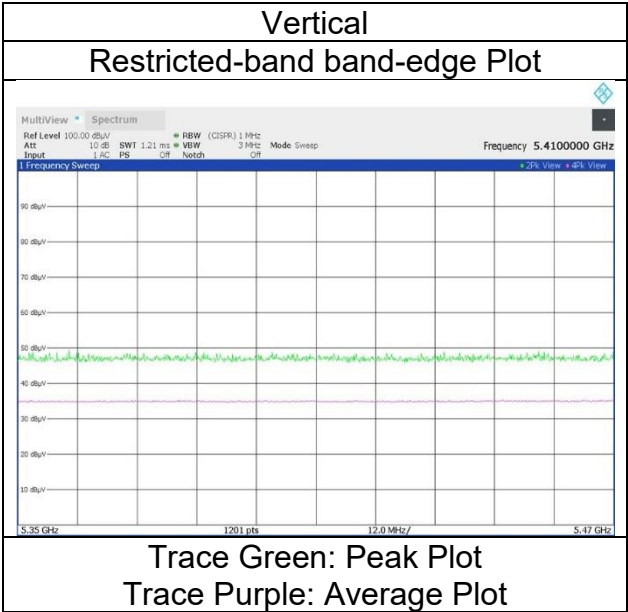
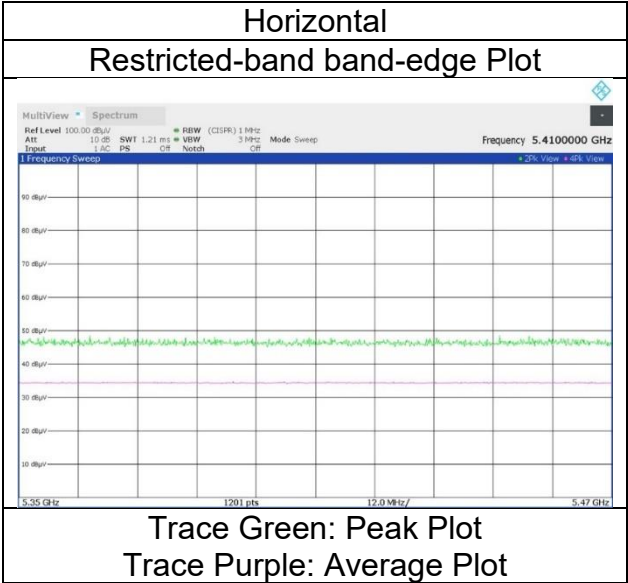


Radiated Spurious Emission

Test place	Shonan EMC Lab.	
Semi Anechoic Chamber	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 242-tone 5530 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 61



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 242-tone 5610 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 64
(Calculation) (above 1 GHz Outside of the restricted band)

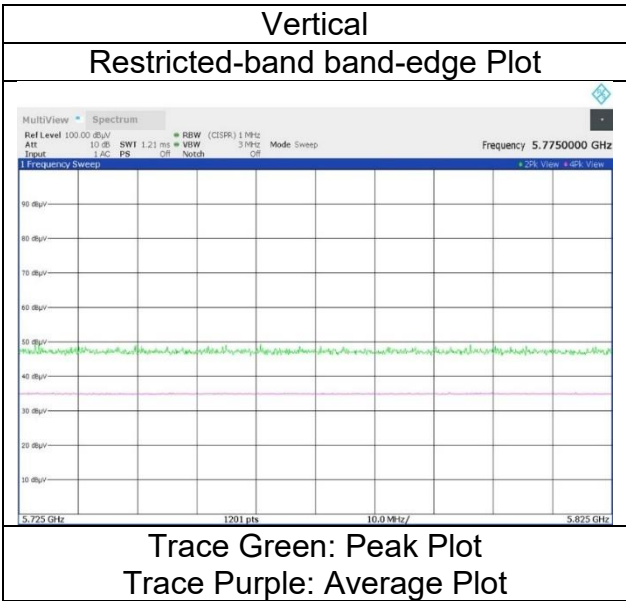
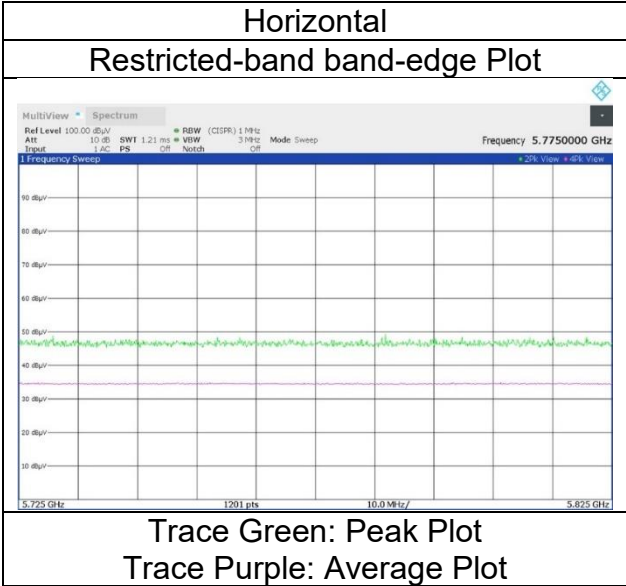
(* PK: Peak, AV: Average, QP: Quasi-Peak)														
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant. Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	50.24	32.41	-25.06	-	2.10	59.69	-35.54	-27.0	8.5	152	25	-
Vert.	5725.000	PK	49.62	32.01	-25.06	-	2.10	58.67	-36.56	-27.0	9.5	248	345	-

Result [dBuV/m] = Reading + Ant. Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 242-tone 5610 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 64



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 242-tone 5775 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 61
(Calculation) (above 1 GHz Outside of the restricted band)

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

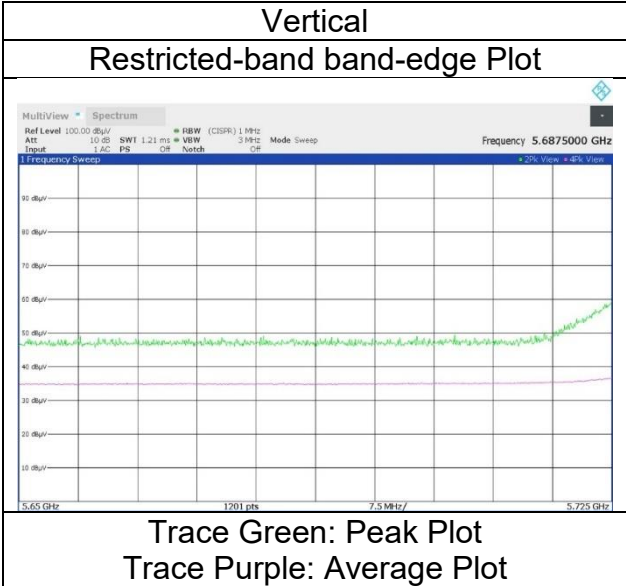
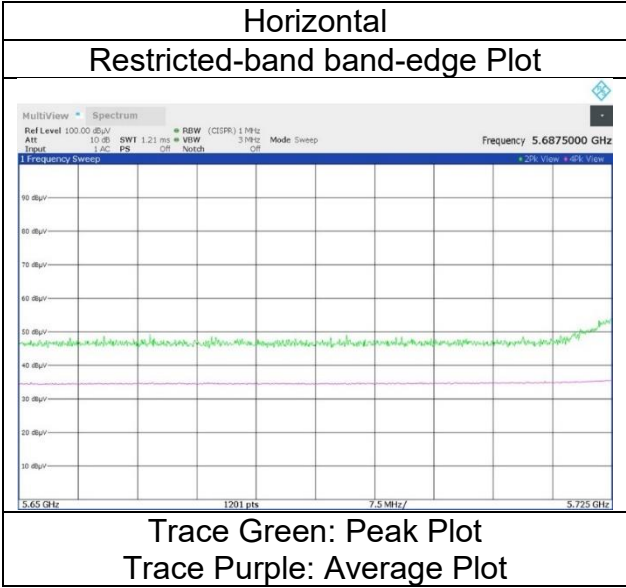
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	49.84	32.19	-25.07	-	2.10	59.06	-36.17	-27.0	9.1	135	27	-
Hori.	5700.000	PK	50.43	32.33	-25.06	-	2.10	59.80	-35.43	10.0	45.4	135	27	-
Hori.	5720.000	PK	53.00	32.40	-25.05	-	2.10	62.45	-32.78	15.6	48.3	135	27	-
Hori.	5725.000	PK	58.55	32.41	-25.06	-	2.10	68.00	-27.23	27.0	54.2	135	27	-
Vert.	5650.000	PK	49.53	31.84	-25.07	-	2.10	58.40	-36.83	-27.0	9.8	212	327	-
Vert.	5700.000	PK	49.09	31.95	-25.06	-	2.10	58.08	-37.15	10.0	47.1	212	327	-
Vert.	5720.000	PK	54.48	31.99	-25.05	-	2.10	63.52	-31.71	15.6	47.3	212	327	-
Vert.	5725.000	PK	60.19	32.01	-25.06	-	2.10	69.24	-25.99	27.0	52.9	212	327	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 242-tone 5775 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 61



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 242-tone 5775 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 64
(Calculation) (above 1 GHz Outside of the restricted band)

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

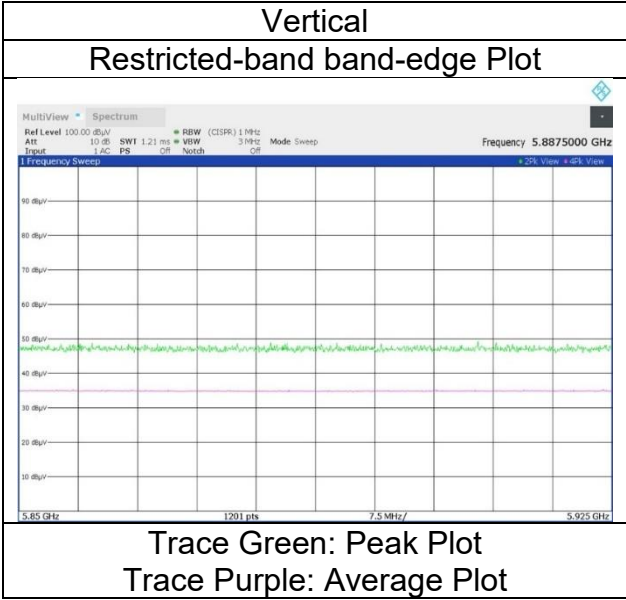
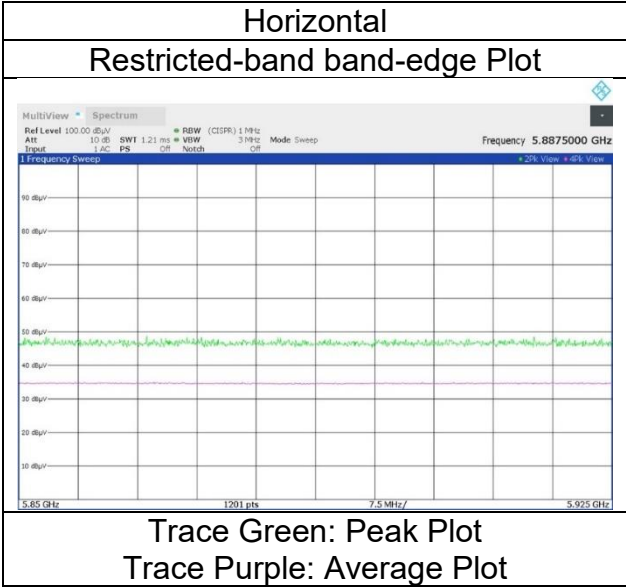
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	50.19	32.76	-25.01	-	2.10	60.04	-35.19	27.0	62.1	119	29	-
Hori.	5855.000	PK	50.40	32.77	-25.00	-	2.10	60.27	-34.96	15.6	50.5	119	29	-
Hori.	5875.000	PK	50.44	32.81	-25.00	-	2.10	60.35	-34.88	10.0	44.8	119	29	-
Hori.	5925.000	PK	50.18	32.88	-24.99	-	2.10	60.17	-35.06	-27.0	8.0	119	29	-
Vert.	5850.000	PK	49.95	32.33	-25.01	-	2.10	59.37	-35.86	27.0	62.8	228	338	-
Vert.	5855.000	PK	49.19	32.34	-25.00	-	2.10	58.63	-36.60	15.6	52.2	228	338	-
Vert.	5875.000	PK	49.14	32.38	-25.00	-	2.10	58.62	-36.61	10.0	46.6	228	338	-
Vert.	5925.000	PK	49.83	32.46	-24.99	-	2.10	59.40	-35.83	-27.0	8.8	228	338	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 242-tone 5775 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 64



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 484-tone 5210 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 65
(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	50.53	32.09	-25.53	-	2.10	59.19	73.9	14.7	165	36	-
Hori.	5150.000	AV	35.64	32.09	-25.53	-	2.10	44.30	53.9	9.6	165	36	VBW: 1 kHz
Vert.	5150.000	PK	49.75	31.86	-25.53	-	2.10	58.18	73.9	15.7	149	346	-
Vert.	5150.000	AV	35.47	31.86	-25.53	-	2.10	43.90	53.9	10.0	149	346	VBW: 1 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).

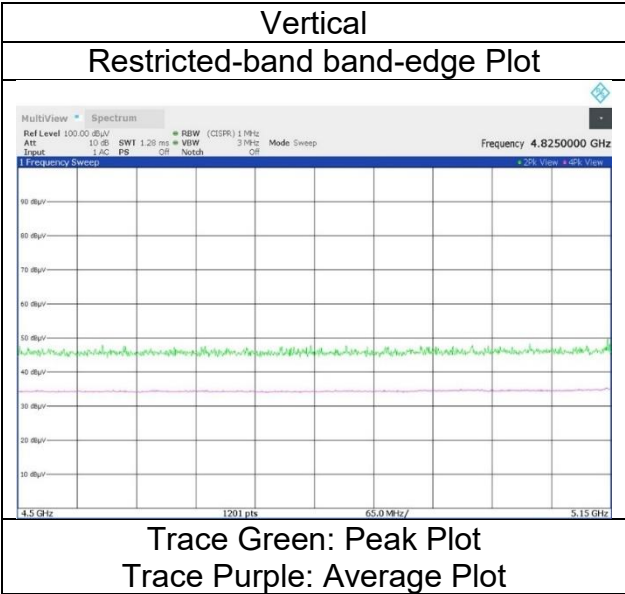
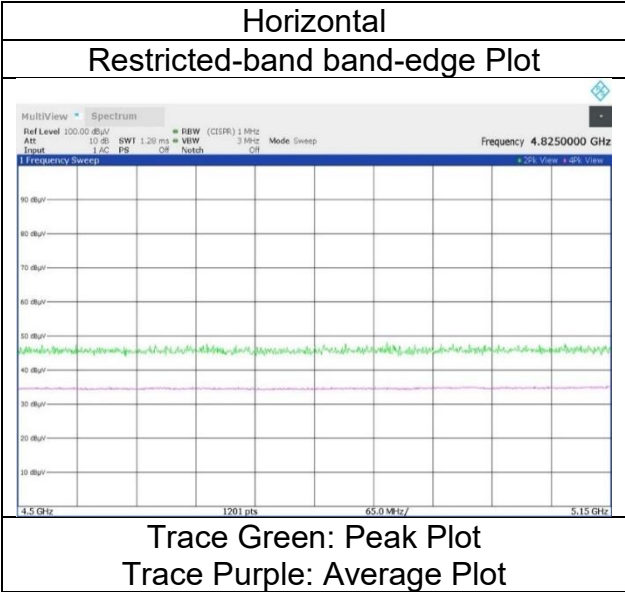
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 484-tone 5210 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 65



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

Radiated Spurious Emission

Test place
Semi Anechoic Chamber
Date
Temperature / Humidity
Engineer

Mode
Antenna type

Shonan EMC Lab.
WAC1
April 28, 2024
20 deg. C / 65 % RH
Yusuke Tanikawara
(1 GHz to 6.4 GHz)
Tx 11ax-80(OFDMA) 484-tone 5290 MHz
5G_CH 0: monopole 5G_CH 1: slot

WAC1
May 4, 2024
22 deg. C / 52 % RH
Takahiro Suzuki
(1 GHz to 6.4 GHz)

Index 66
(above 1 GHz Inside of the restricted band)

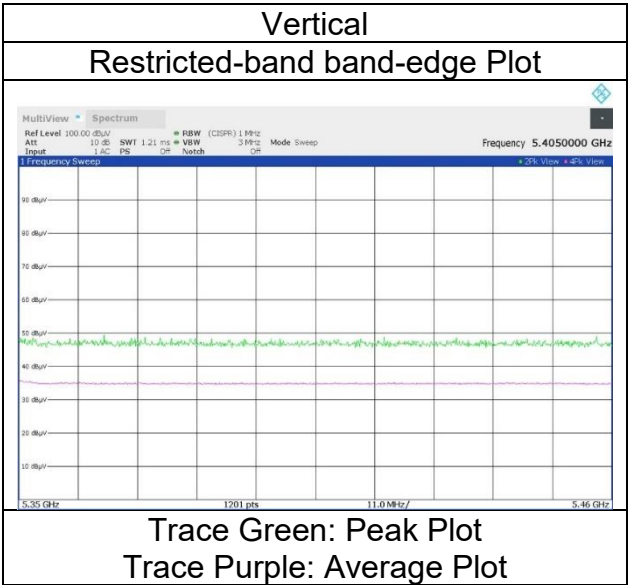
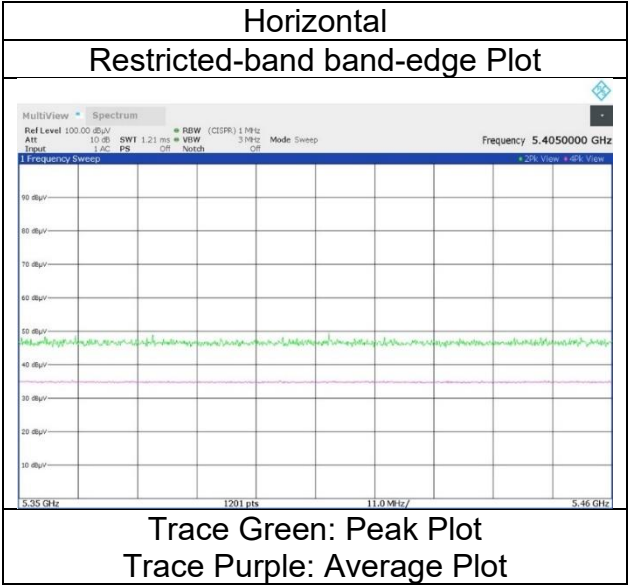
(* PK: Peak, AV: Average, QP: Quasi-Peak)													
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	50.92	31.84	-25.29	-	2.10	59.57	73.9	14.3	172	36	-
Hori.	5350.000	AV	35.46	31.84	-25.29	-	2.10	44.11	53.9	9.7	172	36	VBW: 1 kHz
Vert.	5350.000	PK	50.03	31.58	-25.29	-	2.10	58.42	73.9	15.4	181	341	-
Vert.	5350.000	AV	35.98	31.58	-25.29	-	2.10	44.37	53.9	9.5	181	341	VBW: 1 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 : 20log (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 484-tone 5290 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 66



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 484-tone 5530 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 65
(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	50.31	32.06	-25.16	-	2.10	59.31	73.9	14.5	170	34	-
Hori.	5460.000	AV	35.19	32.06	-25.16	-	2.10	44.19	53.9	9.7	170	34	VBW: 1 kHz
Vert.	5460.000	PK	48.86	31.78	-25.16	-	2.10	57.58	73.9	16.3	234	332	-
Vert.	5460.000	AV	35.54	31.78	-25.16	-	2.10	44.26	53.9	9.6	234	332	VBW: 1 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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 (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	50.02	32.07	-25.15	-	2.10	59.04	-36.19	-27.0	9.1	170	34	-
Vert.	5470.000	PK	49.55	31.79	-25.15	-	2.10	58.29	-36.94	-27.0	9.9	234	332	-

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

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

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

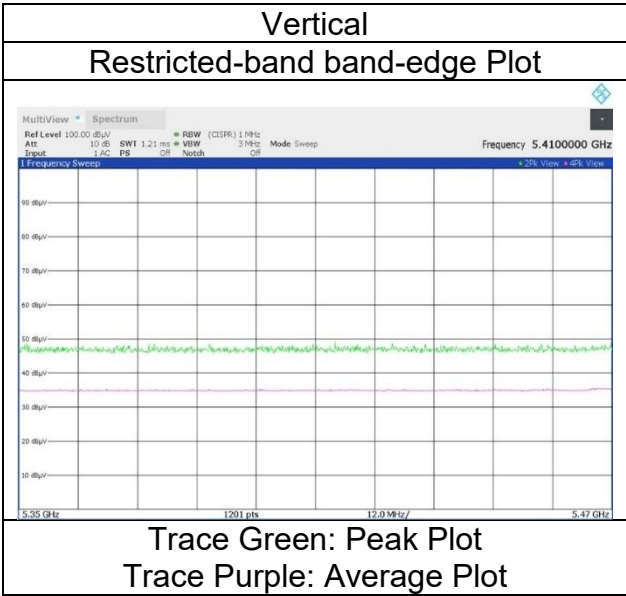
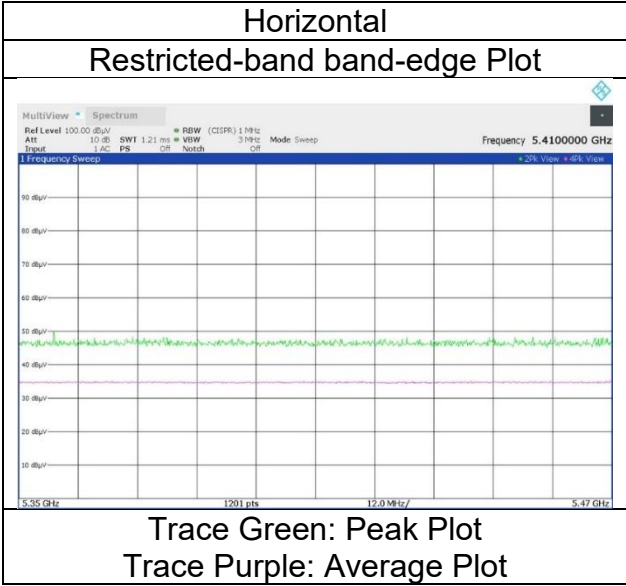
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 484-tone 5530 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 65



