



EMI TEST REPORT

Test Report No. : 24KE0303-HO-1

Applicant : Sony Corporation

Type of Equipment : Receiver
Wireless Keyboard
Wireless Mouse

Model No. : VGP-WRC1
VGP-WKB1
VGP-WMS1

Test standard : FCC Part 15 Subpart C
Section 15.207, Section 15.247 : 2004

FCC ID : AK8VGPWRC1
AK8VGPWKB1
AK8VGPWMS1

Test Result : Complied

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

Date of test:

July 2, 2004 to July 18 2004

Tested by:

Naoki Sakamoto
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Hiroka Umeyama
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Approved by :

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CONTENTS	PAGE
SECTION 1: Client information	3
SECTION 2: Equipment under test (E.U.T.)	3
SECTION 3: Test specification, procedures & results	5
SECTION 4: Operation of E.U.T. during testing	8
SECTION 5: Conducted Emission, Section 15.207	11
SECTION 6: Spurious Emission 15.247(c)	12
SECTION 7: Bandwidth, Section 15.247(a)(2)	13
SECTION 8: Maximum Peak Output Power, Section 15.247(b)(3)	13
SECTION 9: Peak Power Density, Section 15.247 (d)	13
APPENDIX 1: Photographs of test setup	14
Conducted Emission	14
Spurious Emission (Radiated) Receiver	15
Spurious Emission (Radiated) Wireless Keyboard.....	16
Spurious Emission (Radiated) Wireless Mouse	17
Spurious Emission (Radiated) Transmitting mode of all devices	18
Worst Case Position.....	19
Worst Case Position (Receiver)	20
Worst Case Position (Wireless Keyboard).....	21
Worst Case Position (Wireless Mouse)	22
APPENDIX 2: Test Instruments	23
APPENDIX 3: Data of EMI test	24
Conducted Emission	24
6dB Bandwidth(DSSS and other forms of modulation)	28
Maximum Peak OutPut Power (DSSS and other forms of modulation)	34
Radiated Spurious Emission(DSSS and other forms of modulation).....	40
Radiated emission Band Edge compliance (DSSS and other forms of modulation).....	154
Power Density (DSSS and other forms of modulation)	175
99%Occupied Bandwidth(DSSS and other forms of modulation).....	181

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SECTION 1: Client information

Company Name : Sony Corporation
 Brand name : SONY
 Address : 6-7-35 Kitashinagawa Shinagawa-ku, Tokyo, 141-0001 Japan
 Telephone Number : +81-3-5795-8702
 Facsimile Number : +81-3-5795-8981
 Contact Person : Michio Kobayashi

SECTION 2: Equipment under test (E.U.T.)**2.1 Identification of E.U.T.**

Type of Equipment : Receiver, Wireless Keyboard, Wireless Mouse
 Model No. : VGP-WRC1, VGP-WKB1, VGP-WMS1
 Serial No.

Equipment	Serial Number
Receiver (VGP-WRC1)	1 (Used for radiated emission and conducted emission test)
	2 (Except for radiated emission and conducted emission test)
Wireless Keyboard (VGP-WKB1)	T6000023 (Used for radiated emission and conducted emission test)
	T6000010 (Except for radiated emission and conducted emission test)
Wireless Mouse (VGP-WMS1)	1 (Used for radiated emission and conducted emission test)
	2 (Except for radiated emission and conducted emission test)

Rating :

Equipment	Rating
Receiver (VGP-WRC1)	DC5V/50mA(USB Port)
Wireless Keyboard (VGP-WKB1)	DC6V/100mA(Battery)
Wireless Mouse (VGP-WMS1)	DC3V/100mA(Battery)

Country of Manufacture : JAPAN
 Receipt Date of Sample : July 2, 2004
 Condition of EUT : Engineering prototype
 (Not for Sale: This sample is equivalent to mass-produced items.)

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2.2 Product Description

Model No :VGP-WRC1(referred to as the EUT in this report) is a Receiver(Transceiver) to receives the signal from Wireless Keyboard and Wireless Mouse, and also send back the signal to Wireless Keyboard and Wireless Mouse.

*Model No :VGP-WKB1(referred to as the EUT in this report) is the Wireless Keyboard.

*Model No :VGP-WMS1(referred to as the EUT in this report) is the Wireless Mouse.

	Receiver	Wireless Keyboard	Wireless Mouse
Equipment Type	Transceiver		
Frequency of operation	2402-2479MHz		
Transmission method	DSSS		
Channel spacing	1MHz		
Channel number	78channels		
Power control	non		
Mode of operation	Simplex		
Antenna Type	Pattern antenna		
Antenna Gain	-0.50dBi		-0.93dBi
Method of Frequency Generation	Synthesizer		
Operating voltage (inner)	DC3.3V		
Operating Temperature	0 deg. C. to +35 deg. C.		

FCC 15.31 (e)

[Receiver (VGP-WRC1)]

This EUT provides stable voltage(DC5V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

[Wireless Keyboard (VGP-WKB1)]

This test was performed with the New Battery (DC6V) and the constant voltage was supplied to this EUT during the tests. Therefore, this EUT complies with the requirement.

[Wireless Mouse (VGP-WMS1)]

This test was performed with the New Battery (DC3V) and the constant voltage was supplied to this EUT during the tests. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

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

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SECTION 3: Test specification, procedures & results**3.1 Test Specification**

Test Specification : FCC Part15 Subpart C : 2004

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

3.2 Procedures and results**[Receiver/Wireless Keyboard/Wireless Mouse]**

No.	Item	Test Procedure	Specification	Remarks	Deviation	EUT	Worst margin	Results
1	Conducted emission	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A	Receiver	9.0dB 0.1534MHz QP, L(1)	Complied
						Wireless Keyboard	*1)	
						Wireless Mouse	*1)	
2	6dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(2)	Conducted	N/A	Receiver	(Low channel) *See data	Complied
						Wireless Keyboard	(High channel) *See data	
						Wireless Mouse	(Low channel) *See data	
3	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(b)(3)	Conducted	N/A	Receiver	30.39dB (Low)	Complied
						Wireless Keyboard	30.29dB (Low)	
						Wireless Mouse	34.28dB (Low)	
*1) The test was not applicable since the EUT does not have AC Mains.								

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No.	Item	Test Procedure	Specification	Remarks	Deviation	EUT	Worst margin	Results
4	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (c)	Conducted/Radiated	N/A	Receiver	4.4dB 22311.000MHz Horizontal Vertical, AV (Transmitting mode of single device)	Complied
						Wireless Keyboard	4.4dB 22311.000MHz Vertical, AV (Transmitting mode of single device)	
						Wireless Mouse	4.4dB 22311.000MHz Horizontal, AV (Transmitting mode of single device)	
						Receiver, Wireless Keyboard and Wireless Mouse (Transmitting mode of all devices)	0.9dB 17353.000MHz Vertical	
5	Restricted Band Edges	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (c)	Conducted	N/A	Receiver	9.9dB 2483.500MHz Vertical, AV	Complied
						Wireless Keyboard	5.8dB 2483.500MHz Horizontal, AV	
						Wireless Mouse	11.5dB Horizontal/ Vertical, AV	
						Receiver, Wireless Keyboard and Wireless Mouse (Transmitting mode of all devices)	0.9dB 17353.000MHz Vertical	
6	Power Density	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247 (d)	Conducted	N/A	Receiver	18.4dB 2402.0MHz	Complied
						Wireless Keyboard	19.7dB 2402.0MHz	
						Wireless Mouse	25.2dB 2402.0MHz	

*These tests were also referred to "Guidance on Measurement for Digital Transmission Systems Section15.247."

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

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3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Results
1	Co-location & co-operation (Confirmation testing for conformity of Radiated Spurious Emission at simultaneous transmission mode.)	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(c)	Radiated	Complied
2	99% Occupied Band Width	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004	Conducted	N/A

3.4 Uncertainty

Conducted Emission

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

The data listed in this test report has enough margin.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is $\pm 4.5\text{dB}(3\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is $\pm 5.2\text{dB}(3\text{m})$.

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is $\pm 6.6\text{dB}$.

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

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is $\pm 3.0\text{dB}$.

The data listed in this test report has enough margin.

3.5 Test Location

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

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

3.6 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

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SECTION 4: Operation of E.U.T. during testing**4.1 Operating Modes**

The mode is used :

1. Transmitting mode of single device (Only one device is transmitting)

--- Receiver & Wireless Keyboard ---
 Low Channel : 2402MHz (Ch1)
 Mid Channel : 2440MHz (Ch39)
 High channel : 2479MHz(Ch78)
 --- Wireless Mouse ---
 Low Channel : 2402MHz (Ch1)
 Mid Channel : 2445MHz (Ch44)
 High channel : 2479MHz (Ch78)

2. Transmitting mode of all devices(co-location & co-operation)

Confirmation testing for conformity of Radiated Spurious Emission at simultaneous transmission mode.

These EUTs (Receiver, Wireless Keyboard and Wireless Mouse) are intended to be used with Personal Computers manufactured by SONY.

Confirmation testing for conformity of Radiated Spurious Emission at simultaneous transmission mode was performed by combination of operation mode in the following table and PC Model:PCG-5A1L(FCC ID:AK8PCG5A1L) which has W-LAN ITT802.11b/g and Bluetooth module installed. Antenna of each devices was mounted within 20cm in diameter.

Table : Testing for the Combination of channel of each devices

		Test item 1	Test item 2	Test item 3	Test item 4	Test item 5	Test item 6	Test item 7	Test item 8
Receiver (VGP-WRC1)		Ch1: 2402MHz (MAX Axis)	Ch39: 2440MHz (MAX Axis)	Ch78: 2479MHz (MAX Axis)	Channel of maximum power in "Maximum Peak Output Power" measurement	Ch1: 2402MHz (MAX Axis)	Ch39: 2440MHz (MAX Axis)	Ch78: 2479MHz (MAX Axis)	Channel of Maximum Power in "Maximum Peak Output Power" measurement
Wireless Keyboard (VGP-WKB1)		Ch1: 2402MHz (MAX Axis)	Ch39: 2440MHz (MAX Axis)	Ch78: 2479MHz (MAX Axis)	Channel of Maximum Power in "Maximum Peak Output Power" measurement	Ch1: 2402MHz (MAX Axis)	Ch39: 2440MHz (MAX Axis)	Ch78: 2479MHz (MAX Axis)	Channel of Maximum Power in "Maximum Peak Output Power" measurement
Wireless Mouse (VGP-WMS1)		Ch1: 2402MHz (MAX Axis)	Ch44: 2445MHz (MAX Axis)	Ch78: 2479MHz (MAX Axis)	Channel of Maximum Power in "Maximum Peak Output Power" measurement	Ch1: 2402MHz (MAX Axis)	Ch44: 2445MHz (MAX Axis)	Ch78: 2479MHz (MAX Axis)	Channel of Maximum Power in "Maximum Peak Output Power" measurement
Notebook PC: PCG-5A1L *1) (FCC ID: AK8PCG5A1L)	IEEE802.11b 11Mbps	Ch1: 2412MHz	Ch6: 2437MHz	Ch11: 2462MHz	Channel of Maximum Power in "Maximum Peak Output Power" measurement	---	---	---	---
	IEEE802.11g 54Mbps	---	---	---	---	Ch1: 2412MHz	Ch6: 2437MHz	Ch11: 2462MHz	Channel of Maximum Power in "Maximum Peak Output Power" measurement
	Bluetooth	Hopping On	Hopping On	Hopping On	Hopping On	Hopping On	Hopping On	Hopping On	Hopping On

*This device is a typical host that was approved by FCC with Bluetooth and Wireless LAN function.

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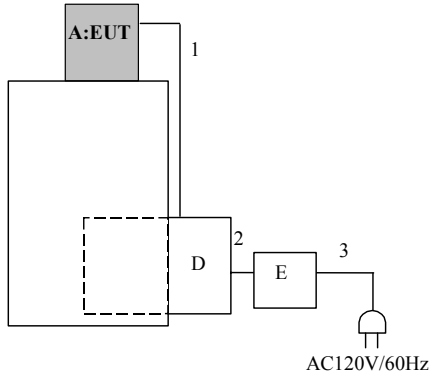
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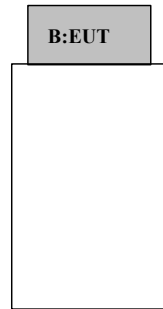
4.2 Configuration and peripherals

[Transmitting mode of single device]

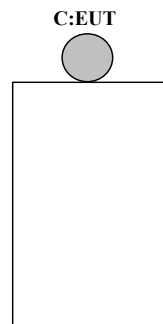
Receiver



Wireless Keyboard



Wireless Mouse



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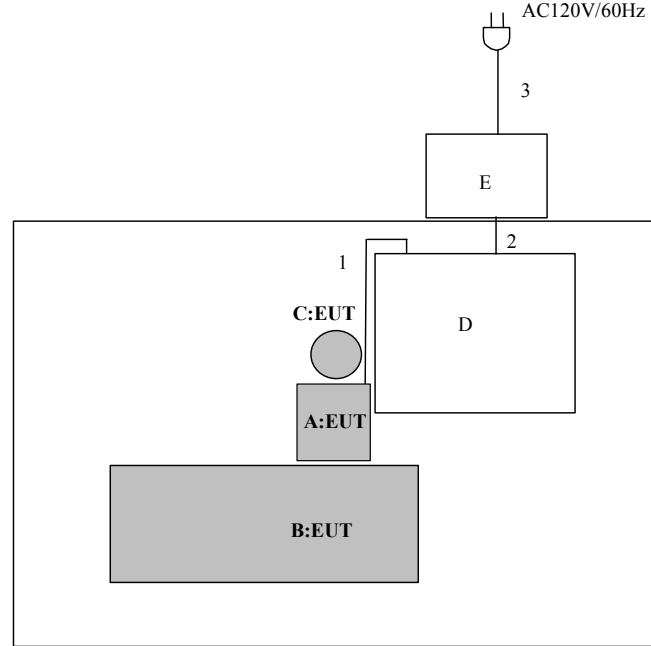
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[Transmitting mode of all devices]



*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
A	Receiver	VGP-WRC1	1 *1) 2 *2)	SONY	AK8VGPWRC1
B	Wireless Keyboard	VGP-WKB1	T6000023 *3) T6000010 *4)	SONY	AK8VGPWKB1
C	Wireless Mouse	VGP-WMS1	1 *5) 2 *6)	SONY	AK8VGPWMS1
D	Notebook Personal Computer (Not EUT)	PCG-5A1L	24	SONY	AK8PCG5A1L
E	AC Adaptor (Not EUT)	PCGA-AC16V6	147774951 0534037	SONY	-

*1) (Used for radiated emission and conducted emission test)

*2) (Except for radiated emission and conducted emission test)

*3) (Used for radiated emission and conducted emission test)

*4) (Except for radiated emission and conducted emission test)

*5) (Used for radiated emission and conducted emission test)

*6) (Except for radiated emission and conducted emission test)

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	USB Cable	2.0	N	Polyvinyl chloride
2	DC Cable	2.0	N	Polyvinyl chloride
3	AC Cable	0.8	N	Polyvinyl chloride

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SECTION 5: Conducted Emission, Section 15.207

Test Procedure

EUT was placed on a polyurethane (1.0m by 0.5m), raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

1) For the tests on EUT with other peripherals (as a whole system)

I/O cable and AC cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane.

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

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

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

Measurement range: 0.15-30MHz

Test data : APPENDIX 3
Test result : Pass

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SECTION 6: Spurious Emission 15.247(c)

[Conducted]

Test Procedure

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

Test data : APPENDIX 3

Test result : Pass

[Radiated]

Test Procedure

EUT was placed on a polyurethane (1.0m by 0.5m or 0.5m x 0.5m), raised 80cm above the conducting ground plane. The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).

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

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

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

The result also satisfied with the general limits specified in section 15.209(a).

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver	Spectrum Analyzer
Detector	QP: BW 120kHz	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth		AV: RBW:1MHz/VBW:10Hz

Test data : APPENDIX 3

Test result : Pass

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SECTION 7: Bandwidth, Section 15.247(a)(2)

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

SECTION 8: Maximum Peak Output Power, Section 15.247(b)(3)

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

SECTION 9: Peak Power Density, Section 15.247 (d)

[Conducted]

Test Procedure

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

Test data : APPENDIX 3
Test result : Pass

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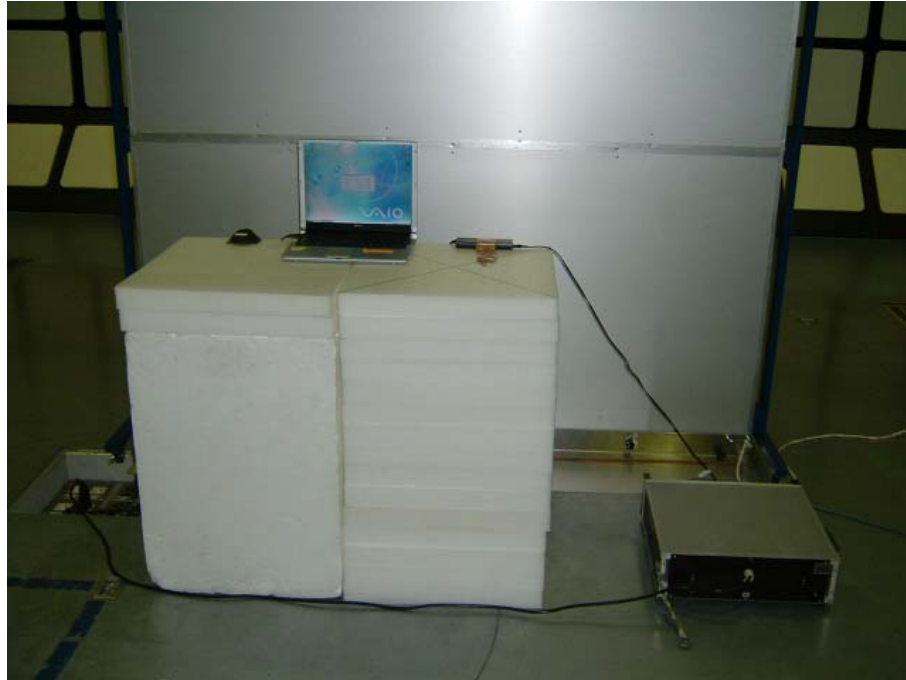
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APPENDIX 1: Photographs of test setup

Conducted Emission

Front



Side



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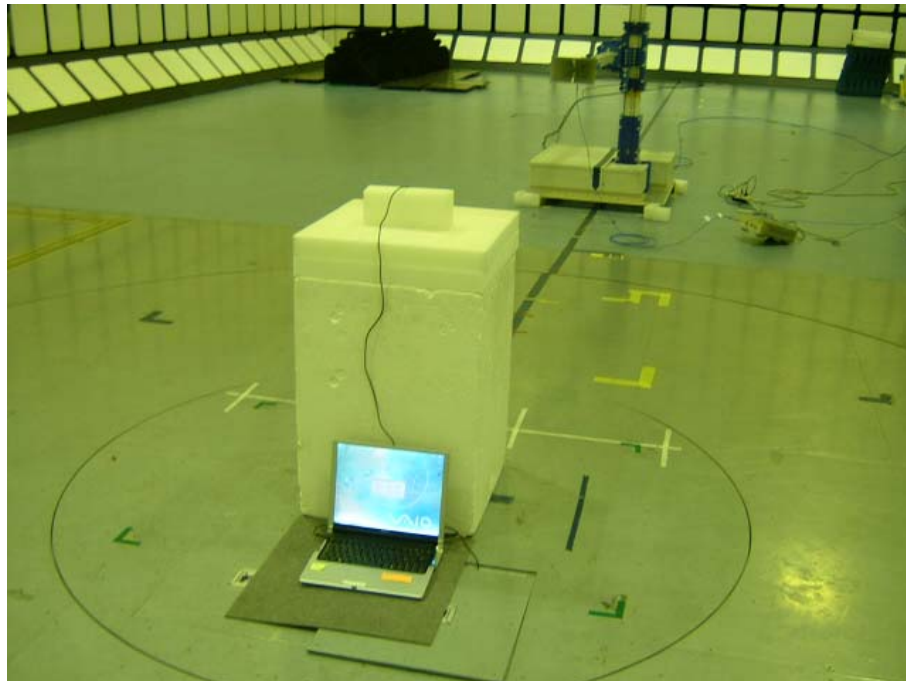
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Spurious Emission (Radiated) Receiver

Front



Rear



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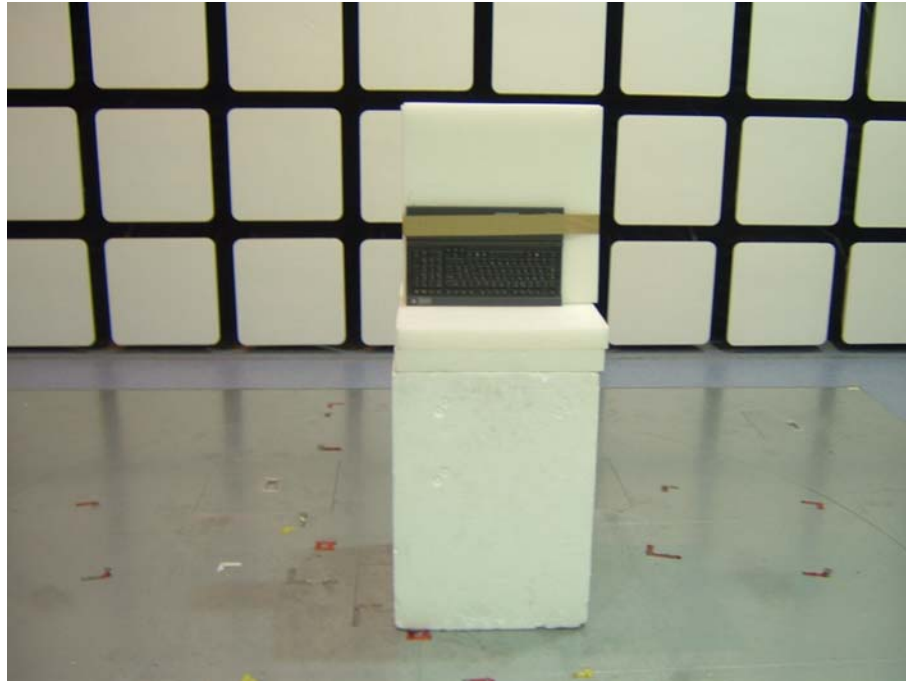
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Spurious Emission (Radiated) Wireless Keyboard

Front



Rear



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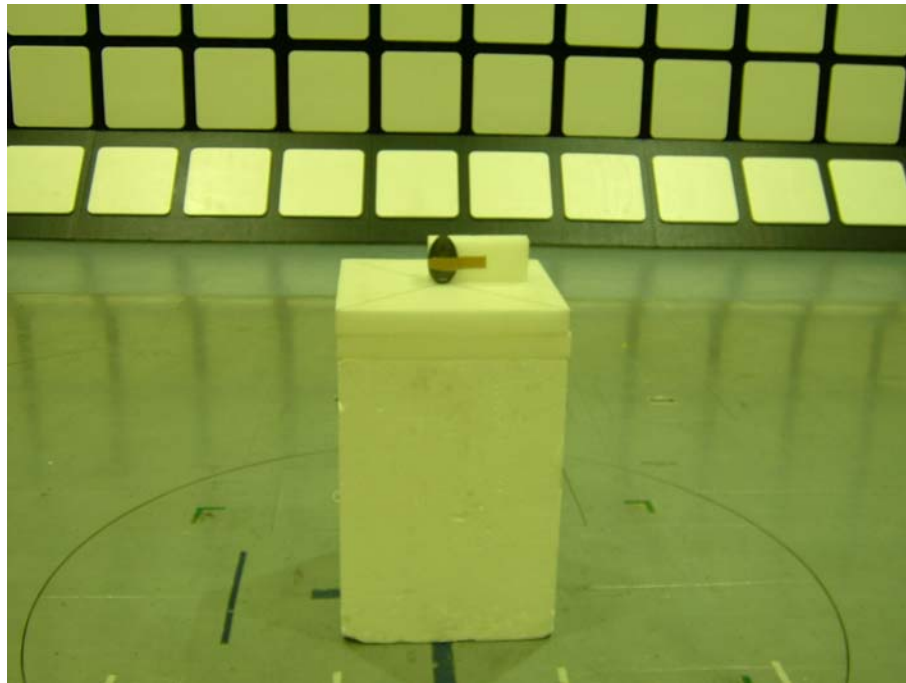
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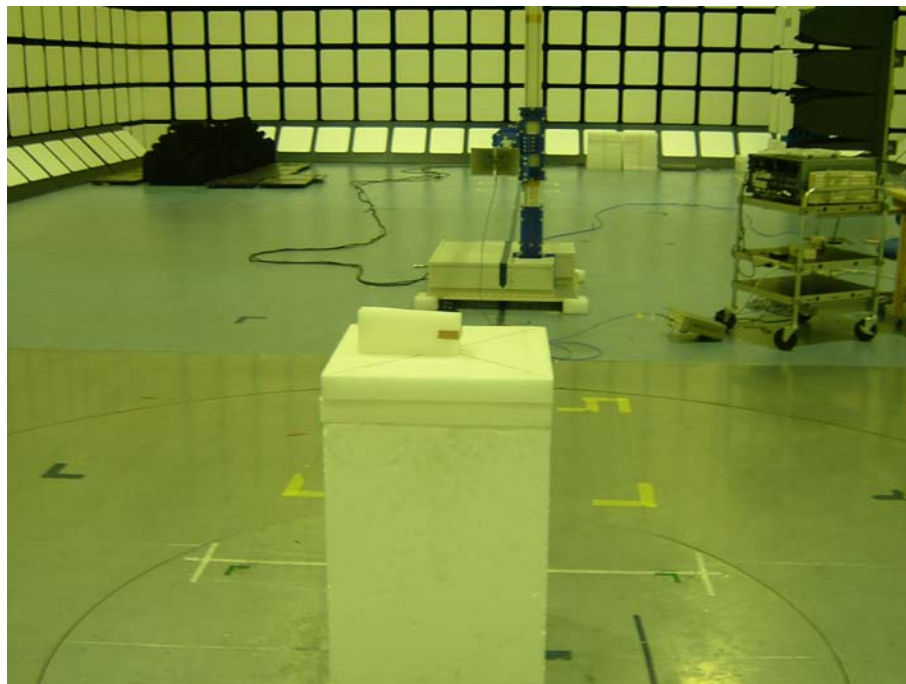
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Spurious Emission (Radiated) Wireless Mouse

Front



Rear



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Spurious Emission (Radiated) Transmitting mode of all devices

Front



Rear



Front (Zoom)



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Worst Case Position

EUT (M/N)	Field orientation of Antenna	Low channel (2402MHz)	Middle channel (2440MHz:Receiver and Wireless Keyboard 2445MHz: Wireless Mouse)	High channel (2479MHz)
Receiver (VGP-WRC1)	Horizontal (MAX Axis)	Y	Z	Z
	Vertical (MAX Axis)	Y	Y	Y
Wireless Keyboard (VGP-WKB1)	Horizontal (MAX Axis)	X	Z	X
	Vertical (MAX Axis)	Y	Z	Y
Wireless Mouse (VGP-WMS1)	Horizontal (MAX Axis)	X	Y	Y
	Vertical (MAX Axis)	Z	Z	Z

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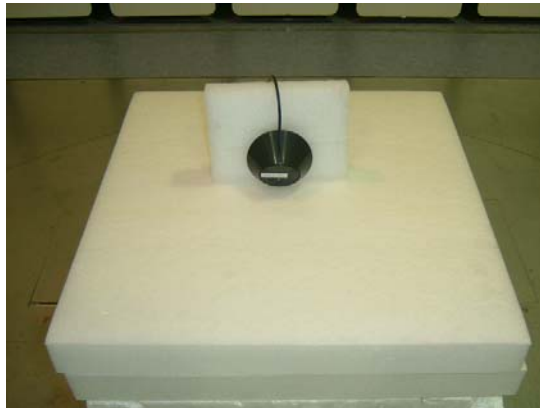
MF060b(10.04.03)

Worst Case Position (Receiver)

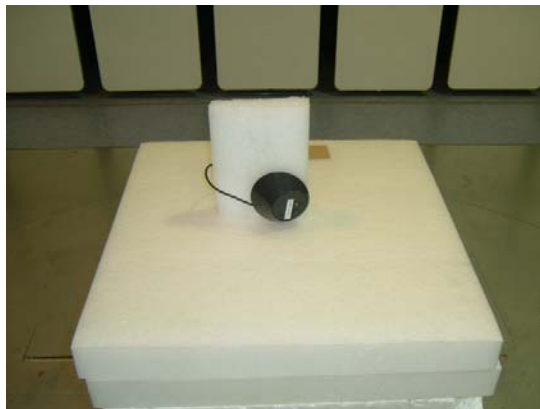
X-axis



Y-axis



Z-axis



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MF060b(10.04.03)

Worst Case Position (Wireless Keyboard)

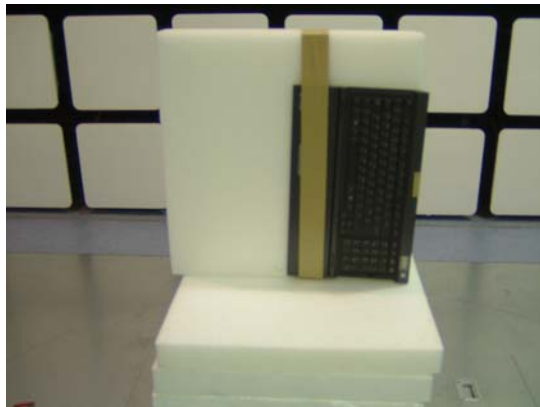
X-axis



Y-axis



Z-axis



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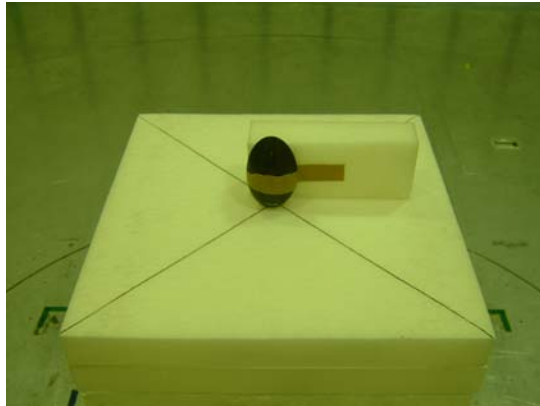
MF060b(10.04.03)

Worst Case Position (Wireless Mouse)

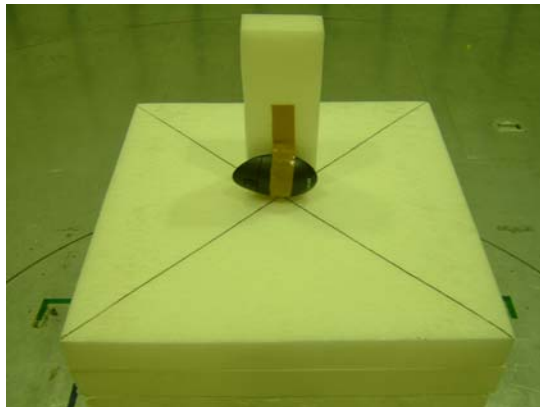
X-axis



Y-axis



Z-axis



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MF060b(10.04.03)

APPENDIX 2: Test Instruments**EMI test Instruments**

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	CE/RE	2003/12/27 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	CE	2003/11/12 * 12
MCC-03	Coaxial Cable	Fujikura/Suhner/Agilent/T SJ	-	CE	2003/12/24 * 12
MLS-02	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2003/11/10 * 12
MCC-01	Coaxial Cable	Suhner/storm/Agilent/TSJ	-	RE	2003/12/19 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2003/12/16 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2003/10/15 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2003/10/15 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2004/05/25 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2004/04/12 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2003/10/15 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2003/10/15 * 12
MRENT-09	Spevctrum Analyzer	Advantest	R3273	RE	2004/02/18* 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE	2004/02/03 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2004/02/24 * 12
MPA-02	Pre Amplifier	Agilent	87405A	RE	2004/04/16 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2003/12/16 * 12
MHA-05	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2004/01/10 * 12
MCC-23	Microwave Cable	Storm	-	RE	2004/05/01 * 12
MCC-05	Microwave Cable	Storm	421-011	RE	2004/01/06 * 12
MAT-23	Attenuator (10dB)	Orient Microwave	BX10-0476-00	RE	2004/03/30 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2003/09/19 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2004/02/06 * 12
MHA-01	Horn Antenna	EMCO	3160-09	RE	2004/01/10 * 12
MCC-04	Microwave Cable	Storm	421-011	RE	2004/01/06 * 12
MCC-24	Microwave Cable	Storm	-	RE	2004/05/01 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2003/09/19 * 12
MAT-22	Attenuator (10dB)	Orient Microwave	BX10-0476-00	RE	2004/03/30 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2004/01/10 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2004/01/10 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	AT	2004/06/12 * 12
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2004/04/12 * 12
MCC-24	Microwave Cable	Storm	-	RE	2004/05/01 * 12
MCC-04	Microwave Cable	Storm	421-011	RE	2004/01/06 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2004/02/06 * 12

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

Test Item:

CE: Conducted emission, RE: Radiated emission, AT: Other tests

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MF060b(10.04.03)

APPENDIX 3: Data of EMI test

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/16 02:52:08

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : AC120V/60Hz
Temp°C/Humi% : 22 / 64
Operator : Mitsuru Fujimura

Mode / Remarks : TX MODE 2402MHz

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

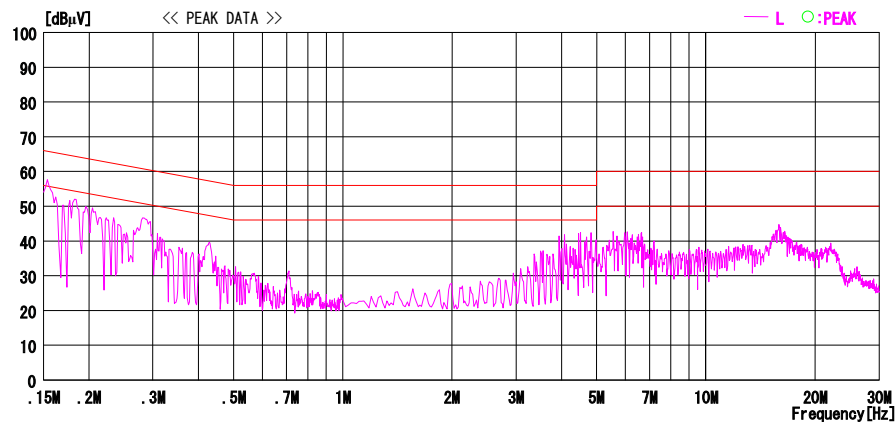
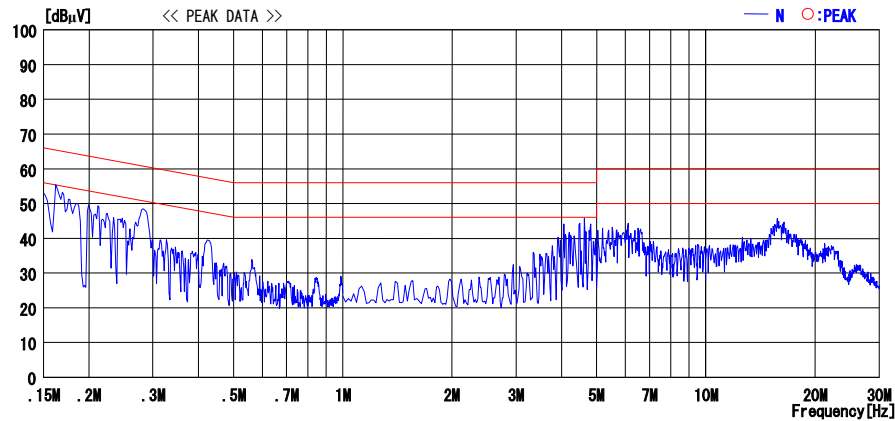


CHART:WITH FACTOR,Peak hold data.Data is uncorrected.
Except for the above table : adequate margin data below the

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Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/16 02:59:37

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : AC120V/60Hz
Temp°C/Humi% : 22 / 64
Operator : Mitsuru Fujimura

Mode / Remarks : TX MODE 2440MHz

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

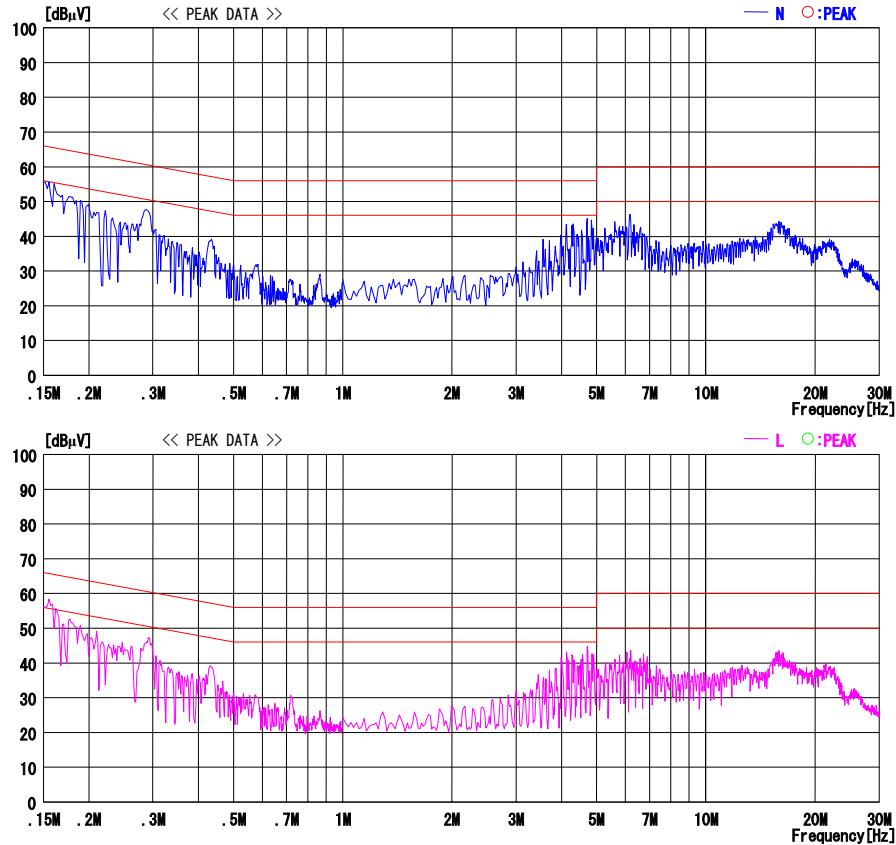


CHART:WITH FACTOR,Peak hold data.Data is uncorrected.
Except for the above table : adequate margin data below the

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Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/16 03:17:19

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : AC120V/60Hz
Temp°C/Humi% : 22 / 64
Operator : Mitsuru Fujimura

Mode / Remarks : TX MODE 2479MHz

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

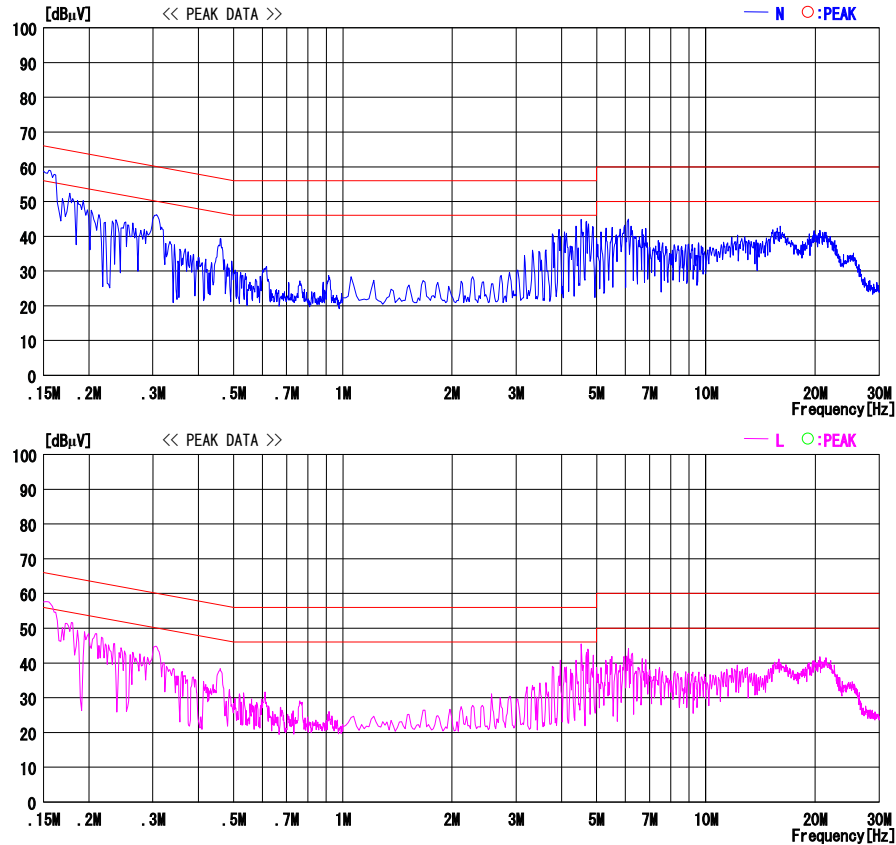


CHART:WITH FACTOR,Peak hold data.Data is uncorrected.
Except for the above table : adequate margin data below the

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Conducted Emission

DATA OF CONDUCTED EMISSION TEST

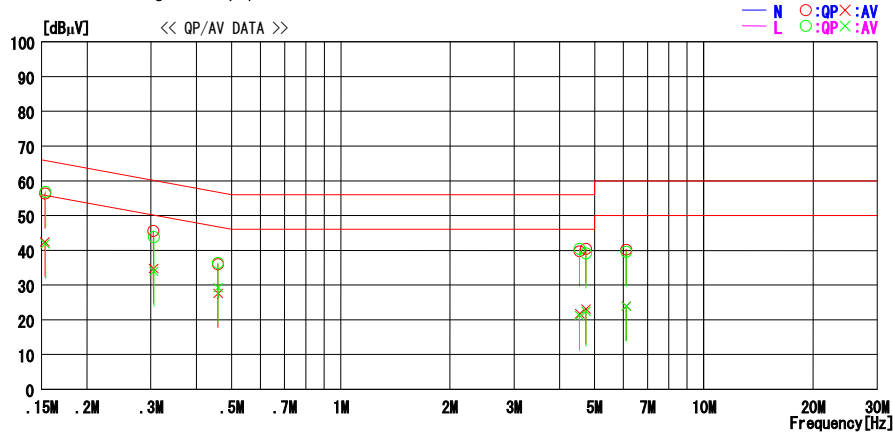
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/16 03:28:19

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : AC120V/60Hz
Temp°C/Humi% : 22 / 64
Operator : Mitsuru Fujimura

Mode / Remarks : TX MODE 2479MHz

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



NO	FREQ [MHz]	READING		C. F [dB]	RESULT		LIMIT	MARGIN	
		QP [dB μ V]	AV [dB μ V]		QP [dB μ V]	AV [dB μ V]		QP [dB]	AV [dB]
1	0.1531	56.2	42.3	0.1	56.3	42.4	65.8	9.5	13.4
2	0.3048	45.2	34.4	0.3	45.5	34.7	60.1	14.6	15.4
3	0.4589	35.5	27.1	0.5	36.0	27.6	56.7	20.7	19.1
4	0.5505	38.8	20.9	0.9	39.7	21.8	56.0	16.3	24.2
5	0.7375	39.6	22.2	0.9	40.5	23.1	56.0	15.5	22.9
6	1.1195	39.2	22.8	1.1	40.3	23.9	60.0	19.7	26.1
7	1.5134	56.7	41.8	0.1	56.8	41.9	65.8	9.0	13.9
8	2.3054	43.5	33.6	0.3	43.8	33.9	60.1	16.3	16.2
9	3.4589	35.9	28.7	0.5	36.4	29.2	56.7	20.3	17.5
10	4.5425	39.6	20.3	0.9	40.5	21.2	56.0	15.5	24.8
11	6.7365	38.2	21.6	0.9	39.1	22.5	56.0	16.9	23.5
12	11.1155	38.6	22.8	1.1	39.7	23.9	60.0	20.3	26.1

CHART: WITH FACTOR, Peak hold data. Data is uncorrected.
Except for the above table : adequate margin data below the limits.
CALCULATION = Reading - C. F.

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MF060b(10.04.03)

6dB Bandwidth(DSSS and other forms of modulation)

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

Company : Sony Corporation
Equipment : Receiver
Model : VGP-WRC1
Sample No. : 2
Power : DC 5V
Mode : Tx (2402, 2440, 2479MHz)

REPORT NO : 24KE0303-HO
REGULATION : Fcc Part15 Subpart C 15.247(a)(2)
TEST DISTANCE : -
DATE : 07/05/2004
TEMPERATURE : 25°C
HUMIDITY : 50%
ENGINEER : Hiroka Umeyama

Ch	Freq. [MHz]	6dB Bandwidth [kHz]	Limit [kHz]
Low	2402.0	930.597	500.0
Mid	2440.0	914.097	500.0
High	2479.0	909.450	500.0

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Head Office EMC Lab.

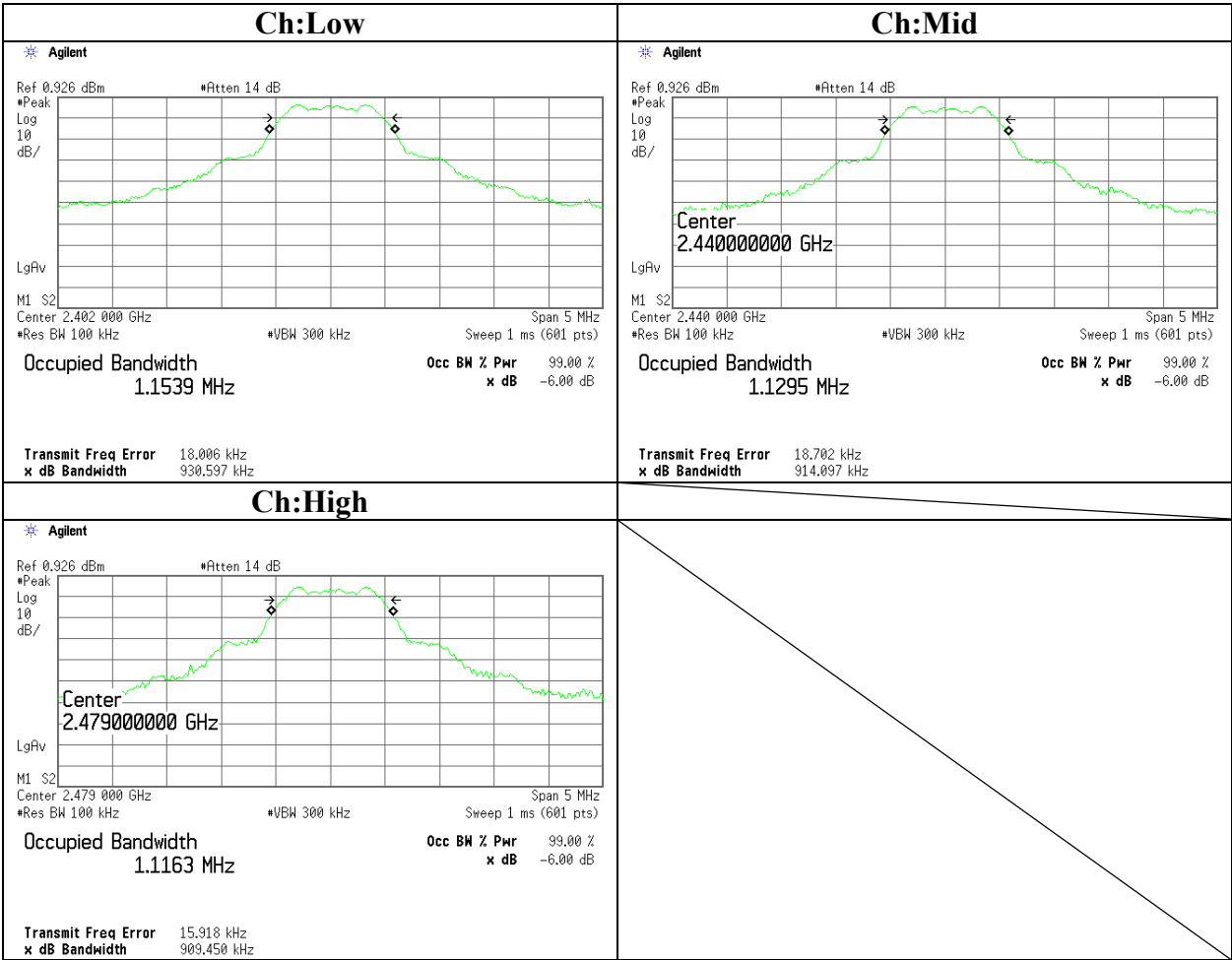
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MF060b(10.04.03)

6dB Bandwidth(DSSS and other forms of modulation)Receiver



6dB Bandwidth(DSSS and other forms of modulation)

UL Apex Co., Ltd.

