



Test Report

Product Name : Notebook P.C.

Model No : R1E

FCC ID : MSQR1E

Applicant : ASUSTeK COMPUTER INC.

Address : 4FL., No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.

Date of Receipt : May. 16, 2007

Issued Date : Jun. 22, 2007

Report No. : 075L112-RFUSP09V01

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

Test Report Certification

Issued Date: Jun. 22, 2007

Rport No.: 075L112-RFUSP09V01



Product Name : Notebook P.C.
Applicant : ASUSTeK COMPUTER INC.
Address : 4FL., No. 150, Li-Te Rd., Peitou, Taipei, Taiwan, R.O.C.
Manufacturer : ASUSTeK COMPUTER INC.
Model No. : R1E
FCC ID. : MSQR1E
Rated Voltage : AC 120V/60Hz
Working Voltage : AC 120V/60Hz
Trade Name : ASUS
Applicable Standard : FCC CFR Title 47 Part 15 Subpart E: 2006
ANSI C63.4: 2003
Test Result : Complied



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

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Tested By : Dino Chen
(Assistant Engineer/Dino Chen)



Approved By : Gene Chang
(President/Gene Chang)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name : Notebook P.C.
 Trade Name : ASUS
 FCC ID. : MSQR1E
 Model No. : R1E
 Frequency Range : 2412MHz - 2462MHz, 5150-5250MHz, 5725-5850MHz
 Number of Channels : 11 in 2.4GHz band, 9 in 5GHz band, 3 in 5GHz band (802.11n)
 Channel Separation : 802.11b/g/n-5/20 MHz, 802.11a-20MHz, 802.11n-40MHz
 Channel Control : Auto
 Data Rate : 802.11b – 1,2,5.5,11Mbps,
 802.11a/g – 6,9,12,18,24,36,48,54Mbps,
 802.11a/g/n (20MHz) – 13,26,39,52,78,104,117,130,144Mbps
 802.11a/n (40MHz) – 27,54,81,108,162,216,243,270,300Mbps
 Type of Modulation : DSSS/ OFDM
 Antenna type : PIFA
 Antenna Gain : Refer to the table “Antenna List”
 Power Adapter : MFR: DELTA, M/N: SADP-65KB B
 Input: AC 100-240V, 50-60Hz,1.5A
 Output: DC 19V, 3.42A
 Cable Out: Non-Shielded, 1.75m
 Power Cord: Non-Shielded, 1.2m

Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	Yageo	CAN4313 537 012501B	1.26 dBi for 2.4 GHz 2.20 dBi for 5.0 GHz

Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 1:	5180 MHz	Channel 2:	5200 MHz	Channel 3:	5220 MHz	Channel 4:	5240 MHz

802.11n-40MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency
Channel 1:	5190 MHz		

Note:

1. This device is a Notebook P.C. with a built-in 2.4GHz and 5GHz transceiver.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test. (802.11b is 1Mbps, 802.11g and 802.11a are 6Mbps, 802.11n 20MHz are 13Mbps, 802.11n 40MHz are 27Mbps)
3. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.

1.2. Operational Description

EUT is a Notebook P.C. with a built-in 2.4GHz and 5GHz transceiver. There are 11 channels in 2412 – 2462MHz and 5 channels in 5745 – 5825MHz, and 3 channel of 802.11n.

The channels are separated by 5MHz in 2.4GHz band and 20MHz in 5GHz band.

This device supports the data rates of 1, 2, 5.5, 11Mbps in 802.11b mode(TX Antenna A and TX Antenna B) , 6, 9, 12, 18, 24, 36, 48, 54Mbps in 802.11a/g mode(TX Antenna A and TX Antenna B), 13, 26, 39, 52, 78, 104, 117, 130, 144 Mbps in 2.4 & 5.0 GHz frequency bands is under 20MHz bandwidth (TX Antenna A , TX Antenna B and TX Antenna A+Antenna B) and 27, 54, 81, 108, 162, 216, 243, 270, 300 Mbps in 5.0 GHz frequency bands is under 40MHz bandwidth (TX Antenna A , TX Antenna B and TX Antenna A+Antenna B)

The signals are modulated by DSSS in 802.11b mode and OFDM in 802.11a/g/n mode. The antennas are Connector and use diversity to improve the receiving sensitivity.

This Notebook P.C., complied with IEEE 802.11b, IEEE 802.11g/n, and IEEE 802.11a/n, is a high-efficiency Wireless LAN adapter. It allows your computer to connect to a wireless network and to share resources, such as files or printers without network wires. Wired Equivalent Protection (WEP) algorithm is used. In addition, its standard compliance ensures that it can communicate with any IEEE 802.11b, IEEE 802.11g/n, and IEEE 802.11a/n network.

Following are the test modes corresponding to the transmit antenna:

Model1: TX Antenna A and TX Antenna B

Mode2: TX Antenna A , TX Antenna B and TX Antenna A+ Antenna B

Mode3: TX Antenna A , TX Antenna B and TX Antenna A+ Antenna B

Test Mode	Mode 1: Transmitter 802.11a-Intel:4965AGN
	Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN
	Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN

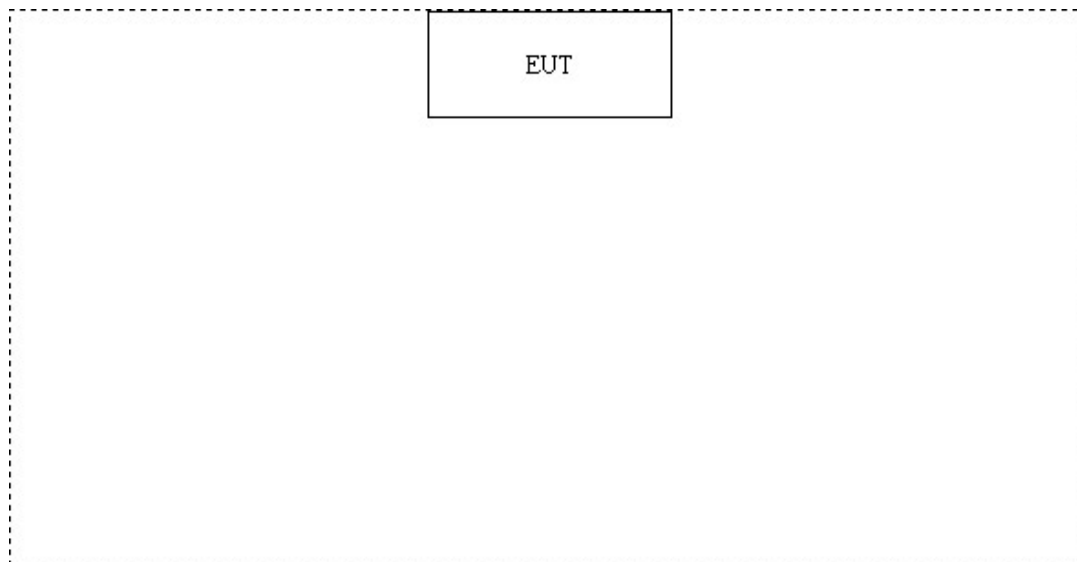
1.3. Tested System Details

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.	FCC ID	Power Cord
N/A					

Signal Cable Type	Signal cable Description
N/A	

1.4. Configuration of tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Execute CRTU.exe on the notebook.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Press “OK” to start the continuous transmission.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: File on
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

2. Conducted Emission

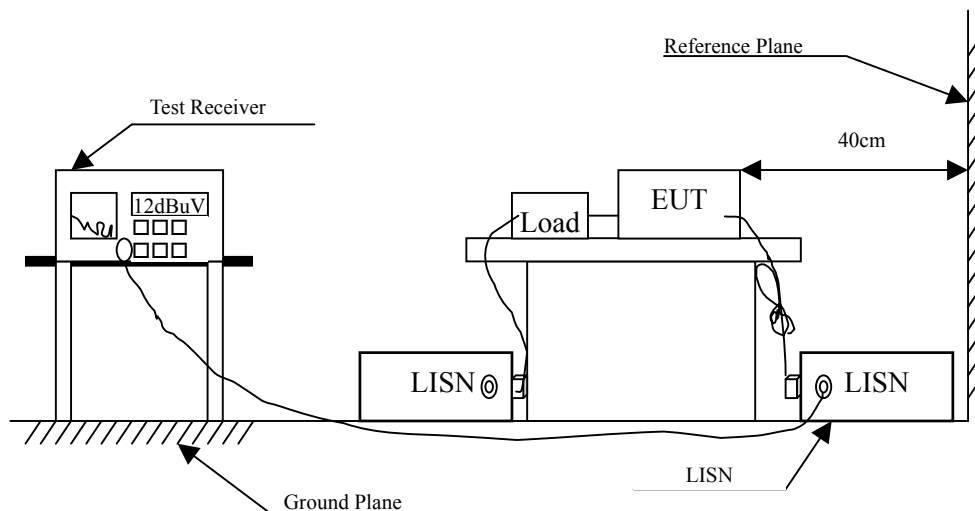
2.1. Test Equipment

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 30/825442/17	May, 2007	
2	L.I.S.N.	R & S	ESH3-Z5/825016/6	May, 2007	EUT
3	L.I.S.N.	Kyoritsu	KNW-407/8-1420-3	May, 2007	Peripherals
4	Pulse Limiter	R & S	ESH3-Z2	May, 2007	
5	No.1 Shielded Room			N/A	

Note: All equipments are calibrated every one year.

2.2. Test Setup



2.3. 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.

2.4. 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 refers 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 of 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.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Notebook P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna A)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV	Margin dB	Limit dBuV
LINE 1					
Quasi-Peak					
0.197	0.202	45.030	45.232	-19.425	64.657
0.267	0.209	43.700	43.909	-18.748	62.657
0.537	0.217	37.400	37.617	-18.383	56.000
1.607	0.261	30.580	30.841	-25.159	56.000
4.755	0.390	34.680	35.070	-20.930	56.000
11.857	0.728	26.840	27.568	-32.432	60.000
Average					
0.197	0.202	39.800	40.002	-14.655	54.657
0.267	0.209	40.410	40.619	-12.038	52.657
0.537	0.217	36.470	36.687	-9.313	46.000
1.607	0.261	29.160	29.421	-16.579	46.000
4.755	0.390	31.800	32.190	-13.810	46.000
11.857	0.728	24.000	24.728	-25.272	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.201	0.202	49.410	49.612	-14.931	64.543
0.267	0.203	43.540	43.743	-18.914	62.657
0.537	0.217	37.440	37.657	-18.343	56.000
1.877	0.275	29.180	29.455	-26.545	56.000
4.556	0.370	35.000	35.370	-20.630	56.000
18.959	0.773	23.140	23.913	-36.087	60.000
Average					
0.201	0.202	44.210	44.412	-10.131	54.543
0.267	0.203	40.290	40.493	-12.164	52.657
0.537	0.217	36.560	36.777	-9.223	46.000
1.877	0.275	26.940	27.215	-18.785	46.000
4.556	0.370	31.900	32.270	-13.730	46.000
18.959	0.773	19.170	19.943	-30.057	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.205	0.202	46.050	46.252	-18.177	64.429
0.267	0.209	43.740	43.949	-18.708	62.657
0.537	0.217	37.360	37.577	-18.423	56.000
1.607	0.261	30.560	30.821	-25.179	56.000
4.623	0.381	35.190	35.571	-20.429	56.000
19.693	0.962	22.540	23.502	-36.498	60.000
Average					
0.205	0.202	40.700	40.902	-13.527	54.429
0.267	0.209	40.620	40.829	-11.828	52.657
0.537	0.217	36.470	36.687	-9.313	46.000
1.607	0.261	29.110	29.371	-16.629	46.000
4.623	0.381	32.230	32.611	-13.389	46.000
19.693	0.962	18.340	19.302	-30.698	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.201	0.202	49.390	49.592	-14.951	64.543
0.404	0.215	37.690	37.905	-20.838	58.743
0.603	0.218	31.600	31.818	-24.182	56.000
1.810	0.264	29.140	29.404	-26.596	56.000
4.822	0.374	35.000	35.374	-20.626	56.000
19.158	0.776	23.330	24.106	-35.894	60.000
Average					
0.201	0.202	44.210	44.412	-10.131	54.543
0.404	0.215	35.470	35.685	-13.058	48.743
0.603	0.218	30.320	30.538	-15.462	46.000
1.810	0.264	27.270	27.534	-18.466	46.000
4.822	0.374	30.400	30.774	-15.226	46.000
19.158	0.776	18.890	19.666	-30.334	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.205	0.202	46.050	46.252	-18.177	64.429
0.267	0.209	43.760	43.969	-18.688	62.657
0.537	0.217	37.320	37.537	-18.463	56.000
1.607	0.261	30.560	30.821	-25.179	56.000
4.154	0.361	35.630	35.991	-20.009	56.000
19.494	0.960	22.870	23.830	-36.170	60.000
Average					
0.205	0.202	40.750	40.952	-13.477	54.429
0.267	0.209	40.570	40.779	-11.878	52.657
0.537	0.217	36.380	36.597	-9.403	46.000
1.607	0.261	29.160	29.421	-16.579	46.000
4.154	0.361	32.730	33.091	-12.909	46.000
19.494	0.960	19.010	19.970	-30.030	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.201	0.202	49.390	49.592	-14.951	64.543
0.267	0.203	43.520	43.723	-18.934	62.657
0.537	0.217	37.500	37.717	-18.283	56.000
1.877	0.275	29.080	29.355	-26.645	56.000
4.822	0.374	35.100	35.474	-20.526	56.000
19.697	0.773	23.350	24.123	-35.877	60.000
Average					
0.201	0.202	44.210	44.412	-10.131	54.543
0.267	0.203	40.290	40.493	-12.164	52.657
0.537	0.217	36.650	36.867	-9.133	46.000
1.877	0.275	27.060	27.335	-18.665	46.000
4.822	0.374	30.310	30.684	-15.316	46.000
19.697	0.773	19.300	20.073	-29.927	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.201	0.202	49.450	49.652	-14.891	64.543
0.334	0.214	35.650	35.864	-24.879	60.743
0.537	0.217	37.380	37.597	-18.403	56.000
1.607	0.261	30.560	30.821	-25.179	56.000
4.420	0.368	35.060	35.428	-20.572	56.000
16.345	0.918	22.860	23.778	-36.222	60.000
Average					
0.201	0.202	44.080	44.282	-10.261	54.543
0.334	0.214	30.890	31.104	-19.639	50.743
0.537	0.217	36.470	36.687	-9.313	46.000
1.607	0.261	29.160	29.421	-16.579	46.000
4.420	0.368	32.190	32.558	-13.442	46.000
16.345	0.918	19.480	20.398	-29.602	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.197	0.202	44.930	45.132	-19.525	64.657
0.267	0.203	43.540	43.743	-18.914	62.657
0.537	0.217	37.460	37.677	-18.323	56.000
1.607	0.261	30.440	30.701	-25.299	56.000
4.220	0.356	35.470	35.826	-20.174	56.000
19.295	0.767	23.460	24.227	-35.773	60.000
Average					
0.197	0.202	39.910	40.112	-14.545	54.657
0.267	0.203	40.290	40.493	-12.164	52.657
0.537	0.217	36.560	36.777	-9.223	46.000
1.607	0.261	29.110	29.371	-16.629	46.000
4.220	0.356	32.500	32.856	-13.144	46.000
19.295	0.767	19.530	20.297	-29.703	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A+B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.201	0.202	49.450	49.652	-14.891	64.543
0.334	0.214	36.480	36.694	-24.049	60.743
0.537	0.217	37.340	37.557	-18.443	56.000
1.607	0.261	30.560	30.821	-25.179	56.000
4.353	0.368	35.650	36.018	-19.982	56.000
16.814	0.924	23.480	24.404	-35.596	60.000
Average					
0.201	0.202	44.210	44.412	-10.131	54.543
0.334	0.214	31.450	31.664	-19.079	50.743
0.537	0.217	36.380	36.597	-9.403	46.000
1.607	0.261	29.110	29.371	-16.629	46.000
4.353	0.368	32.840	33.208	-12.792	46.000
16.814	0.924	19.410	20.334	-29.666	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A+B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.197	0.202	44.910	45.112	-19.545	64.657
0.267	0.203	43.560	43.763	-18.894	62.657
0.537	0.217	37.420	37.637	-18.363	56.000
1.607	0.261	30.360	30.621	-25.379	56.000
3.884	0.351	34.340	34.691	-21.309	56.000
19.423	0.769	22.220	22.989	-37.011	60.000
Average					
0.197	0.202	40.080	40.282	-14.375	54.657
0.267	0.203	40.290	40.493	-12.164	52.657
0.537	0.217	36.560	36.777	-9.223	46.000
1.607	0.261	29.410	29.671	-16.329	46.000
3.884	0.351	30.810	31.161	-14.839	46.000
19.423	0.769	15.780	16.549	-33.451	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.205	0.202	46.030	46.232	-18.197	64.429
0.267	0.209	43.990	44.199	-18.458	62.657
0.537	0.217	37.340	37.557	-18.443	56.000
1.205	0.246	30.140	30.386	-25.614	56.000
4.619	0.381	32.490	32.871	-23.129	56.000
16.814	0.924	23.260	24.184	-35.816	60.000
Average					
0.205	0.202	40.700	40.902	-13.527	54.429
0.267	0.209	40.520	40.729	-11.928	52.657
0.537	0.217	36.380	36.597	-9.403	46.000
1.205	0.246	29.260	29.506	-16.494	46.000
4.619	0.381	28.820	29.201	-16.799	46.000
16.814	0.924	18.920	19.844	-30.156	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.201	0.202	49.390	49.592	-14.951	64.543
0.267	0.203	43.520	43.723	-18.934	62.657
0.537	0.217	37.480	37.697	-18.303	56.000
1.607	0.261	30.440	30.701	-25.299	56.000
4.888	0.376	33.000	33.376	-22.624	56.000
20.166	0.769	22.990	23.759	-36.241	60.000
Average					
0.201	0.202	44.210	44.412	-10.131	54.543
0.267	0.203	40.290	40.493	-12.164	52.657
0.537	0.217	36.650	36.867	-9.133	46.000
1.607	0.261	29.110	29.371	-16.629	46.000
4.888	0.376	28.350	28.726	-17.274	46.000
20.166	0.769	18.770	19.539	-30.461	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190 MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.201	0.202	49.470	49.672	-14.871	64.543
0.334	0.214	35.630	35.844	-24.899	60.743
0.537	0.217	37.400	37.617	-18.383	56.000
1.607	0.261	30.580	30.841	-25.159	56.000
4.088	0.354	34.700	35.054	-20.946	56.000
16.615	0.921	23.260	24.181	-35.819	60.000
Average					
0.201	0.202	44.080	44.282	-10.261	54.543
0.334	0.214	30.810	31.024	-19.719	50.743
0.537	0.217	36.470	36.687	-9.313	46.000
1.607	0.261	29.110	29.371	-16.629	46.000
4.088	0.354	32.090	32.444	-13.556	46.000
16.615	0.921	19.230	20.151	-29.849	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190 MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.197	0.202	44.970	45.172	-19.485	64.657
0.267	0.203	43.640	43.843	-18.814	62.657
0.537	0.217	37.460	37.677	-18.323	56.000
1.138	0.245	29.840	30.085	-25.915	56.000
4.755	0.373	34.800	35.173	-20.827	56.000
19.494	0.770	23.580	24.350	-35.650	60.000
Average					
0.197	0.202	39.910	40.112	-14.545	54.657
0.267	0.203	40.340	40.543	-12.114	52.657
0.537	0.217	36.560	36.777	-9.223	46.000
1.138	0.245	27.620	27.865	-18.135	46.000
4.755	0.373	31.430	31.803	-14.197	46.000
19.494	0.770	19.700	20.470	-29.530	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A+B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 1					
Quasi-Peak					
0.201	0.202	49.450	49.652	-14.891	64.543
0.334	0.214	35.630	35.844	-24.899	60.743
0.736	0.230	30.080	30.310	-25.690	56.000
2.212	0.279	27.700	27.979	-28.021	56.000
4.021	0.353	34.660	35.013	-20.987	56.000
19.630	0.962	22.720	23.682	-36.318	60.000
Average					
0.201	0.202	44.080	44.282	-10.261	54.543
0.334	0.214	30.810	31.024	-19.719	50.743
0.736	0.230	29.030	29.260	-16.740	46.000
2.212	0.279	22.520	22.799	-23.201	46.000
4.021	0.353	31.820	32.173	-13.827	46.000
19.630	0.962	18.340	19.302	-30.698	50.000

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 P.C.
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A+B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV	dB	dBuV
LINE 2					
Quasi-Peak					
0.205	0.202	46.010	46.212	-18.217	64.429
0.267	0.203	43.660	43.863	-18.794	62.657
0.537	0.217	37.300	37.517	-18.483	56.000
1.607	0.261	30.440	30.701	-25.299	56.000
4.755	0.373	34.720	35.093	-20.907	56.000
19.697	0.773	23.310	24.083	-35.917	60.000
Average					
0.205	0.202	40.960	41.162	-13.267	54.429
0.267	0.203	40.290	40.493	-12.164	52.657
0.537	0.217	36.470	36.687	-9.313	46.000
1.607	0.261	29.160	29.421	-16.579	46.000
4.755	0.373	31.430	31.803	-14.197	46.000
19.697	0.773	19.220	19.993	-30.007	50.000

Note:

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

3. Peak Transmit Power

3.1. Test Equipment

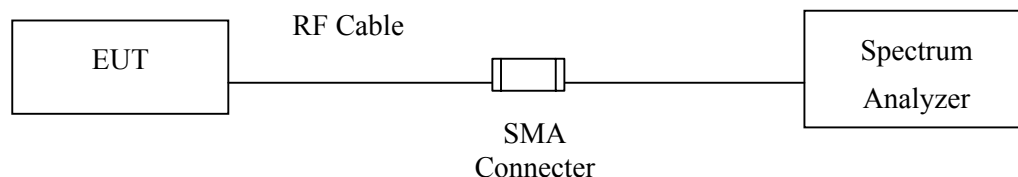
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Nov, 2006

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

3.2. Test Setup

Conduction Power Measurement



3.3. Limits

- For the band 5.15-5.25 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 50 mW or $4 \text{ dBm} + 10\log B$, where B is the 26-dB emission bandwidth in MHz. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
- For the band 5.25-5.35 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10\log B$, where B is the 26-dB emission bandwidth in MHz. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
- For the band 5.725-5.825 GHz, the peak transmit power over the frequency band of operation shall not exceed the lesser of 1W or $17 \text{ dBm} + 10\log B$, where B is the 26-dB emission bandwidth in MHz. If transmitting antenna of directional gain greater than 6 dBi are used, the peak transmit power shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

3.4. Limits

The maximum peak power shall be less 1 Watt.

