



EMI TEST REPORT

Test Report No. : 24LE0219-HO-1

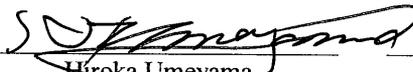
Applicant : Sony Corporation
Type of Equipment : Notebook Personal Computer
Model No. : PCG-1H1L
Test standard : FCC Part 15 Subpart C
Section 15.207, Section 15.247 : 2004
FCC ID : AK8PCG1H1L
Test Result : Complied

1. This test report shall not be reproduced in full or partial, without the written approval of UL Apex Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.

Date of test:

August 8 to 20, 2004

Tested by:


Hiroka Umeyama
EMC Service


Kenichi Adachi
EMC Service

Approved by :


Hironobu Shimoji
Group Leader of
EMC Service

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

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SECTION 1: Client information

Company Name : Sony Corporation
Brand name : SONY
Address : 6-7-35, Kitashinagawa, Shinagawa-ku, Tokyo, 141-0001 Japan
Telephone Number : +81-3-5795-8711
Facsimile Number : +81-3-5795-8981
Contact Person : Tsutomu Shibusawa

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment : Notebook Personal Computer
Model No. : PCG-1H1L
Serial No. : 1200027(Radiated and Conducted emission tests) / 1200034(Other)
Country of Manufacture : JAPAN
Rating : (AC Adaptor) Input :AC100 - 240V/Output:DC16V, 2.2A
Receipt Date of Sample : June 17, 2004
Condition of EUT : Engineering Prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

Clock frequency	100MHz, 66MHz, 48MHz, 33MHz, 30MHz, 25MHz, 24.576MHz, 14.31818MHz, 10MHz, 32.768kHz, 900MHz, 40MHz
Feature of EUT	Notebook Personal Computer with IEEE802.11b/g, Antenna included

Equipment Type	Transceiver	
Frequency band	Lower limit	2400MHz
	Upper limit	2483.5MHz
Frequency of Operation	2412 – 2462MHz ISM band	
Bandwidth & Channel spacing	5MHz (11 channels)	
Type of Modulation	DSSS	
Antenna Type	Film Antenna (Lambda/4 Monopole Antenna)	
Antenna Connector Type	U, FL connector (Hirose)	
Antenna Gain	X-Y (Peak): -1.70dBi X-Z (Peak): -1.80dBi Y-Z (Peak): -1.83dBi	
Transmit Power	16dBm	
Mode of Operation	Simplex	
ITU code	G1D	
Temperature of operation	0 deg. C. to +35 deg. C.	

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FCC 15.31 (e)

This EUT provides stable voltage constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

It is impossible for end users to replace the antenna, because the antenna is mounted inside of the EUT. Therefore, the equipment complies with the antenna requirement of Section 15.203.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C : 2004
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits : 2004
Section 15.247 Operation within the bands 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz : 2004

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A	9.1dB 0.30707MHz N, AV	Complied
2	6dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(2)	Conducted	N/A	*See data.	Complied
3	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(b)(3)	Conducted	N/A		Complied
4	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (c)	Conducted/ Radiated	N/A	0.4dB 2483.5MHz HOR	Complied
5	Restricted Band Edges	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (c)	Conducted	N/A	*See data.	Complied
6	Power Density	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (d)	Conducted	N/A	*See data.	Complied

Note: UL Apex's EMI Work Procedures No.QPM05.

Uncertainty:

*In case of the margin below the EMC Head Office's uncertainty.

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is ± 1.3 dB.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ± 4.5 dB(3m)/ ± 4.7 dB(10m).

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ± 5.2 dB(3m)/ ± 3.8 dB(10m).

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ± 6.6 dB.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is ± 3.0 dB.

*These tests were also referred to "Guidance on Measurement for Digital Transmission Systems Section 15.247".

*These tests were performed without any deviations from test procedure except for additions or exclusions.

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3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99 % Occupied Band Width	RSS-210(issue 5): 2001 + Amendment:2002 + Amend ment2:2003 + Amendment3:2004	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004	Conducted	N/A	N/A	N/A

3.4 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0

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	Listed date (for FCC)	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	February 01, 2002	313583	IC4247	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	June 05, 2002	846015	IC4247-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 shielded room	-	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.4 measurement room	-	-	-	3.1 x 5.0 x 2.7m	N/A	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1 and No.2 semi-anechoic and No.3 shielded room.

3.5 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

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SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode is used : *IEEE 802.11b : CCK (QPSK, 11Mbps)
-Transmitting mode
Low channel : 2412MHz
Middle channel : 2437MHz
High channel : 2462MHz

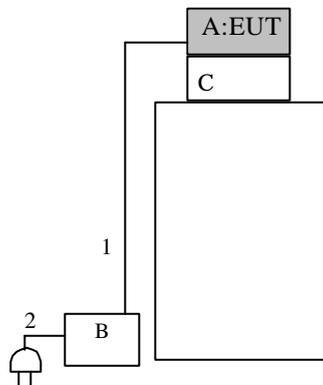
*IEEE 802.11g : OFDM(64QAM, 54Mbps)
-Transmitting mode
Low channel : 2412MHz
Middle channel : 2437MHz
High channel : 2462MHz

The EUT has an ability to provide some different modulation and data rates. Some of these modulation and data rates did not change in the spectrum envelopes of the EUT at conducted Measurement with the antenna terminal.

Main and Sub Antenna did not change in the spectrum envelopes of the EUT at conducted Measurement with the antenna terminal.

Therefore, the results of the final measurements were the IEEE 802.11b DSSS(CCK, QPSK, 11Mbps) and IEEE 802.11g OFDM(64QAM, 54Mbps) modulation as the highest data rate and with Main Antenna (since the both main and sub antenna are the same type and set up symmetrically).

4.2 Configuration and peripherals



AC120V/60Hz

* Cabling was taken into consideration and test data was taken under worse case conditions.

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Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID
A	Notebook Personal Computer	PCG-1H1L	1200027(Radiated and Conducted emission tests) 1200034(Other)	Sony Corp.	AK8PCG1H1L
B	AC Adaptor	VGA-AC16V7	0001197	Sony Corp.	-
C	Battery	VGA-BPS1	2000173	Sony Corp.	-

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	DC cable	1.8	N	Polyvinyl chloride
2	AC cable	0.8	N	Polyvinyl chloride

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SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a platform of nominal size, 0.5m by 0.5m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

1) For the tests on EUT itself (as a stand alone equipment)

Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN/(AMN) to the input power source. All unused 50ohm connectors of the LISN(AMN) were resistively terminated in 50ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber or a Measurement Room.

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

Detector : CISPR quasi-peak detector (IF BW 9 kHz)
Measurement range : 0.15-30MHz
Test data : APPENDIX 3
Test result : Pass

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SECTION 6: Spurious Emission

[Conducted]

Test Procedure

The Out of Band Emission was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

[Radiated]

Test Procedure

EUT was placed on a platform of nominal size, 0.5m by 0.5m, raised 80cm above the conducting ground plane. The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).

The height of the measuring varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver or the Spectrum Analyzer.

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

When not satisfying the requirement of Section 15.209, 20dBc was applied the restricted band of Section 15.205.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver / Spectrum Analyzer	Spectrum Analyzer
Detector	QP: BW 120kHz(T/R)	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth	20dBc : RBW: 100kHz VBW: 300kHz (S/A)	AV: RBW:1MHz/VBW:10Hz 20dBc : RBW:100kHz/VBW:300kHz

Test data : APPENDIX 3
Test result : Pass

- The carrier level was measured at each position of all three axes X, Y and Z, and the position that has the maximum noise was determined.

With the position, the noise levels of all the frequencies was measured.

SECTION 7: Bandwidth

Test Procedure

The bandwidth was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 8: Maximum Peak Output Power

Test Procedure

The test for IEEE802.11b was made with the power meter.

The test for IEEE802.11g was made with the spectrum analyzer that has a function of channel-power measurements.

The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

SECTION 9: Peak Power Density

[Conducted]

Test Procedure

The Peak Power Density was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3
Test result : Pass

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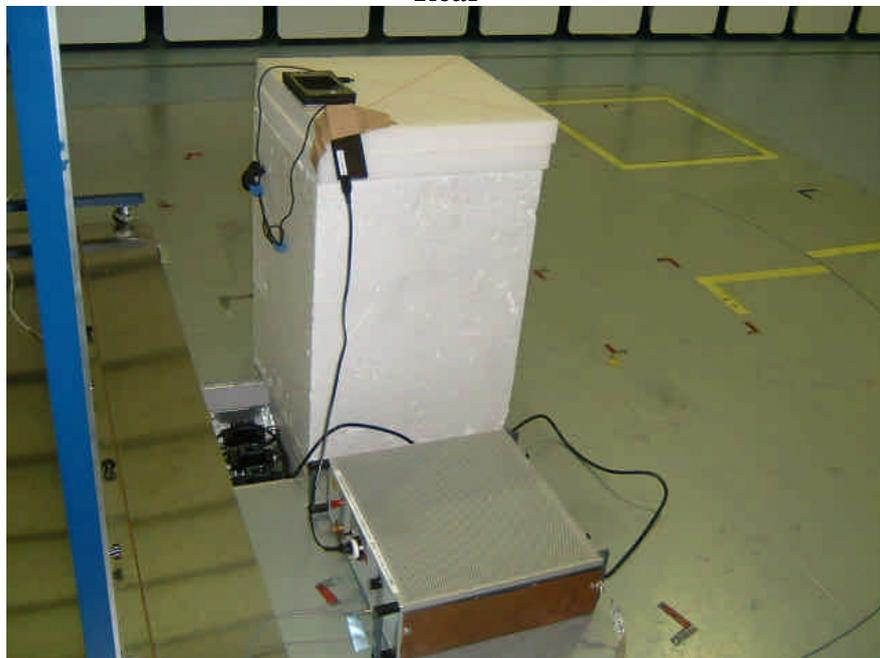
APPENDIX 1: Photographs of test setup

Conducted Emission

Front



Rear

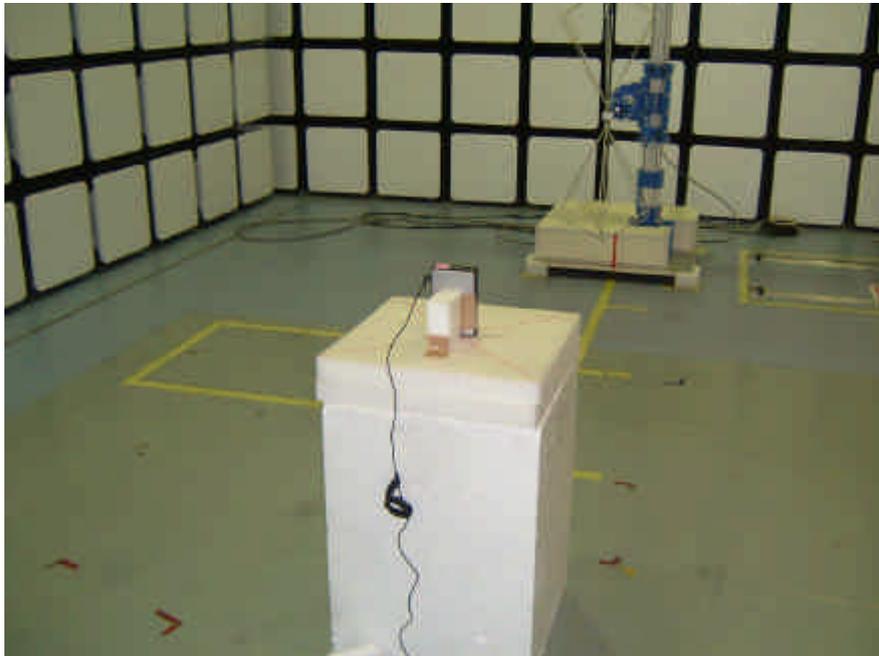


Spurious Emission (Radiated)

Front



Rear



Worst Case Position (X-axis:Horizontal / Y-axis:Vertical)

X-axis



Y-axis



Z-axis



APPENDIX 2:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE/CE	2004/04/12 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2003/10/15 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2003/10/15 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2004/02/24 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2003/12/16 * 12
MPA-02	Pre Amplifier	Agilent	87405A	RE	2004/04/16 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE/CE	2004/02/03 * 12
MRENT-09	Spectrum Analyzer	Advantest	R3273	RE/CE	2004/02/18 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	AT	2004/06/12 * 12
MAT-22	Attenuator (10dB)	Orient Microwave	BX10-0476-00	AT	2004/03/30 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2004/01/10 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2003/09/19 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2004/02/06 * 12
MCC-04	Microwave Cable	Storm	421-011	RE	2004/01/06 * 12
MCC-24	Microwave Cable	Storm	-	RE	2004/05/01 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2004/01/10 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2004/02/24 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE(EUT)	2004/02/17 * 12

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Test Item:

CE: Conducted emission,
RE: Spurious Radiated emission,
AT: The other.

APPENDIX 3: Data of EMI test

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2004/08/18 15:57:21

Applicant	: Sony Corporation	Report No.	: 24LE0219-HO
Kind of EUT	: Notebook Personal Computer	Power	: AC120V / 60Hz(AC Adapter)
Model No.	: PCG-1H1L	Temp /Humi%	: 27 deg.C / 55 %
Serial No.	: 1200027	Operator	: Hiroka Umeyama

Mode / Remarks : Transmitting 11b 11Mbps 2412MHz

LIMIT : FCC15C § 15.207 (QP)
 FCC15C § 15.207 (AV)

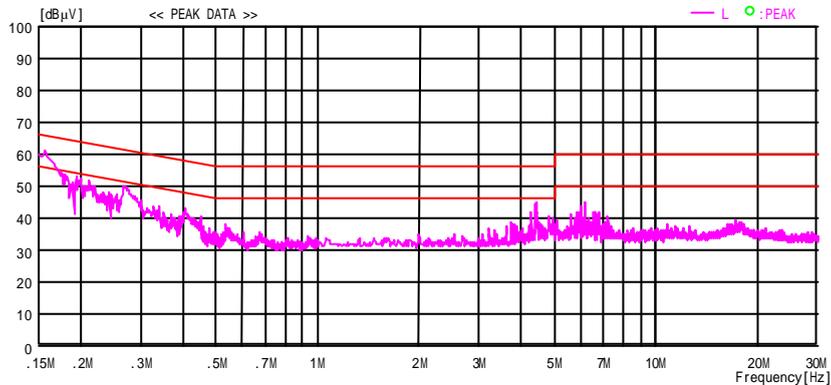
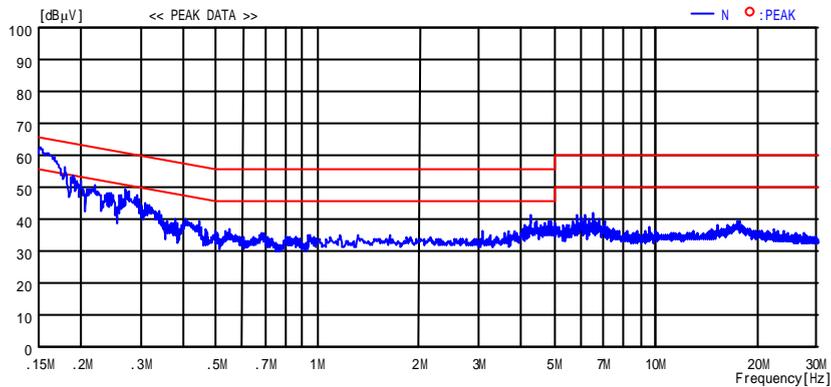


