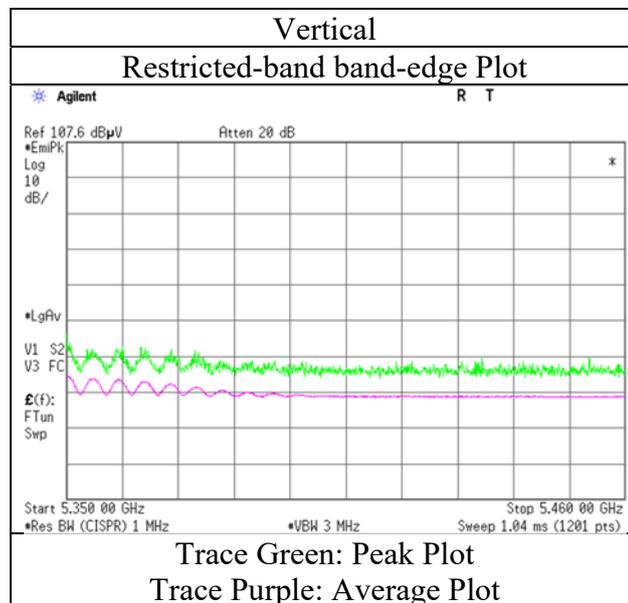
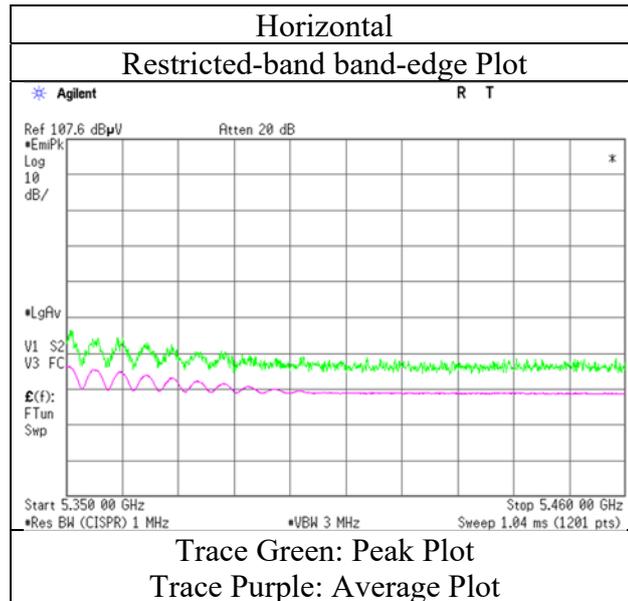


Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.4 Semi Anechoic Chamber
Date April 9, 2020
Temperature / Humidity 22 deg. C / 32 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5290 MHz (996-tone RU)

RU Index 67



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (26-tone RU)

RU Index 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5460.000	PK	40.2	31.7	6.0	31.9	-	46.0	68.2	22.2	
Hori.	5470.000	PK	41.1	31.7	6.0	31.9	-	47.0	68.2	21.2	
Hori.	5460.000	AV	32.4	31.7	6.0	31.9	0.2	38.5	53.9	15.4	*1)
Vert.	5460.000	PK	40.1	31.7	6.0	31.9	-	45.9	68.2	22.3	
Vert.	5470.000	PK	41.2	31.7	6.0	31.9	-	47.0	68.2	21.2	
Vert.	5460.000	AV	32.3	31.7	6.0	31.9	0.2	38.3	53.9	15.6	*1)

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

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

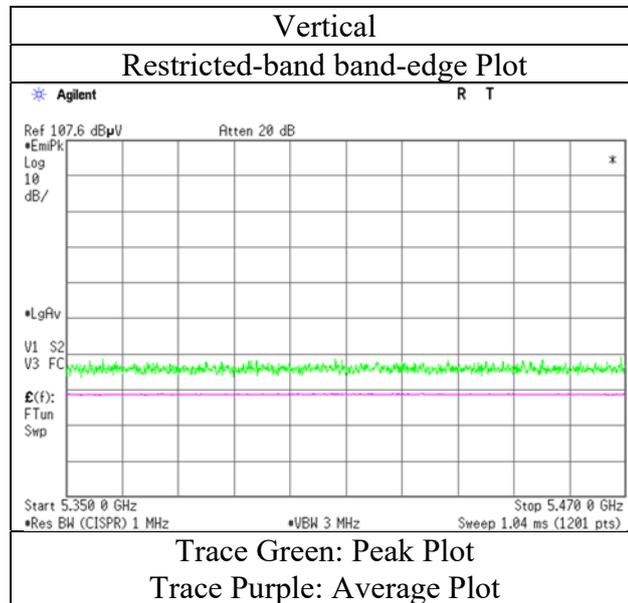
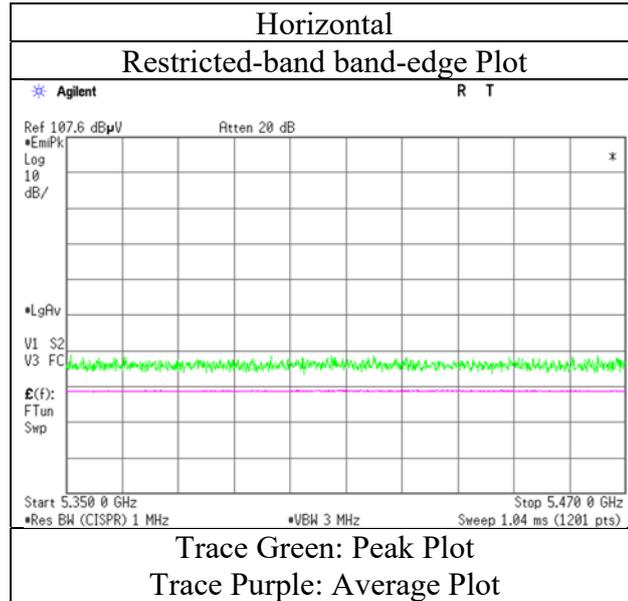
Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

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

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (26-tone RU)

RU Index 0



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (52-tone RU)

RU Index37

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5460.000	PK	40.2	31.7	6.0	31.9	-	46.1	68.2	22.2	
Hori.	5470.000	PK	41.2	31.7	6.0	31.9	-	47.0	68.2	21.2	
Hori.	5460.000	AV	32.5	31.7	6.0	31.9	0.2	38.6	53.9	15.3	*1)
Vert.	5460.000	PK	40.9	31.7	6.0	31.9	-	46.7	68.2	21.5	
Vert.	5470.000	PK	41.2	31.7	6.0	31.9	-	47.1	68.2	21.1	
Vert.	5460.000	AV	32.6	31.7	6.0	31.9	0.2	38.6	53.9	15.3	*1)

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

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

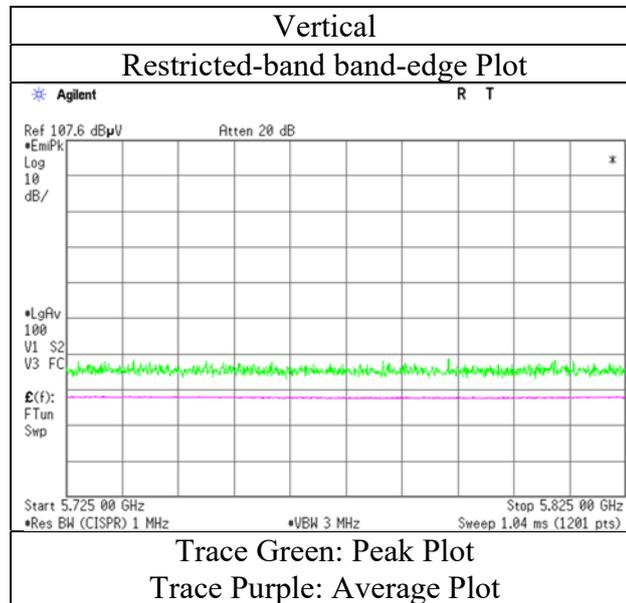
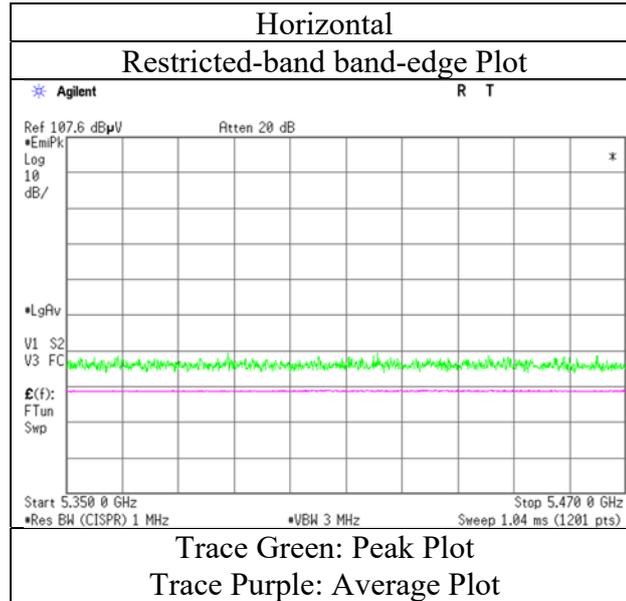
Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

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

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (52-tone RU)

RU Index37



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (106-tone RU)

RU Index 53

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5460.000	PK	40.3	31.7	6.0	31.9	-	46.2	68.2	22.1	
Hori.	5470.000	PK	41.3	31.7	6.0	31.9	-	47.1	68.2	21.1	
Hori.	5460.000	AV	32.6	31.7	6.0	31.9	0.2	38.6	53.9	15.3	*1)
Vert.	5460.000	PK	40.9	31.7	6.0	31.9	-	46.7	68.2	21.5	
Vert.	5470.000	PK	41.4	31.7	6.0	31.9	-	47.3	68.2	20.9	
Vert.	5460.000	AV	32.6	31.7	6.0	31.9	0.2	38.7	53.9	15.3	*1)

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

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

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

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

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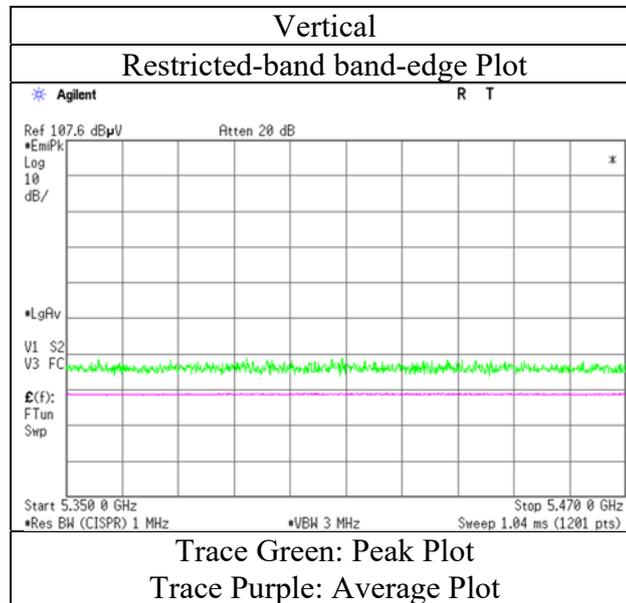
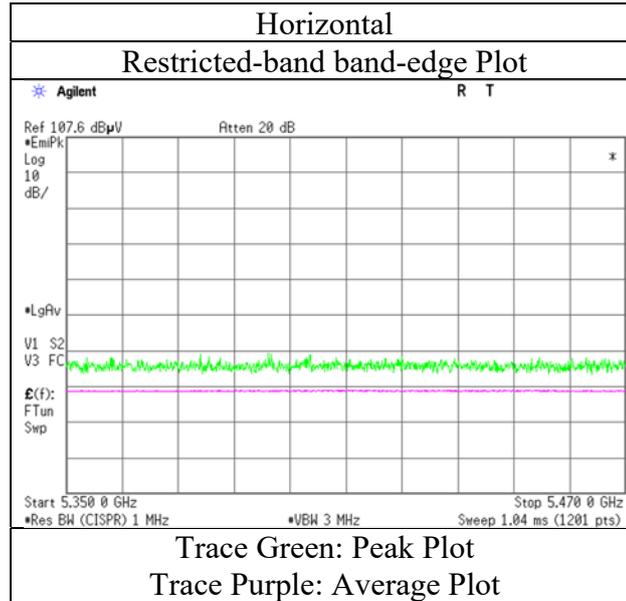
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (106-tone RU)

RU Index 53



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (242-tone RU)

RU Index 61

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5460.000	PK	40.4	31.7	6.0	31.9	-	46.2	68.2	22.0	
Hori.	5470.000	PK	41.4	31.7	6.0	31.9	-	47.2	68.2	21.0	
Hori.	5460.000	AV	32.8	31.7	6.0	31.9	0.2	38.9	53.9	15.0	*1)
Vert.	5460.000	PK	40.8	31.7	6.0	31.9	-	46.7	68.2	21.5	
Vert.	5470.000	PK	41.1	31.7	6.0	31.9	-	47.0	68.2	21.2	
Vert.	5460.000	AV	32.8	31.7	6.0	31.9	0.2	38.8	53.9	15.1	*1)