3.5. Uncertainty

$\pm 1.27 \text{ dB}$

3.6. Test Result of Peak Transmit Power

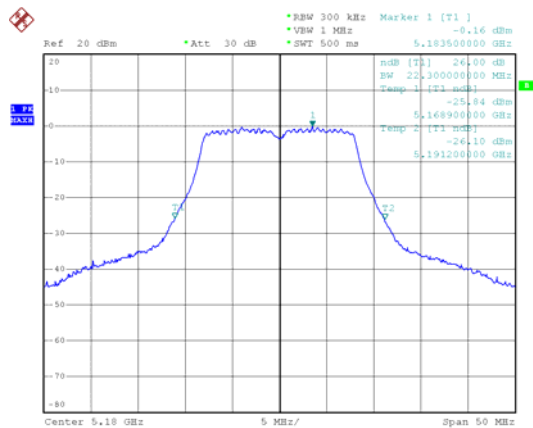
Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5180 MHz) (Antenna A)

Peak Transmit Power Measurement:

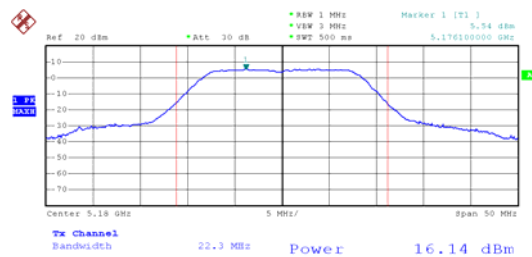
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
1	5180	22.3	16.14

Limits (dBm)	Result
50mW (17dBm) or 4dBm+10 log (B= 22.3MHz)=17.48dBm	Pass

26dBc Occupied Bandwidth: Channel 01



Peak Transmit Power: Channel 01



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5180 MHz) (Antenna B)

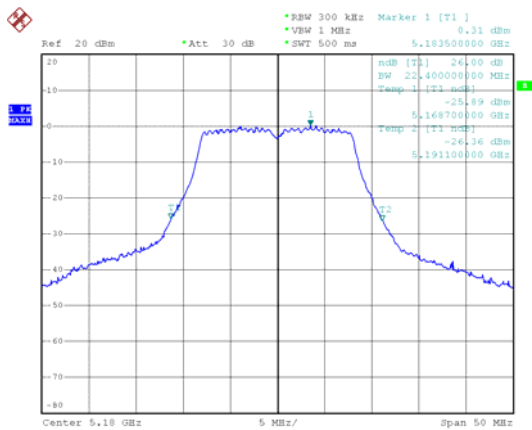
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5180	22.4	16.03

Limits (dBm)	Result
50mW (17dBm) or 4dBm+10 log (B= 22.4MHz)=17.50 dBm	Pass

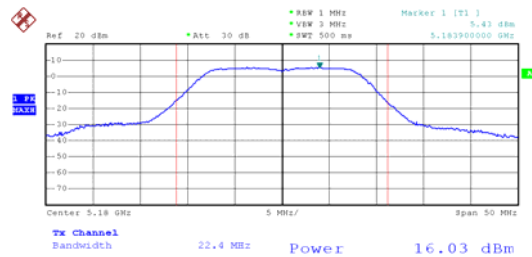
26dBc Occupied Bandwidth:

Channel 01



Peak Transmit Power:

Channel 01



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna A)

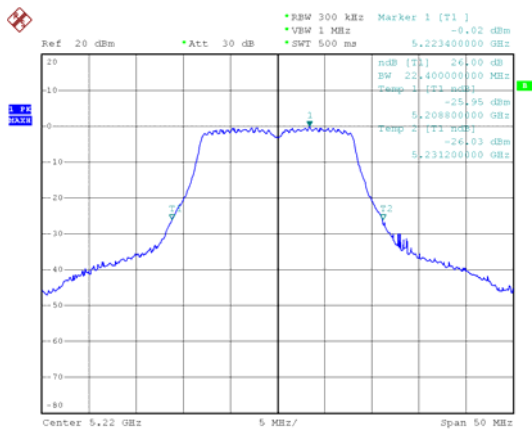
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
03	5220	22.4	16.11

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 22.4\text{MHz}) = 17.50\text{dBm}$	Pass

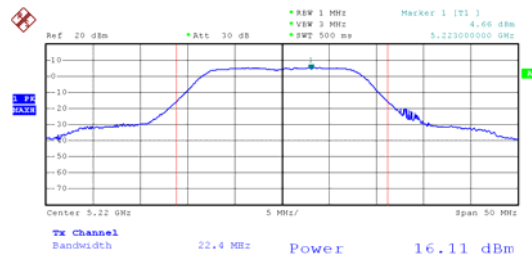
26dBc Occupied Bandwidth:

Channel 03



Peak Transmit Power:

Channel 03



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna B)

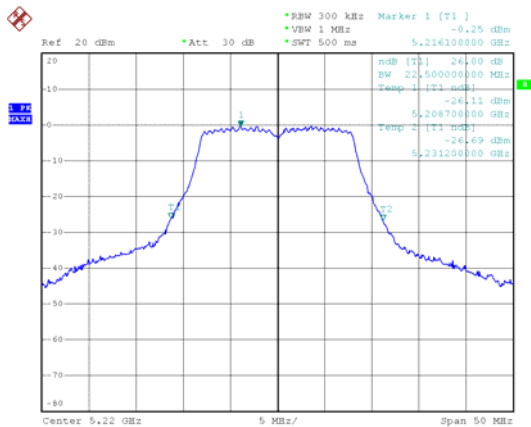
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
03	5220	22.5	16.03

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B=22.5 \text{ MHz})=17.52\text{dBm}$	Pass

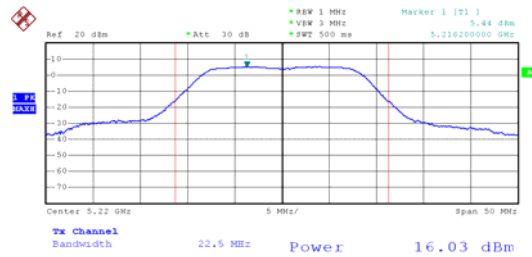
26dBc Occupied Bandwidth:

Channel 03



Peak Transmit Power:

Channel 03



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5240MHz) (Antenna A)

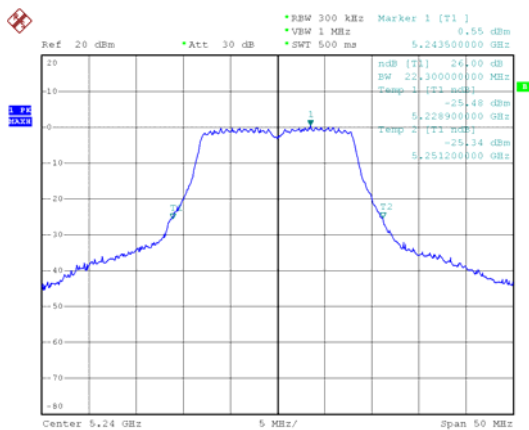
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
04	5240	22.3	16.33

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 22.3\text{MHz}) = 17.48\text{dBm}$	Pass

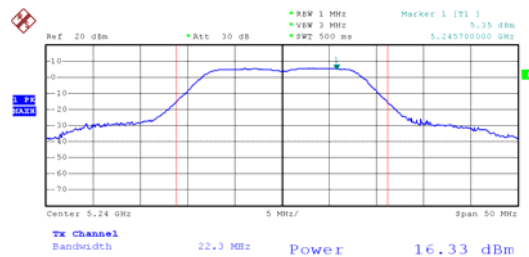
26dBc Occupied Bandwidth:

Channel 04



Peak Transmit Power:

Channel 04



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5240MHz) (Antenna B)

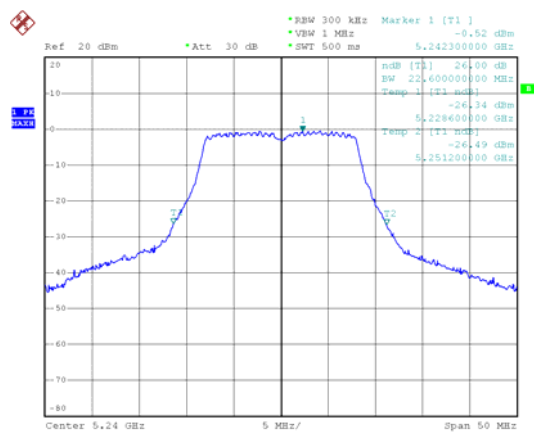
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
04	5240	22.6	16.02

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 22.6\text{MHz}) = 17.54\text{dBm}$	Pass

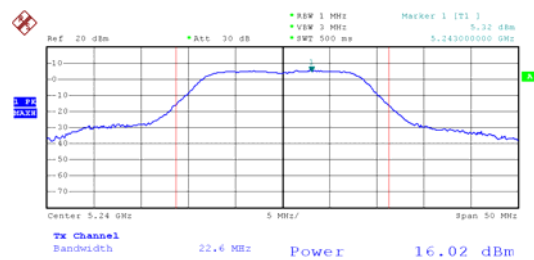
26dBc Occupied Bandwidth:

Channel 04



Peak Transmit Power:

Channel 04



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180 MHz) (Antenna A)

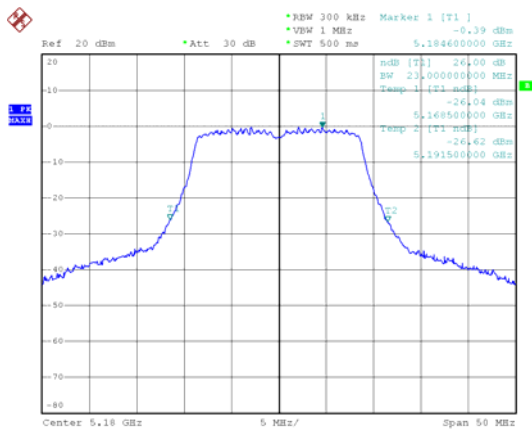
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5180	23	16.02

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 23 \text{ MHz}) = 17.62 \text{ dBm}$	Pass

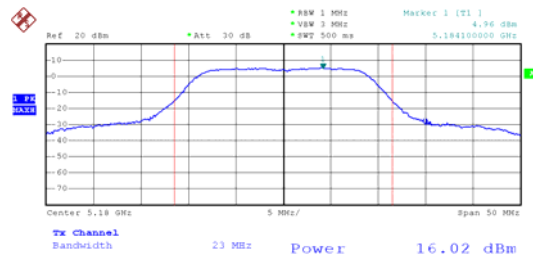
26dBc Occupied Bandwidth:

Channel 01



Peak Transmit Power:

Channel 01



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180 MHz) (Antenna B)

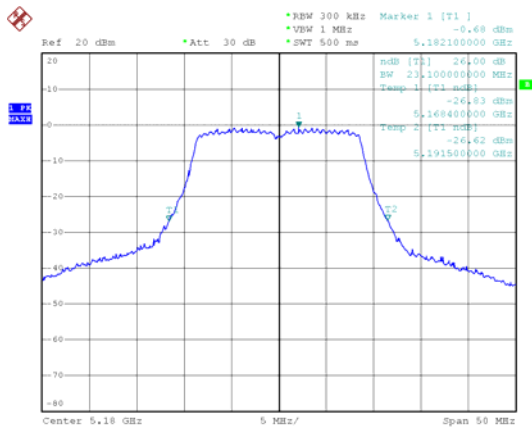
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5180	23.1	16.16

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 23.1\text{MHz}) = 17.64 \text{ dBm}$	Pass

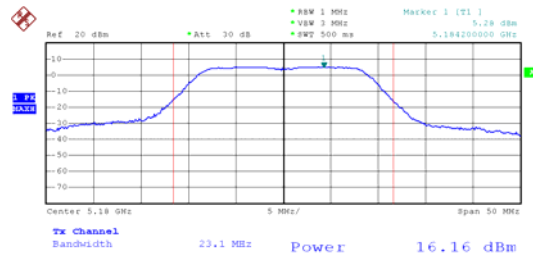
26dBc Occupied Bandwidth:

Channel 01



Peak Transmit Power:

Channel 01



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180 MHz) (Antenna A+B)

Peak Transmit Power Measurement: (Antenna A)

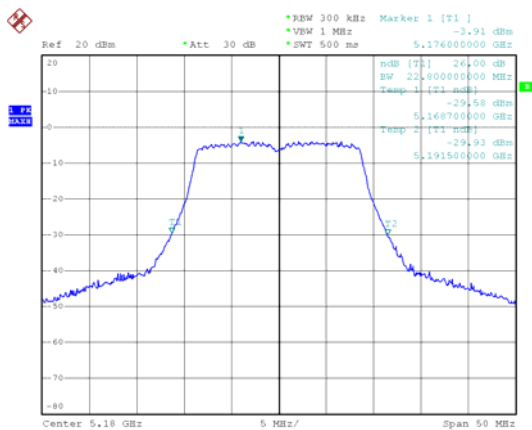
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5180	22.8	13.04

Limits (dBm)
50mW (17dBm) or $4\text{dBm} + 10 \log(B=22.8 \text{ MHz}) = 17.58 \text{ dBm}$

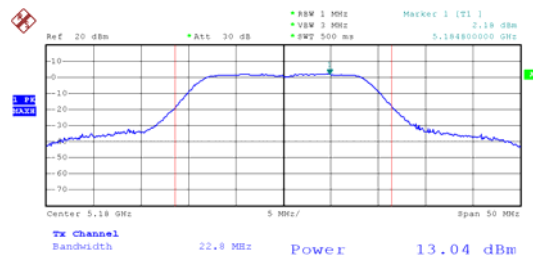
26dBc Occupied Bandwidth:

Peak Transmit Power:

Channel 01



Channel 01



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180 MHz) (Antenna A+B)

Peak Transmit Power Measurement: (Antenna B)

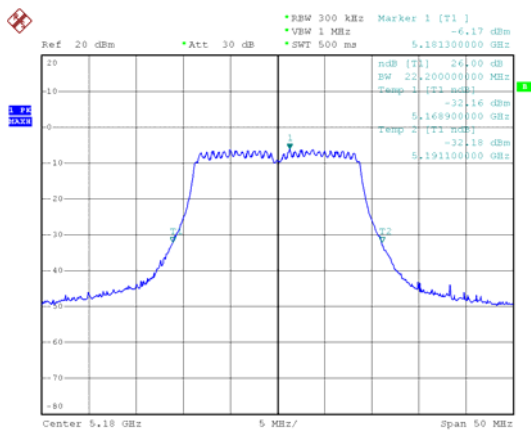
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5180	22.2	11.65

Limits (dBm)
50mW (17dBm) or $4\text{dBm} + 10 \log(B = 22.2\text{MHz}) = 17.46 \text{ dBm}$

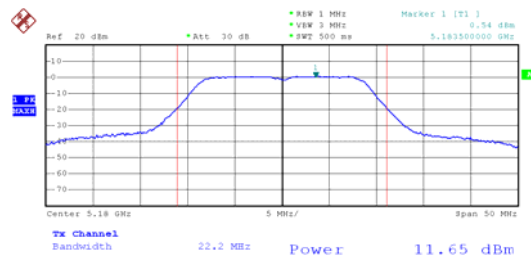
26dBc Occupied Bandwidth:

Peak Transmit Power:

Channel 01



Channel 01



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180 MHz) (Antenna A+B)

Data Speed: HT08Mbps (Antenna A+B)

Channel No.	Frequency (MHz)	DataRate (Mbps)	Peak Power Ch. A (dBm)	Peak Power Ch. A (mW)	Peak Power Ch. B (dBm)	Peak Power Ch. B (mW)	Peak Power Ch. A+B (dBm)	Required Limit (dBm)	Result
01	5180.000	HT08	13.040	20.137	11.650	14.622	15.411	17.58	Pass

P.S: Peak Power Ch. A+B=10*Log (Ch.A(mW)+ Ch.B(mW))

Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A)

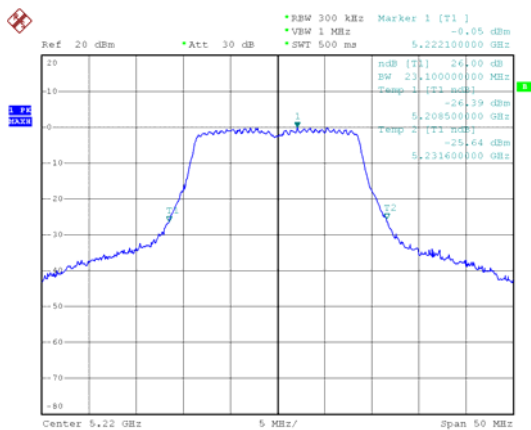
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
03	5220	23.1	16.40

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B=23.1 \text{ MHz}) = 17.64 \text{ dBm}$	Pass

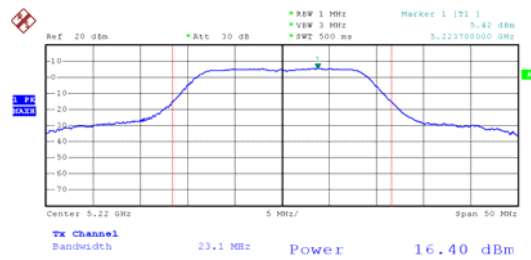
26dBc Occupied Bandwidth:

Channel 03



Peak Transmit Power:

Channel 03



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna B)

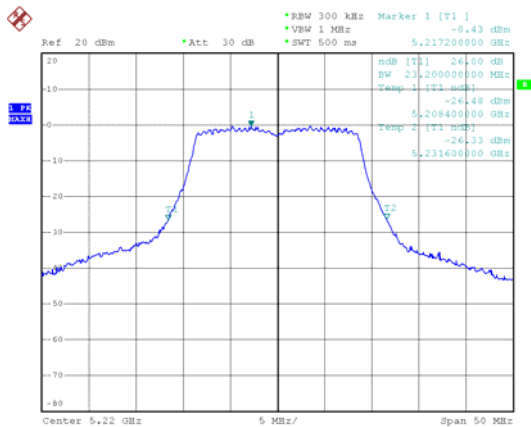
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
03	5220	23.2	16.08

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B=23.2\text{MHz}) = 17.65 \text{ dBm}$	Pass

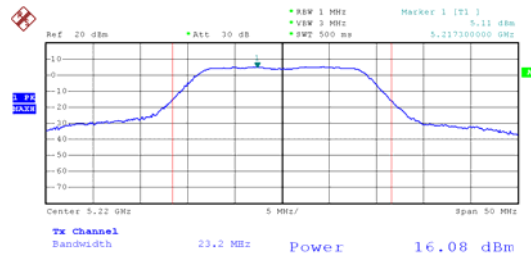
26dBc Occupied Bandwidth:

Channel 03



Peak Transmit Power:

Channel 03



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A+B)

Peak Transmit Power Measurement: (Antenna A)

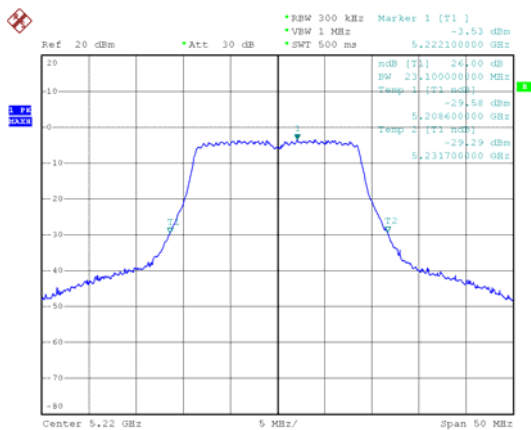
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
03	5220	23.1	13.04

Limits (dBm)
50mW (17dBm) or 4dBm+10 log (B= 23.1MHz)=17.64dBm

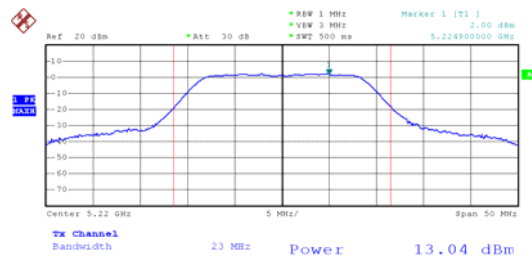
26dBc Occupied Bandwidth:

Peak Transmit Power:

Channel 03



Channel 03



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A+B)

Peak Transmit Power Measurement: (Antenna B)

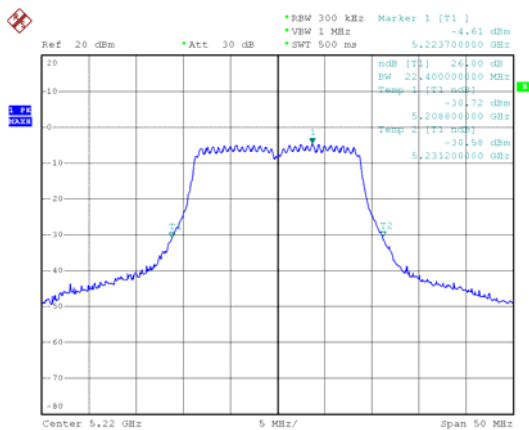
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
03	5220	22.4	11.40

Limits (dBm)
50mW (17dBm) or 4dBm+10 log (B= 22.4 MHz)= 17.50 dBm

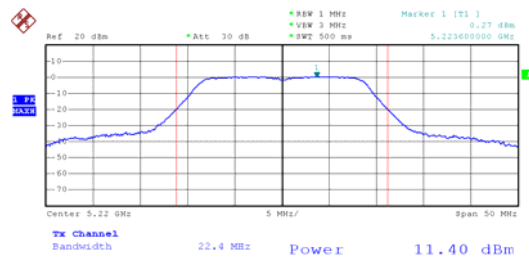
26dBc Occupied Bandwidth:

Peak Transmit Power:

Channel 03



Channel 03



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A+B)

Data Speed: HT08Mbps (Antenna A+B)

Channel No.	Frequency (MHz)	DataRate (Mbps)	Peak Power Ch. A (dBm)	Peak Power Ch. A (mW)	Peak Power Ch. B (dBm)	Peak Power Ch. B (mW)	Peak Power Ch. A+B (dBm)	Required Limit (dBm)	Result
03	5220.000	HT08	13.040	20.137	11.400	13.804	15.307	17.64	Pass

P.S: Peak Power Ch. A+B=10*Log (Ch.A(mW)+ Ch.B(mW))

Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240MHz) (Antenna A)

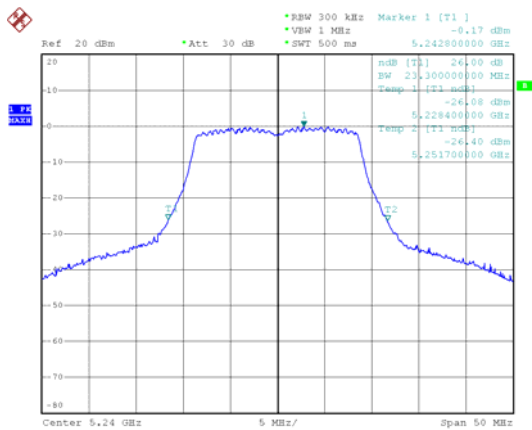
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
04	5240	23.3	16.48

Limits (dBm)	Result
50mW (17dBm) or 4dBm+10 log (B=23.3 MHz)= 17.67 dBm	Pass

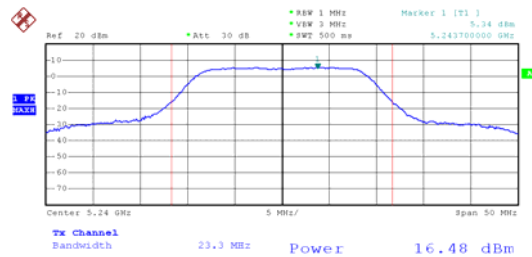
26dBc Occupied Bandwidth:

Channel 04



Peak Transmit Power:

Channel 04



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240MHz) (Antenna B)

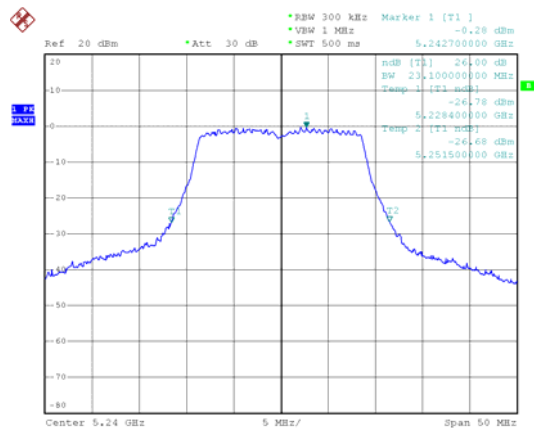
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
04	5240	23.1	16.12

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 23.1\text{MHz}) = 17.64 \text{ dBm}$	Pass

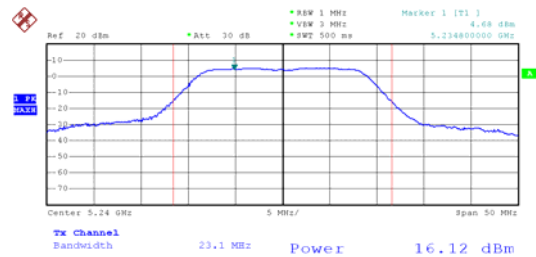
26dBc Occupied Bandwidth:

Channel 04



Peak Transmit Power:

Channel 04



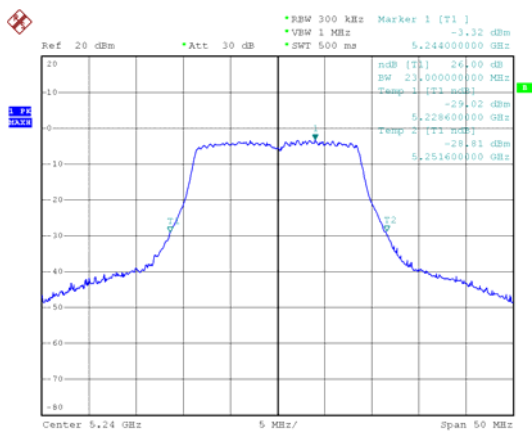
Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240MHz) (Antenna A+B)

Peak Transmit Power Measurement: (Antenna A)

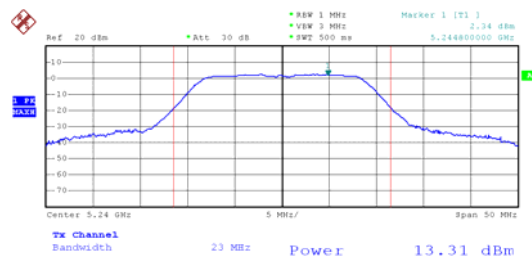
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
04	5240	23	13.31

Limits (dBm)
50mW (17dBm) or $4\text{dBm} + 10 \log(B=23 \text{ MHz}) = 17.62 \text{ dBm}$

**26dBc Occupied Bandwidth:
Channel 04**



**Peak Transmit Power:
Channel 04**



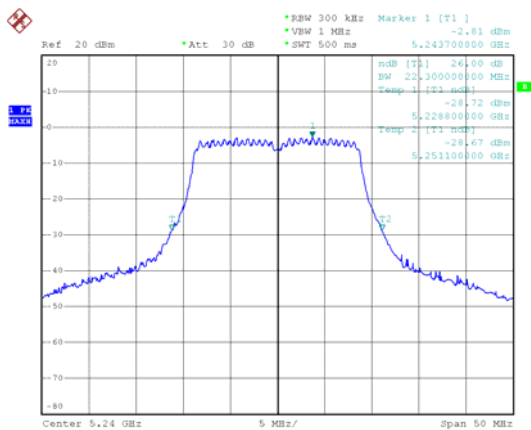
Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240MHz) (Antenna A+B)

