# RADIO TEST REPORT

## Test Report No. : 10812026H-C-R1

| | | |
|---|---|---|
| **Applicant** | : | **NIKON CORPORATION** |
| **Type of Equipment** | : | **Wireless Transmitter** |
| **Model No.** | : | **N1526** |
| **FCC ID** | : | **CGJ1152EA** |
| **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 above regulation.
4. The test results in this report are traceable to the national or international standards.
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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)
7. This report is a revised version of 10812026H-C. 10812026H-C is replaced with this report.

**Date of test:** June 7 to July 2, 2015

**Representative test engineer:**
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**Approved by:**
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Leader
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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.: 10812026H-C

| Revision | Test report No. | Date | Page revised | Contents |
|---|---|---|---|---|
| - (Original) | 10812026H-C | July 28, 2015 | - | - |
| 1 | 10812026H-C-R1 | November 24, 2015 | P.5 | Update of FCC15 version |
| 1 | 10812026H-C-R1 | November 24, 2015 | P.5 | Correction of FCC Part 15.203 Antenna requirement sentence |
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**CONTENTS** **PAGE**

# 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 | : | Kouichi Sakurai |

*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. | : | N1526 |
| Serial No. | : | Refer to Clause 4.2 |
| Rating | : | DC 5.0 V |
| Receipt Date of Sample | : | June 1, 2015 |
| Country of Mass-production | : | Japan |
| Condition of EUT | : | Engineering prototype<br>(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 No: N1526 (referred to as the EUT in this report) is the Wireless Transmitter.

**General Specification**

| | | |
|---|---|---|
| Clock frequency(ies) in the system | : | 40 MHz (Crystal), 32.7 kHz (OSC) |
| 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 *<br>5260 - 5320 *<br>5745 - 5825 * | 5190 - 5230 *<br>5270 - 5310 *<br>5755 - 5795 * | 5210 *<br>5290 *<br>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 0: Pattern Antenna Inverted L Type<br>Antenna 1: Pattern Antenna Inverted L Type | | | | | |
| Antenna Gain | 2.4GHz: 1 dBi<br>5GHz: 1 dBi | | | | | |
| Directional Antenna Gain | 2.4 GHz: 4.01 dBi<br>5 GHz: 4.01 dBi | | | | | |

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

# 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

## 3.2 Procedures and results

| Item | Test Procedure | Specification | Worst margin | Results | Remarks |
|---|---|---|---|---|---|
| Conducted Emission | **FCC :**ANSI C63.4:2009 | **FCC:** 15.407(b)(6) / 15.207 | **QP**<br>17.7 dB<br>0.47375 MHz, N<br>**AV**<br>7.7 dB<br>0.47375 MHz, N<br>0.47242 MHz, L | Complied | - |
| | **IC:** RSS-Gen 8.8 | **IC:** RSS-Gen 8.8 | | | |
| 26dB Emission Bandwidth | **FCC :**ANSI C63.4:2009, FCC KDB Publication Number 789033 | **FCC :** 15.407(a)(1)(2)(3) | See data | N/A | Conducted |
| | **IC:** - | **IC:** - | | | |
| Maximum Conducted Output Power | **FCC :**ANSI C63.4:2009, FCC KDB Publication Number 789033 | **FCC :** 15.407(a)(1)(2)(3) | | Complied | Conducted |
| | **IC:** - | **IC:** RSS-247 6.2.1(1)<br>6.2.2(1)<br>6.2.3(1)<br>6.2.4(1) | | | |
| Maximum Power Spectral Density | **FCC :**ANSI C63.4:2009, FCC KDB Publication Number 789033 | **FCC :** 15.407(a)(1)(2)(3) | | Complied | Conducted |
| | **IC:** - | **IC:** RSS-247 6.2.1(1)<br>6.2.2(1)<br>6.2.3(1)<br>6.2.4(1) | | | |
| Spurious Emission Restricted Band Edge | **FCC:** ANSI C63.4:2009 | **FCC :** 15.407(b), 15.205 and 15.209 | 0.1dB<br>11510.000MHz, AV, Hori. | Complied | Conducted (below 30MHz) / Radiated (above 30MHz) *1) |
| | **IC:** - | **IC:** RSS-247 6.2.1(2)<br>6.2.2(2)<br>6.2.3(2)<br>6.2.4(2) | | | |
| 6dB Emission Bandwidth | **FCC :**ANSI C63.4:2009 | **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 10812026H-E-R1 issued by UL Japan, Inc.
*1) Radiated test was selected over 30 MHz based on section FCC15.407(b) and KDB 789033 D02 G.3.b).

**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 | - | Conducted |

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

## 3.4 Uncertainty

**EMI**

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

| Test room (semi-anechoic chamber) | Conducted emission (±dB) |
|---|---|
| | 150kHz-30MHz |
| No.1 | 3.5dB |
| No.2 | 3.5dB |
| No.3 | 3.4dB |
| No.4 | 3.5dB |

| Test room (semi-anechoic chamber) | Radiated emission | | | | | | |
|---|---|---|---|---|---|---|---|
| | (3m*)(±dB) | | | | (1m*)(±dB) | | (0.5m*)(±dB) |
| | 9kHz -30MHz | 30MHz -300MHz | 300MHz -1GHz | 1GHz -10GHz | 10GHz -18GHz | 18GHz -26.5GHz | 26.5GHz -40GHz |
| No.1 | 4.3dB | 5.5dB | 6.3dB | 5.5dB | 5.8dB | 5.8dB | 4.3dB |
| No.2 | 4.2dB | 5.4dB | 6.3dB | 5.4dB | 5.7dB | 5.9dB | 5.6dB |
| No.3 | 4.4dB | 5.4dB | 6.4dB | 5.2dB | 5.5dB | 5.8dB | 5.5dB |
| No.4 | 4.7dB | 5.6dB | 6.4dB | 5.3dB | 5.7dB | 5.9dB | 5.5dB |

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

| Antenna terminal conducted emission and Power density (±dB) | | | Antenna terminal conducted emission (±dB) | | Channel power (±dB) |
|---|---|---|---|---|---|
| Below 1GHz | 1GHz-3GHz | 3GHz-18GHz | 18GHz-26.5GHz | 26.5GHz-40GHz | |
| 1.5dB | 1.7dB | 2.8dB | 2.8dB | 2.9dB | 2.6dB |

Conducted Emission test

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

Radiated emission test(3m)

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

### 3.5 Test Location

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

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

### 3.6 Test data, Test instruments, and Test set up

Refer to APPENDIX.

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

## 4.1 Operating Modes

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 |
| IEEE 802.11n SISO 20MHz BW (11n-20) | MCS 1, PN9 |
| IEEE 802.11ac SISO 20MHz BW (11ac-20) | MCS 1, PN9 |
| IEEE 802.11n SISO 40MHz BW (11n-40) | MCS 1, PN9 |
| IEEE 802.11ac SISO 40MHz BW (11ac-40) | MCS 1, PN9 |
| IEEE 802.11ac SISO 80MHz BW (11ac-80) | MCS 1, PN9 *1) |
| *The worst condition was determined based on the test result of Maximum Peak Output Power.<br>*EUT has the power settings by the software as follows;<br>- Power Setting: Refer to the following table.<br>- Software: LAB-tool<br>Ver : 15.2.4.92<br>*This setting of software is the worst case.<br>Any conditions under the normal use do not exceed the condition of setting.<br>In addition, end users cannot change the settings of the output power of the product.<br>*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 (SISO) | 9 dBm | 9 dBm | 9 dBm | 9 dBm |
| 11n-20 (SISO) | 9 dBm | 9 dBm | 9 dBm | 9 dBm |
| 11ac-20(SISO) | 9 dBm | 9 dBm | 9 dBm | 9 dBm |

| 20MHz Band W53 | ch52 | ch56 | ch60 | ch64 |
|---|---|---|---|---|
| 11a (SISO) | 9 dBm | 9 dBm | 9 dBm | 9 dBm |
| 11n-20 (SISO) | 9 dBm | 9 dBm | 9 dBm | 9 dBm |
| 11ac-20(SISO) | 9 dBm | 9 dBm | 9 dBm | 9 dBm |

| 20MHz Band W58 | ch149 | ch153 | ch157 | ch161 | ch165 |
|---|---|---|---|---|---|
| 11a (SISO) | 7 dBm | 9 dBm | 9 dBm | 9 dBm | 9 dBm |
| 11n-20 (SISO) | 7 dBm | 9 dBm | 9 dBm | 9 dBm | 9 dBm |
| 11ac-20(SISO) | 7 dBm | 9 dBm | 9 dBm | 9 dBm | 9 dBm |

| 40MHz Band W52 | ch38 | ch46 |
|---|---|---|
| 11n-40(SISO) | 9 dBm | 9 dBm |
| 11ac-40(SISO) | 9 dBm | 9 dBm |

| 40MHz Band W53 | ch54 | ch62 |
|---|---|---|
| 11n-40(SISO) | 9 dBm | 9 dBm |
| 11ac-40(SISO) | 9 dBm | 9 dBm |

| 40MHz Band W58 | ch151 | ch159 |
|---|---|---|
| 11n-40(SISO) | 7 dBm | 9 dBm |
| 11ac-40(SISO) | 7 dBm | 9 dBm |

| 80MHz Band W52 | Ch42 |
|---|---|
| 11ac-80(SISO) | 6dBm |

| 80MHz Band W53 | ch58 |
|---|---|
| 11ac-80(SISO) | 7dBm |

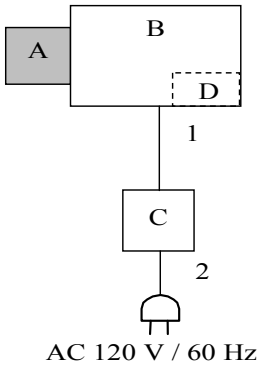
| 80MHz Band W58 | ch155 |
|---|---|
| 11ac-80(SISO) | 5dBm |

*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) | 0+1 | - | 5310MHz *1) | - | - |
| Conducted Spurious Emission | 11ac-40 Tx *1) | 0 | - | 5310MHz *1) | - | - |
| 26dB Emission Bandwidth | 11a Tx<br>11n-20 Tx<br>11ac-20 Tx | 0 | - | 5260MHz<br>5300MHz<br>5320MHz | - | - |
| | 11n-40 Tx<br>11ac-40 Tx | 0 | - | 5270MHz<br>5310MHz | - | - |
| | 11ac-80 Tx | 0 | - | 5290MHz | - | - |
| 99% Occupied Bandwidth | 11a Tx<br>11n-20 Tx<br>11ac-20 Tx | 0 | 5180MHz<br>5220MHz<br>5240MHz | 5260MHz<br>5300MHz<br>5320MHz | - | 5745MHz<br>5785MHz<br>5825MHz |
| | 11n-40 Tx<br>11ac-40 Tx | 0 | 5190MHz<br>5230MHz | 5270MHz<br>5310MHz | - | 5755MHz<br>5795MHz |
| | 11ac-80 Tx | 0 | 5210MHz | 5290MHz | - | 5775MHz |
| Maximum Conducted Output Power, Maximum Power Spectral Density | 11a Tx<br>11n-20 Tx<br>11ac-20 Tx | 0+1, 0, 1 | 5180MHz<br>5220MHz<br>5240MHz | 5260MHz<br>5300MHz<br>5320MHz | - | 5745MHz<br>5785MHz<br>5825MHz |
| | 11n-40 Tx<br>11ac-40 Tx | 0+1, 0, 1 | 5190MHz<br>5230MHz | 5270MHz<br>5310MHz | - | 5755MHz<br>5795MHz |
| | 11ac-80 Tx | 0+1, 0, 1 | 5210MHz | 5290MHz | - | 5775MHz |
| Radiated Spurious Emission (Above 1GHz) | 11ac-20 Tx *3) | 0+1 | 5180MHz | 5260MHz<br>5320MHz | - | 5745MHz<br>5785MHz<br>5825MHz |
| | 11ac-40 Tx *3) | 0+1 | 5190MHz | 5270MHz<br>5310MHz | - | 5755MHz<br>5795MHz |
| | 11ac-80 Tx | 0+1 | 5210MHz | 5290MHz | - | 5775MHz |
| Band Edge confirmation | 11ac-20 Tx *3) | 0+1 | 5180MHz | 5320MHz | - | 5745MHz<br>5825MHz |
| | 11ac-40 Tx *3) | 0+1 | 5190MHz | 5310MHz | - | 5755MHz<br>5795MHz |
| | 11ac-80 Tx | 0+1 | 5210MHz | 5290MHz | - | 5775MHz |
| 6dB Bandwidth | 11a Tx<br>11n-20 Tx<br>11ac-20 Tx | 0 | - | - | - | 5745MHz<br>5785MHz<br>5825MHz |
| | 11n-40 Tx<br>11ac-40 Tx | 0 | - | - | - | 5755MHz<br>5795MHz |
| | 11ac-80 Tx | 0 | - | - | - | 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 0 and Antenna port 1, 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 | N1526 | No.1 | NEC Platforms, Ltd. | EUT |
| B | Camera | Q870 | PT62024 | Nikon | - |
| C | AC Adapter | YHA-67EA | 3Y000410 | YHT | - |
| D | Power Connector | - | - | Nikon | - |

**List of cables used**

| No. | Name | Length (m) | Shield | | Remarks |
|---|---|---|---|---|---|
| | | | Cable | Connector | |
| 1 | DC Cable | 2.0 | Unshielded | Unshielded | - |
| 2 | AC Cable | 2.0 | Unshielded | Unshielded | - |

## SECTION 5: Conducted Emission

**Test Procedure**

EUT was placed on a wooden table of nominal size, 0.5m by 1.0m, raised 0.8m above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

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

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

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

## SECTION 6: Radiated Spurious Emission and Band Edge Compliance

**Test Procedure**

EUT was placed on a urethane platform of nominal size, 0.5m by 1.0m, raised 0.8m above the conducting ground plane.
The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with a ground plane.
The height of the measuring antenna varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field strength.
The measurements were made with the following detector function of the test receiver and the Spectrum analyzer (in linear mode).
The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver, or the Spectrum Analyzer.
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
Restricted bandedge: 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

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

**Test Antennas are used as below;**

| Frequency | 30MHz to 300MHz | 300MHz to 1GHz | Above 1GHz |
|---|---|---|---|
| Antenna Type | Biconical | Logperiodic | Horn |

| Frequency | Below 1GHz | Above 1GHz | |
|---|---|---|---|
| Instrument used | Test Receiver | Spectrum Analyzer | |
| Detector | QP | PK | AV |
| IF Bandwidth | BW 120kHz(T/R) | RBW: 1MHz<br>VBW: 3MHz | Method AD *1)<br>RBW: 1MHz<br>VBW: 3MHz<br>Detector: Power Averaging (RMS)<br>Duty factor was added to the results. |
| Test Distance | 3m | 3m (below 10GHz),<br>1m*2) (above 10GHz),<br>0.5m*3) (above 26.5GHz) | |

*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 (3.0m/1.0m) = 9.5dB
*3) Distance Factor: 20 x log (3.0m/0.5m) = 15.6dB

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

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

**Measurement range : 30M-40GHz**
**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

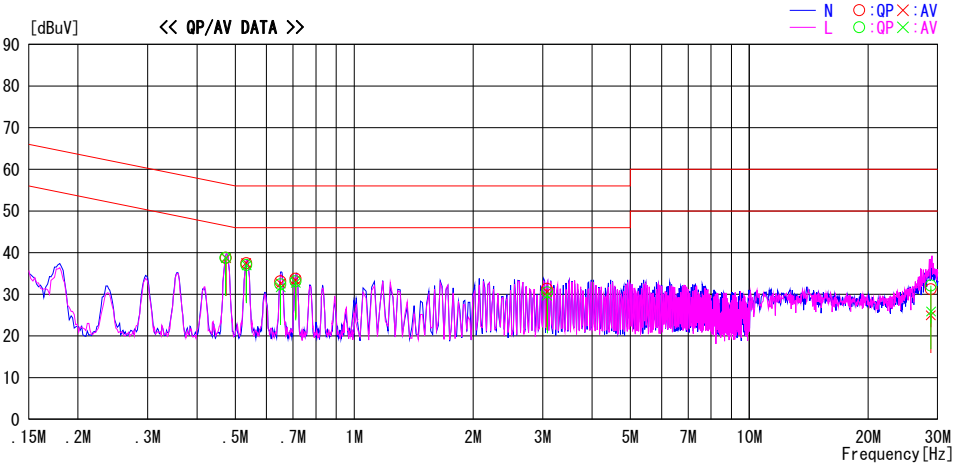
UL Japan, Inc. Ise EMC Lab. No.2 Semi Anechoic Chamber
Date : 2015/07/02

Report No. : 10812026H

Temp./Humi. : 18deg. C / 58% RH
Engineer : Takafumi Noguchi

Mode / Remarks : 11ac40 5310MHz

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] | | |
| 0.47375 | 25.5 | 25.5 | 13.2 | 38.7 | 38.7 | 56.4 | 46.4 | 17.7 | 7.7 | N | |
| 0.53312 | 24.3 | 24.3 | 13.2 | 37.5 | 37.5 | 56.0 | 46.0 | 18.5 | 8.5 | N | |
| 0.65108 | 19.8 | 19.3 | 13.3 | 33.1 | 32.6 | 56.0 | 46.0 | 22.9 | 13.4 | N | |
| 0.70998 | 20.4 | 20.1 | 13.3 | 33.7 | 33.4 | 56.0 | 46.0 | 22.3 | 12.6 | N | |
| 3.07759 | 17.7 | 17.0 | 13.6 | 31.3 | 30.6 | 56.0 | 46.0 | 24.7 | 15.4 | N | |
| 28.81857 | 15.8 | 9.6 | 15.4 | 31.2 | 25.0 | 60.0 | 50.0 | 28.8 | 25.0 | N | |
| 0.47242 | 25.5 | 25.6 | 13.2 | 38.7 | 38.8 | 56.5 | 46.5 | 17.8 | 7.7 | L | |
| 0.53370 | 23.8 | 23.8 | 13.2 | 37.0 | 37.0 | 56.0 | 46.0 | 19.0 | 9.0 | L | |
| 0.65092 | 19.1 | 18.4 | 13.3 | 32.4 | 31.7 | 56.0 | 46.0 | 23.6 | 14.3 | L | |
| 0.71118 | 19.8 | 19.5 | 13.3 | 33.1 | 32.8 | 56.0 | 46.0 | 22.9 | 13.2 | L | |
| 3.07977 | 16.9 | 16.1 | 13.6 | 30.5 | 29.7 | 56.0 | 46.0 | 25.5 | 16.3 | L | |
| 28.82543 | 16.7 | 10.5 | 15.4 | 32.1 | 25.9 | 60.0 | 50.0 | 27.9 | 24.1 | 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. | 10812026H |
| Date | 06/09/2015 |
| Temperature/ Humidity | 23deg. C / 43% RH |
| Engineer | Tomoki Matsui |
| Mode | Tx 11a |

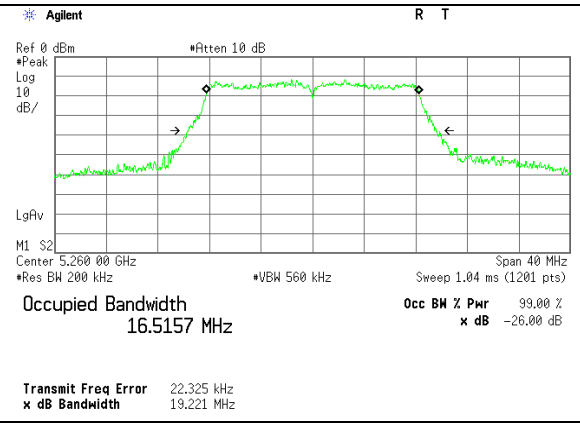
11a Antenna port 0

| 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 | - |

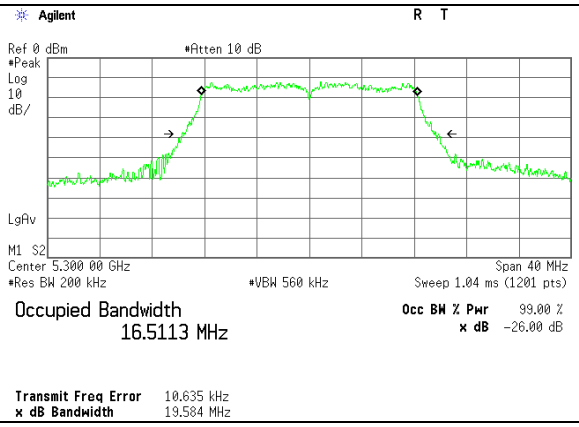
# 26dB Emission Bandwidth

## 11a Antenna port 0

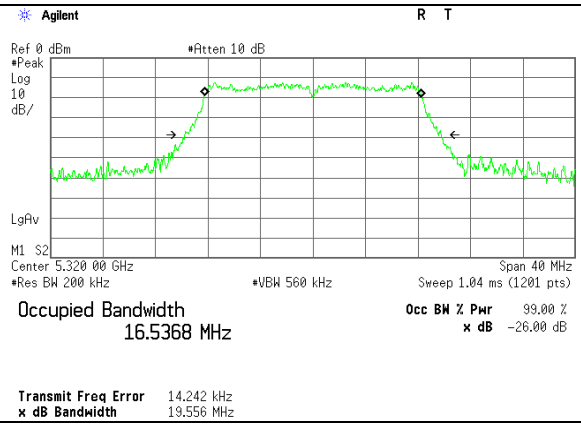
### 5260MHz




### 5300MHz




### 5320MHz

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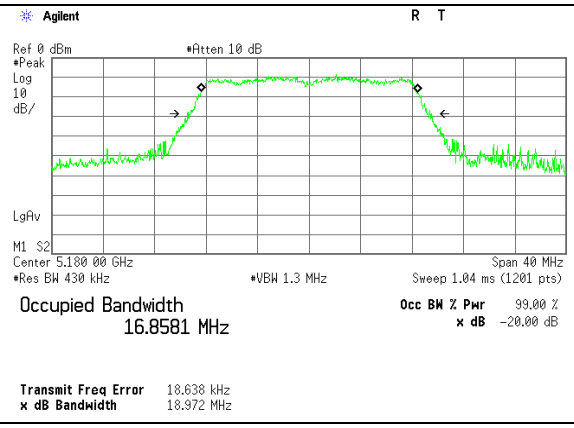
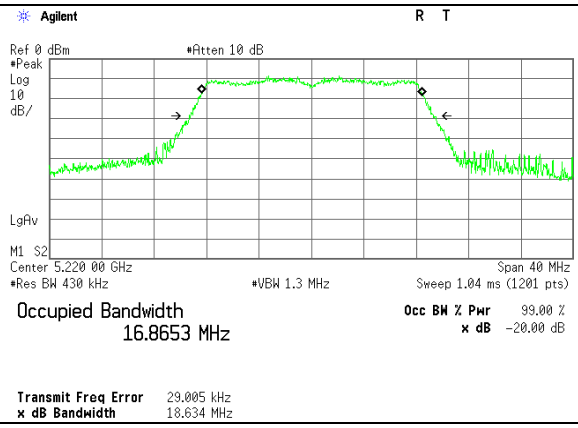
# 99% Occupied Bandwidth

