



RADIO TEST REPORT


Test Report No. : 11288814H-C-R1

Applicant : Sony Interactive Entertainment Inc.
Type of Equipment : Wireless communication module
Model No. : J20H091
FCC ID : AK8M16DFL1
Test regulation : FCC Part 15 Subpart E: 2016
(Except for DFS test)
*Class II permissive change
(Maximum Conducted Output Power, Maximum Power Spectral Density and Radiated Spurious Emission tests only)
Test Result : Complied

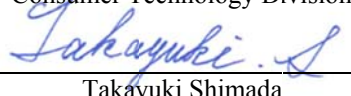
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2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the above regulation.
4. The test results in this report are traceable to the national or international standards.
5. This test report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.
6. This test report covers Radio technical requirements. It does not cover administrative issues such as Manual or non-Radio test related Requirements. (if applicable)
7. This report is a revised version of 11288814H-C. 11288814H-C is replaced with this report.

Date of test: April 20 to May 20, 2016

Representative test engineer:


Yuta Moriya
Engineer
Consumer Technology Division

Approved by:


Takayuki Shimada
Engineer
Consumer Technology Division



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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13-EM-F0429

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SECTION 1: Customer information

Company Name	Sony Interactive 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	Kiyoto Sasaki

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

2.1 Identification of E.U.T.

Type of Equipment	Wireless communication module
Model No	J20H091
Serial No	Refer to Clause 4.2
Country of Manufacture	China/Japan
Receipt Date of Sample	February 6, 2016 (Maximum Conducted Output Power and Maximum Power Spectral Density tests) April 30, 2016 (Radiated Spurious Emission test)
Condition of EUT	Production 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

J20H091 is the Wireless communication module.

Product Specification

Clock frequency in the system (radio part)	40MHz
Operating Temperature	-10 - +85 deg. C
Power Supply	DC 3.3 V, DC 1.8 V
Size	20 x 18 x 3.6 mm, 55pin LGA

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Radio Specification

WLAN (IEEE802.11b/g/n-20)

Equipment Type	Transceiver
Frequency of Operation	2412-2462MHz
Type of Modulation	DSSS, OFDM
Bandwidth & Channel spacing	Less than 20MHz & 5MHz
Method of frequency generation	Synthesizer
Power Supply (inner)	DC 3.3 V / DC 1.8 V / DC 1.1 V
Antenna Type	PIFA (Antenna port WA for 2.4GHz / Antenna port WB)
Antenna Gain: G _{ANT}	5.6dBi (Antenna port WA for 2.4GHz / Antenna port WB)
Directional Gain *1)	8.61dBi

WLAN (IEEE802.11a/11n-20/11ac-20/11n-40/11ac-40/11ac-80)

Equipment Type	Transceiver
Frequency of Operation	W52: 5180-5240MHz W53: 5260-5320MHz W56: 5500-5700MHz W58: 5745-5825MHz
Type of Modulation	OFDM
Bandwidth & Channel spacing	Less than 20MHz/40MHz/80MHz&20MHz/40MHz/80MHz
Method of frequency generation	Synthesizer
Power Supply (inner)	DC 3.3 V / DC 1.8 V / DC 1.1 V
Antenna Type	PIFA (Antenna port WA for 5GHz / Antenna port WC for 5GHz)
Antenna Gain: G _{ANT}	5.0dBi (Antenna port WA for 5GHz) 5.6dBi (Antenna port WC for 5GHz)
Directional Gain *1)	8.32dBi

Bluetooth (BDR/EDR)

Equipment Type	Transceiver
Frequency of Operation	2402-2480MHz
Type of Modulation	FHSS (GFSK, $\pi/4$ DQPSK, 8DPSK)
Bandwidth & Channel spacing	79MHz & 1MHz
Method of frequency generation	Synthesizer
Power Supply (inner)	DC 3.3 V / DC 1.8 V / DC 1.1 V
Antenna Type	PIFA (Antenna port WC for 2.4 GHz)
Antenna Gain	7.2dBi (Antenna port WC for 2.4 GHz)

Bluetooth (Low Energy)

Equipment Type	Transceiver
Frequency of Operation	2402-2480MHz
Type of Modulation	GFSK
Bandwidth & Channel spacing	1MHz & 2MHz
Method of frequency generation	Synthesizer
Power Supply (inner)	DC 3.3 V / DC 1.8 V / DC 1.1 V
Antenna Type	PIFA (Antenna port WC for 2.4 GHz)
Antenna Gain	7.2dBi (Antenna port WC for 2.4 GHz)

*1) Directional antenna gain = $10 \log \left(\frac{G_{ANT1}}{10^{20}} + \frac{G_{ANT2}}{10^{20}} \right)^2 / 2$

This test report applies to WLAN (5 GHz band).

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<Contents of the change from original model>

Test Report Number of original model is 11155194H-C-R3 (issued by UL Japan, Inc.).

Specification was changed from the original model as follows:

* The form change of the antenna design.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part 15 Subpart E
FCC part 15 final revised on April 6, 2016.

Title : FCC 47CFR Part15 Radio Frequency Device Subpart E
Unlicensed National Information Infrastructure Devices
Section 15.407 General technical requirements

* Also the EUT complies with FCC Part 15 Subpart B.

3.2 Procedures and results

Item	Test Procedure	Specification	Worst margin	Results	Remarks
Maximum Conducted Output Power *1)	FCC: KDB Publication Number 789033	FCC: 15.407 (a) (1) (2) (3)	See data	Complied	Conducted
	IC: -	IC: RSS-247 6.2.1 (1) 6.2.2 (1) 6.2.3 (1) 6.2.4 (1)			
Maximum Power Spectral Density *1)	FCC: KDB Publication Number 789033	FCC : 15.407 (a) (1) (2) (3)	See data	Complied	Conducted
	IC: -	IC: RSS-247 6.2.1 (1) 6.2.2 (1) 6.2.3 (1) 6.2.4 (1)			
Spurious Emission Restricted Band Edge	FCC: ANSI C63.10-2013 KDB Publication Number 789033	FCC: 15.407 (b), 15.205 and 15.209	4.9 dB 5470.000 MHz, AV, Hori.	Complied	Radiated (> 30 MHz) *2)

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

*1) Since directional antenna gain was higher than the original test report: 11155194H-C-R3, this test report was shown as recalculated limit.

*2) Radiated test was selected over 30 MHz based on section FCC 15.407 (b) and KDB 789033 D02 G.3.b).

* In case any questions arise about test procedure, ANSI C63.10: 2013 is also referred.

FCC Part 15.31 (e)

The EUT has the power supply regulator. However one of the input voltages to RF part doesn't go through the regulator. The stable voltage will be supplied by the end product, which will be required to have a power supply regulator. Therefore, the EUT complies with the requirement.

FCC Part 15.203/212 Antenna requirement

The EUT has a unique coupling/antenna connector (U.FL). Therefore the equipment complies with the requirement of 15.203/212.

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3.3 Addition to standard

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 $k=2$.
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Antenna terminal test Uncertainty (+/-)							
Power meter		Conducted emission and Power density			Conducted emission		Channel power
Below 1 GHz	Above 1 GHz	Below 1 GHz	1 GHz - 3 GHz	3 GHz - 18 GHz	18 GHz - 26.5 GHz	26.5 GHz - 40 GHz	
0.9 dB	1.0 dB	1.4 dB	1.7 dB	2.8 dB	2.8 dB	2.9 dB	2.6 dB

Test distance	Radiated emission (+dB) 9 kHz - 30 MHz
3m	3.8 dB
10m	3.7 dB

Polarity	Radiated emission (Below 1GHz)			
	(3 m*)(+dB)		(10 m*)(+dB)	
	30 – 200 MHz	200 – 1000MHz	30 – 200 MHz	200 – 1000MHz
Horizontal	4.9 dB	5.2 dB	4.9 dB	5.0 dB
Vertical	4.6 dB	5.9 dB	5.0 dB	5.0 dB

Radiated emission				
(3 m*)(+dB)		(1 m*)(+dB)	(1 m*)(+dB)	(10 m*)(+dB)
1 – 6GHz	6 – 18GHz	10 – 26.5 GHz	26.5 – 40GHz	1 -18 GHz
5.1 dB	5.3 dB	5.1 dB	5.1 dB	5.3 dB

*Measurement distance

Radiated emission test

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

3.5 Test Location

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Test site	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms	Maximum measurement distance
No.1 semi-anechoic chamber	2973C-1	19.2 x 11.2 x 7.7	7.0 x 6.0	No.1 Power source room	10 m
No.2 semi-anechoic chamber	2973C-2	7.5 x 5.8 x 5.2	4.0 x 4.0	-	3 m
No.3 semi-anechoic chamber	2973C-3	12.0 x 8.5 x 5.9	6.8 x 5.75	No.3 Preparation room	3 m
No.3 shielded room	-	4.0 x 6.0 x 2.7	N/A	-	-
No.4 semi-anechoic chamber	2973C-4	12.0 x 8.5 x 5.9	6.8 x 5.75	No.4 Preparation room	3 m
No.4 shielded room	-	4.0 x 6.0 x 2.7	N/A	-	-
No.5 semi-anechoic chamber	-	6.0 x 6.0 x 3.9	6.0 x 6.0	-	-
No.6 shielded room	-	4.0 x 4.5 x 2.7	4.0 x 4.5	-	-
No.6 measurement room	-	4.75 x 5.4 x 3.0	4.75 x 4.15	-	-
No.7 shielded room	-	4.7 x 7.5 x 2.7	4.7 x 7.5	-	-
No.8 measurement room	-	3.1 x 5.0 x 2.7	N/A	-	-
No.9 measurement room	-	8.8 x 4.6 x 2.8	2.4 x 2.4	-	-
No.11 measurement room	-	6.2 x 4.7 x 3.0	4.8 x 4.6	-	-

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

3.6 Test data, Test instruments, and Test set up

Refer to APPENDIX.

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

4.1 Operating Mode(s)

Test operating mode was determined as follows according to “Section 1 of 6 802.11 a/b/g/n testing - Managing Complex Regulatory Approvals -” of TCB Council Workshop October 2009 and also was judged the necessity of 802.11ac mode by the pre-test.

Mode	Remarks*
IEEE 802.11a (11a)	6 Mbps, PN9
IEEE 802.11n MIMO 20 MHz BW (11n-20)	MCS 0, PN9
IEEE 802.11ac MIMO 20 MHz BW (11ac-20)	MCS 0 (1Tx), PN9
IEEE 802.11n MIMO 40 MHz BW (11n-40)	MCS 0, PN9
IEEE 802.11ac MIMO 40 MHz BW (11ac-40)	MCS 0 (1Tx), PN9
IEEE 802.11ac MIMO 80 MHz BW (11ac-80)	MCS 0 (1Tx), PN9
*The worst antenna and condition was determined based on the test result of Maximum Conducted Output Power of original test report (Test report No. 11155194H-C-R3).	
*The power value of the EUT was set for testing as follows (setting value might be different from product specification value); Power settings: 20 M band: 8 dBm 40 M band: 5 dBm 80 M band: 3 dBm Software: O-pro_DOS_Labtool_Ver 2.0.0.88 *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.	

*The details of Operation mode(s)

Test Item	Operating Mode	Tested Antenna port	Tested Frequency			
			Lower Band	Middle Band	Additional Band	Upper Band
Maximum Conducted Output Power, Maximum Power Spectral Density	11a Tx	WA+WC,	5180 MHz	5260 MHz	5500 MHz	5745 MHz
	11n-20 Tx	WA, WC	5220 MHz	5300 MHz	5580 MHz	5785 MHz
	11ac-20 Tx		5240 MHz	5320 MHz	5700 MHz	5825 MHz
	11n-40 Tx	WA+WC,	5190 MHz	5270 MHz	5510 MHz	5755 MHz
	11ac-40 Tx	WA, WC	5230 MHz	5310 MHz	5550 MHz	5795 MHz
	11ac-80 Tx	WA	5210 MHz	5290 MHz	5530 MHz	5775 MHz
Radiated Spurious Emission (Below 1 GHz)	11n-20 Tx *1)	WA+WC	5180 MHz	-	-	-
Radiated Spurious Emission (Above 1 GHz)	11a Tx	WA+WC	5180 MHz	5260 MHz	5500 MHz	5745 MHz
	11n-20 Tx			5320 MHz	5580 MHz	5785 MHz
					5700 MHz	5825 MHz
	11ac-20 Tx	WA+WC	5180 MHz	5320 MHz	5500 MHz	5745 MHz
					5700 MHz	5825 MHz
	11n-40 Tx	WA+WC	5190 MHz	5270 MHz	5510 MHz	5755 MHz
				5310 MHz	5550 MHz	5795 MHz
				5670 MHz		
	11ac-40 Tx	WA+WC	5190 MHz	5270 MHz	5510 MHz	5755 MHz
				5310 MHz	5670 MHz	5795 MHz
	11ac-80 Tx	WA+WC	5210 MHz	5290 MHz	5530 MHz	5775 MHz
				5610 MHz		

*1) The mode was tested as a representative, because it had the highest power at antenna terminal test.

*Simultaneously transmission

Test Item	Operating Mode *1)	Tested Antenna port	Tested Frequency			
			Lower Band	Middle Band	Additional Band	Upper Band
Radiated Spurious Emission	Hopping on 3DH5 + 11n-40	WA+WC	-	-	5510 MHz	-

*1) The mode was tested as a representative, because it had the worst margin of 5GHz at radiated emission test.

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4.2 Configuration and peripherals

This page has been submitted for a separate exhibit.

SECTION 5: Radiated Spurious Emission and Band Edge Compliance

Test Procedure

< Below 1GHz >

EUT was placed on a urethane platform of nominal size, 0.5 m by 1.0 m, raised 0.8 m above the conducting ground plane. The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with a ground plane.

< Above 1GHz >

EUT was placed on a urethane platform of nominal size, 0.5 m by 1.0 m, raised 1.5 m above the conducting ground plane.

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

The height of the measuring antenna varied between 1 and 4 m 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.

< Below 1GHz >

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

< Above 1GHz >

Inside of restricted bands (Section 15.205):

Apply to limit in the Section 15.209 (a).

Outside of the restricted bands:

Apply to limit 68.2 dBuV/m, 3 m (-27 dBm e.i.r.p. *) in the Section 15.407 (b) (1) (2) (3).

-27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge in the KDB926956 D01.

Restricted band edge:

Apply to limit in the Section 15.209 (a).

Since this limit is severer than the limit of the inside of restricted bands.

*Electric field strength to e.i.r.p. conversion:

$$E = \frac{1000000\sqrt{30P}}{3} \text{ (uV/m)} \quad :P \text{ is the e.i.r.p. (Watts)}$$

Test Antennas are used as below;

Frequency	30 MHz to 200 MHz	200 MHz to 1 GHz	Above 1 GHz
Antenna Type	Biconical	Logperiodic	Horn

Frequency	Below 1 GHz	Above 1 GHz	
Instrument used	Test Receiver	Spectrum Analyzer	
Detector	QP	Peak	Average
IF Bandwidth	BW: 120 kHz	RBW: 1 MHz VBW: 3 MHz	Method AD *1) RBW: 1 MHz VBW: 3 MHz Detector: Power Averaging (RMS) Trace: ≥ 100 traces If duty cycle was less than 98%, a duty factor was added to the results.
Test Distance	3 m	4.4 m*2) (1 GHz – 10GHz), 1 m*3) (10 GHz – 40 GHz)	

*1) The test method was also referred to KDB 789033 D02 General UNII Test Procedures New Rules v01r02 "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E (Issued on April 8, 2016)".

*2) Distance Factor: $20 \times \log(4.4 \text{ m}/3.0 \text{ m}) = 3.33 \text{ dB}$

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

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT (Module and Antenna) 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 : 30 MHz-40 GHz
Test data : APPENDIX
Test result : Pass

SECTION 6: 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 and Test method
Maximum Conducted Output Power	-	-	-	Auto	Average	-	Power Meter (Sensor: 80 MHz BW) (Method PM)
Maximum Power Spectral Density	Encompass the entire EBW	1 MHz or 470 kHz *1)	≥ 3 RBW	Auto	RMS Power Averaging (200 times)	Clear Write	Spectrum Analyzer

* The test method was also referred to KDB 789033 D02 General UNII Test Procedures New Rules v01r02 "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E (Issued on April 8, 2016)".

*1) KDB 789033 D02 says that RBW is set to be 500 kHz for 5.725 GHz-5.850 GHz, but it is not possible with spectrum analyzer, so RBW Correction Factor ($10 \log(500 \text{ kHz} / 470 \text{ kHz})$) was added to the test result.

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: Test data

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 11288814H
Date : April 20, 2016
Temperature / Humidity : 25deg. C / 51 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11a

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW (B for FCC) [MHz]	99% OBW (B for IC) [MHz]	Conducted power						e.i.r.p.					
			Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]	Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]
WA [mW]	WC [mW]	Sum [mW]	WA [mW]	WC [mW]	Sum [mW]									
5180	-	16.769	8.26	7.21	15.47	11.90	21.65	9.75	56.10	48.98	105.08	20.22	29.97	9.75
5220	-	16.799	7.73	7.19	14.92	11.74	21.65	9.91	52.48	48.87	101.35	20.06	29.97	9.91
5240	-	16.750	8.02	7.05	15.06	11.78	21.65	9.87	54.45	47.86	102.31	20.10	29.97	9.87
5260	19.343	16.821	7.87	7.06	14.93	11.74	21.54	9.80	53.46	47.97	101.43	20.06	29.97	9.91
5300	19.409	16.783	7.78	6.75	14.53	11.62	21.56	9.94	52.84	45.81	98.66	19.94	29.97	10.03
5320	19.298	16.831	7.82	6.76	14.58	11.64	21.53	9.89	53.09	45.92	99.01	19.96	29.97	10.01
5500	19.417	16.845	7.93	7.33	15.25	11.83	21.56	9.73	53.83	49.77	103.60	20.15	29.97	9.82
5580	19.411	16.807	7.19	7.21	14.41	11.59	21.56	9.97	48.87	48.98	97.84	19.91	29.97	10.06
5700	19.161	16.822	7.29	7.31	14.61	11.65	21.50	9.85	49.55	49.66	99.20	19.97	29.97	10.00
5745	-	-	7.23	7.26	14.49	11.61	27.68	16.07	49.09	49.32	98.41	19.93	36.00	16.07
5785	-	-	6.59	7.14	13.74	11.38	27.68	16.30	44.77	48.53	93.30	19.70	36.00	16.30
5825	-	-	6.81	7.01	13.82	11.41	27.68	16.27	46.24	47.64	93.88	19.73	36.00	16.27

Tested Frequency [MHz]	Duty Factor [dB]	Antenna port WA					Antenna port WC					Result	
		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	e.i.r.p. [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	e.i.r.p. [dBm]
5180	0.02	-3.26	2.25	10.16	8.32	9.17	17.49	-3.85	2.25	10.16	8.32	8.58	16.90
5220	0.02	-3.56	2.26	10.16	8.32	8.88	17.20	-3.87	2.26	10.16	8.32	8.57	16.89
5240	0.02	-3.42	2.27	10.17	8.32	9.04	17.36	-3.98	2.27	10.17	8.32	8.48	16.80
5260	0.02	-3.50	2.27	10.17	8.32	8.96	17.28	-3.97	2.27	10.17	8.32	8.49	16.81
5300	0.02	-3.56	2.28	10.17	8.32	8.91	17.23	-4.18	2.28	10.17	8.32	8.29	16.61
5320	0.02	-3.55	2.29	10.17	8.32	8.93	17.25	-4.18	2.29	10.17	8.32	8.30	16.62
5500	0.02	-3.56	2.33	10.20	8.32	8.99	17.31	-3.90	2.33	10.20	8.32	8.65	16.97
5580	0.02	-3.98	2.34	10.19	8.32	8.57	16.89	-3.97	2.34	10.19	8.32	8.58	16.90
5700	0.02	-3.91	2.35	10.17	8.32	8.63	16.95	-3.90	2.35	10.17	8.32	8.64	16.96
5745	0.02	-3.95	2.35	10.17	8.32	8.59	16.91	-3.93	2.35	10.17	8.32	8.61	16.93
5785	0.02	-4.34	2.35	10.16	8.32	8.19	16.51	-3.99	2.35	10.16	8.32	8.54	16.86
5825	0.02	-4.21	2.36	10.16	8.32	8.33	16.65	-4.08	2.36	10.16	8.32	8.46	16.78

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5250 MHz-5350 MHz, 5470 MHz-5725 MHz) = 250 mW or (11 + 10logB) dBm, whichever is lower

The conducted power limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 11288814H
Date : April 20, 2016
Temperature / Humidity : 25deg. C / 51 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11n-20

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW [MHz]	99% OBW [MHz]	Conducted power						e.i.r.p.					
			Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]	Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]
			WA [mW]	WC [mW]	Sum [mW]				WA [mW]	WC [mW]	Sum [mW]			
5180	-	17.758	8.30	7.23	15.53	11.91	21.65	9.74	56.36	49.09	105.45	20.23	29.97	9.74
5220	-	17.693	7.76	7.23	14.99	11.76	21.65	9.89	52.72	49.09	101.81	20.08	29.97	9.89
5240	-	17.745	8.00	7.06	15.06	11.78	21.65	9.87	54.33	47.97	102.30	20.10	29.97	9.87
5260	19.820	17.740	7.80	7.14	14.94	11.74	21.65	9.91	52.97	48.53	101.50	20.06	29.97	9.91
5300	19.836	17.771	7.62	7.01	14.64	11.65	21.65	10.00	51.76	47.64	99.40	19.97	29.97	10.00
5320	19.671	17.736	7.80	6.79	14.59	11.64	21.61	9.97	52.97	46.13	99.10	19.96	29.97	10.01
5500	19.711	17.715	7.98	7.24	15.22	11.83	21.62	9.79	54.20	49.20	103.40	20.15	29.97	9.82
5580	19.870	17.712	7.18	7.23	14.41	11.59	21.65	10.06	48.75	49.09	97.84	19.91	29.97	10.06
5700	20.029	17.759	7.18	7.46	14.64	11.66	21.65	9.99	48.75	50.70	99.45	19.98	29.97	9.99
5745	-	-	7.19	7.28	14.47	11.61	27.68	16.07	48.87	49.43	98.30	19.93	36.00	16.07
5785	-	-	6.85	7.23	14.08	11.49	27.68	16.19	46.56	49.09	95.65	19.81	36.00	16.19
5825	-	-	7.06	7.14	14.21	11.53	27.68	16.15	47.97	48.53	96.50	19.85	36.00	16.15

Tested Frequency [MHz]	Duty Factor [dB]	Antenna port WA					Antenna port WC						
		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result	
						Cond. Power [dBm]	e.i.r.p. [dBm]					Cond. Power [dBm]	e.i.r.p. [dBm]
5180	0.03	-3.25	2.25	10.16	8.32	9.19	17.51	-3.85	2.25	10.16	8.32	8.59	16.91
5220	0.03	-3.55	2.26	10.16	8.32	8.90	17.22	-3.86	2.26	10.16	8.32	8.59	16.91
5240	0.03	-3.44	2.27	10.17	8.32	9.03	17.35	-3.98	2.27	10.17	8.32	8.49	16.81
5260	0.03	-3.55	2.27	10.17	8.32	8.92	17.24	-3.93	2.27	10.17	8.32	8.54	16.86
5300	0.03	-3.66	2.28	10.17	8.32	8.82	17.14	-4.02	2.28	10.17	8.32	8.46	16.78
5320	0.03	-3.57	2.29	10.17	8.32	8.92	17.24	-4.17	2.29	10.17	8.32	8.32	16.64
5500	0.03	-3.54	2.33	10.20	8.32	9.02	17.34	-3.96	2.33	10.20	8.32	8.60	16.92
5580	0.03	-4.00	2.34	10.19	8.32	8.56	16.88	-3.97	2.34	10.19	8.32	8.59	16.91
5700	0.03	-3.99	2.35	10.17	8.32	8.56	16.88	-3.82	2.35	10.17	8.32	8.73	17.05
5745	0.03	-3.98	2.35	10.17	8.32	8.57	16.89	-3.93	2.35	10.17	8.32	8.62	16.94
5785	0.03	-4.18	2.35	10.16	8.32	8.36	16.68	-3.95	2.35	10.16	8.32	8.59	16.91
5825	0.03	-4.06	2.36	10.16	8.32	8.49	16.81	-4.01	2.36	10.16	8.32	8.54	16.86

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5250 MHz-5350 MHz, 5470 MHz-5725 MHz) = 250 mW or (11 + 10logB) dBm, whichever is lower

The conducted power limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

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Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 11288814H
Date : April 20, 2016
Temperature / Humidity : 25deg. C / 51 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11ac-20

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW [MHz] (B for FCC)	99% OBW [MHz] (B for IC)	Conducted power						e.i.r.p.					
			Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]	Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]
			WA [mW]	WC [mW]	Sum [mW]				WA [mW]	WC [mW]	Sum [mW]			
5180	-	17.760	7.43	7.18	14.61	11.65	21.65	10.00	50.47	48.75	99.22	19.97	29.97	10.00
5220	-	17.749	7.36	6.97	14.33	11.56	21.65	10.09	50.00	47.32	97.32	19.88	29.97	10.09
5240	-	17.753	7.60	7.06	14.67	11.66	21.65	9.99	51.64	47.97	99.61	19.98	29.97	9.99
5260	19.857	17.764	7.66	7.05	14.70	11.67	21.65	9.98	52.00	47.86	99.86	19.99	29.97	9.98
5300	19.528	17.711	7.48	6.87	14.35	11.57	21.58	10.01	50.82	46.67	97.48	19.89	29.97	10.08
5320	19.680	17.730	7.26	6.71	13.98	11.45	21.62	10.17	49.32	45.60	94.92	19.77	29.97	10.20
5500	19.598	17.774	7.57	7.16	14.73	11.68	21.60	9.92	51.40	48.64	100.05	20.00	29.97	9.97
5580	19.765	17.750	6.95	7.19	14.14	11.51	21.63	10.12	47.21	48.87	96.07	19.83	29.97	10.14
5700	19.856	17.782	7.26	7.28	14.54	11.63	21.65	10.02	49.32	49.43	98.75	19.95	29.97	10.02
5745	-	-	7.13	7.18	14.31	11.56	27.68	16.12	48.42	48.75	97.17	19.88	36.00	16.12
5785	-	-	6.79	7.29	14.09	11.49	27.68	16.19	46.13	49.55	95.68	19.81	36.00	16.19
5825	-	-	7.05	7.14	14.19	11.52	27.68	16.16	47.86	48.53	96.39	19.84	36.00	16.16