Peak Transmit Power Measurement: (Antenna B)

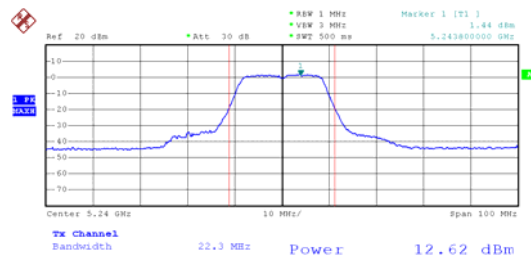
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
04	5240	22.3	12.62

Limits (dBm)
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 22.3\text{MHz}) = 17.48 \text{ dBm}$

**26dBc Occupied Bandwidth:
Channel 04**



**Peak Transmit Power:
Channel 04**



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240MHz) (Antenna A+B)

Data Speed: HT08Mbps (Antenna A+B)

Channel No.	Frequency (MHz)	DataRate (Mbps)	Peak Power Ch. A (dBm)	Peak Power Ch. A (mW)	Peak Power Ch. B (dBm)	Peak Power Ch. B (mW)	Peak Power Ch. A+B (dBm)	Required Limit (dBm)	Result
04	5240.000	HT08	13.310	21.429	12.620	18.281	15.989	17.62	Pass

P.S: Peak Power Ch. A+B=10*Log (Ch.A(mW)+ Ch.B(mW))

Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN(5190MHz) (Antenna A)

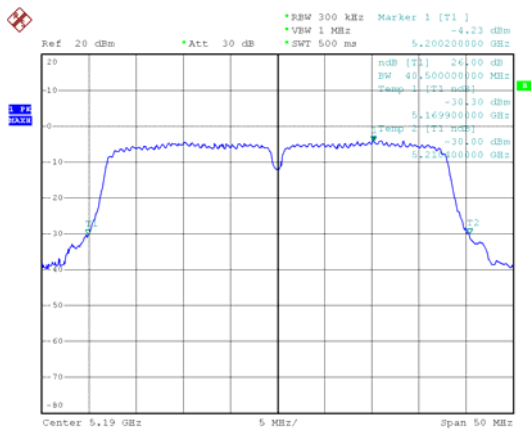
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5190	40.5	15.07

Limits (dBm)	Result
50mW (17dBm) or 4dBm+10 log (B=40.5 MHz)= 20.07 dBm	Pass

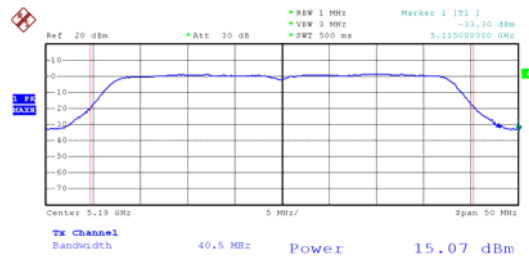
26dBc Occupied Bandwidth:

Channel 01



Peak Transmit Power:

Channel 01



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN(5190MHz) (Antenna B)

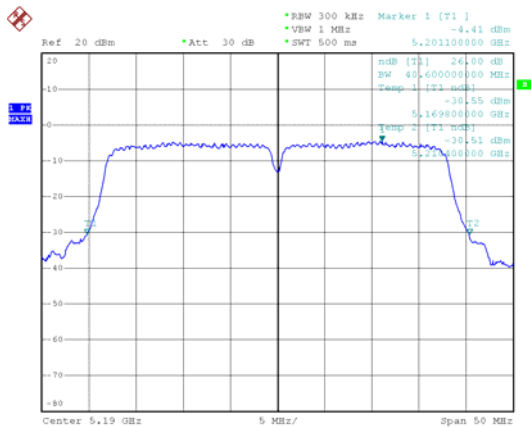
Peak Transmit Power Measurement:

Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5190	40.6	15.01

Limits (dBm)	Result
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 40.6\text{MHz}) = 20.09\text{dBm}$	Pass

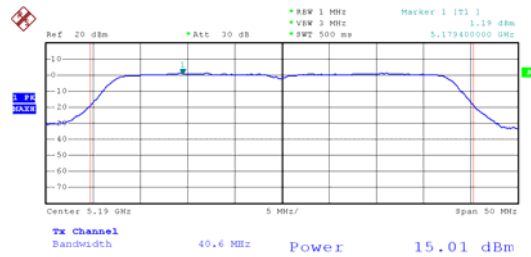
26dBc Occupied Bandwidth:

Channel 01



Peak Transmit Power:

Channel 01



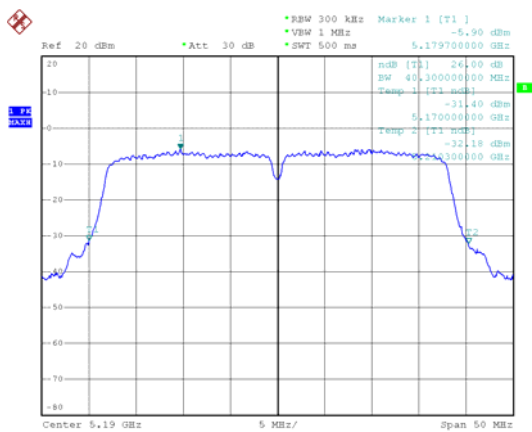
Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN(5190 MHz) (Antenna A+B)

Peak Transmit Power Measurement: (Antenna A)

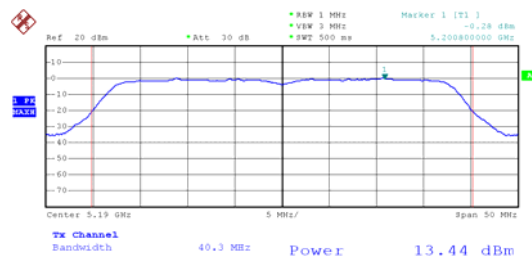
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5190	40.3	13.44

Limits (dBm)
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 40.3\text{MHz}) = 20.05 \text{ dBm}$

**26dBc Occupied Bandwidth:
Channel 01**



**Peak Transmit Power:
Channel 01**



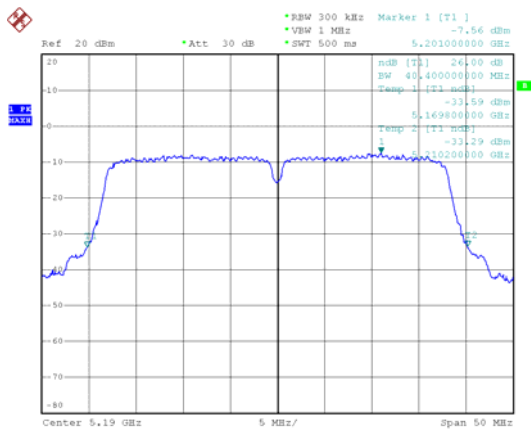
Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN(5190 MHz) (Antennal A+B)

Peak Transmit Power Measurement: (Antenna B)

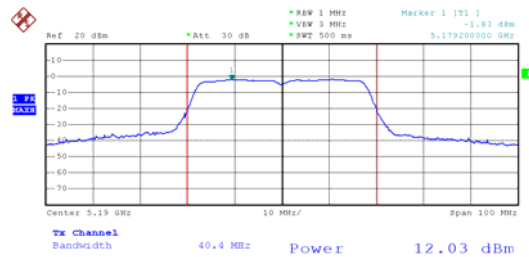
Channel No.	Frequency (MHz)	26dBc Occupied Bandwidth (MHz)	Measurement Level (dBm)
01	5190	40.4	12.03

Limits (dBm)
50mW (17dBm) or $4\text{dBm} + 10 \log (B = 40.4\text{MHz}) = 20.06 \text{ dBm}$

**26dBc Occupied Bandwidth:
Channel 01**



**Peak Transmit Power:
Channel 01**



Product : Notebook P.C.
 Test Item : Peak Transmit Power
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN(5190 MHz) (Antennal A+B)

Data Speed: HT08Mbps (Antenna A+B)

Channel No.	Frequency (MHz)	DataRate (Mbps)	Peak Power Ch. A (dBm)	Peak Power Ch. A (mW)	Peak Power Ch. B (dBm)	Peak Power Ch. B (mW)	Peak Power Ch. A+B (dBm)	Required Limit (dBm)	Result
01	5190.000	HT08	13.440	22.080	12.030	15.959	15.802	20.06	Pass

P.S: Peak Power Ch. A+B=10*Log (Ch.A(mW)+ Ch.B(mW))

4. Peak Power Spectral Density

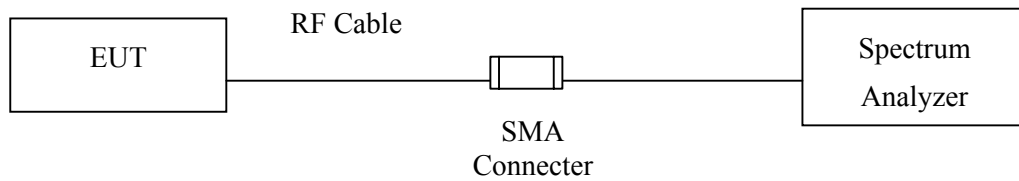
4.1. Test Equipment

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

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Nov, 2006

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. Limits

- iv. For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
- v. For the band 5.25-5.35 GHz, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
- vi. For the band 5.725-5.825 GHz, the peak power spectral density shall not exceed 17 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

4.4. Uncertainty

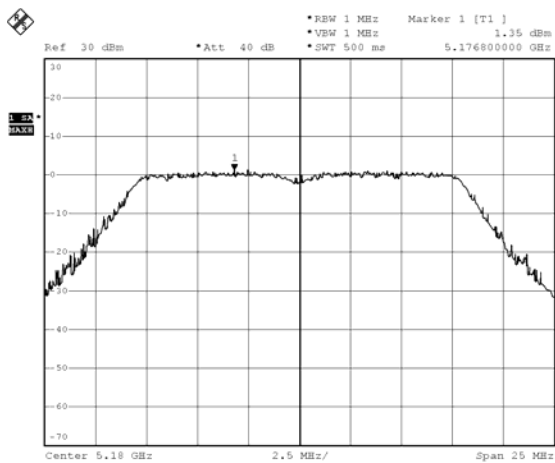
± 1.27 dB

4.5. Test Result of Peak Power Spectral Density

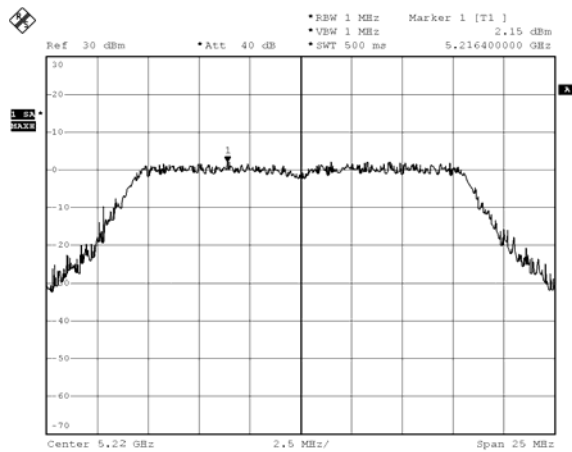
Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (Antenna A)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
01	5180.00	1.35	< 4	Pass
03	5220.00	2.15	< 4	Pass
04	5240.00	1.02	< 4	Pass

Channel 01:

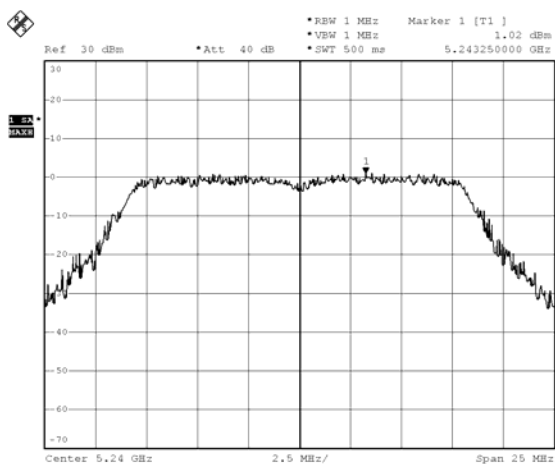


Channel 03:



PN1

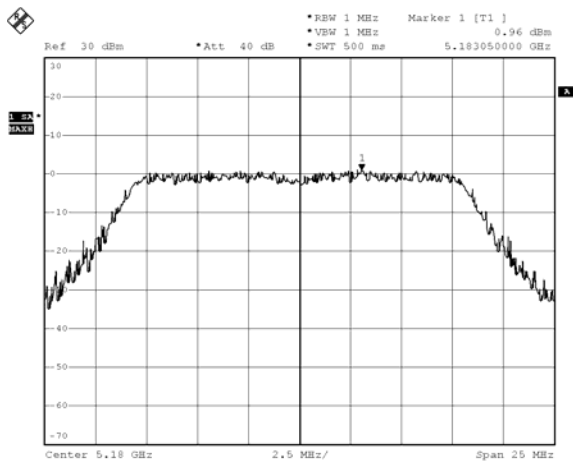
Channel 04:



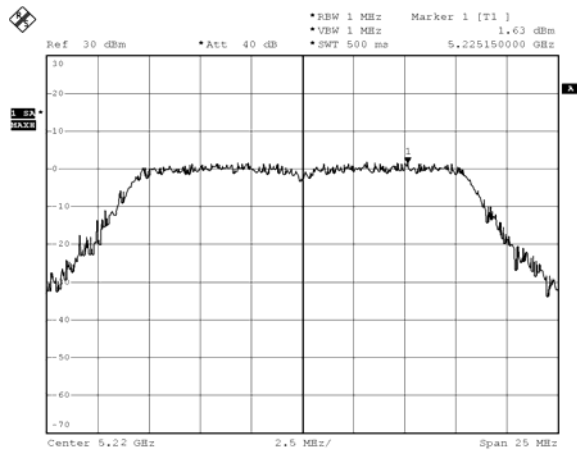
Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (Antenna B)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
01	5180.00	0.96	< 4	Pass
03	5220.00	1.63	< 4	Pass
04	5240.00	1.01	< 4	Pass

Channel 01:

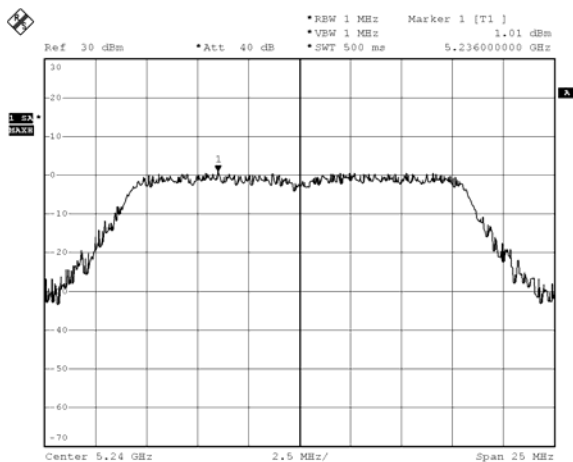


Channel 03:



FN1

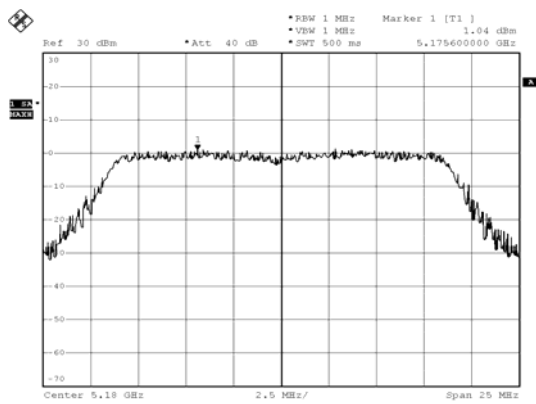
Channel 04:



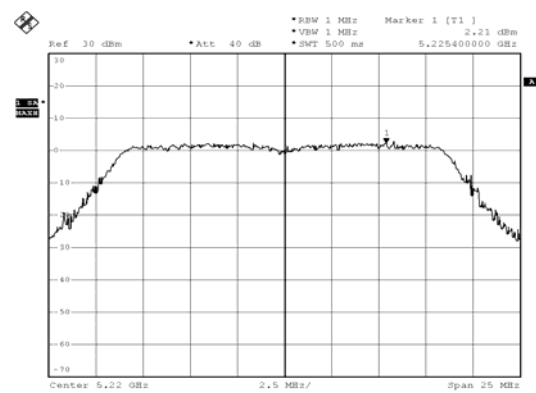
Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (Antenna A)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
01	5180.00	1.04	< 4	Pass
03	5220.00	2.21	< 4	Pass
04	5240.00	2.18	< 4	Pass

Channel 01:

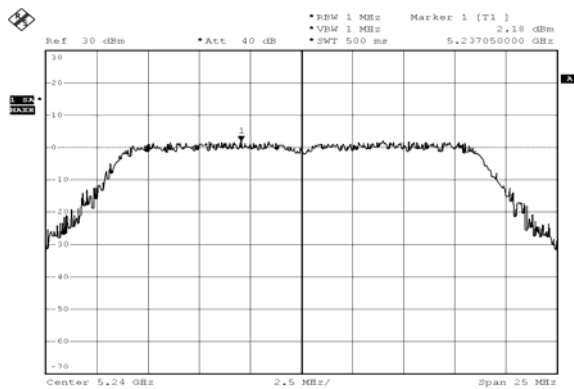


Channel 03:



PN1

Channel 04:

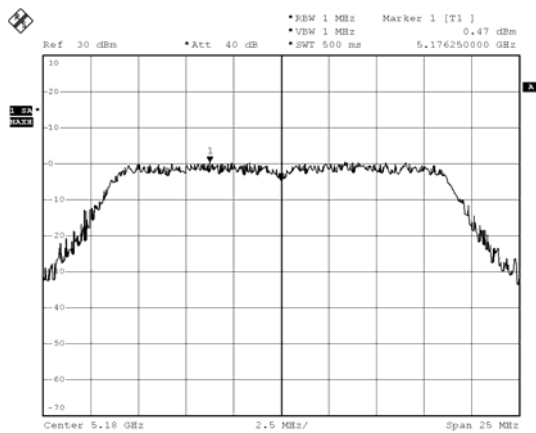


PN1

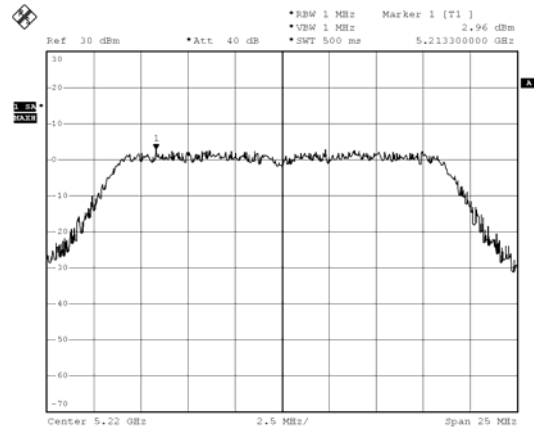
Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (Antenna B)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
01	5180.00	0.47	< 4	Pass
03	5220.00	2.96	< 4	Pass
04	5240.00	2.98	< 4	Pass

Channel 01:

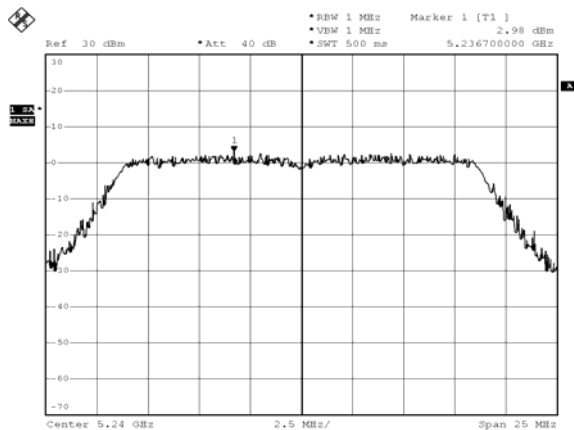


Channel 03:



PN1

Channel 04:

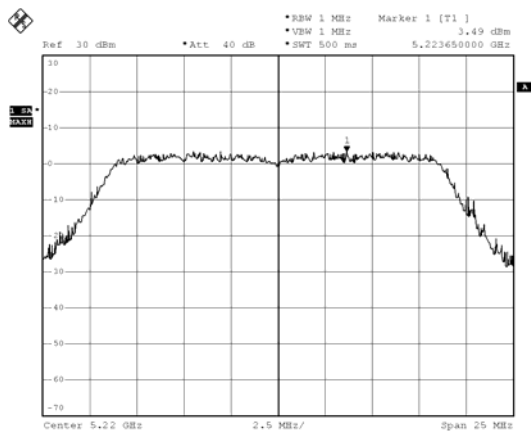


PN1

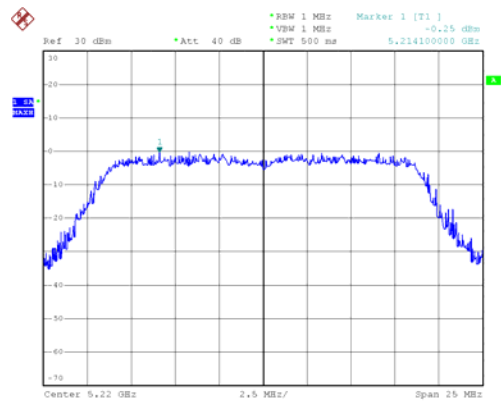
Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (Antenna A+B)

Channel No.	Frequency (MHz)	Measurement Level (dBm)
01	5180.00	-1.78
03	5220.00	-0.25
04	5240.00	-0.01

Channel 01: (Antenna A)

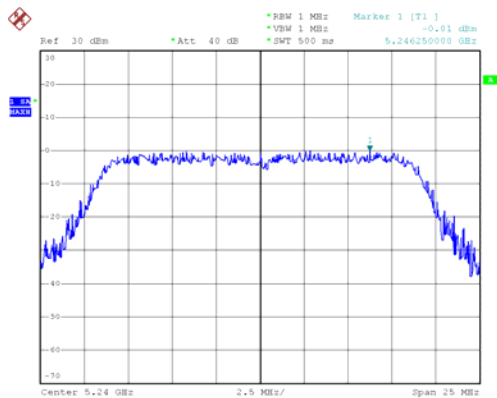


Channel 03: (Antenna A)



PN1
 Date: 10.JUL.2007 20:42:37

Channel 04: (Antenna A)

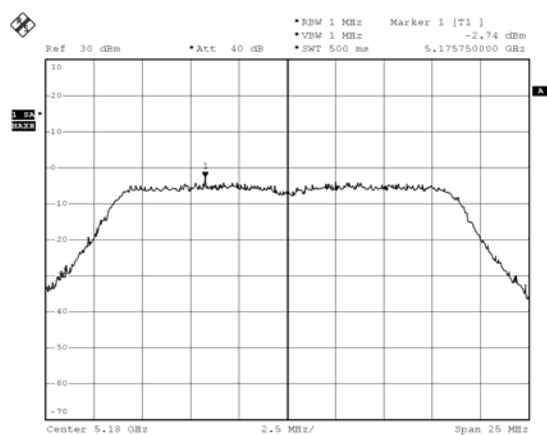


PN1
 Date: 10.JUL.2007 20:45:44

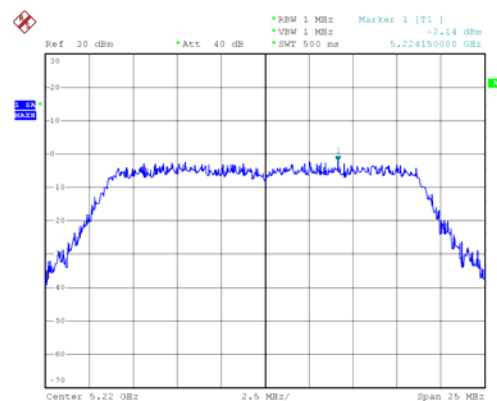
Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (Antenna A+B)

Channel No.	Frequency (MHz)	Measurement Level (dBm)
01	5180.00	-2.74
03	5220.00	-2.14
04	5240.00	-1.35

Channel 01: (Antenna B)

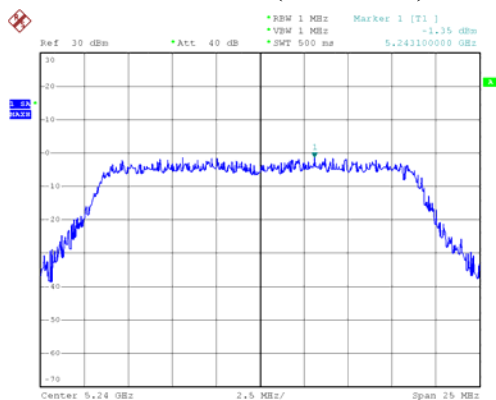


Channel 03: (Antenna B)



FN1
 Date: 10.JUL.2007 20:43:39

Channel 04: (Antenna B)



FN1
 Date: 10.JUL.2007 20:45:03

Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (Antennal A+B)

Data Speed: HT8Mbps (Antenna A+B)

