



RADIO TEST REPORT

Test Report No. : 12079941H-C

Applicant : Sony Interactive Entertainment Inc.
Type of Equipment : Wireless communication module
Model No. : AW-CB319
FCC ID : AK8M18DAQ1
Test regulation : FCC Part 15 Subpart E: 2018
(Except for DFS test)
Test Result : Complied

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2. The results in this report apply only to the sample tested.
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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: January 23 to February 6, 2018

Representative test engineer:

Ken Fujita

Ken Fujita
Engineer

Consumer Technology Division

Approved by:

Takayuki Shimada

Takayuki Shimada
Leader

Consumer Technology Division



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UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

13-EM-F0429

REVISION HISTORY

Original Test Report No.: 12079941H-C

Revision	Test report No.	Date	Page revised	Contents
- (Original)	12079941H-C	March 9, 2018	-	-

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SECTION 1: Customer information

Company Name	Sony Interactive Entertainment Inc.
Brand Name	SONY
Address	1-7-1 Konan, Minato-ku, Tokyo, 108-0075 Japan
Telephone Number	+81-50-3807-5639
Facsimile Number	+81-50-3807-9594
Contact Person	Kiyoto Sasaki

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

2.1 Identification of E.U.T.

Type of Equipment	Wireless communication module
Model No	AW-CB319
Serial No	Refer to Clause 4.2
Country of Manufacture	China/Japan
Receipt Date of Sample	January 20, 2018
Condition of EUT	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification of EUT	No modification by the test lab.

2.2 Product Description

AW-CB319 is the Wireless communication module.

Product Specification

Clock frequency in the system (radio part)	26 MHz
Operating Temperature	-10 deg. C - +85 deg. C
Power Supply	DC 3.3 V, DC 1.8 V
Size	20 x 18 x 3.0 mm, 55pin LGA

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Facsimile : +81 596 24 8124

Radio Specification

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

Equipment Type	Transceiver
Frequency of Operation	2412 MHz - 2462 MHz
Type of Modulation	DSSS, OFDM
Bandwidth & Channel spacing	Less than 20 MHz & 5 MHz
Method of frequency generation	Synthesizer
Antenna Type	IFA (Antenna port WA for 2.4 GHz / Antenna port WB for 2.4 GHz)
Antenna Gain: G _{ANT}	4.0 dBi (Antenna port WA for 2.4 GHz), 4.2 dBi (Antenna port WB for 2.4 GHz)
Directional Gain *1)	7.11 dBi

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

Equipment Type	Transceiver
Frequency of Operation	U-NII-1: 5180 MHz - 5240 MHz U-NII-2A: 5260 MHz - 5320 MHz U-NII-2C: 5500 MHz - 5700 MHz U-NII-3: 5745 MHz - 5825 MHz
Type of Modulation	OFDM
Bandwidth & Channel spacing	Less than 20 MHz / 40 MHz / 80 MHz & 20 MHz / 40 MHz / 80 MHz
Method of frequency generation	Synthesizer
Antenna Type	IFA (Antenna port WA for 5 GHz), PIFA (Antenna port WC for 5 GHz)
Antenna Gain: G _{ANT}	5.0 dBi (Antenna port WA for 5 GHz), 3.5 dBi (Antenna port WC for 5 GHz)
Directional Gain *1)	7.29 dBi

Bluetooth (BDR/EDR)

Equipment Type	Transceiver
Frequency of Operation	2402 MHz - 2480 MHz
Type of Modulation	FHSS (GFSK, $\pi/4$ DQPSK, 8DPSK)
Bandwidth & Channel spacing	79 MHz & 1 MHz
Method of frequency generation	Synthesizer
Antenna Type	PIFA (Antenna port WC for 2.4 GHz)
Antenna Gain	6.4 dBi (Antenna port WC for 2.4 GHz)

Bluetooth (Low Energy)

Equipment Type	Transceiver
Frequency of Operation	2402 MHz - 2480 MHz
Type of Modulation	GFSK
Bandwidth & Channel spacing	1 MHz & 2 MHz
Method of frequency generation	Synthesizer
Antenna Type	PIFA (Antenna port WC for 2.4 GHz)
Antenna Gain	6.4 dBi (Antenna port WC for 2.4 GHz)

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

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

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part 15 Subpart E
FCC Part 15 final revised on February 2, 2018 and effective March 5, 2018

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

* The revision on February 2, 2018, does not affect the test specification applied to the EUT.

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

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 15.5 dB, 0.50000 MHz, N AV 26.9 dB, 0.15000 MHz, L	Complied	-
	IC: RSS-Gen 8.8	IC: RSS-Gen 8.8			
26 dB Emission Bandwidth	FCC: KDB Publication Number 789033 D02	FCC: 15.407 (a) (1) (2) (3)	See data	N/A	Conducted
	IC: -	IC: -			
Maximum Conducted Output Power	FCC: KDB Publication Number 789033 D02	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 D02	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 D02	FCC: 15.407 (b), 15.205 and 15.209	4.1 dB 5460.00 MHz, AV, Vert.	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.
* For DFS tests, please see the test report number 12079941H-D issued by UL Japan, Inc.
*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 Part 15.31 (e)

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

FCC Part 15.203/212 Antenna requirement

The EUT has unique coupling/antenna connectors (U.FL) for antenna ports WC and also has a pattern antenna (Antenna port WA and WB) that is not removable from the EUT.
Therefore the equipment complies with the requirement of 15.203/212.

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 $k=2$.

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Antenna Terminal test

Test Item	Uncertainty (+/-)
RF output power	1.3 dB
Antenna terminal conducted emission / Power density / Burst power	2.7 dB
Adjacent channel power / Channel power	
Below 3GHz	1.9 dB
3 GHz or 6 GHz	2.1 dB

Conducted emission

using Item	Frequency range	Uncertainty (+/-)
AMN (LISN)	0.009 MHz to 0.15 MHz	3.8 dB
	0.15 MHz to 30 MHz	3.4 dB

Radiated emission

Test distance *	Frequency range	Uncertainty (+/-)
3 m	9 kHz to 30 MHz	3.3 dB
10 m		3.2 dB
3 m	30 MHz to 200 MHz (Horizontal)	4.8 dB
	30 MHz to 200 MHz (Vertical)	5.0 dB
	200 MHz to 1000 MHz (Horizontal)	5.2 dB
	200 MHz to 1000 MHz (Vertical)	6.3 dB
10 m	30 MHz to 200 MHz (Horizontal)	4.8 dB
	30 MHz to 200 MHz (Vertical)	4.9 dB
	200 MHz to 1000 MHz (Horizontal)	5.0 dB
	200 MHz to 1000 MHz (Vertical)	5.0 dB
3 m	1 GHz to 6 GHz	5.0 dB
	6 GHz to 18 GHz	5.3 dB
1 m	10 GHz to 26.5 GHz	5.8 dB
	26.5 GHz to 40 GHz	5.8 dB
10 m	1 GHz to 18 GHz	5.2 dB

* Measurement distance

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.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

3.5 Test Location

UL Japan, Inc. Ise EMC Lab.
 4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
 Telephone: +81 596 24 8999, Facsimile: +81 596 24 8124
 NVLAP Lab. code: 200572-0 / FCC Test Firm Registration Number: 199967

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 and also was judged the necessity of 802.11ac mode by the pre-test.

Mode	Remarks*
IEEE 802.11a (11a)	54 Mbps, PN9
IEEE 802.11n MIMO 20 MHz BW (11n-20)	MCS 7, PN9
IEEE 802.11ac MIMO 20 MHz BW (11ac-20)	MCS 7 (1Tx), PN9
IEEE 802.11n MIMO 40 MHz BW (11n-40)	MCS 7, PN9
IEEE 802.11ac MIMO 40 MHz BW (11ac-40)	MCS 7 (1Tx), PN9
IEEE 802.11ac MIMO 80 MHz BW (11ac-80)	MCS 7 (1Tx), PN9
*The worst antenna and condition was determined based on the test result of Maximum Conducted Output Power.	
*The power value of the EUT was set for testing as follows (setting value might be different from product specification value); Power settings: U-NII-1: Value = 12 U-NII-2A, U-NII-2C, U-NII-3: Value = 16 Software: MT_TEST_Tool_Ver6.3 *This setting of software is the worst case. Any conditions under the normal use do not exceed the condition of setting. In addition, end users cannot change the settings of the output power of the product.	

*The details of Operation mode(s)

Test Item	Operating Mode	Tested Antenna port	Tested Frequency			
			Lower Band	Middle Band	Additional Band	Upper Band
Conducted emission, Radiated Spurious Emission (Below 1 GHz)	11ac-20 Tx *1)	WA+WC	-	-	5700 MHz	-
26 dB Emission Bandwidth	11a Tx 11n-20 Tx 11ac-20 Tx	WC	-	5260 MHz 5300 MHz 5320 MHz	5500 MHz 5580 MHz 5700 MHz	-
	11n-40 Tx 11ac-40 Tx	WC	-	5270 MHz 5310 MHz	5510 MHz 5550 MHz 5670 MHz	-
	11ac-80 Tx	WC	-	5290 MHz	5530 MHz 5610 MHz	-
99 % Occupied Bandwidth	11a Tx 11n-20 Tx 11ac-20 Tx	WC	5180 MHz 5220 MHz 5240 MHz	5260 MHz 5300 MHz 5320 MHz	5500 MHz 5580 MHz 5700 MHz	5745 MHz 5785 MHz 5825 MHz
	11n-40 Tx 11ac-40 Tx	WC	5190 MHz 5230 MHz	5270 MHz 5310 MHz	5510 MHz 5550 MHz 5670 MHz	5755 MHz 5795 MHz
	11ac-80 Tx	WC	5210 MHz	5290 MHz	5530 MHz 5610 MHz	5775 MHz
Maximum Conducted Output Power, Maximum Power Spectral Density	11a Tx 11n-20 Tx 11ac-20 Tx	WA+WC, WA, WC	5180 MHz 5220 MHz 5240 MHz	5260 MHz 5300 MHz 5320 MHz	5500 MHz 5580 MHz 5700 MHz	5745 MHz 5785 MHz 5825 MHz
	11n-40 Tx 11ac-40 Tx	WA+WC, WA, WC	5190 MHz 5230 MHz	5270 MHz 5310 MHz	5510 MHz 5550 MHz 5670 MHz	5755 MHz 5795 MHz
	11ac-80 Tx	WA+WC, WA, WC	5210 MHz	5290 MHz	5530 MHz 5610 MHz	5775 MHz
6 dB Bandwidth	11a Tx 11n-20 Tx 11ac-20 Tx	WC	-	-	-	5745 MHz 5785 MHz 5825 MHz
	11n-40 Tx 11ac-40 Tx					5755 MHz 5795 MHz
	11ac-80 Tx					5775 MHz
Radiated Spurious Emission (Above 1 GHz)	11ac-20 Tx *2)	WA+WC	5180 MHz	5260 MHz 5320 MHz	5500 MHz 5580 MHz 5700 MHz	5745 MHz 5785 MHz 5825 MHz
	11ac-40 Tx *2)	WA+WC	5190 MHz	5270 MHz 5310 MHz	5510 MHz 5550 MHz 5670 MHz	5755 MHz 5795 MHz
	11ac-80 Tx	WA+WC	5210 MHz	5290 MHz	5530 MHz 5610 MHz	5775 MHz
Conducted Spurious Emission	11ac-20 Tx *1)	WA	-	-	5700 MHz	-

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

*2) Since 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 output power.

*Simultaneously transmission

Test Item	Operating Mode *1)	Tested Antenna port	Tested Frequency			
			Lower Band	Middle Band	Additional Band	Upper Band
Radiated Spurious Emission	Hopping on 3DH5 + 11ac-80	WA+WC	-	5530 MHz	-	-

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

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

4.2 Configuration and peripherals

This page has been submitted for a separate exhibit.

SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a urethane platform of nominal size, 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.

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

< Below 1GHz >

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

< Above 1GHz >

EUT was placed on a urethane platform of nominal size, 0.5 m by 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).

For W58 Bandedge

-27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge in the section 15.407(b)(4)(i).

Restricted band edge:

Apply to limit in the Section 15.209 (a).

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

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

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

Test Antennas are used as below;

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

Frequency	Below 1 GHz	Above 1 GHz	
Instrument used	Test Receiver	Spectrum Analyzer	
Detector	QP	Peak	Average
IF Bandwidth	BW: 120 kHz	RBW: 1 MHz VBW: 3 MHz	Method AD *1) RBW: 1 MHz VBW: 3 MHz Detector: Power Averaging (RMS) Trace: ≥ 100 traces If duty cycle was less than 98%, a duty factor was added to the results.
Test Distance	3 m	3 m (below 1 GHz), 4.45 m*2) (1 GHz - 10GHz), 1 m*3) (10 GHz - 40 GHz)	

*1) The test method was also referred to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E".

*2) Distance Factor: $20 \times \log(4.45 \text{ m}/3.0 \text{ m}) = 3.43 \text{ dB}$

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

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT 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.

Test	Span	RBW	VBW	Sweep time	Detector	Trace	Instrument used and Test method
26 dB Bandwidth	Enough to capture the emission	Close to 1 % of EBW	> 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
20 dB Bandwidth	Enough to capture the emission	100 kHz	300 kHz	Auto	Peak	Max Hold	Spectrum Analyzer
6 dB Bandwidth	Enough to capture the emission	100 kHz	300 kHz	Auto	Peak	Max Hold	Spectrum Analyzer
Maximum Conducted Output Power	-	-	-	Auto	Average	-	Power Meter (Sensor: 80 MHz BW) (Method PM)
Maximum Power Spectral Density	Encompass the entire EBW	1 MHz or 470 kHz *2)	≥ 3 RBW	Auto	RMS Power Averaging (200 times)	Clear Write	Spectrum Analyzer
Conducted Spurious Emission*3)	9 kHz - 150 kHz 150 kHz - 30 MHz	200 Hz 9.1 kHz	620 Hz 27 kHz	Auto	Peak	Max Hold	Spectrum Analyzer

* The test method was also referred to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 "Guidelines for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices Part 15, Subpart E".

*1) Peak hold was applied as Worst-case measurement.

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

*3) In the frequency range below 30 MHz, 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. (9 kHz-150 kHz: RBW = 200 Hz, 150 kHz-30 MHz: RBW = 9.1 kHz)

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

Test data : APPENDIX

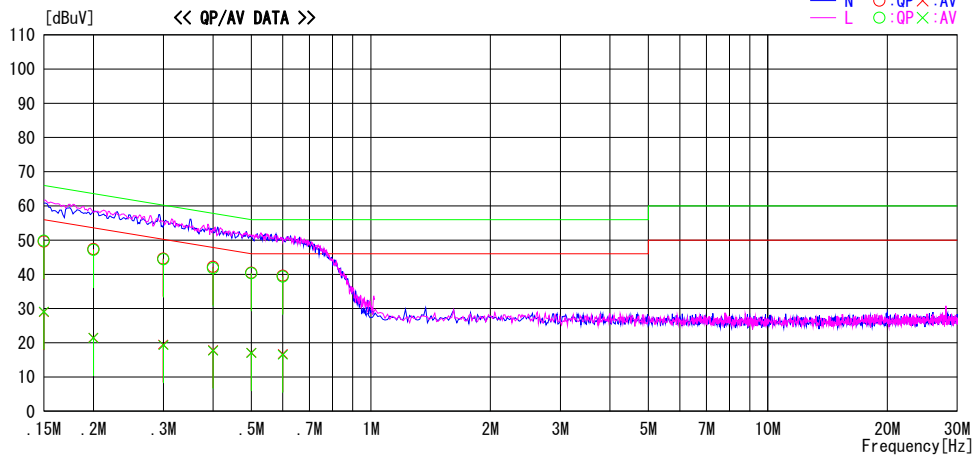
Test result : Pass

APPENDIX 1: Test data

Conducted Emission

Report No. 12079941H
Test place Ise EMC Lab.
Semi Anechoic Chamber No.3
Date February 6, 2018
Temperature / Humidity 22 deg. C / 29 % RH
Engineer Takafumi Noguchi
Mode Tx 11ac-20 5700 MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	36.4	15.8	13.2	49.6	29.0	66.0	56.0	16.4	27.0	N	
0.19998	34.2	8.3	13.2	47.4	21.5	63.6	53.6	16.2	32.1	N	
0.29959	31.4	6.3	13.2	44.6	19.5	60.3	50.3	15.7	30.8	N	
0.40040	28.9	4.6	13.3	42.2	17.9	57.8	47.8	15.6	29.9	N	
0.50000	27.2	3.8	13.3	40.5	17.1	56.0	46.0	15.5	28.9	N	
0.59972	26.3	3.4	13.3	39.6	16.7	56.0	46.0	16.4	29.3	N	
0.15000	36.6	15.9	13.2	49.8	29.1	66.0	56.0	16.2	26.9	L	
0.19998	33.9	8.2	13.2	47.1	21.4	63.6	53.6	16.5	32.2	L	
0.30035	31.2	6.1	13.2	44.4	19.3	60.2	50.2	15.8	30.9	L	
0.40025	28.5	4.4	13.3	41.8	17.7	57.8	47.8	16.0	30.1	L	
0.50000	27.0	3.7	13.3	40.3	17.0	56.0	46.0	15.7	29.0	L	
0.59985	26.0	3.2	13.3	39.3	16.5	56.0	46.0	16.7	29.5	L	

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

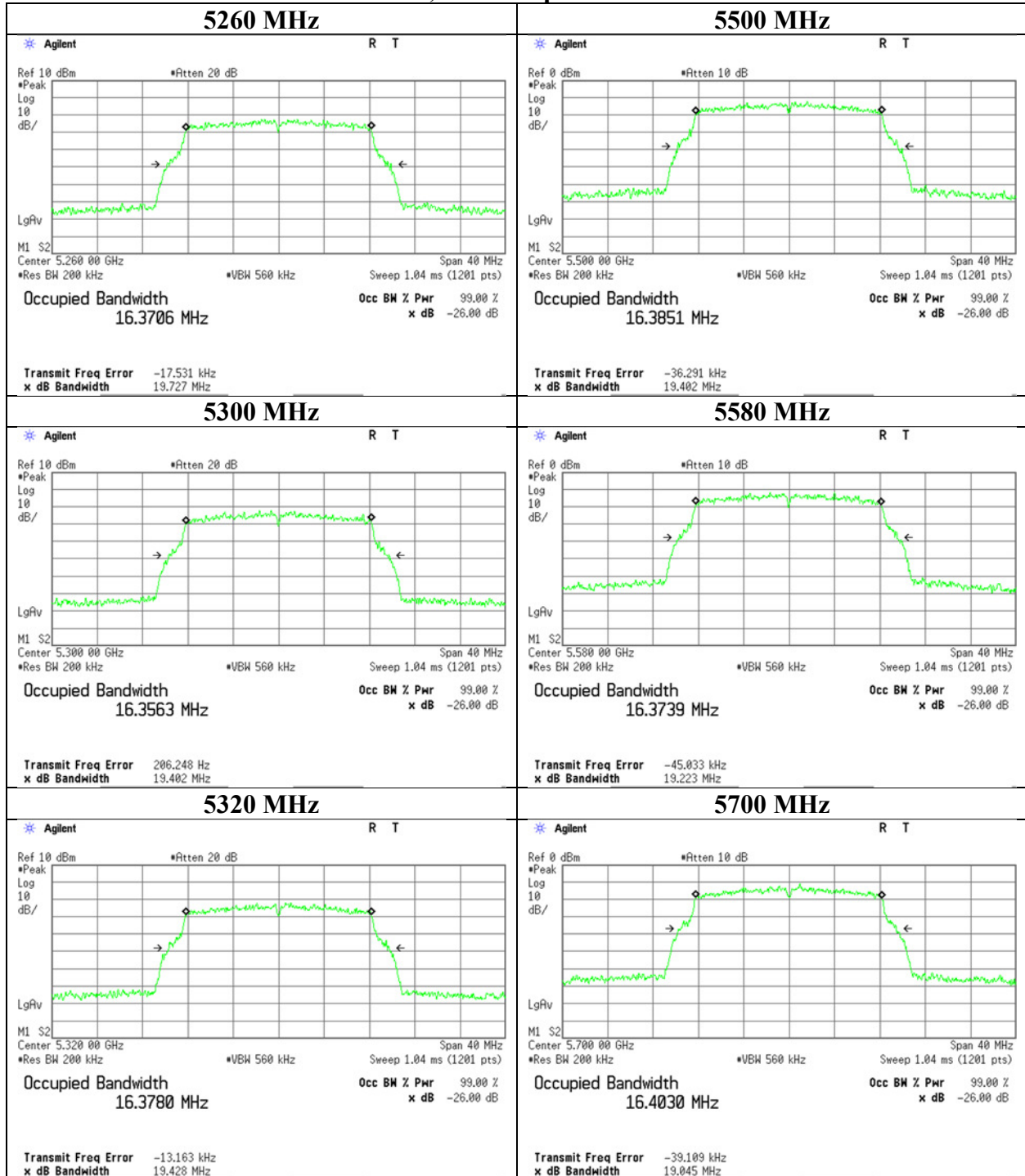
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 26, 2018
Temperature / Humidity 24deg. C / 20 % RH
Engineer Yuta Moriya
Mode Tx 11a

Antenna	Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
Antenna port WC	5180	-	16558.5
	5220	-	16589.0
	5240	-	16577.1
	5260	19.727	16557.8
	5300	19.402	16558.7
	5320	19.428	16657.6
	5500	19.402	16628.4
	5580	19.223	16606.6
	5700	19.045	16555.1
	5745	-	16606.9
	5785	-	16599.1
	5825	-	16521.7

26 dB Emission Bandwidth

11a, Antenna port WC



UL Japan, Inc.

Ise EMC Lab.

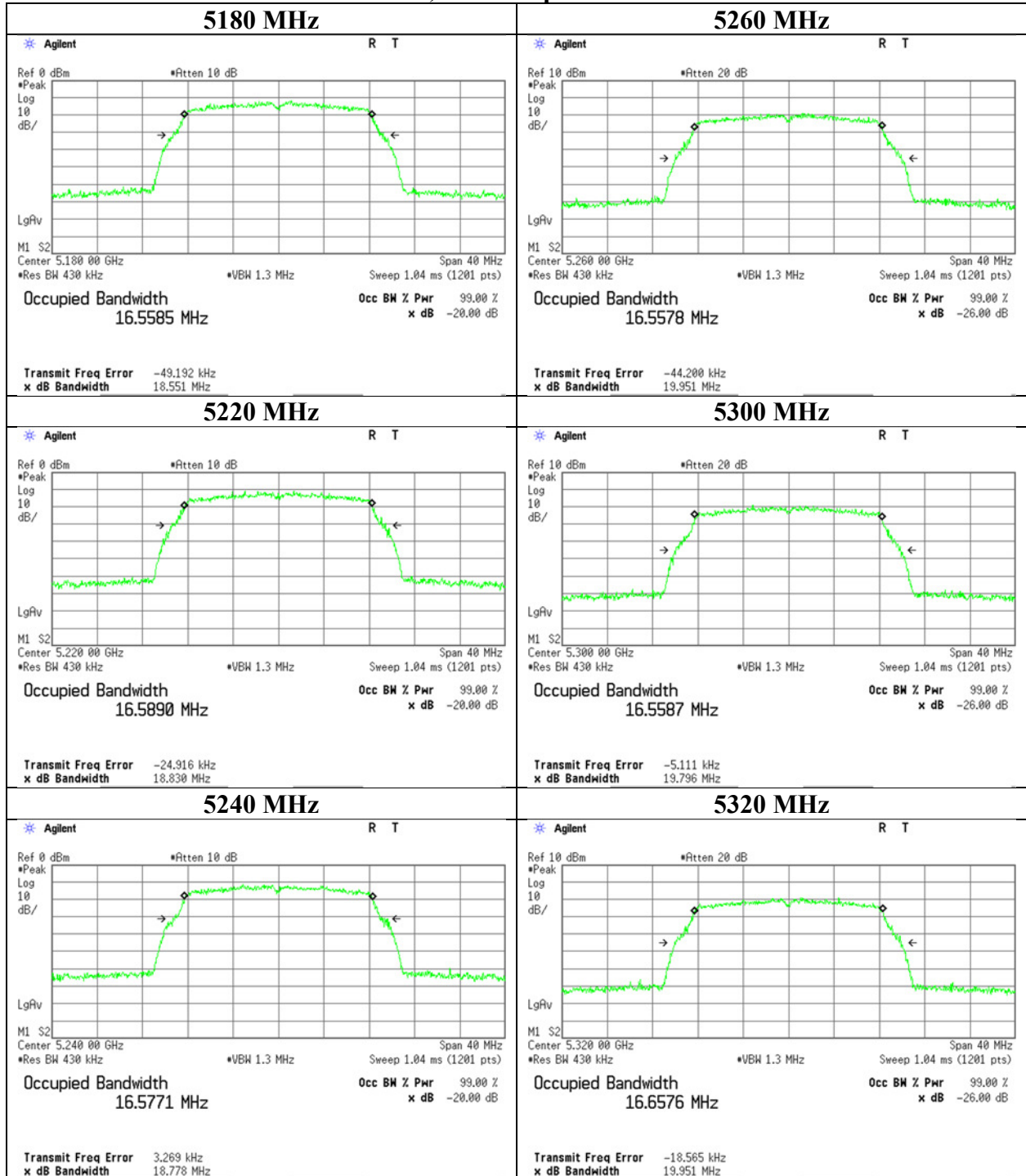
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11a, Antenna port WC



UL Japan, Inc.

Ise EMC Lab.

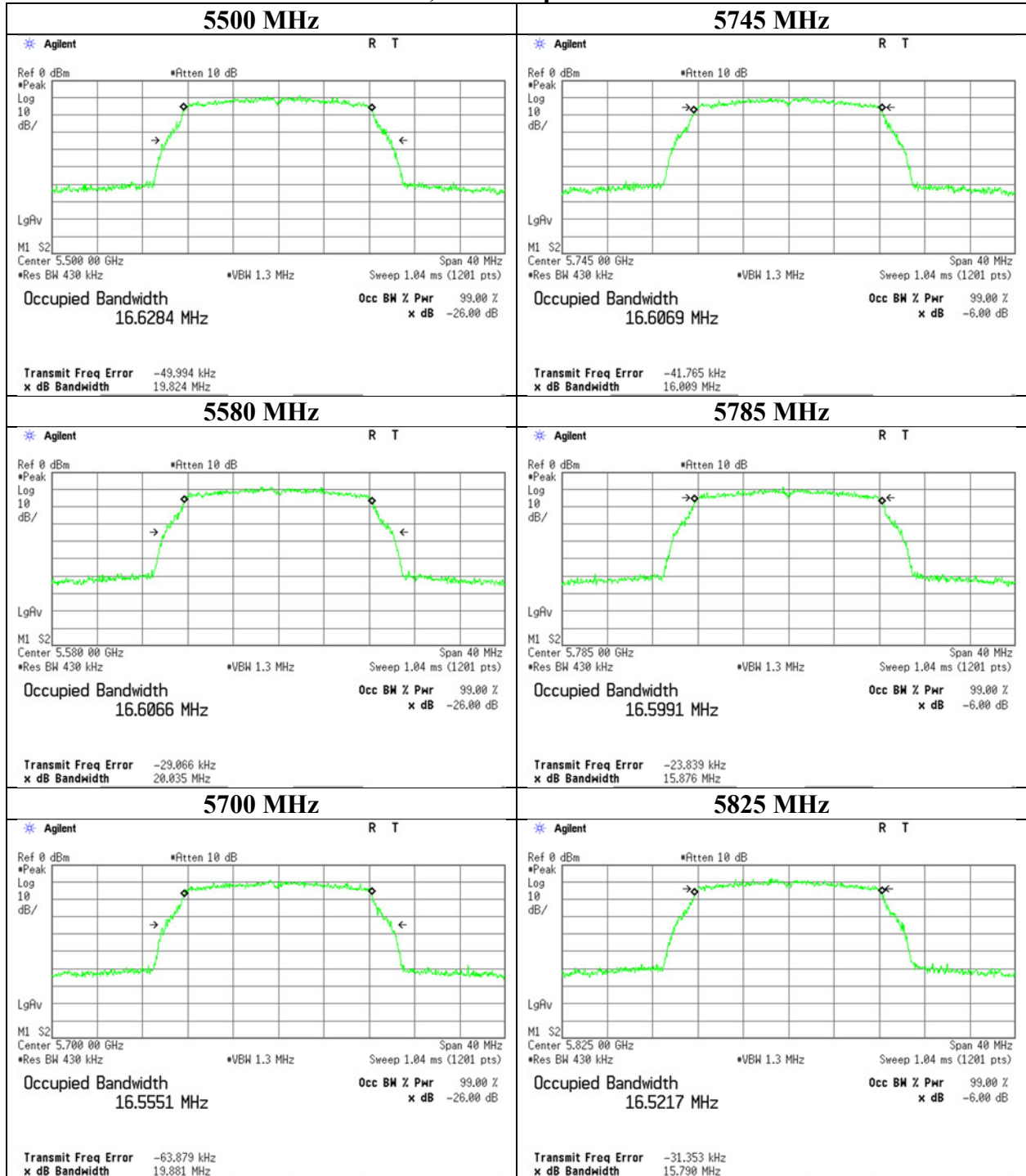
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11a, Antenna port WC



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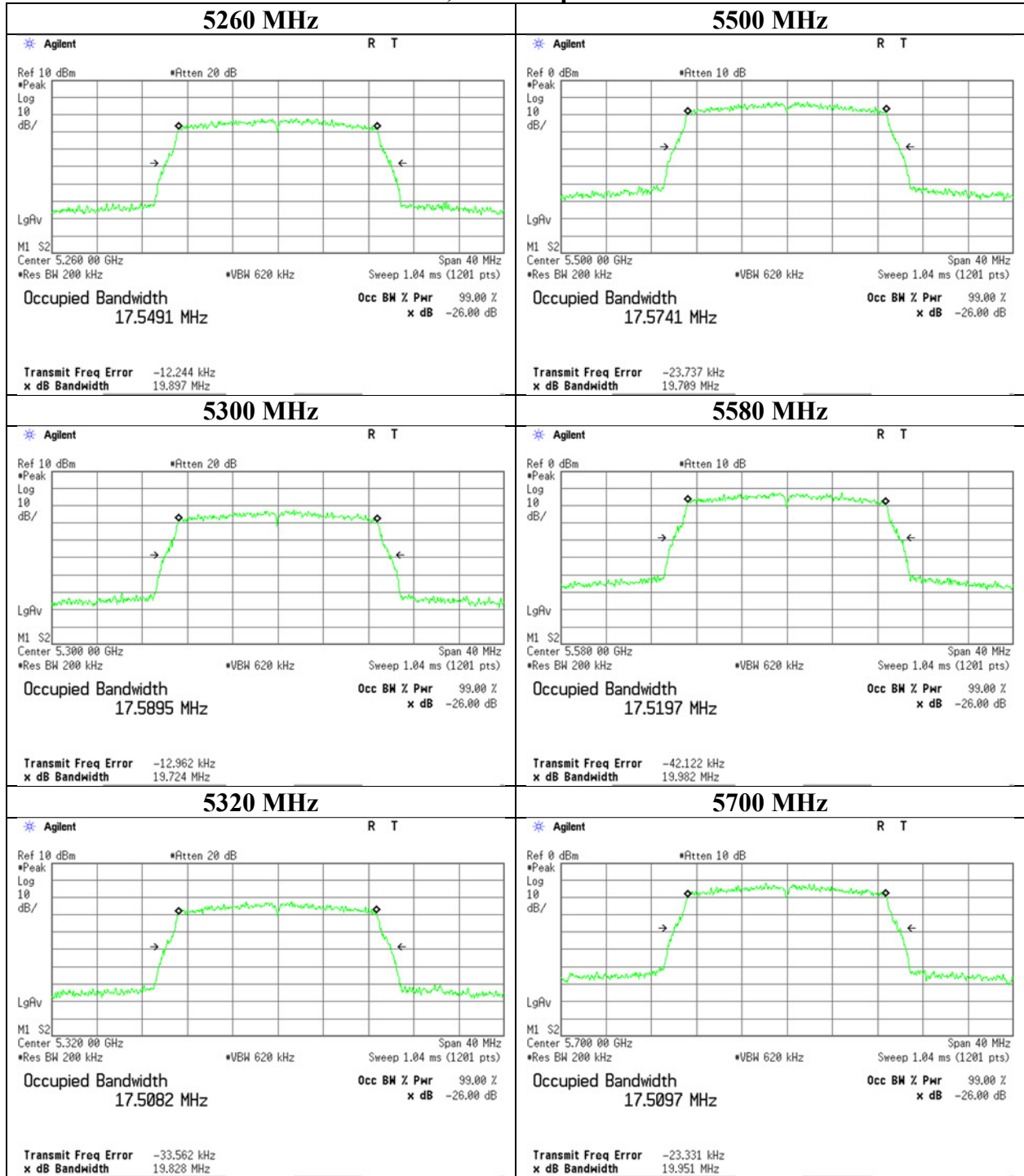
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 26, 2018
Temperature / Humidity 24deg. C / 20 % RH
Engineer Yuta Moriya
Mode Tx 11n-20

Antenna	Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
Antenna port WC	5180	-	17680.5
	5220	-	17722.6
	5240	-	17727.5
	5260	19.897	17759.3
	5300	19.724	17709.8
	5320	19.828	17739.1
	5500	19.709	17709.2
	5580	19.982	17717.5
	5700	19.951	17694.7
	5745	-	17709.8
	5785	-	17670.4
	5825	-	17706.7

26 dB Emission Bandwidth

11n-20, Antenna port WC



UL Japan, Inc.

Ise EMC Lab.

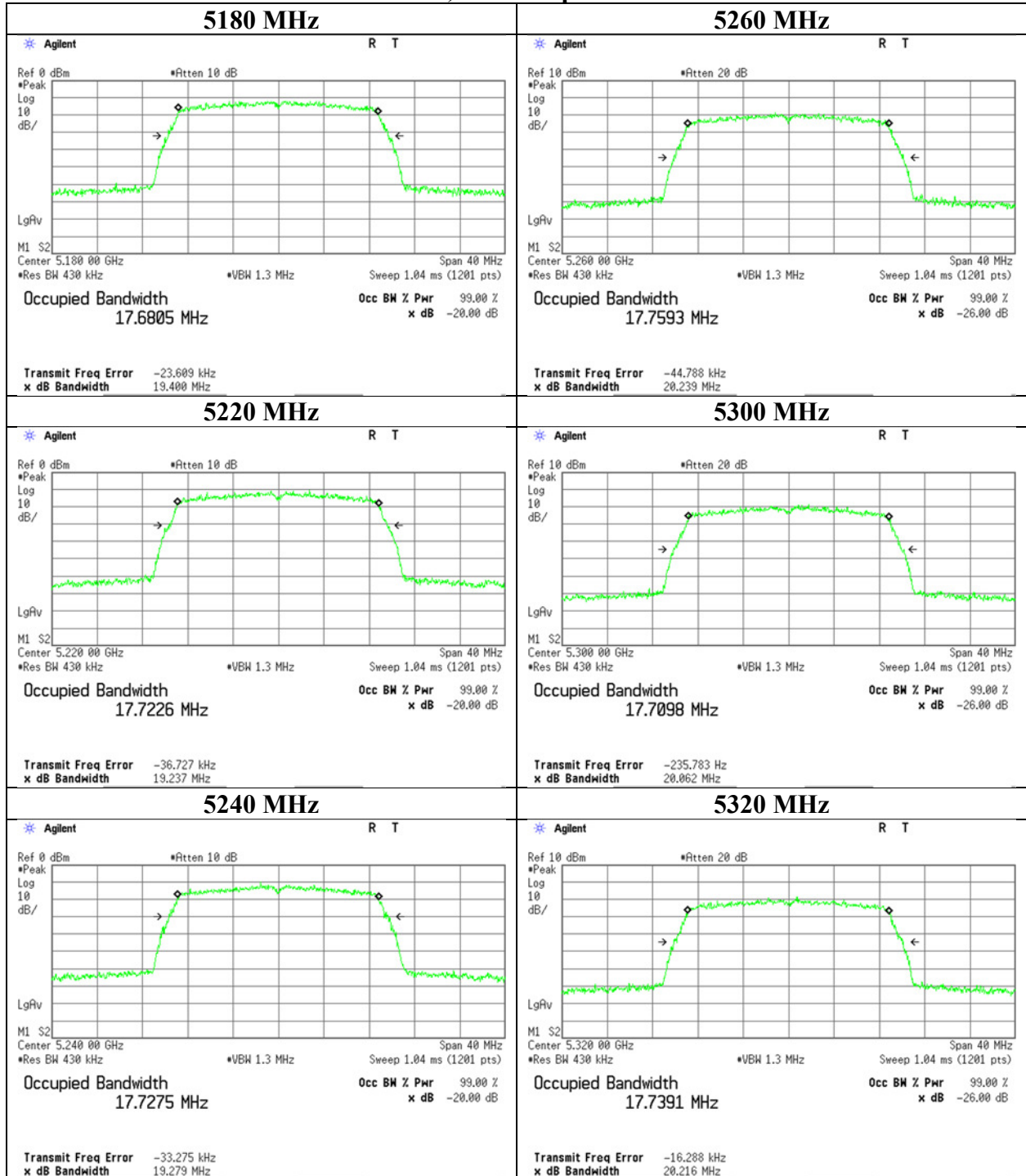
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11n-20, Antenna port WC



UL Japan, Inc.

Ise EMC Lab.

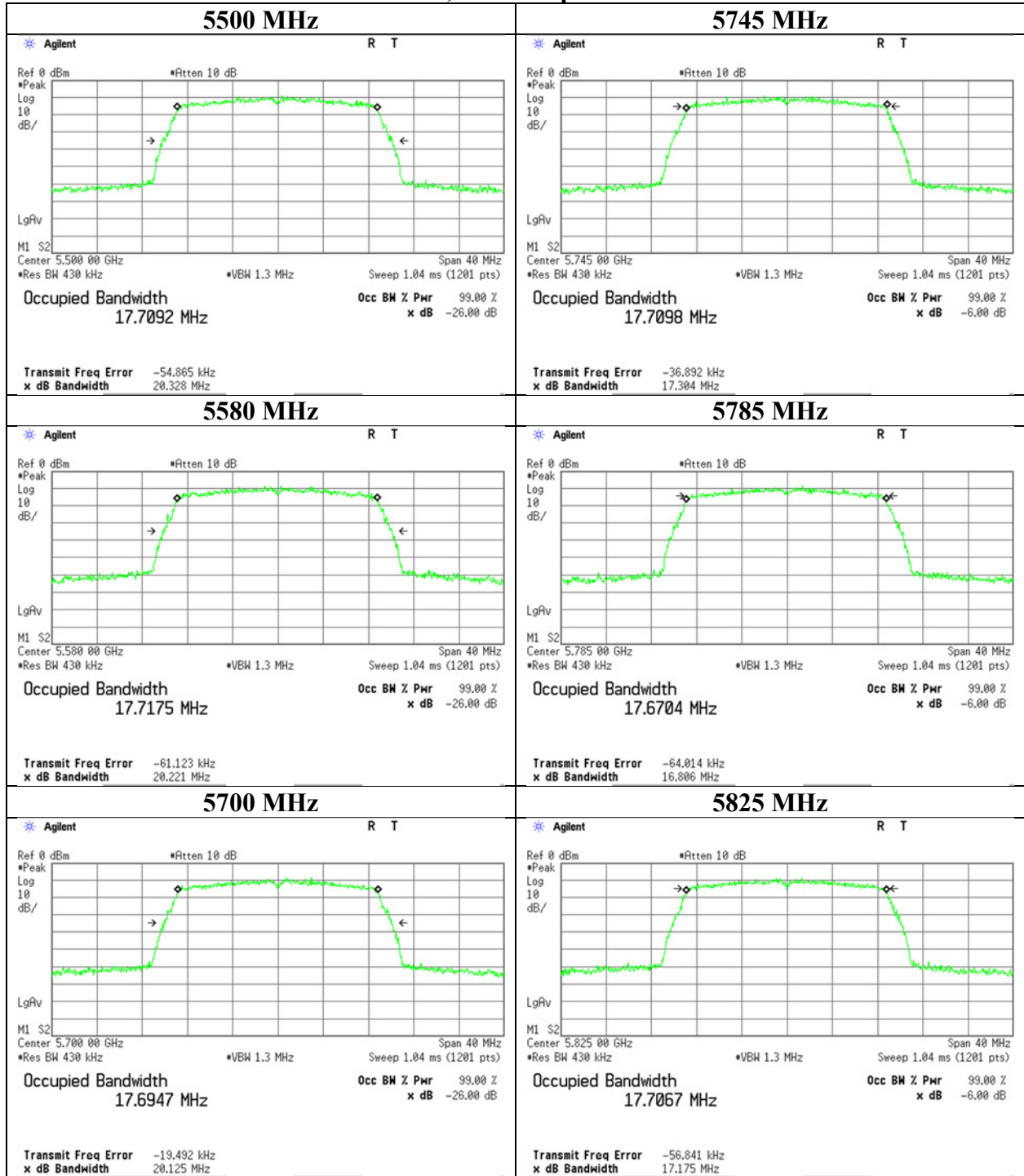
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11n-20, Antenna port WC



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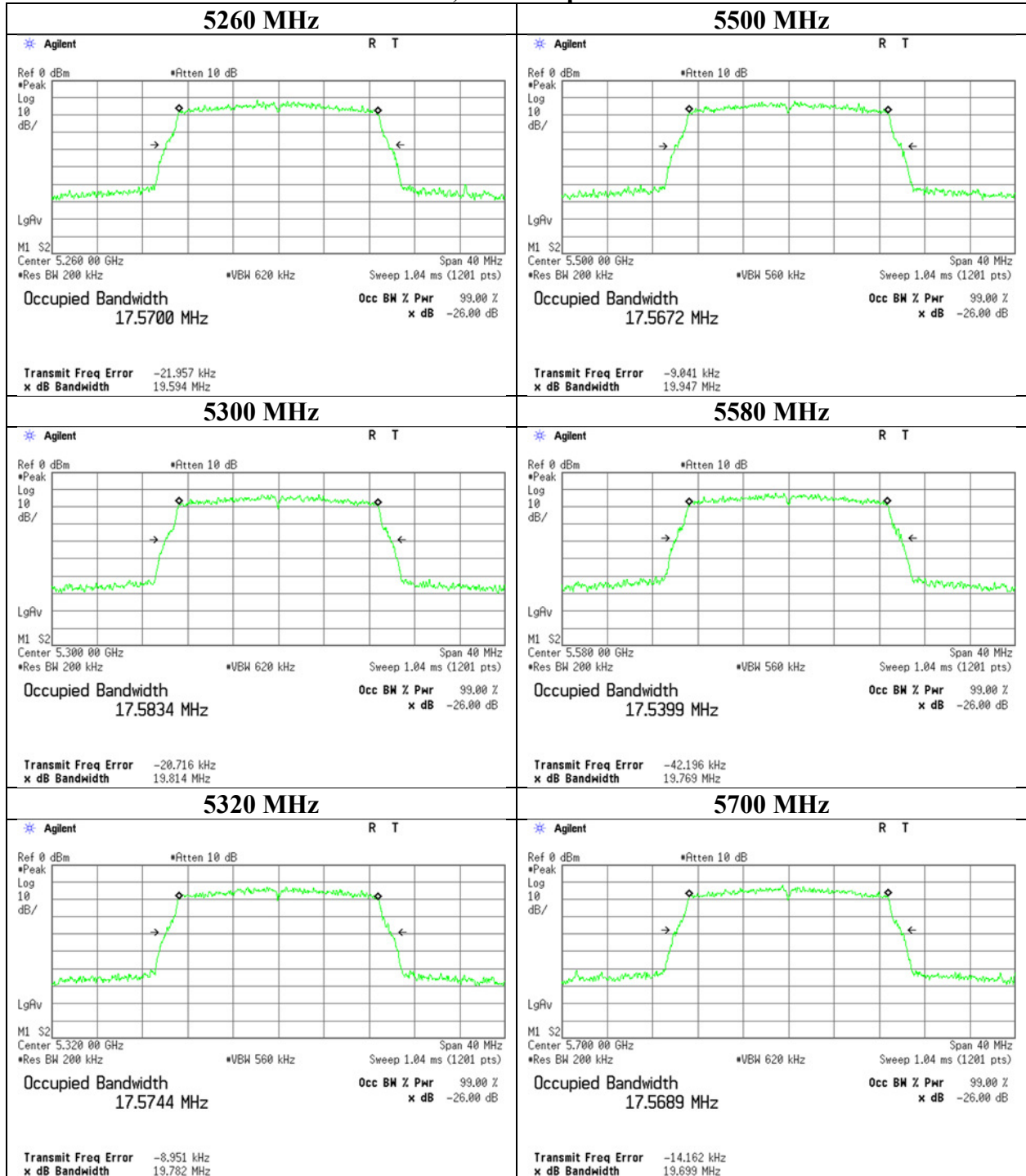
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 29, 2018
Temperature / Humidity 23deg. C / 32 % RH
Engineer Takafumi Noguchi
Mode Tx 11ac-20

Antenna	Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
Antenna port WC	5180	-	17689.5
	5220	-	17689.2
	5240	-	17675.0
	5260	19.594	17733.6
	5300	19.814	17680.8
	5320	19.782	17697.0
	5500	19.947	17689.7
	5580	19.769	17706.9
	5700	19.699	17707.7
	5745	-	17666.0
	5785	-	17662.7
	5825	-	17718.5

26 dB Emission Bandwidth

11ac-20, Antenna port WC



UL Japan, Inc.