Tested Frequency [MHz]	Duty Factor [dB]	Antenna port WA					Antenna port WC							
		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result		
						Cond. Power [dBm]	e.i.r.p. [dBm]					Cond. Power [dBm]	e.i.r.p. [dBm]	
5180	0.02	-3.72	2.25	10.16	8.32	8.71	17.03	-3.87	2.25	10.16	8.32	8.56	16.88	
5220	0.02	-3.77	2.26	10.16	8.32	8.67	16.99	-4.01	2.26	10.16	8.32	8.43	16.75	
5240	0.02	-3.65	2.27	10.17	8.32	8.81	17.13	-3.97	2.27	10.17	8.32	8.49	16.81	
5260	0.02	-3.62	2.27	10.17	8.32	8.84	17.16	-3.98	2.27	10.17	8.32	8.48	16.80	
5300	0.02	-3.73	2.28	10.17	8.32	8.74	17.06	-4.10	2.28	10.17	8.32	8.37	16.69	
5320	0.02	-3.87	2.29	10.17	8.32	8.61	16.93	-4.21	2.29	10.17	8.32	8.27	16.59	
5500	0.02	-3.76	2.33	10.20	8.32	8.79	17.11	-4.00	2.33	10.20	8.32	8.55	16.87	
5580	0.02	-4.13	2.34	10.19	8.32	8.42	16.74	-3.98	2.34	10.19	8.32	8.57	16.89	
5700	0.02	-3.93	2.35	10.17	8.32	8.61	16.93	-3.92	2.35	10.17	8.32	8.62	16.94	
5745	0.02	-4.01	2.35	10.17	8.32	8.53	16.85	-3.98	2.35	10.17	8.32	8.56	16.88	
5785	0.02	-4.21	2.35	10.16	8.32	8.32	16.64	-3.90	2.35	10.16	8.32	8.63	16.95	
5825	0.02	-4.06	2.36	10.16	8.32	8.48	16.80	-4.00	2.36	10.16	8.32	8.54	16.86	

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5250 MHz-5350 MHz, 5470 MHz-5725 MHz) = 250 mW or (11 + 10logB) dBm, whichever is lower

The conducted power limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.3 Measurement Room
Report No. : 11288814H
Date : February 16, 2016
Temperature / Humidity : 20deg. C / 34 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11n-40

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW (B for FCC) [MHz]	99% OBW (B for IC) [MHz]	Conducted power						e.i.r.p.					
			Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]	Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]
			WA [mW]	WC [mW]	Sum [mW]				WA [mW]	WC [mW]	Sum [mW]			
5190	-	36.197	3.95	3.49	7.45	8.72	21.65	12.93	26.85	23.71	50.57	17.04	29.97	12.93
5230	-	36.191	3.87	3.31	7.18	8.56	21.65	13.09	26.30	22.49	48.79	16.88	29.97	13.09
5270	40.129	36.127	3.92	3.21	7.13	8.53	21.65	13.12	26.61	21.83	48.43	16.85	29.97	13.12
5310	40.218	36.153	3.78	3.21	7.00	8.45	21.65	13.20	25.70	21.83	47.53	16.77	29.97	13.20
5510	39.755	36.200	3.73	3.48	7.21	8.58	21.65	13.07	25.35	23.60	48.96	16.90	29.97	13.07
5550	40.122	36.200	3.43	3.59	7.02	8.46	21.65	13.19	23.28	24.38	47.66	16.78	29.97	13.19
5670	39.834	36.158	3.48	3.46	6.93	8.41	21.65	13.24	23.60	23.50	47.10	16.73	29.97	13.24
5755	-	-	3.30	3.40	6.69	8.26	27.68	19.42	22.39	23.07	45.45	16.58	36.00	19.42
5795	-	-	3.18	3.48	6.67	8.24	27.68	19.44	21.63	23.66	45.29	16.56	36.00	19.44

Tested Frequency [MHz]	Duty Factor [dB]	Antenna port WA						Antenna port WC					
		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result	
						Cond. Power [dBm]	e.i.r.p. [dBm]					Cond. Power [dBm]	e.i.r.p. [dBm]
5190	0.05	-5.01	0.80	10.13	8.32	5.97	14.29	-5.52	0.80	10.10	8.32	5.43	13.75
5230	0.05	-5.10	0.80	10.13	8.32	5.88	14.20	-5.75	0.80	10.10	8.32	5.20	13.52
5270	0.05	-5.05	0.80	10.13	8.32	5.93	14.25	-5.88	0.80	10.10	8.32	5.07	13.39
5310	0.05	-5.20	0.80	10.13	8.32	5.78	14.10	-5.88	0.80	10.10	8.32	5.07	13.39
5510	0.05	-5.27	0.80	10.14	8.32	5.72	14.04	-5.55	0.80	10.11	8.32	5.41	13.73
5550	0.05	-5.64	0.80	10.14	8.32	5.35	13.67	-5.40	0.80	10.10	8.32	5.55	13.87
5670	0.05	-5.57	0.80	10.13	8.32	5.41	13.73	-5.55	0.80	10.09	8.32	5.39	13.71
5755	0.05	-5.79	0.80	10.12	8.32	5.18	13.50	-5.62	0.80	10.08	8.32	5.31	13.63
5795	0.05	-5.94	0.80	10.12	8.32	5.03	13.35	-5.51	0.80	10.08	8.32	5.42	13.74

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5250 MHz-5350 MHz, 5470 MHz-5725 MHz) = 250 mW or (11 + 10logB) dBm, whichever is lower

The conducted power limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

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Ise EMC Lab.

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Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.3 Measurement Room
Report No. : 11288814H
Date : February 16, 2016
Temperature / Humidity : 20deg. C / 34 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11ac-40

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW (B for FCC) [MHz]	99% OBW (B for IC) [MHz]	Conducted power						e.i.r.p.					
			Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]	Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]
			WA [mW]	WC [mW]	Sum [mW]				WA [mW]	WC [mW]	Sum [mW]			
5190	-	36.143	3.78	3.46	7.24	8.60	21.65	13.05	25.70	23.50	49.20	16.92	29.97	13.05
5230	-	36.114	3.85	3.28	7.13	8.53	21.65	13.12	26.12	22.28	48.41	16.85	29.97	13.12
5270	39.569	36.114	3.93	3.14	7.07	8.49	21.65	13.16	26.67	21.33	48.00	16.81	29.97	13.16
5310	40.752	36.153	3.78	3.21	6.99	8.45	21.65	13.20	25.70	21.78	47.48	16.77	29.97	13.20
5510	39.731	36.208	3.56	3.31	6.87	8.37	21.65	13.28	24.15	22.49	46.65	16.69	29.97	13.28
5550	39.872	36.163	3.50	3.51	7.01	8.46	21.65	13.19	23.77	23.82	47.59	16.78	29.97	13.19
5670	39.902	36.171	3.33	3.47	6.79	8.32	21.65	13.33	22.59	23.55	46.14	16.64	29.97	13.33
5755	-	-	3.16	3.32	6.47	8.11	27.68	19.57	21.43	22.54	43.97	16.43	36.00	19.57
5795	-	-	3.22	3.43	6.65	8.23	27.68	19.45	21.88	23.28	45.16	16.55	36.00	19.45

Tested Frequency [MHz]	Duty Factor [dB]	Antenna port WA						Antenna port WC					
		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result	
						Cond. Power [dBm]	e.i.r.p. [dBm]					Cond. Power [dBm]	e.i.r.p. [dBm]
5190	0.06	-5.21	0.80	10.13	8.32	5.78	14.10	-5.57	0.80	10.10	8.32	5.39	13.71
5230	0.06	-5.14	0.80	10.13	8.32	5.85	14.17	-5.80	0.80	10.10	8.32	5.16	13.48
5270	0.06	-5.05	0.80	10.13	8.32	5.94	14.26	-5.99	0.80	10.10	8.32	4.97	13.29
5310	0.06	-5.21	0.80	10.13	8.32	5.78	14.10	-5.90	0.80	10.10	8.32	5.06	13.38
5510	0.06	-5.49	0.80	10.14	8.32	5.51	13.83	-5.77	0.80	10.11	8.32	5.20	13.52
5550	0.06	-5.56	0.80	10.14	8.32	5.44	13.76	-5.51	0.80	10.10	8.32	5.45	13.77
5670	0.06	-5.77	0.80	10.13	8.32	5.22	13.54	-5.55	0.80	10.09	8.32	5.40	13.72
5755	0.06	-5.99	0.80	10.12	8.32	4.99	13.31	-5.73	0.80	10.08	8.32	5.21	13.53
5795	0.06	-5.90	0.80	10.12	8.32	5.08	13.40	-5.59	0.80	10.08	8.32	5.35	13.67

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5250 MHz-5350 MHz, 5470 MHz-5725 MHz) = 250 mW or (11 + 10logB) dBm, whichever is lower

The conducted power limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

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Maximum Conducted Output Power

Test place : Ise EMC Lab. No.3 Measurement Room
Report No. : 11288814H
Date : February 16, 2016
Temperature / Humidity : 20deg. C / 34 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11ac-80

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW (B for FCC) [MHz]	99% OBW (B for IC) [MHz]	Conducted power							e.i.r.p.				
			Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]	Antenna port			Result [dBm]	Limit [dBm]	Margin [dB]
			WA [mW]	WC [mW]	Sum [mW]				WA [mW]	WC [mW]	Sum [mW]			
5210	-	76.229	2.62	2.49	5.11	7.09	21.65	14.56	17.82	16.90	34.73	15.41	29.97	14.56
5290	80.979	76.220	2.63	2.28	4.91	6.91	21.65	14.74	17.86	15.45	33.32	15.23	29.97	14.74
5530	81.100	76.184	2.45	2.41	4.86	6.87	21.65	14.78	16.63	16.37	33.00	15.19	29.97	14.78
5610	82.712	76.028	2.22	2.40	4.63	6.65	21.65	15.00	15.10	16.33	31.43	14.97	29.97	15.00
5775	-	-	2.21	2.37	4.58	6.61	27.68	21.07	15.03	16.11	31.14	14.93	36.00	21.07

Antenna port WA							Antenna port WC						
Tested Frequency [MHz]	Duty Factor [dB]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result	
						Cond. Power [dBm]	e.i.r.p. [dBm]					Cond. Power [dBm]	e.i.r.p. [dBm]
5210	0.11	-6.85	0.80	10.13	8.32	4.19	12.51	-7.05	0.80	10.10	8.32	3.96	12.28
5290	0.11	-6.84	0.80	10.13	8.32	4.20	12.52	-7.44	0.80	10.10	8.32	3.57	11.89
5530	0.11	-7.16	0.80	10.14	8.32	3.89	12.21	-7.20	0.80	10.11	8.32	3.82	12.14
5610	0.11	-7.57	0.80	10.13	8.32	3.47	11.79	-7.20	0.80	10.10	8.32	3.81	12.13
5775	0.11	-7.58	0.80	10.12	8.32	3.45	11.77	-7.24	0.80	10.08	8.32	3.75	12.07

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor

e.i.r.p. Result = Conducted Power Result + Antenna Gain

Conducted Power Limit (5250 MHz-5350 MHz, 5470 MHz-5725 MHz) = 250 mW or (11 + 10logB) dBm, whichever is lower

The conducted power limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

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Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 11288814H
Date : April 21, 2016
Temperature / Humidity : 25deg. C / 51 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11a

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	WA [mW/MHz]	WC [mW/MHz]	Sum [mW/MHz]				WA [mW/MHz]	WC [mW/MHz]	Sum [mW/MHz]			
5180	0.68	0.67	1.35	1.31	8.68	7.37	4.64	4.55	9.19	9.63	17.00	7.37
5220	0.65	0.62	1.27	1.03	8.68	7.65	4.42	4.19	8.62	9.35	17.00	7.65
5240	0.74	0.57	1.31	1.19	8.68	7.49	5.05	3.88	8.93	9.51	17.00	7.49
5260	0.68	0.63	1.31	1.16	8.68	7.52	4.60	4.27	8.87	9.48	17.00	7.52
5300	0.65	0.59	1.24	0.93	8.68	7.75	4.43	3.98	8.42	9.25	17.00	7.75
5320	0.65	0.59	1.24	0.94	8.68	7.74	4.39	4.04	8.43	9.26	17.00	7.74
5500	0.62	0.57	1.19	0.76	8.68	7.92	4.21	3.89	8.10	9.08	17.00	7.92
5580	0.60	0.60	1.20	0.80	8.68	7.88	4.07	4.09	8.16	9.12	17.00	7.88
5700	0.68	0.60	1.28	1.09	8.68	7.59	4.65	4.08	8.73	9.41	17.00	7.59
5745	0.32	0.30	0.61	-2.11	27.68	29.79	2.15	2.03	4.18	6.21	36.00	29.79
5785	0.31	0.32	0.63	-2.04	27.68	29.72	2.09	2.16	4.25	6.28	36.00	29.72
5825	0.31	0.31	0.62	-2.06	27.68	29.74	2.09	2.13	4.23	6.26	36.00	29.74

Tested Frequency [MHz]	Antenna port WA							Antenna port WC							
	Duty Factor [dB]	RBW Correction Factor [dB]	PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result		PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result		
							Cond. [dBm/MHz]	e.i.r.p. [dBm/MHz]					Cond. [dBm/MHz]	e.i.r.p. [dBm/MHz]	
5180	0.02	0.00	-14.09	2.25	10.16	8.32	-1.66	6.66	-14.17	2.25	10.16	8.32	-1.74	6.58	
5220	0.02	0.00	-14.30	2.26	10.16	8.32	-1.86	6.46	-14.53	2.26	10.16	8.32	-2.09	6.23	
5240	0.02	0.00	-13.74	2.27	10.17	8.32	-1.28	7.04	-14.90	2.27	10.17	8.32	-2.44	5.88	
5260	0.02	0.00	-14.15	2.27	10.17	8.32	-1.69	6.63	-14.47	2.27	10.17	8.32	-2.01	6.31	
5300	0.02	0.00	-14.32	2.28	10.17	8.32	-1.85	6.47	-14.79	2.28	10.17	8.32	-2.32	6.00	
5320	0.02	0.00	-14.38	2.29	10.17	8.32	-1.90	6.42	-14.74	2.29	10.17	8.32	-2.26	6.07	
5500	0.02	0.00	-14.63	2.33	10.20	8.32	-2.08	6.24	-14.98	2.33	10.20	8.32	-2.43	5.89	
5580	0.02	0.00	-14.77	2.34	10.19	8.32	-2.22	6.10	-14.76	2.34	10.19	8.32	-2.21	6.11	
5700	0.02	0.00	-14.19	2.35	10.17	8.32	-1.65	6.67	-14.76	2.35	10.17	8.32	-2.22	6.11	
5745	0.02	0.27	-17.81	2.35	10.17	8.32	-5.00	3.32	-18.05	2.35	10.17	8.32	-5.25	3.07	
5785	0.02	0.27	-17.92	2.35	10.16	8.32	-5.12	3.20	-17.78	2.35	10.16	8.32	-4.98	3.34	
5825	0.02	0.27	-17.92	2.36	10.16	8.32	-5.11	3.21	-17.84	2.36	10.16	8.32	-5.03	3.29	

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 11288814H
Date : April 21, 2016
Temperature / Humidity : 25deg. C / 51 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11n-20

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	WA	WC	Sum				WA	WC	Sum			
[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	
5180	0.61	0.65	1.26	1.02	8.68	7.66	4.16	4.42	8.58	9.34	17.00	7.66
5220	0.59	0.58	1.17	0.69	8.68	7.99	3.99	3.97	7.95	9.01	17.00	7.99
5240	0.62	0.57	1.20	0.77	8.68	7.91	4.24	3.88	8.12	9.09	17.00	7.91
5260	0.64	0.57	1.21	0.83	8.68	7.85	4.34	3.88	8.22	9.15	17.00	7.85
5300	0.62	0.57	1.19	0.76	8.68	7.92	4.20	3.89	8.09	9.08	17.00	7.92
5320	0.61	0.54	1.15	0.61	8.68	8.07	4.15	3.68	7.82	8.93	17.00	8.07
5500	0.56	0.59	1.15	0.62	8.68	8.06	3.83	4.01	7.84	8.94	17.00	8.06
5580	0.53	0.59	1.12	0.50	8.68	8.18	3.63	3.99	7.62	8.82	17.00	8.18
5700	0.64	0.57	1.21	0.84	8.68	7.84	4.36	3.88	8.24	9.16	17.00	7.84
5745	0.31	0.29	0.60	-2.24	27.68	29.92	2.08	1.97	4.05	6.08	36.00	29.92
5785	0.28	0.30	0.59	-2.31	27.68	29.99	1.93	2.05	3.99	6.01	36.00	29.99
5825	0.31	0.31	0.63	-2.03	27.68	29.71	2.13	2.12	4.25	6.29	36.00	29.71

Tested Frequency [MHz]	Duty Factor [dB]	RBW Correction Factor [dB]	Antenna port WA					Antenna port WC						
			PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.
			[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	0.03	0.00	-14.57	2.25	10.16	8.32	-2.13	6.19	-14.31	2.25	10.16	8.32	-1.87	6.46
5220	0.03	0.00	-14.77	2.26	10.16	8.32	-2.32	6.01	-14.78	2.26	10.16	8.32	-2.33	5.99
5240	0.03	0.00	-14.52	2.27	10.17	8.32	-2.05	6.27	-14.90	2.27	10.17	8.32	-2.43	5.89
5260	0.03	0.00	-14.41	2.27	10.17	8.32	-1.94	6.38	-14.90	2.27	10.17	8.32	-2.43	5.89
5300	0.03	0.00	-14.57	2.28	10.17	8.32	-2.09	6.23	-14.90	2.28	10.17	8.32	-2.42	5.90
5320	0.03	0.00	-14.63	2.29	10.17	8.32	-2.14	6.18	-15.16	2.29	10.17	8.32	-2.67	5.65
5500	0.03	0.00	-15.05	2.33	10.20	8.32	-2.49	5.83	-14.85	2.33	10.20	8.32	-2.29	6.03
5580	0.03	0.00	-15.28	2.34	10.19	8.32	-2.72	5.60	-14.87	2.34	10.19	8.32	-2.31	6.01
5700	0.03	0.00	-14.48	2.35	10.17	8.32	-1.93	6.39	-14.98	2.35	10.17	8.32	-2.43	5.89
5745	0.03	0.27	-17.95	2.35	10.17	8.32	-5.13	3.19	-18.19	2.35	10.17	8.32	-5.37	2.95
5785	0.03	0.27	-18.27	2.35	10.16	8.32	-5.46	2.86	-18.00	2.35	10.16	8.32	-5.19	3.13
5825	0.03	0.27	-17.85	2.36	10.16	8.32	-5.03	3.29	-17.87	2.36	10.16	8.32	-5.05	3.27

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 11288814H
Date : April 21, 2016
Temperature / Humidity : 25deg. C / 51 % RH
Engineer : Takafumi Noguchi
Mode : Tx 11ac-20

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	WA	WC	Sum				WA	WC	Sum			
[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	
5180	0.66	0.61	1.27	1.05	8.68	7.63	4.51	4.14	8.65	9.37	17.00	7.63
5220	0.65	0.59	1.24	0.93	8.68	7.75	4.40	4.02	8.42	9.25	17.00	7.75
5240	0.66	0.57	1.23	0.89	8.68	7.79	4.49	3.84	8.33	9.21	17.00	7.79
5260	0.67	0.63	1.31	1.17	8.68	7.51	4.58	4.30	8.89	9.49	17.00	7.51
5300	0.61	0.56	1.17	0.69	8.68	7.99	4.14	3.82	7.96	9.01	17.00	7.99
5320	0.61	0.55	1.16	0.63	8.68	8.05	4.12	3.72	7.84	8.95	17.00	8.05
5500	0.62	0.52	1.14	0.57	8.68	8.11	4.20	3.53	7.74	8.89	17.00	8.11
5580	0.59	0.54	1.14	0.56	8.68	8.12	4.03	3.70	7.73	8.88	17.00	8.12
5700	0.59	0.57	1.16	0.65	8.68	8.03	3.99	3.89	7.88	8.97	17.00	8.03
5745	0.30	0.29	0.59	-2.31	27.68	29.99	2.03	1.95	3.99	6.01	36.00	29.99
5785	0.27	0.30	0.58	-2.40	27.68	30.08	1.85	2.05	3.91	5.92	36.00	30.08
5825	0.31	0.32	0.63	-2.01	27.68	29.69	2.12	2.15	4.27	6.31	36.00	29.69

Tested Frequency [MHz]	Duty Factor [dB]	RBW Correction Factor [dB]	Antenna port WA					Antenna port WC						
			PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.
			[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	0.02	0.00	-14.21	2.25	10.16	8.32	-1.78	6.55	-14.58	2.25	10.16	8.32	-2.15	6.17
5220	0.02	0.00	-14.32	2.26	10.16	8.32	-1.88	6.44	-14.72	2.26	10.16	8.32	-2.28	6.04
5240	0.02	0.00	-14.26	2.27	10.17	8.32	-1.80	6.52	-14.94	2.27	10.17	8.32	-2.48	5.84
5260	0.02	0.00	-14.17	2.27	10.17	8.32	-1.71	6.61	-14.44	2.27	10.17	8.32	-1.98	6.34
5300	0.02	0.00	-14.62	2.28	10.17	8.32	-2.15	6.17	-14.97	2.28	10.17	8.32	-2.50	5.82
5320	0.02	0.00	-14.65	2.29	10.17	8.32	-2.17	6.15	-15.09	2.29	10.17	8.32	-2.61	5.71
5500	0.02	0.00	-14.63	2.33	10.20	8.32	-2.08	6.24	-15.39	2.33	10.20	8.32	-2.84	5.48
5580	0.02	0.00	-14.81	2.34	10.19	8.32	-2.26	6.06	-15.19	2.34	10.19	8.32	-2.64	5.68
5700	0.02	0.00	-14.85	2.35	10.17	8.32	-2.31	6.01	-14.96	2.35	10.17	8.32	-2.42	5.90
5745	0.02	0.27	-18.04	2.35	10.17	8.32	-5.24	3.08	-18.22	2.35	10.17	8.32	-5.42	2.90
5785	0.02	0.27	-18.44	2.35	10.16	8.32	-5.64	2.68	-17.99	2.35	10.16	8.32	-5.19	3.13
5825	0.02	0.27	-17.86	2.36	10.16	8.32	-5.05	3.27	-17.81	2.36	10.16	8.32	-5.00	3.32

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = $10 * \log(\text{Specified bandwidth} / \text{Measured bandwidth})$

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

Maximum Power Spectral Density

Test place	Ise EMC Lab. No.3 Preparation Room	
Report No.	11288814H	
Date	February 16, 2016	February 17, 2016
Temperature / Humidity	23deg. C / 34 % RH	24deg. C / 34 % RH
Engineer	Tomoki Matsui	Tomoki Matsui
Mode	Tx 11n-40	

Antenna port WA+WC Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	WA	WC	Sum				WA	WC	Sum			
[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	
5190	0.15	0.15	0.29	-5.31	8.68	13.99	1.02	0.99	2.00	3.01	17.00	13.99
5230	0.16	0.14	0.30	-5.26	8.68	13.94	1.06	0.96	2.02	3.06	17.00	13.94
5270	0.16	0.13	0.28	-5.46	8.68	14.14	1.05	0.88	1.93	2.86	17.00	14.14
5310	0.15	0.13	0.29	-5.39	8.68	14.07	1.05	0.91	1.96	2.93	17.00	14.07
5510	0.15	0.14	0.29	-5.37	8.68	14.05	1.04	0.93	1.97	2.95	17.00	14.05
5550	0.13	0.14	0.27	-5.62	8.68	14.30	0.89	0.97	1.86	2.70	17.00	14.30
5670	0.13	0.13	0.26	-5.86	8.68	14.54	0.85	0.91	1.76	2.46	17.00	14.54
5755	0.07	0.07	0.14	-8.68	27.68	36.36	0.46	0.46	0.92	-0.36	36.00	36.36
5795	0.07	0.08	0.14	-8.48	27.68	36.16	0.45	0.52	0.96	-0.16	36.00	36.16