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

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

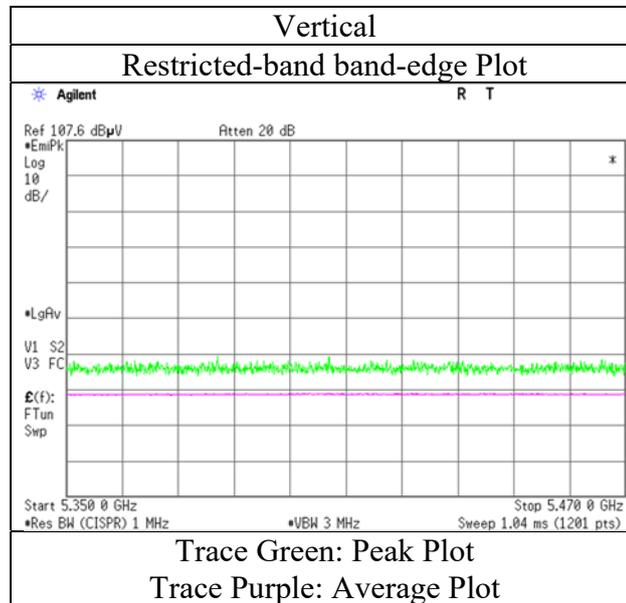
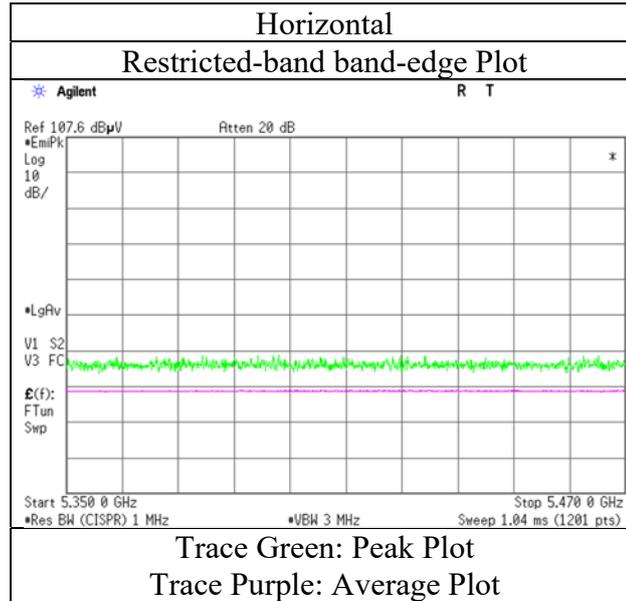
Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

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

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (242-tone RU)

RU Index 61



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (484-tone RU)

RU Index 65

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5460.000	PK	42.8	31.7	6.0	31.9	-	48.6	68.2	19.6	
Hori.	5470.000	PK	46.2	31.7	6.0	31.9	-	52.0	68.2	16.2	
Hori.	5460.000	AV	33.5	31.7	6.0	31.9	0.3	39.6	53.9	14.3	*1)
Vert.	5460.000	PK	42.5	31.7	6.0	31.9	-	48.3	68.2	19.9	
Vert.	5470.000	PK	47.2	31.7	6.0	31.9	-	53.0	68.2	15.2	
Vert.	5460.000	AV	33.8	31.7	6.0	31.9	0.3	39.9	53.9	14.0	*1)

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

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

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

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

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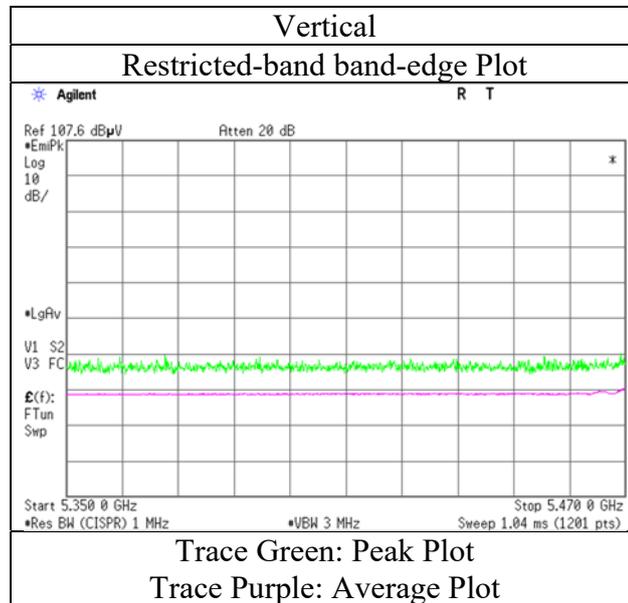
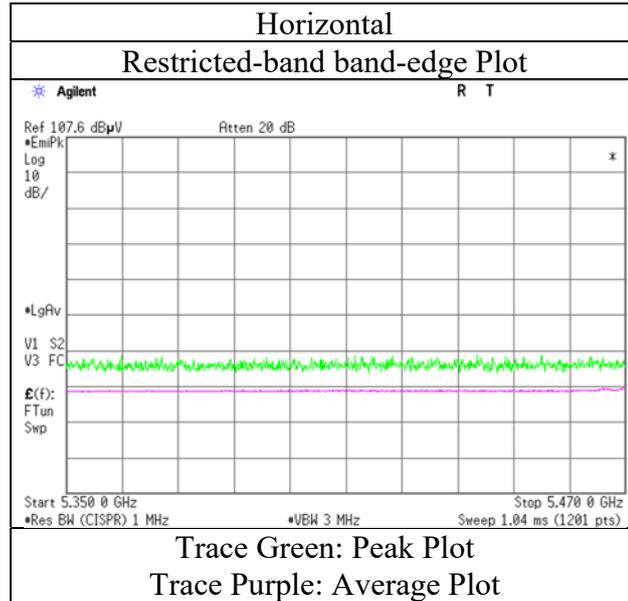
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (484-tone RU)

RU Index 65



* 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.

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Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.4 Semi Anechoic Chamber
Date April 9, 2020
Temperature / Humidity 22 deg. C / 32 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (996-tone RU)

RU Index 67

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5460.000	PK	55.1	32.0	6.4	31.3	-	62.1	68.2	6.1	
Hori.	5470.000	PK	56.0	32.0	6.4	31.3	-	63.0	68.2	5.2	
Hori.	5460.000	AV	44.7	32.0	6.4	31.3	0.3	52.0	53.9	1.9	*1)
Vert.	5460.000	PK	53.9	32.0	6.4	31.3	-	61.0	68.2	7.2	
Vert.	5470.000	PK	56.4	32.0	6.4	31.3	-	63.5	68.2	4.7	
Vert.	5460.000	AV	43.5	32.0	6.4	31.3	0.3	50.8	53.9	3.1	*1)

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

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

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

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

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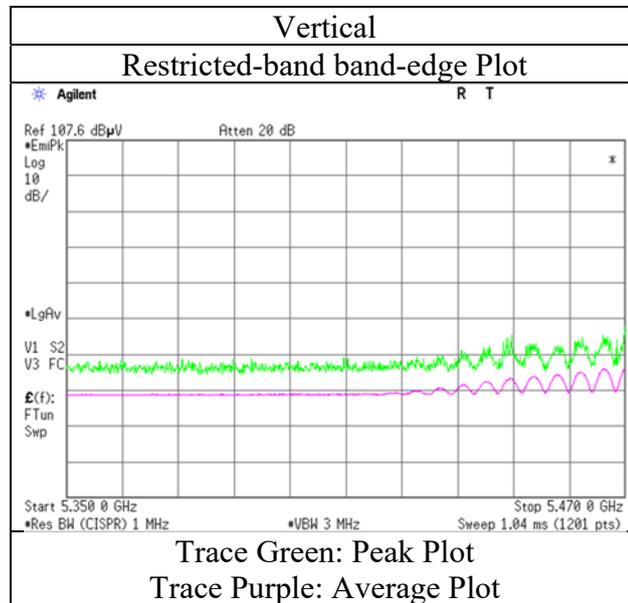
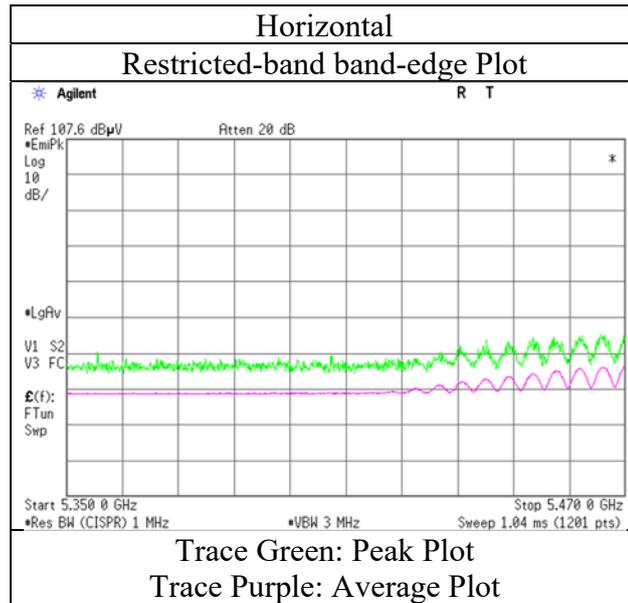
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.4 Semi Anechoic Chamber
Date April 9, 2020
Temperature / Humidity 22 deg. C / 32 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5530 MHz (996-tone RU)

RU Index 67



* 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.

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Ise EMC Lab.

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

Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (26-tone RU)

RU Index 36

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5725.000	PK	40.2	32.0	6.1	31.9	-	46.4	68.2	21.8	
Vert.	5725.000	PK	40.3	32.0	6.1	31.9	-	46.5	68.2	21.7	

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

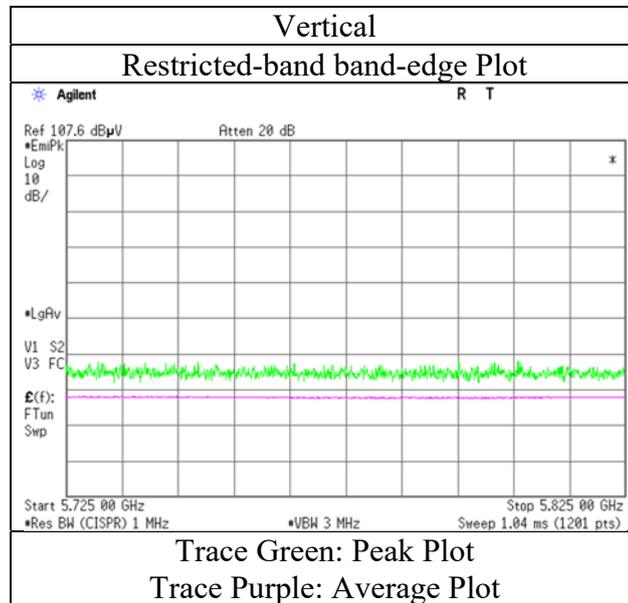
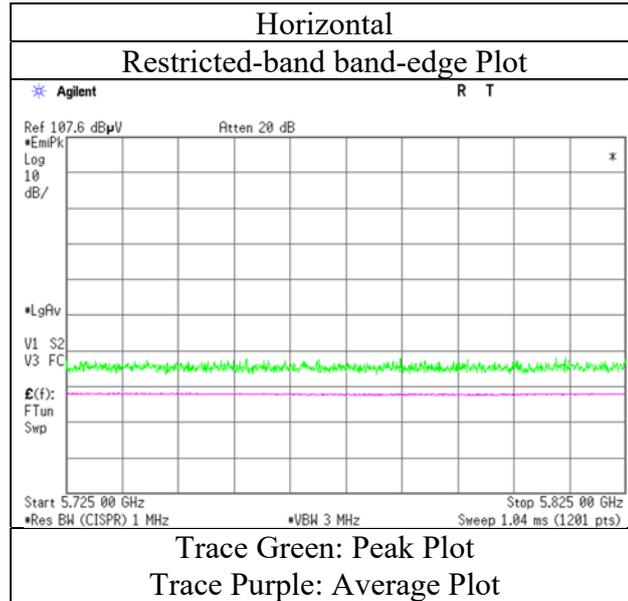
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (26-tone RU)

RU Index 36



* 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.