Ise EMC Lab.

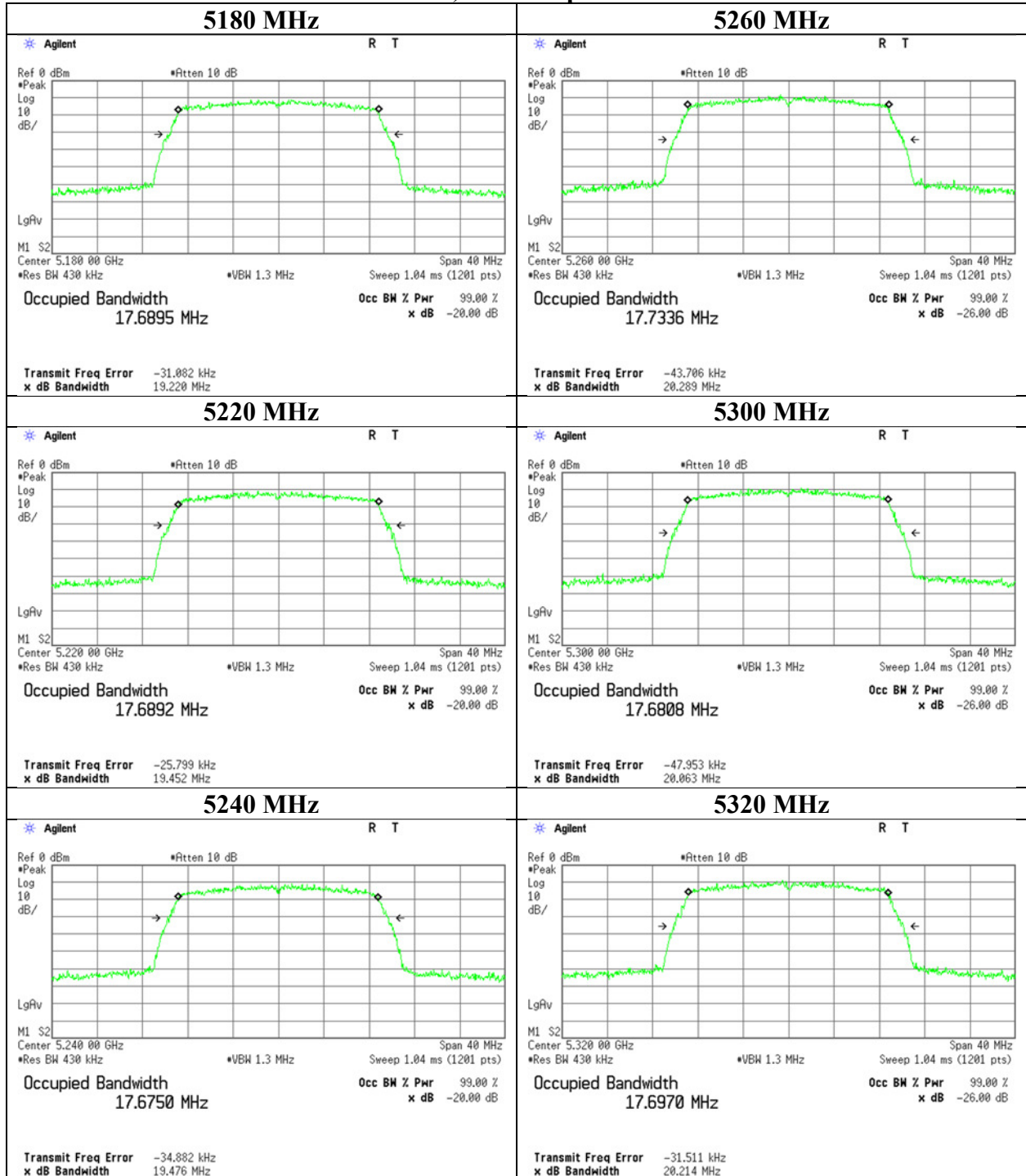
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11ac-20, Antenna port WC



UL Japan, Inc.

Ise EMC Lab.

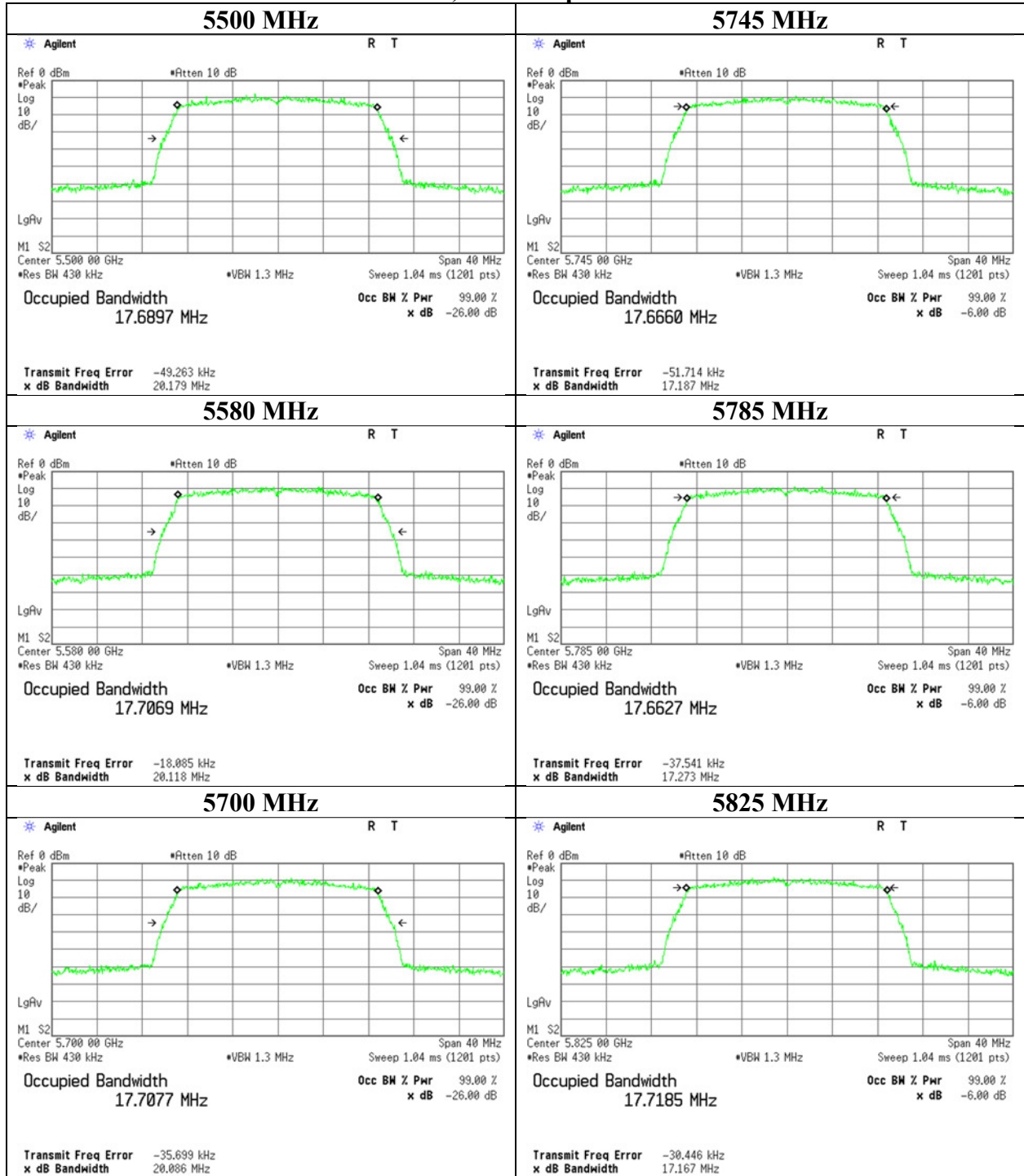
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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99 % Occupied Bandwidth

11ac-20, Antenna port WC



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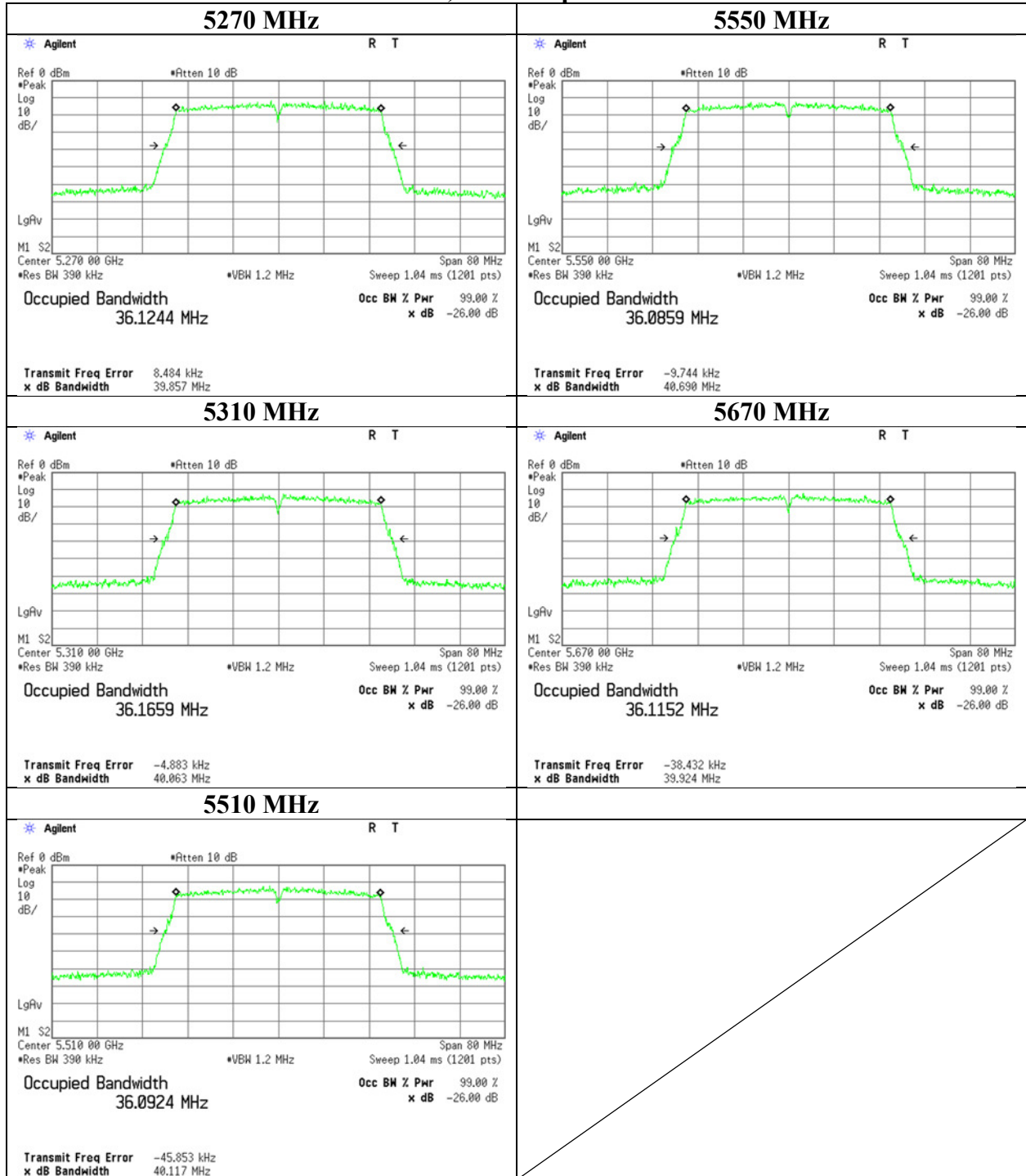
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 29, 2018
Temperature / Humidity 23deg. C / 32 % RH
Engineer Takafumi Noguchi
Mode Tx 11n-40

Antenna	Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
Antenna Port WC	5190	-	36246.4
	5230	-	36342.8
	5270	39.857	36236.5
	5310	40.063	36226.3
	5510	40.117	36189.3
	5550	40.690	36230.5
	5670	39.924	36217.5
	5755	-	36237.4
	5795	-	36263.4

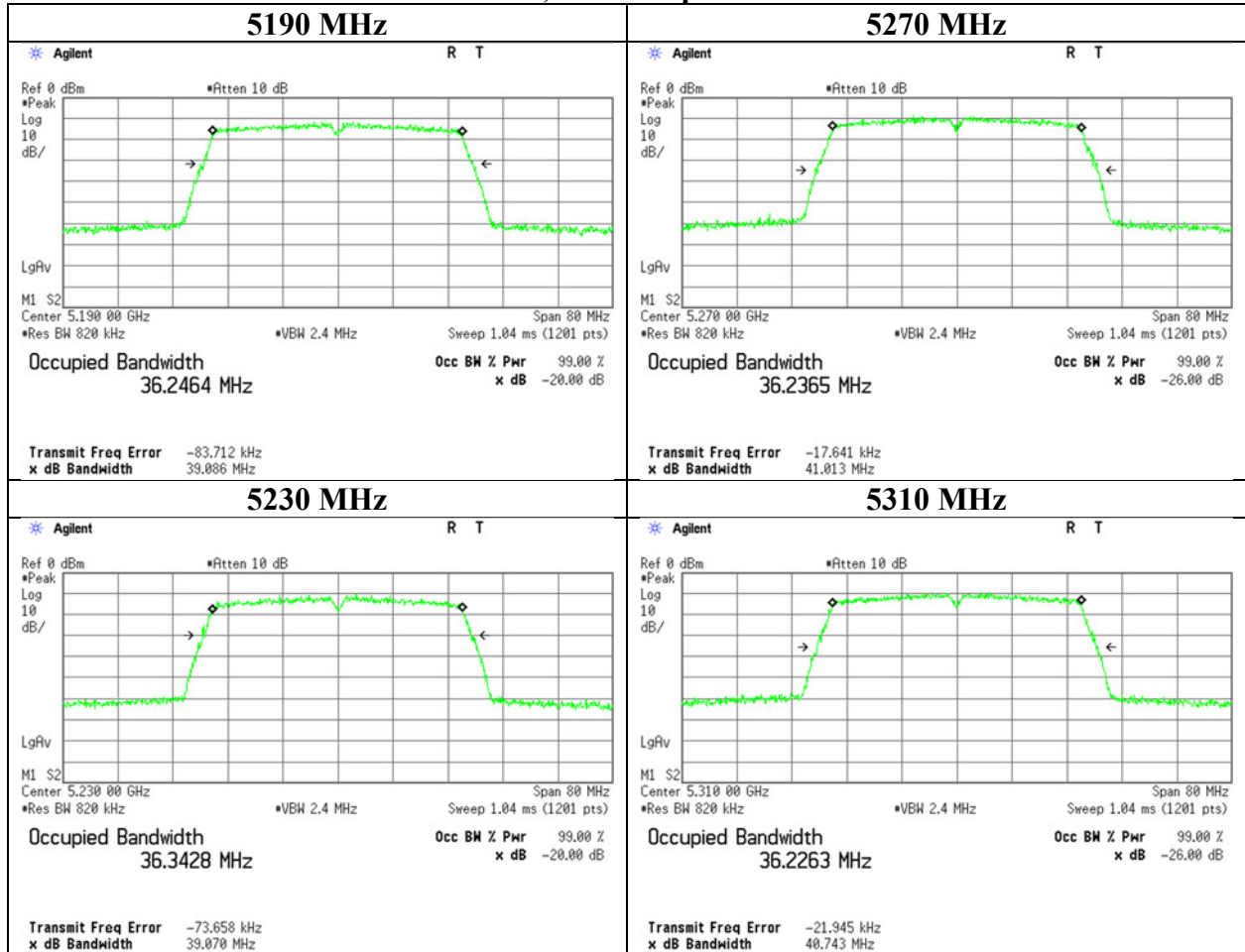
26 dB Emission Bandwidth

11n-40, Antenna port WC



99 % Occupied Bandwidth

11n-40, Antenna port WC



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Ise EMC Lab.

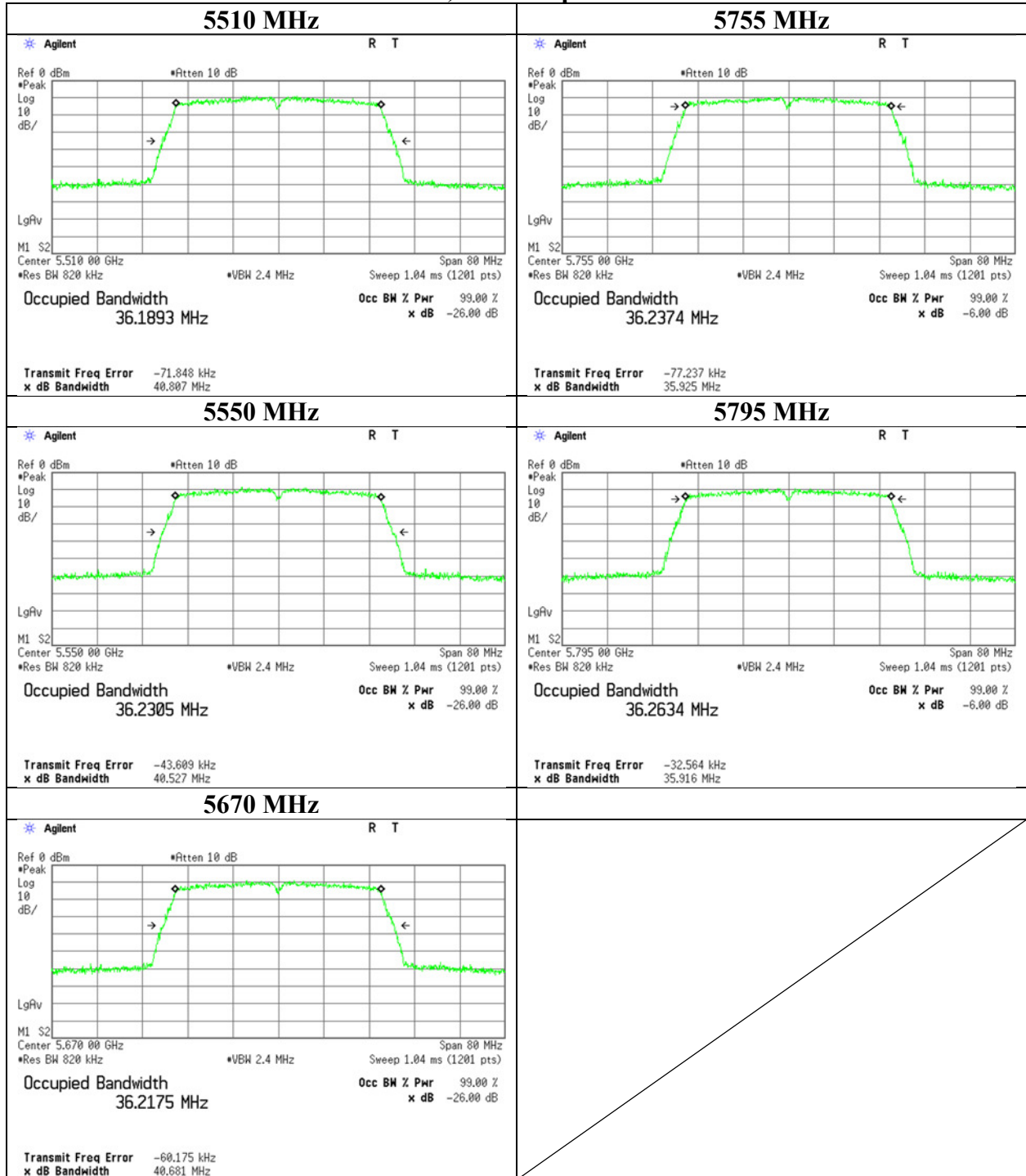
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Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11n-40, Antenna port WC



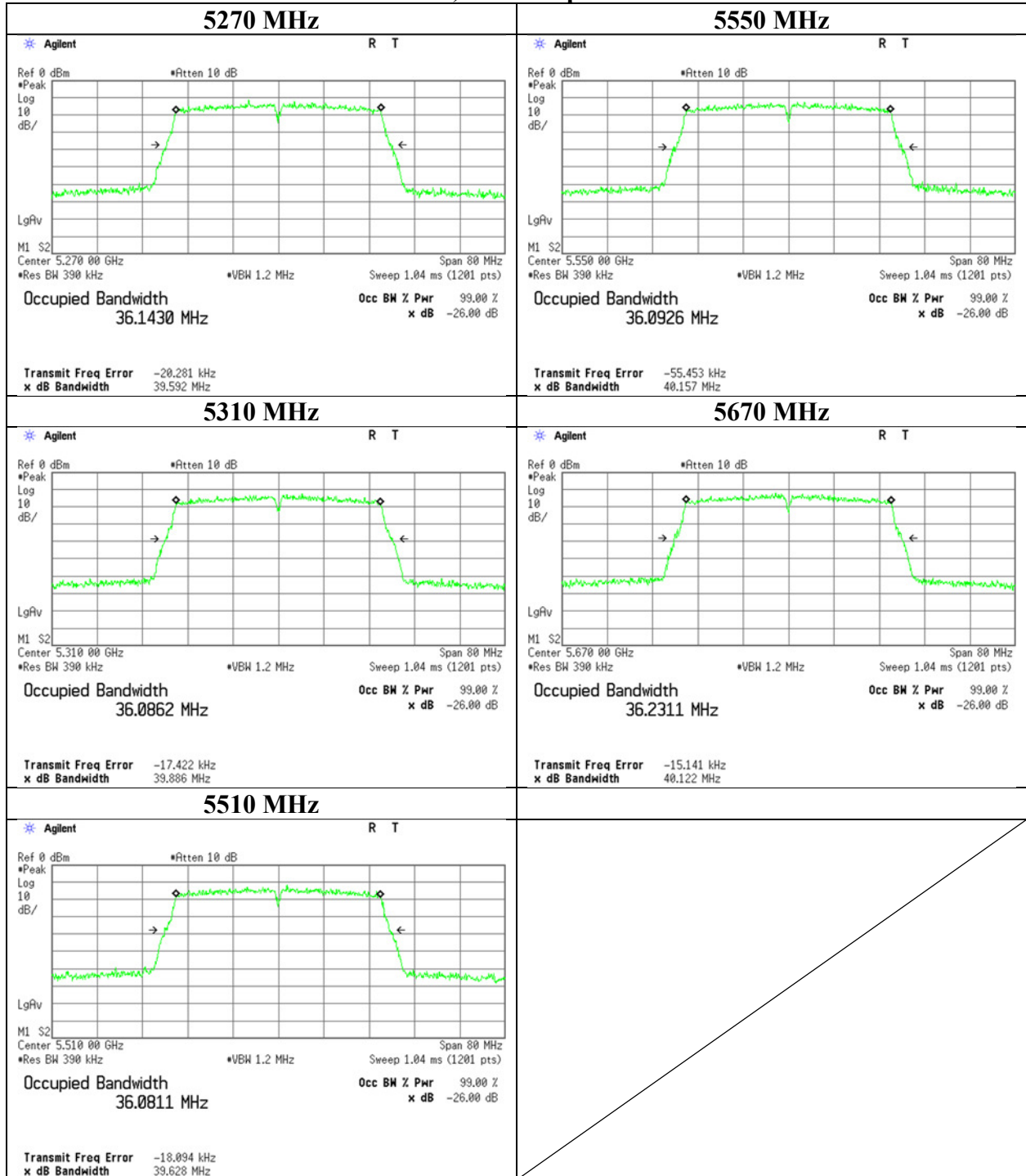
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 29, 2018
Temperature / Humidity 23deg. C / 32 % RH
Engineer Takafumi Noguchi
Mode Tx 11ac-40

Antenna	Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
Antenna Port WC	5190	-	36280.1
	5230	-	36237.2
	5270	39.592	36258.7
	5310	39.886	36274.5
	5510	39.628	36271.3
	5550	40.157	36235.8
	5670	40.122	36249.0
	5755	-	36231.2
	5795	-	36281.1

26 dB Emission Bandwidth

11ac-40, Antenna port WC



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Ise EMC Lab.

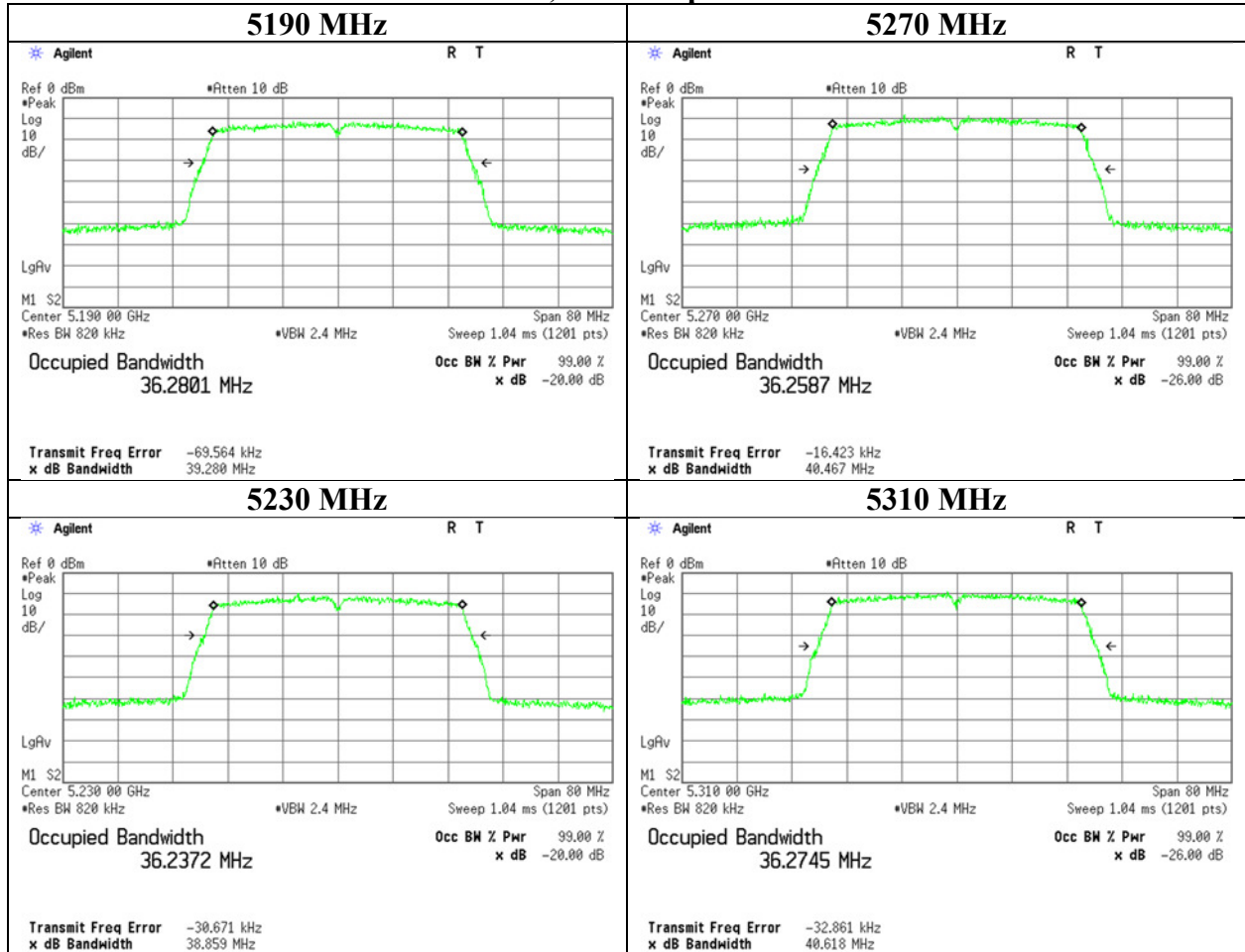
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Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11ac-40, Antenna port WC



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Ise EMC Lab.

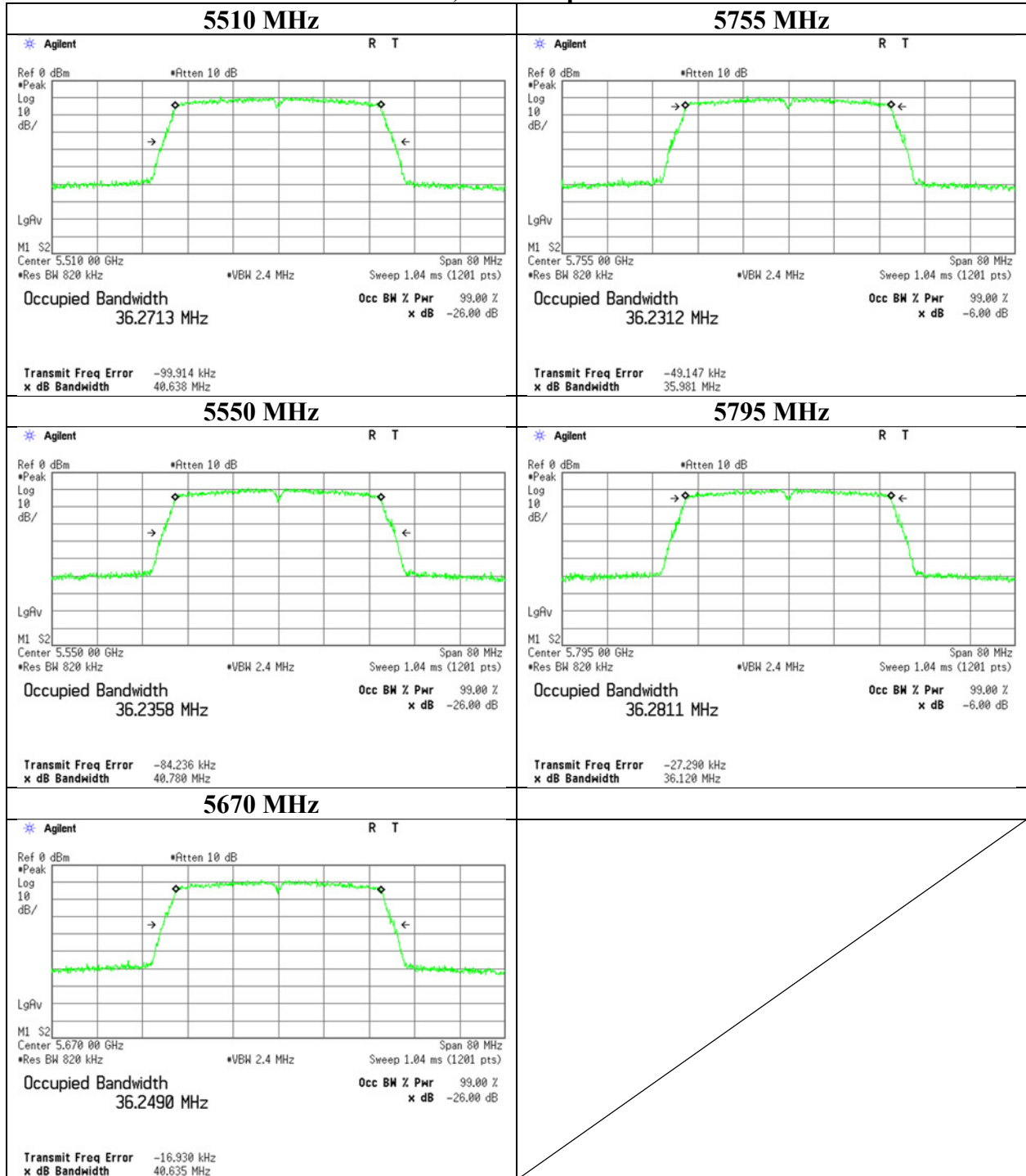
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11ac-40, Antenna port WC



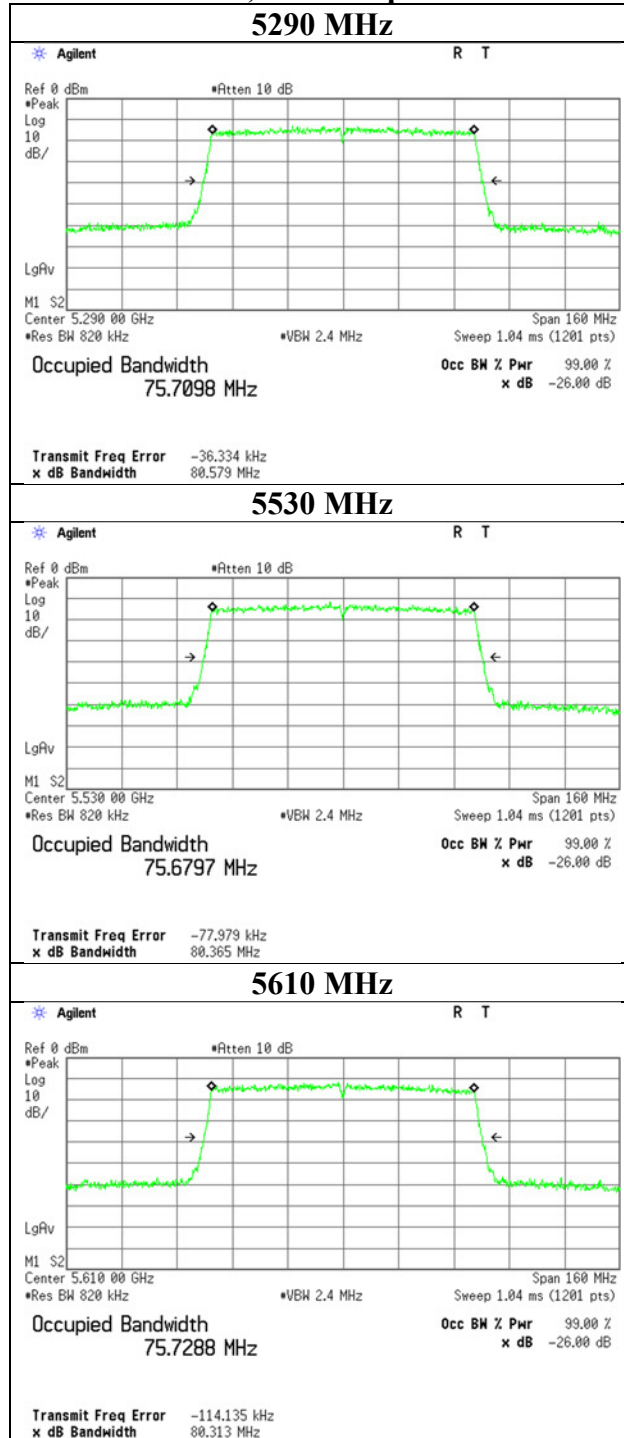
26 dB Emission Bandwidth and 99 % Occupied Bandwidth

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 29, 2018
Temperature / Humidity 23deg. C / 32 % RH
Engineer Takafumi Noguchi
Mode Tx 11ac-80

Antenna	Tested Frequency [MHz]	26 dB Emission Bandwidth [MHz]	99 % Occupied Bandwidth [kHz]
Antenna Port WC	5210	-	75896.1
	5290	80.579	75881.3
	5530	80.365	75813.9
	5610	80.313	75847.0
	5775	-	75860.4

26 dB Emission Bandwidth

11ac-80, Antenna port WC



UL Japan, Inc.

Ise EMC Lab.

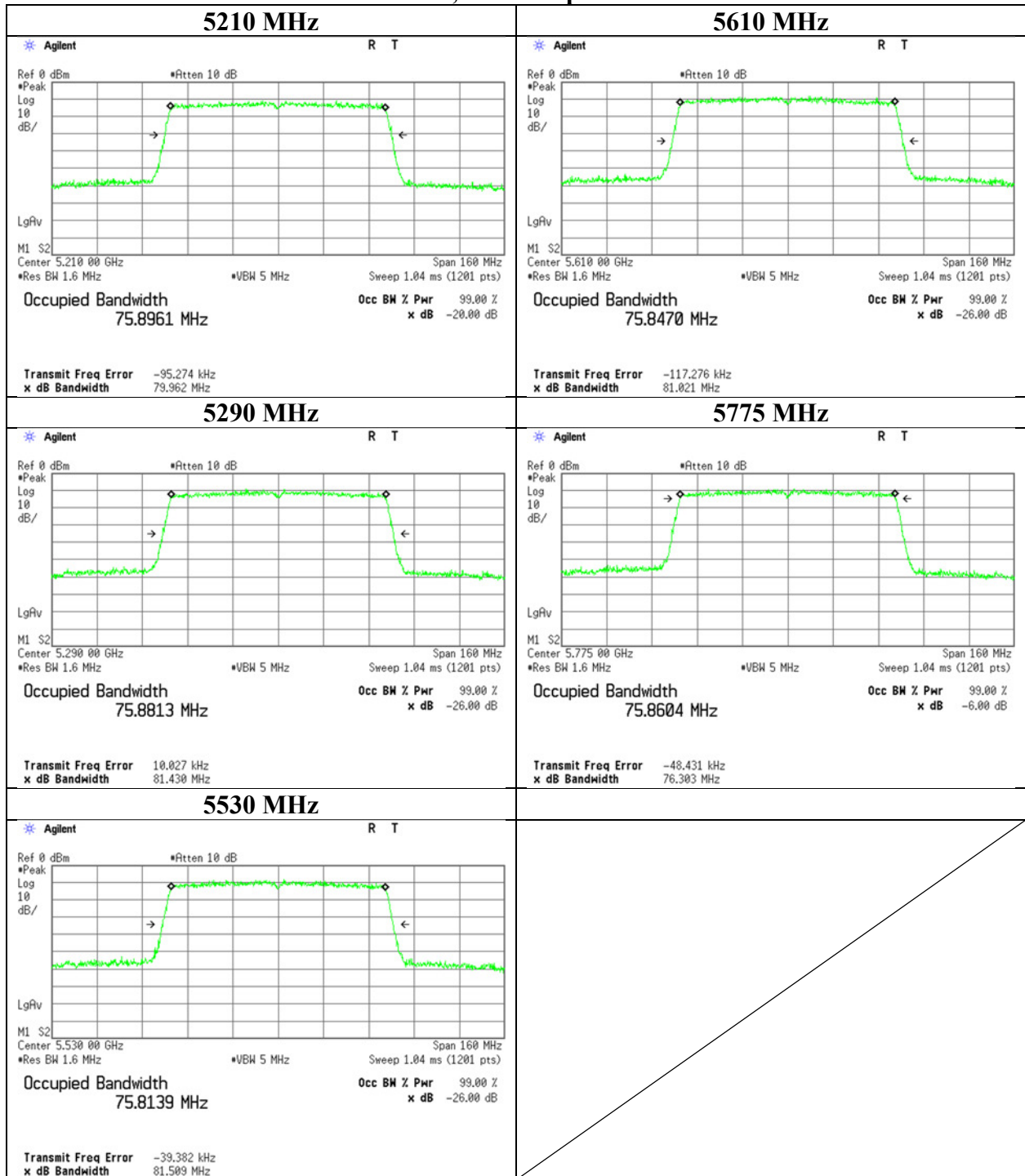
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Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

99 % Occupied Bandwidth

11ac-80, Antenna port WC



6 dB Bandwidth

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 26, 2018 January 29, 2018
Temperature / Humidity 24deg. C / 20 % RH 23deg. C / 32 % RH
Engineer Yuta Moriya Takafumi Noguchi
Mode Tx

11a

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5745	16.412	> 500
5785	16.343	> 500
5825	16.419	> 500

11n-20

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5745	17.429	> 500
5785	17.614	> 500
5825	17.563	> 500

11ac-20

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5745	17.607	> 500
5785	17.651	> 500
5825	17.502	> 500

11n-40

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5755	36.381	> 500
5795	36.453	> 500

11ac-40

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5755	36.431	> 500
5795	36.459	> 500