Tested Frequency [MHz]	Duty Factor [dB]	RBW Correction Factor [dB]	Antenna port WA					Antenna port WC						
			PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.
			[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5190	0.05	0.00	-21.11	2.71	10.10	8.32	-8.25	0.07	-21.27	2.71	10.13	8.32	-8.38	-0.06
5230	0.05	0.00	-20.94	2.72	10.10	8.32	-8.07	0.25	-21.40	2.72	10.13	8.32	-8.50	-0.17
5270	0.05	0.00	-20.96	2.72	10.10	8.32	-8.09	0.23	-21.79	2.72	10.13	8.32	-8.89	-0.57
5310	0.05	0.00	-20.99	2.73	10.10	8.32	-8.11	0.21	-21.63	2.73	10.13	8.32	-8.72	-0.40
5510	0.05	0.00	-21.08	2.78	10.11	8.32	-8.14	0.18	-21.61	2.78	10.14	8.32	-8.64	-0.32
5550	0.05	0.00	-21.73	2.78	10.10	8.32	-8.80	-0.48	-21.44	2.78	10.14	8.32	-8.47	-0.15
5670	0.05	0.00	-21.96	2.80	10.09	8.32	-9.02	-0.70	-21.71	2.80	10.13	8.32	-8.73	-0.41
5755	0.05	0.27	-24.93	2.81	10.08	8.32	-11.72	-3.40	-24.91	2.81	10.12	8.32	-11.66	-3.34
5795	0.05	0.27	-25.04	2.81	10.08	8.32	-11.83	-3.51	-24.42	2.81	10.12	8.32	-11.17	-2.85

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

Maximum Power Spectral Density

Test place	Ise EMC Lab. No.3 Preparation Room	
Report No.	11288814H	
Date	February 16, 2016	February 17, 2016
Temperature / Humidity	23deg. C / 34 % RH	24deg. C / 34 % RH
Engineer	Tomoki Matsui	Tomoki Matsui
Mode	Tx 11ac-40	

Antenna port WA+WC Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)							PSD (e.i.r.p.)						
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin		
	WA	WC	Sum				WA	WC	Sum					
[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]			
5190	0.15	0.15	0.30	-5.21	8.68	13.89	1.03	1.02	2.05	3.11	17.00	13.89		
5230	0.15	0.13	0.29	-5.40	8.68	14.08	1.05	0.91	1.96	2.92	17.00	14.08		
5270	0.15	0.14	0.29	-5.35	8.68	14.03	1.04	0.94	1.98	2.97	17.00	14.03		
5310	0.15	0.15	0.30	-5.19	8.68	13.87	1.03	1.02	2.06	3.13	17.00	13.87		
5510	0.14	0.14	0.28	-5.50	8.68	14.18	0.98	0.93	1.91	2.82	17.00	14.18		
5550	0.14	0.14	0.28	-5.58	8.68	14.26	0.92	0.96	1.88	2.74	17.00	14.26		
5670	0.12	0.14	0.26	-5.88	8.68	14.56	0.83	0.92	1.76	2.44	17.00	14.56		
5755	0.06	0.07	0.13	-8.85	27.68	36.53	0.43	0.45	0.89	-0.53	36.00	36.53		
5795	0.06	0.07	0.14	-8.67	27.68	36.35	0.43	0.49	0.92	-0.35	36.00	36.35		

Tested Frequency [MHz]	Duty Factor [dB]	RBW Correction Factor [dB]	Antenna port WA					Antenna port WC							
			PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.	
			[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	
5190	0.06	0.00	-21.08	2.71	10.10	8.32	-8.21	0.11	-21.13	2.71	10.13	8.32	-8.23	0.09	
5230	0.06	0.00	-20.99	2.72	10.10	8.32	-8.11	0.21	-21.65	2.72	10.13	8.32	-8.74	-0.42	
5270	0.06	0.00	-21.02	2.72	10.10	8.32	-8.14	0.18	-21.51	2.72	10.13	8.32	-8.60	-0.27	
5310	0.06	0.00	-21.07	2.73	10.10	8.32	-8.18	0.14	-21.14	2.73	10.13	8.32	-8.22	0.10	
5510	0.06	0.00	-21.36	2.78	10.11	8.32	-8.41	-0.09	-21.60	2.78	10.14	8.32	-8.62	-0.30	
5550	0.06	0.00	-21.62	2.78	10.10	8.32	-8.68	-0.35	-21.48	2.78	10.14	8.32	-8.50	-0.18	
5670	0.06	0.00	-22.06	2.80	10.09	8.32	-9.11	-0.79	-21.66	2.80	10.13	8.32	-8.67	-0.35	
5755	0.06	0.27	-25.16	2.81	10.08	8.32	-11.94	-3.62	-25.05	2.81	10.12	8.32	-11.79	-3.47	
5795	0.06	0.27	-25.17	2.81	10.08	8.32	-11.95	-3.63	-24.68	2.81	10.12	8.32	-11.42	-3.10	

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

Maximum Power Spectral Density

Test place	Ise EMC Lab. No.3 Preparation Room	
Report No.	11288814H	
Date	February 16, 2016	February 17, 2016
Temperature / Humidity	23deg. C / 34 % RH	24deg. C / 34 % RH
Engineer	Tomoki Matsui	Tomoki Matsui
Mode	Tx 11ac-80	

Antenna port WA+WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	PSD (Conducted)							PSD (e.i.r.p.)						
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin		
	WA	WC	Sum				WA	WC	Sum					
[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]			
5210	0.05	0.04	0.09	-10.50	8.68	19.18	0.33	0.27	0.61	-2.18	17.00	19.18		
5290	0.05	0.04	0.08	-10.72	8.68	19.40	0.32	0.26	0.58	-2.40	17.00	19.40		
5530	0.04	0.04	0.08	-11.13	8.68	19.81	0.25	0.27	0.52	-2.81	17.00	19.81		
5610	0.04	0.04	0.07	-11.27	8.68	19.95	0.25	0.25	0.51	-2.95	17.00	19.95		
5775	0.02	0.02	0.04	-13.64	27.68	41.32	0.14	0.15	0.29	-5.32	36.00	41.32		

Tested Frequency [MHz]	Duty Factor [dB]	RBW Correction Factor [dB]	Antenna port WA					Antenna port WC						
			PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result Cond.	PSD Result e.i.r.p.
			[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5210	0.11	0.00	-26.02	2.71	10.10	8.32	-13.10	-4.78	-26.91	2.71	10.13	8.32	-13.96	-5.64
5290	0.11	0.00	-26.27	2.73	10.10	8.32	-13.33	-5.01	-27.14	2.73	10.13	8.32	-14.17	-5.85
5530	0.11	0.00	-27.30	2.78	10.11	8.32	-14.30	-5.98	-27.02	2.78	10.14	8.32	-13.99	-5.67
5610	0.11	0.00	-27.26	2.79	10.10	8.32	-14.26	-5.94	-27.33	2.79	10.13	8.32	-14.30	-5.98
5775	0.11	0.27	-30.11	2.81	10.08	8.32	-16.84	-8.52	-29.77	2.81	10.12	8.32	-16.46	-8.14

Sample Calculation:

PSD: Power Spectral Density

The PSD within 5725 MHz to 5825 MHz are based on any 500 kHz band.

RBW Correction Factor = 10 * log (Specified bandwidth / Measured bandwidth)

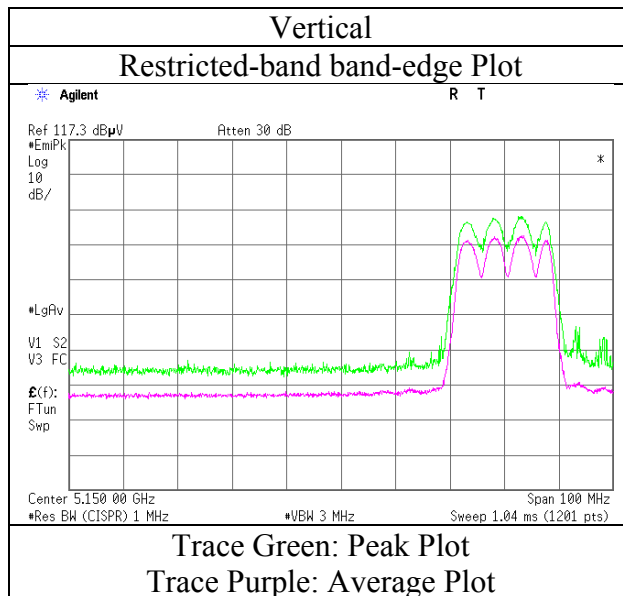
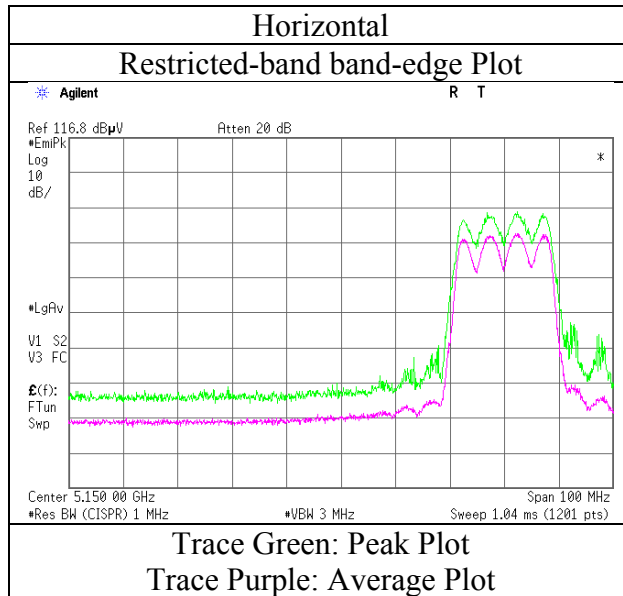
PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

The conducted PSD limit was reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. (All frequencies for FCC, 5725 MHz-5850 MHz for IC)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Yuta Moriya
Mode	Tx 11a 5180 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 16, 2016 May 19, 2016
Temperature / Humidity : 23deg. C / 52 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11a 5260 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	10520.000	PK	41.8	38.9	-2.0	33.5	-	45.2	73.9	28.7	Floor noise
Hori	15780.000	PK	42.5	39.6	-0.1	32.8	-	49.2	73.9	24.7	Floor noise
Hori	10520.000	AV	33.4	38.9	-2.0	33.5	-	36.8	53.9	17.1	Floor noise
Hori	15780.000	AV	33.9	39.6	-0.1	32.8	-	40.6	53.9	13.3	Floor noise
Vert	10520.000	PK	41.8	38.9	-2.0	33.5	-	45.2	73.9	28.7	Floor noise
Vert	15780.000	PK	42.5	39.6	-0.1	32.8	-	49.2	73.9	24.7	Floor noise
Vert	10520.000	AV	33.4	38.9	-2.0	33.5	-	36.8	53.9	17.1	Floor noise
Vert	15780.000	AV	33.9	39.6	-0.1	32.8	-	40.6	53.9	13.3	Floor noise

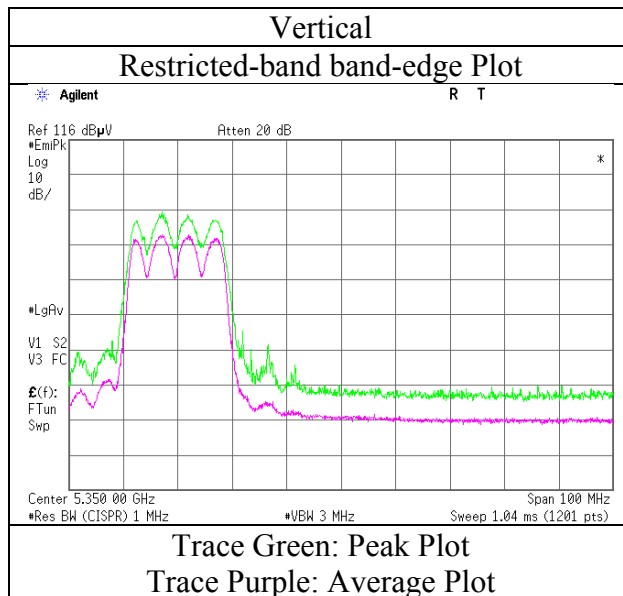
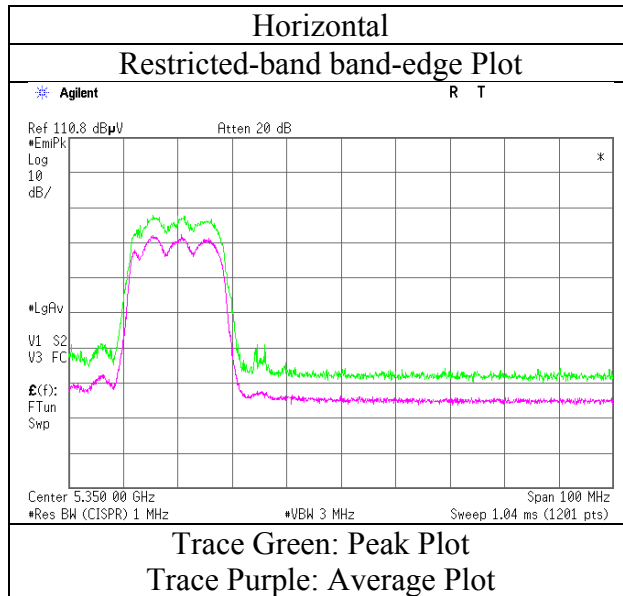
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Yuta Moriya
Mode	Tx 11a 5320 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 16, 2016 May 19, 2016
Temperature / Humidity : 23deg. C / 52 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11a 5500 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5470.000	PK	42.7	32.2	7.3	31.8	-	50.4	73.9	23.5	
Hori	11000.000	PK	42.6	39.9	-2.0	33.6	-	46.9	73.9	27.0	Floor noise
Hori	16500.000	PK	42.6	40.4	-0.1	32.8	-	50.1	73.9	23.8	Floor noise
Hori	5470.000	AV	35.0	32.2	7.3	31.8	-	42.7	53.9	11.2	
Hori	11000.000	AV	34.5	39.9	-2.0	33.6	-	38.8	53.9	15.1	Floor noise
Hori	16500.000	AV	33.7	40.4	-0.1	32.8	-	41.2	53.9	12.7	Floor noise
Vert	5470.000	PK	45.8	32.2	7.3	31.8	-	53.5	73.9	20.4	
Vert	11000.000	PK	42.7	39.9	-2.0	33.6	-	47.0	73.9	26.9	Floor noise
Vert	16500.000	PK	42.7	40.4	-0.1	32.8	-	50.2	73.9	23.7	Floor noise
Vert	5470.000	AV	35.7	32.2	7.3	31.8	-	43.4	53.9	10.5	
Vert	11000.000	AV	34.6	39.9	-2.0	33.6	-	38.9	53.9	15.0	Floor noise
Vert	16500.000	AV	33.8	40.4	-0.1	32.8	-	41.3	53.9	12.6	Floor noise

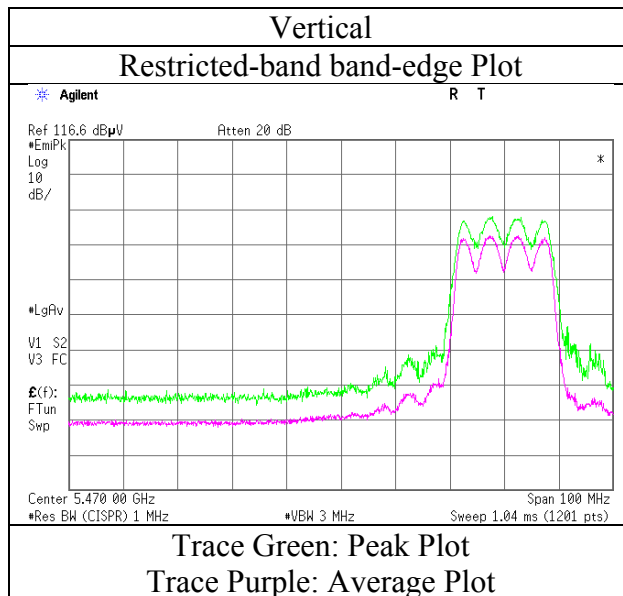
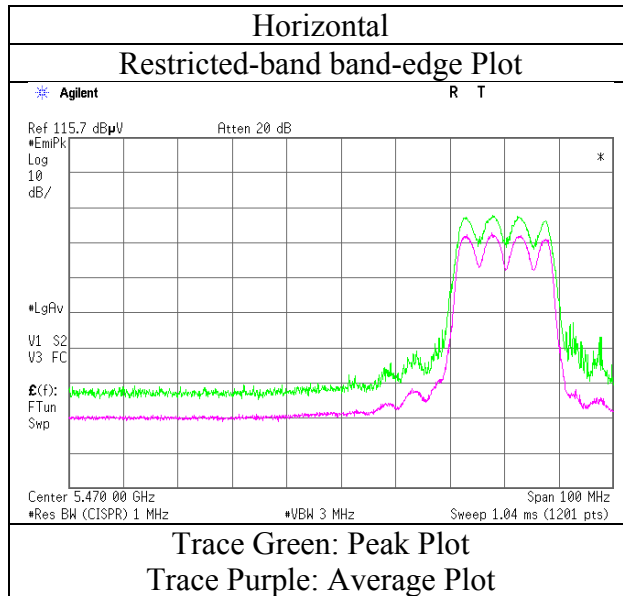
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

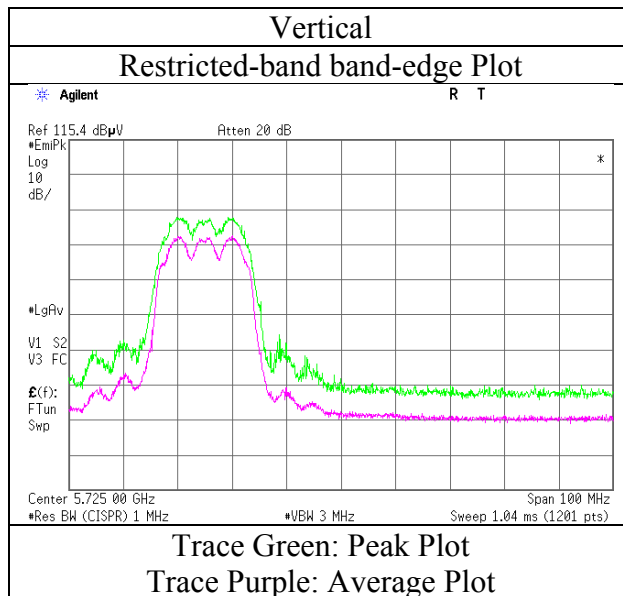
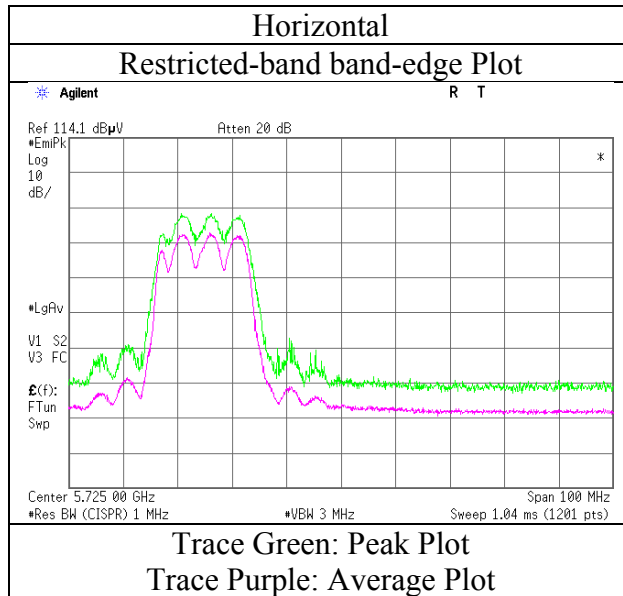
Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Yuta Moriya
Mode	Tx 11a 5500 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Yuta Moriya
Mode	Tx 11a 5700 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 16, 2016 May 19, 2016
Temperature / Humidity : 23deg. C / 52 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11a 5745 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5650.000	PK	40.1	32.4	7.4	31.8	-	48.1	68.2	20.1	
Hori	5700.000	PK	41.3	32.5	7.4	31.8	-	49.4	105.2	55.8	
Hori	5720.000	PK	49.4	32.6	7.5	31.8	-	57.7	110.8	53.1	
Hori	5725.000	PK	54.2	32.6	7.5	31.8	-	62.5	122.2	59.7	
Hori	11490.000	PK	41.9	41.0	-1.7	33.4	-	47.8	73.9	26.1	Floor noise
Hori	17235.000	PK	41.2	42.4	-0.1	32.7	-	50.8	73.9	23.1	Floor noise
Hori	11490.000	AV	33.9	41.0	-1.7	33.4	-	39.8	53.9	14.1	Floor noise
Hori	17235.000	AV	33.6	42.4	-0.1	32.7	-	43.2	53.9	10.7	Floor noise
Vert	5650.000	PK	40.2	32.4	7.4	31.8	-	48.2	68.2	20.0	
Vert	5700.000	PK	41.2	32.5	7.4	31.8	-	49.3	105.2	55.9	
Vert	5720.000	PK	51.6	32.6	7.5	31.8	-	59.9	110.8	50.9	
Vert	5725.000	PK	55.7	32.6	7.5	31.8	-	64.0	122.2	58.2	
Vert	11490.000	PK	41.9	41.0	-1.7	33.4	-	47.8	73.9	26.1	Floor noise
Vert	17235.000	PK	41.2	42.4	-0.1	32.7	-	50.8	73.9	23.1	Floor noise
Vert	11490.000	AV	33.9	41.0	-1.7	33.4	-	39.8	53.9	14.1	Floor noise
Vert	17235.000	AV	33.6	42.4	-0.1	32.7	-	43.2	53.9	10.7	Floor noise

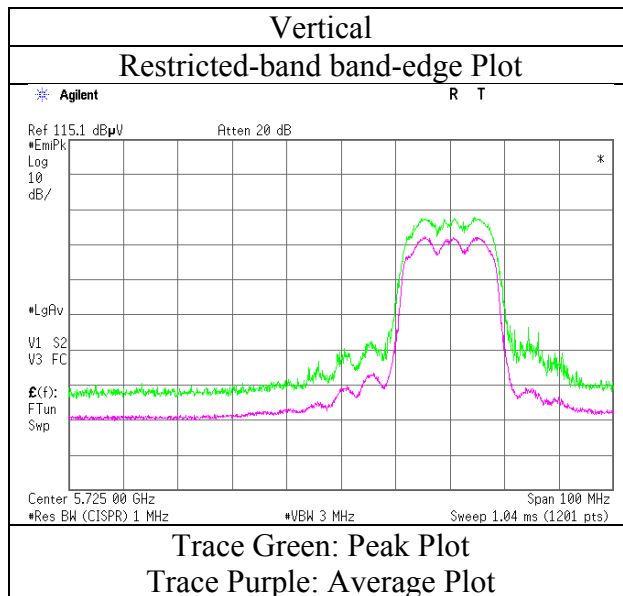
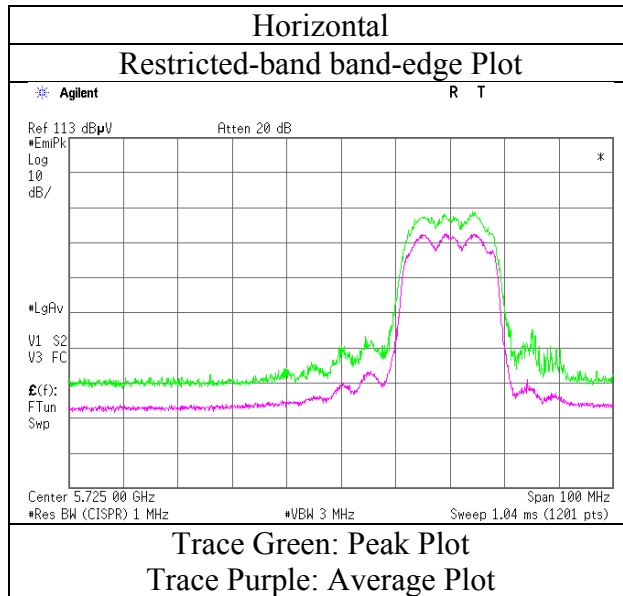
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Yuta Moriya
Mode	Tx 11a 5745 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 16, 2016 May 19, 2016
Temperature / Humidity : 23deg. C / 52 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11a 5825 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5850.000	PK	49.7	32.8	7.5	31.8	-	58.2	122.2	64.0	
Hori	5855.000	PK	44.6	32.8	7.5	31.8	-	53.1	110.8	57.7	
Hori	5875.000	PK	40.3	32.8	7.5	31.8	-	48.8	105.2	56.4	
Hori	5925.000	PK	39.8	32.9	7.5	31.8	-	48.4	68.2	19.8	
Hori	11650.000	PK	41.7	40.8	-1.5	33.4	-	47.6	73.9	26.3	Floor noise
Hori	17475.000	PK	42.5	43.4	0.2	32.7	-	53.4	73.9	20.5	Floor noise
Hori	11650.000	AV	33.9	40.8	-1.5	33.4	-	39.8	53.9	14.1	Floor noise
Hori	17475.000	AV	34.2	43.4	0.2	32.7	-	45.1	53.9	8.8	Floor noise
Vert	5850.000	PK	46.8	32.8	7.5	31.8	-	55.3	122.2	66.9	
Vert	5855.000	PK	45.8	32.8	7.5	31.8	-	54.3	110.8	56.5	
Vert	5875.000	PK	40.6	32.8	7.5	31.8	-	49.1	105.2	56.1	
Vert	5925.000	PK	40.3	32.9	7.5	31.8	-	48.9	68.2	19.3	
Vert	11650.000	PK	41.8	40.8	-1.5	33.4	-	47.7	73.9	26.2	Floor noise
Vert	17475.000	PK	42.4	43.4	0.2	32.7	-	53.3	73.9	20.6	Floor noise
Vert	11650.000	AV	34.0	40.8	-1.5	33.4	-	39.9	53.9	14.0	Floor noise
Vert	17475.000	AV	34.1	43.4	0.2	32.7	-	45.0	53.9	8.9	Floor noise