Head Office EMC Lab. No.3 Measurement Room

Company : Sony Corporation
 Equipment : Wireless Keyboard
 Model : VGP-WKB1
 Sample No. : T6000010
 Power : DC 6V
 Mode : Tx (2402, 2440, 2479MHz)

REPORT NO : 24KE0303-HO
 REGULATION : Fcc Part15 Subpart C 15.247(a)(2)
 TEST DISTANCE : -
 DATE : 07/05/2004
 TEMPERATURE : 25℃
 HUMIDITY : 50%
 ENGINEER : Hiroka Umeyama

Ch	Freq. [MHz]	6dB Bandwidth [kHz]	Limit [kHz]
Low	2402.0	925.567	500.0
Mid	2440.0	917.552	500.0
High	2479.0	906.148	500.0

UL Apex Co., Ltd.**Head Office EMC Lab.**

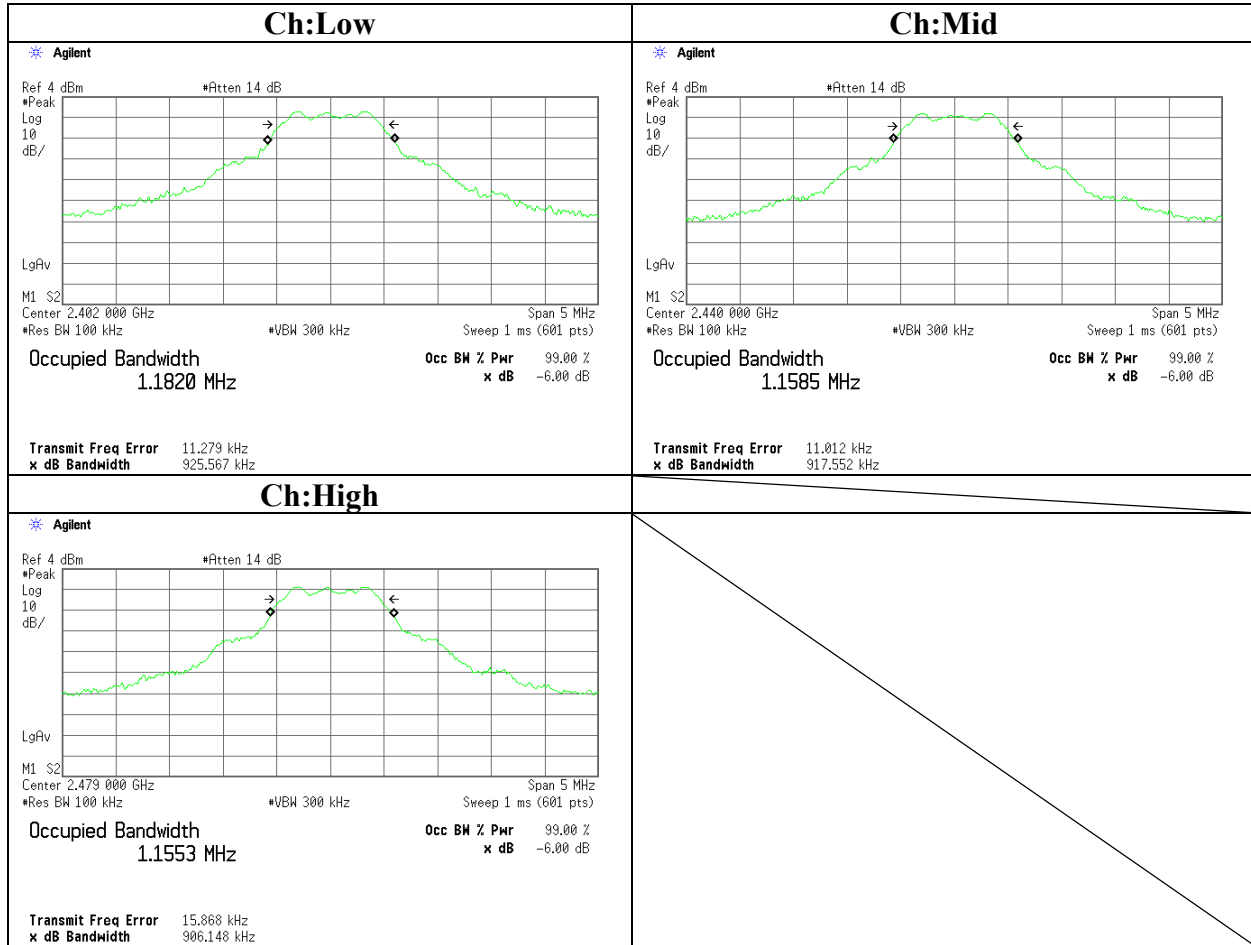
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MF060b(10.04.03)

6dB Bandwidth(DSSS and other forms of modulation)Wireless Keyboard



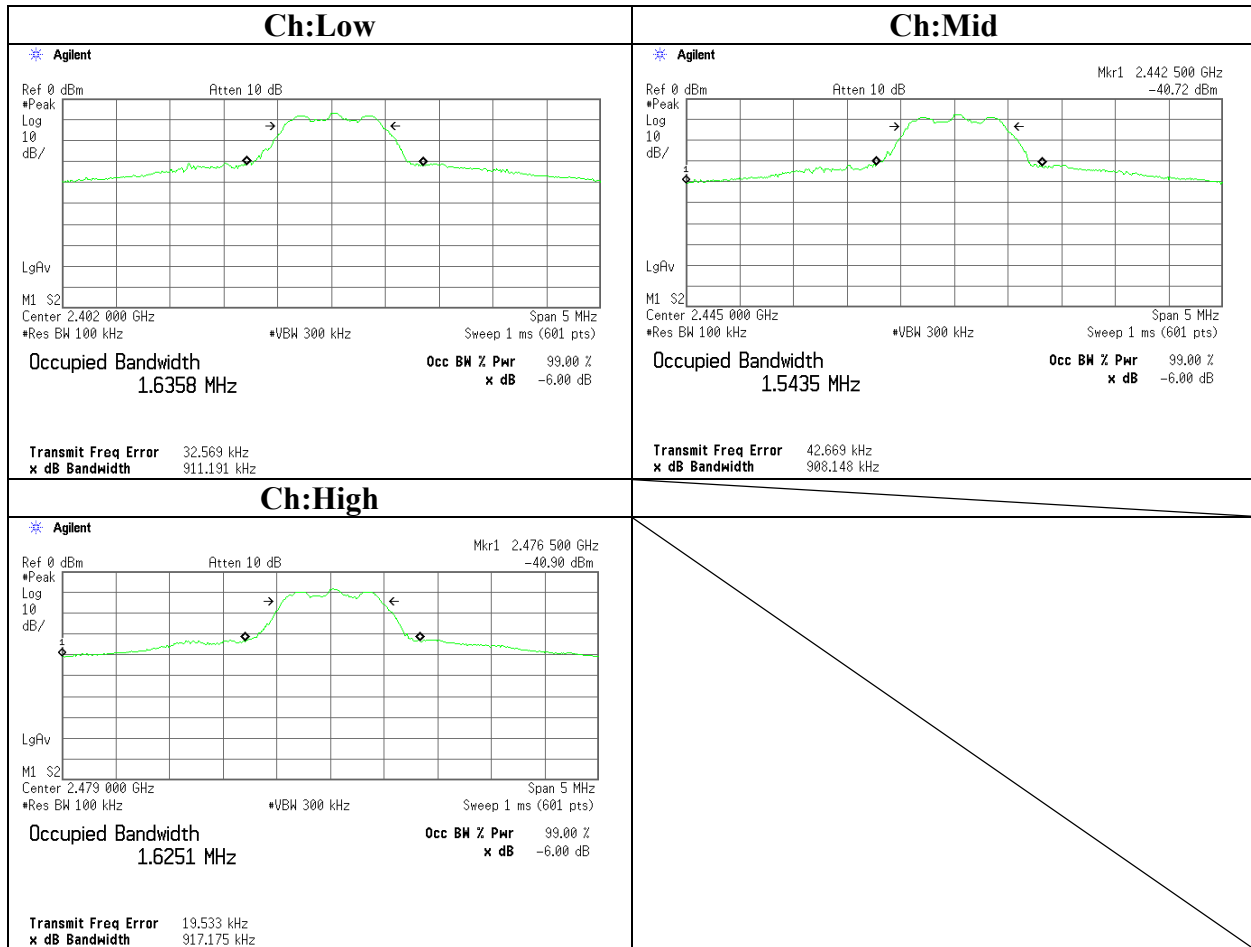
6dB Bandwidth(DSSS and other forms of modulation)

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

Company : Sony Corporation
Equipment : Wireless Mouse
Model : VGP-WMS1
Sample No. : 2
Power : DC 3V
Mode : Tx (2402, 2445, 2479MHz)

REPORT NO : 24KE0303-HO
REGULATION : Fcc Part15 Subpart C 15.247(a)(2)
TEST DISTANCE : -
DATE : 07/12/2004
TEMPERATURE : 24°C
HUMIDITY : 49%
ENGINEER : Naoki Sakamoto

Ch	Freq. [MHz]	6dB Bandwidth [kHz]	Limit [kHz]
Low	2402.0	911.191	500.0
Mid	2445.0	908.148	500.0
High	2479.0	917.175	500.0

6dB Bandwidth(DSSS and other forms of modulation)Wireless Mouse**UL Apex Co., Ltd.****Head Office EMC Lab.**

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MF060b(10.04.03)

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

UL Apex Co., Ltd.

Head Office EMC Lab. No.3 Measurement Room

Company	: Sony Corporation	REPORT NO	: 24KE0303-HO
Equipment	: Receiver	REGULATION	: Fcc Part15 Subpart C 15.247(b)(3)
Model	: VGP-WRC1	TEST DISTANCE	: -
Sample No.	: 2	DATE	: 07/05/2004
Power	: DC 5V	TEMPERATURE	: 25°C
Mode	: Tx (2402, 2440, 2479MHz)	HUMIDITY	: 50%
		ENGINEER	: Hiroka Umeyama

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2402.0	-1.52	1.13	0.00	-0.39	30.00	30.39
Mid	2440.0	-2.25	1.09	0.00	-1.16	30.00	31.16
High	2479.0	-3.05	1.18	0.00	-1.87	30.00	31.87

Sample Calculation:

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

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

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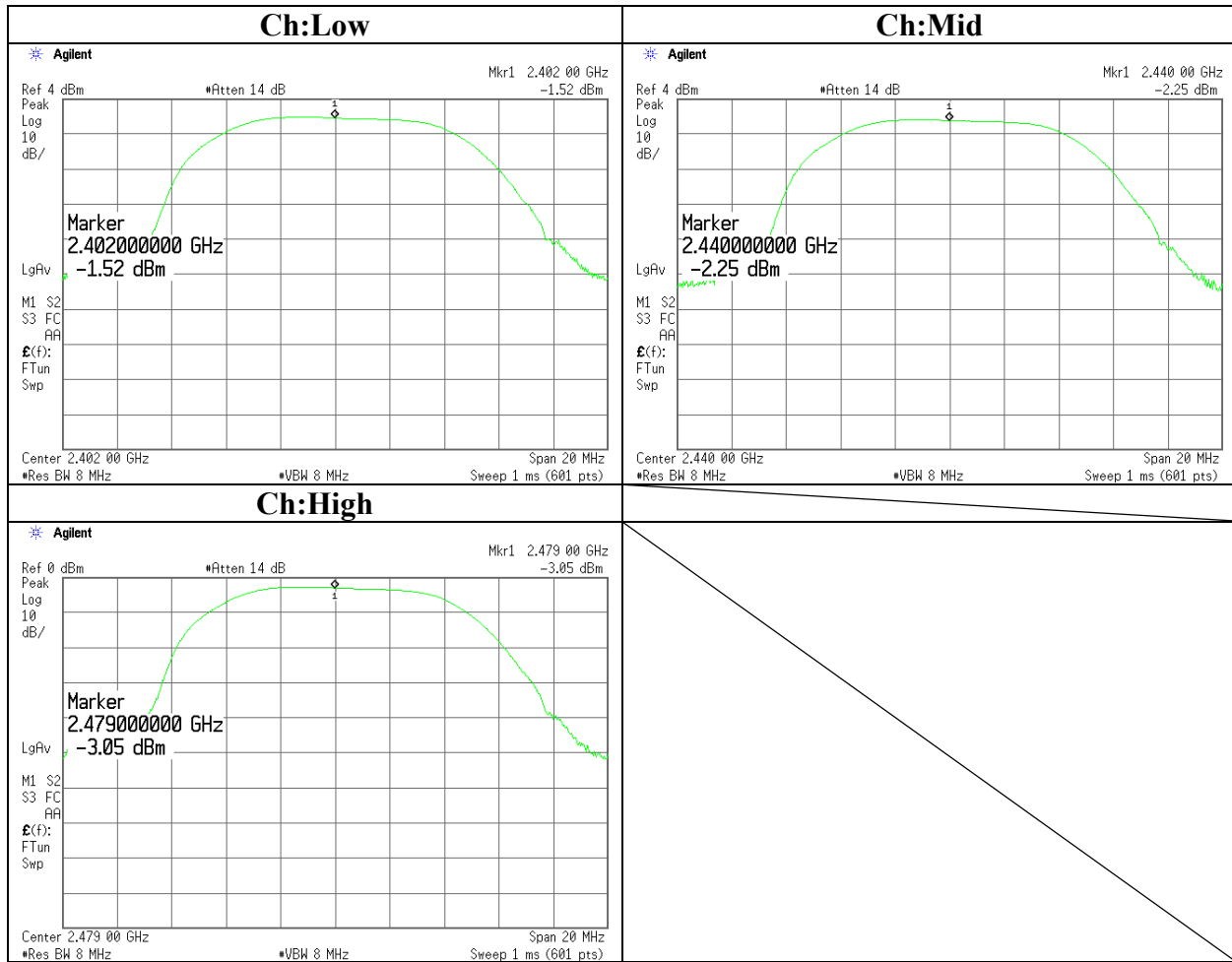
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MF060b(10.04.03)

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



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

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

Company	: Sony Corporation	REPORT NO	: 24KE0303-HO
Equipment	: Wireless Keyboard	REGULATION	: Fcc Part15 Subpart C 15.247(b)(3)
Model	: VGP-WKB1	TEST DISTANCE	: -
Sample No.	: T6000010	DATE	: 07/05/2004
Power	: DC 6V	TEMPERATURE	: 25°C
Mode	: Tx (2402, 2440, 2479MHz)	HUMIDITY	: 50%
		ENGINEER	: Hiroka Umeyama

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2402.0	-1.42	1.13	0.00	-0.29	30.00	30.29
Mid	2440.0	-2.15	1.09	0.00	-1.06	30.00	31.06
High	2479.0	-2.93	1.18	0.00	-1.75	30.00	31.75

Sample Calculation:

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

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

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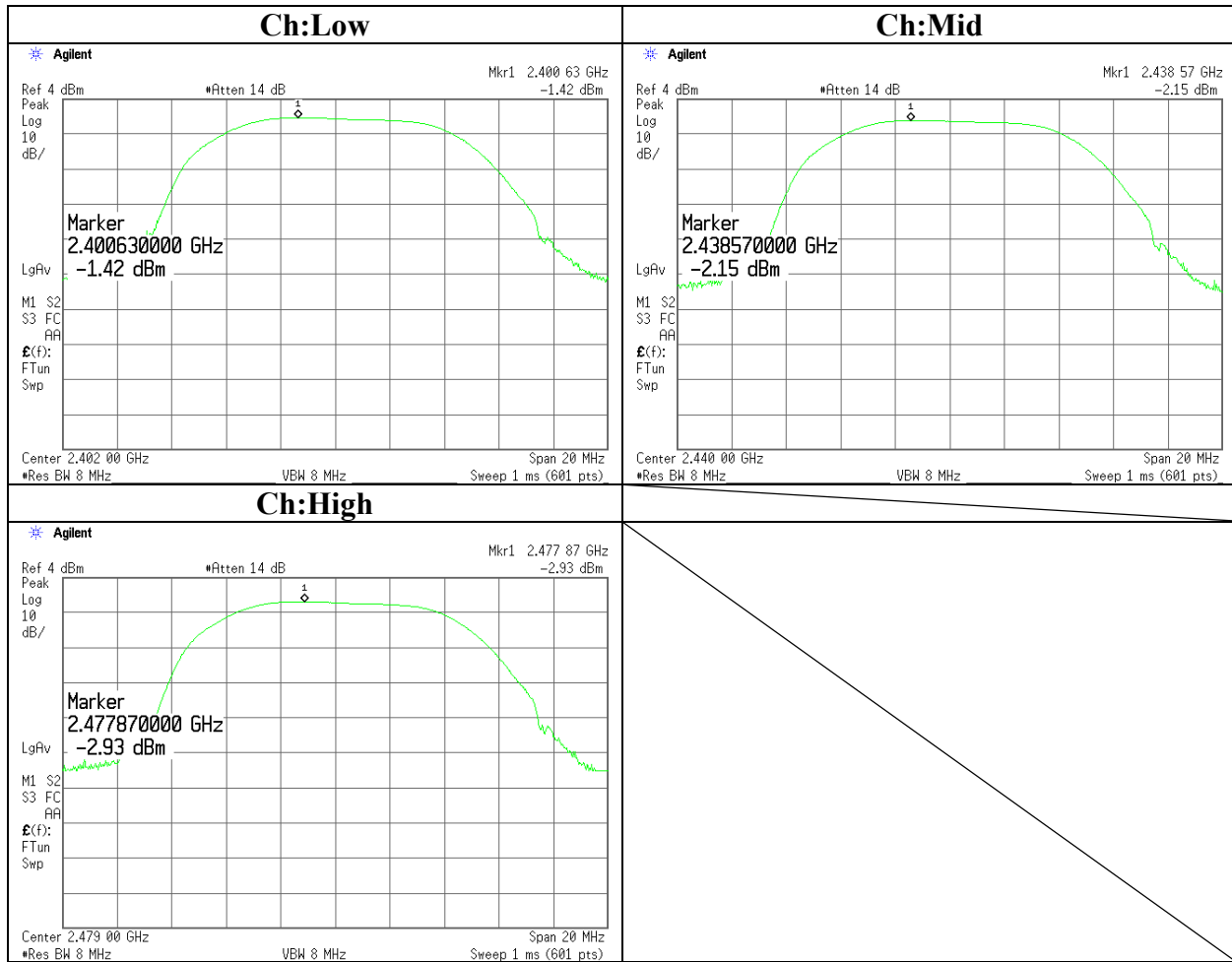
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MF060b(10.04.03)

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



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MF060b(10.04.03)

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

UL Apex Co., Ltd.

Head Office EMC Lab. No.3 Measurement Room

Company	: Sony Corporation	REPORT NO	: 24KE0303-HO
Equipment	: Wireless Mouse	REGULATION	: Fcc Part15 Subpart C 15.247(b)(3)
Model	: VGP-WMS1	TEST DISTANCE	: -
Sample No.	: 2	DATE	: 07/12/2004
Power	: DC 3V	TEMPERATURE	: 24°C
Mode	: Tx (2402, 2445, 2479MHz)	HUMIDITY	: 49%
		ENGINEER	: Naoki Sakamoto

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (1W) [dBm]	Margin [dB]
Low	2402.0	-5.41	1.13	0.00	-4.28	30.00	34.28
Mid	2445.0	-6.19	1.09	0.00	-5.10	30.00	35.10
High	2479.0	-7.03	1.18	0.00	-5.85	30.00	35.85

Sample Calculation:

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

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

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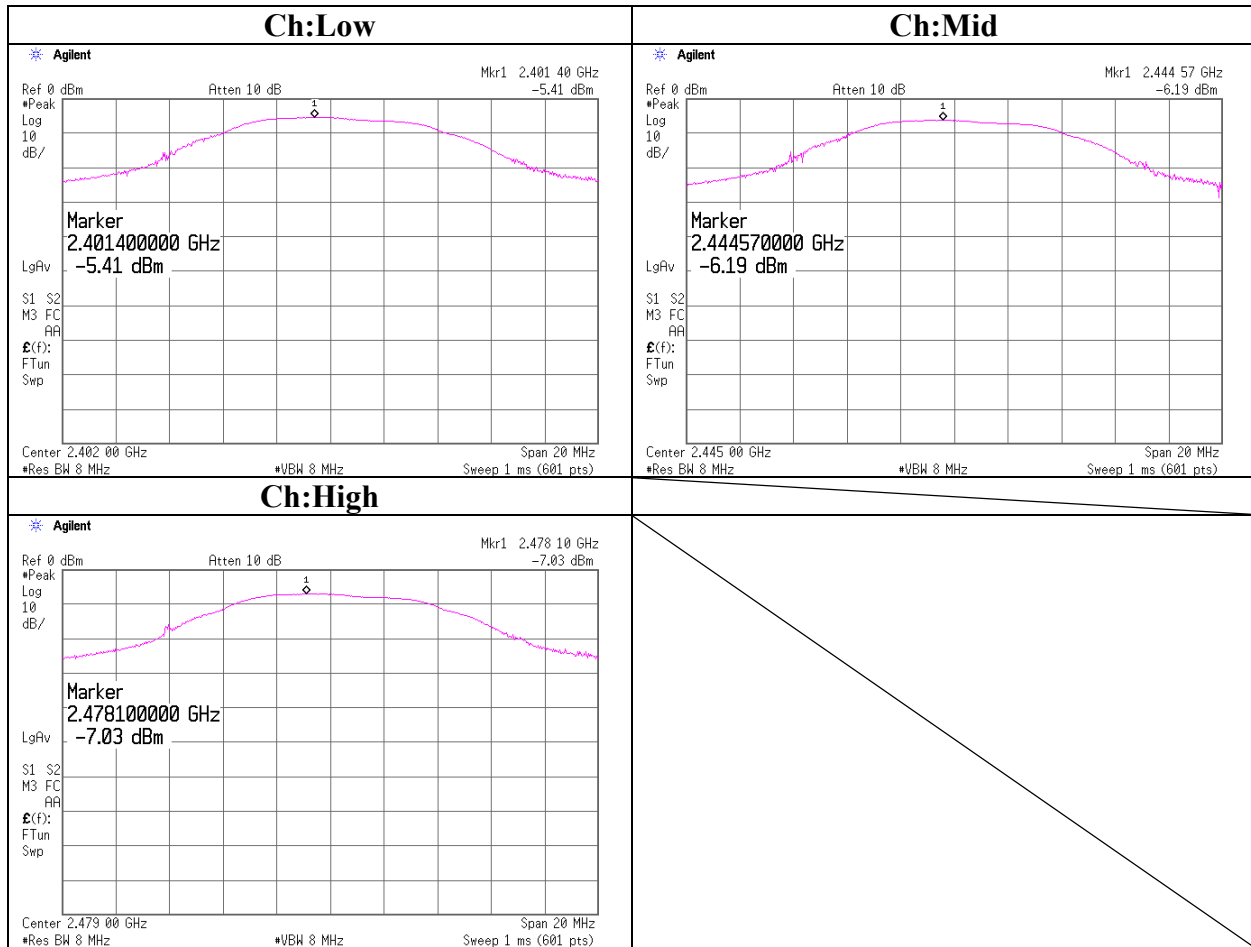
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MF060b(10.04.03)

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



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MF060b(10.04.03)

Radiated Spurious Emission(DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

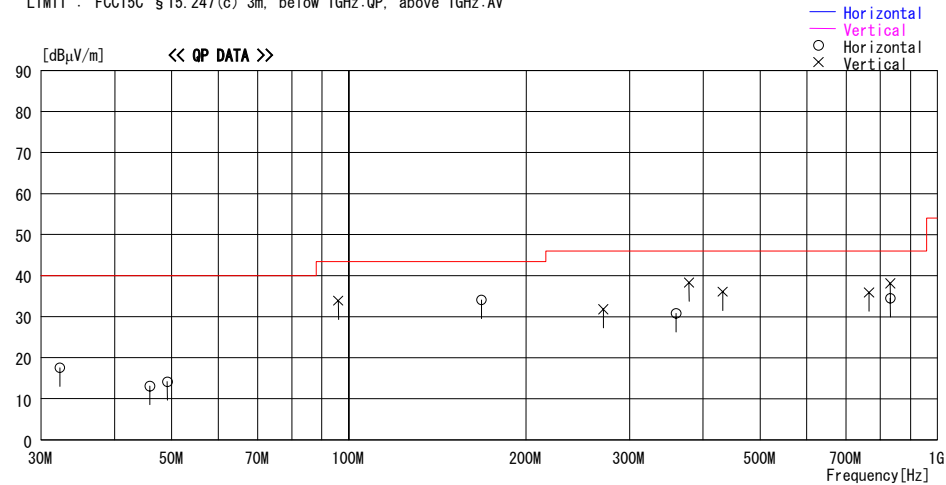
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/07/09 03:14:02

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Y Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	32.265	16.8	17.7	6.4	23.3	17.6	40.0	22.4	100	360
2	45.900	18.3	11.4	6.6	23.2	13.1	40.0	26.9	100	0
3	49.152	20.2	10.5	6.7	23.2	14.2	40.0	25.8	100	360
4	167.953	33.9	15.6	7.7	23.1	34.1	43.5	9.4	182	250
5	359.875	28.3	16.6	8.6	22.7	30.8	46.0	15.2	100	140
6	832.502	25.0	21.5	10.6	22.6	34.5	46.0	11.5	100	228
----- Vertical -----										
7	95.974	40.5	9.2	7.2	23.0	33.9	43.5	9.6	100	360
8	270.544	27.8	18.6	8.3	22.9	31.8	46.0	14.2	100	157
9	378.615	35.0	17.4	8.7	22.8	38.3	46.0	7.7	100	195
10	432.001	31.4	18.3	9.1	22.7	36.1	46.0	9.9	100	186
11	764.975	27.0	21.1	10.4	22.6	35.9	46.0	10.1	100	157
12	832.502	28.6	21.5	10.6	22.6	38.1	46.0	7.9	111	86

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

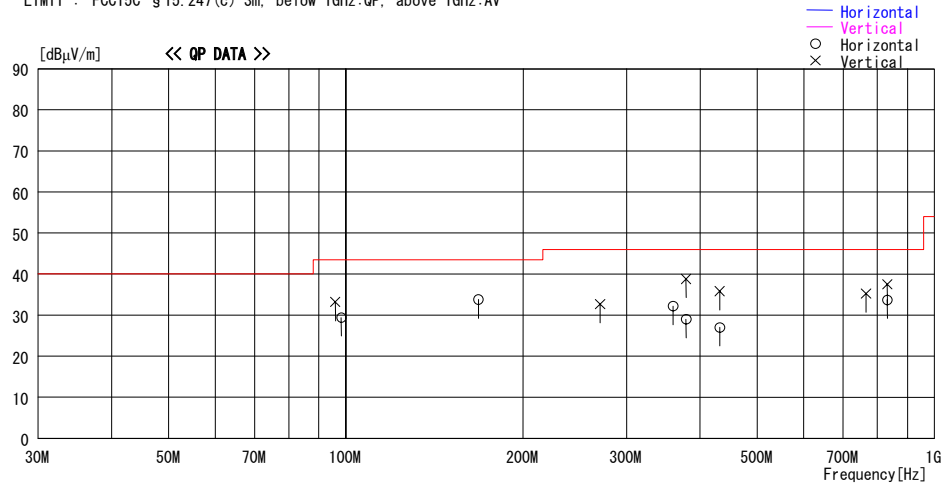
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/09 03:57:35

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Y Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	98.305	35.4	9.8	7.2	23.0	29.4	43.5	14.1	100	0
2	167.946	33.6	15.6	7.7	23.1	33.8	43.5	9.7	180	245
3	359.874	29.7	16.6	8.6	22.7	32.2	46.0	13.8	100	139
4	378.615	25.7	17.4	8.7	22.8	29.0	46.0	17.0	100	215
5	432.001	22.3	18.3	9.1	22.7	27.0	46.0	19.0	100	247
6	832.501	24.2	21.5	10.6	22.6	33.7	46.0	12.3	151	229
----- Vertical -----										
7	95.952	39.8	9.2	7.2	23.0	33.2	43.5	10.3	100	164
8	270.362	28.7	18.6	8.3	22.9	32.7	46.0	13.3	100	183
9	378.615	35.5	17.4	8.7	22.8	38.8	46.0	7.2	100	172
10	432.001	31.1	18.3	9.1	22.7	35.8	46.0	10.2	100	191
11	764.976	26.3	21.1	10.4	22.6	35.2	46.0	10.8	113	148
12	832.503	28.0	21.5	10.6	22.6	37.5	46.0	8.5	100	77

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

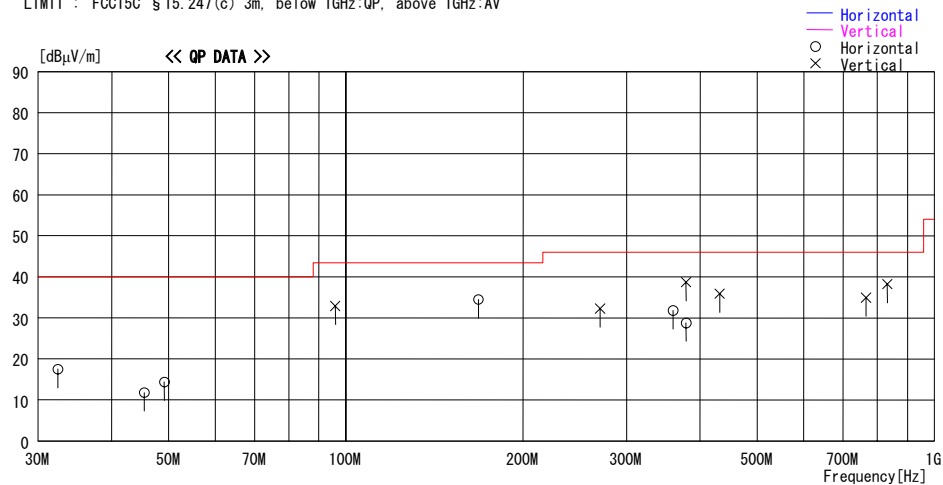
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/09 04:43:53

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Z Axis Ver:Y Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
				[dB]	[dB]	[dBμV/m]	[dBμV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	32.408	16.8	17.6	6.4	23.3	17.5	40.0	22.5	100	0
2	45.424	16.9	11.5	6.6	23.2	11.8	40.0	28.2	100	0
3	49.154	20.4	10.5	6.7	23.2	14.4	40.0	25.6	100	360
4	167.917	34.3	15.6	7.7	23.1	34.5	43.5	9.0	177	91
5	359.841	29.3	16.6	8.6	22.7	31.8	46.0	14.2	100	143
6	378.615	25.5	17.4	8.7	22.8	28.8	46.0	17.2	135	227
----- Vertical -----										
7	95.958	39.5	9.2	7.2	23.0	32.9	43.5	10.6	100	206
8	270.359	28.3	18.6	8.3	22.9	32.3	46.0	13.7	100	166
9	378.615	35.4	17.4	8.7	22.8	38.7	46.0	7.3	100	163
10	432.001	31.2	18.3	9.1	22.7	35.9	46.0	10.1	100	177
11	764.972	26.0	21.1	10.4	22.6	34.9	46.0	11.1	100	165
12	832.501	28.7	21.5	10.6	22.6	38.2	46.0	7.8	100	210

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

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

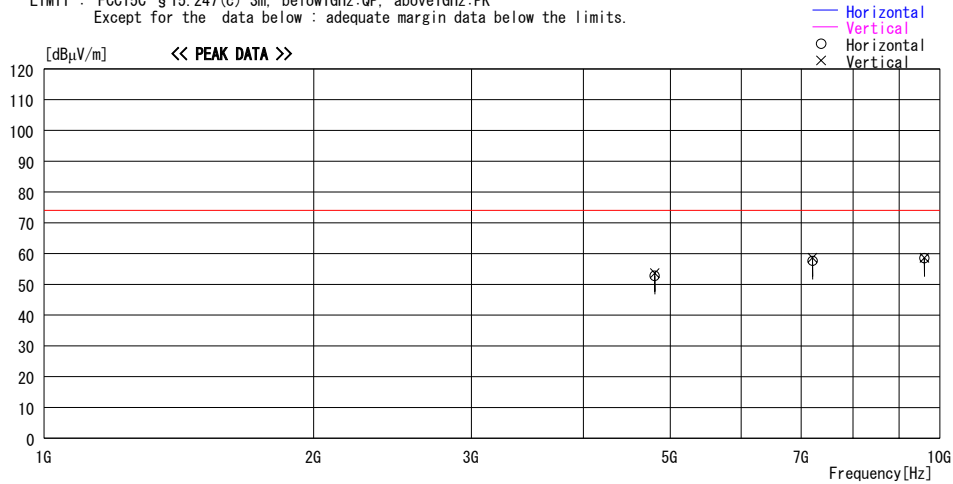
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4803.922	44.8	35.1	9.0	36.1	52.8	74.0	21.2
2	7206.125	45.0	37.6	10.6	35.6	57.6	74.0	16.4
3	9608.139	45.4	37.1	12.4	36.3	58.6	74.0	15.4
----- Vertical -----								
4	4804.000	45.6	35.1	9.0	36.1	53.6	74.0	20.4
5	7206.125	46.0	37.6	10.6	35.6	58.6	74.0	15.4
6	9608.139	45.4	37.1	12.4	36.3	58.6	74.0	15.4

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

Page:

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

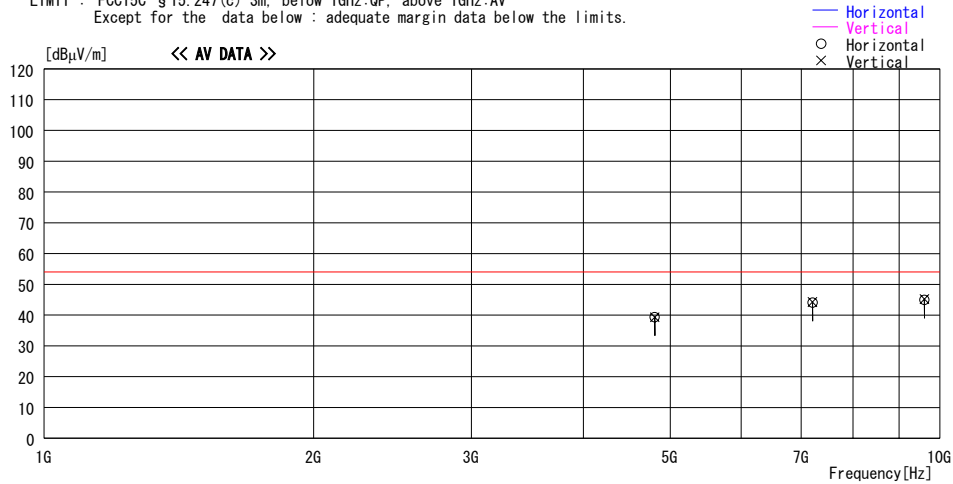
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Z Axis (MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4803.922	31.4	35.1	9.0	36.1	39.4	54.0	14.7
2	7206.125	31.5	37.6	10.6	35.6	44.1	54.0	9.9
3	9608.139	31.8	37.1	12.4	36.3	45.0	54.0	9.0
----- Vertical -----								
4	4804.000	31.3	35.1	9.0	36.1	39.3	54.0	14.7
5	7206.125	31.6	37.6	10.6	35.6	44.2	54.0	9.8
6	9608.139	32.0	37.1	12.4	36.3	45.2	54.0	8.8

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

Page:

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

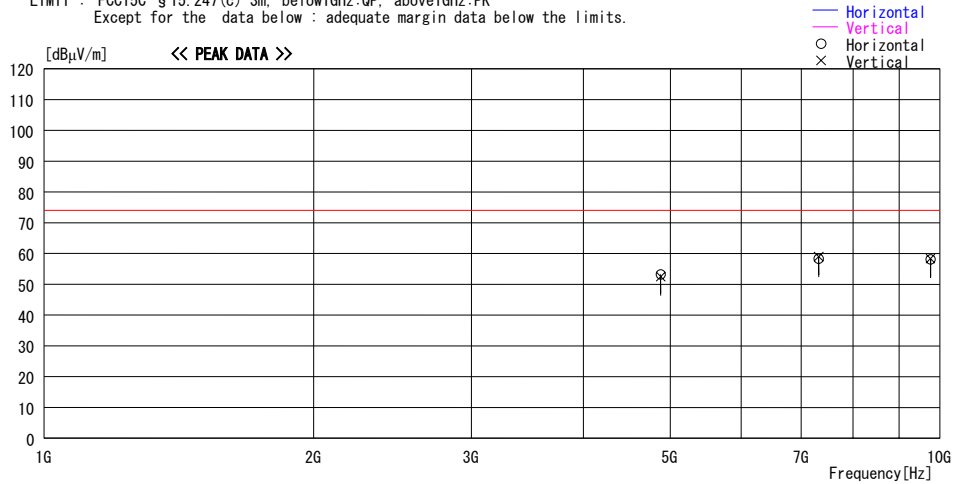
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4879.682	44.9	35.4	9.0	36.1	53.2	74.0	20.8
2	7320.366	45.4	37.9	10.7	35.7	58.3	74.0	15.7
3	9760.047	44.9	37.0	12.5	36.3	58.1	74.0	15.9
----- Vertical -----								
4	4879.682	44.1	35.4	9.0	36.1	52.4	74.0	21.6
5	7320.366	46.1	37.9	10.7	35.7	59.0	74.0	15.0
6	9760.047	45.2	37.0	12.5	36.3	58.4	74.0	15.6

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

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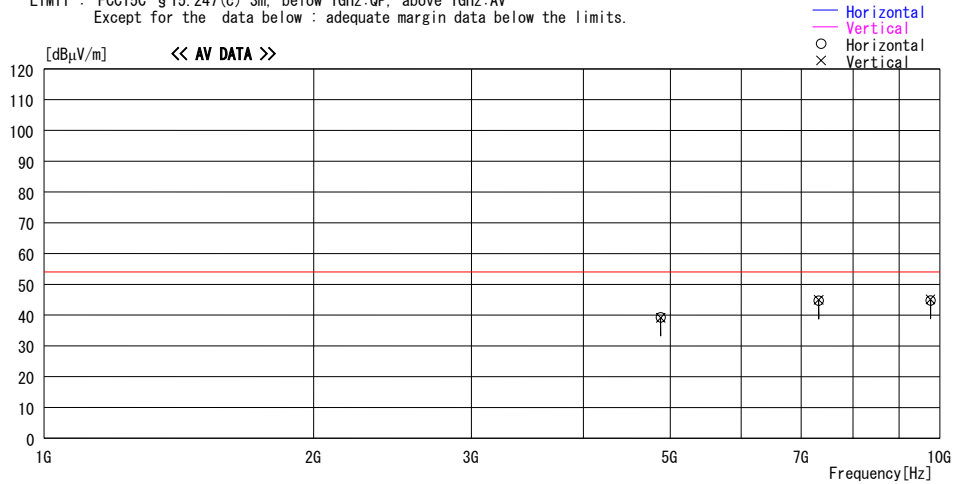
MF060b(10.04.03)

[Transmitting mode by single device]**DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Y Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4879.682	30.9	35.4	9.0	36.1	39.2	54.0	14.8
2	7320.366	31.8	37.9	10.7	35.7	44.7	54.0	9.3
3	9760.047	31.5	37.0	12.5	36.3	44.7	54.0	9.3
----- Vertical -----								
4	4879.682	30.8	35.4	9.0	36.1	39.1	54.0	14.9
5	7320.366	32.0	37.9	10.7	35.7	44.9	54.0	9.1
6	9760.047	31.9	37.0	12.5	36.3	45.1	54.0	8.9

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

Page:

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

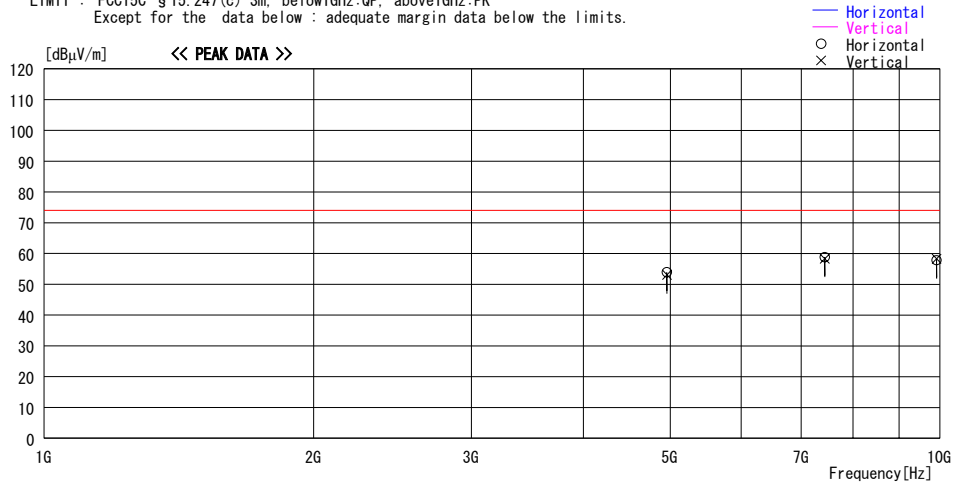
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Z Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4958.035	45.0	35.8	9.2	36.1	53.9	74.0	20.1
2	7436.818	45.6	38.2	10.8	35.7	58.9	74.0	15.2
3	9916.430	44.6	37.0	12.6	36.3	57.9	74.0	16.1
----- Vertical -----								
4	4958.035	44.1	35.8	9.2	36.1	53.0	74.0	21.0
5	7436.818	45.0	38.2	10.8	35.7	58.3	74.0	15.7
6	9916.430	45.0	37.0	12.6	36.3	58.3	74.0	15.7

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

Page:

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

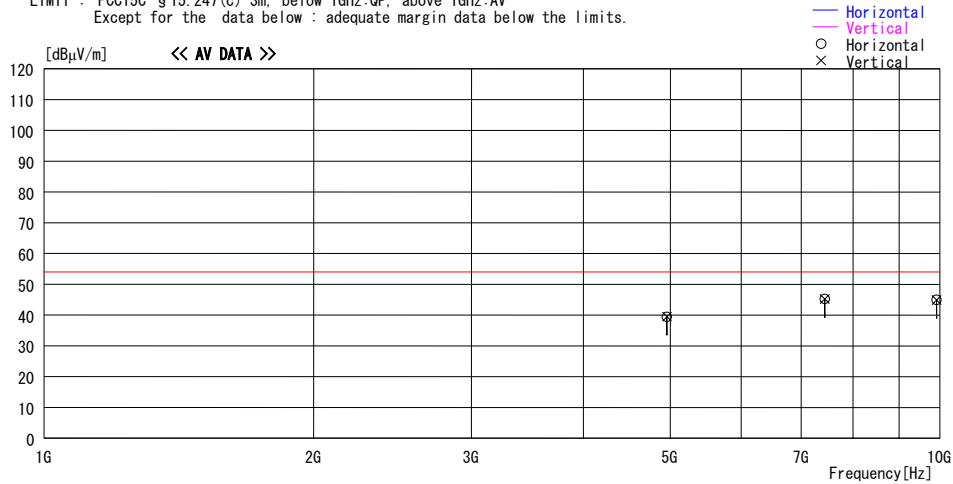
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Z Axis Ver:Y Axis (MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4958.035	30.5	35.8	9.2	36.1	39.4	54.0	14.6
2	7436.818	31.9	38.2	10.8	35.7	45.2	54.0	8.8
3	9916.430	31.6	37.0	12.6	36.3	44.9	54.0	9.1
----- Vertical -----								
4	4958.035	30.5	35.8	9.2	36.1	39.4	54.0	14.6
5	7436.818	31.9	38.2	10.8	35.7	45.2	54.0	8.8
6	9916.430	31.6	37.0	12.6	36.3	44.9	54.0	9.1

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

Page:

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4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

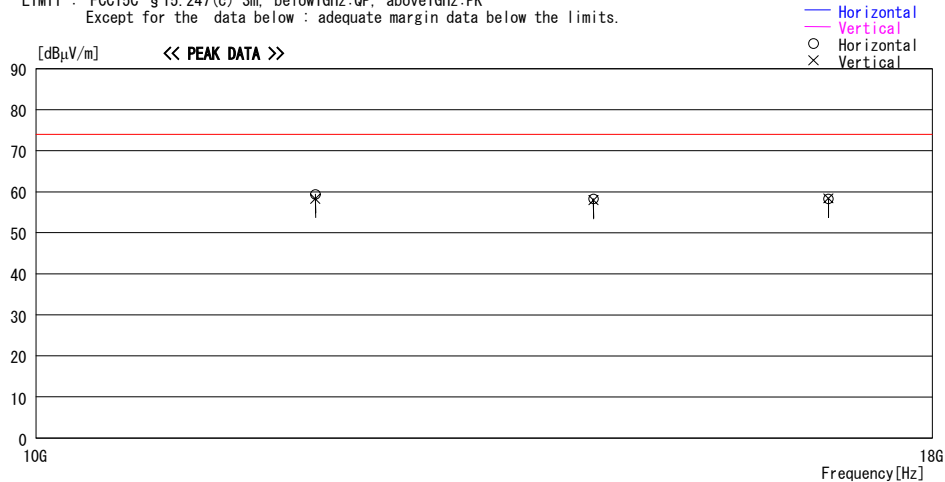
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12010.000	45.3	41.4	8.0	35.3	59.4	74.0	14.6
2	14412.000	44.2	41.4	8.0	35.3	58.3	74.0	15.7
3	16814.000	44.2	41.4	8.0	35.3	58.3	74.0	15.7
----- Vertical -----								
4	12010.000	44.2	41.4	8.0	35.3	58.3	74.0	15.7
5	14412.000	43.9	41.4	8.0	35.3	58.0	74.0	16.0
6	16814.000	44.3	41.4	8.0	35.3	58.4	74.0	15.6

- *1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.
*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

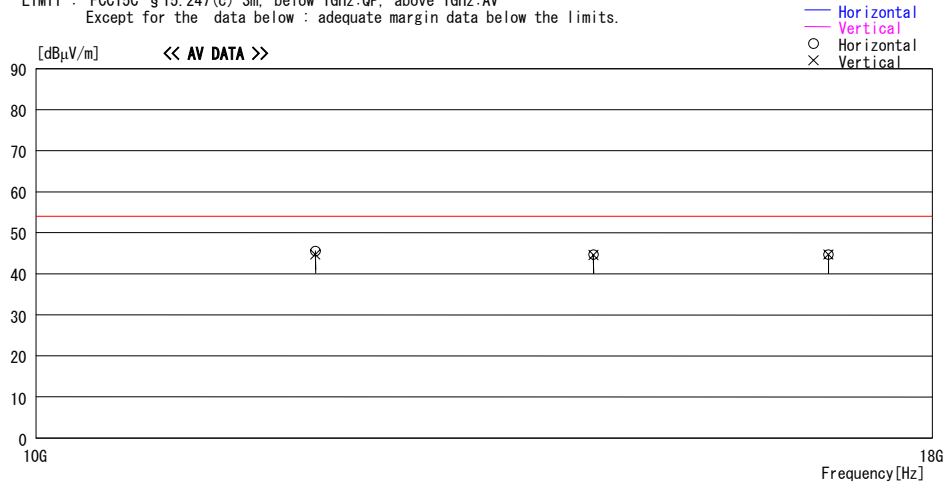
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Y Axis(MAX)

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



- *1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.
*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

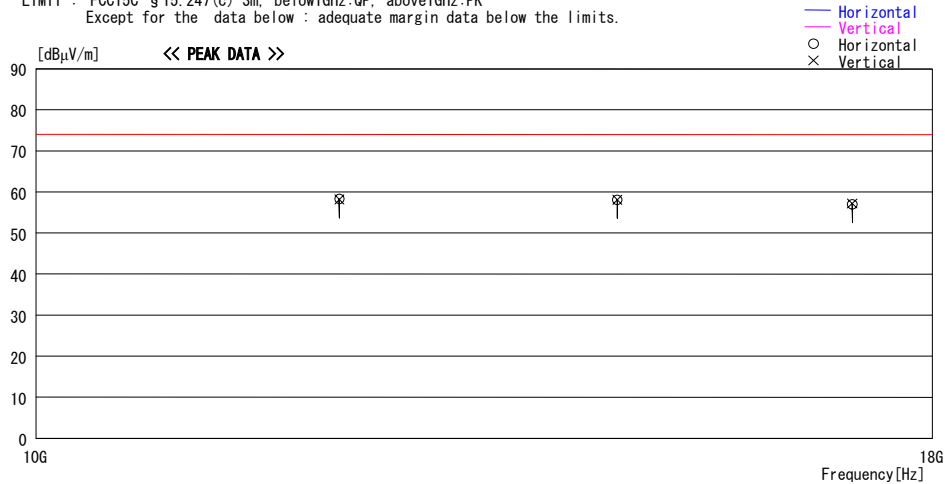
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12200.000	44.2	41.4	8.0	35.3	58.3	74.0	15.7
2	14640.000	44.0	41.4	8.0	35.3	58.1	74.0	15.9
3	17080.000	42.9	41.4	8.0	35.3	57.0	74.0	17.0
----- Vertical -----								
4	12200.000	44.1	41.4	8.0	35.3	58.2	74.0	15.9
5	14640.000	44.0	41.4	8.0	35.3	58.1	74.0	15.9
6	17080.000	43.1	41.4	8.0	35.3	57.2	74.0	16.9

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

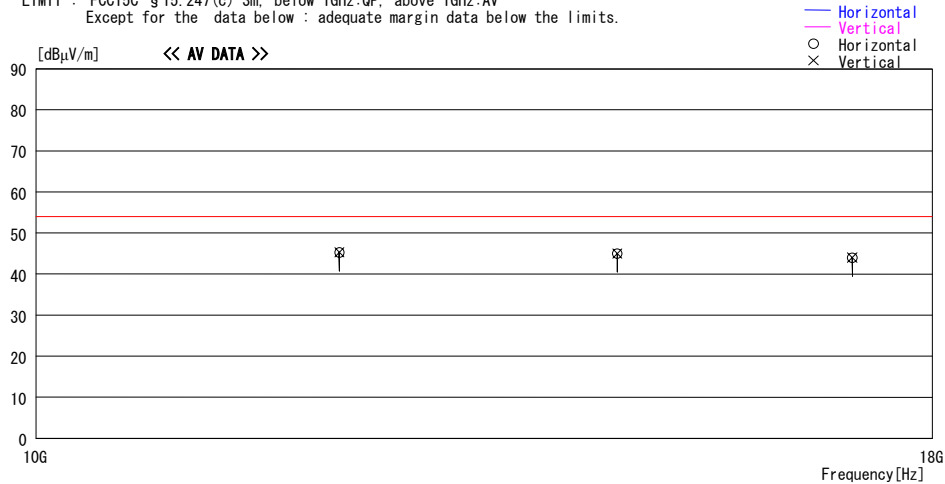
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Y Axis (MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12200.000	31.2	41.4	8.0	35.3	45.3	54.0	8.7
2	14640.000	30.9	41.4	8.0	35.3	45.0	54.0	9.0
3	17080.000	29.9	41.4	8.0	35.3	44.0	54.0	10.0
----- Vertical -----								
4	12200.000	31.2	41.4	8.0	35.3	45.3	54.0	8.7
5	14640.000	30.9	41.4	8.0	35.3	45.0	54.0	9.0
6	17080.000	29.9	41.4	8.0	35.3	44.0	54.0	10.0