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALORATION: RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2004/08/18 16:03:14

Applicant : Sony Corporation	Report No. : 24LE0219-HO
Kind of EUT : Notebook Personal Computer	Power : AC120V / 60Hz(AC Adapter)
Model No. : PCG-1H1L	Temp /Humi% : 27 deg.C / 55 %
Serial No. : 1200027	Operator : Hiroka Umeyama

Mode / Remarks : Transmitting 11b 11Mbps 2437MHz

LIMIT : FCC15C §15.207 (QP)
 FCC15C §15.207 (AV)

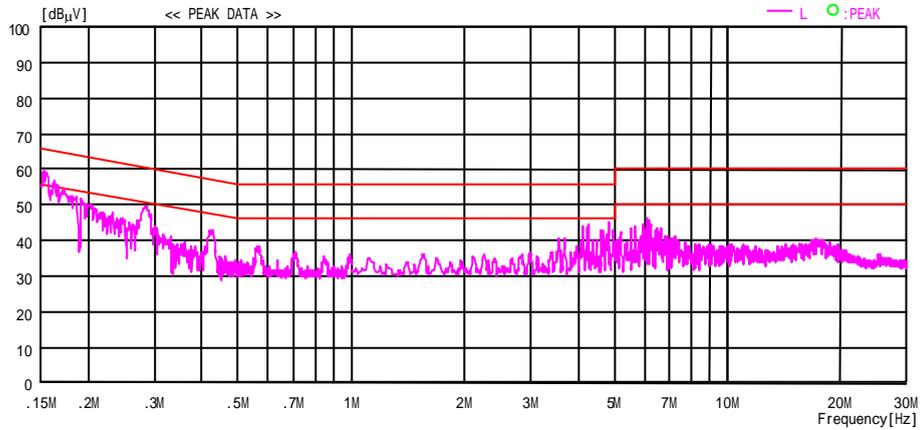
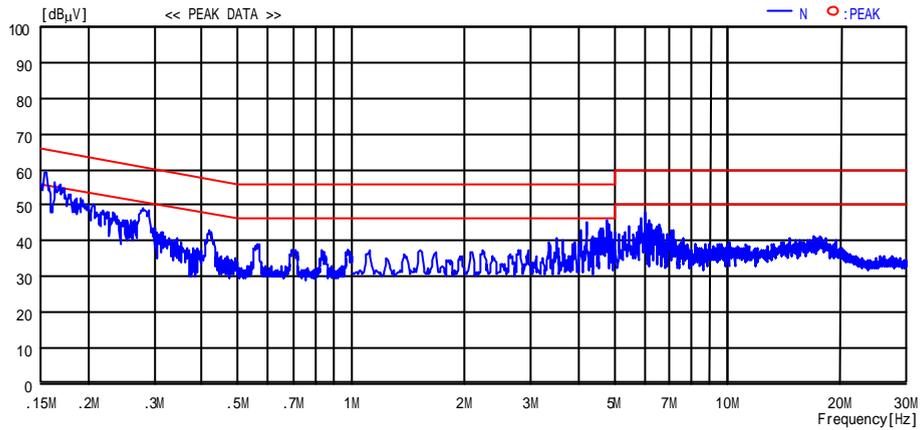


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2004/08/18 16:08:10

Applicant : Sony Corporation	Report No. : 24LE0219-HO
Kind of EUT : Notebook Personal Computer	Power : AC120V / 60Hz(AC Adapter)
Model No. : PCG-1H1L	Temp /Humi% : 27 deg.C / 55 %
Serial No. : 1200027	Operator : Hiroka Umeyama

Mode / Remarks : Transmitting 11b 11Mbps 2462MHz

LIMIT : FCC15C §15.207 (QP)
 FCC15C §15.207 (AV)

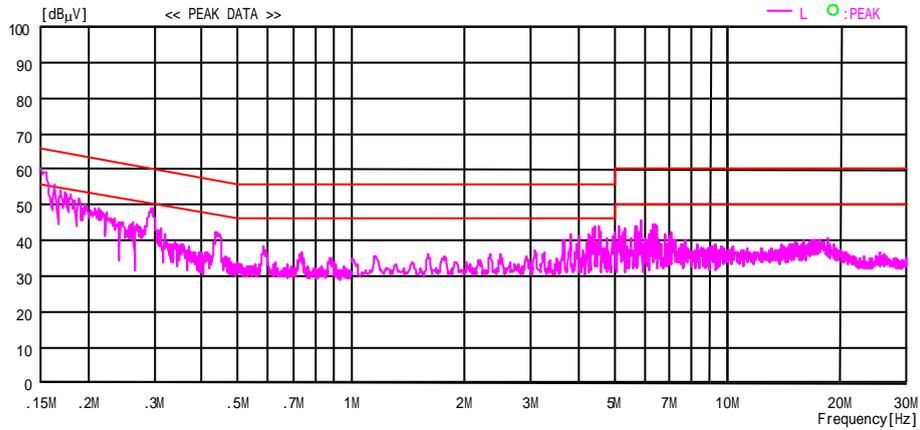
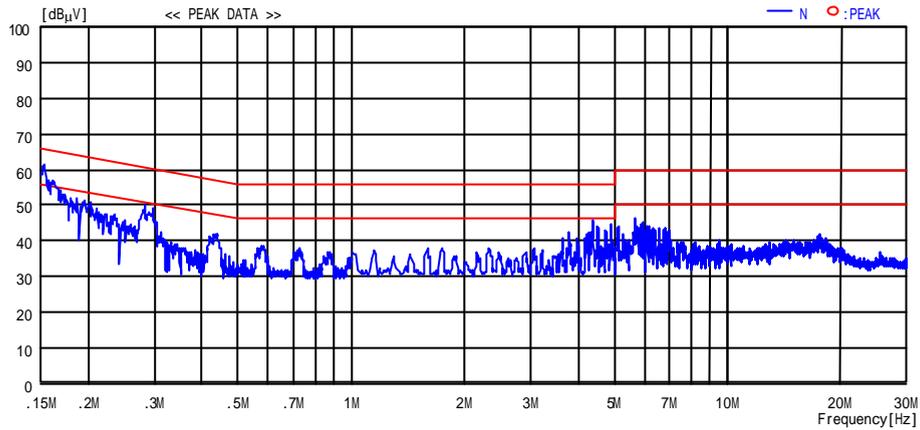


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

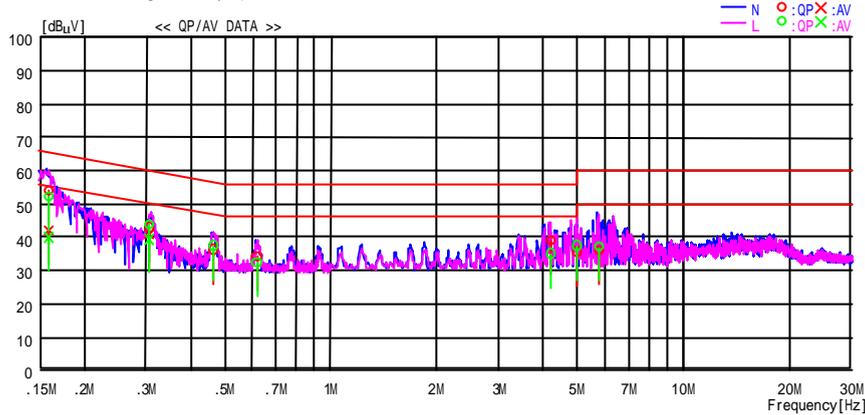
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2004/08/18 16:22:35

Applicant : Sony Corporation
 Kind of EUT : Notebook Personal Computer
 Model No. : PCG-1H1L
 Serial No. : 1200027
 Report No. : 24LE0219-HO
 Power : AC120V / 60Hz(AC Adapter)
 Temp /Humi% : 27 deg.C / 55 %
 Operator : Hiroka Umeyama

Mode / Remarks : Transmitting 11g 54Mbps 2412MHz

LIMIT : FCC15C § 15.207 (QP)
 FCC15C § 15.207 (AV)



Frequency [MHz]	Reading Level		Corr Factor	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
0.15980	52.7	40.0	0.0	52.7	40.0	65.5	55.5	13.3	15.5	L
0.15980	54.0	41.8	0.0	54.0	41.8	65.5	55.5	11.5	13.7	N
0.30707	43.6	39.3	0.1	43.7	39.4	60.0	50.0	16.3	10.6	L
0.30707	42.5	40.8	0.1	42.6	40.9	60.0	50.0	17.4	9.1	N
0.46580	36.1	----	0.1	36.2	----	56.6	----	20.4	----	N
0.46580	37.2	----	0.1	37.3	----	56.6	----	19.3	----	L
0.62020	33.9	----	0.2	34.1	----	56.0	----	21.9	----	N
0.62020	32.1	----	0.2	32.3	----	56.0	----	23.7	----	L
4.20200	38.6	----	0.5	39.1	----	56.0	----	16.9	----	N
4.20200	34.5	----	0.5	35.0	----	56.0	----	21.0	----	L
4.99000	34.9	----	0.6	35.5	----	56.0	----	20.5	----	N
4.99000	36.8	----	0.6	37.4	----	56.0	----	18.6	----	L
5.77900	35.0	----	0.7	35.7	----	60.0	----	24.3	----	N
5.77900	36.3	----	0.7	37.0	----	60.0	----	23.0	----	L

CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F(L1SN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2004/08/18 16:18:38

Applicant : Sony Corporation Kind of EUT : Notebook Personal Computer Model No. : PCG-1H1L Serial No. : 1200027	Report No. : 24LE0219-H0 Power : AC120V / 60Hz(AC Adapter) Temp /Humi% : 27 deg.C / 55 % Operator : Hiroka Uneyama
Mode / Remarks : Transmitting 11g 54Mbps 2437MHz	
LIMIT : FCC15C §15.207 (QP) FCC15C §15.207 (AV)	

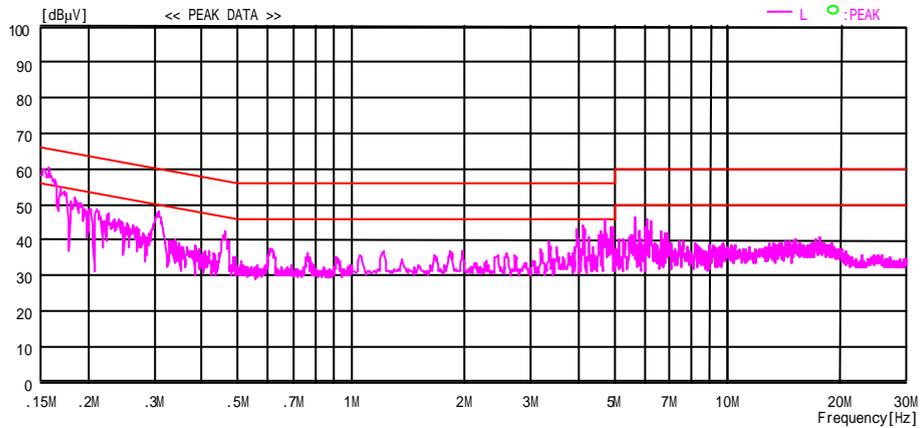
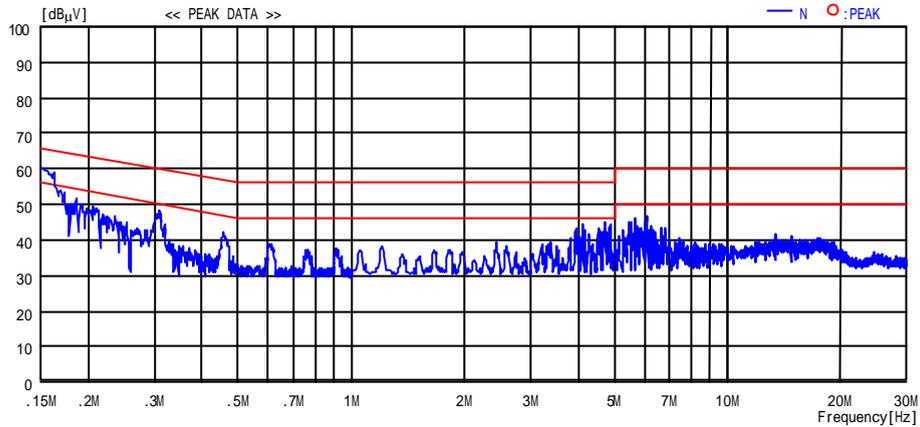


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2004/08/18 16:14:49

Applicant	: Sony Corporation	Report No.	: 24LE0219-HO
Kind of EUT	: Notebook Personal Computer	Power	: AC120V / 60Hz(AC Adapter)
Model No.	: PCG-1H1L	Temp /Humi%	: 27 deg.C / 55 %
Serial No.	: 1200027	Operator	: Hiroka Umeyama

Mode / Remarks : Transmitting 11g 54Mbps 2462MHz

LIMIT : FCC15C § 15.207 (OP)
 FCC15C § 15.207 (AV)

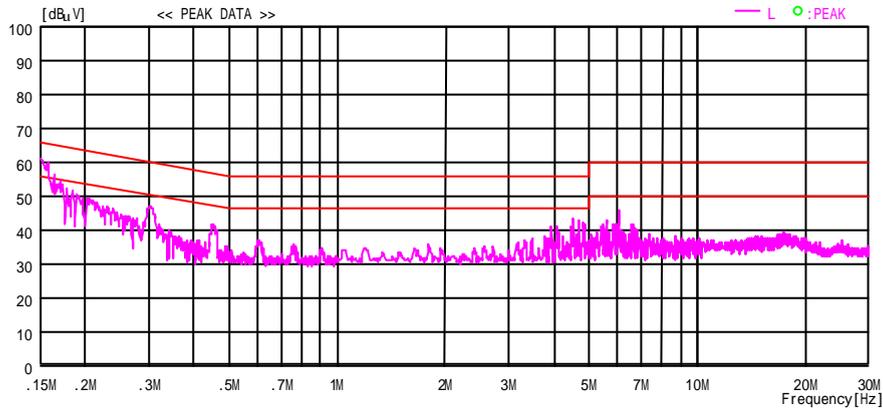
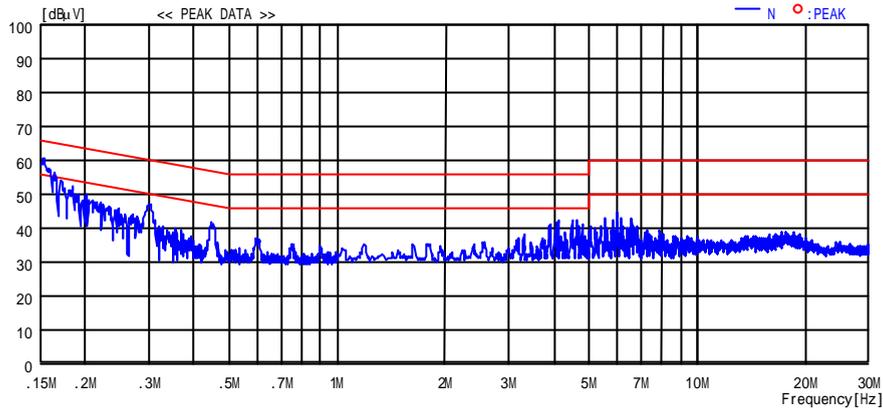