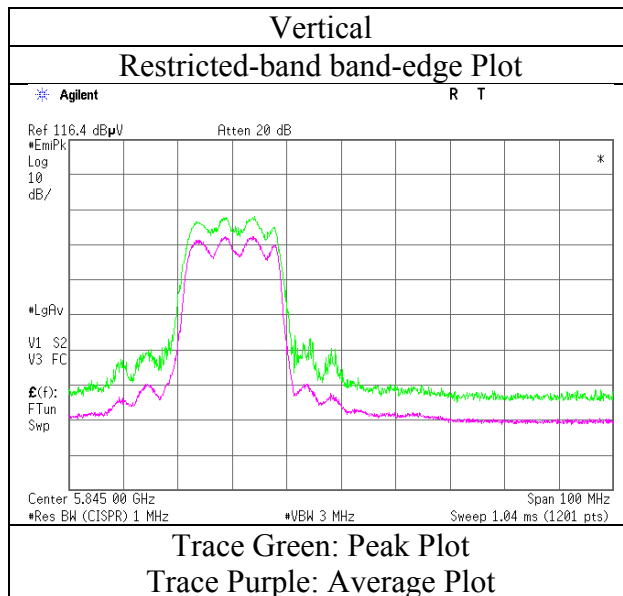
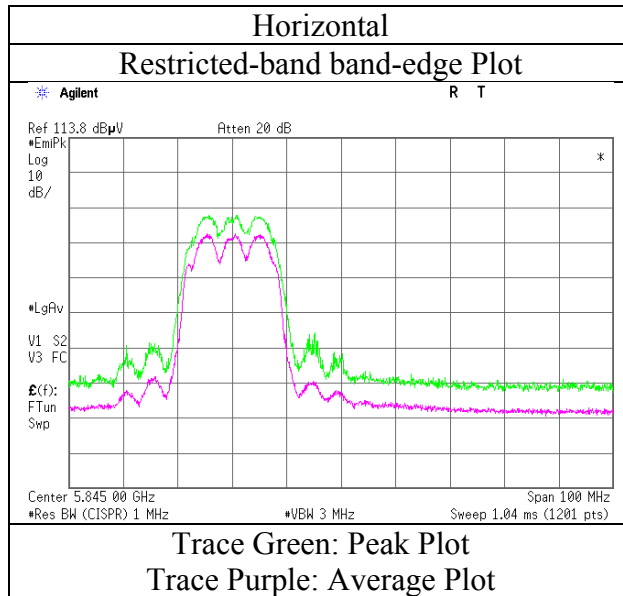
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Yuta Moriya
Mode	Tx 11a 5825 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 16, 2016 May 19, 2016 May 20, 2016
Temperature / Humidity : 23deg. C / 52 % RH 24deg. C / 39 % RH 24deg. C / 47 % RH
Engineer : Yuta Moriya Shinichi Miyazono Yuta Moriya
(1 GHz - 10 GHz) (10 GHz - 40 GHz) (Below 1 GHz)
Mode : Tx 11n-20 5180 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.000	QP	26.1	10.3	7.3	32.2	-	11.5	40.0	28.5	
Hori	81.555	QP	24.7	6.6	7.8	32.2	-	6.9	40.0	33.1	
Hori	94.433	QP	24.3	8.9	8.0	32.2	-	9.0	43.5	34.5	
Hori	292.044	QP	34.7	13.4	9.8	31.9	-	26.0	46.0	20.0	
Hori	737.334	QP	21.2	20.2	12.6	31.9	-	22.1	46.0	23.9	
Hori	939.966	QP	21.3	22.2	13.6	30.7	-	26.4	46.0	19.6	
Hori	5150.000	PK	50.5	32.2	7.2	31.7	-	58.2	73.9	15.7	
Hori	10360.000	PK	42.3	38.7	-2.0	33.5	-	45.5	73.9	28.4	Floor noise
Hori	15540.000	PK	41.4	39.8	-0.2	32.7	-	48.3	73.9	25.6	Floor noise
Hori	5150.000	AV	36.2	32.2	7.2	31.7	-	43.9	53.9	10.0	
Hori	10360.000	AV	33.7	38.7	-2.0	33.5	-	36.9	53.9	17.0	Floor noise
Hori	15540.000	AV	33.5	39.8	-0.2	32.7	-	40.4	53.9	13.5	Floor noise
Vert	50.000	QP	26.4	10.3	7.3	32.2	-	11.8	40.0	28.2	
Vert	81.555	QP	26.5	6.6	7.8	32.2	-	8.7	40.0	31.3	
Vert	94.433	QP	31.1	8.9	8.0	32.2	-	15.8	43.5	27.7	
Vert	292.044	QP	29.7	13.4	9.8	31.9	-	21.0	46.0	25.0	
Vert	737.334	QP	21.2	20.2	12.6	31.9	-	22.1	46.0	23.9	
Vert	939.966	QP	21.2	22.2	13.6	30.7	-	26.3	46.0	19.7	
Vert	5150.000	PK	49.0	32.2	7.2	31.7	-	56.7	73.9	17.2	
Vert	10360.000	PK	42.3	38.7	-2.0	33.5	-	45.5	73.9	28.4	Floor noise
Vert	15540.000	PK	41.4	39.8	-0.2	32.7	-	48.3	73.9	25.6	Floor noise
Vert	5150.000	AV	36.4	32.2	7.2	31.7	-	44.1	53.9	9.8	
Vert	10360.000	AV	33.7	38.7	-2.0	33.5	-	36.9	53.9	17.0	Floor noise
Vert	15540.000	AV	33.5	39.8	-0.2	32.7	-	40.4	53.9	13.5	Floor noise

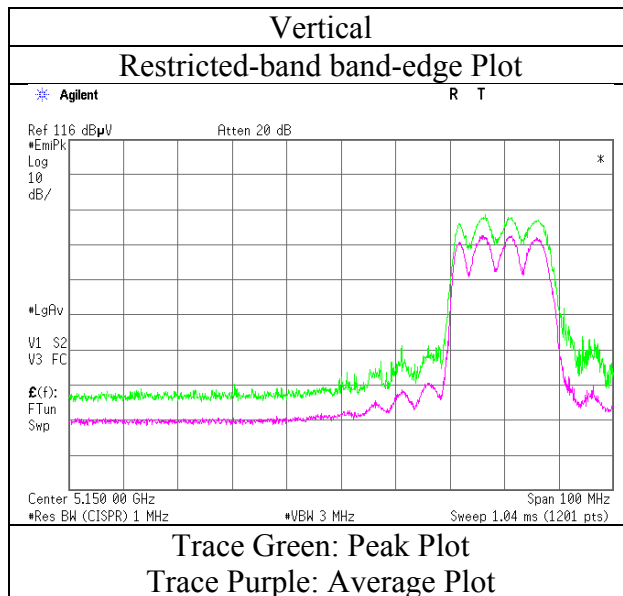
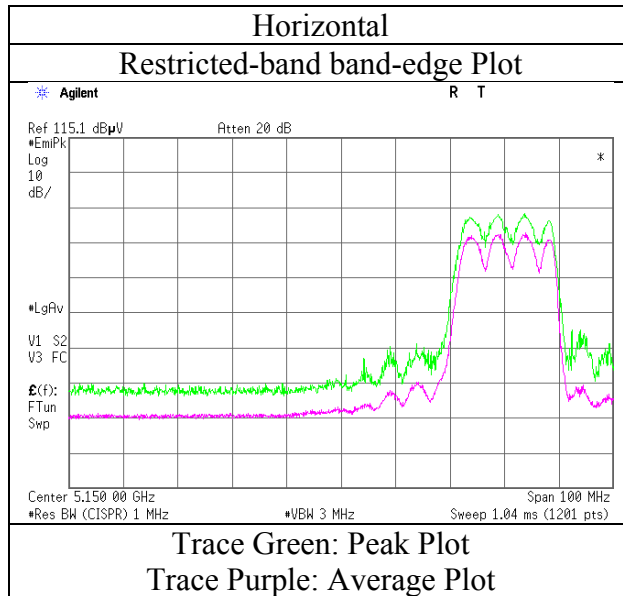
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Yuta Moriya
Mode	Tx 11n-20 5180 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 16, 2016 May 19, 2016
Temperature / Humidity : 23deg. C / 52 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-20 5260 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	10520.000	PK	41.7	38.9	-2.0	33.5	-	45.1	73.9	28.8	Floor noise
Hori	15780.000	PK	42.4	39.6	-0.1	32.8	-	49.1	73.9	24.8	Floor noise
Hori	10520.000	AV	33.3	38.9	-2.0	33.5	-	36.7	53.9	17.2	Floor noise
Hori	15780.000	AV	33.8	39.6	-0.1	32.8	-	40.5	53.9	13.4	Floor noise
Vert	10520.000	PK	41.7	38.9	-2.0	33.5	-	45.1	73.9	28.8	Floor noise
Vert	15780.000	PK	42.5	39.6	-0.1	32.8	-	49.2	73.9	24.7	Floor noise
Vert	10520.000	AV	33.3	38.9	-2.0	33.5	-	36.7	53.9	17.2	Floor noise
Vert	15780.000	AV	33.9	39.6	-0.1	32.8	-	40.6	53.9	13.3	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 16, 2016 May 19, 2016
Temperature / Humidity : 23deg. C / 52 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-20 5320 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5350.000	PK	42.4	32.2	7.3	31.8	-	50.1	73.9	23.8	
Hori	10640.000	PK	42.1	39.1	-2.0	33.5	-	45.7	73.9	28.2	Floor noise
Hori	15960.000	PK	42.5	39.4	0.1	32.9	-	49.1	73.9	24.8	Floor noise
Hori	5350.000	AV	33.6	32.2	7.3	31.8	-	41.3	53.9	12.6	
Hori	10640.000	AV	33.5	39.1	-2.0	33.5	-	37.1	53.9	16.8	Floor noise
Hori	15960.000	AV	34.3	39.4	0.1	32.9	-	40.9	53.9	13.0	Floor noise
Vert	5350.000	PK	43.1	32.2	7.3	31.8	-	50.8	73.9	23.1	
Vert	10640.000	PK	42.1	39.1	-2.0	33.5	-	45.7	73.9	28.2	Floor noise
Vert	15960.000	PK	42.6	39.4	0.1	32.9	-	49.2	73.9	24.7	Floor noise
Vert	5350.000	AV	34.3	32.2	7.3	31.8	-	42.0	53.9	11.9	
Vert	10640.000	AV	33.6	39.1	-2.0	33.5	-	37.2	53.9	16.7	Floor noise
Vert	15960.000	AV	34.4	39.4	0.1	32.9	-	41.0	53.9	12.9	Floor noise

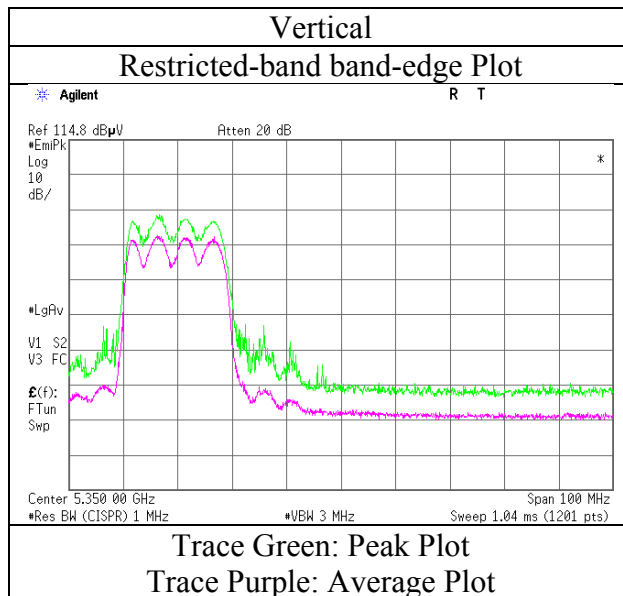
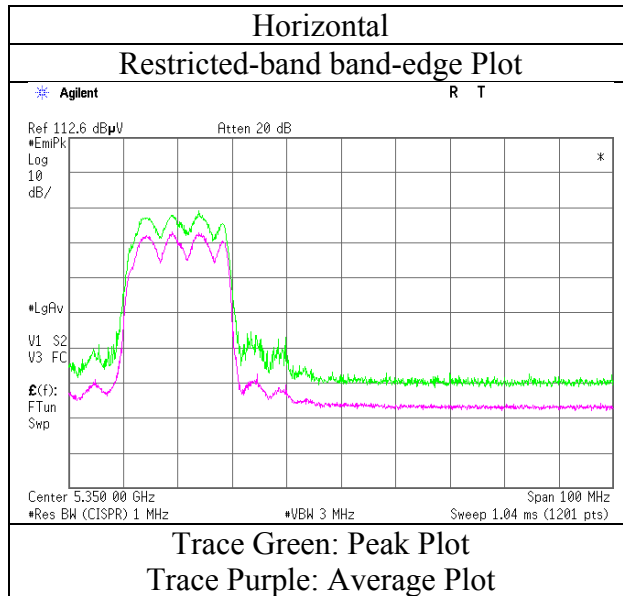
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Yuta Moriya
Mode	Tx 11n-20 5320 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. 11288814H
Date May 16, 2016 May 19, 2016
Temperature / Humidity 22deg. C / 66 % RH 24deg. C / 39 % RH
Engineer Shinichi Miyazono Shinichi Miyazono
(1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode Tx 11n-20 5500 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5470.000	PK	44.2	32.2	7.3	31.8	-	51.9	73.9	22.0	
Hori	11000.000	PK	42.5	39.9	-2.0	33.6	-	46.8	73.9	27.1	Floor noise
Hori	16500.000	PK	42.5	40.4	-0.1	32.8	-	50.0	73.9	23.9	Floor noise
Hori	5470.000	AV	36.0	32.2	7.3	31.8	-	43.7	53.9	10.2	
Hori	11000.000	AV	34.3	39.9	-2.0	33.6	-	38.6	53.9	15.3	Floor noise
Hori	16500.000	AV	33.6	40.4	-0.1	32.8	-	41.1	53.9	12.8	Floor noise
Vert	5470.000	PK	45.8	32.2	7.3	31.8	-	53.5	73.9	20.4	
Vert	11000.000	PK	42.6	39.9	-2.0	33.6	-	46.9	73.9	27.0	Floor noise
Vert	16500.000	PK	42.6	40.4	-0.1	32.8	-	50.1	73.9	23.8	Floor noise
Vert	5470.000	AV	36.8	32.2	7.3	31.8	-	44.5	53.9	9.4	
Vert	11000.000	AV	34.5	39.9	-2.0	33.6	-	38.8	53.9	15.1	Floor noise
Vert	16500.000	AV	33.7	40.4	-0.1	32.8	-	41.2	53.9	12.7	Floor noise

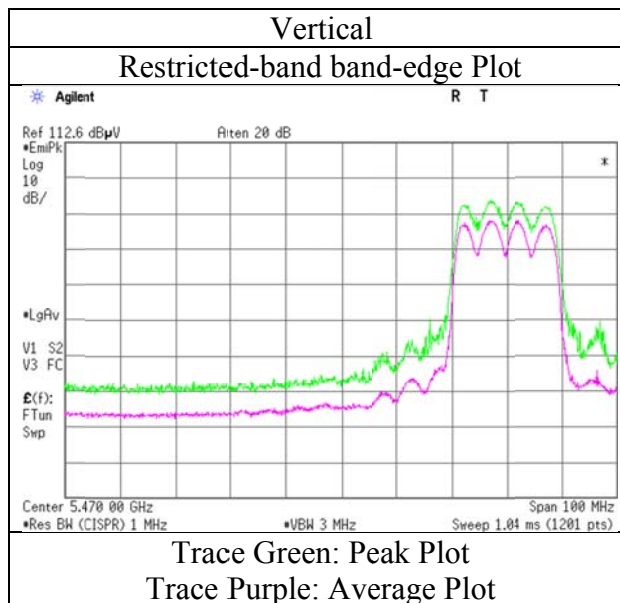
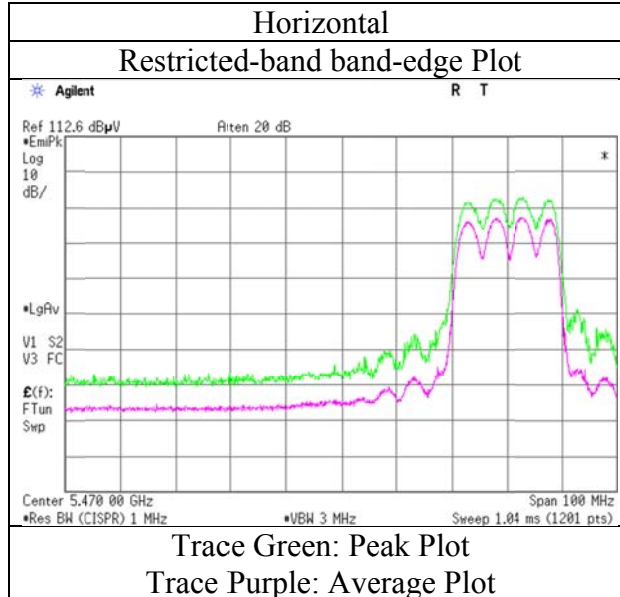
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$
10 GHz - 40 GHz $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.5\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	22deg. C / 66 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11n-20 5500 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber	
Report No.	11288814H	
Date	May 16, 2016	May 19, 2016
Temperature / Humidity	22deg. C / 66 % RH	24deg. C / 39 % RH
Engineer	Shinichi Miyazono	Shinichi Miyazono
	(1 GHz - 10 GHz)	(10 GHz - 40 GHz)
Mode	Tx 11n-20 5580 MHz	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	11160.000	PK	42.2	40.3	-1.9	33.5	-	47.1	73.9	26.8	Floor noise
Hori	16740.000	PK	42.9	40.9	-0.1	32.8	-	50.9	73.9	23.0	Floor noise
Hori	11160.000	AV	33.7	40.3	-1.9	33.5	-	38.6	53.9	15.3	Floor noise
Hori	16740.000	AV	34.5	40.9	-0.1	32.8	-	42.5	53.9	11.4	Floor noise
Vert	11160.000	PK	42.2	40.3	-1.9	33.5	-	47.1	73.9	26.8	Floor noise
Vert	16740.000	PK	42.9	40.9	-0.1	32.8	-	50.9	73.9	23.0	Floor noise
Vert	11160.000	AV	33.7	40.3	-1.9	33.5	-	38.6	53.9	15.3	Floor noise
Vert	16740.000	AV	34.5	40.9	-0.1	32.8	-	42.5	53.9	11.4	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. 11288814H
Date May 16, 2016 May 19, 2016
Temperature / Humidity 22deg. C / 66 % RH 24deg. C / 39 % RH
Engineer Shinichi Miyazono Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode Tx 11n-20 5700 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5725.000	PK	47.6	32.6	7.5	31.8	-	55.9	73.9	18.0	
Hori	11400.000	PK	41.2	40.8	-1.7	33.4	-	46.9	73.9	27.0	Floor noise
Hori	17100.000	PK	41.8	41.8	-0.2	32.8	-	50.6	73.9	23.3	Floor noise
Hori	5725.000	AV	36.0	32.6	7.5	31.8	-	44.3	53.9	9.6	
Hori	11400.000	AV	32.9	40.8	-1.7	33.4	-	38.6	53.9	15.3	Floor noise
Hori	17100.000	AV	33.6	41.8	-0.2	32.8	-	42.4	53.9	11.5	Floor noise
Vert	5725.000	PK	45.3	32.6	7.5	31.8	-	53.6	73.9	20.3	
Vert	11400.000	PK	41.2	40.8	-1.7	33.4	-	46.9	73.9	27.0	Floor noise
Vert	17100.000	PK	41.8	41.8	-0.2	32.8	-	50.6	73.9	23.3	Floor noise
Vert	5725.000	AV	36.4	32.6	7.5	31.8	-	44.7	53.9	9.2	
Vert	11400.000	AV	32.9	40.8	-1.7	33.4	-	38.6	53.9	15.3	Floor noise
Vert	17100.000	AV	33.6	41.8	-0.2	32.8	-	42.4	53.9	11.5	Floor noise

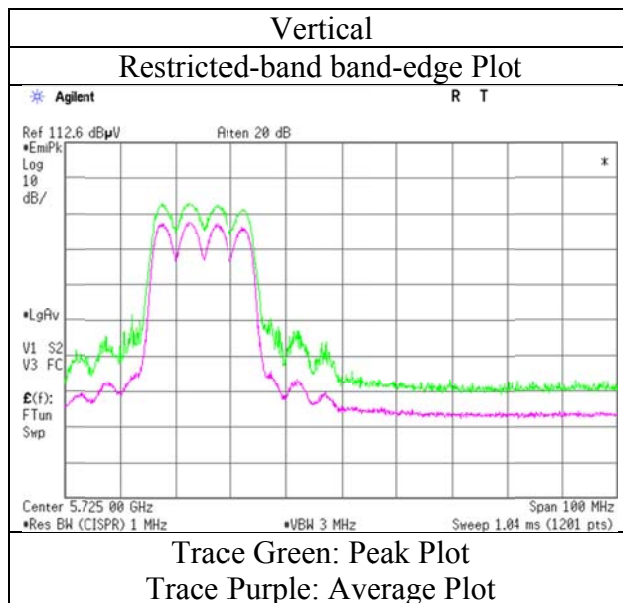
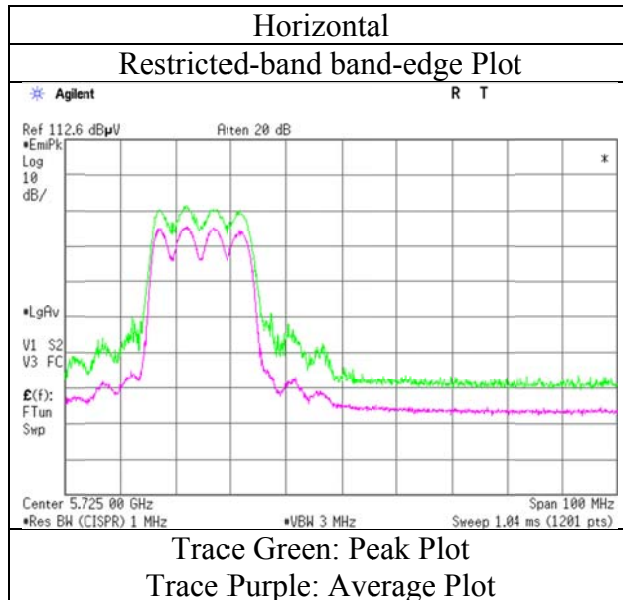
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$
 10 GHz - 40 GHz $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.5\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	22deg. C / 66 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11n-20 5700 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 16, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 66 % RH 24deg. C / 39 % RH
Engineer : Shinichi Miyazono Shinichi Miyazono
(1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-20 5745 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5650.000	PK	40.3	32.4	7.4	31.8	-	48.3	68.2	19.9	
Hori	5700.000	PK	41.8	32.5	7.4	31.8	-	49.9	105.2	55.3	
Hori	5720.000	PK	46.4	32.6	7.5	31.8	-	54.7	110.8	56.1	
Hori	5725.000	PK	50.1	32.6	7.5	31.8	-	58.4	122.2	63.8	
Hori	11490.000	PK	41.9	41.0	-1.7	33.4	-	47.8	73.9	26.1	Floor noise
Hori	17235.000	PK	41.1	42.4	-0.1	32.7	-	50.7	73.9	23.2	Floor noise
Hori	11490.000	AV	33.9	41.0	-1.7	33.4	-	39.8	53.9	14.1	Floor noise
Hori	17235.000	AV	33.6	42.4	-0.1	32.7	-	43.2	53.9	10.7	Floor noise
Vert	5650.000	PK	40.6	32.4	7.4	31.8	-	48.6	68.2	19.6	
Vert	5700.000	PK	42.5	32.5	7.4	31.8	-	50.6	105.2	54.6	
Vert	5720.000	PK	46.6	32.6	7.5	31.8	-	54.9	110.8	55.9	
Vert	5725.000	PK	52.2	32.6	7.5	31.8	-	60.5	122.2	61.7	
Vert	11490.000	PK	41.8	41.0	-1.7	33.4	-	47.7	73.9	26.2	Floor noise
Vert	17235.000	PK	41.2	42.4	-0.1	32.7	-	50.8	73.9	23.1	Floor noise
Vert	11490.000	AV	33.8	41.0	-1.7	33.4	-	39.7	53.9	14.2	Floor noise
Vert	17235.000	AV	33.5	42.4	-0.1	32.7	-	43.1	53.9	10.8	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

UL Japan, Inc.

Ise EMC Lab.

