



RADIO TEST REPORT

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

Applicant : Sony Computer Entertainment Inc.
Type of Equipment : Computer Entertainment System
Model No. : CECH-4001x
FCC ID : AK8CBEH19Z1
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: 
Takumi Shimada
Engineer of WiSE Japan,
UL Verification Service

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



NVLAP LAB CODE: 200572-0

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.
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<http://www.ul.com/japan/jpn/pages/services/emc/about/mark1/index.jsp#nvlap>

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13-EM-F0429

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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	1530006 (Power Supply: DELTA) 1530007 (Power Supply: SONY) 1530013 (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.

Details of model name CECH-4001x:

“x” will be replaced by an alphabet denoting the different hard disk specification.

The difference of the hard disk specification does not influence on radio specification.

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

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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 7.3dB, 0.15000MHz, N/L AV 13.3dB, 0.15000MHz, N/L	Complied	-
Carrier Frequency Separation	FCC: FCC Public Notice DA 00-705 IC: -	FCC: Section15.247(a)(1) ----- IC: RSS-210 A8.1 (b)	See data.	Complied	Conducted
20dB Bandwidth	FCC: FCC Public Notice DA 00-705 IC: -	FCC: Section15.247(a)(1) ----- IC: RSS-210 A8.1 (a)		Complied	Conducted
Number of Hopping Frequency	FCC: FCC Public Notice DA 00-705 IC: -	FCC: Section15.247(a)(1)(iii) ----- IC: RSS-210 A8.1 (d)		Complied	Conducted
Dwell time	FCC: FCC Public Notice DA 00-705 IC: -	FCC: Section15.247(a)(1)(iii) ----- IC: RSS-210 A8.1 (d)		Complied	Conducted
Maximum Peak Output Power	FCC: FCC Public Notice DA 00-705 IC: RSS-Gen 4.8	FCC: Section15.247(a)(b)(1) ----- IC: RSS-210 A8.4 (2)		Complied	Conducted
Spurious Emission & Band Edge Compliance	FCC: FCC Public Notice DA 00-705 IC: RSS-Gen 4.9	FCC: Section15.247(d) ----- IC: RSS-210 A8.5 RSS-Gen 6 and 7.2.3		5.4dB 576.423MHz, 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.

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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 test report has enough margin, more than the site margin.

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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)

Bluetooth (BT): Transmitting (Tx), Payload: PRBS9
Inquiry

Details of Operating Mode(s)

Test Item	Mode	Tested frequency
Conducted Emission *1)	Tx (Hopping off) DH5, 3DH5	2402MHz 2441MHz 2480MHz
Spurious Emission (Radiated)	Tx (Hopping off) DH5, 3DH5	2402MHz 2441MHz *2) 2480MHz
Spurious Emission (Conducted)	Tx (Hopping off) DH5, 3DH5	2402MHz 2441MHz 2480MHz
Carrier Frequency Separation	Tx (Hopping on) DH5, 3DH5 Inquiry	2402MHz 2441MHz 2480MHz
20dB Bandwidth	Tx (Hopping off) DH5, 3DH5 Inquiry	2402MHz 2441MHz 2480MHz
Number of Hopping Frequency	Tx (Hopping on) DH5, 3DH5 Inquiry	-
Dwell time	Tx (Hopping on), -DH1, DH3, DH5 -3DH1, 3DH3, 3DH5 Inquiry	-
Maximum Peak Output Power	Tx (Hopping off) DH5, 3DH5 Inquiry	2402MHz 2441MHz 2480MHz
Band Edge Compliance (Conducted)	Tx DH5, 3DH5 -Hopping on -Hopping off	2402MHz 2480MHz
99% Occupied Bandwidth	Tx DH5, 3DH5 -Hopping on -Hopping off	2402MHz 2441MHz 2480MHz

*As a result of preliminary test, the formal test was performed with the above modes, which had the maximum payload length (except Dwell time test)

*EUT has the power settings by the software as follows;

Power settings: Same as production model

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.

*Antenna 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 these have similar antenna characteristics and equal maximum gain.

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

*2) The difference between Power Supply: SONY and DELTA was confirmed by Bluetooth 3DH5 2441 Transmitting (Tx) mode.

4.2 Configuration and peripherals

This page has been submitted for a separate exhibit.

This page has been submitted for a separate exhibit.

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

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 *2)	RBW: 100kHz VBW: 300kHz (S/A)
Test Distance	3m	3m (below 10GHz), 1m*1) (above 10GHz),		3m (below 10GHz), 1m*1) (above 10GHz),

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

*2) Although 00-705 accepts VBW=10Hz for AV measurements, it was confirmed that superfluous smoothing was not performed.

- 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-25GHz
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
20dB Bandwidth	3MHz	30kHz	100kHz	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)
Carrier Frequency Separation	5MHz	100kHz	300kHz	Auto	Peak	Max Hold	Spectrum Analyzer
Number of Hopping Frequency	30MHz	300kHz	1MHz	Auto	Peak	Max Hold	Spectrum Analyzer
Dwell Time	Zero Span	100kHz, 1MHz	300kHz, 3MHz	As necessary capture the entire dwell time per hopping channel	Peak	Max Hold	Spectrum Analyzer
Conducted Spurious Emission *1)	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				
Conducted Spurious Emission Band Edge compliance	20MHz	300kHz	1MHz	Auto	Peak	Max Hold	Spectrum Analyzer

*1) 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 not detected as shown in the chart.(9kHz-150kHz:RBW=200Hz, 150kHz-30MHz:RBW=9.1kHz)

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

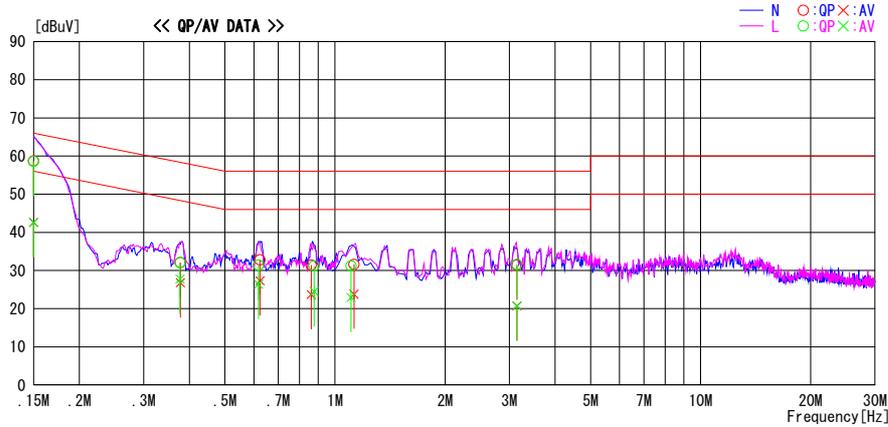
UL Japan, Inc. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2012/03/30

Report No. : 32GE0144-HO-01

Temp./Humi. : 22deg. C / 38% RH
Engineer : Shinya Watanabe

Mode / Remarks : BT Tx, 2480MHz, DH5

LIMIT : FCC15.207 QP
FCC15.207 AV

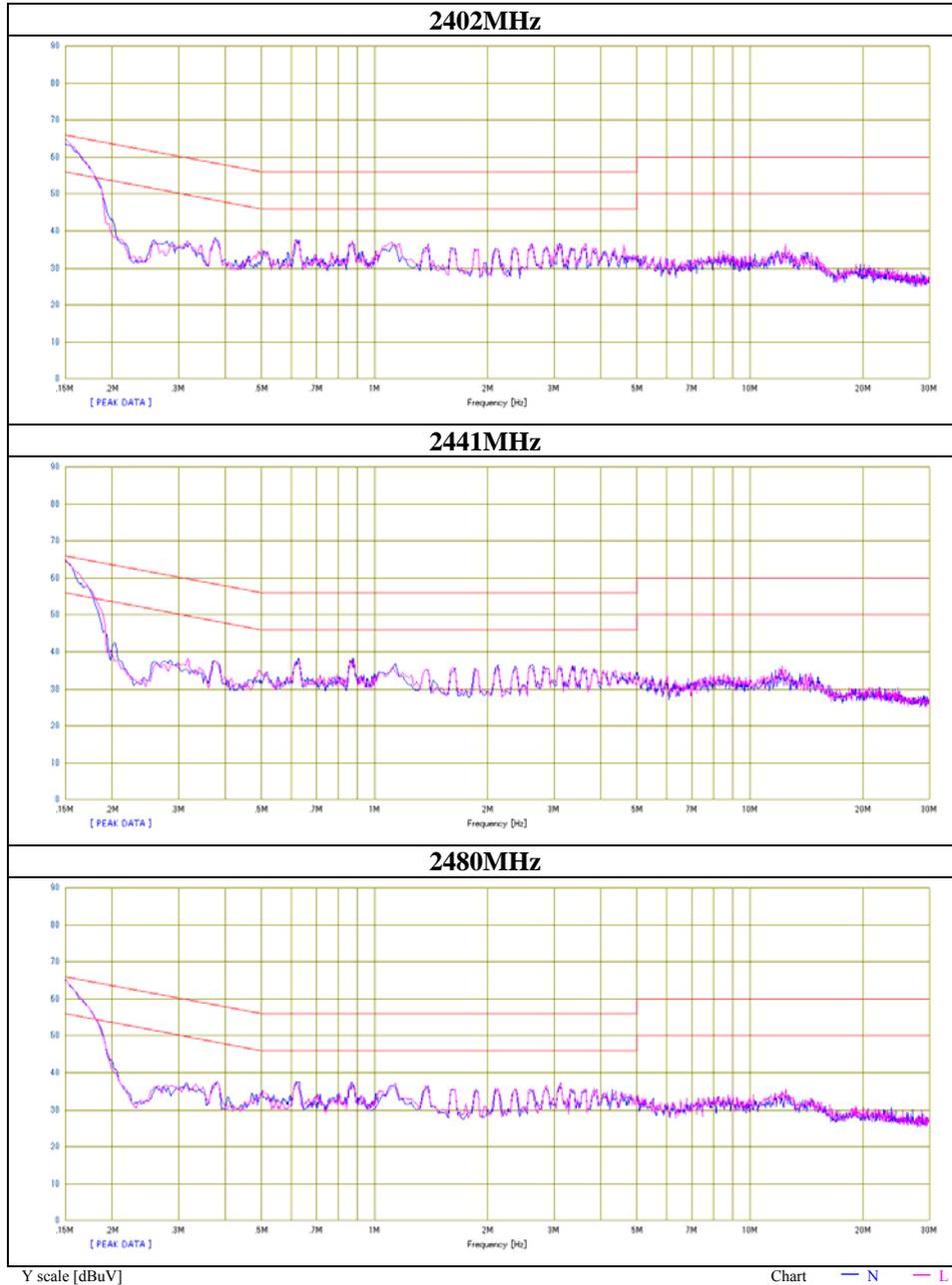


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.15000	45.4	29.3	13.3	58.7	42.6	66.0	56.0	7.3	13.4	N
0.37806	18.8	13.5	13.3	32.1	26.8	58.3	48.3	26.2	21.5	N
0.62382	19.5	14.0	13.3	32.8	27.3	56.0	46.0	23.2	18.7	N
0.86075	18.1	10.4	13.3	31.4	23.7	56.0	46.0	24.6	22.3	N
1.12745	18.3	10.5	13.3	31.6	23.8	56.0	46.0	24.4	22.2	N
3.14658	17.8	7.1	13.6	31.4	20.7	56.0	46.0	24.6	25.3	N
0.15000	45.3	29.3	13.3	58.6	42.6	66.0	56.0	7.4	13.4	L
0.37698	18.8	14.5	13.3	32.1	27.8	58.3	48.3	26.2	20.5	L
0.61780	18.1	13.1	13.3	31.4	26.4	56.0	46.0	24.6	19.6	L
0.87765	17.9	11.2	13.3	31.2	24.5	56.0	46.0	24.8	21.5	L
1.10653	17.9	9.6	13.3	31.2	22.9	56.0	46.0	24.8	23.1	L
3.14413	18.0	7.1	13.6	31.6	20.7	56.0	46.0	24.4	25.3	L

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F.[dB] (LISN 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	22 deg. C / 38% RH
Engineer	Shinya Watanabe
Mode	Tx DH5



Conducted Emission
(Power Supply: SONY)

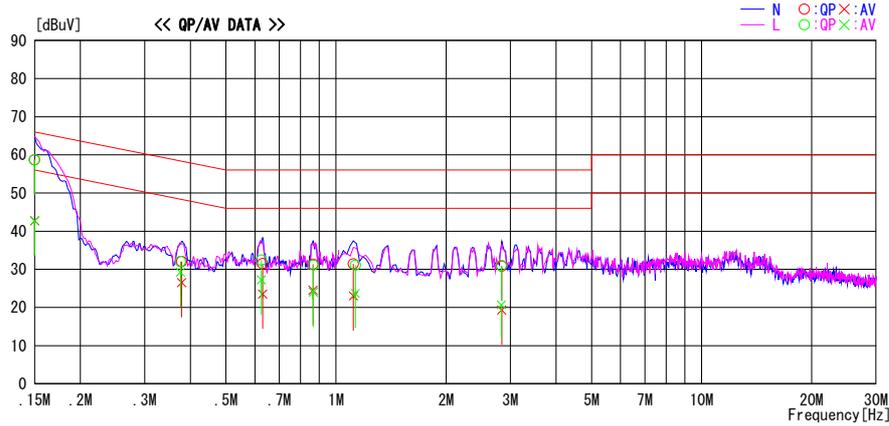
DATA OF CONDUCTED EMISSION TEST

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

Report No. : 32GE0144-HO-01
Temp./Humi. : 22deg. C / 38% RH
Engineer : Shinya Watanabe

Mode / Remarks : BT Tx, 2480MHz, 3DH5

LIMIT : FCC15.207 QP
FCC15.207 AV

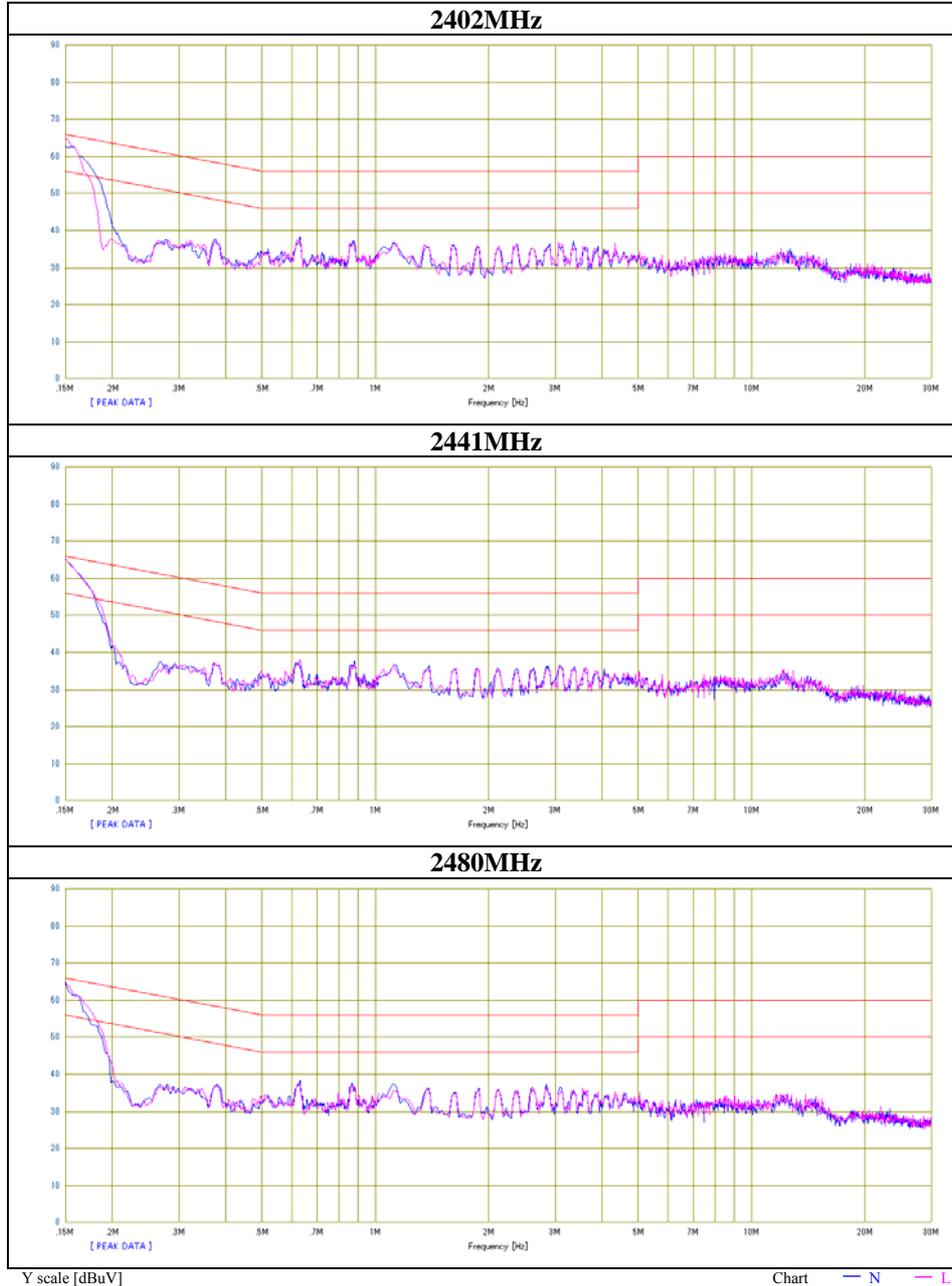


Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.15000	45.4	29.4	13.3	58.7	42.7	66.0	56.0	7.3	13.3	N
0.37838	18.7	13.2	13.3	32.0	26.5	58.3	48.3	26.3	21.8	N
0.63067	18.2	10.2	13.3	31.5	23.5	56.0	46.0	24.5	22.5	N
0.86557	18.0	11.2	13.3	31.3	24.5	56.0	46.0	24.7	21.5	N
1.11605	18.1	9.7	13.3	31.4	23.0	56.0	46.0	24.6	23.0	N
2.83935	17.3	5.8	13.5	30.8	19.3	56.0	46.0	25.2	26.7	N
0.15000	45.4	29.4	13.3	58.7	42.7	66.0	56.0	7.3	13.3	L
0.37563	18.7	15.9	13.3	32.0	29.2	58.4	48.4	26.4	19.2	L
0.62517	19.1	13.9	13.3	32.4	27.2	56.0	46.0	23.6	18.8	L
0.86702	17.8	10.7	13.3	31.1	24.0	56.0	46.0	24.9	22.0	L
1.12965	17.8	10.4	13.3	31.1	23.7	56.0	46.0	24.9	22.3	L
2.83355	17.5	7.2	13.5	31.0	20.7	56.0	46.0	25.0	25.3	L

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN 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	22 deg. C / 38% RH
Engineer	Shinya Watanabe
Mode	Tx 3DH5



Conducted Emission
(Power Supply: DELTA)