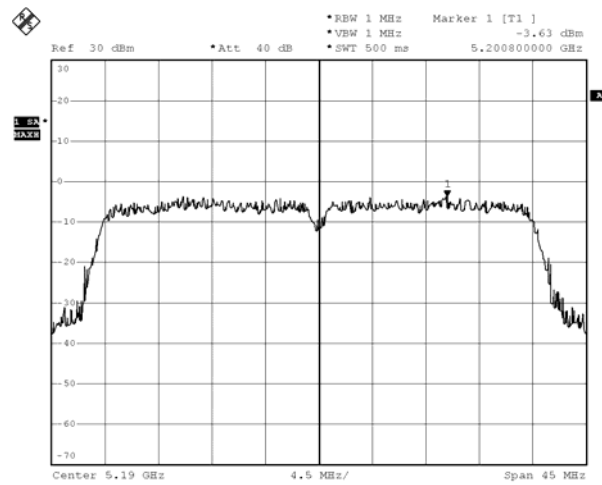
Channel No.	Frequency (MHz)	Data Rate (Mbps)	Power Density Ch. A (dBm)	Power Density Ch. A (mW)	Power Density Ch. B (dBm)	Power Density Ch. B (mW)	Power Density Ch. A+B (dBm)	Required Limit (dBm)	Result
01	5180.00	HT08	-1.780	0.664	-2.740	0.532	0.777	< 4dBm	Pass
03	5220.00	HT08	-0.250	0.944	-2.140	0.611	1.917	< 4dBm	Pass
04	5240.00	HT08	-0.010	0.998	-1.350	0.733	2.382	< 4dBm	Pass

P.S: Power Density Ch. A+B=10*Log (Ch.A(mW)+ Ch.B(mW))

Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (Antenna A)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
01	5190	-3.63	< 4	Pass

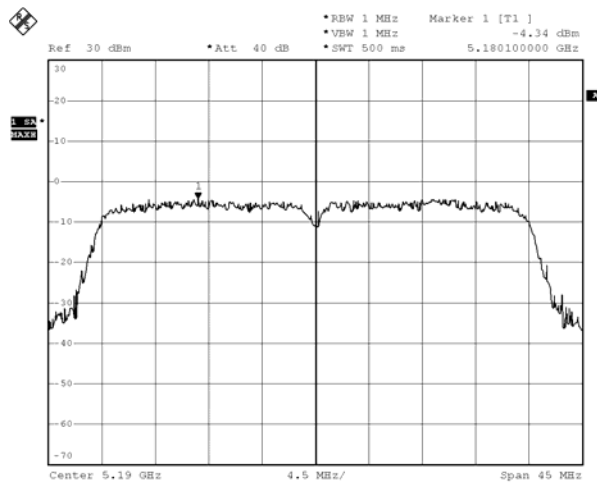
Channel 01:



Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna B)

Channel No.	Frequency (MHz)	Measurement Level (dBm)	Required Limit (dBm)	Result
01	5190	-4.34	< 4	Pass

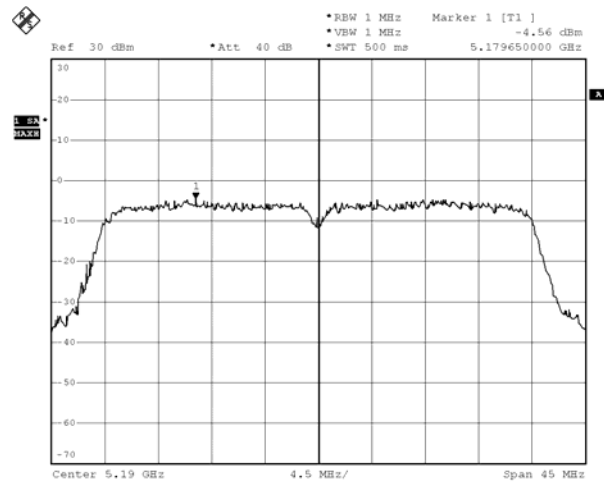
Channel 01:



Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190 MHz)(Antennal A+B)

Channel No.	Frequency (MHz)	Measurement Level (dBm)
01	5190	-4.56

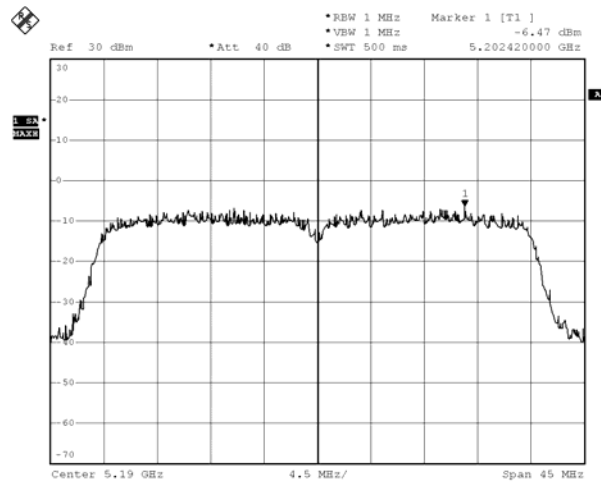
Channel 01: (Antenna A)



Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A+B)

Channel No.	Frequency (MHz)	Measurement Level (dBm)
01	5190	-6.47

Channel 01: (Antenna B)



Product : Notebook P.C.
 Test Item : Peak Power Spectral Density
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A+B)

Data Speed: HT8Mbps (Antenna A+B)

Channel No.	Frequency (MHz)	Data Rate (Mbps)	Power Density Ch. A (dBm)	Power Density Ch. A (mW)	Power Density Ch. B (dBm)	Power Density Ch. B (mW)	Power Density Ch. A+B (dBm)	Required Limit (dBm)	Result
01	5190	HT08	-4.56	0.349	-6.47	0.225	-2.400	< 4dBm	Pass

P.S: Power Density Ch. A+B=10*Log (Ch.A(mW)+ Ch.B(mW))

5. Peak Excursion

5.1. Test Equipment

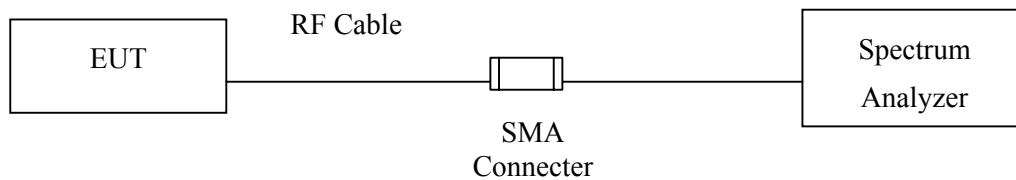
The following test equipments are used during the radiated emission tests:

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
X	Spectrum Analyzer	R&S	FSP40 / 100170	Nov, 2006

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

Conduction Power Measurement



5.3. Limits

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

5.4. Uncertainty

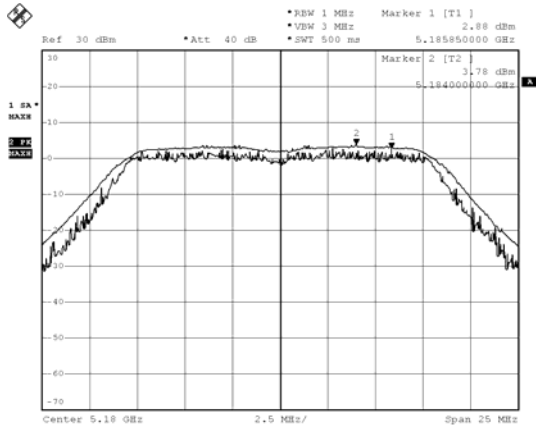
± 1.27 dB

5.5. Test Result of Peak Excursion

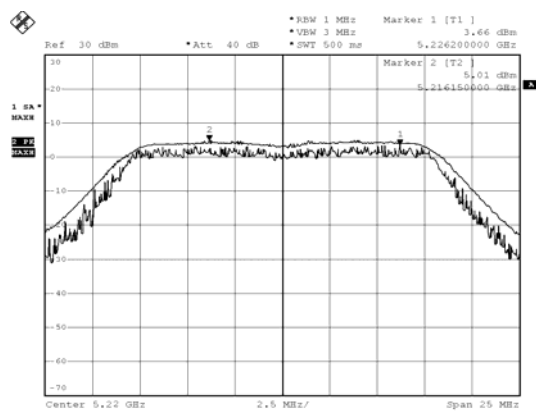
Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (Antenna A)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5180.00	0.9	≤ 13	Pass
03	5220.00	1.35	≤ 13	Pass
04	5240.00	1.28	≤ 13	Pass

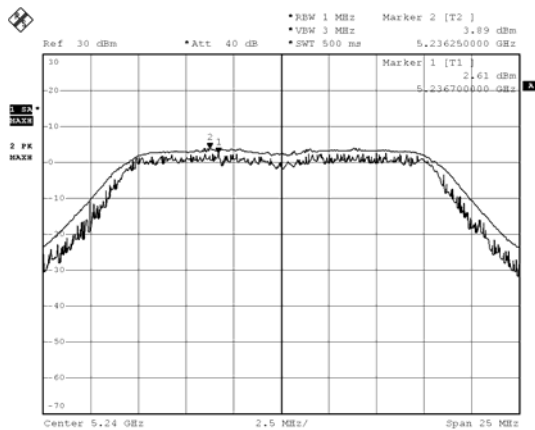
Channel 01 :



Channel 03:



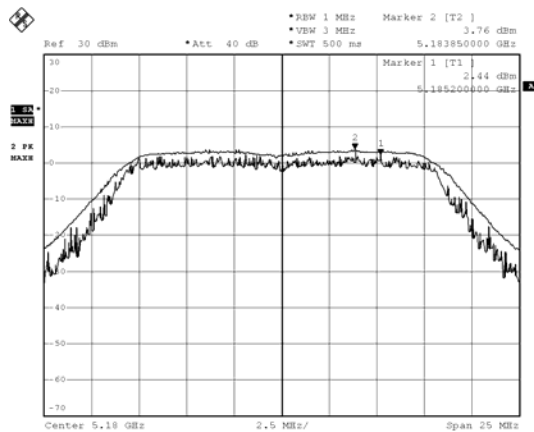
Channel 04:



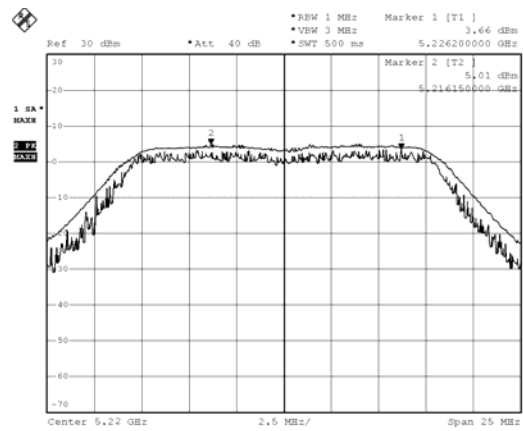
Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN(Antenna B)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5180.00	1.32	≤ 13	Pass
03	5220.00	1.35	≤ 13	Pass
04	5240.00	1.22	≤ 13	Pass

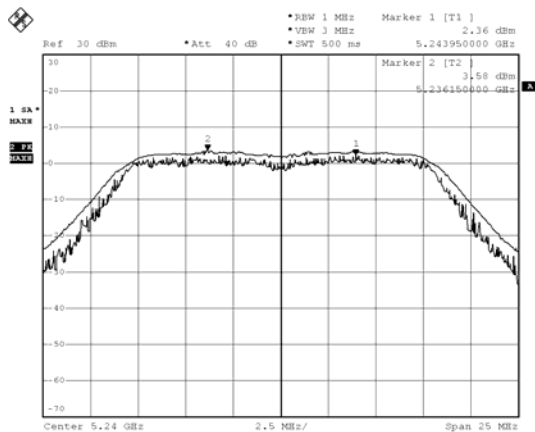
Channel 01 :



Channel 03:



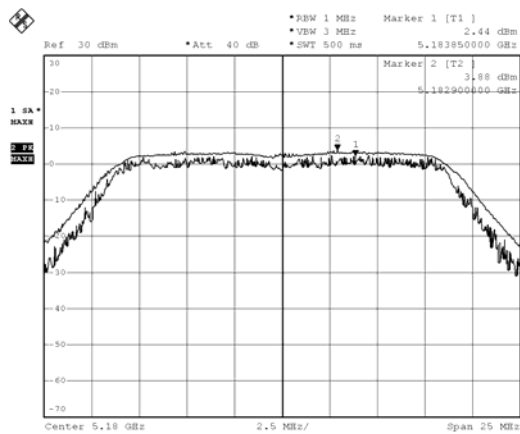
Channel 04:



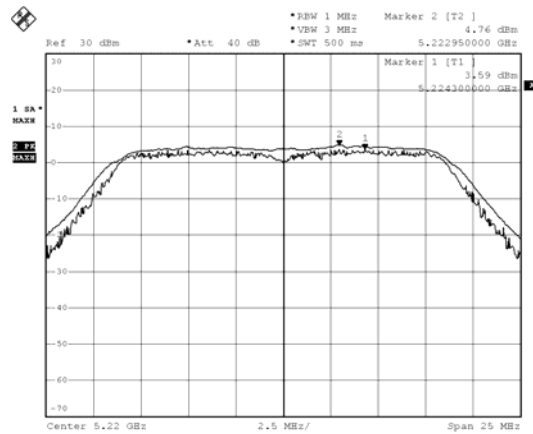
Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN(Antenna A)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5180.00	1.44	≤ 13	Pass
03	5220.00	1.17	≤ 13	Pass
04	5240.00	1.49	≤ 13	Pass

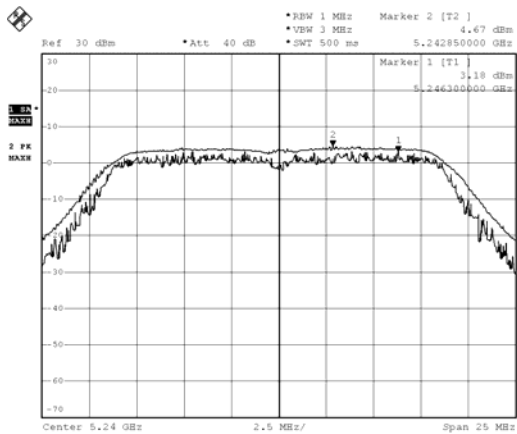
Channel 01 :



Channel 03 :



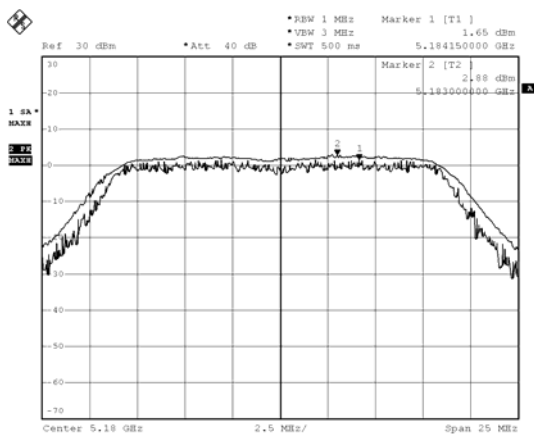
Channel 04 :



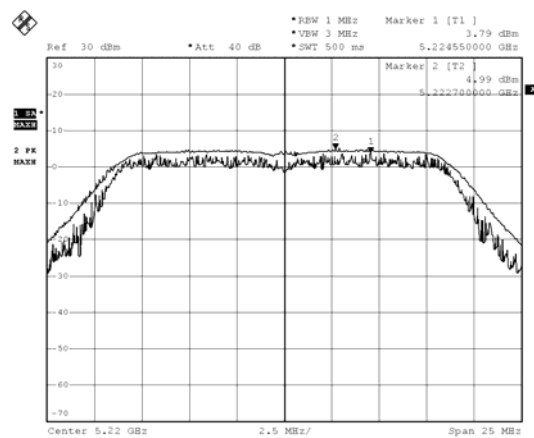
Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (Antenna B)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5180.00	1.23	≤ 13	Pass
03	5220.00	1.2	≤ 13	Pass
04	5240.00	1.14	≤ 13	Pass

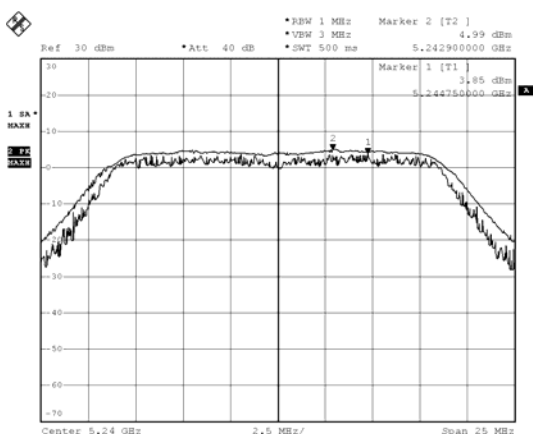
Channel 01 :



Channel 03 :



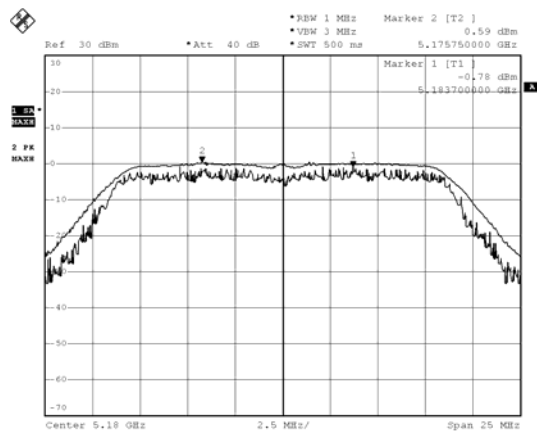
Channel 04 :



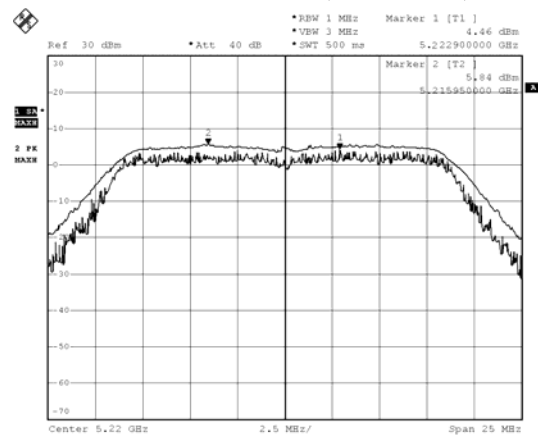
Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (Antenna A+B)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5180.00	1.37	≤ 13	Pass
03	5220.00	1.38	≤ 13	Pass
04	5240.00	1.03	≤ 13	Pass

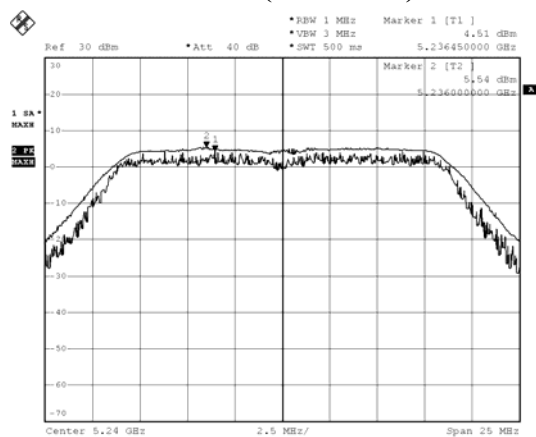
Channel 01 : (Antenna A)



Channel 03 : (Antenna A)



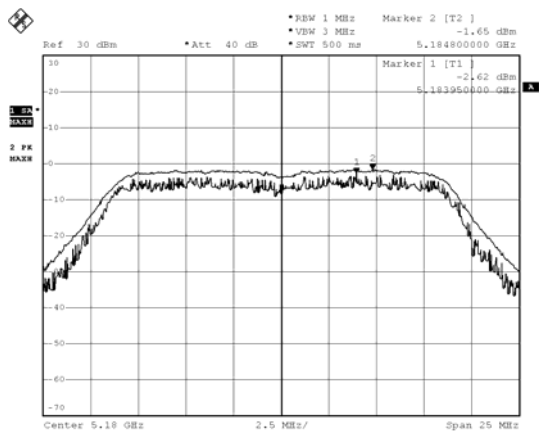
Channel 04 : (Antenna A)



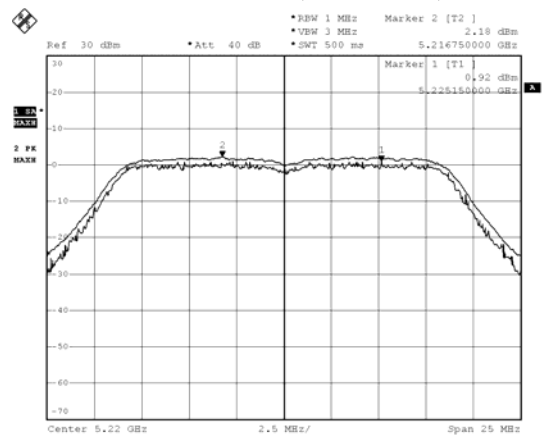
Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (Antenna A+B)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5180.00	0.97	≤ 13	Pass
03	5220.00	1.26	≤ 13	Pass
04	5240.00	1.58	≤ 13	Pass

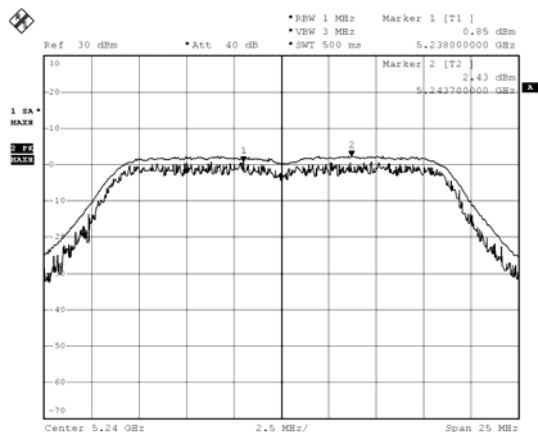
Channel 01 : (Antenna B)



Channel 03 : (Antenna B)



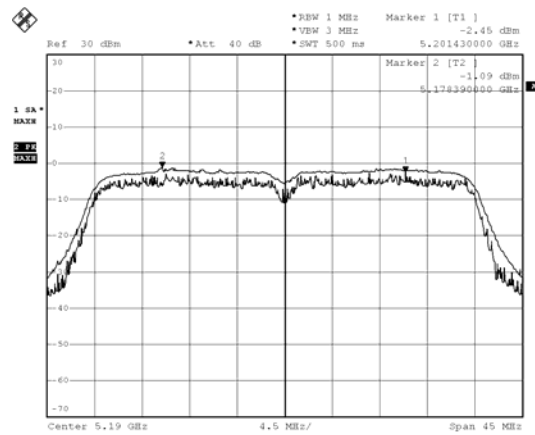
Channel 04 : (Antenna B)



Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (Antenna A)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5190.00	1.36	≤ 13	Pass

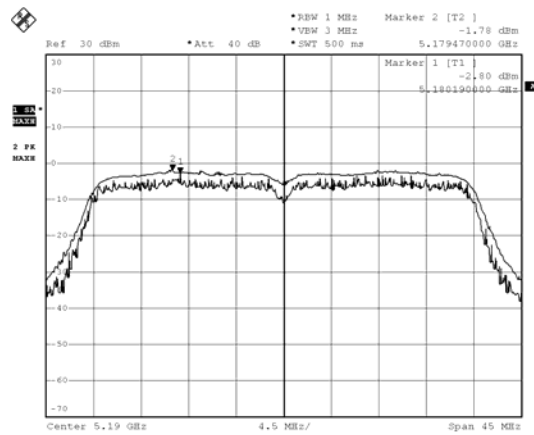
Channel 01 :



Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN(Antenna B)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5190.00	1.02	≤ 13	Pass

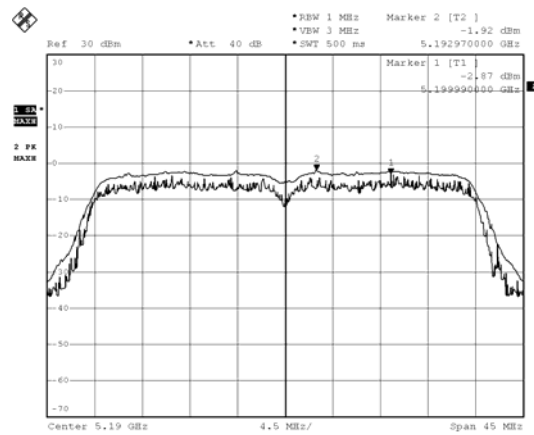
Channel 01 :



Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (Antenna A+B)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5190.00	0.95	≤ 13	Pass

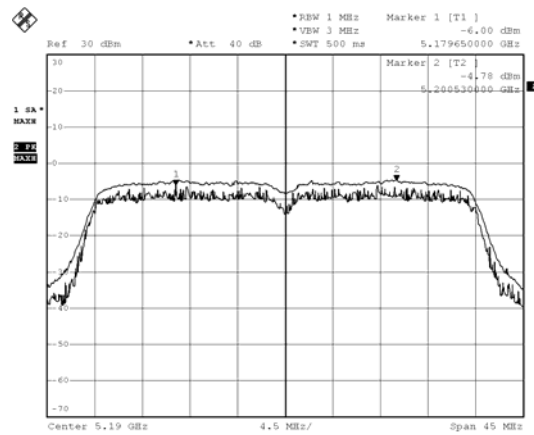
Channel 01 : (Antenna A)



Product : Notebook P.C.
 Test Item : Peak Excursion
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (Antenna A+B)

Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dB)	Result
01	5190.00	1.22	≤ 13	Pass

Channel 01 : (Antenna B)



6. Undesirable Emission

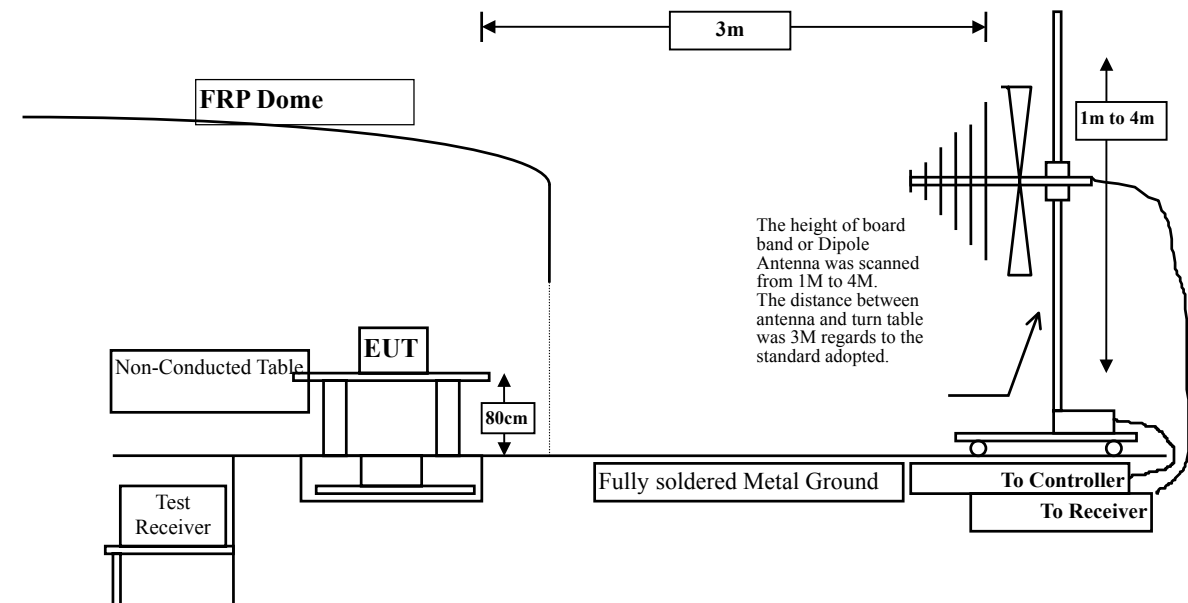
6.1. Test Equipment

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

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	X	Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2007
	X	Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2007
	X	Horn Antenna	ETS	3115 / 0005-6160	July, 2007
	X	Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 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.