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

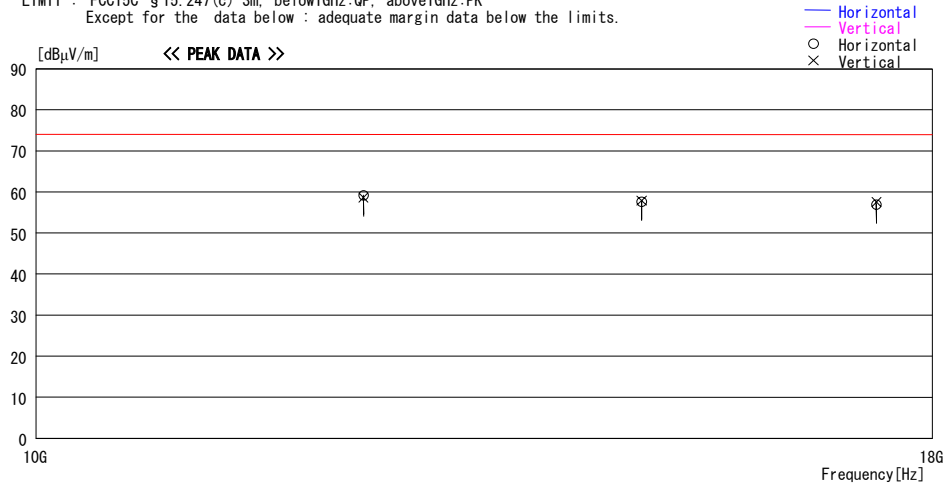
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Z Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12395.000	45.1	41.4	8.0	35.3	59.2	74.0	14.8
2	14874.000	43.5	41.4	8.0	35.3	57.6	74.0	16.4
3	17353.000	42.8	41.4	8.0	35.3	56.9	74.0	17.1
----- Vertical -----								
4	12395.000	44.5	41.4	8.0	35.3	58.6	74.0	15.4
5	14874.000	43.8	41.4	8.0	35.3	57.9	74.0	16.1
6	17353.000	43.4	41.4	8.0	35.3	57.5	74.0	16.5

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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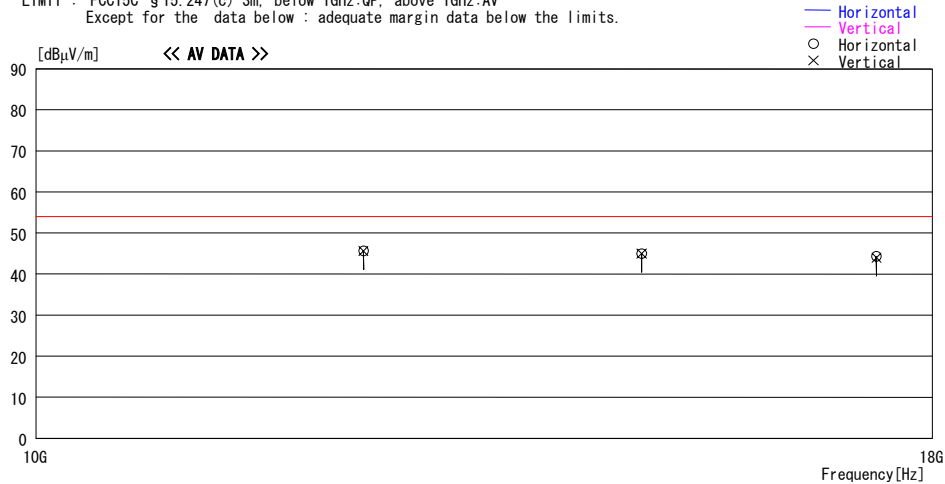
MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Z Axis Ver:Y Axis (MAX)

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

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$ CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

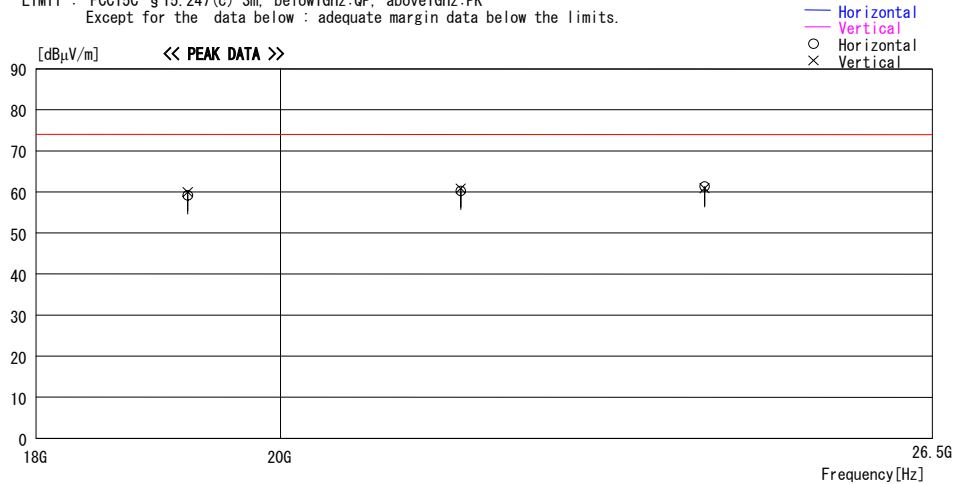
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19216.000	43.7	42.1	8.3	34.9	59.2	74.0	14.8
2	21618.000	44.6	40.8	10.2	35.4	60.2	74.0	13.8
3	24020.000	45.2	41.0	11.0	35.8	61.4	74.0	12.7
----- Vertical -----								
4	19216.000	44.4	42.1	8.3	34.9	59.9	74.0	14.1
5	21618.000	45.3	40.8	10.2	35.4	60.9	74.0	13.2
6	24020.000	44.7	41.0	11.0	35.8	60.9	74.0	13.1

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

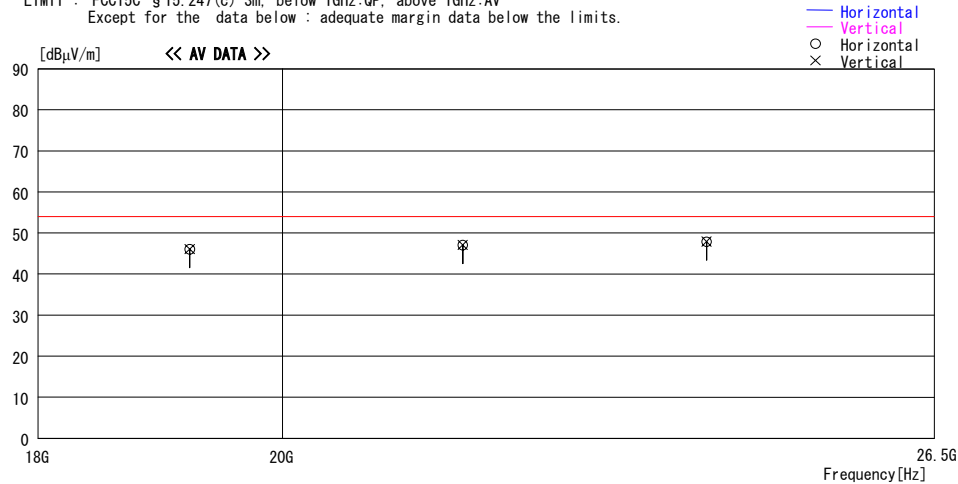
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Y Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19216.000	30.5	42.1	8.3	34.9	46.0	54.0	8.0
2	21618.000	31.5	40.8	10.2	35.4	47.1	54.0	6.9
3	24020.000	31.7	41.0	11.0	35.8	47.9	54.0	6.1
----- Vertical -----								
4	19216.000	30.6	42.1	8.3	34.9	46.1	54.0	7.9
5	21618.000	31.5	40.8	10.2	35.4	47.1	54.0	6.9
6	24020.000	31.7	41.0	11.0	35.8	47.9	54.0	6.1

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

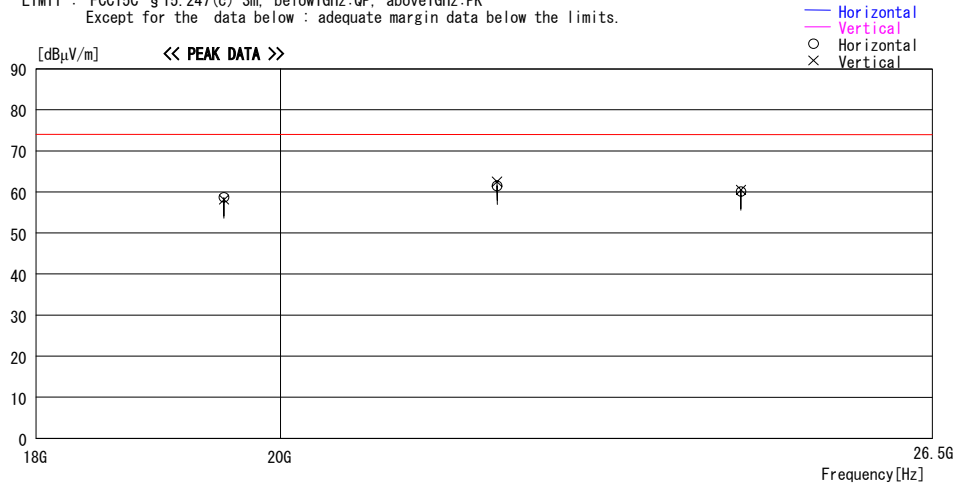
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

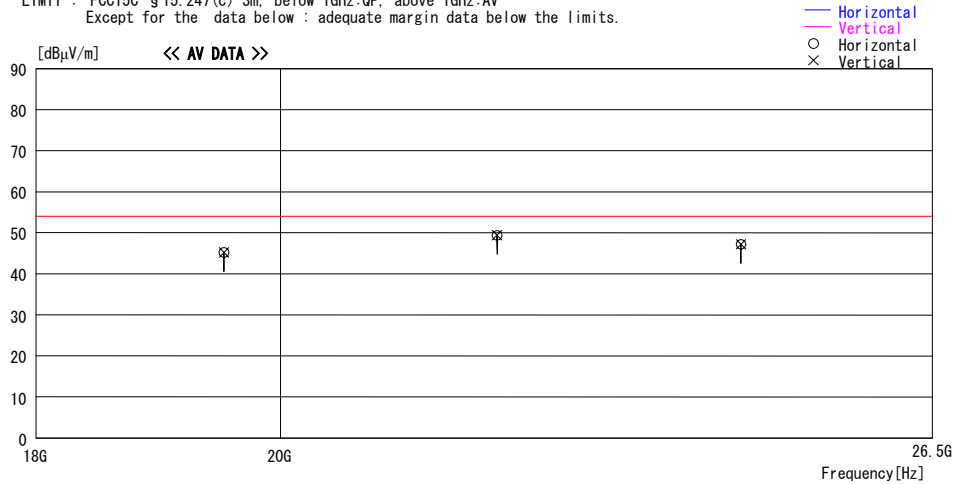
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Y Axis(MAX)

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



*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

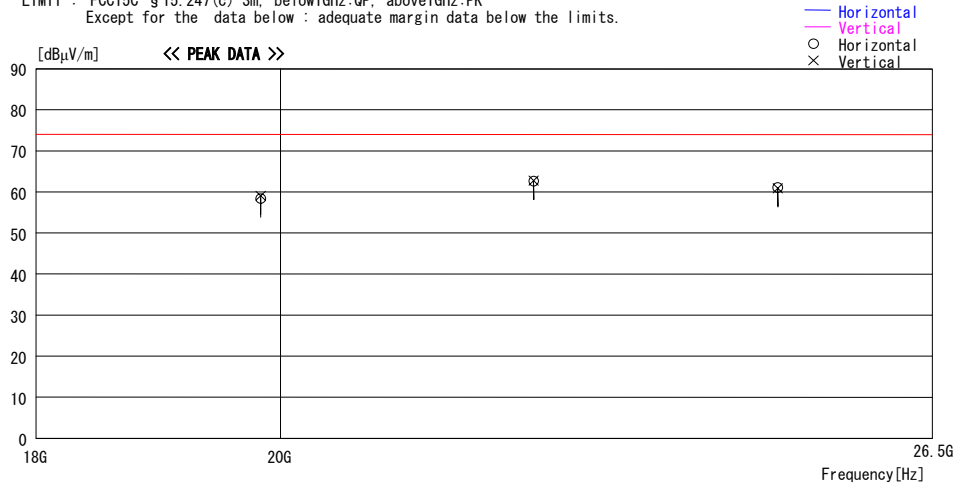
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Z Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

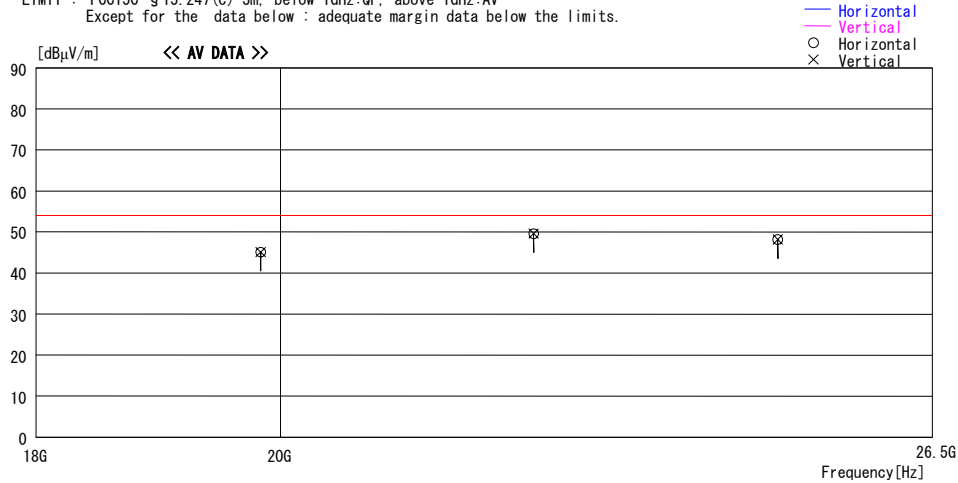
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Z Axis Ver:Y Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19832.000	30.3	41.2	8.9	35.3	45.1	54.0	8.9
2	22311.000	32.8	41.3	10.6	35.1	49.6	54.0	4.4
3	24790.000	32.4	41.2	11.3	36.7	48.2	54.0	5.8
----- Vertical -----								
4	19832.000	30.3	41.2	8.9	35.3	45.1	54.0	8.9
5	22311.000	32.8	41.3	10.6	35.1	49.6	54.0	4.4
6	24790.000	32.4	41.2	11.3	36.7	48.2	54.0	5.9

- *1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.
*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

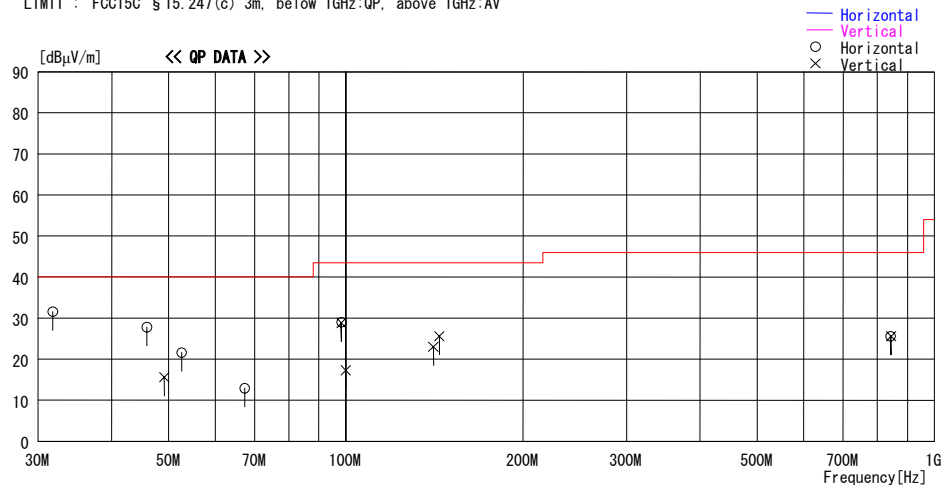
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/09 00:56:17Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT	LIMIT	MARGIN	ANTENNA	TABLE
				[dB]	[dB]	[dBμV/m]	[dBμV/m]	[dB]	[cm]	[DEG]
----- Horizontal -----										
1	31.748	30.6	17.9	6.4	23.3	31.6	40.0	8.4	112	360
2	45.885	33.0	11.4	6.6	23.2	27.8	40.0	12.2	111	360
3	52.570	28.3	9.7	6.8	23.2	21.6	40.0	18.4	118	360
4	67.320	22.0	7.1	6.9	23.1	12.9	40.0	27.1	225	0
5	98.304	35.0	9.8	7.2	23.0	29.0	43.5	14.5	115	360
6	842.465	16.0	21.5	10.6	22.5	25.6	46.0	20.4	100	0
----- Vertical -----										
7	49.152	21.6	10.5	6.7	23.2	15.6	40.0	24.4	100	0
8	98.304	34.8	9.8	7.2	23.0	28.8	43.5	14.7	208	360
9	100.003	22.9	10.2	7.2	23.0	17.3	43.5	26.2	100	0
10	140.890	24.4	14.1	7.5	23.0	23.0	43.5	20.5	265	360
11	144.210	26.9	14.3	7.5	23.1	25.6	43.5	17.9	266	0
12	844.650	16.0	21.5	10.6	22.5	25.6	46.0	20.4	100	360

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

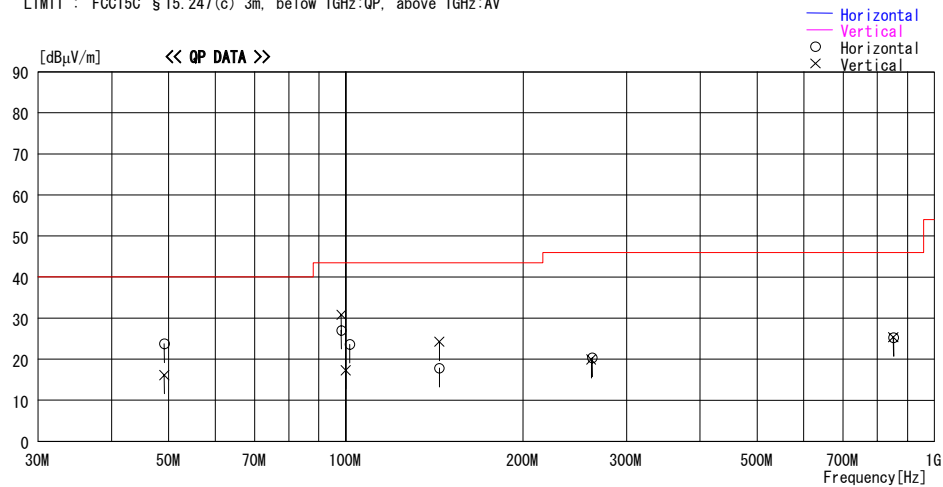
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/09 00:05:40Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	49.152	29.7	10.5	6.7	23.2	23.7	40.0	16.3	100	360
2	98.304	33.0	9.8	7.2	23.0	27.0	43.5	16.5	100	0
3	101.572	29.0	10.4	7.2	23.0	23.6	43.5	19.9	102	360
4	144.195	19.1	14.3	7.5	23.1	17.8	43.5	25.7	100	0
5	262.179	17.0	18.1	8.2	23.0	20.3	46.0	25.7	100	360
6	852.987	15.8	21.4	10.5	22.5	25.2	46.0	20.8	100	360
----- Vertical -----										
7	49.153	22.1	10.5	6.7	23.2	16.1	40.0	23.9	100	-1
8	98.305	36.8	9.8	7.2	23.0	30.8	43.5	12.7	190	360
9	100.003	22.9	10.2	7.2	23.0	17.3	43.5	26.2	118	0
10	144.215	25.5	14.3	7.5	23.1	24.2	43.5	19.3	278	360
11	261.123	16.7	18.0	8.2	23.0	19.9	46.0	26.1	100	0
12	852.289	15.9	21.4	10.5	22.5	25.3	46.0	20.7	100	0

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

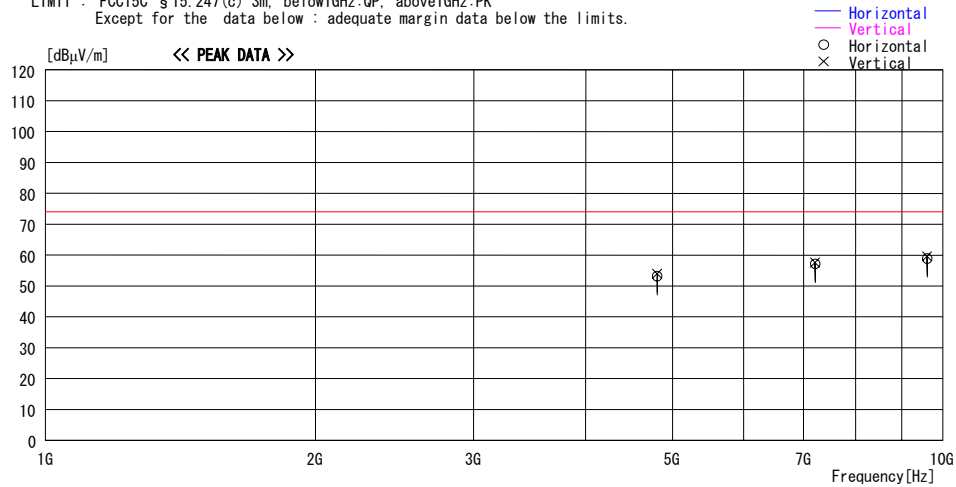
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/07/02 15:14:08

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp./ Humi. : 23deg. C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Y Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
Horizontal								
1	4803.496	43.7	35.3	10.3	36.1	53.2	74.0	20.8
2	7206.284	42.6	37.9	12.3	35.6	57.2	74.0	16.8
3	9607.446	43.2	37.6	14.4	36.3	58.9	74.0	15.1
Vertical								
4	4803.496	44.5	35.3	10.3	36.1	54.0	74.0	20.1
5	7206.284	43.0	37.9	12.3	35.6	57.6	74.0	16.4
6	9607.446	43.9	37.6	14.4	36.3	59.6	74.0	14.4

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

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DATA OF RADIATED EMISSION TEST

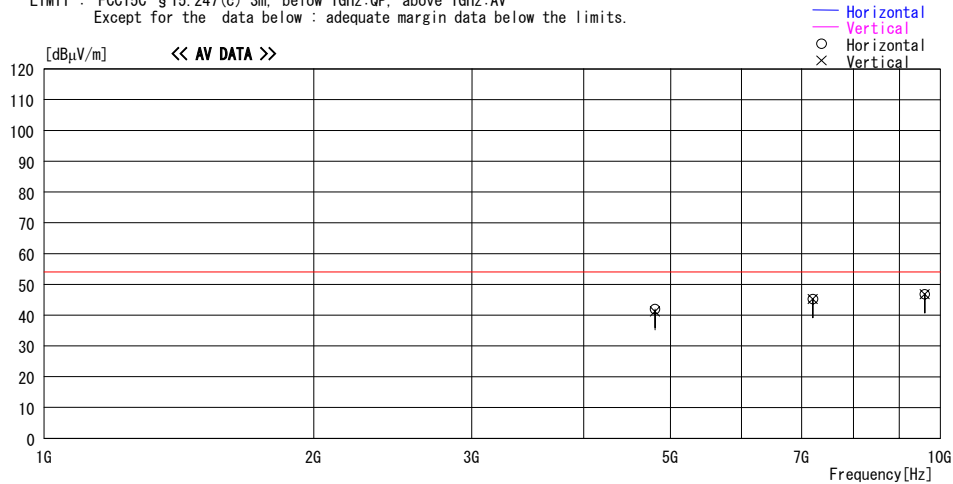
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/02 15:14:08

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp. / Humi. : 23deg. C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Y Axis (MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4803.496	32.5	35.3	10.3	36.1	42.0	54.0	12.0
2	7206.284	30.6	37.9	12.3	35.6	45.2	54.0	8.8
3	9607.446	31.1	37.6	14.4	36.3	46.8	54.0	7.2
----- Vertical -----								
4	4803.496	31.7	35.3	10.3	36.1	41.2	54.0	12.8
5	7206.284	30.6	37.9	12.3	35.6	45.2	54.0	8.8
6	9607.446	31.1	37.6	14.4	36.3	46.8	54.0	7.2

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

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/02 16:16:14

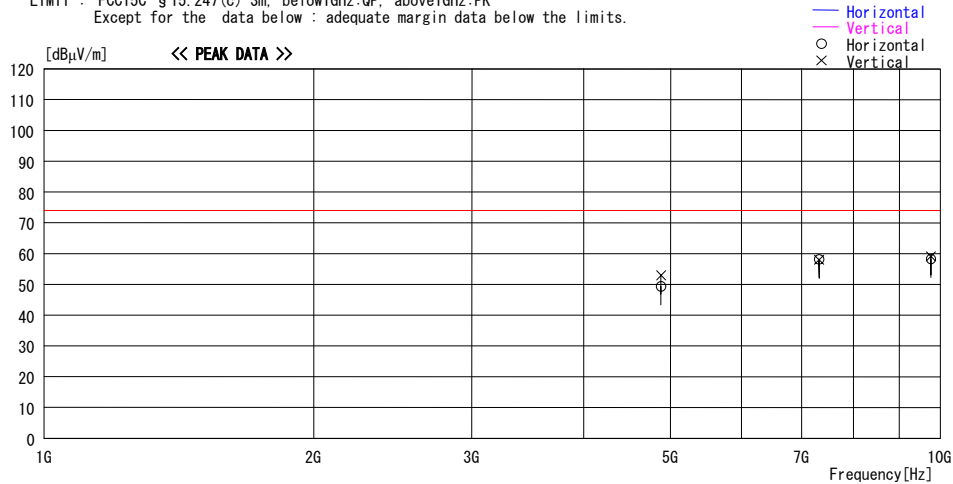
Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp./ Humi. : 23deg. C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4879.230	39.2	35.7	10.5	36.1	49.3	74.0	24.7
2	7320.136	43.2	38.2	12.5	35.7	58.2	74.0	15.8
3	9759.198	42.8	37.3	14.5	36.3	58.3	74.0	15.7
----- Vertical -----								
4	4879.230	42.8	35.7	10.5	36.1	52.9	74.0	21.1
5	7320.136	43.0	38.2	12.5	35.7	58.0	74.0	16.1
6	9760.198	43.6	37.3	14.5	36.3	59.1	74.0	14.9

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

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

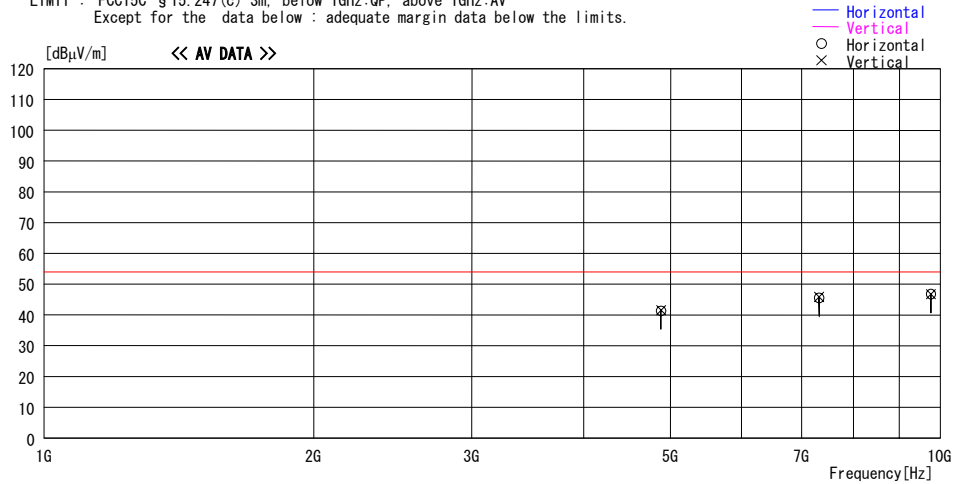
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/02 16:16:14

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp./ Humi. : 23deg. C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Z Axis (MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4879.230	31.2	35.7	10.5	36.1	41.3	54.0	12.7
2	7320.136	30.5	38.2	12.5	35.7	45.5	54.0	8.5
3	9760.198	31.3	37.3	14.5	36.3	46.8	54.0	7.2
----- Vertical -----								
4	4879.230	31.4	35.7	10.5	36.1	41.5	54.0	12.5
5	7320.136	30.8	38.2	12.5	35.7	45.8	54.0	8.2
6	9760.198	31.2	37.3	14.5	36.3	46.7	54.0	7.3

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

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

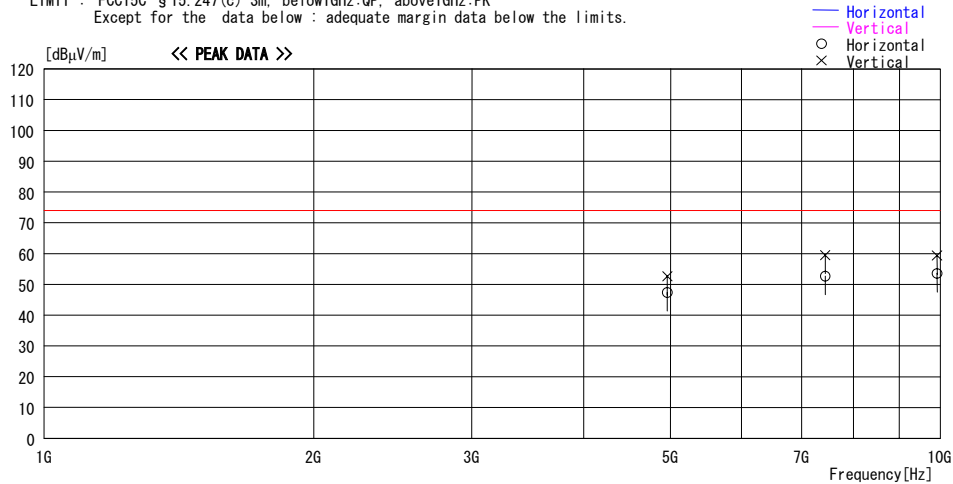
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/02 12:05:27

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp./ Humi. : 23deg. C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor: X axis Ver:Y Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4958.072	36.9	36.1	10.5	36.1	47.4	74.0	26.6
2	7437.895	37.4	38.5	12.5	35.7	52.7	74.0	21.3
3	9917.855	38.2	37.0	14.6	36.3	53.5	74.0	20.5
----- Vertical -----								
4	4958.072	42.1	36.1	10.5	36.1	52.6	74.0	21.4
5	7437.895	44.1	38.5	12.5	35.7	59.4	74.0	14.6
6	9917.855	44.0	37.0	14.6	36.3	59.3	74.0	14.7

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

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

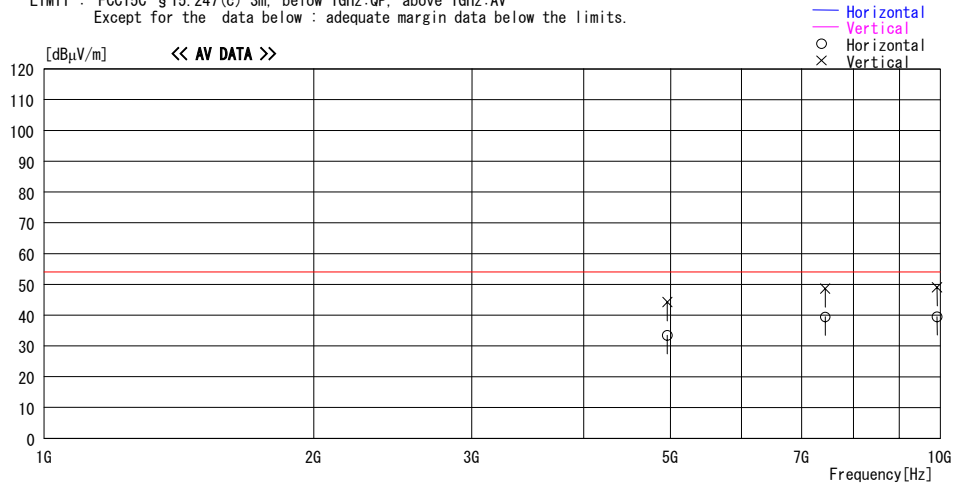
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/02 12:05:27

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp./Humi. : 23deg.C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor: X axis Ver:Y Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4958.072	22.9	36.1	10.5	36.1	33.4	54.0	20.6
2	7437.895	24.1	38.5	12.5	35.7	39.4	54.0	14.6
3	9917.855	24.2	37.0	14.6	36.3	39.5	54.0	14.5
----- Vertical -----								
4	4958.072	33.8	36.1	10.5	36.1	44.3	54.0	9.8
5	7437.895	33.3	38.5	12.5	35.7	48.6	54.0	5.4
6	9917.855	33.7	37.0	14.6	36.3	49.0	54.0	5.0

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

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[Transmitting mode by single device]

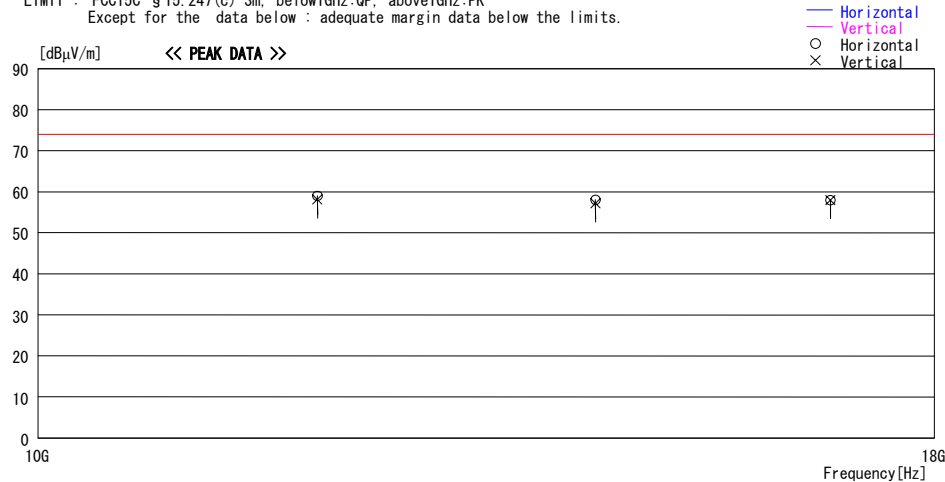
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Y Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	12010.000	44.9	41.4	8.0	35.3	59.0	74.0	15.0
2	14412.000	43.9	41.4	8.0	35.3	58.0	74.0	16.0
3	16814.000	43.9	41.4	8.0	35.3	58.0	74.0	16.0
----- Vertical -----								
4	12010.000	44.0	41.4	8.0	35.3	58.1	74.0	15.9
5	14412.000	43.1	41.4	8.0	35.3	57.2	74.0	16.8
6	16814.000	43.9	41.4	8.0	35.3	58.0	74.0	16.0

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$ CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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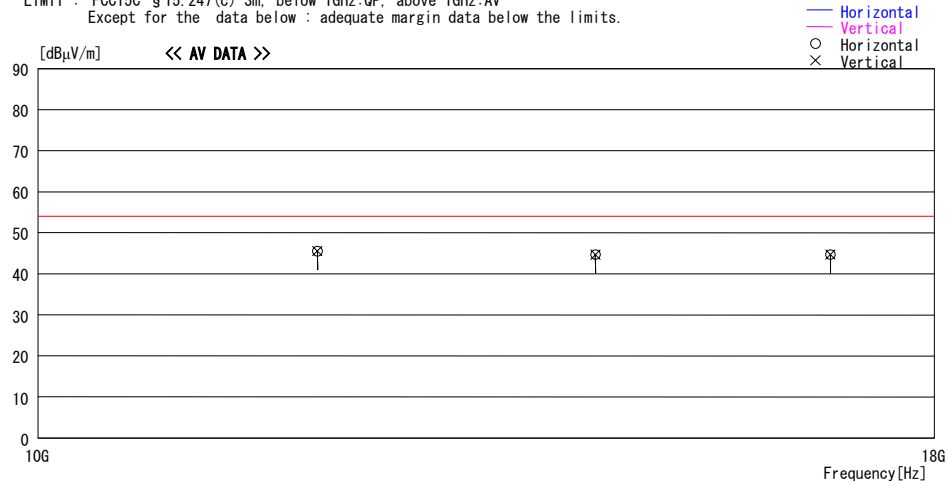
MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Y Axis(MAX)

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

No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12010.000	31.5	41.4	8.0	35.3	45.6	54.0	8.4
2	14412.000	30.6	41.4	8.0	35.3	44.7	54.0	9.3
3	16814.000	30.6	41.4	8.0	35.3	44.7	54.0	9.3
----- Vertical -----								
4	12010.000	31.5	41.4	8.0	35.3	45.6	54.0	8.4
5	14412.000	30.6	41.4	8.0	35.3	44.7	54.0	9.3
6	16814.000	30.6	41.4	8.0	35.3	44.7	54.0	9.3

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN. -Dfac) - AMP. GAIN

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

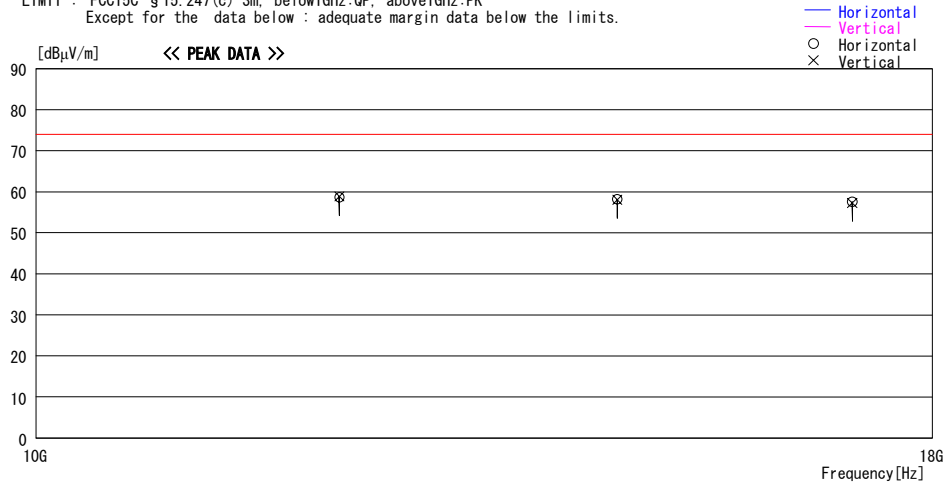
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12200.000	44.6	41.4	8.0	35.3	58.7	74.0	15.3
2	14640.000	44.1	41.4	8.0	35.3	58.2	74.0	15.8
3	17080.000	43.5	41.4	8.0	35.3	57.6	74.0	16.4
----- Vertical -----								
4	12200.000	44.8	41.4	8.0	35.3	58.9	74.0	15.2
5	14640.000	43.9	41.4	8.0	35.3	58.0	74.0	16.0
6	17080.000	43.2	41.4	8.0	35.3	57.3	74.0	16.7

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

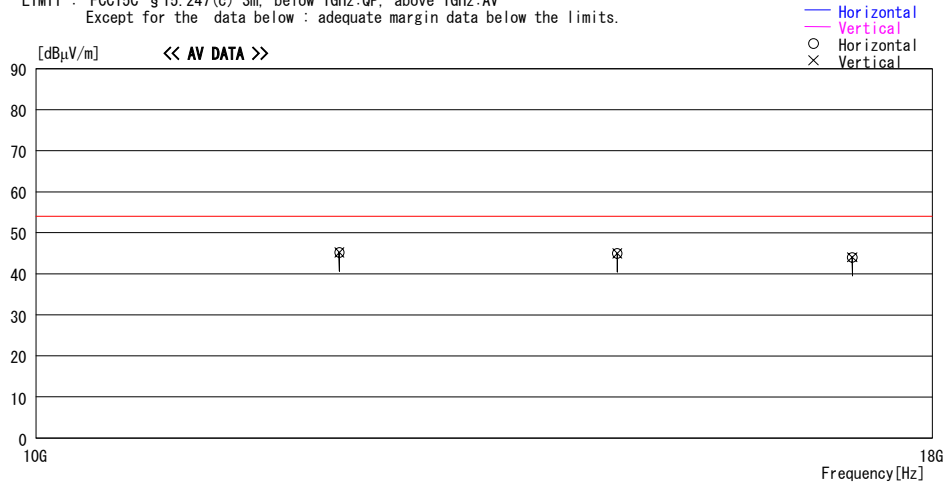
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Z Axis(MAX)

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



*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

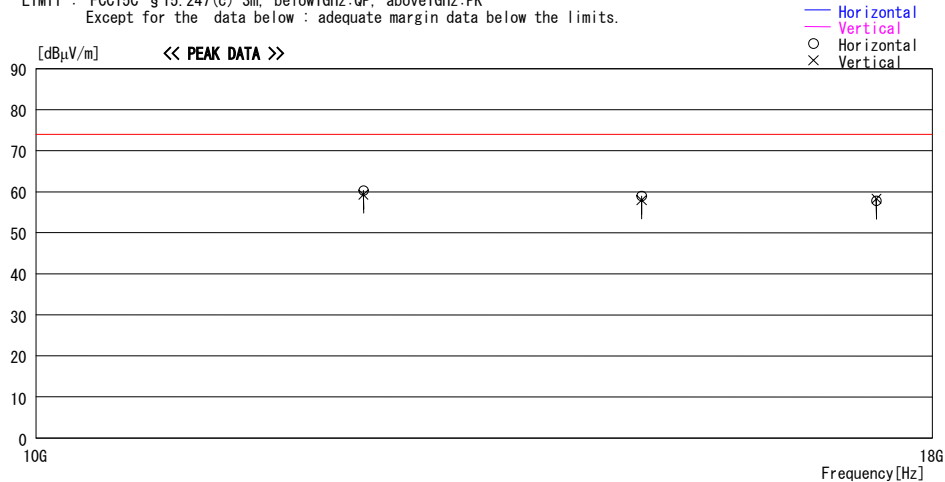
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:X Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12395.000	46.2	41.4	8.0	35.3	60.3	74.0	13.7
2	14874.000	44.9	41.4	8.0	35.3	59.0	74.0	15.0
3	17353.000	43.7	41.4	8.0	35.3	57.8	74.0	16.2
----- Vertical -----								
4	12395.000	45.2	41.4	8.0	35.3	59.3	74.0	14.7
5	14874.000	43.8	41.4	8.0	35.3	57.9	74.0	16.1
6	17353.000	44.2	41.4	8.0	35.3	58.3	74.0	15.7

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

CHART:WITHOUT FACTOR ANT TYPE : 30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN Page:

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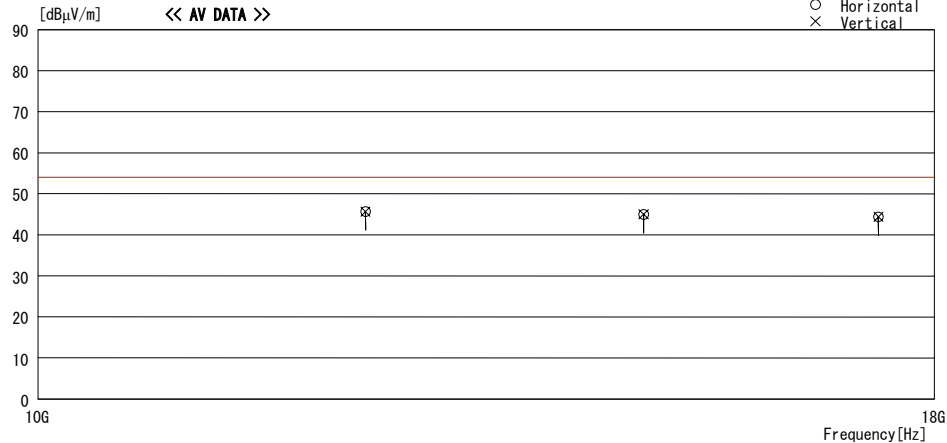
MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:X Axis Ver:Y Axis(MAX)

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

No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12395.000	31.6	41.4	8.0	35.3	45.7	54.0	8.3
2	14874.000	30.9	41.4	8.0	35.3	45.0	54.0	9.0
3	17353.000	30.3	41.4	8.0	35.3	44.4	54.0	9.6
----- Vertical -----								
4	12395.000	31.6	41.4	8.0	35.3	45.7	54.0	8.3
5	14874.000	30.9	41.4	8.0	35.3	45.0	54.0	9.0
6	17353.000	30.3	41.4	8.0	35.3	44.4	54.0	9.6

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

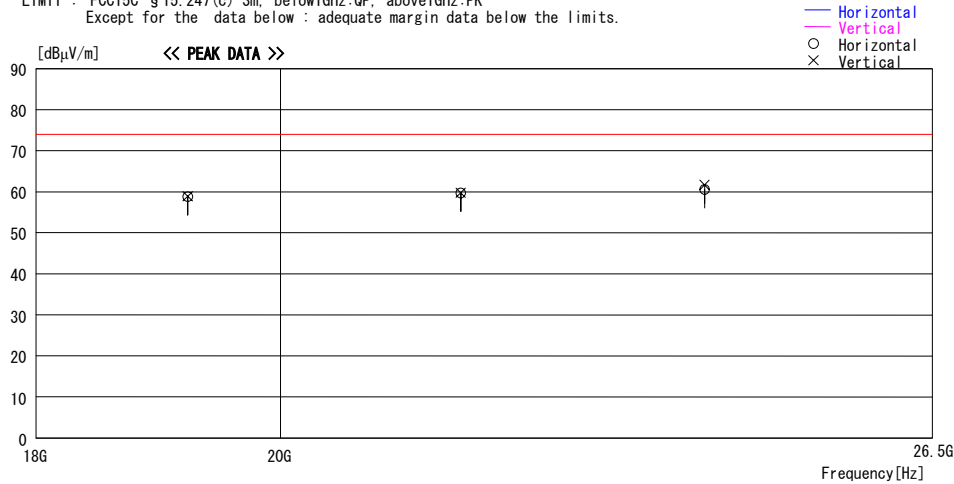
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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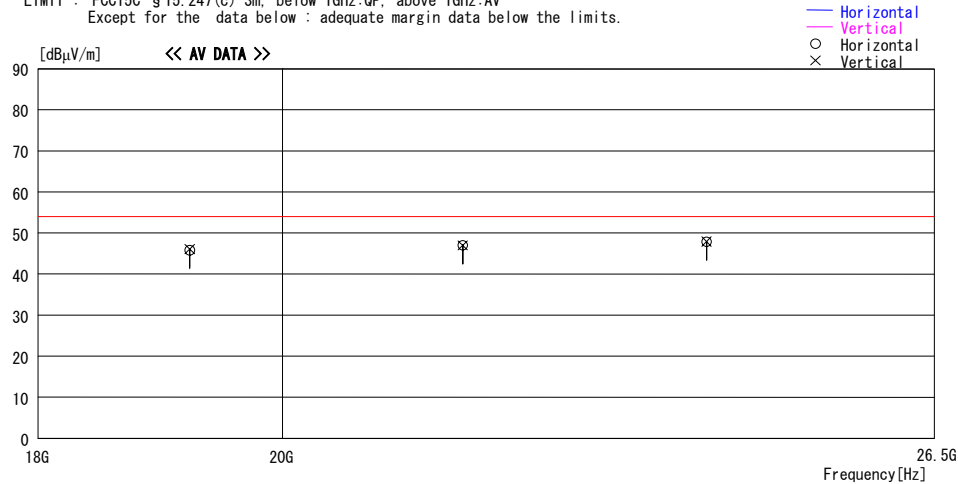
MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Y Axis (MAX)

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

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

CHART: WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

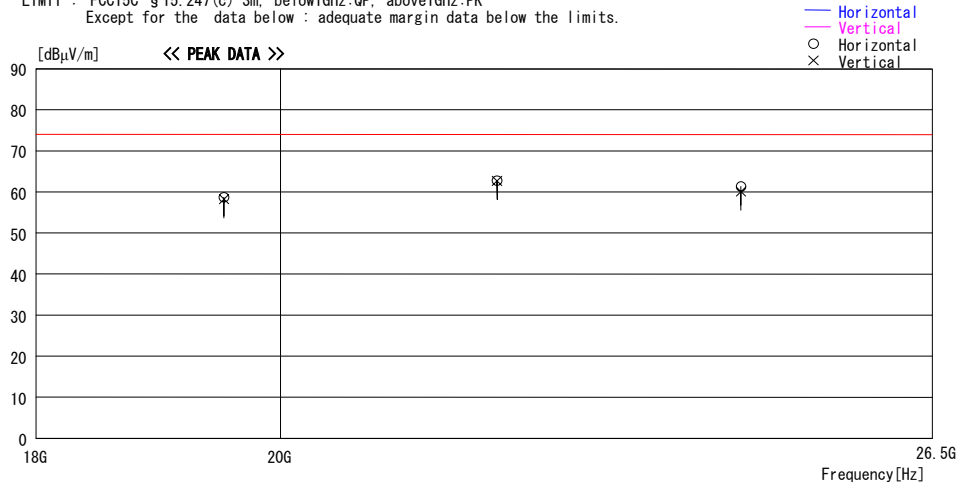
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19520.000	43.9	41.2	8.6	35.0	58.7	74.0	15.3
2	21960.000	46.3	41.1	10.4	35.0	62.8	74.0	11.2
3	24400.000	45.5	41.2	11.2	36.6	61.3	74.0	12.7
----- Vertical -----								
4	19520.000	43.4	41.2	8.6	35.0	58.2	74.0	15.8
5	21960.000	46.2	41.1	10.4	35.0	62.7	74.0	11.3
6	24400.000	44.3	41.2	11.2	36.6	60.1	74.0	13.9

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

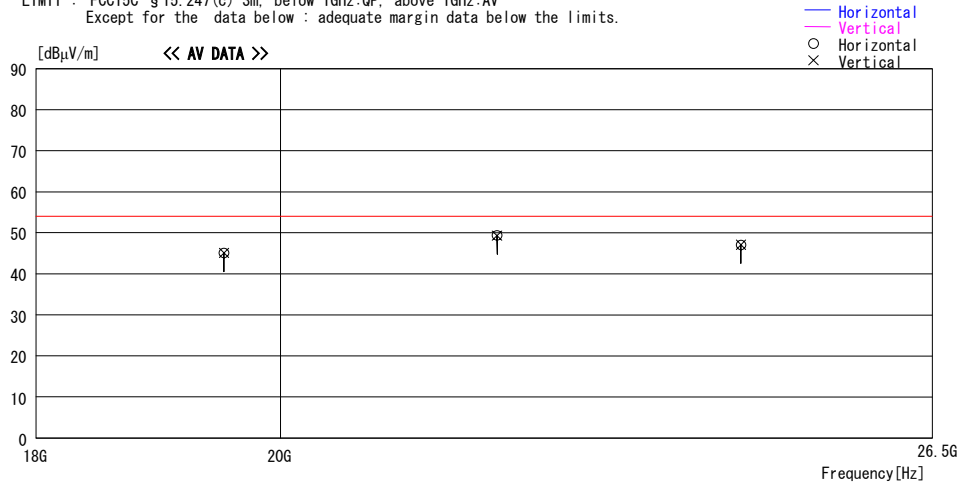
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2440MHz, Hor:Z Axis Ver:Z Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19520.000	30.3	41.2	8.6	35.0	45.1	54.0	8.9
2	21960.000	32.9	41.1	10.4	35.0	49.4	54.0	4.6
3	24400.000	31.3	41.2	11.2	36.6	47.1	54.0	6.9
----- Vertical -----								
4	19520.000	30.3	41.2	8.6	35.0	45.1	54.0	8.9
5	21960.000	32.8	41.1	10.4	35.0	49.3	54.0	4.7
6	24400.000	31.3	41.2	11.2	36.6	47.1	54.0	6.9