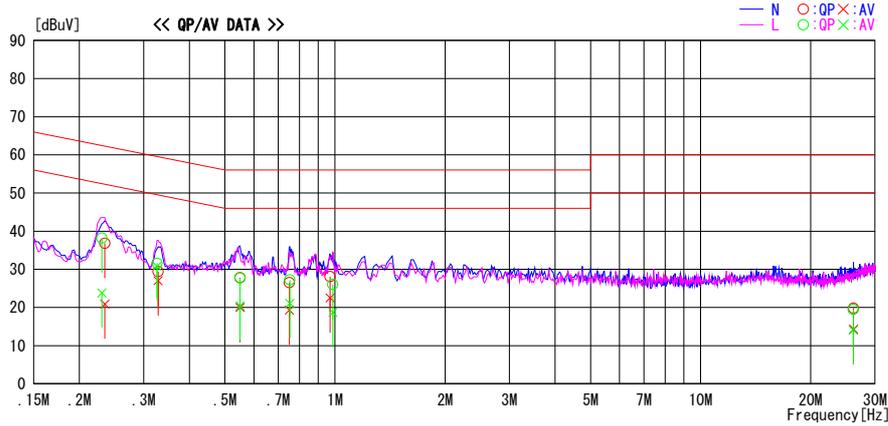
DATA OF CONDUCTED EMISSION TEST

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

Report No. : 32GE0144-HO-01
Temp./Humi. : 22deg. C / 38% RH
Engineer : Shinya Watanabe

Mode / Remarks : BT Tx, 2480MHz, DH5

LIMIT : FCC15.207 QP
FCC15.207 AV

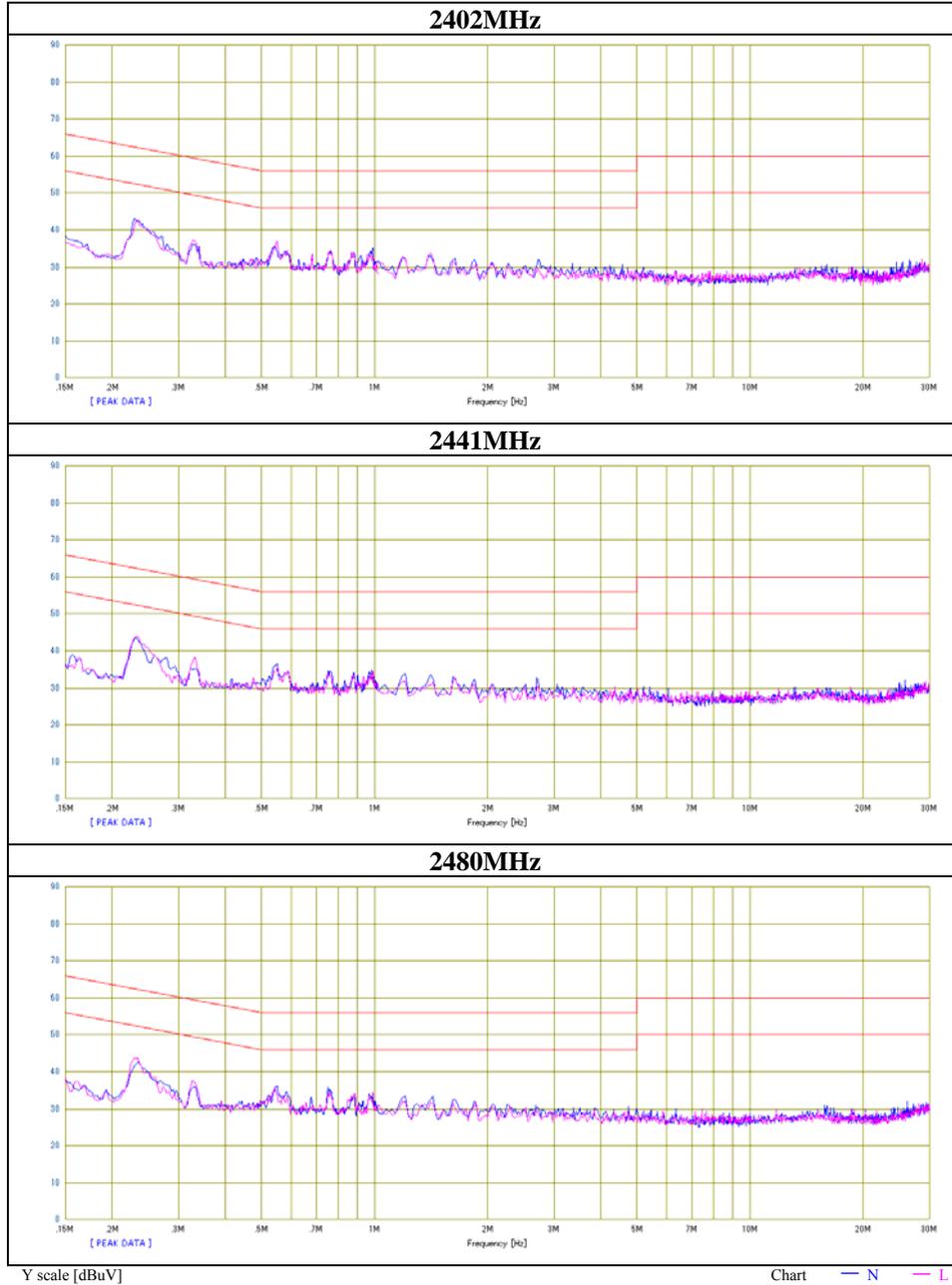


Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.23483	23.5	7.6	13.3	36.8	20.9	62.3	52.3	25.5	31.4	N
0.32835	16.1	13.7	13.3	29.4	27.0	59.5	49.5	30.1	22.5	N
0.55020	14.5	6.7	13.3	27.8	20.0	56.0	46.0	28.2	26.0	N
0.75030	13.2	6.0	13.3	26.5	19.3	56.0	46.0	29.5	26.7	N
0.96997	14.8	9.2	13.3	28.1	22.5	56.0	46.0	27.9	23.5	N
26.19054	4.9	-0.6	14.9	19.8	14.3	60.0	50.0	40.2	35.7	N
0.23048	24.9	10.5	13.3	38.2	23.8	62.4	52.4	24.2	28.6	L
0.32618	18.3	17.5	13.3	31.6	30.8	59.5	49.5	27.9	18.7	L
0.55020	14.4	7.1	13.3	27.7	20.4	56.0	46.0	28.3	25.6	L
0.75247	13.9	7.8	13.3	27.2	21.1	56.0	46.0	28.8	24.9	L
0.98737	12.7	5.4	13.3	26.0	18.7	56.0	46.0	30.0	27.3	L
26.14041	4.6	-0.8	14.9	19.5	14.1	60.0	50.0	40.5	35.9	L

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN 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	22 deg. C / 38% RH
Engineer	Shinya Watanabe
Mode	Tx DH5



Conducted Emission
(Power Supply: DELTA)

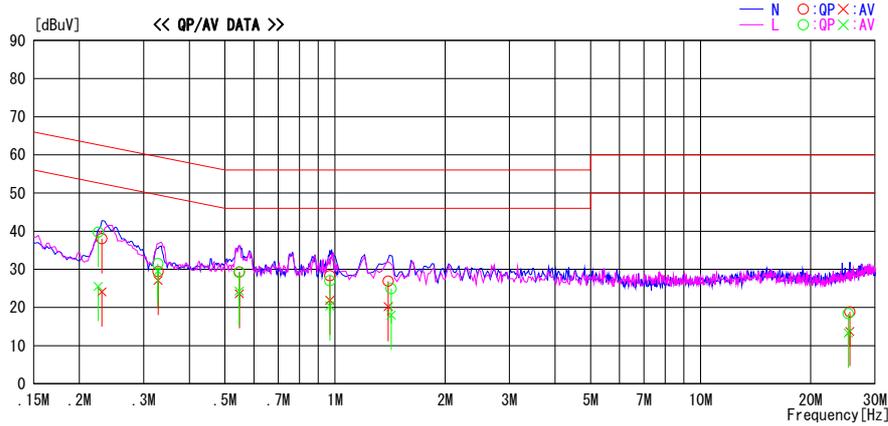
DATA OF CONDUCTED EMISSION TEST

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

Report No. : 32GE0144-HO-01
Temp./Humi. : 22deg. C / 38% RH
Engineer : Shinya Watanabe

Mode / Remarks : BT Tx, 2480MHz, 3DH5

LIMIT : FCC15.207 QP
FCC15.207 AV

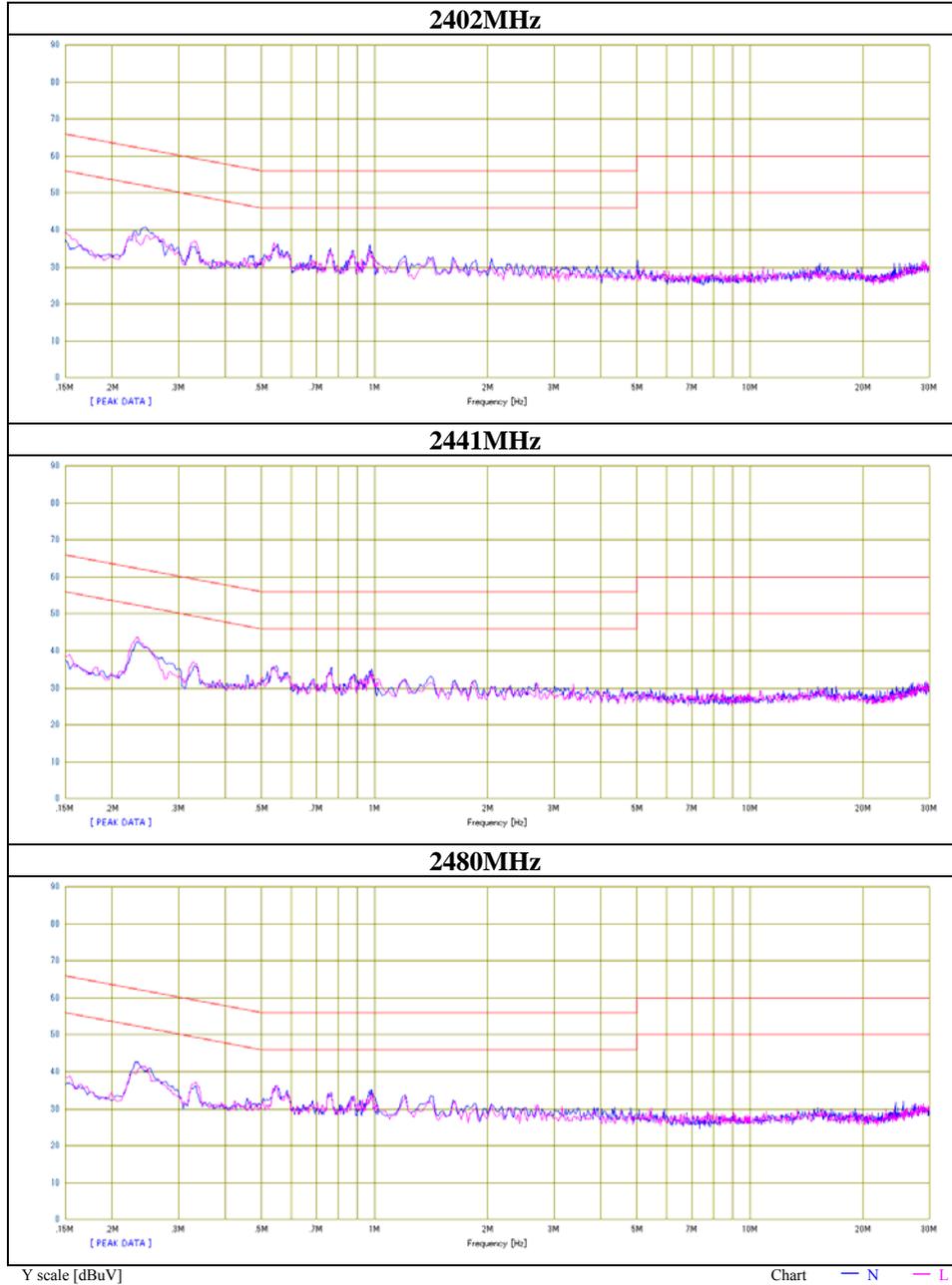


Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.23048	24.7	10.8	13.3	38.0	24.1	62.4	52.4	24.4	28.3	N
0.32828	16.1	13.8	13.3	29.4	27.1	59.5	49.5	30.1	22.4	N
0.54765	16.0	10.3	13.3	29.3	23.6	56.0	46.0	26.7	22.4	N
0.96865	15.0	8.6	13.3	28.3	21.9	56.0	46.0	27.7	24.1	N
1.39873	13.5	6.8	13.4	26.9	20.2	56.0	46.0	29.1	25.8	N
25.58904	3.9	-1.2	14.9	18.8	13.7	60.0	50.0	41.2	36.3	N
0.22528	26.5	12.3	13.2	39.7	25.5	62.6	52.6	22.9	27.1	L
0.32810	18.2	16.2	13.3	31.5	29.5	59.5	49.5	28.0	20.0	L
0.54713	15.9	11.0	13.3	29.2	24.3	56.0	46.0	26.8	21.7	L
0.96825	13.7	7.1	13.3	27.0	20.4	56.0	46.0	29.0	25.6	L
1.42475	11.5	4.6	13.4	24.9	18.0	56.0	46.0	31.1	28.0	L
25.33841	3.5	-1.6	14.9	18.4	13.3	60.0	50.0	41.6	36.7	L

CHART: WITH FACTOR, Peak hold data. CALCULATION: RESULT[dBuV]=READING[dBuV]+C.F[dB] (LISN 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	22 deg. C / 38% RH
Engineer	Shinya Watanabe
Mode	Tx 3DH5

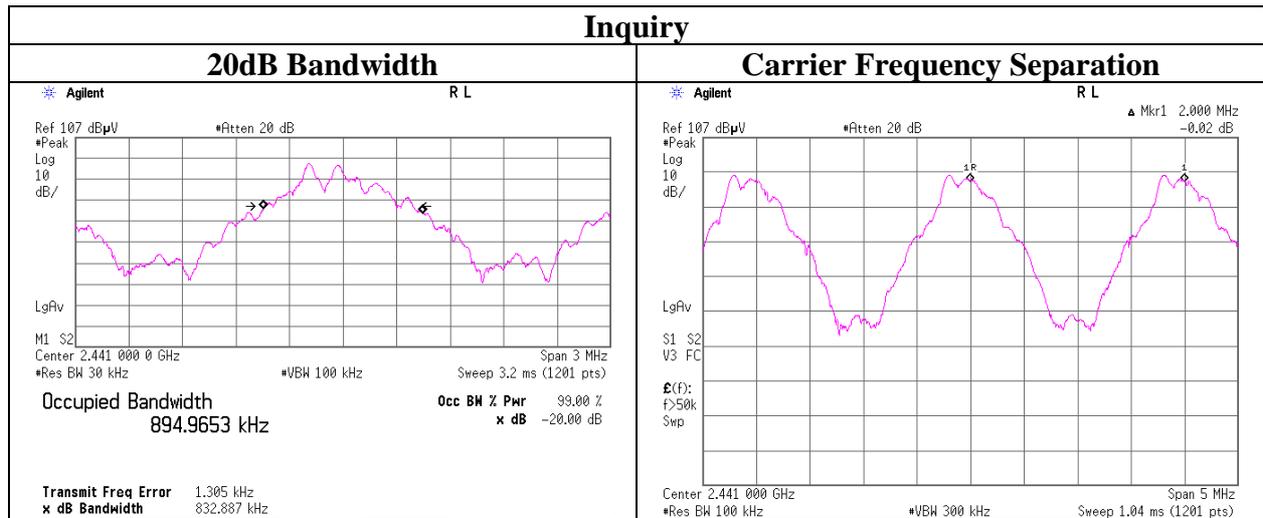


20dB Bandwidth and Carrier Frequency Separation

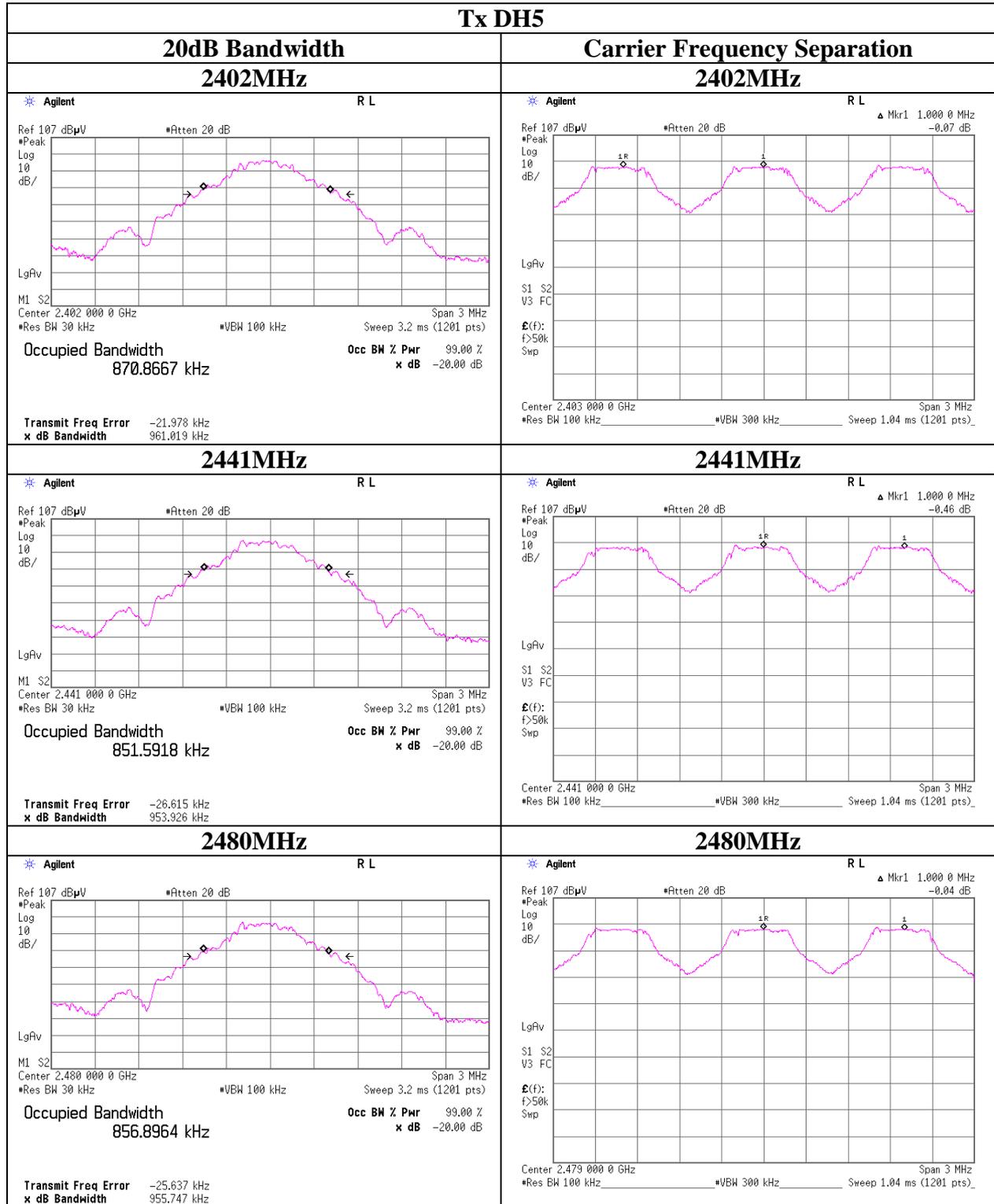
Test place	Head Office EMC Lab. No.11 Measurement Room
Report No.	32GE044-HO-01
Date	03/15/2012
Temperature/ Humidity	22 deg. C / 26% RH
Engineer	Yutaka Yoshida
Mode	Tx (Hopping on) DH5/3DH5/Inquiry

