



RADIO TEST REPORT

Test Report No. : 32GE0144-HO-01-C

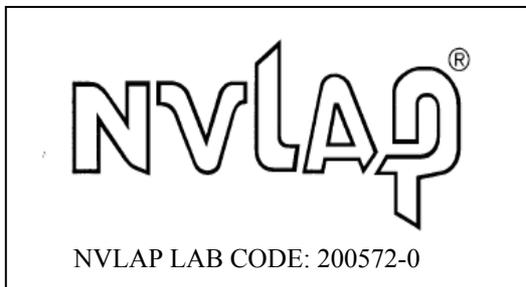
Applicant : Sony Computer Entertainment Inc.
Type of Equipment : Computer Entertainment System
Model No. : CECH-4001x
FCC ID : AK8CBEH19C1
Test regulation : FCC Part 15 Subpart C: 2012
Test Result : Complied

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2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the above regulation.
4. The test results in this report are traceable to the national or international standards.
5. This test report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Date of test: March 12 to April 1, 2012

Representative test engineer: T. Shimada
Takumi Shimada
Engineer of WiSE Japan,
UL Verification Service

Approved by: M. Nishiyama
Masanori Nishiyama
Leader of WiSE Japan,
UL Verification Service



This laboratory is accredited by the NVLAP LAB CODE 200572-0, U.S.A. The tests reported herein have been performed in accordance with its terms of accreditation. *As for the range of Accreditation in NVLAP, you may refer to the WEB address, <http://www.ul.com/japan/jpn/pages/services/emc/about/mark1/index.jsp#nvlap>

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SECTION 1: Customer information

Company Name	Sony Computer Entertainment Inc.
Brand Name	SONY
Address	1-7-1 Konan, Minato-ku, Tokyo 108-0075, Japan
Telephone Number	+81-3-6748-6333
Facsimile Number	+81-3-6748-6383
Contact Person	Akiko Tsukada

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

2.1 Identification of E.U.T.

Type of Equipment	Computer Entertainment System
Model No	CECH-4001x
Serial No	1530004 (Power Supply: DELTA) 1530005 (Power Supply: SONY) 1530003 (for Antenna terminal conducted tests)
Rating	AC120V / 60Hz
Country of Manufacture	JAPAN/CHINA
Receipt Date of Sample	March 9, 2012
Condition of EUT	Engineering prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification of EUT	No modification by the test lab.

2.2 Product Description

Model:CECH-4001x, referred to as the EUT in this report, is a Computer Entertainment System.
The EUT contains Bluetooth (Ver. 2.0+EDR) module and IEEE802.11b/g WLAN module. Those modules do not transmit simultaneously.

The clock frequencies used in the EUT: Max clock frequency is 3.2GHz.

Bluetooth (Ver. 2.0+EDR)

Equipment Type	Transceiver
Frequency of Operation	2402-2480MHz
Type of Modulation	FHSS (GFSK, $\pi/4$ -DQPSK, 8DPSK)
Bandwidth & Channel spacing	1MHz & 1MHz
Power Supply (inner)	DC3.3V/1.8V
Antenna Type	PIFA
Antenna Gain	3.0 dBi (max)
Antenna Connector Type	U.FL

IEEE802.11b/g WLAN

Equipment Type	Transceiver	
Frequency of Operation	2412-2462MHz	
Type of Modulation	DSSS/OFDM	
Bandwidth & Channel spacing	20MHz & 5MHz	
Power Supply (inner)	DC3.3V/1.8V	
Antenna Type	Antenna 0: IFA	Antenna 1: PIFA
Antenna Gain	Antenna 0: 1.5 dBi (max)	Antenna 1: 3.0 dBi (max)
Antenna Connector Type	Antenna 0: N/A	Antenna 1: U.FL

List of Model No.:

Model No.	Product Name	Note
CECH-4001x*1	Computer Entertainment System	Tested model
DECH-4000Ax*1	Debugging Station	*2
DECH-S4000Ax*1	Debugging Station for AV test	*3

Note:

*1: "x" will be replaced by an alphabet denoting the different hard disk specification.

*2: The difference between DECH-4000Ax and CECH-4001x is software only.

*3: DECH-S4000Ax and DECH-4000Ax is same in specification, but DECH-S4000Ax is for AV test.

The differences among the above three models do not influence on radio specification.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part 15 Subpart C: 2012, final revised on February 1, 2012

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

*The EUT complies with FCC Part 15 Subpart B: 2011, final revised on February 1, 2012.

3.2 Procedures and results

Item	Test Procedure	Specification	Worst margin	Results	Remarks
Conducted Emission	FCC: ANSI C63.4:2003 7. AC powerline Conducted Emission measurements ----- IC: RSS-Gen 7.2.4	FCC: Section 15.207 ----- IC: RSS-Gen 7.2.4	QP 7.7dB, 0.15000MHz, N AV 14.5dB, 0.15000MHz, N	Complied	-
6dB Bandwidth	FCC: "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247" ----- IC: RSS-Gen 4.6.2	FCC: Section 15.247(a)(2) ----- IC: RSS-210 A8.2(a)	See data.	Complied	Conducted
Maximum Peak Output Power	FCC: "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247" ----- IC: RSS-Gen 4.8	FCC: Section 15.247(b)(3) ----- IC: RSS-210 A8.4(4)		Complied	Conducted
Power Density	FCC: "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247" ----- IC: -	FCC: Section 15.247 (e) ----- IC: RSS-210 A8.2(b)		Complied	Conducted
Spurious Emission Restricted Band Edges	FCC: "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247" ----- IC: RSS-Gen 4.9	FCC: Section15.247(d) ----- IC: RSS-210 A8.5 RSS-Gen 7.2.3		5.3dB 576.241MHz, Horizontal, QP	Complied

Note: UL Japan, Inc.'s EMI Work Procedures No. 13-EM-W0420 and 13-EM-W0422.

* In case any questions arise about test procedure, ANSI C63.4: 2003 is also referred.

FCC 15.31 (e)

This EUT provides stable voltage (DC3.3/1.8V) constantly to RF part regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

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

3.3 Addition to standard

Item	Test Procedure	Specification	Worst margin	Results	Remarks
99% Occupied Bandwidth	IC: RSS-Gen 4.6.1	IC: RSS-Gen 4.6.1	N/A	-	Conducted

Other than above, no addition, exclusion nor deviation has been made from the standard.

3.4 Uncertainty

EMI

The following uncertainties have been calculated to provide a confidence level of 95% using a coverage factor k=2.

Test room (semi-anechoic chamber)	Conducted emission (+dB)
	150kHz-30MHz
No.1	3.5dB
No.2	3.6dB
No.3	3.6dB
No.4	3.6dB

Test room (semi-anechoic chamber)	Radiated emission						
	(3m*)(+dB)				(1m*)(+dB)		(0.5m*)(+dB)
	9kHz -30MHz	30MHz -300MHz	300MHz -1GHz	1GHz -10GHz	10GHz -18GHz	18GHz -26.5GHz	26.5GHz -40GHz
No.1	4.2dB	5.0dB	5.1dB	4.7dB	5.7dB	4.4dB	4.3dB
No.2	4.1dB	5.2dB	5.1dB	4.8dB	5.6dB	4.3dB	4.2dB
No.3	4.5dB	5.0dB	5.2dB	4.8dB	5.6dB	4.5dB	4.2dB
No.4	4.7dB	5.2dB	5.2dB	4.8dB	5.6dB	5.1dB	4.2dB

*3m/1m/0.5m = Measurement distance

Power meter (+dB)	
Below 1GHz	Above 1GHz
1.0dB	1.0dB

Antenna terminal conducted emission and Power density (+dB)			Antenna terminal conducted emission (+dB)		Channel power (+dB)
Below 1GHz	1GHz-3GHz	3GHz-18GHz	18GHz-26.5GHz	26.5GHz-40GHz	
1.0dB	1.1dB	2.7dB	3.2dB	3.3dB	1.5dB

Conducted Emission test

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

Radiated emission test(3m)

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

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3.5 Test Location

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	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	313583	2973C-1	19.2 x 11.2 x 7.7m	7.0 x 6.0m	No.1 Power source room
No.2 semi-anechoic chamber	655103	2973C-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 semi-anechoic chamber	148738	2973C-3	12.0 x 8.5 x 5.9m	6.8 x 5.75m	No.3 Preparation room
No.3 shielded room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.4 semi-anechoic chamber	134570	2973C-4	12.0 x 8.5 x 5.9m	6.8 x 5.75m	No.4 Preparation room
No.4 shielded room	-	-	4.0 x 6.0 x 2.7m	N/A	-
No.5 semi-anechoic chamber	-	-	6.0 x 6.0 x 3.9m	6.0 x 6.0m	-
No.6 shielded room	-	-	4.0 x 4.5 x 2.7m	4.75 x 5.4 m	-
No.6 measurement room	-	-	4.75 x 5.4 x 3.0m	4.75 x 4.15 m	-
No.7 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.8 measurement room	-	-	3.1 x 5.0 x 2.7m	N/A	-
No.9 measurement room	-	-	8.0 x 4.5 x 2.8m	2.0 x 2.0m	-
No.10 measurement room	-	-	2.6 x 2.8 x 2.5m	2.4 x 2.4m	-
No.11 measurement room	-	-	3.1 x 3.4 x 3.0m	2.4 x 3.4m	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1, No.2, No.3, and No.4 semi-anechoic chambers and No.3 and No.4 shielded rooms.

3.6 Data of EMI, Test instruments, and Test set up

Refer to APPENDIX.

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

4.1 Operating Mode(s)

Mode	Remarks*
IEEE 802.11b (11b)	2Mbps, PN9
IEEE 802.11g (11g)	24Mbps, PN9
*Transmitting duty was 100% on all tests. *The worst condition was determined based on the test result of Maximum Peak Output Power (Mid Channel)	
*Power of the EUT was set by the software as follows; Power settings: 12 (dBm) Software/Version: LABTOOL_LV2DIAG_20111206 *This setting of software is the worst case. Any conditions under the normal use do not exceed the condition of setting. In addition, end users cannot change the settings of the output power of the product.	

Test Item	Operating Mode	Tested frequency
Conducted Emission *1)	11b Tx 11g Tx	2412MHz 2437MHz 2462MHz
Spurious Emission(Radiated)	11b Tx 11g Tx	2412MHz *2) 2437MHz 2462MHz
	11b Tx	2437MHz
6dB Bandwidth Maximum Peak Output Power Power Density 99% Occupied Bandwidth Spurious Emission (Conducted)	11b Tx 11g Tx	2412MHz 2437MHz 2462MHz

*Antenna 1 has two kinds of manufacturer's antennas (TE Connectivity and LuxShare-ICT) and the test was performed only with TE Connectivity antenna according to the customer's request, because they have identical antenna characteristics.

*The transmitting data shall be scrambled with the following scramblers and it was transmitted continuously.

[11b]

11Mbps: IEEE Std 802.11b(1999) Section 18.2.4

[11g]

24Mbps: IEEE Std 802.11a(1999) Section 17.3.5.4

*1) The test was performed for both of Power Supply: SONY and DELTA. Other tests except Conducted Emission were performed with Power Supply: SONY as a representative.

*2) The difference between Power Supply: SONY and DELTA was confirmed by the IEEE802.11g Transmitting (Tx), 24Mbps mode.

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4.2 Configuration and peripherals

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SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a urethane platform of nominal size, 1.0m by 1.5m, raised 0.8m 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.

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

I/O 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. All unused 50ohm connectors of the LISN(AMN) were resistivity terminated in 50ohm when not connected to the measuring equipment.

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

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

The test results and limit are rounded off to one decimal place, so some differences might be observed.

Detector	: QP and AV
Measurement range	: 0.15-30MHz
Test data	: APPENDIX
Test result	: Pass

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SECTION 6: Radiated Spurious Emission

Test Procedure

It was measured based on "2. Radiated emission test" of "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247".

EUT was placed on a urethane platform of nominal size, 1.5m by 1.0m, raised 0.8m above the conducting ground plane.

The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with a ground plane.

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

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

The measurements were made with the following detector function of the test receiver and the Spectrum analyzer (in linear mode).

The test was made with the detector (RBW/VBW) in the following table.

When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

Test Antennas are used as below;

Frequency	Below 30MHz	30MHz to 300MHz	300MHz to 1GHz	Above 1GHz
Antenna Type	Loop	Biconical	Logperiodic	Horn

In any 100kHz bandwidth outside the restricted 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.

20dBc was applied to the frequency over the limit of FCC 15.209 / Table 5 of RSS-Gen 7.2.5(IC) and outside the restricted band of FCC15.205 / Table 3 of RSS-Gen 7.2.2 (IC).

Frequency	Below 1GHz	Above 1GHz		20dBc
Instrument used	Test Receiver	Spectrum Analyzer		Spectrum Analyzer
Detector	QP	PK	AV	PK
IF Bandwidth	BW 120kHz(T/R)	RBW: 1MHz VBW: 3MHz	RBW: 1MHz VBW: 10Hz *1)	RBW: 100kHz VBW: 300kHz (S/A)
Test Distance	3m	3m (below 10GHz), 1m*2) (above 10GHz)		3m (below 10GHz), 1m*2) (above 10GHz)

*1) The test was performed with VBW 10Hz since the EUT had no intervals during which the transmitter was off (see Appendix).

*2) Distance Factor: $20 \times \log(3.0\text{m}/1.0\text{m}) = 9.5\text{dB}$

- The carrier level and noise levels were confirmed at each position of X and Y axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

The test results and limit are rounded off to one decimal place, so some differences might be observed.

Measurement range : 30M-26.5GHz
Test data : APPENDIX
Test result : Pass

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SECTION 7: Antenna Terminal Conducted Tests

Test Procedure

The tests were made with below setting connected to the antenna port.

Test	Span	RBW	VBW	Sweep time	Detector	Trace	Instrument used
6dB Bandwidth	20MHz	100kHz	300kHz	Auto	Peak	Max Hold	Spectrum Analyzer
99% Occupied Bandwidth	Enough width to display 20dB Bandwidth	1 to 3% of Span	Three times of RBW	Auto	Peak	Max Hold	Spectrum Analyzer
Maximum Peak Output Power	-	-	-	Auto	Peak	-	Power Meter (Sensor: 50MHz BW)
Peak Power Density	18MHz	30kHz	100kHz	600sec	Peak	Max Hold	Spectrum Analyzer *1) *2)
Conducted Spurious Emission *3)	9kHz to 150kHz	200Hz	620Hz	Auto	Peak	Max Hold	Spectrum Analyzer
	150kHz to 30MHz	9.1kHz	27kHz				
	30MHz to 25GHz (Less or equal to 5GHz)	100kHz	300kHz				

*1) PSD Option 1 of "Guidance on Measurement of Digital Transmission Systems Operating under Section15.247".
*2) The test was not performed at RBW:3kHz however the measurement is to be performed with RBW:3kHz in the regulation, because, the measurement value with RBW:3kHz is less than the value of RBW:30kHz and the test data met the limit with RBW:30kHz.
*3) In the frequency range below 30MHz, RBW was narrowed to separate the noise contents.
Then, wide-band noise near the limit was checked separately, however the noise was low enough as shown in the chart.(9kHz-150kHz:RBW=200Hz, 150kHz-30MHz:RBW=9.1kHz). Since the margin is more than about 50dB, the EUT complies with the limit of FCC15.209 if the measurement is performed with RBW=100kHz.

The test results and limit are rounded off to two decimals place, so some differences might be observed.

Test data : APPENDIX
Test result : Pass

APPENDIX 1: Data of EMI test

Conducted Emission
(Power Supply: SONY)

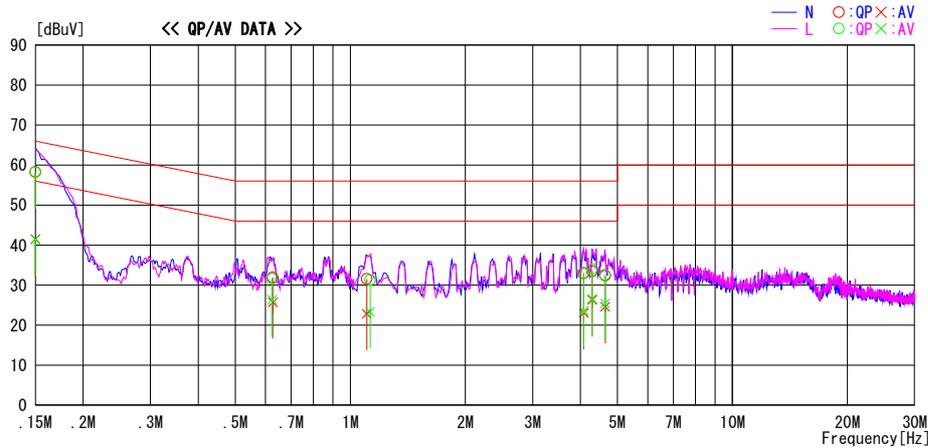
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/30

Report No. : 32GE0144-HO-01
Temp./Humi. : 25deg. C / 32% RH
Engineer : Hironobu Ohnishi

Mode / Remarks : WLAN 11b Tx, 2412MHz, 2Mbps, Antenna 0

LIMIT : FCC15.207 QP
FCC15.207 AV

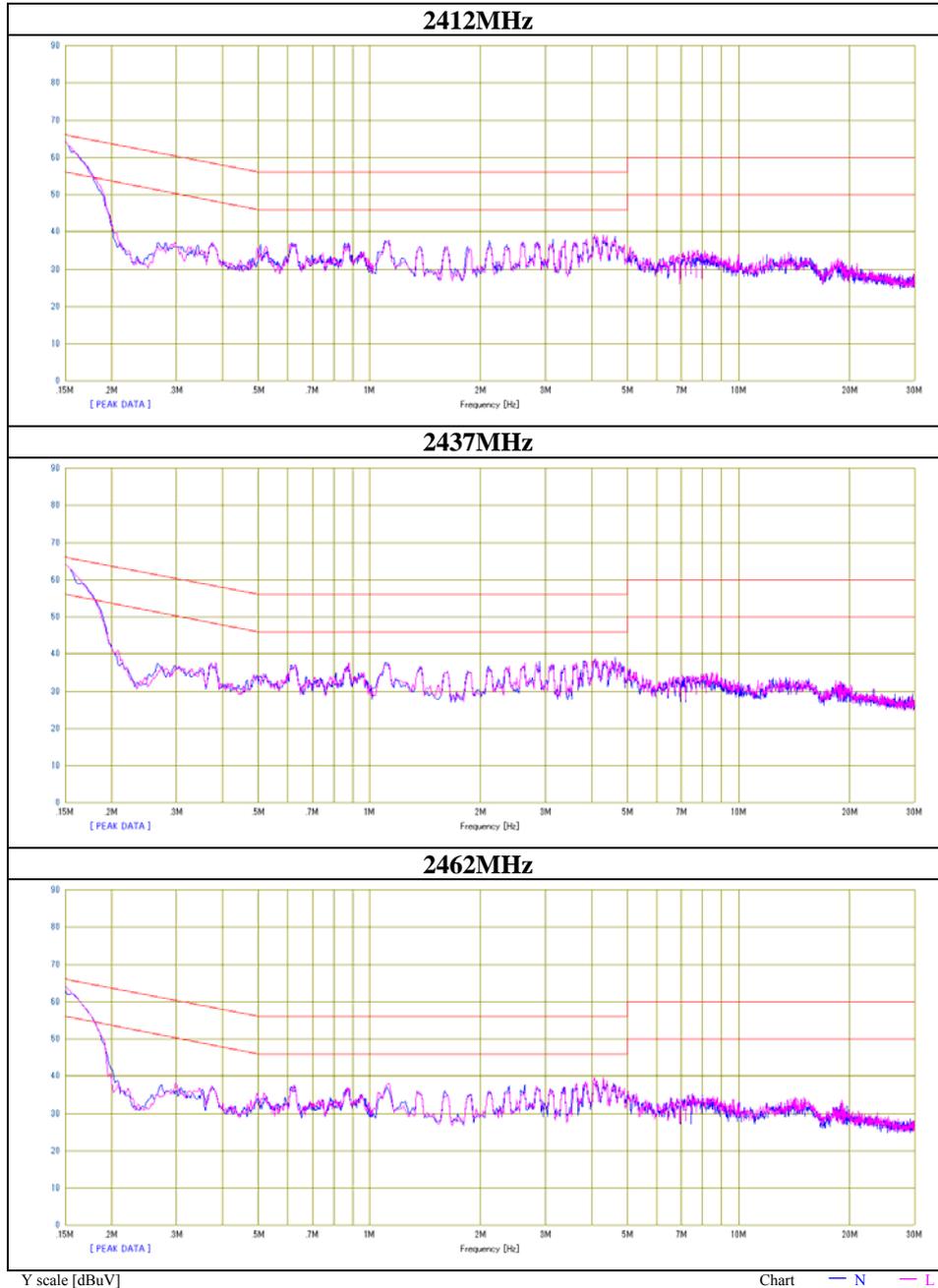


Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	45.0	28.2	13.3	58.3	41.5	66.0	56.0	7.7	14.5	N	
0.62670	18.6	12.4	13.3	31.9	25.7	56.0	46.0	24.1	20.3	N	
1.10392	18.3	9.6	13.3	31.6	22.9	56.0	46.0	24.4	23.1	N	
4.08400	19.3	9.5	13.6	32.9	23.1	56.0	46.0	23.1	22.9	N	
4.29484	19.9	12.7	13.6	33.5	26.3	56.0	46.0	22.5	19.7	N	
4.64288	18.7	10.9	13.7	32.4	24.6	56.0	46.0	23.6	21.4	N	
0.15000	44.9	28.1	13.3	58.2	41.4	66.0	56.0	7.8	14.6	L	
0.62385	18.3	13.0	13.3	31.6	26.3	56.0	46.0	24.4	19.7	L	
1.12646	18.0	10.0	13.3	31.3	23.3	56.0	46.0	24.7	22.7	L	
4.08390	19.5	10.0	13.6	33.1	23.6	56.0	46.0	22.9	22.4	L	
4.29300	20.4	13.0	13.6	34.0	26.6	56.0	46.0	22.0	19.4	L	
4.63860	18.9	11.7	13.7	32.6	25.4	56.0	46.0	23.4	20.6	L	

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

Conducted Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	32GE0144-HO-01
Date	03/30/2012
Temperature/ Humidity	25deg. C / 32% RH
Engineer	Hironobu Ohnishi
Mode	11b Tx, Antenna 0



Conducted Emission
(Power Supply: SONY)

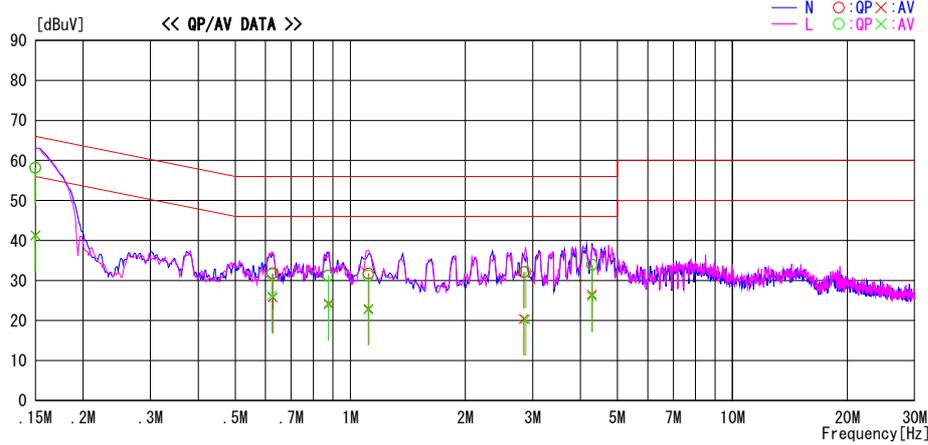
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/30

Report No. : 32GE0144-HO-01
Temp./Humi. : 25deg. C / 32% RH
Engineer : Hironobu Ohnishi

Mode / Remarks : WLAN 11b Tx, 2412MHz, 2Mbps, Antenna 1

LIMIT : FCC15.207 QP
FCC15.207 AV

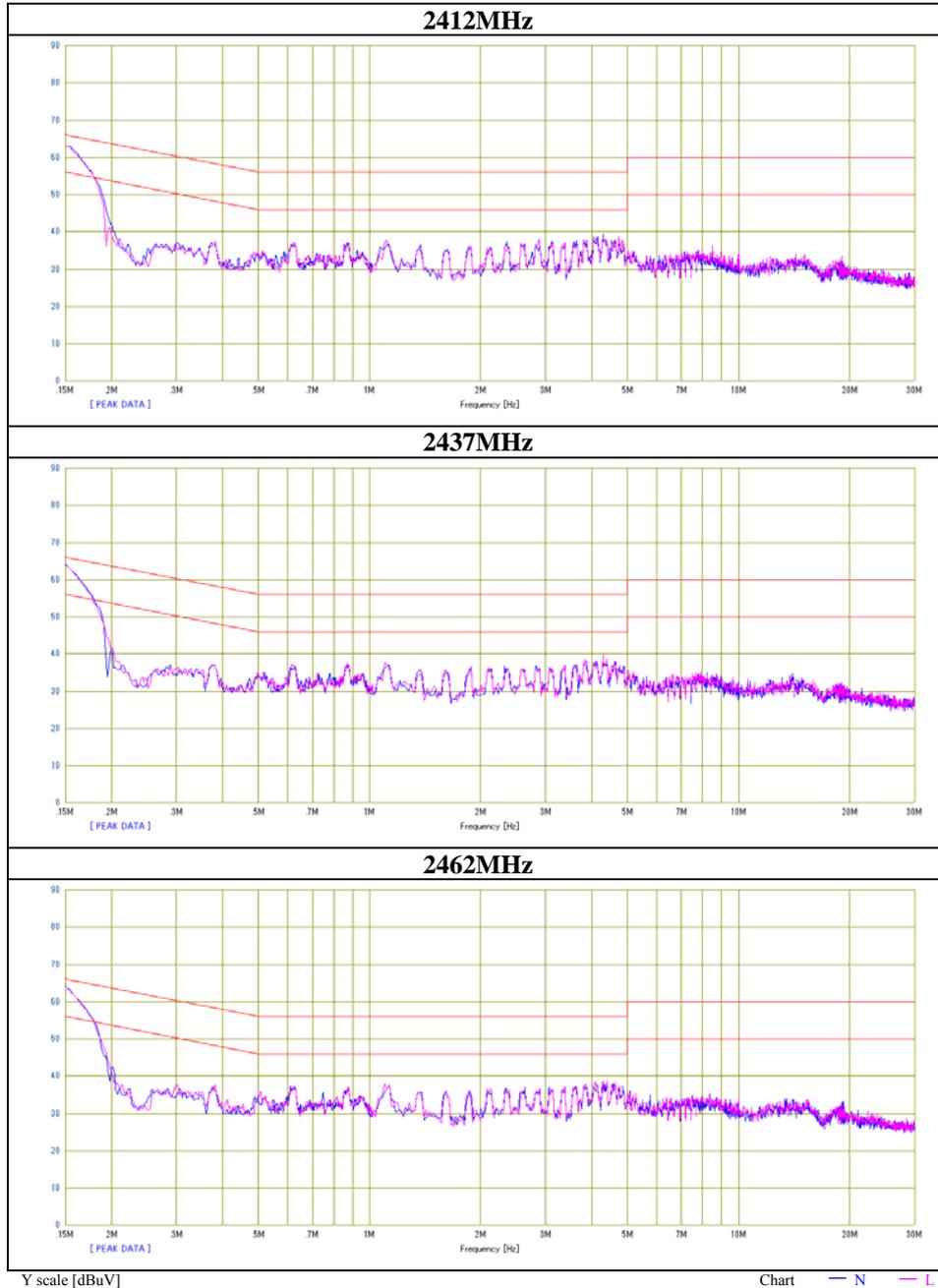


Frequency [MHz]	Reading		Level [dB]	Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]			QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	44.9	28.0	13.3		58.2	41.3	66.0	56.0	7.8	14.7	N	
0.62596	18.5	12.5	13.3		31.8	25.8	56.0	46.0	24.2	20.2	N	
0.87688	18.0	10.9	13.3		31.3	24.2	56.0	46.0	24.7	21.8	N	
1.11696	18.4	9.7	13.3		31.7	23.0	56.0	46.0	24.3	23.0	N	
2.84640	18.6	6.9	13.5		32.1	20.4	56.0	46.0	23.9	25.6	N	
4.29176	20.3	12.9	13.6		33.9	26.5	56.0	46.0	22.1	19.5	N	
0.15000	44.8	27.9	13.3		58.1	41.2	66.0	56.0	7.9	14.8	L	
0.62328	18.3	12.9	13.3		31.6	26.2	56.0	46.0	24.4	19.8	L	
0.87720	17.9	10.7	13.3		31.2	24.0	56.0	46.0	24.8	22.0	L	
1.11424	18.0	9.4	13.3		31.3	22.7	56.0	46.0	24.7	23.3	L	
2.87808	18.7	6.8	13.5		32.2	20.3	56.0	46.0	23.8	25.7	L	
4.29104	20.3	12.5	13.6		33.9	26.1	56.0	46.0	22.1	19.9	L	

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

Conducted Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	32GE0144-HO-01
Date	03/30/2012
Temperature/ Humidity	25deg. C / 32% RH
Engineer	Hironobu Ohnishi
Mode	11b Tx, Antenna 1



Conducted Emission
(Power Supply: SONY)

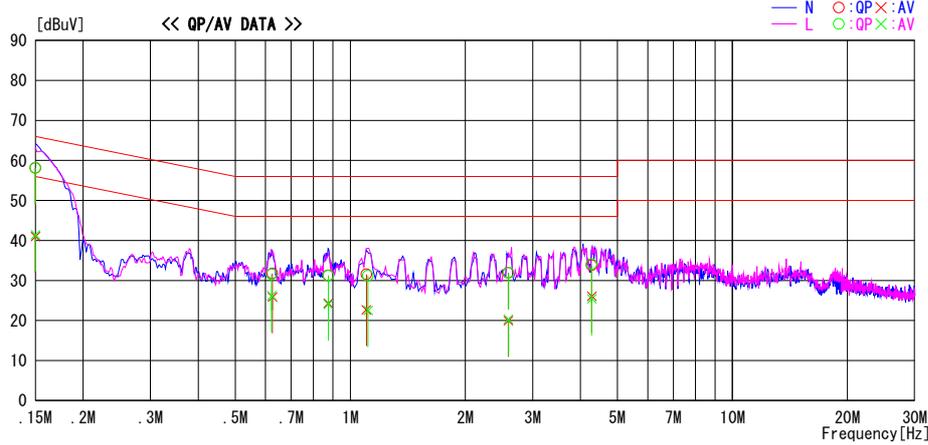
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/30