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

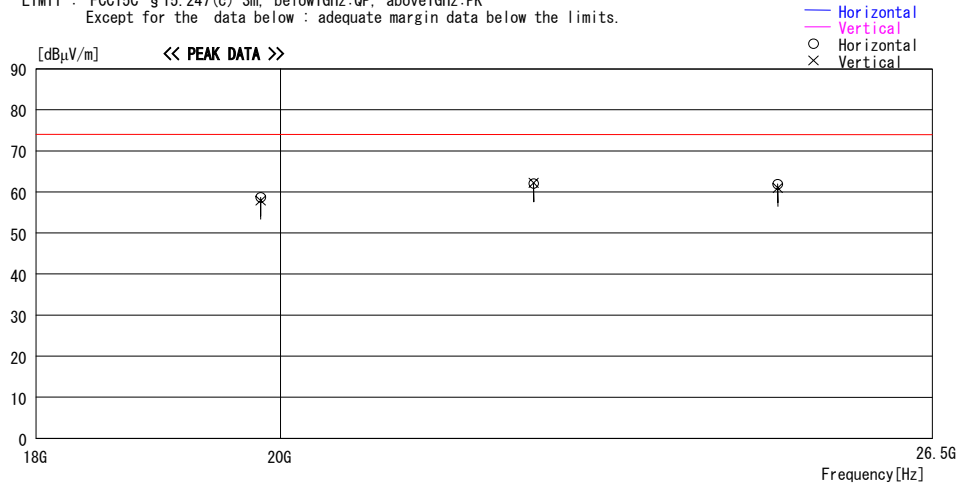
Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:X Axis Ver:Y Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN. -Dfac) - AMP. GAIN

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

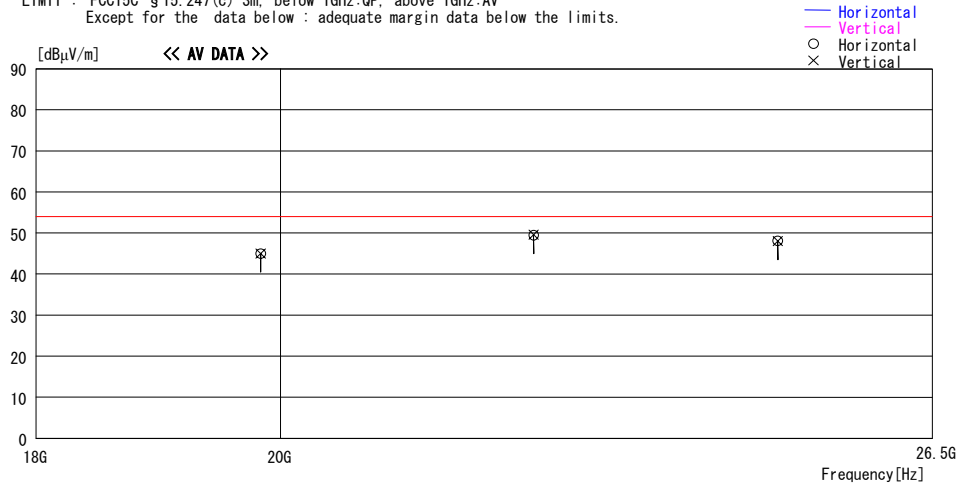
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:X Axis Ver:Y Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19832.000	30.2	41.2	8.9	35.3	45.0	54.0	9.0
2	22311.000	32.7	41.3	10.6	35.1	49.5	54.0	4.5
3	24790.000	32.3	41.2	11.3	36.7	48.1	54.0	5.9
----- Vertical -----								
4	19832.000	30.2	41.2	8.9	35.3	45.0	54.0	9.0
5	22311.000	32.8	41.3	10.6	35.1	49.6	54.0	4.4
6	24790.000	32.2	41.2	11.3	36.7	48.0	54.0	6.0

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN. -Dfac) - AMP. GAIN

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MF060b(10.04.03)

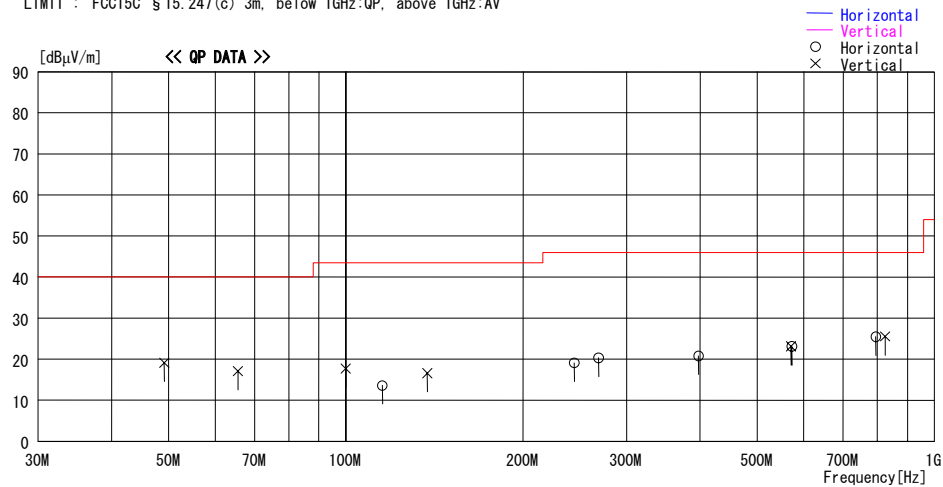
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/08 20:49:15Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	115.363	16.8	12.4	7.3	22.9	13.6	43.5	29.9	100	0
2	244.416	16.7	17.3	8.1	23.0	19.1	46.0	26.9	100	360
3	268.674	16.5	18.5	8.2	22.9	20.3	46.0	25.7	100	0
4	397.304	16.6	18.2	8.8	22.8	20.8	46.0	25.2	100	360
5	572.992	17.0	19.2	9.6	22.7	23.1	46.0	22.9	100	0
6	794.910	16.0	21.5	10.5	22.6	25.4	46.0	20.6	100	360
----- Vertical -----										
7	49.153	25.1	10.5	6.7	23.2	19.1	40.0	20.9	100	360
8	65.565	25.9	7.4	6.9	23.1	17.1	40.0	22.9	179	0
9	100.002	23.3	10.2	7.2	23.0	17.7	43.5	25.8	124	360
10	137.626	18.1	14.0	7.5	23.0	16.6	43.5	26.9	134	0
11	570.925	17.0	19.2	9.6	22.7	23.1	46.0	22.9	100	360
12	825.239	16.0	21.5	10.6	22.6	25.5	46.0	20.5	100	0

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

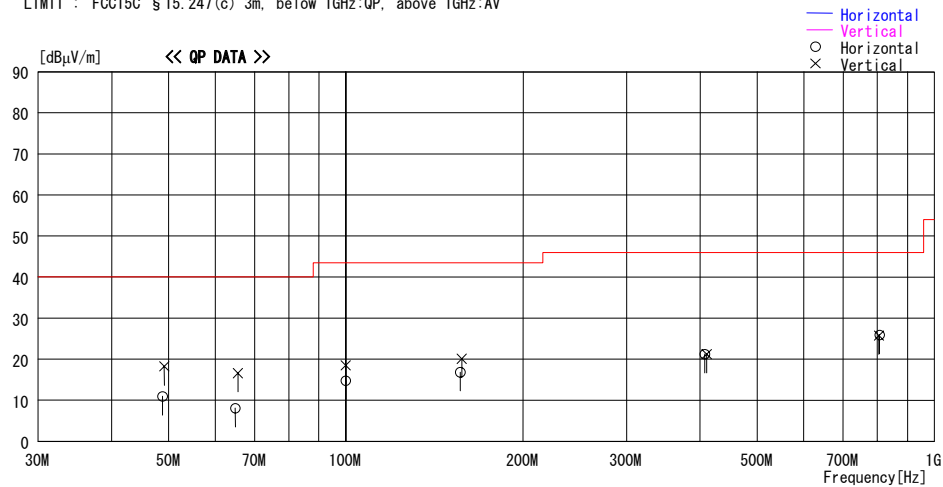
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/08 21:23:12Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2445MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	48.810	16.8	10.6	6.7	23.2	10.9	40.0	29.1	150	360
2	64.869	16.7	7.5	6.9	23.1	8.0	40.0	32.0	100	0
3	100.002	20.4	10.2	7.2	23.0	14.8	43.5	28.7	170	360
4	156.310	17.3	15.0	7.6	23.1	16.8	43.5	26.7	100	0
5	407.144	16.7	18.3	9.0	22.8	21.2	46.0	24.8	100	360
6	807.465	16.4	21.6	10.5	22.6	25.9	46.0	20.1	100	360
----- Vertical -----										
7	49.153	24.2	10.5	6.7	23.2	18.2	40.0	21.8	100	360
8	65.542	25.4	7.4	6.9	23.1	16.6	40.0	23.4	170	0
9	100.002	24.1	10.2	7.2	23.0	18.5	43.5	25.0	125	360
10	157.287	20.5	15.1	7.6	23.1	20.1	43.5	23.4	100	0
11	410.602	16.7	18.3	9.0	22.8	21.2	46.0	24.8	100	64
12	804.745	16.2	21.6	10.5	22.6	25.7	46.0	20.3	100	0

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

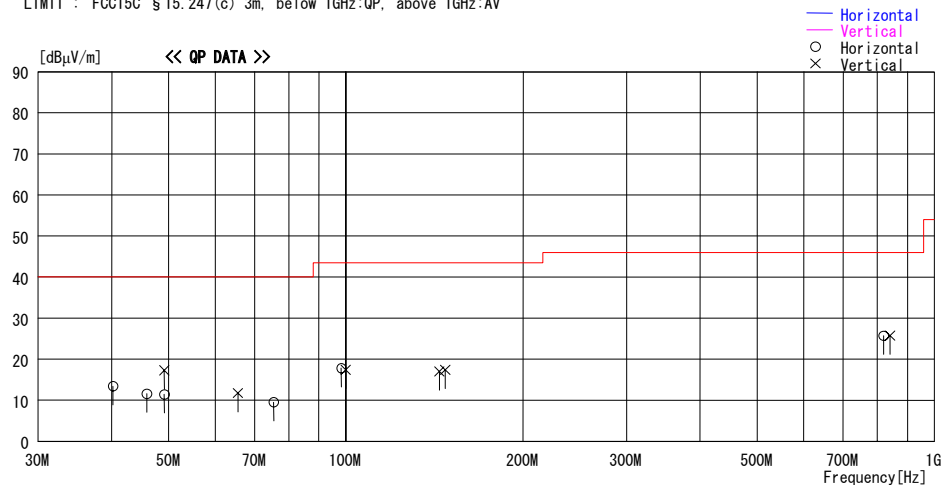
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/08 22:05:41Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	40.218	16.4	13.6	6.6	23.2	13.4	40.0	26.6	100	360
2	45.885	16.8	11.4	6.6	23.2	11.6	40.0	28.4	100	0
3	49.151	17.4	10.5	6.7	23.2	11.4	40.0	28.6	100	360
4	75.394	19.2	6.5	6.9	23.1	9.5	40.0	30.5	100	0
5	98.304	23.8	9.8	7.2	23.0	17.8	43.5	25.7	163	360
6	820.849	16.2	21.5	10.6	22.6	25.7	46.0	20.3	100	0
----- Vertical -----										
7	49.153	23.3	10.5	6.7	23.2	17.3	40.0	22.7	100	0
8	65.565	20.5	7.4	6.9	23.1	11.7	40.0	28.3	100	360
9	100.002	23.0	10.2	7.2	23.0	17.4	43.5	26.1	100	-1
10	144.210	18.3	14.3	7.5	23.1	17.0	43.5	26.5	100	360
11	147.457	18.5	14.5	7.5	23.1	17.4	43.5	26.1	100	0
12	841.147	16.1	21.5	10.6	22.5	25.7	46.0	20.3	100	0

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

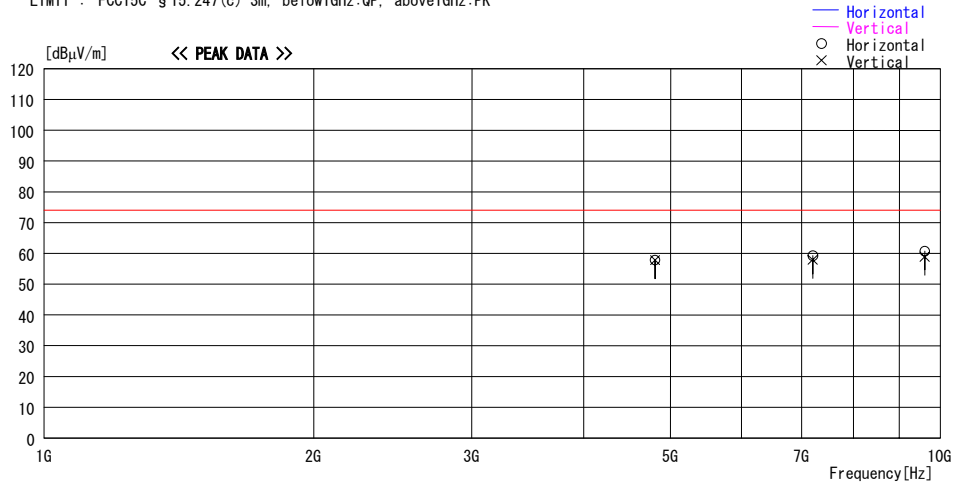
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:39:01

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4804.266	49.8	35.1	9.0	36.1	57.8	74.0	16.2
2	7206.264	46.7	37.6	10.6	35.6	59.3	74.0	14.7
3	9608.028	47.5	37.1	12.4	36.3	60.7	74.0	13.3
----- Vertical -----								
4	4804.266	49.8	35.1	9.0	36.1	57.8	74.0	16.2
5	7206.264	45.3	37.6	10.6	35.6	57.9	74.0	16.1
6	9608.028	45.7	37.1	12.4	36.3	58.9	74.0	15.1

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

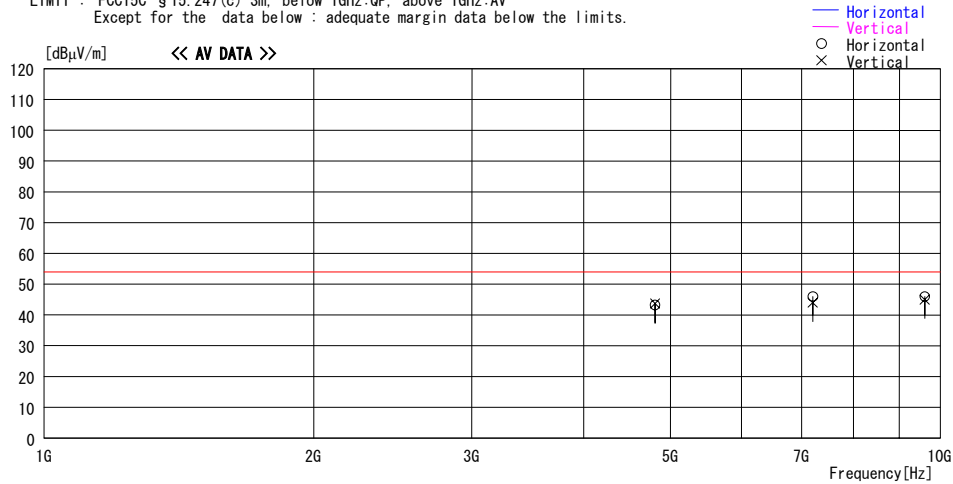
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:39:01

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis (MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4804.266	35.3	35.1	9.0	36.1	43.3	54.0	10.7
2	7206.264	33.4	37.6	10.6	35.6	46.0	54.0	8.0
3	9608.028	32.8	37.1	12.4	36.3	46.0	54.0	8.0
----- Vertical -----								
4	4804.266	35.7	35.1	9.0	36.1	43.7	54.0	10.3
5	7206.264	31.4	37.6	10.6	35.6	44.0	54.0	10.0
6	9608.028	31.8	37.1	12.4	36.3	45.0	54.0	9.0

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

Page:

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MF060b(10.04.03)

[Transmitting mode by single device]

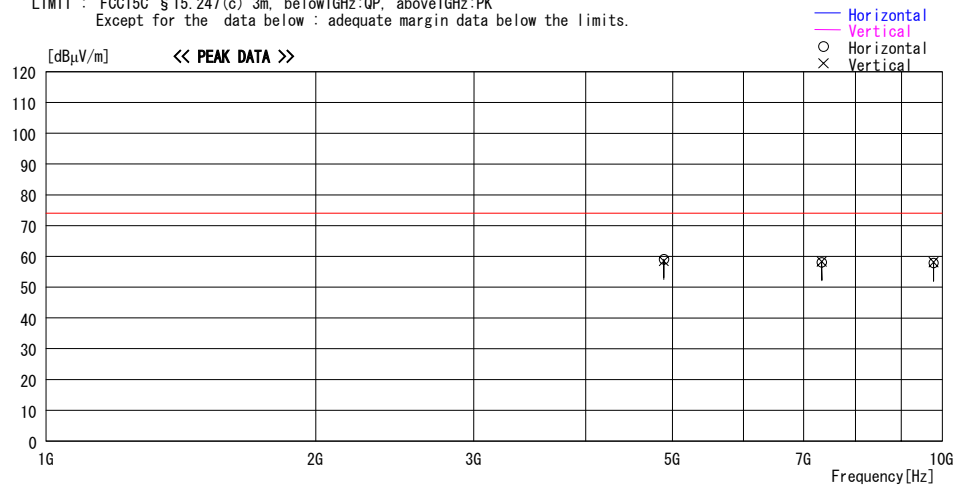
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2445MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	4890.083	50.7	35.5	9.0	36.1	59.1	74.0	14.9
2	7335.013	45.1	38.0	10.7	35.7	58.1	74.0	15.9
3	9780.007	44.6	37.0	12.5	36.3	57.8	74.0	16.2
----- Vertical -----								
4	4890.083	50.1	35.5	9.0	36.1	58.5	74.0	15.5
5	7335.013	45.3	38.0	10.7	35.7	58.3	74.0	15.7
6	9780.007	44.9	37.0	12.5	36.3	58.1	74.0	15.9

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

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

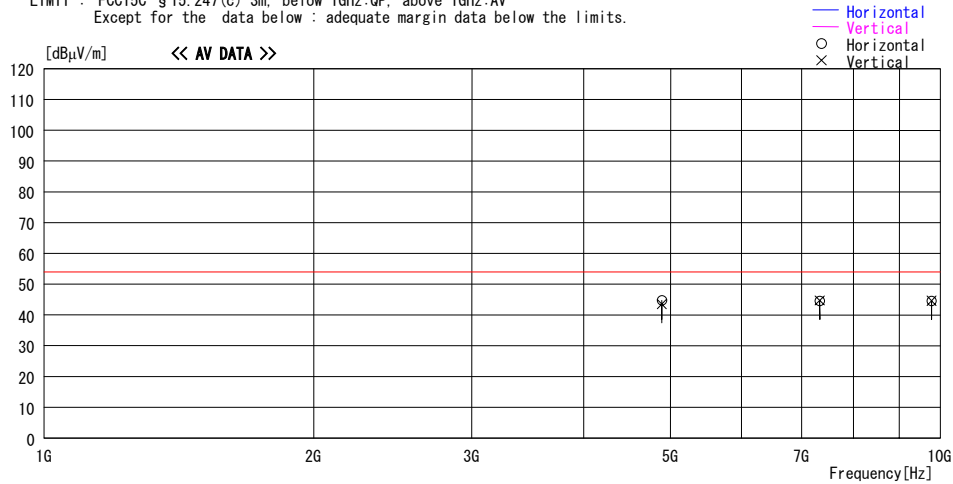
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2445MHz, Hor:Y Axis Ver:Z Axis (MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4890.083	36.3	35.5	9.0	36.1	44.7	54.0	9.3
2	7335.013	31.6	38.0	10.7	35.7	44.6	54.0	9.4
3	9780.007	31.4	37.0	12.5	36.3	44.6	54.0	9.4
----- Vertical -----								
4	4890.083	35.1	35.5	9.0	36.1	43.5	54.0	10.5
5	7335.013	31.7	38.0	10.7	35.7	44.7	54.0	9.3
6	9780.007	31.4	37.0	12.5	36.3	44.6	54.0	9.4

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

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

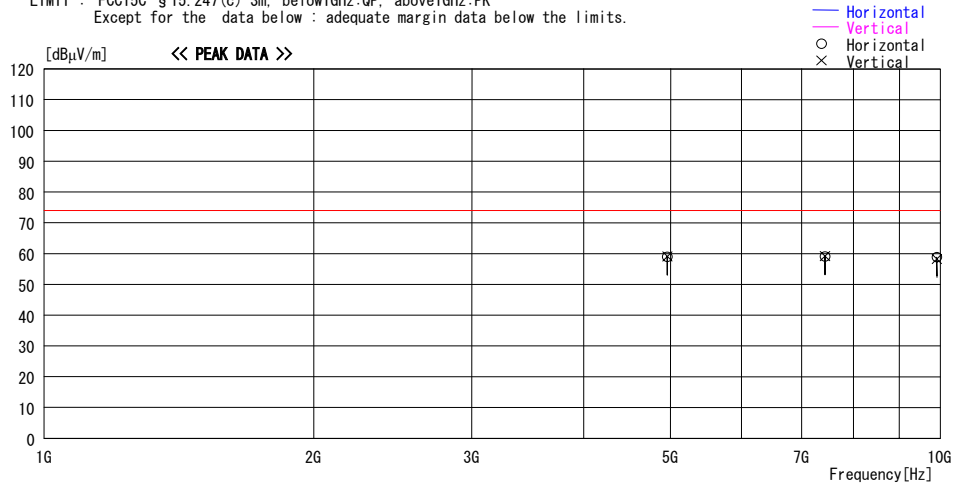
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 01:10:22

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4958.163	50.1	35.8	9.2	36.1	59.0	74.0	15.0
2	7436.903	45.8	38.2	10.8	35.7	59.1	74.0	14.9
3	9916.175	45.5	37.0	12.6	36.3	58.8	74.0	15.2
----- Vertical -----								
4	4958.163	50.2	35.8	9.2	36.1	59.1	74.0	14.9
5	7436.903	45.8	38.2	10.8	35.7	59.1	74.0	14.9
6	9916.175	45.0	37.0	12.6	36.3	58.3	74.0	15.7

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

Page:

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

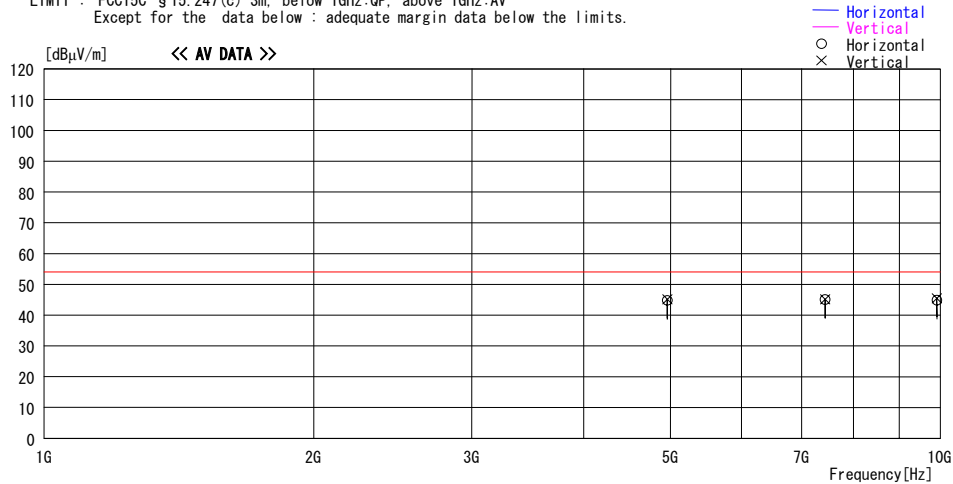
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 01:10:22

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis (MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4958.163	35.9	35.8	9.2	36.1	44.8	54.0	9.2
2	7436.903	31.8	38.2	10.8	35.7	45.1	54.0	8.9
3	9916.175	31.5	37.0	12.6	36.3	44.8	54.0	9.2
----- Vertical -----								
4	4958.163	36.2	35.8	9.2	36.1	45.1	54.0	8.9
5	7437.903	31.8	38.2	10.8	35.7	45.1	54.0	8.9
6	9916.175	32.2	37.0	12.6	36.3	45.5	54.0	8.5

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

Page:

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

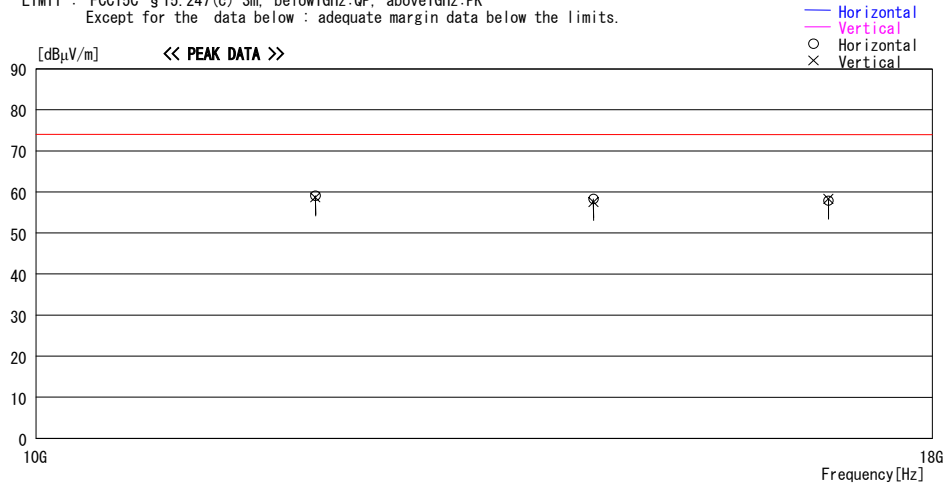
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

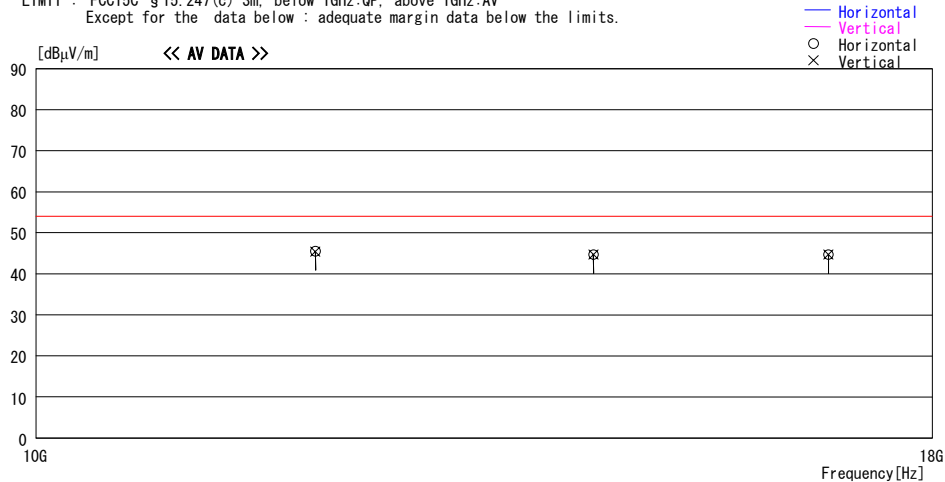
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12010.000	31.5	41.4	8.0	35.3	45.6	54.0	8.4
2	14412.000	30.6	41.4	8.0	35.3	44.7	54.0	9.3
3	16814.000	30.6	41.4	8.0	35.3	44.7	54.0	9.3
----- Vertical -----								
4	12010.000	31.3	41.4	8.0	35.3	45.4	54.0	8.6
5	14412.000	30.6	41.4	8.0	35.3	44.7	54.0	9.3
6	16814.000	30.6	41.4	8.0	35.3	44.7	54.0	9.3

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

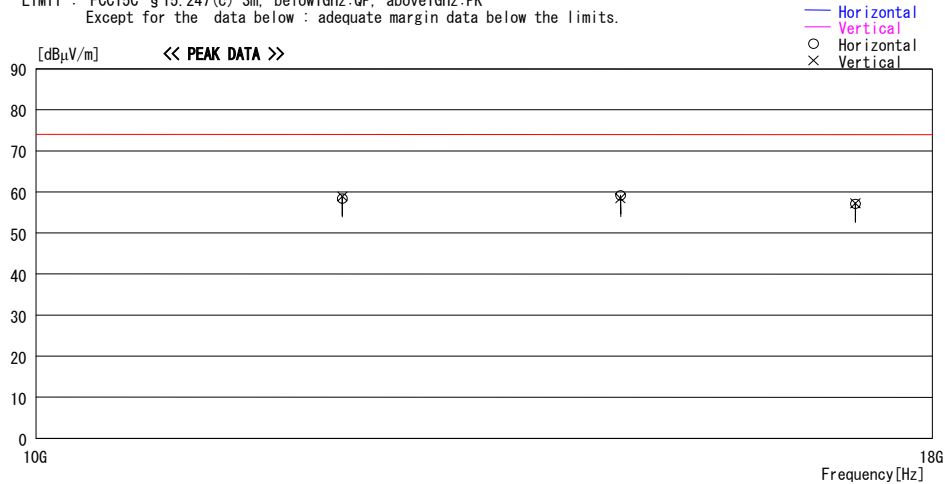
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2445MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12225.000	44.3	41.4	8.0	35.3	58.4	74.0	15.6
2	14670.000	45.1	41.4	8.0	35.3	59.2	74.0	14.8
3	17115.000	43.0	41.4	8.0	35.3	57.1	74.0	16.9
----- Vertical -----								
4	12225.000	44.8	41.4	8.0	35.3	58.9	74.0	15.1
5	14670.000	44.4	41.4	8.0	35.3	58.5	74.0	15.5
6	17115.000	43.1	41.4	8.0	35.3	57.2	74.0	16.8

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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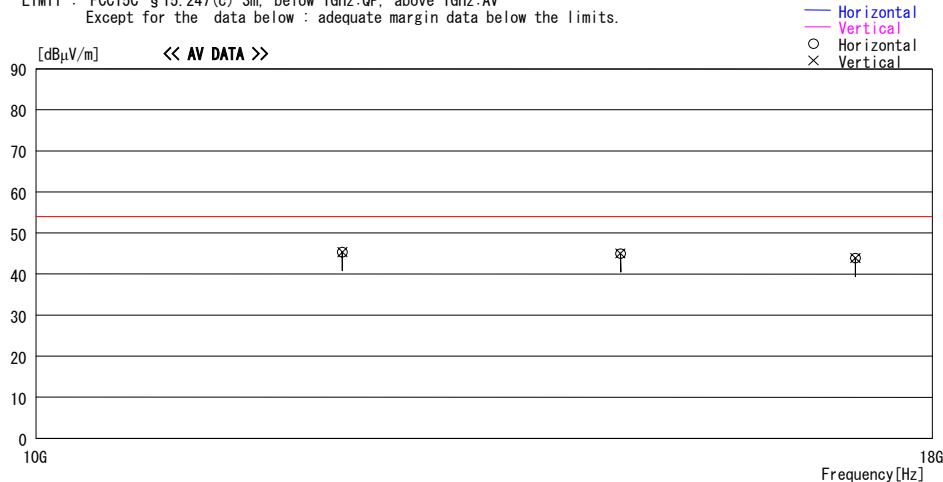
MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2445MHz, Hor:Y Axis Ver:Z Axis(MAX)

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

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

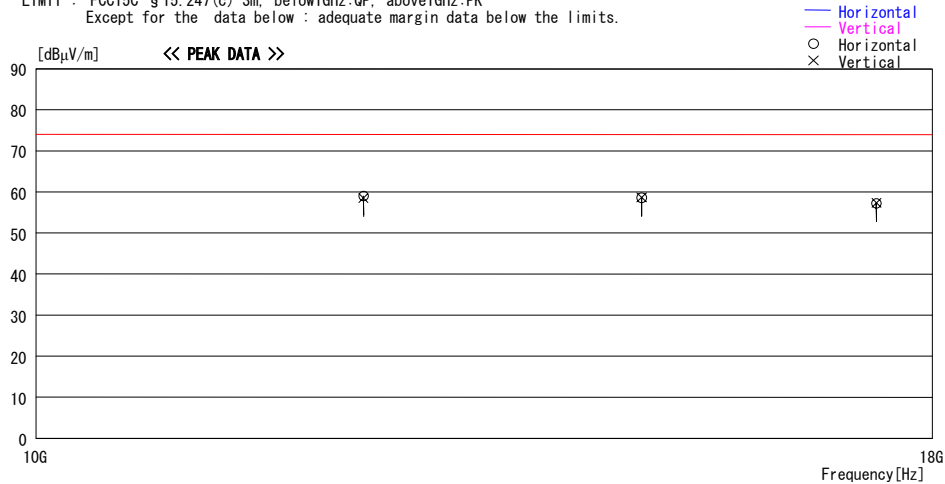
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12395.000	44.9	41.4	8.0	35.3	59.0	74.0	15.0
2	14874.000	44.5	41.4	8.0	35.3	58.6	74.0	15.4
3	17353.000	43.1	41.4	8.0	35.3	57.2	74.0	16.8
----- Vertical -----								
4	12395.000	44.4	41.4	8.0	35.3	58.5	74.0	15.5
5	14874.000	44.6	41.4	8.0	35.3	58.7	74.0	15.3
6	17353.000	43.2	41.4	8.0	35.3	57.3	74.0	16.7

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

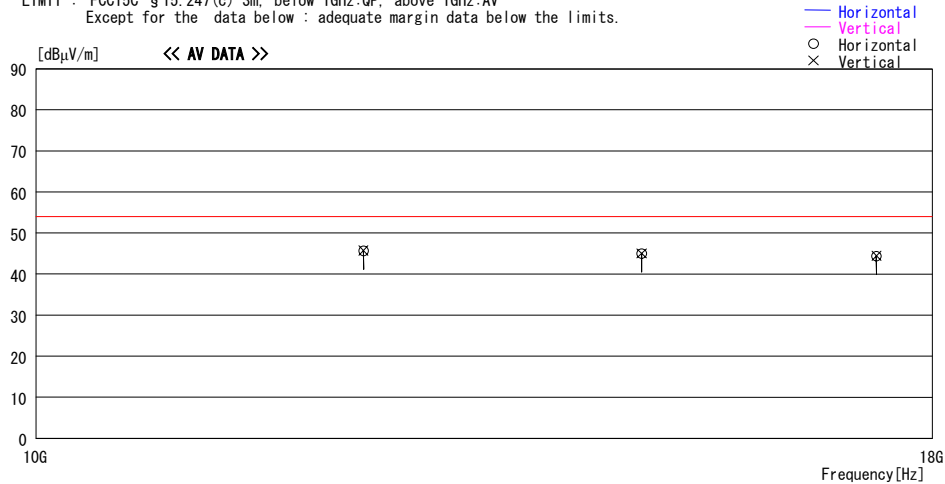
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12395.000	31.6	41.4	8.0	35.3	45.7	54.0	8.3
2	14874.000	30.9	41.4	8.0	35.3	45.0	54.0	9.0
3	17353.000	30.3	41.4	8.0	35.3	44.4	54.0	9.6
----- Vertical -----								
4	12395.000	31.6	41.4	8.0	35.3	45.7	54.0	8.3
5	14874.000	30.9	41.4	8.0	35.3	45.0	54.0	9.0
6	17353.000	30.3	41.4	8.0	35.3	44.4	54.0	9.6

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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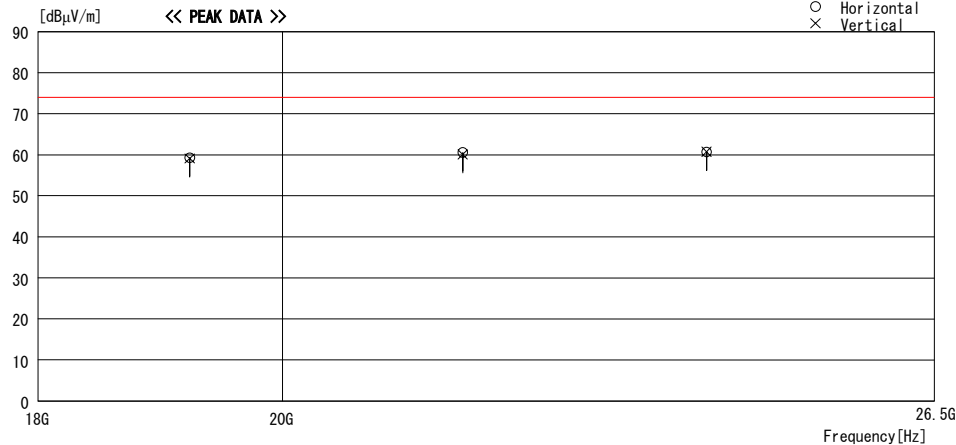
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis (MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19216.000	43.8	42.1	8.3	34.9	59.3	74.0	14.7
2	21618.000	45.0	40.8	10.2	35.4	60.6	74.0	13.4
3	24020.000	44.5	41.0	11.0	35.8	60.7	74.0	13.3
----- Vertical -----								
4	19216.000	43.6	42.1	8.3	34.9	59.1	74.0	14.9
5	21618.000	44.5	40.8	10.2	35.4	60.1	74.0	13.9
6	24020.000	44.5	41.0	11.0	35.8	60.7	74.0	13.3

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

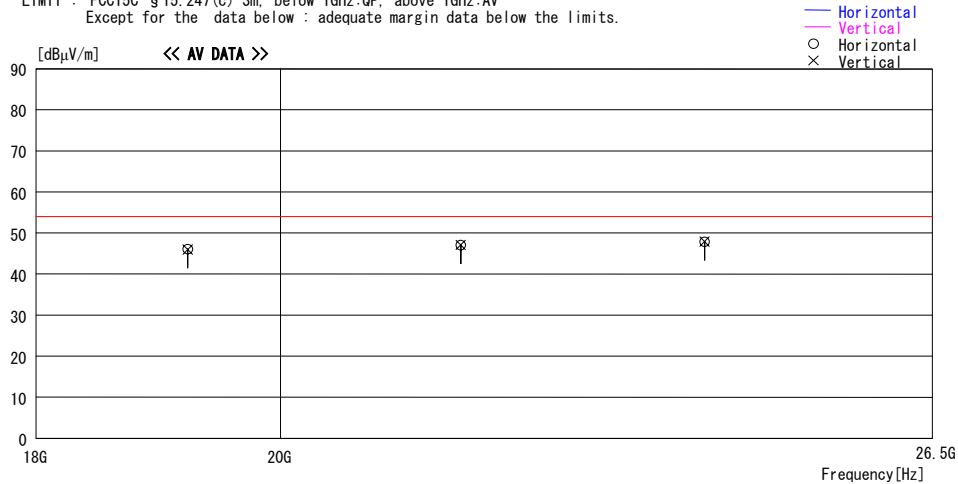
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19216.000	30.6	42.1	8.3	34.9	46.1	54.0	7.9
2	21618.000	31.5	40.8	10.2	35.4	47.1	54.0	6.9
3	24020.000	31.7	41.0	11.0	35.8	47.9	54.0	6.1
----- Vertical -----								
4	19216.000	30.5	42.1	8.3	34.9	46.0	54.0	8.0
5	21618.000	31.5	40.8	10.2	35.4	47.1	54.0	6.9
6	24020.000	31.7	41.0	11.0	35.8	47.9	54.0	6.1

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

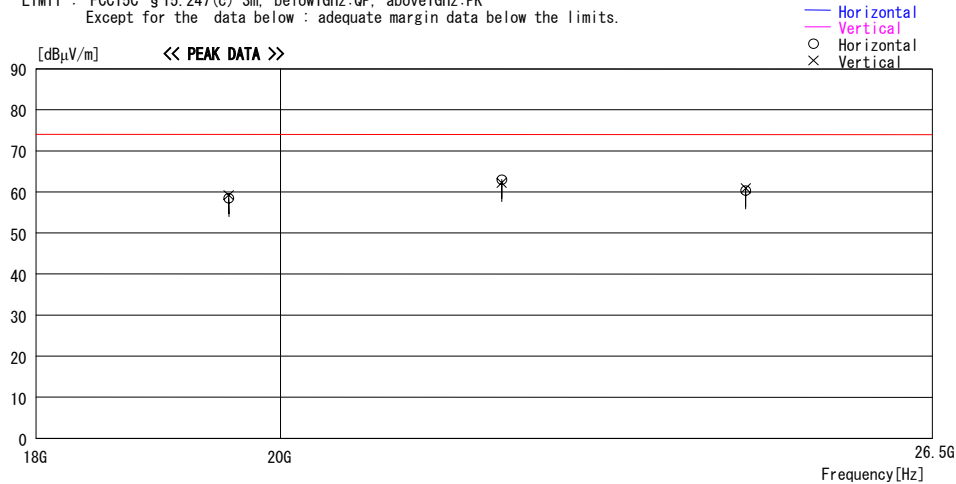
Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2445MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19560.000	43.6	41.2	8.7	35.0	58.5	74.0	15.5
2	22005.000	46.3	41.1	10.5	34.9	63.0	74.0	11.0
3	24450.000	44.6	41.3	11.2	36.7	60.4	74.0	13.6
----- Vertical -----								
4	19560.000	44.3	41.2	8.7	35.0	59.2	74.0	14.8
5	22005.000	45.5	41.1	10.5	34.9	62.2	74.0	11.8
6	24450.000	45.1	41.3	11.2	36.7	60.9	74.0	13.1

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

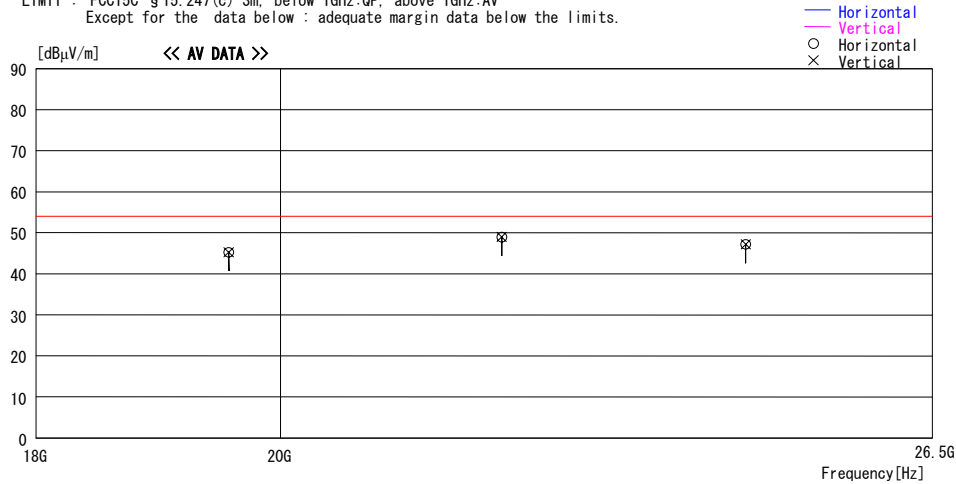
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2445MHz, Hor:Y Axis Ver:Z Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19560.000	30.4	41.2	8.7	35.0	45.3	54.0	8.7
2	22005.000	32.3	41.1	10.5	34.9	49.0	54.0	5.0
3	24450.000	31.4	41.3	11.2	36.7	47.2	54.0	6.8
----- Vertical -----								
4	19560.000	30.4	41.2	8.7	35.0	45.3	54.0	8.7
5	22005.000	32.3	41.1	10.5	34.9	49.0	54.0	5.0
6	24450.000	31.4	41.3	11.2	36.7	47.2	54.0	6.8

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

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Facsimile : +81 596 24 8124

MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

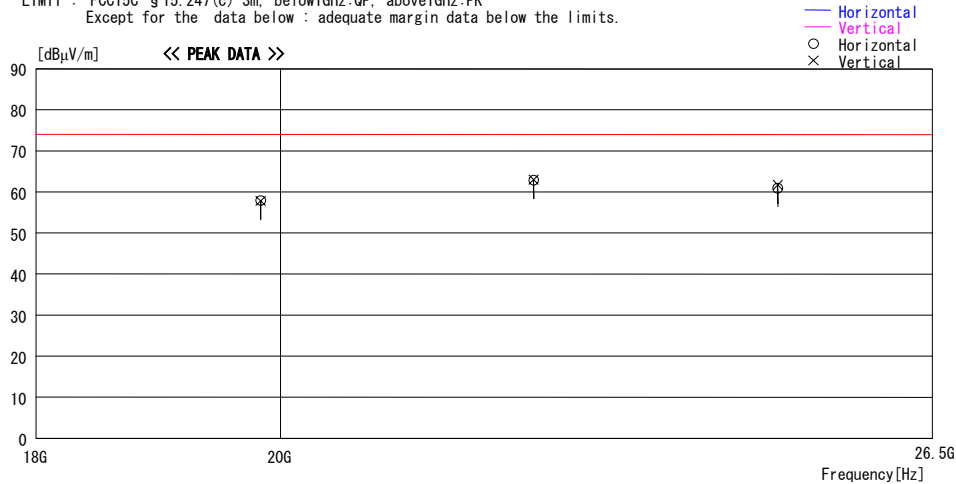
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19832.000	43.1	41.2	8.9	35.3	57.9	74.0	16.1
2	22311.000	46.1	41.3	10.6	35.1	62.9	74.0	11.1
3	24790.000	45.1	41.2	11.3	36.7	60.9	74.0	13.1
----- Vertical -----								
4	19832.000	43.0	41.2	8.9	35.3	57.8	74.0	16.2
5	22311.000	46.2	41.3	10.6	35.1	63.0	74.0	11.0
6	24790.000	45.9	41.2	11.3	36.7	61.7	74.0	12.3

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

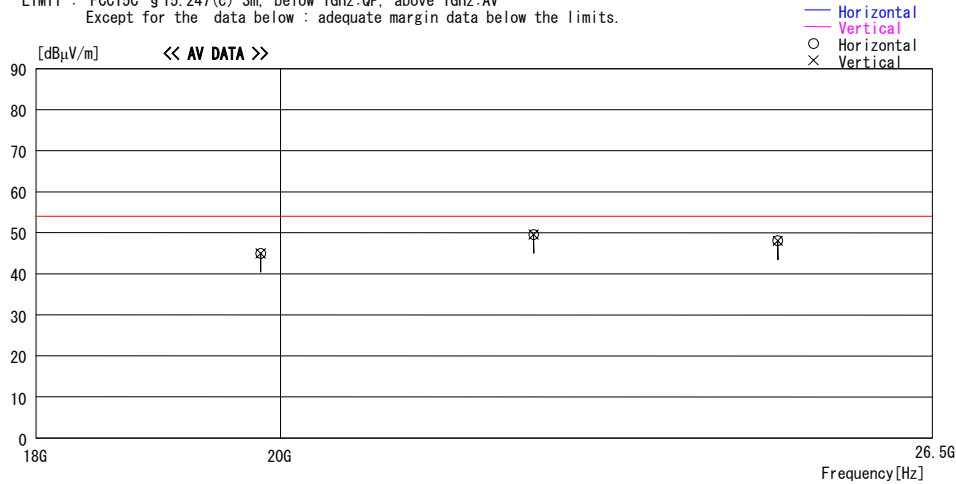
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX)

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19832.000	30.2	41.2	8.9	35.3	45.0	54.0	9.0
2	22311.000	32.8	41.3	10.6	35.1	49.6	54.0	4.4
3	24790.000	32.3	41.2	11.3	36.7	48.1	54.0	5.9
----- Vertical -----								
4	19832.000	30.2	41.2	8.9	35.3	45.0	54.0	9.0
5	22311.000	32.8	41.3	10.6	35.1	49.6	54.0	4.4
6	24790.000	32.3	41.2	11.3	36.7	48.1	54.0	5.9

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

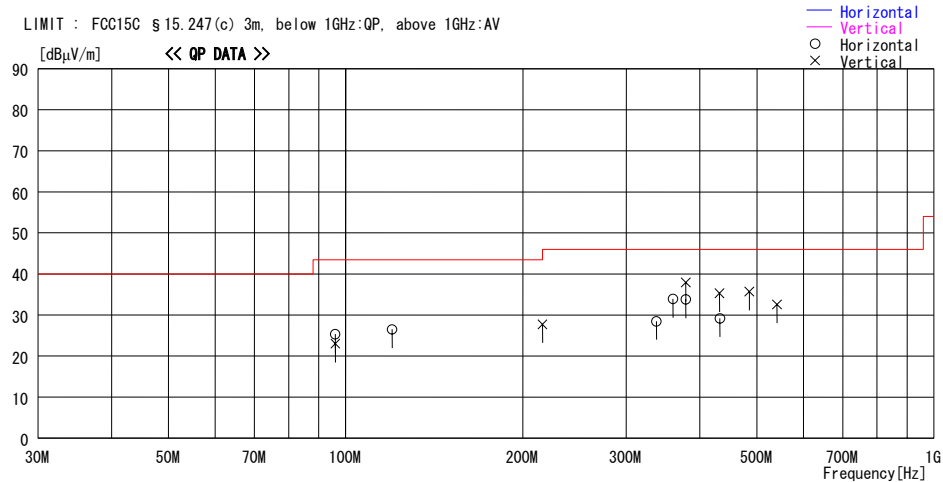
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/09 22:09:38

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Test Item 1(Test Item 4)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	95.972	35.7	9.2	8.0	27.6	25.3	43.5	18.2	205	188
2	119.971	32.8	13.1	8.0	27.4	26.5	43.5	17.0	268	193
3	337.564	30.1	15.7	10.2	27.5	28.5	46.0	17.5	100	146
4	360.068	34.2	16.7	10.5	27.5	33.9	46.0	12.1	100	156
5	378.622	33.3	17.4	10.7	27.6	33.8	46.0	12.2	100	270
6	432.532	28.3	18.2	10.8	28.1	29.2	46.0	16.8	239	270
----- Vertical -----										
7	96.008	33.4	9.2	8.0	27.6	23.0	43.5	20.5	100	359
8	216.012	28.8	17.1	9.2	27.4	27.7	46.0	18.3	201	126
9	378.613	37.4	17.4	10.7	27.6	37.9	46.0	8.1	157	195
10	432.007	34.4	18.2	10.8	28.1	35.3	46.0	10.7	100	204
11	485.491	35.1	18.0	11.1	28.5	35.7	46.0	10.3	100	194
12	540.657	31.2	18.6	11.3	28.5	32.6	46.0	13.4	190	217

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

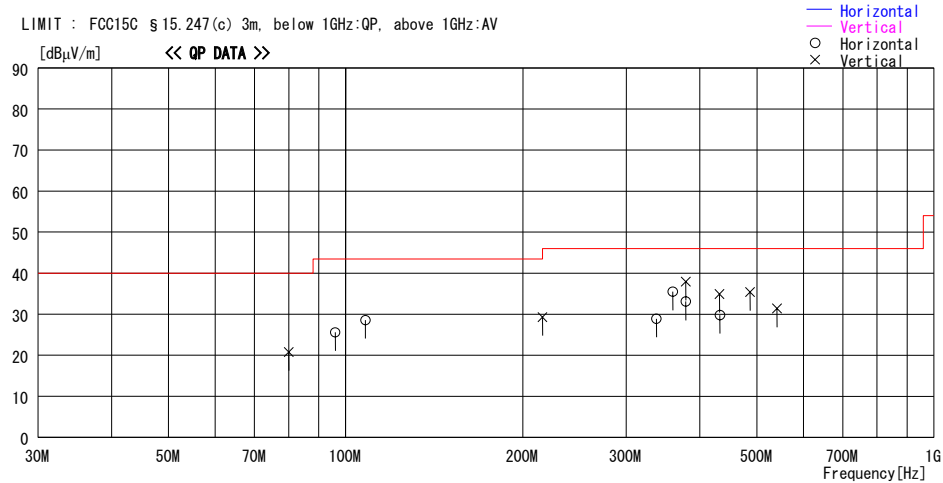
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/09 23:02:40

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Test Item 2

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	95.966	36.0	9.2	8.0	27.6	25.6	43.5	17.9	192	0
2	107.966	36.9	11.4	8.0	27.7	28.6	43.5	14.9	276	359
3	337.432	30.6	15.7	10.1	27.5	28.9	46.0	17.1	100	132
4	359.867	35.8	16.7	10.5	27.5	35.5	46.0	10.5	100	312
5	378.622	32.6	17.4	10.7	27.6	33.1	46.0	12.9	100	257
6	432.569	28.9	18.2	10.8	28.1	29.8	46.0	16.2	228	257
----- Vertical -----										
7	80.005	34.6	6.3	7.7	27.8	20.8	40.0	19.2	100	0
8	216.012	30.4	17.1	9.2	27.4	29.3	46.0	16.7	198	129
9	378.442	37.4	17.4	10.7	27.6	37.9	46.0	8.1	131	199
10	432.009	34.0	18.2	10.8	28.1	34.9	46.0	11.1	116	192
11	486.683	34.8	18.0	11.1	28.5	35.4	46.0	10.6	100	197
12	540.700	30.0	18.6	11.3	28.5	31.4	46.0	14.6	180	192

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

UL Apex Co., Ltd.

