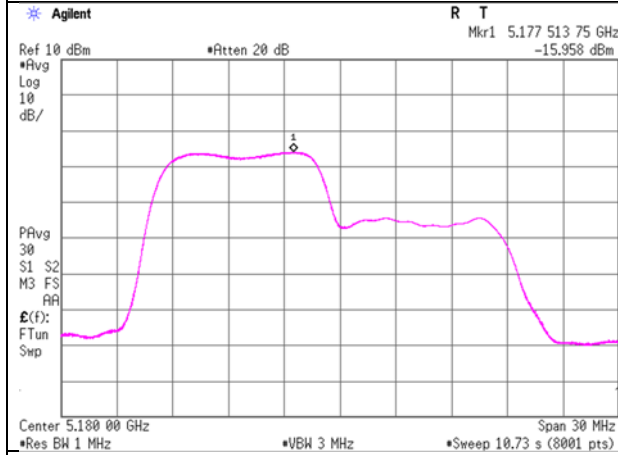


Maximum Power Spectral Density

11ax-20 (OFDMA) Ant B

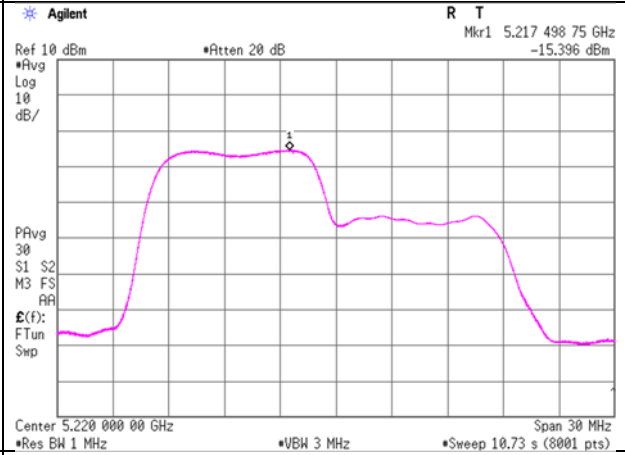
106-tone RU 5180 MHz

RU Index 53

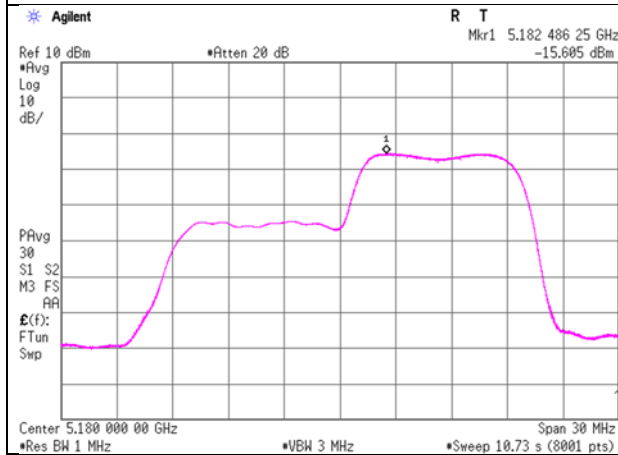


106-tone RU 5220 MHz

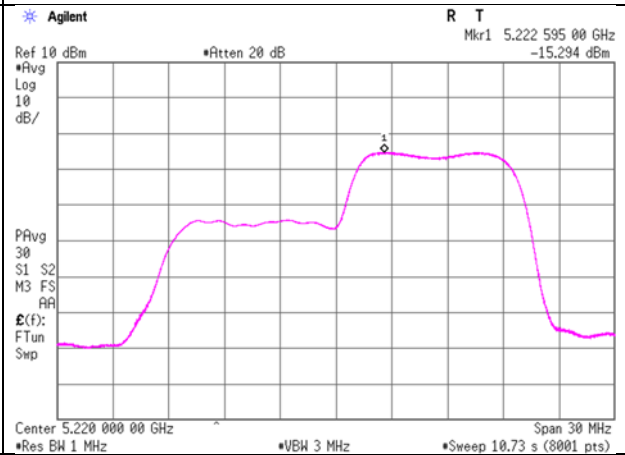
RU Index 53



RU Index 54



RU Index 54

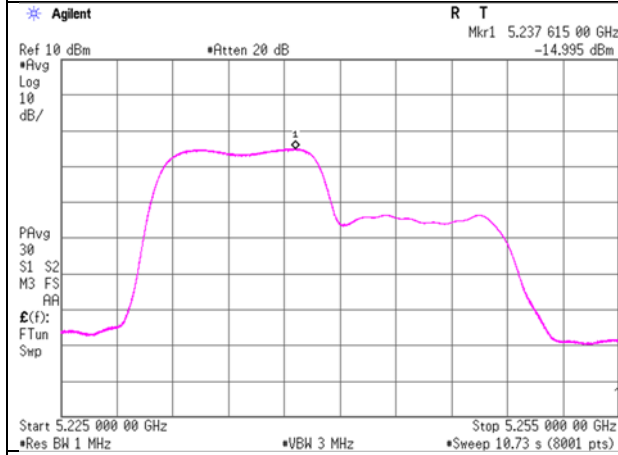


Maximum Power Spectral Density

11ax-20 (OFDMA) Ant B

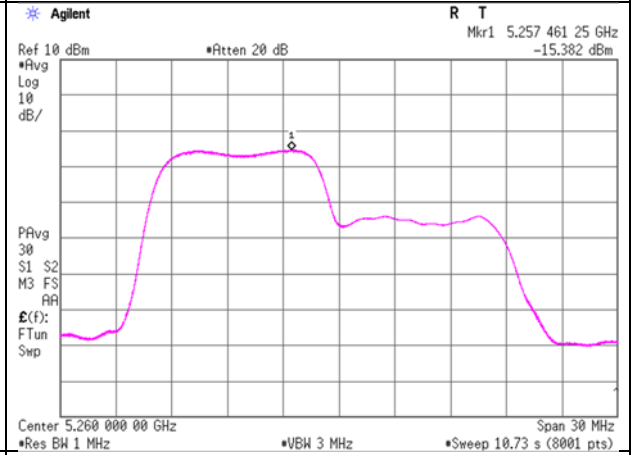
106-tone RU 5240 MHz

RU Index 53

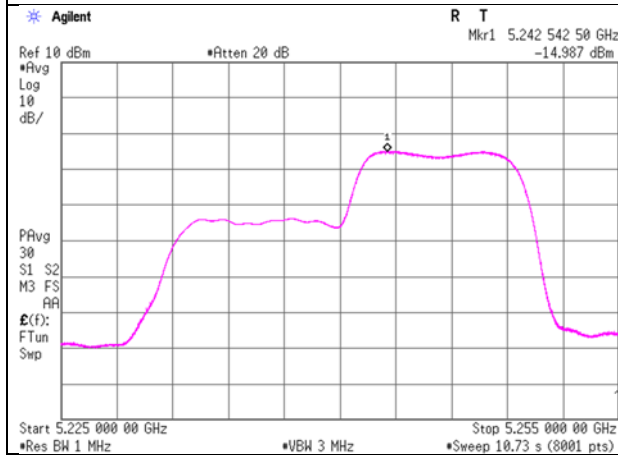


106-tone RU 5260 MHz

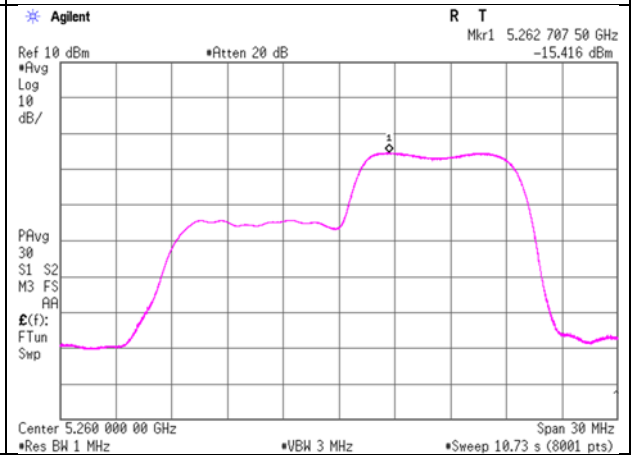
RU Index 53



RU Index 54



RU Index 54

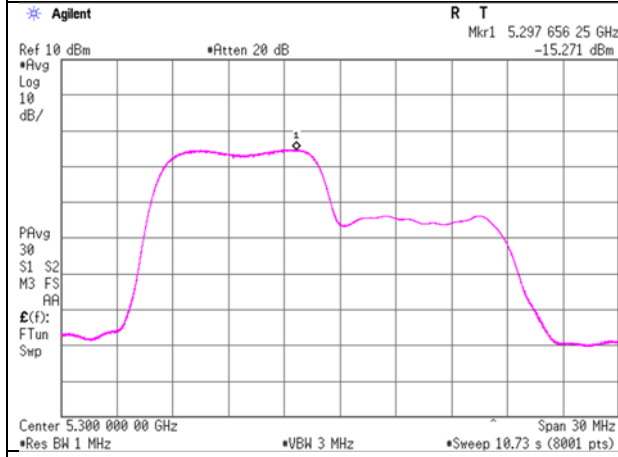


Maximum Power Spectral Density

11ax-20 (OFDMA) Ant B

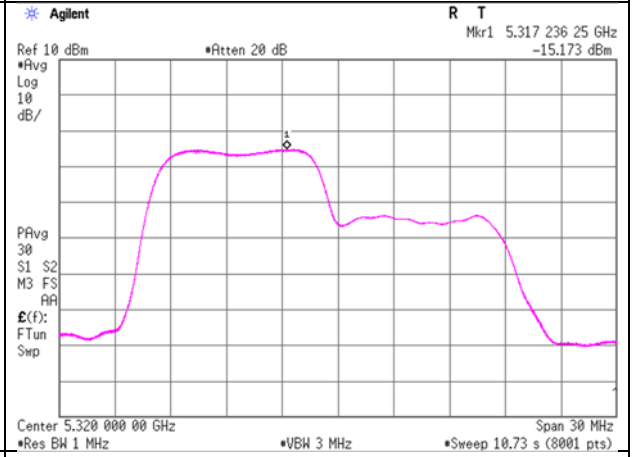
106-tone RU 5300 MHz

RU Index 53

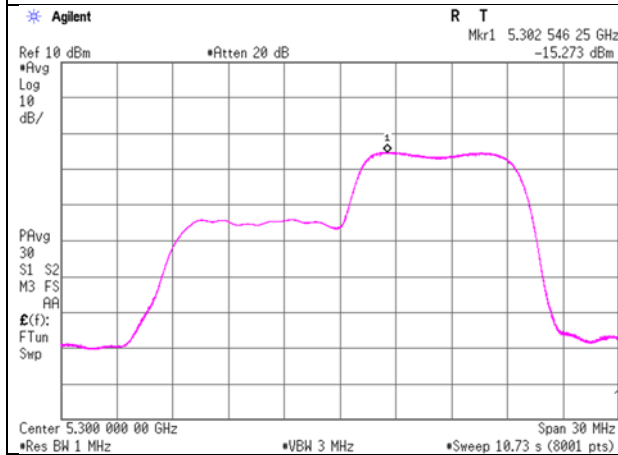


106-tone RU 5320 MHz

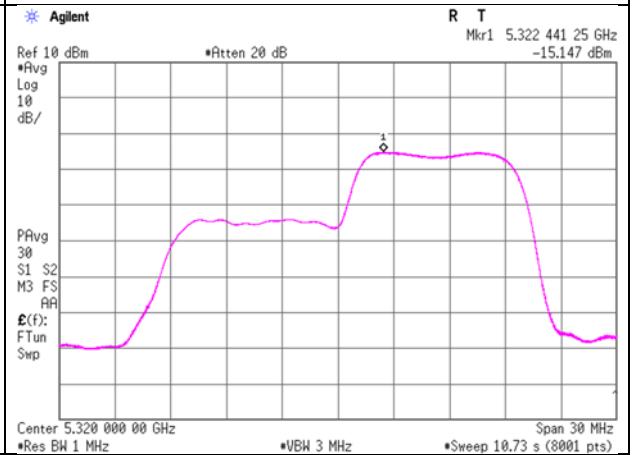
RU Index 53



RU Index 54



RU Index 54

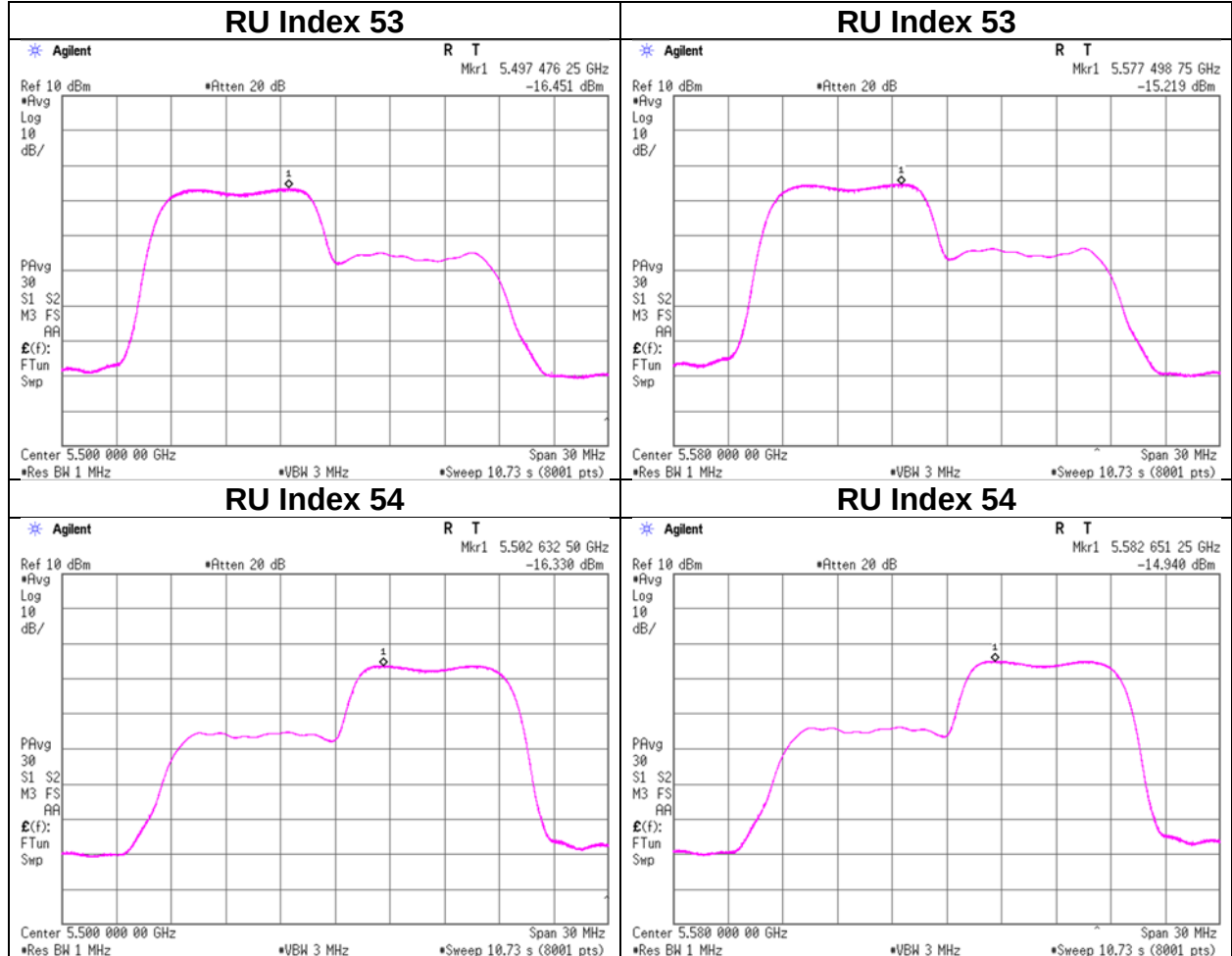


Maximum Power Spectral Density

11ax-20 (OFDMA)
Ant B

106-tone RU 5500 MHz

106-tone RU 5580 MHz

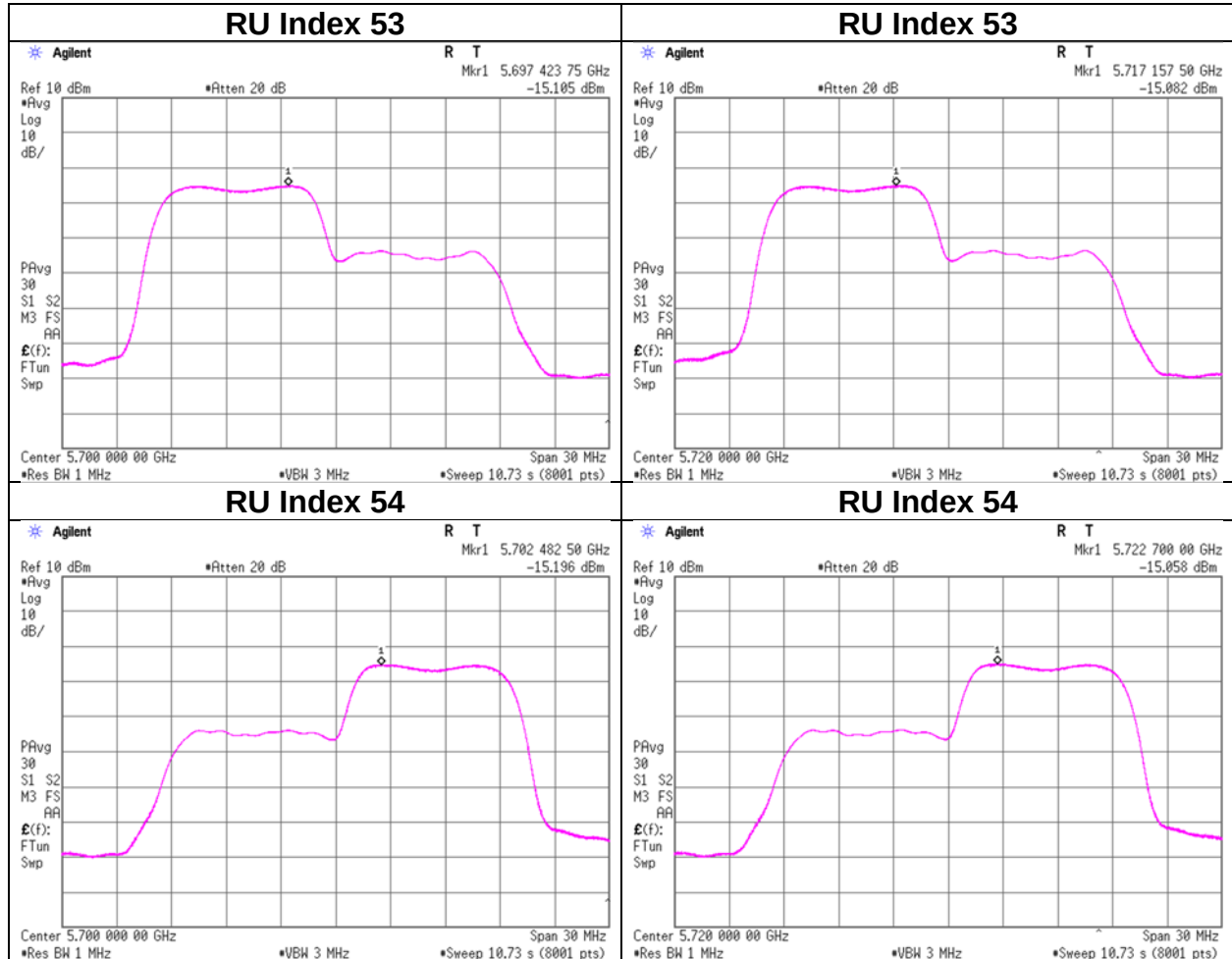


Maximum Power Spectral Density

11ax-20 (OFDMA)
Ant B

106-tone RU 5700 MHz

106-tone RU 5720 MHz

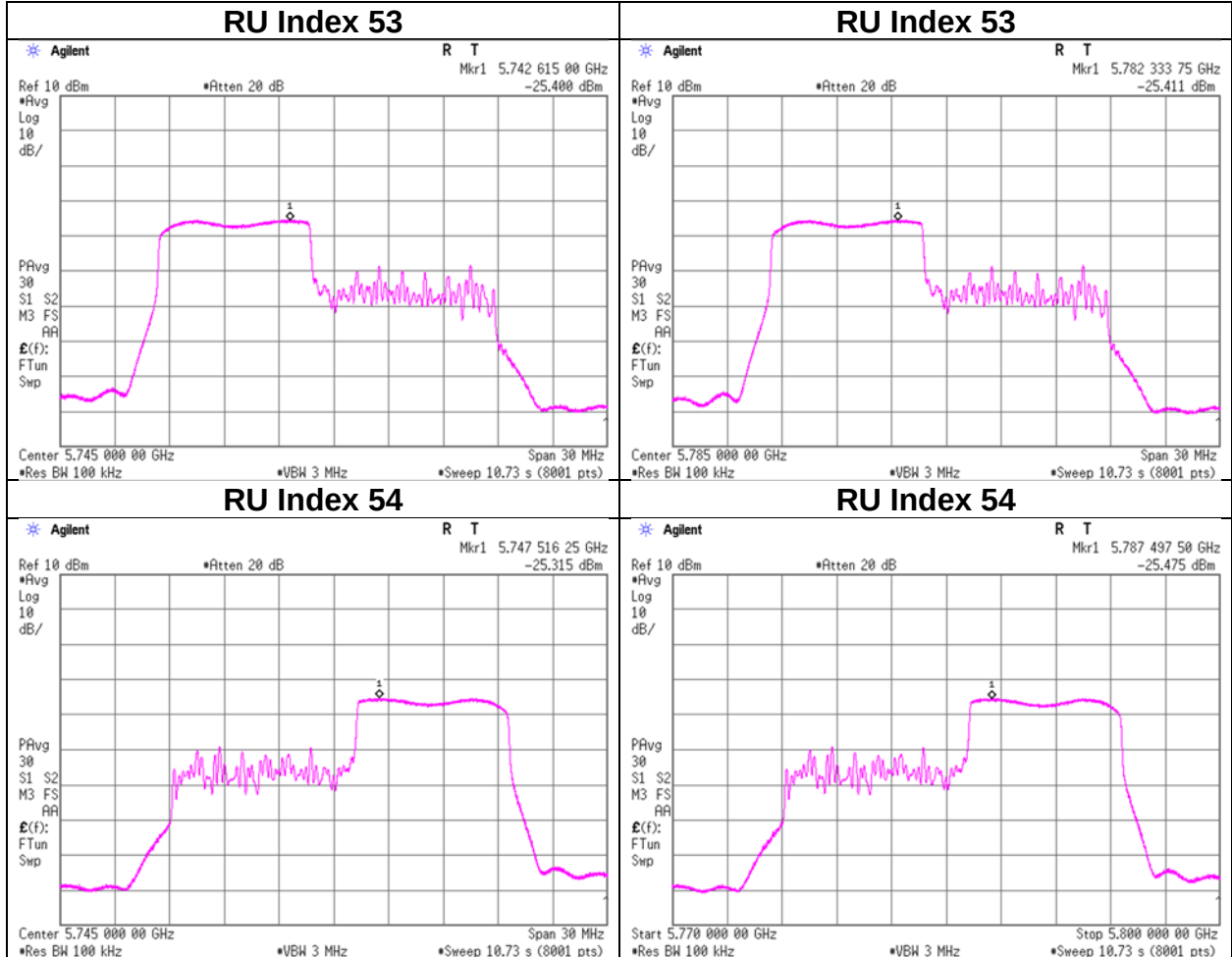


Maximum Power Spectral Density

11ax-20 (OFDMA)
Ant B

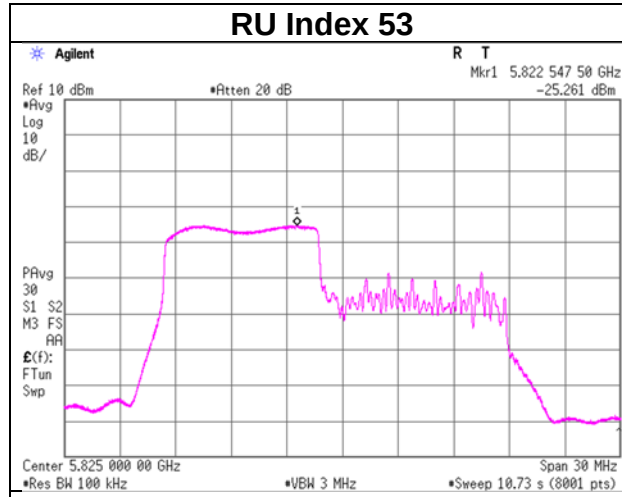
106-tone RU 5745 MHz

106-tone RU 5785 MHz

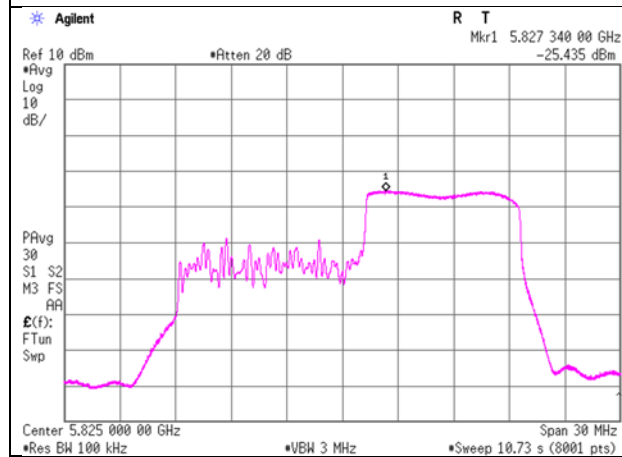


Maximum Power Spectral Density

11ax-20 (OFDMA)
Ant B
106-tone RU 5825 MHz
RU Index 53



RU Index 54



Maximum Power Spectral Density

Test place Shonan EMC Lab. No.5 Shielded Room
Date March 25, 2023
Temperature / Humidity 23 deg. C / 42% RH
Engineer Hiromasa Sato
Mode Tx 11ax-20 (OFDMA) 242-tone RU

Ant A + Ant B								Applied limit: 15.407, mobile and portable client device							
Tested Frequency [MHz]	RU Index	PSD (Conducted)						PSD (e.i.r.p.)							
		Antenna			Result	Limit	Margin	Antenna			Result	Limit	Margin		
		Ant A [mW/MHz]	Ant B [mW/MHz]	2 port [mW/MHz]				Ant A [mW/MHz]	Ant B [mW/MHz]	2 port [mW/MHz]					
5180	61	-	0.65	1.31	1.17	11.00	9.83	-	1.57	3.15	4.98	17.00	12.02		
5220	61	-	0.70	1.39	1.44	11.00	9.56	-	1.67	3.35	5.25	17.00	11.75		
5240	61	-	0.73	1.46	1.63	11.00	9.37	-	1.75	3.50	5.44	17.00	11.56		
5260	61	-	0.66	1.32	1.20	11.00	9.80	-	1.73	3.47	5.40	17.00	11.60		
5300	61	-	0.71	1.41	1.50	11.00	9.50	-	1.86	3.72	5.70	17.00	11.30		
5320	61	-	0.72	1.43	1.56	11.00	9.44	-	1.88	3.77	5.76	17.00	11.24		
5500	61	-	0.61	1.21	0.83	11.00	10.17	-	1.63	3.26	5.13	17.00	11.87		
5580	61	-	0.77	1.55	1.90	11.00	9.10	-	2.08	4.17	6.20	17.00	10.80		
5700	61	-	0.72	1.44	1.58	30.00	28.42	-	1.94	3.87	5.88	36.00	30.12		
5720	61	-	0.75	1.50	1.77	30.00	28.23	-	2.02	4.05	6.07	36.00	29.93		
5745	61	-	0.37	0.75	-1.27	30.00	31.27	-	1.01	2.03	3.07	36.00	32.93		
5785	61	-	0.36	0.71	-1.46	30.00	31.46	-	0.97	1.94	2.88	36.00	33.12		
5825	61	-	0.38	0.75	-1.24	30.00	31.24	-	1.02	2.04	3.10	36.00	32.90		

Sample Calculation: Result = PSD Antenna: Ant B (worst) x2

Tested Frequency [MHz]	RU Index	Duty Factor	RBW Correction Factor [dB]	Ant A				Ant B				PSD Result	
				PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	PSD Reading	Cable Loss	Atten. Loss	Antenna Gain	Cond.	e.i.r.p.
		[dB]		[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dB]	[dB]	[dBi]	[dBm/MHz]	[dBm/MHz]
5180	61	0.00	0.00	-	3.07	9.98	3.81	-15.05	3.12	10.09	3.81	-1.84	1.97
5220	61	0.00	0.00	-	3.08	9.98	3.81	-14.79	3.13	10.09	3.81	-1.57	2.24
5240	61	0.00	0.00	-	3.09	9.98	3.81	-14.60	3.13	10.09	3.81	-1.38	2.43
5260	61	0.00	0.00	-	3.09	9.98	4.20	-14.88	3.09	9.98	4.20	-1.81	2.39
5300	61	0.00	0.00	-	3.10	9.98	4.20	-14.59	3.10	9.98	4.20	-1.51	2.69
5320	61	0.00	0.00	-	3.10	9.98	4.20	-14.53	3.10	9.98	4.20	-1.45	2.75
5500	61	0.00	0.00	-	3.13	9.98	4.30	-15.46	3.18	10.10	4.30	-2.18	2.12
5580	61	0.00	0.00	-	3.15	9.98	4.30	-14.41	3.20	10.10	4.30	-1.11	3.19
5700	61	0.00	0.00	-	3.17	9.98	4.30	-14.76	3.23	10.10	4.30	-1.43	2.87
5720	61	0.00	0.00	-	3.17	9.98	4.30	-14.57	3.23	10.10	4.30	-1.24	3.06
5745	61	0.00	6.99	-	3.18	9.98	4.34	-24.61	3.24	10.10	4.34	-4.28	0.06
5785	61	0.00	6.99	-	3.19	9.98	4.34	-24.81	3.25	10.10	4.34	-4.47	-0.13
5825	61	0.00	6.99	-	3.19	9.98	4.34	-24.61	3.26	10.11	4.34	-4.25	0.09

Sample Calculation:

PSD: Power Spectral Density

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

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

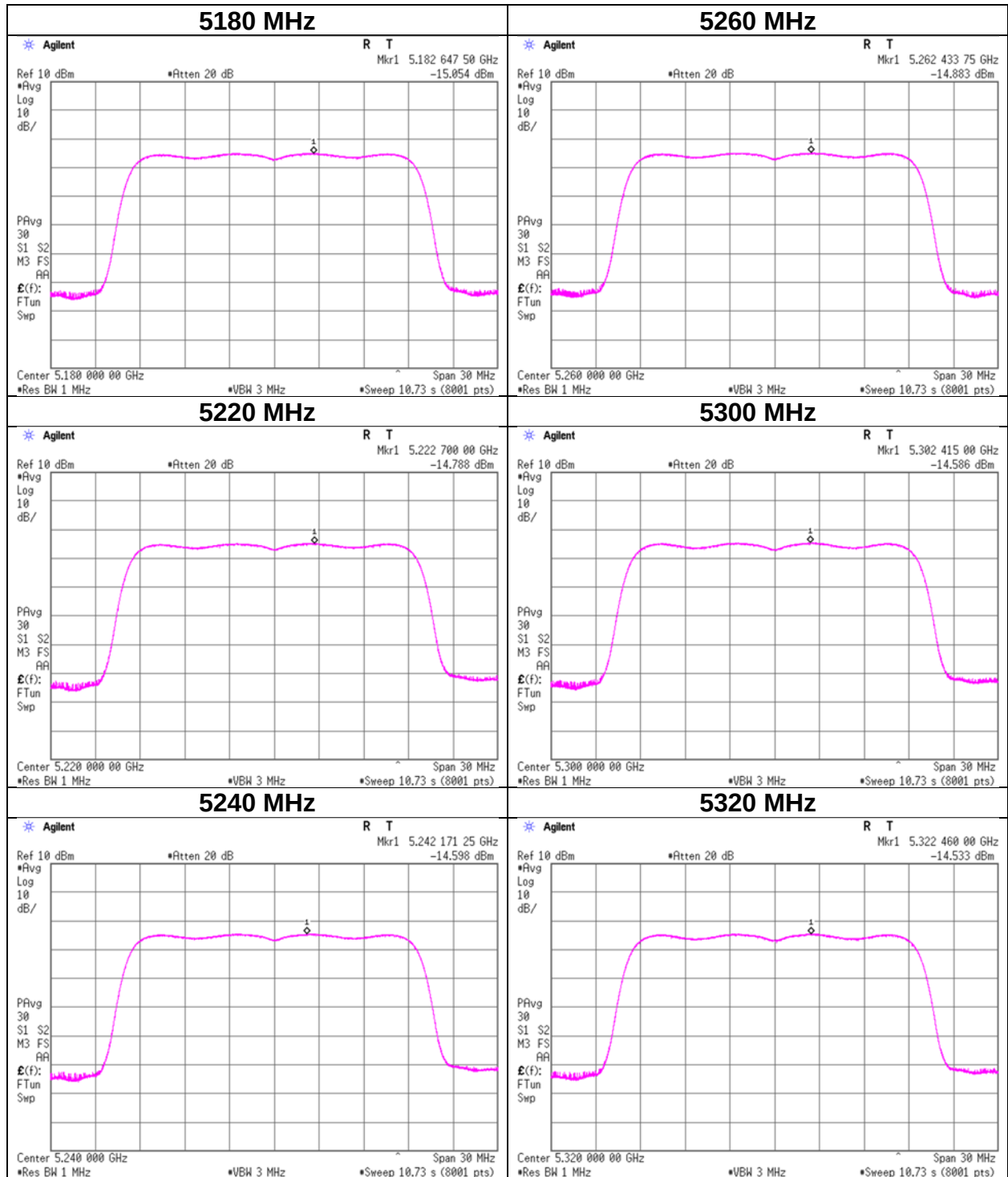
PSD Result (Conducted) = Reading + Cable Loss (including the cable(s) customer supplied) + Atten. Loss + Duty Factor + RBW Correction Factor

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

* The Duty Factor is 0 dB, since this measurement was performed the method SA-3 of section 12.4.2.6 of ANSI C63.10.