Report No. : 32GE0144-HO-01
Temp./Humi. : 25deg. C / 32% RH
Engineer : Hironobu Ohnishi

Mode / Remarks : WLAN 11g Tx, 2412MHz, 24Mbps, Antenna 0

LIMIT : FCC15.207 QP
FCC15.207 AV

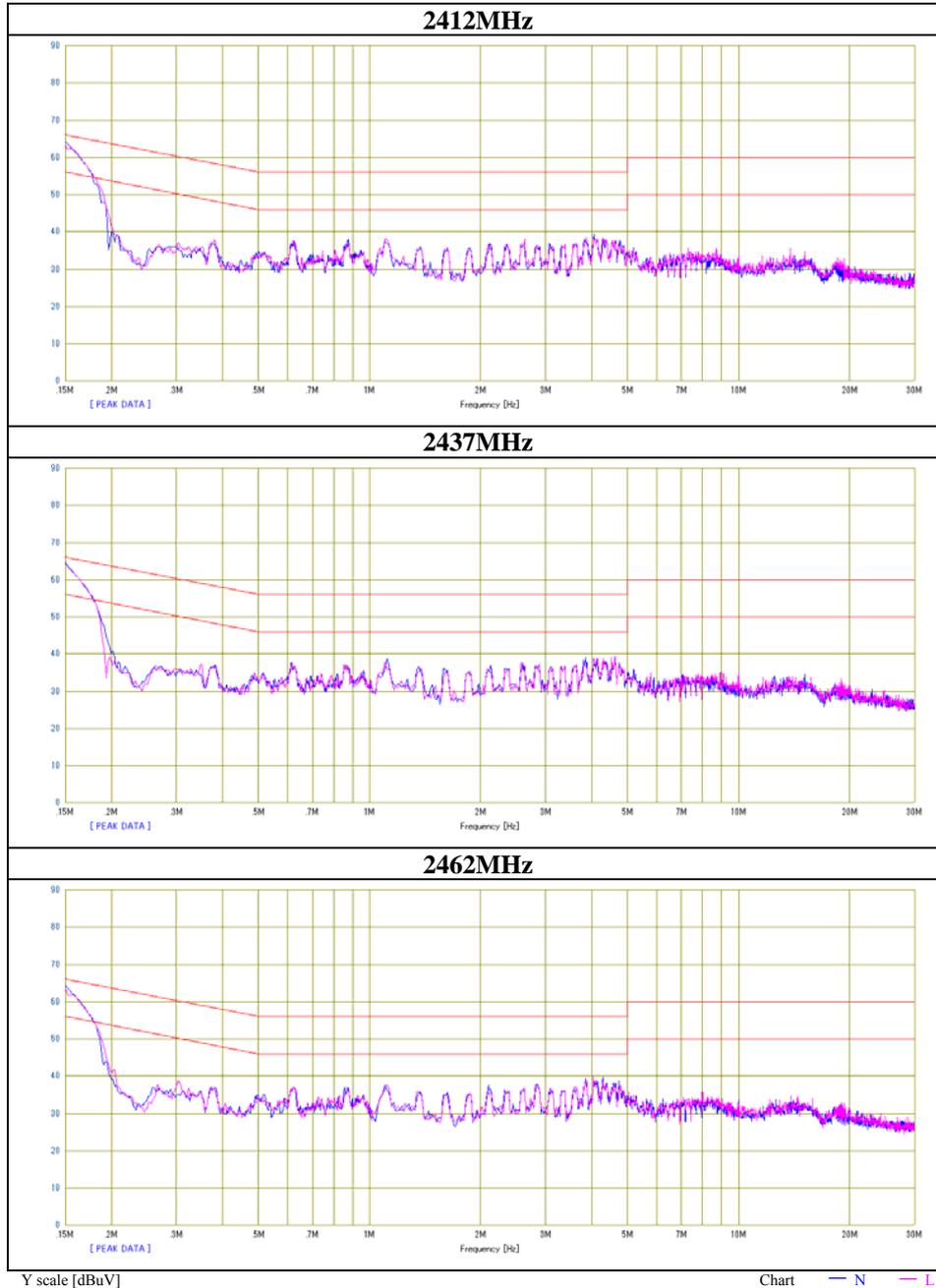


Frequency [MHz]	Reading		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	44.8	27.7	13.3	58.1	41.0	66.0	56.0	7.9	15.0	N	
0.62560	18.4	12.6	13.3	31.7	25.9	56.0	46.0	24.3	20.1	N	
0.87604	18.0	11.0	13.3	31.3	24.3	56.0	46.0	24.7	21.7	N	
1.10152	18.3	9.4	13.3	31.6	22.7	56.0	46.0	24.4	23.3	N	
2.59200	18.5	6.6	13.4	31.9	20.0	56.0	46.0	24.1	26.0	N	
4.28496	20.2	12.5	13.6	33.8	26.1	56.0	46.0	22.2	19.9	N	
0.15000	44.9	28.1	13.3	58.2	41.4	66.0	56.0	7.8	14.6	L	
0.62292	18.3	12.9	13.3	31.6	26.2	56.0	46.0	24.4	19.8	L	
0.87604	17.9	10.8	13.3	31.2	24.1	56.0	46.0	24.8	21.9	L	
1.11304	17.9	9.2	13.3	31.2	22.5	56.0	46.0	24.8	23.5	L	
2.59440	18.5	6.9	13.4	31.9	20.3	56.0	46.0	24.1	25.7	L	
4.28444	20.5	11.8	13.6	34.1	25.4	56.0	46.0	21.9	20.6	L	

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

Conducted Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	32GE0144-HO-01
Date	03/30/2012
Temperature/ Humidity	25deg. C / 32% RH
Engineer	Hironobu Ohnishi
Mode	11g Tx, Antenna 0



Conducted Emission
(Power Supply: SONY)

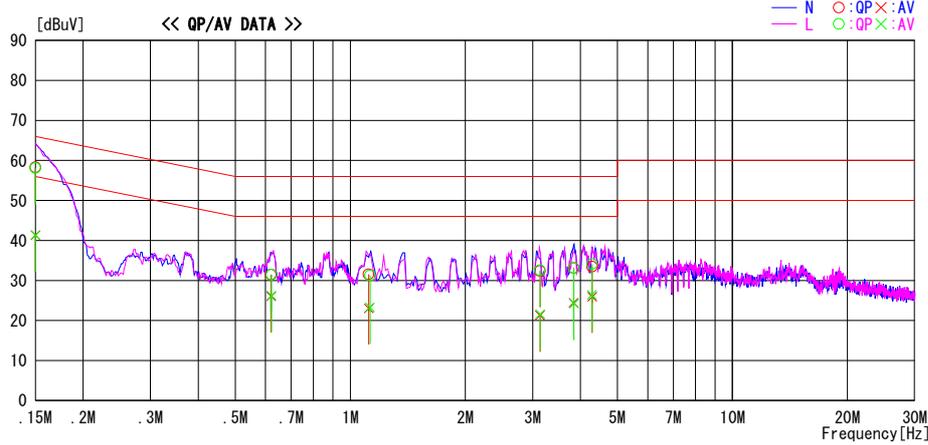
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/30

Report No. : 32GE0144-HO-01
Temp./Humi. : 25deg. C / 32% RH
Engineer : Hironobu Ohnishi

Mode / Remarks : WLAN 11g Tx, 2412MHz, 24Mbps, Antenna 1

LIMIT : FCC15.207 QP
FCC15.207 AV

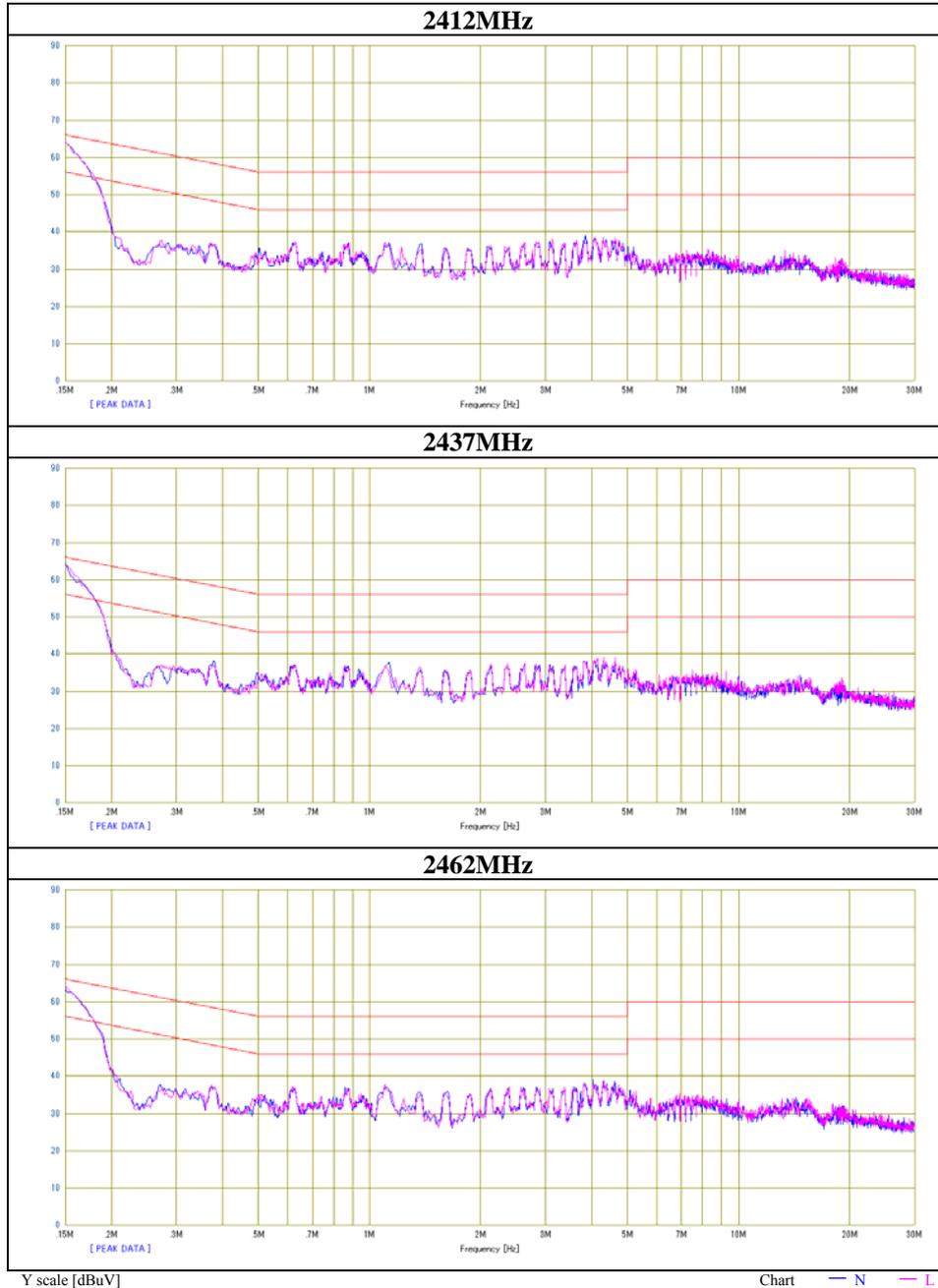


Frequency [MHz]	Reading		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	45.0	28.0	13.3	58.3	41.3	66.0	56.0	7.7	14.7	N	
0.62020	18.2	12.8	13.3	31.5	26.1	56.0	46.0	24.5	19.9	N	
1.11808	18.3	9.8	13.3	31.6	23.1	56.0	46.0	24.4	22.9	N	
3.13592	18.8	7.7	13.6	32.4	21.3	56.0	46.0	23.6	24.7	N	
3.84305	19.5	10.8	13.6	33.1	24.4	56.0	46.0	22.9	21.6	N	
4.29328	19.9	12.4	13.6	33.5	26.0	56.0	46.0	22.5	20.0	N	
0.15000	44.8	28.0	13.3	58.1	41.3	66.0	56.0	7.9	14.7	L	
0.62240	18.2	12.9	13.3	31.5	26.2	56.0	46.0	24.5	19.8	L	
1.12636	18.0	10.0	13.3	31.3	23.3	56.0	46.0	24.7	22.7	L	
3.13904	19.0	8.0	13.6	32.6	21.6	56.0	46.0	23.4	24.4	L	
3.84516	19.5	10.6	13.6	33.1	24.2	56.0	46.0	22.9	21.8	L	
4.29012	20.5	12.8	13.6	34.1	26.4	56.0	46.0	21.9	19.6	L	

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

Conducted Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	32GE0144-HO-01
Date	03/30/2012
Temperature/ Humidity	25deg. C / 32% RH
Engineer	Hironobu Ohnishi
Mode	11g Tx, Antenna 1



Conducted Emission
(Power Supply: DELTA)

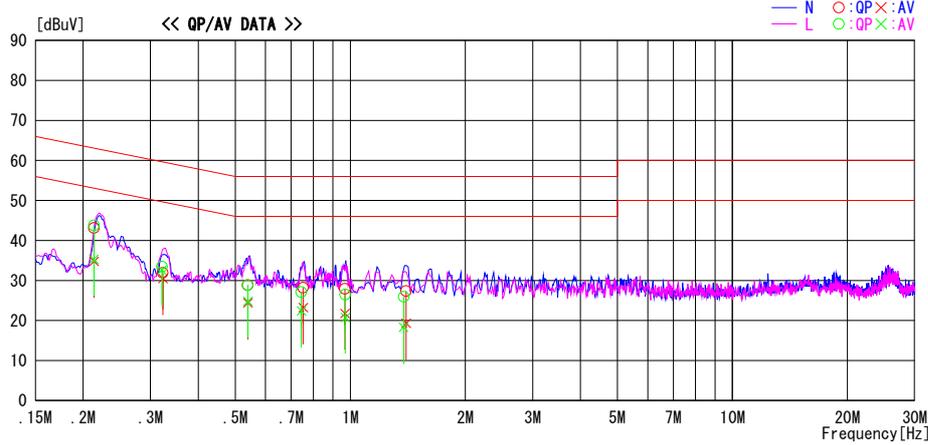
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/31

Report No. : 32GE0144-HO-01
Temp./Humi. : 25deg. C / 32% RH
Engineer : Hironobu Ohnishi

Mode / Remarks : WLAN 11b Tx, 2412MHz, 2Mbps, Antenna 0

LIMIT : FCC15.207 QP
FCC15.207 AV

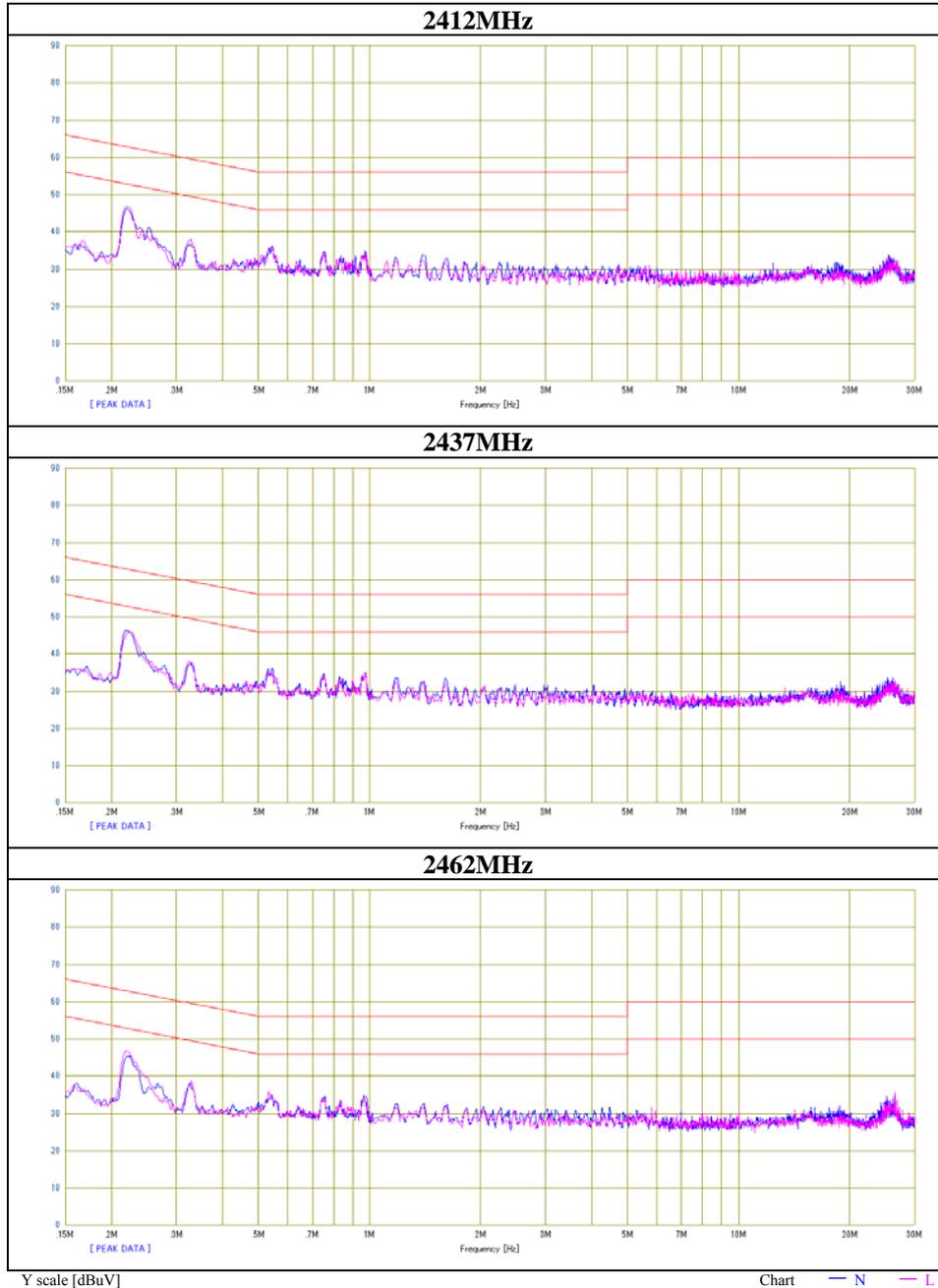


Frequency [MHz]	Reading		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.21348	29.9	21.6	13.2	43.1	34.8	63.1	53.1	20.0	18.3	N	
0.32324	18.6	17.2	13.3	31.9	30.5	59.6	49.6	27.7	19.1	N	
0.53952	15.5	11.1	13.3	28.8	24.4	56.0	46.0	27.2	21.6	N	
0.75264	14.9	9.9	13.3	28.2	23.2	56.0	46.0	27.8	22.8	N	
0.96832	14.6	8.5	13.3	27.9	21.8	56.0	46.0	28.1	24.2	N	
1.39912	14.0	5.9	13.4	27.4	19.3	56.0	46.0	28.6	26.7	N	
0.21332	30.5	22.1	13.2	43.7	35.3	63.1	53.1	19.4	17.8	L	
0.32168	20.2	19.3	13.3	33.5	32.6	59.7	49.7	26.2	17.1	L	
0.53960	15.5	11.5	13.3	28.8	24.8	56.0	46.0	27.2	21.2	L	
0.74472	13.8	9.1	13.3	27.1	22.4	56.0	46.0	28.9	23.6	L	
0.97096	13.2	7.5	13.3	26.5	20.8	56.0	46.0	29.5	25.2	L	
1.37976	12.5	4.9	13.4	25.9	18.3	56.0	46.0	30.1	27.7	L	

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

Conducted Emission
(Power Supply: DELTA)

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	32GE0144-HO-01
Date	03/30/2012
Temperature/ Humidity	25deg. C / 32% RH
Engineer	Hironobu Ohnishi
Mode	11b Tx, Antenna 0



Conducted Emission
(Power Supply: DELTA)

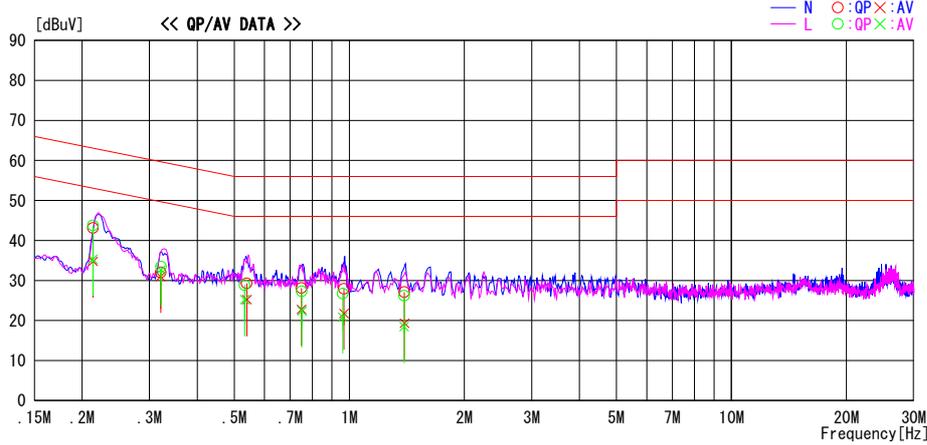
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/31

Report No. : 32GE0144-HO-01
Temp./Humi. : 25deg. C / 32% RH
Engineer : Hironobu Ohnishi

Mode / Remarks : WLAN 11b Tx, 2412MHz, 2Mbps, Antenna 1

LIMIT : FCC15.207 QP
FCC15.207 AV

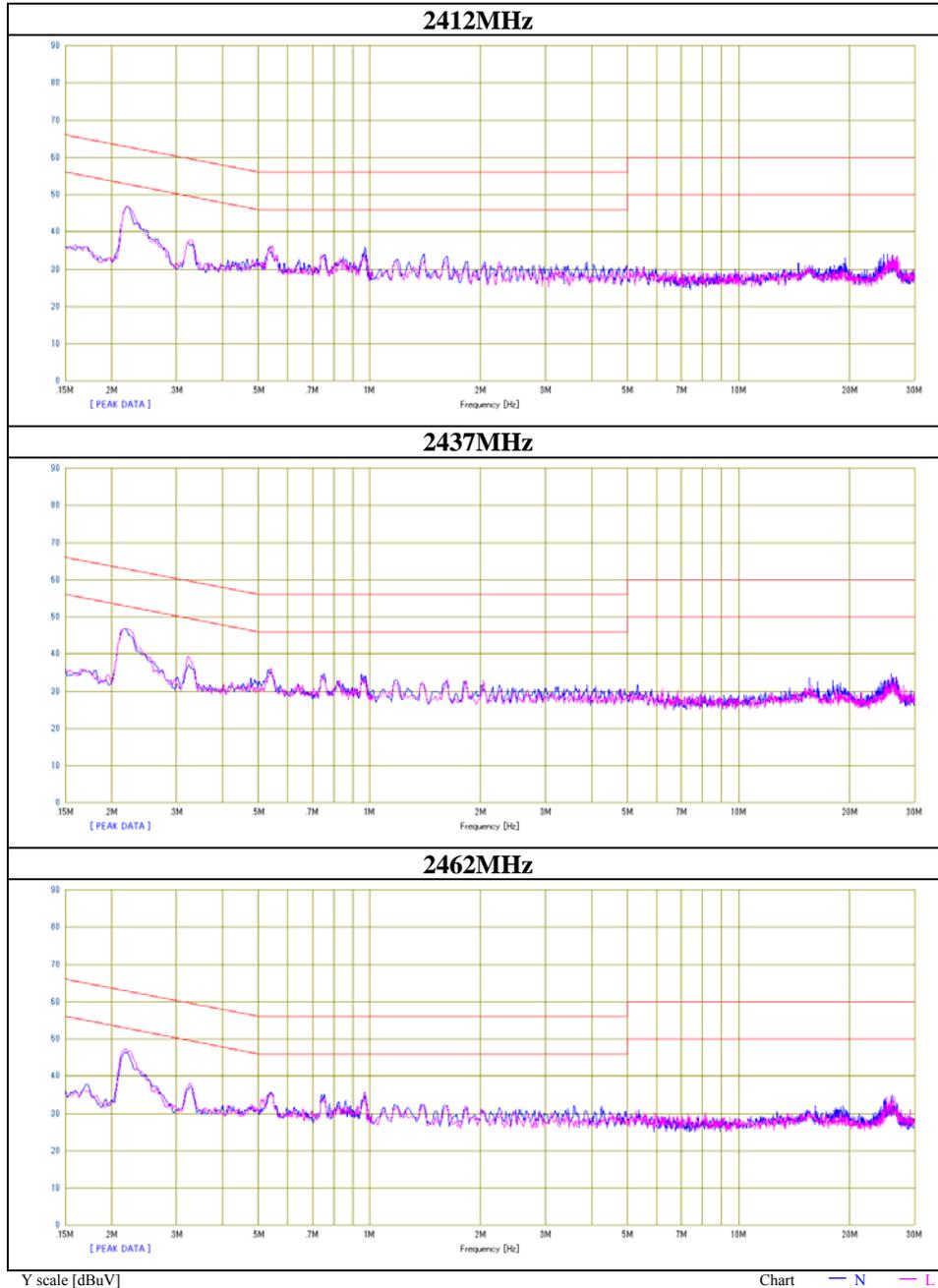


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.21356	29.9	21.6	13.2	43.1	34.8	63.1	53.1	20.0	18.3	N	
0.32088	18.7	17.7	13.3	32.0	31.0	59.7	49.7	27.7	18.7	N	
0.53980	16.0	11.9	13.3	29.3	25.2	56.0	46.0	26.7	20.8	N	
0.74928	14.8	9.5	13.3	28.1	22.8	56.0	46.0	27.9	23.2	N	
0.96792	14.6	8.5	13.3	27.9	21.8	56.0	46.0	28.1	24.2	N	
1.39328	13.7	5.9	13.4	27.1	19.3	56.0	46.0	28.9	26.7	N	
0.21324	30.5	22.1	13.2	43.7	35.3	63.1	53.1	19.4	17.8	L	
0.32160	20.2	19.3	13.3	33.5	32.6	59.7	49.7	26.2	17.1	L	
0.53256	15.5	11.9	13.3	28.8	25.2	56.0	46.0	27.2	20.8	L	
0.75112	14.0	9.1	13.3	27.3	22.4	56.0	46.0	28.7	23.6	L	
0.96044	13.4	7.6	13.3	26.7	20.9	56.0	46.0	29.3	25.1	L	
1.39176	12.8	5.1	13.4	26.2	18.5	56.0	46.0	29.8	27.5	L	

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

Conducted Emission
(Power Supply: DELTA)

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	32GE0144-HO-01
Date	03/30/2012
Temperature/ Humidity	25deg. C / 32% RH
Engineer	Hironobu Ohnishi
Mode	11b Tx, Antenna 1



Conducted Emission
(Power Supply: DELTA)

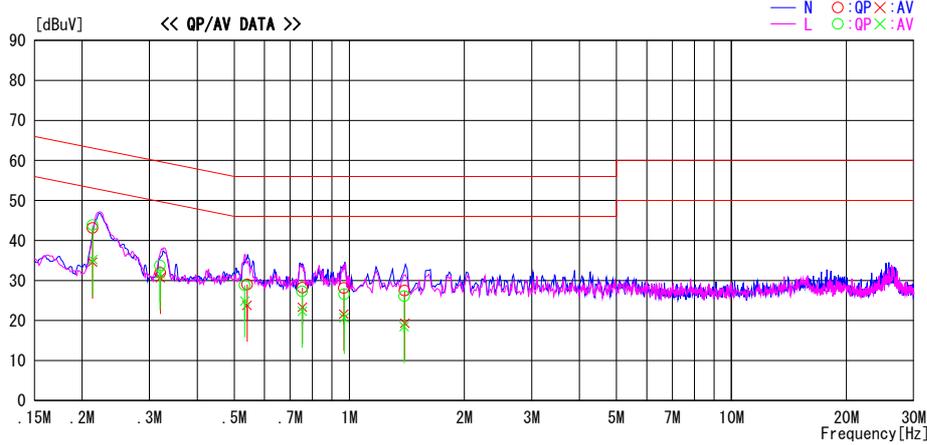
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/31

Report No. : 32GE0144-HO-01
Temp./Humi. : 25deg. C / 32% RH
Engineer : Hironobu Ohnishi