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

6dB Bandwidth(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

Company : Sony Corporation
Equipment : Notebook Personal Computer
Model : PCG-1H1L
Sample No. : 1200034
Power : DC 16V (AC 120V / 60Hz)
Mode : Tx, IEEE802.11b,11Mbps
: Tx, IEEE802.11g,54Mbps

REPORT NO : 24LE0219-HO
REGULATION : Fcc Part15 Subpart C 15.247(a)(2)
TEST DISTANCE : -
DATE : 08/09/2004
TEMPERATURE : 24
HUMIDITY : 60%
ENGINEER : Hiroka Umeyama

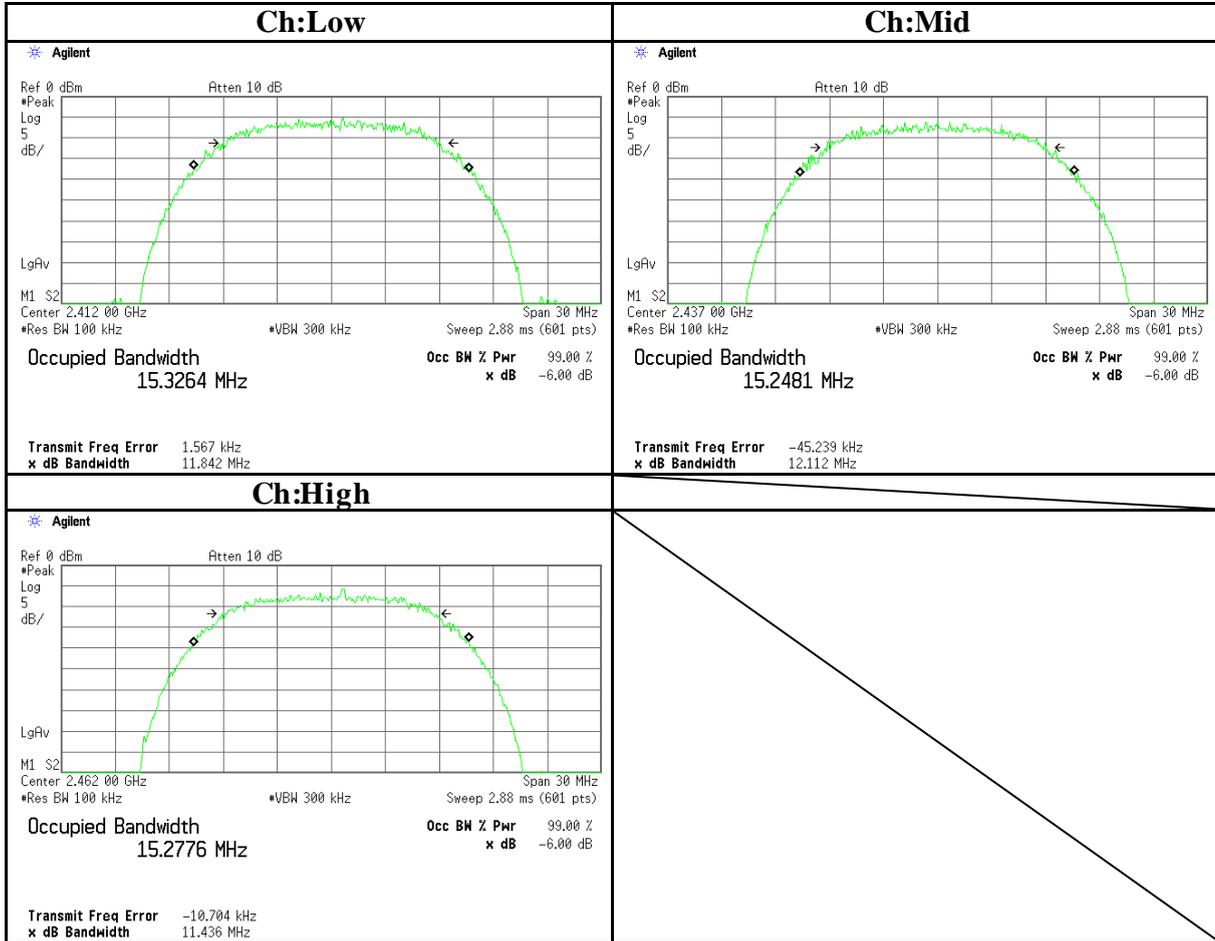
[IEEE802.11b]

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	11.842	500.0
Mid	2437.0	12.112	500.0
High	2462.0	11.436	500.0

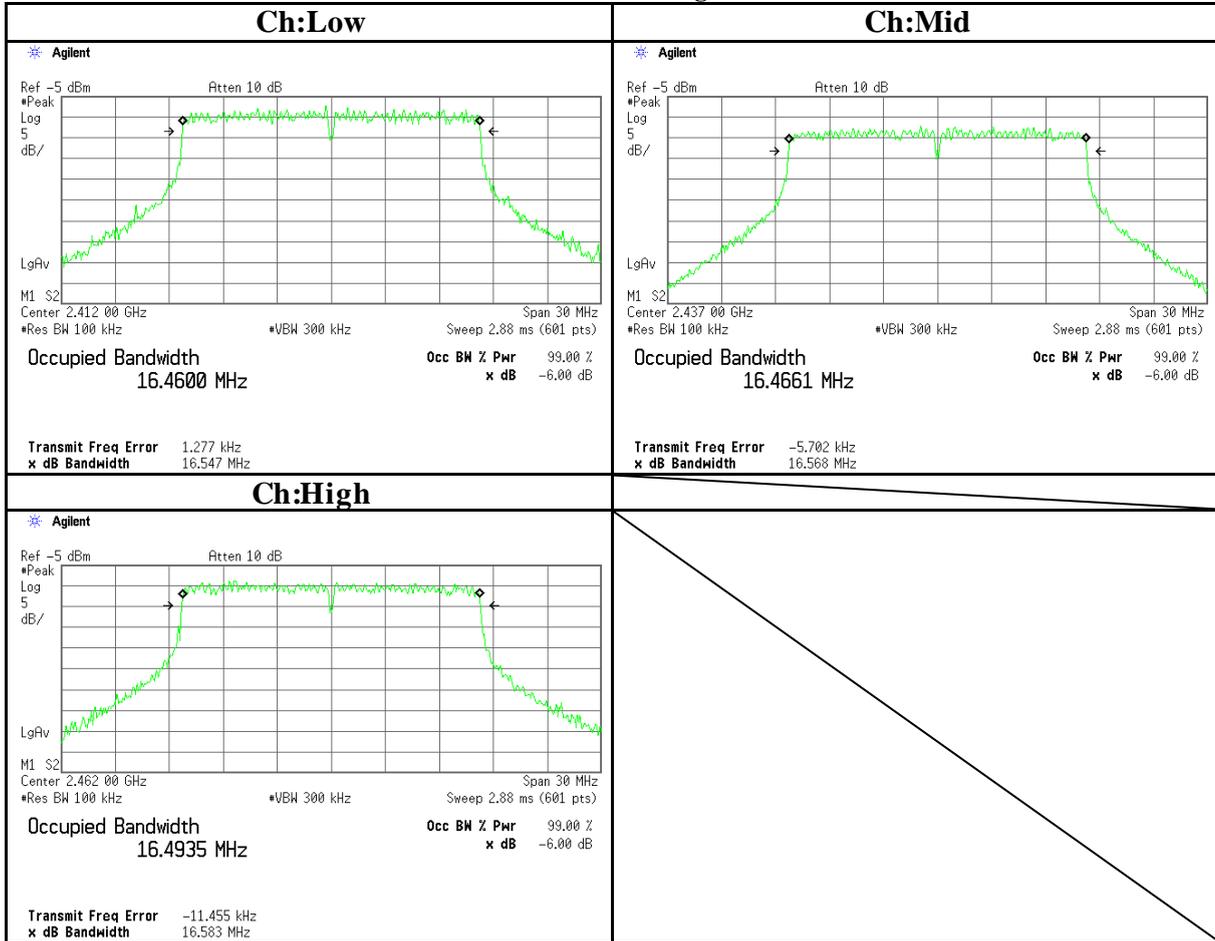
[IEEE802.11g]

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	16.547	500.0
Mid	2437.0	16.568	500.0
High	2462.0	16.583	500.0

6dB Bandwidth(DSSS and other forms of modulation)
IEEE802.11b



6dB Bandwidth(DSSS and other forms of modulation)
IEEE802.11g



Maximum Peak OutPut Power (DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

Company : Sony Corporation
Equipment : Notebook Personal Computer
Model : PCG-1H1L
Sample No. : 1200034
Power : DC 16V (AC 120V / 60Hz)
Mode : Tx, IEEE802.11b, 11Mbps
: Tx, IEEE802.11g

REPORT NO : 24LE0219-HO
REGULATION : Fcc Part15 Subpart C 15.247(b)(3)
TEST DISTANCE : -
DATE : 08/09/2004
TEMPERATURE : 24
HUMIDITY : 60%
ENGINEER : Hiroka Umeyama

[IEEE802.11b] Main Antenna

Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	-4.4	1.1	20.0	16.7	30.0	13.3
Mid	2437.0	-4.4	1.1	20.0	16.7	30.0	13.3
High	2462.0	-4.9	1.1	20.0	16.2	30.0	13.8

[IEEE802.11b] Sub Antenna

Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	-3.4	1.1	20.0	17.7	30.0	12.3
Mid	2437.0	-3.6	1.1	20.0	17.5	30.0	12.5
High	2462.0	-4.8	1.1	20.0	16.3	30.0	13.7

[IEEE802.11g] 64QAM , Main Antenna

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	9.2	1.1	10.0	20.3	30.0	9.7
Mid	2437.0	9.0	1.1	10.0	20.1	30.0	9.9
High	2462.0	8.2	1.1	10.0	19.3	30.0	10.7

[IEEE802.11g] 64QAM , Sub Antenna

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	9.0	1.1	10.0	20.1	30.0	9.9
Mid	2437.0	9.3	1.1	10.0	20.4	30.0	9.6
High	2462.0	8.0	1.1	10.0	19.1	30.0	10.9

[IEEE802.11g] QPSK, Main Antenna

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	11.3	1.1	10.0	22.4	30.0	7.6
Mid	2437.0	10.4	1.1	10.0	21.5	30.0	8.5
High	2462.0	10.3	1.1	10.0	21.4	30.0	8.6

[IEEE802.11g] QPSK, Sub Antenna

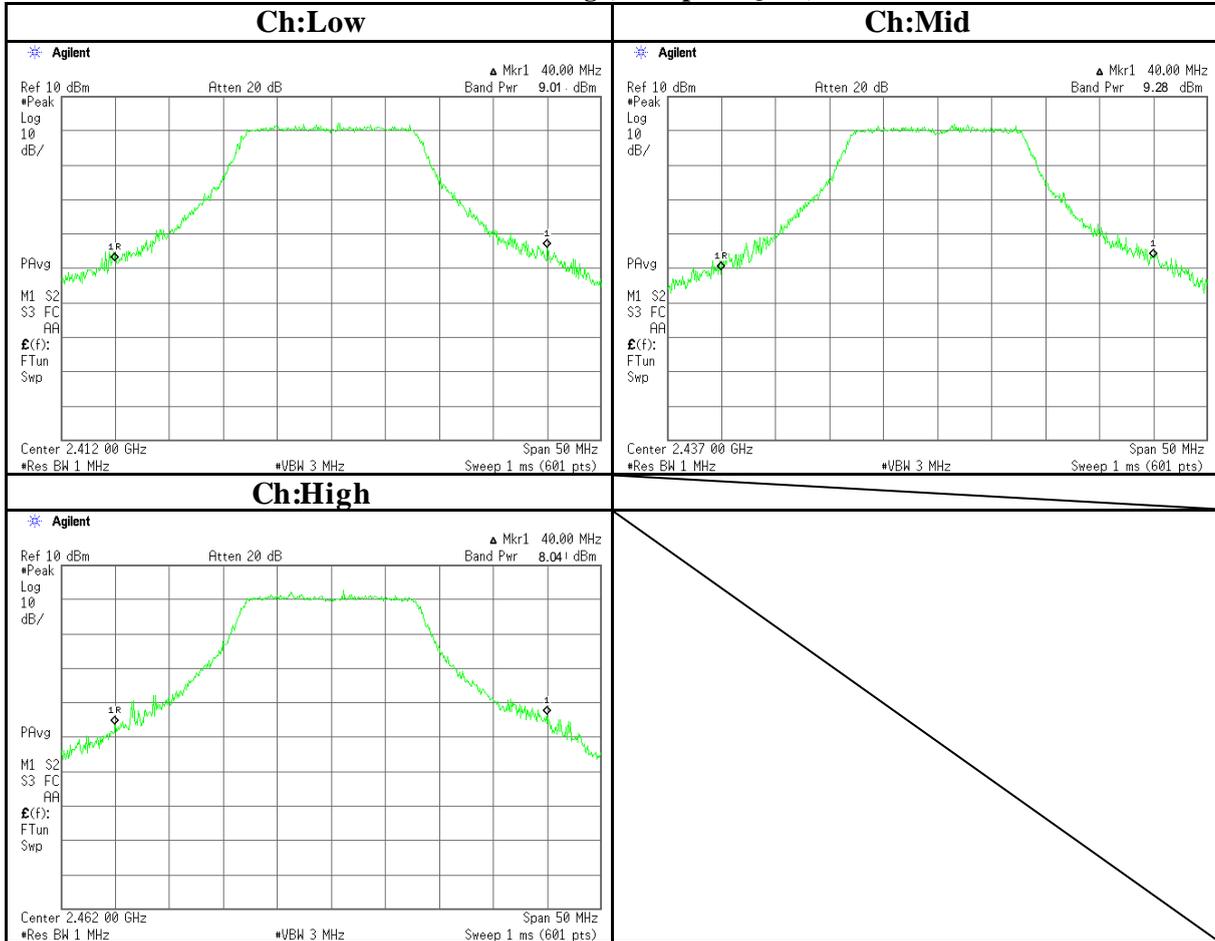
Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2412.0	11.2	1.1	10.0	22.3	30.0	7.7
Mid	2437.0	10.1	1.1	10.0	21.2	30.0	8.8
High	2462.0	10.7	1.1	10.0	21.8	30.0	8.2

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer) + Attenuator

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

Maximum Peak OutPut Power (DSSS and other forms of modulation)
IEEE802.11g (54Mbps:64QAM)