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
Mode Tx 11ax-80(OFDMA) 484-tone 5610 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 66
(Calculation) (above 1 GHz Outside of the restricted band)

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

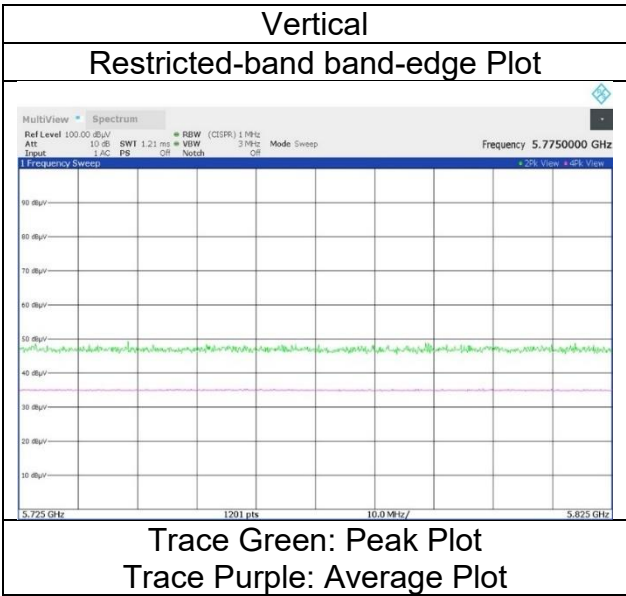
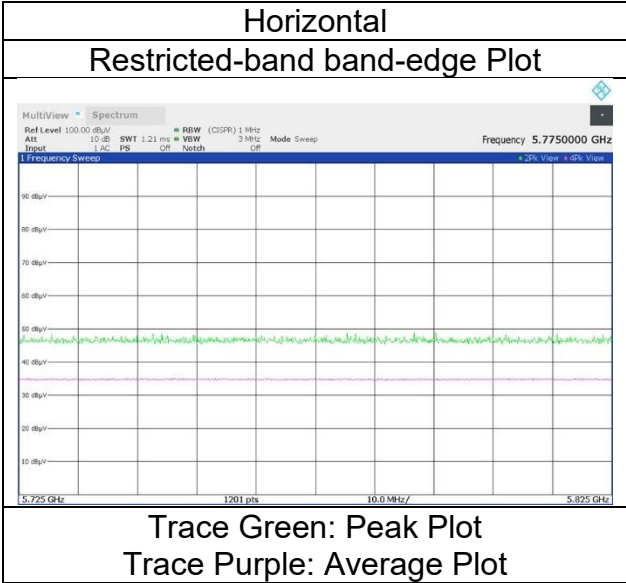
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	50.19	32.41	-25.06	-	2.10	59.64	-35.59	-27.0	8.5	151	25	-
Vert.	5725.000	PK	49.22	32.01	-25.06	-	2.10	58.27	-36.96	-27.0	9.9	217	325	-

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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 484-tone 5610 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 66



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 484-tone 5775 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 65
(Calculation) (above 1 GHz Outside of the restricted band)

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

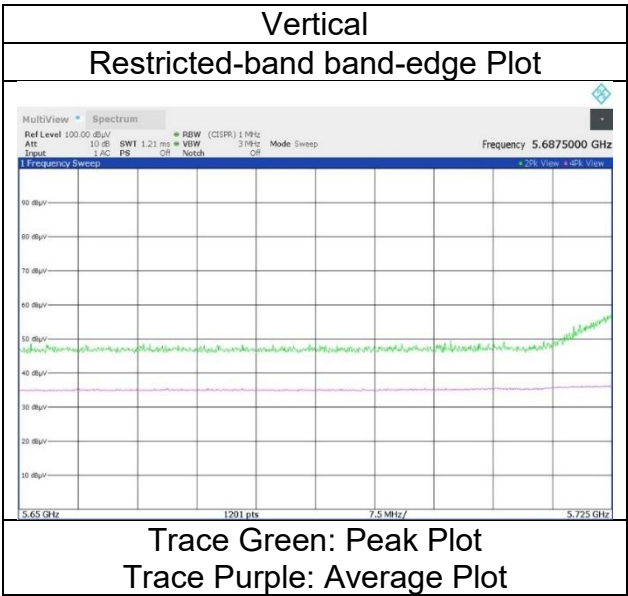
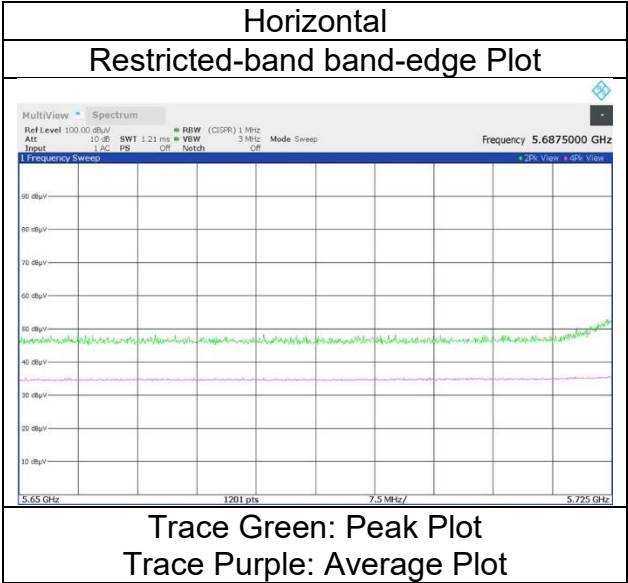
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	49.98	32.19	-25.07	-	2.10	59.20	-36.03	-27.0	9.0	109	28	-
Hori.	5700.000	PK	50.73	32.33	-25.06	-	2.10	60.10	-35.13	10.0	45.1	109	28	-
Hori.	5720.000	PK	52.12	32.40	-25.05	-	2.10	61.57	-33.66	15.6	49.2	109	28	-
Hori.	5725.000	PK	56.34	32.41	-25.06	-	2.10	65.79	-29.44	27.0	56.4	109	28	-
Vert.	5650.000	PK	48.92	31.84	-25.07	-	2.10	57.79	-37.44	-27.0	10.4	223	338	-
Vert.	5700.000	PK	48.93	31.95	-25.06	-	2.10	57.92	-37.31	10.0	47.3	223	338	-
Vert.	5720.000	PK	53.55	31.99	-25.05	-	2.10	62.59	-32.64	15.6	48.2	223	338	-
Vert.	5725.000	PK	58.29	32.01	-25.06	-	2.10	67.34	-27.89	27.0	54.8	223	338	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 484-tone 5775 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 65



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 484-tone 5775 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 66
(Calculation) (above 1 GHz Outside of the restricted band)

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

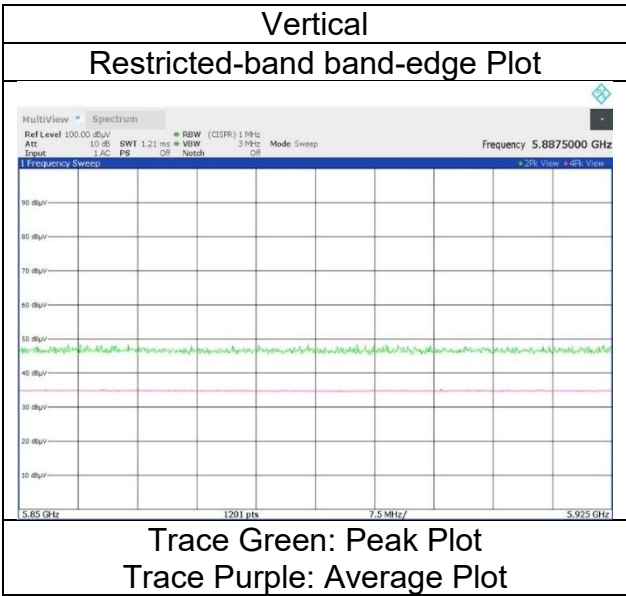
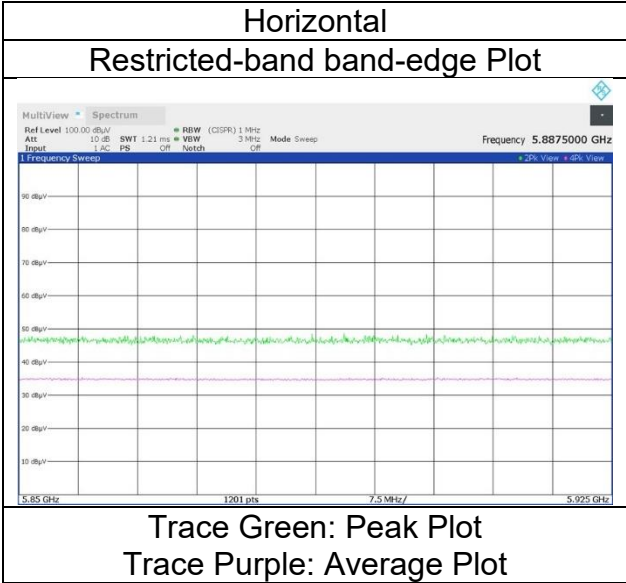
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	49.81	32.76	-25.01	-	2.10	59.66	-35.57	27.0	62.5	109	29	-
Hori.	5855.000	PK	50.38	32.77	-25.00	-	2.10	60.25	-34.98	15.6	50.5	109	29	-
Hori.	5875.000	PK	50.77	32.81	-25.00	-	2.10	60.68	-34.55	10.0	44.5	109	29	-
Hori.	5925.000	PK	50.00	32.88	-24.99	-	2.10	59.99	-35.24	-27.0	8.2	109	29	-
Vert.	5850.000	PK	49.46	32.33	-25.01	-	2.10	58.88	-36.35	27.0	63.3	206	329	-
Vert.	5855.000	PK	48.78	32.34	-25.00	-	2.10	58.22	-37.01	15.6	52.6	206	329	-
Vert.	5875.000	PK	48.61	32.38	-25.00	-	2.10	58.09	-37.14	10.0	47.1	206	329	-
Vert.	5925.000	PK	48.43	32.46	-24.99	-	2.10	58.00	-37.23	-27.0	10.2	206	329	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 484-tone 5775 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 66



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 996-tone 5210 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 67
(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	50.88	32.09	-25.53	-	2.10	59.54	73.9	14.3	150	36	-
Hori.	5150.000	AV	36.12	32.09	-25.53	-	2.10	44.78	53.9	9.1	150	36	VBW: 2 kHz
Vert.	5150.000	PK	51.03	31.86	-25.53	-	2.10	59.46	73.9	14.4	147	350	-
Vert.	5150.000	AV	36.80	31.86	-25.53	-	2.10	45.23	53.9	8.6	147	350	VBW: 2 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).

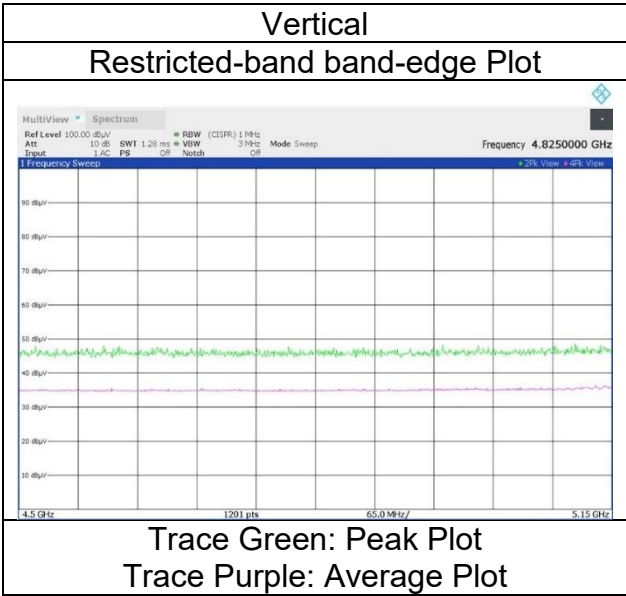
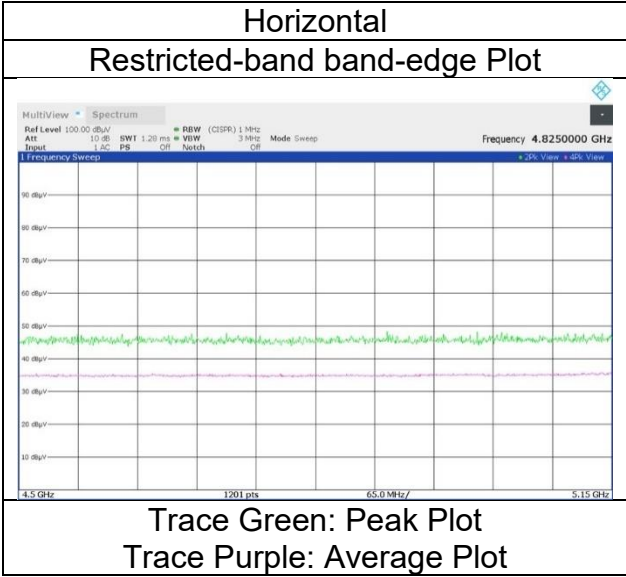
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 996-tone 5210 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 67



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

Radiated Spurious Emission

Test place
Semi Anechoic Chamber
Date
Temperature / Humidity
Engineer

Mode
Antenna type

Shonan EMC Lab.
WAC1
April 28, 2024
20 deg. C / 65 % RH
Yusuke Tanikawara
(1 GHz to 6.4 GHz)
Tx 11ax-80(OFDMA) 996-tone 5290 MHz
5G_CH 0: monopole 5G_CH 1: slot

WAC1
May 4, 2024
22 deg. C / 52 % RH
Takahiro Suzuki
(1 GHz to 6.4 GHz)

Index 67
(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	51.64	31.84	-25.29	-	2.10	60.29	73.9	13.6	124	36	-
Hori.	5350.000	AV	36.02	31.84	-25.29	-	2.10	44.67	53.9	9.2	124	36	VBW: 2 kHz
Vert.	5350.000	PK	50.73	31.58	-25.29	-	2.10	59.12	73.9	14.7	182	337	-
Vert.	5352.685	PK	50.35	31.59	-25.29	-	2.10	58.75	73.9	15.1	182	337	-
Vert.	5350.000	AV	36.37	31.58	-25.29	-	2.10	44.76	53.9	9.1	182	337	VBW: 2 kHz
Vert.	5352.685	AV	36.91	31.59	-25.29	-	2.10	45.31	53.9	8.5	182	337	VBW: 2 kHz

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

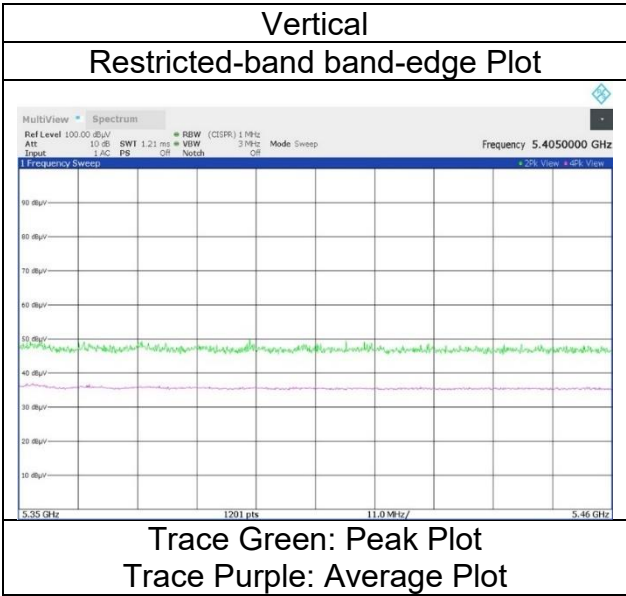
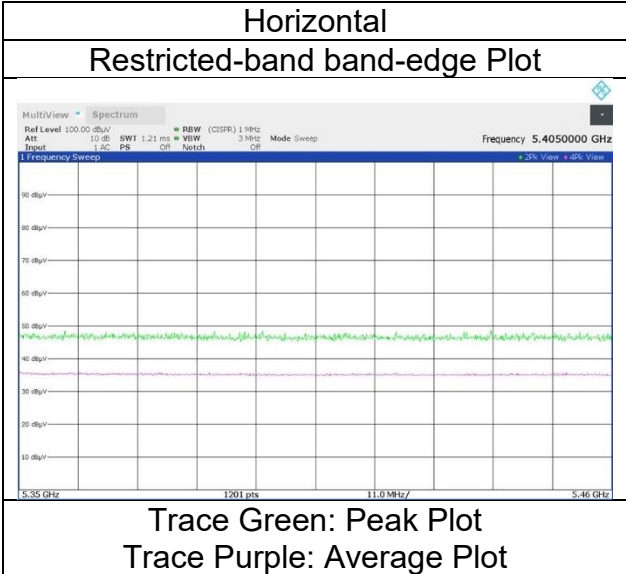
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : 20log (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 996-tone 5290 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 67



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 996-tone 5530 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 67
(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	50.66	32.06	-25.16	-	2.10	59.66	73.9	14.2	183	47	-
Hori.	5460.000	AV	35.79	32.06	-25.16	-	2.10	44.79	53.9	9.1	183	47	VBW: 2 kHz
Vert.	5460.000	PK	49.06	31.78	-25.16	-	2.10	57.78	73.9	16.1	225	335	-
Vert.	5460.000	AV	35.45	31.78	-25.16	-	2.10	44.17	53.9	9.7	225	335	VBW: 2 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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 (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	50.95	32.07	-25.15	-	2.10	59.97	-35.26	-27.0	8.2	183	47	-
Vert.	5465.050	PK	52.19	31.79	-25.16	-	2.10	60.92	-34.31	-27.0	7.3	225	335	-
Vert.	5470.000	PK	49.07	31.79	-25.15	-	2.10	57.81	-37.42	-27.0	10.4	225	335	-

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

Result (ERP [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).

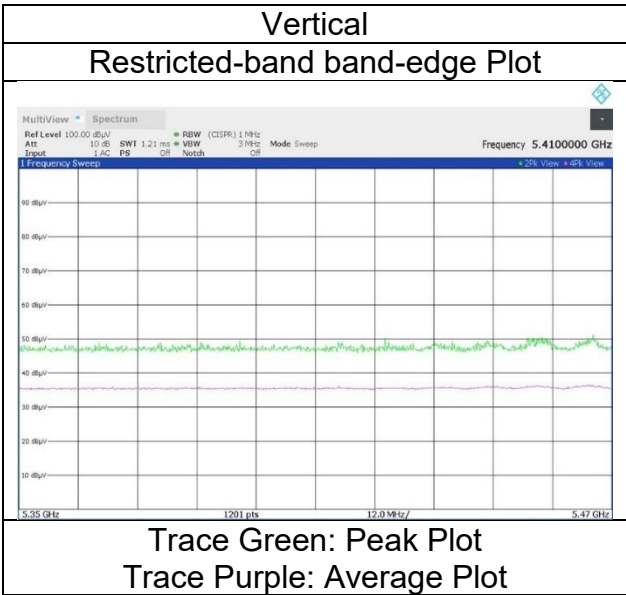
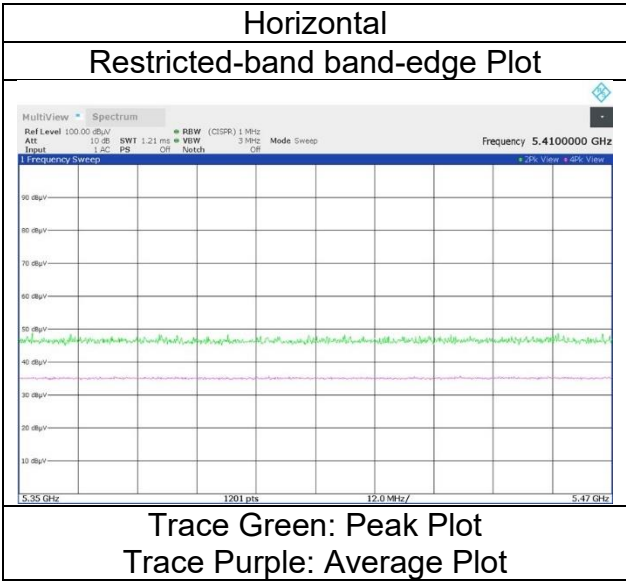
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 996-tone 5530 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 67



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 996-tone 5610 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 67
(Calculation) (above 1 GHz Outside of the restricted band)