Mode	Freq. [MHz]	20dB Bandwidth [MHz]	Carrier Frequency Separation [MHz]	Limit for Carrier Frequency separation [MHz]
DH5	2402.0	0.961	1.000	≥ 0.641
DH5	2441.0	0.954	1.000	≥ 0.636
DH5	2480.0	0.956	1.000	≥ 0.637
3DH5	2402.0	1.301	1.000	≥ 0.867
3DH5	2441.0	1.302	1.000	≥ 0.868
3DH5	2480.0	1.300	1.000	≥ 0.867
Inquiry	2441.0	0.833	2.000	≥ 0.555

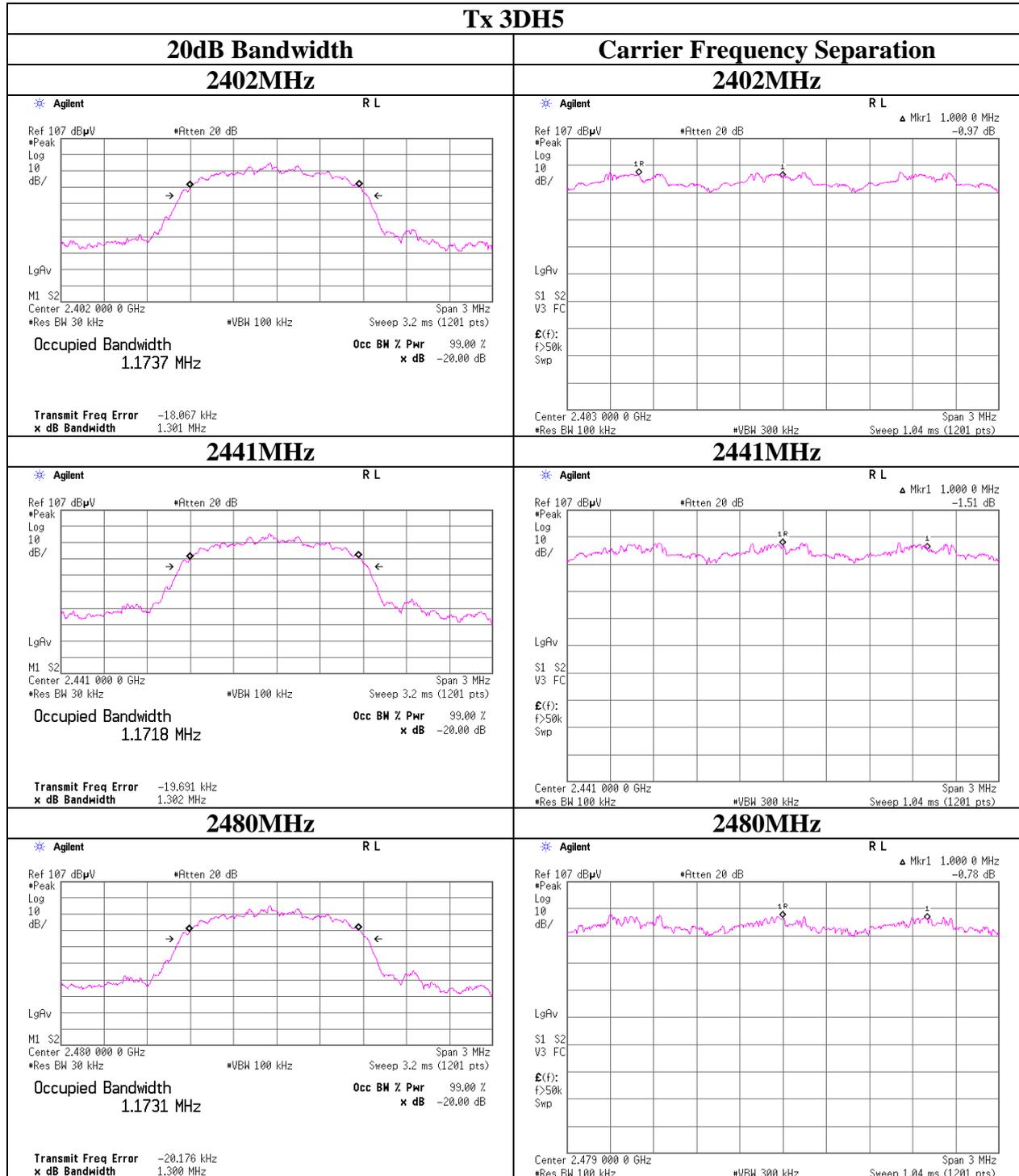
Limit: Two-thirds of 20dB Bandwidth or 25kHz (whichever is greater).
No limit applies to 20dB Bandwidth.



20dB Bandwidth and Carrier Frequency Separation



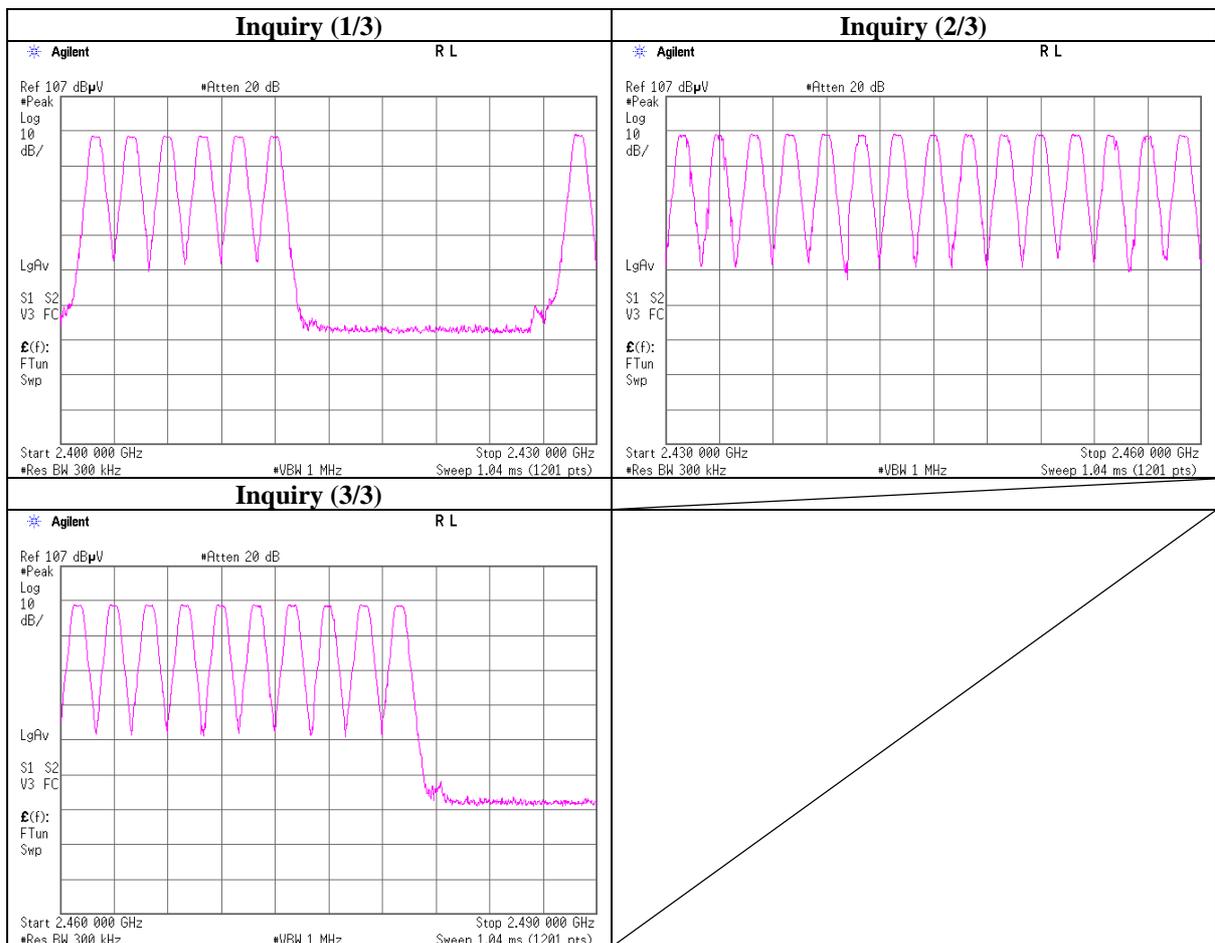
20dB Bandwidth and Carrier Frequency Separation



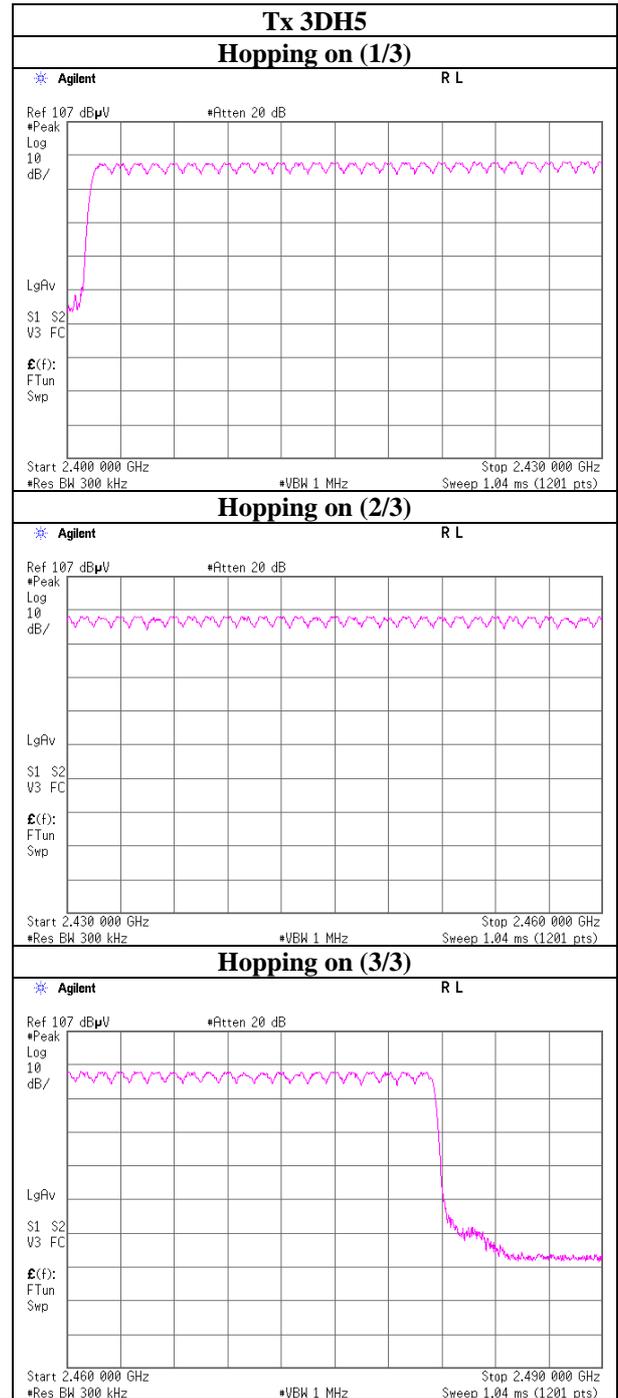
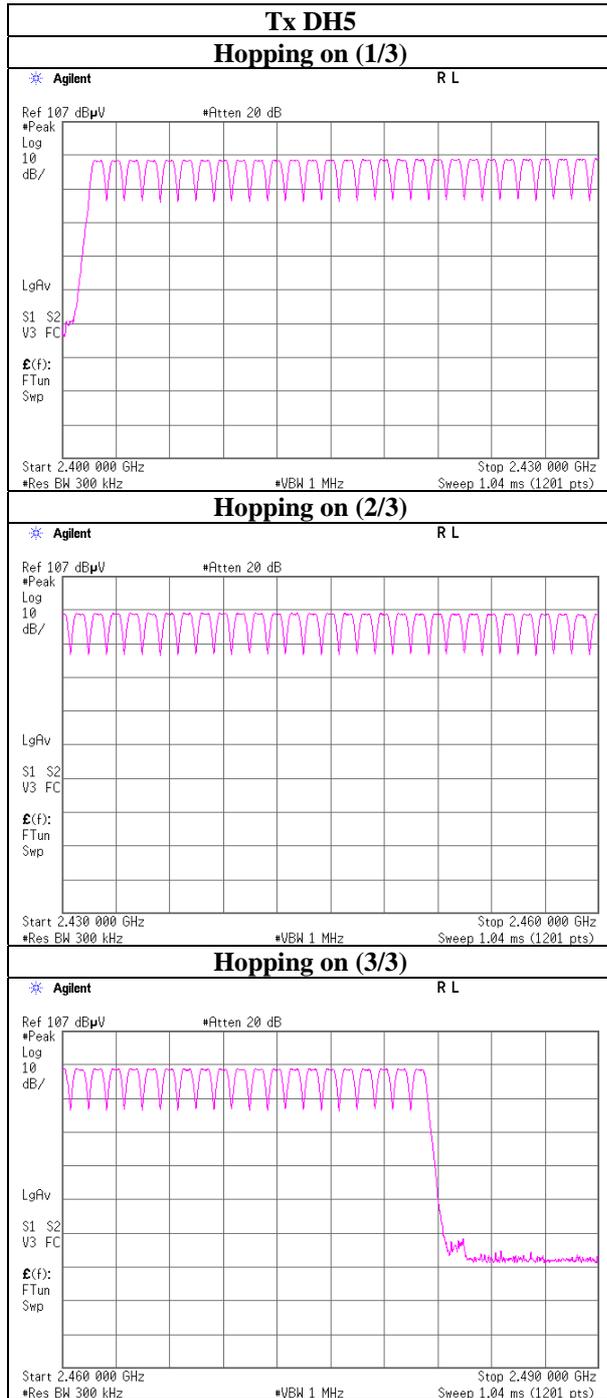
Number of Hopping Frequency

Test place	Head Office EMC Lab. No.11 Measurement Room
Report No.	32GE0144-HO-01
Date	03/15/2012
Temperature/ Humidity	22 deg. C / 26% RH
Engineer	Yutaka Yoshida
Mode	Tx (Hopping on) DH5/3DH5/Inquiry

Mode	Number of channel [times]	Limit [times]
DH5	79	>= 15
3DH5	79	>= 15
Inquiry	32	>= 15



Number of Hopping Frequency



Dwell time

Test place Head Office EMC Lab. No.11 Measurement Room
Report No. 32GE0144-HO-01
Date 03/16/2012
Temperature/ Humidity 21 deg. C / 22% RH
Engineer Yutaka Yoshida
Mode Tx (Hopping on) DH5/3DH5/Inquiry

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period		Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	47.2 times / 5 sec. x	31.6 sec. =	299 times	0.419	125
DH3	26.6 times / 5 sec. x	31.6 sec. =	169 times	1.690	286
DH5	15.8 times / 5 sec. x	31.6 sec. =	100 times	2.941	294
3DH1	48.4 times / 5 sec. x	31.6 sec. =	306 times	0.424	130
3DH3	24.8 times / 5 sec. x	31.6 sec. =	157 times	1.677	263
3DH5	17.2 times / 5 sec. x	31.6 sec. =	109 times	2.949	321
Inquiry	99.0 times / 1 sec. x	12.8 sec. =	1268 times	0.124	157

Sample Calculation

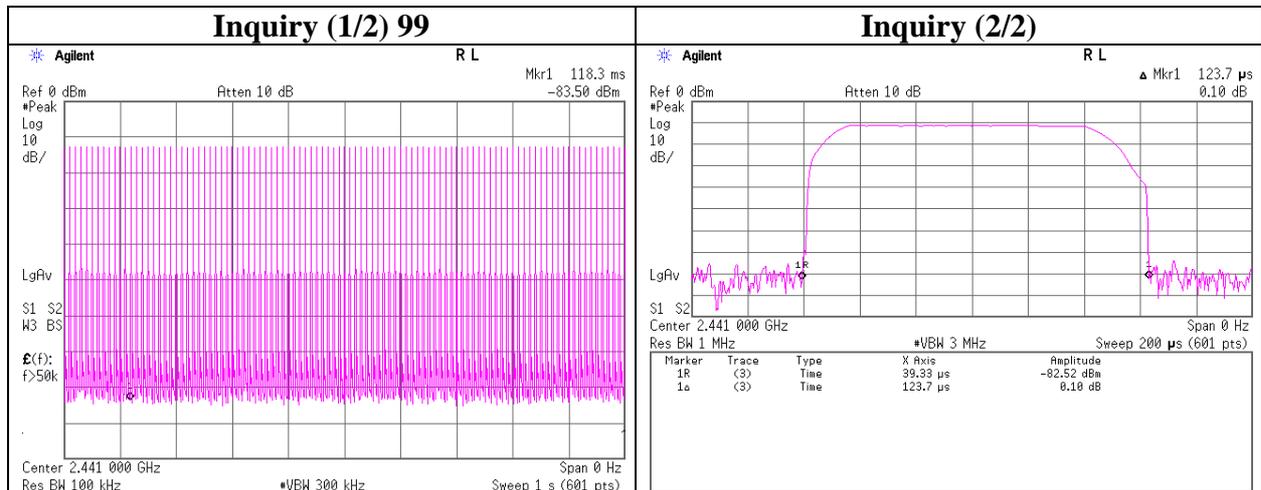
Result = Number of transmission x Length of transmission time

*Average data of 5 tests.(except Inquiry)