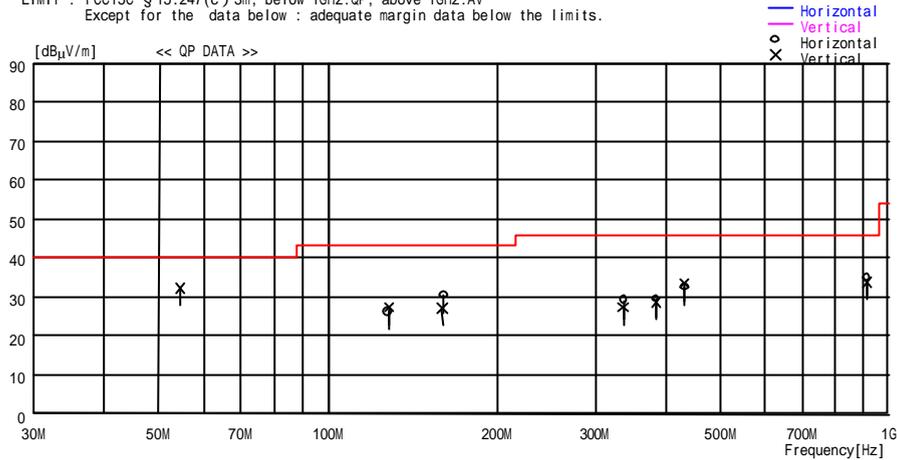
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/08/08 14:46:18

Applicant : Sony Corporation	Report No. : 24LE0219-HO
Kind of EUT : Personal Computer	Power : AC120V(DC16V)
Model No. : PCG-1H1L	Temp./Humidity : 24deg.C / 62%
Sample No. : 1200027	Operator : Hiroka Uneyama

Mode / Remarks : IEEE802.11b_11Mbps Tx2437MHz Max-axis(Y)

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
 Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBµV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBµV/m]	LIMIT [dBµV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	128.122	28.4	13.4	7.4	22.9	26.3	43.5	17.2	158	87
2	160.658	30.8	15.2	7.6	23.0	30.6	43.5	12.9	141	243
3	336.062	27.9	15.6	8.4	22.8	29.1	46.0	16.9	101	225
4	384.068	26.0	17.6	8.7	22.8	29.5	46.0	16.5	100	239
5	432.079	27.7	18.3	9.1	22.7	32.4	46.0	13.6	198	239
6	912.159	25.0	21.5	10.9	22.6	34.8	46.0	11.2	144	205
----- Vertical -----										
7	54.559	39.4	9.3	6.8	23.2	32.3	40.0	7.7	100	246
8	128.128	29.4	13.4	7.4	22.9	27.3	43.5	16.2	100	359
9	159.659	27.3	15.2	7.6	23.0	27.1	43.5	16.4	100	197
10	336.064	26.2	15.6	8.4	22.8	27.4	46.0	18.6	166	121
11	384.069	25.1	17.6	8.7	22.8	28.6	46.0	17.4	100	359
12	432.077	28.7	18.3	9.1	22.7	33.4	46.0	12.6	118	246
13	912.159	24.0	21.5	10.9	22.6	33.8	46.0	12.2	149	183

CHART: WITH FACTOR ANT TYPE: -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
 CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

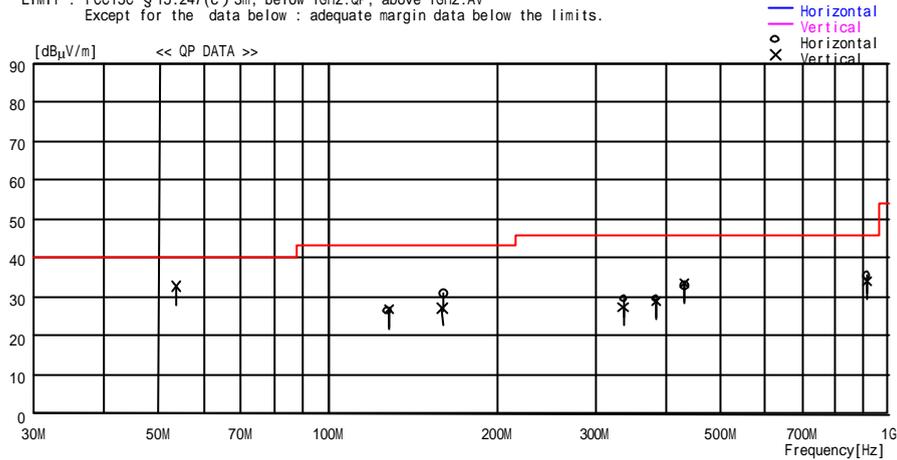
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/08/08 16:01:10

Applicant : Sony Corporation	Report No. : 24LE0219-HO
Kind of EUT : Personal Computer	Power : AC120V(DC16V)
Model No. : PCG-1H1L	Temp./Humi% : 24deg.C / 62%
Sample No. : 1200027	Operator : Hiroka Uneyama

Mode / Remarks : IEEE802.11b_11Mbps Tx2462MHz Max-axis(Y)

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBµV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBµV/m]	LIMIT [dBµV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	128.136	28.5	13.4	7.4	22.9	26.4	43.5	17.1	155	74
2	160.666	30.9	15.2	7.6	23.0	30.7	43.5	12.8	125	246
3	336.064	28.3	15.6	8.4	22.8	29.5	46.0	16.5	103	231
4	384.067	25.9	17.6	8.7	22.8	29.4	46.0	16.6	100	236
5	432.078	28.2	18.3	9.1	22.7	32.9	46.0	13.1	196	241
6	912.158	25.6	21.5	10.9	22.6	35.4	46.0	10.6	163	215
----- Vertical -----										
7	53.561	39.6	9.5	6.8	23.2	32.7	40.0	7.3	100	246
8	128.131	29.1	13.4	7.4	22.9	27.0	43.5	16.5	100	348
9	159.660	27.4	15.2	7.6	23.0	27.2	43.5	16.3	100	234
10	336.064	26.3	15.6	8.4	22.8	27.5	46.0	18.5	171	126
11	384.068	25.3	17.6	8.7	22.8	28.8	46.0	17.2	127	196
12	432.079	28.7	18.3	9.1	22.7	33.4	46.0	12.6	138	243
13	912.159	24.1	21.5	10.9	22.6	33.9	46.0	12.1	147	179

CHART: WITH FACTOR ANT TYPE: -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
 CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

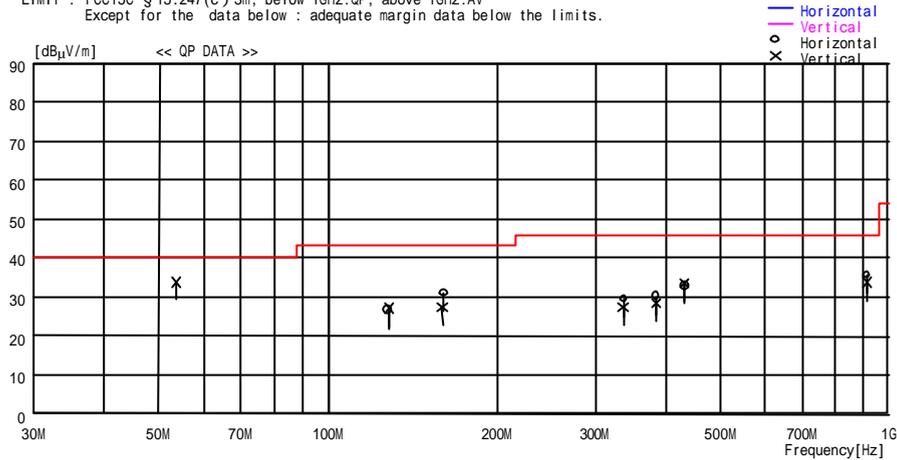
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2004/08/08 17:19:05

Applicant : Sony Corporation Kind of EUT : Personal Computer Model No. : PCG-1H1L Sample No. : 1200027	Report No. : 24LE0219-HO Power : AC120V(DC16V) Temp. /Humi% : 24deg.C / 62% Operator : Hiroka Umeyama
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Mode / Remarks : IEEE802.11g_54Mbps Tx2412MHz Max-axis(Y)

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
 Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBµV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBµV/m]	LIMIT [dBµV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	128.140	28.6	13.4	7.4	22.9	26.5	43.5	17.0	161	84
2	160.671	31.2	15.2	7.6	23.0	31.0	43.5	12.5	135	251
3	336.061	28.4	15.6	8.4	22.8	29.6	46.0	16.4	100	229
4	384.064	26.6	17.6	8.7	22.8	30.1	46.0	15.9	100	219
5	432.079	28.2	18.3	9.1	22.7	32.9	46.0	13.1	194	251
6	912.160	25.8	21.5	10.9	22.6	35.6	46.0	10.4	157	214
----- Vertical -----										
7	53.564	40.7	9.5	6.8	23.2	33.8	40.0	6.2	100	355
8	128.133	29.2	13.4	7.4	22.9	27.1	43.5	16.4	100	345
9	159.663	27.6	15.2	7.6	23.0	27.4	43.5	16.1	100	227
10	336.061	26.3	15.6	8.4	22.8	27.5	46.0	18.5	168	128
11	384.069	24.9	17.6	8.7	22.8	28.4	46.0	17.6	129	208
12	432.076	28.7	18.3	9.1	22.7	33.4	46.0	12.6	132	248
13	912.159	23.9	21.5	10.9	22.6	33.7	46.0	12.3	142	174

CHART: WITH FACTOR ANT TYPE: -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
 CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

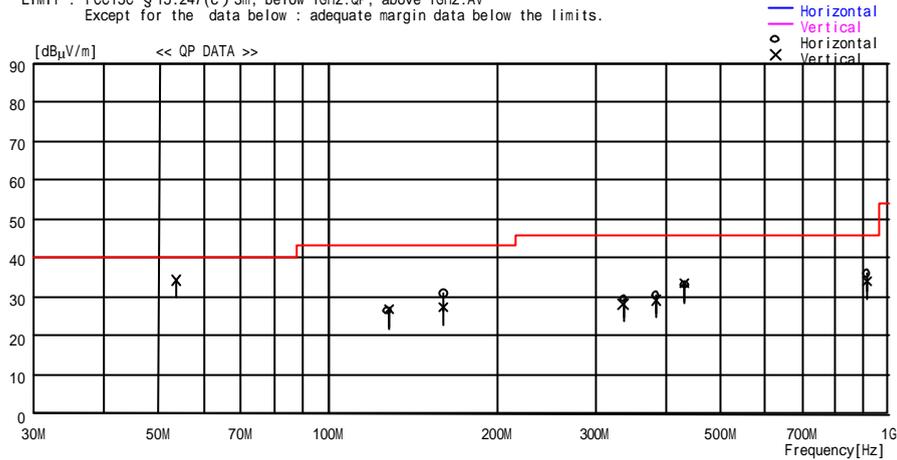
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/08/08 18:39:35

Applicant : Sony Corporation	Report No. : 24LE0219-HO
Kind of EUT : Personal Computer	Power : AC120V(DC16V)
Model No. : PCG-1H1L	Temp./Humidity : 24deg.C / 62%
Sample No. : 1200027	Operator : Hiroka Uneyama

Mode / Remarks : IEEE802.11g_54Mbps Tx2437MHz Max-axis(Y)

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
 Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dBµV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBµV/m]	LIMIT [dBµV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	128.143	28.5	13.4	7.4	22.9	26.4	43.5	17.1	161	250
2	160.677	30.9	15.2	7.6	23.0	30.7	43.5	12.8	136	252
3	336.062	28.2	15.6	8.4	22.8	29.4	46.0	16.6	102	235
4	384.069	26.8	17.6	8.7	22.8	30.3	46.0	15.7	100	212
5	432.078	28.4	18.3	9.1	22.7	33.1	46.0	12.9	194	266
6	912.159	26.1	21.5	10.9	22.6	35.9	46.0	10.1	159	219
----- Vertical -----										
7	53.567	41.2	9.5	6.8	23.2	34.3	40.0	5.7	100	359
8	128.139	29.1	13.4	7.4	22.9	27.0	43.5	16.5	100	0
9	160.683	27.6	15.2	7.6	23.0	27.4	43.5	16.1	100	231
10	336.064	27.0	15.6	8.4	22.8	28.2	46.0	17.8	171	140
11	384.069	25.7	17.6	8.7	22.8	29.2	46.0	16.8	154	191
12	432.079	28.8	18.3	9.1	22.7	33.5	46.0	12.5	137	241
13	912.158	24.2	21.5	10.9	22.6	34.0	46.0	12.0	149	171

CHART: WITH FACTOR ANT TYPE: -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
 CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

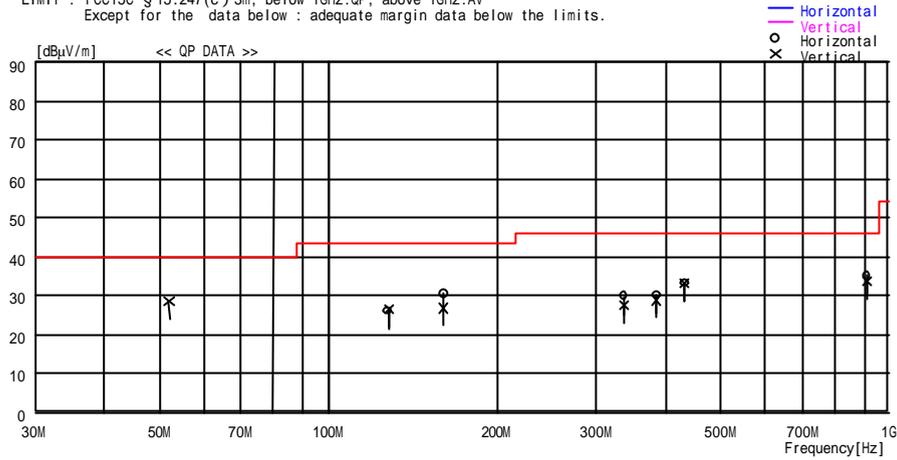
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2004/08/08 19:26:06

Applicant : Sony Corporation
 Kind of EUT : Personal Computer
 Model No. : PCG-1H1L
 Sample No. : 1200027
 Report No. : 24LE0219-HO
 Power : AC120V (DC16V)
 Temp /Humi% : 24deg.C / 62%
 Operator : Hiroka Uneyama

Mode / Remarks : IEEE802.11g_54Mbps Tx2462MHz Max-axis(Y)

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
 Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING QP [dB _μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB _μ V/m]	LIMIT [dB _μ V/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	128.148	28.1	13.4	7.4	22.9	26.0	43.5	17.5	250	113
2	160.685	30.6	15.2	7.6	23.0	30.4	43.5	13.1	200	232
3	336.065	28.5	15.6	8.4	22.8	29.7	46.0	16.3	100	225
4	384.069	26.6	17.6	8.7	22.8	30.1	46.0	15.9	100	213
5	432.079	28.5	18.3	9.1	22.7	33.2	46.0	12.8	200	284
6	912.159	25.2	21.5	10.9	22.6	35.0	46.0	11.0	163	225
----- Vertical -----										
7	52.068	35.1	9.8	6.7	23.2	28.4	40.0	11.6	100	360
8	128.157	28.5	13.4	7.4	22.9	26.4	43.5	17.1	100	1
9	160.691	27.0	15.2	7.6	23.0	26.8	43.5	16.7	100	235
10	336.061	26.2	15.6	8.4	22.8	27.4	46.0	18.6	193	22
11	384.069	25.2	17.6	8.7	22.8	28.7	46.0	17.3	171	359
12	432.078	28.5	18.3	9.1	22.7	33.2	46.0	12.8	127	240
13	912.159	23.9	21.5	10.9	22.6	33.7	46.0	12.3	155	180