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

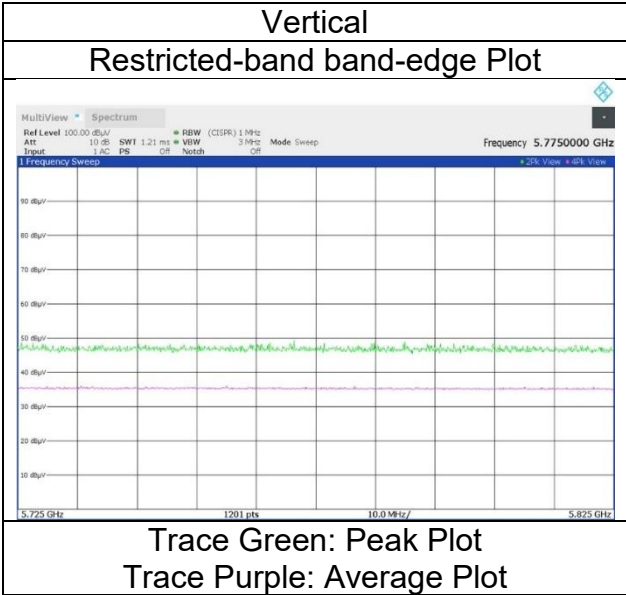
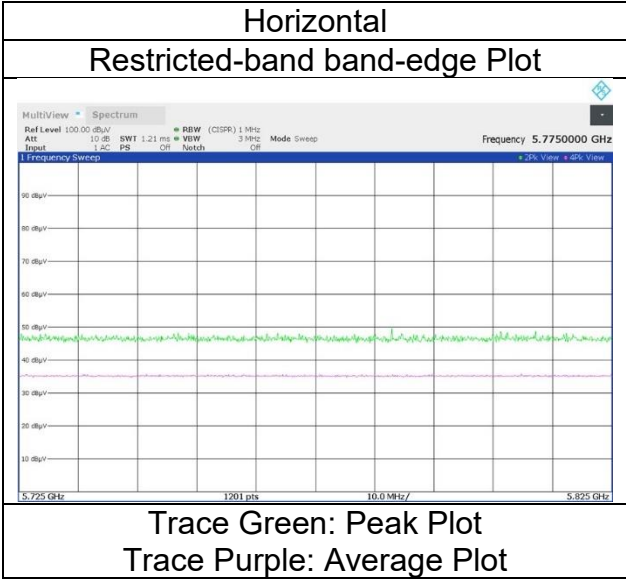
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant. Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	50.12	32.41	-25.06		2.10	59.57	-35.66	-27.0	8.6	152	25	-
Vert.	5725.000	PK	49.73	32.01	-25.06		2.10	58.78	-36.45	-27.0	9.4	245	337	-

Result [dBuV/m] = Reading + Ant. Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 996-tone 5610 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 67



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode Tx 11ax-80(OFDMA) 996-tone 5775 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 67
(Calculation) (above 1 GHz Outside of the restricted band)

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

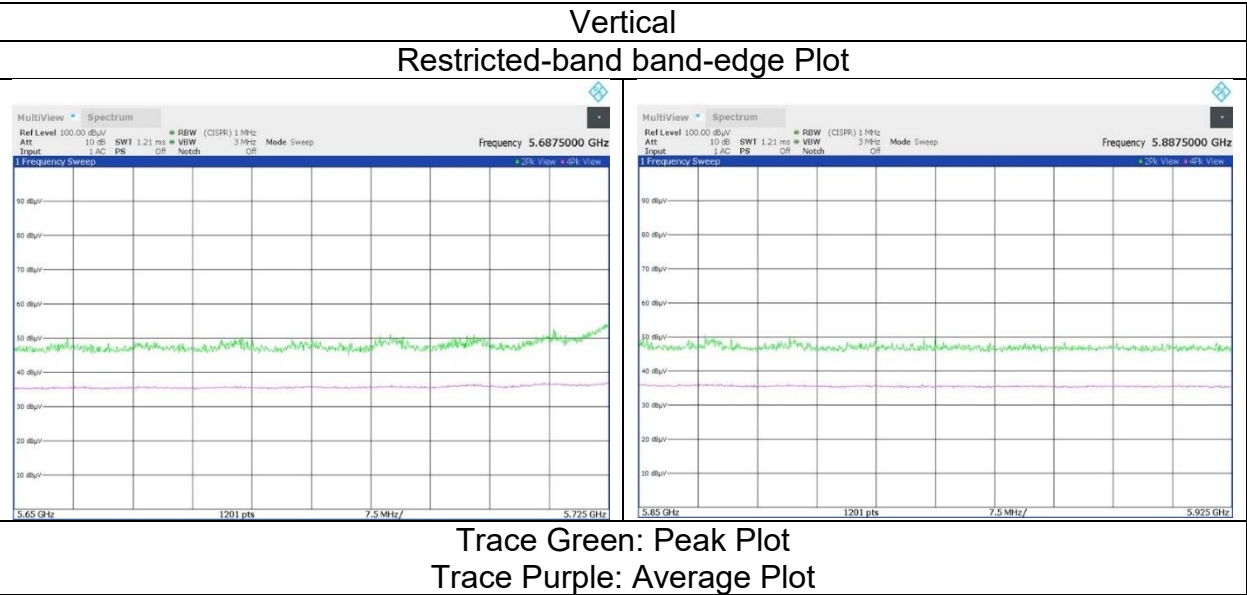
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	50.10	32.19	-25.07	-	2.10	59.32	-35.91	-27.0	8.9	107	29	-
Hori.	5700.000	PK	50.21	32.33	-25.06	-	2.10	59.58	-35.65	10.0	45.6	107	29	-
Hori.	5720.000	PK	51.64	32.40	-25.05	-	2.10	61.09	-34.14	15.6	49.7	107	29	-
Hori.	5725.000	PK	54.38	32.41	-25.06	-	2.10	63.83	-31.40	27.0	58.4	107	29	-
Hori.	5850.000	PK	50.35	32.76	-25.01	-	2.10	60.20	-35.03	27.0	62.0	107	29	-
Hori.	5855.000	PK	50.07	32.77	-25.00	-	2.10	59.94	-35.29	15.6	50.8	107	29	-
Hori.	5875.000	PK	50.77	32.81	-25.00	-	2.10	60.68	-34.55	10.0	44.5	107	29	-
Hori.	5925.000	PK	50.03	32.88	-24.99	-	2.10	60.02	-35.21	-27.0	8.2	107	29	-
Vert.	5650.000	PK	49.90	31.84	-25.07	-	2.10	58.77	-36.46	-27.0	9.4	226	341	-
Vert.	5700.000	PK	50.33	31.95	-25.06	-	2.10	59.32	-35.91	10.0	45.9	226	341	-
Vert.	5720.000	PK	52.66	31.99	-25.05	-	2.10	61.70	-33.53	15.6	49.1	226	341	-
Vert.	5725.000	PK	55.97	32.01	-25.06	-	2.10	65.02	-30.21	27.0	57.2	226	341	-
Vert.	5850.000	PK	51.80	32.33	-25.01	-	2.10	61.22	-34.01	27.0	61.0	226	341	-
Vert.	5855.000	PK	50.05	32.34	-25.00	-	2.10	59.49	-35.74	15.6	51.3	226	341	-
Vert.	5875.000	PK	49.07	32.38	-25.00	-	2.10	58.55	-36.68	10.0	46.6	226	341	-
Vert.	5925.000	PK	49.11	32.46	-24.99	-	2.10	58.68	-36.55	-27.0	9.5	226	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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	Tx 11ax-80(OFDMA) 996-tone 5775 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 67



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.			
Semi Anechoic Chamber	WAC1	WAC1	WAC1	WAC1
Date	March 13, 2024	March 18, 2024	March 19, 2024	June 13, 2024
Temperature / Humidity	19 deg. C / 40 % RH	20 deg. C / 32 % RH	20 deg. C / 23 % RH	23 deg. C / 64 % RH
Engineer	Takahiro Suzuki	Miku Ikudome	Miku Ikudome	Hiromasa Sato
	(1 GHz to 6.4 GHz)	(6.4 GHz to 10 GHz)	(10 GHz to 18 GHz)	(18 GHz to 40 GHz)
Mode	Tx 11ax-160(OFDM) 5250 MHz			
Antenna type	5G_CH 0: monopole 5G_CH 1: slot			

(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.	5100.000	PK	49.34	31.96	-25.59	-	2.10	57.81	73.9	16.0	146	39	-
Hori.	5150.000	PK	49.63	31.86	-25.53	-	2.10	58.06	73.9	15.8	146	39	-
Hori.	5350.000	PK	49.47	31.58	-25.29	-	2.10	57.86	73.9	16.0	146	39	-
Hori.	15750.000	PK	46.86	39.78	-25.95	-	-9.54	51.15	73.9	22.7	150	0	-
Hori.	5100.000	AV	34.61	31.96	-25.59	-	2.10	43.08	53.9	10.8	146	39	VBW:200 Hz
Hori.	5150.000	AV	34.90	31.86	-25.53	-	2.10	43.33	53.9	10.5	146	39	VBW:200 Hz
Hori.	5350.000	AV	35.09	31.58	-25.29	-	2.10	43.48	53.9	10.4	146	39	VBW:200 Hz
Hori.	15750.000	AV	32.51	39.78	-25.95	-	-9.54	36.80	53.9	17.1	150	0	VBW:200 Hz, Floor noise
Vert.	5100.000	PK	49.31	31.96	-25.59	-	2.10	57.78	73.9	16.1	179	7	-
Vert.	5150.000	PK	51.07	31.86	-25.53	-	2.10	59.50	73.9	14.4	179	7	-
Vert.	5350.000	PK	52.02	31.58	-25.29	-	2.10	60.41	73.9	13.4	179	7	-
Vert.	15750.000	PK	46.57	39.78	-25.95	-	-9.54	50.86	73.9	23.0	150	0	-
Vert.	5100.000	AV	34.52	31.96	-25.59	-	2.10	42.99	53.9	10.9	179	7	VBW:200 Hz
Vert.	5150.000	AV	34.70	31.86	-25.53	-	2.10	43.13	53.9	10.7	179	7	VBW:200 Hz
Vert.	5350.000	AV	36.49	31.58	-25.29	-	2.10	44.88	53.9	9.0	179	7	VBW:200 Hz
Vert.	15750.000	AV	32.46	39.78	-25.95	-	-9.54	36.75	53.9	17.1	150	0	VBW:200 Hz, Floor noise

1 GHz - 18 GHz : Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) + Distance factor

Other bands : Result = 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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.	7000.000	PK	52.35	35.68	-33.34	-	2.10	56.79	-38.44	-27.0	11.4	203	47	-
Hori.	10500.000	PK	48.03	36.46	-29.32	-	-9.54	45.63	-49.60	-27.0	22.6	131	116	-
Vert.	7000.000	PK	52.10	35.68	-33.34	-	2.10	56.54	-38.69	-27.0	11.6	202	331	-
Vert.	10500.000	PK	48.68	36.46	-29.32	-	-9.54	46.28	-48.95	-27.0	21.9	147	282	-

1 GHz - 18 GHz : Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) + Distance factor

Other bands : Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Result (EIRP [dBm]) = $10 \cdot \log((10^{\frac{\text{Result [dBuV/m]}}{10}} / 20) \cdot 10^{(-6)} \cdot \text{Distance} : 3 [\text{m}]^2 / 30 \cdot 10^{-3})$

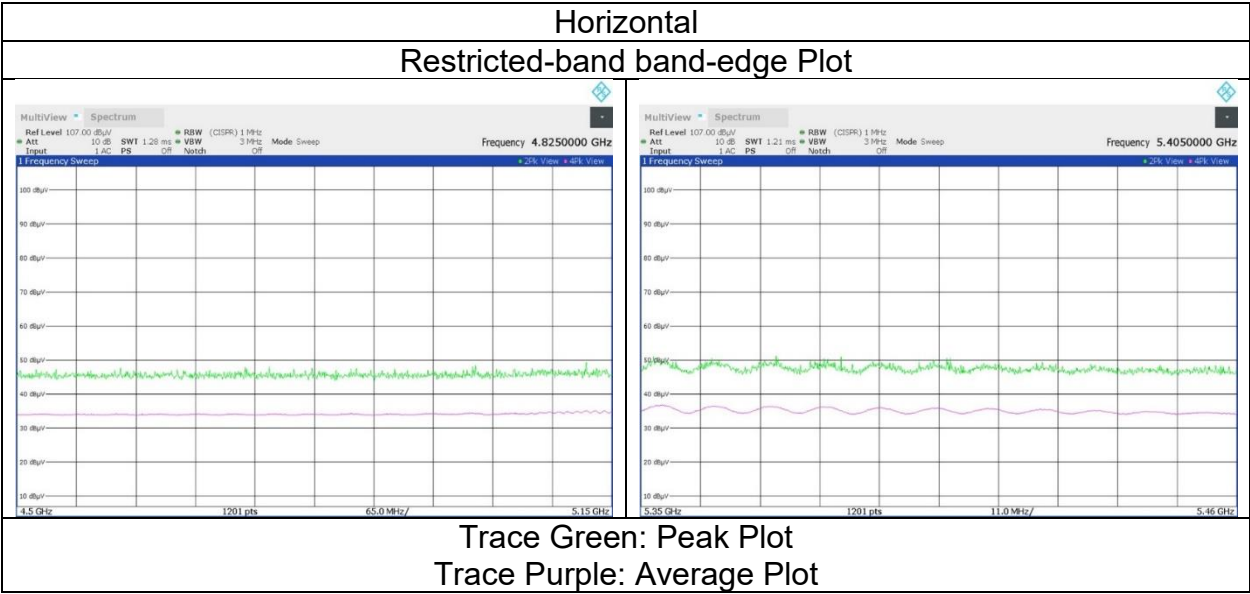
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).

Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1
Date	March 13, 2024
Temperature / Humidity	19 deg. C / 40 % RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-160(OFDM) 5250 MHz
Antenna type	5G_CH 0: monopole 5G_CH 1: slot



* 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	WAC1	WAC1	WAC1	WAC1
Date	March 13, 2024	March 18, 2024	March 19, 2024	June 13, 2024
Temperature / Humidity	19 deg. C / 40 % RH	20 deg. C / 32 % RH	20 deg. C / 23 % RH	23 deg. C / 64 % RH
Engineer	Takahiro Suzuki	Miku Ikudome	Miku Ikudome	Hiromasa Sato
	(1 GHz to 6.4 GHz)	(6.4 GHz to 10 GHz)	(10 GHz to 18 GHz)	(18 GHz to 40 GHz)
Mode	Tx 11ax-160(OFDM) 5570 MHz			
Antenna type	5G_CH 0: monopole 5G_CH 1: slot			

(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	49.47	31.78	-25.16	-	2.10	58.19	73.9	15.7	167	30	-
Hori.	11140.000	PK	47.20	37.50	-28.63	-	-9.54	46.53	73.9	27.3	197	211	-
Hori.	5460.000	AV	35.05	31.78	-25.16	-	2.10	43.77	53.9	10.1	167	30	VBW: 200 Hz
Hori.	11140.000	AV	32.18	37.50	-28.63	-	-9.54	31.51	53.9	22.3	197	211	VBW: 200 Hz
Vert.	5460.000	PK	50.11	31.78	-25.16	-	2.10	58.83	73.9	15.0	192	333	-
Vert.	11140.000	PK	46.80	37.50	-28.63	-	-9.54	46.13	73.9	27.7	182	303	-
Vert.	5460.000	AV	34.96	31.78	-25.16	-	2.10	43.68	53.9	10.2	192	333	VBW: 200 Hz
Vert.	11140.000	AV	32.26	37.50	-28.63	-	-9.54	31.59	53.9	22.3	182	303	VBW: 200 Hz

1 GHz - 18 GHz : Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) + Distance factor
Other bands : Result = 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$
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 (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	49.79	31.79	-25.15	-	2.10	58.53	-36.70	-27.0	9.7	167	30	-
Hori.	5725.000	PK	49.36	32.01	-25.06	-	2.10	58.41	-36.82	-27.0	9.8	167	30	-
Hori.	6684.000	PK	50.60	34.32	-33.36	-	2.10	53.66	-41.57	-27.0	14.5	153	49	-
Hori.	16710.000	PK	46.85	39.51	-25.12	-	-9.54	51.70	-43.53	-27.0	16.5	150	0	-
Vert.	5470.000	PK	49.29	31.79	-25.15	-	2.10	58.03	-37.20	-27.0	10.2	192	333	-
Vert.	5725.000	PK	49.28	32.01	-25.06	-	2.10	58.33	-36.90	-27.0	9.9	192	333	-
Vert.	6684.000	PK	49.87	34.32	-33.36	-	2.10	52.93	-42.30	-27.0	15.3	183	336	-
Vert.	16710.000	PK	46.83	39.51	-25.12	-	-9.54	51.68	-43.55	-27.0	16.5	150	0	-

1 GHz - 18 GHz : Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) + Distance factor
Other bands : Result = 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$
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	WAC1
Date	March 13, 2024
Temperature / Humidity	19 deg. C / 40 % RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-160(OFDM) 5570 MHz
Antenna type	5G_CH 0: monopole 5G_CH 1: slot



* 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
	(1 GHz to 6.4 GHz)	(1 GHz to 6.4 GHz)
Mode	TX 11ax-160(OFDMA) 26-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / 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	50.12	32.09	-25.53		2.10	58.78	73.9	15.1	175	45	-
Hori.	5150.000	AV	35.47	32.09	-25.53		2.10	44.13	53.9	9.7	175	45	VBW: 1 kHz
Vert.	5150.000	PK	48.97	31.86	-25.53		2.10	57.40	73.9	16.5	148	350	-
Vert.	5150.000	AV	35.18	31.86	-25.53		2.10	43.61	53.9	10.2	148	350	VBW: 1 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).

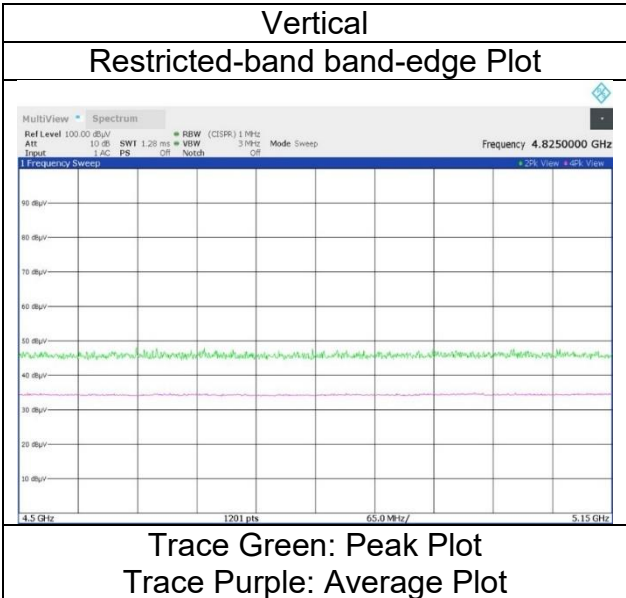
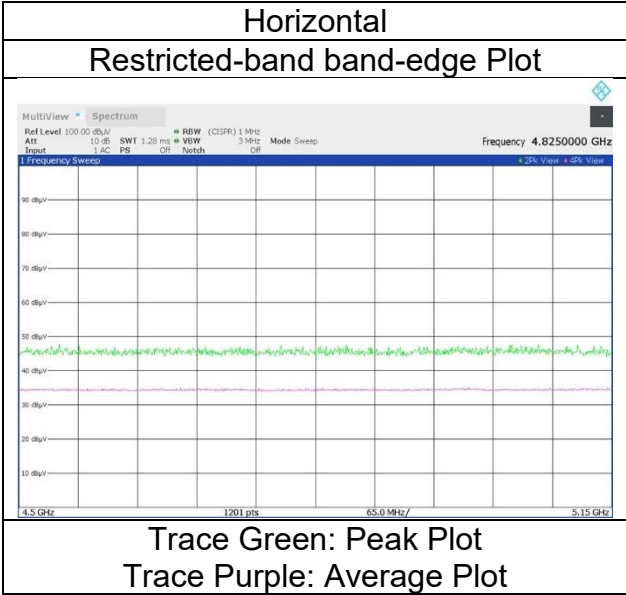
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	TX 11ax-160(OFDMA) 26-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 0



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.	
Semi Anechoic Chamber	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara (1 GHz to 6.4 GHz)	Takahiro Suzuki (1 GHz to 6.4 GHz)
Mode	TX 11ax-160(OFDMA) 26-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 36

(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	50.74	31.84	-25.29	-	2.10	59.39	73.9	14.5	216	48	
Hori.	5350.000	AV	34.97	31.84	-25.29	-	2.10	43.62	53.9	10.2	216	48	VBW: 1 kHz
Vert.	5350.000	PK	49.21	31.58	-25.29	-	2.10	57.60	73.9	16.3	185	328	
Vert.	5350.000	AV	35.11	31.58	-25.29	-	2.10	43.50	53.9	10.4	185	328	VBW: 1 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).

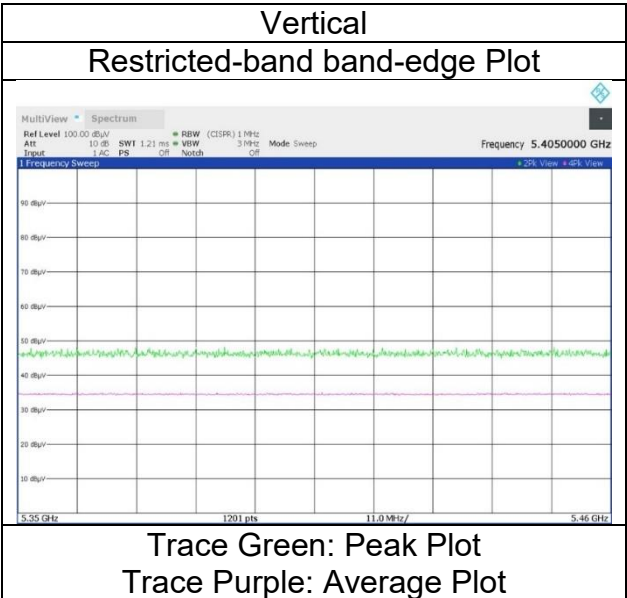
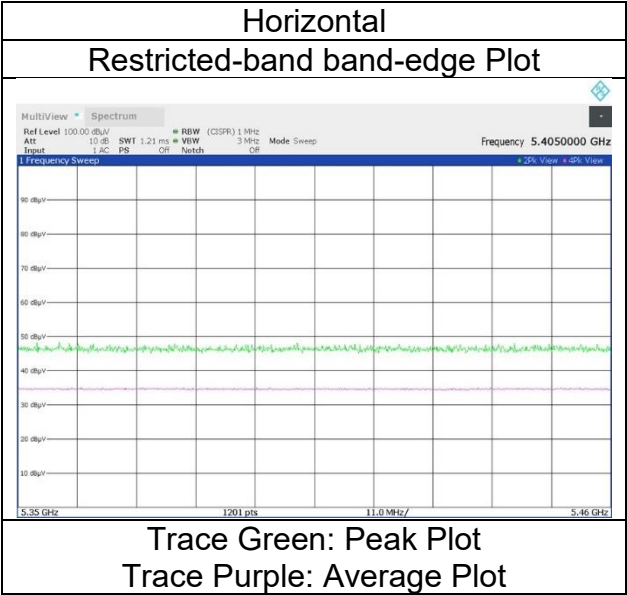
Distance factor : 1 GHz - 10 GHz : $20\log(3.82 \text{ m} / 3.0 \text{ m}) = 2.10 \text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	TX 11ax-160(OFDMA) 26-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 36



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 26-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / 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	50.38	32.06	-25.16	-	2.10	59.38	73.9	14.5	214	44	-
Hori.	5460.000	AV	35.15	32.06	-25.16	-	2.10	44.15	53.9	9.7	214	44	VBW: 1 kHz
Vert.	5460.000	PK	49.06	31.78	-25.16	-	2.10	57.78	73.9	16.1	194	338	-
Vert.	5460.000	AV	35.13	31.78	-25.16	-	2.10	43.85	53.9	10.0	194	338	VBW: 1 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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 (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	50.02	32.07	-25.15	-	2.10	59.04	-36.19	-27.0	9.1	214	44	-
Vert.	5470.000	PK	48.88	31.79	-25.15	-	2.10	57.62	-37.61	-27.0	10.6	194	338	-

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

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

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

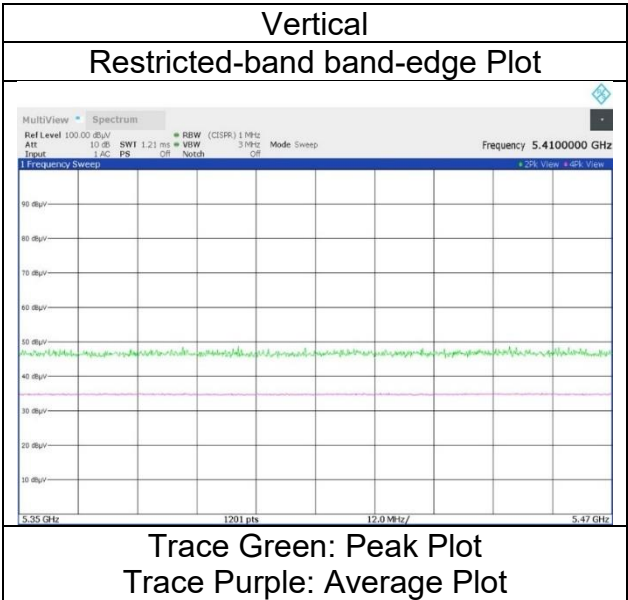
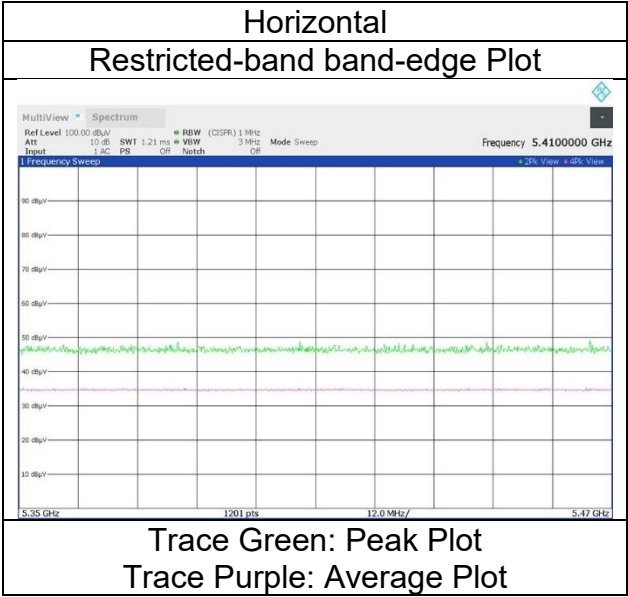
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
	(1 GHz to 6.4 GHz)	(1 GHz to 6.4 GHz)
Mode	TX 11ax-160(OFDMA) 26-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 0



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 26-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 36
(Calculation) (above 1 GHz Outside of the restricted band)

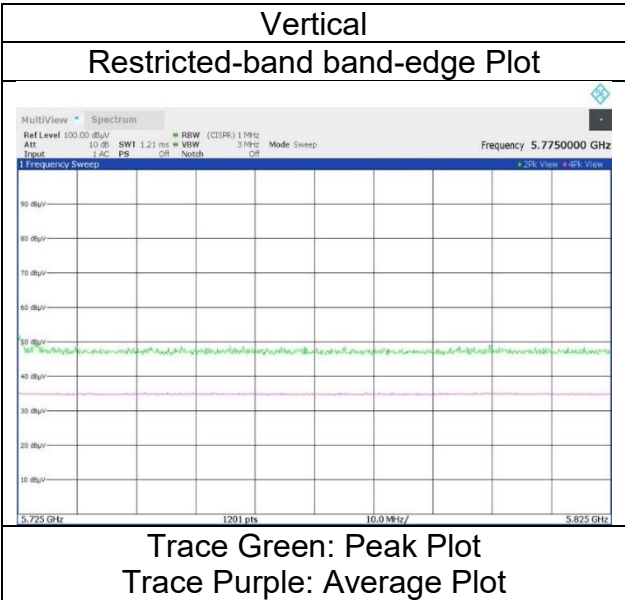
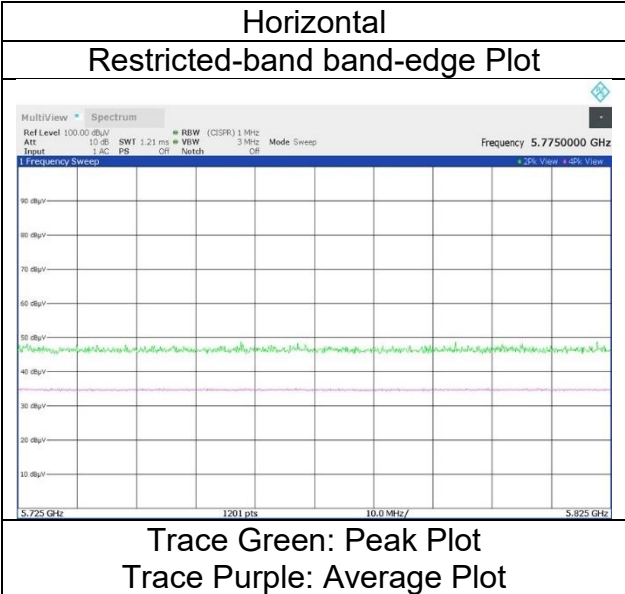
(* PK: Peak, AV: Average, QP: Quasi-Peak)														
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant. Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	49.94	32.41	-25.06	-	2.10	59.39	-35.84	-27.0	8.8	150	26	-
Vert.	5725.000	PK	52.43	32.01	-25.06	-	2.10	61.48	-33.75	-27.0	6.7	236	334	-

Result [dBuV/m] = Reading + Ant. Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
	(1 GHz to 6.4 GHz)	(1 GHz to 6.4 GHz)
Mode	TX 11ax-160(OFDMA) 26-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 36



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 52-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / 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	49.67	32.09	-25.53		- 2.10	58.33	73.9	15.5	209	30	-
Hori.	5150.000	AV	35.69	32.09	-25.53		- 2.10	44.35	53.9	9.5	209	30	VBW: 2 kHz
Vert.	5150.000	PK	49.33	31.86	-25.53		- 2.10	57.76	73.9	16.1	181	350	-
Vert.	5150.000	AV	36.07	31.86	-25.53		- 2.10	44.50	53.9	9.4	181	350	VBW: 2 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).

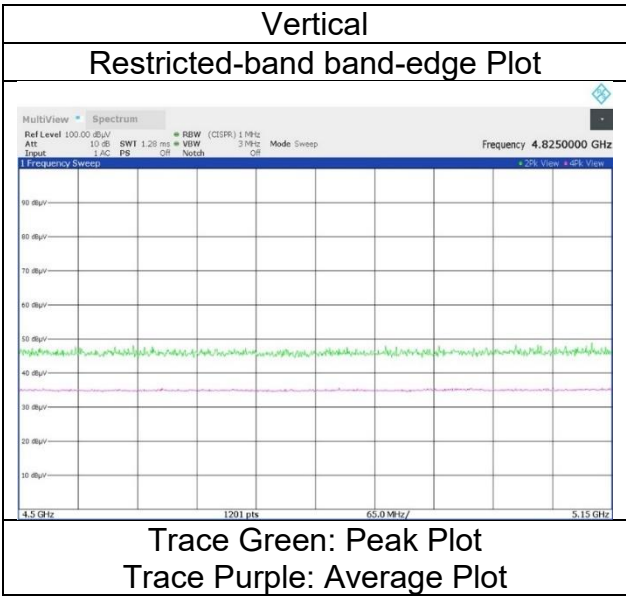
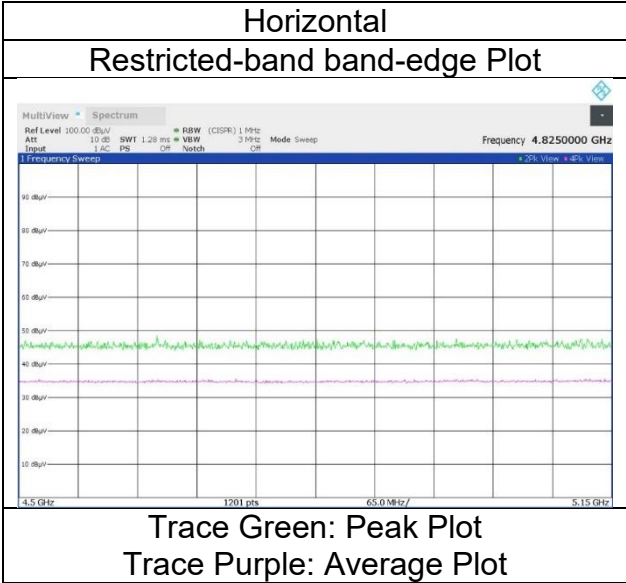
Distance factor : 1 GHz - 10 GHz : 20log (3.82 m / 3.0 m) = 2.10 dB

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	TX 11ax-160(OFDMA) 52-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 37



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 52-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 52
(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	49.58	31.84	-25.29	-	2.10	58.23	73.9	15.6	125	38	-
Hori.	5350.000	AV	35.62	31.84	-25.29	-	2.10	44.27	53.9	9.6	125	38	VBW: 2 kHz
Vert.	5350.000	PK	49.44	31.58	-25.29	-	2.10	57.83	73.9	16.0	194	331	-
Vert.	5350.000	AV	35.97	31.58	-25.29	-	2.10	44.36	53.9	9.5	194	331	VBW: 2 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).

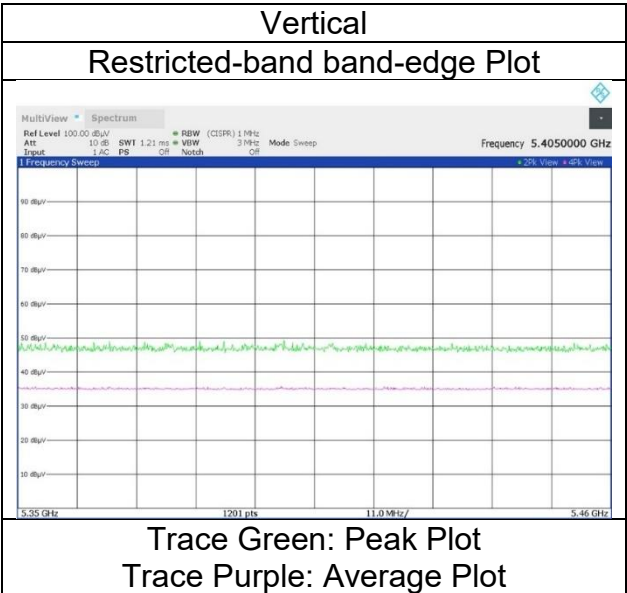
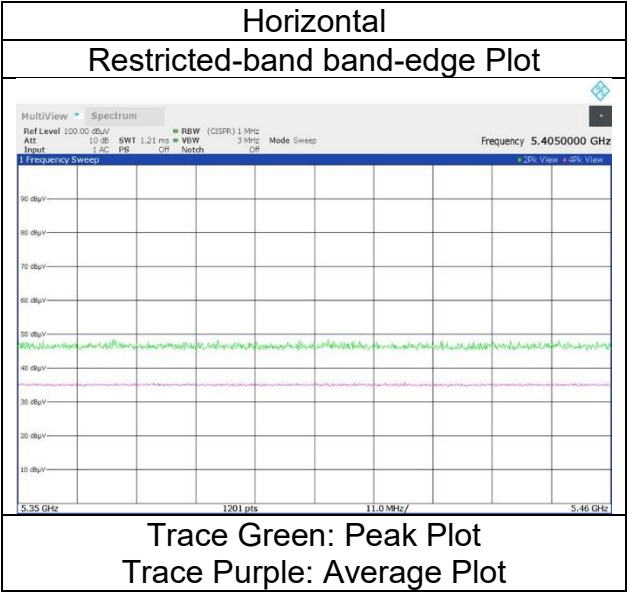
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	TX 11ax-160(OFDMA) 52-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 52



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 4, 2024
Temperature / Humidity 20 deg. C / 65 % RH 22 deg. C / 52 % RH
Engineer Yusuke Tanikawara Takahiro Suzuki
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 52-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / 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.	5432.580	PK	50.51	32.04	-25.20	-	2.10	59.45	73.9	14.4	110	32	-
Hori.	5436.773	PK	50.55	32.04	-25.20	-	2.10	59.49	73.9	14.4	110	32	-
Hori.	5441.570	PK	50.14	32.05	-25.20	-	2.10	59.09	73.9	14.8	110	32	-
Hori.	5460.000	PK	50.54	32.06	-25.16	-	2.10	59.54	73.9	14.3	110	32	-
Hori.	5432.580	AV	35.53	32.04	-25.20	-	2.10	44.47	53.9	9.4	110	32	VBW: 2 kHz
Hori.	5436.773	AV	35.59	32.04	-25.20	-	2.10	44.53	53.9	9.3	110	32	VBW: 2 kHz
Hori.	5441.570	AV	35.73	32.05	-25.20	-	2.10	44.68	53.9	9.2	110	32	VBW: 2 kHz
Hori.	5460.000	AV	35.72	32.06	-25.16	-	2.10	44.72	53.9	9.1	110	32	VBW: 2 kHz
Vert.	5432.580	PK	51.75	31.76	-25.20	-	2.10	60.41	73.9	13.4	220	338	-
Vert.	5436.773	PK	53.13	31.76	-25.20	-	2.10	61.79	73.9	12.1	220	338	-
Vert.	5441.570	PK	51.95	31.77	-25.20	-	2.10	60.62	73.9	13.2	220	338	-
Vert.	5460.000	PK	49.11	31.78	-25.16	-	2.10	57.83	73.9	16.0	220	338	-
Vert.	5432.580	AV	35.84	31.76	-25.20	-	2.10	44.50	53.9	9.4	220	338	VBW: 2 kHz
Vert.	5436.773	AV	36.21	31.76	-25.20	-	2.10	44.87	53.9	9.0	220	338	VBW: 2 kHz
Vert.	5441.570	AV	36.15	31.77	-25.20	-	2.10	44.82	53.9	9.0	220	338	VBW: 2 kHz
Vert.	5460.000	AV	35.84	31.78	-25.16	-	2.10	44.56	53.9	9.3	220	338	VBW: 2 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	50.91	32.07	-25.15	-	2.10	59.93	-35.30	-27.0	8.3	110	32	-
Vert.	5470.000	PK	49.78	31.79	-25.15	-	2.10	58.52	-36.71	-27.0	9.7	220	338	-

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).

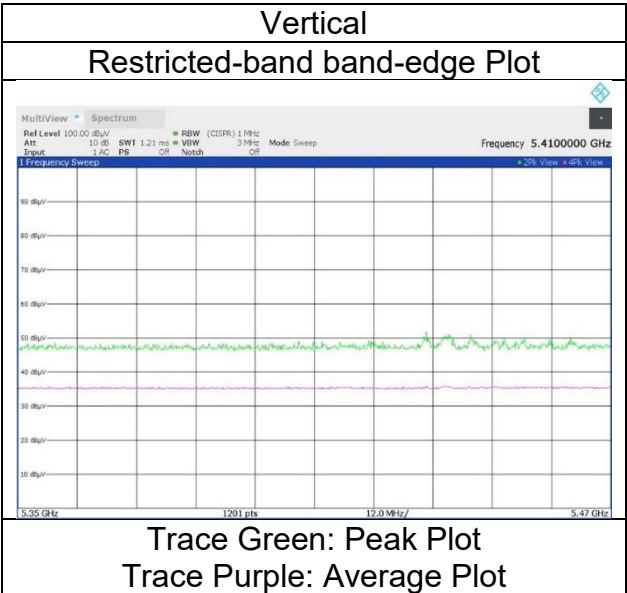
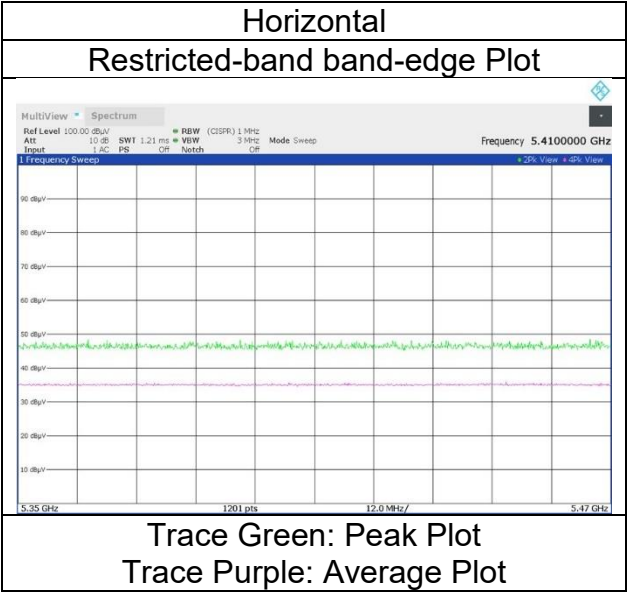
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	TX 11ax-160(OFDMA) 52-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 37



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.	
Semi Anechoic Chamber	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
	(1 GHz to 6.4 GHz)	(1 GHz to 6.4 GHz)
Mode	TX 11ax-160(OFDMA) 52-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 52
(Calculation) (above 1 GHz Outside of the restricted band)

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

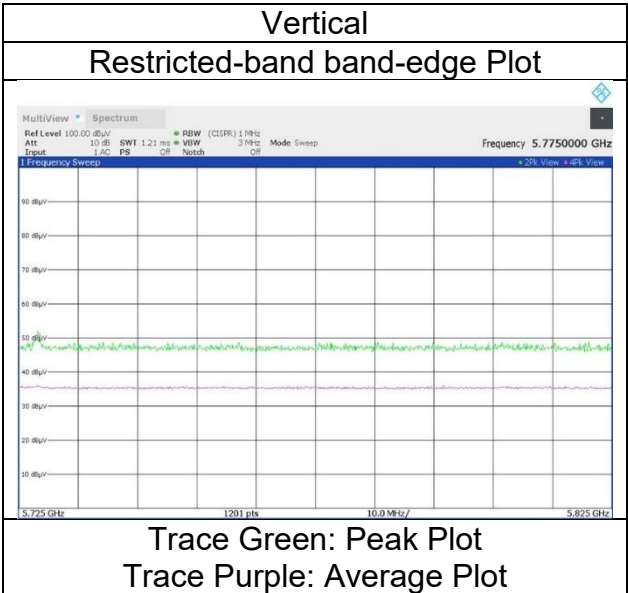
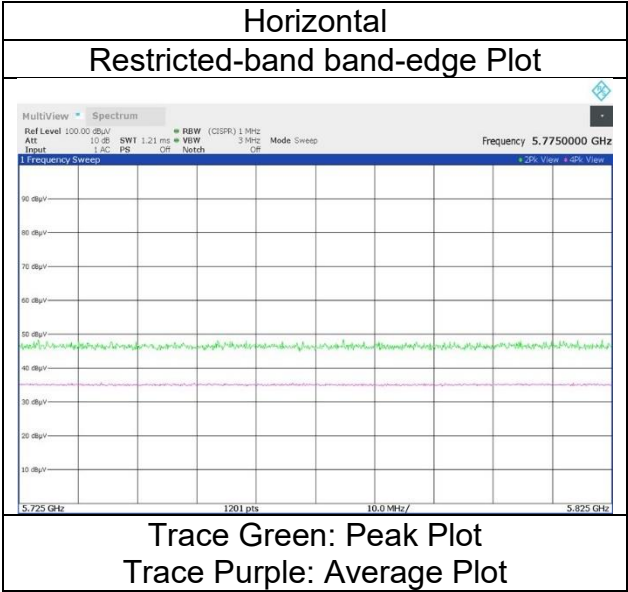
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	49.84	32.41	-25.06		2.10	59.29	-35.94	-27.0	8.9	151	25	-
Hori.	5728.214	PK	50.70	32.42	-25.06		2.10	60.16	-35.07	-27.0	8.0	151	25	-
Vert.	5725.000	PK	49.91	32.01	-25.06		2.10	58.96	-36.27	-27.0	9.2	100	0	-
Vert.	5728.214	PK	52.90	32.02	-25.06		2.10	61.96	-33.27	-27.0	6.2	100	0	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 4, 2024
Temperature / Humidity	20 deg. C / 65 % RH	22 deg. C / 52 % RH
Engineer	Yusuke Tanikawara	Takahiro Suzuki
Mode	TX 11ax-160(OFDMA) 52-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 52



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 106-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / 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.	5128.121	PK	53.30	32.11	-25.56	-	2.10	61.95	73.9	11.9	156	37	-
Hori.	5150.000	PK	50.73	32.09	-25.53	-	2.10	59.39	73.9	14.5	156	37	-
Hori.	5128.121	AV	37.15	32.11	-25.56	-	2.10	45.80	53.9	8.1	156	37	VBW: 3 kHz
Hori.	5150.000	AV	36.67	32.09	-25.53	-	2.10	45.33	53.9	8.5	156	37	VBW: 3 kHz
Vert.	5150.000	PK	49.74	31.86	-25.53	-	2.10	58.17	73.9	15.7	148	350	-
Vert.	5150.000	AV	36.61	31.86	-25.53	-	2.10	45.04	53.9	8.8	148	350	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).

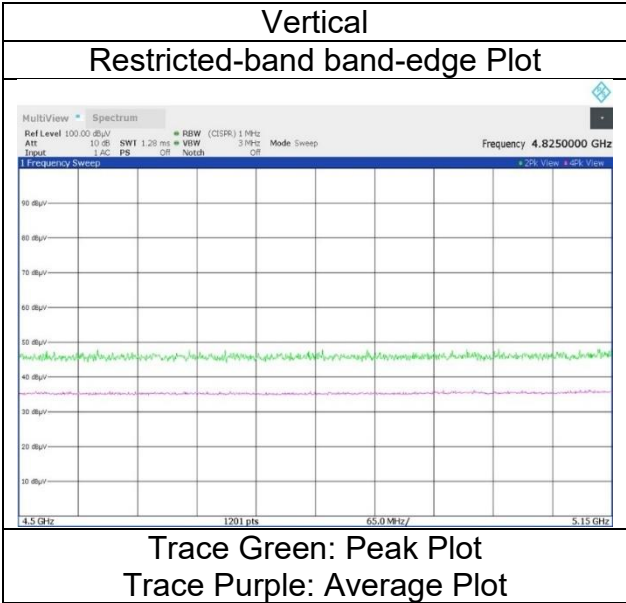
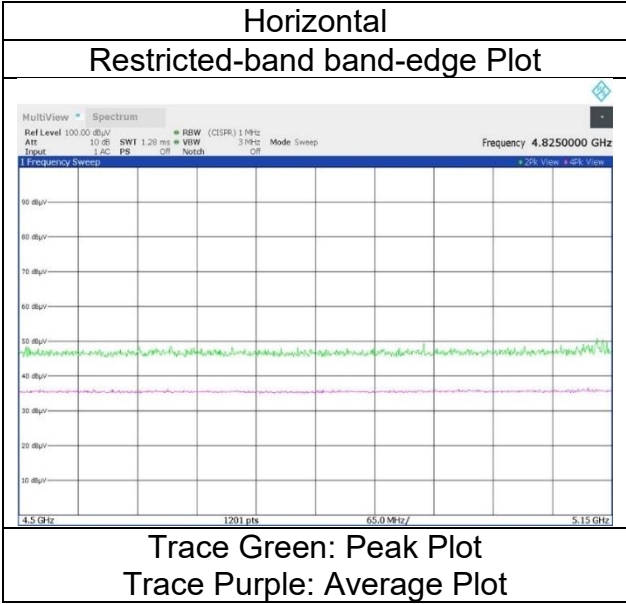
Distance factor : 1 GHz - 10 GHz : 20log (3.82 m / 3.0 m) = 2.10 dB

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 106-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 53



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.	
Semi Anechoic Chamber	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawada	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 106-tone 5250 MHz	
Antenna type	5G CH 0: monopole 5G CH 1: slot	

Segment 1 / Index 60

(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	49.05	31.84	-25.29	-	2.10	57.70	73.9	16.2	124	37	-
Hori.	5394.925	PK	50.82	31.95	-25.24	-	2.10	59.63	73.9	14.2	124	37	-
Hori.	5350.000	AV	36.86	31.84	-25.29	-	2.10	45.51	53.9	8.3	124	37	VBW: 3 kHz
Hori.	5394.925	AV	36.93	31.95	-25.24	-	2.10	45.74	53.9	8.1	124	37	VBW: 3 kHz
Vert.	5350.000	PK	49.51	31.58	-25.29	-	2.10	57.90	73.9	16.0	175	339	-
Vert.	5385.787	PK	52.59	31.67	-25.25	-	2.10	61.11	73.9	12.7	175	339	-
Vert.	5392.298	PK	53.82	31.68	-25.24	-	2.10	62.36	73.9	11.5	175	339	-
Vert.	5396.116	PK	54.31	31.69	-25.24	-	2.10	62.86	73.9	11.0	175	339	-
Vert.	5401.000	PK	53.59	31.70	-25.24	-	2.10	62.15	73.9	11.7	175	339	-
Vert.	5406.280	PK	52.50	31.71	-25.23	-	2.10	61.08	73.9	12.8	175	339	-
Vert.	5350.000	AV	36.40	31.58	-25.29	-	2.10	44.79	53.9	9.1	175	339	VBW: 3 kHz
Vert.	5385.787	AV	37.43	31.67	-25.25	-	2.10	45.95	53.9	7.9	175	339	VBW: 3 kHz
Vert.	5392.298	AV	37.84	31.68	-25.24	-	2.10	46.38	53.9	7.5	175	339	VBW: 3 kHz
Vert.	5396.116	AV	37.65	31.69	-25.24	-	2.10	46.20	53.9	7.7	175	339	VBW: 3 kHz
Vert.	5401.000	AV	37.62	31.70	-25.24	-	2.10	46.18	53.9	7.7	175	339	VBW: 3 kHz
Vert.	5406.280	AV	37.75	31.71	-25.23	-	2.10	46.33	53.9	7.5	175	339	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).

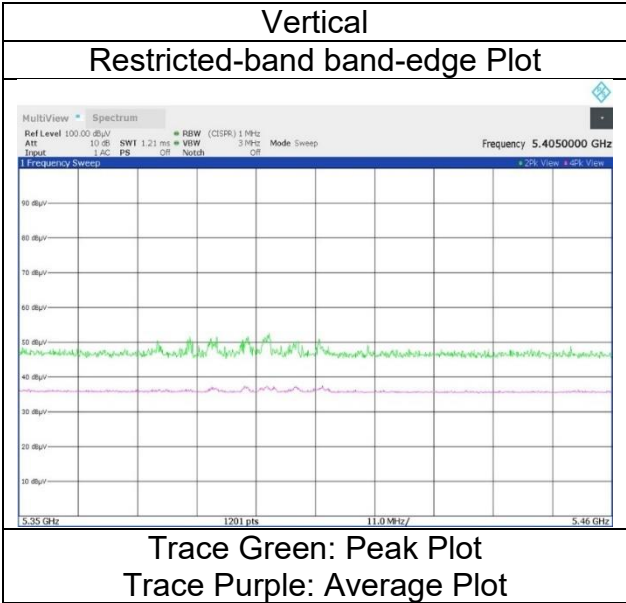
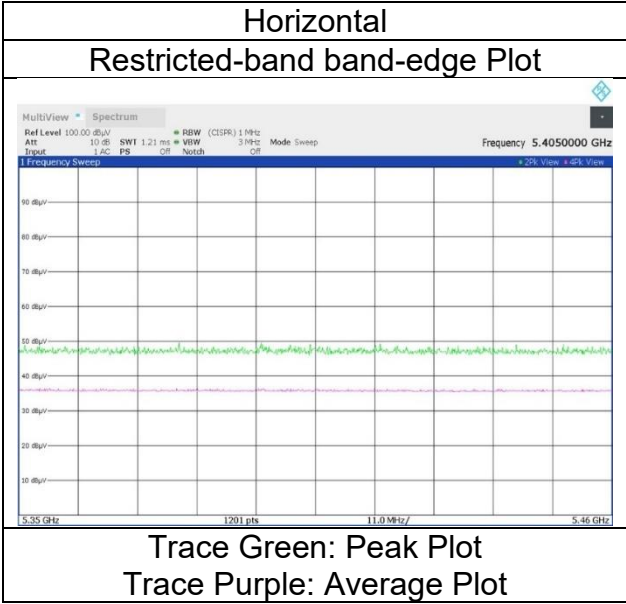
Distance factor : 1 GHz - 10 GHz : $20\log (3.82 \text{ m} / 3.0 \text{ m}) = 2.10 \text{ dB}$

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.	
Semi Anechoic Chamber	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 106-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 60



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
Mode TX 11ax-160(OFDMA) 106-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / 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	49.22	32.06	-25.16	-	2.10	58.22	73.9	15.6	143	37	-
Hori.	5460.000	AV	36.76	32.06	-25.16	-	2.10	45.76	53.9	8.1	143	37	VBW: 3 kHz
Vert.	5460.000	PK	49.13	31.78	-25.16	-	2.10	57.85	73.9	16.0	235	333	-
Vert.	5460.000	AV	36.49	31.78	-25.16	-	2.10	45.21	53.9	8.6	235	333	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 : 20log (3.82 m / 3.0 m) = 2.10 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 (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5470.000	PK	49.32	32.07	-25.15	-	2.10	58.34	-36.89	-27.0	9.8	143	37	-
Vert.	5470.000	PK	49.51	31.79	-25.15	-	2.10	58.25	-36.98	-27.0	9.9	235	333	-

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

Result (ERP [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).

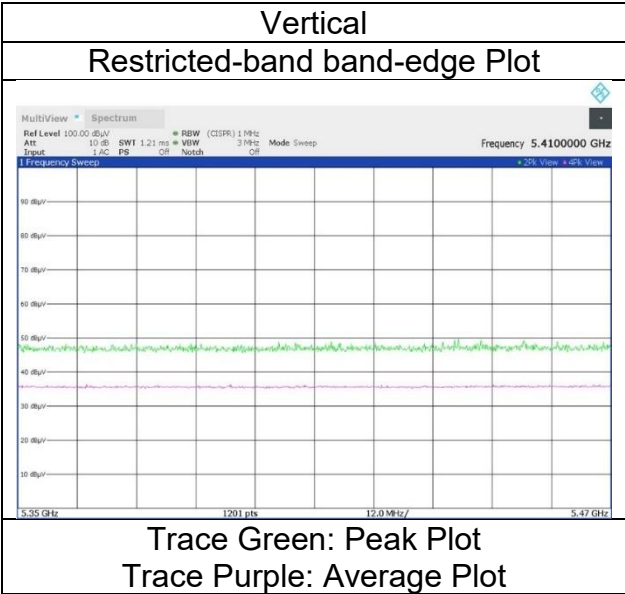
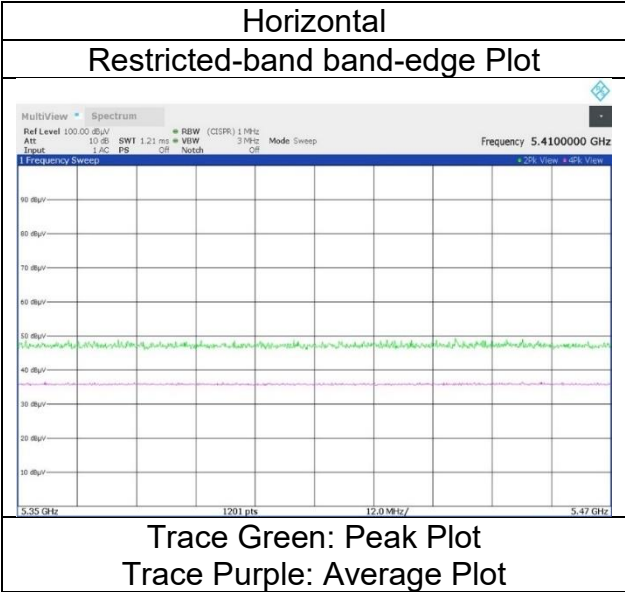
Distance factor : 1 GHz - 10 GHz : 20log (3.82 m / 3.0 m) = 2.10 dB

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 106-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 53



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 106-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 60
(Calculation) (above 1 GHz Outside of the restricted band)

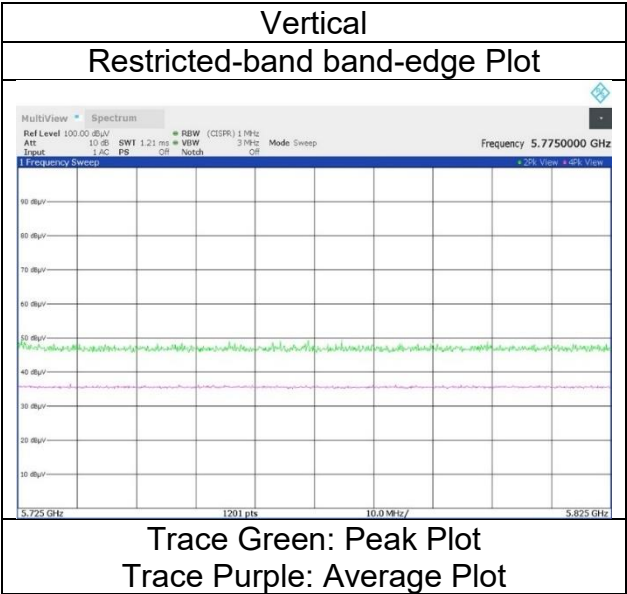
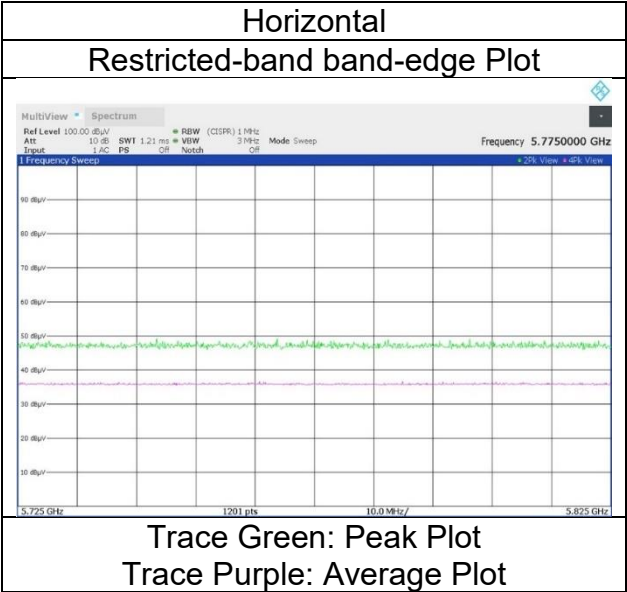
(* PK: Peak, AV: Average, QP: Quasi-Peak)														
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	50.23	32.41	-25.06	-	2.10	59.68	-35.55	-27.0	8.5	113	39	-
Vert.	5725.000	PK	50.17	32.01	-25.06	-	2.10	59.22	-36.01	-27.0	9.0	226	326	-

Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 106-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 60



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 242-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / 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.	5118.953	PK	51.29	32.12	-25.57	-	2.10	59.94	73.9	13.9	147	36	-
Hori.	5150.000	PK	49.59	32.09	-25.53	-	2.10	58.25	73.9	15.6	147	36	-
Hori.	5118.953	AV	35.64	32.12	-25.57	-	2.10	44.29	53.9	9.6	147	36	VBW: 500 Hz
Hori.	5150.000	AV	35.62	32.09	-25.53	-	2.10	44.28	53.9	9.6	147	36	VBW: 500 Hz
Vert.	5150.000	PK	49.90	31.86	-25.53	-	2.10	58.33	73.9	15.5	147	351	-
Vert.	5150.000	AV	35.44	31.86	-25.53	-	2.10	43.87	53.9	10.0	147	351	VBW: 500 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).

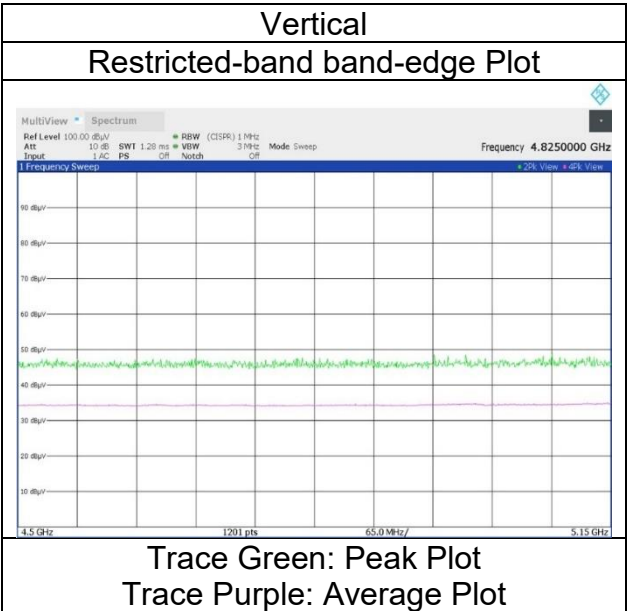
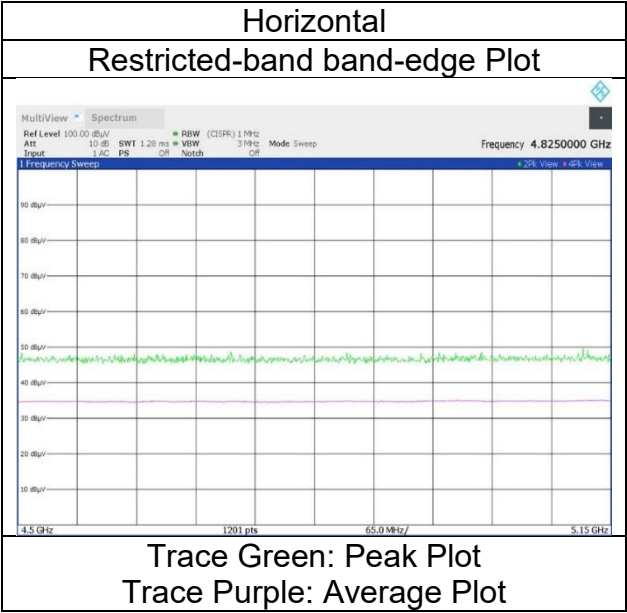
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 242-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 61



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 242-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 64
(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	50.04	31.84	-25.29	-	2.10	58.69	73.9	15.2	175	38	-
Hori.	5350.000	AV	35.36	31.84	-25.29	-	2.10	44.01	53.9	9.8	175	38	VBW: 500 Hz
Vert.	5350.000	PK	49.06	31.58	-25.29	-	2.10	57.45	73.9	16.4	196	333	-
Vert.	5388.096	PK	53.33	31.67	-25.25	-	2.10	61.85	73.9	12.0	196	333	-
Vert.	5392.215	PK	53.30	31.68	-25.24	-	2.10	61.84	73.9	12.0	196	333	-
Vert.	5398.490	PK	52.58	31.70	-25.24	-	2.10	61.14	73.9	12.7	196	333	-
Vert.	5403.781	PK	52.83	31.71	-25.24	-	2.10	61.40	73.9	12.5	196	333	-
Vert.	5408.105	PK	54.09	31.72	-25.23	-	2.10	62.68	73.9	11.2	196	333	-
Vert.	5350.000	AV	35.20	31.58	-25.29	-	2.10	43.59	53.9	10.3	196	333	VBW: 500 Hz
Vert.	5388.096	AV	35.12	31.67	-25.25	-	2.10	43.64	53.9	10.2	196	333	VBW: 500 Hz
Vert.	5392.215	AV	35.18	31.68	-25.24	-	2.10	43.72	53.9	10.1	196	333	VBW: 500 Hz
Vert.	5398.490	AV	35.15	31.70	-25.24	-	2.10	43.71	53.9	10.1	196	333	VBW: 500 Hz
Vert.	5403.781	AV	35.20	31.71	-25.24	-	2.10	43.77	53.9	10.1	196	333	VBW: 500 Hz
Vert.	5408.105	AV	35.24	31.72	-25.23	-	2.10	43.83	53.9	10.0	196	333	VBW: 500 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).

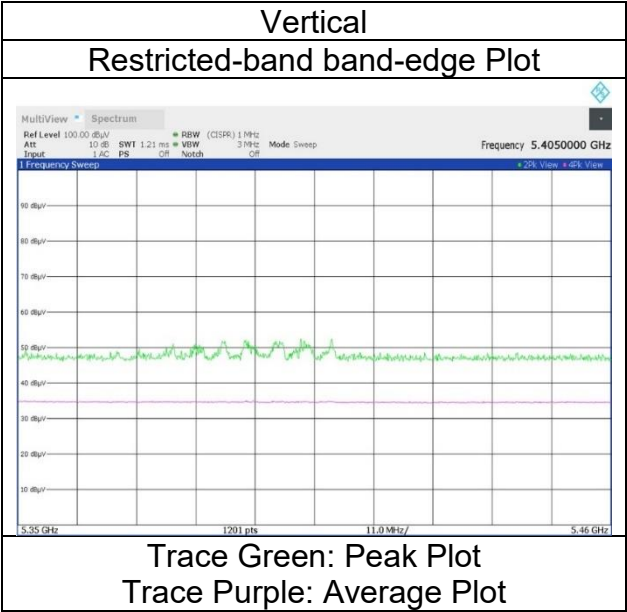
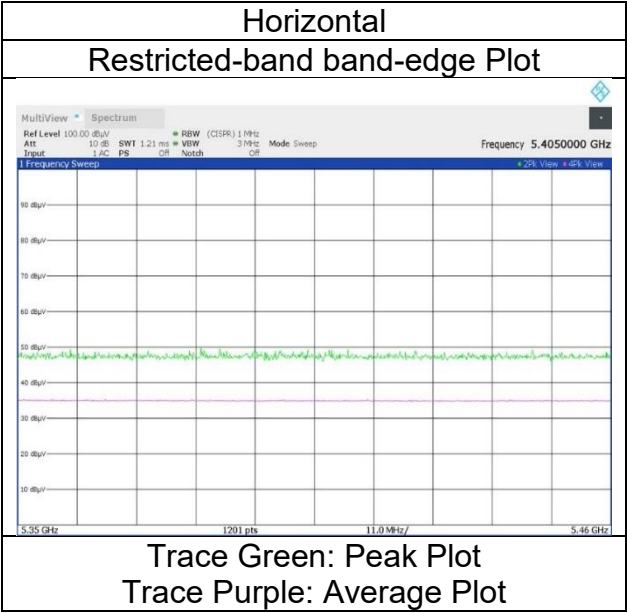
Distance factor : 1 GHz - 10 GHz : 20log (3.82 m / 3.0 m) = 2.10 dB

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 242-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 64



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 242-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / 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	49.59	32.06	-25.16	-	2.10	58.59	73.9	15.3	147	50	-
Hori.	5460.000	AV	35.19	32.06	-25.16	-	2.10	44.19	53.9	9.7	147	50	VBW: 500 Hz
Vert.	5444.270	PK	51.89	31.77	-25.19	-	2.10	60.57	73.9	13.3	254	329	-
Vert.	5460.000	PK	49.94	31.78	-25.16	-	2.10	58.66	73.9	15.2	254	329	-
Vert.	5444.270	AV	35.13	31.77	-25.19	-	2.10	43.81	53.9	10.0	254	329	VBW: 500 Hz
Vert.	5460.000	AV	35.11	31.78	-25.16	-	2.10	43.83	53.9	10.0	254	329	VBW: 500 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	49.77	32.07	-25.15	-	2.10	58.79	-36.44	-27.0	9.4	147	50	-
Vert.	5470.000	PK	49.15	31.79	-25.15	-	2.10	57.89	-37.34	-27.0	10.3	254	329	-

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).

