Radiated Spurious Emission

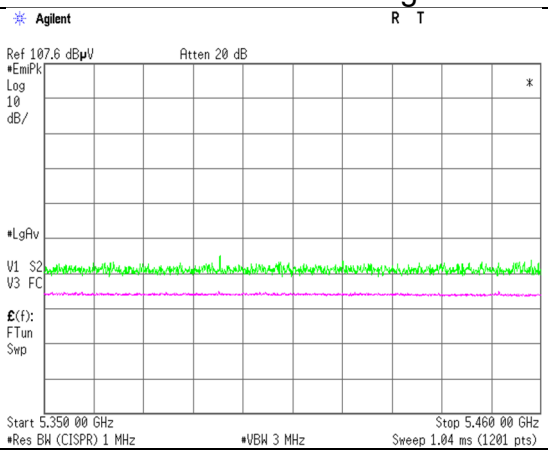
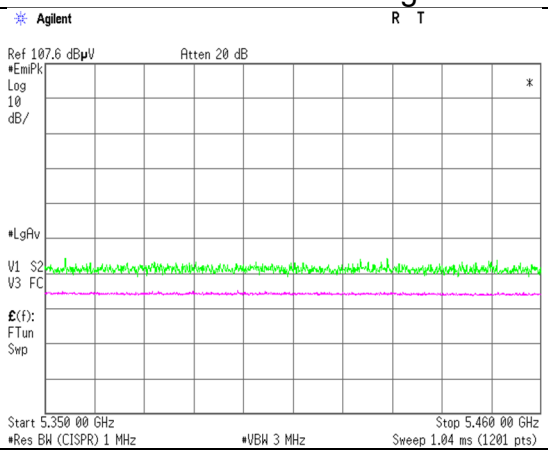
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	February 21, 2024
Temperature / Humidity	20 deg. C / 43 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-80 5290 MHz with 11n-20 2462 MHz

(above 1 GHz Inside of the restricted band)

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5350.000	PK	50.77	32.99	15.16	45.75	2.26	55.43	73.9	18.4	345	0	
Hori.	5350.000	AV	40.12	32.99	15.16	45.75	2.26	44.78	53.9	**9.1**	345	0	VBW: 4.3 kHz
Vert.	5350.000	PK	51.03	32.99	15.16	45.75	2.26	55.69	73.9	18.2	280	347	
Vert.	5350.000	AV	40.03	32.99	15.16	45.75	2.26	44.69	53.9	9.2	280	347	VBW: 4.3 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 (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	February 21, 2024
Temperature / Humidity	20 deg. C / 43 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-80 5530 MHz with 11n-20 2462 MHz

(above 1 GHz Inside of the restricted band)

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5460.000	PK	52.41	33.14	15.22	45.68	2.26	57.35	73.9	16.5	365	292	
Hori.	5460.000	AV	41.28	33.14	15.22	45.68	2.26	46.22	53.9	7.6	365	292	VBW: 4.3 kHz
Vert.	5460.000	PK	51.78	33.14	15.22	45.68	2.26	56.72	73.9	17.1	272	8	
Vert.	5460.000	AV	41.47	33.14	15.22	45.68	2.26	46.41	53.9	**7.4**	272	8	VBW: 4.3 kHz

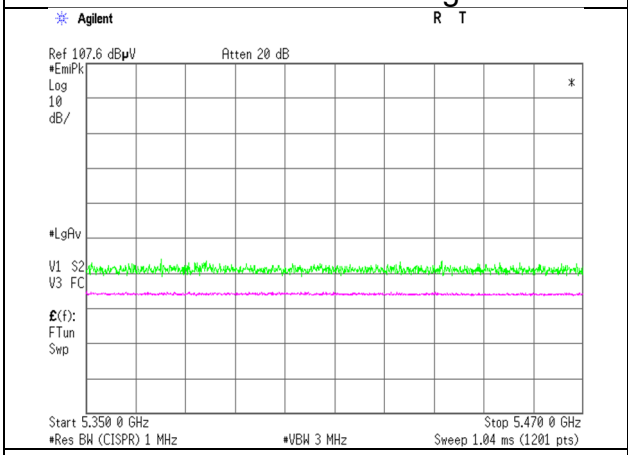
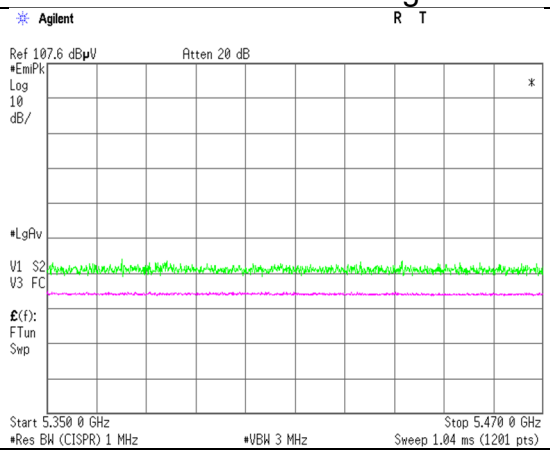
Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).
Distance factor : 1 GHz - 10 GHz : 20log (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 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	52.89	33.17	15.23	45.68	2.26	57.87	-37.35	-27.0	10.3	365	292	
Vert.	5470.000	PK	52.48	33.17	15.23	45.68	2.26	57.46	-37.76	-27.0	10.7	272	8	

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 (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

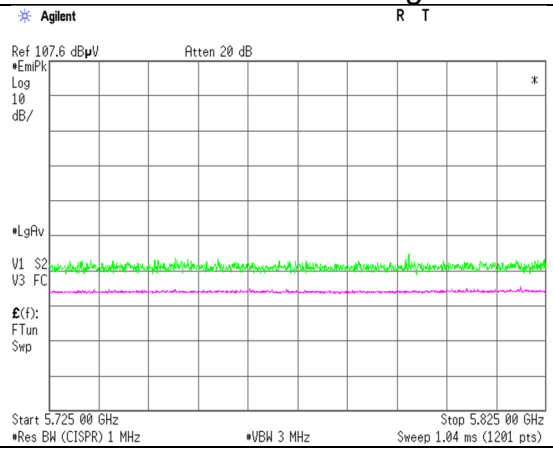
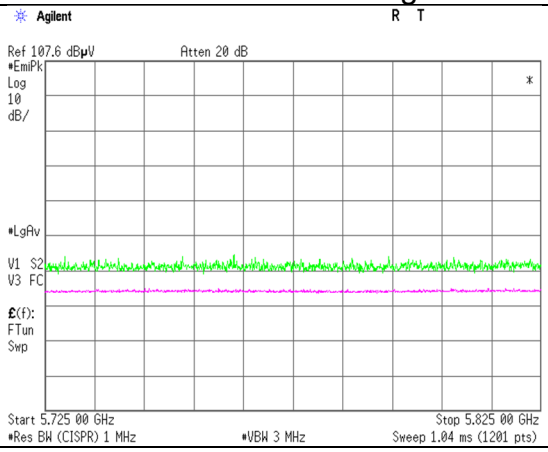
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	February 21, 2024
Temperature / Humidity	20 deg. C / 43 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-80 5610 MHz with 11n-20 2462 MHz

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5725.000	PK	52.04	33.64	15.39	45.70	2.26	57.63	-37.59	-27.0	10.5	258	17	
Vert.	5725.000	PK	52.14	33.64	15.39	45.70	2.26	57.73	-37.49	-27.0	**10.4**	265	359	

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 (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	February 21, 2024
Temperature / Humidity	20 deg. C / 43 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-80 5775 MHz with 11n-20 2462 MHz

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

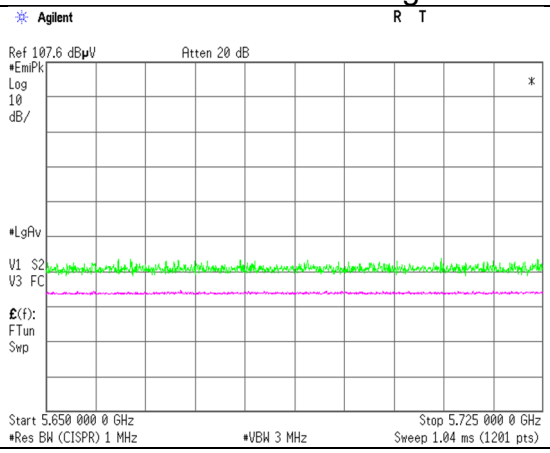
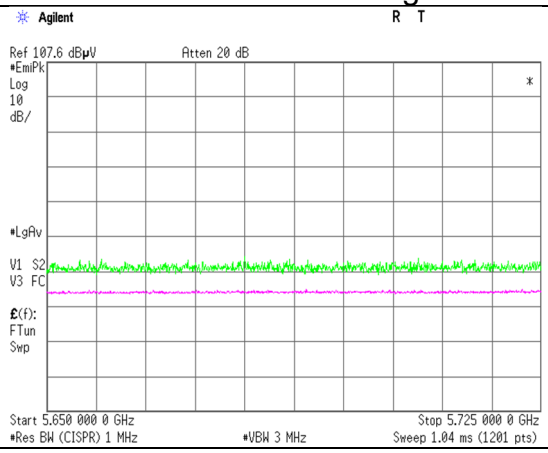
(* PK: Peak, AV: Average, QP: Quasi-Peak)

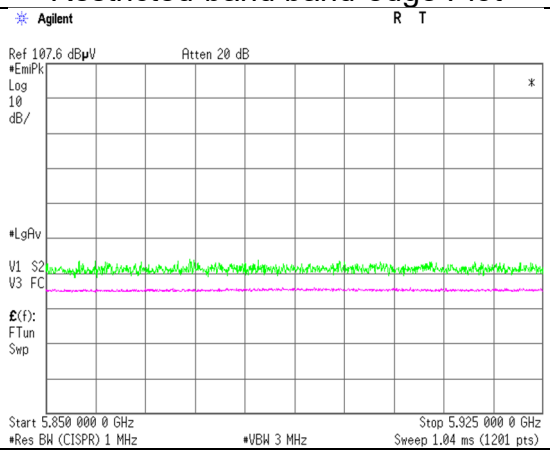
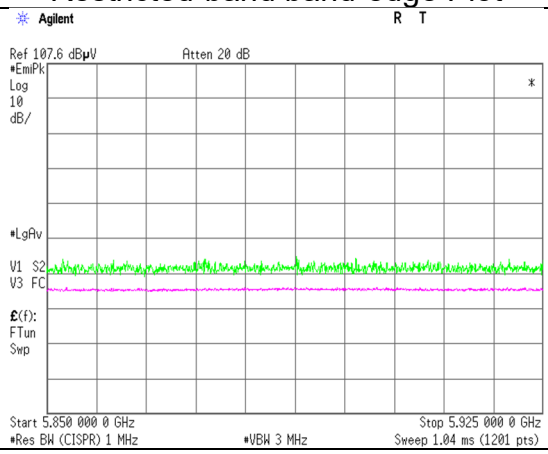
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	51.35	33.39	15.34	45.73	2.26	56.61	-38.61	-27.0	11.6	262	295	
Hori.	5700.000	PK	52.68	33.53	15.37	45.72	2.26	58.12	-37.10	10.0	47.1	262	295	
Hori.	5720.000	PK	51.43	33.61	15.38	45.70	2.26	56.98	-38.24	15.6	53.8	262	295	
Hori.	5725.000	PK	51.70	33.64	15.39	45.70	2.26	57.29	-37.93	27.0	64.9	262	295	
Hori.	5850.000	PK	49.85	34.18	15.46	45.53	2.26	56.22	-39.00	27.0	66.0	262	295	
Hori.	5855.000	PK	49.76	34.22	15.46	45.52	2.26	56.18	-39.04	15.6	54.6	262	295	
Hori.	5875.000	PK	49.91	34.36	15.48	45.50	2.26	56.51	-38.71	10.0	48.7	262	295	
Hori.	5925.000	PK	50.85	34.65	15.51	45.46	2.26	57.81	-37.41	-27.0	10.4	262	295	
Vert.	5650.000	PK	51.05	33.39	15.34	45.73	2.26	56.31	-38.91	-27.0	11.9	328	0	
Vert.	5700.000	PK	51.65	33.53	15.37	45.72	2.26	57.09	-38.13	10.0	48.1	328	0	
Vert.	5720.000	PK	51.69	33.61	15.38	45.70	2.26	57.24	-37.98	15.6	53.5	328	0	
Vert.	5725.000	PK	51.92	33.64	15.39	45.70	2.26	57.51	-37.71	27.0	64.7	328	0	
Vert.	5850.000	PK	49.73	34.18	15.46	45.53	2.26	56.10	-39.12	27.0	66.1	328	0	
Vert.	5855.000	PK	50.68	34.22	15.46	45.52	2.26	57.10	-38.12	15.6	53.7	328	0	
Vert.	5875.000	PK	50.52	34.36	15.48	45.50	2.26	57.12	-38.10	10.0	48.1	328	0	
Vert.	5925.000	PK	51.40	34.65	15.51	45.46	2.26	58.36	-36.86	-27.0	**9.8**	328	0	

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 (3.89 m / 3.0 m) = 2.26 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	February 21, 2024
Temperature / Humidity	20 deg. C / 43 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-80 5775 MHz with 11n-20 2462 MHz

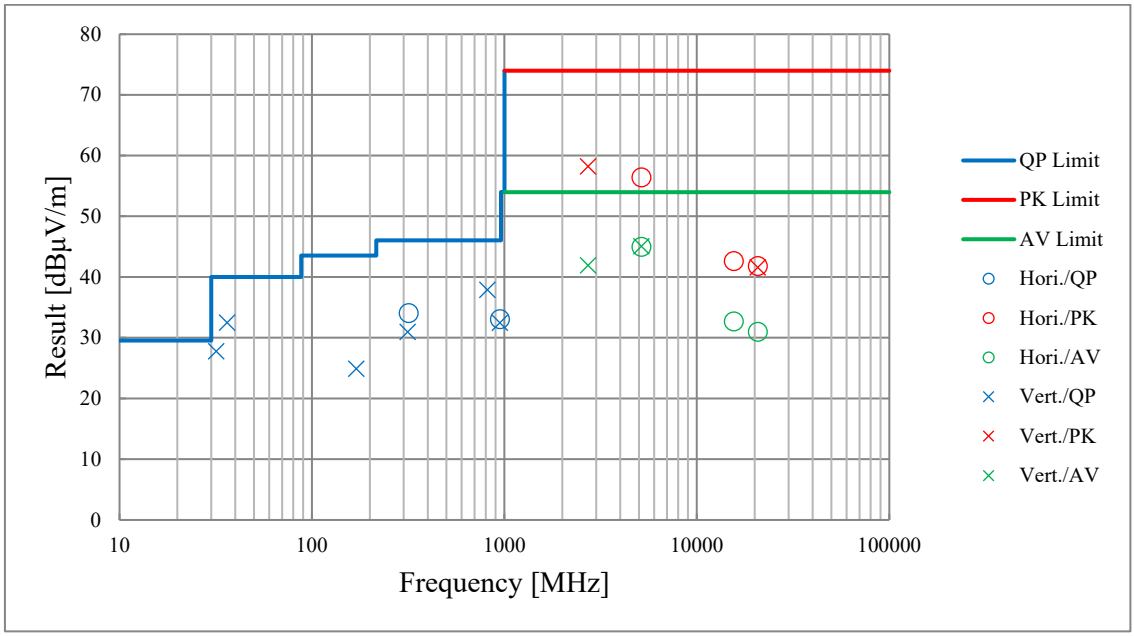
Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

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

Test place	Kashima EMC Lab.					
Semi Anechoic Chamber	No.11	No.11	No.11	No.11	No.11	No.11
Date	February 23, 2024	February 20, 2024	February 22, 2024	February 22, 2024	February 22, 2024	February 23, 2024
Temperature / Humidity	19 deg. C / 42 % RH	21 deg. C / 53 % RH	20 deg. C / 41 % RH	20 deg. C / 41 % RH	20 deg. C / 41 % RH	19 deg. C / 42 % RH
Engineer	Hiromitsu Tanabe (30 MHz to 1 GHz)	Hiromitsu Tanabe (1 GHz to 6.4 GHz)	Hiromitsu Tanabe (6.4 GHz to 10 GHz)	Hiromitsu Tanabe (10 GHz to 18 GHz)	Hiromitsu Tanabe (18 GHz to 26.5 GHz)	Hiromitsu Tanabe (26.5 GHz to 40 GHz)
Mode	Tx 11a 5180 MHz with 11n-20 2462 MHz					



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

Radiated Spurious Emission

Test place	Kashima EMC Lab.					
Semi Anechoic Chamber	No.11	No.10	No.10	No.11	No.11	No.11
Date	March 13, 2024	March 18, 2024	March 18, 2024	March 12, 2024	March 12, 2024	March 12, 2024
Temperature / Humidity	20 deg. C / 38 % RH	21 deg. C / 42 % RH	21 deg. C / 42 % RH	18 deg. C / 41 % RH	18 deg. C / 41 % RH	18 deg. C / 41 % RH
Engineer	Kazuhiro Ando (30 MHz to 1 GHz)	Hiromitsu Tanabe (1 GHz to 6.4 GHz)	Hiromitsu Tanabe (6.4 GHz to 10 GHz)	Kazuhiro Ando (10 GHz to 18 GHz)	Kazuhiro Ando (18 GHz to 26.5 GHz)	Kazuhiro Ando (26.5 GHz to 40 GHz)
Mode	Tx 11a 5180 MHz with BT Hopping On 3DH5					

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	290.223	QP	44.00	13.22	7.57	31.96	0.00	32.83	46.0	13.1	119	157	
Hori.	816.000	QP	34.40	22.62	9.63	31.75	0.00	34.90	46.0	11.1	100	226	
Hori.	947.534	QP	31.10	23.95	10.06	30.96	0.00	34.15	46.0	11.8	153	214	
Hori.	5150.000	PK	54.28	32.62	15.05	45.81	3.31	59.45	73.9	14.4	295	353	
Hori.	15540.000	PK	45.87	38.15	10.02	41.97	-9.54	42.53	73.9	31.3	150	0	Floor noise
Hori.	20720.000	PK	44.21	-3.86	10.43	0.00	-9.54	41.24	73.9	32.6	150	170	*1)
Hori.	5150.000	AV	41.17	32.62	15.05	45.81	3.31	46.34	53.9	7.5	295	353	VBW:2.2 kHz
Hori.	15540.000	AV	36.54	38.15	10.02	41.97	-9.54	33.20	53.9	20.7	150	0	Floor noise
Hori.	20720.000	AV	34.58	-3.86	10.43	0.00	-9.54	31.61	53.9	22.2	150	170	VBW:2.2 kHz,*1)
Vert.	31.951	QP	42.10	12.55	5.69	32.18	0.00	28.16	40.0	11.8	100	108	
Vert.	36.274	QP	44.20	12.91	5.74	32.17	0.00	30.68	40.0	9.3	100	277	
Vert.	139.998	QP	36.50	13.31	6.69	32.09	0.00	24.41	43.5	19.0	100	239	
Vert.	315.619	QP	39.60	13.95	7.70	31.94	0.00	29.31	46.0	16.6	100	355	
Vert.	816.000	QP	37.60	22.62	9.63	31.75	0.00	38.10	46.0	7.9	138	205	
Vert.	864.000	QP	35.70	22.97	9.78	31.53	0.00	36.92	46.0	9.0	140	217	
Vert.	947.722	QP	26.70	23.95	10.06	30.96	0.00	29.75	46.0	16.2	165	302	
Vert.	5150.000	PK	54.02	32.62	15.05	45.81	3.31	59.19	73.9	14.7	265	5	
Vert.	15540.000	PK	47.08	38.15	10.02	41.97	-9.54	43.74	73.9	30.1	150	0	Floor noise
Vert.	20720.000	PK	45.07	-3.86	10.43	0.00	-9.54	42.10	73.9	31.8	163	0	*1)
Vert.	5150.000	AV	41.26	32.62	15.05	45.81	3.31	46.43	53.9	**7.4**	265	5	VBW:2.2 kHz
Vert.	15540.000	AV	36.58	38.15	10.02	41.97	-9.54	33.24	53.9	20.6	150	0	Floor noise
Vert.	20720.000	AV	36.02	-3.86	10.43	0.00	-9.54	33.05	53.9	20.8	163	0	VBW:2.2 kHz,*1)

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB
*1) Antenna factor includes amprifier gain

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	10360.000	PK	47.80	38.48	8.09	43.12	-9.54	41.71	-53.51	-27.0	26.5	150	0	
Vert.	10360.000	PK	48.88	38.48	8.09	43.12	-9.54	42.79	-52.43	-27.0	25.4	150	0	

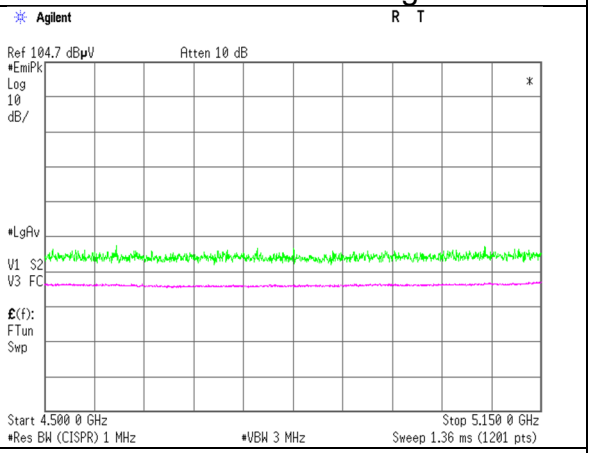
Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Result (EIRP [dBm]) = 10 * LOG ((10 ^ (Electric Field Strength [dBuV/m] / 20) * 10 ^ (-6) * Distance : 3 [m]) ^ 2 / 30 * 10 ^ 3)
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).
Distance factor : 1 GHz - 10 GHz : 20log (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.11
Date	March 18, 2024
Temperature / Humidity	21 deg. C / 42 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11a 5180 MHz with BT Hopping On 3DH5

Horizontal

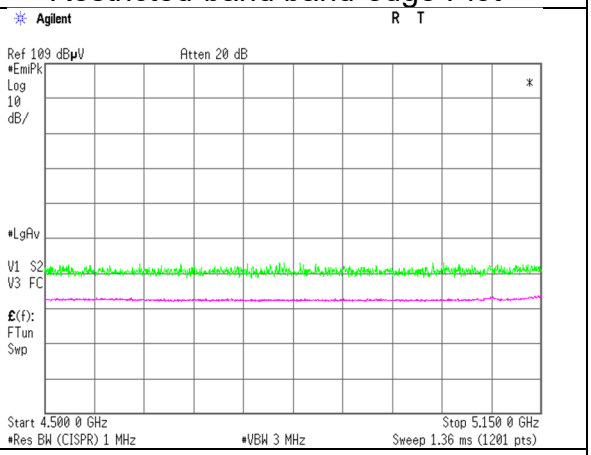
Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green: Peak Plot
Trace Purple: Average Plot

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

Radiated Spurious Emission

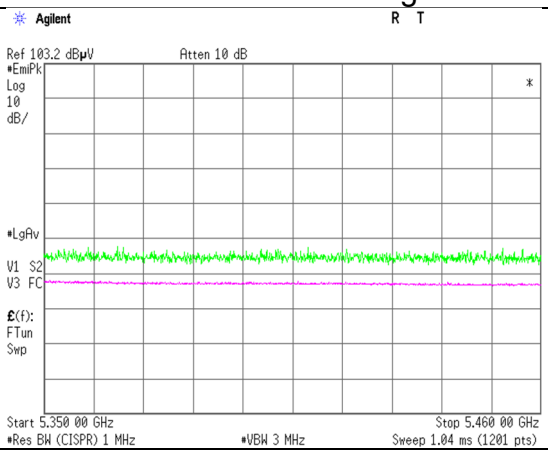
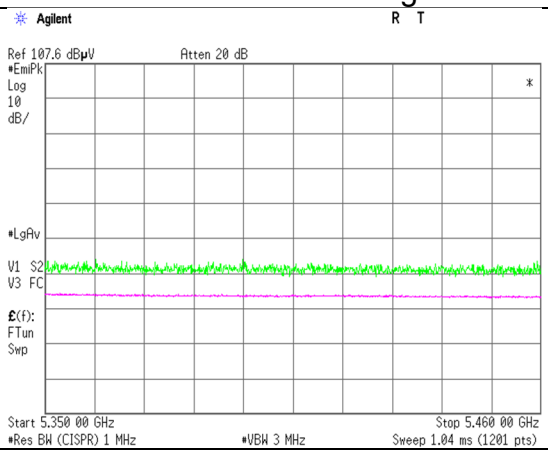
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	21 deg. C / 42 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11a 5320 MHz with BT Hopping On 3DH5

(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	52.22	32.92	15.17	45.75	3.31	57.87	73.9	16.0	400	215	
Hori.	5350.000	AV	40.11	32.92	15.17	45.75	3.31	45.76	53.9	**8.1**	400	215	VBW: 2.2 kHz
Vert.	5350.000	PK	52.81	32.92	15.17	45.75	3.31	58.46	73.9	15.4	288	0	
Vert.	5350.000	AV	40.09	32.92	15.17	45.75	3.31	45.74	53.9	**8.1**	288	0	VBW: 2.2 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	21 deg. C / 42 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11a 5500 MHz with BT Hopping On 3DH5

(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	54.20	33.22	15.22	45.68	3.31	60.27	73.9	13.6	400	25	
Hori.	5460.000	AV	41.09	33.22	15.22	45.68	3.31	47.16	53.9	**6.7**	400	25	VBW: 2.2 kHz
Vert.	5460.000	PK	54.16	33.22	15.22	45.68	3.31	60.23	73.9	13.6	300	345	
Vert.	5460.000	AV	41.11	33.22	15.22	45.68	3.31	47.18	53.9	**6.7**	300	345	VBW: 2.2 kHz

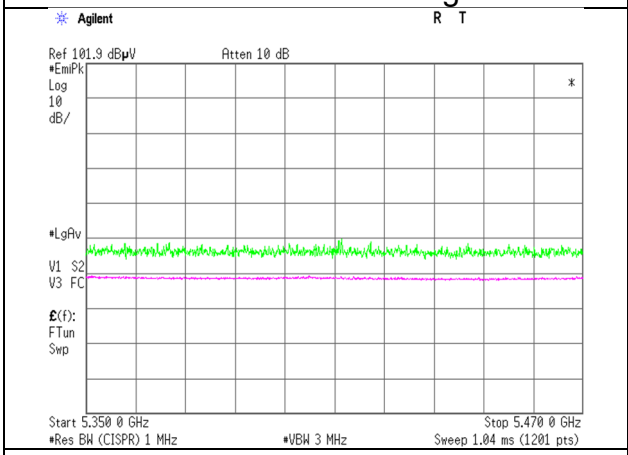
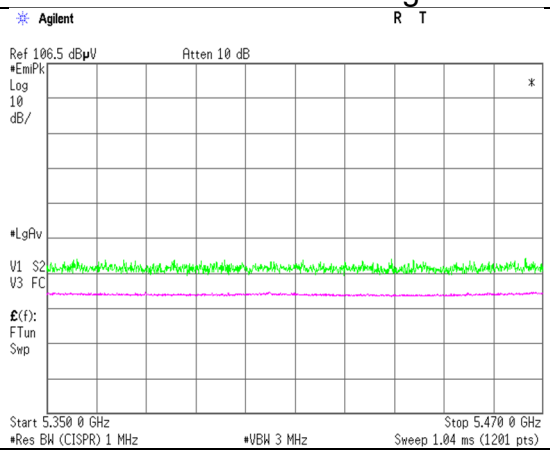
Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).
Distance factor : 1 GHz - 10 GHz : 20log (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 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	53.98	33.25	15.22	45.68	3.31	60.08	-35.14	-27.0	8.1	400	25	
Vert.	5470.000	PK	55.04	33.25	15.22	45.68	3.31	61.14	-34.08	-27.0	7.0	300	345	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

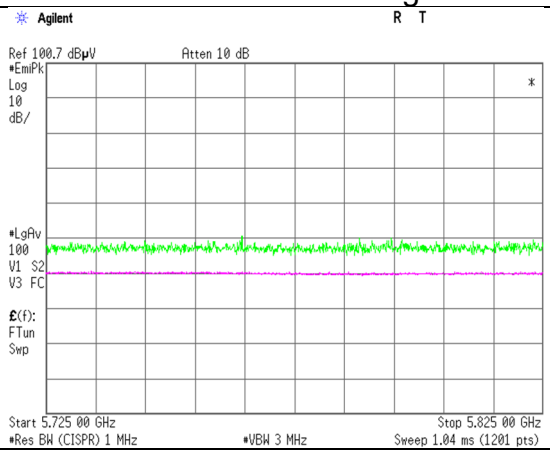
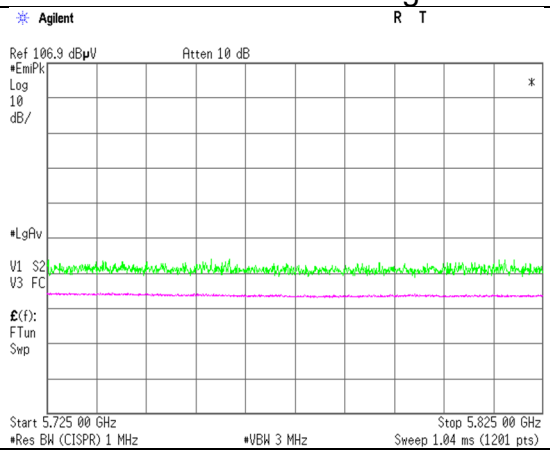
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	21 deg. C / 42 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11a 5700 MHz with BT Hopping On 3DH5

(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	53.84	33.69	15.38	45.70	3.31	60.52	-34.70	-27.0	7.7	360	0	
Vert.	5725.000	PK	54.02	33.69	15.38	45.70	3.31	60.70	-34.52	-27.0	**7.5**	280	355	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

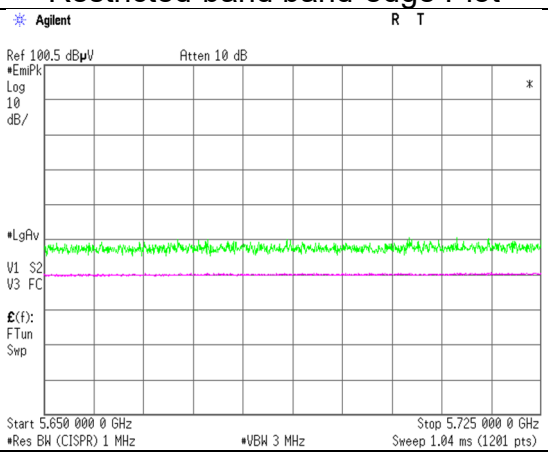
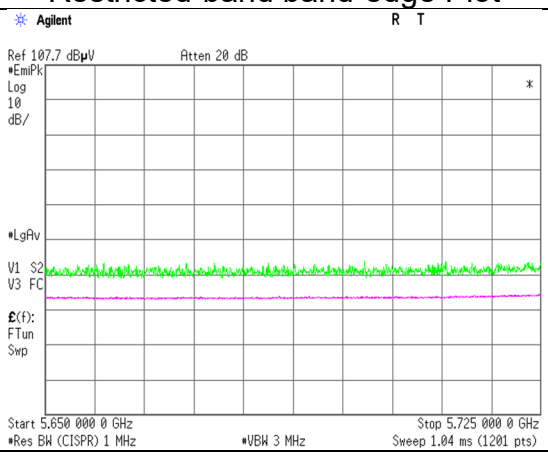
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	21 deg. C / 42 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11a 5745 MHz with BT Hopping On 3DH5

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	54.51	33.51	15.35	45.73	3.31	60.95	-34.27	-27.0	**7.2**	400	268	
Hori.	5700.000	PK	53.80	33.61	15.37	45.72	3.31	60.37	-34.85	10.0	44.8	400	268	
Hori.	5720.000	PK	53.70	33.67	15.38	45.70	3.31	60.36	-34.86	15.6	50.4	400	268	
Hori.	5725.000	PK	54.86	33.69	15.38	45.70	3.31	61.54	-33.68	27.0	60.6	400	268	
Vert.	5650.000	PK	54.18	33.51	15.35	45.73	3.31	60.62	-34.60	-27.0	7.6	370	350	
Vert.	5700.000	PK	53.55	33.61	15.37	45.72	3.31	60.12	-35.10	10.0	45.1	370	350	
Vert.	5720.000	PK	54.37	33.67	15.38	45.70	3.31	61.03	-34.19	15.6	49.7	370	350	
Vert.	5725.000	PK	53.91	33.69	15.38	45.70	3.31	60.59	-34.63	27.0	61.6	370	350	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

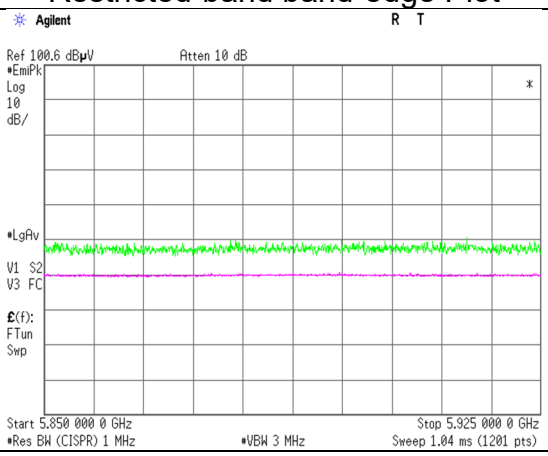
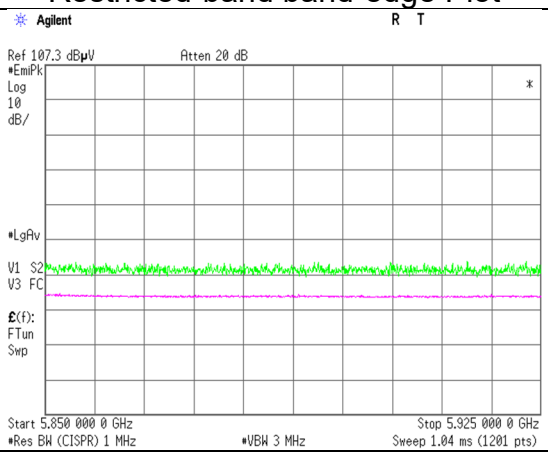
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	21 deg. C / 42 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11a 5825 MHz with BT Hopping On 3DH5

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	51.48	34.23	15.45	45.53	3.31	58.94	-36.28	27.0	63.2	368	0	
Hori.	5855.000	PK	52.09	34.26	15.45	45.52	3.31	59.59	-35.63	15.6	51.2	368	0	
Hori.	5875.000	PK	52.75	34.38	15.47	45.50	3.31	60.41	-34.81	10.0	44.8	368	0	
Hori.	5925.000	PK	53.68	34.67	15.50	45.46	3.31	61.70	-33.52	-27.0	**6.5**	368	0	
Vert.	5850.000	PK	52.95	34.23	15.45	45.53	3.31	60.41	-34.81	27.0	61.8	345	355	
Vert.	5855.000	PK	53.07	34.26	15.45	45.52	3.31	60.57	-34.65	15.6	50.2	345	355	
Vert.	5875.000	PK	52.31	34.38	15.47	45.50	3.31	59.97	-35.25	10.0	45.2	345	355	
Vert.	5925.000	PK	52.42	34.67	15.50	45.46	3.31	60.44	-34.78	-27.0	7.7	345	355	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

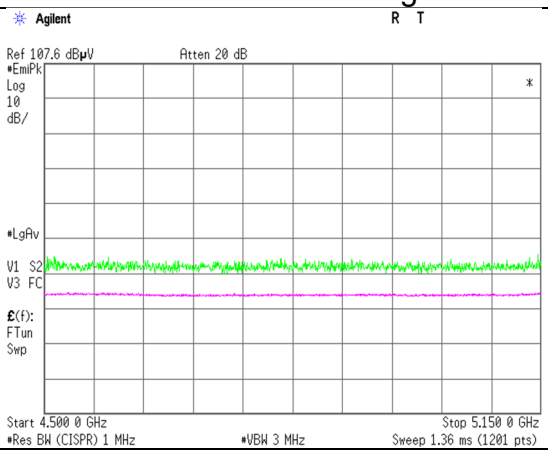
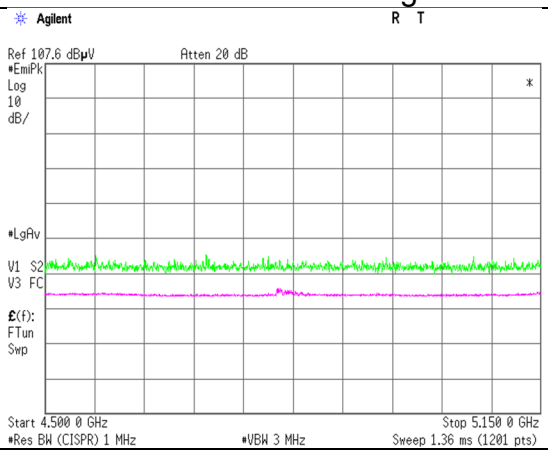
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-20 5180 MHz with BT Hopping On 3DH5

(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	52.70	32.62	15.05	45.81	3.31	57.87	73.9	16.0	391	18	
Hori.	5150.000	AV	41.31	32.62	15.05	45.81	3.31	46.48	53.9	**7.4**	391	18	VBW: 2.4 kHz
Vert.	5150.000	PK	52.84	32.62	15.05	45.81	3.31	58.01	73.9	15.8	345	356	
Vert.	5150.000	AV	41.01	32.62	15.05	45.81	3.31	46.18	53.9	7.7	345	356	VBW: 2.4 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

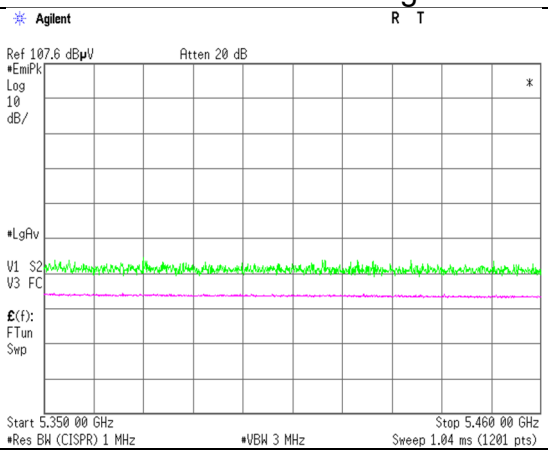
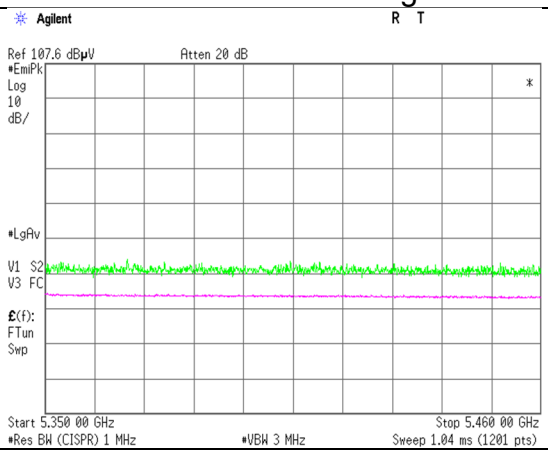
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-20 5320 MHz with BT Hopping On 3DH5

(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	50.21	32.92	15.17	45.75	3.31	55.86	73.9	18.0	366	50	
Hori.	5350.000	AV	39.76	32.92	15.17	45.75	3.31	45.41	53.9	8.4	366	50	VBW: 2.4 kHz
Vert.	5350.000	PK	51.11	32.92	15.17	45.75	3.31	56.76	73.9	17.1	333	0	
Vert.	5350.000	AV	39.87	32.92	15.17	45.75	3.31	45.52	53.9	**8.3**	333	0	VBW: 2.4 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-20 5500 MHz with BT Hopping On 3DH5

(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	51.55	33.22	15.22	45.68	3.31	57.62	73.9	16.2	364	61	
Hori.	5460.000	AV	40.53	33.22	15.22	45.68	3.31	46.60	53.9	**7.3**	364	61	VBW: 2.4 kHz
Vert.	5460.000	PK	51.78	33.22	15.22	45.68	3.31	57.85	73.9	16.0	363	349	
Vert.	5460.000	AV	40.40	33.22	15.22	45.68	3.31	46.47	53.9	7.4	363	349	VBW: 2.4 kHz

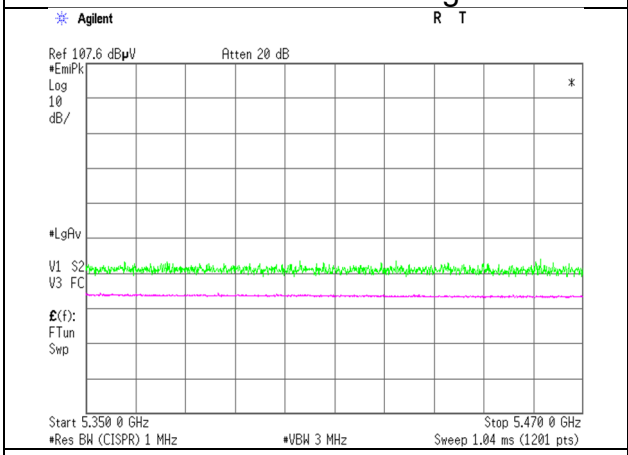
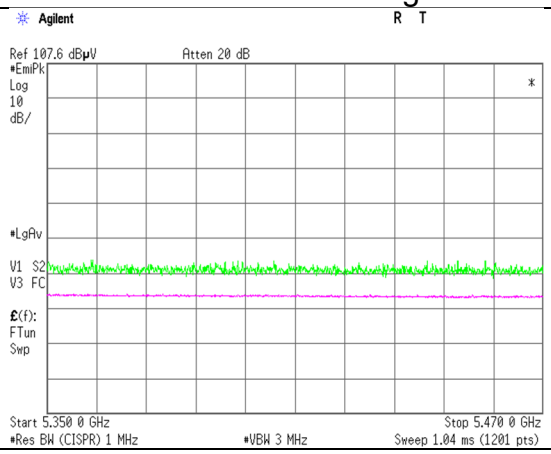
Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).
Distance factor : 1 GHz - 10 GHz : 20log (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 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	51.64	33.25	15.22	45.68	3.31	57.74	-37.48	-27.0	10.4	364	61	
Vert.	5470.000	PK	52.03	33.25	15.22	45.68	3.31	58.13	-37.09	-27.0	10.0	363	349	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

