

Radiated Spurious Emission

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.10	No.10	No.10	No.10
Date	January 16, 2023	January 13, 2023	January 16, 2023	January 16, 2023
Temperature / Humidity	18 deg. C / 48 % RH	20 deg. C / 39 % RH	18 deg. C / 48 % RH	18 deg. C / 48 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
Mode	(30 MHz - 1000 MHz)	(1 GHz - 10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
	Tx, Hopping Off, DH5 2402 MHz			

(* 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.	195.485	QP	43.40	10.09	7.90	31.34	0.00	30.05	43.5	13.4	187	257	
Hori.	288.417	QP	46.00	13.09	8.78	31.30	0.00	36.57	46.0	9.4	140	277	
Hori.	375.000	QP	42.50	15.04	9.85	31.24	0.00	36.15	46.0	9.8	100	340	
Hori.	625.020	QP	33.40	20.20	11.04	31.08	0.00	33.56	46.0	12.4	100	110	
Hori.	2390.000	PK	53.00	27.50	13.24	43.53	3.29	53.50	73.9	20.4	183	279	
Hori.	2558.000	PK	52.60	28.17	13.35	43.44	3.29	53.97	73.9	19.9	230	278	
Hori.	2584.000	PK	55.00	28.30	13.38	43.42	3.29	56.55	73.9	17.3	161	215	
Hori.	4804.000	PK	51.10	32.54	5.17	44.95	3.29	47.15	73.9	26.7	158	174	
Hori.	6000.674	PK	55.40	34.97	5.76	45.09	3.29	54.33	73.9	19.5	148	155	
Hori.	7206.000	PK	48.40	37.22	6.34	43.89	3.29	51.36	73.9	22.5	150	0	Floor noise
Hori.	9608.000	PK	46.00	37.99	7.22	41.78	3.29	52.72	73.9	21.1	150	0	Floor noise
Hori.	2390.000	AV	40.00	27.50	13.24	43.53	3.29	40.50	53.9	13.4	183	279	VBW: 360 Hz
Hori.	2558.000	AV	42.30	28.17	13.35	43.44	3.29	43.67	53.9	10.2	230	278	VBW: 360 Hz*1)
Hori.	2584.000	AV	41.70	28.30	13.38	43.42	3.29	43.25	53.9	10.6	161	215	VBW: 10 Hz
Hori.	4804.000	AV	38.40	32.54	5.17	44.95	3.29	34.45	53.9	19.4	158	174	VBW: 360 Hz
Hori.	6000.674	AV	44.70	34.97	5.76	45.09	3.29	43.63	53.9	10.2	148	155	VBW: 10 Hz
Hori.	7206.000	AV	35.60	37.22	6.34	43.89	3.29	38.56	53.9	15.3	150	0	Floor noise
Hori.	9608.000	AV	33.30	37.99	7.22	41.78	3.29	40.02	53.9	13.8	150	0	Floor noise
Vert.	87.831	QP	39.80	7.86	6.77	31.52	0.00	22.91	40.0	17.0	100	340	
Vert.	158.212	QP	43.70	13.40	7.54	31.40	0.00	33.24	43.5	10.2	100	97	
Vert.	180.402	QP	46.40	11.88	7.75	31.38	0.00	34.65	43.5	8.8	100	129	
Vert.	210.364	QP	47.80	9.80	8.03	31.32	0.00	34.31	43.5	9.1	100	294	
Vert.	288.076	QP	44.50	13.08	8.78	31.30	0.00	35.06	46.0	10.9	100	45	
Vert.	366.344	QP	37.90	14.81	9.75	31.25	0.00	31.21	46.0	14.7	100	146	
Vert.	631.070	QP	35.40	20.24	11.06	31.08	0.00	35.62	46.0	10.3	100	285	
Vert.	2390.000	PK	50.80	27.50	13.24	43.53	3.29	51.30	73.9	22.6	154	139	
Vert.	2506.000	PK	53.50	27.98	13.31	43.47	3.29	54.61	73.9	19.2	202	145	
Vert.	2558.000	PK	53.20	28.17	13.35	43.44	3.29	54.57	73.9	19.3	202	145	
Vert.	4804.000	PK	50.00	32.54	5.17	44.95	3.29	46.05	73.9	27.8	150	0	Floor noise
Vert.	6000.833	PK	55.50	34.97	5.76	45.09	3.29	54.43	73.9	19.4	194	207	
Vert.	7206.000	PK	48.30	37.22	6.34	43.89	3.29	51.26	73.9	22.6	150	0	Floor noise
Vert.	9608.000	PK	46.40	37.99	7.22	41.78	3.29	53.12	73.9	20.7	150	0	Floor noise
Vert.	2390.000	AV	36.90	27.50	13.24	43.53	3.29	37.40	53.9	16.5	154	139	VBW: 360 Hz
Vert.	2506.000	AV	41.30	27.98	13.31	43.47	3.29	42.41	53.9	11.4	202	145	VBW: 10 Hz
Vert.	2558.000	AV	40.90	28.17	13.35	43.44	3.29	42.27	53.9	11.6	202	145	VBW: 360 Hz*1)
Vert.	4804.000	AV	37.60	32.54	5.17	44.95	3.29	33.65	53.9	20.2	150	0	Floor noise
Vert.	6000.833	AV	45.00	34.97	5.76	45.09	3.29	43.93	53.9	9.9	194	207	VBW: 10 Hz
Vert.	7206.000	AV	35.60	37.22	6.34	43.89	3.29	38.56	53.9	15.3	150	0	Floor noise
Vert.	9608.000	AV	33.40	37.99	7.22	41.78	3.29	40.12	53.9	13.7	150	0	Floor noise

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

Distance factor : 1 GHz - 10 GHz : 20log(4.38 m / 3.0 m) = 3.29 dB

10 GHz - 26.5 GHz : 20log(1.0 m / 3.0 m) = -9.54 dB

*1) This noise has the same duty cycle as the carrier.

* These results have sufficient margin without taking account Dwell time factor.

20 dBc Data Sheet (RBW 100 kHz, VBW 300 kHz)

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]	Remark
Hori.	2402.000	PK	96.60	27.53	13.25	43.52	3.29	97.15	-	-	Carrier
Hori.	2400.000	PK	46.70	27.52	13.25	43.52	3.29	47.24	77.15	29.9	
Vert.	2402.000	PK	93.50	27.53	13.25	43.52	3.29	94.05	-	-	Carrier
Vert.	2400.000	PK	43.80	27.52	13.25	43.52	3.29	44.34	74.05	29.7	

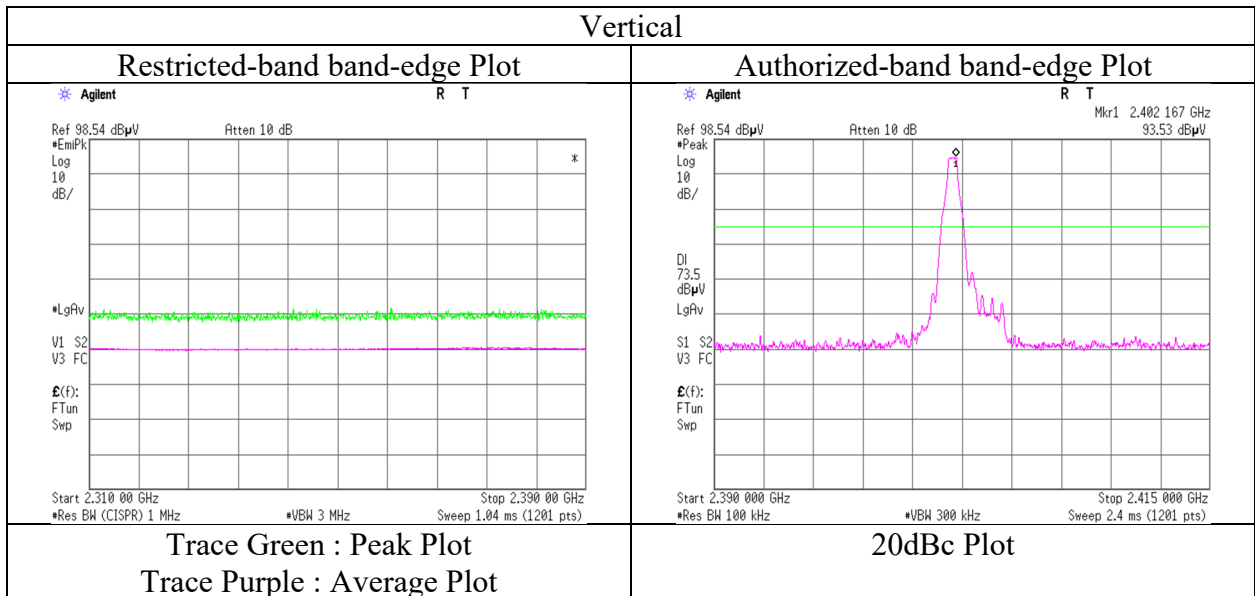
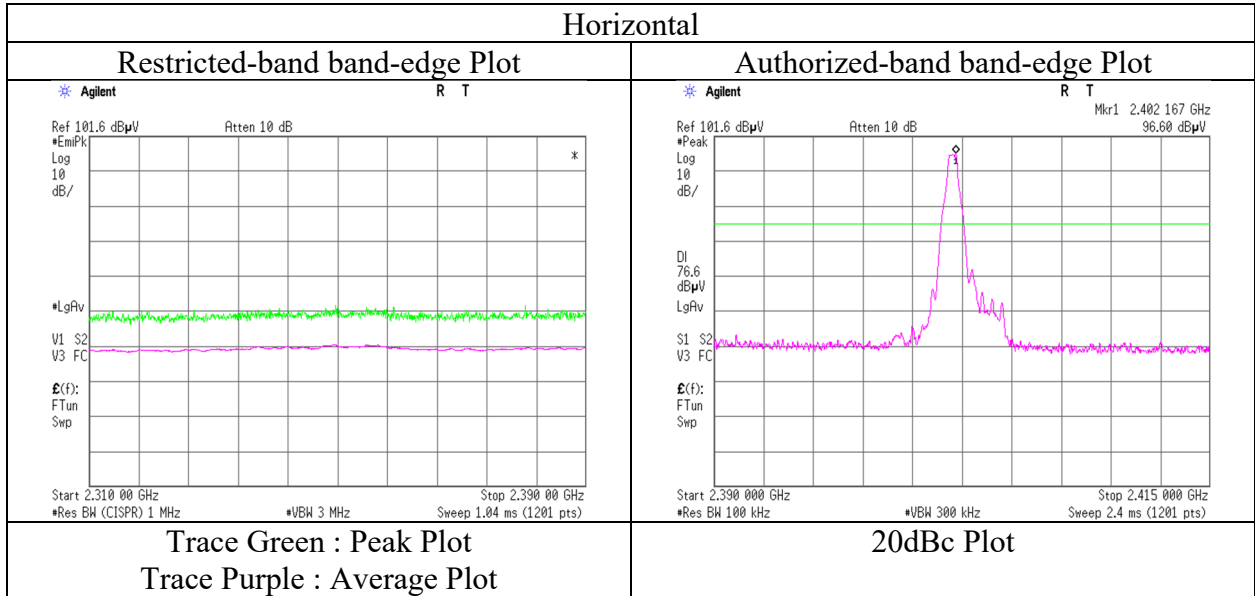
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log(4.38 m / 3.0 m) = 3.29 dB

10 GHz - 26.5 GHz : 20log(1.0 m / 3.0 m) = -9.54 dB

**Radiated Spurious Emission
(Reference Plot for band-edge)**

Test place Kashima EMC Lab.
Semi Anechoic Chamber No.10
Date January 13, 2023
Temperature / Humidity 20 deg. C / 39 % RH
Engineer Hiromitsu Tanabe
 (1 GHz - 10 GHz)
Mode Tx, Hopping Off, DH5 2402 MHz



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

Radiated Spurious Emission

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.10	No.10	No.10	No.10
Date	January 16, 2023	January 13, 2023	January 16, 2023	January 16, 2023
Temperature / Humidity	18 deg. C / 48 % RH	20 deg. C / 39 % RH	18 deg. C / 48 % RH	18 deg. C / 48 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
Mode	(30 MHz - 1000 MHz)	(1 GHz - 10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
	Tx, Hopping Off, DH5 2441 MHz			

(* 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.	195.485	QP	44.40	10.09	7.90	31.34	0.00	31.05	43.5	12.4	183	262	
Hori.	288.417	QP	43.50	13.09	8.78	31.30	0.00	34.07	46.0	11.9	162	288	
Hori.	375.000	QP	41.80	15.04	9.85	31.24	0.00	35.45	46.0	10.5	100	189	
Hori.	625.020	QP	32.00	20.20	11.04	31.08	0.00	32.16	46.0	13.8	136	231	
Hori.	2578.910	PK	51.70	28.27	13.38	43.42	3.29	53.22	73.9	20.6	193	134	
Hori.	2597.000	PK	54.10	28.37	13.39	43.41	3.29	55.74	73.9	18.1	157	215	
Hori.	4882.000	PK	50.80	32.56	5.22	45.01	3.29	46.86	73.9	27.0	170	167	
Hori.	6000.537	PK	54.50	34.97	5.76	45.09	3.29	53.43	73.9	20.4	170	167	
Hori.	7323.000	PK	47.10	37.37	6.33	43.62	3.29	50.47	73.9	23.4	150	0	Floor noise
Hori.	9764.000	PK	45.00	37.99	7.26	41.62	3.29	51.92	73.9	21.9	150	0	Floor noise
Hori.	2578.910	AV	39.70	28.27	13.38	43.42	3.29	41.22	53.9	12.6	193	134	VBW: 10 Hz
Hori.	2597.000	AV	42.70	28.37	13.39	43.41	3.29	44.34	53.9	9.5	157	215	VBW: 360 Hz*1)
Hori.	4882.000	AV	38.00	32.56	5.22	45.01	3.29	34.06	53.9	19.8	170	167	VBW: 360 Hz
Hori.	6000.537	AV	43.60	34.97	5.76	45.09	3.29	42.53	53.9	11.3	170	167	VBW: 10 Hz
Hori.	7323.000	AV	34.80	37.37	6.33	43.62	3.29	38.17	53.9	15.7	150	0	Floor noise
Hori.	9764.000	AV	32.70	37.99	7.26	41.62	3.29	39.62	53.9	14.2	150	0	Floor noise
Vert.	87.715	QP	37.80	7.86	6.77	31.52	0.00	20.91	40.0	19.0	100	342	
Vert.	152.148	QP	45.10	13.37	7.48	31.41	0.00	34.54	43.5	8.9	100	67	
Vert.	182.377	QP	46.40	11.65	7.77	31.37	0.00	34.45	43.5	9.0	100	131	
Vert.	210.361	QP	47.20	9.80	8.03	31.32	0.00	33.71	43.5	9.7	100	296	
Vert.	288.076	QP	43.90	13.08	8.78	31.30	0.00	34.46	46.0	11.5	100	44	
Vert.	375.000	QP	42.20	15.04	9.85	31.24	0.00	35.85	46.0	10.1	100	41	
Vert.	631.070	QP	34.60	20.24	11.06	31.08	0.00	34.82	46.0	11.1	100	288	
Vert.	2505.385	PK	53.40	27.98	13.31	43.47	3.29	54.51	73.9	19.3	205	218	
Vert.	2597.000	PK	52.20	28.37	13.39	43.41	3.29	53.84	73.9	20.0	197	175	
Vert.	4882.000	PK	48.50	32.56	5.22	45.01	3.29	44.56	73.9	29.3	150	0	Floor noise
Vert.	6000.743	PK	53.40	34.97	5.76	45.09	3.29	52.33	73.9	21.5	163	169	
Vert.	7323.000	PK	46.80	37.37	6.33	43.62	3.29	50.17	73.9	23.7	150	0	Floor noise
Vert.	9764.000	PK	45.40	37.99	7.26	41.62	3.29	52.32	73.9	21.5	150	0	Floor noise
Vert.	2505.385	AV	41.40	27.98	13.31	43.47	3.29	42.51	53.9	11.3	205	218	VBW: 10 Hz
Vert.	2597.000	AV	40.70	28.37	13.39	43.41	3.29	42.34	53.9	11.5	197	175	VBW: 360 Hz*1)
Vert.	4882.000	AV	36.70	32.56	5.22	45.01	3.29	32.76	53.9	21.1	150	0	Floor noise
Vert.	6000.743	AV	43.00	34.97	5.76	45.09	3.29	41.93	53.9	11.9	163	169	VBW: 10 Hz
Vert.	7323.000	AV	34.80	37.37	6.33	43.62	3.29	38.17	53.9	15.7	150	0	Floor noise
Vert.	9764.000	AV	32.70	37.99	7.26	41.62	3.29	39.62	53.9	14.2	150	0	Floor noise

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

Distance factor : 1 GHz - 10 GHz : $20\log(4.38\text{ m} / 3.0\text{ m}) = 3.29\text{ dB}$

10 GHz - 26.5 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

*1) This noise has the same duty cycle as the carrier.

* These results have sufficient margin without taking account Dwell time factor.

Radiated Spurious Emission

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.10	No.10	No.10	No.10
Date	January 16, 2023	January 13, 2023	January 16, 2023	January 16, 2023
Temperature / Humidity	18 deg. C / 48 % RH	20 deg. C / 39 % RH	18 deg. C / 48 % RH	18 deg. C / 48 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
Mode	(30 MHz - 1000 MHz)	(1 GHz - 10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
	Tx, Hopping Off, DH5 2480 MHz			

(* 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.	195.451	QP	40.30	10.09	7.90	31.34	0.00	26.95	43.5	16.5	183	258	
Hori.	290.938	QP	35.40	13.14	8.80	31.30	0.00	26.04	46.0	19.9	131	284	
Hori.	375.000	QP	39.80	15.04	9.85	31.24	0.00	33.45	46.0	12.5	100	342	
Hori.	625.020	QP	29.70	20.20	11.04	31.08	0.00	29.86	46.0	16.1	100	237	
Hori.	875.030	QP	29.30	22.89	11.98	30.87	0.00	33.30	46.0	12.7	100	237	
Hori.	2483.500	PK	49.70	27.87	13.30	43.48	3.29	50.68	73.9	23.2	207	274	
Hori.	2584.000	PK	53.50	28.30	13.38	43.42	3.29	55.05	73.9	18.8	251	231	
Hori.	2636.000	PK	52.00	28.54	13.39	43.42	3.29	53.80	73.9	20.1	247	253	
Hori.	4960.000	PK	51.70	32.66	5.27	45.06	3.29	47.86	73.9	26.0	127	188	
Hori.	6000.240	PK	54.10	34.97	5.76	45.09	3.29	53.03	73.9	20.8	132	171	
Hori.	7440.000	PK	47.10	37.36	6.37	43.34	3.29	50.78	73.9	23.1	150	0	Floor noise
Hori.	9920.000	PK	45.60	38.19	7.33	41.65	3.29	52.76	73.9	21.1	150	0	Floor noise
Hori.	2483.500	AV	37.60	27.87	13.30	43.48	3.29	38.58	53.9	15.3	207	274	VBW: 360 Hz
Hori.	2584.000	AV	40.80	28.30	13.38	43.42	3.29	42.35	53.9	11.5	251	231	VBW: 10 Hz
Hori.	2636.000	AV	41.80	28.54	13.39	43.42	3.29	43.60	53.9	10.3	247	253	VBW: 360 Hz*1)
Hori.	4960.000	AV	38.30	32.66	5.27	45.06	3.29	34.46	53.9	19.4	127	188	VBW: 360 Hz
Hori.	6000.240	AV	42.80	34.97	5.76	45.09	3.29	41.73	53.9	12.1	132	171	VBW: 10 Hz
Hori.	7440.000	AV	34.90	37.36	6.37	43.34	3.29	38.58	53.9	15.3	150	0	Floor noise
Hori.	9920.000	AV	33.40	38.19	7.33	41.65	3.29	40.56	53.9	13.3	150	0	Floor noise
Vert.	70.306	QP	37.30	11.48	6.53	31.56	0.00	23.75	40.0	16.2	100	106	
Vert.	152.145	QP	42.30	13.37	7.48	31.41	0.00	31.74	43.5	11.7	100	95	
Vert.	176.322	QP	42.00	12.41	7.71	31.39	0.00	30.73	43.5	12.7	100	140	
Vert.	210.361	QP	47.00	9.80	8.03	31.32	0.00	33.51	43.5	9.9	100	284	
Vert.	375.000	QP	40.10	15.04	9.85	31.24	0.00	33.75	46.0	12.2	100	43	
Vert.	631.070	QP	34.60	20.24	11.06	31.08	0.00	34.82	46.0	11.1	100	282	
Vert.	2483.500	PK	49.50	27.87	13.30	43.48	3.29	50.48	73.9	23.4	111	134	
Vert.	2502.423	PK	52.40	27.97	13.31	43.47	3.29	53.50	73.9	20.4	225	159	
Vert.	2636.000	PK	51.40	28.54	13.39	43.42	3.29	53.20	73.9	20.7	186	164	
Vert.	4960.000	PK	48.10	32.66	5.27	45.06	3.29	44.26	73.9	29.6	150	0	Floor noise
Vert.	6000.601	PK	54.10	34.97	5.76	45.09	3.29	53.03	73.9	20.8	143	211	
Vert.	7440.000	PK	46.40	37.36	6.37	43.34	3.29	50.08	73.9	23.8	150	0	Floor noise
Vert.	9920.000	PK	46.20	38.19	7.33	41.65	3.29	53.36	73.9	20.5	150	0	Floor noise
Vert.	2483.500	AV	36.80	27.87	13.30	43.48	3.29	37.78	53.9	16.1	111	134	VBW: 360 Hz
Vert.	2502.423	AV	40.50	27.97	13.31	43.47	3.29	41.60	53.9	12.3	225	159	VBW: 10 Hz
Vert.	2636.000	AV	40.00	28.54	13.39	43.42	3.29	41.80	53.9	12.1	186	164	VBW: 360 Hz*1)
Vert.	4960.000	AV	37.00	32.66	5.27	45.06	3.29	33.16	53.9	20.7	150	0	Floor noise
Vert.	6000.601	AV	43.40	34.97	5.76	45.09	3.29	42.33	53.9	11.5	143	211	VBW: 10 Hz
Vert.	7440.000	AV	34.70	37.36	6.37	43.34	3.29	38.38	53.9	15.5	150	0	Floor noise
Vert.	9920.000	AV	33.70	38.19	7.33	41.65	3.29	40.86	53.9	13.0	150	0	Floor noise

