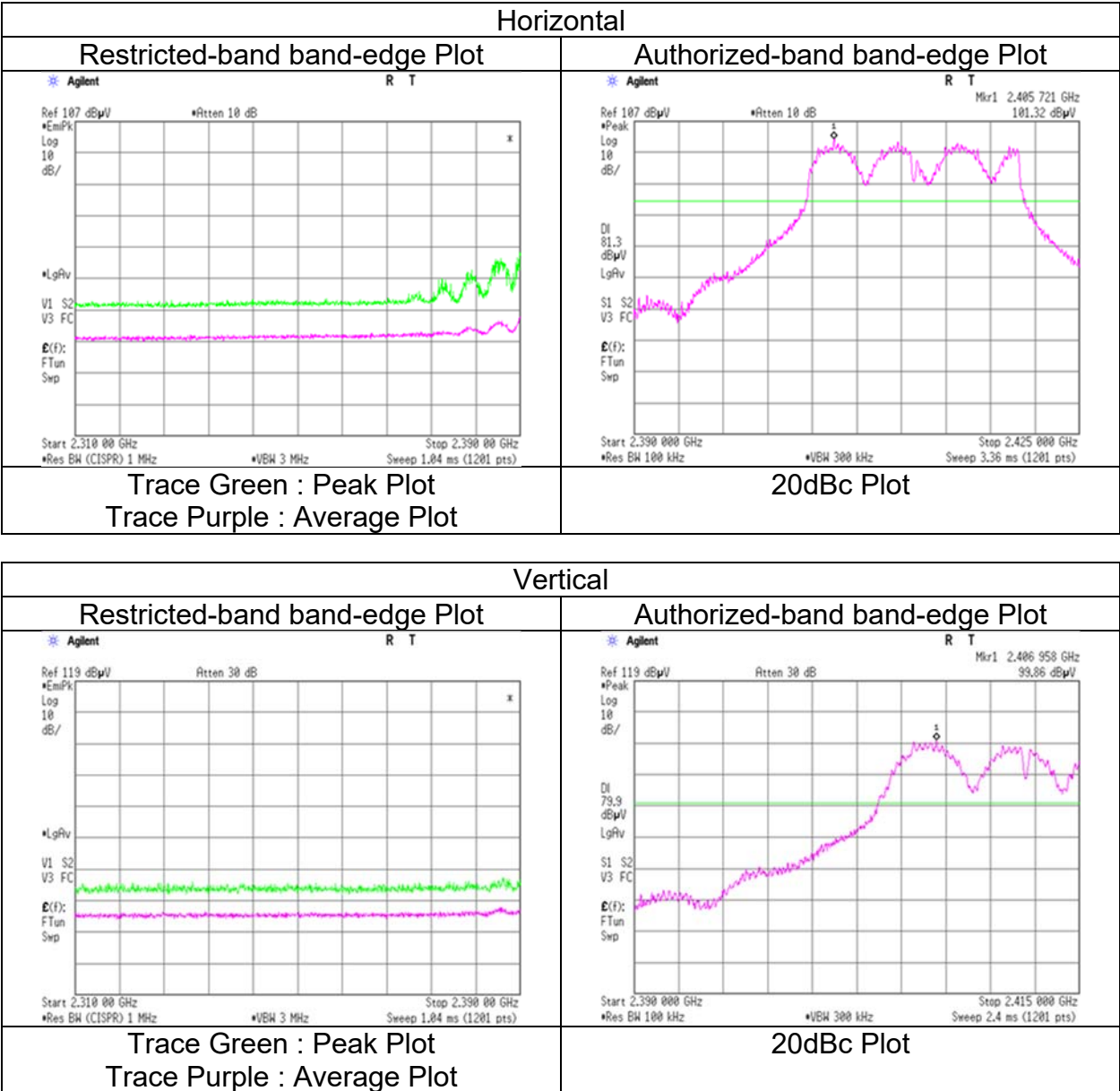


Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 27, 2023
Temperature / Humidity	24 deg.C, 53 %RH
Engineer	Ken Fujita
Mode	Tx 11g(CDD), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 1	WAC 1
Date	August 27, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	24 deg.C, 53 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Ken Fujita	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11g(CDD), 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

(* 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.	2287.370	PK	52.05	28.21	14.39	41.58	2.19	55.26	73.9	18.6	165	61	-
Hori.	2582.776	PK	52.15	27.91	14.68	41.66	2.19	55.27	73.9	18.6	160	79	-
Hori.	2879.911	PK	50.10	28.48	6.68	41.72	2.19	45.73	73.9	28.1	156	58	-
Hori.	4874.000	PK	52.80	31.50	7.09	42.88	2.19	50.70	73.9	23.2	160	86	-
Hori.	7311.000	PK	49.15	37.24	8.51	43.41	2.19	53.68	73.9	20.2	150	0	-
Hori.	9748.000	PK	48.85	39.00	9.74	43.02	2.19	56.76	73.9	17.1	150	0	-
Hori.	2287.370	AV	43.28	28.21	14.39	41.58	2.19	46.49	53.9	7.4	165	61	-
Hori.	2582.776	AV	43.02	27.91	14.68	41.66	2.19	46.14	53.9	7.7	160	79	-
Hori.	2879.911	AV	43.08	28.48	6.68	41.72	2.19	38.71	53.9	15.1	156	58	-
Hori.	4874.000	AV	41.68	31.50	7.09	42.88	2.19	39.58	53.9	14.3	160	86	-
Hori.	7311.000	AV	39.83	37.24	8.51	43.41	2.19	44.36	53.9	9.5	150	0	Floor noise
Hori.	9748.000	AV	39.83	39.00	9.74	43.02	2.19	47.74	53.9	6.1	150	0	Floor noise
Vert.	2287.370	PK	51.07	28.21	14.39	41.58	2.19	54.28	73.9	19.6	157	45	-
Vert.	2582.776	PK	52.48	27.91	14.68	41.66	2.19	55.60	73.9	18.3	167	76	-
Vert.	2879.911	PK	50.52	28.48	6.68	41.72	2.19	46.15	73.9	27.7	163	67	-
Vert.	4874.000	PK	55.70	31.50	7.09	42.88	2.19	53.60	73.9	20.3	187	59	-
Vert.	7311.000	PK	49.11	37.24	8.51	43.41	2.19	53.64	73.9	20.2	150	0	-
Vert.	9748.000	PK	48.29	39.00	9.74	43.02	2.19	56.20	73.9	17.7	150	0	-
Vert.	2287.370	AV	42.83	28.21	14.39	41.58	2.19	46.04	53.9	7.8	157	45	-
Vert.	2582.776	AV	42.32	27.91	14.68	41.66	2.19	45.44	53.9	8.4	167	76	-
Vert.	2879.911	AV	42.06	28.48	6.68	41.72	2.19	37.69	53.9	16.2	163	67	-
Vert.	4874.000	AV	44.91	31.50	7.09	42.88	2.19	42.81	53.9	11.0	187	59	-
Vert.	7311.000	AV	39.78	37.24	8.51	43.41	2.19	44.31	53.9	9.5	150	0	Floor noise
Vert.	9748.000	AV	39.98	39.00	9.74	43.02	2.19	47.89	53.9	6.0	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 1 WAC 1
Date August 27, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 24 deg.C, 53 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Ken Fujita Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11g(CDD), 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

(* 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.	2307.425	PK	52.10	28.18	14.41	41.58	2.19	55.30	73.9	18.6	169	84	-
Hori.	2483.500	PK	60.48	27.89	14.60	41.64	2.19	63.52	73.9	10.3	166	82	-
Hori.	2484.779	PK	64.41	27.89	14.60	41.64	2.19	67.45	73.9	6.4	166	82	-
Hori.	2616.400	PK	50.31	27.95	14.72	41.66	2.19	53.51	73.9	20.3	180	79	-
Hori.	2879.874	PK	50.37	28.48	6.68	41.72	2.19	46.00	73.9	27.9	160	54	-
Hori.	4924.000	PK	53.25	31.61	7.12	42.89	2.19	51.28	73.9	22.6	159	154	-
Hori.	7386.000	PK	48.45	37.36	8.54	43.46	2.19	53.08	73.9	20.8	150	0	-
Hori.	9848.000	PK	48.78	39.06	9.80	42.94	2.19	56.89	73.9	17.0	150	0	-
Hori.	2307.425	AV	39.90	28.18	14.41	41.58	2.19	43.10	53.9	10.8	169	84	-
Hori.	2483.500	AV	42.93	27.89	14.60	41.64	2.19	45.97	53.9	7.9	166	82	-
Hori.	2484.779	AV	44.51	27.89	14.60	41.64	2.19	47.55	53.9	6.3	166	82	-
Hori.	2616.400	AV	39.54	27.95	14.72	41.66	2.19	42.74	53.9	11.1	180	79	-
Hori.	2879.874	AV	42.99	28.48	6.68	41.72	2.19	38.62	53.9	15.2	160	54	-
Hori.	4924.000	AV	44.46	31.61	7.12	42.89	2.19	42.49	53.9	11.4	159	154	-
Hori.	7386.000	AV	39.62	37.36	8.54	43.46	2.19	44.25	53.9	9.6	150	0	Floor noise
Hori.	9848.000	AV	39.64	39.06	9.80	42.94	2.19	47.75	53.9	6.1	150	0	Floor noise
Vert.	2307.425	PK	51.94	28.18	14.41	41.58	2.19	55.14	73.9	18.7	164	65	-
Vert.	2483.500	PK	59.18	27.89	14.60	41.64	2.19	62.22	73.9	11.6	168	78	-
Vert.	2484.779	PK	58.75	27.89	14.60	41.64	2.19	61.79	73.9	12.1	168	78	-
Vert.	2616.400	PK	50.83	27.95	14.72	41.66	2.19	54.03	73.9	19.8	158	69	-
Vert.	2879.874	PK	49.25	28.48	6.68	41.72	2.19	44.88	73.9	29.0	155	67	-
Vert.	4924.000	PK	56.12	31.61	7.12	42.89	2.19	54.15	73.9	19.7	188	33	-
Vert.	7386.000	PK	48.41	37.36	8.54	43.46	2.19	53.04	73.9	20.8	150	0	-
Vert.	9848.000	PK	48.26	39.06	9.80	42.94	2.19	56.37	73.9	17.5	150	0	-
Vert.	2307.425	AV	40.01	28.18	14.41	41.58	2.19	43.21	53.9	10.6	164	65	-
Vert.	2483.500	AV	43.82	27.89	14.60	41.64	2.19	46.86	53.9	7.0	168	78	-
Vert.	2484.779	AV	43.11	27.89	14.60	41.64	2.19	46.15	53.9	7.7	168	78	-
Vert.	2616.400	AV	40.54	27.95	14.72	41.66	2.19	43.74	53.9	10.1	158	69	-
Vert.	2879.874	AV	41.68	28.48	6.68	41.72	2.19	37.31	53.9	16.5	155	67	-
Vert.	4924.000	AV	46.12	31.61	7.12	42.89	2.19	44.15	53.9	9.7	188	33	-
Vert.	7386.000	AV	39.54	37.36	8.54	43.46	2.19	44.17	53.9	9.7	150	0	Floor noise
Vert.	9848.000	AV	39.68	39.06	9.80	42.94	2.19	47.79	53.9	6.1	150	0	Floor noise

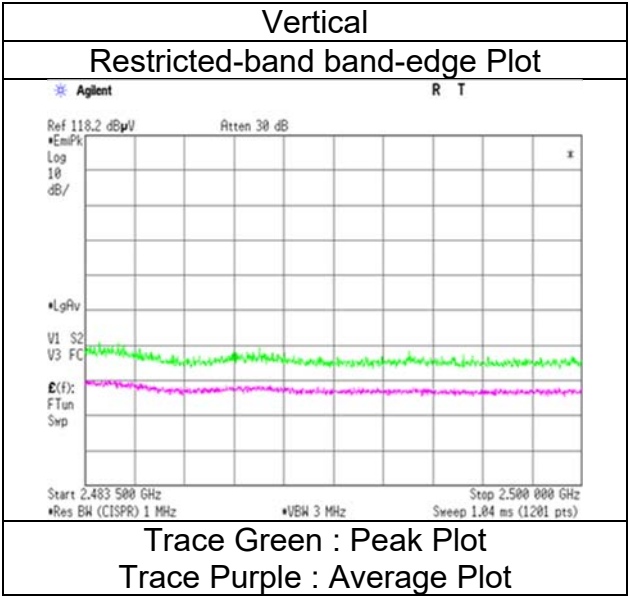
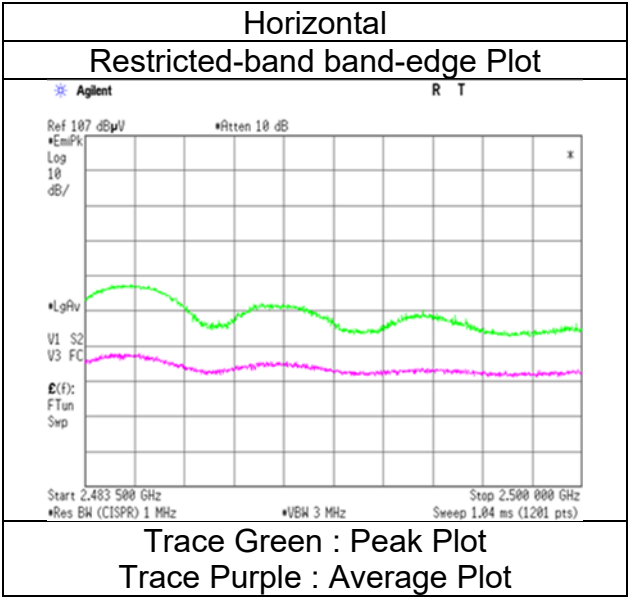
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 27, 2023
Temperature / Humidity	24 deg.C, 53 %RH
Engineer	Ken Fujita
Mode	Tx 11g(CDD), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 1 WAC 1
Date August 27, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 24 deg.C, 53 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Ken Fujita Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11n-20(CDD), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

(* 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.	2266.858	PK	52.43	28.23	14.37	41.57	2.19	55.65	73.9	18.2	166	75	-
Hori.	2390.000	PK	61.96	27.98	14.49	41.61	2.19	65.01	73.9	8.8	157	88	-
Hori.	2562.228	PK	53.54	27.90	14.66	41.65	2.19	56.64	73.9	17.2	161	86	-
Hori.	2879.821	PK	50.44	28.48	6.68	41.72	2.19	46.07	73.9	27.8	163	65	-
Hori.	4824.000	PK	52.97	31.41	7.06	42.87	2.19	50.76	73.9	23.1	162	77	-
Hori.	7236.000	PK	48.37	37.15	8.48	43.36	2.19	52.83	73.9	21.0	150	0	-
Hori.	9648.000	PK	48.94	38.72	9.70	43.09	2.19	56.46	73.9	17.4	150	0	-
Hori.	2266.858	AV	42.99	28.23	14.37	41.57	2.19	46.21	53.9	7.6	166	75	-
Hori.	2390.000	AV	49.24	27.98	14.49	41.61	2.19	52.29	53.9	1.6	157	88	-
Hori.	2562.228	AV	43.00	27.90	14.66	41.65	2.19	46.10	53.9	7.8	161	86	-
Hori.	2879.821	AV	43.01	28.48	6.68	41.72	2.19	38.64	53.9	15.2	163	65	-
Hori.	4824.000	AV	43.90	31.41	7.06	42.87	2.19	41.69	53.9	12.2	162	77	-
Hori.	7236.000	AV	39.81	37.15	8.48	43.36	2.19	44.27	53.9	9.6	150	0	Floor noise
Hori.	9648.000	AV	39.73	38.72	9.70	43.09	2.19	47.25	53.9	6.6	150	0	Floor noise
Vert.	2266.858	PK	51.40	28.23	14.37	41.57	2.19	54.62	73.9	19.2	163	123	-
Vert.	2390.000	PK	62.25	27.98	14.49	41.61	2.19	65.30	73.9	8.6	179	36	-
Vert.	2562.228	PK	51.63	27.90	14.66	41.65	2.19	54.73	73.9	19.1	162	121	-
Vert.	2879.821	PK	50.88	28.48	6.68	41.72	2.19	46.51	73.9	27.3	165	117	-
Vert.	4824.000	PK	56.70	31.41	7.06	42.87	2.19	54.49	73.9	19.4	100	0	-
Vert.	7236.000	PK	48.33	37.15	8.48	43.36	2.19	52.79	73.9	21.1	150	0	-
Vert.	9648.000	PK	48.79	38.72	9.70	43.09	2.19	56.31	73.9	17.5	150	0	-
Vert.	2266.858	AV	41.57	28.23	14.37	41.57	2.19	44.79	53.9	9.1	163	123	-
Vert.	2390.000	AV	48.97	27.98	14.49	41.61	2.19	52.02	53.9	1.8	179	36	-
Vert.	2562.228	AV	44.62	27.90	14.66	41.65	2.19	47.72	53.9	6.1	162	121	-
Vert.	2879.821	AV	42.40	28.48	6.68	41.72	2.19	38.03	53.9	15.8	165	117	-
Vert.	4824.000	AV	46.94	31.41	7.06	42.87	2.19	44.73	53.9	9.1	100	0	-
Vert.	7236.000	AV	39.38	37.15	8.48	43.36	2.19	43.84	53.9	10.0	150	0	Floor noise
Vert.	9648.000	AV	39.71	38.72	9.70	43.09	2.19	47.23	53.9	6.6	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

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.	2412.000	PK	100.63	27.95	14.52	41.61	2.19	103.68	-	-	Carrier
Hori.	2400.000	PK	66.50	27.97	14.50	41.61	2.19	69.55	83.6	14.0	-
Vert.	2412.000	PK	100.39	27.95	14.52	41.61	2.19	103.44	-	-	Carrier
Vert.	2400.000	PK	67.54	27.97	14.50	41.61	2.19	70.59	83.4	12.8	-

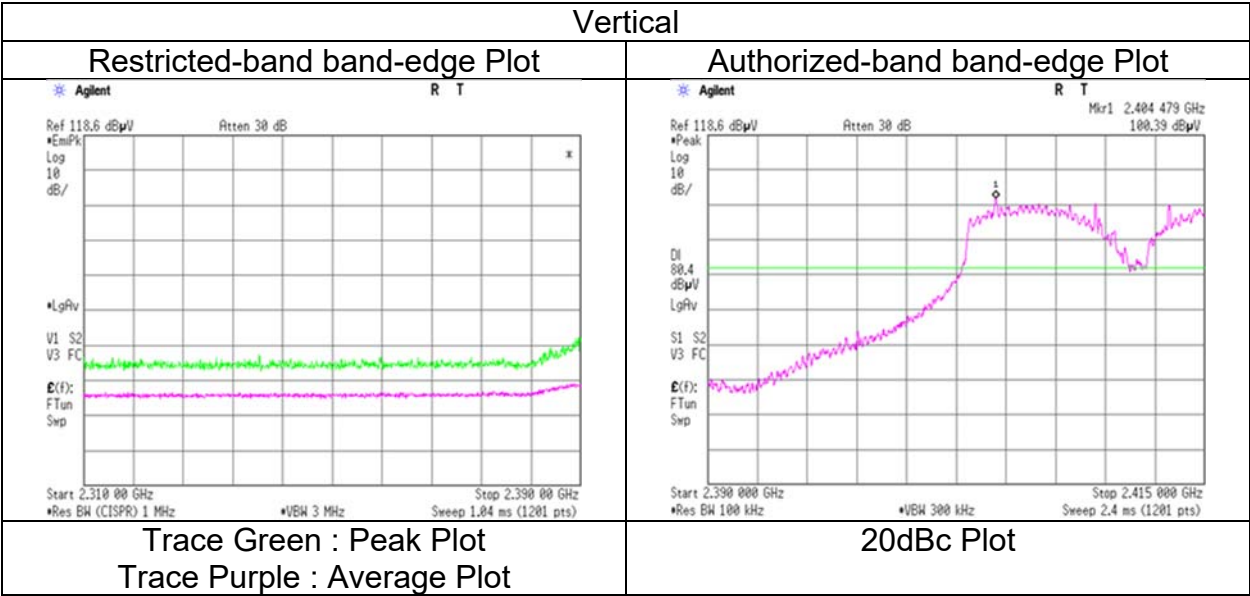
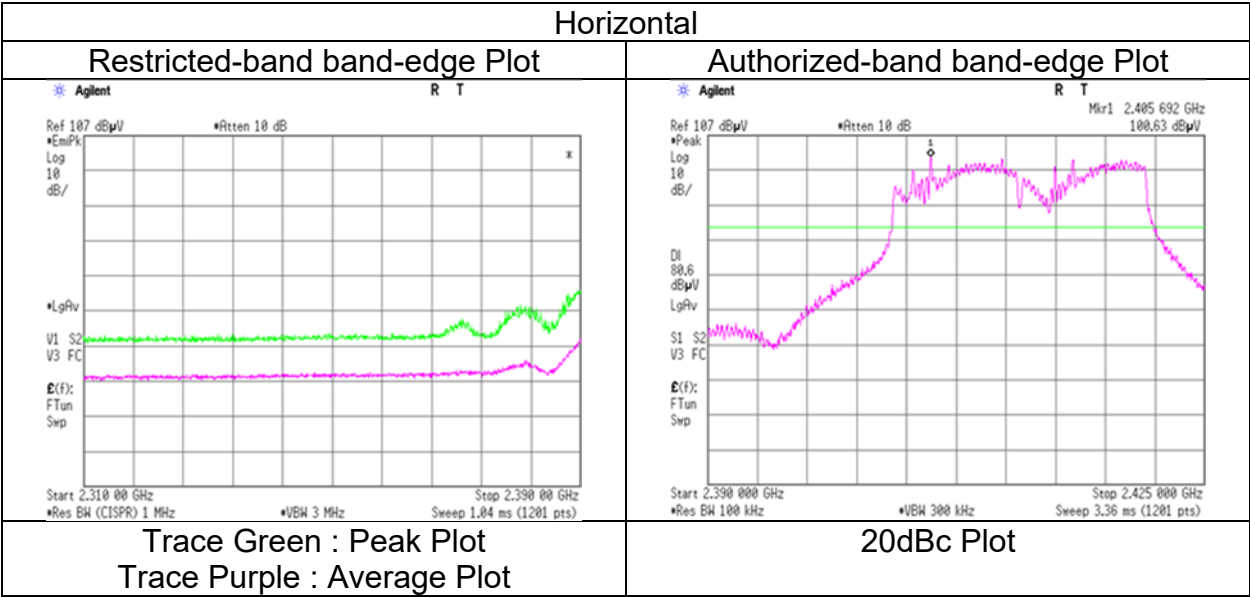
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 27, 2023
Temperature / Humidity	24 deg.C, 53 %RH
Engineer	Ken Fujita
Mode	Tx 11n-20(CDD), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 1	WAC 1
Date	August 27, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	24 deg.C, 53 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Ken Fujita	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11n-20(CDD), 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

(* 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.	2290.600	PK	52.22	28.21	14.40	41.58	2.19	55.44	73.9	18.4	157	81	-
Hori.	2583.710	PK	51.86	27.91	14.69	41.66	2.19	54.99	73.9	18.9	166	83	-
Hori.	2879.873	PK	50.26	28.48	6.68	41.72	2.19	45.89	73.9	28.0	158	66	-
Hori.	4874.000	PK	52.48	31.50	7.09	42.88	2.19	50.38	73.9	23.5	171	99	-
Hori.	7311.000	PK	48.79	37.24	8.51	43.41	2.19	53.32	73.9	20.5	150	0	-
Hori.	9748.000	PK	48.69	39.00	9.74	43.02	2.19	56.60	73.9	17.3	150	0	-
Hori.	2290.600	AV	44.15	28.21	14.40	41.58	2.19	47.37	53.9	6.5	157	81	-
Hori.	2583.710	AV	42.93	27.91	14.69	41.66	2.19	46.06	53.9	7.8	166	83	-
Hori.	2879.873	AV	42.84	28.48	6.68	41.72	2.19	38.47	53.9	15.4	158	66	-
Hori.	4874.000	AV	41.43	31.50	7.09	42.88	2.19	39.33	53.9	14.5	171	99	-
Hori.	7311.000	AV	40.35	37.24	8.51	43.41	2.19	44.88	53.9	9.0	150	0	Floor noise
Hori.	9748.000	AV	39.86	39.00	9.74	43.02	2.19	47.77	53.9	6.1	150	0	Floor noise
Vert.	2290.600	PK	52.63	28.21	14.40	41.58	2.19	55.85	73.9	18.0	154	98	-
Vert.	2583.710	PK	50.40	27.91	14.69	41.66	2.19	53.53	73.9	20.3	161	78	-
Vert.	2883.033	PK	49.46	28.48	6.66	41.72	2.19	45.07	73.9	28.8	158	87	-
Vert.	4874.000	PK	55.39	31.50	7.09	42.88	2.19	53.29	73.9	20.6	187	39	-
Vert.	7311.000	PK	48.23	37.24	8.51	43.41	2.19	52.76	73.9	21.1	150	0	-
Vert.	9748.000	PK	48.33	39.00	9.74	43.02	2.19	56.24	73.9	17.6	150	0	-
Vert.	2290.600	AV	43.34	28.21	14.40	41.58	2.19	46.56	53.9	7.3	154	98	-
Vert.	2583.710	AV	41.99	27.91	14.69	41.66	2.19	45.12	53.9	8.7	161	78	-
Vert.	2883.033	AV	40.81	28.48	6.66	41.72	2.19	36.42	53.9	17.4	158	87	-
Vert.	4874.000	AV	44.32	31.50	7.09	42.88	2.19	42.22	53.9	11.6	187	39	-
Vert.	7311.000	AV	39.87	37.24	8.51	43.41	2.19	44.40	53.9	9.5	150	0	Floor noise
Vert.	9748.000	AV	39.39	39.00	9.74	43.02	2.19	47.30	53.9	6.6	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 1 WAC 1
Date August 27, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 24 deg.C, 53 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Ken Fujita Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11n-20(CDD), 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