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

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Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (52-tone RU)

RU Index 52

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5725.000	PK	40.2	32.0	6.1	31.9	-	46.4	68.2	21.8	
Vert.	5725.000	PK	40.3	32.0	6.1	31.9	-	46.5	68.2	21.7	

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

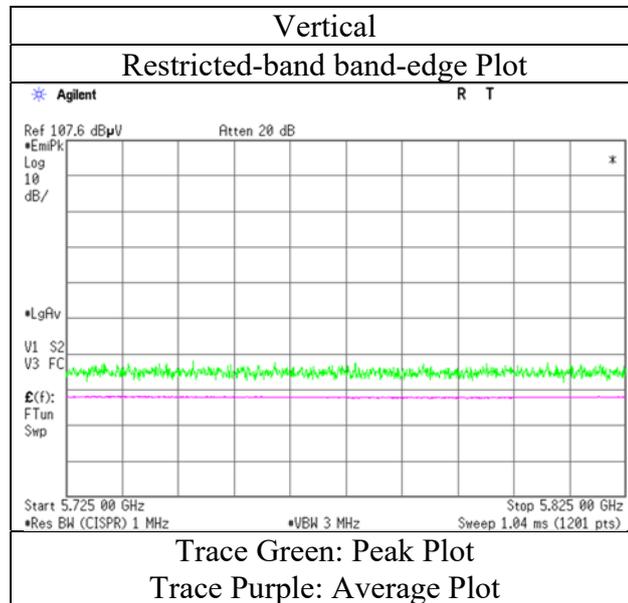
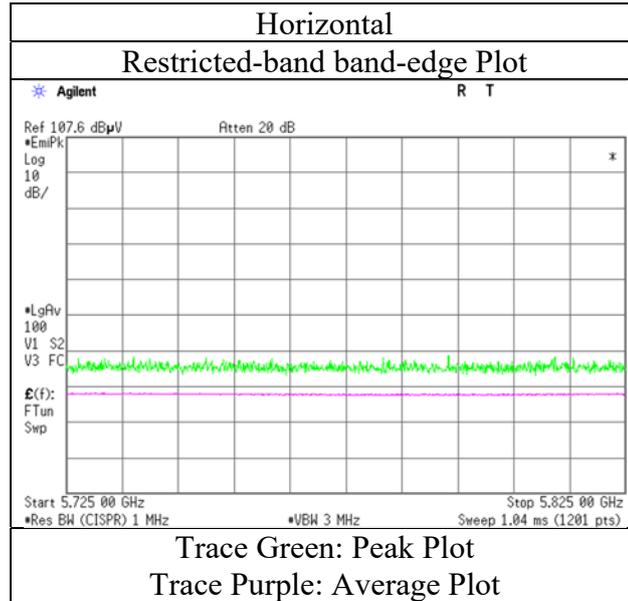
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
 (IFA Antenna)

Report No. 13170804H
 Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
 Date February 19, 2020
 Temperature / Humidity 22 deg. C / 42 % RH
 Engineer Yuta Moriya
 (1 GHz - 10 GHz)
 Mode Tx 11ax-80 5610 MHz (52-tone RU)

RU Index 52



* 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.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

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Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (106-tone RU)

RU Index 60

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5725.000	PK	40.5	32.0	6.1	31.9	-	46.7	68.2	21.5	
Vert.	5725.000	PK	40.7	32.0	6.1	31.9	-	46.8	68.2	21.4	

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

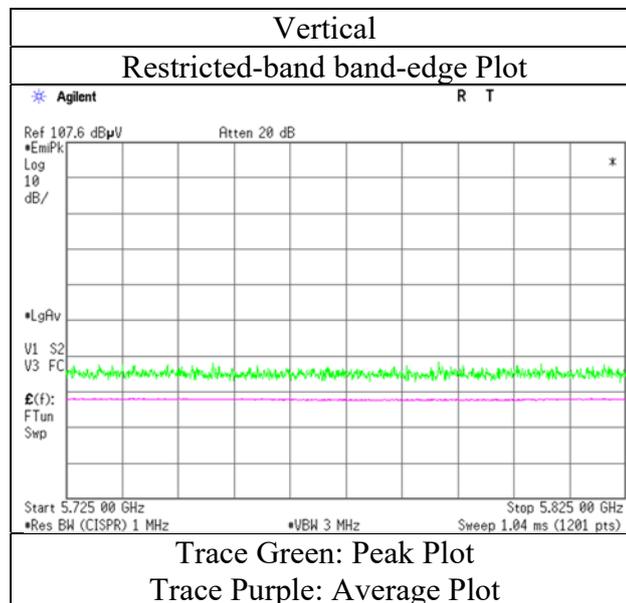
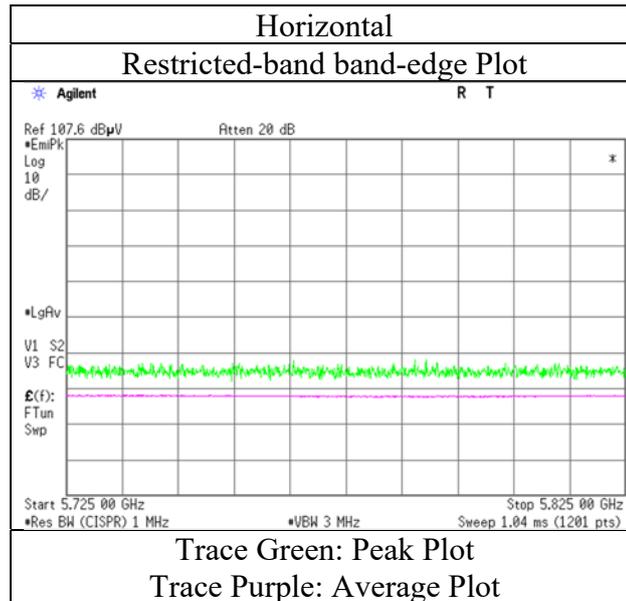
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (106-tone RU)

RU Index 60



* 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.

UL Japan, Inc.

Ise EMC Lab.

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

Telephone : +81 596 24 8999

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Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (242-tone RU)

RU Index 64

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5725.000	PK	40.6	32.0	6.1	31.9	-	46.8	68.2	21.4	
Vert.	5725.000	PK	40.7	32.0	6.1	31.9	-	46.8	68.2	21.4	

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

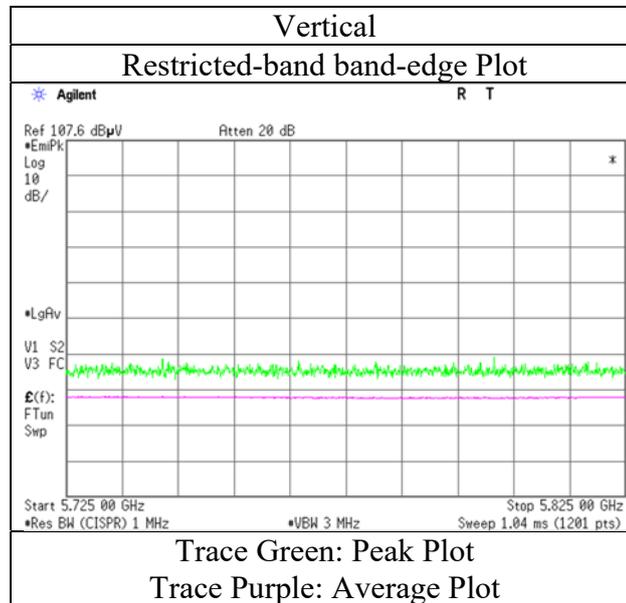
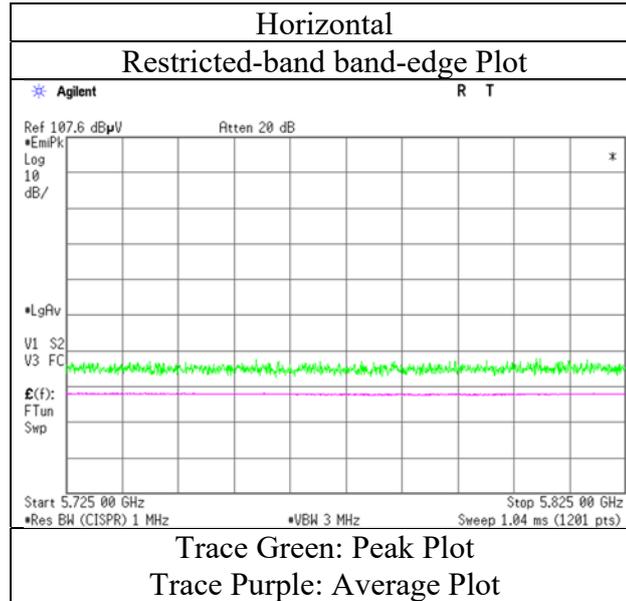
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (242-tone RU)

RU Index 64



* 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.

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Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (484-tone RU)

RU Index 66

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5725.000	PK	40.6	32.0	6.1	31.9	-	46.8	68.2	21.4	
Vert.	5725.000	PK	40.9	32.0	6.1	31.9	-	47.0	68.2	21.2	

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

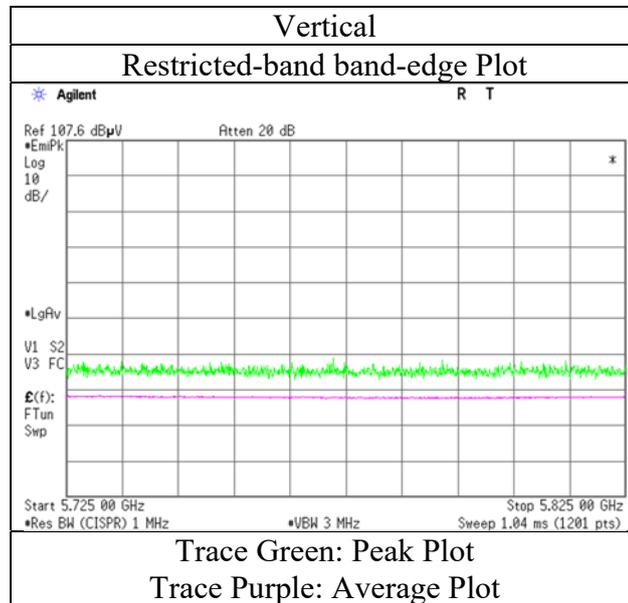
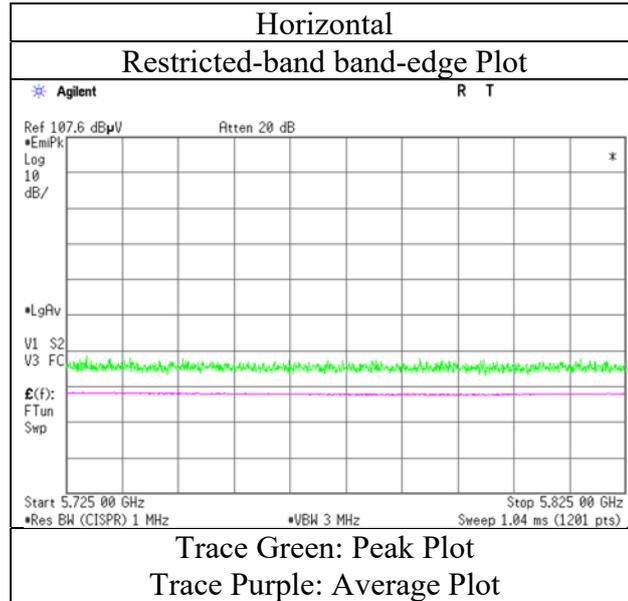
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 19, 2020
Temperature / Humidity 22 deg. C / 42 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (484-tone RU)

RU Index 66



* 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.

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Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.4 Semi Anechoic Chamber
Date April 10, 2020
Temperature / Humidity 20 deg. C / 28 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (996-tone RU)

RU Index 67

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5725.000	PK	41.2	32.5	6.5	31.4	-	48.8	68.2	19.4	
Vert.	5725.000	PK	42.1	32.5	6.5	31.4	-	49.7	68.2	18.5	

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

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

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

UL Japan, Inc.

Ise EMC Lab.