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
 CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN Page:

Radiated Spurious Emission(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

COMPANY : Sony Corporation
EQUIPMENT : Notebook Personal Computer
MODEL : PCG-1H1L
SAMPLE NO. : 1200027
POWER : DC16V(AC120V/60Hz)
MODE : Transmitting (11b / 11Mbps / CH1:2412MHz)

REGULATION : Fcc Part15 Subpart C 15.247(c)
TEST DISTANCE : 3m / 1m
DATE : 08/18/2004 08/20/2004
TEMPERATURE : 25deg.C. 25deg.C.
HUMIDITY : 60% 60%
ENGINEER : Hiroka Umeyama Kenichi Adachi

PK DETECT (RBW: 1MHz VBW:1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	2390.0	46.7	48.6	30.7	36.3	6.4	0.0	47.5	49.4	74.0	26.5	24.6
2	2400.0	-	-	30.8	36.3	6.4	0.0	-	-	-	-	-
3	4824.0	44.1	45.6	35.2	36.1	9.4	1.0	53.6	55.1	74.0	20.4	18.9
4	7236.0	41.6	42.3	37.7	35.6	11.8	0.5	56.0	56.7	74.0	18.0	17.3
5	9648.0	43.3	43.8	37.1	36.3	13.9	0.5	58.5	59.0	74.0	15.5	15.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
9	12060.0	42.5	42.4	41.1	35.7	15.5	0.0	53.9	53.8	74.0	20.1	20.2
10	14472.0	40.2	40.4	41.0	34.6	16.6	0.0	53.7	53.9	74.0	20.3	20.1
11	16884.0	43.6	43.8	46.0	35.5	18.6	0.0	63.2	63.4	74.0	10.8	10.6
12	19296.0	42.5	42.7	39.6	34.9	20.4	0.0	58.1	58.3	74.0	15.9	15.7
13	21708.0	43.0	43.2	40.7	35.3	22.1	0.0	61.0	61.2	74.0	13.0	12.8
14	24120.0	43.5	43.7	40.0	36.0	22.6	0.0	60.6	60.8	74.0	13.4	13.2

AV DETECT (RBW: 1MHz VBW:10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	2390.0	36.4	40.0	30.7	36.3	6.4	0.0	37.2	40.8	54.0	16.8	13.2
2	2400.0	-	-	30.8	36.3	6.4	0.0	-	-	-	-	-
3	4824.0	32.1	34.1	35.2	36.1	9.4	1.0	41.6	43.6	54.0	12.4	10.4
4	7236.0	30.7	30.8	37.7	35.6	11.8	0.5	45.1	45.2	54.0	8.9	8.8
5	9648.0	31.6	31.5	37.1	36.3	13.9	0.5	46.8	46.7	54.0	7.2	7.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
9	12060.0	30.1	30.3	41.1	35.7	15.5	0.0	41.5	41.7	54.0	12.5	12.3
10	14472.0	28.5	28.5	41.0	34.6	16.6	0.0	42.0	42.0	54.0	12.0	12.0
11	16884.0	30.5	30.7	46.0	35.5	18.6	0.0	50.1	50.3	54.0	3.9	3.7
12	19296.0	30.3	30.4	39.6	34.9	20.4	0.0	45.9	46.0	54.0	8.1	8.0
13	21708.0	31.5	31.5	40.7	35.3	22.1	0.0	49.5	49.5	54.0	4.5	4.5
14	24120.0	30.5	30.6	40.0	36.0	22.6	0.0	47.6	47.7	54.0	6.4	6.3

20dBc(Fundamental 2412MHz) (RBW: 100kHz VBW:100kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Atten. or Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass												
1	2412.0	93.8	94.3	30.7	36.3	6.4	0.0	94.7	95.2	-	-	-
2	2400.0	50.2	52.9	30.7	36.3	6.4	0.0	51.1	53.8	Funda-20dB	23.6	21.4

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5 dB
* Except for the above table : All other spurious emissions were less than 20dB for the limit.
* Atten. : 1 to 3.5GHz, Filter : 3.5 to 26GHz
* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.
* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

Radiated Spurious Emission(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

COMPANY : Sony Corporation
EQUIPMENT : Notebook Personal Computer
MODEL : PCG-IH1L
SAMPLE NO. : 1200027
POWER : DC16V(AC120V/60Hz)
MODE : Transmitting (11b / 11Mbps / CH6:2437MHz)

REGULATION : Fcc Part15 Subpart C 15.247(c)
TEST DISTANCE : 3m / 1m
DATE : 08/18/2004 08/20/2004
TEMPERATURE : 25deg.C. 25deg.C.
HUMIDITY : 60% 60%
ENGINEER : Hiroka Umeyama Kenichi Adachi

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	4874.0	44.6	44.6	35.4	36.1	9.4	1.0	54.4	54.4	74.0	19.6	19.6
2	7311.0	42.3	41.1	37.9	35.6	11.9	0.5	57.1	55.9	74.0	16.9	18.1
3	9748.0	42.3	43.1	37.0	36.3	14.0	0.5	57.5	58.3	74.0	16.6	15.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
4	12185.0	43.0	43.1	41.4	35.6	15.6	0.0	54.9	55.0	74.0	19.1	19.0
5	14622.0	40.1	40.3	41.5	34.8	16.8	0.0	54.1	54.3	74.0	19.9	19.7
6	17059.0	43.0	43.1	46.4	35.4	18.8	0.0	63.3	63.4	74.0	10.7	10.6
7	19496.0	43.1	43.2	39.2	34.9	20.6	0.0	58.5	58.6	74.0	15.5	15.4
8	21933.0	44.0	44.1	40.5	35.0	22.3	0.0	62.3	62.4	74.0	11.7	11.6
9	24370.0	44.0	43.3	40.1	36.6	22.7	0.0	60.7	60.0	74.0	13.3	14.0

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit A V [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	4874.0	33.4	35.2	35.4	36.1	9.4	1.0	43.2	45.0	54.0	10.8	9.0
2	7311.0	30.8	30.8	37.9	35.6	11.9	0.5	45.6	45.6	54.0	8.4	8.4
3	9748.0	31.5	31.5	37.0	36.3	14.0	0.5	46.7	46.7	54.0	7.4	7.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
4	12185.0	30.0	30.1	41.4	35.6	15.6	0.0	41.9	42.0	54.0	12.1	12.0
5	14622.0	28.4	28.3	41.5	34.8	16.8	0.0	42.4	42.3	54.0	11.6	11.7
6	17059.0	30.5	30.7	46.4	35.4	18.8	0.0	50.8	51.0	54.0	3.2	3.0
7	19496.0	30.4	30.3	39.2	34.9	20.6	0.0	45.8	45.7	54.0	8.2	8.3
8	21933.0	31.9	31.7	40.5	35.0	22.3	0.0	50.2	50.0	54.0	3.8	4.0
9	24370.0	31.4	31.4	40.1	36.6	22.7	0.0	48.1	48.1	54.0	5.9	5.9

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) =

9.5 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

* Atten. : 1 to 3.5GHz, Filter : 3.5 to 26GHz

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

Radiated Spurious Emission(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

COMPANY : Sony Corporation
EQUIPMENT : Notebook Personal Computer
MODEL : PCG-1H1L
SAMPLE NO. : 1200027
POWER : DC16V(AC120V/60Hz)
MODE : Transmitting (11b / 11Mbps / CH11:2462MHz)

REGULATION : Fcc Part15 Subpart C 15.247(c)
TEST DISTANCE : 3m / 1m
DATE : 08/18/2004 08/20/2004
TEMPERATURE : 25deg.C. 25deg.C.
HUMIDITY : 60% 60%
ENGINEER : Hiroka Umeyama Kenichi Adachi

(RBW: 1MHz, VBW:1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	2483.5	53.5	51.5	30.8	36.2	6.5	0.0	54.6	52.6	74.0	19.4	21.4
2	2688.0	48.8	48.7	31.4	36.2	6.7	0.0	50.7	50.6	74.0	23.3	23.4
3	4924.0	45.5	44.3	35.9	36.1	9.5	1.0	55.9	54.7	74.0	18.1	19.3
4	7386.0	43.1	43.0	38.3	35.7	12.0	0.5	58.3	58.2	74.0	15.7	15.8
5	9848.0	43.5	43.4	37.1	36.4	14.1	0.5	58.9	58.8	74.0	15.2	15.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
6	12310.0	43.0	43.1	41.7	35.6	15.6	0.0	55.2	55.3	74.0	18.8	18.7
7	14772.0	40.7	40.9	42.1	34.9	16.9	0.0	55.3	55.5	74.0	18.7	18.5
8	17234.0	43.3	43.2	46.7	35.3	18.9	0.0	64.1	64.0	74.0	9.9	10.0
9	19696.0	42.2	42.1	39.6	35.2	20.7	0.0	57.8	57.7	74.0	16.2	16.3
10	22158.0	44.2	44.1	40.6	35.0	22.3	0.0	62.6	62.5	74.0	11.4	11.5
11	24620.0	44.1	44.0	40.2	36.8	22.9	0.0	60.9	60.8	74.0	13.1	13.2

(RBW: 1MHz, VBW:10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	2483.5	40.7	39.1	30.8	36.2	6.5	0.0	41.8	40.2	54.0	12.2	13.8
2	2688.0	44.9	45.1	31.4	36.2	6.7	0.0	46.8	47.0	54.0	7.2	7.0
3	4924.0	31.7	32.5	35.9	36.1	9.5	1.0	42.1	42.9	54.0	11.9	11.1
4	7386.0	31.2	30.8	38.3	35.7	12.0	0.5	46.4	46.0	54.0	7.6	8.0
5	9848.0	31.7	31.9	37.1	36.4	14.1	0.5	47.1	47.3	54.0	7.0	6.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
6	12310.0	31.5	31.6	41.7	35.6	15.6	0.0	43.7	43.8	54.0	10.3	10.2
7	14772.0	29.0	29.0	42.1	34.9	16.9	0.0	43.6	43.6	54.0	10.4	10.4
8	17234.0	31.0	30.9	46.7	35.3	18.9	0.0	51.8	51.7	54.0	2.2	2.3
9	19696.0	30.4	30.3	39.6	35.2	20.7	0.0	46.0	45.9	54.0	8.0	8.1
10	22158.0	31.8	31.8	40.6	35.0	22.3	0.0	50.2	50.2	54.0	3.8	3.8
11	24620.0	32.0	32.1	40.2	36.8	22.9	0.0	48.8	48.9	54.0	5.2	5.1

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) =

9.5 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

* Atten. : 1 to 3.5GHz, Filter : 3.5 to 26GHz

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

Radiated Spurious Emission(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

COMPANY : Sony Corporation
EQUIPMENT : Notebook Personal Computer
MODEL : PCG-1H1L
SAMPLE NO. : 1200027
POWER : DC16V(AC120V/60Hz)
MODE : Transmitting (11g / 54Mbps / CH1:2412MHz)
REGULATION : Fcc Part15 Subpart C 15.247(c)
TEST DISTANCE : 3m / 1m
DATE : 08/18/2004
TEMPERATURE : 25deg.C.
HUMIDITY : 60%
ENGINEER : Hiroka Umeyama Kenichi Adachi

PK DETECT (RBW: 1MHz, VBW:1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	2390.0	53.9	56.3	30.7	36.3	6.4	0.0	54.7	57.1	74.0	19.3	16.9
2	2400.0	-	-	30.8	36.3	6.4	0.0	-	-	-	-	-
3	4824.0	45.1	46.4	35.2	36.1	9.4	1.0	54.6	55.9	74.0	19.4	18.1
4	7236.0	43.7	43.5	37.7	35.6	11.8	0.5	58.1	57.9	74.0	15.9	16.1
5	9648.0	44.8	44.5	37.1	36.3	13.9	0.5	60.0	59.7	74.0	14.0	14.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
9	12060.0	42.2	42.0	41.1	35.7	15.5	0.0	53.6	53.4	74.0	20.4	20.6
10	14472.0	40.6	40.7	41.0	34.6	16.6	0.0	54.1	54.2	74.0	19.9	19.8
11	16884.0	43.0	43.1	46.0	35.5	18.6	0.0	62.6	62.7	74.0	11.4	11.3
12	19296.0	41.1	41.0	39.6	34.9	20.4	0.0	56.7	56.6	74.0	17.3	17.4
13	21708.0	43.2	43.4	40.7	35.3	22.1	0.0	61.2	61.4	74.0	12.8	12.6
14	24120.0	43.4	42.5	40.0	36.0	22.6	0.0	60.5	59.6	74.0	13.5	14.4

AV DETECT (RBW: 1MHz, VBW:10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	2390.0	37.5	39.6	30.7	36.3	6.4	0.0	38.3	40.4	54.0	15.7	13.6
2	2400.0	-	-	30.8	36.3	6.4	0.0	-	-	-	-	-
3	4824.0	31.9	32.4	35.2	36.1	9.4	1.0	41.4	41.9	54.0	12.6	12.1
4	7236.0	30.9	30.9	37.7	35.6	11.8	0.5	45.3	45.3	54.0	8.7	8.7
5	9648.0	31.7	32.1	37.1	36.3	13.9	0.5	46.9	47.3	54.0	7.1	6.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
9	12060.0	30.2	30.1	41.1	35.7	15.5	0.0	41.6	41.5	54.0	12.4	12.5
10	14472.0	28.5	28.5	41.0	34.6	16.6	0.0	42.0	42.0	54.0	12.0	12.0
11	16884.0	30.7	30.8	46.0	35.5	18.6	0.0	50.3	50.4	54.0	3.7	3.6
12	19296.0	30.8	30.9	39.6	34.9	20.4	0.0	46.4	46.5	54.0	7.6	7.5
13	21708.0	31.2	31.1	40.7	35.3	22.1	0.0	49.2	49.1	54.0	4.8	4.9
14	24120.0	30.7	30.6	40.0	36.0	22.6	0.0	47.8	47.7	54.0	6.2	6.3

20dBc(Fundamental)2412MHz (RBW: 100kHz, VBW:100kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Atten. or Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass												
1	2412.0	87.1	90.8	30.7	36.3	6.4	0.0	88.0	91.7	-	-	-
2	2400.0	59.2	60.6	30.7	36.3	6.4	0.0	60.1	61.5	Funda-20dB	7.9	10.2

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5 dB
* Except for the above table : All other spurious emissions were less than 20dB for the limit.
* Atten. : 1 to 3.5GHz, Filter : 3.5 to 26GHz
* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.
* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

Radiated Spurious Emission(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

COMPANY : Sony Corporation
EQUIPMENT : Notebook Personal Computer
MODEL : PCG-IH1L
SAMPLE NO. : 1200027
POWER : DC16V(AC120V/60Hz)
MODE : Transmitting (11g / 54Mbps / CH6:2437MHz)

REGULATION : Fcc Part15 Subpart C 15.247(c)
TEST DISTANCE : 3m / 1m
DATE : 08/18/2004 08/20/2004
TEMPERATURE : 25deg.C. 25deg.C.
HUMIDITY : 60% 60%
ENGINEER : Hiroka Umeyama Kenichi Adachi