(* 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.	2307.278	PK	51.72	28.18	14.41	41.58	2.19	54.92	73.9	18.9	155	77	-
Hori.	2483.500	PK	52.57	27.89	14.60	41.64	2.19	55.61	73.9	18.2	187	79	-
Hori.	2488.698	PK	58.20	27.89	14.60	41.64	2.19	61.24	73.9	12.6	187	79	-
Hori.	2611.075	PK	51.88	27.94	14.71	41.66	2.19	55.06	73.9	18.8	161	64	-
Hori.	2879.916	PK	50.43	28.48	6.68	41.72	2.19	46.06	73.9	27.8	159	58	-
Hori.	4924.000	PK	52.58	31.61	7.12	42.89	2.19	50.61	73.9	23.2	159	154	-
Hori.	7386.000	PK	48.36	37.36	8.54	43.46	2.19	52.99	73.9	20.9	150	0	-
Hori.	9848.000	PK	49.18	39.06	9.80	42.94	2.19	57.29	73.9	16.6	150	0	-
Hori.	2307.278	AV	42.01	28.18	14.41	41.58	2.19	45.21	53.9	8.6	155	77	-
Hori.	2483.500	AV	42.18	27.89	14.60	41.64	2.19	45.22	53.9	8.6	187	79	-
Hori.	2488.698	AV	44.47	27.89	14.60	41.64	2.19	47.51	53.9	6.3	187	79	-
Hori.	2611.075	AV	42.30	27.94	14.71	41.66	2.19	45.48	53.9	8.4	161	64	-
Hori.	2879.916	AV	43.11	28.48	6.68	41.72	2.19	38.74	53.9	15.1	159	58	-
Hori.	4924.000	AV	42.63	31.61	7.12	42.89	2.19	40.66	53.9	13.2	159	154	-
Hori.	7386.000	AV	40.06	37.36	8.54	43.46	2.19	44.69	53.9	9.2	150	0	Floor noise
Hori.	9848.000	AV	40.43	39.06	9.80	42.94	2.19	48.54	53.9	5.3	150	0	Floor noise
Vert.	2307.278	PK	51.54	28.18	14.41	41.58	2.19	54.74	73.9	19.1	153	76	-
Vert.	2483.500	PK	55.04	27.89	14.60	41.64	2.19	58.08	73.9	15.8	163	115	-
Vert.	2488.698	PK	54.30	27.89	14.60	41.64	2.19	57.34	73.9	16.5	163	115	-
Vert.	2611.075	PK	51.71	27.94	14.71	41.66	2.19	54.89	73.9	19.0	161	77	-
Vert.	2879.916	PK	50.89	28.48	6.68	41.72	2.19	46.52	73.9	27.3	158	98	-
Vert.	4924.000	PK	55.28	31.61	7.12	42.89	2.19	53.31	73.9	20.5	178	89	-
Vert.	7386.000	PK	48.21	37.36	8.54	43.46	2.19	52.84	73.9	21.0	150	0	-
Vert.	9848.000	PK	48.98	39.06	9.80	42.94	2.19	57.09	73.9	16.8	150	0	-
Vert.	2307.278	AV	42.14	28.18	14.41	41.58	2.19	45.34	53.9	8.5	153	76	-
Vert.	2483.500	AV	44.73	27.89	14.60	41.64	2.19	47.77	53.9	6.1	163	115	-
Vert.	2488.698	AV	44.08	27.89	14.60	41.64	2.19	47.12	53.9	6.7	163	115	-
Vert.	2611.075	AV	42.85	27.94	14.71	41.66	2.19	46.03	53.9	7.8	161	77	-
Vert.	2879.916	AV	42.93	28.48	6.68	41.72	2.19	38.56	53.9	15.3	158	98	-
Vert.	4924.000	AV	44.29	31.61	7.12	42.89	2.19	42.32	53.9	11.5	178	89	-
Vert.	7386.000	AV	40.01	37.36	8.54	43.46	2.19	44.64	53.9	9.2	150	0	Floor noise
Vert.	9848.000	AV	39.67	39.06	9.80	42.94	2.19	47.78	53.9	6.1	150	0	Floor noise

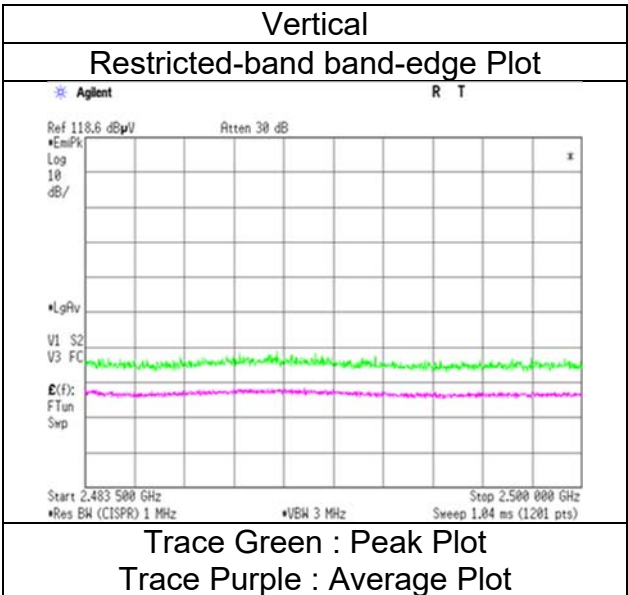
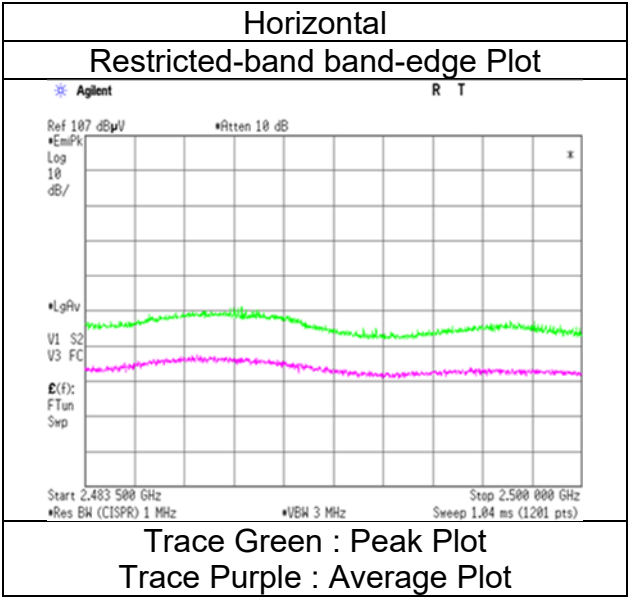
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 27, 2023
Temperature / Humidity	24 deg.C, 53 %RH
Engineer	Ken Fujita
Mode	Tx 11n-20(CDD), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 1	WAC 1
Date	July 18, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	21 deg.C, 49 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Shiro Kobayashi	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11n-20(SDM), 2412 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

(* 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.	2390.000	PK	59.67	27.98	14.48	41.61	2.19	62.71	73.9	11.1	122	89	-
Hori.	2879.972	PK	52.97	28.48	6.68	41.72	2.19	48.60	73.9	25.3	390	86	-
Hori.	4824.000	PK	52.80	31.41	7.06	42.87	2.19	50.59	73.9	23.3	104	68	-
Hori.	7236.000	PK	49.44	37.15	8.48	43.36	2.19	53.90	73.9	20.0	150	0	-
Hori.	9648.000	PK	48.11	38.73	9.70	43.09	2.19	55.64	73.9	18.2	150	0	-
Hori.	2390.000	AV	46.93	27.98	14.48	41.61	2.19	49.97	53.9	3.9	122	89	-
Hori.	2879.972	AV	48.03	28.48	6.68	41.72	2.19	43.66	53.9	10.2	390	86	-
Hori.	4824.000	AV	42.34	31.41	7.06	42.87	2.19	40.13	53.9	13.7	104	68	-
Hori.	7236.000	AV	39.81	37.15	8.48	43.36	2.19	44.27	53.9	9.6	150	0	Floor noise
Hori.	9648.000	AV	39.11	38.73	9.70	43.09	2.19	46.64	53.9	7.2	150	0	Floor noise
Vert.	2390.000	PK	59.25	27.98	14.48	41.61	2.19	62.29	73.9	11.6	227	106	-
Vert.	2879.969	PK	53.75	28.48	6.68	41.72	2.19	49.38	73.9	24.5	168	118	-
Vert.	4824.000	PK	55.16	31.41	7.06	42.87	2.19	52.95	73.9	20.9	104	322	-
Vert.	7236.000	PK	49.81	37.15	8.48	43.36	2.19	54.27	73.9	19.6	100	0	-
Vert.	9648.000	PK	48.88	38.73	9.70	43.09	2.19	56.41	73.9	17.4	100	0	-
Vert.	2390.000	AV	46.31	27.98	14.48	41.61	2.19	49.35	53.9	4.5	227	106	-
Vert.	2879.969	AV	48.02	28.48	6.68	41.72	2.19	43.65	53.9	10.2	168	118	-
Vert.	4824.000	AV	44.03	31.41	7.06	42.87	2.19	41.82	53.9	12.0	104	322	-
Vert.	7236.000	AV	39.77	37.15	8.48	43.36	2.19	44.23	53.9	9.6	100	0	Floor noise
Vert.	9648.000	AV	39.33	38.73	9.70	43.09	2.19	46.86	53.9	7.0	100	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 (3.86 m / 3.0 m) = 2.19 dB

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

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.	2412.000	PK	99.28	27.95	14.51	41.61	2.19	102.32	-	-	Carrier
Hori.	2400.000	PK	66.49	27.97	14.49	41.61	2.19	69.53	82.3	12.7	-
Vert.	2412.000	PK	99.47	27.95	14.51	41.61	2.19	102.51	-	-	Carrier
Vert.	2400.000	PK	64.94	27.97	14.49	41.61	2.19	67.98	82.5	14.5	-

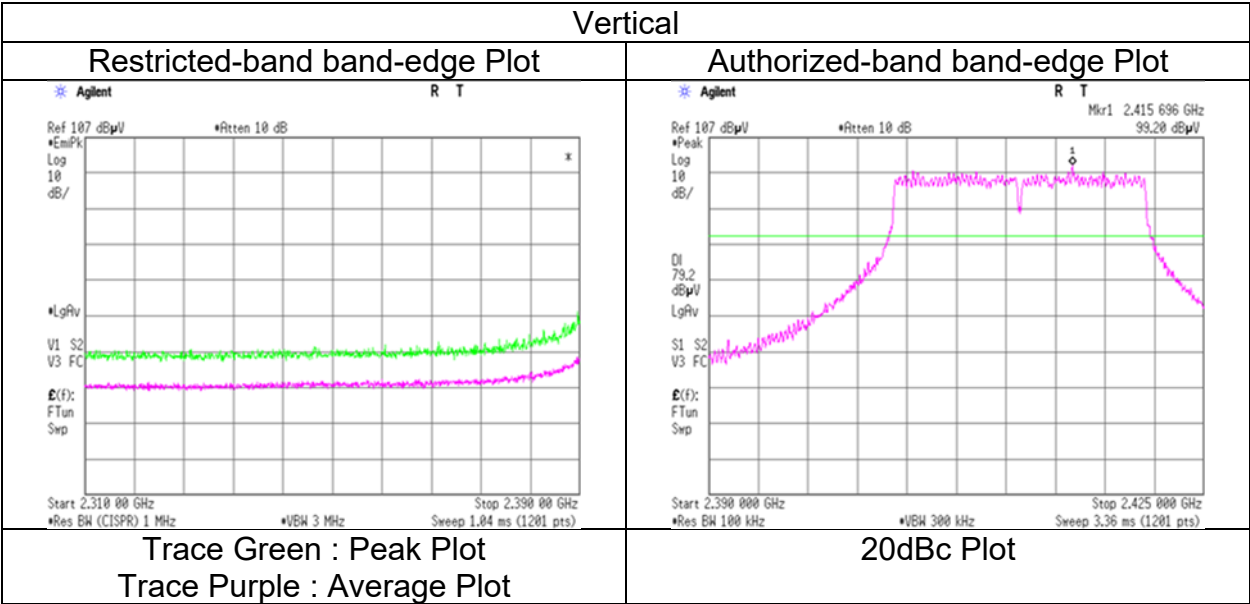
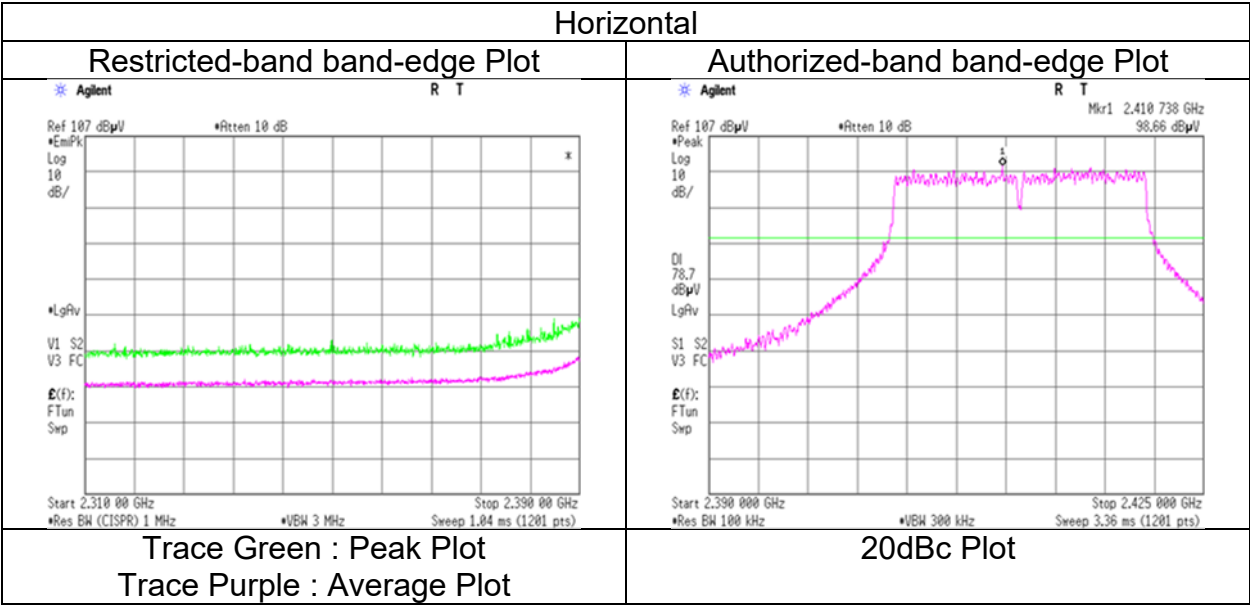
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	July 18, 2023
Temperature / Humidity	21 deg.C, 49 %RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-20(SDM), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 1	WAC 1
Date	July 19, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 52 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Shiro Kobayashi	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11n-20(SDM), 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

(* 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.	2879.965	PK	51.96	28.48	6.68	41.72	2.19	47.59	73.9	26.3	320	103	-
Hori.	4874.000	PK	52.99	31.50	7.09	42.88	2.19	50.89	73.9	23.0	105	56	-
Hori.	7311.000	PK	49.33	37.24	8.51	43.41	2.19	53.86	73.9	20.0	150	0	-
Hori.	9748.000	PK	48.46	39.00	9.74	43.02	2.19	56.37	73.9	17.5	150	0	-
Hori.	2879.965	AV	45.30	28.48	6.68	41.72	2.19	40.93	53.9	12.9	320	103	-
Hori.	4874.000	AV	42.58	31.50	7.09	42.88	2.19	40.48	53.9	13.4	105	56	-
Hori.	7311.000	AV	39.77	37.24	8.51	43.41	2.19	44.30	53.9	9.6	150	0	Floor noise
Hori.	9748.000	AV	39.61	39.00	9.74	43.02	2.19	47.52	53.9	6.3	150	0	Floor noise
Vert.	2879.963	PK	53.93	28.48	6.68	41.72	2.19	49.56	73.9	24.3	173	103	-
Vert.	4874.000	PK	54.56	31.50	7.09	42.88	2.19	52.46	73.9	21.4	103	330	-
Vert.	7311.000	PK	49.81	37.24	8.51	43.41	2.19	54.34	73.9	19.5	150	0	-
Vert.	9748.000	PK	48.82	39.00	9.74	43.02	2.19	56.73	73.9	17.1	150	0	-
Vert.	2879.963	AV	46.03	28.48	6.68	41.72	2.19	41.66	53.9	12.2	173	103	-
Vert.	4874.000	AV	43.94	31.50	7.09	42.88	2.19	41.84	53.9	12.0	103	330	-
Vert.	7311.000	AV	39.56	37.24	8.51	43.41	2.19	44.09	53.9	9.8	150	0	Floor noise
Vert.	9748.000	AV	39.61	39.00	9.74	43.02	2.19	47.52	53.9	6.3	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 (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 1 WAC 1
Date July 19, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 22 deg.C, 52 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Shiro Kobayashi Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11n-20(SDM), 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

(* 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.	2483.500	PK	56.88	27.89	14.59	41.64	2.19	59.91	73.9	13.9	160	82	-
Hori.	2879.991	PK	51.59	28.48	6.68	41.72	2.19	47.22	73.9	26.6	218	105	-
Hori.	4924.000	PK	53.05	31.61	7.12	42.89	2.19	51.08	73.9	22.8	116	67	-
Hori.	7386.000	PK	48.34	37.36	8.54	43.46	2.19	52.97	73.9	20.9	150	0	-
Hori.	9848.000	PK	47.99	39.06	9.80	42.94	2.19	56.10	73.9	17.8	150	0	-
Hori.	2483.500	AV	45.58	27.89	14.59	41.64	2.19	48.61	53.9	5.2	160	82	-
Hori.	2879.991	AV	45.42	28.48	6.68	41.72	2.19	41.05	53.9	12.8	218	105	-
Hori.	4924.000	AV	42.16	31.61	7.12	42.89	2.19	40.19	53.9	13.7	116	67	-
Hori.	7386.000	AV	39.77	37.36	8.54	43.46	2.19	44.40	53.9	9.5	150	0	Floor noise
Hori.	9848.000	AV	39.55	39.06	9.80	42.94	2.19	47.66	53.9	6.2	150	0	Floor noise
Vert.	2483.500	PK	56.46	27.89	14.59	41.64	2.19	59.49	73.9	14.4	149	112	-
Vert.	2879.967	PK	51.94	28.48	6.68	41.72	2.19	47.57	73.9	26.3	138	86	-
Vert.	4924.000	PK	54.05	31.61	7.12	42.89	2.19	52.08	73.9	21.8	257	140	-
Vert.	7386.000	PK	48.39	37.36	8.54	43.46	2.19	53.02	73.9	20.8	150	0	-
Vert.	9848.000	PK	48.65	39.06	9.80	42.94	2.19	56.76	73.9	17.1	150	0	-
Vert.	2483.500	AV	45.50	27.89	14.59	41.64	2.19	48.53	53.9	5.3	149	112	-
Vert.	2879.967	AV	45.04	28.48	6.68	41.72	2.19	40.67	53.9	13.2	138	86	-
Vert.	4924.000	AV	43.99	31.61	7.12	42.89	2.19	42.02	53.9	11.8	257	140	-
Vert.	7386.000	AV	39.84	37.36	8.54	43.46	2.19	44.47	53.9	9.4	150	0	Floor noise
Vert.	9848.000	AV	39.60	39.06	9.80	42.94	2.19	47.71	53.9	6.1	150	0	Floor noise

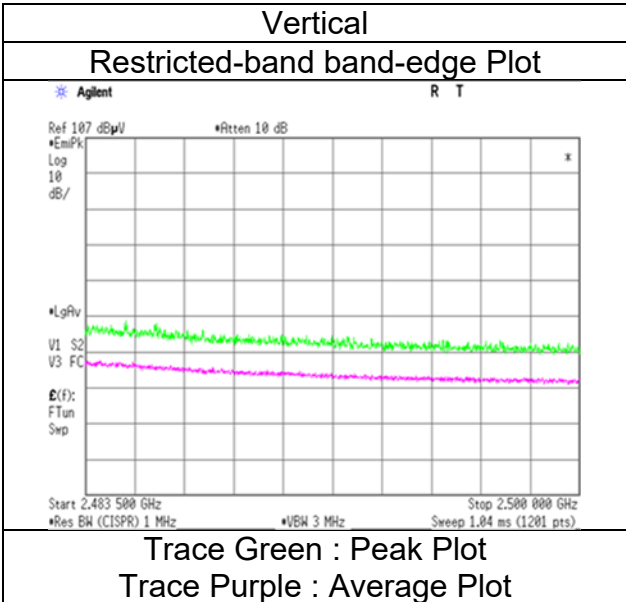
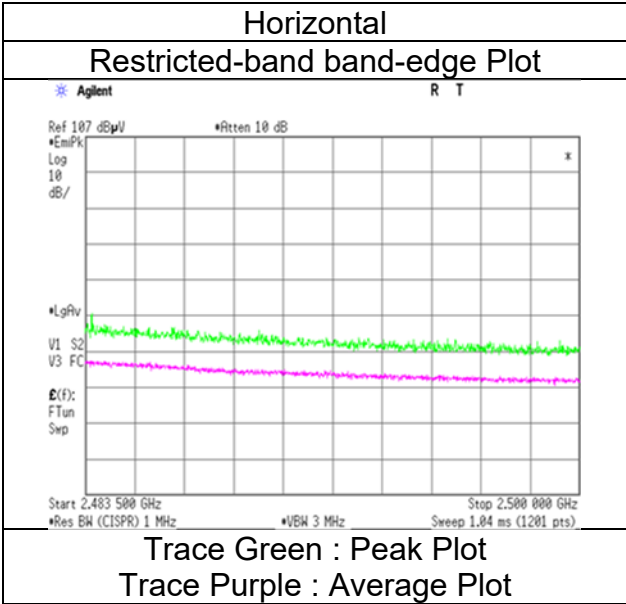
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	July 19, 2023
Temperature / Humidity	22 deg.C, 52 %RH
Engineer	Shiro Kobayashi
Mode	Tx 11n-20(SDM), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 1 WAC 1
Date August 28, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 22 deg.C, 55 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDM)(CDD), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

(* 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.	2257.948	PK	52.00	28.23	14.35	41.57	2.19	55.20	73.9	18.7	136	235	-
Hori.	2390.000	PK	56.50	27.98	14.48	41.61	2.19	59.54	73.9	14.3	152	266	-
Hori.	2566.832	PK	52.12	27.91	14.66	41.65	2.19	55.23	73.9	18.6	143	238	-
Hori.	2879.982	PK	50.23	28.48	6.68	41.72	2.19	45.86	73.9	28.0	149	233	-
Hori.	4824.000	PK	54.25	31.41	7.06	42.87	2.19	52.04	73.9	21.8	112	14	-
Hori.	7236.000	PK	50.82	37.15	8.48	43.36	2.19	55.28	73.9	18.6	150	0	-
Hori.	9648.000	PK	50.61	38.72	9.70	43.09	2.19	58.13	73.9	15.7	150	0	-
Hori.	2257.948	AV	39.33	28.23	14.35	41.57	2.19	42.53	53.9	11.3	136	235	-
Hori.	2390.000	AV	40.77	27.98	14.48	41.61	2.19	43.81	53.9	10.0	152	266	-
Hori.	2566.832	AV	40.00	27.91	14.66	41.65	2.19	43.11	53.9	10.7	143	238	-
Hori.	2879.982	AV	43.09	28.48	6.68	41.72	2.19	38.72	53.9	15.1	149	233	-
Hori.	4824.000	AV	41.51	31.41	7.06	42.87	2.19	39.30	53.9	14.6	112	14	-
Hori.	7236.000	AV	38.52	37.15	8.48	43.36	2.19	42.98	53.9	10.9	150	0	Floor noise
Hori.	9648.000	AV	38.30	38.72	9.70	43.09	2.19	45.82	53.9	8.0	150	0	Floor noise
Vert.	2257.948	PK	51.87	28.23	14.35	41.57	2.19	55.07	73.9	18.8	138	152	-
Vert.	2390.000	PK	59.31	27.98	14.48	41.61	2.19	62.35	73.9	11.5	142	159	-
Vert.	2566.832	PK	52.39	27.91	14.66	41.65	2.19	55.50	73.9	18.4	140	144	-
Vert.	2879.892	PK	49.06	28.48	6.68	41.72	2.19	44.69	73.9	29.2	129	117	-
Vert.	4824.000	PK	57.12	31.41	7.06	42.87	2.19	54.91	73.9	18.9	152	227	-
Vert.	7236.000	PK	50.06	37.15	8.48	43.36	2.19	54.52	73.9	19.3	150	0	-
Vert.	9648.000	PK	50.85	38.72	9.70	43.09	2.19	58.37	73.9	15.5	150	0	-
Vert.	2257.948	AV	40.62	28.23	14.35	41.57	2.19	43.82	53.9	10.0	138	152	-
Vert.	2390.000	AV	42.38	27.98	14.48	41.61	2.19	45.42	53.9	8.4	142	159	-
Vert.	2566.832	AV	41.38	27.91	14.66	41.65	2.19	44.49	53.9	9.4	140	144	-
Vert.	2879.892	AV	42.37	28.48	6.68	41.72	2.19	38.00	53.9	15.9	129	117	-
Vert.	4824.000	AV	43.92	31.41	7.06	42.87	2.19	41.71	53.9	12.1	152	227	-
Vert.	7236.000	AV	38.36	37.15	8.48	43.36	2.19	42.82	53.9	11.0	150	0	Floor noise
Vert.	9648.000	AV	38.32	38.72	9.70	43.09	2.19	45.84	53.9	8.0	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 : 20log (3.86 m / 3.0 m) = 2.19 dB