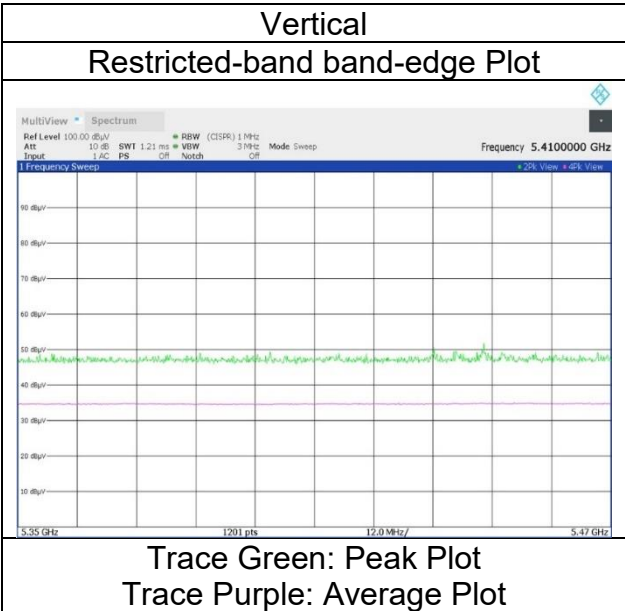
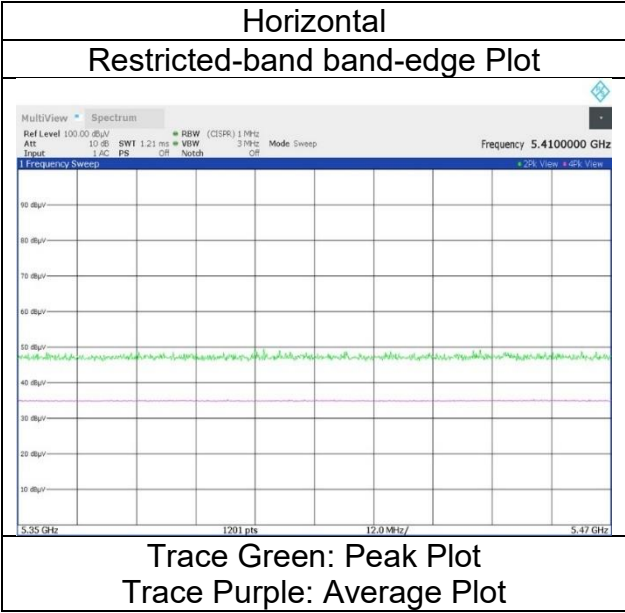
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 242-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 61



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 242-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 64
(Calculation) (above 1 GHz Outside of the restricted band)

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

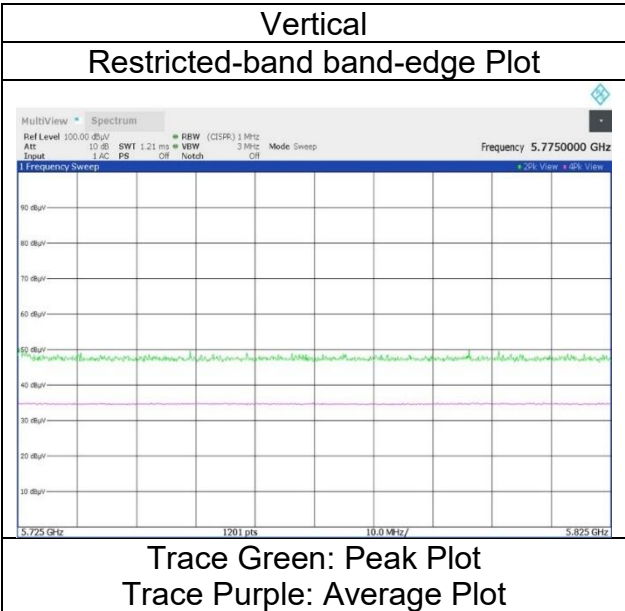
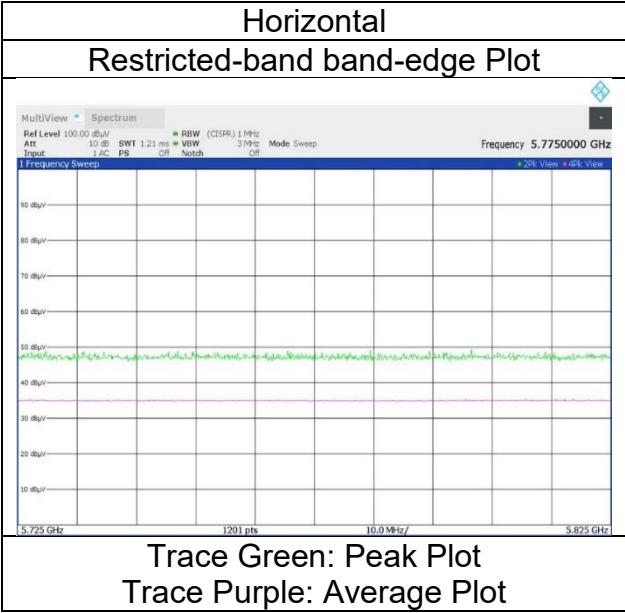
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant. Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	49.46	32.41	-25.06		2.10	58.91	-36.32	-27.0	9.3	134	45	-
Vert.	5725.000	PK	51.79	32.01	-25.06		2.10	60.84	-34.39	-27.0	7.3	230	328	-

Result [dBuV/m] = Reading + Ant. Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 242-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 64



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.	
Semi Anechoic Chamber	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
	(1 GHz to 6.4 GHz)	(1 GHz to 6.4 GHz)
Mode	TX 11ax-160(OFDMA) 484-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 65

(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.	5118.880	PK	52.59	32.12	-25.57	-	2.10	61.24	73.9	12.6	156	37	-
Hori.	5150.000	PK	50.87	32.09	-25.53	-	2.10	59.53	73.9	14.3	156	37	-
Hori.	5118.880	AV	36.24	32.12	-25.57	-	2.10	44.89	53.9	9.0	156	37	VBW: 1 kHz
Hori.	5150.000	AV	36.33	32.09	-25.53	-	2.10	44.99	53.9	8.9	156	37	VBW: 1 kHz
Vert.	5125.362	PK	52.98	31.92	-25.56	-	2.10	61.44	73.9	12.4	138	351	-
Vert.	5150.000	PK	50.49	31.86	-25.53	-	2.10	58.92	73.9	14.9	138	351	-
Vert.	5125.362	AV	35.74	31.92	-25.56	-	2.10	44.20	53.9	9.7	138	351	VBW: 1 kHz
Vert.	5150.000	AV	36.31	31.86	-25.53	-	2.10	44.74	53.9	9.1	138	351	VBW: 1 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).

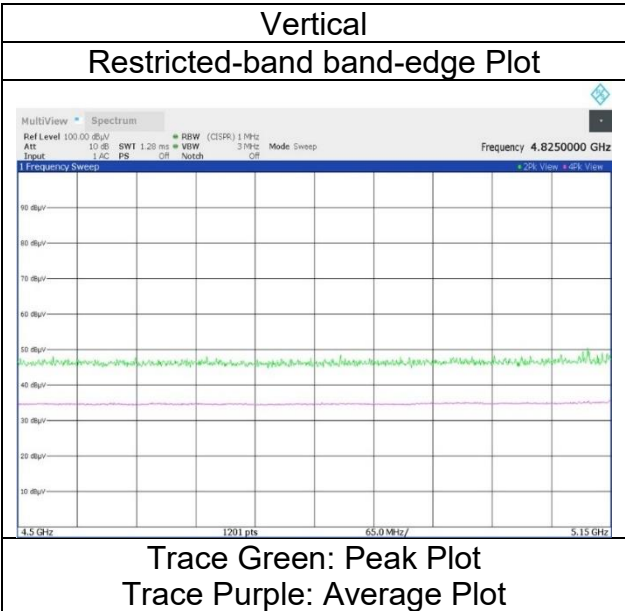
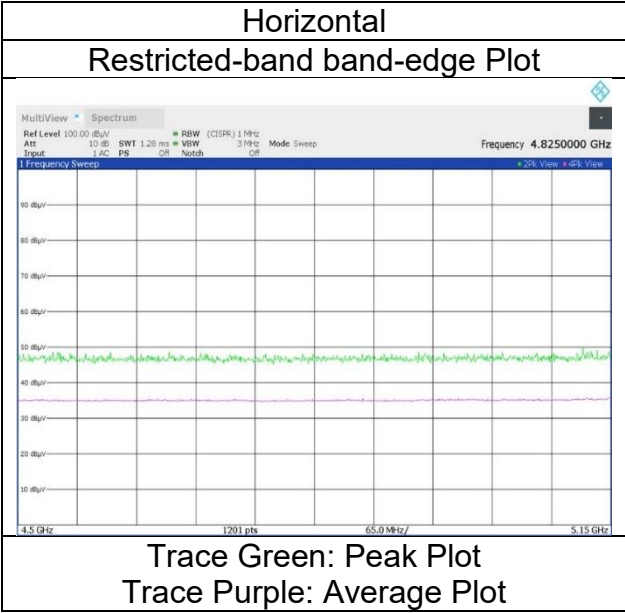
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 484-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 65



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 484-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 66
(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	49.84	31.84	-25.29	-	2.10	58.49	73.9	15.4	140	39	-
Hori.	5388.147	PK	51.35	31.93	-25.25	-	2.10	60.13	73.9	13.7	140	39	-
Hori.	5398.737	PK	51.24	31.96	-25.24	-	2.10	60.06	73.9	13.8	140	39	-
Hori.	5350.000	AV	36.01	31.84	-25.29	-	2.10	44.66	53.9	9.2	140	39	VBW: 1 kHz
Hori.	5388.147	AV	35.88	31.93	-25.25	-	2.10	44.66	53.9	9.2	140	39	VBW: 1 kHz
Hori.	5398.737	AV	35.99	31.96	-25.24	-	2.10	44.81	53.9	9.0	140	39	VBW: 1 kHz
Vert.	5350.000	PK	49.29	31.58	-25.29	-	2.10	57.68	73.9	16.2	153	331	-
Vert.	5354.625	PK	50.86	31.59	-25.29	-	2.10	59.26	73.9	14.6	153	331	-
Vert.	5388.182	PK	53.06	31.67	-25.25	-	2.10	61.58	73.9	12.3	153	331	-
Vert.	5392.177	PK	52.88	31.68	-25.24	-	2.10	61.42	73.9	12.4	153	331	-
Vert.	5397.856	PK	52.82	31.70	-25.24	-	2.10	61.38	73.9	12.5	153	331	-
Vert.	5403.318	PK	52.32	31.71	-25.24	-	2.10	60.89	73.9	13.0	153	331	-
Vert.	5408.143	PK	52.90	31.72	-25.23	-	2.10	61.49	73.9	12.4	153	331	-
Vert.	5350.000	AV	35.44	31.58	-25.29	-	2.10	43.83	53.9	10.0	153	331	VBW: 1 kHz
Vert.	5354.625	AV	36.01	31.59	-25.29	-	2.10	44.41	53.9	9.4	153	331	VBW: 1 kHz
Vert.	5388.182	AV	35.63	31.67	-25.25	-	2.10	44.15	53.9	9.7	153	331	VBW: 1 kHz
Vert.	5392.177	AV	35.60	31.68	-25.24	-	2.10	44.14	53.9	9.7	153	331	VBW: 1 kHz
Vert.	5397.856	AV	35.80	31.70	-25.24	-	2.10	44.36	53.9	9.5	153	331	VBW: 1 kHz
Vert.	5403.318	AV	35.49	31.71	-25.24	-	2.10	44.06	53.9	9.8	153	331	VBW: 1 kHz
Vert.	5408.143	AV	35.53	31.72	-25.23	-	2.10	44.12	53.9	9.7	153	331	VBW: 1 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).

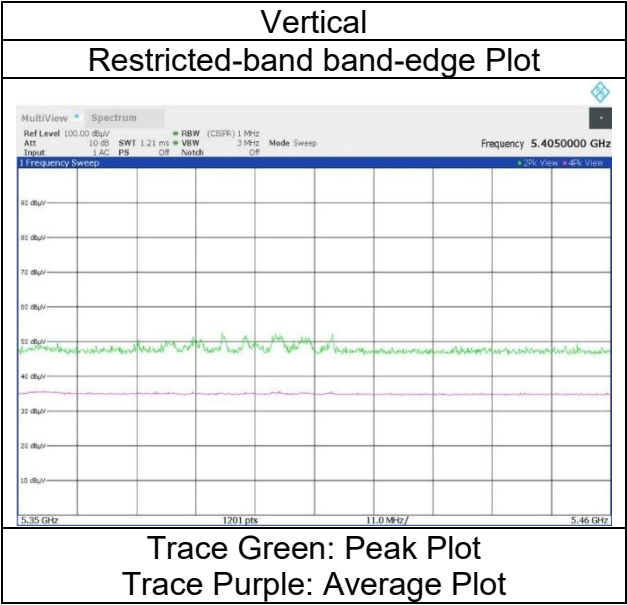
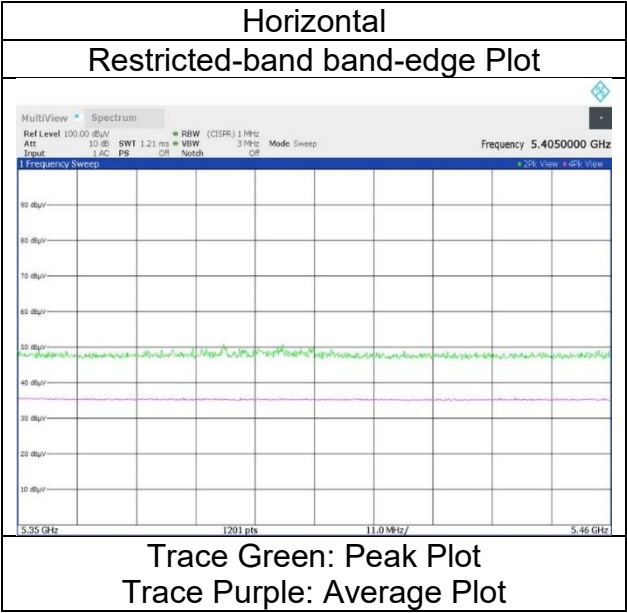
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 484-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 66



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 484-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / Index 65
(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	49.48	32.06	-25.16	-	2.10	58.48	73.9	15.4	113	46	-
Hori.	5460.000	AV	35.67	32.06	-25.16	-	2.10	44.67	53.9	9.2	113	46	VBW: 1 kHz
Vert.	5442.778	PK	53.37	31.77	-25.19	-	2.10	62.05	73.9	11.8	193	332	-
Vert.	5448.270	PK	52.59	31.78	-25.18	-	2.10	61.29	73.9	12.6	193	332	-
Vert.	5460.000	PK	49.11	31.78	-25.16	-	2.10	57.83	73.9	16.0	193	332	-
Vert.	5442.778	AV	35.35	31.77	-25.19	-	2.10	44.03	53.9	9.8	193	332	VBW: 1 kHz
Vert.	5448.270	AV	35.35	31.78	-25.18	-	2.10	44.05	53.9	9.8	193	332	VBW: 1 kHz
Vert.	5460.000	AV	35.29	31.78	-25.16	-	2.10	44.01	53.9	9.8	193	332	VBW: 1 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 : 20log (3.82 m / 3.0 m) = 2.10 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	50.01	32.07	-25.15	-	2.10	59.03	-36.20	-27.0	9.2	113	46	-
Vert.	5466.550	PK	49.94	31.79	-25.16	-	2.10	58.67	-36.56	-27.0	9.5	193	332	-
Vert.	5470.000	PK	50.05	31.79	-25.15	-	2.10	58.79	-36.44	-27.0	9.4	193	332	-

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).

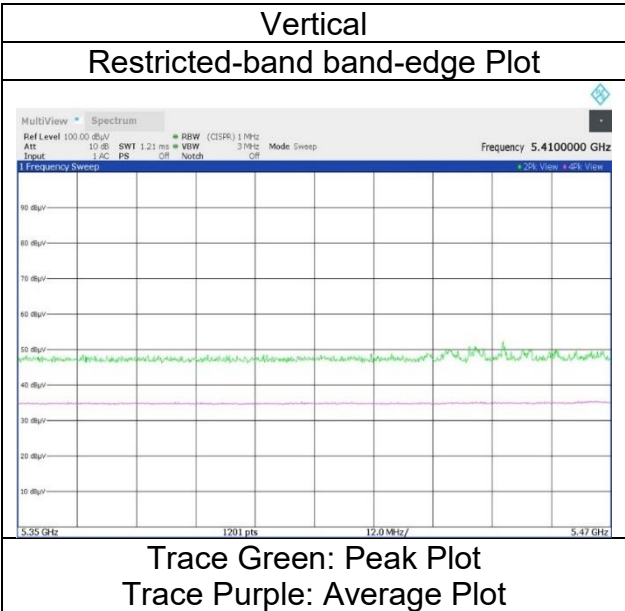
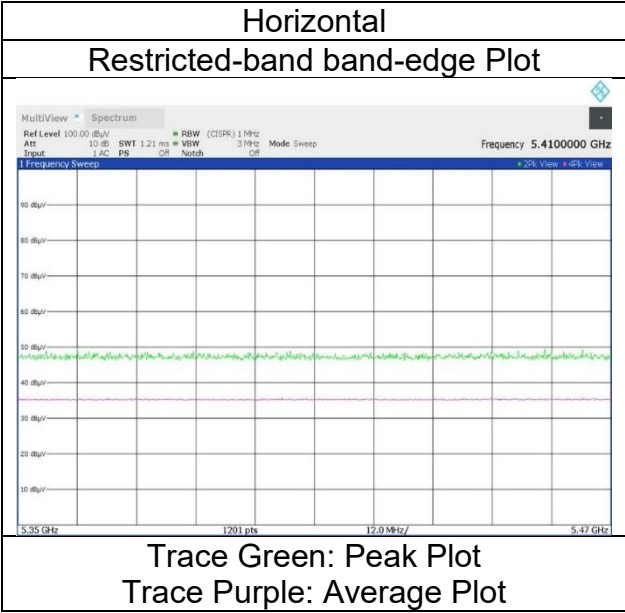
Distance factor : 1 GHz - 10 GHz : 20log (3.82 m / 3.0 m) = 2.10 dB

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 484-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 65



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 484-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 66
(Calculation) (above 1 GHz Outside of the restricted band)

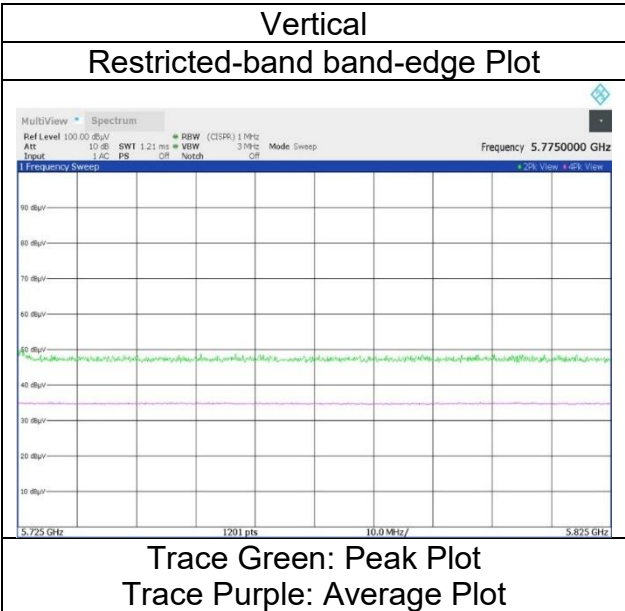
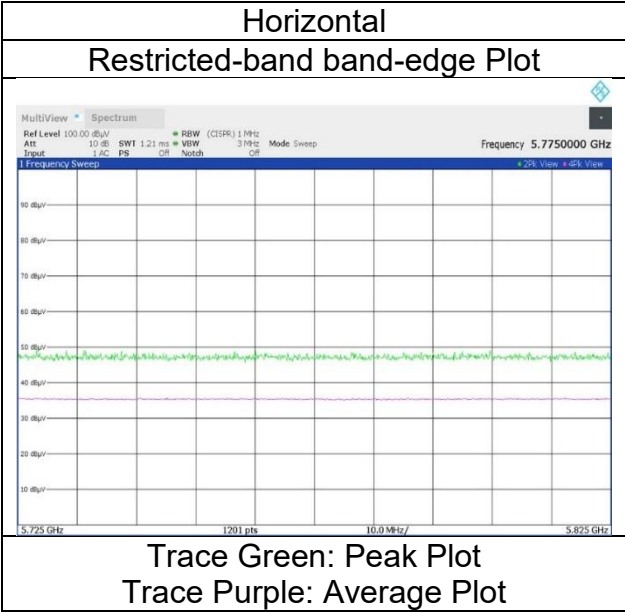
(* PK: Peak, AV: Average, QP: Quasi-Peak)														
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	50.27	32.41	-25.06	-	2.10	59.72	-35.51	-27.0	8.5	107	26	-
Vert.	5725.000	PK	51.37	32.01	-25.06	-	2.10	60.42	-34.81	-27.0	7.8	209	327	-

Result [dBuV/m] = Reading + Ant. Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier)) + Distance factor
Result (ERP [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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 484-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 66



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 996-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / Index 67
(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.	5128.218	PK	53.82	32.11	-25.56	-	2.10	62.47	73.9	11.4	183	37	-
Hori.	5150.000	PK	51.64	32.09	-25.53	-	2.10	60.30	73.9	13.6	183	37	-
Hori.	5128.218	AV	37.41	32.11	-25.56	-	2.10	46.06	53.9	7.8	183	37	VBW: 2 kHz
Hori.	5150.000	AV	37.39	32.09	-25.53	-	2.10	46.05	53.9	7.8	183	37	VBW: 2 kHz
Vert.	5127.023	PK	52.15	31.92	-25.56	-	2.10	60.61	73.9	13.2	175	330	-
Vert.	5150.000	PK	50.18	31.86	-25.53	-	2.10	58.61	73.9	15.2	175	330	-
Vert.	5127.023	AV	36.71	31.92	-25.56	-	2.10	45.17	53.9	8.7	175	330	VBW: 2 kHz
Vert.	5150.000	AV	36.30	31.86	-25.53	-	2.10	44.73	53.9	9.1	175	330	VBW: 2 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).