Mode / Remarks : WLAN 11g Tx, 2412MHz, 24Mbps, Antenna 0

LIMIT : FCC15.207 QP
FCC15.207 AV

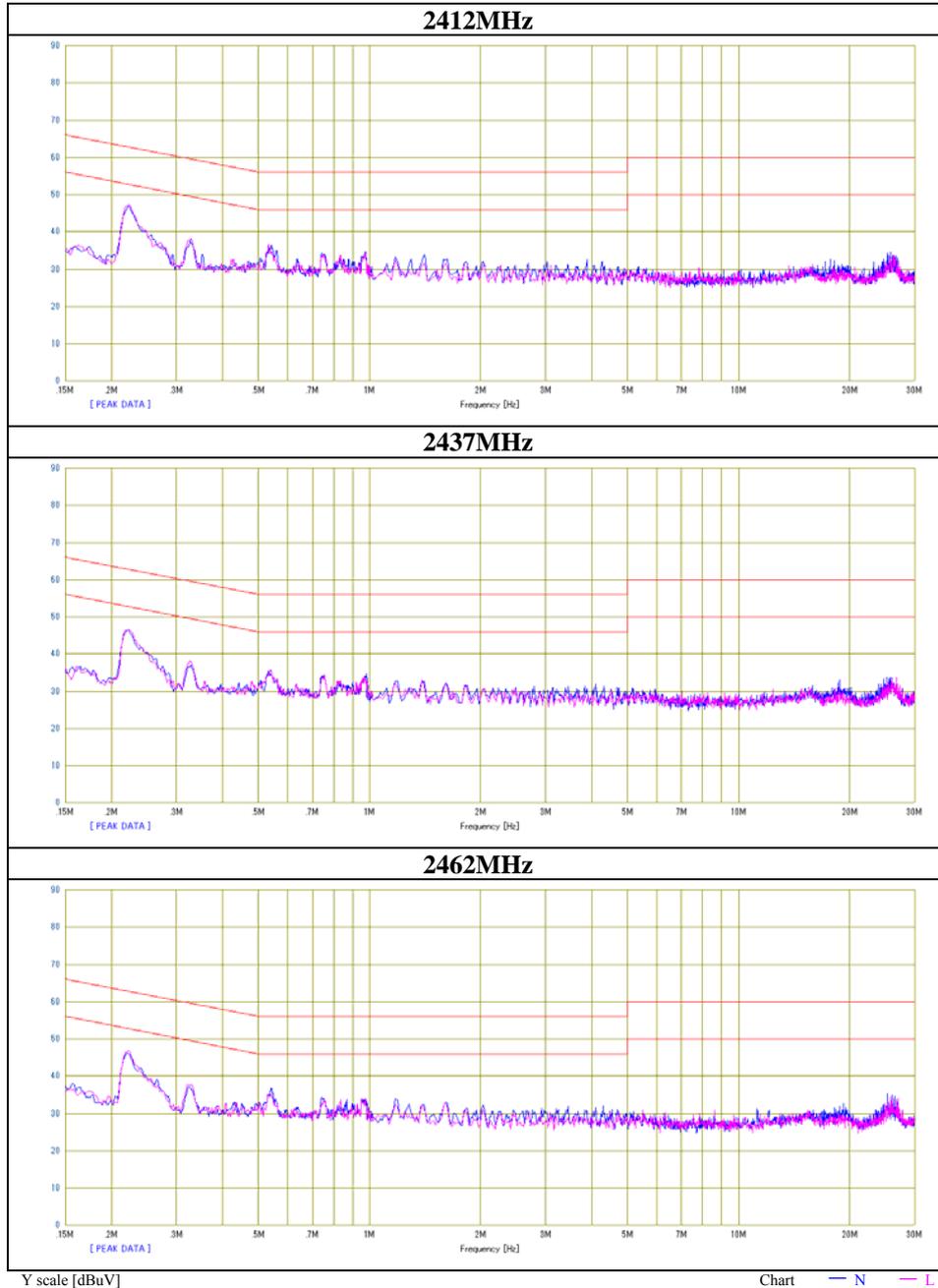


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.21280	29.9	21.4	13.2	43.1	34.6	63.1	53.1	20.0	18.5	N	
0.32028	18.6	17.4	13.3	31.9	30.7	59.7	49.7	27.8	19.0	N	
0.54048	15.7	10.5	13.3	29.0	23.8	56.0	46.0	27.0	22.2	N	
0.75364	14.9	10.0	13.3	28.2	23.3	56.0	46.0	27.8	22.7	N	
0.96724	14.8	8.3	13.3	28.1	21.6	56.0	46.0	27.9	24.4	N	
1.39736	14.1	5.9	13.4	27.5	19.3	56.0	46.0	28.5	26.7	N	
0.21304	30.6	22.0	13.2	43.8	35.2	63.1	53.1	19.3	17.9	L	
0.31936	20.4	18.4	13.3	33.7	31.7	59.7	49.7	26.0	18.0	L	
0.53228	15.5	11.6	13.3	28.8	24.9	56.0	46.0	27.2	21.1	L	
0.75260	14.0	9.0	13.3	27.3	22.3	56.0	46.0	28.7	23.7	L	
0.96900	13.3	7.4	13.3	26.6	20.7	56.0	46.0	29.4	25.3	L	
1.39272	12.7	5.1	13.4	26.1	18.5	56.0	46.0	29.9	27.5	L	

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

Conducted Emission
(Power Supply: DELTA)

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	32GE0144-HO-01
Date	03/30/2012
Temperature/ Humidity	25deg. C / 32% RH
Engineer	Hironobu Ohnishi
Mode	11g Tx, Antenna 0



Conducted Emission
(Power Supply: DELTA)

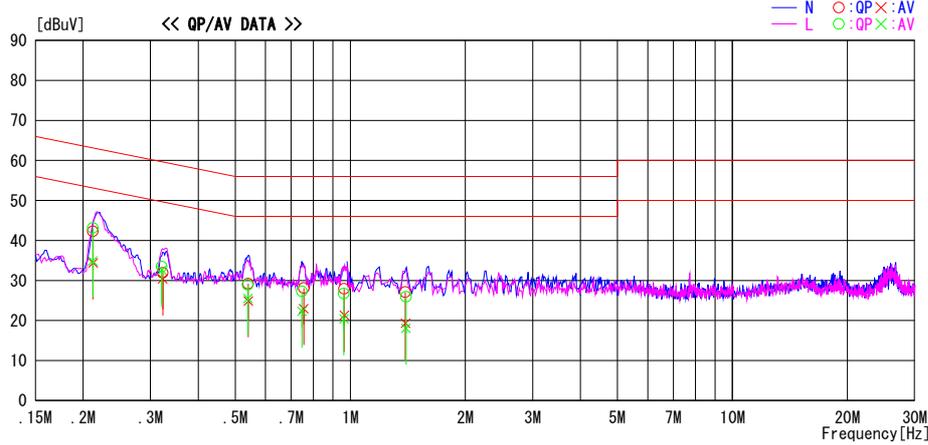
DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/31

Report No. : 32GE0144-HO-01
Temp./Humi. : 25deg. C / 32% RH
Engineer : Hironobu Ohnishi

Mode / Remarks : WLAN 11g Tx, 2412MHz, 24Mbps, Antenna 1

LIMIT : FCC15.207 QP
FCC15.207 AV

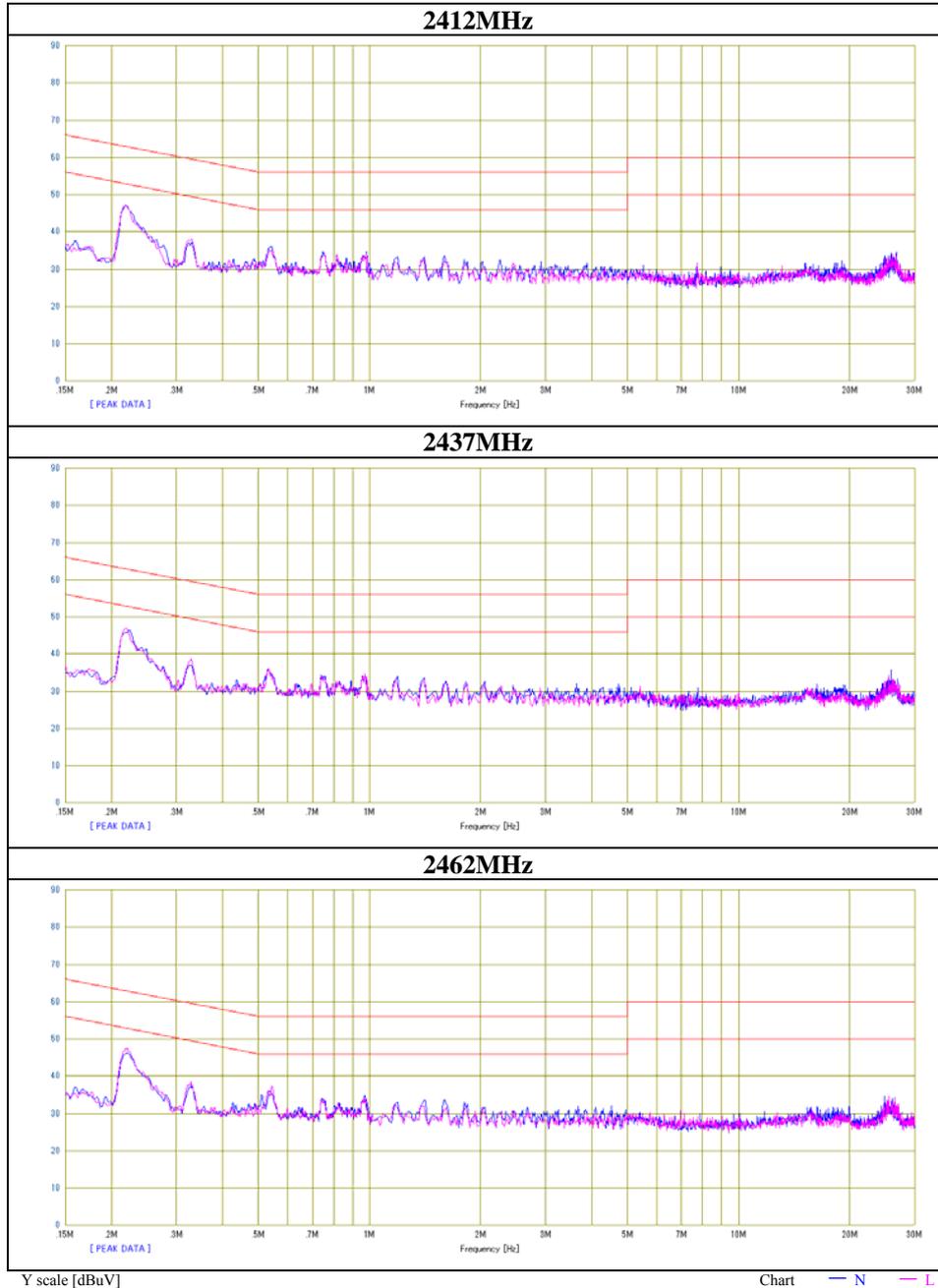


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.21212	29.1	21.2	13.2	42.3	34.4	63.1	53.1	20.8	18.7	N	
0.32312	18.6	17.1	13.3	31.9	30.4	59.6	49.6	27.7	19.2	N	
0.54060	15.9	11.6	13.3	29.2	24.9	56.0	46.0	26.8	21.1	N	
0.75524	14.8	9.7	13.3	28.1	23.0	56.0	46.0	27.9	23.0	N	
0.96360	14.6	8.0	13.3	27.9	21.3	56.0	46.0	28.1	24.7	N	
1.39360	13.7	5.9	13.4	27.1	19.3	56.0	46.0	28.9	26.7	N	
0.21204	29.9	21.7	13.2	43.1	34.9	63.1	53.1	20.0	18.2	L	
0.32128	20.2	19.3	13.3	33.5	32.6	59.7	49.7	26.2	17.1	L	
0.53956	15.6	12.2	13.3	28.9	25.5	56.0	46.0	27.1	20.5	L	
0.74692	14.0	9.0	13.3	27.3	22.3	56.0	46.0	28.7	23.7	L	
0.96240	13.4	7.1	13.3	26.7	20.4	56.0	46.0	29.3	25.6	L	
1.39760	12.5	4.7	13.4	25.9	18.1	56.0	46.0	30.1	27.9	L	

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

Conducted Emission
(Power Supply: DELTA)

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	32GE0144-HO-01
Date	03/30/2012
Temperature/ Humidity	25deg. C / 32% RH
Engineer	Hironobu Ohnishi
Mode	11g Tx, Antenna 1



6dB Bandwidth

Test place Head Office EMC Lab. No.3 Measurement Room
Report No. 32GE0144-HO-01
Date 03/13/2012
Temperature/ Humidity 21 deg. C / 47% RH
Engineer Takeshi Choda
Mode Tx

11b Antenna 0

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
2412	9.920	>500
2437	9.954	>500
2462	9.949	>500

11g Antenna 0

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
2412	16.504	>500
2437	16.517	>500
2462	16.519	>500

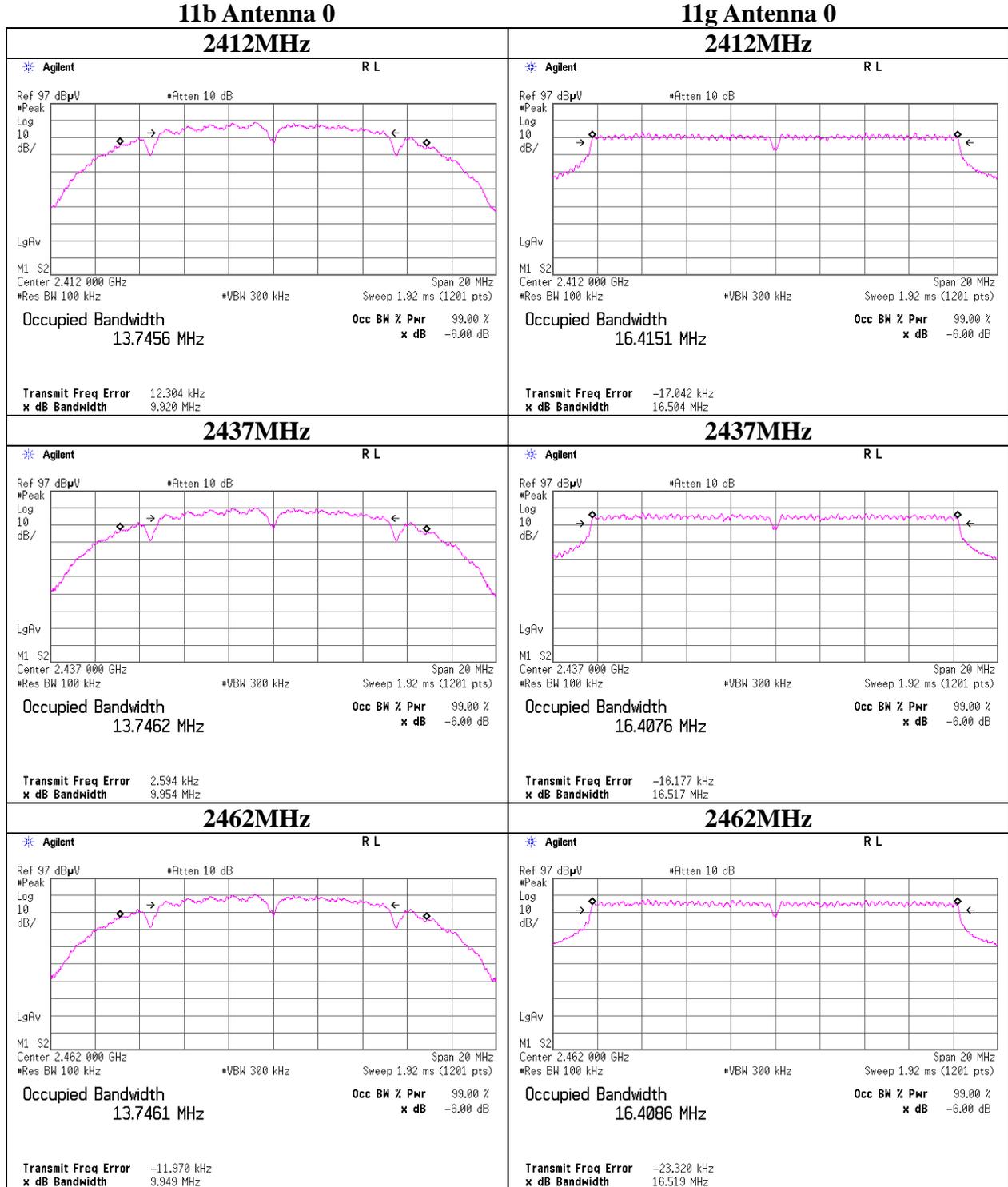
11b Antenna 1

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
2412	9.919	>500
2437	9.923	>500
2462	9.949	>500

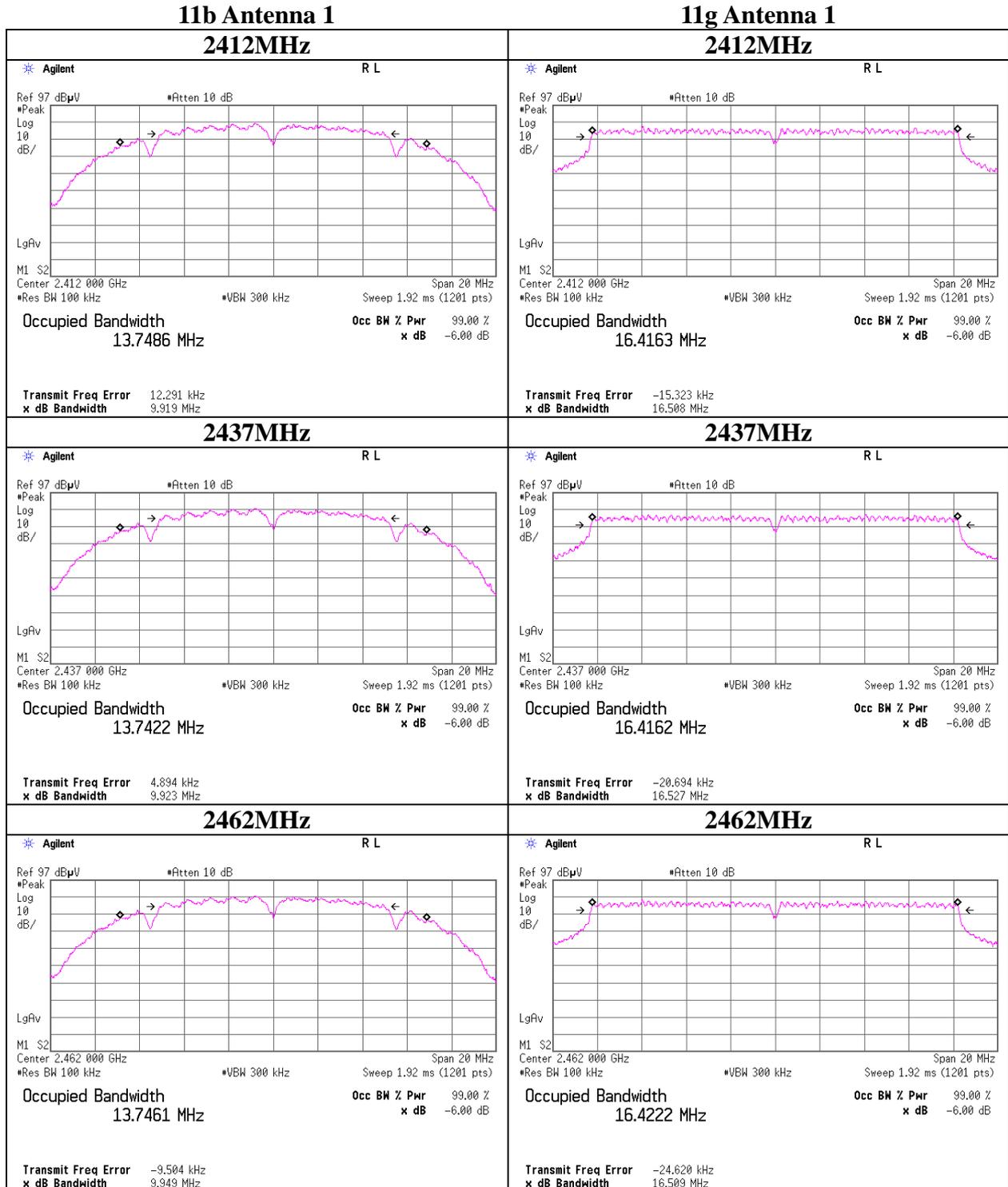
11g Antenna 1

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
2412	16.508	>500
2437	16.527	>500
2462	16.509	>500

6dB Bandwidth



6dB Bandwidth



Maximum Peak Output Power

Test place	Head Office EMC Lab. No.4 Measurement Room
Report No.	31HE0085-HO-01
Date	03/12/2012
Temperature/ Humidity	23 deg. C / 32% RH
Engineer	Takumi Shimada
Mode	11g Tx

Antenna 0

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
				[dBm]	[mW]	[dBm]	[mW]	
2412	12.35	0.80	9.96	23.11	204.64	30.00	1000	6.89
2437	11.51	0.80	9.96	22.27	168.66	30.00	1000	7.73
2462	11.76	0.80	9.96	22.52	178.65	30.00	1000	7.48

Antenna 1

Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
				[dBm]	[mW]	[dBm]	[mW]	
2412	12.01	0.80	9.96	22.77	189.23	30.00	1000	7.23
2437	11.47	0.80	9.96	22.23	167.11	30.00	1000	7.77
2462	11.55	0.80	9.96	22.31	170.22	30.00	1000	7.69

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 2437MHz

Rate [Mbps]	Reading [dBm]	Remark
6	10.21	
9	9.62	
12	10.00	
18	10.49	
24	11.51	*
36	11.33	
48	10.71	
54	11.15	

Antenna 1, 2437MHz

Rate [Mbps]	Reading [dBm]	Remark
6	10.23	
9	9.34	
12	10.01	
18	10.22	
24	11.47	*
36	11.30	
48	10.55	
54	11.12	

*: Worst Rate

All comparison were carried out on same frequency and measurement factors.

UL Japan, Inc.

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Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/27/2012 03/31/2012 04/01/2012
Temperature/ Humidity 23 deg. C / 37% RH 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Takumi Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2412MHz Antenna 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.654	QP	24.1	16.3	7.2	32.0	15.6	40.0	24.4	
Hori	69.987	QP	42.5	6.4	7.7	32.1	24.5	40.0	15.5	
Hori	200.556	QP	32.1	16.6	8.8	31.9	25.6	43.5	17.9	
Hori	404.252	QP	35.1	17.7	10.3	32.0	31.1	46.0	14.9	
Hori	576.241	QP	41.2	20.2	11.3	32.0	40.7	46.0	5.3	
Hori	809.421	QP	28.1	23.7	12.5	31.7	32.6	46.0	13.4	
Hori	2390.000	PK	53.5	28.1	2.2	32.2	51.6	73.9	22.3	
Hori	2397.975	PK	61.2	28.1	2.2	32.2	59.3	-	-	- See 20dBc Data Sheet
Hori	2400.000	PK	59.4	28.1	2.2	32.2	57.5	73.9	16.4	
Hori	3186.674	PK	58.9	28.7	2.6	31.9	58.3	73.9	15.6	
Hori	4824.000	PK	43.6	31.2	4.8	31.4	48.2	73.9	25.7	
Hori	7236.000	PK	42.0	35.6	5.6	32.4	50.8	73.9	23.1	
Hori	9648.000	PK	44.4	38.3	6.8	33.2	56.3	73.9	17.6	
Hori	24120.000	PK	47.6	38.7	-1.8	32.1	52.4	73.9	21.5	
Hori	2390.000	AV	40.3	28.1	2.2	32.2	38.4	53.9	15.5	
Hori	2397.975	AV	53.8	28.1	2.2	32.2	51.9	-	-	- See 20dBc Data Sheet
Hori	2400.000	AV	48.8	28.1	2.2	32.2	46.9	53.9	7.0	
Hori	3186.674	AV	39.3	28.7	2.6	31.9	38.7	53.9	15.2	
Hori	4824.000	AV	32.9	31.2	4.8	31.4	37.5	53.9	16.4	
Hori	7236.000	AV	30.1	35.6	5.6	32.4	38.9	53.9	15.1	
Hori	9648.000	AV	35.2	38.3	6.8	33.2	47.1	53.9	6.9	
Hori	24120.000	AV	35.3	38.7	-1.8	32.1	40.1	53.9	13.8	
Vert	35.421	QP	35.4	16.3	7.2	32.0	26.8	40.0	13.2	
Vert	69.723	QP	43.9	6.4	7.7	32.1	25.6	40.0	14.4	
Vert	200.524	QP	36.5	16.6	8.8	31.9	30.0	43.5	13.5	
Vert	404.525	QP	42.1	17.7	10.3	32.0	38.1	46.0	7.9	
Vert	576.423	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	810.039	QP	31.0	23.7	12.5	31.6	35.6	46.0	10.4	
Vert	2390.000	PK	51.5	28.1	2.2	32.2	49.6	73.9	24.4	
Vert	2398.073	PK	60.2	28.1	2.2	32.2	58.3	-	-	- See 20dBc Data Sheet
Vert	2400.000	PK	58.5	28.1	2.2	32.2	56.6	73.9	17.3	
Vert	3186.667	PK	55.8	28.7	2.6	31.9	55.2	73.9	18.7	
Vert	4824.000	PK	42.3	31.2	4.8	31.4	46.9	73.9	27.0	
Vert	7236.000	PK	42.1	35.6	5.6	32.4	50.9	73.9	23.0	
Vert	9648.000	PK	43.5	38.3	6.8	33.2	55.4	73.9	18.5	
Vert	24120.000	PK	47.5	38.7	-1.8	32.1	52.3	73.9	21.6	
Vert	2390.000	AV	38.5	28.1	2.2	32.2	36.6	53.9	17.3	
Vert	2398.073	AV	52.9	28.1	2.2	32.2	51.0	-	-	- See 20dBc Data Sheet
Vert	2400.000	AV	48.0	28.1	2.2	32.2	46.1	53.9	7.8	
Vert	3186.667	AV	36.9	28.7	2.6	31.9	36.3	53.9	17.6	
Vert	4824.000	AV	31.8	31.2	4.8	31.4	36.4	53.9	17.5	
Vert	7236.000	AV	30.2	35.6	5.6	32.4	39.0	53.9	15.0	
Vert	9648.000	AV	32.4	38.3	6.8	33.2	44.3	53.9	9.6	
Vert	24120.000	AV	35.3	38.7	-1.8	32.1	40.1	53.9	13.8	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply : SONY)

Test place : Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. : 32GE0144-HO-01
Date : 03/27/2012
Temperature/ Humidity : 23 deg. C / 37% RH
Engineer : Takumi Shimada
Mode : 11b Tx 2412MHz Antenna 0