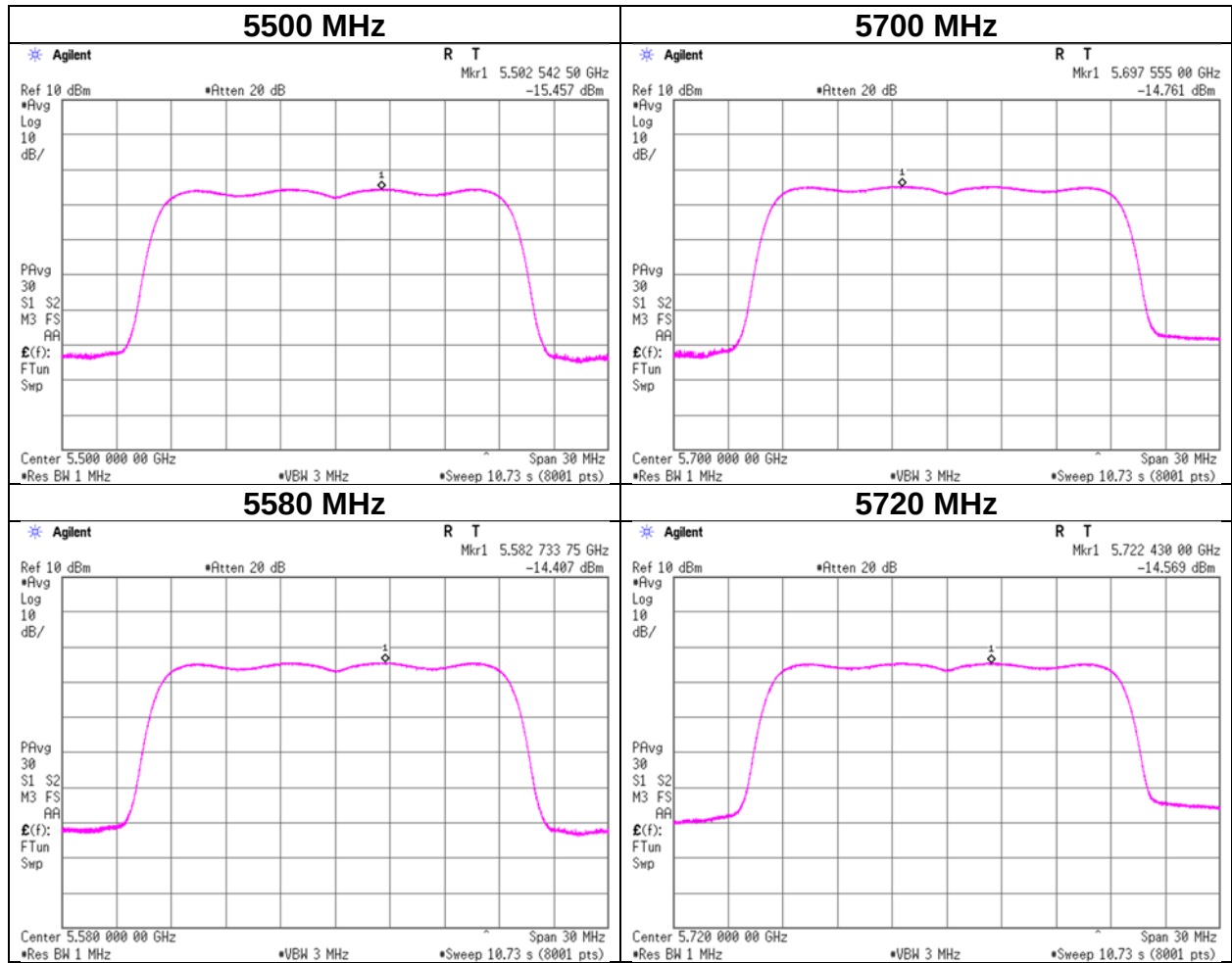
Maximum Power Spectral Density

11ax-20, Ant B 242-tone RU



Maximum Power Spectral Density

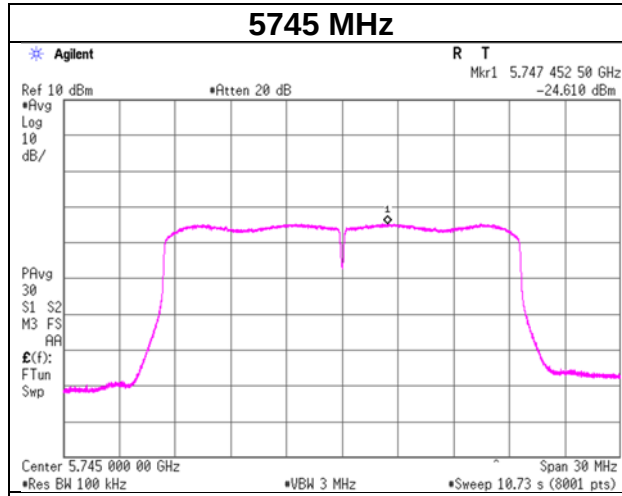
11ax-20, Ant B 242-tone RU



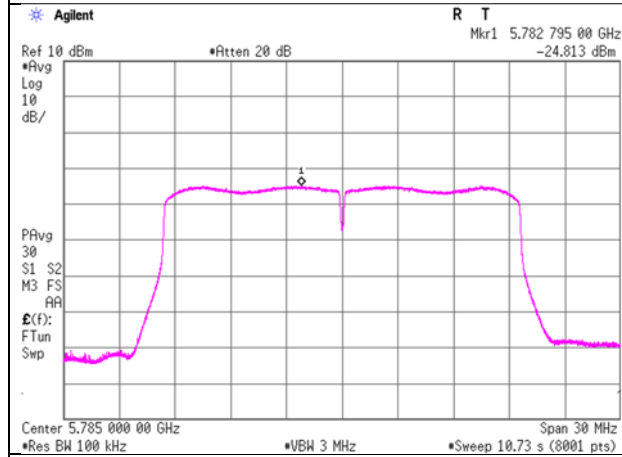
Maximum Power Spectral Density

11ax-20, Ant B
242-tone RU

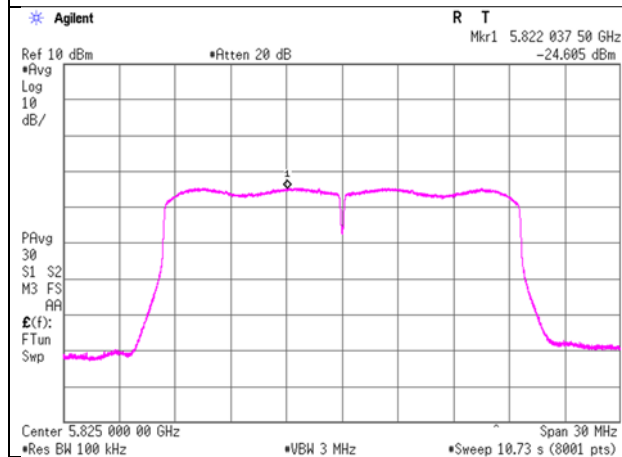
5745 MHz



5785 MHz



5825 MHz



Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11a, 5180 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	45.16	31.91	17.52	39.82	2.45	57.22	73.9	16.6	119	173	-
Hori.	5150.000	AV	35.16	31.91	17.52	39.82	2.45	47.22	53.9	6.6	119	173	VBW: 3 kHz
Vert.	5150.000	PK	45.04	31.91	17.52	39.82	2.45	57.10	73.9	16.8	109	152	-
Vert.	5150.000	AV	35.06	31.91	17.52	39.82	2.45	47.12	53.9	6.7	109	152	VBW: 3 kHz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

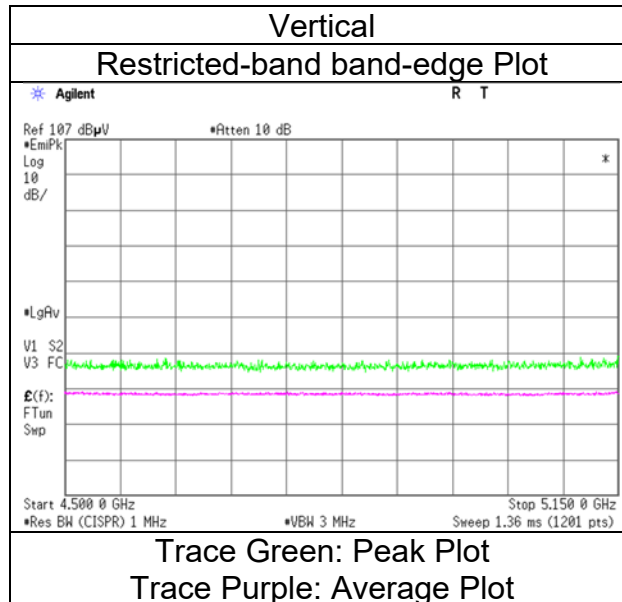
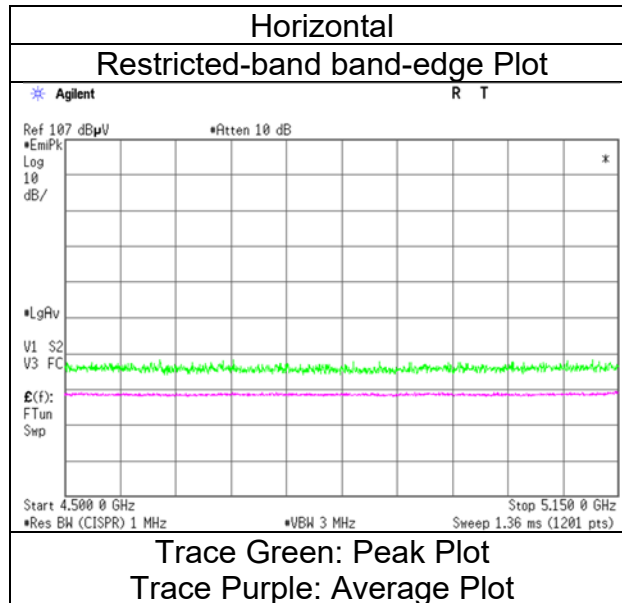
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	1
Date	February 25, 2023
Temperature / Humidity	22 deg.C, 32 %RH
Engineer	Kenichi Adachi
Mode	Tx 11a, 5180 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11a, 5240 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	45.14	31.91	17.52	39.82	2.45	57.20	73.9	16.7	121	175	-
Hori.	5150.000	AV	35.15	31.91	17.52	39.82	2.45	47.21	53.9	6.6	121	175	VBW: 3 kHz
Vert.	5150.000	PK	45.08	31.91	17.52	39.82	2.45	57.14	73.9	16.7	111	150	-
Vert.	5150.000	AV	35.07	31.91	17.52	39.82	2.45	47.13	53.9	6.7	111	150	VBW: 3 kHz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11a, 5320 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	45.32	31.62	17.69	39.84	2.45	57.24	73.9	16.6	119	171	-
Hori.	5350.000	AV	35.52	31.62	17.69	39.84	2.45	47.44	53.9	6.4	119	171	VBW: 3 kHz
Vert.	5350.000	PK	45.22	31.62	17.69	39.84	2.45	57.14	73.9	16.7	109	151	-
Vert.	5350.000	AV	35.36	31.62	17.69	39.84	2.45	47.28	53.9	6.6	109	151	VBW: 3 kHz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

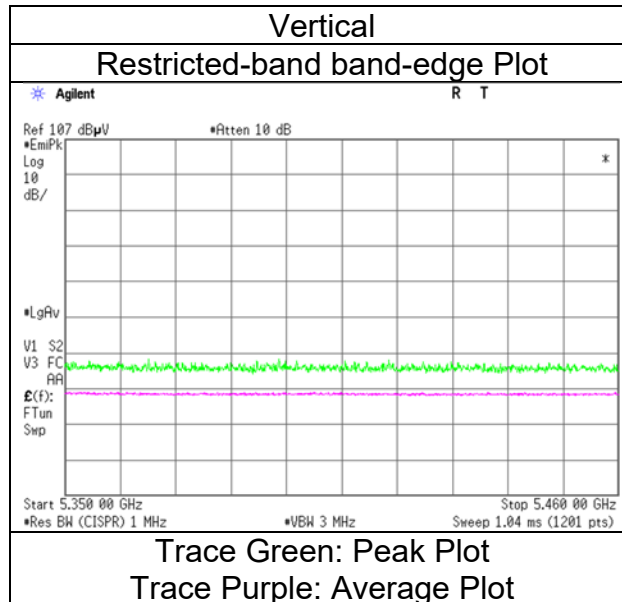
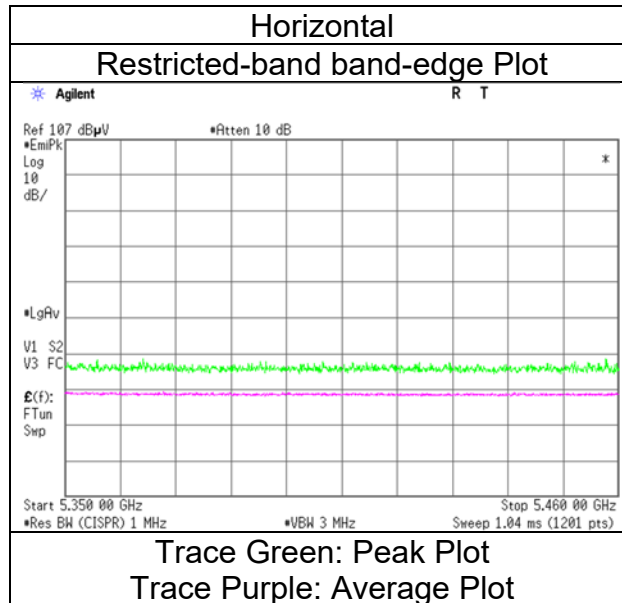
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
Mode Tx 11a, 5320 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11a, 5500 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	45.02	31.84	17.79	39.86	2.45	57.24	73.9	16.6	120	169	-
Hori.	5460.000	AV	35.22	31.84	17.79	39.86	2.45	47.44	53.9	6.4	120	169	VBW: 3 kHz
Vert.	5460.000	PK	44.96	31.84	17.79	39.86	2.45	57.18	73.9	16.7	110	152	-
Vert.	5460.000	AV	35.11	31.84	17.79	39.86	2.45	47.33	53.9	6.5	110	152	VBW: 3 kHz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	45.44	31.85	17.80	39.86	2.45	57.68	-37.55	-27.0	10.5	120	169	-
Vert.	5470.000	PK	45.38	31.85	17.80	39.86	2.45	57.62	-37.61	-27.0	10.6	110	152	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 * \text{LOG}((10^{\wedge}(\text{Electric Field Strength [dBuV/m]} / 20)) * 10^{\wedge}(-6)) * \text{Distance} : 3 [\text{m}]^2 / 30 * 10^{\wedge}3)$

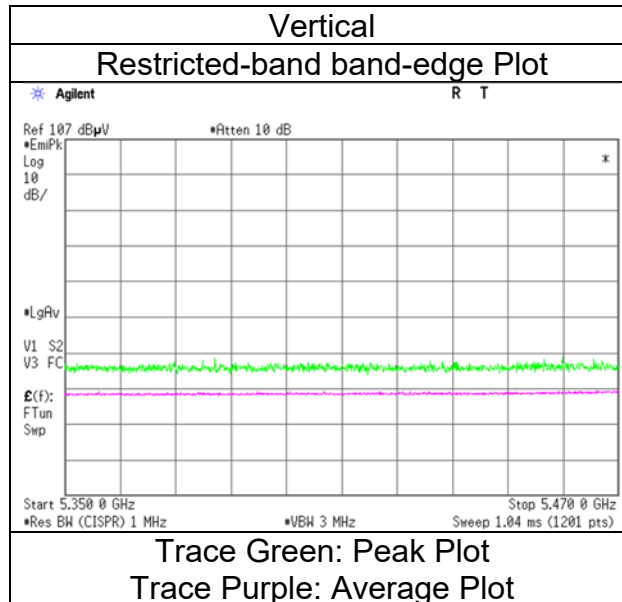
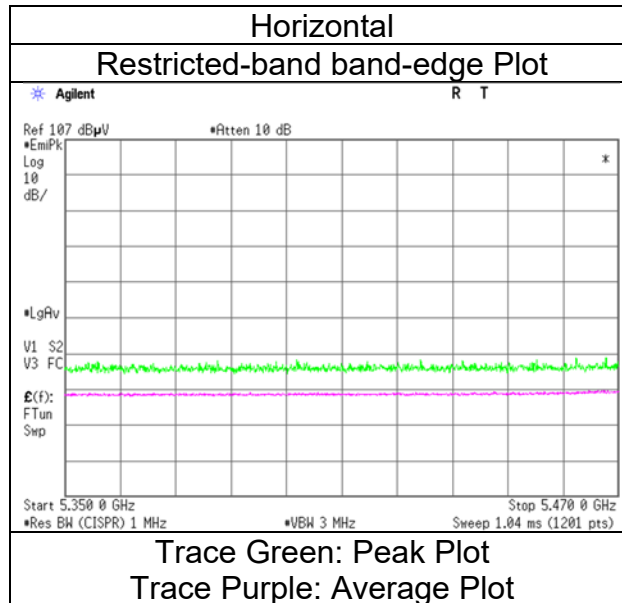
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
Mode Tx 11a, 5500 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11a, 5700 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	45.48	32.27	17.96	39.92	2.45	58.24	-36.99	-27.0	9.9	118	169	-
Vert.	5725.000	PK	45.33	32.27	17.96	39.92	2.45	58.09	-37.14	-27.0	10.1	107	152	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

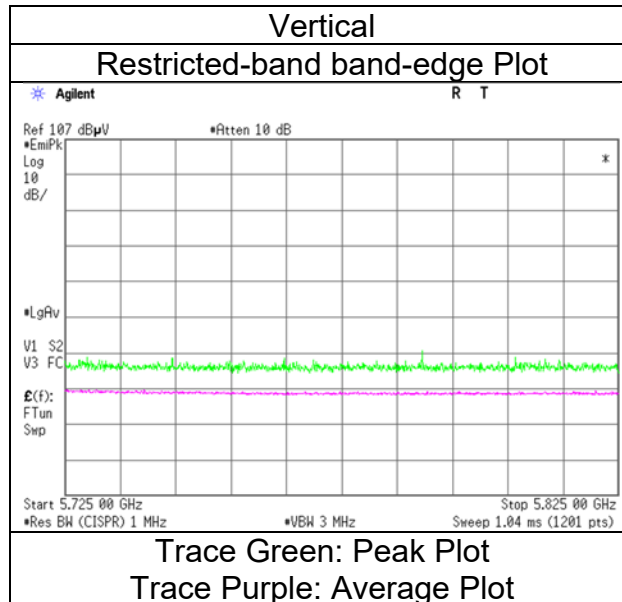
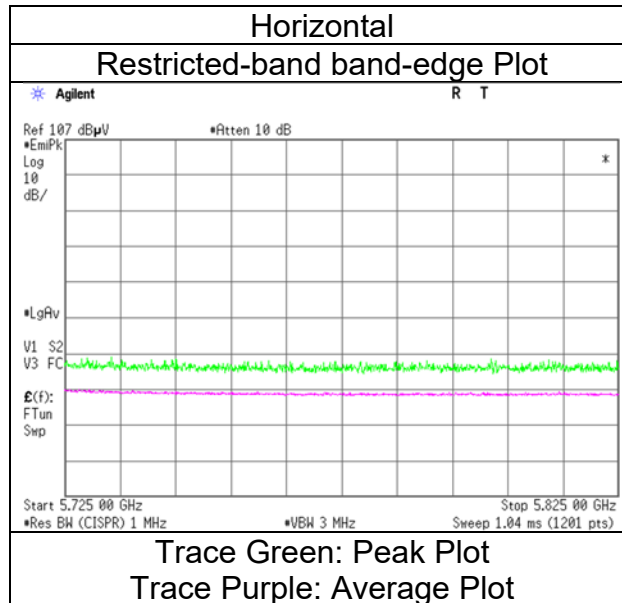
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
Mode Tx 11a, 5700 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11a, 5745 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	45.14	32.06	17.92	39.90	2.45	57.67	-37.56	-27.0	10.5	118	169	-
Hori.	5700.000	PK	45.22	32.19	17.95	39.92	2.45	57.89	-37.34	10.0	47.3	118	169	-
Hori.	5720.000	PK	45.30	32.25	17.96	39.92	2.45	58.04	-37.19	15.6	52.7	118	169	-
Hori.	5725.000	PK	47.08	32.27	17.96	39.92	2.45	59.84	-35.39	27.0	62.3	118	169	-
Vert.	5650.000	PK	45.02	32.06	17.92	39.90	2.45	57.55	-37.68	-27.0	10.6	109	157	-
Vert.	5700.000	PK	45.13	32.19	17.95	39.92	2.45	57.80	-37.43	10.0	47.4	109	157	-
Vert.	5720.000	PK	45.18	32.25	17.96	39.92	2.45	57.92	-37.31	15.6	52.9	109	157	-
Vert.	5725.000	PK	45.70	32.27	17.96	39.92	2.45	58.46	-36.77	27.0	63.7	109	157	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

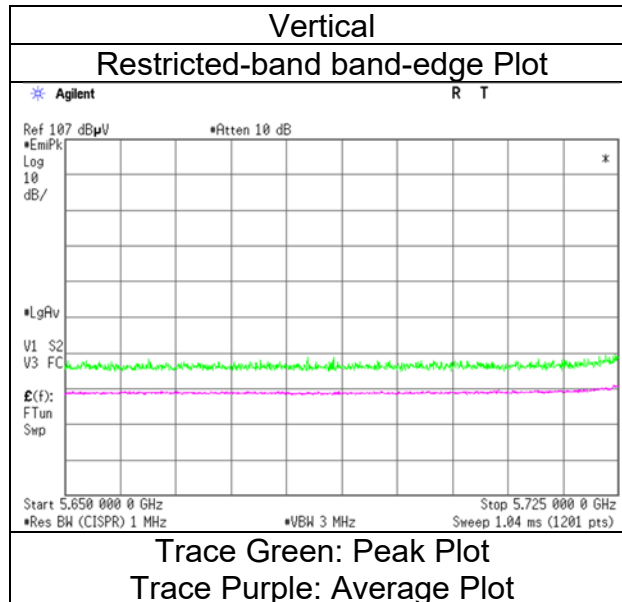
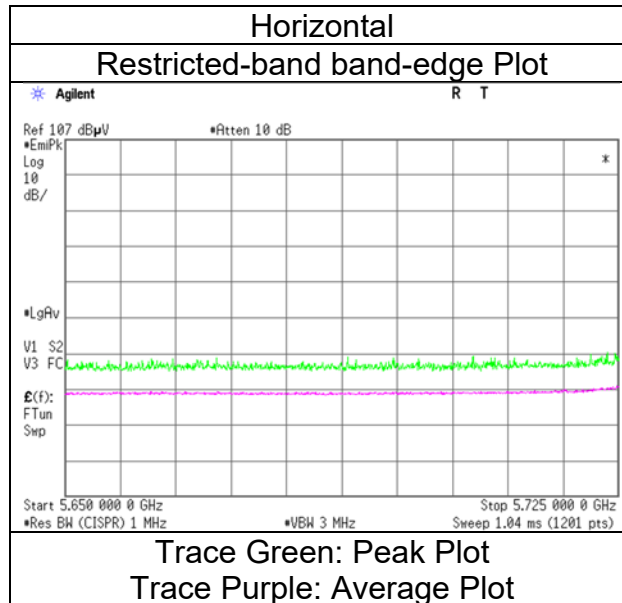
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	1
Date	February 25, 2023
Temperature / Humidity	22 deg.C, 32 %RH
Engineer	Kenichi Adachi
Mode	Tx 11a, 5745 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11a, 5825 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	45.60	32.63	18.05	39.96	2.45	58.77	-36.46	27.0	63.4	117	168	-
Hori.	5855.000	PK	45.24	32.64	18.05	39.96	2.45	58.42	-36.81	15.6	52.4	117	168	-
Hori.	5875.000	PK	44.94	32.68	18.07	39.97	2.45	58.17	-37.06	10.0	47.0	117	168	-
Hori.	5925.000	PK	44.64	32.75	18.09	39.98	2.45	57.95	-37.28	-27.0	10.2	117	168	-
Vert.	5850.000	PK	45.10	32.63	18.05	39.96	2.45	58.27	-36.96	27.0	63.9	109	153	-
Vert.	5855.000	PK	45.08	32.64	18.05	39.96	2.45	58.26	-36.97	15.6	52.5	109	153	-
Vert.	5875.000	PK	44.87	32.68	18.07	39.97	2.45	58.10	-37.13	10.0	47.1	109	153	-
Vert.	5925.000	PK	44.57	32.75	18.09	39.98	2.45	57.88	-37.35	-27.0	10.3	109	153	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20)) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