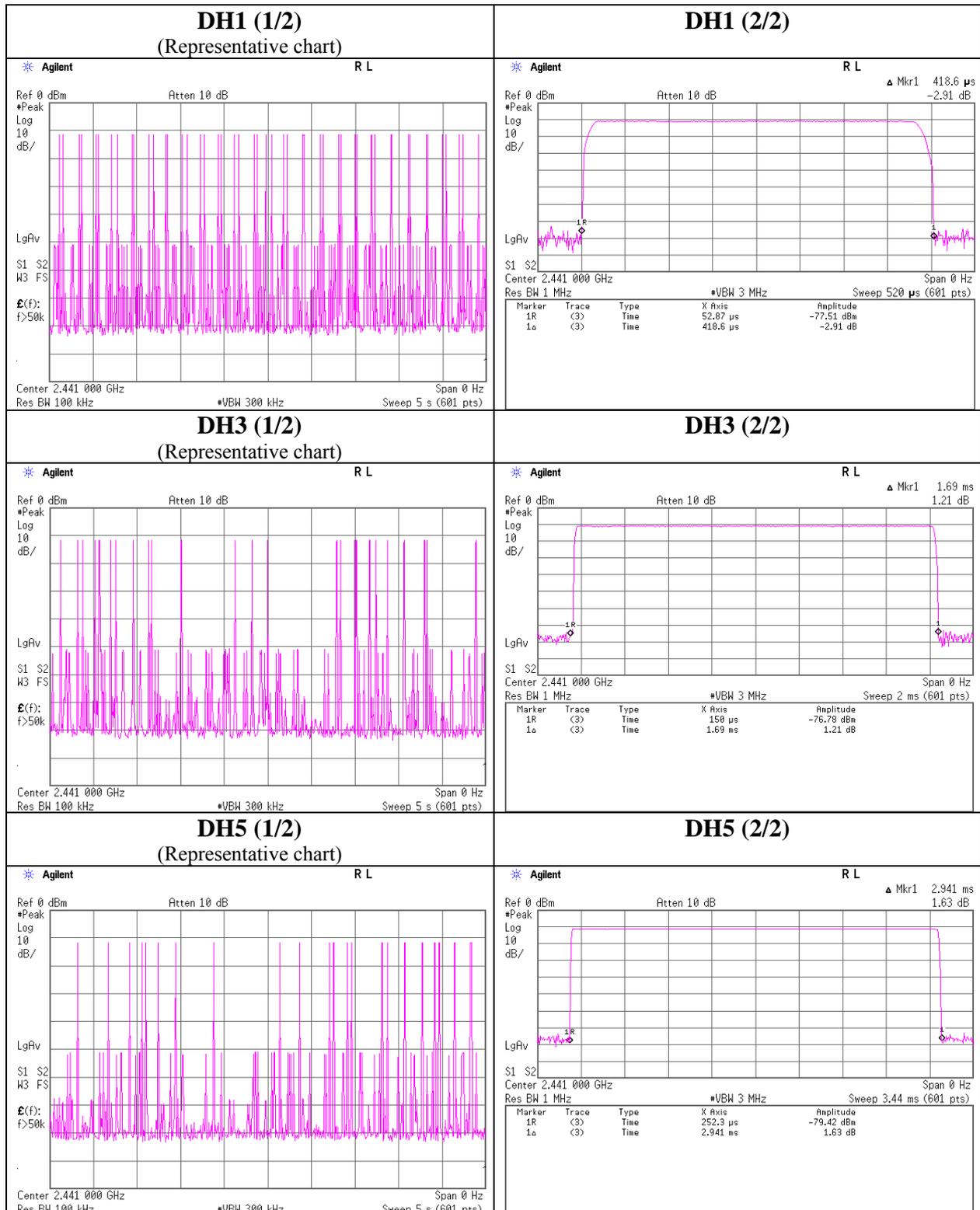
Mode	Sampling [times]					Average [times]
	1	2	3	4	5	
DH1	45	48	48	47	48	47.2
DH3	25	27	23	30	28	26.6
DH5	15	15	15	12	22	15.8
3DH1	49	49	48	49	47	48.4
3DH3	22	28	24	25	25	24.8
3DH5	19	11	18	23	15	17.2

Sample Calculation

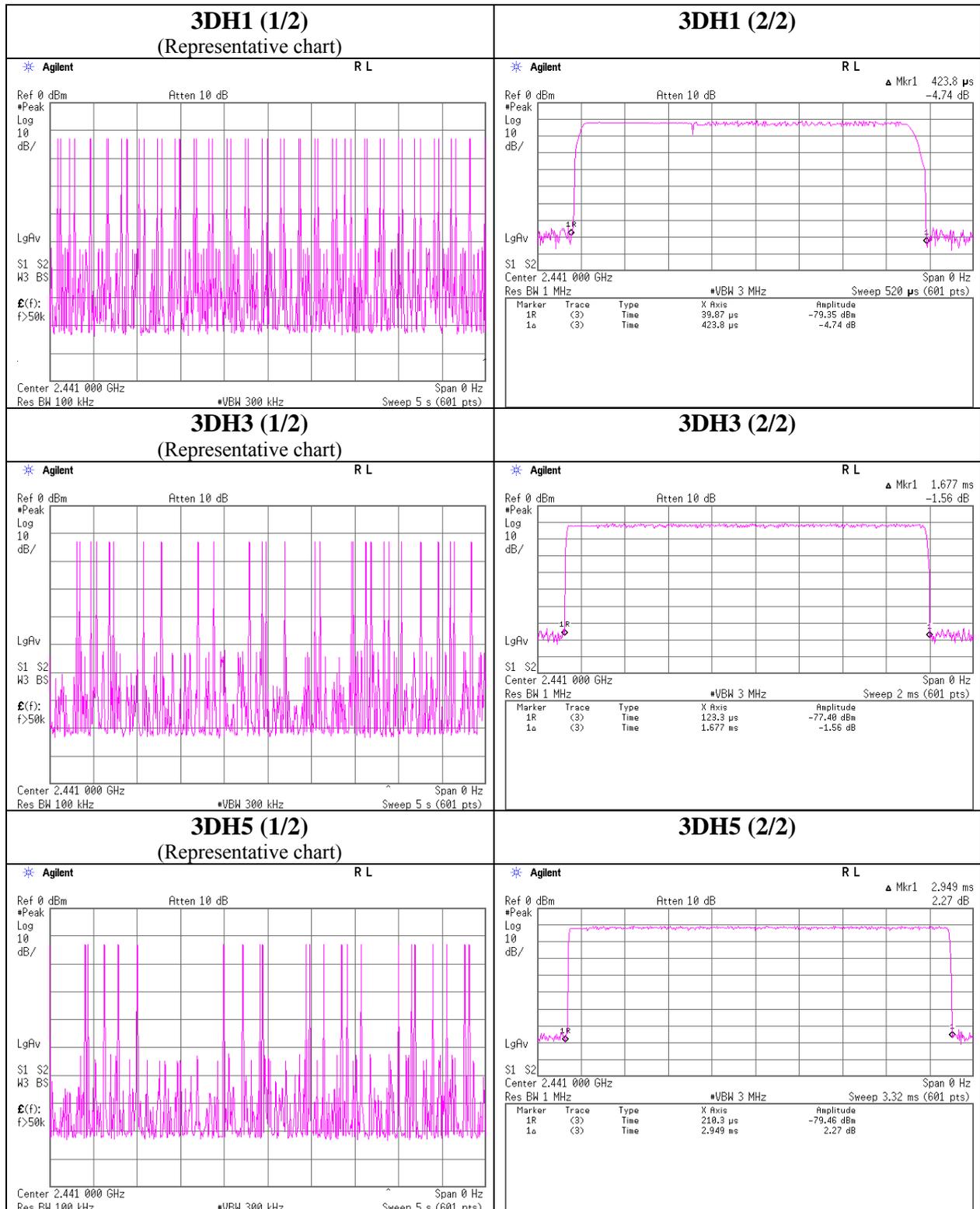
Average= Summation(Sampling 1 to 5) / 5



Dwell time



Dwell time



Radiated Spurious Emission
(Power Supply : DELTA)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/23/2012 03/24/2012 04/1/2012
Temperature/ Humidity 23 deg. C / 37% RH 23 deg. C / 37% RH 24 deg. C / 41% RH
Engineer Hiroshi Kukita Takayuki Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode Tx, DH5 2402MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	34.950	QP	23.4	16.5	7.2	32.0	15.1	40.0	24.9	
Hori	69.150	QP	42.6	6.5	7.7	32.1	24.7	40.0	15.3	
Hori	200.549	QP	31.2	16.6	8.8	31.9	24.7	43.5	18.8	
Hori	404.999	QP	34.2	17.7	10.3	32.0	30.2	46.0	15.8	
Hori	576.499	QP	40.0	20.2	11.3	32.0	39.5	46.0	6.5	
Hori	809.837	QP	27.7	23.7	12.5	31.6	32.3	46.0	13.7	
Hori	1593.950	PK	56.0	25.5	1.8	33.2	50.1	73.9	23.8	
Hori	2390.000	PK	44.9	28.1	2.2	32.2	43.0	73.9	30.9	
Hori	2399.750	PK	57.8	28.1	2.2	32.2	55.9	73.9	18.0	
Hori	2400.000	PK	61.6	28.1	2.2	32.2	59.7	-	-	See 20dBc Data Sheet
Hori	4804.000	PK	41.4	31.2	3.9	31.4	45.1	73.9	28.8	
Hori	7206.000	PK	41.1	35.6	4.6	32.4	48.9	73.9	25.0	
Hori	9608.000	PK	40.5	38.3	5.5	33.2	51.1	73.9	22.8	
Hori	24020.000	PK	47.0	38.8	-1.8	31.6	52.4	73.9	21.5	
Hori	1593.950	AV	38.6	25.5	1.8	33.2	32.7	53.9	21.2	
Hori	2390.000	AV	30.0	28.1	2.2	32.2	28.1	53.9	25.8	
Hori	2399.750	AV	48.2	28.1	2.2	32.2	46.3	53.9	7.6	
Hori	2400.000	AV	49.7	28.1	2.2	32.2	47.8	-	-	See 20dBc Data Sheet
Hori	4804.000	AV	29.8	31.2	3.9	31.4	33.5	53.9	20.4	
Hori	7206.000	AV	29.8	35.6	4.6	32.4	37.6	53.9	16.3	
Hori	9608.000	AV	30.1	38.3	5.5	33.2	40.7	53.9	13.2	
Hori	24020.000	AV	35.2	38.8	-1.8	31.6	40.6	53.9	13.3	
Vert	33.150	QP	34.7	17.3	7.1	32.0	27.0	40.0	13.0	
Vert	70.500	QP	45.6	6.4	7.7	32.1	27.4	40.0	12.6	
Vert	200.549	QP	36.2	16.6	8.8	31.9	29.7	43.5	13.8	
Vert	404.999	QP	41.5	17.7	10.3	32.0	37.5	46.0	8.5	
Vert	576.499	QP	35.1	20.2	11.3	32.0	34.6	46.0	11.4	
Vert	811.003	QP	30.4	23.7	12.5	31.6	35.0	46.0	11.0	
Vert	1595.337	PK	56.2	25.5	1.8	33.2	50.3	73.9	23.6	
Vert	2390.000	PK	45.1	28.1	2.2	32.2	43.2	73.9	30.7	
Vert	2399.715	PK	56.1	28.1	2.2	32.2	54.2	73.9	19.7	
Vert	2400.000	PK	63.8	28.1	2.2	32.2	61.9	-	-	See 20dBc Data Sheet
Vert	4804.000	PK	40.0	31.2	3.9	31.4	43.7	73.9	30.2	
Vert	7206.000	PK	41.2	35.6	4.6	32.4	49.0	73.9	24.9	
Vert	9608.000	PK	40.9	38.3	5.5	33.2	51.5	73.9	22.4	
Vert	24020.000	PK	47.5	38.8	-1.8	31.6	52.9	73.9	21.0	
Vert	1595.337	AV	41.5	25.5	1.8	33.2	35.6	53.9	18.3	
Vert	2390.000	AV	31.8	28.1	2.2	32.2	29.9	53.9	24.0	
Vert	2399.715	AV	46.4	28.1	2.2	32.2	44.5	53.9	9.4	
Vert	2400.000	AV	52.6	28.1	2.2	32.2	50.7	-	-	See 20dBc Data Sheet
Vert	4804.000	AV	29.7	31.2	3.9	31.4	33.4	53.9	20.5	
Vert	7206.000	AV	30.3	35.6	4.6	32.4	38.1	53.9	15.8	
Vert	9608.000	AV	30.2	38.3	5.5	33.2	40.8	53.9	13.1	
Vert	24020.000	AV	35.2	38.8	-1.8	31.6	40.6	53.9	13.3	

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 03/23/2012 03/24/2012 04/1/2012
Temperature/ Humidity 23 deg. C / 37% RH 23 deg. C / 37% RH 24 deg. C / 41% RH
Engineer Hiroshi Kukita Takayuki Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode Tx, DH5 2441MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	34.231	QP	23.5	16.8	7.1	32.0	15.4	40.0	24.6	
Hori	69.321	QP	42.5	6.5	7.7	32.1	24.6	40.0	15.4	
Hori	200.410	QP	32.1	16.6	8.8	31.9	25.6	43.5	17.9	
Hori	404.321	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.312	QP	40.8	20.2	11.3	32.0	40.3	46.0	5.7	
Hori	809.000	QP	27.9	23.7	12.5	31.7	32.4	46.0	13.6	
Hori	1595.917	PK	55.3	25.5	1.8	33.2	49.4	73.9	24.5	
Hori	4882.000	PK	41.8	31.4	3.8	31.4	45.6	73.9	28.3	
Hori	7323.000	PK	41.6	35.7	4.6	32.5	49.4	73.9	24.5	
Hori	9764.000	PK	41.2	38.5	5.5	33.2	52.0	73.9	21.9	
Hori	24410.000	PK	47.1	38.6	-1.7	31.6	52.4	73.9	21.5	
Hori	1595.917	AV	40.8	25.5	1.8	33.2	34.9	53.9	19.0	
Hori	4882.000	AV	29.9	31.4	3.8	31.4	33.7	53.9	20.2	
Hori	7323.000	AV	30.5	35.7	4.6	32.5	38.3	53.9	15.6	
Hori	9764.000	AV	30.3	38.5	5.5	33.2	41.1	53.9	12.8	
Hori	24410.000	AV	34.6	38.6	-1.7	31.6	39.9	53.9	14.0	
Vert	33.123	QP	34.5	17.3	7.1	32.0	26.8	40.0	13.2	
Vert	70.321	QP	46.0	6.4	7.7	32.1	27.8	40.0	12.2	
Vert	200.415	QP	36.4	16.6	8.8	31.9	29.9	43.5	13.6	
Vert	404.412	QP	41.3	17.7	10.3	32.0	37.3	46.0	8.7	
Vert	576.213	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	811.231	QP	30.8	23.7	12.5	31.6	35.4	46.0	10.6	
Vert	1595.934	PK	53.0	25.5	1.8	33.2	47.1	73.9	26.8	
Vert	4882.000	PK	41.7	31.4	3.8	31.4	45.5	73.9	28.4	
Vert	7323.000	PK	43.0	35.7	4.6	32.5	50.8	73.9	23.1	
Vert	9764.000	PK	42.4	38.5	5.5	33.2	53.2	73.9	20.7	
Vert	24410.000	PK	47.2	38.6	-1.7	31.6	52.5	73.9	21.4	
Vert	1595.934	AV	39.9	25.5	1.8	33.2	34.0	53.9	19.9	
Vert	4882.000	AV	30.7	31.4	3.8	31.4	34.5	53.9	19.4	
Vert	7323.000	AV	30.0	35.7	4.6	32.5	37.8	53.9	16.1	
Vert	9764.000	AV	30.5	38.5	5.5	33.2	41.3	53.9	12.6	
Vert	24410.000	AV	34.6	38.6	-1.7	31.6	39.9	53.9	14.0	

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 03/23/2012 03/24/2012 04/1/2012
Temperature/ Humidity 23 deg. C / 37% RH 23 deg. C / 37% RH 24 deg. C / 41% RH
Engineer Hiroshi Kukita Takayuki Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode Tx, DH5 2480MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	34.542	QP	23.9	16.7	7.1	32.0	15.7	40.0	24.3	
Hori	69.321	QP	42.5	6.5	7.7	32.1	24.6	40.0	15.4	
Hori	200.452	QP	31.4	16.6	8.8	31.9	24.9	43.5	18.6	
Hori	404.541	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.321	QP	40.9	20.2	11.3	32.0	40.4	46.0	5.6	
Hori	809.310	QP	27.9	23.7	12.5	31.7	32.4	46.0	13.6	
Hori	1595.451	PK	56.0	25.5	1.8	33.2	50.1	73.9	23.8	
Hori	2483.500	PK	47.8	28.5	2.2	32.2	46.3	73.9	27.6	
Hori	4960.000	PK	42.0	31.6	3.9	31.4	46.1	73.9	27.8	
Hori	7440.000	PK	42.8	35.8	4.7	32.5	50.8	73.9	23.1	
Hori	9920.000	PK	42.2	38.6	5.6	33.3	53.1	73.9	20.8	
Hori	24800.000	PK	48.5	38.5	-1.6	31.5	53.9	73.9	20.0	
Hori	1595.451	AV	39.8	25.5	1.8	33.2	33.9	53.9	20.0	
Hori	2483.500	AV	32.7	28.5	2.2	32.2	31.2	53.9	22.7	
Hori	4960.000	AV	30.9	31.6	3.9	31.4	35.0	53.9	18.9	
Hori	7440.000	AV	30.2	35.8	4.7	32.5	38.2	53.9	15.7	
Hori	9920.000	AV	30.6	38.6	5.6	33.3	41.5	53.9	12.4	
Hori	24800.000	AV	36.5	38.5	-1.6	31.5	41.9	53.9	12.0	
Vert	33.421	QP	34.5	17.2	7.1	32.0	26.7	40.0	13.3	
Vert	70.423	QP	45.7	6.4	7.7	32.1	27.5	40.0	12.5	
Vert	200.532	QP	36.2	16.6	8.8	31.9	29.7	43.5	13.8	
Vert	404.213	QP	41.6	17.7	10.3	32.0	37.6	46.0	8.4	
Vert	576.321	QP	35.9	20.2	11.3	32.0	35.4	46.0	10.6	
Vert	811.310	QP	31.2	23.7	12.5	31.6	35.8	46.0	10.2	
Vert	1596.683	PK	55.3	25.5	1.8	33.2	49.4	73.9	24.5	
Vert	2483.500	PK	47.1	28.5	2.2	32.2	45.6	73.9	28.3	
Vert	4960.000	PK	42.0	31.6	3.9	31.4	46.1	73.9	27.8	
Vert	7440.000	PK	41.9	35.8	4.7	32.5	49.9	73.9	24.0	
Vert	9920.000	PK	42.4	38.6	5.6	33.3	53.3	73.9	20.6	
Vert	24800.000	PK	48.4	38.5	-1.6	31.5	53.8	73.9	20.1	
Vert	1596.683	AV	41.0	25.5	1.8	33.2	35.1	53.9	18.8	
Vert	2483.500	AV	32.7	28.5	2.2	32.2	31.2	53.9	22.7	
Vert	4960.000	AV	30.2	31.6	3.9	31.4	34.3	53.9	19.6	
Vert	7440.000	AV	30.6	35.8	4.7	32.5	38.6	53.9	15.3	
Vert	9920.000	AV	30.4	38.6	5.6	33.3	41.3	53.9	12.6	
Vert	24800.000	AV	36.5	38.5	-1.6	31.5	41.9	53.9	12.0	

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 03/23/2012 03/24/2012 04/1/2012
Temperature/ Humidity 23 deg. C / 37% RH 23 deg. C / 37% RH 24 deg. C / 41% RH
Engineer Hiroshi Kukita Takayuki Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode Tx, 3DH5 2402MHz