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Facsimile : +81 596 24 8124

MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

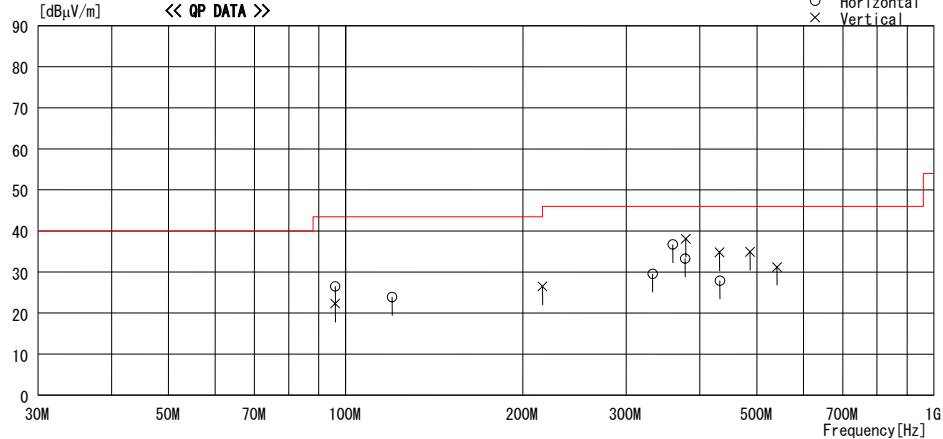
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/10 00:13:58

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Test Item 3

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	95.984	36.9	9.2	8.0	27.6	26.5	43.5	17.0	204	0
2	119.955	30.2	13.1	8.0	27.4	23.9	43.5	19.6	137	359
3	359.875	37.0	16.7	10.5	27.5	36.7	46.0	9.3	100	302
4	377.605	32.7	17.4	10.7	27.5	33.3	46.0	12.7	100	230
5	332.555	31.5	15.5	10.1	27.5	29.6	46.0	16.4	100	157
6	432.577	27.0	18.2	10.8	28.1	27.9	46.0	18.1	230	245
----- Vertical -----										
7	96.003	32.7	9.2	8.0	27.6	22.3	43.5	21.2	100	359
8	378.437	37.6	17.4	10.7	27.6	38.1	46.0	7.9	131	199
9	431.998	33.9	18.2	10.8	28.1	34.8	46.0	11.2	100	181
10	486.688	34.3	18.0	11.1	28.5	34.9	46.0	11.1	100	204
11	216.009	27.6	17.1	9.2	27.4	26.5	46.0	19.5	198	139
12	540.661	29.8	18.6	11.3	28.5	31.2	46.0	14.8	187	223

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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Telephone : +81 596 24 8116

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MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

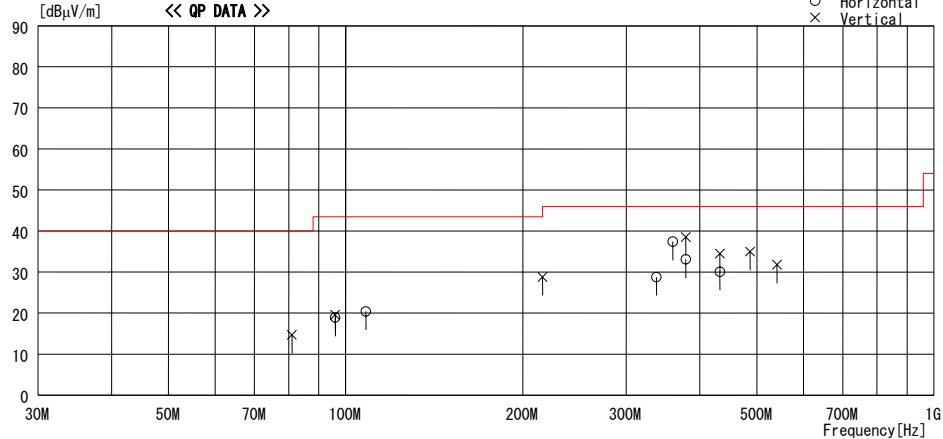
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/10 01:32:30

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Test Item 5(Test Item 8)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	95.989	29.3	9.2	8.0	27.6	18.9	43.5	24.6	100	260
2	108.166	28.7	11.4	8.0	27.7	20.4	43.5	23.1	100	0
3	337.571	30.4	15.7	10.2	27.5	28.8	46.0	17.2	100	147
4	359.895	37.7	16.7	10.5	27.5	37.4	46.0	8.6	100	24
5	378.607	32.6	17.4	10.7	27.6	33.1	46.0	12.9	100	226
6	432.569	29.2	18.2	10.8	28.1	30.1	46.0	15.9	246	272
----- Vertical -----										
7	80.997	28.4	6.4	7.7	27.8	14.7	40.0	25.3	100	359
8	95.966	30.0	9.2	8.0	27.6	19.6	43.5	23.9	100	255
9	216.007	29.9	17.1	9.2	27.4	28.8	46.0	17.2	207	145
10	378.432	38.0	17.4	10.7	27.6	38.5	46.0	7.5	142	201
11	432.558	33.6	18.2	10.8	28.1	34.5	46.0	11.5	100	200
12	486.688	34.4	18.0	11.1	28.5	35.0	46.0	11.0	100	193
13	540.662	30.4	18.6	11.3	28.5	31.8	46.0	14.2	183	212

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

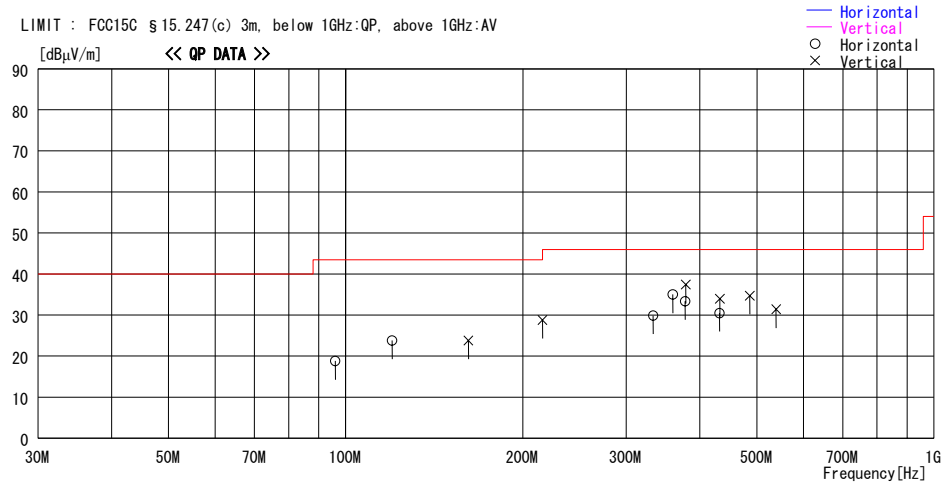
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/10 03:32:24

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Test Item 6

LIMIT : FCC15C § 15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	95.967	29.2	9.2	8.0	27.6	18.8	43.5	24.7	306	201
2	119.964	30.1	13.1	8.0	27.4	23.8	43.5	19.7	265	178
3	332.993	31.7	15.6	10.1	27.5	29.9	46.0	16.1	100	100
4	359.876	35.3	16.7	10.5	27.5	35.0	46.0	11.0	100	359
5	377.600	32.8	17.4	10.7	27.5	33.4	46.0	12.6	100	249
6	432.004	29.6	18.2	10.8	28.1	30.5	46.0	15.5	243	232
----- Vertical -----										
7	161.638	27.3	15.4	8.8	27.7	23.8	43.5	19.7	100	359
8	215.997	29.9	17.1	9.2	27.4	28.8	43.5	14.7	258	181
9	378.437	36.9	17.4	10.7	27.6	37.4	46.0	8.6	157	208
10	432.564	33.1	18.2	10.8	28.1	34.0	46.0	12.0	100	211
11	486.498	34.1	18.0	11.1	28.5	34.7	46.0	11.3	100	195
12	539.134	30.1	18.5	11.3	28.5	31.4	46.0	14.6	210	197

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

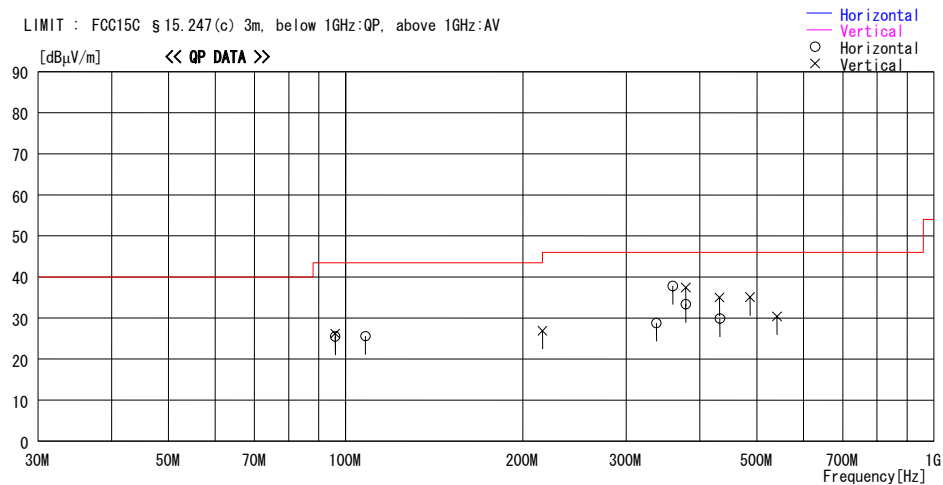
Facsimile : +81 596 24 8124

MF060b(10.04.03)

[Transmitting mode by all devices]**DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/10 00:50:12Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 55%
Operator : Naoki Sakamoto

Mode / Remarks : Test Item 7

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV



No.	FREQ [MHz]	READING QP [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	95.977	35.9	9.2	8.0	27.6	25.5	43.5	18.0	233	0
2	107.981	33.9	11.4	8.0	27.7	25.6	43.5	17.9	170	360
3	359.889	38.1	16.7	10.5	27.5	37.8	46.0	8.2	100	22
4	378.432	32.9	17.4	10.7	27.6	33.4	46.0	12.6	100	235
5	337.567	30.4	15.7	10.2	27.5	28.8	46.0	17.2	100	150
6	432.568	29.0	18.2	10.8	28.1	29.9	46.0	16.1	246	240
----- Vertical -----										
7	95.983	36.6	9.2	8.0	27.6	26.2	43.5	17.3	204	359
8	378.622	36.9	17.4	10.7	27.6	37.4	46.0	8.6	164	200
9	431.994	34.1	18.2	10.8	28.1	35.0	46.0	11.0	115	194
10	486.693	34.5	18.0	11.1	28.5	35.1	46.0	10.9	100	191
11	216.001	28.0	17.1	9.2	27.4	26.9	46.0	19.1	204	137
12	540.702	29.0	18.6	11.3	28.5	30.4	46.0	15.6	179	201

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)**UL Apex Co., Ltd.****Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

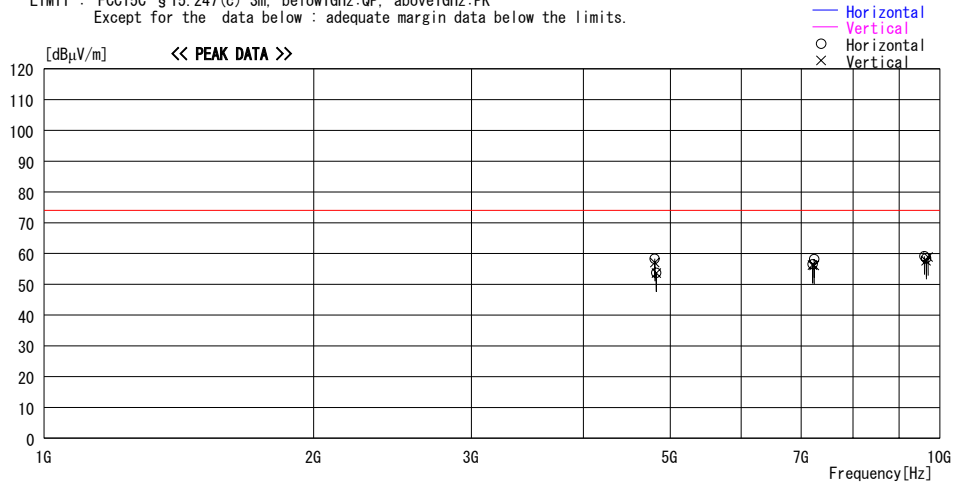
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/17 15:35:59

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Temp°C/Humi% : 23 / 58%
Serial No. : 1 & T600023 & 1
Operator : Naoki Sakamoto
Mode / Remarks : Test Item 1 (Test Item 4)

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	4804.105	48.8	35.3	10.3	36.1	58.3	74.0	15.7
2	4824.156	44.1	35.4	10.3	36.1	53.7	74.0	20.3
3	7206.201	41.9	37.9	12.3	35.6	56.5	74.0	17.5
4	7236.329	43.5	38.0	12.3	35.6	58.2	74.0	15.8
5	9608.108	43.4	37.6	14.4	36.3	59.1	74.0	14.9
6	9648.223	42.9	37.5	14.4	36.3	58.5	74.0	15.5
----- Vertical -----								
7	4804.105	47.5	35.3	10.3	36.1	57.0	74.0	17.0
8	4824.156	44.0	35.4	10.3	36.1	53.6	74.0	20.4
9	7206.201	41.6	37.9	12.3	35.6	56.2	74.0	17.8
10	7236.329	41.4	38.0	12.3	35.6	56.1	74.0	17.9
11	9648.223	42.0	37.5	14.4	36.3	57.6	74.0	16.4
12	9698.108	43.3	37.4	14.5	36.3	58.9	74.0	15.1

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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Head Office EMC Lab.

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MF060b(10.04.03)

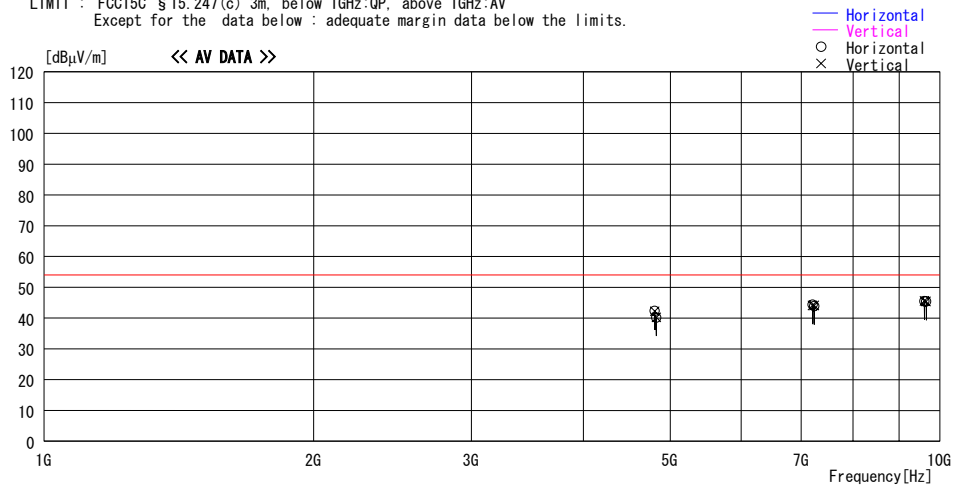
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/17 15:35:59

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Operator : Naoki Sakamoto
Serial No. : 1 & T600023 & 1

Mode / Remarks : Test Item 1 (Test Item 4)
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4804.105	32.8	35.3	10.3	36.1	42.3	54.0	11.7
2	4824.156	30.6	35.4	10.3	36.1	40.2	54.0	13.8
3	7206.201	29.8	37.9	12.3	35.6	44.4	54.0	9.6
4	7236.329	29.2	38.0	12.3	35.6	43.9	54.0	10.1
5	9608.108	29.8	37.6	14.4	36.3	45.5	54.0	8.6
6	9648.223	29.8	37.5	14.4	36.3	45.4	54.0	8.6
----- Vertical -----								
7	4804.105	32.7	35.3	10.3	36.1	42.2	54.0	11.8
8	4824.156	30.6	35.4	10.3	36.1	40.2	54.0	13.8
9	7206.201	29.5	37.9	12.3	35.6	44.1	54.0	9.9
10	7236.329	29.4	38.0	12.3	35.6	44.1	54.0	9.9
11	9608.108	29.8	37.6	14.4	36.3	45.5	54.0	8.5
12	9648.223	29.8	37.5	14.4	36.3	45.4	54.0	8.6

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP 30-300MHz BICONICAL 300MHz-1000MHz LOGPERIODIC 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

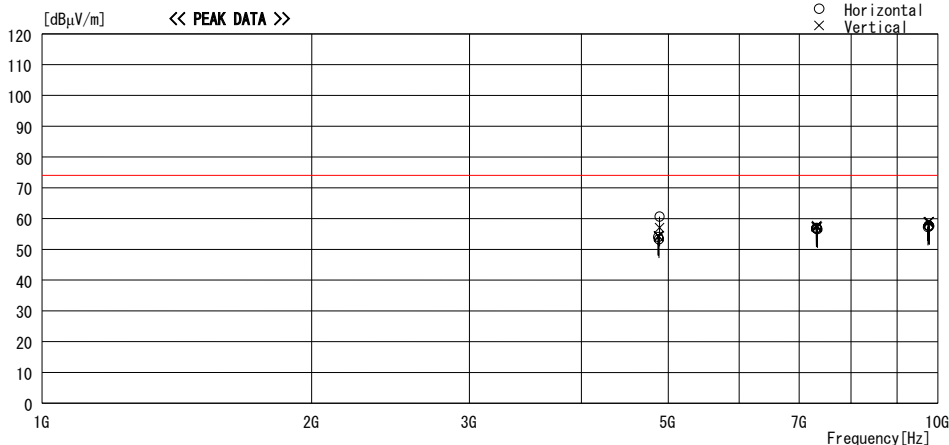
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/07/17 16:16:33

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1

Report No. : 24KE0303-H0
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto

Mode / Remarks : Test Item 2
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

- Horizontal
- Vertical
- Horizontal
- × Vertical



No.	FREQ	READING PK	ANT. FACTOR	LOSS	GAIN	RESULT	LIMIT	MARGIN
	[MHz]	[dBμV]	[dB/m]	[dB]	[dB]	[dBμV/m]	[dBμV/m]	[dB]
----- Horizontal -----								
1	4874.128	43.9	35.6	10.5	36.1	53.9	74.0	20.1
2	4880.702	43.1	35.7	10.5	36.1	53.2	74.0	20.8
3	4890.076	50.6	35.7	10.5	36.1	60.7	74.0	13.3
4	7311.308	41.9	38.1	12.5	35.7	56.8	74.0	17.2
5	7320.138	42.0	38.2	12.5	35.7	57.0	74.0	17.1
6	7335.438	41.5	38.2	12.5	35.7	56.5	74.0	17.5
7	9748.226	41.8	37.3	14.5	36.3	57.3	74.0	16.8
8	9760.177	42.2	37.3	14.5	36.3	57.7	74.0	16.3
9	9780.494	42.1	37.2	14.5	36.3	57.5	74.0	16.5
----- Vertical -----								
10	4874.128	44.3	35.6	10.5	36.1	54.3	74.0	19.7
11	4879.702	44.0	35.7	10.5	36.1	54.1	74.0	19.9
12	4890.076	46.9	35.7	10.5	36.1	57.0	74.0	17.0
13	7311.308	42.4	38.1	12.5	35.7	57.3	74.0	16.7
14	7320.138	42.7	38.2	12.5	35.7	57.7	74.0	16.3
15	7335.438	42.3	38.2	12.5	35.7	57.3	74.0	16.7
16	9748.226	43.3	37.3	14.5	36.3	58.8	74.0	15.2
17	9760.177	43.3	37.3	14.5	36.3	58.8	74.0	15.2
18	9780.494	43.6	37.2	14.5	36.3	59.0	74.0	15.0

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

Page:

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

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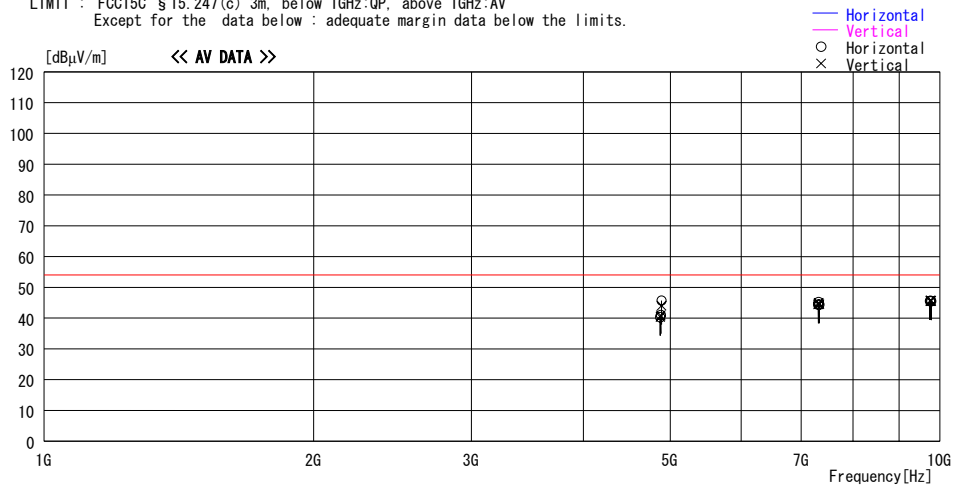
MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 16:16:33

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 2
Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4874.128	30.3	35.6	10.5	36.1	40.3	54.0	13.7
2	4880.702	30.9	35.7	10.5	36.1	41.0	54.0	13.0
3	4890.076	35.6	35.7	10.5	36.1	45.7	54.0	8.3
4	7311.308	29.5	38.1	12.5	35.7	44.4	54.0	9.6
5	7320.138	30.2	38.2	12.5	35.7	45.2	54.0	8.8
6	7335.438	29.4	38.2	12.5	35.7	44.4	54.0	9.6
7	9748.226	30.0	37.3	14.5	36.3	45.5	54.0	8.5
8	9760.177	30.1	37.3	14.5	36.3	45.6	54.0	8.4
9	9780.494	30.0	37.2	14.5	36.3	45.4	54.0	8.6
----- Vertical -----								
10	4874.128	30.3	35.6	10.5	36.1	40.3	54.0	13.7
11	4879.702	30.8	35.7	10.5	36.1	40.9	54.0	13.1
12	4890.076	33.9	35.7	10.5	36.1	44.0	54.0	10.0
13	7311.308	29.5	38.1	12.5	35.7	44.4	54.0	9.6
14	7320.138	29.9	38.2	12.5	35.7	44.9	54.0	9.1
15	7335.438	29.5	38.2	12.5	35.7	44.5	54.0	9.5
16	9748.226	30.0	37.3	14.5	36.3	45.5	54.0	8.5
17	9760.177	30.2	37.3	14.5	36.3	45.7	54.0	8.3
18	9780.494	30.1	37.2	14.5	36.3	45.5	54.0	8.5

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

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 17:13:50

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto

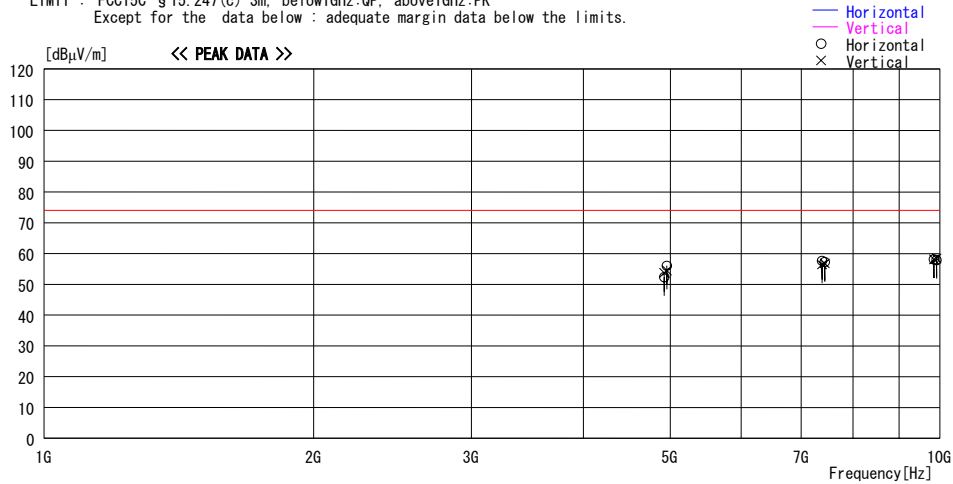
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1

Serial No. : 1 & T600023 & 1

Mode / Remarks : Test Item 3

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4923.604	42.0	35.9	10.5	36.1	52.3	74.0	21.7
2	4958.139	45.5	36.1	10.5	36.1	56.0	74.0	18.0
3	7385.844	42.5	38.3	12.5	35.7	57.6	74.0	16.4
4	7436.593	42.0	38.4	12.5	35.7	57.2	74.0	16.8
5	9847.508	42.7	37.1	14.6	36.3	58.1	74.0	15.9
6	9916.011	42.6	37.0	14.6	36.3	57.9	74.0	16.1
----- Vertical -----								
7	4923.604	43.4	35.9	10.5	36.1	53.7	74.0	20.3
8	4958.139	43.9	36.1	10.5	36.1	54.4	74.0	19.6
9	7385.844	41.3	38.3	12.5	35.7	56.4	74.0	17.6
10	7436.593	41.6	38.4	12.5	35.7	56.8	74.0	17.2
11	9847.508	42.7	37.1	14.6	36.3	58.1	74.0	15.9
12	9916.011	43.1	37.0	14.6	36.3	58.4	74.0	15.6

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

Page:

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(10.04.03)

[Transmitting mode by all devices]**DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 17:13:50Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& ReceiverReport No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto

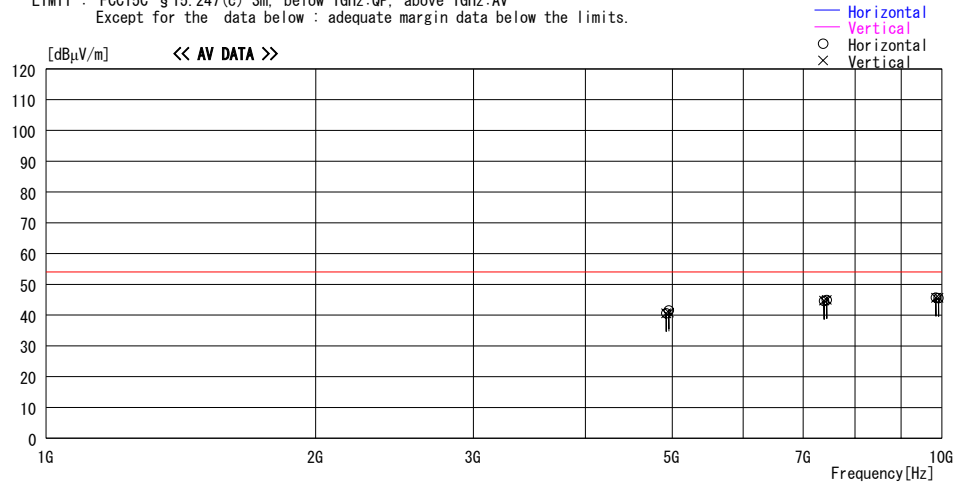
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1

Serial No. : 1 & T600023 & 1

Mode / Remarks : Test Item 3

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4923.604	30.3	35.9	10.5	36.1	40.6	54.0	13.4
2	4958.139	31.0	36.1	10.5	36.1	41.5	54.0	12.5
3	7385.844	29.5	38.3	12.5	35.7	44.6	54.0	9.4
4	7436.593	29.7	38.4	12.5	35.7	44.9	54.0	9.1
5	9847.508	30.3	37.1	14.6	36.3	45.7	54.0	8.3
6	9916.011	30.2	37.0	14.6	36.3	45.5	54.0	8.5
----- Vertical -----								
7	4923.604	30.3	35.9	10.5	36.1	40.6	54.0	13.4
8	4958.139	30.3	36.1	10.5	36.1	40.8	54.0	13.3
9	7385.844	29.6	38.3	12.5	35.7	44.7	54.0	9.3
10	7436.593	29.7	38.4	12.5	35.7	44.9	54.0	9.1
11	9847.508	30.2	37.1	14.6	36.3	45.6	54.0	8.4
12	9916.011	30.3	37.0	14.6	36.3	45.6	54.0	8.4

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

Page:

UL Apex Co., Ltd.**Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

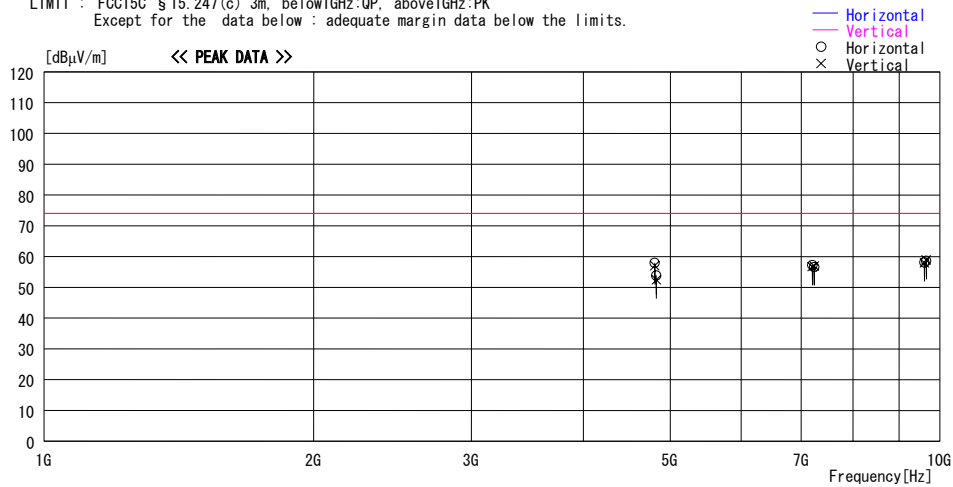
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 15:35:59

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 5 (Test Item 8)
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	4804.266	48.5	35.3	10.3	36.1	58.0	74.0	16.0
2	4823.511	44.2	35.4	10.3	36.1	53.8	74.0	20.2
3	7205.586	42.6	37.9	12.3	35.6	57.2	74.0	16.8
4	7235.852	41.9	38.0	12.3	35.6	56.6	74.0	17.4
5	9608.052	42.4	37.6	14.4	36.3	58.1	74.0	15.9
6	9647.797	43.0	37.5	14.4	36.3	58.6	74.0	15.4
----- Vertical -----								
7	4804.266	47.5	35.3	10.3	36.1	57.0	74.0	17.0
8	4823.511	42.8	35.4	10.3	36.1	52.4	74.0	21.6
9	7205.586	42.1	37.9	12.3	35.6	56.7	74.0	17.3
10	7235.852	42.2	38.0	12.3	35.6	56.9	74.0	17.1
11	9608.052	42.2	37.6	14.4	36.3	57.9	74.0	16.1
12	9647.797	43.3	37.5	14.4	36.3	58.9	74.0	15.1

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

Page:

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Head Office EMC Lab.

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MF060b(10.04.03)

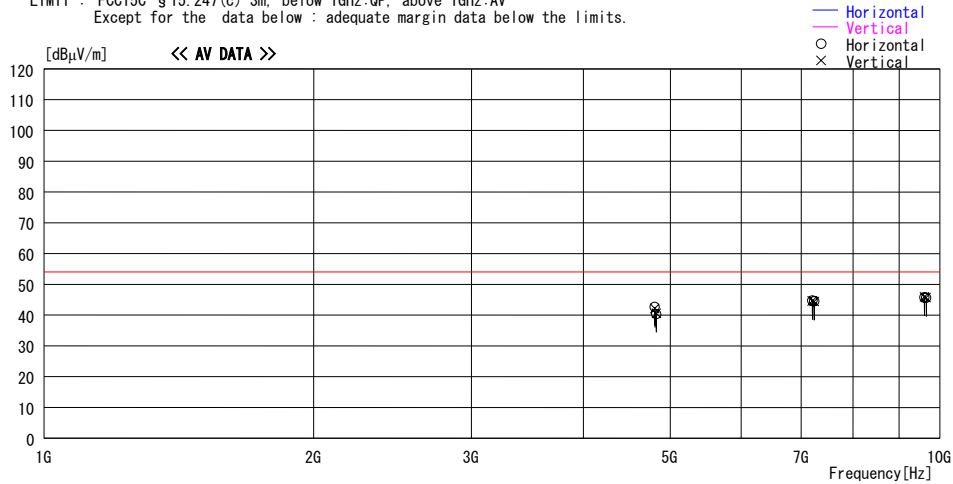
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 15:35:59

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 5 (Test Item 8)
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING AV [dB μ V]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	4804.266	33.2	35.3	10.3	36.1	42.7	54.0	11.3
2	4823.511	30.8	35.4	10.3	36.1	40.4	54.0	13.6
3	7205.586	30.1	37.9	12.3	35.6	44.7	54.0	9.3
4	7235.852	29.8	38.0	12.3	35.6	44.5	54.0	9.5
5	9608.052	30.1	37.6	14.4	36.3	45.8	54.0	8.2
6	9647.797	30.0	37.5	14.4	36.3	45.6	54.0	8.4
----- Vertical -----								
7	4804.266	32.6	35.3	10.3	36.1	42.1	54.0	11.9
8	4823.511	31.0	35.4	10.3	36.1	40.6	54.0	13.4
9	7205.586	30.0	37.9	12.3	35.6	44.6	54.0	9.4
10	7235.852	29.7	38.0	12.3	35.6	44.4	54.0	9.6
11	9608.052	30.2	37.6	14.4	36.3	45.9	54.0	8.1
12	9647.797	30.1	37.5	14.4	36.3	45.7	54.0	8.3

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

Page:

UL Apex Co., Ltd.

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MF060b(10.04.03)

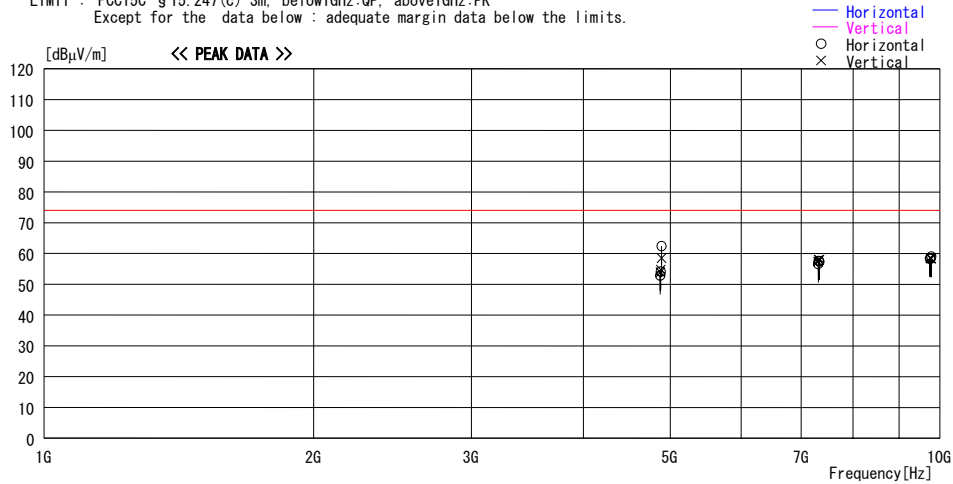
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 16:16:33

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 6
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4874.117	42.8	35.6	10.5	36.1	52.8	74.0	21.2
2	4879.632	44.0	35.7	10.5	36.1	54.1	74.0	19.9
3	4890.070	52.3	35.7	10.5	36.1	62.4	74.0	11.6
4	7311.243	41.7	38.1	12.5	35.7	56.6	74.0	17.4
5	7320.016	42.6	38.2	12.5	35.7	57.6	74.0	16.4
6	7334.795	42.4	38.2	12.5	35.7	57.4	74.0	16.6
7	9748.162	42.9	37.3	14.5	36.3	58.4	74.0	15.6
8	9760.094	42.8	37.3	14.5	36.3	58.3	74.0	15.7
9	9780.116	43.7	37.2	14.5	36.3	59.1	74.0	14.9
----- Vertical -----								
10	4874.117	43.9	35.6	10.5	36.1	53.9	74.0	20.1
11	4879.632	44.6	35.7	10.5	36.1	54.7	74.0	19.3
12	4890.070	48.4	35.7	10.5	36.1	58.5	74.0	15.5
13	7311.243	42.5	38.1	12.5	35.7	57.4	74.0	16.6
14	7320.016	43.0	38.2	12.5	35.7	58.0	74.0	16.0
15	7334.795	42.9	38.2	12.5	35.7	57.9	74.0	16.1
16	9748.162	43.1	37.3	14.5	36.3	58.6	74.0	15.4
17	9760.094	43.0	37.3	14.5	36.3	58.5	74.0	15.5
18	9780.116	42.9	37.2	14.5	36.3	58.3	74.0	15.7

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

Page:

UL Apex Co., Ltd.

Head Office EMC Lab.

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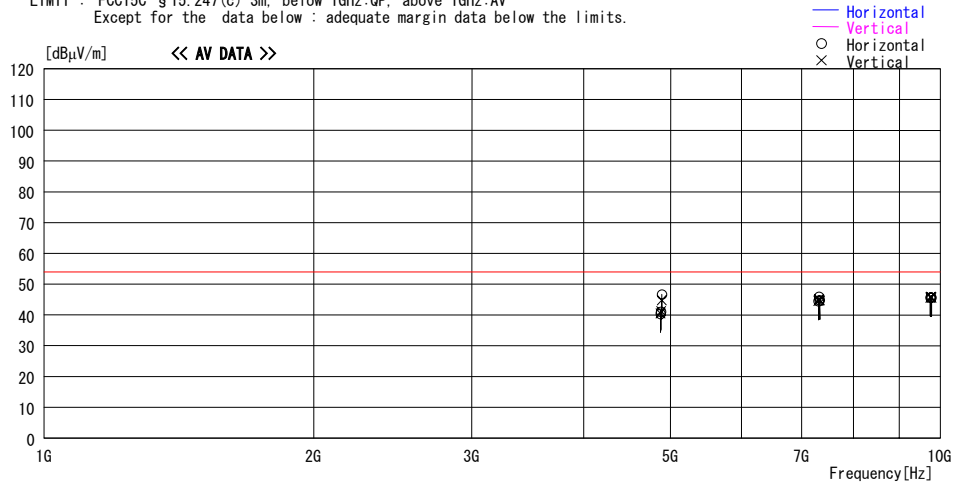
MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 16:16:33

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 6
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4874.117	30.4	35.6	10.5	36.1	40.4	54.0	13.6
2	4879.632	30.9	35.7	10.5	36.1	41.0	54.0	13.0
3	4890.070	36.5	35.7	10.5	36.1	46.6	54.0	7.4
4	7311.243	29.6	38.1	12.5	35.7	44.5	54.0	9.5
5	7320.016	30.8	38.2	12.5	35.7	45.8	54.0	8.2
6	7334.795	29.7	38.2	12.5	35.7	44.7	54.0	9.3
7	9748.162	30.1	37.3	14.5	36.3	45.6	54.0	8.4
8	9760.094	30.2	37.3	14.5	36.3	45.7	54.0	8.3
9	9780.116	30.2	37.2	14.5	36.3	45.6	54.0	8.4
----- Vertical -----								
10	4874.117	30.5	35.6	10.5	36.1	40.5	54.0	13.5
11	4879.632	31.1	35.7	10.5	36.1	41.2	54.0	12.8
12	4890.070	34.7	35.7	10.5	36.1	44.8	54.0	9.2
13	7311.243	29.7	38.1	12.5	35.7	44.6	54.0	9.4
14	7320.016	30.1	38.2	12.5	35.7	45.1	54.0	8.9
15	7334.795	29.7	38.2	12.5	35.7	44.7	54.0	9.3
16	9748.162	30.1	37.3	14.5	36.3	45.6	54.0	8.4
17	9760.094	30.4	37.3	14.5	36.3	45.9	54.0	8.1
18	9780.116	30.2	37.2	14.5	36.3	45.6	54.0	8.4

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

Page:

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 17:13:50

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto

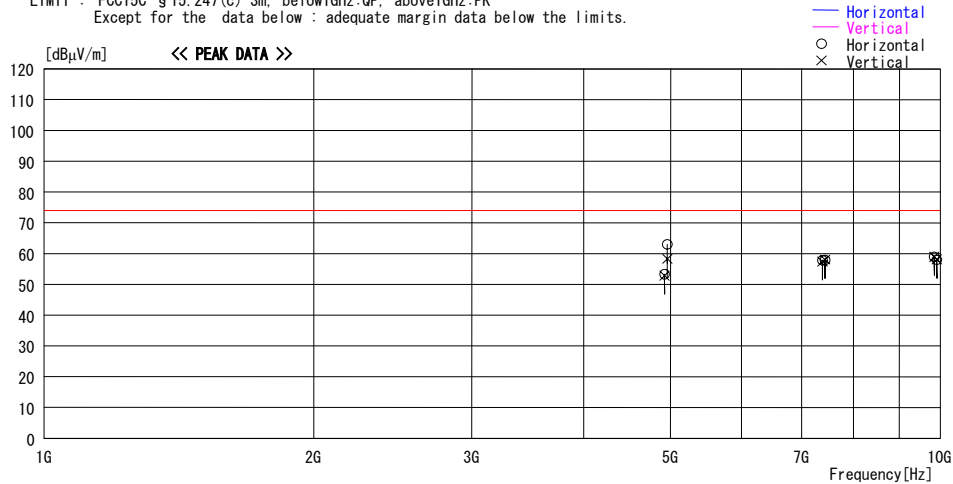
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1

Serial No. : 1 & T600023 & 1

Mode / Remarks : Test Item 7

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4923.750	42.9	35.9	10.5	36.1	53.2	74.0	20.8
2	4958.197	52.5	36.1	10.5	36.1	63.0	74.0	11.0
3	7385.806	42.7	38.3	12.5	35.7	57.8	74.0	16.2
4	7437.131	42.7	38.4	12.5	35.7	57.9	74.0	16.1
5	9848.052	43.6	37.1	14.6	36.3	59.0	74.0	15.0
6	9916.011	42.6	37.0	14.6	36.3	57.9	74.0	16.1
----- Vertical -----								
7	4923.750	42.5	35.9	10.5	36.1	52.8	74.0	21.2
8	4958.197	47.8	36.1	10.5	36.1	58.3	74.0	15.7
9	7385.806	42.3	38.3	12.5	35.7	57.4	74.0	16.6
10	7437.131	42.8	38.4	12.5	35.7	58.0	74.0	16.0
11	9848.052	43.5	37.1	14.6	36.3	58.9	74.0	15.1
12	9916.011	42.8	37.0	14.6	36.3	58.1	74.0	15.9

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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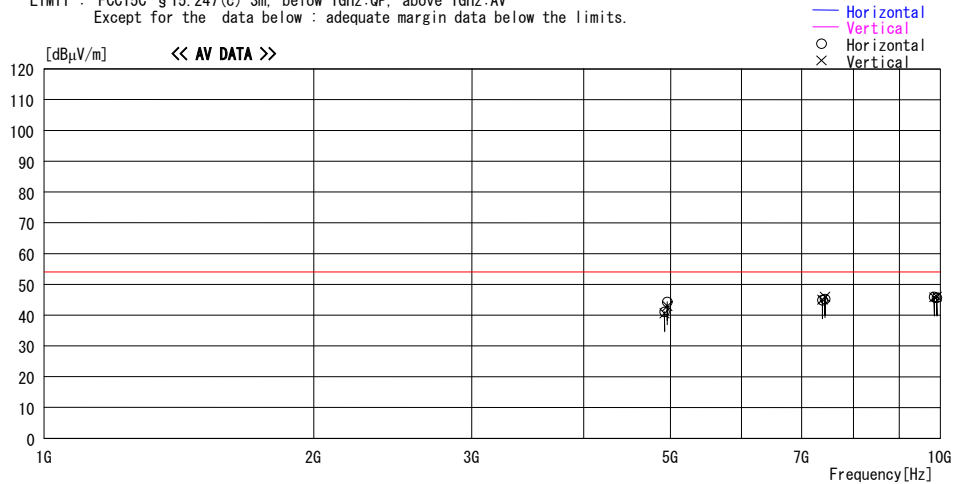
MF060b(10.04.03)

[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/17 17:13:50

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : L & T600023 & 1
Mode / Remarks : Test Item 7
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	4923.750	30.8	35.9	10.5	36.1	41.1	54.0	12.9
2	4958.197	33.8	36.1	10.5	36.1	44.3	54.0	9.7
3	7385.806	29.8	38.3	12.5	35.7	44.9	54.0	9.1
4	7437.131	30.0	38.4	12.5	35.7	45.2	54.0	8.8
5	9848.052	30.5	37.1	14.6	36.3	45.9	54.0	8.1
6	9916.011	30.4	37.0	14.6	36.3	45.7	54.0	8.3
----- Vertical -----								
7	4923.750	30.3	35.9	10.5	36.1	40.6	54.0	13.4
8	4958.197	32.4	36.1	10.5	36.1	42.9	54.0	11.1
9	7385.806	29.9	38.3	12.5	35.7	45.0	54.0	9.0
10	7437.131	30.7	38.4	12.5	35.7	45.9	54.0	8.1
11	9848.052	30.4	37.1	14.6	36.3	45.8	54.0	8.2
12	9916.011	30.7	37.0	14.6	36.3	46.0	54.0	8.0

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

Page:

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MF060b(10.04.03)

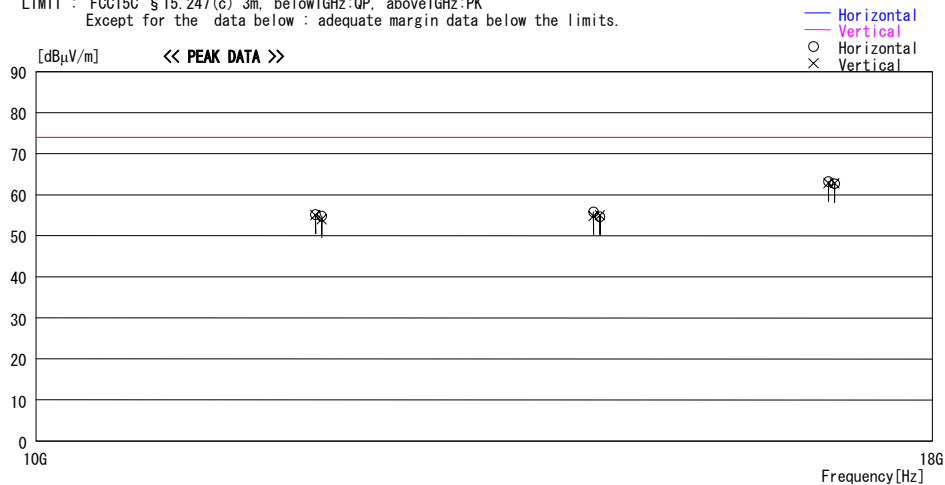
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 1 (Test Item 4)
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	12010.000	43.3	41.0	6.6	35.7	55.2	74.0	18.8
2	12060.000	42.9	41.1	6.5	35.7	54.8	74.0	19.2
3	14412.000	41.6	41.1	7.7	34.6	55.8	74.0	18.2
4	14472.000	40.5	41.0	7.7	34.6	54.6	74.0	19.4
5	16814.000	43.3	45.9	9.6	35.6	63.2	74.0	10.8
6	16884.000	42.7	46.0	9.5	35.5	62.7	74.0	11.3
----- Vertical -----								
7	12010.000	43.1	41.0	6.6	35.7	55.0	74.0	19.0
8	12060.000	42.1	41.1	6.5	35.7	54.0	74.0	20.0
9	14412.000	40.6	41.1	7.7	34.6	54.8	74.0	19.2
10	14472.000	40.9	41.0	7.7	34.6	55.0	74.0	19.1
11	16814.000	42.9	45.9	9.6	35.6	62.8	74.0	11.2
12	16884.000	42.8	46.0	9.5	35.5	62.8	74.0	11.2