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

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.	2412.000	PK	97.09	27.95	14.51	41.61	2.19	100.13	-	-	Carrier
Hori.	2400.000	PK	66.12	27.97	14.49	41.61	2.19	69.16	80.1	10.9	-
Vert.	2412.000	PK	96.53	27.95	14.51	41.61	2.19	99.57	-	-	Carrier
Vert.	2400.000	PK	66.84	27.97	14.49	41.61	2.19	69.88	79.5	9.6	-

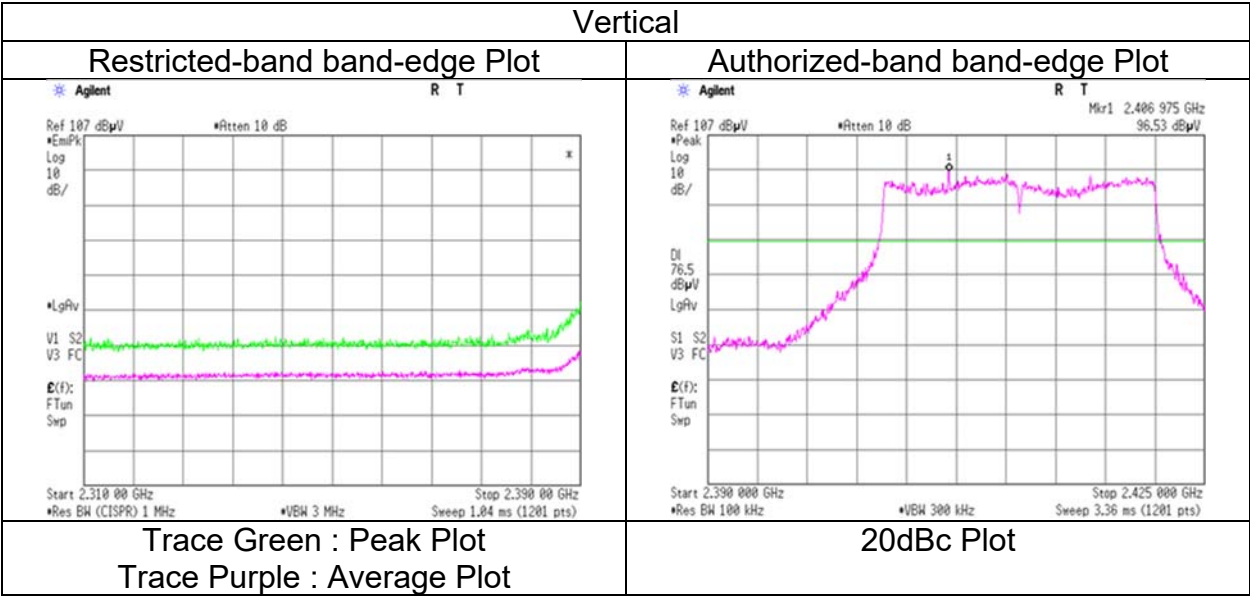
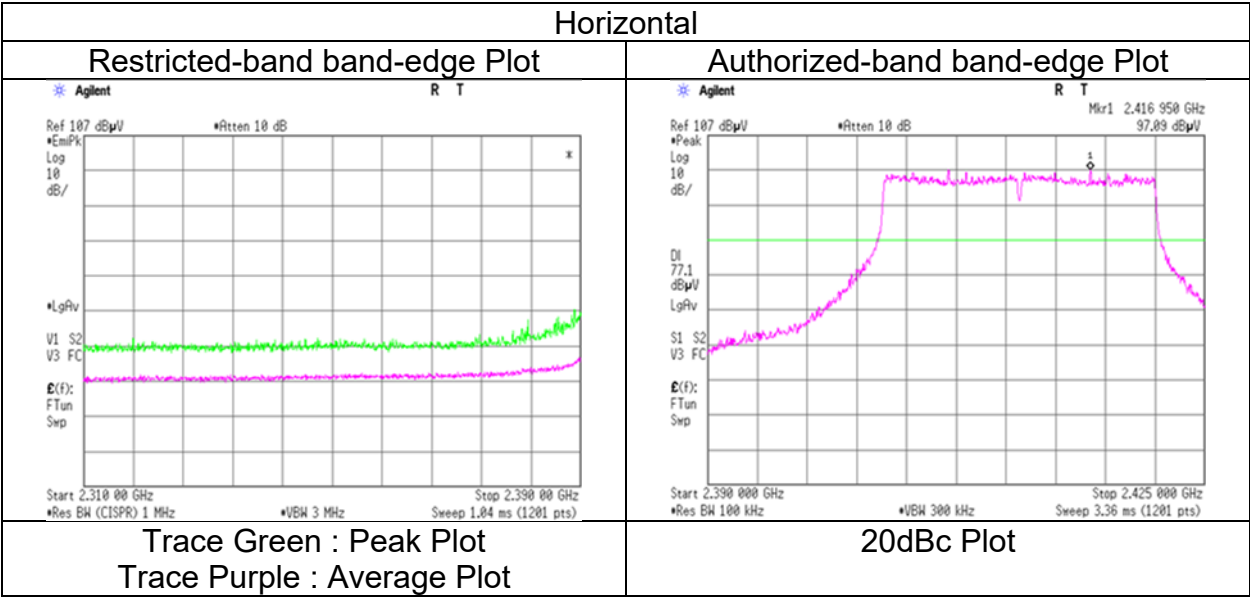
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 28, 2023
Temperature / Humidity	22 deg.C, 55 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20(OFDM)(CDD), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 1	WAC 1
Date	August 28, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 55 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDM)(CDD), 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

(* 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.	2257.943	PK	52.13	28.23	14.35	41.57	2.19	55.33	73.9	18.5	135	232	-
Hori.	2566.760	PK	52.06	27.91	14.66	41.65	2.19	55.17	73.9	18.7	145	238	-
Hori.	2880.012	PK	50.19	28.48	6.68	41.72	2.19	45.82	73.9	28.0	151	230	-
Hori.	4874.000	PK	56.67	31.50	7.09	42.88	2.19	54.57	73.9	19.3	170	12	-
Hori.	7311.000	PK	50.52	37.24	8.51	43.41	2.19	55.05	73.9	18.8	150	0	-
Hori.	9748.000	PK	50.39	39.00	9.74	43.02	2.19	58.30	73.9	15.6	150	0	-
Hori.	2257.943	AV	39.11	28.23	14.35	41.57	2.19	42.31	53.9	11.5	135	232	-
Hori.	2566.760	AV	39.95	27.91	14.66	41.65	2.19	43.06	53.9	10.8	145	238	-
Hori.	2880.012	AV	43.03	28.48	6.68	41.72	2.19	38.66	53.9	15.2	151	230	-
Hori.	4874.000	AV	43.76	31.50	7.09	42.88	2.19	41.66	53.9	12.2	170	12	-
Hori.	7311.000	AV	38.32	37.24	8.51	43.41	2.19	42.85	53.9	11.0	150	0	Floor noise
Hori.	9748.000	AV	38.29	39.00	9.74	43.02	2.19	46.20	53.9	7.7	150	0	Floor noise
Vert.	2257.867	PK	51.72	28.23	14.35	41.57	2.19	54.92	73.9	18.9	140	148	-
Vert.	2566.792	PK	51.24	27.91	14.66	41.65	2.19	54.35	73.9	19.5	137	146	-
Vert.	2879.923	PK	49.22	28.48	6.68	41.72	2.19	44.85	73.9	29.0	130	115	-
Vert.	4874.000	PK	56.74	31.50	7.09	42.88	2.19	54.64	73.9	19.2	147	138	-
Vert.	7311.000	PK	50.12	37.24	8.51	43.41	2.19	54.65	73.9	19.2	150	0	-
Vert.	9748.000	PK	50.41	39.00	9.74	43.02	2.19	58.32	73.9	15.5	150	0	-
Vert.	2257.867	AV	40.44	28.23	14.35	41.57	2.19	43.64	53.9	10.2	140	148	-
Vert.	2566.792	AV	41.25	27.91	14.66	41.65	2.19	44.36	53.9	9.5	137	146	-
Vert.	2879.923	AV	42.19	28.48	6.68	41.72	2.19	37.82	53.9	16.0	130	115	-
Vert.	4874.000	AV	44.23	31.50	7.09	42.88	2.19	42.13	53.9	11.7	147	138	-
Vert.	7311.000	AV	38.28	37.24	8.51	43.41	2.19	42.81	53.9	11.0	150	0	Floor noise
Vert.	9748.000	AV	38.08	39.00	9.74	43.02	2.19	45.99	53.9	7.9	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.			
Semi Anechoic Chamber	WAC 1	SAC 3	WAC 1	WAC 1
Date	October 24, 2023	August 28, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 51 %RH	22 deg.C, 55 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Kenichi Adachi	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(30 MHz -1 GHz)	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDM)(CDD), 2462 MHz			
Antenna	2G_CH0: monopole, 2G_CH1: monopole			

(* 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.	144.004	QP	41.78	11.63	6.89	33.05	0.00	27.25	43.5	16.2	233	259	-
Hori.	170.852	QP	46.56	12.63	7.25	33.01	0.00	33.43	43.5	10.0	116	261	-
Hori.	202.040	QP	40.33	11.27	7.12	32.95	0.00	25.77	43.5	17.7	159	256	-
Hori.	252.215	QP	37.30	11.90	7.27	32.82	0.00	23.65	46.0	22.3	131	95	-
Hori.	399.851	QP	27.88	15.83	7.67	32.44	0.00	18.94	46.0	27.0	187	33	-
Hori.	2307.416	PK	51.96	28.18	14.40	41.58	2.19	55.15	73.9	18.7	170	22	-
Hori.	2483.500	PK	53.70	27.89	14.59	41.64	2.19	56.73	73.9	17.1	173	5	-
Hori.	2487.982	PK	53.41	27.89	14.59	41.64	2.19	56.44	73.9	17.4	173	5	-
Hori.	2616.400	PK	50.24	27.95	14.71	41.66	2.19	53.43	73.9	20.4	173	19	-
Hori.	2880.012	PK	49.63	28.48	6.68	41.72	2.19	45.26	73.9	28.6	132	117	-
Hori.	4924.000	PK	54.79	31.61	7.12	42.89	2.19	52.82	73.9	21.0	139	210	-
Hori.	7386.000	PK	50.33	37.36	8.54	43.46	2.19	54.96	73.9	18.9	150	0	-
Hori.	9848.000	PK	50.36	39.06	9.80	42.94	2.19	58.47	73.9	15.4	150	0	-
Hori.	2307.416	AV	39.52	28.18	14.40	41.58	2.19	42.71	53.9	11.1	170	22	-
Hori.	2483.500	AV	39.56	27.89	14.59	41.64	2.19	42.59	53.9	11.3	173	5	-
Hori.	2487.982	AV	39.95	27.89	14.59	41.64	2.19	42.98	53.9	10.9	173	5	-
Hori.	2616.400	AV	39.35	27.95	14.71	41.66	2.19	42.54	53.9	11.3	173	19	-
Hori.	2880.012	AV	42.26	28.48	6.68	41.72	2.19	37.89	53.9	16.0	132	117	-
Hori.	4924.000	AV	42.31	31.61	7.12	42.89	2.19	40.34	53.9	13.5	139	210	-
Hori.	7386.000	AV	38.41	37.36	8.54	43.46	2.19	43.04	53.9	10.8	150	0	Floor noise
Hori.	9848.000	AV	38.24	39.06	9.80	42.94	2.19	46.35	53.9	7.5	150	0	Floor noise
Vert.	89.553	QP	42.28	9.12	6.85	33.09	0.00	25.16	43.5	18.3	100	25	-
Vert.	144.005	QP	47.08	11.63	6.89	33.05	0.00	32.55	43.5	10.9	100	76	-
Vert.	179.173	QP	42.54	13.23	7.22	33.00	0.00	29.99	43.5	13.5	100	345	-
Vert.	206.888	QP	36.77	11.13	7.13	32.94	0.00	22.09	43.5	21.4	100	140	-
Vert.	499.994	QP	30.68	17.89	7.92	32.17	0.00	24.32	46.0	21.6	100	76	-
Vert.	699.762	QP	25.68	19.85	8.33	31.53	0.00	22.33	46.0	23.6	100	106	-
Vert.	2307.339	PK	52.02	28.18	14.40	41.58	2.19	55.21	73.9	18.6	136	229	-
Vert.	2483.500	PK	60.68	27.89	14.59	41.64	2.19	63.71	73.9	10.1	172	142	-
Vert.	2616.224	PK	50.49	27.95	14.71	41.66	2.19	53.68	73.9	20.2	139	144	-
Vert.	2879.888	PK	49.52	28.48	6.68	41.72	2.19	45.15	73.9	28.7	132	109	-
Vert.	4924.000	PK	56.41	31.61	7.12	42.89	2.19	54.44	73.9	19.4	165	300	-
Vert.	7386.000	PK	50.24	37.36	8.54	43.46	2.19	54.87	73.9	19.0	150	0	-
Vert.	9848.000	PK	50.33	39.06	9.80	42.94	2.19	58.44	73.9	15.4	150	0	-
Vert.	2307.339	AV	39.63	28.18	14.40	41.58	2.19	42.82	53.9	11.0	136	229	-
Vert.	2483.500	AV	43.91	27.89	14.59	41.64	2.19	46.94	53.9	6.9	172	142	-
Vert.	2616.224	AV	40.23	27.95	14.71	41.66	2.19	43.42	53.9	10.4	139	144	-
Vert.	2879.888	AV	42.05	28.48	6.68	41.72	2.19	37.68	53.9	16.2	132	109	-
Vert.	4924.000	AV	43.34	31.61	7.12	42.89	2.19	41.37	53.9	12.5	165	300	-
Vert.	7386.000	AV	38.31	37.36	8.54	43.46	2.19	42.94	53.9	10.9	150	0	Floor noise
Vert.	9848.000	AV	38.12	39.06	9.80	42.94	2.19	46.23	53.9	7.6	150	0	Floor noise

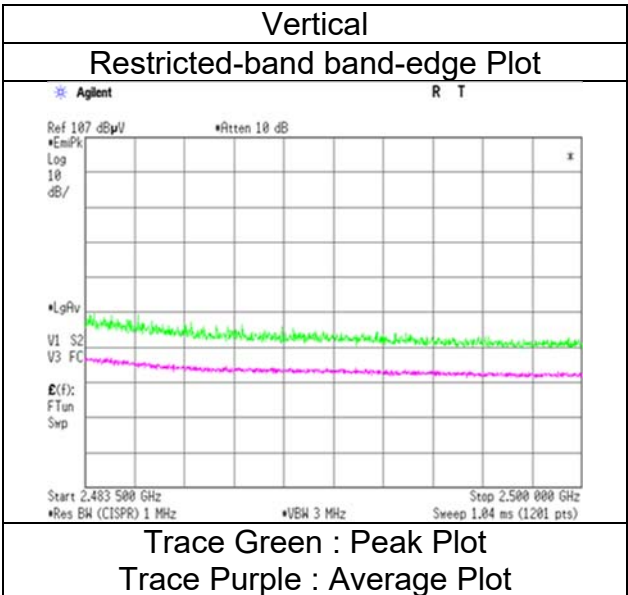
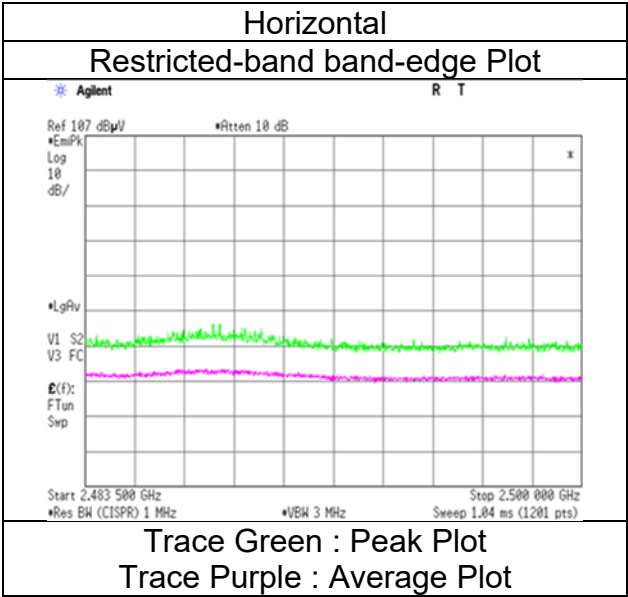
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 28, 2023
Temperature / Humidity	22 deg.C, 55 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20(OFDM)(CDD), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 1 WAC 1
Date August 28, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 22 deg.C, 55 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDM)(SDM), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

(* 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.	2257.897	PK	51.95	28.23	14.35	41.57	2.19	55.15	73.9	18.7	135	229	-
Hori.	2390.000	PK	60.24	27.98	14.48	41.61	2.19	63.28	73.9	10.6	141	181	-
Hori.	2566.798	PK	52.18	27.91	14.66	41.65	2.19	55.29	73.9	18.6	145	233	-
Hori.	2879.996	PK	50.19	28.48	6.68	41.72	2.19	45.82	73.9	28.0	152	235	-
Hori.	4824.000	PK	53.39	31.41	7.06	42.87	2.19	51.18	73.9	22.7	160	186	-
Hori.	7236.000	PK	50.56	37.15	8.48	43.36	2.19	55.02	73.9	18.8	150	0	-
Hori.	9648.000	PK	50.51	38.72	9.70	43.09	2.19	58.03	73.9	15.8	150	0	-
Hori.	2257.897	AV	39.45	28.23	14.35	41.57	2.19	42.65	53.9	11.2	135	229	-
Hori.	2390.000	AV	42.64	27.98	14.48	41.61	2.19	45.68	53.9	8.2	141	181	-
Hori.	2566.798	AV	39.87	27.91	14.66	41.65	2.19	42.98	53.9	10.9	145	233	-
Hori.	2879.996	AV	40.09	28.48	6.68	41.72	2.19	35.72	53.9	18.1	152	235	-
Hori.	4824.000	AV	41.12	31.41	7.06	42.87	2.19	38.91	53.9	14.9	160	186	-
Hori.	7236.000	AV	38.43	37.15	8.48	43.36	2.19	42.89	53.9	11.0	150	0	Floor noise
Hori.	9648.000	AV	38.25	38.72	9.70	43.09	2.19	45.77	53.9	8.1	150	0	Floor noise
Vert.	2257.886	PK	51.64	28.23	14.35	41.57	2.19	54.84	73.9	19.0	136	148	-
Vert.	2390.000	PK	62.02	27.98	14.48	41.61	2.19	65.06	73.9	8.8	141	157	-
Vert.	2566.862	PK	52.45	27.91	14.66	41.65	2.19	55.56	73.9	18.3	138	147	-
Vert.	2880.012	PK	48.86	28.48	6.68	41.72	2.19	44.49	73.9	29.4	132	120	-
Vert.	4824.000	PK	54.36	31.41	7.06	42.87	2.19	52.15	73.9	21.7	169	140	-
Vert.	7236.000	PK	50.35	37.15	8.48	43.36	2.19	54.81	73.9	19.0	150	0	-
Vert.	9648.000	PK	50.44	38.72	9.70	43.09	2.19	57.96	73.9	15.9	150	0	-
Vert.	2257.886	AV	40.43	28.23	14.35	41.57	2.19	43.63	53.9	10.2	136	148	-
Vert.	2390.000	AV	44.36	27.98	14.48	41.61	2.19	47.40	53.9	6.5	141	157	-
Vert.	2566.862	AV	41.52	27.91	14.66	41.65	2.19	44.63	53.9	9.2	138	147	-
Vert.	2880.012	AV	42.17	28.48	6.68	41.72	2.19	37.80	53.9	16.1	132	120	-
Vert.	4824.000	AV	42.38	31.41	7.06	42.87	2.19	40.17	53.9	13.7	169	140	-
Vert.	7236.000	AV	38.53	37.15	8.48	43.36	2.19	42.99	53.9	10.9	150	0	Floor noise
Vert.	9648.000	AV	38.18	38.72	9.70	43.09	2.19	45.70	53.9	8.2	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

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.	2412.000	PK	96.74	27.95	14.51	41.61	2.19	99.78	-	-	Carrier
Hori.	2400.000	PK	65.08	27.97	14.49	41.61	2.19	68.12	79.7	11.5	-
Vert.	2412.000	PK	98.76	27.95	14.51	41.61	2.19	101.80	-	-	Carrier
Vert.	2400.000	PK	65.96	27.97	14.49	41.61	2.19	69.00	81.8	12.8	-

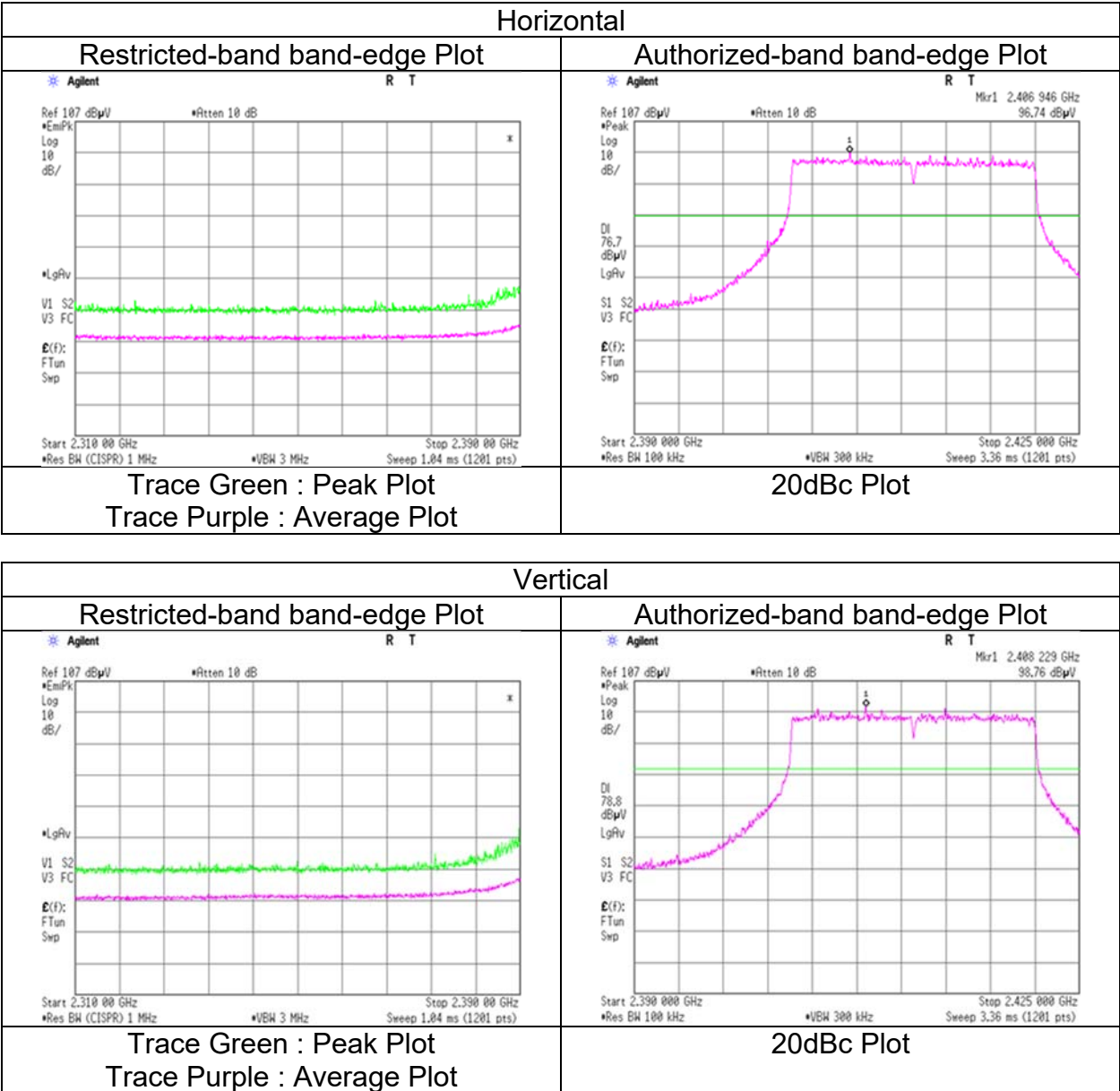
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 28, 2023
Temperature / Humidity	22 deg.C, 55 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20(OFDM)(SDM), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 1	WAC 1
Date	August 28, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 55 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDM)(SDM), 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

