# RADIO TEST REPORT

## Test Report No. 15370547H-C-R1

| | |
|---|---|
| **Customer** | **Sony Interactive Entertainment Inc.** |
| **Description of EUT** | **Wireless communication module** |
| **Model Number of EUT** | **J20H104** |
| **FCC ID** | **AK8M21DFD1** |
| **Test Regulation** | **FCC Part 15 Subpart E** |
| **Test Result** | **Complied** |
| **Issue Date** | **September 6, 2024** |
| **Remarks** | **- WLAN (5 GHz band) part**<br>**- For Permissive Change**<br>**- Radiated Spurious Emission only** |

| **Representative Test Engineer** | **Approved By** |
|---|---|
| Kiyoshiro Okazaki<br>Engineer | Takayuki Shimada<br>Leader |

CERTIFICATE 5107.02

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☒ There is no testing item of "Non-accreditation".

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# REVISION HISTORY

## Original Test Report No.: 15370547H-C

This report is a revised version of 15370547H-C. 15370547H-C is replaced with this report.

| Revision | Test Report No. | Date | Page Revised Contents |
|---|---|---|---|
| - (Original) | 15370547H-C | August 30, 2024 | - |
| 1 | 15370547H-C-R1 | September 6, 2024 | **4.1 Operating Mode(s)**<br>- Added note for power setting:<br>"(The test was conducted by high power settings.)" |
| | | | **APPENDIX 4: Configuration and Peripherals**<br>- Corrected information of Shield (Cable / Connector) for No. 1 to 4 cables in List of Cables Used:<br>Unshielded → Shielded |

## Reference: Abbreviations (Including words undescribed in this report)

| | | | |
|---|---|---|---|
| A2LA | The American Association for Laboratory Accreditation | IEC | International Electrotechnical Commission |
| AC | Alternating Current | IEEE | Institute of Electrical and Electronics Engineers |
| AFH | Adaptive Frequency Hopping | IF | Intermediate Frequency |
| AM | Amplitude Modulation | ILAC | International Laboratory Accreditation Conference |
| Amp, AMP | Amplifier | ISED | Innovation, Science and Economic Development Canada |
| ANSI | American National Standards Institute | ISO | International Organization for Standardization |
| Ant, ANT | Antenna | JAB | Japan Accreditation Board |
| AP | Access Point | LAN | Local Area Network |
| ASK | Amplitude Shift Keying | LIMS | Laboratory Information Management System |
| Atten., ATT | Attenuator | MCS | Modulation and Coding Scheme |
| AV | Average | MRA | Mutual Recognition Arrangement |
| BPSK | Binary Phase-Shift Keying | N/A | Not Applicable |
| BR | Bluetooth Basic Rate | NIST | National Institute of Standards and Technology |
| BT | Bluetooth | NS | No signal detect. |
| BT LE | Bluetooth Low Energy | NSA | Normalized Site Attenuation |
| BW | BandWidth | NVLAP | National Voluntary Laboratory Accreditation Program |
| Cal Int | Calibration Interval | OBW | Occupied Band Width |
| CCK | Complementary Code Keying | OFDM | Orthogonal Frequency Division Multiplexing |
| Ch., CH | Channel | OFDMA | Orthogonal Frequency Division Multiple Access |
| CISPR | Comite International Special des Perturbations Radioelectriques | P/M | Power meter |
| CW | Continuous Wave | PCB | Printed Circuit Board |
| DBPSK | Differential BPSK | PER | Packet Error Rate |
| DC | Direct Current | PHY | Physical Layer |
| D-factor | Distance factor | PK | Peak |
| DFS | Dynamic Frequency Selection | PN | Pseudo random Noise |
| DQPSK | Differential QPSK | PP | Preamble Puncturing |
| DSSS | Direct Sequence Spread Spectrum | PRBS | Pseudo-Random Bit Sequence |
| EDR | Enhanced Data Rate | PSD | Power Spectral Density |
| EIRP, e.i.r.p. | Equivalent Isotropically Radiated Power | QAM | Quadrature Amplitude Modulation |
| EMC | ElectroMagnetic Compatibility | QP | Quasi-Peak |
| EMI | ElectroMagnetic Interference | QPSK | Quadri-Phase Shift Keying |
| EN | European Norm | RBW | Resolution Band Width |
| ERP, e.r.p. | Effective Radiated Power | RDS | Radio Data System |
| EU | European Union | RE | Radio Equipment |
| EUT | Equipment Under Test | RF | Radio Frequency |
| Fac. | Factor | RMS | Root Mean Square |
| FCC | Federal Communications Commission | RSS | Radio Standards Specifications |
| FHSS | Frequency Hopping Spread Spectrum | Rx | Receiving |
| FM | Frequency Modulation | SA, S/A | Spectrum Analyzer |
| Freq. | Frequency | SG | Signal Generator |
| FSK | Frequency Shift Keying | SVSWR | Site-Voltage Standing Wave Ratio |
| GFSK | Gaussian Frequency-Shift Keying | TR | Test Receiver |
| GNSS | Global Navigation Satellite System | Tx | Transmitting |
| GPS | Global Positioning System | VBW | Video BandWidth |
| Hori. | Horizontal | Vert. | Vertical |
| ICES | Interference-Causing Equipment Standard | WLAN | Wireless LAN |

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# SECTION 1: Customer Information

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

The information provided by the customer is as follows;
- Customer, Description of EUT, Model Number of EUT, FCC ID on the cover and other relevant pages
- Operating/Test Mode(s) (Mode(s)) on all the relevant pages
- SECTION 1: Customer Information
- SECTION 2: Equipment Under Test (EUT) other than the Receipt Date and Test Date
- SECTION 4: Operation of EUT during testing

# SECTION 2: Equipment Under Test (EUT)

## 2.1 Identification of EUT

| | |
|---|---|
| Description | Wireless communication module |
| Model Number | J20H104 |
| Serial Number | Refer to SECTION 4.2 |
| Condition | Production prototype<br>(Not for Sale: This sample is equivalent to mass-produced items.) |
| Modification | No Modification by the test lab |
| Receipt Date | July 16, 2024 |
| Test Date | July 19 to 29, 2024 |

## 2.2 Product Description

**General Specification**

| | |
|---|---|
| Rating | DC 3.3 V |

## Radio Specification

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

| | | |
|---|---|---|
| Equipment Type | Transceiver | |
| Frequency of Operation | 2412 MHz to 2462 MHz | |
| Type of Modulation | DSSS, OFDM | |
| | OFDMA (IEEE802.11ax only) | 20 MHz: 26/52/106/242-tone RU |
| Antenna Type | IFA | |
| Antenna Gain: $G_{ANT}$ | Antenna 1: 4.0 dBi<br>Antenna 2: 3.5 dBi | |
| Directional Gain *1) | 6.76 dBi | |

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

| | | |
|---|---|---|
| Equipment Type | Transceiver | |
| Frequency of Operation | 20 M Band: | 5180 MHz to 5240 MHz<br>5260 MHz to 5320 MHz<br>5500 MHz to 5720 MHz<br>5745 MHz to 5825 MHz |
| | 40 M Band: | 5190 MHz to 5230 MHz<br>5270 MHz to 5310 MHz<br>5510 MHz to 5710 MHz<br>5755 MHz to 5795 MHz |
| | 80 M Band: | 5210 MHz<br>5290 MHz<br>5530 MHz to 5690 MHz<br>5775 MHz |
| Type of Modulation | OFDM | |
| | OFDMA (IEEE802.11ax only) | 20 MHz: 26/52/106/242-tone RU |
| | | 40 MHz: 26/52/106/242/484-tone RU |
| | | 80 MHz: 26/52/106/242/484/996-tone RU |
| Antenna Type | IFA | |
| Antenna Gain: $G_{ANT}$ | Antenna 1: 6.4 dBi<br>Antenna 3: 3.5 dBi | |
| Directional Gain *1) | 8.08 dBi | |

### BT1: Bluetooth (BR / EDR / Low Energy)

| | |
|---|---|
| Equipment Type | Transceiver |
| Frequency of Operation | 2402 MHz to 2480 MHz |
| Type of Modulation | BT: FHSS (GFSK, π/4DQPSK, 8DPSK)<br>BT LE: GFSK |
| Antenna Type | IFA |
| Antenna Gain | Antenna 3: 4.0 dBi |

### BT2: Bluetooth (BR / EDR / Low Energy)

| | |
|---|---|
| Equipment Type | Transceiver |
| Frequency of Operation | 2402 MHz to 2480 MHz |
| Type of Modulation | BT: FHSS (GFSK, π/4DQPSK, 8DPSK)<br>BT LE: GFSK |
| Antenna Type | IFA |
| Antenna Gain | Antenna 4: 4.0 dBi |

*1) Directional antenna gain = $10\log\left(\left(10^{\frac{Gain(Ant1)}{20}} + 10^{\frac{Gain(Ant2\ or\ Ant3)}{20}}\right)^2/2\right)$

# SECTION 3: Test specification, Procedures & Results

## 3.1 Test Specification

| | |
|---|---|
| Test Specification | FCC Part 15 Subpart E<br>The latest version on the first day of the testing period |
| Title | FCC 47 CFR Part 15 Radio Frequency Device Subpart E<br>Unlicensed National Information Infrastructure Devices<br>Section 15.407 General technical requirements |

## 3.2 Procedures and Results

| Item | Test Procedure | Specification | Worst Margin | Results | Remarks |
|---|---|---|---|---|---|
| Spurious Emission Restricted Band Edge | **FCC:** ANSI C63.10-2013 KDB Publication Number 789033 | **FCC:** 15.407 (b), 15.205 and 15.209 | 1.2 dB<br>5350.0 MHz<br>Vertical, AV | Complied | Radiated (above 30 MHz) *1) |
| | **ISED:** - | **ISED:** RSS-247 6.2 | | | |
| Note: UL Japan, Inc.'s EMI Work Procedures: Work Instructions-ULID-003591 and Work Instructions-ULID-003593.<br>* In case any questions arise about test procedure, ANSI C63.10: 2013 is also referred.<br><br>*1) Radiated test was selected over 30 MHz based on FCC 15.407 (b) and KDB 789033 D02 G.3.b). | | | | | |

**FCC Part 15.31 (e)**
The stable voltage will be supplied by the end product, which will be required to have a power supply regulator. Therefore, the EUT complies with the requirement.

**FCC Part 15.203/212 Antenna requirement**
The EUT has unique coupling/antenna connector (U.FL).
Therefore, the equipment complies with the antenna requirement of Section 15.203/212.

## 3.3 Addition to Standard

No addition, exclusion nor deviation has been made from the standard.

## 3.4 Uncertainty

Measurement uncertainty is not taken into account when stating conformity with a specified requirement. Note: When margins obtained from test results are less than the measurement uncertainty, the test results may exceed the limit.

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

**Radiated emission**

| Measurement distance | Frequency range | | Unit | Calculated Uncertainty (+/-) |
|---|---|---|---|---|
| 3 m | 9 kHz to 30 MHz | | dB | 3.3 |
| 10 m | | | dB | 3.1 |
| 3 m | 30 MHz to 200 MHz | Horizontal | dB | 4.7 |
| | | Vertical | dB | 4.7 |
| | 200 MHz to 1000 MHz | Horizontal | dB | 4.8 |
| | | Vertical | dB | 6.0 |
| 10 m | 30 MHz to 200 MHz | Horizontal | dB | 5.2 |
| | | Vertical | dB | 5.1 |
| | 200 MHz to 1000 MHz | Horizontal | dB | 5.2 |
| | | Vertical | dB | 5.2 |
| 3 m | 1 GHz to 6 GHz | | dB | 5.1 |
| | 6 GHz to 18 GHz | | dB | 5.4 |
| 1 m | 10 GHz to 18 GHz | | dB | 5.4 |
| | 18 GHz to 26.5 GHz | | dB | 5.3 |
| | 26.5 GHz to 40 GHz | | dB | 4.8 |
| 0.5 m | 26.5 GHz to 40 GHz | | dB | 5.0 |

## 3.5 Test Location

UL Japan, Inc. Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 Japan
Telephone: +81-596-24-8999
A2LA Certificate Number: 5107.02 / FCC Test Firm Registration Number: 884919
ISED Lab Company Number: 2973C / CAB identifier: JP0002

| Test site | Width x Depth x Height (m) | Size of reference ground plane (m) / horizontal conducting plane | Other rooms | Maximum measurement distance |
|---|---|---|---|---|
| No.1 semi-anechoic chamber | 19.2 x 11.2 x 7.7 | 7.0 x 6.0 | No.1 Power source room | 10 m |
| No.2 semi-anechoic chamber | 7.5 x 5.8 x 5.2 | 4.0 x 4.0 | - | 3 m |
| No.3 semi-anechoic chamber | 12.0 x 8.5 x 5.9 | 6.8 x 5.75 | No.3 Preparation room | 3 m |
| No.3 shielded room | 4.0 x 6.0 x 2.7 | N/A | - | - |
| No.4 semi-anechoic chamber | 12.0 x 8.5 x 5.9 | 6.8 x 5.75 | No.4 Preparation room | 3 m |
| No.4 shielded room | 4.0 x 6.0 x 2.7 | N/A | - | - |
| No.5 semi-anechoic chamber | 6.0 x 6.0 x 3.9 | 6.0 x 6.0 | - | - |
| No.5 measurement room | 6.4 x 6.4 x 3.0 | 6.4 x 6.4 | - | - |
| No.6 shielded room | 4.0 x 4.5 x 2.7 | 4.0 x 4.5 | - | - |
| No.6 measurement room | 4.75 x 5.4 x 3.0 | 4.75 x 4.15 | - | - |
| No.7 shielded room | 4.7 x 7.5 x 2.7 | 4.7 x 7.5 | - | - |
| No.8 measurement room | 3.1 x 5.0 x 2.7 | 3.1 x 5.0 | - | - |
| No.9 measurement room | 8.8 x 4.6 x 2.8 | 2.4 x 2.4 | - | - |
| No.10 shielded room | 3.8 x 2.8 x 2.8 | 3.8 x 2.8 | - | - |
| No.11 measurement room | 4.0 x 3.4 x 2.5 | N/A | - | - |
| No.12 measurement room | 2.6 x 3.4 x 2.5 | N/A | - | - |
| Large Chamber | 16.9 x 22.1 x 10.17 | 16.9 x 22.1 | - | 10 m |
| Small Chamber | 5.3 x 6.69 x 3.59 | 5.3 x 6.69 | - | - |

## 3.6 Test Data, Test Instruments, and Test Set Up

Refer to APPENDIX.

# SECTION 4: Operation of EUT during testing

## 4.1 Operating Mode(s)

| Mode | Remarks* |
|---|---|
| IEEE 802.11ax MIMO 20 MHz BW (11ax-20) | MCS 0 (1TX), PN9 |
| IEEE 802.11ax MIMO 40 MHz BW (11ax-40) | MCS 0 (1TX), PN9 |
| IEEE 802.11ax MIMO 80 MHz BW (11ax-80) | MCS 0 (1TX), PN9 |
| *The worst antenna and condition was determined based on the test result of Maximum Conducted Output Power. | |
| *Power of the EUT was set by the software as follows;<br>Power Setting: See the table below<br>(The test was conducted by high power settings.)<br>Software: autotest_for-ULJ.sh<br>(Date: December 13, 2022, Storage location: Driven by connected PC)<br><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. | |
| Test operating mode was determined as follows according to “Section 1 of 6 802.11 a/b/g/n testing - Managing Complex Regulatory Approvals - ” of TCB Council Workshop October 2009 and also was judged the necessity of 802.11ax mode by the pre-test. | |

**Power Setting for Radiated Spurious Emission**

| | | 5.2 GHz band | | | 5.3 GHz band / 5.6 GHz band / 5.8 GHz band | | |
|---|---|---|---|---|---|---|---|
| | | 20 MHz | 40 MHz | 80 MHz | 20 MHz | 40 MHz | 80 MHz |
| OFDM | | 13 | | | 16 | | |
| OFDMA | 26-tone RU | -4 | | | -1 | | |
| | 52-tone RU | 2 | | | 5 | | |
| | 106-tone RU | 8 | | | 11 | | |
| | 242-tone RU | 13 | | | 16 | | |
| | 484-tone RU | - | 13 | | - | 16 | |
| | 996-tone RU | - | - | 13 | - | - | 16 |

*The Details of Operation Mode(s)

| Test Item | Operating Mode | Tested Antenna | Tested Frequency | | | |
|---|---|---|---|---|---|---|
| | | | Lower Band | Middle Band | Additional Band | Upper Band |
| Radiated Spurious Emission (Below 1 GHz) | Tx 11ax-20 *1) | Antenna 1 + 3 | - | - | 5500 MHz | - |
| Radiated Spurious Emission (Above 1 GHz) | Tx 11ax-20 [OFDM] *2)<br>Tx 11ax-20 [OFDMA] *3) | Antenna 1 + 3 | 5180 MHz | 5260 MHz<br>5320 MHz | 5500 MHz<br>5580 MHz<br>5700 MHz | 5745 MHz<br>5785 MHz<br>5825 MHz |
| | Tx 11ax-40 [OFDM] *2)<br>Tx 11ax-40 [OFDMA] *3) | | 5190 MHz | 5270 MHz<br>5310 MHz | 5510 MHz<br>5550 MHz<br>5670 MHz | 5755 MHz<br>5795 MHz |
| | Tx 11ax-80 [OFDM] *2)<br>Tx 11ax-80 [OFDMA] *3) | | 5210 MHz | 5290 MHz | 5530 MHz<br>5610 MHz<br>5690 MHz | 5775 MHz |

*1) The mode was tested as a representative because it had the highest power at antenna terminal test.
*2) Since each of 20 MHz BW (11a / 11n-20 / 11ac-20 / 11ax-20), 40 MHz BW (11n-40 / 11ac-40 / 11ax-40), 80 MHz BW (11ac-80 / 11ax-80), and 160 MHz BW (11ac-160 / 11ax-160) have the same modulation method and no differences in transmitting specification, the test was performed on the representative mode that had the highest output power.
*3) OFDMA configuration tests were conducted only at the band edge since preliminary testing indicated that the other spurious emission was lower than OFDM.

Simultaneous transmission
(Only Antenna 3 simultaneously transmits BT1 and WLAN 5 GHz on a signal antenna.)

| Test Item | Mode *1) | Antenna type |
|---|---|---|
| Radiated Spurious Emission | Tx 11ax-80 [OFDM] 5290 MHz + BT1 3DH5 Hopping | Antenna 3 |

*1) The test was conducted on representative mode, the worst mode of GHz band at Spurious emission test for WLAN 5 GHz band and the mode had the highest power at Antenna terminal conducted test for BT1.

## 4.2 Configuration and Peripherals

This clause has been submitted for separate exhibit (refer to APPENDIX 4).

## SECTION 5: Radiated Spurious Emission and Band Edge Compliance

**Test Procedure**

< Below 1 GHz >
EUT was placed on a urethane platform of nominal size, 0.5 m by 1.0 m, raised 0.8 m above the conducting ground plane. The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with a ground plane.

< Above 1 GHz >
EUT was placed on a urethane platform of nominal size, 0.5 m by 0.5 m, raised 1.5 m above the conducting ground plane. The Radiated Electric Field Strength has been measured in a Semi Anechoic Chamber with absorbent materials lined on a ground plane. Test antenna was aimed at the EUT for receiving the maximum signal and always kept within the illumination area of the 3 dB beamwidth of the antenna.

The height of the measuring antenna varied between 1 m and 4 m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field strength.
The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver, or the Spectrum Analyzer.
The measurements were made with the following detector function of the test receiver and the Spectrum analyzer (in linear mode).
The test was made with the detector (RBW/VBW) in the following table.
When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

< Below 1 GHz >
The result also satisfied with the general limits specified in section 15.209 (a).

< Above 1 GHz >
Inside of restricted bands (Section 15.205):
Apply to limit in the Section 15.209 (a).

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

For 5.8 GHz band Bandedge
-27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge in the section 15.407(b)(4)(i).

Restricted band edge:
Apply to limit in the Section 15.209 (a).
Since this limit is severer than the limit of the inside of restricted bands.

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

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

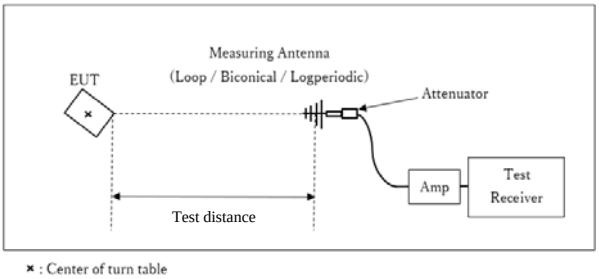
**Test Antennas are used as below;**

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

| Frequency | Below 1 GHz | Above 1 GHz | |
|---|---|---|---|
| Instrument Used | Test Receiver | Spectrum Analyzer | |
| Detector | QP | Peak | Average |
| IF Bandwidth | BW: 120 kHz | RBW: 1 MHz<br>VBW: 3 MHz | Method AD<br>RBW: 1 MHz<br>VBW: 3 MHz<br>Detector: Power Averaging (RMS)<br>Trace: ≥ 100 traces<br>If duty cycle was less than 98%, a duty factor was added to the results. |

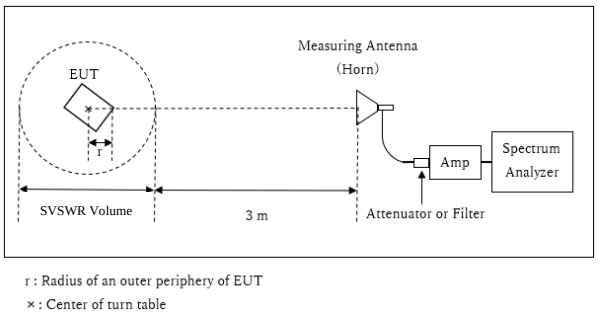
**Figure 2: Test Setup**

Below 1 GHz




Test Distance: 3 m

1 GHz to 10 GHz

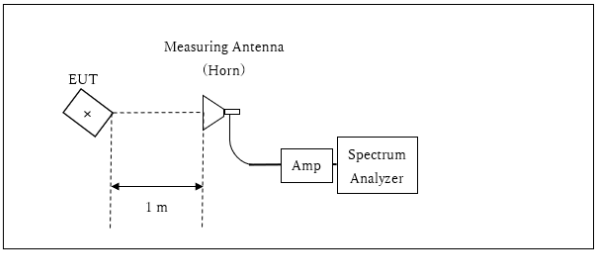



[1 GHz to 6 GHz]
Distance Factor: 20 x log (3.9 m / 3.0 m) = 2.28 dB
Test Distance: (3 + SVSWR Volume /2) - r = 3.9 m
SVSWR Volume : 2.0 m

[6 GHz to 10 GHz]
Distance Factor: 20 x log (4.90 m / 3.0 m) = 4.27 dB
Test Distance: (4.3 + SVSWR Volume /2) - r = 4.90 m
SVSWR Volume : 1.4 m

r = 0.1 m

10 GHz to 40 GHz




Distance Factor: 20 x log (1.0 m / 3.0 m) = -9.5 dB
*Test Distance: 1 m

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

Test results are rounded off and limit are rounded down, so some differences might be observed.

**Measurement Range : 30 MHz to 40 GHz**
**Test Data : APPENDIX**
**Test Result : Pass**

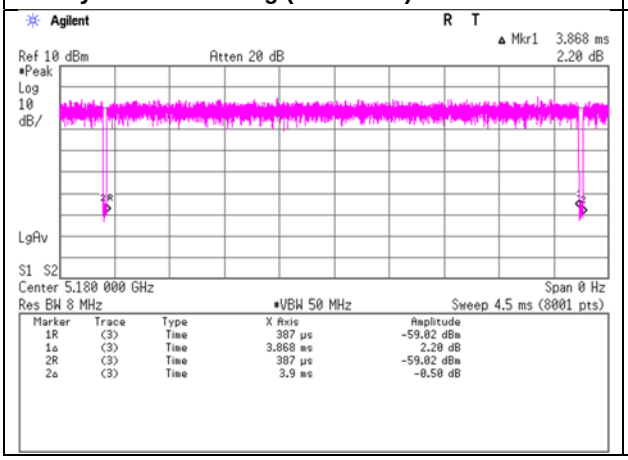
# APPENDIX 1: Test Data

## Burst rate confirmation

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 23 deg. C / 68 % RH |
| Engineer | Kiyoshiro Okazaki |
| Mode | Tx |

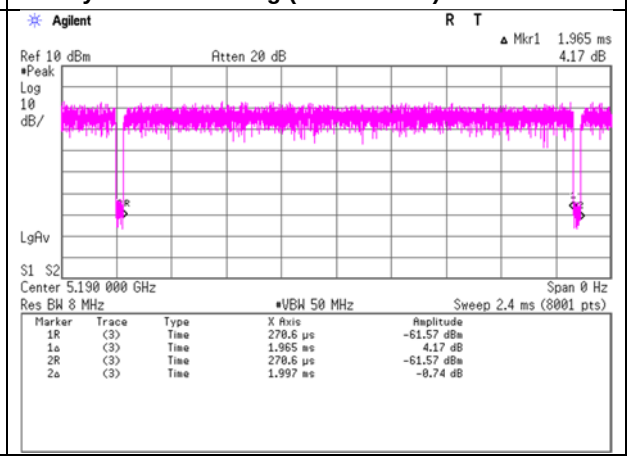
### 11ax-20 [OFDM] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.992 |
| Tx on / (Tx on + Tx off) * 100 = | 99.2 % |
| Duty factor = 10 * log (3.9 / 3.868) = | 0.04 dB |



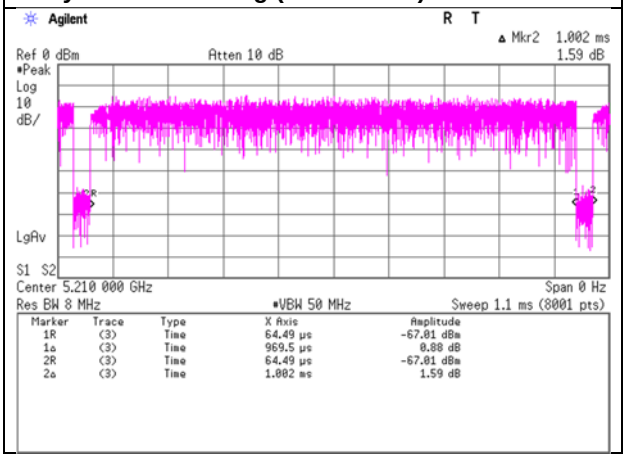

### 11ax-40 [OFDM] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.984 |
| Tx on / (Tx on + Tx off) * 100 = | 98.4 % |
| Duty factor = 10 * log (1.997 / 1.965) = | 0.07 dB |




### 11ax-80 [OFDM] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.968 |
| Tx on / (Tx on + Tx off) * 100 = | 96.8 % |
| Duty factor = 10 * log (1002 / 969.5) = | 0.14 dB |

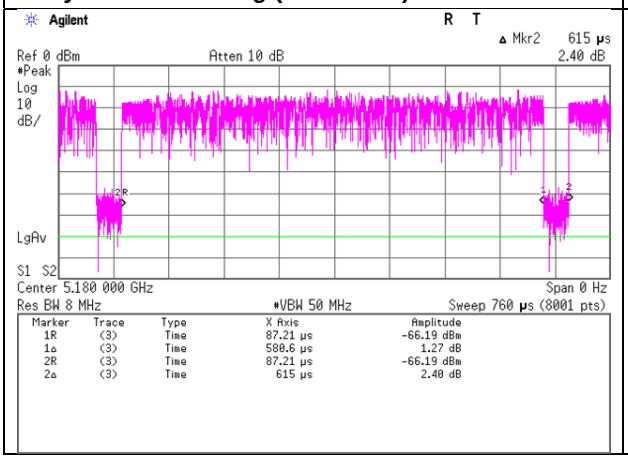


# Burst rate confirmation

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 23, 2024 |
| Temperature / Humidity | 23 deg. C / 62 % RH |
| Engineer | Takafumi Noguchi |
| Mode | Tx |