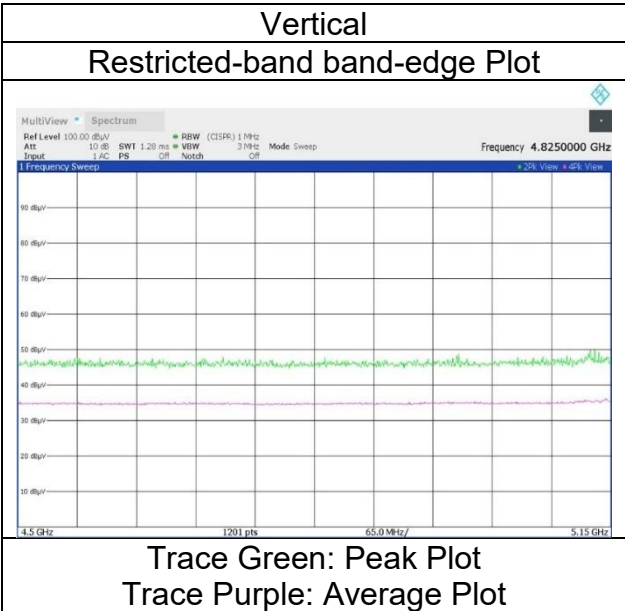
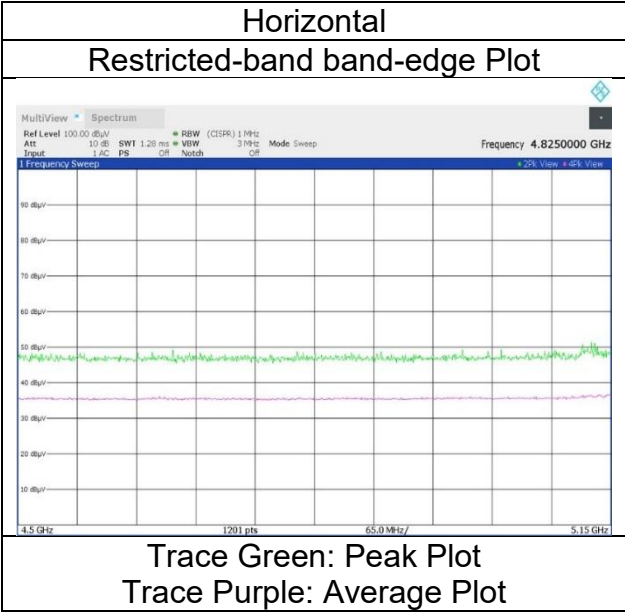
Distance factor : 1 GHz - 10 GHz : 20log (3.82 m / 3.0 m) = 2.10 dB

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 996-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 67



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 996-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 67
(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	50.06	31.84	-25.29	-	2.10	58.71	73.9	15.1	184	39	-
Hori.	5355.541	PK	51.03	31.86	-25.29	-	2.10	59.70	73.9	14.2	184	39	-
Hori.	5398.633	PK	52.91	31.96	-25.24	-	2.10	61.73	73.9	12.1	184	39	-
Hori.	5403.883	PK	51.92	31.97	-25.24	-	2.10	60.75	73.9	13.1	184	39	-
Hori.	5350.000	AV	36.54	31.84	-25.29	-	2.10	45.19	53.9	8.7	184	39	VBW: 2 kHz
Hori.	5355.541	AV	36.60	31.86	-25.29	-	2.10	45.27	53.9	8.6	184	39	VBW: 2 kHz
Hori.	5398.633	AV	36.80	31.96	-25.24	-	2.10	45.62	53.9	8.2	184	39	VBW: 2 kHz
Hori.	5403.883	AV	36.85	31.97	-25.24	-	2.10	45.68	53.9	8.2	184	39	VBW: 2 kHz
Vert.	5350.000	PK	48.84	31.58	-25.29	-	2.10	57.23	73.9	16.6	201	332	-
Vert.	5355.316	PK	52.07	31.59	-25.29	-	2.10	60.47	73.9	13.4	201	332	-
Vert.	5392.192	PK	52.98	31.68	-25.24	-	2.10	61.52	73.9	12.3	201	332	-
Vert.	5398.518	PK	53.92	31.70	-25.24	-	2.10	62.48	73.9	11.4	201	332	-
Vert.	5404.176	PK	53.31	31.71	-25.24	-	2.10	61.88	73.9	12.0	201	332	-
Vert.	5350.000	AV	35.87	31.58	-25.29	-	2.10	44.26	53.9	9.6	201	332	VBW: 2 kHz
Vert.	5355.316	AV	36.81	31.59	-25.29	-	2.10	45.21	53.9	8.6	201	332	VBW: 2 kHz
Vert.	5392.192	AV	36.24	31.68	-25.24	-	2.10	44.78	53.9	9.1	201	332	VBW: 2 kHz
Vert.	5398.518	AV	37.04	31.70	-25.24	-	2.10	45.60	53.9	8.3	201	332	VBW: 2 kHz
Vert.	5404.176	AV	36.72	31.71	-25.24	-	2.10	45.29	53.9	8.6	201	332	VBW: 2 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).

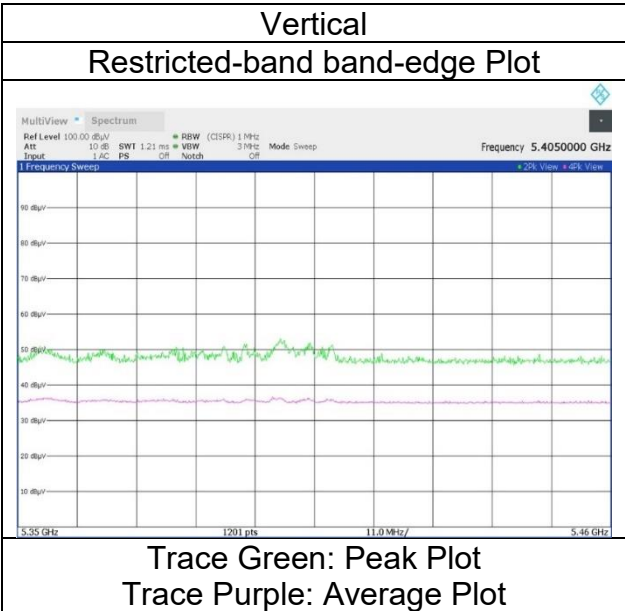
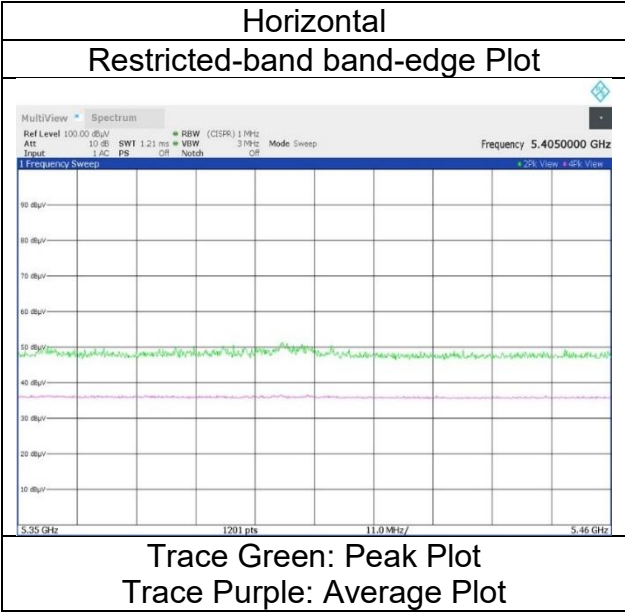
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 996-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 67



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
 (1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 996-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 0 / Index 67
(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	50.11	32.06	-25.16	-	2.10	59.11	73.9	14.7	183	46	-
Hori.	5460.000	AV	36.32	32.06	-25.16	-	2.10	45.32	53.9	8.5	183	46	VBW: 2 kHz
Vert.	5444.215	PK	51.73	31.77	-25.19	-	2.10	60.41	73.9	13.4	221	329	-
Vert.	5460.000	PK	50.53	31.78	-25.16	-	2.10	59.25	73.9	14.6	221	329	-
Vert.	5444.215	AV	36.09	31.77	-25.19	-	2.10	44.77	53.9	9.1	221	329	VBW: 2 kHz
Vert.	5460.000	AV	35.99	31.78	-25.16	-	2.10	44.71	53.9	9.1	221	329	VBW: 2 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	50.39	32.07	-25.15	-	2.10	59.41	-35.82	-27.0	8.8	183	46	-
Vert.	5468.226	PK	50.26	31.79	-25.16	-	2.10	58.99	-36.24	-27.0	9.2	221	329	-
Vert.	5470.000	PK	50.36	31.79	-25.15	-	2.10	59.10	-36.13	-27.0	9.1	221	329	-

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).

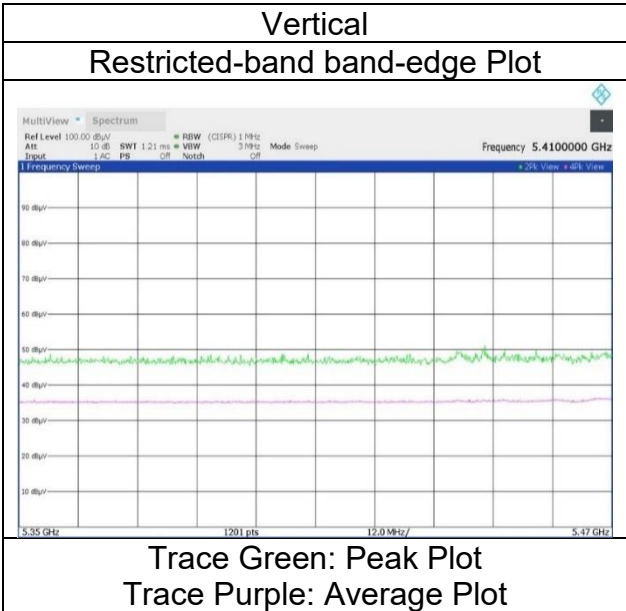
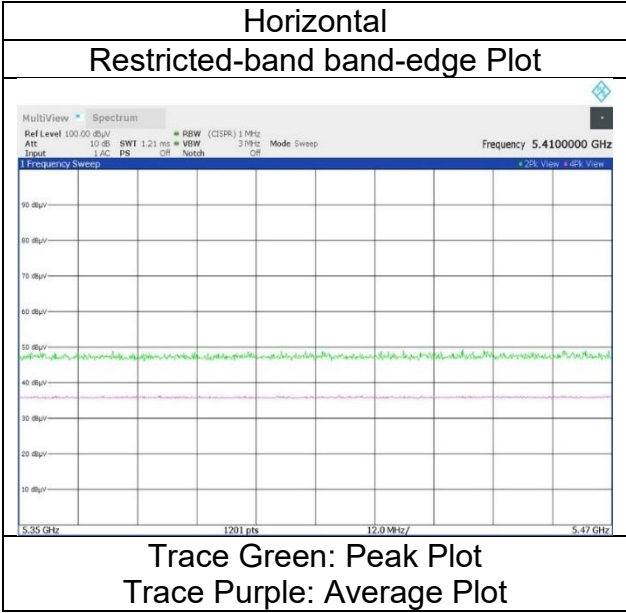
Distance factor : 1 GHz - 10 GHz : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 996-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 0 / Index 67



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 996-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Segment 1 / Index 67
(Calculation) (above 1 GHz Outside of the restricted band)

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

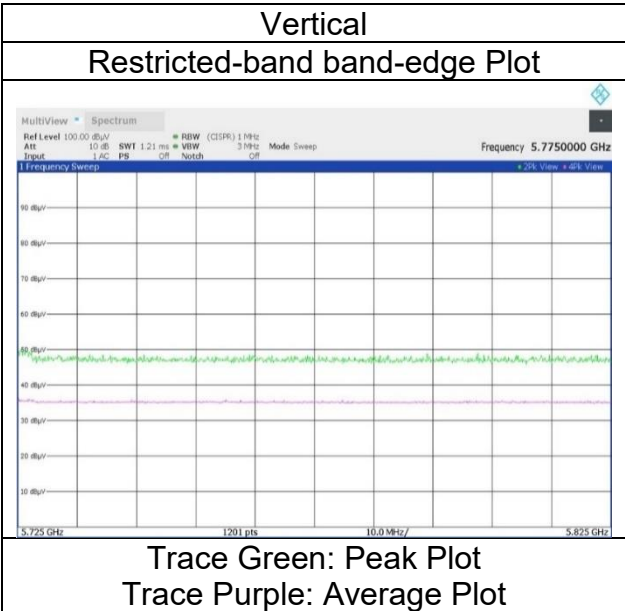
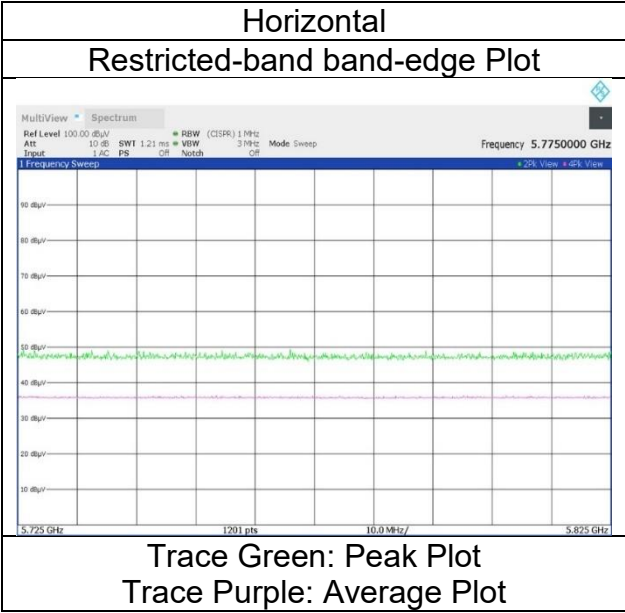
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (ERP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	50.51	32.41	-25.06		2.10	59.96	-35.27	-27.0	8.2	136	45	-
Vert.	5725.000	PK	51.59	32.01	-25.06		2.10	60.64	-34.59	-27.0	7.5	251	327	-

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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 996-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Segment 1 / Index 67



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 2*996-tone 5250 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 68
(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.	5105.006	PK	52.38	32.11	-25.59	-	2.10	61.00	73.9	12.9	109	42	-
Hori.	5146.188	PK	53.25	32.09	-25.54	-	2.10	61.90	73.9	12.0	109	42	-
Hori.	5150.000	PK	50.93	32.09	-25.53	-	2.10	59.59	73.9	14.3	109	42	-
Hori.	5350.000	PK	51.22	31.84	-25.29	-	2.10	59.87	73.9	14.0	109	42	-
Hori.	5355.286	PK	53.70	31.86	-25.29	-	2.10	62.37	73.9	11.5	109	42	-
Hori.	5105.006	AV	38.02	32.11	-25.59	-	2.10	46.64	53.9	7.2	109	42	VBW: 2 kHz
Hori.	5146.188	AV	38.74	32.09	-25.54	-	2.10	47.39	53.9	6.5	109	42	VBW: 2 kHz
Hori.	5150.000	AV	37.25	32.09	-25.53	-	2.10	45.91	53.9	7.9	109	42	VBW: 2 kHz
Hori.	5350.000	AV	37.09	31.84	-25.29	-	2.10	45.74	53.9	8.1	109	42	VBW: 2 kHz
Hori.	5355.286	AV	38.22	31.86	-25.29	-	2.10	46.89	53.9	7.0	109	42	VBW: 2 kHz
Vert.	5129.725	PK	53.96	31.91	-25.56	-	2.10	62.41	73.9	11.4	146	352	-
Vert.	5139.882	PK	56.68	31.89	-25.55	-	2.10	65.12	73.9	8.7	146	352	-
Vert.	5150.000	PK	53.77	31.86	-25.53	-	2.10	62.20	73.9	11.7	146	352	-
Vert.	5350.000	PK	52.11	31.58	-25.29	-	2.10	60.50	73.9	13.4	146	352	-
Vert.	5351.324	PK	53.41	31.58	-25.29	-	2.10	61.80	73.9	12.1	146	352	-
Vert.	5362.623	PK	55.02	31.61	-25.28	-	2.10	63.45	73.9	10.4	146	352	-
Vert.	5372.496	PK	54.27	31.63	-25.27	-	2.10	62.73	73.9	11.1	146	352	-
Vert.	5382.493	PK	54.12	31.66	-25.26	-	2.10	62.62	73.9	11.2	146	352	-
Vert.	5129.725	AV	38.48	31.91	-25.56	-	2.10	46.93	53.9	6.9	146	352	VBW: 2 kHz
Vert.	5139.882	AV	39.01	31.89	-25.55	-	2.10	47.45	53.9	6.4	146	352	VBW: 2 kHz
Vert.	5150.000	AV	38.85	31.86	-25.53	-	2.10	47.28	53.9	6.6	146	352	VBW: 2 kHz
Vert.	5350.000	AV	37.39	31.58	-25.29	-	2.10	45.78	53.9	8.1	146	352	VBW: 2 kHz
Vert.	5351.324	AV	38.08	31.58	-25.29	-	2.10	46.47	53.9	7.4	146	352	VBW: 2 kHz
Vert.	5362.623	AV	38.36	31.61	-25.28	-	2.10	46.79	53.9	7.1	146	352	VBW: 2 kHz
Vert.	5372.496	AV	37.99	31.63	-25.27	-	2.10	46.45	53.9	7.4	146	352	VBW: 2 kHz
Vert.	5382.493	AV	38.17	31.66	-25.26	-	2.10	46.67	53.9	7.2	146	352	VBW: 2 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 : $20\log(3.82\text{ m} / 3.0\text{ m}) = 2.10\text{ dB}$

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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 2*996-tone 5250 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

Index 68



* 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 WAC1 WAC1
Date April 28, 2024 May 5, 2024
Temperature / Humidity 20 deg. C / 65 % RH 20 deg. C / 53 % RH
Engineer Yusuke Tanikawara Shiro Kobayashi
(1 GHz to 6.4 GHz) (1 GHz to 6.4 GHz)
Mode TX 11ax-160(OFDMA) 2*996-tone 5570 MHz
Antenna type 5G_CH 0: monopole 5G_CH 1: slot

Index 68 (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	51.21	32.06	-25.16	-	2.10	60.21	73.9	13.6	136	46	-
Hori.	5460.000	AV	37.16	32.06	-25.16	-	2.10	46.16	53.9	7.7	136	46	VBW: 2 kHz
Vert.	5449.470	PK	54.96	31.78	-25.18	-	2.10	63.66	73.9	10.2	249	327	-
Vert.	5459.365	PK	55.17	31.78	-25.16	-	2.10	63.89	73.9	10.0	249	327	-
Vert.	5460.000	PK	54.55	31.78	-25.16	-	2.10	63.27	73.9	10.6	249	327	-
Vert.	5449.470	AV	37.61	31.78	-25.18	-	2.10	46.31	53.9	7.5	249	327	VBW: 2 kHz
Vert.	5459.365	AV	37.72	31.78	-25.16	-	2.10	46.44	53.9	7.4	249	327	VBW: 2 kHz
Vert.	5460.000	AV	37.54	31.78	-25.16	-	2.10	46.26	53.9	7.6	249	327	VBW: 2 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 : 20log (3.82 m / 3.0 m) = 2.10 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.	5460.860	PK	51.40	32.06	-25.16	-	2.10	60.40	-34.83	-27.0	7.8	136	46	-
Hori.	5470.000	PK	51.27	32.07	-25.15	-	2.10	60.29	-34.94	-27.0	7.9	136	46	-
Hori.	5725.000	PK	50.46	32.41	-25.06	-	2.10	59.91	-35.32	-27.0	8.3	136	46	-
Vert.	5470.000	PK	52.89	31.79	-25.15	-	2.10	61.63	-33.60	-27.0	6.5	249	327	-
Vert.	5725.000	PK	51.14	32.01	-25.06	-	2.10	60.19	-35.04	-27.0	8.0	249	327	-
Vert.	5732.136	PK	53.35	32.04	-25.06	-	2.10	62.43	-32.80	-27.0	5.8	249	327	-
Vert.	5741.888	PK	52.84	32.06	-25.05	-	2.10	61.95	-33.28	-27.0	6.2	249	327	-