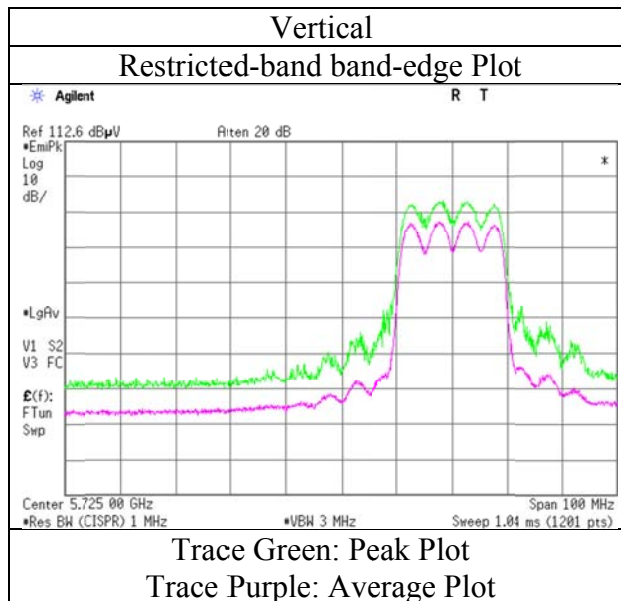
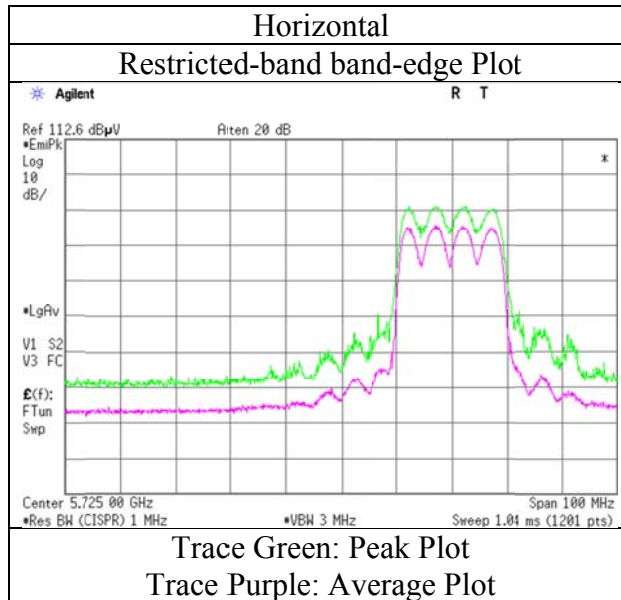
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	22deg. C / 66 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11n-20 5745 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
 Report No. : 11288814H
 Date : May 16, 2016 May 19, 2016
 Temperature / Humidity : 22deg. C / 66 % RH 24deg. C / 39 % RH
 Engineer : Shinichi Miyazono Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
 Mode : Tx 11n-20 5785 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	11570.000	PK	41.9	40.9	-1.7	33.4	-	47.7	73.9	26.2	Floor noise
Hori	17355.000	PK	43.5	42.9	0.0	32.7	-	53.7	73.9	20.2	Floor noise
Hori	11570.000	AV	33.1	40.9	-1.7	33.4	-	38.9	53.9	15.0	Floor noise
Hori	17355.000	AV	34.3	42.9	0.0	32.7	-	44.5	53.9	9.4	Floor noise
Vert	11570.000	PK	41.9	40.9	-1.7	33.4	-	47.7	73.9	26.2	Floor noise
Vert	17355.000	PK	43.5	42.9	0.0	32.7	-	53.7	73.9	20.2	Floor noise
Vert	11570.000	AV	33.1	40.9	-1.7	33.4	-	38.9	53.9	15.0	Floor noise
Vert	17355.000	AV	34.3	42.9	0.0	32.7	-	44.5	53.9	9.4	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. 11288814H
Date May 16, 2016 May 19, 2016
Temperature / Humidity 22deg. C / 66 % RH 24deg. C / 39 % RH
Engineer Shinichi Miyazono Shinichi Miyazono
(1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode Tx 11n-20 5825 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5850.000	PK	46.6	32.8	7.5	31.8	-	55.1	122.2	67.1	
Hori	5855.000	PK	45.5	32.8	7.5	31.8	-	54.0	110.8	56.8	
Hori	5875.000	PK	42.2	32.8	7.5	31.8	-	50.7	105.2	54.5	
Hori	5925.000	PK	40.6	32.9	7.5	31.8	-	49.2	68.2	19.0	
Hori	11650.000	PK	41.8	40.8	-1.5	33.4	-	47.7	73.9	26.2	Floor noise
Hori	17475.000	PK	42.5	43.4	0.2	32.7	-	53.4	73.9	20.5	Floor noise
Hori	11650.000	AV	34.0	40.8	-1.5	33.4	-	39.9	53.9	14.0	Floor noise
Hori	17475.000	AV	34.2	43.4	0.2	32.7	-	45.1	53.9	8.8	Floor noise
Vert	5850.000	PK	46.3	32.8	7.5	31.8	-	54.8	122.2	67.4	
Vert	5855.000	PK	44.7	32.8	7.5	31.8	-	53.2	110.8	57.6	
Vert	5875.000	PK	41.3	32.8	7.5	31.8	-	49.8	105.2	55.4	
Vert	5925.000	PK	40.5	32.9	7.5	31.8	-	49.1	68.2	19.1	
Vert	11650.000	PK	41.8	40.8	-1.5	33.4	-	47.7	73.9	26.2	Floor noise
Vert	17475.000	PK	42.5	43.4	0.2	32.7	-	53.4	73.9	20.5	Floor noise
Vert	11650.000	AV	34.0	40.8	-1.5	33.4	-	39.9	53.9	14.0	Floor noise
Vert	17475.000	AV	34.2	43.4	0.2	32.7	-	45.1	53.9	8.8	Floor noise

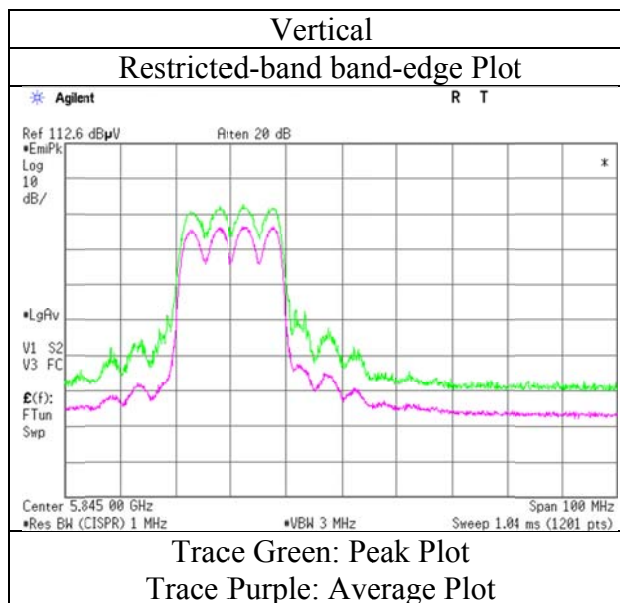
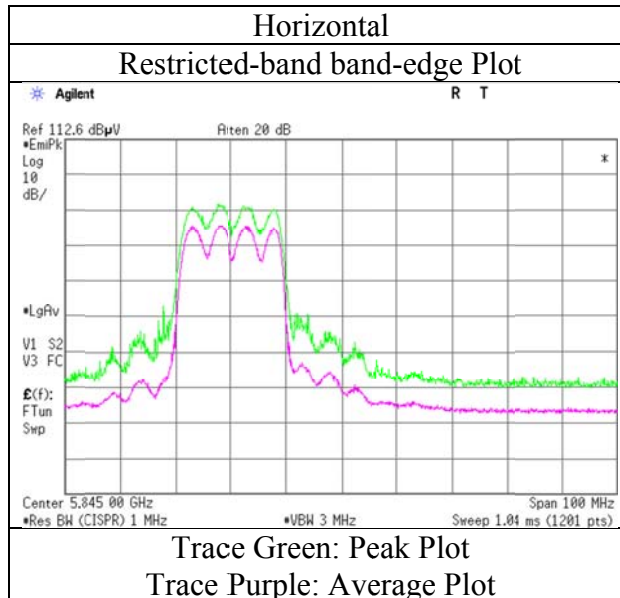
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 16, 2016
Temperature / Humidity	22deg. C / 66 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11n-20 5825 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 60 % RH
Engineer : Yuta Moriya
(1 GHz - 10 GHz)
Mode : Tx 11ac-20 5180 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5150.000	PK	48.1	32.2	7.2	31.7	-	55.8	73.9	18.1	
Hori	5150.000	AV	35.9	32.2	7.2	31.7	-	43.6	53.9	10.3	
Vert	5150.000	PK	46.8	32.2	7.2	31.7	-	54.5	73.9	19.4	
Vert	5150.000	AV	35.9	32.2	7.2	31.7	-	43.6	53.9	10.3	

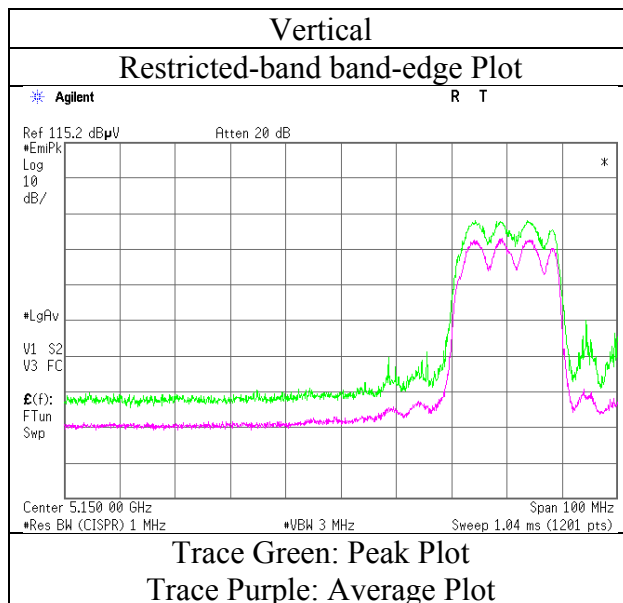
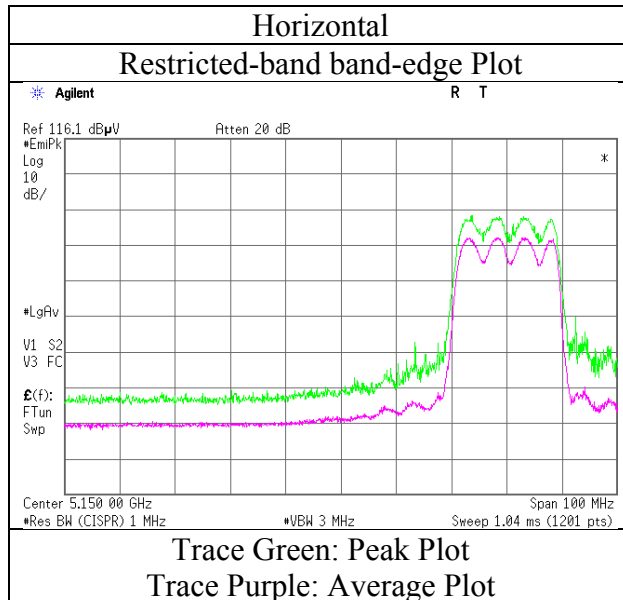
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11ac-20 5180 MHz



* Final result of restricted band edge was shown in tabular data.

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Ise EMC Lab.

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 60 % RH
Engineer : Yuta Moriya
(1 GHz - 10 GHz)
Mode : Tx 11ac-20 5320 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5350.000	PK	42.0	32.2	7.3	31.8	-	49.7	73.9	24.2	
Hori	5350.000	AV	34.2	32.2	7.3	31.8	-	41.9	53.9	12.0	
Vert	5350.000	PK	49.3	32.2	7.3	31.8	-	57.0	73.9	16.9	
Vert	5350.000	AV	35.9	32.2	7.3	31.8	-	43.6	53.9	10.3	

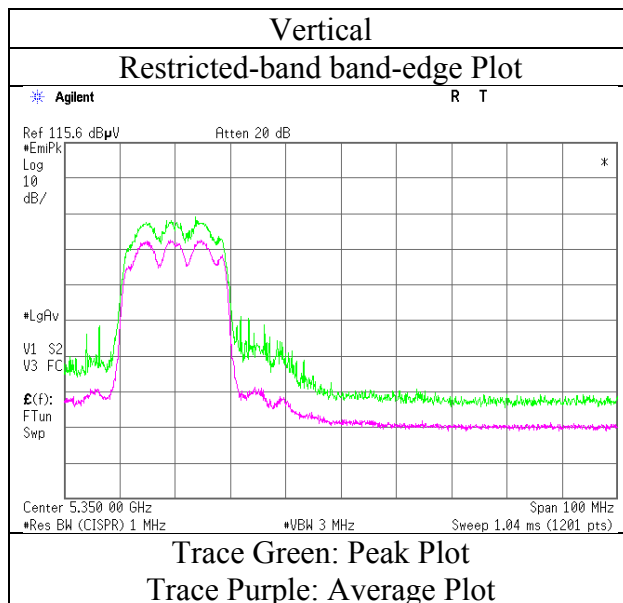
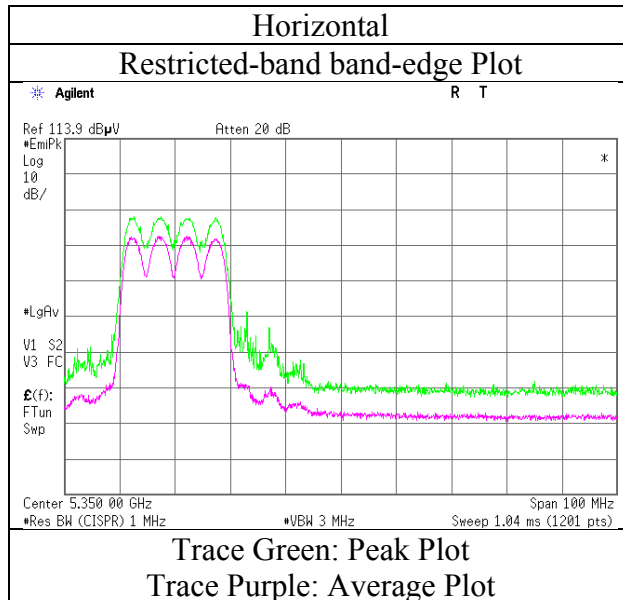
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11ac-20 5320 MHz



* Final result of restricted band edge was shown in tabular data.

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 60 % RH
Engineer : Yuta Moriya
(1 GHz - 10 GHz)
Mode : Tx 11ac-20 5500 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5470.000	PK	47.4	32.2	7.3	31.8	-	55.1	73.9	18.8	
Hori	5470.000	AV	37.1	32.2	7.3	31.8	-	44.8	53.9	9.1	
Vert	5470.000	PK	47.8	32.2	7.3	31.8	-	55.5	73.9	18.4	
Vert	5470.000	AV	37.1	32.2	7.3	31.8	-	44.8	53.9	9.1	

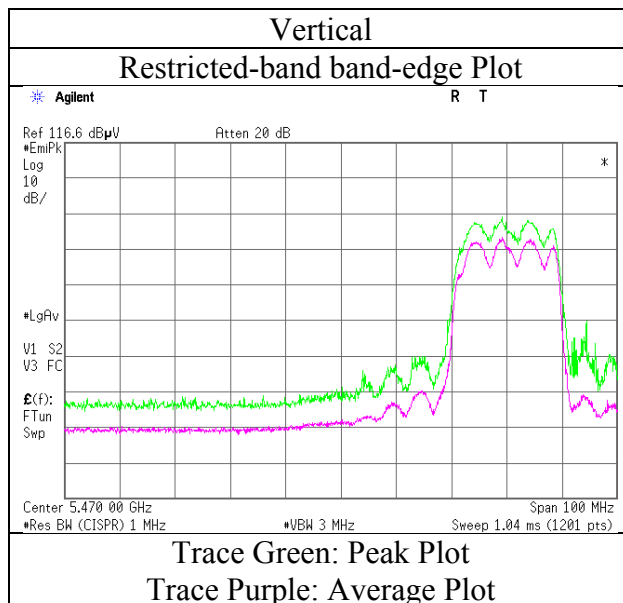
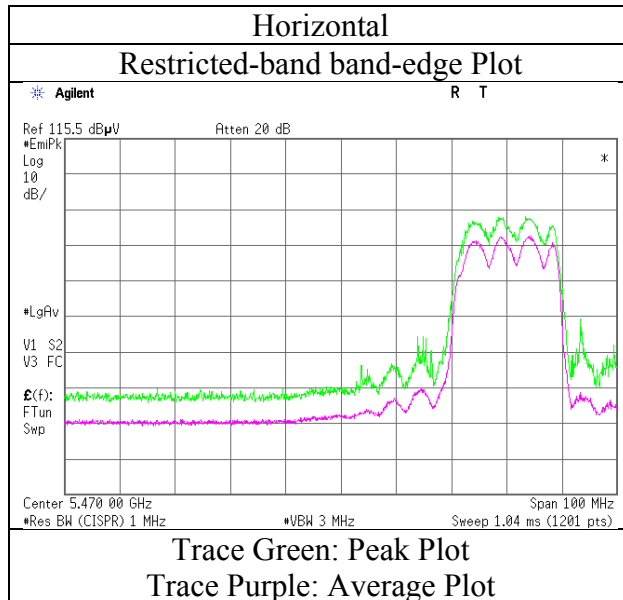
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11ac-20 5500 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 60 % RH
Engineer : Yuta Moriya
(1 GHz - 10 GHz)
Mode : Tx 11ac-20 5700 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5725.000	PK	48.7	32.6	7.5	31.8	-	57.0	73.9	16.9	
Hori	5725.000	AV	35.9	32.6	7.5	31.8	-	44.2	53.9	9.7	
Vert	5725.000	PK	49.6	32.6	7.5	31.8	-	57.9	73.9	16.0	
Vert	5725.000	AV	36.7	32.6	7.5	31.8	-	45.0	53.9	8.9	

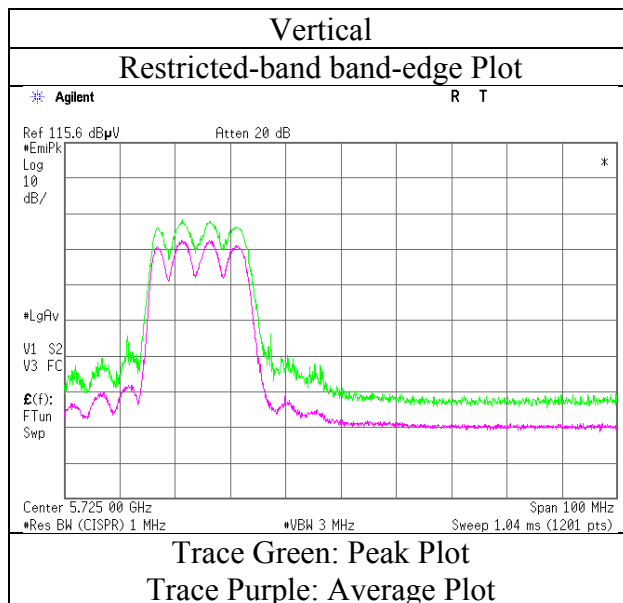
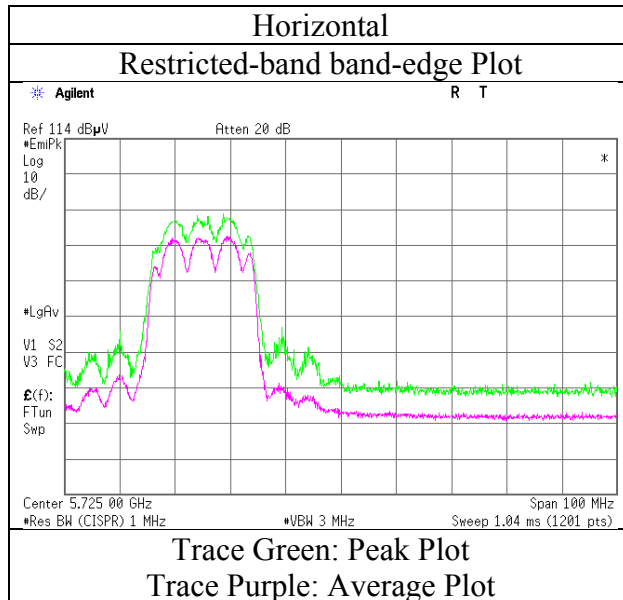
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11ac-20 5700 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 60 % RH
Engineer : Yuta Moriya
(1 GHz - 10 GHz)
Mode : Tx 11ac-20 5745 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5650.000	PK	40.7	32.4	7.4	31.8	-	48.7	68.2	19.5	
Hori	5700.000	PK	41.0	32.5	7.4	31.8	-	49.1	105.2	56.1	
Hori	5720.000	PK	47.0	32.6	7.5	31.8	-	55.3	110.8	55.5	
Hori	5725.000	PK	52.0	32.6	7.5	31.8	-	60.3	122.2	61.9	
Vert	5650.000	PK	41.1	32.4	7.4	31.8	-	49.1	68.2	19.1	
Vert	5700.000	PK	40.8	32.5	7.4	31.8	-	48.9	105.2	56.3	
Vert	5720.000	PK	50.3	32.6	7.5	31.8	-	58.6	110.8	52.2	
Vert	5725.000	PK	55.0	32.6	7.5	31.8	-	63.3	122.2	58.9	

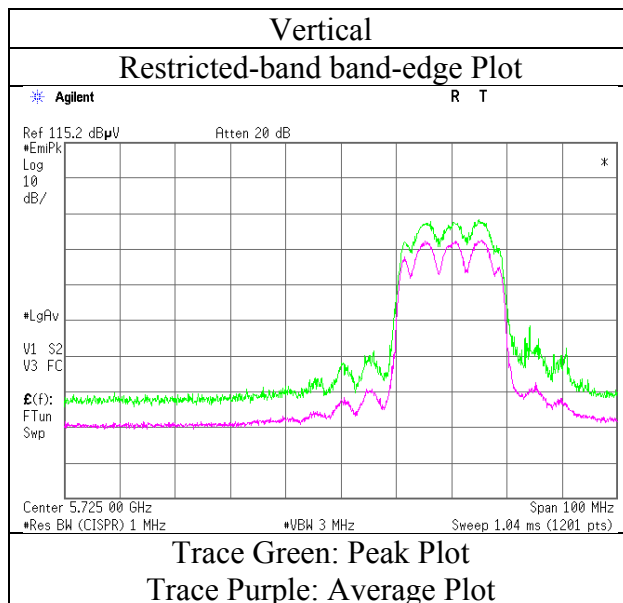
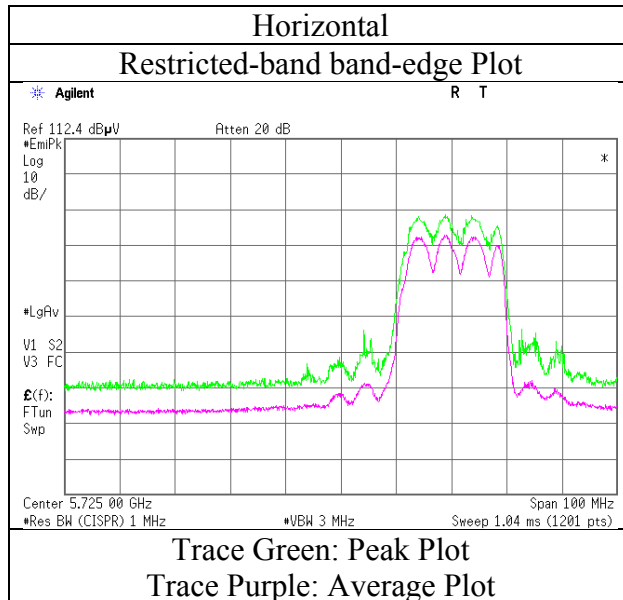
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11ac-20 5745 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 60 % RH
Engineer : Yuta Moriya
(1 GHz - 10 GHz)
Mode : Tx 11ac-20 5825 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5850.000	PK	47.2	32.8	7.5	31.8	-	55.7	122.2	66.5	
Hori	5855.000	PK	43.6	32.8	7.5	31.8	-	52.1	110.8	58.7	
Hori	5875.000	PK	41.3	32.8	7.5	31.8	-	49.8	105.2	55.4	
Hori	5925.000	PK	40.4	32.9	7.5	31.8	-	49.0	68.2	19.2	
Vert	5850.000	PK	50.0	32.8	7.5	31.8	-	58.5	122.2	63.7	
Vert	5855.000	PK	44.9	32.8	7.5	31.8	-	53.4	110.8	57.4	
Vert	5875.000	PK	41.1	32.8	7.5	31.8	-	49.6	105.2	55.6	
Vert	5925.000	PK	40.0	32.9	7.5	31.8	-	48.6	68.2	19.6	

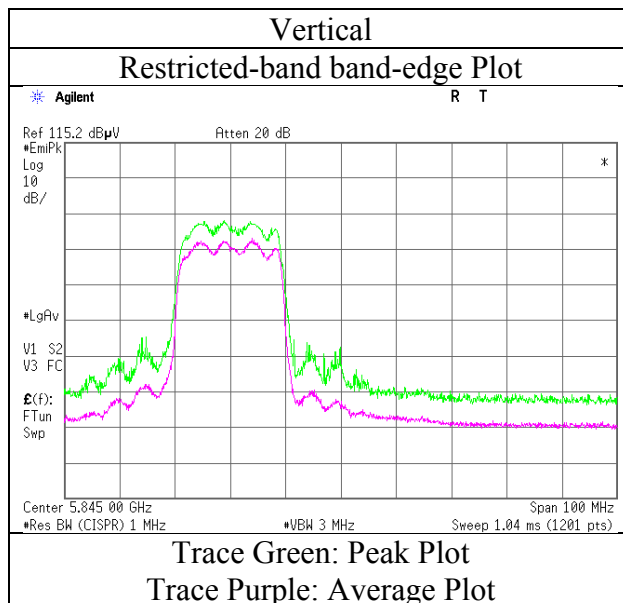
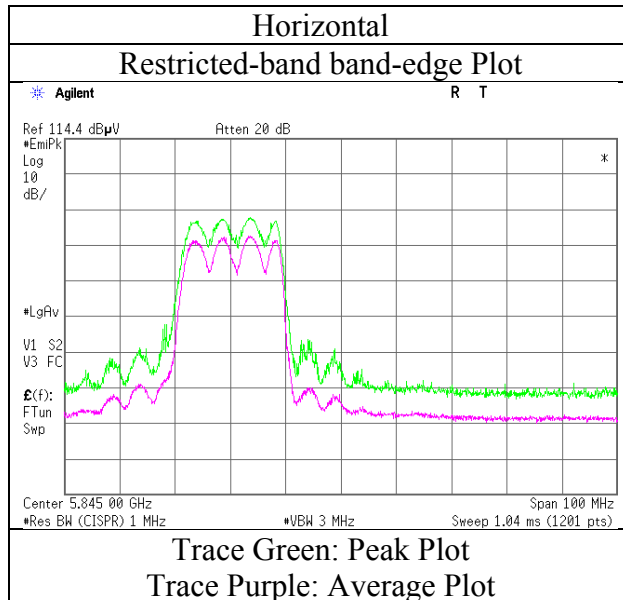
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11ac-20 5825 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 60 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-40 5190 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5150.000	PK	52.1	32.2	7.2	31.7	-	59.8	73.9	14.1	
Hori	10380.000	PK	42.2	38.7	-2.0	33.5	-	45.4	73.9	28.5	Floor noise
Hori	15570.000	PK	42.0	39.8	-0.2	32.7	-	48.9	73.9	25.0	Floor noise
Hori	5150.000	AV	39.5	32.2	7.2	31.7	-	47.2	53.9	6.7	
Hori	10380.000	AV	34.1	38.7	-2.0	33.5	-	37.3	53.9	16.6	Floor noise
Hori	15570.000	AV	33.3	39.8	-0.2	32.7	-	40.2	53.9	13.7	Floor noise
Vert	5150.000	PK	55.5	32.2	7.2	31.7	-	63.2	73.9	10.7	
Vert	10380.000	PK	42.2	38.7	-2.0	33.5	-	45.4	73.9	28.5	Floor noise
Vert	15570.000	PK	42.0	39.8	-0.2	32.7	-	48.9	73.9	25.0	Floor noise
Vert	5150.000	AV	36.4	32.2	7.2	31.7	-	44.1	53.9	9.8	
Vert	10380.000	AV	34.1	38.7	-2.0	33.5	-	37.3	53.9	16.6	Floor noise
Vert	15570.000	AV	33.3	39.8	-0.2	32.7	-	40.2	53.9	13.7	Floor noise

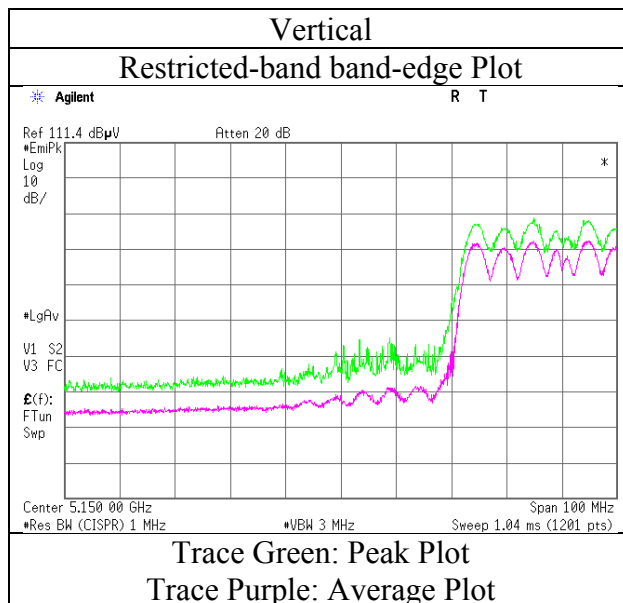
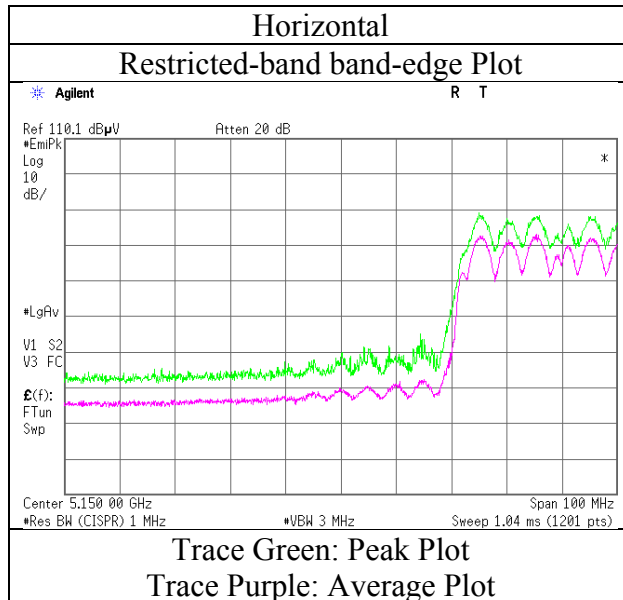
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11n-40 5190 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 60 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-40 5270 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	10540.000	PK	41.3	38.9	-2.0	33.5	-	44.7	73.9	29.2	Floor noise
Hori	15810.000	PK	42.6	39.5	-0.1	32.8	-	49.2	73.9	24.7	Floor noise
Hori	10540.000	AV	33.1	38.9	-2.0	33.5	-	36.5	53.9	17.4	Floor noise
Hori	15810.000	AV	33.7	39.5	-0.1	32.8	-	40.3	53.9	13.6	Floor noise
Vert	10540.000	PK	41.2	38.9	-2.0	33.5	-	44.6	73.9	29.3	Floor noise
Vert	15810.000	PK	42.7	39.5	-0.1	32.8	-	49.3	73.9	24.6	Floor noise
Vert	10540.000	AV	33.0	38.9	-2.0	33.5	-	36.4	53.9	17.5	Floor noise
Vert	15810.000	AV	33.8	39.5	-0.1	32.8	-	40.4	53.9	13.5	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 60 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-40 5310 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5350.000	PK	51.5	32.2	7.3	31.8	-	59.2	73.9	14.7	
Hori	10620.000	PK	41.5	39.1	-2.0	33.5	-	45.1	73.9	28.8	Floor noise
Hori	15930.000	PK	42.2	39.4	0.1	32.9	-	48.8	73.9	25.1	Floor noise
Hori	5350.000	AV	37.0	32.2	7.3	31.8	-	44.7	53.9	9.2	
Hori	10620.000	AV	33.3	39.1	-2.0	33.5	-	36.9	53.9	17.0	Floor noise
Hori	15930.000	AV	34.1	39.4	0.1	32.9	-	40.7	53.9	13.2	Floor noise
Vert	5350.000	PK	52.6	32.2	7.3	31.8	-	60.3	73.9	13.6	
Vert	10620.000	PK	41.5	39.1	-2.0	33.5	-	45.1	73.9	28.8	Floor noise
Vert	15930.000	PK	42.1	39.4	0.1	32.9	-	48.7	73.9	25.2	Floor noise
Vert	5350.000	AV	38.1	32.2	7.3	31.8	-	45.8	53.9	8.1	
Vert	10620.000	AV	33.2	39.1	-2.0	33.5	-	36.8	53.9	17.1	Floor noise
Vert	15930.000	AV	34.2	39.4	0.1	32.9	-	40.8	53.9	13.1	Floor noise

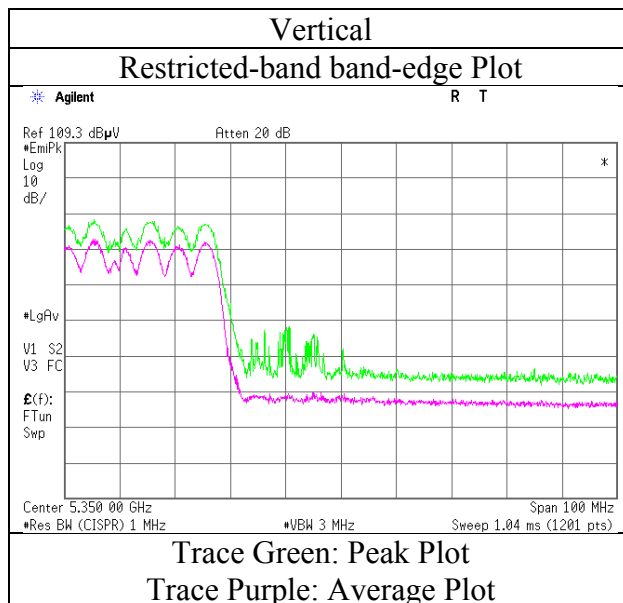
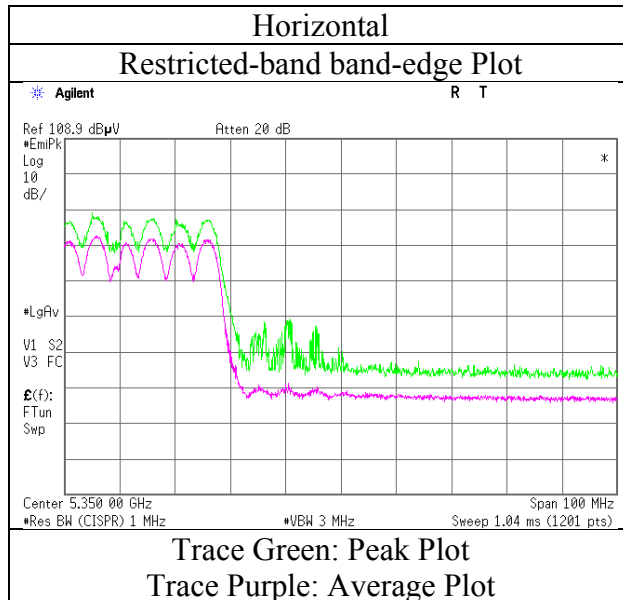
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11n-40 5310 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 60 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-40 5510 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5470.000	PK	50.5	32.2	7.3	31.8	-	58.2	73.9	15.7	
Hori	11020.000	PK	42.4	39.9	-2.0	33.6	-	46.7	73.9	27.2	Floor noise
Hori	16530.000	PK	42.3	40.5	-0.1	32.8	-	49.9	73.9	24.0	Floor noise
Hori	5470.000	AV	36.3	32.2	7.3	31.8	-	44.0	53.9	9.9	
Hori	11020.000	AV	33.8	39.9	-2.0	33.6	-	38.1	53.9	15.8	Floor noise
Hori	16530.000	AV	34.0	40.5	-0.1	32.8	-	41.6	53.9	12.3	Floor noise
Vert	5470.000	PK	51.8	32.2	7.3	31.8	-	59.5	73.9	14.4	
Vert	11020.000	PK	42.4	39.9	-2.0	33.6	-	46.7	73.9	27.2	Floor noise
Vert	16530.000	PK	42.3	40.5	-0.1	32.8	-	49.9	73.9	24.0	Floor noise
Vert	5470.000	AV	41.3	32.2	7.3	31.8	-	49.0	53.9	4.9	
Vert	11020.000	AV	33.8	39.9	-2.0	33.6	-	38.1	53.9	15.8	Floor noise
Vert	16530.000	AV	34.0	40.5	-0.1	32.8	-	41.6	53.9	12.3	Floor noise

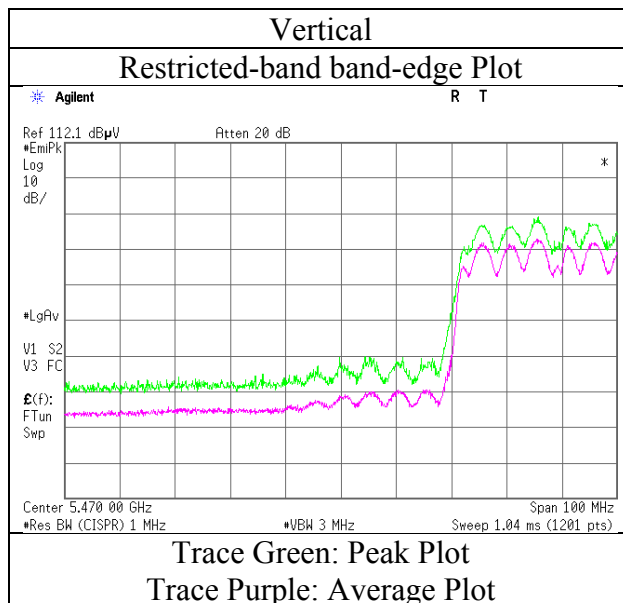
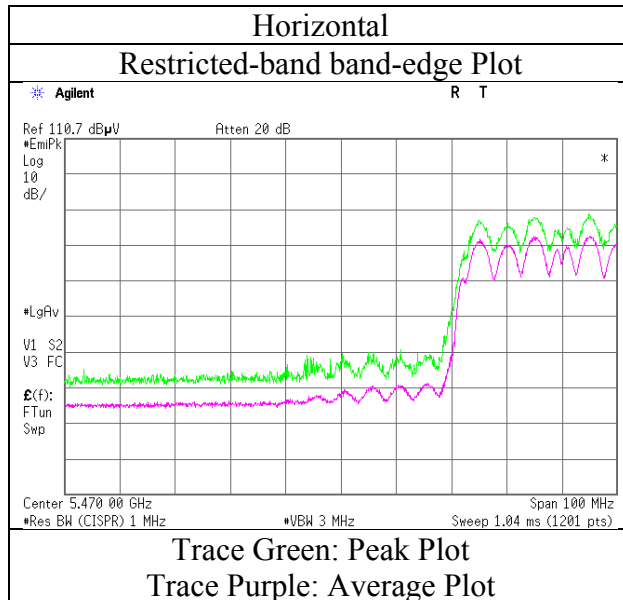
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11n-40 5510 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 60 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-40 5550 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	11100.000	PK	42.9	40.1	-2.0	33.5	-	47.5	73.9	26.4	Floor noise
Hori	16650.000	PK	42.4	40.7	0.0	32.8	-	50.3	73.9	23.6	Floor noise
Hori	11100.000	AV	34.1	40.1	-2.0	33.5	-	38.7	53.9	15.2	Floor noise
Hori	16650.000	AV	34.6	40.7	0.0	32.8	-	42.5	53.9	11.4	Floor noise
Vert	11100.000	PK	42.9	40.1	-2.0	33.5	-	47.5	73.9	26.4	Floor noise
Vert	16650.000	PK	42.4	40.7	0.0	32.8	-	50.3	73.9	23.6	Floor noise
Vert	11100.000	AV	34.1	40.1	-2.0	33.5	-	38.7	53.9	15.2	Floor noise
Vert	16650.000	AV	34.6	40.7	0.0	32.8	-	42.5	53.9	11.4	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 60 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-40 5670 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5725.000	PK	40.5	32.6	7.5	31.8	-	48.8	73.9	25.1	
Hori	11340.000	PK	42.1	40.7	-1.8	33.5	-	47.5	73.9	26.4	Floor noise
Hori	17010.000	PK	42.5	41.5	-0.2	32.8	-	51.0	73.9	22.9	Floor noise
Hori	5725.000	AV	32.7	32.6	7.5	31.8	-	41.0	53.9	12.9	
Hori	11340.000	AV	33.2	40.7	-1.8	33.5	-	38.6	53.9	15.3	Floor noise
Hori	17010.000	AV	34.0	41.5	-0.2	32.8	-	42.5	53.9	11.4	Floor noise
Vert	5725.000	PK	41.3	32.6	7.5	31.8	-	49.6	73.9	24.3	
Vert	11340.000	PK	42.1	40.7	-1.8	33.5	-	47.5	73.9	26.4	Floor noise
Vert	17010.000	PK	42.5	41.5	-0.2	32.8	-	51.0	73.9	22.9	Floor noise
Vert	5725.000	AV	32.8	32.6	7.5	31.8	-	41.1	53.9	12.8	
Vert	11340.000	AV	33.2	40.7	-1.8	33.5	-	38.6	53.9	15.3	Floor noise
Vert	17010.000	AV	34.0	41.5	-0.2	32.8	-	42.5	53.9	11.4	Floor noise

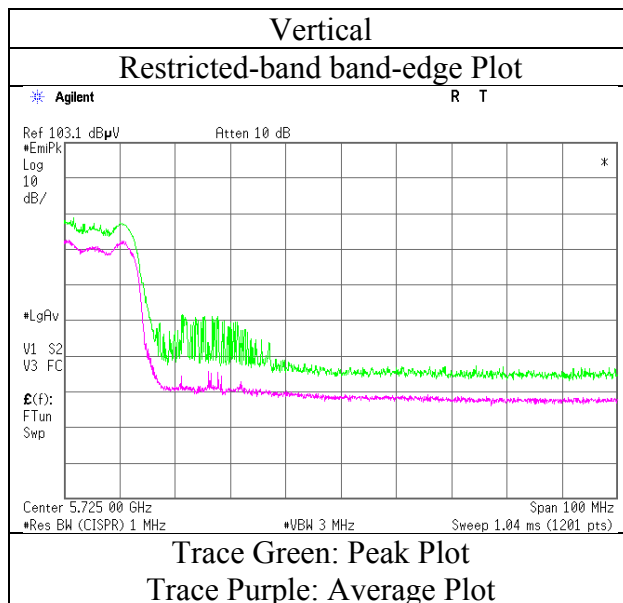
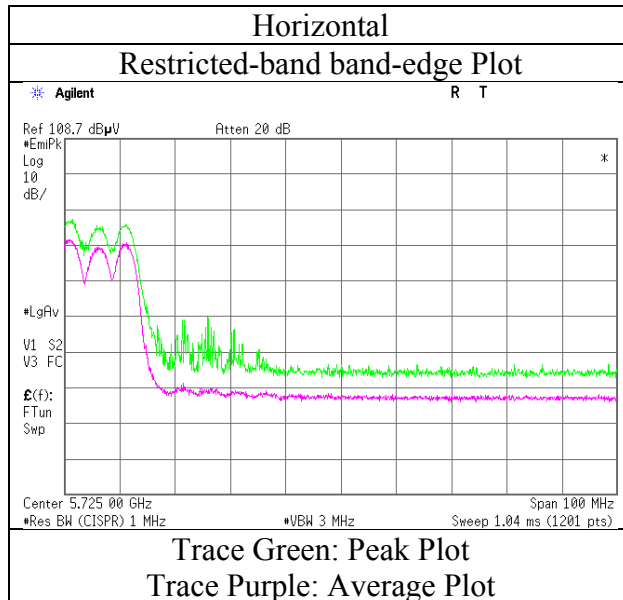
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11n-40 5670 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 60 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-40 5755 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5650.000	PK	41.4	32.4	7.4	31.8	-	49.4	68.2	18.8	
Hori	5700.000	PK	42.2	32.5	7.4	31.8	-	50.3	105.2	54.9	
Hori	5720.000	PK	49.8	32.6	7.5	31.8	-	58.1	110.8	52.7	
Hori	5725.000	PK	50.3	32.6	7.5	31.8	-	58.6	122.2	63.6	
Hori	11510.000	PK	41.7	41.0	-1.7	33.4	-	47.6	73.9	26.3	Floor noise
Hori	17265.000	PK	41.9	42.5	0.0	32.7	-	51.7	73.9	22.2	Floor noise
Hori	11510.000	AV	33.7	41.0	-1.7	33.4	-	39.6	53.9	14.3	Floor noise
Hori	17265.000	AV	33.5	42.5	0.0	32.7	-	43.3	53.9	10.6	Floor noise
Vert	5650.000	PK	40.3	32.4	7.4	31.8	-	48.3	68.2	19.9	
Vert	5700.000	PK	44.5	32.5	7.4	31.8	-	52.6	105.2	52.6	
Vert	5720.000	PK	51.9	32.6	7.5	31.8	-	60.2	110.8	50.6	
Vert	5725.000	PK	51.2	32.6	7.5	31.8	-	59.5	122.2	62.7	
Vert	11510.000	PK	41.6	41.0	-1.7	33.4	-	47.5	73.9	26.4	Floor noise
Vert	17265.000	PK	41.8	42.5	0.0	32.7	-	51.6	73.9	22.3	Floor noise
Vert	11510.000	AV	33.6	41.0	-1.7	33.4	-	39.5	53.9	14.4	Floor noise
Vert	17265.000	AV	33.4	42.5	0.0	32.7	-	43.2	53.9	10.7	Floor noise

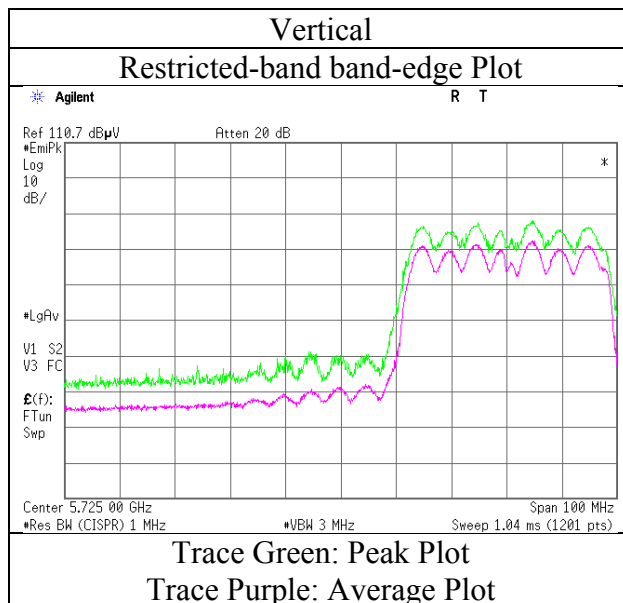
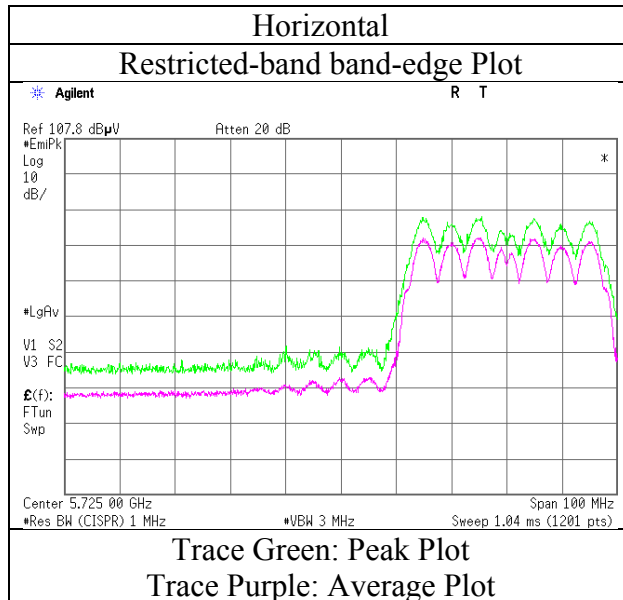
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11n-40 5755 MHz



* Final result of restricted band edge was shown in tabular data.

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Ise EMC Lab.