6.2. Test Setup



6.3. Limits

- (1) For transmitters operating in the 5.15-5.25 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5.25-5.35 GHz band that generate emissions in the 5.15-5.25 GHz band must meet all applicable technical requirements for operation in the 5.15-5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5.15-5.25 GHz band.
- (3) For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz.
- (4) The field strength of emissions appearing within restricted bands of operation shall not exceed the limits in the Section 15.209.
- (5) Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	$\mu\text{V/m @3m}$	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 (μV)
 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.

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 C63.4:2001 on radiated measurement.

The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field strength 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 harmonics is checked.

6.5. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 1GHz

6.6. Test Result of Undesirable Emission

Product : Notebook P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5180MHz) (Antenna A)

Frequency MHz	Correct Factor dB	Reading Level dBuV	Measurement Level dBuV/m	Margin dB	Limit dBuV/m
Horizontal					
Peak Detector					
10360.000	11.765	36.005	47.770	-26.230	74.000
15540.000	14.859	35.081	49.939	-24.061	74.000
Average Detector					
--					
Vertical					
Peak Detector					
10360.000	11.952	37.832	49.783	-24.217	74.000
15540.000	13.868	36.376	50.244	-23.756	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
Test Item : Undesirable Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5180MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10360.000	11.952	39.249	51.200	-22.800	74.000
15540.000	13.868	35.716	49.584	-24.416	74.000

Average Detector

--

Vertical

Peak Detector

10360.000	11.952	37.511	49.462	-24.538	74.000
15540.000	13.868	36.603	50.471	-23.529	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10440.000	12.285	37.912	50.197	-23.803	74.000
15660.000	13.340	36.196	49.536	-24.464	74.000

Average Detector

--

Vertical

Peak Detector

10440.000	12.285	37.264	49.549	-24.451	74.000
15660.000	13.340	36.218	49.558	-24.442	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
Test Item : Undesirable Emission
Test Site : No.3 OATS
Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10440.000	12.285	38.475	50.760	-23.240	74.000
15660.000	13.340	35.813	49.153	-24.847	74.000

Average Detector

--

Vertical

Peak Detector

10440.000	12.285	37.926	50.211	-23.789	74.000
15660.000	13.340	36.407	49.747	-24.253	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5240MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10480.000	12.451	37.220	49.671	-24.329	74.000
15720.000	13.076	36.801	49.877	-24.123	74.000

Average Detector

--

Vertical

Peak Detector

10480.000	12.451	37.349	49.800	-24.200	74.000
15720.000	13.076	36.622	49.698	-24.302	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5240MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10480.000	12.451	37.222	49.673	-24.327	74.000
15720.000	13.076	37.299	50.375	-23.625	74.000

Average Detector

--

Vertical

Peak Detector

10480.000	12.451	38.188	50.639	-23.361	74.000
15720.000	13.076	35.959	49.035	-24.965	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz °
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz °
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180 MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
10360.000	11.952	37.468	49.419	-24.581	74.000
15540.000	13.868	35.655	49.523	-24.477	74.000
Average Detector					
--					
Vertical					
Peak Detector					
10360.000	11.952	37.939	49.890	-24.110	74.000
15540.000	13.868	36.853	50.721	-23.279	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180 MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10360.000	11.952	36.856	48.807	-25.193	74.000
15540.000	13.868	35.981	49.849	-24.151	74.000

Average Detector

--

Vertical

Peak Detector

10360.000	11.952	37.261	49.212	-24.788	74.000
15540.000	13.868	36.244	50.112	-23.888	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN(5180 MHz) (Antenna A+ B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10360.000	11.952	37.259	49.210	-24.790	74.000
15540.000	13.868	36.157	50.025	-23.975	74.000

Average Detector

--

Vertical

Peak Detector

10360.000	11.952	37.989	49.940	-24.060	74.000
15540.000	13.868	36.178	50.046	-23.954	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220 MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10440.000	12.285	37.351	49.636	-24.364	74.000
15660.000	13.340	35.494	48.834	-25.166	74.000

Average Detector

--

Vertical

Peak Detector

10440.000	12.285	37.007	49.292	-24.708	74.000
15660.000	13.340	35.664	49.004	-24.996	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN 5220 MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10440.000	12.285	38.648	50.933	-23.067	74.000
15660.000	13.340	35.859	49.199	-24.801	74.000

Average Detector

--

Vertical

Peak Detector

10440.000	12.285	37.749	50.034	-23.966	74.000
15660.000	13.340	35.014	48.354	-25.646	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220 MHz) (Antenna A+ B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10440.000	12.285	35.449	47.734	-26.266	74.000
15660.000	13.340	34.351	47.691	-26.309	74.000

Average Detector

--

Vertical

Peak Detector

10440.000	12.285	37.362	49.647	-24.353	74.000
15660.000	13.340	35.241	48.581	-25.419	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240 MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10480.000	12.451	37.233	49.684	-24.316	74.000
15720.000	13.076	37.090	50.166	-23.834	74.000

Average Detector

--

Vertical

Peak Detector

10480.000	12.451	37.478	49.929	-24.071	74.000
15720.000	13.076	36.549	49.625	-24.375	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240 MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10480.000	12.451	37.638	50.089	-23.911	74.000
15720.000	13.076	37.134	50.210	-23.790	74.000

Average Detector

--

Vertical

Peak Detector

10480.000	12.451	37.892	50.343	-23.657	74.000
15720.000	13.076	37.612	50.688	-23.312	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240 MHz) (Antenna A+ B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
10480.000	12.451	38.143	50.594	-23.406	74.000
15720.000	13.076	37.405	50.481	-23.519	74.000
Average Detector					
--					
Vertical					
Peak Detector					
10480.000	12.451	37.536	49.987	-24.013	74.000
15720.000	13.076	36.383	49.459	-24.541	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190 MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10380.000	12.042	37.512	49.554	-24.446	74.000
15570.000	13.736	36.711	50.446	-23.554	74.000

Average Detector

--

Vertical

Peak Detector

10380.000	12.042	37.109	49.151	-24.849	74.000
15570.000	13.736	36.114	49.849	-24.151	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190 MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

10380.000	12.042	37.184	49.226	-24.774	74.000
15570.000	13.736	35.895	49.630	-24.370	74.000

Average Detector

--

Vertical

Peak Detector

10380.000	12.042	36.439	48.481	-25.519	74.000
15570.000	13.736	36.655	50.390	-23.610	74.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190 MHz) (Antenna A+B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
10380.000	12.042	37.413	49.455	-24.545	74.000
15570.000	13.736	36.589	50.324	-23.676	74.000
Average Detector					
--					
Vertical					
Peak Detector					
10380.000	12.042	36.746	48.788	-25.212	74.000
15570.000	13.736	35.883	49.618	-24.382	74.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Measurement 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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
209.450	9.804	20.439	30.243	-13.257	43.500
291.900	13.751	21.249	35.000	-11.000	46.000
502.875	18.517	12.664	31.181	-14.819	46.000
667.772	20.663	8.882	29.545	-16.455	46.000
798.725	21.908	13.269	35.177	-10.823	46.000
903.000	22.061	10.786	32.847	-13.153	46.000
Average Detector					
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Vertical					
Peak Detector					
168.225	9.724	20.460	30.184	-13.316	43.500
250.675	13.346	27.331	40.677	-5.323	46.000
367.075	16.475	17.022	33.497	-12.503	46.000
619.275	21.591	9.197	30.788	-15.212	46.000
752.650	23.201	5.416	28.617	-17.383	46.000
891.525	22.996	8.086	31.082	-14.918	46.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5220MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
199.745	9.715	20.552	30.267	-13.233	43.500
335.550	14.410	15.247	29.657	-16.343	46.000
418.000	17.672	12.815	30.486	-15.514	46.000
585.232	20.118	9.773	29.892	-16.108	46.000
752.650	21.251	12.248	33.499	-12.501	46.000
837.525	21.962	12.455	34.416	-11.584	46.000

Average Detector

--

Vertical

Peak Detector

168.225	9.724	21.043	30.767	-12.733	43.500
250.675	13.346	26.835	40.181	-5.819	46.000
502.875	18.472	14.397	32.869	-13.131	46.000
619.275	21.591	9.362	30.953	-15.047	46.000
752.365	23.199	5.958	29.157	-16.843	46.000
837.525	21.486	9.468	30.954	-15.046	46.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
199.750	9.716	22.356	32.072	-11.428	43.500
301.600	14.066	18.196	32.262	-13.738	46.000
398.600	16.458	14.526	30.984	-15.016	46.000
585.325	20.122	9.412	29.533	-16.467	46.000
752.650	21.251	15.370	36.621	-9.379	46.000
900.575	22.049	10.744	32.794	-13.206	46.000
Average Detector					
--					
Vertical					
Peak Detector					
168.225	9.724	21.765	31.489	-12.011	43.500
291.900	13.784	19.406	33.190	-12.810	46.000
401.025	18.298	12.300	30.598	-15.402	46.000
619.272	21.591	9.999	31.590	-14.410	46.000
752.650	23.201	5.905	29.106	-16.894	46.000
900.575	23.649	4.543	28.192	-17.808	46.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

168.225	10.202	17.292	27.494	-16.006	43.500
291.960	13.760	17.864	31.624	-14.376	46.000
418.000	17.672	12.828	30.500	-15.500	46.000
607.150	20.225	9.073	29.298	-16.702	46.000
752.650	21.251	13.359	34.610	-11.390	46.000
837.525	21.962	12.914	34.875	-11.125	46.000

Average Detector

--

Vertical

Peak Detector

88.200	8.976	22.222	31.198	-12.302	43.500
250.675	13.346	27.114	40.460	-5.540	46.000
398.600	17.966	13.019	30.985	-15.015	46.000
619.275	21.591	10.126	31.717	-14.283	46.000
764.775	22.857	7.049	29.906	-16.094	46.000
919.975	24.166	4.991	29.157	-16.843	46.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
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 P.C.
Test Item : Undesirable Emission
Test Site : No.3 OATS
Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5220MHz) (Antenna A+B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

168.225	10.202	20.496	30.698	-12.802	43.500
291.900	13.751	17.822	31.573	-14.427	46.000
418.000	17.672	12.206	29.878	-16.122	46.000
585.325	20.122	9.053	29.174	-16.826	46.000
752.650	21.251	12.600	33.851	-12.149	46.000
837.525	21.962	12.046	34.007	-11.993	46.000

Average Detector

--

Vertical

Peak Detector

168.225	9.724	22.433	32.157	-11.343	43.500
250.675	13.346	28.154	41.500	-4.500	46.000
367.075	16.475	16.435	32.910	-13.090	46.000
619.275	21.591	9.233	30.824	-15.176	46.000
752.650	23.201	6.128	29.329	-16.671	46.000
900.575	23.649	5.084	28.733	-17.267	46.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
199.750	9.716	22.116	31.832	-11.668	43.500
291.900	13.751	19.519	33.270	-12.730	46.000
502.875	18.517	13.855	32.372	-13.628	46.000
667.774	20.663	9.944	30.607	-15.393	46.000
798.725	21.908	12.618	34.526	-11.474	46.000
898.150	22.135	11.413	33.548	-12.452	46.000
Average Detector					
--					
Vertical					
Peak Detector					
168.225	9.724	22.431	32.155	-11.345	43.500
291.900	13.784	17.905	31.689	-14.311	46.000
401.025	18.298	11.280	29.578	-16.422	46.000
619.275	21.591	9.397	30.988	-15.012	46.000
752.650	23.201	7.839	31.040	-14.960	46.000
919.975	24.166	7.850	32.016	-13.984	46.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m

Horizontal

Peak Detector

199.750	9.716	20.820	30.536	-12.964	43.500
291.900	13.751	18.106	31.857	-14.143	46.000
502.875	18.517	14.375	32.892	-13.108	46.000
667.775	20.663	9.163	29.826	-16.174	46.000
793.865	22.167	14.933	37.100	-8.900	46.000
898.150	22.135	11.310	33.445	-12.555	46.000

Average Detector

--

Vertical

Peak Detector

168.225	9.724	23.930	33.654	-9.846	43.500
250.675	13.346	27.614	40.960	-5.040	46.000
367.075	16.475	16.060	32.535	-13.465	46.000
619.275	21.591	9.153	30.744	-15.256	46.000
752.650	23.201	7.895	31.096	-14.904	46.000
903.000	23.661	5.265	28.926	-17.074	46.000

Average Detector

--

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
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 P.C.
 Test Item : Undesirable Emission
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A+B)

Frequency	Correct	Reading	Measurement	Margin	Limit
MHz	Factor	Level	Level		
	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector					
199.750	9.716	20.456	30.172	-13.328	43.500
367.075	15.892	16.531	32.423	-13.577	46.000
502.875	18.517	14.084	32.601	-13.399	46.000
667.775	20.663	8.617	29.280	-16.720	46.000
801.150	21.771	13.479	35.250	-10.750	46.000
903.000	22.061	12.068	34.129	-11.871	46.000
Average Detector					
--					
Vertical					
Peak Detector					
168.225	9.724	24.457	34.181	-9.319	43.500
250.675	13.346	27.954	41.300	-4.700	46.000
502.875	18.472	15.290	33.762	-12.238	46.000
667.775	19.949	11.251	31.200	-14.800	46.000
801.150	21.828	8.358	30.186	-15.814	46.000
919.975	24.166	4.483	28.649	-17.351	46.000
Average Detector					
--					

Note:

1. All Readings below 1GHz are Quasi-Peak, above are average value.
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.

7. Band Edge

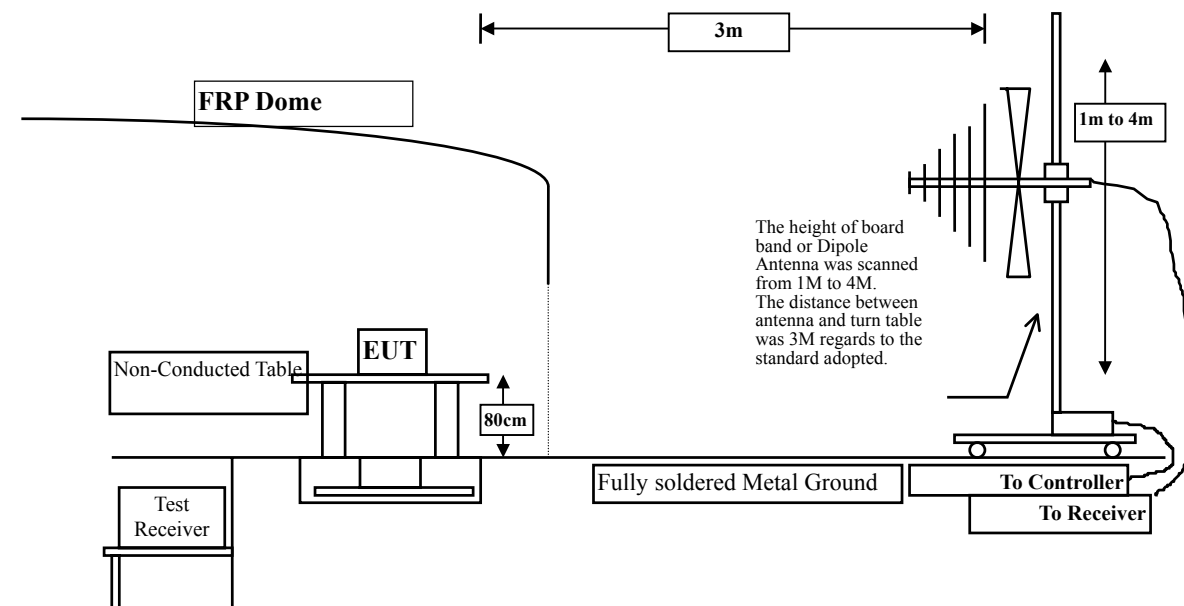
7.1. Test Equipment

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

Test Site		Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	X	Test Receiver	R & S	ESI 26 / 838786 / 004	May, 2007
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2007
	X	Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May, 2007
	X	Horn Antenna	ETS	3115 / 0005-6160	July, 2006
	X	Pre-Amplifier	QTK	QTK-AMP-01 / 0001	July, 2006

7.2. Test Setup

RF Radiated Measurement:



7.3. Limits

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

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.

7.4. 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 C63.4:1992 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

7.5. Uncertainty

± 3.8 dB below 1GHz

± 3.9 dB above 1GHz

7.6. Test Result of Band Edge

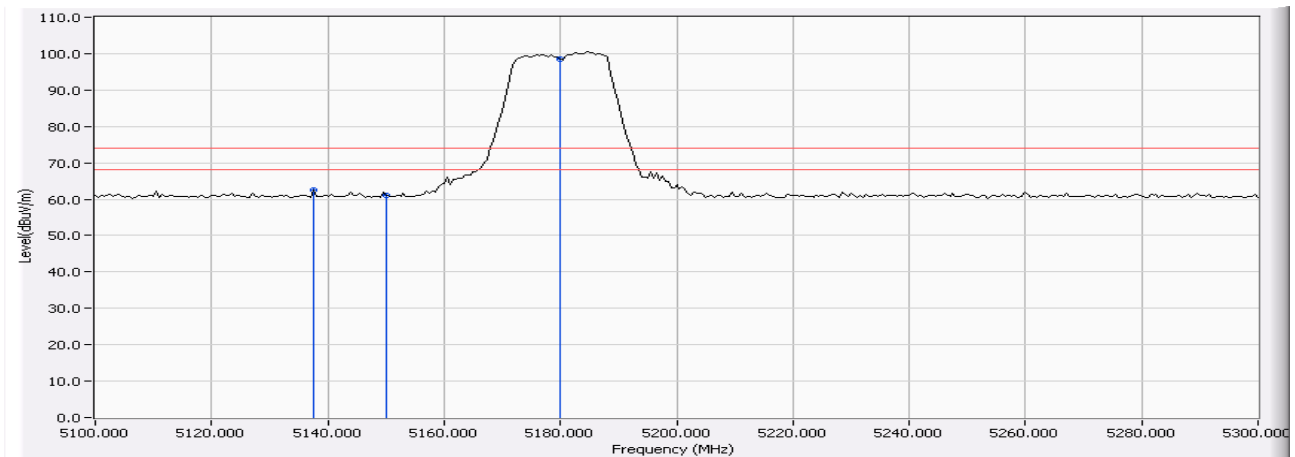
Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5180MHz) (Antenna A)

RF Radiated Measurement (Horizontal):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5137.500	3.983	58.539	62.522	74.00	54.00	Pass
01(Average)	5137.500	3.983	34.680	38.663	74.00	54.00	Pass

Figure Channel 01:

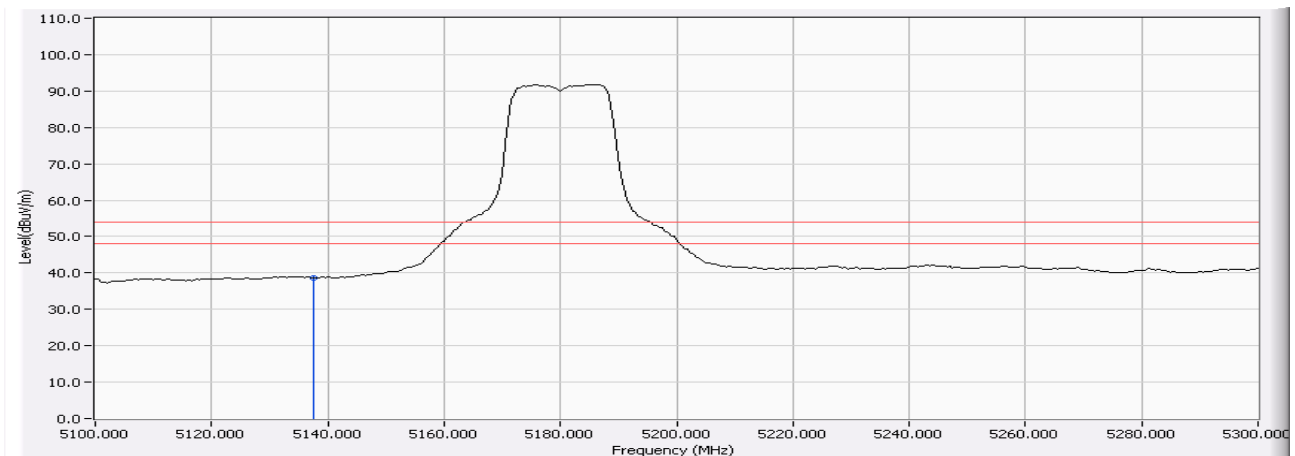
Horizontal (Peak)



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

Figure Channel 01:

Horizontal (Average)



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

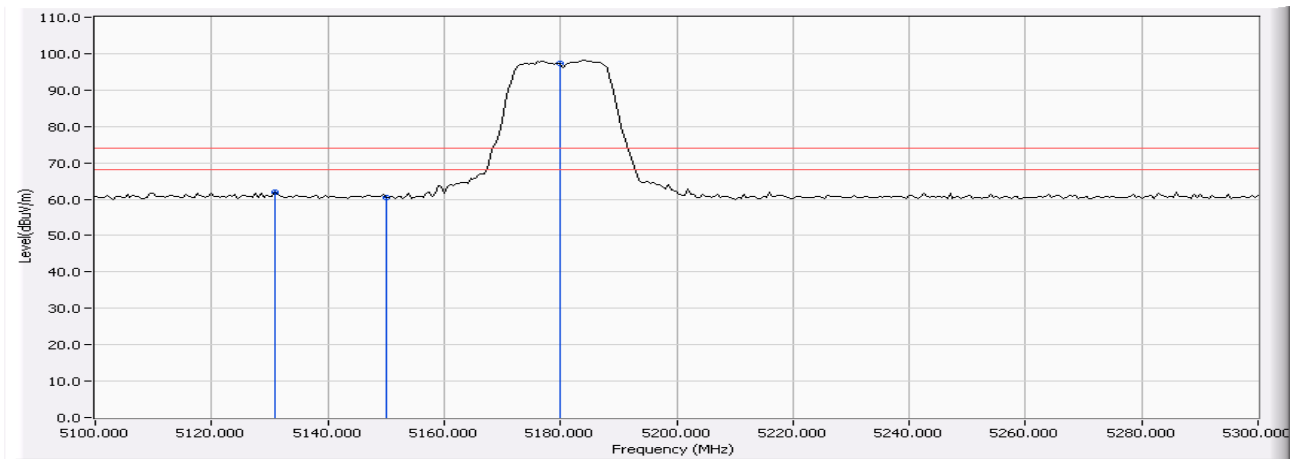
Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5180MHz) (Antenna A)