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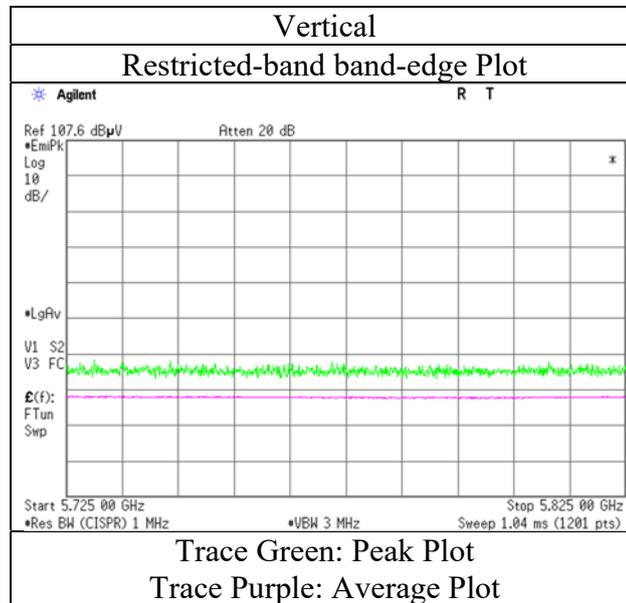
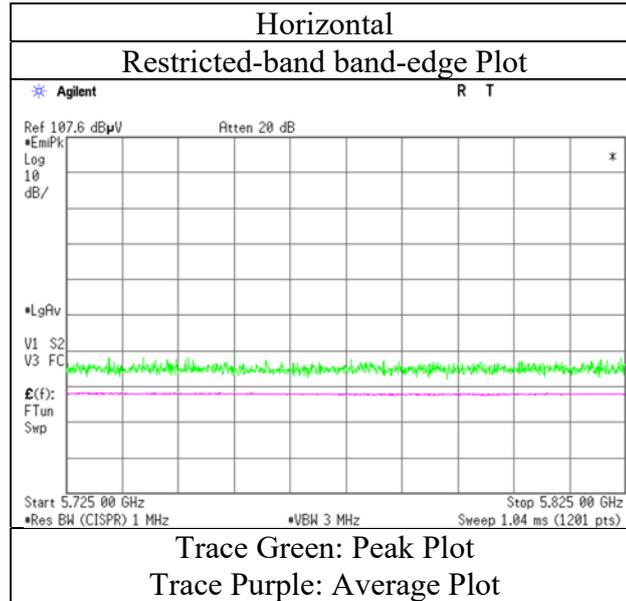
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.4 Semi Anechoic Chamber
Date April 10, 2020
Temperature / Humidity 20 deg. C / 28 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5610 MHz (996-tone RU)

RU Index 67



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (26-tone RU)

RU Index 0

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5650.000	PK	42.0	31.8	6.1	31.9	-	48.0	68.2	20.2	
Hori.	5700.000	PK	41.9	31.9	6.1	31.9	-	48.0	105.2	57.2	
Hori.	5720.000	PK	41.9	32.0	6.1	31.9	-	48.1	110.8	62.8	
Hori.	5725.000	PK	42.3	32.0	6.1	31.9	-	48.5	122.2	73.7	
Vert.	5650.000	PK	42.0	31.8	6.1	31.9	-	48.0	68.2	20.2	
Vert.	5700.000	PK	41.9	31.9	6.1	31.9	-	48.0	105.2	57.2	
Vert.	5720.000	PK	42.0	32.0	6.1	31.9	-	48.1	110.8	62.7	
Vert.	5725.000	PK	42.3	32.0	6.1	31.9	-	48.5	122.2	73.8	

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

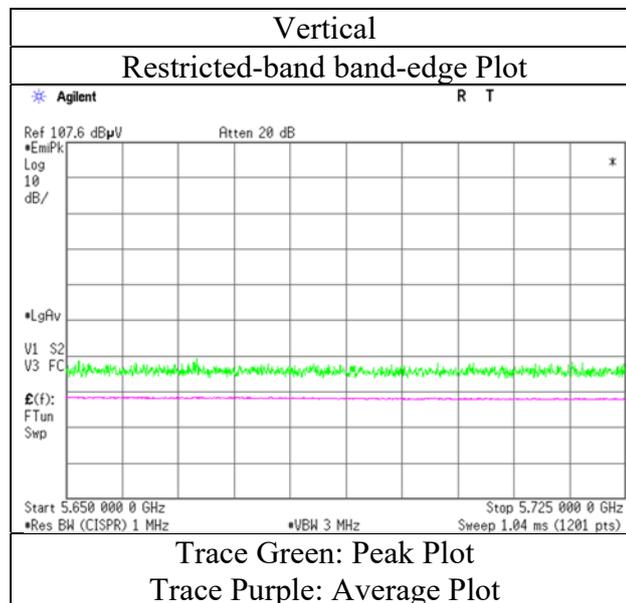
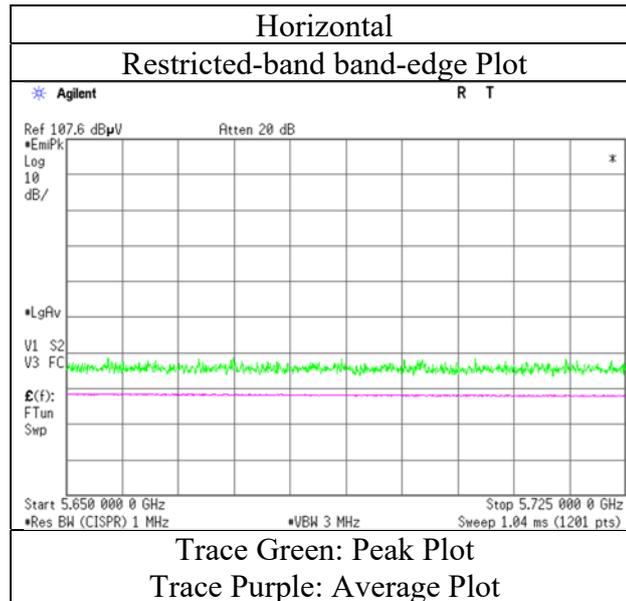
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (26-tone RU)

RU Index 0



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (52-tone RU)

RU Index 37

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5650.000	PK	42.1	31.8	6.1	31.9	-	48.1	68.2	20.1	
Hori.	5700.000	PK	42.2	31.9	6.1	31.9	-	48.3	105.2	56.9	
Hori.	5720.000	PK	43.1	32.0	6.1	31.9	-	49.3	110.8	61.5	
Hori.	5725.000	PK	44.5	32.0	6.1	31.9	-	50.7	122.2	71.5	
Vert.	5650.000	PK	42.2	31.8	6.1	31.9	-	48.2	68.2	20.0	
Vert.	5700.000	PK	42.2	31.9	6.1	31.9	-	48.3	105.2	56.9	
Vert.	5720.000	PK	42.8	32.0	6.1	31.9	-	48.9	110.8	61.9	
Vert.	5725.000	PK	44.4	32.0	6.1	31.9	-	50.6	122.2	71.7	

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

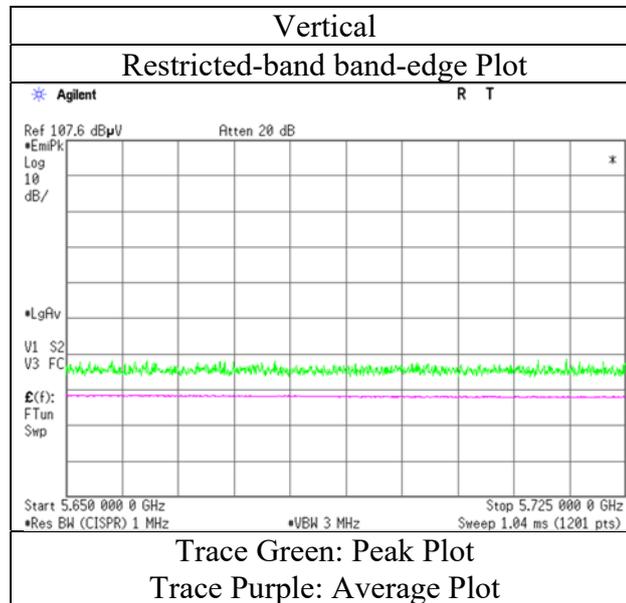
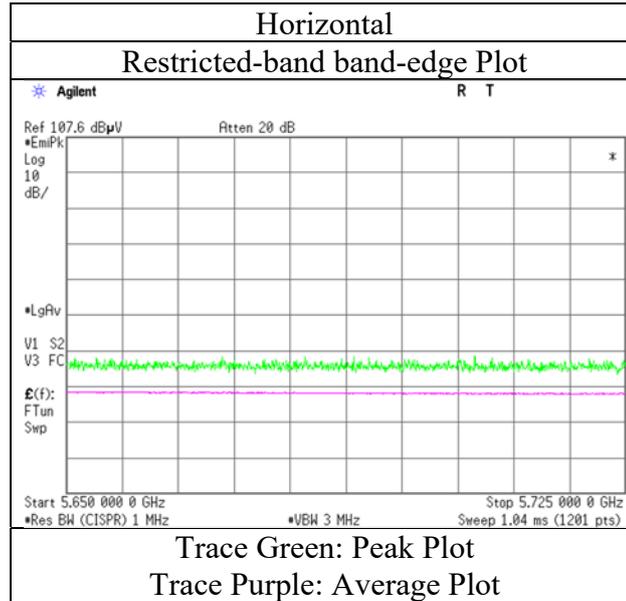
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (52-tone RU)

RU Index 37



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (106-tone RU)

RU Index 53

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5650.000	PK	42.3	31.8	6.1	31.9	-	48.2	68.2	20.0	
Hori.	5700.000	PK	42.8	31.9	6.1	31.9	-	48.9	105.2	56.3	
Hori.	5720.000	PK	43.5	32.0	6.1	31.9	-	49.6	110.8	61.2	
Hori.	5725.000	PK	46.3	32.0	6.1	31.9	-	52.4	122.2	69.8	
Vert.	5650.000	PK	42.4	31.8	6.1	31.9	-	48.4	68.2	19.8	
Vert.	5700.000	PK	42.2	31.9	6.1	31.9	-	48.3	105.2	57.0	
Vert.	5720.000	PK	43.5	32.0	6.1	31.9	-	49.7	110.8	61.1	
Vert.	5725.000	PK	46.3	32.0	6.1	31.9	-	52.4	122.2	69.8	

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

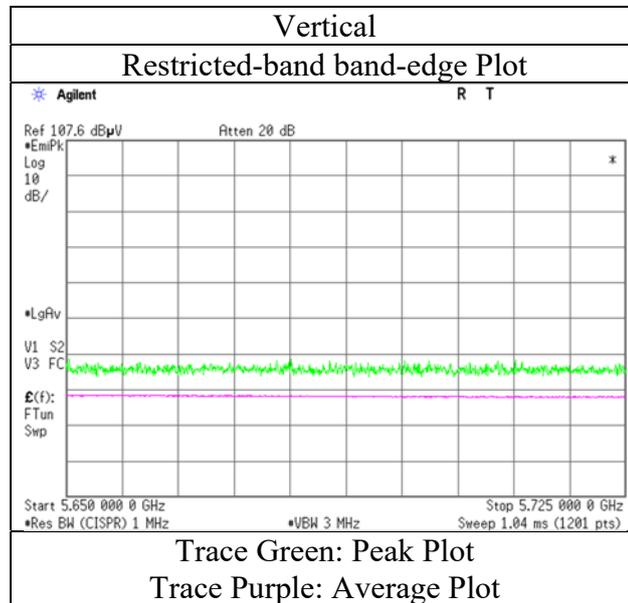
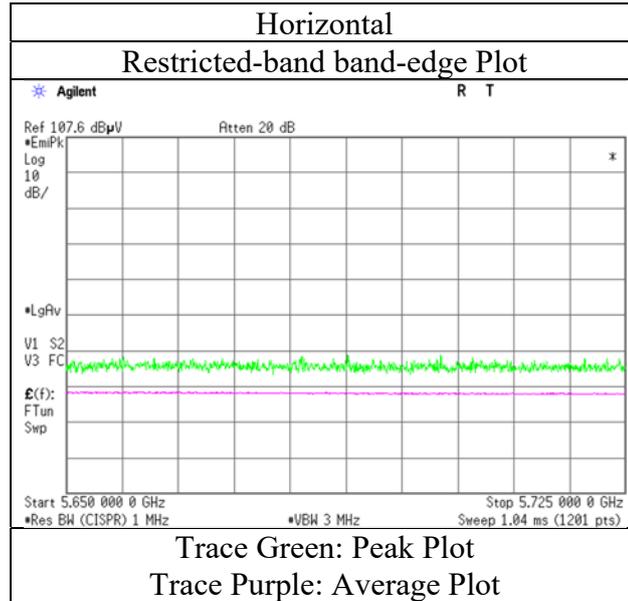
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (106-tone RU)

RU Index 53



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (242-tone RU)

RU Index 61

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5650.000	PK	42.0	31.8	6.1	31.9	-	48.0	68.2	20.3	
Hori.	5700.000	PK	42.4	31.9	6.1	31.9	-	48.5	105.2	56.7	
Hori.	5720.000	PK	46.9	32.0	6.1	31.9	-	53.1	110.8	57.7	
Hori.	5725.000	PK	48.8	32.0	6.1	31.9	-	54.9	122.2	67.3	
Vert.	5650.000	PK	41.6	31.8	6.1	31.9	-	47.5	68.2	20.7	
Vert.	5700.000	PK	42.6	31.9	6.1	31.9	-	48.6	105.2	56.6	
Vert.	5720.000	PK	46.1	32.0	6.1	31.9	-	52.2	110.8	58.6	
Vert.	5725.000	PK	47.7	32.0	6.1	31.9	-	53.9	122.2	68.3	