## 11a Antenna port 0

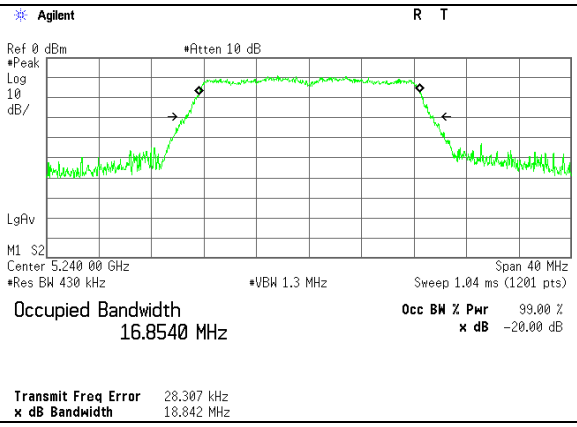
### 5180MHz



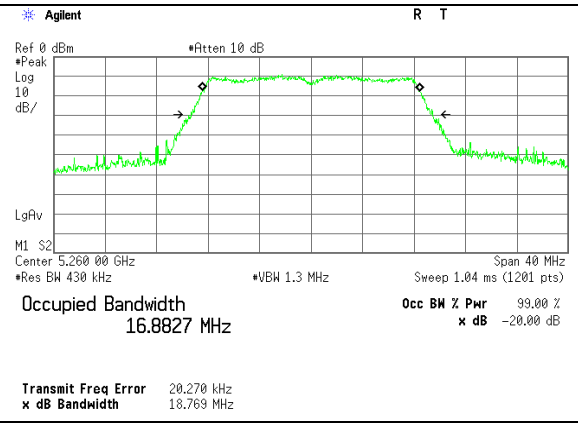

### 5220MHz



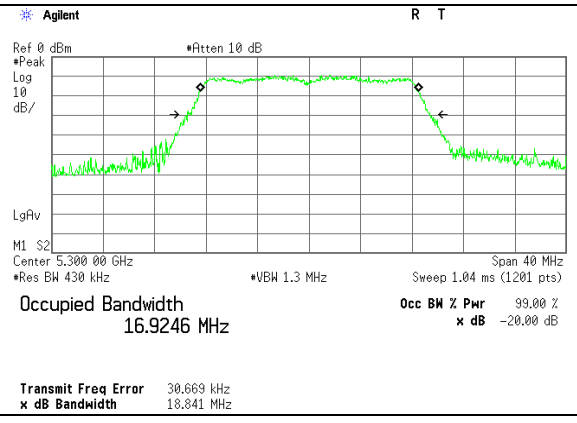

### 5240MHz



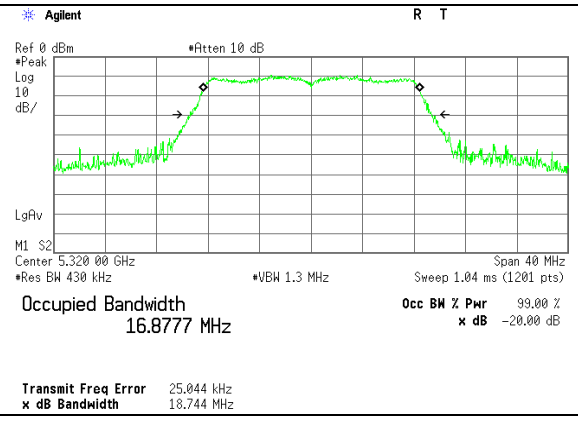

### 5260MHz




### 5300MHz




### 5320MHz





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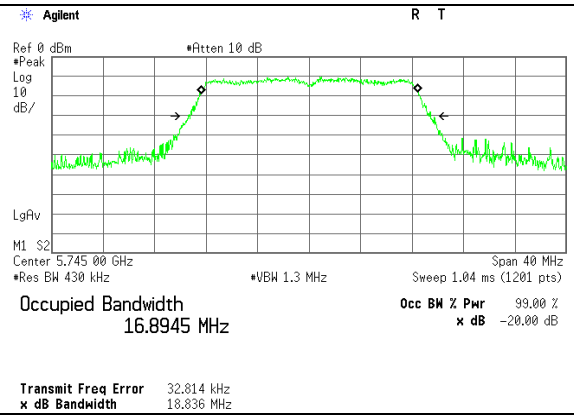
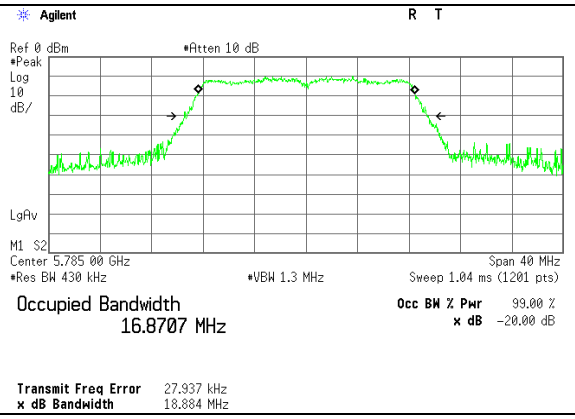
# 99% Occupied Bandwidth

## 11a Antenna port 0

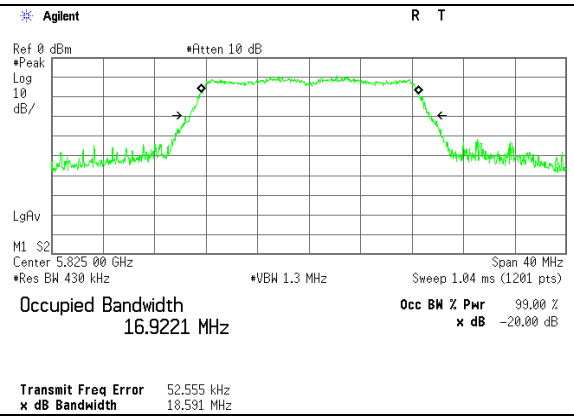
### 5745MHz




### 5785MHz




### 5825MHz



# 26dB Emission Bandwidth and 99% Occupied Bandwidth

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| Date | 06/09/2015 |
| Temperature/ Humidity | 23deg. C / 43% RH |
| Engineer | Tomoki Matsui |
| Mode | Tx 11n-20 |

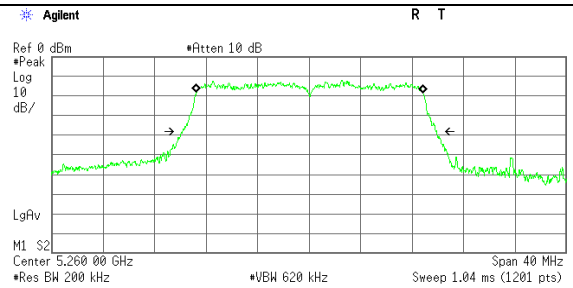
11n-20 Antenna port 0

| 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 | - |

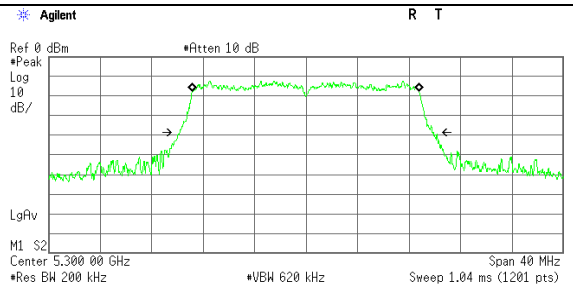
# 26dB Emission Bandwidth

## 11n-20 Antenna port 0

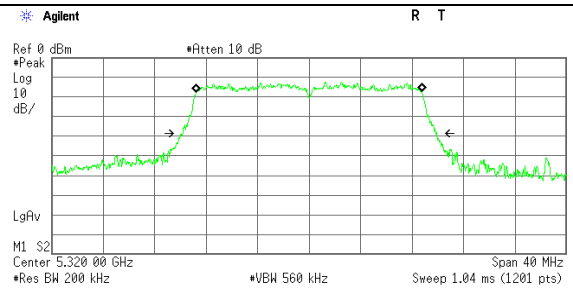
### 5260MHz




### 5300MHz




### 5320MHz





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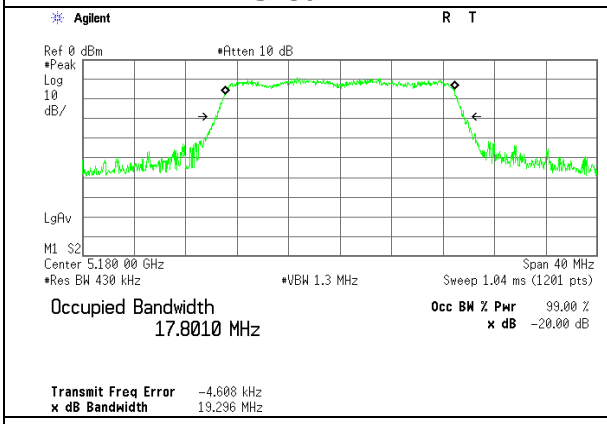
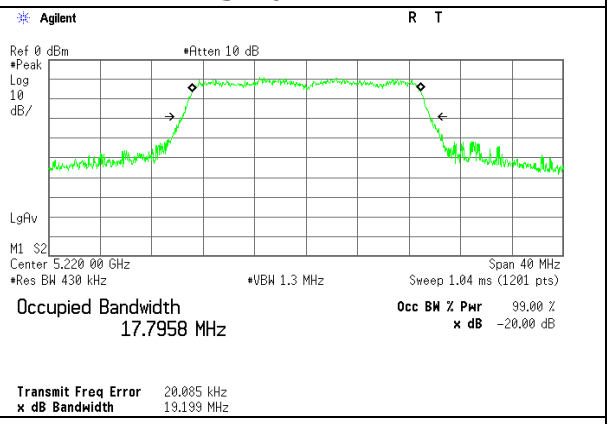
# 99% Occupied Bandwidth

## 11n-20 Antenna port 0

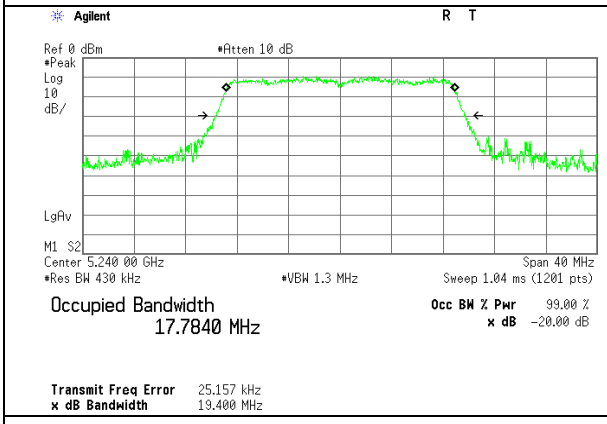
### 5180MHz



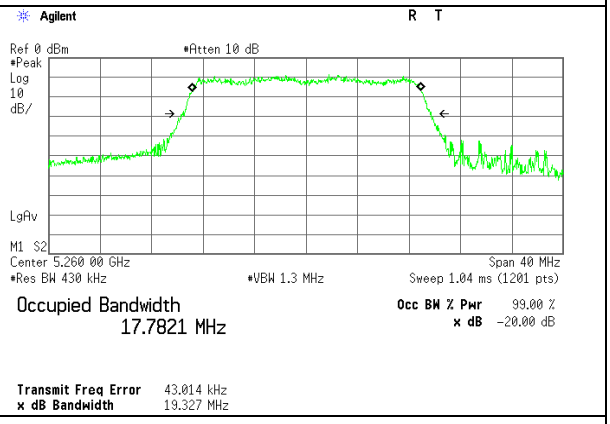

### 5220MHz



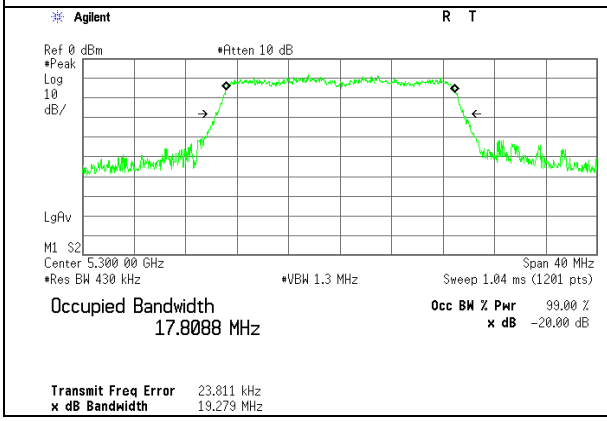

### 5240MHz



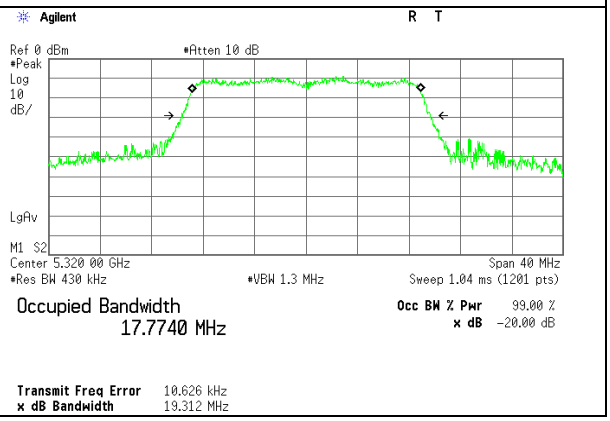

### 5260MHz




### 5300MHz



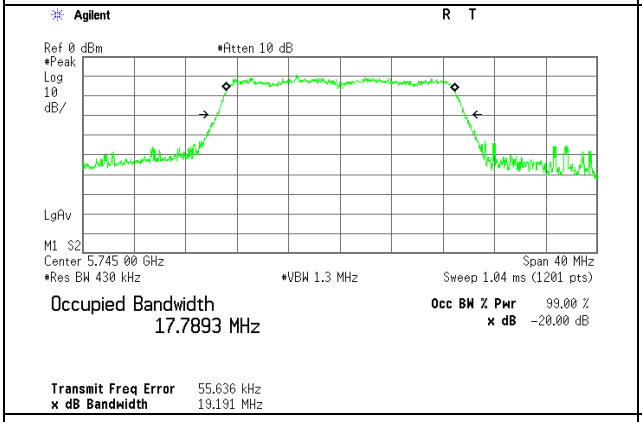

### 5320MHz



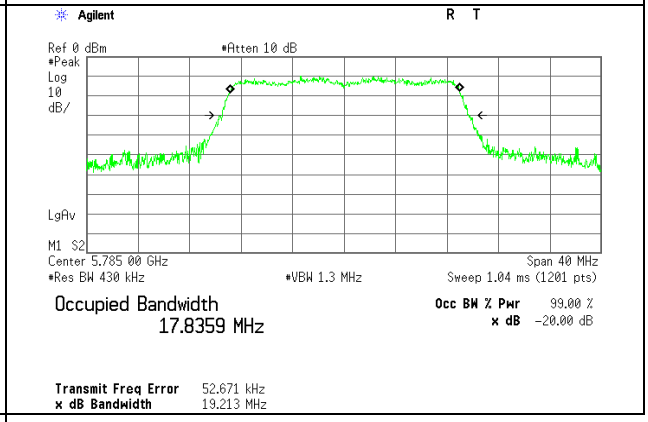
# 99% Occupied Bandwidth

## 11n-20 Antenna port 0

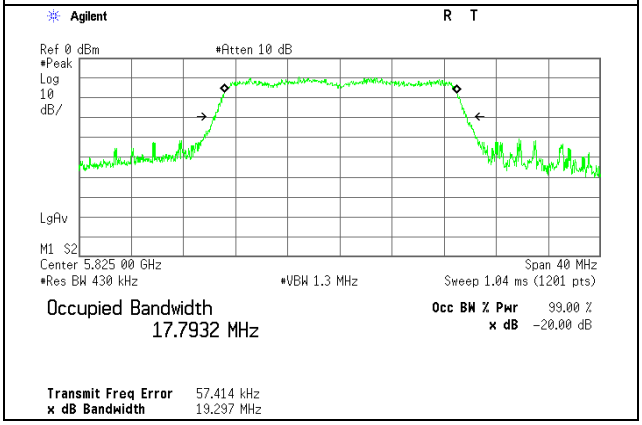
### 5745MHz




### 5785MHz




### 5825MHz



# 26dB Emission Bandwidth and 99% Occupied Bandwidth

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| Date | 06/09/2015 |
| Temperature/ Humidity | 23deg. C / 43% RH |
| Engineer | Tomoki Matsui |
| Mode | Tx 11ac-20 |

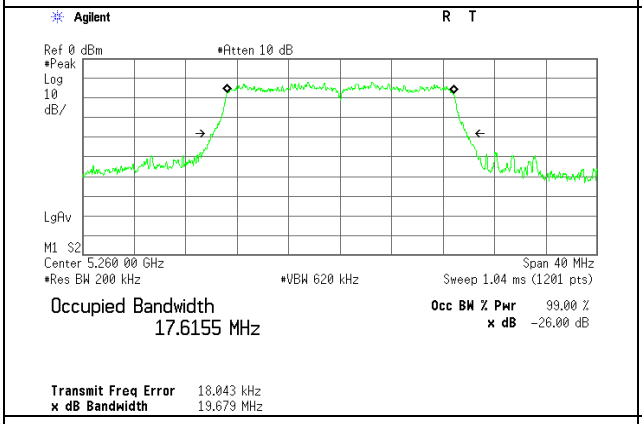
Tx 11ac-20 Antenna port 0

| 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 | - |

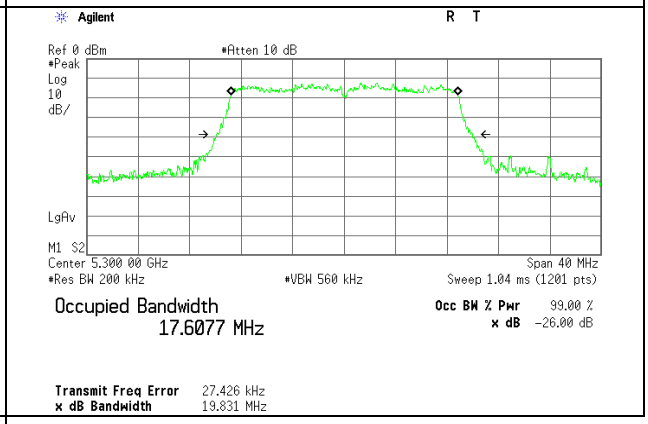
# 26dB Emission Bandwidth

## 11ac-20 Antenna port 0

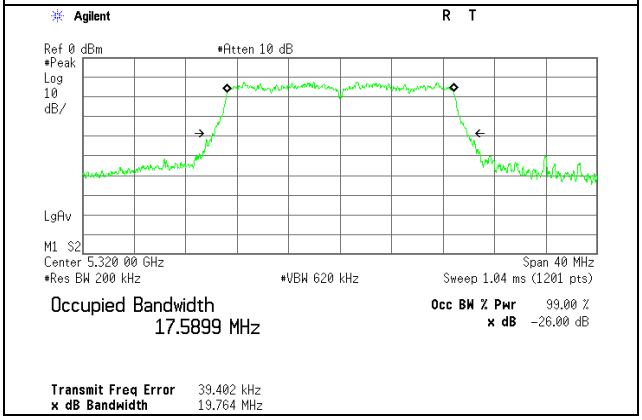
### 5260MHz




### 5300MHz




### 5320MHz

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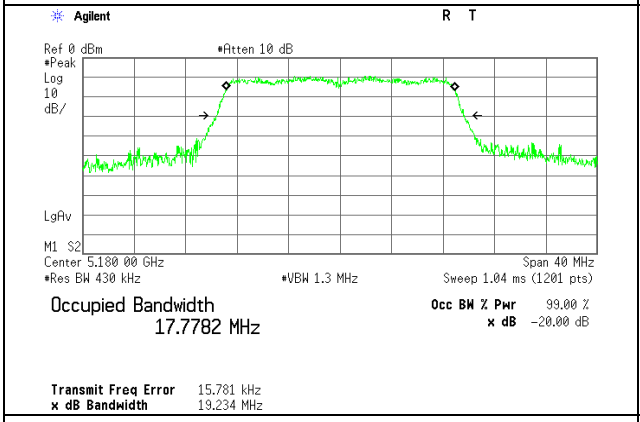
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

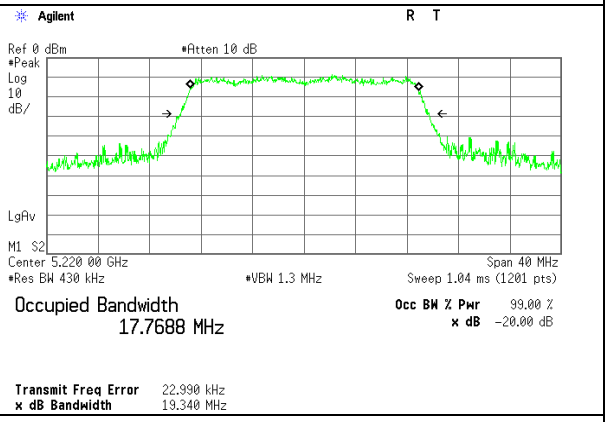
# 99% Occupied Bandwidth

## 11ac-20 Antenna port 0

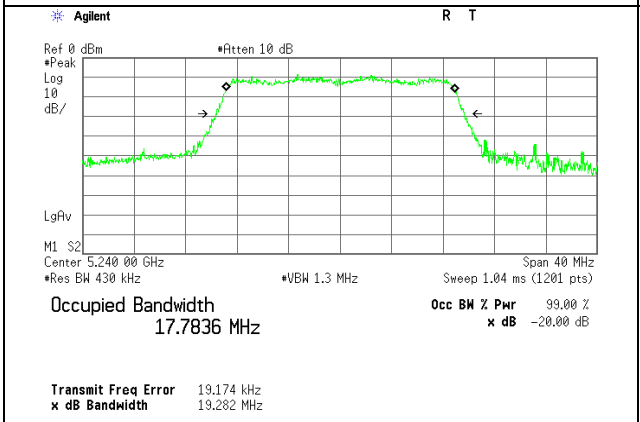
### 5180MHz



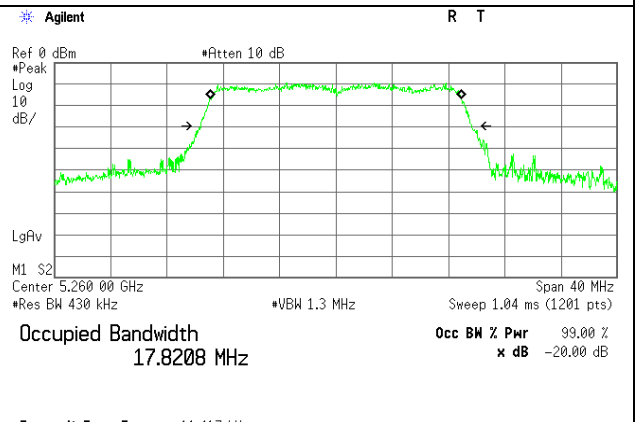

### 5220MHz



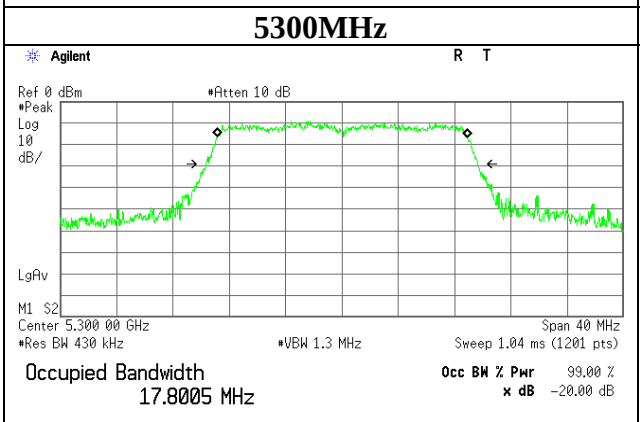

### 5240MHz



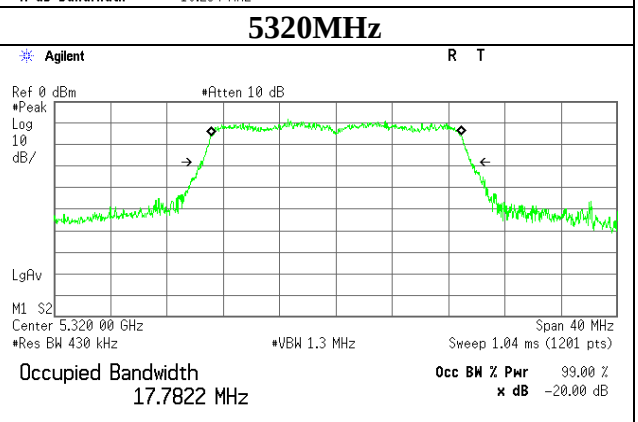

### 5260MHz




### 5300MHz



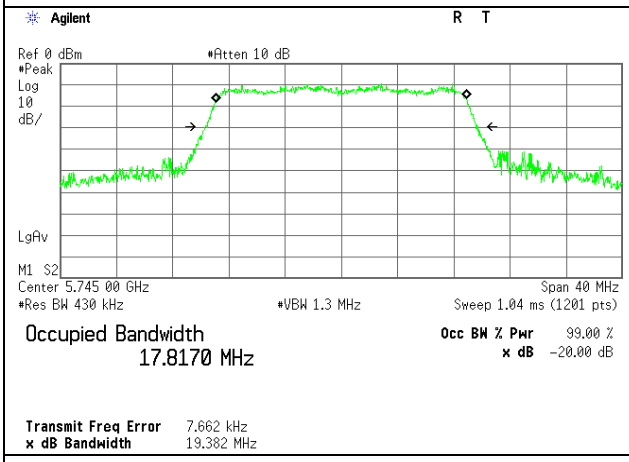

### 5320MHz



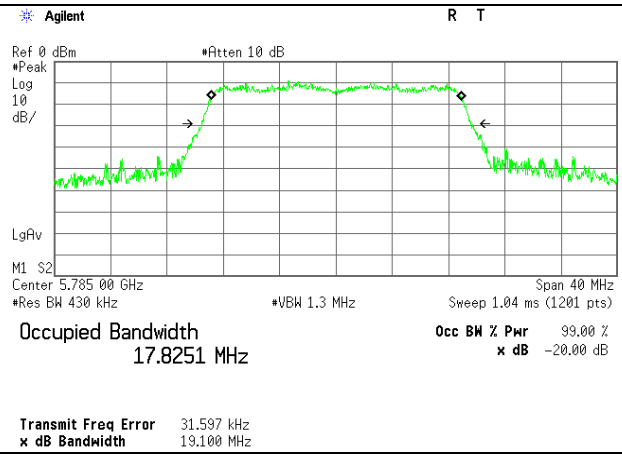
# 99% Occupied Bandwidth

## 11ac-20 Antenna port 0

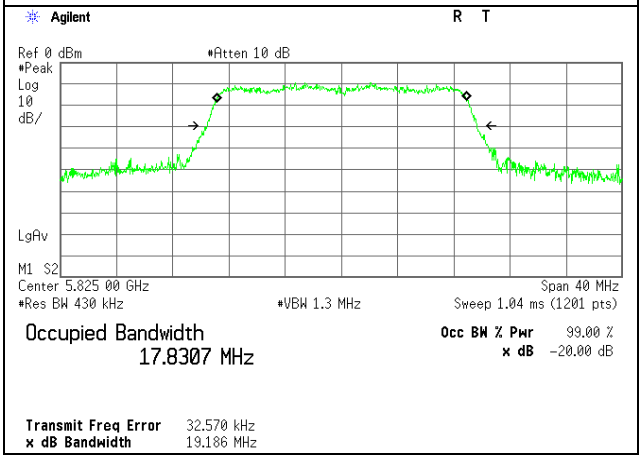
### 5745MHz




### 5785MHz




### 5825MHz



# 26dB Emission Bandwidth and 99% Occupied Bandwidth

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| Date | 06/09/2015 |
| Temperature/ Humidity | 23deg. C / 43% RH |
| Engineer | Tomoki Matsui |
| Mode | Tx 11n-40 |

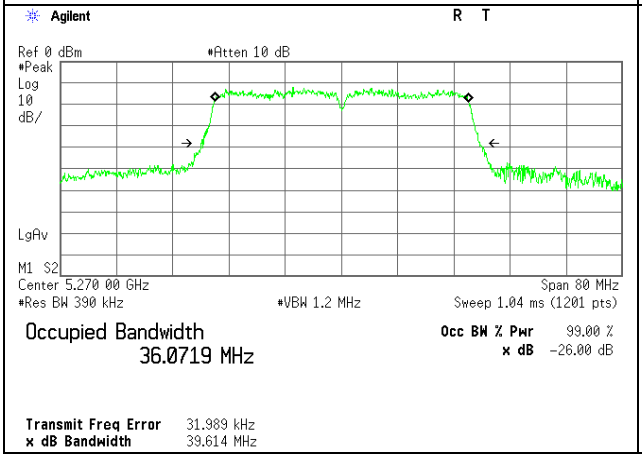
Tx 11n-40 Antenna port 0

| 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 | - |

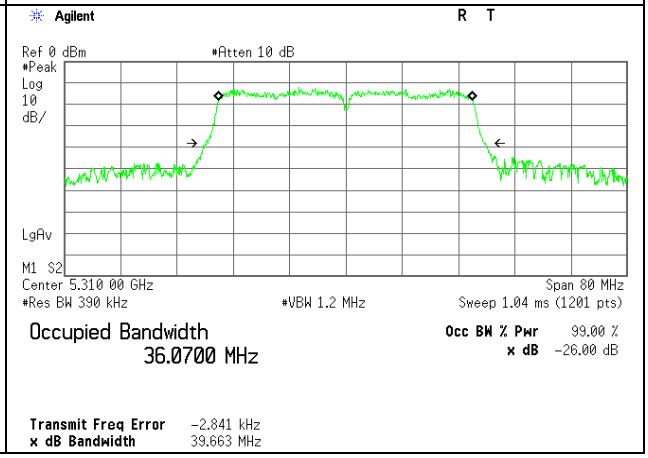
# 26dB Emission Bandwidth

## 11n-40 Antenna port 0

### 5270MHz



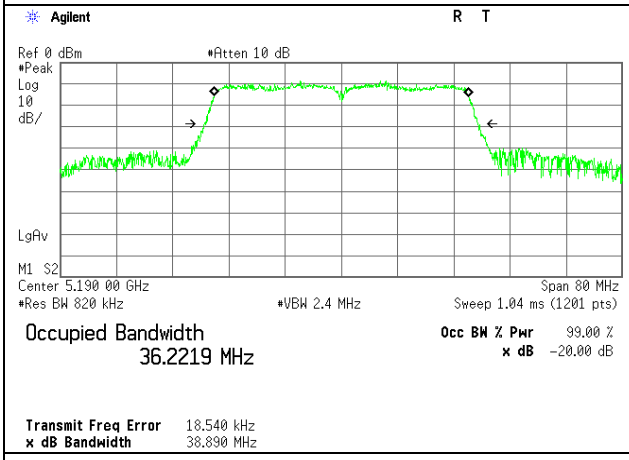

### 5310MHz



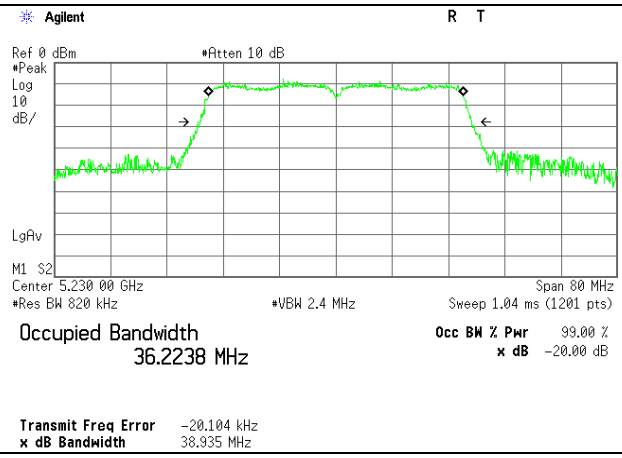
# 99% Occupied Bandwidth

## 11n-40 Antenna port 0

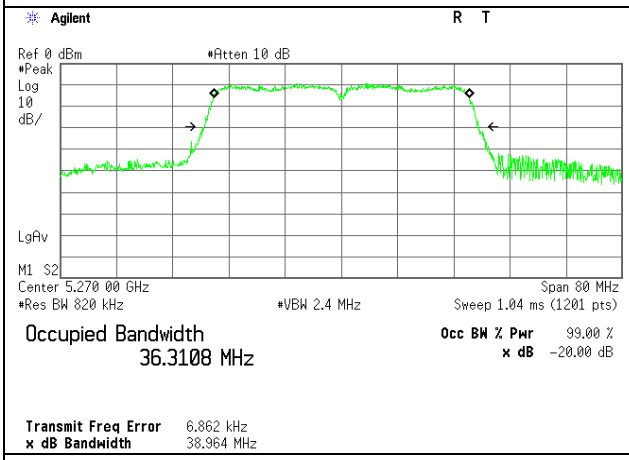
### 5190MHz



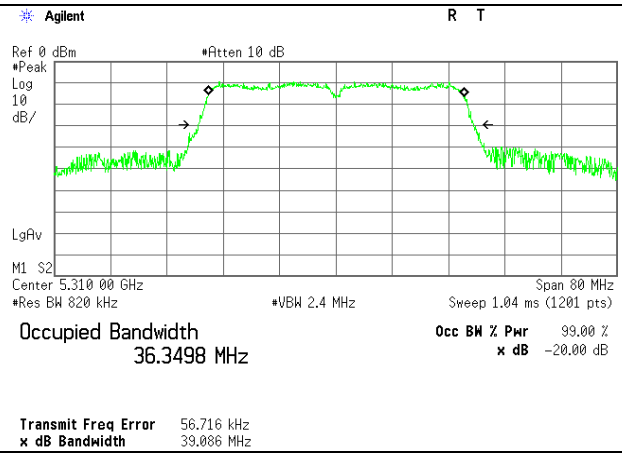

### 5230MHz



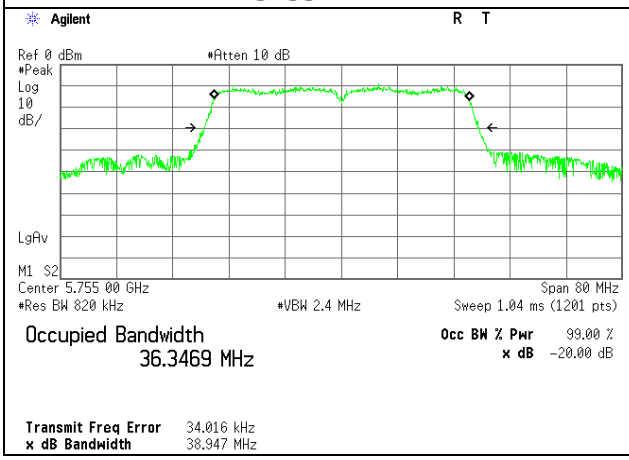

### 5270MHz



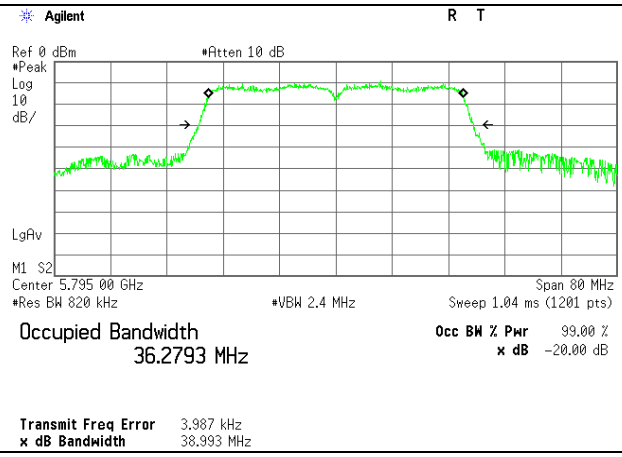

### 5310MHz




### 5755MHz




### 5795MHz



# 26dB Emission Bandwidth and 99% Occupied Bandwidth

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| Date | 06/09/2015 |
| Temperature/ Humidity | 23deg. C / 43% RH |
| Engineer | Tomoki Matsui |
| Mode | Tx 11ac-40 |

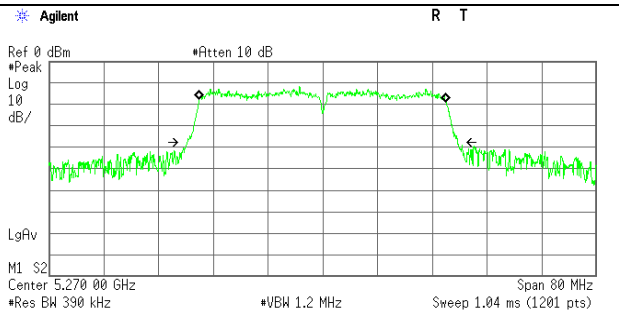
Tx 11ac-40 Antenna port 0

| 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 | - |

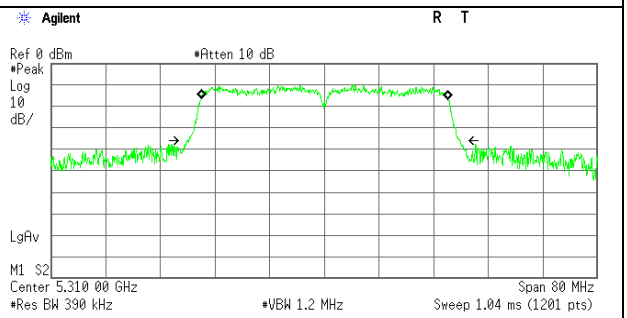
# 26dB Emission Bandwidth

## 11ac-40 Antenna port 0

### 5270MHz



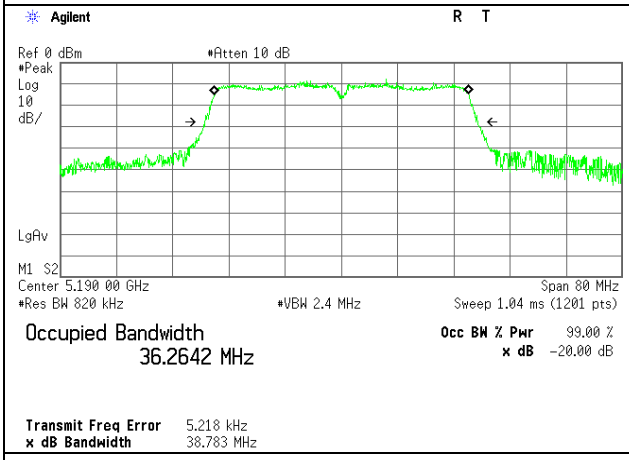

### 5310MHz



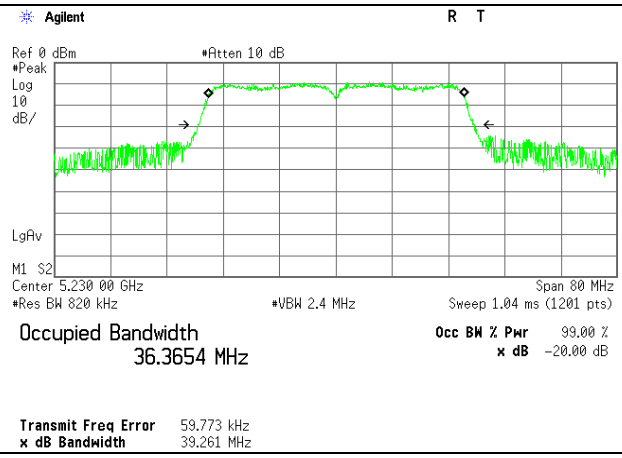
# 99% Occupied Bandwidth

## 11ac-40 Antenna port 0

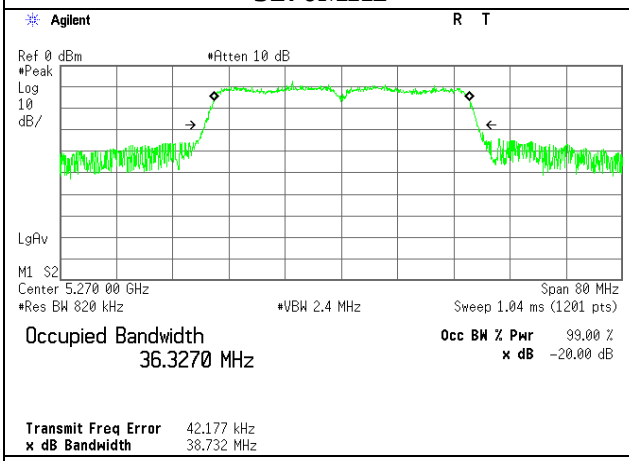
### 5190MHz



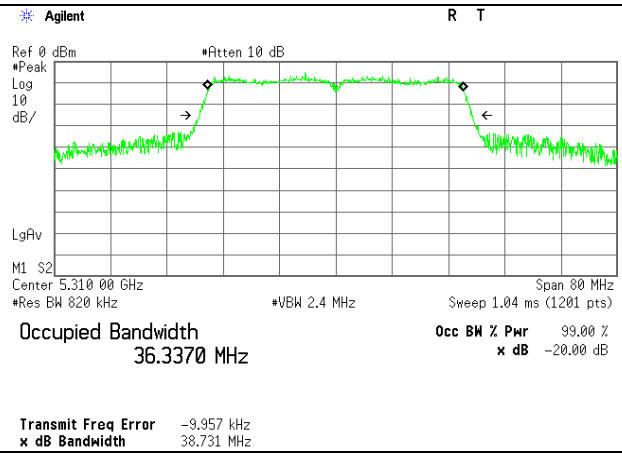

### 5230MHz



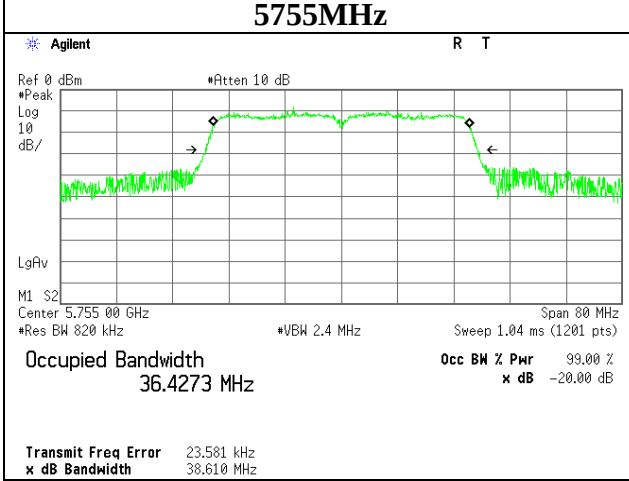

### 5270MHz



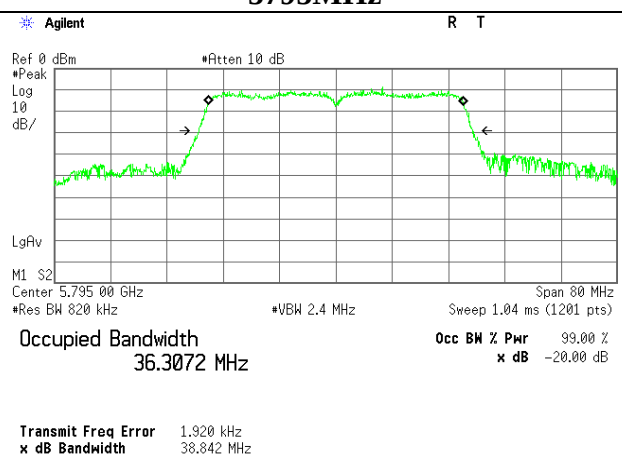

### 5310MHz




### 5755MHz




### 5795MHz



# 26dB Emission Bandwidth and 99% Occupied Bandwidth

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| Date | 06/09/2015 |
| Temperature/ Humidity | 23deg. C / 43% RH |
| Engineer | Tomoki Matsui |
| Mode | Tx 11ac-80 |

Tx 11ac-80 Antenna port 0

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

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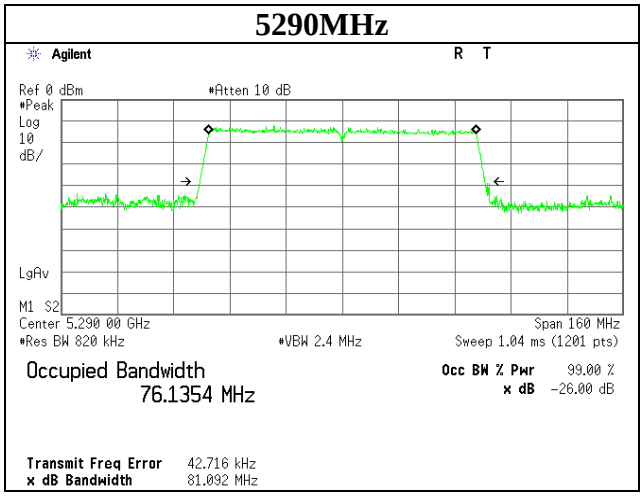
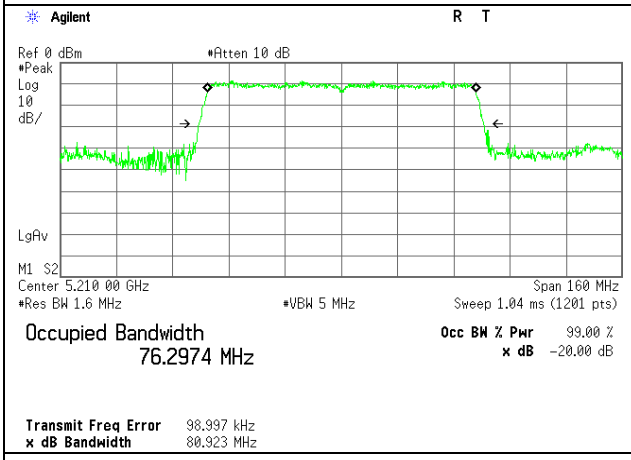
# 26dB Emission Bandwidth