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

Distance factor : 1 GHz - 10 GHz : $20\log(4.38\text{ m} / 3.0\text{ m}) = 3.29\text{ dB}$

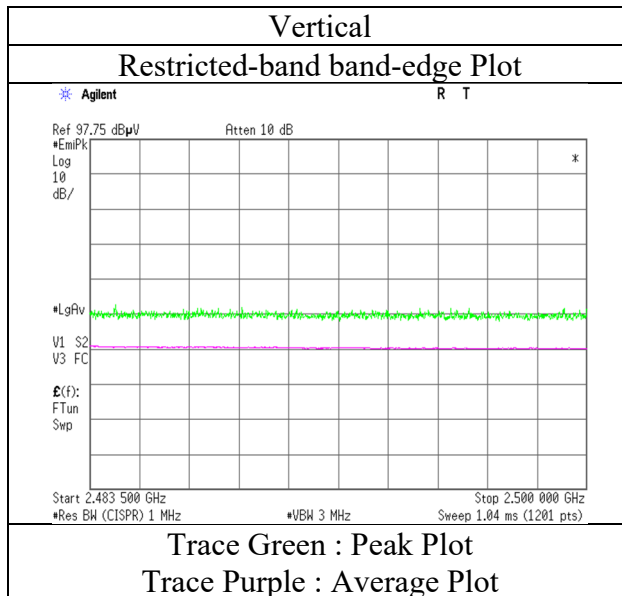
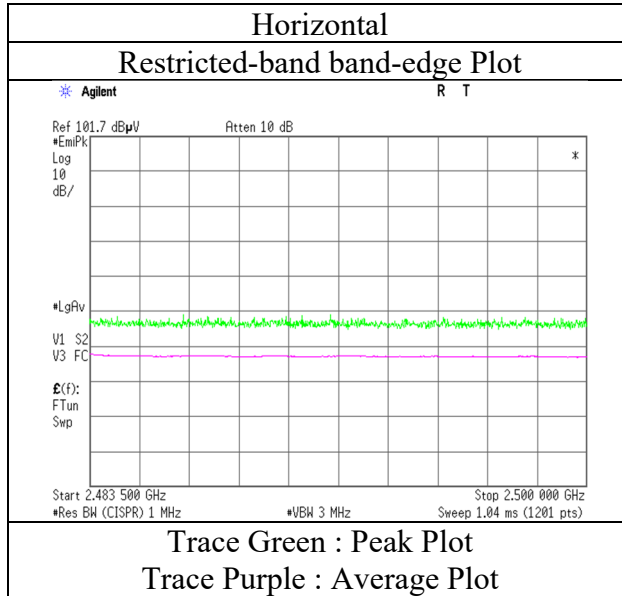
10 GHz - 26.5 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

*1) This noise has the same duty cycle as the carrier.

* These results have sufficient margin without taking account Dwell time factor.

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	January 13, 2023
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz - 10 GHz)
Mode	Tx, Hopping Off, DH5 2480 MHz



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

Radiated Spurious Emission

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.10	No.10	No.10	No.10
Date	January 16, 2023	January 13, 2023	January 16, 2023	January 16, 2023
Temperature / Humidity	18 deg. C / 48 % RH	20 deg. C / 39 % RH	18 deg. C / 48 % RH	18 deg. C / 48 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
Mode	(30 MHz - 1000 MHz)	(1 GHz - 10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
	Tx, Hopping Off, 3DH5 2402 MHz			

(* 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.	195.451	QP	40.70	10.09	7.90	31.34	0.00	27.35	43.5	16.1	175	175	256
Hori.	250.000	QP	41.70	11.72	8.41	31.32	0.00	30.51	46.0	15.4	135	135	252
Hori.	375.000	QP	39.90	15.04	9.85	31.24	0.00	33.55	46.0	12.4	100	100	172
Hori.	500.000	QP	35.20	17.77	10.67	31.17	0.00	32.47	46.0	13.5	100	100	222
Hori.	625.020	QP	31.10	20.20	11.04	31.08	0.00	31.26	46.0	14.7	100	100	240
Hori.	2390.000	PK	50.10	27.50	13.24	43.53	3.29	50.60	73.9	23.3	154	154	265
Hori.	2558.000	PK	50.40	28.17	13.35	43.44	3.29	51.77	73.9	22.1	230	230	278
Hori.	2577.722	PK	53.00	28.27	13.38	43.42	3.29	54.52	73.9	19.3	164	164	204
Hori.	4804.000	PK	49.20	32.54	5.17	44.95	3.29	45.25	73.9	28.6	170	170	179
Hori.	6000.552	PK	54.80	34.97	5.76	45.09	3.29	53.73	73.9	20.1	172	172	107
Hori.	7206.000	PK	47.50	37.22	6.34	43.89	3.29	50.46	73.9	23.4	150	150	0 Floor noise
Hori.	9608.000	PK	45.00	37.99	7.22	41.78	3.29	51.72	73.9	22.1	150	150	0 Floor noise
Hori.	2390.000	AV	40.80	27.50	13.24	43.53	3.29	41.30	53.9	12.6	154	154	265 VBW: 360 Hz
Hori.	2558.000	AV	39.30	28.17	13.35	43.44	3.29	40.67	53.9	13.2	230	230	278 VBW: 360 Hz*1)
Hori.	2577.722	AV	40.60	28.27	13.38	43.42	3.29	42.12	53.9	11.7	164	164	204 VBW: 10 Hz
Hori.	4804.000	AV	37.60	32.54	5.17	44.95	3.29	33.65	53.9	20.2	170	170	179 VBW: 360 Hz
Hori.	6000.552	AV	43.10	34.97	5.76	45.09	3.29	42.03	53.9	11.8	172	172	107 VBW: 10 Hz
Hori.	7206.000	AV	35.30	37.22	6.34	43.89	3.29	38.26	53.9	15.6	150	150	0 Floor noise
Hori.	9608.000	AV	32.60	37.99	7.22	41.78	3.29	39.32	53.9	14.5	150	150	0 Floor noise
Vert.	68.972	QP	37.30	11.66	6.52	31.56	0.00	23.92	40.0	16.0	100	100	176
Vert.	152.152	QP	43.30	13.37	7.48	31.41	0.00	32.74	43.5	10.7	100	100	287
Vert.	176.326	QP	42.60	12.41	7.71	31.39	0.00	31.33	43.5	12.1	100	100	121
Vert.	210.361	QP	47.50	9.80	8.03	31.32	0.00	34.01	43.5	9.4	100	100	291
Vert.	375.000	QP	41.80	15.04	9.85	31.24	0.00	35.45	46.0	10.5	100	100	36
Vert.	631.070	QP	34.30	20.24	11.06	31.08	0.00	34.52	46.0	11.4	100	100	288
Vert.	2390.000	PK	48.50	27.50	13.24	43.53	3.29	49.00	73.9	24.9	150	150	143
Vert.	2505.706	PK	53.01	27.98	13.31	43.47	3.29	54.12	73.9	19.7	221	221	159
Vert.	2558.141	PK	52.90	28.17	13.35	43.44	3.29	54.27	73.9	19.6	203	203	148
Vert.	4804.000	PK	49.00	32.54	5.17	44.95	3.29	45.05	73.9	28.8	150	150	0 Floor noise
Vert.	6000.833	PK	54.20	34.97	5.76	45.09	3.29	53.13	73.9	20.7	214	214	205
Vert.	7206.000	PK	46.90	37.22	6.34	43.89	3.29	49.86	73.9	24.0	150	150	0 Floor noise
Vert.	9608.000	PK	44.60	37.99	7.22	41.78	3.29	51.32	73.9	22.5	150	150	0 Floor noise
Vert.	2390.000	AV	36.80	27.50	13.24	43.53	3.29	37.30	53.9	16.6	150	150	143 VBW: 360 Hz
Vert.	2505.706	AV	40.80	27.98	13.31	43.47	3.29	41.91	53.9	11.9	221	221	159 VBW: 10 Hz
Vert.	2558.141	AV	40.80	28.17	13.35	43.44	3.29	42.17	53.9	11.7	203	203	148 VBW: 360 Hz*1)
Vert.	4804.000	AV	36.90	32.54	5.17	44.95	3.29	32.95	53.9	20.9	150	150	0 Floor noise
Vert.	6000.833	AV	43.70	34.97	5.76	45.09	3.29	42.63	53.9	11.2	214	214	205 VBW: 10 Hz
Vert.	7206.000	AV	35.20	37.22	6.34	43.89	3.29	38.16	53.9	15.7	150	150	0 Floor noise
Vert.	9608.000	AV	32.60	37.99	7.22	41.78	3.29	39.32	53.9	14.5	150	150	0 Floor noise

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

Distance factor : 1 GHz - 10 GHz : 20log(4.38 m / 3.0 m) = 3.29 dB

10 GHz - 26.5 GHz : 20log(1.0 m / 3.0 m) = -9.54 dB

*1) This noise has the same duty cycle as the carrier.

* These results have sufficient margin without taking account Dwell time factor.