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	23.6	16.8	7.1	32.0	15.5	40.0	24.5	
Hori	69.321	QP	42.2	6.5	7.7	32.1	24.3	40.0	15.7	
Hori	200.542	QP	32.1	16.6	8.8	31.9	25.6	43.5	17.9	
Hori	404.321	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.310	QP	40.4	20.2	11.3	32.0	39.9	46.0	6.1	
Hori	809.231	QP	27.0	23.7	12.5	31.7	31.5	46.0	14.5	
Hori	1593.425	PK	56.0	25.5	1.8	33.2	50.1	73.9	23.8	
Hori	2390.000	PK	49.8	28.1	2.2	32.2	47.9	73.9	26.0	
Hori	2400.000	PK	64.4	28.1	2.2	32.2	62.5	-	-	See 20dBc Data Sheet
Hori	4804.000	PK	41.2	31.2	3.9	31.4	44.9	73.9	29.0	
Hori	7206.000	PK	40.8	35.6	4.6	32.4	48.6	73.9	25.3	
Hori	9608.000	PK	40.9	38.3	5.5	33.2	51.5	73.9	22.4	
Hori	24020.000	PK	47.5	38.8	-1.8	31.6	52.9	73.9	21.0	
Hori	1593.425	AV	38.8	25.5	1.8	33.2	32.9	53.9	21.0	
Hori	2390.000	AV	35.3	28.1	2.2	32.2	33.4	53.9	20.5	
Hori	2400.000	AV	54.0	28.1	2.2	32.2	52.1	-	-	See 20dBc Data Sheet
Hori	4804.000	AV	30.0	31.2	3.9	31.4	33.7	53.9	20.2	
Hori	7206.000	AV	30.4	35.6	4.6	32.4	38.2	53.9	15.7	
Hori	9608.000	AV	30.2	38.3	5.5	33.2	40.8	53.9	13.1	
Hori	24020.000	AV	35.2	38.8	-1.8	31.6	40.6	53.9	13.3	
Vert	33.412	QP	34.5	17.2	7.1	32.0	26.7	40.0	13.3	
Vert	70.321	QP	45.8	6.4	7.7	32.1	27.6	40.0	12.4	
Vert	200.542	QP	36.5	16.6	8.8	31.9	30.0	43.5	13.5	
Vert	404.232	QP	42.1	17.7	10.3	32.0	38.1	46.0	7.9	
Vert	576.431	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	811.231	QP	30.5	23.7	12.5	31.6	35.1	46.0	10.9	
Vert	1593.533	PK	53.6	25.5	1.8	33.2	47.7	73.9	26.2	
Vert	2390.000	PK	48.1	28.1	2.2	32.2	46.2	73.9	27.7	
Vert	2400.000	PK	64.8	28.1	2.2	32.2	62.9	-	-	See 20dBc Data Sheet
Vert	4804.000	PK	41.1	31.2	3.9	31.4	44.8	73.9	29.1	
Vert	7206.000	PK	41.3	35.6	4.6	32.4	49.1	73.9	24.8	
Vert	9608.000	PK	41.0	38.3	5.5	33.2	51.6	73.9	22.3	
Vert	24020.000	PK	47.2	38.8	-1.8	31.6	52.6	73.9	21.3	
Vert	1593.533	AV	38.9	25.5	1.8	33.2	33.0	53.9	20.9	
Vert	2390.000	AV	33.8	28.1	2.2	32.2	31.9	53.9	22.0	
Vert	2400.000	AV	52.9	28.1	2.2	32.2	51.0	-	-	See 20dBc Data Sheet
Vert	4804.000	AV	29.8	31.2	3.9	31.4	33.5	53.9	20.4	
Vert	7206.000	AV	30.5	35.6	4.6	32.4	38.3	53.9	15.6	
Vert	9608.000	AV	30.2	38.3	5.5	33.2	40.8	53.9	13.1	
Vert	24020.000	AV	35.2	38.8	-1.8	31.6	40.6	53.9	13.3	

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 : 03/23/2012
Temperature/ Humidity : 23 deg. C / 37% RH
Engineer : Hiroshi Kukita
Mode : Tx, 3DH5 2402MHz

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	2402.000	PK	94.5	28.1	2.2	32.2	92.6	-	-	Carrier
Hori	2400.000	PK	51.9	28.1	2.2	32.2	50.0	72.6	22.6	
Vert	2402.000	PK	97.6	28.1	2.2	32.2	95.7	-	-	Carrier
Vert	2400.000	PK	55.4	28.1	2.2	32.2	53.5	75.7	22.2	

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

Radiated Spurious Emission
(Power Supply : DELTA)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 32GE0144-HO-01
Date 03/23/2012 03/24/2012 04/1/2012
Temperature/ Humidity 23 deg. C / 37% RH 23 deg. C / 37% RH 24 deg. C / 41% RH
Engineer Hiroshi Kukita Takayuki Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode Tx, 3DH5 2441MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	34.565	QP	23.3	16.7	7.1	32.0	15.1	40.0	24.9	
Hori	69.231	QP	42.1	6.5	7.7	32.1	24.2	40.0	15.8	
Hori	200.548	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	576.321	QP	40.8	20.2	11.3	32.0	40.3	46.0	5.7	
Hori	809.321	QP	27.6	23.7	12.5	31.7	32.1	46.0	13.9	
Hori	1595.917	PK	56.5	25.5	1.8	33.2	50.6	73.9	23.3	
Hori	4882.000	PK	41.7	31.4	3.8	31.4	45.5	73.9	28.4	
Hori	7323.000	PK	41.1	35.7	4.6	32.5	48.9	73.9	25.0	
Hori	9764.000	PK	40.9	38.5	5.5	33.2	51.7	73.9	22.2	
Hori	24410.000	PK	47.2	38.6	-1.7	31.6	52.5	73.9	21.4	
Hori	1595.917	AV	38.4	25.5	1.8	33.2	32.5	53.9	21.4	
Hori	4882.000	AV	30.1	31.4	3.8	31.4	33.9	53.9	20.0	
Hori	7323.000	AV	30.3	35.7	4.6	32.5	38.1	53.9	15.8	
Hori	9764.000	AV	30.2	38.5	5.5	33.2	41.0	53.9	12.9	
Hori	24410.000	AV	34.6	38.6	-1.7	31.6	39.9	53.9	14.0	
Vert	34.121	QP	34.2	16.9	7.1	32.0	26.1	40.0	13.9	
Vert	70.453	QP	45.2	6.4	7.7	32.1	27.0	40.0	13.0	
Vert	200.542	QP	36.7	16.6	8.8	31.9	30.2	43.5	13.3	
Vert	404.231	QP	41.2	17.7	10.3	32.0	37.2	46.0	8.8	
Vert	576.321	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	811.231	QP	30.2	23.7	12.5	31.6	34.8	46.0	11.2	
Vert	1595.934	PK	59.0	25.5	1.8	33.2	53.1	73.9	20.8	
Vert	4882.000	PK	40.0	31.4	3.8	31.4	43.8	73.9	30.1	
Vert	7323.000	PK	41.4	35.7	4.6	32.5	49.2	73.9	24.7	
Vert	9764.000	PK	42.3	38.5	5.5	33.2	53.1	73.9	20.8	
Vert	24410.000	PK	47.2	38.6	-1.7	31.6	52.5	73.9	21.4	
Vert	1595.934	AV	44.3	25.5	1.8	33.2	38.4	53.9	15.5	
Vert	4882.000	AV	30.4	31.4	3.8	31.4	34.2	53.9	19.7	
Vert	7323.000	AV	30.2	35.7	4.6	32.5	38.0	53.9	15.9	
Vert	9764.000	AV	30.2	38.5	5.5	33.2	41.0	53.9	12.9	
Vert	24410.000	AV	34.6	38.6	-1.7	31.6	39.9	53.9	14.0	

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 03/23/2012 03/24/2012 04/1/2012
Temperature/ Humidity 23 deg. C / 37% RH 23 deg. C / 37% RH 24 deg. C / 41% RH
Engineer Hiroshi Kukita Takayuki Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode Tx, 3DH5 2480MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	34.521	QP	23.9	16.7	7.1	32.0	15.7	40.0	24.3	
Hori	69.213	QP	42.5	6.5	7.7	32.1	24.6	40.0	15.4	
Hori	200.523	QP	32.4	16.6	8.8	31.9	25.9	43.5	17.6	
Hori	404.231	QP	34.5	17.7	10.3	32.0	30.5	46.0	15.5	
Hori	576.423	QP	41.1	20.2	11.3	32.0	40.6	46.0	5.4	
Hori	809.310	QP	28.1	23.7	12.5	31.7	32.6	46.0	13.4	
Hori	1595.422	PK	56.9	25.5	1.8	33.2	51.0	73.9	22.9	
Hori	2483.500	PK	57.8	28.5	2.2	32.2	56.3	73.9	17.6	
Hori	4960.000	PK	41.4	31.6	3.9	31.4	45.5	73.9	28.4	
Hori	7440.000	PK	42.2	35.8	4.7	32.5	50.2	73.9	23.7	
Hori	9920.000	PK	41.2	38.6	5.6	33.3	52.1	73.9	21.8	
Hori	24800.000	PK	48.5	38.5	-1.6	31.5	53.9	73.9	20.0	
Hori	1595.422	AV	38.3	25.5	1.8	33.2	32.4	53.9	21.5	
Hori	2483.500	AV	35.2	28.5	2.2	32.2	33.7	53.9	20.2	
Hori	4960.000	AV	30.5	31.6	3.9	31.4	34.6	53.9	19.3	
Hori	7440.000	AV	30.1	35.8	4.7	32.5	38.1	53.9	15.8	
Hori	9920.000	AV	30.3	38.6	5.6	33.3	41.2	53.9	12.7	
Hori	24800.000	AV	36.5	38.5	-1.6	31.5	41.9	53.9	12.0	
Vert	33.452	QP	34.6	17.2	7.1	32.0	26.8	40.0	13.2	
Vert	70.421	QP	45.9	6.4	7.7	32.1	27.7	40.0	12.3	
Vert	200.543	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	576.231	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	811.310	QP	31.0	23.7	12.5	31.6	35.6	46.0	10.4	
Vert	1593.627	PK	55.2	25.5	1.8	33.2	49.3	73.9	24.6	
Vert	2483.500	PK	59.4	28.5	2.2	32.2	57.9	73.9	16.0	
Vert	4960.000	PK	41.5	31.6	3.9	31.4	45.6	73.9	28.3	
Vert	7440.000	PK	41.3	35.8	4.7	32.5	49.3	73.9	24.6	
Vert	9920.000	PK	41.4	38.6	5.6	33.3	52.3	73.9	21.6	
Vert	24800.000	PK	48.4	38.5	-1.6	31.5	53.8	73.9	20.1	
Vert	1593.627	AV	39.1	25.5	1.8	33.2	33.2	53.9	20.7	
Vert	2483.500	AV	36.2	28.5	2.2	32.2	34.7	53.9	19.2	
Vert	4960.000	AV	30.1	31.6	3.9	31.4	34.2	53.9	19.7	
Vert	7440.000	AV	30.2	35.8	4.7	32.5	38.2	53.9	15.7	
Vert	9920.000	AV	30.3	38.6	5.6	33.3	41.2	53.9	12.7	
Vert	24800.000	AV	36.5	38.5	-1.6	31.5	41.9	53.9	12.0	

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 03/23/2012 03/24/2012 04/1/2012
Temperature/ Humidity 23 deg. C / 37% RH 23 deg. C / 37% RH 24 deg. C / 41% RH
Engineer Hiroshi Kukita Takayuki Shimada Tomotaka Sasagawa
(1-10GHz) (10-26.5GHz) (30-1000MHz)
Mode Tx, 3DH5 2441MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	34.523	QP	23.5	16.7	7.1	32.0	15.3	40.0	24.7	
Hori	69.231	QP	42.2	6.5	7.7	32.1	24.3	40.0	15.7	
Hori	200.542	QP	32.1	16.6	8.8	31.9	25.6	43.5	17.9	
Hori	404.232	QP	34.1	17.7	10.3	32.0	30.1	46.0	15.9	
Hori	576.232	QP	40.9	20.2	11.3	32.0	40.4	46.0	5.6	
Hori	809.421	QP	28.1	23.7	12.5	31.7	32.6	46.0	13.4	
Hori	1595.733	PK	56.8	25.5	1.8	33.2	50.9	73.9	23.0	
Hori	4882.000	PK	41.2	31.4	3.8	31.4	45.0	73.9	28.9	
Hori	7323.000	PK	41.4	35.7	4.6	32.5	49.2	73.9	24.7	
Hori	9764.000	PK	41.0	38.5	5.5	33.2	51.8	73.9	22.1	
Hori	24410.000	PK	46.8	38.6	-1.7	31.6	52.1	73.9	21.8	
Hori	1595.733	AV	42.6	25.5	1.8	33.2	36.7	53.9	17.2	
Hori	4882.000	AV	30.3	31.4	3.8	31.4	34.1	53.9	19.8	
Hori	7323.000	AV	30.2	35.7	4.6	32.5	38.0	53.9	15.9	
Hori	9764.000	AV	30.5	38.5	5.5	33.2	41.3	53.9	12.6	
Hori	24410.000	AV	34.6	38.6	-1.7	31.6	39.9	53.9	14.0	
Vert	34.210	QP	31.2	16.8	7.1	32.0	23.0	40.0	17.0	
Vert	70.532	QP	45.3	6.4	7.7	32.1	27.1	40.0	12.9	
Vert	200.432	QP	36.5	16.6	8.8	31.9	30.0	43.5	13.5	
Vert	404.231	QP	42.1	17.7	10.3	32.0	38.1	46.0	7.9	
Vert	576.442	QP	35.4	20.2	11.3	32.0	34.9	46.0	11.1	
Vert	811.232	QP	31.2	23.7	12.5	31.6	35.8	46.0	10.2	
Vert	1596.117	PK	54.8	25.5	1.8	33.2	48.9	73.9	25.0	
Vert	4882.000	PK	41.0	31.4	3.8	31.4	44.8	73.9	29.1	
Vert	7323.000	PK	41.2	35.7	4.6	32.5	49.0	73.9	24.9	
Vert	9764.000	PK	42.1	38.5	5.5	33.2	52.9	73.9	21.0	
Vert	24410.000	PK	47.0	38.6	-1.7	31.6	52.3	73.9	21.6	
Vert	1596.117	AV	37.9	25.5	1.8	33.2	32.0	53.9	21.9	
Vert	4882.000	AV	30.2	31.4	3.8	31.4	34.0	53.9	19.9	
Vert	7323.000	AV	30.4	35.7	4.6	32.5	38.2	53.9	15.7	
Vert	9764.000	AV	30.1	38.5	5.5	33.2	40.9	53.9	13.0	
Vert	24410.000	AV	34.6	38.6	-1.7	31.6	39.9	53.9	14.0	

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

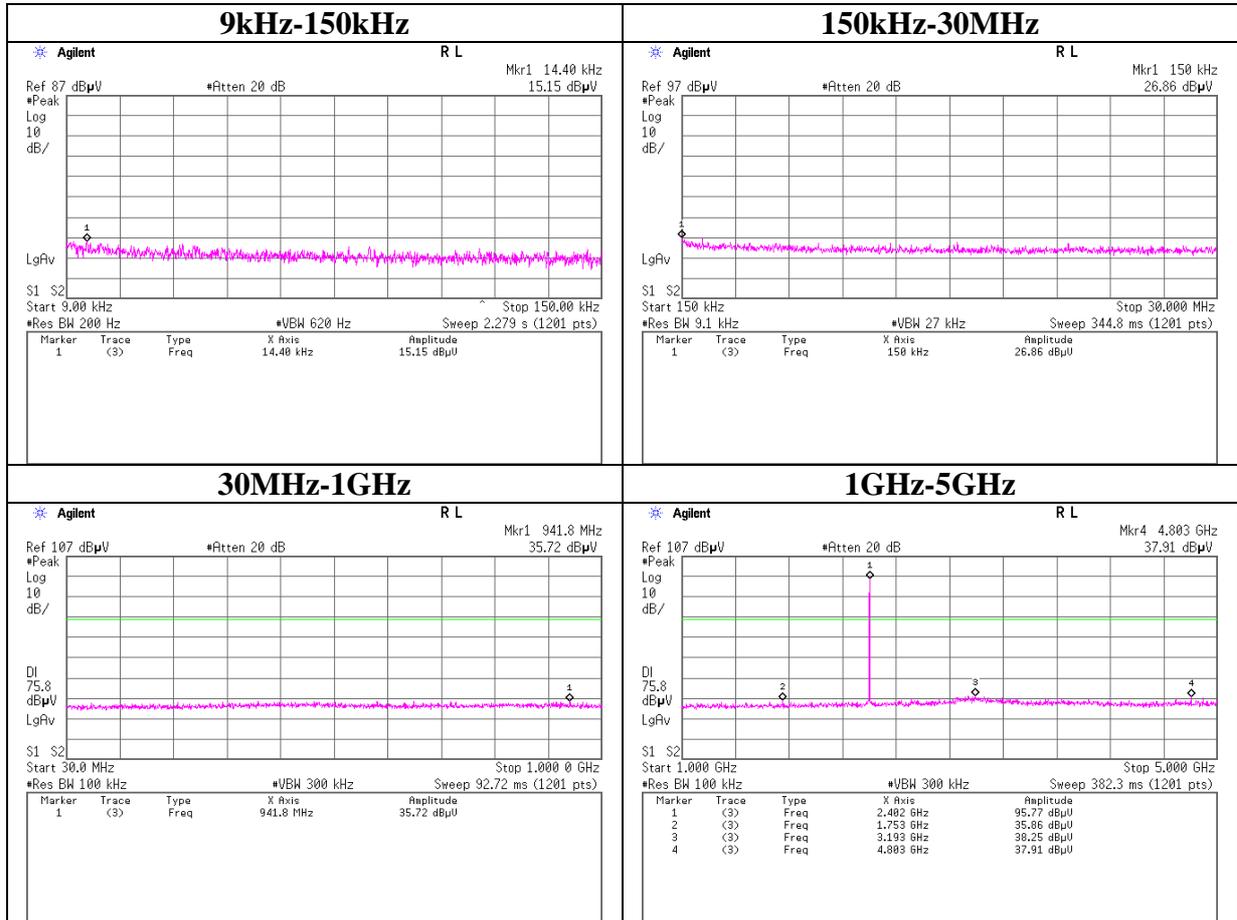
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