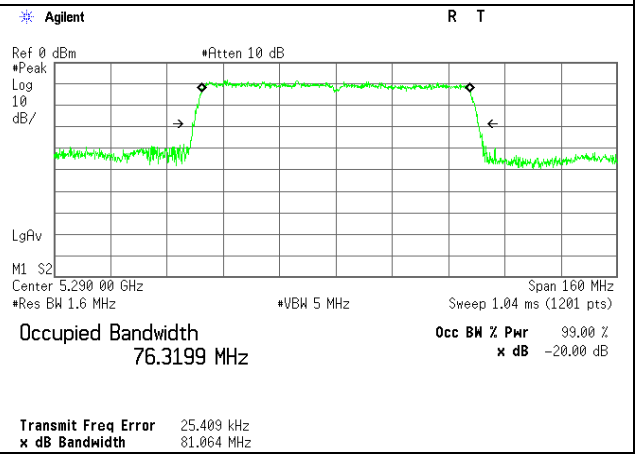
# 99% Occupied Bandwidth

## 11ac-80 Antenna port 0

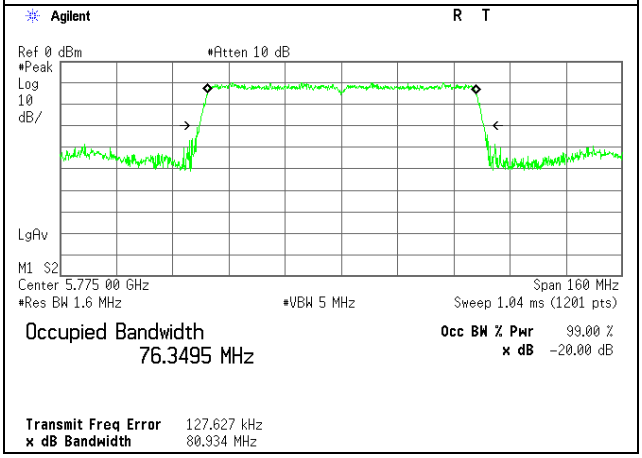
### 5210MHz




### 5290MHz




### 5775MHz



# 6dB Bandwidth

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| 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 0

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

11n-20 Antenna port 0

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

11ac-20 Antenna port 0

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

11n-40 Antenna port 0

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

11ac-40 Antenna port 0

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

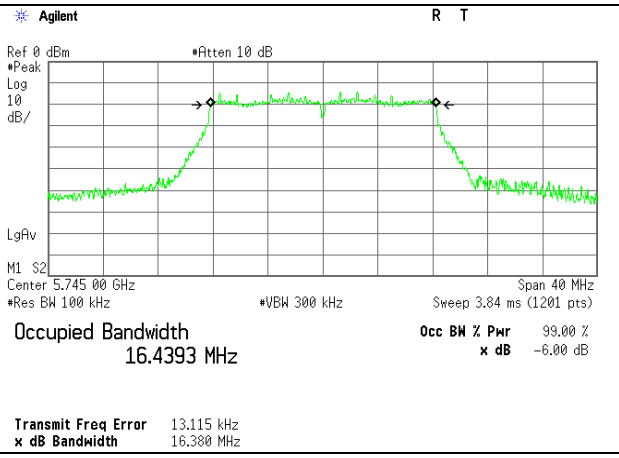
11ac-80 Antenna port 0

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

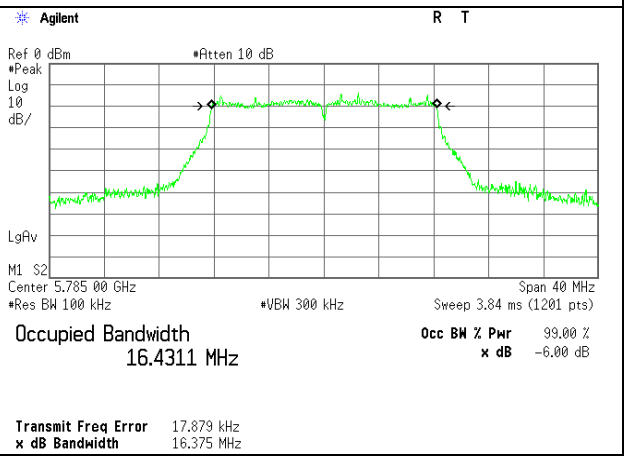
# 6dB Bandwidth

## 11a Antenna port 0

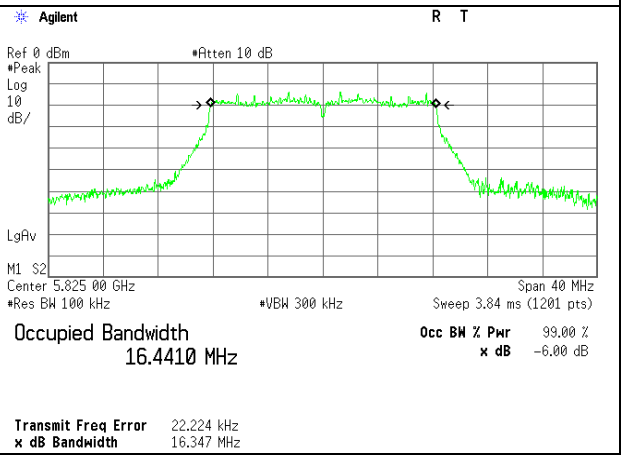
### 5745MHz




### 5785MHz



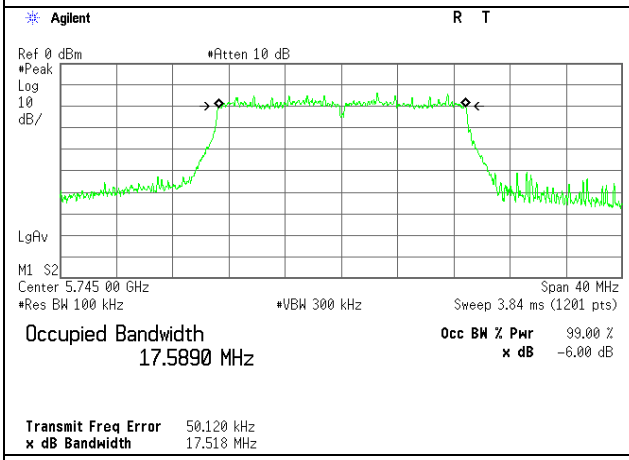

### 5825MHz



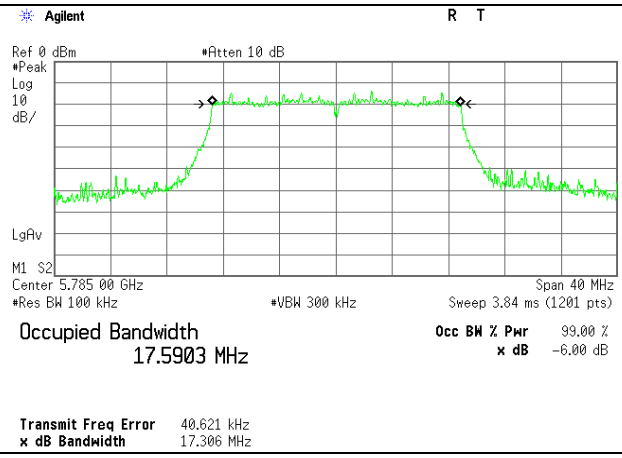
# 6dB Bandwidth

## 11n-20 Antenna port 0

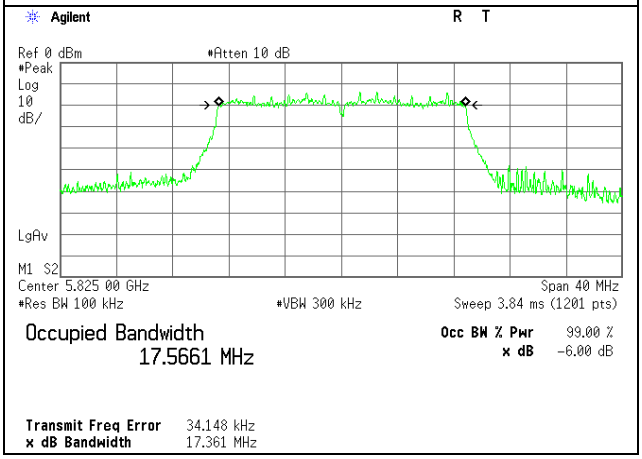
### 5745MHz




### 5785MHz




### 5825MHz

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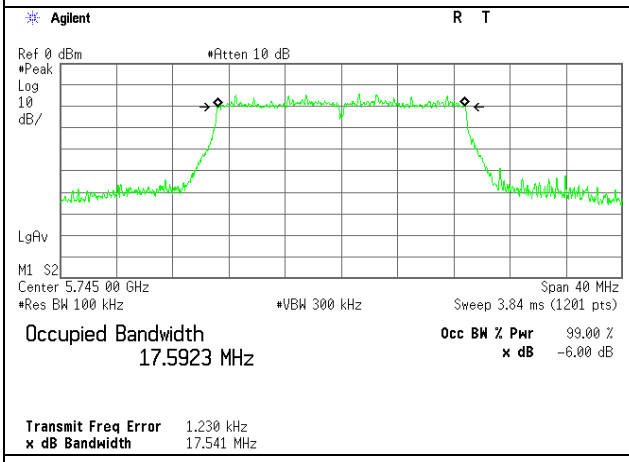
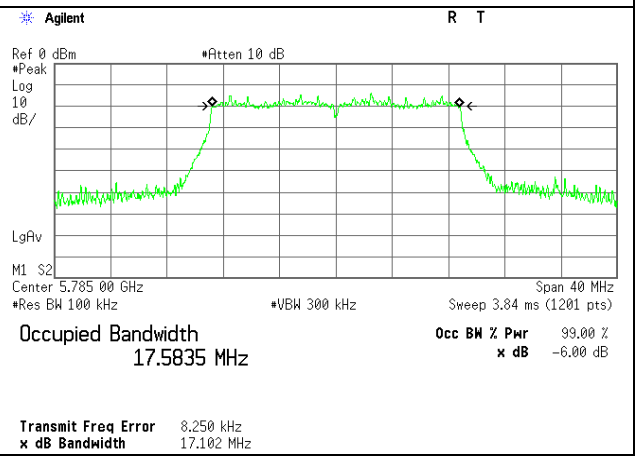
# 6dB Bandwidth

## 11ac-20 Antenna port 0

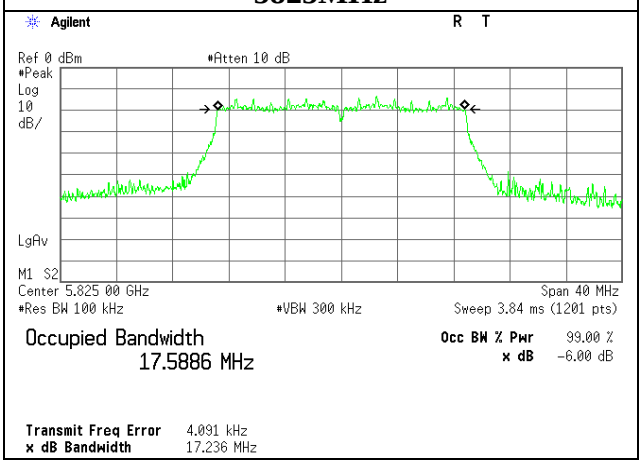
### 5745MHz




### 5785MHz




### 5825MHz

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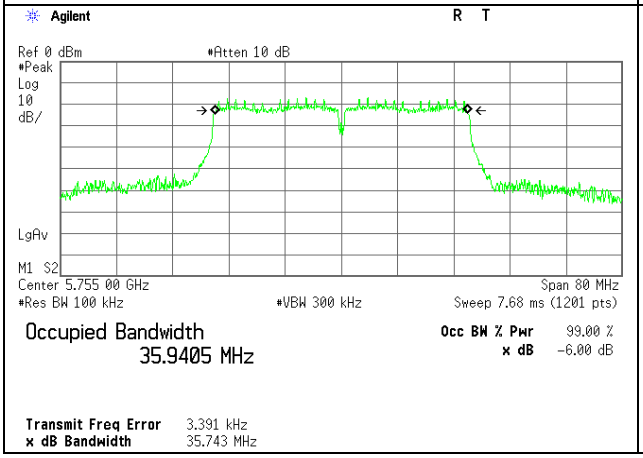
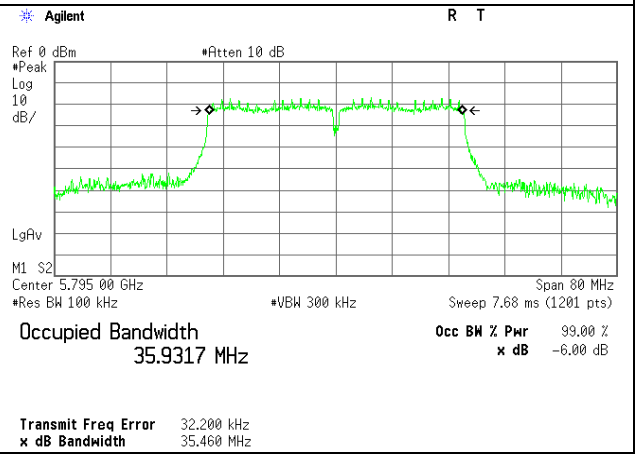
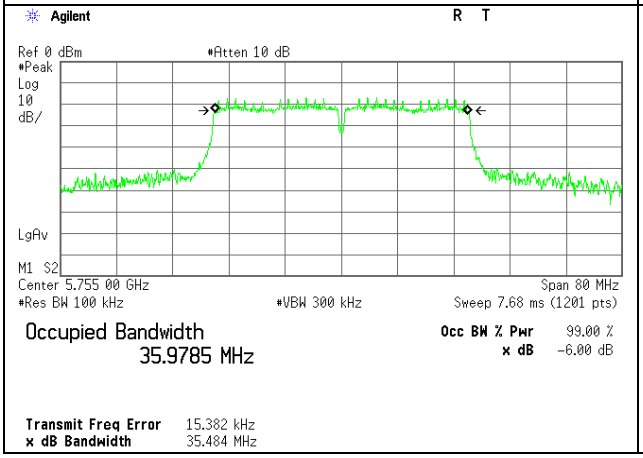
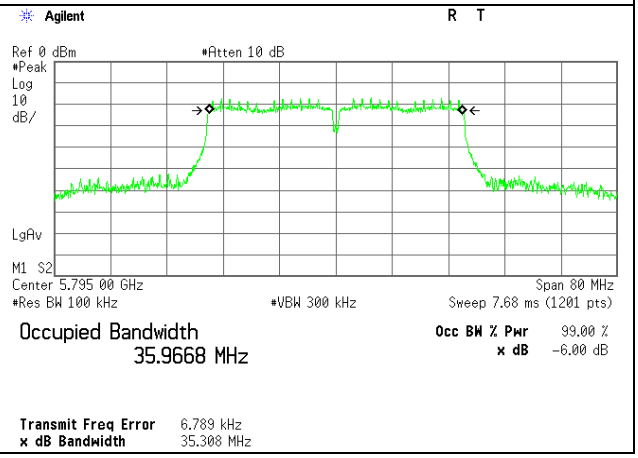
# 6dB Bandwidth

## 11n-40 Antenna port 0

| 5755MHz | 5795MHz |
|---|---|
|  |  |

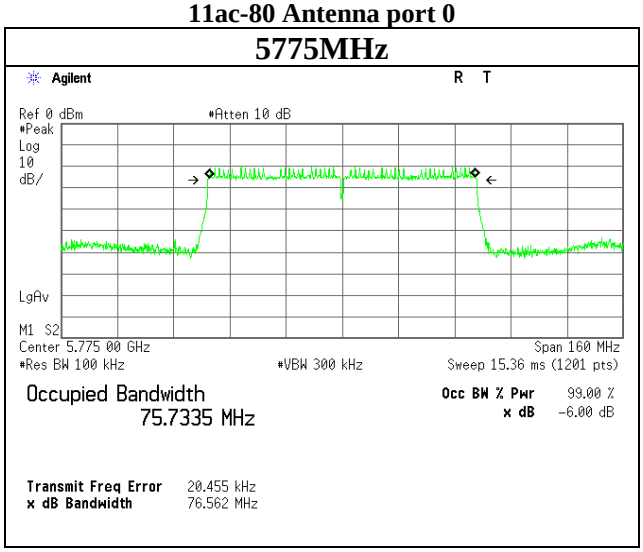
# 6dB Bandwidth

## 11ac-40 Antenna port 0

| 5755MHz | 5795MHz |
|---|---|
|  |  |

# 6dB Emission Bandwidth

**11ac-80 Antenna port 0**



# Maximum Conducted Output Power

| | | |
|---|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room | |
| Report No. | 10812026H | |
| Date | 06/07/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 54% RH | 23deg. C / 49% RH |
| Engineer | Yuta Moriya | Shinichi Miyazono |
| Mode | Tx 11a | |

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (e.i.r.p) | | Limit (Cond.) | | Limit (e.i.r.p) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Cond.) | (e.i.r.p.) | (Cond.) | (e.i.r.p.) | | | | | | | | | | |
| [MHz] | [mW] | [mW] | [mW] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | 10.99 | 27.67 | 9.71 | 24.43 | 13.16 | 20.70 | 17.17 | 52.10 | 23.97 | 250.00 | 29.97 | 993.12 | 10.81 | 12.80 |
| 5220.0 | 10.84 | 27.29 | 9.57 | 24.10 | 13.10 | 20.41 | 17.11 | 51.39 | 23.97 | 250.00 | 29.97 | 993.12 | 10.87 | 12.86 |
| 5240.0 | 10.99 | 27.67 | 9.84 | 24.77 | 13.19 | 20.83 | 17.20 | 52.44 | 23.97 | 250.00 | 29.97 | 993.12 | 10.78 | 12.77 |
| 5260.0 | 10.74 | 27.04 | 9.98 | 25.12 | 13.16 | 20.72 | 17.17 | 52.16 | 23.83 | 241.55 | 29.83 | 961.61 | 10.67 | 12.66 |
| 5300.0 | 10.89 | 27.42 | 10.05 | 25.29 | 13.21 | 20.94 | 17.22 | 52.71 | 23.91 | 246.04 | 29.91 | 979.49 | 10.70 | 12.69 |
| 5320.0 | 10.67 | 26.85 | 10.02 | 25.23 | 13.16 | 20.69 | 17.17 | 52.09 | 23.91 | 246.04 | 29.91 | 979.49 | 10.75 | 12.74 |
| 5745.0 | 5.77 | 14.52 | 5.58 | 14.06 | 10.55 | 11.35 | 14.56 | 28.58 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.45 | 21.44 |
| 5785.0 | 10.14 | 25.53 | 9.82 | 24.72 | 13.00 | 19.96 | 17.01 | 50.24 | 30.00 | 1000.00 | 36.00 | 3981.07 | 17.00 | 18.99 |
| 5825.0 | 10.21 | 25.70 | 9.93 | 25.00 | 13.04 | 20.14 | 17.05 | 50.71 | 30.00 | 1000.00 | 36.00 | 3981.07 | 16.96 | 18.95 |

**Antenna port 0**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | -0.95 | 1.25 | 10.11 | 4.01 | 10.41 | 10.99 | 14.42 | 27.67 | 23.97 | 250.00 | 29.97 | 993.12 | 13.56 | 15.55 |
| 5220.0 | -1.01 | 1.25 | 10.11 | 4.01 | 10.35 | 10.84 | 14.36 | 27.29 | 23.97 | 250.00 | 29.97 | 993.12 | 13.62 | 15.61 |
| 5240.0 | -0.96 | 1.26 | 10.11 | 4.01 | 10.41 | 10.99 | 14.42 | 27.67 | 23.97 | 250.00 | 29.97 | 993.12 | 13.56 | 15.55 |
| 5260.0 | -1.06 | 1.26 | 10.11 | 4.01 | 10.31 | 10.74 | 14.32 | 27.04 | 23.83 | 241.55 | 29.83 | 961.61 | 13.52 | 15.51 |
| 5300.0 | -1.01 | 1.27 | 10.11 | 4.01 | 10.37 | 10.89 | 14.38 | 27.42 | 23.91 | 246.04 | 29.91 | 979.49 | 13.54 | 15.53 |
| 5320.0 | -1.10 | 1.27 | 10.11 | 4.01 | 10.28 | 10.67 | 14.29 | 26.85 | 23.91 | 246.04 | 29.91 | 979.49 | 13.63 | 15.62 |
| 5745.0 | -3.82 | 1.36 | 10.07 | 4.01 | 7.61 | 5.77 | 11.62 | 14.52 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.39 | 24.38 |
| 5785.0 | -1.41 | 1.37 | 10.10 | 4.01 | 10.06 | 10.14 | 14.07 | 25.53 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.94 | 21.93 |
| 5825.0 | -1.39 | 1.38 | 10.10 | 4.01 | 10.09 | 10.21 | 14.10 | 25.70 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.91 | 21.90 |

**Antenna port 1**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | -1.43 | 1.25 | 10.05 | 4.01 | 9.87 | 9.71 | 13.88 | 24.43 | 23.97 | 250.00 | 29.97 | 993.12 | 14.10 | 16.09 |
| 5220.0 | -1.49 | 1.25 | 10.05 | 4.01 | 9.81 | 9.57 | 13.82 | 24.10 | 23.97 | 250.00 | 29.97 | 993.12 | 14.16 | 16.15 |
| 5240.0 | -1.38 | 1.26 | 10.05 | 4.01 | 9.93 | 9.84 | 13.94 | 24.77 | 23.97 | 250.00 | 29.97 | 993.12 | 14.04 | 16.03 |
| 5260.0 | -1.32 | 1.26 | 10.05 | 4.01 | 9.99 | 9.98 | 14.00 | 25.12 | 23.83 | 241.55 | 29.83 | 961.61 | 13.84 | 15.83 |
| 5300.0 | -1.30 | 1.27 | 10.05 | 4.01 | 10.02 | 10.05 | 14.03 | 25.29 | 23.91 | 246.04 | 29.91 | 979.49 | 13.89 | 15.88 |
| 5320.0 | -1.31 | 1.27 | 10.05 | 4.01 | 10.01 | 10.02 | 14.02 | 25.23 | 23.91 | 246.04 | 29.91 | 979.49 | 13.90 | 15.89 |
| 5745.0 | -3.94 | 1.36 | 10.05 | 4.01 | 7.47 | 5.58 | 11.48 | 14.06 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.53 | 24.52 |
| 5785.0 | -1.49 | 1.37 | 10.04 | 4.01 | 9.92 | 9.82 | 13.93 | 24.72 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.08 | 22.07 |
| 5825.0 | -1.45 | 1.38 | 10.04 | 4.01 | 9.97 | 9.93 | 13.98 | 25.00 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.03 | 22.02 |

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna Gain
15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm
15.407(a)(3) Limit(Cond.) = 30dBm(1W)
Limit(e.i.r.p.) = Limit(Cond.) + 6dBi

# Maximum Conducted Output Power

| | | |
|---|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room | |
| Report No. | 10812026H | |
| Date | 06/07/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 54% RH | 23deg. C / 49% RH |
| Engineer | Yuta Moriya | Shinichi Miyazono |
| Mode | Tx 11n-20 | |

