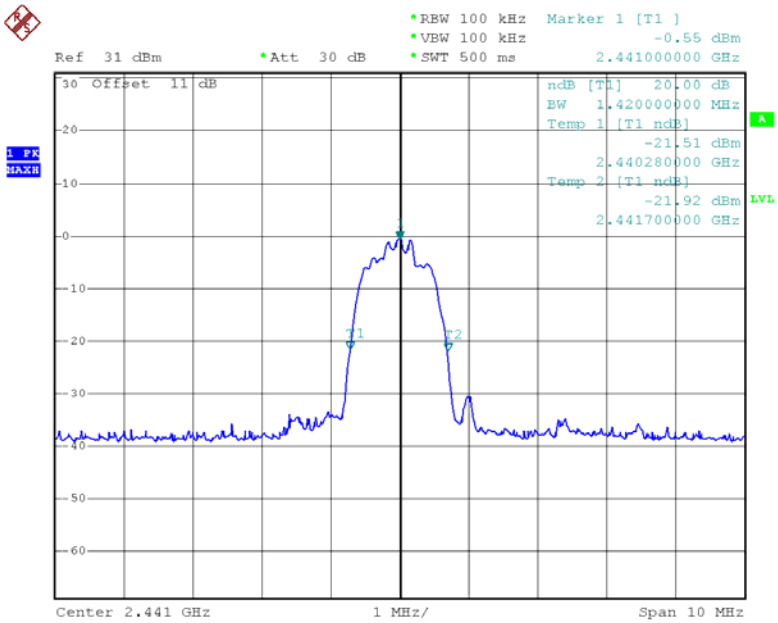
Figure Channel 00:



Product : Notebook
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps (2441MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
39	2441	1420	--	NA

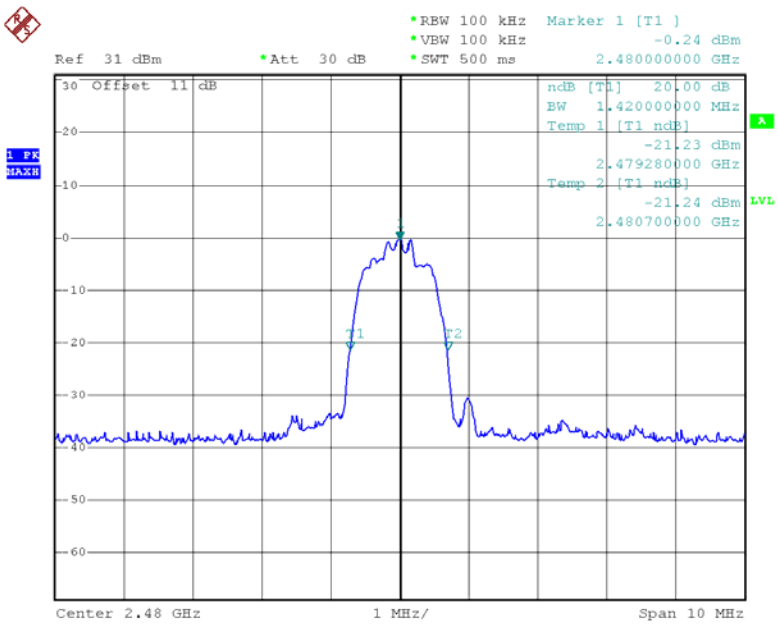
Figure Channel 39:



Product : Notebook
Test Item : Occupied Bandwidth Data
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter - 3Mbps(2480MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
78	2480	1420	--	NA

Figure Channel 78:



11. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs