RADIO TEST REPORT

Test Report No. : 11022049H-B

Applicant	:	**NIKON CORPORATION**
Type of Equipment	:	**Wireless Transmitter**
Model No.	:	**N1534**
FCC ID	:	**CGJ1252EA**
Test regulation	:	**FCC Part 15 Subpart E: 2015**
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)

Date of test: June 5 to June 29, 2015
and November 3 to 27, 2015

Representative test engineer:
Yutaka Yoshida
Engineer
Consumer Technology Division

Approved by:
Takahiro Hatakeda
Leader
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.
*As for the range of Accreditation in NVLAP, you may refer to the WEB address,
http://japan.ul.com/resources/emc_accredited/

REVISION HISTORY

Original Test Report No.: 11022049H-B

Revision	Test report No.	Date	Page revised	Contents
- (Original)	11022049H-B	January 6, 2016	-	-

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SECTION 1: Customer information

Company Name	:	NEC Platforms, Ltd.
Address	:	800, Shimomata, Kakegawa-shi, Shizuoka 436-8501,Japan
Telephone Number	:	+81-537-22-8276
Facsimile Number	:	+81-537-22-8236
Contact Person	:	Masamitsu Kawamura

*Remarks:
NIKON CORPORATION designates NEC Platforms, Ltd. as manufacturer of the product (Wireless Transmitter).

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

2.1 Identification of E.U.T.

Type of Equipment	:	Wireless Transmitter
Model No.	:	N1534
Serial No.	:	Refer to Section 4, Clause 4.2
Rating	:	DC 7.0 V
Receipt Date of Sample	:	June 1, 2015 (Used for all tests except for Maximum conducted output power, Maximum power spectral density, and Radiated spurious emission tests) October 28, 2015 (Used for Maximum conducted output power, Maximum power spectral density, and Radiated spurious emission test)
Country of Mass-production	:	Japan
Condition of EUT	:	Engineering prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification of EUT	:	No Modification by the test lab

2.2 Product Description

Model: N1534 (referred to as the EUT in this report) is a Wireless Transmitter.

General Specification

Clock frequency(ies) in the system	:	800 MHz Radio part: 32.7 kHz (OSC), 40 MHz (Crystal)
Operating temperature	:	0 deg. C to +40 deg. C

Radio Specification

Radio Type	:	Transceiver
Power Supply (inner)	:	DC 3.3 V

Specification of Wireless LAN (IEEE802.11b/g/a/n-20/n-40/11ac-20/11ac-40/11ac-80)

Type of radio	IEEE802.11b	IEEE802.11g/n (20 M band)	IEEE802.11n (40 M band)	IEEE802.11a/n/ac (20 M band)	IEEE802.11n/ac (40 M band)	IEEE802.11ac (80 M band)
Frequency of operation (MHz)	2412 - 2462	2412 - 2462	2422 - 2452	5180 - 5240 * 5260 - 5320 * 5745 - 5825 *	5190 - 5230 * 5270 - 5310 * 5755 - 5795 *	5210 * 5290 * 5775 *
Type of modulation	DSSS (CCK, DQPSK, DBPSK)	OFDM-CCK (64QAM, 16QAM, QPSK, BPSK)		OFDM (64QAM, 16QAM, QPSK, BPSK, 256QAM(IEEE802.11ac only))		
Channel spacing	5 MHz			20 MHz	40 MHz	80 MHz
Antenna type	Antenna 1: Pattern Dipole Antenna Antenna 2: Pattern Dipole Antenna					
Antenna Gain	<Antenna 1> 2.4 GHz : - 2.2 dBi 5 GHz : 2.1 dBi <Antenna 2> 2.4 GHz : 0.3 dBi 5 GHz: 2.1 dBi					
Directional Antenna Gain *1)	2.4 GHz: 2.15 dBi 5 GHz: 5.11 dBi					

* This test report applies to Wireless LAN (5 GHz Band).

*1) Directional antenna gain = 10log $[(10^{G1/20} + 10^{G2/20})^2 / N_{ANT}]$ [dBi]

SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification	:	FCC Part 15 Subpart E: 2015, final revised on November 23, 2015 *Some parts are effective on and after December 17, 2015 or December 23, 2015. The revision does not affect the test specification applied to the EUT.
Title	:	FCC 47CFR Part15 Radio Frequency Device Subpart E Unlicensed National Information Infrastructure Devices Section 15.407 General technical requirements

* The EUT complies with FCC Part 15 Subpart B: 2015, final revised on November 23, 2015.

3.2 Procedures and results

Item	Test Procedure	Specification	Worst margin	Results	Remarks
Conducted Emission	**FCC:** ANSI C63.10-2013	**FCC:** 15.407 (b) (6) / 15.207	**QP** 6.7 dB, 0.35866 MHz, N **AV** 3.8 dB, 0.35866 MHz, N	Complied	-
	IC: RSS-Gen 8.8	**IC:** RSS-Gen 8.8			
26 dB Emission Bandwidth	**FCC:** KDB Publication Number 789033	**FCC:** 15.407 (a) (1) (2) (3)	See data	N/A	Conducted
	IC: -	**IC:** -			
Maximum Conducted Output Power	**FCC:** KDB Publication Number 789033	**FCC:** 15.407 (a) (1) (2) (3)		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	**FCC:** KDB Publication Number 789033	**FCC :** 15.407 (a) (1) (2) (3)		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	0.1 dB 5350.000 MHz, AV, Hori. 5352.022 MHz, AV, Hori.	Complied	Conducted (< 30 MHz) / Radiated (> 30 MHz) *1)
	IC: -	**IC:** RSS-247 6.2.1 (2) 6.2.2 (2) 6.2.3 (2) 6.2.4 (2)			
6 dB Emission Bandwidth	**FCC:** ANSI C63.10-2013	**FCC:** 15.407 (e)	See data	Complied	Conducted
	IC: -	**IC:** RSS-247 6.2.4 (1)			

Note: UL Japan, Inc.'s EMI Work Procedures No. 13-EM-W0420 and 13-EM-W0422.
*1) 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 15.31 (e)
This EUT provides stable voltage (DC 3.3 V) constantly to RF Part regardless of input voltage. Therefore, this EUT complies with the requirement.

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

3.3 Addition to standard

Item	Test Procedure	Specification	Worst margin	Results	Remarks
99 % Occupied Band Width	RSS-Gen 6.6	**IC:** -	N/A	N/A	Conducted

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

3.4 Uncertainty

EMI

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

Ise EMC Lab.

Test site (semi anechoic chamber)	Conducted emission Uncertainty (+/-)			
	No. 1	No. 2	No. 3	No. 4
150 kHz - 30 MHz	3.5 dB	3.5 dB	3.4 dB	3.5 dB

Test site (semi anechoic chamber)	Radiated emission Uncertainty (+/-)						
	Measurement distance: 3 m				1 m		0.5 m
	9 kHz -30 MHz	30 MHz -300 MHz	300 MHz -1 GHz	1 GHz -10 GHz	10 GHz -18 GHz	18 GHz -26.5 GHz	26.5 GHz -40 GHz
No. 1	4.3 dB	5.1 dB	6.2 dB	5.5 dB	5.8 dB	5.8 dB	4.3 dB
No. 2	4.2 dB	5.1 dB	6.2 dB	5.4 dB	5.7 dB	5.9 dB	5.6 dB
No. 3	4.4 dB	5.1 dB	6.3 dB	5.2 dB	5.5 dB	5.8 dB	5.5 dB
No. 4	4.7 dB	5.3 dB	6.3 dB	5.3 dB	5.7 dB	5.9 dB	5.5 dB

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

Conducted Emission test

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

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.

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.

Mode	Remarks*
IEEE 802.11a (11a)	6Mbps, PN9, Antenna port 1 and 2 simultaneous transmission
IEEE 802.11n SISO 20MHz BW (11n-20)	MCS 1, PN9, Antenna port 1 and 2 simultaneous transmission
IEEE 802.11ac SISO 20MHz BW (11ac-20)	MCS 1, PN9, Antenna port 1 and 2 simultaneous transmission
IEEE 802.11n SISO 40MHz BW (11n-40)	MCS 1, PN9, Antenna port 1 and 2 simultaneous transmission
IEEE 802.11ac SISO 40MHz BW (11ac-40)	MCS 1, PN9, Antenna port 1 and 2 simultaneous transmission
IEEE 802.11ac SISO 80MHz BW (11ac-80)	MCS 1, PN9 *1), Antenna port 1 and 2 simultaneous transmission

*The worst condition was determined based on the test result of Maximum Peak Output Power.
*EUT has the power settings by the software as follows;
- Power Setting: Refer to the following table.
- Software: LAB-tool
Ver: 15.2.4.92
*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.
*1) Radiated spurious emission test was performed with Rate:MCS9 because of the test tool.

[Power Settings]

20MHz Band W52	ch36	ch40	ch44	ch48
11a	8 dBm	8 dBm	8 dBm	8 dBm
11n-20	8 dBm	8 dBm	8 dBm	8 dBm
11ac-20	8 dBm	8 dBm	8 dBm	8 dBm

20MHz Band W53	ch52	ch56	ch60	ch64
11a	7 dBm	7 dBm	7 dBm	7 dBm
11n-20	7 dBm	7 dBm	7 dBm	7 dBm
11ac-20	7 dBm	7 dBm	7 dBm	7 dBm

20MHz Band W58	ch149	ch153	ch157	ch161	ch165
11a	7 dBm	8 dBm	8 dBm	8 dBm	8 dBm
11n-20	7 dBm	8 dBm	8 dBm	8 dBm	8 dBm
11ac-20	7 dBm	8 dBm	8 dBm	8 dBm	8 dBm

40MHz Band W52	ch38	ch46
11n-40	8 dBm	8 dBm
11ac-40	8 dBm	8 dBm

40MHz Band W53	ch54	ch62
11n-40	7 dBm	7 dBm
11ac-40	7 dBm	7 dBm

40MHz Band W58	ch151	ch159
11n-40	7 dBm	8 dBm
11ac-40	7 dBm	8 dBm

80MHz Band W52	Ch42
11ac-80	6dBm

80MHz Band W53	ch58
11ac-80	6dBm

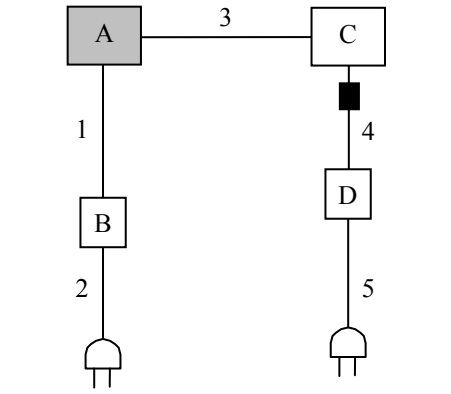
80MHz Band W58	ch155
11ac-80	5dBm

*The details of Operating mode(s)

Test Item	Operating Mode	Tested Antenna port *2)	Tested Frequency			
			Low Band	Middle Band	Additional Band	Upper Band
Conducted emission, Radiated Spurious Emission (Below 1GHz)	11ac-40 Tx *1)	1+2	-	5310MHz *1)	-	-
Conducted Spurious Emission	11ac-40 Tx *1)	1	-	5310MHz *1)	-	-
26dB Emission Bandwidth	11a Tx 11n-20 Tx 11ac-20 Tx	1	-	5260MHz 5300MHz 5320MHz	-	-
	11n-40 Tx 11ac-40 Tx	1	-	5270MHz 5310MHz	-	-
	11ac-80 Tx	1	-	5290MHz	-	-
99% Occupied Bandwidth	11a Tx 11n-20 Tx 11ac-20 Tx	1	5180MHz 5220MHz 5240MHz	5260MHz 5300MHz 5320MHz	-	5745MHz 5785MHz 5825MHz
	11n-40 Tx 11ac-40 Tx	1	5190MHz 5230MHz	5270MHz 5310MHz	-	5755MHz 5795MHz
	11ac-80 Tx	1	5210MHz	5290MHz	-	5775MHz
Maximum Conducted Output Power, Maximum Power Spectral Density	11a Tx 11n-20 Tx 11ac-20 Tx	1+2, 1, 2	5180MHz 5220MHz 5240MHz	5260MHz 5300MHz 5320MHz	-	5745MHz 5785MHz 5825MHz
	11n-40 Tx 11ac-40 Tx	1+2, 1, 2	5190MHz 5230MHz	5270MHz 5310MHz	-	5755MHz 5795MHz
	11ac-80 Tx	1+2, 1, 2	5210MHz	5290MHz	-	5775MHz
Radiated Spurious Emission (Above 1GHz)	11ac-20 Tx *3)	1+2	5180MHz	5260MHz 5320MHz	-	5745MHz 5785MHz 5825MHz
	11ac-40 Tx *3)	1+2	5190MHz	5270MHz 5310MHz	-	5755MHz 5795MHz
	11ac-80 Tx	1+2	5210MHz	5290MHz	-	5775MHz
Band Edge confirmation	11ac-20 Tx *3)	1+2	5180MHz	5320MHz	-	5745MHz 5825MHz
	11ac-40 Tx *3)	1+2	5190MHz	5310MHz	-	5755MHz 5795MHz
	11ac-80 Tx	1+2	5210MHz	5290MHz	-	5775MHz
6dB Bandwidth	11a Tx 11n-20 Tx 11ac-20 Tx	1	-	-	-	5745MHz 5785MHz 5825MHz
	11n-40 Tx 11ac-40 Tx	1	-	-	-	5755MHz 5795MHz
	11ac-80 Tx	1	-	-	-	5775MHz

*1) The operating mode and tested frequency were tested as a representative, because it had the highest power at antenna terminal test.
*2) After the comparison between Antenna port 1 and Antenna port 2, test was performed with the antenna that had higher power as a representative.
*3) Since 11a, 11n-20 and 11ac-20, 11n-40 and 11ac-40 have the same modulation method and no differences in transmitting specification, test was performed on the representative mode that had the highest conducted output power.

4.2 Configuration and peripherals



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

Description of EUT

No.	Item	Model number	Serial number	Manufacturer	Remarks
A	Wireless Transmitter	N1534	PT2-17	NEC Platforms, Ltd.	EUT
B	AC Adapter	EH-5b	0315C	NEC Platforms, Ltd.	-
C	Laptop PC	T60	L3DM301	Lenovo	-
D	AC Adapter	DCWP CM-2	11S92P1156Z1ZDXN 12ED9Z	Lenovo	-

List of cables used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	DC Cable	1.7	Shielded	Shielded	-
2	AC Cable	1.4	Shielded	Shielded	
3	LAN Cable	1.0	Unshielded	Unshielded	
4	DC Cable	0.9	Unshielded	Unshielded	
5	AC Cable	1.7	Unshielded	Unshielded	

SECTION 5: Conducted Emission

Test Procedure and conditions

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

For the tests on EUT with other peripherals (as a whole system)
I/O cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle 30 cm to 40 cm long and were hanged at a 40 cm height to the ground plane. All unused 50 ohm connectors of the LISN (AMN) were resistivity terminated in 50 ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber.
The EUT was connected to a LISN (AMN).
An overview sweep with peak detection has been performed.

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

Detector	**: QP and CISPR Average**
Measurement range	**: 0.15 MHz-30 MHz**
Test data	**: APPENDIX**
Test result	**: Pass**

SECTION 6: Radiated Spurious Emission and Band Edge Compliance

Test Procedure

[For 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.

[For above 1GHz]
EUT was placed on a urethane platform of nominal size, 0.5 m by 0.5 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).
Apply to limit 68.2 dBuV/m, 3 m (-27 dBm e.i.r.p.*) or
78.2 dBuV/m, 3 m (-17 dBm e.i.r.p.*) in the Section 15.407 (b).

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:

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

Test Antennas are used as below;

Frequency	30 MHz to 300 MHz	300 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 Duty factor was added to the results.
Test Distance	3 m	3 m (below 10 GHz), 1 m*2) (above 10 GHz), 0.5 m*3) (above 26.5 GHz)	

*1) The test method was also referred to KDB 789033 D02 General UNII Test Procedures New Rules v01 "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E (Issued on June 6, 2014)".
*2) Distance Factor: 20 x log (1.0 m/3.0 m) = -9.5 dB
*3) Distance Factor: 20 x log (0.5 m/3.0 m) = -15.6 dB

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

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

Measurement range : 30 MHz-40 GHz
Test data : APPENDIX
Test result : Pass

SECTION 7: Antenna Terminal Conducted Tests

Test Procedure

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

Test	Span	RBW	VBW	Sweep time	Detector	Trace	Instrument used and Test method
26dB Bandwidth	40MHz, 80MHz, 160MHz	Close to 1% of EBW	Greater than RBW	Auto	Peak	Max Hold	Spectrum Analyzer
99% Occupied Bandwidth *1)	Enough width to display emission skirts	1 to 5% of OBW	≥ 3 RBW	Auto	Peak	Max Hold	Spectrum Analyzer
6dB Bandwidth	160MHz	100kHz	300kHz	Auto	Peak	Max Hold	Spectrum Analyzer
Maximum Conducted Output Power	-	-	-	Auto	Averaging	-	Power Meter (Sensor: 80MHz BW) (Method PM-G)
Maximum Power Spectral Density	40MHz, 80MHz, 160MHz	1MHz or 470kHz *2)	3MHz or 1.5MHz	Auto	Sample Power Averaging (200 times)	Clear Write	Spectrum Analyzer
Conducted Spurious Emission*3)	9kHz-150kHz	200Hz	620Hz	Auto	Peak	Max Hold	Spectrum Analyzer
	150kHz-30MHz	9.1kHz	27kHz				
Band Edge confirmation *4)	80MHz, 160MHz, 240MHz	1MHz	3MHz	Auto	Peak	Max Hold	Spectrum Analyzer (Method VB)
			>1/T		Average		

* The test method was also referred to KDB 789033 D02 General UNII Test Procedures New Rules v01 "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E (Issued on June 6, 2014)".

*1) Peak hold was applied as Worst-case measurement.
*2) FCC standard says that RBW is set to be 500kHz for 5.725-5.850GHz, but it is not possible with spectrum analyzer, so 10log(500kHz/470kHz) was added to the test result.
*3) In the frequency range below 30MHz, RBW was narrowed to separate the noise contents. Then, wide-band noise near the limit was checked separately, however the noise was not detected as shown in the chart.(9kHz-150kHz:RBW=200Hz, 150kHz-30MHz:RBW=9.1kHz)
*4) Reference data

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

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

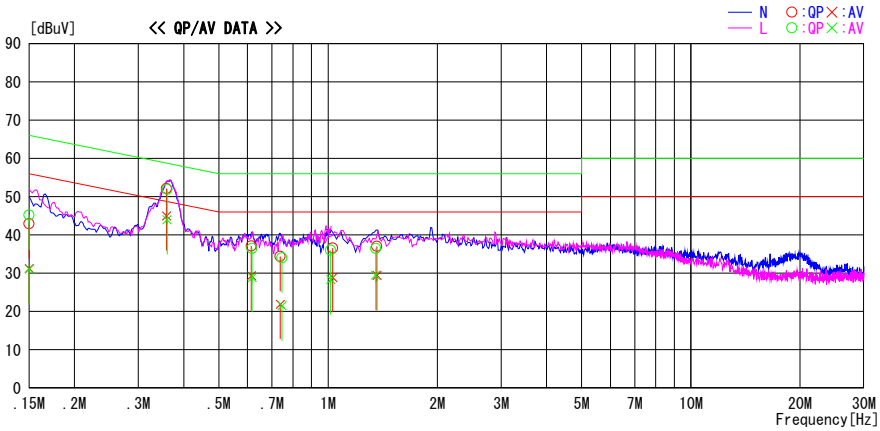
UL Japan, Inc. Ise EMC Lab. No.2 Semi Anechoic Chamber
Date : 2015/11/08

Report No. : 11022049HH

Temp./Humi. : 23deg. C / 63% RH
Engineer : Shinichi Miyazono

Mode / Remarks : Tx 11ac40 5310MHz MCS1

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.15000	29.7	18.0	13.2	42.9	31.2	66.0	56.0	23.1	24.8	N	
0.35866	38.9	31.8	13.2	52.1	45.0	58.8	48.8	6.7	3.8	N	
0.61480	23.8	16.0	13.3	37.1	29.3	56.0	46.0	18.9	16.7	N	
0.73795	21.1	8.6	13.3	34.4	21.9	56.0	46.0	21.6	24.1	N	
1.03050	23.3	15.6	13.3	36.6	28.9	56.0	46.0	19.4	17.1	N	
1.36333	23.6	16.0	13.4	37.0	29.4	56.0	46.0	19.0	16.6	N	
0.15000	32.0	17.9	13.2	45.2	31.1	66.0	56.0	20.8	24.9	L	
0.36000	38.7	30.8	13.2	51.9	44.0	58.7	48.7	6.8	4.7	L	
0.61700	23.2	15.6	13.3	36.5	28.9	56.0	46.0	19.5	17.1	L	
0.74635	20.7	8.2	13.3	34.0	21.5	56.0	46.0	22.0	24.5	L	
1.01700	22.7	15.0	13.3	36.0	28.3	56.0	46.0	20.0	17.7	L	
1.35300	23.1	16.1	13.4	36.5	29.5	56.0	46.0	19.5	16.5	L	

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

26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/09/2015
Temperature/ Humidity	23deg. C / 43% RH
Engineer	Tomoki Matsui
Mode	Tx 11a

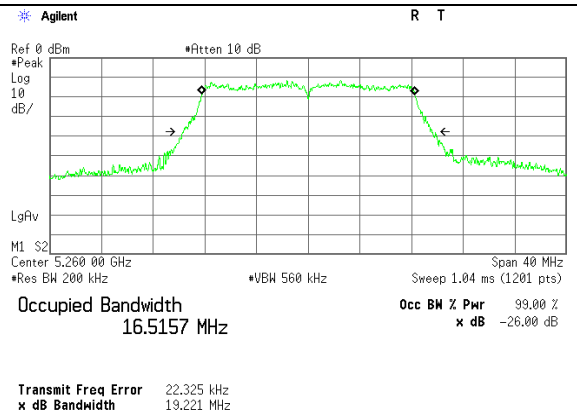
11a Antenna port 1

Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5180	-	16.8581	-
5220	-	16.8653	-
5240	-	16.8540	-
5260	19.221	16.8827	-
5300	19.584	16.9246	-
5320	19.556	16.8777	-
5745	-	16.8945	-
5785	-	16.8707	-
5825	-	16.9221	-

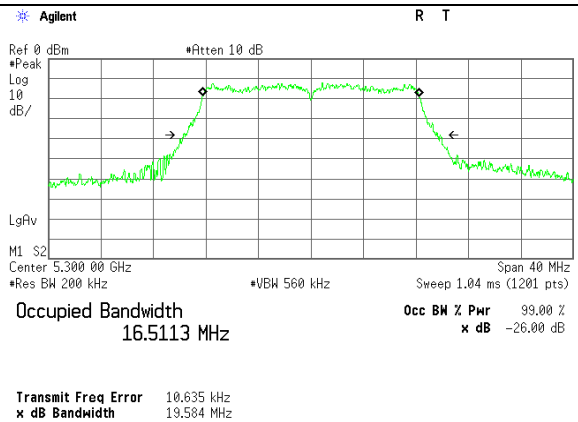
26dB Emission Bandwidth

11a Antenna port 1

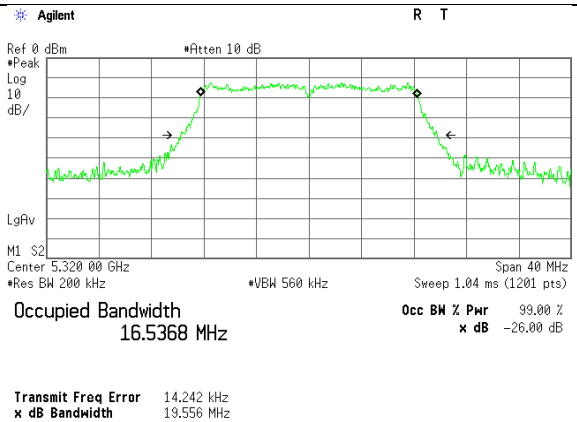
5260MHz



5300MHz



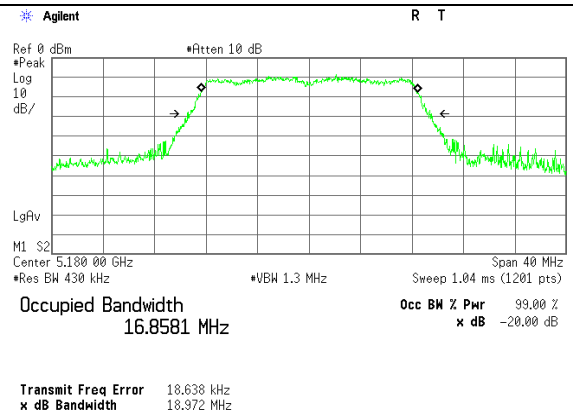
5320MHz



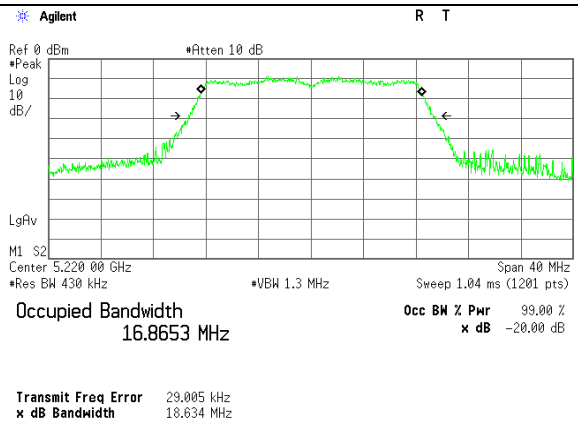
99% Occupied Bandwidth

11a Antenna port 1

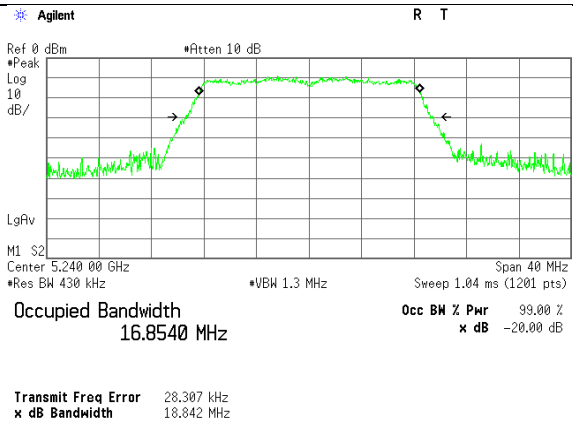
5180MHz



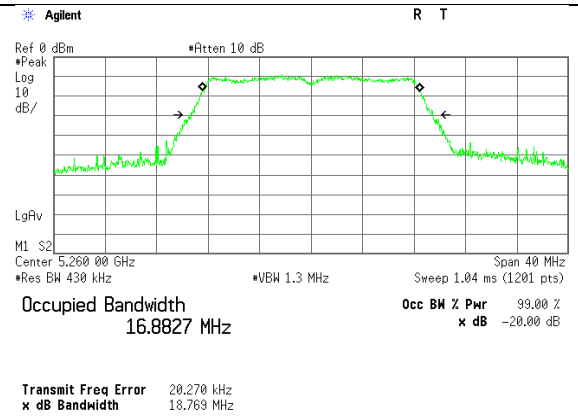
5220MHz



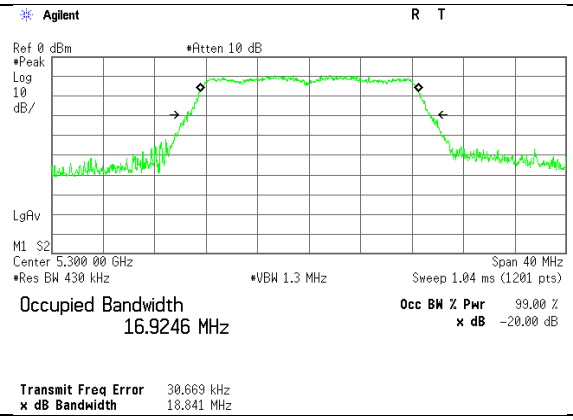
5240MHz



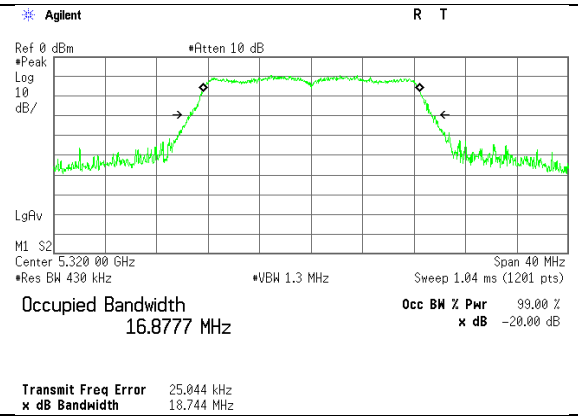
5260MHz



5300MHz



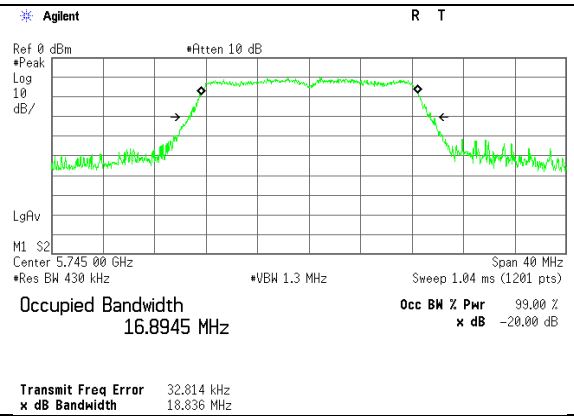
5320MHz



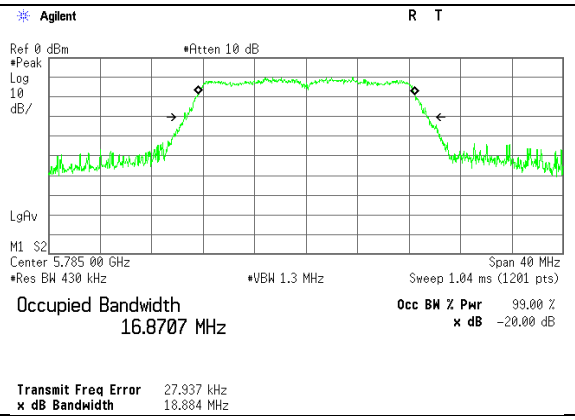
99% Occupied Bandwidth

11a Antenna port 1

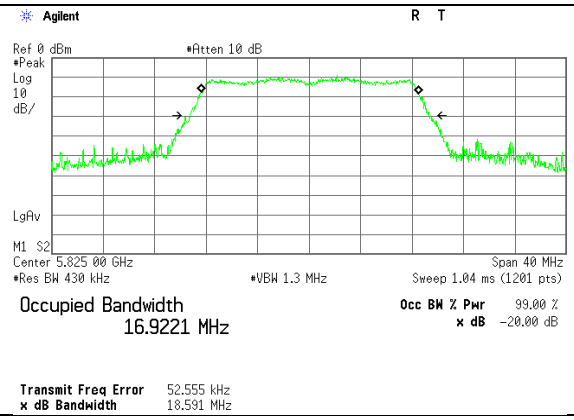
5745MHz



5785MHz



5825MHz



26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/09/2015
Temperature/ Humidity	23deg. C / 43% RH
Engineer	Tomoki Matsui
Mode	Tx 11n-20

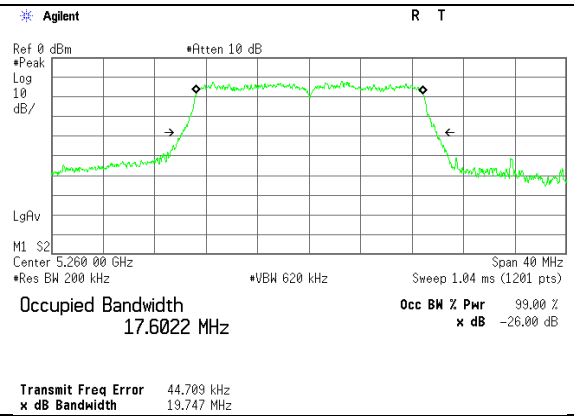
11n-20 Antenna port 1

Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5180	-	17.8010	-
5220	-	17.7958	-
5240	-	17.7840	-
5260	19.747	17.7821	-
5300	19.709	17.8088	-
5320	19.725	17.7740	-
5745	-	17.7893	-
5785	-	17.8359	-
5825	-	17.7932	-

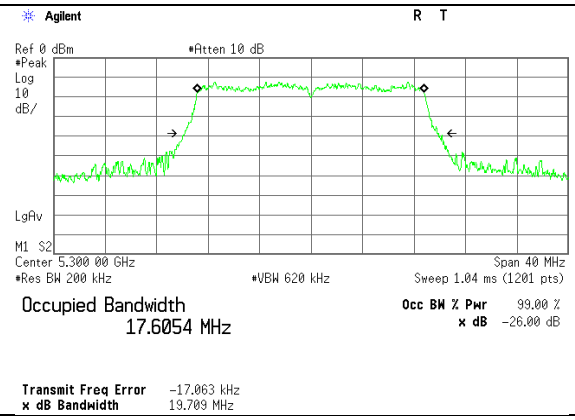
26dB Emission Bandwidth

11n-20 Antenna port 1

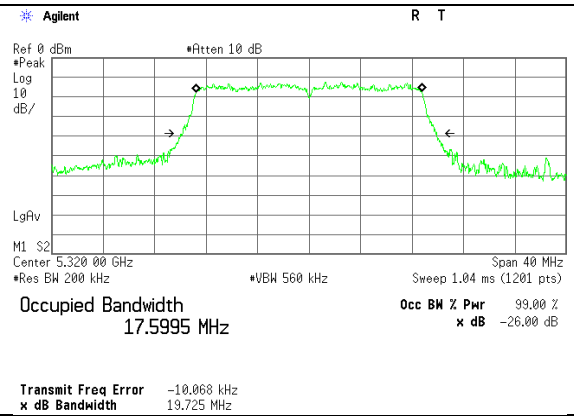
5260MHz



5300MHz



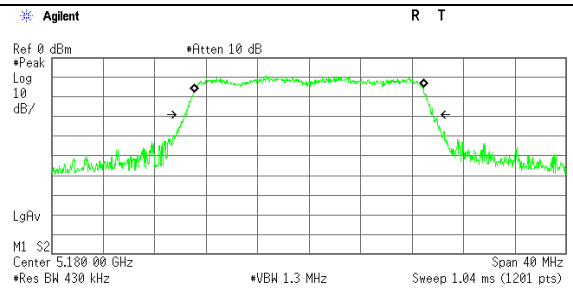
5320MHz



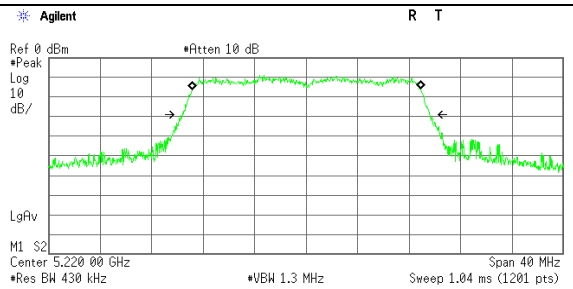
99% Occupied Bandwidth

11n-20 Antenna port 1

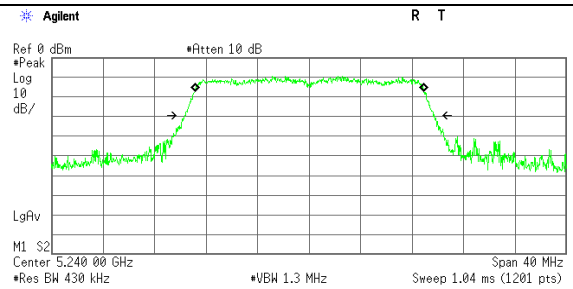
5180MHz



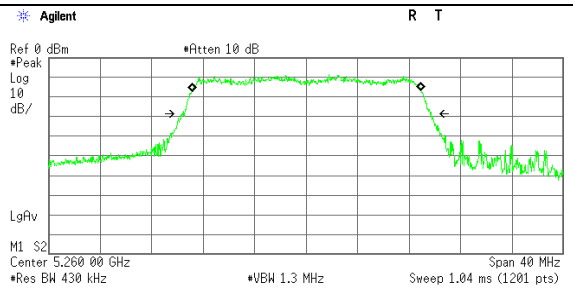
5220MHz



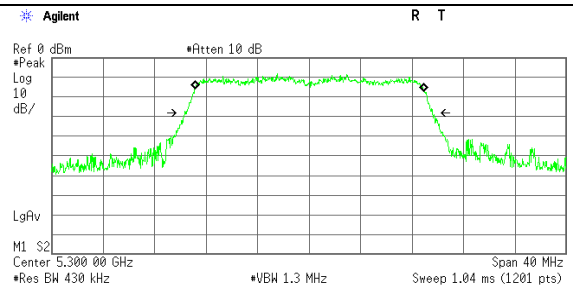
5240MHz



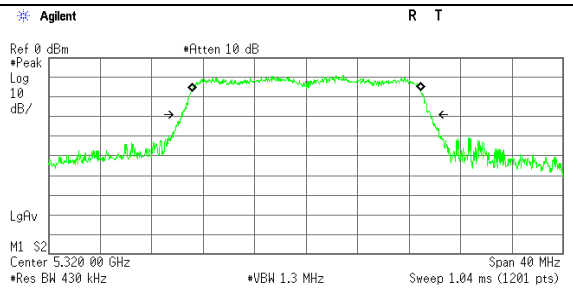
5260MHz



5300MHz



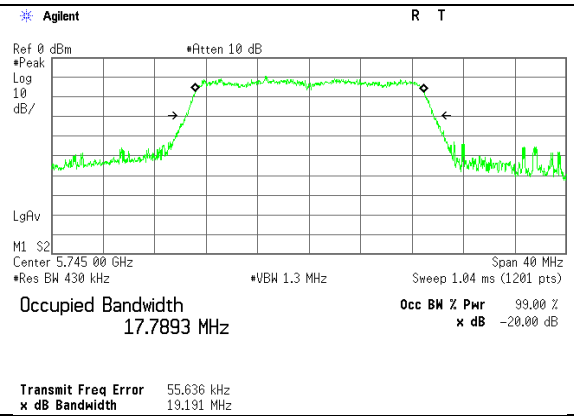
5320MHz



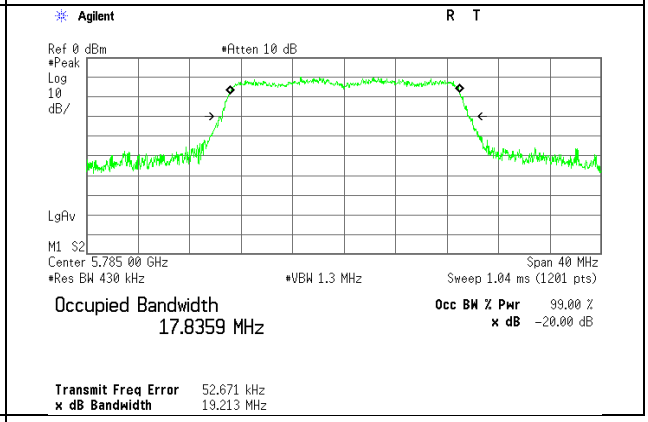
99% Occupied Bandwidth

11n-20 Antenna port 1

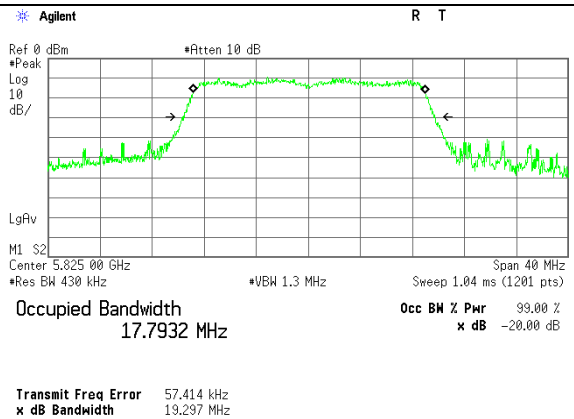
5745MHz



5785MHz



5825MHz



26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/09/2015
Temperature/ Humidity	23deg. C / 43% RH
Engineer	Tomoki Matsui
Mode	Tx 11ac-20

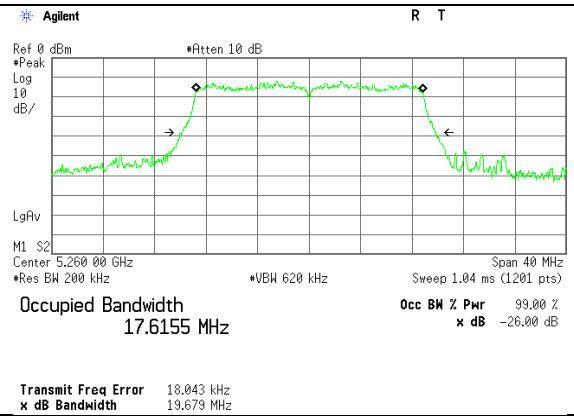
Tx 11ac-20 Antenna port 1

Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5180	-	17.7782	-
5220	-	17.7688	-
5240	-	17.7836	-
5260	19.679	17.8208	-
5300	19.831	17.8005	-
5320	19.764	17.7822	-
5745	-	17.8170	-
5785	-	17.8251	-
5825	-	17.8307	-

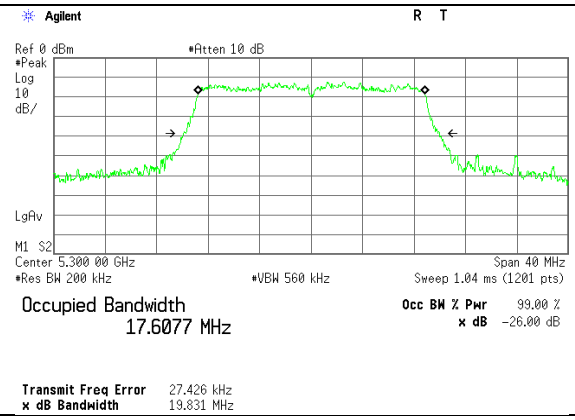
26dB Emission Bandwidth

11ac-20 Antenna port 1

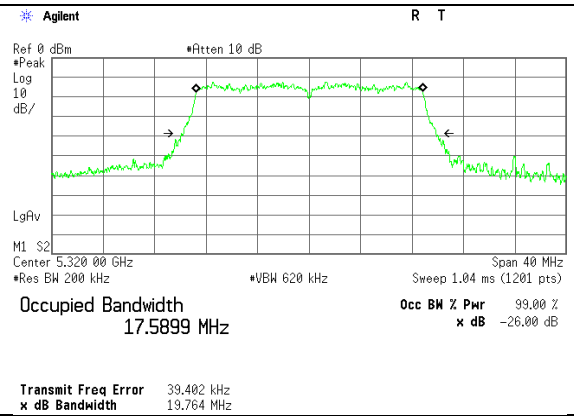
5260MHz



5300MHz



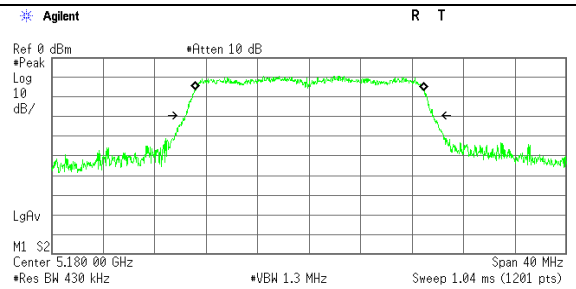
5320MHz



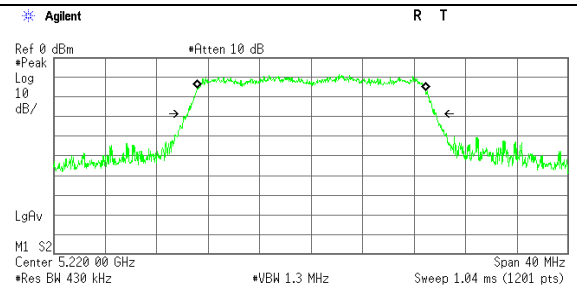
99% Occupied Bandwidth

11ac-20 Antenna port 1

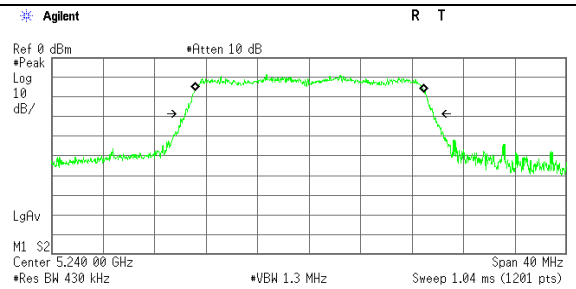
5180MHz



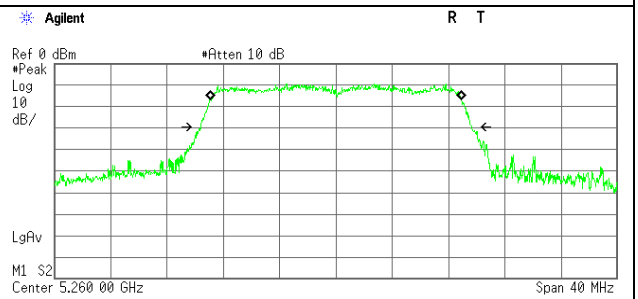
5220MHz



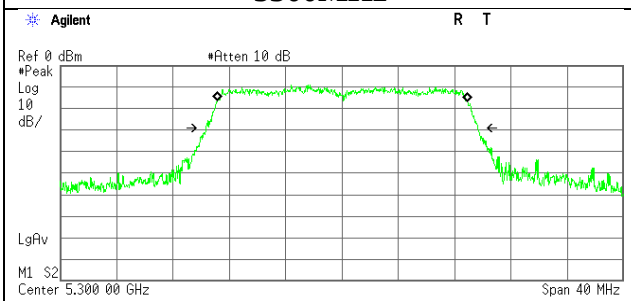
5240MHz



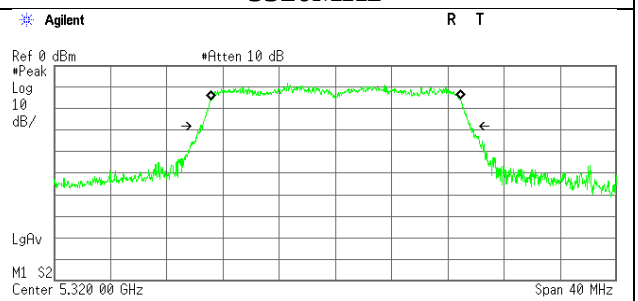
5260MHz



5300MHz



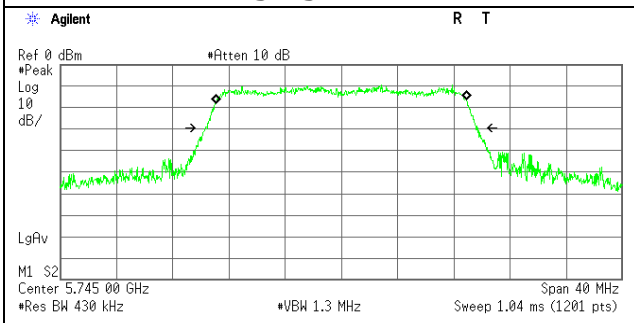
5320MHz



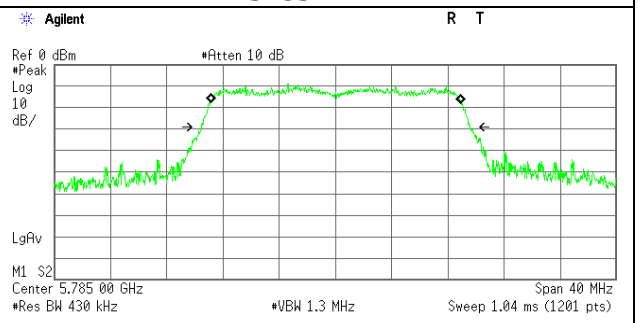
99% Occupied Bandwidth

11ac-20 Antenna port 1

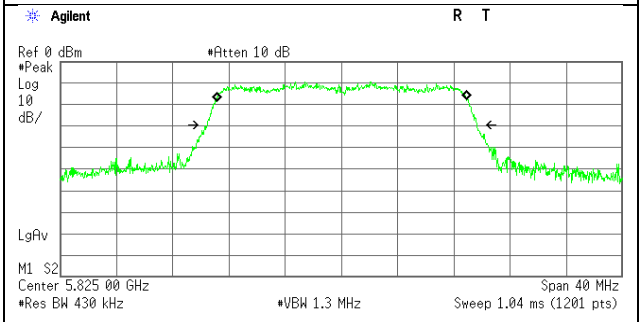
5745MHz



5785MHz



5825MHz



26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/09/2015
Temperature/ Humidity	23deg. C / 43% RH
Engineer	Tomoki Matsui
Mode	Tx 11n-40

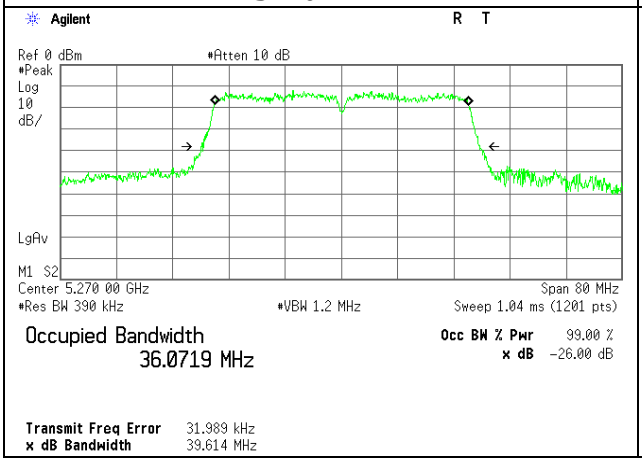
Tx 11n-40 Antenna port 1

Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5190	-	36.2219	-
5230	-	36.2238	-
5270	39.614	36.3108	-
5310	39.663	36.3498	-
5755	-	36.3469	-
5795	-	36.2793	-

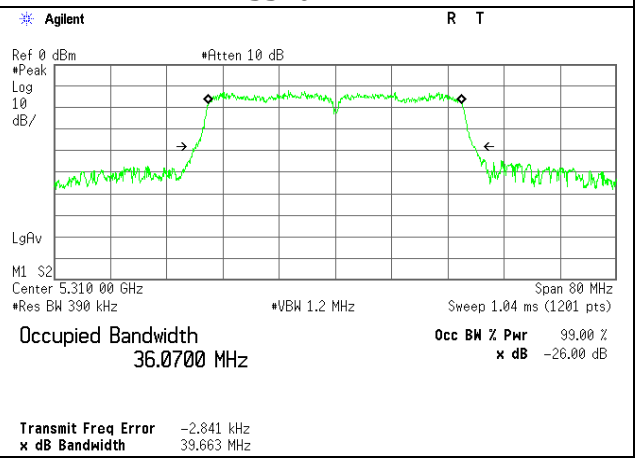
26dB Emission Bandwidth

11n-40 Antenna port 1

5270MHz



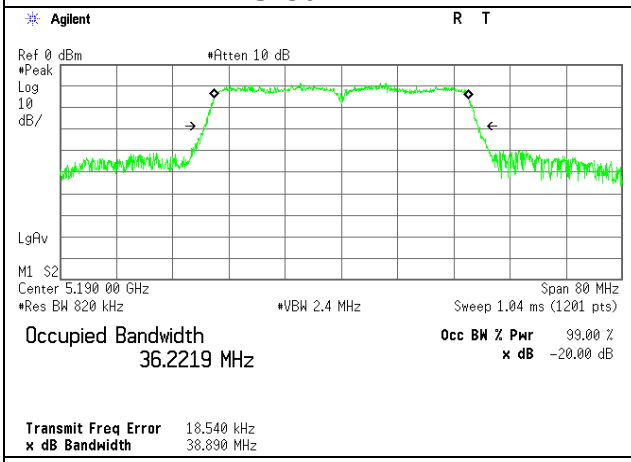
5310MHz



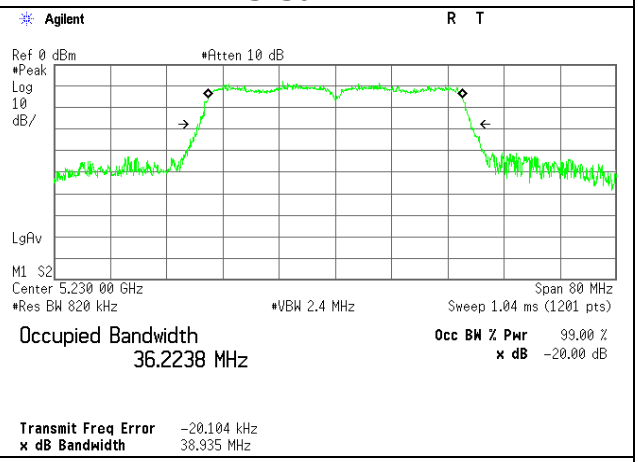
99% Occupied Bandwidth

11n-40 Antenna port 1

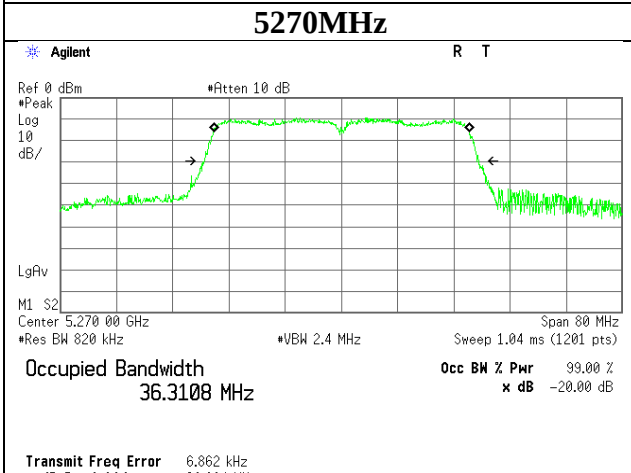
5190MHz



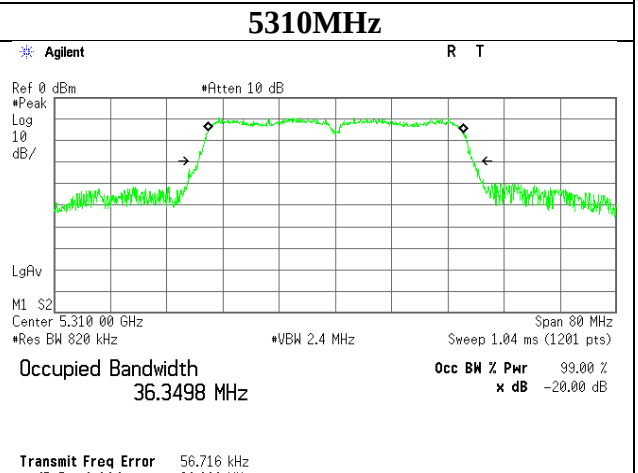
5230MHz



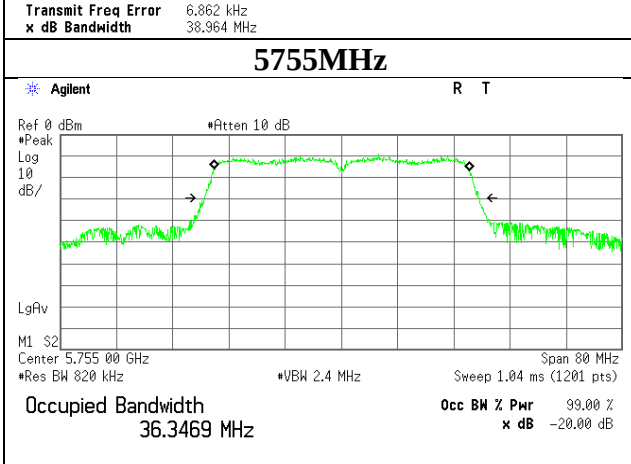
5270MHz



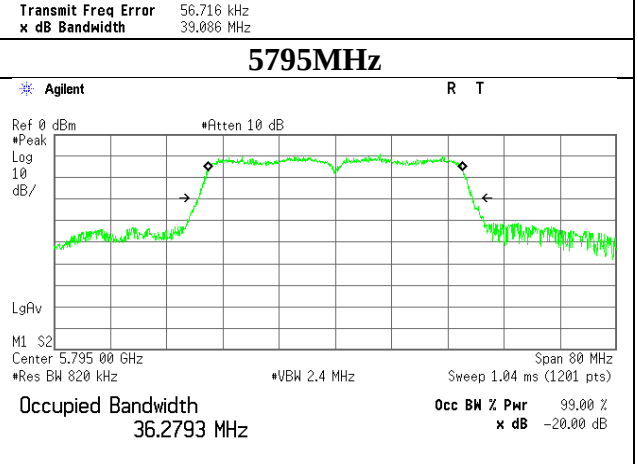
5310MHz



5755MHz



5795MHz



26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/09/2015
Temperature/ Humidity	23deg. C / 43% RH
Engineer	Tomoki Matsui
Mode	Tx 11ac-40

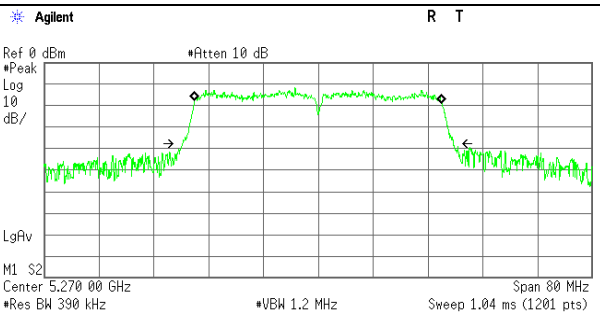
Tx 11ac-40 Antenna port 1

Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5190	-	36.2642	-
5230	-	36.3654	-
5270	39.609	36.3270	-
5310	39.824	36.3370	-
5755	-	36.4273	-
5795	-	36.3072	-

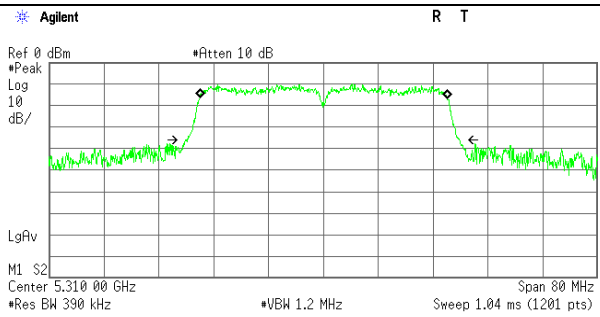
26dB Emission Bandwidth

11ac-40 Antenna port 1

5270MHz



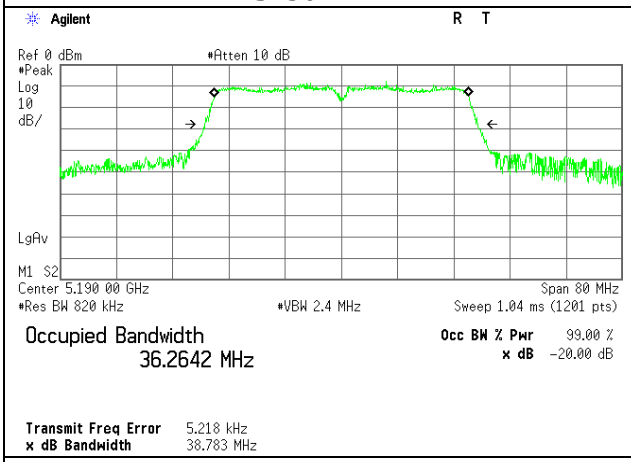
5310MHz



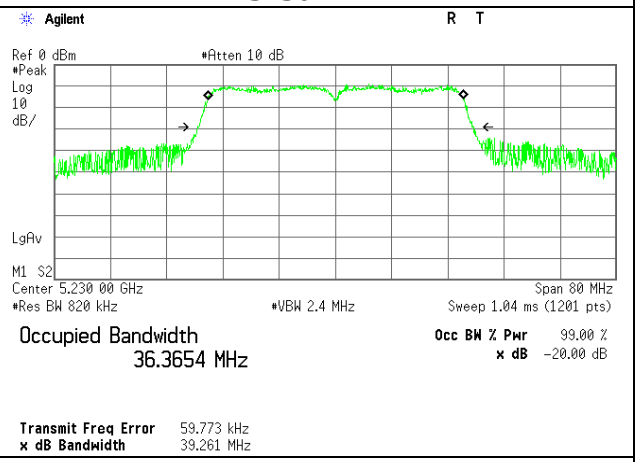
99% Occupied Bandwidth

11ac-40 Antenna port 1

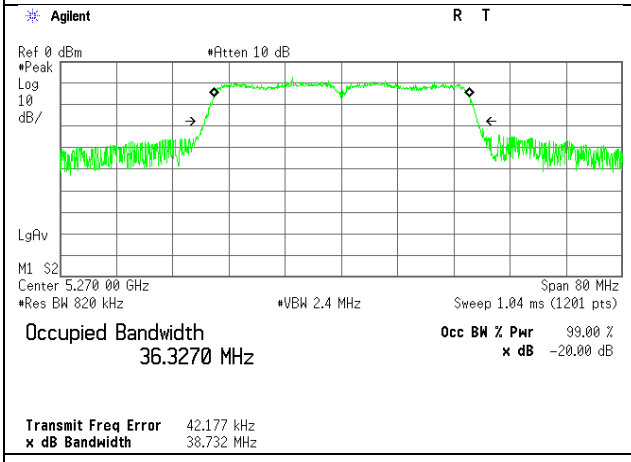
5190MHz



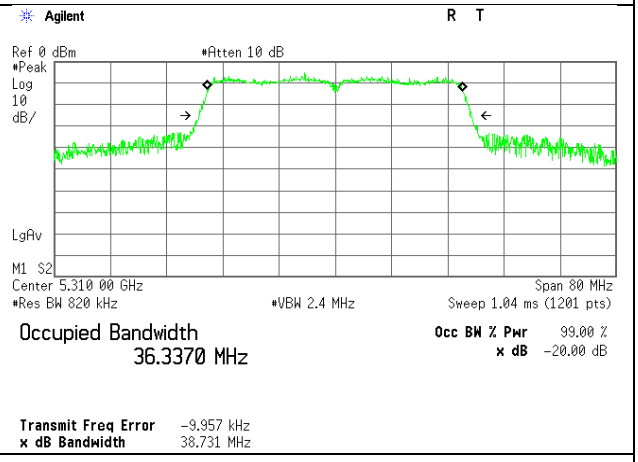
5230MHz



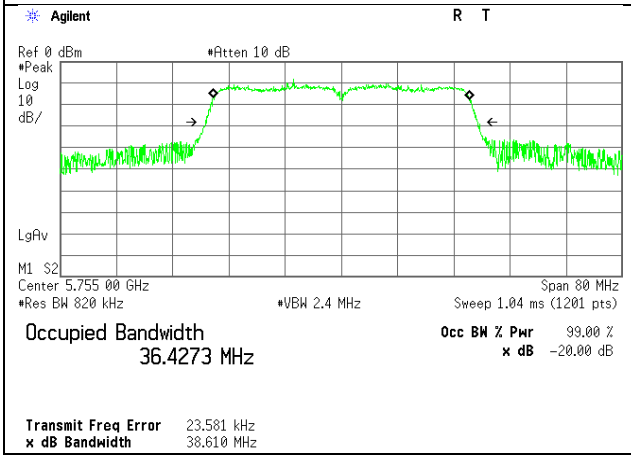
5270MHz



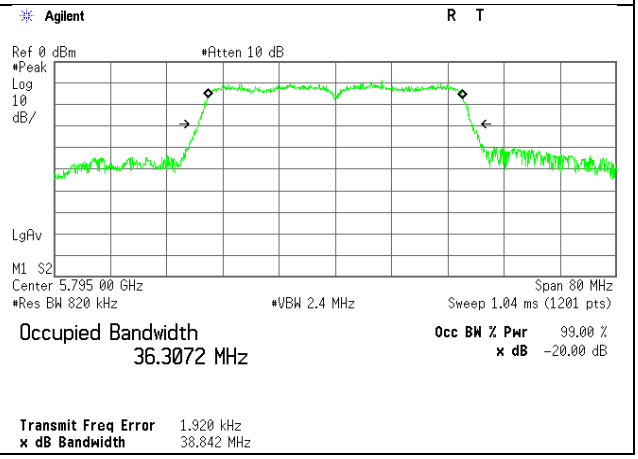
5310MHz



5755MHz



5795MHz



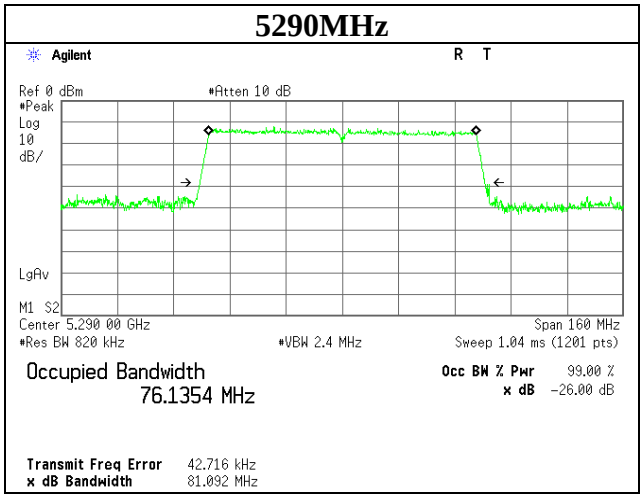
26dB Emission Bandwidth and 99% Occupied Bandwidth

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/09/2015
Temperature/ Humidity	23deg. C / 43% RH
Engineer	Tomoki Matsui
Mode	Tx 11ac-80

Tx 11ac-80 Antenna port 1

Frequency [MHz]	26dB Emission Bandwidth [MHz]	99% Occupied Bandwidth [MHz]	Limit [MHz]
5210	-	76.2974	-
5290	81.092	76.3199	-
5775	-	76.3495	-

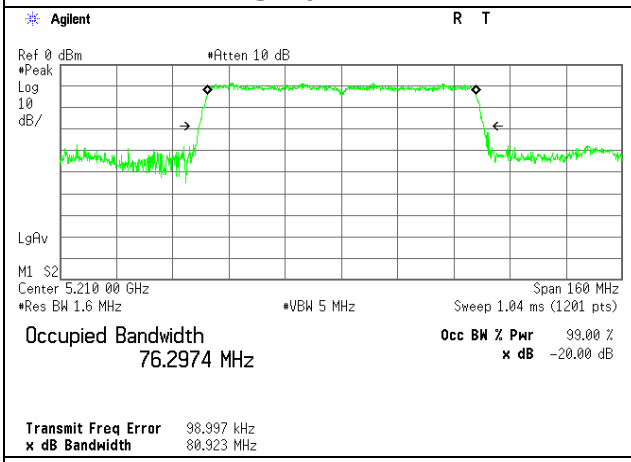
26dB Emission Bandwidth



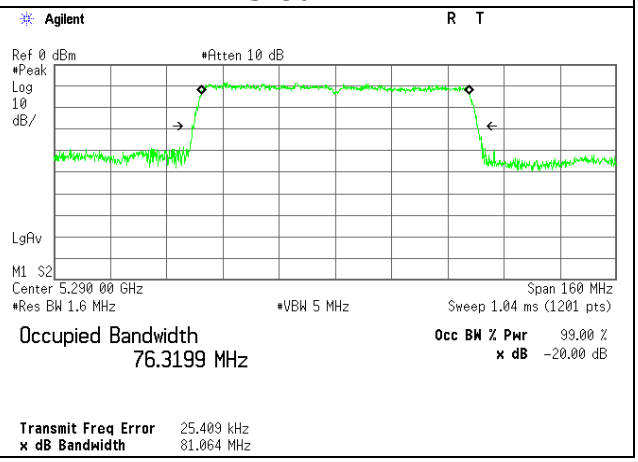
99% Occupied Bandwidth

11ac-80 Antenna port 1

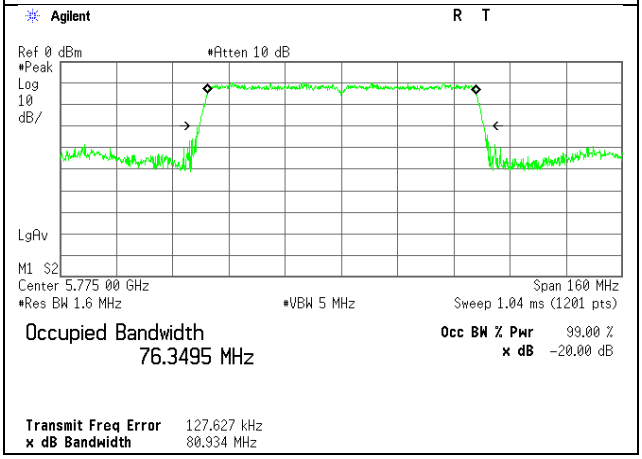
5210MHz



5290MHz



5775MHz



6dB Bandwidth

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/09/2015
Temperature/ Humidity	23deg. C / 43% RH
Engineer	Tomoki Matsui
Mode	Tx 11a /11n-20 /11ac-20 /11n-40 /11ac-40 /11ac-80

11a Antenna port 1

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5745	16.380	>500
5785	16.375	>500
5825	16.347	>500

11n-20 Antenna port 1

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5745	17.518	>500
5785	17.306	>500
5825	17.361	>500

11ac-20 Antenna port 1

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5745	17.541	>500
5785	17.102	>500
5825	17.236	>500

11n-40 Antenna port 1

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5755	35.743	>500
5795	35.460	>500

11ac-40 Antenna port 1

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5755	35.484	>500
5795	35.308	>500

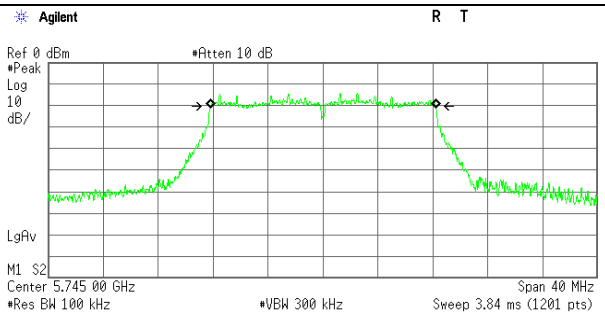
11ac-80 Antenna port 1

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5775	76.562	>500

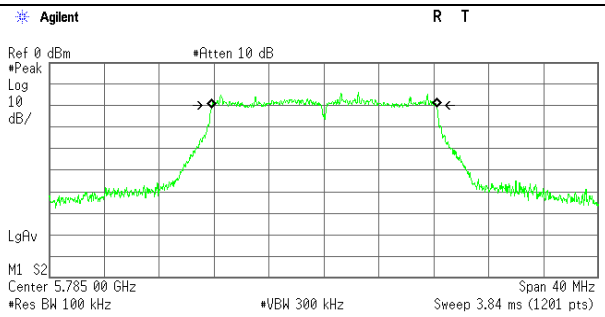
6dB Bandwidth

11a Antenna port 1

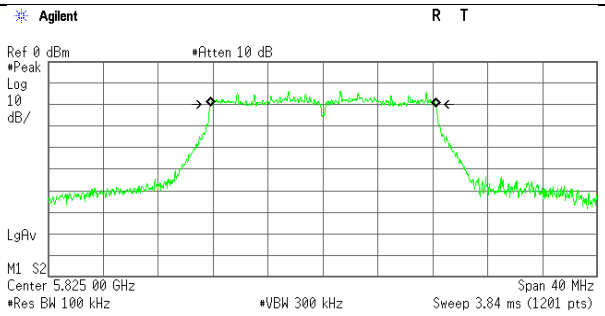
5745MHz



5785MHz



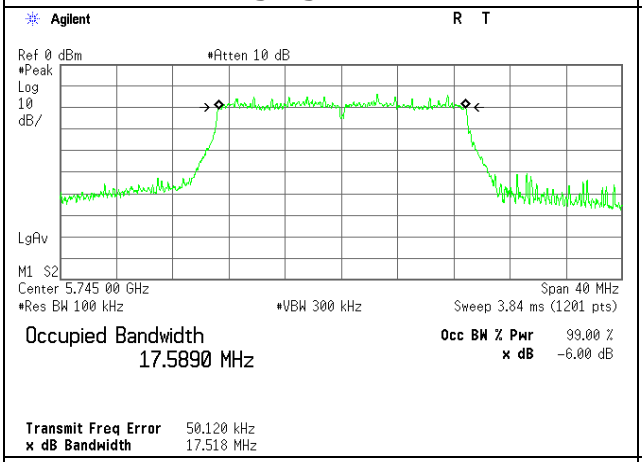
5825MHz



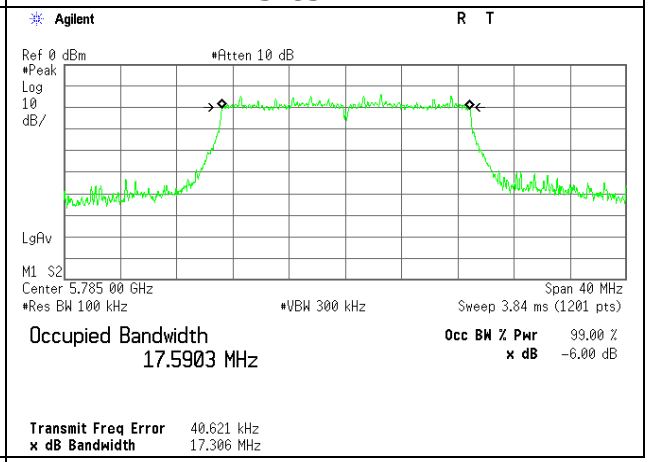
6dB Bandwidth

11n-20 Antenna port 1

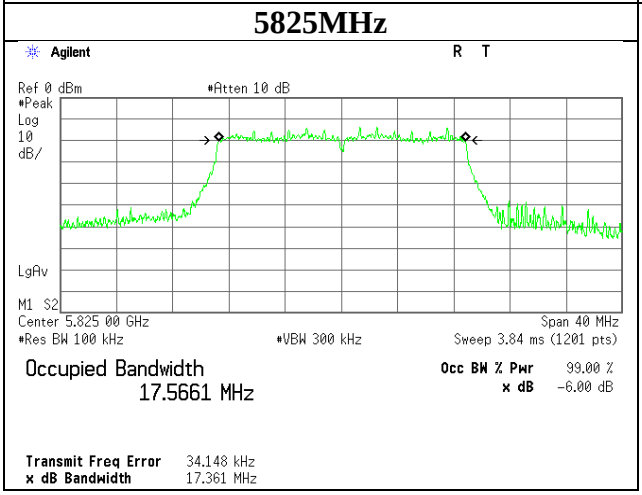
5745MHz



5785MHz



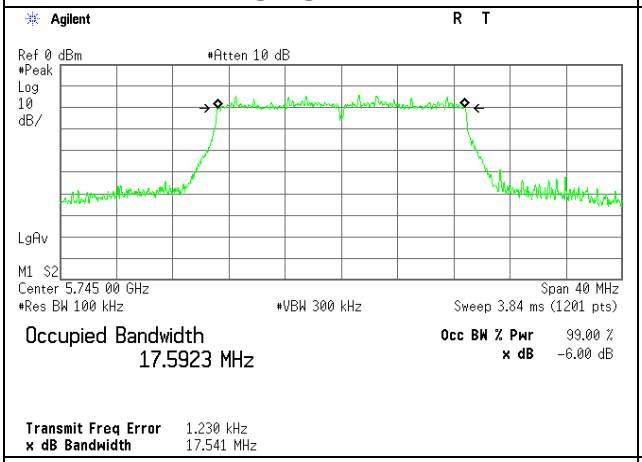
5825MHz



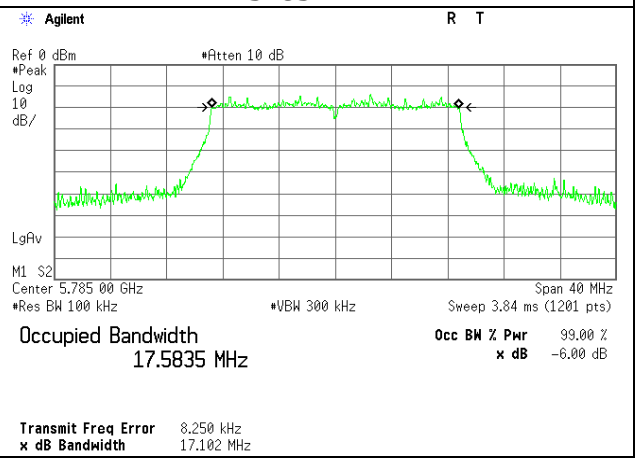
6dB Bandwidth

11ac-20 Antenna port 1

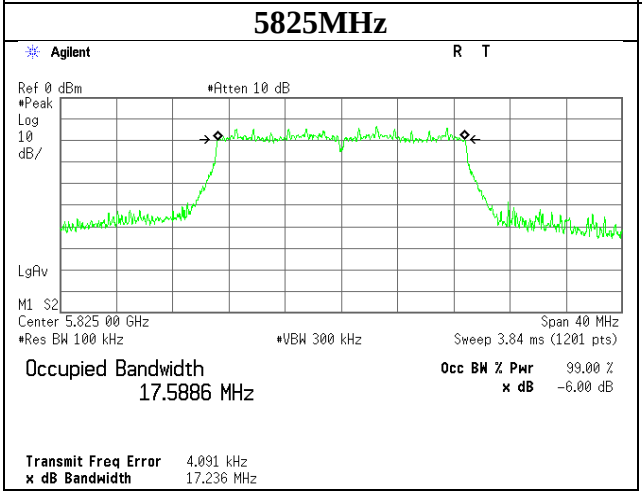
5745MHz



5785MHz



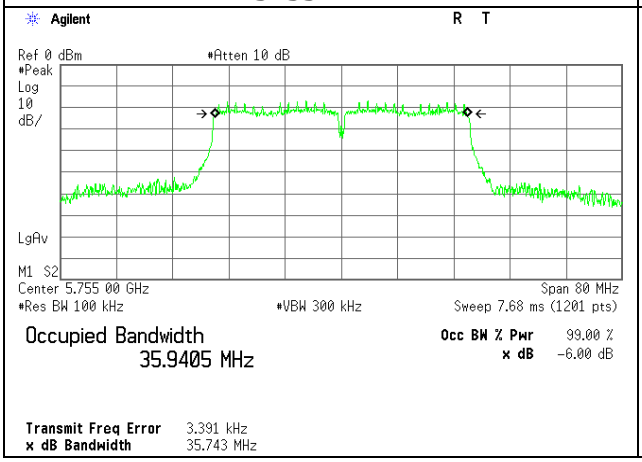
5825MHz



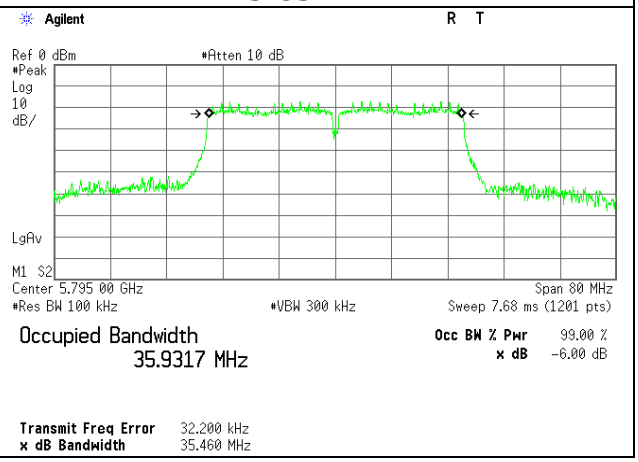
6dB Bandwidth

11n-40 Antenna port 1

5755MHz



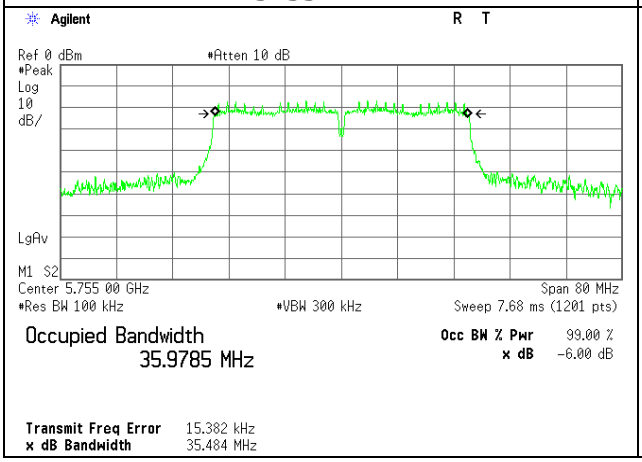
5795MHz



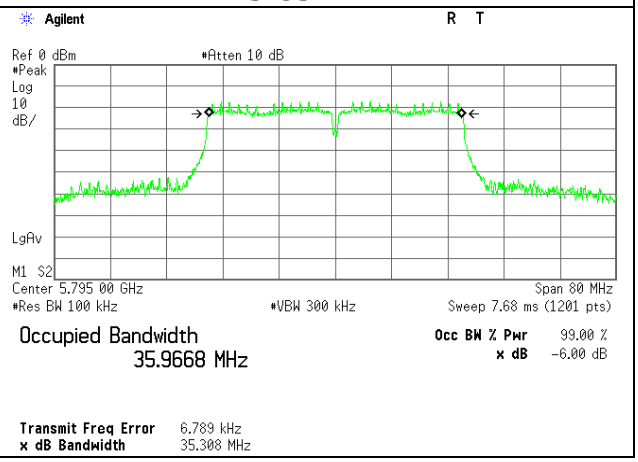
6dB Bandwidth

11ac-40 Antenna port 1

5755MHz

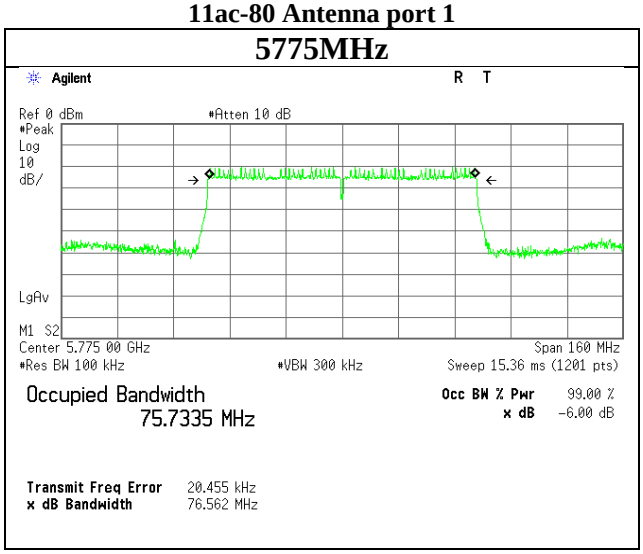


5795MHz



6dB Emission Bandwidth

11ac-80 Antenna port 1



Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/25/2015
Temperature/ Humidity	28deg. C / 26% RH
Engineer	Yutaka Yoshida
Mode	Tx 11a

Antenna port 1+2 Method PM-G(Measurement using a Gated RF average power meter) Applied limit: 15.407, mobile and portable client device

Tested Frequency	26 dB EBW (B for FCC)	99% OBW (B for IC)	Conducted power						e.i.r.p.					
			Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
			1	2	Sum				1	2	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5180	-	16.858	8.17	8.73	16.90	12.28	23.97	11.69	26.49	28.33	54.82	17.39	29.97	12.58
5220	-	16.865	8.56	10.10	18.66	12.71	23.97	11.26	27.75	32.77	60.52	17.82	29.97	12.15
5240	-	16.854	8.29	9.28	17.57	12.45	23.97	11.52	26.87	30.10	56.98	17.56	29.97	12.41
5260	19.221	16.883	6.30	7.43	13.73	11.38	23.83	12.45	20.44	24.09	44.52	16.49	29.97	13.48
5300	19.584	16.925	6.83	8.26	15.09	11.79	23.91	12.12	22.16	26.80	48.95	16.90	29.97	13.07
5320	19.556	16.878	7.11	8.54	15.64	11.94	23.91	11.97	23.05	27.68	50.73	17.05	29.97	12.92
5745	-	-	7.87	7.81	15.68	11.95	30.00	18.05	25.54	25.32	50.86	17.06	36.00	18.94
5785	-	-	9.34	10.41	19.75	12.96	30.00	17.04	30.29	33.77	64.05	18.07	36.00	17.93
5825	-	-	9.06	10.08	19.14	12.82	30.00	17.18	29.39	32.70	62.09	17.93	36.00	18.07

		Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5180	0.00	-1.97	1.25	9.84	5.11	9.12	14.23	-1.76	1.25	9.92	5.11	9.41	14.52
5220	0.00	-1.77	1.25	9.84	5.11	9.32	14.43	-1.13	1.25	9.92	5.11	10.04	15.15
5240	0.00	-1.92	1.26	9.84	5.11	9.18	14.29	-1.51	1.26	9.93	5.11	9.68	14.79
5260	0.00	-3.11	1.26	9.84	5.11	7.99	13.10	-2.48	1.26	9.93	5.11	8.71	13.82
5300	0.00	-2.77	1.27	9.85	5.11	8.35	13.46	-2.03	1.27	9.93	5.11	9.17	14.28
5320	0.00	-2.60	1.27	9.85	5.11	8.52	13.63	-1.89	1.27	9.93	5.11	9.31	14.42
5745	0.00	-2.25	1.36	9.85	5.11	8.96	14.07	-2.38	1.36	9.95	5.11	8.93	14.04
5785	0.00	-1.52	1.37	9.85	5.11	9.70	14.81	-1.14	1.37	9.95	5.11	10.18	15.29
5825	0.00	-1.66	1.38	9.85	5.11	9.57	14.68	-1.29	1.38	9.95	5.11	10.04	15.15

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

Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/25/2015
Temperature/ Humidity	28deg. C / 26% RH
Engineer	Yutaka Yoshida
Mode	Tx 11n-20

Antenna port 1+2 Method PM-G(Measurement using a Gated RF average power meter) Applied limit: 15.407, mobile and portable client device

Tested Frequency	26 dB EBW (B for FCC)	99% OBW (B for IC)	Conducted power						e.i.r.p.					
			Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
			1	2	Sum				1	2	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5180	-	17.801	8.75	9.12	17.88	12.52	23.97	11.45	28.39	29.59	57.98	17.63	29.97	12.34
5220	-	17.796	8.40	9.13	17.53	12.44	23.97	11.53	27.24	29.61	56.86	17.55	29.97	12.42
5240	-	17.784	8.40	9.35	17.75	12.49	23.97	11.48	27.25	30.31	57.56	17.60	29.97	12.37
5260	19.747	17.782	6.63	7.78	14.40	11.58	23.95	12.37	21.50	25.22	46.72	16.69	29.97	13.28
5300	19.709	17.809	6.75	8.30	15.05	11.78	23.94	12.16	21.90	26.92	48.82	16.89	29.97	13.08
5320	19.725	17.774	6.90	8.48	15.37	11.87	23.95	12.08	22.37	27.49	49.86	16.98	29.97	12.99
5745	-	-	7.32	8.38	15.70	11.96	30.00	18.04	23.73	27.20	50.92	17.07	36.00	18.93
5785	-	-	9.38	9.83	19.21	12.84	30.00	17.16	30.43	31.88	62.31	17.95	36.00	18.05
5825	-	-	9.04	9.94	18.98	12.78	30.00	17.22	29.33	32.25	61.57	17.89	36.00	18.11

		Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5180	0.00	-1.67	1.25	9.84	5.11	9.42	14.53	-1.57	1.25	9.92	5.11	9.60	14.71
5220	0.00	-1.85	1.25	9.84	5.11	9.24	14.35	-1.57	1.25	9.92	5.11	9.60	14.71
5240	0.00	-1.86	1.26	9.84	5.11	9.24	14.35	-1.48	1.26	9.93	5.11	9.71	14.82
5260	0.00	-2.89	1.26	9.84	5.11	8.21	13.32	-2.28	1.26	9.93	5.11	8.91	14.02
5300	0.00	-2.82	1.27	9.85	5.11	8.30	13.41	-2.01	1.27	9.93	5.11	9.19	14.30
5320	0.00	-2.73	1.27	9.85	5.11	8.39	13.50	-1.92	1.27	9.93	5.11	9.28	14.39
5745	0.00	-2.57	1.36	9.85	5.11	8.64	13.75	-2.07	1.36	9.95	5.11	9.24	14.35
5785	0.00	-1.50	1.37	9.85	5.11	9.72	14.83	-1.39	1.37	9.95	5.11	9.93	15.04
5825	0.00	-1.67	1.38	9.85	5.11	9.56	14.67	-1.35	1.38	9.95	5.11	9.98	15.09

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

Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/26/2015
Temperature/ Humidity	24deg. C / 41% RH
Engineer	Yutaka Yoshida
Mode	Tx 11ac-20

Antenna port 1+2 Method PM-G(Measurement using a Gated RF average power meter) Applied limit: 15.407, mobile and portable client device

Tested Frequency	26 dB EBW (B for FCC)	99% OBW (B for IC)	Conducted power						e.i.r.p.					
			Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
			1	2	Sum				1	2	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5180	-	17.778	8.34	9.82	18.16	12.59	23.97	11.38	27.05	31.85	58.90	17.70	29.97	12.27
5220	-	17.769	8.23	8.88	17.11	12.33	23.97	11.64	26.69	28.81	55.49	17.44	29.97	12.53
5240	-	17.784	8.06	9.15	17.21	12.36	23.97	11.61	26.14	29.69	55.83	17.47	29.97	12.50
5260	19.679	17.821	5.95	7.44	13.39	11.27	23.94	12.67	19.29	24.14	43.43	16.38	29.97	13.59
5300	19.831	17.801	6.23	7.82	14.05	11.48	23.97	12.49	20.21	25.35	45.56	16.59	29.97	13.38
5320	19.764	17.782	6.88	8.26	15.14	11.80	23.95	12.15	22.32	26.80	49.12	16.91	29.97	13.06
5745	-	-	7.54	7.54	15.08	11.78	30.00	18.22	24.45	24.46	48.91	16.89	36.00	19.11
5785	-	-	8.78	9.39	18.16	12.59	30.00	17.41	28.46	30.44	58.91	17.70	36.00	18.30
5825	-	-	9.25	9.43	18.68	12.71	30.00	17.29	30.01	30.58	60.59	17.82	36.00	18.18

		Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5180	0.00	-1.88	1.25	9.84	5.11	9.21	14.32	-1.25	1.25	9.92	5.11	9.92	15.03
5220	0.00	-1.94	1.25	9.84	5.11	9.15	14.26	-1.69	1.25	9.92	5.11	9.48	14.59
5240	0.00	-2.04	1.26	9.84	5.11	9.06	14.17	-1.57	1.26	9.93	5.11	9.62	14.73
5260	0.00	-3.36	1.26	9.84	5.11	7.74	12.85	-2.47	1.26	9.93	5.11	8.72	13.83
5300	0.00	-3.17	1.27	9.85	5.11	7.95	13.06	-2.27	1.27	9.93	5.11	8.93	14.04
5320	0.00	-2.74	1.27	9.85	5.11	8.38	13.49	-2.03	1.27	9.93	5.11	9.17	14.28
5745	0.00	-2.44	1.36	9.85	5.11	8.77	13.88	-2.53	1.36	9.95	5.11	8.78	13.89
5785	0.00	-1.79	1.37	9.85	5.11	9.43	14.54	-1.59	1.37	9.95	5.11	9.73	14.84
5825	0.00	-1.57	1.38	9.85	5.11	9.66	14.77	-1.58	1.38	9.95	5.11	9.75	14.86

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

Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/26/2015
Temperature/ Humidity	24deg. C / 41% RH
Engineer	Yutaka Yoshida
Mode	Tx 11n-40

Antenna port 1+2 Method PM-G(Measurement using a Gated RF average power meter) Applied limit: 15.407, mobile and portable client device

Tested Frequency	26 dB EBW (B for FCC)	99% OBW (B for IC)	Conducted power						e.i.r.p.					
			Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
			1	2	Sum				1	2	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5190	-	36.222	7.84	9.27	17.11	12.33	23.97	11.64	25.42	30.08	55.50	17.44	29.97	12.53
5230	-	36.224	7.88	8.92	16.80	12.25	23.97	11.72	25.54	28.94	54.49	17.36	29.97	12.61
5270	39.614	36.311	6.19	7.00	13.18	11.20	23.97	12.77	20.06	22.69	42.76	16.31	29.97	13.66
5310	39.663	36.350	6.38	7.85	14.23	11.53	23.97	12.44	20.68	25.48	46.16	16.64	29.97	13.33
5755	-	-	7.68	7.66	15.34	11.86	30.00	18.14	24.90	24.86	49.76	16.97	36.00	19.03
5795	-	-	8.78	9.78	18.56	12.69	30.00	17.31	28.46	31.73	60.19	17.80	36.00	18.20

		Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5190	0.00	-2.15	1.25	9.84	5.11	8.94	14.05	-1.50	1.25	9.92	5.11	9.67	14.78
5230	0.00	-2.14	1.26	9.84	5.11	8.96	14.07	-1.68	1.26	9.93	5.11	9.51	14.62
5270	0.00	-3.19	1.26	9.84	5.11	7.91	13.02	-2.74	1.26	9.93	5.11	8.45	13.56
5310	0.00	-3.07	1.27	9.85	5.11	8.05	13.16	-2.25	1.27	9.93	5.11	8.95	14.06
5755	0.00	-2.36	1.36	9.85	5.11	8.85	13.96	-2.46	1.36	9.95	5.11	8.85	13.96
5795	0.00	-1.79	1.37	9.85	5.11	9.43	14.54	-1.41	1.37	9.95	5.11	9.91	15.02

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

Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	10812026H
Date	11/26/2015
Temperature/ Humidity	24deg. C / 41% RH
Engineer	Yutaka Yoshida
Mode	Tx 11ac-40

Antenna port 1+2 Method PM-G(Measurement using a Gated RF average power meter) Applied limit: 15.407, mobile and portable client device

Tested Frequency	26 dB EBW (B for FCC)	99% OBW (B for IC)	Conducted power						e.i.r.p.					
			Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
			1	2	Sum				1	2	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5190	-	36.264	7.89	8.42	16.31	12.12	23.97	11.85	25.60	27.31	52.90	17.23	29.97	12.74
5230	-	36.365	7.88	8.96	16.84	12.26	23.97	11.71	25.54	29.08	54.62	17.37	29.97	12.60
5270	39.609	36.327	6.02	7.18	13.19	11.20	23.97	12.77	19.52	23.27	42.79	16.31	29.97	13.66
5310	39.824	36.337	6.17	7.69	13.87	11.42	23.97	12.55	20.03	24.95	44.98	16.53	29.97	13.44
5755	-	-	6.97	7.51	14.48	11.61	30.00	18.39	22.61	24.35	46.96	16.72	36.00	19.28
5795	-	-	8.36	9.97	18.33	12.63	30.00	17.37	27.12	32.32	59.44	17.74	36.00	18.26

		Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5190	0.00	-2.12	1.25	9.84	5.11	8.97	14.08	-1.92	1.25	9.92	5.11	9.25	14.36
5230	0.00	-2.14	1.26	9.84	5.11	8.96	14.07	-1.66	1.26	9.93	5.11	9.53	14.64
5270	0.00	-3.31	1.26	9.84	5.11	7.79	12.90	-2.63	1.26	9.93	5.11	8.56	13.67
5310	0.00	-3.21	1.27	9.85	5.11	7.91	13.02	-2.34	1.27	9.93	5.11	8.86	13.97
5755	0.00	-2.78	1.36	9.85	5.11	8.43	13.54	-2.55	1.36	9.95	5.11	8.76	13.87
5795	0.00	-2.00	1.37	9.85	5.11	9.22	14.33	-1.33	1.37	9.95	5.11	9.99	15.10

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

Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/26/2015
Temperature/ Humidity	24deg. C / 41% RH
Engineer	Yutaka Yoshida
Mode	Tx 11ac-80

Antenna port 1+2 Method PM-G(Measurement using a Gated RF average power meter) Applied limit: 15.407, mobile and portable client device

Tested Frequency	26 dB EBW (B for FCC)	99% OBW (B for IC)	Conducted power						e.i.r.p.					
			Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
			1	2	Sum				1	2	Sum			
[MHz]	[MHz]	[MHz]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]	[mW]	[mW]	[mW]	[dBm]	[dBm]	[dB]
5210	-	76.297	5.56	5.76	11.32	10.54	23.97	13.43	18.04	18.68	36.72	15.65	29.97	14.32
5290	81.092	76.320	5.22	6.05	11.27	10.52	23.97	13.45	16.92	19.63	36.56	15.63	29.97	14.34
5755	-	-	5.40	5.16	10.56	10.24	30.00	19.76	17.51	16.73	34.24	15.35	36.00	20.65

		Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result		Power Meter Reading	Cable Loss	Atten. Loss	Antenna Gain	Result	
						Cond. Power	e.i.r.p.					Cond. Power	e.i.r.p.
[MHz]	[dB]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[dBm]
5210	0.00	-3.64	1.25	9.84	5.11	7.45	12.56	-3.57	1.25	9.92	5.11	7.60	12.71
5290	0.00	-3.94	1.27	9.85	5.11	7.18	12.29	-3.38	1.27	9.93	5.11	7.82	12.93
5755	0.00	-3.90	1.37	9.85	5.11	7.32	12.43	-4.19	1.37	9.95	5.11	7.13	12.24

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

Maximum Conducted Output Power(Worst Rate Check)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/05/2015 Night
Temperature/ Humidity	23deg. C / 58% RH
Engineer	Shinichi Miyazono
Mode	11a Tx

5180MHz

Rate [Mbps]	Reading Antenna port 1		Reading Antenna port 2		Result Antenna port 1+2		Remark
	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
6	-1.08	0.78	-	-	-	-	
9	-1.02	0.79	-1.83	0.66	-	-	*Single transmission
12	-1.04	0.79	-	-	-	-	
18	-1.14	0.77	-	-	-	-	
24	-1.08	0.78	-	-	-	-	
36	-1.09	0.78	-	-	-	-	
48	-1.19	0.76	-	-	-	-	
54	-1.17	0.76	-	-	-	-	
6	-0.98	0.80	-1.63	0.69	1.72	1.49	*Simultaneous transmission
9	-1.14	0.77	-1.64	0.69	1.63	1.45	
12	-1.06	0.78	-1.66	0.68	1.66	1.47	
18	-1.26	0.75	-1.69	0.68	1.54	1.43	
24	-1.07	0.78	-1.78	0.66	1.60	1.45	
36	-1.11	0.77	-1.74	0.67	1.60	1.44	
48	-1.25	0.75	-1.71	0.67	1.54	1.42	
54	-1.12	0.77	-1.68	0.68	1.62	1.45	

* Worst Rate

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

Maximum Conducted Output Power(Worst Rate Check)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/05/2015 Night
Temperature/ Humidity	23deg. C / 58% RH
Engineer	Shinichi Miyazono
Mode	11n-20 Tx

5180MHz

MCS Index	Reading Antenna port 1		Reading Antenna port 2		Result Antenna port 1+2		Remark
	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
0	-0.97	0.80	-1.89	0.65	-	-	*Single transmission
1	-1.14	0.77	-	-	-	-	
2	-1.26	0.75	-	-	-	-	
3	-1.21	0.76	-	-	-	-	
4	-1.22	0.76	-	-	-	-	
5	-1.12	0.77	-	-	-	-	
6	-1.23	0.75	-	-	-	-	
7	-1.14	0.77	-	-	-	-	
0	-1.09	0.78	-1.61	0.69	1.67	1.47	
1	-1.06	0.78	-1.53	0.70	1.72	1.49	*Simultaneous transmission
2	-1.08	0.78	-1.73	0.67	1.62	1.45	
3	-1.10	0.78	-1.71	0.67	1.62	1.45	
4	-1.02	0.79	-1.68	0.68	1.67	1.47	
5	-1.02	0.79	-1.61	0.69	1.71	1.48	
6	-1.09	0.78	-1.61	0.69	1.67	1.47	
7	-1.10	0.78	-1.68	0.68	1.63	1.46	
8	-1.06	0.78	-1.70	0.68	1.64	1.46	
9	-1.09	0.78	-1.54	0.70	1.70	1.48	*MIMO
10	-1.06	0.78	-1.73	0.67	1.63	1.45	
11	-1.17	0.76	-1.57	0.70	1.64	1.46	
12	-1.26	0.75	-1.83	0.66	1.47	1.40	
13	-1.22	0.76	-1.77	0.67	1.52	1.42	
14	-1.02	0.79	-1.73	0.67	1.65	1.46	
15	-1.05	0.79	-1.74	0.67	1.63	1.46	

* Worst MCS

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

Maximum Conducted Output Power(Worst Rate Check)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/05/2015 Night
Temperature/ Humidity	23deg. C / 58% RH
Engineer	Shinichi Miyazono
Mode	11ac-20 Tx

5180MHz

MCS Index	Reading Antenna port 1		Reading Antenna port 2		Result Antenna port 1+2		Remark
	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
0	-1.11	0.77	-1.93	0.64	-	-	*Single transmission
1	-1.28	0.74	-	-	-	-	
2	-1.20	0.76	-	-	-	-	
3	-1.12	0.77	-	-	-	-	
4	-1.14	0.77	-	-	-	-	
5	-1.22	0.76	-	-	-	-	
6	-1.21	0.76	-	-	-	-	
7	-1.17	0.76	-	-	-	-	
8	-1.26	0.75	-	-	-	-	
0	-0.99	0.80	-1.64	0.69	1.71	1.48	
1	-0.92	0.81	-1.58	0.70	1.77	1.50	*Simultaneous transmission
2	-1.00	0.79	-1.64	0.69	1.70	1.48	
3	-1.01	0.79	-1.60	0.69	1.72	1.48	
4	-1.03	0.79	-1.68	0.68	1.67	1.47	
5	-1.05	0.79	-1.72	0.67	1.64	1.46	
6	-1.01	0.79	-1.65	0.68	1.69	1.48	
7	-1.00	0.79	-1.64	0.69	1.70	1.48	
8	-1.02	0.79	-1.61	0.69	1.71	1.48	
0	-0.99	0.80	-1.68	0.68	1.69	1.48	
1	-0.95	0.80	-1.60	0.69	1.75	1.50	*MIMO
2	-1.01	0.79	-1.68	0.68	1.68	1.47	
3	-1.00	0.79	-1.57	0.70	1.73	1.49	
4	-1.00	0.79	-1.75	0.67	1.65	1.46	
5	-1.06	0.78	-1.78	0.66	1.61	1.45	
6	-1.01	0.79	-1.78	0.66	1.63	1.46	
7	-1.03	0.79	-1.68	0.68	1.67	1.47	
8	-1.05	0.79	-1.67	0.68	1.66	1.47	

* Worst MCS

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

Maximum Conducted Output Power(Worst Rate Check)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/06/2015
Temperature/ Humidity	22deg. C / 55% RH
Engineer	Kazuya Yoshioka
Mode	11n-40 Tx

5190MHz

MCS Index	Reading Antenna port 1		Reading Antenna port 2		Result Antenna port 1+2		Remark
	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
0	-0.92	0.81	-1.62	0.69	-	-	*Single transmission
1	-1.36	0.73	-	-	-	-	
2	-1.16	0.77	-	-	-	-	
3	-1.09	0.78	-	-	-	-	
4	-1.08	0.78	-	-	-	-	
5	-1.07	0.78	-	-	-	-	
6	-1.41	0.72	-	-	-	-	
7	-1.32	0.74	-	-	-	-	
0	-0.87	0.82	-1.42	0.72	1.87	1.54	
1	-0.84	0.82	-1.44	0.72	1.88	1.54	*Simultaneous transmission
2	-1.08	0.78	-1.67	0.68	1.65	1.46	
3	-0.76	0.84	-1.61	0.69	1.85	1.53	
4	-1.09	0.78	-1.71	0.67	1.62	1.45	
5	-1.01	0.79	-1.59	0.69	1.72	1.49	
6	-1.12	0.77	-1.58	0.70	1.67	1.47	
7	-0.89	0.81	-1.49	0.71	1.83	1.52	
8	-0.85	0.82	-1.51	0.71	1.84	1.53	*MIMO
9	-0.62	0.87	-1.81	0.66	1.84	1.53	
10	-0.91	0.81	-1.75	0.67	1.70	1.48	
11	-0.68	0.86	-1.75	0.67	1.83	1.52	
12	-0.92	0.81	-1.63	0.69	1.75	1.50	
13	-1.04	0.79	-1.87	0.65	1.58	1.44	
14	-1.12	0.77	-1.53	0.70	1.69	1.48	
15	-0.96	0.80	-1.44	0.72	1.82	1.52	

* Worst MCS

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

Maximum Conducted Output Power(Worst Rate Check)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/06/2015
Temperature/ Humidity	22deg. C / 55% RH
Engineer	Kazuya Yoshioka
Mode	11ac-40 Tx

5190MHz

MCS Index	Reading Antenna port 1		Reading Antenna port 2		Result Antenna port 1+2		Remark
	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
0	-1.45	0.72	-	-	-	-	
1	-1.32	0.74	-	-	-	-	
2	-1.40	0.72	-	-	-	-	
3	-1.30	0.74	-	-	-	-	
4	-1.27	0.75	-	-	-	-	
5	-1.18	0.76	-1.59	0.69	-	-	*Single transmission
6	-1.42	0.72	-	-	-	-	
7	-1.27	0.75	-	-	-	-	
8	-1.47	0.71	-	-	-	-	
9	-1.35	0.73	-	-	-	-	
0	-0.88	0.82	-1.66	0.68	1.76	1.50	
1	-0.76	0.84	-1.23	0.75	2.02	1.59	*Simultaneous transmission
2	-0.83	0.83	-1.56	0.70	1.83	1.52	
3	-0.69	0.85	-1.54	0.70	1.92	1.55	
4	-0.75	0.84	-1.80	0.66	1.77	1.50	
5	-0.60	0.87	-1.78	0.66	1.86	1.53	
6	-0.77	0.84	-1.76	0.67	1.77	1.50	
7	-0.93	0.81	-1.51	0.71	1.80	1.51	
8	-0.71	0.85	-1.49	0.71	1.93	1.56	
9	-1.03	0.79	-1.54	0.70	1.73	1.49	
0	-1.08	0.78	-1.49	0.71	1.73	1.49	
1	-1.18	0.76	-1.77	0.67	1.55	1.43	
2	-0.77	0.84	-1.79	0.66	1.76	1.50	
3	-0.80	0.83	-1.59	0.69	1.83	1.53	*MIMO
4	-0.91	0.81	-1.52	0.70	1.81	1.52	
5	-1.12	0.77	-1.56	0.70	1.68	1.47	
6	-0.97	0.80	-1.67	0.68	1.70	1.48	
7	-0.88	0.82	-1.61	0.69	1.78	1.51	
8	-0.85	0.82	-1.69	0.68	1.76	1.50	
9	-1.25	0.75	-1.55	0.70	1.61	1.45	

* Worst MCS

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

Maximum Conducted Output Power(Worst Rate Check)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/06/2015
Temperature/ Humidity	22deg. C / 55% RH
Engineer	Kazuya Yoshioka
Mode	11ac-80 Tx

5210MHz

MCS Index	Reading Antenna port 1		Reading Antenna port 2		Result Antenna port 1+2		Remark
	[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
0	-1.13	0.77	-	-	-	-	
1	-1.08	0.78	-	-	-	-	
2	-0.85	0.82	-	-	-	-	
3	-0.77	0.84	-1.48	0.71	-	-	*Single transmission
4	-1.06	0.78	-	-	-	-	
5	-1.06	0.78	-	-	-	-	
6	-1.20	0.76	-	-	-	-	
7	-1.00	0.79	-	-	-	-	
8	-0.97	0.80	-	-	-	-	
9	-0.85	0.82	-	-	-	-	
0	-0.64	0.86	-1.29	0.74	2.06	1.61	
1	-0.57	0.88	-1.28	0.74	2.10	1.62	*Simultaneous transmission
2	-0.70	0.85	-1.49	0.71	1.93	1.56	
3	-0.73	0.85	-1.42	0.72	1.95	1.57	
4	-0.88	0.82	-1.53	0.70	1.82	1.52	
5	-0.92	0.81	-1.48	0.71	1.82	1.52	
6	-0.79	0.83	-1.44	0.72	1.91	1.55	
7	-1.13	0.77	-1.38	0.73	1.76	1.50	
8	-0.99	0.80	-1.11	0.77	1.96	1.57	
9	-0.65	0.86	-1.50	0.71	1.96	1.57	
0	-0.69	0.85	-1.22	0.76	2.06	1.61	*MIMO
1	-0.73	0.85	-1.30	0.74	2.00	1.59	
2	-0.85	0.82	-1.49	0.71	1.85	1.53	
3	-0.76	0.84	-1.39	0.73	1.95	1.57	
4	-0.85	0.82	-1.38	0.73	1.90	1.55	
5	-0.88	0.82	-1.29	0.74	1.93	1.56	
6	-1.04	0.79	-1.49	0.71	1.75	1.50	
7	-0.94	0.81	-1.46	0.71	1.82	1.52	
8	-0.86	0.82	-1.53	0.70	1.83	1.52	
9	-0.98	0.80	-1.46	0.71	1.80	1.51	

* Worst MCS

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

Maximum Average Output Power (Reference data for SAR testing)

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 11022049H
Date 11/25/2015
Temperature/ Humidity 28deg. C / 26% RH
Engineer Yutaka Yoshida
Mode 11a Tx 6Mbps

[AV]

Antenna port 1+2 Gating OFF

Freq.	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p.)	
	(Cond.)	(e.r.i.p)	(Cond.)	(e.r.i.p)				
[MHz]	[mW]	[mW]	[mW]	[mW]	[dBm]	[mW]	[dBm]	[mW]
5180.0	7.69	24.95	8.26	26.80	12.03	15.96	17.14	51.76
5200.0	6.86	22.24	8.59	27.87	11.89	15.45	17.00	50.11
5220.0	8.04	26.08	8.29	26.88	12.13	16.33	17.24	52.96
5240.0	7.80	25.31	8.52	27.65	12.13	16.33	17.24	52.96
5260.0	5.93	19.25	7.01	22.74	11.12	12.95	16.23	41.99
5280.0	6.32	20.48	6.93	22.48	11.22	13.25	16.33	42.96
5300.0	5.86	18.99	6.94	22.49	11.07	12.79	16.18	41.48
5320.0	6.29	20.40	7.00	22.71	11.24	13.29	16.35	43.11
5745.0	6.89	22.35	7.02	22.78	11.43	13.91	16.54	45.13
5765.0	8.36	27.12	8.68	28.15	12.31	17.04	17.42	55.27
5785.0	8.36	27.12	8.72	28.28	12.33	17.08	17.44	55.40
5805.0	7.64	24.79	8.78	28.48	12.15	16.42	17.26	53.27
5825.0	8.36	27.12	8.64	28.02	12.30	17.00	17.41	55.14

Antenna port 1

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5180.0	-2.23	1.25	9.84	5.11	8.86	7.69	13.97	24.95
5200.0	-2.73	1.25	9.84	5.11	8.36	6.86	13.47	22.24
5220.0	-2.04	1.25	9.84	5.11	9.05	8.04	14.16	26.08
5240.0	-2.18	1.26	9.84	5.11	8.92	7.80	14.03	25.31
5260.0	-3.37	1.26	9.84	5.11	7.73	5.93	12.84	19.25
5280.0	-3.11	1.27	9.84	5.11	8.00	6.32	13.11	20.48
5300.0	-3.44	1.27	9.85	5.11	7.68	5.86	12.79	18.99
5320.0	-3.13	1.27	9.85	5.11	7.99	6.29	13.10	20.40
5745.0	-2.83	1.36	9.85	5.11	8.38	6.89	13.49	22.35
5765.0	-1.99	1.36	9.85	5.11	9.22	8.36	14.33	27.12
5785.0	-2.00	1.37	9.85	5.11	9.22	8.36	14.33	27.12
5805.0	-2.39	1.37	9.85	5.11	8.83	7.64	13.94	24.79
5825.0	-2.01	1.38	9.85	5.11	9.22	8.36	14.33	27.12

Antenna port 2

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5180.0	-2.00	1.25	9.92	5.11	9.17	8.26	14.28	26.80
5200.0	-1.83	1.25	9.92	5.11	9.34	8.59	14.45	27.87
5220.0	-1.99	1.25	9.92	5.11	9.18	8.29	14.29	26.88
5240.0	-1.88	1.26	9.93	5.11	9.31	8.52	14.42	27.65
5260.0	-2.73	1.26	9.93	5.11	8.46	7.01	13.57	22.74
5280.0	-2.79	1.27	9.93	5.11	8.41	6.93	13.52	22.48
5300.0	-2.79	1.27	9.93	5.11	8.41	6.94	13.52	22.49
5320.0	-2.75	1.27	9.93	5.11	8.45	7.00	13.56	22.71
5745.0	-2.84	1.36	9.95	5.11	8.47	7.02	13.58	22.78
5765.0	-1.92	1.36	9.95	5.11	9.39	8.68	14.50	28.15
5785.0	-1.91	1.37	9.95	5.11	9.41	8.72	14.52	28.28
5805.0	-1.88	1.37	9.95	5.11	9.44	8.78	14.55	28.48
5825.0	-1.96	1.38	9.95	5.11	9.37	8.64	14.48	28.02

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain

*As a result of preliminary test, the formal test was performed with simultaneous transmission had the worst rate.

Maximum Average Output Power (Reference data for SAR testing)

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 11022049H
Date 11/25/2015
Temperature/ Humidity 28deg. C / 26% RH
Engineer Yutaka Yoshida
Mode 11n-20 Tx MCS 0

[AV]

Antenna port 1+2 Gating OFF

Freq.	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p.)	
	(Cond.)	(e.r.i.p)	(Cond.)	(e.r.i.p)				
[MHz]	[mW]	[mW]	[mW]	[mW]	[dBm]	[mW]	[dBm]	[mW]
5180.0	8.24	26.74	8.57	27.81	12.26	16.82	17.37	54.55
5200.0	8.00	25.95	8.57	27.81	12.19	16.57	17.30	53.76
5220.0	7.91	25.66	8.58	27.83	12.17	16.49	17.28	53.49
5240.0	7.89	25.61	8.80	28.55	12.23	16.70	17.34	54.16
5260.0	6.23	20.20	6.99	22.69	11.21	13.22	16.32	42.89
5280.0	6.48	21.01	6.93	22.48	11.27	13.41	16.38	43.49
5300.0	6.36	20.63	6.97	22.60	11.25	13.33	16.36	43.23
5320.0	6.51	21.12	6.92	22.45	11.28	13.43	16.39	43.57
5745.0	6.87	22.30	7.01	22.72	11.42	13.88	16.53	45.02
5765.0	8.88	28.79	8.80	28.54	12.47	17.68	17.58	57.33
5785.0	8.82	28.59	8.82	28.61	12.46	17.64	17.57	57.20
5805.0	8.56	27.75	8.82	28.61	12.40	17.38	17.51	56.36
5825.0	8.52	27.62	8.80	28.54	12.38	17.32	17.49	56.17

Antenna port 1

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5180.0	-1.93	1.25	9.84	5.11	9.16	8.24	14.27	26.74
5200.0	-2.06	1.25	9.84	5.11	9.03	8.00	14.14	25.95
5220.0	-2.11	1.25	9.84	5.11	8.98	7.91	14.09	25.66
5240.0	-2.13	1.26	9.84	5.11	8.97	7.89	14.08	25.61
5260.0	-3.16	1.26	9.84	5.11	7.94	6.23	13.05	20.20
5280.0	-3.00	1.27	9.84	5.11	8.11	6.48	13.22	21.01
5300.0	-3.08	1.27	9.85	5.11	8.04	6.36	13.15	20.63
5320.0	-2.98	1.27	9.85	5.11	8.14	6.51	13.25	21.12
5745.0	-2.84	1.36	9.85	5.11	8.37	6.87	13.48	22.30
5765.0	-1.73	1.36	9.85	5.11	9.48	8.88	14.59	28.79
5785.0	-1.77	1.37	9.85	5.11	9.45	8.82	14.56	28.59
5805.0	-1.90	1.37	9.85	5.11	9.32	8.56	14.43	27.75
5825.0	-1.93	1.38	9.85	5.11	9.30	8.52	14.41	27.62

Antenna port 2

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5180.0	-1.84	1.25	9.92	5.11	9.33	8.57	14.44	27.81
5200.0	-1.84	1.25	9.92	5.11	9.33	8.57	14.44	27.81
5220.0	-1.84	1.25	9.92	5.11	9.33	8.58	14.44	27.83
5240.0	-1.74	1.26	9.93	5.11	9.45	8.80	14.56	28.55
5260.0	-2.74	1.26	9.93	5.11	8.45	6.99	13.56	22.69
5280.0	-2.79	1.27	9.93	5.11	8.41	6.93	13.52	22.48
5300.0	-2.77	1.27	9.93	5.11	8.43	6.97	13.54	22.60
5320.0	-2.80	1.27	9.93	5.11	8.40	6.92	13.51	22.45
5745.0	-2.85	1.36	9.95	5.11	8.46	7.01	13.57	22.72
5765.0	-1.86	1.36	9.95	5.11	9.45	8.80	14.56	28.54
5785.0	-1.86	1.37	9.95	5.11	9.46	8.82	14.57	28.61
5805.0	-1.86	1.37	9.95	5.11	9.46	8.82	14.57	28.61
5825.0	-1.88	1.38	9.95	5.11	9.45	8.80	14.56	28.54

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain

*As a result of preliminary test, the formal test was performed with simultaneous transmission had the worst rate.

Maximum Average Output Power (Reference data for SAR testing)

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 11022049H
Date 11/26/2015
Temperature/ Humidity 24deg. C / 41% RH
Engineer Yutaka Yoshida
Mode 11ac-20 Tx MCS 0

[AV]

Antenna port 1+2 Gating OFF

Freq.	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p.)	
	(Cond.)	(e.r.i.p)	(Cond.)	(e.r.i.p)				
[MHz]	[mW]	[mW]	[mW]	[mW]	[dBm]	[mW]	[dBm]	[mW]
5180.0	7.84	25.42	8.81	28.59	12.21	16.65	17.32	54.00
5200.0	7.84	25.42	8.81	28.59	12.21	16.65	17.32	54.00
5220.0	7.47	24.23	8.72	28.28	12.09	16.19	17.20	52.50
5240.0	7.49	24.28	8.58	27.84	12.06	16.07	17.17	52.12
5260.0	5.59	18.13	7.01	22.74	11.00	12.60	16.11	40.87
5280.0	5.96	19.34	6.98	22.63	11.12	12.94	16.23	41.97
5300.0	5.86	18.99	6.95	22.55	11.07	12.81	16.18	41.54
5320.0	6.48	21.02	7.07	22.92	11.32	13.55	16.43	43.94
5745.0	7.07	22.92	7.06	22.88	11.50	14.12	16.61	45.80
5765.0	8.23	26.68	8.78	28.48	12.31	17.01	17.42	55.16
5785.0	8.25	26.75	8.80	28.54	12.32	17.05	17.43	55.29
5805.0	8.56	27.75	8.88	28.81	12.41	17.44	17.52	56.56
5825.0	8.58	27.81	8.88	28.81	12.42	17.46	17.53	56.62

Antenna port 1

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5180.0	-2.15	1.25	9.84	5.11	8.94	7.84	14.05	25.42
5200.0	-2.15	1.25	9.84	5.11	8.94	7.84	14.05	25.42
5220.0	-2.36	1.25	9.84	5.11	8.73	7.47	13.84	24.23
5240.0	-2.36	1.26	9.84	5.11	8.74	7.49	13.85	24.28
5260.0	-3.63	1.26	9.84	5.11	7.47	5.59	12.58	18.13
5280.0	-3.36	1.27	9.84	5.11	7.75	5.96	12.86	19.34
5300.0	-3.44	1.27	9.85	5.11	7.68	5.86	12.79	18.99
5320.0	-3.00	1.27	9.85	5.11	8.12	6.48	13.23	21.02
5745.0	-2.72	1.36	9.85	5.11	8.49	7.07	13.60	22.92
5765.0	-2.06	1.36	9.85	5.11	9.15	8.23	14.26	26.68
5785.0	-2.06	1.37	9.85	5.11	9.16	8.25	14.27	26.75
5805.0	-1.90	1.37	9.85	5.11	9.32	8.56	14.43	27.75
5825.0	-1.90	1.38	9.85	5.11	9.33	8.58	14.44	27.81

Antenna port 2

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5180.0	-1.72	1.25	9.92	5.11	9.45	8.81	14.56	28.59
5200.0	-1.72	1.25	9.92	5.11	9.45	8.81	14.56	28.59
5220.0	-1.77	1.25	9.92	5.11	9.40	8.72	14.51	28.28
5240.0	-1.85	1.26	9.93	5.11	9.34	8.58	14.45	27.84
5260.0	-2.73	1.26	9.93	5.11	8.46	7.01	13.57	22.74
5280.0	-2.76	1.27	9.93	5.11	8.44	6.98	13.55	22.63
5300.0	-2.78	1.27	9.93	5.11	8.42	6.95	13.53	22.55
5320.0	-2.71	1.27	9.93	5.11	8.49	7.07	13.60	22.92
5745.0	-2.82	1.36	9.95	5.11	8.49	7.06	13.60	22.88
5765.0	-1.87	1.36	9.95	5.11	9.44	8.78	14.55	28.48
5785.0	-1.87	1.37	9.95	5.11	9.45	8.80	14.56	28.54
5805.0	-1.83	1.37	9.95	5.11	9.49	8.88	14.60	28.81
5825.0	-1.84	1.38	9.95	5.11	9.49	8.88	14.60	28.81

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain

*As a result of preliminary test, the formal test was performed with simultaneous transmission had the worst rate.

Maximum Average Output Power (Reference data for SAR testing)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/26/2015
Temperature/ Humidity	24deg. C / 41% RH
Engineer	Yutaka Yoshida
Mode	11n-40 Tx MCS 0

[AV]

Antenna port 1+2 Gating OFF

Freq.	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p)	
	(Cond.)	(e.i.r.p)	(Cond.)	(e.i.r.p)				
[MHz]	[mW]	[mW]	[mW]	[mW]	[dBm]	[mW]	[dBm]	[mW]
5190.0	7.30	23.67	8.65	28.07	12.03	15.95	17.14	51.74
5230.0	7.27	23.57	8.21	26.64	11.90	15.48	17.01	50.21
5270.0	5.77	18.73	6.53	21.18	10.90	12.30	16.01	39.90
5310.0	5.94	19.26	7.00	22.71	11.12	12.94	16.23	41.96
5755.0	6.91	22.40	7.06	22.88	11.45	13.96	16.56	45.28
5795.0	8.17	26.50	8.88	28.81	12.32	17.05	17.43	55.31

Antenna port 1

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5190.0	-2.46	1.25	9.84	5.11	8.63	7.30	13.74	23.67
5230.0	-2.49	1.26	9.84	5.11	8.61	7.27	13.72	23.57
5270.0	-3.49	1.26	9.84	5.11	7.61	5.77	12.72	18.73
5310.0	-3.38	1.27	9.85	5.11	7.74	5.94	12.85	19.26
5755.0	-2.82	1.36	9.85	5.11	8.39	6.91	13.50	22.40
5795.0	-2.10	1.37	9.85	5.11	9.12	8.17	14.23	26.50

Antenna port 2

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5190.0	-1.80	1.25	9.92	5.11	9.37	8.65	14.48	28.07
5230.0	-2.04	1.26	9.93	5.11	9.15	8.21	14.26	26.64
5270.0	-3.04	1.26	9.93	5.11	8.15	6.53	13.26	21.18
5310.0	-2.75	1.27	9.93	5.11	8.45	7.00	13.56	22.71
5755.0	-2.82	1.36	9.95	5.11	8.49	7.06	13.60	22.88
5795.0	-1.83	1.37	9.95	5.11	9.49	8.88	14.60	28.81

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain

*As a result of preliminary test, the formal test was performed with simultaneous transmission had the worst rate.

Maximum Average Output Power (Reference data for SAR testing)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/26/2015
Temperature/ Humidity	24deg. C / 41% RH
Engineer	Yutaka Yoshida
Mode	11ac-40 Tx MCS 0

[AV]

Antenna port 1+2 Gating OFF

Freq.	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p)	
	(Cond.)	(e.i.r.p)	(Cond.)	(e.i.r.p)				
[MHz]	[mW]	[mW]	[mW]	[mW]	[dBm]	[mW]	[dBm]	[mW]
5190.0	7.40	24.00	7.89	25.60	11.84	15.29	16.95	49.60
5230.0	7.37	23.89	8.41	27.26	11.98	15.77	17.09	51.16
5270.0	5.66	18.34	6.74	21.87	10.93	12.40	16.04	40.21
5310.0	5.80	18.82	7.03	22.81	11.08	12.83	16.19	41.63
5755.0	6.54	21.20	7.04	22.83	11.33	13.57	16.44	44.03
5795.0	7.84	25.42	8.88	28.81	12.23	16.72	17.34	54.23

Antenna port 1

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5190.0	-2.40	1.25	9.84	5.11	8.69	7.40	13.80	24.00
5230.0	-2.43	1.26	9.84	5.11	8.67	7.37	13.78	23.89
5270.0	-3.58	1.26	9.84	5.11	7.52	5.66	12.63	18.34
5310.0	-3.48	1.27	9.85	5.11	7.64	5.80	12.75	18.82
5755.0	-3.06	1.36	9.85	5.11	8.15	6.54	13.26	21.20
5795.0	-2.28	1.37	9.85	5.11	8.94	7.84	14.05	25.42

Antenna port 2

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5190.0	-2.20	1.25	9.92	5.11	8.97	7.89	14.08	25.60
5230.0	-1.94	1.26	9.93	5.11	9.25	8.41	14.36	27.26
5270.0	-2.90	1.26	9.93	5.11	8.29	6.74	13.40	21.87
5310.0	-2.73	1.27	9.93	5.11	8.47	7.03	13.58	22.81
5755.0	-2.83	1.36	9.95	5.11	8.48	7.04	13.59	22.83
5795.0	-1.83	1.37	9.95	5.11	9.49	8.88	14.60	28.81

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain

*As a result of preliminary test, the formal test was performed with simultaneous transmission had the worst rate.

Maximum Average Output Power (Reference data for SAR testing)

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/26/2015
Temperature/ Humidity	24deg. C / 41% RH
Engineer	Yutaka Yoshida
Mode	11ac-80 Tx MCS 0

[AV]

Antenna port 1+2 Gating OFF

Freq.	Antenna Port 1 Result		Antenna Port 2 Result		Result Antenna Port 1+2 (Cond.)		Result Antenna Port 1+2 (e.i.r.p)	
	(Cond.)	(e.i.r.p)	(Cond.)	(e.i.r.p)				
[MHz]	[mW]	[mW]	[mW]	[mW]	[dBm]	[mW]	[dBm]	[mW]
5210.0	4.76	15.43	4.77	15.47	9.79	9.52	14.90	30.89
5290.0	4.39	14.24	5.09	16.52	9.77	9.48	14.88	30.76
5775.0	4.24	13.75	4.43	14.37	9.38	8.67	14.49	28.12

Antenna port 1

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5210.0	-4.32	1.25	9.84	5.11	6.77	4.76	11.88	15.43
5290.0	-4.69	1.27	9.85	5.11	6.43	4.39	11.54	14.24
5775.0	-4.95	1.37	9.85	5.11	6.27	4.24	11.38	13.75

Antenna port 2

Freq.	P/M Reading	Cable Loss	Atten. Loss	Antenna Gain	Result (Cond.)		Result (e.i.r.p.)	
[MHz]	[dBm]	[dB]	[dB]	[dBi]	[dBm]	[mW]	[dBm]	[mW]
5210.0	-4.39	1.25	9.92	5.11	6.78	4.77	11.89	15.47
5290.0	-4.13	1.27	9.93	5.11	7.07	5.09	12.18	16.52
5775.0	-4.85	1.37	9.95	5.11	6.47	4.43	11.58	14.37

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain

Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/27/2015
Temperature/ Humidity	25deg. C / 23% RH
Engineer	Yutaka Yoshida
Mode	11a Tx

Antenna port 1+2 Applied limit: 15.407, mobile and portable client device

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	1	2	Sum				1	2	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5180	0.81	0.78	1.59	2.02	11.00	8.98	2.62	2.54	5.16	7.13	17.00	9.87
5220	0.77	0.81	1.59	2.00	11.00	9.00	2.51	2.63	5.14	7.11	17.00	9.89
5240	0.77	0.94	1.71	2.32	11.00	8.68	2.48	3.05	5.53	7.43	17.00	9.57
5260	0.56	0.72	1.27	1.05	11.00	9.95	1.81	2.32	4.13	6.16	17.00	10.84
5300	0.69	0.61	1.30	1.14	11.00	9.86	2.24	1.98	4.22	6.25	17.00	10.75
5320	0.62	0.79	1.40	1.47	11.00	9.53	2.00	2.55	4.55	6.58	17.00	10.42
5745	0.30	0.29	0.60	-2.25	30.00	32.25	0.98	0.95	1.93	2.86	36.00	33.14
5785	0.38	0.36	0.74	-1.30	30.00	31.30	1.22	1.18	2.40	3.81	36.00	32.19
5825	0.34	0.33	0.68	-1.69	30.00	31.69	1.11	1.08	2.20	3.42	36.00	32.58

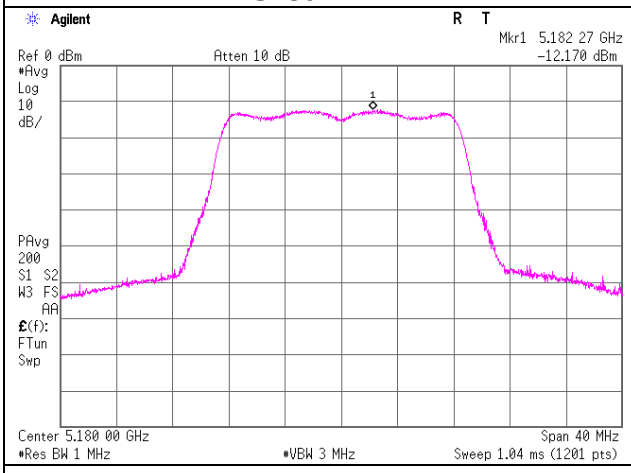
			Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	0.15	0.00	-12.17	1.25	9.84	5.11	-0.93	4.18	-12.38	1.25	9.92	5.11	-1.05	4.06
5220	0.15	0.00	-12.35	1.25	9.84	5.11	-1.11	4.00	-12.24	1.25	9.92	5.11	-0.91	4.20
5240	0.15	0.00	-12.41	1.26	9.84	5.11	-1.16	3.95	-11.61	1.26	9.93	5.11	-0.27	4.84
5260	0.15	0.00	-13.78	1.26	9.84	5.11	-2.53	2.58	-12.79	1.26	9.93	5.11	-1.46	3.65
5300	0.15	0.00	-12.88	1.27	9.85	5.11	-1.62	3.49	-13.49	1.27	9.93	5.11	-2.14	2.97
5320	0.15	0.00	-13.36	1.27	9.85	5.11	-2.09	3.02	-12.40	1.27	9.93	5.11	-1.05	4.06
5745	0.15	0.27	-16.83	1.36	9.85	5.11	-5.20	-0.09	-17.05	1.36	9.95	5.11	-5.32	-0.21
5785	0.15	0.27	-15.89	1.37	9.85	5.11	-4.25	0.86	-16.11	1.37	9.95	5.11	-4.38	0.73
5825	0.15	0.27	-16.30	1.38	9.85	5.11	-4.65	0.46	-16.51	1.38	9.95	5.11	-4.76	0.35

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

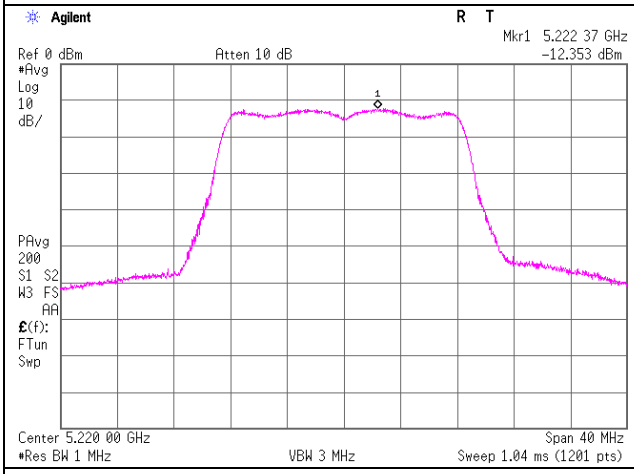
Maximum Power Spectral Density

11a Antenna port 1

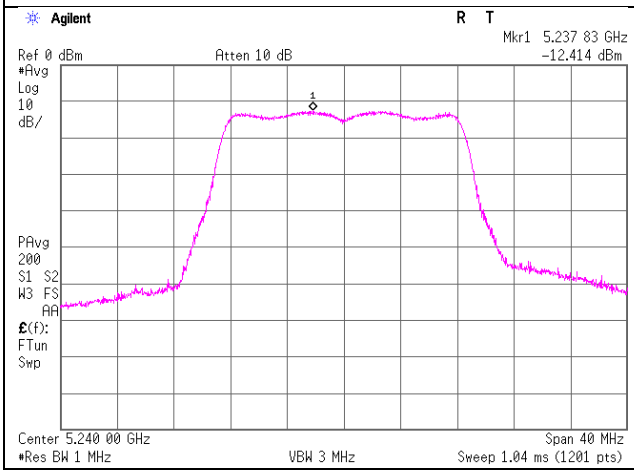
5180MHz



5220MHz

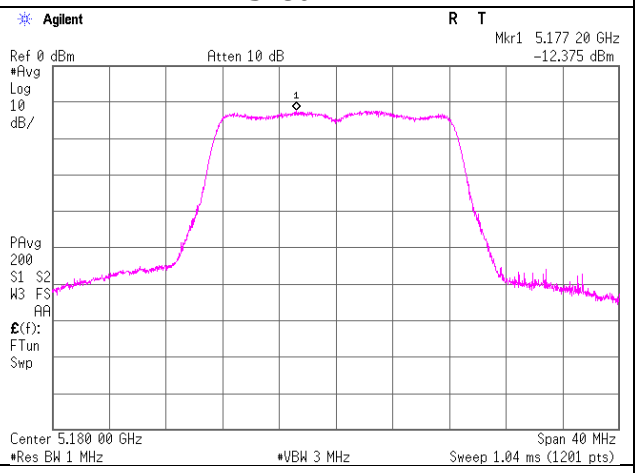


5240MHz

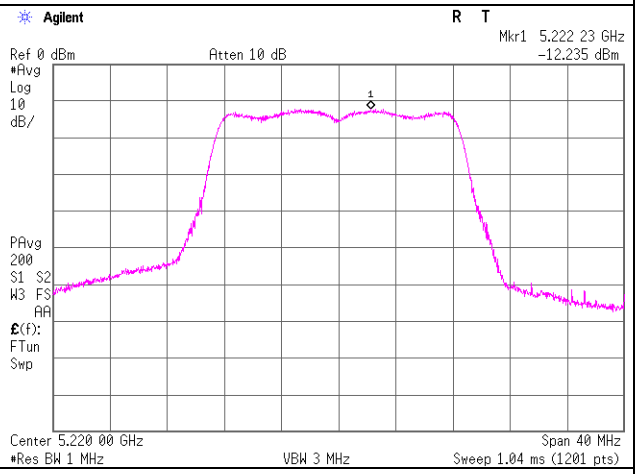


11a Antenna port 2

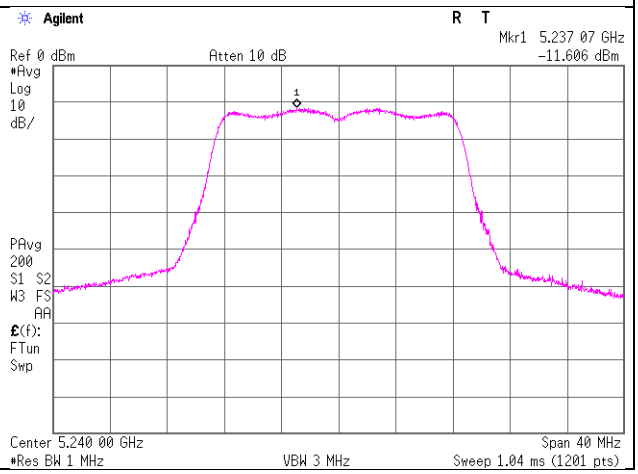
5180MHz



5220MHz



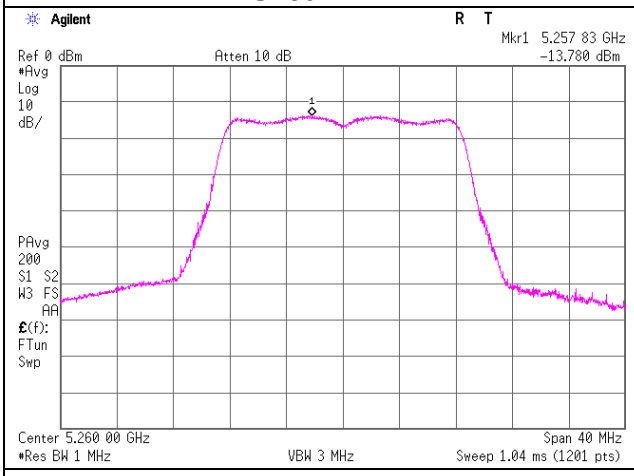
5240MHz



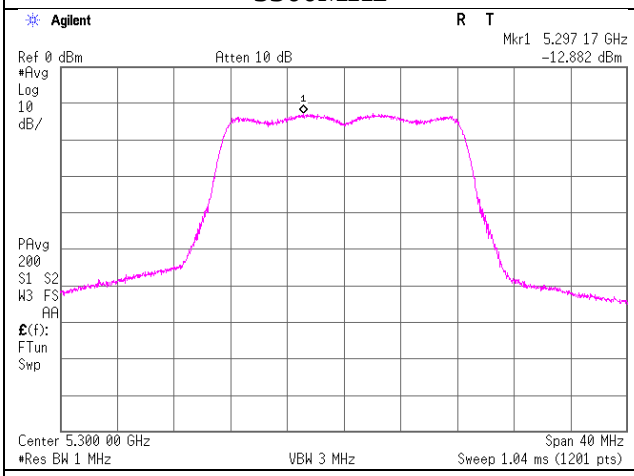
Maximum Power Spectral Density

11a Antenna port 1

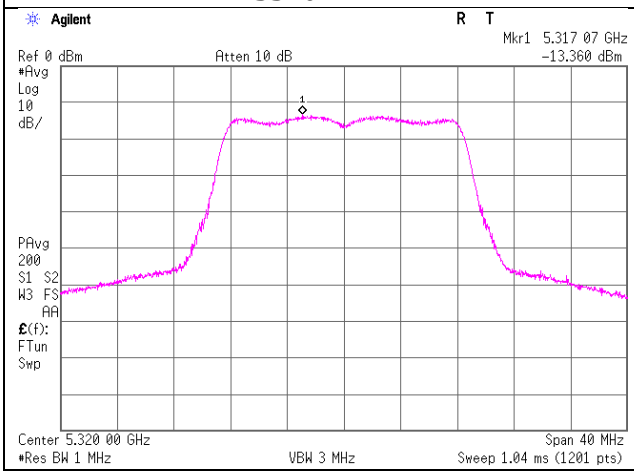
5260MHz



5300MHz

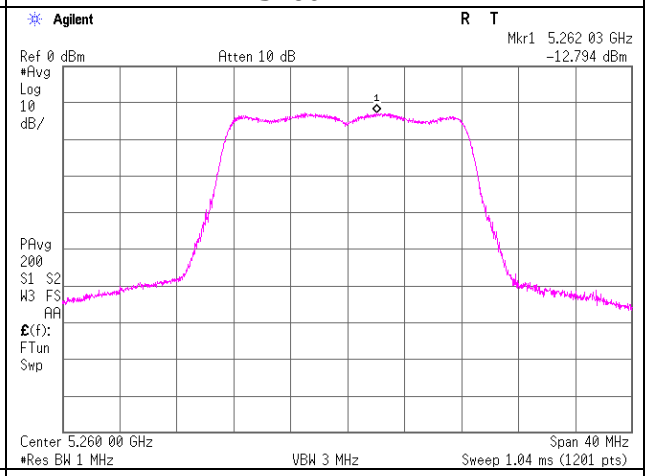


5320MHz

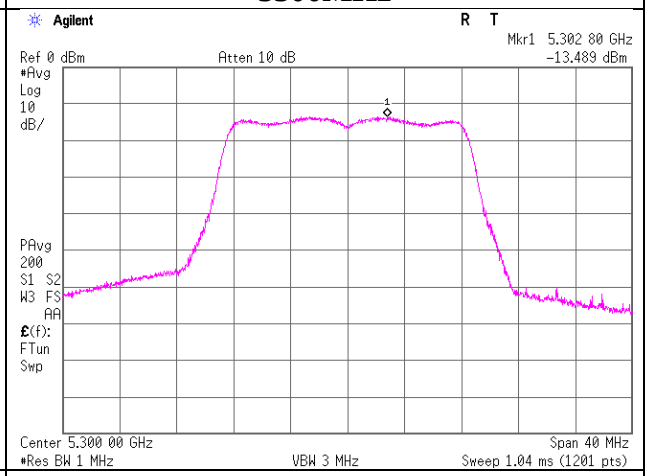


11a Antenna port 2

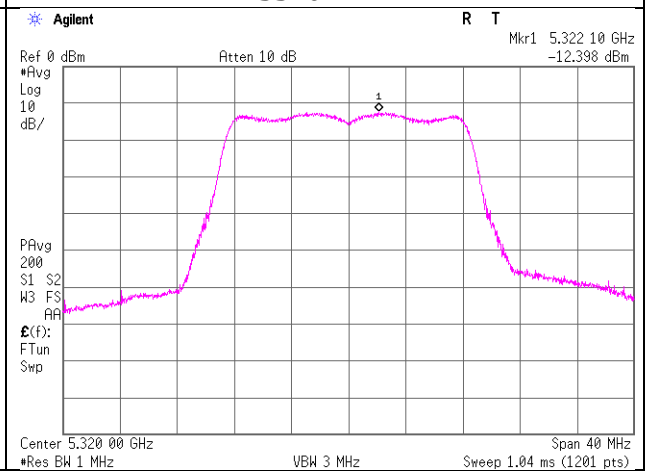
5260MHz



5300MHz



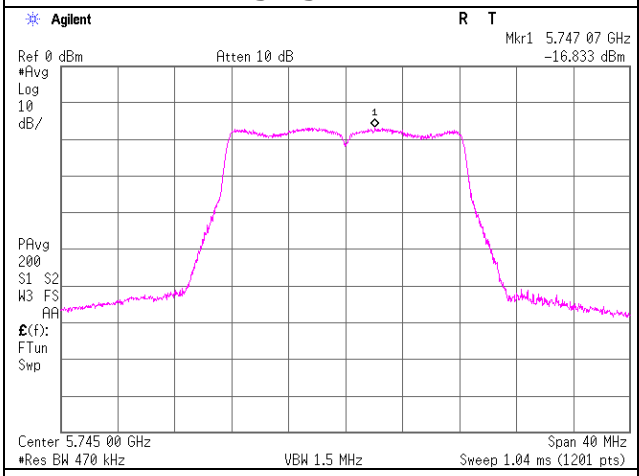
5320MHz



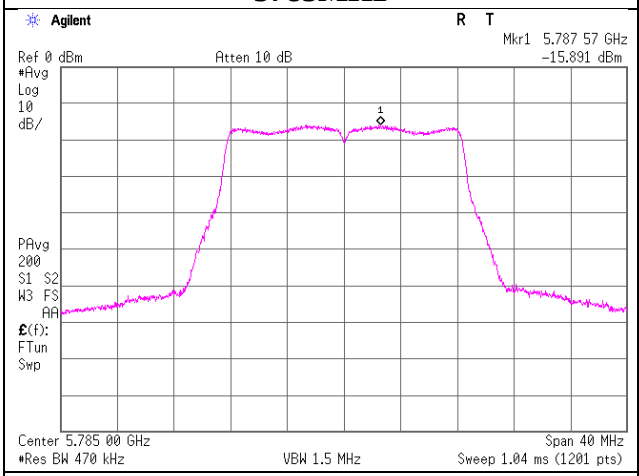
Maximum Power Spectral Density

11a Antenna port 1

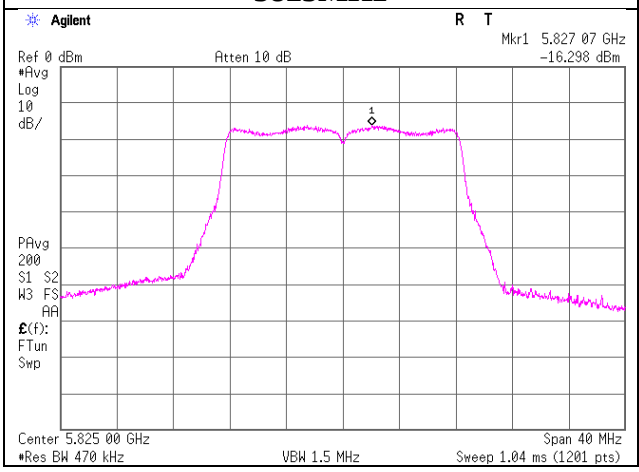
5745MHz



5785MHz

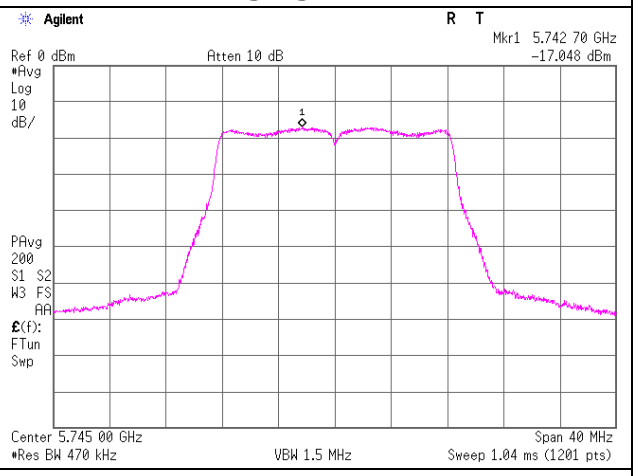


5825MHz

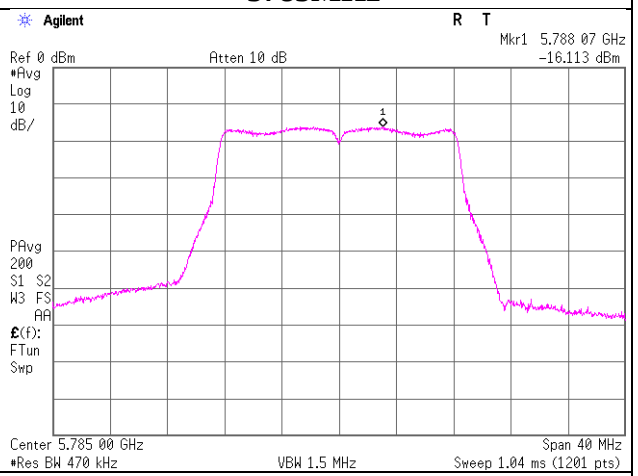


11a Antenna port 2

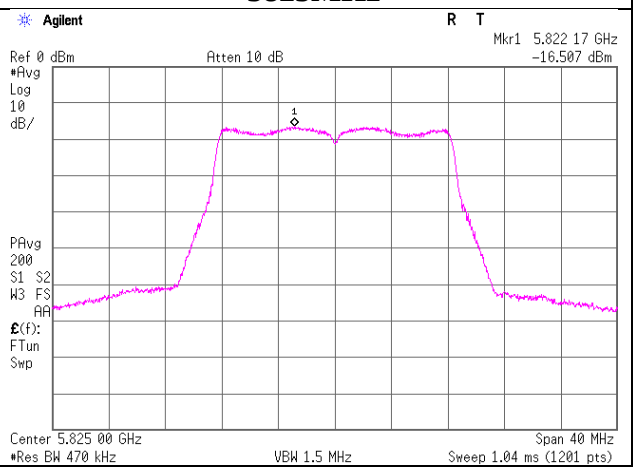
5745MHz



5785MHz



5825MHz



Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/27/2015
Temperature/ Humidity	25deg. C / 23% RH
Engineer	Yutaka Yoshida
Mode	11n-20 Tx

Antenna port 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	1	2	Sum				1	2	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5180	0.72	0.76	1.48	1.69	11.00	9.31	2.33	2.45	4.78	6.80	17.00	10.20
5220	0.63	0.72	1.35	1.31	11.00	9.69	2.03	2.35	4.38	6.42	17.00	10.58
5240	0.72	0.87	1.59	2.00	11.00	9.00	2.32	2.82	5.14	7.11	17.00	9.89
5260	0.49	0.65	1.14	0.57	11.00	10.43	1.58	2.12	3.70	5.68	17.00	11.32
5300	0.52	0.72	1.25	0.96	11.00	10.04	1.69	2.35	4.04	6.07	17.00	10.93
5320	0.57	0.78	1.35	1.30	11.00	9.70	1.84	2.54	4.38	6.41	17.00	10.59
5745	0.30	0.29	0.59	-2.27	30.00	32.27	0.97	0.95	1.92	2.84	36.00	33.16
5785	0.38	0.34	0.71	-1.46	30.00	31.46	1.23	1.09	2.32	3.65	36.00	32.35
5825	0.36	0.36	0.72	-1.41	30.00	31.41	1.18	1.16	2.34	3.70	36.00	32.30

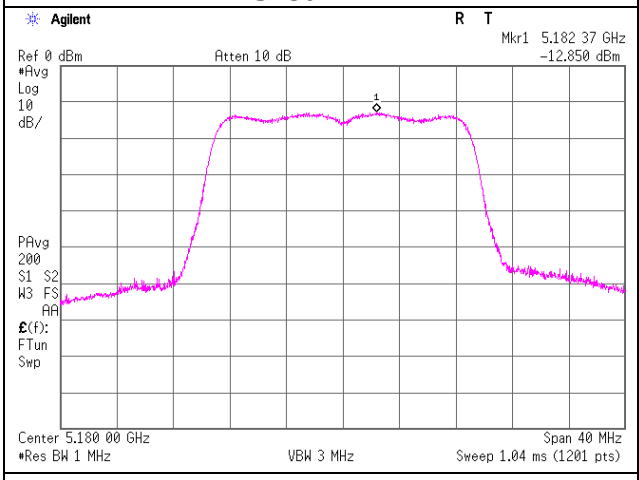
			Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	0.33	0.00	-12.85	1.25	9.84	5.11	-1.43	3.68	-12.72	1.25	9.92	5.11	-1.22	3.89
5220	0.33	0.00	-13.45	1.25	9.84	5.11	-2.03	3.08	-12.91	1.25	9.92	5.11	-1.41	3.70
5240	0.33	0.00	-12.89	1.26	9.84	5.11	-1.46	3.65	-12.12	1.26	9.93	5.11	-0.60	4.51
5260	0.33	0.00	-14.56	1.26	9.84	5.11	-3.13	1.98	-13.37	1.26	9.93	5.11	-1.85	3.26
5300	0.33	0.00	-14.27	1.27	9.85	5.11	-2.82	2.29	-12.93	1.27	9.93	5.11	-1.40	3.71
5320	0.33	0.00	-13.90	1.27	9.85	5.11	-2.45	2.66	-12.60	1.27	9.93	5.11	-1.07	4.04
5745	0.33	0.27	-17.05	1.36	9.85	5.11	-5.24	-0.13	-17.23	1.36	9.95	5.11	-5.33	-0.22
5785	0.33	0.27	-16.04	1.37	9.85	5.11	-4.22	0.89	-16.66	1.37	9.95	5.11	-4.75	0.36
5825	0.33	0.27	-16.22	1.38	9.85	5.11	-4.39	0.72	-16.38	1.38	9.95	5.11	-4.46	0.65

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

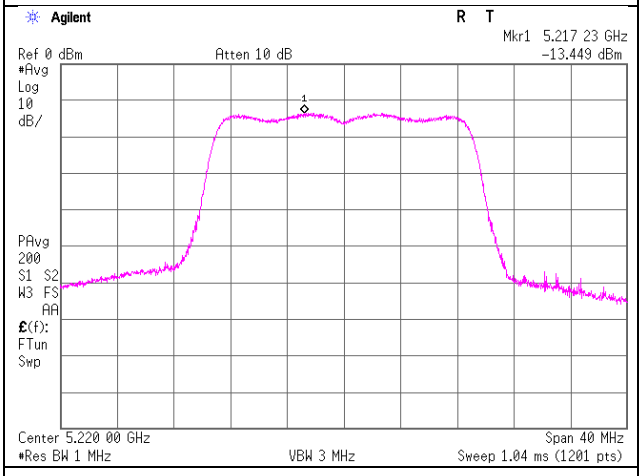
Maximum Power Spectral Density

11n-20 Antenna port 1

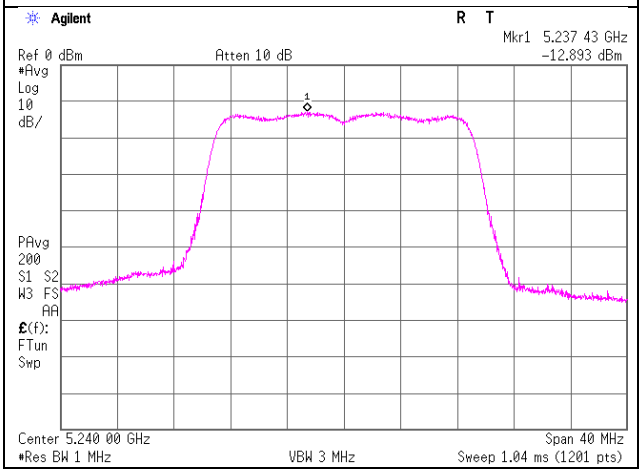
5180MHz



5220MHz

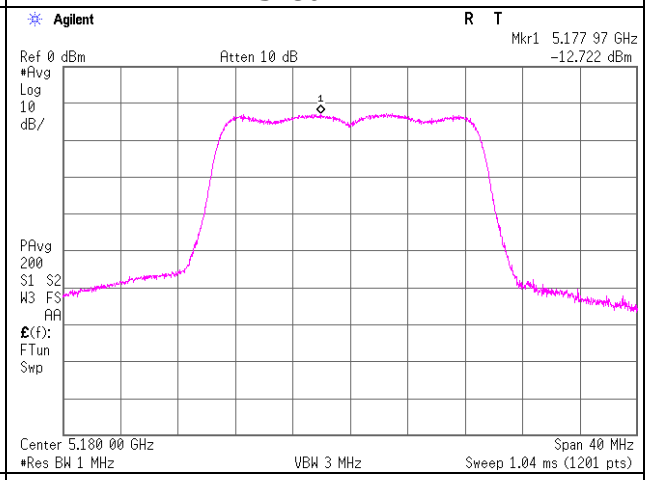


5240MHz

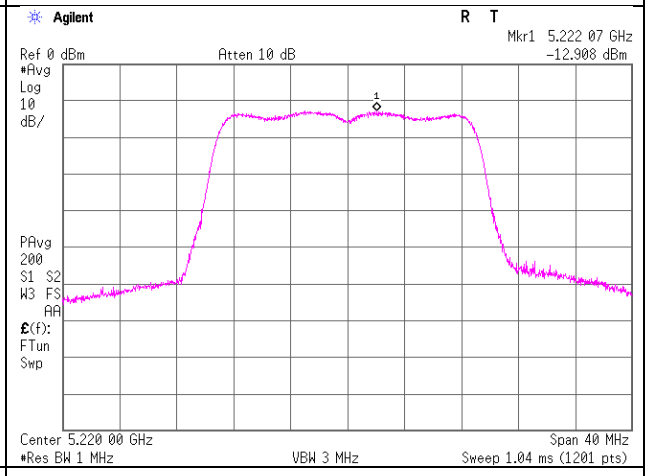


11n-20 Antenna port 2

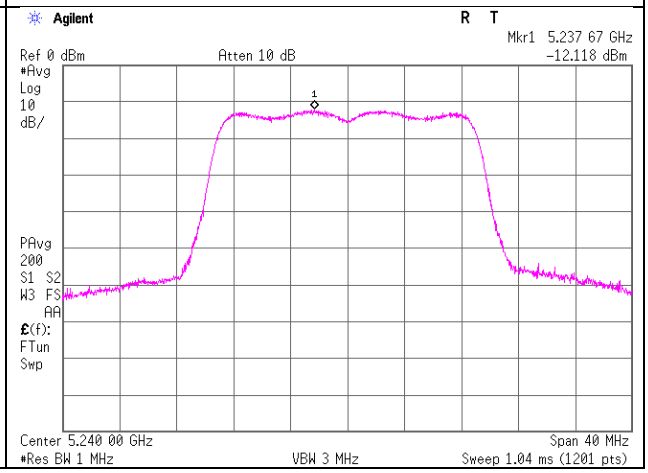
5180MHz



5220MHz



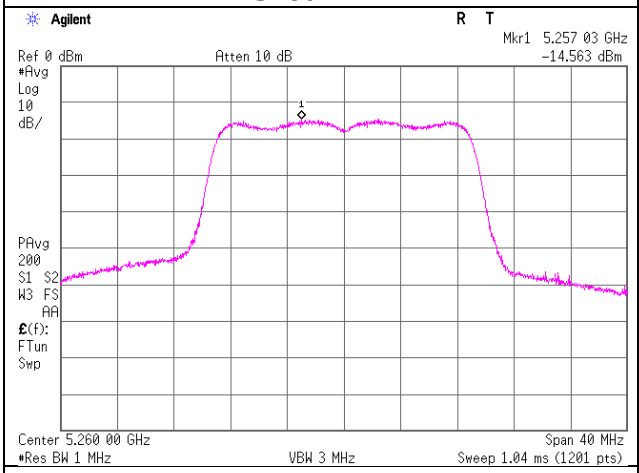
5240MHz



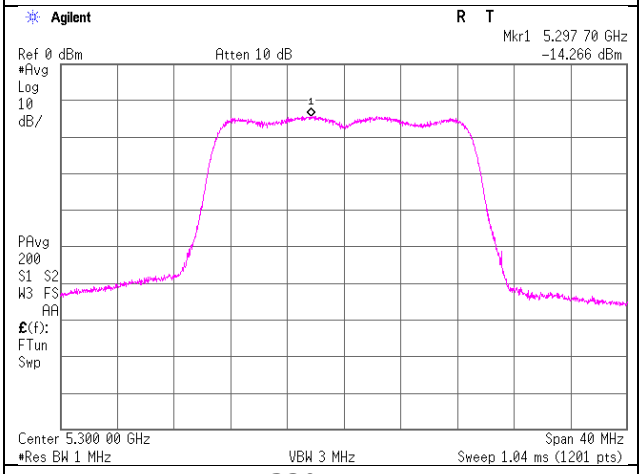
Maximum Power Spectral Density

11n-20 Antenna port 1

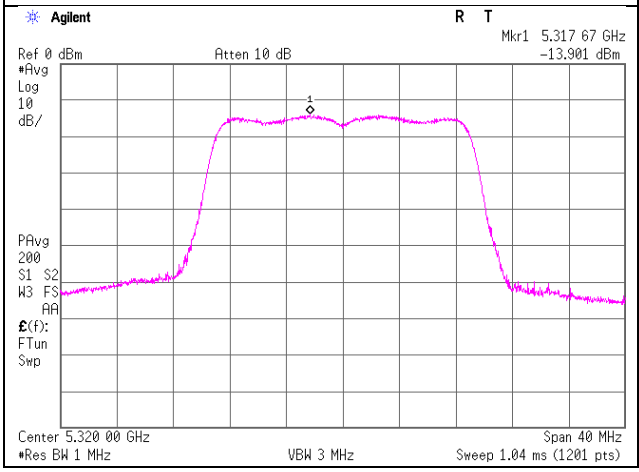
5260MHz



5300MHz

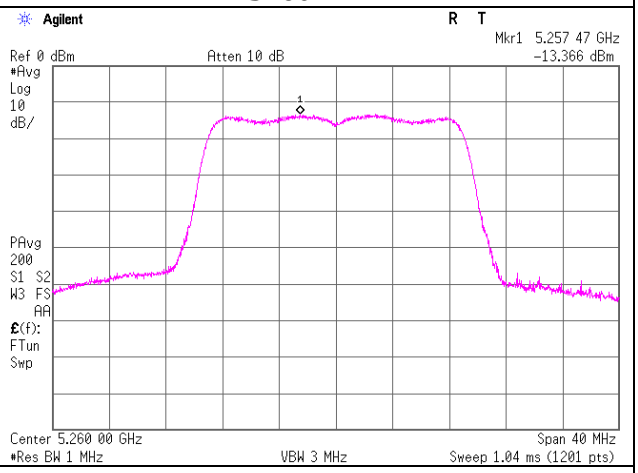


5320MHz

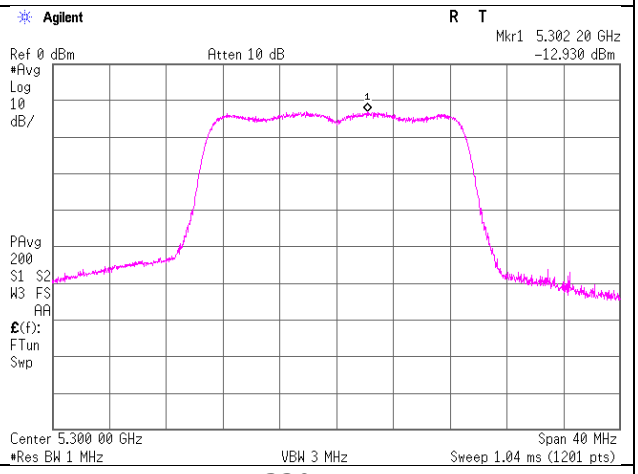


11n-20 Antenna port 2

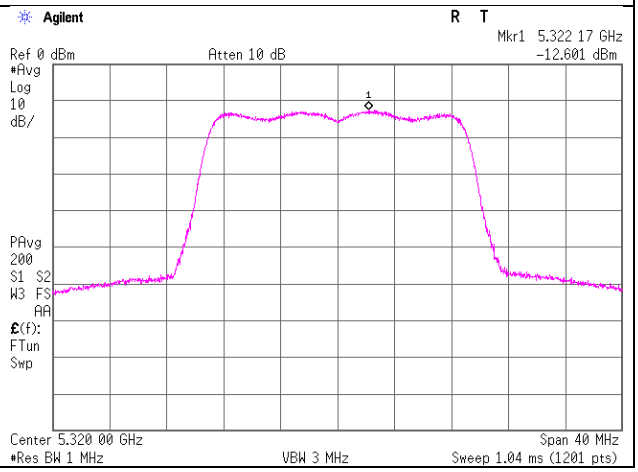
5260MHz



5300MHz



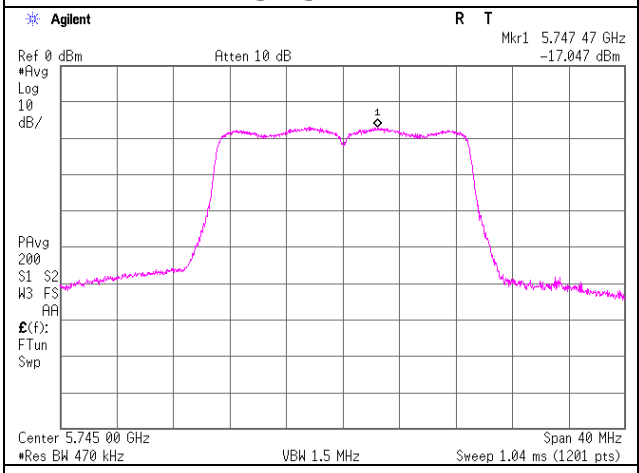
5320MHz



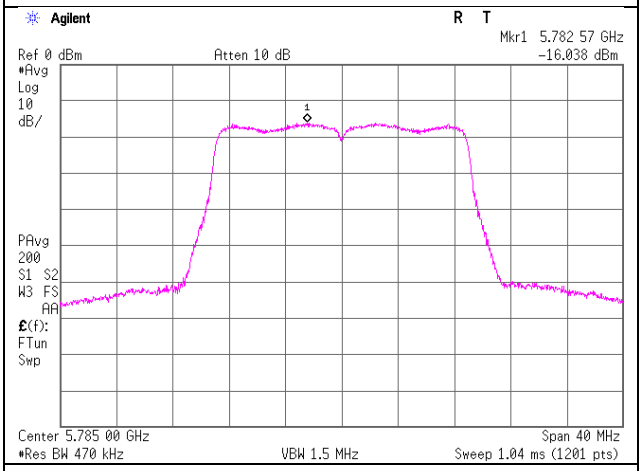
Maximum Power Spectral Density

11n-20 Antenna port 1

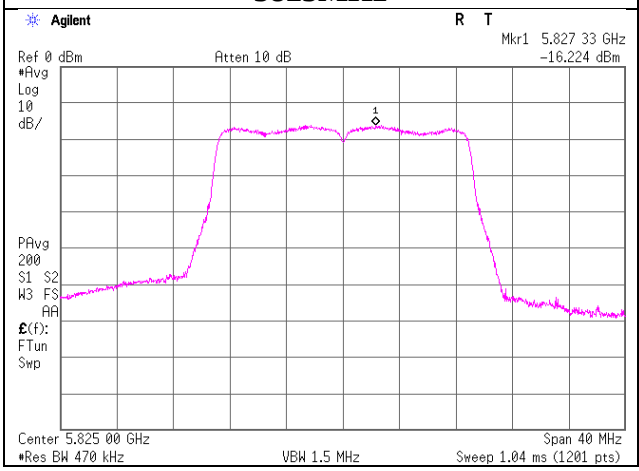
5745MHz



5785MHz

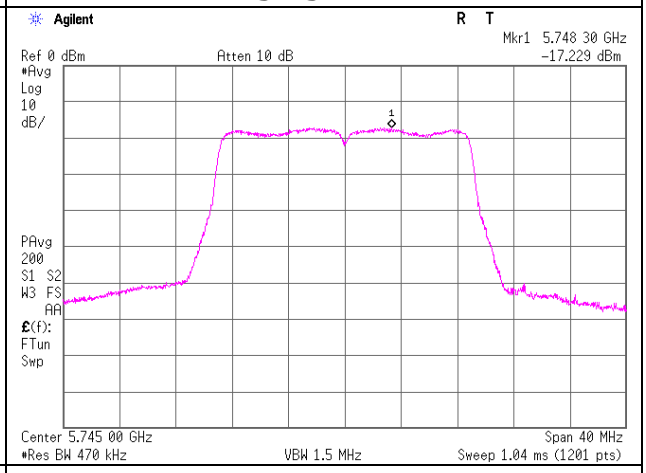


5825MHz

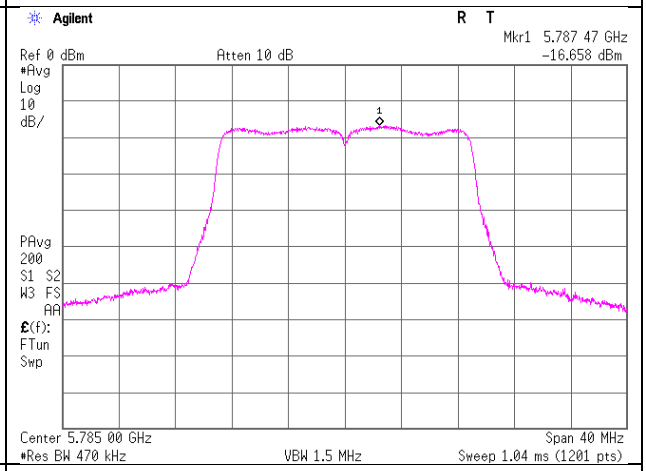


11n-20 Antenna port 2

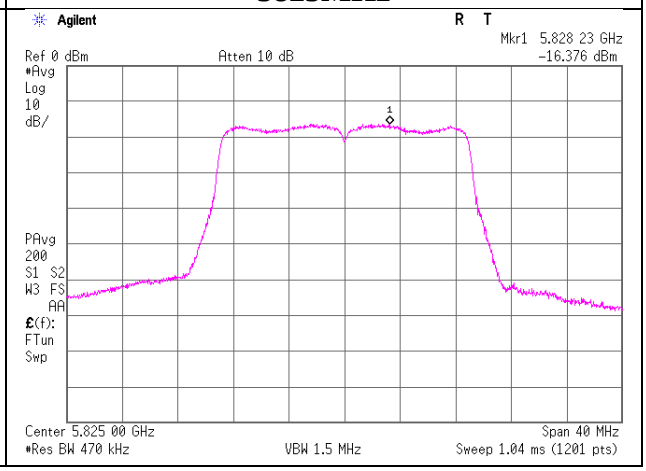
5745MHz



5785MHz



5825MHz



Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/27/2015
Temperature/ Humidity	25deg. C / 23% RH
Engineer	Yutaka Yoshida
Mode	11ac-20 Tx

Antenna port 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	1	2	Sum				1	2	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5180	0.62	0.75	1.37	1.38	11.00	9.62	2.02	2.43	4.45	6.49	17.00	10.51
5220	0.70	0.71	1.41	1.48	11.00	9.52	2.26	2.31	4.56	6.59	17.00	10.41
5240	0.55	0.79	1.34	1.28	11.00	9.72	1.79	2.57	4.36	6.39	17.00	10.61
5260	0.51	0.66	1.17	0.68	11.00	10.32	1.65	2.15	3.79	5.79	17.00	11.21
5300	0.51	0.73	1.24	0.93	11.00	10.07	1.64	2.38	4.02	6.04	17.00	10.96
5320	0.51	0.72	1.23	0.90	11.00	10.10	1.66	2.33	3.99	6.01	17.00	10.99
5745	0.28	0.31	0.59	-2.31	30.00	32.31	0.90	1.01	1.91	2.80	36.00	33.20
5785	0.39	0.37	0.76	-1.19	30.00	31.19	1.27	1.19	2.46	3.92	36.00	32.08
5825	0.38	0.33	0.71	-1.48	30.00	31.48	1.24	1.07	2.31	3.63	36.00	32.37

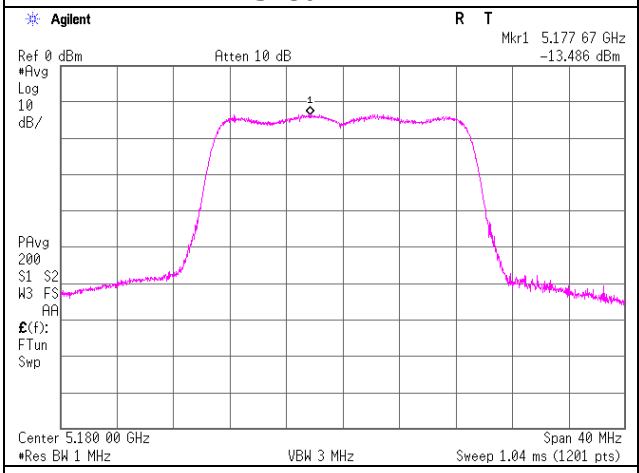
			Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	0.34	0.00	-13.49	1.25	9.84	5.11	-2.05	3.06	-12.76	1.25	9.92	5.11	-1.25	3.86
5220	0.34	0.00	-13.01	1.25	9.84	5.11	-1.58	3.53	-13.00	1.25	9.92	5.11	-1.48	3.63
5240	0.34	0.00	-14.02	1.26	9.84	5.11	-2.57	2.54	-12.54	1.26	9.93	5.11	-1.02	4.09
5260	0.34	0.00	-14.39	1.26	9.84	5.11	-2.95	2.16	-13.32	1.26	9.93	5.11	-1.80	3.31
5300	0.34	0.00	-14.41	1.27	9.85	5.11	-2.95	2.16	-12.89	1.27	9.93	5.11	-1.35	3.76
5320	0.34	0.00	-14.36	1.27	9.85	5.11	-2.91	2.20	-12.99	1.27	9.93	5.11	-1.44	3.67
5745	0.34	0.27	-17.39	1.36	9.85	5.11	-5.56	-0.45	-17.00	1.36	9.95	5.11	-5.08	0.03
5785	0.34	0.27	-15.90	1.37	9.85	5.11	-4.06	1.05	-16.27	1.37	9.95	5.11	-4.35	0.76
5825	0.34	0.27	-16.01	1.38	9.85	5.11	-4.16	0.95	-16.77	1.38	9.95	5.11	-4.84	0.27

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 (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

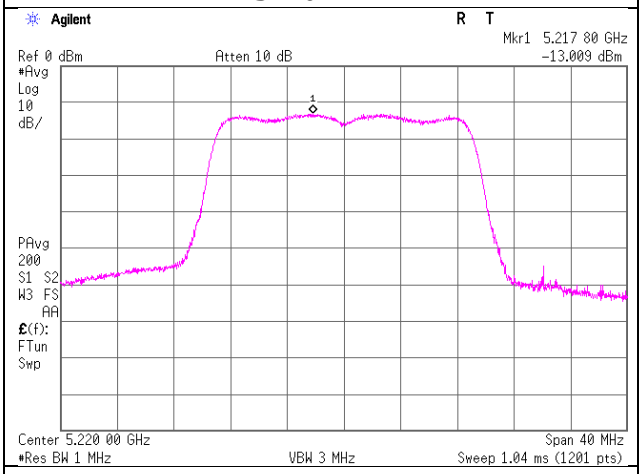
Maximum Power Spectral Density

11ac-20 Antenna port 1

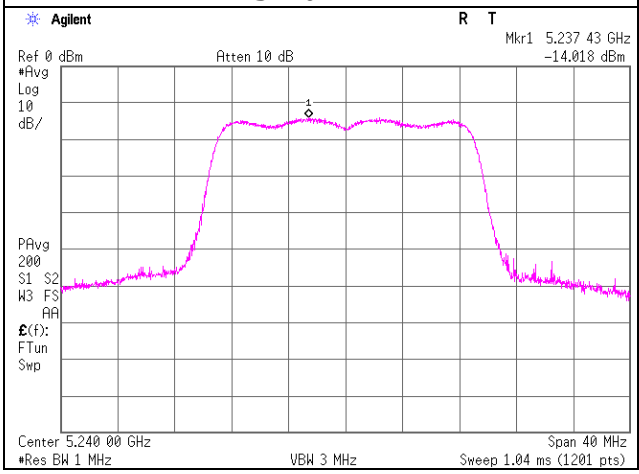
5180MHz



5220MHz

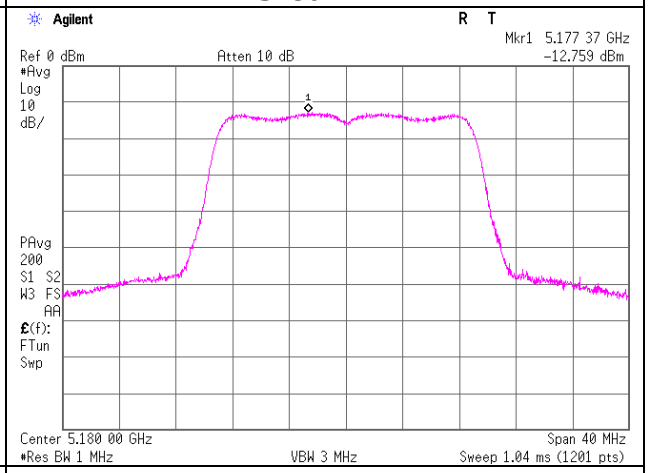


5240MHz

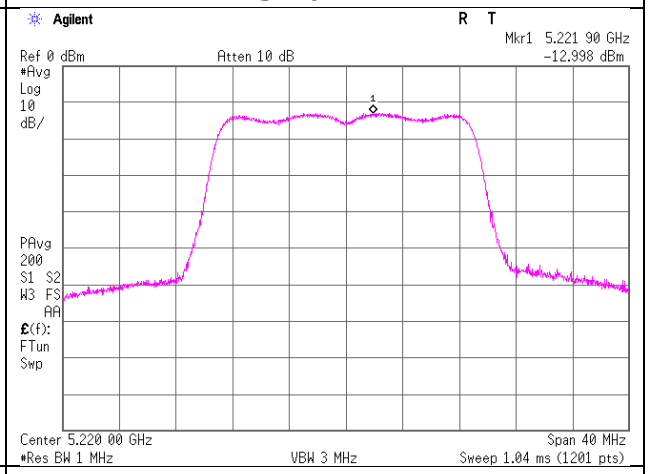


11ac-20 Antenna port 2

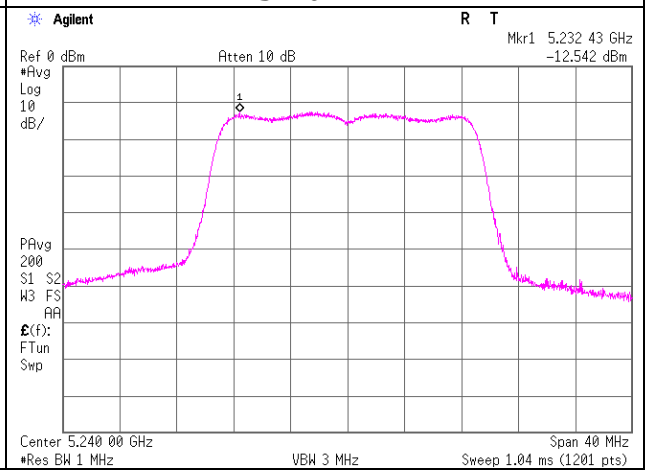
5180MHz



5220MHz



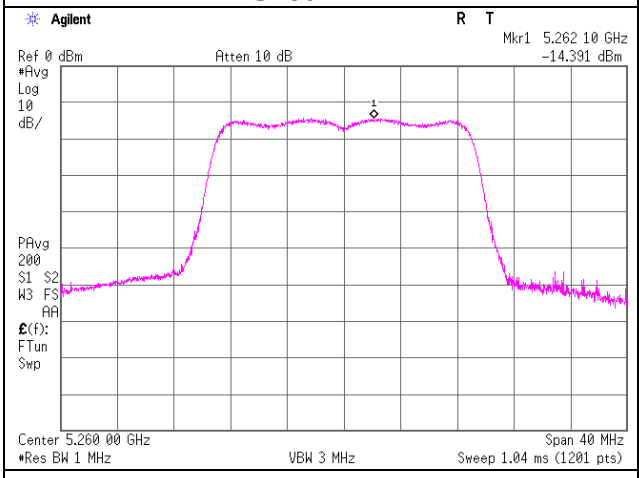
5240MHz



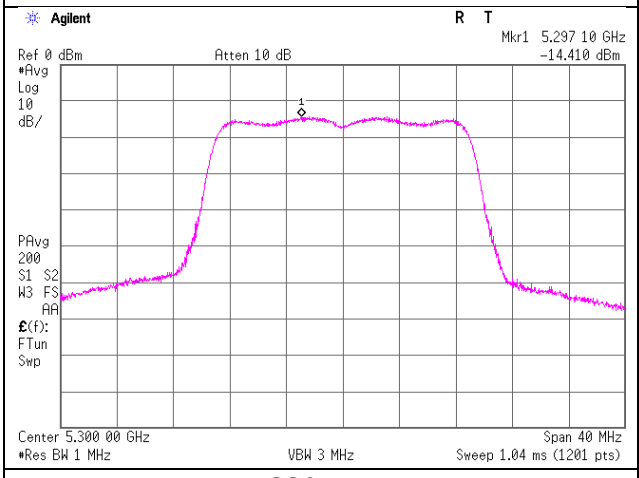
Maximum Power Spectral Density

11ac-20 Antenna port 1

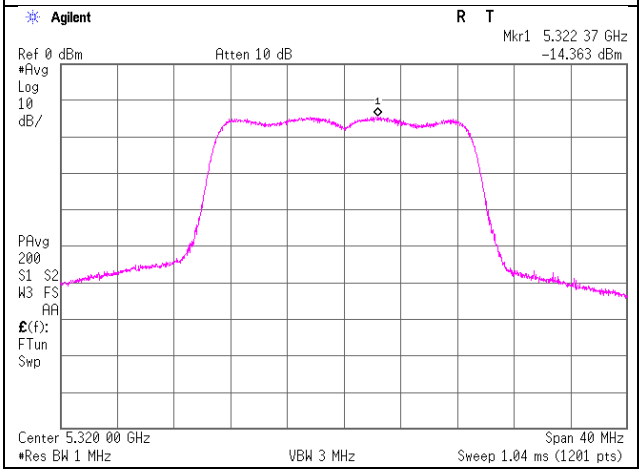
5260MHz



5300MHz

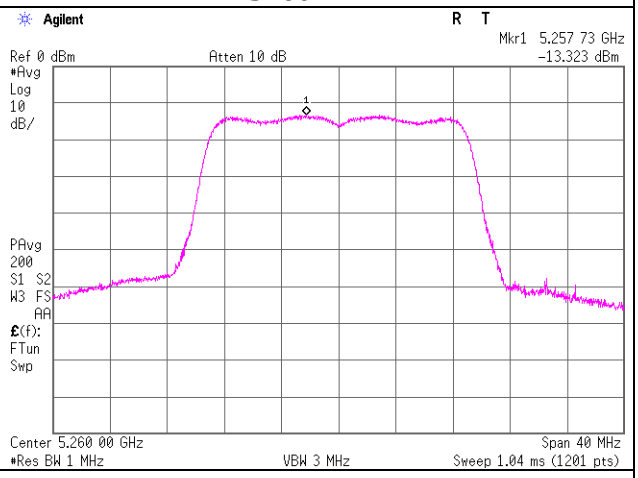


5320MHz

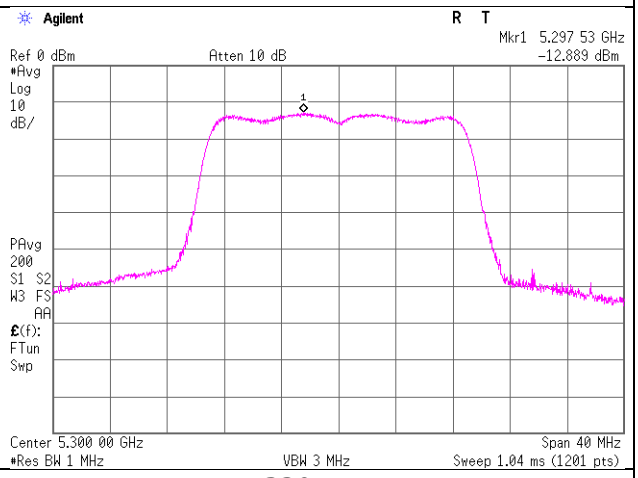


11ac-20 Antenna port 2

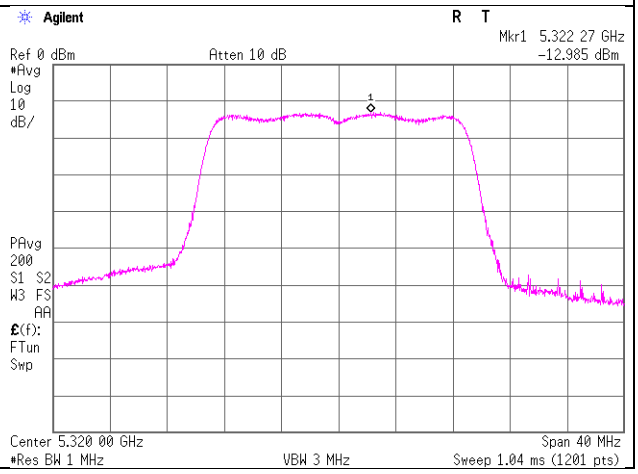
5260MHz



5300MHz



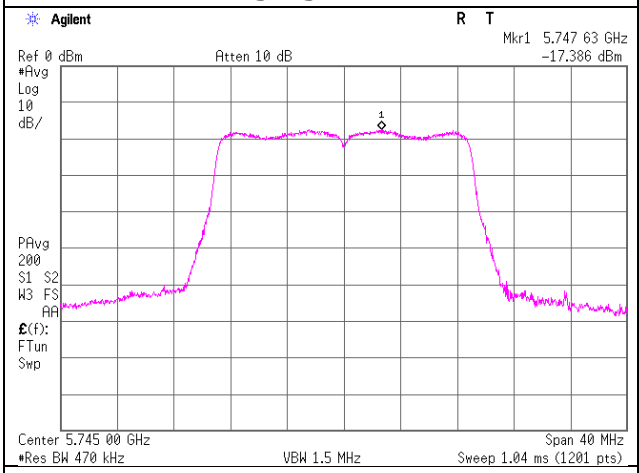
5320MHz



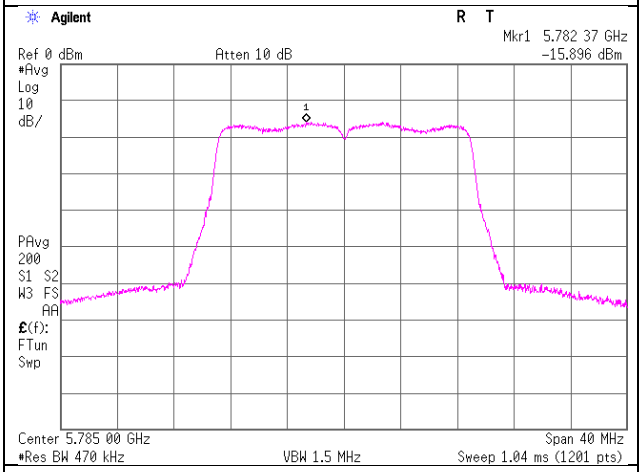
Maximum Power Spectral Density

11ac-20 Antenna port 1

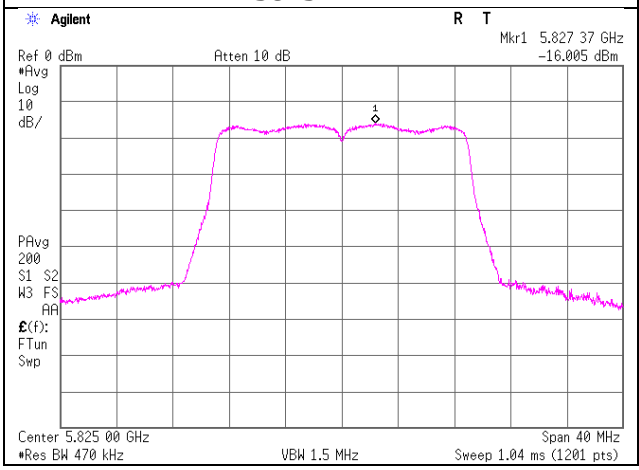
5745MHz



5785MHz

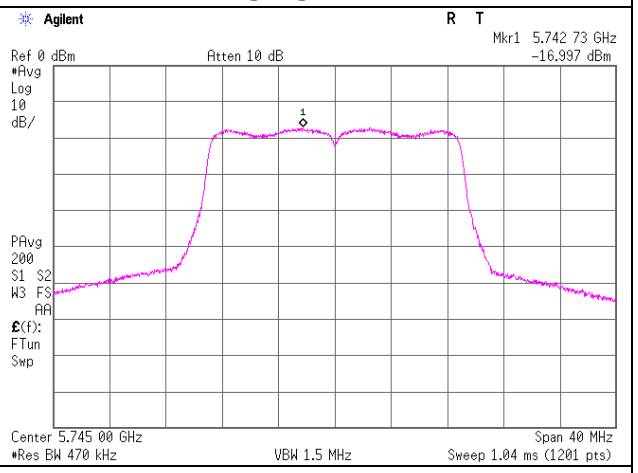


5825MHz

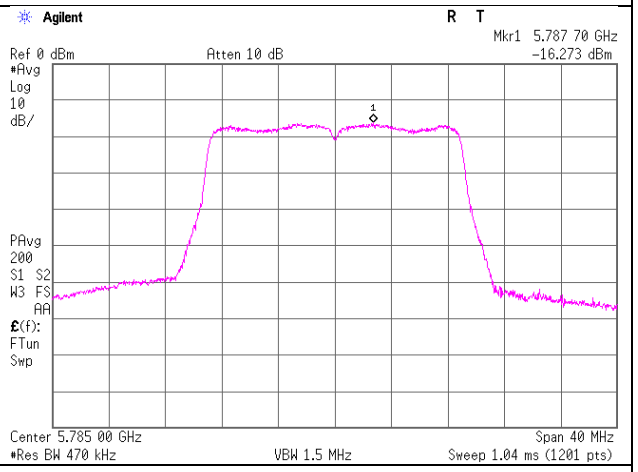


11ac-20 Antenna port 2

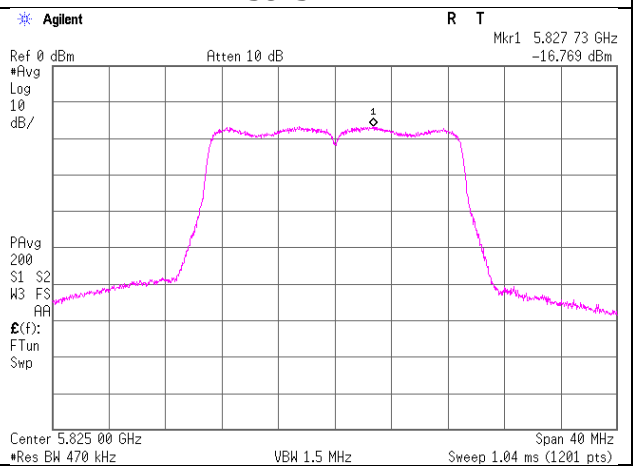
5745MHz



5785MHz



5825MHz



Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/27/2015
Temperature/ Humidity	25deg. C / 23% RH
Engineer	Yutaka Yoshida
Mode	11n-40 Tx

Antenna port 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	1	2	Sum				1	2	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5190	0.29	0.37	0.66	-1.82	11.00	12.82	0.94	1.19	2.13	3.29	17.00	13.71
5230	0.28	0.39	0.67	-1.77	11.00	12.77	0.91	1.25	2.16	3.34	17.00	13.66
5270	0.22	0.29	0.52	-2.88	11.00	13.88	0.72	0.95	1.67	2.23	17.00	14.77
5310	0.22	0.30	0.52	-2.87	11.00	13.87	0.71	0.96	1.68	2.24	17.00	14.76
5755	0.16	0.15	0.31	-5.03	30.00	35.03	0.52	0.50	1.02	0.08	36.00	35.92
5795	0.18	0.17	0.35	-4.52	30.00	34.52	0.59	0.55	1.15	0.59	36.00	35.41

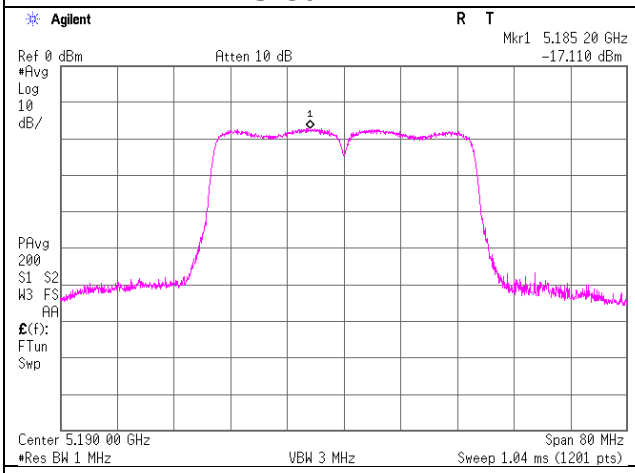
			Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5190	0.64	0.00	-17.11	1.25	9.84	5.11	-5.38	-0.27	-16.17	1.25	9.92	5.11	-4.35	0.76
5230	0.64	0.00	-17.27	1.26	9.84	5.11	-5.53	-0.42	-15.97	1.26	9.93	5.11	-4.14	0.97
5270	0.64	0.00	-18.26	1.26	9.84	5.11	-6.52	-1.41	-17.17	1.26	9.93	5.11	-5.34	-0.23
5310	0.64	0.00	-18.34	1.27	9.85	5.11	-6.59	-1.48	-17.11	1.27	9.93	5.11	-5.27	-0.16
5755	0.64	0.27	-20.10	1.36	9.85	5.11	-7.97	-2.86	-20.31	1.36	9.95	5.11	-8.10	-2.99
5795	0.64	0.27	-19.51	1.37	9.85	5.11	-7.37	-2.26	-19.92	1.37	9.95	5.11	-7.69	-2.58

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

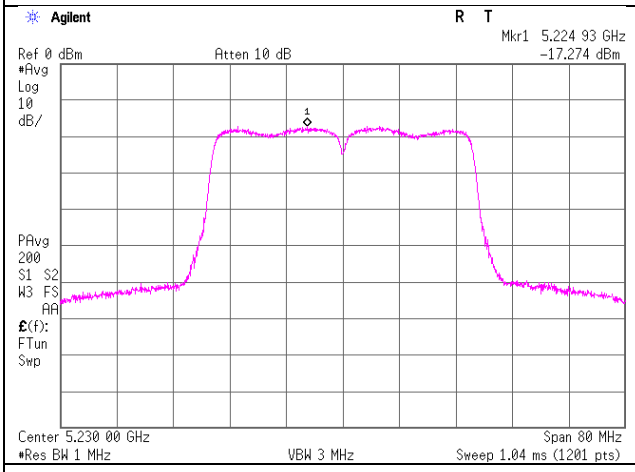
Maximum Power Spectral Density

11n-40 Antenna port 1

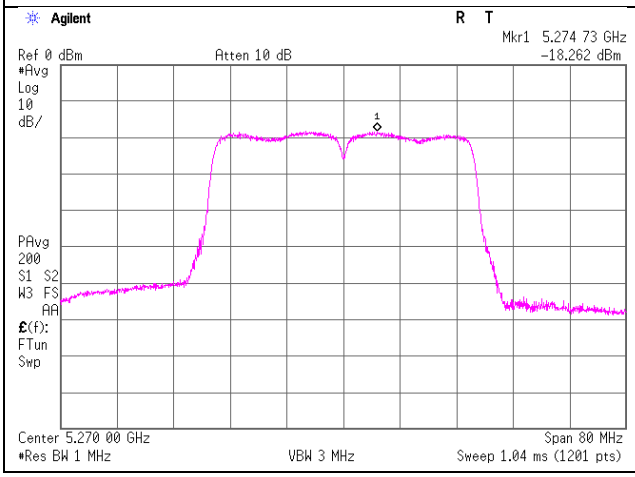
5190MHz



5230MHz

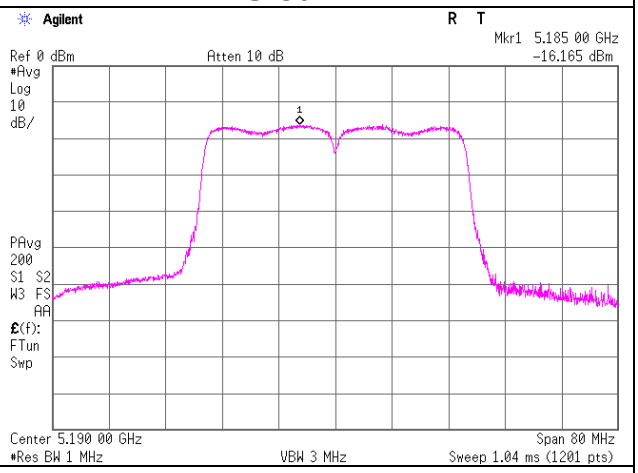


5270MHz

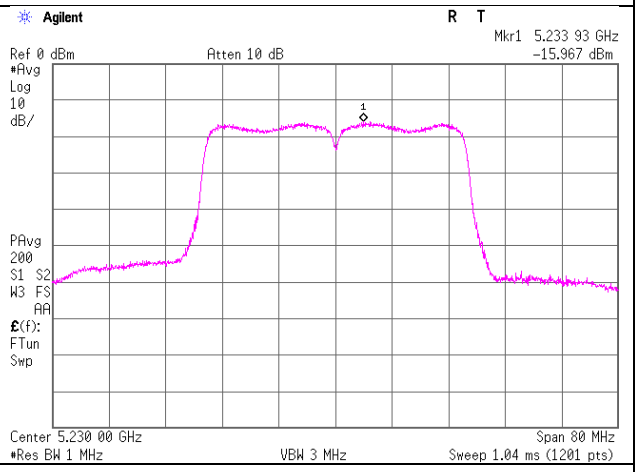


11n-40 Antenna port 2

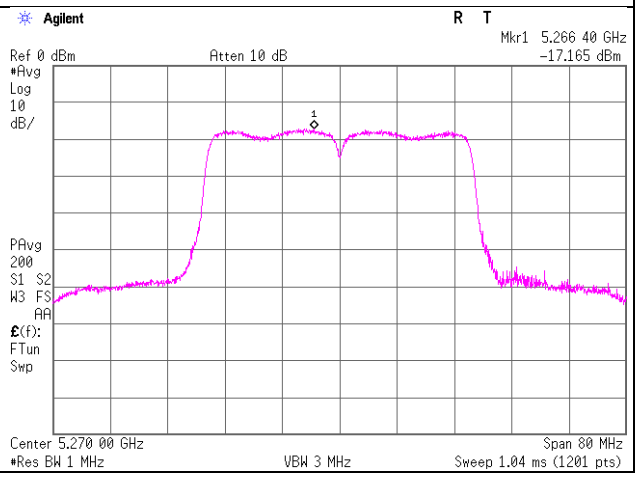
5190MHz



5230MHz



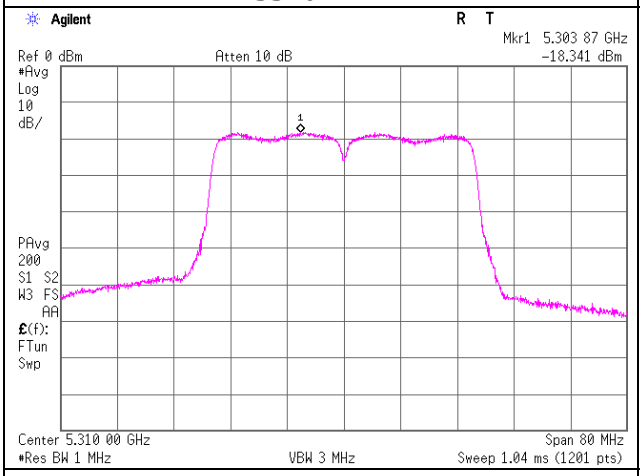
5270MHz



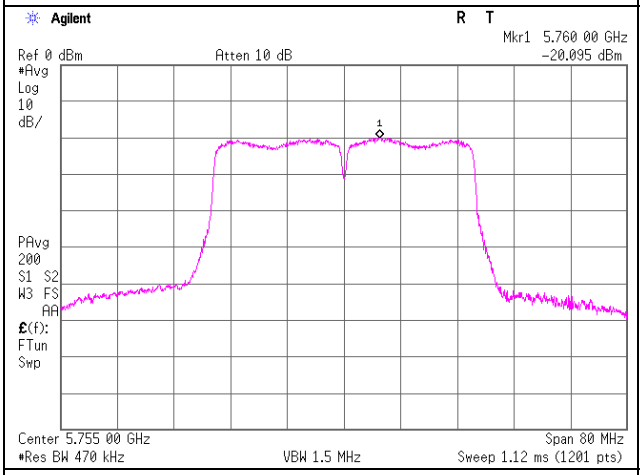
Maximum Power Spectral Density

11n-40 Antenna port 1

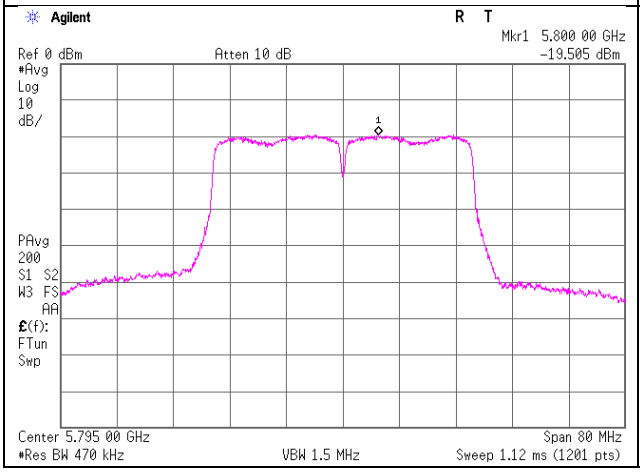
5310MHz



5755MHz

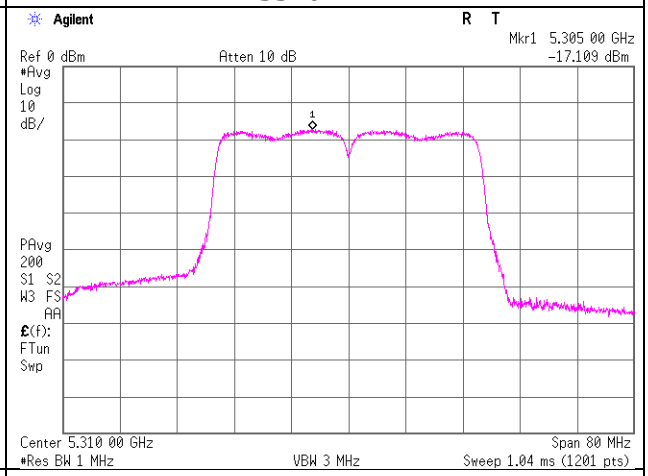


5795MHz

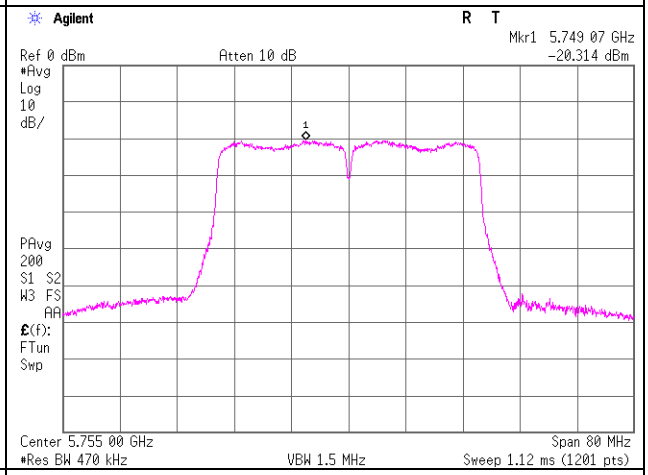


11n-40 Antenna port 2

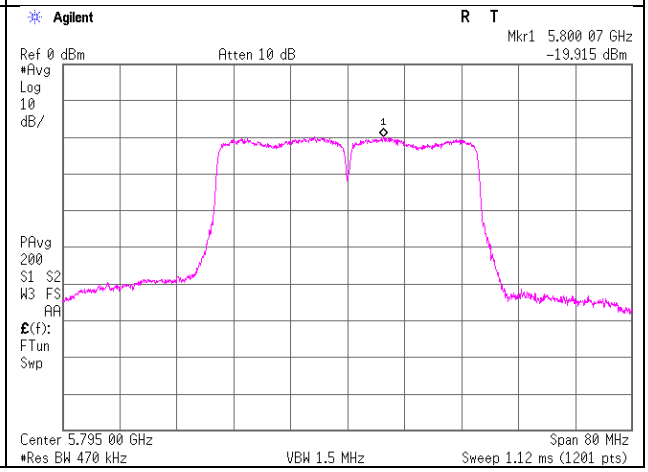
5310MHz



5755MHz



5795MHz



Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/27/2015
Temperature/ Humidity	25deg. C / 23% RH
Engineer	Yutaka Yoshida
Mode	11ac-40 Tx

Antenna port 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	1	2	Sum				1	2	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5190	0.30	0.39	0.68	-1.66	11.00	12.66	0.96	1.26	2.21	3.45	17.00	13.55
5230	0.28	0.34	0.62	-2.09	11.00	13.09	0.91	1.09	2.01	3.02	17.00	13.98
5270	0.28	0.34	0.61	-2.13	11.00	13.13	0.90	1.09	1.99	2.98	17.00	14.02
5310	0.26	0.30	0.56	-2.50	11.00	13.50	0.85	0.98	1.82	2.61	17.00	14.39
5755	0.13	0.13	0.26	-5.85	30.00	35.85	0.44	0.41	0.84	-0.74	36.00	36.74
5795	0.17	0.16	0.32	-4.89	30.00	34.89	0.55	0.51	1.05	0.22	36.00	35.78

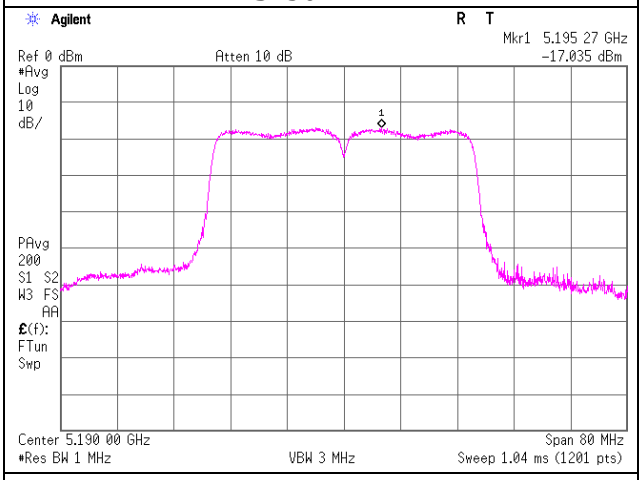
			Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5190	0.65	0.00	-17.04	1.25	9.84	5.11	-5.29	-0.18	-15.95	1.25	9.92	5.11	-4.12	0.99
5230	0.65	0.00	-17.26	1.26	9.84	5.11	-5.51	-0.40	-16.56	1.26	9.93	5.11	-4.72	0.39
5270	0.65	0.00	-17.32	1.26	9.84	5.11	-5.57	-0.46	-16.58	1.26	9.93	5.11	-4.75	0.36
5310	0.65	0.00	-17.60	1.27	9.85	5.11	-5.83	-0.72	-17.06	1.27	9.93	5.11	-5.21	-0.10
5755	0.65	0.27	-20.84	1.36	9.85	5.11	-8.70	-3.59	-21.25	1.36	9.95	5.11	-9.03	-3.92
5795	0.65	0.27	-19.88	1.37	9.85	5.11	-7.74	-2.63	-20.30	1.37	9.95	5.11	-8.06	-2.95

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

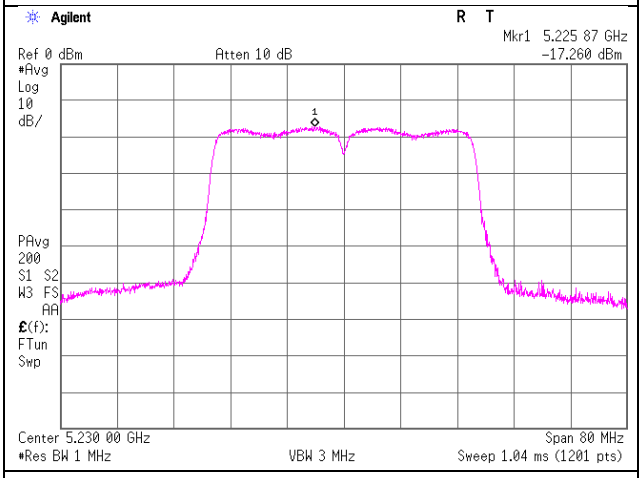
Maximum Power Spectral Density

11ac-40 Antenna port 1

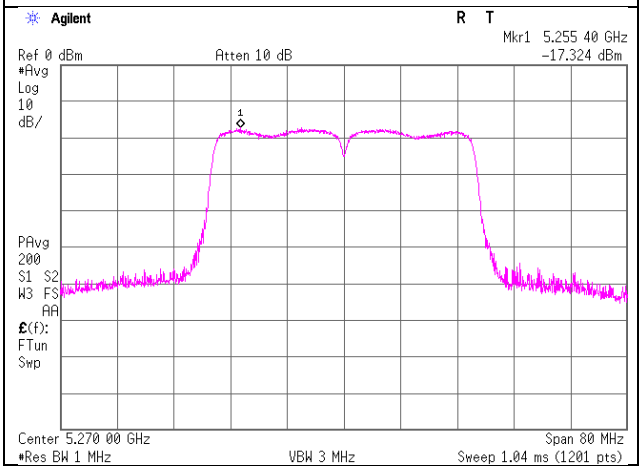
5190MHz



5230MHz

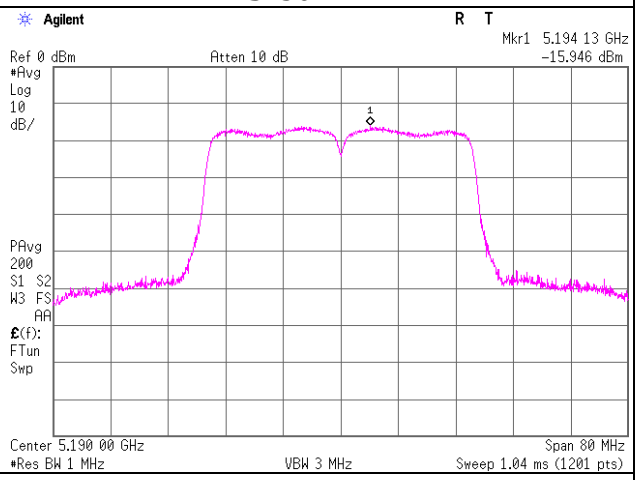


5270MHz

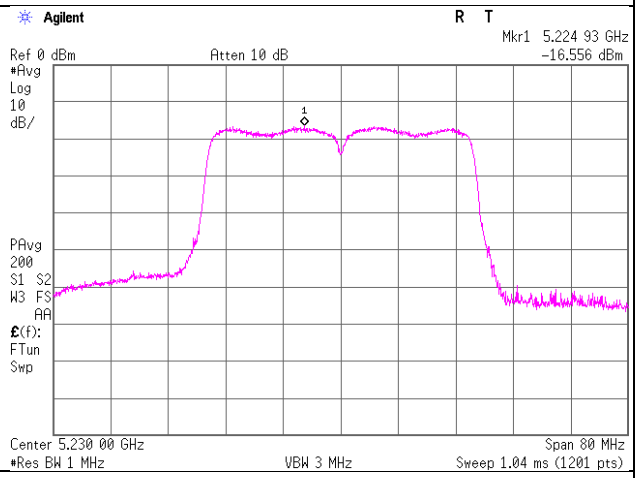


11ac-40 Antenna port 2

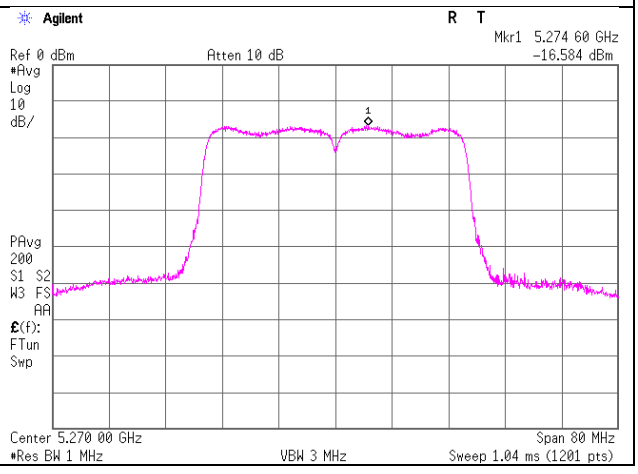
5190MHz



5230MHz



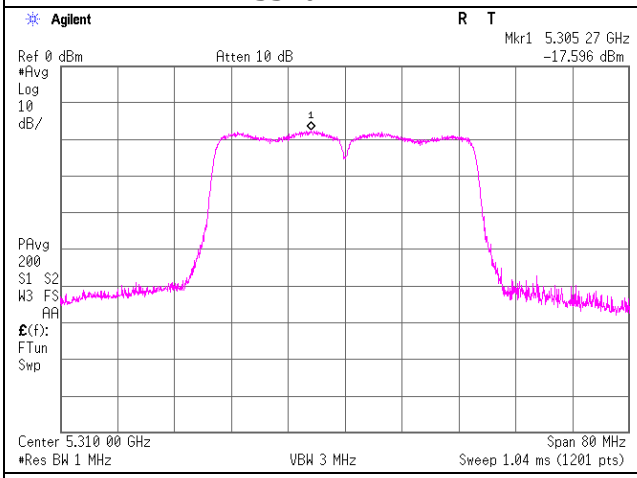
5270MHz



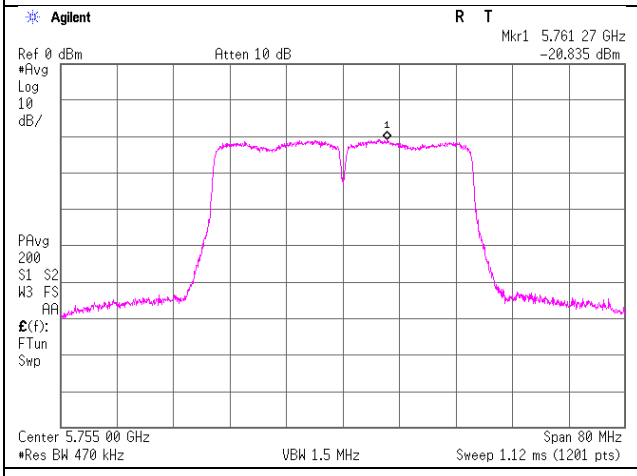
Maximum Power Spectral Density

11ac-40 Antenna port 1

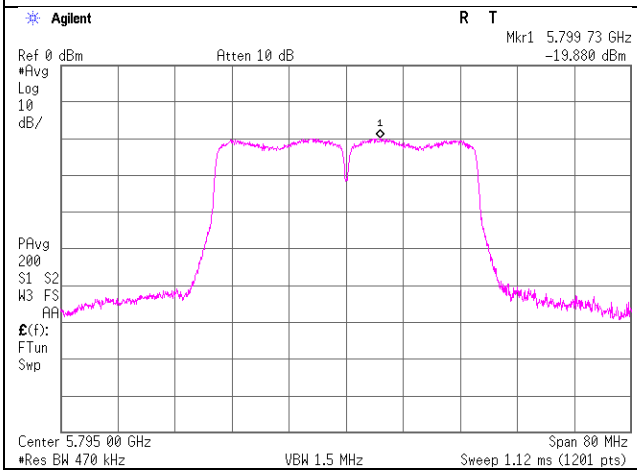
5310MHz



5755MHz

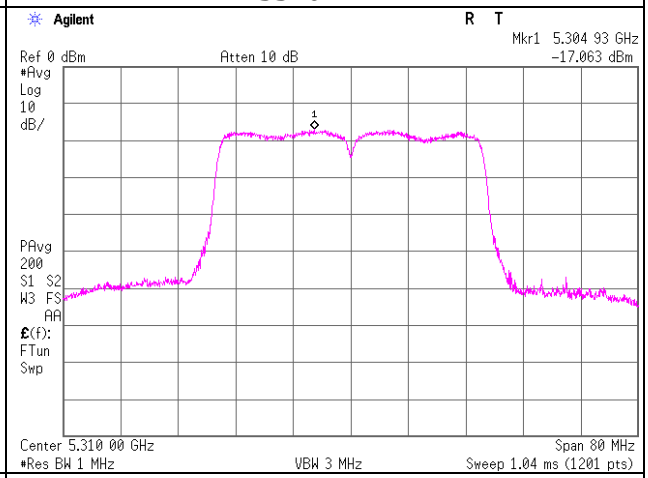


5795MHz

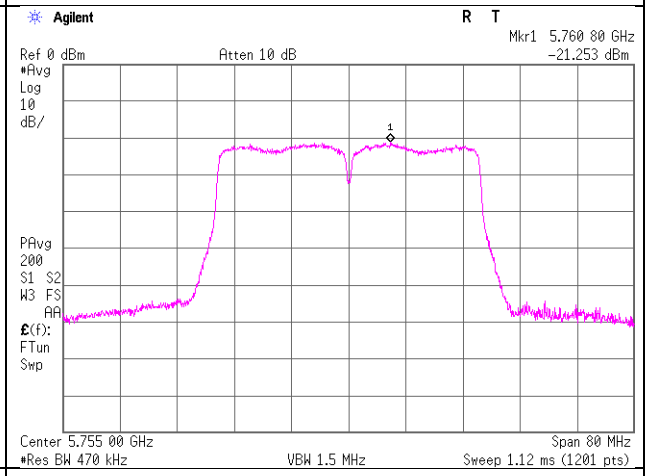


11ac-40 Antenna port 2

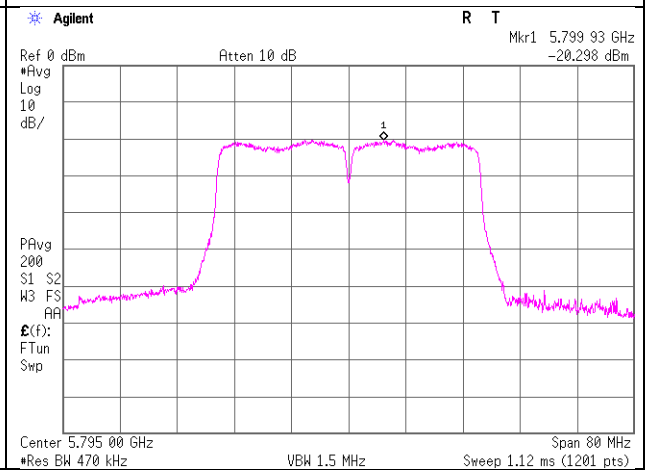
5310MHz



5755MHz



5795MHz



Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	11/27/2015
Temperature/ Humidity	25deg. C / 23% RH
Engineer	Yutaka Yoshida
Mode	11ac-80 Tx

Antenna port 1+2

Applied limit: 15.407, mobile and portable client device

Tested Frequency	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna port			Result	Limit	Margin	Antenna port			Result	Limit	Margin
	1	2	Sum				1	2	Sum			
[MHz]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[mW/MHz]	[mW/MHz]	[mW/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]
5210	0.08	0.10	0.19	-7.31	11.00	18.31	0.27	0.33	0.60	-2.20	17.00	19.20
5290	0.09	0.11	0.20	-6.99	11.00	17.99	0.29	0.36	0.65	-1.88	17.00	18.88
5775	0.05	0.04	0.09	-10.58	30.00	40.58	0.15	0.13	0.28	-5.47	36.00	41.47

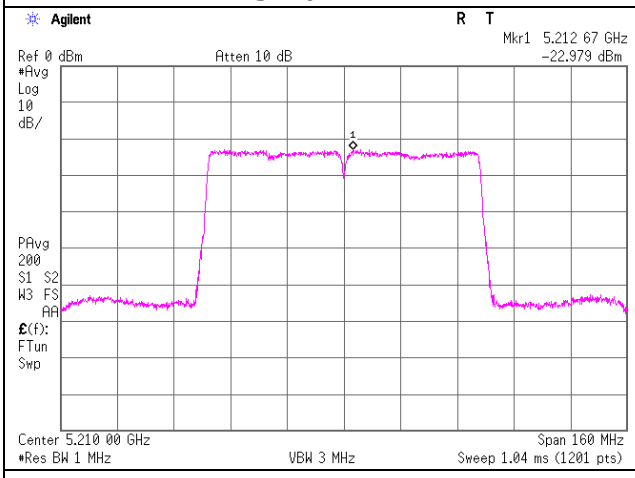
			Antenna port 1						**Antenna port 2**					
Tested Frequency	Duty Factor	RBW Correction Factor	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result		PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Result	
							Cond.	e.i.r.p.					Cond.	e.i.r.p.
[MHz]	[dB]	[dB]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5210	1.07	0.00	-22.98	1.25	9.84	5.11	-10.82	-5.71	-22.12	1.25	9.92	5.11	-9.88	-4.77
5290	1.07	0.00	-22.67	1.27	9.85	5.11	-10.49	-5.38	-21.83	1.27	9.93	5.11	-9.56	-4.45
5775	1.07	0.27	-25.88	1.37	9.85	5.11	-13.32	-8.21	-26.53	1.37	9.95	5.11	-13.87	-8.76

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

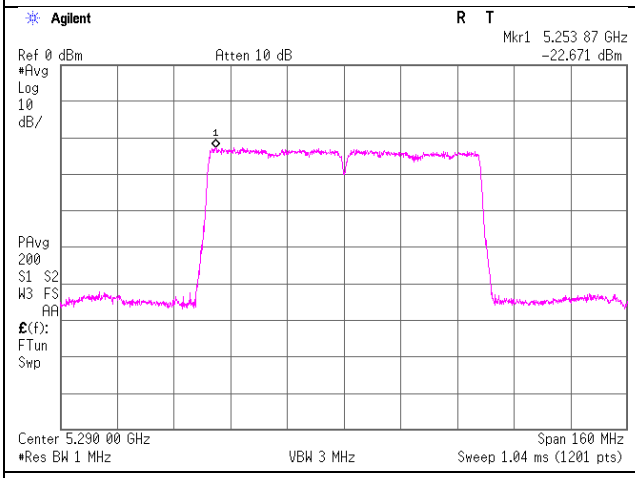
Maximum Power Spectral Density

11ac-80 Antenna port 1

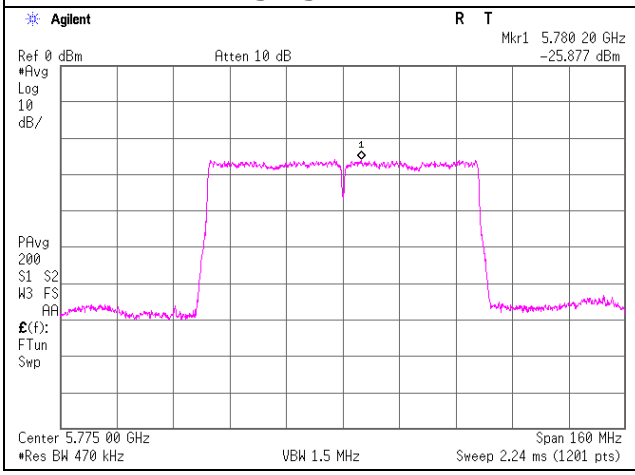
5210MHz



5290MHz

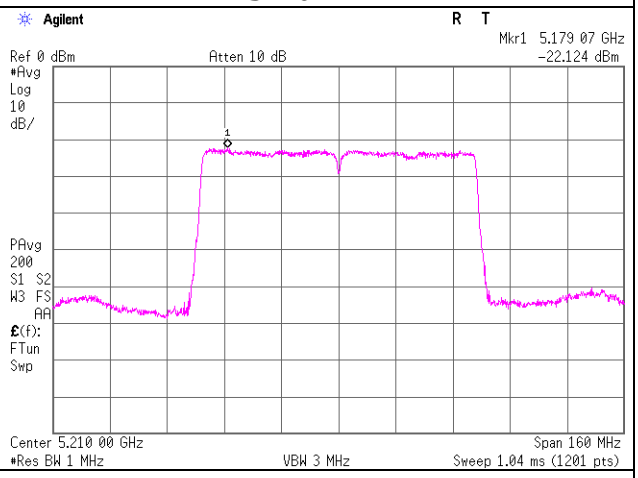


5775MHz

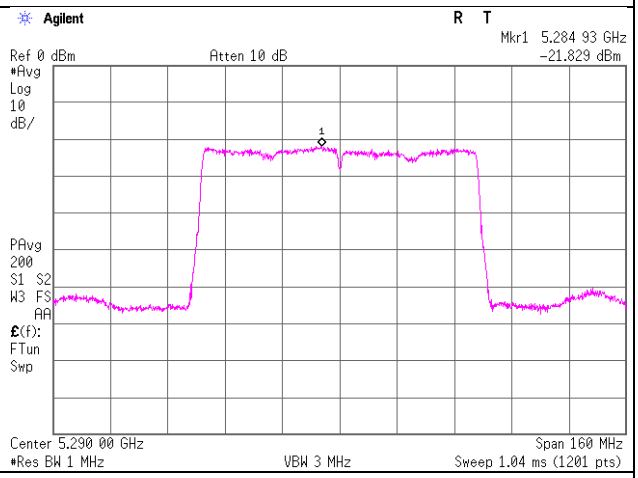


11ac-80 Antenna port 2

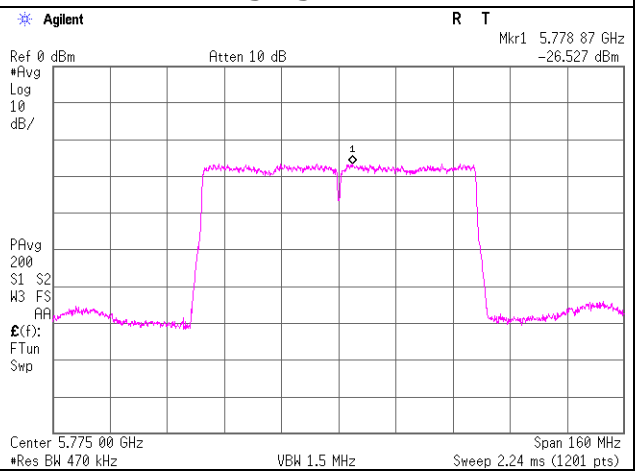
5210MHz



5290MHz



5775MHz



Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/03/2015	11/05/2015
Temperature / Humidity	23deg. C / 52 % RH	22deg. C / 50 % RH
Engineer	Ken Fujita	Ken Fujita
	(1 GHz-18 GHz)	(18 GHz-40 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	55.4	33.0	3.8	34.1	-	58.1	73.9	15.8	
Hori	10360.000	PK	45.8	40.0	-2.2	34.4	-	49.2	73.9	24.7	
Hori	15540.000	PK	43.9	39.6	-0.7	33.5	-	49.3	73.9	24.6	Floor Noise
Hori	20720.000	PK	47.6	39.5	-1.7	33.2	-	52.2	73.9	21.7	Floor Noise
Hori	5150.000	AV	42.7	33.0	3.8	34.1	0.3	45.7	53.9	8.2	*1)
Hori	10360.000	AV	38.9	40.0	-2.2	34.4	0.3	42.6	53.9	11.3	
Hori	15540.000	AV	34.8	39.6	-0.7	33.5	-	40.2	53.9	13.7	Floor Noise
Hori	20720.000	AV	38.0	39.5	-1.7	33.2	-	42.6	53.9	11.3	Floor Noise
Vert	5150.000	PK	55.5	33.0	3.8	34.1	-	58.2	73.9	15.7	
Vert	10360.000	PK	45.0	40.0	-2.2	34.4	-	48.4	73.9	25.5	
Vert	15540.000	PK	44.3	39.6	-0.7	33.5	-	49.7	73.9	24.2	Floor Noise
Vert	20720.000	PK	47.9	39.5	-1.7	33.2	-	52.5	73.9	21.4	Floor Noise
Vert	5150.000	AV	43.2	33.0	3.8	34.1	0.3	46.2	53.9	7.7	*1)
Vert	10360.000	AV	38.1	40.0	-2.2	34.4	0.3	41.8	53.9	12.1	
Vert	15540.000	AV	35.7	39.6	-0.7	33.5	-	41.1	53.9	12.8	Floor Noise
Vert	20720.000	AV	37.8	39.5	-1.7	33.2	-	42.4	53.9	11.5	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

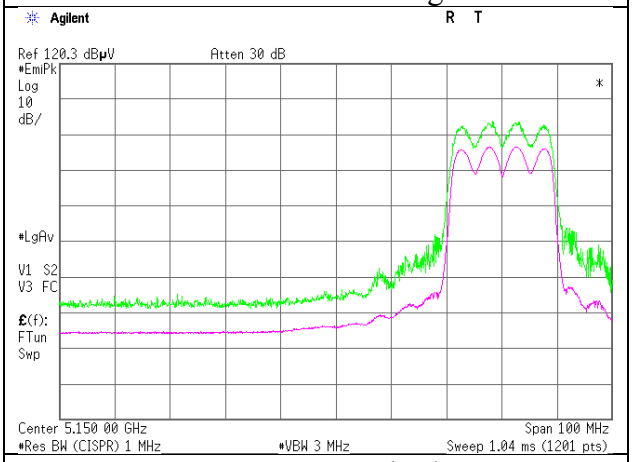
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/03/2015
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Ken Fujita
Mode	Tx 11ac-20 5180 MHz

Horizontal

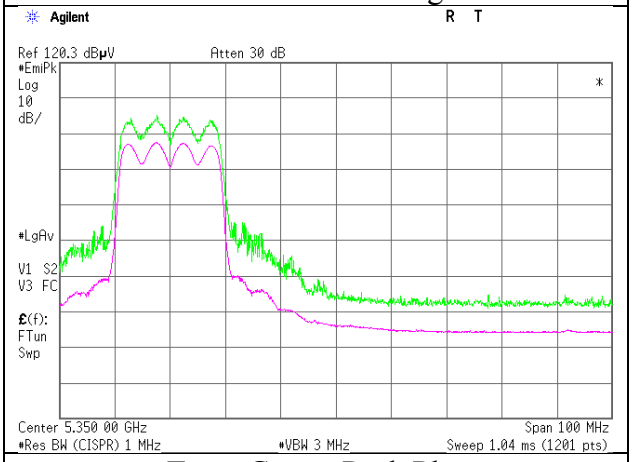
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/03/2015	11/05/2015
Temperature / Humidity	23deg. C / 52 % RH	22deg. C / 50 % RH
Engineer	Ken Fujita	Ken Fujita
	(1 GHz-18 GHz)	(18 GHz-40 GHz)
Mode	Tx 11ac-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	45.0	40.4	-2.2	34.3	-	48.9	73.9	25.0	
Hori	15780.000	PK	44.3	38.9	-0.9	33.6	-	48.7	73.9	25.2	Floor Noise
Hori	21040.000	PK	47.9	39.6	-1.6	33.3	-	52.6	73.9	21.3	Floor Noise
Hori	10520.000	AV	36.1	40.4	-2.2	34.3	0.3	40.3	53.9	13.6	
Hori	15780.000	AV	35.1	38.9	-0.9	33.6	-	39.5	53.9	14.4	Floor Noise
Hori	21040.000	AV	38.1	39.6	-1.6	33.3	-	42.8	53.9	11.1	Floor Noise
Vert	10520.000	PK	44.7	40.4	-2.2	34.3	-	48.6	73.9	25.3	
Vert	15780.000	PK	44.6	38.9	-0.9	33.6	-	49.0	73.9	24.9	Floor Noise
Vert	21040.000	PK	48.1	39.6	-1.6	33.3	-	52.8	73.9	21.1	Floor Noise
Vert	10520.000	AV	38.3	40.4	-2.2	34.3	0.3	42.5	53.9	11.4	
Vert	15780.000	AV	35.4	38.9	-0.9	33.6	-	39.8	53.9	14.1	Floor Noise
Vert	21040.000	AV	37.9	39.6	-1.6	33.3	-	42.6	53.9	11.3	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/03/2015	11/05/2015
Temperature / Humidity	23deg. C / 52 % RH	22deg. C / 50 % RH
Engineer	Ken Fujita	Ken Fujita
	(1 GHz-18 GHz)	(18 GHz-40 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	51.3	32.9	3.8	34.0	-	54.0	73.9	19.9	
Hori	10640.000	PK	44.9	40.8	-2.1	34.2	-	49.4	73.9	24.5	
Hori	15960.000	PK	44.6	38.4	-1.0	33.7	-	48.3	73.9	25.6	Floor Noise
Hori	21280.000	PK	47.7	39.8	-1.6	33.3	-	52.6	73.9	21.3	Floor Noise
Hori	5350.000	AV	41.5	32.9	3.8	34.0	0.3	44.5	53.9	9.4	*1)
Hori	10640.000	AV	37.1	40.8	-2.1	34.2	0.3	41.9	53.9	12.0	
Hori	15960.000	AV	35.2	38.4	-1.0	33.7	-	38.9	53.9	15.0	Floor Noise
Hori	21280.000	AV	38.1	39.8	-1.6	33.3	-	43.0	53.9	10.9	Floor Noise
Vert	5350.000	PK	50.8	32.9	3.8	34.0	-	53.5	73.9	20.4	
Vert	10640.000	PK	44.5	40.8	-2.1	34.2	-	49.0	73.9	24.9	
Vert	15960.000	PK	44.6	38.4	-1.0	33.7	-	48.3	73.9	25.6	Floor Noise
Vert	21280.000	PK	48.0	39.8	-1.6	33.3	-	52.9	73.9	21.0	Floor Noise
Vert	5350.000	AV	40.6	32.9	3.8	34.0	0.3	43.6	53.9	10.3	*1)
Vert	10640.000	AV	36.3	40.8	-2.1	34.2	0.3	41.1	53.9	12.8	
Vert	15960.000	AV	35.3	38.4	-1.0	33.7	-	39.0	53.9	14.9	Floor Noise
Vert	21280.000	AV	37.3	39.8	-1.6	33.3	-	42.2	53.9	11.7	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

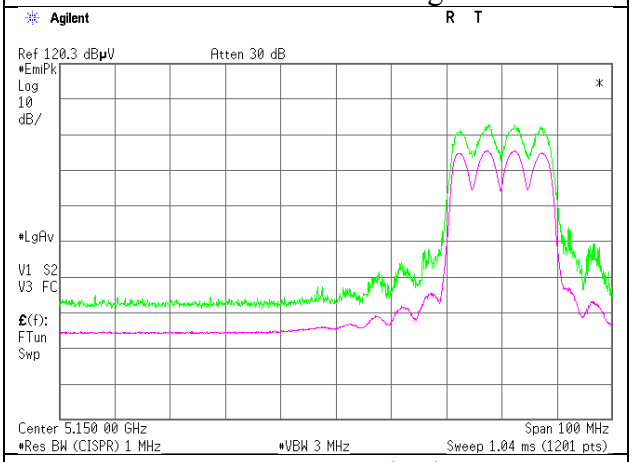
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/03/2015
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Ken Fujita
Mode	Tx 11ac-20 5320 MHz

Horizontal

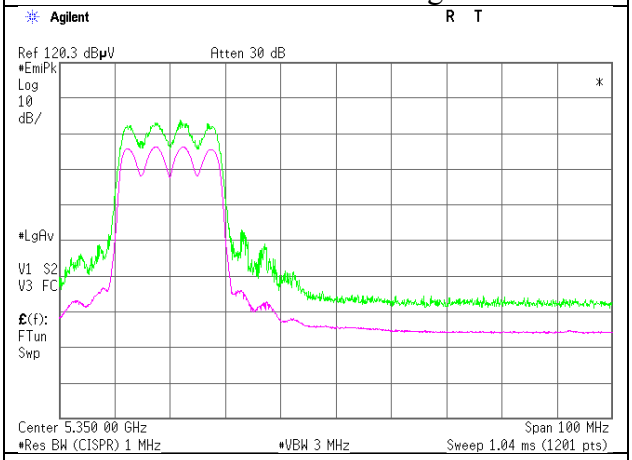
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/03/2015	11/05/2015
Temperature / Humidity	23deg. C / 52 % RH	22deg. C / 50 % RH
Engineer	Ken Fujita	Ken Fujita
	(1 GHz-18 GHz)	(18 GHz-40 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	5725.000	PK	56.9	33.2	4.0	33.9	-	60.2	73.9	13.7	
Hori	11490.000	PK	46.3	41.1	-1.7	33.7	-	52.0	73.9	21.9	
Hori	17235.000	PK	44.1	42.8	-0.6	32.7	-	53.6	73.9	20.3	Floor Noise
Hori	22980.000	PK	47.8	40.8	-1.3	32.1	-	55.2	73.9	18.7	Floor Noise
Hori	5725.000	AV	45.4	33.2	4.0	33.9	0.3	49.0	53.9	4.9	*1)
Hori	11490.000	AV	39.2	41.1	-1.7	33.7	0.3	45.2	53.9	8.7	
Hori	17235.000	AV	34.9	42.8	-0.6	32.7	-	44.4	53.9	9.5	Floor Noise
Hori	22980.000	AV	38.0	40.8	-1.3	32.1	-	45.4	53.9	8.5	Floor Noise
Vert	5725.000	PK	55.3	33.2	4.0	33.9	-	58.6	73.9	15.3	
Vert	11490.000	PK	46.2	41.1	-1.7	33.7	-	51.9	73.9	22.0	
Vert	17235.000	PK	43.2	42.8	-0.6	32.7	-	52.7	73.9	21.2	Floor Noise
Vert	22980.000	PK	47.9	40.8	-1.3	32.1	-	55.3	73.9	18.6	Floor Noise
Vert	5725.000	AV	42.5	33.2	4.0	33.9	0.3	46.1	53.9	7.8	*1)
Vert	11490.000	AV	37.9	41.1	-1.7	33.7	0.3	43.9	53.9	10.0	
Vert	17235.000	AV	34.7	42.8	-0.6	32.7	-	44.2	53.9	9.7	Floor Noise
Vert	22980.000	AV	37.9	40.8	-1.3	32.1	-	45.3	53.9	8.6	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

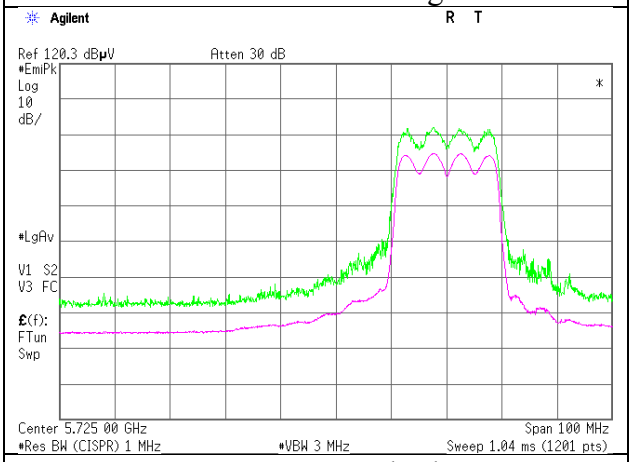
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/03/2015
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Ken Fujita
Mode	Tx 11ac-20 5745 MHz

Horizontal

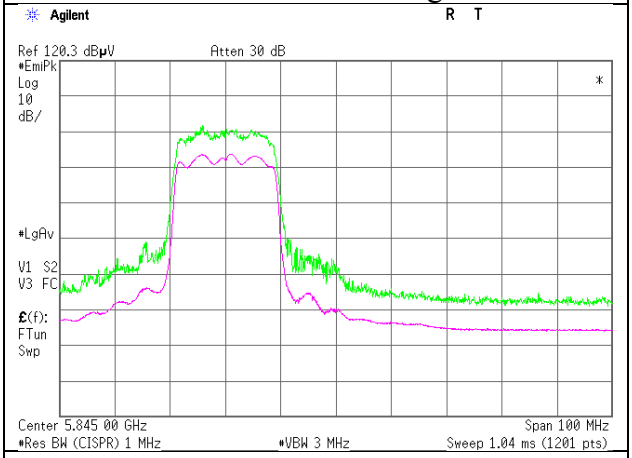
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/03/2015	11/05/2015
Temperature / Humidity	23deg. C / 52 % RH	22deg. C / 50 % RH
Engineer	Ken Fujita	Ken Fujita
	(1 GHz-18 GHz)	(18 GHz-40 GHz)
Mode	Tx 11ac-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	45.7	41.0	-1.7	33.7	-	51.3	73.9	22.6	
Hori	17355.000	PK	44.2	43.4	-0.4	32.7	-	54.5	73.9	19.4	Floor Noise
Hori	23140.000	PK	47.8	40.6	-1.3	32.0	-	55.1	73.9	18.8	Floor Noise
Hori	11570.000	AV	37.2	41.0	-1.7	33.7	0.3	43.1	53.9	10.8	
Hori	17355.000	AV	36.0	43.4	-0.4	32.7	-	46.3	53.9	7.6	Floor Noise
Hori	23140.000	AV	38.1	40.6	-1.3	32.0	-	45.4	53.9	8.5	Floor Noise
Vert	11570.000	PK	46.0	41.0	-1.7	33.7	-	51.6	73.9	22.3	
Vert	17355.000	PK	44.1	43.4	-0.4	32.7	-	54.4	73.9	19.5	Floor Noise
Vert	23140.000	PK	48.3	40.6	-1.3	32.0	-	55.6	73.9	18.3	Floor Noise
Vert	11570.000	AV	38.5	41.0	-1.7	33.7	0.3	44.4	53.9	9.5	
Vert	17355.000	AV	35.0	43.4	-0.4	32.7	-	45.3	53.9	8.6	Floor Noise
Vert	23140.000	AV	38.0	40.6	-1.3	32.0	-	45.3	53.9	8.6	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/03/2015	11/05/2015
Temperature / Humidity	23deg. C / 52 % RH	22deg. C / 50 % RH
Engineer	Ken Fujita	Ken Fujita
	(1 GHz-18 GHz)	(18 GHz-40 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	57.0	33.4	4.0	34.0	-	60.4	73.9	13.5	
Hori	11650.000	PK	47.3	40.9	-1.6	33.6	-	53.0	73.9	20.9	
Hori	17475.000	PK	44.7	43.9	-0.4	32.7	-	55.5	73.9	18.4	Floor Noise
Hori	23300.000	PK	47.8	40.3	-1.2	32.0	-	54.9	73.9	19.0	Floor Noise
Hori	5850.000	AV	45.0	33.4	4.0	34.0	0.3	48.7	53.9	5.2	*1)
Hori	11650.000	AV	41.4	40.9	-1.6	33.6	0.3	47.4	53.9	6.5	
Hori	17475.000	AV	36.3	43.9	-0.4	32.7	-	47.1	53.9	6.8	Floor Noise
Hori	23300.000	AV	38.2	40.3	-1.2	32.0	-	45.3	53.9	8.6	Floor Noise
Vert	5850.000	PK	53.1	33.4	4.0	34.0	-	56.5	73.9	17.4	
Vert	11650.000	PK	46.4	40.9	-1.6	33.6	-	52.1	73.9	21.8	
Vert	17475.000	PK	43.8	43.9	-0.4	32.7	-	54.6	73.9	19.3	Floor Noise
Vert	23300.000	PK	47.9	40.3	-1.2	32.0	-	55.0	73.9	18.9	Floor Noise
Vert	5850.000	AV	41.5	33.4	4.0	34.0	0.3	45.2	53.9	8.7	*1)
Vert	11650.000	AV	40.5	40.9	-1.6	33.6	0.3	46.5	53.9	7.4	
Vert	17475.000	AV	34.4	43.9	-0.4	32.7	-	45.2	53.9	8.7	Floor Noise
Vert	23300.000	AV	38.2	40.3	-1.2	32.0	-	45.3	53.9	8.6	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

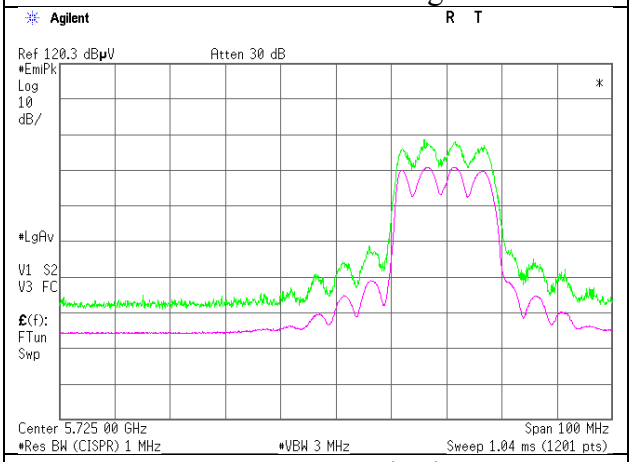
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/03/2015
Temperature / Humidity	23deg. C / 52 % RH
Engineer	Ken Fujita
Mode	Tx 11ac-20 5825 MHz

Horizontal

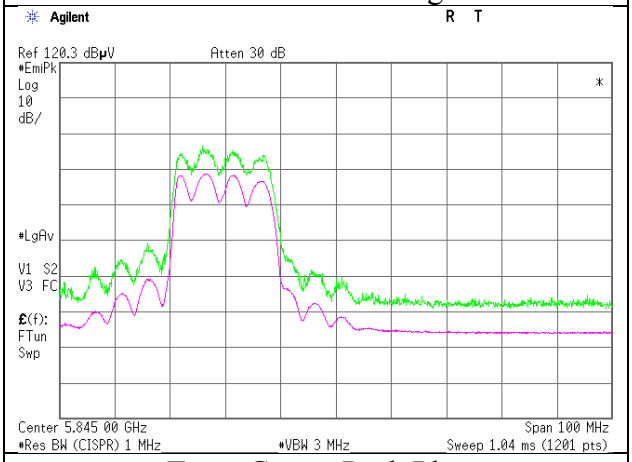
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/04/2015	11/05/2015
Temperature / Humidity	23deg. C / 39 % RH	22deg. C / 50 % RH
Engineer	Shinichi Miyazono	Ken Fujita
	(1 GHz-10 GHz)	(10 GHz-40 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	5147.625	PK	64.9	33.0	3.8	34.1	-	67.6	73.9	6.3	
Hori	5150.000	PK	64.5	33.0	3.8	34.1	-	67.2	73.9	6.7	
Hori	10380.000	PK	44.8	40.0	-2.2	34.4	-	48.2	73.9	25.7	
Hori	15570.000	PK	43.8	39.5	-0.7	33.5	-	49.1	73.9	24.8	Floor Noise
Hori	20760.000	PK	47.9	39.5	-1.7	33.2	-	52.5	73.9	21.4	Floor Noise
Hori	5147.625	AV	50.0	33.0	3.8	34.1	0.7	53.4	53.9	0.5	*1)
Hori	5150.000	AV	49.8	33.0	3.8	34.1	0.7	53.2	53.9	0.7	*1)
Hori	10380.000	AV	37.1	40.0	-2.2	34.4	0.7	41.2	53.9	12.7	
Hori	15570.000	AV	35.4	39.5	-0.7	33.5	-	40.7	53.9	13.2	Floor Noise
Hori	20760.000	AV	38.0	39.5	-1.7	33.2	-	42.6	53.9	11.3	Floor Noise
Vert	5147.625	PK	62.0	33.0	3.8	34.1	-	64.7	73.9	9.2	
Vert	5150.000	PK	62.7	33.0	3.8	34.1	-	65.4	73.9	8.5	
Vert	10380.000	PK	47.5	40.0	-2.2	34.4	-	50.9	73.9	23.0	
Vert	15570.000	PK	44.2	39.5	-0.7	33.5	-	49.5	73.9	24.4	Floor Noise
Vert	20760.000	PK	48.9	39.5	-1.7	33.2	-	53.5	73.9	20.4	Floor Noise
Vert	5147.625	AV	47.5	33.0	3.8	34.1	0.7	50.9	53.9	3.0	*1)
Vert	5150.000	AV	47.9	33.0	3.8	34.1	0.7	51.3	53.9	2.6	*1)
Vert	10380.000	AV	40.7	40.0	-2.2	34.4	0.7	44.8	53.9	9.1	
Vert	15570.000	AV	36.3	39.5	-0.7	33.5	-	41.6	73.9	32.3	Floor Noise
Vert	20760.000	AV	37.5	39.5	-1.7	33.2	-	42.1	53.9	11.8	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

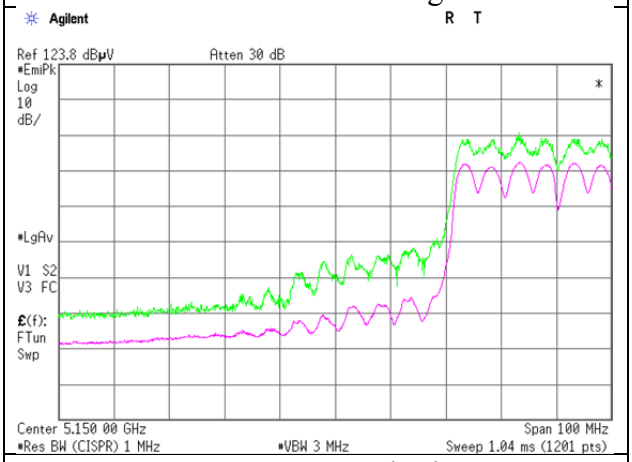
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/04/2015
Temperature / Humidity	23deg. C / 39 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5190 MHz

Horizontal

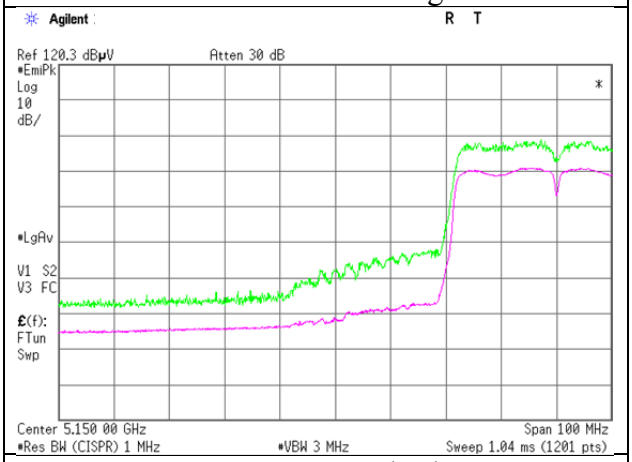
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/04/2015	11/05/2015
Temperature / Humidity	23deg. C / 39 % RH	22deg. C / 50 % RH
Engineer	Shinichi Miyazono	Ken Fujita
	(1 GHz-10 GHz)	(10 GHz-40 GHz)
Mode	Tx 11ac-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	46.3	40.5	-2.2	34.3	-	50.3	73.9	23.6	
Hori	15810.000	PK	43.4	38.8	-0.9	33.6	-	47.7	73.9	26.2	Floor Noise
Hori	21080.000	PK	48.1	39.6	-1.6	33.3	-	52.8	73.9	21.1	Floor Noise
Hori	10540.000	AV	39.5	40.5	-2.2	34.3	0.7	44.2	53.9	9.7	
Hori	15810.000	AV	35.2	38.8	-0.9	33.6	-	39.5	53.9	14.4	Floor Noise
Hori	21080.000	AV	38.2	39.6	-1.6	33.3	-	42.9	53.9	11.0	Floor Noise
Vert	10540.000	PK	46.3	40.5	-2.2	34.3	-	50.3	73.9	23.6	
Vert	15810.000	PK	44.3	38.8	-0.9	33.6	-	48.6	73.9	25.3	Floor Noise
Vert	21080.000	PK	48.8	39.6	-1.6	33.3	-	53.5	73.9	20.4	Floor Noise
Vert	10540.000	AV	37.6	40.5	-2.2	34.3	0.7	42.3	53.9	11.6	
Vert	15810.000	AV	36.6	38.8	-0.9	33.6	-	40.9	73.9	33.0	Floor Noise
Vert	21080.000	AV	37.7	39.6	-1.6	33.3	-	42.4	53.9	11.5	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber		
Report No.	11022049H		
Date	11/04/2015	11/05/2015	11/08/2015
Temperature / Humidity	23deg. C / 39 % RH	22deg. C / 50 % RH	23deg. C / 63 % RH
Engineer	Shinichi Miyazono (1 GHz-10 GHz)	Ken Fujita (10 GHz-40 GHz)	Shinichi Miyazono (Below 1 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	62.499	QP	48.4	6.6	7.1	28.4	-	33.7	40.0	6.3	
Hori	70.310	QP	47.0	5.7	7.2	28.4	-	31.5	40.0	8.5	
Hori	143.998	QP	32.9	14.4	7.8	28.0	-	27.1	43.5	16.4	
Hori	166.349	QP	33.3	15.7	7.9	27.9	-	29.0	43.5	14.5	
Hori	249.996	QP	39.8	17.2	8.5	27.4	-	38.1	46.0	7.9	
Hori	431.996	QP	30.7	17.4	9.5	28.3	-	29.3	46.0	16.7	
Hori	5350.000	PK	65.4	32.9	3.8	34.0	-	68.1	73.9	5.8	
Hori	5352.022	PK	65.4	32.9	3.8	34.0	-	68.1	73.9	5.8	
Hori	10620.000	PK	45.4	40.7	-2.1	34.2	-	49.8	73.9	24.1	
Hori	15930.000	PK	43.6	38.5	-0.9	33.7	-	47.5	73.9	26.4	Floor Noise
Hori	21240.000	PK	47.8	39.8	-1.6	33.3	-	52.7	73.9	21.2	Floor Noise
Hori	5350.000	AV	50.5	32.9	3.8	34.0	0.7	53.8	53.9	0.1	*1)
Hori	5352.022	AV	50.5	32.9	3.8	34.0	0.7	53.8	53.9	0.1	*1)
Hori	10620.000	AV	37.3	40.7	-2.1	34.2	0.7	42.4	53.9	11.5	
Hori	15930.000	AV	35.9	38.5	-0.9	33.7	-	39.8	53.9	14.1	Floor Noise
Hori	21240.000	AV	38.4	39.8	-1.6	33.3	-	43.3	53.9	10.6	Floor Noise
Vert	62.499	QP	47.1	6.6	7.1	28.4	-	32.4	40.0	7.6	
Vert	78.972	QP	49.4	6.3	7.3	28.3	-	34.7	40.0	5.3	
Vert	249.996	QP	35.3	17.2	8.5	27.4	-	33.6	46.0	12.4	
Vert	623.994	QP	30.6	19.6	10.3	28.4	-	32.1	46.0	13.9	
Vert	719.992	QP	31.1	20.7	10.7	28.0	-	34.5	46.0	11.5	
Vert	830.446	QP	28.2	22.0	11.1	27.7	-	33.6	46.0	12.4	
Vert	5350.000	PK	63.5	32.9	3.8	34.0	-	66.2	73.9	7.7	
Vert	5352.022	PK	64.6	32.9	3.8	34.0	-	67.3	73.9	6.6	
Vert	10620.000	PK	47.2	40.7	-2.1	34.2	-	51.6	73.9	22.3	
Vert	15930.000	PK	44.5	38.5	-0.9	33.7	-	48.4	73.9	25.5	Floor Noise
Vert	21240.000	PK	47.9	39.8	-1.6	33.3	-	52.8	73.9	21.1	Floor Noise
Vert	5350.000	AV	49.5	32.9	3.8	34.0	0.7	52.9	53.9	1.0	*1)
Vert	5352.022	AV	50.1	32.9	3.8	34.0	0.7	53.5	53.9	0.4	*1)
Vert	10620.000	AV	41.6	40.7	-2.1	34.2	0.7	46.7	53.9	7.2	
Vert	15930.000	AV	36.7	38.5	-0.9	33.7	-	40.6	73.9	33.3	Floor Noise
Vert	21240.000	AV	36.8	39.8	-1.6	33.3	-	41.7	53.9	12.2	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

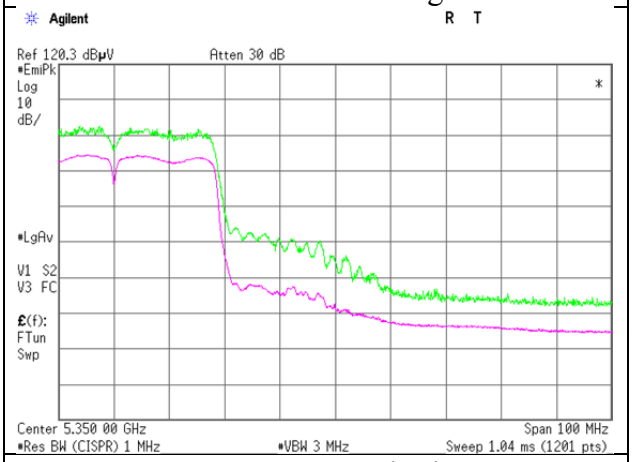
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/04/2015
Temperature / Humidity	23deg. C / 39 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5310 MHz

Horizontal

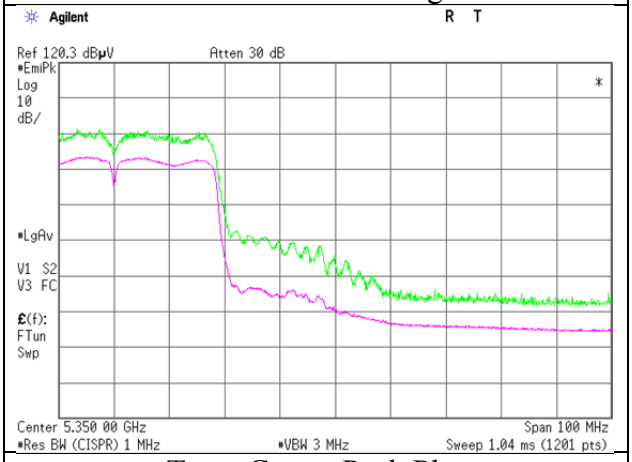
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/04/2015	11/05/2015
Temperature / Humidity	23deg. C / 39 % RH	22deg. C / 50 % RH
Engineer	Shinichi Miyazono	Ken Fujita
	(1 GHz-10 GHz)	(10 GHz-40 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	5712.612	PK	55.6	33.2	4.0	33.9	-	58.9	73.9	15.0	
Hori	5715.000	PK	58.7	33.2	4.0	33.9	-	62.0	73.9	11.9	
Hori	5722.108	PK	62.7	33.2	4.0	33.9	-	66.0	73.9	7.9	
Hori	5725.000	PK	61.9	33.2	4.0	33.9	-	65.2	73.9	8.7	
Hori	11510.000	PK	47.2	41.1	-1.7	33.7	-	52.9	73.9	21.0	
Hori	17265.000	PK	43.6	43.0	-0.6	32.7	-	53.3	73.9	20.6	Floor Noise
Hori	23020.000	PK	47.4	40.8	-1.3	32.0	-	54.9	73.9	19.0	Floor Noise
Hori	5712.612	AV	44.2	33.2	4.0	33.9	0.7	48.2	53.9	5.7	*1)
Hori	5715.000	AV	44.2	33.2	4.0	33.9	0.7	48.2	53.9	5.7	*1)
Hori	5722.108	AV	49.0	33.2	4.0	33.9	0.7	53.0	53.9	0.9	*1)
Hori	5725.000	AV	47.7	33.2	4.0	33.9	0.7	51.7	53.9	2.2	*1)
Hori	11510.000	AV	41.3	41.1	-1.7	33.7	0.7	47.7	53.9	6.2	
Hori	17265.000	AV	36.3	43.0	-0.6	32.7	-	46.0	53.9	7.9	Floor Noise
Hori	23020.000	AV	38.6	40.8	-1.3	32.0	-	46.1	53.9	7.8	Floor Noise
Vert	5712.612	PK	55.6	33.2	4.0	33.9	-	58.9	73.9	15.0	
Vert	5715.000	PK	55.5	33.2	4.0	33.9	-	58.8	73.9	15.1	
Vert	5722.108	PK	58.4	33.2	4.0	33.9	-	61.7	73.9	12.2	
Vert	5725.000	PK	58.1	33.2	4.0	33.9	-	61.4	73.9	12.5	
Vert	11510.000	PK	45.5	41.1	-1.7	33.7	-	51.2	73.9	22.7	
Vert	17265.000	PK	44.8	43.0	-0.6	32.7	-	54.5	73.9	19.4	Floor Noise
Vert	23020.000	PK	47.6	40.8	-1.3	32.0	-	55.1	73.9	18.8	Floor Noise
Vert	5712.612	AV	41.5	33.2	4.0	33.9	0.7	45.5	53.9	8.4	*1)
Vert	5715.000	AV	41.4	33.2	4.0	33.9	0.7	45.4	53.9	8.5	*1)
Vert	5722.108	AV	44.7	33.2	4.0	33.9	0.7	48.7	53.9	5.2	*1)
Vert	5725.000	AV	44.6	33.2	4.0	33.9	0.7	48.6	53.9	5.3	*1)
Vert	11510.000	AV	37.8	41.1	-1.7	33.7	0.7	44.2	53.9	9.7	
Vert	17265.000	AV	36.3	43.0	-0.6	32.7	-	46.0	73.9	27.9	Floor Noise
Vert	23020.000	AV	37.4	40.8	-1.3	32.0	-	44.9	53.9	9.0	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

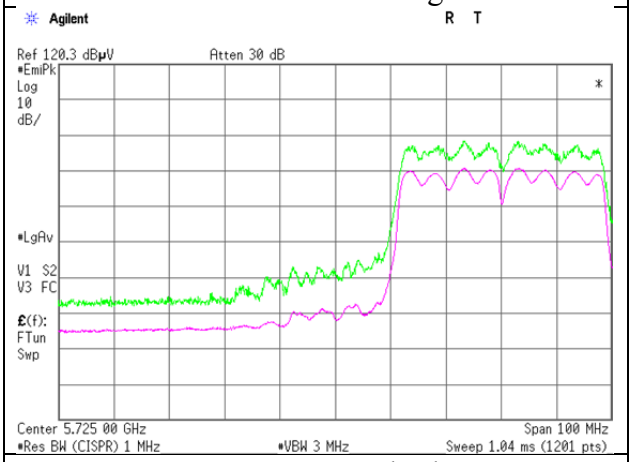
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/04/2015
Temperature / Humidity	23deg. C / 39 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5755 MHz

Horizontal

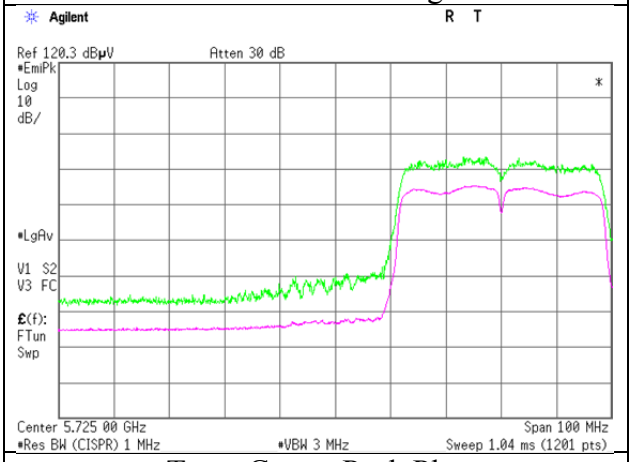
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/04/2015	11/05/2015
Temperature / Humidity	23deg. C / 39 % RH	22deg. C / 50 % RH
Engineer	Shinichi Miyazono	Ken Fujita
	(1 GHz-10 GHz)	(10 GHz-40 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	53.8	33.4	4.0	34.0	-	57.2	73.9	16.7	
Hori	5860.000	PK	53.3	33.4	4.0	34.0	-	56.7	73.9	17.2	
Hori	11590.000	PK	45.5	41.0	-1.6	33.7	-	51.2	73.9	22.7	
Hori	17385.000	PK	43.8	43.5	-0.4	32.7	-	54.2	73.9	19.7	Floor Noise
Hori	23180.000	PK	47.4	40.5	-1.2	32.0	-	54.7	73.9	19.2	Floor Noise
Hori	5850.000	AV	43.7	33.4	4.0	34.0	0.7	47.8	53.9	6.1	*1)
Hori	5860.000	AV	42.6	33.4	4.0	34.0	0.7	46.7	53.9	7.2	*1)
Hori	11590.000	AV	37.9	41.0	-1.6	33.7	0.7	44.3	53.9	9.6	
Hori	17385.000	AV	35.8	43.5	-0.4	32.7	-	46.2	53.9	7.7	Floor Noise
Hori	23180.000	AV	38.8	40.5	-1.2	32.0	-	46.1	53.9	7.8	Floor Noise
Vert	5850.000	PK	47.6	33.4	4.0	34.0	-	51.0	73.9	22.9	
Vert	5860.000	PK	46.8	33.4	4.0	34.0	-	50.2	73.9	23.7	
Vert	11590.000	PK	46.1	41.0	-1.6	33.7	-	51.8	73.9	22.1	
Vert	17385.000	PK	44.7	43.5	-0.4	32.7	-	55.1	73.9	18.8	Floor Noise
Vert	23180.000	PK	47.5	40.5	-1.2	32.0	-	54.8	73.9	19.1	Floor Noise
Vert	5850.000	AV	38.9	33.4	4.0	34.0	0.7	43.0	53.9	10.9	*1)
Vert	5860.000	AV	37.2	33.4	4.0	34.0	0.7	41.3	53.9	12.6	*1)
Vert	11590.000	AV	39.5	41.0	-1.6	33.7	0.7	45.9	53.9	8.0	
Vert	17385.000	AV	36.5	43.5	-0.4	32.7	-	46.9	73.9	27.0	Floor Noise
Vert	23180.000	AV	37.3	40.5	-1.2	32.0	-	44.6	53.9	9.3	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

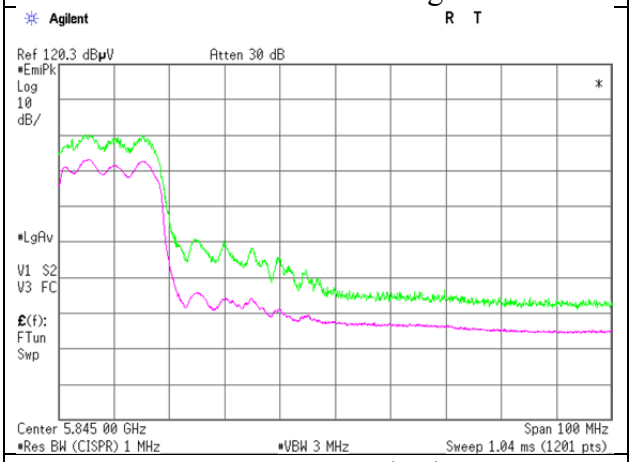
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/04/2015
Temperature / Humidity	23deg. C / 39 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-40 5795 MHz

Horizontal

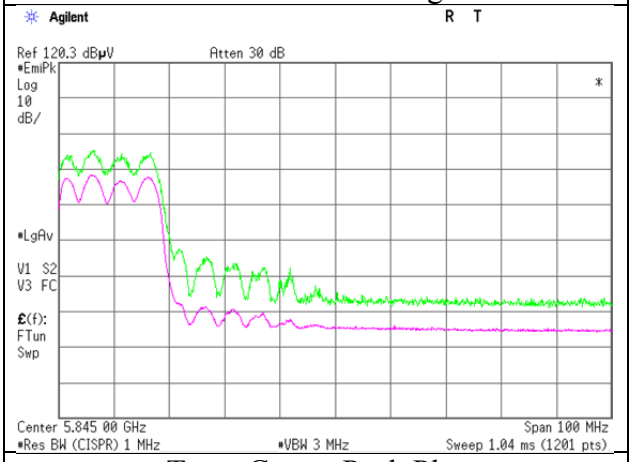
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/05/2015	11/05/2015
Temperature / Humidity	23deg. C / 44 % RH	22deg. C / 50 % RH
Engineer	Shinichi Miyazono	Ken Fujita
	(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	5137.263	PK	59.0	33.0	3.8	34.2	-	61.6	73.9	12.3	
Hori	5150.000	PK	55.9	33.0	3.8	34.1	-	58.6	73.9	15.3	
Hori	10420.000	PK	46.4	40.1	-2.2	34.4	-	49.9	73.9	24.0	
Hori	15630.000	PK	43.4	39.3	-0.8	33.5	-	48.4	73.9	25.5	Floor Noise
Hori	20840.000	PK	47.6	39.5	-1.7	33.3	-	52.1	73.9	21.8	Floor Noise
Hori	5137.263	AV	46.7	33.0	3.8	34.2	2.7	52.0	53.9	1.9	*1) *2)
Hori	5150.000	AV	42.4	33.0	3.8	34.1	2.7	47.8	53.9	6.1	*1) *2)
Hori	10420.000	AV	39.6	40.1	-2.2	34.4	2.7	45.8	53.9	8.1	*2)
Hori	15630.000	AV	36.3	39.3	-0.8	33.5	-	41.3	53.9	12.6	Floor Noise
Hori	20840.000	AV	38.9	39.5	-1.7	33.3	-	43.4	53.9	10.5	Floor Noise
Vert	5132.565	PK	60.1	33.0	3.8	34.2	-	62.7	73.9	11.2	
Vert	5150.000	PK	55.4	33.0	3.8	34.1	-	58.1	73.9	15.8	
Vert	10420.000	PK	47.6	40.1	-2.2	34.4	-	51.1	73.9	22.8	
Vert	15630.000	PK	44.8	39.3	-0.8	33.5	-	49.8	73.9	24.1	Floor Noise
Vert	20840.000	PK	47.9	39.5	-1.7	33.3	-	52.4	73.9	21.5	Floor Noise
Vert	5132.565	AV	47.5	33.0	3.8	34.2	2.7	52.8	53.9	1.1	*1) *2)
Vert	5150.000	AV	42.1	33.0	3.8	34.1	2.7	47.5	53.9	6.4	*1) *2)
Vert	10420.000	AV	42.1	40.1	-2.2	34.4	2.7	48.3	53.9	5.6	*2)
Vert	15630.000	AV	36.7	39.3	-0.8	33.5	-	41.7	73.9	32.2	Floor Noise
Vert	20840.000	AV	37.7	39.5	-1.7	33.3	-	42.2	53.9	11.7	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

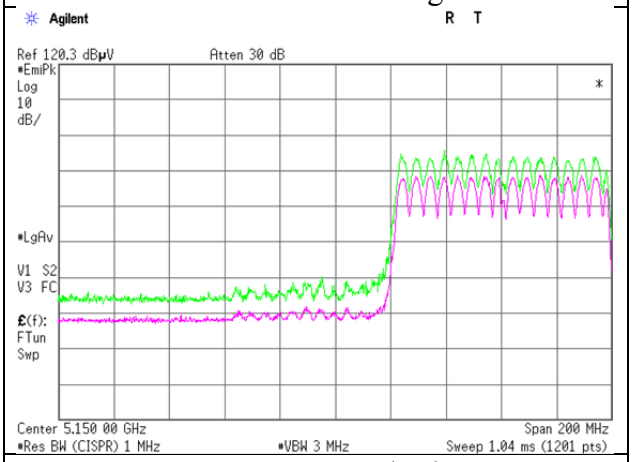
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)
*2) Radiated spurious emission test was performed with Rate:MCS9 because of the test tool.

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/05/2015
Temperature / Humidity	23deg. C / 44 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-80 5210 MHz

Horizontal

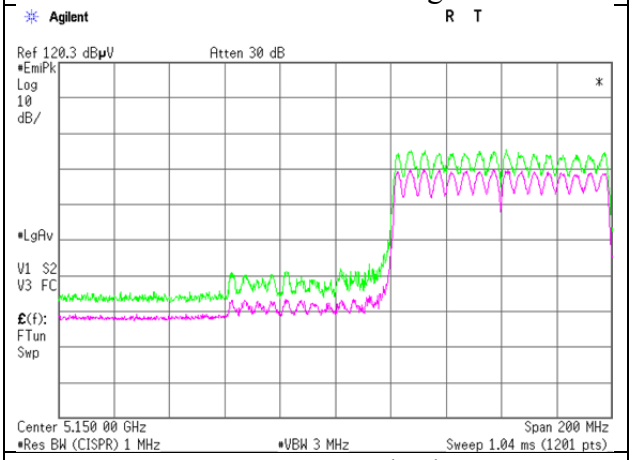
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/05/2015	11/05/2015
Temperature / Humidity	23deg. C / 44 % RH	22deg. C / 50 % RH
Engineer	Shinichi Miyazono	Ken Fujita
	(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	57.2	32.9	3.8	34.0	-	59.9	73.9	14.0	
Hori	5360.000	PK	61.5	32.9	3.9	34.0	-	64.3	73.9	9.6	
Hori	10580.000	PK	44.5	40.6	-2.2	34.3	-	48.6	73.9	25.3	
Hori	15870.000	PK	43.5	38.7	-0.9	33.6	-	47.7	73.9	26.2	Floor Noise
Hori	21160.000	PK	48.3	39.7	-1.6	33.3	-	53.1	73.9	20.8	Floor Noise
Hori	5350.000	AV	45.1	32.9	3.8	34.0	2.7	50.5	53.9	3.4	*1) *2)
Hori	5360.000	AV	48.2	32.9	3.9	34.0	2.7	53.7	53.9	0.2	*1) *2)
Hori	10580.000	AV	36.7	40.6	-2.2	34.3	2.7	43.5	53.9	10.4	*2)
Hori	15870.000	AV	36.5	38.7	-0.9	33.6	-	40.7	53.9	13.2	Floor Noise
Hori	21160.000	AV	38.3	39.7	-1.6	33.3	-	43.1	53.9	10.8	Floor Noise
Vert	5350.000	PK	55.7	32.9	3.8	34.0	-	58.4	73.9	15.5	
Vert	5360.000	PK	59.6	32.9	3.9	34.0	-	62.4	73.9	11.5	
Vert	10580.000	PK	47.5	40.6	-2.2	34.3	-	51.6	73.9	22.3	
Vert	15870.000	PK	44.2	38.7	-0.9	33.6	-	48.4	73.9	25.5	Floor Noise
Vert	21160.000	PK	48.5	39.7	-1.6	33.3	-	53.3	73.9	20.6	Floor Noise
Vert	5350.000	AV	42.1	32.9	3.8	34.0	2.7	47.5	53.9	6.4	*1) *2)
Vert	5360.000	AV	47.4	32.9	3.9	34.0	2.7	52.9	53.9	1.0	*1) *2)
Vert	10580.000	AV	40.5	40.6	-2.2	34.3	2.7	47.3	53.9	6.6	*2)
Vert	15870.000	AV	36.4	38.7	-0.9	33.6	-	40.6	73.9	33.3	Floor Noise
Vert	21160.000	AV	37.4	39.7	-1.6	33.3	-	42.2	53.9	11.7	Floor Noise

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

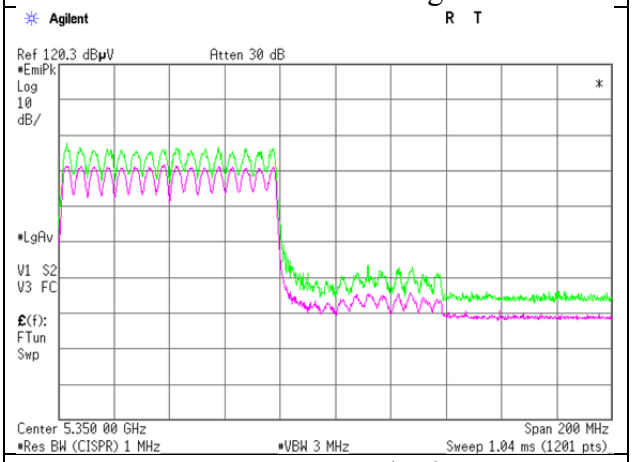
Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)
*2) Radiated spurious emission test was performed with Rate:MCS9 because of the test tool.

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/05/2015
Temperature / Humidity	23deg. C / 44 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-80 5290 MHz

Horizontal

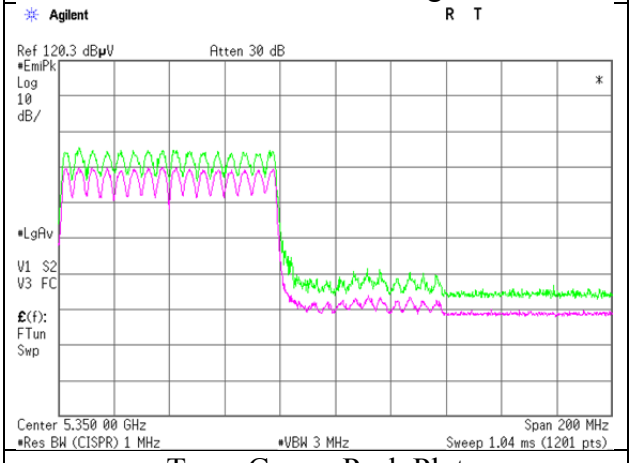
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	11022049H	
Date	11/05/2015	11/05/2015
Temperature / Humidity	23deg. C / 44 % RH	22deg. C / 50 % RH
Engineer	Shinichi Miyazono	Ken Fujita
	(1 GHz-10 GHz)	(10 GHz-40 GHz)
Mode	Tx 11ac-80 5775 MHz	

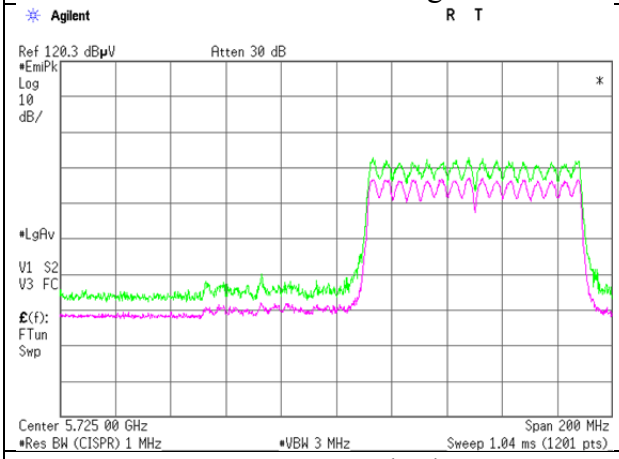
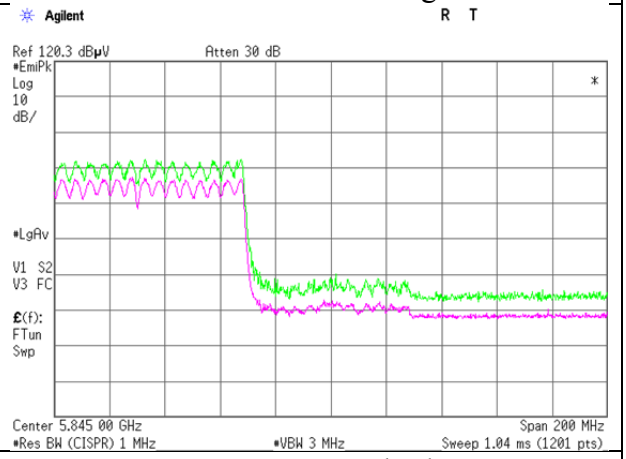
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	5698.000	PK	58.2	33.2	4.0	33.9	-	61.5	73.9	12.4	
Hori	5715.000	PK	53.7	33.2	4.0	33.9	-	57.0	73.9	16.9	
Hori	5725.000	PK	55.4	33.2	4.0	33.9	-	58.7	73.9	15.2	
Hori	5850.000	PK	54.4	33.4	4.0	34.0	-	57.8	73.9	16.1	
Hori	5860.000	PK	54.5	33.4	4.0	34.0	-	57.9	73.9	16.0	
Hori	5862.704	PK	57.4	33.4	4.0	34.0	-	60.8	73.9	13.1	
Hori	11550.000	PK	44.2	41.0	-1.7	33.7	-	49.8	73.9	24.1	
Hori	17325.000	PK	43.2	43.2	-0.6	32.7	-	53.1	73.9	20.8	Floor Noise
Hori	23100.000	PK	48.1	40.6	-1.3	32.0	-	55.4	73.9	18.5	Floor Noise
Hori	5698.000	AV	46.2	33.2	4.0	33.9	2.7	52.2	53.9	1.7	*1) *2)
Hori	5715.000	AV	42.0	33.2	4.0	33.9	2.7	48.0	53.9	5.9	*1) *2)
Hori	5725.000	AV	43.6	33.2	4.0	33.9	2.7	49.6	53.9	4.3	*1) *2)
Hori	5850.000	AV	43.5	33.4	4.0	34.0	2.7	49.6	53.9	4.3	*1) *2)
Hori	5860.000	AV	43.7	33.4	4.0	34.0	2.7	49.8	53.9	4.1	*1) *2)
Hori	5862.704	AV	46.3	33.4	4.0	34.0	2.7	52.4	53.9	1.5	*1) *2)
Hori	11550.000	AV	36.6	41.0	-1.7	33.7	2.7	44.9	53.9	9.0	*2)
Hori	17325.000	AV	36.8	43.2	-0.6	32.7	-	46.7	53.9	7.2	Floor Noise
Hori	23100.000	AV	38.1	40.6	-1.3	32.0	-	45.4	53.9	8.5	Floor Noise
Vert	5715.000	PK	49.5	33.2	4.0	33.9	-	52.8	73.9	21.1	
Vert	5725.000	PK	52.8	33.2	4.0	33.9	-	56.1	73.9	17.8	
Vert	5850.000	PK	48.4	33.4	4.0	34.0	-	51.8	73.9	22.1	
Vert	5860.000	PK	47.5	33.4	4.0	34.0	-	50.9	73.9	23.0	
Vert	11550.000	PK	46.6	41.0	-1.7	33.7	-	52.2	73.9	21.7	
Vert	17325.000	PK	44.1	43.2	-0.6	32.7	-	54.0	73.9	19.9	Floor Noise
Vert	23100.000	PK	47.9	40.6	-1.3	32.0	-	55.2	73.9	18.7	Floor Noise
Vert	5715.000	AV	36.8	33.2	4.0	33.9	2.7	42.8	53.9	11.1	*1) *2)
Vert	5725.000	AV	38.0	33.2	4.0	33.9	2.7	44.0	53.9	9.9	*1) *2)
Vert	5850.000	AV	38.3	33.4	4.0	34.0	2.7	44.4	53.9	9.5	*1) *2)
Vert	5860.000	AV	37.4	33.4	4.0	34.0	2.7	43.5	53.9	10.4	*1) *2)
Vert	11550.000	AV	39.7	41.0	-1.7	33.7	2.7	48.0	53.9	5.9	*2)
Vert	17325.000	AV	36.3	43.2	-0.6	32.7	-	46.2	73.9	27.7	Floor Noise
Vert	23100.000	AV	37.2	40.6	-1.3	32.0	-	44.5	53.9	9.4	Floor Noise

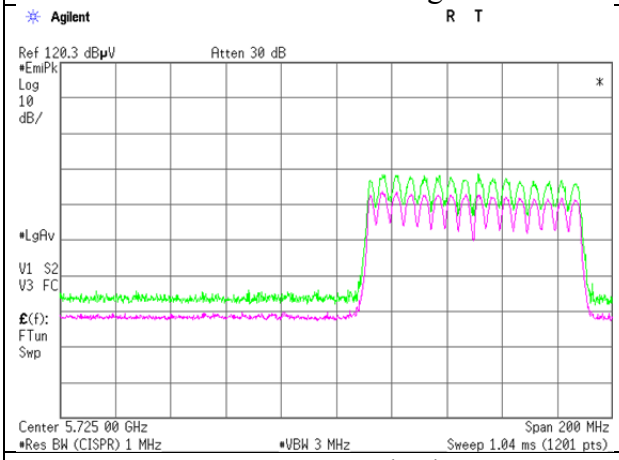
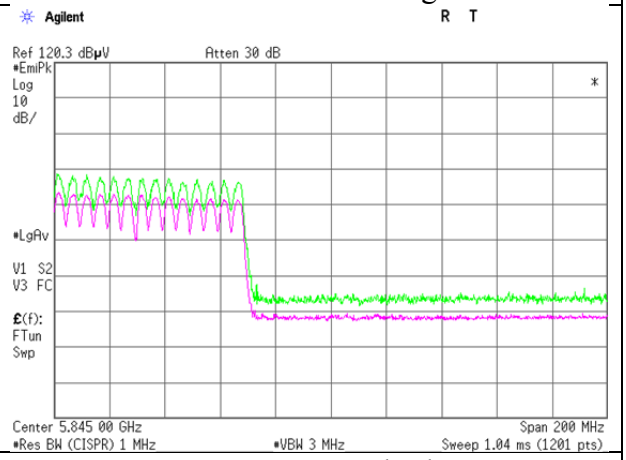
Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB
26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB
*1) Not Out of Band emission(Leakage Power)
*2) Radiated spurious emission test was performed with Rate:MCS9 because of the test tool.

Radiated Spurious Emission

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber
Report No.	11022049H
Date	11/05/2015
Temperature / Humidity	23deg. C / 44 % RH
Engineer	Shinichi Miyazono
Mode	Tx 11ac-80 5775 MHz

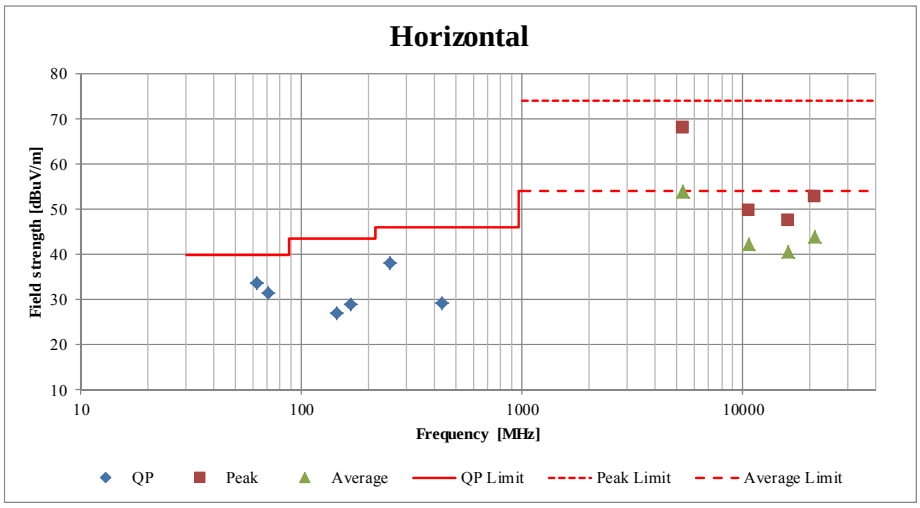
Horizontal	Horizontal
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

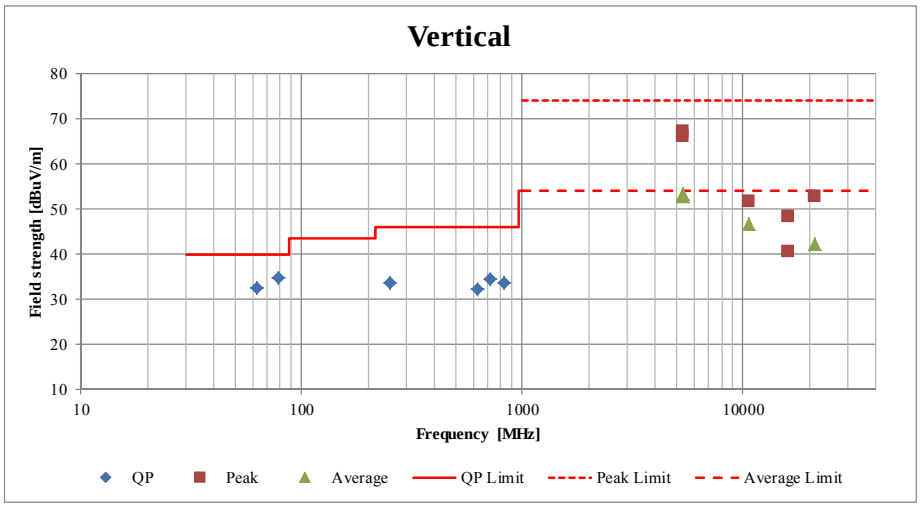
Vertical	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Spurious Emission
(Plot data, Worst case)

Test place	Ise EMC Lab. No.2 Semi Anechoic Chamber		
Report No.	11022049H		
Date	11/04/2015	11/05/2015	11/08/2015
Temperature / Humidity	23deg. C / 39 % RH	22deg. C / 50 % RH	23deg. C / 63 % RH
Engineer	Shinichi Miyazono (1 GHz-10 GHz)	Ken Fujita (10 GHz-40 GHz)	Shinichi Miyazono (Below 1 GHz)
Mode	Tx 11ac-40 5310 MHz		





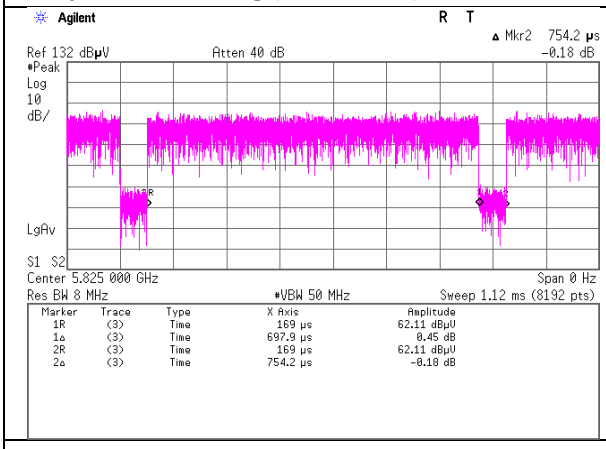
*These plots data contains sufficient number to show the trend of characteristic features for EUT.

Burst rate confirmation

Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber
Report No.	11022049H
Date	06/08/2015
Temperature/ Humidity	23deg. C / 58% RH
Engineer	Tomohisa Nakagawa
Mode	11ac-20 / 11ac-40 /11ac-80 Tx

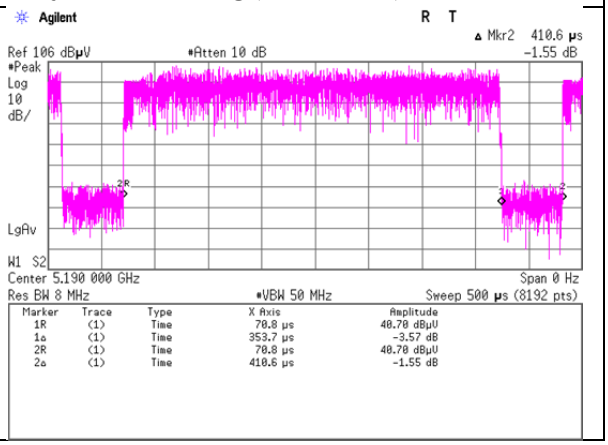
11ac-20 MCS1

Tx on / (Tx on + Tx off) = 0.925
Tx on / (Tx on + Tx off) * 100 = 92.5 %
Duty factor = 10 * log (754.2 / 697.9) = 0.34 dB



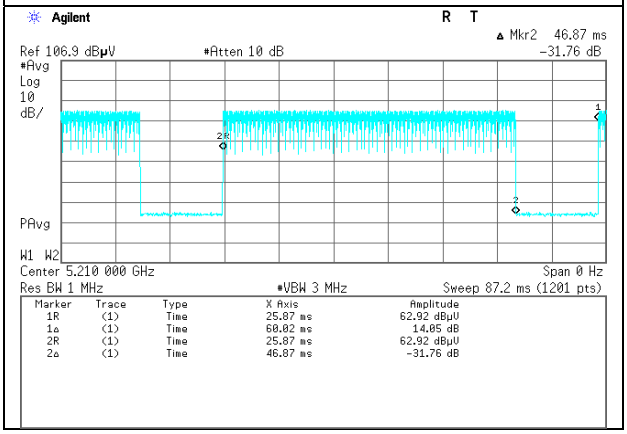
11ac-40 MCS1

Tx on / (Tx on + Tx off) = 0.861
Tx on / (Tx on + Tx off) * 100 = 86.1 %
Duty factor = 10 * log (410.6 / 353.7) = 0.65 dB



11ac-80 MCS1

Tx on / (Tx on + Tx off) = 0.781
Tx on / (Tx on + Tx off) * 100 = 78.1 %
Duty factor = 10 * log (60.02 / 46.87) = 1.07 dB

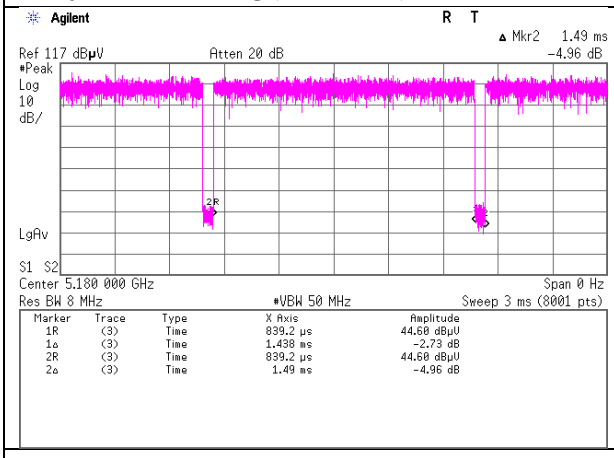


Burst rate confirmation

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/29/2015
Temperature/ Humidity	23deg. C / 49% RH
Engineer	Shinichi Miyazono
Mode	11a / 11n-20 / 11n-40 Tx

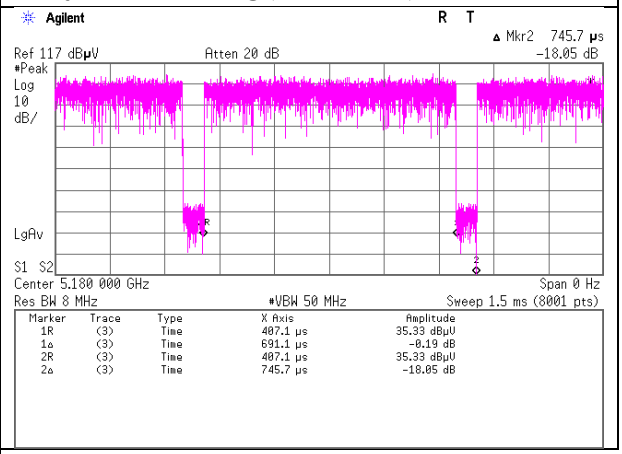
11a 6Mbps

Tx on / (Tx on + Tx off) = 0.965
Tx on / (Tx on + Tx off) * 100 = 96.5 %
Duty factor = 10 * log (1.49 / 1.438) = 0.15 dB



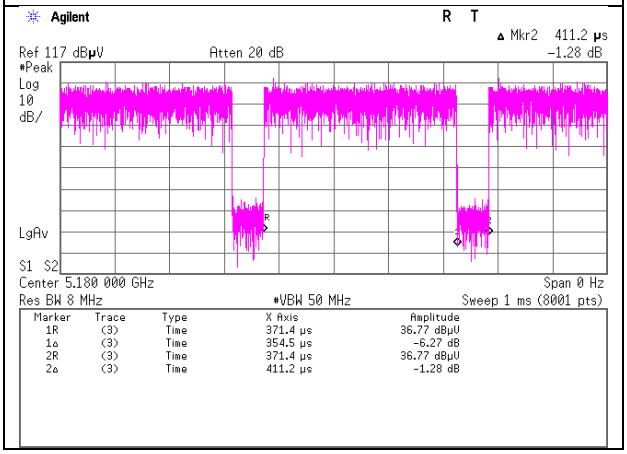
11n-20 MCS1

Tx on / (Tx on + Tx off) = 0.927
Tx on / (Tx on + Tx off) * 100 = 92.7 %
Duty factor = 10 * log (745.7 / 691.1) = 0.33 dB



11n-40 MCS1

Tx on / (Tx on + Tx off) = 0.862
Tx on / (Tx on + Tx off) * 100 = 86.2 %
Duty factor = 10 * log (411.2 / 354.5) = 0.64 dB

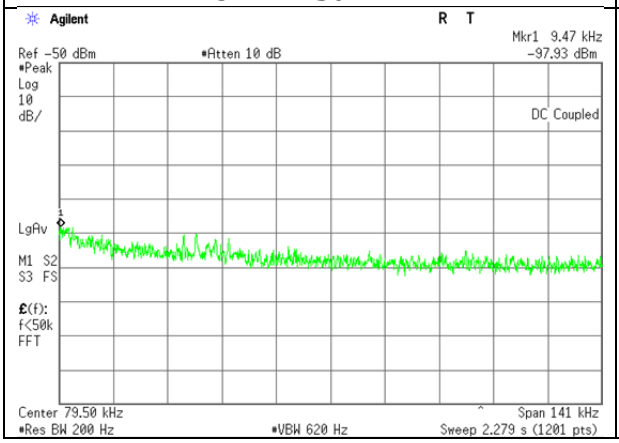


Conducted Spurious Emission

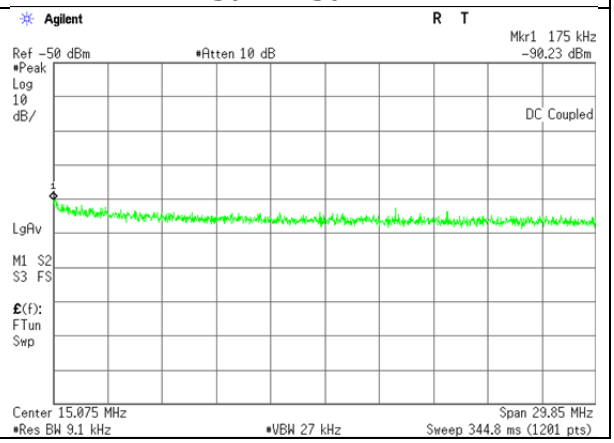
Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	11022049H
Date	06/29/2015
Temperature/ Humidity	23deg. C / 49% RH
Engineer	Shinichi Miyazono
Mode	11ac-40 Tx

11ac-40 Tx 5310MHz Antenna port 1

9kHz-150kHz



150kHz-30MHz



Frequency [kHz]	Reading [dBm]	Cable Loss [dB]	Attenator [dB]	Antenna Gain [dBi]	N (Number of Output	EIRP [dBm]	Distance [m]	Ground bounce [dB]	E (field strength) [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
9.47	-97.9	0.00	9.83	2.0	2	-83.1	300	6.0	-21.8	48.0	69.8	
175.00	-90.2	0.00	9.82	2.0	2	-75.4	300	6.0	-14.1	22.7	36.8	

E=EIRP-20log(D)+Ground bounce +104.8[dBuV/m]

EIRP=Reading+Cable Loss+Attenator+Antenna Gain+10*log(N)

APPENDIX 2: Test instruments

Test equipment (Used for June 5 to June 29, 2015)

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MOS-19	Thermo-Hygrometer	Custom	CTH-201	0001	AT	2014/12/22 * 12
MPM-16	Power Meter	Agilent	8990B	MY51000271	AT	2015/04/01 * 12
MPSE-22	Power sensor	Agilent	N1923A	MY54070003	AT	2015/04/01 * 12
MPSE-23	Power sensor	Agilent	N1923A	MY54070004	AT	2015/04/01 * 12
MAT-20	Attenuator(10dB)(above 1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-110	-	AT	2015/01/08 * 12
MAT-22	Attenuator(10dB) 1-18GHz	Orient Microwave	BX10-0476-00	-	AT	2015/03/18 * 12
MRENT-122	Spectrum Analyzer	KEYSIGHT	E4440A	MY46187096	AT	2015/06/01 * 12
MAT-24	Attenuator(10dB)(above 1GHz)	Agilent	8493C	71389	AT	2015/06/18 * 12
MAT-25	Attenuator(10dB)(above 1GHz)	Agilent	8493C	71642	AT	2015/06/18 * 12
MCC-144	Microwave Cable	Junkosha	MWX221	1207S407	AT	2014/08/08 * 12 *1)
MAT-10	Attenuator(10dB)	Weinschel Corp	2	BL1173	AT	2014/11/19 * 12
MCC-38	Coaxial Cable	UL Japan	-	-	AT	2014/12/02 * 12
MSA-16	Spectrum Analyzer	Agilent	E4440A	MY46186390	AT	2015/02/16 * 12

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

Test equipment (Used for November 3 to 27, 2015)

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-02	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-06902	RE/CE	2015/07/01 * 12
MOS-22	Thermo-Hygrometer	Custom	CTH-201	0003	RE/CE	2015/01/13 * 12
MJM-14	Measure	KOMELON	KMC-36	-	RE/CE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-
MSA-13	Spectrum Analyzer	Agilent	E4440A	MY46185823	RE	2015/06/02 * 12
MHA-06	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	254	RE	2015/02/05 * 12
MCC-168	Microwave Cable	Junkosha	MWX221	1408S016(1m) / 1409S492(5m)	RE	2015/09/24 * 12
MPA-10	Pre Amplifier	Agilent	8449B	3008A02142	RE	2015/01/28 * 12
MHA-02	Horn Antenna 18-26.5GHz	EMCO	3160-09	1265	RE	2015/02/05 * 12
MMM-01	Digital Tester	Fluke	FLUKE 26-3	78030611	RE/CE	2015/08/19 * 12
MHF-16	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCA	7001	RE	2015/09/15 * 12
MCC-176	Microwave Cable	Junkosha	MMX221-00500D MSDMS	1502S303	RE	2015/03/27 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	US44300523	RE	2015/11/06 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	100300	RE/CE	2015/06/08 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	VHA91032008	RE	2015/10/11 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	201	RE	2015/10/11 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	-	RE	2015/02/06 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	BK7970	RE	2014/11/11 * 12
MPA-09	Pre Amplifier	Agilent	8447D	2944A10845	RE	2015/09/04 * 12
MSA-16	Spectrum Analyzer	Agilent	E4440A	MY46186390	RE/CE	2015/02/16 * 12
MLS-25	LISN(AMN)	Schwarzbeck	NSLK8127	8127-731	CE(EUT)	2015/07/17 * 12
MLS-26	LISN(AMN)	Schwarzbeck	NSLK8127	8127-732	CE(AE)	2015/07/17 * 12
MTA-28	Terminator	TME	CT-01	-	CE	2014/11/26 * 12
MCC-13	Coaxial Cable	Fujikura	3D-2W(12m)/5D-2W(5m)/5D-2W(0.8m)/5D-2W(1m)	-	CE	2015/02/06 * 12
MAT-65	Attenuator(13dB)	JFW Industries, Inc.	50FP-013H2 N	-	CE	2015/01/29 * 12
MPM-16	Power Meter	Agilent	8990B	MY51000271	AT	2015/04/01 * 12
MPSE-22	Power sensor	Agilent	N1923A	MY54070003	AT	2015/04/01 * 12
MPSE-23	Power sensor	Agilent	N1923A	MY54070004	AT	2015/04/01 * 12
MAT-92	Attenuator	Weinschel Associates	WA56-10	56100308	AT	2015/06/01 * 12
MAT-89	Attenuator	Weinschel Associates	WA56-10	56100305	AT	2015/06/01 * 12
MOS-19	Thermo-Hygrometer	Custom	CTH-201	0001	AT	2014/12/22 * 12
MSA-15	Spectrum Analyzer	Agilent	E4440A	MY46187105	AT	2015/11/11 * 12

The expiration date of the calibration is the end of the expired month.
All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

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

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