RF Radiated Measurement (Vertical):

Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5131.000	3.978	57.813	61.791	74.00	54.00	Pass
01(Average)	5131.000	3.978	33.665	37.643	74.00	54.00	Pass

Figure Channel 01:

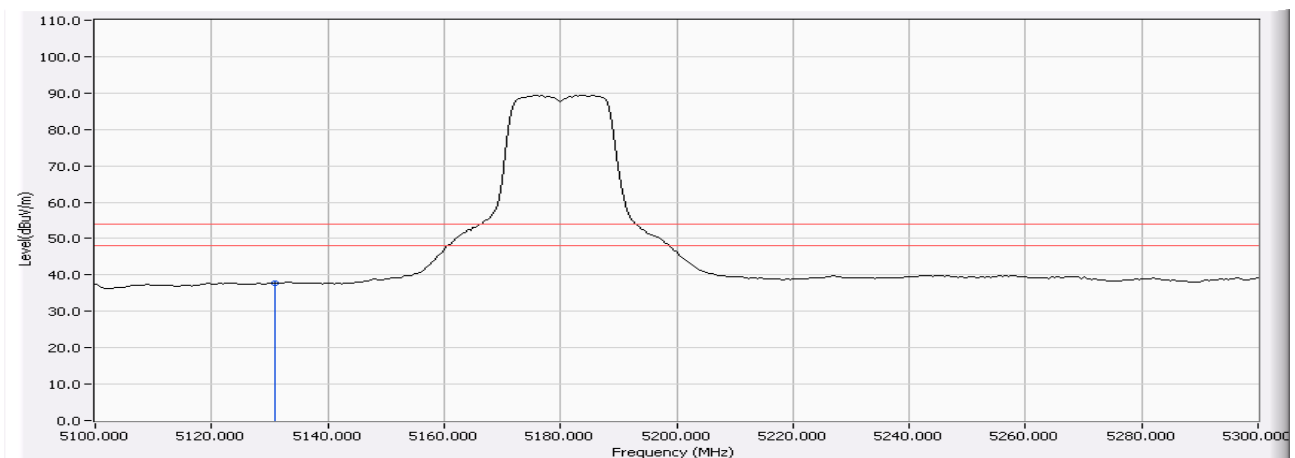
Vertical (Peak)



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

Figure Channel 01:

Vertical (Average)



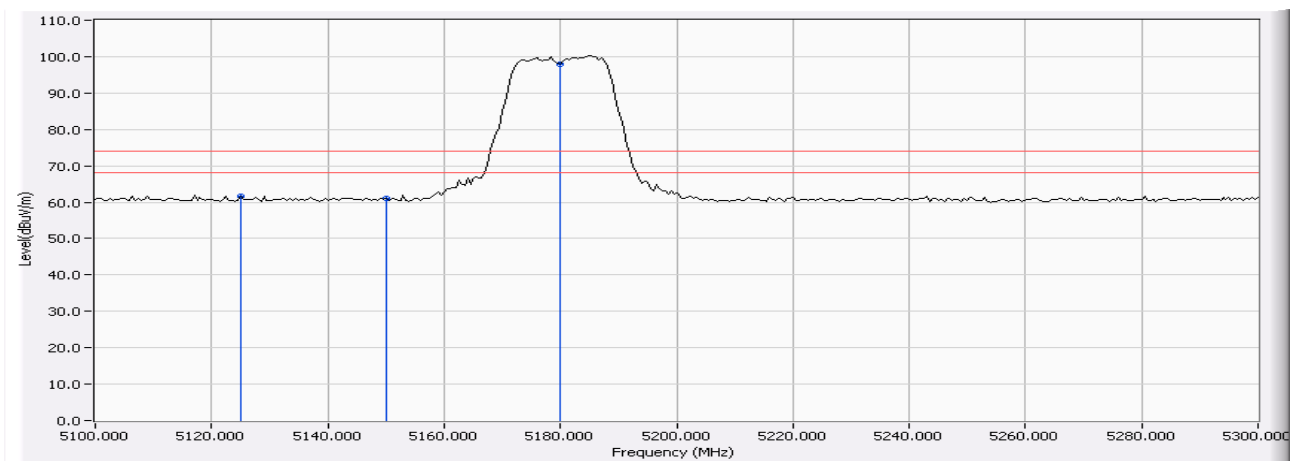
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5180MHz) (Antenna B)

RF Radiated Measurement (Horizontal):

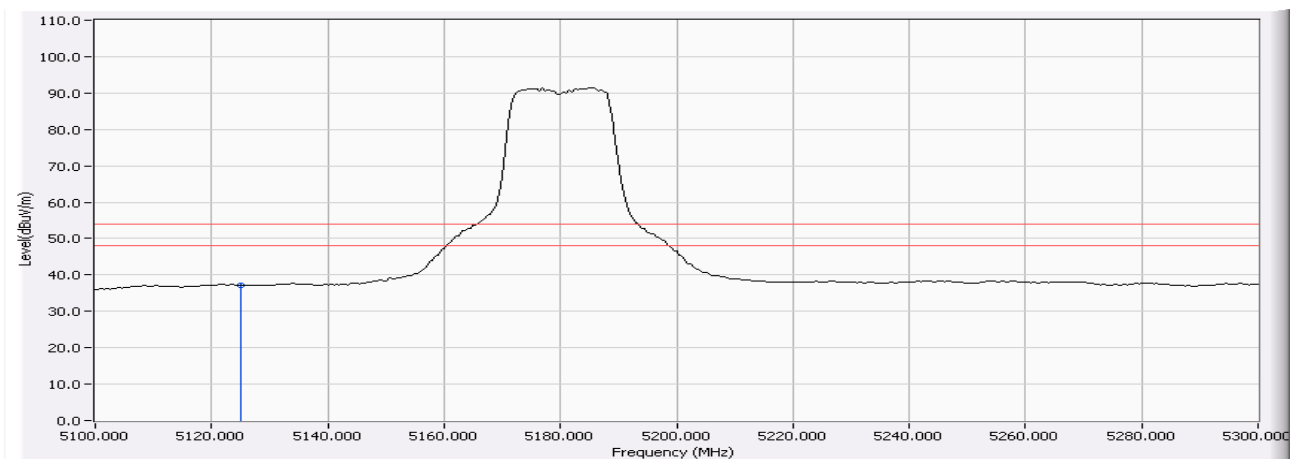
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5125.000	3.973	57.675	61.648	74.00	54.00	Pass
01(Average)	5125.000	3.973	33.239	37.212	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



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

Figure Channel 01: Horizontal (Average)



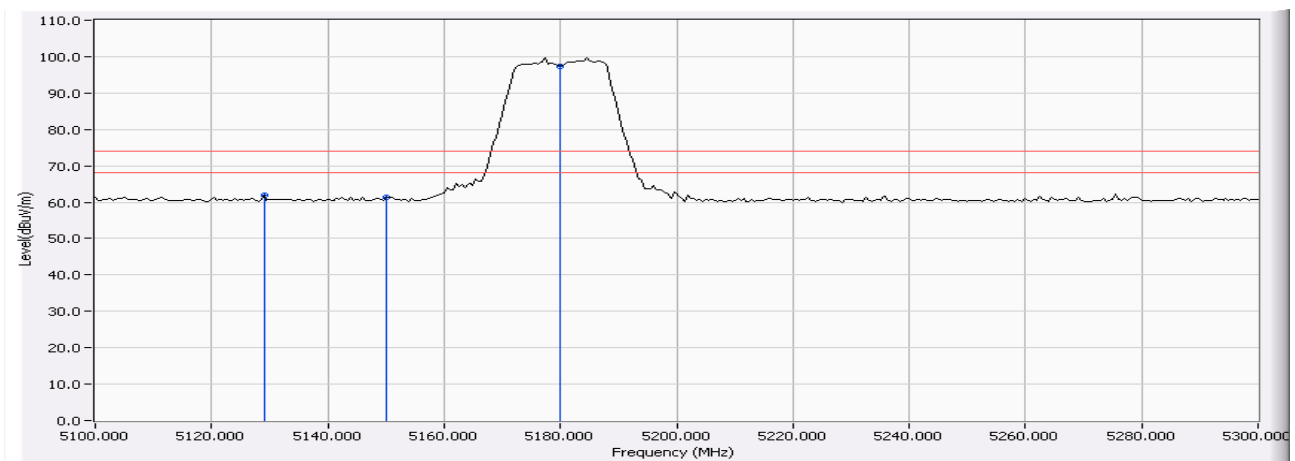
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5180MHz) (Antenna B)

RF Radiated Measurement (Vertical):

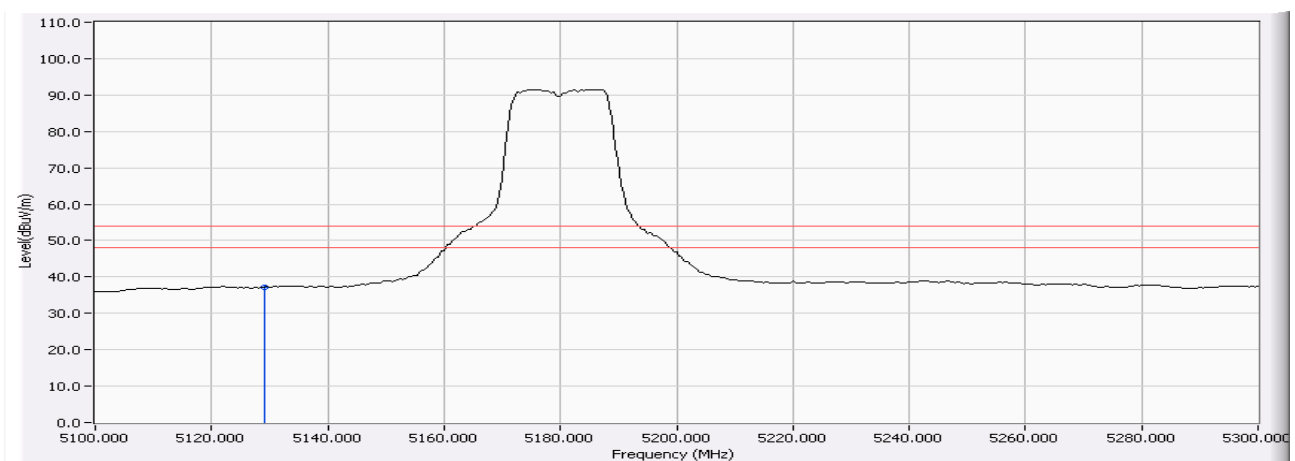
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5129.000	3.976	58.098	62.074	74.00	54.00	Pass
01(Average)	5129.000	3.976	33.110	37.086	74.00	54.00	Pass

Figure Channel 01: Vertical (Peak)



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

Figure Channel 01: Vertical (Average)



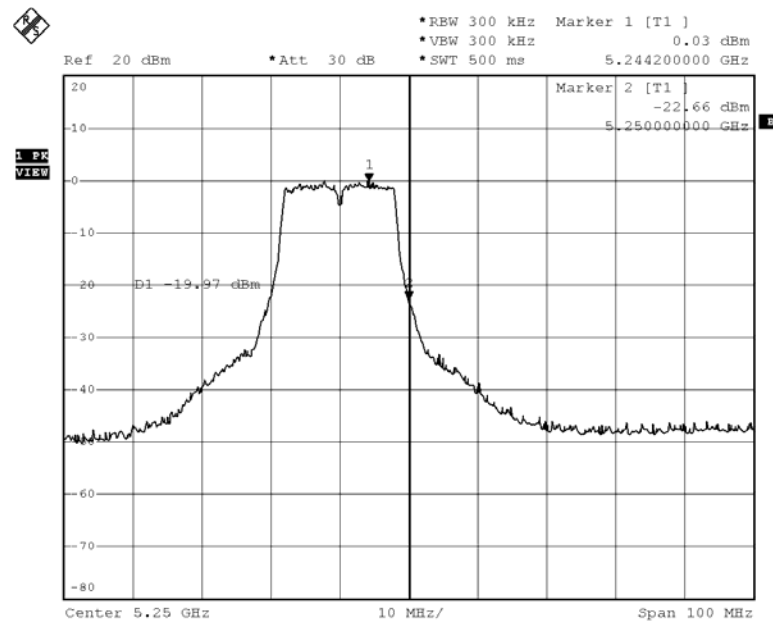
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5240MHz) (Antenna A)

RF Conduction Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
4	< 5250	>20	Pass

Figure Channel 4:



PN1

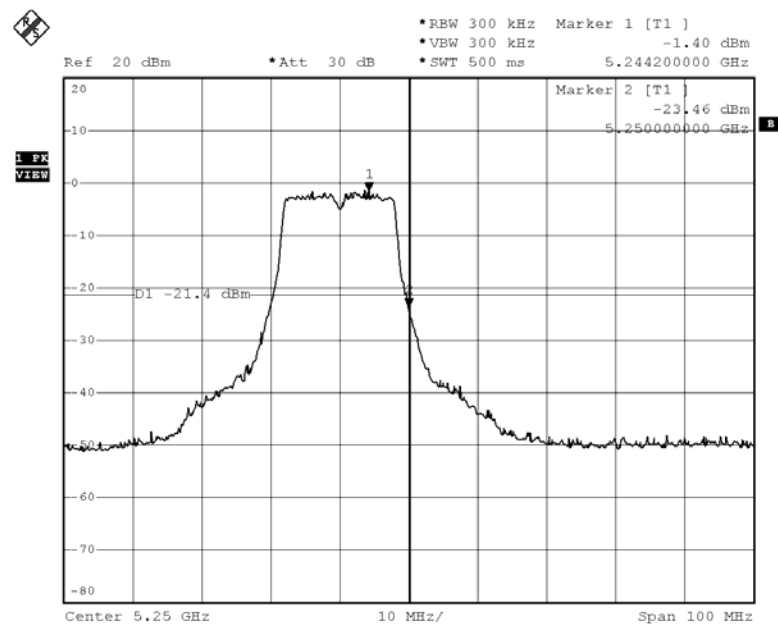
Date: 21.JUN.2007 19:25:47

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN (5240MHz) (Antenna B)

RF Conduction Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
4	< 5250	>20	Pass

Figure Channel 4:



PN1

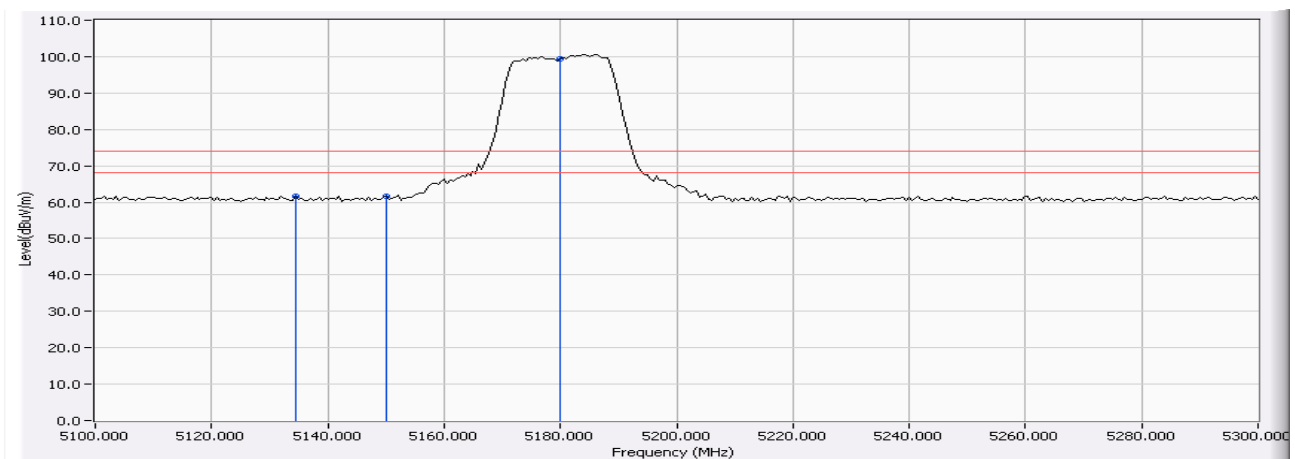
Date: 21.JUN.2007 19:16:17

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180MHz) (Antenna A)

RF Radiated Measurement (Horizontal):

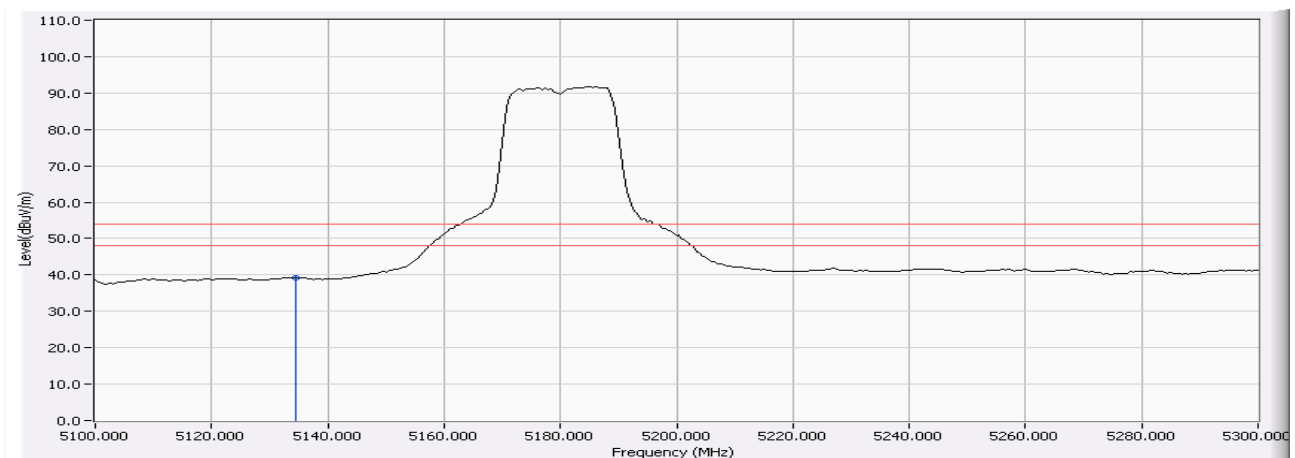
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5134.500	3.980	57.766	61.746	74.00	54.00	Pass
01(Average)	5134.500	3.980	35.101	39.081	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



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

Figure Channel 01: Horizontal (Average)



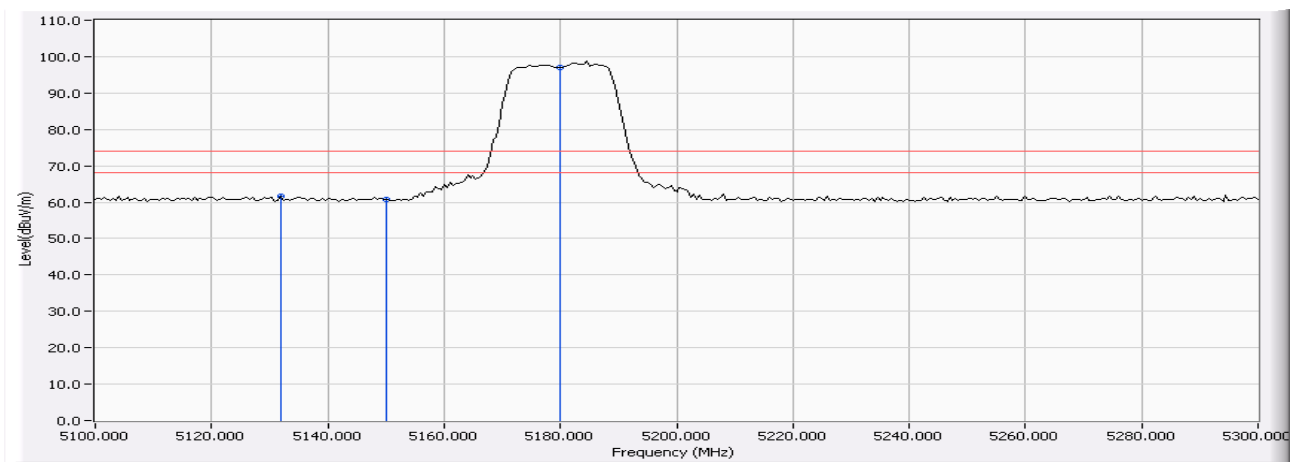
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180MHz) (Antenna A)

RF Radiated Measurement (Vertical):

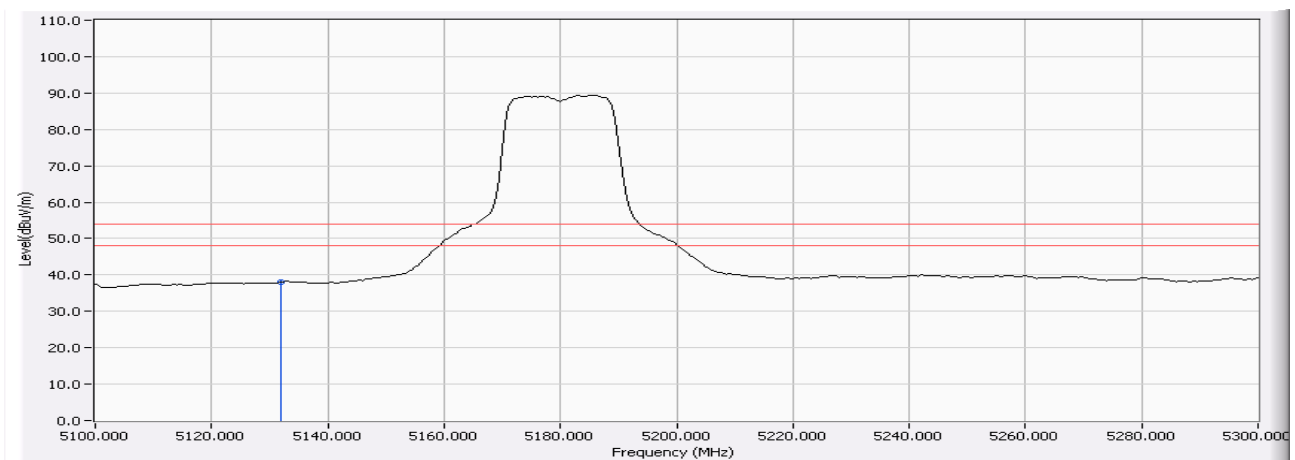
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5132.000	3.978	57.751	61.729	74.00	54.00	Pass
01(Average)	5132.000	3.978	34.025	38.003	74.00	54.00	Pass

Figure Channel 01: Vertical (Peak)



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

Figure Channel 01: Vertical (Average)



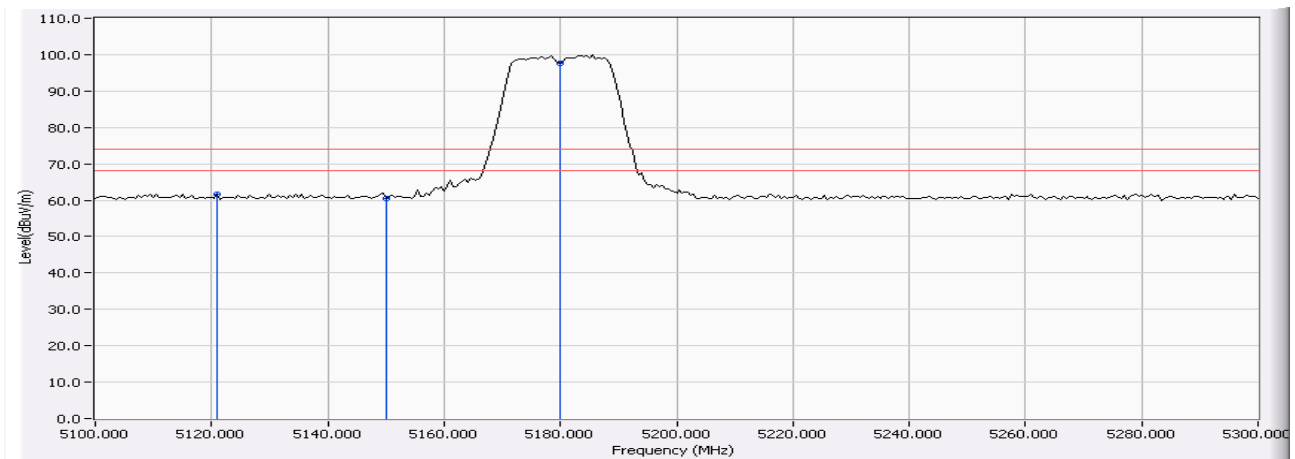
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180MHz) (Antenna B)

RF Radiated Measurement (Horizontal):