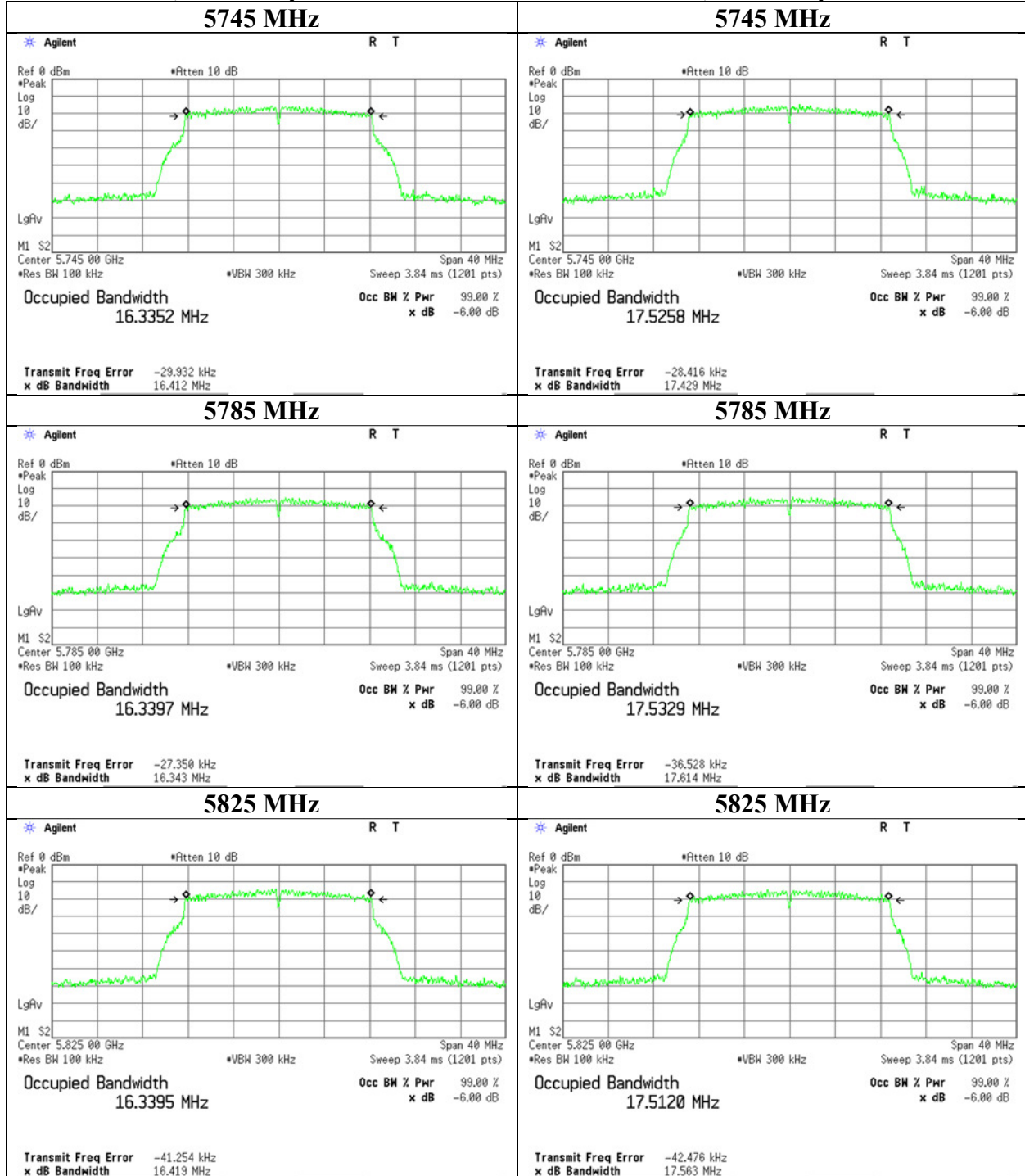
11ac-80

Frequency [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
5775	76.607	> 500

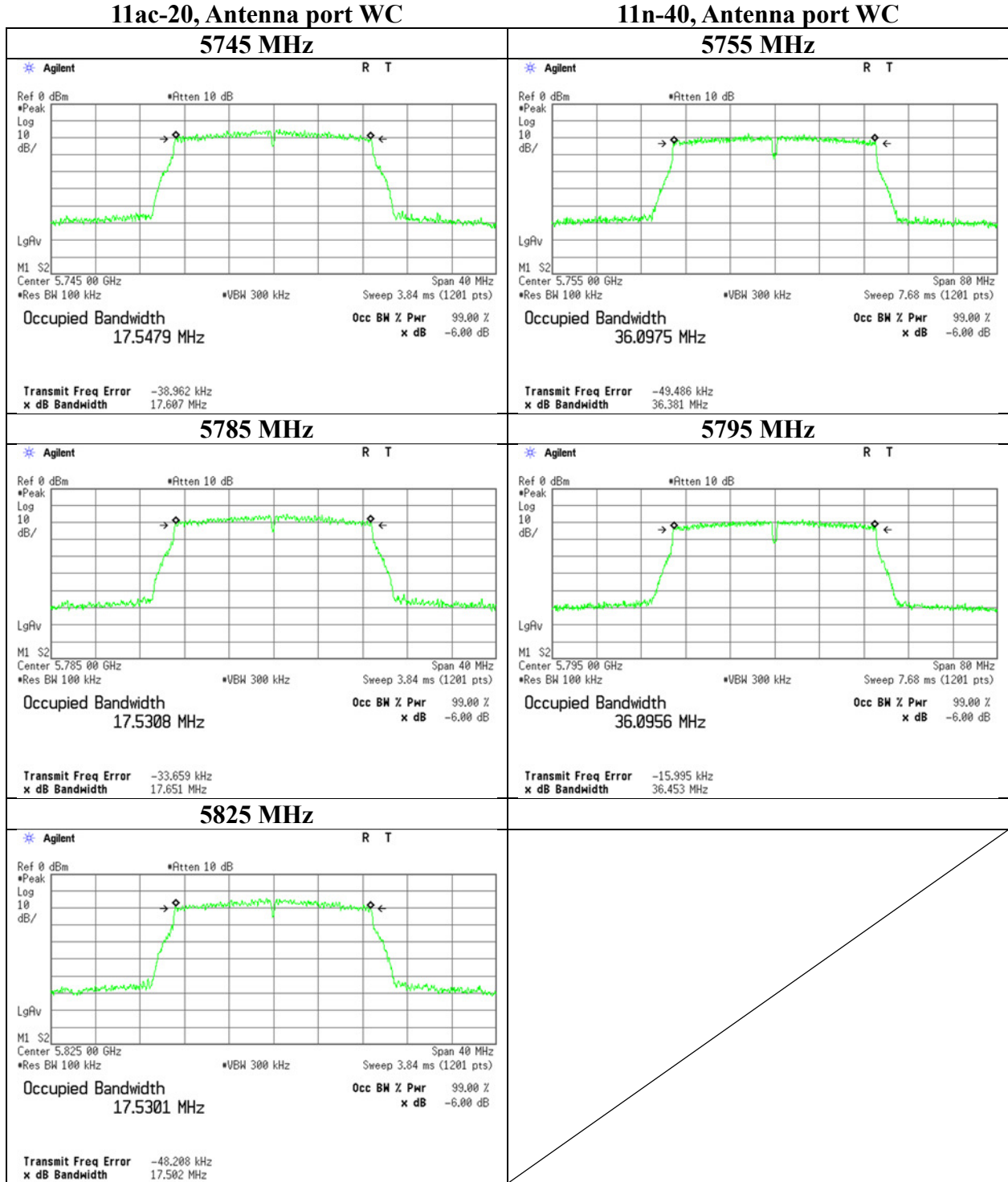
6 dB Bandwidth

11a, Antenna port WC

11n-20, Antenna port WC

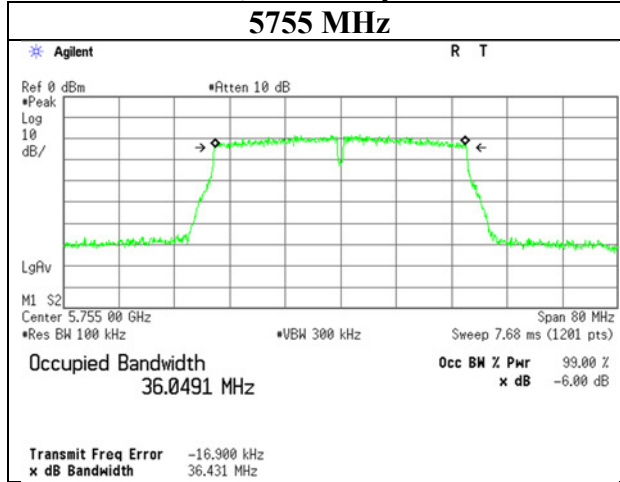


6 dB Bandwidth

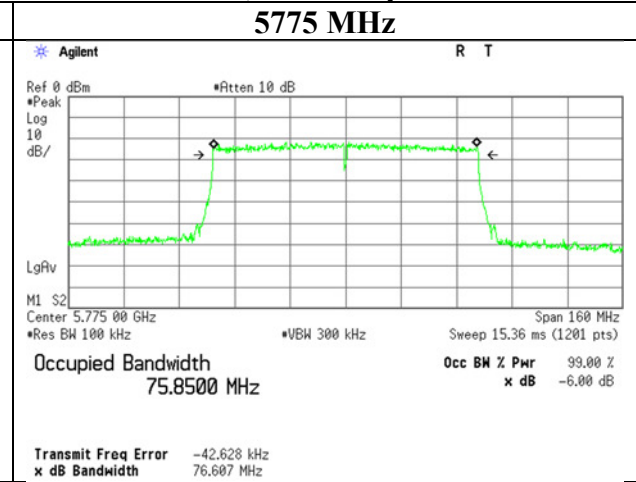


6 dB Bandwidth

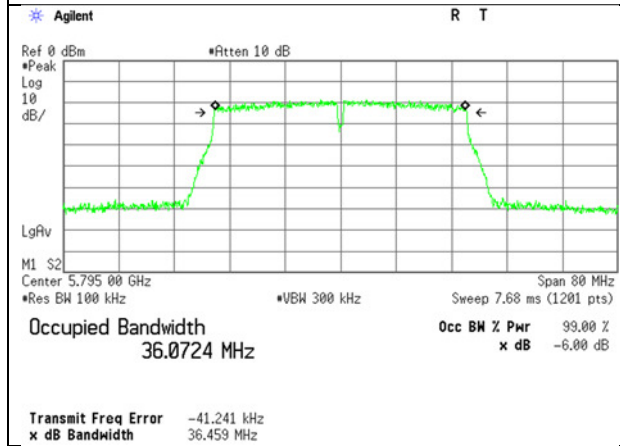
11ac-40, Antenna port WC



11ac-80, Antenna port WC



5795 MHz



Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 23deg. C / 20 % RH
Engineer : Takumi Shimada
Mode : Tx 11a 54 Mbps

Antenna port WA + WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW [MHz]	99% OBW [MHz]	Conducted power						e.i.r.p.					
			Antenna		Sum [mW]	Result [dBm]	Limit [dBm]	Margin [dB]	Antenna		Sum [mW]	Result [dBm]	Limit [dBm]	Margin [dB]
	(B for FCC)	(B for IC)	WA [mW]	WC [mW]										
5180	-	16.559	3.88	4.04	7.92	8.99	22.68	13.69	20.80	21.63	42.42	16.28	29.97	13.69
5220	-	16.589	3.78	3.85	7.62	8.82	22.68	13.86	20.23	20.61	40.84	16.11	29.97	13.86
5240	-	16.577	3.99	4.03	8.02	9.04	22.68	13.64	21.38	21.58	42.96	16.33	29.97	13.64
5260	19.727	16.558	6.65	5.48	12.14	10.84	22.66	11.82	35.65	29.38	65.02	18.13	29.97	11.84
5300	19.402	16.559	6.25	6.47	12.72	11.05	22.58	11.53	33.50	34.67	68.17	18.34	29.97	11.63
5320	19.428	16.658	6.21	6.30	12.50	10.97	22.59	11.62	33.27	33.73	66.99	18.26	29.97	11.71
5500	19.402	16.628	6.49	7.26	13.75	11.38	22.58	11.20	34.75	38.90	73.66	18.67	29.97	11.30
5580	19.223	16.607	7.31	7.50	14.81	11.71	22.54	10.83	39.17	40.18	79.35	19.00	29.97	10.97
5700	19.045	16.555	6.92	8.24	15.16	11.81	22.50	10.69	37.07	44.16	81.23	19.10	29.97	10.87
5745	-	-	6.37	8.51	14.88	11.73	28.71	16.98	34.12	45.60	79.72	19.02	36.00	16.98
5785	-	-	6.47	8.73	15.20	11.82	28.71	16.89	34.67	46.77	81.45	19.11	36.00	16.89
5825	-	-	6.64	7.64	14.28	11.55	28.71	17.16	35.56	40.93	76.49	18.84	36.00	17.16

Tested Frequency [MHz]	Duty Factor [dB]	Antenna port WA						Antenna port WC					
		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result	
						Cond. Power [dBm]	e.i.r.p. [dBm]					Cond. Power [dBm]	e.i.r.p. [dBm]
5180	0.00	-4.86	0.70	10.05	7.29	5.89	13.18	-4.77	0.70	10.13	7.29	6.06	13.35
5220	0.00	-4.98	0.70	10.05	7.29	5.77	13.06	-4.98	0.70	10.13	7.29	5.85	13.14
5240	0.00	-4.74	0.70	10.05	7.29	6.01	13.30	-4.78	0.70	10.13	7.29	6.05	13.34
5260	0.00	-2.52	0.70	10.05	7.29	8.23	15.52	-3.44	0.70	10.13	7.29	7.39	14.68
5300	0.00	-2.79	0.70	10.05	7.29	7.96	15.25	-2.73	0.70	10.14	7.29	8.11	15.40
5320	0.00	-2.83	0.70	10.06	7.29	7.93	15.22	-2.85	0.70	10.14	7.29	7.99	15.28
5500	0.00	-2.74	0.80	10.06	7.29	8.12	15.41	-2.33	0.80	10.14	7.29	8.61	15.90
5580	0.00	-2.22	0.80	10.06	7.29	8.64	15.93	-2.19	0.80	10.14	7.29	8.75	16.04
5700	0.00	-2.45	0.80	10.05	7.29	8.40	15.69	-1.77	0.80	10.13	7.29	9.16	16.45
5745	0.00	-2.81	0.80	10.05	7.29	8.04	15.33	-1.63	0.80	10.13	7.29	9.30	16.59
5785	0.00	-2.74	0.80	10.05	7.29	8.11	15.40	-1.51	0.80	10.12	7.29	9.41	16.70
5825	0.00	-2.63	0.80	10.05	7.29	8.22	15.51	-2.09	0.80	10.12	7.29	8.83	16.12

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor
e.i.r.p. Result = Conducted Power Result + Antenna Gain

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

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

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 23deg. C / 20 % RH
Engineer : Takumi Shimada
Mode : Tx 11n-20 MCS 7

Antenna port WA + WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW (B for FCC) [MHz]	99% OBW (B for IC) [MHz]	Conducted power						e.i.r.p.					
			WA [mW]	Antenna WC [mW]	Sum [mW]	Result [dBm]	Limit [dBm]	Margin [dB]	WA [mW]	Antenna WC [mW]	Sum [mW]	Result [dBm]	Limit [dBm]	Margin [dB]
5180	-	17.681	3.94	4.04	7.97	9.02	22.68	13.66	21.09	21.63	42.71	16.31	29.97	13.66
5220	-	17.723	3.99	4.04	8.03	9.05	22.68	13.63	21.38	21.63	43.01	16.34	29.97	13.63
5240	-	17.728	4.10	3.97	8.07	9.07	22.68	13.61	21.98	21.28	43.26	16.36	29.97	13.61
5260	19.897	17.759	6.50	5.37	11.87	10.75	22.68	11.93	34.83	28.77	63.61	18.04	29.97	11.93
5300	19.724	17.710	5.65	6.08	11.73	10.69	22.65	11.96	30.27	32.58	62.85	17.98	29.97	11.99
5320	19.828	17.739	5.70	6.18	11.88	10.75	22.68	11.93	30.55	33.11	63.66	18.04	29.97	11.93
5500	19.709	17.709	6.38	7.28	13.66	11.35	22.65	11.30	34.20	38.99	73.19	18.64	29.97	11.33
5580	19.982	17.718	7.31	7.50	14.81	11.71	22.68	10.97	39.17	40.18	79.35	19.00	29.97	10.97
5700	19.951	17.695	7.01	8.24	15.26	11.83	22.68	10.85	37.58	44.16	81.74	19.12	29.97	10.85
5745	-	-	6.47	8.38	14.85	11.72	28.71	16.99	34.67	44.87	79.55	19.01	36.00	16.99
5785	-	-	6.14	8.75	14.89	11.73	28.71	16.98	32.89	46.88	79.77	19.02	36.00	16.98
5825	-	-	6.59	7.53	14.13	11.50	28.71	17.21	35.32	40.36	75.68	18.79	36.00	17.21

Tested Frequency [MHz]	Duty Factor [dB]	Antenna port WA						Antenna port WC					
		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	e.i.r.p. [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	e.i.r.p. [dBm]
5180	0.00	-4.80	0.70	10.05	7.29	5.95	13.24	-4.77	0.70	10.13	7.29	6.06	13.35
5220	0.00	-4.74	0.70	10.05	7.29	6.01	13.30	-4.77	0.70	10.13	7.29	6.06	13.35
5240	0.00	-4.62	0.70	10.05	7.29	6.13	13.42	-4.84	0.70	10.13	7.29	5.99	13.28
5260	0.00	-2.62	0.70	10.05	7.29	8.13	15.42	-3.53	0.70	10.13	7.29	7.30	14.59
5300	0.00	-3.23	0.70	10.05	7.29	7.52	14.81	-3.00	0.70	10.14	7.29	7.84	15.13
5320	0.00	-3.20	0.70	10.06	7.29	7.56	14.85	-2.93	0.70	10.14	7.29	7.91	15.20
5500	0.00	-2.81	0.80	10.06	7.29	8.05	15.34	-2.32	0.80	10.14	7.29	8.62	15.91
5580	0.00	-2.22	0.80	10.06	7.29	8.64	15.93	-2.19	0.80	10.14	7.29	8.75	16.04
5700	0.00	-2.39	0.80	10.05	7.29	8.46	15.75	-1.77	0.80	10.13	7.29	9.16	16.45
5745	0.00	-2.74	0.80	10.05	7.29	8.11	15.40	-1.70	0.80	10.13	7.29	9.23	16.52
5785	0.00	-2.97	0.80	10.05	7.29	7.88	15.17	-1.50	0.80	10.12	7.29	9.42	16.71
5825	0.00	-2.66	0.80	10.05	7.29	8.19	15.48	-2.15	0.80	10.12	7.29	8.77	16.06

Sample Calculation:

Conducted Power Result = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor
e.i.r.p. Result = Conducted Power Result + Antenna Gain

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

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

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11ac-20

Antenna port WA + WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW (B for FCC) [MHz]	99% OBW (B for IC) [MHz]	Conducted power						e.i.r.p.					
			WA [mW]	Antenna WC [mW]	Sum [mW]	Result [dBm]	Limit [dBm]	Margin [dB]	WA [mW]	Antenna WC [mW]	Sum [mW]	Result [dBm]	Limit [dBm]	Margin [dB]
5180	-	17.690	4.11	3.92	8.03	9.05	22.68	13.63	22.03	20.99	43.02	16.34	29.97	13.63
5220	-	17.689	3.71	3.97	7.68	8.85	22.68	13.83	19.86	21.28	41.14	16.14	29.97	13.83
5240	-	17.675	3.68	3.72	7.41	8.70	22.68	13.98	19.72	19.95	39.68	15.99	29.97	13.98
5260	19.594	17.734	5.74	5.30	11.04	10.43	22.63	12.20	30.76	28.38	59.14	17.72	29.97	12.25
5300	19.814	17.681	5.78	5.94	11.72	10.69	22.67	11.98	30.97	31.84	62.82	17.98	29.97	11.99
5320	19.782	17.697	5.68	5.89	11.56	10.63	22.67	12.04	30.41	31.55	61.96	17.92	29.97	12.05
5500	19.947	17.690	6.32	6.89	13.21	11.21	22.68	11.47	33.88	36.90	70.78	18.50	29.97	11.47
5580	19.769	17.707	6.71	7.43	14.14	11.51	22.66	11.15	35.97	39.81	75.79	18.80	29.97	11.17
5700	19.699	17.708	7.10	8.20	15.30	11.85	22.65	10.80	38.02	43.95	81.97	19.14	29.97	10.83
5745	-	-	6.10	8.45	14.55	11.63	28.71	17.08	32.66	45.29	77.95	18.92	36.00	17.08
5785	-	-	5.65	8.53	14.18	11.52	28.71	17.19	30.27	45.71	75.98	18.81	36.00	17.19
5825	-	-	6.44	7.29	13.74	11.38	28.71	17.33	34.51	39.08	73.60	18.67	36.00	17.33

Tested Frequency [MHz]	Duty Factor [dB]	Antenna port WA						Antenna port WC					
		Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	Result e.i.r.p. [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	Result e.i.r.p. [dBm]
5180	0.00	-4.61	0.70	10.05	7.29	6.14	13.43	-4.90	0.70	10.13	7.29	5.93	13.22
5220	0.00	-5.06	0.70	10.05	7.29	5.69	12.98	-4.84	0.70	10.13	7.29	5.99	13.28
5240	0.00	-5.09	0.70	10.05	7.29	5.66	12.95	-5.12	0.70	10.13	7.29	5.71	13.00
5260	0.00	-3.16	0.70	10.05	7.29	7.59	14.88	-3.59	0.70	10.13	7.29	7.24	14.53
5300	0.00	-3.13	0.70	10.05	7.29	7.62	14.91	-3.10	0.70	10.14	7.29	7.74	15.03
5320	0.00	-3.22	0.70	10.06	7.29	7.54	14.83	-3.14	0.70	10.14	7.29	7.70	14.99
5500	0.00	-2.85	0.80	10.06	7.29	8.01	15.30	-2.56	0.80	10.14	7.29	8.38	15.67
5580	0.00	-2.59	0.80	10.06	7.29	8.27	15.56	-2.23	0.80	10.14	7.29	8.71	16.00
5700	0.00	-2.34	0.80	10.05	7.29	8.51	15.80	-1.79	0.80	10.13	7.29	9.14	16.43
5745	0.00	-3.00	0.80	10.05	7.29	7.85	15.14	-1.66	0.80	10.13	7.29	9.27	16.56
5785	0.00	-3.33	0.80	10.05	7.29	7.52	14.81	-1.61	0.80	10.12	7.29	9.31	16.60
5825	0.00	-2.76	0.80	10.05	7.29	8.09	15.38	-2.29	0.80	10.12	7.29	8.63	15.92

Sample Calculation:

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

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

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

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

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11n-40

Antenna port WA +Antenna port WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW [MHz]	99% OBW [MHz]	Conducted power						e.i.r.p.					
			Antenna			Result [dBm]	Limit [dBm]	Margin [dB]	Antenna			Result [dBm]	Limit [dBm]	Margin [dB]
	(B for FCC)	(B for IC)	WA [mW]	WC [mW]	Sum [mW]				WA [mW]	WC [mW]	Sum [mW]			
5190	-	36.246	3.38	3.83	7.21	8.58	22.68	14.10	18.11	20.51	38.63	15.87	29.97	14.10
5230	-	36.343	3.75	3.72	7.47	8.73	22.68	13.95	20.09	19.91	40.00	16.02	29.97	13.95
5270	39.857	36.237	6.14	5.40	11.53	10.62	22.68	12.06	32.89	28.91	61.79	17.91	29.97	12.06
5310	40.063	36.226	5.78	5.90	11.68	10.68	22.68	12.00	30.97	31.62	62.60	17.97	29.97	12.00
5510	40.117	36.189	6.38	7.18	13.56	11.32	22.68	11.36	34.20	38.46	72.66	18.61	29.97	11.36
5550	40.690	36.231	6.27	7.05	13.31	11.24	22.68	11.44	33.57	37.76	71.33	18.53	29.97	11.44
5670	39.924	36.218	6.95	6.46	13.41	11.27	22.68	11.41	37.24	34.59	71.83	18.56	29.97	11.41
5755	-	-	6.10	8.09	14.19	11.52	28.71	17.19	32.66	43.35	76.01	18.81	36.00	17.19
5795	-	-	5.98	8.77	14.75	11.69	28.71	17.02	32.06	46.99	79.05	18.98	36.00	17.02

Tested Frequency [MHz]	Antenna port WA						Antenna port WC						
	Duty Factor [dB]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	Result e.i.r.p. [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	Result e.i.r.p. [dBm]
5190	0.00	-5.46	0.70	10.05	7.29	5.29	12.58	-5.00	0.70	10.13	7.29	5.83	13.12
5230	0.00	-5.01	0.70	10.05	7.29	5.74	13.03	-5.13	0.70	10.13	7.29	5.70	12.99
5270	0.00	-2.87	0.70	10.05	7.29	7.88	15.17	-3.51	0.70	10.13	7.29	7.32	14.61
5310	0.00	-3.14	0.70	10.06	7.29	7.62	14.91	-3.13	0.70	10.14	7.29	7.71	15.00
5510	0.00	-2.81	0.80	10.06	7.29	8.05	15.34	-2.38	0.80	10.14	7.29	8.56	15.85
5550	0.00	-2.89	0.80	10.06	7.29	7.97	15.26	-2.46	0.80	10.14	7.29	8.48	15.77
5670	0.00	-2.43	0.80	10.05	7.29	8.42	15.71	-2.83	0.80	10.13	7.29	8.10	15.39
5755	0.00	-3.00	0.80	10.05	7.29	7.85	15.14	-1.85	0.80	10.13	7.29	9.08	16.37
5795	0.00	-3.08	0.80	10.05	7.29	7.77	15.06	-1.49	0.80	10.12	7.29	9.43	16.72

Sample Calculation:

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

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

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

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

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11ac-40

Antenna port WA +Antenna port WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW (B for FCC) [MHz]	99% OBW (B for IC) [MHz]	Conducted power						e.i.r.p.					
			WA [mW]	WC [mW]	Sum [mW]	Result [dBm]	Limit [dBm]	Margin [dB]	WA [mW]	WC [mW]	Sum [mW]	Result [dBm]	Limit [dBm]	Margin [dB]
5190	-	36.280	3.57	3.77	7.34	8.66	22.68	14.02	19.14	20.18	39.33	15.95	29.97	14.02
5230	-	36.237	3.50	3.83	7.33	8.65	22.68	14.03	18.75	20.51	39.26	15.94	29.97	14.03
5270	39.592	36.259	6.37	5.50	11.86	10.74	22.68	11.94	34.12	29.44	63.56	18.03	29.97	11.94
5310	39.886	36.275	5.53	6.08	11.61	10.65	22.68	12.03	29.65	32.58	62.23	17.94	29.97	12.03
5510	39.628	36.271	6.40	7.21	13.61	11.34	22.68	11.34	34.28	38.64	72.91	18.63	29.97	11.34
5550	40.157	36.236	6.34	6.97	13.30	11.24	22.68	11.44	33.96	37.33	71.29	18.53	29.97	11.44
5670	40.122	36.249	7.05	6.52	13.56	11.32	22.68	11.36	37.76	34.91	72.67	18.61	29.97	11.36
5755	-	-	6.15	8.63	14.78	11.70	28.71	17.01	32.96	46.24	79.20	18.99	36.00	17.01
5795	-	-	6.17	8.61	14.78	11.70	28.71	17.01	33.04	46.13	79.17	18.99	36.00	17.01

Tested Frequency [MHz]	Antenna port WA						Antenna port WC						
	Duty Factor [dB]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	e.i.r.p. [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	e.i.r.p. [dBm]
5190	0.00	-5.22	0.70	10.05	7.29	5.53	12.82	-5.07	0.70	10.13	7.29	5.76	13.05
5230	0.00	-5.31	0.70	10.05	7.29	5.44	12.73	-5.00	0.70	10.13	7.29	5.83	13.12
5270	0.00	-2.71	0.70	10.05	7.29	8.04	15.33	-3.43	0.70	10.13	7.29	7.40	14.69
5310	0.00	-3.33	0.70	10.06	7.29	7.43	14.72	-3.00	0.70	10.14	7.29	7.84	15.13
5510	0.00	-2.80	0.80	10.06	7.29	8.06	15.35	-2.36	0.80	10.14	7.29	8.58	15.87
5550	0.00	-2.84	0.80	10.06	7.29	8.02	15.31	-2.51	0.80	10.14	7.29	8.43	15.72
5670	0.00	-2.37	0.80	10.05	7.29	8.48	15.77	-2.79	0.80	10.13	7.29	8.14	15.43
5755	0.00	-2.96	0.80	10.05	7.29	7.89	15.18	-1.57	0.80	10.13	7.29	9.36	16.65
5795	0.00	-2.95	0.80	10.05	7.29	7.90	15.19	-1.57	0.80	10.12	7.29	9.35	16.64

Sample Calculation:

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

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

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

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

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11ac-80

Antenna port WA +Antenna port WC

Applied limit: 15.407, mobile and portable client device

Tested Frequency [MHz]	26 dB EBW (B for FCC) [MHz]	99% OBW (B for IC) [MHz]	Conducted power						e.i.r.p.					
			Antenna			Result [dBm]	Limit [dBm]	Margin [dB]	Antenna			Result [dBm]	Limit [dBm]	Margin [dB]
1 [mW]	2 [mW]	Sum [mW]	1 [mW]	2 [mW]	Sum [mW]									
5210	-	75.896	3.41	4.09	7.50	8.75	22.68	13.93	18.28	21.93	40.21	16.04	29.97	13.93
5290	80.579	75.881	5.57	6.14	11.71	10.69	22.68	11.99	29.85	32.89	62.74	17.98	29.97	11.99
5530	80.365	75.814	6.56	6.68	13.24	11.22	22.68	11.46	35.16	35.81	70.97	18.51	29.97	11.46
5610	80.313	75.847	7.33	7.83	15.16	11.81	22.68	10.87	39.26	41.98	81.24	19.10	29.97	10.87
5775	-	-	5.87	8.71	14.58	11.64	28.71	17.07	31.48	46.67	78.14	18.93	36.00	17.07

Tested Frequency [MHz]	Antenna port WA							Antenna port WC						
	Duty Factor [dB]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	Result e.i.r.p. [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	Result Cond. Power [dBm]	Result e.i.r.p. [dBm]	
5210	0.00	-5.42	0.70	10.05	7.29	5.33	12.62	-4.71	0.70	10.13	7.29	6.12	13.41	
5290	0.00	-3.29	0.70	10.05	7.29	7.46	14.75	-2.95	0.70	10.13	7.29	7.88	15.17	
5530	0.00	-2.69	0.80	10.06	7.29	8.17	15.46	-2.69	0.80	10.14	7.29	8.25	15.54	
5610	0.00	-2.20	0.80	10.05	7.29	8.65	15.94	-1.99	0.80	10.13	7.29	8.94	16.23	
5775	0.00	-3.16	0.80	10.05	7.29	7.69	14.98	-1.53	0.80	10.13	7.29	9.40	16.69	

Sample Calculation:

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

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

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

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

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 23, 2018
Temperature / Humidity : 24deg. C / 22 % RH
Engineer : Takafumi Noguchi
Mode : Tx

5500 MHz

mode	Rate [Mbps]	Antenna port WA Reading Average		Antenna port WC Reading Average		Total Reading Power		Remark [dB]
		[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
11a	6	-2.79	0.526	-2.45	0.569	0.39	1.095	
	9	-2.79	0.526	-2.44	0.570	0.40	1.096	
	12	-2.75	0.531	-2.40	0.575	0.44	1.106	
	18	-2.72	0.535	-2.43	0.571	0.44	1.106	
	24	-2.78	0.527	-2.44	0.570	0.40	1.097	
	36	-3.06	0.494	-2.28	0.592	0.36	1.086	
	48	-2.85	0.519	-2.32	0.586	0.43	1.105	
54	-2.78	0.527	-2.29	0.590	0.48	1.117	*	

*: Worst Rate

*1)The test was conducted by the use of Gate function.

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

Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room	
Report No.	12079941H	
Date	January 23, 2018	January 24, 2018
Temperature / Humidity	24deg. C / 22 % RH	22deg. C / 21 % RH
Engineer	Takafumi Noguchi	Yuta Moriya
Mode	Tx	

5500 MHz

mode	MCS Number	Antenna port WA Reading Average		Antenna port WC Reading Average		Total Reading Power		Remark
		[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
		11n-20	0	-2.48	0.565	-2.44	0.570	
1	-2.57		0.553	-2.45	0.569	0.50	1.122	
2	-2.58		0.552	-2.33	0.585	0.56	1.137	
3	-2.62		0.547	-2.36	0.581	0.52	1.128	
4	-2.56		0.555	-2.35	0.582	0.56	1.137	
5	-2.44		0.570	-2.40	0.575	0.59	1.146	
6	-2.54		0.557	-2.33	0.585	0.58	1.142	
7	-2.51		0.561	-2.32	0.586	0.60	1.147	*
8	-2.69		0.538	-2.49	0.564	0.42	1.102	
9	-2.51		0.561	-2.40	0.575	0.56	1.136	
10	-2.56		0.555	-2.49	0.564	0.49	1.118	
11	-2.54		0.557	-2.34	0.583	0.57	1.141	
12	-2.52		0.560	-2.39	0.577	0.56	1.137	
13	-2.51		0.561	-2.39	0.577	0.56	1.138	
14	-2.55		0.556	-2.47	0.566	0.50	1.122	
15	-2.65	0.543	-2.55	0.556	0.41	1.099		

*Worst MCS

*1)The test was conducted by the use of Gate function.

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

Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room	
Report No.	12079941H	
Date	January 23, 2018	January 24, 2018
Temperature / Humidity	24deg. C / 22 % RH	22deg. C / 21 % RH
Engineer	Takafumi Noguchi	Yuta Moriya
Mode	Tx	

5500 MHz

mode	MCS Number	Antenna port WA Reading Average		Antenna port WC Reading Average		Total Reading Power		Remark
		[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
		11ac-20 1TX	0	-2.65	0.543	-2.59	0.551	
1	-2.59		0.551	-2.51	0.561	0.46	1.112	
2	-2.48		0.565	-2.47	0.566	0.54	1.131	
3	-2.39		0.577	-2.58	0.552	0.53	1.129	
4	-2.44		0.570	-2.52	0.560	0.53	1.130	
5	-2.53		0.558	-2.43	0.571	0.53	1.130	
6	-2.60		0.550	-2.47	0.566	0.48	1.116	
7	-2.40		0.575	-2.31	0.587	0.66	1.163	*
8	-2.53		0.558	-2.49	0.564	0.50	1.122	
11ac-20 2TX	0	-2.72	0.535	-2.63	0.546	0.34	1.080	
	1	-2.43	0.571	-2.59	0.551	0.50	1.122	
	2	-2.51	0.561	-2.55	0.556	0.48	1.117	
	3	-2.72	0.535	-2.48	0.565	0.41	1.100	
	4	-2.45	0.569	-2.46	0.568	0.56	1.136	
	5	-2.48	0.565	-2.49	0.564	0.53	1.129	
	6	-2.61	0.548	-2.41	0.574	0.50	1.122	
	7	-2.43	0.571	-2.40	0.575	0.60	1.147	
	8	-2.55	0.556	-2.40	0.575	0.54	1.131	

*Worst MCS

*1)The test was conducted by the use of Gate function.

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

Maximum Conducted Output Power

Test place	Ise EMC Lab. No.11 Measurement Room	
Report No.	12079941H	
Date	January 23, 2018	January 24, 2018
Temperature / Humidity	24deg. C / 22 % RH	22deg. C / 21 % RH
Engineer	Takafumi Noguchi	Yuta Moriya
Mode	Tx	

5510 MHz

mode	MCS Number	Antenna port WA Reading Average		Antenna port WC Reading Average		Total Reading Power		Remark
		[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
		11n-40	0	-2.40	0.575	-2.30	0.589	
1	-2.39		0.577	-2.25	0.596	0.69	1.172	
2	-2.43		0.571	-2.24	0.597	0.68	1.169	
3	-2.39		0.577	-2.21	0.601	0.71	1.178	
4	-2.45		0.569	-2.27	0.593	0.65	1.162	
5	-2.34		0.583	-2.22	0.600	0.73	1.183	
6	-2.33		0.585	-2.22	0.600	0.74	1.185	
7	-2.32		0.586	-2.17	0.607	0.77	1.193	*
8	-2.33		0.585	-2.19	0.604	0.75	1.189	
9	-2.39		0.577	-2.29	0.590	0.67	1.167	
10	-2.40		0.575	-2.21	0.601	0.71	1.177	
11	-2.43		0.571	-2.27	0.593	0.66	1.164	
12	-2.34		0.583	-2.20	0.603	0.74	1.186	
13	-2.35		0.582	-2.17	0.607	0.75	1.189	
14	-2.43		0.571	-2.30	0.589	0.65	1.160	
15	-2.40	0.575	-2.27	0.593	0.68	1.168		

*Worst MCS

*1)The test was conducted by the use of Gate function.

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

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 23, 2018
Temperature / Humidity : 24deg. C / 22 % RH
Engineer : Takafumi Noguchi
Mode : Tx

5510 MHz

mode	MCS Number	Antenna port WA Reading Average		Antenna port WC Reading Average		Total Reading Power		Remark
		[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
11ac-40 1TX	0	-2.45	0.569	-2.41	0.574	0.58	1.143	
	1	-2.32	0.586	-2.28	0.592	0.71	1.178	
	2	-2.30	0.589	-2.26	0.594	0.73	1.183	
	3	-2.28	0.592	-2.20	0.603	0.77	1.194	
	4	-2.27	0.593	-2.21	0.601	0.77	1.194	
	5	-2.25	0.596	-2.21	0.601	0.78	1.197	
	6	-2.41	0.574	-2.42	0.573	0.60	1.147	
	7	-2.24	0.597	-2.20	0.603	0.79	1.200	*
	8	-2.26	0.594	-2.21	0.601	0.78	1.195	
	9	-2.39	0.577	-2.35	0.582	0.64	1.159	
11ac-40 2TX	0	-2.28	0.592	-2.24	0.597	0.75	1.189	
	1	-2.33	0.585	-2.29	0.590	0.70	1.175	
	2	-2.36	0.581	-2.32	0.586	0.67	1.167	
	3	-2.40	0.575	-2.36	0.581	0.63	1.156	
	4	-2.29	0.590	-2.25	0.596	0.74	1.186	
	5	-2.27	0.593	-2.23	0.598	0.76	1.191	
	6	-2.24	0.597	-2.22	0.600	0.78	1.197	
	7	-2.25	0.596	-2.21	0.601	0.78	1.197	
	8	-2.28	0.592	-2.24	0.597	0.75	1.189	
	9	-2.37	0.579	-2.33	0.585	0.66	1.164	

*Worst MCS

*1)The test was conducted by the use of Gate function.

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

Maximum Conducted Output Power

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 24, 2018
Temperature / Humidity : 22deg. C / 21 % RH
Engineer : Yuta Moriya
Mode : Tx

5530 MHz

mode	MCS Number	Antenna port WA Reading Average		Antenna port WC Reading Average		Total Reading Power		Remark
		[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]	
11ac-80 1TX	0	-2.89	0.514	-2.68	0.540	0.23	1.054	
	1	-2.79	0.526	-2.69	0.538	0.27	1.064	
	2	-2.77	0.528	-2.64	0.545	0.31	1.073	
	3	-2.86	0.518	-2.73	0.533	0.22	1.051	
	4	-2.90	0.513	-2.70	0.537	0.21	1.050	
	5	-2.90	0.513	-2.51	0.561	0.31	1.074	
	6	-2.87	0.516	-2.66	0.542	0.25	1.058	
	7	-2.76	0.530	-2.61	0.548	0.33	1.078	*
	8	-2.85	0.519	-2.66	0.542	0.26	1.061	
	9	-2.94	0.508	-2.69	0.538	0.20	1.046	
11ac-80 2TX	0	-3.10	0.490	-2.70	0.537	0.11	1.027	
	1	-2.85	0.519	-2.61	0.548	0.28	1.067	
	2	-2.99	0.502	-2.83	0.521	0.10	1.024	
	3	-2.95	0.507	-2.80	0.525	0.14	1.032	
	4	-2.92	0.511	-2.59	0.551	0.26	1.061	
	5	-2.90	0.513	-2.64	0.545	0.24	1.057	
	6	-2.92	0.511	-2.60	0.550	0.25	1.060	
	7	-2.83	0.521	-2.73	0.533	0.23	1.055	
	8	-2.87	0.516	-2.73	0.533	0.21	1.050	
	9	-2.91	0.512	-2.81	0.524	0.15	1.035	

*Worst MCS

*1)The test was conducted by the use of Gate function.

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

Average Output Power
(Reference data for RF Exposure)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 23deg. C / 20 % RH
Engineer : Takumi Shimada
Mode : Tx 11a 6 Mbps

Tested Frequency [MHz]	Antenna port WA				Antenna port WC				Antenna port WA + WC			
	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Result (Burst average)			
									Antenna		Sum	
								WA [mW]	WC [mW]	WA+WC [mW]	WA+WC [dBm]	
5180	-5.04	0.70	10.05	5.71	-5.02	0.70	10.13	5.81	3.72	3.81	7.53	8.77
5220	-4.80	0.70	10.05	5.95	-5.35	0.70	10.13	5.48	3.94	3.53	7.47	8.73
5240	-4.78	0.70	10.05	5.97	-5.13	0.70	10.13	5.70	3.95	3.72	7.67	8.85
5260	-2.67	0.70	10.05	8.08	-3.58	0.70	10.13	7.25	6.43	5.31	11.74	10.70
5300	-2.92	0.70	10.05	7.83	-3.00	0.70	10.14	7.84	6.07	6.08	12.15	10.85
5320	-2.77	0.70	10.06	7.99	-2.98	0.70	10.14	7.86	6.30	6.11	12.40	10.94
5500	-2.57	0.80	10.06	8.29	-2.50	0.80	10.14	8.44	6.75	6.98	13.73	11.38
5580	-2.10	0.80	10.06	8.76	-2.38	0.80	10.14	8.56	7.52	7.18	14.69	11.67
5700	-2.23	0.80	10.05	8.62	-1.98	0.80	10.13	8.95	7.28	7.85	15.13	11.80
5745	-2.66	0.80	10.05	8.19	-1.87	0.80	10.13	9.06	6.59	8.05	14.65	11.66
5785	-2.50	0.80	10.05	8.35	-1.84	0.80	10.12	9.08	6.84	8.09	14.93	11.74
5825	-2.46	0.80	10.05	8.39	-2.63	0.80	10.12	8.29	6.90	6.75	13.65	11.35

Sample Calculation:

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

*The equipment and cables were not used for factor 0 dB of the data sheets.

The average output power was measured with the lowest order modulation and lowest data rate configuration in each IEEE 802.11 mode based on KDB 248227 D01.

Average Output Power
(Reference data for RF Exposure)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 23deg. C / 20 % RH
Engineer : Takumi Shimada
Mode : Tx 11n-20 MCS 0

Tested Frequency [MHz]	Antenna port WA				Antenna port WC				Antenna port WA + WC			
	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Result (Burst average)			
									Antenna		Sum	
								WA [mW]	WC [mW]	WA+WC [mW]	WA+WC [dBm]	
5180	-4.59	0.70	10.05	6.16	-5.20	0.70	10.13	5.63	4.13	3.66	7.79	8.91
5220	-4.85	0.70	10.05	5.90	-5.19	0.70	10.13	5.64	3.89	3.66	7.55	8.78
5240	-4.56	0.70	10.05	6.19	-5.01	0.70	10.13	5.82	4.16	3.82	7.98	9.02
5260	-2.57	0.70	10.05	8.18	-3.73	0.70	10.13	7.10	6.58	5.13	11.71	10.68
5300	-3.04	0.70	10.05	7.71	-3.22	0.70	10.14	7.62	5.90	5.78	11.68	10.68
5320	-3.09	0.70	10.06	7.67	-3.09	0.70	10.14	7.75	5.85	5.96	11.80	10.72
5500	-2.92	0.80	10.06	7.94	-2.51	0.80	10.14	8.43	6.22	6.97	13.19	11.20
5580	-2.23	0.80	10.06	8.63	-2.34	0.80	10.14	8.60	7.29	7.24	14.54	11.63
5700	-2.32	0.80	10.05	8.53	-2.00	0.80	10.13	8.93	7.13	7.82	14.94	11.74
5745	-2.78	0.80	10.05	8.07	-1.80	0.80	10.13	9.13	6.41	8.18	14.60	11.64
5785	-2.61	0.80	10.05	8.24	-1.82	0.80	10.12	9.10	6.67	8.13	14.80	11.70
5825	-2.41	0.80	10.05	8.44	-2.48	0.80	10.12	8.44	6.98	6.98	13.96	11.45

Sample Calculation:

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

*The equipment and cables were not used for factor 0 dB of the data sheets.