(* 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.	2257.989	PK	52.06	28.23	14.35	41.57	2.19	55.26	73.9	18.6	133	230	-
Hori.	2566.057	PK	52.15	27.91	14.66	41.65	2.19	55.26	73.9	18.6	140	235	-
Hori.	2880.012	PK	50.28	28.48	6.68	41.72	2.19	45.91	73.9	27.9	147	232	-
Hori.	4874.000	PK	53.52	31.50	7.09	42.88	2.19	51.42	73.9	22.4	163	9	-
Hori.	7311.000	PK	50.44	37.24	8.51	43.41	2.19	54.97	73.9	18.9	150	0	-
Hori.	9748.000	PK	50.62	39.00	9.74	43.02	2.19	58.53	73.9	15.3	150	0	-
Hori.	2257.989	AV	40.00	28.23	14.35	41.57	2.19	43.20	53.9	10.7	133	230	-
Hori.	2566.057	AV	39.79	27.91	14.66	41.65	2.19	42.90	53.9	11.0	140	235	-
Hori.	2880.012	AV	43.17	28.48	6.68	41.72	2.19	38.80	53.9	15.1	147	232	-
Hori.	4874.000	AV	41.15	31.50	7.09	42.88	2.19	39.05	53.9	14.8	163	9	-
Hori.	7311.000	AV	38.26	37.24	8.51	43.41	2.19	42.79	53.9	11.1	150	0	Floor noise
Hori.	9748.000	AV	38.37	39.00	9.74	43.02	2.19	46.28	53.9	7.6	150	0	Floor noise
Vert.	2257.977	PK	51.64	28.23	14.35	41.57	2.19	54.84	73.9	19.0	137	145	-
Vert.	2566.671	PK	51.33	27.91	14.66	41.65	2.19	54.44	73.9	19.4	135	143	-
Vert.	2879.955	PK	49.63	28.48	6.68	41.72	2.19	45.26	73.9	28.6	127	118	-
Vert.	4874.000	PK	54.08	31.50	7.09	42.88	2.19	51.98	73.9	21.9	154	145	-
Vert.	7311.000	PK	50.34	37.24	8.51	43.41	2.19	54.87	73.9	19.0	150	0	-
Vert.	9748.000	PK	50.29	39.00	9.74	43.02	2.19	58.20	73.9	15.7	150	0	-
Vert.	2257.977	AV	40.25	28.23	14.35	41.57	2.19	43.45	53.9	10.4	137	145	-
Vert.	2566.671	AV	41.32	27.91	14.66	41.65	2.19	44.43	53.9	9.4	135	143	-
Vert.	2879.955	AV	42.23	28.48	6.68	41.72	2.19	37.86	53.9	16.0	127	118	-
Vert.	4874.000	AV	44.43	31.50	7.09	42.88	2.19	42.33	53.9	11.5	154	145	-
Vert.	7311.000	AV	38.41	37.24	8.51	43.41	2.19	42.94	53.9	10.9	150	0	Floor noise
Vert.	9748.000	AV	38.29	39.00	9.74	43.02	2.19	46.20	53.9	7.7	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 1 WAC 1
Date August 28, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 22 deg.C, 55 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDM)(SDM), 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

(* 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.	2307.503	PK	52.13	28.18	14.40	41.58	2.19	55.32	73.9	18.5	165	28	-
Hori.	2483.500	PK	58.13	27.89	14.59	41.64	2.19	61.16	73.9	12.7	188	152	-
Hori.	2487.988	PK	53.34	27.89	14.59	41.64	2.19	56.37	73.9	17.5	175	8	-
Hori.	2616.302	PK	50.35	27.95	14.71	41.66	2.19	53.54	73.9	20.3	176	15	-
Hori.	2880.012	PK	49.48	28.48	6.68	41.72	2.19	45.11	73.9	28.7	130	115	-
Hori.	4924.000	PK	53.59	31.61	7.12	42.89	2.19	51.62	73.9	22.2	183	12	-
Hori.	7386.000	PK	50.24	37.36	8.54	43.46	2.19	54.87	73.9	19.0	150	0	-
Hori.	9848.000	PK	50.30	39.06	9.80	42.94	2.19	58.41	73.9	15.4	150	0	-
Hori.	2307.503	AV	39.48	28.18	14.40	41.58	2.19	42.67	53.9	11.2	165	28	-
Hori.	2483.500	AV	42.07	27.89	14.59	41.64	2.19	45.10	53.9	8.8	188	152	-
Hori.	2487.988	AV	40.04	27.89	14.59	41.64	2.19	43.07	53.9	10.8	175	8	-
Hori.	2616.302	AV	39.21	27.95	14.71	41.66	2.19	42.40	53.9	11.5	176	15	-
Hori.	2880.012	AV	42.43	28.48	6.68	41.72	2.19	38.06	53.9	15.8	130	115	-
Hori.	4924.000	AV	41.02	31.61	7.12	42.89	2.19	39.05	53.9	14.8	183	12	-
Hori.	7386.000	AV	38.35	37.36	8.54	43.46	2.19	42.98	53.9	10.9	150	0	Floor noise
Hori.	9848.000	AV	38.26	39.06	9.80	42.94	2.19	46.37	53.9	7.5	150	0	Floor noise
Vert.	2307.503	PK	52.14	28.18	14.40	41.58	2.19	55.33	73.9	18.5	135	225	-
Vert.	2483.500	PK	59.34	27.89	14.59	41.64	2.19	62.37	73.9	11.5	181	149	-
Vert.	2487.988	PK	52.96	27.89	14.59	41.64	2.19	55.99	73.9	17.9	169	240	-
Vert.	2616.302	PK	50.78	27.95	14.71	41.66	2.19	53.97	73.9	19.9	140	142	-
Vert.	2880.012	PK	49.38	28.48	6.68	41.72	2.19	45.01	73.9	28.8	130	113	-
Vert.	4924.000	PK	55.65	31.61	7.12	42.89	2.19	53.68	73.9	20.2	143	145	-
Vert.	7386.000	PK	50.46	37.36	8.54	43.46	2.19	55.09	73.9	18.8	150	0	-
Vert.	9848.000	PK	50.34	39.06	9.80	42.94	2.19	58.45	73.9	15.4	150	0	-
Vert.	2307.503	AV	39.37	28.18	14.40	41.58	2.19	42.56	53.9	11.3	135	225	-
Vert.	2483.500	AV	42.76	27.89	14.59	41.64	2.19	45.79	53.9	8.1	181	149	-
Vert.	2487.988	AV	43.75	27.89	14.59	41.64	2.19	46.78	53.9	7.1	169	240	-
Vert.	2616.302	AV	39.99	27.95	14.71	41.66	2.19	43.18	53.9	10.7	140	142	-
Vert.	2880.012	AV	41.89	28.48	6.68	41.72	2.19	37.52	53.9	16.3	130	113	-
Vert.	4924.000	AV	42.90	31.61	7.12	42.89	2.19	40.93	53.9	12.9	143	145	-
Vert.	7386.000	AV	38.24	37.36	8.54	43.46	2.19	42.87	53.9	11.0	150	0	Floor noise
Vert.	9848.000	AV	38.20	39.06	9.80	42.94	2.19	46.31	53.9	7.5	150	0	Floor noise

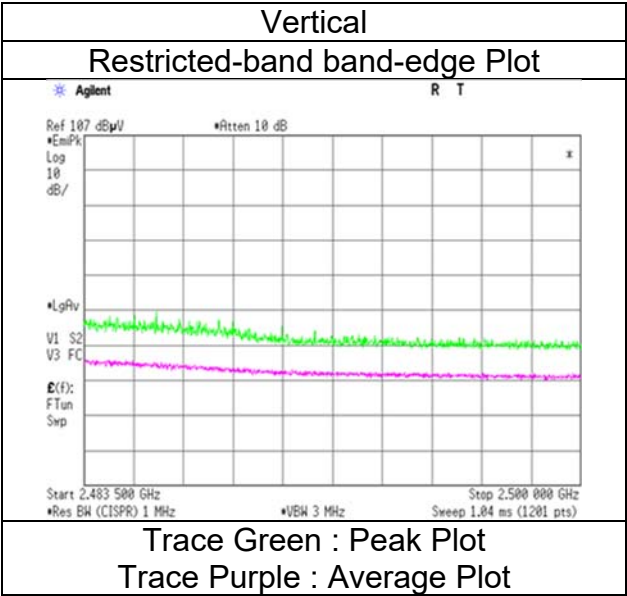
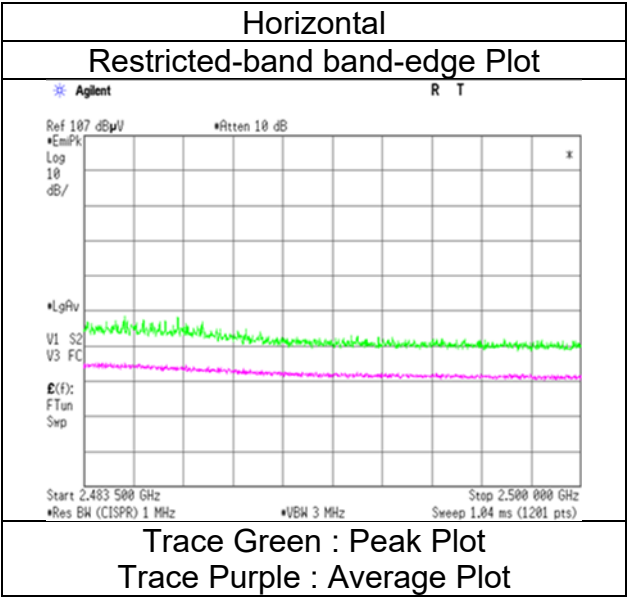
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 28, 2023
Temperature / Humidity	22 deg.C, 55 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20(OFDM)(SDM), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 18, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 21 deg.C, 52 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 0

(* 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.	2249.607	PK	60.02	28.30	12.49	46.16	2.19	56.84	73.9	17.0	126	52	-
Hori.	2390.000	PK	55.72	27.77	12.59	46.08	2.19	52.19	73.9	21.7	162	43	-
Hori.	2556.726	PK	60.66	27.87	12.68	45.91	2.19	57.49	73.9	16.4	156	46	-
Hori.	2880.128	PK	57.33	28.39	4.56	45.55	2.19	46.92	73.9	26.9	115	83	-
Hori.	4824.000	PK	60.58	31.56	4.34	45.36	2.19	53.31	73.9	20.5	147	80	-
Hori.	7236.000	PK	51.35	36.21	5.30	44.53	2.19	50.52	73.9	23.3	100	0	-
Hori.	9648.000	PK	50.45	38.75	6.12	42.86	2.19	54.65	73.9	19.2	100	0	-
Hori.	2249.607	AV	50.61	28.30	12.49	46.16	2.19	47.43	53.9	6.4	126	52	-
Hori.	2390.000	AV	45.08	27.77	12.59	46.08	2.19	41.55	53.9	12.3	162	43	-
Hori.	2556.726	AV	50.93	27.87	12.68	45.91	2.19	47.76	53.9	6.1	156	46	-
Hori.	2880.128	AV	50.42	28.39	4.56	45.55	2.19	40.01	53.9	13.8	115	83	-
Hori.	4824.000	AV	48.58	31.56	4.34	45.36	2.19	41.31	53.9	12.5	147	80	-
Hori.	7236.000	AV	41.31	36.21	5.30	44.53	2.19	40.48	53.9	13.4	100	0	Floor noise
Hori.	9648.000	AV	40.15	38.75	6.12	42.86	2.19	44.35	53.9	9.5	100	0	Floor noise
Vert.	2249.863	PK	59.55	28.30	12.49	46.16	2.19	56.37	73.9	17.5	228	137	-
Vert.	2390.000	PK	55.41	27.77	12.59	46.08	2.19	51.88	73.9	22.0	156	45	-
Vert.	2557.157	PK	61.03	27.87	12.68	45.91	2.19	57.86	73.9	16.0	146	42	-
Vert.	2879.981	PK	56.80	28.39	4.56	45.55	2.19	46.39	73.9	27.5	184	80	-
Vert.	4824.000	PK	62.12	31.56	4.34	45.36	2.19	54.85	73.9	19.0	153	208	-
Vert.	7236.000	PK	51.40	36.21	5.30	44.53	2.19	50.57	73.9	23.3	100	0	-
Vert.	9648.000	PK	49.88	38.75	6.12	42.86	2.19	54.08	73.9	19.8	100	0	-
Vert.	2249.863	AV	49.95	28.30	12.49	46.16	2.19	46.77	53.9	7.1	228	137	-
Vert.	2390.000	AV	45.02	27.77	12.59	46.08	2.19	41.49	53.9	12.4	156	45	-
Vert.	2557.157	AV	51.82	27.87	12.68	45.91	2.19	48.65	53.9	5.2	146	42	-
Vert.	2879.981	AV	50.33	28.39	4.56	45.55	2.19	39.92	53.9	13.9	184	80	-
Vert.	4824.000	AV	50.23	31.56	4.34	45.36	2.19	42.96	53.9	10.9	153	208	-
Vert.	7236.000	AV	41.15	36.21	5.30	44.53	2.19	40.32	53.9	13.5	100	0	Floor noise
Vert.	9648.000	AV	40.05	38.75	6.12	42.86	2.19	44.25	53.9	9.6	100	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 (3.86 m / 3.0 m) = 2.19 dB

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

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.	2412.000	PK	107.96	27.74	12.60	46.06	2.19	104.43	-	-	Carrier
Hori.	2400.000	PK	75.42	27.76	12.59	46.07	2.19	71.89	84.4	12.5	-
Vert.	2412.000	PK	109.05	27.74	12.60	46.06	2.19	105.52	-	-	Carrier
Vert.	2400.000	PK	76.49	27.76	12.59	46.07	2.19	72.96	85.5	12.5	-

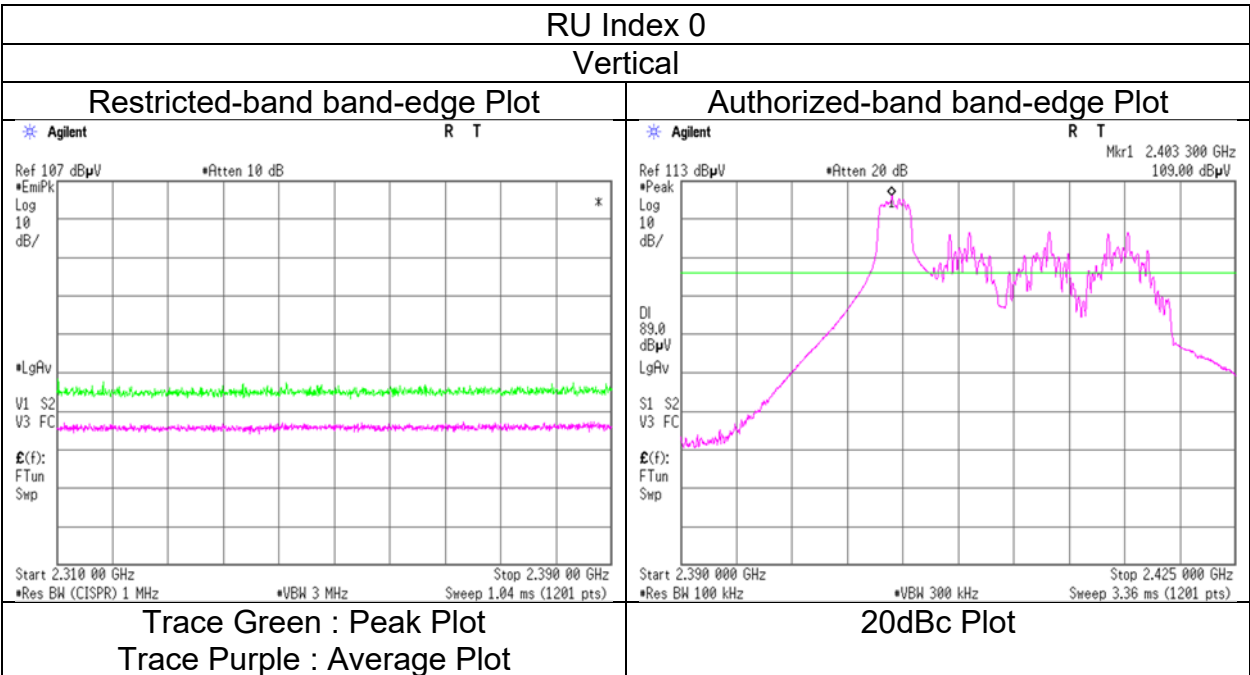
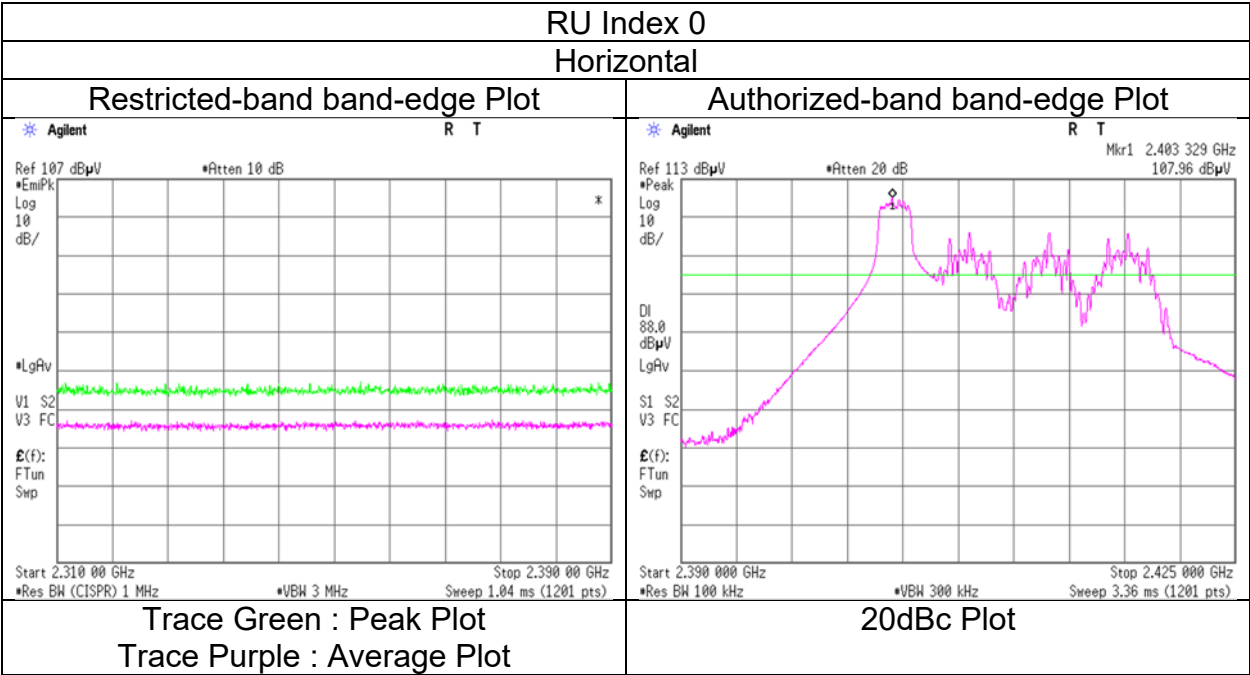
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 18, 2023
Temperature / Humidity	21 deg.C, 52 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2437 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 4

(* 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.	2282.617	PK	59.26	28.17	12.52	46.14	2.19	56.00	73.9	17.9	185	26	-
Hori.	2589.778	PK	58.83	27.94	12.70	45.88	2.19	55.78	73.9	18.1	134	52	-
Hori.	2880.002	PK	57.55	28.39	4.56	45.55	2.19	47.14	73.9	26.7	141	76	-
Hori.	4874.000	PK	57.70	31.61	4.37	45.35	2.19	50.52	73.9	23.3	127	269	-
Hori.	7311.000	PK	51.19	36.26	5.31	44.34	2.19	50.61	73.9	23.2	150	0	-
Hori.	9748.000	PK	49.78	39.00	6.15	42.83	2.19	54.29	73.9	19.6	150	0	-
Hori.	2282.617	AV	49.97	28.17	12.52	46.14	2.19	46.71	53.9	7.1	185	26	-
Hori.	2589.778	AV	49.26	27.94	12.70	45.88	2.19	46.21	53.9	7.6	134	52	-
Hori.	2880.002	AV	51.25	28.39	4.56	45.55	2.19	40.84	53.9	13.0	141	76	-
Hori.	4874.000	AV	46.51	31.61	4.37	45.35	2.19	39.33	53.9	14.5	127	269	-
Hori.	7311.000	AV	41.48	36.26	5.31	44.34	2.19	40.90	53.9	13.0	150	0	Floor noise
Hori.	9748.000	AV	39.44	39.00	6.15	42.83	2.19	43.95	53.9	9.9	150	0	Floor noise
Vert.	2284.170	PK	58.56	28.16	12.52	46.14	2.19	55.29	73.9	18.6	161	135	-
Vert.	2591.423	PK	59.24	27.94	12.70	45.88	2.19	56.19	73.9	17.7	152	36	-
Vert.	2879.986	PK	56.17	28.39	4.56	45.55	2.19	45.76	73.9	28.1	113	120	-
Vert.	4874.000	PK	60.16	31.61	4.37	45.35	2.19	52.98	73.9	20.9	150	135	-
Vert.	7311.000	PK	51.42	36.26	5.31	44.34	2.19	50.84	73.9	23.0	150	0	-
Vert.	9748.000	PK	49.16	39.00	6.15	42.83	2.19	53.67	73.9	20.2	150	0	-
Vert.	2284.170	AV	49.24	28.16	12.52	46.14	2.19	45.97	53.9	7.9	161	135	-
Vert.	2591.423	AV	49.42	27.94	12.70	45.88	2.19	46.37	53.9	7.5	152	36	-
Vert.	2879.986	AV	49.26	28.39	4.56	45.55	2.19	38.85	53.9	15.0	113	120	-
Vert.	4874.000	AV	49.33	31.61	4.37	45.35	2.19	42.15	53.9	11.7	150	135	-
Vert.	7311.000	AV	41.49	36.26	5.31	44.34	2.19	40.91	53.9	12.9	150	0	Floor noise
Vert.	9748.000	AV	39.31	39.00	6.15	42.83	2.19	43.82	53.9	10.0	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 : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 8

(* 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.	2316.621	PK	61.95	28.01	12.54	46.12	2.19	58.57	73.9	15.3	147	68	-
Hori.	2483.500	PK	54.44	27.75	12.64	45.99	2.19	51.03	73.9	22.8	144	62	-
Hori.	2624.233	PK	59.07	28.03	12.72	45.84	2.19	56.17	73.9	17.7	123	51	-
Hori.	2880.084	PK	57.30	28.39	4.56	45.55	2.19	46.89	73.9	27.0	141	76	-
Hori.	4924.000	PK	60.33	31.65	4.37	45.34	2.19	53.20	73.9	20.7	113	268	-
Hori.	7386.000	PK	50.77	36.38	5.34	44.16	2.19	50.52	73.9	23.3	100	0	-
Hori.	9848.000	PK	49.46	38.99	6.20	42.73	2.19	54.11	73.9	19.7	100	0	-
Hori.	2316.621	AV	52.23	28.01	12.54	46.12	2.19	48.85	53.9	5.0	147	68	-
Hori.	2483.500	AV	44.62	27.75	12.64	45.99	2.19	41.21	53.9	12.6	144	62	-
Hori.	2624.233	AV	49.65	28.03	12.72	45.84	2.19	46.75	53.9	7.1	123	51	-
Hori.	2880.084	AV	51.07	28.39	4.56	45.55	2.19	40.66	53.9	13.2	141	76	-
Hori.	4924.000	AV	48.09	31.65	4.37	45.34	2.19	40.96	53.9	12.9	113	268	-
Hori.	7386.000	AV	40.35	36.38	5.34	44.16	2.19	40.10	53.9	13.8	100	0	Floor noise
Hori.	9848.000	AV	39.34	38.99	6.20	42.73	2.19	43.99	53.9	9.9	100	0	Floor noise
Vert.	2316.581	PK	60.56	28.01	12.54	46.12	2.19	57.18	73.9	16.7	191	106	-
Vert.	2483.500	PK	54.63	27.75	12.64	45.99	2.19	51.22	73.9	22.6	179	113	-
Vert.	2624.404	PK	59.31	28.03	12.72	45.84	2.19	56.41	73.9	17.4	213	55	-
Vert.	2879.973	PK	56.47	28.39	4.56	45.55	2.19	46.06	73.9	27.8	153	103	-
Vert.	4924.000	PK	61.73	31.65	4.37	45.34	2.19	54.60	73.9	19.3	177	192	-
Vert.	7386.000	PK	50.62	36.38	5.34	44.16	2.19	50.37	73.9	23.5	150	0	-
Vert.	9848.000	PK	49.73	38.99	6.20	42.73	2.19	54.38	73.9	19.5	150	0	-
Vert.	2316.581	AV	51.82	28.01	12.54	46.12	2.19	48.44	53.9	5.4	191	106	-
Vert.	2483.500	AV	44.81	27.75	12.64	45.99	2.19	41.40	53.9	12.5	179	113	-
Vert.	2624.404	AV	49.65	28.03	12.72	45.84	2.19	46.75	53.9	7.1	213	55	-
Vert.	2879.973	AV	49.18	28.39	4.56	45.55	2.19	38.77	53.9	15.1	153	103	-
Vert.	4924.000	AV	50.12	31.65	4.37	45.34	2.19	42.99	53.9	10.9	177	192	-
Vert.	7386.000	AV	40.99	36.38	5.34	44.16	2.19	40.74	53.9	13.1	150	0	Floor noise
Vert.	9848.000	AV	39.73	38.99	6.20	42.73	2.19	44.38	53.9	9.5	150	0	Floor noise