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 (3.82 m / 3.0 m) = 2.10 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	WAC1	WAC1
Date	April 28, 2024	May 5, 2024
Temperature / Humidity	20 deg. C / 65 % RH	20 deg. C / 53 % RH
Engineer	Yusuke Tanikawara	Shiro Kobayashi
Mode	TX 11ax-160(OFDMA) 2*996-tone 5570 MHz	
Antenna type	5G_CH 0: monopole 5G_CH 1: slot	

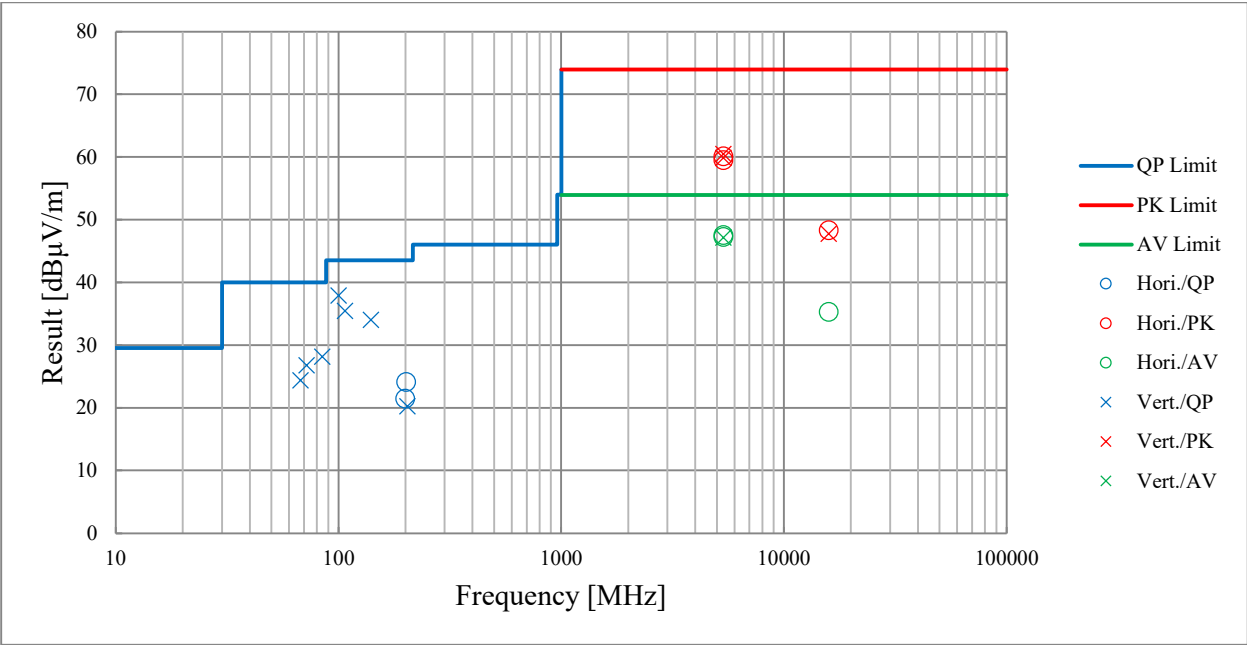
Index 68



* 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)

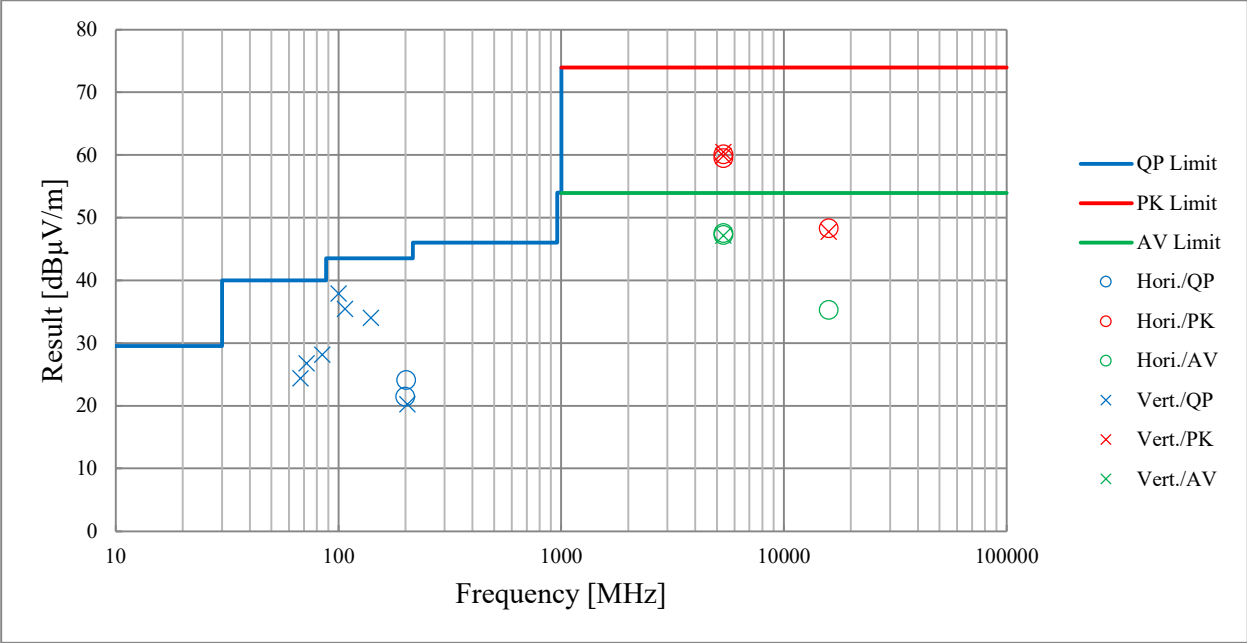
Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	SAC 2	WAC 1
Date	March 21, 2024	January 6, 2024	January 10, 2024
Temperature / Humidity	19 deg. C / 23 % RH	23 deg. C / 30 % RH	20 deg. C / 35 % RH
Engineer	Miku Ikudome (30 MHz to 1 GHz)	Makoto Hosaka (1 GHz to 6.4 GHz)	Miku Ikuome (6.4 GHz to 10 GHz)
Semi Anechoic Chamber	SAC 3	WAC 1	WAC 1
Date	December 21, 2023	January 17, 2024	June 12, 2024
Temperature / Humidity	21 deg. C / 26 % RH	24 deg. C / 31 % RH	24 deg. C / 67 % RH
Engineer	Hiromasa Sato (10 GHz to 18 GHz)	Hiromasa Sato (18 GHz to 26.5 GHz)	Hiromasa Sato (26.5 GHz to 40 GHz)
Mode	Tx 11ac-80 5290 MHz		
Antenna type	5G_CH 0: monopole 5G_CH 1: monopole		



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

Radiated Spurious Emission
(Plot data, Worst case mode for Maximum Conducted Output Power)

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC1	WAC1	WAC1
Date	March 21, 2024	January 13, 2024	January 16, 2024
Temperature / Humidity	19 deg. C / 23 % RH	21 deg. C / 35 % RH	20 deg. C / 30 % RH
Engineer	Miku Ikudome (30 MHz to 1 GHz)	Kouki Yamada (1 GHz to 10 GHz)	Yohsuke Matsuzawa (10 GHz to 18 GHz)
Semi Anechoic Chamber	WAC1	WAC1	
Date	January 17, 2024	June 13, 2024	
Temperature / Humidity	21 deg. C / 20 % RH	23 deg. C / 64 % RH	
Engineer	Miku Ikudome (18 GHz to 26.5 GHz)	Hiromasa Sato (26.5 GHz to 40 GHz)	
Mode	Tx 11ac-80 5290 MHz		
Antenna type	5G_CH 0: monopole 5G_CH 1: slot		

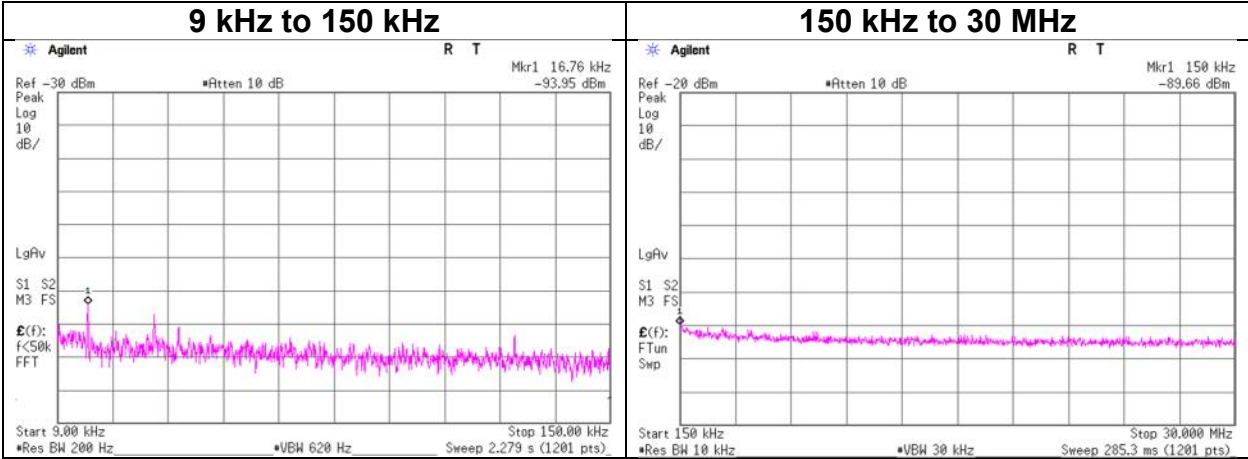


*These plots data contains sufficient number to show the trend of characteristic features for EUT.

Conducted Spurious Emission

Test place
Date
Temperature / Humidity
Engineer
Mode

Shonan EMC Lab. No.8 Shielded Room
June 24, 2024
25 deg. C / 55 % RH
Yosuke Murakami
Tx 11ac-80 5290 MHz



Frequency	Reading	Cable Loss	Attenuator	Antenna Gain*	N	EIRP	Distance	Ground bounce	E	Limit	Margin	Remark
[kHz]	[dBm]	[dB]	[dB]	[dBi]	(Number of Output)	[dBm]	[m]	[dB]	(field strength) [dBuV/m]	[dBuV/m]	[dB]	
16.76	-93.95	0.01	9.83	2.0	2	-79.1	300	6.0	-17.8	43.1	60.9	-
150.00	-89.66	0.01	9.83	2.0	2	-74.8	300	6.0	-13.6	24.0	37.6	-

$E \text{ [dBuV/m]} = \text{EIRP [dBm]} - 20 \log (\text{Distance [m]}) + \text{Ground bounce [dB]} + 104.8 \text{ [dBuV/m]}$
 $\text{EIRP [dBm]} = \text{Reading [dBm]} + \text{Cable loss [dB]} + \text{Attenuator Loss [dB]} + \text{Antenna gain [dBi]} + 10 * \log (N)$
N: Number of output
*2.0 dBi was applied to the test result based on KDB 789033 since antenna gain was less than 2.0 dBi.

APPENDIX 2: Test Instruments

Test Equipment (1/4)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	145089	Spectrum Analyzer	Keysight Technologies Inc	E4446A	MY46180525	2023/12/13	12
AT	145095	Digital Tester	SANWA	PC500	7019224	2024/05/29	12
AT	145111	Digital Tester	SANWA	PC500	7019232	2023/09/25	12
AT	145113	Digital Multimeter	Agilent Technologies	U1251A	TW46350095	2023/09/25	12
AT	145745	Terminator	TME	CT-01 BP	-	2023/12/08	12
AT	146190	Terminator	TME	CT-01 BP	-	2023/12/08	12
AT	146198	Terminator	TME	CT-01 BP	-	2024/02/16	12
AT	146207	Terminator	JFW	50T-128	-	2023/11/22	12
AT	146212	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997828	2023/09/25	12
AT	146223	Spectrum Analyzer	Keysight Technologies Inc	N9010A-526	MY48031482	2023/10/07	12
AT	146247	Power Meter	Keysight Technologies Inc	8990B	MY51000272	2024/05/14	12
AT	146310	Power sensor	Keysight Technologies Inc	N1923A	MY5326009	2024/05/14	12
AT	146311	Power sensor	Keysight Technologies Inc	N1923A	MY5349008	2024/05/14	12
AT	146362	Thermo-Hygrometer	CUSTOM. Inc	CTH-190	K-07	2023/08/03	12
AT	160493	Attenuator	Weinschel Corp.	54A-10	83406	2023/12/08	12
AT	160494	Attenuator	Weinschel Corp.	54A-10	83420	2023/12/12	12
AT	160495	Attenuator	Weinschel Corp.	54A-20	86752	2023/12/08	12
AT	160496	Attenuator	Weinschel Corp.	54A-20	87636	2023/12/08	12
AT	169910	Power Meter	Keysight Technologies Inc	8990B	MY51000448	2023/09/28	12
AT	169911	Power sensor	Keysight Technologies Inc	N1923A	MY57270004	2023/09/28	12
AT	169912	Power sensor	Keysight Technologies Inc	N1923A	MY57290005	2023/09/28	12
AT	171614	Terminator	Weinschel - API Technologies Corp	M1459A	88995	2024/05/10	12
AT	171615	Terminator	Weinschel - API Technologies Corp	M1459A	88997	2024/05/09	12
AT	171616	Terminator	Weinschel - API Technologies Corp	M1459A	89025	2024/05/09	12
AT	179106	Coaxial Cable	Junkosha	MWX241-01000KMSKMS/B	1901Q061-R	2024/04/10	12
AT	179107	Coaxial Cable	Junkosha	MWX241-01000KMSKMS/B	1901Q062-R	2024/04/10	12
AT	191845	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2023/08/07	12
AT	191847	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2023/08/03	12
AT	196937	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	803605/2	2024/03/07	12
AT	196941	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	803093/2	2024/03/07	12
AT	235604	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY45300743	2024/05/23	12
AT	236410	Spectrum Analyzer	Keysight Technologies Inc	N9030B	MY63050151	2024/04/26	12
AT	240499	Spectrum Analyzer	Keysight Technologies Inc	N9020B	MY59050557	2023/10/21	12
AT	242075	Terminator	Weinschel - API Technologies Corp	M1459A	121073	2023/11/17	12

Test Equipment (2/4)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	245176	Coaxial Cable	Hayashi-Repic co., Ltd.	KMS020B-GL140sE-KMS020B-2.0m	49334-01-03	2024/02/14	12
AT	245177	Coaxial Cable	Hayashi-Repic co., Ltd.	KMS020B-GL140sE-KMS020B-2.0m	49334-01-04	2024/02/14	12
AT,RE	145800	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY48250106	2024/03/25	12
AT,RE	145801	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY48250152	2024/02/27	12
CE	145035	Coaxial Cable	Suhner	RG223U	-	2024/04/01	12
CE	145541	LISN	Rohde & Schwarz	ENV216	100514	2024/02/06	12
CE	145542	LISN	Rohde & Schwarz	ENV216	100516	2024/02/06	12
CE	145746	Terminator	TME	CT-01 BP	-	2023/12/08	12
CE	146209	Test Receiver	Rohde & Schwarz	ESU26	100484	2023/09/22	12
CE	146294	Humidity Indicator	A&D Company	AD-5681	4062118	-	-
CE	199786	Attenuator	JFW	50HF-006N	-	2024/06/14	12
CE,RE	146210	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997823	2023/09/25	12
CE,RE	146432	Tape Measure	TAJIMA	GL19-55	-	-	-
CE,RE	170932	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3(RE,CE,ME,PE)	Ver 3.1.0546	-	-
RE	144938	Highpass Filter	Micro-Tronics	HPM50112	7	2023/10/11	12
RE	144941	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	230	2024/05/13	12
RE	144942	Horn Antenna	ETS-Lindgren (Cedar Park, Texas)	3160-10	00047525	2024/05/23	12
RE	144975	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/NS4906	-/0901-270(RF Selector)	2024/04/10	12
RE	144976	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/NS4906	-/0901-270(RF Selector)	2024/04/10	12
RE	145004	Pre Amplifier	SONOMA	310N	290212	2024/02/13	12
RE	145005	Pre Amplifier	Toyo Corporation	TPA0118-36	2046104	2024/02/16	12
RE	145007	Pre Amplifier	Toyo Corporation	HAP18-26W	19	2024/03/05	12
RE	145022	Biconical Antenna	Schwarzbeck Mess-Elektronik OHG	BBA9106	91032665	2024/04/10	12
RE	145128	Pre Amplifier	Toyo Corporation	TPA0118-36	1440490	2024/05/08	12
RE	145129	Pre Amplifier	Toyo Corporation	HAP26-40W	B3208602403-176	2024/05/09	12
RE	145136	Attenuator	Keysight Technologies Inc	8493C-010	74864	2023/10/12	12
RE	145137	Attenuator	Keysight Technologies Inc	8493C-010	74865	2023/10/11	12
RE	145176	Coaxial Cable	Suhner	SUCOFLEX 102	32703/2	2023/08/23	12
RE	145377	Highpass Filter	Micro-Tronics	HPM50112	28	2023/10/11	12
RE	145384	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-726	2024/03/11	12
RE	145501	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-739	2024/03/20	12
RE	145512	Horn Antenna	ETS-Lindgren	3160-09	00094868	2024/06/20	12
RE	145514	Horn Antenna	ETS-Lindgren	3160-10	00092383	2024/06/20	12
RE	145528	Logperiodic Antenna	Schwarzbeck Mess-Elektronik OHG	VUSLP9111B	195	2024/04/10	12

Test Equipment (3/4)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	145563	Semi-Anechoic Chamber	TDK	SAEC-02(NSA)	2	2024/03/22	12
RE	145565	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	2024/04/03	12
RE	145566	Semi-Anechoic Chamber	TDK	SAEC-03(SVSWR)	3	2024/05/23	12
RE	145598	Semi-Anechoic Chamber	TDK	SAEC-02(SVSWR)	2	2024/05/22	12
RE	145793	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997819	2024/05/29	12
RE	146105	Antenna Tilt Jig	Intelligent System Engineering Co., Ltd	Antenna Tilt Jig	T-S003	-	-
RE	150463	Test Receiver	Rohde & Schwarz	ESW44	101581	2023/08/25	12
RE	150921	Attenuator	JFW	50HF-003N	-	2024/02/13	12
RE	151617	Coaxial Cable	Junkosha	MWX221-01000NFSNMS/B	1612S006	-	-
RE	156380	Coaxial Cable	Huber+Suhner	SUCOFLEX_104_E	SN MY 13406/4E	2024/05/09	12
RE	160899	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46185516	2023/12/29	12
RE	166491	Coaxial Cable	Junkosha	MWX221-01000NFSNMS/B	1612S005	2024/01/10	12
RE	167095	Attenuator	JFW	50HF-006N	-	2024/02/13	12
RE	168300	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	800375/4A	-	-
RE	178573	Coaxial Cable	Huber+Suhner	SUCOFLEX_104_E	MY13407/4E	2024/03/05	12
RE	179540	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	802815/2	2024/03/05	12
RE	191838	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2023/08/03	12
RE	191840	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2023/08/03	12

Test Equipment (4/4)

Test Item	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	194685	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	711	2024/03/20	12
RE	196945	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	803414/2	2024/03/12	12
RE	200010	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	575618/4	2024/06/05	12
RE	207277	Measuring	ASKUL	-	-	-	-
RE	207280	Tape Measure	ASKUL	-	-	-	-
RE	213530	Test Receiver	Rohde & Schwarz	ESW44	103068	2024/02/22	12
RE	235267	Test Receiver	Rohde & Schwarz	ESW44	103018	2024/03/05	12
RE	235268	Test Receiver	Rohde & Schwarz	ESW44	103212	2023/12/26	12
RE	235639	DIGITAL MULTIMETER	HIOKI E.E. CORPORATION	DT4261	230313156	2024/05/29	12
RE	235735	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2024/04/28	12
RE	235738	Thermo-Hygrometer	CUSTOM. Inc	CTH-230	-	2024/04/28	12
RE	236212	Semi-Anechoic Chamber	TDK	SWAC-01(NSA)	1	2024/05/09	12
RE	236586	Horn Antenna	AINFO Inc.	LB-42-25-C2-KF	2020087000114	2024/04/05	12
RE	236616	Semi-Anechoic Chamber	TDK	SWAC-01(SVSWR)	1	2024/06/04	12
RE	236686	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	787	2024/04/19	12
RE	236708	Coaxial Cable	Hayashi-Repic co., Ltd.	NMS079B-GL310C-SMS117B-2m	47256-02-03	2024/05/09	12
RE	236710	Coaxial Cable	Hayashi-Repic co., Ltd.	KMS020B-GL140sE-KMS020B-7.0m	47256-03-01	2024/05/09	12
RE	236711	Coaxial Cable	Hayashi-Repic co., Ltd.	KMS020B-GL140sE-KMS020B-7.0m	47256-03-02	2024/05/09	12
RE	236799	Antenna Tilt Jig	Intelligent System Engineering Co., Ltd	Antenna Tilt Jig	1512004-0019-052	-	-
RE	236869	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	200084/4A	-	-
RE	237719	Pre Amplifier	TSJ (Techno Science Japan)	MLA-18265-J03	23060017	2024/06/05	12
RE	237784	RF RELAY MATRIX	TSJ (Techno Science Japan)	RFM-E221261R	07795	2023/11/01	12
RE	243214	Coaxial Cable	Hayashi-Repic co., Ltd.	SMS13-13A26-NMS13-9.0m	49306-01-02	2024/06/12	12
RE	243215	Coaxial Cable	Hayashi-Repic co., Ltd.	SMS13-13A26-NMS13-9.0m	49306-01-03	2024/06/12	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:

AT: Antenna Terminal Conducted test

CE: Conducted Emission

RE: Radiated Emission