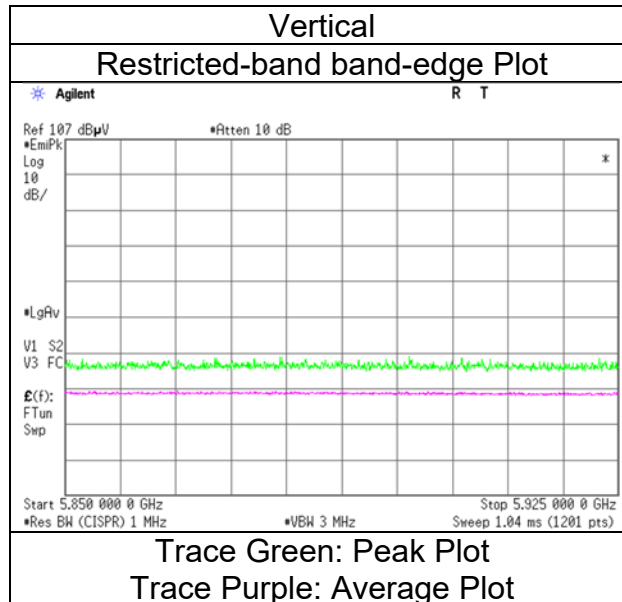
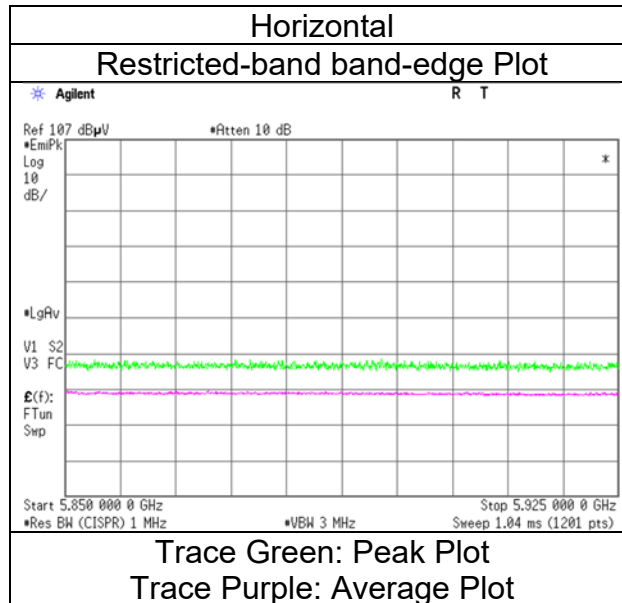
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 25, 2023
Temperature / Humidity 22 deg.C, 32 %RH
Engineer Kenichi Adachi
Mode Tx 11a, 5825 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 26, 2023
Temperature / Humidity 21 deg.C, 26 %RH
Engineer Kouki Yamada
(1 GHz -10 GHz)
Mode Tx 11n-20, 5180 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	45.12	31.91	17.52	39.82	2.45	57.18	73.9	16.7	132	105	-
Hori.	5150.000	AV	33.82	31.91	17.52	39.82	2.45	45.88	53.9	8.0	132	105	VBW: 110 Hz
Vert.	5150.000	PK	45.02	31.91	17.52	39.82	2.45	57.08	73.9	16.8	133	149	-
Vert.	5150.000	AV	33.62	31.91	17.52	39.82	2.45	45.68	53.9	8.2	133	149	VBW: 110 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

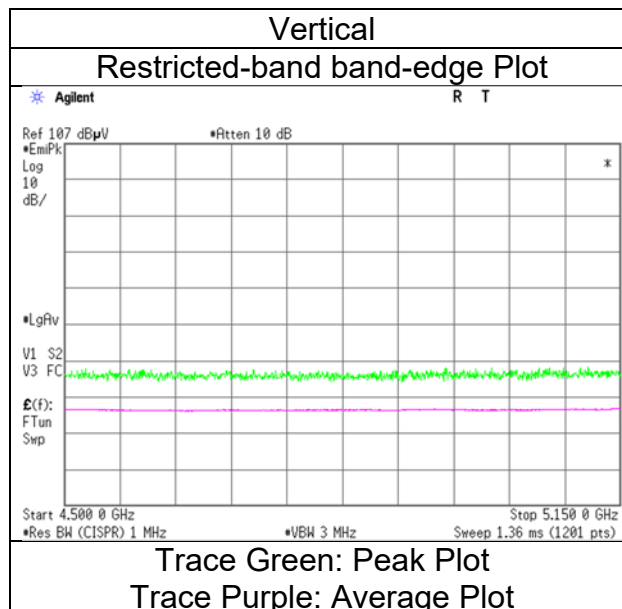
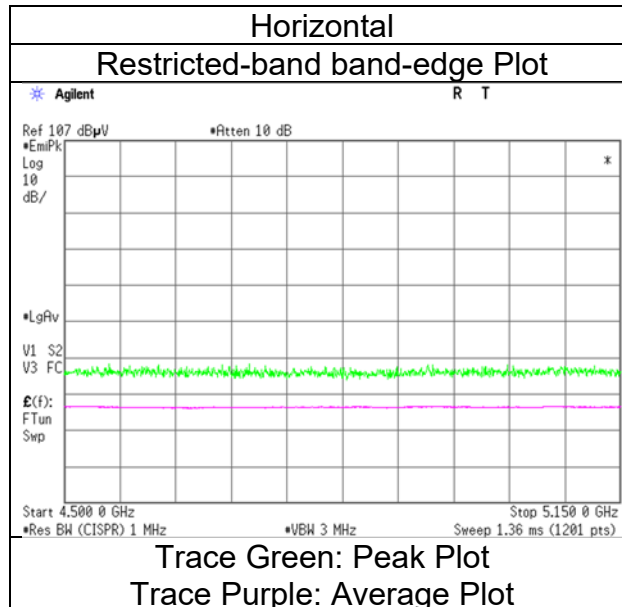
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	1
Date	February 26, 2023
Temperature / Humidity	21 deg.C, 26 %RH
Engineer	Kouki Yamada
Mode	Tx 11n-20, 5180 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 26, 2023
Temperature / Humidity 21 deg.C, 26 %RH
Engineer Kouki Yamada
(1 GHz -10 GHz)
Mode Tx 11n-20, 5240 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	45.24	31.91	17.52	39.82	2.45	57.30	73.9	16.6	131	108	-
Hori.	5150.000	AV	33.52	31.91	17.52	39.82	2.45	45.58	53.9	8.3	131	108	VBW: 110 Hz
Vert.	5150.000	PK	45.21	31.91	17.52	39.82	2.45	57.27	73.9	16.6	134	145	-
Vert.	5150.000	AV	33.84	31.91	17.52	39.82	2.45	45.90	53.9	8.0	134	145	VBW: 110 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 26, 2023
Temperature / Humidity 21 deg.C, 26 %RH
Engineer Kouki Yamada
(1 GHz -10 GHz)
Mode Tx 11n-20, 5320 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	45.52	31.62	17.69	39.84	2.45	57.44	73.9	16.4	133	101	-
Hori.	5350.000	AV	33.56	31.62	17.69	39.84	2.45	45.48	53.9	8.4	133	101	VBW: 110 Hz
Vert.	5350.000	PK	45.51	31.62	17.69	39.84	2.45	57.43	73.9	16.4	135	155	-
Vert.	5350.000	AV	33.55	31.62	17.69	39.84	2.45	45.47	53.9	8.4	135	155	VBW: 110 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

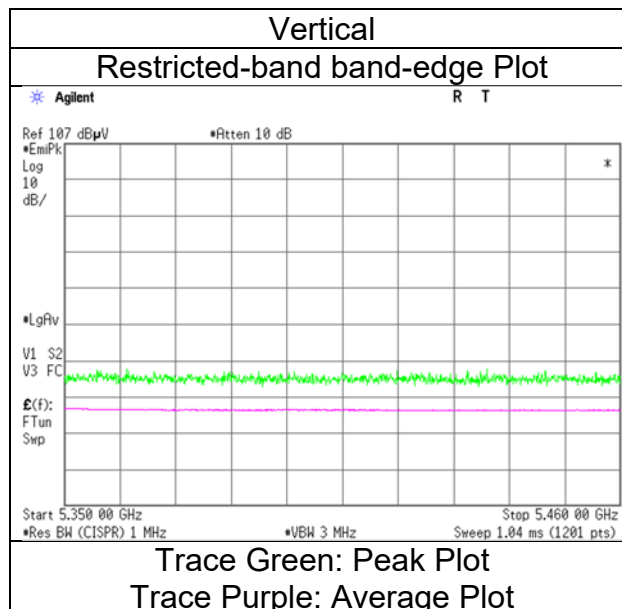
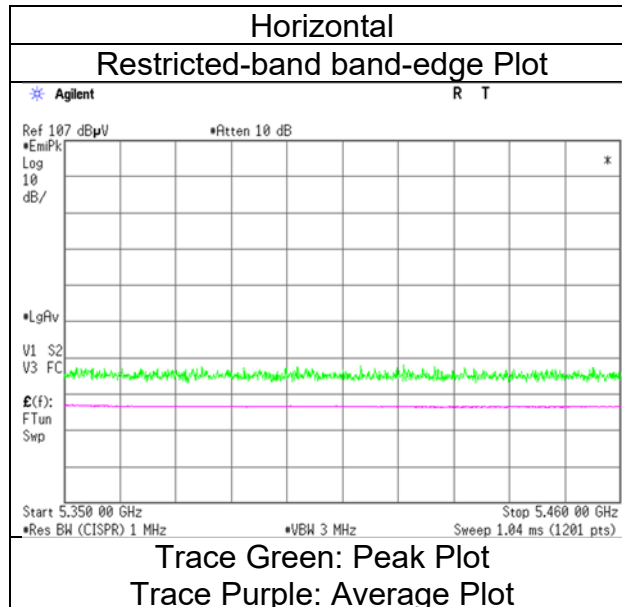
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	1
Date	February 26, 2023
Temperature / Humidity	21 deg.C, 26 %RH
Engineer	Kouki Yamada
Mode	Tx 11n-20, 5320 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 26, 2023
Temperature / Humidity 21 deg.C, 26 %RH
Engineer Kouki Yamada
(1 GHz -10 GHz)
Mode Tx 11n-20, 5500 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	45.97	31.84	17.79	39.86	2.45	58.19	73.9	15.7	139	109	-
Hori.	5460.000	AV	33.51	31.84	17.79	39.86	2.45	45.73	53.9	8.1	139	109	VBW: 110 Hz
Vert.	5460.000	PK	45.53	31.84	17.79	39.86	2.45	57.75	73.9	16.1	121	155	-
Vert.	5460.000	AV	33.37	31.84	17.79	39.86	2.45	45.59	53.9	8.3	121	155	VBW: 110 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	45.99	31.85	17.80	39.86	2.45	58.23	-37.00	-27.0	10.0	139	109	-
Vert.	5470.000	PK	46.22	31.85	17.80	39.86	2.45	58.46	-36.77	-27.0	9.7	121	155	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 * \text{LOG}((10^{\wedge}(\text{Electric Field Strength [dBuV/m]} / 20)) * 10^{\wedge}(-6)) * \text{Distance} : 3 [\text{m}]^2 / 30 * 10^{\wedge}3$

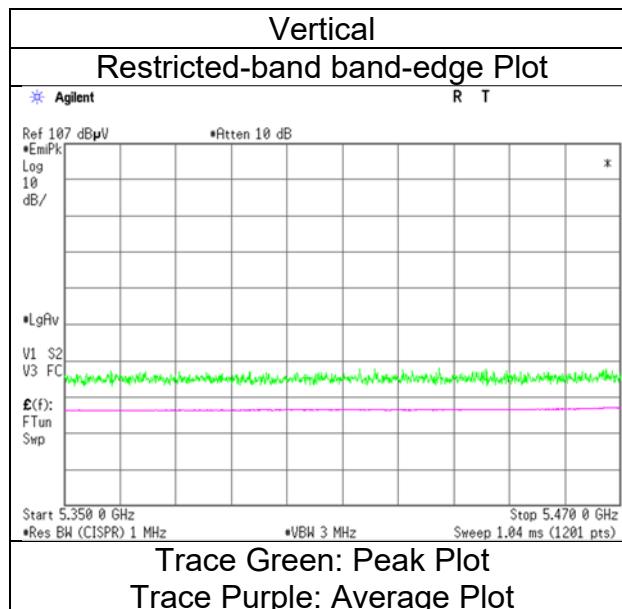
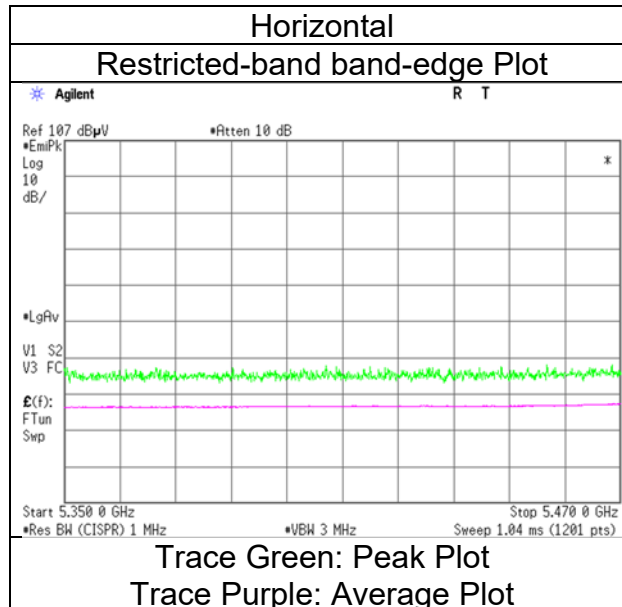
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	1
Date	February 26, 2023
Temperature / Humidity	21 deg.C, 26 %RH
Engineer	Kouki Yamada
Mode	Tx 11n-20, 5500 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 26, 2023
Temperature / Humidity 21 deg.C, 26 %RH
Engineer Kouki Yamada
(1 GHz -10 GHz)
Mode Tx 11n-20, 5700 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	47.96	32.27	17.96	39.92	2.45	60.72	-34.51	-27.0	7.5	133	103	-
Vert.	5725.000	PK	47.89	32.27	17.96	39.92	2.45	60.65	-34.58	-27.0	7.5	122	157	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

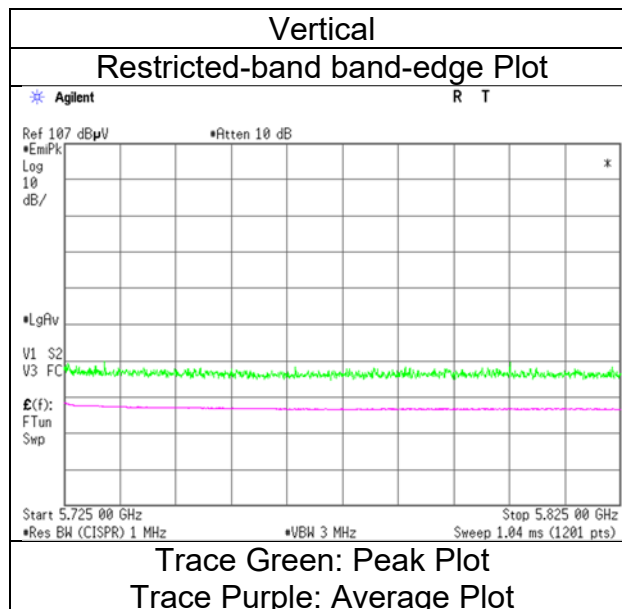
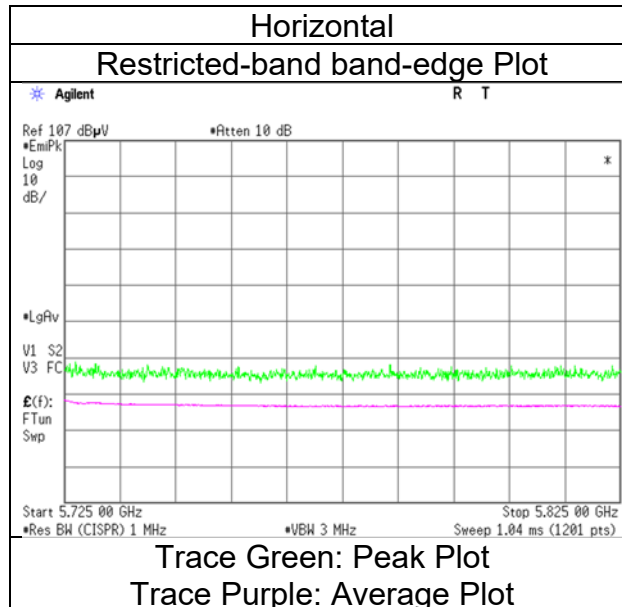
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	1
Date	February 26, 2023
Temperature / Humidity	21 deg.C, 26 %RH
Engineer	Kouki Yamada
Mode	Tx 11n-20, 5700 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 26, 2023
Temperature / Humidity 21 deg.C, 26 %RH
Engineer Kouki Yamada
(1 GHz -10 GHz)
Mode Tx 11n-20, 5745 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	45.56	32.06	17.92	39.90	2.45	58.09	-37.14	-27.0	10.1	132	114	-
Hori.	5700.000	PK	46.14	32.19	17.95	39.92	2.45	58.81	-36.42	10.0	46.4	132	114	-
Hori.	5720.000	PK	46.60	32.25	17.96	39.92	2.45	59.34	-35.89	15.6	51.4	132	114	-
Hori.	5725.000	PK	54.89	32.27	17.96	39.92	2.45	67.65	-27.58	27.0	54.5	132	114	-
Vert.	5650.000	PK	45.47	32.06	17.92	39.90	2.45	58.00	-37.23	-27.0	10.2	123	154	-
Vert.	5700.000	PK	45.95	32.19	17.95	39.92	2.45	58.62	-36.61	10.0	46.6	123	154	-
Vert.	5720.000	PK	46.55	32.25	17.96	39.92	2.45	59.29	-35.94	15.6	51.5	123	154	-
Vert.	5725.000	PK	54.17	32.27	17.96	39.92	2.45	66.93	-28.30	27.0	55.3	123	154	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

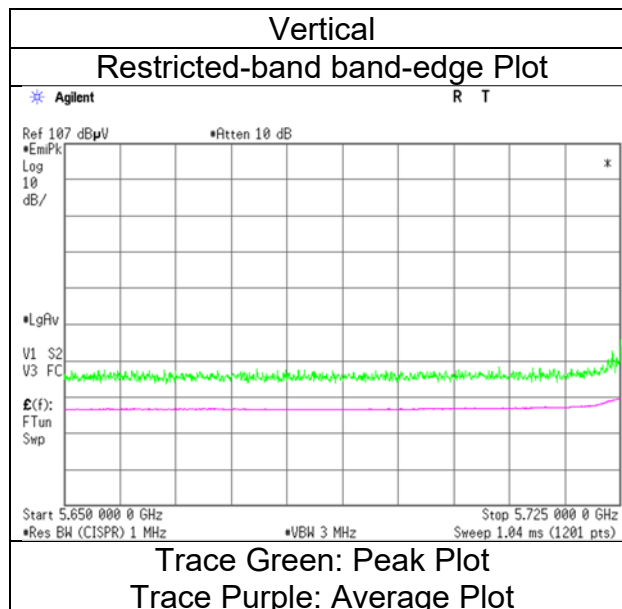
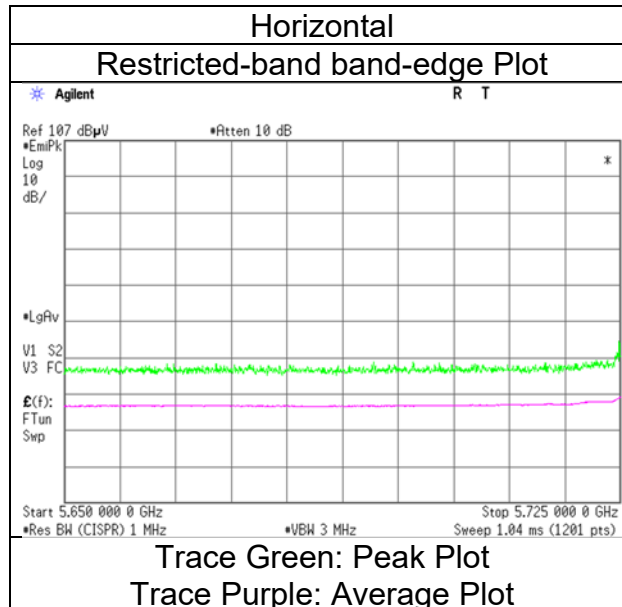
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	1
Date	February 26, 2023
Temperature / Humidity	21 deg.C, 26 %RH
Engineer	Kouki Yamada
Mode	Tx 11n-20, 5745 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 1
Date February 26, 2023
Temperature / Humidity 21 deg.C, 26 %RH
Engineer Kouki Yamada
(1 GHz -10 GHz)
Mode Tx 11n-20, 5825 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	46.74	32.63	18.05	39.96	2.45	59.91	-35.32	27.0	62.3	133	109	-
Hori.	5855.000	PK	46.07	32.64	18.05	39.96	2.45	59.25	-35.98	15.6	51.5	133	109	-
Hori.	5875.000	PK	46.09	32.68	18.07	39.97	2.45	59.32	-35.91	10.0	45.9	133	109	-
Hori.	5925.000	PK	46.18	32.75	18.09	39.98	2.45	59.49	-35.74	-27.0	8.7	133	109	-
Vert.	5850.000	PK	46.58	32.63	18.05	39.96	2.45	59.75	-35.48	27.0	62.4	123	160	-
Vert.	5855.000	PK	45.85	32.64	18.05	39.96	2.45	59.03	-36.20	15.6	51.8	123	160	-
Vert.	5875.000	PK	45.90	32.68	18.07	39.97	2.45	59.13	-36.10	10.0	46.1	123	160	-
Vert.	5925.000	PK	45.93	32.75	18.09	39.98	2.45	59.24	-35.99	-27.0	8.9	123	160	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

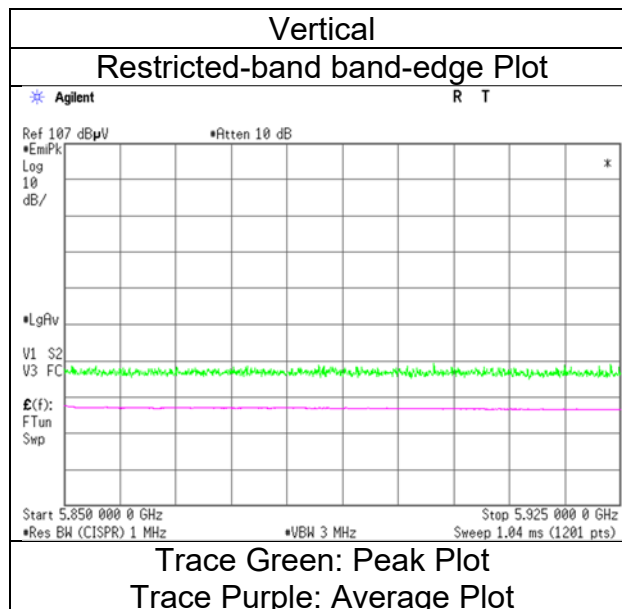
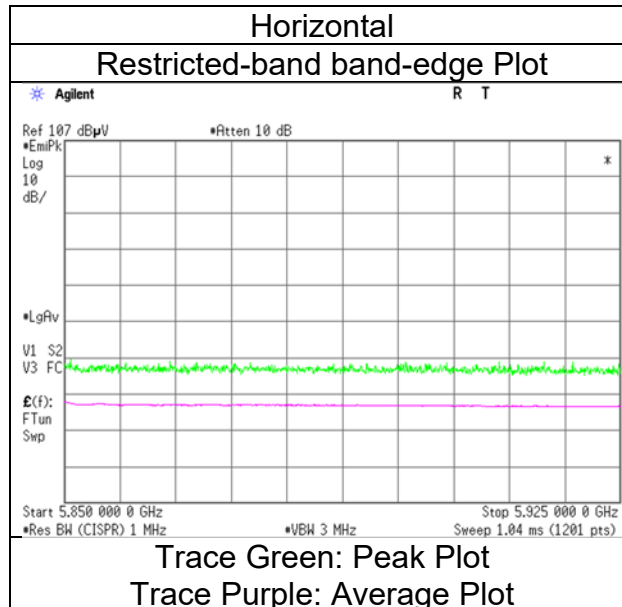
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	1
Date	February 26, 2023
Temperature / Humidity	21 deg.C, 26 %RH
Engineer	Kouki Yamada
Mode	Tx 11n-20, 5825 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 27, 2023
Temperature / Humidity 23 deg.C, 35 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ac-20, 5180 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	45.87	32.70	16.90	38.82	2.45	59.10	73.9	14.8	170	109	-
Hori.	5150.000	AV	31.87	32.70	16.90	38.82	2.45	45.10	53.9	8.8	170	109	VBW: 110 Hz
Vert.	5150.000	PK	44.63	32.70	16.90	38.82	2.45	57.86	73.9	16.0	173	147	-
Vert.	5150.000	AV	31.86	32.70	16.90	38.82	2.45	45.09	53.9	8.8	173	147	VBW: 110 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

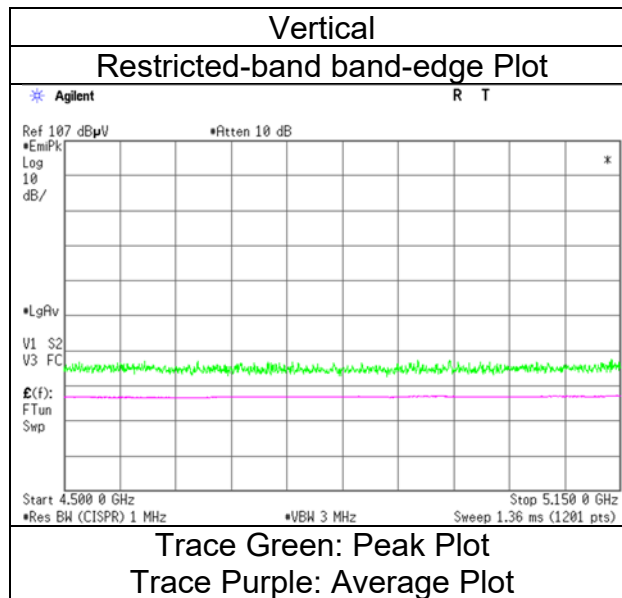
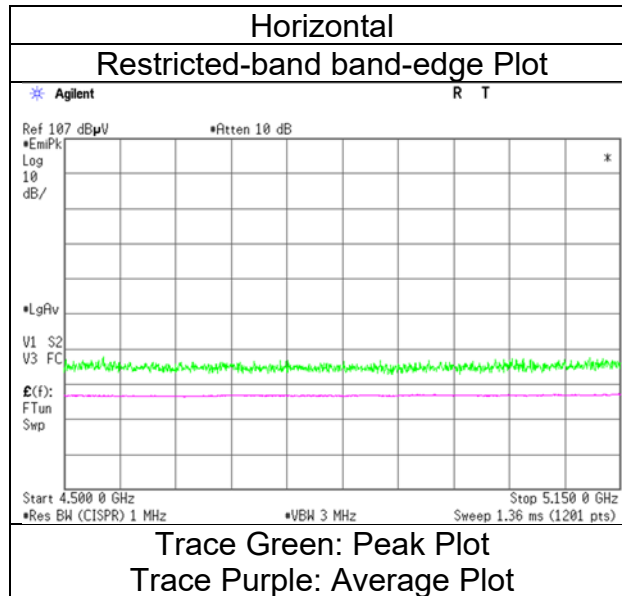
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	2
Date	February 27, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ac-20, 5180 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 27, 2023
Temperature / Humidity 23 deg.C, 35 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ac-20, 5240 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	45.21	32.70	16.90	38.82	2.45	58.44	73.9	15.4	152	172	-
Hori.	5150.000	AV	31.62	32.70	16.90	38.82	2.45	44.85	53.9	9.0	152	172	VBW: 110 Hz
Vert.	5150.000	PK	45.15	32.70	16.90	38.82	2.45	58.38	73.9	15.5	127	180	-
Vert.	5150.000	AV	31.63	32.70	16.90	38.82	2.45	44.86	53.9	9.0	127	180	VBW: 110 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 27, 2023
Temperature / Humidity 23 deg.C, 35 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ac-20, 5320 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	43.65	32.43	17.02	38.92	2.45	56.63	73.9	17.2	150	98	-
Hori.	5350.000	AV	32.00	32.43	17.02	38.92	2.45	44.98	53.9	8.9	150	98	VBW: 110 Hz
Vert.	5350.000	PK	43.88	32.43	17.02	38.92	2.45	56.86	73.9	17.0	100	144	-
Vert.	5350.000	AV	31.81	32.43	17.02	38.92	2.45	44.79	53.9	9.1	100	144	VBW: 110 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

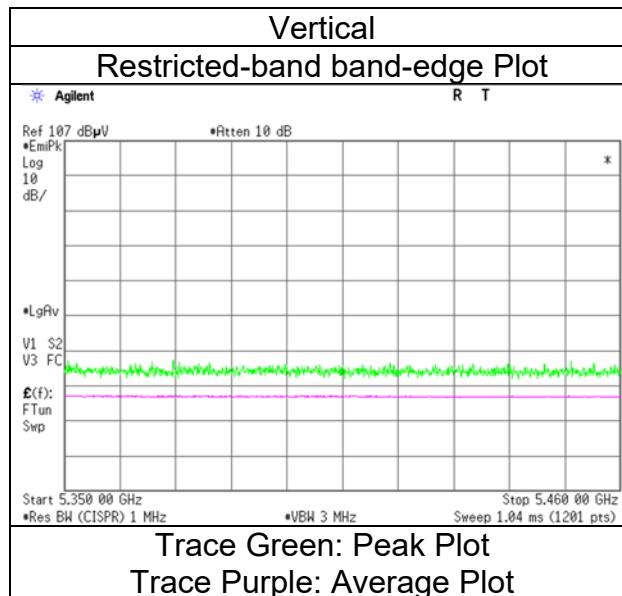
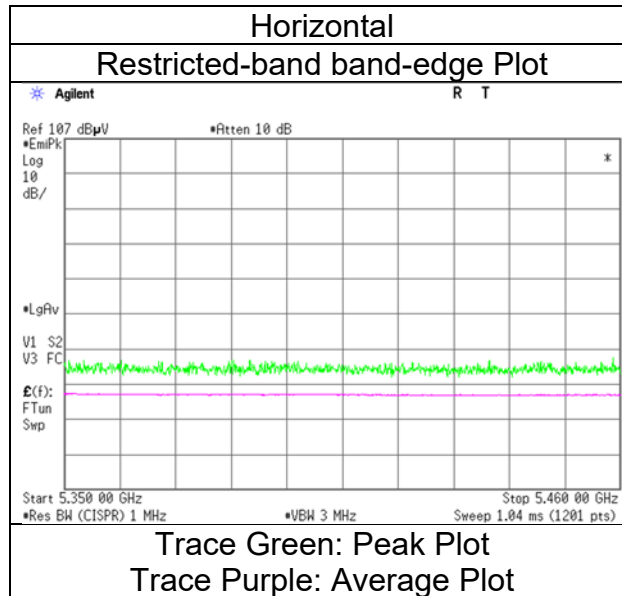
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 27, 2023
Temperature / Humidity 23 deg.C, 35 %RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ac-20, 5320 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 27, 2023
Temperature / Humidity 23 deg.C, 35 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ac-20, 5500 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	45.11	32.65	17.09	38.97	2.45	58.33	73.9	15.5	166	106	-
Hori.	5460.000	AV	32.00	32.65	17.09	38.97	2.45	45.22	53.9	8.6	166	106	VBW: 110 Hz
Vert.	5460.000	PK	44.62	32.65	17.09	38.97	2.45	57.84	73.9	16.0	100	218	-
Vert.	5460.000	AV	31.86	32.65	17.09	38.97	2.45	45.08	53.9	8.8	100	218	VBW: 110 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	44.85	32.66	17.10	38.98	2.45	58.08	-37.15	-27.0	10.1	166	106	-
Vert.	5470.000	PK	45.41	32.66	17.10	38.98	2.45	58.64	-36.59	-27.0	9.5	100	218	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 * \text{LOG}((10^{\wedge}(\text{Electric Field Strength [dBuV/m]} / 20)) * 10^{\wedge}(-6) * \text{Distance : 3 [m]})^2 / 30 * 10^{\wedge}3)$

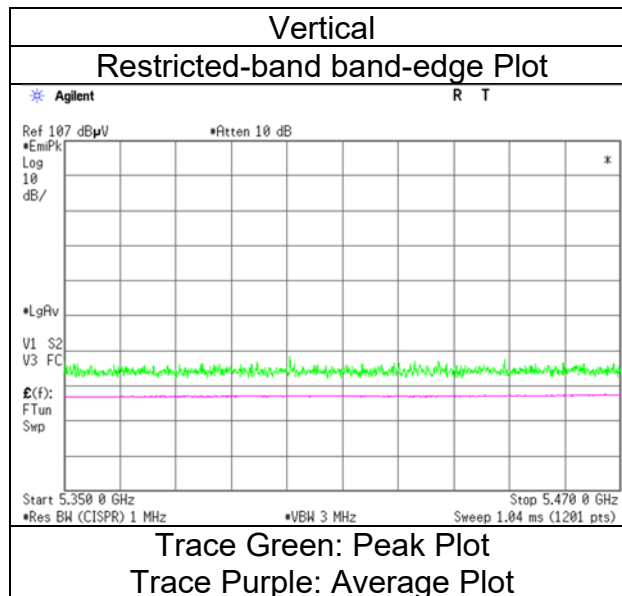
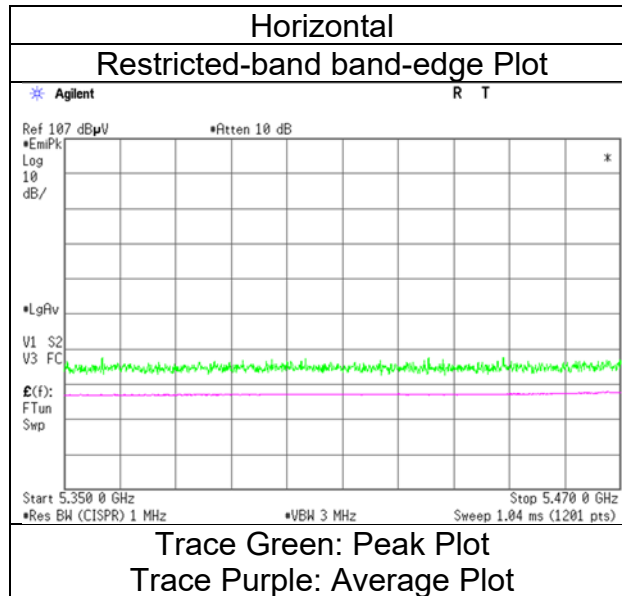
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 27, 2023
Temperature / Humidity 23 deg.C, 35 %RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ac-20, 5500 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 27, 2023
Temperature / Humidity 23 deg.C, 35 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ac-20, 5700 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	45.47	33.14	17.24	39.01	2.45	59.29	-35.94	-27.0	8.9	146	116	-
Vert.	5725.000	PK	44.63	33.14	17.24	39.01	2.45	58.45	-36.78	-27.0	9.7	100	216	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

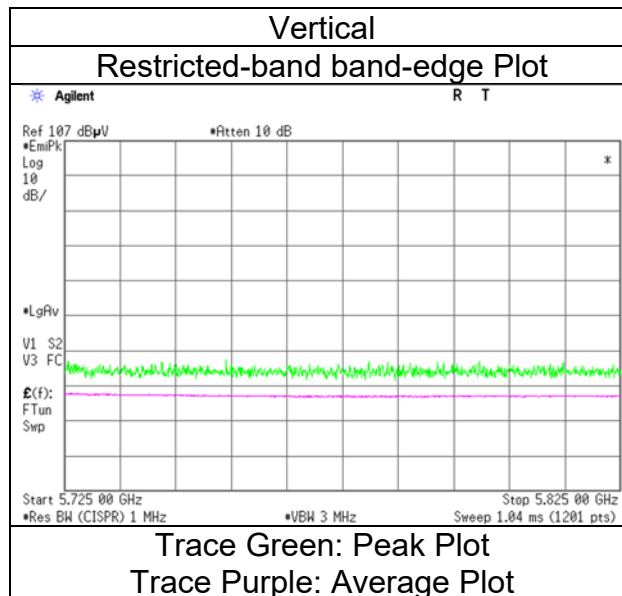
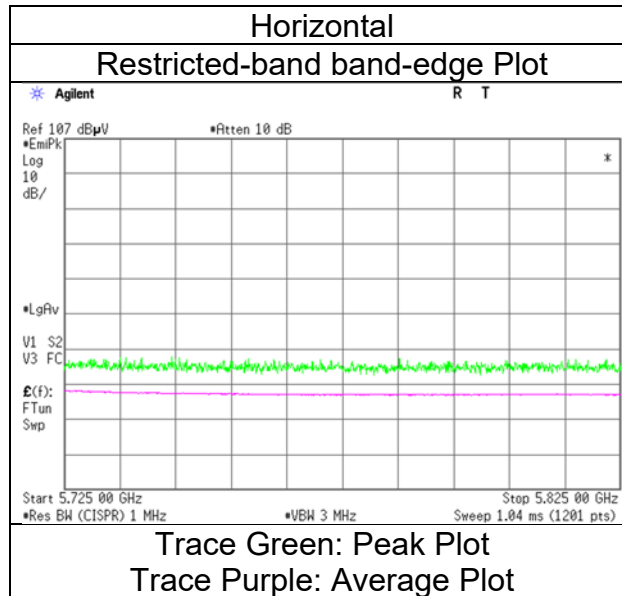
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz : 20log (3.98 m/ 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m/ 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 27, 2023
Temperature / Humidity 23 deg.C, 35 %RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ac-20, 5700 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 28, 2023
Temperature / Humidity 23 deg.C, 34 %RH
Engineer Takahiro Suzuki
(1 GHz -10 GHz)
Mode Tx 11ac-20, 5745 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	47.37	32.90	18.01	39.00	2.45	61.73	-33.50	-27.0	6.5	101	112	-
Hori.	5700.000	PK	46.75	33.05	18.03	39.01	2.45	61.27	-33.96	10.0	43.9	101	112	-
Hori.	5720.000	PK	47.14	33.12	18.04	39.01	2.45	61.74	-33.49	15.6	49.0	101	112	-
Hori.	5725.000	PK	56.01	33.14	18.04	39.01	2.45	70.63	-24.60	27.0	51.6	101	112	-
Vert.	5650.000	PK	44.90	32.90	18.01	39.00	2.45	59.26	-35.97	-27.0	8.9	102	161	-
Vert.	5700.000	PK	45.74	33.05	18.03	39.01	2.45	60.26	-34.97	10.0	44.9	102	161	-
Vert.	5720.000	PK	45.41	33.12	18.04	39.01	2.45	60.01	-35.22	15.6	50.8	102	161	-
Vert.	5725.000	PK	53.19	33.14	18.04	39.01	2.45	67.81	-27.42	27.0	54.4	102	161	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

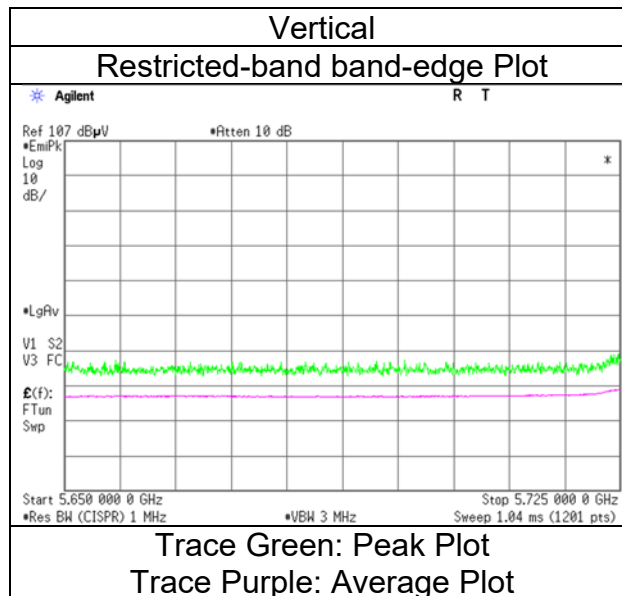
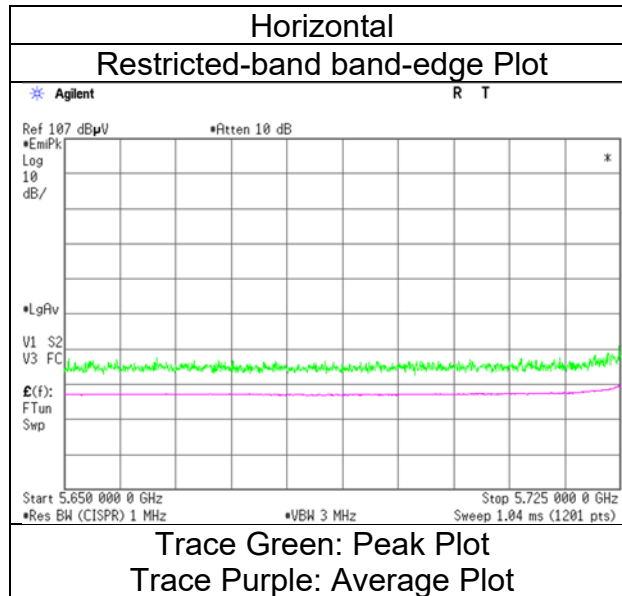
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	2
Date	February 28, 2023
Temperature / Humidity	23 deg.C, 34 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ac-20, 5745 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 28, 2023
Temperature / Humidity 23 deg.C, 34 %RH
Engineer Takahiro Suzuki
(1 GHz -10 GHz)
Mode Tx 11ac-20, 5825 MHz

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	48.73	33.53	18.12	39.02	2.45	63.81	-31.42	27.0	58.4	114	113	-
Hori.	5855.000	PK	46.71	33.54	18.12	39.02	2.45	61.80	-33.43	15.6	49.0	114	113	-
Hori.	5875.000	PK	47.53	33.58	18.15	39.02	2.45	62.69	-32.54	10.0	42.5	114	113	-
Hori.	5925.000	PK	45.84	33.64	18.17	39.02	2.45	61.08	-34.15	-27.0	7.1	114	113	-
Vert.	5850.000	PK	47.48	33.53	18.12	39.02	2.45	62.56	-32.67	27.0	59.6	104	157	-
Vert.	5855.000	PK	46.97	33.54	18.12	39.02	2.45	62.06	-33.17	15.6	48.7	104	157	-
Vert.	5875.000	PK	45.87	33.58	18.15	39.02	2.45	61.03	-34.20	10.0	44.2	104	157	-
Vert.	5925.000	PK	46.10	33.64	18.17	39.02	2.45	61.34	-33.89	-27.0	6.8	104	157	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20)) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

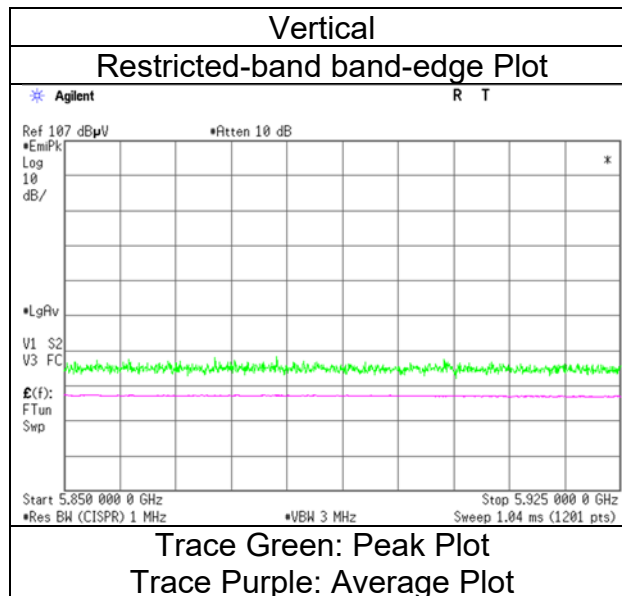
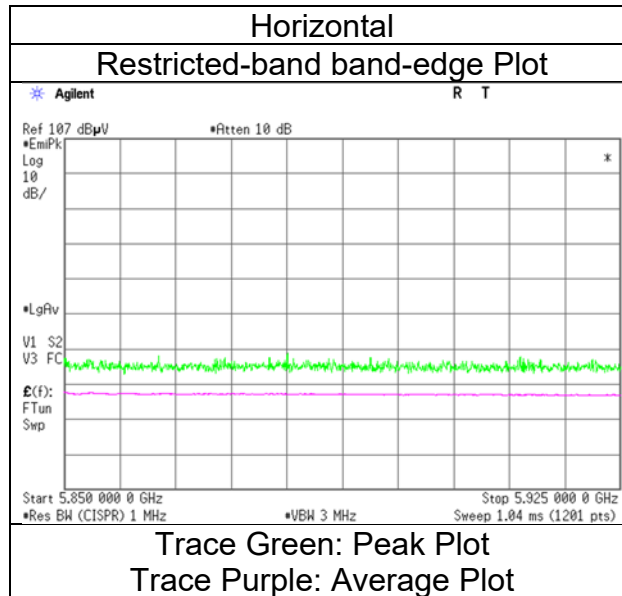
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	2
Date	February 28, 2023
Temperature / Humidity	23 deg.C, 34 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ac-20, 5825 MHz



* 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 Shonan EMC Lab.
Semi Anechoic
Chamber 2 3 3 3
Date February 28, 2023 March 4, 2023 March 5, 2023 March 6, 2023
Temperature /
Humidity 23 deg.C, 34 %RH 23 deg.C, 30 %RH 21 deg.C, 29 %RH 25 deg.C, 31 %RH
Engineer Takahiro Suzuki Kenichi Adachi Kouki Yamada Hiromasa Sato
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz) (26.5 GHz -40 GHz)
Mode Tx 11ax-20 (OFDM), 5180 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	46.38	32.70	17.62	38.82	2.45	60.33	73.9	13.5	104	102	-
Hori.	20720.000	PK	52.52	40.08	14.38	47.02	-9.54	50.42	73.9	23.4	212	351	-
Hori.	5150.000	AV	33.06	32.70	17.62	38.82	2.45	47.01	53.9	6.8	104	102	VBW: 150 Hz
Hori.	20720.000	AV	49.02	40.08	14.38	47.02	-9.54	46.92	53.9	6.9	212	351	VBW: 150 Hz
Vert.	5150.000	PK	47.91	32.70	17.62	38.82	2.45	61.86	73.9	12.0	104	154	-
Vert.	20720.000	PK	52.62	40.08	14.38	47.02	-9.54	50.52	73.9	23.3	137	34	-
Vert.	5150.000	AV	33.29	32.70	17.62	38.82	2.45	47.24	53.9	6.6	104	154	VBW: 150 Hz
Vert.	20720.000	AV	50.13	40.08	14.38	47.02	-9.54	48.03	53.9	5.8	137	34	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor: 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	10360.000	PK	61.68	36.44	9.64	42.84	-9.54	55.38	-39.85	-27.0	12.8	131	51	-
Vert.	10360.000	PK	59.36	36.44	9.64	42.84	-9.54	53.06	-42.17	-27.0	15.1	121	104	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 * \text{LOG}((10^{\wedge}(\text{Electric Field Strength [dBuV/m] / 20}) * 10^{\wedge}(-6)) * \text{Distance : 3 [m]})^{\wedge}2 / 30 * 10^{\wedge}3)$

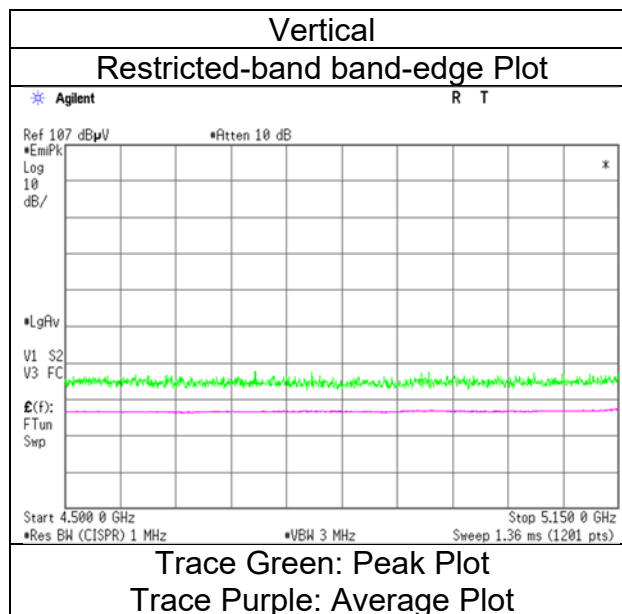
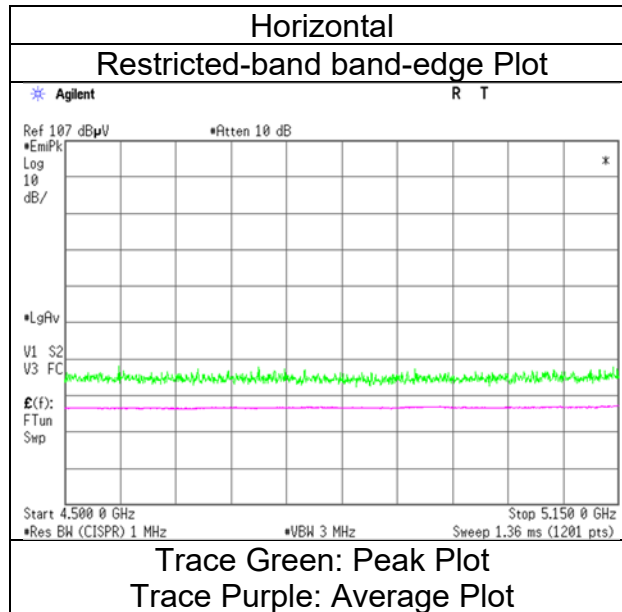
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	2
Date	February 28, 2023
Temperature / Humidity	23 deg.C, 34 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20 (OFDM), 5180 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 2, 2023
Temperature / Humidity 23 deg.C, 38 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 26-tone RU, 5180 MHz

RU Index 0

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	48.83	32.18	16.90	43.07	2.45	57.29	73.9	16.6	112	31	-
Hori.	5150.000	AV	36.33	32.18	16.90	43.07	2.45	44.79	53.9	9.1	112	31	VBW: 750 Hz
Vert.	5150.000	PK	48.37	32.18	16.90	43.07	2.45	56.83	73.9	17.0	130	165	-
Vert.	5150.000	AV	36.37	32.18	16.90	43.07	2.45	44.83	53.9	9.0	130	165	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

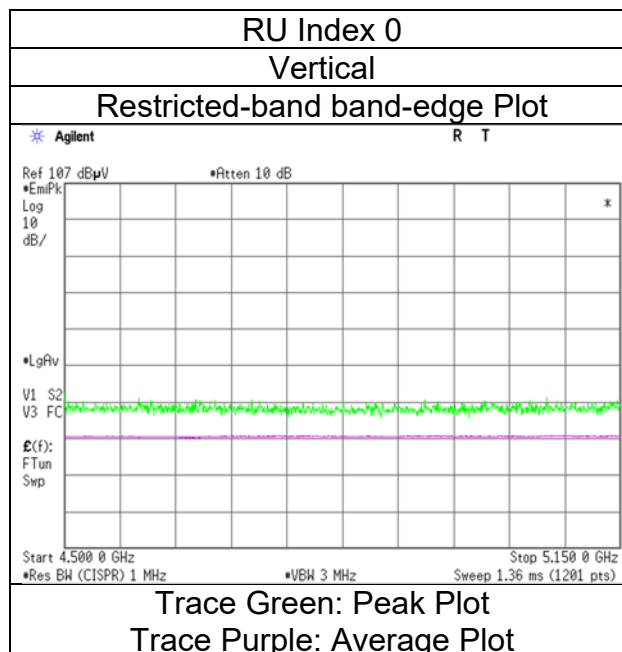
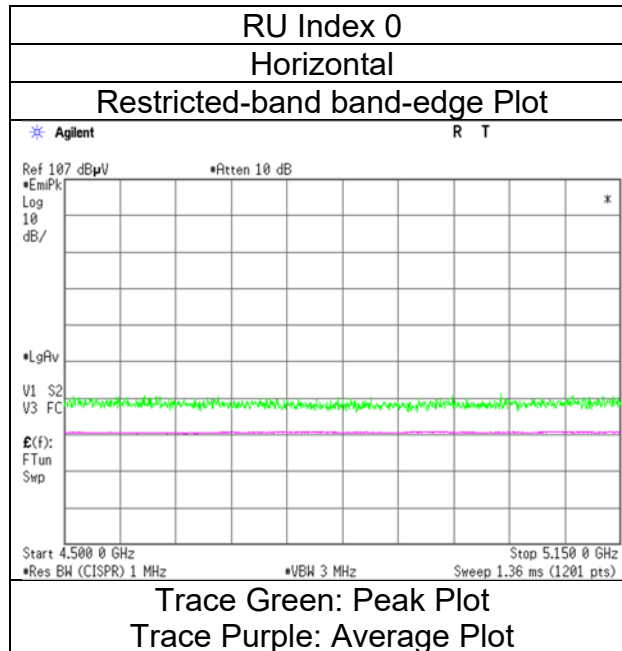
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 2, 2023
Temperature / Humidity	23 deg.C, 38 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 5180 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yusuke Tanikawara
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 52-tone RU, 5180 MHz

RU Index 37

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	48.78	32.18	16.90	43.07	2.45	57.24	73.9	16.6	133	106	-
Hori.	5150.000	AV	36.40	32.18	16.90	43.07	2.45	44.86	53.9	9.0	133	106	VBW: 750 Hz
Vert.	5150.000	PK	48.84	32.18	16.90	43.07	2.45	57.30	73.9	16.6	110	157	-
Vert.	5150.000	AV	36.43	32.18	16.90	43.07	2.45	44.89	53.9	9.0	110	157	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

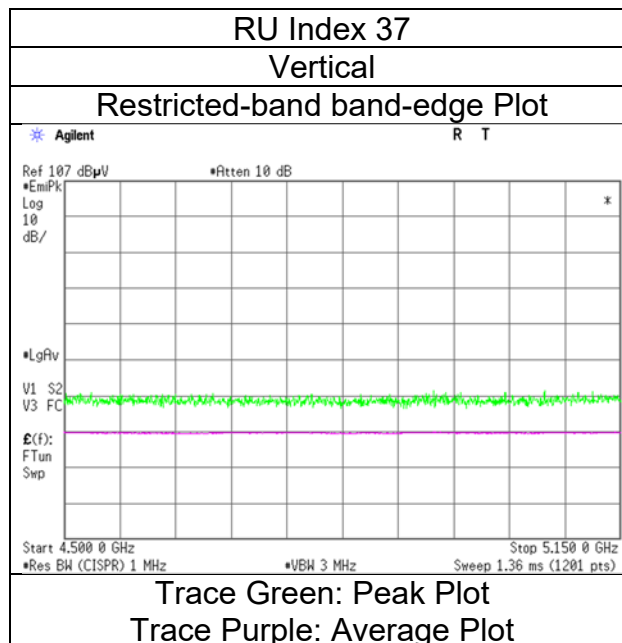
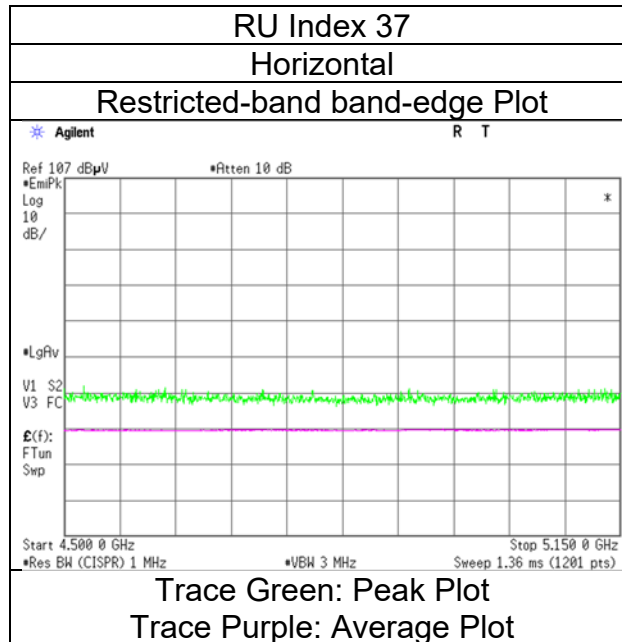
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yusuke Tanikawara
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 5180 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yusuke Tanikawara
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 106-tone RU, 5180 MHz

RU Index 53

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	48.35	32.18	16.90	43.07	2.45	56.81	73.9	17.0	148	163	-
Hori.	5150.000	AV	36.51	32.18	16.90	43.07	2.45	44.97	53.9	8.9	148	163	VBW: 750 Hz
Vert.	5150.000	PK	48.13	32.18	16.90	43.07	2.45	56.59	73.9	17.3	116	213	-
Vert.	5150.000	AV	36.51	32.18	16.90	43.07	2.45	44.97	53.9	8.9	116	213	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

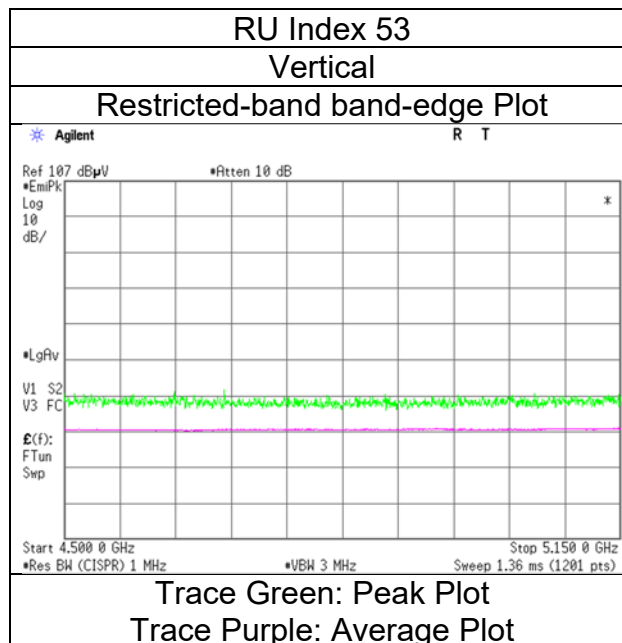
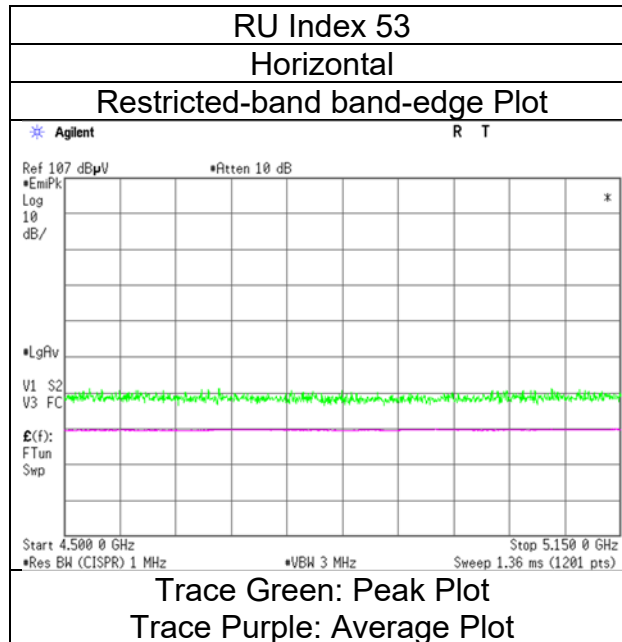
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yusuke Tanikawara
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 5180 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 242-tone RU, 5180 MHz

RU Index 61

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	49.51	32.18	16.90	43.07	2.45	57.97	73.9	15.9	187	167	-
Hori.	5150.000	AV	36.82	32.18	16.90	43.07	2.45	45.28	53.9	8.6	187	167	VBW: 750 Hz
Vert.	5150.000	PK	49.43	32.18	16.90	43.07	2.45	57.89	73.9	16.0	100	159	-
Vert.	5150.000	AV	36.97	32.18	16.90	43.07	2.45	45.43	53.9	8.4	100	159	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

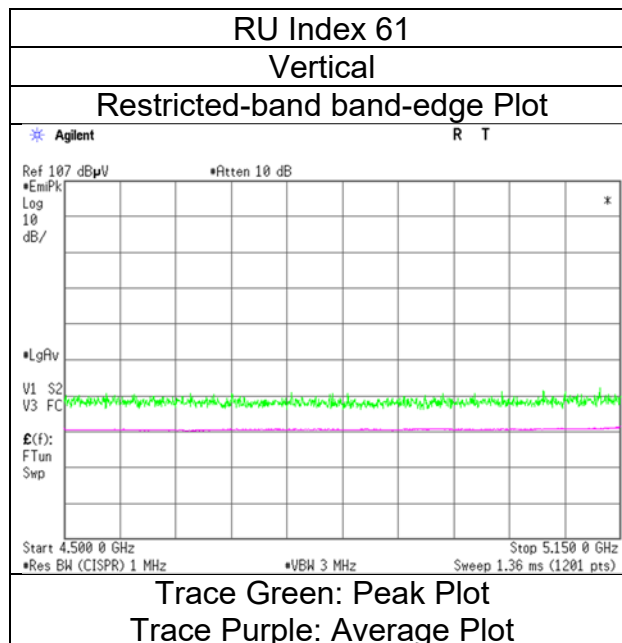
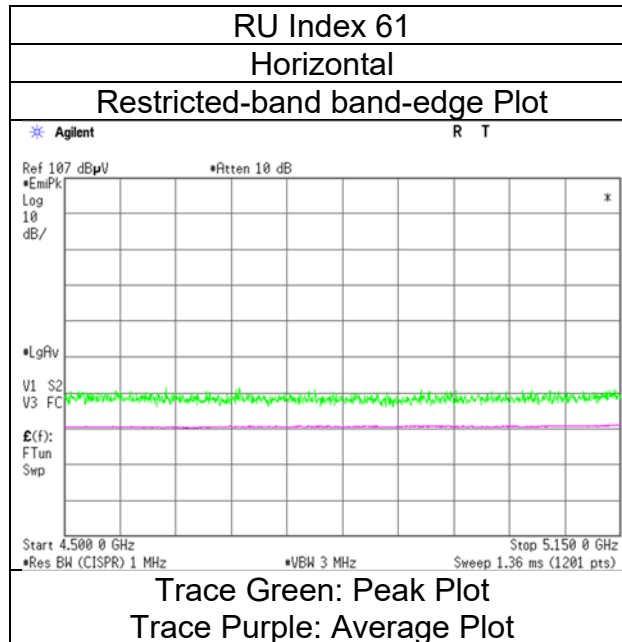
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 5180 MHz



* 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	Shonan EMC Lab.			
Semi Anechoic Chamber	2	3	3	3
Date	February 28, 2023	March 4, 2023	March 6, 2023	March 6, 2023
Temperature / Humidity	23 deg.C, 34 %RH	23 deg.C, 30 %RH	22 deg.C, 30 %RH	25 deg.C, 31 %RH
Engineer	Takahiro Suzuki (1 GHz -10 GHz)	Kenichi Adachi (10 GHz -18 GHz)	Kouki Yamada (18 GHz -26.5 GHz)	Hiromasa Sato (26.5 GHz -40 GHz)
Mode	Tx 11ax-20 (OFDM), 5240 MHz			

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5150.000	PK	46.04	32.70	17.62	38.82	2.45	59.99	73.9	13.9	148	104	-
Hori.	20960.000	PK	47.03	40.07	14.50	47.01	-9.54	45.05	73.9	28.8	152	215	-
Hori.	5150.000	AV	32.60	32.70	17.62	38.82	2.45	46.55	53.9	7.3	148	104	VBW: 150 Hz
Hori.	20960.000	AV	41.35	40.07	14.50	47.01	-9.54	39.37	53.9	14.5	152	215	VBW: 150 Hz
Vert.	5150.000	PK	46.65	32.70	17.62	38.82	2.45	60.60	73.9	13.3	102	156	-
Vert.	20960.000	PK	49.06	40.07	14.50	47.01	-9.54	47.08	73.9	26.8	192	79	-
Vert.	5150.000	AV	32.67	32.70	17.62	38.82	2.45	46.62	53.9	7.2	102	156	VBW: 150 Hz
Vert.	20960.000	AV	44.76	40.07	14.50	47.01	-9.54	42.78	53.9	11.1	192	79	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	10480.000	PK	60.66	36.56	9.71	42.84	-9.54	54.55	-40.68	-27.0	13.6	131	29	-
Vert.	10480.000	PK	58.78	36.56	9.71	42.84	-9.54	52.67	-42.56	-27.0	15.5	121	92	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 * \text{LOG}((10^{\wedge}(\text{Electric Field Strength [dBuV/m] / 20}) * 10^{\wedge}(-6)) * \text{Distance : 3 [m]})^{\wedge}2 / 30 * 10^{\wedge}3)$

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.			
Semi Anechoic Chamber	2	3	3	3
Date	February 28, 2023	March 4, 2023	March 6, 2023	March 6, 2023
Temperature / Humidity	23 deg.C, 34 %RH	23 deg.C, 30 %RH	22 deg.C, 30 %RH	25 deg.C, 31 %RH
Engineer	Takahiro Suzuki (1 GHz -10 GHz)	Kenichi Adachi (10 GHz -18 GHz)	Kouki Yamada (18 GHz -26.5 GHz)	Hirromasa Sato (26.5 GHz -40 GHz)
Mode	Tx 11ax-20 (OFDM), 5320 MHz			

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	47.81	32.43	17.78	38.92	2.45	61.55	73.9	12.3	106	98	-
Hori.	10640.000	PK	54.46	37.05	9.76	42.86	-9.54	48.87	73.9	25.0	130	46	-
Hori.	21280.000	PK	50.56	40.09	14.63	47.09	-9.54	48.65	73.9	25.2	203	319	-
Hori.	5350.000	AV	33.11	32.43	17.78	38.92	2.45	46.85	53.9	7.0	106	98	VBW: 150 Hz
Hori.	10640.000	AV	44.48	37.05	9.76	42.86	-9.54	38.89	53.9	15.0	130	46	VBW: 150 Hz
Hori.	21280.000	AV	48.77	40.09	14.63	47.09	-9.54	46.86	53.9	7.0	203	319	VBW: 150 Hz
Vert.	5350.000	PK	47.30	32.43	17.78	38.92	2.45	61.04	73.9	12.8	100	219	-
Vert.	10640.000	PK	52.77	37.05	9.76	42.86	-9.54	47.18	73.9	26.7	120	100	-
Vert.	21280.000	PK	53.32	40.09	14.63	47.09	-9.54	51.41	73.9	22.4	135	31	-
Vert.	5350.000	AV	32.93	32.43	17.78	38.92	2.45	46.67	53.9	7.2	100	219	VBW: 150 Hz
Vert.	10640.000	AV	42.67	37.05	9.76	42.86	-9.54	37.08	53.9	16.8	120	100	VBW: 150 Hz
Vert.	21280.000	AV	51.68	40.09	14.63	47.09	-9.54	49.77	53.9	4.1	135	31	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

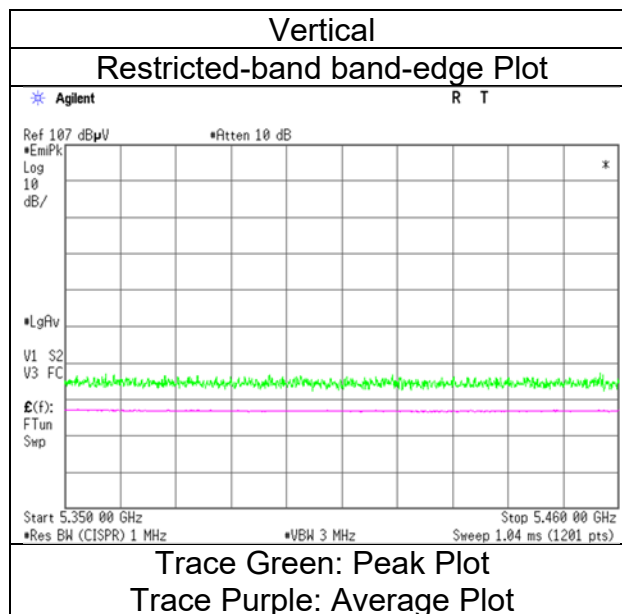
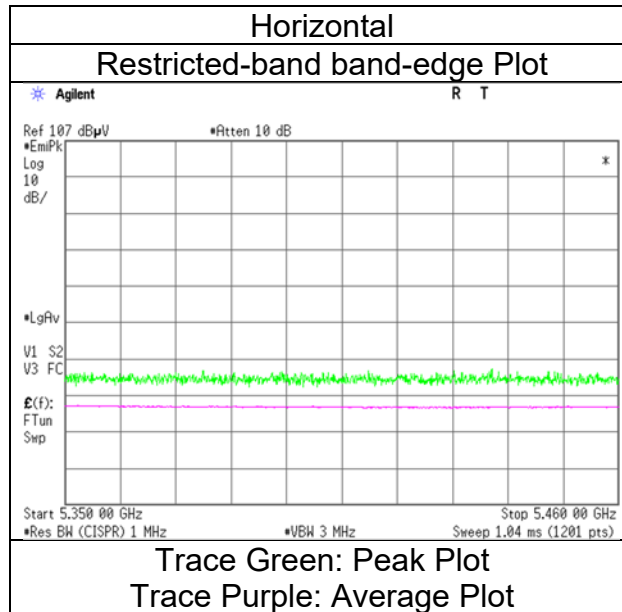
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m/ 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m/ 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 28, 2023
Temperature / Humidity 23 deg.C, 34 %RH
Engineer Takahiro Suzuki
Mode Tx 11ax-20 (OFDM), 5320 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 2, 2023
Temperature / Humidity 23 deg.C, 38 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 26-tone RU, 5320 MHz

RU Index 8

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	48.73	31.91	17.02	43.30	2.45	56.81	73.9	17.0	253	107	-
Hori.	5350.000	AV	36.55	31.91	17.02	43.30	2.45	44.63	53.9	9.2	253	107	VBW: 750 Hz
Vert.	5350.000	PK	47.75	31.91	17.02	43.30	2.45	55.83	73.9	18.0	100	222	-
Vert.	5350.000	AV	36.58	31.91	17.02	43.30	2.45	44.66	53.9	9.2	100	222	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

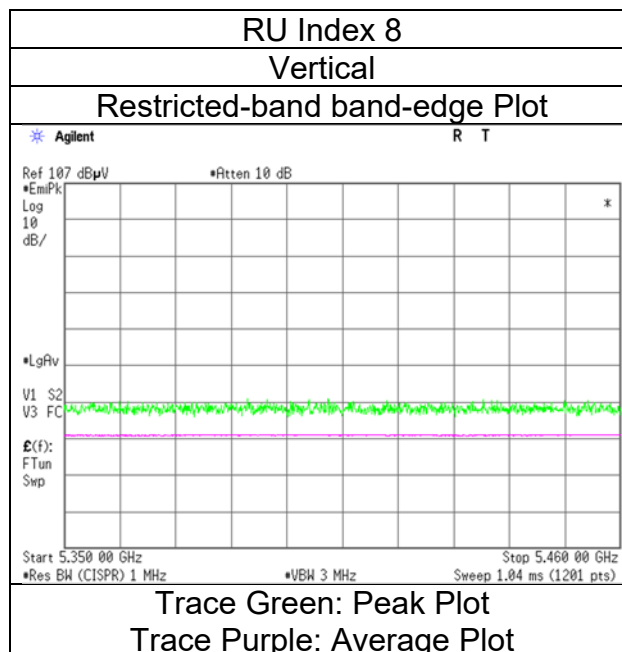
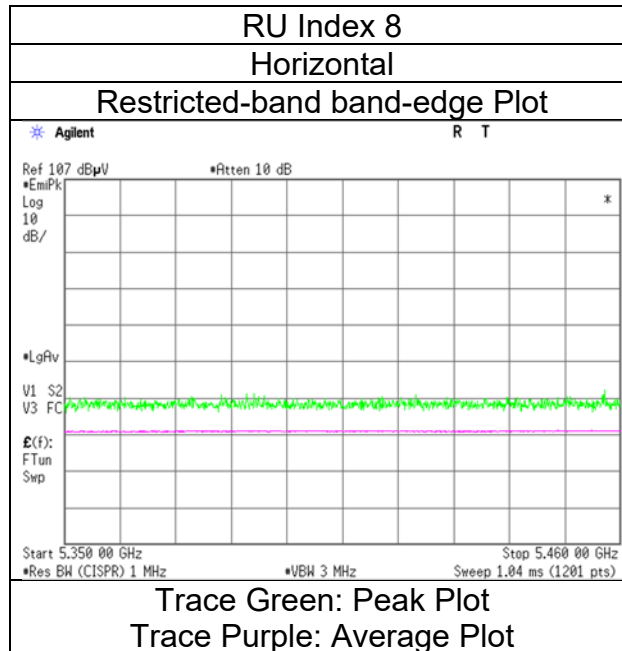
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 2, 2023
Temperature / Humidity	23 deg.C, 38 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 5320 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yusuke Tanikawara
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 52-tone RU, 5320 MHz

RU Index 40

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	48.93	31.91	17.02	43.30	2.45	57.01	73.9	16.8	150	98	-
Hori.	5350.000	AV	36.48	31.91	17.02	43.30	2.45	44.56	53.9	9.3	150	98	VBW: 750 Hz
Vert.	5350.000	PK	48.34	31.91	17.02	43.30	2.45	56.42	73.9	17.4	112	226	-
Vert.	5350.000	AV	36.53	31.91	17.02	43.30	2.45	44.61	53.9	9.2	112	226	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

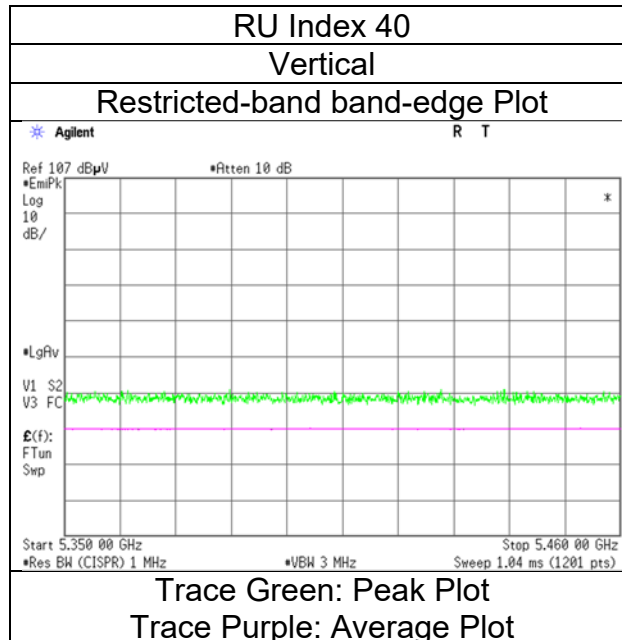
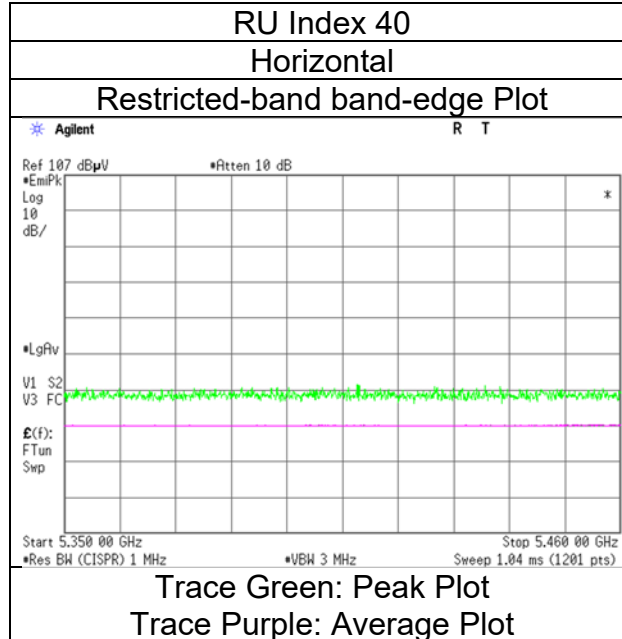
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yusuke Tanikawara
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 5320 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 106-tone RU, 5320 MHz

RU Index 54

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	48.33	31.91	17.02	43.30	2.45	56.41	73.9	17.4	159	101	-
Hori.	5350.000	AV	36.63	31.91	17.02	43.30	2.45	44.71	53.9	9.1	159	101	VBW: 750 Hz
Vert.	5350.000	PK	48.63	31.91	17.02	43.30	2.45	56.71	73.9	17.1	156	148	-
Vert.	5350.000	AV	36.53	31.91	17.02	43.30	2.45	44.61	53.9	9.2	156	148	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

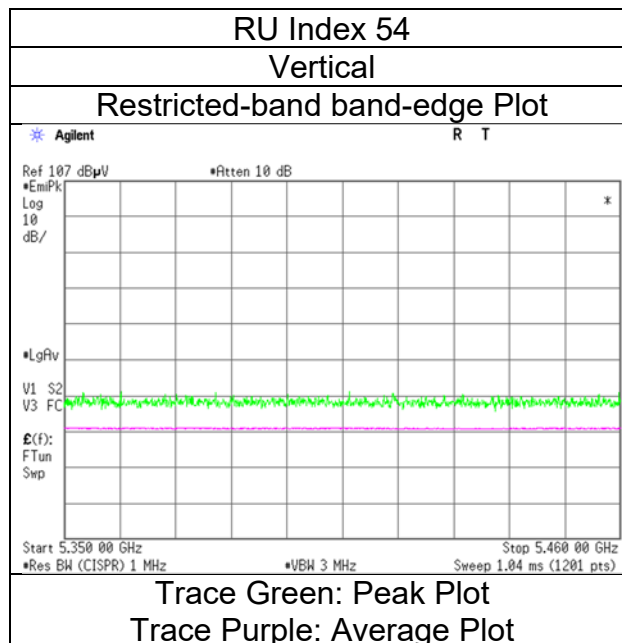
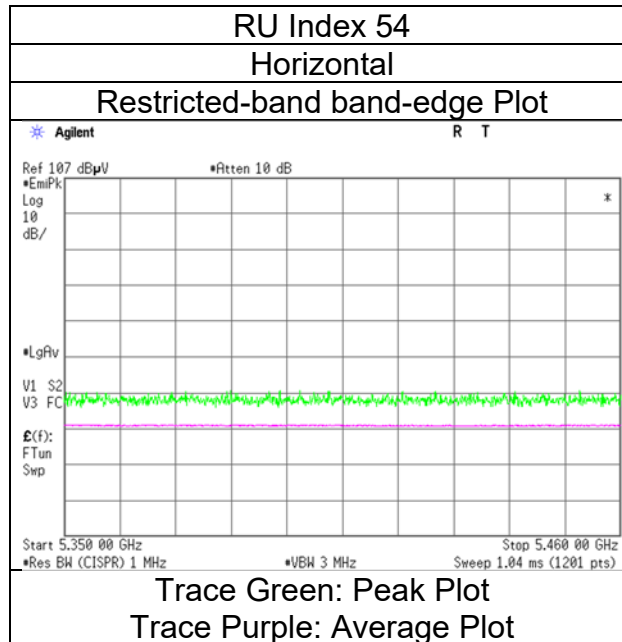
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 5320 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 242-tone RU, 5320 MHz

RU Index 61

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	48.86	31.91	17.02	43.30	2.45	56.94	73.9	16.9	153	104	-
Hori.	5350.000	AV	37.20	31.91	17.02	43.30	2.45	45.28	53.9	8.6	153	104	VBW: 750 Hz
Vert.	5350.000	PK	48.36	31.91	17.02	43.30	2.45	56.44	73.9	17.4	103	216	-
Vert.	5350.000	AV	37.21	31.91	17.02	43.30	2.45	45.29	53.9	8.6	103	216	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

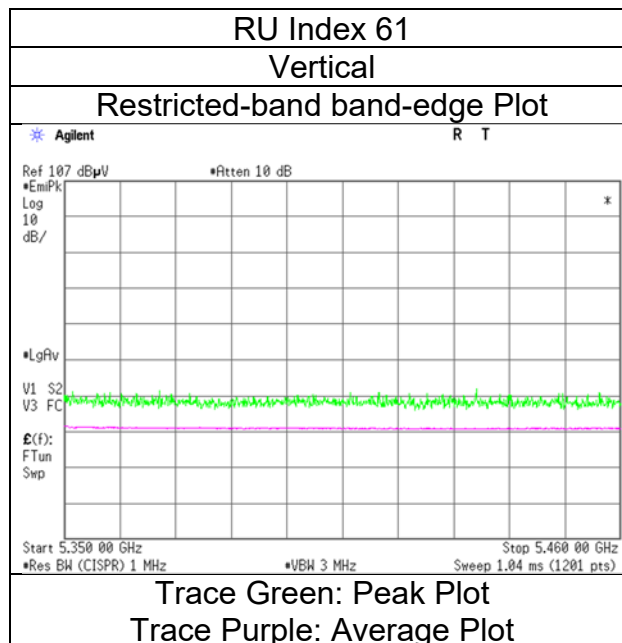
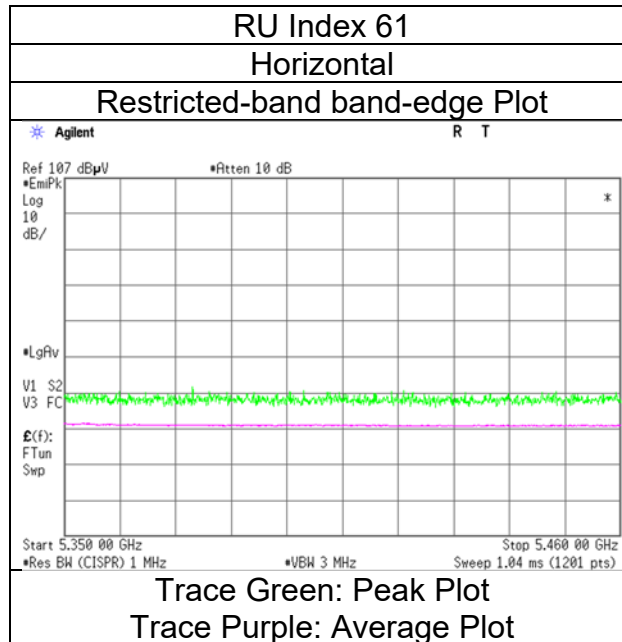
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 5320 MHz



* 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	Shonan EMC Lab.			
Semi Anechoic Chamber	2	3	3	3
Date	February 28, 2023	March 4, 2023	March 6, 2023	March 6, 2023
Temperature / Humidity	23 deg.C, 34 %RH	23 deg.C, 30 %RH	22 deg.C, 30 %RH	25 deg.C, 31 %RH
Engineer	Takahiro Suzuki	Kenichi Adachi	Kouki Yamada	Hiromasa Sato
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)	(26.5 GHz -40 GHz)
Mode	Tx 11ax-20 (OFDM), 5500 MHz			

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	47.15	32.65	17.88	38.97	2.45	61.16	73.9	12.7	100	103	-
Hori.	11000.000	PK	53.07	37.37	9.86	42.90	-9.54	47.86	73.9	26.0	133	32	-
Hori.	5460.000	AV	32.85	32.65	17.88	38.97	2.45	46.86	53.9	7.0	100	103	VBW: 150 Hz
Hori.	11000.000	AV	42.17	37.37	9.86	42.90	-9.54	36.96	53.9	16.9	133	32	VBW: 150 Hz
Vert.	5460.000	PK	46.64	32.65	17.88	38.97	2.45	60.65	73.9	13.2	100	153	-
Vert.	11000.000	PK	51.63	37.37	9.86	42.90	-9.54	46.42	73.9	27.4	128	101	-
Vert.	5460.000	AV	32.74	32.65	17.88	38.97	2.45	46.75	53.9	7.1	100	153	VBW: 150 Hz
Vert.	11000.000	AV	41.28	37.37	9.86	42.90	-9.54	36.07	53.9	17.8	128	101	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	47.62	32.66	17.89	38.98	2.45	61.64	-33.59	-27.0	6.5	100	103	-
Hori.	22000.000	PK	54.18	40.25	14.91	47.43	-9.54	52.37	-42.86	-27.0	15.8	180	38	-
Vert.	5470.000	PK	46.23	32.66	17.89	38.98	2.45	60.25	-34.98	-27.0	7.9	100	153	-
Vert.	22000.000	PK	54.54	40.25	14.91	47.43	-9.54	52.73	-42.50	-27.0	15.5	136	341	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20)) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

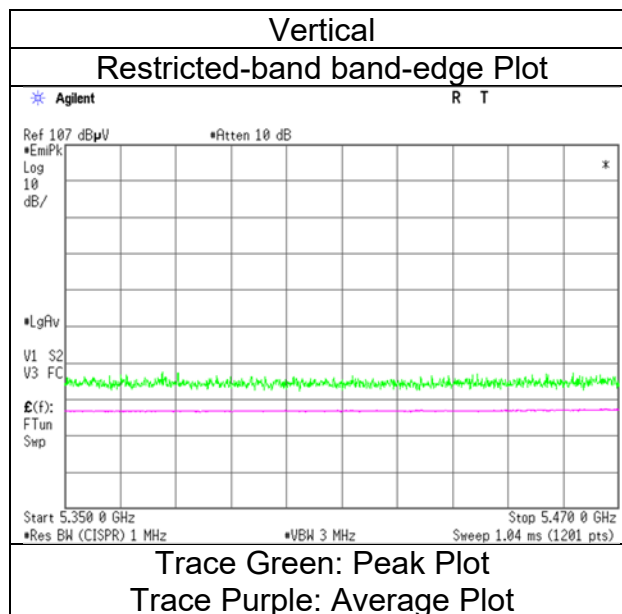
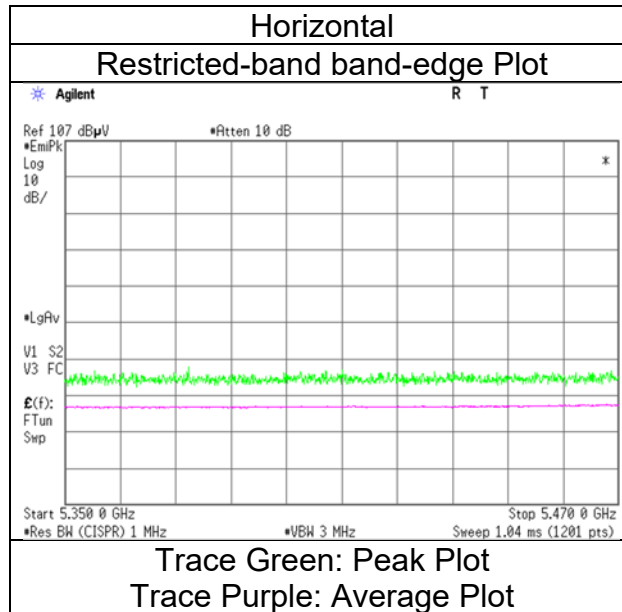
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 28, 2023
Temperature / Humidity 23 deg.C, 34 %RH
Engineer Takahiro Suzuki
Mode Tx 11ax-20 (OFDM), 5500 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 2, 2023
Temperature / Humidity 23 deg.C, 38 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 26-tone RU, 5500 MHz

RU Index 0

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	48.46	32.16	17.09	43.42	2.45	56.74	73.9	17.1	100	43	-
Hori.	5460.000	AV	36.60	32.16	17.09	43.42	2.45	44.88	53.9	9.0	100	43	VBW: 750 Hz
Vert.	5460.000	PK	48.78	32.16	17.09	43.42	2.45	57.06	73.9	16.8	135	12	-
Vert.	5460.000	AV	36.57	32.16	17.09	43.42	2.45	44.85	53.9	9.0	135	12	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	48.25	32.18	17.10	43.44	2.45	56.54	-38.69	-27.0	11.6	100	43	-
Vert.	5470.000	PK	49.14	32.18	17.10	43.44	2.45	57.43	-37.80	-27.0	10.8	135	12	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

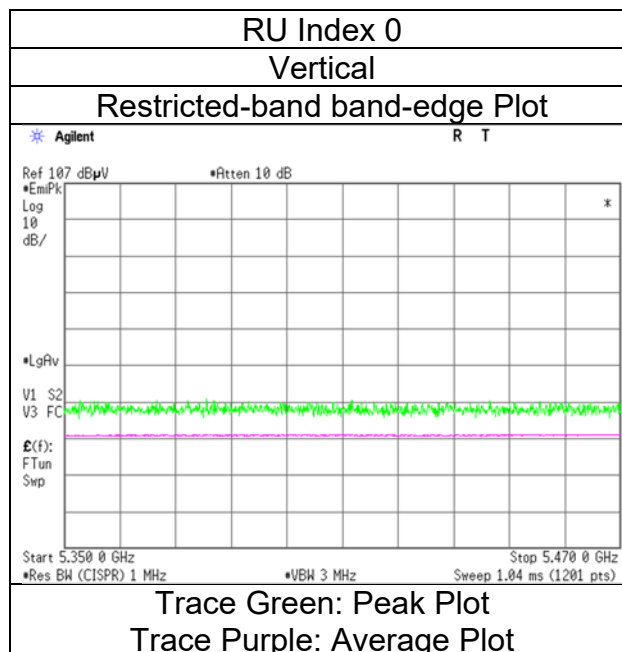
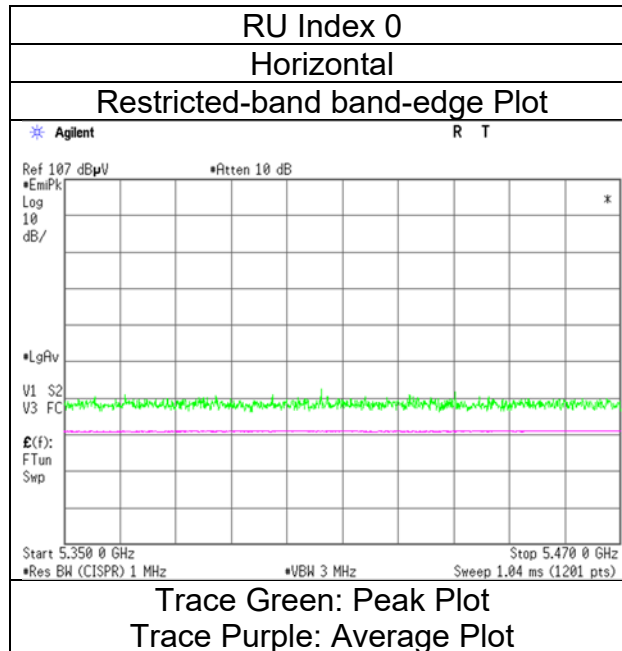
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 2, 2023
Temperature / Humidity	23 deg.C, 38 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 5500 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yusuke Tanikawara
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 52-tone RU, 5500 MHz

RU Index 37

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	48.87	32.16	17.09	43.42	2.45	57.15	73.9	16.7	135	113	-
Hori.	5460.000	AV	36.60	32.16	17.09	43.42	2.45	44.88	53.9	9.0	135	113	VBW: 750 Hz
Vert.	5460.000	PK	48.13	32.16	17.09	43.42	2.45	56.41	73.9	17.4	102	148	-
Vert.	5460.000	AV	36.81	32.16	17.09	43.42	2.45	45.09	53.9	8.8	102	148	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	48.43	32.18	17.10	43.44	2.45	56.72	-38.51	-27.0	11.5	135	113	-
Vert.	5470.000	PK	49.51	32.18	17.10	43.44	2.45	57.80	-37.43	-27.0	10.4	102	148	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

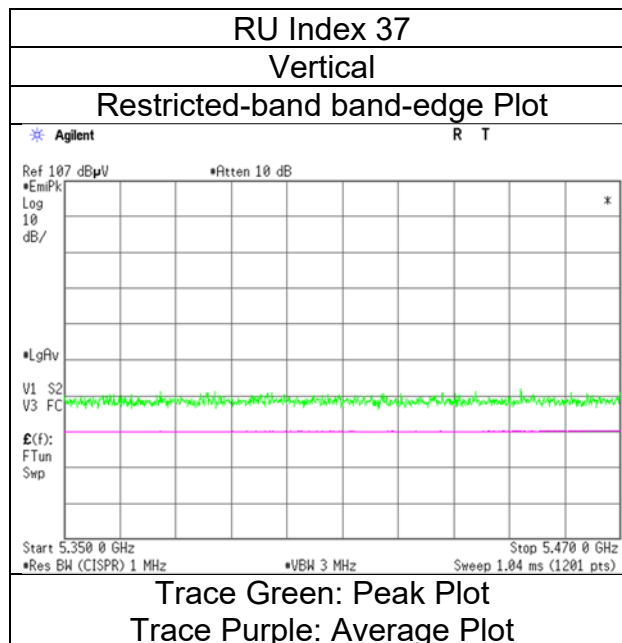
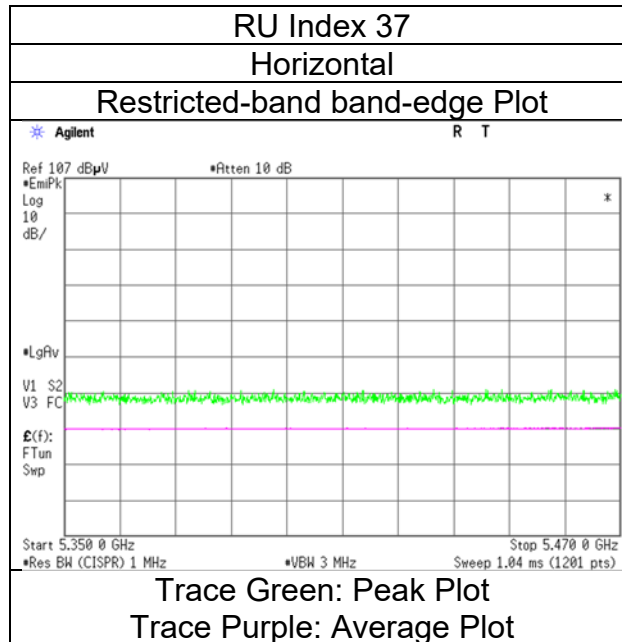
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yusuke Tanikawara
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 5500 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 106-tone RU, 5500 MHz

RU Index 53

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	48.00	32.16	17.09	43.42	2.45	56.28	73.9	17.6	149	101	-
Hori.	5460.000	AV	36.58	32.16	17.09	43.42	2.45	44.86	53.9	9.0	149	101	VBW: 750 Hz
Vert.	5460.000	PK	47.83	32.16	17.09	43.42	2.45	56.11	73.9	17.7	124	152	-
Vert.	5460.000	AV	36.56	32.16	17.09	43.42	2.45	44.84	53.9	9.0	124	152	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	48.45	32.18	17.10	43.44	2.45	56.74	-38.49	-27.0	11.4	149	101	-
Vert.	5470.000	PK	49.60	32.18	17.10	43.44	2.45	57.89	-37.34	-27.0	10.3	124	152	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

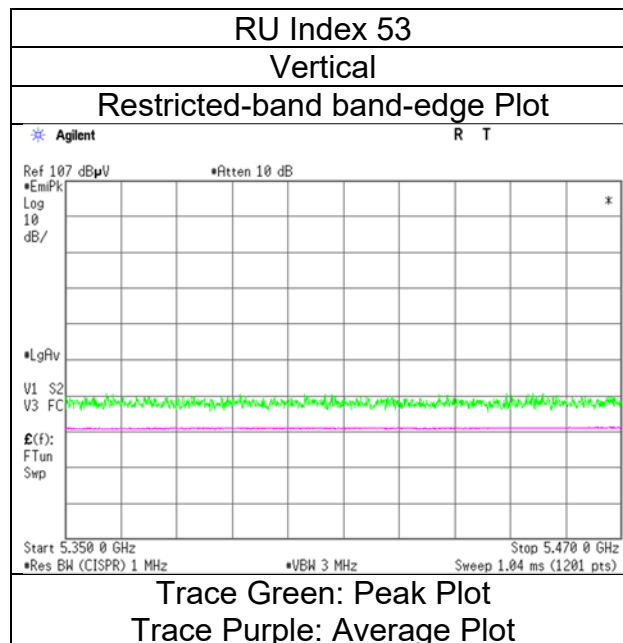
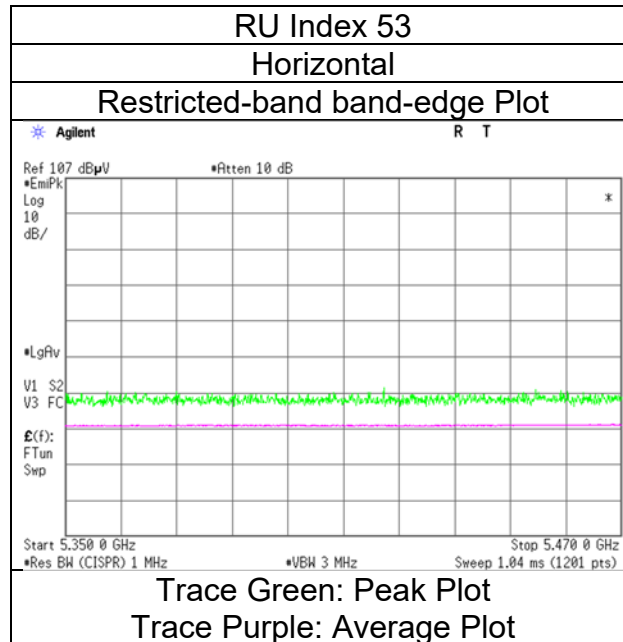
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 5500 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 242-tone RU, 5500 MHz

RU Index 61

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	49.03	32.16	17.09	43.42	2.45	57.31	73.9	16.5	133	105	-
Hori.	5460.000	AV	37.00	32.16	17.09	43.42	2.45	45.28	53.9	8.6	133	105	VBW: 750 Hz
Vert.	5460.000	PK	48.33	32.16	17.09	43.42	2.45	56.61	73.9	17.2	122	154	-
Vert.	5460.000	AV	36.82	32.16	17.09	43.42	2.45	45.10	53.9	8.8	122	154	VBW: 750 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	48.33	32.18	17.10	43.44	2.45	56.62	-38.61	-27.0	11.6	133	105	-
Vert.	5470.000	PK	48.45	32.18	17.10	43.44	2.45	56.74	-38.49	-27.0	11.4	122	154	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

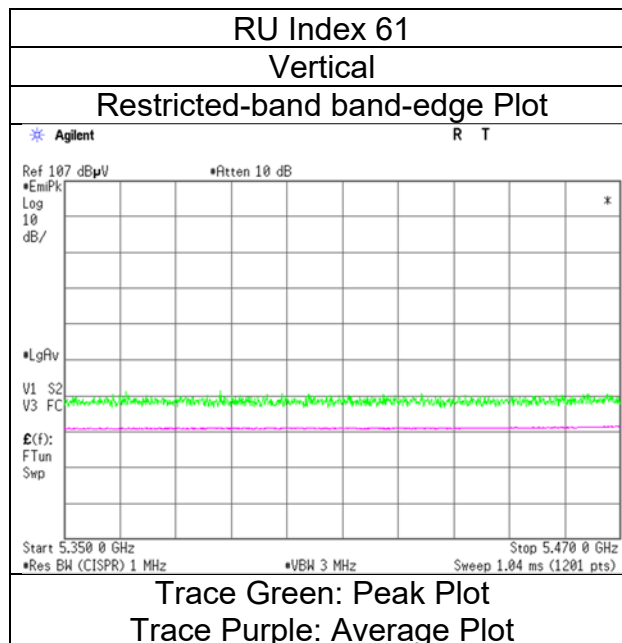
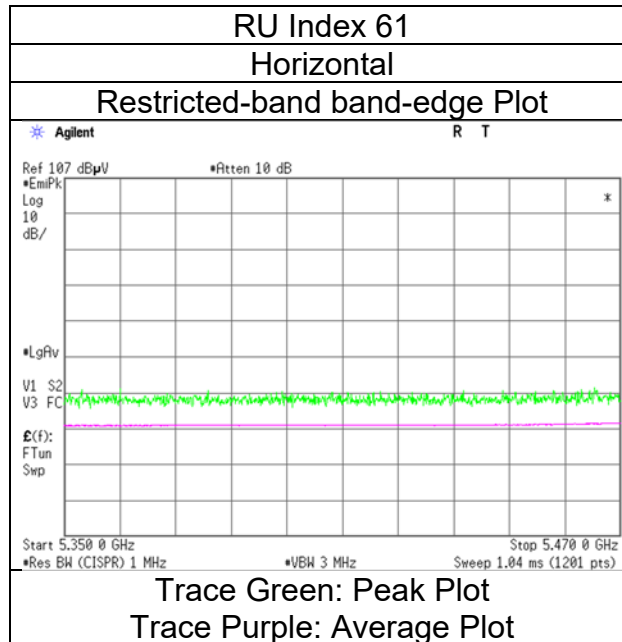
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 5500 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 2 3 3 3
Date February 28, 2023 March 4, 2023 March 6, 2023 March 6, 2023
Temperature / Humidity 23 deg.C, 34 %RH 23 deg.C, 30 %RH 22 deg.C, 30 %RH 25 deg.C, 31 %RH
Engineer Takahiro Suzuki Kenichi Adachi Kouki Yamada Hiromasa Sato
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz) (26.5 GHz -40 GHz)
Mode Tx 11ax-20 (OFDM), 5580 MHz

(below 1 GHz and above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	381.531	QP	29.45	15.21	8.99	31.95	0.00	21.70	46.0	24.3	100	59	-
Hori.	521.575	QP	25.03	17.56	9.59	31.96	0.00	20.22	46.0	25.7	100	57	-
Hori.	11160.000	PK	51.84	37.44	9.94	42.80	-9.54	46.88	73.9	27.0	132	49	-
Hori.	22320.000	PK	52.43	40.28	14.97	47.47	-9.54	50.67	73.9	23.2	240	21	-
Hori.	11160.000	AV	41.07	37.44	9.94	42.80	-9.54	36.11	53.9	17.7	132	49	VBW: 150 Hz
Hori.	22320.000	AV	49.19	40.28	14.97	47.47	-9.54	47.43	53.9	6.4	240	21	VBW: 150 Hz
Vert.	36.813	QP	46.16	16.08	6.59	32.19	0.00	36.64	40.0	3.3	100	197	-
Vert.	39.260	QP	45.87	15.17	6.64	32.19	0.00	35.49	40.0	4.5	100	212	-
Vert.	44.163	QP	44.14	13.36	6.73	32.19	0.00	32.04	40.0	7.9	100	265	-
Vert.	78.511	QP	49.55	6.40	7.47	32.16	0.00	31.26	40.0	8.7	100	129	-
Vert.	110.406	QP	50.73	11.93	7.26	32.14	0.00	37.78	43.5	5.7	100	2	-
Vert.	117.802	QP	51.16	12.88	7.24	32.13	0.00	39.15	43.5	4.3	100	257	-
Vert.	120.297	QP	49.48	13.13	7.26	32.13	0.00	37.74	43.5	5.7	100	287	-
Vert.	125.123	QP	48.96	13.58	7.33	32.12	0.00	37.75	43.5	5.7	100	310	-
Vert.	127.773	QP	48.78	13.71	7.37	32.12	0.00	37.74	43.5	5.7	100	228	-
Vert.	135.045	QP	47.39	14.19	7.50	32.11	0.00	36.97	43.5	6.5	100	303	-
Vert.	821.919	QP	20.46	20.85	10.70	31.53	0.00	20.48	46.0	25.5	150	161	-
Vert.	11160.000	PK	53.75	37.44	9.94	42.80	-9.54	48.79	73.9	25.1	142	116	-
Vert.	22320.000	PK	52.24	40.28	14.97	47.47	-9.54	50.48	73.9	23.4	138	61	-
Vert.	11160.000	AV	41.74	37.44	9.94	42.80	-9.54	36.78	53.9	17.1	142	116	VBW: 150 Hz
Vert.	22320.000	AV	48.83	40.28	14.97	47.47	-9.54	47.07	53.9	6.8	138	61	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor: 1 GHz - 10 GHz: $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz: $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 2 3 3 3
Date February 28, 2023 March 4, 2023 March 6, 2023 March 6, 2023
Temperature / Humidity 23 deg.C, 34 %RH 23 deg.C, 30 %RH 22 deg.C, 30 %RH 25 deg.C, 31 %RH
Engineer Takahiro Suzuki Kenichi Adachi Kouki Yamada Hiromasa Sato
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz) (26.5 GHz -40 GHz)
Mode Tx 11ax-20 (OFDM), 5700 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	11400.000	PK	49.98	38.00	10.06	42.64	-9.54	45.86	73.9	28.0	130	48	-
Hori.	22800.000	PK	51.53	40.19	15.10	47.30	-9.54	49.98	73.9	23.9	176	321	-
Hori.	11400.000	AV	39.63	38.00	10.06	42.64	-9.54	35.51	53.9	18.3	130	48	VBW: 150 Hz
Hori.	22800.000	AV	48.26	40.19	15.10	47.30	-9.54	46.71	53.9	7.1	176	321	VBW: 150 Hz
Vert.	11400.000	PK	49.28	38.00	10.06	42.64	-9.54	45.16	73.9	28.7	139	107	-
Vert.	22800.000	PK	53.44	40.19	15.10	47.30	-9.54	51.89	73.9	22.0	131	62	-
Vert.	11400.000	AV	38.99	38.00	10.06	42.64	-9.54	34.87	53.9	19.0	139	107	VBW: 150 Hz
Vert.	22800.000	AV	50.38	40.19	15.10	47.30	-9.54	48.83	53.9	5.0	131	62	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor: 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	49.62	33.14	18.04	39.01	2.45	64.24	-30.99	-27.0	3.9	100	99	-
Vert.	5725.000	PK	47.87	33.14	18.04	39.01	2.45	62.49	-32.74	-27.0	5.7	100	158	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

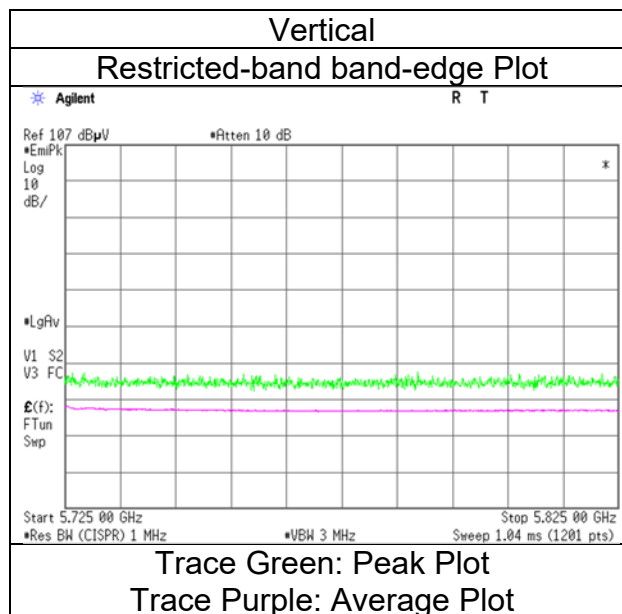
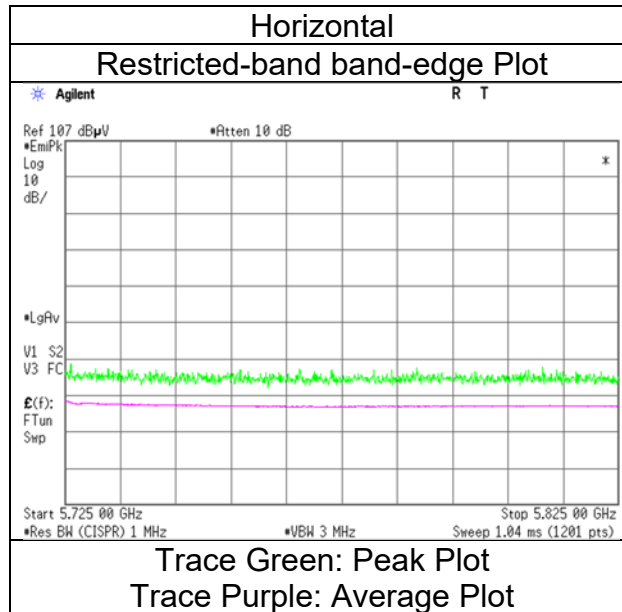
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 2
Date February 28, 2023
Temperature / Humidity 23 deg.C, 34 %RH
Engineer Takahiro Suzuki
Mode Tx 11ax-20 (OFDM), 5700 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 2, 2023
Temperature / Humidity 23 deg.C, 38 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 26-tone RU, 5700 MHz

RU Index 8

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	49.12	32.63	17.24	43.42	2.45	58.02	-37.21	-27.0	10.2	172	96	-
Vert.	5725.000	PK	48.30	32.63	17.24	43.42	2.45	57.20	-38.03	-27.0	11.0	111	210	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20)) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

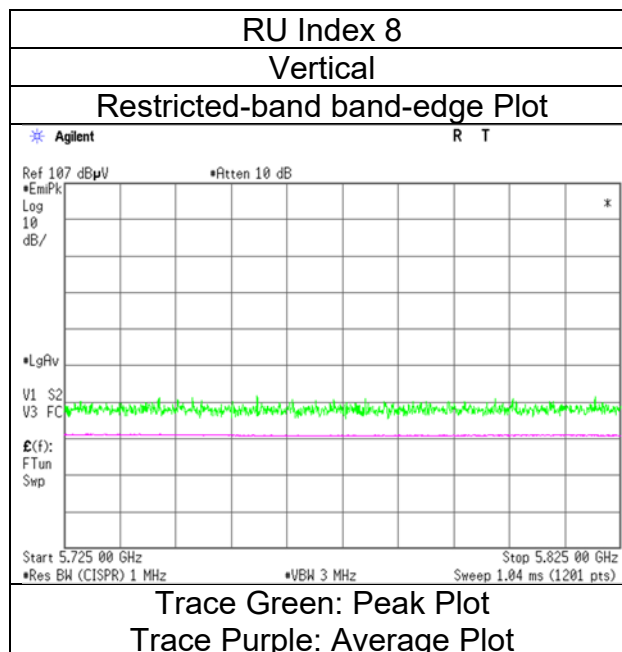
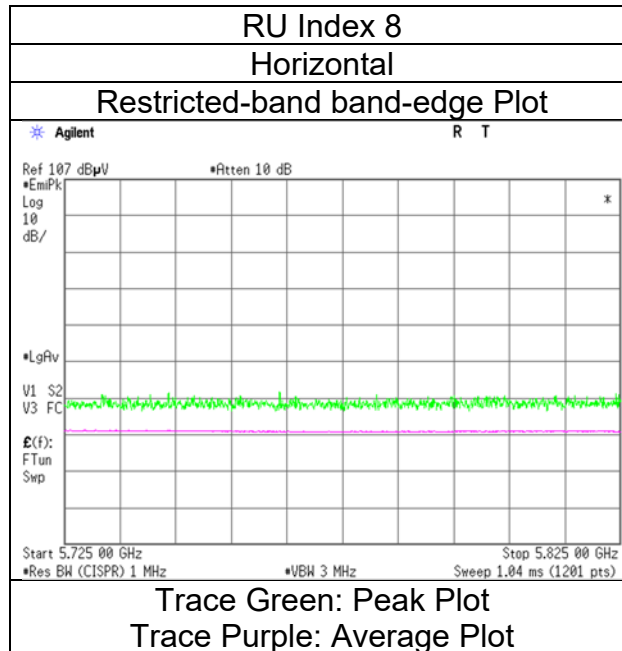
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 2, 2023
Temperature / Humidity	23 deg.C, 38 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 5700 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yusuke Tanikawara
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 52-tone RU, 5700 MHz

RU Index 40

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	48.75	32.63	17.24	43.42	2.45	57.65	-37.58	-27.0	10.5	102	107	-
Vert.	5725.000	PK	48.89	32.63	17.24	43.42	2.45	57.79	-37.44	-27.0	10.4	146	212	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20)) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

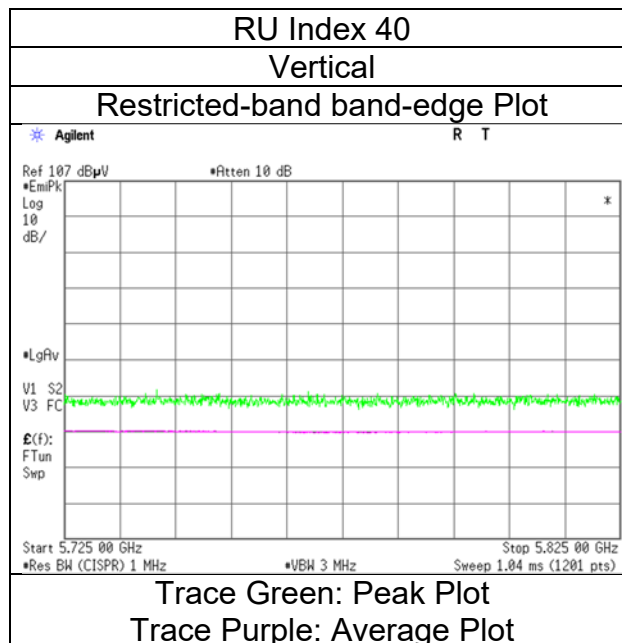
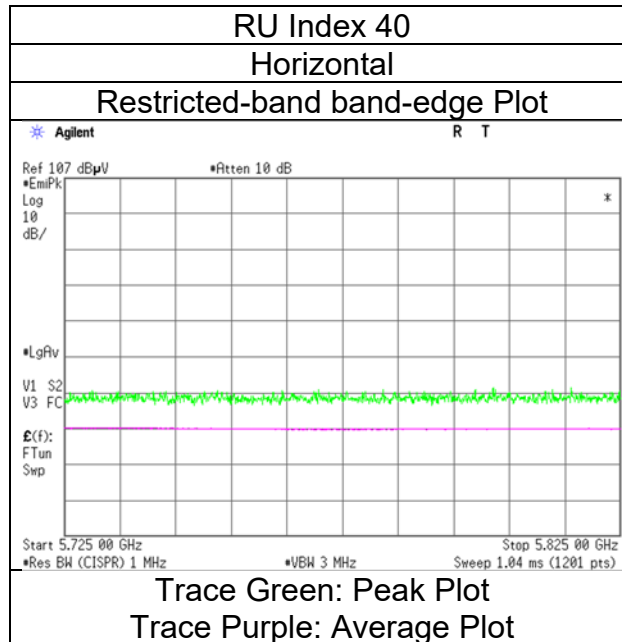
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yusuke Tanikawara
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 5700 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 106-tone RU, 5700 MHz

RU Index 54

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	48.45	32.63	17.24	43.42	2.45	57.35	-37.88	-27.0	10.8	153	117	-
Vert.	5725.000	PK	48.03	32.63	17.24	43.42	2.45	56.93	-38.30	-27.0	11.3	123	160	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

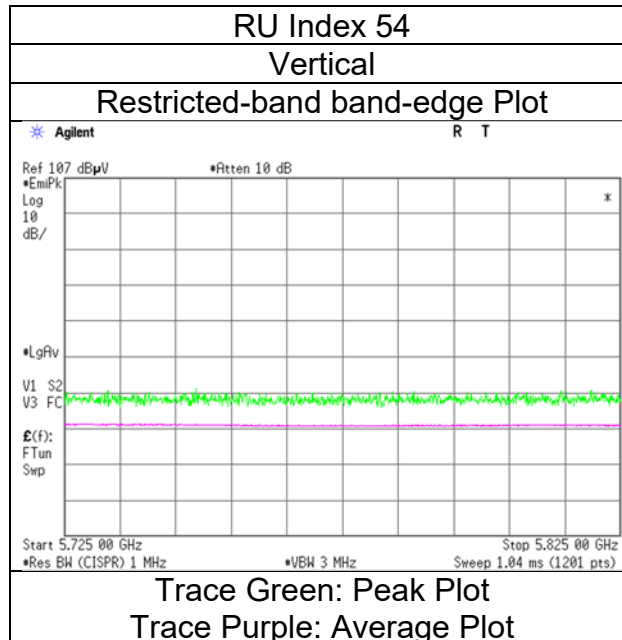
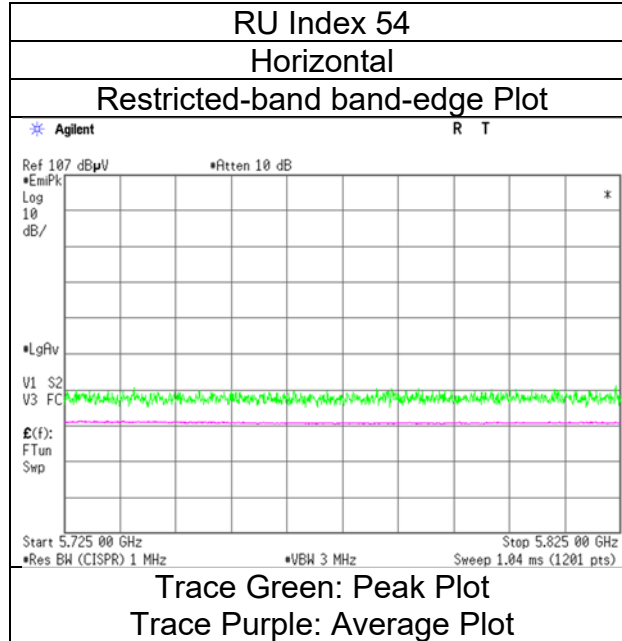
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m/ 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m/ 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 5700 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 242-tone RU, 5700 MHz

RU Index 61

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	50.57	32.63	17.24	43.42	2.45	59.47	-35.76	-27.0	8.7	182	112	-
Vert.	5725.000	PK	50.37	32.63	17.24	43.42	2.45	59.27	-35.96	-27.0	8.9	112	211	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

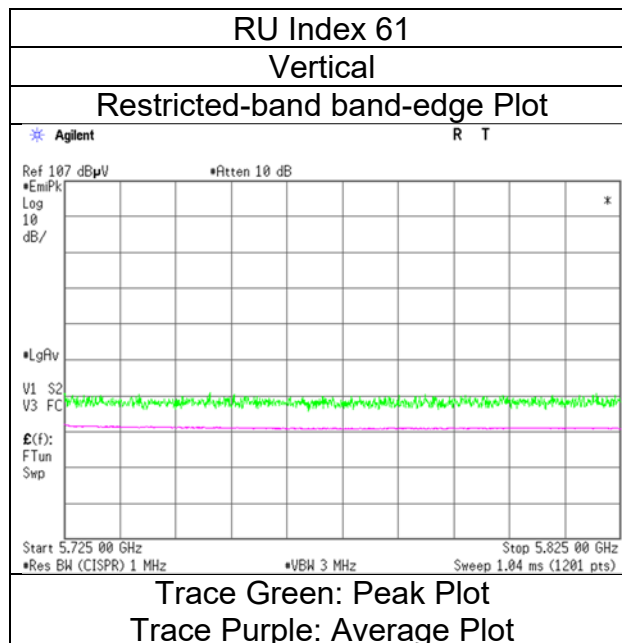
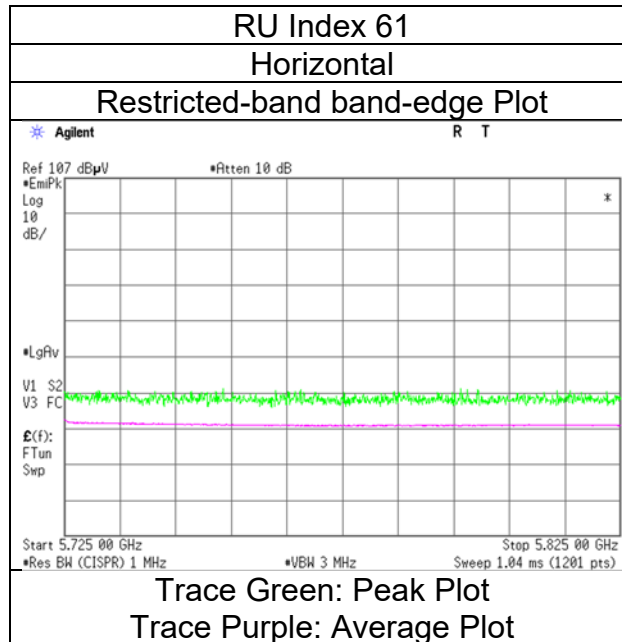
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 5700 MHz