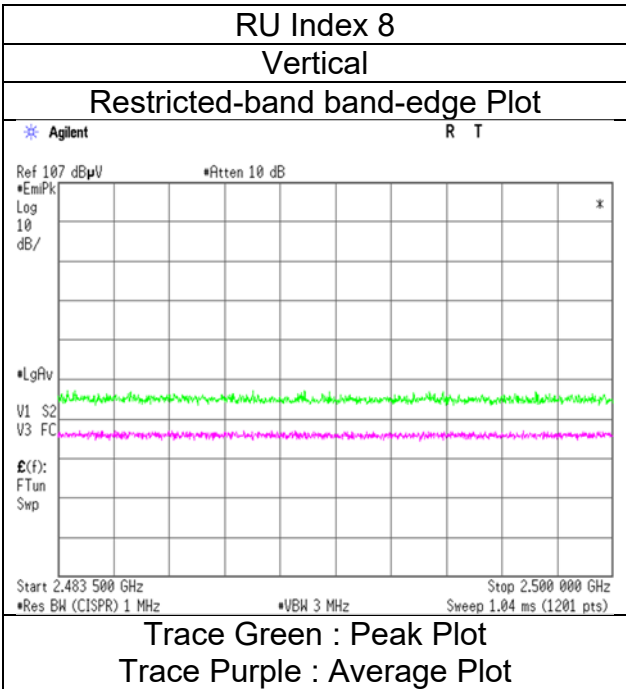
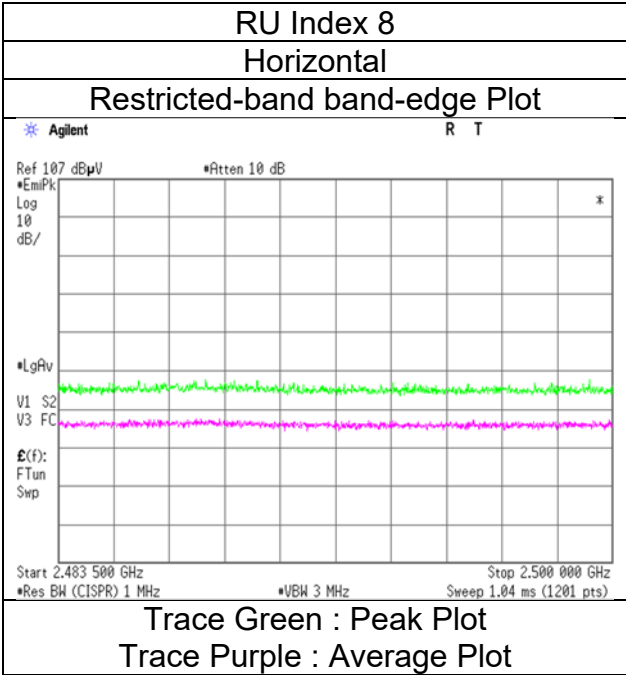
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz: $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 20, 2023
Temperature / Humidity	23 deg.C, 60 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 37

(* 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.	2249.783	PK	59.80	28.30	12.49	46.16	2.19	56.62	73.9	17.2	129	52	-
Hori.	2371.383	PK	59.68	27.82	12.57	46.09	2.19	56.17	73.9	17.7	207	52	-
Hori.	2390.000	PK	55.29	27.77	12.59	46.08	2.19	51.76	73.9	22.1	207	52	-
Hori.	2559.540	PK	59.78	27.88	12.68	45.91	2.19	56.62	73.9	17.2	210	90	-
Hori.	2880.109	PK	56.59	28.39	4.56	45.55	2.19	46.18	73.9	27.7	140	76	-
Hori.	4824.000	PK	59.16	31.56	4.34	45.36	2.19	51.89	73.9	22.0	140	79	-
Hori.	7236.000	PK	51.04	36.21	5.30	44.53	2.19	50.21	73.9	23.6	150	0	-
Hori.	9648.000	PK	50.32	38.75	6.12	42.86	2.19	54.52	73.9	19.3	150	0	-
Hori.	7236.000	AV	41.36	36.21	5.30	44.53	2.19	40.53	53.9	13.3	150	0	Floor noise
Hori.	9648.000	AV	40.01	38.75	6.12	42.86	2.19	44.21	53.9	9.6	150	0	Floor noise
Vert.	2249.397	PK	59.64	28.30	12.49	46.16	2.19	56.46	73.9	17.4	226	136	-
Vert.	2390.000	PK	56.90	27.77	12.59	46.08	2.19	53.37	73.9	20.5	152	37	-
Vert.	2558.804	PK	60.18	27.88	12.68	45.91	2.19	57.02	73.9	16.8	100	0	-
Vert.	2879.977	PK	56.33	28.39	4.56	45.55	2.19	45.92	73.9	27.9	155	103	-
Vert.	4824.000	PK	61.34	31.56	4.34	45.36	2.19	54.07	73.9	19.8	124	210	-
Vert.	7236.000	PK	51.26	36.21	5.30	44.53	2.19	50.43	73.9	23.4	100	0	-
Vert.	9648.000	PK	50.51	38.75	6.12	42.86	2.19	54.71	73.9	19.1	100	0	-
Vert.	7236.000	AV	41.57	36.21	5.30	44.53	2.19	40.74	53.9	13.1	100	0	Floor noise
Vert.	9648.000	AV	40.19	38.75	6.12	42.86	2.19	44.39	53.9	9.5	100	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2249.783	AV	50.14	28.30	12.49	46.16	0.21	2.19	47.17	53.9	6.7	-
Hori.	2371.383	AV	45.37	27.82	12.57	46.09	0.21	2.19	42.07	53.9	11.8	-
Hori.	2390.000	AV	45.57	27.77	12.59	46.08	0.21	2.19	42.25	53.9	11.6	*1)
Hori.	2559.540	AV	50.37	27.88	12.68	45.91	0.21	2.19	47.42	53.9	6.4	-
Hori.	2880.109	AV	49.58	28.39	4.56	45.55	0.21	2.19	39.38	53.9	14.5	-
Hori.	4824.000	AV	48.64	31.56	4.34	45.36	0.21	2.19	41.58	53.9	12.3	-
Vert.	2249.397	AV	50.55	28.30	12.49	46.16	0.21	2.19	47.58	53.9	6.3	-
Vert.	2390.000	AV	45.95	27.77	12.59	46.08	0.21	2.19	42.63	53.9	11.2	*1)
Vert.	2558.804	AV	51.38	27.88	12.68	45.91	0.21	2.19	48.43	53.9	5.4	-
Vert.	2879.977	AV	48.90	28.39	4.56	45.55	0.21	2.19	38.70	53.9	15.2	-
Vert.	4824.000	AV	50.95	31.56	4.34	45.36	0.21	2.19	43.89	53.9	10.0	-

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

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	108.09	27.74	12.60	46.06	2.19	104.56	-	-	Carrier
Hori.	2400.000	PK	70.88	27.76	12.59	46.07	2.19	67.35	84.5	17.1	-
Vert.	2412.000	PK	108.62	27.74	12.60	46.06	2.19	105.09	-	-	Carrier
Vert.	2400.000	PK	70.80	27.76	12.59	46.07	2.19	67.27	85.0	17.7	-

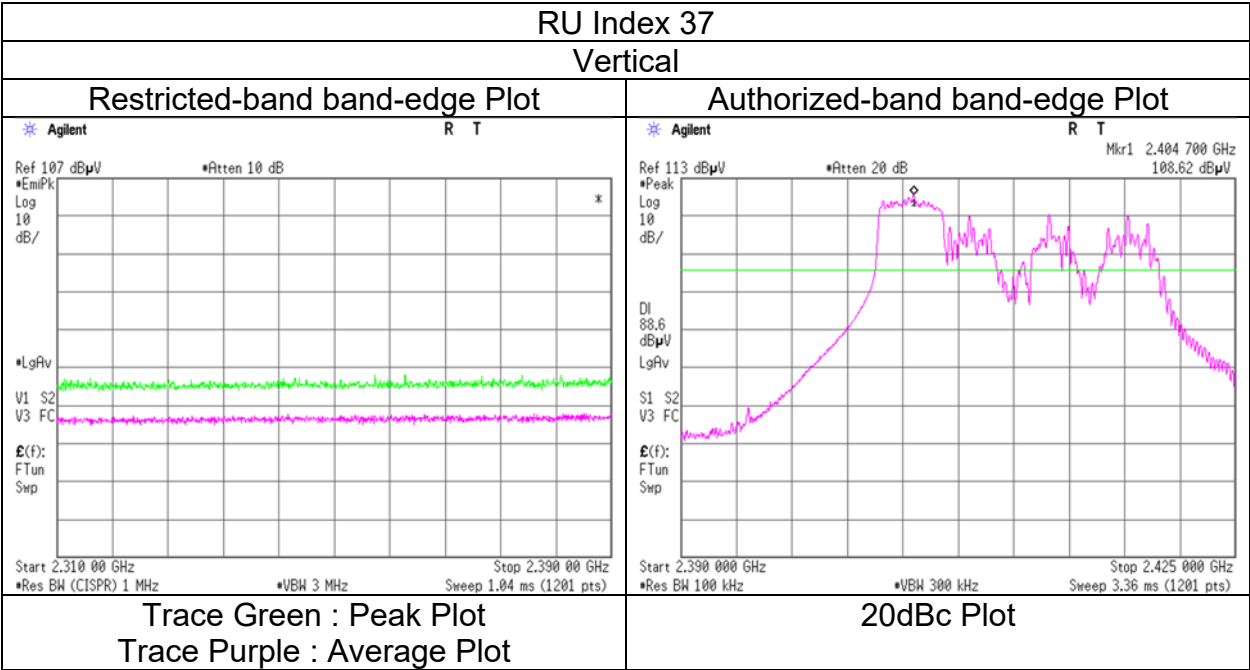
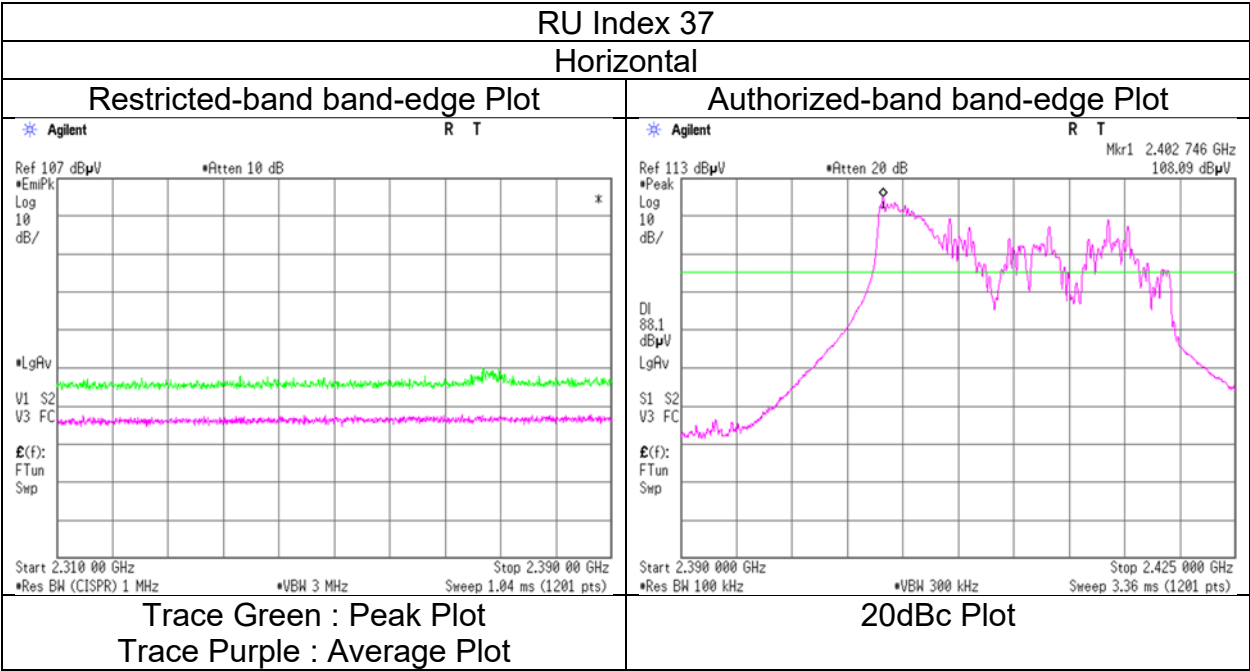
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 20, 2023
Temperature / Humidity	23 deg.C, 60 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2437 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 38

(* 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.	2281.261	PK	61.50	28.17	12.52	46.14	2.19	58.24	73.9	15.6	123	82	-
Hori.	2586.217	PK	60.44	27.93	12.70	45.88	2.19	57.38	73.9	16.5	100	0	-
Hori.	2880.104	PK	57.46	28.39	4.56	45.55	2.19	47.05	73.9	26.8	140	77	-
Hori.	4874.000	PK	59.98	31.61	4.37	45.35	2.19	52.80	73.9	21.1	155	82	-
Hori.	7311.000	PK	51.09	36.26	5.31	44.34	2.19	50.51	73.9	23.3	150	0	-
Hori.	9748.000	PK	49.22	39.00	6.15	42.83	2.19	53.73	73.9	20.1	150	0	-
Hori.	7311.000	AV	41.67	36.26	5.31	44.34	2.19	41.09	53.9	12.8	150	0	Floor noise
Hori.	9748.000	AV	39.29	39.00	6.15	42.83	2.19	43.80	53.9	10.1	150	0	Floor noise
Vert.	2280.142	PK	60.97	28.18	12.52	46.14	2.19	57.72	73.9	16.1	145	98	-
Vert.	2586.363	PK	59.65	27.93	12.70	45.88	2.19	56.59	73.9	17.3	141	108	-
Vert.	2879.995	PK	57.12	28.39	4.56	45.55	2.19	46.71	73.9	27.1	130	80	-
Vert.	4874.000	PK	61.21	31.61	4.37	45.35	2.19	54.03	73.9	19.8	147	208	-
Vert.	7311.000	PK	51.50	36.26	5.31	44.34	2.19	50.92	73.9	22.9	150	0	-
Vert.	9748.000	PK	49.48	39.00	6.15	42.83	2.19	53.99	73.9	19.9	150	0	-
Vert.	7311.000	AV	41.61	36.26	5.31	44.34	2.19	41.03	53.9	12.8	150	0	Floor noise
Vert.	9748.000	AV	39.38	39.00	6.15	42.83	2.19	43.89	53.9	10.0	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: $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2281.261	AV	50.77	28.17	12.52	46.14	0.21	2.19	47.72	53.9	6.1	-
Hori.	2586.217	AV	51.41	27.93	12.70	45.88	0.21	2.19	48.56	53.9	5.3	-
Hori.	2880.104	AV	50.71	28.39	4.56	45.55	0.21	2.19	40.51	53.9	13.3	-
Hori.	4874.000	AV	49.81	31.61	4.37	45.35	0.21	2.19	42.84	53.9	11.0	-
Vert.	2280.142	AV	51.16	28.18	12.52	46.14	0.21	2.19	48.12	53.9	5.7	-
Vert.	2586.363	AV	50.80	27.93	12.70	45.88	0.21	2.19	47.95	53.9	5.9	-
Vert.	2879.995	AV	50.41	28.39	4.56	45.55	0.21	2.19	40.21	53.9	13.6	-
Vert.	4874.000	AV	50.75	31.61	4.37	45.35	0.21	2.19	43.78	53.9	10.1	-

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

Distance factor : 1 GHz - 10 GHz: $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Duty factor refer to "Burst rate confirmation" sheet.

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 40

(* 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.	2316.532	PK	61.44	28.01	12.54	46.12	2.19	58.06	73.9	15.8	144	65	-
Hori.	2483.500	PK	56.26	27.75	12.64	45.99	2.19	52.85	73.9	21.0	146	55	-
Hori.	2879.949	PK	57.37	28.39	4.56	45.55	2.19	46.96	73.9	26.9	137	77	-
Hori.	4924.000	PK	59.35	31.65	4.37	45.34	2.19	52.22	73.9	21.6	303	82	-
Hori.	7386.000	PK	50.19	36.38	5.34	44.16	2.19	49.94	73.9	23.9	150	0	-
Hori.	9848.000	PK	49.22	38.99	6.20	42.73	2.19	53.87	73.9	20.0	150	0	-
Hori.	7386.000	AV	40.87	36.38	5.34	44.16	2.19	40.62	53.9	13.2	150	0	Floor noise
Hori.	9848.000	AV	39.62	38.99	6.20	42.73	2.19	44.27	53.9	9.6	150	0	Floor noise
Vert.	2316.532	PK	60.71	28.01	12.54	46.12	2.19	57.33	73.9	16.5	159	115	-
Vert.	2483.500	PK	56.87	27.75	12.64	45.99	2.19	53.46	73.9	20.4	163	106	-
Vert.	2879.949	PK	56.97	28.39	4.56	45.55	2.19	46.56	73.9	27.3	145	142	-
Vert.	4924.000	PK	60.61	31.65	4.37	45.34	2.19	53.48	73.9	20.4	161	160	-
Vert.	7386.000	PK	51.08	36.38	5.34	44.16	2.19	50.83	73.9	23.0	150	0	-
Vert.	9848.000	PK	49.17	38.99	6.20	42.73	2.19	53.82	73.9	20.0	150	0	-
Vert.	7386.000	AV	40.86	36.38	5.34	44.16	2.19	40.61	53.9	13.2	150	0	Floor noise
Vert.	9848.000	AV	39.39	38.99	6.20	42.73	2.19	44.04	53.9	9.8	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2316.532	AV	50.63	28.01	12.54	46.12	0.21	2.19	47.46	53.9	6.4	-
Hori.	2483.500	AV	45.29	27.75	12.64	45.99	0.21	2.19	42.09	53.9	11.8	*1)
Hori.	2879.949	AV	50.49	28.39	4.56	45.55	0.21	2.19	40.29	53.9	13.6	-
Hori.	4924.000	AV	46.92	31.65	4.37	45.34	0.21	2.19	40.00	53.9	13.9	-
Vert.	2316.532	AV	49.48	28.01	12.54	46.12	0.21	2.19	46.31	53.9	7.5	-
Vert.	2483.500	AV	45.28	27.75	12.64	45.99	0.21	2.19	42.08	53.9	11.8	*1)
Vert.	2879.949	AV	49.96	28.39	4.56	45.55	0.21	2.19	39.76	53.9	14.1	-
Vert.	4924.000	AV	48.50	31.65	4.37	45.34	0.21	2.19	41.58	53.9	12.3	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2462.000	PK	108.24	27.72	12.64	46.01	2.19	104.78	-	-	Carrier
Hori.	2622.896	PK	48.98	28.03	12.72	45.84	2.19	46.08	84.7	38.6	-
Vert.	2462.000	PK	108.03	27.72	12.64	46.01	2.19	104.57	-	-	Carrier
Vert.	2622.896	PK	49.01	28.03	12.72	45.84	2.19	46.11	84.5	38.3	-

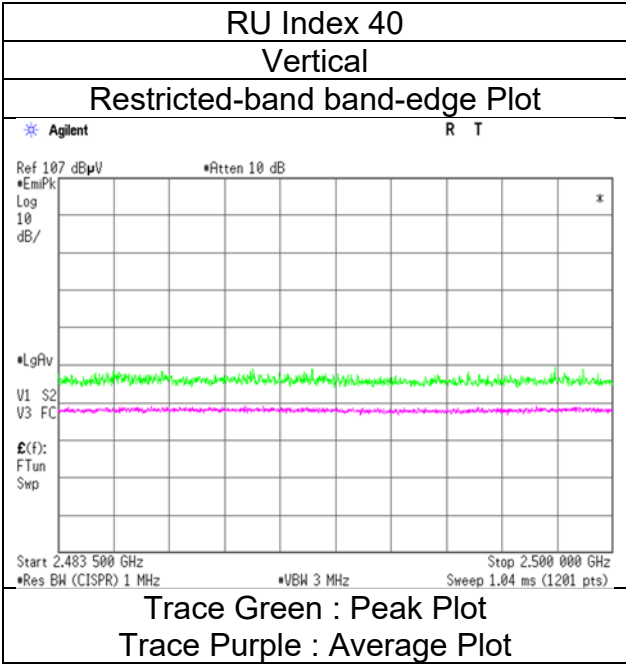
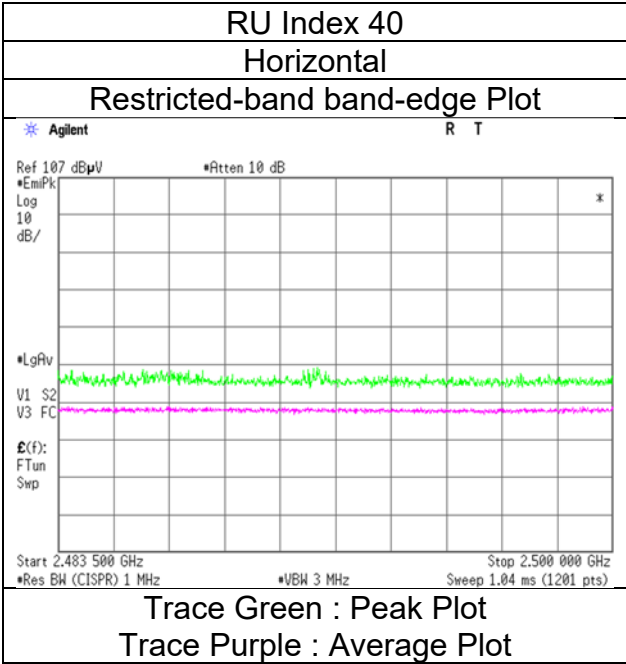
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 20, 2023
Temperature / Humidity	23 deg.C, 60 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date September 8, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 24 deg.C, 70 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 106-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 53

(* 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.	2255.575	PK	51.76	28.28	12.49	36.59	2.19	58.13	73.9	15.7	103	73	-
Hori.	2390.000	PK	53.00	27.77	12.57	36.58	2.19	58.95	73.9	14.9	146	68	-
Hori.	2561.354	PK	51.72	27.88	12.66	36.58	2.19	57.87	73.9	16.0	133	82	-
Hori.	2879.945	PK	49.26	28.39	4.77	36.65	2.19	47.96	73.9	25.9	121	95	-
Hori.	4824.000	PK	48.61	31.56	4.68	36.13	2.19	50.91	73.9	22.9	100	87	-
Hori.	7236.000	PK	44.96	36.21	5.56	36.36	2.19	52.56	73.9	21.3	150	0	-
Hori.	9648.000	PK	45.19	38.75	6.37	36.47	2.19	56.03	73.9	17.8	150	0	-
Hori.	7236.000	AV	34.71	36.21	5.56	36.36	2.19	42.31	53.9	11.5	150	0	Floor noise
Hori.	9648.000	AV	34.83	38.75	6.37	36.47	2.19	45.67	53.9	8.2	150	0	Floor noise
Vert.	2255.267	PK	49.82	28.28	12.49	36.59	2.19	56.19	73.9	17.7	160	96	-
Vert.	2390.000	PK	49.86	27.77	12.57	36.58	2.19	55.81	73.9	18.0	220	57	-
Vert.	2557.786	PK	50.72	27.88	12.66	36.58	2.19	56.87	73.9	17.0	227	43	-
Vert.	2879.946	PK	49.12	28.39	4.77	36.65	2.19	47.82	73.9	26.0	150	136	-
Vert.	4824.000	PK	50.03	31.56	4.68	36.13	2.19	52.33	73.9	21.5	143	128	-
Vert.	7236.000	PK	44.84	36.21	5.56	36.36	2.19	52.44	73.9	21.4	150	0	-
Vert.	9648.000	PK	45.23	38.75	6.37	36.47	2.19	56.07	73.9	17.8	150	0	-
Vert.	7236.000	AV	34.79	36.21	5.56	36.36	2.19	42.39	53.9	11.5	150	0	Floor noise
Vert.	9648.000	AV	34.73	38.75	6.37	36.47	2.19	45.57	53.9	8.3	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2255.575	AV	39.64	28.28	12.49	36.59	0.40	2.19	46.41	53.9	7.4	-
Hori.	2390.000	AV	37.79	27.77	12.57	36.58	0.40	2.19	44.14	53.9	9.7	*1)
Hori.	2561.354	AV	40.26	27.88	12.66	36.58	0.40	2.19	46.81	53.9	7.0	-
Hori.	2879.945	AV	41.45	28.39	4.77	36.65	0.40	2.19	40.55	53.9	13.3	-
Hori.	4824.000	AV	37.39	31.56	4.68	36.13	0.40	2.19	40.09	53.9	13.8	-
Vert.	2255.267	AV	39.31	28.28	12.49	36.59	0.40	2.19	46.08	53.9	7.8	-
Vert.	2390.000	AV	36.79	27.77	12.57	36.58	0.40	2.19	43.14	53.9	10.7	*1)
Vert.	2557.786	AV	39.87	27.88	12.66	36.58	0.40	2.19	46.42	53.9	7.4	-
Vert.	2879.946	AV	41.35	28.39	4.77	36.65	0.40	2.19	40.45	53.9	13.4	-
Vert.	4824.000	AV	39.83	31.56	4.68	36.13	0.40	2.19	42.53	53.9	11.3	-

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

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	97.21	27.74	12.58	36.58	2.19	103.14	-	-	Carrier
Hori.	2400.000	PK	59.91	27.76	12.57	36.58	2.19	65.85	83.1	17.2	-
Vert.	2412.000	PK	96.02	27.74	12.58	36.58	2.19	101.95	-	-	Carrier
Vert.	2400.000	PK	63.22	27.76	12.57	36.58	2.19	69.16	81.9	12.7	-