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result dBuV/m	Limit dBuV/m	Margin [dB]	Remark
Hori	2412.000	PK	99.2	28.2	2.2	32.2	97.4	-	-	Carrier
Hori	2397.975	PK	55.1	28.1	2.2	32.2	53.2	77.4	24.2	
Vert	2412.000	PK	98.4	28.2	2.2	32.2	96.6	-	-	Carrier
Vert	2398.073	PK	53.5	28.1	2.2	32.2	51.6	76.6	25.0	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/27/2012 03/31/2012 04/01/2012
Temperature/ Humidity 23 deg. C / 37% RH 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Takumi Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2437MHz Antenna 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.613	QP	24.1	16.3	7.2	32.0	15.6	40.0	24.4	
Hori	69.841	QP	42.8	6.4	7.7	32.1	24.8	40.0	15.2	
Hori	200.524	QP	32.1	16.6	8.8	31.9	25.6	43.5	17.9	
Hori	404.231	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.231	QP	41.1	20.2	11.3	32.0	40.6	46.0	5.4	
Hori	809.321	QP	28.0	23.7	12.5	31.7	32.5	46.0	13.5	
Hori	3188.867	PK	58.8	28.7	2.6	31.9	58.2	73.9	15.7	
Hori	4874.000	PK	44.3	31.4	4.8	31.4	49.1	73.9	24.8	
Hori	7311.000	PK	42.5	35.7	5.6	32.5	51.3	73.9	22.6	
Hori	9748.000	PK	43.2	38.4	7.0	33.2	55.4	73.9	18.5	
Hori	24370.000	PK	47.4	38.6	-1.8	32.1	52.1	73.9	21.8	
Hori	3188.867	AV	40.1	28.7	2.6	31.9	39.5	53.9	14.4	
Hori	4874.000	AV	35.2	31.4	4.8	31.4	40.0	53.9	13.9	
Hori	7311.000	AV	30.1	35.7	5.6	32.5	38.9	53.9	15.0	
Hori	9748.000	AV	33.3	38.4	7.0	33.2	45.5	53.9	8.4	
Hori	24370.000	AV	34.7	38.6	-1.8	32.1	39.4	53.9	14.5	
Vert	35.410	QP	34.9	16.3	7.2	32.0	26.3	40.0	13.7	
Vert	69.989	QP	44.8	6.4	7.7	32.1	26.5	40.0	13.5	
Vert	200.452	QP	35.9	16.6	8.8	31.9	29.4	43.5	14.1	
Vert	404.123	QP	42.1	17.7	10.3	32.0	38.1	46.0	7.9	
Vert	576.993	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	809.310	QP	28.9	23.7	12.5	31.7	33.4	46.0	12.6	
Vert	3187.207	PK	55.5	28.7	2.6	31.9	54.9	73.9	19.0	
Vert	4874.000	PK	44.0	31.4	4.8	31.4	48.8	73.9	25.1	
Vert	7311.000	PK	41.9	35.7	5.6	32.5	50.7	73.9	23.2	
Vert	9748.000	PK	43.6	38.4	7.0	33.2	55.8	73.9	18.1	
Vert	24370.000	PK	47.2	38.6	-1.8	32.1	51.9	73.9	22.0	
Vert	3187.207	AV	37.1	28.7	2.6	31.9	36.5	53.9	17.4	
Vert	4874.000	AV	35.0	31.4	4.8	31.4	39.8	53.9	14.1	
Vert	7311.000	AV	30.2	35.7	5.6	32.5	39.0	53.9	14.9	
Vert	9748.000	AV	32.8	38.4	7.0	33.2	45.0	53.9	9.0	
Vert	24370.000	AV	34.7	38.6	-1.8	32.1	39.4	53.9	14.5	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/27/2012 03/31/2012 04/01/2012
Temperature/ Humidity 23 deg. C / 37% RH 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Takumi Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode 11b Tx 2462MHz Antenna 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.210	QP	24.1	16.4	7.2	32.0	15.7	40.0	24.3	
Hori	69.883	QP	41.7	6.4	7.7	32.1	23.7	40.0	16.3	
Hori	200.423	QP	32.1	16.6	8.8	31.9	25.6	43.5	17.9	
Hori	404.213	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.123	QP	40.9	20.2	11.3	32.0	40.4	46.0	5.6	
Hori	809.321	QP	28.2	23.7	12.5	31.7	32.7	46.0	13.3	
Hori	2483.500	PK	54.1	28.5	2.2	32.2	52.6	73.9	21.3	
Hori	3187.500	PK	60.2	28.7	2.6	31.9	59.6	73.9	14.3	
Hori	4924.000	PK	45.5	31.5	4.8	31.4	50.4	73.9	23.5	
Hori	7386.000	PK	43.8	35.8	5.6	32.5	52.7	73.9	21.2	
Hori	9848.000	PK	45.2	38.5	7.1	33.3	57.5	73.9	16.5	
Hori	24620.000	PK	47.5	38.6	-1.7	32.2	52.2	73.9	21.7	
Hori	2483.500	AV	42.1	28.5	2.2	32.2	40.6	53.9	13.3	
Hori	3187.500	AV	41.2	28.7	2.6	31.9	40.6	53.9	13.3	
Hori	4924.000	AV	36.1	31.5	4.8	31.4	41.0	53.9	12.9	
Hori	7386.000	AV	31.9	35.8	5.6	32.5	40.8	53.9	13.1	
Hori	9848.000	AV	35.6	38.5	7.1	33.3	47.9	53.9	6.0	
Hori	24620.000	AV	35.3	38.6	-1.7	32.2	40.0	53.9	13.9	
Vert	35.732	QP	34.2	16.2	7.2	32.0	25.5	40.0	14.5	
Vert	69.732	QP	44.5	6.4	7.7	32.1	26.2	40.0	13.8	
Vert	200.543	QP	36.5	16.6	8.8	31.9	30.0	43.5	13.5	
Vert	404.845	QP	42.1	17.7	10.3	32.0	38.1	46.0	7.9	
Vert	576.993	QP	34.9	20.2	11.3	32.0	34.4	46.0	11.6	
Vert	810.310	QP	31.4	23.7	12.5	31.6	36.0	46.0	10.0	
Vert	2483.500	PK	54.0	28.5	2.2	32.2	52.5	73.9	21.4	
Vert	3187.957	PK	55.7	28.7	2.6	31.9	55.1	73.9	18.8	
Vert	4924.000	PK	46.7	31.5	4.8	31.4	51.6	73.9	22.3	
Vert	7386.000	PK	44.7	35.8	5.6	32.5	53.6	73.9	20.3	
Vert	9848.000	PK	45.2	38.5	7.1	33.3	57.5	73.9	16.4	
Vert	24620.000	PK	47.4	38.6	-1.7	32.2	52.1	73.9	21.8	
Vert	2483.500	AV	41.8	28.5	2.2	32.2	40.3	53.9	13.6	
Vert	3187.957	AV	39.1	28.7	2.6	31.9	38.5	53.9	15.4	
Vert	4924.000	AV	37.1	31.5	4.8	31.4	42.0	53.9	11.9	
Vert	7386.000	AV	32.0	35.8	5.6	32.5	40.9	53.9	13.0	
Vert	9848.000	AV	35.4	38.5	7.1	33.3	47.7	53.9	6.2	
Vert	24620.000	AV	35.4	38.6	-1.7	32.2	40.1	53.9	13.8	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/31/2012 04/01/2012
Temperature/ Humidity 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Tomotaka Sasagawa
(1-26.5GHz) (30-1000MHz)
Mode 11g Tx 2412MHz Antenna 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.421	QP	23.1	16.3	7.2	32.0	14.6	40.0	25.4	
Hori	69.874	QP	42.5	6.4	7.7	32.1	24.5	40.0	15.5	
Hori	200.983	QP	32.0	16.6	8.8	31.9	25.5	43.5	18.0	
Hori	404.231	QP	33.8	17.7	10.3	32.0	29.8	46.0	16.2	
Hori	576.231	QP	38.9	20.2	11.3	32.0	38.4	46.0	7.6	
Hori	809.983	QP	27.9	23.7	12.5	31.6	32.5	46.0	13.5	
Hori	2390.000	PK	59.5	28.1	2.2	32.3	57.5	73.9	16.5	
Hori	2400.000	PK	78.6	28.1	2.2	32.3	76.6	-	-	See 20dBc Data Sheet
Hori	3186.873	PK	59.8	28.7	2.5	31.9	59.1	73.9	14.9	
Hori	4824.000	PK	40.8	31.2	4.8	31.5	45.3	73.9	28.6	
Hori	7236.000	PK	42.0	35.6	5.5	32.5	50.6	73.9	23.3	
Hori	9648.000	PK	43.5	38.3	6.6	32.9	55.5	73.9	18.4	
Hori	24120.000	PK	47.4	38.7	-1.8	32.1	52.2	73.9	21.7	
Hori	2390.000	AV	46.6	28.1	2.2	32.3	44.6	53.9	9.3	
Hori	2400.000	AV	62.4	28.1	2.2	32.3	60.4	-	-	See 20dBc Data Sheet
Hori	3186.873	AV	40.4	28.7	2.5	31.9	39.7	53.9	14.2	
Hori	4824.000	AV	29.3	31.2	4.8	31.5	33.8	53.9	20.1	
Hori	7236.000	AV	30.1	35.6	5.5	32.5	38.7	53.9	15.3	
Hori	9648.000	AV	34.0	38.3	6.6	32.9	46.0	53.9	7.9	
Hori	24120.000	AV	35.4	38.7	-1.8	32.1	40.2	53.9	13.7	
Vert	35.412	QP	33.2	16.3	7.2	32.0	24.6	40.0	15.4	
Vert	69.824	QP	45.9	6.4	7.7	32.1	27.6	40.0	12.4	
Vert	200.721	QP	35.6	16.6	8.8	31.9	29.1	43.5	14.4	
Vert	404.221	QP	40.9	17.7	10.3	32.0	36.9	46.0	9.1	
Vert	576.992	QP	34.9	20.2	11.3	32.0	34.4	46.0	11.6	
Vert	810.321	QP	30.7	23.7	12.5	31.6	35.3	46.0	10.7	
Vert	2390.000	PK	58.5	28.1	2.2	32.3	56.5	73.9	17.4	
Vert	2400.000	PK	75.9	28.1	2.2	32.3	73.9	-	-	See 20dBc Data Sheet
Vert	3186.670	PK	55.7	28.7	2.5	31.9	55.0	73.9	18.9	
Vert	4824.000	PK	40.4	31.2	4.8	31.5	44.9	73.9	29.0	
Vert	7236.000	PK	41.8	35.6	5.5	32.5	50.4	73.9	23.5	
Vert	9648.000	PK	44.4	38.3	6.6	32.9	56.4	73.9	17.5	
Vert	24120.000	PK	47.7	38.7	-1.8	32.1	52.5	73.9	21.4	
Vert	2390.000	AV	44.4	28.1	2.2	32.3	42.4	53.9	11.5	
Vert	2400.000	AV	59.7	28.1	2.2	32.3	57.7	-	-	See 20dBc Data Sheet
Vert	3186.670	AV	35.8	28.7	2.5	31.9	35.1	53.9	18.8	
Vert	4824.000	AV	29.4	31.2	4.8	31.5	33.9	53.9	20.1	
Vert	7236.000	AV	30.2	35.6	5.5	32.5	38.8	53.9	15.1	
Vert	9648.000	AV	33.1	38.3	6.6	32.9	45.1	53.9	8.8	
Vert	24120.000	AV	35.3	38.7	-1.8	32.1	40.1	53.9	13.8	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply : SONY)

Test place : Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. : 32GE0144-HO-01
Date : 03/31/2012
Temperature/ Humidity : 22 deg. C / 39% RH
Engineer : Takumi Shimada
Mode : 11g Tx 2412MHz Antenna 0

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	97.7	28.2	2.2	32.3	95.8	-	-	Carrier
Hori	2400.000	PK	64.8	28.1	2.2	32.3	62.8	75.8	13.0	
Vert	2412.000	PK	96.5	28.2	2.2	32.3	94.6	-	-	Carrier
Vert	2400.000	PK	62.7	28.1	2.2	32.3	60.7	74.6	13.9	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/31/2012 04/01/2012
Temperature/ Humidity 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Tomotaka Sasagawa
(1-26.5GHz) (30-1000MHz)
Mode 11g Tx 2437MHz Antenna 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.843	QP	25.2	16.2	7.2	32.0	16.6	40.0	23.4	
Hori	69.874	QP	41.8	6.4	7.7	32.1	23.8	40.0	16.2	
Hori	200.652	QP	32.4	16.6	8.8	31.9	25.9	43.5	17.6	
Hori	404.213	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.231	QP	40.8	20.2	11.3	32.0	40.3	46.0	5.7	
Hori	809.421	QP	28.1	23.7	12.5	31.7	32.6	46.0	13.4	
Hori	3187.880	PK	60.0	28.7	2.5	31.9	59.3	73.9	14.6	
Hori	4874.000	PK	44.1	31.4	4.8	31.5	48.8	73.9	25.1	
Hori	7311.000	PK	44.8	35.7	5.5	32.5	53.5	73.9	20.4	
Hori	9748.000	PK	45.5	38.4	6.8	32.9	57.8	73.9	16.1	
Hori	24370.000	PK	47.3	38.6	-1.8	32.1	52.0	73.9	21.9	
Hori	3187.880	AV	42.6	28.7	2.5	31.9	41.9	53.9	12.0	
Hori	4874.000	AV	31.2	31.4	4.8	31.5	35.9	53.9	18.0	
Hori	7311.000	AV	31.8	35.7	5.5	32.5	40.5	53.9	13.4	
Hori	9748.000	AV	33.3	38.4	6.8	32.9	45.6	53.9	8.3	
Hori	24370.000	AV	34.7	38.6	-1.8	32.1	39.4	53.9	14.5	
Vert	35.432	QP	33.1	16.3	7.2	32.0	24.5	40.0	15.5	
Vert	69.764	QP	44.9	6.4	7.7	32.1	26.6	40.0	13.4	
Vert	200.523	QP	37.8	16.6	8.8	31.9	31.3	43.5	12.2	
Vert	404.510	QP	42.3	17.7	10.3	32.0	38.3	46.0	7.7	
Vert	576.981	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	809.321	QP	31.1	23.7	12.5	31.7	35.6	46.0	10.4	
Vert	3188.777	PK	56.6	28.7	2.5	31.9	55.9	73.9	18.0	
Vert	4874.000	PK	43.1	31.4	4.8	31.5	47.8	73.9	26.1	
Vert	7311.000	PK	44.4	35.7	5.5	32.5	53.1	73.9	20.8	
Vert	9748.000	PK	45.0	38.4	6.8	32.9	57.3	73.9	16.6	
Vert	24370.000	PK	47.6	38.6	-1.8	32.1	52.3	73.9	21.6	
Vert	3188.777	AV	39.7	28.7	2.5	31.9	39.0	53.9	14.9	
Vert	4874.000	AV	31.8	31.4	4.8	31.5	36.5	53.9	17.4	
Vert	7311.000	AV	32.5	35.7	5.5	32.5	41.2	53.9	12.8	
Vert	9748.000	AV	33.3	38.4	6.8	32.9	45.6	53.9	8.3	
Vert	24370.000	AV	34.7	38.6	-1.8	32.1	39.4	53.9	14.5	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/31/2012 04/01/2012
Temperature/ Humidity 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Tomotaka Sasagawa
(1-26.5GHz) (30-1000MHz)
Mode 11g Tx 2462MHz Antenna 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.421	QP	24.5	16.3	7.2	32.0	16.0	40.0	24.0	
Hori	69.743	QP	41.8	6.4	7.7	32.1	23.8	40.0	16.2	
Hori	200.562	QP	32.1	16.6	8.8	31.9	25.6	43.5	17.9	
Hori	404.140	QP	33.2	17.7	10.3	32.0	29.2	46.0	16.8	
Hori	576.243	QP	39.8	20.2	11.3	32.0	39.3	46.0	6.7	
Hori	809.900	QP	27.4	23.7	12.5	31.6	32.0	46.0	14.0	
Hori	2483.500	PK	58.7	28.5	2.2	32.2	57.2	73.9	16.7	
Hori	3186.933	PK	58.4	28.7	2.5	31.9	57.7	73.9	16.2	
Hori	4924.000	PK	41.3	31.5	4.8	31.5	46.1	73.9	27.8	
Hori	7386.000	PK	42.2	35.8	5.5	32.6	50.9	73.9	23.0	
Hori	9848.000	PK	43.3	38.5	7.0	33.0	55.8	73.9	18.1	
Hori	24620.000	PK	47.4	38.6	-1.7	32.2	52.1	73.9	21.8	
Hori	2483.500	AV	44.8	28.5	2.2	32.2	43.3	53.9	10.6	
Hori	3186.933	AV	39.7	28.7	2.5	31.9	39.0	53.9	14.9	
Hori	4924.000	AV	29.4	31.5	4.8	31.5	34.2	53.9	19.7	
Hori	7386.000	AV	30.3	35.8	5.5	32.6	39.0	53.9	14.9	
Hori	9848.000	AV	32.5	38.5	7.0	33.0	45.0	53.9	8.9	
Hori	24620.000	AV	35.4	38.6	-1.7	32.2	40.1	53.9	13.8	
Vert	35.342	QP	33.0	16.4	7.2	32.0	24.5	40.0	15.5	
Vert	69.984	QP	44.5	6.4	7.7	32.1	26.2	40.0	13.8	
Vert	200.532	QP	37.1	16.6	8.8	31.9	30.6	43.5	12.9	
Vert	404.421	QP	42.3	17.7	10.3	32.0	38.3	46.0	7.7	
Vert	576.241	QP	34.7	20.2	11.3	32.0	34.2	46.0	11.8	
Vert	810.231	QP	30.9	23.7	12.5	31.6	35.5	46.0	10.5	
Vert	2483.500	PK	58.0	28.5	2.2	32.2	56.5	73.9	17.4	
Vert	3189.367	PK	55.6	28.7	2.5	31.9	54.9	73.9	19.0	
Vert	4924.000	PK	41.2	31.5	4.8	31.5	46.0	73.9	28.0	
Vert	7386.000	PK	41.7	35.8	5.5	32.6	50.4	73.9	23.6	
Vert	9848.000	PK	43.0	38.5	7.0	33.0	55.5	73.9	18.4	
Vert	24620.000	PK	47.5	38.6	-1.7	32.2	52.2	73.9	21.7	
Vert	2483.500	AV	44.3	28.5	2.2	32.2	42.8	53.9	11.1	
Vert	3189.367	AV	37.8	28.7	2.5	31.9	37.1	53.9	16.8	
Vert	4924.000	AV	29.5	31.5	4.8	31.5	34.3	53.9	19.6	
Vert	7386.000	AV	30.4	35.8	5.5	32.6	39.1	53.9	14.8	
Vert	9848.000	AV	32.9	38.5	7.0	33.0	45.4	53.9	8.5	
Vert	24620.000	AV	35.4	38.6	-1.7	32.2	40.1	53.9	13.8	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/31/2012 04/01/2012
Temperature/ Humidity 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Tomotaka Sasagawa
(1-26.5GHz) (30-1000MHz)
Mode 11b Tx 2412MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.410	QP	24.1	16.3	7.2	32.0	15.6	40.0	24.4	
Hori	69.837	QP	42.5	6.4	7.7	32.1	24.5	40.0	15.5	
Hori	200.788	QP	31.8	16.6	8.8	31.9	25.3	43.5	18.2	
Hori	404.242	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.421	QP	39.7	20.2	11.3	32.0	39.2	46.0	6.8	
Hori	809.124	QP	28.9	23.7	12.5	31.7	33.4	46.0	12.6	
Hori	2390.000	PK	52.1	28.1	2.2	32.3	50.1	73.9	23.9	
Hori	2398.147	PK	60.3	28.1	2.2	32.3	58.3	-	-	See 20dBc Data Sheet
Hori	2400.000	PK	59.3	28.1	2.2	32.3	57.3	73.9	16.6	
Hori	4824.000	PK	43.0	31.2	4.8	31.5	47.5	73.9	26.4	
Hori	7236.000	PK	41.9	35.6	5.5	32.5	50.5	73.9	23.4	
Hori	9648.000	PK	42.6	38.3	6.6	32.9	54.6	73.9	19.3	
Hori	24120.000	PK	47.6	38.7	-1.8	32.1	52.4	73.9	21.5	
Hori	2390.000	AV	40.0	28.1	2.2	32.3	38.0	53.9	15.9	
Hori	2398.147	AV	50.6	28.1	2.2	32.3	48.6	-	-	See 20dBc Data Sheet
Hori	2400.000	AV	47.9	28.1	2.2	32.3	45.9	53.9	8.0	
Hori	4824.000	AV	31.6	31.2	4.8	31.5	36.1	53.9	17.8	
Hori	7236.000	AV	30.2	35.6	5.5	32.5	38.8	53.9	15.1	
Hori	9648.000	AV	31.6	38.3	6.6	32.9	43.6	53.9	10.4	
Hori	24120.000	AV	35.3	38.7	-1.8	32.1	40.1	53.9	13.8	
Vert	35.830	QP	32.4	16.2	7.2	32.0	23.7	40.0	16.3	
Vert	69.893	QP	44.5	6.4	7.7	32.1	26.2	40.0	13.8	
Vert	200.523	QP	36.5	16.6	8.8	31.9	30.0	43.5	13.5	
Vert	404.243	QP	42.3	17.7	10.3	32.0	38.3	46.0	7.7	
Vert	576.932	QP	34.9	20.2	11.3	32.0	34.4	46.0	11.6	
Vert	811.222	QP	32.1	23.7	12.5	31.6	36.7	46.0	9.3	
Vert	2390.000	PK	56.2	28.1	2.2	32.3	54.2	73.9	19.8	
Vert	2397.927	PK	63.5	28.1	2.2	32.3	61.5	-	-	See 20dBc Data Sheet
Vert	2400.000	PK	59.8	28.1	2.2	32.3	57.8	73.9	16.1	
Vert	4824.000	PK	43.2	31.2	4.8	31.5	47.7	73.9	26.2	
Vert	7236.000	PK	42.5	35.6	5.5	32.5	51.1	73.9	22.8	
Vert	9648.000	PK	43.2	38.3	6.6	32.9	55.2	73.9	18.7	
Vert	24120.000	PK	47.7	38.7	-1.8	32.1	52.5	73.9	21.4	
Vert	2390.000	AV	42.0	28.1	2.2	32.3	40.0	53.9	13.9	
Vert	2397.927	AV	52.2	28.1	2.2	32.3	50.2	-	-	See 20dBc Data Sheet
Vert	2400.000	AV	48.6	28.1	2.2	32.3	46.6	53.9	7.3	
Vert	4824.000	AV	33.1	31.2	4.8	31.5	37.6	53.9	16.3	
Vert	7236.000	AV	30.3	35.6	5.5	32.5	38.9	53.9	15.0	
Vert	9648.000	AV	32.8	38.3	6.6	32.9	44.8	53.9	9.1	
Vert	24120.000	AV	35.4	38.7	-1.8	32.1	40.2	53.9	13.7	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/31/2012 04/01/2012
Temperature/ Humidity 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Tomotaka Sasagawa
(1-26.5GHz) (30-1000MHz)
Mode 11b Tx 2462MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	34.775	QP	23.9	16.6	7.1	32.0	15.6	40.0	24.4	
Hori	69.774	QP	42.6	6.4	7.7	32.1	24.6	40.0	15.4	
Hori	200.432	QP	32.2	16.6	8.8	31.9	25.7	43.5	17.8	
Hori	404.213	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.231	QP	38.9	20.2	11.3	32.0	38.4	46.0	7.6	
Hori	810.123	QP	27.9	23.7	12.5	31.6	32.5	46.0	13.5	
Hori	2483.500	PK	52.0	28.5	2.2	32.2	50.5	73.9	23.4	
Hori	4924.000	PK	44.4	31.5	4.8	31.5	49.2	73.9	24.7	
Hori	7386.000	PK	42.0	35.8	5.5	32.6	50.7	73.9	23.2	
Hori	9848.000	PK	44.4	38.5	7.0	33.0	56.9	73.9	17.0	
Hori	24620.000	PK	47.6	38.6	-1.7	32.2	52.3	73.9	21.6	
Hori	2483.500	AV	40.6	28.5	2.2	32.2	39.1	53.9	14.8	
Hori	4924.000	AV	35.1	31.5	4.8	31.5	39.9	53.9	14.1	
Hori	7386.000	AV	30.3	35.8	5.5	32.6	39.0	53.9	14.9	
Hori	9848.000	AV	33.6	38.5	7.0	33.0	46.1	53.9	7.9	
Hori	24620.000	AV	35.5	38.6	-1.7	32.2	40.2	53.9	13.7	
Vert	34.231	QP	34.9	16.8	7.1	32.0	26.7	40.0	13.3	
Vert	69.874	QP	44.8	6.4	7.7	32.1	26.5	40.0	13.5	
Vert	200.543	QP	38.2	16.6	8.8	31.9	31.7	43.5	11.8	
Vert	404.512	QP	42.3	17.7	10.3	32.0	38.3	46.0	7.7	
Vert	576.988	QP	34.5	20.2	11.3	32.0	34.0	46.0	12.0	
Vert	810.432	QP	30.8	23.7	12.5	31.6	35.4	46.0	10.6	
Vert	2483.500	PK	53.5	28.5	2.2	32.2	52.0	73.9	21.9	
Vert	4924.000	PK	44.4	31.5	4.8	31.5	49.2	73.9	24.8	
Vert	7386.000	PK	42.1	35.8	5.5	32.6	50.8	73.9	23.2	
Vert	9848.000	PK	43.8	38.5	7.0	33.0	56.3	73.9	17.6	
Vert	24620.000	PK	47.5	38.6	-1.7	32.2	52.2	73.9	21.7	
Vert	2483.500	AV	40.1	28.5	2.2	32.2	38.6	53.9	15.3	
Vert	4924.000	AV	33.4	31.5	4.8	31.5	38.2	53.9	15.7	
Vert	7386.000	AV	30.4	35.8	5.5	32.6	39.1	53.9	14.8	
Vert	9848.000	AV	33.8	38.5	7.0	33.0	46.3	53.9	7.6	
Vert	24620.000	AV	35.4	38.6	-1.7	32.2	40.1	53.9	13.8	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/31/2012 04/01/2012
Temperature/ Humidity 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Tomotaka Sasagawa
(1-26.5GHz) (30-1000MHz)
Mode 11g Tx 2412MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.730	QP	24.1	16.2	7.2	32.0	15.5	40.0	24.5	
Hori	70.743	QP	42.5	6.4	7.7	32.1	24.5	40.0	15.5	
Hori	200.541	QP	32.4	16.6	8.8	31.9	25.9	43.5	17.6	
Hori	404.231	QP	33.9	17.7	10.3	32.0	29.9	46.0	16.1	
Hori	576.321	QP	40.2	20.2	11.3	32.0	39.7	46.0	6.3	
Hori	809.421	QP	28.1	23.7	12.5	31.7	32.6	46.0	13.4	
Hori	2390.000	PK	59.5	28.1	2.2	32.3	57.5	73.9	16.5	
Hori	2400.000	PK	78.8	28.1	2.2	32.3	76.8	-	-	See 20dBc Data Sheet
Hori	4824.000	PK	41.6	31.2	4.8	31.5	46.1	73.9	27.8	
Hori	7236.000	PK	42.4	35.6	5.5	32.5	51.0	73.9	22.9	
Hori	9648.000	PK	42.3	38.3	6.6	32.9	54.3	73.9	19.6	
Hori	24120.000	PK	47.4	38.7	-1.8	32.1	52.2	73.9	21.7	
Hori	2390.000	AV	45.7	28.1	2.2	32.3	43.7	53.9	10.2	
Hori	2400.000	AV	61.4	28.1	2.2	32.3	59.4	-	-	See 20dBc Data Sheet
Hori	4824.000	AV	30.1	31.2	4.8	31.5	34.6	53.9	19.3	
Hori	7236.000	AV	30.0	35.6	5.5	32.5	38.6	53.9	15.3	
Hori	9648.000	AV	31.3	38.3	6.6	32.9	43.3	53.9	10.7	
Hori	24120.000	AV	35.3	38.7	-1.8	32.1	40.1	53.9	13.8	
Vert	35.421	QP	32.4	16.3	7.2	32.0	23.8	40.0	16.2	
Vert	70.320	QP	44.3	6.4	7.7	32.1	26.1	40.0	13.9	
Vert	200.641	QP	35.6	16.6	8.8	31.9	29.1	43.5	14.4	
Vert	404.123	QP	41.9	17.7	10.3	32.0	37.9	46.0	8.1	
Vert	576.300	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	809.998	QP	30.9	23.7	12.5	31.6	35.5	46.0	10.5	
Vert	2390.000	PK	63.2	28.1	2.2	32.3	61.2	73.9	12.7	
Vert	2400.000	PK	81.0	28.1	2.2	32.3	79.0	-	-	See 20dBc Data Sheet
Vert	4824.000	PK	43.5	31.2	4.8	31.5	48.0	73.9	25.9	
Vert	7236.000	PK	41.0	35.6	5.5	32.5	49.6	73.9	24.3	
Vert	9648.000	PK	43.5	38.3	6.6	32.9	55.5	73.9	18.4	
Vert	24120.000	PK	47.5	38.7	-1.8	32.1	52.3	73.9	21.6	
Vert	2390.000	AV	48.6	28.1	2.2	32.3	46.6	53.9	7.3	
Vert	2400.000	AV	63.5	28.1	2.2	32.3	61.5	-	-	See 20dBc Data Sheet
Vert	4824.000	AV	31.4	31.2	4.8	31.5	35.9	53.9	18.0	
Vert	7236.000	AV	30.1	35.6	5.5	32.5	38.7	53.9	15.2	
Vert	9648.000	AV	33.1	38.3	6.6	32.9	45.1	53.9	8.8	
Vert	24120.000	AV	35.3	38.7	-1.8	32.1	40.1	53.9	13.8	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply : SONY)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/31/2012 04/01/2012
Temperature/ Humidity 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Tomotaka Sasagawa
(1-26.5GHz) (30-1000MHz)
Mode 11g Tx 2437MHz Antenna 1

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	35.632	QP	25.4	16.3	7.2	32.0	16.9	40.0	23.1	
Hori	69.731	QP	43.2	6.4	7.7	32.1	25.2	40.0	14.8	
Hori	200.413	QP	31.9	16.6	8.8	31.9	25.4	43.5	18.1	
Hori	404.213	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.231	QP	39.8	20.2	11.3	32.0	39.3	46.0	6.7	
Hori	809.432	QP	28.1	23.7	12.5	31.7	32.6	46.0	13.4	
Hori	4874.000	PK	41.7	31.4	4.8	31.5	46.4	73.9	27.5	
Hori	7311.000	PK	42.9	35.7	5.5	32.5	51.6	73.9	22.3	
Hori	9748.000	PK	42.3	38.4	6.8	32.9	54.6	73.9	19.3	
Hori	24370.000	PK	47.5	38.6	-1.8	32.1	52.2	73.9	21.7	
Hori	4874.000	AV	29.6	31.4	4.8	31.5	34.3	53.9	19.6	
Hori	7311.000	AV	30.1	35.7	5.5	32.5	38.8	53.9	15.1	
Hori	9748.000	AV	31.1	38.4	6.8	32.9	43.4	53.9	10.5	
Hori	24370.000	AV	34.7	38.6	-1.8	32.1	39.4	53.9	14.5	
Vert	35.310	QP	32.4	16.4	7.2	32.0	23.9	40.0	16.1	
Vert	69.982	QP	43.9	6.4	7.7	32.1	25.6	40.0	14.4	
Vert	200.541	QP	36.7	16.6	8.8	31.9	30.2	43.5	13.3	
Vert	404.215	QP	42.0	17.7	10.3	32.0	38.0	46.0	8.0	
Vert	576.841	QP	36.2	20.2	11.3	32.0	35.7	46.0	10.3	
Vert	810.321	QP	31.4	23.7	12.5	31.6	36.0	46.0	10.0	
Vert	4874.000	PK	42.1	31.4	4.8	31.5	46.8	73.9	27.1	
Vert	7311.000	PK	43.8	35.7	5.5	32.5	52.5	73.9	21.4	
Vert	9748.000	PK	42.8	38.4	6.8	32.9	55.1	73.9	18.8	
Vert	24370.000	PK	47.3	38.6	-1.8	32.1	52.0	73.9	21.9	
Vert	4874.000	AV	30.6	31.4	4.8	31.5	35.3	53.9	18.6	
Vert	7311.000	AV	30.7	35.7	5.5	32.5	39.4	53.9	14.5	
Vert	9748.000	AV	31.9	38.4	6.8	32.9	44.2	53.9	9.7	
Vert	24370.000	AV	34.7	38.6	-1.8	32.1	39.4	53.9	14.5	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
(Power Supply : DELTA)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/31/2012 04/01/2012
Temperature/ Humidity 22 deg. C / 39% RH 24 deg. C / 41% RH
Engineer Takumi Shimada Tomotaka Sasagawa
(1-26.5GHz) (30-1000MHz)
Mode 11g Tx 2412MHz Antenna 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	34.321	QP	23.9	16.8	7.1	32.0	15.8	40.0	24.2	
Hori	69.321	QP	42.5	6.5	7.7	32.1	24.6	40.0	15.4	
Hori	200.542	QP	32.1	16.6	8.8	31.9	25.6	43.5	17.9	
Hori	404.214	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.231	QP	39.8	20.2	11.3	32.0	39.3	46.0	6.7	
Hori	809.231	QP	28.0	23.7	12.5	31.7	32.5	46.0	13.5	
Hori	2390.000	PK	58.7	28.1	2.2	32.3	56.7	73.9	17.2	
Hori	2400.000	PK	79.6	28.1	2.2	32.3	77.6	-	-	- See 20dBc Data Sheet
Hori	4824.000	PK	40.8	31.2	4.8	31.5	45.3	73.9	28.6	
Hori	7236.000	PK	42.7	35.6	5.5	32.5	51.3	73.9	22.6	
Hori	9648.000	PK	44.1	38.3	6.6	32.9	56.1	73.9	17.8	
Hori	24120.000	PK	47.5	38.7	-1.8	32.1	52.3	73.9	21.6	
Hori	2390.000	AV	45.8	28.1	2.2	32.3	43.8	53.9	10.1	
Hori	2400.000	AV	62.5	28.1	2.2	32.3	60.5	-	-	- See 20dBc Data Sheet
Hori	4824.000	AV	28.9	31.2	4.8	31.5	33.4	53.9	20.5	
Hori	7236.000	AV	30.0	35.6	5.5	32.5	38.6	53.9	15.3	
Hori	9648.000	AV	33.8	38.3	6.6	32.9	45.8	53.9	8.1	
Hori	24120.000	AV	35.3	38.7	-1.8	32.1	40.1	53.9	13.8	
Vert	34.120	QP	34.9	16.9	7.1	32.0	26.8	40.0	13.2	
Vert	70.321	QP	45.8	6.4	7.7	32.1	27.6	40.0	12.4	
Vert	200.421	QP	36.7	16.6	8.8	31.9	30.2	43.5	13.4	
Vert	404.213	QP	42.1	17.7	10.3	32.0	38.1	46.0	7.9	
Vert	576.843	QP	34.5	20.2	11.3	32.0	34.0	46.0	12.0	
Vert	811.342	QP	30.5	23.7	12.5	31.6	35.1	46.0	10.9	
Vert	2390.000	PK	58.0	28.1	2.2	32.3	56.0	73.9	17.9	
Vert	2400.000	PK	76.4	28.1	2.2	32.3	74.4	-	-	- See 20dBc Data Sheet
Vert	4824.000	PK	40.4	31.2	4.8	31.5	44.9	73.9	29.0	
Vert	7236.000	PK	42.3	35.6	5.5	32.5	50.9	73.9	23.0	
Vert	9648.000	PK	43.3	38.3	6.6	32.9	55.3	73.9	18.6	
Vert	24120.000	PK	47.5	38.7	-1.8	32.1	52.3	73.9	21.6	
Vert	2390.000	AV	44.2	28.1	2.2	32.3	42.2	53.9	11.7	
Vert	2400.000	AV	59.7	28.1	2.2	32.3	57.7	-	-	- See 20dBc Data Sheet
Vert	4824.000	AV	29.0	31.2	4.8	31.5	33.5	53.9	20.4	
Vert	7236.000	AV	30.1	35.6	5.5	32.5	38.7	53.9	15.2	
Vert	9648.000	AV	32.7	38.3	6.6	32.9	44.7	53.9	9.2	
Vert	24120.000	AV	35.3	38.7	-1.8	32.1	40.1	53.9	13.8	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Radiated Spurious Emission
20dBc Data Sheet
(Power Supply : DELTA)