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

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MF060b(10.04.03)

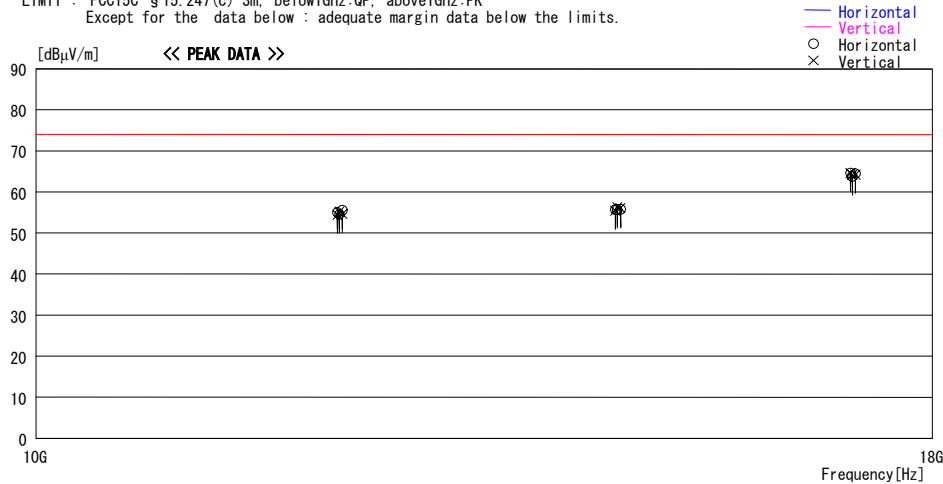
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 2
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
Horizontal								
1	12185.000	42.6	41.4	6.6	35.6	55.0	74.0	19.0
2	12200.000	42.1	41.4	6.6	35.6	54.5	74.0	19.5
3	12225.000	43.0	41.5	6.6	35.6	55.5	74.0	18.5
4	14622.000	41.1	41.5	7.9	34.8	55.7	74.0	18.3
5	14640.000	41.0	41.6	7.9	34.8	55.7	74.0	18.3
6	14670.000	40.9	41.7	7.9	34.8	55.7	74.0	18.3
7	17059.000	43.9	46.4	9.7	35.4	64.6	74.0	9.4
8	17080.000	43.1	46.4	9.7	35.4	63.8	74.0	10.2
9	17115.000	43.7	46.5	9.7	35.4	64.5	74.0	9.5
Vertical								
10	12185.000	42.0	41.4	6.6	35.6	54.4	74.0	19.6
11	12200.000	42.7	41.4	6.6	35.6	55.1	74.0	18.9
12	12225.000	42.1	41.5	6.6	35.6	54.6	74.0	19.4
13	14622.000	40.8	41.5	7.9	34.8	55.4	74.0	18.6
14	14640.000	41.6	41.6	7.9	34.8	56.3	74.0	17.7
15	14670.000	41.2	41.7	7.9	34.8	56.0	74.0	18.0
16	17059.000	43.9	46.4	9.7	35.4	64.6	74.0	9.4
17	17080.000	43.4	46.4	9.7	35.4	64.1	74.0	9.9
18	17115.000	43.4	46.5	9.7	35.4	64.2	74.0	9.8

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

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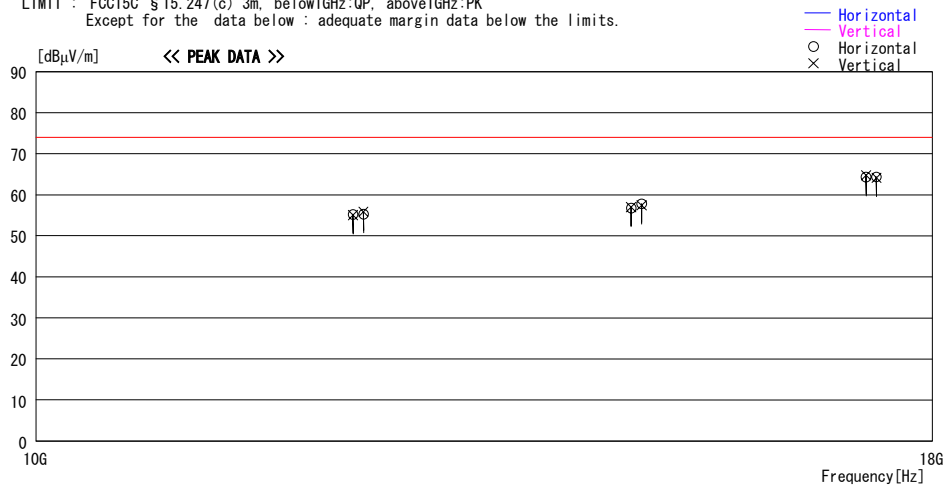
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 3
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12310.000	42.5	41.7	6.6	35.6	55.2	74.0	18.8
2	12395.000	42.3	41.9	6.6	35.5	55.3	74.0	18.7
3	14772.000	41.5	42.1	8.0	34.9	56.7	74.0	17.3
4	14874.000	42.0	42.6	8.2	35.0	57.8	74.0	16.2
5	17234.000	43.2	46.7	9.7	35.3	64.3	74.0	9.7
6	17353.000	42.9	46.9	9.8	35.2	64.4	74.0	9.6
----- Vertical -----								
7	12310.000	42.3	41.7	6.6	35.6	55.0	74.0	19.0
8	12395.000	42.9	41.9	6.6	35.5	55.9	74.0	18.1
9	14772.000	41.8	42.1	8.0	34.9	57.0	74.0	17.1
10	14874.000	41.6	42.6	8.2	35.0	57.4	74.0	16.6
11	17234.000	43.7	46.7	9.7	35.3	64.8	74.0	9.2
12	17353.000	42.6	46.9	9.8	35.2	64.1	74.0	9.9

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto

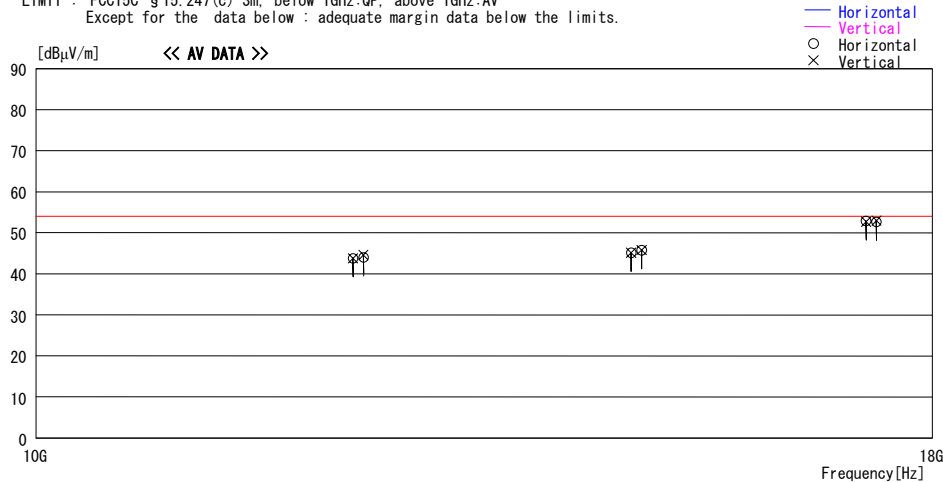
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1

Serial No. : 1 & T600023 & 1

Mode / Remarks : Test Item 3

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12310.000	31.1	41.7	6.6	35.6	43.8	54.0	10.2
2	12395.000	31.0	41.9	6.6	35.5	44.0	54.0	10.0
3	14772.000	30.0	42.1	8.0	34.9	45.2	54.0	8.9
4	14874.000	30.0	42.6	8.2	35.0	45.8	54.0	8.2
5	17234.000	31.8	46.7	9.7	35.3	52.9	54.0	1.1
6	17353.000	31.2	46.9	9.8	35.2	52.7	54.0	1.3
----- Vertical -----								
7	12310.000	31.1	41.7	6.6	35.6	43.8	54.0	10.2
8	12395.000	31.6	41.9	6.6	35.5	44.6	54.0	9.4
9	14772.000	30.0	42.1	8.0	34.9	45.2	54.0	8.9
10	14874.000	30.0	42.6	8.2	35.0	45.8	54.0	8.2
11	17234.000	31.6	46.7	9.7	35.3	52.7	54.0	1.3
12	17353.000	31.5	46.9	9.8	35.2	53.0	54.0	1.0

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

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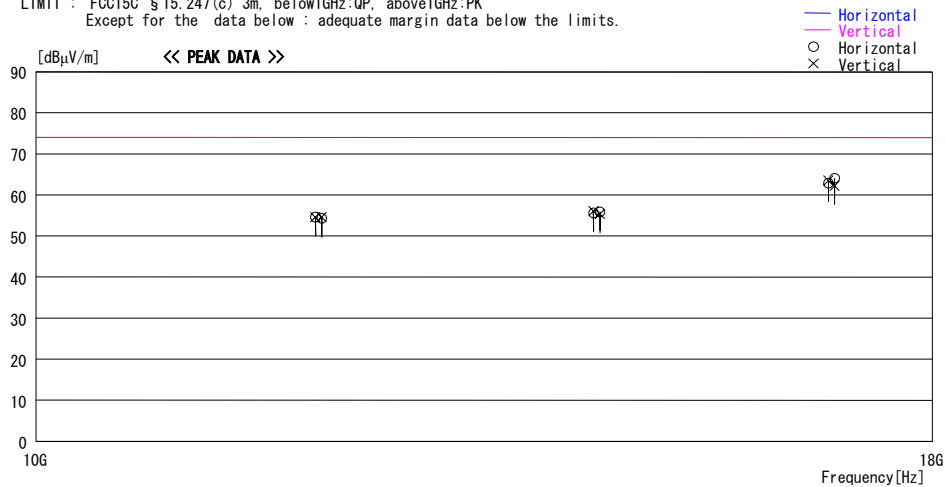
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 5(Test Item 8)
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	12010.000	42.7	41.0	6.6	35.7	54.6	74.0	19.4
2	12060.000	42.4	41.1	6.5	35.7	54.3	74.0	19.7
3	14412.000	41.4	41.1	7.7	34.6	55.6	74.0	18.4
4	14472.000	41.8	41.0	7.7	34.6	55.9	74.0	18.1
5	16814.000	43.0	45.9	9.6	35.6	62.9	74.0	11.1
6	16884.000	44.1	46.0	9.5	35.5	64.1	74.0	9.9
----- Vertical -----								
7	12010.000	42.7	41.0	6.6	35.7	54.6	74.0	19.4
8	12060.000	42.7	41.1	6.5	35.7	54.6	74.0	19.4
9	14412.000	41.8	41.1	7.7	34.6	56.0	74.0	18.0
10	14472.000	41.2	41.0	7.7	34.6	55.3	74.0	18.7
11	16814.000	43.6	45.9	9.6	35.6	63.5	74.0	10.5
12	16884.000	42.2	46.0	9.5	35.5	62.2	74.0	11.8

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

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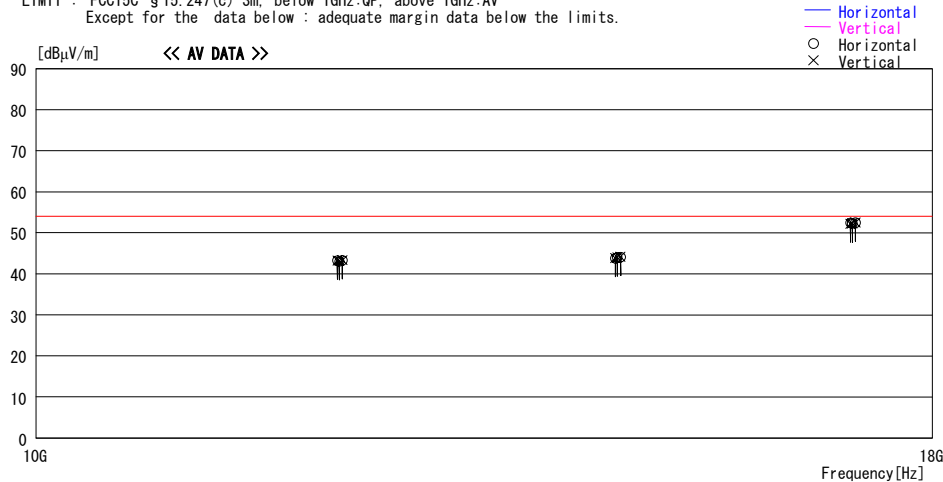
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 6
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	12185.000	30.9	41.4	6.6	35.6	43.3	54.0	10.8
2	12200.000	30.6	41.4	6.6	35.6	43.0	54.0	11.0
3	12225.000	30.8	41.5	6.6	35.6	43.3	54.0	10.7
4	14622.000	29.2	41.5	7.9	34.8	43.8	54.0	10.2
5	14640.000	29.3	41.6	7.9	34.8	44.0	54.0	10.0
6	14670.000	29.3	41.7	7.9	34.8	44.1	54.0	9.9
7	17059.000	31.7	46.4	9.7	35.4	52.4	54.0	1.6
8	17080.000	31.5	46.4	9.7	35.4	52.2	54.0	1.8
9	17115.000	31.7	46.5	9.7	35.4	52.5	54.0	1.5
----- Vertical -----								
10	12185.000	30.8	41.4	6.6	35.6	43.2	54.0	10.8
11	12200.000	30.7	41.4	6.6	35.6	43.1	54.0	10.9
12	12225.000	30.8	41.5	6.6	35.6	43.3	54.0	10.7
13	14622.000	29.3	41.5	7.9	34.8	43.9	54.0	10.1
14	14640.000	29.3	41.6	7.9	34.8	44.0	54.0	10.0
15	14670.000	29.4	41.7	7.9	34.8	44.2	54.0	9.8
16	17059.000	31.5	46.4	9.7	35.4	52.2	54.0	1.8
17	17080.000	31.6	46.4	9.7	35.4	52.3	54.0	1.7
18	17115.000	31.7	46.5	9.7	35.4	52.5	54.0	1.5

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

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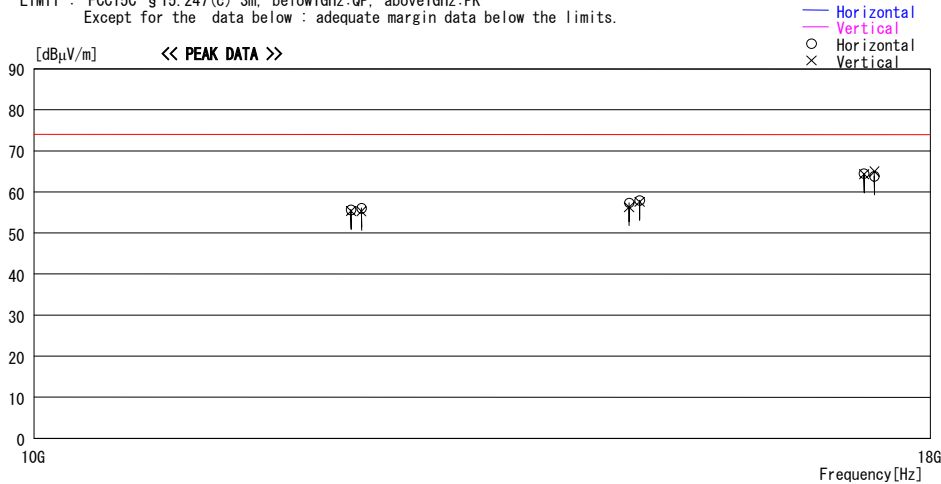
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 7
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	12310.000	43.0	41.7	6.6	35.6	55.7	74.0	18.3
2	12395.000	43.0	41.9	6.6	35.5	56.0	74.0	18.0
3	14772.000	42.1	42.1	8.0	34.9	57.3	74.0	16.7
4	14874.000	42.2	42.6	8.2	35.0	58.0	74.0	16.0
5	17234.000	43.4	46.7	9.7	35.3	64.5	74.0	9.5
6	17353.000	42.3	46.9	9.8	35.2	63.8	74.0	10.2
----- Vertical -----								
7	12310.000	42.6	41.7	6.6	35.6	55.3	74.0	18.7
8	12395.000	42.2	41.9	6.6	35.5	55.2	74.0	18.8
9	14772.000	41.1	42.1	8.0	34.9	56.3	74.0	17.7
10	14874.000	41.8	42.6	8.2	35.0	57.6	74.0	16.4
11	17234.000	43.2	46.7	9.7	35.3	64.3	74.0	9.7
12	17353.000	43.5	46.9	9.8	35.2	65.0	74.0	9.1

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

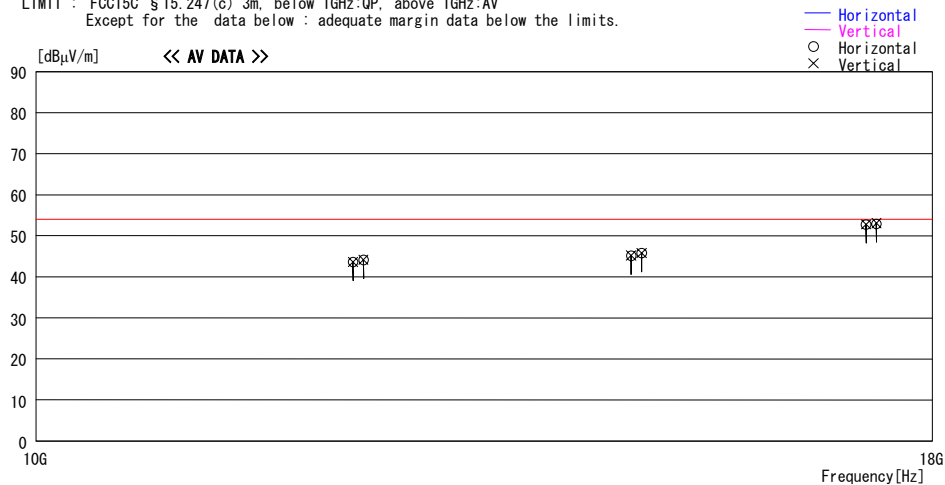
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 7
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING AV [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	12310.000	31.0	41.7	6.6	35.6	43.7	54.0	10.4
2	12395.000	31.1	41.9	6.6	35.5	44.1	54.0	9.9
3	14772.000	30.0	42.1	8.0	34.9	45.2	54.0	8.8
4	14874.000	30.0	42.6	8.2	35.0	45.8	54.0	8.2
5	17234.000	31.7	46.7	9.7	35.3	52.8	54.0	1.2
6	17353.000	31.4	46.9	9.8	35.2	52.9	54.0	1.1
----- Vertical -----								
7	12310.000	30.9	41.7	6.6	35.6	43.6	54.0	10.4
8	12395.000	31.2	41.9	6.6	35.5	44.2	54.0	9.8
9	14772.000	30.0	42.1	8.0	34.9	45.2	54.0	8.8
10	14874.000	30.0	42.6	8.2	35.0	45.8	54.0	8.2
11	17234.000	31.7	46.7	9.7	35.3	52.8	54.0	1.2
12	17353.000	31.6	46.9	9.8	35.2	53.1	54.0	0.9

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

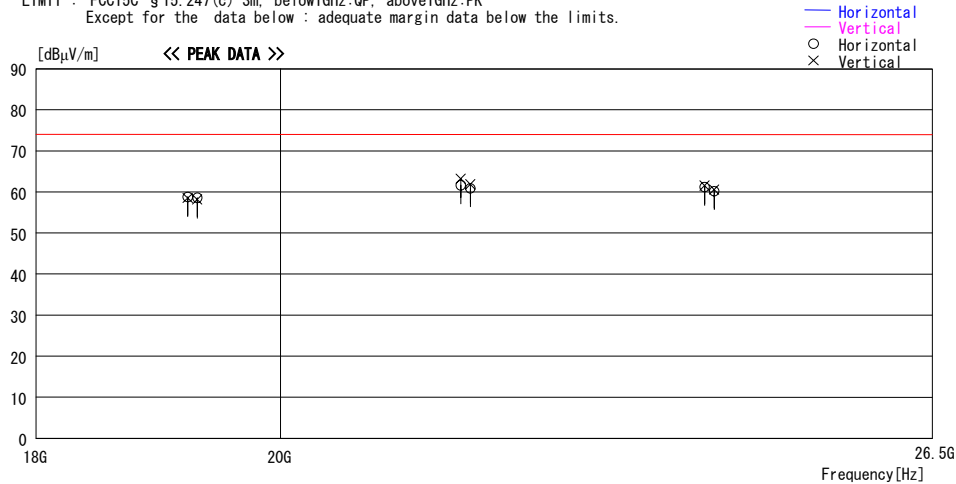
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 1 (Test Item 4)
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19216.000	43.2	39.7	10.8	34.9	58.8	74.0	15.2
2	19296.000	43.0	39.6	10.9	34.9	58.6	74.0	15.4
3	21618.000	43.7	40.8	12.6	35.4	61.7	74.0	12.3
4	21708.000	42.9	40.7	12.6	35.3	60.9	74.0	13.1
5	24020.000	44.0	39.9	13.1	35.8	61.2	74.0	12.8
6	24120.000	43.1	40.0	13.1	36.0	60.2	74.0	13.8
----- Vertical -----								
7	19216.000	42.9	39.7	10.8	34.9	58.5	74.0	15.5
8	19296.000	42.5	39.6	10.9	34.9	58.1	74.0	15.9
9	21618.000	45.2	40.8	12.6	35.4	63.2	74.0	10.8
10	21708.000	43.8	40.7	12.6	35.3	61.8	74.0	12.2
11	24020.000	44.4	39.9	13.1	35.8	61.6	74.0	12.4
12	24120.000	43.5	40.0	13.1	36.0	60.6	74.0	13.4

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

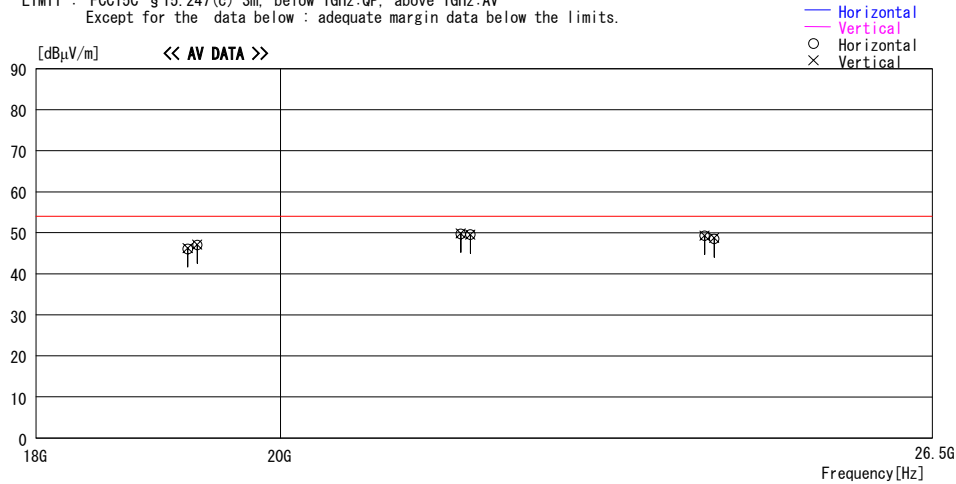
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 1 (Test Item 4)
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19216.000	30.5	39.7	10.8	34.9	46.1	54.0	7.9
2	19296.000	31.5	39.6	10.9	34.9	47.1	54.0	6.9
3	21618.000	31.8	40.8	12.6	35.4	49.8	54.0	4.2
4	21708.000	31.6	40.7	12.6	35.3	49.6	54.0	4.4
5	24020.000	32.1	39.9	13.1	35.8	49.3	54.0	4.7
6	24120.000	31.5	40.0	13.1	36.0	48.6	54.0	5.4
----- Vertical -----								
7	19216.000	30.7	39.7	10.8	34.9	46.3	54.0	7.7
8	19296.000	31.5	39.6	10.9	34.9	47.1	54.0	6.9
9	21618.000	31.8	40.8	12.6	35.4	49.8	54.0	4.2
10	21708.000	31.6	40.7	12.6	35.3	49.6	54.0	4.4
11	24020.000	32.1	39.9	13.1	35.8	49.3	54.0	4.7
12	24120.000	31.7	40.0	13.1	36.0	48.8	54.0	5.2

- *1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.
*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

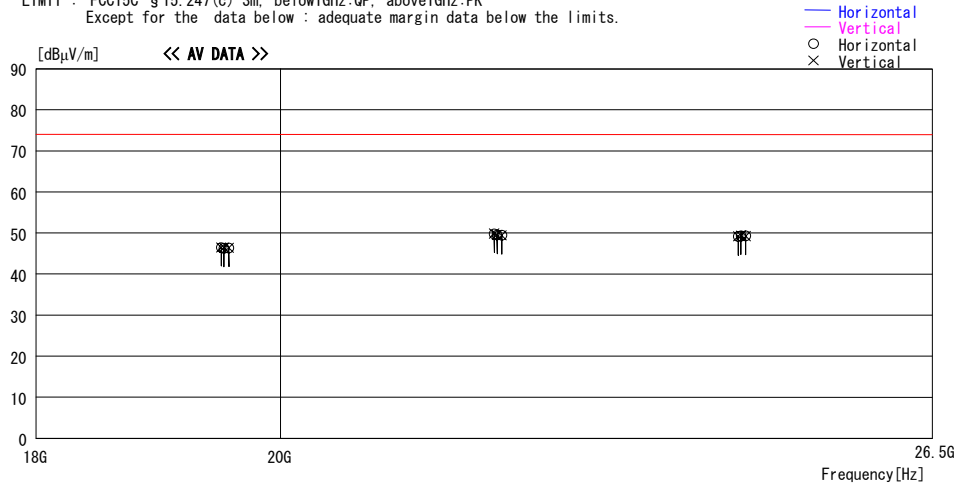
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 2
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19496.000	31.1	39.2	11.1	34.9	46.5	74.0	27.5
2	19520.000	31.0	39.2	11.1	35.0	46.3	74.0	27.7
3	19560.000	31.0	39.3	11.1	35.0	46.4	74.0	27.6
4	21933.000	31.5	40.5	12.8	35.0	49.8	74.0	24.2
5	21960.000	31.4	40.4	12.8	35.0	49.6	74.0	24.5
6	22005.000	31.2	40.4	12.8	34.9	49.5	74.0	24.5
7	24370.000	32.5	40.1	13.2	36.6	49.2	74.0	24.9
8	24400.000	32.6	40.1	13.2	36.6	49.3	74.0	24.7
9	24450.000	32.6	40.2	13.2	36.7	49.3	74.0	24.7
----- Vertical -----								
10	19496.000	31.1	39.2	11.1	34.9	46.5	74.0	27.5
11	19520.000	31.1	39.2	11.1	35.0	46.4	74.0	27.6
12	19560.000	31.0	39.3	11.1	35.0	46.4	74.0	27.6
13	21933.000	31.5	40.5	12.8	35.0	49.8	74.0	24.2
14	21960.000	31.4	40.4	12.8	35.0	49.6	74.0	24.5
15	22005.000	31.1	40.4	12.8	34.9	49.4	74.0	24.6
16	24370.000	32.5	40.1	13.2	36.6	49.2	74.0	24.8
17	24400.000	32.6	40.1	13.2	36.6	49.3	74.0	24.7
18	24450.000	32.6	40.2	13.2	36.7	49.3	74.0	24.7

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

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MF060b(10.04.03)

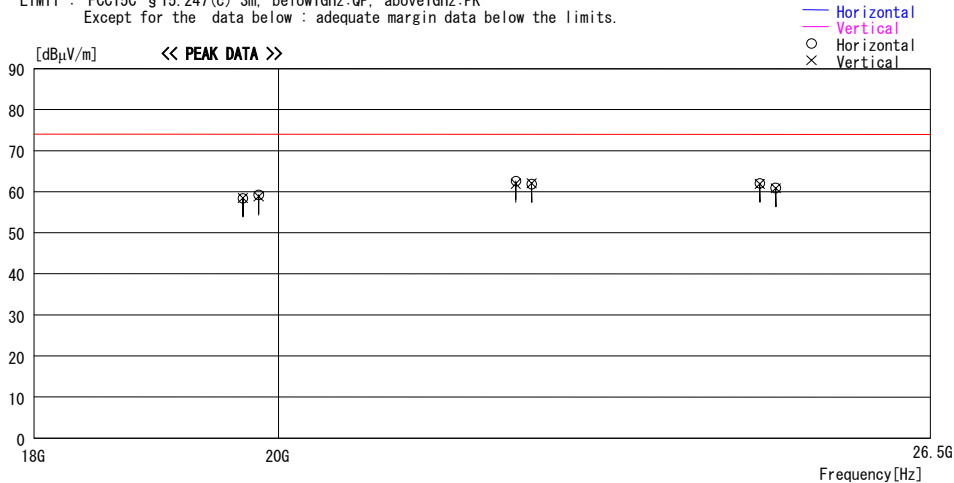
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 3
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-H0
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19696.000	42.8	39.6	11.2	35.2	58.4	74.0	15.7
2	19832.000	43.4	39.9	11.3	35.3	59.3	74.0	14.7
3	22158.000	44.2	40.6	12.8	35.0	62.6	74.0	11.4
4	22311.000	43.4	40.7	12.9	35.1	61.9	74.0	12.1
5	24620.000	45.3	40.2	13.4	36.8	62.1	74.0	11.9
6	24790.000	44.0	40.2	13.4	36.7	60.9	74.0	13.1
----- Vertical -----								
7	19696.000	42.9	39.6	11.2	35.2	58.5	74.0	15.5
8	19832.000	42.9	39.9	11.3	35.3	58.8	74.0	15.2
9	22158.000	43.6	40.6	12.8	35.0	62.0	74.0	12.0
10	22311.000	43.6	40.7	12.9	35.1	62.1	74.0	11.9
11	24620.000	45.1	40.2	13.4	36.8	61.9	74.0	12.1
12	24790.000	43.9	40.2	13.4	36.7	60.8	74.0	13.2

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

UL Apex Co., Ltd.

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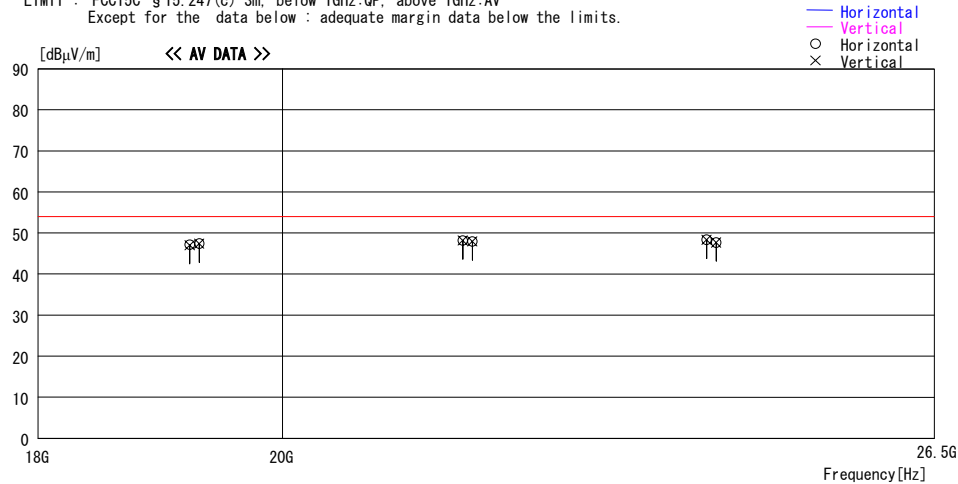
MF060b(10.04.03)

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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 5 (Test Item 8)
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS	GAIN	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19216.000	30.9	41.7	9.9	35.3	47.2	54.0	6.8
2	19296.000	31.1	41.7	9.9	35.3	47.4	54.0	6.6
3	21618.000	31.9	41.7	9.9	35.3	48.2	54.0	5.8
4	21708.000	31.7	41.7	9.9	35.3	48.0	54.0	6.0
5	24020.000	32.1	41.7	9.9	35.3	48.4	54.0	5.6
6	24120.000	31.4	41.7	9.9	35.3	47.7	54.0	6.3
----- Vertical -----								
7	19216.000	30.7	41.7	9.9	35.3	47.0	54.0	7.0
8	19296.000	31.1	41.7	9.9	35.3	47.4	54.0	6.6
9	21618.000	31.9	41.7	9.9	35.3	48.2	54.0	5.8
10	21708.000	31.7	41.7	9.9	35.3	48.0	54.0	6.0
11	24020.000	32.1	41.7	9.9	35.3	48.4	54.0	5.6
12	24120.000	31.4	41.7	9.9	35.3	47.7	54.0	6.3

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

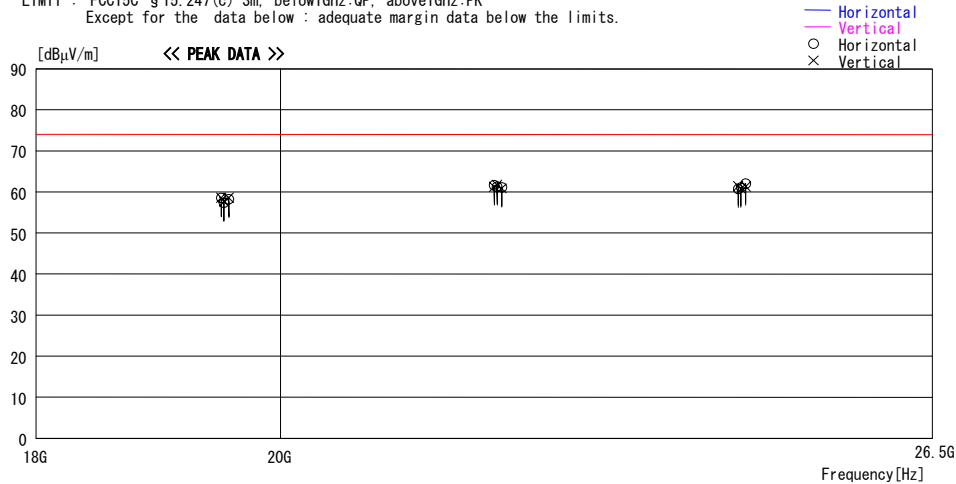
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DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 6
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19496.000	43.1	39.2	11.1	34.9	58.5	74.0	15.5
2	19520.000	42.1	39.2	11.1	35.0	57.4	74.0	16.6
3	19560.000	42.9	39.3	11.1	35.0	58.3	74.0	15.8
4	21933.000	43.4	40.5	12.8	35.0	61.7	74.0	12.3
5	21960.000	43.1	40.4	12.8	35.0	61.3	74.0	12.7
6	22005.000	42.8	40.4	12.8	34.9	61.1	74.0	12.9
7	24370.000	44.0	40.1	13.2	36.6	60.7	74.0	13.3
8	24400.000	44.5	40.1	13.2	36.6	61.2	74.0	12.8
9	24450.000	45.3	40.2	13.2	36.7	62.0	74.0	12.0
----- Vertical -----								
10	19496.000	43.2	39.2	11.1	34.9	58.6	74.0	15.4
11	19520.000	42.3	39.2	11.1	35.0	57.6	74.0	16.4
12	19560.000	43.2	39.3	11.1	35.0	58.6	74.0	15.4
13	21933.000	43.0	40.5	12.8	35.0	61.3	74.0	12.7
14	21960.000	43.5	40.4	12.8	35.0	61.7	74.0	12.3
15	22005.000	42.6	40.4	12.8	34.9	60.9	74.0	13.2
16	24370.000	44.7	40.1	13.2	36.6	61.4	74.0	12.6
17	24400.000	44.1	40.1	13.2	36.6	60.8	74.0	13.2
18	24450.000	44.6	40.2	13.2	36.7	61.3	74.0	12.7

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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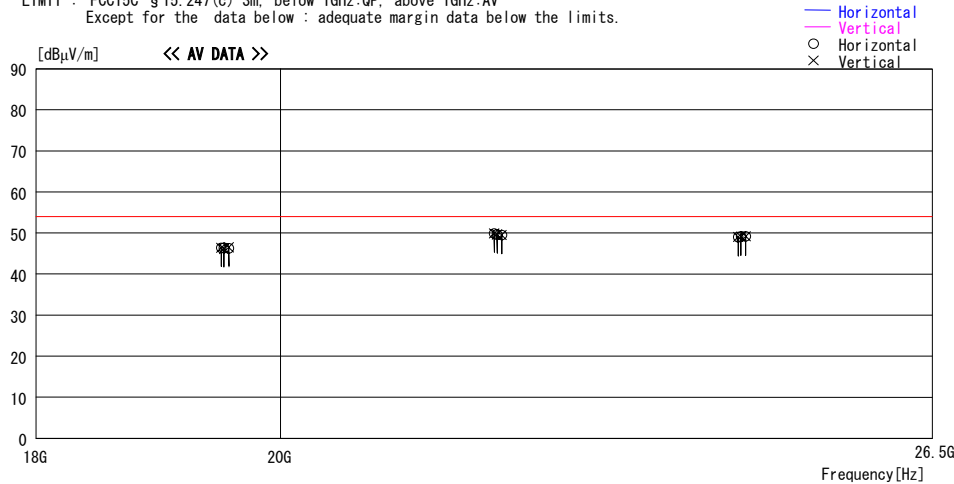
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[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 6
Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19496.000	31.0	39.2	11.1	34.9	46.4	54.0	7.6
2	19520.000	31.1	39.2	11.1	35.0	46.4	54.0	7.6
3	19560.000	30.9	39.3	11.1	35.0	46.3	54.0	7.7
4	21933.000	31.6	40.5	12.8	35.0	49.9	54.0	4.1
5	21960.000	31.5	40.4	12.8	35.0	49.7	54.0	4.3
6	22005.000	31.2	40.4	12.8	34.9	49.5	54.0	4.5
7	24370.000	32.3	40.1	13.2	36.6	49.0	54.0	5.0
8	24400.000	32.5	40.1	13.2	36.6	49.2	54.0	4.8
9	24450.000	32.5	40.2	13.2	36.7	49.2	54.0	4.8
----- Vertical -----								
10	19496.000	31.0	39.2	11.1	34.9	46.4	54.0	7.6
11	19520.000	30.9	39.2	11.1	35.0	46.2	54.0	7.8
12	19560.000	31.1	39.3	11.1	35.0	46.5	54.0	7.5
13	21933.000	31.6	40.5	12.8	35.0	49.9	54.0	4.1
14	21960.000	31.4	40.4	12.8	35.0	49.6	54.0	4.4
15	22005.000	31.2	40.4	12.8	34.9	49.5	54.0	4.5
16	24370.000	32.3	40.1	13.2	36.6	49.0	54.0	5.0
17	24400.000	32.4	40.1	13.2	36.6	49.1	54.0	4.9
18	24450.000	32.5	40.2	13.2	36.7	49.2	54.0	4.8

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

Head Office EMC Lab.

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MF060b(10.04.03)

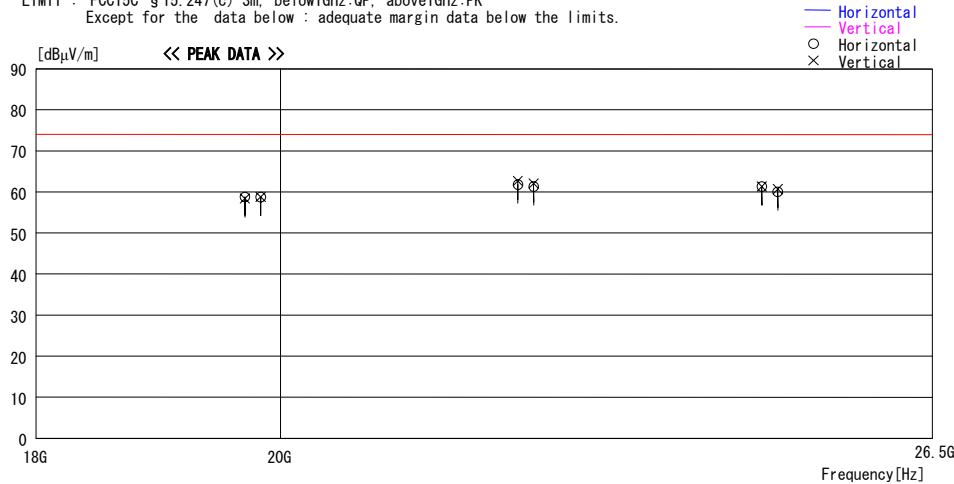
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 7
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19696.000	43.2	39.6	11.2	35.2	58.8	74.0	15.2
2	19832.000	42.9	39.9	11.3	35.3	58.8	74.0	15.2
3	22158.000	43.4	40.6	12.8	35.0	61.8	74.0	12.2
4	22311.000	42.8	40.7	12.9	35.1	61.3	74.0	12.7
5	24620.000	44.5	40.2	13.4	36.8	61.3	74.0	12.7
6	24790.000	43.2	40.2	13.4	36.7	60.1	74.0	13.9
----- Vertical -----								
7	19696.000	42.8	39.6	11.2	35.2	58.4	74.0	15.6
8	19832.000	42.9	39.9	11.3	35.3	58.8	74.0	15.2
9	22158.000	44.3	40.6	12.8	35.0	62.7	74.0	11.3
10	22311.000	43.6	40.7	12.9	35.1	62.1	74.0	11.9
11	24620.000	44.5	40.2	13.4	36.8	61.3	74.0	12.7
12	24790.000	43.8	40.2	13.4	36.7	60.7	74.0	13.3

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = $20\log(3/1.0) = 9.5\text{dB}$

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

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MF060b(10.04.03)

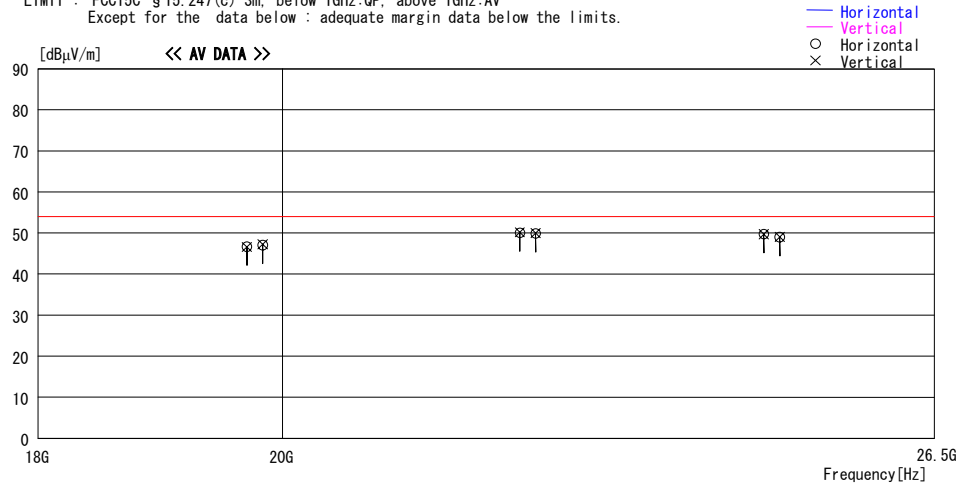
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/15 13:54:51

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 7
LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	19696.000	31.1	39.6	11.2	35.2	46.7	54.0	7.3
2	19832.000	31.2	39.9	11.3	35.3	47.1	54.0	6.9
3	22158.000	31.7	40.6	12.8	35.0	50.1	54.0	3.9
4	22311.000	31.4	40.7	12.9	35.1	49.9	54.0	4.1
5	24620.000	32.9	40.2	13.4	36.8	49.7	54.0	4.3
6	24790.000	32.1	40.2	13.4	36.7	49.0	54.0	5.0
----- Vertical -----								
7	19696.000	31.0	39.6	11.2	35.2	46.6	54.0	7.4
8	19832.000	31.3	39.9	11.3	35.3	47.2	54.0	6.8
9	22158.000	31.8	40.6	12.8	35.0	50.2	54.0	3.8
10	22311.000	31.5	40.7	12.9	35.1	50.0	54.0	4.0
11	24620.000	32.9	40.2	13.4	36.8	49.7	54.0	4.3
12	24790.000	32.2	40.2	13.4	36.7	49.1	54.0	4.9

*1) In the frequency over the fifth harmonic, the noise from the EUT was not seen. Its base noise implies the system noise floor.

*2) Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

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

UL Apex Co., Ltd.