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

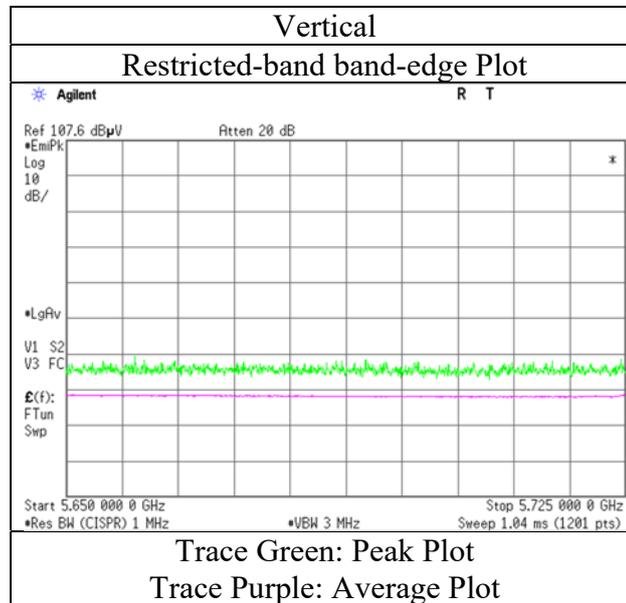
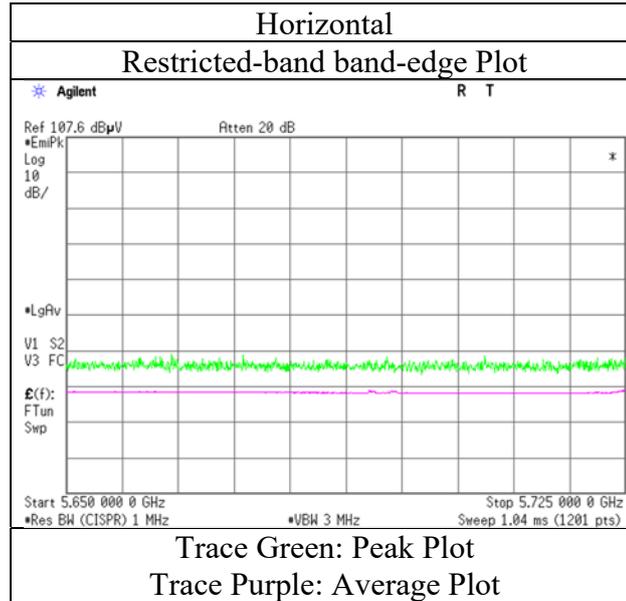
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (242-tone RU)

RU Index 61



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (484-tone RU)

RU Index 65

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5650.000	PK	42.2	31.8	6.1	31.9	-	48.2	68.2	20.0	
Hori.	5700.000	PK	44.4	31.9	6.1	31.9	-	50.5	105.2	54.7	
Hori.	5720.000	PK	53.5	32.0	6.1	31.9	-	59.7	110.8	51.1	
Hori.	5725.000	PK	55.6	32.0	6.1	31.9	-	61.7	122.2	60.5	
Vert.	5650.000	PK	42.6	31.8	6.1	31.9	-	48.5	68.2	19.7	
Vert.	5700.000	PK	43.8	31.9	6.1	31.9	-	49.9	105.2	55.3	
Vert.	5720.000	PK	52.7	32.0	6.1	31.9	-	58.9	110.8	51.9	
Vert.	5725.000	PK	54.7	32.0	6.1	31.9	-	60.9	122.2	61.3	

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

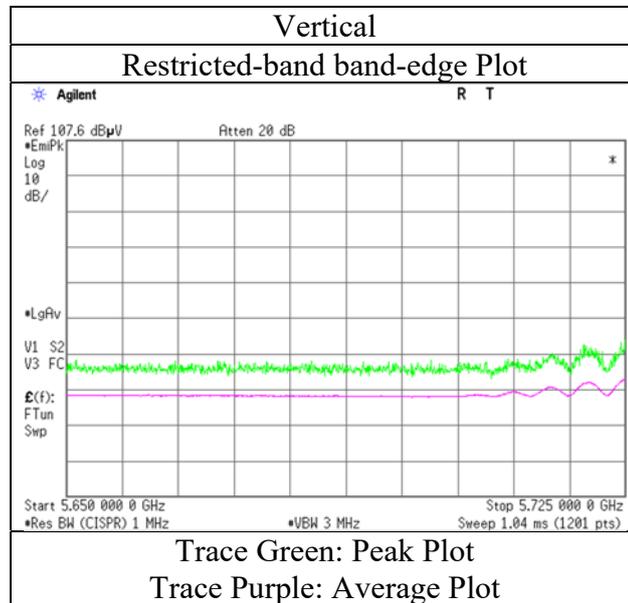
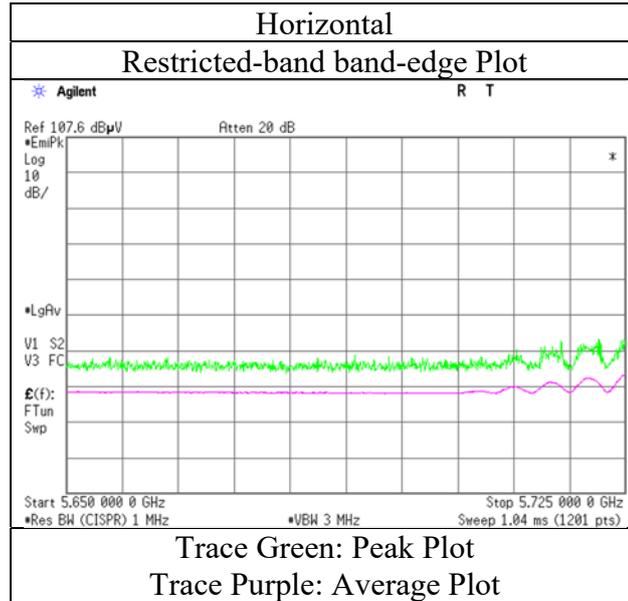
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (484-tone RU)

RU Index 65



* 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.

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Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (26-tone RU)

RU Index 36

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5850.000	PK	42.1	32.2	6.1	31.9	-	48.6	122.2	73.6	
Hori.	5855.000	PK	41.9	32.2	6.1	31.9	-	48.3	110.8	62.5	
Hori.	5875.000	PK	42.0	32.3	6.2	31.9	-	48.5	105.2	56.7	
Hori.	5925.000	PK	42.2	32.3	6.2	31.9	-	48.7	68.2	19.5	
Vert.	5850.000	PK	42.1	32.2	6.1	31.9	-	48.6	122.2	73.6	
Vert.	5855.000	PK	41.8	32.2	6.1	31.9	-	48.3	110.8	62.5	
Vert.	5875.000	PK	41.8	32.3	6.2	31.9	-	48.3	105.2	56.9	
Vert.	5925.000	PK	42.0	32.3	6.2	31.9	-	48.5	68.2	19.7	

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

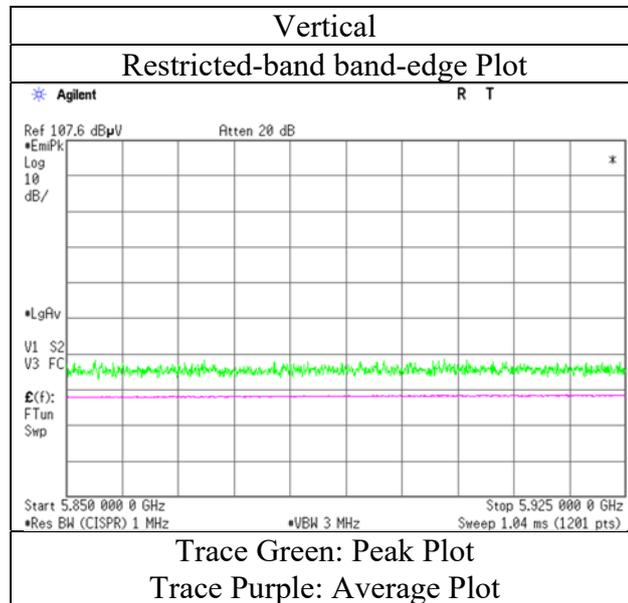
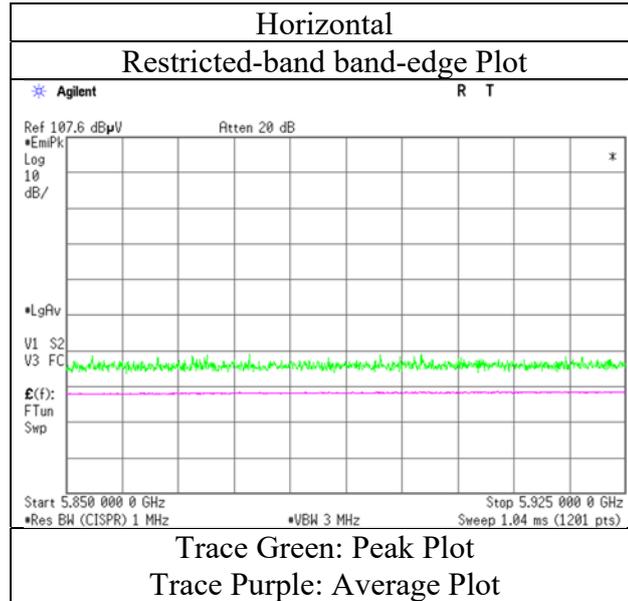
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (26-tone RU)

RU Index 36



* 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.

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Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (52-tone RU)

RU Index 52

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5850.000	PK	42.0	32.2	6.1	31.9	-	48.5	122.2	73.7	
Hori.	5855.000	PK	42.0	32.2	6.1	31.9	-	48.4	110.8	62.4	
Hori.	5875.000	PK	41.9	32.3	6.2	31.9	-	48.4	105.2	56.8	
Hori.	5925.000	PK	42.0	32.3	6.2	31.9	-	48.5	68.2	19.7	
Vert.	5850.000	PK	42.0	32.2	6.1	31.9	-	48.4	122.2	73.8	
Vert.	5855.000	PK	42.0	32.2	6.1	31.9	-	48.4	110.8	62.4	
Vert.	5875.000	PK	41.9	32.3	6.2	31.9	-	48.4	105.2	56.8	
Vert.	5925.000	PK	42.0	32.3	6.2	31.9	-	48.5	68.2	19.7	

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

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

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

UL Japan, Inc.

Ise EMC Lab.

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

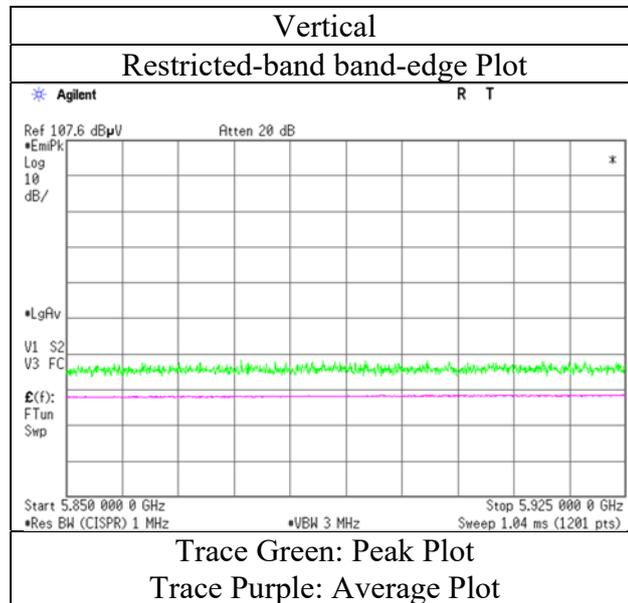
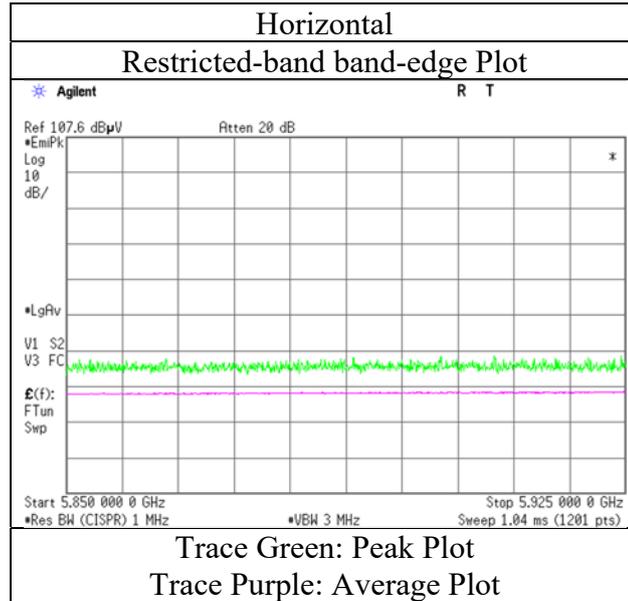
Telephone : +81 596 24 8999

Facsimile : +81 596 24 8124

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (52-tone RU)