PK DETECT (RBW: 1MHz VBW:1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	4874.0	45.3	47.7	35.4	36.1	9.4	1.0	55.1	57.5	74.0	18.9	16.5
2	7311.0	43.7	43.9	37.9	35.6	11.9	0.5	58.5	58.7	74.0	15.5	15.3
3	9748.0	44.6	44.3	37.0	36.3	14.0	0.5	59.8	59.5	74.0	14.3	14.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
4	12185.0	42.2	42.1	41.4	35.6	15.6	0.0	54.1	54.0	74.0	19.9	20.0
5	14622.0	41.1	41.3	41.5	34.8	16.8	0.0	55.1	55.3	74.0	18.9	18.7
6	17059.0	42.6	42.8	46.4	35.4	18.8	0.0	62.9	63.1	74.0	11.1	10.9
7	19496.0	42.5	42.4	39.2	34.9	20.6	0.0	57.9	57.8	74.0	16.1	16.2
8	21933.0	43.8	43.6	40.5	35.0	22.3	0.0	62.1	61.9	74.0	11.9	12.1
9	24370.0	43.6	43.8	40.1	36.6	22.7	0.0	60.3	60.5	74.0	13.7	13.5

AV DETECT (RBW: 1MHz VBW:10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	4874.0	32.5	33.8	35.4	36.1	9.4	1.0	42.3	43.6	54.0	11.7	10.4
2	7311.0	31.2	31.0	37.9	35.6	11.9	0.5	46.0	45.8	54.0	8.0	8.2
3	9748.0	31.8	31.8	37.0	36.3	14.0	0.5	47.0	47.0	54.0	7.1	7.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
4	12185.0	30.1	30.0	41.4	35.6	15.6	0.0	42.0	41.9	54.0	12.0	12.1
5	14622.0	28.7	28.4	41.5	34.8	16.8	0.0	42.7	42.4	54.0	11.3	11.6
6	17059.0	30.7	30.6	46.4	35.4	18.8	0.0	51.0	50.9	54.0	3.0	3.1
7	19496.0	30.6	30.5	39.2	34.9	20.6	0.0	46.0	45.9	54.0	8.0	8.1
8	21933.0	31.4	31.0	40.5	35.0	22.3	0.0	49.7	49.3	54.0	4.3	4.7
9	24370.0	31.4	31.5	40.1	36.6	22.7	0.0	48.1	48.2	54.0	5.9	5.8

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) =

9.5 dB

* Except for the above table : All other spurious emissions were less than 20dB for the limit.

* Atten. : 1 to 3.5GHz, Filter : 3.5 to 26GHz

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

Radiated Spurious Emission(DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

COMPANY : Sony Corporation
EQUIPMENT : Notebook Personal Computer
MODEL : PCG-IH1L
SAMPLE NO. : 1200027
POWER : DC16V(AC120V/60Hz)
MODE : Transmitting (11g / 54Mbps / CH11:2462MHz)

REGULATION : Fcc Part15 Subpart C 15.247(c)
TEST DISTANCE : 3m / 1m
DATE : 08/18/2004 08/20/2004
TEMPERATURE : 25deg.C. 25deg.C.
HUMIDITY : 60% 60%
ENGINEER : Hiroka Umeyama Kenichi Adachi

PK DETECT (RBW: 1MHz, VBW:1MHz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	2483.5	70.5	61.3	30.8	36.2	6.5	0.0	71.6	62.4	74.0	2.4	11.6
2	2688.0	50.9	47.6	31.4	36.2	6.7	0.0	52.8	49.5	74.0	21.2	24.5
3	4924.0	47.4	49.2	35.9	36.1	9.5	1.0	57.8	59.6	74.0	16.2	14.4
4	7386.0	44.1	43.0	38.3	35.7	12.0	0.5	59.3	58.2	74.0	14.7	15.8
5	9848.0	44.5	44.8	37.1	36.4	14.1	0.5	59.9	60.2	74.0	14.2	13.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
6	12310.0	42.4	42.3	41.7	35.6	15.6	0.0	54.6	54.5	74.0	19.4	19.5
7	14772.0	41.4	41.5	42.1	34.9	16.9	0.0	56.0	56.1	74.0	18.0	17.9
8	17234.0	42.7	42.8	46.7	35.3	18.9	0.0	63.5	63.6	74.0	10.5	10.4
9	19696.0	42.8	42.9	39.6	35.2	20.7	0.0	58.4	58.5	74.0	15.6	15.5
10	22158.0	43.7	43.6	40.6	35.0	22.3	0.0	62.1	62.0	74.0	11.9	12.0
11	24620.0	44.4	44.3	40.2	36.8	22.9	0.0	61.2	61.1	74.0	12.8	12.9

AV DETECT (RBW: 1MHz, VBW:10Hz)

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)												
1	2483.5	52.5	51.3	30.8	36.2	6.5	0.0	53.6	52.4	54.0	0.4	1.6
2	2688.0	45.9	40.0	31.4	36.2	6.7	0.0	47.8	41.9	54.0	6.2	12.1
3	4924.0	33.4	35.1	35.9	36.1	9.5	1.0	43.8	45.5	54.0	10.2	8.5
4	7386.0	30.9	31.0	38.3	35.7	12.0	0.5	46.1	46.2	54.0	7.9	7.8
5	9848.0	32.1	32.1	37.1	36.4	14.1	0.5	47.5	47.5	54.0	6.5	6.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac												
6	12310.0	30.6	30.5	41.7	35.6	15.6	0.0	42.8	42.7	54.0	11.2	11.3
7	14772.0	29.4	29.1	42.1	34.9	16.9	0.0	44.0	43.7	54.0	10.0	10.3
8	17234.0	30.9	31.0	46.7	35.3	18.9	0.0	51.7	51.8	54.0	2.3	2.2
9	19696.0	30.2	30.2	39.6	35.2	20.7	0.0	45.8	45.8	54.0	8.2	8.2
10	22158.0	31.7	31.7	40.6	35.0	22.3	0.0	50.1	50.1	54.0	3.9	3.9
11	24620.0	32.9	32.8	40.2	36.8	22.9	0.0	49.7	49.6	54.0	4.3	4.4

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) =

9.5 dB

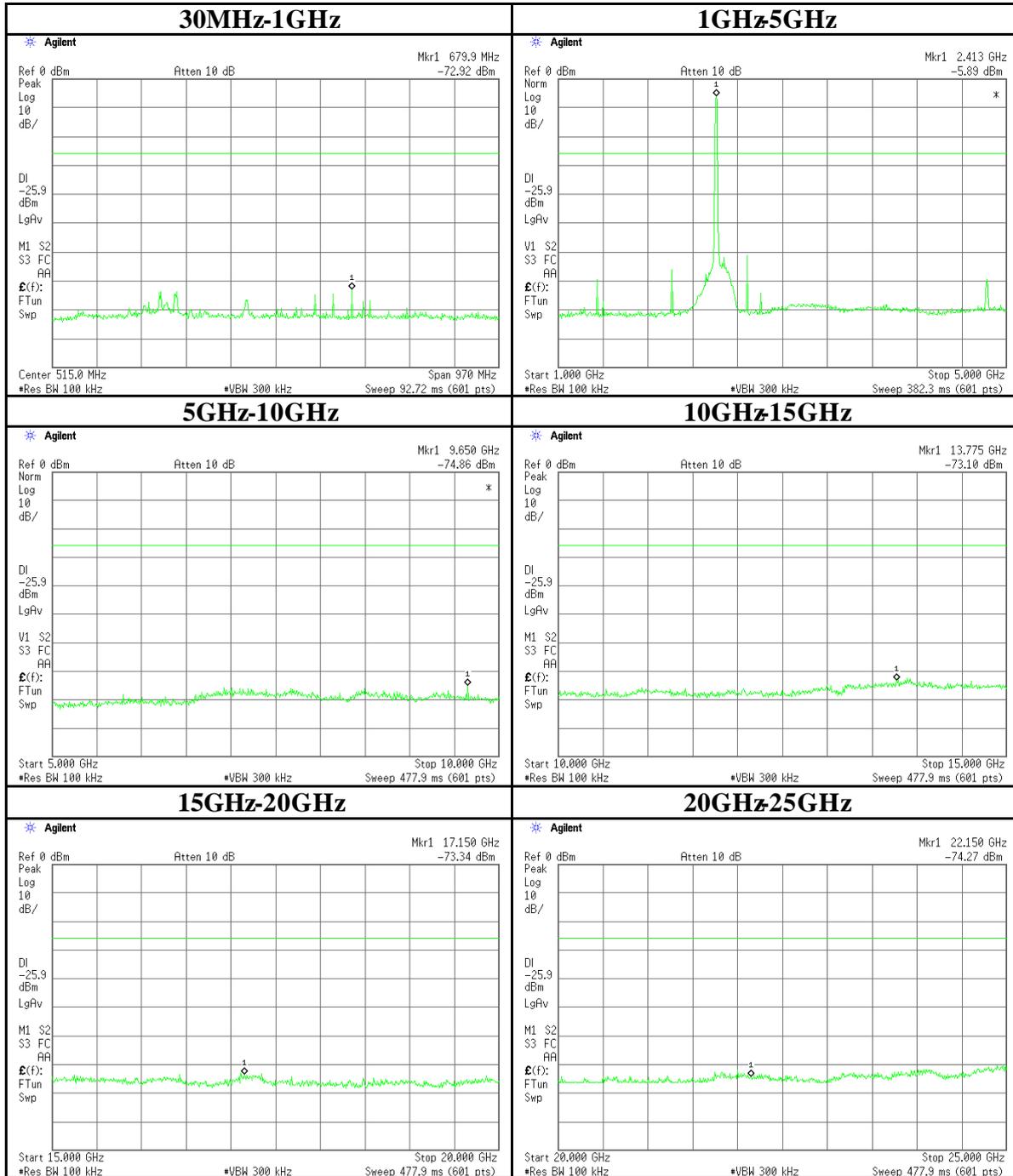
* Except for the above table : All other spurious emissions were less than 20dB for the limit.

* Atten. : 1 to 3.5GHz, Filter : 3.5 to 26GHz

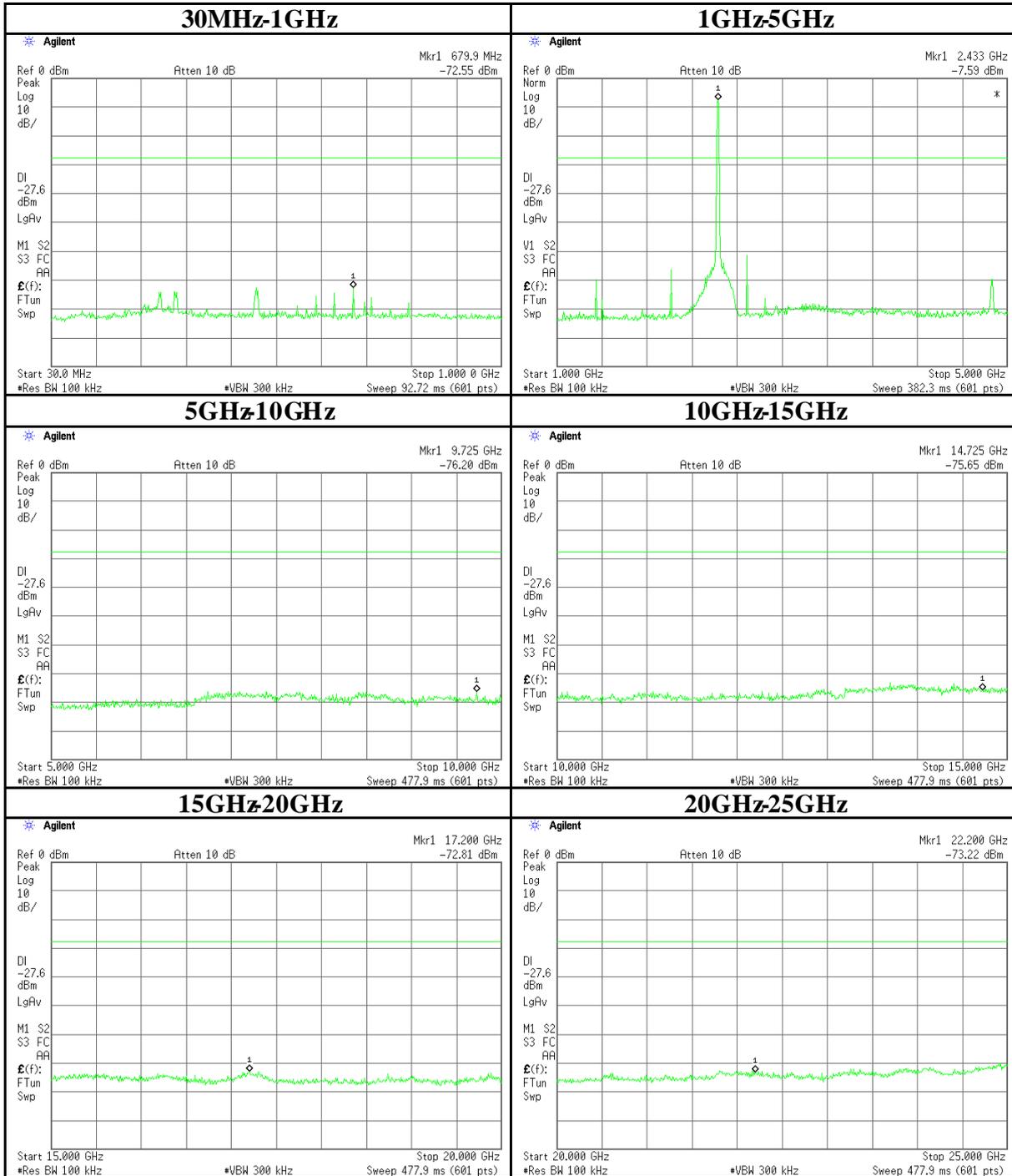
* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

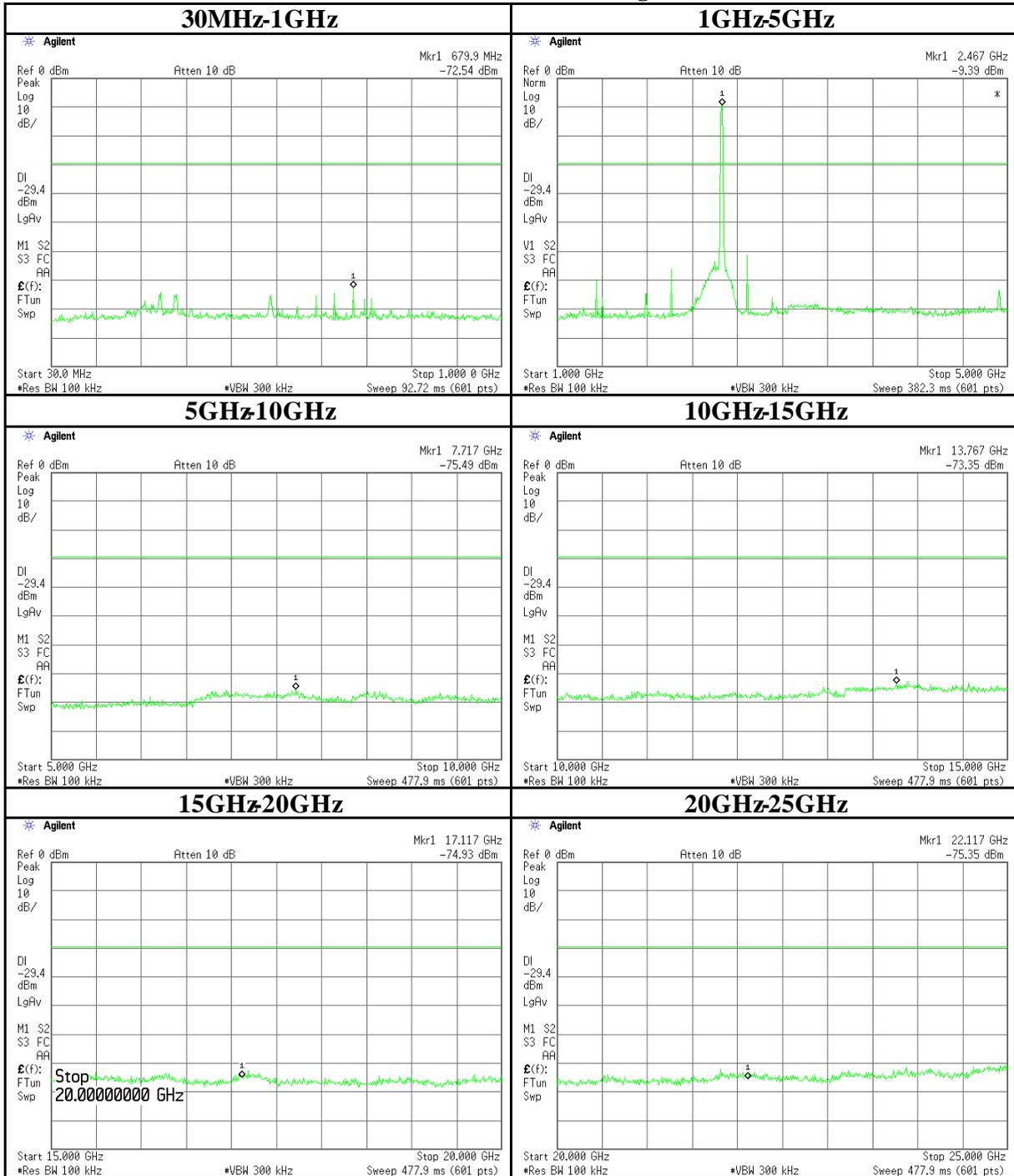
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11b Ch : Low



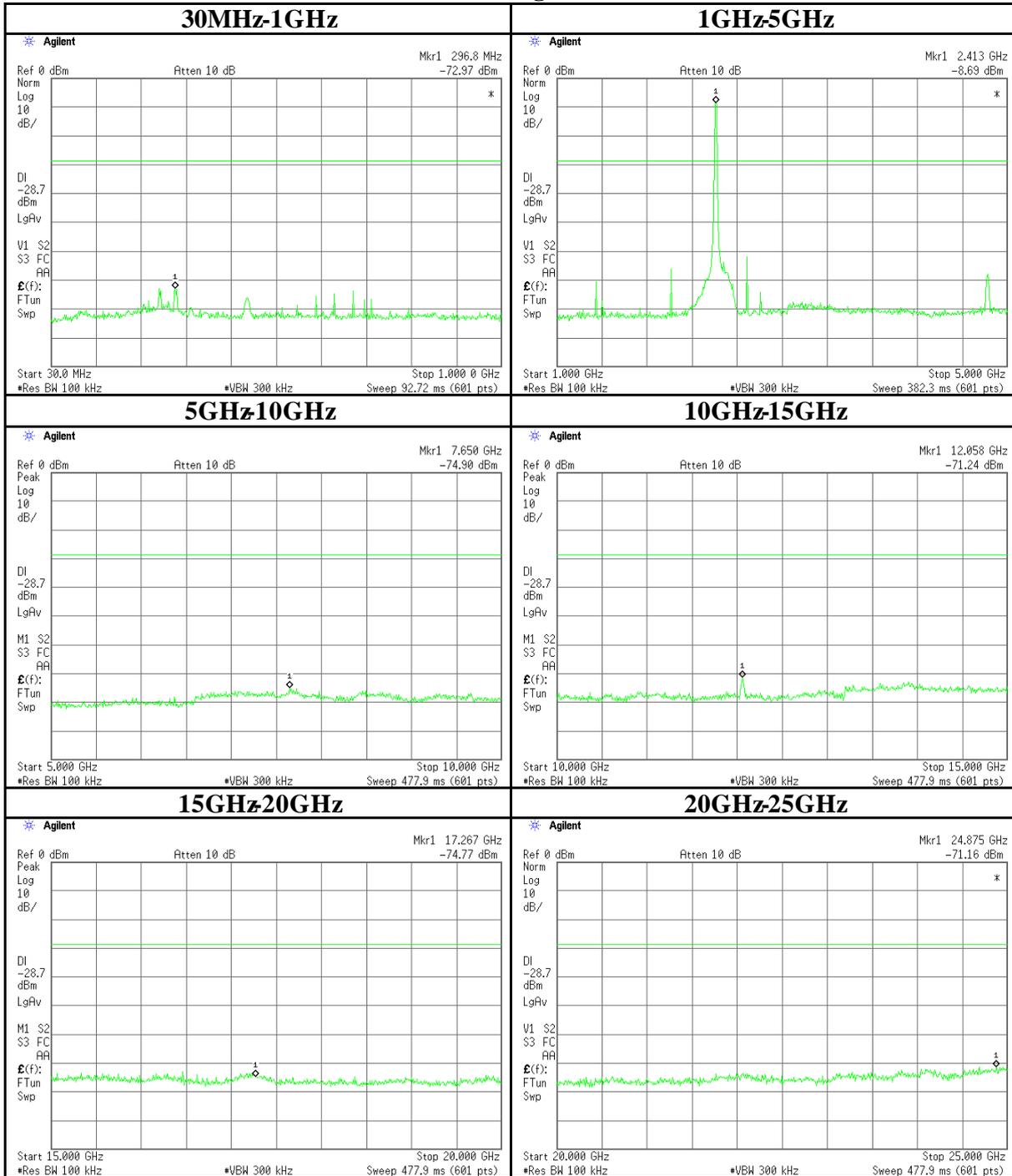
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11b Ch : Mid



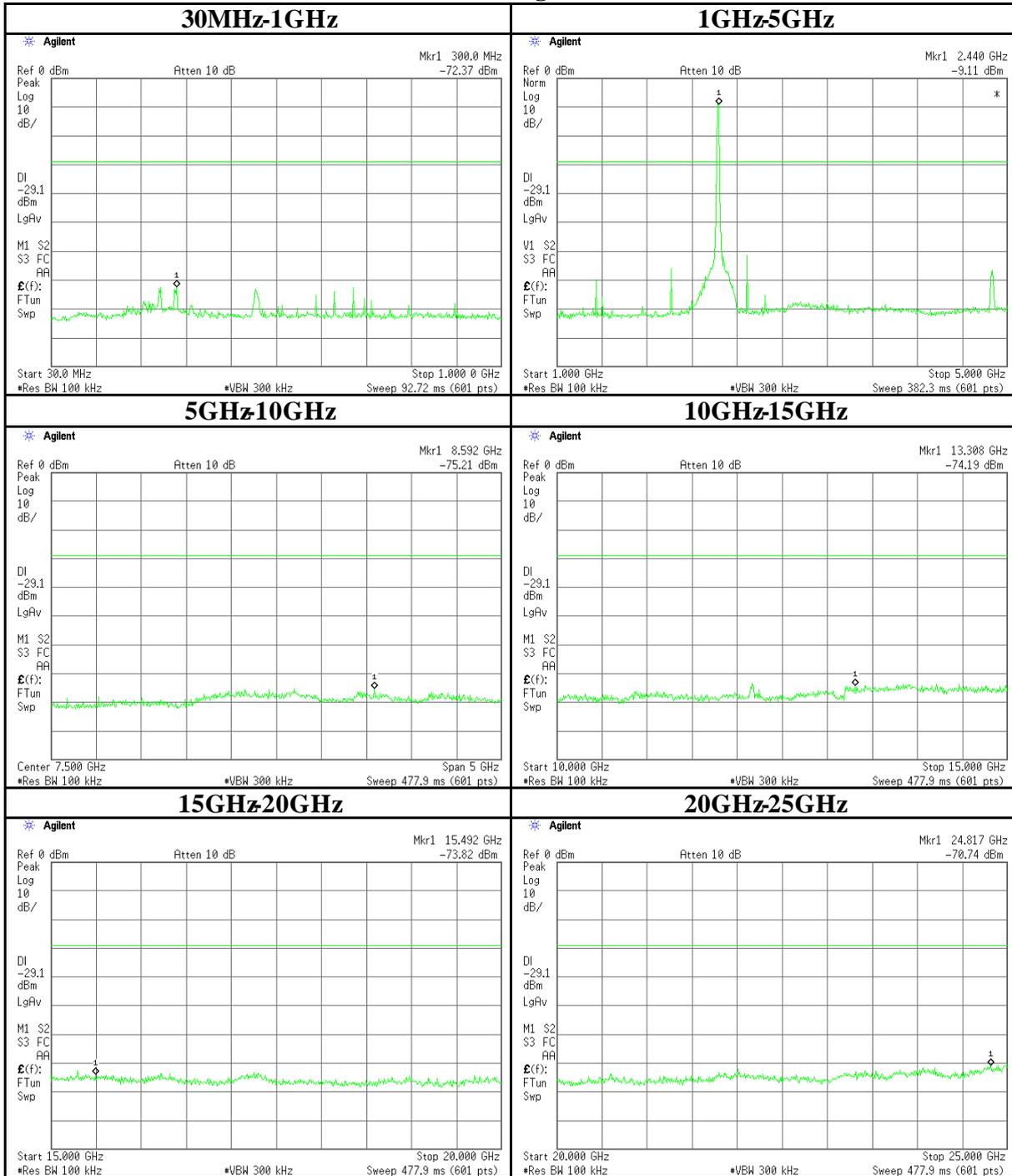
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11b Ch : High



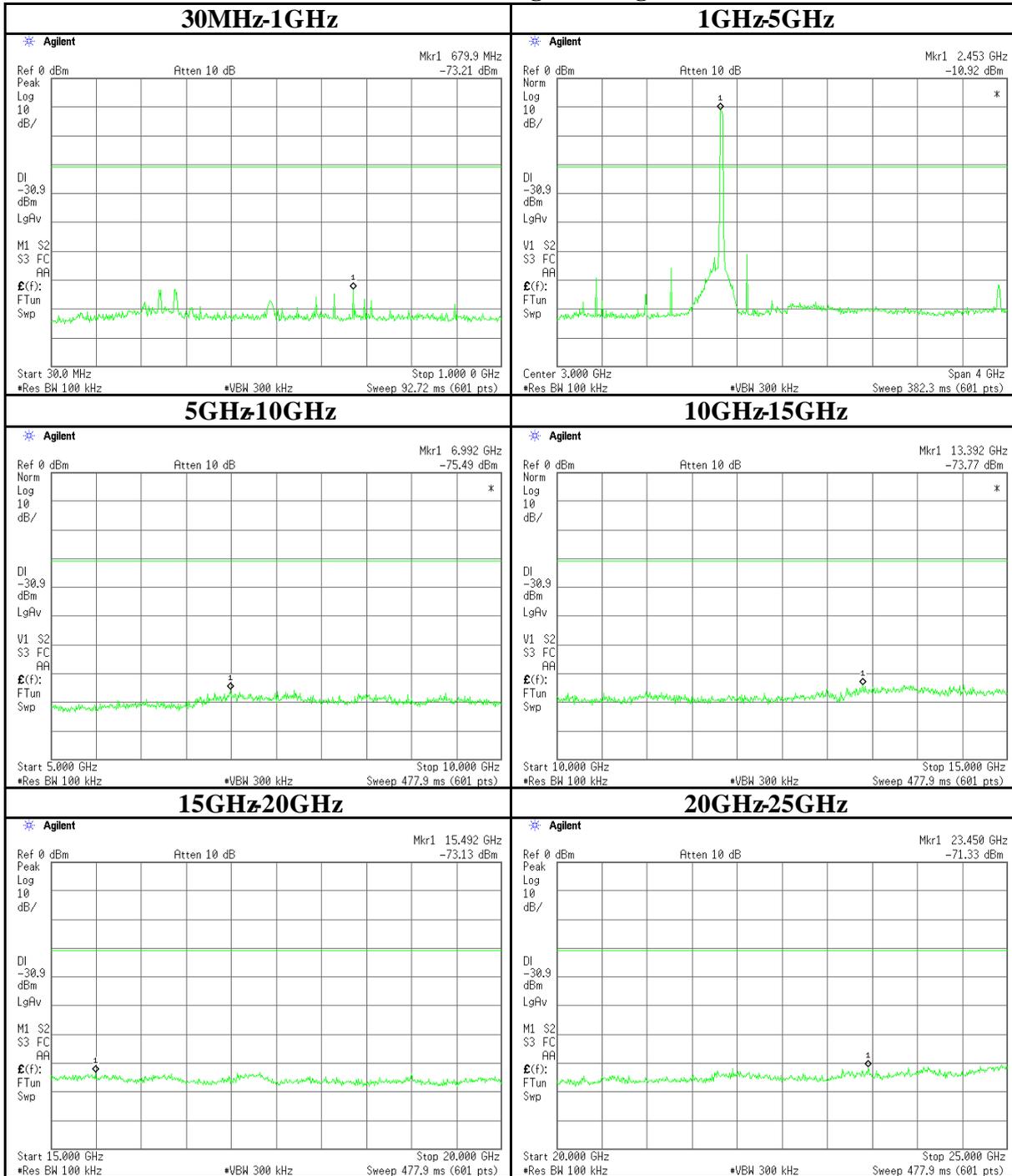
Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11g Ch : Low



Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11g Ch : Mid

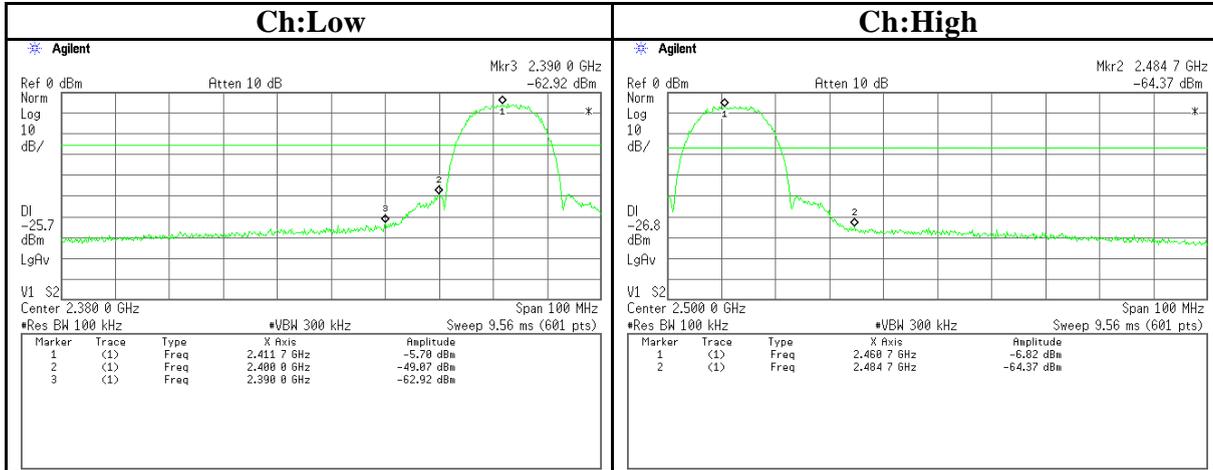


Conducted Spurious Emission(DSSS and other forms of modulation)
IEEE802.11g Ch : High

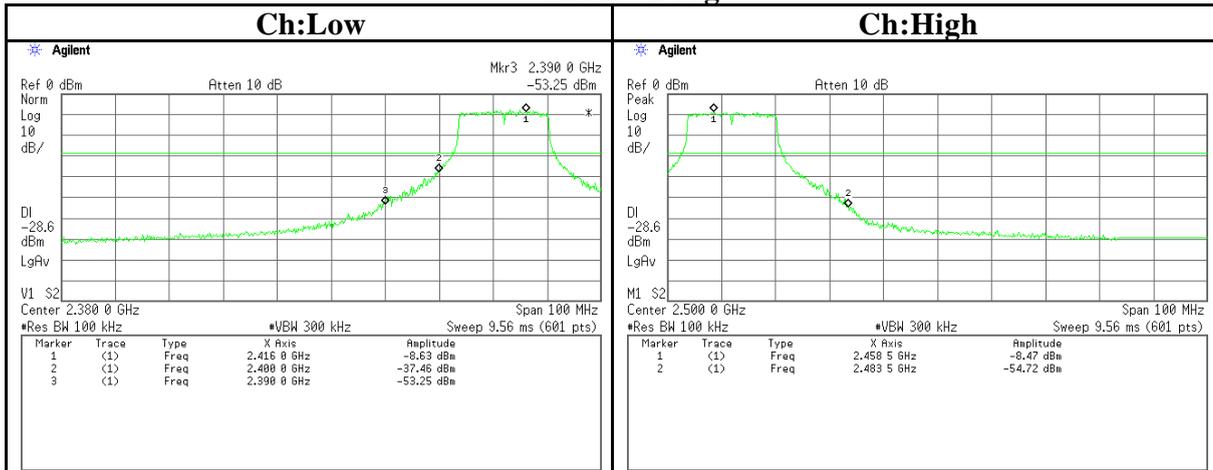


Conducted emission Band Edge compliance (DSSS and other forms of modulation)

IEEE802.11b



IEEE802.11g



Power Density (DSSS and other forms of modulation)

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Measurement Room

Company	: Sony Corporation	REPORT NO	: 24LE0219-HO
Equipment	: Notebook Personal Computer	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: PCG-1H1L	TEST DISTANCE	: -
Sample No.	: 1200034	DATE	: 08/09/2004
Power	: DC 16V (AC 120V / 60Hz)	TEMPERATURE	: 24
Mode	: Tx, IEEE802.11b,11Mbps	HUMIDITY	: 60%
	: Tx, IEEE802.11g,54Mbps	ENGINEER	: Hiroka Umeyama

[IEEE802.11b]

Ch	Freq. [MHz]	Reading [dBm]	Cable [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.7	-16.56	1.1	10.0	-5.4	8.0	13.4
Mid	2437.7	-16.49	1.1	10.0	-5.4	8.0	13.4
High	2462.4	-17.61	1.1	10.0	-6.5	8.0	14.5

Sample Calculation:

Result = Reading + Cable Loss (spplied by customer) + Attenuator

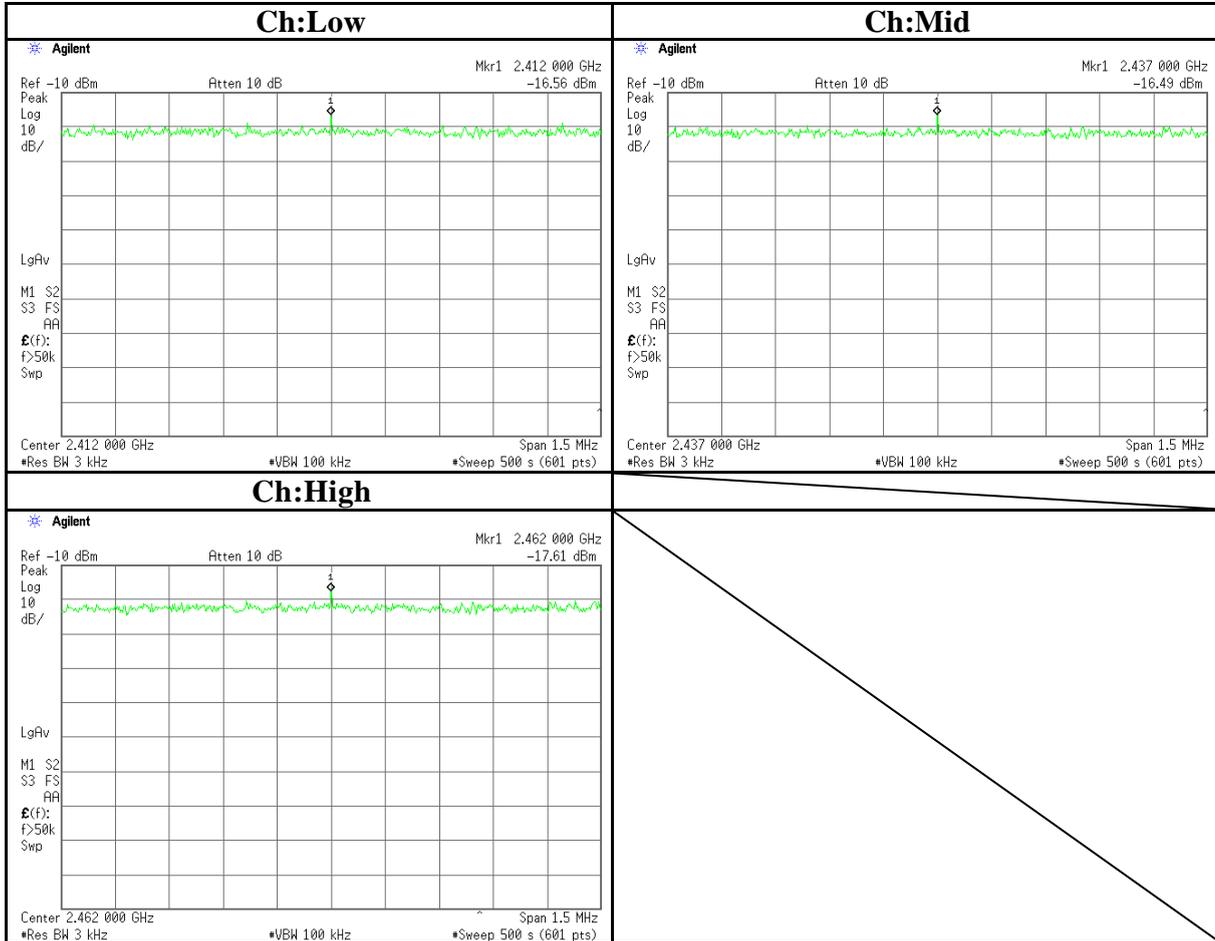
[IEEE802.11g]

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.4	-20.27	1.1	10.0	-9.1	8.0	17.1
Mid	2437.6	-21.23	1.1	10.0	-10.1	8.0	18.1
High	2461.4	-21.79	1.1	10.0	-10.7	8.0	18.7

Sample Calculation:

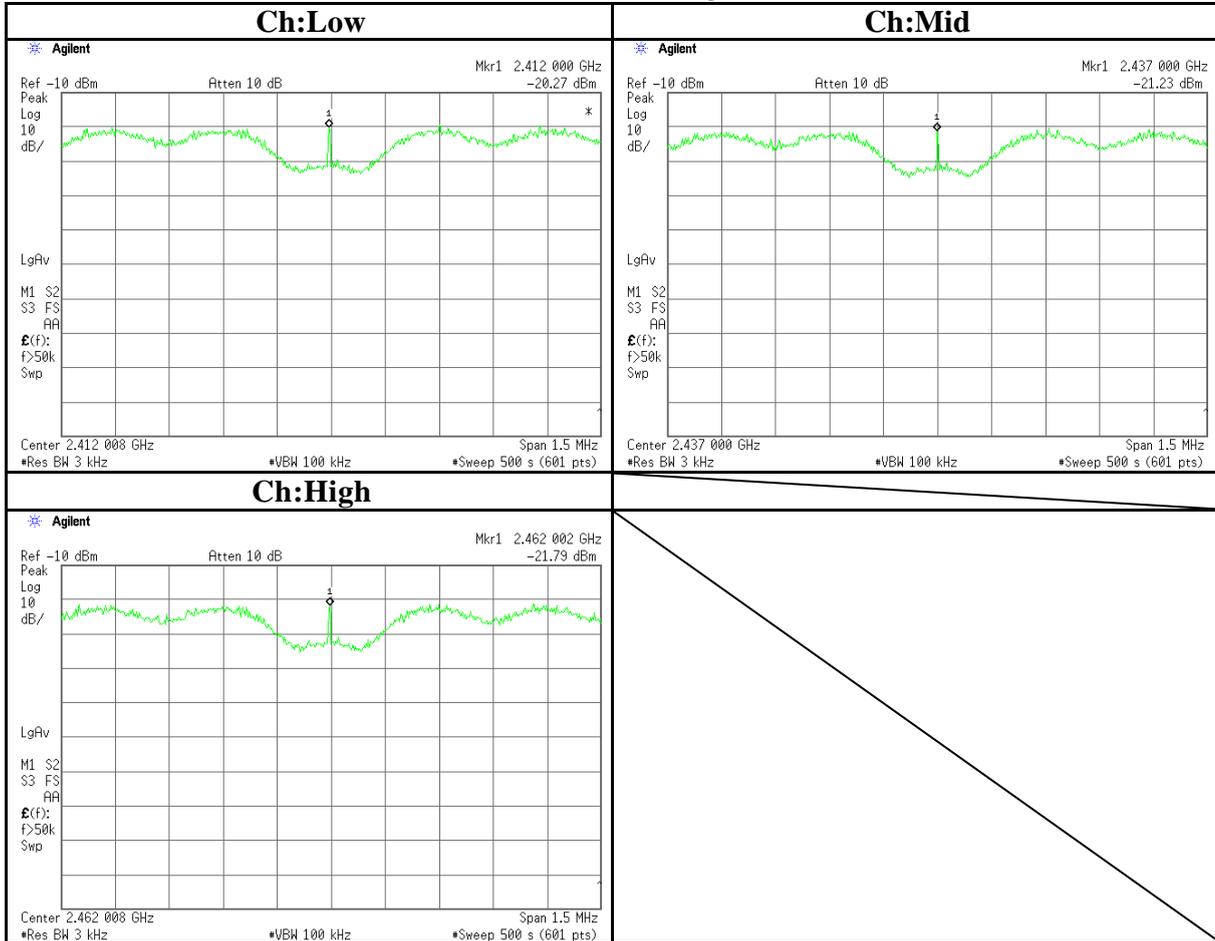
Result = Reading + Cable Loss (supplied by customer)+ Attenuator

Power Density(DSSS and other forms of modulation)
IEEE802.11b

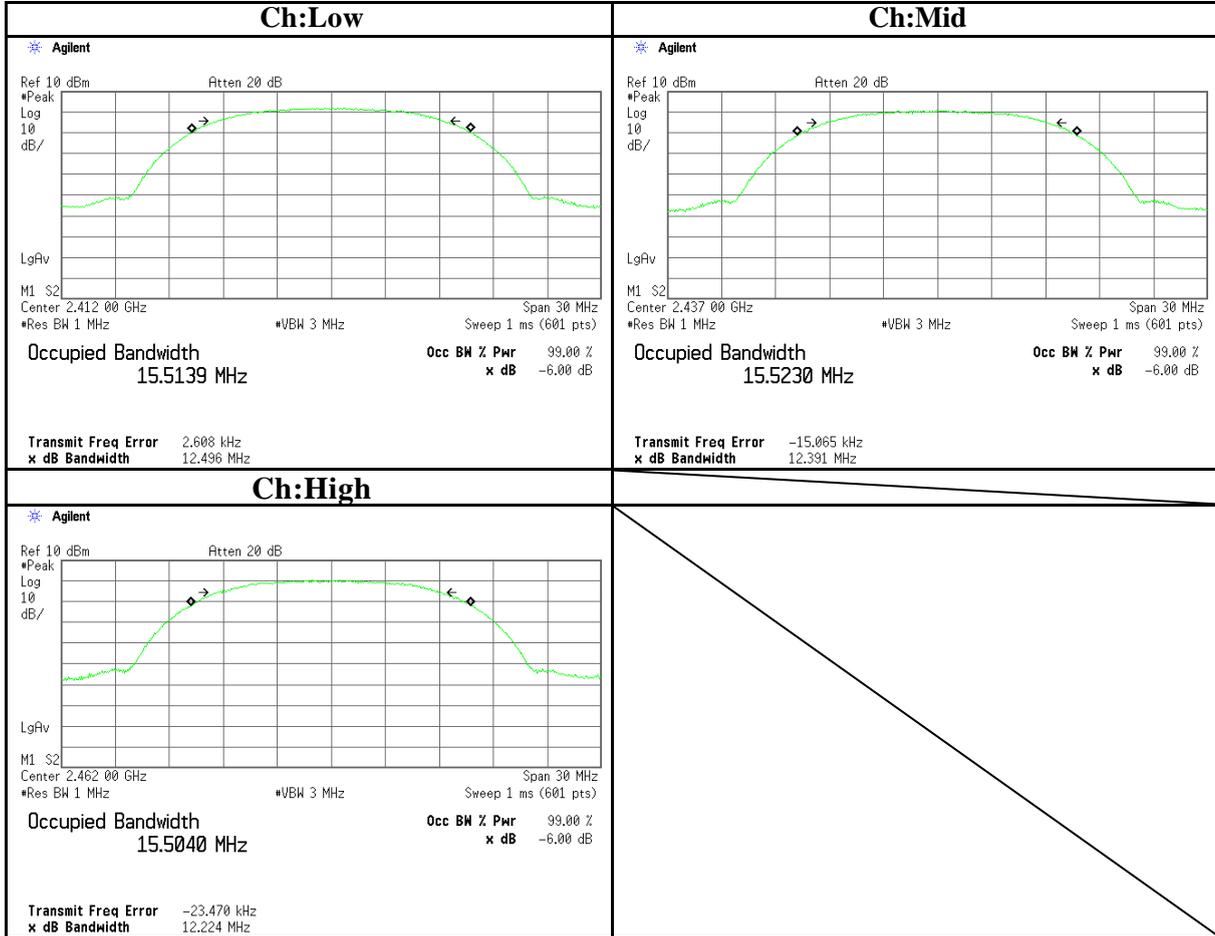


Power Density(DSSS and other forms of modulation)

IEEE802.11g



99% Occupied Bandwidth(DSSS and other forms of modulation)
IEEE802.11b



99% Occupied Bandwidth(DSSS and other forms of modulation)
IEEE802.11g