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (e.i.r.p) | | Limit (Cond.) | | Limit (e.i.r.p) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Cond.) | (e.i.r.p.) | (Cond.) | (e.i.r.p.) | | | | | | | | | | |
| [MHz] | [mW] | [mW] | [mW] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | 10.74 | 27.04 | 9.55 | 24.04 | 13.07 | 20.29 | 17.08 | 51.08 | 23.97 | 250.00 | 29.97 | 993.12 | 10.90 | 12.89 |
| 5220.0 | 10.42 | 26.24 | 9.23 | 23.23 | 12.93 | 19.65 | 16.94 | 49.47 | 23.97 | 250.00 | 29.97 | 993.12 | 11.04 | 13.03 |
| 5240.0 | 10.40 | 26.18 | 9.48 | 23.17 | 12.98 | 19.88 | 16.93 | 49.36 | 23.97 | 250.00 | 29.97 | 993.12 | 10.99 | 13.04 |
| 5260.0 | 10.72 | 25.94 | 9.53 | 23.99 | 13.06 | 20.24 | 16.98 | 49.93 | 23.95 | 248.31 | 29.95 | 988.55 | 10.89 | 12.97 |
| 5300.0 | 10.45 | 26.24 | 9.86 | 24.10 | 13.08 | 20.31 | 17.02 | 50.34 | 23.94 | 247.74 | 29.94 | 986.28 | 10.86 | 12.92 |
| 5320.0 | 10.69 | 26.30 | 9.77 | 24.32 | 13.11 | 20.46 | 17.04 | 50.62 | 23.95 | 248.31 | 29.95 | 988.55 | 10.84 | 12.91 |
| 5745.0 | 6.10 | 15.35 | 5.51 | 13.87 | 10.65 | 11.60 | 14.66 | 29.21 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.35 | 21.34 |
| 5785.0 | 10.19 | 25.64 | 9.95 | 24.95 | 13.04 | 20.14 | 17.04 | 50.59 | 30.00 | 1000.00 | 36.00 | 3981.07 | 16.96 | 18.96 |
| 5825.0 | 10.16 | 25.59 | 9.95 | 25.06 | 13.04 | 20.12 | 17.05 | 50.65 | 30.00 | 1000.00 | 36.00 | 3981.07 | 16.96 | 18.95 |

**Antenna port 0**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | -1.05 | 1.25 | 10.11 | 4.01 | 10.31 | 10.74 | 14.32 | 27.04 | 23.97 | 250.00 | 29.97 | 993.12 | 13.66 | 15.65 |
| 5220.0 | -1.18 | 1.25 | 10.11 | 4.01 | 10.18 | 10.42 | 14.19 | 26.24 | 23.97 | 250.00 | 29.97 | 993.12 | 13.79 | 15.78 |
| 5240.0 | -1.20 | 1.26 | 10.11 | 4.01 | 10.17 | 10.40 | 14.18 | 26.18 | 23.97 | 250.00 | 29.97 | 993.12 | 13.80 | 15.79 |
| 5260.0 | -1.24 | 1.26 | 10.11 | 4.01 | 10.30 | 10.72 | 14.14 | 25.94 | 23.95 | 248.31 | 29.95 | 988.55 | 13.65 | 15.81 |
| 5300.0 | -1.20 | 1.27 | 10.11 | 4.01 | 10.19 | 10.45 | 14.19 | 26.24 | 23.94 | 247.74 | 29.94 | 986.28 | 13.75 | 15.75 |
| 5320.0 | -1.19 | 1.27 | 10.11 | 4.01 | 10.29 | 10.69 | 14.20 | 26.30 | 23.95 | 248.31 | 29.95 | 988.55 | 13.66 | 15.75 |
| 5745.0 | -3.58 | 1.36 | 10.07 | 4.01 | 7.85 | 6.10 | 11.86 | 15.35 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.15 | 24.14 |
| 5785.0 | -1.39 | 1.37 | 10.10 | 4.01 | 10.08 | 10.19 | 14.09 | 25.64 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.92 | 21.91 |
| 5825.0 | -1.41 | 1.38 | 10.10 | 4.01 | 10.07 | 10.16 | 14.08 | 25.59 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.93 | 21.92 |

**Antenna port 1**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | -1.50 | 1.25 | 10.05 | 4.01 | 9.80 | 9.55 | 13.81 | 24.04 | 23.97 | 250.00 | 29.97 | 993.12 | 14.17 | 16.16 |
| 5220.0 | -1.65 | 1.25 | 10.05 | 4.01 | 9.65 | 9.23 | 13.66 | 23.23 | 23.97 | 250.00 | 29.97 | 993.12 | 14.32 | 16.31 |
| 5240.0 | -1.67 | 1.26 | 10.05 | 4.01 | 9.77 | 9.48 | 13.65 | 23.17 | 23.97 | 250.00 | 29.97 | 993.12 | 14.20 | 16.32 |
| 5260.0 | -1.52 | 1.26 | 10.05 | 4.01 | 9.79 | 9.53 | 13.80 | 23.99 | 23.95 | 248.31 | 29.95 | 988.55 | 14.16 | 16.15 |
| 5300.0 | -1.51 | 1.27 | 10.05 | 4.01 | 9.94 | 9.86 | 13.82 | 24.10 | 23.94 | 247.74 | 29.94 | 986.28 | 14.00 | 16.12 |
| 5320.0 | -1.47 | 1.27 | 10.05 | 4.01 | 9.90 | 9.77 | 13.86 | 24.32 | 23.95 | 248.31 | 29.95 | 988.55 | 14.05 | 16.09 |
| 5745.0 | -4.00 | 1.36 | 10.05 | 4.01 | 7.41 | 5.51 | 11.42 | 13.87 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.59 | 24.58 |
| 5785.0 | -1.45 | 1.37 | 10.04 | 4.01 | 9.98 | 9.95 | 13.97 | 24.95 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.02 | 22.03 |
| 5825.0 | -1.44 | 1.38 | 10.04 | 4.01 | 9.98 | 9.95 | 13.99 | 25.06 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.02 | 22.01 |

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna Gain
15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm
15.407(a)(3) Limit(Cond.) = 30dBm(1W)
Limit(e.i.r.p.) = Limit(Cond.) + 6dBi

# Maximum Conducted Output Power

| | | |
|---|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room | |
| Report No. | 10812026H | |
| Date | 06/07/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 54% RH | 23deg. C / 49% RH |
| Engineer | Yuta Moriya | Shinichi Miyazono |
| Mode | Tx 11ac-20 | |

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (e.i.r.p) | | Limit (Cond.) | | Limit (e.i.r.p) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Cond.) | (e.i.r.p.) | (Cond.) | (e.i.r.p.) | | | | | | | | | | |
| [MHz] | [mW] | [mW] | [mW] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | 10.52 | 26.49 | 9.23 | 23.17 | 12.95 | 19.75 | 16.96 | 49.66 | 23.97 | 250.00 | 29.97 | 993.12 | 11.02 | 13.01 |
| 5220.0 | 10.74 | 27.04 | 9.40 | 23.44 | 13.04 | 20.14 | 17.03 | 50.48 | 23.97 | 250.00 | 29.97 | 993.12 | 10.93 | 12.94 |
| 5240.0 | 11.40 | 28.71 | 9.59 | 24.15 | 13.22 | 21.00 | 17.23 | 52.86 | 23.97 | 250.00 | 29.97 | 993.12 | 10.75 | 12.74 |
| 5260.0 | 11.09 | 27.93 | 9.64 | 24.27 | 13.17 | 20.73 | 17.18 | 52.19 | 23.94 | 247.74 | 29.94 | 986.28 | 10.77 | 12.76 |
| 5300.0 | 11.02 | 27.73 | 10.33 | 26.00 | 13.29 | 21.34 | 17.30 | 53.73 | 23.97 | 250.00 | 29.97 | 993.12 | 10.68 | 12.67 |
| 5320.0 | 10.67 | 26.85 | 9.75 | 24.55 | 13.10 | 20.42 | 17.11 | 51.40 | 23.95 | 248.31 | 29.95 | 988.55 | 10.85 | 12.84 |
| 5745.0 | 5.86 | 14.76 | 5.62 | 14.16 | 10.60 | 11.48 | 14.61 | 28.92 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.40 | 21.39 |
| 5785.0 | 10.00 | 25.18 | 10.23 | 25.76 | 13.06 | 20.23 | 17.07 | 50.94 | 30.00 | 1000.00 | 36.00 | 3981.07 | 16.94 | 18.93 |
| 5825.0 | 9.95 | 25.06 | 9.66 | 24.32 | 12.93 | 19.61 | 16.94 | 49.38 | 30.00 | 1000.00 | 36.00 | 3981.07 | 17.07 | 19.06 |

**Antenna port 0**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | -1.14 | 1.25 | 10.11 | 4.01 | 10.22 | 10.52 | 14.23 | 26.49 | 23.97 | 250.00 | 29.97 | 993.12 | 13.75 | 15.74 |
| 5220.0 | -1.05 | 1.25 | 10.11 | 4.01 | 10.31 | 10.74 | 14.32 | 27.04 | 23.97 | 250.00 | 29.97 | 993.12 | 13.66 | 15.65 |
| 5240.0 | -0.80 | 1.26 | 10.11 | 4.01 | 10.57 | 11.40 | 14.58 | 28.71 | 23.97 | 250.00 | 29.97 | 993.12 | 13.40 | 15.39 |
| 5260.0 | -0.92 | 1.26 | 10.11 | 4.01 | 10.45 | 11.09 | 14.46 | 27.93 | 23.94 | 247.74 | 29.94 | 986.28 | 13.49 | 15.48 |
| 5300.0 | -0.96 | 1.27 | 10.11 | 4.01 | 10.42 | 11.02 | 14.43 | 27.73 | 23.97 | 250.00 | 29.97 | 993.12 | 13.55 | 15.54 |
| 5320.0 | -1.10 | 1.27 | 10.11 | 4.01 | 10.28 | 10.67 | 14.29 | 26.85 | 23.95 | 248.31 | 29.95 | 988.55 | 13.67 | 15.66 |
| 5745.0 | -3.75 | 1.36 | 10.07 | 4.01 | 7.68 | 5.86 | 11.69 | 14.76 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.32 | 24.31 |
| 5785.0 | -1.47 | 1.37 | 10.10 | 4.01 | 10.00 | 10.00 | 14.01 | 25.18 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.00 | 21.99 |
| 5825.0 | -1.50 | 1.38 | 10.10 | 4.01 | 9.98 | 9.95 | 13.99 | 25.06 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.02 | 22.01 |

**Antenna port 1**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5180.0 | -1.66 | 1.25 | 10.05 | 4.01 | 9.65 | 9.23 | 13.65 | 23.17 | 23.97 | 250.00 | 29.97 | 993.12 | 14.32 | 16.32 |
| 5220.0 | -1.61 | 1.25 | 10.05 | 4.01 | 9.73 | 9.40 | 13.70 | 23.44 | 23.97 | 250.00 | 29.97 | 993.12 | 14.24 | 16.27 |
| 5240.0 | -1.49 | 1.26 | 10.05 | 4.01 | 9.82 | 9.59 | 13.83 | 24.15 | 23.97 | 250.00 | 29.97 | 993.12 | 14.15 | 16.14 |
| 5260.0 | -1.47 | 1.26 | 10.05 | 4.01 | 9.84 | 9.64 | 13.85 | 24.27 | 23.94 | 247.74 | 29.94 | 986.28 | 14.10 | 16.09 |
| 5300.0 | -1.18 | 1.27 | 10.05 | 4.01 | 10.14 | 10.33 | 14.15 | 26.00 | 23.97 | 250.00 | 29.97 | 993.12 | 13.83 | 15.82 |
| 5320.0 | -1.43 | 1.27 | 10.05 | 4.01 | 9.89 | 9.75 | 13.90 | 24.55 | 23.95 | 248.31 | 29.95 | 988.55 | 14.06 | 16.05 |
| 5745.0 | -3.91 | 1.36 | 10.05 | 4.01 | 7.50 | 5.62 | 11.51 | 14.16 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.50 | 24.49 |
| 5785.0 | -1.31 | 1.37 | 10.04 | 4.01 | 10.10 | 10.23 | 14.11 | 25.76 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.90 | 21.89 |
| 5825.0 | -1.57 | 1.38 | 10.04 | 4.01 | 9.85 | 9.66 | 13.86 | 24.32 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.15 | 22.14 |

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna Gain
15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm
15.407(a)(3) Limit(Cond.) = 30dBm(1W)
Limit(e.i.r.p.) = Limit (Cond.) + 6dBi

# Maximum Conducted Output Power

| | | |
|---|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room | |
| Report No. | 10812026H | |
| Date | 06/07/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 54% RH | 23deg. C / 49% RH |
| Engineer | Yuta Moriya | Shinichi Miyazono |
| Mode | Tx 11n-40 | |

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (e.i.r.p) | | Limit (Cond.) | | Limit (e.i.r.p) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Cond.) | (e.i.r.p.) | (Cond.) | (e.i.r.p.) | | | | | | | | | | |
| [MHz] | [mW] | [mW] | [mW] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5190.0 | 10.59 | 26.67 | 9.42 | 23.71 | 13.01 | 20.01 | 17.02 | 50.38 | 23.97 | 250.00 | 29.97 | 993.12 | 10.96 | 12.95 |
| 5230.0 | 10.23 | 25.76 | 9.59 | 24.15 | 12.97 | 19.83 | 16.98 | 49.92 | 23.97 | 250.00 | 29.97 | 993.12 | 11.00 | 12.99 |
| 5270.0 | 10.50 | 26.42 | 9.79 | 24.66 | 13.07 | 20.29 | 17.08 | 51.08 | 23.97 | 250.00 | 29.97 | 993.12 | 10.90 | 12.89 |
| 5310.0 | 10.50 | 26.42 | 9.62 | 24.21 | 13.03 | 20.11 | 17.04 | 50.63 | 23.97 | 250.00 | 29.97 | 993.12 | 10.94 | 12.93 |
| 5755.0 | 5.20 | 13.09 | 4.62 | 11.64 | 9.92 | 9.82 | 13.93 | 24.73 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.08 | 22.07 |
| 5795.0 | 10.09 | 25.41 | 9.68 | 24.38 | 12.96 | 19.78 | 16.97 | 49.79 | 30.00 | 1000.00 | 36.00 | 3981.07 | 17.04 | 19.03 |

**Antenna port 0**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5190.0 | -1.11 | 1.25 | 10.11 | 4.01 | 10.25 | 10.59 | 14.26 | 26.67 | 23.97 | 250.00 | 29.97 | 993.12 | 13.72 | 15.71 |
| 5230.0 | -1.27 | 1.26 | 10.11 | 4.01 | 10.10 | 10.23 | 14.11 | 25.76 | 23.97 | 250.00 | 29.97 | 993.12 | 13.87 | 15.86 |
| 5270.0 | -1.16 | 1.26 | 10.11 | 4.01 | 10.21 | 10.50 | 14.22 | 26.42 | 23.97 | 250.00 | 29.97 | 993.12 | 13.76 | 15.75 |
| 5310.0 | -1.17 | 1.27 | 10.11 | 4.01 | 10.21 | 10.50 | 14.22 | 26.42 | 23.97 | 250.00 | 29.97 | 993.12 | 13.76 | 15.75 |
| 5755.0 | -4.27 | 1.36 | 10.07 | 4.01 | 7.16 | 5.20 | 11.17 | 13.09 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.84 | 24.83 |
| 5795.0 | -1.43 | 1.37 | 10.10 | 4.01 | 10.04 | 10.09 | 14.05 | 25.41 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.96 | 21.95 |

**Antenna port 1**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5190.0 | -1.56 | 1.25 | 10.05 | 4.01 | 9.74 | 9.42 | 13.75 | 23.71 | 23.97 | 250.00 | 29.97 | 993.12 | 14.23 | 16.22 |
| 5230.0 | -1.49 | 1.26 | 10.05 | 4.01 | 9.82 | 9.59 | 13.83 | 24.15 | 23.97 | 250.00 | 29.97 | 993.12 | 14.15 | 16.14 |
| 5270.0 | -1.40 | 1.26 | 10.05 | 4.01 | 9.91 | 9.79 | 13.92 | 24.66 | 23.97 | 250.00 | 29.97 | 993.12 | 14.06 | 16.05 |
| 5310.0 | -1.49 | 1.27 | 10.05 | 4.01 | 9.83 | 9.62 | 13.84 | 24.21 | 23.97 | 250.00 | 29.97 | 993.12 | 14.14 | 16.13 |
| 5755.0 | -4.76 | 1.36 | 10.05 | 4.01 | 6.65 | 4.62 | 10.66 | 11.64 | 30.00 | 1000.00 | 36.00 | 3981.07 | 23.35 | 25.34 |
| 5795.0 | -1.55 | 1.37 | 10.04 | 4.01 | 9.86 | 9.68 | 13.87 | 24.38 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.14 | 22.13 |

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna Gain
15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm
15.407(a)(3) Limit(Cond.) = 30dBm(1W)
Limit(e.i.r.p.) = Limit(Cond.) + 6dBi

# Maximum Conducted Output Power

| | | |
|---|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room | |
| Report No. | 10812026H | |
| Date | 06/07/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 54% RH | 23deg. C / 49% RH |
| Engineer | Yuta Moriya | Shinichi Miyazono |
| Mode | Tx 11ac-40 | |

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (e.i.r.p) | | Limit (Cond.) | | Limit (e.i.r.p) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Cond.) | (e.i.r.p.) | (Cond.) | (e.i.r.p.) | | | | | | | | | | |
| [MHz] | [mW] | [mW] | [mW] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5190.0 | 10.57 | 26.61 | 9.53 | 23.99 | 13.03 | 20.10 | 17.04 | 50.60 | 23.97 | 250.00 | 29.97 | 993.12 | 10.94 | 12.93 |
| 5230.0 | 10.26 | 25.82 | 9.53 | 23.99 | 12.96 | 19.78 | 16.97 | 49.81 | 23.97 | 250.00 | 29.97 | 993.12 | 11.01 | 13.00 |
| 5270.0 | 10.59 | 26.67 | 9.40 | 23.66 | 13.01 | 19.99 | 17.02 | 50.33 | 23.97 | 250.00 | 29.97 | 993.12 | 10.96 | 12.95 |
| 5310.0 | 11.02 | 27.73 | 10.38 | 26.12 | 13.30 | 21.39 | 17.31 | 53.85 | 23.97 | 250.00 | 29.97 | 993.12 | 10.67 | 12.66 |
| 5755.0 | 5.64 | 14.19 | 5.15 | 12.97 | 10.33 | 10.79 | 14.34 | 27.16 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.67 | 21.66 |
| 5795.0 | 10.07 | 25.35 | 9.77 | 24.60 | 12.98 | 19.84 | 16.99 | 49.95 | 30.00 | 1000.00 | 36.00 | 3981.07 | 17.02 | 19.01 |

**Antenna port 0**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5190.0 | -1.12 | 1.25 | 10.11 | 4.01 | 10.24 | 10.57 | 14.25 | 26.61 | 23.97 | 250.00 | 29.97 | 993.12 | 13.73 | 15.72 |
| 5230.0 | -1.26 | 1.26 | 10.11 | 4.01 | 10.11 | 10.26 | 14.12 | 25.82 | 23.97 | 250.00 | 29.97 | 993.12 | 13.86 | 15.85 |
| 5270.0 | -1.12 | 1.26 | 10.11 | 4.01 | 10.25 | 10.59 | 14.26 | 26.67 | 23.97 | 250.00 | 29.97 | 993.12 | 13.72 | 15.71 |
| 5310.0 | -0.96 | 1.27 | 10.11 | 4.01 | 10.42 | 11.02 | 14.43 | 27.73 | 23.97 | 250.00 | 29.97 | 993.12 | 13.55 | 15.54 |
| 5755.0 | -3.92 | 1.36 | 10.07 | 4.01 | 7.51 | 5.64 | 11.52 | 14.19 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.49 | 24.48 |
| 5795.0 | -1.44 | 1.37 | 10.10 | 4.01 | 10.03 | 10.07 | 14.04 | 25.35 | 30.00 | 1000.00 | 36.00 | 3981.07 | 19.97 | 21.96 |

**Antenna port 1**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5190.0 | -1.51 | 1.25 | 10.05 | 4.01 | 9.79 | 9.53 | 13.80 | 23.99 | 23.97 | 250.00 | 29.97 | 993.12 | 14.18 | 16.17 |
| 5230.0 | -1.52 | 1.26 | 10.05 | 4.01 | 9.79 | 9.53 | 13.80 | 23.99 | 23.97 | 250.00 | 29.97 | 993.12 | 14.18 | 16.17 |
| 5270.0 | -1.58 | 1.26 | 10.05 | 4.01 | 9.73 | 9.40 | 13.74 | 23.66 | 23.97 | 250.00 | 29.97 | 993.12 | 14.24 | 16.23 |
| 5310.0 | -1.16 | 1.27 | 10.05 | 4.01 | 10.16 | 10.38 | 14.17 | 26.12 | 23.97 | 250.00 | 29.97 | 993.12 | 13.81 | 15.80 |
| 5755.0 | -4.29 | 1.36 | 10.05 | 4.01 | 7.12 | 5.15 | 11.13 | 12.97 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.88 | 24.87 |
| 5795.0 | -1.51 | 1.37 | 10.04 | 4.01 | 9.90 | 9.77 | 13.91 | 24.60 | 30.00 | 1000.00 | 36.00 | 3981.07 | 20.10 | 22.09 |

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna Gain
15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm
15.407(a)(3) Limit(Cond.) = 30dBm(1W)
Limit(e.i.r.p.) = Limit(Cond.) + 6dBi

# Maximum Conducted Output Power

| | | | |
|---|---|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room | | |
| Report No. | 10812026H | | |
| Date | 06/07/2015 | 06/29/2015 | 07/02/2015 |
| Temperature/ Humidity | 23deg. C / 54% RH | 23deg. C / 49% RH | 24deg. C / 54% RH |
| Engineer | Yuta Moriya | Shinichi Miyazono | Shinichi Miyazono |
| Mode | Tx 11ac-80 | | |

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (e.i.r.p) | | Limit (Cond.) | | Limit (e.i.r.p) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (Cond.) | (e.i.r.p.) | (Cond.) | (e.i.r.p.) | | | | | | | | | | |
| [MHz] | [mW] | [mW] | [mW] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5210.0 | 3.66 | 9.23 | 3.56 | 8.95 | 8.59 | 7.22 | 12.60 | 18.18 | 23.97 | 250.00 | 29.97 | 993.12 | 15.38 | 17.37 |
| 5290.0 | 5.50 | 13.84 | 4.80 | 12.08 | 10.13 | 10.29 | 14.14 | 25.91 | 23.97 | 250.00 | 29.97 | 993.12 | 13.84 | 15.83 |
| 5775.0 | 3.32 | 8.36 | 2.88 | 7.24 | 7.92 | 6.20 | 11.93 | 15.60 | 30.00 | 1000.00 | 36.00 | 3981.07 | 22.08 | 24.07 |