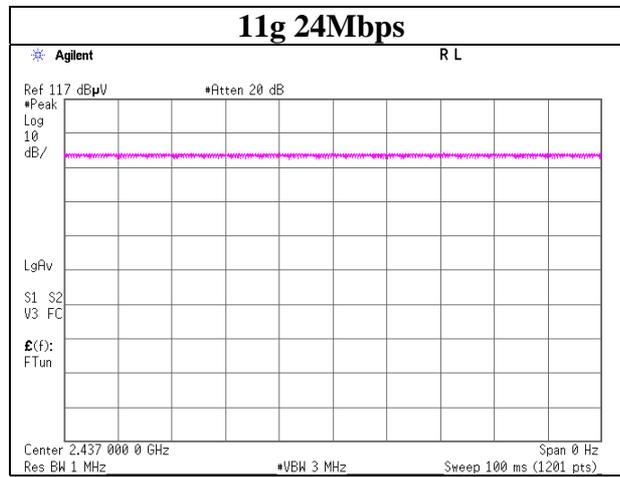
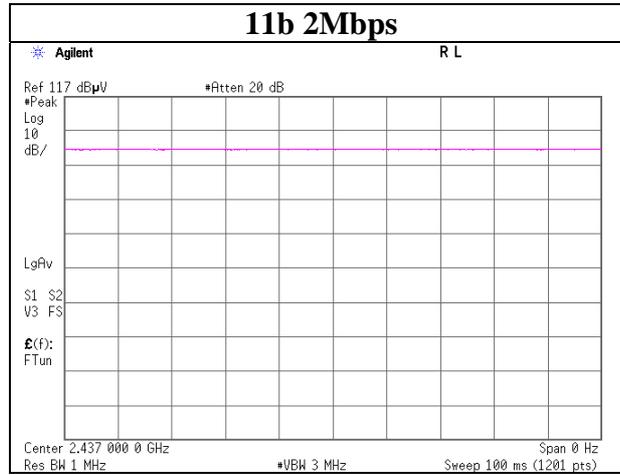
Test place : Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. : 32GE0144-HO-01
Date : 03/31/2012
Temperature/ Humidity : 22 deg. C / 39% RH
Engineer : Takumi Shimada
Mode : 11g Tx 2412MHz Antenna 0

20dBc Data Sheet

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant Factor [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	2412.000	PK	97.5	28.2	2.2	32.3	95.6	-	-	Carrier
Hori	2400.000	PK	65.3	28.1	2.2	32.3	63.3	75.6	12.3	
Vert	2412.000	PK	96.0	28.2	2.2	32.3	94.1	-	-	Carrier
Vert	2400.000	PK	62.6	28.1	2.2	32.3	60.6	74.1	13.5	

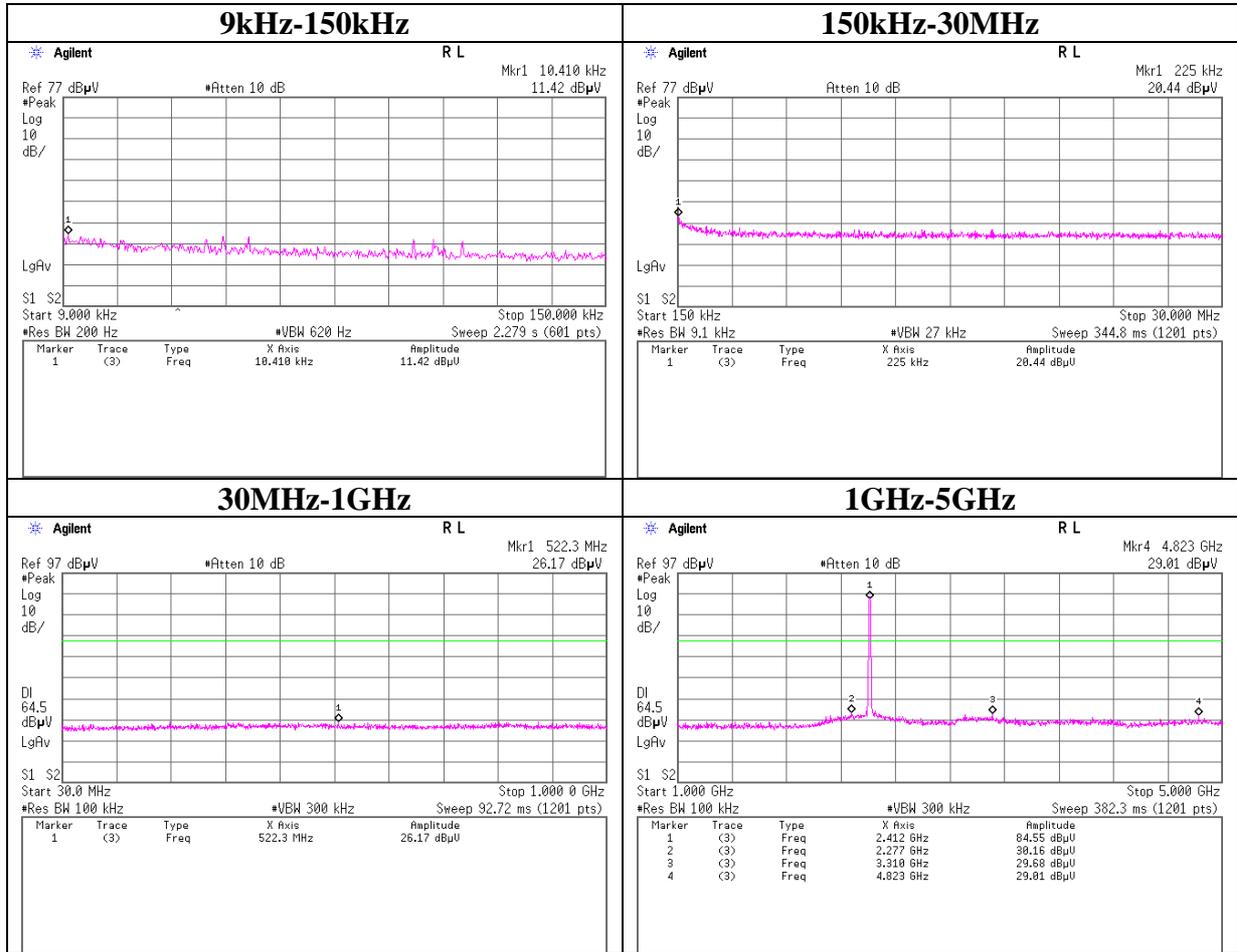
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

Burst rate confirmation



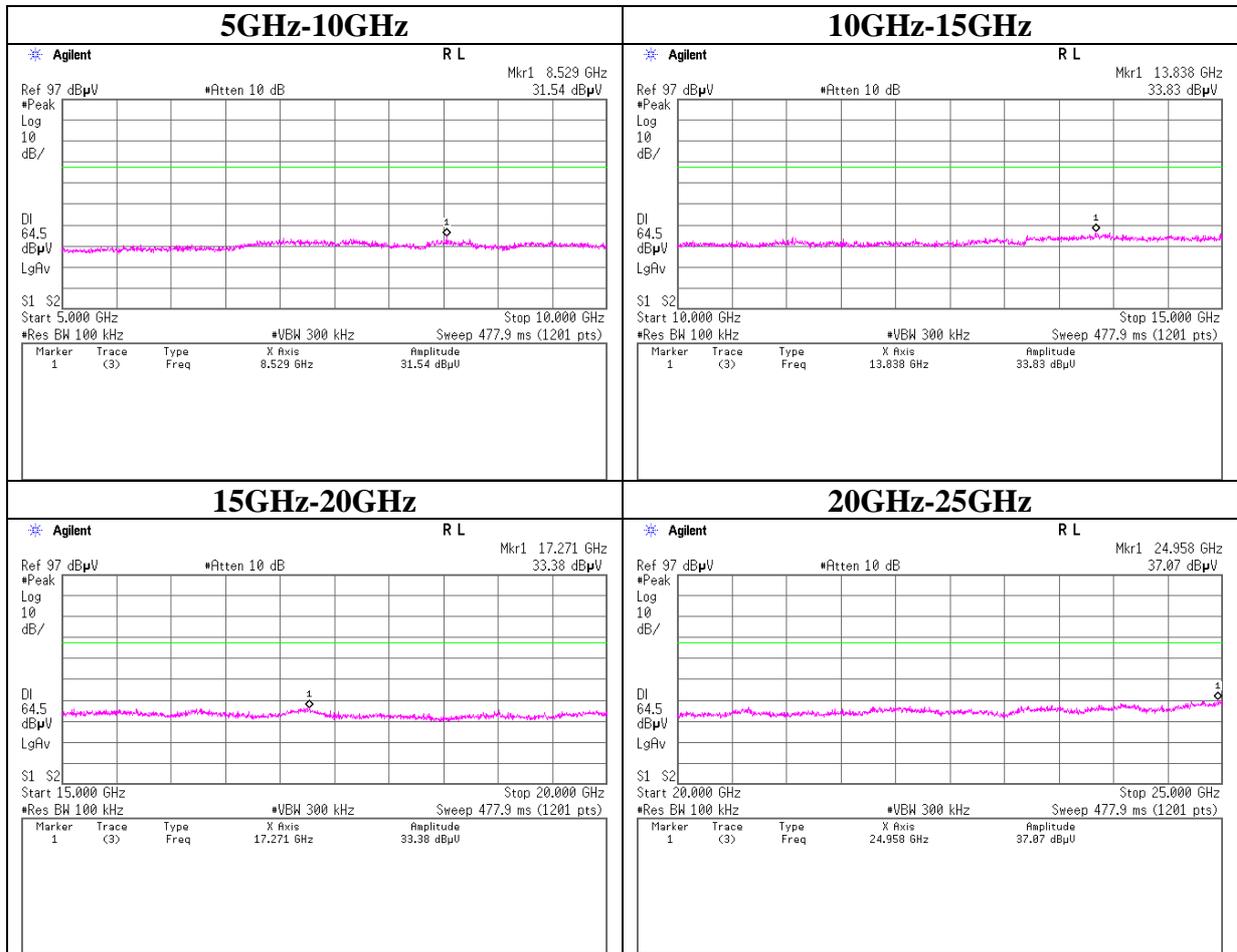
Conducted Spurious Emission

11b Antenna 0 Tx 2412MHz



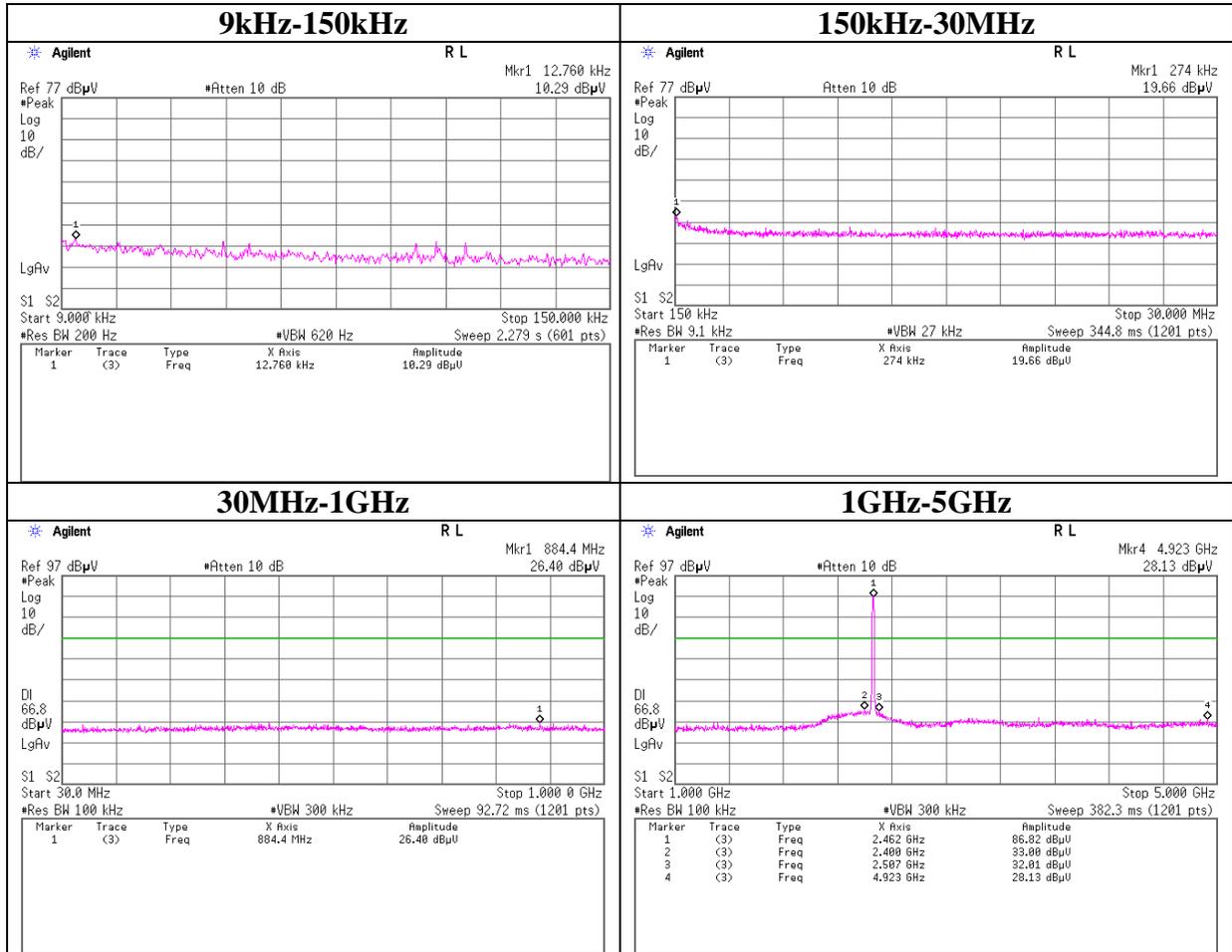
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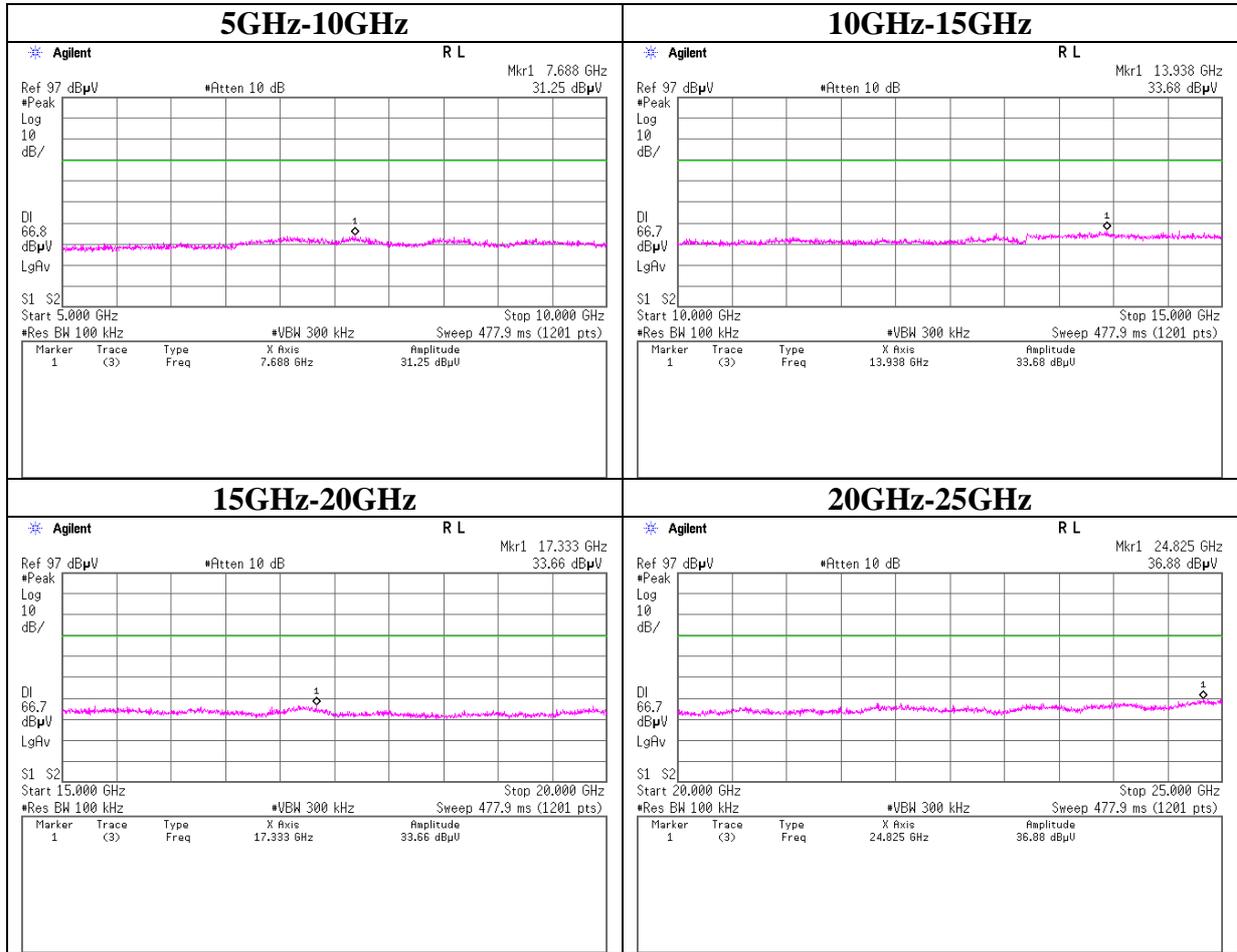
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11b Antenna 0 Tx 2437MHz



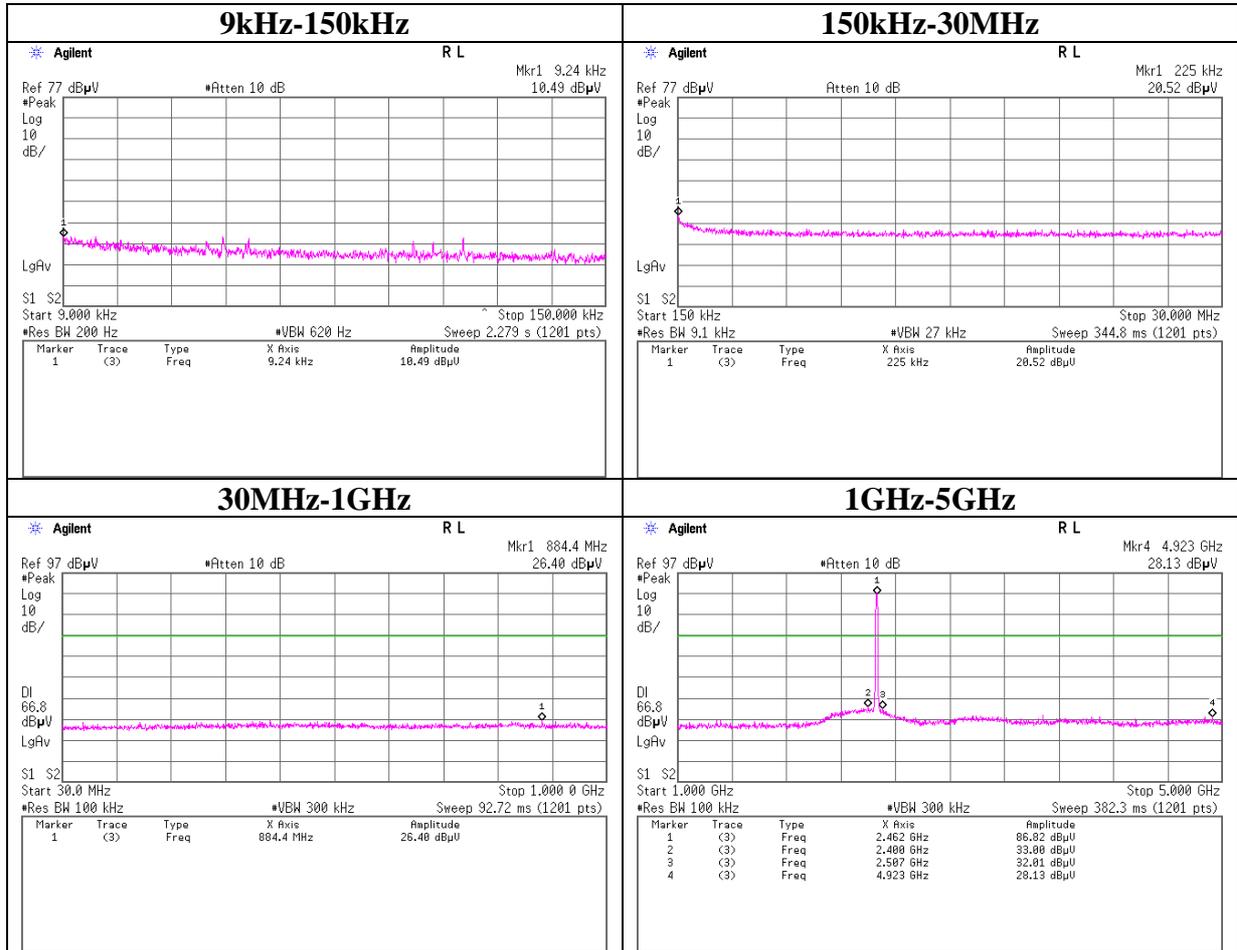
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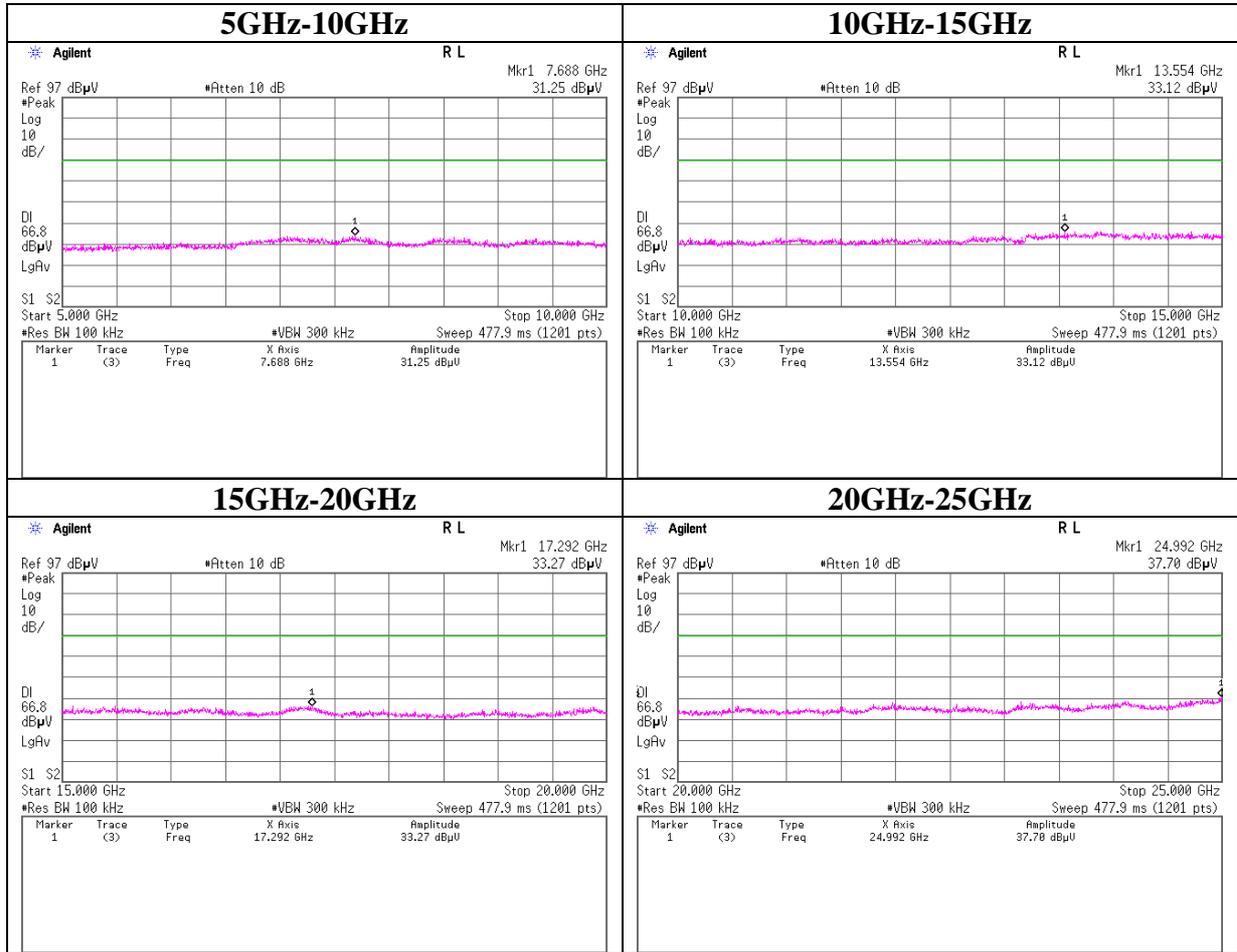
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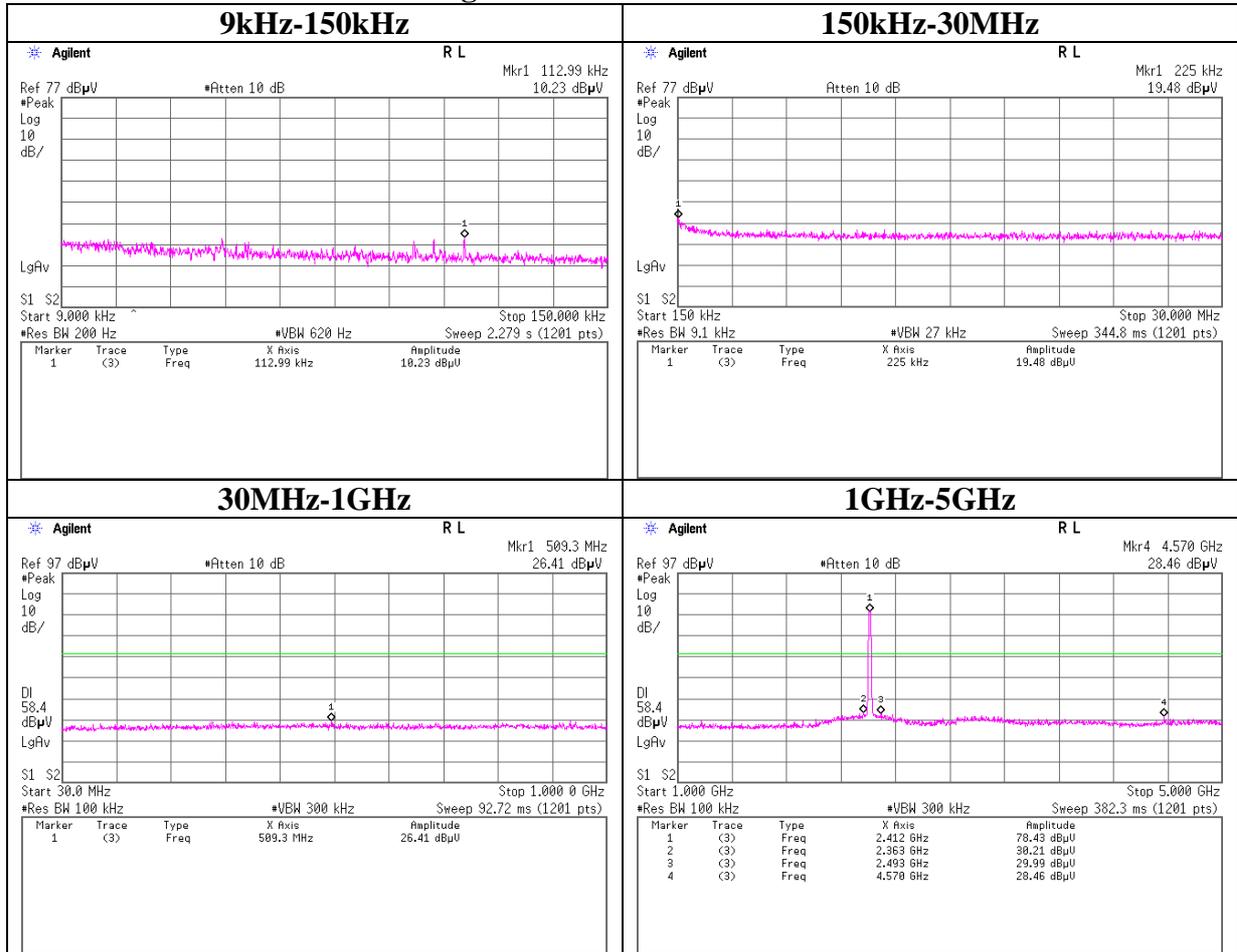
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11b Antenna 0 Tx 2462MHz