The average output power was measured with the lowest order modulation and lowest data rate configuration in each IEEE 802.11 mode based on KDB 248227 D01.

Average Output Power
(Reference data for RF Exposure)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11ac-20 MCS 0

Tested Frequency [MHz]	Antenna port WA				Antenna port WC				Antenna port WA + WC			
	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Result (Burst average)			
									Antenna		Sum	
								WA [mW]	WC [mW]	WA+WC [mW]	WA+WC [dBm]	
5180	-4.69	0.70	10.05	6.06	-4.97	0.70	10.13	5.86	4.04	3.85	7.89	8.97
5220	-5.07	0.70	10.05	5.68	-4.85	0.70	10.13	5.98	3.70	3.96	7.66	8.84
5240	-5.10	0.70	10.05	5.65	-5.13	0.70	10.13	5.70	3.67	3.72	7.39	8.69
5260	-3.17	0.70	10.05	7.58	-3.92	0.70	10.13	6.91	5.73	4.91	10.64	10.27
5300	-3.33	0.70	10.05	7.42	-3.31	0.70	10.14	7.53	5.52	5.66	11.18	10.49
5320	-3.24	0.70	10.06	7.52	-3.34	0.70	10.14	7.50	5.65	5.62	11.27	10.52
5500	-2.90	0.80	10.06	7.96	-2.61	0.80	10.14	8.33	6.25	6.81	13.06	11.16
5580	-2.61	0.80	10.06	8.25	-2.58	0.80	10.14	8.36	6.68	6.85	13.54	11.32
5700	-2.35	0.80	10.05	8.50	-2.00	0.80	10.13	8.93	7.08	7.82	14.90	11.73
5745	-3.02	0.80	10.05	7.83	-2.04	0.80	10.13	8.89	6.07	7.74	13.81	11.40
5785	-3.35	0.80	10.05	7.50	-1.85	0.80	10.12	9.07	5.62	8.07	13.70	11.37
5825	-2.79	0.80	10.05	8.06	-2.67	0.80	10.12	8.25	6.40	6.68	13.08	11.17

Sample Calculation:

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

*The equipment and cables were not used for factor 0 dB of the data sheets.

The average output power was measured with the lowest order modulation and lowest data rate configuration in each IEEE 802.11 mode based on KDB 248227 D01.

Average Output Power
(Reference data for RF Exposure)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11n-40 MCS 0

Tested Frequency [MHz]	Antenna port WA				Antenna port WC				Antenna port WA + WC			
	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Result (Burst average)			
									Antenna		Sum	
								WA [mW]	WC [mW]	WA+WC [mW]	WA+WC [dBm]	
5190	-5.48	0.70	10.05	5.27	-5.17	0.70	10.13	5.66	3.37	3.68	7.05	8.48
5230	-5.04	0.70	10.05	5.71	-5.37	0.70	10.13	5.46	3.72	3.52	7.24	8.60
5270	-2.89	0.70	10.05	7.86	-3.82	0.70	10.13	7.01	6.11	5.02	11.13	10.47
5310	-3.19	0.70	10.06	7.57	-3.27	0.70	10.14	7.57	5.71	5.71	11.43	10.58
5510	-2.85	0.80	10.06	8.01	-2.52	0.80	10.14	8.42	6.32	6.95	13.27	11.23
5550	-2.93	0.80	10.06	7.93	-2.76	0.80	10.14	8.18	6.21	6.58	12.79	11.07
5670	-2.45	0.80	10.05	8.40	-3.16	0.80	10.13	7.77	6.92	5.98	12.90	11.11
5755	-3.03	0.80	10.05	7.82	-1.90	0.80	10.13	9.03	6.05	8.00	14.05	11.48
5795	-3.10	0.80	10.05	7.75	-1.74	0.80	10.12	9.18	5.96	8.28	14.24	11.53

Sample Calculation:

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

*The equipment and cables were not used for factor 0 dB of the data sheets.

The average output power was measured with the lowest order modulation and lowest data rate configuration in each IEEE 802.11 mode based on KDB 248227 D01.

Average Output Power
(Reference data for RF Exposure)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11ac-40 MCS 0

Tested Frequency [MHz]	Antenna port WA				Antenna port WC				Antenna port WA + WC			
	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Result (Burst average)			
									Antenna		Sum	
								WA [mW]	WC [mW]	WA+WC [mW]	[dBm]	
5190	-5.26	0.70	10.05	5.49	-5.21	0.70	10.13	5.62	3.54	3.65	7.19	8.57
5230	-5.35	0.70	10.05	5.40	-5.16	0.70	10.13	5.67	3.47	3.69	7.16	8.55
5270	-2.84	0.70	10.05	7.91	-3.65	0.70	10.13	7.18	6.18	5.22	11.40	10.57
5310	-3.39	0.70	10.06	7.37	-3.06	0.70	10.14	7.78	5.46	6.00	11.46	10.59
5510	-2.85	0.80	10.06	8.01	-2.48	0.80	10.14	8.46	6.32	7.01	13.34	11.25
5550	-2.86	0.80	10.06	8.00	-2.77	0.80	10.14	8.17	6.31	6.56	12.87	11.10
5670	-2.61	0.80	10.05	8.24	-2.82	0.80	10.13	8.11	6.67	6.47	13.14	11.19
5755	-2.98	0.80	10.05	7.87	-1.79	0.80	10.13	9.14	6.12	8.20	14.33	11.56
5795	-2.97	0.80	10.05	7.88	-1.62	0.80	10.12	9.30	6.14	8.51	14.65	11.66

Sample Calculation:

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

*The equipment and cables were not used for factor 0 dB of the data sheets.

The average output power was measured with the lowest order modulation and lowest data rate configuration in each IEEE 802.11 mode based on KDB 248227 D01.

Average Output Power
(Reference data for RF Exposure)

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 25, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11ac-80 MCS 0

Tested Frequency [MHz]	Antenna port WA				Antenna port WC				Antenna port WA + WC			
	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Power Meter Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result (Burst average) [dBm]	Result (Burst average)			
									Antenna		Sum	
								WA [mW]	WC [mW]	WA+WC [mW]	[dBm]	
5210	-5.48	0.70	10.05	5.27	-4.88	0.70	10.13	5.95	3.37	3.94	7.30	8.63
5290	-3.31	0.70	10.06	7.45	-3.00	0.70	10.14	7.84	5.56	6.08	11.64	10.66
5530	-2.87	0.80	10.06	7.99	-2.71	0.80	10.14	8.23	6.30	6.65	12.95	11.12
5610	-2.29	0.80	10.05	8.56	-2.24	0.80	10.13	8.69	7.18	7.40	14.57	11.64
5775	-3.22	0.80	10.05	7.63	-1.86	0.80	10.12	9.06	5.79	8.05	13.85	11.41

Sample Calculation:

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

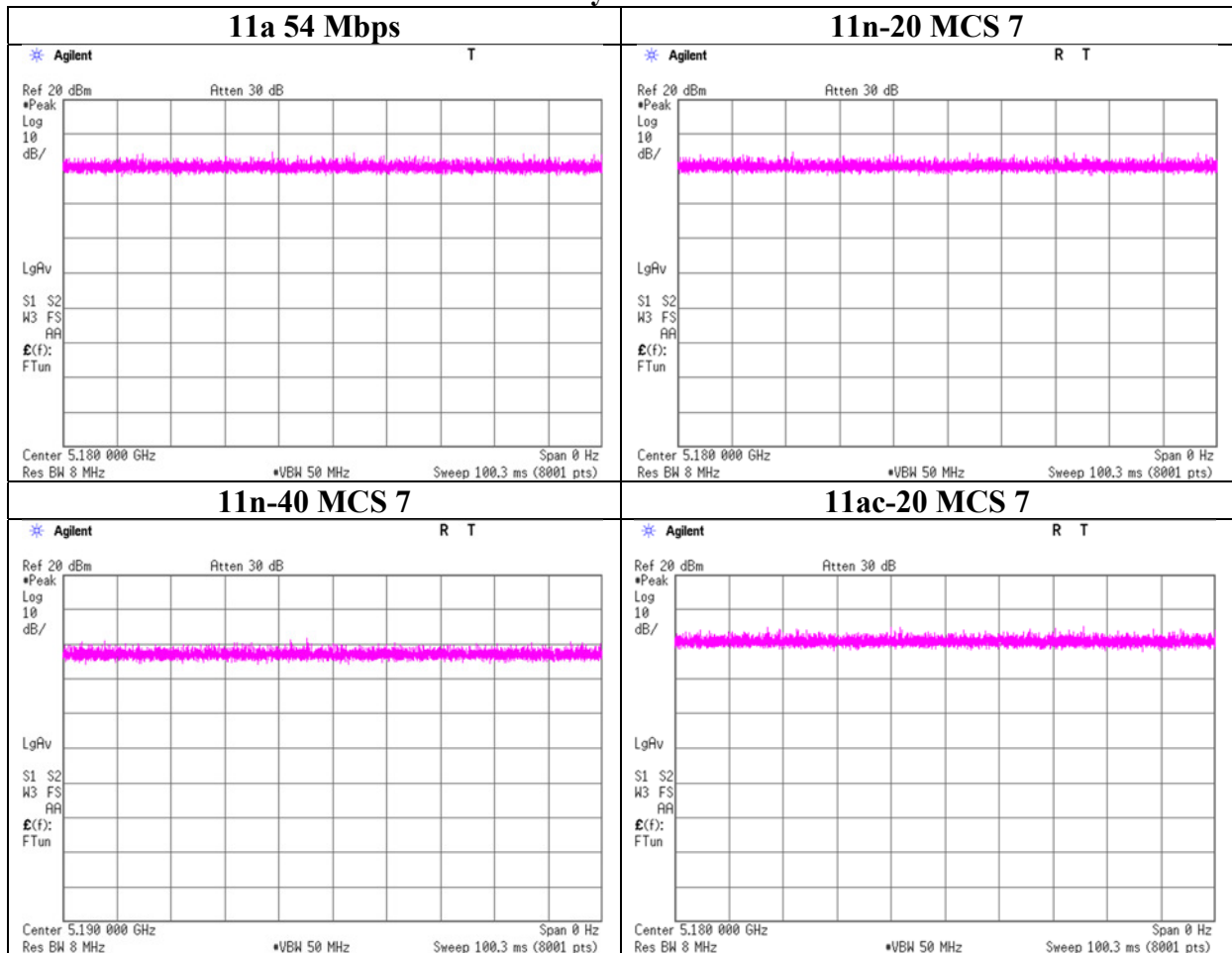
*The equipment and cables were not used for factor 0 dB of the data sheets.

The average output power was measured with the lowest order modulation and lowest data rate configuration in each IEEE 802.11 mode based on KDB 248227 D01.

Burst rate confirmation

Test place : Ise EMC Lab. No.11 Measurement Room
 Report No. : 12079941H
 Date : January 29, 2018
 Temperature / Humidity : 23deg. C / 32 % RH
 Engineer : Takafumi Noguchi
 Mode : Tx

Duty 100 %



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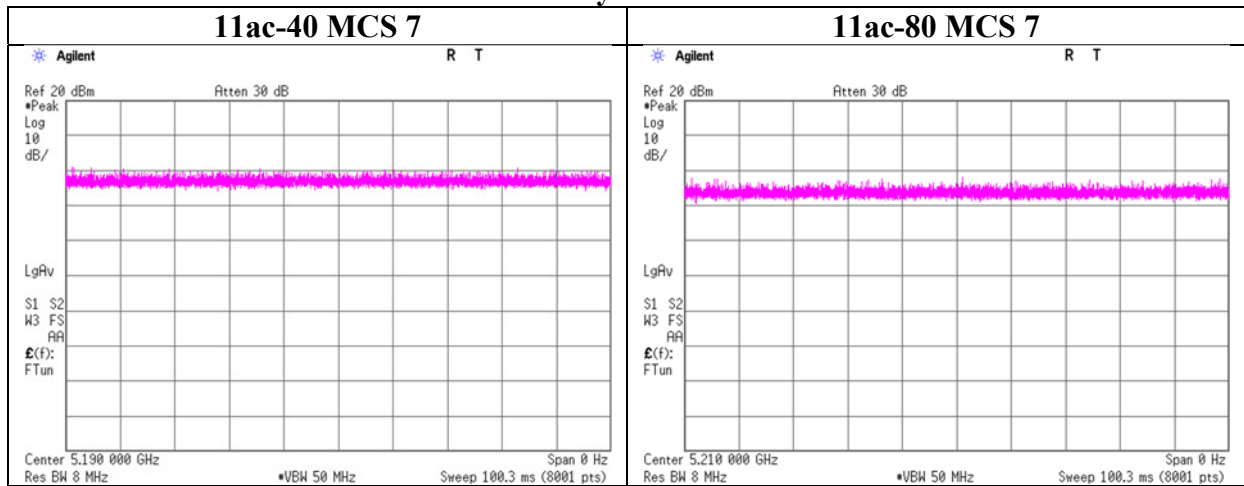
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Burst rate confirmation

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 29, 2018
Temperature / Humidity 23deg. C / 32 % RH
Engineer Takafumi Noguchi
Mode Tx

Duty 100 %



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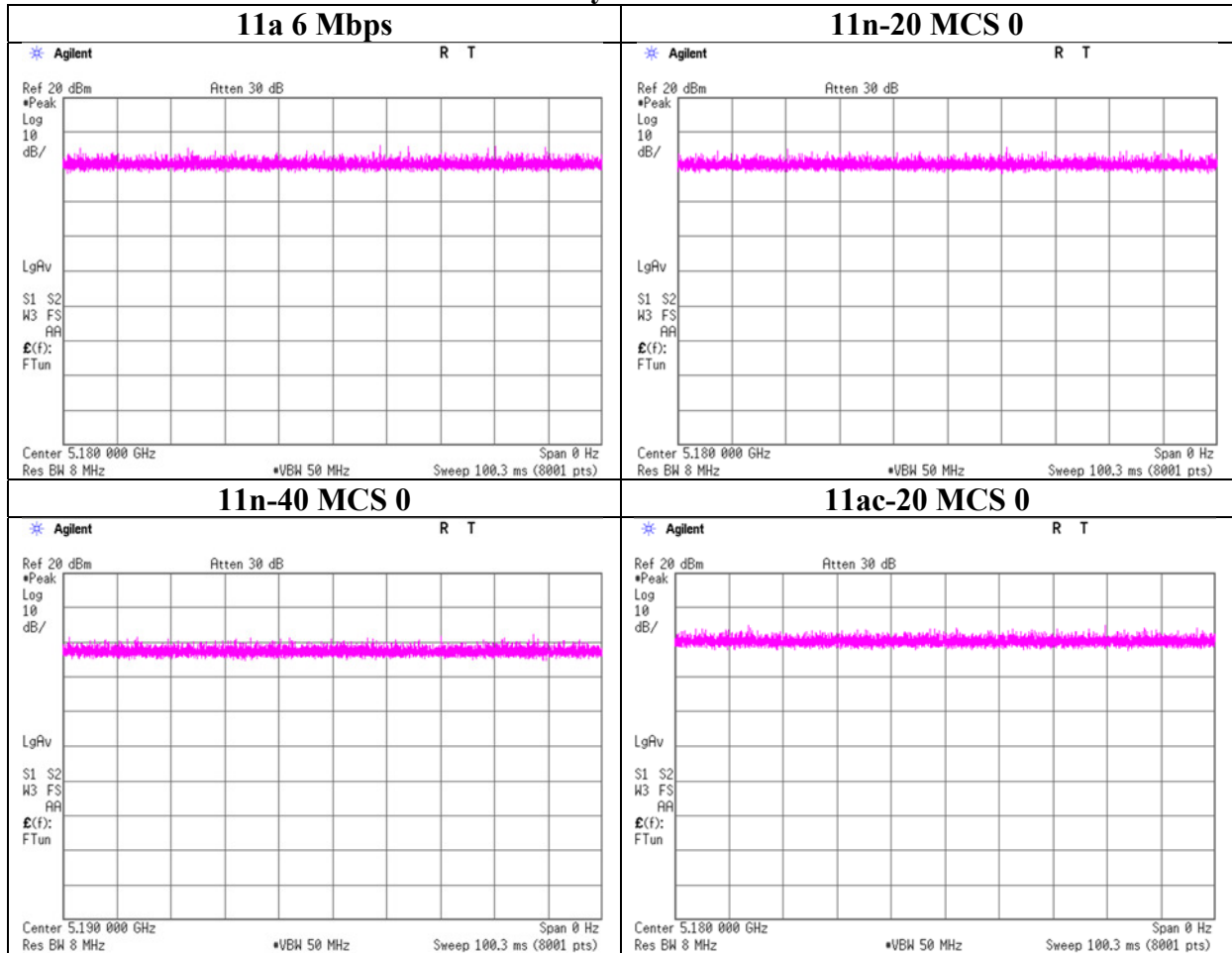
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Burst rate confirmation

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	12079941H
Date	January 29, 2018
Temperature / Humidity	23deg. C / 32 % RH
Engineer	Takafumi Noguchi
Mode	Tx

Duty 100 %



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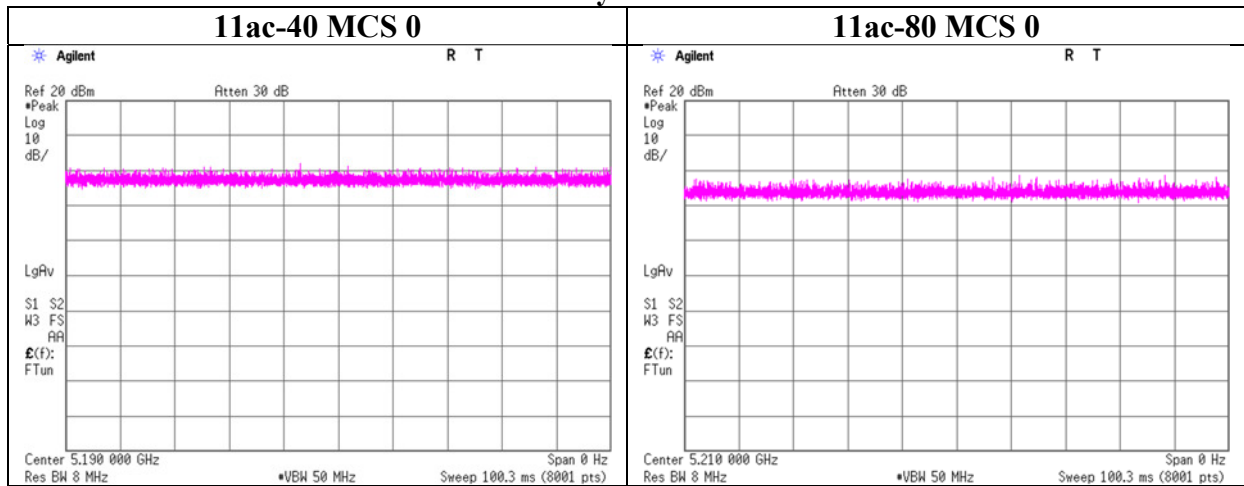
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Burst rate confirmation

Test place Ise EMC Lab. No.11 Measurement Room
Report No. 12079941H
Date January 29, 2018
Temperature / Humidity 23deg. C / 32 % RH
Engineer Takafumi Noguchi
Mode Tx

Duty 100 %



Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 26, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11a

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

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]	Antenna			Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
	1 [mW/MHz]	2 [mW/MHz]	Sum [mW/MHz]				1 [mW/MHz]	2 [mW/MHz]	Sum [mW/MHz]			
5180	0.30	0.41	0.71	-1.49	9.71	11.20	1.61	2.19	3.80	5.80	17.00	11.20
5220	0.38	0.39	0.78	-1.10	9.71	10.81	2.06	2.10	4.16	6.19	17.00	10.81
5240	0.37	0.38	0.75	-1.25	9.71	10.96	1.97	2.06	4.02	6.04	17.00	10.96
5260	0.61	0.57	1.18	0.73	9.71	8.98	3.29	3.05	6.34	8.02	17.00	8.98
5300	0.54	0.60	1.14	0.58	9.71	9.13	2.90	3.23	6.13	7.87	17.00	9.13
5320	0.57	0.59	1.16	0.65	9.71	9.06	3.07	3.16	6.23	7.94	17.00	9.06
5500	0.59	0.67	1.26	1.01	9.71	8.70	3.15	3.61	6.76	8.30	17.00	8.70
5580	0.65	0.70	1.34	1.29	9.71	8.42	3.48	3.72	7.20	8.58	17.00	8.42
5700	0.64	0.73	1.37	1.36	9.71	8.35	3.41	3.92	7.34	8.65	17.00	8.35
5745	0.29	0.40	0.70	-1.57	28.71	30.28	1.58	2.15	3.73	5.72	36.00	30.28
5785	0.30	0.42	0.72	-1.40	28.71	30.11	1.61	2.27	3.88	5.89	36.00	30.11
5825	0.36	0.42	0.78	-1.10	28.71	29.81	1.93	2.23	4.16	6.19	36.00	29.81