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Facsimile : +81 596 24 8124

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 60 % RH 24deg. C / 39 % RH
Engineer : Yuta Moriya Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11n-40 5795 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5850.000	PK	42.2	32.8	7.5	31.8	-	50.7	122.2	71.5	
Hori	5855.000	PK	41.6	32.8	7.5	31.8	-	50.1	110.8	60.7	
Hori	5875.000	PK	40.8	32.8	7.5	31.8	-	49.3	105.2	55.9	
Hori	5925.000	PK	40.3	32.9	7.5	31.8	-	48.9	68.2	19.3	
Hori	11590.000	PK	41.5	40.9	-1.6	33.4	-	47.4	73.9	26.5	Floor noise
Hori	17385.000	PK	42.5	43.0	0.1	32.7	-	52.9	73.9	21.0	Floor noise
Hori	11590.000	AV	33.5	40.9	-1.6	33.4	-	39.4	53.9	14.5	Floor noise
Hori	17385.000	AV	34.4	43.0	0.1	32.7	-	44.8	53.9	9.1	Floor noise
Vert	5850.000	PK	43.3	32.8	7.5	31.8	-	51.8	122.2	70.4	
Vert	5855.000	PK	42.9	32.8	7.5	31.8	-	51.4	110.8	59.4	
Vert	5875.000	PK	40.7	32.8	7.5	31.8	-	49.2	105.2	56.0	
Vert	5925.000	PK	40.5	32.9	7.5	31.8	-	49.1	68.2	19.1	
Vert	11590.000	PK	41.5	40.9	-1.6	33.4	-	47.4	73.9	26.5	Floor noise
Vert	17385.000	PK	42.5	43.0	0.1	32.7	-	52.9	73.9	21.0	Floor noise
Vert	11590.000	AV	33.5	40.9	-1.6	33.4	-	39.4	53.9	14.5	Floor noise
Vert	17385.000	AV	34.4	43.0	0.1	32.7	-	44.8	53.9	9.1	Floor noise

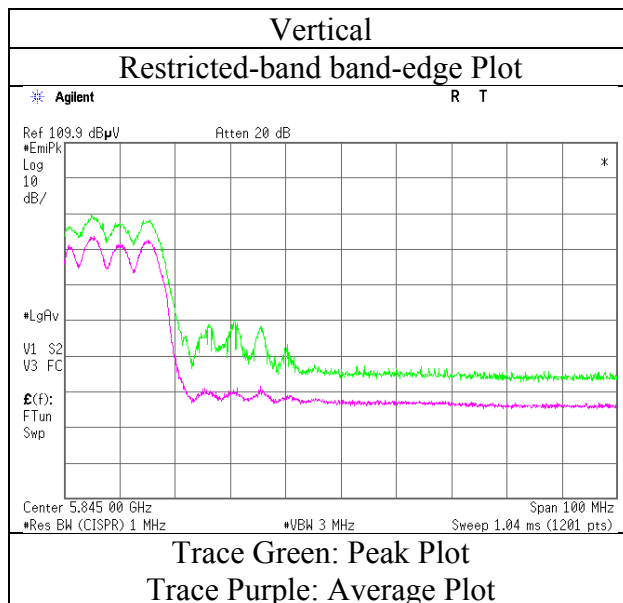
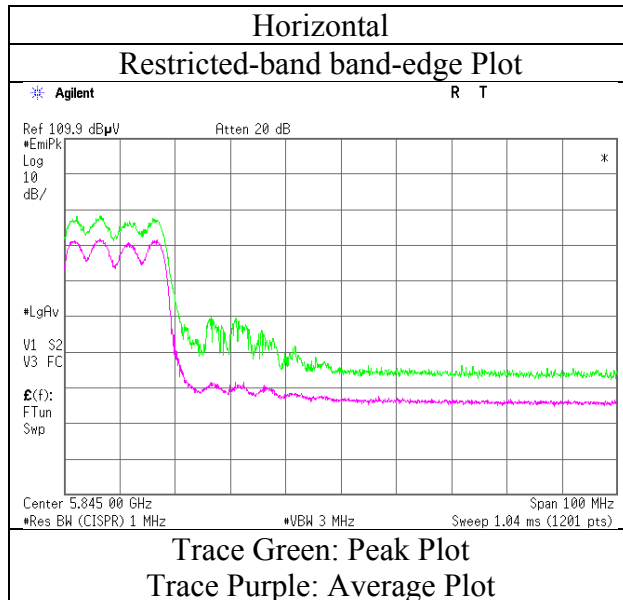
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 60 % RH
Engineer	Yuta Moriya
Mode	Tx 11n-40 5795 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
 Report No. : 11288814H
 Date : May 17, 2016
 Temperature / Humidity : 22deg. C / 48 % RH
 Engineer : Shinichi Miyazono
 (1 GHz - 10 GHz)
 Mode : Tx 11ac-40 5190 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5150.000	PK	49.8	32.2	7.2	31.7	-	57.5	73.9	16.4	
Hori	5150.000	AV	39.6	32.2	7.2	31.7	-	47.3	53.9	6.6	
Vert	5150.000	PK	51.3	32.2	7.2	31.7	-	59.0	73.9	14.9	
Vert	5150.000	AV	41.2	32.2	7.2	31.7	-	48.9	53.9	5.0	

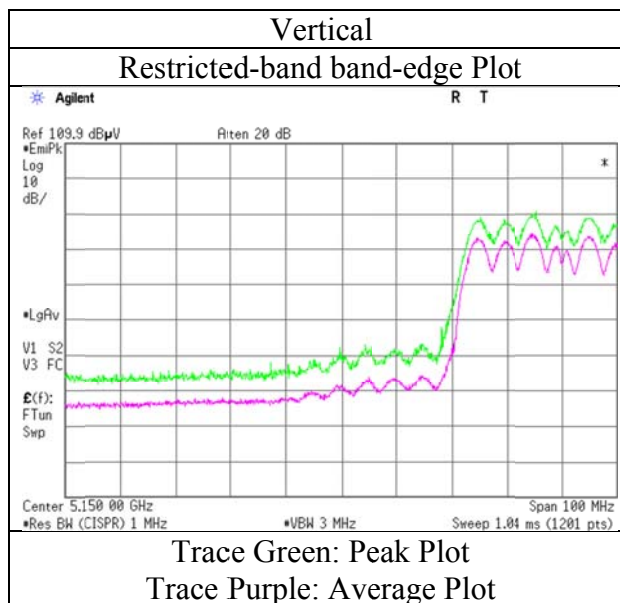
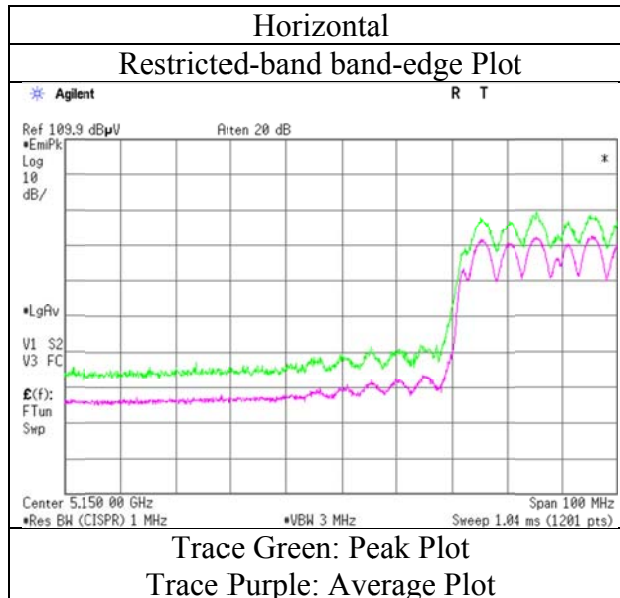
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5190 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 48 % RH
Engineer : Shinichi Miyazono
(1 GHz - 10 GHz)
Mode : Tx 11ac-40 5310 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5350.000	PK	47.8	32.2	7.3	31.8	-	55.5	73.9	18.4	
Hori	5350.000	AV	35.9	32.2	7.3	31.8	-	43.6	53.9	10.3	
Vert	5350.000	PK	51.1	32.2	7.3	31.8	-	58.8	73.9	15.1	
Vert	5350.000	AV	38.0	32.2	7.3	31.8	-	45.7	53.9	8.2	

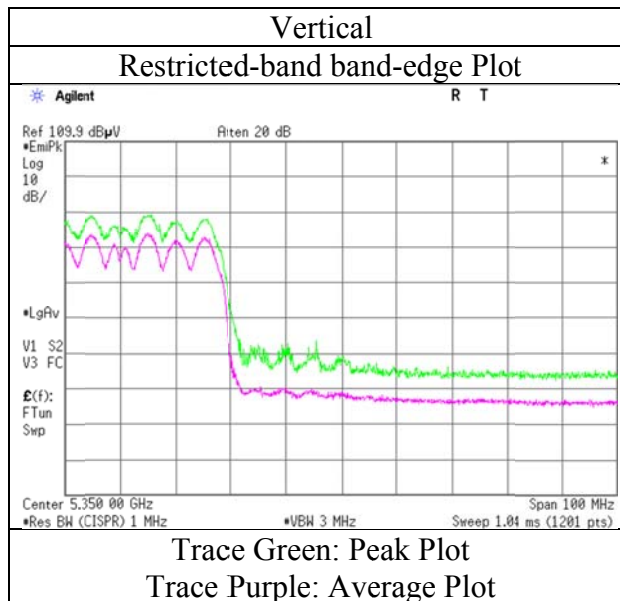
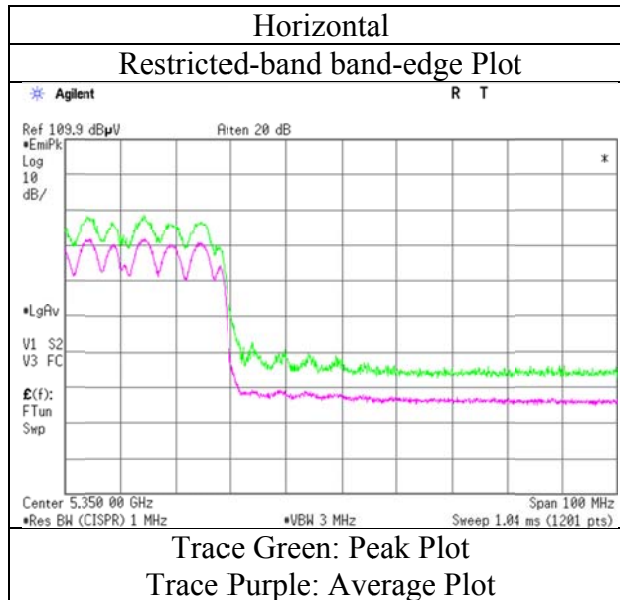
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5310 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 48 % RH
Engineer : Shinichi Miyazono
(1 GHz - 10 GHz)
Mode : Tx 11ac-40 5510 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5470.000	PK	49.4	32.2	7.3	31.8	-	57.1	73.9	16.8	
Hori	5470.000	AV	38.2	32.2	7.3	31.8	-	45.9	53.9	8.0	
Vert	5470.000	PK	50.8	32.2	7.3	31.8	-	58.5	73.9	15.4	
Vert	5470.000	AV	39.9	32.2	7.3	31.8	-	47.6	53.9	6.3	

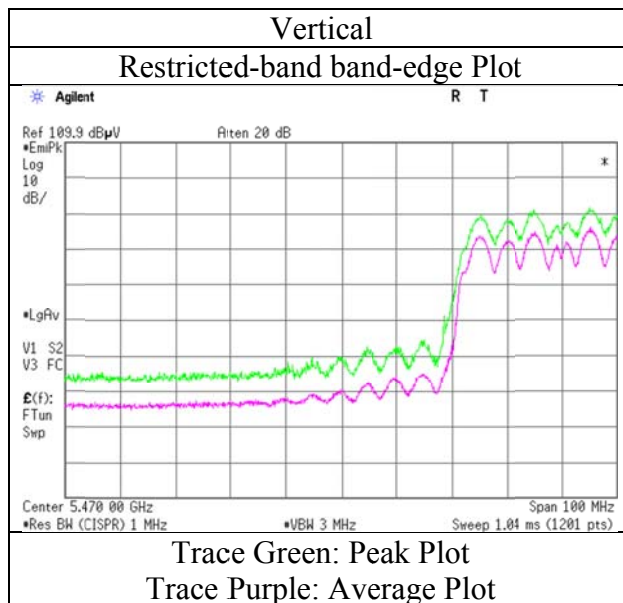
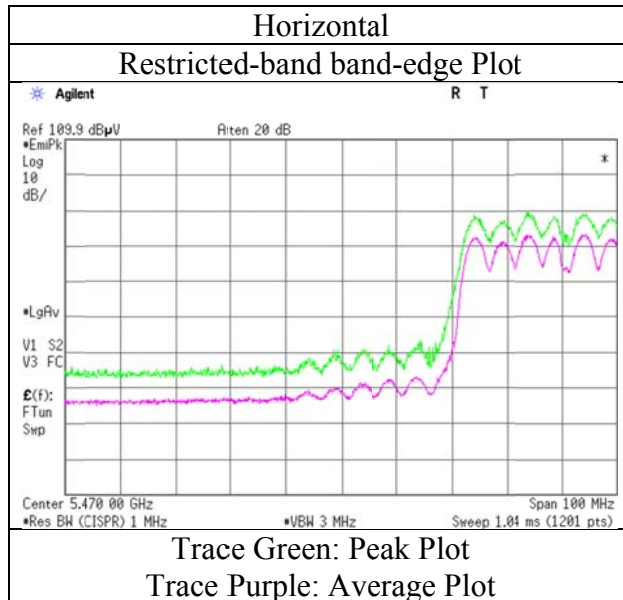
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5510 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 48 % RH
Engineer : Shinichi Miyazono
(1 GHz - 10 GHz)
Mode : Tx 11ac-40 5670 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5725.000	PK	41.3	32.6	7.5	31.8	-	49.6	73.9	24.3	
Hori	5725.000	AV	33.0	32.6	7.5	31.8	-	41.3	53.9	12.6	
Vert	5725.000	PK	43.2	32.6	7.5	31.8	-	51.5	73.9	22.4	
Vert	5725.000	AV	33.6	32.6	7.5	31.8	-	41.9	53.9	12.0	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$

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Ise EMC Lab.

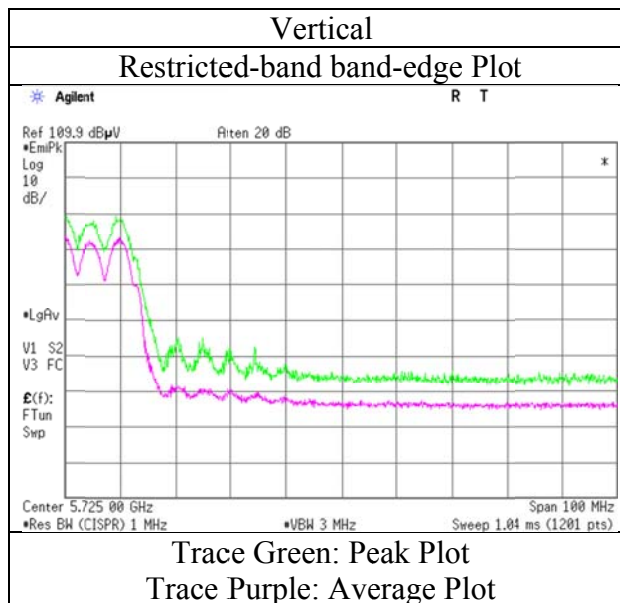
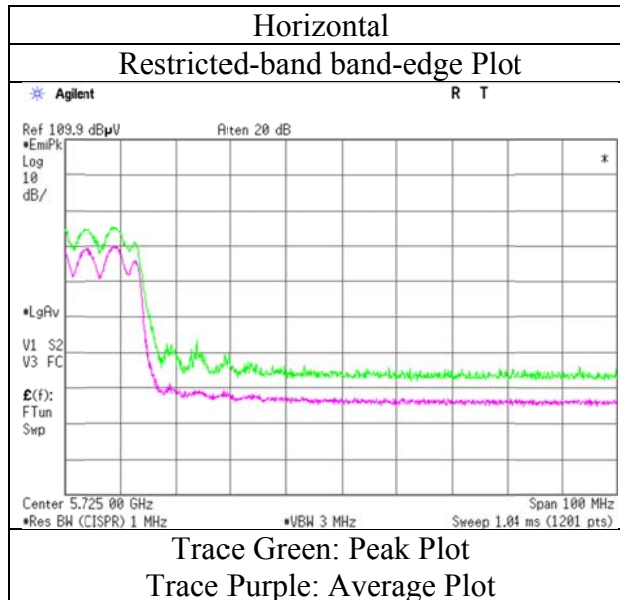
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5670 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 48 % RH
Engineer : Shinichi Miyazono
(1 GHz - 10 GHz)
Mode : Tx 11ac-40 5755 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5650.000	PK	40.1	32.4	7.4	31.8	-	48.1	68.2	20.1	
Hori	5700.000	PK	42.1	32.5	7.4	31.8	-	50.2	105.2	55.0	
Hori	5720.000	PK	49.9	32.6	7.5	31.8	-	58.2	110.8	52.6	
Hori	5725.000	PK	50.7	32.6	7.5	31.8	-	59.0	122.2	63.2	
Vert	5650.000	PK	40.9	32.4	7.4	31.8	-	48.9	68.2	19.3	
Vert	5700.000	PK	42.8	32.5	7.4	31.8	-	50.9	105.2	54.3	
Vert	5720.000	PK	50.1	32.6	7.5	31.8	-	58.4	110.8	52.4	
Vert	5725.000	PK	50.5	32.6	7.5	31.8	-	58.8	122.2	63.4	

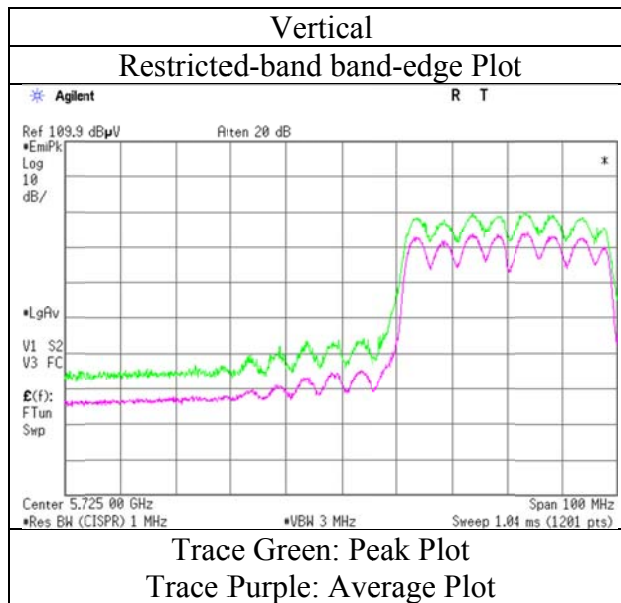
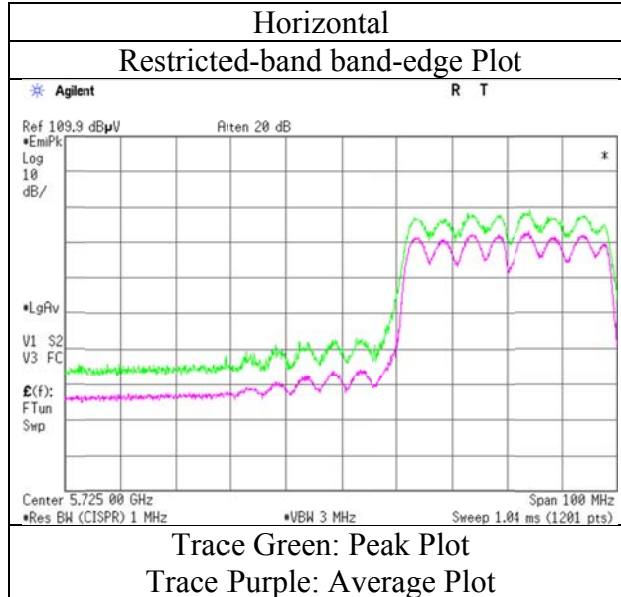
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz 20log(4.4 m / 3.0 m) = 3.33 dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5755 MHz



* Final result of restricted band edge was shown in tabular data.

UL Japan, Inc.

Ise EMC Lab.

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Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016
Temperature / Humidity : 22deg. C / 48 % RH
Engineer : Shinichi Miyazono
(1 GHz - 10 GHz)
Mode : Tx 11ac-40 5795 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5850.000	PK	41.9	32.8	7.5	31.8	-	50.4	122.2	71.8	
Hori	5855.000	PK	41.5	32.8	7.5	31.8	-	50.0	110.8	60.8	
Hori	5875.000	PK	40.7	32.8	7.5	31.8	-	49.2	105.2	56.0	
Hori	5925.000	PK	40.0	32.9	7.5	31.8	-	48.6	68.2	19.6	
Vert	5850.000	PK	42.0	32.8	7.5	31.8	-	50.5	122.2	71.7	
Vert	5855.000	PK	41.6	32.8	7.5	31.8	-	50.1	110.8	60.7	
Vert	5875.000	PK	40.4	32.8	7.5	31.8	-	48.9	105.2	56.3	
Vert	5925.000	PK	40.0	32.9	7.5	31.8	-	48.6	68.2	19.6	

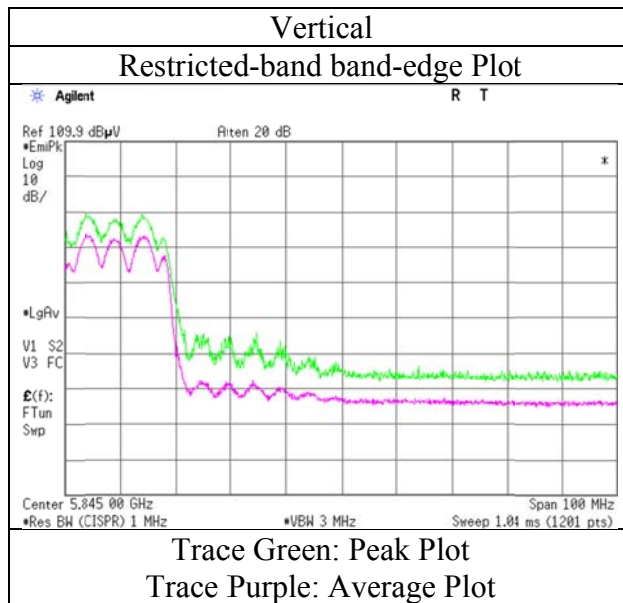
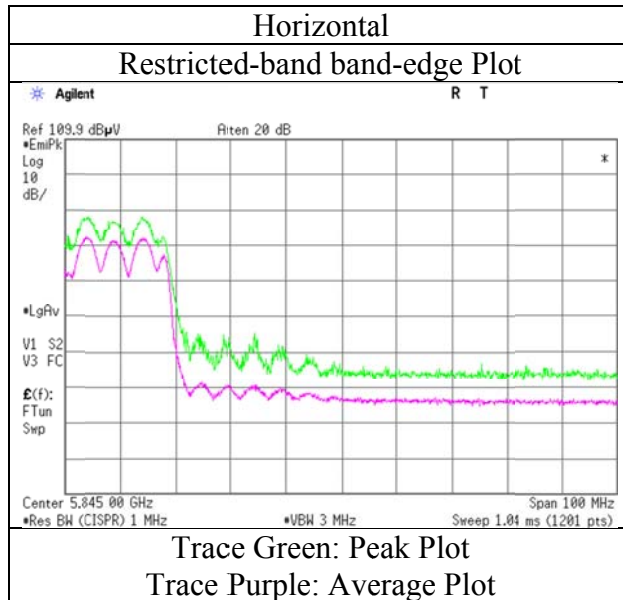
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)

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

Distance factor: 1 GHz - 10 GHz $20\log(4.4\text{ m} / 3.0\text{ m}) = 3.33\text{ dB}$

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5795 MHz



* Final result of restricted band edge was shown in tabular data.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 48 % RH 24deg. C / 39 % RH
Engineer : Shinichi Miyazono Shinichi Miyazono
(1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11ac-80 5210 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5136.750	PK	47.2	32.2	7.2	31.7	-	54.9	73.9	19.0	
Hori	5150.000	PK	43.2	32.2	7.2	31.7	-	50.9	73.9	23.0	
Hori	10420.000	PK	41.8	38.7	-2.1	33.5	-	44.9	73.9	29.0	Floor noise
Hori	15630.000	PK	41.5	39.7	-0.1	32.7	-	48.4	73.9	25.5	Floor noise
Hori	5136.750	AV	36.6	32.2	7.2	31.7	0.1	44.4	53.9	9.5	*1)
Hori	5150.000	AV	34.8	32.2	7.2	31.7	0.1	42.6	53.9	11.3	*1)
Hori	10420.000	AV	33.5	38.7	-2.1	33.5	-	36.6	53.9	17.3	Floor noise
Hori	15630.000	AV	33.1	39.7	-0.1	32.7	-	40.0	53.9	13.9	Floor noise
Vert	5139.080	PK	47.0	32.2	7.2	31.7	-	54.7	73.9	19.2	
Vert	5150.000	PK	43.3	32.2	7.2	31.7	-	51.0	73.9	22.9	
Vert	10420.000	PK	41.8	38.7	-2.1	33.5	-	44.9	73.9	29.0	Floor noise
Vert	15630.000	PK	41.6	39.7	-0.1	32.7	-	48.5	73.9	25.4	Floor noise
Vert	5139.080	AV	36.8	32.2	7.2	31.7	0.1	44.6	53.9	9.3	*1)
Vert	5150.000	AV	35.0	32.2	7.2	31.7	0.1	42.8	53.9	11.1	*1)
Vert	10420.000	AV	33.5	38.7	-2.1	33.5	-	36.6	53.9	17.3	Floor noise
Vert	15630.000	AV	33.2	39.7	-0.1	32.7	-	40.1	53.9	13.8	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

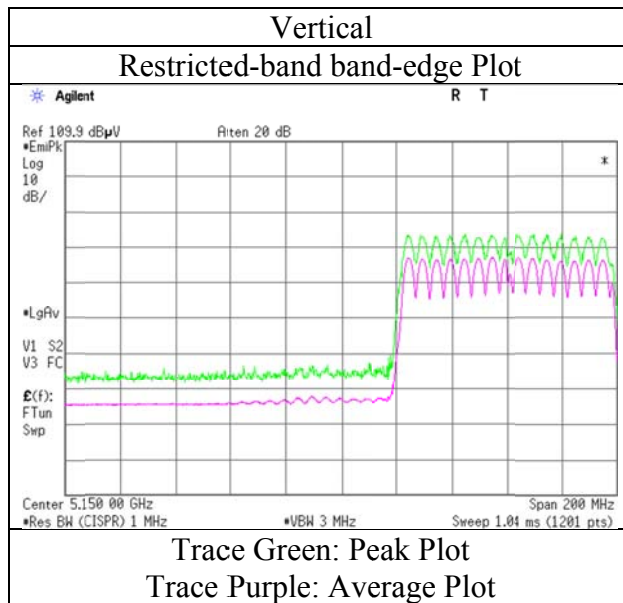
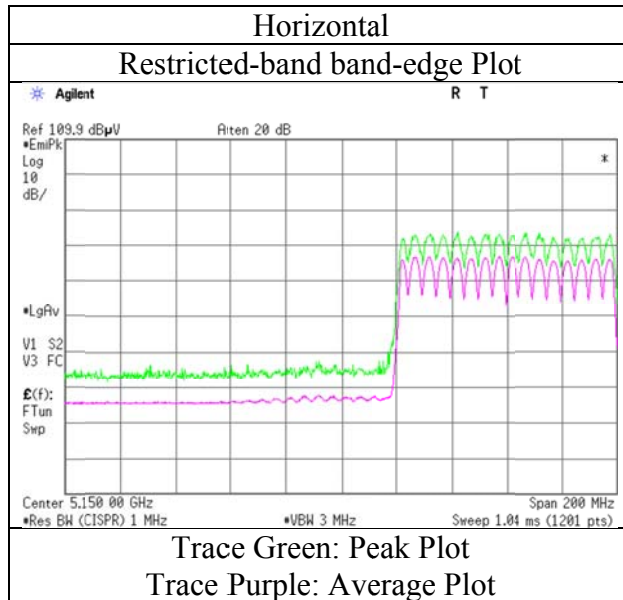
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-80 5210 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. 11288814H
Date May 17, 2016 May 19, 2016
Temperature / Humidity 22deg. C / 48 % RH 24deg. C / 39 % RH
Engineer Shinichi Miyazono Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode Tx 11ac-80 5290 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5350.000	PK	44.4	32.2	7.3	31.8	-	52.1	73.9	21.8	
Hori	5358.550	PK	48.2	32.2	7.3	31.8	-	55.9	73.9	18.0	
Hori	10580.000	PK	41.9	39.0	-2.0	33.5	-	45.4	73.9	28.5	Floor noise
Hori	15870.000	PK	42.4	39.5	0.1	32.8	-	49.2	73.9	24.7	Floor noise
Hori	5350.000	AV	35.1	32.2	7.3	31.8	0.1	42.9	53.9	11.0	*1)
Hori	5358.550	AV	37.5	32.2	7.3	31.8	0.1	45.3	53.9	8.6	*1)
Hori	10580.000	AV	33.6	39.0	-2.0	33.5	-	37.1	53.9	16.8	Floor noise
Hori	15870.000	AV	34.1	39.5	0.1	32.8	-	40.9	53.9	13.0	Floor noise
Vert	5350.000	PK	46.2	32.2	7.3	31.8	-	53.9	73.9	20.0	
Vert	5357.050	PK	49.4	32.2	7.3	31.8	-	57.1	73.9	16.8	
Vert	10580.000	PK	41.9	39.0	-2.0	33.5	-	45.4	73.9	28.5	Floor noise
Vert	15870.000	PK	42.4	39.5	0.1	32.8	-	49.2	73.9	24.7	Floor noise
Vert	5350.000	AV	35.8	32.2	7.3	31.8	0.1	43.6	53.9	10.3	*1)
Vert	5357.050	AV	39.0	32.2	7.3	31.8	0.1	46.8	53.9	7.1	*1)
Vert	10580.000	AV	33.6	39.0	-2.0	33.5	-	37.1	53.9	16.8	Floor noise
Vert	15870.000	AV	34.0	39.5	0.1	32.8	-	40.8	53.9	13.1	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