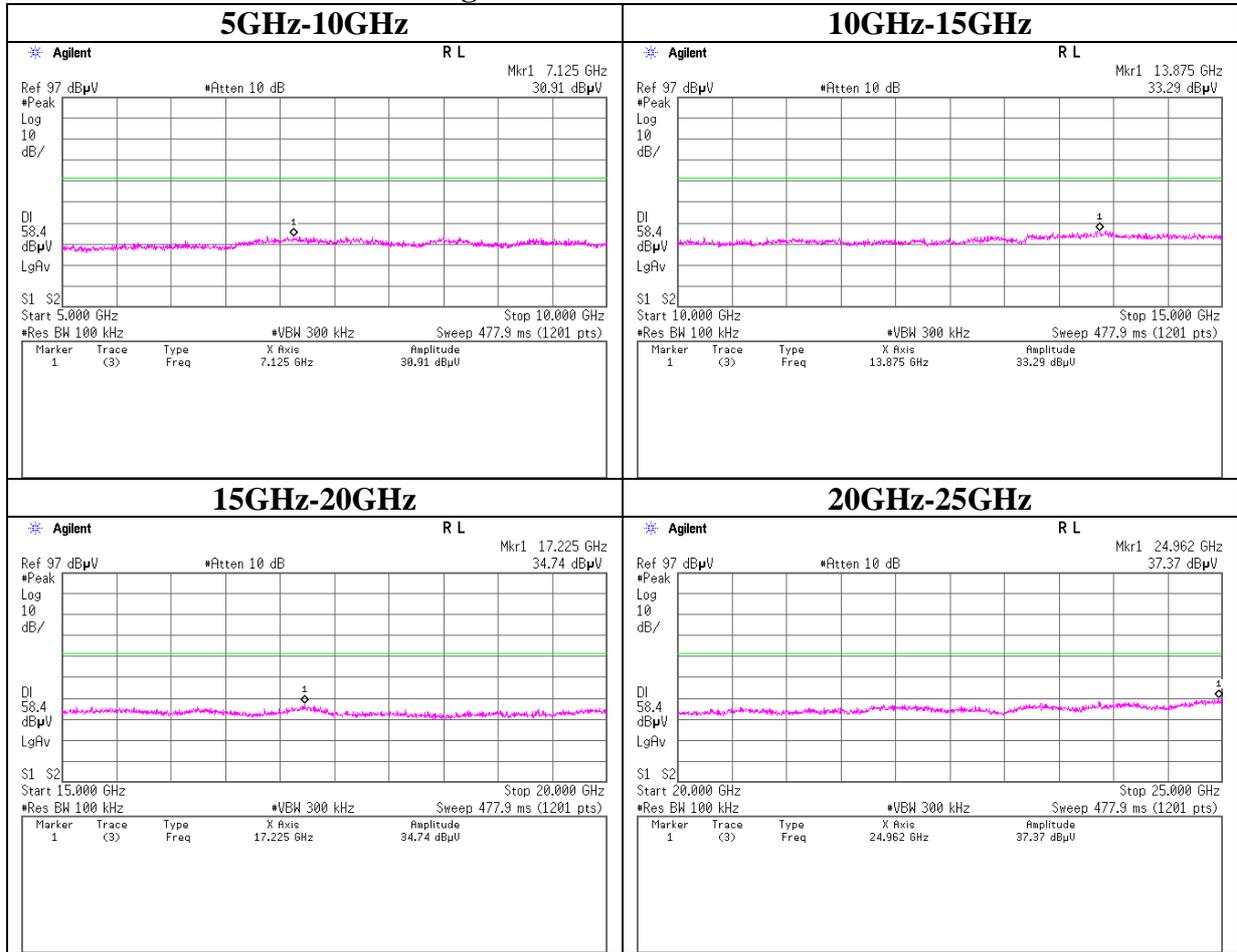
Conducted Spurious Emission

11g Antenna 0 Tx 2412MHz



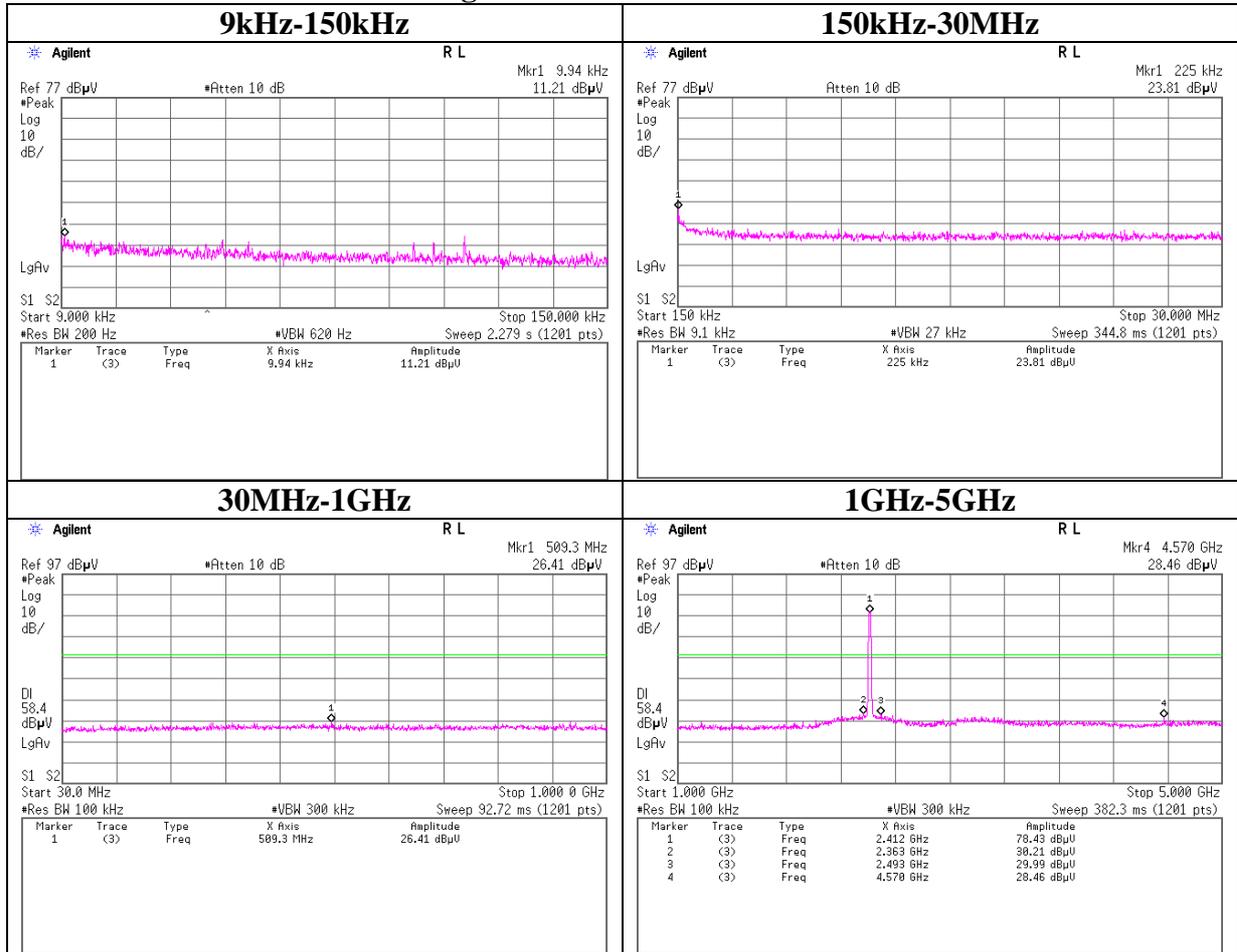
Conducted Spurious Emission

11g Antenna 0 Tx 2412MHz



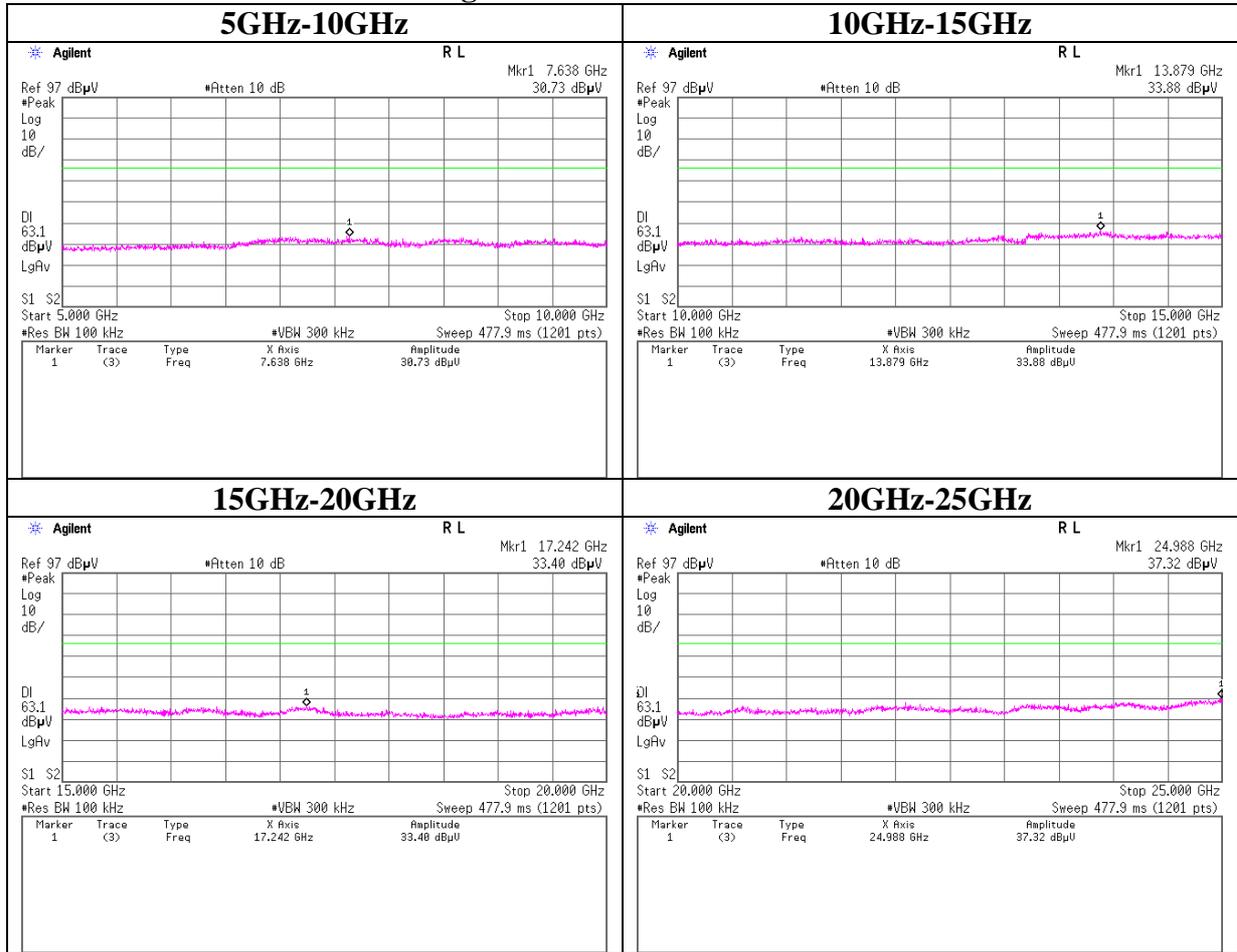
Conducted Spurious Emission

11g Antenna 0 Tx 2437MHz



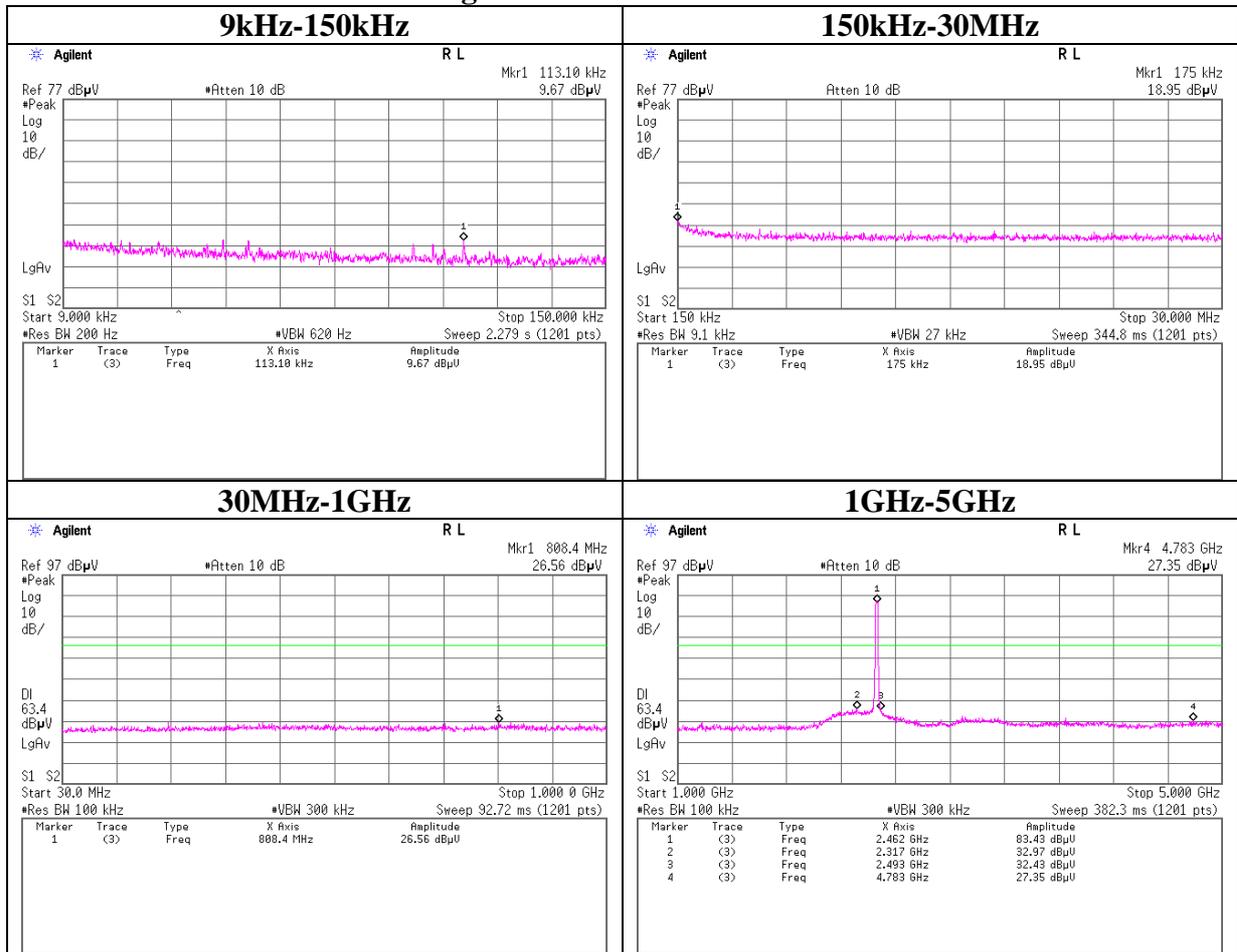
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11g Antenna 0 Tx 2437MHz



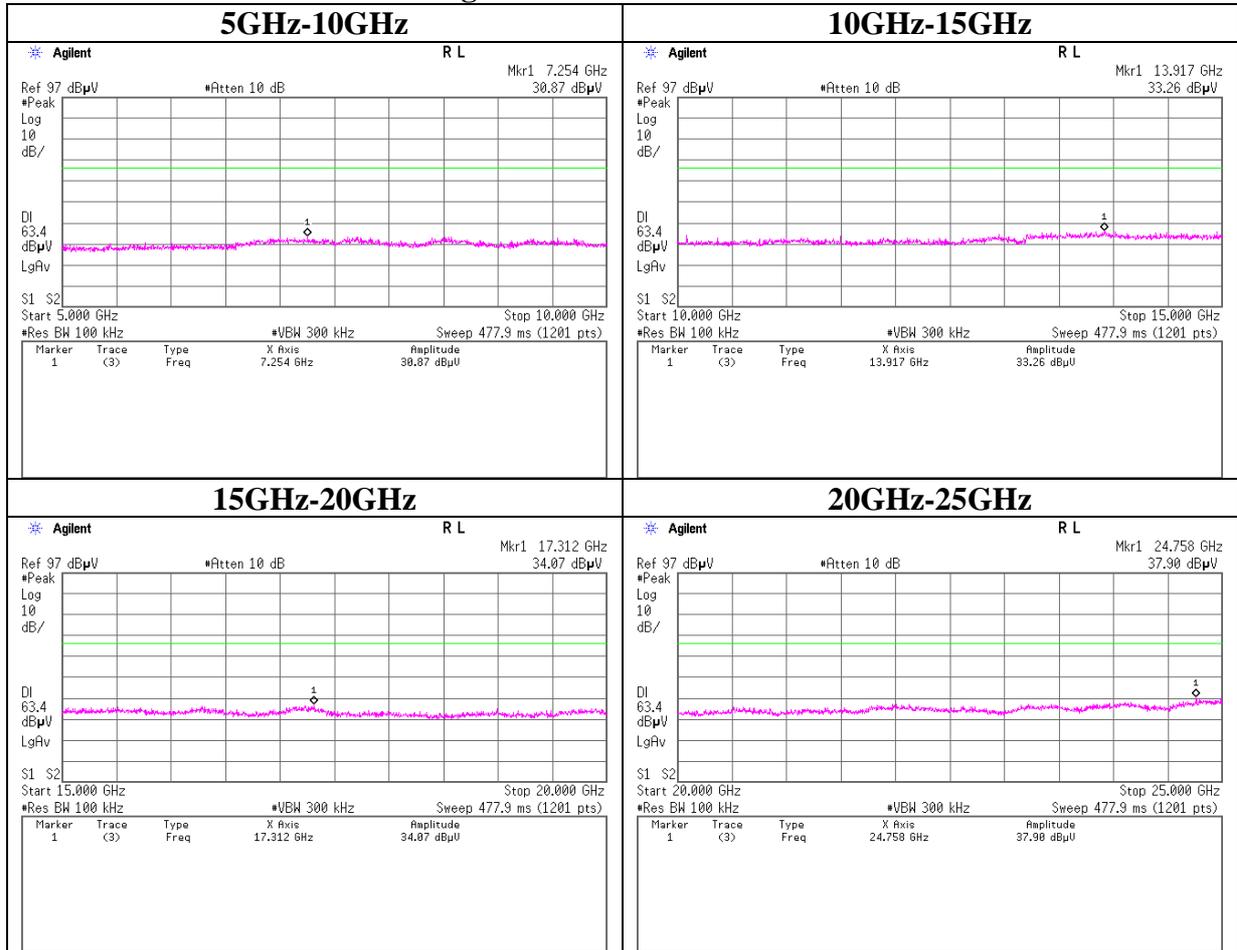
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11g Antenna 0 Tx 2462MHz



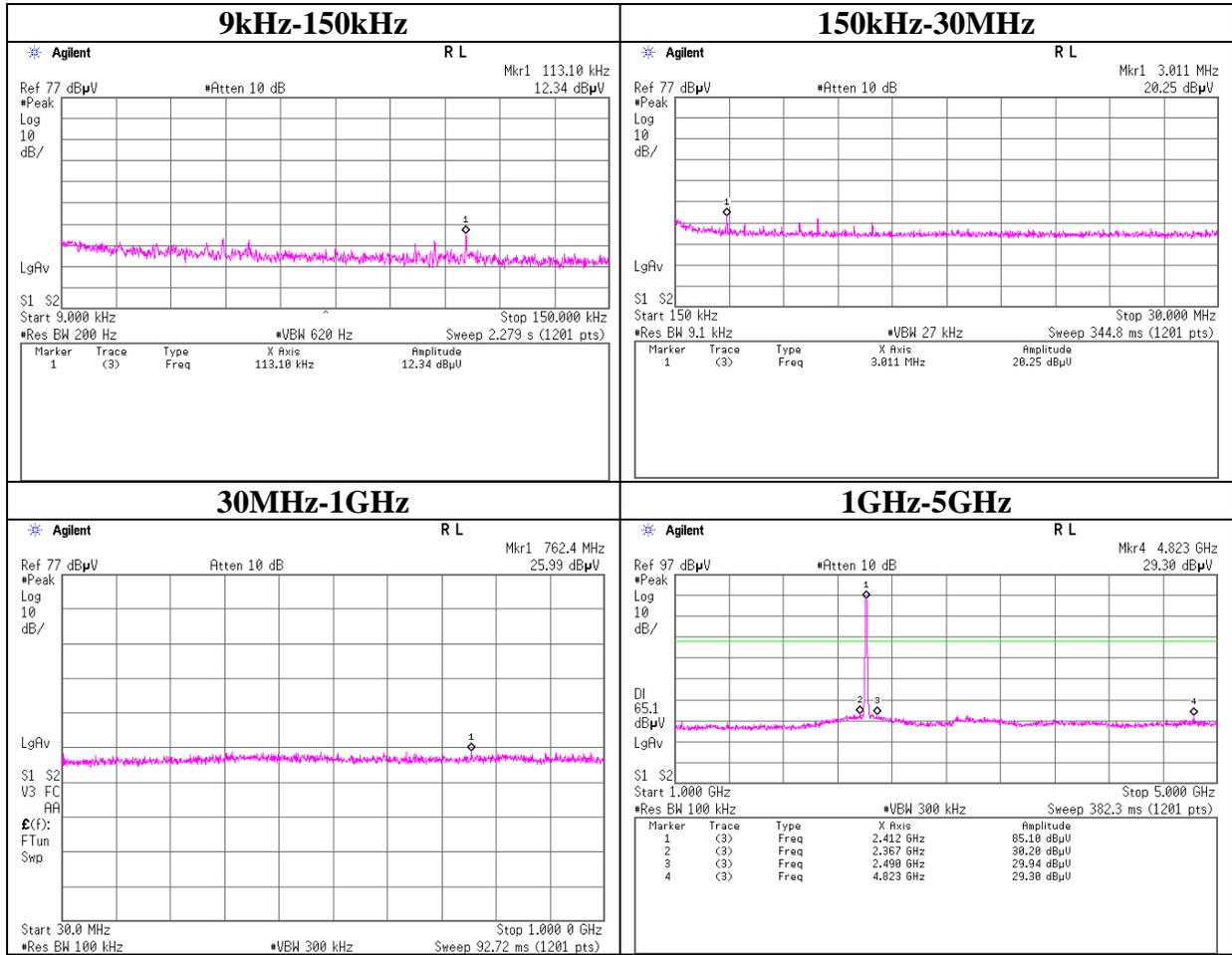
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11g Tx Antenna 0 2462MHz



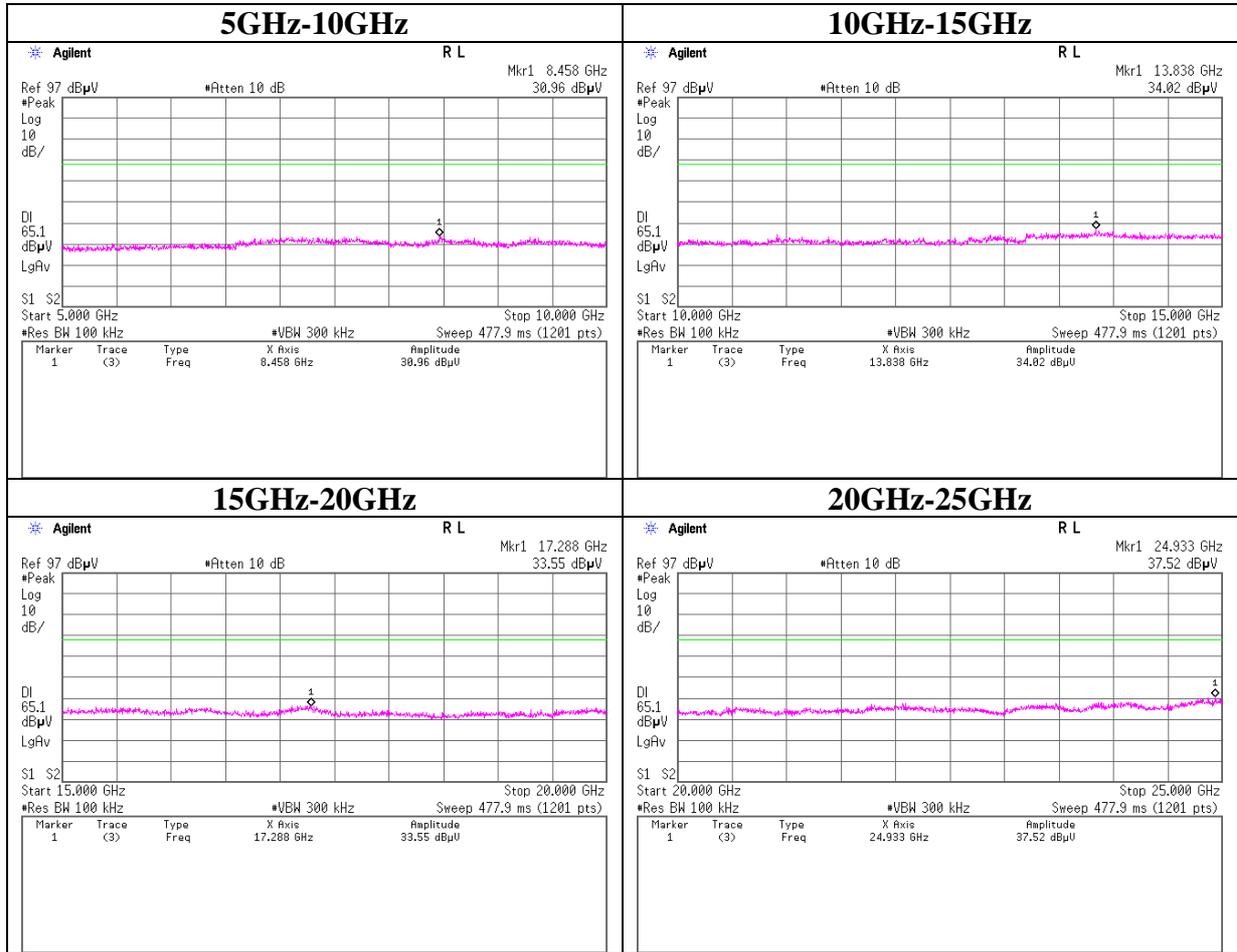
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11b Antenna 1 Tx 2412MHz



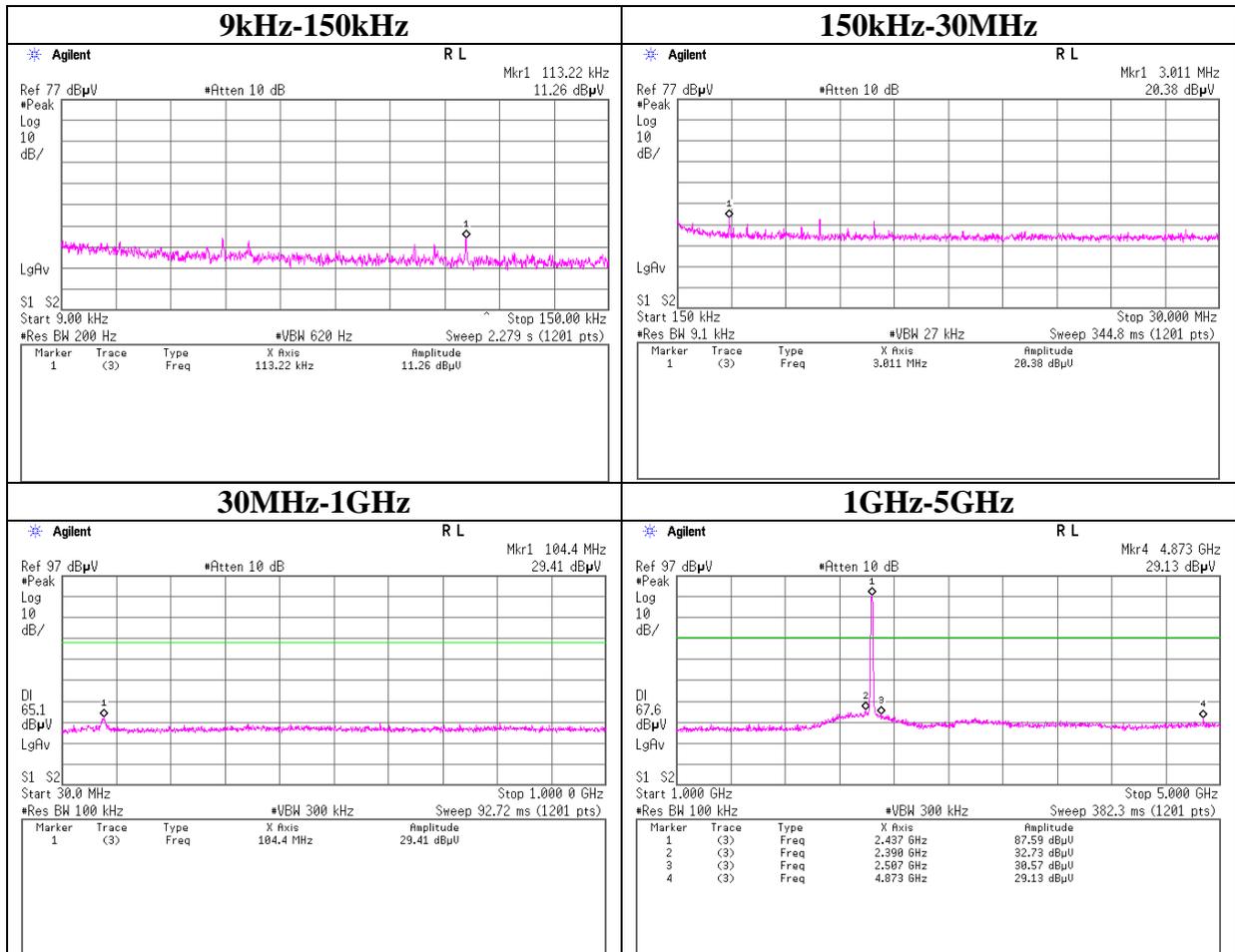
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11b Antenna 1 Tx 2412MHz