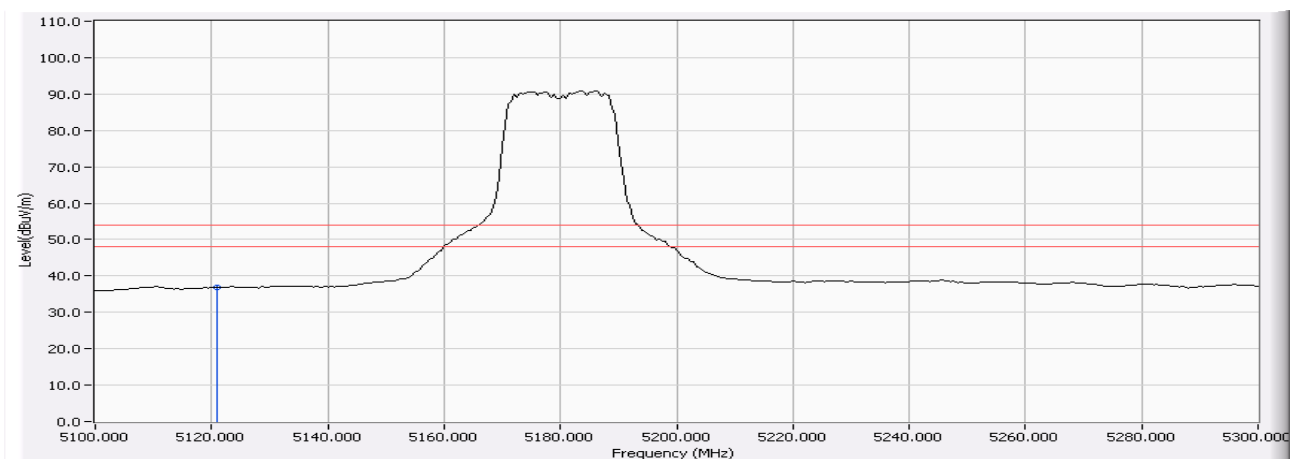
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5121.000	3.971	57.736	61.707	74.00	54.00	Pass
01(Average)	5121.000	3.971	32.928	36.899	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



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

Figure Channel 01: Horizontal (Average)



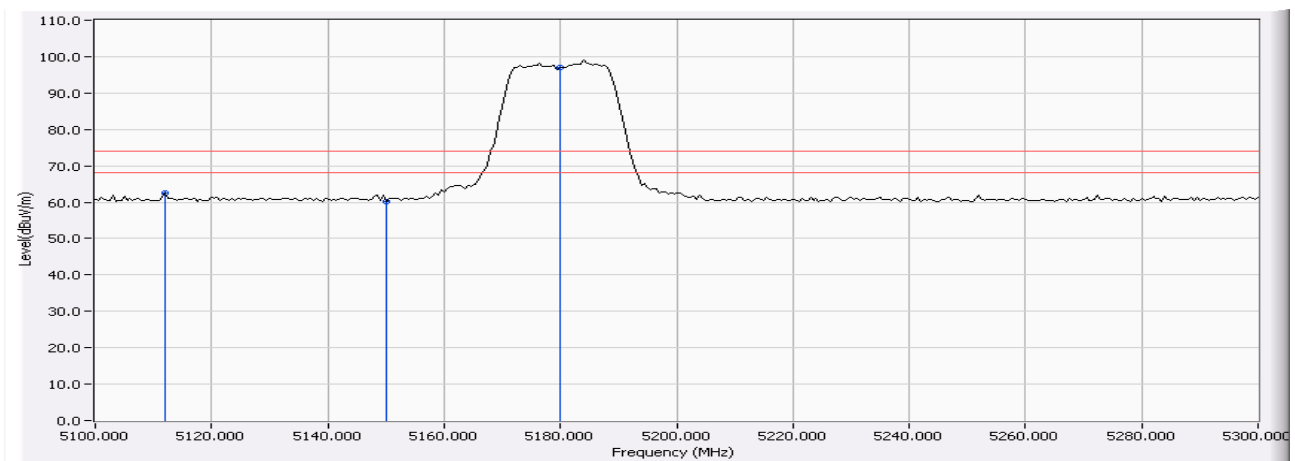
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5180MHz) (Antenna B)

RF Radiated Measurement (Vertical):

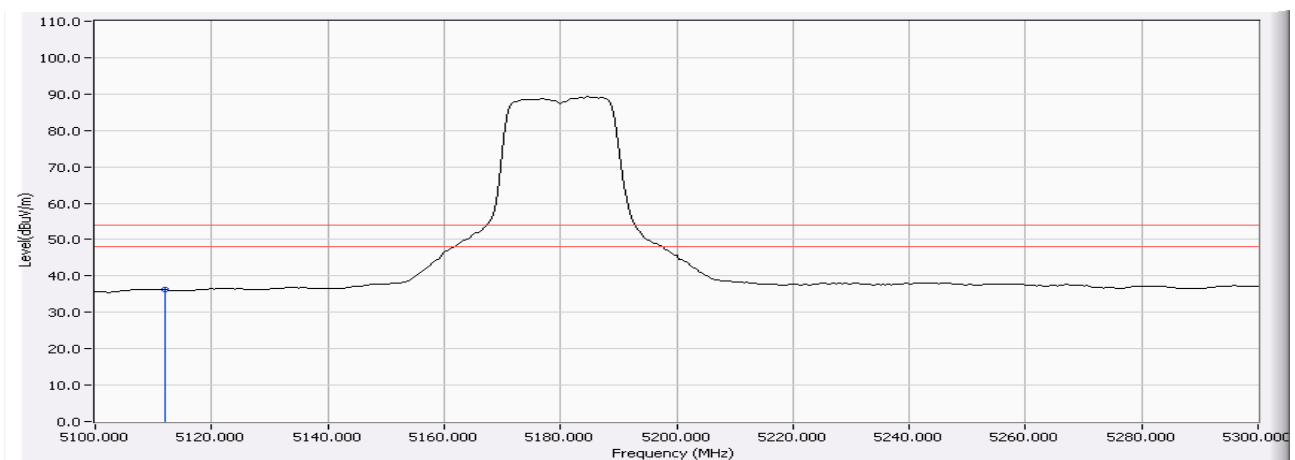
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01(Peak)	5112.000	3.969	58.622	62.591	74.00	54.00	Pass
01(Average)	5112.000	3.969	32.163	36.132	74.00	54.00	Pass

Figure Channel 01: Vertical (Peak)



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

Figure Channel 01: Vertical (Average)



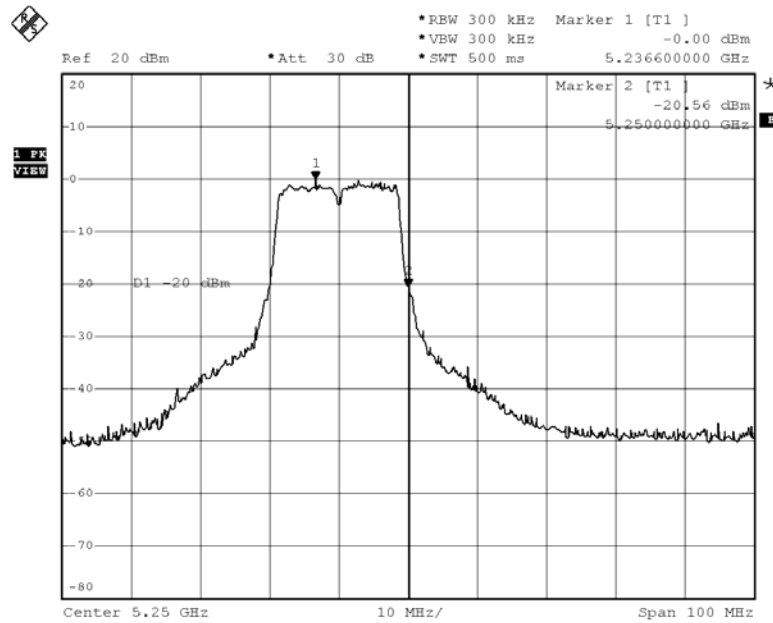
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240MHz) (Antenna A)

RF Conduction Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
4	< 5250	>20	Pass

Figure Channel 4:



PN1

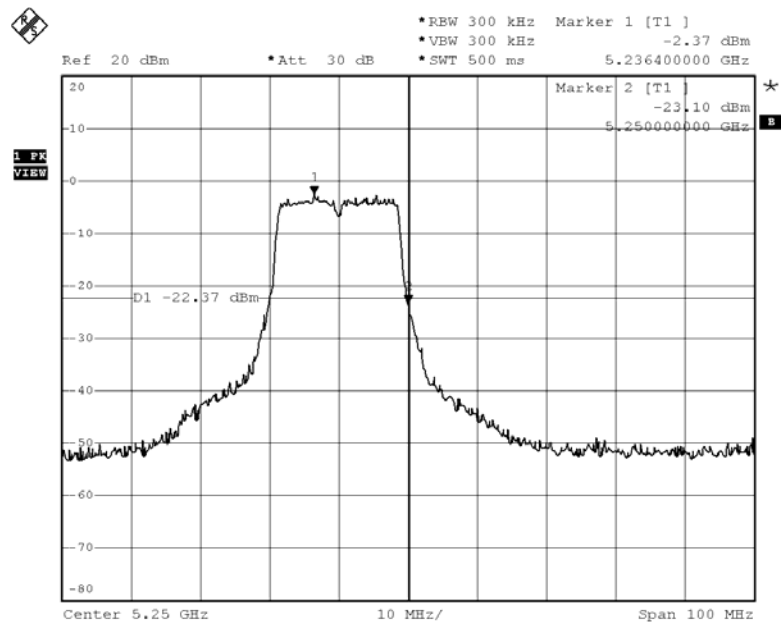
Date: 21.JUN.2007 19:06:28

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN (5240MHz) (Antenna B)

RF Conduction Measurement:

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
4	< 5250	>20	Pass

Figure Channel 4:



PN1

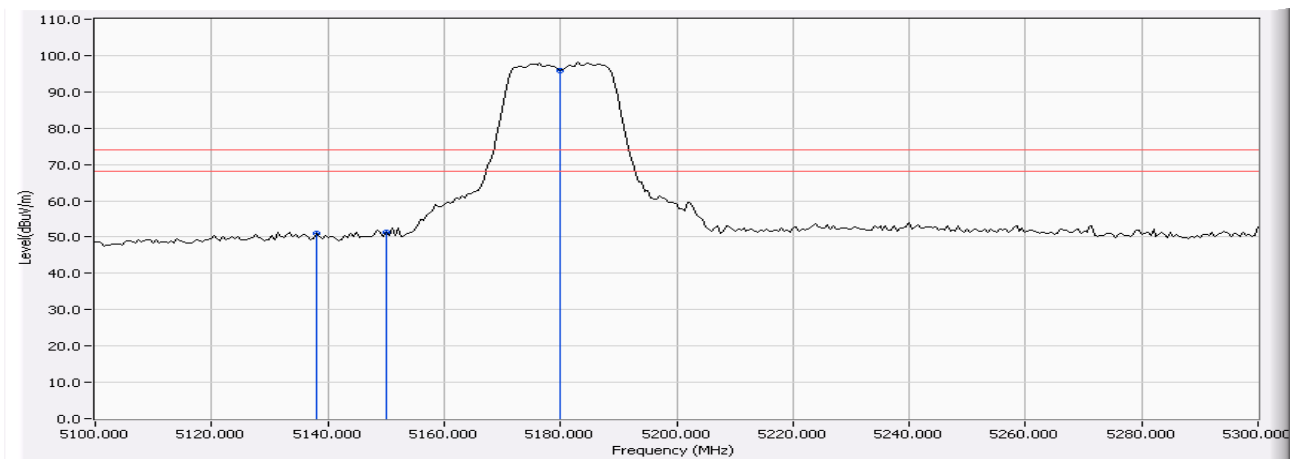
Date: 21.JUN.2007 19:18:16

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN(5180MHz) (Antenna A+B)

RF Radiated Measurement (Horizontal):

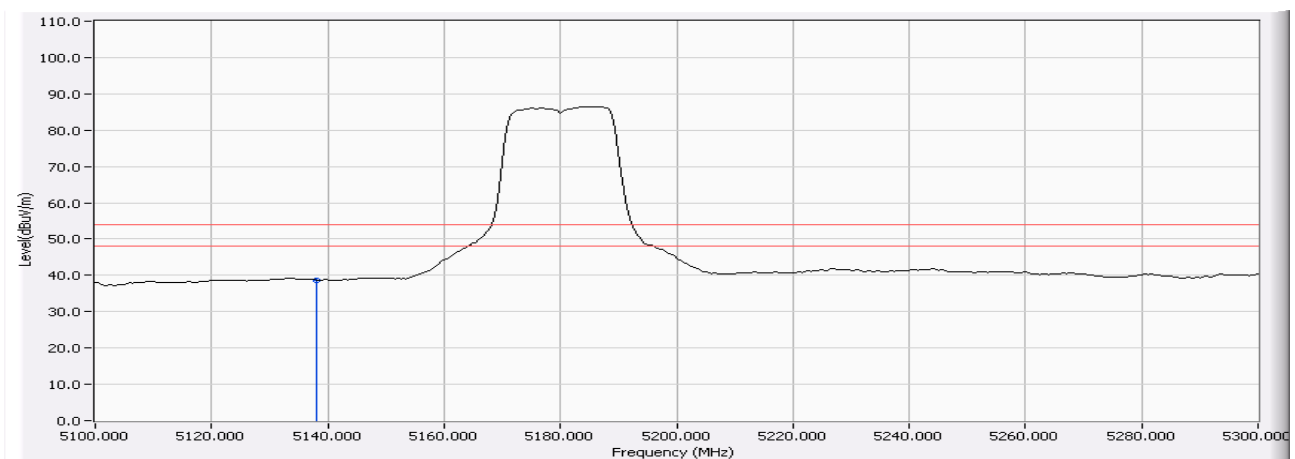
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5138.000	3.983	46.931	50.914	74.00	54.00	Pass
01(Average)	5138.000	3.983	34.723	38.706	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



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

Figure Channel 01: Horizontal (Average)



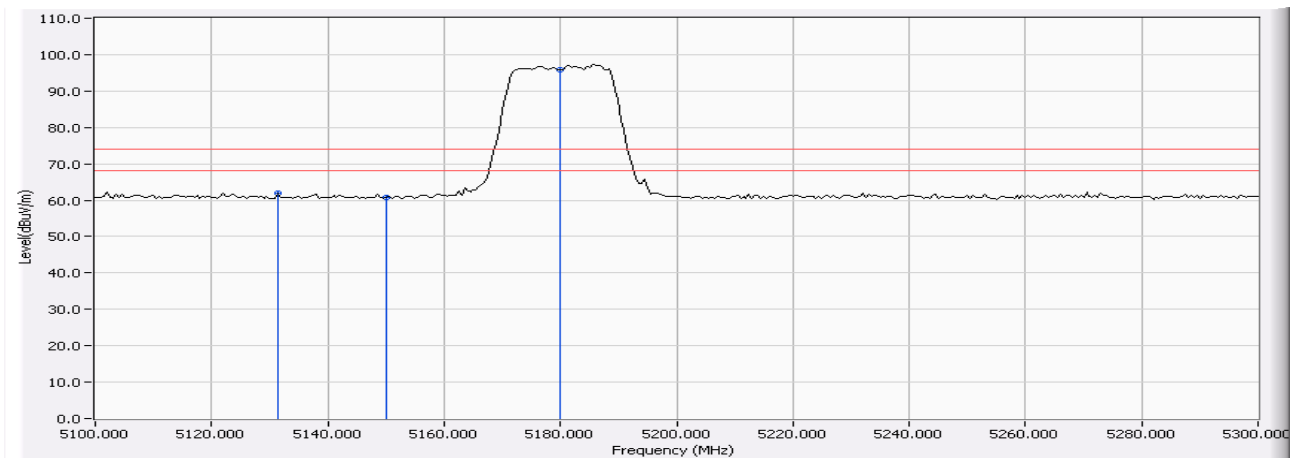
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN(5180MHz) (Antenna A+B)

RF Radiated Measurement (Vertical):

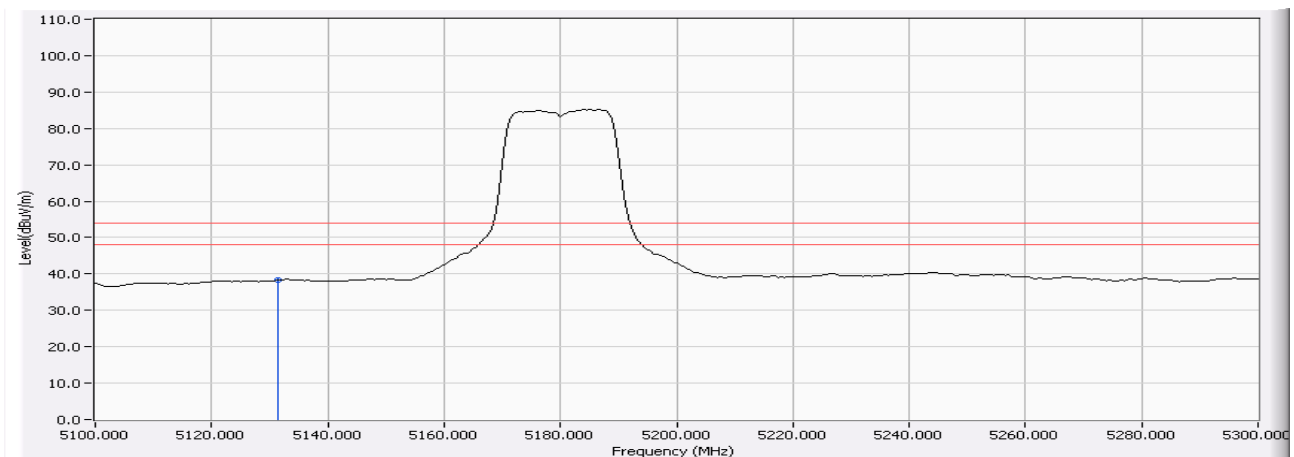
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5131.500	3.978	57.921	61.899	74.00	54.00	Pass
01 (Average)	5131.500	3.978	34.223	38.201	74.00	54.00	Pass

Figure Channel 01: Vertical (Peak)



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

Figure Channel 01: Vertical (Average)



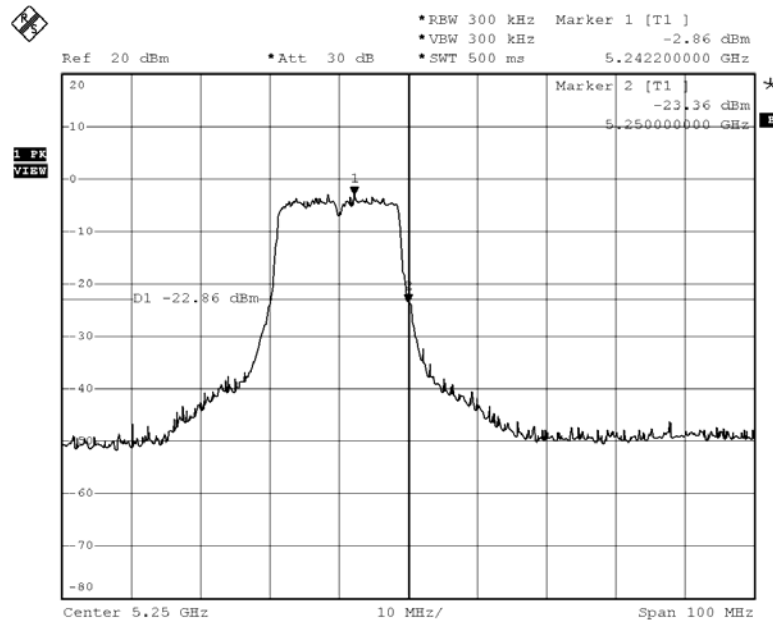
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN(5240MHz) (Antenna A+B)

RF Conduction Measurement: (Antenna A)

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
4	< 5250	>20	Pass

Figure Channel 4:



PN1

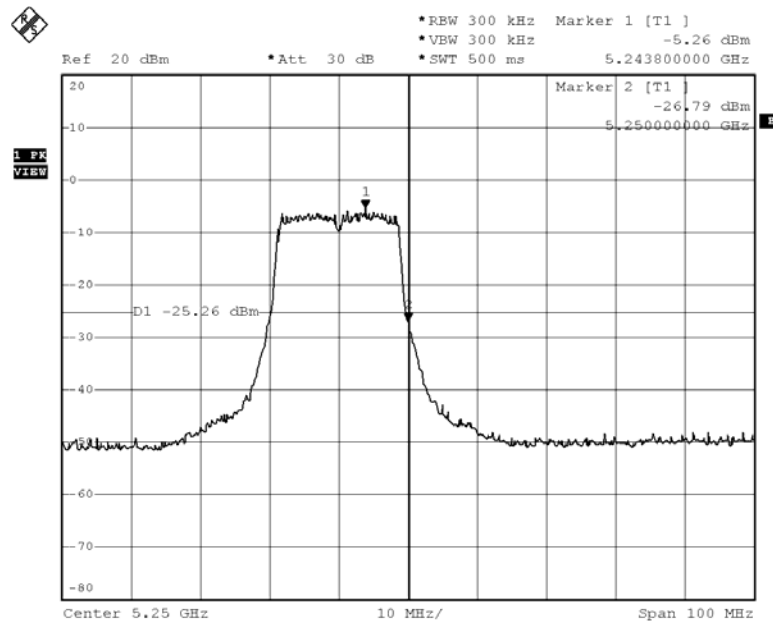
Date: 21.JUN.2007 19:09:10

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11n (20MHz)-Intel:4965AGN(5240MHz) (Antenna A+B)

RF Conduction Measurement: (Antenna B)

Channel No.	Frequency (MHz)	Required Limit (dBc)	Result
4	< 5250	>20	Pass

Figure Channel 4:



PN1

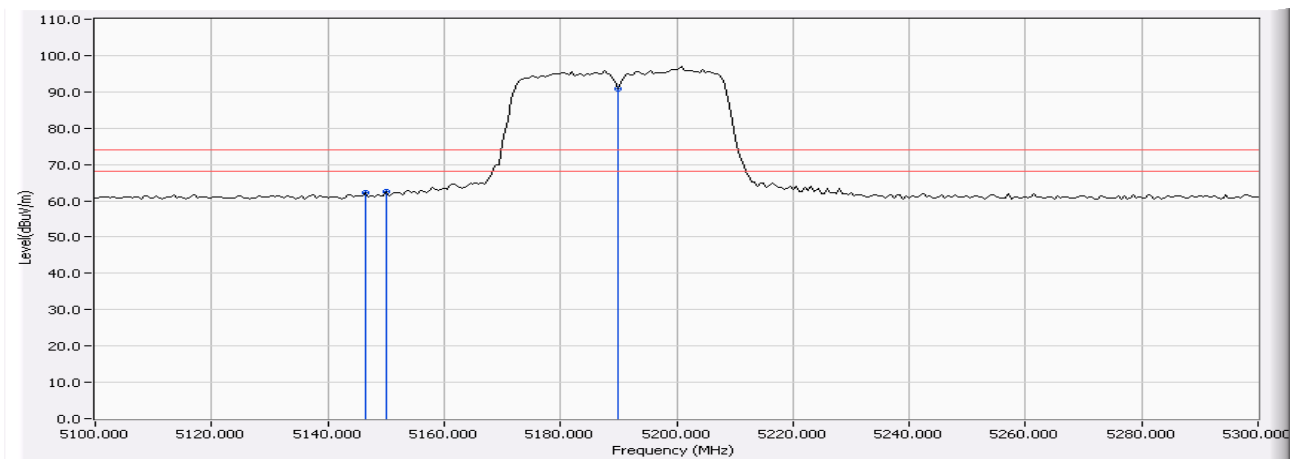
Date: 21.JUN.2007 19:19:59

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A)

RF Radiated Measurement (Horizontal):

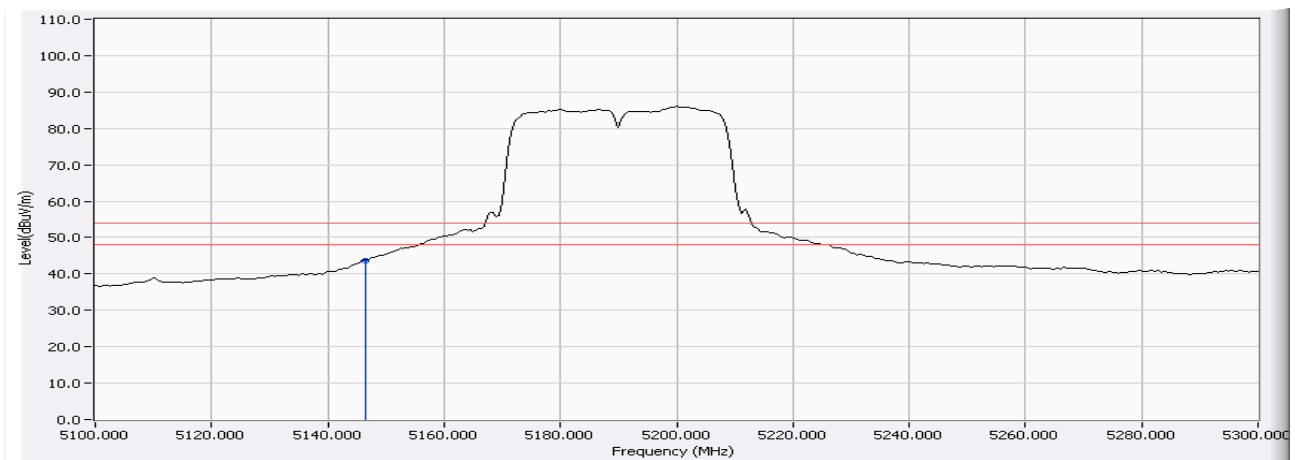
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5146.500	3.995	58.229	62.223	74.00	54.00	Pass
01(Average)	5146.500	3.995	39.778	43.772	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