Tested Frequency [MHz]	Antenna Port WA							Antenna Port WC						
	Duty Factor [dB]	RBW Correction Factor [dB]	PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]	PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]
5180	0.00	0.00	-15.98	0.70	10.05	7.29	-5.23	2.06	-14.71	0.70	10.13	7.29	-3.88	3.41
5220	0.00	0.00	-14.91	0.70	10.05	7.29	-4.16	3.13	-14.89	0.70	10.13	7.29	-4.06	3.23
5240	0.00	0.00	-15.10	0.70	10.05	7.29	-4.35	2.94	-14.99	0.70	10.13	7.29	-4.16	3.13
5260	0.00	0.00	-12.87	0.70	10.05	7.29	-2.12	5.17	-13.28	0.70	10.13	7.29	-2.45	4.84
5300	0.00	0.00	-13.42	0.70	10.05	7.29	-2.67	4.62	-13.03	0.70	10.14	7.29	-2.19	5.10
5320	0.00	0.00	-13.17	0.70	10.06	7.29	-2.41	4.88	-13.14	0.70	10.14	7.29	-2.30	4.99
5500	0.00	0.00	-13.16	0.80	10.06	7.29	-2.30	4.99	-12.66	0.80	10.14	7.29	-1.72	5.57
5580	0.00	0.00	-12.73	0.80	10.06	7.29	-1.87	5.42	-12.52	0.80	10.14	7.29	-1.58	5.71
5700	0.00	0.00	-12.81	0.80	10.05	7.29	-1.96	5.33	-12.29	0.80	10.13	7.29	-1.36	5.94
5745	0.00	0.27	-16.42	0.80	10.05	7.29	-5.31	1.98	-15.16	0.80	10.13	7.29	-3.96	3.33
5785	0.00	0.27	-16.34	0.80	10.05	7.29	-5.22	2.07	-14.92	0.80	10.12	7.29	-3.73	3.56
5825	0.00	0.27	-15.54	0.80	10.05	7.29	-4.43	2.86	-15.00	0.80	10.12	7.29	-3.81	3.48

Sample Calculation:

PSD: Power Spectral Density

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

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

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

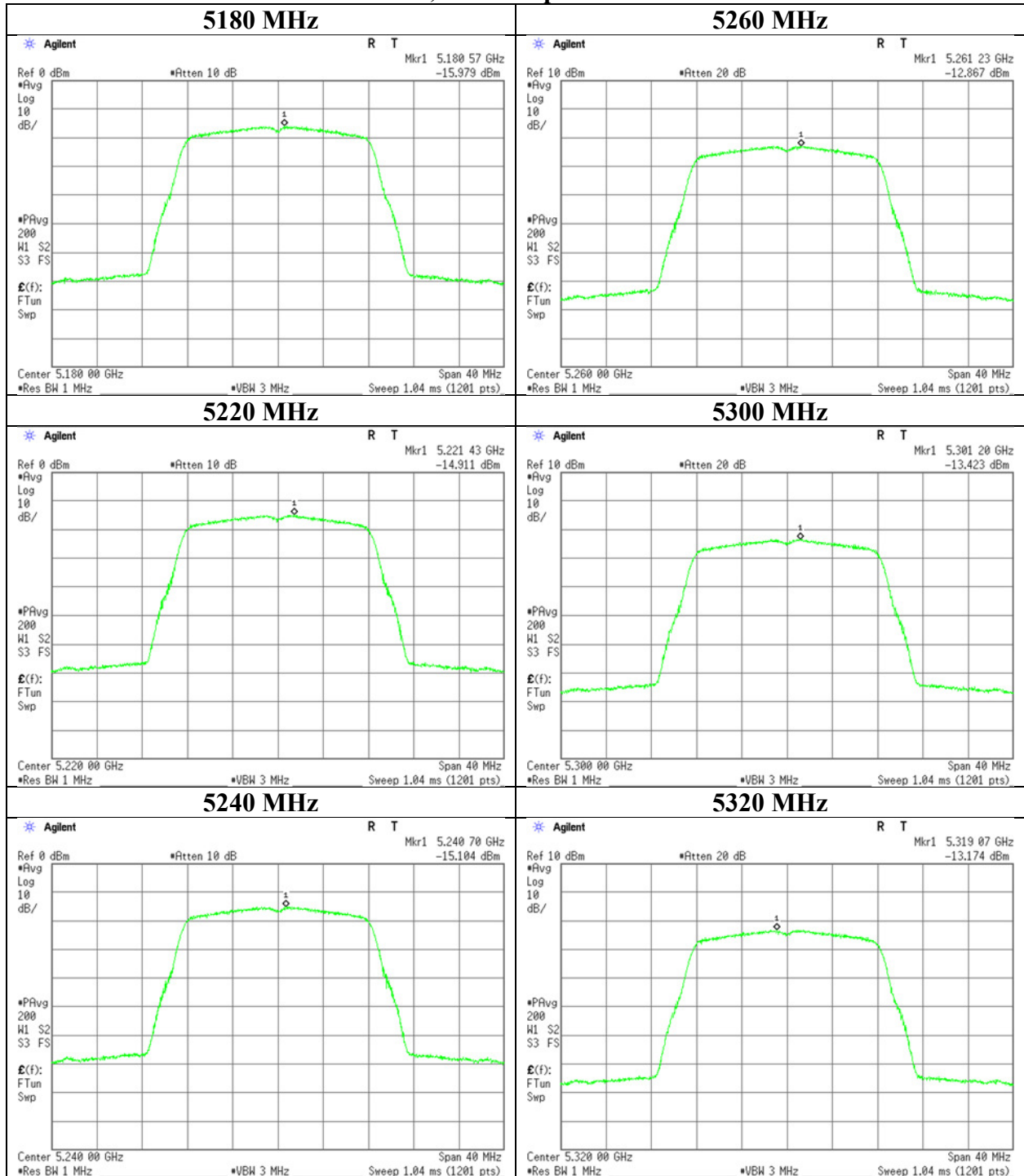
PSD Result (e.i.r.p.) = Conducted PSD Result + Antenna Gain

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

Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	12079941H
Date	January 26, 2018
Temperature / Humidity	24deg. C / 20 % RH
Engineer	Yuta Moriya
Mode	Tx 11a

11a, Antenna port WA



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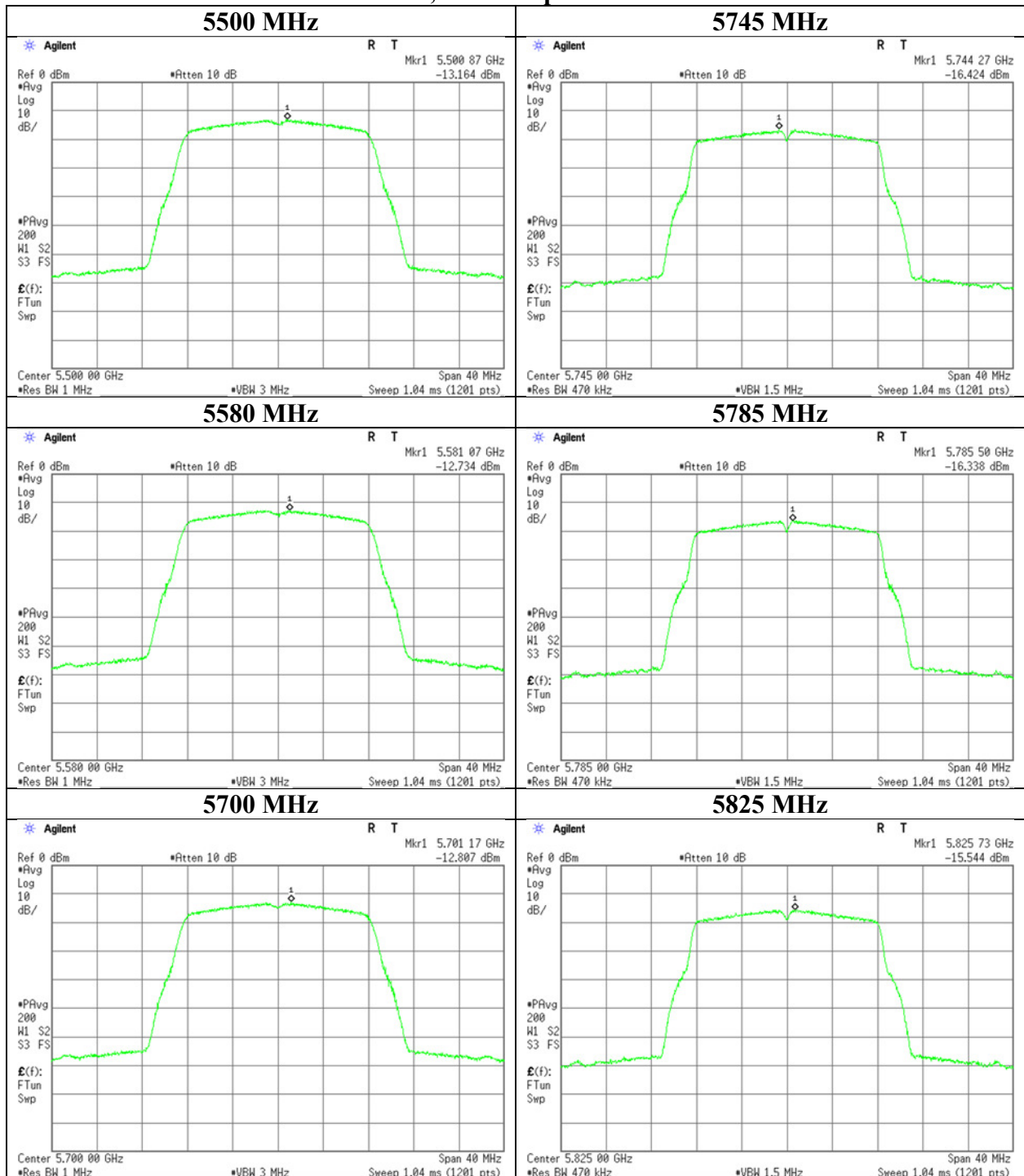
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	12079941H
Date	January 26, 2018
Temperature / Humidity	24deg. C / 20 % RH
Engineer	Yuta Moriya
Mode	Tx 11a

11a, Antenna port WA



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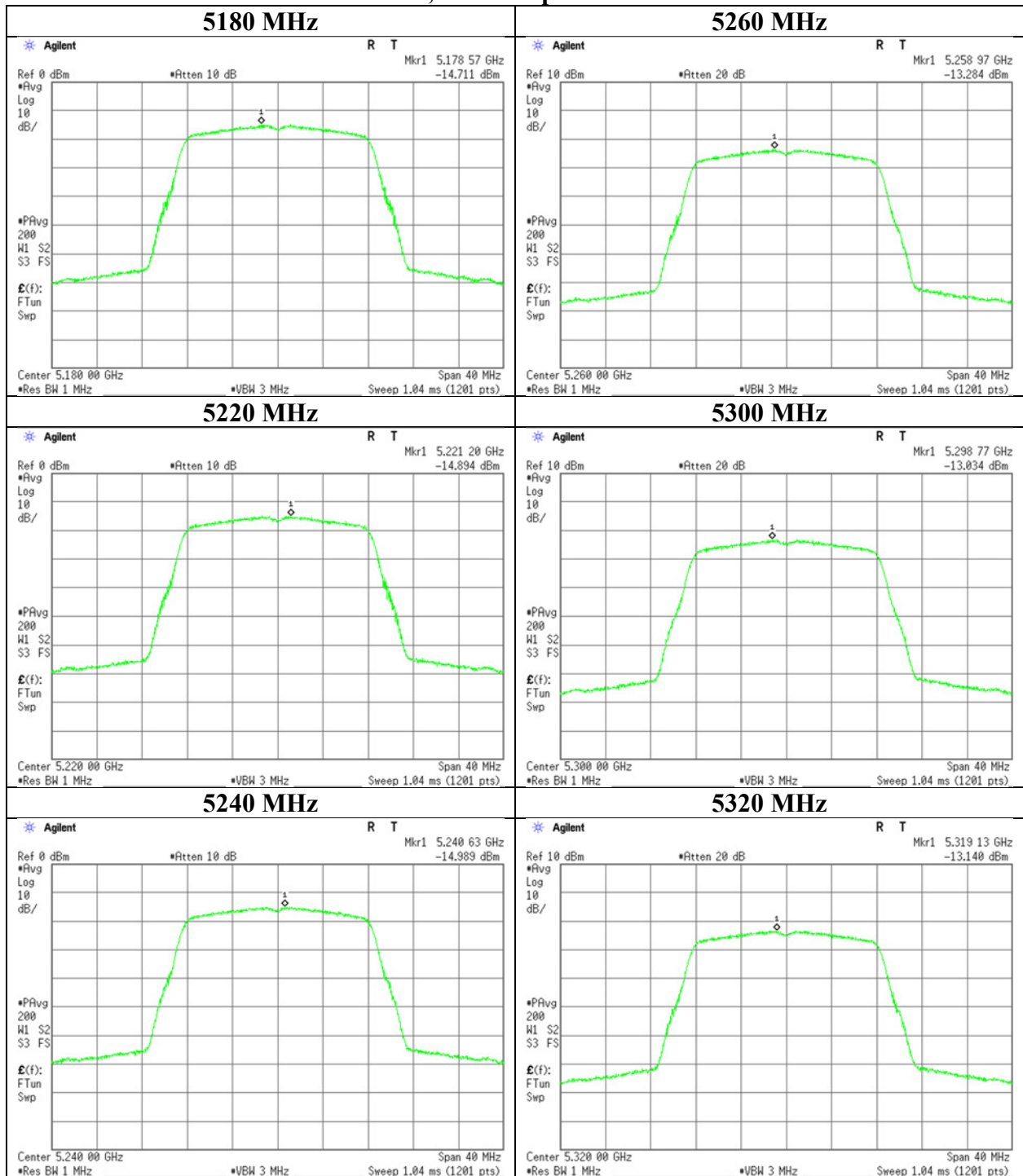
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
 Report No. : 12079941H
 Date : January 26, 2018
 Temperature / Humidity : 24deg. C / 20 % RH
 Engineer : Yuta Moriya
 Mode : Tx 11a

11a, Antenna port WC



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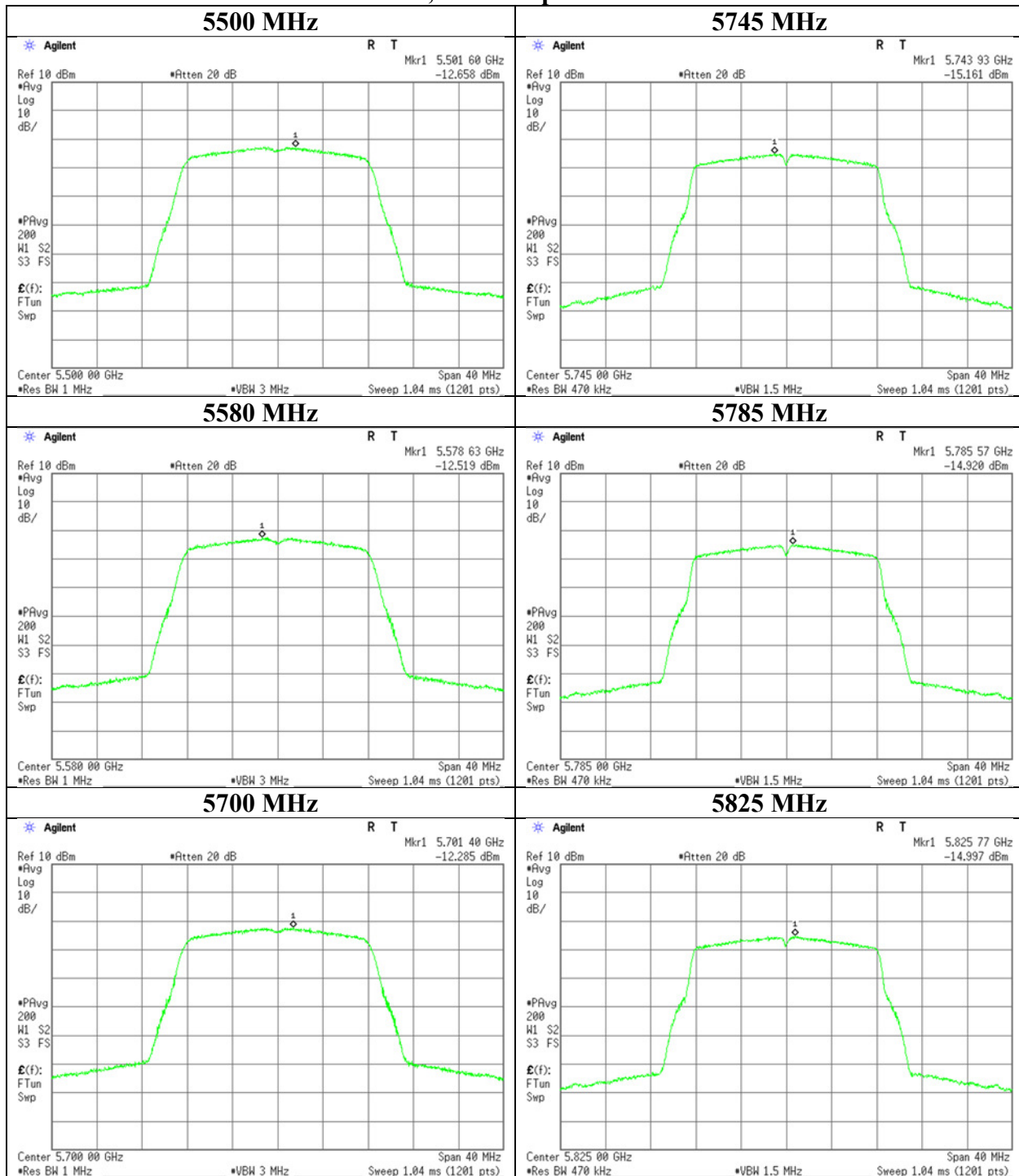
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place	Ise EMC Lab. No.11 Measurement Room
Report No.	12079941H
Date	January 26, 2018
Temperature / Humidity	24deg. C / 20 % RH
Engineer	Yuta Moriya
Mode	Tx 11a

11a, Antenna port WC



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Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Maximum Power Spectral Density

Test place : Ise EMC Lab. No.11 Measurement Room
Report No. : 12079941H
Date : January 26, 2018
Temperature / Humidity : 24deg. C / 20 % RH
Engineer : Yuta Moriya
Mode : Tx 11n-20

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

Tested Frequency [MHz]	PSD (Conducted)						PSD (e.i.r.p.)					
	Antenna			Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]	Antenna			Result [dBm/MHz]	Limit [dBm/MHz]	Margin [dB]
	1 [mW/MHz]	2 [mW/MHz]	Sum [mW/MHz]				1 [mW/MHz]	2 [mW/MHz]	Sum [mW/MHz]			
5180	0.36	0.35	0.71	-1.48	9.71	11.19	1.94	1.88	3.81	5.81	17.00	11.19
5220	0.40	0.36	0.75	-1.22	9.71	10.93	2.12	1.92	4.04	6.07	17.00	10.93
5240	0.34	0.37	0.71	-1.50	9.71	11.21	1.82	1.97	3.79	5.79	17.00	11.21
5260	0.62	0.51	1.13	0.54	9.71	9.17	3.31	2.75	6.06	7.83	17.00	9.17
5300	0.56	0.56	1.12	0.49	9.71	9.22	2.99	3.01	5.99	7.78	17.00	9.22
5320	0.54	0.56	1.10	0.43	9.71	9.28	2.91	3.01	5.92	7.72	17.00	9.28
5500	0.57	0.73	1.31	1.16	9.71	8.55	3.07	3.93	7.00	8.45	17.00	8.55
5580	0.65	0.61	1.26	1.01	9.71	8.70	3.47	3.28	6.75	8.30	17.00	8.70
5700	0.58	0.71	1.30	1.13	9.71	8.58	3.11	3.83	6.94	8.42	17.00	8.58
5745	0.30	0.40	0.69	-1.60	28.71	30.31	1.59	2.12	3.71	5.69	36.00	30.31
5785	0.31	0.40	0.72	-1.45	28.71	30.16	1.69	2.15	3.84	5.84	36.00	30.16
5825	0.38	0.36	0.74	-1.30	28.71	30.01	2.06	1.91	3.98	5.99	36.00	30.01

Tested Frequency [MHz]	Antenna Port WA							Antenna Port WC						
	Duty Factor [dB]	RBW Correction Factor [dB]	PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]	PSD Reading [dBm/MHz]	Cable Loss [dB]	Atten. Loss [dB]	Antenna Gain [dBi]	PSD Result Cond. [dBm/MHz]	PSD Result e.i.r.p. [dBm/MHz]
5180	0.00	0.00	-15.17	0.70	10.05	7.29	-4.42	2.87	-15.39	0.70	10.13	7.29	-4.56	2.74
5220	0.00	0.00	-14.78	0.70	10.05	7.29	-4.03	3.26	-15.28	0.70	10.13	7.29	-4.45	2.84
5240	0.00	0.00	-15.43	0.70	10.05	7.29	-4.68	2.61	-15.18	0.70	10.13	7.29	-4.35	2.94
5260	0.00	0.00	-12.84	0.70	10.05	7.29	-2.09	5.20	-13.73	0.70	10.13	7.29	-2.90	4.40
5300	0.00	0.00	-13.29	0.70	10.05	7.29	-2.54	4.75	-13.35	0.70	10.14	7.29	-2.51	4.78
5320	0.00	0.00	-13.41	0.70	10.06	7.29	-2.65	4.64	-13.35	0.70	10.14	7.29	-2.51	4.78
5500	0.00	0.00	-13.28	0.80	10.06	7.29	-2.42	4.87	-12.29	0.80	10.14	7.29	-1.35	5.94
5580	0.00	0.00	-12.74	0.80	10.06	7.29	-1.88	5.41	-13.07	0.80	10.14	7.29	-2.13	5.16
5700	0.00	0.00	-13.21	0.80	10.05	7.29	-2.36	4.93	-12.39	0.80	10.13	7.29	-1.46	5.83
5745	0.00	0.27	-16.40	0.80	10.05	7.29	-5.28	2.01	-15.23	0.80	10.13	7.29	-4.03	3.26
5785	0.00	0.27	-16.14	0.80	10.05	7.29	-5.02	2.27	-15.16	0.80	10.12	7.29	-3.97	3.32
5825	0.00	0.27	-15.27	0.80	10.05	7.29	-4.15	3.14	-15.66	0.80	10.12	7.29	-4.47	2.82

Sample Calculation:

PSD: Power Spectral Density

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

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

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

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

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