* 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 Shonan EMC Lab.
Semi Anechoic
Chamber 3 3 3 3
Date February 28, 2023 March 4, 2023 March 6, 2023 March 6, 2023
Temperature /
Humidity 23 deg.C, 37 %RH 23 deg.C, 30 %RH 22 deg.C, 30 %RH 25 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa Kenichi Adachi Kouki Yamada Hiromasa Sato
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz) (26.5 GHz -40 GHz)
Mode Tx 11ax-20 (OFDM), 5745 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	11490.000	PK	48.88	38.19	10.11	42.59	-9.54	45.05	73.9	28.8	130	62	-
Hori.	22980.000	PK	51.82	40.16	15.17	47.17	-9.54	50.44	73.9	23.4	166	326	-
Hori.	11490.000	AV	37.94	38.19	10.11	42.59	-9.54	34.11	53.9	19.7	130	62	VBW: 150 Hz
Hori.	22980.000	AV	48.55	40.16	15.17	47.17	-9.54	47.17	53.9	6.7	166	326	VBW: 150 Hz
Vert.	11490.000	PK	48.64	38.19	10.11	42.59	-9.54	44.81	73.9	29.0	119	71	-
Vert.	22980.000	PK	51.22	40.16	15.17	47.17	-9.54	49.84	73.9	24.0	133	71	-
Vert.	11490.000	AV	37.63	38.19	10.11	42.59	-9.54	33.80	53.9	20.1	119	71	VBW: 150 Hz
Vert.	22980.000	AV	49.51	40.16	15.17	47.17	-9.54	48.13	53.9	5.7	133	71	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	49.26	32.42	17.20	43.44	2.45	57.89	-37.34	-27.0	10.3	150	112	-
Hori.	5700.000	PK	49.13	32.55	17.22	43.43	2.45	57.92	-37.31	10.0	47.3	150	112	-
Hori.	5715.000	PK	48.75	32.60	17.23	43.42	2.45	57.61	-37.62	14.2	51.8	150	112	-
Hori.	5720.000	PK	49.85	32.61	17.23	43.42	2.45	58.72	-36.51	15.6	52.1	150	112	-
Hori.	5725.000	PK	52.41	32.63	17.24	43.42	2.45	61.31	-33.92	27.0	60.9	150	112	-
Vert.	5650.000	PK	49.21	32.42	17.20	43.44	2.45	57.84	-37.39	-27.0	10.3	108	162	-
Vert.	5700.000	PK	50.13	32.55	17.22	43.43	2.45	58.92	-36.31	10.0	46.3	108	162	-
Vert.	5715.000	PK	49.56	32.60	17.23	43.42	2.45	58.42	-36.81	14.2	51.0	108	162	-
Vert.	5720.000	PK	50.22	32.61	17.23	43.42	2.45	59.09	-36.14	15.6	51.7	108	162	-
Vert.	5725.000	PK	52.73	32.63	17.24	43.42	2.45	61.63	-33.60	27.0	60.6	108	162	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 * \text{LOG}((10^{\wedge}(\text{Electric Field Strength [dBuV/m]} / 20)) * 10^{\wedge}(-6)) * \text{Distance} : 3 [\text{m}]^2 / 30 * 10^{\wedge}3)$

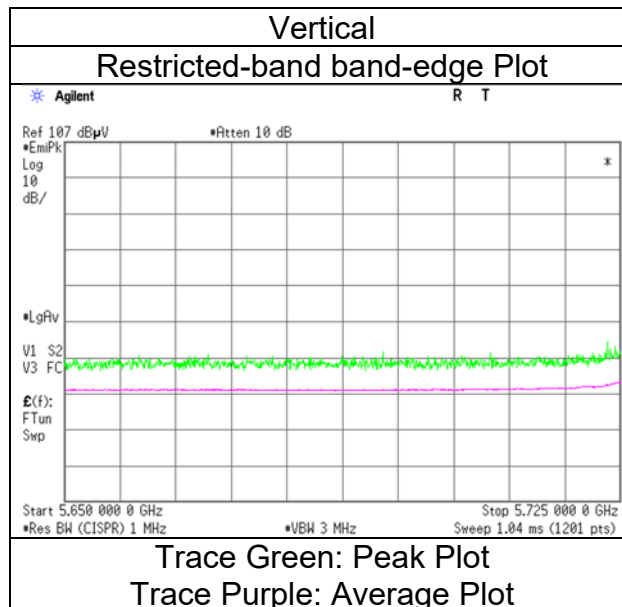
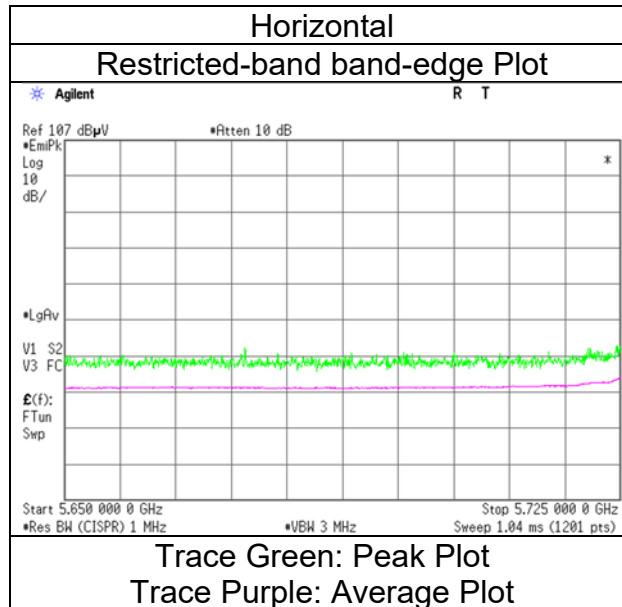
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	February 28, 2023
Temperature / Humidity	23 deg.C, 37 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDM), 5745 MHz



* 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 Shonan EMC Lab.
Semi Anechoic
Chamber 3
Date March 2, 2023
Temperature / Humidity 23 deg.C, 38 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 26-tone RU, 5745 MHz

RU Index 0

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	47.81	32.42	17.20	43.44	2.45	56.44	-38.79	-27.0	11.7	182	119	-
Hori.	5700.000	PK	47.86	32.55	17.22	43.43	2.45	56.65	-38.58	10.0	48.5	182	119	-
Hori.	5715.000	PK	48.14	32.60	17.23	43.42	2.45	57.00	-38.23	14.2	52.4	182	119	-
Hori.	5720.000	PK	48.57	32.61	17.23	43.42	2.45	57.44	-37.79	15.6	53.3	182	119	-
Hori.	5725.000	PK	48.86	32.63	17.24	43.42	2.45	57.76	-37.47	27.0	64.4	182	119	-
Vert.	5650.000	PK	48.00	32.42	17.20	43.44	2.45	56.63	-38.60	-27.0	11.6	115	210	-
Vert.	5700.000	PK	47.75	32.55	17.22	43.43	2.45	56.54	-38.69	10.0	48.6	115	210	-
Vert.	5715.000	PK	48.61	32.60	17.23	43.42	2.45	57.47	-37.76	14.2	51.9	115	210	-
Vert.	5720.000	PK	48.91	32.61	17.23	43.42	2.45	57.78	-37.45	15.6	53.0	115	210	-
Vert.	5725.000	PK	48.25	32.63	17.24	43.42	2.45	57.15	-38.08	27.0	65.0	115	210	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

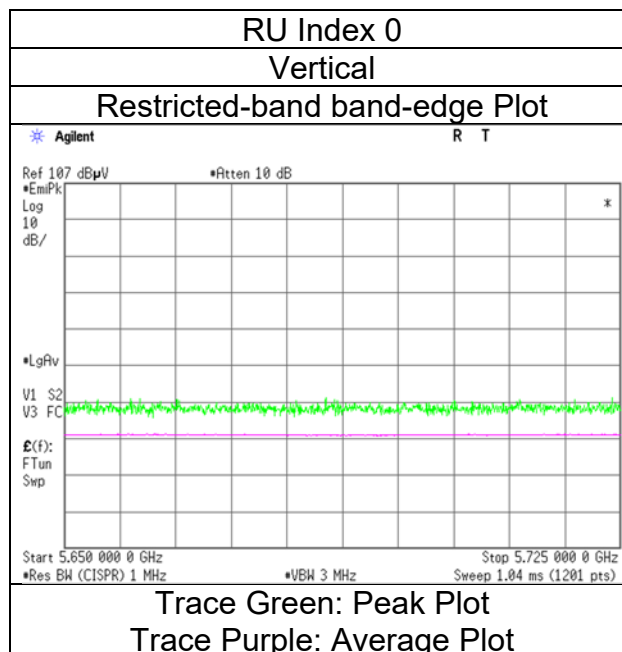
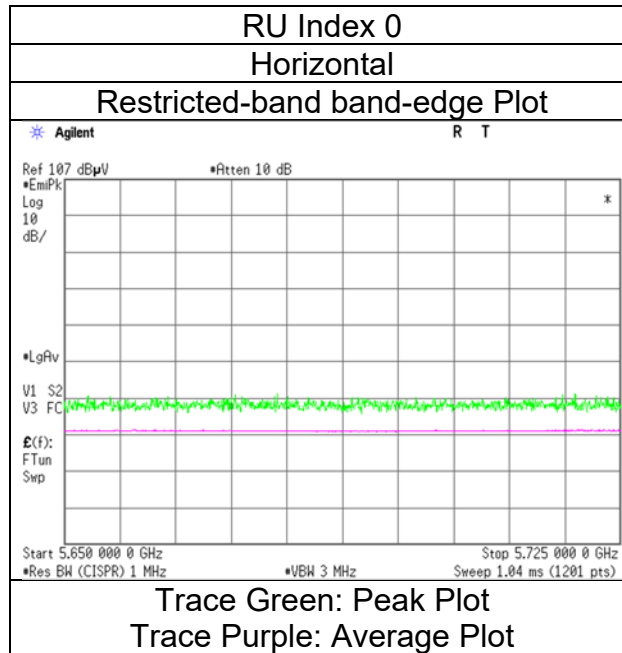
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 2, 2023
Temperature / Humidity	23 deg.C, 38 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 5745 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yusuke Tanikawara
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 52-tone RU, 5745 MHz

RU Index 37

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	48.23	32.42	17.20	43.44	2.45	56.86	-38.37	-27.0	11.3	152	118	-
Hori.	5700.000	PK	48.63	32.55	17.22	43.43	2.45	57.42	-37.81	10.0	47.8	152	118	-
Hori.	5720.000	PK	48.61	32.61	17.23	43.42	2.45	57.48	-37.75	15.6	53.3	152	118	-
Hori.	5725.000	PK	49.11	32.63	17.24	43.42	2.45	58.01	-37.22	27.0	64.2	152	118	-
Vert.	5650.000	PK	48.43	32.42	17.20	43.44	2.45	57.06	-38.17	-27.0	11.1	124	157	-
Vert.	5700.000	PK	48.20	32.55	17.22	43.43	2.45	56.99	-38.24	10.0	48.2	124	157	-
Vert.	5720.000	PK	48.45	32.61	17.23	43.42	2.45	57.32	-37.91	15.6	53.5	124	157	-
Vert.	5725.000	PK	48.74	32.63	17.24	43.42	2.45	57.64	-37.59	27.0	64.5	124	157	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20)) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

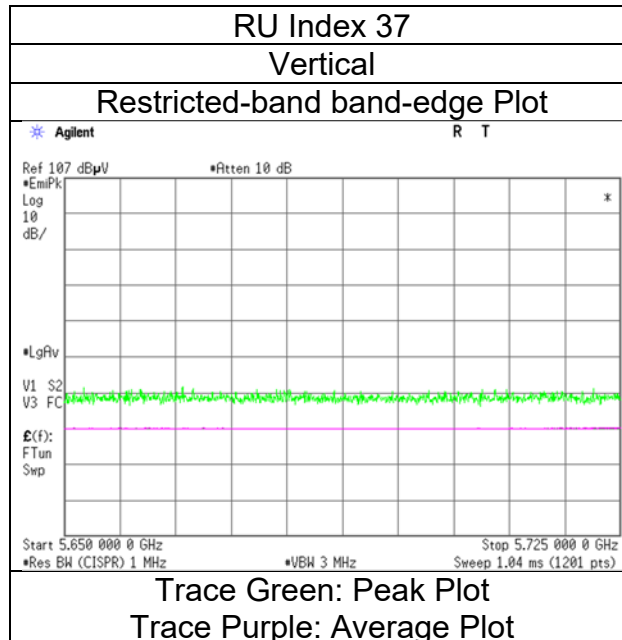
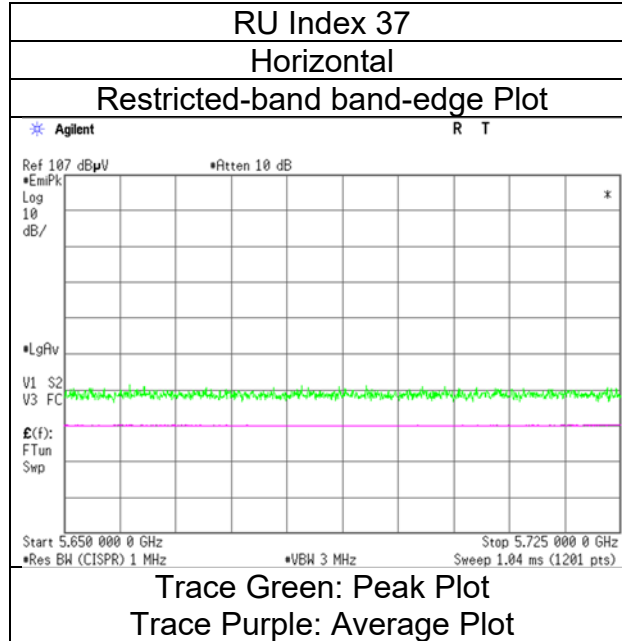
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m/ 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m/ 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yusuke Tanikawara
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 5745 MHz



* 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 Shonan EMC Lab.
Semi Anechoic
Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 106-tone RU, 5745 MHz

RU Index 53

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	48.05	32.42	17.20	43.44	2.45	56.68	-38.55	-27.0	11.5	155	119	-
Hori.	5700.000	PK	48.38	32.55	17.22	43.43	2.45	57.17	-38.06	10.0	48.0	155	119	-
Hori.	5715.000	PK	48.61	32.60	17.23	43.42	2.45	57.47	-37.76	14.2	51.9	155	119	-
Hori.	5720.000	PK	49.15	32.61	17.23	43.42	2.45	58.02	-37.21	15.6	52.8	155	119	-
Hori.	5725.000	PK	48.63	32.63	17.24	43.42	2.45	57.53	-37.70	27.0	64.7	155	119	-
Vert.	5650.000	PK	47.75	32.42	17.20	43.44	2.45	56.38	-38.85	-27.0	11.8	109	211	-
Vert.	5700.000	PK	47.80	32.55	17.22	43.43	2.45	56.59	-38.64	10.0	48.6	109	211	-
Vert.	5715.000	PK	47.76	32.60	17.23	43.42	2.45	56.62	-38.61	14.2	52.8	109	211	-
Vert.	5720.000	PK	48.72	32.61	17.23	43.42	2.45	57.59	-37.64	15.6	53.2	109	211	-
Vert.	5725.000	PK	48.77	32.63	17.24	43.42	2.45	57.67	-37.56	27.0	64.5	109	211	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

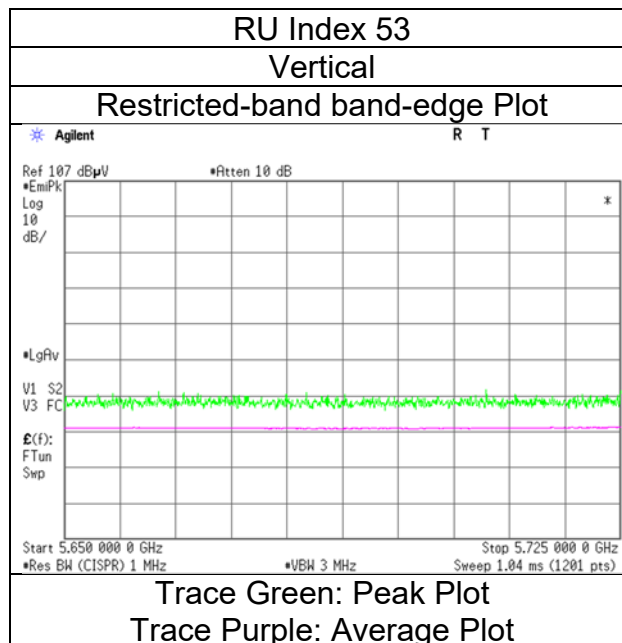
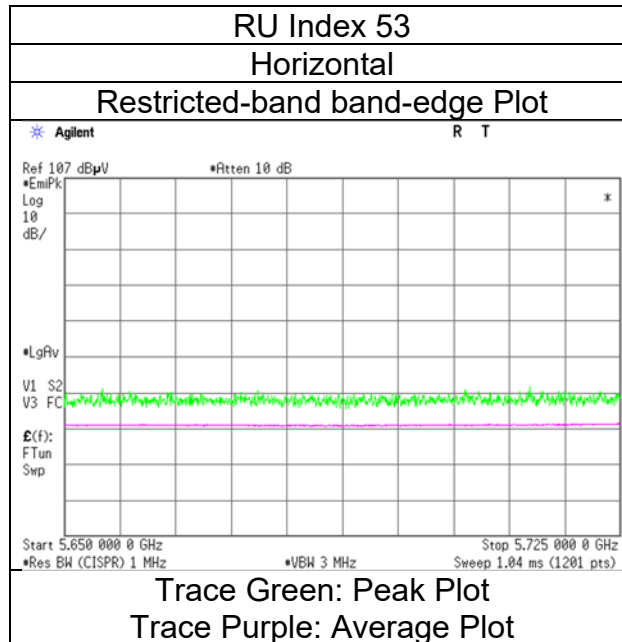
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 5745 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 4, 2023
Temperature / Humidity 23 deg.C, 30 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 242-tone RU, 5745 MHz

RU Index 61

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	48.38	32.42	17.20	43.44	2.45	57.01	-38.22	-27.0	11.2	118	108	-
Hori.	5700.000	PK	48.54	32.55	17.22	43.43	2.45	57.33	-37.90	10.0	47.9	118	108	-
Hori.	5720.000	PK	48.88	32.61	17.23	43.42	2.45	57.75	-37.48	15.6	53.0	118	108	-
Hori.	5721.938	PK	51.29	32.62	17.24	43.42	2.45	60.18	-35.05	20.1	55.1	118	108	-
Hori.	5725.000	PK	49.98	32.63	17.24	43.42	2.45	58.88	-36.35	27.0	63.3	118	108	-
Vert.	5650.000	PK	48.35	32.42	17.20	43.44	2.45	56.98	-38.25	-27.0	11.2	121	159	-
Vert.	5700.000	PK	48.42	32.55	17.22	43.43	2.45	57.21	-38.02	10.0	48.0	121	159	-
Vert.	5720.000	PK	48.66	32.61	17.23	43.42	2.45	57.53	-37.70	15.6	53.3	121	159	-
Vert.	5721.938	PK	50.98	32.62	17.24	43.42	2.45	59.87	-35.36	20.1	55.4	121	159	-
Vert.	5725.000	PK	49.88	32.63	17.24	43.42	2.45	58.78	-36.45	27.0	63.4	121	159	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

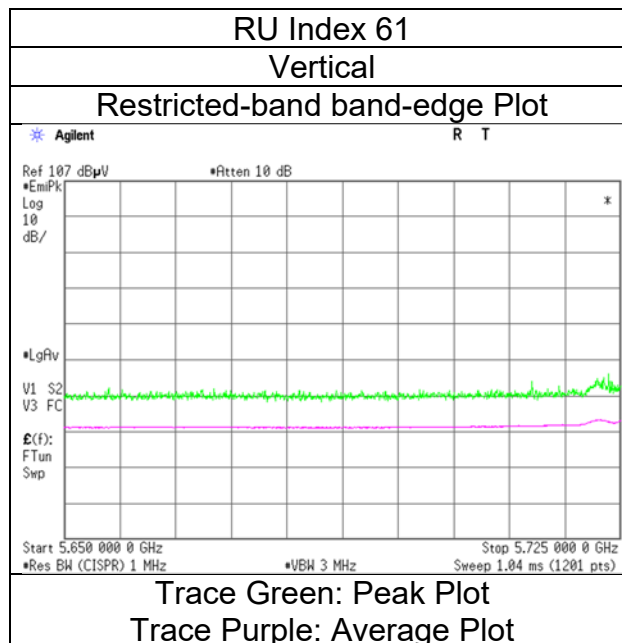
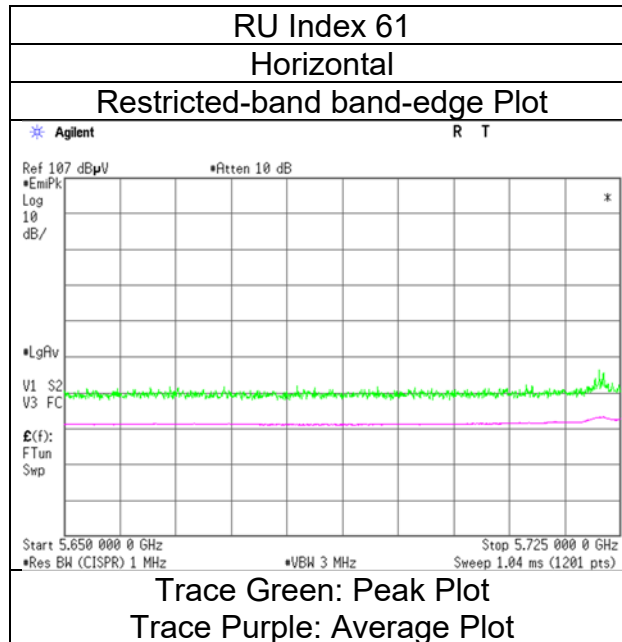
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 4, 2023
Temperature / Humidity	23 deg.C, 30 %RH
Engineer	Kenichi Adachi
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 5745 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3 3 3 3
Date February 28, 2023 March 4, 2023 March 6, 2023 March 6, 2023
Temperature / Humidity 23 deg.C, 37 %RH 23 deg.C, 30 %RH 22 deg.C, 30 %RH 25 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa Kenichi Adachi Kouki Yamada Hiromasa Sato
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz) (26.5 GHz -40 GHz)
Mode Tx 11ax-20 (OFDM), 5785 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	11570.000	PK	49.12	38.25	10.15	42.55	-9.54	45.43	73.9	28.4	130	60	-
Hori.	11570.000	AV	38.08	38.25	10.15	42.55	-9.54	34.39	53.9	19.5	130	60	VBW: 150 Hz
Vert.	11570.000	PK	48.98	38.25	10.15	42.55	-9.54	45.29	73.9	28.6	121	59	-
Vert.	11570.000	AV	37.94	38.25	10.15	42.55	-9.54	34.25	53.9	19.6	121	59	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor: 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	23140.000	PK	52.02	40.14	15.25	47.01	-9.54	50.86	-44.37	-27.0	17.3	177	350	-
Vert.	23140.000	PK	51.96	40.14	15.25	47.01	-9.54	50.80	-44.43	-27.0	17.4	136	71	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 * \text{LOG}((10^{\wedge}(\text{Electric Field Strength [dBuV/m]} / 20)) * 10^{\wedge}(-6) * \text{Distance} : 3 [\text{m}])^{\wedge}2 / 30 * 10^{\wedge}3)$

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

Distance factor: 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic
Chamber 3 3 3 3
Date February 28, 2023 March 4, 2023 March 6, 2023 March 6, 2023
Temperature /
Humidity 23 deg.C, 37 %RH 23 deg.C, 30 %RH 22 deg.C, 30 %RH 25 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa Kenichi Adachi Kouki Yamada Hiromasa Sato
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz) (26.5 GHz -40 GHz)
Mode Tx 11ax-20 (OFDM), 5825 MHz

(above 1 GHz Inside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	11650.000	PK	50.69	38.33	10.20	42.51	-9.54	47.17	73.9	26.7	132	61	-
Hori.	11650.000	AV	39.24	38.33	10.20	42.51	-9.54	35.72	53.9	18.1	132	61	VBW: 150 Hz
Vert.	11650.000	PK	50.41	38.33	10.20	42.51	-9.54	46.89	73.9	27.0	122	121	-
Vert.	11650.000	AV	39.17	38.33	10.20	42.51	-9.54	35.65	53.9	18.2	122	121	VBW: 150 Hz

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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

Distance factor: 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	51.88	32.99	17.32	43.39	2.45	61.25	-33.98	27.0	60.9	200	110	-
Hori.	5855.000	PK	47.85	33.00	17.32	43.39	2.45	57.23	-38.00	15.6	53.6	200	110	-
Hori.	5860.000	PK	48.30	33.00	17.33	43.39	2.45	57.69	-37.54	14.2	51.7	200	110	-
Hori.	5875.000	PK	47.93	33.03	17.35	43.39	2.45	57.37	-37.86	10.0	47.8	200	110	-
Hori.	5925.000	PK	48.21	33.10	17.37	43.38	2.45	57.75	-37.48	-27.0	10.4	200	110	-
Hori.	23300.000	PK	52.76	40.13	15.33	46.85	-9.54	51.83	-43.40	-27.0	16.4	179	351	-
Vert.	5850.000	PK	49.85	32.99	17.32	43.39	2.45	59.22	-36.01	27.0	63.0	108	158	-
Vert.	5855.000	PK	47.82	33.00	17.32	43.39	2.45	57.20	-38.03	15.6	53.6	108	158	-
Vert.	5860.000	PK	47.55	33.00	17.33	43.39	2.45	56.94	-38.29	14.2	52.4	108	158	-
Vert.	5875.000	PK	47.86	33.03	17.35	43.39	2.45	57.30	-37.93	10.0	47.9	108	158	-
Vert.	5925.000	PK	48.23	33.10	17.37	43.38	2.45	57.77	-37.46	-27.0	10.4	108	158	-
Vert.	23300.000	PK	52.90	40.13	15.33	46.85	-9.54	51.97	-43.26	-27.0	16.2	128	69	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 * \text{LOG}((10^{\wedge}(\text{Electric Field Strength [dBuV/m]} / 20)) * 10^{\wedge}(-6) * \text{Distance} : 3\text{ [m]})^{\wedge}2 / 30 * 10^{\wedge}3)$

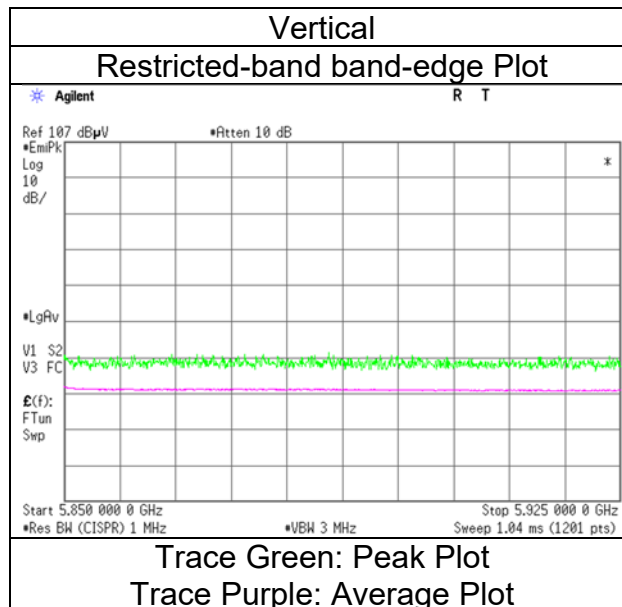
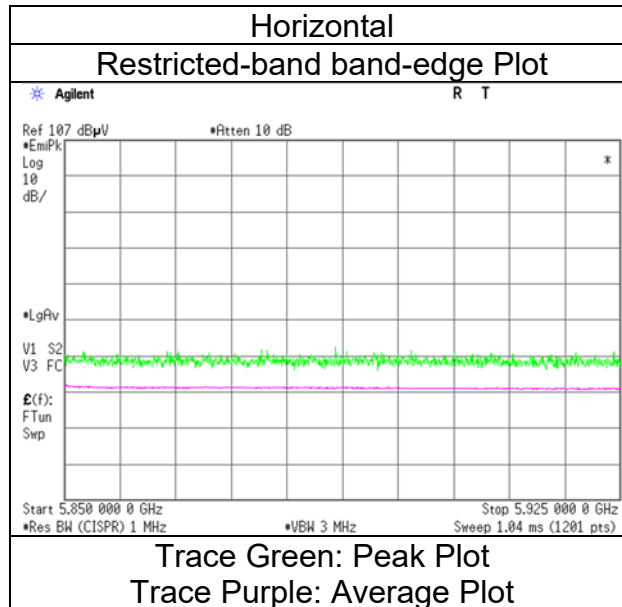
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor: 1 GHz - 10 GHz : $20\log(3.98\text{ m} / 3.0\text{ m}) = 2.45\text{ dB}$

10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 3
Date February 28, 2023
Temperature / Humidity 23 deg.C, 37 %RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ax-20 (OFDM), 5825 MHz



* 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 Shonan EMC Lab.
Semi Anechoic
Chamber 3
Date March 2, 2023
Temperature / Humidity 23 deg.C, 38 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 26-tone RU, 5825 MHz