*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

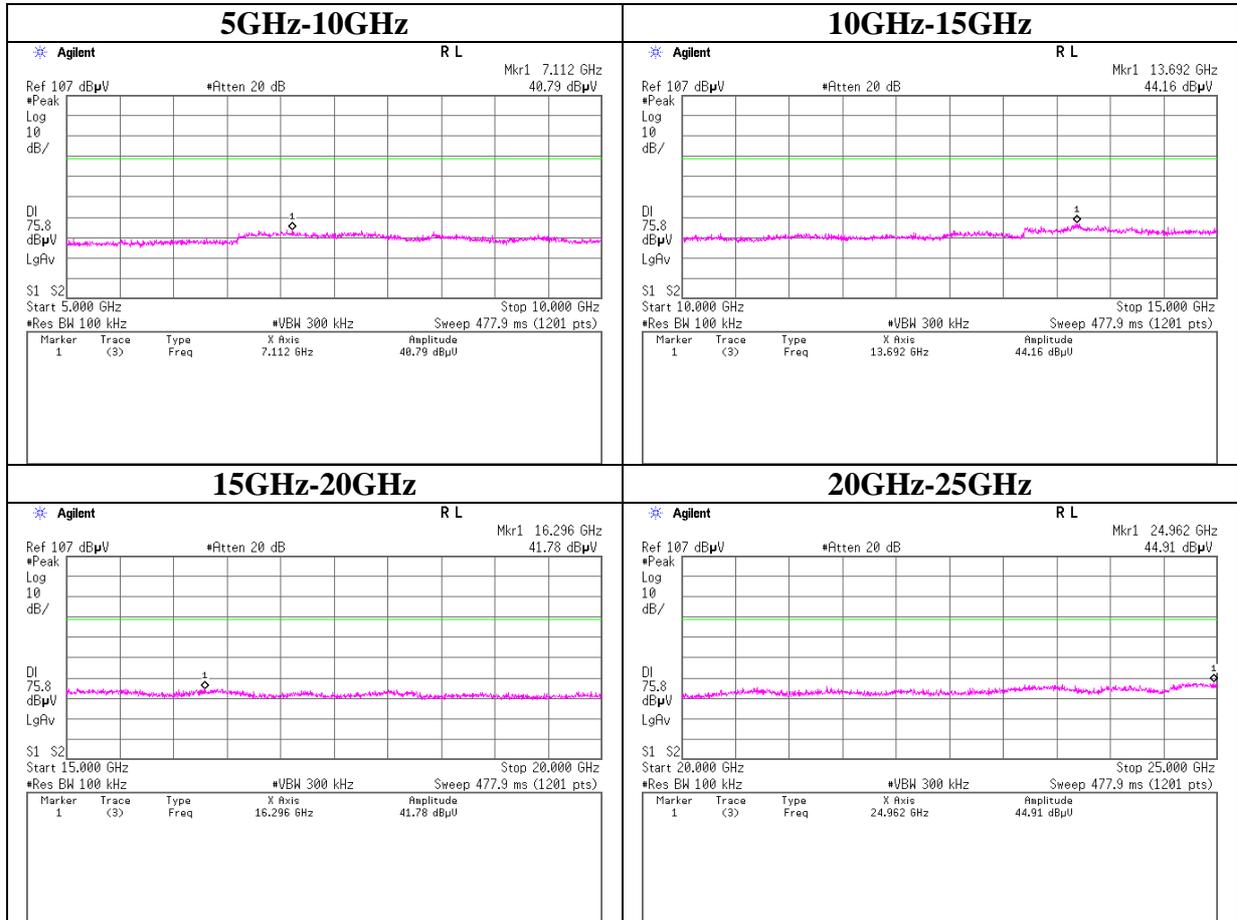
Conducted Spurious Emission

Tx DH5 2402MHz



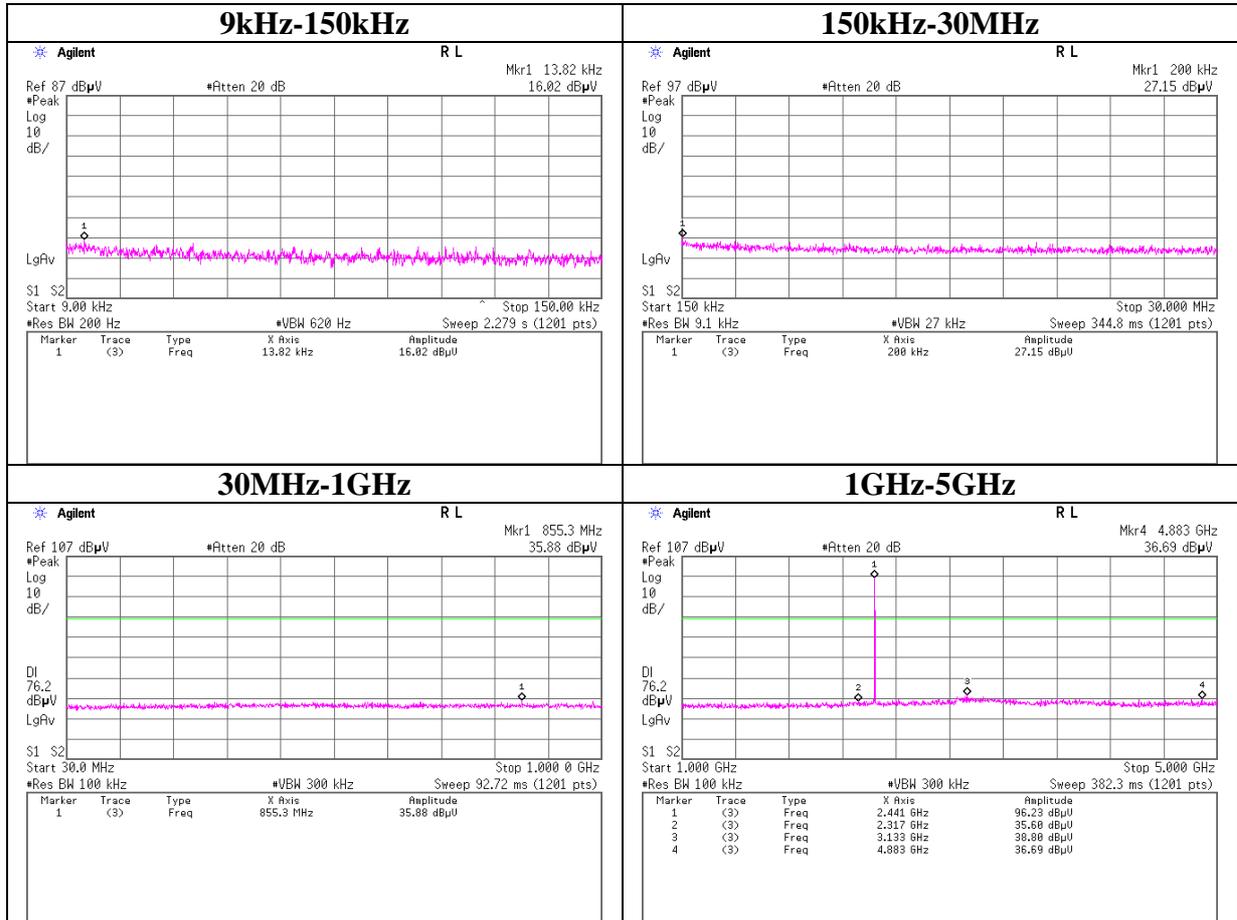
Conducted Spurious Emission

Tx DH5 2402MHz



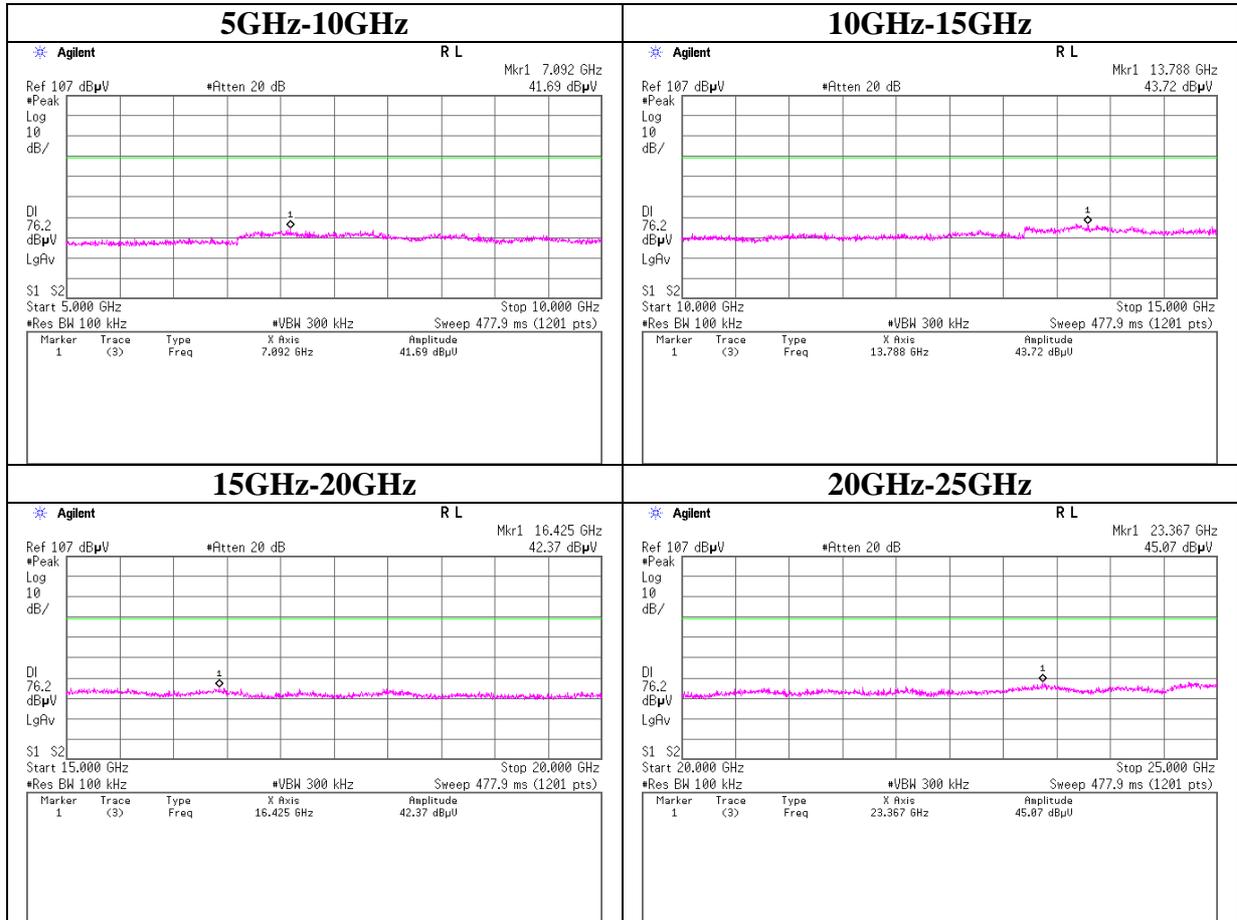
Conducted Spurious Emission

Tx DH5 2441MHz



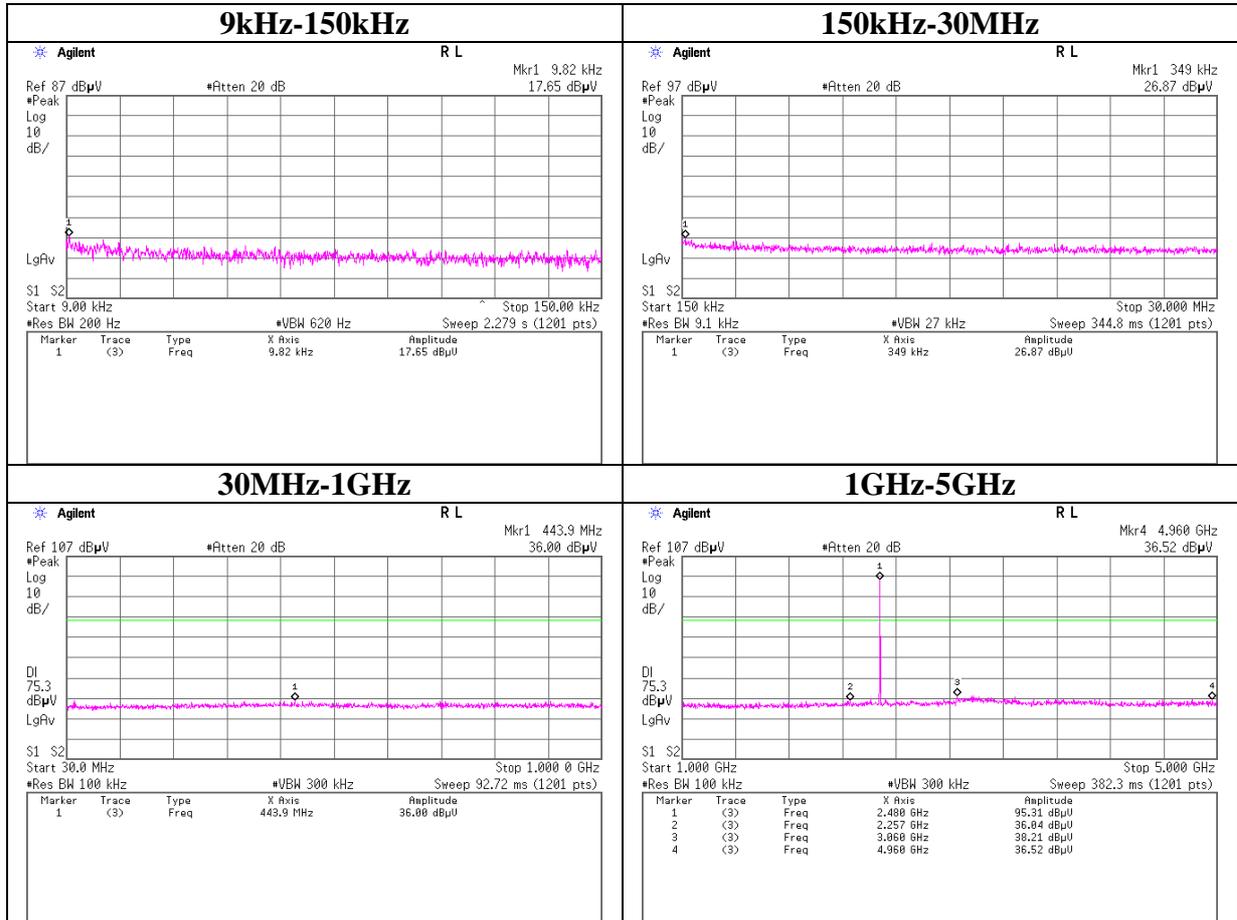
Conducted Spurious Emission

Tx DH5 2441MHz



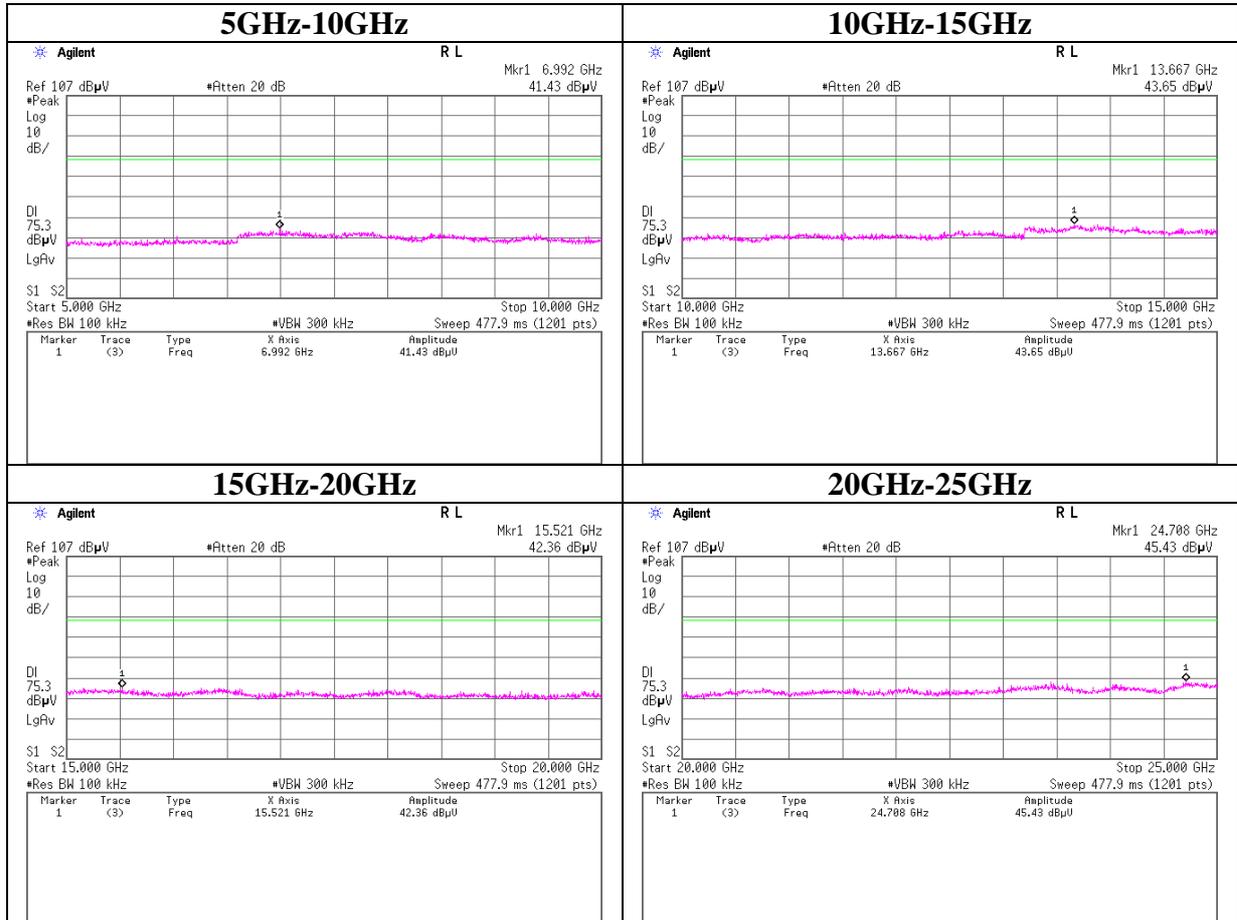
Conducted Spurious Emission

Tx DH5 2480MHz



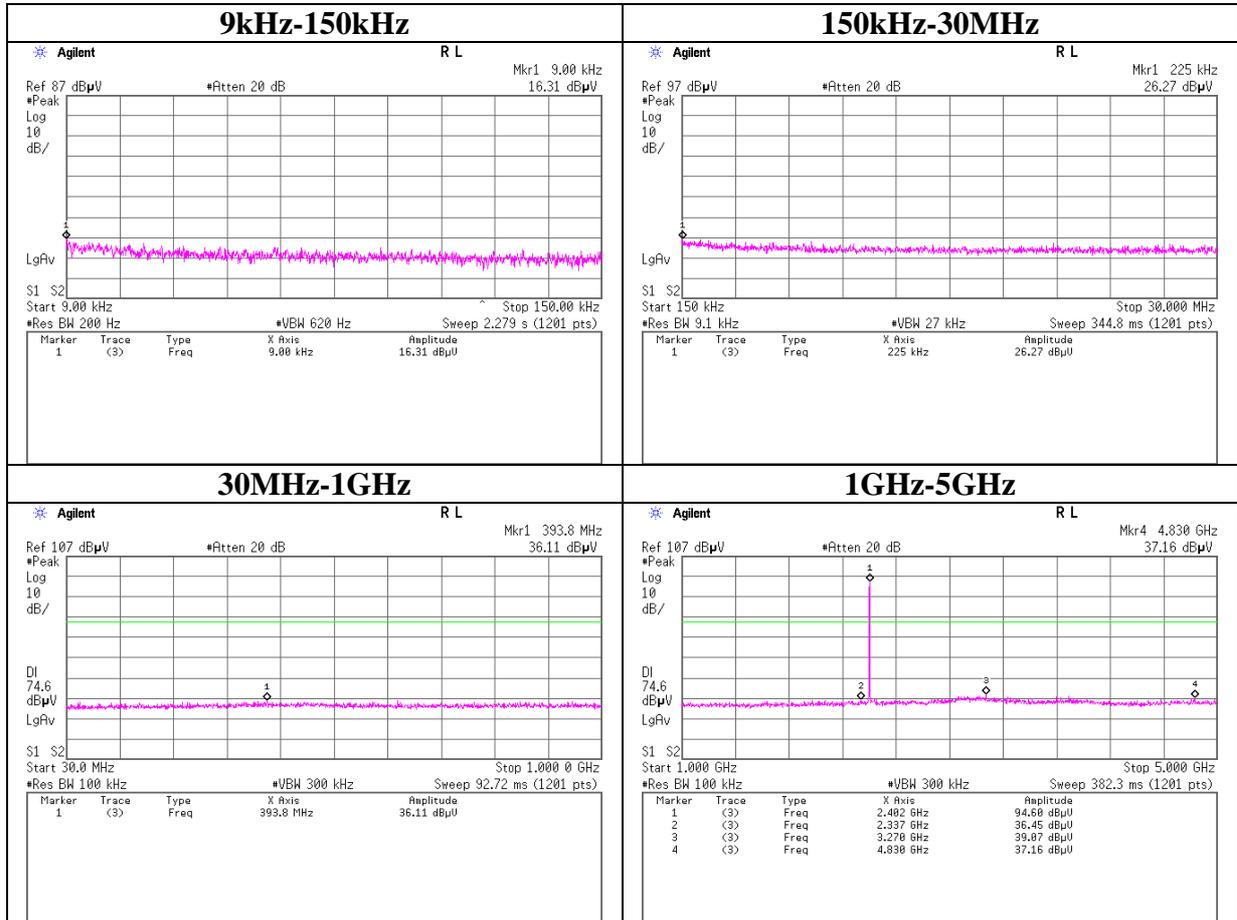
Conducted Spurious Emission

Tx DH5 2480MHz



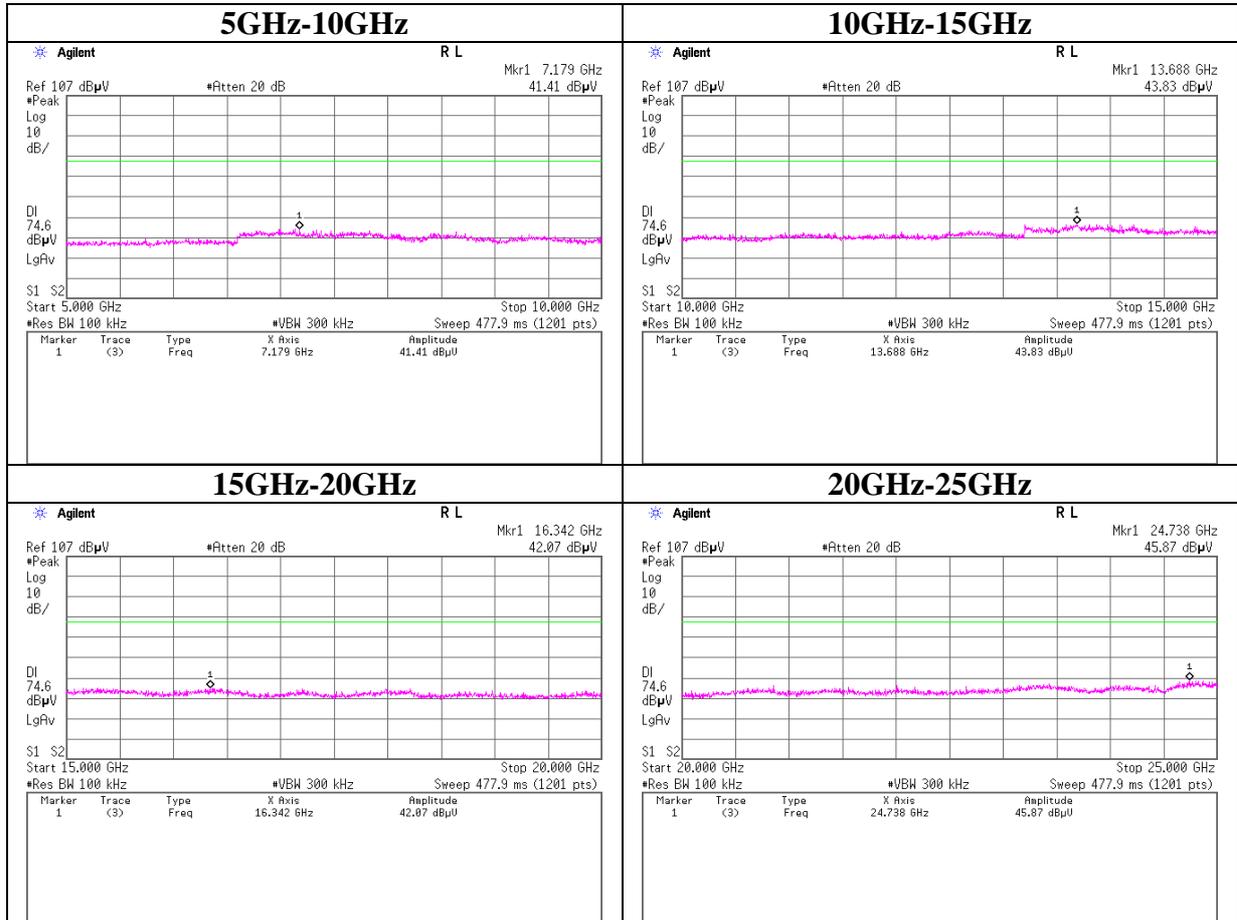
Conducted Spurious Emission

Tx 3DH5 2402MHz



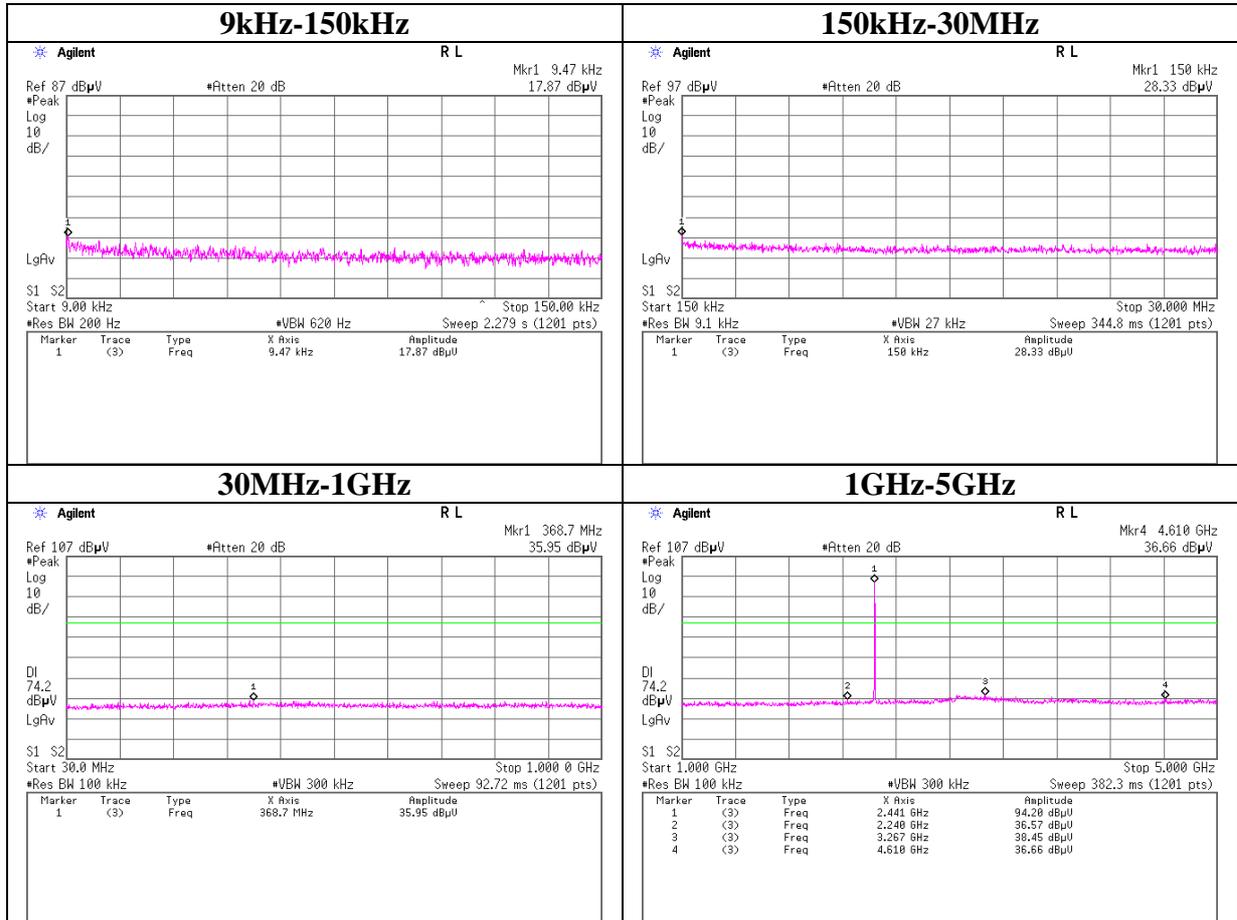
Conducted Spurious Emission

Tx 3DH5 2402MHz



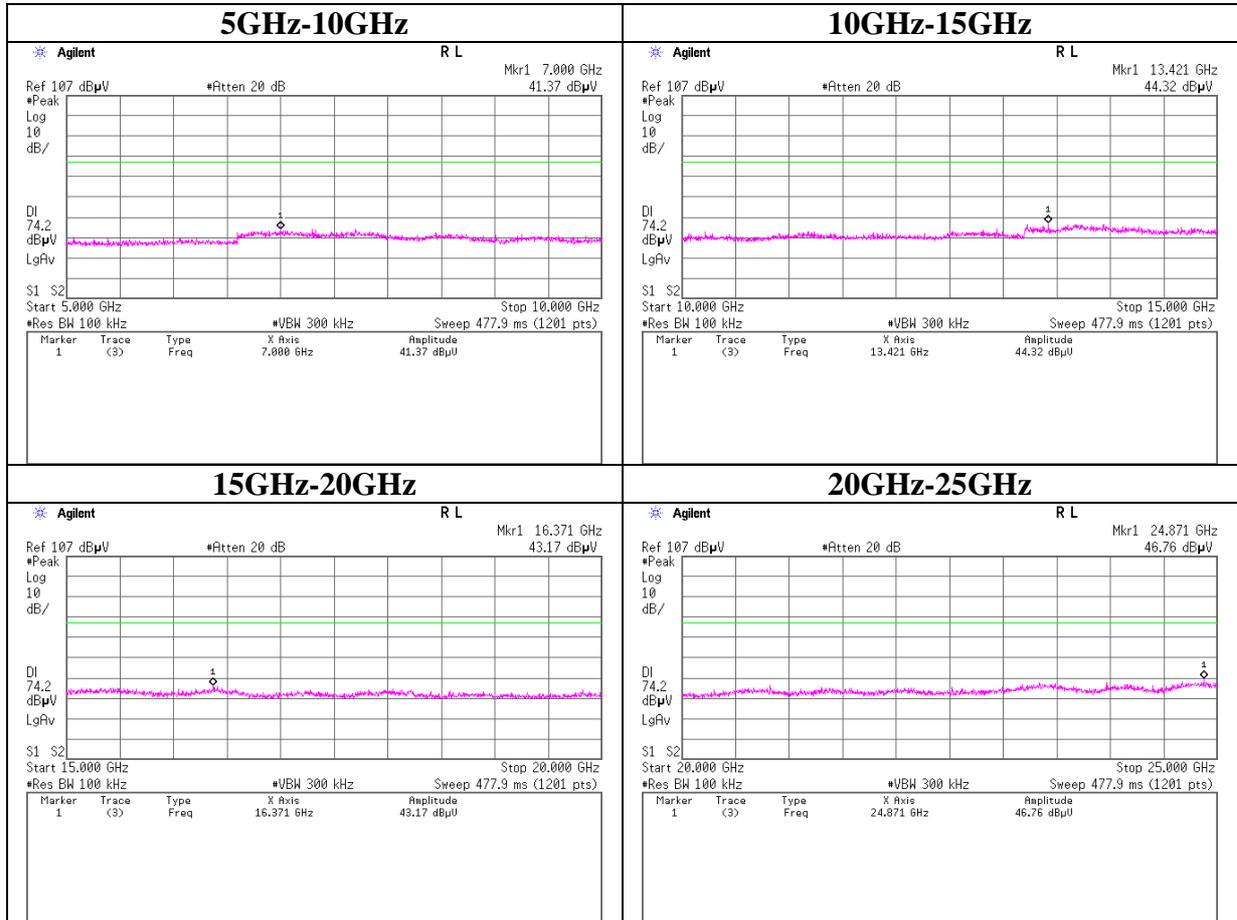
Conducted Spurious Emission