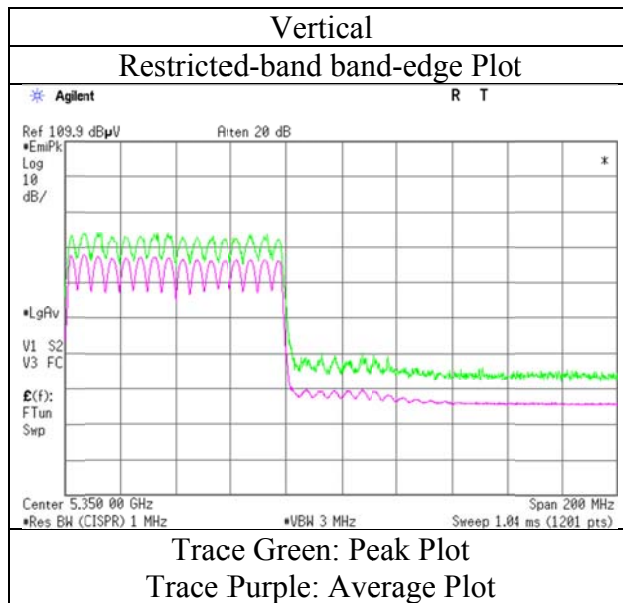
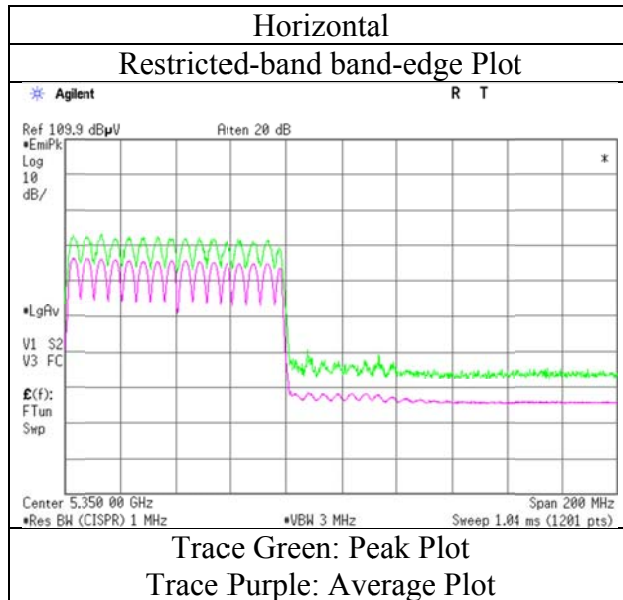
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz 20log(4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log(1.0 m / 3.0 m) = -9.5 dB

*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-80 5290 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place : Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No. : 11288814H
Date : May 17, 2016 May 19, 2016
Temperature / Humidity : 22deg. C / 48 % RH 24deg. C / 39 % RH
Engineer : Shinichi Miyazono Shinichi Miyazono
 (1 GHz - 10 GHz) (10 GHz - 40 GHz)
Mode : Tx 11ac-80 5530 MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5459.250	PK	45.6	32.2	7.3	31.8	-	53.3	73.9	20.6	
Hori	5460.000	PK	44.1	32.2	7.3	31.8	-	51.8	73.9	22.1	
Hori	5470.000	PK	43.8	32.2	7.3	31.8	-	51.5	73.9	22.4	
Hori	11060.000	PK	42.3	40.0	-2.0	33.6	-	46.7	73.9	27.2	Floor noise
Hori	16590.000	PK	42.4	40.6	-0.1	32.8	-	50.1	73.9	23.8	Floor noise
Hori	5459.250	AV	35.5	32.2	7.3	31.8	0.1	43.3	53.9	10.6	*1)
Hori	5460.000	AV	34.6	32.2	7.3	31.8	0.1	42.4	53.9	11.5	*1)
Hori	5470.000	AV	34.5	32.2	7.3	31.8	0.1	42.3	53.9	11.6	*1)
Hori	11060.000	AV	33.8	40.0	-2.0	33.6	-	38.2	53.9	15.7	Floor noise
Hori	16590.000	AV	34.1	40.6	-0.1	32.8	-	41.8	53.9	12.1	Floor noise
Vert	5457.829	PK	48.8	32.2	7.3	31.8	-	56.5	73.9	17.4	
Vert	5460.000	PK	45.7	32.2	7.3	31.8	-	53.4	73.9	20.5	
Vert	5470.000	PK	44.8	32.2	7.3	31.8	-	52.5	73.9	21.4	
Vert	11060.000	PK	42.3	40.0	-2.0	33.6	-	46.7	73.9	27.2	Floor noise
Vert	16590.000	PK	42.5	40.6	-0.1	32.8	-	50.2	73.9	23.7	Floor noise
Vert	5457.829	AV	37.8	32.2	7.3	31.8	0.1	45.6	53.9	8.3	*1)
Vert	5460.000	AV	35.8	32.2	7.3	31.8	0.1	43.6	53.9	10.3	*1)
Vert	5470.000	AV	35.3	32.2	7.3	31.8	0.1	43.1	53.9	10.8	*1)
Vert	11060.000	AV	33.9	40.0	-2.0	33.6	-	38.3	53.9	15.6	Floor noise
Vert	16590.000	AV	34.1	40.6	-0.1	32.8	-	41.8	53.9	12.1	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor

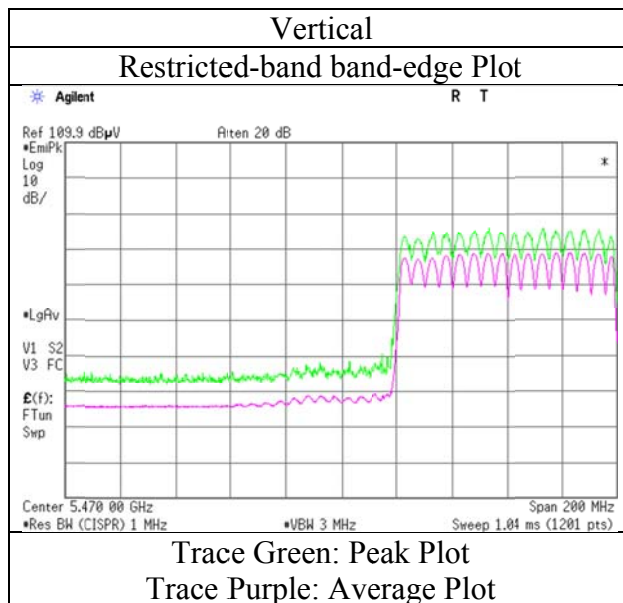
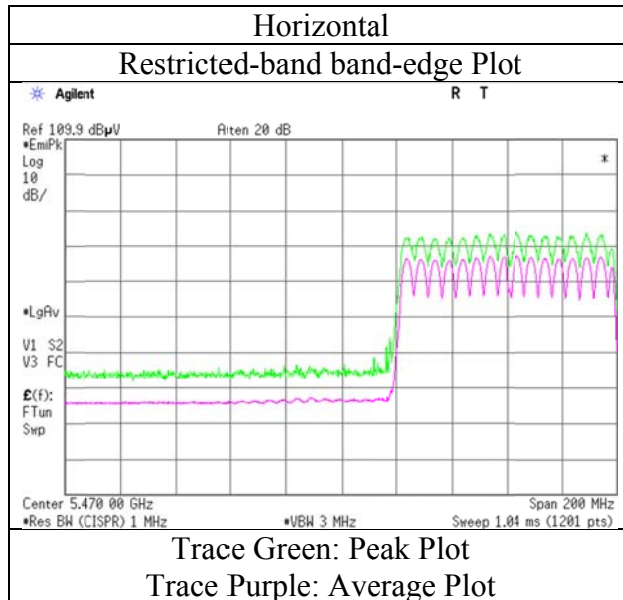
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

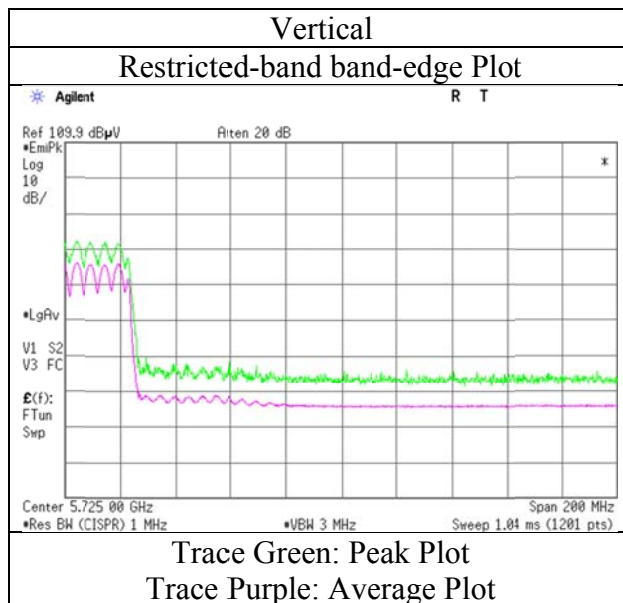
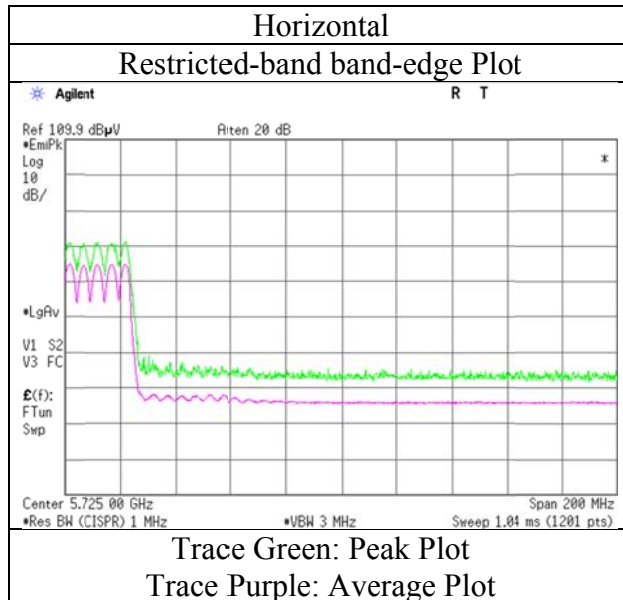
Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-80 5530 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

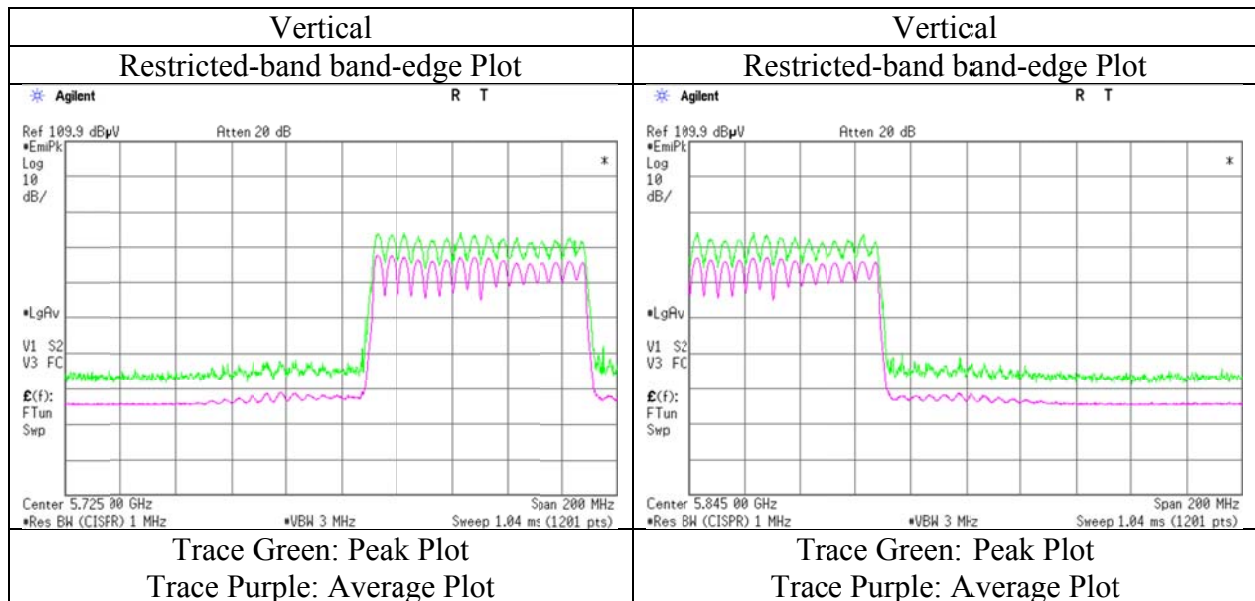
Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-80 5610 MHz



* Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11288814H
Date	May 17, 2016
Temperature / Humidity	22deg. C / 48 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-80 5775 MHz



* Final result of restricted band edge was shown in tabular data.

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Ise EMC Lab.

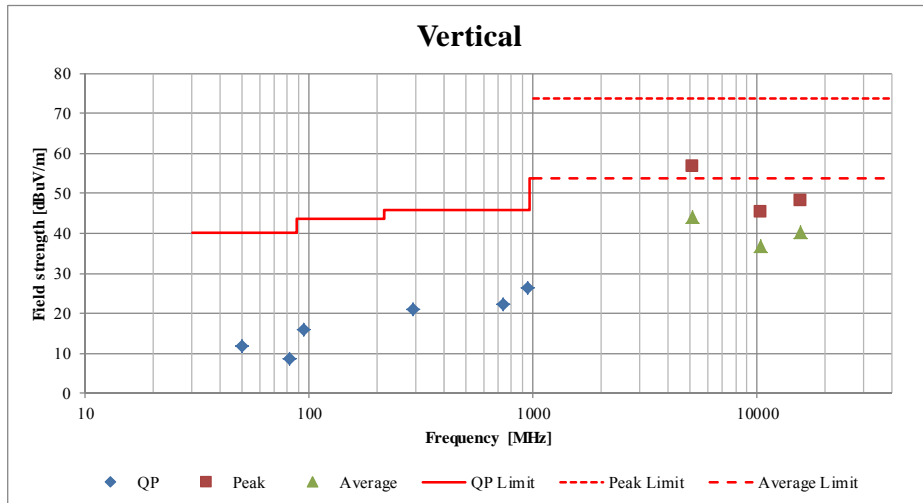
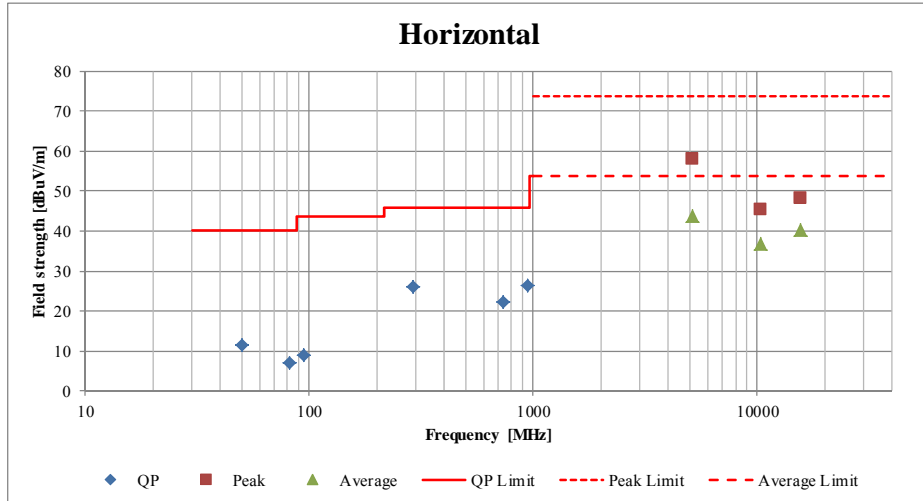
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Radiated Spurious Emission (Plot data, Worst case)

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber		
Report No.	11288814H		
Date	May 16, 2016	May 19, 2016	May 20, 2016
Temperature / Humidity	23deg. C / 52 % RH	24deg. C / 39 % RH	24deg. C / 47 % RH
Engineer	Yuta Moriya (1 GHz - 10 GHz)	Shinichi Miyazono (10 GHz - 40 GHz)	Yuta Moriya (Below 1 GHz)
Mode	Tx 11n-20 5180MHz		



*These plots data contains sufficient number to show the trend of characteristic features for EUT.

Radiated Spurious Emission

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber		
Report No.	11288814H		
Date	May 19, 2016	May 19, 2016	May 20, 2016
Temperature / Humidity	22deg. C / 45 % RH	24deg. C / 39 % RH	24deg. C / 47 % RH
Engineer	Yuta Moriya (1 GHz - 10 GHz)	Shinichi Miyazono (10 GHz - 40 GHz)	Yuta Moriya (Below 1 GHz)
Mode	Tx, Hopping On, 3DH5 and 11n-40 5510MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.003	QP	25.1	10.3	7.3	32.2	-	10.5	40.0	29.5	
Hori	81.533	QP	24.5	6.6	7.8	32.2	-	6.7	40.0	33.3	
Hori	94.445	QP	24.2	8.9	8.0	32.2	-	8.9	43.5	34.6	
Hori	292.042	QP	35.1	13.4	9.8	31.9	-	26.4	46.0	19.6	
Hori	737.334	QP	21.1	20.2	12.6	31.9	-	22.0	46.0	24.0	
Hori	939.966	QP	21.2	22.2	13.6	30.7	-	26.3	46.0	19.7	
Hori	5460.000	PK	48.0	32.2	7.3	31.8	-	55.7	73.9	18.2	
Hori	5470.000	PK	51.2	32.2	7.3	31.8	-	58.9	73.9	15.0	
Hori	11020.000	PK	42.4	39.9	-2.0	33.6	-	46.7	73.9	27.2	Floor noise
Hori	16530.000	PK	42.3	40.5	-0.1	32.8	-	49.9	73.9	24.0	Floor noise
Hori	5460.000	AV	32.7	32.2	7.3	31.8	-	40.4	53.9	13.5	
Hori	5470.000	AV	37.3	32.2	7.3	31.8	-	45.0	53.9	8.9	
Hori	11020.000	AV	33.8	39.9	-2.0	33.6	-	38.1	53.9	15.8	Floor noise
Hori	16530.000	AV	34.0	40.5	-0.1	32.8	-	41.6	53.9	12.3	Floor noise
Vert	50.003	QP	25.1	10.3	7.3	32.2	-	10.5	40.0	29.5	
Vert	81.533	QP	26.1	6.6	7.8	32.2	-	8.3	40.0	31.7	
Vert	94.445	QP	30.5	8.9	8.0	32.2	-	15.2	43.5	28.3	
Vert	292.042	QP	30.1	13.4	9.8	31.9	-	21.4	46.0	24.6	
Vert	737.334	QP	21.1	20.2	12.6	31.9	-	22.0	46.0	24.0	
Vert	939.966	QP	21.2	22.2	13.6	30.7	-	26.3	46.0	19.7	
Vert	5460.000	PK	48.1	32.2	7.3	31.8	-	55.8	73.9	18.1	
Vert	5470.000	PK	51.7	32.2	7.3	31.8	-	59.4	73.9	14.5	
Vert	11020.000	PK	42.3	39.9	-2.0	33.6	-	46.6	73.9	27.3	Floor noise
Vert	16530.000	PK	42.2	40.5	-0.1	32.8	-	49.8	73.9	24.1	Floor noise
Vert	5460.000	AV	37.7	32.2	7.3	31.8	-	45.4	53.9	8.5	
Vert	5470.000	AV	41.2	32.2	7.3	31.8	-	48.9	53.9	5.0	
Vert	11020.000	AV	33.7	39.9	-2.0	33.6	-	38.0	53.9	15.9	Floor noise
Vert	16530.000	AV	33.9	40.5	-0.1	32.8	-	41.5	53.9	12.4	Floor noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz 20log (4.4 m / 3.0 m) = 3.33 dB
 10 GHz - 40 GHz 20log (1.0 m / 3.0 m) = -9.5 dB

APPENDIX 2: Test instruments

Test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-03	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE	2015/10/01 * 12
MOS-13	Thermo-Hygrometer	Custom	CTH-180	1301	RE	2016/01/21 * 12
MJM-16	Measure	KOMELON	KMC-36	-	RE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE	-
MSA-16	Spectrum Analyzer	Agilent	E4440A	MY46186390	RE	2016/02/08 * 12
MHA-20	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	258	RE	2015/05/18 * 12
MCC-167	Microwave Cable	Junkosha	MWX221	1404S374(1m) / 1405S074(5m)	RE	2015/05/21 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	MY39500779	RE	2016/03/24 * 12
MMM-08	DIGITAL HiTESTER	Hioki	3805	051201197	RE	2016/01/13 * 12
MSA-10	Spectrum Analyzer	Agilent	E4448A	MY46180655	RE	2016/02/24 * 12
MTR-08	Test Receiver	Rohde & Schwarz	ESCI	100767	RE	2015/09/02 * 12
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	1915	RE	2015/10/11 * 12
MLA-22	Logperiodic Antenna(200-1000MHz)	Schwarzbeck	VUSLP9111B	911B-191	RE	2016/01/30 * 12
MCC-51	Coaxial cable	UL Japan	-	-	RE	2015/07/13 * 12
MAT-70	Attenuator(6dB)	Agilent	8491A-006	MY52460153	RE	2016/04/05 * 12
MPA-13	Pre Amplifier	SONOMA INSTRUMENT	310	260834	RE	2016/03/24 * 12
MHA-16	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170306	RE	2015/05/19 * 12
MHF-22	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCB	602	RE	2016/01/19 * 12
MCC-177	Microwave Cable	Junkosha	MMX221-00500D MSDMS	1502S304	RE	2016/03/10 * 12
MCC-54	Microwave Cable	Suhner	SUCOFLEX101	2873(1m) / 2876(5m)	RE	2016/03/18 * 12
MHA-29	Horn Antenna 26.5-40GHz	ETS LINDGREN	3160-10	00152399	RE	2015/09/04 * 12
MPA-22	Pre Amplifier	MITEQ, Inc	AMF-6F-2600400-3 3-8P / AMF-4F-2600400-3 3-8P	1871355 /1871328	RE	2015/09/03 * 12
MPM-17	Power Meter	DARE!! Instruments	RPR3006W	14I00048SNO081	AT	2015/11/09 * 12
MPM-18	Power Meter	DARE!! Instruments	RPR3006W	14I00048SNO082	AT	2015/11/09 * 12
MAT-80	Attenuator	Weinschel Associates	WA1-20-33	100130	AT	2015/05/04 * 12
MAT-82	Attenuator	Weinschel Associates	WA1-20-33	100132	AT	2015/05/04 * 12
MTA-46	Terminator	Mini-Circuits	ANNE-50X+	MUU3460143	AT	Pre Check
MMM-12	DIGITAL HiTESTER	Hioki	3805	060500120	AT	2015/02/05 * 12 *1)
MOS-14	Thermo-Hygrometer	Custom	CTH-201	1401	AT	2016/01/21 * 12
MSA-14	Spectrum Analyzer	Agilent	E4440A	MY48250080	AT	2015/10/07 * 12
MAT-57	Attenuator(10dB)	Suhner	6810.19.A	-	AT	2016/01/18 * 12
MAT-58	Attenuator(10dB)	Suhner	6810.19.A	-	AT	2016/01/18 * 12
MCC-138	Microwave cable	HUBER+SUHNER	SUCOFLEX 102	37953/2	AT	2015/10/08 * 12
MTA-36	Terminator	-	50ΩSMA	-	AT	Pre Check
MTA-43	Terminator	Mini-Circuits	ANNE-50X+	MUU3460140	AT	Pre Check
MOS-29	Thermo-Hygrometer	Custom	CTH-201	2901	AT	2016/01/21 * 12
MPM-16	Power Meter	Agilent	8990B	MY51000271	AT	2015/04/01 * 12 *1)
MPSE-22	Power sensor	Agilent	N1923A	MY54070003	AT	2015/04/01 * 12 *1)
MPSE-23	Power sensor	Agilent	N1923A	MY54070004	AT	2015/04/01 * 12 *1)

*1) This test equipment was used for the tests before the expiration date of the calibration.

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: RE: Radiated Emission

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