RU Index 8

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	48.65	32.99	17.32	43.39	2.45	58.02	-37.21	27.0	64.2	132	113	-
Hori.	5855.000	PK	48.45	33.00	17.32	43.39	2.45	57.83	-37.40	15.6	53.0	132	113	-
Hori.	5860.000	PK	48.41	33.00	17.33	43.39	2.45	57.80	-37.43	14.2	51.6	132	113	-
Hori.	5875.000	PK	48.30	33.03	17.35	43.39	2.45	57.74	-37.49	10.0	47.4	132	113	-
Hori.	5925.000	PK	47.85	33.10	17.37	43.38	2.45	57.39	-37.84	-27.0	10.8	132	113	-
Vert.	5850.000	PK	48.12	32.99	17.32	43.39	2.45	57.49	-37.74	27.0	64.7	117	171	-
Vert.	5855.000	PK	48.13	33.00	17.32	43.39	2.45	57.51	-37.72	15.6	53.3	117	171	-
Vert.	5860.000	PK	48.63	33.00	17.33	43.39	2.45	58.02	-37.21	14.2	51.4	117	171	-
Vert.	5875.000	PK	48.66	33.03	17.35	43.39	2.45	58.10	-37.13	10.0	47.1	117	171	-
Vert.	5925.000	PK	48.45	33.10	17.37	43.38	2.45	57.99	-37.24	-27.0	10.2	117	171	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

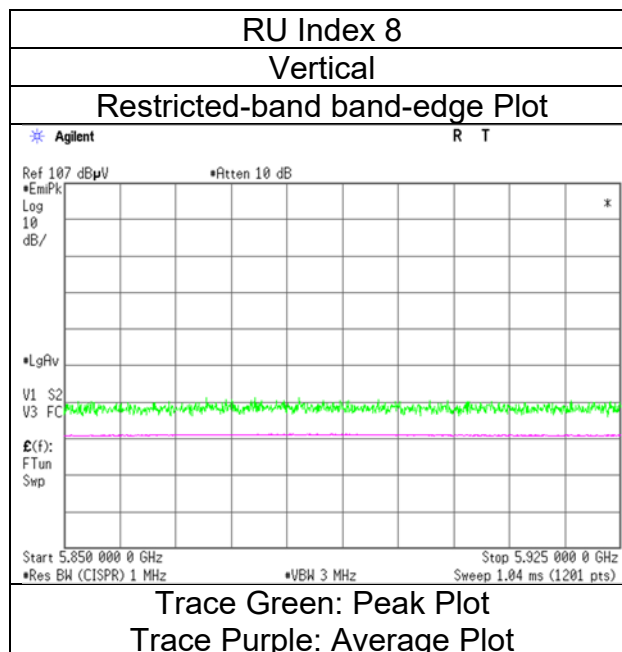
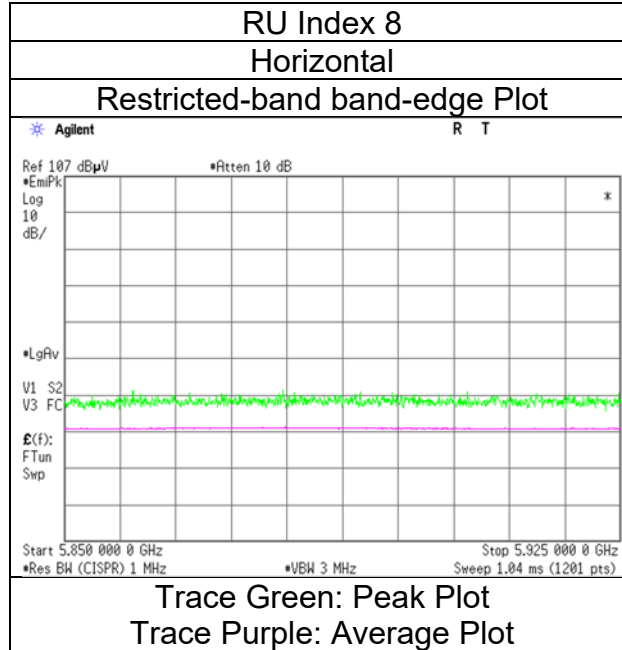
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 2, 2023
Temperature / Humidity	23 deg.C, 38 %RH
Engineer	Yohsuke Matsuzawa
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 5825 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yusuke Tanikawara
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 52-tone RU, 5825 MHz

RU Index 40

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	48.65	32.99	17.32	43.39	2.45	58.02	-37.21	27.0	64.2	151	121	-
Hori.	5855.000	PK	48.29	33.00	17.32	43.39	2.45	57.67	-37.56	15.6	53.1	151	121	-
Hori.	5875.000	PK	48.44	33.03	17.35	43.39	2.45	57.88	-37.35	10.0	47.3	151	121	-
Hori.	5925.000	PK	48.30	33.10	17.37	43.38	2.45	57.84	-37.39	-27.0	10.3	151	121	-
Vert.	5850.000	PK	48.43	32.99	17.32	43.39	2.45	57.80	-37.43	27.0	64.4	115	157	-
Vert.	5855.000	PK	48.40	33.00	17.32	43.39	2.45	57.78	-37.45	15.6	53.0	115	157	-
Vert.	5875.000	PK	48.63	33.03	17.35	43.39	2.45	58.07	-37.16	10.0	47.1	115	157	-
Vert.	5925.000	PK	48.42	33.10	17.37	43.38	2.45	57.96	-37.27	-27.0	10.2	115	157	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20)) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

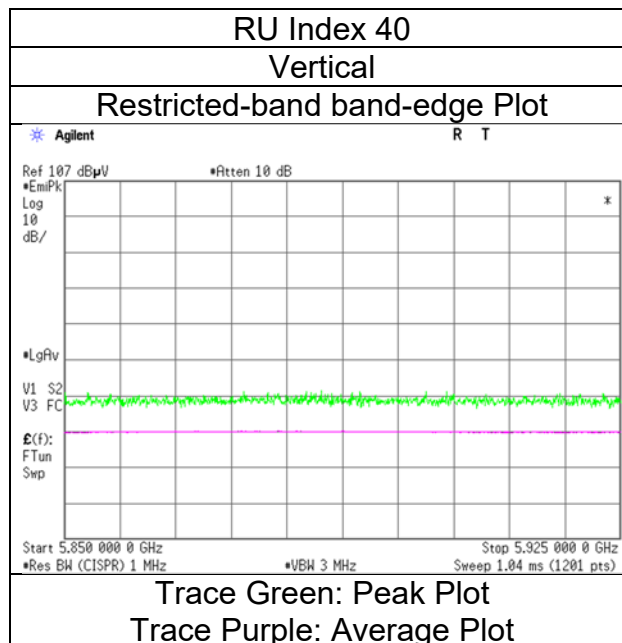
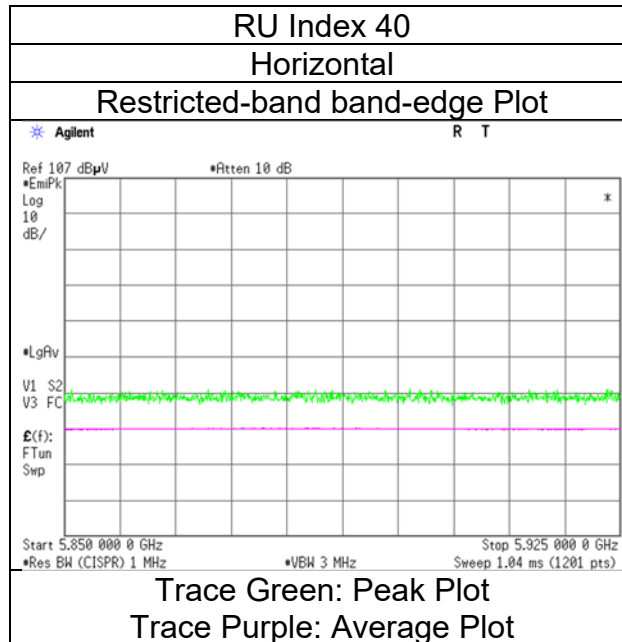
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 3, 2023
Temperature / Humidity	24 deg.C, 31 %RH
Engineer	Yusuke Tanikawara
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 5825 MHz



* 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 Shonan EMC Lab.
Semi Anechoic
Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 106-tone RU, 5825 MHz

RU Index 54

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	47.82	32.99	17.32	43.39	2.45	57.19	-38.04	27.0	65.0	112	117	-
Hori.	5855.000	PK	47.86	33.00	17.32	43.39	2.45	57.24	-37.99	15.6	53.5	112	117	-
Hori.	5860.000	PK	48.11	33.00	17.33	43.39	2.45	57.50	-37.73	14.2	51.9	112	117	-
Hori.	5875.000	PK	48.73	33.03	17.35	43.39	2.45	58.17	-37.06	10.0	47.0	112	117	-
Hori.	5925.000	PK	47.77	33.10	17.37	43.38	2.45	57.31	-37.92	-27.0	10.9	112	117	-
Vert.	5850.000	PK	48.48	32.99	17.32	43.39	2.45	57.85	-37.38	27.0	64.3	145	161	-
Vert.	5855.000	PK	48.13	33.00	17.32	43.39	2.45	57.51	-37.72	15.6	53.3	145	161	-
Vert.	5860.000	PK	48.00	33.00	17.33	43.39	2.45	57.39	-37.84	14.2	52.0	145	161	-
Vert.	5875.000	PK	47.68	33.03	17.35	43.39	2.45	57.12	-38.11	10.0	48.1	145	161	-
Vert.	5925.000	PK	47.52	33.10	17.37	43.38	2.45	57.06	-38.17	-27.0	11.1	145	161	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

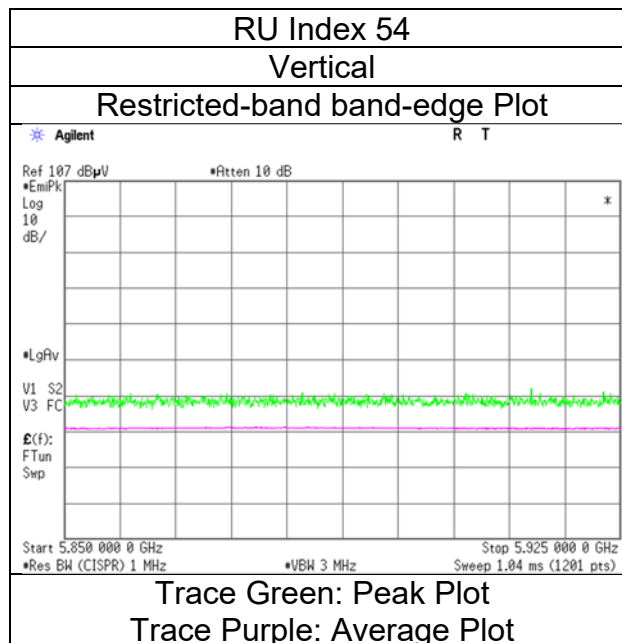
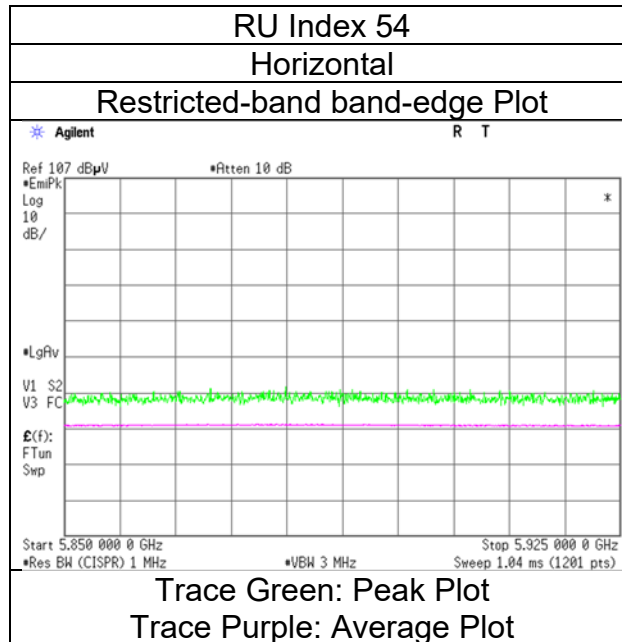
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 3, 2023
Temperature / Humidity 24 deg.C, 31 %RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ax-20 (OFDMA) 106-tone RU, 5825 MHz



* 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 Shonan EMC Lab.
Semi Anechoic Chamber 3
Date March 4, 2023
Temperature / Humidity 23 deg.C, 30 %RH
Engineer Kenichi Adachi
(1 GHz -10 GHz)
Mode Tx 11ax-20 (OFDMA) 242-tone RU, 5825 MHz

RU Index 61

(Calculation) (above 1 GHz Outside of the restricted band)

(* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	50.98	32.99	17.32	43.39	2.45	60.35	-34.88	27.0	61.8	120	103	-
Hori.	5855.000	PK	49.06	33.00	17.32	43.39	2.45	58.44	-36.79	15.6	52.3	120	103	-
Hori.	5875.000	PK	48.38	33.03	17.35	43.39	2.45	57.82	-37.41	10.0	47.4	120	103	-
Hori.	5925.000	PK	48.12	33.10	17.37	43.38	2.45	57.66	-37.57	-27.0	10.5	120	103	-
Vert.	5850.000	PK	50.95	32.99	17.32	43.39	2.45	60.32	-34.91	27.0	61.9	112	151	-
Vert.	5855.000	PK	48.94	33.00	17.32	43.39	2.45	58.32	-36.91	15.6	52.5	112	151	-
Vert.	5875.000	PK	48.33	33.03	17.35	43.39	2.45	57.77	-37.46	10.0	47.4	112	151	-
Vert.	5925.000	PK	48.04	33.10	17.37	43.38	2.45	57.58	-37.65	-27.0	10.6	112	151	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20)) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)

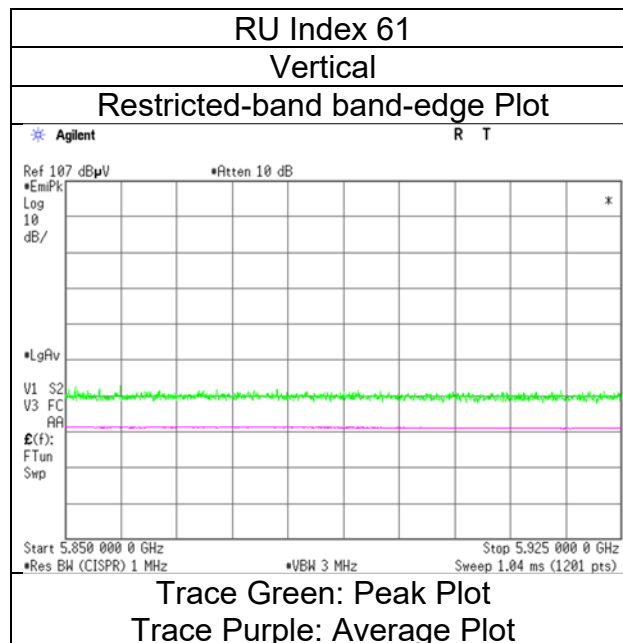
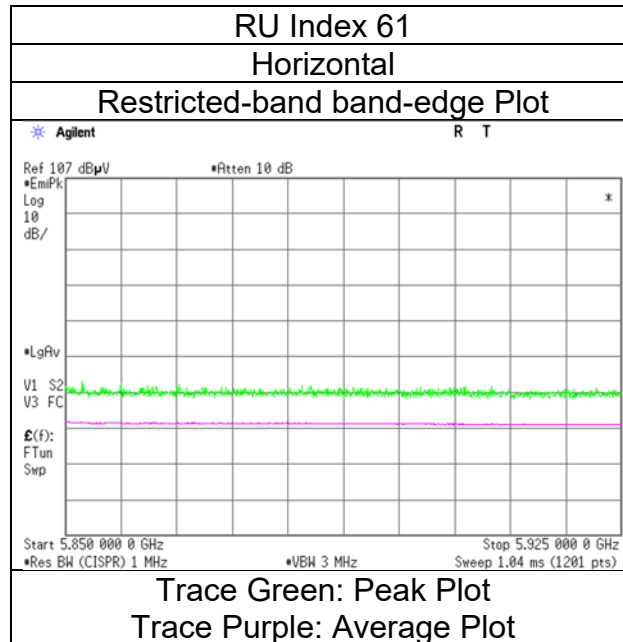
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m/ 3.0 m) = 2.45 dB

10 GHz - 40 GHz : 20log (1.0 m/ 3.0 m) = -9.54 dB

Radiated Spurious Emission

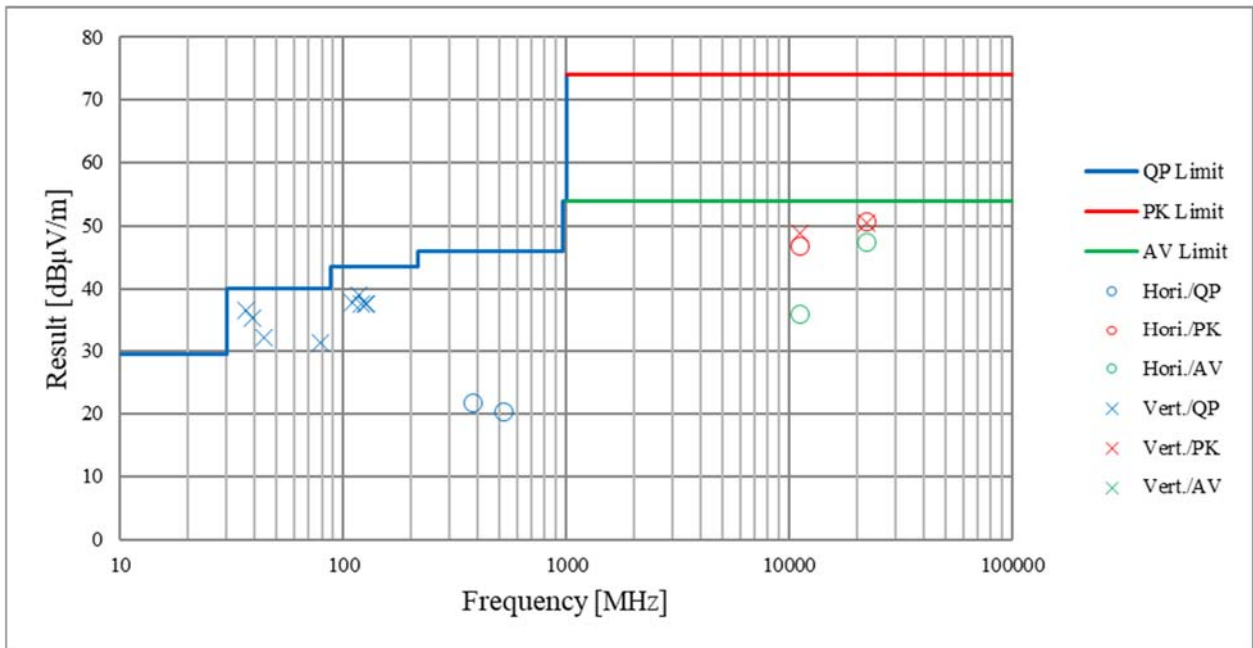
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 4, 2023
Temperature / Humidity	23 deg.C, 30 %RH
Engineer	Kenichi Adachi
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 5825 MHz



* 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 (Plot data, Worst case mode for Maximum Conducted Output Power)

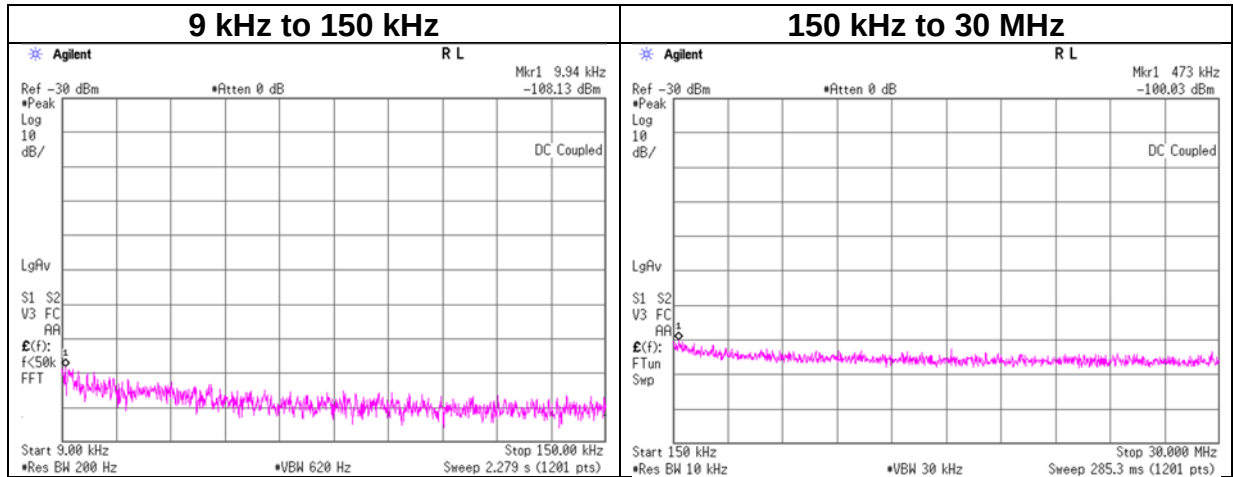
Test place	Shonan EMC Lab.			
Semi Anechoic Chamber	3	2	3	3
Date	March 16, 2023	February 28, 2023	March 4, 2023	March 6, 2023
Temperature / Humidity	22 deg.C, 35 %RH	23 deg.C, 34 %RH	23 deg.C, 30 %RH	22 deg.C, 30 %RH
Engineer	Takahiro Suzuki	Takahiro Suzuki	Kenichi Adachi	Kouki Yamada
	(30 MHz -1 GHz)	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20 (OFDM), 5580 MHz			



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

Conducted Spurious Emission

Test place Shonan EMC Lab. No.5 Shielded Room
Date March 24, 2023
Temperature / Humidity 22 deg. C / 42% RH
Engineer Akihiro Oda
Mode Tx 11ax-20 (OFDM), 5580 MHz



FREQ [kHz]	Reading [dBm]	Cable Loss [dB]	Anttenuator Loss [dB]	Antenna Gain	N (Number of output)	EIRP [dBm]	Distance [m]	Ground bounce [dB]	E (field Strength) [dBuV/m]	Limit [dBuV/m]	Margin [dB]
9.94	-108.13	1.01	9.97	4.30	2	-89.84	300.00	6.00	-28.58	47.60	76.18
473.00	-100.03	1.01	9.97	4.30	2	-81.74	300.00	6.00	-20.48	14.10	34.58

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

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

N: Number of output port

APPENDIX 2: Test Instruments

Test Equipment (1/3)

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	KTS-08	145095	Digital Tester	SANWA	PC500	7019224	2022/04/07	12
AT	SAT10-21	204925	Attenuator	Weinschel Corp.	54A-10	109970	2023/02/10	12
AT	SAT10-22	204926	Attenuator	Weinschel Corp.	54A-10	109971	2023/02/10	12
AT	SCC-G13	145166	Coaxial Cable	Suhner	SUCOFLEX 102	31599/2	2022/12/01	12
AT	SCC-G14	145175	Coaxial Cable	Suhner	SUCOFLEX 102	31600/2	2022/12/01	12
AT	SOS-27	191845	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12
AT	SOS-28	191846	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12
AT	SPM-08	146268	Power Meter	Raditeq (Formerly DARE!! Instruments)	RPR3006W	15100041SNO73	2022/05/24	12
AT	SPM-13	169910	Power Meter	Keysight Technologies Inc	8990B	MY51000448	2022/11/08	12
AT	SPSS-06	169911	Power sensor	Keysight Technologies Inc	N1923A	MY57270004	2022/11/08	12
AT	SPSS-07	169912	Power sensor	Keysight Technologies Inc	N1923A	MY57290005	2022/11/08	12
AT	SRENT-09	150461	Spectrum Analyzer	Keysight Technologies	E4440A	MY46186392	2022/03/14	12
AT	SRENT-15	160899	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46185516	2023/01/26	12
AT	STM-G11	204923	Terminator	Weinschel - API Technologies Corp	M1459A	110101	2023/02/10	12
AT	STS-05	146212	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997828	2022/09/20	12
CE	SAT3-10	144960	Attenuator	JFW	50HF-003N	-	2022/08/23	12
CE	SCC-C9/C10/SRSE-03	145036	Coaxial Cable&RF Selector	Suhner/Suhner/TOYO	RG223U/141PE/NS4906	-/0901-271(RF Selector)	2023/04/18	12
CE	SLS-04	145541	LISN	Rohde & Schwarz	ENV216	100514	2023/02/21	12
CE	SLS-05	145542	LISN	Rohde & Schwarz	ENV216	100516	2023/02/21	12
CE	SOS-06	146294	Humidity Indicator	A&D Company	AD-5681	4062118	-	-
CE	STM-05	145762	Terminator	TME	CT-01 BP	-	2022/12/16	12
CE	STM-16	146195	Terminator	TME	CT-01 BP	-	2023/02/08	12
CE,RE	COTS-SEMI-5	170932	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3(RE,CE,ME,PE)	-	-	-
CE,RE	KJM-02	146432	Measure	TAJIMA	GL19-55	-	-	-
CE,RE	STR-09	213530	Test Receiver	Rohde & Schwarz	ESW44	103068	2023/01/12	12
CE,RE	STS-03	146210	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997823	2022/09/20	12
RE	KFL-15	144938	Highpass Filter	MICRO-TRONICS	HPM50112	7	2022/10/20	12
RE	KSA-08	145089	Spectrum Analyzer	Keysight Technologies Inc	E4446A	MY46180525	2022/11/01	12
RE	SAEC-01(SVSWR)	145561	Semi-Anechoic Chamber	TDK	SAEC-01(SVSWR)	1	2022/05/13	12
RE	SAEC-02(SVSWR)	145598	Semi-Anechoic Chamber	TDK	SAEC-02(SVSWR)	2	2022/05/16	12

Test Equipment (2/3)

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	SAEC-03(NSA)	145565	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	2023/04/05	12
RE	SAEC-03(SVSWR)	145566	Semi-Anechoic Chamber	TDK	SAEC-03(SVSWR)	3	2022/05/18	12
RE	SAF-03	145126	Pre Amplifier	SONOMA	310N	290213	2023/02/09	12
RE	SAF-04	145127	Pre Amplifier	Toyo Corporation	TPA0118-36	2072554	2022/05/20	12
RE	SAF-05	145128	Pre Amplifier	Toyo Corporation	TPA0118-36	1440490	2022/05/12	12
RE	SAF-06	145005	Pre Amplifier	Toyo Corporation	TPA0118-36	1440491	2023/02/02	12
RE	SAF-08	145007	Pre Amplifier	Toyo Corporation	HAP18-26W	19	2023/03/03	12
RE	SAF-10	145129	Pre Amplifier	Toyo Corporation	HAP26-40W	10	2023/03/03	12
RE	SAJ-02	146104	Antenna Tilt Jig	Intelligent System Engineering Co., Ltd	Antenna Tilt Jig	T-S002	-	-
RE	SAJ-03	146105	Antenna Tilt Jig	Intelligent System Engineering Co., Ltd	Antenna Tilt Jig	T-S003	-	-
RE	SAT10-06	145137	Attenuator	Keysight Technologies Inc	8493C-010	74865	2022/10/20	12
RE	SAT6-13	167094	Attenuator	JFW	50HF-006N	-	2023/02/09	12
RE	SBA-03	145023	Biconical Antenna	Schwarzbeck Mess-Elektronik OHG	BBA9106	91032666	2022/05/14	12
RE	SCC-C1/C2/C3/C4/C5/C10/SRSE-03	145171	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/ NS4906	-/0901-271(RF Selector)	2023/04/18	12
RE	SCC-G05	145039	Coaxial Cable	Junkosha	J12J102207-00	APR-30-15-037	2023/01/12	12
RE	SCC-G15	145176	Coaxial Cable	Suhner	SUCOFLEX 102	32703/2	2023/03/03	12
RE	SCC-G40	166491	Coaxial Cable	Junkosha	MWX221-01000NFSNMS/B	1612S005	2023/01/12	12
RE	SCC-G41	151617	Coaxial Cable	Junkosha	MWX221-01000NFSNMS/B	1612S006	2023/01/12	12
RE	SCC-G43	156380	Coaxial Cable	Huber+Suhner	SUCOFLEX_104_E	SN MY 13406/4E	2022/05/20	12
RE	SCC-G44	168300	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	800375/4A	2022/11/10	12
RE	SCC-G57	179540	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	802815/2	2023/03/03	12
RE	SCC-G62	196985	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	803650/2	2023/03/02	12
RE	SCC-G70	200010	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	575618/4	2022/07/22	12
RE	SFL-03	145377	Highpass Filter	MICRO-TRONICS	HPM50112	28	2022/10/20	12
RE	SHA-01	145383	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-725	2023/03/01	12
RE	SHA-02	145384	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-726	2023/03/09	12
RE	SHA-03	145501	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-739	2023/03/27	12
RE	SHA-04	145512	Horn Antenna	ETS-Lindgren	3160-09	00094868	2022/06/06	12
RE	SHA-06	145514	Horn Antenna	ETS-Lindgren	3160-10	00092383	2022/06/06	12
RE	SHA-10	194685	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	711	2023/03/27	12

Test Equipment (3/3)

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	SJM-20	207277	Measuring	ASKUL	-	-	-	-
RE	SJM-22	207279	Tape Measure	ASKUL	-	-	-	-
RE	SLA-07	145529	Logperiodic Antenna	Schwarzbeck Mess-Elektronik OHG	VUSLP9111B	196	2022/05/14	12
RE	SOS-20	191837	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/06	12
RE	SOS-21	191838	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12
RE	SOS-23	191840	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12
RE	STS-01	145792	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997812	2022/09/20	12
RE	STS-02	145793	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80097819	2022/04/07	12

*Hyphens for Last Calibration 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.

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

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

Test item:

CE: Conducted Emission

RE: Radiated Emission

AT: Antenna Terminal Conducted test