20 dBc Data Sheet (RBW 100 kHz, VBW 300 kHz)

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]	Remark
Hori.	2402.000	PK	95.00	27.53	13.25	43.52	3.29	95.55	-	-	Carrier
Hori.	2400.000	PK	52.80	27.52	13.25	43.52	3.29	53.34	75.55	22.2	-
Vert.	2402.000	PK	91.30	27.53	13.25	43.52	3.29	91.85	-	-	Carrier
Vert.	2400.000	PK	50.70	27.52	13.25	43.52	3.29	51.24	71.85	20.6	-

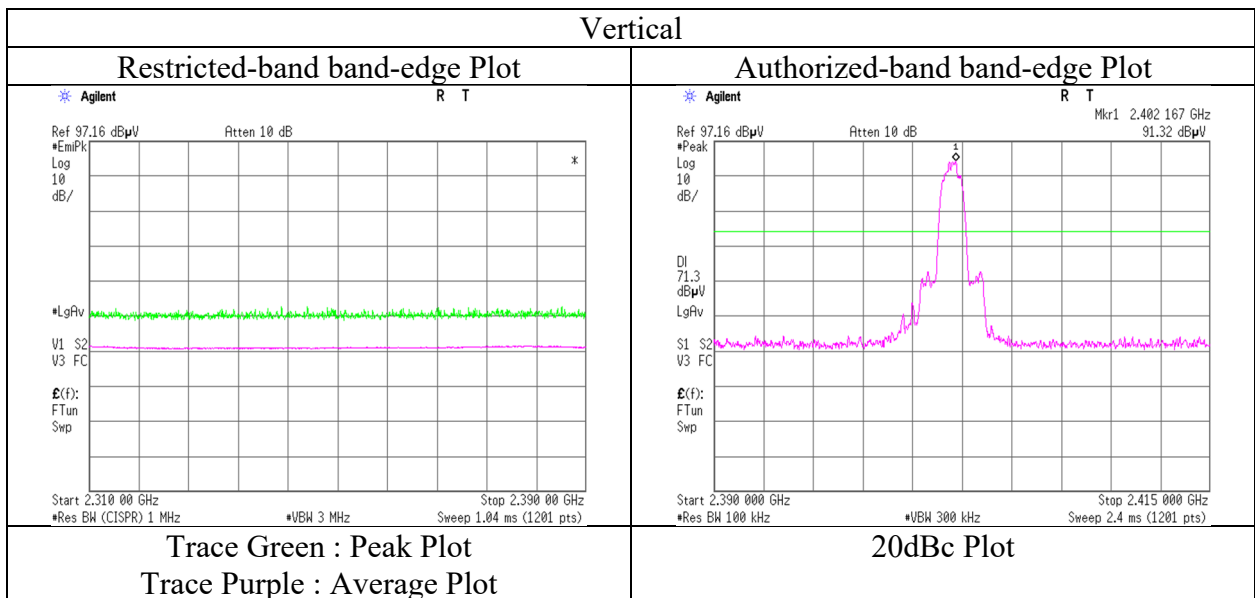
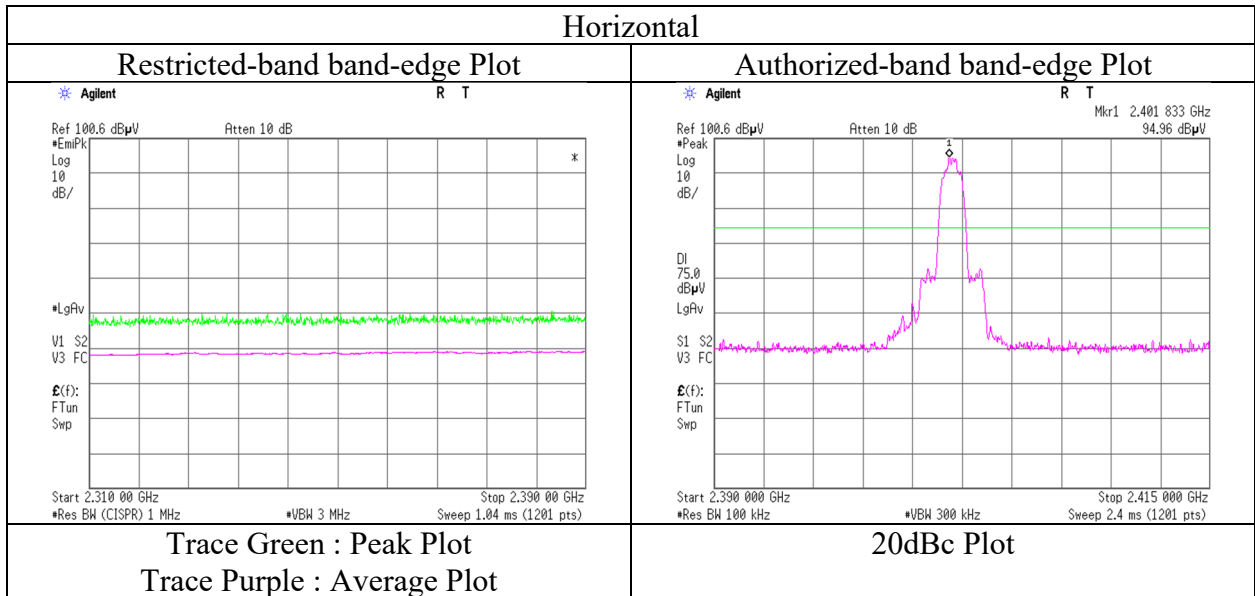
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log(4.38 m / 3.0 m) = 3.29 dB

10 GHz - 26.5 GHz : 20log(1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	January 13, 2023
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe
	(1 GHz - 10 GHz)
Mode	Tx, Hopping Off, 3DH5 2402 MHz



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

Radiated Spurious Emission

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.10	No.10	No.10	No.10
Date	January 16, 2023	January 13, 2023	January 16, 2023	January 16, 2023
Temperature / Humidity	18 deg. C / 48 % RH	20 deg. C / 39 % RH	18 deg. C / 48 % RH	18 deg. C / 48 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
Mode	(30 MHz - 1000 MHz)	(1 GHz - 10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
	Tx, Hopping Off, 3DH5 2441 MHz			

(* 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.	193.462	QP	41.10	10.22	7.88	31.35	0.00	27.85	43.5	15.6	162	270	
Hori.	250.000	QP	41.70	11.72	8.41	31.32	0.00	30.51	46.0	15.4	166	243	
Hori.	375.000	QP	39.60	15.04	9.85	31.24	0.00	33.25	46.0	12.7	100	266	
Hori.	500.000	QP	33.30	17.77	10.67	31.17	0.00	30.57	46.0	15.4	100	223	
Hori.	625.020	QP	31.30	20.20	11.04	31.08	0.00	31.46	46.0	14.5	100	251	
Hori.	2577.495	PK	55.20	28.27	13.38	43.42	3.29	56.72	73.9	17.1	191	133	
Hori.	2597.000	PK	55.90	28.37	13.39	43.41	3.29	57.54	73.9	16.3	125	215	
Hori.	4882.000	PK	49.80	32.56	5.22	45.01	3.29	45.86	73.9	28.0	150	170	
Hori.	6000.535	PK	54.00	34.97	5.76	45.09	3.29	52.93	73.9	20.9	145	155	
Hori.	7323.000	PK	46.20	37.37	6.33	43.62	3.29	49.57	73.9	24.3	150	0	Floor noise
Hori.	9764.000	PK	45.30	37.99	7.26	41.62	3.29	52.22	73.9	21.6	150	0	Floor noise
Hori.	2577.495	AV	41.80	28.27	13.38	43.42	3.29	43.32	53.9	10.5	191	133	VBW: 10 Hz
Hori.	2597.000	AV	43.50	28.37	13.39	43.41	3.29	45.14	53.9	8.7	125	215	VBW: 360 Hz*1)
Hori.	4882.000	AV	37.80	32.56	5.22	45.01	3.29	33.86	53.9	20.0	150	170	VBW: 360 Hz
Hori.	6000.535	AV	44.00	34.97	5.76	45.09	3.29	42.93	53.9	10.9	145	155	VBW: 10 Hz
Hori.	7323.000	AV	35.30	37.37	6.33	43.62	3.29	38.67	53.9	15.2	150	0	Floor noise
Hori.	9764.000	AV	32.90	37.99	7.26	41.62	3.29	39.82	53.9	14.0	150	0	Floor noise
Vert.	70.301	QP	37.50	11.48	6.53	31.56	0.00	23.95	40.0	16.0	100	166	
Vert.	151.137	QP	42.00	13.32	7.47	31.41	0.00	31.38	43.5	12.1	100	91	
Vert.	175.318	QP	42.60	12.53	7.70	31.39	0.00	31.44	43.5	12.0	100	123	
Vert.	210.361	QP	47.00	9.80	8.03	31.32	0.00	33.51	43.5	9.9	100	279	
Vert.	375.000	QP	39.80	15.04	9.85	31.24	0.00	33.45	46.0	12.5	100	51	
Vert.	631.070	QP	34.50	20.24	11.06	31.08	0.00	34.72	46.0	11.2	100	287	
Vert.	2505.636	PK	54.70	27.98	13.31	43.47	3.29	55.81	73.9	18.0	155	205	
Vert.	2597.000	PK	54.50	28.37	13.39	43.41	3.29	56.14	73.9	17.7	197	178	
Vert.	4882.000	PK	49.80	32.56	5.22	45.01	3.29	45.86	73.9	28.0	150	0	Floor noise
Vert.	6000.805	PK	53.60	34.97	5.76	45.09	3.29	52.53	73.9	21.3	170	173	
Vert.	7323.000	PK	47.50	37.37	6.33	43.62	3.29	50.87	73.9	23.0	150	0	Floor noise
Vert.	9764.000	PK	45.40	37.99	7.26	41.62	3.29	52.32	73.9	21.5	150	0	Floor noise
Vert.	2505.636	AV	41.40	27.98	13.31	43.47	3.29	42.51	53.9	11.3	155	205	VBW: 10 Hz
Vert.	2597.000	AV	41.50	28.37	13.39	43.41	3.29	43.14	53.9	10.7	197	178	VBW: 360 Hz*1)
Vert.	4882.000	AV	36.80	32.56	5.22	45.01	3.29	32.86	53.9	21.0	150	0	Floor noise
Vert.	6000.805	AV	42.80	34.97	5.76	45.09	3.29	41.73	53.9	12.1	170	173	VBW: 10 Hz
Vert.	7323.000	AV	35.10	37.37	6.33	43.62	3.29	38.47	53.9	15.4	150	0	Floor noise
Vert.	9764.000	AV	32.90	37.99	7.26	41.62	3.29	39.82	53.9	14.0	150	0	Floor noise

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

Distance factor : 1 GHz - 10 GHz : $20\log(4.38\text{ m} / 3.0\text{ m}) = 3.29\text{ dB}$

10 GHz - 26.5 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

*1) This noise has the same duty cycle as the carrier.

* These results have sufficient margin without taking account Dwell time factor.