RU Index 52



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (106-tone RU)

RU Index 60

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5850.000	PK	42.0	32.2	6.1	31.9	-	48.5	122.2	73.7	
Hori.	5855.000	PK	41.7	32.2	6.1	31.9	-	48.2	110.8	62.6	
Hori.	5875.000	PK	41.6	32.3	6.2	31.9	-	48.1	105.2	57.1	
Hori.	5925.000	PK	41.8	32.3	6.2	31.9	-	48.3	68.2	19.9	
Vert.	5850.000	PK	42.3	32.2	6.1	31.9	-	48.7	122.2	73.5	
Vert.	5855.000	PK	41.7	32.2	6.1	31.9	-	48.2	110.8	62.6	
Vert.	5875.000	PK	41.6	32.3	6.2	31.9	-	48.1	105.2	57.1	
Vert.	5925.000	PK	41.9	32.3	6.2	31.9	-	48.4	68.2	19.8	

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

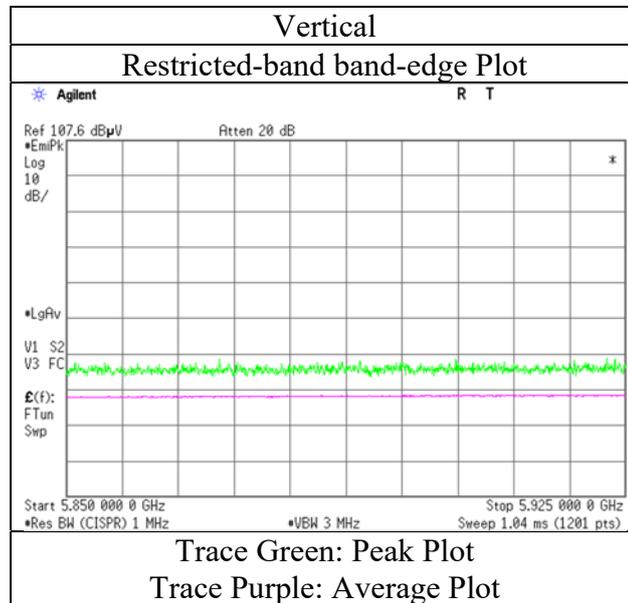
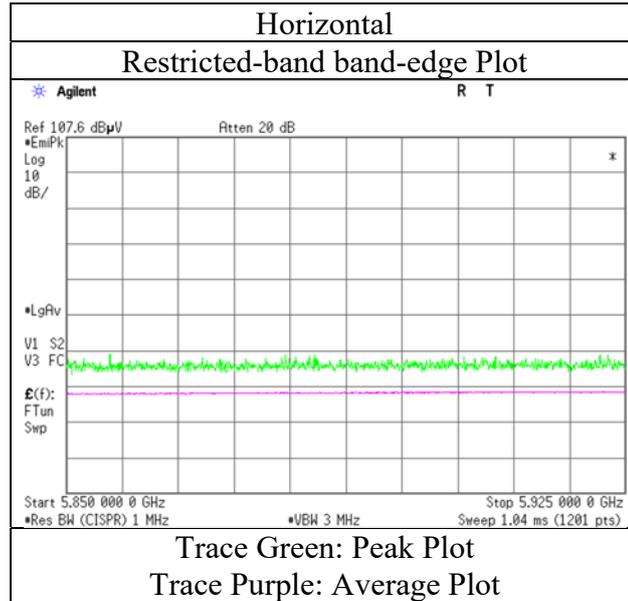
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (106-tone RU)

RU Index 60



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (242-tone RU)

RU Index 64

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5850.000	PK	42.4	32.2	6.1	31.9	-	48.8	122.2	73.4	
Hori.	5855.000	PK	42.1	32.2	6.1	31.9	-	48.6	110.8	62.2	
Hori.	5875.000	PK	42.1	32.3	6.2	31.9	-	48.6	105.2	56.6	
Hori.	5925.000	PK	41.8	32.3	6.2	31.9	-	48.4	68.2	19.9	
Vert.	5850.000	PK	42.1	32.2	6.1	31.9	-	48.6	122.2	73.6	
Vert.	5855.000	PK	42.1	32.2	6.1	31.9	-	48.6	110.8	62.2	
Vert.	5875.000	PK	42.1	32.3	6.2	31.9	-	48.6	105.2	56.6	
Vert.	5925.000	PK	42.0	32.3	6.2	31.9	-	48.5	68.2	19.7	

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

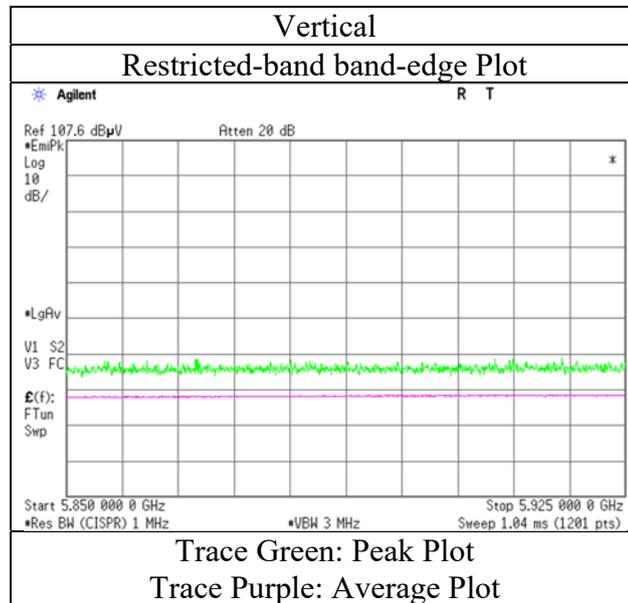
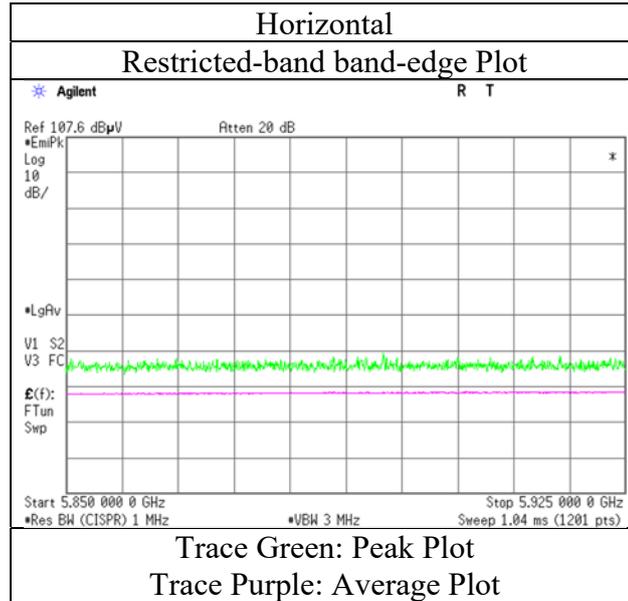
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (242-tone RU)

RU Index 64



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (484-tone RU)

RU Index 66

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5850.000	PK	44.4	32.2	6.1	31.9	-	50.9	122.2	71.3	
Hori.	5855.000	PK	44.4	32.2	6.1	31.9	-	50.9	110.8	59.9	
Hori.	5875.000	PK	42.5	32.3	6.2	31.9	-	49.0	105.2	56.2	
Hori.	5925.000	PK	42.1	32.3	6.2	31.9	-	48.6	68.2	19.6	
Vert.	5850.000	PK	44.3	32.2	6.1	31.9	-	50.8	122.2	71.4	
Vert.	5855.000	PK	43.3	32.2	6.1	31.9	-	49.8	110.8	61.0	
Vert.	5875.000	PK	42.5	32.3	6.2	31.9	-	48.9	105.2	56.3	
Vert.	5925.000	PK	42.5	32.3	6.2	31.9	-	49.0	68.2	19.2	

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

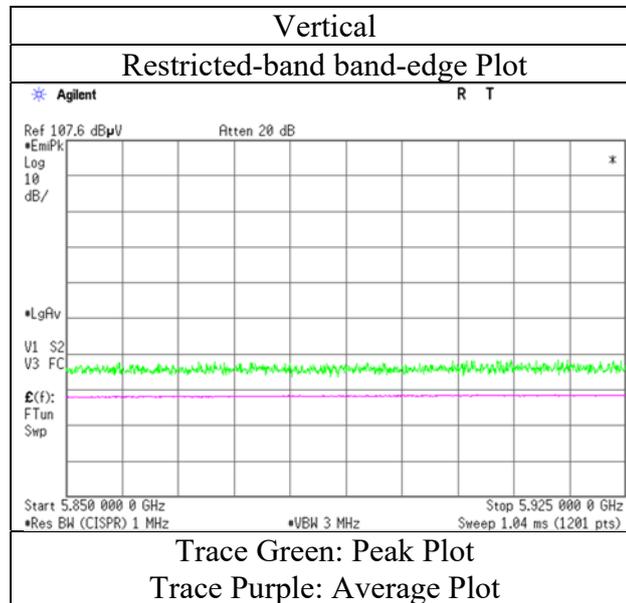
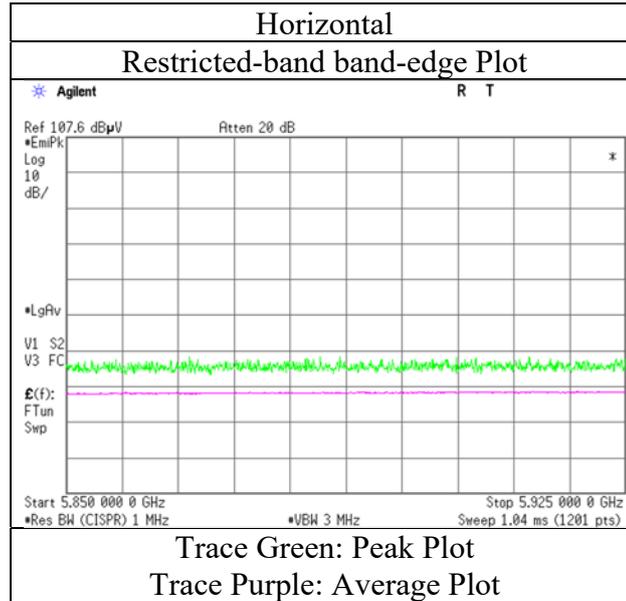
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.3 Semi Anechoic Chamber
Date February 20, 2020
Temperature / Humidity 23 deg. C / 28 % RH
Engineer Takafumi Noguchi
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (484-tone RU)

RU Index 66



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.4 Semi Anechoic Chamber
Date April 10, 2020
Temperature / Humidity 20 deg. C / 28 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (996-tone RU)

RU Index 67

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	5650.000	PK	41.1	32.3	6.5	31.4	-	48.5	68.2	19.7	
Hori.	5700.000	PK	54.0	32.5	6.5	31.4	-	61.6	105.2	43.6	
Hori.	5720.000	PK	57.2	32.5	6.5	31.4	-	64.8	110.8	46.0	
Hori.	5725.000	PK	58.8	32.5	6.5	31.4	-	66.4	122.2	55.8	
Hori.	5850.000	PK	51.0	32.8	6.6	31.4	-	59.0	122.2	63.2	
Hori.	5855.000	PK	50.5	32.8	6.6	31.4	-	58.5	110.8	52.4	
Hori.	5875.000	PK	44.8	32.8	6.6	31.4	-	52.7	105.2	52.5	
Hori.	5925.000	PK	41.4	32.8	6.6	31.4	-	49.3	68.2	18.9	
Vert.	5650.000	PK	42.1	32.3	6.5	31.4	-	49.5	68.2	18.7	
Vert.	5700.000	PK	55.4	32.5	6.5	31.4	-	63.0	105.2	42.2	
Vert.	5720.000	PK	58.6	32.5	6.5	31.4	-	66.3	110.8	44.6	
Vert.	5725.000	PK	60.3	32.5	6.5	31.4	-	67.9	122.2	54.3	
Vert.	5850.000	PK	52.8	32.8	6.6	31.4	-	60.8	122.2	61.4	
Vert.	5855.000	PK	51.9	32.8	6.6	31.4	-	59.8	110.8	51.0	
Vert.	5875.000	PK	45.8	32.8	6.6	31.4	-	53.7	105.2	51.5	
Vert.	5925.000	PK	40.8	32.8	6.6	31.4	-	48.8	68.2	19.4	