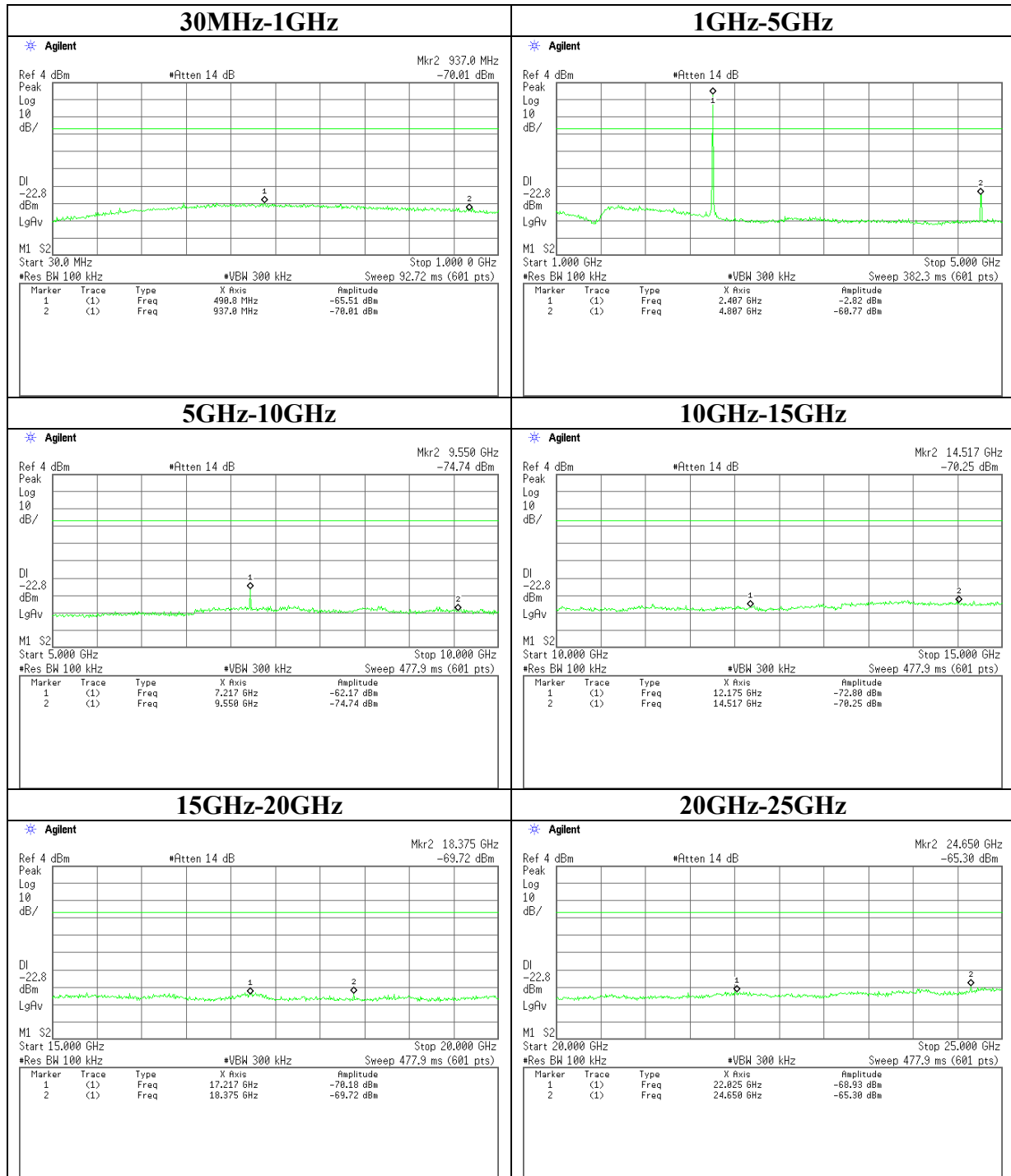
Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(10.04.03)

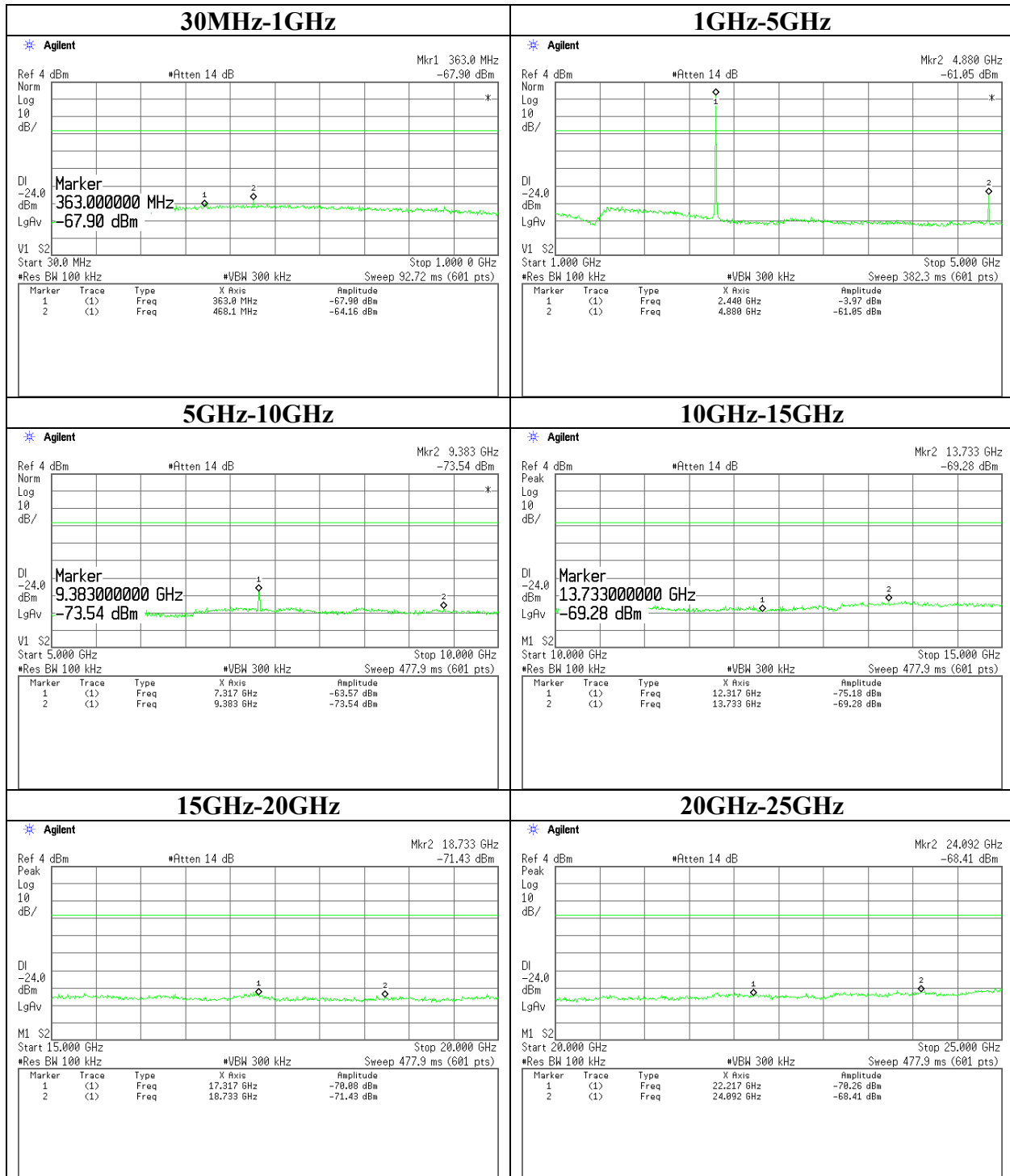
Conducted Spurious Emission(DSSS and other forms of modulation) Receiver**Ch : Low****UL Apex Co., Ltd.****Head Office EMC Lab.**

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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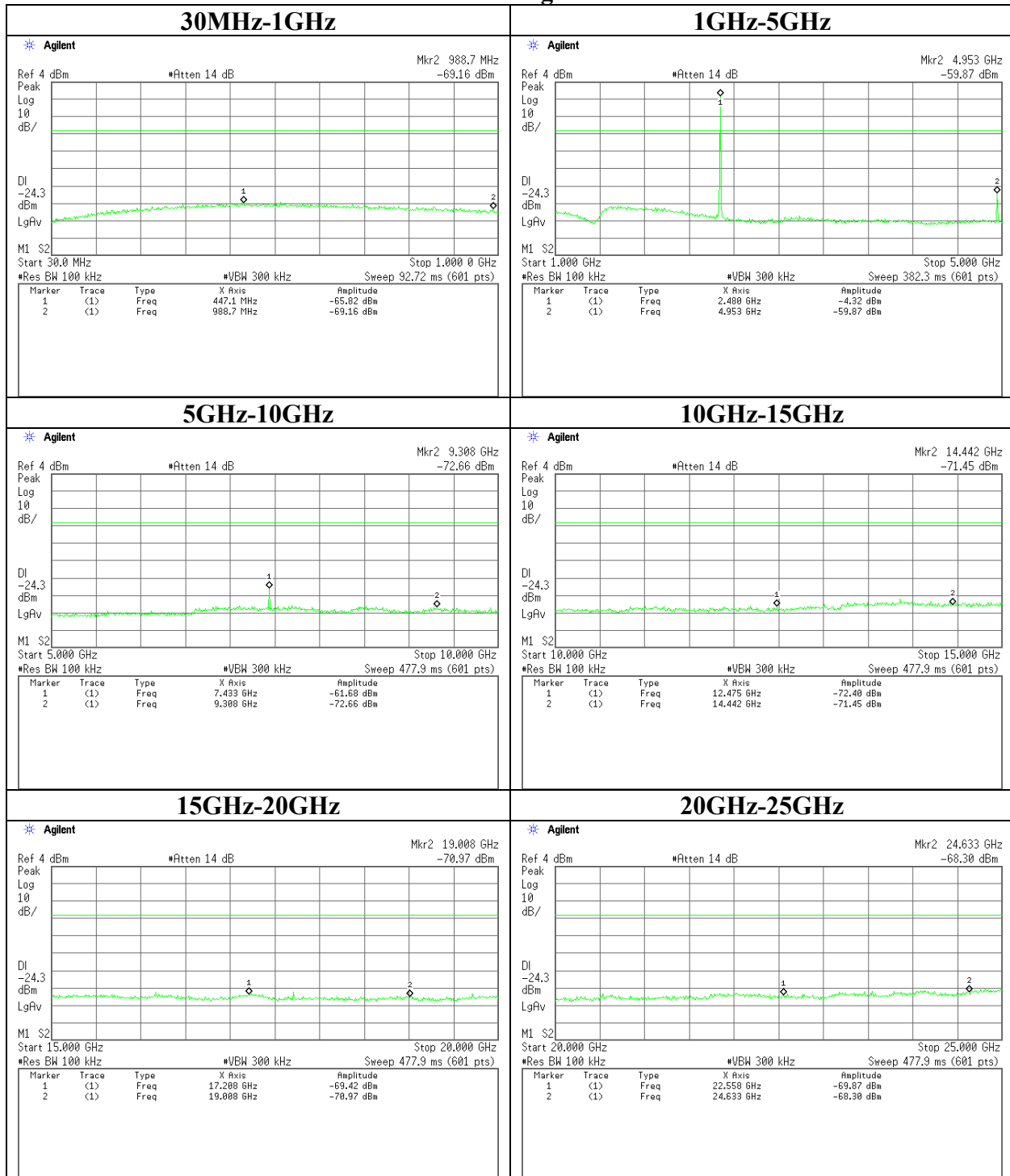
MF060b(10.04.03)

Conducted Spurious Emission(DSSS and other forms of modulation) Receiver**Ch : Mid****UL Apex Co., Ltd.****Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

Conducted Spurious Emission(DSSS and other forms of modulation) Receiver

Ch : High



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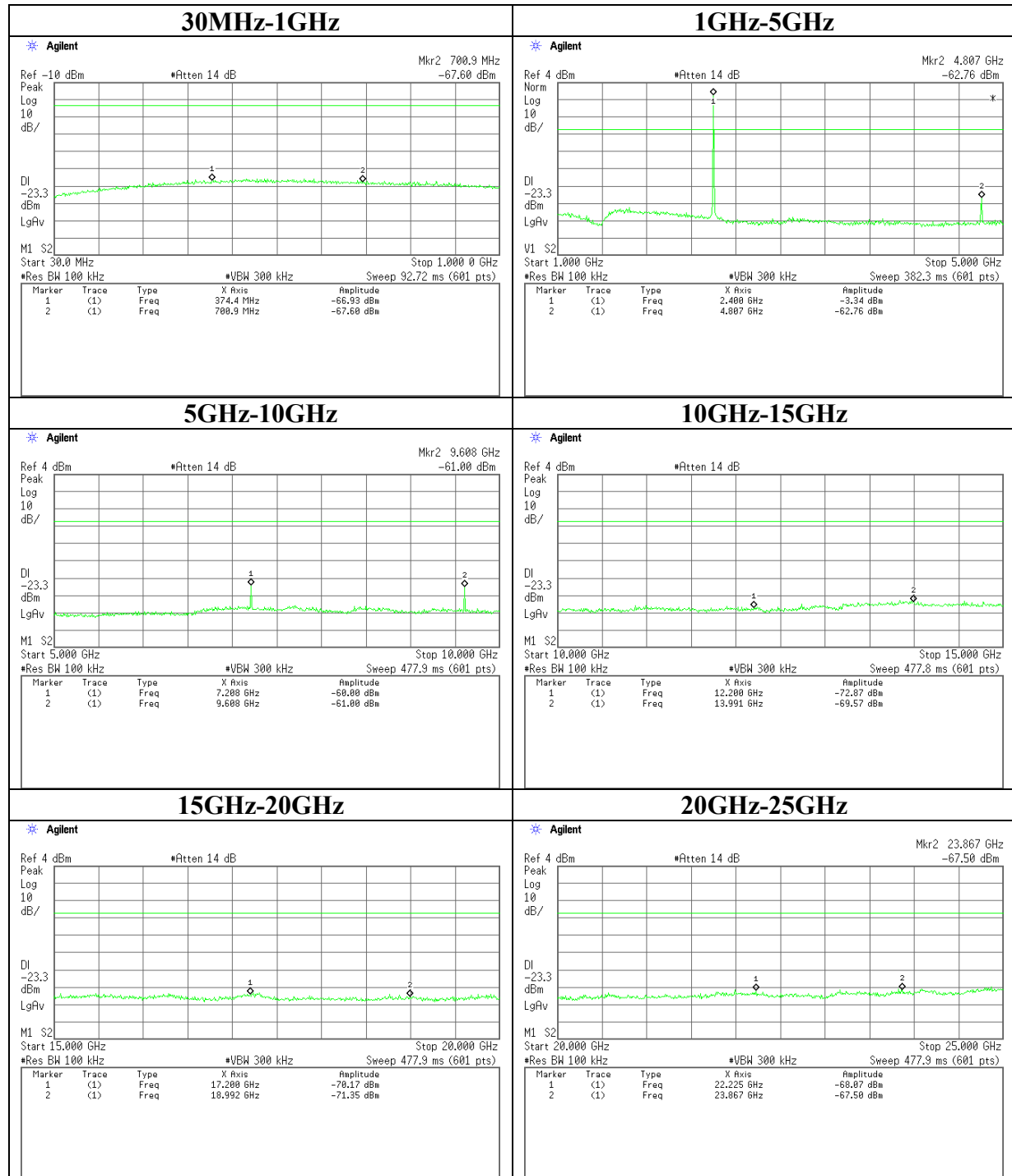
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

Conducted Spurious Emission(DSSS and other forms of modulation) Wireless Keyboard

Ch : Low



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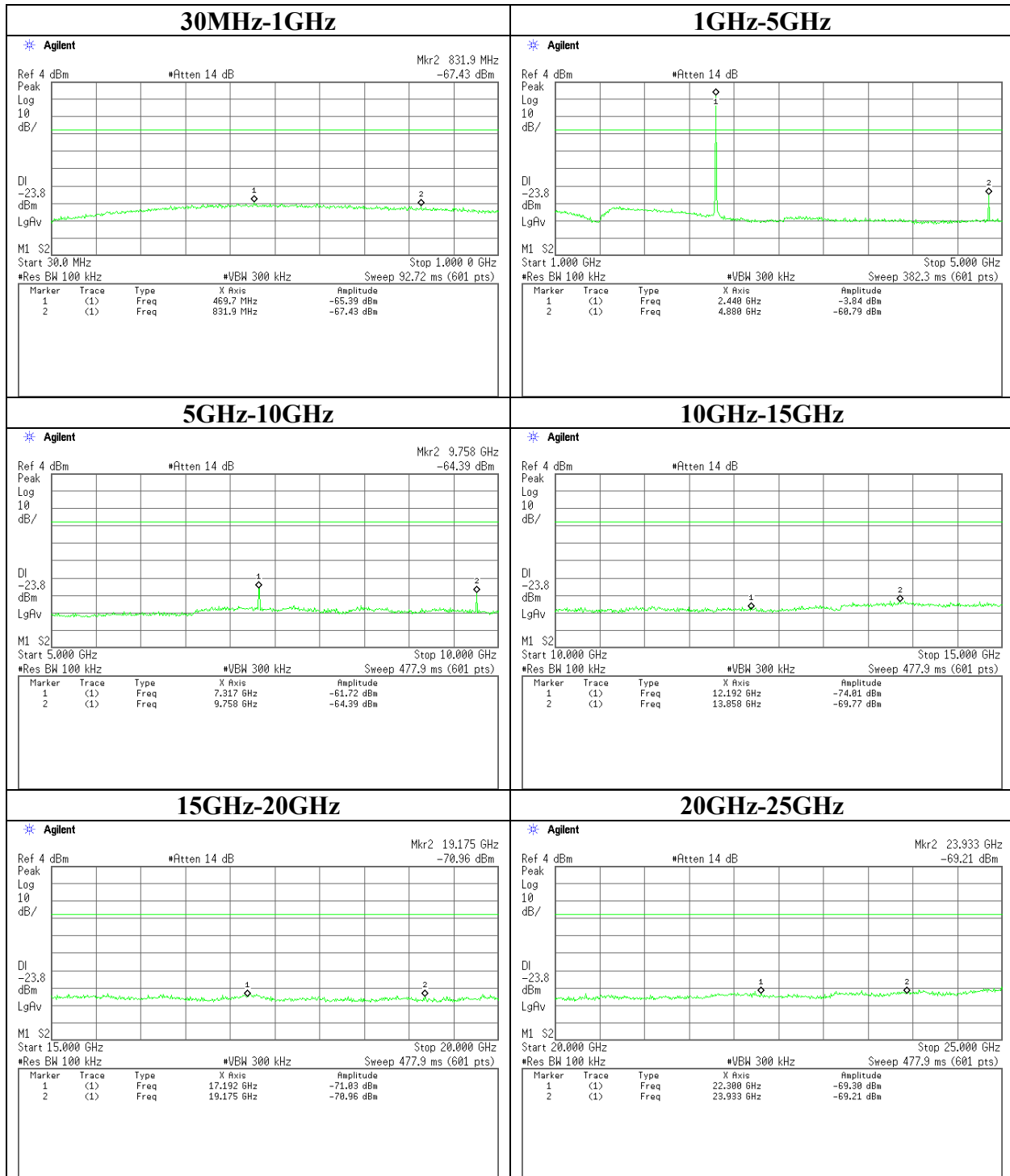
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

Conducted Spurious Emission(DSSS and other forms of modulation) Wireless Keyboard

Ch : Mid



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Head Office EMC Lab.

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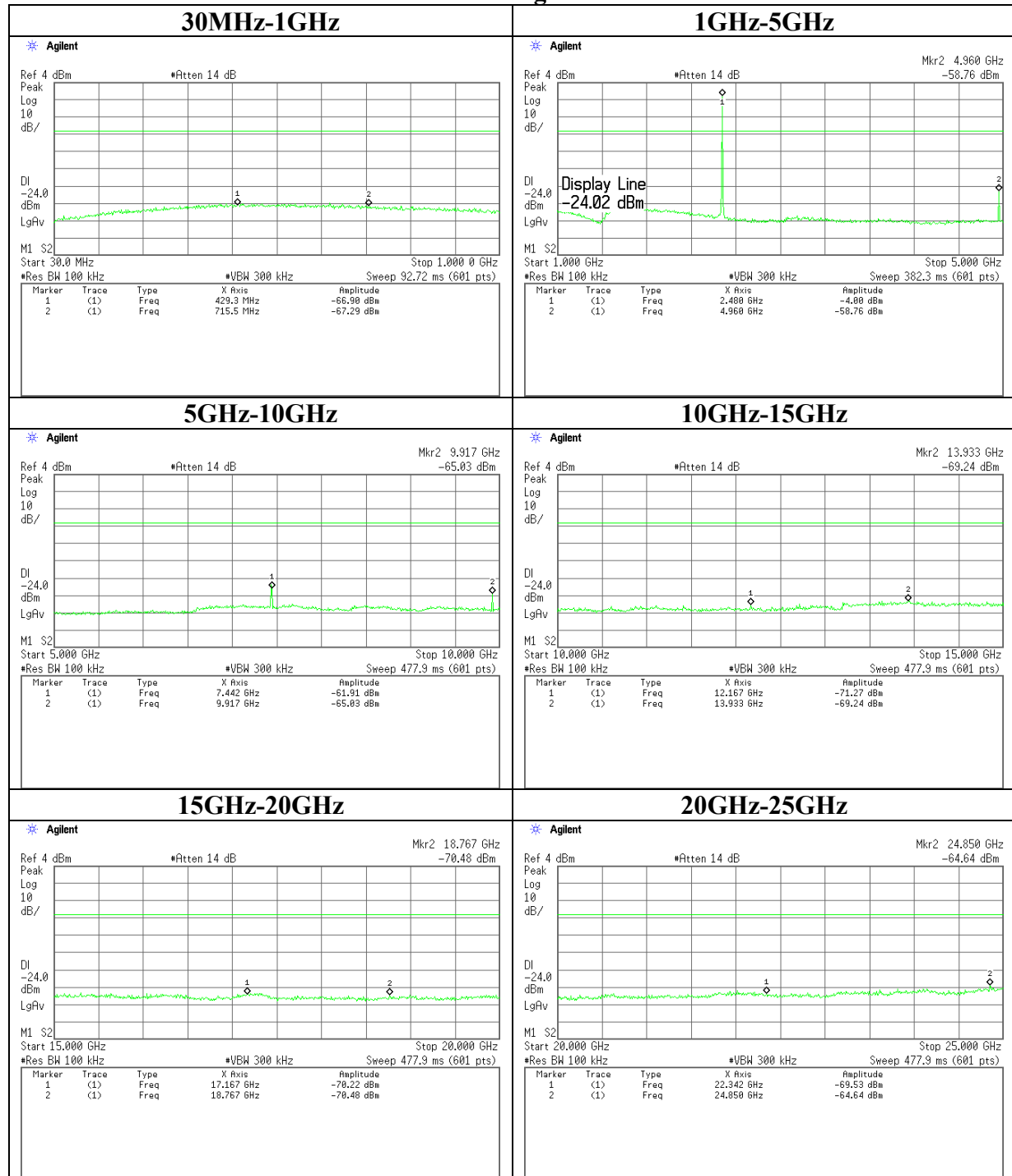
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

Conducted Spurious Emission(DSSS and other forms of modulation) Wireless Keyboard

Ch : High



UL Apex Co., Ltd.

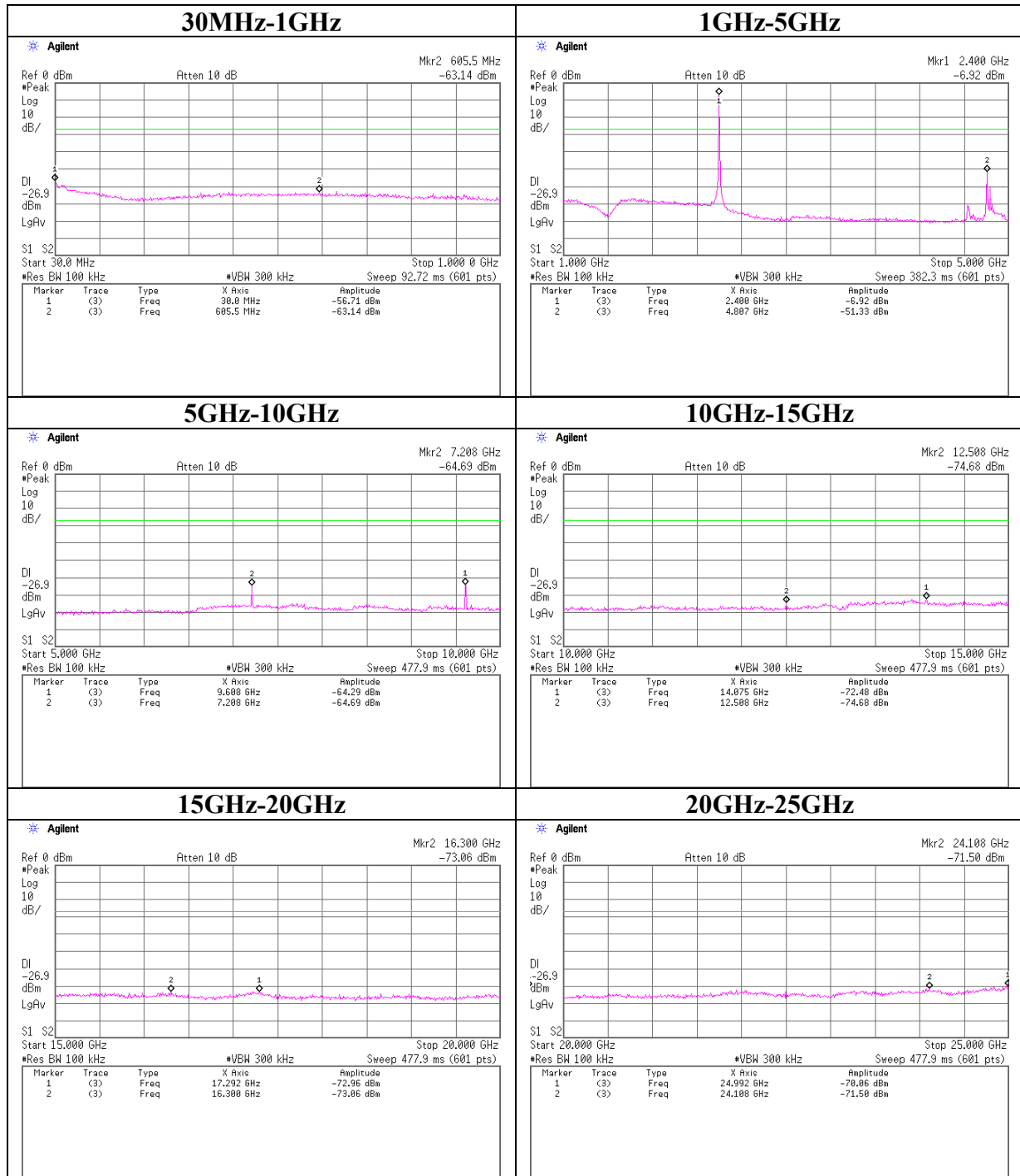
Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(10.04.03)

Conducted Spurious Emission(DSSS and other forms of modulation) Wireless Mouse**Ch : Low****UL Apex Co., Ltd.****Head Office EMC Lab.**

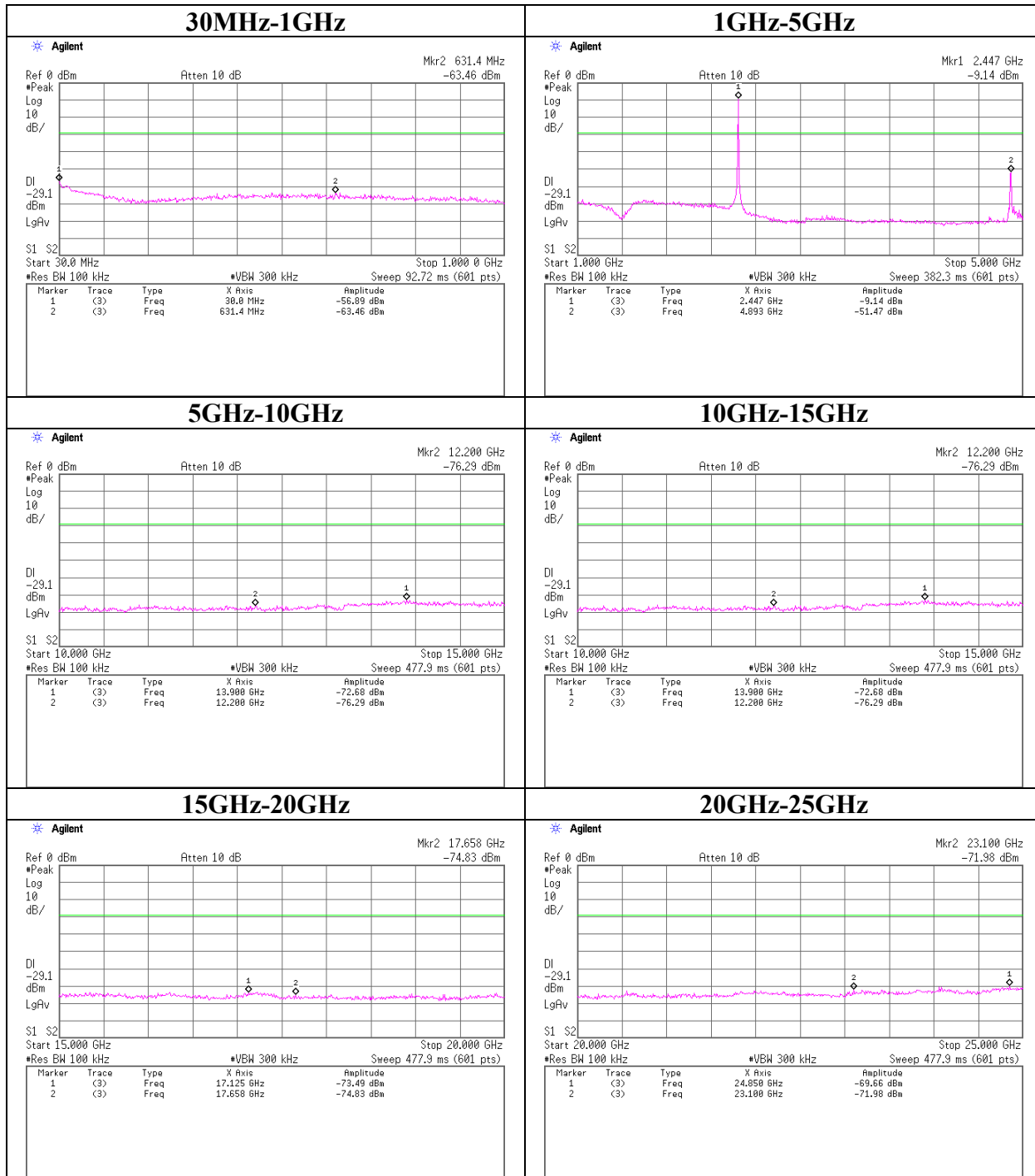
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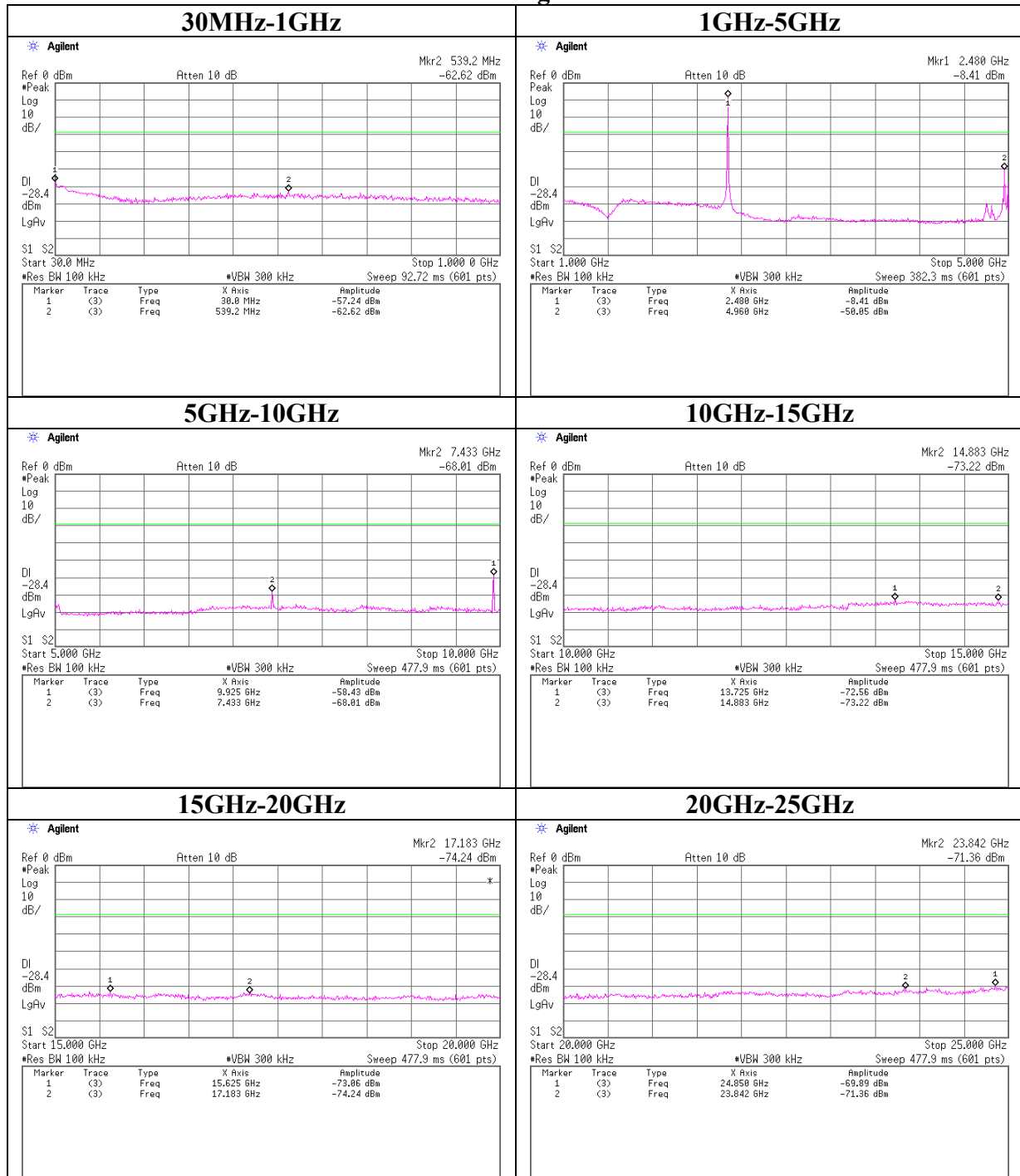
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(10.04.03)

Conducted Spurious Emission(DSSS and other forms of modulation) Wireless Mouse
Ch : Mid



Conducted Spurious Emission(DSSS and other forms of modulation) Wireless Mouse**Ch : High****UL Apex Co., Ltd.****Head Office EMC Lab.**

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MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

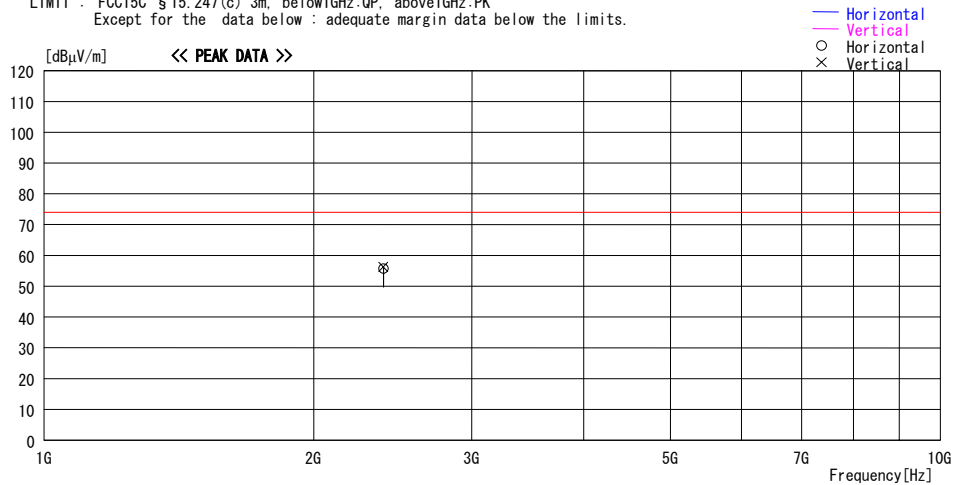
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Z Axis(MAX) Band Edge Compliance

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	45.8	30.7	15.5	36.3	55.7	74.0	18.3
----- Vertical -----								
2	2390.000	46.4	30.7	15.5	36.3	56.3	74.0	17.7

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

Page:

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MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

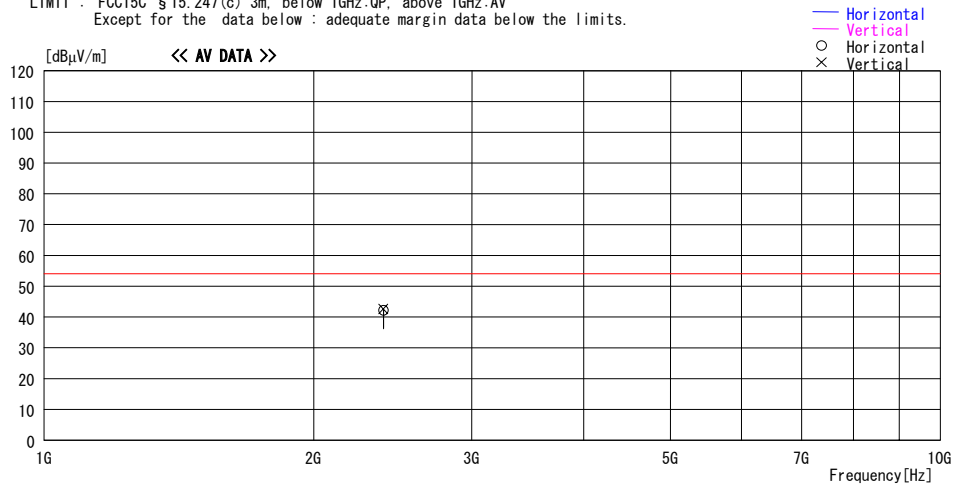
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:Y Axis Ver:Z Axis(MAX) Band Edge Compliance

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	32.3	30.7	15.5	36.3	42.2	54.0	11.8
----- Vertical -----								
2	2390.000	32.7	30.7	15.5	36.3	42.6	54.0	11.4

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

Page:

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MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

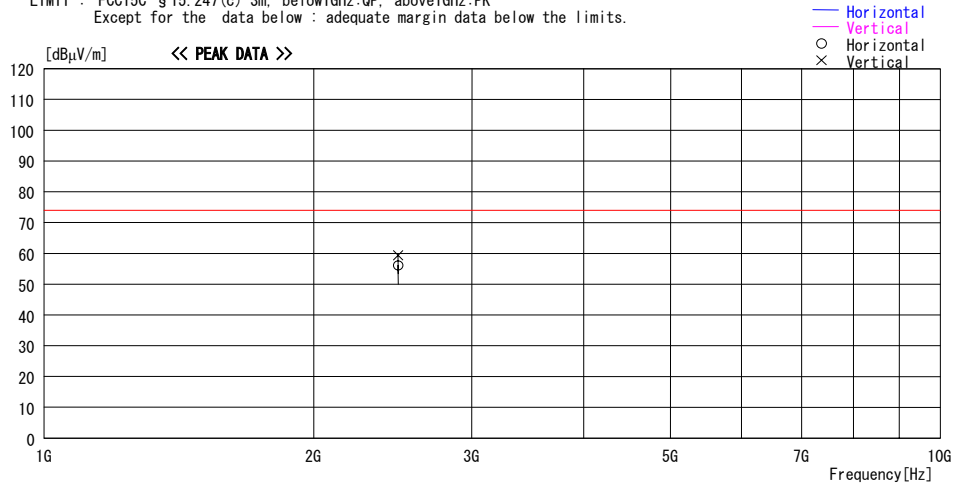
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX) Band Edge Compliance

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	46.0	30.8	15.5	36.2	56.1	74.0	17.9
----- Vertical -----								
2	2483.500	49.3	30.8	15.5	36.2	59.4	74.0	14.6

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

Page:

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MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

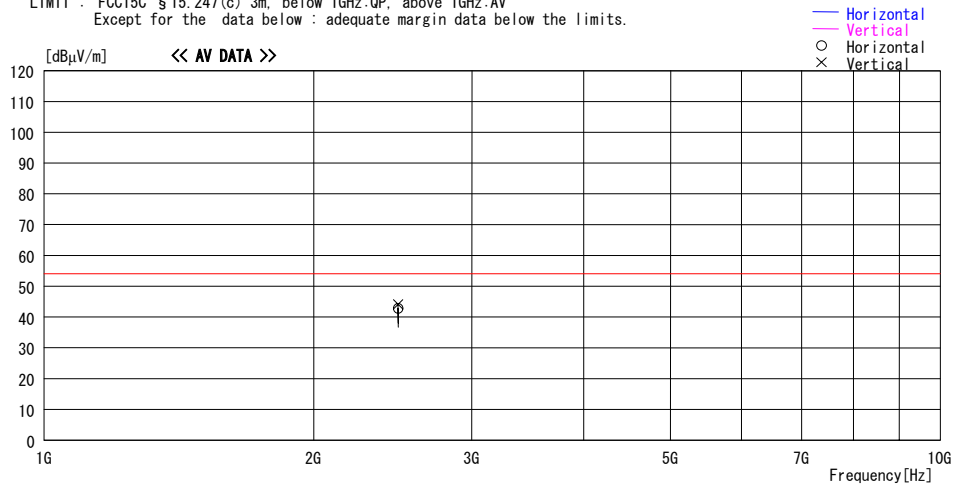
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:54:36

Applicant : Sony Corporation
Kind of EUT : Receiver
Model No. : VGP-WRC1
Serial No. : 1

Report No. : 24KE0303-HO
Power : DC5V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX) Band Edge Compliance

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	32.7	30.8	15.5	36.2	42.8	54.0	11.3
----- Vertical -----								
2	2483.500	34.0	30.8	15.5	36.2	44.1	54.0	9.9

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

Page:

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Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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Facsimile : +81 596 24 8124

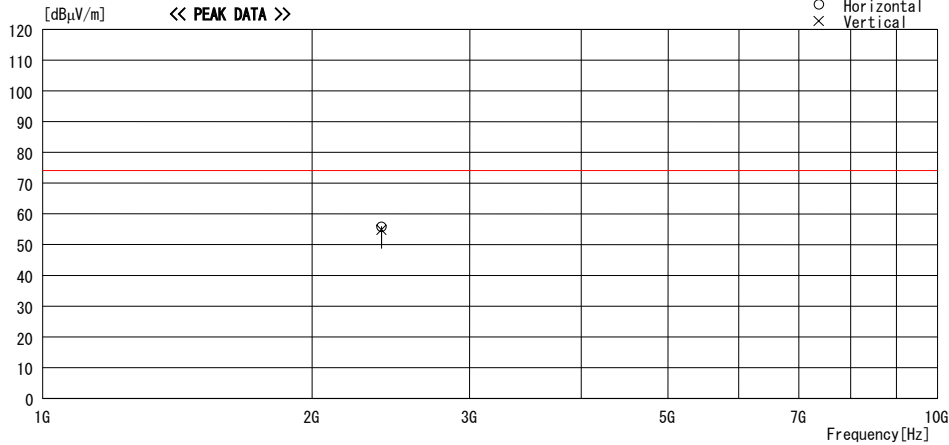
MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)**[Transmitting mode by single device]****DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/02 12:05:27Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023Report No. : 24KE0303-H0
Power : DC6V
Temp. / Humi. : 23deg. C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor: X axis Ver:Y Axis(MAX) Band Edge Compliance

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	44.9	30.8	16.4	36.3	55.8	74.0	18.2
----- Vertical -----								
2	2390.000	43.9	30.8	16.4	36.3	54.8	74.0	19.2

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)**UL Apex Co., Ltd.****Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

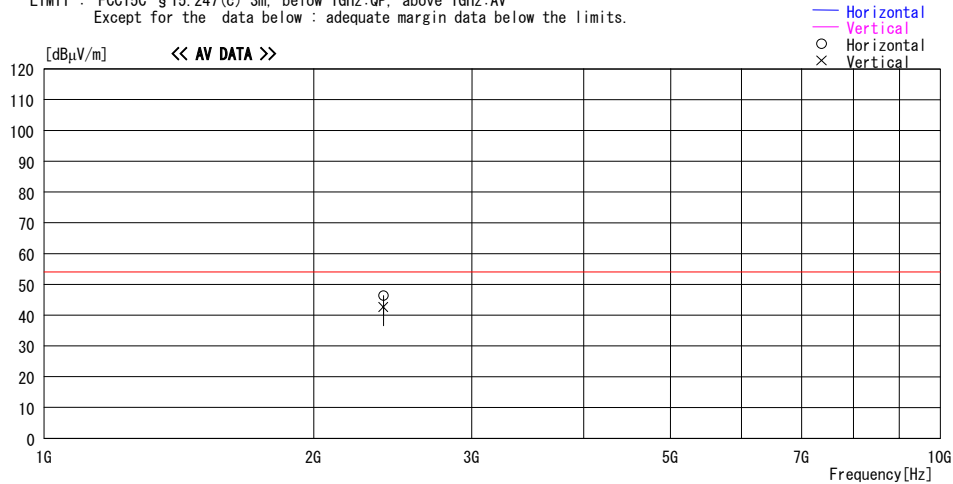
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/02 12:05:27

Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp. / Humi. : 23deg. C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor: X axis Ver:Y Axis(MAX) Band Edge Compliance

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	35.4	30.8	16.4	36.3	46.3	54.0	7.7
----- Vertical -----								
2	2390.000	31.8	30.8	16.4	36.3	42.7	54.0	11.3

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

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2004/07/02 12:05:27

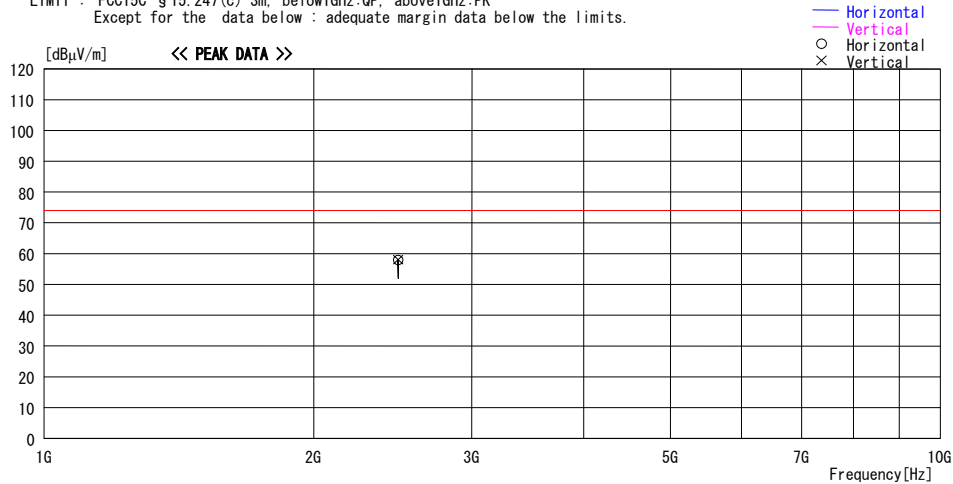
Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023

Report No. : 24KE0303-H0
Power : DC6V
Temp./Humi. : 23deg.C / 60%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor: X axis Ver:Y Axis(MAX) Band Edge Compliance

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	46.6	31.0	16.5	36.2	57.9	74.0	16.1
----- Vertical -----								
2	2483.500	46.7	31.0	16.5	36.2	58.0	74.0	16.0

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

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(10.04.03)

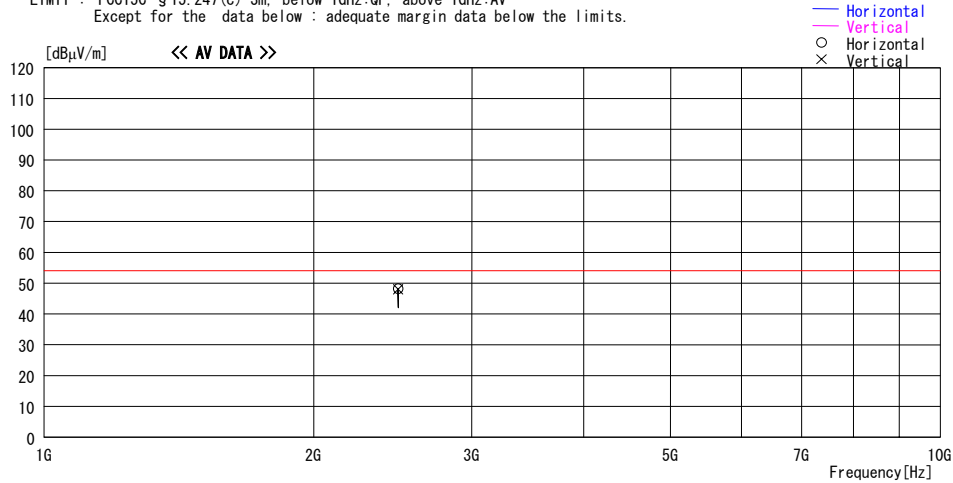
Radiated emission Band Edge compliance (DSSS and other forms of modulation)

[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2004/07/02 12:05:27Applicant : Sony Corporation
Kind of EUT : Wireless Keyboard
Model No. : VGP-WKB1
Serial No. : T6000023Report No. : 24KE0303-HO
Power : DC6V
Temp. / Humi. : 23deg. C / 60%
Operator : Naoki Sakamoto

Model / Remarks : Tx:2479MHz, Hor: X axis Ver:Y Axis(MAX) Band Edge Compliance

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

No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	36.9	31.0	16.5	36.2	48.2	54.0	5.8
----- Vertical -----								
2	2483.500	36.7	31.0	16.5	36.2	48.0	54.0	6.0

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

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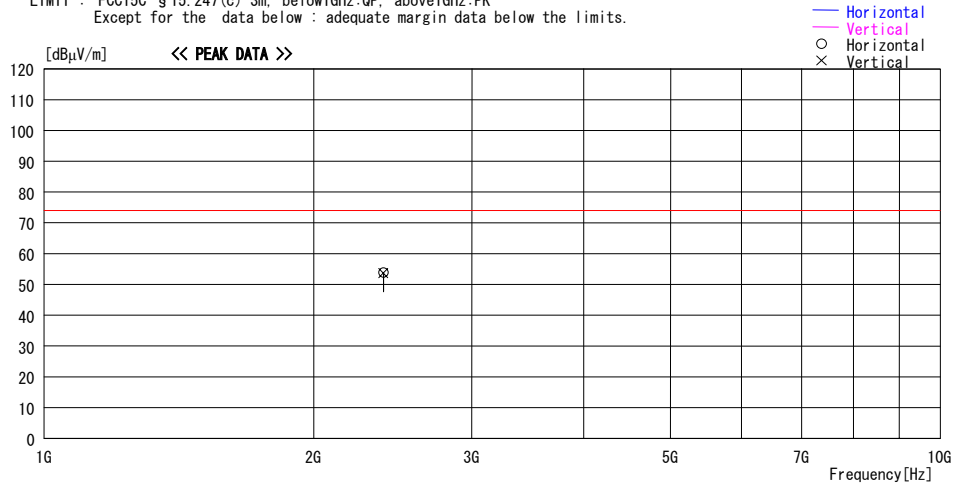
MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)**[Transmitting mode by single device]****DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:39:01Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis (MAX) Band Edge Compliance

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	43.9	30.7	15.6	36.3	53.9	74.0	20.2
----- Vertical -----								
2	2390.000	43.6	30.7	15.6	36.3	53.6	74.0	20.4

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

UL Apex Co., Ltd.**Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

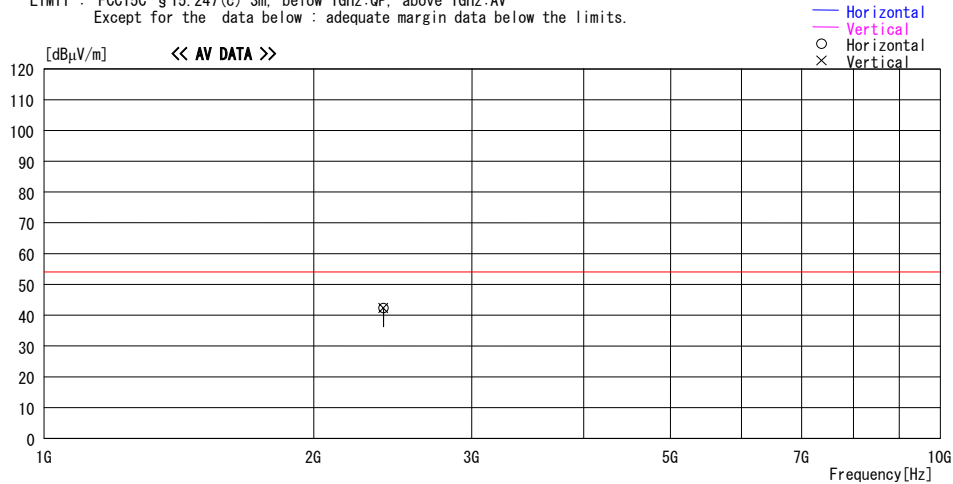
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:39:01

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2402MHz, Hor:X Axis Ver:Z Axis(MAX) Band Edge Compliance

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	32.3	30.7	15.6	36.3	42.3	54.0	11.7
----- Vertical -----								
2	2390.000	32.3	30.7	15.6	36.3	42.3	54.0	11.7

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:39:01

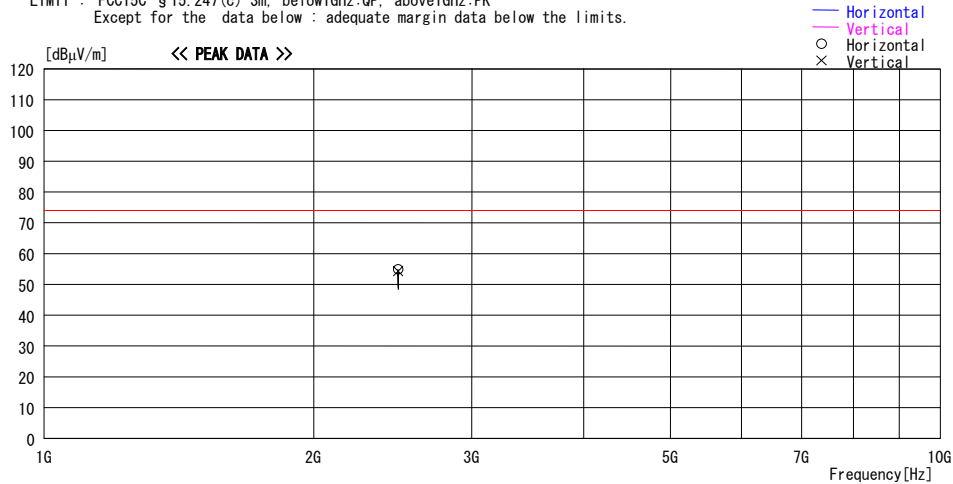
Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX) Band Edge Compliance

LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	44.7	30.8	15.6	36.2	54.9	74.0	19.1
----- Vertical -----								
2	2483.500	44.1	30.8	15.6	36.2	54.3	74.0	19.7

CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

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MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by single device]