Tx 3DH5 2441MHz



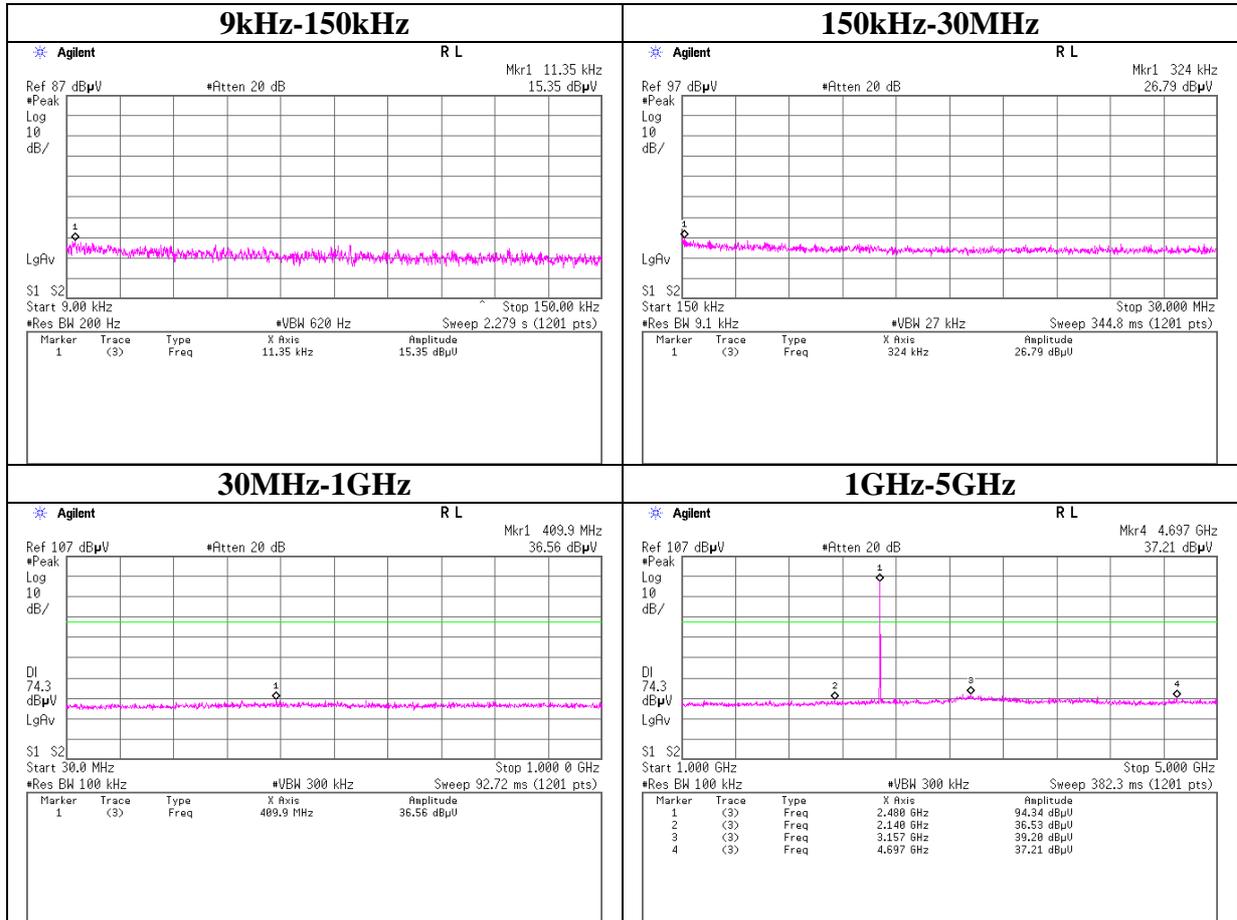
Conducted Spurious Emission

Tx 3DH5 2441MHz



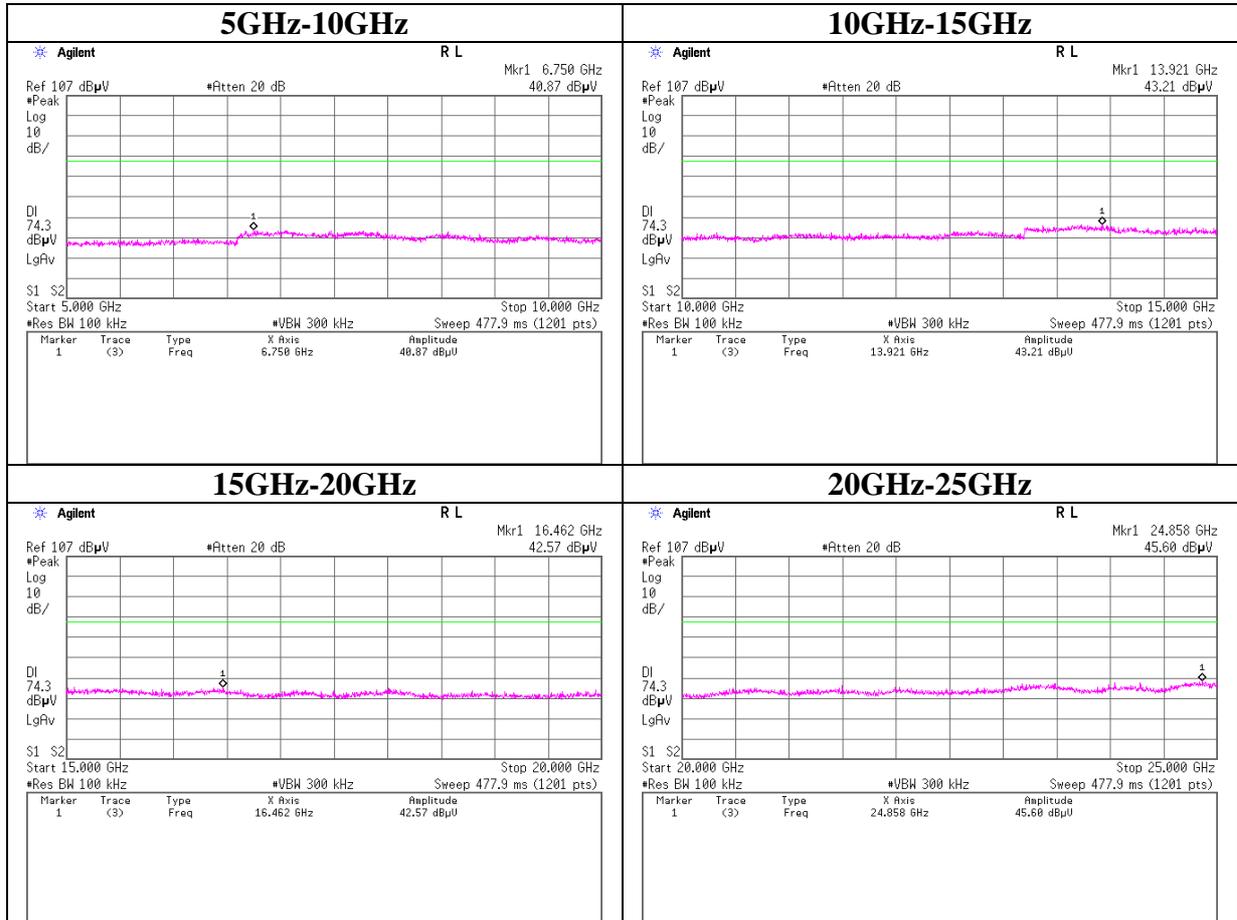
Conducted Spurious Emission

Tx 3DH5 2480MHz



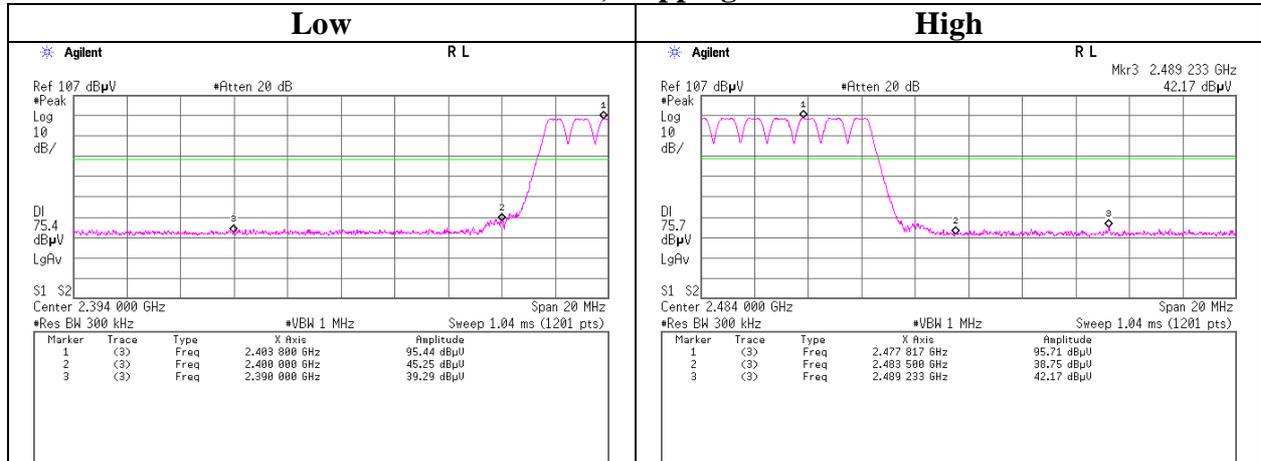
Conducted Spurious Emission

Tx 3DH5 2480MHz

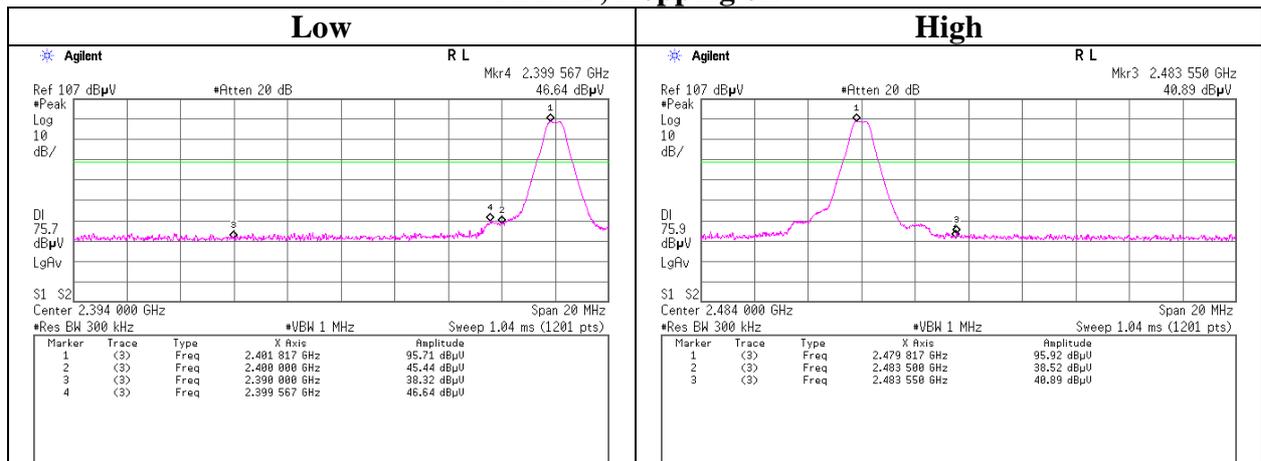


Conducted Emission Band Edge compliance

Tx DH5, Hopping on

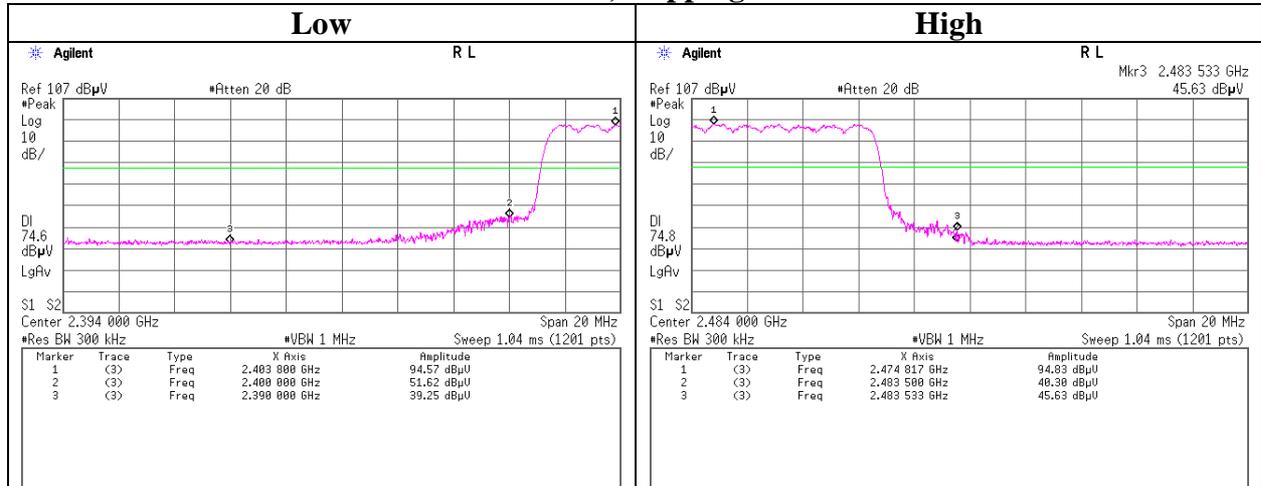


Tx DH5, Hopping off

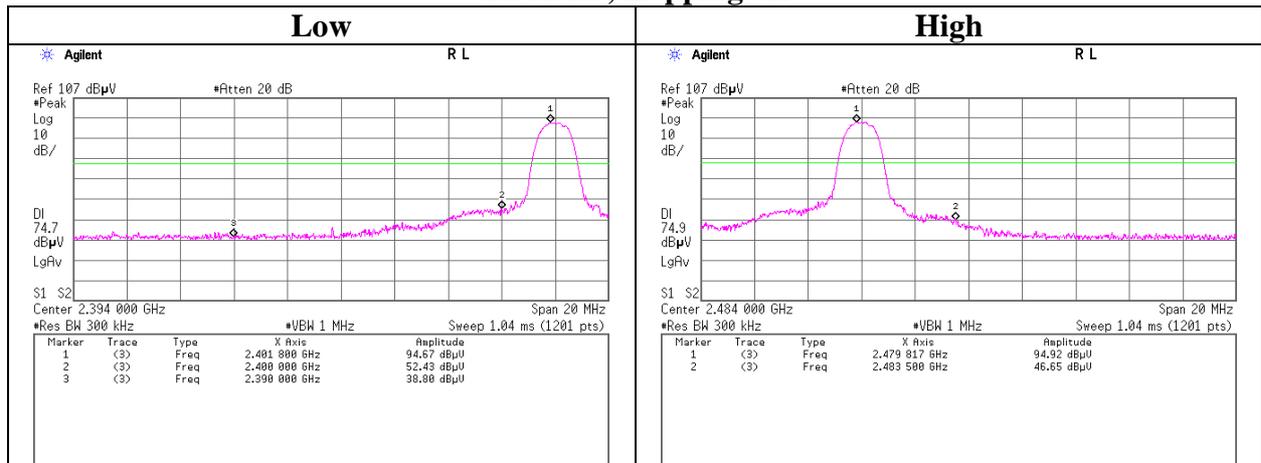


Conducted Emission Band Edge compliance

Tx 3DH5, Hopping on

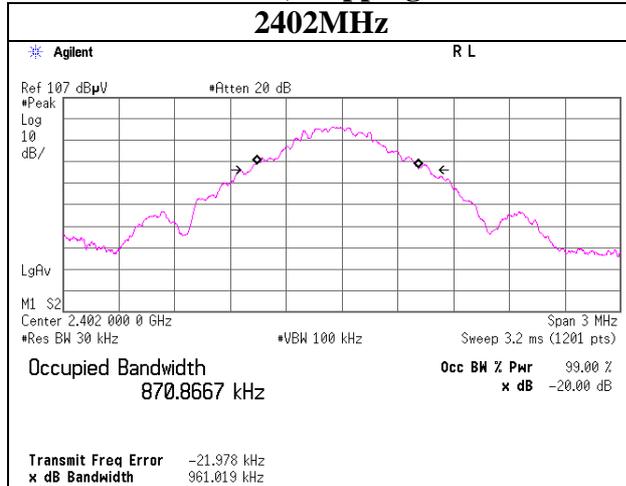


Tx 3DH5, Hopping off

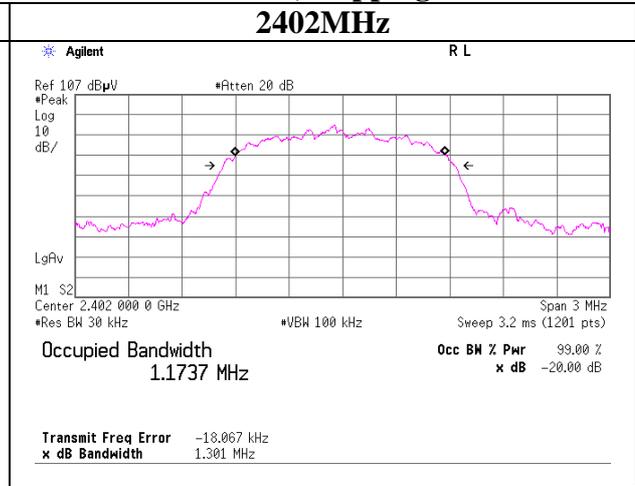


99%Occupied Bandwidth

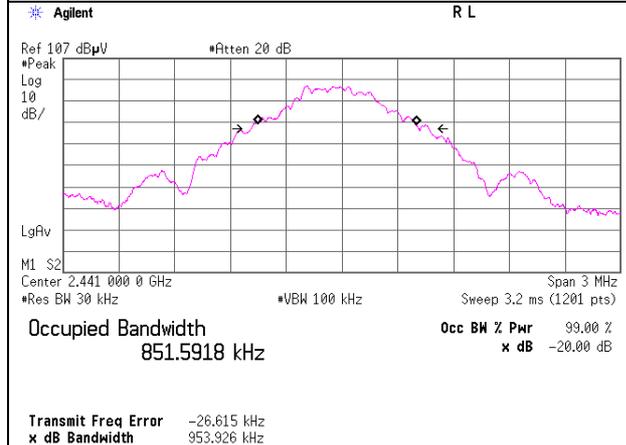
Tx DH5, Hopping off



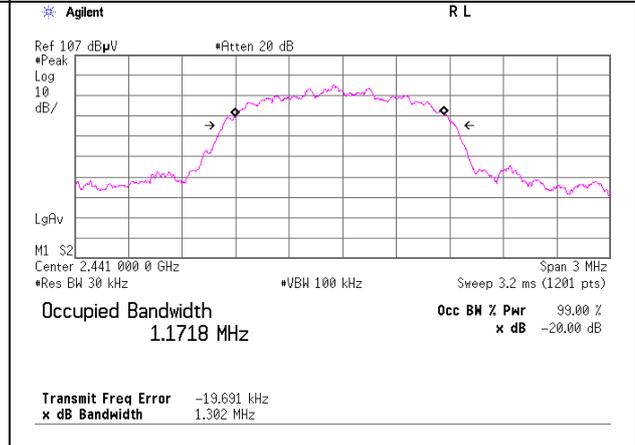
Tx 3DH5, Hopping off



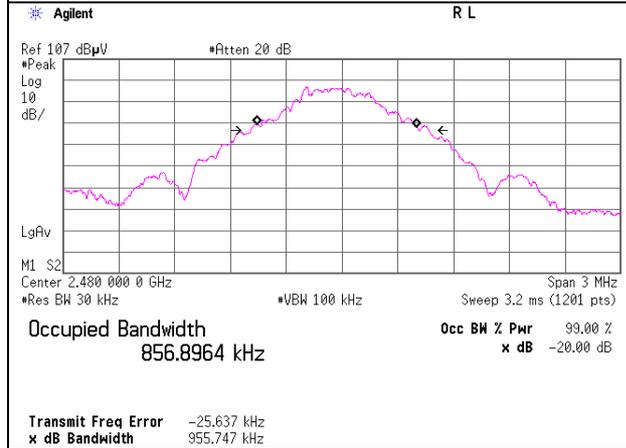