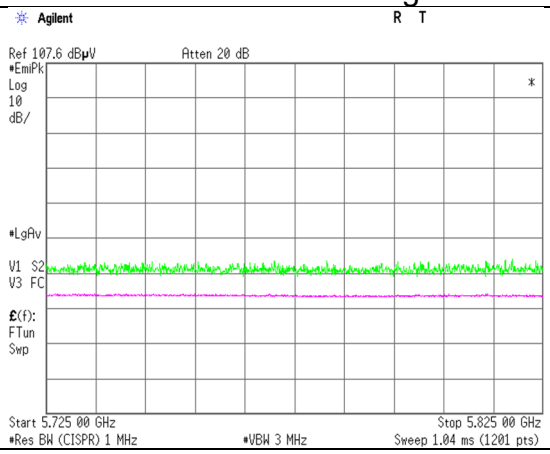
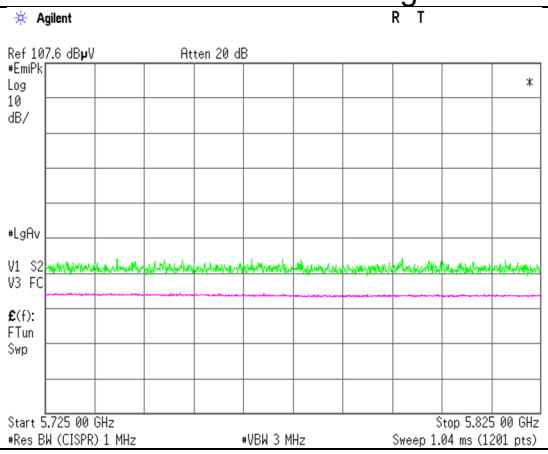
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-20 5700 MHz with BT Hopping On 3DH5

(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	52.17	33.69	15.38	45.70	3.31	58.85	-36.37	-27.0	**9.3**	394	61	
Vert.	5725.000	PK	51.85	33.69	15.38	45.70	3.31	58.53	-36.69	-27.0	9.6	340	348	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

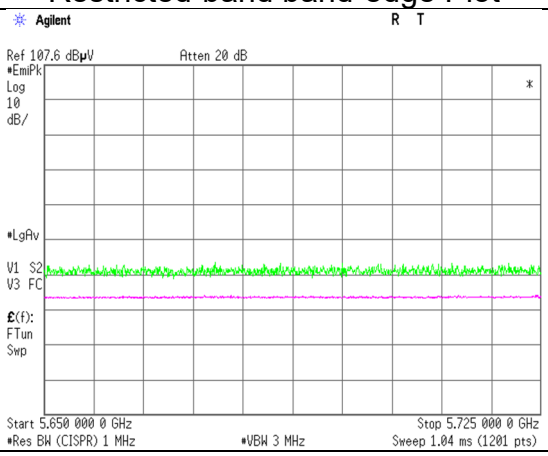
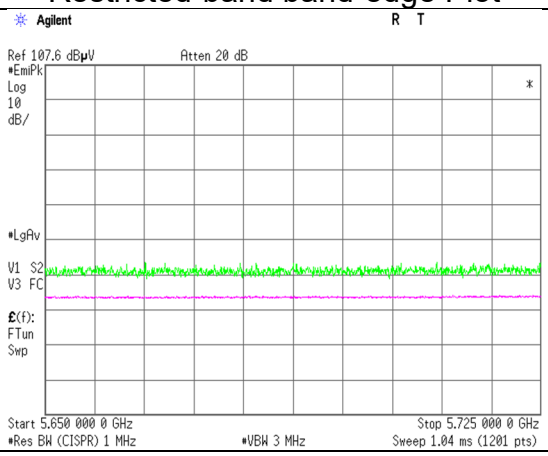
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-20 5745 MHz with BT Hopping On 3DH5

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	51.47	33.51	15.35	45.73	3.31	57.91	-37.31	-27.0	**10.3**	388	61	
Hori.	5700.000	PK	52.52	33.61	15.37	45.72	3.31	59.09	-36.13	10.0	46.1	388	61	
Hori.	5720.000	PK	52.39	33.67	15.38	45.70	3.31	59.05	-36.17	15.6	51.7	388	61	
Hori.	5725.000	PK	52.89	33.69	15.38	45.70	3.31	59.57	-35.65	27.0	62.6	388	61	
Vert.	5650.000	PK	50.97	33.51	15.35	45.73	3.31	57.41	-37.81	-27.0	10.8	385	351	
Vert.	5700.000	PK	52.32	33.61	15.37	45.72	3.31	58.89	-36.33	10.0	46.3	385	351	
Vert.	5720.000	PK	52.80	33.67	15.38	45.70	3.31	59.46	-35.76	15.6	51.3	385	351	
Vert.	5725.000	PK	52.76	33.69	15.38	45.70	3.31	59.44	-35.78	27.0	62.7	385	351	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

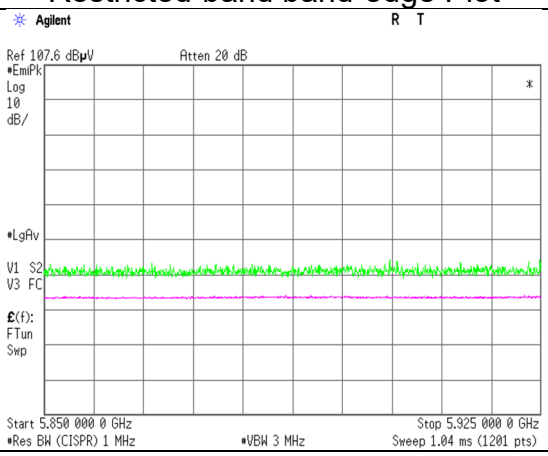
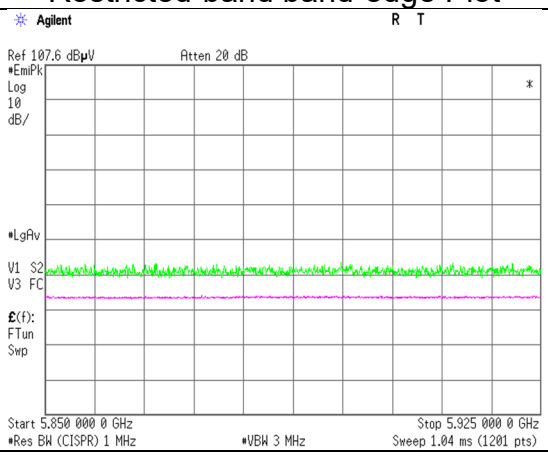
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-20 5825 MHz with BT Hopping On 3DH5

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	50.48	34.23	15.45	45.53	3.31	57.94	-37.28	27.0	64.2	395	63	
Hori.	5855.000	PK	50.41	34.26	15.45	45.52	3.31	57.91	-37.31	15.6	52.9	395	63	
Hori.	5875.000	PK	51.35	34.38	15.47	45.50	3.31	59.01	-36.21	10.0	46.2	395	63	
Hori.	5925.000	PK	51.85	34.67	15.50	45.46	3.31	59.87	-35.35	-27.0	**8.3**	395	63	
Vert.	5850.000	PK	50.43	34.23	15.45	45.53	3.31	57.89	-37.33	27.0	64.3	379	349	
Vert.	5855.000	PK	49.94	34.26	15.45	45.52	3.31	57.44	-37.78	15.6	53.3	379	349	
Vert.	5875.000	PK	50.51	34.38	15.47	45.50	3.31	58.17	-37.05	10.0	47.0	379	349	
Vert.	5925.000	PK	51.11	34.67	15.50	45.46	3.31	59.13	-36.09	-27.0	9.0	379	349	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

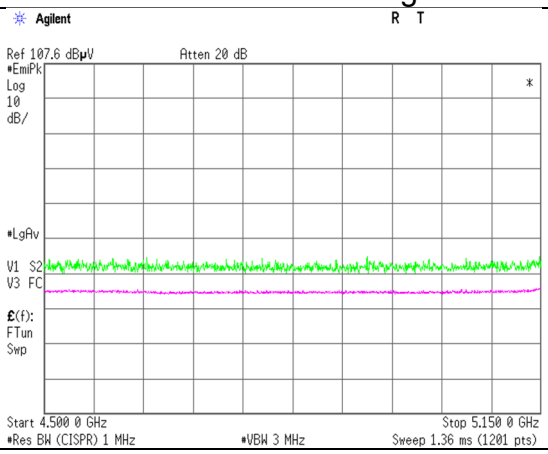
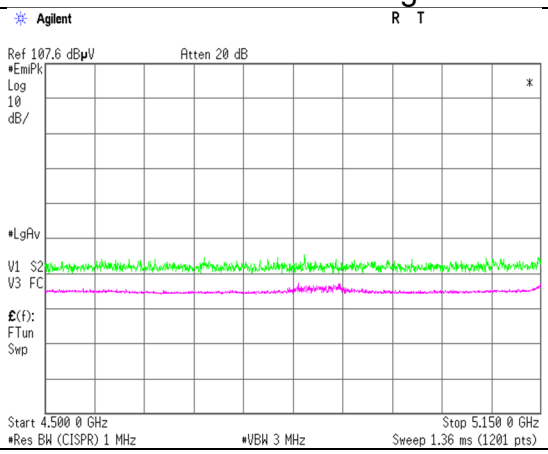
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11n-40 5190 MHz with BT Hopping On 3DH5

(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	52.97	32.62	15.05	45.81	3.31	58.14	73.9	15.7	394	355	
Hori.	5150.000	AV	42.79	32.62	15.05	45.81	3.31	47.96	53.9	5.9	394	355	VBW: 5.6 kHz
Vert.	5150.000	PK	53.29	32.62	15.05	45.81	3.31	58.46	73.9	15.4	379	0	
Vert.	5150.000	AV	43.34	32.62	15.05	45.81	3.31	48.51	53.9	**5.3**	379	0	VBW: 5.6 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