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

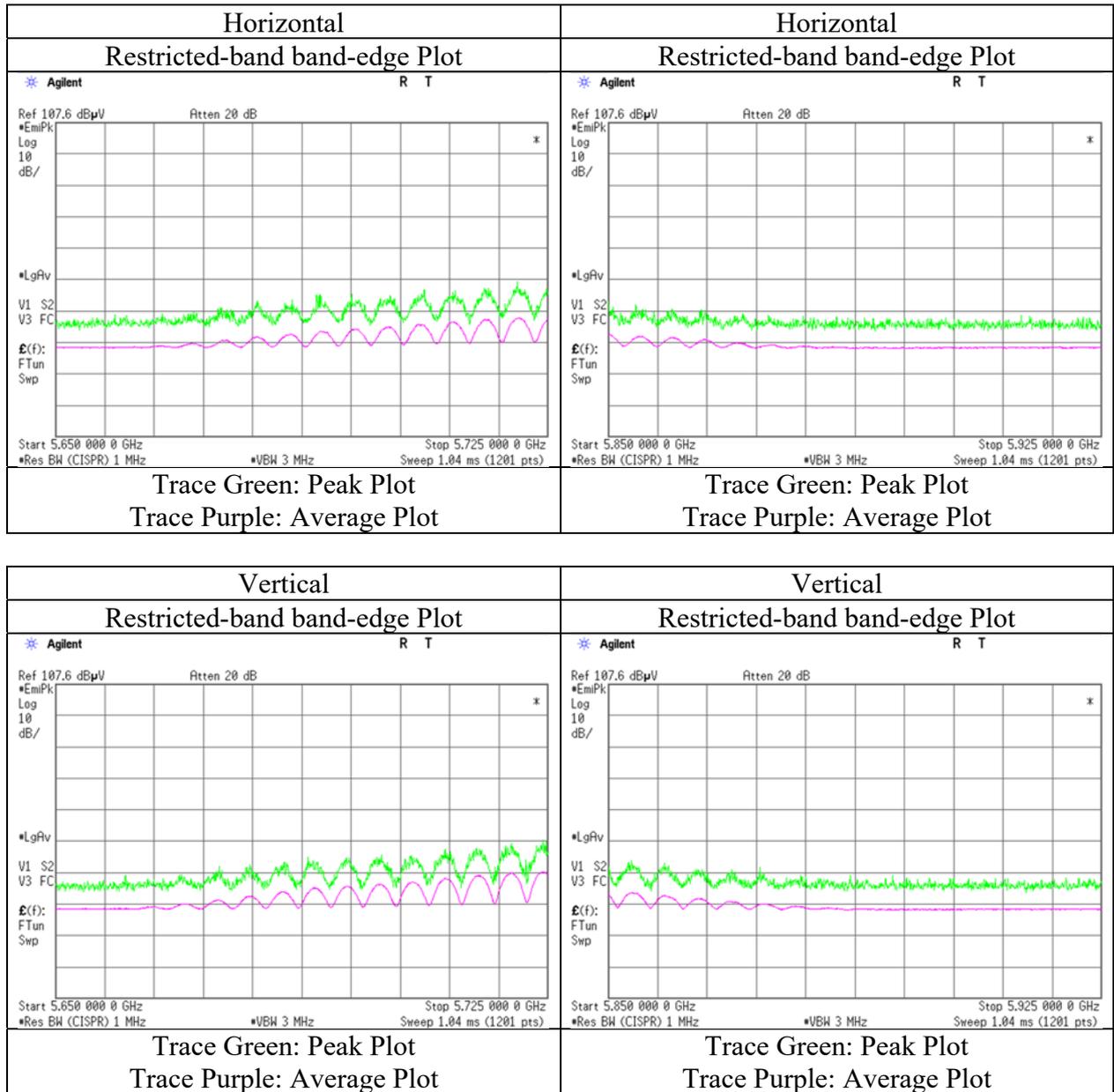
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz $20\log(3.9\text{ m} / 3.0\text{ m}) = 2.28\text{ dB}$

Radiated Spurious Emission
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.4 Semi Anechoic Chamber
Date April 10, 2020
Temperature / Humidity 20 deg. C / 28 % RH
Engineer Yuta Moriya
(1 GHz - 10 GHz)
Mode Tx 11ax-80 5775 MHz (996-tone RU)

RU Index 67



* 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
(IFA Antenna)

Report No. 13170804H
Test place Ise EMC Lab. No.2 Semi Anechoic Chamber
Date January 21, 2020 January 22, 2020
Temperature / Humidity 23deg. C / 30 % RH 21 deg. C / 41 % RH
Engineer Koji Yamamoto Takumi Shimada
(1 GHz - 40 GHz) (Below1GHz)
Mode Tx 11ax-80 5290 MHz (OFDM) + BT1 3DH5 Hopping

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	33.911	QP	28.6	17.2	7.1	30.5	-	22.4	40.0	17.6	
Hori.	52.966	QP	25.1	10.2	7.4	30.4	-	12.3	40.0	27.7	
Hori.	100.380	QP	25.5	10.4	8.0	30.2	-	13.6	43.5	29.9	
Hori.	363.212	QP	24.4	15.0	10.3	29.5	-	20.2	46.0	25.8	
Hori.	507.384	QP	24.1	17.5	11.1	30.0	-	22.7	46.0	23.3	
Hori.	967.858	QP	22.3	22.1	13.2	27.9	-	29.7	54.0	24.3	
Hori.	5350.000	PK	48.0	31.5	5.8	34.3	-	51.1	73.9	22.9	
Hori.	5354.922	PK	48.3	31.5	5.8	34.3	-	51.4	73.9	22.6	
Hori.	10580.000	PK	42.3	40.1	-2.1	34.5	-	45.8	68.2	22.4	Floor noise
Hori.	15870.000	PK	44.6	37.4	-0.4	34.2	-	47.4	73.9	26.5	Floor noise
Hori.	5350.000	AV	38.9	31.5	5.8	34.3	0.8	42.7	53.9	11.2	*1)
Hori.	5354.922	AV	39.1	31.5	5.8	34.3	0.8	42.9	53.9	11.0	*1)
Hori.	15870.000	AV	36.5	37.4	-0.4	34.2	-	39.3	53.9	14.6	Floor noise
Vert.	33.911	QP	32.3	17.2	7.1	30.5	-	26.1	40.0	13.9	
Vert.	52.966	QP	34.6	10.2	7.4	30.4	-	21.8	40.0	18.2	
Vert.	100.380	QP	26.5	10.4	8.0	30.2	-	14.6	43.5	28.9	
Vert.	363.212	QP	25.1	15.0	10.3	29.5	-	20.9	46.0	25.1	
Vert.	507.384	QP	24.1	17.5	11.1	30.0	-	22.7	46.0	23.3	
Vert.	967.858	QP	22.2	22.1	13.2	27.9	-	29.6	54.0	24.4	
Vert.	5350.000	PK	49.1	31.5	5.8	34.3	-	52.2	73.9	21.7	
Vert.	5354.922	PK	49.3	31.5	5.8	34.3	-	52.3	73.9	21.6	
Vert.	10580.000	PK	43.2	40.1	-2.1	34.5	-	46.6	68.2	21.6	Floor noise
Vert.	15870.000	PK	44.2	37.4	-0.4	34.2	-	47.0	73.9	26.9	Floor noise
Vert.	5350.000	AV	39.1	31.5	5.8	34.3	0.8	42.9	53.9	11.0	*1)
Vert.	5354.922	AV	39.4	31.5	5.8	34.3	0.8	43.2	53.9	10.7	*1)
Vert.	15870.000	AV	36.1	37.4	-0.4	34.2	-	38.9	53.9	15.0	Floor noise

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

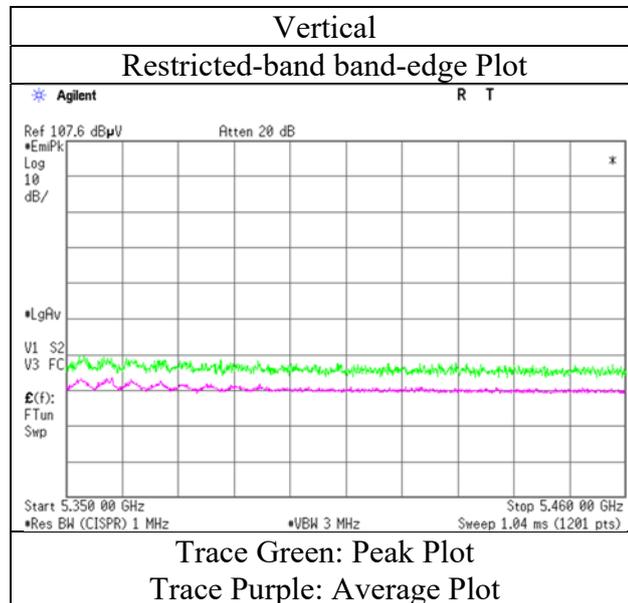
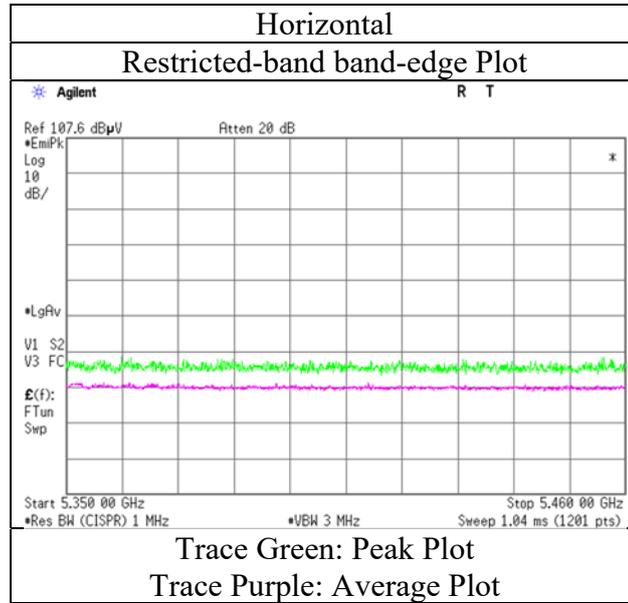
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz 20log(3.65 m / 3.0 m) = 1.71 dB
10 GHz - 26.5 GHz 20log(1.0 m / 3.0 m) = -9.5 dB

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

Radiated Spurious Emission
 (IFA Antenna)

Report No. 13170804H
 Test place Ise EMC Lab. No.2 Semi Anechoic Chamber
 Date January 21, 2020
 Temperature / Humidity 23deg. C / 30 % RH
 Engineer Koji Yamamoto
 Mode Tx 11ax-80 5290 MHz (OFDM) + BT1 3DH5 Hopping



* 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.

UL Japan, Inc.

Ise EMC Lab.

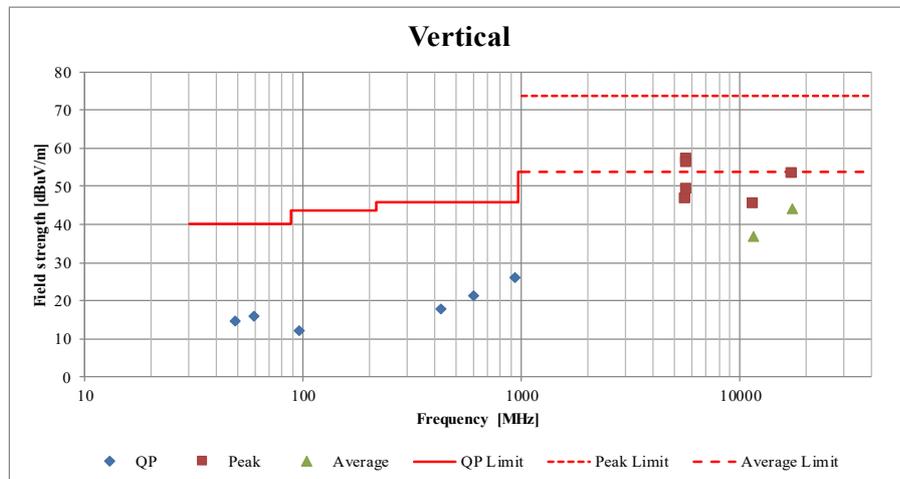
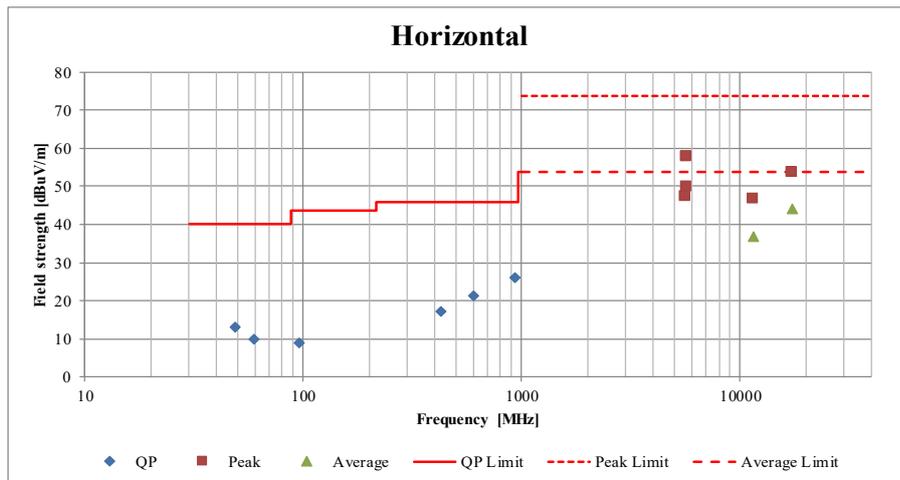
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Radiated Spurious Emission
(Plot data, Worst case)
 (IFA Antenna)