DATA OF RADIATED EMISSION TEST

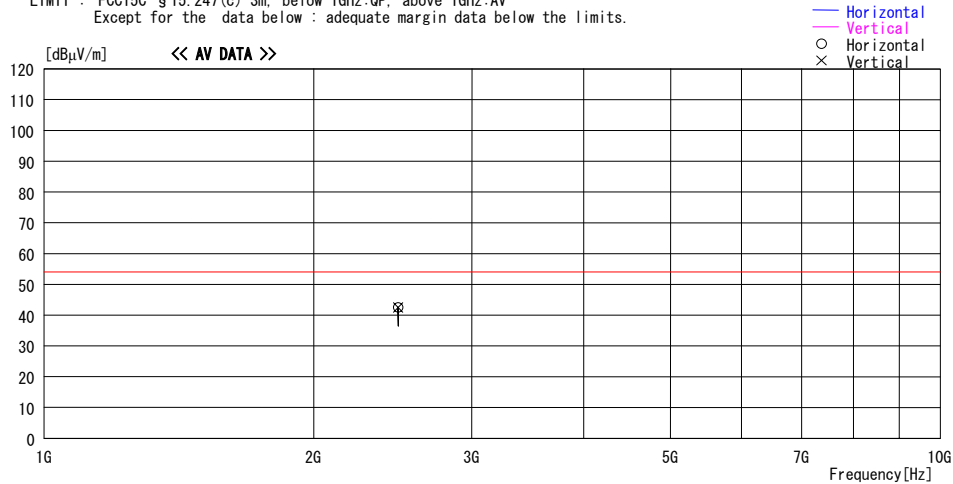
UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/08 00:39:01

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse
Model No. : VGP-WMS1
Serial No. : 1

Report No. : 24KE0303-H0
Power : DC3V
Temp°C/Humi% : 26 / 50%
Operator : Naoki Sakamoto

Mode / Remarks : Tx:2479MHz, Hor:Y Axis Ver:Z Axis(MAX) Band Edge Compliance

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



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	32.3	30.8	15.6	36.2	42.5	54.0	11.5
----- Vertical -----								
2	2483.500	32.3	30.8	15.6	36.2	42.5	54.0	11.5

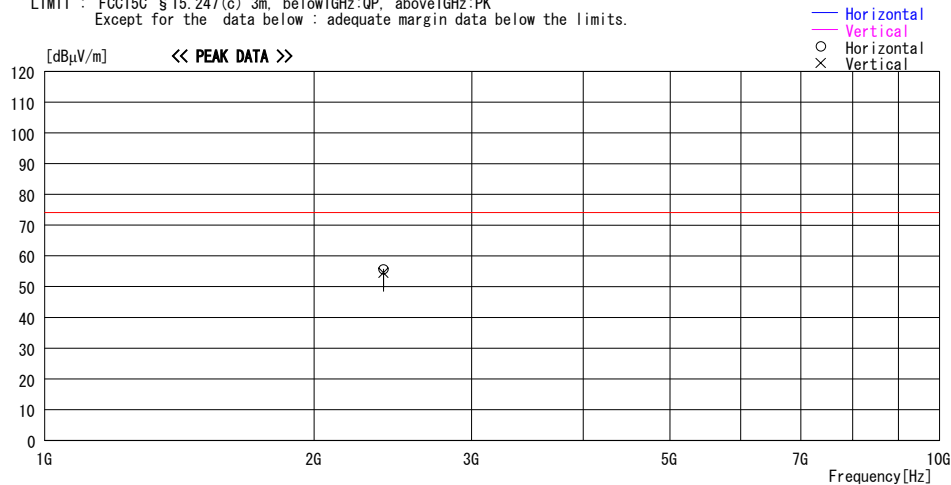
CHART:WITHOUT FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Page:

Radiated emission Band Edge compliance (DSSS and other forms of modulation)**[Transmitting mode by all devices]****DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/18 12:05:27

Applicant : Sony Corporation
 Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
 Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
 Serial No. : 1 & T600023 & 1
 Mode / Remarks : Test Item 1 (Test Item 4) Band Edge Compliance
 LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
 Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
 Power : DC3V (MS), DC6V (KB), DC5V (RCV)
 Temp°C/Humi% : 23 / 58%
 Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	44.8	30.8	16.3	36.3	55.6	74.0	18.4
----- Vertical -----								
2	2390.000	43.7	30.8	16.3	36.3	54.5	74.0	19.5

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

Page:

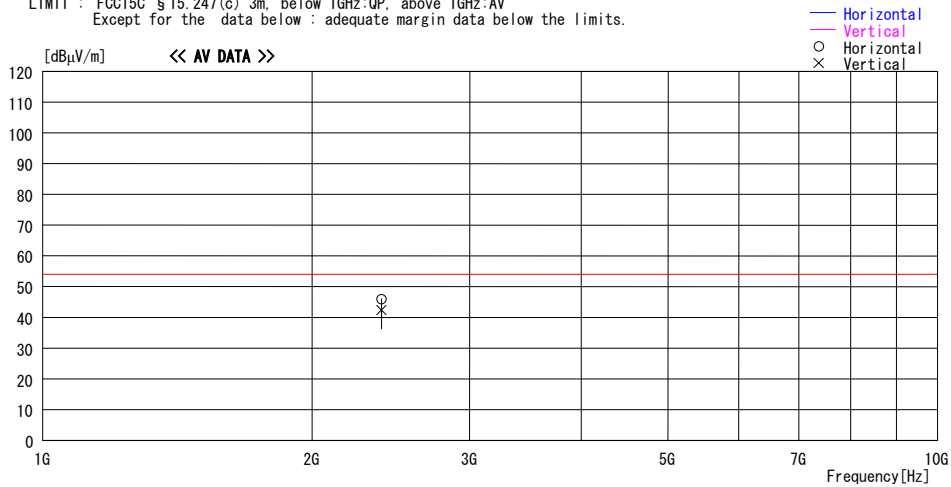
UL Apex Co., Ltd.**Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)**[Transmitting mode by all devices]****DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/18 12:05:27

Applicant : Sony Corporation
 Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
 Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
 Serial No. : 1 & T600023 & 1
 Mode / Remarks : Test Item 1(Test Item 4) Band Edge Compliance
 LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV
 Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
 Power : DC3V (MS), DC6V (KB), DC5V (RCV)
 Temp°C/Humi% : 23 / 58%
 Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	35.2	30.8	16.3	36.3	46.0	54.0	8.0
----- Vertical -----								
2	2390.000	31.6	30.8	16.3	36.3	42.4	54.0	11.6

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

Page:

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MF060b(10.04.03)

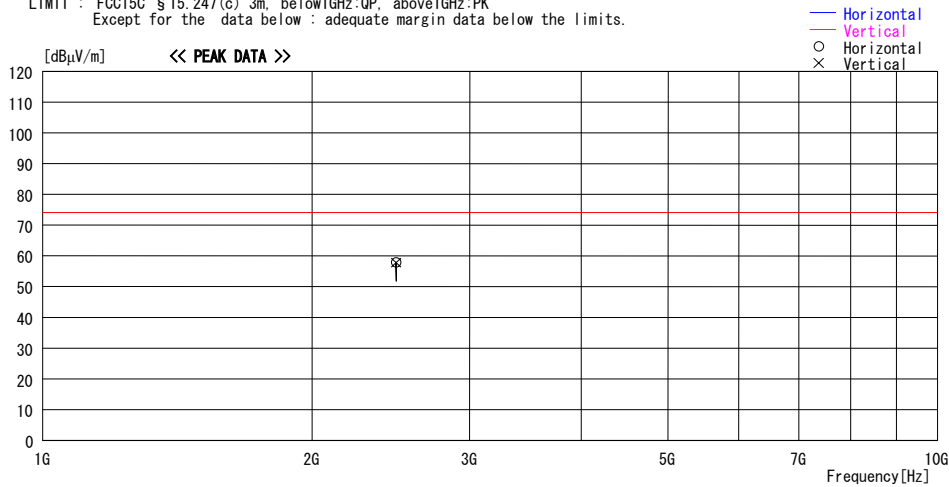
Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/18 12:05:27

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 3 Band Edge Compliance
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	46.9	30.8	16.4	36.2	57.9	74.0	16.1
----- Vertical -----								
2	2483.500	46.8	30.8	16.4	36.2	57.8	74.0	16.2

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

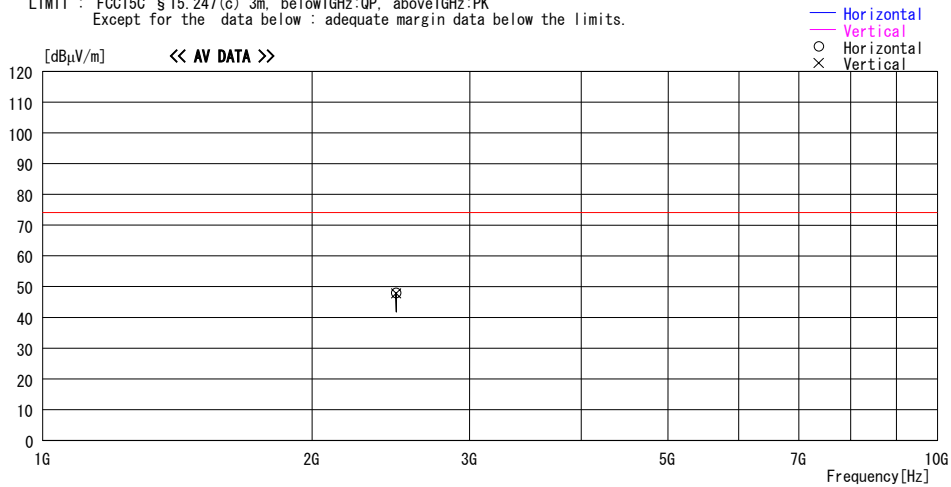
Radiated emission Band Edge compliance (DSSS and other forms of modulation)
[Transmitting mode by all devices]

DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/18 12:05:27

Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& Receiver
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
Serial No. : 1 & T600023 & 1
Mode / Remarks : Test Item 3 Band Edge Compliance
LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto



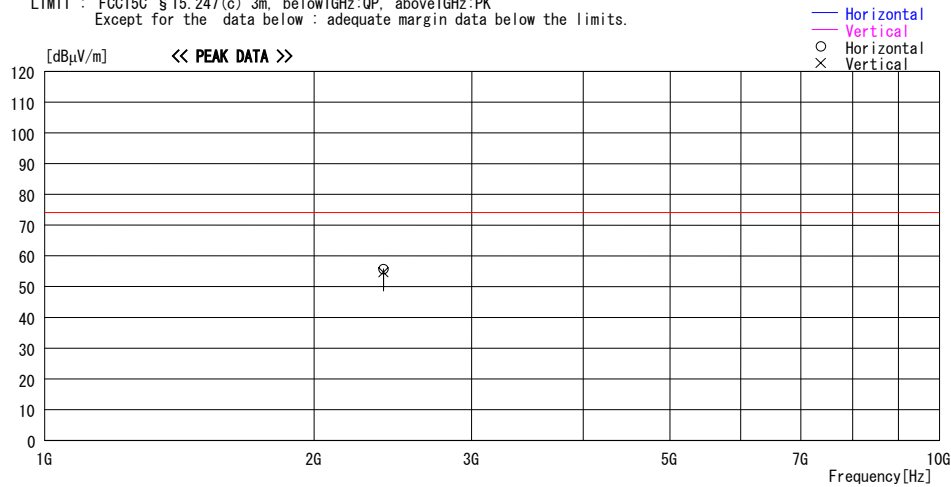
No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	36.9	30.8	16.4	36.2	47.9	74.0	26.1
----- Vertical -----								
2	2483.500	36.8	30.8	16.4	36.2	47.8	74.0	26.2

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

Radiated emission Band Edge compliance (DSSS and other forms of modulation)**[Transmitting mode by all devices]****DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/18 12:05:27

Applicant : Sony Corporation
 Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
 Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
 Serial No. : 1 & T600023 & 1
 Mode / Remarks : Test Item 5 (Test Item 8)
 LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
 Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
 Power : DC3V (MS), DC6V (KB), DC5V (RCV)
 Temp°C/Humi% : 23 / 58%
 Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	44.9	30.8	16.3	36.3	55.7	74.0	18.3
----- Vertical -----								
2	2390.000	43.8	30.8	16.3	36.3	54.6	74.0	19.4

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

Page:

UL Apex Co., Ltd.**Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)**[Transmitting mode by all devices]****DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/18 12:05:27Applicant : Sony Corporation
Kind of EUT : Wireless Mouse & Wireless Keyboard
& ReceiverReport No. : 24KE0303-HO
Power : DC3V (MS), DC6V (KB), DC5V (RCV)
Temp°C/Humi% : 23 / 58%
Operator : Naoki Sakamoto

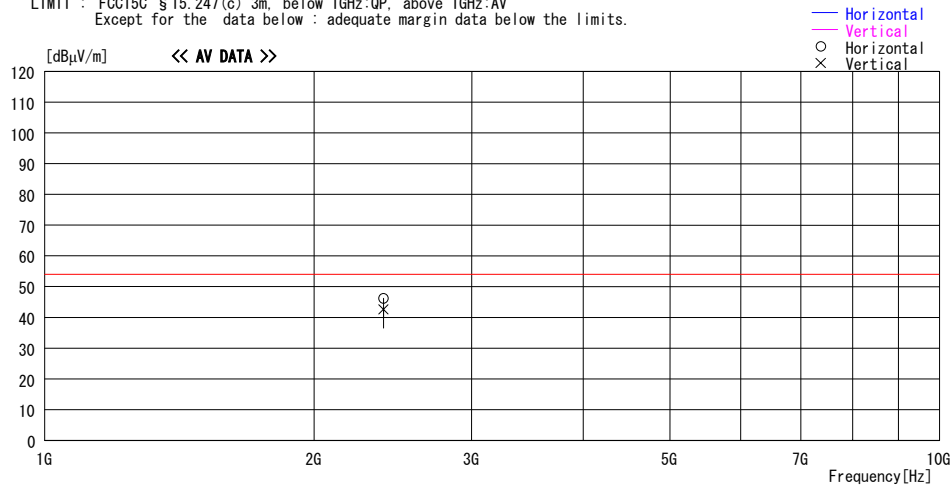
Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1

Serial No. : 1 & T600023 & 1

Mode / Remarks : Test Item 5 (Test Item 8)

LIMIT : FCC15C §15.247(c) 3m, below 1GHz:QP, above 1GHz:AV

Except for the data below : adequate margin data below the limits.



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2390.000	35.4	30.8	16.3	36.3	46.2	54.0	7.8
----- Vertical -----								
2	2390.000	31.8	30.8	16.3	36.3	42.6	54.0	11.4

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

Page:

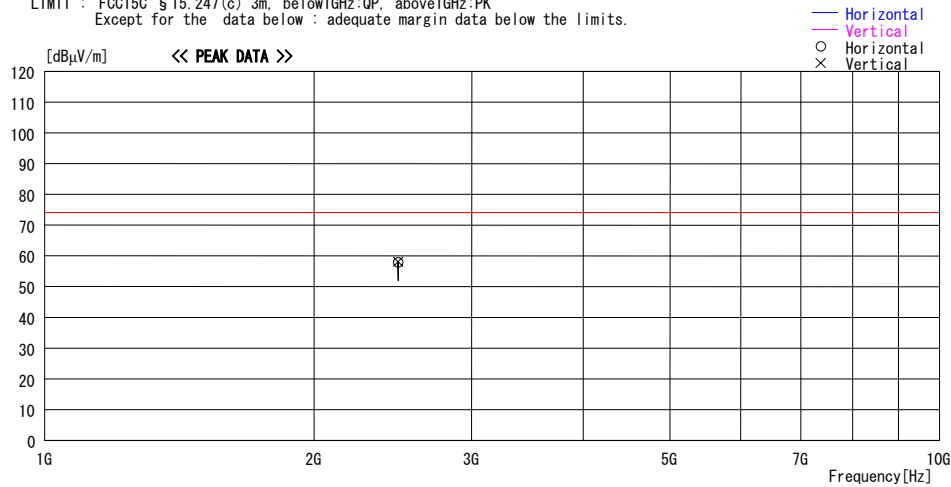
UL Apex Co., Ltd.**Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)**[Transmitting mode by all devices]****DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/18 12:05:27

Applicant : Sony Corporation
 Kind of EUT : Wireless Mouse & Wireless Keyboard
 & Receiver
 Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
 Serial No. : 1 & T600023 & 1
 Mode / Remarks : Test Item 7 Band Edge Compliance
 LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
 Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
 Power : DC3V (MS), DC6V (KB), DC5V (RCV)
 Temp°C/Humi% : 23 / 58%
 Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING PK [dB μ V]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dB μ V/m]	LIMIT [dB μ V/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	46.7	31.0	16.4	36.2	57.9	74.0	16.1
----- Vertical -----								
2	2483.500	46.9	31.0	16.4	36.2	58.1	74.0	15.9

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

Page:

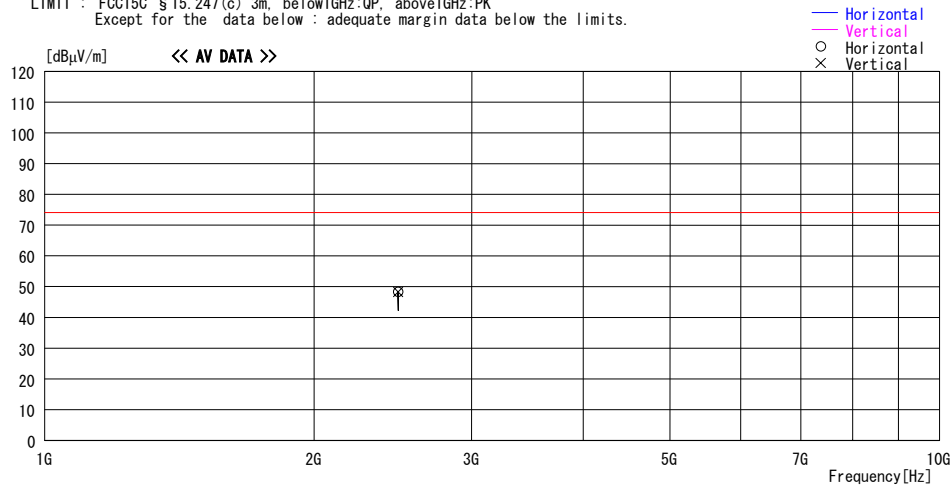
UL Apex Co., Ltd.**Head Office EMC Lab.****4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN****Telephone : +81 596 24 8116****Facsimile : +81 596 24 8124**

MF060b(10.04.03)

Radiated emission Band Edge compliance (DSSS and other forms of modulation)**[Transmitting mode by all devices]****DATA OF RADIATED EMISSION TEST**UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2004/07/18 12:05:27

Applicant : Sony Corporation
 Kind of EUT : Wireless Mouse & Wireless Keyboard & Receiver
 Model No. : VGP-WMS1 & VGP-WKB1 & VGP-WRC1
 Serial No. : 1 & T600023 & 1
 Mode / Remarks : Test Item 7 Band Edge Compliance
 LIMIT : FCC15C §15.247(c) 3m, below1GHz:QP, above1GHz:PK
 Except for the data below : adequate margin data below the limits.

Report No. : 24KE0303-HO
 Power : DC3V (MS), DC6V (KB), DC5V (RCV)
 Temp°C/Humi% : 23 / 58%
 Operator : Naoki Sakamoto



No.	FREQ [MHz]	READING AV [dBμV]	ANT FACTOR [dB/m]	LOSS [dB]	GAIN [dB]	RESULT [dBμV/m]	LIMIT [dBμV/m]	MARGIN [dB]
----- Horizontal -----								
1	2483.500	37.1	31.0	16.4	36.2	48.3	74.0	25.7
----- Vertical -----								
2	2483.500	37.0	31.0	16.4	36.2	48.2	74.0	25.8

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

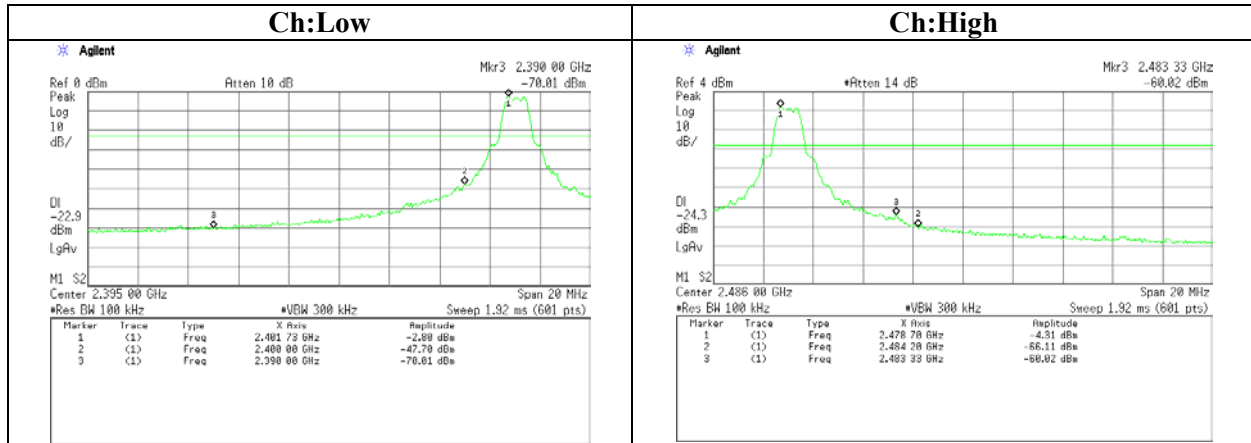
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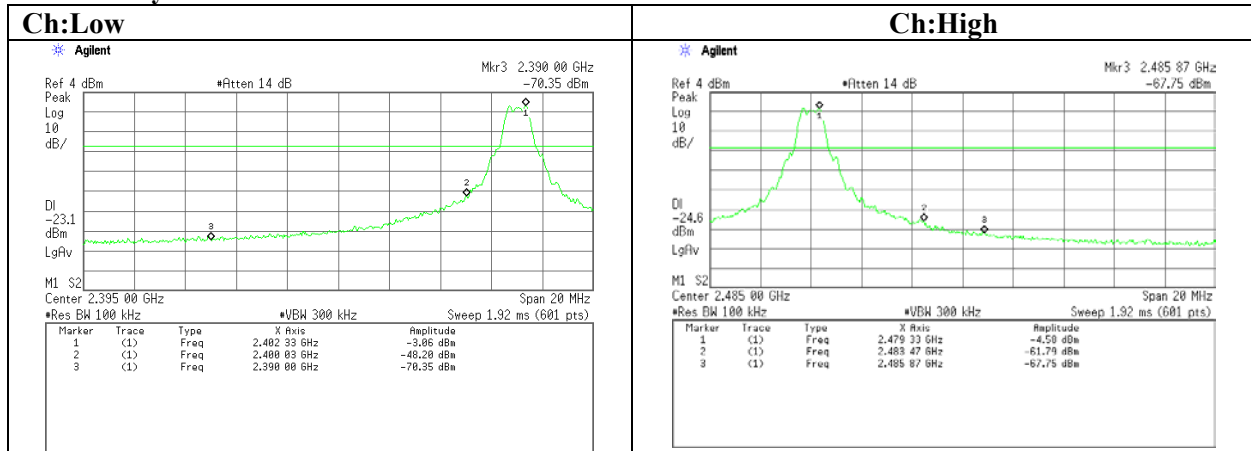
MF060b(10.04.03)

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

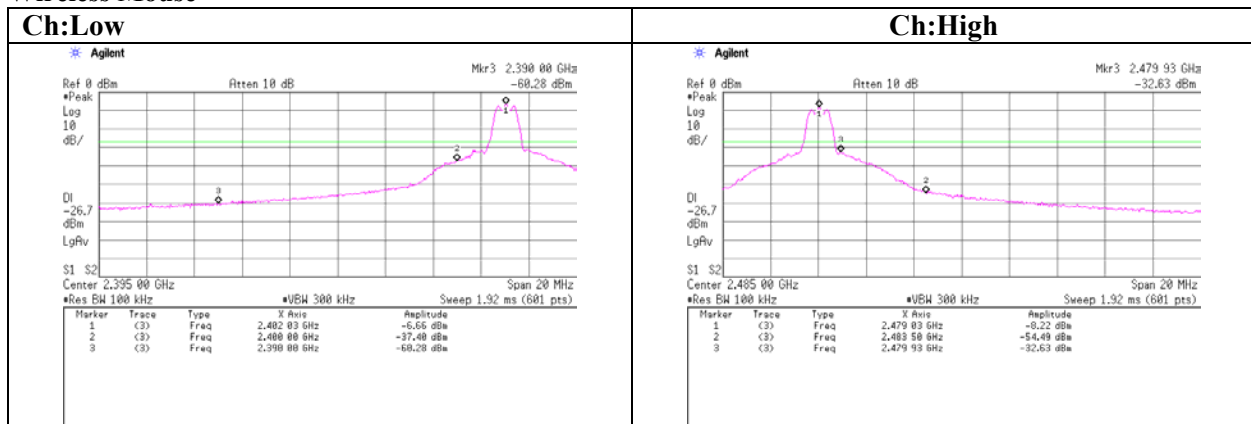
Receiver



Wireless Keyboard



Wireless Mouse



Power Density (DSSS and other forms of modulation)

UL Apex Co., Ltd.

Head Office EMC Lab. No.3 Measurement Room

Company : Sony Corporation

Equipment : Receiver

Model : VGP-WRC1

Sample No. : 4

Power : DC 5V

Mode : Tx (2402, 2440, 2479MHz)

REPORT NO : 24KE0303-HO

REGULATION : Fcc Part15 Subpart C 15.247(d)

TEST DISTANCE : -

DATE : 07/05/2004

TEMPERATURE : 25°C

HUMIDITY : 50%

ENGINEER : Hiroka Umeyama

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2402.0	-11.55	1.13	0.0	-10.4	8.0	18.4
Mid	2440.0	-12.76	1.09	0.0	-11.7	8.0	19.7
High	2479.0	-13.11	1.18	0.0	-11.9	8.0	19.9

Sample Calculation:

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

* Atten. was not used for factor 0.0dB of the above table.

UL Apex Co., Ltd.**Head Office EMC Lab.**

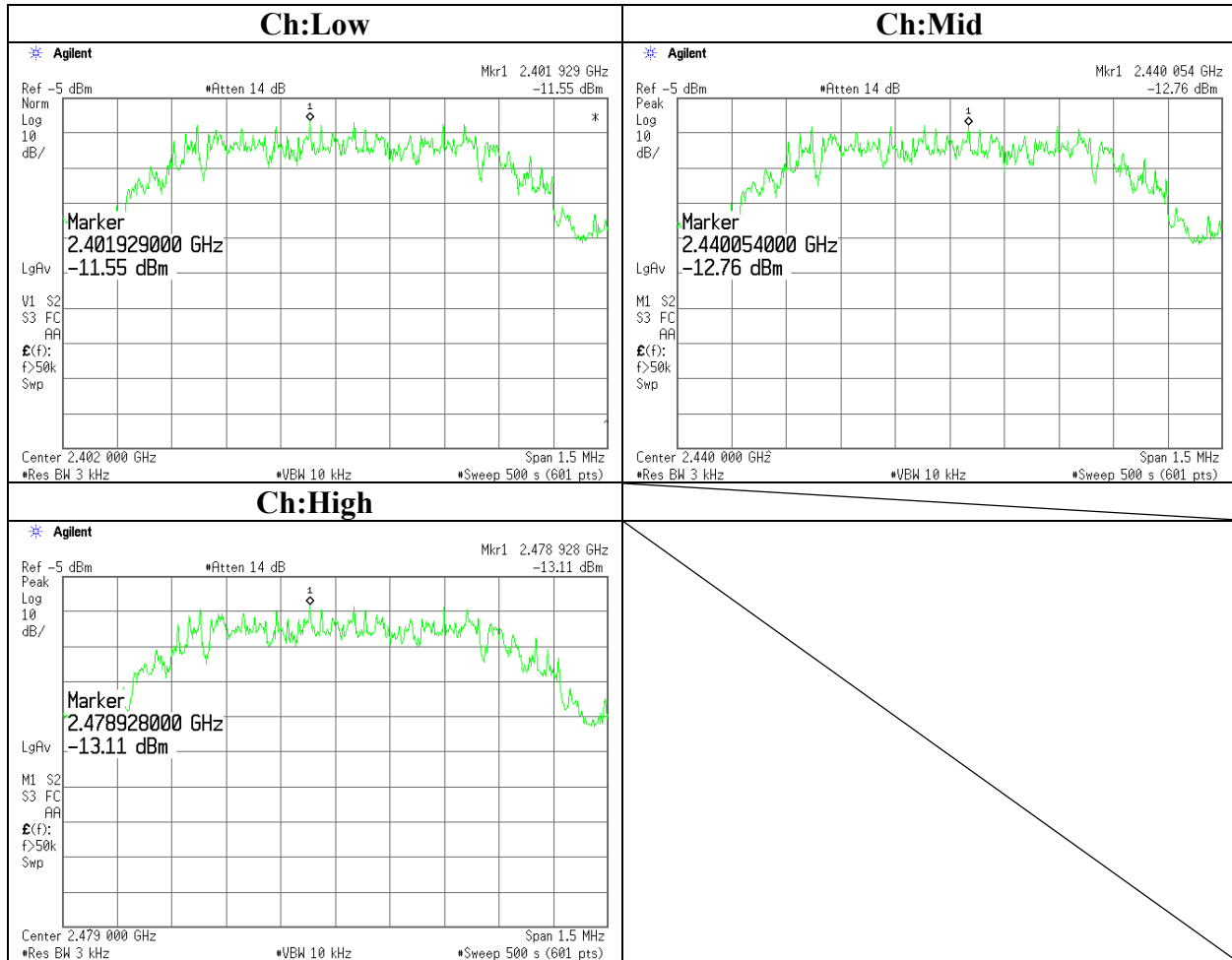
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MF060b(10.04.03)

Power Density(DSSS and other forms of modulation) Receiver



Power Density (DSSS and other forms of modulation)

UL Apex Co., Ltd.

Head Office EMC Lab. No.3 Measurement Room

Company	: Sony Corporation	REPORT NO	: 24KE0303-HO
Equipment	: Wireless Keyboard	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: VGP-WKB1	TEST DISTANCE	: -
Sample No.	: T6000010	DATE	: 07/05/2004
Power	: DC 6V	TEMPERATURE	: 25°C
Mode	: Tx (2402, 2440, 2479MHz)	HUMIDITY	: 50%
		ENGINEER	: Hiroka Umeyama

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2402.0	-12.80	1.13	0.0	-11.7	8.0	19.7
Mid	2440.0	-14.43	1.09	0.0	-13.3	8.0	21.3
High	2479.0	-14.45	1.18	0.0	-13.3	8.0	21.3

Sample Calculation:

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

* Atten. was not used for factor 0.0dB of the above table.

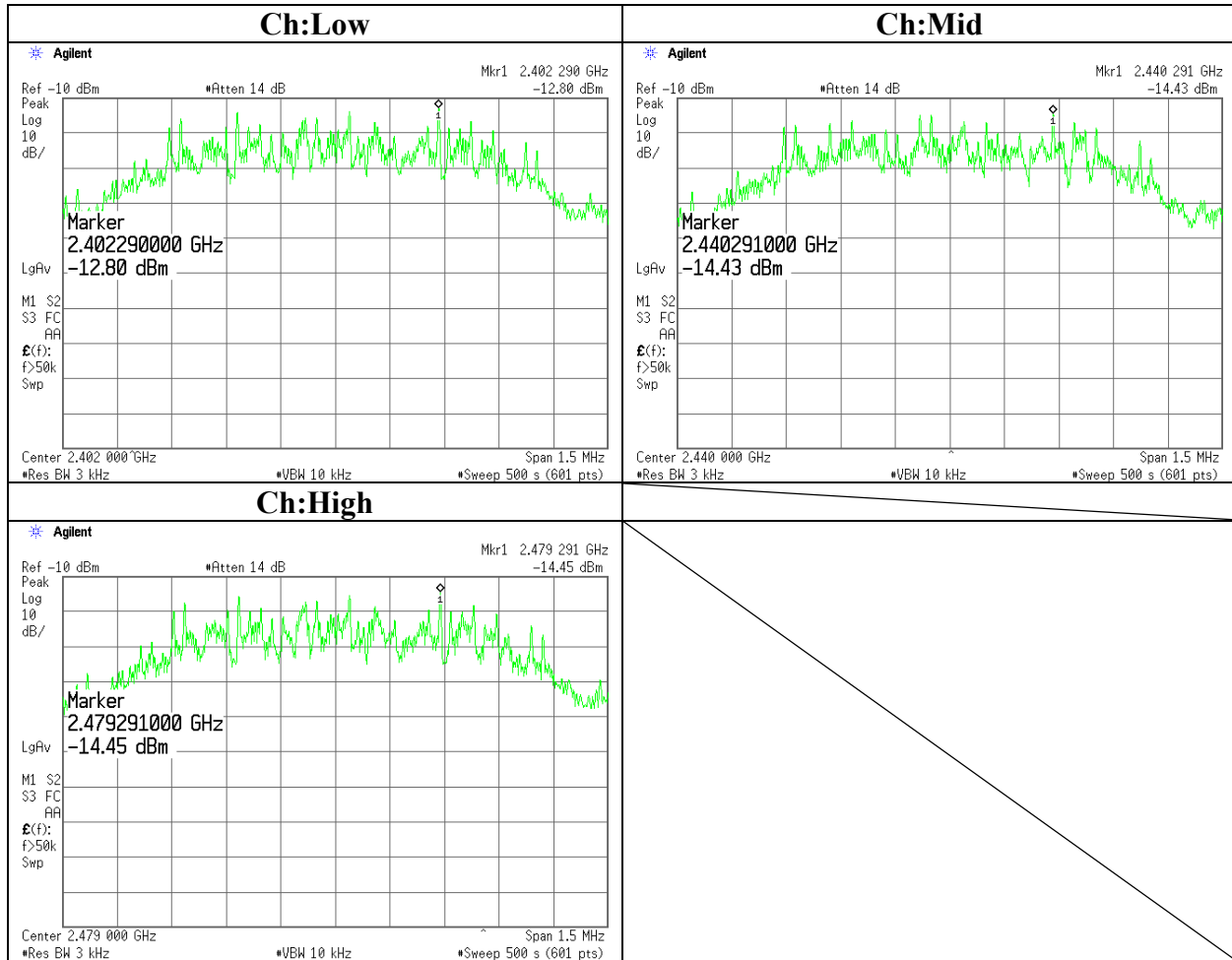
UL Apex Co., Ltd.**Head Office EMC Lab.**

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MF060b(10.04.03)

Power Density(DSSS and other forms of modulation) Wireless Keyboard**UL Apex Co., Ltd.****Head Office EMC Lab.**

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MF060b(10.04.03)

Power Density (DSSS and other forms of modulation)

UL Apex Co., Ltd.

Head Office EMC Lab. No.3 Measurement Room

Company : Sony Corporation

Equipment : Wireless Mouse

Model : VGP-WMS1

Sample No. : 2

Power : DC 3V

Mode : Tx (2402, 2445, 2479MHz)

REPORT NO : 24KE0303-HO

REGULATION : Fcc Part15 Subpart C 15.247(d)

TEST DISTANCE : -

DATE : 07/12/2004

TEMPERATURE : 24°C

HUMIDITY : 79%

ENGINEER : Naoki Sakamoto

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2402.0	-18.35	1.13	0.0	-17.2	8.0	25.2
Mid	2445.0	-19.12	1.09	0.0	-18.0	8.0	26.0
High	2479.0	-20.05	1.18	0.0	-18.9	8.0	26.9

Sample Calculation:

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

* Atten. was not used for factor 0.0dB of the above table.

UL Apex Co., Ltd.**Head Office EMC Lab.**

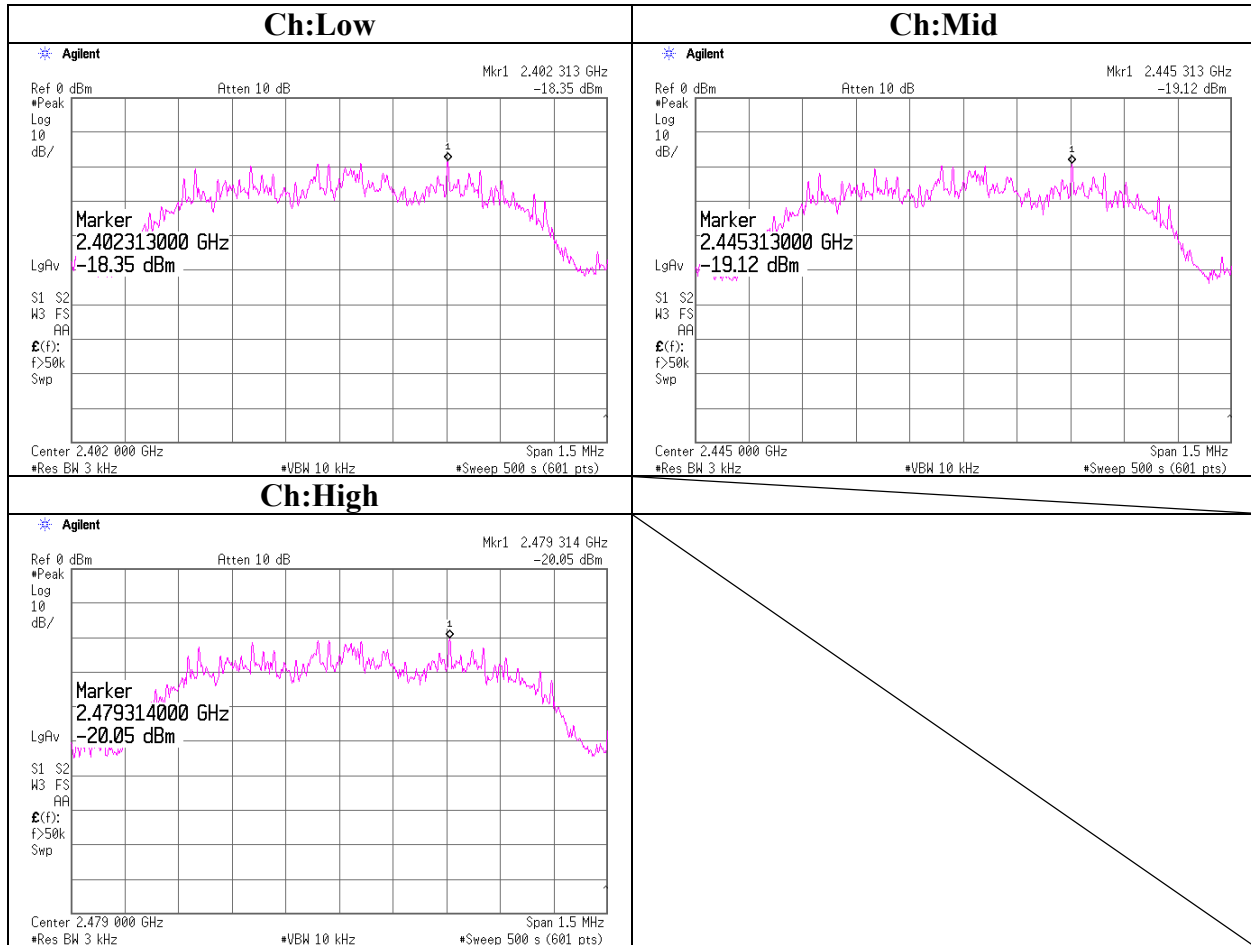
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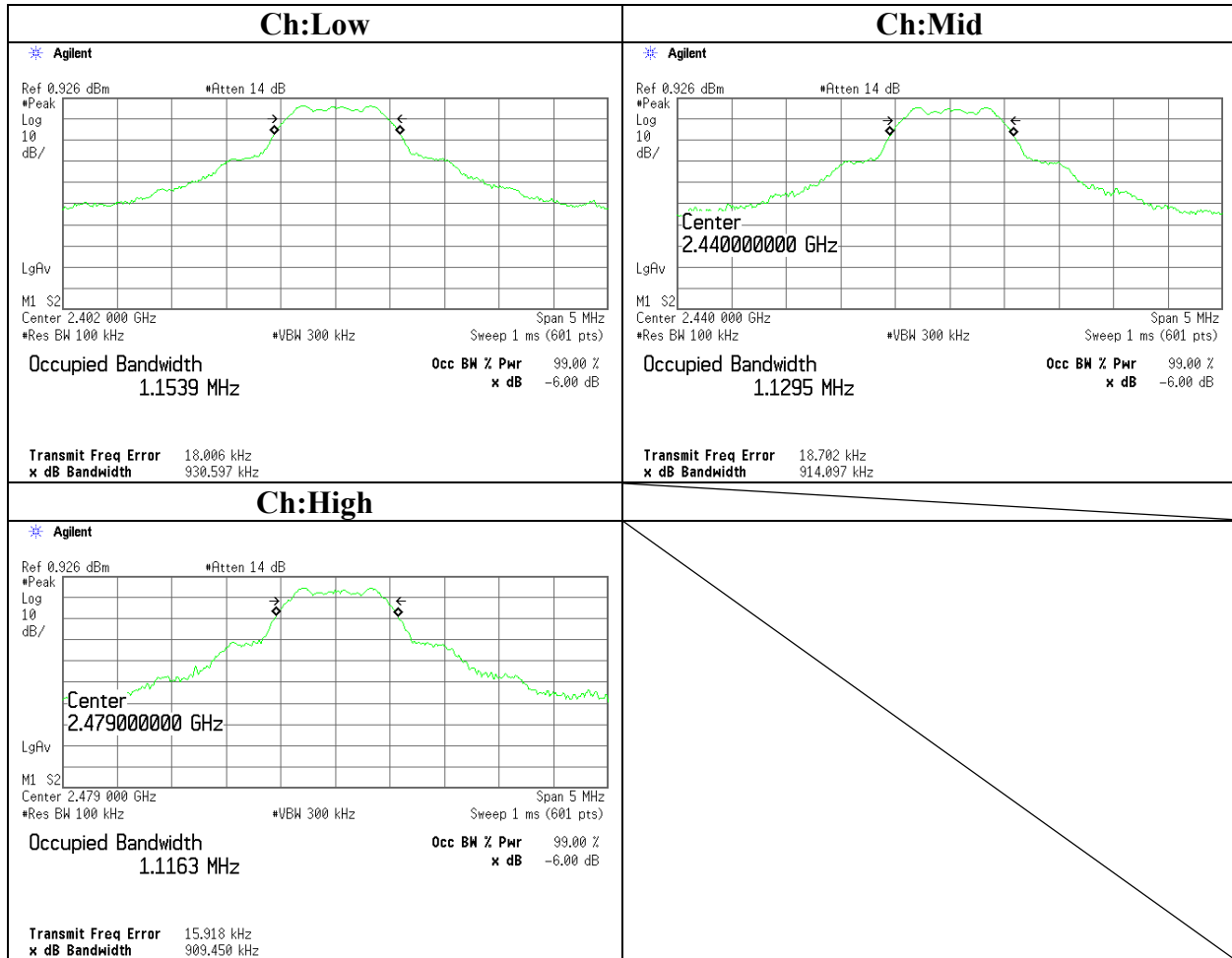
Facsimile : +81 596 24 8124

MF060b(10.04.03)

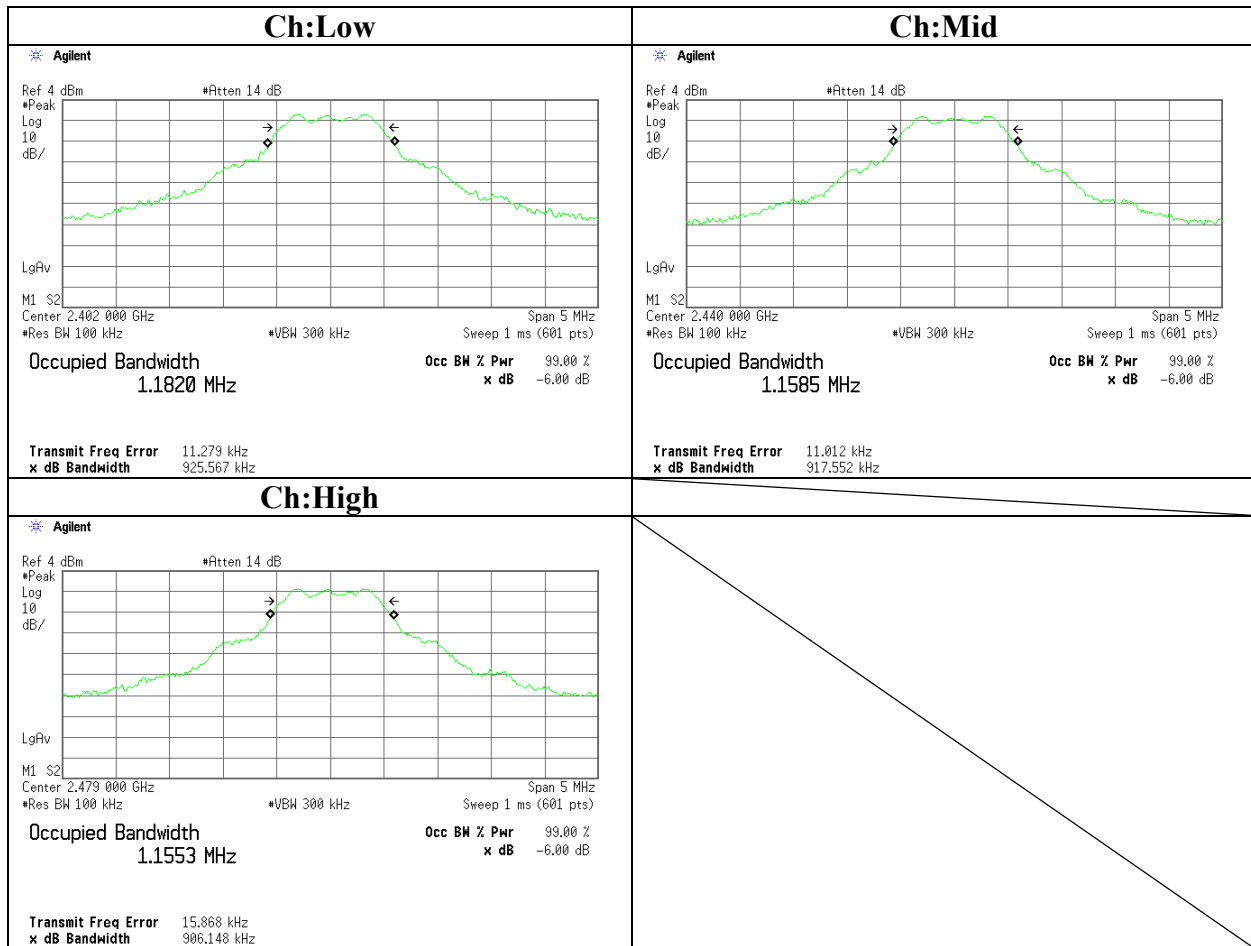
Power Density(DSSS and other forms of modulation) Wireless Mouse



99%Occupied Bandwidth(DSSS and other forms of modulation)
Receiver



99%Occupied Bandwidth(DSSS and other forms of modulation)
Wireless Keyboard



UL Apex Co., Ltd.

Head Office EMC Lab.

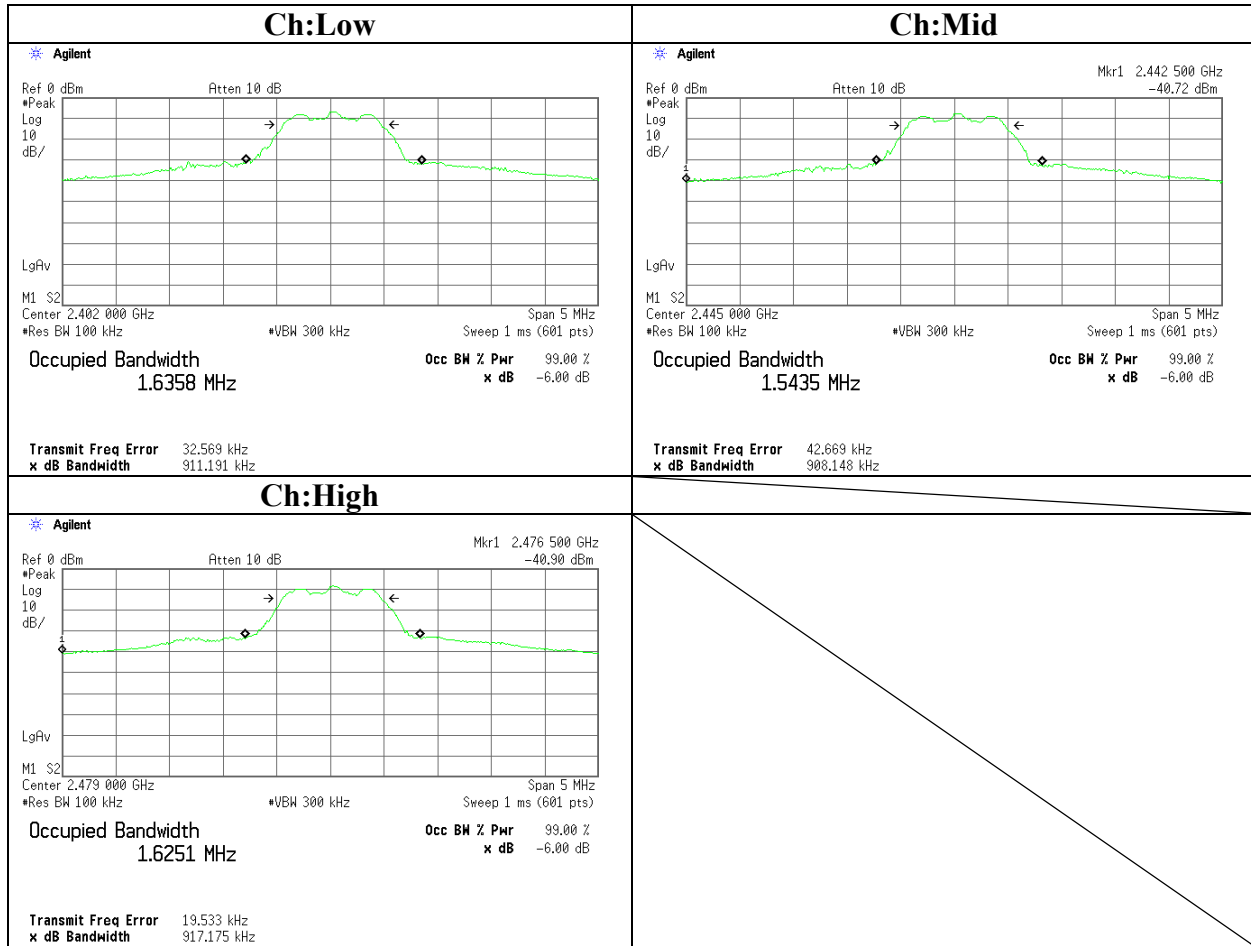
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MF060b(10.04.03)

99%Occupied Bandwidth(DSSS and other forms of modulation)
Wireless Mouse



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