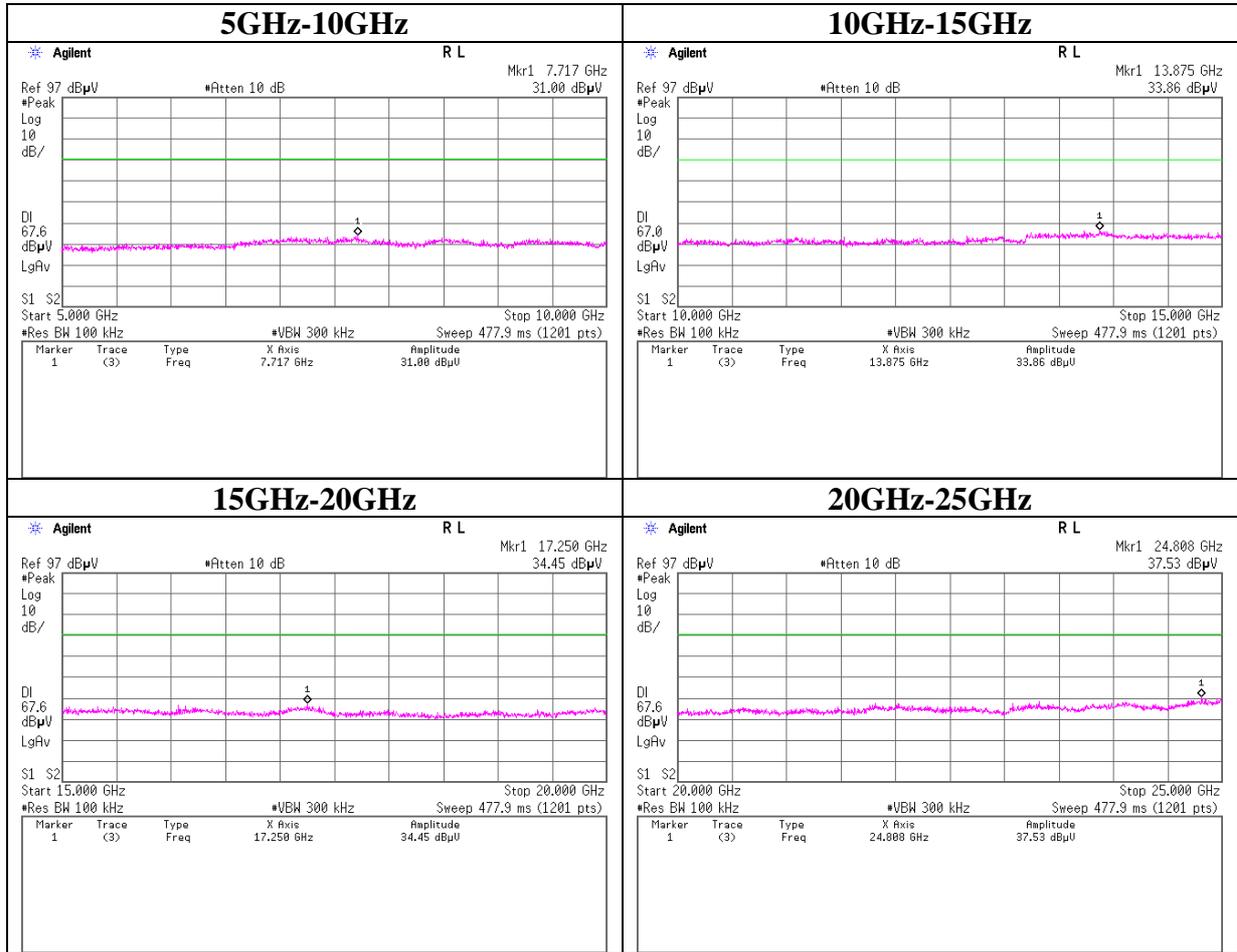
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11b Antenna 1 Tx 2437MHz



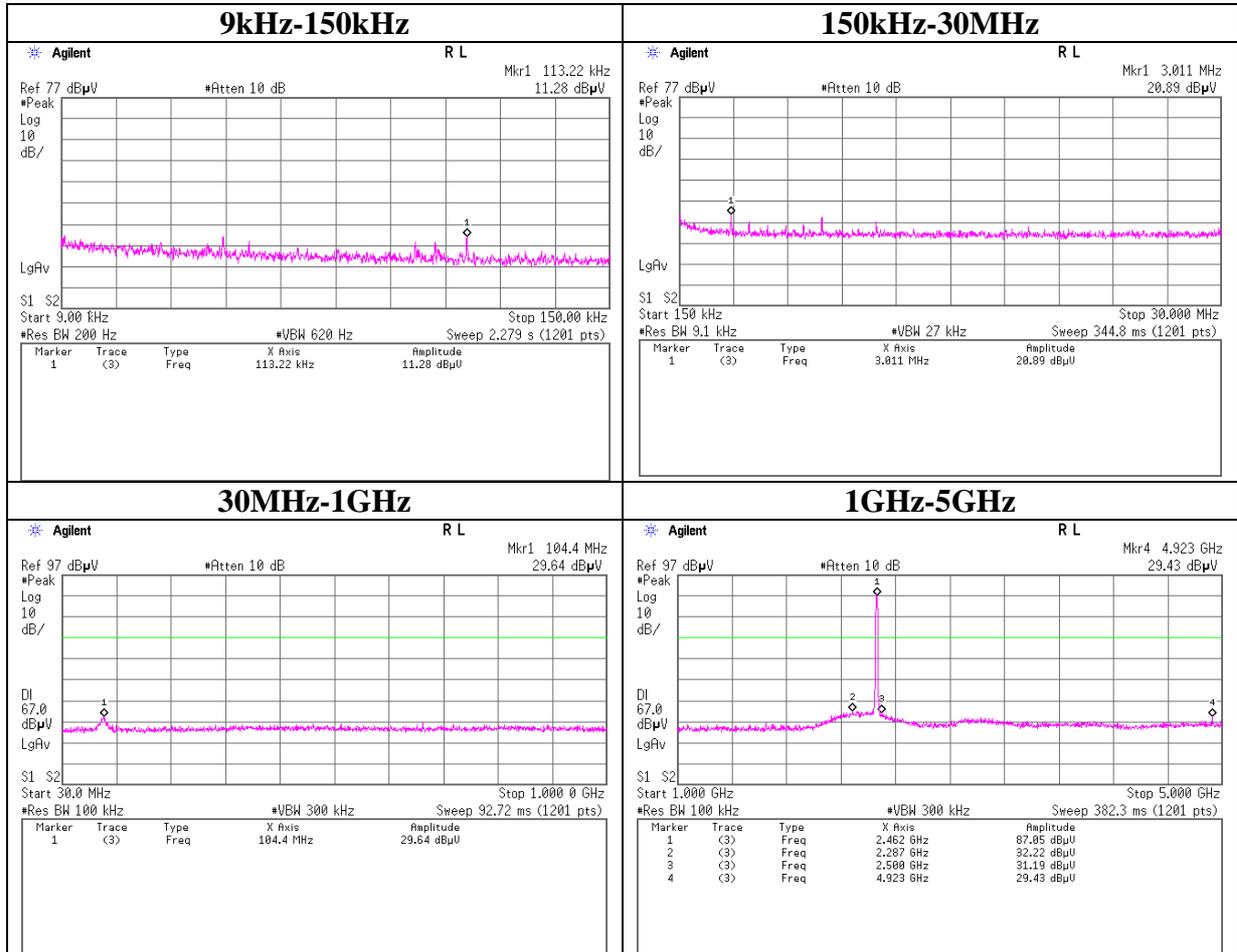
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11b Antenna 1 Tx 2437MHz



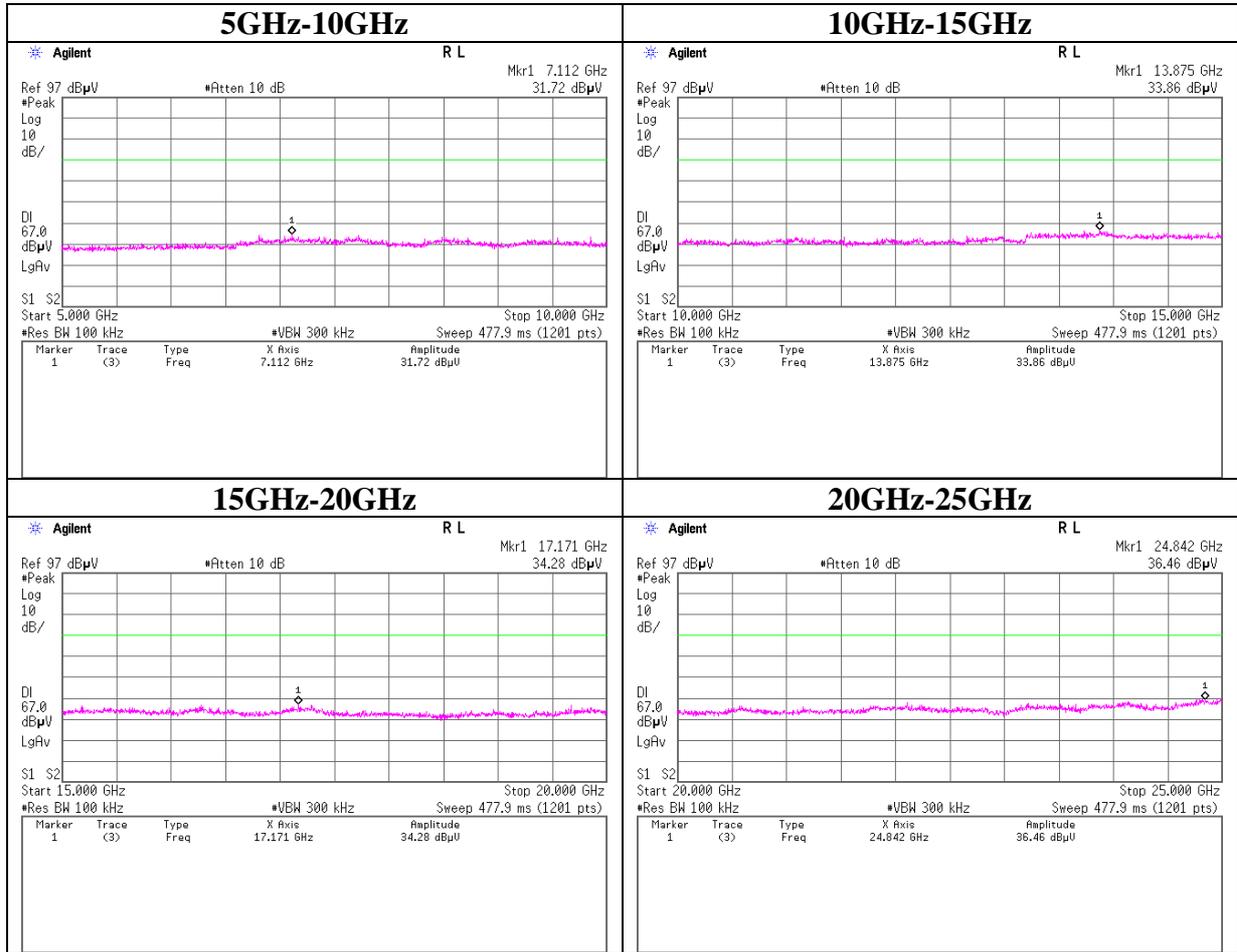
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11b Antenna 1 Tx 2462MHz



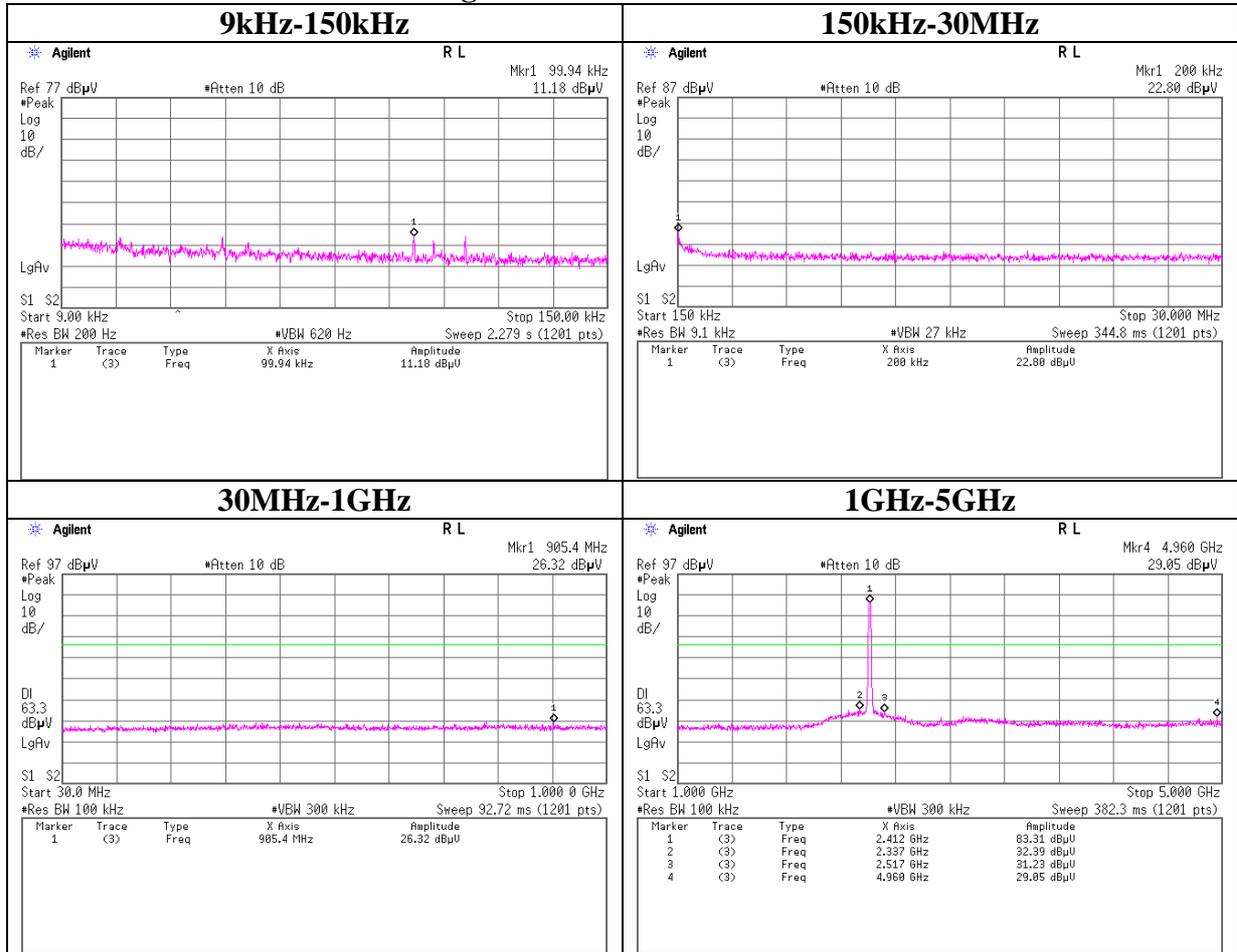
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11b Antenna 1 Tx 2462MHz



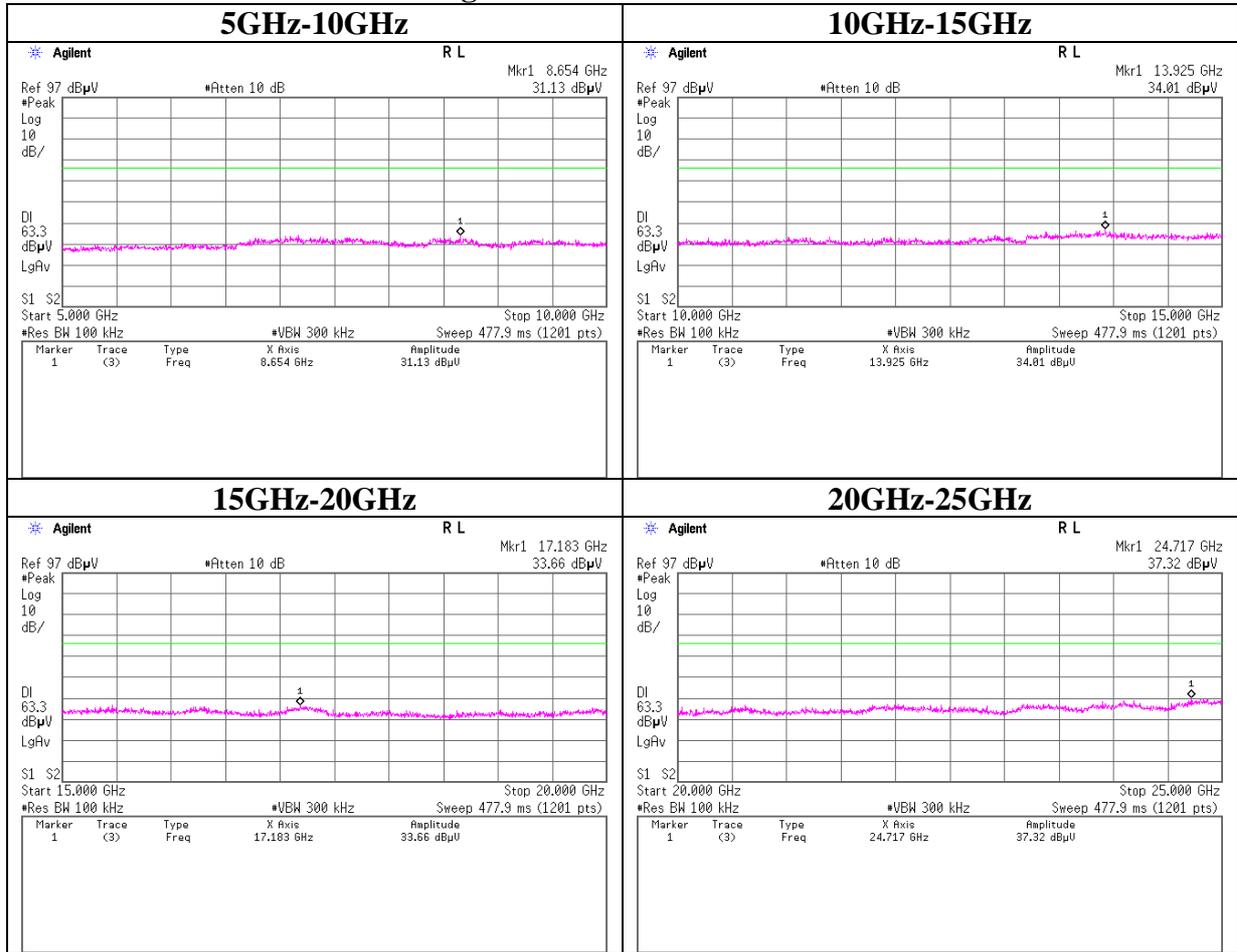
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11g Antenna 1 Tx 2412MHz



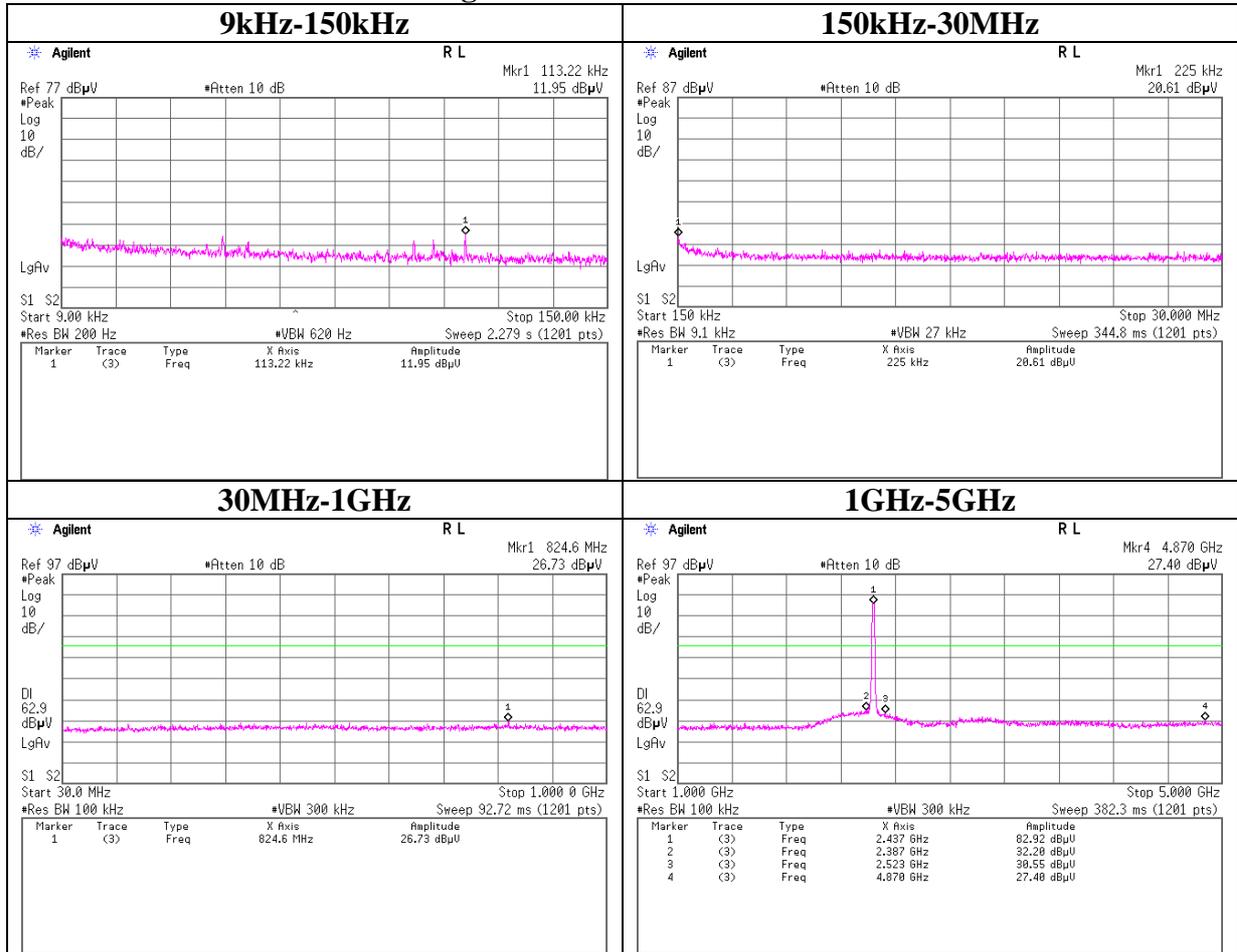
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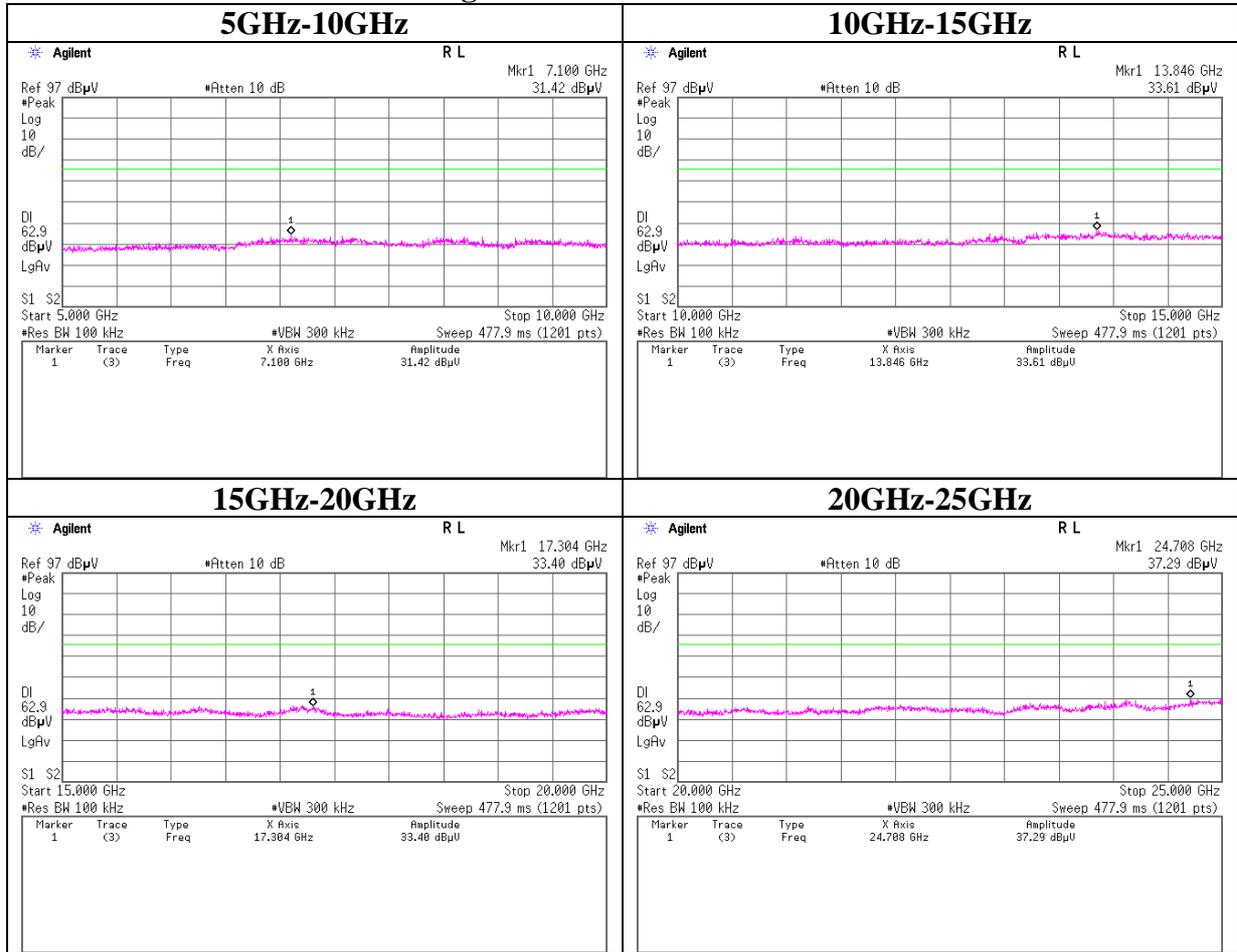
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11g Antenna 1 Tx 2437MHz



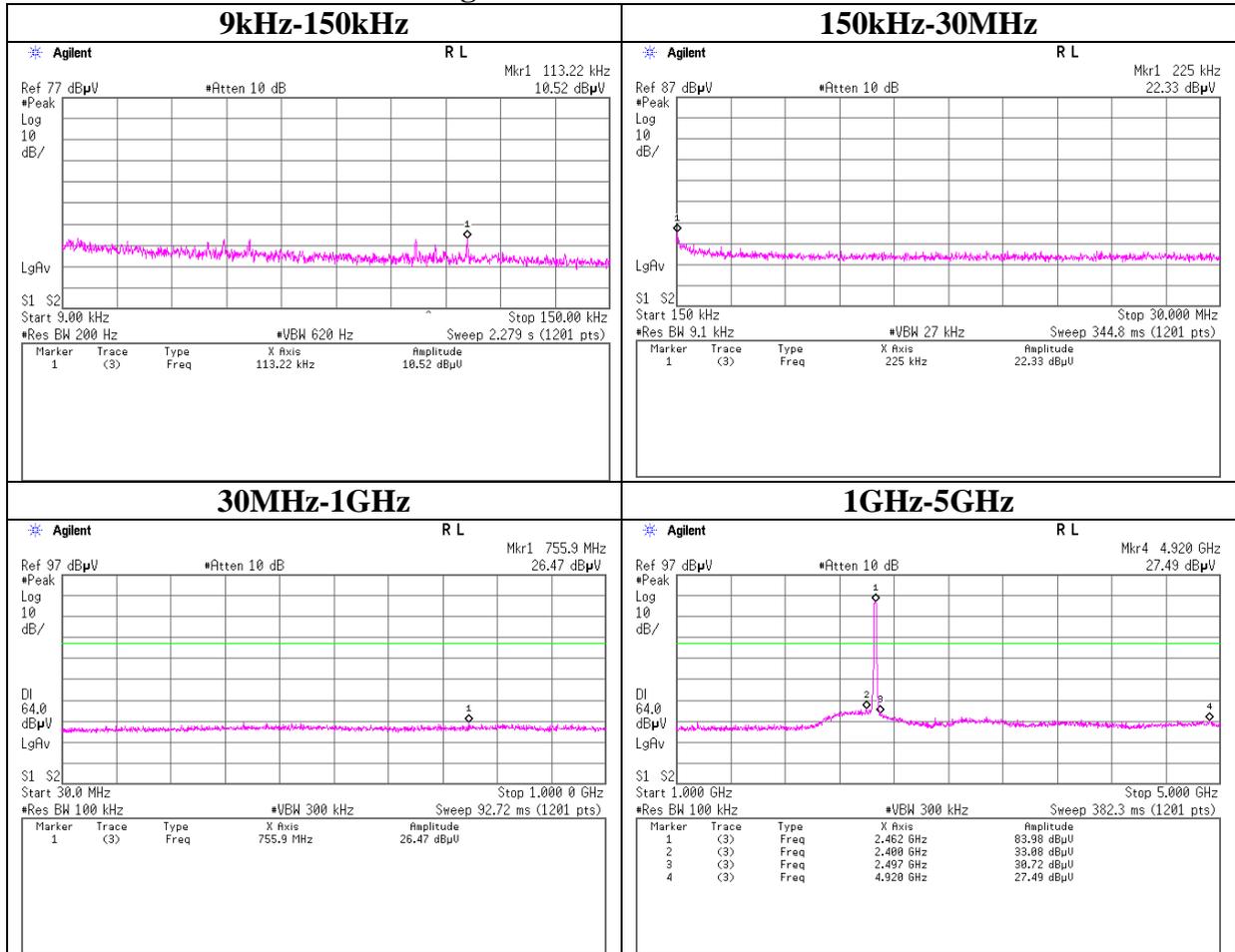
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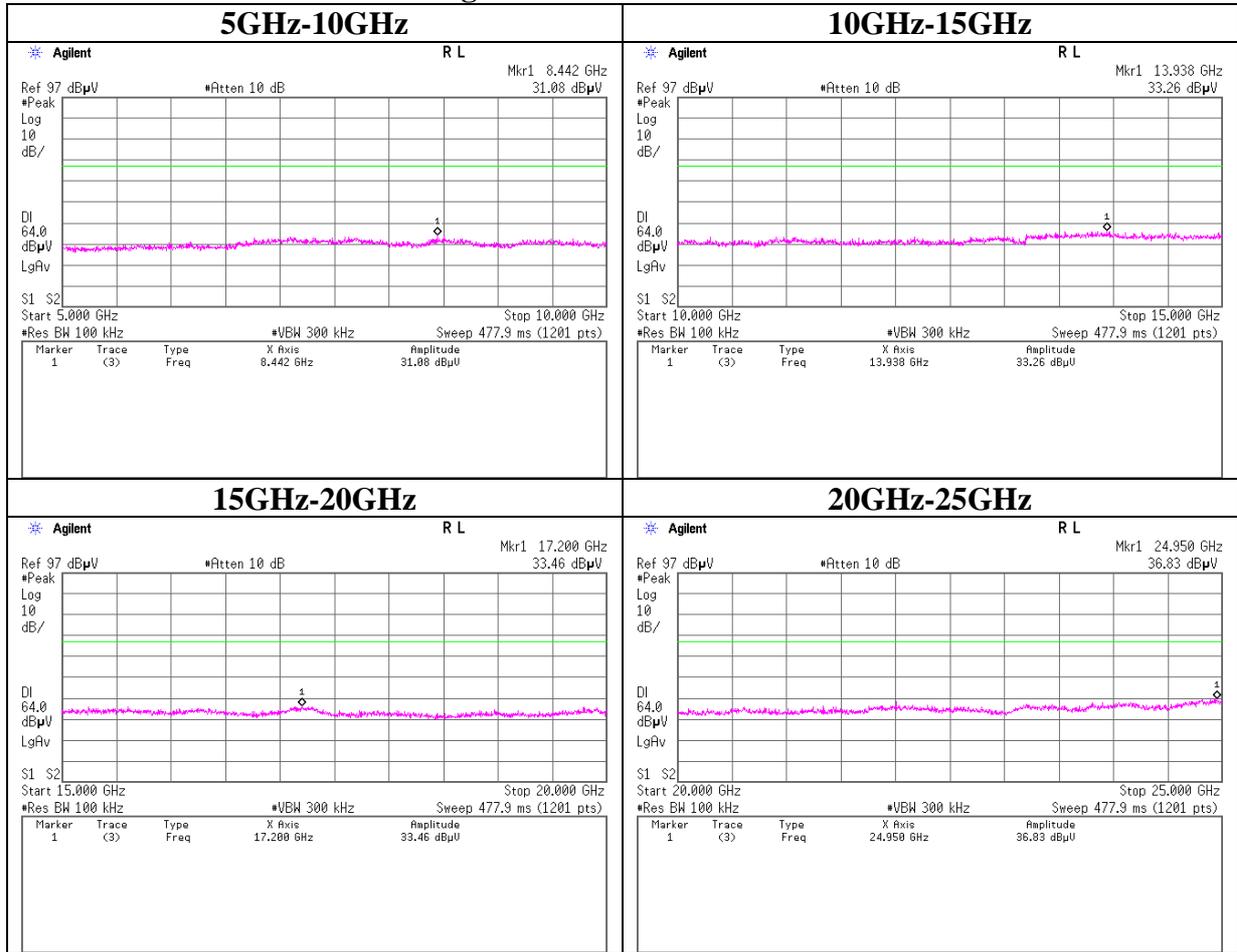
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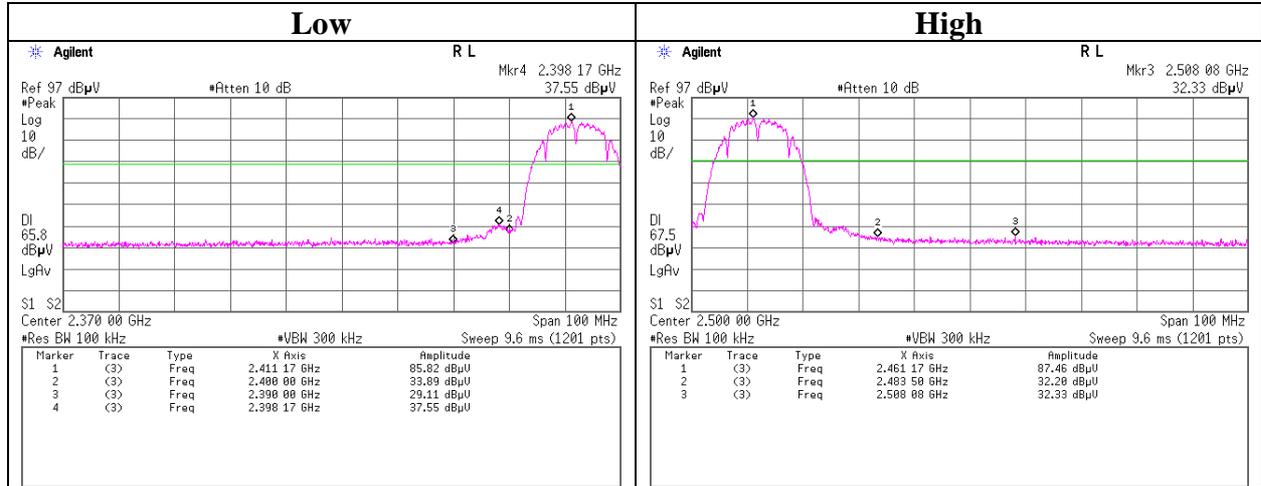
Conducted Spurious Emission