Radiated Spurious Emission

Test place Kashima EMC Lab.
Semi Anechoic Chamber No.10 No.10 No.10 No.10
Date January 16, 2023 January 13, 2023 January 16, 2023 January 16, 2023
Temperature / Humidity 18 deg. C / 48 % RH 20 deg. C / 39 % RH 18 deg. C / 48 % RH 18 deg. C / 48 % RH
Engineer Hiromitsu Tanabe Hiromitsu Tanabe Hiromitsu Tanabe Hiromitsu Tanabe
Mode (30 MHz - 1000 MHz) (1 GHz - 10 GHz) (10 GHz - 18 GHz) (18 GHz - 26.5 GHz)
Tx, Hopping Off, 3DH5 2480 MHz

(* 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.	196.504	QP	41.30	10.01	7.91	31.34	0.00	27.88	43.5	15.6	178	268	
Hori.	250.000	QP	40.10	11.72	8.41	31.32	0.00	28.91	46.0	17.0	161	246	
Hori.	375.000	QP	41.90	15.04	9.85	31.24	0.00	35.55	46.0	10.4	100	175	
Hori.	500.000	QP	34.80	17.77	10.67	31.17	0.00	32.07	46.0	13.9	100	224	
Hori.	625.020	QP	32.20	20.20	11.04	31.08	0.00	32.36	46.0	13.6	100	249	
Hori.	2483.500	PK	50.80	27.87	13.30	43.48	3.29	51.78	73.9	22.1	207	270	
Hori.	2577.855	PK	53.10	28.27	13.38	43.42	3.29	54.62	73.9	19.2	224	111	
Hori.	2636.000	PK	49.60	28.54	13.39	43.42	3.29	51.40	73.9	22.5	159	277	
Hori.	4960.000	PK	49.60	32.66	5.27	45.06	3.29	45.76	73.9	28.1	150	0	
Hori.	6000.535	PK	54.00	34.97	5.76	45.09	3.29	52.93	73.9	20.9	145	155	
Hori.	7440.000	PK	47.30	37.36	6.37	43.34	3.29	50.98	73.9	22.9	150	0	
Hori.	9920.000	PK	46.40	38.19	7.33	41.65	3.29	53.56	73.9	20.3	150	0	
Hori.	2483.500	AV	38.00	27.87	13.30	43.48	3.29	38.98	53.9	14.9	207	270	VBW: 360 Hz
Hori.	2577.855	AV	41.40	28.27	13.38	43.42	3.29	42.92	53.9	10.9	224	111	VBW: 10 Hz
Hori.	2636.000	AV	39.50	28.54	13.39	43.42	3.29	41.30	53.9	12.6	159	277	VBW: 360 Hz*1)
Hori.	4960.000	AV	37.30	32.66	5.27	45.06	3.29	33.46	53.9	20.4	150	0	Floor noise
Hori.	6000.535	AV	44.00	34.97	5.76	45.09	3.29	42.93	53.9	10.9	145	155	VBW: 10 Hz
Hori.	7440.000	AV	35.60	37.36	6.37	43.34	3.29	39.28	53.9	14.6	150	0	Floor noise
Hori.	9920.000	AV	34.80	38.19	7.33	41.65	3.29	41.96	53.9	11.9	150	0	Floor noise
Vert.	70.280	QP	37.30	11.49	6.53	31.56	0.00	23.76	40.0	16.2	100	96	
Vert.	152.160	QP	44.20	13.37	7.48	31.41	0.00	33.64	43.5	9.8	100	322	
Vert.	175.322	QP	41.80	12.53	7.70	31.39	0.00	30.64	43.5	12.8	100	126	
Vert.	210.361	QP	46.80	9.80	8.03	31.32	0.00	33.31	43.5	10.1	100	289	
Vert.	375.000	QP	41.30	15.04	9.85	31.24	0.00	34.95	46.0	11.0	100	40	
Vert.	631.070	QP	34.80	20.24	11.06	31.08	0.00	35.02	46.0	10.9	100	283	
Vert.	2483.500	PK	51.20	27.87	13.30	43.48	3.29	52.18	73.9	21.7	100	124	
Vert.	2505.606	PK	53.30	27.98	13.31	43.47	3.29	54.41	73.9	19.4	154	211	
Vert.	2636.000	PK	50.50	28.54	13.39	43.42	3.29	52.30	73.9	21.6	155	198	
Vert.	4960.000	PK	48.40	32.66	5.27	45.06	3.29	44.56	73.9	29.3	150	0	Floor noise
Vert.	6000.580	PK	52.40	34.97	5.76	45.09	3.29	51.33	73.9	22.5	186	162	
Vert.	7440.000	PK	47.10	37.36	6.37	43.34	3.29	50.78	73.9	23.1	150	0	Floor noise
Vert.	9920.000	PK	16.30	38.19	7.33	41.65	3.29	23.46	73.9	50.4	150	0	Floor noise
Vert.	2483.500	AV	38.20	27.87	13.30	43.48	3.29	39.18	53.9	14.7	100	124	VBW: 360 Hz
Vert.	2505.606	AV	41.30	27.98	13.31	43.47	3.29	42.41	53.9	11.4	154	211	VBW: 10 Hz
Vert.	2636.000	AV	39.60	28.54	13.39	43.42	3.29	41.40	53.9	12.5	155	198	VBW: 360 Hz*1)
Vert.	4960.000	AV	37.50	32.66	5.27	45.06	3.29	33.66	53.9	20.2	150	0	Floor noise
Vert.	6000.580	AV	43.50	34.97	5.76	45.09	3.29	42.43	53.9	11.4	186	162	VBW: 10 Hz
Vert.	7440.000	AV	35.60	37.36	6.37	43.34	3.29	39.28	53.9	14.6	150	0	Floor noise
Vert.	9920.000	AV	34.40	38.19	7.33	41.65	3.29	41.56	53.9	12.3	150	0	Floor noise

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

Distance factor : 1 GHz - 10 GHz : 20log (4.38 m / 3.0 m) = 3.29 dB

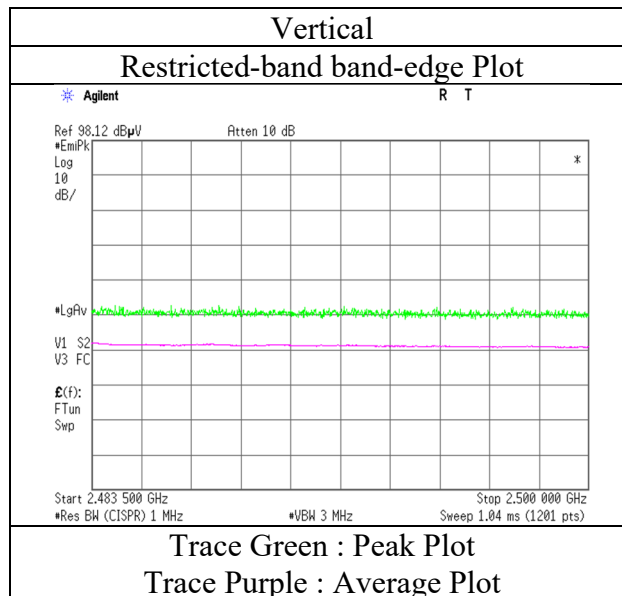
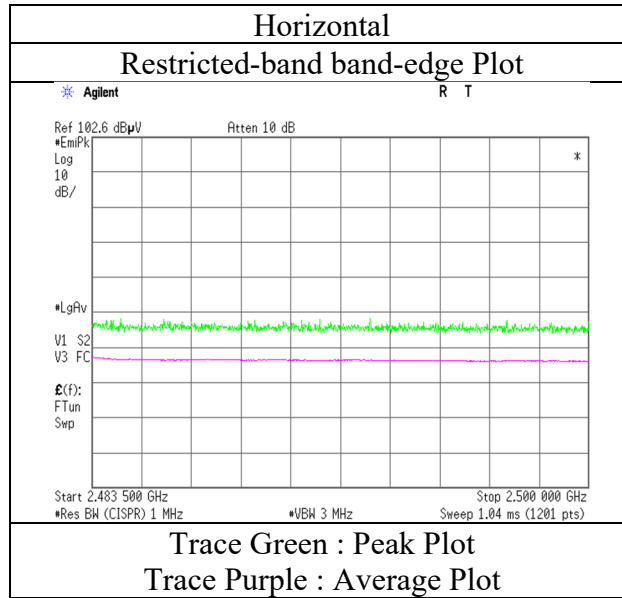
10 GHz - 26.5 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

*1) This noise has the same duty cycle as the carrier.

* These results have sufficient margin without taking account Dwell time factor.

Radiated Spurious Emission (Reference Plot for band-edge)

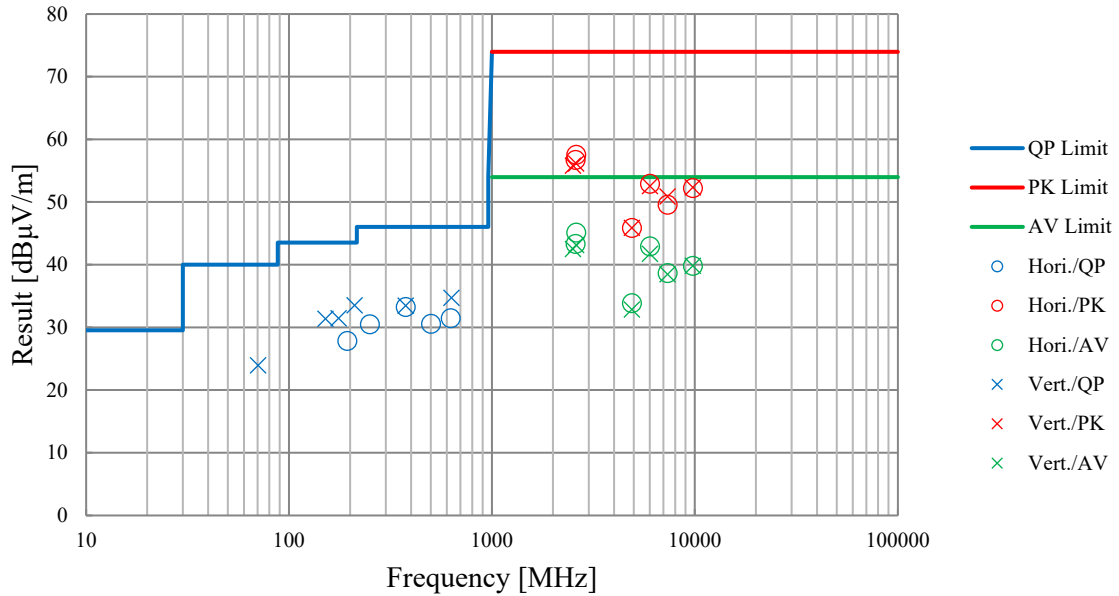
Test place	Kashima EMC Lab.
Semi Anechoic Chamber	No.10
Date	January 13, 2023
Temperature / Humidity	20 deg. C / 39 % RH
Engineer	Hiromitsu Tanabe (1 GHz - 10 GHz)
Mode	Tx, Hopping Off, 3DH5 2480 MHz



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

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

Test place	Kashima EMC Lab.			
Semi Anechoic Chamber	No.10	No.10	No.10	No.10
Date	January 16, 2023	January 13, 2023	January 16, 2023	January 16, 2023
Temperature / Humidity	18 deg. C / 48 % RH	20 deg. C / 39 % RH	18 deg. C / 48 % RH	18 deg. C / 48 % RH
Engineer	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe	Hiromitsu Tanabe
	(30 MHz - 1000 MHz)	(1 GHz - 10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx, Hopping Off, 3DH5 2441 MHz			