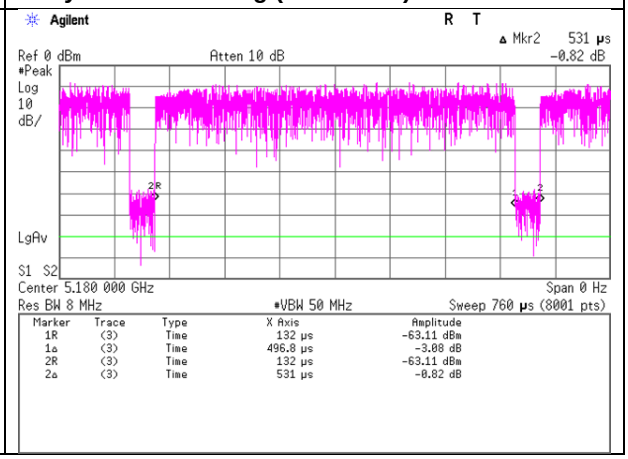
## 11ax-20 [26-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.944 |
| Tx on / (Tx on + Tx off) * 100 = | 94.4 % |
| Duty factor = 10 * log (615 / 580.6) = | 0.25 dB |



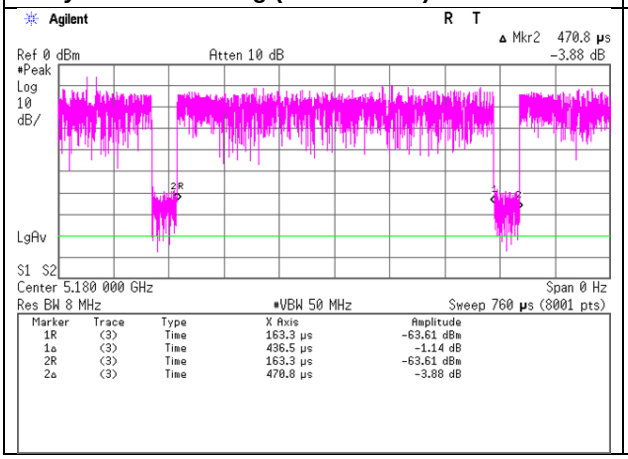

## 11ax-20 [52-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.936 |
| Tx on / (Tx on + Tx off) * 100 = | 93.6 % |
| Duty factor = 10 * log (531 / 496.8) = | 0.29 dB |



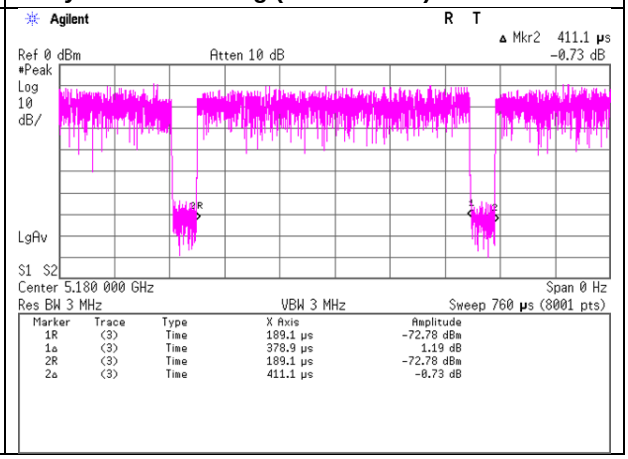

## 11ax-20 [106-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.927 |
| Tx on / (Tx on + Tx off) * 100 = | 92.7 % |
| Duty factor = 10 * log (470.8 / 436.5) = | 0.33 dB |




## 11ax-20 [242-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.922 |
| Tx on / (Tx on + Tx off) * 100 = | 92.2 % |
| Duty factor = 10 * log (411.1 / 378.9) = | 0.35 dB |

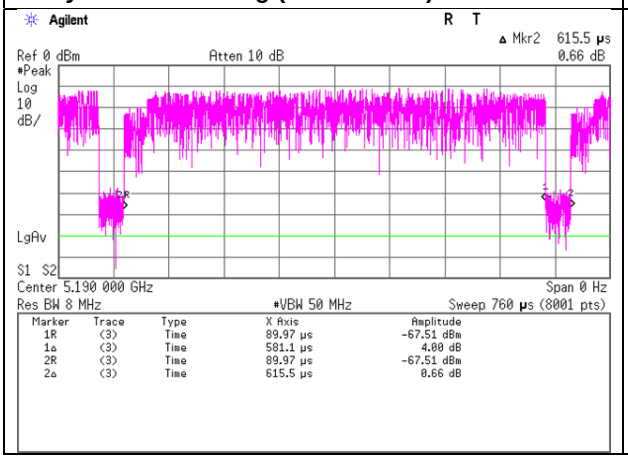


# Burst rate confirmation

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 23, 2024 |
| Temperature / Humidity | 23 deg. C / 62 % RH |
| Engineer | Takafumi Noguchi |
| Mode | Tx |

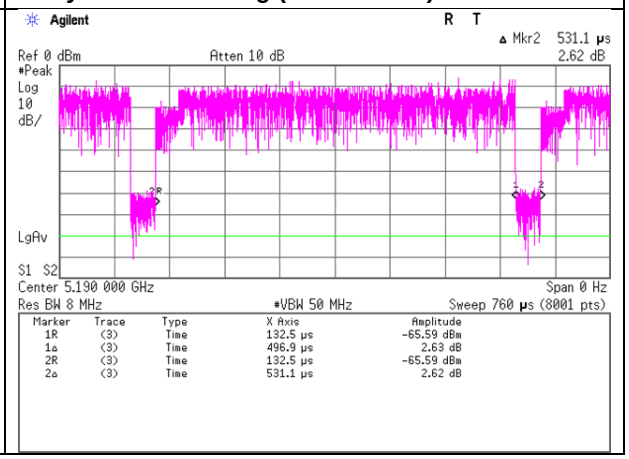
## 11ax-40 [26-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.944 |
| Tx on / (Tx on + Tx off) * 100 = | 94.4 % |
| Duty factor = 10 * log (615.5 / 581.1) = | 0.25 dB |



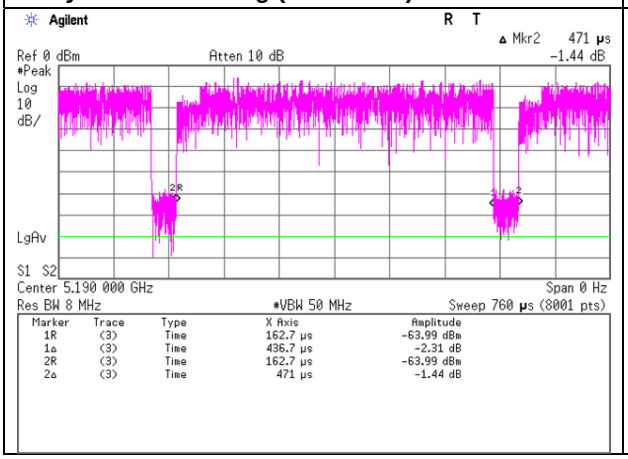

## 11ax-40 [52-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.936 |
| Tx on / (Tx on + Tx off) * 100 = | 93.6 % |
| Duty factor = 10 * log (531.1 / 496.9) = | 0.29 dB |



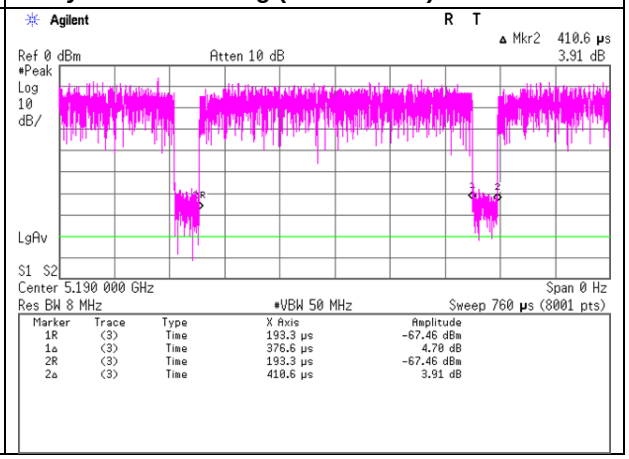

## 11ax-40 [106-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.927 |
| Tx on / (Tx on + Tx off) * 100 = | 92.7 % |
| Duty factor = 10 * log (471 / 436.7) = | 0.33 dB |




## 11ax-40 [242-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.917 |
| Tx on / (Tx on + Tx off) * 100 = | 91.7 % |
| Duty factor = 10 * log (410.6 / 376.6) = | 0.38 dB |

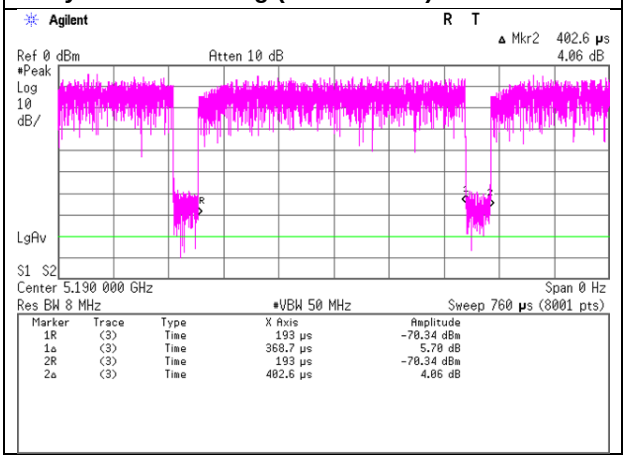


# Burst rate confirmation

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 23, 2024 |
| Temperature / Humidity | 23 deg. C / 62 % RH |
| Engineer | Takafumi Noguchi |
| Mode | Tx |

## 11ax-40 [484-tone RU]
## MCS 0

| | |
|---|---|
| **Tx on / (Tx on + Tx off) =** | **0.916** |
| **Tx on / (Tx on + Tx off) * 100 =** | **91.6 %** |
| **Duty factor = 10 * log (402.6 / 368.7) =** | **0.38 dB** |

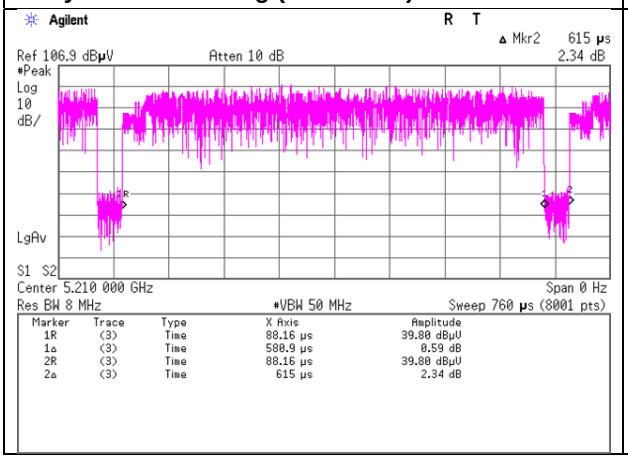


# Burst rate confirmation

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 23, 2024 |
| Temperature / Humidity | 23 deg. C / 62 % RH |
| Engineer | Takafumi Noguchi |
| Mode | Tx |

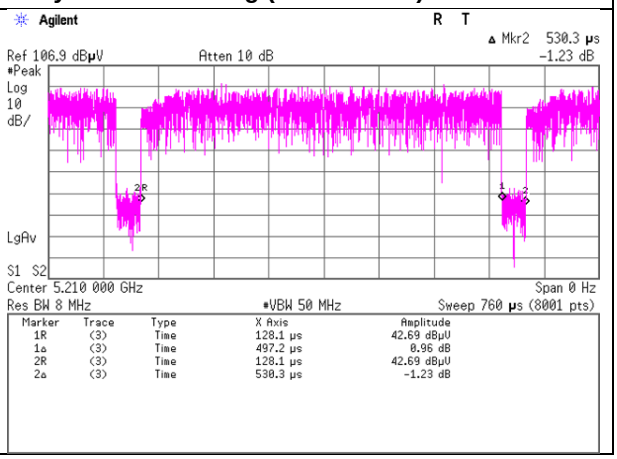
## 11ax-80 [26-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.945 |
| Tx on / (Tx on + Tx off) * 100 = | 94.5 % |
| Duty factor = 10 * log (615 / 580.9) = | 0.25 dB |



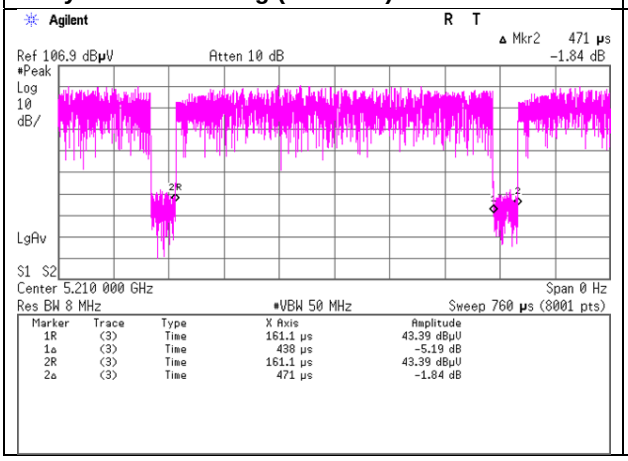

## 11ax-80 [52-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.938 |
| Tx on / (Tx on + Tx off) * 100 = | 93.8 % |
| Duty factor = 10 * log (530.3 / 497.2) = | 0.28 dB |



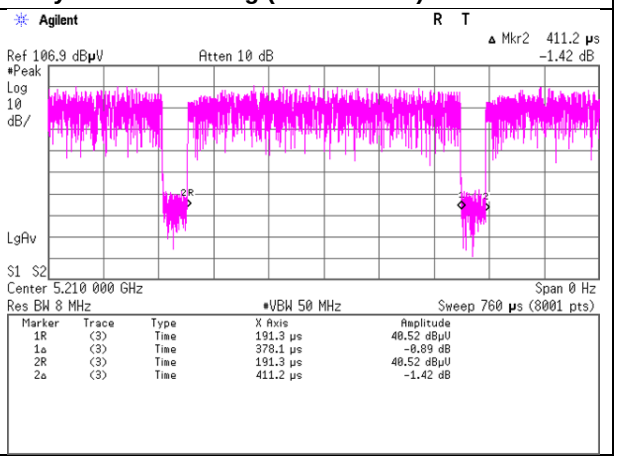

## 11ax-80 [106-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.930 |
| Tx on / (Tx on + Tx off) * 100 = | 93.0 % |
| Duty factor = 10 * log (471 / 438) = | 0.32 dB |




## 11ax-80 [242-tone RU] MCS 0

| | |
|---|---|
| Tx on / (Tx on + Tx off) = | 0.920 |
| Tx on / (Tx on + Tx off) * 100 = | 92.0 % |
| Duty factor = 10 * log (411.2 / 378.1) = | 0.36 dB |

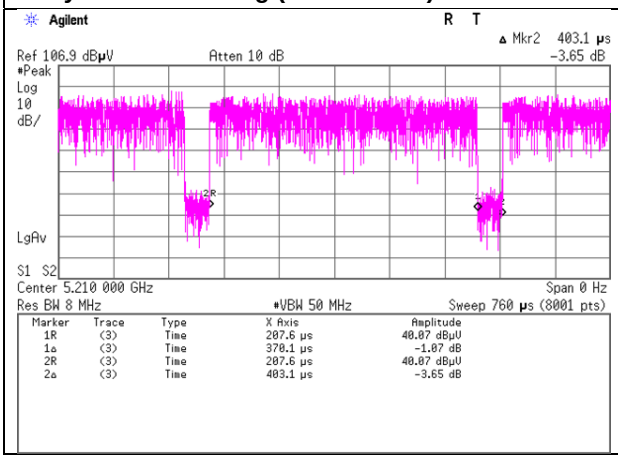


# Burst rate confirmation

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 23, 2024 |
| Temperature / Humidity | 23 deg. C / 62 % RH |
| Engineer | Takafumi Noguchi |
| Mode | Tx |

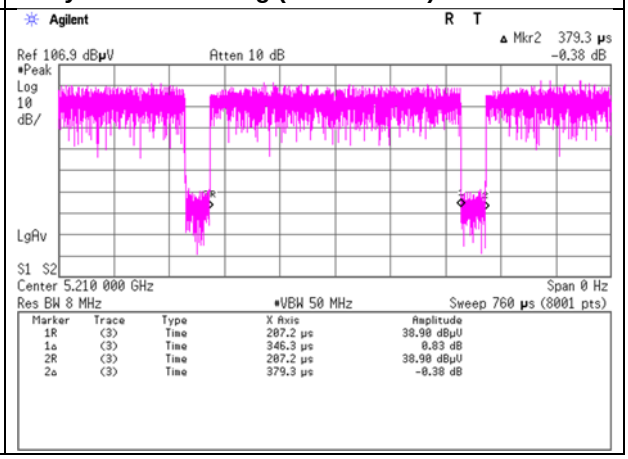
## 11ax-80 [484-tone RU] MCS 0

| | |
|---|---|
| **Tx on / (Tx on + Tx off) =** | **0.918** |
| **Tx on / (Tx on + Tx off) * 100 =** | **91.8 %** |
| **Duty factor = 10 * log (403.1 / 370.1) =** | **0.37 dB** |




## 11ax-80 [996-tone RU] MCS 0

| | |
|---|---|
| **Tx on / (Tx on + Tx off) =** | **0.913** |
| **Tx on / (Tx on + Tx off) * 100 =** | **91.3 %** |
| **Duty factor = 10 * log (379.3 / 346.3) =** | **0.40 dB** |



# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 23 deg. C / 68 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Kiyoshiro Okazaki (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-20 5180 MHz [OFDM] |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 49.3 | 40.5 | 32.2 | 6.3 | 30.9 | - | 56.9 | 48.1 | 73.9 | 53.9 | 17.0 | 5.8 | |
| Hori. | 10360.0 | 43.5 | - | 35.9 | -3.1 | 32.6 | - | 43.8 | - | 68.2 | - | 24.4 | - | |
| Hori. | 15540.0 | 44.5 | 35.8 | 39.3 | -1.9 | 32.2 | - | 49.7 | 41.0 | 73.9 | 53.9 | 24.2 | 12.9 | Floor noise |
| Vert. | 5150.0 | 48.9 | 40.2 | 32.2 | 6.3 | 30.9 | - | 56.4 | 47.8 | 73.9 | 53.9 | 17.5 | 6.2 | |
| Vert. | 10360.0 | 44.0 | - | 35.9 | -3.1 | 32.6 | - | 44.2 | - | 68.2 | - | 24.0 | - | |
| Vert. | 15540.0 | 44.0 | 35.6 | 39.3 | -1.9 | 32.2 | - | 49.2 | 40.8 | 73.9 | 53.9 | 24.7 | 13.1 | Floor noise |

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

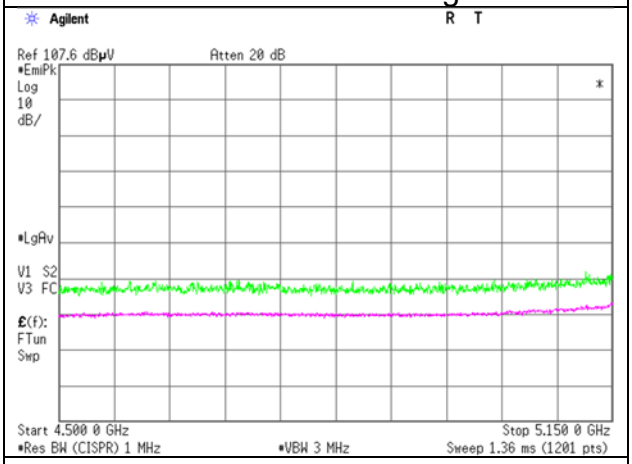
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 23 deg. C / 68 % RH |
| Engineer | Kiyoshiro Okazaki |
| Mode | Tx 11ax-20 5180 MHz [OFDM] |

Horizontal

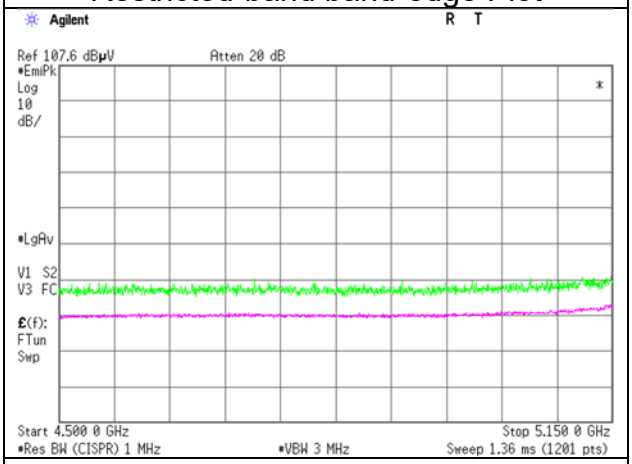
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) | Kiyoshiro Okazaki<br>(6 GHz to 10 GHz) | Kiyoshiro Okazaki<br>(10 GHz to 18 GHz) | Takafumi Noguchi<br>(18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi<br>(Above 26.5 GHz) |
| Mode | Tx 11ax-20 5260 MHz [OFDM] |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 10520.0 | 44.8 | - | 36.2 | -3.0 | 32.6 | - | 45.3 | - | 68.2 | - | 22.9 | - | |
| Hori. | 15780.0 | 43.0 | 35.7 | 39.6 | -1.8 | 32.2 | - | 48.6 | 41.3 | 73.9 | 53.9 | 25.3 | 12.6 | Floor noise |
| Vert. | 10520.0 | 45.1 | - | 36.2 | -3.0 | 32.6 | - | 45.6 | - | 68.2 | - | 22.6 | - | |
| Vert. | 15780.0 | 42.9 | 35.6 | 39.6 | -1.8 | 32.2 | - | 48.5 | 41.2 | 73.9 | 53.9 | 25.4 | 12.7 | Floor noise |

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

| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-20 5320 MHz [OFDM] |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 50.7 | 41.3 | 31.8 | 6.3 | 30.9 | - | 57.9 | 48.5 | 73.9 | 53.9 | 16.0 | 5.4 | |
| Hori. | 10640.0 | 45.8 | 37.3 | 36.7 | -3.0 | 32.7 | - | 46.8 | 38.2 | 73.9 | 53.9 | 27.1 | 15.7 | |
| Hori. | 15960.0 | 43.4 | 35.6 | 39.9 | -1.8 | 32.3 | - | 49.2 | 41.4 | 73.9 | 53.9 | 24.7 | 12.5 | Floor noise |
| Vert. | 5350.0 | 52.7 | 43.0 | 31.8 | 6.3 | 30.9 | - | 59.9 | 50.2 | 73.9 | 53.9 | 14.0 | 3.7 | |
| Vert. | 10640.0 | 45.2 | 37.9 | 36.7 | -3.0 | 32.7 | - | 46.2 | 38.9 | 73.9 | 53.9 | 27.8 | 15.0 | |
| Vert. | 15960.0 | 43.2 | 35.4 | 39.9 | -1.8 | 32.3 | - | 49.1 | 41.3 | 73.9 | 53.9 | 24.8 | 12.6 | Floor noise |

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

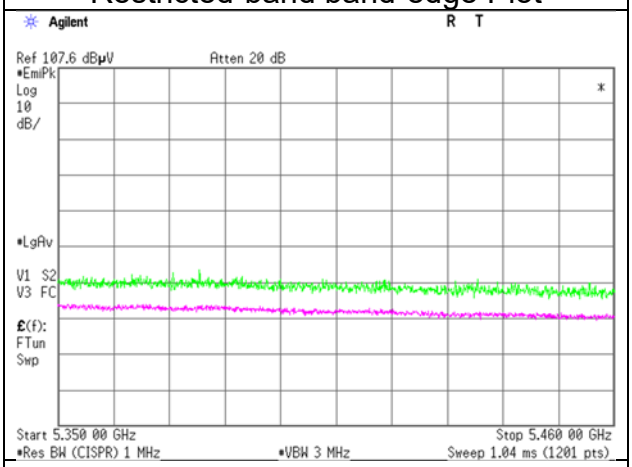
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi |
| Mode | Tx 11ax-20 5320 MHz [OFDM] |

Horizontal

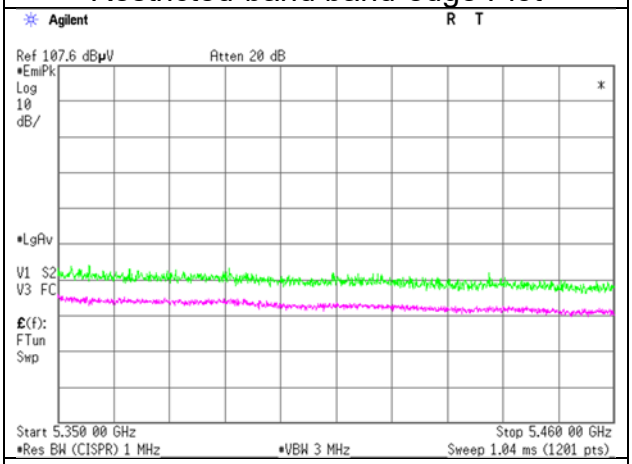
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | | |
|---|---|---|
| Semi Anechoic Chamber | No.4 | No.4 |
| Date | July 28, 2024 | July 29, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH | 21 deg. C / 54 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) | Takumi Nishida (Below 1 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5500 MHz | |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 109.1 | 48.2 | - | 11.7 | 7.9 | 32.1 | - | 35.8 | - | 43.5 | - | 7.7 | - | |
| Hori. | 111.2 | 45.2 | - | 11.9 | 8.0 | 32.1 | - | 33.0 | - | 43.5 | - | 10.5 | - | |
| Hori. | 169.0 | 39.9 | - | 15.9 | 8.5 | 32.0 | - | 32.2 | - | 43.5 | - | 11.3 | - | |
| Hori. | 329.3 | 41.4 | - | 14.5 | 9.7 | 32.0 | - | 33.6 | - | 46.0 | - | 12.4 | - | |
| Hori. | 592.1 | 38.4 | - | 19.1 | 11.2 | 32.2 | - | 36.5 | - | 46.0 | - | 9.5 | - | |
| Hori. | 929.7 | 30.7 | - | 22.0 | 12.4 | 30.9 | - | 34.1 | - | 46.0 | - | 11.9 | - | |
| Hori. | 5460.0 | 50.5 | 40.9 | 32.1 | 6.4 | 30.9 | - | 58.0 | 48.4 | 68.2 | 53.9 | 10.2 | 5.5 | |
| Hori. | 5470.0 | 51.5 | - | 32.1 | 6.4 | 30.9 | - | 59.0 | - | 68.2 | - | 9.2 | - | |
| Hori. | 11000.0 | 48.8 | 40.7 | 37.4 | -2.9 | 32.8 | - | 50.5 | 42.4 | 73.9 | 53.9 | 23.4 | 11.5 | |
| Hori. | 16500.0 | 43.9 | - | 39.9 | -1.7 | 32.3 | - | 49.7 | - | 68.2 | - | 18.5 | - | Floor noise |
| Vert. | 36.4 | 44.6 | - | 16.2 | 7.1 | 32.1 | - | 35.8 | - | 40.0 | - | 4.2 | - | |
| Vert. | 109.2 | 47.7 | - | 11.7 | 7.9 | 32.1 | - | 35.3 | - | 43.5 | - | 8.2 | - | |
| Vert. | 169.0 | 41.0 | - | 15.9 | 8.5 | 32.0 | - | 33.3 | - | 43.5 | - | 10.2 | - | |
| Vert. | 327.1 | 42.4 | - | 14.4 | 9.7 | 32.0 | - | 34.5 | - | 46.0 | - | 11.5 | - | |
| Vert. | 605.4 | 39.4 | - | 19.3 | 11.3 | 32.2 | - | 37.8 | - | 46.0 | - | 8.2 | - | |
| Vert. | 859.2 | 33.7 | - | 21.8 | 12.1 | 31.4 | - | 36.2 | - | 46.0 | - | 9.8 | - | |
| Vert. | 5460.0 | 51.2 | 41.6 | 32.1 | 6.4 | 30.9 | - | 58.7 | 49.1 | 68.2 | 53.9 | 9.5 | 4.8 | |
| Vert. | 5470.0 | 52.1 | - | 32.1 | 6.4 | 30.9 | - | 59.6 | - | 68.2 | - | 8.6 | - | |
| Vert. | 11000.0 | 50.8 | 42.0 | 37.4 | -2.9 | 32.8 | - | 52.4 | 43.7 | 73.9 | 53.9 | 21.5 | 10.2 | |
| Vert. | 16500.0 | 43.7 | - | 39.9 | -1.7 | 32.3 | - | 49.5 | - | 68.2 | - | 18.7 | - | Floor noise |

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

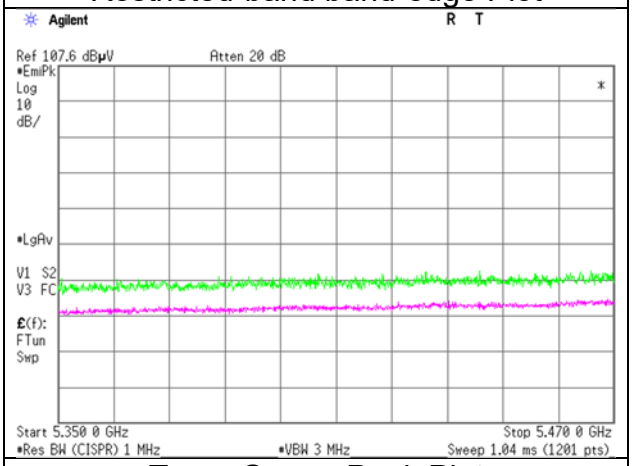
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5500 MHz |

Horizontal

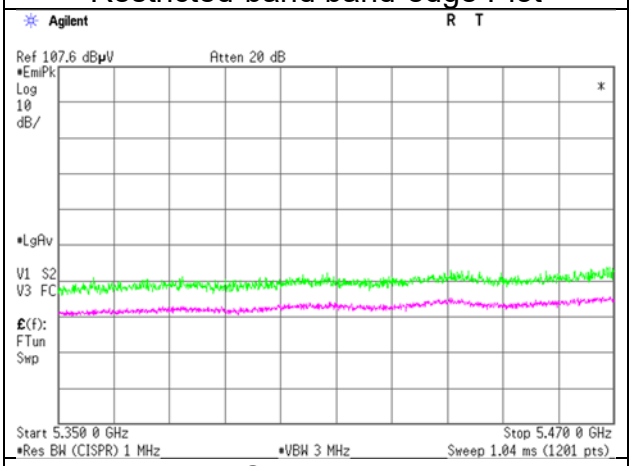
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) | Kiyoshiro Okazaki<br>(6 GHz to 10 GHz) | Kiyoshiro Okazaki<br>(10 GHz to 18 GHz) | Takafumi Noguchi<br>(18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi<br>(Above 26.5 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5580 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 11160.0 | 47.7 | 39.1 | 37.3 | -2.9 | 32.8 | - | 49.5 | 40.8 | 73.9 | 53.9 | 24.5 | 13.1 | |
| Hori. | 16740.0 | 43.7 | - | 39.6 | -1.6 | 32.3 | - | 49.3 | - | 68.2 | - | 18.9 | - | Floor noise |
| Vert. | 11160.0 | 49.2 | 39.6 | 37.3 | -2.9 | 32.8 | - | 50.9 | 41.3 | 73.9 | 53.9 | 23.0 | 12.6 | |
| Vert. | 16740.0 | 43.3 | - | 39.6 | -1.6 | 32.3 | - | 49.0 | - | 68.2 | - | 19.2 | - | Floor noise |

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

| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5700 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 57.7 | - | 32.5 | 6.5 | 31.0 | - | 65.7 | - | 68.2 | - | 2.5 | - | |
| Hori. | 11400.0 | 46.1 | 38.1 | 37.6 | -2.8 | 32.7 | - | 48.2 | 40.2 | 73.9 | 53.9 | 25.7 | 13.7 | |
| Hori. | 17100.0 | 43.6 | - | 39.7 | -1.5 | 32.4 | - | 49.3 | - | 68.2 | - | 18.9 | - | Floor noise |
| Vert. | 5725.0 | 57.0 | - | 32.5 | 6.5 | 31.0 | - | 65.0 | - | 68.2 | - | 3.2 | - | |
| Vert. | 11400.0 | 45.2 | 37.1 | 37.6 | -2.8 | 32.7 | - | 47.3 | 39.2 | 73.9 | 53.9 | 26.6 | 14.7 | |
| Vert. | 17100.0 | 44.7 | - | 39.7 | -1.5 | 32.4 | - | 50.5 | - | 68.2 | - | 17.7 | - | Floor noise |

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

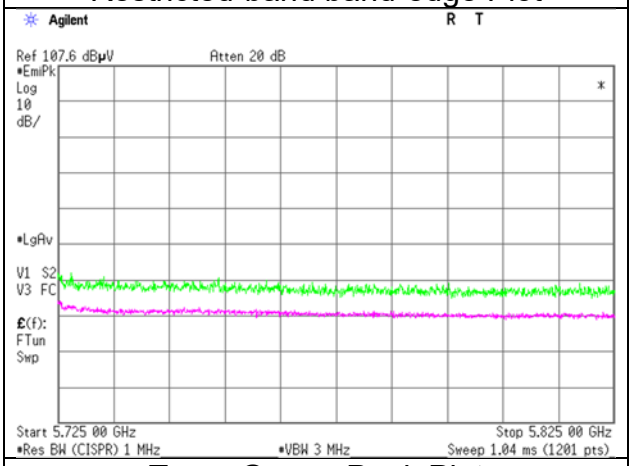
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5700 MHz |

Horizontal

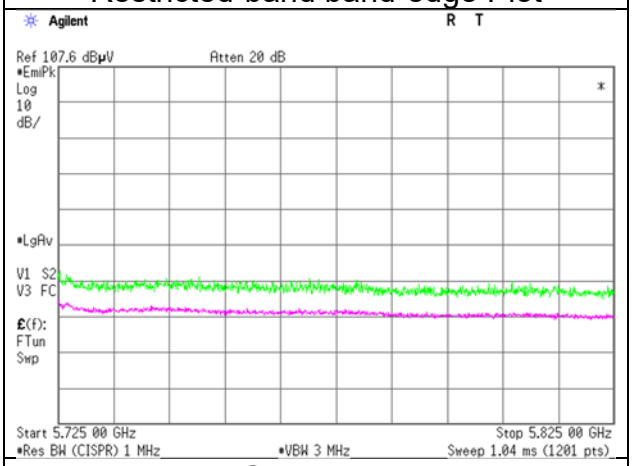
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5745 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 45.5 | - | 32.4 | 6.5 | 31.0 | - | 53.3 | - | 68.2 | - | 14.9 | - | |
| Hori. | 5700.0 | 46.2 | - | 32.5 | 6.5 | 31.0 | - | 54.1 | - | 105.2 | - | 51.1 | - | |
| Hori. | 5720.0 | 52.1 | - | 32.5 | 6.5 | 31.0 | - | 60.1 | - | 110.8 | - | 50.7 | - | |
| Hori. | 5725.0 | 67.4 | - | 32.5 | 6.5 | 31.0 | - | 75.4 | - | 122.2 | - | 46.8 | - | |
| Hori. | 11490.0 | 44.1 | 36.3 | 37.7 | -2.8 | 32.7 | - | 46.3 | 38.5 | 73.9 | 53.9 | 27.6 | 15.4 | |
| Hori. | 17235.0 | 44.5 | - | 39.8 | -1.5 | 32.4 | - | 50.5 | - | 68.2 | - | 17.7 | - | Floor noise |
| Vert. | 5650.0 | 46.3 | - | 32.4 | 6.5 | 31.0 | - | 54.1 | - | 68.2 | - | 14.1 | - | |
| Vert. | 5700.0 | 47.4 | - | 32.5 | 6.5 | 31.0 | - | 55.3 | - | 105.2 | - | 49.9 | - | |
| Vert. | 5720.0 | 54.1 | - | 32.5 | 6.5 | 31.0 | - | 62.1 | - | 110.8 | - | 48.7 | - | |
| Vert. | 5725.0 | 68.0 | - | 32.5 | 6.5 | 31.0 | - | 76.0 | - | 122.2 | - | 46.2 | - | |
| Vert. | 11490.0 | 43.6 | 35.5 | 37.7 | -2.8 | 32.7 | - | 45.8 | 37.7 | 73.9 | 53.9 | 28.2 | 16.2 | |
| Vert. | 17235.0 | 44.2 | - | 39.8 | -1.5 | 32.4 | - | 50.2 | - | 68.2 | - | 18.0 | - | Floor noise |

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

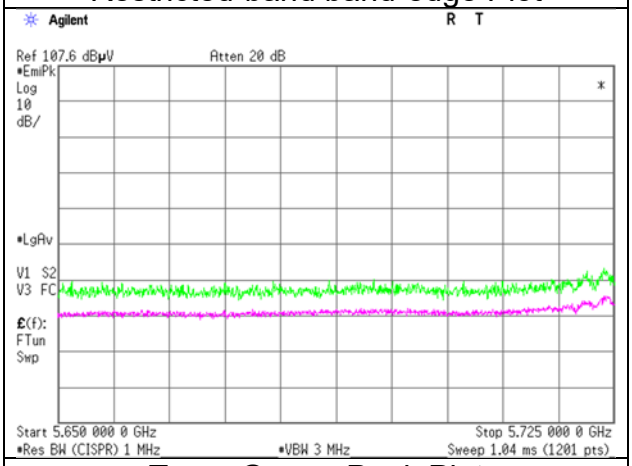
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5745 MHz |

Horizontal

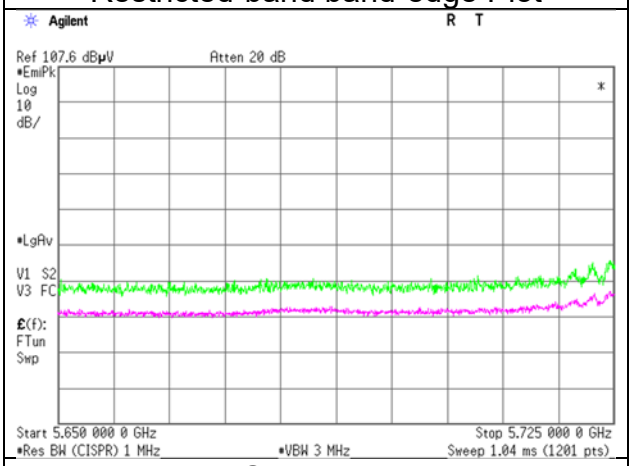
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) | Kiyoshiro Okazaki<br>(6 GHz to 10 GHz) | Kiyoshiro Okazaki<br>(10 GHz to 18 GHz) | Takafumi Noguchi<br>(18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi<br>(Above 26.5 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5785 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 11570.0 | 43.6 | 35.0 | 37.7 | -2.8 | 32.7 | - | 45.8 | 37.2 | 73.9 | 53.9 | 28.1 | 16.7 | |
| Hori. | 17355.0 | 43.6 | - | 39.9 | -1.4 | 32.4 | - | 49.8 | - | 68.2 | - | 18.4 | - | Floor noise |
| Vert. | 11570.0 | 42.2 | 34.8 | 37.7 | -2.8 | 32.7 | - | 44.4 | 37.0 | 73.9 | 53.9 | 29.5 | 16.9 | |
| Vert. | 17355.0 | 43.5 | - | 39.9 | -1.4 | 32.4 | - | 49.7 | - | 68.2 | - | 18.6 | - | Floor noise |

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

| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5825 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5850.0 | 52.6 | - | 32.8 | 6.5 | 31.1 | - | 60.9 | - | 122.2 | - | 61.3 | - | |
| Hori. | 5855.0 | 48.6 | - | 32.8 | 6.5 | 31.1 | - | 56.9 | - | 110.8 | - | 53.9 | - | |
| Hori. | 5875.0 | 46.9 | - | 32.8 | 6.6 | 31.1 | - | 55.2 | - | 105.2 | - | 50.0 | - | |
| Hori. | 5925.0 | 45.2 | - | 32.8 | 6.6 | 31.1 | - | 53.5 | - | 68.2 | - | 14.7 | - | |
| Hori. | 11650.0 | 44.0 | 35.4 | 37.7 | -2.8 | 32.6 | - | 46.4 | 37.7 | 73.9 | 53.9 | 27.6 | 16.2 | |
| Hori. | 17475.0 | 43.1 | - | 40.0 | -1.4 | 32.4 | - | 49.4 | - | 68.2 | - | 18.8 | - | Floor noise |
| Vert. | 5850.0 | 53.7 | - | 32.8 | 6.5 | 31.1 | - | 62.0 | - | 122.2 | - | 60.2 | - | |
| Vert. | 5855.0 | 49.3 | - | 32.8 | 6.5 | 31.1 | - | 57.6 | - | 110.8 | - | 53.2 | - | |
| Vert. | 5875.0 | 46.9 | - | 32.8 | 6.6 | 31.1 | - | 55.2 | - | 105.2 | - | 50.0 | - | |
| Vert. | 5925.0 | 45.2 | - | 32.8 | 6.6 | 31.1 | - | 53.5 | - | 68.2 | - | 14.7 | - | |
| Vert. | 11650.0 | 44.5 | 35.5 | 37.7 | -2.8 | 32.6 | - | 46.8 | 37.8 | 73.9 | 53.9 | 27.1 | 16.1 | |
| Vert. | 17475.0 | 43.2 | - | 40.0 | -1.4 | 32.4 | - | 49.5 | - | 68.2 | - | 18.7 | - | Floor noise |

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

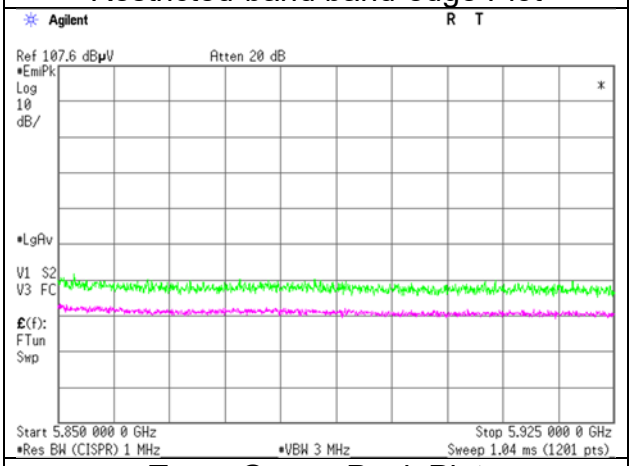
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [OFDM] 5825 MHz |

Horizontal

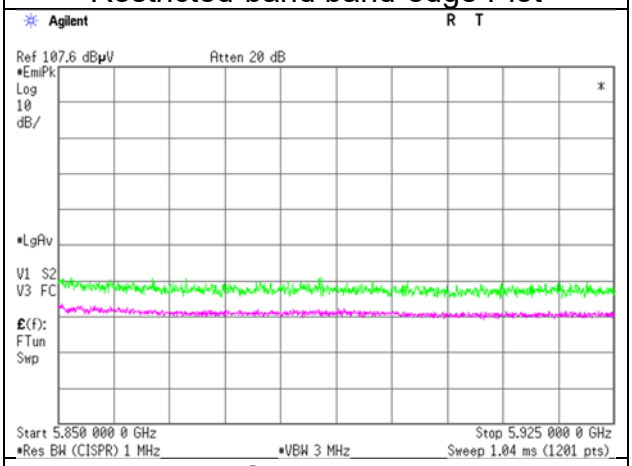
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 0] 5180 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 41.0 | 32.8 | 32.2 | 6.3 | 30.9 | 0.3 | 48.6 | 40.6 | 73.9 | 53.9 | 25.3 | 13.3 | *1) |
| Vert. | 5150.0 | 42.1 | 33.2 | 32.2 | 6.3 | 30.9 | 0.3 | 49.7 | 41.0 | 73.9 | 53.9 | 24.2 | 12.9 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

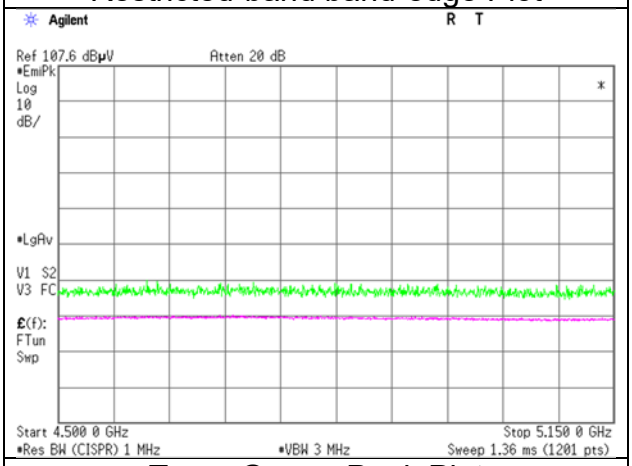
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 0] 5180 MHz |

Horizontal

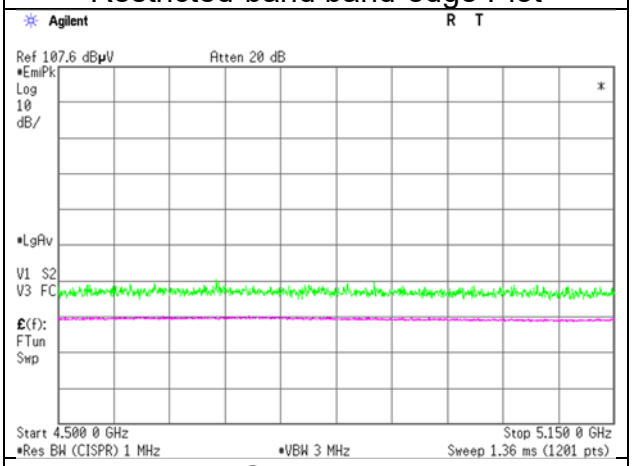
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 37] 5180 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 42.5 | 33.3 | 32.2 | 6.3 | 30.9 | 0.3 | 50.1 | 41.2 | 73.9 | 53.9 | 23.8 | 12.7 | *1) |
| Vert. | 5150.0 | 42.8 | 33.8 | 32.2 | 6.3 | 30.9 | 0.3 | 50.3 | 41.6 | 73.9 | 53.9 | 23.6 | 12.3 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

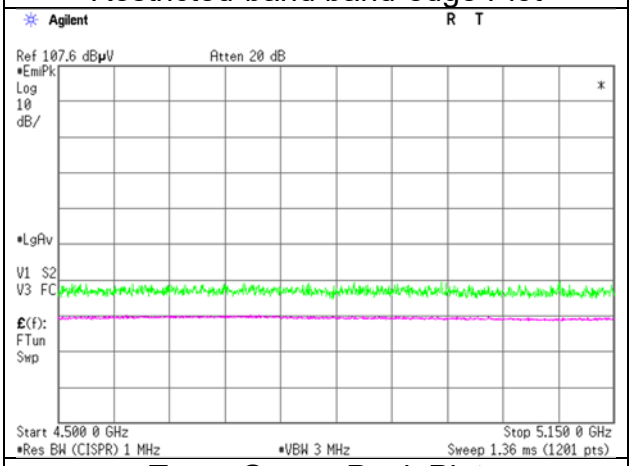
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 37] 5180 MHz |

Horizontal

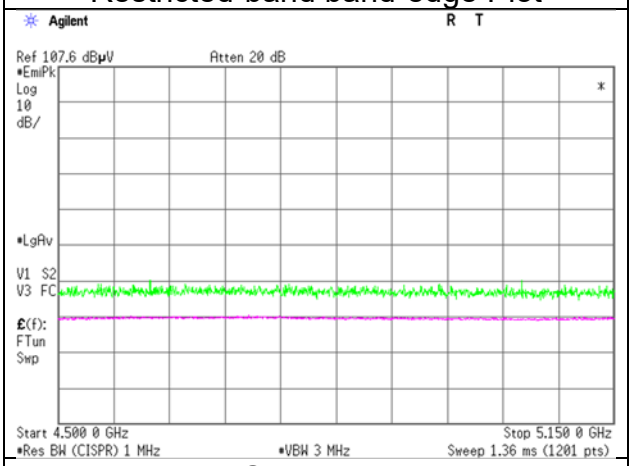
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 53] 5180 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 42.5 | 34.3 | 32.2 | 6.3 | 30.9 | 0.3 | 50.0 | 42.2 | 73.9 | 53.9 | 23.9 | 11.7 | *1) |
| Vert. | 5150.0 | 44.8 | 34.4 | 32.2 | 6.3 | 30.9 | 0.3 | 52.3 | 42.3 | 73.9 | 53.9 | 21.6 | 11.6 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

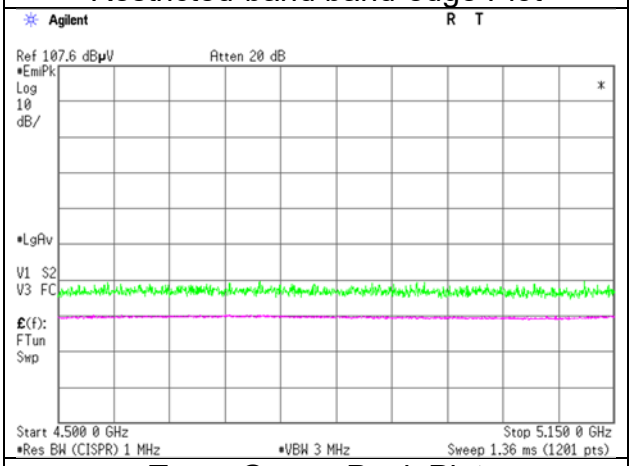
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 53] 5180 MHz |

Horizontal

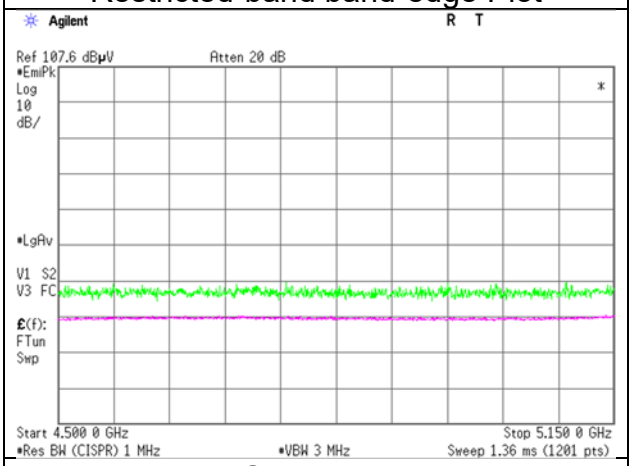
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5180 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 45.6 | 36.5 | 32.2 | 6.3 | 30.9 | 0.4 | 53.2 | 44.4 | 73.9 | 53.9 | 20.7 | 9.5 | *1) |
| Vert. | 5150.0 | 46.4 | 37.2 | 32.2 | 6.3 | 30.9 | 0.4 | 54.0 | 45.1 | 73.9 | 53.9 | 20.0 | 8.8 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

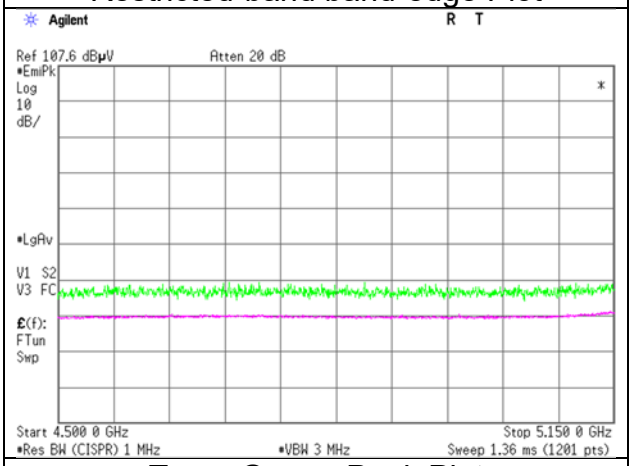
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5180 MHz |

Horizontal

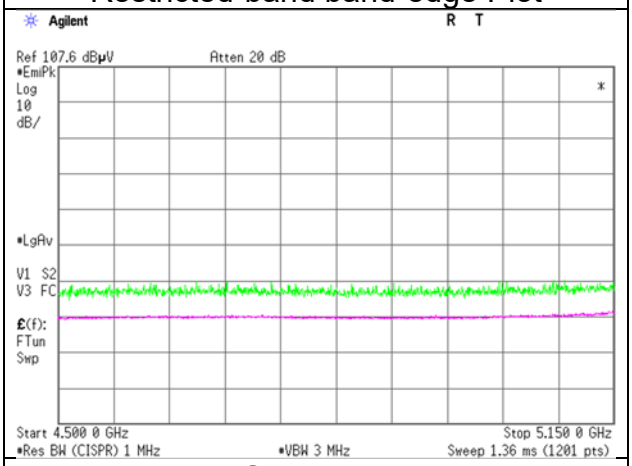
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 8] 5320 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 42.4 | 33.7 | 31.8 | 6.3 | 30.9 | 0.3 | 49.6 | 41.2 | 73.9 | 53.9 | 24.3 | 12.8 | *1) |
| Vert. | 5350.0 | 42.3 | 33.9 | 31.8 | 6.3 | 30.9 | 0.3 | 49.5 | 41.3 | 73.9 | 53.9 | 24.4 | 12.6 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

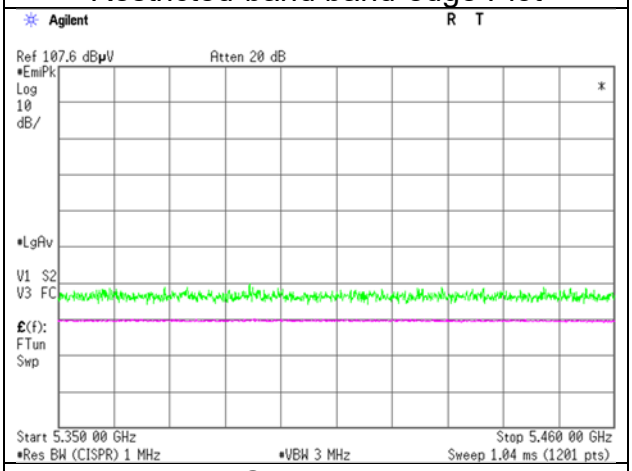
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 8] 5320 MHz |

Horizontal

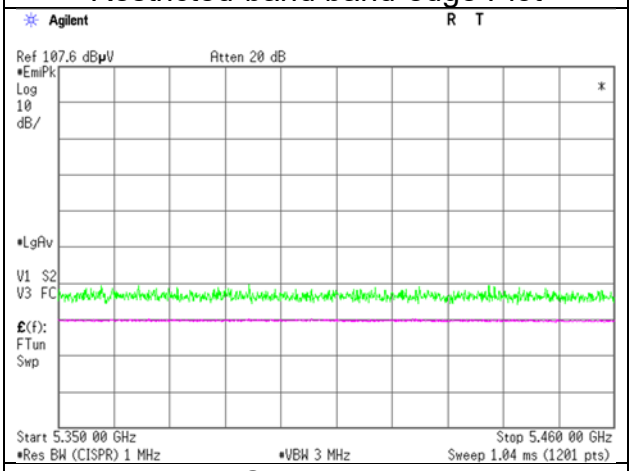
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 40] 5320 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 42.9 | 34.5 | 31.8 | 6.3 | 30.9 | 0.3 | 50.1 | 41.9 | 73.9 | 53.9 | 23.8 | 12.0 | *1) |
| Vert. | 5350.0 | 45.1 | 36.6 | 31.8 | 6.3 | 30.9 | 0.3 | 52.3 | 44.1 | 73.9 | 53.9 | 21.6 | 9.8 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

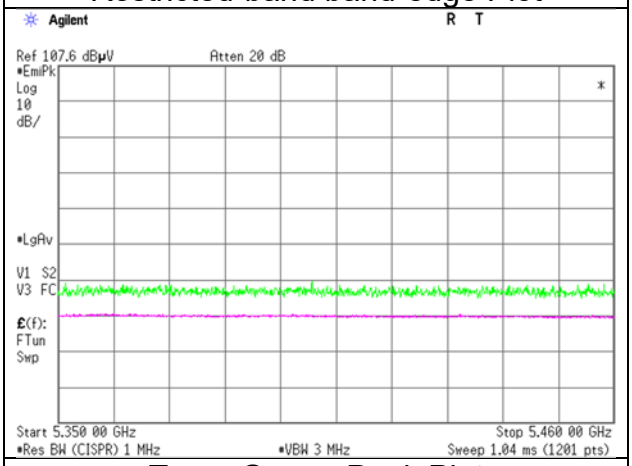
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 40] 5320 MHz |

Horizontal

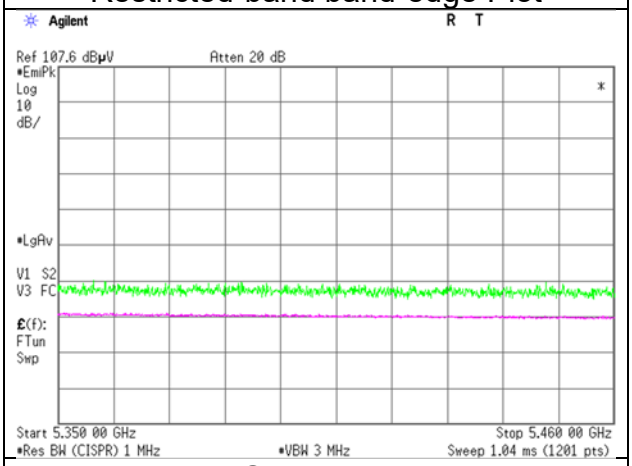
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 54] 5320 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 43.7 | 35.8 | 31.8 | 6.3 | 30.9 | 0.3 | 50.9 | 43.3 | 73.9 | 53.9 | 23.0 | 10.6 | *1) |
| Vert. | 5350.0 | 45.6 | 37.0 | 31.8 | 6.3 | 30.9 | 0.3 | 52.8 | 44.5 | 73.9 | 53.9 | 21.1 | 9.4 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

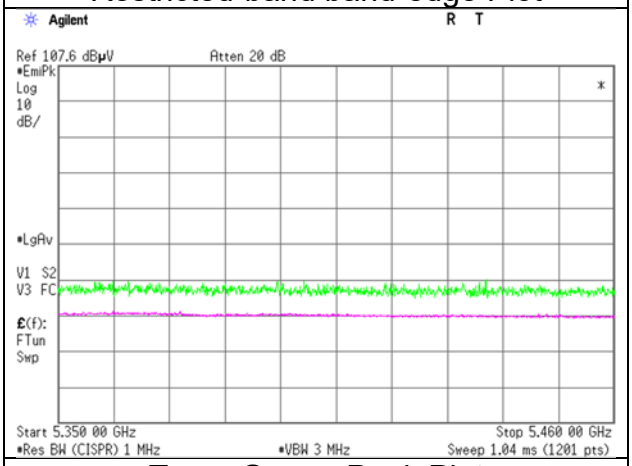
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 54] 5320 MHz |

Horizontal

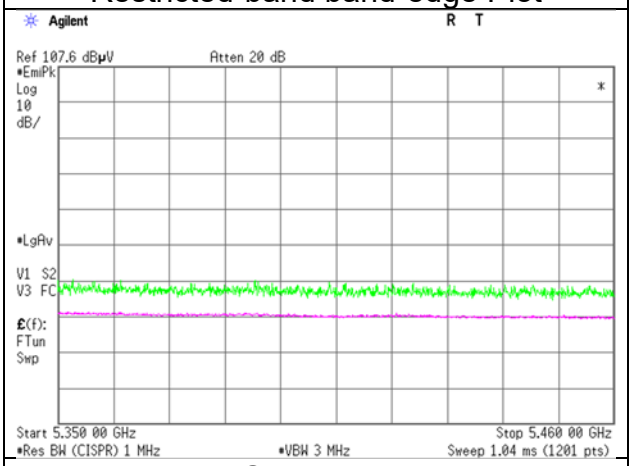
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5320 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 47.0 | 38.1 | 31.8 | 6.3 | 30.9 | 0.4 | 54.2 | 45.7 | 73.9 | 53.9 | 19.7 | 8.2 | *1) |
| Vert. | 5350.0 | 48.0 | 39.3 | 31.8 | 6.3 | 30.9 | 0.4 | 55.2 | 46.9 | 73.9 | 53.9 | 18.7 | 7.0 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

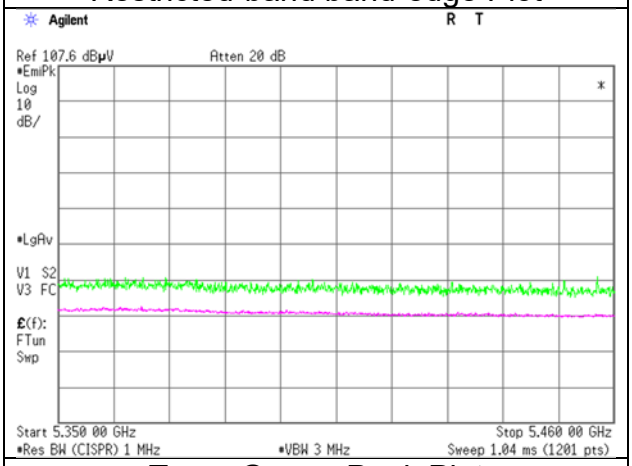
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5320 MHz |

Horizontal

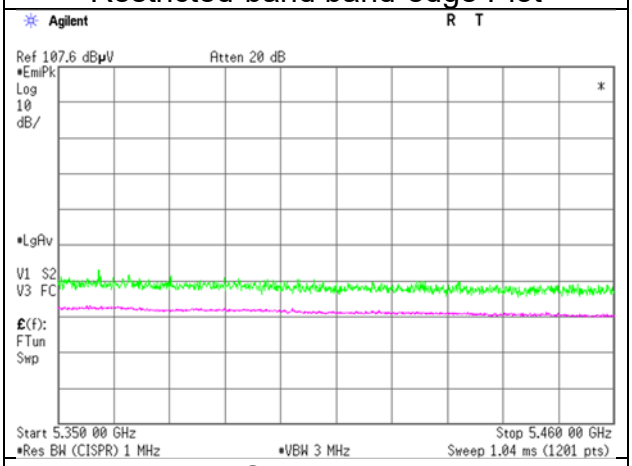
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 0] 5500 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 42.1 | 33.6 | 32.1 | 6.4 | 30.9 | 0.3 | 49.6 | 41.3 | 68.2 | 53.9 | 18.6 | 12.6 | *1) |
| Hori. | 5470.0 | 42.5 | - | 32.1 | 6.4 | 30.9 | - | 50.0 | - | 68.2 | - | 18.2 | - | |
| Vert. | 5460.0 | 42.2 | 33.9 | 32.1 | 6.4 | 30.9 | 0.3 | 49.7 | 41.6 | 68.2 | 53.9 | 18.5 | 12.3 | *1) |
| Vert. | 5470.0 | 43.1 | - | 32.1 | 6.4 | 30.9 | - | 50.6 | - | 68.2 | - | 17.6 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

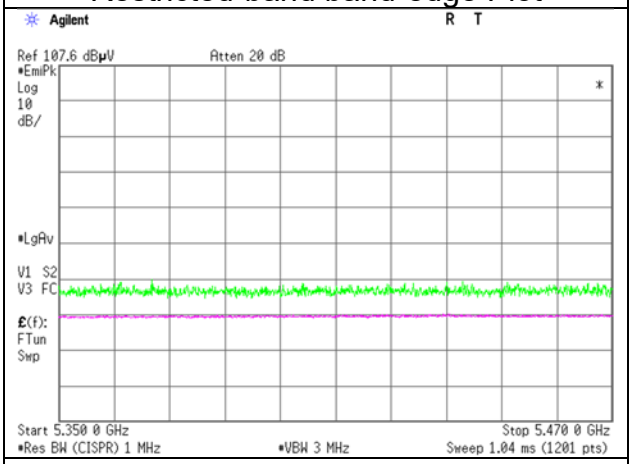
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 0] 5500 MHz |

Horizontal

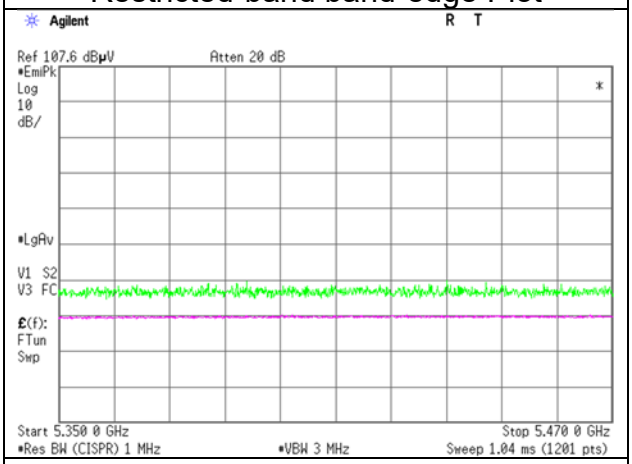
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 37] 5500 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 44.5 | 35.1 | 32.1 | 6.4 | 30.9 | 0.3 | 52.0 | 42.9 | 68.2 | 53.9 | 16.2 | 11.0 | *1) |
| Hori. | 5470.0 | 45.0 | - | 32.1 | 6.4 | 30.9 | - | 52.5 | - | 68.2 | - | 15.7 | - | |
| Vert. | 5460.0 | 44.3 | 35.1 | 32.1 | 6.4 | 30.9 | 0.3 | 51.8 | 42.9 | 68.2 | 53.9 | 16.4 | 11.0 | *1) |
| Vert. | 5470.0 | 44.8 | - | 32.1 | 6.4 | 30.9 | - | 52.3 | - | 68.2 | - | 15.9 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

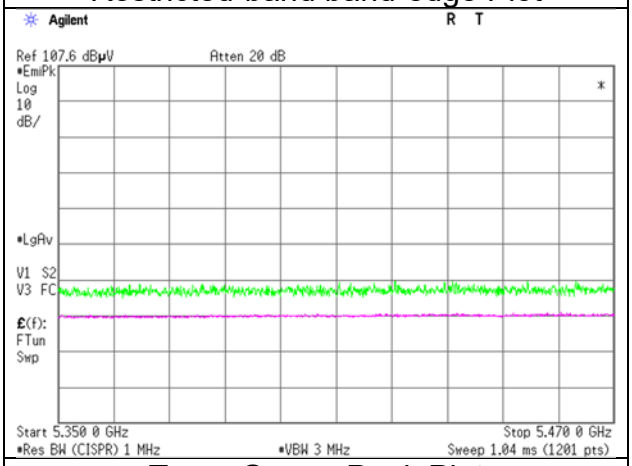
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 37] 5500 MHz |

Horizontal

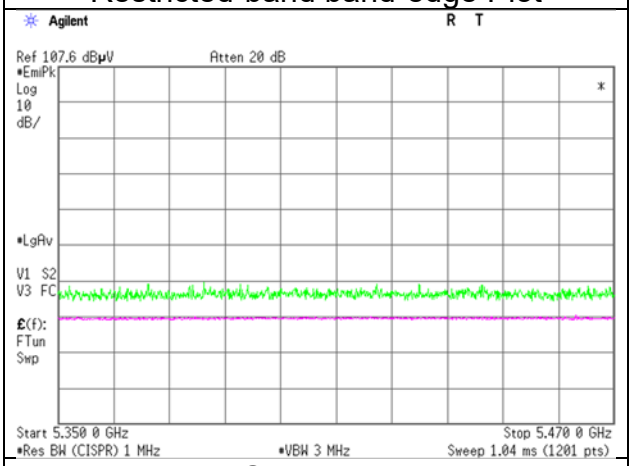
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 53] 5500 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 45.8 | 36.0 | 32.1 | 6.4 | 30.9 | 0.3 | 53.3 | 43.8 | 68.2 | 53.9 | 14.9 | 10.1 | *1) |
| Hori. | 5470.0 | 45.3 | - | 32.1 | 6.4 | 30.9 | - | 52.9 | - | 68.2 | - | 15.3 | - | |
| Vert. | 5460.0 | 44.8 | 36.4 | 32.1 | 6.4 | 30.9 | 0.3 | 52.3 | 44.2 | 68.2 | 53.9 | 15.9 | 9.7 | *1) |
| Vert. | 5470.0 | 46.4 | - | 32.1 | 6.4 | 30.9 | - | 54.0 | - | 68.2 | - | 14.3 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

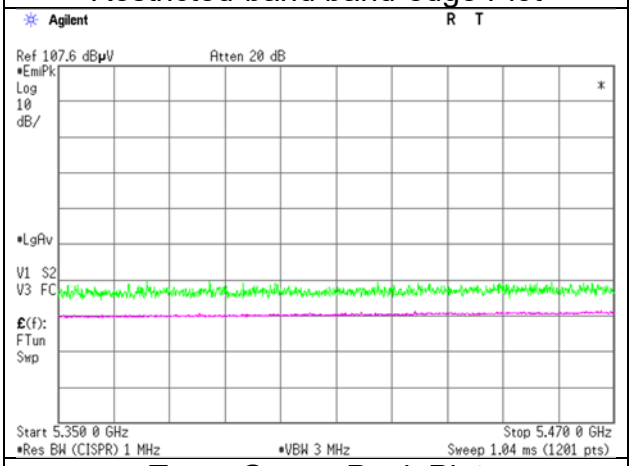
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 53] 5500 MHz |

Horizontal

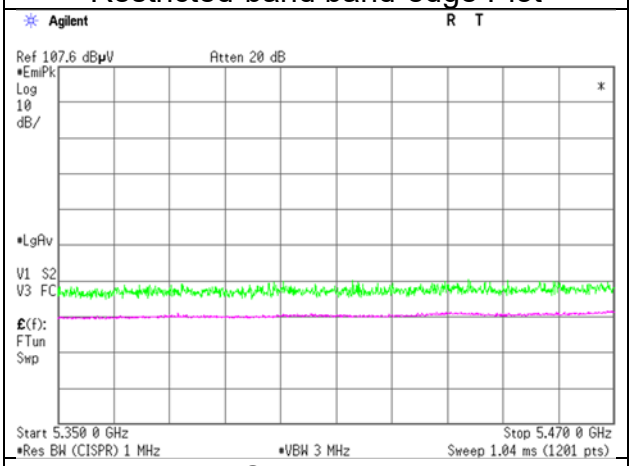
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5500 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 46.7 | 37.9 | 32.1 | 6.4 | 30.9 | 0.4 | 54.2 | 45.8 | 68.2 | 53.9 | 14.0 | 8.1 | *1) |
| Hori. | 5470.0 | 46.9 | - | 32.1 | 6.4 | 30.9 | - | 54.4 | - | 68.2 | - | 13.8 | - | |
| Vert. | 5460.0 | 49.2 | 39.0 | 32.1 | 6.4 | 30.9 | 0.4 | 56.7 | 46.8 | 68.2 | 53.9 | 11.5 | 7.1 | *1) |
| Vert. | 5470.0 | 49.3 | - | 32.1 | 6.4 | 30.9 | - | 56.8 | - | 68.2 | - | 11.4 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

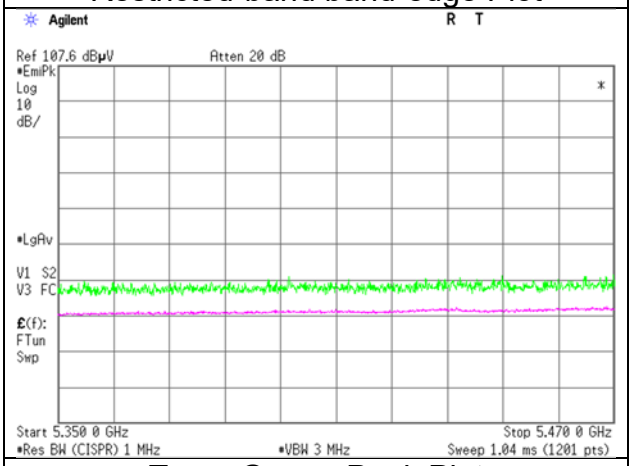
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 21, 2024 |
| Temperature / Humidity | 23 deg. C / 59 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5500 MHz |

Horizontal

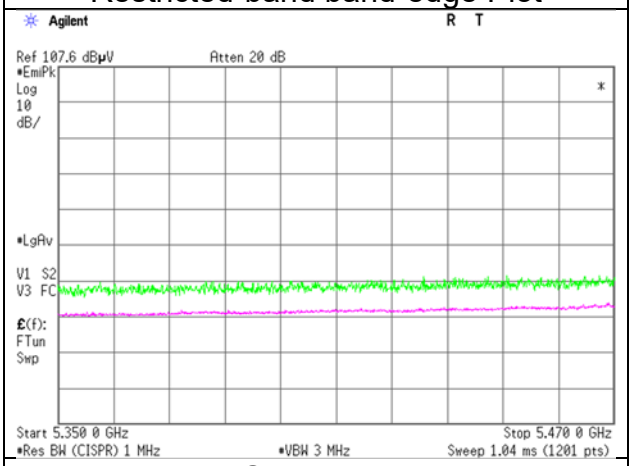
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 8] 5700 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 42.3 | - | 32.5 | 6.5 | 31.0 | - | 50.3 | - | 68.2 | - | 17.9 | - | |
| Vert. | 5725.0 | 41.7 | - | 32.5 | 6.5 | 31.0 | - | 49.7 | - | 68.2 | - | 18.5 | - | |

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

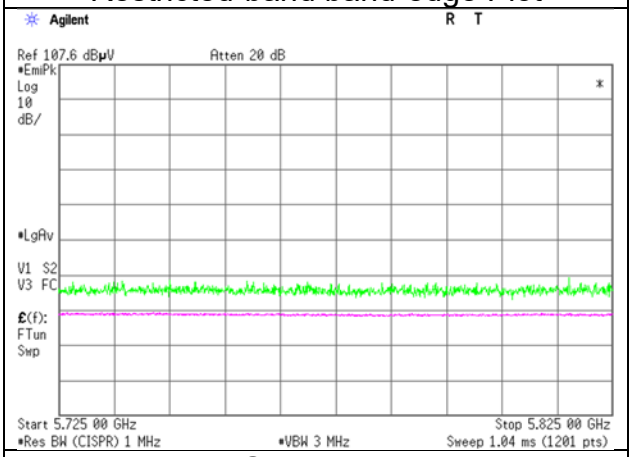
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 8] 5700 MHz |

Horizontal

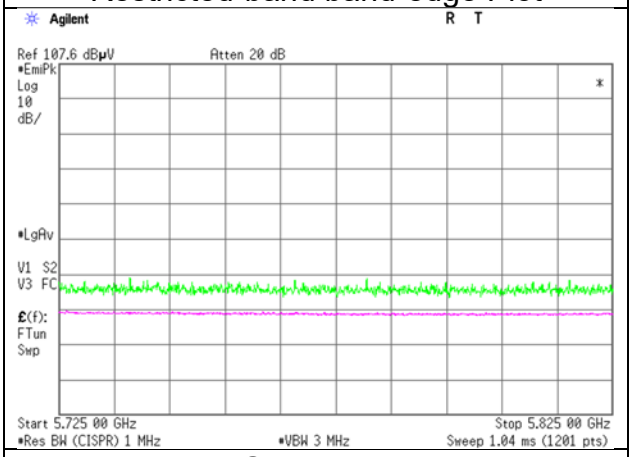
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 40] 5700 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 42.8 | - | 32.5 | 6.5 | 31.0 | - | 50.8 | - | 68.2 | - | 17.4 | - | |
| Vert. | 5725.0 | 43.1 | - | 32.5 | 6.5 | 31.0 | - | 51.1 | - | 68.2 | - | 17.1 | - | |

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

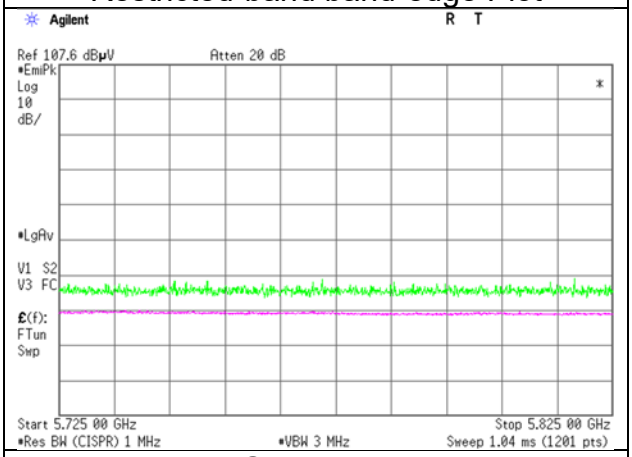
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 40] 5700 MHz |

Horizontal

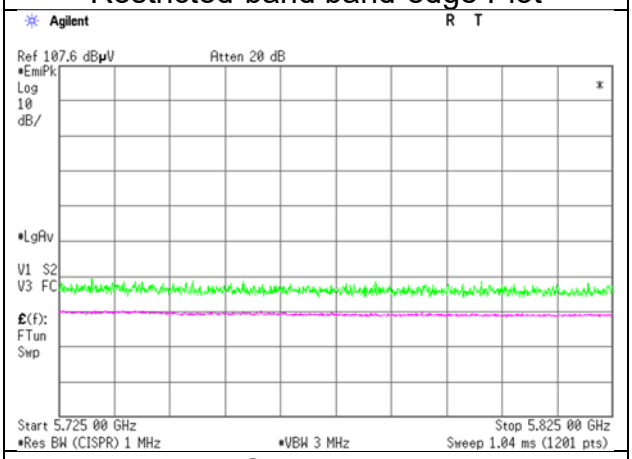
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 54] 5700 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 44.7 | - | 32.5 | 6.5 | 31.0 | - | 52.7 | - | 68.2 | - | 15.5 | - | |
| Vert. | 5725.0 | 45.4 | - | 32.5 | 6.5 | 31.0 | - | 53.4 | - | 68.2 | - | 14.8 | - | |

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

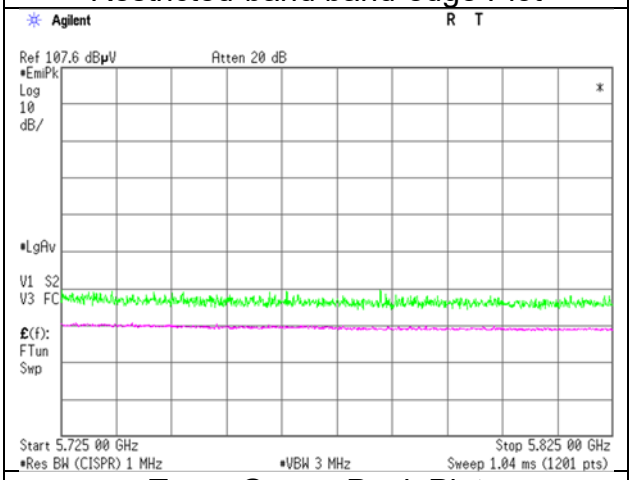
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 54] 5700 MHz |

Horizontal

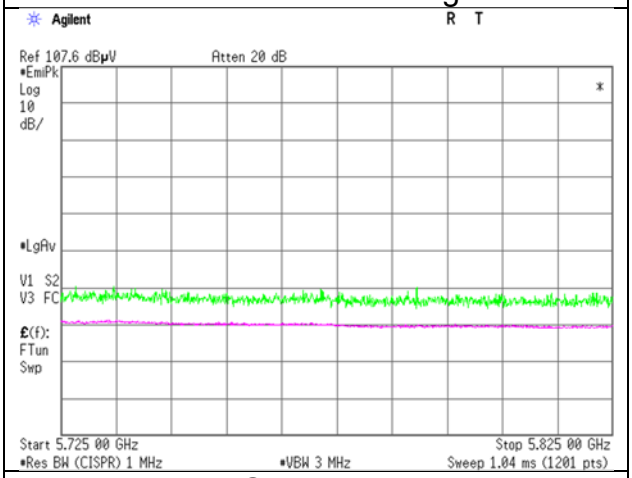
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5700 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 54.3 | - | 32.5 | 6.5 | 31.0 | - | 62.3 | - | 68.2 | - | 5.9 | - | |
| Vert. | 5725.0 | 51.9 | - | 32.5 | 6.5 | 31.0 | - | 59.9 | - | 68.2 | - | 8.3 | - | |

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

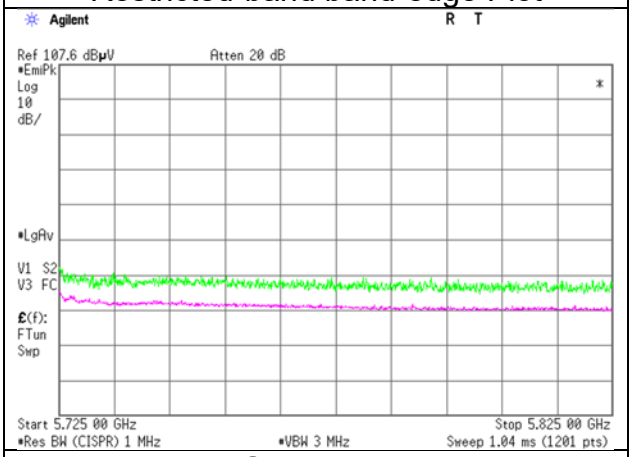
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5700 MHz |

Horizontal

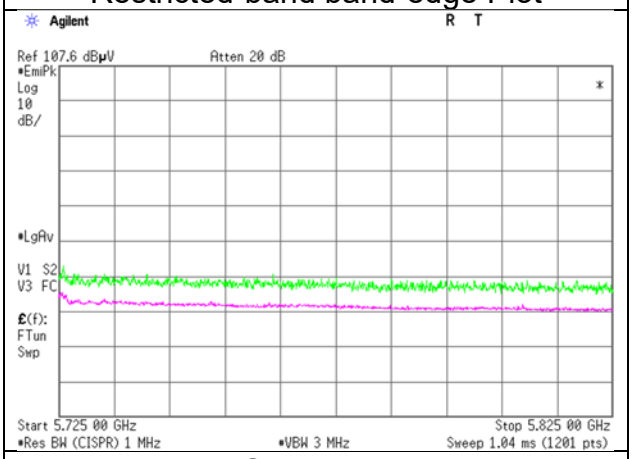
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 0] 5745 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 40.8 | - | 32.4 | 6.5 | 31.0 | - | 48.6 | - | 68.2 | - | 19.6 | - | |
| Hori. | 5700.0 | 41.2 | - | 32.5 | 6.5 | 31.0 | - | 49.2 | - | 105.2 | - | 56.0 | - | |
| Hori. | 5720.0 | 41.8 | - | 32.5 | 6.5 | 31.0 | - | 49.8 | - | 110.8 | - | 61.0 | - | |
| Hori. | 5725.0 | 55.1 | - | 32.5 | 6.5 | 31.0 | - | 63.1 | - | 122.2 | - | 59.1 | - | |
| Vert. | 5650.0 | 40.9 | - | 32.4 | 6.5 | 31.0 | - | 48.7 | - | 68.2 | - | 19.5 | - | |
| Vert. | 5700.0 | 41.2 | - | 32.5 | 6.5 | 31.0 | - | 49.1 | - | 105.2 | - | 56.1 | - | |
| Vert. | 5720.0 | 41.8 | - | 32.5 | 6.5 | 31.0 | - | 49.8 | - | 110.8 | - | 61.0 | - | |
| Vert. | 5725.0 | 56.2 | - | 32.5 | 6.5 | 31.0 | - | 64.2 | - | 122.2 | - | 58.0 | - | |

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

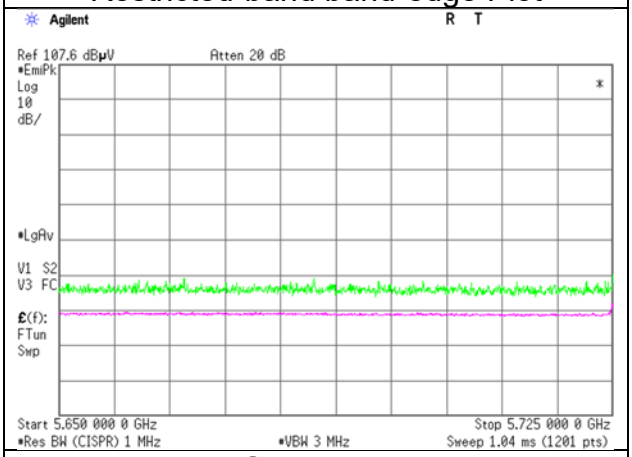
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 0] 5745 MHz |

Horizontal

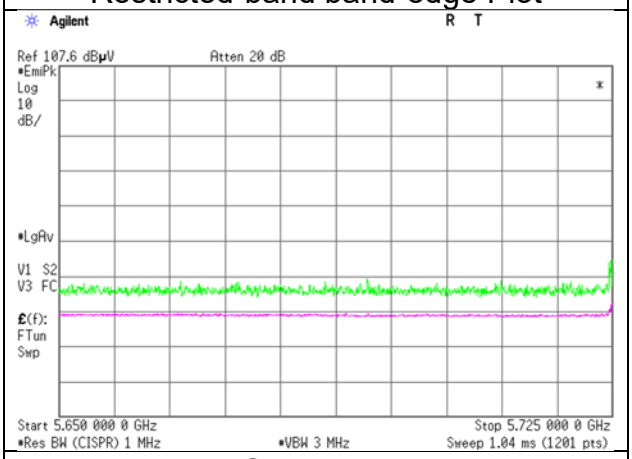
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 37] 5745 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 41.5 | - | 32.4 | 6.5 | 31.0 | - | 49.4 | - | 68.2 | - | 18.9 | - | |
| Hori. | 5700.0 | 42.3 | - | 32.5 | 6.5 | 31.0 | - | 50.2 | - | 105.2 | - | 55.0 | - | |
| Hori. | 5720.0 | 43.4 | - | 32.5 | 6.5 | 31.0 | - | 51.4 | - | 110.8 | - | 59.5 | - | |
| Hori. | 5725.0 | 56.3 | - | 32.5 | 6.5 | 31.0 | - | 64.3 | - | 122.2 | - | 57.9 | - | |
| Vert. | 5650.0 | 41.5 | - | 32.4 | 6.5 | 31.0 | - | 49.3 | - | 68.2 | - | 18.9 | - | |
| Vert. | 5700.0 | 42.9 | - | 32.5 | 6.5 | 31.0 | - | 50.8 | - | 105.2 | - | 54.4 | - | |
| Vert. | 5720.0 | 43.2 | - | 32.5 | 6.5 | 31.0 | - | 51.2 | - | 110.8 | - | 59.6 | - | |
| Vert. | 5725.0 | 59.7 | - | 32.5 | 6.5 | 31.0 | - | 67.7 | - | 122.2 | - | 54.5 | - | |

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

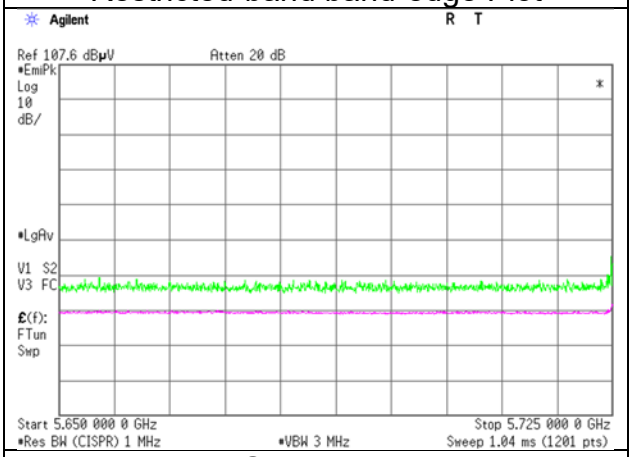
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 37] 5745 MHz |

Horizontal

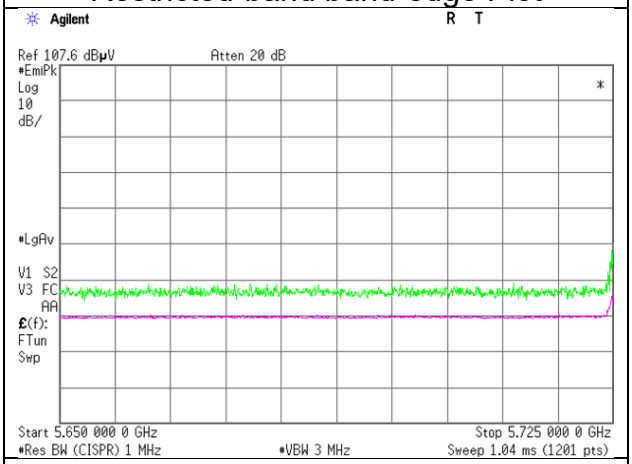
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 53] 5745 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 42.5 | - | 32.4 | 6.5 | 31.0 | - | 50.3 | - | 68.2 | - | 17.9 | - | |
| Hori. | 5700.0 | 43.7 | - | 32.5 | 6.5 | 31.0 | - | 51.6 | - | 105.2 | - | 53.6 | - | |
| Hori. | 5720.0 | 44.2 | - | 32.5 | 6.5 | 31.0 | - | 52.2 | - | 110.8 | - | 58.6 | - | |
| Hori. | 5725.0 | 61.0 | - | 32.5 | 6.5 | 31.0 | - | 69.1 | - | 122.2 | - | 53.2 | - | |
| Vert. | 5650.0 | 42.9 | - | 32.4 | 6.5 | 31.0 | - | 50.7 | - | 68.2 | - | 17.5 | - | |
| Vert. | 5700.0 | 44.8 | - | 32.5 | 6.5 | 31.0 | - | 52.7 | - | 105.2 | - | 52.5 | - | |
| Vert. | 5720.0 | 45.1 | - | 32.5 | 6.5 | 31.0 | - | 53.1 | - | 110.8 | - | 57.7 | - | |
| Vert. | 5725.0 | 62.5 | - | 32.5 | 6.5 | 31.0 | - | 70.5 | - | 122.2 | - | 51.7 | - | |

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

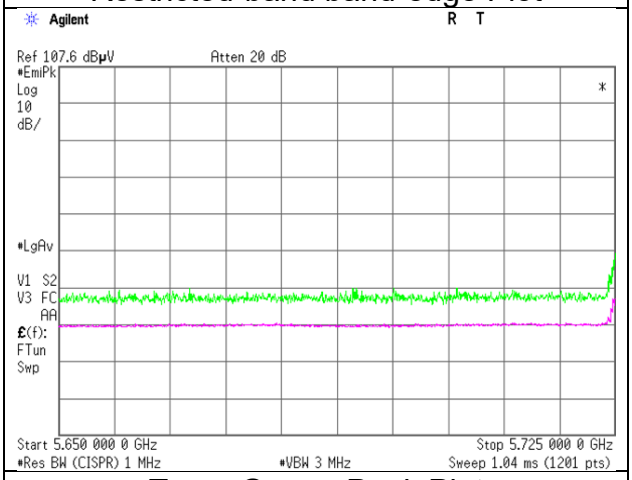
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 53] 5745 MHz |

Horizontal

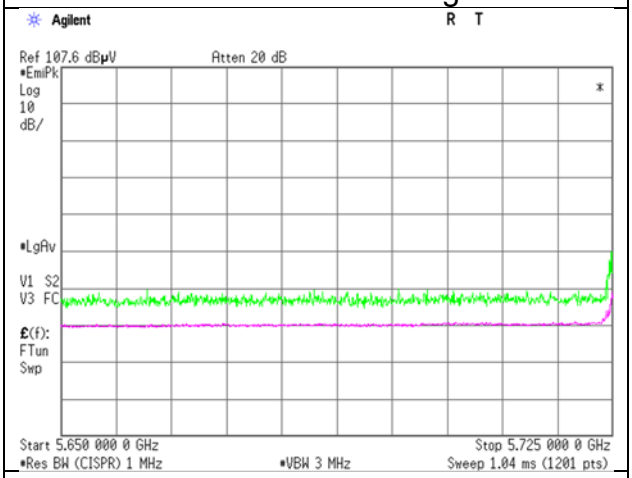
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5745 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 43.8 | - | 32.4 | 6.5 | 31.0 | - | 51.6 | - | 68.2 | - | 16.6 | - | |
| Hori. | 5700.0 | 44.4 | - | 32.5 | 6.5 | 31.0 | - | 52.4 | - | 105.2 | - | 52.8 | - | |
| Hori. | 5720.0 | 50.1 | - | 32.5 | 6.5 | 31.0 | - | 58.1 | - | 110.8 | - | 52.7 | - | |
| Hori. | 5725.0 | 61.5 | - | 32.5 | 6.5 | 31.0 | - | 69.5 | - | 122.2 | - | 52.7 | - | |
| Vert. | 5650.0 | 43.2 | - | 32.4 | 6.5 | 31.0 | - | 51.0 | - | 68.2 | - | 17.2 | - | |
| Vert. | 5700.0 | 45.0 | - | 32.5 | 6.5 | 31.0 | - | 52.9 | - | 105.2 | - | 52.3 | - | |
| Vert. | 5720.0 | 52.9 | - | 32.5 | 6.5 | 31.0 | - | 60.9 | - | 110.8 | - | 49.9 | - | |
| Vert. | 5725.0 | 63.4 | - | 32.5 | 6.5 | 31.0 | - | 71.5 | - | 122.2 | - | 50.8 | - | |

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

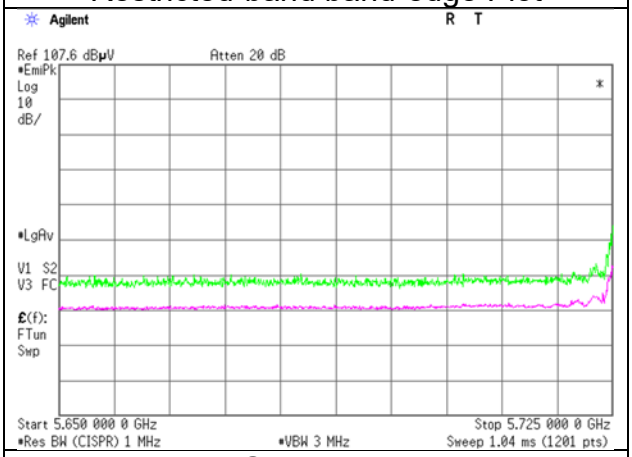
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5745 MHz |

Horizontal

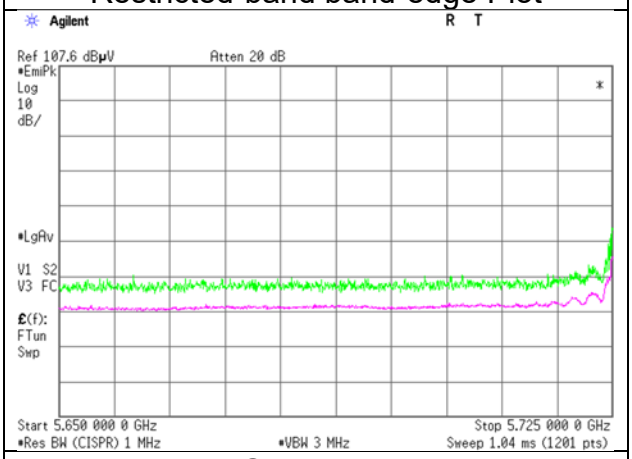
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 8] 5825 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5850.0 | 42.1 | - | 32.8 | 6.5 | 31.1 | - | 50.4 | - | 122.2 | - | 71.8 | - | |
| Hori. | 5855.0 | 41.6 | - | 32.8 | 6.5 | 31.1 | - | 49.9 | - | 110.8 | - | 60.9 | - | |
| Hori. | 5875.0 | 41.3 | - | 32.8 | 6.6 | 31.1 | - | 49.6 | - | 105.2 | - | 55.6 | - | |
| Hori. | 5925.0 | 40.9 | - | 32.8 | 6.6 | 31.1 | - | 49.3 | - | 68.2 | - | 19.0 | - | |
| Vert. | 5850.0 | 42.2 | - | 32.8 | 6.5 | 31.1 | - | 50.5 | - | 122.2 | - | 71.8 | - | |
| Vert. | 5855.0 | 41.8 | - | 32.8 | 6.5 | 31.1 | - | 50.1 | - | 110.8 | - | 60.7 | - | |
| Vert. | 5875.0 | 41.6 | - | 32.8 | 6.6 | 31.1 | - | 49.8 | - | 105.2 | - | 55.4 | - | |
| Vert. | 5925.0 | 40.9 | - | 32.8 | 6.6 | 31.1 | - | 49.2 | - | 68.2 | - | 19.0 | - | |

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

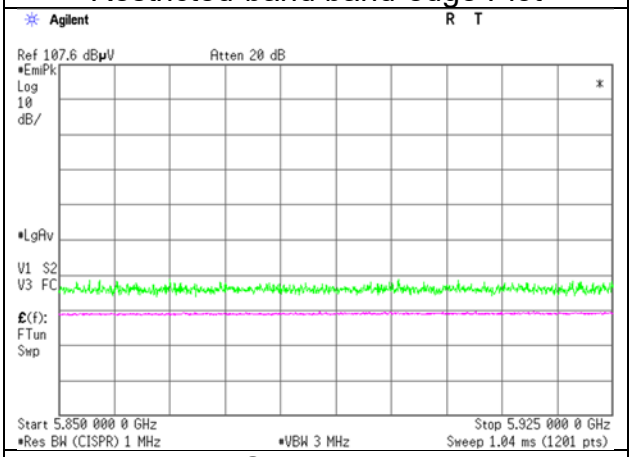
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [26-tone RU/Index 8] 5825 MHz |

Horizontal

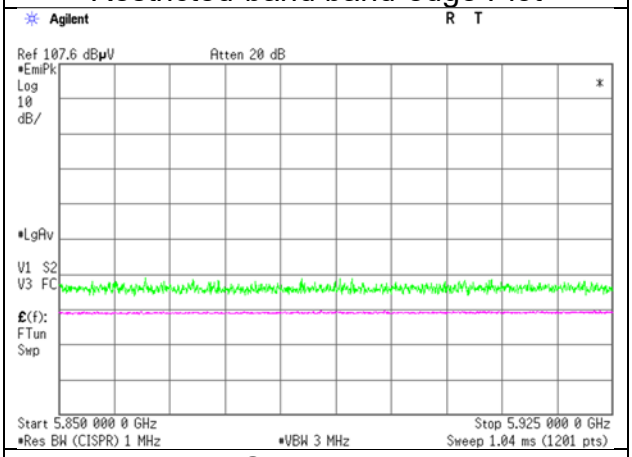
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 40] 5825 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5850.0 | 43.2 | - | 32.8 | 6.5 | 31.1 | - | 51.4 | - | 122.2 | - | 70.8 | - | |
| Hori. | 5855.0 | 42.6 | - | 32.8 | 6.5 | 31.1 | - | 50.8 | - | 110.8 | - | 60.0 | - | |
| Hori. | 5875.0 | 42.5 | - | 32.8 | 6.6 | 31.1 | - | 50.8 | - | 105.2 | - | 54.4 | - | |
| Hori. | 5925.0 | 42.0 | - | 32.8 | 6.6 | 31.1 | - | 50.3 | - | 68.2 | - | 17.9 | - | |
| Vert. | 5850.0 | 43.7 | - | 32.8 | 6.5 | 31.1 | - | 52.0 | - | 122.2 | - | 70.2 | - | |
| Vert. | 5855.0 | 42.9 | - | 32.8 | 6.5 | 31.1 | - | 51.2 | - | 110.8 | - | 59.6 | - | |
| Vert. | 5875.0 | 42.7 | - | 32.8 | 6.6 | 31.1 | - | 51.0 | - | 105.2 | - | 54.2 | - | |
| Vert. | 5925.0 | 41.8 | - | 32.8 | 6.6 | 31.1 | - | 50.1 | - | 68.2 | - | 18.1 | - | |

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

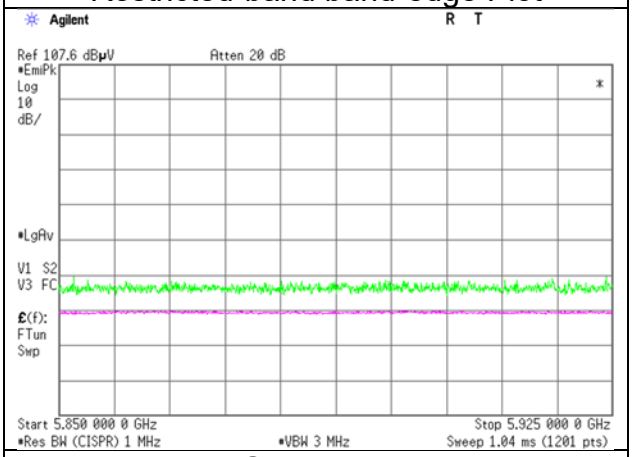
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [52-tone RU/Index 40] 5825 MHz |

Horizontal

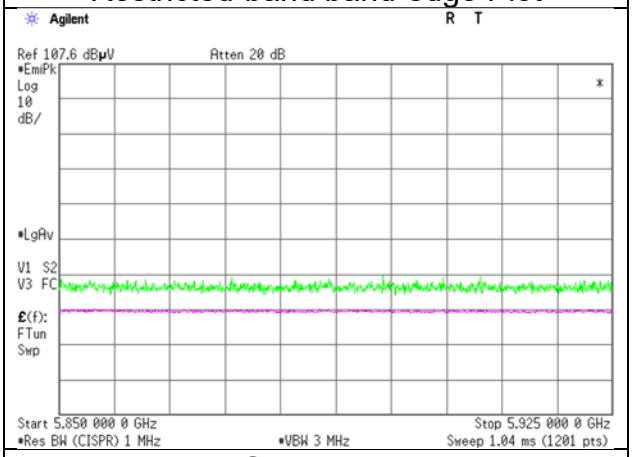
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 54] 5825 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5850.0 | 44.5 | - | 32.8 | 6.5 | 31.1 | - | 52.7 | - | 122.2 | - | 69.5 | - | |
| Hori. | 5855.0 | 43.6 | - | 32.8 | 6.5 | 31.1 | - | 51.9 | - | 110.8 | - | 58.9 | - | |
| Hori. | 5875.0 | 43.0 | - | 32.8 | 6.6 | 31.1 | - | 51.3 | - | 105.2 | - | 53.9 | - | |
| Hori. | 5925.0 | 42.1 | - | 32.8 | 6.6 | 31.1 | - | 50.4 | - | 68.2 | - | 17.8 | - | |
| Vert. | 5850.0 | 44.9 | - | 32.8 | 6.5 | 31.1 | - | 53.2 | - | 122.2 | - | 69.0 | - | |
| Vert. | 5855.0 | 43.9 | - | 32.8 | 6.5 | 31.1 | - | 52.2 | - | 110.8 | - | 58.6 | - | |
| Vert. | 5875.0 | 43.5 | - | 32.8 | 6.6 | 31.1 | - | 51.8 | - | 105.2 | - | 53.4 | - | |
| Vert. | 5925.0 | 43.2 | - | 32.8 | 6.6 | 31.1 | - | 51.5 | - | 68.2 | - | 16.7 | - | |

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

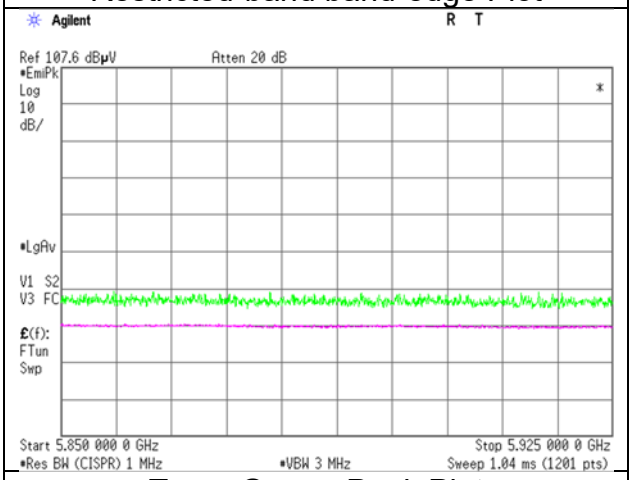
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [106-tone RU/Index 54] 5825 MHz |

Horizontal

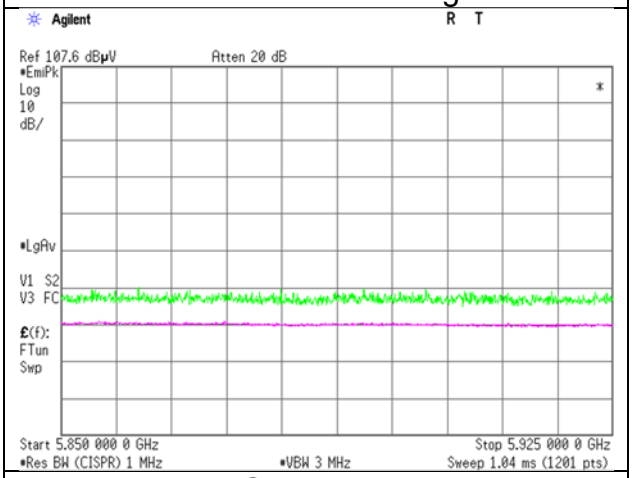
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5825 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5850.0 | 50.1 | - | 32.8 | 6.5 | 31.1 | - | 58.4 | - | 122.2 | - | 63.9 | - | |
| Hori. | 5855.0 | 47.7 | - | 32.8 | 6.5 | 31.1 | - | 55.9 | - | 110.8 | - | 54.9 | - | |
| Hori. | 5875.0 | 45.8 | - | 32.8 | 6.6 | 31.1 | - | 54.1 | - | 105.2 | - | 51.1 | - | |
| Hori. | 5925.0 | 44.7 | - | 32.8 | 6.6 | 31.1 | - | 53.0 | - | 68.2 | - | 15.2 | - | |
| Vert. | 5850.0 | 51.9 | - | 32.8 | 6.5 | 31.1 | - | 60.1 | - | 122.2 | - | 62.1 | - | |
| Vert. | 5855.0 | 49.2 | - | 32.8 | 6.5 | 31.1 | - | 57.5 | - | 110.8 | - | 53.3 | - | |
| Vert. | 5875.0 | 46.7 | - | 32.8 | 6.6 | 31.1 | - | 54.9 | - | 105.2 | - | 50.3 | - | |
| Vert. | 5925.0 | 45.0 | - | 32.8 | 6.6 | 31.1 | - | 53.3 | - | 68.2 | - | 14.9 | - | |

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

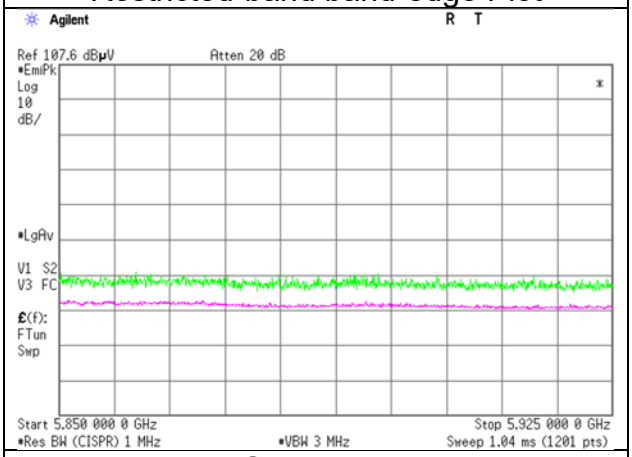
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-20 [242-tone RU/Index 61] 5825 MHz |

Horizontal

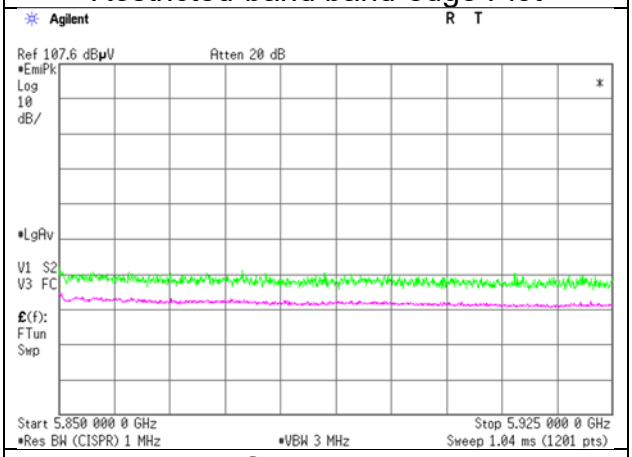
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 23 deg. C / 68 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Kiyoshiro Okazaki (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5190 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 50.2 | 40.9 | 32.2 | 6.3 | 30.9 | - | 57.8 | 48.4 | 73.9 | 53.9 | 16.1 | 5.5 | |
| Hori. | 10380.0 | 43.1 | - | 35.9 | -3.1 | 32.6 | - | 43.4 | - | 68.2 | - | 24.8 | - | |
| Hori. | 15570.0 | 43.6 | 35.8 | 39.3 | -1.9 | 32.2 | - | 48.8 | 41.0 | 73.9 | 53.9 | 25.1 | 12.9 | Floor noise |
| Vert. | 5150.0 | 50.7 | 41.4 | 32.2 | 6.3 | 30.9 | - | 58.2 | 49.0 | 73.9 | 53.9 | 15.7 | 4.9 | |
| Vert. | 10380.0 | 44.1 | - | 35.9 | -3.1 | 32.6 | - | 44.4 | - | 68.2 | - | 23.8 | - | |
| Vert. | 15570.0 | 43.7 | 36.1 | 39.3 | -1.9 | 32.2 | - | 48.9 | 41.3 | 73.9 | 53.9 | 25.0 | 12.6 | Floor noise |

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

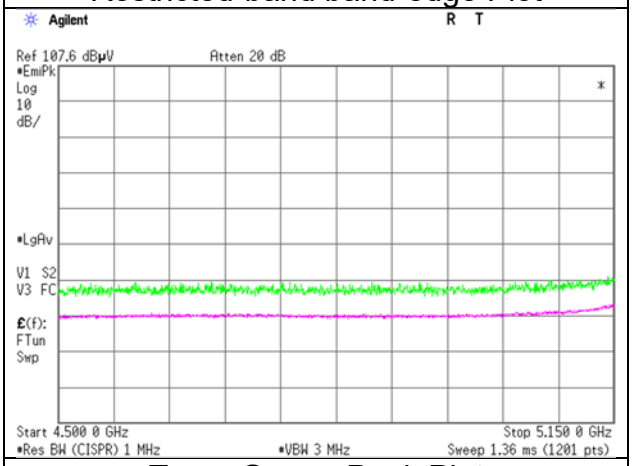
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 23 deg. C / 68 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5190 MHz |

Horizontal

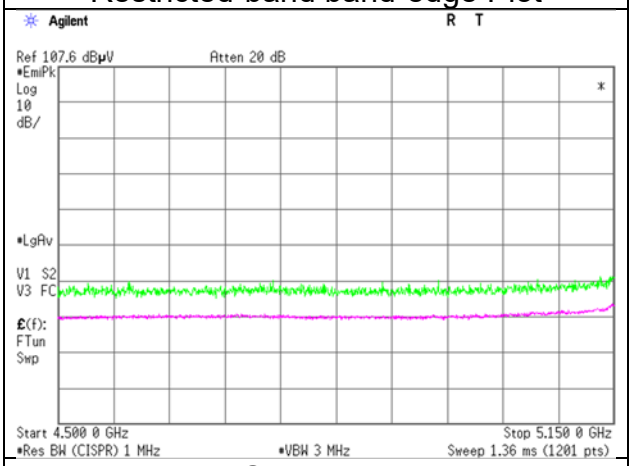
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5270 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 10540.0 | 44.7 | - | 36.2 | -3.0 | 32.7 | - | 45.3 | - | 68.2 | - | 22.9 | - | |
| Hori. | 15810.0 | 43.3 | 35.6 | 39.7 | -1.8 | 32.2 | - | 48.9 | 41.2 | 73.9 | 53.9 | 25.0 | 12.7 | Floor noise |
| Vert. | 10540.0 | 45.6 | - | 36.2 | -3.0 | 32.7 | - | 46.2 | - | 68.2 | - | 22.1 | - | |
| Vert. | 15810.0 | 43.3 | 35.3 | 39.7 | -1.8 | 32.2 | - | 48.9 | 40.9 | 73.9 | 53.9 | 25.0 | 13.0 | Floor noise |

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

| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5310 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 52.4 | 42.4 | 31.8 | 6.3 | 30.9 | - | 59.6 | 49.6 | 73.9 | 53.9 | 14.3 | 4.3 | |
| Hori. | 10620.0 | 44.6 | 36.2 | 36.6 | -3.0 | 32.7 | - | 45.5 | 37.1 | 73.9 | 53.9 | 28.4 | 16.8 | |
| Hori. | 15930.0 | 43.5 | 35.4 | 39.9 | -1.8 | 32.2 | - | 49.3 | 41.2 | 73.9 | 53.9 | 24.6 | 12.7 | Floor noise |
| Vert. | 5350.0 | 54.4 | 44.4 | 31.8 | 6.3 | 30.9 | - | 61.6 | 51.6 | 73.9 | 53.9 | 12.3 | 2.3 | |
| Vert. | 10620.0 | 45.2 | 37.1 | 36.6 | -3.0 | 32.7 | - | 46.1 | 38.0 | 73.9 | 53.9 | 27.8 | 16.0 | |
| Vert. | 15930.0 | 43.9 | 35.5 | 39.9 | -1.8 | 32.2 | - | 49.7 | 41.3 | 73.9 | 53.9 | 24.2 | 12.6 | Floor noise |

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

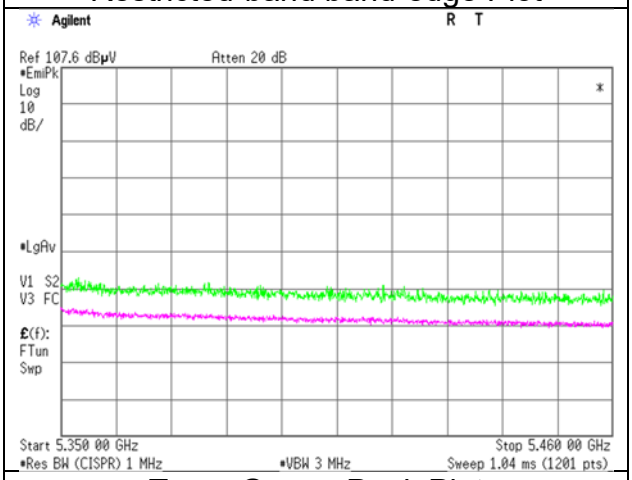
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5310 MHz |

Horizontal

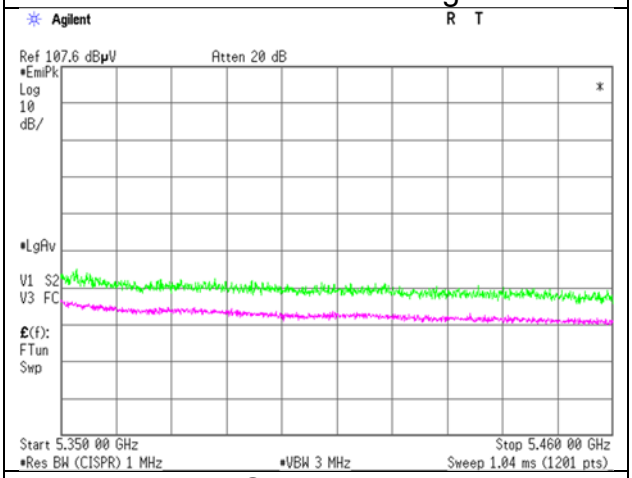
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5510 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 51.1 | 41.1 | 32.1 | 6.4 | 30.9 | - | 58.6 | 48.6 | 68.2 | 53.9 | 9.6 | 5.3 | |
| Hori. | 5470.0 | 55.0 | - | 32.1 | 6.4 | 30.9 | - | 62.5 | - | 68.2 | - | 5.7 | - | |
| Hori. | 11020.0 | 47.0 | 38.9 | 37.3 | -2.9 | 32.8 | - | 48.6 | 40.6 | 73.9 | 53.9 | 25.3 | 13.4 | |
| Hori. | 16530.0 | 42.9 | - | 39.8 | -1.7 | 32.3 | - | 48.8 | - | 68.2 | - | 19.5 | - | Floor noise |
| Vert. | 5460.0 | 52.9 | 42.2 | 32.1 | 6.4 | 30.9 | - | 60.4 | 49.7 | 68.2 | 53.9 | 7.8 | 4.2 | |
| Vert. | 5470.0 | 56.6 | - | 32.1 | 6.4 | 30.9 | - | 64.1 | - | 68.2 | - | 4.1 | - | |
| Vert. | 11020.0 | 48.2 | 39.5 | 37.3 | -2.9 | 32.8 | - | 49.9 | 41.2 | 73.9 | 53.9 | 24.0 | 12.7 | |
| Vert. | 16530.0 | 43.2 | - | 39.8 | -1.7 | 32.3 | - | 49.0 | - | 68.2 | - | 19.2 | - | Floor noise |

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

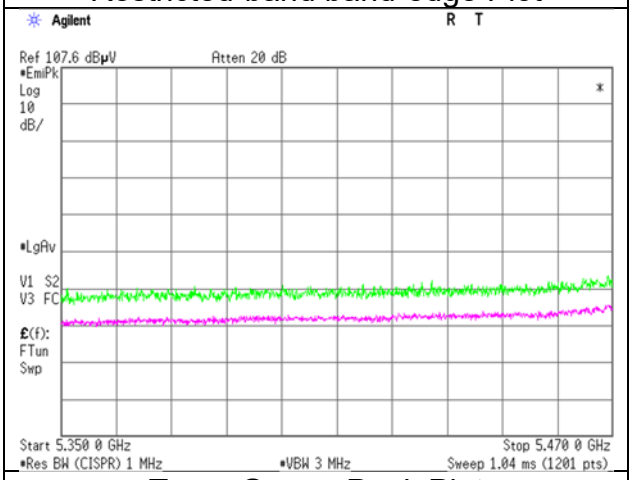
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5510 MHz |

Horizontal

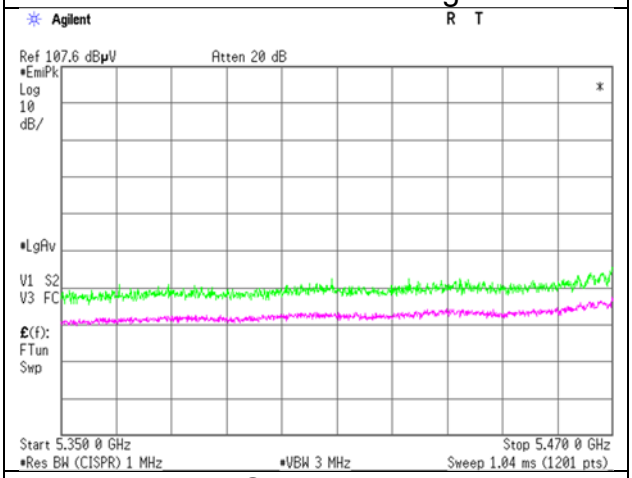
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) | Kiyoshiro Okazaki<br>(6 GHz to 10 GHz) | Kiyoshiro Okazaki<br>(10 GHz to 18 GHz) | Takafumi Noguchi<br>(18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi<br>(Above 26.5 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5550 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 11100.0 | 46.6 | 38.3 | 37.3 | -2.9 | 32.8 | - | 48.3 | 40.0 | 73.9 | 53.9 | 25.6 | 13.9 | |
| Hori. | 16650.0 | 43.7 | - | 39.7 | -1.6 | 32.3 | - | 49.4 | - | 68.2 | - | 18.8 | - | Floor noise |
| Vert. | 11100.0 | 46.6 | 38.5 | 37.3 | -2.9 | 32.8 | - | 48.2 | 40.2 | 73.9 | 53.9 | 25.7 | 13.7 | |
| Vert. | 16650.0 | 43.4 | - | 39.7 | -1.6 | 32.3 | - | 49.1 | - | 68.2 | - | 19.1 | - | Floor noise |

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

| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5670 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 47.2 | - | 32.5 | 6.5 | 31.0 | - | 55.2 | - | 68.2 | - | 13.0 | - | |
| Hori. | 11340.0 | 45.4 | 37.6 | 37.6 | -2.8 | 32.7 | - | 47.4 | 39.7 | 73.9 | 53.9 | 26.5 | 14.2 | |
| Hori. | 17010.0 | 43.0 | - | 39.6 | -1.6 | 32.4 | - | 48.7 | - | 68.2 | - | 19.6 | - | Floor noise |
| Vert. | 5725.0 | 48.0 | - | 32.5 | 6.5 | 31.0 | - | 56.0 | - | 68.2 | - | 12.2 | - | |
| Vert. | 11340.0 | 44.2 | 35.8 | 37.6 | -2.8 | 32.7 | - | 46.2 | 37.8 | 73.9 | 53.9 | 27.7 | 16.1 | |
| Vert. | 17010.0 | 43.1 | - | 39.6 | -1.6 | 32.4 | - | 48.8 | - | 68.2 | - | 19.4 | - | Floor noise |

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

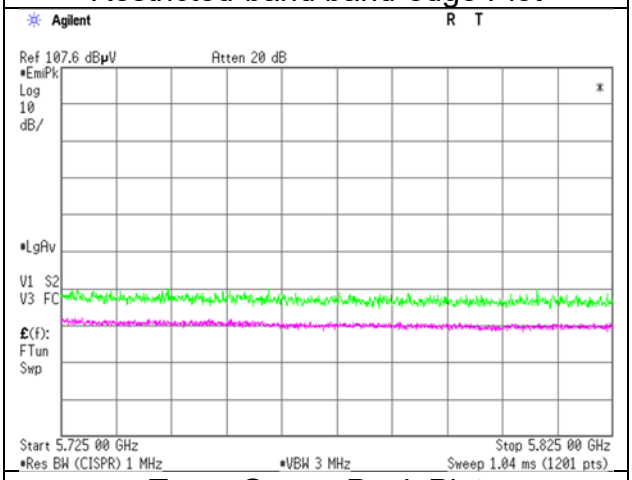
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5670 MHz |

Horizontal

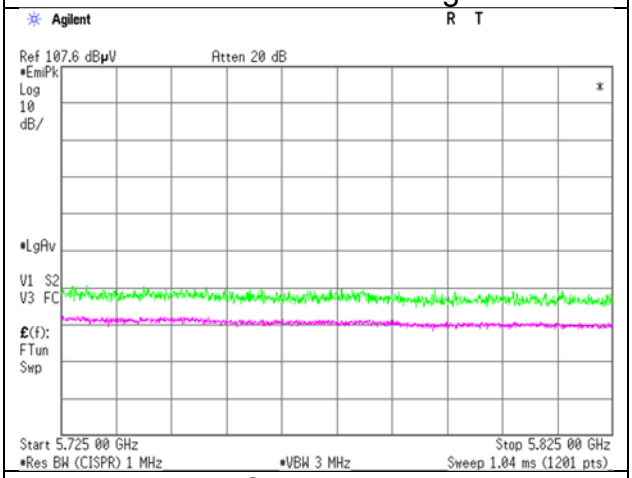
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5755 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 45.1 | - | 32.4 | 6.5 | 31.0 | - | 52.9 | - | 68.2 | - | 15.3 | - | |
| Hori. | 5700.0 | 46.4 | - | 32.5 | 6.5 | 31.0 | - | 54.3 | - | 105.2 | - | 50.9 | - | |
| Hori. | 5720.0 | 54.7 | - | 32.5 | 6.5 | 31.0 | - | 62.7 | - | 110.8 | - | 48.1 | - | |
| Hori. | 5725.0 | 56.1 | - | 32.5 | 6.5 | 31.0 | - | 64.1 | - | 122.2 | - | 58.1 | - | |
| Hori. | 11510.0 | 43.0 | 35.3 | 37.7 | -2.8 | 32.7 | - | 45.3 | 37.5 | 73.9 | 53.9 | 28.7 | 16.4 | |
| Hori. | 17265.0 | 43.7 | - | 39.9 | -1.5 | 32.4 | - | 49.7 | - | 68.2 | - | 18.5 | - | Floor noise |
| Vert. | 5650.0 | 46.2 | - | 32.4 | 6.5 | 31.0 | - | 54.0 | - | 68.2 | - | 14.2 | - | |
| Vert. | 5700.0 | 47.4 | - | 32.5 | 6.5 | 31.0 | - | 55.3 | - | 105.2 | - | 49.9 | - | |
| Vert. | 5720.0 | 54.5 | - | 32.5 | 6.5 | 31.0 | - | 62.5 | - | 110.8 | - | 48.3 | - | |
| Vert. | 5725.0 | 56.3 | - | 32.5 | 6.5 | 31.0 | - | 64.3 | - | 122.2 | - | 57.9 | - | |
| Vert. | 11510.0 | 43.9 | 34.5 | 37.7 | -2.8 | 32.7 | - | 46.2 | 36.7 | 73.9 | 53.9 | 27.8 | 17.2 | |
| Vert. | 17265.0 | 43.4 | - | 39.9 | -1.5 | 32.4 | - | 49.5 | - | 68.2 | - | 18.7 | - | Floor noise |

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

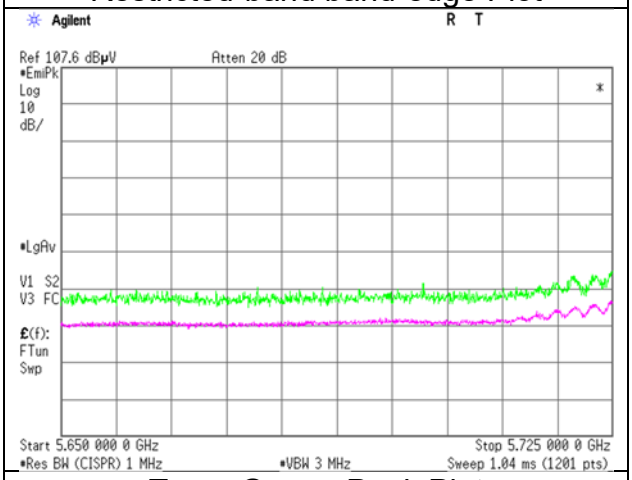
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5755 MHz |

Horizontal

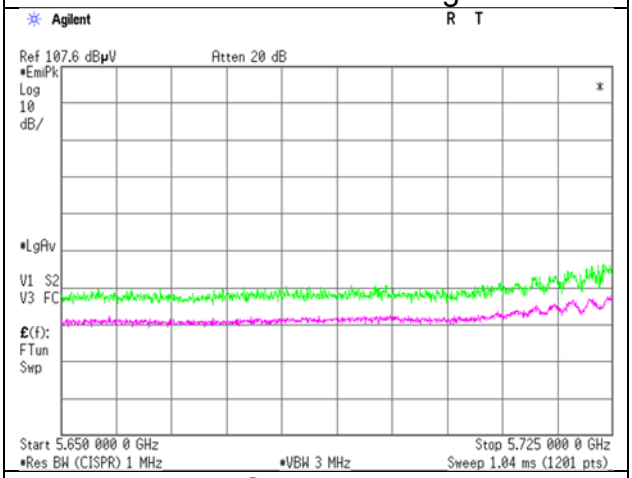
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | | | | |
|---|---|---|---|---|
| Test place | Ise EMC Lab. | | | |
| Semi Anechoic Chamber | No.4 | No.4 | No.4 | No.4 |
| Date | July 19, 2024 | July 24, 2024 | July 25, 2024 | July 26, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH | 22 deg. C / 62 % RH | 23 deg. C / 63 % RH | 22 deg. C / 56 % RH |
| Engineer | Takafumi Noguchi (1 GHz to 6 GHz) | Kiyoshiro Okazaki (6 GHz to 10 GHz) | Kiyoshiro Okazaki (10 GHz to 18 GHz) | Takafumi Noguchi (18 GHz to 26.5 GHz) |

| | |
|---|---|
| Semi Anechoic Chamber | No.4 |
| Date | July 28, 2024 |
| Temperature / Humidity | 23 deg. C / 58 % RH |
| Engineer | Takafumi Noguchi (Above 26.5 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5795 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5850.0 | 48.0 | - | 32.8 | 6.5 | 31.1 | - | 56.3 | - | 122.2 | - | 65.9 | - | |
| Hori. | 5855.0 | 47.6 | - | 32.8 | 6.5 | 31.1 | - | 55.9 | - | 110.8 | - | 54.9 | - | |
| Hori. | 5875.0 | 46.3 | - | 32.8 | 6.6 | 31.1 | - | 54.6 | - | 105.2 | - | 50.6 | - | |
| Hori. | 5925.0 | 44.5 | - | 32.8 | 6.6 | 31.1 | - | 52.8 | - | 68.2 | - | 15.4 | - | |
| Hori. | 11590.0 | 41.4 | 33.8 | 37.7 | -2.8 | 32.7 | - | 43.7 | 36.1 | 73.9 | 53.9 | 30.2 | 17.8 | |
| Hori. | 17385.0 | 42.9 | - | 40.0 | -1.4 | 32.4 | - | 49.1 | - | 68.2 | - | 19.2 | - | Floor noise |
| Vert. | 5850.0 | 47.7 | - | 32.8 | 6.5 | 31.1 | - | 56.0 | - | 122.2 | - | 66.2 | - | |
| Vert. | 5855.0 | 47.3 | - | 32.8 | 6.5 | 31.1 | - | 55.6 | - | 110.8 | - | 55.2 | - | |
| Vert. | 5875.0 | 46.2 | - | 32.8 | 6.6 | 31.1 | - | 54.5 | - | 105.2 | - | 50.7 | - | |
| Vert. | 5925.0 | 44.5 | - | 32.8 | 6.6 | 31.1 | - | 52.8 | - | 68.2 | - | 15.4 | - | |
| Vert. | 11590.0 | 42.0 | 33.6 | 37.7 | -2.8 | 32.7 | - | 44.3 | 35.9 | 73.9 | 53.9 | 29.6 | 18.0 | |
| Vert. | 17385.0 | 43.0 | - | 40.0 | -1.4 | 32.4 | - | 49.2 | - | 68.2 | - | 19.0 | - | Floor noise |

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

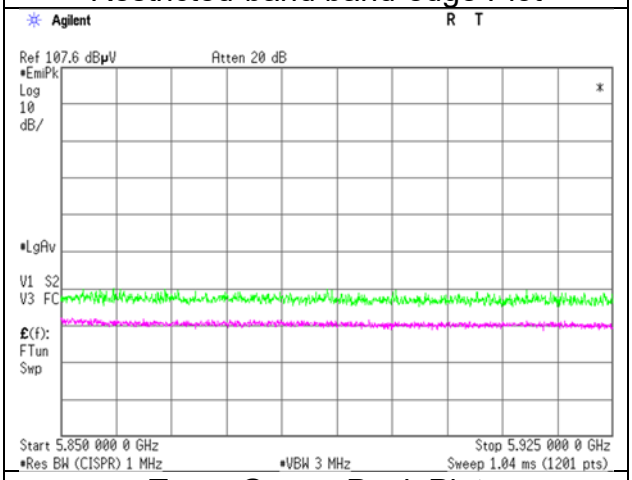
| | | |
|---|---|---|
| Distance factor: | 1 GHz - 6 GHz | 20log (3.9 m / 3.0 m) = 2.28 dB |
| | 6 GHz - 10 GHz | 20log (4.9 m / 3.0 m) = 4.27 dB |
| | 10 GHz - 40 GHz | 20log (1.0 m / 3.0 m) = -9.5 dB |

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 19, 2024 |
| Temperature / Humidity | 22 deg. C / 57 % RH |
| Engineer | Takafumi Noguchi<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [OFDM] 5795 MHz |

Horizontal

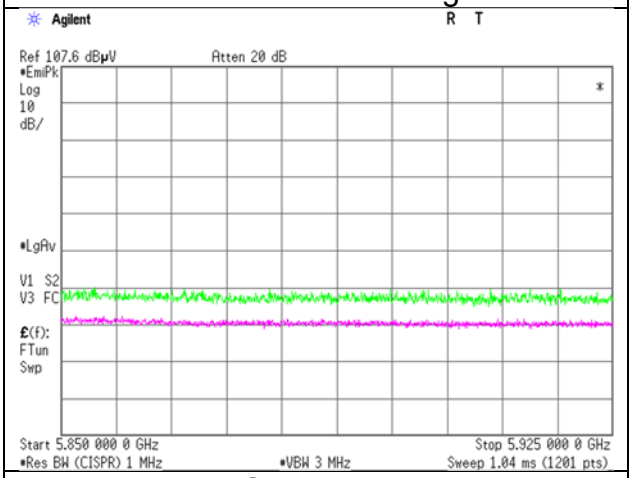
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 0] 5190 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 41.2 | 33.1 | 32.2 | 6.3 | 30.9 | 0.3 | 48.8 | 40.9 | 73.9 | 53.9 | 25.1 | 13.0 | *1) |
| Vert. | 5150.0 | 41.8 | 33.4 | 32.2 | 6.3 | 30.9 | 0.3 | 49.4 | 41.2 | 73.9 | 53.9 | 24.5 | 12.7 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

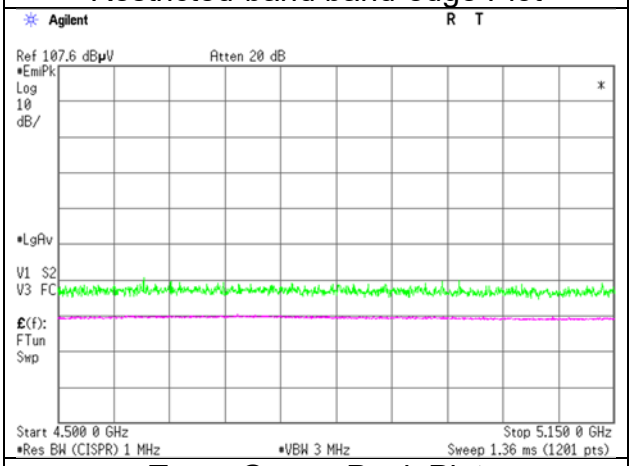
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 0] 5190 MHz |

Horizontal

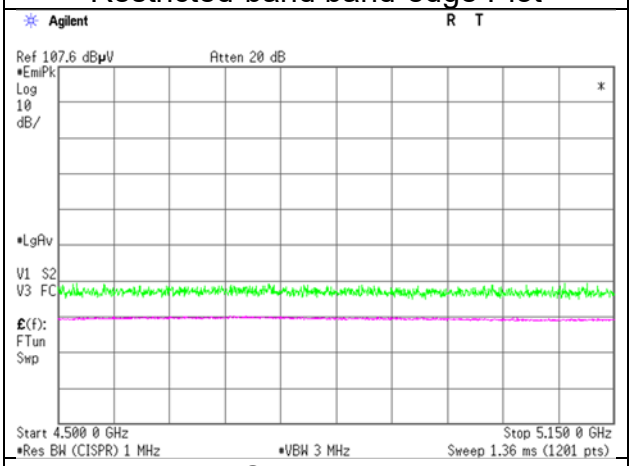
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

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|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 37] 5190 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 43.7 | 33.8 | 32.2 | 6.3 | 30.9 | 0.3 | 51.3 | 41.6 | 73.9 | 53.9 | 22.6 | 12.3 | *1) |
| Vert. | 5150.0 | 42.9 | 33.7 | 32.2 | 6.3 | 30.9 | 0.3 | 50.5 | 41.5 | 73.9 | 53.9 | 23.4 | 12.4 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

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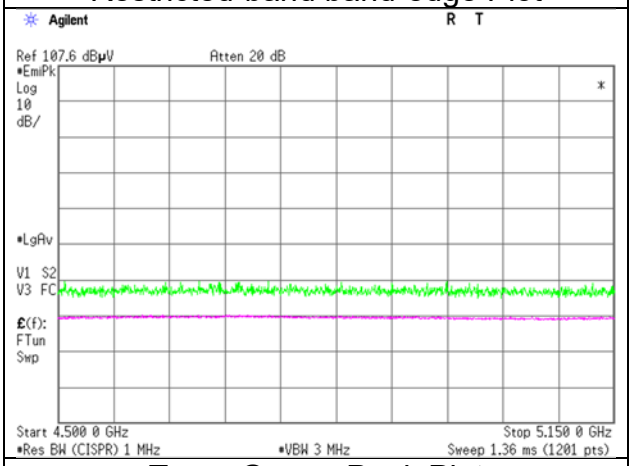
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 37] 5190 MHz |

Horizontal

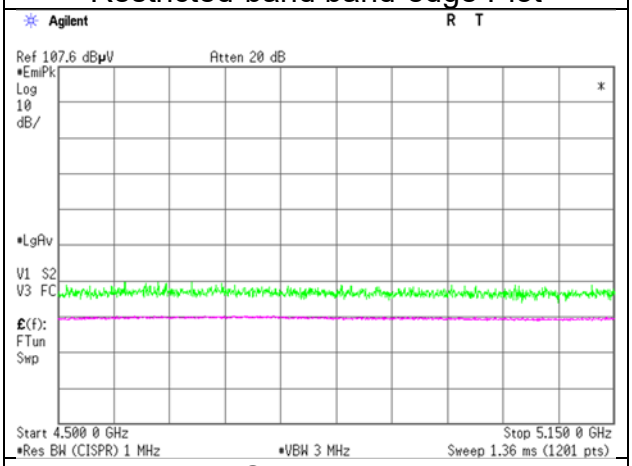
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 53] 5190 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 43.8 | 35.2 | 32.2 | 6.3 | 30.9 | 0.3 | 51.4 | 43.1 | 73.9 | 53.9 | 22.5 | 10.8 | *1) |
| Vert. | 5150.0 | 44.5 | 35.8 | 32.2 | 6.3 | 30.9 | 0.3 | 52.1 | 43.7 | 73.9 | 53.9 | 21.9 | 10.2 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

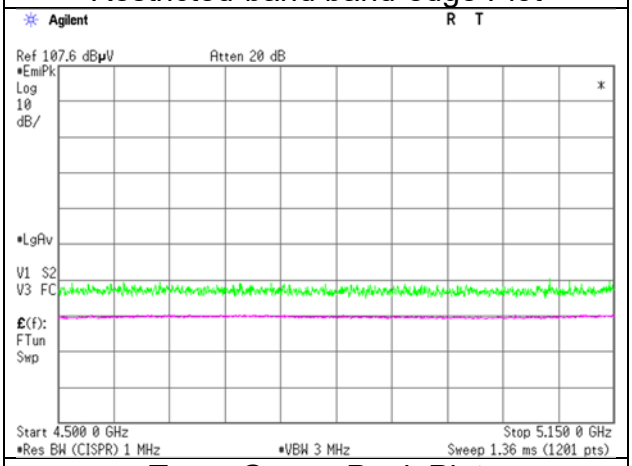
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 53] 5190 MHz |

Horizontal

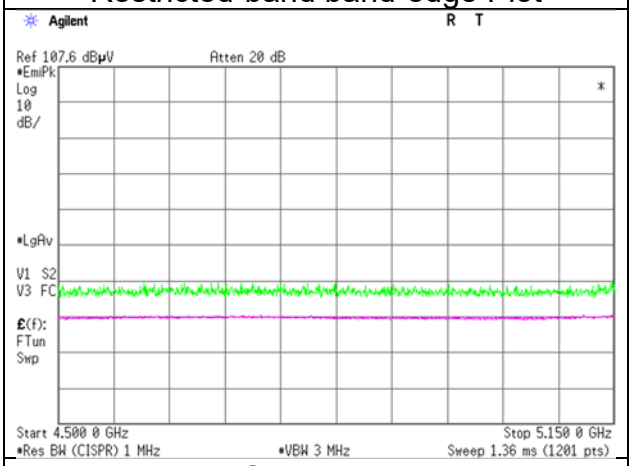
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 61] 5190 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 47.0 | 38.3 | 32.2 | 6.3 | 30.9 | 0.4 | 54.5 | 46.2 | 73.9 | 53.9 | 19.4 | 7.7 | *1) |
| Vert. | 5150.0 | 47.1 | 38.2 | 32.2 | 6.3 | 30.9 | 0.4 | 54.6 | 46.1 | 73.9 | 53.9 | 19.3 | 7.8 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

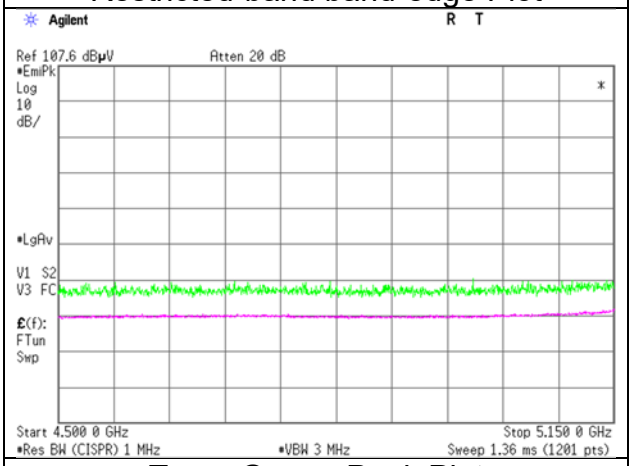
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 61] 5190 MHz |

Horizontal

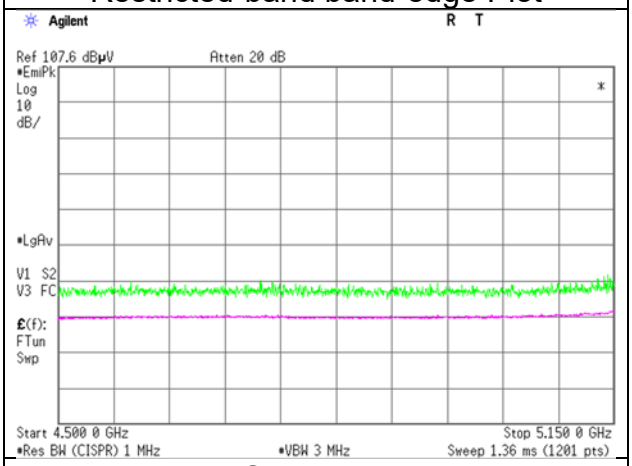
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [484-tone RU/Index 65] 5190 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5150.0 | 48.9 | 39.5 | 32.2 | 6.3 | 30.9 | 0.4 | 56.5 | 47.4 | 73.9 | 53.9 | 17.4 | 6.5 | *1) |
| Vert. | 5150.0 | 49.2 | 40.3 | 32.2 | 6.3 | 30.9 | 0.4 | 56.8 | 48.2 | 73.9 | 53.9 | 17.1 | 5.7 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

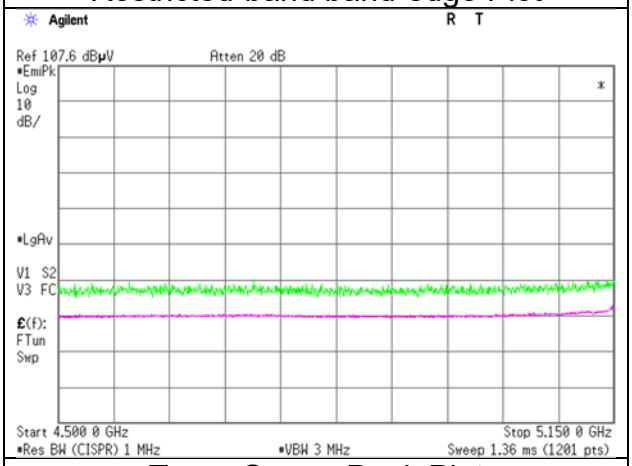
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [484-tone RU/Index 65] 5190 MHz |

Horizontal

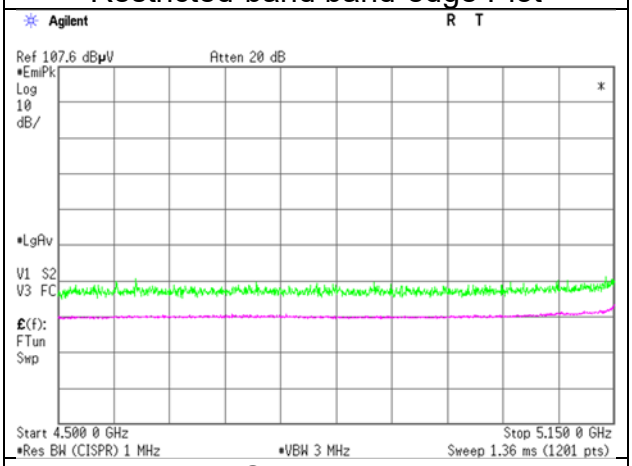
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 17] 5310 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 42.7 | 33.9 | 31.8 | 6.3 | 30.9 | 0.3 | 49.8 | 41.3 | 73.9 | 53.9 | 24.1 | 12.6 | *1) |
| Vert. | 5350.0 | 43.0 | 34.1 | 31.8 | 6.3 | 30.9 | 0.3 | 50.2 | 41.5 | 73.9 | 53.9 | 23.7 | 12.4 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

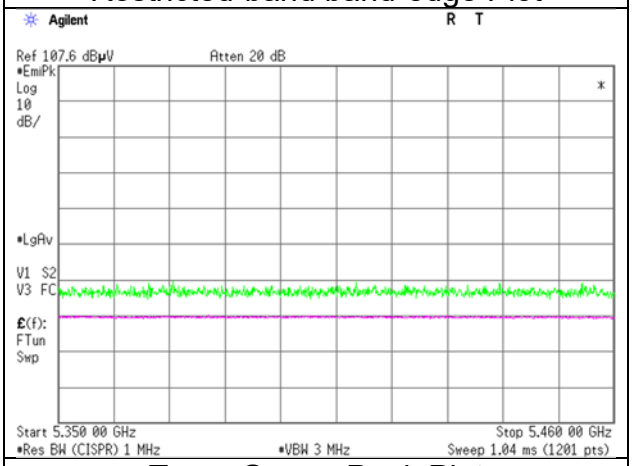
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 17] 5310 MHz |

Horizontal

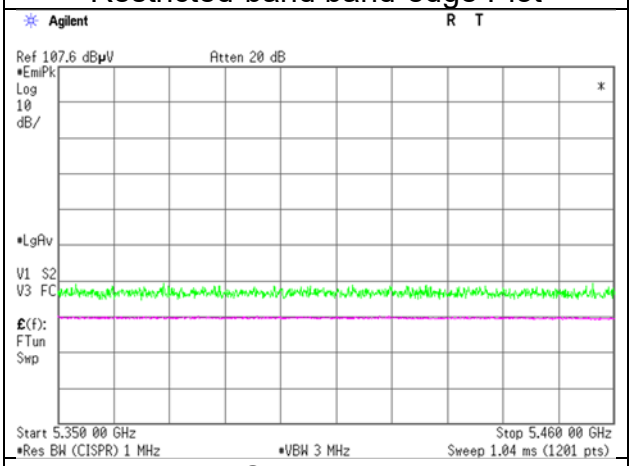
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 44] 5310 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 44.5 | 35.1 | 31.8 | 6.3 | 30.9 | 0.3 | 51.7 | 42.5 | 73.9 | 53.9 | 22.2 | 11.4 | *1) |
| Vert. | 5350.0 | 44.1 | 35.8 | 31.8 | 6.3 | 30.9 | 0.3 | 51.3 | 43.2 | 73.9 | 53.9 | 22.6 | 10.7 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

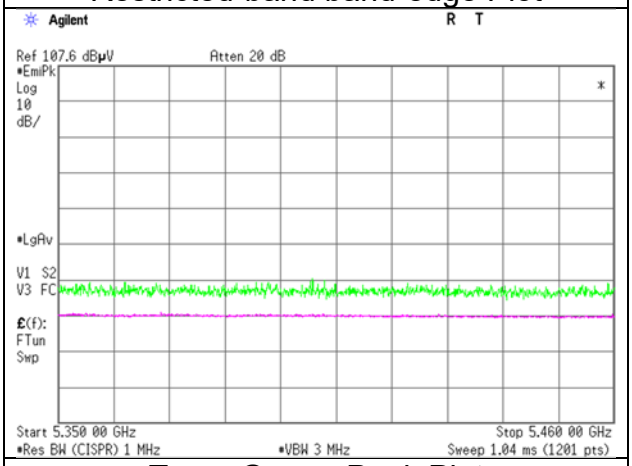
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 44] 5310 MHz |

Horizontal

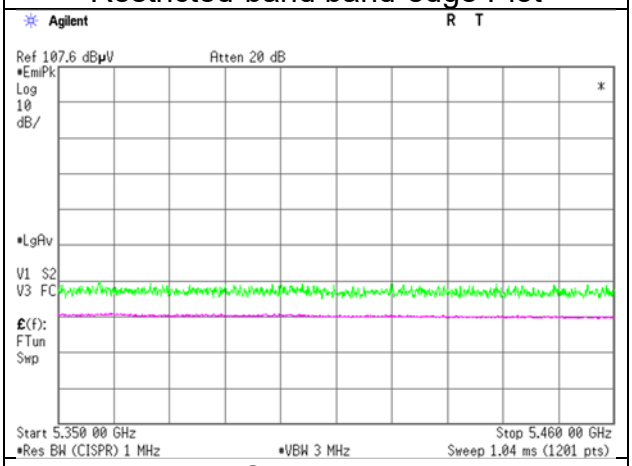
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 56] 5310 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 46.2 | 36.8 | 31.8 | 6.3 | 30.9 | 0.3 | 53.4 | 44.3 | 73.9 | 53.9 | 20.5 | 9.6 | *1) |
| Vert. | 5350.0 | 45.8 | 37.2 | 31.8 | 6.3 | 30.9 | 0.3 | 52.9 | 44.7 | 73.9 | 53.9 | 21.0 | 9.2 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

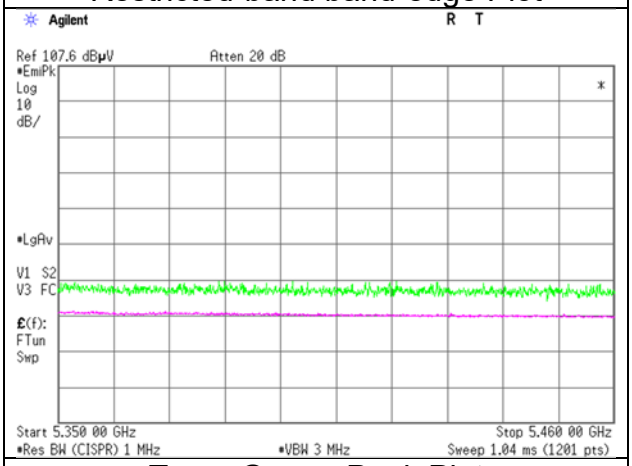
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 56] 5310 MHz |

Horizontal

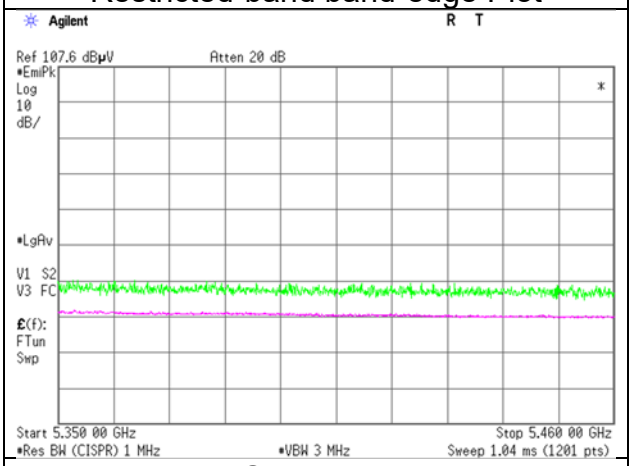
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 62] 5310 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 49.3 | 40.4 | 31.8 | 6.3 | 30.9 | 0.4 | 56.5 | 48.0 | 73.9 | 53.9 | 17.4 | 5.9 | *1) |
| Vert. | 5350.0 | 50.4 | 40.5 | 31.8 | 6.3 | 30.9 | 0.4 | 57.6 | 48.1 | 73.9 | 53.9 | 16.3 | 5.8 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

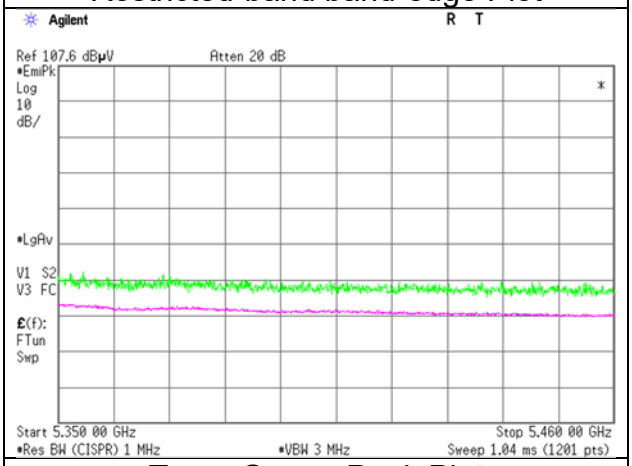
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 62] 5310 MHz |

Horizontal

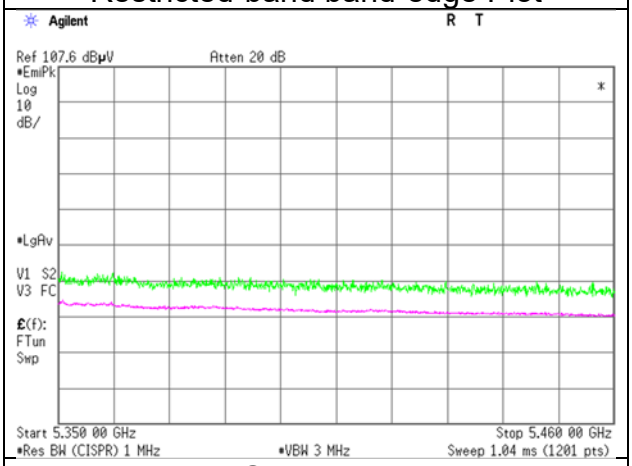
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [484-tone RU/Index 65] 5310 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5350.0 | 52.1 | 42.3 | 31.8 | 6.3 | 30.9 | 0.4 | 59.3 | 49.9 | 73.9 | 53.9 | 14.6 | 4.0 | *1) |
| Vert. | 5350.0 | 51.5 | 42.5 | 31.8 | 6.3 | 30.9 | 0.4 | 58.7 | 50.1 | 73.9 | 53.9 | 15.2 | 3.8 | *1) |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

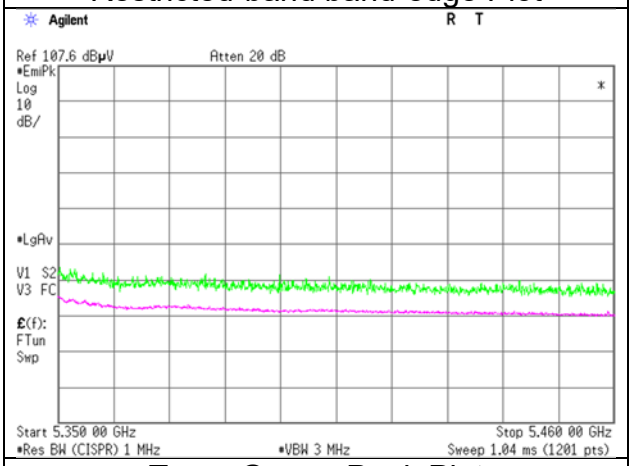
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 67 % RH |
| Engineer | Takumi Nishida<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [484-tone RU/Index 65] 5310 MHz |

Horizontal

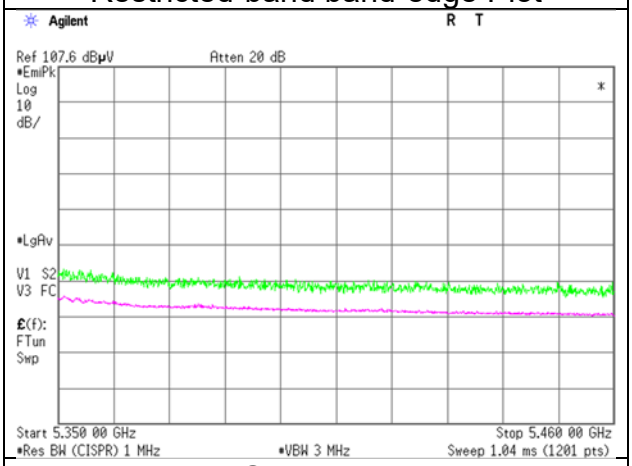
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 0] 5510 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 42.5 | 33.5 | 32.1 | 6.4 | 30.9 | 0.3 | 50.0 | 41.2 | 68.2 | 53.9 | 18.2 | 12.7 | *1) |
| Hori. | 5470.0 | 42.6 | - | 32.1 | 6.4 | 30.9 | - | 50.1 | - | 68.2 | - | 18.1 | - | |
| Vert. | 5460.0 | 42.1 | 33.6 | 32.1 | 6.4 | 30.9 | 0.3 | 49.6 | 41.3 | 68.2 | 53.9 | 18.6 | 12.6 | *1) |
| Vert. | 5470.0 | 42.7 | - | 32.1 | 6.4 | 30.9 | - | 50.2 | - | 68.2 | - | 18.0 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

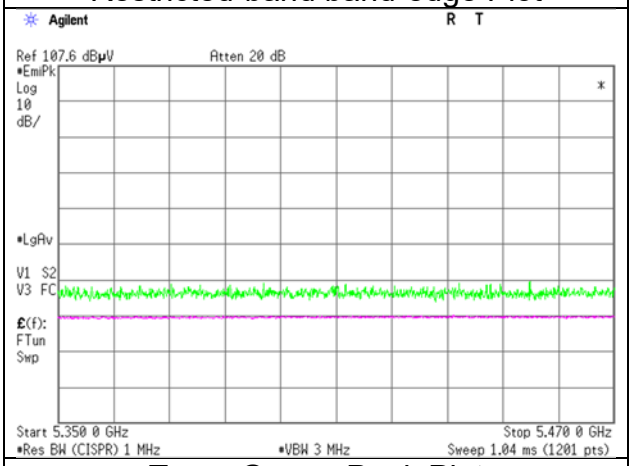
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 0] 5510 MHz |

Horizontal

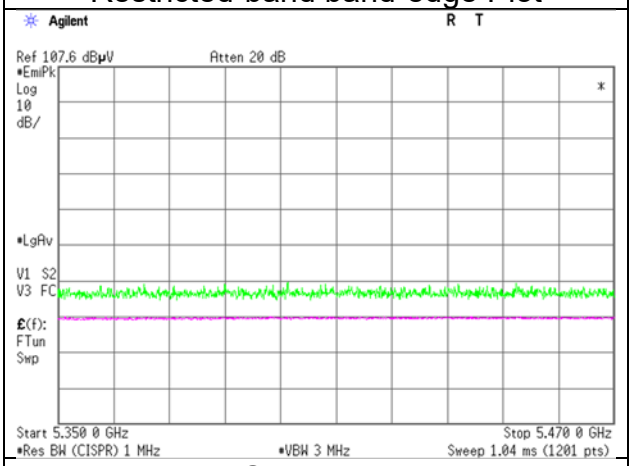
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 37] 5510 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 43.9 | 34.2 | 32.1 | 6.4 | 30.9 | 0.3 | 51.4 | 42.0 | 68.2 | 53.9 | 16.9 | 11.9 | *1) |
| Hori. | 5470.0 | 43.0 | - | 32.1 | 6.4 | 30.9 | - | 50.5 | - | 68.2 | - | 17.7 | - | |
| Vert. | 5460.0 | 44.3 | 34.6 | 32.1 | 6.4 | 30.9 | 0.3 | 51.8 | 42.4 | 68.2 | 53.9 | 16.4 | 11.5 | *1) |
| Vert. | 5470.0 | 43.4 | - | 32.1 | 6.4 | 30.9 | - | 50.9 | - | 68.2 | - | 17.3 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

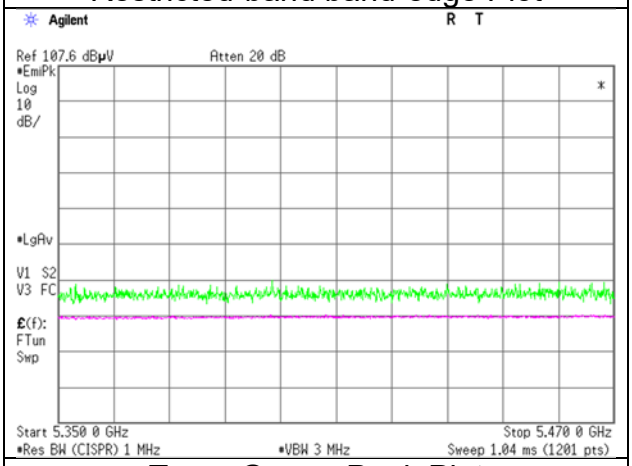
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 37] 5510 MHz |

Horizontal

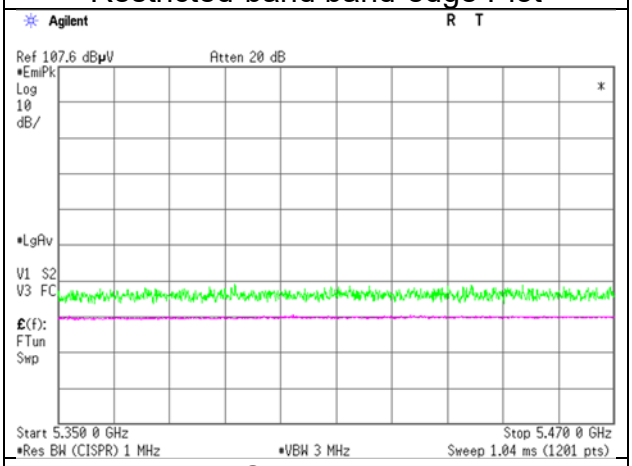
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 53] 5510 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 45.3 | 35.8 | 32.1 | 6.4 | 30.9 | 0.3 | 52.8 | 43.7 | 68.2 | 53.9 | 15.4 | 10.2 | *1) |
| Hori. | 5470.0 | 45.5 | - | 32.1 | 6.4 | 30.9 | - | 53.1 | - | 68.2 | - | 15.1 | - | |
| Vert. | 5460.0 | 44.7 | 36.0 | 32.1 | 6.4 | 30.9 | 0.3 | 52.2 | 43.8 | 68.2 | 53.9 | 16.0 | 10.1 | *1) |
| Vert. | 5470.0 | 45.3 | - | 32.1 | 6.4 | 30.9 | - | 52.8 | - | 68.2 | - | 15.4 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

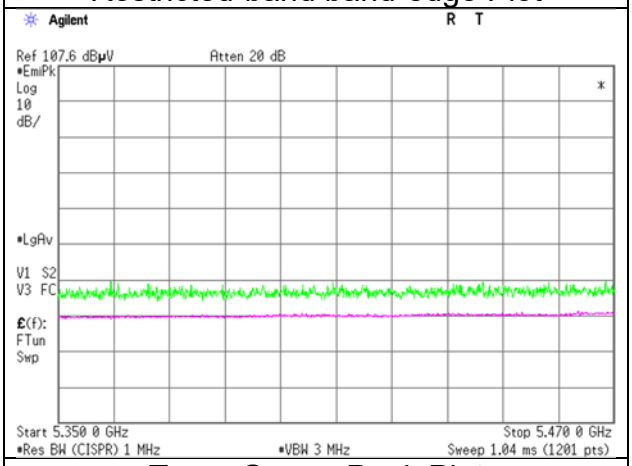
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 53] 5510 MHz |

Horizontal

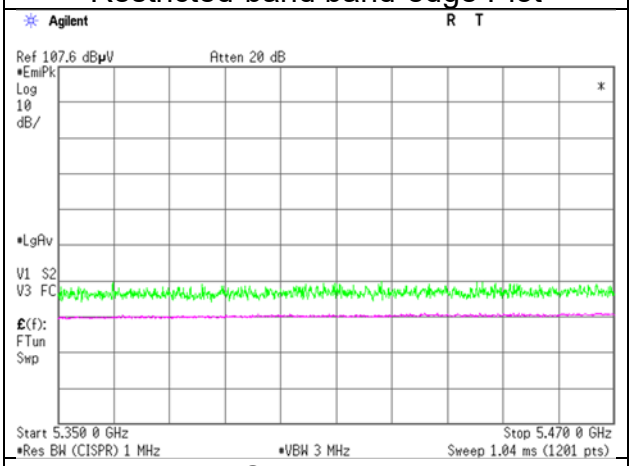
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 61] 5510 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 47.4 | 38.5 | 32.1 | 6.4 | 30.9 | 0.4 | 54.9 | 46.4 | 68.2 | 53.9 | 13.3 | 7.5 | *1) |
| Hori. | 5470.0 | 47.6 | - | 32.1 | 6.4 | 30.9 | - | 55.2 | - | 68.2 | - | 13.1 | - | |
| Vert. | 5460.0 | 47.6 | 39.0 | 32.1 | 6.4 | 30.9 | 0.4 | 55.1 | 46.9 | 68.2 | 53.9 | 13.2 | 7.1 | *1) |
| Vert. | 5470.0 | 48.6 | - | 32.1 | 6.4 | 30.9 | - | 56.1 | - | 68.2 | - | 12.1 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

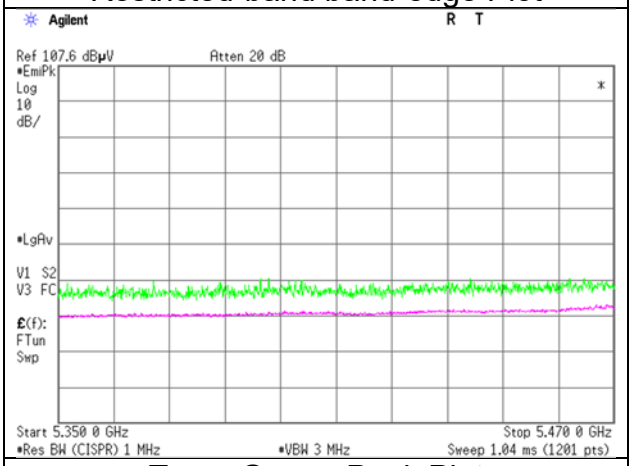
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 61] 5510 MHz |

Horizontal

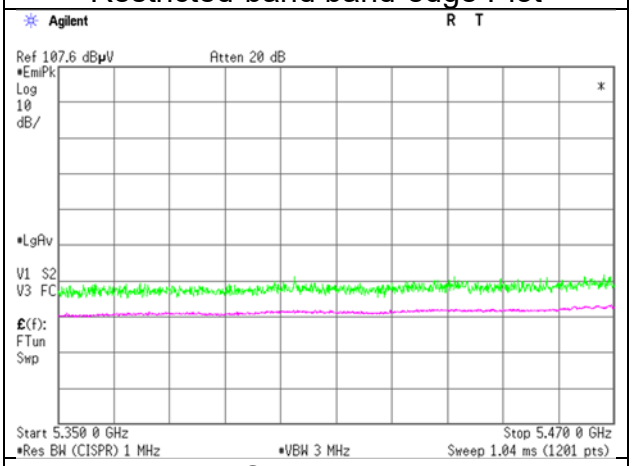
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [484-tone RU/Index 65] 5510 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5460.0 | 47.9 | 38.6 | 32.1 | 6.4 | 30.9 | 0.4 | 55.4 | 46.4 | 68.2 | 53.9 | 12.8 | 7.5 | *1) |
| Hori. | 5470.0 | 50.0 | - | 32.1 | 6.4 | 30.9 | - | 57.5 | - | 68.2 | - | 10.7 | - | |
| Vert. | 5460.0 | 47.4 | 38.8 | 32.1 | 6.4 | 30.9 | 0.4 | 54.9 | 46.6 | 68.2 | 53.9 | 13.3 | 7.3 | *1) |
| Vert. | 5470.0 | 50.9 | - | 32.1 | 6.4 | 30.9 | - | 58.4 | - | 68.2 | - | 9.8 | - | |

Result (QP / PK) = Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier)
Result (AV)= Reading + Ant Factor + Loss (Cable+Attenuator+Filter+Distance factor(above 1 GHz)) - Gain(Amplifier) + Duty factor
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).
*QP detector was used up to 1GHz.
*1) Not Out of Band emission(Leakage Power)

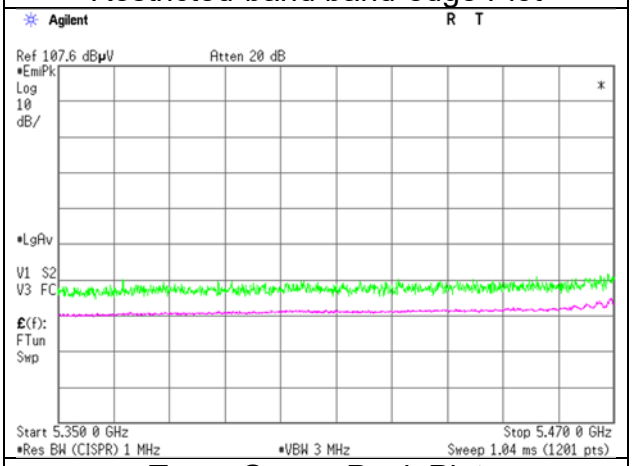
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [484-tone RU/Index 65] 5510 MHz |

Horizontal

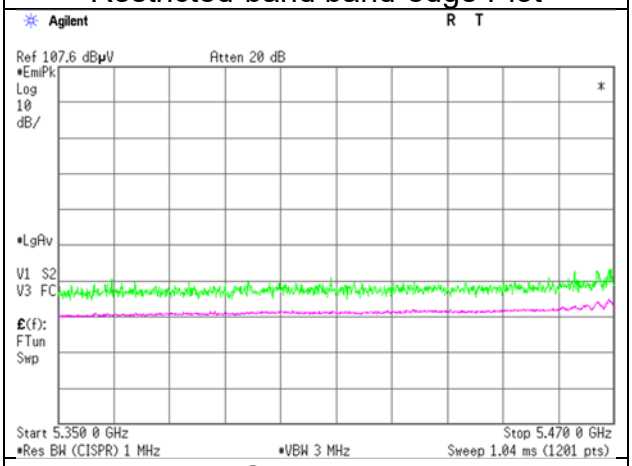
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 17] 5670 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 41.3 | - | 32.5 | 6.5 | 31.0 | - | 49.3 | - | 68.2 | - | 18.9 | - | |
| Vert. | 5725.0 | 41.9 | - | 32.5 | 6.5 | 31.0 | - | 49.9 | - | 68.2 | - | 18.3 | - | |

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

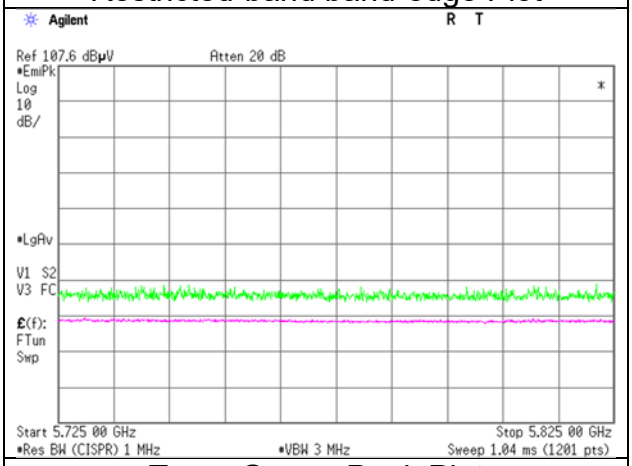
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 17] 5670 MHz |

Horizontal

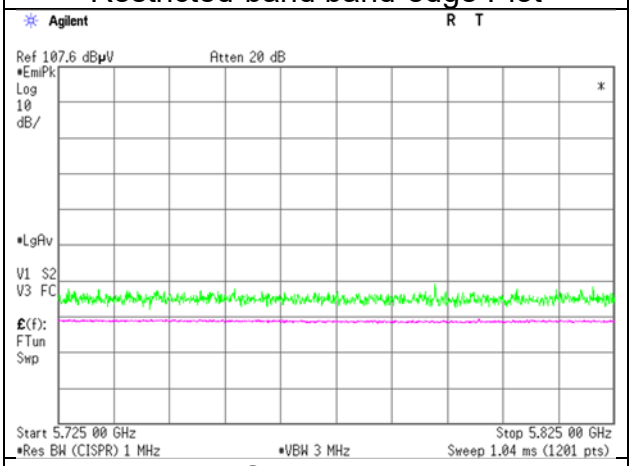
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 44] 5670 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 42.2 | - | 32.5 | 6.5 | 31.0 | - | 50.3 | - | 68.2 | - | 18.0 | - | |
| Vert. | 5725.0 | 43.5 | - | 32.5 | 6.5 | 31.0 | - | 51.5 | - | 68.2 | - | 16.7 | - | |

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

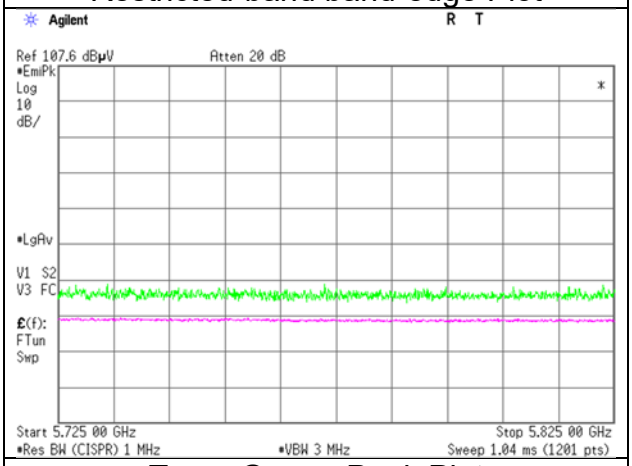
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 44] 5670 MHz |

Horizontal

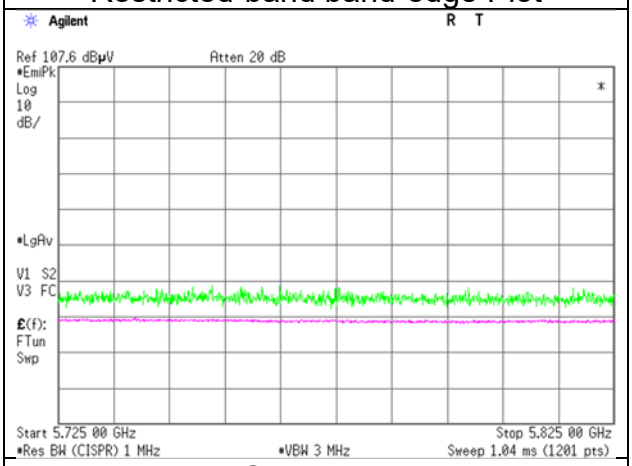
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 56] 5670 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 43.5 | - | 32.5 | 6.5 | 31.0 | - | 51.5 | - | 68.2 | - | 16.7 | - | |
| Vert. | 5725.0 | 43.4 | - | 32.5 | 6.5 | 31.0 | - | 51.4 | - | 68.2 | - | 16.8 | - | |

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

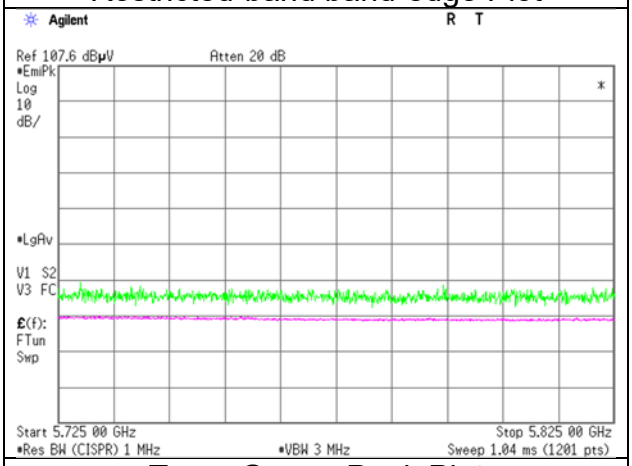
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 56] 5670 MHz |

Horizontal

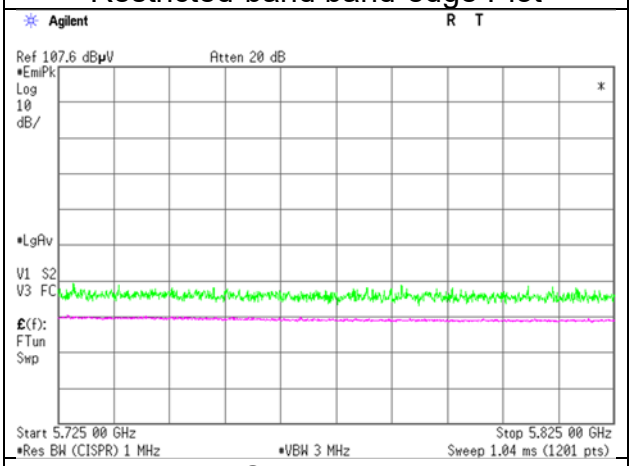
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 62] 5670 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 45.7 | - | 32.5 | 6.5 | 31.0 | - | 53.7 | - | 68.2 | - | 14.5 | - | |
| Vert. | 5725.0 | 45.2 | - | 32.5 | 6.5 | 31.0 | - | 53.2 | - | 68.2 | - | 15.0 | - | |

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

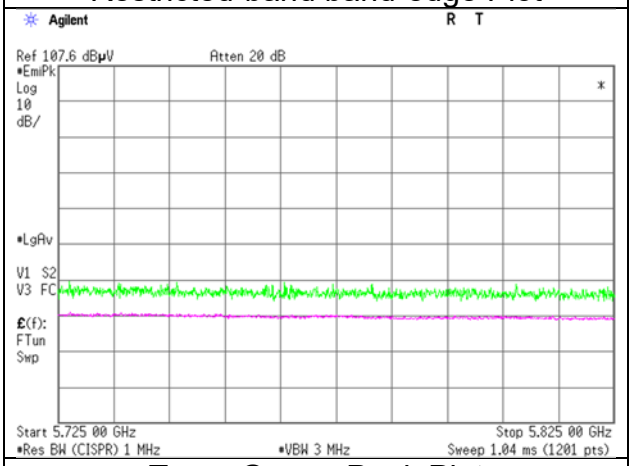
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 62] 5670 MHz |

Horizontal

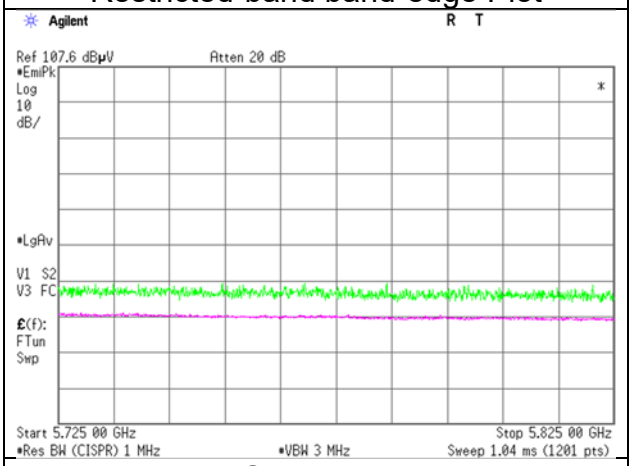
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [484-tone RU/Index 65] 5670 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5725.0 | 46.3 | - | 32.5 | 6.5 | 31.0 | - | 54.3 | - | 68.2 | - | 13.9 | - | |
| Vert. | 5725.0 | 47.6 | - | 32.5 | 6.5 | 31.0 | - | 55.6 | - | 68.2 | - | 12.6 | - | |

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

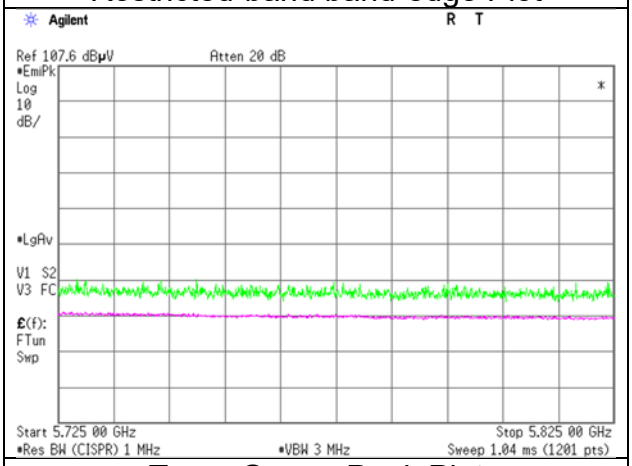
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [484-tone RU/Index 65] 5670 MHz |

Horizontal

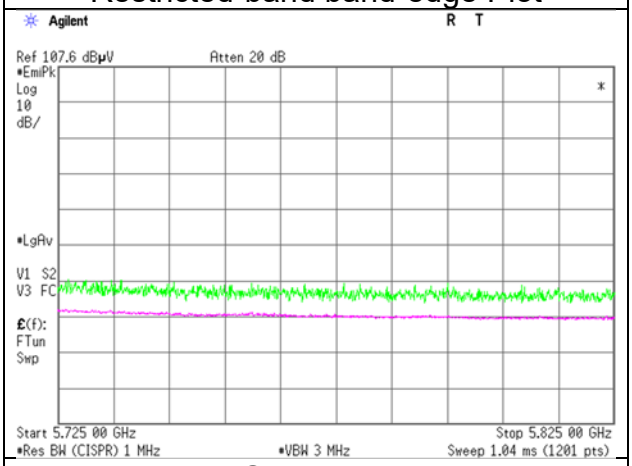
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 0] 5755 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 41.0 | - | 32.4 | 6.5 | 31.0 | - | 48.9 | - | 68.2 | - | 19.3 | - | |
| Hori. | 5700.0 | 41.3 | - | 32.5 | 6.5 | 31.0 | - | 49.3 | - | 105.2 | - | 55.9 | - | |
| Hori. | 5720.0 | 41.4 | - | 32.5 | 6.5 | 31.0 | - | 49.4 | - | 110.8 | - | 61.4 | - | |
| Hori. | 5725.0 | 41.9 | - | 32.5 | 6.5 | 31.0 | - | 50.0 | - | 122.2 | - | 72.3 | - | |
| Vert. | 5650.0 | 41.1 | - | 32.4 | 6.5 | 31.0 | - | 48.9 | - | 68.2 | - | 19.3 | - | |
| Vert. | 5700.0 | 41.2 | - | 32.5 | 6.5 | 31.0 | - | 49.2 | - | 105.2 | - | 56.1 | - | |
| Vert. | 5720.0 | 41.7 | - | 32.5 | 6.5 | 31.0 | - | 49.6 | - | 110.8 | - | 61.2 | - | |
| Vert. | 5725.0 | 41.7 | - | 32.5 | 6.5 | 31.0 | - | 49.7 | - | 122.2 | - | 72.5 | - | |

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

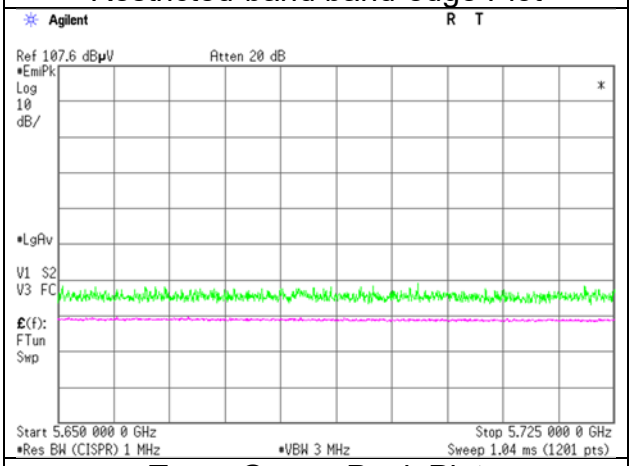
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [26-tone RU/Index 0] 5755 MHz |

Horizontal

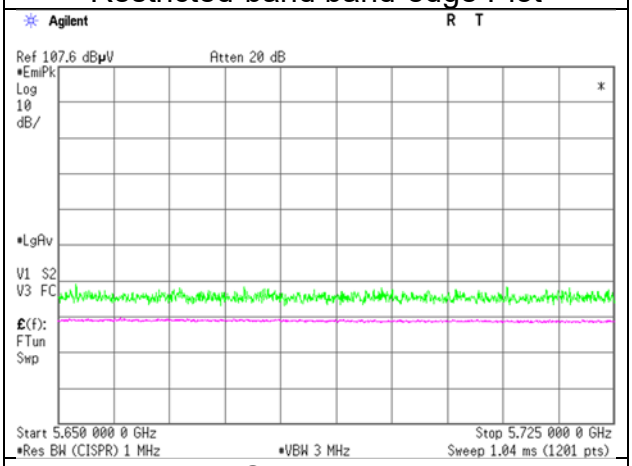
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 37] 5755 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 42.2 | - | 32.4 | 6.5 | 31.0 | - | 50.0 | - | 68.2 | - | 18.2 | - | |
| Hori. | 5700.0 | 42.8 | - | 32.5 | 6.5 | 31.0 | - | 50.7 | - | 105.2 | - | 54.5 | - | |
| Hori. | 5720.0 | 42.9 | - | 32.5 | 6.5 | 31.0 | - | 50.9 | - | 110.8 | - | 59.9 | - | |
| Hori. | 5725.0 | 43.3 | - | 32.5 | 6.5 | 31.0 | - | 51.3 | - | 122.2 | - | 70.9 | - | |
| Vert. | 5650.0 | 41.9 | - | 32.4 | 6.5 | 31.0 | - | 49.7 | - | 68.2 | - | 18.5 | - | |
| Vert. | 5700.0 | 42.0 | - | 32.5 | 6.5 | 31.0 | - | 50.0 | - | 105.2 | - | 55.3 | - | |
| Vert. | 5720.0 | 42.3 | - | 32.5 | 6.5 | 31.0 | - | 50.3 | - | 110.8 | - | 60.5 | - | |
| Vert. | 5725.0 | 43.6 | - | 32.5 | 6.5 | 31.0 | - | 51.6 | - | 122.2 | - | 70.6 | - | |

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

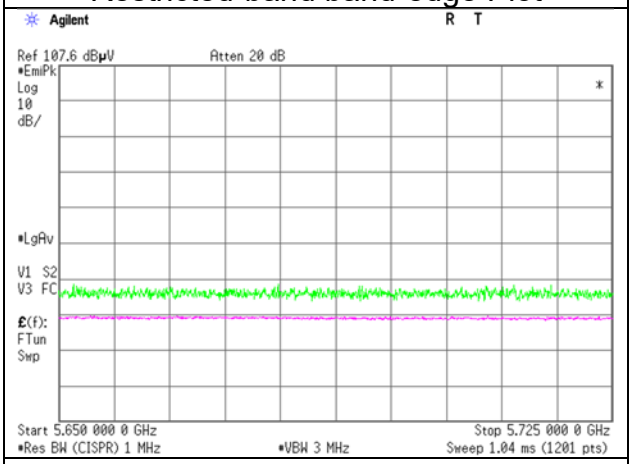
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [52-tone RU/Index 37] 5755 MHz |

Horizontal

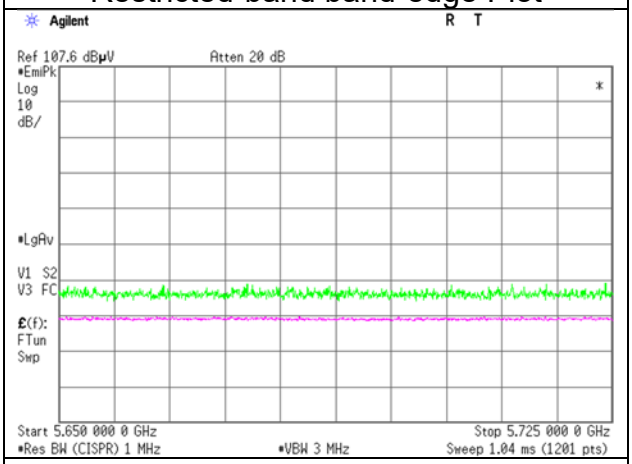
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 53] 5755 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 42.1 | - | 32.4 | 6.5 | 31.0 | - | 49.9 | - | 68.2 | - | 18.3 | - | |
| Hori. | 5700.0 | 42.2 | - | 32.5 | 6.5 | 31.0 | - | 50.1 | - | 105.2 | - | 55.1 | - | |
| Hori. | 5720.0 | 43.4 | - | 32.5 | 6.5 | 31.0 | - | 51.4 | - | 110.8 | - | 59.4 | - | |
| Hori. | 5725.0 | 44.1 | - | 32.5 | 6.5 | 31.0 | - | 52.1 | - | 122.2 | - | 70.1 | - | |
| Vert. | 5650.0 | 42.5 | - | 32.4 | 6.5 | 31.0 | - | 50.3 | - | 68.2 | - | 17.9 | - | |
| Vert. | 5700.0 | 42.7 | - | 32.5 | 6.5 | 31.0 | - | 50.6 | - | 105.2 | - | 54.6 | - | |
| Vert. | 5720.0 | 42.8 | - | 32.5 | 6.5 | 31.0 | - | 50.8 | - | 110.8 | - | 60.0 | - | |
| Vert. | 5725.0 | 44.7 | - | 32.5 | 6.5 | 31.0 | - | 52.7 | - | 122.2 | - | 69.5 | - | |

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

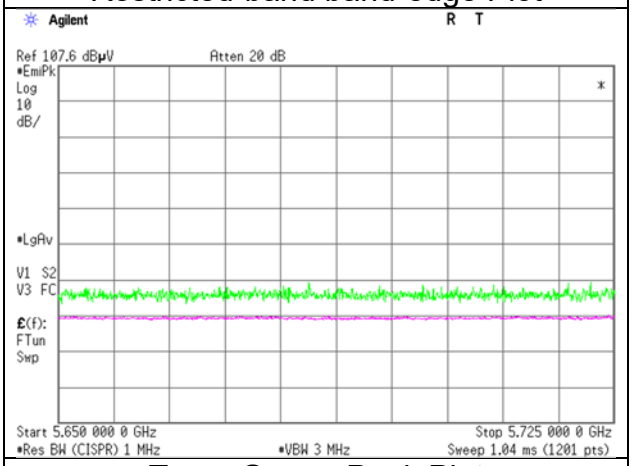
Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [106-tone RU/Index 53] 5755 MHz |

Horizontal

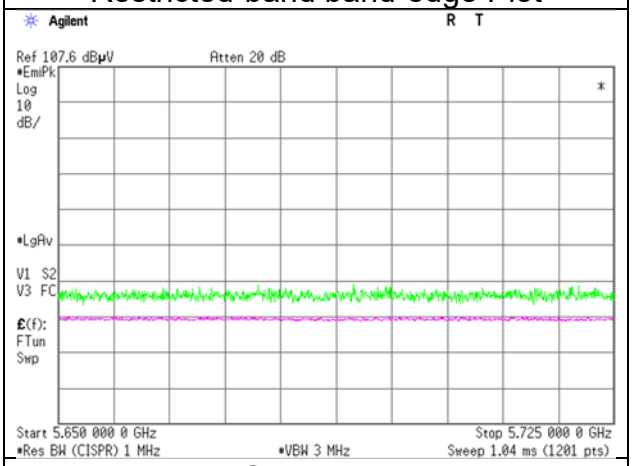
Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot




Trace Green: Peak Plot
Trace Purple: Average Plot

* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.
Final result of restricted band edge was shown in tabular data.

# Radiated Spurious Emission

| | |
|---|---|
| Test place | Ise EMC Lab. |
| Semi Anechoic Chamber | No.4 |
| Date | July 22, 2024 |
| Temperature / Humidity | 23 deg. C / 57 % RH |
| Engineer | Kiyoshiro Okazaki<br>(1 GHz to 6 GHz) |
| Mode | Tx 11ax-40 [242-tone RU/Index 61] 5755 MHz |

| Polarity [Hori/Vert] | Frequency [MHz] | Reading (QP / PK) [dBuV] | Reading (AV) [dBuV] | Ant. Factor [dB/m] | Loss [dB] | Gain [dB] | Duty Factor [dB] | Result (QP / PK) [dBuV/m] | Result (AV) [dBuV/m] | Limit (QP / PK) [dBuV/m] | Limit (AV) [dBuV/m] | Margin (QP / PK) [dB] | Margin (AV) [dB] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hori. | 5650.0 | 43.2 | - | 32.4 | 6.5 | 31.0 | - | 51.0 | - | 68.2 | - | 17.2 | - | |
| Hori. | 5700.0 | 45.3 | - | 32.5 | 6.5 | 31.0 | - | 53.2 | - | 105.2 | - | 52.0 | - | |
| Hori. | 5720.0 | 50.4 | - | 32.5 | 6.5 | 31.0 | - | 58.4 | - | 110.8 | - | 52.4 | - | |
| Hori. | 5725.0 | 52.8 | - | 32.5 | 6.5 | 31.0 | - | 60.8 | - | 122.2 | - | 61.4 | - | |
| Vert. | 5650.0 | 43.5 | - | 32.4 | 6.5 | 31.0 | - | 51.3 | - | 68.2 | - | 16.9 | - | |
| Vert. | 5700.0 | 45.3 | - | 32.5 | 6.5 | 31.0 | - | 53.2 | - | 105.2 | - | 52.0 | - | |
| Vert. | 5720.0 | 47.4 | - | 32.5 | 6.5 | 31.0 | - | 55.4 | - | 110.8 | - | 55.4 | - | |
| Vert. | 5725.0 | 52.0 | - | 32.5 | 6.5 | 31.0 | - | 60.0 | - | 122.2 | - | 62.2 | - | |

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

Distance factor: 1 GHz - 6 GHz 20log (3.9 m / 3.0 m) = 2.28 dB