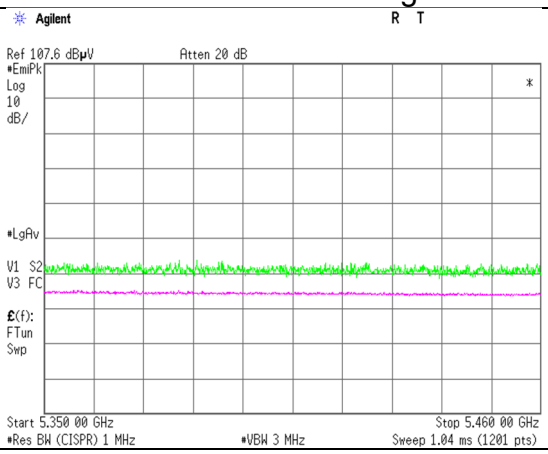
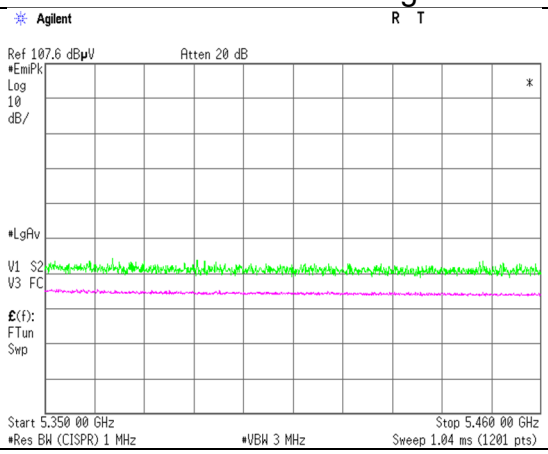
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11n-40 5310 MHz with BT Hopping On 3DH5

(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	51.42	32.92	15.17	45.75	3.31	57.07	73.9	16.8	393	355	
Hori.	5350.000	AV	40.80	32.92	15.17	45.75	3.31	46.45	53.9	7.4	393	355	VBW: 5.6 kHz
Vert.	5350.000	PK	51.77	32.92	15.17	45.75	3.31	57.42	73.9	16.4	384	0	
Vert.	5350.000	AV	41.48	32.92	15.17	45.75	3.31	47.13	53.9	**6.7**	384	0	VBW: 5.6 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11n-40 5510 MHz with BT Hopping On 3DH5

(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	51.75	33.22	15.22	45.68	3.31	57.82	73.9	16.0	400	58	
Hori.	5460.000	AV	41.60	33.22	15.22	45.68	3.31	47.67	53.9	6.2	400	58	VBW: 5.6 kHz
Vert.	5460.000	PK	51.81	33.22	15.22	45.68	3.31	57.88	73.9	16.0	378	349	
Vert.	5460.000	AV	41.87	33.22	15.22	45.68	3.31	47.94	53.9	**5.9**	378	349	VBW: 5.6 kHz

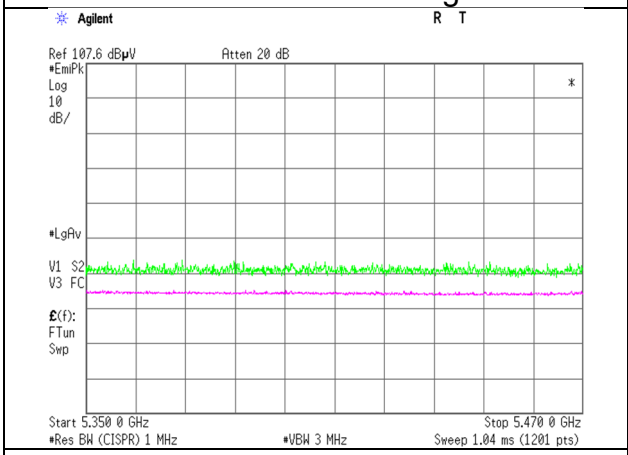
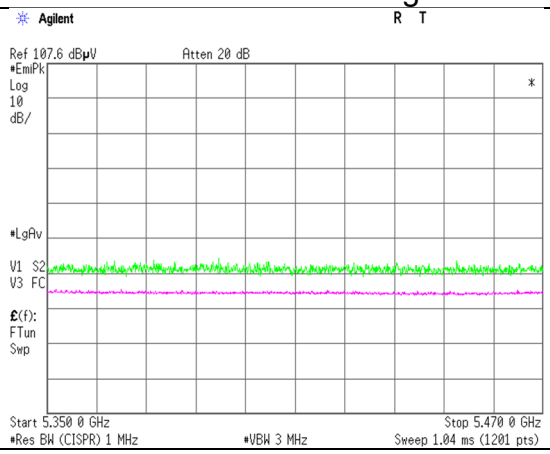
Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).
Distance factor : 1 GHz - 10 GHz : 20log (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 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	52.32	33.25	15.22	45.68	3.31	58.42	-36.80	-27.0	9.8	400	58	
Vert.	5470.000	PK	52.89	33.25	15.22	45.68	3.31	58.99	-36.23	-27.0	9.2	378	349	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

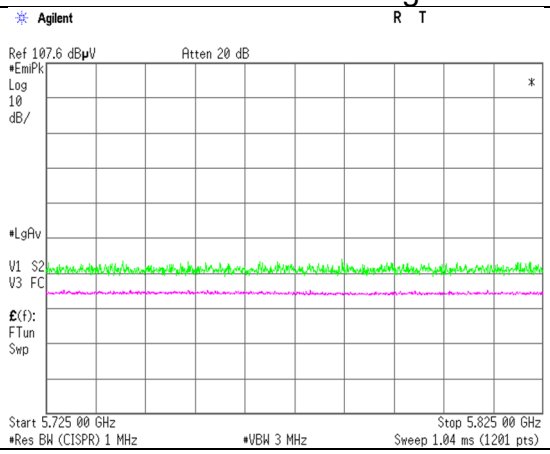
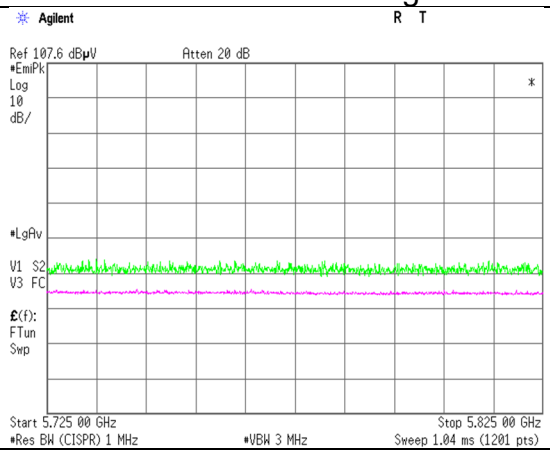
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11n-40 5670 MHz with BT Hopping On 3DH5

(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	52.62	33.69	15.38	45.70	3.31	59.30	-35.92	-27.0	**8.9**	396	62	
Vert.	5725.000	PK	51.80	33.69	15.38	45.70	3.31	58.48	-36.74	-27.0	9.7	360	349	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

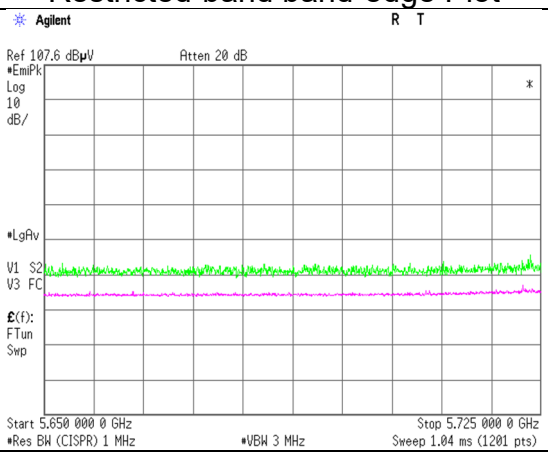
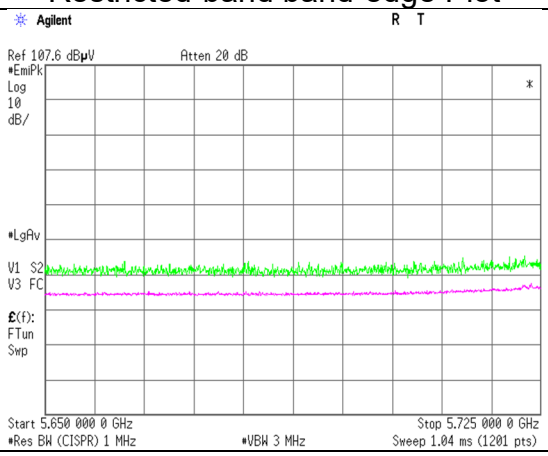
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11n-40 5755 MHz with BT Hopping On 3DH5

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	52.49	33.51	15.35	45.73	3.31	58.93	-36.29	-27.0	**9.2**	390	69	
Hori.	5700.000	PK	52.42	33.61	15.37	45.72	3.31	58.99	-36.23	10.0	46.2	390	69	
Hori.	5720.000	PK	52.93	33.67	15.38	45.70	3.31	59.59	-35.63	15.6	51.2	390	69	
Hori.	5725.000	PK	53.38	33.69	15.38	45.70	3.31	60.06	-35.16	27.0	62.1	390	69	
Vert.	5650.000	PK	51.61	33.51	15.35	45.73	3.31	58.05	-37.17	-27.0	10.1	385	350	
Vert.	5700.000	PK	52.40	33.61	15.37	45.72	3.31	58.97	-36.25	10.0	46.2	385	350	
Vert.	5720.000	PK	53.59	33.67	15.38	45.70	3.31	60.25	-34.97	15.6	50.5	385	350	
Vert.	5725.000	PK	53.98	33.69	15.38	45.70	3.31	60.66	-34.56	27.0	61.5	385	350	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

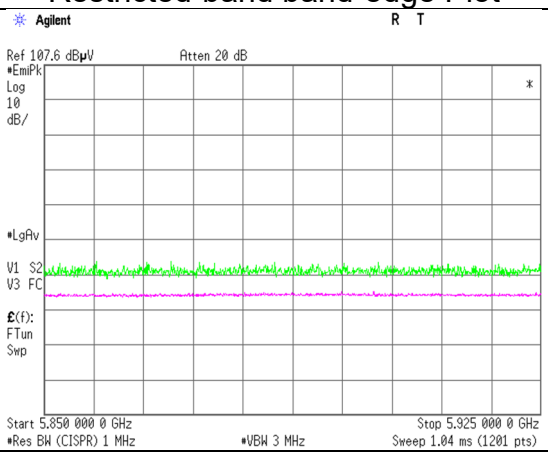
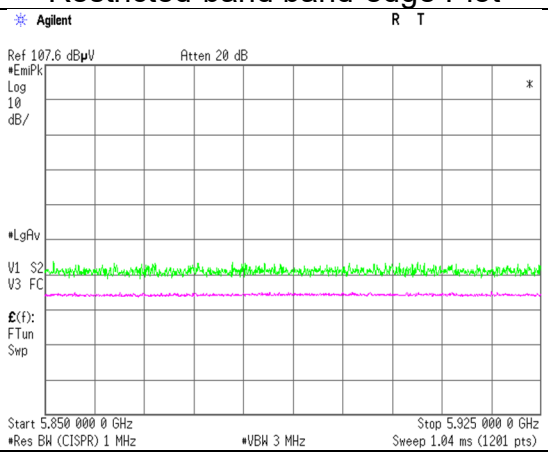
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 18, 2024
Temperature / Humidity	23 deg. C / 40 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11n-40 5795 MHz with BT Hopping On 3DH5