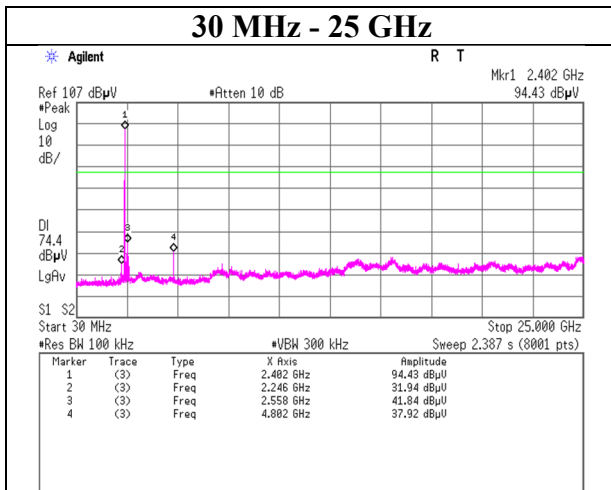
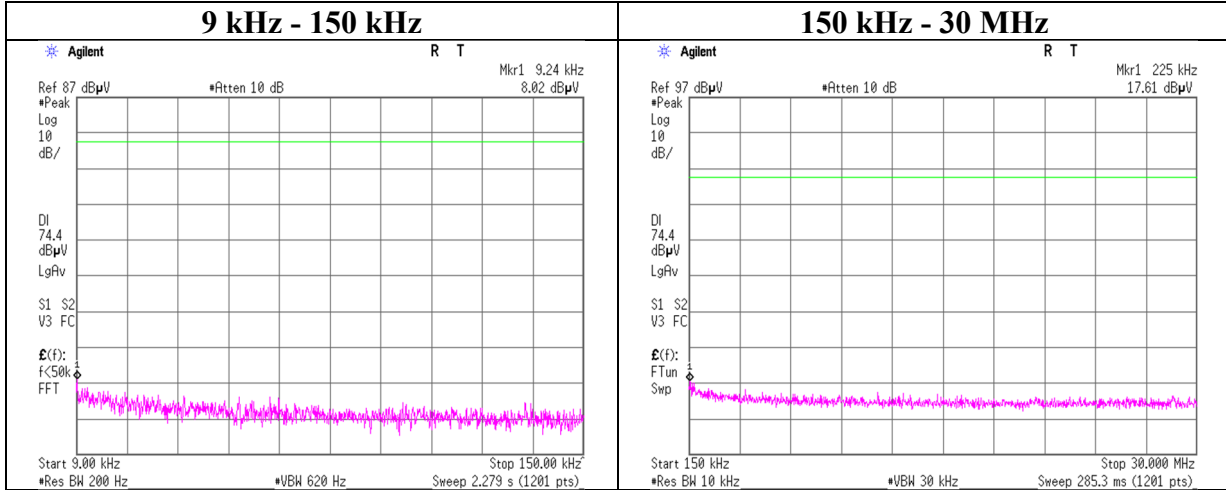


*These plots data contains sufficient number to show the trend of characteristic features for EUT.

Conducted Spurious Emission

Test place Kashima EMC Lab. No.2 Measurement Room
Date April 21, 2022
Temperature / Humidity 20 deg. C / 54 % RH
Engineer Hiromitsu Tanabe
Mode Tx, Hopping Off, DH5

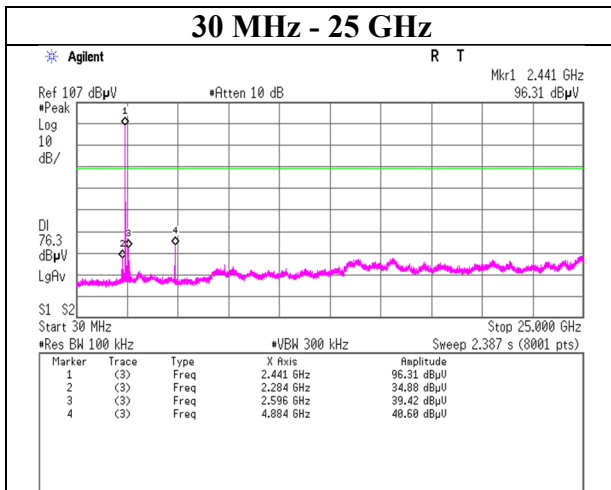
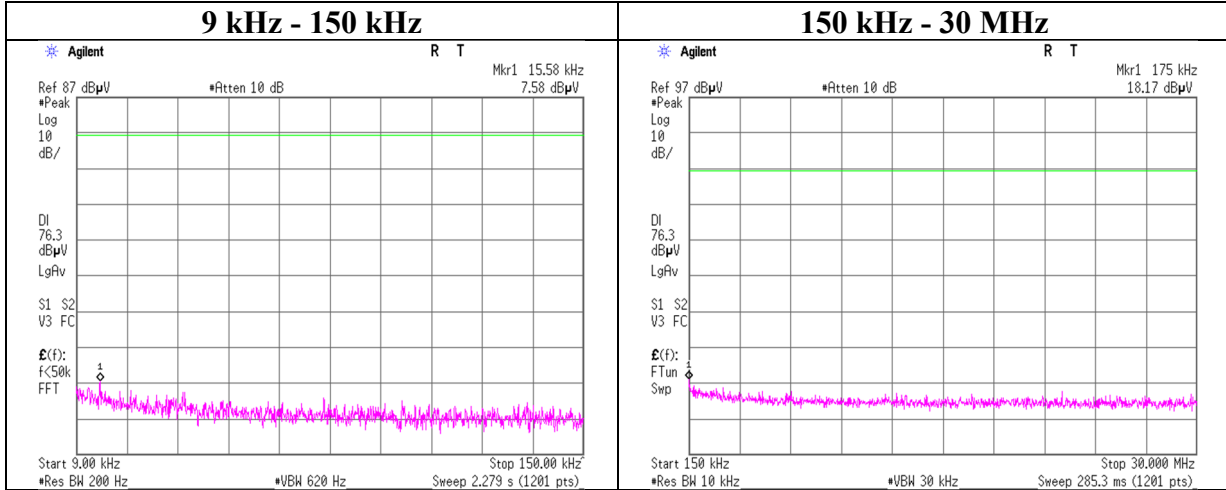
2402 MHz



Conducted Spurious Emission

Test place Kashima EMC Lab. No.2 Measurement Room
Date April 21, 2022
Temperature / Humidity 20 deg. C / 54 % RH
Engineer Hiromitsu Tanabe
Mode Tx, Hopping Off, DH5

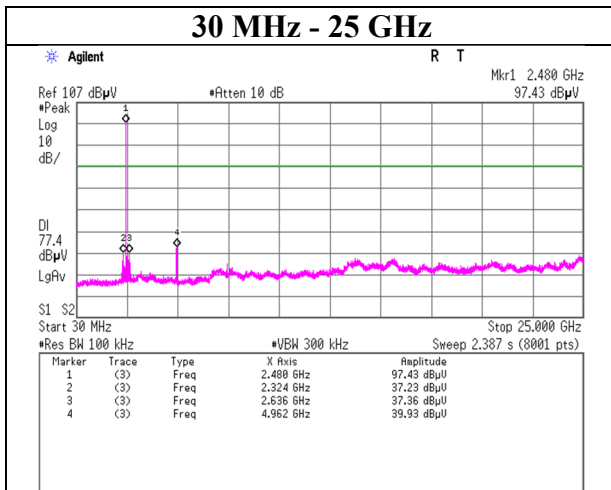
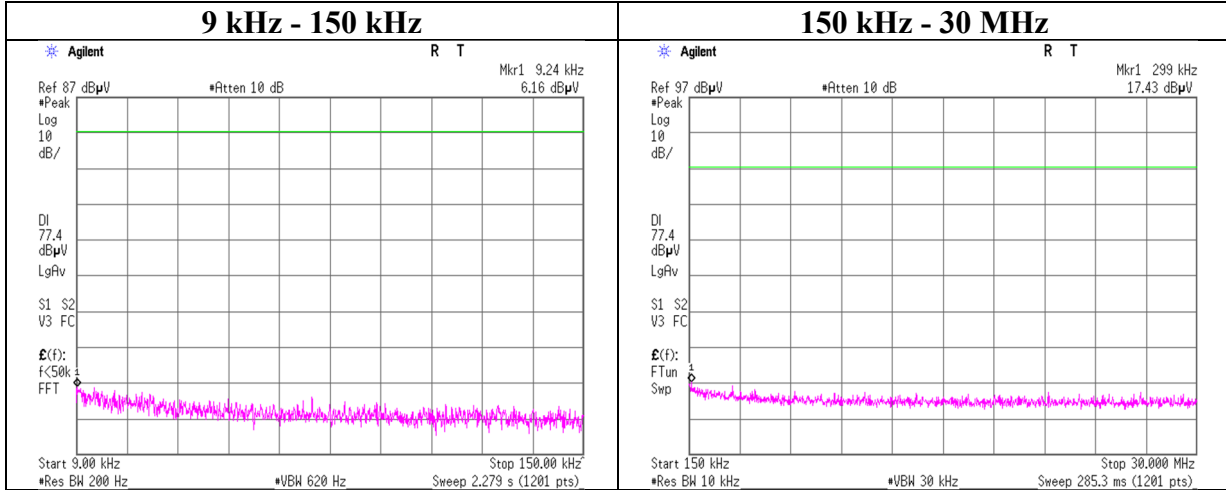
2441 MHz



Conducted Spurious Emission

Test place Kashima EMC Lab. No.2 Measurement Room
Date April 21, 2022
Temperature / Humidity 20 deg. C / 54 % RH
Engineer Hiromitsu Tanabe
Mode Tx, Hopping Off, DH5