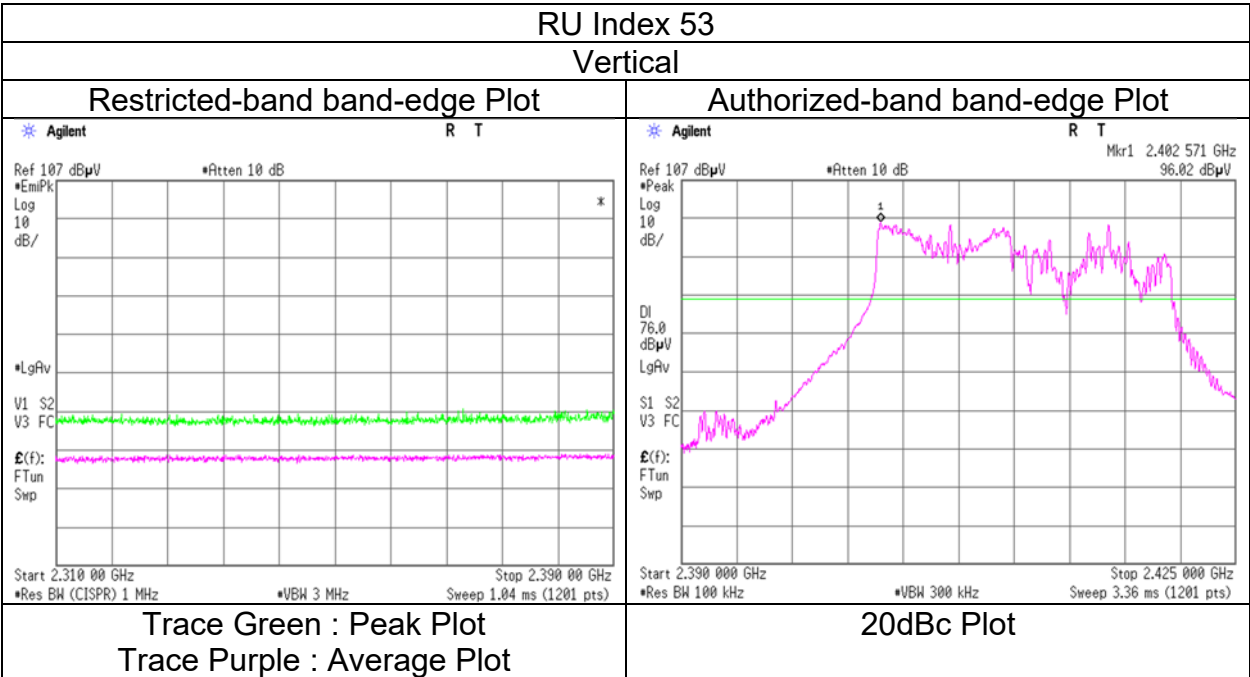
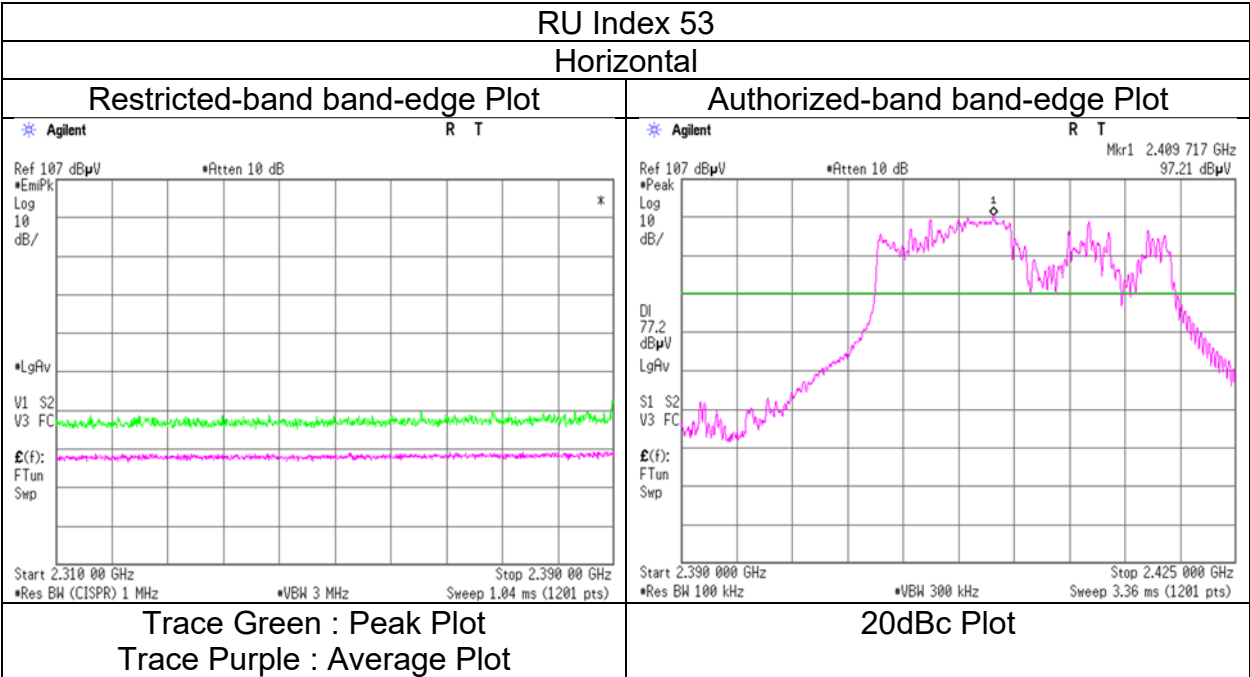
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	September 8, 2023
Temperature / Humidity	24 deg.C, 70 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 106-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date September 8, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 24 deg.C, 70 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 106-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 54

(* 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.	2315.743	PK	52.58	28.02	12.52	36.59	2.19	58.72	73.9	15.1	123	80	-
Hori.	2483.500	PK	53.37	27.75	12.62	36.57	2.19	59.36	73.9	14.5	143	89	-
Hori.	2879.987	PK	49.44	28.39	4.77	36.65	2.19	48.14	73.9	25.7	120	94	-
Hori.	4924.000	PK	49.30	31.65	4.71	36.10	2.19	51.75	73.9	22.1	119	89	-
Hori.	7386.000	PK	45.21	36.38	5.63	36.38	2.19	53.03	73.9	20.8	150	0	-
Hori.	9848.000	PK	44.96	38.99	6.43	36.37	2.19	56.20	73.9	17.7	150	0	-
Hori.	7386.000	AV	34.33	36.38	5.63	36.38	2.19	42.15	53.9	11.7	150	0	Floor noise
Hori.	9848.000	AV	34.89	38.99	6.43	36.37	2.19	46.13	53.9	7.7	150	0	Floor noise
Vert.	2316.162	PK	51.56	28.02	12.52	36.59	2.19	57.70	73.9	16.2	239	104	-
Vert.	2483.500	PK	51.98	27.75	12.62	36.57	2.19	57.97	73.9	15.9	167	110	-
Vert.	2617.548	PK	49.57	28.01	12.70	36.60	2.19	55.87	73.9	18.0	190	36	-
Vert.	2879.972	PK	49.99	28.39	4.77	36.65	2.19	48.69	73.9	25.2	152	135	-
Vert.	4924.000	PK	50.02	31.65	4.71	36.10	2.19	52.47	73.9	21.4	158	137	-
Vert.	7386.000	PK	45.04	36.38	5.63	36.38	2.19	52.86	73.9	21.0	150	0	-
Vert.	9848.000	PK	44.94	38.99	6.43	36.37	2.19	56.18	73.9	17.7	150	0	-
Vert.	7386.000	AV	34.37	36.38	5.63	36.38	2.19	42.19	53.9	11.7	150	0	Floor noise
Vert.	9848.000	AV	34.82	38.99	6.43	36.37	2.19	46.06	53.9	7.8	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2315.743	AV	41.23	28.02	12.52	36.59	0.40	2.19	47.77	53.9	6.1	-
Hori.	2483.500	AV	37.66	27.75	12.62	36.57	0.40	2.19	44.05	53.9	9.8	*1)
Hori.	2879.987	AV	42.07	28.39	4.77	36.65	0.40	2.19	41.17	53.9	12.7	-
Hori.	4924.000	AV	37.74	31.65	4.71	36.10	0.40	2.19	40.59	53.9	13.3	-
Vert.	2316.162	AV	39.77	28.02	12.52	36.59	0.40	2.19	46.31	53.9	7.5	-
Vert.	2483.500	AV	36.80	27.75	12.62	36.57	0.40	2.19	43.19	53.9	10.7	*1)
Vert.	2617.548	AV	38.76	28.01	12.70	36.60	0.40	2.19	45.46	53.9	8.4	-
Vert.	2879.972	AV	41.72	28.39	4.77	36.65	0.40	2.19	40.82	53.9	13.0	-
Vert.	4924.000	AV	39.33	31.65	4.71	36.10	0.40	2.19	42.18	53.9	11.7	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

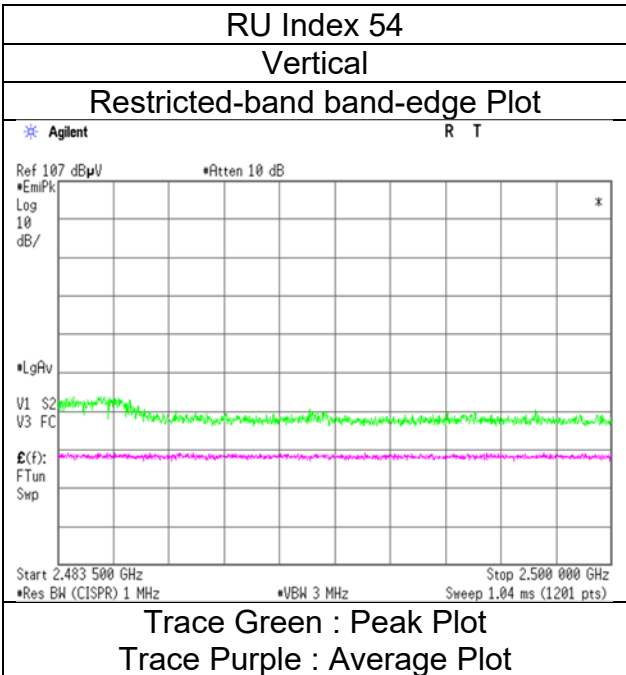
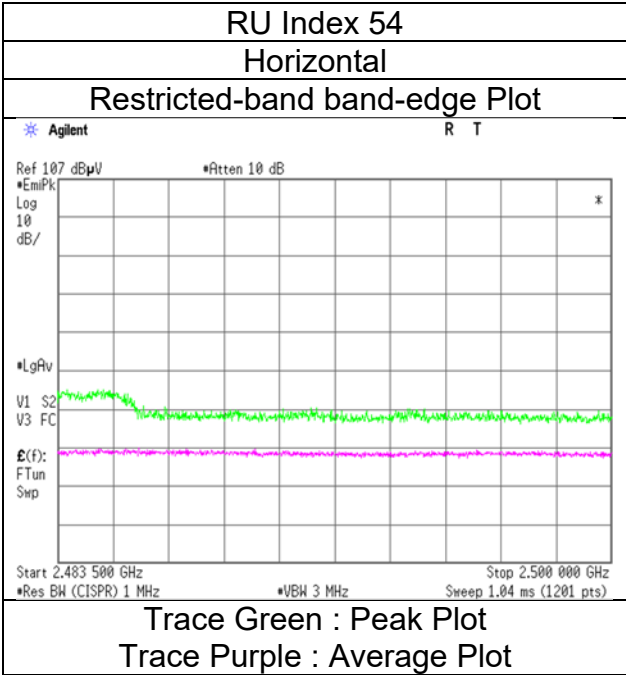
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	September 8, 2023
Temperature / Humidity	24 deg.C, 70 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 106-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 12, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	25 deg.C, 42 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Kouki Yamada	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(CDD) 242-tone RU, 2412 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

RU Index 61

(* 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.	2266.578	PK	56.86	28.24	12.51	46.15	2.19	53.65	73.9	20.2	152	82	-
Hori.	2384.130	PK	61.23	27.78	12.59	46.08	2.19	57.71	73.9	16.1	115	49	-
Hori.	2390.000	PK	64.71	27.77	12.59	46.08	2.19	61.18	73.9	12.7	115	49	-
Hori.	2880.001	PK	55.62	28.39	4.56	45.55	2.19	45.21	73.9	28.6	100	83	-
Hori.	4824.000	PK	55.66	31.56	4.34	45.36	2.19	48.39	73.9	25.5	150	54	-
Hori.	7236.000	PK	50.89	36.21	5.30	44.53	2.19	50.06	73.9	23.8	150	0	-
Hori.	9648.000	PK	50.13	38.75	6.12	42.86	2.19	54.33	73.9	19.5	150	0	-
Hori.	7236.000	AV	41.40	36.21	5.30	44.53	2.19	40.57	53.9	13.3	150	0	Floor noise
Hori.	9648.000	AV	40.37	38.75	6.12	42.86	2.19	44.57	53.9	9.3	150	0	Floor noise
Vert.	2266.269	PK	57.36	28.24	12.51	46.15	2.19	54.15	73.9	19.7	189	103	-
Vert.	2378.812	PK	58.22	27.79	12.58	46.08	2.19	54.70	73.9	19.2	204	99	-
Vert.	2390.000	PK	66.57	27.77	12.59	46.08	2.19	63.04	73.9	10.8	204	99	-
Vert.	2880.000	PK	56.57	28.39	4.56	45.55	2.19	46.16	73.9	27.7	170	77	-
Vert.	4824.000	PK	58.50	31.56	4.34	45.36	2.19	51.23	73.9	22.6	148	46	-
Vert.	7236.000	PK	51.30	36.21	5.30	44.53	2.19	50.47	73.9	23.4	150	0	-
Vert.	9648.000	PK	50.38	38.75	6.12	42.86	2.19	54.58	73.9	19.3	150	0	-
Vert.	7236.000	AV	40.49	36.21	5.30	44.53	2.19	39.66	53.9	14.2	150	0	Floor noise
Vert.	9648.000	AV	39.44	38.75	6.12	42.86	2.19	43.64	53.9	10.2	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 : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2266.578	AV	47.65	28.24	12.51	46.15	0.26	2.19	44.70	53.9	9.2	-
Hori.	2384.130	AV	46.76	27.78	12.59	46.08	0.26	2.19	43.50	53.9	10.4	-
Hori.	2390.000	AV	52.04	27.77	12.59	46.08	0.26	2.19	48.77	53.9	5.1	*1)
Hori.	2880.001	AV	50.37	28.39	4.56	45.55	0.26	2.19	40.22	53.9	13.6	-
Hori.	4824.000	AV	46.94	31.56	4.34	45.36	0.26	2.19	39.93	53.9	13.9	-
Vert.	2266.269	AV	48.43	28.24	12.51	46.15	0.26	2.19	45.48	53.9	8.4	-
Vert.	2378.812	AV	47.91	27.79	12.58	46.08	0.26	2.19	44.65	53.9	9.2	-
Vert.	2390.000	AV	54.50	27.77	12.59	46.08	0.26	2.19	51.23	53.9	2.6	*1)
Vert.	2880.000	AV	50.62	28.39	4.56	45.55	0.26	2.19	40.47	53.9	13.4	-
Vert.	4824.000	AV	47.97	31.56	4.34	45.36	0.26	2.19	40.96	53.9	12.9	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	105.87	27.74	12.60	46.06	2.19	102.34	-	-	Carrier
Hori.	2400.000	PK	70.27	27.76	12.59	46.07	2.19	66.74	82.3	15.5	-
Hori.	2561.809	PK	49.73	27.88	12.68	45.91	2.19	46.57	82.3	35.7	-
Vert.	2412.000	PK	105.47	27.74	12.60	46.06	2.19	101.94	-	-	Carrier
Vert.	2400.000	PK	68.42	27.76	12.59	46.07	2.19	64.89	81.9	17.0	-
Vert.	2558.123	PK	48.82	27.88	12.68	45.91	2.19	45.66	81.9	36.2	-

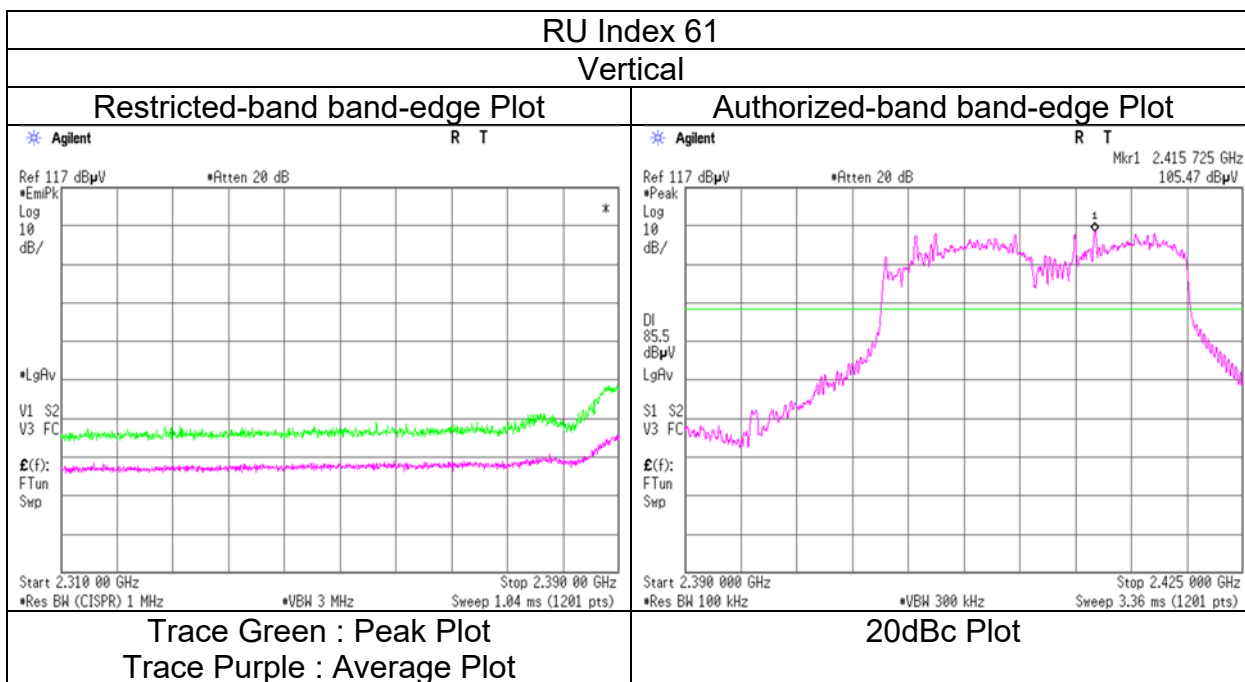
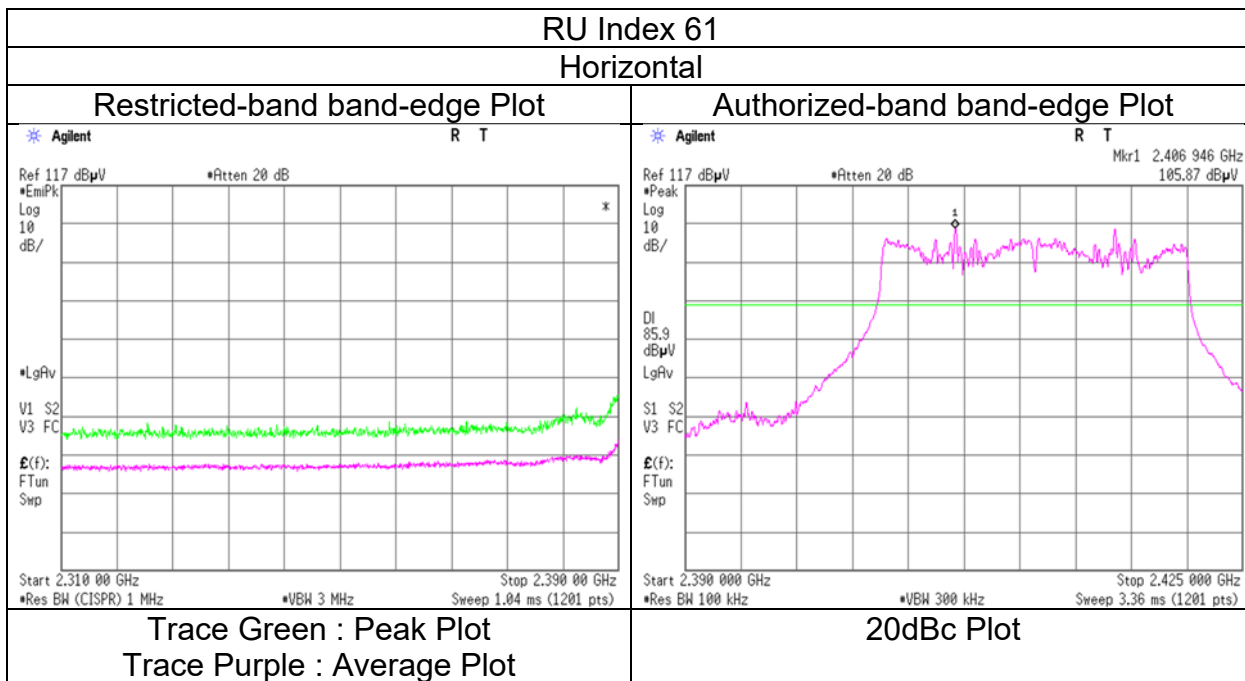
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 12, 2023
Temperature / Humidity	25 deg.C, 42 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDMA)(CDD) 242-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 12, 2023 October 22, 2023 October 23, 2023
Temperature / Humidity 25 deg.C, 42 %RH 20 deg.C, 43 %RH 21 deg.C, 50 %RH
Engineer Kouki Yamada Yohsuke Matsuzawa Kenichi Adachi
(1 GHz -10 GHz) (10 GHz - 18 GHz) (18 GHz - 26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 242-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 61

(* 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.	2316.484	PK	59.40	28.01	12.54	46.12	2.19	56.02	73.9	17.8	197	70	-
Hori.	2483.500	PK	61.62	27.75	12.64	45.99	2.19	58.21	73.9	15.6	145	81	-
Hori.	2486.992	PK	62.85	27.75	12.65	45.98	2.19	59.46	73.9	14.4	145	81	-
Hori.	2879.962	PK	56.62	28.39	4.56	45.55	2.19	46.21	73.9	27.6	133	77	-
Hori.	4924.000	PK	55.60	31.65	4.37	45.34	2.19	48.47	73.9	25.4	149	81	-
Hori.	7386.000	PK	51.78	36.38	5.34	44.16	2.19	51.53	73.9	22.3	150	0	-
Hori.	9848.000	PK	49.64	38.99	6.20	42.73	2.19	54.29	73.9	19.6	150	0	-
Hori.	7386.000	AV	41.22	36.38	5.34	44.16	2.19	40.97	53.9	12.9	150	0	Floor noise
Hori.	9848.000	AV	39.86	38.99	6.20	42.73	2.19	44.51	53.9	9.3	150	0	Floor noise
Vert.	2316.057	PK	57.53	28.02	12.54	46.12	2.19	54.16	73.9	19.7	180	107	-
Vert.	2483.500	PK	61.78	27.75	12.64	45.99	2.19	58.37	73.9	15.5	146	104	-
Vert.	2486.855	PK	63.23	27.75	12.65	45.98	2.19	59.84	73.9	14.0	146	104	-
Vert.	2880.018	PK	56.02	28.39	4.56	45.55	2.19	45.61	73.9	28.2	155	57	-
Vert.	4924.000	PK	56.01	31.65	4.37	45.34	2.19	48.88	73.9	25.0	198	145	-
Vert.	7386.000	PK	50.89	36.38	5.34	44.16	2.19	50.64	73.9	23.2	150	0	-
Vert.	9848.000	PK	50.20	38.99	6.20	42.73	2.19	54.85	73.9	19.0	150	0	-
Vert.	7386.000	AV	41.20	36.38	5.34	44.16	2.19	40.95	53.9	12.9	150	0	Floor noise
Vert.	9848.000	AV	39.91	38.99	6.20	42.73	2.19	44.56	53.9	9.3	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2316.484	AV	49.53	28.01	12.54	46.12	0.26	2.19	46.41	53.9	7.4	-
Hori.	2483.500	AV	48.37	27.75	12.64	45.99	0.26	2.19	45.22	53.9	8.6	*1)
Hori.	2486.992	AV	49.10	27.75	12.65	45.98	0.26	2.19	45.97	53.9	7.9	-
Hori.	2879.962	AV	50.76	28.39	4.56	45.55	0.26	2.19	40.61	53.9	13.2	-
Hori.	4924.000	AV	47.24	31.65	4.37	45.34	0.26	2.19	40.37	53.9	13.5	-
Vert.	2316.057	AV	48.68	28.02	12.54	46.12	0.26	2.19	45.57	53.9	8.3	-
Vert.	2483.500	AV	47.28	27.75	12.64	45.99	0.26	2.19	44.13	53.9	9.7	*1)
Vert.	2486.855	AV	49.47	27.75	12.65	45.98	0.26	2.19	46.34	53.9	7.5	-
Vert.	2880.018	AV	50.14	28.39	4.56	45.55	0.26	2.19	39.99	53.9	13.9	-
Vert.	4924.000	AV	48.23	31.65	4.37	45.34	0.26	2.19	41.36	53.9	12.5	-

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2462.000	PK	105.70	27.72	12.64	46.01	2.19	102.24	-	-	Carrier
Hori.	2611.344	PK	48.42	27.99	12.72	45.85	2.19	45.47	82.2	36.7	-
Vert.	2462.000	PK	105.02	27.72	12.64	46.01	2.19	101.56	-	-	Carrier
Vert.	2611.048	PK	48.13	27.99	12.72	45.85	2.19	45.18	81.5	36.3	-

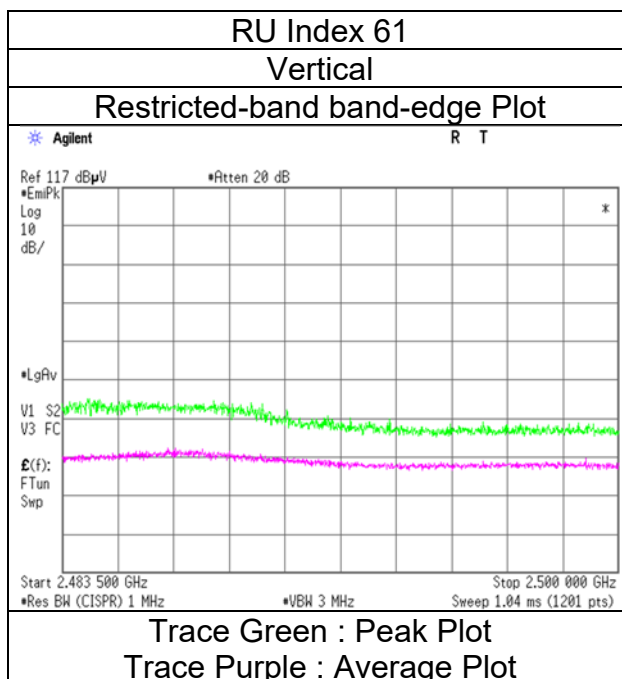
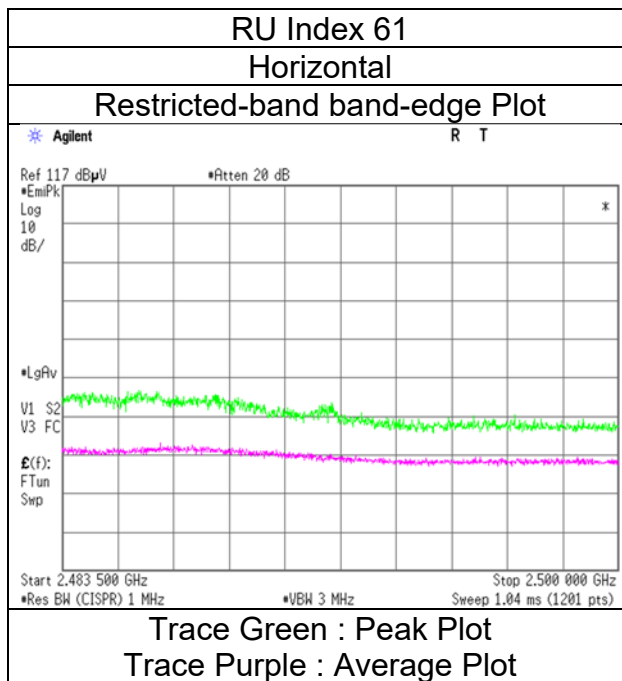
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	September 8, 2023
Temperature / Humidity	24 deg.C, 70 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 242-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 18, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 21 deg.C, 52 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 0

(* 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.	2250.158	PK	59.64	28.30	12.51	46.16	2.19	56.48	73.9	17.4	123	78	-
Hori.	2390.000	PK	55.91	27.77	12.59	46.08	2.19	52.38	73.9	21.5	154	71	-
Hori.	2557.164	PK	60.13	27.87	12.68	45.91	2.19	56.96	73.9	16.9	166	90	-
Hori.	2879.979	PK	58.21	28.39	4.56	45.55	2.19	47.80	73.9	26.1	114	82	-
Hori.	4824.000	PK	58.23	31.56	4.34	45.36	2.19	50.96	73.9	22.9	110	91	-
Hori.	7236.000	PK	51.61	36.21	5.30	44.53	2.19	50.78	73.9	23.1	150	0	-
Hori.	9648.000	PK	50.52	38.75	6.12	42.86	2.19	54.72	73.9	19.1	150	0	-
Hori.	7236.000	AV	41.16	36.21	5.30	44.53	2.19	40.33	53.9	13.5	150	0	Floor noise
Hori.	9648.000	AV	40.16	38.75	6.12	42.86	2.19	44.36	53.9	9.5	150	0	Floor noise
Vert.	2249.831	PK	58.48	28.30	12.49	46.16	2.19	55.30	73.9	18.6	267	91	-
Vert.	2390.000	PK	55.72	27.77	12.59	46.08	2.19	52.19	73.9	21.7	149	33	-
Vert.	2556.591	PK	60.65	27.87	12.68	45.91	2.19	57.48	73.9	16.4	184	25	-
Vert.	2879.993	PK	57.38	28.39	4.56	45.55	2.19	46.97	73.9	26.9	101	120	-
Vert.	4824.000	PK	62.01	31.56	4.34	45.36	2.19	54.74	73.9	19.1	118	211	-
Vert.	7236.000	PK	50.87	36.21	5.30	44.53	2.19	50.04	73.9	23.8	150	0	-
Vert.	9648.000	PK	50.70	38.75	6.12	42.86	2.19	54.90	73.9	19.0	150	0	-
Vert.	7236.000	AV	41.37	36.21	5.30	44.53	2.19	40.54	53.9	13.3	150	0	Floor noise
Vert.	9648.000	AV	40.58	38.75	6.12	42.86	2.19	44.78	53.9	9.1	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2250.158	AV	49.54	28.30	12.51	46.16	0.20	2.19	46.58	53.9	7.3	-
Hori.	2390.000	AV	45.53	27.77	12.59	46.08	0.20	2.19	42.20	53.9	11.7	*1)
Hori.	2557.164	AV	50.58	27.87	12.68	45.91	0.20	2.19	47.61	53.9	6.2	-
Hori.	2879.979	AV	51.03	28.39	4.56	45.55	0.20	2.19	40.82	53.9	13.0	-
Hori.	4824.000	AV	47.32	31.56	4.34	45.36	0.20	2.19	40.25	53.9	13.6	-
Vert.	2249.831	AV	48.05	28.30	12.49	46.16	0.20	2.19	45.07	53.9	8.8	-
Vert.	2390.000	AV	45.31	27.77	12.59	46.08	0.20	2.19	41.98	53.9	11.9	*1)
Vert.	2556.591	AV	48.82	27.87	12.68	45.91	0.20	2.19	45.85	53.9	8.0	-
Vert.	2879.993	AV	50.33	28.39	4.56	45.55	0.20	2.19	40.12	53.9	13.7	-
Vert.	4824.000	AV	49.26	31.56	4.34	45.36	0.20	2.19	42.19	53.9	11.7	-

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

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	107.31	27.74	12.60	46.06	2.19	103.78	-	-	Carrier
Hori.	2400.000	PK	72.40	27.76	12.59	46.07	2.19	68.87	83.7	14.8	-
Vert.	2412.000	PK	106.65	27.74	12.60	46.06	2.19	103.12	-	-	Carrier
Vert.	2400.000	PK	69.93	27.76	12.59	46.07	2.19	66.40	83.1	16.7	-

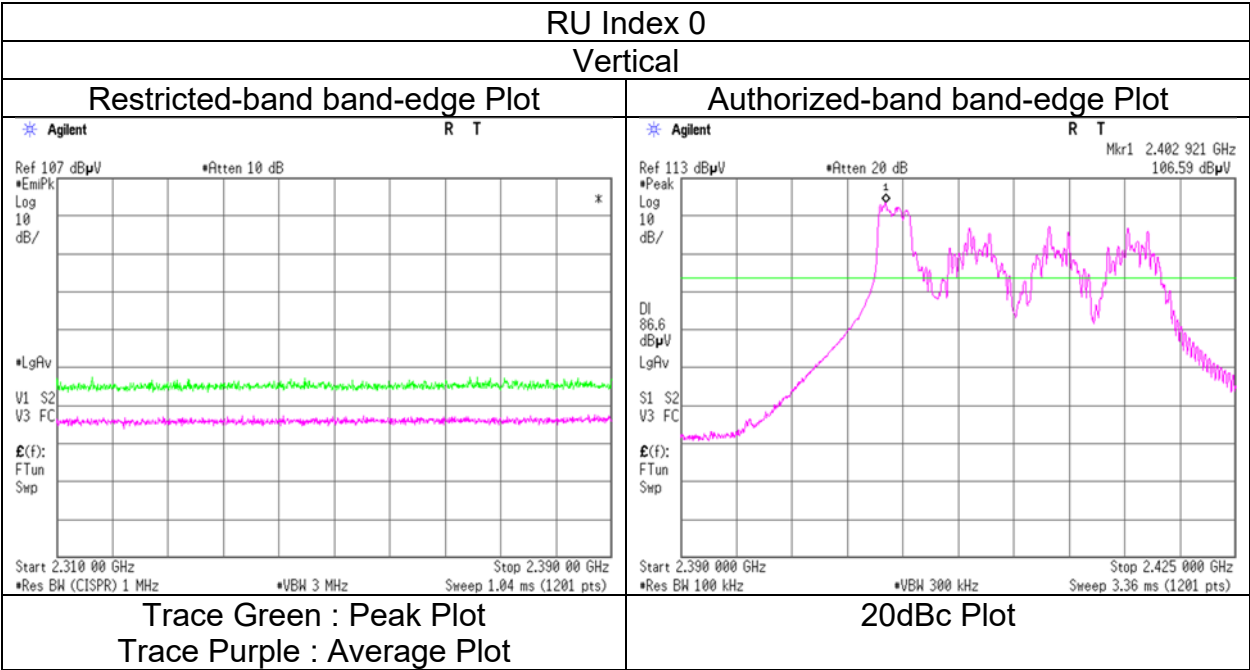
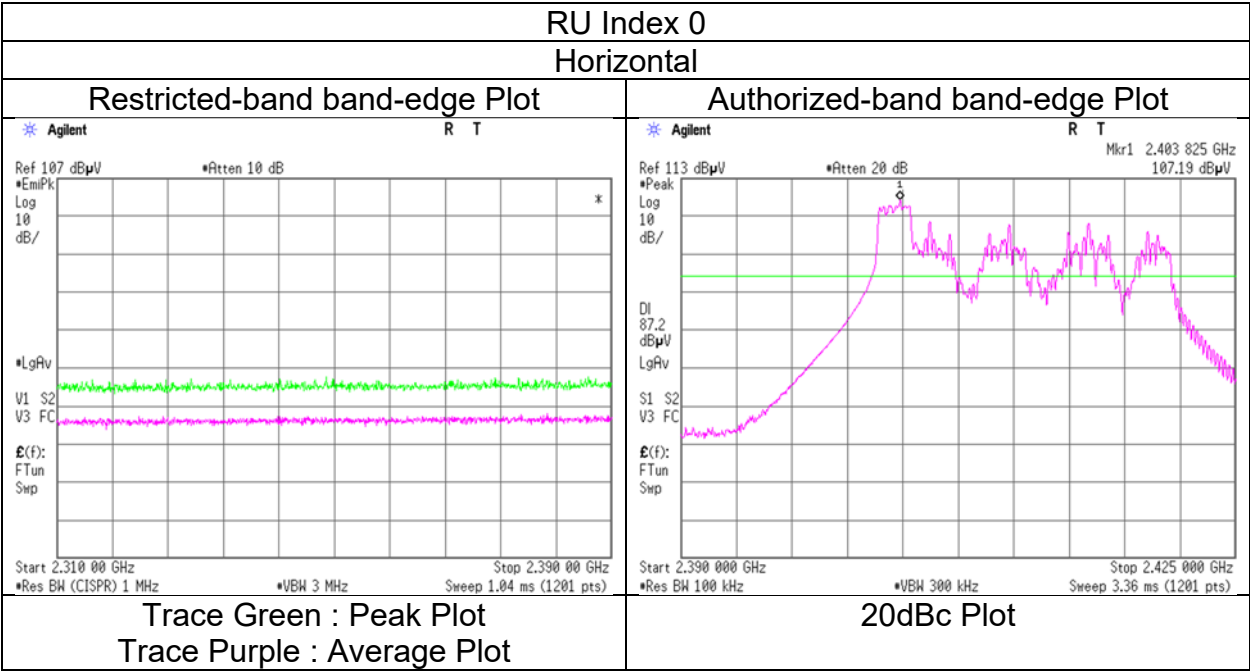
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 18, 2023
Temperature / Humidity	21 deg.C, 52 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 18, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 21 deg.C, 52 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2437 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 4

(* 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.	2282.673	PK	59.28	28.17	12.52	46.14	2.19	56.02	73.9	17.8	100	76	-
Hori.	2589.798	PK	59.39	27.94	12.70	45.88	2.19	56.34	73.9	17.5	112	72	-
Hori.	2879.967	PK	57.36	28.39	4.56	45.55	2.19	46.95	73.9	26.9	140	86	-
Hori.	4874.000	PK	57.01	31.61	4.37	45.35	2.19	49.83	73.9	24.0	100	85	-
Hori.	7311.000	PK	50.97	36.26	5.31	44.34	2.19	50.39	73.9	23.5	100	0	-
Hori.	9748.000	PK	49.12	39.00	6.15	42.83	2.19	53.63	73.9	20.2	100	0	-
Hori.	7311.000	AV	41.57	36.26	5.31	44.34	2.19	40.99	53.9	12.9	100	0	Floor noise
Hori.	9748.000	AV	39.27	39.00	6.15	42.83	2.19	43.78	53.9	10.1	100	0	Floor noise
Vert.	2282.585	PK	58.73	28.17	12.52	46.14	2.19	55.47	73.9	18.4	223	98	-
Vert.	2589.955	PK	58.72	27.94	12.70	45.88	2.19	55.67	73.9	18.2	123	30	-
Vert.	2879.965	PK	57.68	28.39	4.56	45.55	2.19	47.27	73.9	26.6	199	108	-
Vert.	4874.000	PK	59.38	31.61	4.37	45.35	2.19	52.20	73.9	21.7	150	135	-
Vert.	7311.000	PK	51.29	36.26	5.31	44.34	2.19	50.71	73.9	23.1	150	0	-
Vert.	9748.000	PK	49.29	39.00	6.15	42.83	2.19	53.80	73.9	20.1	150	0	-
Vert.	7311.000	AV	41.69	36.26	5.31	44.34	2.19	41.11	53.9	12.7	150	0	Floor noise
Vert.	9748.000	AV	39.14	39.00	6.15	42.83	2.19	43.65	53.9	10.2	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: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2282.673	AV	48.27	28.17	12.52	46.14	0.20	2.19	45.21	53.9	8.6	-
Hori.	2589.798	AV	48.94	27.94	12.70	45.88	0.20	2.19	46.09	53.9	7.8	-
Hori.	2879.967	AV	52.11	28.39	4.56	45.55	0.20	2.19	41.90	53.9	12.0	-
Hori.	4874.000	AV	46.13	31.61	4.37	45.35	0.20	2.19	39.15	53.9	14.7	-
Vert.	2282.585	AV	48.82	28.17	12.52	46.14	0.20	2.19	45.76	53.9	8.1	-
Vert.	2589.955	AV	48.92	27.94	12.70	45.88	0.20	2.19	46.07	53.9	7.8	-
Vert.	2879.965	AV	51.51	28.39	4.56	45.55	0.20	2.19	41.30	53.9	12.6	-
Vert.	4874.000	AV	48.36	31.61	4.37	45.35	0.20	2.19	41.38	53.9	12.5	-

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

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 18, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 21 deg.C, 52 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 8

(* 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.	2317.223	PK	61.75	28.01	12.54	46.12	2.19	58.37	73.9	15.5	144	81	-
Hori.	2483.500	PK	56.63	27.75	12.64	45.99	2.19	53.22	73.9	20.6	150	81	-
Hori.	2624.394	PK	59.24	28.03	12.72	45.84	2.19	56.34	73.9	17.5	159	93	-
Hori.	2879.978	PK	57.94	28.39	4.56	45.55	2.19	47.53	73.9	26.3	116	83	-
Hori.	4924.000	PK	59.07	31.65	4.37	45.34	2.19	51.94	73.9	21.9	100	90	-
Hori.	7386.000	PK	51.17	36.38	5.34	44.16	2.19	50.92	73.9	22.9	150	0	-
Hori.	9848.000	PK	49.70	38.99	6.20	42.73	2.19	54.35	73.9	19.5	150	0	-
Hori.	7386.000	AV	40.79	36.38	5.34	44.16	2.19	40.54	53.9	13.3	150	0	Floor noise
Hori.	9848.000	AV	39.99	38.99	6.20	42.73	2.19	44.64	53.9	9.2	150	0	Floor noise
Vert.	2317.432	PK	60.70	28.01	12.54	46.12	2.19	57.32	73.9	16.5	151	82	-
Vert.	2483.500	PK	56.98	27.75	12.64	45.99	2.19	53.57	73.9	20.3	100	0	-
Vert.	2623.531	PK	58.56	28.03	12.72	45.84	2.19	55.66	73.9	18.2	167	29	-
Vert.	2880.078	PK	57.44	28.39	4.56	45.55	2.19	47.03	73.9	26.8	100	121	-
Vert.	4924.000	PK	61.57	31.65	4.37	45.34	2.19	54.44	73.9	19.4	160	138	-
Vert.	7386.000	PK	50.83	36.38	5.34	44.16	2.19	50.58	73.9	23.3	150	0	-
Vert.	9848.000	PK	49.58	38.99	6.20	42.73	2.19	54.23	73.9	19.6	150	0	-
Vert.	7386.000	AV	40.87	36.38	5.34	44.16	2.19	40.62	53.9	13.2	150	0	Floor noise
Vert.	9848.000	AV	39.81	38.99	6.20	42.73	2.19	44.46	53.9	9.4	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2317.223	AV	51.25	28.01	12.54	46.12	0.20	2.19	48.07	53.9	5.8	-
Hori.	2483.500	AV	45.46	27.75	12.64	45.99	0.20	2.19	42.25	53.9	11.6	*1)
Hori.	2624.394	AV	49.41	28.03	12.72	45.84	0.20	2.19	46.71	53.9	7.1	-
Hori.	2879.978	AV	51.79	28.39	4.56	45.55	0.20	2.19	41.58	53.9	12.3	-
Hori.	4924.000	AV	48.17	31.65	4.37	45.34	0.20	2.19	41.24	53.9	12.6	-
Vert.	2317.432	AV	50.29	28.01	12.54	46.12	0.20	2.19	47.11	53.9	6.7	-
Vert.	2483.500	AV	44.78	27.75	12.64	45.99	0.20	2.19	41.57	53.9	12.3	*1)
Vert.	2623.531	AV	49.16	28.03	12.72	45.84	0.20	2.19	46.46	53.9	7.4	-
Vert.	2880.078	AV	51.78	28.39	4.56	45.55	0.20	2.19	41.57	53.9	12.3	-
Vert.	4924.000	AV	49.73	31.65	4.37	45.34	0.20	2.19	42.80	53.9	11.1	-

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

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

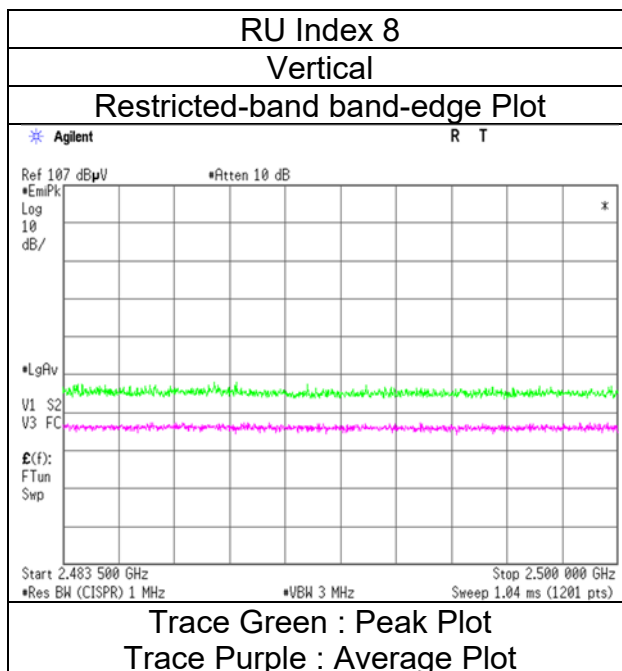
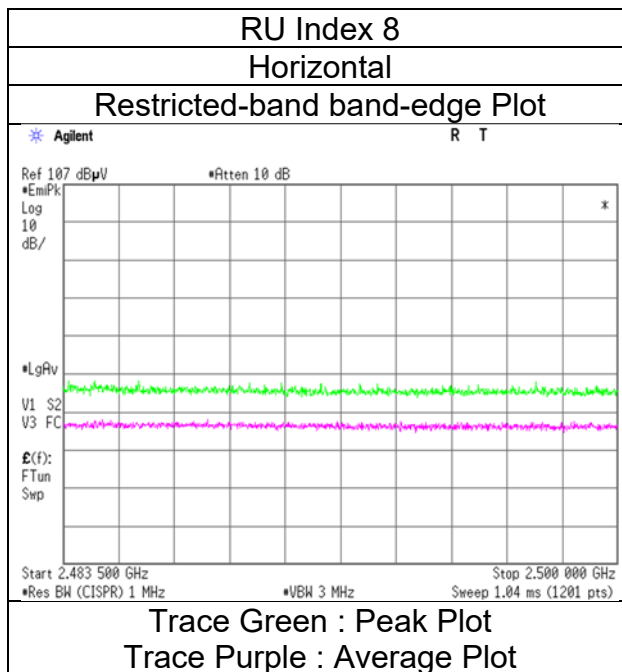
10 GHz - 40 GHz: 20log (1.0 m / 3.0 m) = -9.54 dB

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 18, 2023
Temperature / Humidity	21 deg.C, 52 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 37

(* 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.	2250.578	PK	59.62	28.30	12.51	46.16	2.19	56.46	73.9	17.4	141	86	-
Hori.	2390.000	PK	56.73	27.77	12.59	46.08	2.19	53.20	73.9	20.7	141	86	-
Hori.	2879.891	PK	56.10	28.39	4.56	45.55	2.19	45.69	73.9	28.2	141	73	-
Hori.	4824.000	PK	56.32	31.56	4.34	45.36	2.19	49.05	73.9	24.8	187	69	-
Hori.	7236.000	PK	50.37	36.21	5.30	44.53	2.19	49.54	73.9	24.3	150	0	-
Hori.	9648.000	PK	49.36	38.75	6.12	42.86	2.19	53.56	73.9	20.3	150	0	-
Hori.	7236.000	AV	40.95	36.21	5.30	44.53	2.19	40.12	53.9	13.7	150	0	Floor noise
Hori.	9648.000	AV	40.38	38.75	6.12	42.86	2.19	44.58	53.9	9.3	150	0	Floor noise
Vert.	2250.578	PK	57.94	28.30	12.51	46.16	2.19	54.78	73.9	19.1	158	91	-
Vert.	2390.000	PK	56.53	27.77	12.59	46.08	2.19	53.00	73.9	20.9	158	91	-
Vert.	2879.891	PK	55.47	28.39	4.56	45.55	2.19	45.06	73.9	28.8	174	80	-
Vert.	4824.000	PK	58.73	31.56	4.34	45.36	2.19	51.46	73.9	22.4	191	130	-
Vert.	7236.000	PK	50.64	36.21	5.30	44.53	2.19	49.81	73.9	24.0	150	0	-
Vert.	9648.000	PK	49.97	38.75	6.12	42.86	2.19	54.17	73.9	19.7	150	0	-
Vert.	7236.000	AV	41.09	36.21	5.30	44.53	2.19	40.26	53.9	13.6	150	0	Floor noise
Vert.	9648.000	AV	40.11	38.75	6.12	42.86	2.19	44.31	53.9	9.5	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2250.578	AV	47.93	28.30	12.51	46.16	0.37	2.19	45.14	53.9	8.7	-
Hori.	2390.000	AV	45.80	27.77	12.59	46.08	0.37	2.19	42.64	53.9	11.2	*1)
Hori.	2879.891	AV	48.88	28.39	4.56	45.55	0.37	2.19	38.84	53.9	15.0	-
Hori.	4824.000	AV	46.27	31.56	4.34	45.36	0.37	2.19	39.37	53.9	14.5	-
Vert.	2250.578	AV	47.60	28.30	12.51	46.16	0.37	2.19	44.81	53.9	9.0	-
Vert.	2390.000	AV	45.86	27.77	12.59	46.08	0.37	2.19	42.70	53.9	11.2	*1)
Vert.	2879.891	AV	48.47	28.39	4.56	45.55	0.37	2.19	38.43	53.9	15.4	-
Vert.	4824.000	AV	47.27	31.56	4.34	45.36	0.37	2.19	40.37	53.9	13.5	-

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

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	107.22	27.74	12.60	46.06	2.19	103.69	-	-	Carrier
Hori.	2400.000	PK	71.96	27.76	12.59	46.07	2.19	68.43	83.6	15.1	-
Hori.	2557.933	PK	48.94	27.88	12.68	45.91	2.19	45.78	83.6	37.8	-
Vert.	2412.000	PK	106.50	27.74	12.60	46.06	2.19	102.97	-	-	Carrier
Vert.	2400.000	PK	71.19	27.76	12.59	46.07	2.19	67.66	82.9	15.2	-
Vert.	2557.933	PK	48.27	27.88	12.68	45.91	2.19	45.11	82.9	37.7	-