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	50.70	34.23	15.45	45.53	3.31	58.16	-37.06	27.0	64.0	385	68	
Hori.	5855.000	PK	50.11	34.26	15.45	45.52	3.31	57.61	-37.61	15.6	53.2	385	68	
Hori.	5875.000	PK	50.88	34.38	15.47	45.50	3.31	58.54	-36.68	10.0	46.6	385	68	
Hori.	5925.000	PK	51.48	34.67	15.50	45.46	3.31	59.50	-35.72	-27.0	8.7	385	68	
Vert.	5850.000	PK	50.64	34.23	15.45	45.53	3.31	58.10	-37.12	27.0	64.1	378	350	
Vert.	5855.000	PK	51.29	34.26	15.45	45.52	3.31	58.79	-36.43	15.6	52.0	378	350	
Vert.	5875.000	PK	50.94	34.38	15.47	45.50	3.31	58.60	-36.62	10.0	46.6	378	350	
Vert.	5925.000	PK	52.24	34.67	15.50	45.46	3.31	60.26	-34.96	-27.0	**7.9**	378	350	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

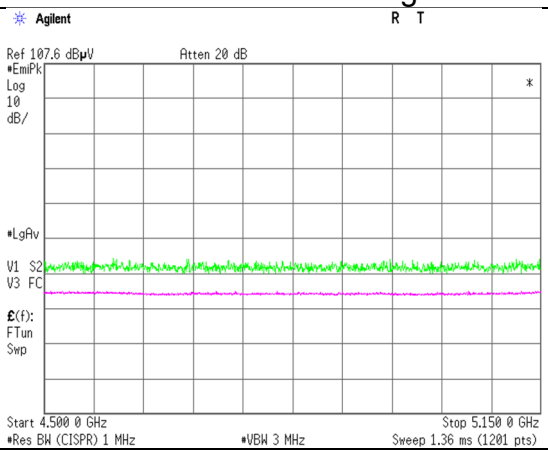
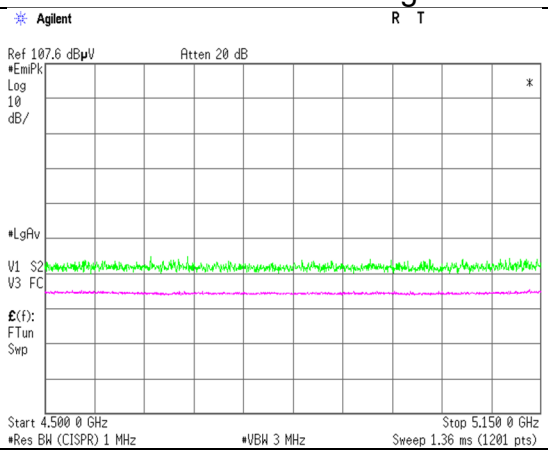
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 19, 2024
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-40 5190 MHz with BT Hopping On 3DH5

(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	52.38	32.62	15.05	45.81	3.31	57.55	73.9	16.3	369	352	
Hori.	5150.000	AV	41.20	32.62	15.05	45.81	3.31	46.37	53.9	7.5	369	352	VBW: 4.3 kHz
Vert.	5150.000	PK	52.25	32.62	15.05	45.81	3.31	57.42	73.9	16.4	400	0	
Vert.	5150.000	AV	41.44	32.62	15.05	45.81	3.31	46.61	53.9	**7.2**	400	0	VBW: 4.3 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

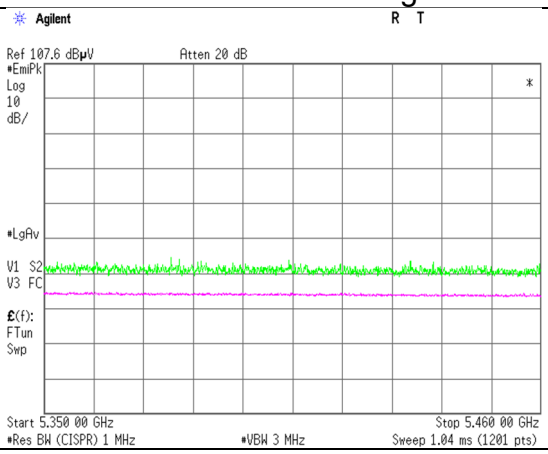
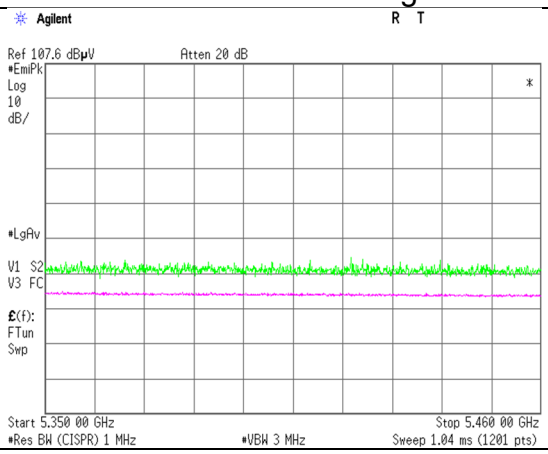
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 19, 2024
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-40 5310 MHz with BT Hopping On 3DH5

(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	50.41	32.92	15.17	45.75	3.31	56.06	73.9	17.8	383	58	
Hori.	5350.000	AV	40.16	32.92	15.17	45.75	3.31	45.81	53.9	8.0	383	58	VBW: 4.3 kHz
Vert.	5350.000	PK	51.38	32.92	15.17	45.75	3.31	57.03	73.9	16.8	384	0	
Vert.	5350.000	AV	40.28	32.92	15.17	45.75	3.31	45.93	53.9	**7.9**	384	0	VBW: 4.3 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 19, 2024
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-40 5510 MHz with BT Hopping On 3DH5

(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	52.11	33.22	15.22	45.68	3.31	58.18	73.9	15.7	400	55	
Hori.	5460.000	AV	41.15	33.22	15.22	45.68	3.31	47.22	53.9	6.6	400	55	VBW: 4.3 kHz
Vert.	5460.000	PK	51.81	33.22	15.22	45.68	3.31	57.88	73.9	16.0	378	8	
Vert.	5460.000	AV	41.28	33.22	15.22	45.68	3.31	47.35	53.9	**6.5**	378	8	VBW: 4.3 kHz

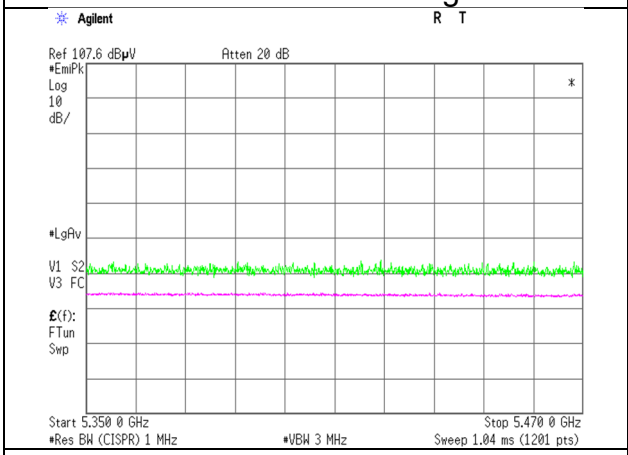
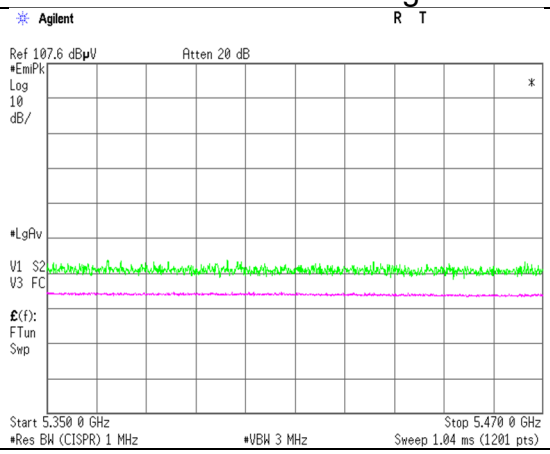
Result [dBuV/m] = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
*Other frequency noises omitted in this report were not seen or have enough margin (more than 20 dB).
Distance factor : 1 GHz - 10 GHz : 20log (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 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	51.93	33.25	15.22	45.68	3.31	58.03	-37.19	-27.0	10.1	400	55	
Vert.	5470.000	PK	51.55	33.25	15.22	45.68	3.31	57.65	-37.57	-27.0	10.5	378	8	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

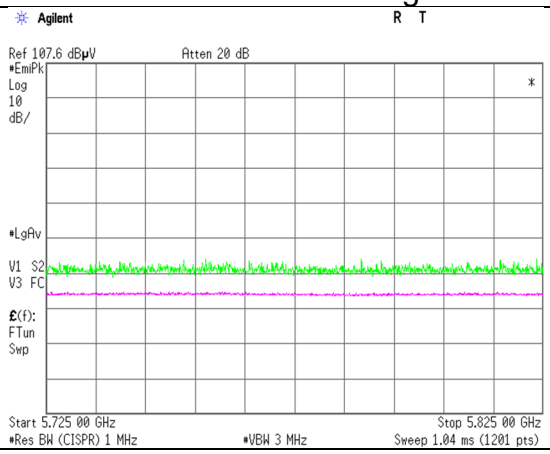
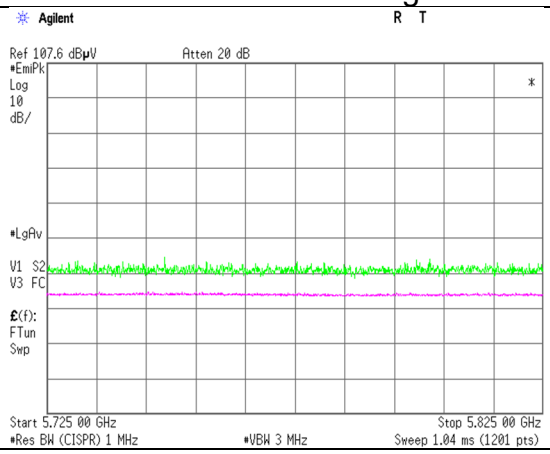
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 19, 2024
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-40 5670 MHz with BT Hopping On 3DH5

(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	52.16	33.69	15.38	45.70	3.31	58.84	-36.38	-27.0	9.3	397	63	
Vert.	5725.000	PK	53.01	33.69	15.38	45.70	3.31	59.69	-35.53	-27.0	**8.5**	395	5	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