**Antenna port 0**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5210.0 | -5.70 | 1.25 | 10.09 | 4.01 | 5.64 | 3.66 | 9.65 | 9.23 | 23.97 | 250.00 | 29.97 | 993.12 | 18.33 | 20.32 |
| 5290.0 | -3.98 | 1.27 | 10.11 | 4.01 | 7.40 | 5.50 | 11.41 | 13.84 | 23.97 | 250.00 | 29.97 | 993.12 | 16.57 | 18.56 |
| 5775.0 | -6.23 | 1.37 | 10.07 | 4.01 | 5.21 | 3.32 | 9.22 | 8.36 | 30.00 | 1000.00 | 36.00 | 3981.07 | 24.79 | 26.78 |

**Antenna port 1**

| Freq. | P/M Reading | Cable Loss | Atten. Loss | Antenna Gain | Result (Cond.) | | Result (e.i.r.p.) | | Limit (Cond.) | | Limit (e.i.r.p.) | | Margin (Cond.) | Margin (e.i.r.p.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dBi] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dBm] | [mW] | [dB] | [dB] |
| 5210.0 | -5.76 | 1.25 | 10.02 | 4.01 | 5.51 | 3.56 | 9.52 | 8.95 | 23.97 | 250.00 | 29.97 | 993.12 | 18.46 | 20.45 |
| 5290.0 | -4.51 | 1.27 | 10.05 | 4.01 | 6.81 | 4.80 | 10.82 | 12.08 | 23.97 | 250.00 | 29.97 | 993.12 | 17.16 | 19.15 |
| 5775.0 | -6.83 | 1.37 | 10.05 | 4.01 | 4.59 | 2.88 | 8.60 | 7.24 | 30.00 | 1000.00 | 36.00 | 3981.07 | 25.41 | 27.40 |

Result(Cond.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten.Loss + Antenna Gain
15.407(a)(1)(iv) Limit(Cond.) = 23.97dBm(250mW)
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm
15.407(a)(3) Limit(Cond.) = 30dBm(1W)
Limit (e.i.r.p.) = Limit(Cond.) + 6dBi

# Maximum Conducted Output Power(Worst Rate Check)

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| Date | 06/05/2015 Night |
| Temperature/ Humidity | 23deg. C / 58% RH |
| Engineer | Shinichi Miyazono |
| Mode | 11a Tx |

5180MHz

| Rate [Mbps] | Reading Antenna port 0 | | Reading Antenna port 1 | | Result Antenna port 0 + 1 | | 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. | 10812026H |
| Date | 06/05/2015 Night |
| Temperature/ Humidity | 23deg. C / 58% RH |
| Engineer | Shinichi Miyazono |
| Mode | 11n-20 Tx |

5180MHz

| MCS Index | Reading Antenna port 0 | | Reading Antenna port 1 | | Result Antenna port 0 + 1 | | 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. | 10812026H |
| Date | 06/05/2015 Night |
| Temperature/ Humidity | 23deg. C / 58% RH |
| Engineer | Shinichi Miyazono |
| Mode | 11ac-20 Tx |

5180MHz

| MCS Index | Reading Antenna port 0 | | Reading Antenna port 1 | | Result Antenna port 0 + 1 | | 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. | 10812026H |
| Date | 06/06/2015 |
| Temperature/ Humidity | 22deg. C / 55% RH |
| Engineer | Kazuya Yoshioka |
| Mode | 11n-40 Tx |

5190MHz

| MCS Index | Reading Antenna port 0 | | Reading Antenna port 1 | | Result Antenna port 0 + 1 | | 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. | 10812026H |
| Date | 06/06/2015 |
| Temperature/ Humidity | 22deg. C / 55% RH |
| Engineer | Kazuya Yoshioka |
| Mode | 11ac-40 Tx |

5190MHz

| MCS Index | Reading | | Reading | | Result | | Remark |
|---|---|---|---|---|---|---|---|
| | $A_{Antenna\ port\ 0}$ | | Antenna 1 | | Antenna 0 + 1 | | |
| | [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. | 10812026H |
| Date | 06/06/2015 |
| Temperature/ Humidity | 22deg. C / 55% RH |
| Engineer | Kazuya Yoshioka |
| Mode | 11ac-80 Tx |

5210MHz

| MCS Index | Reading Antenna port 0 | | Reading Antenna port 1 | | Result Antenna port 0 + 1 | | 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. | 10812026H | |
| Date | 06/07/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 54% RH | 23deg. C / 49% RH |
| Engineer | Yuta Moriya | Shinichi Miyazono |
| Mode | 11a Tx 6Mbps | |

[AV]

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (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 | 10.57 | 26.61 | 9.40 | 23.66 | 13.00 | 19.97 | 17.01 | 50.27 |
| 5200.0 | 10.28 | 25.88 | 8.95 | 22.54 | 12.84 | 19.23 | 16.85 | 48.42 |
| 5220.0 | 10.42 | 26.24 | 9.44 | 23.77 | 12.98 | 19.86 | 16.99 | 50.01 |
| 5240.0 | 10.62 | 26.73 | 9.33 | 23.50 | 13.00 | 19.95 | 17.01 | 50.23 |
| 5260.0 | 10.35 | 26.06 | 9.77 | 24.60 | 13.04 | 20.12 | 17.05 | 50.67 |
| 5280.0 | 10.09 | 25.41 | 9.10 | 22.91 | 12.83 | 19.19 | 16.84 | 48.32 |
| 5300.0 | 10.86 | 27.35 | 9.40 | 23.66 | 13.07 | 20.26 | 17.08 | 51.01 |
| 5320.0 | 10.40 | 26.18 | 9.86 | 24.83 | 13.07 | 20.26 | 17.08 | 51.01 |
| 5745.0 | 5.65 | 14.22 | 5.38 | 13.55 | 10.43 | 11.03 | 14.44 | 27.78 |
| 5765.0 | 9.23 | 23.23 | 9.12 | 22.96 | 12.64 | 18.35 | 16.65 | 46.19 |
| 5785.0 | 9.77 | 24.60 | 9.68 | 24.38 | 12.89 | 19.46 | 16.90 | 48.98 |
| 5805.0 | 9.27 | 23.33 | 9.10 | 22.91 | 12.64 | 18.37 | 16.65 | 46.24 |
| 5825.0 | 9.98 | 25.12 | 9.64 | 24.27 | 12.93 | 19.62 | 16.94 | 49.38 |

**Antenna port 0**

| 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 | -1.12 | 1.25 | 10.11 | 4.01 | 10.24 | 10.57 | 14.25 | 26.61 |
| 5200.0 | -1.22 | 1.25 | 10.09 | 4.01 | 10.12 | 10.28 | 14.13 | 25.88 |
| 5220.0 | -1.18 | 1.25 | 10.11 | 4.01 | 10.18 | 10.42 | 14.19 | 26.24 |
| 5240.0 | -1.11 | 1.26 | 10.11 | 4.01 | 10.26 | 10.62 | 14.27 | 26.73 |
| 5260.0 | -1.22 | 1.26 | 10.11 | 4.01 | 10.15 | 10.35 | 14.16 | 26.06 |
| 5280.0 | -1.32 | 1.27 | 10.09 | 4.01 | 10.04 | 10.09 | 14.05 | 25.41 |
| 5300.0 | -1.02 | 1.27 | 10.11 | 4.01 | 10.36 | 10.86 | 14.37 | 27.35 |
| 5320.0 | -1.21 | 1.27 | 10.11 | 4.01 | 10.17 | 10.40 | 14.18 | 26.18 |
| 5745.0 | -3.91 | 1.36 | 10.07 | 4.01 | 7.52 | 5.65 | 11.53 | 14.22 |
| 5765.0 | -1.78 | 1.36 | 10.07 | 4.01 | 9.65 | 9.23 | 13.66 | 23.23 |
| 5785.0 | -1.57 | 1.37 | 10.10 | 4.01 | 9.90 | 9.77 | 13.91 | 24.60 |
| 5805.0 | -1.77 | 1.37 | 10.07 | 4.01 | 9.67 | 9.27 | 13.68 | 23.33 |
| 5825.0 | -1.49 | 1.38 | 10.10 | 4.01 | 9.99 | 9.98 | 14.00 | 25.12 |

**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] |
| 5180.0 | -1.63 | 1.25 | 10.11 | 4.01 | 9.73 | 9.40 | 13.74 | 23.66 |
| 5200.0 | -1.75 | 1.25 | 10.02 | 4.01 | 9.52 | 8.95 | 13.53 | 22.54 |
| 5220.0 | -1.61 | 1.25 | 10.11 | 4.01 | 9.75 | 9.44 | 13.76 | 23.77 |
| 5240.0 | -1.67 | 1.26 | 10.11 | 4.01 | 9.70 | 9.33 | 13.71 | 23.50 |
| 5260.0 | -1.47 | 1.26 | 10.11 | 4.01 | 9.90 | 9.77 | 13.91 | 24.60 |
| 5280.0 | -1.70 | 1.27 | 10.02 | 4.01 | 9.59 | 9.10 | 13.60 | 22.91 |
| 5300.0 | -1.65 | 1.27 | 10.11 | 4.01 | 9.73 | 9.40 | 13.74 | 23.66 |
| 5320.0 | -1.44 | 1.27 | 10.11 | 4.01 | 9.94 | 9.86 | 13.95 | 24.83 |
| 5745.0 | -4.10 | 1.36 | 10.05 | 4.01 | 7.31 | 5.38 | 11.32 | 13.55 |
| 5765.0 | -1.81 | 1.36 | 10.05 | 4.01 | 9.60 | 9.12 | 13.61 | 22.96 |
| 5785.0 | -1.61 | 1.37 | 10.10 | 4.01 | 9.86 | 9.68 | 13.87 | 24.38 |
| 5805.0 | -1.83 | 1.37 | 10.05 | 4.01 | 9.59 | 9.10 | 13.60 | 22.91 |
| 5825.0 | -1.64 | 1.38 | 10.10 | 4.01 | 9.84 | 9.64 | 13.85 | 24.27 |

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain
15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

*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. | 10812026H | |
| Date | 06/08/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 54% RH | 23deg. C / 49% RH |
| Engineer | Tomoki Matsui | Shinichi Miyazono |
| Mode | 11n-20 Tx MCS 0 | |

[AV]

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (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 | 10.05 | 25.29 | 9.25 | 23.28 | 12.85 | 19.29 | 16.86 | 48.57 |
| 5200.0 | 9.77 | 24.60 | 8.30 | 20.89 | 12.57 | 18.07 | 16.58 | 45.50 |
| 5220.0 | 9.68 | 24.38 | 8.73 | 21.98 | 12.65 | 18.41 | 16.66 | 46.36 |
| 5240.0 | 10.23 | 25.76 | 9.46 | 23.82 | 12.94 | 19.70 | 16.95 | 49.59 |
| 5260.0 | 10.69 | 26.92 | 9.14 | 23.01 | 12.97 | 19.83 | 16.98 | 49.93 |
| 5280.0 | 10.16 | 25.59 | 8.39 | 21.13 | 12.69 | 18.56 | 16.70 | 46.72 |
| 5300.0 | 10.38 | 26.12 | 9.84 | 24.77 | 13.06 | 20.22 | 17.07 | 50.90 |
| 5320.0 | 10.67 | 26.85 | 9.75 | 24.55 | 13.10 | 20.42 | 17.11 | 51.40 |
| 5745.0 | 5.71 | 14.39 | 5.07 | 12.76 | 10.33 | 10.78 | 14.34 | 27.15 |
| 5765.0 | 9.25 | 23.28 | 8.99 | 22.65 | 12.61 | 18.24 | 16.62 | 45.93 |
| 5785.0 | 9.51 | 23.93 | 9.93 | 25.00 | 12.89 | 19.44 | 16.90 | 48.94 |
| 5805.0 | 9.20 | 23.17 | 8.97 | 22.59 | 12.60 | 18.18 | 16.61 | 45.77 |
| 5825.0 | 9.71 | 24.43 | 9.86 | 24.83 | 12.92 | 19.57 | 16.93 | 49.27 |

**Antenna port 0**

| 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 | -1.34 | 1.25 | 10.11 | 4.01 | 10.02 | 10.05 | 14.03 | 25.29 |
| 5200.0 | -1.44 | 1.25 | 10.09 | 4.01 | 9.90 | 9.77 | 13.91 | 24.60 |
| 5220.0 | -1.50 | 1.25 | 10.11 | 4.01 | 9.86 | 9.68 | 13.87 | 24.38 |
| 5240.0 | -1.27 | 1.26 | 10.11 | 4.01 | 10.10 | 10.23 | 14.11 | 25.76 |
| 5260.0 | -1.08 | 1.26 | 10.11 | 4.01 | 10.29 | 10.69 | 14.30 | 26.92 |
| 5280.0 | -1.29 | 1.27 | 10.09 | 4.01 | 10.07 | 10.16 | 14.08 | 25.59 |
| 5300.0 | -1.22 | 1.27 | 10.11 | 4.01 | 10.16 | 10.38 | 14.17 | 26.12 |
| 5320.0 | -1.10 | 1.27 | 10.11 | 4.01 | 10.28 | 10.67 | 14.29 | 26.85 |
| 5745.0 | -3.86 | 1.36 | 10.07 | 4.01 | 7.57 | 5.71 | 11.58 | 14.39 |
| 5765.0 | -1.77 | 1.36 | 10.07 | 4.01 | 9.66 | 9.25 | 13.67 | 23.28 |
| 5785.0 | -1.69 | 1.37 | 10.10 | 4.01 | 9.78 | 9.51 | 13.79 | 23.93 |
| 5805.0 | -1.80 | 1.37 | 10.07 | 4.01 | 9.64 | 9.20 | 13.65 | 23.17 |
| 5825.0 | -1.61 | 1.38 | 10.10 | 4.01 | 9.87 | 9.71 | 13.88 | 24.43 |

**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 | -1.70 | 1.25 | 10.11 | 4.01 | 9.66 | 9.25 | 13.67 | 23.28 |
| 5200.0 | -2.08 | 1.25 | 10.02 | 4.01 | 9.19 | 8.30 | 13.20 | 20.89 |
| 5220.0 | -1.95 | 1.25 | 10.11 | 4.01 | 9.41 | 8.73 | 13.42 | 21.98 |
| 5240.0 | -1.61 | 1.26 | 10.11 | 4.01 | 9.76 | 9.46 | 13.77 | 23.82 |
| 5260.0 | -1.76 | 1.26 | 10.11 | 4.01 | 9.61 | 9.14 | 13.62 | 23.01 |
| 5280.0 | -2.05 | 1.27 | 10.02 | 4.01 | 9.24 | 8.39 | 13.25 | 21.13 |
| 5300.0 | -1.45 | 1.27 | 10.11 | 4.01 | 9.93 | 9.84 | 13.94 | 24.77 |
| 5320.0 | -1.49 | 1.27 | 10.11 | 4.01 | 9.89 | 9.75 | 13.90 | 24.55 |
| 5745.0 | -4.36 | 1.36 | 10.05 | 4.01 | 7.05 | 5.07 | 11.06 | 12.76 |
| 5765.0 | -1.87 | 1.36 | 10.05 | 4.01 | 9.54 | 8.99 | 13.55 | 22.65 |
| 5785.0 | -1.50 | 1.37 | 10.10 | 4.01 | 9.97 | 9.93 | 13.98 | 25.00 |
| 5805.0 | -1.89 | 1.37 | 10.05 | 4.01 | 9.53 | 8.97 | 13.54 | 22.59 |
| 5825.0 | -1.54 | 1.38 | 10.10 | 4.01 | 9.94 | 9.86 | 13.95 | 24.83 |

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain
15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

*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. | 10812026H | |
| Date | 06/08/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 57% RH | 23deg. C / 49% RH |
| Engineer | Tomoki Matsui | Shinichi Miyazono |
| Mode | 11ac-20 Tx MCS 0 | |

[AV]

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (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 | 10.50 | 26.42 | 9.20 | 23.17 | 12.94 | 19.70 | 16.95 | 49.60 |
| 5200.0 | 10.00 | 25.18 | 8.95 | 22.54 | 12.78 | 18.95 | 16.79 | 47.72 |
| 5220.0 | 10.30 | 25.94 | 9.38 | 23.60 | 12.94 | 19.68 | 16.95 | 49.55 |
| 5240.0 | 10.64 | 26.79 | 9.42 | 23.71 | 13.02 | 20.06 | 17.03 | 50.51 |
| 5260.0 | 10.07 | 25.35 | 8.83 | 22.23 | 12.76 | 18.90 | 16.77 | 47.58 |
| 5280.0 | 10.14 | 25.53 | 8.79 | 22.13 | 12.77 | 18.93 | 16.78 | 47.66 |
| 5300.0 | 10.69 | 26.92 | 9.79 | 24.66 | 13.11 | 20.49 | 17.12 | 51.58 |
| 5320.0 | 10.38 | 26.12 | 9.51 | 23.93 | 12.98 | 19.88 | 16.99 | 50.05 |
| 5745.0 | 5.26 | 13.24 | 5.07 | 12.76 | 10.14 | 10.33 | 14.15 | 26.01 |
| 5765.0 | 9.35 | 23.55 | 9.12 | 22.96 | 12.67 | 18.47 | 16.68 | 46.51 |
| 5785.0 | 9.79 | 24.66 | 9.89 | 24.89 | 12.94 | 19.68 | 16.95 | 49.55 |
| 5805.0 | 9.31 | 23.44 | 8.97 | 22.59 | 12.62 | 18.29 | 16.63 | 46.04 |
| 5825.0 | 9.84 | 24.77 | 9.55 | 24.04 | 12.88 | 19.39 | 16.89 | 48.82 |

**Antenna port 0**

| 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 | -1.15 | 1.25 | 10.11 | 4.01 | 10.21 | 10.50 | 14.22 | 26.42 |
| 5200.0 | -1.34 | 1.25 | 10.09 | 4.01 | 10.00 | 10.00 | 14.01 | 25.18 |
| 5220.0 | -1.23 | 1.25 | 10.11 | 4.01 | 10.13 | 10.30 | 14.14 | 25.94 |
| 5240.0 | -1.10 | 1.26 | 10.11 | 4.01 | 10.27 | 10.64 | 14.28 | 26.79 |
| 5260.0 | -1.34 | 1.26 | 10.11 | 4.01 | 10.03 | 10.07 | 14.04 | 25.35 |
| 5280.0 | -1.30 | 1.27 | 10.09 | 4.01 | 10.06 | 10.14 | 14.07 | 25.53 |
| 5300.0 | -1.09 | 1.27 | 10.11 | 4.01 | 10.29 | 10.69 | 14.30 | 26.92 |
| 5320.0 | -1.22 | 1.27 | 10.11 | 4.01 | 10.16 | 10.38 | 14.17 | 26.12 |
| 5745.0 | -4.22 | 1.36 | 10.07 | 4.01 | 7.21 | 5.26 | 11.22 | 13.24 |
| 5765.0 | -1.72 | 1.36 | 10.07 | 4.01 | 9.71 | 9.35 | 13.72 | 23.55 |
| 5785.0 | -1.56 | 1.37 | 10.10 | 4.01 | 9.91 | 9.79 | 13.92 | 24.66 |
| 5805.0 | -1.75 | 1.37 | 10.07 | 4.01 | 9.69 | 9.31 | 13.70 | 23.44 |
| 5825.0 | -1.55 | 1.38 | 10.10 | 4.01 | 9.93 | 9.84 | 13.94 | 24.77 |

**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 | -1.72 | 1.25 | 10.11 | 4.01 | 9.64 | 9.20 | 13.65 | 23.17 |
| 5200.0 | -1.75 | 1.25 | 10.02 | 4.01 | 9.52 | 8.95 | 13.53 | 22.54 |
| 5220.0 | -1.64 | 1.25 | 10.11 | 4.01 | 9.72 | 9.38 | 13.73 | 23.60 |
| 5240.0 | -1.63 | 1.26 | 10.11 | 4.01 | 9.74 | 9.42 | 13.75 | 23.71 |
| 5260.0 | -1.91 | 1.26 | 10.11 | 4.01 | 9.46 | 8.83 | 13.47 | 22.23 |
| 5280.0 | -1.85 | 1.27 | 10.02 | 4.01 | 9.44 | 8.79 | 13.45 | 22.13 |
| 5300.0 | -1.47 | 1.27 | 10.11 | 4.01 | 9.91 | 9.79 | 13.92 | 24.66 |
| 5320.0 | -1.60 | 1.27 | 10.11 | 4.01 | 9.78 | 9.51 | 13.79 | 23.93 |
| 5745.0 | -4.36 | 1.36 | 10.05 | 4.01 | 7.05 | 5.07 | 11.06 | 12.76 |
| 5765.0 | -1.81 | 1.36 | 10.05 | 4.01 | 9.60 | 9.12 | 13.61 | 22.96 |
| 5785.0 | -1.52 | 1.37 | 10.10 | 4.01 | 9.95 | 9.89 | 13.96 | 24.89 |
| 5805.0 | -1.89 | 1.37 | 10.05 | 4.01 | 9.53 | 8.97 | 13.54 | 22.59 |
| 5825.0 | -1.68 | 1.38 | 10.10 | 4.01 | 9.80 | 9.55 | 13.81 | 24.04 |

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain
15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

*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. | 10812026H | |
| Date | 06/08/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 57% RH | 23deg. C / 49% RH |
| Engineer | Tomoki Matsui | Shinichi Miyazono |
| Mode | 11n-40 Tx MCS 0 | |

[AV]

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (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 | 8.61 | 21.68 | 8.55 | 21.53 | 12.35 | 17.16 | 16.36 | 43.20 |
| 5230.0 | 8.83 | 22.23 | 8.73 | 21.98 | 12.45 | 17.56 | 16.46 | 44.21 |
| 5270.0 | 9.68 | 24.38 | 8.67 | 21.83 | 12.64 | 18.35 | 16.65 | 46.21 |
| 5310.0 | 9.89 | 24.89 | 8.99 | 22.65 | 12.76 | 18.88 | 16.77 | 47.54 |
| 5755.0 | 4.92 | 12.39 | 4.27 | 10.47 | 9.63 | 9.19 | 13.59 | 22.86 |
| 5795.0 | 9.08 | 22.86 | 8.91 | 22.44 | 12.55 | 17.99 | 16.56 | 45.29 |

**Antenna port 0**

| 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 | -1.96 | 1.23 | 10.08 | 4.01 | 9.35 | 8.61 | 13.36 | 21.68 |
| 5230.0 | -1.86 | 1.24 | 10.08 | 4.01 | 9.46 | 8.83 | 13.47 | 22.23 |
| 5270.0 | -1.47 | 1.25 | 10.08 | 4.01 | 9.86 | 9.68 | 13.87 | 24.38 |
| 5310.0 | -1.38 | 1.25 | 10.08 | 4.01 | 9.95 | 9.89 | 13.96 | 24.89 |
| 5755.0 | -4.51 | 1.36 | 10.07 | 4.01 | 6.92 | 4.92 | 10.93 | 12.39 |
| 5795.0 | -1.87 | 1.37 | 10.08 | 4.01 | 9.58 | 9.08 | 13.59 | 22.86 |