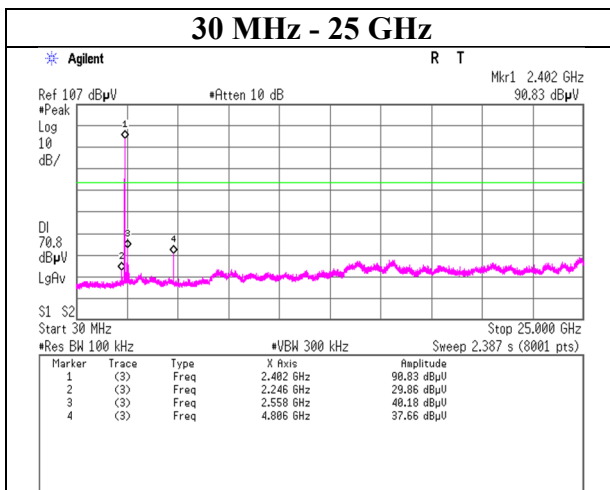
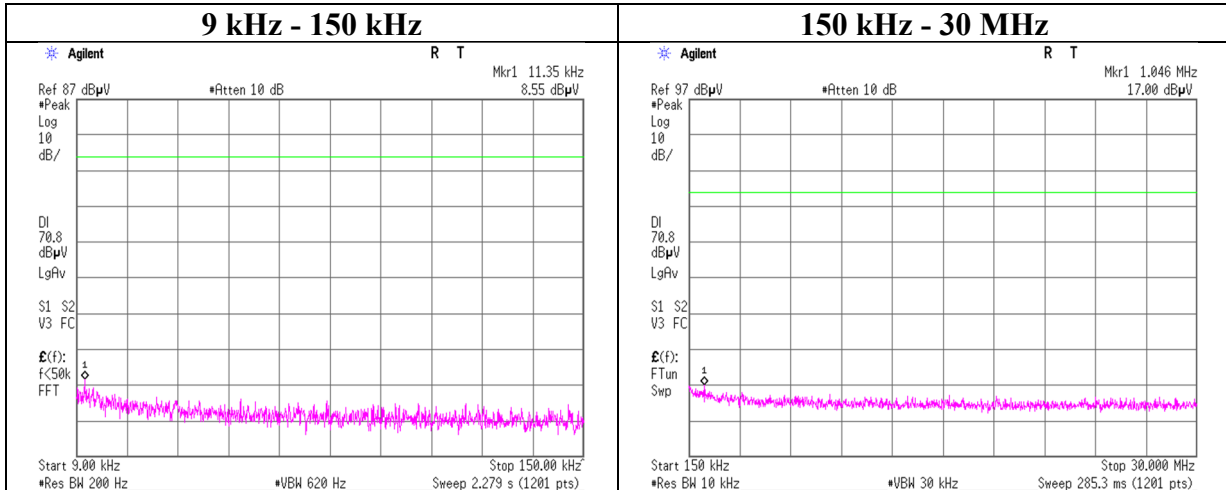
2480 MHz



Conducted Spurious Emission

Test place	Kashima EMC Lab. No.2 Measurement Room
Date	April 21, 2022
Temperature / Humidity	20 deg. C / 54 % RH
Engineer	Hiromitsu Tanabe
Mode	Tx, Hopping Off, 3DH5

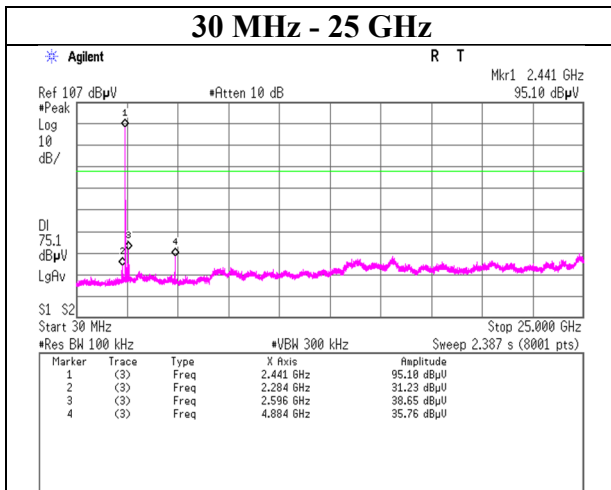
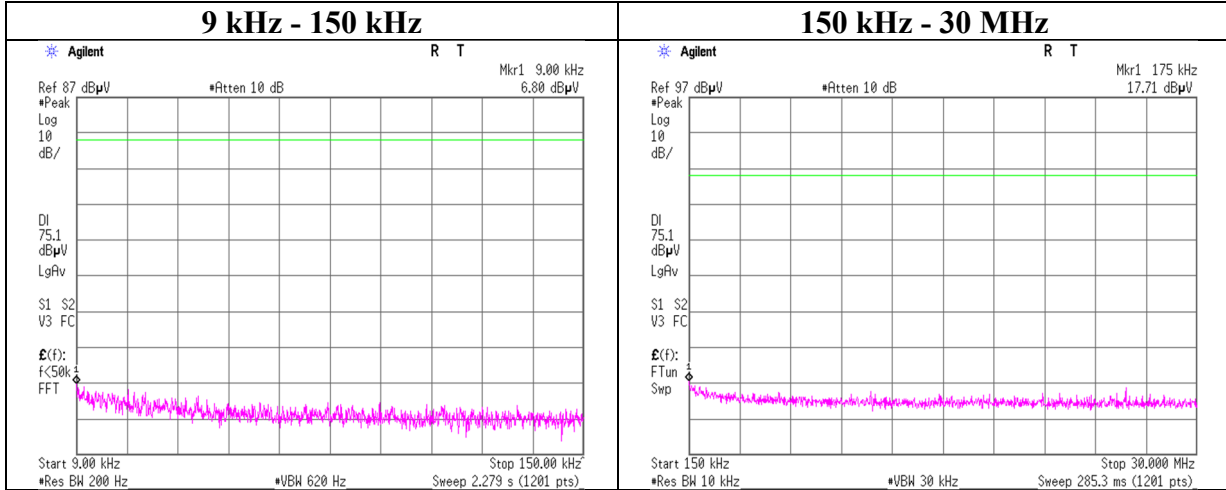
2402 MHz



Conducted Spurious Emission

Test place Kashima EMC Lab. No.2 Measurement Room
 Date April 21, 2022
 Temperature / Humidity 20 deg. C / 54 % RH
 Engineer Hiromitsu Tanabe
 Mode Tx, Hopping Off, 3DH5

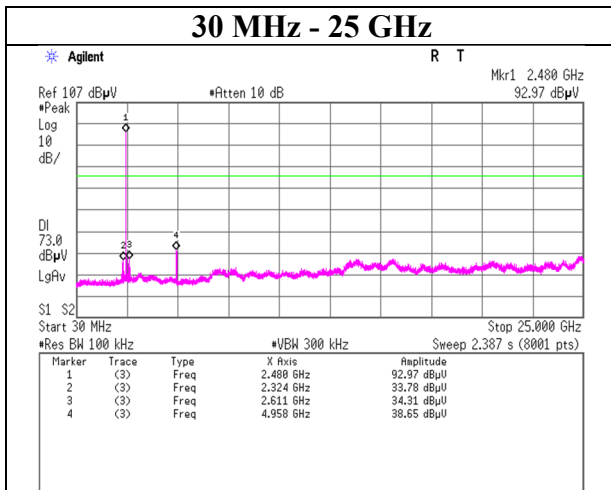
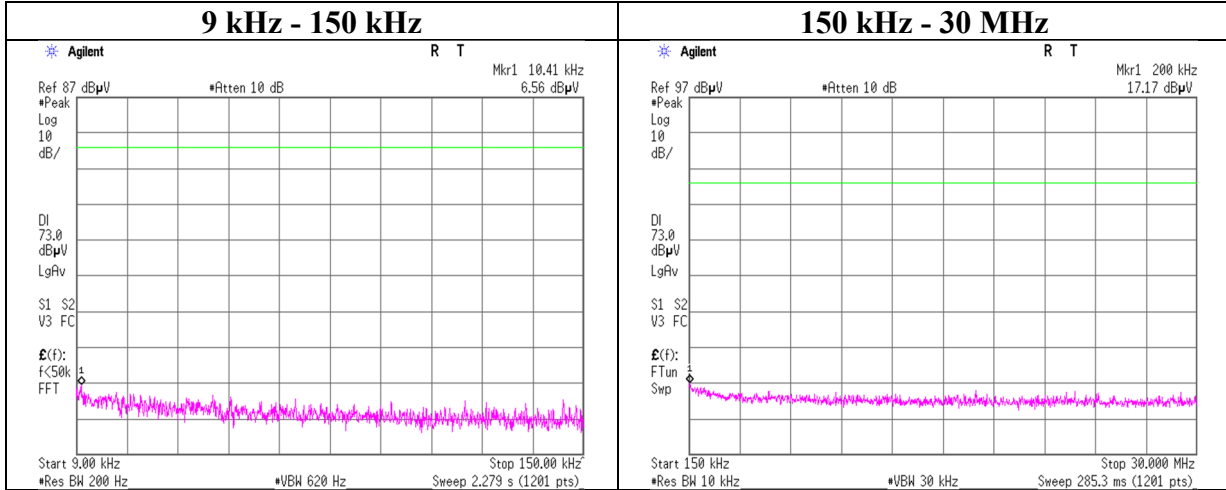
2441 MHz



Conducted Spurious Emission

Test place Kashima EMC Lab. No.2 Measurement Room
Date April 21, 2022
Temperature / Humidity 20 deg. C / 54 % RH
Engineer Hiromitsu Tanabe
Mode Tx, Hopping Off, 3DH5