2441MHz



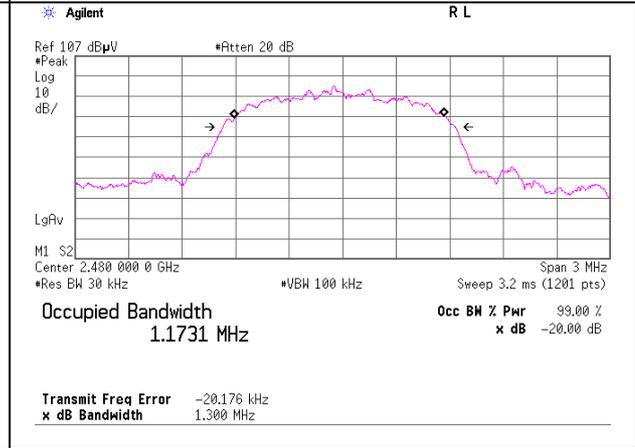
2441MHz



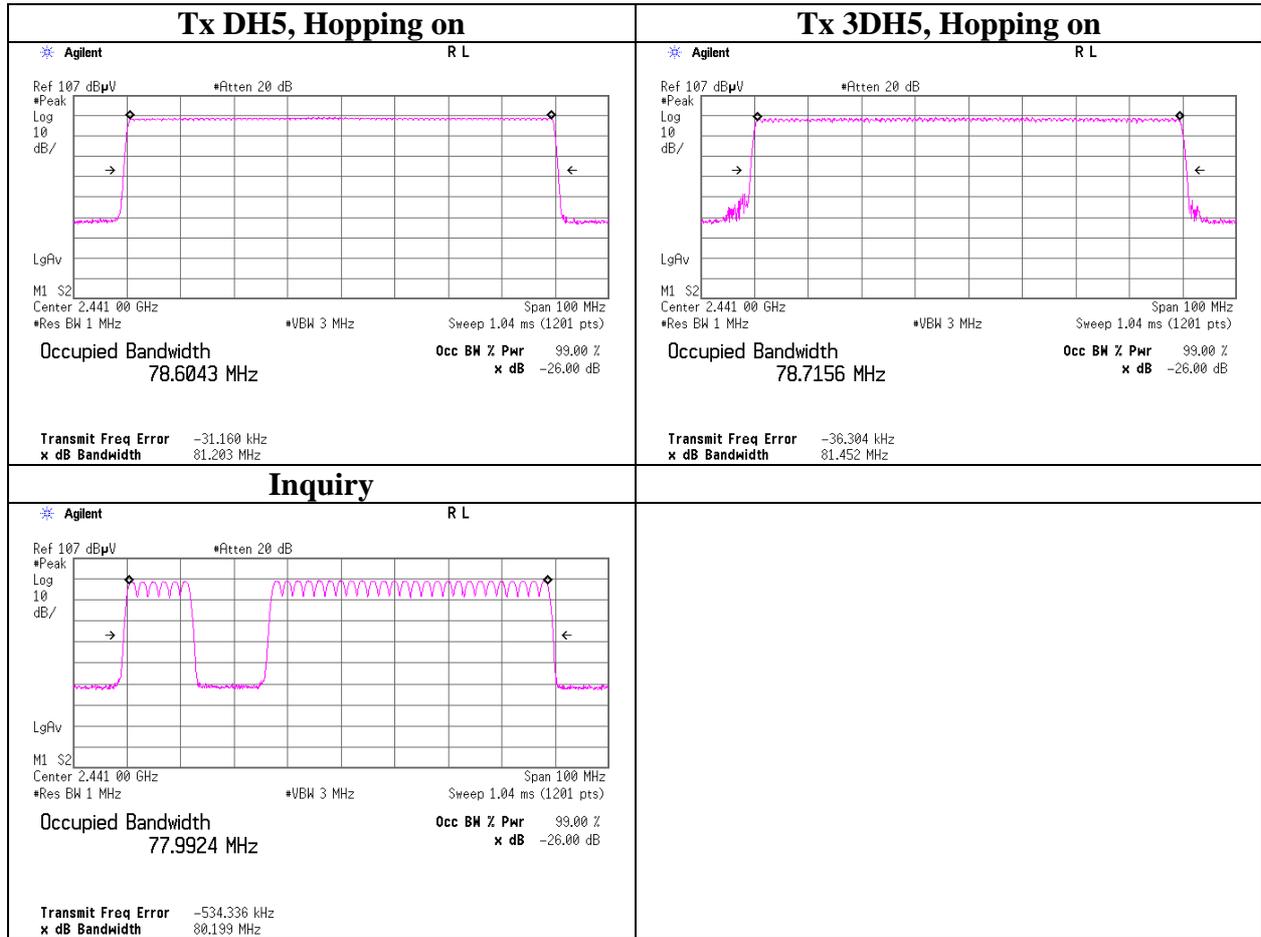
2480MHz



2480MHz



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/RE	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	-
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
MHA-17	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170307	RE	2011/06/17 * 12
MHF-06	High Pass Filter 3.5-24GHz	TOKIMEC	TF323DCA	601	RE	2011/05/16 * 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	CE	2011/04/08 * 12
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

EMI test equipment (2/2)

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MSA-05	Spectrum Analyzer	Advantest	R3273	160400285	RE	2011/11/23 * 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

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