**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 | -1.99 | 1.23 | 10.08 | 4.01 | 9.32 | 8.55 | 13.33 | 21.53 |
| 5230.0 | -1.91 | 1.24 | 10.08 | 4.01 | 9.41 | 8.73 | 13.42 | 21.98 |
| 5270.0 | -1.95 | 1.25 | 10.08 | 4.01 | 9.38 | 8.67 | 13.39 | 21.83 |
| 5310.0 | -1.79 | 1.25 | 10.08 | 4.01 | 9.54 | 8.99 | 13.55 | 22.65 |
| 5755.0 | -5.11 | 1.36 | 10.05 | 3.90 | 6.30 | 4.27 | 10.20 | 10.47 |
| 5795.0 | -1.95 | 1.37 | 10.08 | 4.01 | 9.50 | 8.91 | 13.51 | 22.44 |

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain
15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

*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. | 10812026H | |
| Date | 06/08/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 57% RH | 23deg. C / 49% RH |
| Engineer | Tomoki Matsui | Shinichi Miyazono |
| Mode | 11ac-40 Tx MCS 0 | |

[AV]

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (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 | 9.79 | 24.66 | 8.67 | 21.83 | 12.66 | 18.46 | 16.67 | 46.49 |
| 5230.0 | 9.71 | 24.43 | 8.77 | 22.08 | 12.67 | 18.48 | 16.68 | 46.51 |
| 5270.0 | 9.93 | 25.00 | 9.08 | 22.86 | 12.79 | 19.01 | 16.80 | 47.86 |
| 5310.0 | 9.31 | 23.44 | 8.99 | 22.65 | 12.63 | 18.31 | 16.64 | 46.09 |
| 5755.0 | 4.57 | 11.51 | 4.02 | 9.86 | 9.34 | 8.59 | 13.30 | 21.37 |
| 5795.0 | 9.12 | 22.96 | 9.31 | 23.44 | 12.66 | 18.43 | 16.67 | 46.40 |

**Antenna port 0**

| 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 | -1.40 | 1.23 | 10.08 | 4.01 | 9.91 | 9.79 | 13.92 | 24.66 |
| 5230.0 | -1.45 | 1.24 | 10.08 | 4.01 | 9.87 | 9.71 | 13.88 | 24.43 |
| 5270.0 | -1.36 | 1.25 | 10.08 | 4.01 | 9.97 | 9.93 | 13.98 | 25.00 |
| 5310.0 | -1.64 | 1.25 | 10.08 | 4.01 | 9.69 | 9.31 | 13.70 | 23.44 |
| 5755.0 | -4.83 | 1.36 | 10.07 | 4.01 | 6.60 | 4.57 | 10.61 | 11.51 |
| 5795.0 | -1.85 | 1.37 | 10.08 | 4.01 | 9.60 | 9.12 | 13.61 | 22.96 |

**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 | -1.93 | 1.23 | 10.08 | 4.01 | 9.38 | 8.67 | 13.39 | 21.83 |
| 5230.0 | -1.89 | 1.24 | 10.08 | 4.01 | 9.43 | 8.77 | 13.44 | 22.08 |
| 5270.0 | -1.75 | 1.25 | 10.08 | 4.01 | 9.58 | 9.08 | 13.59 | 22.86 |
| 5310.0 | -1.79 | 1.25 | 10.08 | 4.01 | 9.54 | 8.99 | 13.55 | 22.65 |
| 5795.0 | -5.37 | 1.36 | 10.05 | 3.90 | 6.04 | 4.02 | 9.94 | 9.86 |
| 5795.0 | -1.76 | 1.37 | 10.08 | 4.01 | 9.69 | 9.31 | 13.70 | 23.44 |

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain
15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

*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. | 10812026H | |
| Date | 06/08/2015 | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 57% RH | 23deg. C / 49% RH |
| Engineer | Tomoki Matsui | Shinichi Miyazono |
| Mode | 11ac-80 Tx MCS 0 | |

[AV]

**Antenna port 0+1**

| Freq. | Antenna Port 0 Result | | Antenna Port 1 Result | | Result Antenna Port 0+1 (Cond.) | | Result Antenna Port 0+1 (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 | 3.56 | 8.97 | 3.33 | 8.39 | 8.39 | 6.90 | 12.40 | 17.37 |
| 5290.0 | 5.15 | 12.97 | 4.45 | 11.19 | 9.82 | 9.60 | 13.83 | 24.17 |
| 5775.0 | 3.05 | 7.69 | 2.78 | 7.00 | 7.66 | 5.83 | 11.67 | 14.69 |

**Antenna port 0**

| 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 | -5.80 | 1.23 | 10.09 | 4.01 | 5.52 | 3.56 | 9.53 | 8.97 |
| 5290.0 | -4.21 | 1.24 | 10.09 | 4.01 | 7.12 | 5.15 | 11.13 | 12.97 |
| 5775.0 | -6.59 | 1.37 | 10.07 | 4.01 | 4.85 | 3.05 | 8.86 | 7.69 |

**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 | -6.02 | 1.23 | 10.02 | 4.01 | 5.23 | 3.33 | 9.24 | 8.39 |
| 5290.0 | -4.78 | 1.24 | 10.02 | 4.01 | 6.48 | 4.45 | 10.49 | 11.19 |
| 5775.0 | -6.98 | 1.37 | 10.05 | 4.01 | 4.44 | 2.78 | 8.45 | 7.00 |

Result(Cond.) = Reading + Cable Loss + Atten.Loss
Result(e.i.r.p.) = Reading + Cable Loss + Atten.Loss + Antenna Gain
15.407(a)(1) Limit(Cond.) = 16.98dBm(50mW) or 4 + 10log(26dB BW) dBm
15.407(a)(2) Limit(Cond.) = 23.97dBm(250mW) or 11 + 10log(26dB BW) dBm

# Maximum Power Spectral Density

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| Date | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 49% RH |
| Engineer | Shinichi Miyazono |
| Mode | 11a Tx |

## <W52, W53 bands>

Antenna Port 0+1

| Freq. | Antenna Port 0 Result | Antenna Port 1 Result | Result Antenna Port 0+1 | | Limit | Margin |
|---|---|---|---|---|---|---|
| [MHz] | [mW/MHz] | [mW/MHz] | [dBm/MHz] | [mW/MHz] | [dBm/MHz] | [dB] |
| 5180.0 | 0.91 | 0.77 | 2.25 | 1.68 | 11.00 | 8.75 |
| 5220.0 | 0.91 | 0.77 | 2.24 | 1.67 | 11.00 | 8.76 |
| 5240.0 | 0.99 | 0.81 | 2.55 | 1.80 | 11.00 | 8.45 |
| 5260.0 | 0.99 | 0.86 | 2.67 | 1.85 | 11.00 | 8.33 |
| 5300.0 | 1.04 | 0.87 | 2.83 | 1.92 | 11.00 | 8.17 |
| 5320.0 | 0.96 | 0.89 | 2.66 | 1.84 | 11.00 | 8.34 |

Antenna Port 0

| Freq. | S/A Reading | Cable Loss | Atten. Loss | Duty Factor | Correction Factor | Result | | Limit | Margin |
|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dB] | [dB] | [dBm/MHz] | [mW/MHz] | [dBm/MHz] | [dB] |
| 5180.0 | -13.30 | 2.67 | 10.08 | 0.15 | 0.00 | -0.40 | 0.91 | 11.00 | 11.40 |
| 5220.0 | -13.34 | 2.68 | 10.09 | 0.15 | 0.00 | -0.42 | 0.91 | 11.00 | 11.42 |
| 5240.0 | -13.00 | 2.70 | 10.09 | 0.15 | 0.00 | -0.06 | 0.99 | 11.00 | 11.06 |
| 5260.0 | -12.98 | 2.70 | 10.09 | 0.15 | 0.00 | -0.04 | 0.99 | 11.00 | 11.04 |
| 5300.0 | -12.78 | 2.73 | 10.09 | 0.15 | 0.00 | 0.19 | 1.04 | 11.00 | 10.81 |
| 5320.0 | -13.16 | 2.73 | 10.09 | 0.15 | 0.00 | -0.19 | 0.96 | 11.00 | 11.19 |

Antenna Port 1

| Freq. | S/A Reading | Cable Loss | Atten. Loss | Duty Factor | Correction Factor | Result | | Limit | Margin |
|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dB] | [dB] | [dBm/MHz] | [mW/MHz] | [dBm/MHz] | [dB] |
| 5180.0 | -14.06 | 2.67 | 10.08 | 0.15 | 0.00 | -1.16 | 0.77 | 11.00 | 12.16 |
| 5220.0 | -14.08 | 2.68 | 10.09 | 0.15 | 0.00 | -1.16 | 0.77 | 11.00 | 12.16 |
| 5240.0 | -13.84 | 2.70 | 10.09 | 0.15 | 0.00 | -0.90 | 0.81 | 11.00 | 11.90 |
| 5260.0 | -13.61 | 2.70 | 10.09 | 0.15 | 0.00 | -0.67 | 0.86 | 11.00 | 11.67 |
| 5300.0 | -13.55 | 2.73 | 10.09 | 0.15 | 0.00 | -0.58 | 0.87 | 11.00 | 11.58 |
| 5320.0 | -13.49 | 2.73 | 10.09 | 0.15 | 0.00 | -0.52 | 0.89 | 11.00 | 11.52 |

Result = Reading + Cable Loss + Atten. Loss + Duty Factor + Correction Factor

## <W58 band>

Antenna Port 0+1

| Freq. | Antenna Port 0 Result | Antenna Port 1 Result | Result Antenna Port 0+1 | | Limit | Margin |
|---|---|---|---|---|---|---|
| [MHz] | [mW/500kHz] | [mW/500kHz] | [dBm/500kHz] | [mW/500kHz] | [dBm/500kHz] | [dB] |
| 5745.0 | 0.29 | 0.30 | -2.31 | 0.59 | 30.00 | 32.31 |
| 5785.0 | 0.46 | 0.46 | -0.34 | 0.92 | 30.00 | 30.34 |
| 5825.0 | 0.48 | 0.53 | 0.04 | 1.01 | 30.00 | 29.96 |

Antenna Port 0

| Freq. | S/A Reading | Cable Loss | Atten. Loss | Duty Factor | Correction Factor | Result | | Limit | Margin |
|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dB] | [dB] | [dBm/500kHz] | [mW/500kHz] | [dBm/500kHz] | [dB] |
| 5745.0 | -18.79 | 2.91 | 10.07 | 0.15 | 0.27 | -5.39 | 0.29 | 30.00 | 35.39 |
| 5785.0 | -16.76 | 2.92 | 10.07 | 0.15 | 0.27 | -3.35 | 0.46 | 30.00 | 33.35 |
| 5825.0 | -16.65 | 2.94 | 10.06 | 0.15 | 0.27 | -3.23 | 0.48 | 30.00 | 33.23 |

Antenna Port 1

| Freq. | S/A Reading | Cable Loss | Atten. Loss | Duty Factor | Correction Factor | Result | | Limit | Margin |
|---|---|---|---|---|---|---|---|---|---|
| [MHz] | [dBm] | [dB] | [dB] | [dB] | [dB] | [dBm/500kHz] | [mW/500kHz] | [dBm/500kHz] | [dB] |
| 5745.0 | -18.64 | 2.91 | 10.07 | 0.15 | 0.27 | -5.24 | 0.30 | 30.00 | 35.24 |
| 5785.0 | -16.76 | 2.92 | 10.07 | 0.15 | 0.27 | -3.35 | 0.46 | 30.00 | 33.35 |
| 5825.0 | -16.15 | 2.94 | 10.06 | 0.15 | 0.27 | -2.73 | 0.53 | 30.00 | 32.73 |

Result = Reading + Cable Loss + Atten. Loss + Duty Factor + Correction Factor

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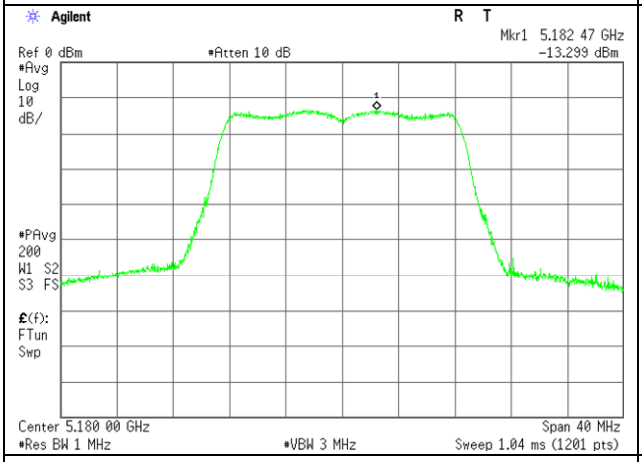
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