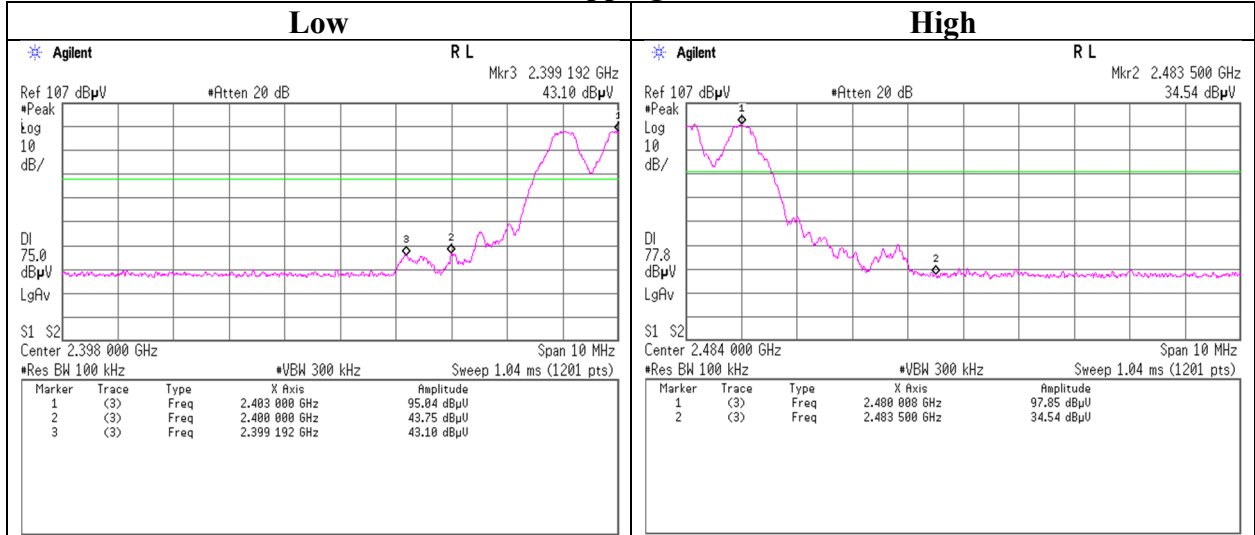
2480 MHz



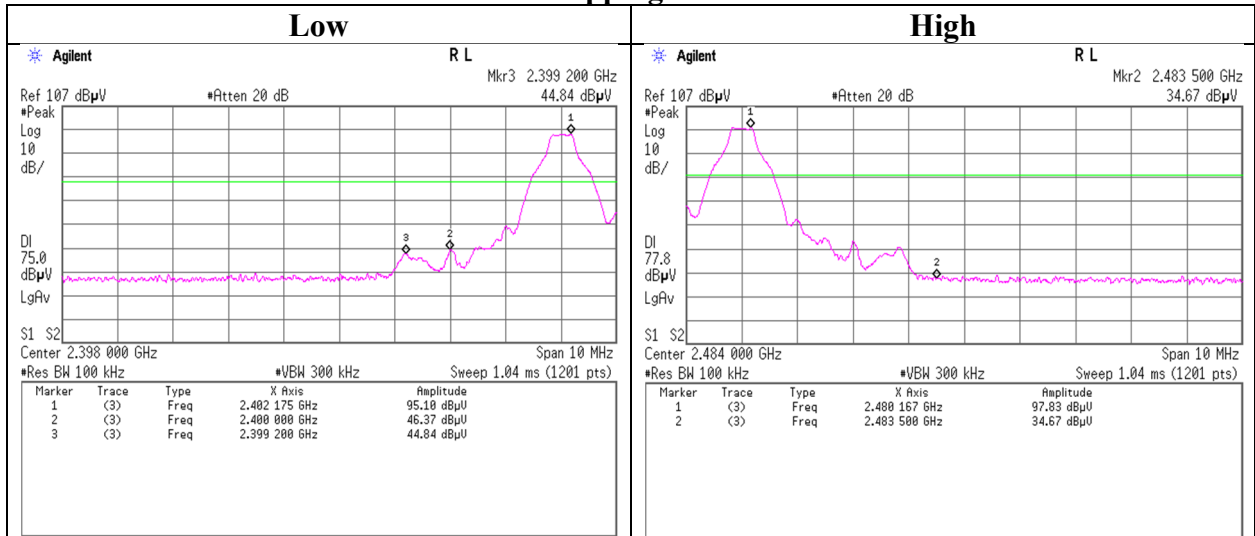
Conducted Emission Band Edge compliance

Test place Kashima EMC Lab. No.2 Measurement Room
Date April 21, 2022
Temperature / Humidity 20 deg. C / 54 % RH
Engineer Hiromitsu Tanabe
Mode Tx DH5

Hopping On



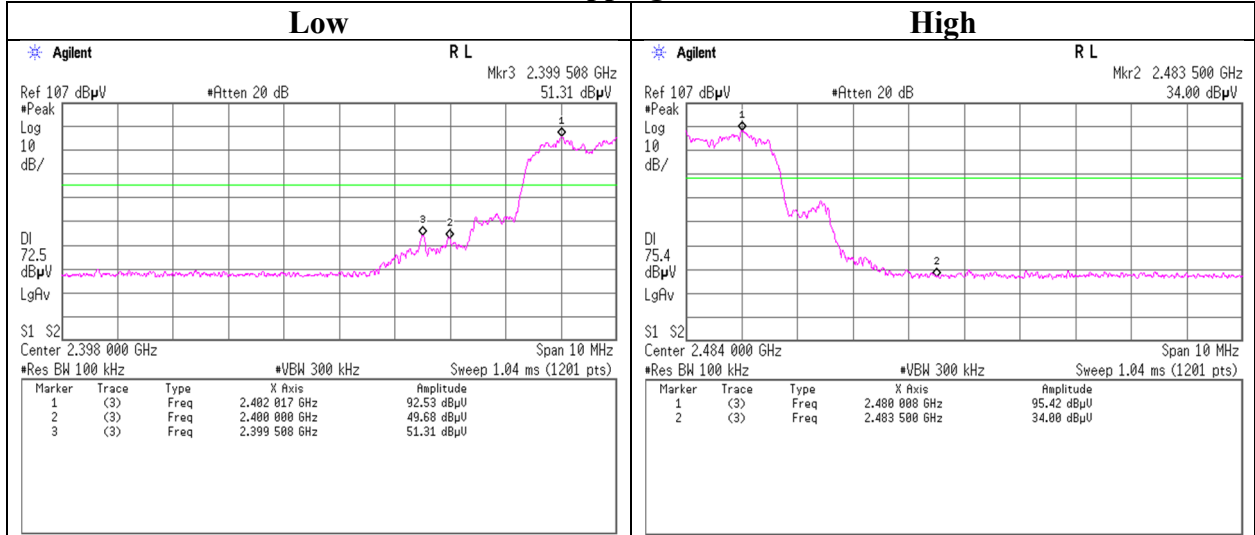
Hopping Off



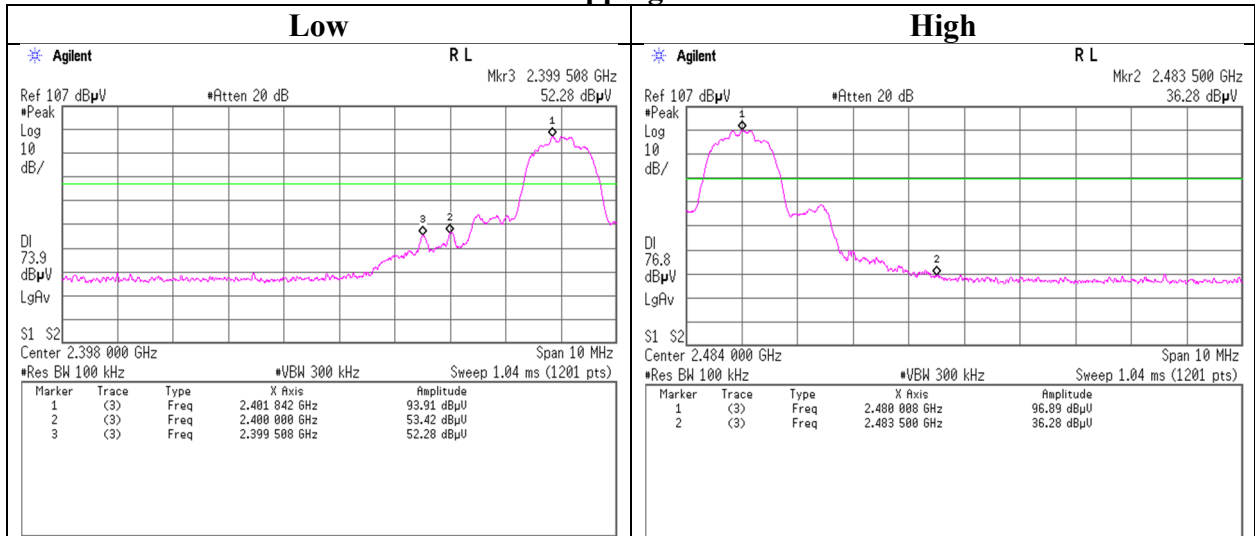
Conducted Emission Band Edge compliance

Test place Kashima EMC Lab. No.2 Measurement Room
Date April 21, 2022
Temperature / Humidity 20 deg. C / 54 % RH
Engineer Hiromitsu Tanabe
Mode Tx 3DH5

Hopping On



Hopping Off



APPENDIX 2: Test Instruments

Test Equipment

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	CSA-07	143643	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY52490024	2021/06/08	12
AT	CAT10-40	192240	10dB Fixed Attenuator	Weinschel Associates	54A-10	101826	2022/01/18	12
AT	CCC-W01	143109	Micro Wave Cable	Suhner	SUCOFLEX102	MY3662/2	2021/05/27	12
AT	CPM-16	143588	Peak Power Analyzer	Keysight Technologies Inc	8990B	MY51000276	2021/06/24	12
AT	CPSO-24	143606	Power Sensor	Keysight Technologies Inc	N1923A	MY54070024	2021/06/24	12
AT	CTS-08	144210	Digital Multimeter	Fluke Corporation	112	89790193	2021/10/11	12
AT	COS-27	200034	Temperature & Humidity Logger	HIOKI E.E. CORPORATION	LR5001/LR9504	200636456 /200699552	2021/07/20	12
AT	CBM-05	143128	Barometer	OTA	No.11	15404	2021/11/24	36
RE	CHA-24	143455	Double Ridged Wave Guide	ETS-Lindgren (Cedar Park, Texas)	3115	00204569	2022/02/05	12
RE	CCC-G09	143140	Micro Wave Cable	Junkosha	MWX221	1407S222	2022/11/21	12
RE	CCC-G16	192243	Microwave Cable	Huber+Suhner	SF104/11N/11PC3 5/8000MM	808995/4	2022/01/18	12
RE	CAF-22	142940	Pre-Amplifier	Micro Wave Factory	MPR-1G26.5-35	161399	2022/06/14	12
RE	CAT10-17	143023	10dB Fixed Atten.	Weinschel - API Technologies Corp	54A-10	56251	2022/05/30	12
RE	CHF-04	143442	HPF	MICRO-TRONICS	HPM50111-02	009	2022/05/30	12
RE	CTR-09	144199	Test Receiver	Keysight Technologies Inc	N9038A	MY53290016	2022/07/21	12
RE	CAEC-10 (SVSWR)	144633	Semi Anechoic Chamber	TDK	SVSWR (No.10)	10	2022/05/09	12
RE	TSA-01	143642	Spectrum Analyzer	Keysight Technologies Inc	N9030A	MY53310670 Version A.13.12	2022/05/25	12
RE	CSA-07	143643	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY52490024	2022/06/23	12
RE	CHA-07	143438	Double Ridged Horn	ETS-Lindgren (Cedar Park, Texas)	3160-09	00166043	2022/06/18	12
RE	CAF-19	142937	Pre-Amplifier	TOYO	HAP18-26W	00000035	2022/06/18	12
RE	CCC-W10	142992	Micro Wave Cable	Suhner	SUCOFLEX102	MY010/2A	2022/08/03	12
RE	CBL-08	143121	LOGBICON	Schwarzbeck Mess-Elektronik OHG	VULB 9168	343	2022/04/18	12
RE	CAT5-03	178806	5dB Fixed Atten.	Pasternack Enterprises	PE7047-5	none	2022/04/01	12
RE	CCC-S10 -R3	143165	10 Site RE 3m System	UL Japan	none	none	2022/08/27	12
RE	CAF-28	183880	Pre-Amplifier	Mini-Circuits	ZKL-2	001	2022/04/06	12
RE	CAEC-10 (NSA)	144632	Semi Anechoic Chamber	TDK	NSA (No.10)	10	2022/05/15	12
RE	CSCL-26	222745	Measure	SHINWA RULES CO., LTD.	80862	none	-	-
RE	COS-10	143542	Temperature & Humidity Indicator	HIOKI E.E. CORPORATION	3641/9680-50	090999895/0909 05406	2022/06/20	12
RE	CBM-10	143133	Barometer	Sanoh Co., Ltd	SBR-151	001439	2021/11/24	36
RE	CTS-14	144216	Digital Multimeter	Fluke Corporation	115	994460954	2022/10/19	12
RE	COTS-CEMI-03	178804	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3 (RE,CE,ME,PE)	Ver 3.1.0484	-	-

*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: RE: Radiated Emission
AT: Antenna Terminal Conducted