11g Tx Antenna 1 2462MHz

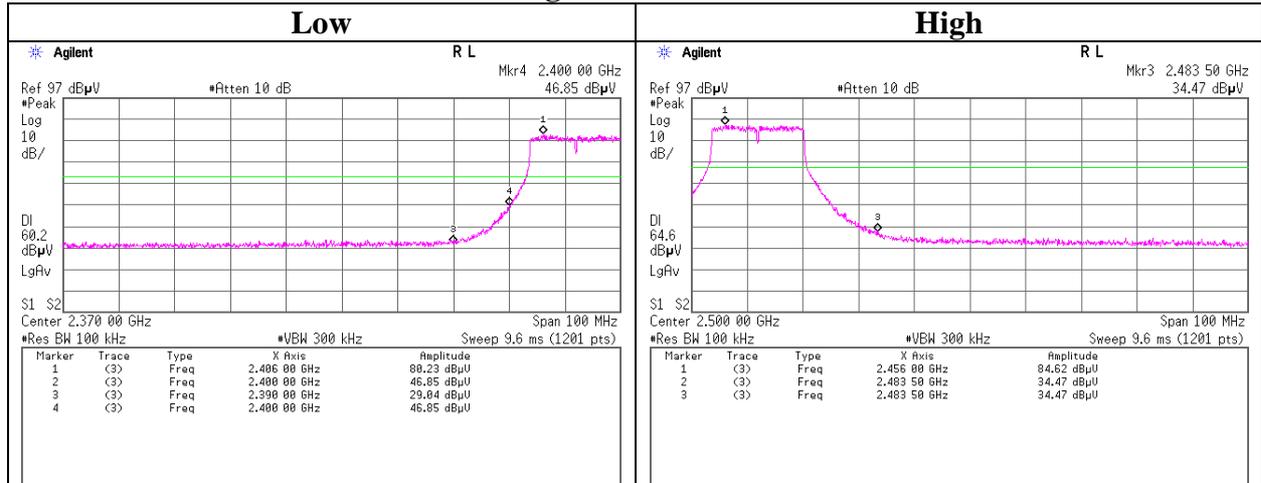


Conducted Emission Band Edge compliance

11b Antenna 0 Tx

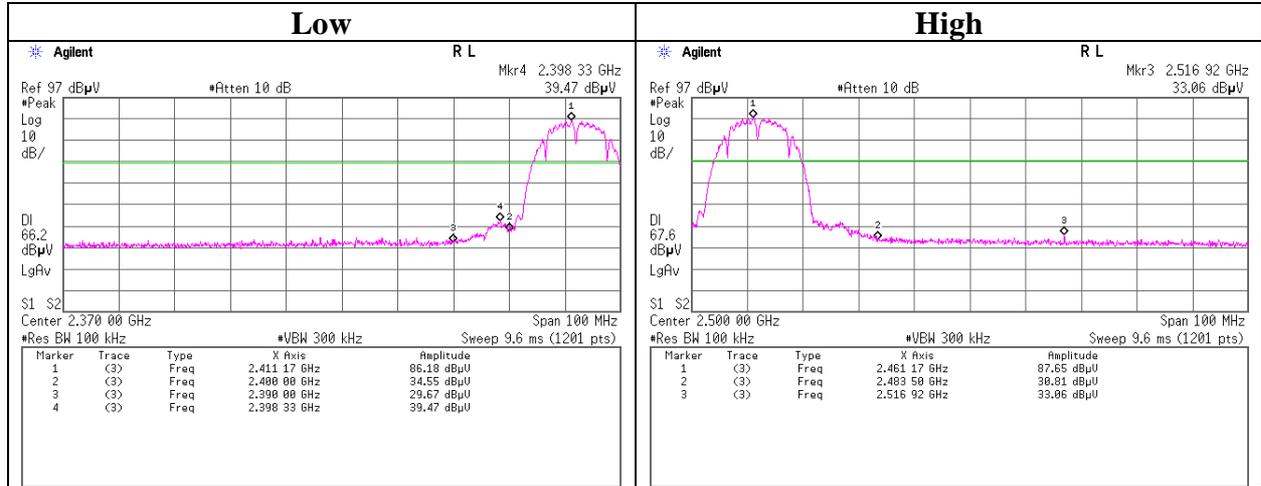


11g Antenna 0 Tx

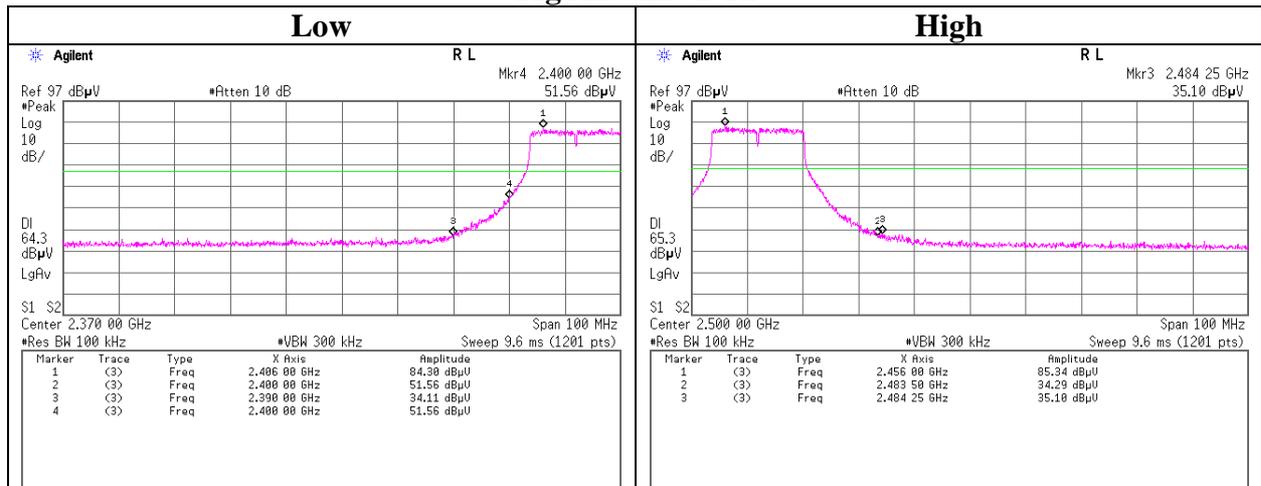


Conducted Emission Band Edge compliance

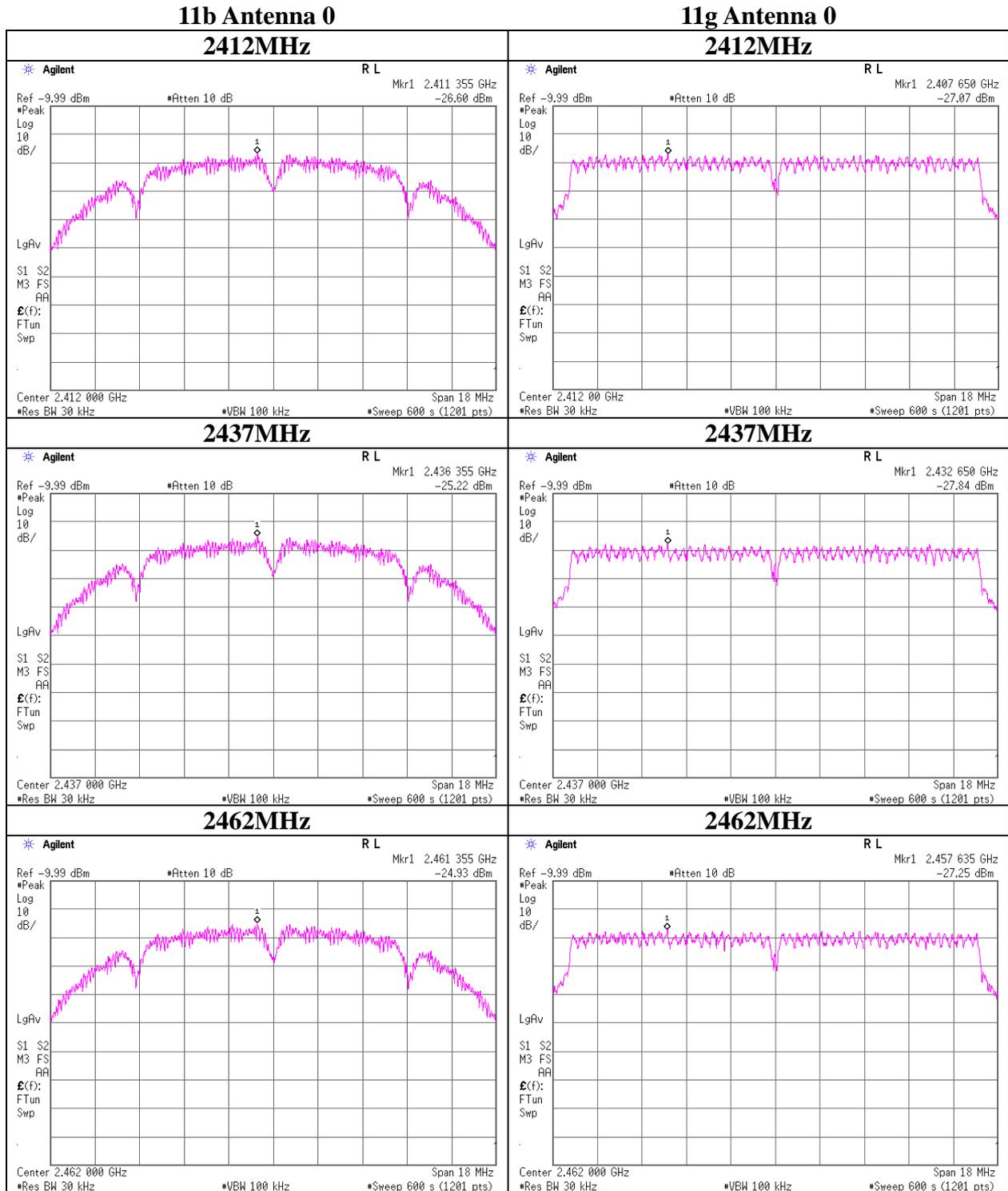
11b Antenna 1 Tx



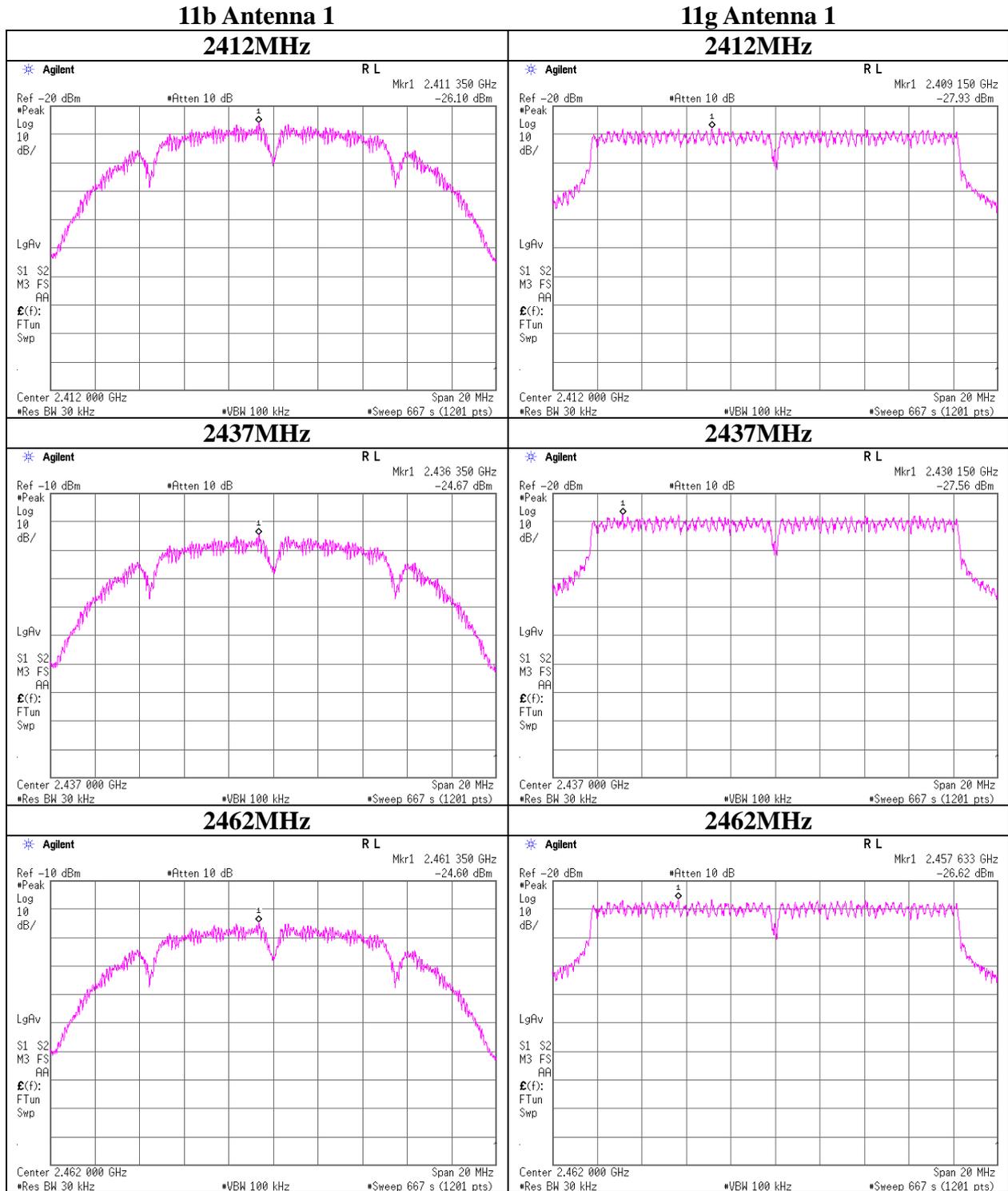
11g Antenna 1 Tx



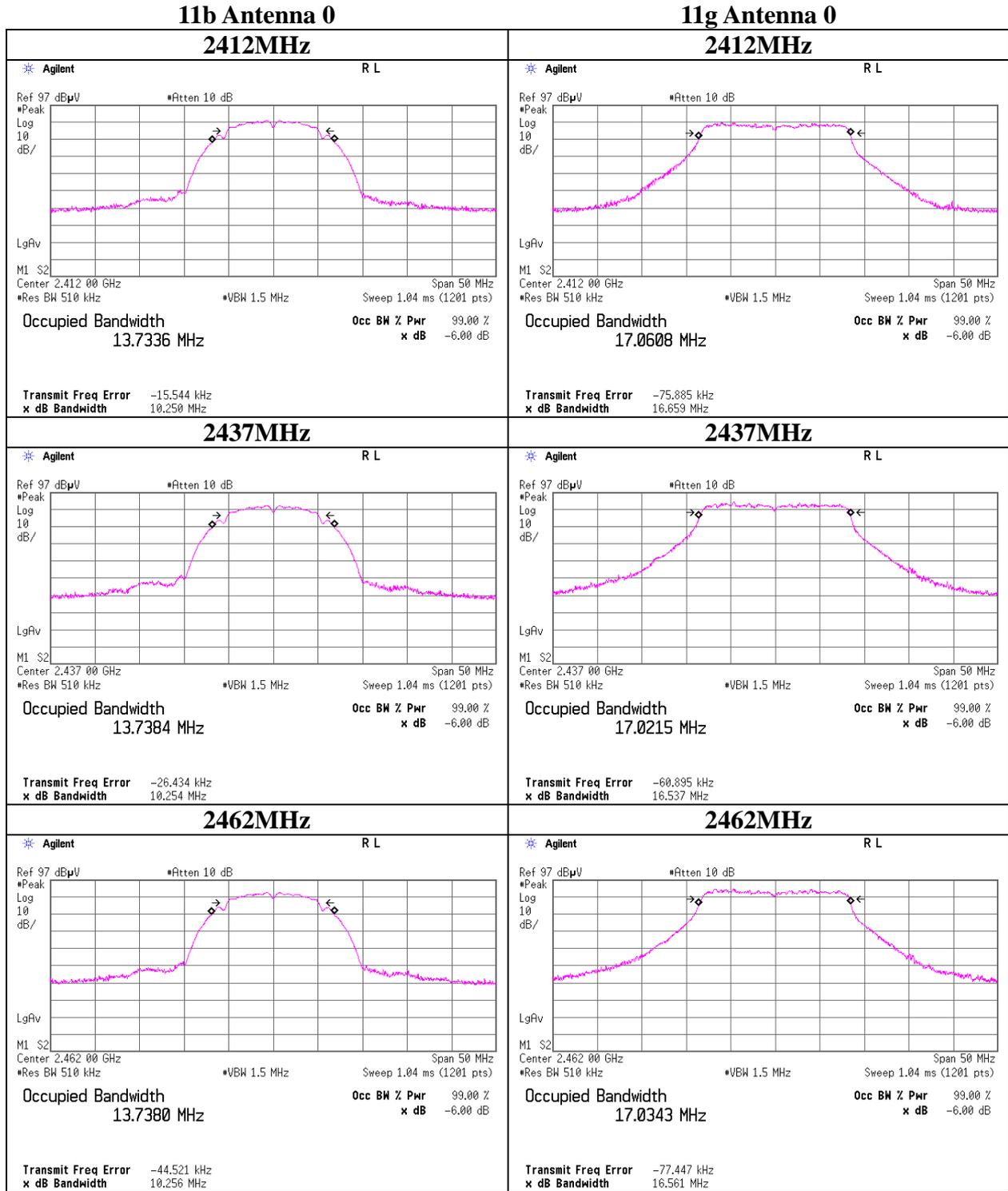
Power Density



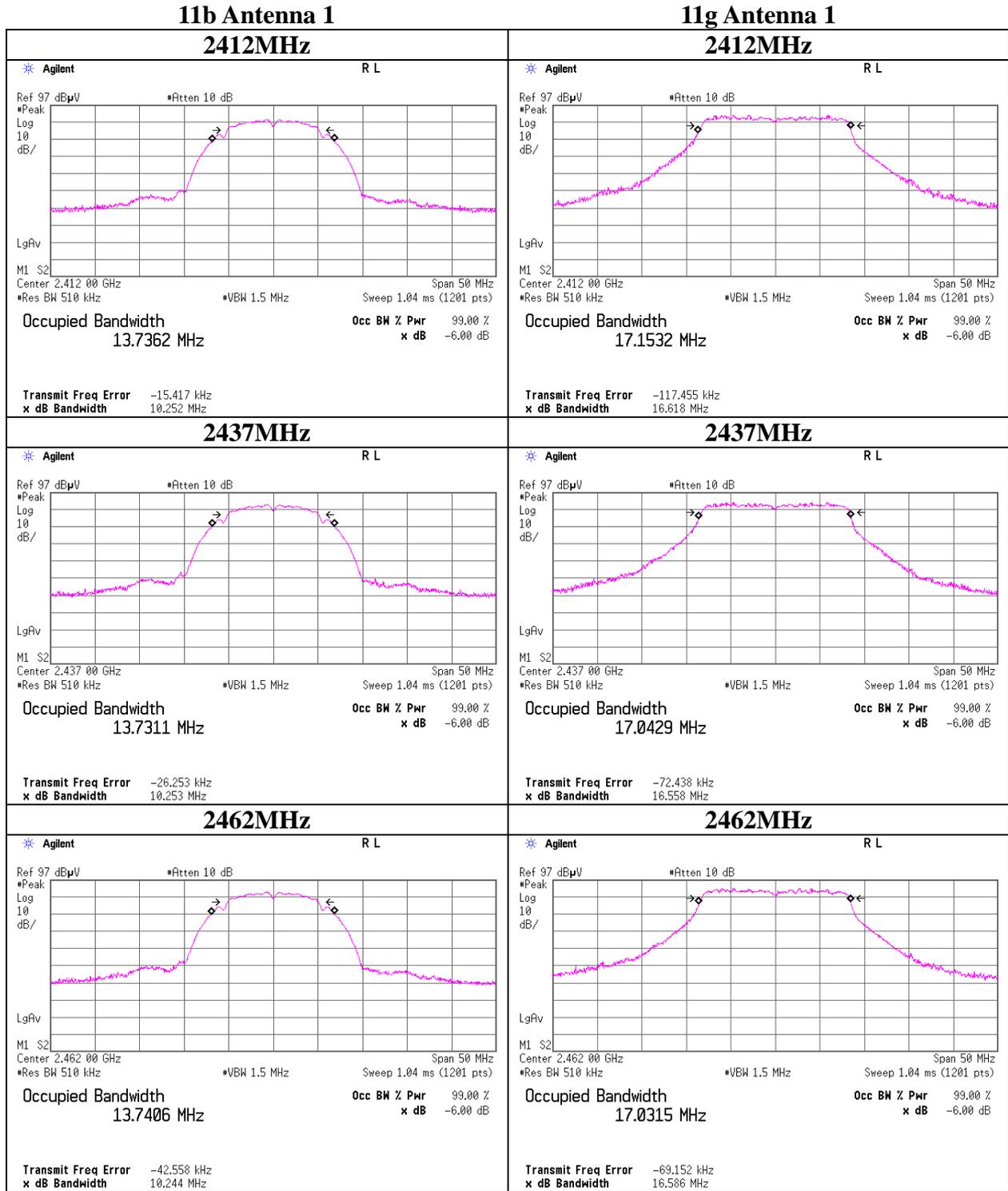
Power Density



99%Occupied Bandwidth



99%Occupied Bandwidth



APPENDIX 2: Test instruments

EMI test equipment [1/2]

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MRENT-95	Spectrum Analyzer	Agilent	E4440A	MY46185823	AT	2011/06/30 * 12
MSA-10	Spectrum Analyzer	Agilent	E4448A	MY46180655	AT	2012/02/03 * 12
MPM-08	Power Meter	Anritsu	ML2495A	6K00003338	AT	2011/09/13 * 12
MPSE-11	Power sensor	Anritsu	MA2411B	011737	AT	2011/09/13 * 12
MAT-24	Attenuator(10dB)(above 1GHz)	Agilent	8493C	71389	AT	2011/06/23 * 12
MCC-138	Microwave cable	HUBER+SUHNER	SUCOFLEX 102	37953/2	AT	2011/10/28 * 12
MOS-14	Thermo-Hygrometer	Custom	CTH-201	-	AT	2012/02/06 * 12
MOS-12	Thermo-Hygrometer	Custom	CTH-180	-	AT	2012/01/06 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	MY44020357	AT	2011/11/23 * 12
MCC-66	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX102	28636/2	AT	2011/04/22 * 12
MAT-21	Attenuator(20dB)(above 1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-120	901247	AT	2012/01/12 * 12
MAT-22	Attenuator(10dB) 1-18GHz	Orient Microwave	BX10-0476-00	-	AT	2012/03/27 * 12
MCC-137	Microwave cable	HUBER+SUHNER	SUCOFLEX 102	37954/2	AT	2011/10/28 * 12
MOS-19	Thermo-Hygrometer	Custom	CTH-201	0001	AT	2011/12/09 * 12
MAEC-04	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE	2012/02/29 * 12
MOS-15	Thermo-Hygrometer	Custom	CTH-180	-	RE	2012/02/06 * 12
MJM-07	Measure	PROMART	SEN1955	-	RE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-
MSA-05	Spectrum Analyzer	Advantest	R3273	160400285	RE	2011/11/23 * 12
MHA-21	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	9120D-557	RE	2011/08/11 * 12
MCC-133	Microwave Cable	HUBER+SUHNER	SUCOFLEX104	336164/4(1m) / 340640(5m)	RE	2011/09/07 * 12
MPA-12	MicroWave System Amplifier	Agilent	83017A	MY39500780	RE	2012/03/28 * 12
MCC-79	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278923/4	RE	2011/12/08 * 12
MHF-20	High Pass Filter 3.5-18.0GHz	TOKIMEC	TF323DCC	607	RE	2011/09/08 * 12
MHA-17	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170307	RE	2011/06/17 * 12
MCC-134	Microwave Cable	HUBER+SUHNER	SUCOFLEX104	336167/4(1m) / 340641(5m)	RE	2011/09/07 * 12
MAEC-03	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	CE	2012/02/24 * 12
MOS-13	Thermo-Hygrometer	Custom	CTH-180	-	CE	2012/02/06 * 12
MJM-06	Measure	PROMART	SEN1955	-	CE	
MSA-04	Spectrum Analyzer	Agilent	E4448A	US44300523	AT	2011/04/08 * 12

EMI test equipment [2/2]

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MTR-08	Test Receiver	Rohde & Schwarz	ESCI	100767	CE	2011/08/11 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	8127363	CE(EUT)	2012/02/06 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	8127364	CE(AE)	2012/02/09 * 12
MTA-30	Terminator	TME	CT-01	-	CE	2012/01/11 * 12
MCC-112	Coaxial cable	Fujikura/Suhner/TSJ	5D-2W(10m)/SFM141(3m)/sucoform141-PE(1m)/421-010(1.5m)/RFM-E321(Switcher)	-/00640	CE	2011/07/15 * 12
MAT-66	Attenuator(13dB)	JFW Industries, Inc.	50FP-013H2 N	-	CE	2012/01/28 * 12
MTR-07	Test Receiver	Rohde & Schwarz	ESCI	100635	RE	2011/10/19 * 12
MBA-05	Biconical Antenna	Schwarzbeck	BBA9106	1302	RE	2011/11/16 * 12
MLA-08	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	N/A	RE	2011/11/16 * 12
MCC-50	Coaxial Cable	UL Japan	-	-	RE	2012/03/15 * 12
AT-38	Attenuator	Anritsu	MP721B	6200961025	RE	2011/12/08 * 12
MPA-14	Pre Amplifier	SONOMA INSTRUMENT	310	260833	RE	2012/03/05 * 12

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

**Test Item: CE: Conducted Emission
RE: Radiated Emission
AT: Antenna Terminal Conducted test**