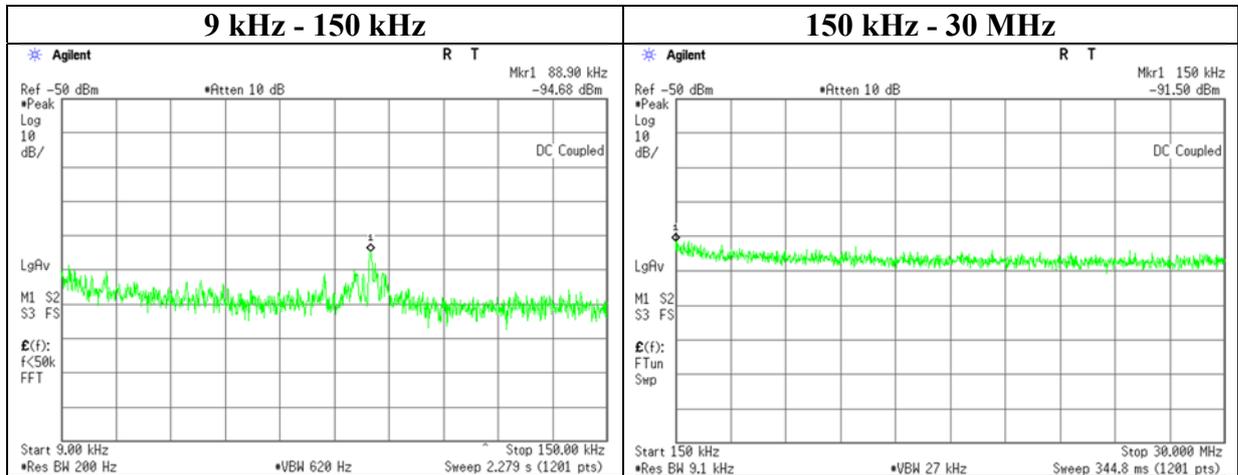
Report No.	13170804H		
Test place	Ise EMC Lab. No.3 Semi Anechoic Chamber		
Date	January 7, 2020	January 7, 2020	January 8, 2020
Temperature / Humidity	23 deg. C / 38 RH	23 deg. C / 35 % RH	22 deg. C / 39 RH
Engineer	Junki Nagatomi (1 GHz - 10 GHz)	Tomohisa Nakagawa (10 GHz - 18 GHz) (26.5 GHz - 40 GHz)	Junki Nagatomi (18 GHz - 26.5 GHz) (Below 1GHz)
Mode	Tx 11ax-40 5755 MHz (OFDM)		



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

Conducted Spurious Emission

Report No. 13170804H
 Test place Ise EMC Lab. No.3 Measurement Room
 Date December 22, 2019
 Temperature / Humidity 22 deg. C / 38 % RH
 Engineer Akihiko Maeda
 Mode Tx 11ax-40 (OFDM) 5755 MHz



Frequency [kHz]	Reading [dBm]	Cable Loss [dB]	Attenuator [dB]	Antenna Gain [dBi]	N (Number of Output)	EIRP [dBm]	Distance [m]	Ground bounce [dB]	E (field strength) [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
88.90	-94.7	0.01	9.9	7.29	2	-74.5	300	6.0	-13.2	28.6	41.8	
150.00	-91.5	0.01	9.9	7.29	2	-71.3	300	6.0	-10.0	24.0	34.0	

$$E \text{ [dBuV/m]} = \text{EIRP [dBm]} - 20 \log(\text{Distance [m]}) + \text{Ground bounce [dB]} + 104.8 \text{ [dBuV/m]}$$

$$\text{EIRP [dBm]} = \text{Reading [dBm]} + \text{Cable loss [dB]} + \text{Attenuator Loss [dB]} + \text{Antenna gain [dBi]} + 10 * \log(N)$$

N: Number of output

The worst antenna gain was applied.

APPENDIX 2: Test instruments

Test Instruments (1/3)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Calibration Due Date	Cal Int
RE/AT/CE	141532	DIGITAL HiTESTER	HIOKI	3805	51201197	01/06/2020	01/31/2021	12
RE/CE	141152	EMI measurement program	TSJ	TEPTO-DV	-	-	-	-
RE/AT/CE	141554	Thermo-Hygrometer	CUSTOM	CTH-201	1301	01/07/2020	01/31/2021	12
RE	141507	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	258	09/26/2019	09/30/2020	12
RE	142013	AC3_Semi Anechoic Chamber(SVSWR)	TDK	Semi Anechoic Chamber 3m	DA-10005	04/08/2019	04/30/2021	24
RE	141580	MicroWave System Amplifier	Keysight Technologies Inc	83017A	MY39500779	03/05/2019	03/31/2020 *1)	12
RE	177964	Microwave Cable	Junkosha INC.	MMX221	1901S329(1 m)/1902S579 (5m)	03/02/2020	03/31/2021	12
RE/CE	142008	AC3_Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	06/26/2018	06/30/2020	24
RE/CE	141899	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY46180655	08/07/2019	08/31/2020	12
RE/AT/CE	142183	Measure	KOMELON	KMC-36	-	-	-	-
AT	141176	RPR3006W measurement software	DARE!! Instruments	RadiMation 2014.2.1	-	-	-	-
AT	141420	Attenuator	Weinschel Associates	WA56-10	56100307	05/17/2019	05/31/2020	12
AT	141419	Attenuator	Weinschel Associates	WA56-10	56100305	05/17/2019	05/31/2020	12
AT	141814	Power Meter	DARE!! Instruments	RPR3006W	14I00048SN O082	11/06/2019	11/30/2020	12
AT	141813	Power Meter	DARE!! Instruments	RPR3006W	14I00048SN O081	08/22/2019	08/31/2020	12
AT	141855	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46187750	11/19/2019	11/30/2020	12
AT	141226	Microwave Cable	Junkosha	MMX221-00500DM SDMS	1502S304	03/05/2019	03/31/2020 *1)	12
AT/RE	141902	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46187105	10/09/2019	10/31/2020	12
AT	141194	Antenna Terminal Measurement Software	UL Japan	-	-	-	-	-
AT	141327	Coaxial Cable	UL Japan	-	-	02/04/2020	02/28/2021	12
AT	141156	Attenuator(10dB)	Weinschel Corp	2	BL1173	11/07/2019	11/30/2020	12
AT	141821	Power Splitters/Combiners	Mini-Circuit	ZFSC-2-10G	326	09/12/2019	09/30/2020	12
RE	141885	Spectrum Analyzer	Keysight Technologies Inc	E4448A	US44300523	11/21/2019	11/30/2020	12
RE	141517	Horn Antenna 26.5-40GHz	ETS LINDGREN	3160-10	152399	09/19/2019	09/30/2020	12
RE	141904	Spectrum Analyzer	Keysight Technologies Inc	N9030A	US51350215	09/20/2019	09/30/2020	12
RE	141588	Pre Amplifier	MITEQ, Inc	AMF-6F-2600400-33-8P / AMF-4F-2600	1871355 /1871328	09/27/2019	09/30/2020	12
RE	160324	Coaxial Cable	Huber+Suhner	SUCOFLEX 102A	MY009/2A	11/22/2019	11/30/2020	12

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Test Instruments (2/3)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Calibration Due Date	Cal Int
RE	141293	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCB	602	01/06/2020	01/31/2021	12
RE	141513	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170306	10/08/2019	10/31/2020	12
RE	141266	Logperiodic Antenna(200-1000M Hz)	Schwarzbeck	VUSLP9111B	9111B-191	08/24/2019	08/31/2020	12
RE	141949	Test Receiver	Rohde & Schwarz	ESCI	100767	08/02/2019	08/31/2020	12
RE	142314	Attenuator	Pasternack	PE7390-6	D/C 1504	06/11/2019	06/30/2020	12
RE	141323	Coaxial cable	UL Japan	-	-	07/02/2019	07/31/2020	12
RE	141424	Biconical Antenna	Schwarzbeck	VHA9103+BBA9106	1915	08/24/2019	08/31/2020	12
RE	141582	Pre Amplifier	SONOMA INSTRUMENT	310	260834	02/10/2020	02/28/2021	12
CE	141357	LISN(AMN)	Schwarzbeck	NSLK8127	8127-729	07/05/2019	07/31/2020	12
CE	141216	Coaxial cable	Fujikura/Suhner/TSJ	5D-2W/SFM14/sucoform141-PE/421-010	-/00640	07/02/2019	07/31/2020	12
CE	141247	Attenuator(13dB)	JFW Industries, Inc.	50FP-013H2 N	-	12/02/2019	12/31/2020	12
CE	146754	Test Receiver	Rohde & Schwarz	ESCI	100299	10/08/2019	10/31/2020	12
RE	141427	Biconical Antenna	Schwarzbeck	VHA9103B+BBA9106	8031	08/23/2019	08/31/2020	12
RE	142004	AC2_Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-06902	06/29/2018	06/30/2020	24
RE	142006	AC2_Semi Anechoic Chamber(SVSWR)	TDK	Semi Anechoic Chamber 3m	DA-06902	04/01/2019	04/30/2021	24
RE	141542	Digital Tester	Fluke Corporation	FLUKE 26-3	78030611	08/20/2019	08/31/2020	12
RE	141579	Pre Amplifier	Keysight Technologies Inc	8449B	3008A02142	01/07/2020	01/31/2021	12
RE	141512	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	254	09/03/2019	09/30/2020	12
RE	141392	Microwave Cable	Junkosha	MWX221	1604S253(1 m) / 537073/126E (5 m)	02/18/2020	02/28/2021	12
RE	141406	High Pass Filter 7-20GHz	TOKIMEC	TF37NCCA	7001	09/12/2019	09/30/2020	12
RE	141503	Horn Antenna 18-26.5GHz	EMCO	3160-09	1265	10/08/2019	10/31/2020	12
RE	141279	Microwave Cable	Junkosha	MMX221-00500DM SDMS	1502S303	03/05/2019	03/31/2020 *1)	12
RE	141578	Pre Amplifier	Keysight Technologies Inc	8447D	2944A10845	09/06/2019	09/30/2020	12
RE	141317	Coaxial Cable	Fujikura/Agilent	-	-	09/03/2019	09/30/2020	12
RE	141203	Attenuator(6dB)	Weinschel Corp	2	BK7970	11/07/2019	11/30/2020	12
RE	141265	Logperiodic Antenna(200-1000M Hz)	Schwarzbeck	VUSLP9111B	9111B-190	08/23/2019	08/31/2020	12
RE	192300	Thermo-Hygrometer	CUSTOM	CTH-201	0013	12/19/2019	12/31/2020	12
AT	141572	Thermo-Hygrometer	CUSTOM	CTH-201	3401	01/07/2020	01/31/2021	12
AT	141414	Microwave Cable	Junkosha	MWX221	1207S407	08/06/2019	08/31/2020	12
AT	141900	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46185823	11/20/2019	11/30/2020	12
AT	141816	Power Meter	DARE!! Instruments	RPR3006W	14I00048SN O084	11/06/2019	11/30/2020	12

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Test Instruments (3/3)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Calibration Due Date	Cal Int
RE	141545	DIGITAL HiTESTER	HIOKI	3805	51201148	01/6/2020	01/31/2021	12
RE	142017	AC4_Semi Anechoic Chamber(SVSWR)	TDK	Semi Anechoic Chamber 3m	DA-10005	04/4/2019	04/30/2021	24
RE	141562	Thermo-Hygrometer	CUSTOM	CTH-201	0010	01/7/2020	01/31/2021	12
RE	141412	Microwave Cable	Junkosha	MWX221	1305S002R(1m) / 1405S146(5m)	06/17/2019	06/30/2020	12
RE	141581	MicroWave System Amplifier	Keysight Technologies Inc	83017A	650	10/16/2019	10/31/2020	12
RE	141508	Horn Antenna 1-18GHz	Schwarzbeck Mess - Elektronik	BBHA9120D	9120D-557	09/26/2019	09/30/2020	12
RE	142227	Measure	KOMELON	KMC-36	-	-	-	-
AT	141338	Attenuator	Weinschel Associates	WA1-20-33	100130	04/02/2020	04/30/2021	12
AT	141250	Attenuator	Weinschel Associates	WA1-20-33	100133	04/02/2020	04/30/2021	12

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

***Hyphens for Last Calibration Date, Calibration Due Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.**

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

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

Test item:

- CE: Conducted Emission test**
- RE: Radiated Emission test**
- AT: Antenna Terminal Conducted test**