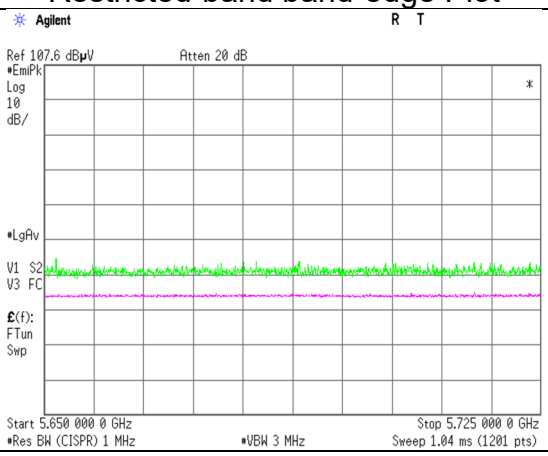
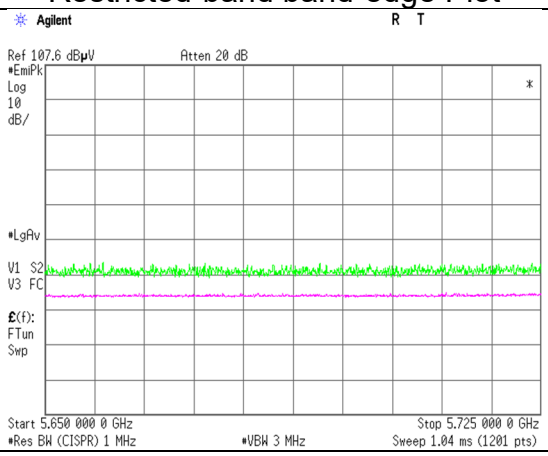
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 19, 2024
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-40 5755 MHz with BT Hopping On 3DH5

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5650.000	PK	52.53	33.51	15.35	45.73	3.31	58.97	-36.25	-27.0	**9.2**	386	64	
Hori.	5700.000	PK	52.22	33.61	15.37	45.72	3.31	58.79	-36.43	10.0	46.4	386	64	
Hori.	5720.000	PK	51.78	33.67	15.38	45.70	3.31	58.44	-36.78	15.6	52.3	386	64	
Hori.	5725.000	PK	52.63	33.69	15.38	45.70	3.31	59.31	-35.91	27.0	62.9	386	64	
Vert.	5650.000	PK	52.07	33.51	15.35	45.73	3.31	58.51	-36.71	-27.0	9.7	386	355	
Vert.	5700.000	PK	52.42	33.61	15.37	45.72	3.31	58.99	-36.23	10.0	46.2	386	355	
Vert.	5720.000	PK	52.98	33.67	15.38	45.70	3.31	59.64	-35.58	15.6	51.1	386	355	
Vert.	5725.000	PK	52.87	33.69	15.38	45.70	3.31	59.55	-35.67	27.0	62.6	386	355	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

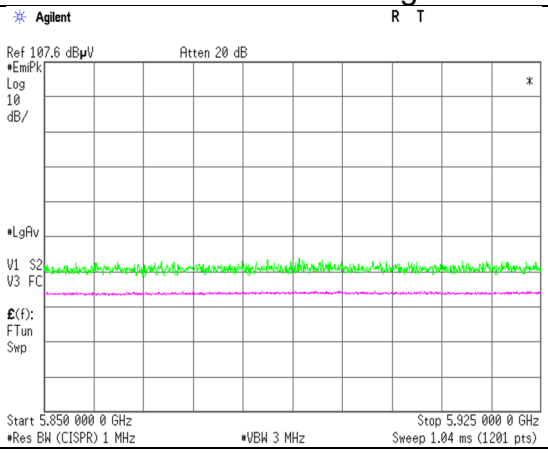
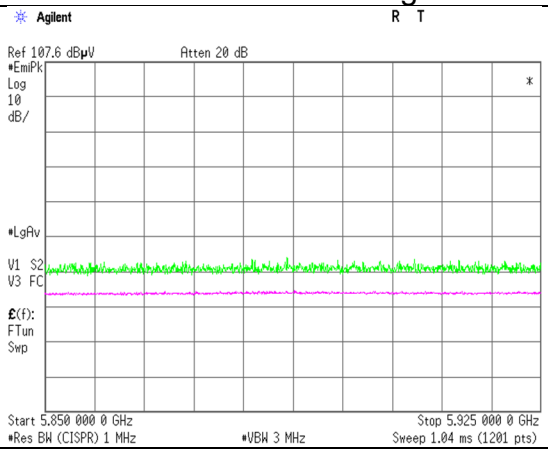
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 19, 2024
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-40 5795 MHz with BT Hopping On 3DH5

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

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Result (EIRP) [dBm]	Limit [dBm]	Margin [dB]	Height [cm]	Angle [deg.]	Remark
Hori.	5850.000	PK	50.05	34.23	15.45	45.53	3.31	57.51	-37.71	27.0	64.7	382	72	
Hori.	5855.000	PK	50.21	34.26	15.45	45.52	3.31	57.71	-37.51	15.6	53.1	382	72	
Hori.	5875.000	PK	50.99	34.38	15.47	45.50	3.31	58.65	-36.57	10.0	46.5	382	72	
Hori.	5925.000	PK	51.21	34.67	15.50	45.46	3.31	59.23	-35.99	-27.0	**8.9**	382	72	
Vert.	5850.000	PK	49.94	34.23	15.45	45.53	3.31	57.40	-37.82	27.0	64.8	400	0	
Vert.	5855.000	PK	50.21	34.26	15.45	45.52	3.31	57.71	-37.51	15.6	53.1	400	0	
Vert.	5875.000	PK	50.00	34.38	15.47	45.50	3.31	57.66	-37.56	10.0	47.5	400	0	
Vert.	5925.000	PK	50.78	34.67	15.50	45.46	3.31	58.80	-36.42	-27.0	9.4	400	0	

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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

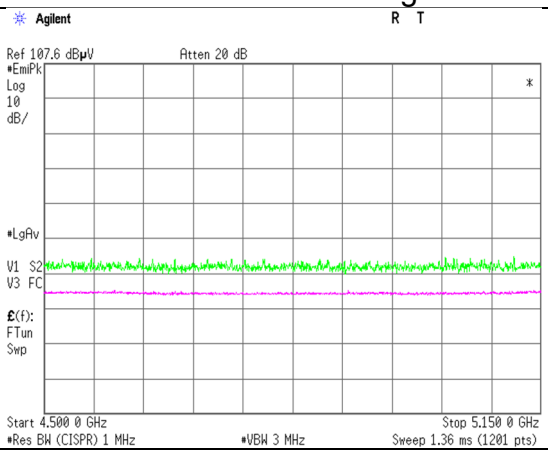
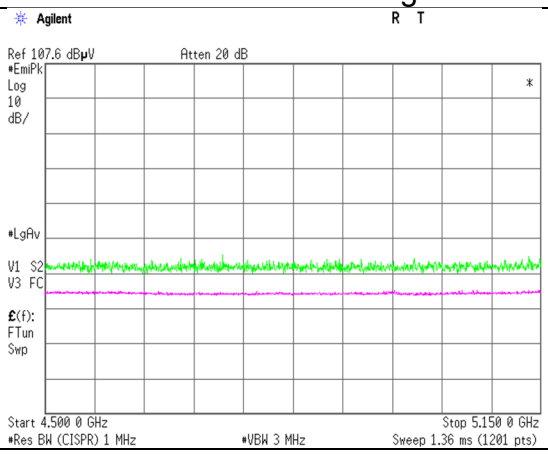
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 19, 2024
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-80 5210 MHz with BT Hopping On 3DH5

(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	51.97	32.62	15.05	45.81	3.31	57.14	73.9	16.7	367	352	
Hori.	5150.000	AV	41.66	32.62	15.05	45.81	3.31	46.83	53.9	**7.0**	367	352	VBW: 4.3 kHz
Vert.	5150.000	PK	52.01	32.62	15.05	45.81	3.31	57.18	73.9	16.7	397	0	
Vert.	5150.000	AV	41.45	32.62	15.05	45.81	3.31	46.62	53.9	7.2	397	0	VBW: 4.3 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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

Radiated Spurious Emission

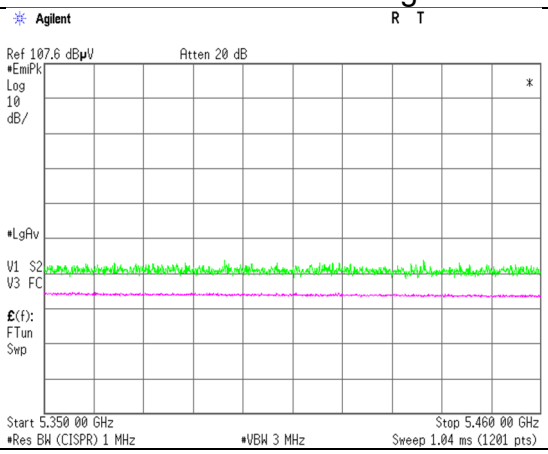
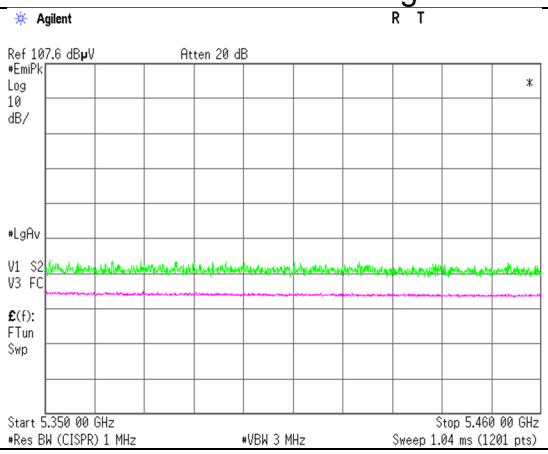
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	March 19, 2024
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz to 6.4 GHz)
Mode	Tx 11ac-80 5290 MHz with BT Hopping On 3DH5

(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	51.06	32.92	15.17	45.75	3.31	56.71	73.9	17.1	300	56	
Hori.	5350.000	AV	40.43	32.92	15.17	45.75	3.31	46.08	53.9	7.8	300	56	VBW: 4.3 kHz
Vert.	5350.000	PK	51.80	32.92	15.17	45.75	3.31	57.45	73.9	16.4	386	0	
Vert.	5350.000	AV	40.61	32.92	15.17	45.75	3.31	46.26	53.9	**7.6**	386	0	VBW: 4.3 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 (4.39 m / 3.0 m) = 3.31 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Horizontal	Vertical
Restricted-band band-edge Plot	Restricted-band band-edge Plot
	
Trace Green: Peak Plot Trace Purple: Average Plot	Trace Green: Peak Plot Trace Purple: Average Plot

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