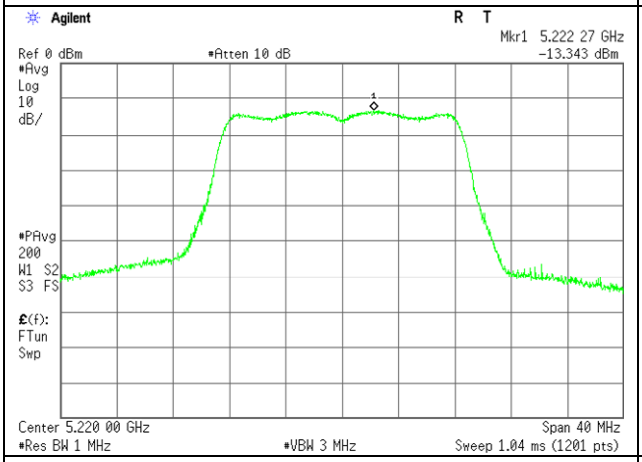
# Maximum Power Spectral Density

## 11a Antenna port 0

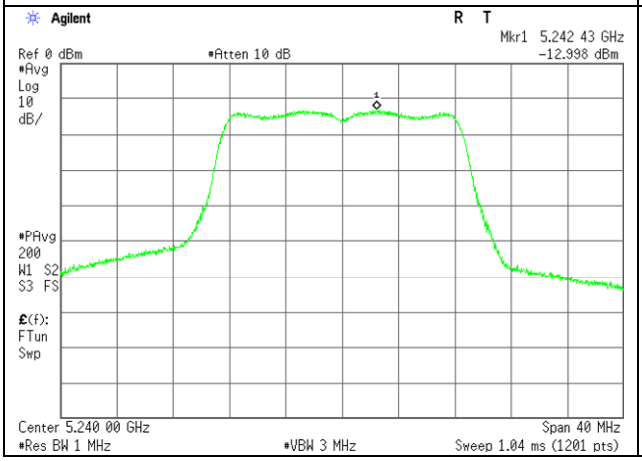
### 5180MHz




### 5220MHz

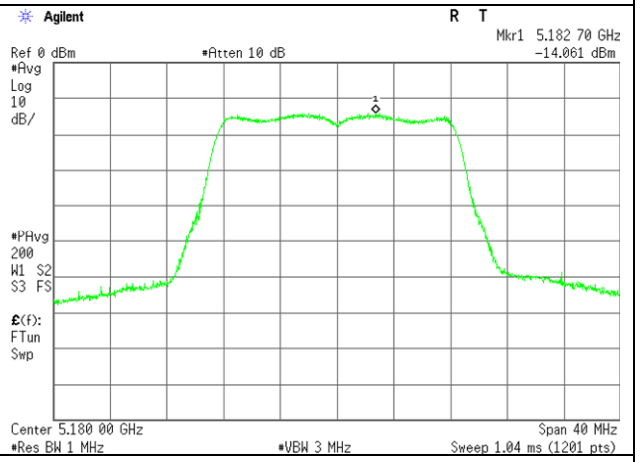



### 5240MHz

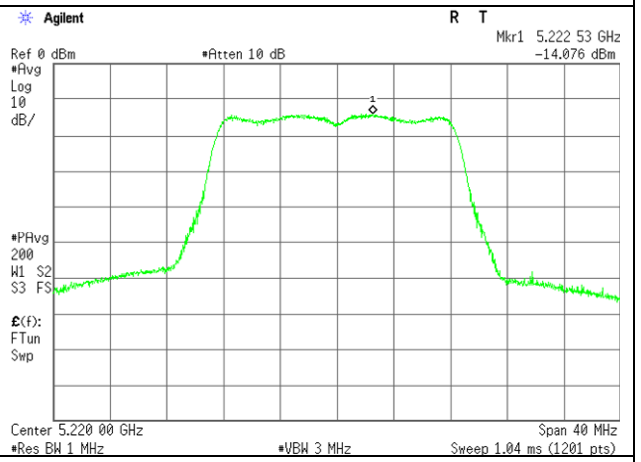



## 11a Antenna port 1

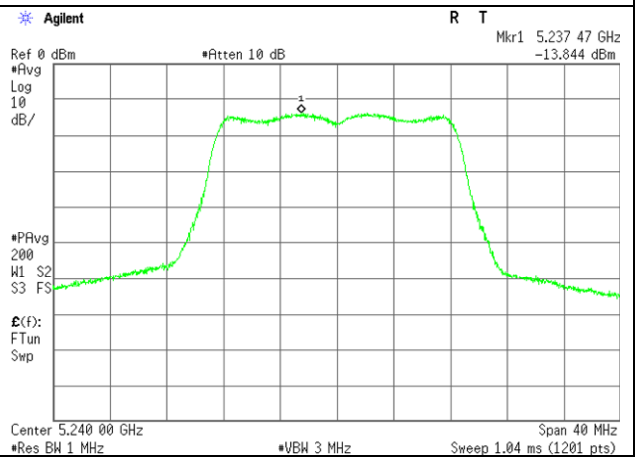
### 5180MHz




### 5220MHz



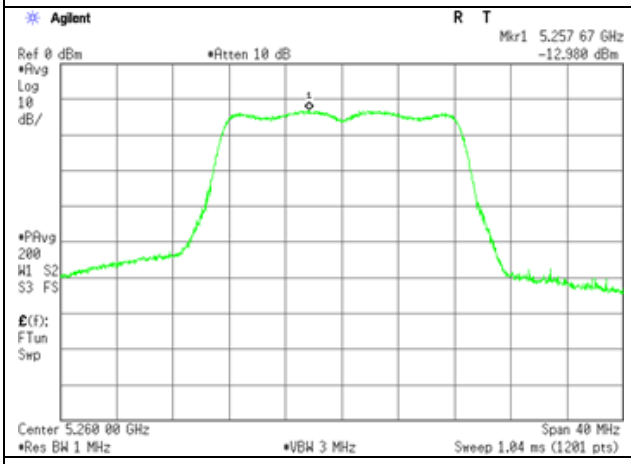

### 5240MHz



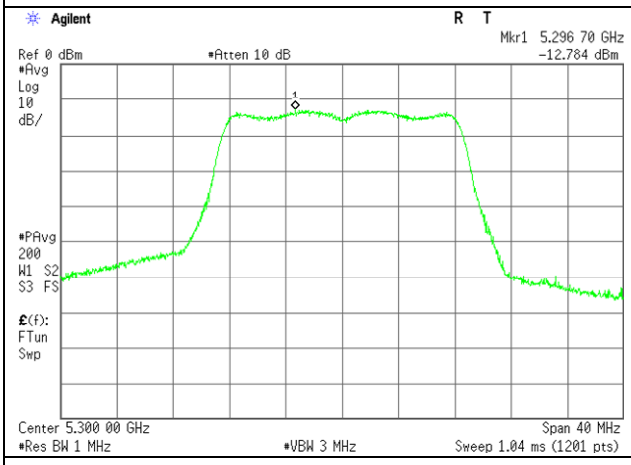
# Maximum Power Spectral Density

## 11a Antenna port 0

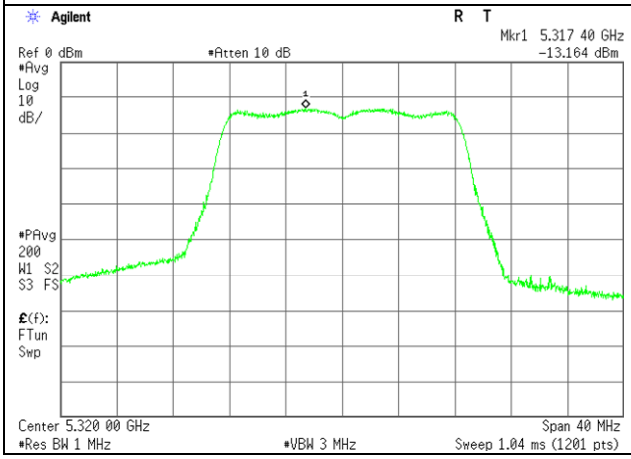
### 5260MHz




### 5300MHz

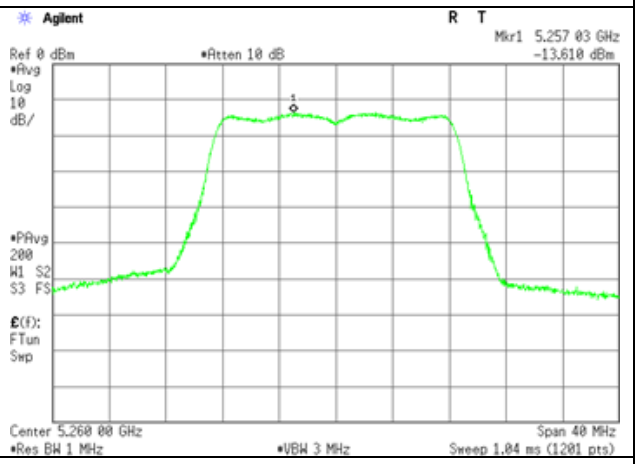



### 5320MHz

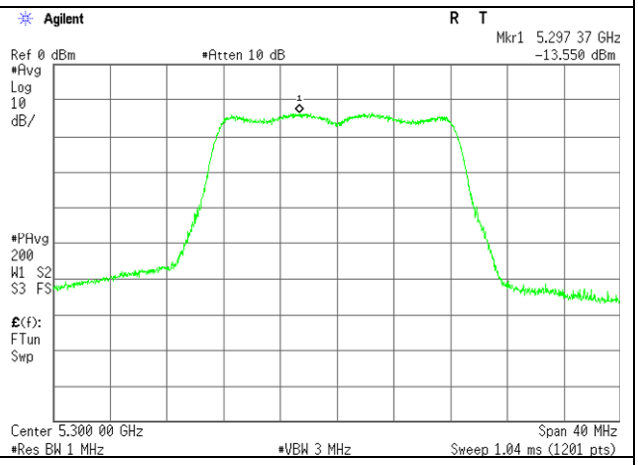



## 11a Antenna port 1

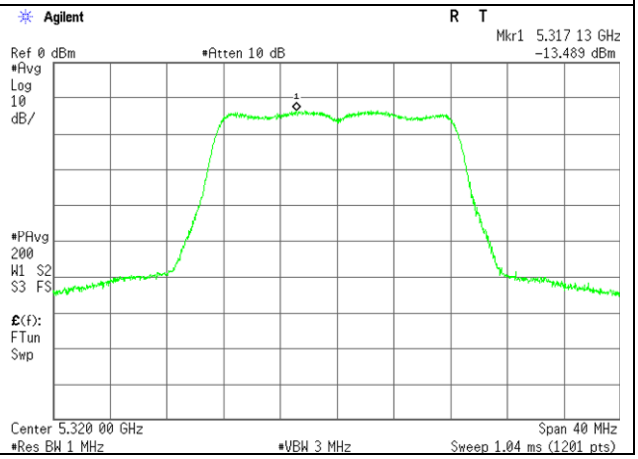
### 5260MHz




### 5300MHz



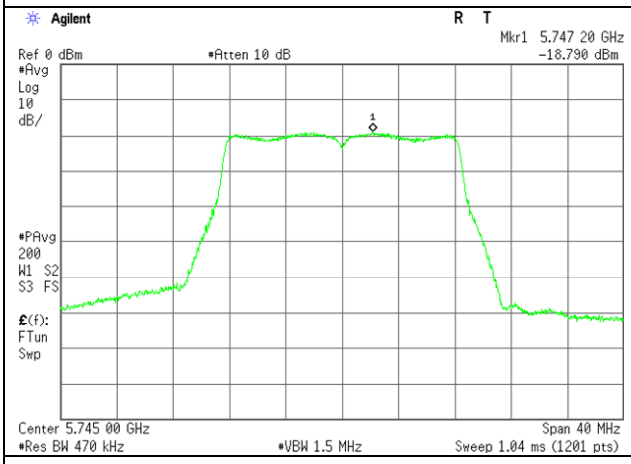

### 5320MHz



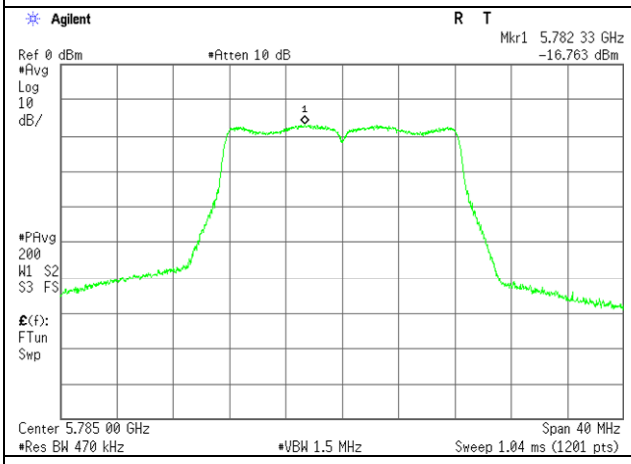
# Maximum Power Spectral Density

## 11a Antenna port 0

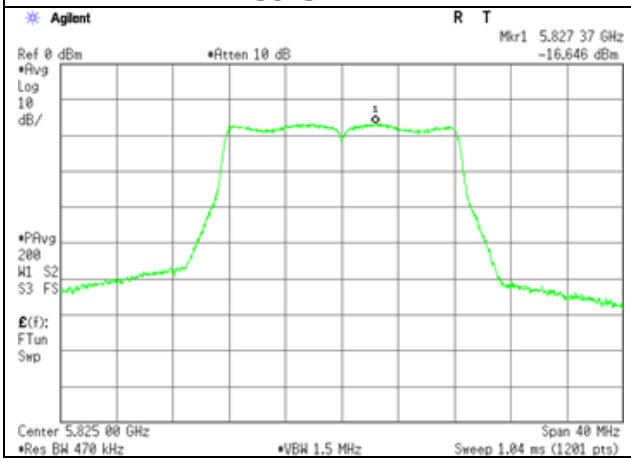
### 5745MHz




### 5785MHz

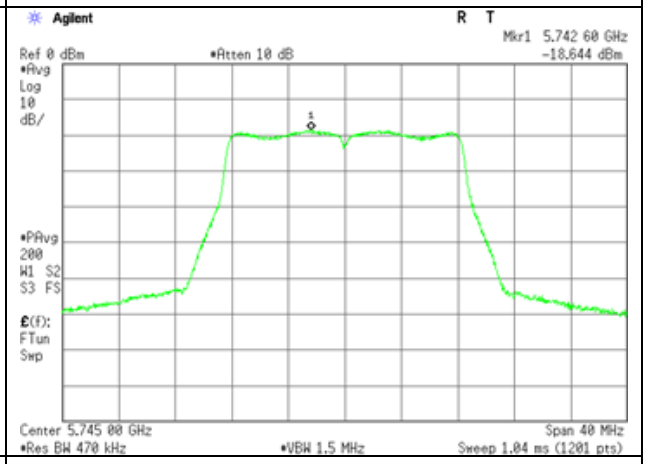



### 5825MHz

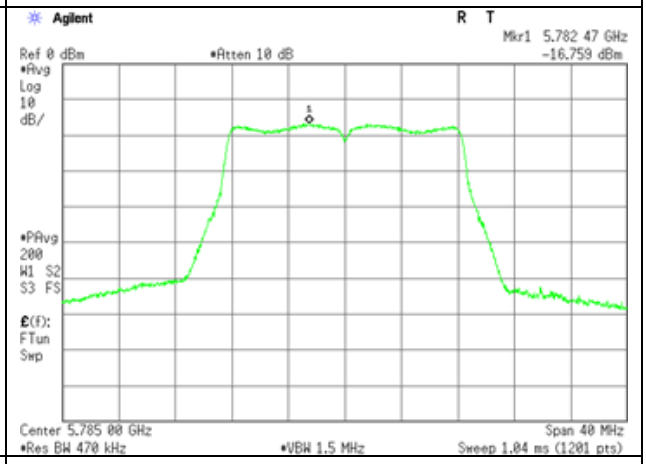



## 11a Antenna port 1

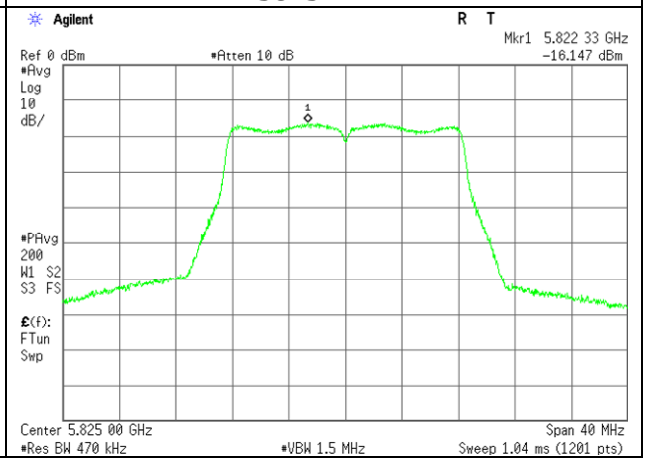
### 5745MHz




### 5785MHz




### 5825MHz



# Maximum Power Spectral Density

| | |
|---|---|
| Test place | Ise EMC Lab. No.11 Measurement Room |
| Report No. | 10812026H |
| Date | 06/29/2015 |
| Temperature/ Humidity | 23deg. C / 49% RH |
| Engineer | Shinichi Miyazono |
| Mode | 11n-20 Tx |

## <W52, W53 bands>

Antenna Port 0+1

| Freq. [MHz] | Antenna Port 0 Result [mW/MHz] | Antenna Port 1 Result [mW/MHz] | Result Antenna Port 0+1 [dBm/MHz] | Result Antenna Port 0+1 [mW/MHz] | Limit [dBm/MHz] | Margin [dB] |
|---|---|---|---|---|---|---|
| 5180.0 | 0.85 | 0.80 | 2.16 | 1.65 | 11.00 | 8.84 |
| 5220.0 | 0.83 | 0.71 | 1.87 | 1.54 | 11.00 | 9.13 |
| 5240.0 | 0.90 | 0.78 | 2.25 | 1.68 | 11.00 | 8.75 |
| 5260.0 | 0.89 | 0.77 | 2.21 | 1.66 | 11.00 | 8.79 |
| 5300.0 | 0.88 | 0.78 | 2.21 | 1.66 | 11.00 | 8.79 |
| 5320.0 | 0.93 | 0.84 | 2.49 | 1.77 | 11.00 | 8.51 |

Antenna Port 0

| Freq. [MHz] | S/A Reading [dBm] | Cable Loss [dB] | Atten. Loss [dB] | Duty Factor [dB] | Correction Factor [dB] | Result [dBm/MHz] | Result [mW/MHz] | Limit [dBm/MHz] | Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|
| 5180.0 | -13.79 | 2.67 | 10.08 | 0.33 | 0.00 | -0.71 | 0.85 | 11.00 | 11.71 |
| 5220.0 | -13.93 | 2.68 | 10.09 | 0.33 | 0.00 | -0.83 | 0.83 | 11.00 | 11.83 |
| 5240.0 | -13.57 | 2.70 | 10.09 | 0.33 | 0.00 | -0.45 | 0.90 | 11.00 | 11.45 |
| 5260.0 | -13.62 | 2.70 | 10.09 | 0.33 | 0.00 | -0.49 | 0.89 | 11.00 | 11.50 |
| 5300.0 | -13.69 | 2.73 | 10.09 | 0.33 | 0.00 | -0.54 | 0.88 | 11.00 | 11.54 |
| 5320.0 | -13.45 | 2.73 | 10.09 | 0.33 | 0.00 | -0.30 | 0.93 | 11.00 | 11.30 |

Antenna Port 1

| Freq. [MHz] | S/A Reading [dBm] | Cable Loss [dB] | Atten. Loss [dB] | Duty Factor [dB] | Correction Factor [dB] | Result [dBm/MHz] | Result [mW/MHz] | Limit [dBm/MHz] | Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|
| 5180.0 | -14.07 | 2.67 | 10.08 | 0.33 | 0.00 | -0.99 | 0.80 | 11.00 | 11.99 |
| 5220.0 | -14.58 | 2.68 | 10.09 | 0.33 | 0.00 | -1.48 | 0.71 | 11.00 | 12.48 |
| 5240.0 | -14.20 | 2.70 | 10.09 | 0.33 | 0.00 | -1.08 | 0.78 | 11.00 | 12.08 |
| 5260.0 | -14.25 | 2.70 | 10.09 | 0.33 | 0.00 | -1.13 | 0.77 | 11.00 | 12.13 |
| 5300.0 | -14.24 | 2.73 | 10.09 | 0.33 | 0.00 | -1.09 | 0.78 | 11.00 | 12.09 |
| 5320.0 | -13.91 | 2.73 | 10.09 | 0.33 | 0.00 | -0.76 | 0.84 | 11.00 | 11.76 |

Result = Reading + Cable Loss + Atten. Loss + Duty Factor + Correction Factor

## <W58 band>

Antenna Port 0+1

| Freq. [MHz] | Antenna Port 0 Result [mW/500kHz] | Antenna Port 1 Result [mW/500kHz] | Result Antenna Port 0+1 [dBm/500kHz] | Result Antenna Port 0+1 [mW/500kHz] | Limit [dBm/500kHz] | Margin [dB] |
|---|---|---|---|---|---|---|
| 5745.0 | 0.26 | 0.27 | -2.69 | 0.54 | 30.00 | 32.69 |
| 5785.0 | 0.39 | 0.42 | -0.95 | 0.80 | 30.00 | 30.95 |
| 5825.0 | 0.42 | 0.43 | -0.74 | 0.84 | 30.00 | 30.74 |

Antenna Port 0

| Freq. [MHz] | S/A Reading [dBm] | Cable Loss [dB] | Atten. Loss [dB] | Duty Factor [dB] | Correction Factor [dB] | Result [dBm/500kHz] | Result [mW/500kHz] | Limit [dBm/500kHz] | Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|
| 5745.0 | -19.35 | 2.91 | 10.07 | 0.33 | 0.27 | -5.77 | 0.26 | 30.00 | 35.77 |
| 5785.0 | -17.73 | 2.92 | 10.07 | 0.33 | 0.27 | -4.14 | 0.39 | 30.00 | 34.14 |
| 5825.0 | -17.40 | 2.94 | 10.06 | 0.33 | 0.27 | -3.80 | 0.42 | 30.00 | 33.80 |

Antenna Port 1

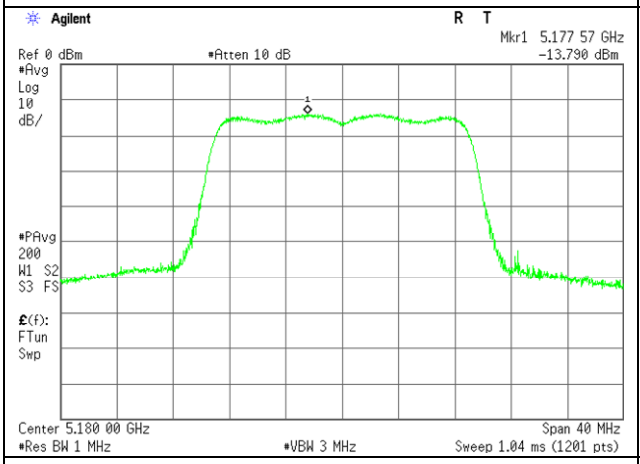
| Freq. [MHz] | S/A Reading [dBm] | Cable Loss [dB] | Atten. Loss [dB] | Duty Factor [dB] | Correction Factor [dB] | Result [dBm/500kHz] | Result [mW/500kHz] | Limit [dBm/500kHz] | Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|
| 5745.0 | -19.21 | 2.91 | 10.07 | 0.33 | 0.27 | -5.63 | 0.27 | 30.00 | 35.63 |
| 5785.0 | -17.38 | 2.92 | 10.07 | 0.33 | 0.27 | -3.79 | 0.42 | 30.00 | 33.79 |
| 5825.0 | -17.30 | 2.94 | 10.06 | 0.33 | 0.27 | -3.70 | 0.43 | 30.00 | 33.70 |

Result = Reading + Cable Loss + Atten. Loss + Duty Factor + Correction Factor

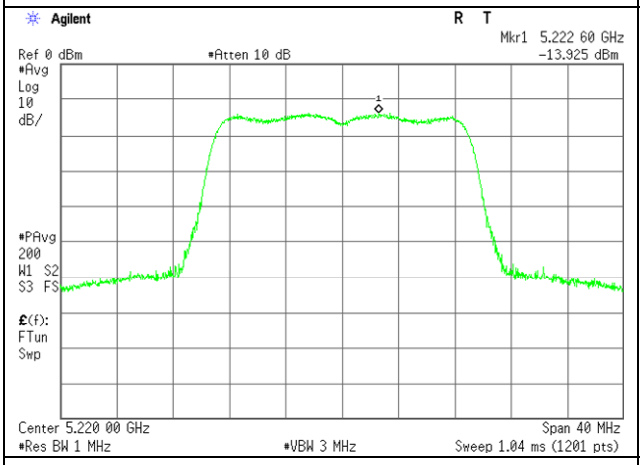
# Maximum Power Spectral Density

## 11n-20 Antenna port 0

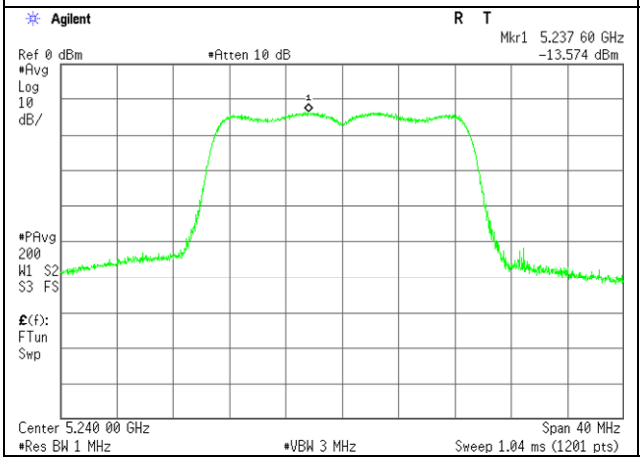
### 5180MHz




### 5220MHz

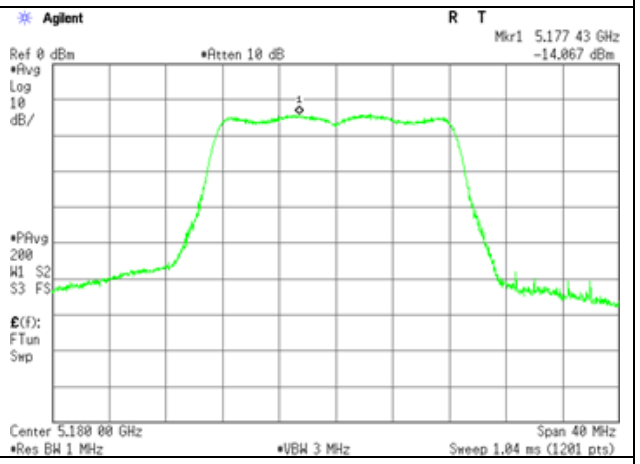



### 5240MHz

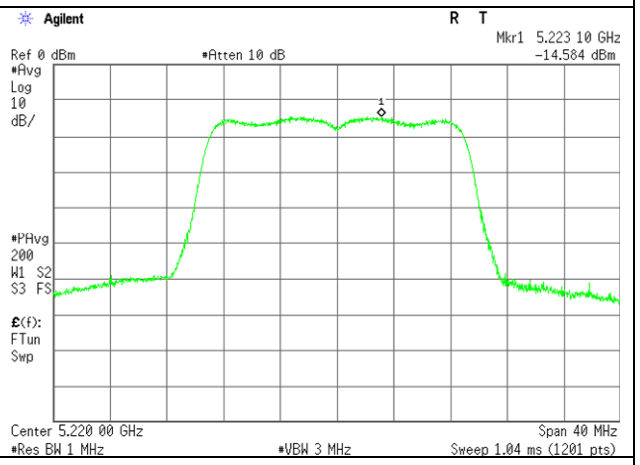



## 11n-20 Antenna port 1

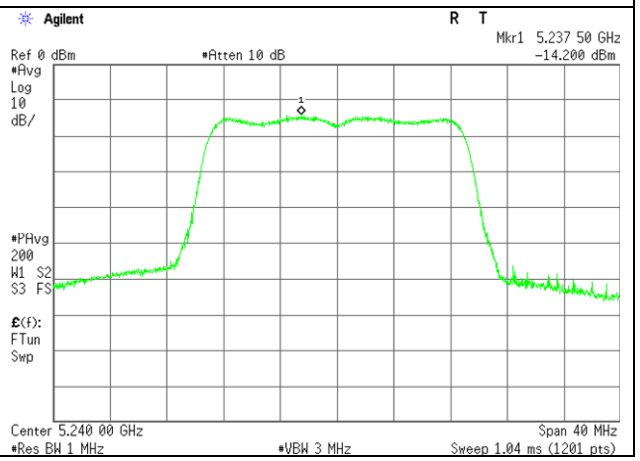
### 5180MHz




### 5220MHz




### 5240MHz

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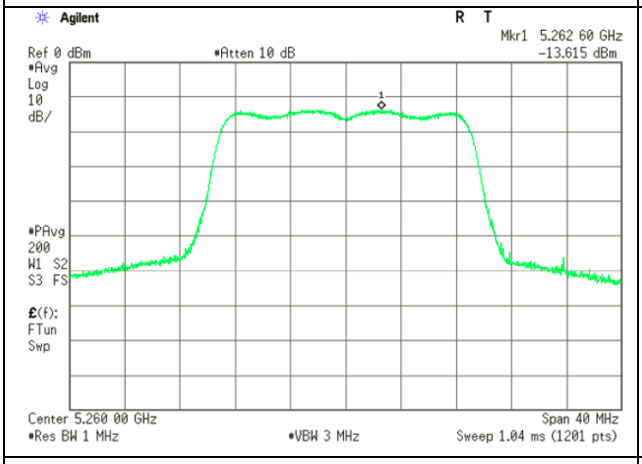
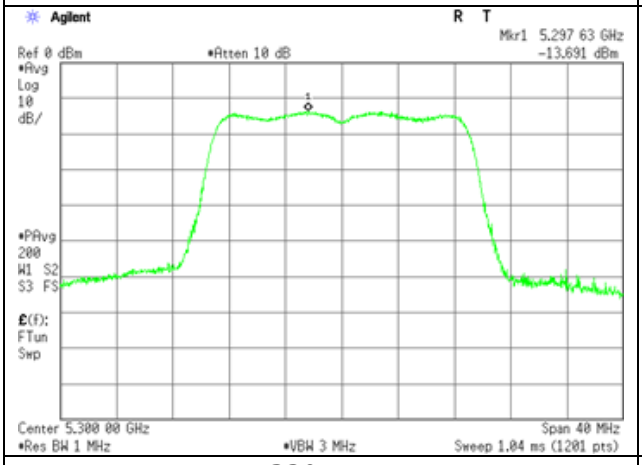
# Maximum Power Spectral Density

## 11n-20 Antenna port 0

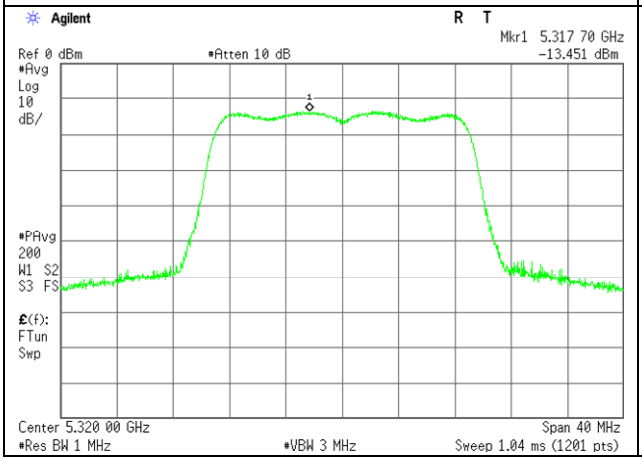
### 5260MHz




### 5300MHz

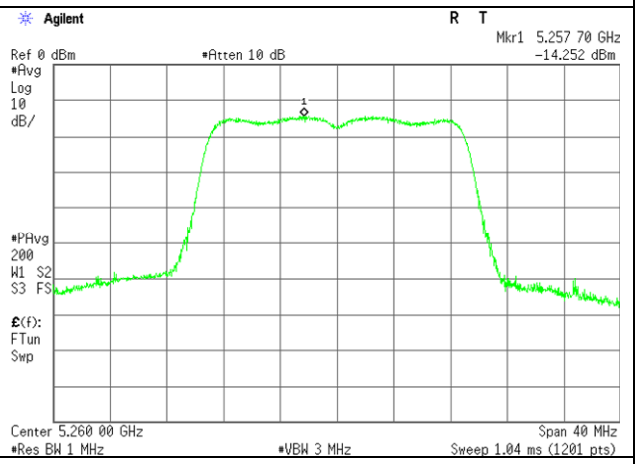



### 5320MHz

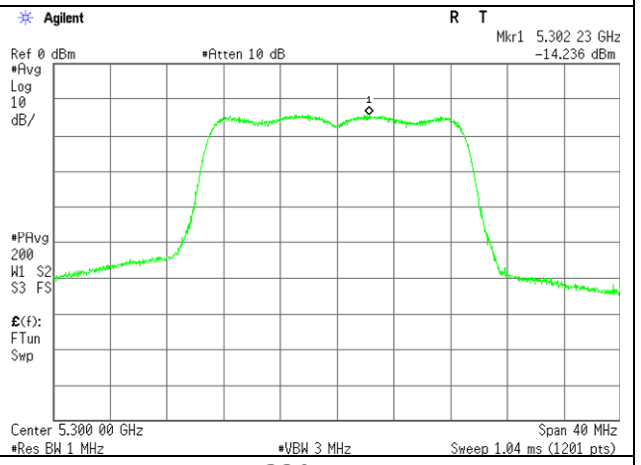



## 11n-20 Antenna port 1

### 5260MHz




### 5300MHz




### 5320MHz