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

Figure Channel 01: Horizontal (Average)



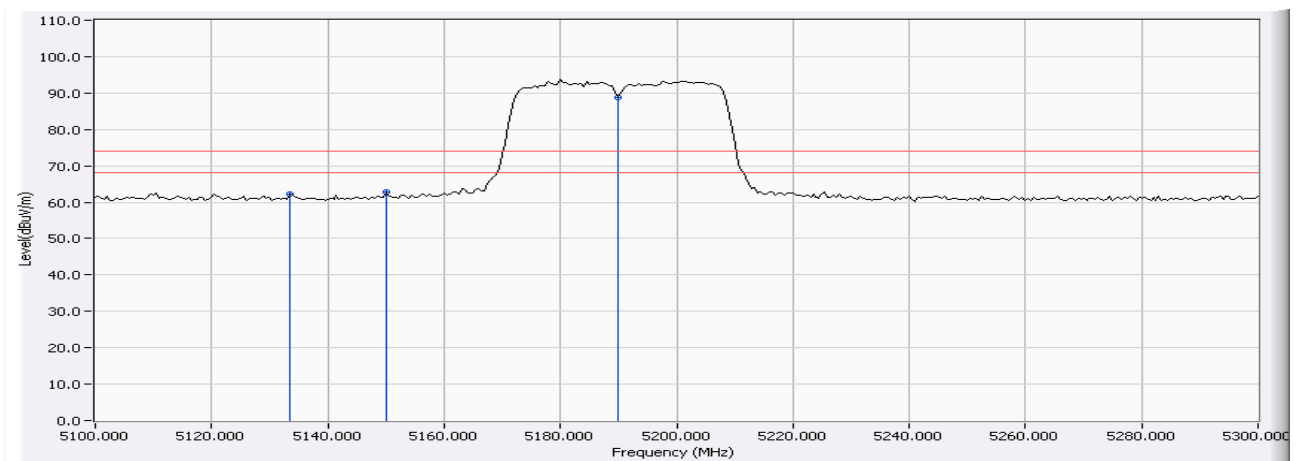
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A)

RF Radiated Measurement (Vertical):

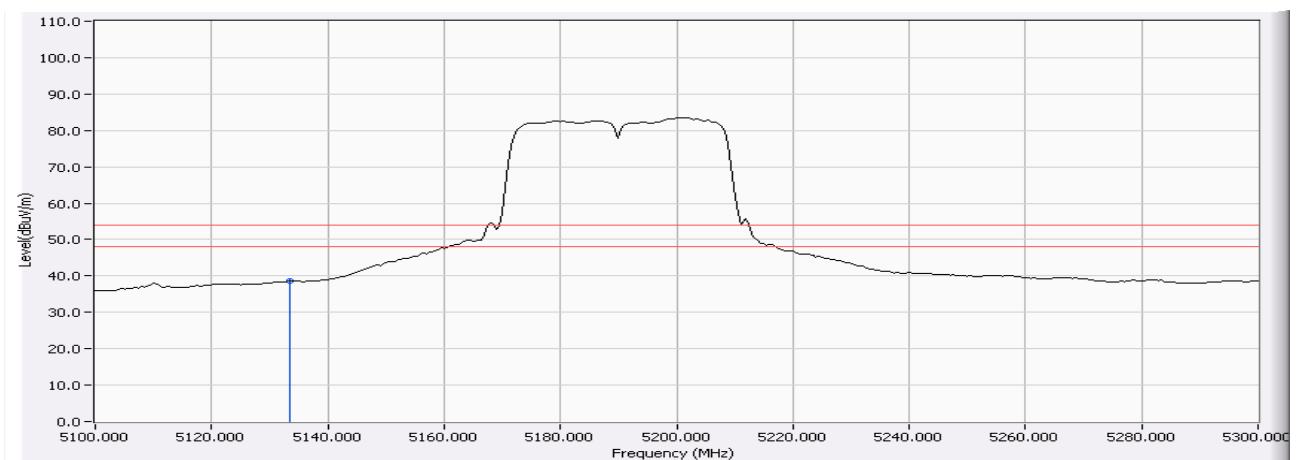
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01(Peak)	5133.500	3.980	58.111	62.091	74.00	54.00	Pass
01(Average)	5133.500	3.980	34.556	38.536	74.00	54.00	Pass

Figure Channel 01: Vertical (Peak)



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

Figure Channel 01: Vertical (Average)



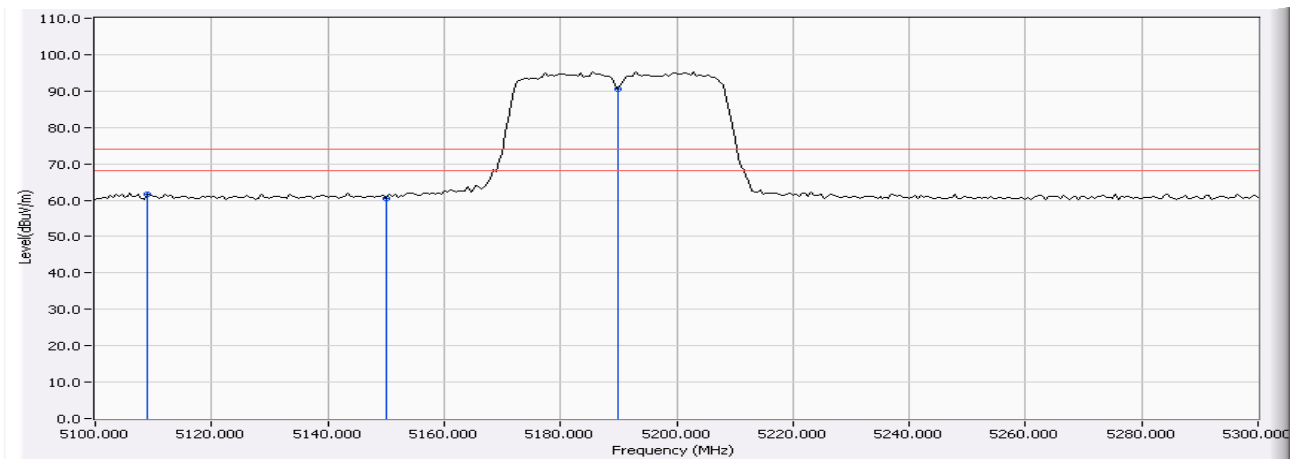
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna B)

RF Radiated Measurement (Horizontal):

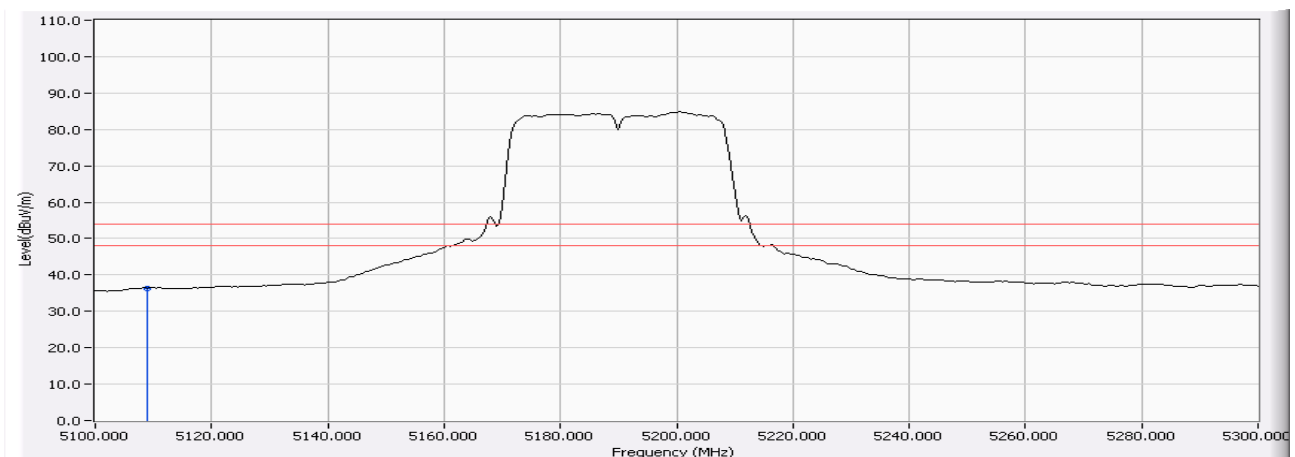
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5109.000	3.968	57.717	61.685	74.00	54.00	Pass
01(Average)	5109.000	3.968	32.445	36.413	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



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

Figure Channel 01: Horizontal (Average)



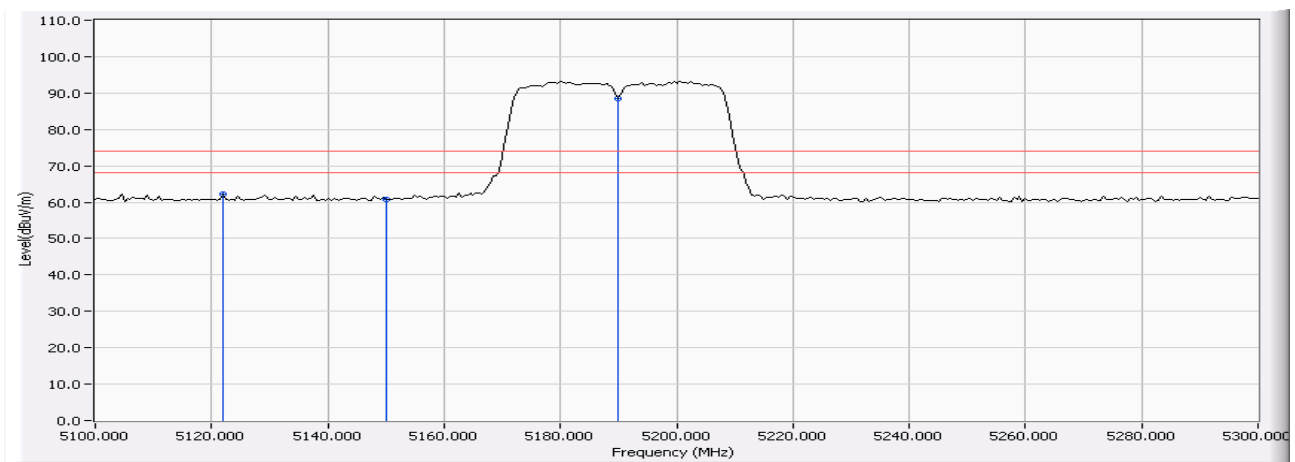
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna B)

RF Radiated Measurement (Vertical):

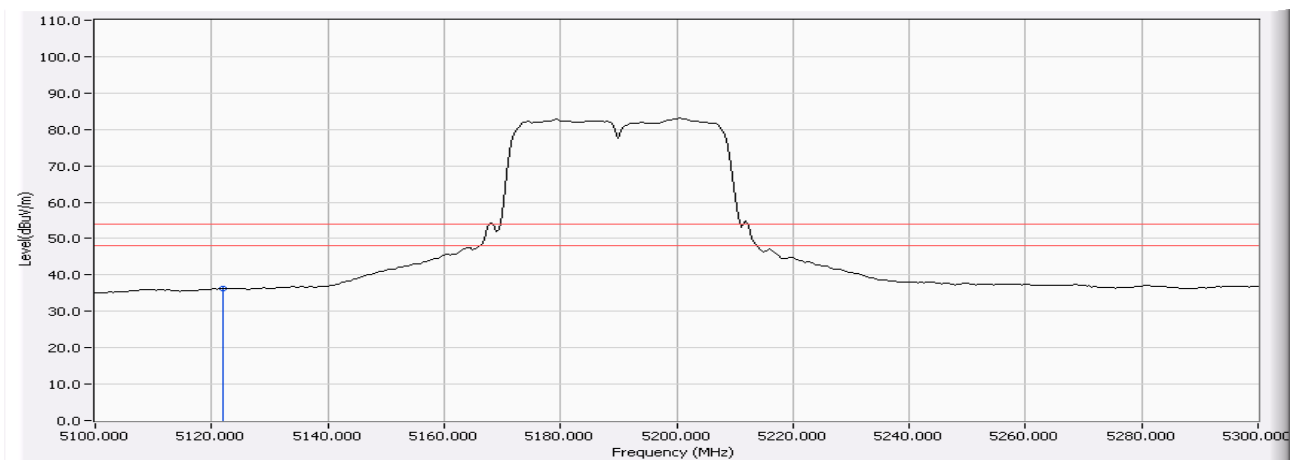
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01 (Peak)	5122.000	3.972	58.151	62.122	74.00	54.00	Pass
01(Average)	5122.000	3.972	32.159	36.130	74.00	54.00	Pass

Figure Channel 01: Vertical (Peak)



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

Figure Channel 01: Vertical (Average)



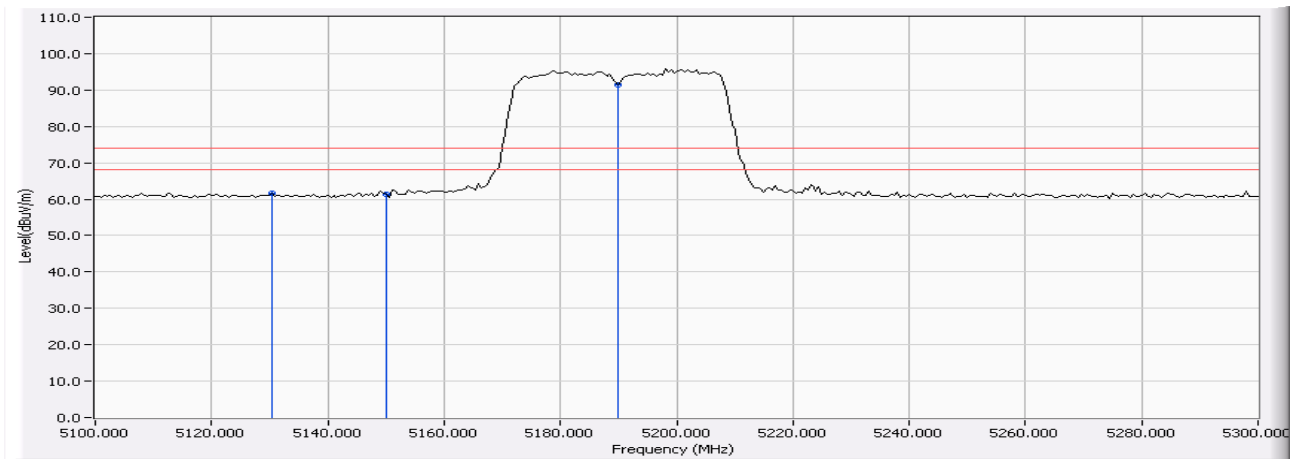
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A+B)

RF Radiated Measurement (Horizontal):

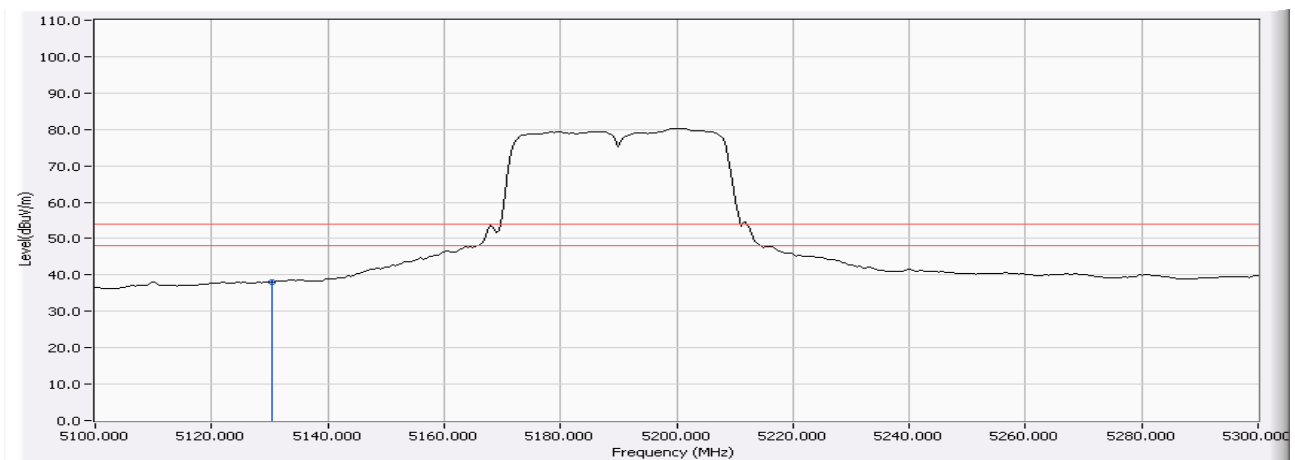
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01(Peak)	5130.500	3.977	57.566	61.543	74.00	54.00	Pass
01(Average)	5130.500	3.977	34.194	38.171	74.00	54.00	Pass

Figure Channel 01: Horizontal (Peak)



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

Figure Channel 01: Horizontal (Average)



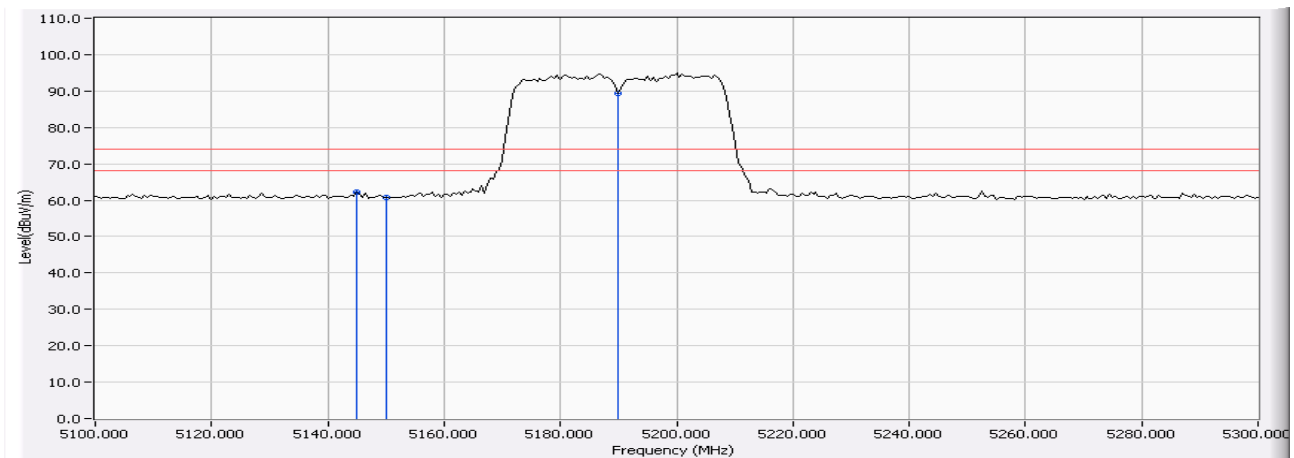
Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Notebook P.C.
 Test Item : Band Edge
 Test Site : No.3 OATS
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN (5190MHz) (Antenna A+B)

RF Radiated Measurement (Vertical):

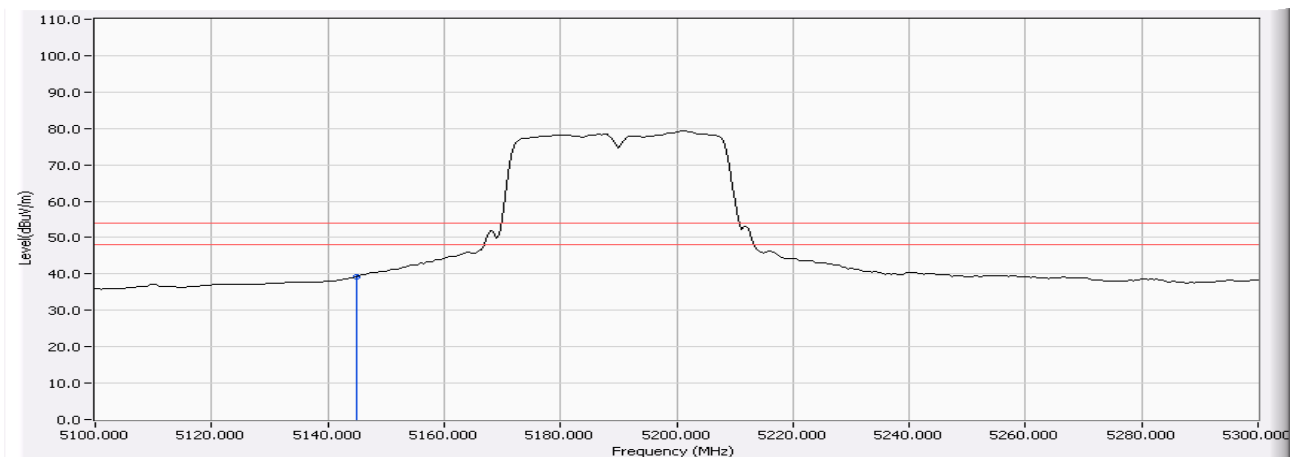
Channel No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Result
01(Peak)	5145.000	3.991	58.221	62.213	74.00	54.00	Pass
01(Average)	5145.000	3.991	35.276	39.268	74.00	54.00	Pass

Figure Channel 01: Vertical (Peak)



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

Figure Channel 01: Vertical (Average)



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

Note: 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.

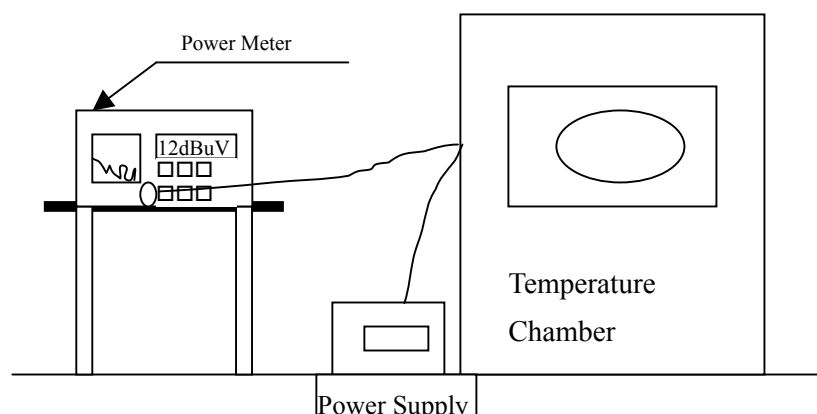
8. Frequency Stability

8.1. Test Equipment

Equipment	Manufacturer	Model No./Serial No.	Last Cal.	Remark
Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2007	
Temperature Chamber	WIT GROUP	TH-1S-B / WIT-02121901	June, 2006	

Note: All equipments are calibrated every one year.

8.2. Test Setup



8.3. Limits

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified

8.4. Uncertainty

± 150 Hz

8.5. Test Result of Frequency Stability

Product : Notebook P.C.
 Test Item : Frequency Stability
 Test Site : Temperature Chamber
 Test Mode : Mode 1: Transmitter 802.11a-Intel:4965AGN

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tnom (20) °C	Vnom (110)V	1	5180.00	5179.95	0.05
		3	5220.00	5219.95	0.05
		4	5240.00	5239.95	0.05
Tnom (25) °C	Vnom (126.5)V	1	5180.00	5179.95	0.05
		3	5220.00	5219.95	0.05
		4	5240.00	5239.95	0.05
Tnom (25) °C	Vnom (93.5)V	1	5180.00	5179.95	0.05
		3	5220.00	5219.95	0.05
		4	5240.00	5239.95	0.05
Tnom (15) °C	Vnom (126.5)V	1	5180.00	5179.95	0.05
		3	5220.00	5219.95	0.05
		4	5240.00	5239.95	0.05
Tnom (15) °C	Vnom (93.5)V	1	5180.00	5179.95	0.05
		3	5220.00	5219.95	0.05
		4	5240.00	5239.95	0.05

Product : Notebook P.C.
 Test Item : Frequency Stability
 Test Site : Temperature Chamber
 Test Mode : Mode 3: Transmitter 802.11n (40MHz)-Intel:4965AGN

Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	ΔF (MHz)
Tnom (20) °C	Vnom (110)V	1	5190.00	5189.95	0.05
Tnom (25) °C	Vnom (126.5)V	1	5190.00	5189.95	0.05
Tnom (25) °C	Vnom (93.5)V	1	5190.00	5189.95	0.05
Tnom (15) °C	Vnom (126.5)V	1	5190.00	5189.95	0.05
Tnom (15) °C	Vnom (93.5)V	1	5190.00	5189.95	0.05

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs