

FCC ID

: AK8PCG6C1L Test report No.: 24GE0260-YK-1

Page Issued date : 1 of 100 : April 23, 2004

EMI TEST REPORT

Test Report No.: 24GE0260-YK-1

Applicant

Sony Corporation

Type of Equipment

Notebook Personal Computer

Model No.

PCG-6C1L

FCC ID

AK8PCG6C1L

Test standard

FCC Part15 Subpart C, Section 15.247: 2003

Test Result

Complied

- 1. This test report shall not be reproduced except 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.

Date of test:

April 1, 2, 5, 6, 7, 10 and 12, 2004

Tested by:

Approved by:

Osamu Watatani

Site Manager of Yamakita EMC Lab.

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1 GENERAL INFORMATION

Applicant

Company Name : Sony Corporation

Brand Name : SONY

Address : 6-7-35 Kita-shinagawa, Shinagawa-ku, Tokyo, 141-0001 JAPAN

Telephone Number : +81 3 5795 8711

Facsimile Number : +81 3 5795 8981

Contact Person : Tsutomu Shibusawa (tshibu@sm.sony.co.jp)

Type of Equipment : Notebook Personal Computer

Model No. : PCG-6C1L

Serial No. : XTA004

Rating : DC16V (AC Adaptor: 100-240V/60Hz)

Receipt Date of Sample : April 1, 2004

Condition of EUT : Engineering prototype

(Not for Sale: This sample is equivalent to mass-produced items.)

Country of manufacture : Japan

Regulation(s) : FCC Part15 Subpart C, Section 15.247: 2003

Test Site : UL Apex Yamakita EMC lab.

No.1 Anechoic chamber and No. 4 Shielded room

1.1 Tested Methodology

The measurements were performed according to the procedures in ANSI C63.4 (2001).

These tests were also referred to FCC 97-114 "Guidance on Measurement for Direct Sequence Spread Spectrum Systems".

1.2 Test Facility

This site has been fully described in a report submitted to FCC office, and accepted on November 8, 2002.

(No.1 Anechoic chamber Registration No.: 95967)

NVLAP Lab. code : 200441-0

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MF060b(11.04.03)

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2 PRODUCT DESCRIPTION

Model: PCG-6C1L (referred to as the EUT in this report) is a Notebook Personal Computer with Wireless LAN module (IEEE802.11b, IEEE802.11g) and Bluetooth module, which was certificated (FCC ID: CWTUGPZ5). The antenna is included in the EUT.

The clock frequencies used in EUT:

2472MHz, 2000MHz, 330MHz, 230MHz, 100MHz, 66MHz, 65MHz, 48MHz, 33MHz, 27MHz, 25MHz, 24.576MHz, 14.318MHz, 14MHz, 12.288MHz, 10MHz

[Wireless LAN Module]

Equipment type : Transceiver Frequency of operation : 2412 - 2462 MHz

Channel spacing : 5 MHz
Channel number : 11
Type of modulation : DSSS
Antenna fixing method : Internal
Antenna type : 1/4λ Monopole

Antenna connector type : U.FL connector <Hirose>

Antenna gain : Right (Sub): -2.45 dBi (including 2.42 dB cable loss)

Left (Main): -3.43 dBi (including 3.27 dB cable loss)

Mode of operation : Duplex
Emission Designation : 22M0P7D
Operation temperature range: 0 - 35 deg. C.

*FCC Part15.31 (e)

The host device PCG-6C1L provides the Wireless LAN module with stable power supply (DC3.3V), and the power is not changed when voltage of the notebook personal computer is varied. Therefore, the notebook personal computer complies power supply regulation.

*FCC Part 15.203 Antenna requirement

The standard type of antenna connector is applied: however, the notebook personal computer complies this requirement since this radio equipment is for professional installation.

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3 SYSTEM TEST CONFIGURATION

3.1 Justification

The system was configured in typical fashion (as a customer would normally use it) for testing.

Test mode: 12 modes

Transmitting (IEEE802.11b (11Mbps))

-2412MHz (Low)
-2437MHz (Middle)
-2462MHz (High)
-2412MHz (Low)
-2437MHz (Middle)
-2462MHz (High)
-2462MHz (High)

Transmitting (IEEE802.11b (11Mbps)) +Bluetooth (Hopping)
-2412MHz (Low)
-2437MHz (Middle)
-2462MHz (High)

Transmitting (IEEE802.11g (54Mbps)) +Bluetooth (Hopping)
-2412MHz (Low)
-2437MHz (Middle)
-2412MHz (Low)
-2437MHz (Middle)

The test was performed with the Main antenna which has the higher antenna gain (since the both main and sub antenna are the same type and set up symmetrically).

-2462MHz (High)

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. 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.

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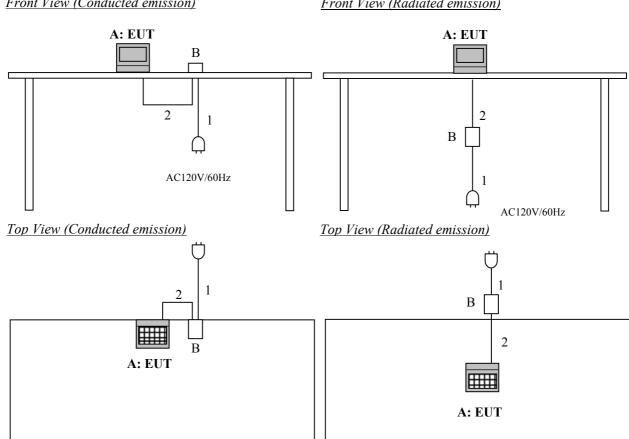
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3.2 **Configuration of Tested System**

Front View (Conducted emission)

Front View (Radiated emission)



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

Description of EUT and support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID	Remarks	
A	Notebook Personal Computer	PCG-6C1L	XTA004	SONY	AK8PCG6C1L	EUT	
В	AC Adapter	PCGA-AC16V6	-	SONY	-	-	

List of cables used

No.	Name	Length (m)	Shield	Backshell material			
1	AC Cable	0.8	Unshielded	Polyvinyl chloride			
2	DC Cable	1.0	Unshielded	Polyvinyl chloride			

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: April 23, 2004 **Issued date**

4 MEASUREMENT UNCERTAINTY

Conducted emission test

The measurement uncertainty (with a 95% confidence level) for this test was $\pm 1.3 dB$.

The data listed in this test report has enough margin, more than site margin.

Radiated emission test

The measurement uncertainty (with 95% confidence level) for this test using Biconical antenna is ±4.8dB. The measurement uncertainty (with 95% confidence level) for this test using Logperiodic antenna is ± 5.2 dB. The measurement uncertainty (with 95% confidence level) for this test using Horn antenna is ± 6.6 dB.

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

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5 SUMMARY OF TESTS

5.1 §15.207 Conducted Emissions (Limits by CISPR Pub.22 Class B)

Test Procedure

EUT was placed on a platform of nominal size, 1m by 1.5m, raised 80cm above the conducting ground plane.

The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT and AC adapter were 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 LISN and excess AC cable was bundled in center.

Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN to the input power source.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT on a shielded room.

The EUT was connected to a Line Impedance Stabilization Network (LISN).

An overview sweep with peak detection has been performed.

The measurements have been performed with a CISPR quasi-peak detector (IF BW 9kHz).

(Measurement range: 150kHz to 30MHz)

Test data : APPENDIX 2 Page 13 to 28

Photographs of test setup : Page 11 Test result : Pass

Test instruments : KCC-33/34, KLS-06, KSA-04, KTR-01

5.2 §15.247 (a)(2) 6dB Bandwidth (Antenna Port Conducted)

Test Procedure

The minimum 6dB bandwidth was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 2 Page 29 to 30

Test result : Pass

Test instruments : KTR-01, KCC-D7

5.3 § 15.247 (b)(1) Maximum Peak Output Power (Antenna Port Conducted)

Test Procedure

The Maximum Peak Output power was measured with a power meter connected to the antenna port.

* Antenna Gain dose not exceed 6dBi.

Test data : APPENDIX 2 Page 31 to 32

Test result : Pass

Test instruments

IEEE 802.11b : KPM-05, KPSS-01 IEEE 802.11g : KTR-01, KCC-D7

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FCC ID : AK8PCG6C1L Test report No. : 24GE0260-YK-1 Page : 9 of 100 Issued date : April 23, 2004

5.4 § 15.247 (c) Out of Band Emissions (Radiated)

Test Procedure

EUT was placed on a platform of nominal size, 1m by 1.5m, raised 80cm above the conducting ground plane. Test was made with the antenna positioned in both the horizontal and vertical planes of polarization.

The measurement antenna was varied in height above the conducting ground plane to obtain the maximum signal strength. The Radiated Electric Field Strength intensity has been measured in an anechoic chamber with a ground plane and at a distance of 3m. The measuring antenna height was varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

Radiated spurious emissions

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. The result was also satisfied the general limits specified in Sec.15.209 (a).

Measurement range : 30MHz to 1000MHz CISPR QP Detector, IF BW 120kHz

: 1GHz to 26GHz PK and AV Detector

Test data : APPENDIX 2 Page 33 to 44 (30 - 1000MHz)

: APPENDIX 2 Page 45 to 68 (1 - 26GHz)

: APPENDIX 2 Page 69 to 84

(Band Edges: 2390MHz/ 2483.5MHz, Restricted band Charts)

Photographs of test setup: Page 12 Test result : Pass

Test instruments : KAF-02, KAF-05, KAT10-S1, KAT6-02, KBA-03, KTR-01, KFL-01

KCC-30/31/32/34, KCC-D3/D7, KHA-01, KHA-03, KLA-03, KAEC-01, KSA-04

5.5 § 15.247 (c) Out of Band Emissions (Antenna Port Conducted)

Test Procedure

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

Test data : APPENDIX 2 Page 85 to 96

Test result : Pass

Test instruments : KTR-01, KCC-D7

5.6 § 15.247 (d) Power Density (Antenna Port Conducted)

Test Procedure

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

Test data : APPENDIX 2 Page 97 to 99

Test result : Pass

Test instruments : KTR-01, KCC-D7

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MF060b(11.04.03)

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APPENDIX 1: Photographs of test setup

1.Page 11 : Conducted emission 2.Page 12 : Radiated emission

APPENDIX 2: Test Data

1.Page $13 - 28$:	Conducted emission
13 - 16		Transmitting (IEEE802.11b (11Mbps))
17 - 20		Transmitting (IEEE802.11g (54Mbps))
21 - 24		Transmitting (IEEE802.11b (11Mbps)) +Bluetooth (Hopping)
25 - 28		Transmitting (IEEE802.11g (54Mbps)) +Bluetooth (Hopping)
2.Page $29 - 30$:	6dB Bandwidth (Antenna Port Conducted)
29		Transmitting (IEEE802.11b (11Mbps))
30		Transmitting (IEEE802.11g (54Mbps))
3.Page $31 - 32$:	Maximum Peak Output Power (Antenna Port Conducted)
31		Transmitting (IEEE802.11b (11Mbps)), Transmitting (IEEE802.11g (54Mbps))
32		Spectrum Analyzer data at Transmitting (IEEE802.11g (54Mbps))
4.Page $33 - 84$:	Out Band of Emissions (Radiated)
30-1000MHz		
33 - 35		Transmitting (IEEE802.11b (11Mbps))
36 - 38		Transmitting (IEEE802.11g (54Mbps))
39 - 41		Transmitting (IEEE802.11b (11Mbps)) +Bluetooth (Hopping)
42 - 44		Transmitting (IEEE802.11g (54Mbps)) +Bluetooth (Hopping)
<u>1-26GHz</u>		
45 - 50		Transmitting (IEEE802.11b (11Mbps))
51 - 56		Transmitting (IEEE802.11g (54Mbps))
57 - 62		Transmitting (IEEE802.11b (11Mbps)) +Bluetooth (Hopping)
63 - 68		Transmitting (IEEE802.11g (54Mbps)) +Bluetooth (Hopping)
Band Edges		
69 - 72		Transmitting (IEEE802.11b (11Mbps))
73 - 76		Transmitting (IEEE802.11g (54Mbps))
77 - 80		Transmitting (IEEE802.11b (11Mbps)) +Bluetooth (Hopping)
81 - 84		Transmitting (IEEE802.11g (54Mbps)) +Bluetooth (Hopping)
5.Page 85 – 96	:	Out Band of Emissions (Antenna Port Conducted)
85 - 90		Transmitting (IEEE802.11b (11Mbps))
91 - 96		Transmitting (IEEE802.11g (54Mbps))
6.Page 97 – 99	:	Power Density (Antenna Port Conducted)
97		Transmitting (IEEE802.11b (11Mbps)), Transmitting (IEEE802.11g (54Mbps))
98		Chart of Transmitting (IEEE802.11b (11Mbps))
99		Chart of Transmitting (IEEE802.11g (54Mbps))

APPENDIX 3: Test instruments

Page 100 : Test instruments

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Conducted emission





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Radiated emission





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DATA OF CONDUCTION TEST

UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer PCG-6C1L

Model No. Serial No. Power

XTA004 : AC120V/60Hz

Mode Remarks : Transmitting (2412MHz) : IEEE802. 11b (11Mbps)

: 4/12/2004 Date : Single Phase : 21 °C : 52 % Phase

Temperature

Engineer

: Toyokazu Imamura

Humidity Regulation

: FCC Part15C § 15. 207. (CISPR Pub. 22)

No.	FREQ.	READII QP [dB μ	ΑV	READI QP [dB µ	NG (L1) AV	LISN FACTOR [dB]		ATTEN.	RES QP [dB]	AV	LIM QP μV]	ITS AV [dB µ	QP	GIN AV [dB]
1. 2. 3. 4. 5. 6.	0. 1500 0. 3363 0. 5098 4. 8957 5. 9985 19. 0000	51. 1 37. 8 29. 2 30. 8 31. 3 30. 3	35. 0 24. 9 19. 4 19. 3 24. 8 24. 5	52. 0 42. 3 29. 4 29. 7 29. 3 29. 8	34. 9 29. 0 15. 5 19. 9 22. 2 23. 9	0. 1 0. 1 0. 1 0. 2 0. 2 0. 9	0. 2 0. 3 0. 3 0. 4 0. 4 0. 6	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	52. 3 42. 7 29. 8 31. 4 31. 9 31. 8	35. 3 29. 4 19. 8 20. 5 25. 4 26. 0	66. 0 59. 3 56. 0 56. 0 60. 0	56. 0 49. 3 46. 0 46. 0 50. 0	13. 7 16. 6 26. 2 24. 6 28. 1 28. 2	20. 7 19. 9 26. 2 25. 5 24. 6 24. 0

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

■LISN: KLS-06 (NSLK8127) ■ COAXIAL CABLE: KCC-33/34

ENI RECEIVER: KTR-01 (ES140)

UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant : Kind of Equipment : : Sony Corporation

Notebook personal Computer

Model No. PCG-6C1L Serial No. XTA004 AC120V/60Hz Power

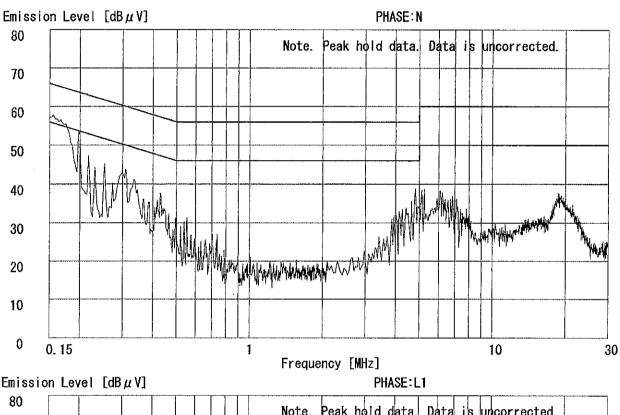
Transmitting (2412MHz) IEEE802. 11b (11Mbps) Mode Remarks

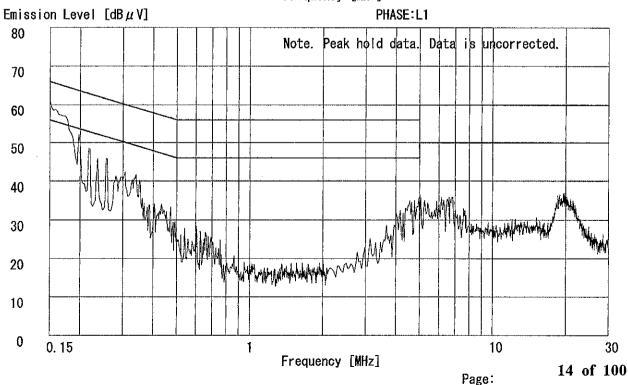
Date

4/12/2004 21 °C Temperature Engineer : Toyokazu Imamura : 52 % Humidity

Regulation 1 : FCC Part15C § 15. 207. (CISPR Pub. 22)

Regulation 2 None





UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant

: Sony Corporation

Kind of Equipment:

Notebook personal Computer

Model No. Serial No. Power PCG-6C1L XTA004

Mode

: AC120V/60Hz : Transmitting(2437MHz) : IEEE802.11b(11Mbps)

Remarks Date

4/12/2004

Temperature

21 °C

Engineer

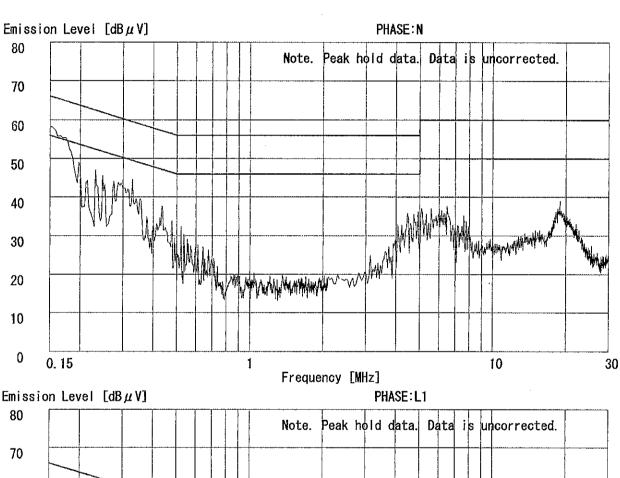
: Toyokazu Imamura

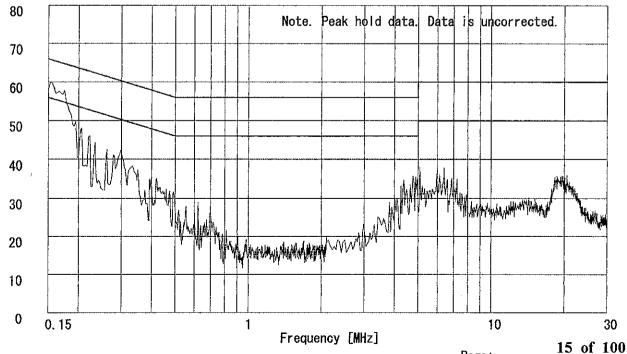
Page:

Humidity Regulation 1 : 52 %

FCC Part15C § 15. 207. (CISPR Pub. 22)

Regulation 2





UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Model No.

Applicant : Sony Corporation Kind of Equipment : Notebook personal Computer PCG-6C1L

Serial No. Power

XTA004 AC120V/60Hz

Mode Remarks Date

: ACTZOV/OUTZ : Transmitting (2462MHz) : IEEE802.11b (11Mbps) : 4/12/2004 : 21 °C : 52 %

Temperature

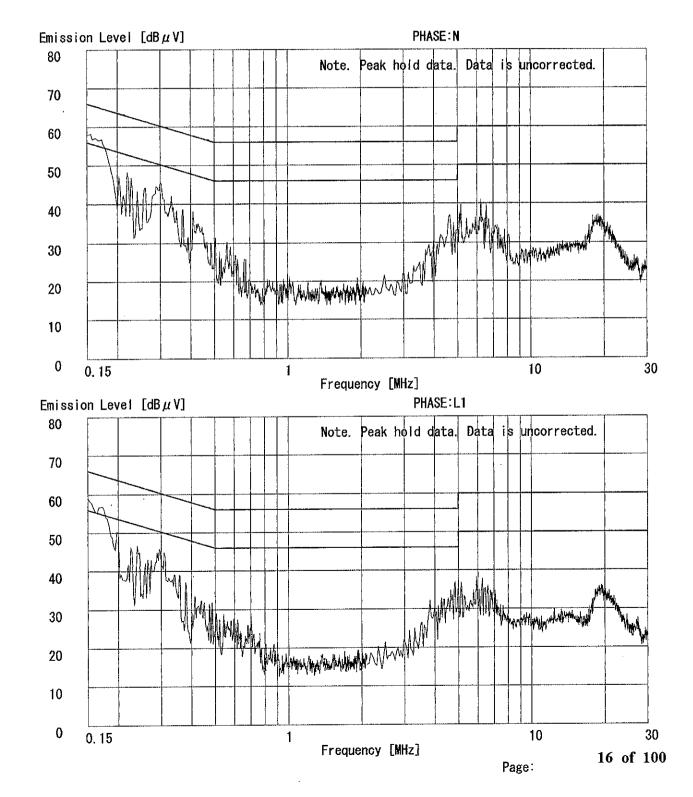
Engineer

: Toyokazu Imamura

Humidity Regulation 1

: FCC Part15C § 15. 207. (CISPR Pub. 22)

: None Regulation 2



DATA OF CONDUCTION TEST

UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer PCG-6C1L

Model No. Serial No.

: XTA004

Power Mode

: AC120V/60Hz

Remarks

Transmitting (2412MHz) IEEE802.11g (54Mbps) 4/12/2004

Date Phase

Temperature

: Single Phase : 21 °C : 52 %

Engineer

: Toyokazu imamura

Humidity Regulation

: FCC Part15C § 15. 207. (CISPR Pub. 22)

No.	FREQ.	READING (N) QP AV [dB μ V]	READING (L QP AV $[dB \mu V]$	1) LISN FACTOR [dB]		ATTEN	. RES QP [dB]	AV	LIM QP μV]	ITS AV [dB,	MAR QP ℓV]	GIN AV [dB]
1. 2. 3. 4. 5. 6.	0. 1500 0. 2893 0. 4327 0. 5758 6. 0150 21. 9594	52. 9 35. 46. 0 32. 6 37. 1 28. 5 26. 7 24. 5 33. 3 23. 4 25. 5 19. 6	5 44. 1 31. 5 36. 4 28. 5 27. 5 23. 4 31. 3 19.	7 0. 1 1 0. 1 3 0. 1 1 0. 2	0. 2 0. 2 0. 3 0. 3 0. 4 0. 6	0. 0 0. 0 0. 0 0. 0 0. 0	53. 2 46. 3 37. 5 27. 9 33. 9 27. 1	36. 0 32. 9 28. 9 24. 9 24. 0 20. 6	66. 0 60. 5 57. 2 56. 0 60. 0	56. 0 50. 5 47. 2 46. 0 50. 0	12. 8 14. 2 19. 7 28. 1 26. 1 32. 9	20. 0 17. 6 18. 3 21. 1 26. 0 29. 4

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

■LISN: KLS-06 (NSLK8127) ■COAXIAL CABLE: KCC-33/34

■EMI RECEIVER: KTR-01 (ES140)

UL Apex Co.,Ltd.

Engineer

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

: Toyokazu Imamura

Page:

: Sony Corporation

Notebook personal Computer

Applicant
Kind of Equipment: Notebook
Model No.: PCG-604
XA004 Power

PCG-6C1L : AC120V/60Hz

Mode Remarks

Regulation 1

Transmitting (2412MHz) IEEE802.11g (54Mbps)

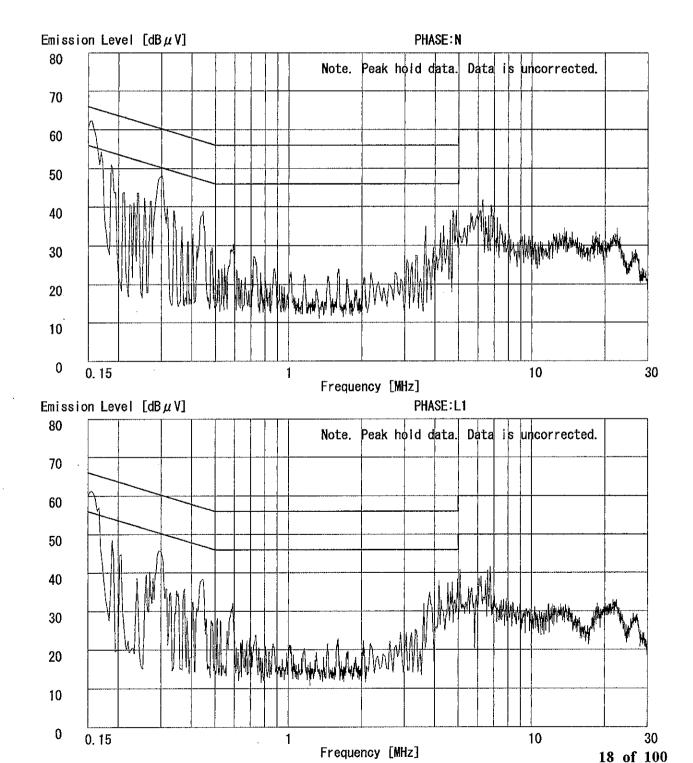
Date

Temperature Humidity

: 4/12/2004 : 21 °C : 52 %

: FCC Part15C § 15, 207. (CISPR Pub. 22)

None Regulation 2



UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant

Kind of Equipment: Model No.

: Sony Corporation : Notebook personal Computer

Serial No.

PCG-6C1L XTA004 AC120V/60Hz

Power Mode Remarks

Transmitting (2437MHz) IEEE802. 11g (54Mbps)

Date

: 4/12/2004 : 21 °C : 52 %

Temperature

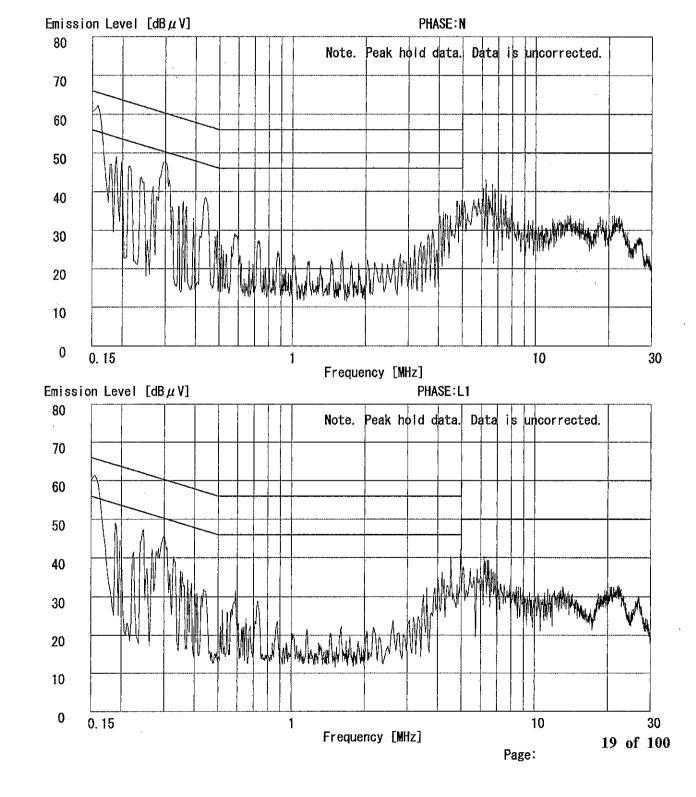
Engineer

: Toyokazu Imamura

Humidity Regulation 1

: FCC Part15C § 15. 207. (CISPR Pub. 22)

None Regulation 2



UL Apex Co., Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant : Sony Corporation Kind of Equipment : Notebook personal Computer

Model No. Serial No. PCG-6C1L XTA004

Power Mode

AC120V/60Hz Transmitting (2462MHz) IEEE802.11g (54Mbps)

Remarks Date

4/12/2004

Temperature

21 ℃ 52 %

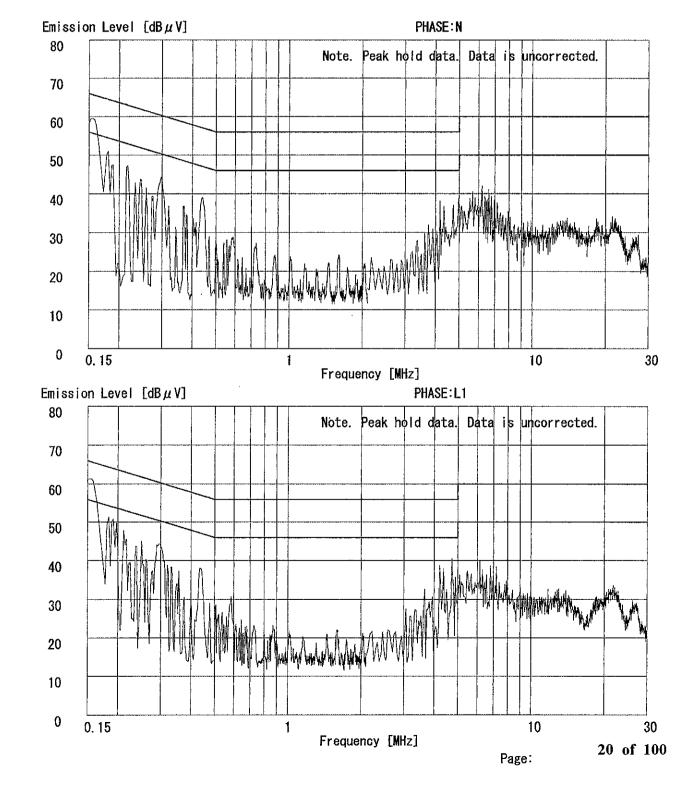
Engineer

: Toyokazu Imamura

Humidity Regulation 1

Regulation 2

: FCC Part15C § 15. 207. (CISPR Pub. 22)



DATA OF CONDUCTION TEST

UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room Report No.: 24GE0260-YK

Applicant

: Sony Corporation

Kind of Equipment

Notebook personal Computer

Model No. Serial No.

PCG-6C1L : XTA004

Power Mode

Remarks

: XTAOU4
: AC120V/60Hz
: Transmitting(2412MHz)
: IEEE802.11b(11Mbps)+Bluetooth(Hopping)
: 4/12/2004
: Single Phase
: 21 °C Engineer
: 52 %

Date Phase

Temperature

: Toyokazu Imamura

Humidity Regulation

: FCC Part15C § 15. 207. (CISPR Pub. 22)

No.	FREQ.	READING QP [dB μ \	AV	READI QP [dB /	AV	LISN FACTOR [dB]		ATTEN.	. RES QP [dB]	AV	LIM QP μV]	ITS AV [dB µ	MAR QP ιV]	GIN AV [dB]
1. 2. 3. 4. 5. 6.	0. 1501 0. 2874 0. 4293 0. 5699 5. 9308 21. 9459	44. 9 2 37. 3 2 27. 4 2 33. 7 2	31. 1 29. 2 26. 1 23. 1 21. 3 18. 5	47. 9 44. 0 36. 4 27. 9 32. 1 25. 4	30. 6 30. 2 26. 1 22. 6 18. 4 18. 8	0. 1 0. 1 0. 1 0. 1 0. 2 1. 0	0. 2 0. 2 0. 3 0. 3 0. 4 0. 6	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	49. 0 45. 2 37. 7 28. 3 34. 3 27. 0	31. 4 30. 5 26. 5 23. 5 21. 9 20. 4	66. 0 60. 6 57. 3 56. 0 60. 0	56. 0 50. 6 47. 3 46. 0 50. 0 50. 0	17. 0 15. 4 19. 6 27. 7 25. 7 33. 0	24. 6 20. 1 20. 8 22. 5 28. 1 29. 6

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

■LISN: KLS-06 (NSLK8127) ■ COAXIAL CABLE: KCC-33/34

ENI RECEIVER: KTR-01 (ES140)

UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant : Sony Corporation Kind of Equipment : Notebook personal Computer

Model No. Serial No. PCG-6C1L XTA004

Power Mode

AC120V/60Hz

Remarks

Transmitting (2412MHz)
IEEE802.11b (11Mbps) +Bluetooth (Hopping)

Date Temperature 4/12/2004

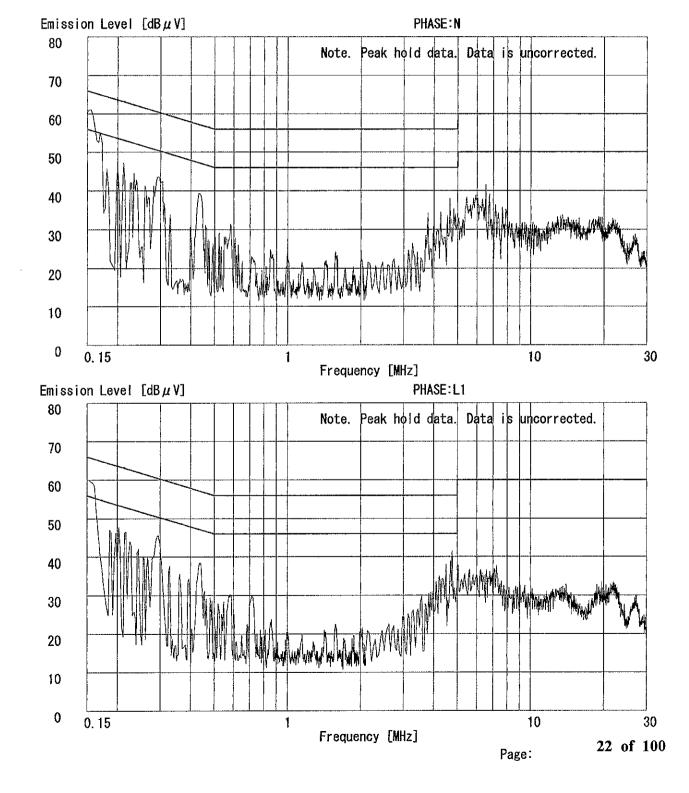
21 °C 52 % Engineer

: Tovokazu Imamura

Humidity

: FCC Part15C § 15. 207. (CISPR Pub. 22)

Regulation 1 Regulation 2



UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant

Kind of Equipment : Model No. :

: Sony Corporation : Notebook personal Computer

Serial No.

PCG-6C1L XTA004

Power Mode

AC120V/60Hz

Remarks

Transmitting (2437MHz)
IEEE802. 11b (11Mbps) +Bluetooth (Hopping)

Date

4/12/2004 21 °C 52 %

Temperature Humidity

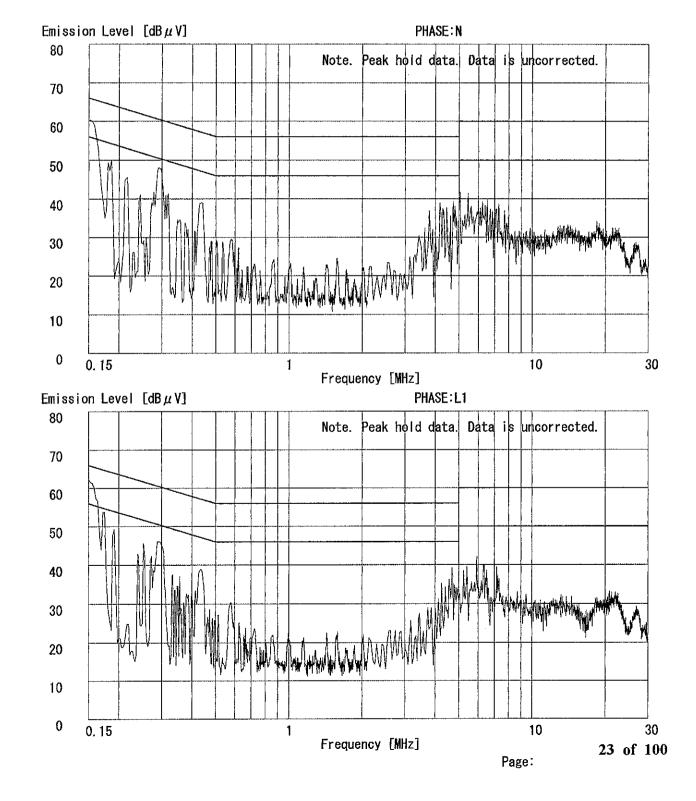
Engineer

: Tovokazu Imamura

Regulation 1

: FCC Part15C § 15. 207. (CISPR Pub. 22)

Regulation 2 : None



UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant

: Sony Corporation

Kind of Equipment :

Notebook personal Computer

Model No. Serial No. PCG-6C1 XTA004 PCG-6C1L

Power

AC120V/60Hz

Mode

Remarks Date

Transmitting (2462MHz)
IEEE802. 11b (11Mbps) +Bluetooth (Hopping)

4/12/2004

Temperature

21 °C

Engineer

: Tovokazu Imamura

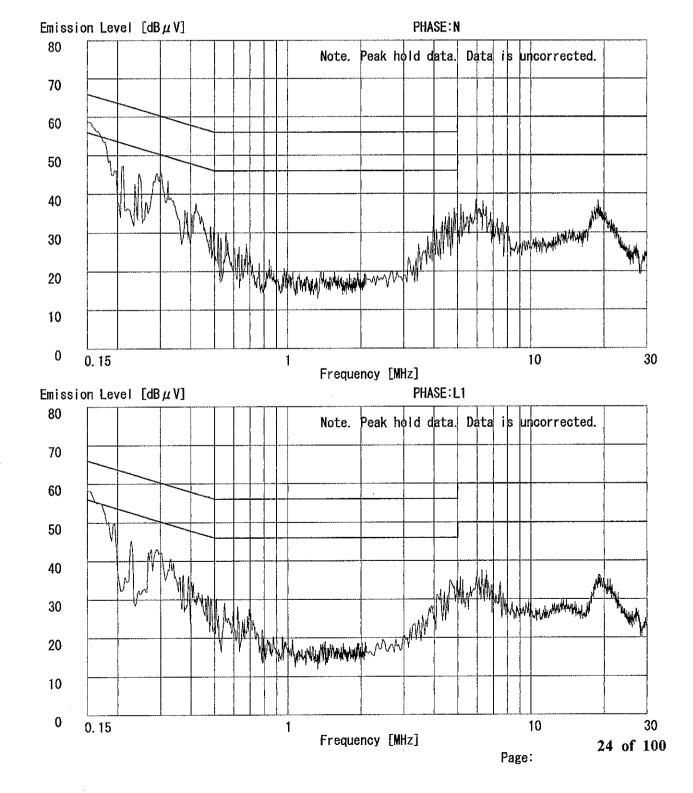
Humidity

Regulation 1

52 % : FCC Part15C § 15. 207. (CISPR Pub. 22)

Regulation 2

None



DATA OF CONDUCTION TEST

UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode Remarks Transmitting (2412MHz)
IEEE802. 11g (54Mbps) +Bluetooth (Hopping)
4/12/2004

Date

Phase Temperature Single Phase 21 °C 52 %

Engineer

: Toyokazu Imamura

Humidity

Regulation

: FCC Part15C § 15, 207, (CISPR Pub. 22)

No.	FREQ.	READI QP [dB μ	AV	READI QP [dB /	NG (L1) ΑV ι V]) LISN FACTOR [dB]		ATTEN.	. RES QP [dB]	AV	LIM QP μV]	ITS AV [dB /	QP	GIN AV [dB]
1. 2. 3. 4. 5. 6.	0. 1500 0. 2880 0. 4231 0. 5691 5. 9357 22. 0000	48. 9 45. 0 37. 1 27. 1 34. 3 24. 9	31. 1 29. 5 26. 4 23. 8 21. 7 18. 3	48. 0 43. 1 36. 7 27. 9 31. 6 25. 4	31. 0 29. 5 26. 0 23. 2 19. 1 19. 0	0. 1 0. 1 0. 1 0. 2	0. 2 0. 2 0. 3 0. 3 0. 4 0. 6	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	49. 2 45. 3 37. 5 28. 3 34. 9 27. 0	31. 4 29. 8 26. 8 24. 2 22. 3 20. 6	66. 0 60. 6 57. 4 56. 0 60. 0 60. 0	56. 0 50. 6 47. 4 46. 0 50. 0 50. 0	16. 8 15. 3 19. 9 27. 7 25. 1 33. 0	24. 6 20. 8 20. 6 21. 8 27. 7 29. 4

CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

■LISN: KLS-06 (NSLK8127) ■ COAXIAL CABLE: KCC-33/34 ■EMI RECEIVER: KTR-01 (ES140)

UL Apex Co.,Ltd.

Engineer

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant

Kind of Equipment : Model No. :

Sony Corporation Notebook personal Computer

Serial No.

PCG-6C1L XTA004

Power Mode

AC120V/60Hz

Remarks

Transmitting (2412MHz)
IEEE802. 11g (54Mbps) +Bluetooth (Hopping)

Date

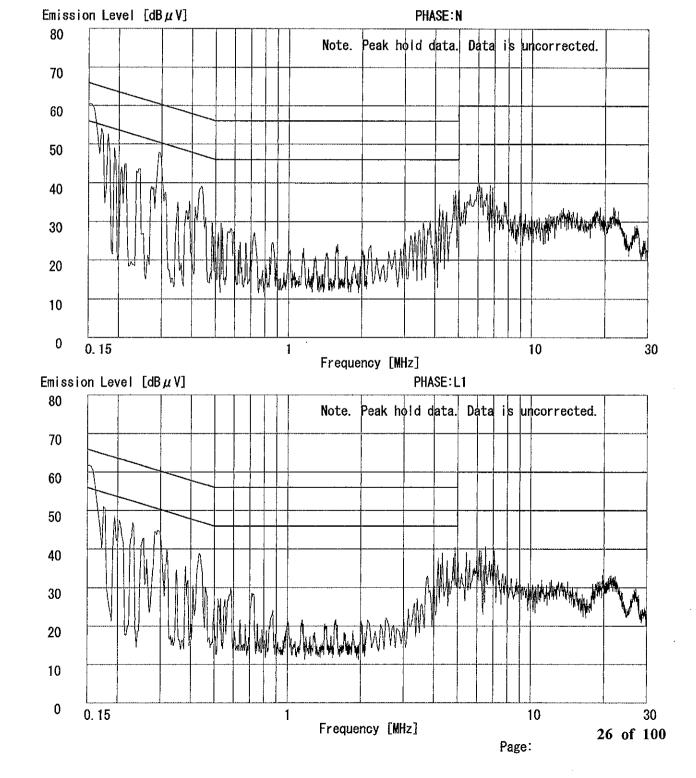
4/12/2004 21 °C

: Tovokazu Imamura

Temperature Humidity

52 % : FCC Part15C § 15. 207. (CISPR Pub. 22)

Regulation 1 Regulation 2



UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

: Toyokazu imamura

Applicant : Kind of Equipment : Model No. :

Sony CorporationNotebook personal Computer PCG-6C1L

Serial No.

XTA004 AC120V/60Hz

Power

Mode Remarks : Transmitting (2437MHz) : IEEE802. 11g (54Mbps) +Bluetooth (Hopping)

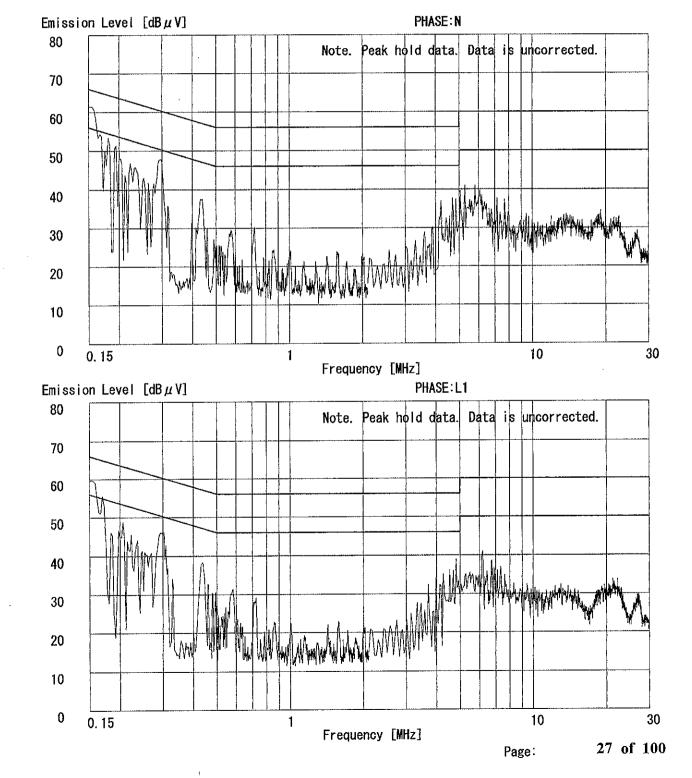
Date Temperature : 4/12/2004 : 21 °C : 52 %

Engineer

Humidity

: FCC Part15C § 15. 207. (CISPR Pub. 22)

Regulation 1 Regulation 2



UL Apex Co.,Ltd.

Yamakita No.2 Shielded Room

Report No.: 24GE0260-YK

Applicant

: Sony Corporation

Kind of Equipment: Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTÃ004

Power

AC120V/60Hz

Mode

Remarks

Transmitting (2462MHz)
1EEE802. 11g (54Mbps) +Bluetooth (Hopping)

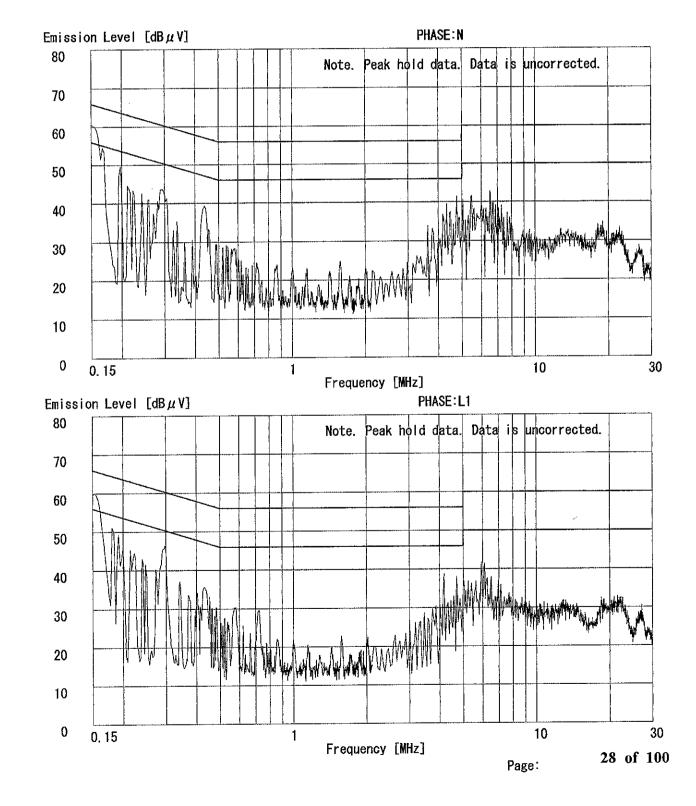
Date Temperature : 4/12/2004 : 21 °C : 52 %

Engineer

: Toyokazu Imamura

Humidity.

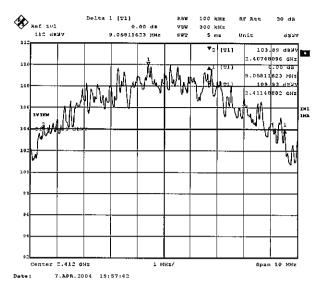
Regulation 1 Regulation 2 : FCC Part15C § 15. 207. (CISPR Pub. 22)



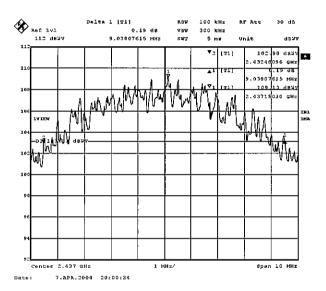
Test Report No.: 24GE0260-YK-1

[IEEE802.11b Main Antenna Terminal]

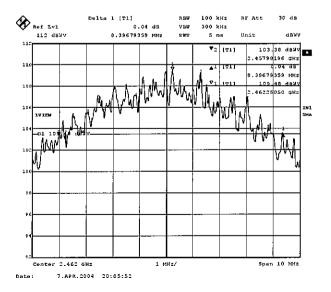
1. Ch Low:2412MHz



2. Ch Mid:2437MHz



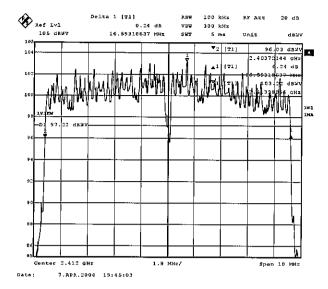
3. Ch High: 2462MHz



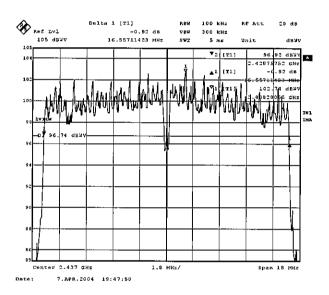
FCC ID: AK8PCG6C1L Test Report No.: 24GE0260-YK-1

[IEEE802.11g Main Antenna Terminal]

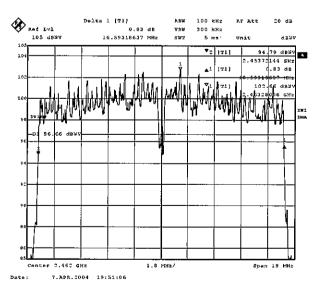
1. Ch Low:2412MHz



2. Ch Mid:2437MHz



3. Ch High;2462MHz



<u>Peak Output Power (Conducted)</u>

UL Apex Co., Ltd

YAMAKITA NO. 4 Sheilded Room

COMPANY : SONY Corporation.

REPORT NO

: 24GE0260-YK-1

EQUIPMENT : Notebook Personal Computer

REGULATION

: Fcc Part15SubpartC 247(b)(1)

MODEL

: PCG-6C1L

DATE

: 2004/ 04/06

FCC ID

POWER

: AK8PCG6C1L

Temp./Humi.

: 23℃/44%

Mode

: AC120V/60Hz : Transmitting

ENGINEER

: Toyokazu Imamura

IEEE802.11b (11Mbps) Main Antenna Terminal

СН	FREQ	PM Reading	Cable Loss	Results	Limit	MARGIN
					(1W)	
	[GHz]	[dBm]	[dB]	[dBm]	[dBm]	[dB]
Low	2412.00	16. 00	0. 78	16. 78	30. 0	13. 22
Mid	2437.00	15. 17	0.66	15. 83	30. 0	14. 17
High	2462.00	15. 00	0. 79	15. 79	30.0	14. 21

IEEE802.11g (54Mbps) Main Antenna Terminal

.LLL.	1 . B /a !!!! B /a	,, 1114,,,,,,,,,,		·		
CH	FREQ	S/A (PK)	Cable Loss	Results	Limit	MARGIN
		Reading			(1W)	
	[GHz]	[dBm]	[dB]	[dBm]	[dBm]	[dB]
Low	2412.00	14. 89	1. 28	16. 17	30.0	13. 83
Mid	2437.00	14. 31	1. 16	15. 47	30.0	14. 53
High	2462.00	14. 08	1. 29	15. 37	30. 0	14.63

Peak Output Power: FCC 15.247(b)(1)

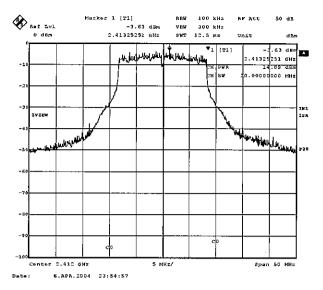
FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1

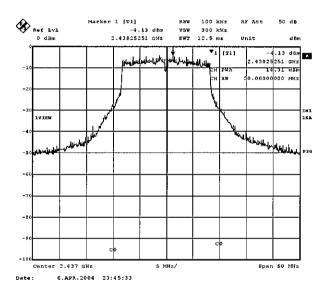
7. Smamura

IEEE802.11g Main Antenna Terminal Spectrum Analyzer data

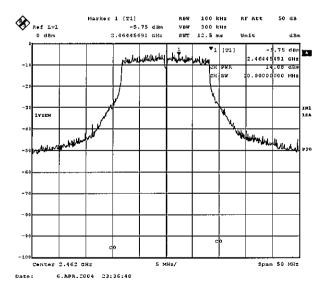
1. Ch Low: 2412MHz



2. Ch Mid:2437MHz



3. Ch High: 2462MHz



UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode Remarks Transmitting (2412MHz) IEEE802. 11b (11Mbps) 4/5/2004

Date

Test Distance Temperature

3 m 24 °C 32 %

Engineer

: Toyokazu Imamura

Humidity Regulation

: FCC Part15C § 15, 209

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ)	VER	LIMITS ΒμV/m]	HOR	RGIN VER iB]
1. 2. 3. 4. 5. 6. 7.	340. 01 510. 25 542. 41 580. 51 745. 81 760. 00 800. 01	BB BB BB BB BB BB	34. 2 30. 3 29. 0 31. 2 26. 4 27. 2 35. 8	32. 9 31. 1 30. 9 33. 0 26. 5 28. 2 32. 2	15. 6 18. 3 18. 8 19. 5 21. 1 21. 3 21. 8	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0 29. 0	5. 7	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	31. 7 30. 2 29. 6 32. 7 30. 3 31. 3 40. 6	30. 4 31. 0 31. 5 34. 5 30. 4 32. 3 37. 0	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 3 15. 8 16. 4 13. 3 15. 7 14. 7 5. 4	15. 6 15. 0 14. 5 11. 5 15. 6 13. 7 9. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREANP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ES140)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant Kind of Equipment Model No. Serial No.

Sony Corporation Notebook personal Computer

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode

Transmitting (2437MHz) IEEE802, 11b (11Mbps) 4/5/2004

Remarks Date

Test Distance

3 m 24 °C 32 %

Engineer : Toyokazu Imamura

Temperature Humidity

Regulation

: FCC Part15C § 15.209

No.	FREQ.	ANT TYPE	REAL HOR [dB]	VER	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ]	VER	LIMITS ΒμV/m]	HOR	RGIN VER B]
1. 2. 3. 4. 5.	340. 01 510. 01 542. 42 580. 50 745. 83 760. 00 800. 01	BB BB BB BB BB	34. 2 31. 0 30. 7 31. 2 27. 4 27. 2 36. 0	32. 6 32. 1 31. 2 33. 5 28. 5 28. 2 32. 2	$21.1 \\ 21.3$	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0	3. 7 4. 6 4. 8 5. 0 5. 7 5. 7	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	31. 7 30. 9 31. 3 32. 7 31. 3 31. 3 40. 8	30. 1 32. 0 31. 8 35. 0 32. 4 32. 3 37. 0	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 3 15. 1 14. 7 13. 3 14. 7 14. 7	15. 9 14. 0 14. 2 11. 0 13. 6 13. 7 9. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ESI40)

UL Apex Co.,Ltd. Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No.

PCG-6C1L XTA004

Serial No. Power

AC120V/60Hz

Mode Remarks : Transmitting (2462MHz) : IEEE802. 11b (11Mbps)

Date

4/10/2004

Test Distance Temperature

Engineer

: Toyokazu imamura

Humidity Regulation : 3 m : 19 °C : 45 % : FCC Part15C § 15. 209

No.	FREQ. ANT TYPE [MHz]	READING HOR VEI $[dB \mu V]$	ANT R FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ V	VER	HOR		RGIN VER dB]
1. 2. 3. 4. 5. 6. 7.	340. 01 BB 510. 25 BB 542. 41 BB 580. 50 BB 745. 81 BB 760. 00 BB 800. 01 BB	33. 7 33. 26. 6 29. 9 27. 9 29. 1 29. 4 29. 1 27. 0 26. 27. 5 26. 4 34. 5 29.	9 18.3 5 18.8 2 19.5 1 21.1 4 21.3	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0	4. 6 4. 8 5. 0 5. 7 5. 7	6. 1 6. 1 6. 1 6. 1	31. 2 26. 5 28. 5 30. 9 30. 9 31. 6 39. 3	30. 6 29. 8 30. 1 30. 7 30. 0 30. 5 34. 5	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 8 19. 5 17. 5 15. 1 15. 1 14. 4 6. 7	15. 4 16. 2 15. 9 15. 3 16. 0 15. 5 11. 5

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ES140)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

Sony Corporation Notebook personal Computer

Serial No.

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode Remarks : Transmitting (2412MHz) : IEEE802. 11g (54Mbps) : 4/5/2004

Date

Test Distance Temperature

: 3 m : 24 ℃ : 32 %

Engineer : Toyokazu Imamura

Humidity

Regulation

: FCC Part15C § 15. 209

No.		ANT TYPE	REAL HOR [dB]	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ \	VER	LIMITS ΒμV/m]	HOR	RGIN VER IB]
1. 2. 3. 4. 5. 6. 7.	340. 01 510. 24 542. 42 580. 51 745. 82 760. 01 800. 01	BB BB BB BB BB BB	34. 5 23. 1 30. 9 31. 0 27. 3 28. 2 36. 7	32. 9 31. 0 31. 0 33. 1 28. 4 29. 0 32. 7	15. 6 18. 3 18. 8 19. 5 21. 1 21. 3 21. 8	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0	3. 7 4. 6 4. 8 5. 0 5. 7 5. 7	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	32. 0 23. 0 31. 5 32. 5 31. 2 32. 3 41. 5	30. 4 30. 9 31. 6 34. 6 32. 3 33. 1 37. 5	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 0 23. 0 14. 5 13. 5 14. 8 13. 7 4. 5	15. 6 15. 1 14. 4 11. 4 13. 7 12. 9 8. 5

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz ■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ESI40)

UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

: Sony Corporation

Kind of Equipment

Notebook personal Computer

Model No. Serial No. : PCG-6C1L : XTA004

Power

: AC120V/60Hz

Mode Remarks

: Transmitting (2437MHz) : IEEE802. 11g (54Mbps)

Date

: 4/5/2004

Test Distance Temperature

Engineer : Toyokazu Imamura

Humidity Regulation

: 3 m : 24 °C : 32 % : FCC Part15C § 15. 209

No.		ANT TYPE	REAI HOR [dB]	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESU HOR [dB μ V	VER	LIMITS BμV/m]	HOR	RGIN VER IB]
1. 2. 3. 4. 5. 6. 7.	340. 01 510. 24 542. 42 580. 51 745. 83 760. 01 800. 01	BB BB BB BB BB BB	34. 3 29. 8 30. 7 30. 6 27. 0 27. 6 36. 1	32. 8 31. 3 30. 7 32. 7 28. 2 28. 3 32. 3	15. 6 18. 3 18. 8 19. 5 21. 1 21. 3 21. 8	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0	5.7	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	31. 8 29. 7 31. 3 32. 1 30. 9 31. 7 40. 9	30. 3 31. 2 31. 3 34. 2 32. 1 32. 4 37. 1	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 2 16. 3 14. 7 13. 9 15. 1 14. 3 5. 1	15. 7 14. 8 14. 7 11. 8 13. 9 13. 6 8. 9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ESI40)

UL Apex Co., Ltd. Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

: Sony Corporation : Notebook personal Computer

Serial No.

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode Remarks : Transmitting (2462MHz) : IEEE802.11g (54Mbps) : 4/5/2004

Date

Test Distance Temperature

: 4/5/20 : 3 m : 24 °C : 32 %

Engineer : Toyokazu Imamura

Humidity

Regulation

FCC Part15C § 15. 209

No.		ANT TYPE	REAL HOR [dB]	VER	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ '	ULT] VER V/m] [di	LIMITS BμV/m]	HOR	RGIN VER B]
1. 2. 3. 4. 5. 6.	339. 00 510. 26 542. 41 580. 51 745. 83 760. 00 800. 01	BB BB BB BB BB BB	34. 8 30. 8 30. 7 31. 0 27. 1 28. 0 36. 7	34. 4 31. 1 30. 5 32. 7 27. 1 28. 6 31. 2	15. 6 18. 3 18. 8 19. 5 21. 1 21. 3 21. 8	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0	4. 6 4. 8 5. 0 5. 7 5. 7	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	32. 3 30. 7 31. 3 32. 5 31. 0 32. 1 41. 5	31. 9 31. 0 31. 1 34. 2 31. 0 32. 7 36. 0	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	13. 7 15. 3 14. 7 13. 5 15. 0 13. 9 4. 5	14. 1 15. 0 14. 9 11. 8 15. 0 13. 3 10. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz
■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant Kind of Equipment Model No.

Sony Corporation Notebook personal Computer

Serial No.

PCG-6C1L XTA004

Power Mode

AC120V/60Hz Transmitting (2462MHz)

Remarks

IEEE802. 11b (11Mbps) +Bluetooth (Hopping) 4/10/2004

Date

Test Distance

3 m ∶ 19 °C ∶ 45 %

Engineer

: Toyokazu Imamura

Temperature Humidity

Regulation

: FCC Part15C § 15, 209

		NT YPE	READI HOR [dB μ	VER F	ANT ACTOR dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RESU HOR [dB μ V	VER	IMITS μV/m]	MAR HOR [d	GIN VER B]
2. 51 3. 54 4. 58 5. 74 6. 76	0. 00 12. 41 30. 54 15. 82 60. 00	BB 2 BB 2 BB 2 BB 2 BB 2	7. 1 7. 7 9. 6 6. 3 6. 3	32. 6 29. 6 29. 6 30. 1 27. 0 26. 4 29. 3	15. 6 18. 3 18. 8 19. 5 21. 1 21. 3 21. 8	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0 29. 0	3. 7 4. 6 4. 8 5. 0 5. 7 5. 7 5. 9	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	30. 9 27. 0 28. 3 31. 1 30. 2 30. 4 37. 8	30. 1 29. 5 30. 2 31. 6 30. 9 30. 5 34. 1	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	15. 1 19. 0 17. 7 14. 9 15. 8 15. 6 8. 2	15. 9 16. 5 15. 8 14. 4 15. 1 15. 5 11. 9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ESI40)

Page:

UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Sony Corporation

Kind of Equipment

Notebook personal Computer

Model No. Serial No. : Notebook : PCG-6C1L : XTA004

Power

: AC120V/60Hz

Mode

Remarks

: Transmitting (2412MHz) : IEEE802. 11b (11Mbps) +Bluetooth (Hopping) : 4/10/2004

Date

Test Distance Temperature

Engineer

: Toyokazu Imamura

Humidity

: 3 m : 19 °C : 45 % : FCC Part15C § 15. 209 Regulation

No. FREG	TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ]	VER	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1. 339.9 2. 510.0 3. 542.4 4. 580.4 5. 745.8 6. 760.0 7. 800.0	3 BB 1 BB 9 BB 1 BB 0 BB	33. 8 27. 7 27. 9 29. 2 26. 2 25. 2 33. 9	32. 7 29. 4 28. 1 29. 9 26. 0 25. 6 30. 5	18. 8 19. 5 21. 1 21. 3	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0	5. 7	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	31. 3 27. 6 28. 5 30. 7 30. 1 29. 3 38. 7	30. 2 29. 3 28. 7 31. 4 29. 9 29. 7 35. 3	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 7 18. 4 17. 5 15. 3 15. 9 16. 7 7. 3	15. 8 16. 7 17. 3 14. 6 16. 1 16. 3 10. 7

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREANP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ES140)

Page:

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UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode

Remarks

Transmitting (2437MHz)
LEEE802. 11b (11Mbps) +Bluetooth (Hopping)

Date

4/10/2004

Test Distance

Engineer

: Toyokazu Imamura

Temperature Humidity Regulation

: 3 m : 19 °C : 45 % : FCC Part15C § 15, 209

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RES HOR [dB μ	VER	LIMITS BμV/m]	HOR	RGIN VER 1B]
1. 2. 3. 4. 5. 6. 7.	340. 00 510. 05 542. 41 580. 50 745. 81 760. 00 800. 01	BB BB BB BB BB BB	34. 0 27. 0 28. 6 29. 5 26. 2 26. 5 34. 5	32. 6 29. 4 28. 9 30. 8 26. 3 26. 0 29. 0	15. 6 18. 3 18. 8 19. 5 21. 1 21. 3 21. 8	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0 29. 0	5. 7	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	31. 5 26. 9 29. 2 31. 0 30. 1 30. 6 39. 3	30. 1 29. 3 29. 5 32. 3 30. 2 30. 1 33. 8	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 5 19. 1 16. 8 15. 0 15. 9 15. 4 6. 7	15. 9 16. 7 16. 5 13. 7 15. 8 15. 9 12. 2

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

MANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co., Ltd. Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode

Remarks

Transmitting (2412MHz)
IEEE802. 11g (54Mbps) + Bluetooth (Hopping)

Date

4/10/2004

Test Distance Temperature

3 m C

Engineer

: Toyokazu Imamura

Humidity

: 45 %

Regulation

: FCC Part15C § 15.209

No.	FREQ. [MHz]	ANT TYPE	REAL HOR [dB	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ \	VER	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5. 6.	340. 01 510. 00 542. 41 580. 50 745. 82 760. 00 800. 00	BB BB BB BB BB BB	34. 2 27. 3 28. 3 29. 3 26. 0 26. 2 34. 5	33. 0 29. 3 28. 5 30. 8 26. 7 25. 5 30. 6	19. 5 21. 1 21. 3	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0	3. 7 4. 6 4. 8 5. 0 5. 7 5. 7 5. 9	6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	31. 7 27. 2 28. 9 30. 8 29. 9 30. 3 39. 3	30. 5 29. 2 29. 1 32. 3 30. 6 29. 6 35. 4	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 3 18. 8 17. 1 15. 2 16. 1 15. 7 6. 7	15. 5 16. 8 16. 9 13. 7 15. 4 16. 4

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ESI40)

UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

: Sony Corporation

Kind of Equipment

Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode

Remarks

Transmitting (2437MHz)
IEEE802. 11g (54Mbps) +Bluetooth (Hopping)

Date

: 4/10/2004

Test Distance Temperature

Engineer

: Toyokazu Imamura

Humidity

: 3 m : 19 °C : 45 % : FCC Part15C § 15. 209 Regulation

No.	FREQ.	ANT TYPE	REAI HOR [dB]	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ Ί	JLT I VER V/m] [di	LIMITS BμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5. 6. 7.	340. 00 510. 00 542. 40 580. 50 745. 82 760. 01 800. 01	BB BB BB BB BB BB	34. 1 27. 4 27. 9 29. 3 25. 7 25. 8 34. 0	33. 0 29. 6 28. 5 30. 7 27. 0 25. 5 31. 1	15. 6 18. 3 18. 8 19. 5 21. 1 21. 3 21. 8	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0 29. 0	5. 7	6. 1	31. 6 27. 3 28. 5 30. 8 29. 6 29. 9 38. 8	30. 5 29. 5 29. 1 32. 2 30. 9 29. 6 35. 9	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 4 18. 7 17. 5 15. 2 16. 4 16. 1 7. 2	15. 5 16. 5 16. 9 13. 8 15. 1 16. 4 10. 1

CALCULATION: READING + ANT, FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz

■ CABLE: KCC-30/31/32/34 ■ PREANP: KAF-05 (8447D) ■ ENI RECEIVER: KTR-01 (ESI40)

UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004

Power

AC120V/60Hz

Mode Remarks Transmitting (2462MHz)
IEEE802. 11g (54Mbps) +Bluetooth (Hopping)

Date

4/10/2004

Test Distance

3 m ∶ 19 °C ∶ 45 %

Engineer

: Toyokazu Imamura

Temperature Humidity

Regulation

: FCC Part15C § 15. 209

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ V	VER	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5. 6. 7.	340. 00 510. 00 542. 41 580. 50 745. 82 760. 00 800. 00	BB BB BB BB BB	33. 7 27. 7 27. 9 29. 5 26. 1 25. 5 34. 3	33. 0 29. 8 28. 0 30. 7 27. 0 25. 4 31. 1	15. 6 18. 3 18. 8 19. 5 21. 1 21. 3 21. 8	27. 9 29. 1 29. 1 29. 1 29. 0 29. 0 29. 0		6. 1 6. 1 6. 1 6. 1 6. 1 6. 1 6. 1	31. 2 27. 6 28. 5 31. 0 30. 0 29. 6 39. 1	30. 5 29. 7 28. 6 32. 2 30. 9 29. 5 35. 9	46. 0 46. 0 46. 0 46. 0 46. 0 46. 0	14. 8 18. 4 17. 5 15. 0 16. 0 16. 4 6. 9	15. 5 16. 3 17. 4 13. 8 15. 1 16. 5 10. 1

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KBA-03 (BBA9106) 30-299. 99MHz/KLA-03 (USLP9143) 300-1000MHz ■ CABLE: KCC-30/31/32/34 ■ PREAMP: KAF-05 (8447D) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment

: Sony Corporation : Notebook personal Computer PCG-6C1L

Model No. Serial No.

: XTA004

Power

: AC120V/60Hz

Mode Remarks Transmitting(2412MHz): IEEE802.11b(11Mbps)

Date

: 4/1/2004

Test Distance

Engineer

: Toyokazu Imamura

Temperature Humidity

Regulation

: 4/1/2004 : 3 m : 24 °C Engine : 39 % : FCC Part15C § 15. 209 (PK Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RES HOR [dB μ	VER	LIMITS dBμV/m]	HOR	RGIN VER dB]
1.	2384. 53	BB	50.0	47. 5	30. 6	36. 9	4. 1	10.0	57.8	55. 3	74. 0	16. 2	18. 7
2.	2390.00	BB	48.0	45. 6	30. 6	36. 9	4 . 1	10.0	55.8	53. 4	74. 0	18. 2	20.6
3.	4824. 00	BB	44.8	44. 5	35. 3	35. 2	5. 6	0.6	51. 1	50.8	74.0	22. 9	23. 2
4.	7236.00	BB	45. 9	45. 5	38. 3	36.8	6. 5	0.5	54. 4	54.0	74.0	19.6	20. 0
5.	9648.00	BB	46.2	45. 9	39. 1	36. 9	7.2	0.5	56. 1	55.8	74.0	17.9	18. 2
6.	12060.00	BB	45. 4	45.5	43.4	36. 3	8. 1	0. 5	61. 1	61.2	74.0	12.9	12. 8
7.	14472.00	BB	45. 1	44.8	42.6	35. 2	7.3	0. 2	60.0	59.7	74. 0	14.0	14. 3
8.	16884, 00	BB	45.2	46.0	43.0	35.0	8, 8	0. 5	62. 5	63. 3	74. 0	11.5	10. 7
9.	19296, 00	BB	44.8	45.2	39. 1	34.7	9. 4	0. 0	58. 6	59. 0		15. 4	15.0
10.	21708.00	BB	45. 2	45.8	39. 2	34. 3	9. 9	0. 0	60.0	60. 6		14.0	13. 4
11.	24120.00	BB	45. 2	45. 8	40. 3	35. 5	10. 9	0.0	60.9	61.5	74. 0	13. 1	12. 5

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA:KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■CABLE: KCC-D3/D7 ■ PREAMP: KAF-O2 (8449B) ■ EMI RECEIVER: KTR-O1 (ESI40)

UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

: Sony Corporation

Kind of Equipment

Notebook persona! Computer PCG-6C1L

Model No. Serial No.

: XTA004

Power Mode Remarks

: AC120V/60Hz Transmitting(2412MHz): IEEE802.11b(11Mbps)

Date

: 4/2/2004

Test Distance Temperature

Engineer : Toyokazu Imamura

Humidity Regulation : 47 27 2004 : 3 m : 22 °C Engine : 43 % : FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RESI HOR [dB μ]	VER	LIMITS IBμV/m]	HOR	RGIN VER dB]
1. 2. 3. 4. 5. 6. 7. 8. 9.	2384. 53 2390. 00 4824. 00 7236. 00 9648. 00 12060. 00 14472. 00 16884. 00 19296. 00 21708. 00 24120. 00	BB BB BB BB BB BB BB BB	35. 4 36. 0 31. 3 32. 9 33. 2 32. 5 31. 9 32. 4 32. 2 32. 7 33. 6	33. 8 34. 1 31. 5 32. 9 33. 3 32. 5 31. 9 32. 4 32. 4 32. 8 33. 8	30. 6 30. 6 35. 3 38. 3 39. 1 43. 4 42. 6 43. 0 39. 1 39. 2 40. 3	36. 9 36. 9 35. 2 36. 8 36. 9 36. 3 35. 2 35. 0 34. 7 34. 3 35. 5	4. 1 4. 1 5. 6 6. 5 7. 2 8. 1 7. 3 8. 8 9. 9	10. 0 10. 0 0. 6 0. 5 0. 5 0. 5 0. 2 0. 5 0. 0	43. 2 43. 8 37. 6 41. 4 43. 1 48. 2 46. 8 49. 7 46. 0 47. 5	41. 6 41. 9 37. 8 41. 4 43. 2 48. 2 46. 8 49. 7 46. 2 47. 6	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	10. 8 10. 2 16. 4 12. 6 10. 9 5. 8 7. 2 4. 3 8. 0 6. 5	12. 4 12. 1 16. 2 12. 6 10. 8 5. 8 7. 2 4. 3 7. 8 6. 4

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

Sony Corporation Notebook personal Computer PCG-6C1L

Serial No. Power

XTA004 AC120V/60Hz

Mode Remarks Transmitting (2437MHz) IEEE802. 11b (11Mbps) 4/1/2004

Date

Test Distance Temperature

3 m 24 °C

Engineer

: Toyokazu Imamura

Humidity Regulation

: 39 % FCC Part15C § 15. 209 (PK Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RES HOR [dB μ	VER	LIMITS ΒμV/m]	HOR	RGIN VER dB]
8.	4874. 00 7311. 00 9748. 00 12185. 00 14622. 00 17059. 00 19496. 00 21933. 00 24370. 00	BB	44. 5 45. 2 45. 6 45. 4 45. 1 44. 9 45. 4 46. 5 46. 7	44. 8 45. 2 46. 5 45. 2 44. 5 45. 2 44. 9 46. 3 46. 8	35. 6 38. 4 39. 1 43. 3 43. 0 43. 3 39. 0 39. 3 40. 4	35. 2 36. 8 37. 0 36. 1 35. 2 34. 9 34. 7 33. 6 36. 3	6. 6 7. 2 8. 1 7. 7 8. 7 9. 5	0. 6 0. 5 0. 6 0. 4 0. 3 0. 5 0. 0 0. 0	51. 1 53. 9 55. 5 61. 1 60. 9 62. 5 59. 2 62. 4 61. 6	51. 4 53. 9 56. 4 60. 9 60. 3 62. 8 58. 7 62. 2 61. 7	74. 0 74. 0 74. 0 74. 0 74. 0 74. 0 74. 0 74. 0 74. 0	22. 9 20. 1 18. 5 12. 9 13. 1 11. 5 14. 8 11. 6 12. 4	22. 6 20. 1 17. 6 13. 1 13. 7 11. 2 15. 3 11. 8 12. 3

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EM! RECEIVER: KTR-01 (ES140)

UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

: Sony Corporation

Kind of Equipment

: Notebook personal Computer : PCG-6C1L

Model No. Serial No. Power

: XTA004

: AC120V/60Hz : Transmitting (2437MHz) : IEEE802.11b(11Mbps) Mode Remarks

Date Test Distance : 4/1/2004

Temperature Humidity

Engineer

: Toyokazu Imamura

: 3 m : 24 °C Engine : 39 % : FCC Part15C § 15. 209 (AV Detection) Regulation

2. 7311. 00 BB 32. 8 32. 8 38. 4 36. 8 6. 6 0. 5 41. 5 54. 0 12. 5 12. 5 3. 9748. 00 BB 32. 8 32. 8 39. 1 37. 0 7. 2 0. 6 42. 7 42. 7 54. 0 11. 3 11. 4. 12185. 00 11. 3	No.	FREQ. [MHz]	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RES HOR $[dB\mu]$	VER	LIMITS BμV/m]	HOR	RGIN VER dB]
8. 21933, 00 BB 33. 4 33. 6 39. 3 33. 6 10. 2 0. 0 49. 3 49. 5 54. 0 4. 7 4.	3. 4. 5.	7311. 00 9748. 00 12185. 00 14622. 00 17059. 00	BB BB BB BB BB	32. 8 32. 8 32. 5 32. 3 32. 2	32. 8 32. 8 32. 5 32. 3 32. 2	38. 4 39. 1 43. 3 43. 0 43. 3	36. 8 37. 0 36. 1 35. 2 34. 9	6. 6 7. 2 8. 1 7. 7 8. 7 9. 5	0. 5 0. 6 0. 4 0. 3 0. 5 0. 0	41. 5 42. 7 48. 2 48. 1 49. 8	41. 5 42. 7 48. 2 48. 1 49. 8	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	12. 5 11. 3 5. 8 5. 9 4. 2 8. 3	15. 8 12. 5 11. 3 5. 8 5. 9 4. 2 8. 3 4. 5

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Sony Corporation Notebook personal Computer Kind of Equipment Model No.

: PCG-6C1L : XTA004 Serial No. : AC120V/60Hz Power

Transmitting (2462MHz) Mode : IEEE802. 11b (11Mbps) Remarks

: 4/1/2004 Date : 3 m : 24 °C : 39 % Test Distance Temperature

Engineer : Toyokazu Imamura

Humidity FCC Part15C § 15. 209 (PK Detection) Regulation

No.	FREQ.	ANT TYPE	REAL HOR [db]	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ]	ULT VER V/m] [d]	LIMITS 3μV/m]	HOR	RGIN VER BB]
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	2483. 50 2488. 29 4924. 00 7386. 00 9848. 00 12310. 00 14772. 00 17234. 00 19696. 00 22158. 00 24620. 00	BB BB BB BB BB BB BB BB BB	46. 2 47. 6 45. 2 45. 5 45. 9 45. 2 45. 4 44. 9 44. 5 46. 3 46. 5	45. 8 48. 0 44. 9 45. 2 46. 2 45. 2 45. 1 45. 5 46. 3 46. 7	30. 7 30. 7 35. 8 38. 6 39. 0 43. 2 43. 2 43. 8 39. 5 39. 2 40. 4	36. 9 36. 9 35. 2 36. 9 37. 0 35. 9 35. 1 34. 8 35. 0 33. 7 36. 0	4. 1 4. 1 5. 6 6. 6 7. 2 8. 1 8. 1 9. 6 10. 3	10. 0 10. 0 0. 5 0. 5 0. 7 0. 4 0. 4 0. 6 0. 0 0. 0	54. 1 55. 5 51. 9 54. 3 55. 8 61. 0 62. 0 63. 0 58. 6 62. 1 61. 8	53. 7 55. 9 51. 6 54. 0 56. 1 61. 0 61. 8 63. 2 59. 6 62. 1 62. 0	74. 0 74. 0	19. 9 18. 5 22. 1 19. 7 18. 2 13. 0 12. 0 11. 0 15. 4 11. 9 12. 2	20. 3 18. 1 22. 4 20. 0 17. 9 13. 0 12. 2 10. 8 14. 4 11. 9 12. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Sony Corporation Notebook personal Computer

Kind of Equipment Model No. Serial No.

PCG-6C1L XTA004

Power Mode

AC120V/60Hz

Remarks

Transmitting (2462MHz) IEEE802.11b (11Mbps) 4/1/2004

Date

Test Distance Temperature

3 m 24 °C 39 %

Engineer : Toyokazu Imamura

Humidity

Regulation : FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RES HOR [dB μ	VER	LIMITS BμV/m]	HOR	RGIN VER dB]
1.	2483. 50	BB	34. 2	33. 8	30. 7	36. 9	4. 1	10. 0	42. 1	41. 7	54. 0	11. 9	12. 3
2.	2488. 29	BB	34. 5	34. 1	30. 7	36. 9	4. 1	10. 0	42. 4	42. 0	54. 0	11. 6	12. 0
3.	4924.00	BB	32. 1	32. 2	35. 8	35. 2	5. 6	0.5	38. 8	38. 9	54.0	15.2	15. 1
4.	7386. 00	BB	32. 8	32. 8	38. 6	36, 9	6. 6	0. 5	41. 6	41. 6	54.0	12. 4	12. 4
5.	9848. 00	BB	33. 1	33. 7	39. 0	37, 0	7. 2	0. 7	43. 0	43. 6	54.0	11. 0	10. 4
6.	12310.00	BB	32. 6	32. 6	43. 2	35. 9	8. 1	0.4	48.4	48. 4	54. 0	5. 6	5.6
7.	14772. 00	BB	32. 4	32. 4	43. 2	35. 1	8. 1	0. 4	49. 0	49. 0	54. 0	5. 0	5. 0
8.	17234. 00	BB	32. 0	32. 0	43. 8	34. 8	8. 5	0. 6	50. 1	50. 1	54. 0	3. 9	3. 9
9.	19696.00	BB	32. 0	32.0	39. 5	35. 0	9.6	0.0	46. 1	46. 1	54.0	7. 9	7.9
10.	22158. 00	BB	33. 3	33. 3	39. 2	33. 7	10. 3	0. 0	49. 1	49. 1	54. 0	4. 9	4. 9
11.	24620. 00	BB	33. 9	33. 9	40. 4	36. 0	10. 9	0. 0	49. 2	49. 2	54. 0	4. 8	4. 8

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-O2 (8449B) ■ EMI RECEIVER: KTR-O1 (ESI40)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004 AC120V/60Hz

Power Mode Remarks

Transmitting(2412MHz) : IEEE802.11g(54Mbps)

Date

4/2/2004

Test Distance

3 m 22 °C 43 %

Engineer

: Toyokazu Imamura

Temperature Humidity Regulation

: FCC Part15C § 15. 209 (PK Detection)

No.	FREQ. [MHz]	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RES HOR [dB μ '	VER	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1. 2.	2312. 02 2390. 00	BB BB	49. 9 51. 8	48. 3 45. 9	30. 5 30. 6	36. 9 36. 9	4. 0	10.0	57. 5	55. 9	74.0	16. 5	18. 1
2. 3.	4824. 00	BB	44. 5	45. 9	35. 3	35. 2	4. 1 5. 6	10. 0 0. 6	59. 6 50. 8	53. 7 50. 7	74. 0 74. 0	14. 4 23. 2	20. 3 23. 3
4.	7236.00	BB	45. 5	45. 5	38. 3	36. 8	6. 5	0. 5	54.0	54.0	74. 0	20.0	20. 0
5.	9648.00	BB	45.6	45.8	39. 1	36. 9	7. 2	0. 5	55. 5	55.7	74.0	18.5	18. 3
6.	12060.00	BB	45.6	45. 5	43. 4	36. 3	8. 1	0.5	61. 3	61.2	74.0	12.7	12.8
7.	14472.00	BB	44.8	44. 9	42.6	35. 2	7. 3	0.2	59. 7	59.8	74.0	14. 3	14. 2
8.	16884.00	BB	45. 2	45. 2	43.0	35.0	8.8	0.5	62. 5	62. 5	74.0	11.5	11.5
9.	19296. 00	BB	45.9	45. 4	39. 1	34. 7	9.4	0.0	59.7	59. 2	74.0	14. 3	14.8
10.	21708.00	BB	45.4	45. 4	39. 2	34. 3	9.9	0.0	60.2	60.2	74.0	13.8	13.8
11.	24120.00	BB 	46. 3	46. 6	40.3	35.5	10. 9	0.0	62.0	62. 3	74.0	12.0	11.7

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-O2 (8449B) ■ EMI RECEIVER: KTR-O1 (ES140)

UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

: Sony Corporation : Notebook personal Computer

PCG-6C1L

Serial No. Power

AC120V/60Hz

Mode

Transmitting (2412MHz) IEEE802. 11g (54Mbps) 4/2/2004

Remarks Date

Test Distance

3 m : 24 °C : 39 %

Engineer : Toyokazu !mamura

Temperature Humidity Regulation

: FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RES HOR [dB μ	VER	LIMITS 1ΒμV/m]	HOR	RGIN VER dB]
1.	2312. 02	BB	39. 7	37. 4	30. 5	36. 9	4. 0	10. 0	47. 3	45. 0	54. 0	6. 7	9. 0
2.	2390.00	BB	35. 7	34 . 1	30.6	36. 9	4. 1	10.0	43. 5	41.9	54.0	10.5	12. 1
3.	4824. 00	BB	31.7	31. 7	35. 3	35. 2	5.6	0.6	38. 0	38.0	54.0	16.0	16. 0
4.	7236.00	BB	32.8	32.8	38. 3	36.8	6.5	0. 5	41.3	41.3	54. 0	12. 7	12. 7
5.	9648.00	BB	32. 7	32.8	39. 1	36. 9	7.2	0. 5	42.6	42. 7	54. 0	11.4	11. 3
6.	12060.00	BB	32. 6	32.6	43. 4	36.3	8, 1	0.5	48. 3	48. 3	54.0	5. 7	5. 7
7.	14472.00	BB	31.9	31.9	42.6	35. 2	7. 3	0. 2	46. 8	46.8	54. 0	7. 2	7. 2
8.	16884.00	BB	32. 4	32. 4	43.0	35.0	8.8	0. 5	49. 7	49. 7	54. 0	4. 3	4. 3
9.	19296.00	BB	32. 2	32. 2	39. 1	34. 7	9. 4	0. 0	46. 0	46. 0	54. 0	8. 0	8. 0
10.	21708.00	BB	32. 7	32, 7	39. 2	34. 3	9. 9	0. 0	47. 5	47. 5	54. 0	6.5	6.5
11.	24120.00	BB	33. 7	33. 6	40. 3	35. 5	10. 9	0.0	49. 4	49. 3	54. 0	4. 6	4. 7

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EM! RECEIVER: KTR-01 (ESI40)

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UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant Kind of Equipment Model No.

Sony Corporation Notebook personal Computer PCG-6C1L XTA004

Serial No.

AC120V/60Hz

Power Mode Remarks

: Transmitting (2437MHz) : IEEE802.11g (54Mbps) : 4/2/2004

Date

Test Distance Temperature

: 3 m : 22 °C : 43 %

Engineer

: Toyokazu Imamura

Humidity Regulation

FCC Part15C § 15. 209 (PK Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ)	VER	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1.	2336. 07	BB	50. 2	48. 3	30. 5	36. 9	4. 1	10. 0	57. 9	56. 0	74. 0	16. 1	18. 0
2.	4874. 00	BB	44. 7	44. 4	35. 6	35. 2	5. 6	0. 6	51. 3	51. 0	74. 0	22. 7	23. 0
3.	7311.00	BB	46. 2	45. 5	38. 4	36.8	6. 6	0. 5	54. 9	54. 2	74. 0	19. 1	19.8
4.	9748.00	BB	45. 4	45. 2	39. 1	37.0	7. 2	0. 6	55. 3	55. 1	74. 0	18. 7	18.9
5.	12185. 00	BB	45. 5	45. 5	43. 3	36. 1	8. Î	0. 4	61. 2	61. 2	74. 0	12. 8	12. 8
6.	14622. 00	BB	45. 8	45. 4	43. 0	35. 2	7. 7	0. 3	61. 6	61. 2	74. 0	12. 4	12. 8
7.	17059.00	BB	45.0	45. 2	43. 3	34. 9	8.7	0.5	62. 6	62.8	74. 0	11.4	11. 2
8.	19496. 00	BB	45. 4	44. 5	39. 0	34. 7	9. 5	0. 0	59. 2	58. 3	74. 0	14. 8	15. 7
9.	21933. 00	BB	46. 5	46. 3	39. 3	33. 6	10. 2	0. 0	62. 4	62. 2	74. 0	11. 6	11. 8
10.	24370. 00	BB	46. 5	46. 2	40. 4	36. 3	10. 8	0. 0	61. 4	61. 1	74. 0	12. 6	12. 9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment

: Sony Corporation : Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004 : AC120V/60Hz

Power Mode

: Transmitting (2437MHz) : IEEE802.11g (54Mbps) : 4/2/2004

Remarks Date

Test Distance Temperature

3 m 22 °C 43 %

Engineer : Toyokazu Imamura

Humidity Regulation

: FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ]	VER	LIMITS dBμV/m]	HOR	RGIN VER B]
1. 2. 3. 4. 5. 6.	2336. 07 4874. 00 7311. 00 9748. 00 12185. 00 14622. 00 17059. 00	BB BB BB BB BB BB	40. 1 31. 9 32. 8 32. 5 32. 6 32. 3 32. 3	36. 1 32. 8 32. 5 32. 6 32. 3 32. 3	30. 5 35. 6 38. 4 39. 1 43. 3 43. 0 43. 3	36. 9 35. 2 36. 8 37. 0 36. 1 35. 2 34. 9	4. 1 5. 6 6. 6 7. 2 8. 1 7. 7 8. 7	10. 0 0. 6 0. 5 0. 6 0. 4 0. 3 0. 5	47. 8 38. 5 41. 5 42. 4 48. 3 48. 1 49. 9	43. 8 38. 7 41. 5 42. 4 48. 3 48. 1 49. 9	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	6. 2 15. 5 12. 5 11. 6 5. 7 5. 9 4. 1	10. 2 15. 3 12. 5 11. 6 5. 7 5. 9 4. 1
8. 9. 10.	19496. 00 21933. 00 24370. 00	BB BB BB	31. 9 33. 5 33. 7	31. 9 33. 5 33. 7	39. 0 39. 3 40. 4	34. 7 33. 6 36. 3	9. 5 10. 2 10. 8	0. 0 0. 0 0. 0	45. 7 49. 4 48. 6	45. 7 49. 4 48. 6	54. 0 54. 0 54. 0 54. 0	8. 3 4. 6 5. 4	8. 3 4. 6 5. 4

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Modei No.

: Sony Corporation : Notebook personal Computer : PCG-6C1L

Serial No. Power

: XTA004 : AC120V/60Hz

Mode Remarks Transmitting (2462MHz): IEEE802. 11g (54Mbps)

Date

: 4/2/2004

Test Distance Temperature

: 3 m : 22 ℃ : 43 %

Engineer

: Toyokazu Imamura

Humidity Regulation

: FCC Part15C § 15. 209 (PK Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESU HOR [dB μ V	VER	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5. 6. 7.	2359. 98 2483. 50 4924. 00 7386. 00 9848. 00 12310. 00 14772. 00	BB BB BB BB BB BB	49. 1 54. 0 44. 9 45. 8 45. 6 45. 2 45. 5	47. 4 51. 2 46. 2 45. 6 46. 2 45. 5 44. 8	30. 5 30. 7 35. 8 38. 6 39. 0 43. 2 43. 2	36. 9 36. 9 35. 2 36. 9 37. 0 35. 9 35. 1	4. 1 4. 1 5. 6 6. 6 7. 2 8. 1 8. 1	10. 0 10. 0 0. 5 0. 5 0. 7 0. 4 0. 4	56. 8 61. 9 51. 6 54. 6 55. 5 61. 0	55. 1 59. 1 52. 9 54. 4 56. 1 61. 3	74. 0 74. 0 74. 0 74. 0 74. 0 74. 0	17. 2 12. 1 22. 4 19. 4 18. 5 13. 0	18. 9 14. 9 21. 1 19. 6 17. 9 12. 7 12. 6
8. 9. 10. 11.	17234. 00 19696. 00 22158. 00 24620. 00	BB BB BB BB	45. 1 44. 5 45. 9 46. 5	44. 8 44. 8 46. 7 46. 8	43. 8 39. 5 39. 2 40. 4	34. 8 35. 0 33. 7 36. 0	8. 5 9. 6 10. 3 10. 9	0. 6 0. 0 0. 0 0. 0	63. 2 58. 6 61. 7 61. 8	62. 9 58. 9 62. 5 62. 1	74. 0 74. 0 74. 0 74. 0	10. 8 15. 4 12. 3 12. 2	11. 1 15. 1 11. 5 11. 9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

Sony Corporation Notebook personal Computer

Serial No.

PCG-6C1L XTA004

Power Mode

Remarks

: AC120V/60Hz : Transmitting(2462MHz) : IEEE802.11g(54Mbps) : 4/2/2004

Date

Test Distance Temperature

3 m 22 °C 43 %

Engineer : Toyokazu Imamura

Humidity Regulation

: FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESU HOR [dB μ)	ULT VER V/m] [di	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5. 6. 7. 8.	2359. 98 2483. 50 4924. 00 7386. 00 9848. 00 12310. 00 14772. 00 17234. 00 19696. 00	BB BB BB BB BB BB BB	37. 9 36. 2 32. 1 32. 7 32. 6 32. 6 32. 4 32. 0 32. 0	35. 1 35. 0 32. 2 32. 8 33. 1 32. 6 32. 3 31. 9	30. 5 30. 7 35. 8 38. 6 39. 0 43. 2 43. 2 43. 8 39. 5	36. 9 36. 9 35. 2 36. 9 37. 0 35. 9 35. 1 34. 8 35. 0	4. 1 4. 1 5. 6 6. 6 7. 2 8. 1 8. 5 9. 6	10. 0 10. 0 0. 5 0. 5 0. 7 0. 4 0. 4 0. 6 0. 0	45. 6 44. 1 38. 8 41. 5 42. 5 48. 4 49. 0 50. 1 46. 1	42. 8 42. 9 38. 9 41. 6 43. 0 48. 4 48. 9 50. 0 46. 0	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	8. 4 9. 9 15. 2 12. 5 11. 5 5. 6 5. 0 3. 9 7. 9	11. 2 11. 1 15. 1 12. 4 11. 0 5. 6 5. 1 4. 0 8. 0
10. 11.	22158. 00 24620. 00	BB BB	33. 3 33. 9	33. 3 33. 9	39. 2 40. 4	33. 7 36. 0	10. 3 10. 9	0. 0 0. 0	49. 1 49. 2	49. 1 49. 2	54. 0 54. 0	4. 9 4. 8	4. 9 4. 8

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Sony Corporation

Kind of Equipment

Notebook personal Computer

Model No. Serial No.

PCG-6C1L XTA004

Power Mode

: AC120V/60Hz

Remarks

Transmitting (2412MHz)
 IEEE802. 11b (11Mbps) +Bluetooth (Hopping)

Date

4/2/2004

Test Distance Temperature

Engineer

: Toyokazu Imamura

Humidity Regulation 3 m 22 °C 43 %

: FCC Part15C § 15. 209 (PK Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RES HOR [dB μ	VER	LIMITS ΒμV/m]	HOR	RGIN VER dB]
1. 2. 3. 4. 5. 6. 7.	2312. 11 2390. 00 4824. 00 7236. 00 9648. 00 12060. 00 14472. 00 16884. 00	BB BB BB BB BB BB	49. 0 46. 7 45. 2 45. 3 45. 5 45. 2 44. 8 45. 1	46. 9 45. 9 45. 5 45. 6 46. 0 44. 9 44. 8 45. 2	30. 5 30. 6 35. 3 38. 3 39. 1 43. 4 42. 6 43. 0	36. 9 36. 9 35. 2 36. 8 36. 9 36. 3 35. 2	4. 0 4. 1 5. 6 6. 5 7. 2 8. 1 7. 3 8. 8	10. 0 10. 0 0. 6 0. 5 0. 5 0. 5 0. 2 0. 5	56. 6 54. 5 51. 5 53. 8 55. 4 60. 9	54. 5 53. 7 51. 8 54. 1 55. 9 60. 6 59. 7	74. 0 74. 0 74. 0 74. 0 74. 0 74. 0	17. 4 19. 5 22. 5 20. 2 18. 6 13. 1 14. 3	19. 5 20. 3 22. 2 19. 9 18. 1 13. 4 14. 3
9. 10.	19296. 00 21708. 00 24120. 00	BB BB BB	45. 2 45. 7 46. 5	45. 2 45. 5 45. 3 46. 3	39. 1 39. 2 40. 3	34. 7 34. 3 35. 5	9. 4 9. 9 10. 9	0. 0 0. 0 0. 0	62. 4 59. 0 60. 5 62. 2	62. 5 59. 3 60. 1 62. 0	74. 0 74. 0 74. 0 74. 0	11. 6 15. 0 13. 5 11. 8	11. 5 14. 7 13. 9 12. 0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■EMI RECEIVER: KTR-01 (ES140)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No. Serial No. PCG-6C1L XTA004

Power Mode

AC120V/60Hz

Remarks

Transmitting (2412MHz)IEEE802. 11b (11Mbps)+Bluetooth (Hopping)

Date

: 4/2/2004

Test Distance Temperature

: 3 m : 22 °C : 43 %

Engineer

: Toyokazu Imamura

Humidity Regulation

: FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RESI HOR [dB μ]	VER	LIMITS ΒμV/m]	HOR	RGIN VER dB]
9. 10.	2312. 11 2390. 00 4824. 00 7236. 00 9648. 00 12060. 00 14472. 00 16884. 00 19296. 00 21708. 00 24120. 00	BB BB BB BB BB BB BB BB BB	38. 4 34. 2 32. 0 32. 7 32. 6 32. 4 31. 8 32. 2 32. 2 32. 7 33. 6	35. 7 33. 9 32. 1 32. 8 33. 6 32. 5 31. 8 32. 2 32. 3 32. 7 33. 7	30. 5 30. 6 35. 3 38. 3 39. 1 43. 4 42. 6 43. 0 39. 1 39. 2 40. 3	36. 9 36. 9 35. 2 36. 8 36. 9 36. 3 35. 2 35. 0 34. 7 34. 3 35. 5	4. 0 4. 1 5. 6 6. 5 7. 2 8. 1 7. 3 8. 8 9. 9	10. 0 10. 0 0. 6 0. 5 0. 5 0. 2 0. 5 0. 0 0. 0	46. 0 42. 0 38. 3 41. 2 42. 5 48. 1 46. 7 49. 5 46. 0 47. 5 49. 3	43. 3 41. 7 38. 4 41. 3 43. 5 48. 2 46. 7 49. 5 46. 1 47. 5 49. 4	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	8. 0 12. 0 15. 7 12. 8 11. 5 5. 9 7. 3 4. 5 8. 0 6. 5 4. 7	10. 7 12. 3 15. 6 12. 7 10. 5 5. 8 7. 3 4. 5 7. 9 6. 5

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co.,Ltd. Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

Sony Corporation Notebook personal Computer PCG-6C1L

Serial No.

XTA004 AC120V/60Hz

Power Mode

Remarks

Transmitting (2437MHz)
LEEE802. 11b (11Mbps) +Bluetooth (Hopping)

Date

Test Distance

: 4/2/2004 : 3 m : 22 °C : 43 %

Engineer

: Toyokazu Imamura

Temperature Humidity

Regulation

: FCC Part15C § 15. 209 (PK Detection)

No.	FREQ.	ANT TYPE	REAL HOR [db]	VER υVER υV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RES HOR [dB μ	VER	LIMITS dBµV/m]	HOR	RGIN VER dB]
	2336. 06 4874. 00 7311. 00 9748. 00 12185. 00 14622. 00 17059. 00 19496. 00 21933. 00 24370. 00	BB BB BB BB BB BB BB BB	49. 6 45. 7 45. 2 45. 3 45. 5 45. 2 44. 8 45. 3 46. 3	46. 4 45. 6 45. 5 45. 2 45. 5 45. 1 45. 0 45. I 46. 5 46. 4	30. 5 35. 6 38. 4 39. 1 43. 3 43. 0 43. 3 39. 0 39. 3	36. 9 35. 2 36. 8 37. 0 36. 1 35. 2 34. 9 34. 7 33. 6 36. 3	4. 1 5. 6 6. 6 7. 2 8. 1 7. 7 8. 7 9. 5 10. 2	10. 0 0. 6 0. 5 0. 6 0. 4 0. 3 0. 5 0. 0 0. 0	57. 3 52. 3 53. 9 55. 2 61. 2 61. 0 62. 4 59. 1 62. 2 64. 5	54. 1 52. 2 54. 2 55. 1 61. 2 60. 9 62. 6 58. 9 62. 4 61. 3	74. 0 74. 0 74. 0 74. 0 74. 0 74. 0 74. 0 74. 0 74. 0	16. 7 21. 7 20. 1 18. 8 12. 8 13. 0 11. 6 14. 9 11. 8 9. 5	19. 9 21. 8 19. 8 18. 9 12. 8 13. 1 11. 4 15. 1 11. 6

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EM! RECEIVER: KTR-01 (ES140)

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UL Apex Co.,Ltd.

Yamakita No. 1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer

Model No. Serial No. PCG-6C1L XTA004

Power

AC120V/60Hz

Mode Remarks Transmitting (2437MHz)
IEEE802. 11b (11Mbps) +Bluetooth (Hopping)
4/2/2004

Date

Test Distance

3 m 22 °C 43 %

Engineer

: Toyokazu Imamura

Temperature Humidity Regulation

: FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ]	ULT VER V/m] [d	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1. 2. 3. 4. 5.	2336. 06 4874. 00 7311. 00 9748. 00 12185. 00 14622. 00	BB BB BB BB BB	39. 9 32. 2 32. 7 32. 5 32. 6 32. 1	35. 2 32. 0 32. 7 32. 8 32. 5 32. 2	30. 5 35. 6 38. 4 39. 1 43. 3 43. 0	36. 9 35. 2 36. 8 37. 0 36. 1	5. 6 6. 6 7. 2 8. 1	10. 0 0. 6 0. 5 0. 6 0. 4	47. 6 38. 8 41. 4 42. 4 48. 3	42. 9 38. 6 41. 4 42. 7 48. 2	54. 0 54. 0 54. 0 54. 0	6. 4 15. 2 12. 6 11. 6 5. 7	11. 1 15. 4 12. 6 11. 3 5. 8
7. 8. 9.	17059. 00 19496. 00 21933. 00	BB BB BB BB	32. 2 32. 0 33. 6 33. 7	32. 2 32. 2 31. 9 33. 5 33. 7	43. 0 43. 3 39. 0 39. 3 40. 4	35. 2 34. 9 34. 7 33. 6 36. 3	7. 7 8. 7 9. 5 10. 2 10. 8	0. 3 0. 5 0. 0 0. 0 0. 0	47. 9 49. 8 45. 8 49. 5 48. 6	48. 0 49. 8 45. 7 49. 4 48. 6	54. 0 54. 0 54. 0 54. 0 54. 0	6. 1 4. 2 8. 2 4. 5 5. 4	6. 0 4. 2 8. 3 4. 6 5. 4

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■CABLE: KCC-D3/D7 PREAMP: KAF-02 (8449B) ■EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

Sony Corporation Notebook personal Computer

Serial No.

PCG-6C1L XTA004

Power Mode

AC120V/60Hz

Remarks

Transmitting (2462MHz)
IEEE802. 11b (11Mbps) +Bluetooth (Hopping)
4/2/2004

Date

Test Distance

3 m 22 °C 43 %

Engineer

: Toyokazu Imamura

Temperature Humidity

Regulation : FCC Part15C § 15. 209 (PK Detection)

1. 2360.00 BB 48.4 46.6 30.5 36.9 4.1 10.0 56.1 54.3 74.0 2. 2483.50 BB 46.7 46.3 30.7 36.9 4.1 10.0 54.6 54.2 74.0 3. 4924.00 BB 45.7 45.9 35.8 35.2 5.6 0.5 52.4 52.6 74.0	MARGIN HOR VER [dB]
4. 7386.00 BB 45.5 45.6 38.6 36.9 6.6 0.5 54.3 54.4 74.0 5. 9848.00 BB 45.5 45.5 39.0 37.0 7.2 0.7 55.4 55.4 74.0 6. 12310.00 BB 45.2 45.7 43.2 35.9 8.1 0.4 61.0 61.5 74.0 7. 14772.00 BB 45.1 45.1 43.2 35.1 8.1 0.4 61.7 61.7 74.0 8. 17234.00 BB 44.4 44.5 43.8 34.8 8.5 0.6 62.5 62.6 74.0 9. 19696.00 BB 45.1 45.3 39.5 35.0 9.6 0.0 59.2 59.4 74.0 10. 22158.00 BB 46.0 46.1 39.2 33.7 10.3 0.0 61.8 61.9 74.0	17. 9 19. 7 19. 4 19. 8 21. 6 21. 4 19. 7 19. 6 18. 6 18. 6 13. 0 12. 5 12. 3 12. 3 11. 5 11. 4 14. 8 14. 6 12. 2 12. 1

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

Page:

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

Sony Corporation Notebook personal Computer

Serial No.

PCG-6C1L XTA004

Power Mode

AC120V/60Hz

Remarks

Transmitting (2462MHz) IEEE802.11b (11Mbps) +Bluetooth (Hopping) 4/2/2004

Date

Test Distance

3 m 22 °C 43 %

Engineer

: Toyokazu Imamura

Temperature Humidity Regulation

: FCC Part15C § 15.209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RESI HOR [dB μ]	VER	LIMITS ΒμV/m]	HOR	RGIN ·VER dB]
1. 2. 3. 4. 5.	2360. 00 2483. 50 4924. 00 7386. 00 9848. 00	BB BB BB BB	37. 4 34. 0 32. 1 32. 7 32. 6	35. 0 33. 4 31. 9 32. 7 32. 9	30. 5 30. 7 35. 8 38. 6 39. 0	36. 9 36. 9 35. 2 36. 9 37. 0	4. 1 4. 1 5. 6 6. 6 7. 2	10. 0 10. 0 0. 5 0. 5 0. 7	45. 1 41. 9 38. 8 41. 5 42. 5	42. 7 41. 3 38. 6 41. 5 42. 8	54. 0 54. 0 54. 0 54. 0 54. 0	8. 9 12. 1 15. 2 12. 5 11. 5	11. 3 12. 7 15. 4 12. 5 11. 2
6. 7. 8. 9. 10.	12310. 00 14772. 00 17234. 00 19696. 00 22158. 00 24620. 00	BB BB BB BB BB	32. 5 32. 2 31. 8 32. 4 33. 2 33. 9	32. 5 32. 3 31. 8 32. 1 33. 3 33. 9	43. 2 43. 2 43. 8 39. 5 39. 2 40. 4	35. 9 35. 1 34. 8 35. 0 33. 7 36. 0	8. 1 8. 1 8. 5 9. 6 10. 3 10. 9	0. 4 0. 4 0. 6 0. 0 0. 0	48. 3 48. 8 49. 9 46. 5 49. 0 49. 2	48. 3 48. 9 49. 9 46. 2 49. 1 49. 2	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	5. 7 5. 2 4. 1 7. 5 5. 0 4. 8	5. 7 5. 1 4. 1 7. 8 4. 9 4. 8

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA : KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

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UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

Serial No. Power

: Sony Corporation : Notebook personal Computer : PCG-6C1L : XTA004

: AC120V/60Hz

Mode

Remarks

A01207 6012
Transmitting (2412MHz)
IEEE802. 11g (54Mbps) +Bluetooth (Hopping)
4/2/2004

Date

Test Distance Temperature

: 3 m : 22 °C : 43 %

Engineer

: Toyokazu Imamura

Humidity

FCC Part15C § 15. 209 (PK Detection) Regulation

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	RES HOR [dB μ]	VER	LIMITS ΒμV/m]	HOR	RGIN VER HB]
1.	2312.00	BB	49.6	49. 9	30. 5	36. 9	4. 0	10. 0	57. 2	57. 5	74. 0	16.8	16.5
2.	2390.00	BB	51.3	47.0	30.6	36. 9	4 . 1	10.0	59. 1	54.8	74.0	14. 9	19.2
3.	4824.00	BB	45.6	44 . 9	35. 3	35. 2	5. 6	0.6	51.9	51.2	74.0	22. 1	22.8
4.	7236.00	BB	45. 5	45.6	38. 3	36.8	6. 5	0.5	54.0	54. 1	74.0	20.0	19.9
5.	9648.00	BB	45. 7	45. 3	39. 1	36. 9	7. 2	0.5	55.6	55. 2	74.0	18.4	18.8
6.	12060.00	BB	45. 2	4 5. 2	43.4	36. 3	8. 1	0.5	60.9	60. 9	74.0	13. 1	13. 1
7.	14472.00	BB	44. 4	44. 5	42.6	35. 2	7.3	0.2	59. 3	59. 4	74.0	14.7	14.6
8.	16884.00	BB	45.6	45. 1	43.0	35. 0	8.8	0.5	62.9	62.4	74.0	11.1	11.6
9.	19296.00	BB	45 . 1	44. 9	39. 1	34. 7	9.4	0.0	58. 9	58. 7	74.0	15. 1	15. 3
10.	21708.00	BB	45.3	45.5	39. 2	34. 3	9.9	0.0	60. 1	60.3	74.0	13. 9	13. 7
11.	24120.00	BB	46.8	46. 3	40.3	35. 5	10.9	0.0	62. 5	62. 0	74.0	11.5	12.0

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-O2 (8449B) ■ EMI RECEIVER: KTR-O1 (ESI40)

UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant Kind of Equipment Model No.

: Sony Corporation : Notebook personal Computer

Serial No.

PCG-6C1L XTA004 : AC120V/60Hz

Power Mode

Remarks

Transmitting (2412MHz)
IEEE802. 11g (54Mbps) +Bluetooth (Hopping)
4/2/2004

Date

Test Distance

3 m 22 °C 43 %

Engineer

: Toyokazu Imamura

Temperature Humidity Regulation

: FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESI HOR [dB μ N	VER	LIMITS ΒμV/m]	HOR	RGIN VER dB]
1. 2. 3. 4. 5. 6. 7. 8. 9.	2312. 00 2390. 00 4824. 00 7236. 00 9648. 00 12060. 00 14472. 00 16884. 00 19296. 00	BB BB BB BB BB BB BB BB	38. 6 35. 4 31. 7 32. 8 32. 8 32. 5 31. 8 32. 2 32. 3	36. 1 34. 0 31. 6 32. 7 32. 7 32. 5 31. 8 32. 3 32. 3	30. 5 30. 6 35. 3 38. 3 39. 1 43. 4 42. 6 43. 0 39. 1	36. 9 36. 9 35. 2 36. 8 36. 9 36. 3 35. 2 35. 0 34. 7	4. 0 4. 1 5. 6 6. 5 7. 2 8. 1 7. 3 8. 8 9. 4	10. 0 10. 0 0. 6 0. 5 0. 5 0. 5 0. 2 0. 5 0. 0	46. 2 43. 2 38. 0 41. 3 42. 7 48. 2 46. 7 49. 5 46. 1	43. 7 41. 8 37. 9 41. 2 42. 6 48. 2 46. 7 49. 6 46. 1	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	7. 8 10. 8 16. 0 12. 7 11. 3 5. 8 7. 3 4. 5 7. 9	10. 3 12. 2 16. 1 12. 8 11. 4 5. 8 7. 3 4. 4 7. 9
10. 11.	21708. 00 24120. 00	BB BB	32. 7 33. 6	32. 7 33. 7	39. 2 40. 3	34. 3 35. 5	9. 9 10. 9	0. 0 0. 0	47. 5 49. 3	47. 5 49. 4	54. 0 54. 0	6. 5 4. 7	6. 5 4. 6

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber

Report No.: 24GE0260-YK

Applicant

Kind of Equipment Model No.

Sony Corporation Notebook personal Computer

Serial No.

PCG-6C1L XTA004 AC120V/60Hz

Power Mode

Remarks

Transmitting (2437MHz)
IEEE802. 11g (54Mbps) +Bluetooth (Hopping)
4/2/2004

Date

Test Distance

3 m 22 °C 43 %

Engineer

: Toyokazu Imamura

Temperature Humidity

Regulation : FCC Part15C § 15. 209 (PK Detection)

No.	FREQ. [MHz]	ANT TYPE	READING HOR VER [dB μ V]		HOR VER FACTOR GAIN LOSS HOR VER		VER FACTOR GAIN LOSS HOR VER		LIMITS	HOR	RGIN VER dB]		
											<i>υμ (/ III</i>]	L	யப்
1.	2335. 95	BB	49.6	47.4	30. 5	36. 9	4. 1	10.0	57.3	55. 1	74. 0	16. 7	18. 9
2.	4874. 00	BB	45. 3	45. 2	35. 6	35. 2	5. 6	0.6	51.9	51.8	74.0	22. i	22. 2
3.	7311.00	BB	45.6	45. 5	38. 4	36.8	6.6	0.5	54. 3	54. 2	74.0	19. 7	19. 8
4.	9748.00	BB	45. 4	45. 2	39. 1	37. 0	7. 2	0. 6	55, 3	55. 1	74. 0	18. 7	18. 9
5.	12185.00	BB	45. 5	45.5	43.3	36. 1	8. 1	0.4	61.2	61. 2	74. 0	12.8	12. 8
6.	14622.00	BB	45.8	45.4	43.0	35. 2	7. 7	0.3	61.6	61. 2	74. 0	12. 4	12. 8
7.	17059.00	BB	45.0	45. 2	43. 3	34. 9	8. 7	0.5	62, 6	62. 8	74. 0	11.4	11. 2
8.	19496.00	BB	45. 4	44. 5	39.0	34. 7	9. 5	0, 0	59. 2	58. 3	74. 0	14. 8	15. 7
9.	21933.00	BB	46. 5	46. 3	39. 3	33. 6	10. 2	0.0	62. 4	62. 2	74. 0	11.6	11.8
10.	24370. 00	BB	46. 5	46. 2	40. 4	36. 3	10. 8	0. 0	61. 4	61. 1	74. 0	12.6	12. 9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz ■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co.,Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Sony Corporation

Kind of Equipment

Notebook personal Computer

Model No.

PCG-6C1L XTA004

Serial No. Power

: AC120V/60Hz

Mode

Remarks

Transmitting(2437MHz)
IEEE802.11g(54Mbps)+Bluetooth(Hopping)

Date

: 4/2/2004

Test Distance

: 3 m : 22 °C : 43 %

Engineer

: Toyokazu Imamura

Temperature Humidity

: FCC Part15C § 15. 209 (AV Detection) Regulation

No.	FREQ.	ANT TYPE	READING HOR VER [dB μ V]		OR VER FACTOR		CABLE ATTEN. LOSS [dB] [dB]		RESULT LIMIT HOR VER [dB μ V/m] [dB μ V/m			HOR VER		
1. 2. 3. 4. 5. 6. 7.	2335. 95 4874. 00 7311. 00 9748. 00 12185. 00 14622. 00 17059. 00 19496. 00	BB BB BB BB BB BB BB	38. 4 31. 9 32. 7 32. 4 32. 6 32. 2 32. 2 31. 9	35. 4 31. 9 32. 7 32. 4 32. 5 32. 2 31. 8 32. 0	35. 6 38. 4 39. 1	36. 9 35. 2 36. 8 37. 0 36. 1 35. 2 34. 9 34. 7	5. 6 6. 6	0.5	46. 1 38. 5 41. 4 42. 3 48. 3 48. 0 49. 8 45. 7	43. 1 38. 5 41. 4 42. 3 48. 2 48. 0 49. 4 45. 8	54. 0 54. 0 54. 0 54. 0 54. 0 54. 0 54. 0	7. 9 15. 5 12. 6 11. 7 5. 7 6. 0 4. 2 8. 3	10. 9 15. 5 12. 6 11. 7 5. 8 6. 0 4. 6 8. 2	
9. 10.	21933. 00 24370. 00	BB BB	33. 3 33. 6	33. 5 33. 7	39. 3 40. 4	33. 6 36. 3	10. 2 10. 8	0. 0 0. 0	49. 2 48. 5	49. 4 48. 6	54. 0 54. 0	4. 8 5. 5	4. 6 5. 4	

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ESI40)

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UL Apex Co., Ltd. Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant |

Kind of Equipment

Sony Corporation Notebook personal Computer

Modei No. Serial No. PCG-6C1L XTA004 AC120V/60Hz

Power Mode

Remarks

Transmitting (2462MHz)
EEEE802. 11g (54Mbps) +Bluetooth (Hopping)

Date

4/2/2004

Test Distance Temperature

: 3 m

Engineer

: Toyokazu Imamura

Humidity Regulation : 43 %

: FCC Part15C § 15. 209 (PK Detection)

No.	FREQ.	ANT TYPE	HOR	DING VER μV]	ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN.	HOR	ULT VER V/m] [LIMITS $dB \mu V/m]$	HOR	RGIN VER dB]
1. 2. 3. 4. 5. 6. 7.	2359. 95 2483. 50 4924. 00 7386. 00 9848. 00 12310. 00 14772. 00 17234. 00	BB BB BB BB BB BB BB	47. 6 54. 2 44. 6 44. 1 46. 2 44. 4 44. 1 45. 4	46. 0 51. 5 45. 6 45. 2 46. 1 45. 5 44. 8 44. 5	30. 5 30. 7 35. 8 38. 6 39. 0 43. 2 43. 2 43. 8	36. 9 36. 9 35. 2 36. 9 37. 0 35. 9 35. 1 34. 8	4. 1 4. 1 5. 6 6. 6 7. 2 8. 1 8. 1 8. 5	10. 0 10. 0 0. 5 0. 5 0. 7 0. 4 0. 4 0. 6	55. 3 62. 1 51. 3 52. 9 56. 1 60. 2 60. 7 63. 5	53. 7 59. 4 52. 3 54. 0 56. 0 61. 3 61. 4 62. 6	74. 0 74. 0 74. 0 74. 0 74. 0 74. 0	18. 7 11. 9 22. 7 21. 1 17. 9 13. 8 13. 3 10. 5	20. 3 14. 6 21. 7 20. 0 18. 0 12. 7 12. 6
9. 10. 11.	19696. 00 22158. 00 24620. 00	BB BB BB	44. 9 46. 3 46. 7	44. 8 46. 1 47. 1	39. 5 39. 2 40. 4	35. 0 33. 7 36. 0	9. 6 10. 3 10. 9	0. 0 0. 0 0. 0	59. 0 62. 1 62. 0	58. 9 61. 9 62. 4	74. 0	15. 0 11. 9 12. 0	15. 1 12. 1 11. 6

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■ CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

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UL Apex Co., Ltd.

Yamakita No.1 Anechoic Chamber Report No.: 24GE0260-YK

Applicant

Kind of Equipment

Sony Corporation Notebook personal Computer PCG-6C1L

Model No. Serial No.

XTA004 AC120V/60Hz

Power Mode

Transmitting (2462MHz)

Remarks

IEEE802. 11g (54Mbps) +Bluetooth (Hopping)

Date

4/2/2004

Test Distance Temperature

3 m 22 °C 43 %

Engineer

: Toyokazu Imamura

Humidity

Regulation : FCC Part15C § 15. 209 (AV Detection)

No.	FREQ.	ANT TYPE		DING	ANT	AMP	CABLE	ATTEN.	RES		LIMITS		RGIN
	[MHz]	TIPE	HOR [dB	VER μ V]	FACTOR [dB/m]	GAIN [dB]	LOSS [dB]	[dB]	$^{ m HOR}$ $^{ m L}$	VER V/m] [d	dBμV/m]	HOR [VER dB]
1.	2359. 95	ВВ	35. 7	34. 5	30. 5	36. 9	4. 1	10.0	43. 4	42. 2	54. 0	10.6	11.8
2.	2483.50	BB	35. 7	34. 5	30. 7	36. 9	4.1	10.0	43.6	42.4	54.0	10.4	11.6
3.	4924.00	BB	32. 3	32. 4	35. 8	35. 2	5.6	0, 5	39.0	39. 1	54. 0	15. 0	14. 9
4.	7386.00	BB	33. 1	33. 1	38. 6	36.9	6.6	0.5	41.9	41.9	54. 0	12. 1	12. 1
5.	9848.00	BB	33. 1	33.0	39.0	37.0	7. 2	0.7	43.0	42.9	54. 0	11. 0	11. 1
6.	12310.00	BB	32. 9	32. 5	43, 2	35. 9	8. 1	0.4	48. 7	48. 3	54. 0	5. 3	5. 7
7.	14772.00	BB	32.6	32. 3	43. 2	35. 1	8. 1	0.4	49. 2	48. 9	54. 0	4.8	5. 1
8.	17234.00	BB	32. 2	31.8	43.8	34.8	8. 5	0.6	50. 3	49. 9	54. 0	3. 7	4. 1
9.	19696.00	BB	32. 1	32. 1	39. 5	35. 0	9. 6	0. 0	46. 2	46. 2	54. 0	7. 8	7.8
10.	22158.00	BB	32, 2	33. 2	39. 2	33. 7	10. 3	0.0	48. 0	49. 0	54. 0	6.0	5.0
11.	24620.00	BB	33. 9	33. 8	40. 4	36. 0	10. 9	0. 0	49. 2	49. 1	54. 0	4. 8	4. 9

CALCULATION: READING + ANT. FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

■ANTENNA: KHA-01 (SAS-200 571) 1-18GHz/KHA-03 (3160-09) 18-26GHz

■CABLE: KCC-D3/D7 ■ PREAMP: KAF-02 (8449B) ■ EMI RECEIVER: KTR-01 (ES140)

Page: 68 of 100

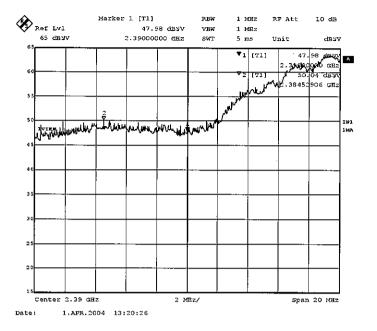
[IEEE802.11b Main Antenna] 2.39GHz (Ch 1;2412MHz)

1. Horizontal/PK

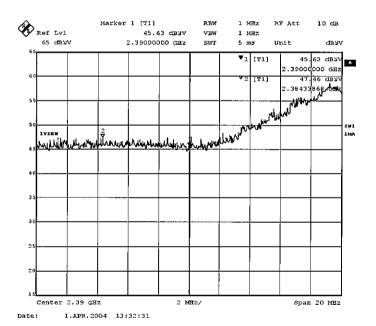
Test Report No.: 24GE0260-YK-1

- Ancumuna

FCC ID: AK8PCG6C1L



2. Vertical/PK



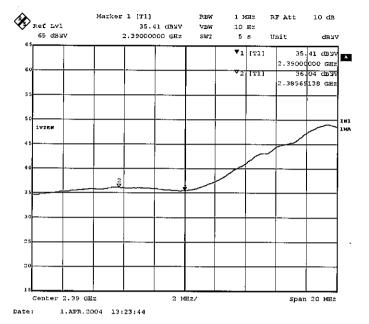
[IEEE802.11b Main Antenna] 2.39GHz (Ch 1:2412MHz)

3. Horizontal/AV

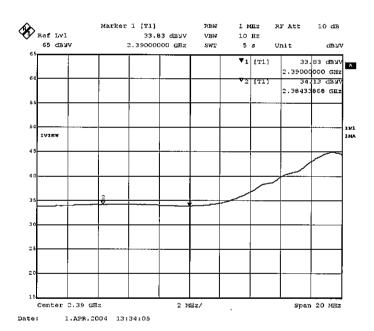


FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1



4. Vertical/AV



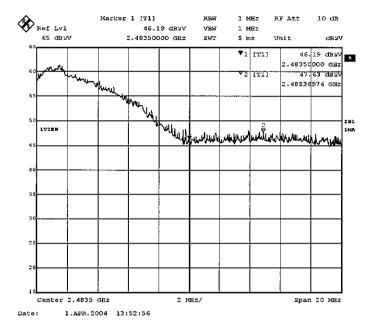
[IEEE802.11b Main Antenna] 2.4835GHz (Ch 11:2462MHz)

1. Horizontal/PK

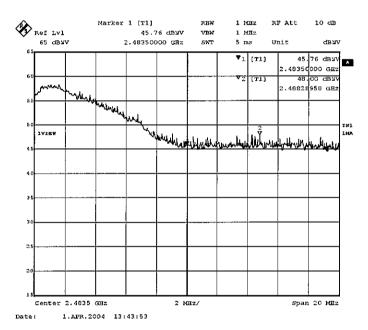
T. Smamura

FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1



2. Vertical/PK



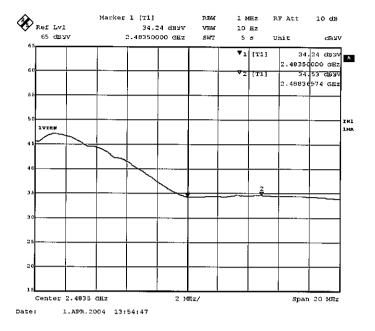
[IEEE802.11b Main Antenna] 2.4835GHz (Ch 11:2462MHz)

3. Horizontal/AV

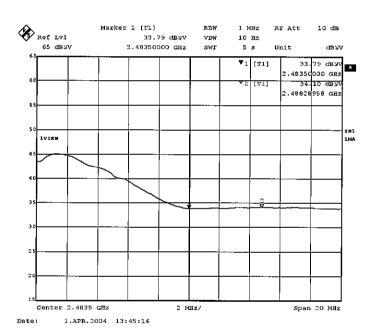
T. Smamura

FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1



4. Vertical/AV

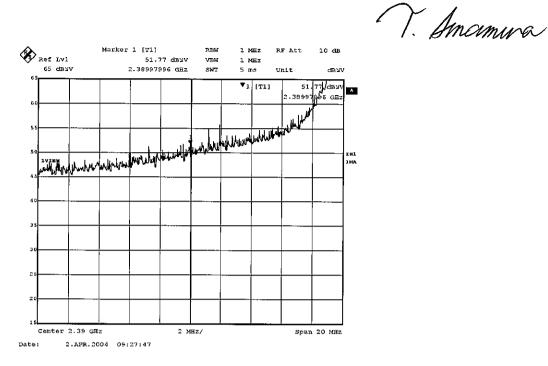


FCC ID: AK8PCG6C1L

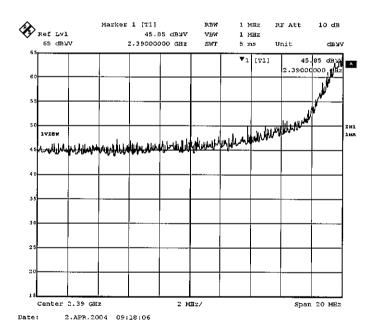
Test Report No.: 24GE0260-YK-1

[IEEE802.11g Main Antenna] 2.39GHz (Ch 1:2412MHz)

1. Horizontal/PK



2. Vertical/PK



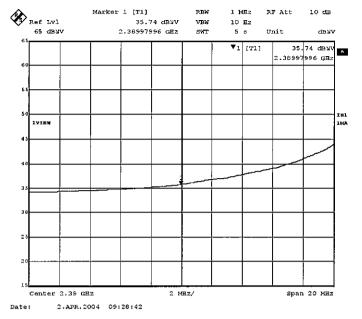
[IEEE802,11g Main Antenna] 2,39GHz (Ch 1;2412MHz)

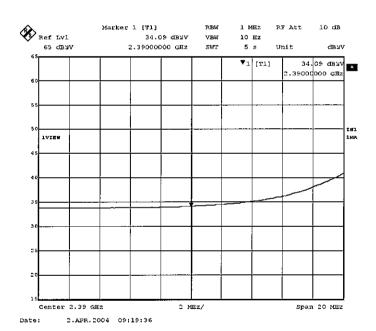
3. Horizontal/AV

T. Smamura

FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1





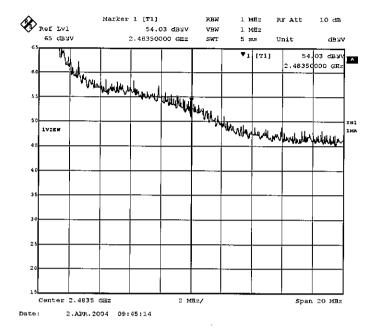
[IEEE802.11g Main Antenna] 2.4835GHz (Ch 11;2462MHz)

1. Horizontal/PK

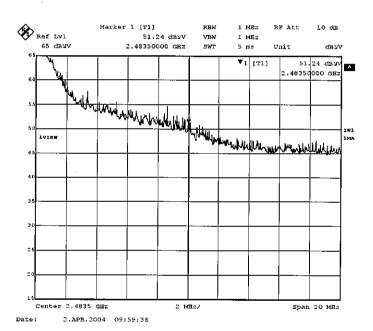
7. Smamura

FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1



2. Vertical/PK



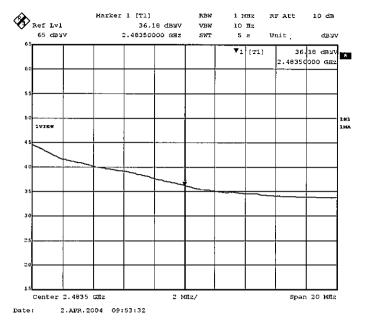
[IEEE802.11g Main Antenna] 2.4835GHz (Ch 11:2462MHz)

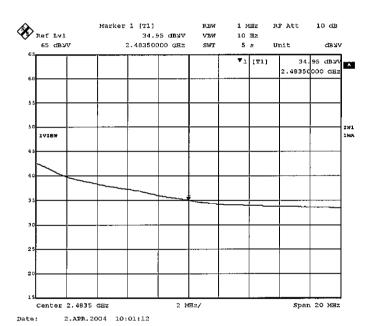
3. Horizontal/AV

T. Smormura

Test Report No.: 24GE0260-YK-1

FCC ID: AK8PCG6C1L



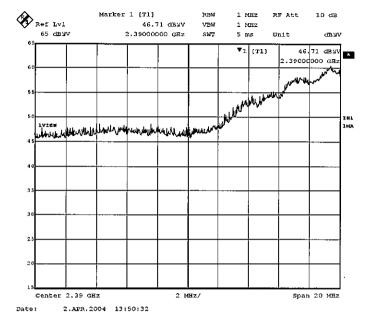


[IEEE802,11b Main Antenna + Bluctooth (Hopping)] 2.39GHz (Ch 1;2412MHz)

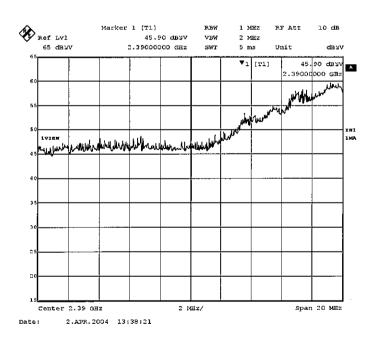
1. Horizontal/PK

FCC ID: AK8PCG6C1L Test Report No.: 24GE0260-YK-1

T. Smamua



2. Vertical/ PK



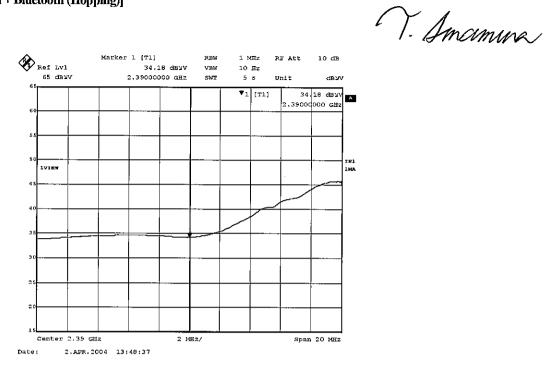
FCC ID: AK8PCG6C1L

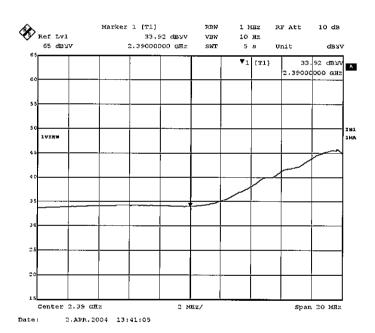
Test Report No.: 24GE0260-YK-1

[IEEE802.11b Main Antenna + Bluetooth (Hopping)]

2.39GHz (Ch 1:2412MHz)

3. Horizontal/AV





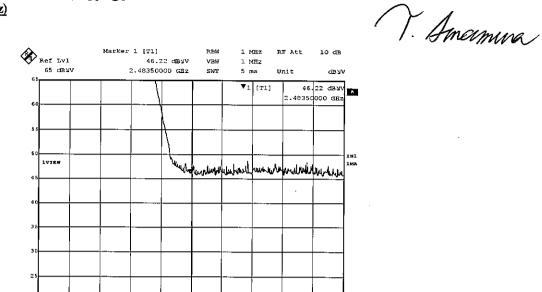
FCC ID: AK8PCG6C1L

span 20 MHz

Test Report No.: 24GE0260-YK-1

[IEEE802.11b Main Antenna + Bluetooth (Hopping)] 2.4835GHz (Ch 11:2462MHz)

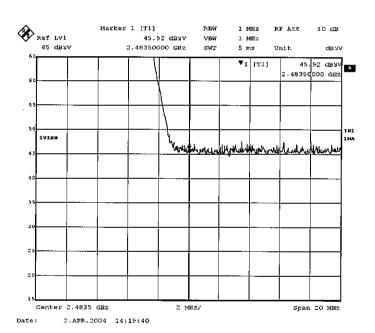
1. Horizontal/PK



2 MHz/

Center 2.4835 GHz
Date: 2.APR.2004 14:11:27

2. Vertical/PK

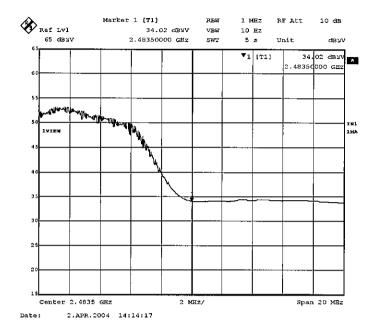


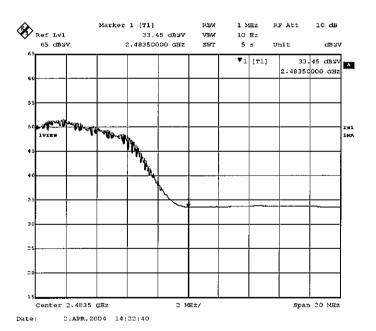
FCC ID: AK8PCG6C1L Test Report No.: 24GE0260-YK-1

[IEEE802.11b Main Antenna + Bluetooth (Hopping)] 2.4835GHz (Ch 11:2462MHz)

3. Horizontal/AV

T. Smamura





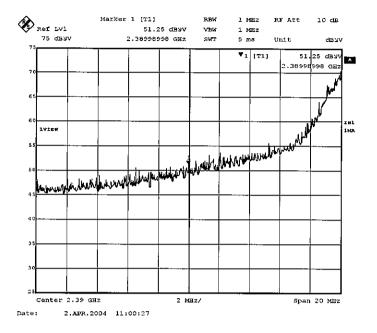
Test Report No.: 24GE0260-YK-1

T. Amamura

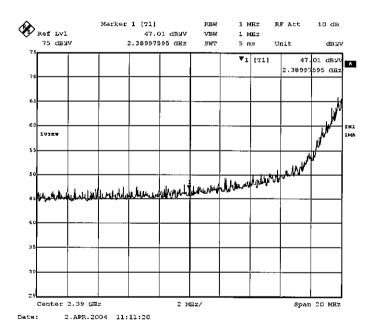
[IEEE802.11g Main Antenna + Bluctooth (Hopping)]

2.39GHz (Ch 1:2412MHz)

1. Horizontal/PK



2. Vertical/PK



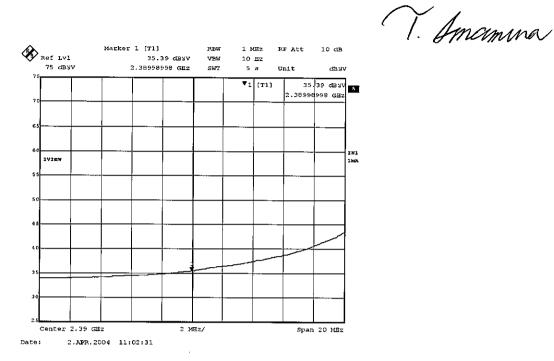
FCC ID: AK8PCG6C1L

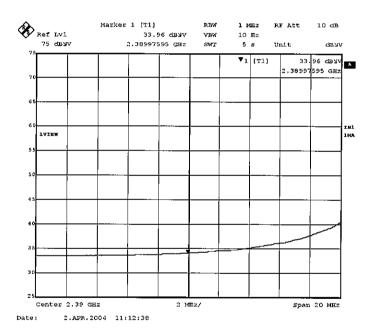
Test Report No.: 24GE0260-YK-1

[IEEE802.11g Main Antenna + Bluetooth (Hopping)]

2.39GHz (Ch 1:2412MHz)

3. Horizontal/AV



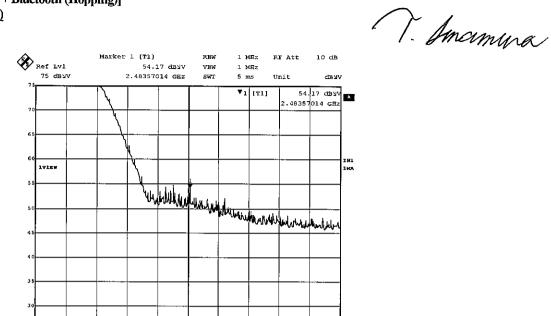


Span 10 MHz

Test Report No.: 24GE0260-YK-1

[IEEE802.11g Main Antenna + Bluetooth (Hopping)] 2.4835GHz (Ch 11;2462MHz)

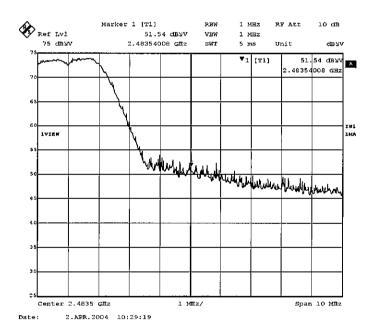
1. Horizontal/PK



1 MHz/

Center 2.4835 GHz
Date: 2.APR.2004 10:47:57

2. Vertical/PK

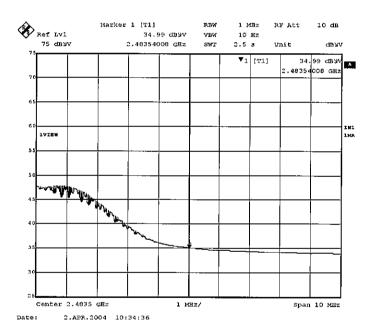


T. Smamura

Test Report No.: 24GE0260-YK-1 [IEEE802.11g Main Antenna + Bluetooth (Hopping)]

2.4835GHz (Ch 11:2462MHz) 3. Horizontal/AV

Ref Lvl Marker 1 [T1] 1 MHz 10 dB 35.23 dBWV 10 Hz 2.5 s VEW 75 dByv 2.48350000 GHz SWT Unit qB AA 35.23 dByV ▼1 [T1] 2.48350000 GEz 1VIEW and the state of t Center 2.4835 GHz 1 MH2/ span 10 MHz 2.APR.2004 10:50:48



F

FCC ID: AK8PCG6C1L

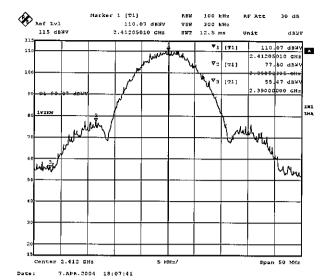
Test Report No.: 24GE0260-YK-1

T. Smannera

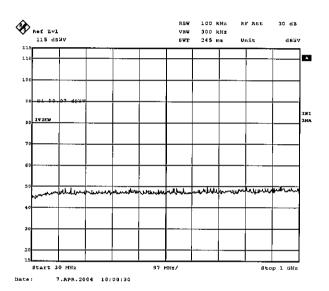
[IEEE802.11b Main Antenna Terminal]

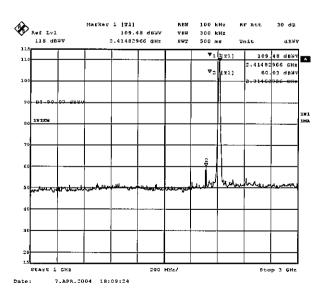
Ch 1: 2412MHz

1.



2.





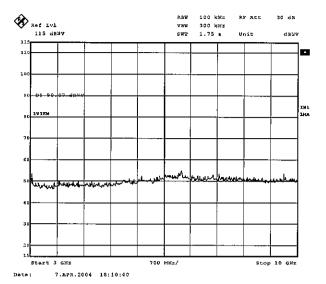
FCC ID: AK8PCG6C1L Test Report No.: 24GE0260-YK-1

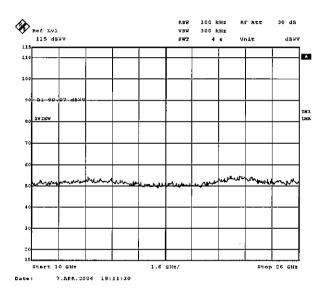
T. Smanura

[IEEE802.11b Main Antenna Terminal]

Ch 1: 2412MHz

4.





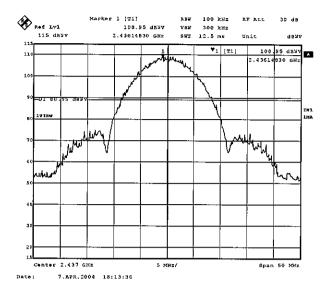
[TEEE802.11b Main Antenna Terminal] Ch 6: 2437MHz

1.

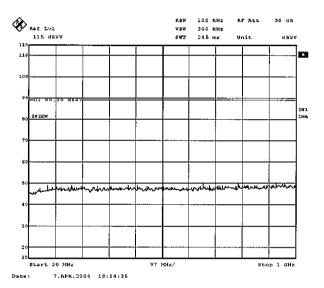


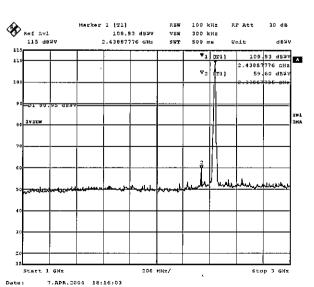
FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1



2.





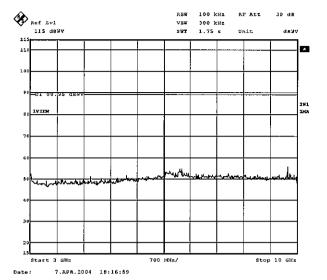
Test Report No.: 24GE0260-YK-1

T. Smarmina

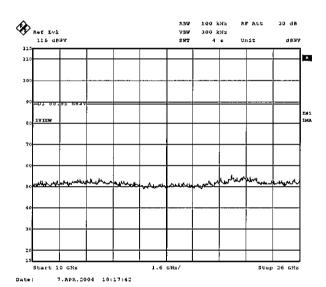
[IEEE802.11b Main Antenna Terminal]

Ch 6: 2437MHz

4







Out of Band Emissions (Conducted): FCC 15.247(c)

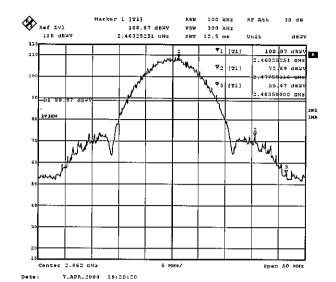
FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1

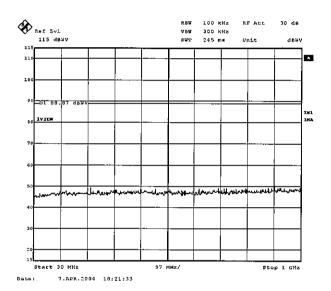
T. Smamura

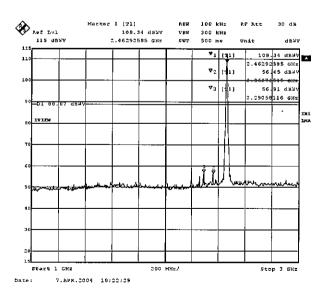
[IEEE802.11b Main Antenna Terminal] Ch 11: 2462MHz

1.



2.





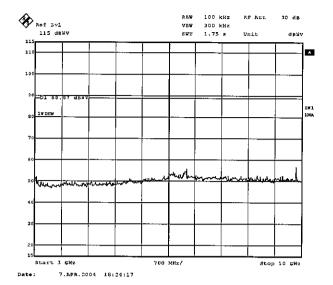
Test Report No.: 24GE0260-YK-1

7. Smormura

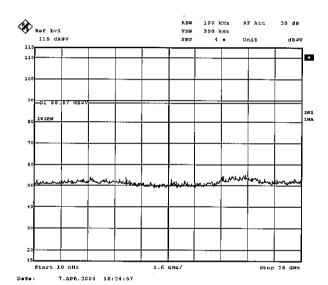
[IEEE802.11b Main Antenna Terminal]

Ch 11: 2462MHz

4







·

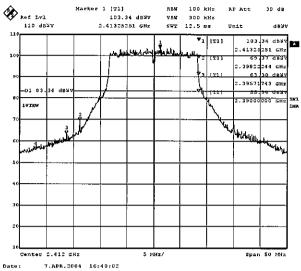
[IEEE802.11g Main Antenna Terminal] Ch 1: 2412MHz

1

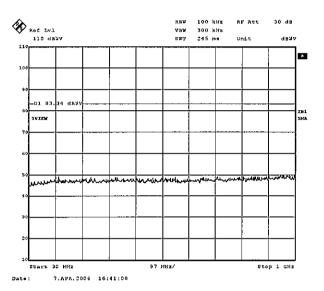
30 dB T- Amamura

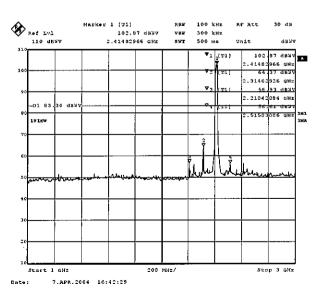
FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1



2.

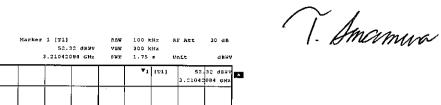




[IEEE802.11g Main Antenna Terminal]

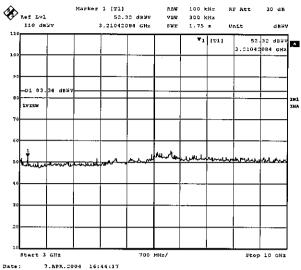
Ch 1: 2412MHz

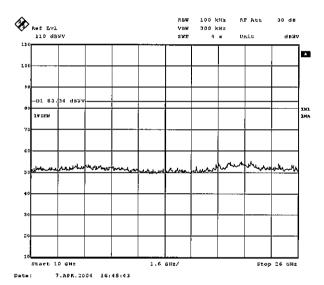
4.



FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1



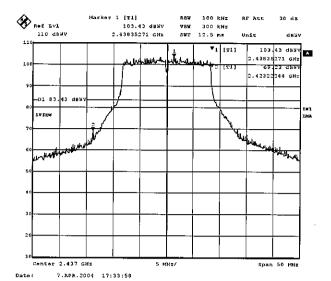


Test Report No.: 24GE0260-YK-1

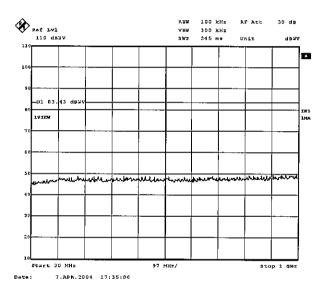
V. Smamura

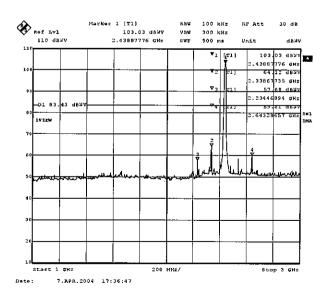
[IEEE802.11g Main Antenna Terminal] Ch 6: 2437MHz

1.



2.



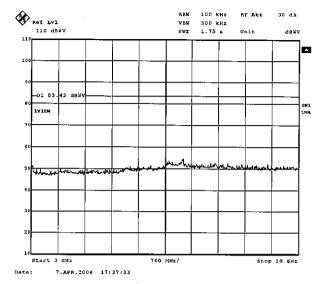


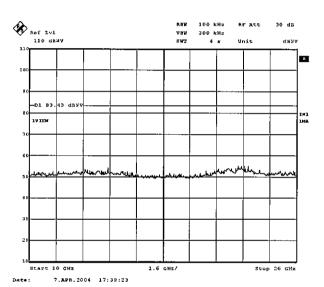
Test Report No.: 24GE0260-YK-1

7. Amamura

[IEEE802.11g Main Antenna Terminal] <u>Ch 6: 2437MHz</u>

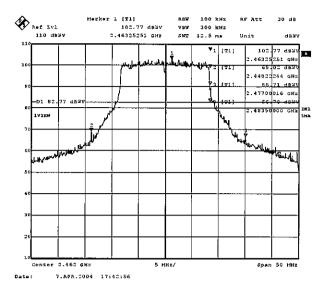
4.





[IEEE802.11g Main Antenna Terminal]

Ch 11: 2462MHz

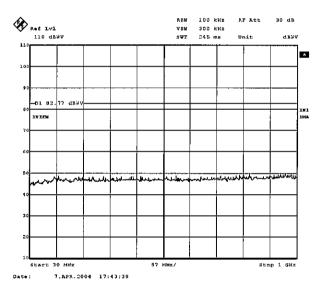


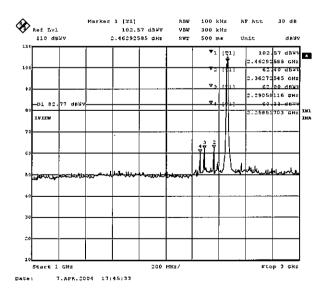
FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1

7. Smamura

2.





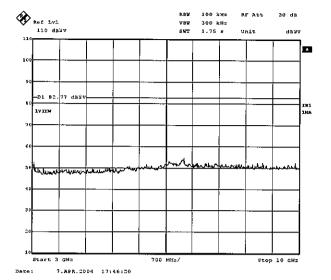
Test Report No.: 24GE0260-YK-1

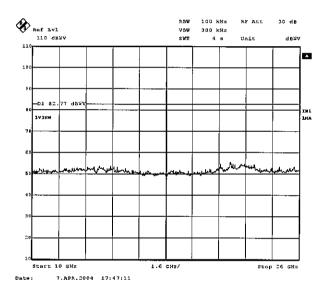
T. Smamura

[IEEE802.11g Main Antenna Terminal]

Ch 11: 2462MHz

4.





Power Density(Conducted)

UL Apex Co., Ltd

YAMAKITA NO. 4 Sheilded Room

COMPANY : SONY Corporation.

REPORT NO

: 24GE0260-YK-1

EQUIPMENT: Notebook Personal Computer

REGULATION

: Fcc Part15SubpartC 247(d)

MODEL

: PCG-6C1L

DATE

: 2004/ 04/07

FCC ID

: AK8PCG6C1L

Temp./Humi.

: 20℃/53%

POWER Mode

: AC120V/60Hz : Transmitting

ENGINEER

: Toyokazu Imamura

IEEE802 11b (11Mbps) Main

1222002.11b (11Mbps) Main						
CH	FREQ	S/A Reading	Cable Loss	Results	Limit	MARGIN
	[GHz]	[dBm]	[dB]	[dBm]	[dBm]	[dB]
Low	2412.64329	-9.56	1.28	-8.28	8.0	16.3
Mid	2437.12525	-11.79	1.16	-10.63	8.0	18.6
High	2462.00301	-11.79	1.29	-10.5	8.0	18.5

IFFF802.11g (54Mbps) Main

	*EEEOOE: 118 (o hilipo) main						
	CH	FREQ	S/A Reading	/A Reading Cable Loss		Limit	MARGIN
		[GHz]	[dBm]	[dB]	[dBm]	[dBm]	[dB]
	Low	2412.00501	-16.17	1.28	-14.89	8.0	22.9
i	Mid	2437.00501	-16.77	1.16	-15.61	8.0	23.6
	High	2462.00501	-16.79	1.29	-15.5	8.0	23.5

Power Density: FCC 15.247(d)

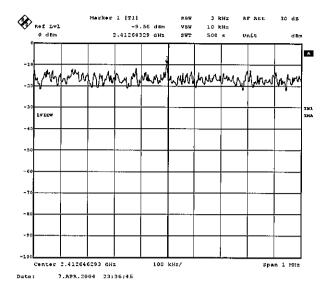
FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1

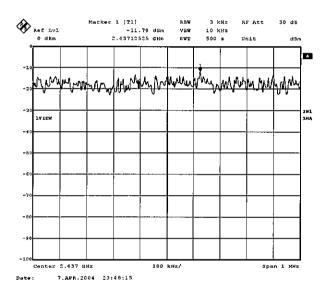
T. Smamura

[IEEE802.11b Main Antenna Terminal]

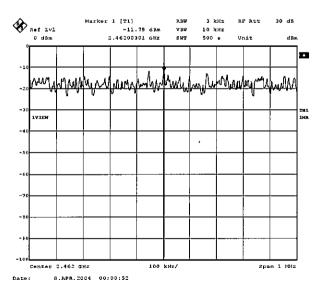
1. ch 1: 2412MHz



2. ch 6: 2437MHz



3. ch 11: 2462MHz



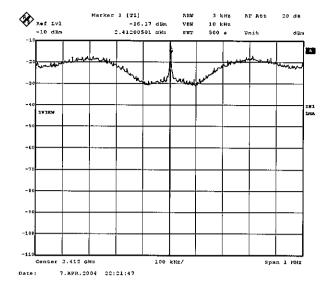
Power Density: FCC 15.247(d)

FCC ID: AK8PCG6C1L

Test Report No.: 24GE0260-YK-1

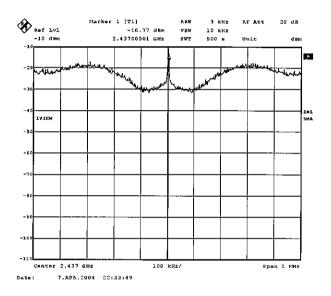
[IEEE802.11g Main Antenna Terminal]

1. ch 1: 2412MHz

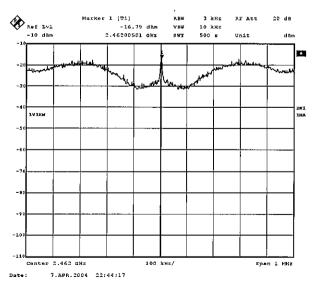


7. Smannia

2. ch 6: 2437MHz



3. ch 11: 2462MHz



Test Report No :24GE0260-YK-1

APPENDIX 3 Test Instruments

EMI test equipment

	finstrument	Manufacturer	Model No 🤲	Jestliem	Orillaretion (Dries 🗘 Intervel((month))
KAEC-01(NSA)	Anechoic Chamber	JSE	Semi 3m	RE	2003/09/07 * 12
KAF-02	Pre Amplifier	Hewlett Packard	8449B	RE	2003/05/08 * 12
KAF-05	Pre Amplifier	Agilent	8447D	RE	2003/06/12 * 12
KAT10-S1	Attenuator	Agilent	8449D 010	RE	2003/04/18 * 12
KAT6-02	Attenuator	INMET	18N-6dB	RE	2003/05/12 * 12
KBA-03	Biconical Antenna	Schwarzbeck	BBA9106	RE	2004/01/31 * 12
KCC-30/31/32 /34	Coaxial Cable	Fujikura/Suhner	5D-2W/S04272B	RE	2004/01/29 * 12
KCC-D3/D7	Coaxial Cable	Rosenberger/Advantest	2201/JUN-08-01-06 1	RE	2003/04/18 * 12
KCC-D7	Coaxial Cable	Advantest	A01002	AT	2003/04/18 * 12
KCC-33/34	Coaxial Cable	Fujikura/Suhner	5D-2W/S04272B	CE	2004/01/29 * 12
KHA-01	Hom Antenna	A.H.Systems	SAS-200/571	RE	2003/08/11 * 12
KHA-03	Hom Antenna	EMCO	3160-09	RE	2003/04/23 * 12
KLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2004/01/31 * 12
KLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2003/09/19 * 12
KPM-05	Power meter	Agilent	E4417A	AT	2004/02/26 * 12
KPSS-01	Power sensor	Agilent	E9327A	AT	2004/03/02 * 12
K\$A-04	Spectrum Analyzer	Advantest	R3271A	CE/RE	2003/09/17 * 12
KTR-01	Test Receiver	Rohde & Schwarz	ESI40	CE/RE/AT	2003/07/25 * 12
KFL-01	Highpass Filter	Hewlett Packard	84300 80038	RE	2003/04/18 * 12

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

Test Item:

CE: Conducted emission test, RE: Radiated emission test,

AT: Antenna terminal conducted test