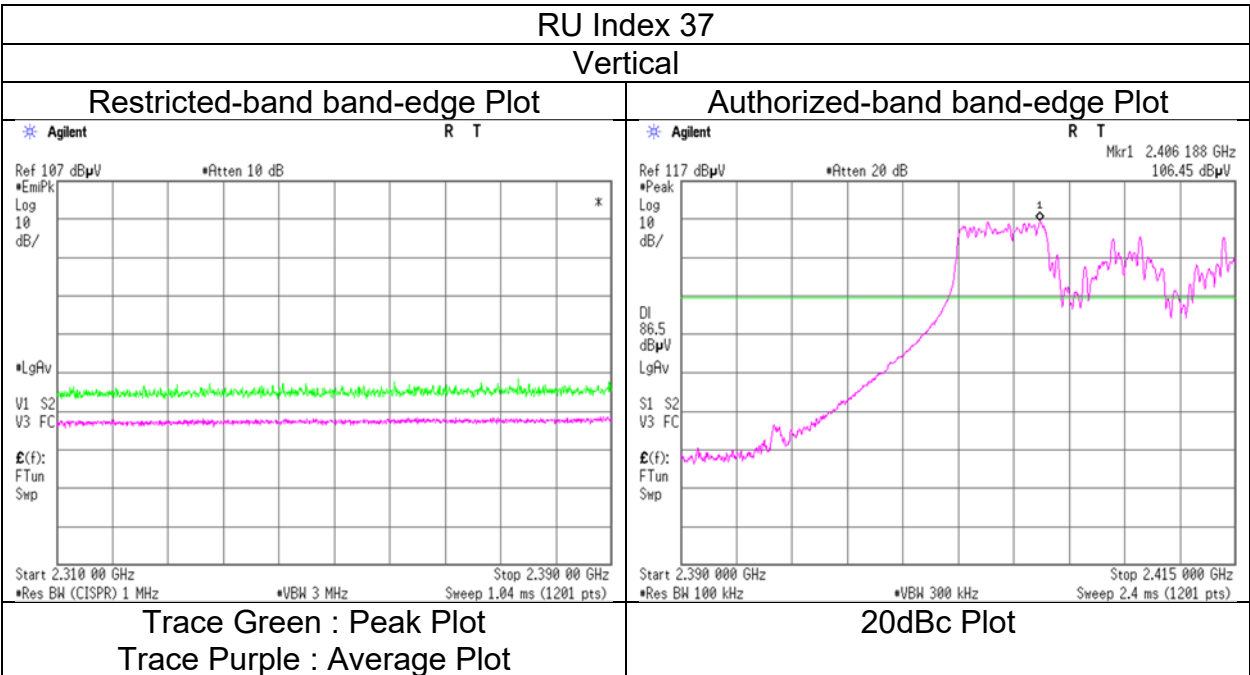
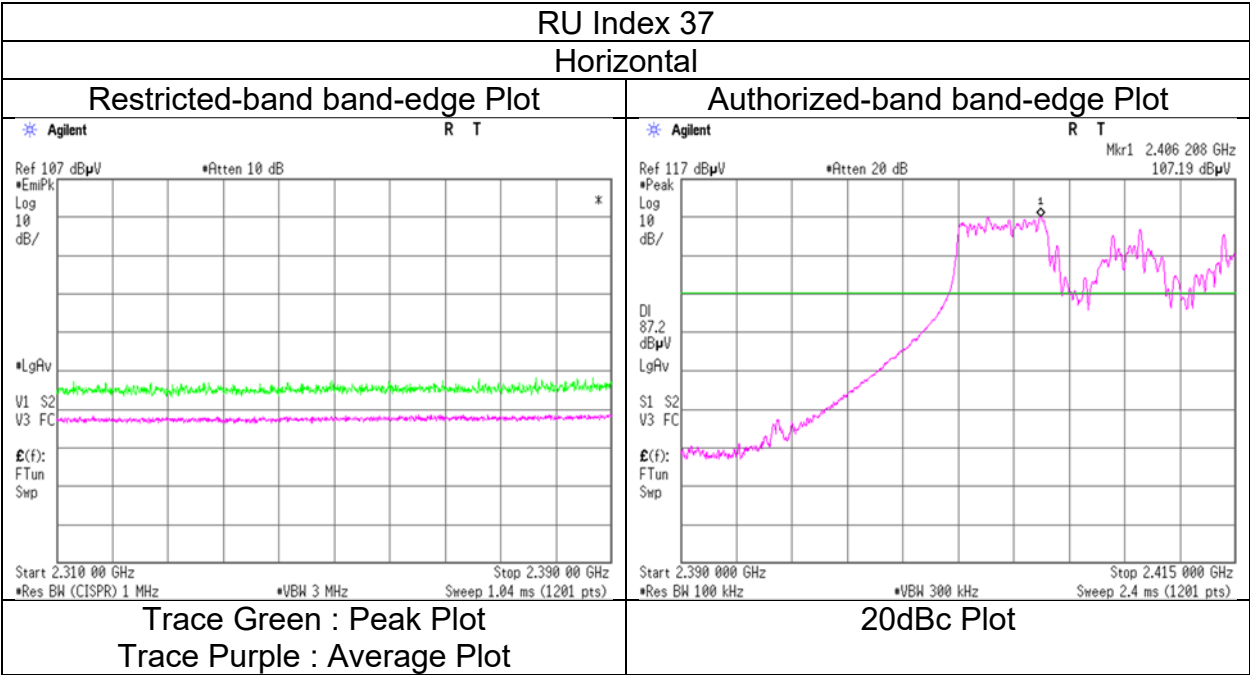
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 20, 2023
Temperature / Humidity	23 deg.C, 60 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2437 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 38

(* 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.	2280.474	PK	57.44	28.18	12.52	46.14	2.19	54.19	73.9	19.7	150	72	-
Hori.	2879.996	PK	56.71	28.39	4.56	45.55	2.19	46.30	73.9	27.6	138	81	-
Hori.	4874.000	PK	56.22	31.61	4.37	45.35	2.19	49.04	73.9	24.8	195	81	-
Hori.	7311.000	PK	50.85	36.26	5.31	44.34	2.19	50.27	73.9	23.6	150	0	-
Hori.	9748.000	PK	48.78	39.00	6.15	42.83	2.19	53.29	73.9	20.6	150	0	-
Hori.	7311.000	AV	41.68	36.26	5.31	44.34	2.19	41.10	53.9	12.8	150	0	Floor noise
Hori.	9748.000	AV	39.39	39.00	6.15	42.83	2.19	43.90	53.9	10.0	150	0	Floor noise
Vert.	2280.474	PK	58.01	28.18	12.52	46.14	2.19	54.76	73.9	19.1	218	89	-
Vert.	2879.996	PK	56.49	28.39	4.56	45.55	2.19	46.08	73.9	27.8	188	101	-
Vert.	4874.000	PK	59.10	31.61	4.37	45.35	2.19	51.92	73.9	21.9	178	133	-
Vert.	7311.000	PK	50.85	36.26	5.31	44.34	2.19	50.27	73.9	23.6	150	0	-
Vert.	9748.000	PK	47.72	39.00	6.15	42.83	2.19	52.23	73.9	21.6	150	0	-
Vert.	7311.000	AV	41.62	36.26	5.31	44.34	2.19	41.04	53.9	12.8	150	0	Floor noise
Vert.	9748.000	AV	39.51	39.00	6.15	42.83	2.19	44.02	53.9	9.8	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2280.474	AV	48.05	28.18	12.52	46.14	0.37	2.19	45.17	53.9	8.7	-
Hori.	2879.996	AV	49.99	28.39	4.56	45.55	0.37	2.19	39.95	53.9	13.9	-
Hori.	4874.000	AV	46.69	31.61	4.37	45.35	0.37	2.19	39.88	53.9	14.0	-
Vert.	2280.474	AV	48.22	28.18	12.52	46.14	0.37	2.19	45.34	53.9	8.5	-
Vert.	2879.996	AV	49.85	28.39	4.56	45.55	0.37	2.19	39.81	53.9	14.0	-
Vert.	4874.000	AV	48.39	31.61	4.37	45.35	0.37	2.19	41.58	53.9	12.3	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

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.	2437.000	PK	106.90	27.72	12.61	46.03	2.19	103.39	-	-	Carrier
Hori.	2588.696	PK	48.57	27.94	12.70	45.88	2.19	45.52	83.3	37.7	-
Vert.	2437.000	PK	105.24	27.72	12.61	46.03	2.19	101.73	-	-	Carrier
Vert.	2588.696	PK	48.38	27.94	12.70	45.88	2.19	45.33	81.7	36.3	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: monopole

RU Index 40

(* 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.	2316.532	PK	60.94	28.01	12.54	46.12	2.19	57.56	73.9	16.3	160	86	-
Hori.	2483.500	PK	57.07	27.75	12.64	45.99	2.19	53.66	73.9	20.2	160	86	-
Hori.	2879.949	PK	57.15	28.39	4.56	45.55	2.19	46.74	73.9	27.1	114	84	-
Hori.	4924.000	PK	57.39	31.65	4.37	45.34	2.19	50.26	73.9	23.6	137	88	-
Hori.	7386.000	PK	50.85	36.38	5.34	44.16	2.19	50.60	73.9	23.3	150	0	-
Hori.	9848.000	PK	49.61	38.99	6.20	42.73	2.19	54.26	73.9	19.6	150	0	-
Hori.	7386.000	AV	40.82	36.38	5.34	44.16	2.19	40.57	53.9	13.3	150	0	Floor noise
Hori.	9848.000	AV	39.63	38.99	6.20	42.73	2.19	44.28	53.9	9.6	150	0	Floor noise
Vert.	2316.532	PK	59.64	28.01	12.54	46.12	2.19	56.26	73.9	17.6	152	104	-
Vert.	2483.500	PK	54.54	27.75	12.64	45.99	2.19	51.13	73.9	22.7	152	104	-
Vert.	2879.949	PK	56.38	28.39	4.56	45.55	2.19	45.97	73.9	27.9	175	99	-
Vert.	4924.000	PK	59.60	31.65	4.37	45.34	2.19	52.47	73.9	21.4	185	137	-
Vert.	7386.000	PK	51.22	36.38	5.34	44.16	2.19	50.97	73.9	22.9	150	0	-
Vert.	9848.000	PK	49.12	38.99	6.20	42.73	2.19	53.77	73.9	20.1	150	0	-
Vert.	7386.000	AV	40.94	36.38	5.34	44.16	2.19	40.69	53.9	13.2	150	0	Floor noise
Vert.	9848.000	AV	39.50	38.99	6.20	42.73	2.19	44.15	53.9	9.7	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2316.532	AV	49.99	28.01	12.54	46.12	0.37	2.19	46.98	53.9	6.9	-
Hori.	2483.500	AV	45.95	27.75	12.64	45.99	0.37	2.19	42.91	53.9	10.9	*1)
Hori.	2879.949	AV	50.23	28.39	4.56	45.55	0.37	2.19	40.19	53.9	13.7	-
Hori.	4924.000	AV	46.28	31.65	4.37	45.34	0.37	2.19	39.52	53.9	14.3	-
Vert.	2316.532	AV	49.05	28.01	12.54	46.12	0.37	2.19	46.04	53.9	7.8	-
Vert.	2483.500	AV	45.20	27.75	12.64	45.99	0.37	2.19	42.16	53.9	11.7	*1)
Vert.	2879.949	AV	49.53	28.39	4.56	45.55	0.37	2.19	39.49	53.9	14.4	-
Vert.	4924.000	AV	48.52	31.65	4.37	45.34	0.37	2.19	41.76	53.9	12.1	-

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

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2462.000	PK	106.73	27.72	12.64	46.01	2.19	103.27	-	-	Carrier
Hori.	2622.896	PK	48.49	28.03	12.72	45.84	2.19	45.59	83.2	37.6	-
Vert.	2462.000	PK	106.16	27.72	12.64	46.01	2.19	102.70	-	-	Carrier
Vert.	2622.896	PK	48.71	28.03	12.72	45.84	2.19	45.81	82.7	36.8	-

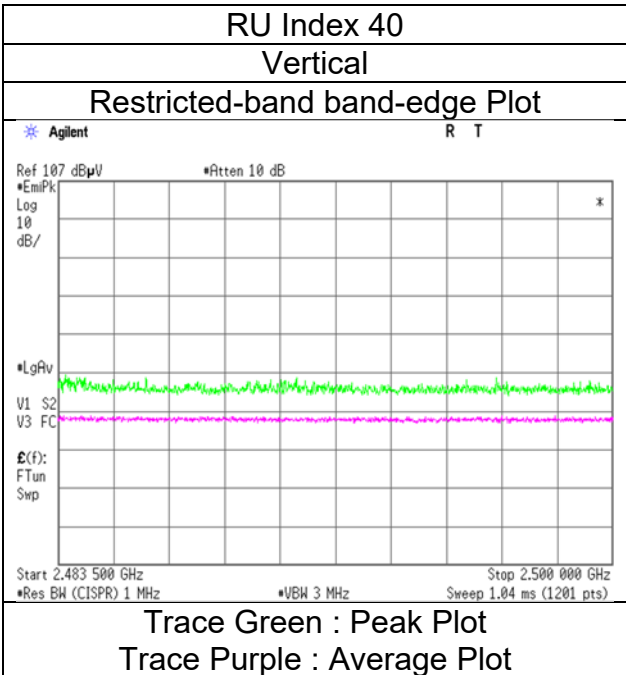
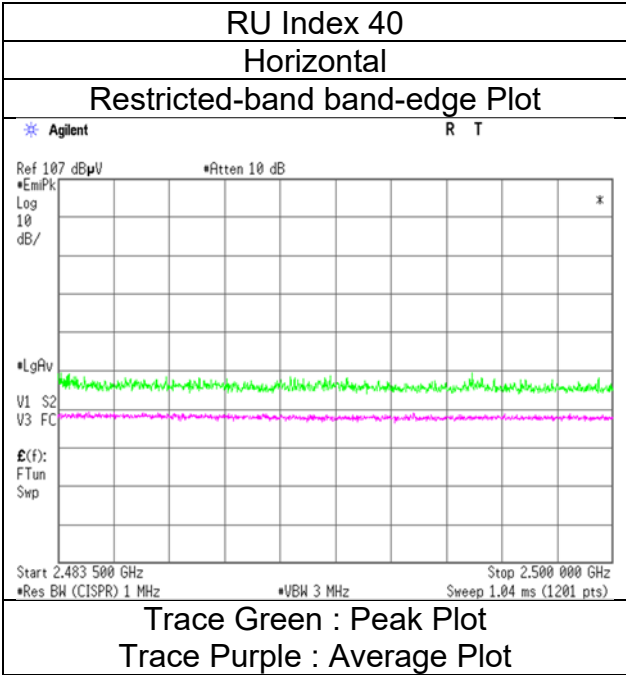
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz: 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 20, 2023
Temperature / Humidity	23 deg.C, 60 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 12, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	25 deg.C, 42 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Kouki Yamada	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz - 10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 106-tone RU, 2412 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

RU Index 53

(* 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.	2253.112	PK	59.35	28.29	12.51	46.16	2.19	56.18	73.9	17.7	126	81	-
Hori.	2390.000	PK	63.78	27.77	12.59	46.08	2.19	60.25	73.9	13.6	160	77	-
Hori.	2880.029	PK	56.18	28.39	4.56	45.55	2.19	45.77	73.9	28.1	100	80	-
Hori.	4824.000	PK	57.58	31.56	4.34	45.36	2.19	50.31	73.9	23.5	334	65	-
Hori.	7236.000	PK	50.95	36.21	5.30	44.53	2.19	50.12	73.9	23.7	150	0	-
Hori.	9648.000	PK	50.44	38.75	6.12	42.86	2.19	54.64	73.9	19.2	150	0	-
Hori.	2253.112	AV	47.90	28.29	12.51	46.16	2.19	44.73	53.9	9.1	126	81	-
Hori.	2390.000	AV	49.89	27.77	12.59	46.08	2.19	46.36	53.9	7.5	160	77	-
Hori.	2880.029	AV	50.76	28.39	4.56	45.55	2.19	40.35	53.9	13.5	100	80	-
Hori.	4824.000	AV	46.75	31.56	4.34	45.36	2.19	39.48	53.9	14.4	334	65	-
Hori.	7236.000	AV	40.40	36.21	5.30	44.53	2.19	39.57	53.9	14.3	150	0	Floor noise
Hori.	9648.000	AV	39.20	38.75	6.12	42.86	2.19	43.40	53.9	10.5	150	0	Floor noise
Vert.	2253.233	PK	57.69	28.29	12.51	46.16	2.19	54.52	73.9	19.3	220	74	-
Vert.	2387.933	PK	61.35	27.77	12.59	46.08	2.19	57.82	73.9	16.0	153	39	-
Vert.	2390.000	PK	60.30	27.77	12.59	46.08	2.19	56.77	73.9	17.1	153	39	-
Vert.	2880.013	PK	57.09	28.39	4.56	45.55	2.19	46.68	73.9	27.2	171	72	-
Vert.	4824.000	PK	59.42	31.56	4.34	45.36	2.19	52.15	73.9	21.7	109	339	-
Vert.	7236.000	PK	50.99	36.21	5.30	44.53	2.19	50.16	73.9	23.7	150	0	-
Vert.	9648.000	PK	49.61	38.75	6.12	42.86	2.19	53.81	73.9	20.0	150	0	-
Vert.	2253.233	AV	48.07	28.29	12.51	46.16	2.19	44.90	53.9	9.0	220	74	-
Vert.	2387.933	AV	46.74	27.77	12.59	46.08	2.19	43.21	53.9	10.6	153	39	-
Vert.	2390.000	AV	47.18	27.77	12.59	46.08	2.19	43.65	53.9	10.2	153	39	-
Vert.	2880.013	AV	50.05	28.39	4.56	45.55	2.19	39.64	53.9	14.2	171	72	-
Vert.	4824.000	AV	49.98	31.56	4.34	45.36	2.19	42.71	53.9	11.1	109	339	-
Vert.	7236.000	AV	41.49	36.21	5.30	44.53	2.19	40.66	53.9	13.2	150	0	Floor noise
Vert.	9648.000	AV	40.43	38.75	6.12	42.86	2.19	44.63	53.9	9.2	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 : 20log (3.86 m / 3.0 m) = 2.19 dB

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

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.	2412.000	PK	107.10	27.74	12.60	46.06	2.19	103.57	-	-	Carrier
Hori.	2400.000	PK	73.02	27.76	12.59	46.07	2.19	69.49	83.5	14.0	-
Hori.	2560.017	PK	50.36	27.88	12.68	45.91	2.19	47.20	83.5	36.3	-
Vert.	2412.000	PK	106.70	27.74	12.60	46.06	2.19	103.17	-	-	Carrier
Vert.	2400.000	PK	71.60	27.76	12.59	46.07	2.19	68.07	83.1	15.0	-
Vert.	2560.325	PK	49.12	27.88	12.68	45.91	2.19	45.96	83.1	37.1	-

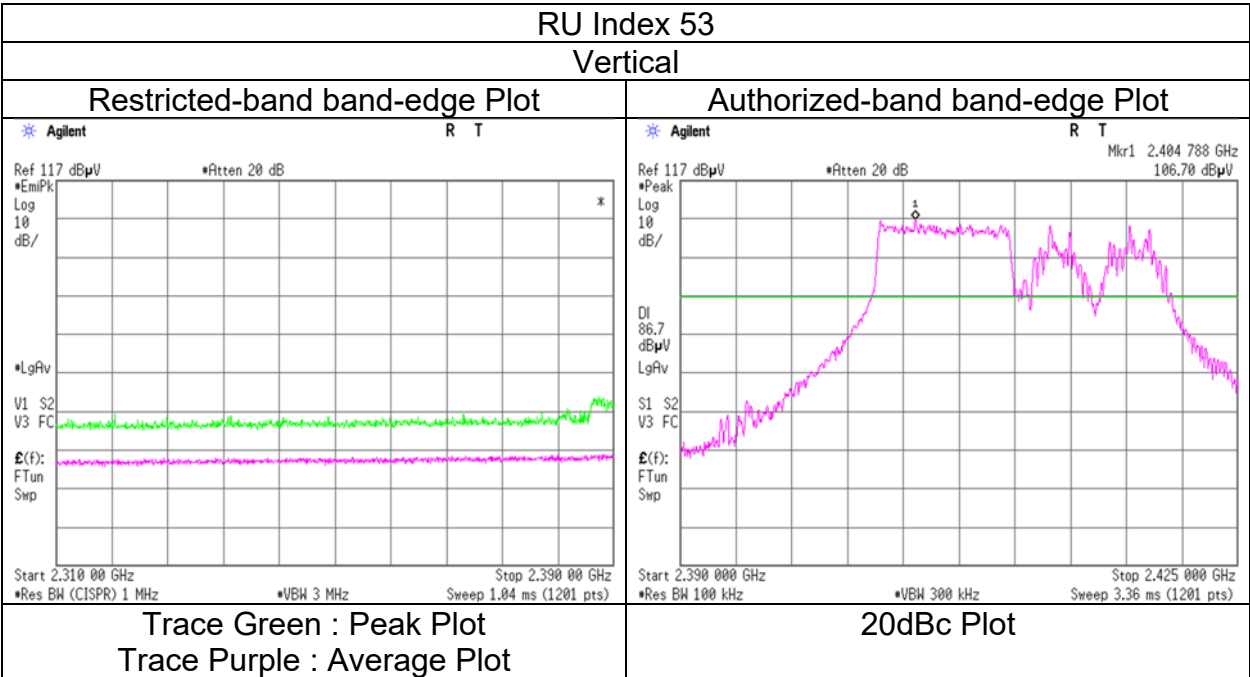
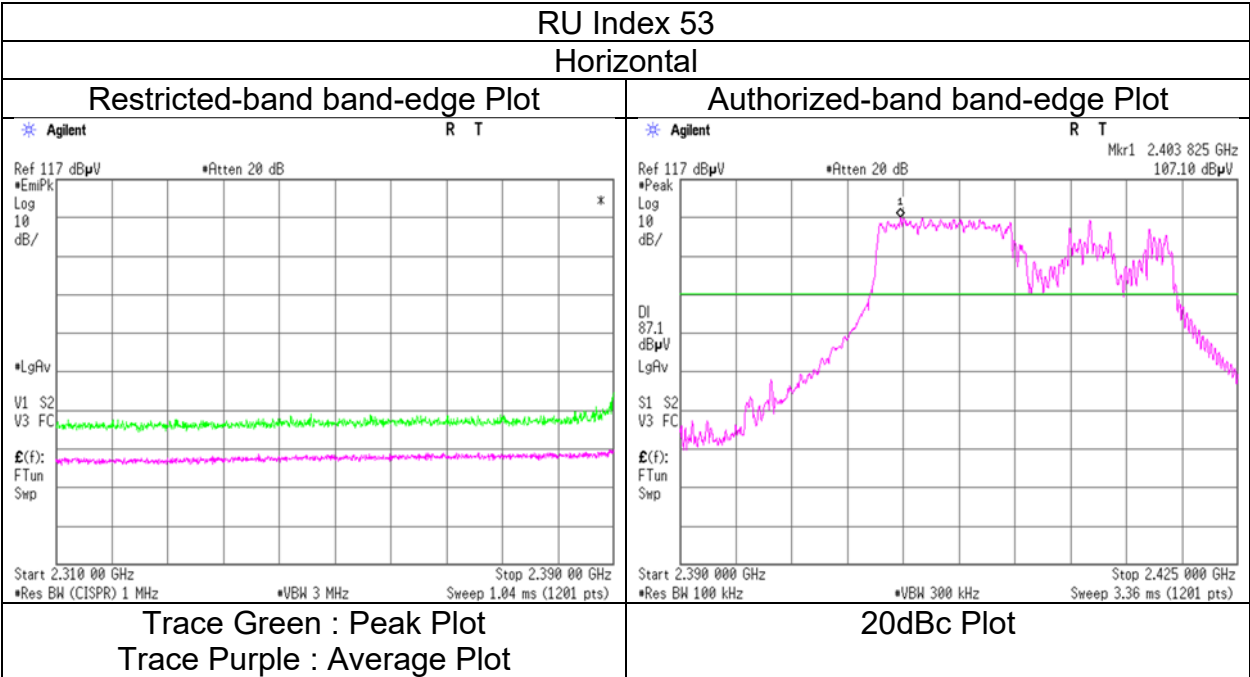
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 12, 2023
Temperature / Humidity	25 deg.C, 42 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDMA)(SDM) 106-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 12, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	25 deg.C, 42 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Kouki Yamada	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 106-tone RU, 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

RU Index 54

(* 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.	2314.032	PK	60.01	28.02	12.54	46.12	2.19	56.64	73.9	17.2	157	72	-
Hori.	2483.500	PK	58.46	27.75	12.64	45.99	2.19	55.05	73.9	18.8	153	66	-
Hori.	2487.212	PK	61.81	27.75	12.65	45.98	2.19	58.42	73.9	15.4	153	66	-
Hori.	2491.379	PK	61.06	27.76	12.65	45.98	2.19	57.68	73.9	16.2	153	66	-
Hori.	2879.962	PK	56.08	28.39	4.56	45.55	2.19	45.67	73.9	28.2	134	77	-
Hori.	4924.000	PK	55.98	31.65	4.37	45.34	2.19	48.85	73.9	25.0	151	80	-
Hori.	7386.000	PK	50.82	36.38	5.34	44.16	2.19	50.57	73.9	23.3	150	0	-
Hori.	9848.000	PK	49.90	38.99	6.20	42.73	2.19	54.55	73.9	19.3	150	0	-
Hori.	2314.032	AV	49.46	28.02	12.54	46.12	2.19	46.09	53.9	7.8	157	72	-
Hori.	2483.500	AV	46.61	27.75	12.64	45.99	2.19	43.20	53.9	10.7	153	66	-
Hori.	2487.212	AV	46.44	27.75	12.65	45.98	2.19	43.05	53.9	10.8	153	66	-
Hori.	2491.379	AV	46.03	27.76	12.65	45.98	2.19	42.65	53.9	11.2	153	66	-
Hori.	2879.962	AV	50.55	28.39	4.56	45.55	2.19	40.14	53.9	13.7	134	77	-
Hori.	4924.000	AV	47.56	31.65	4.37	45.34	2.19	40.43	53.9	13.4	151	80	-
Hori.	7386.000	AV	40.94	36.38	5.34	44.16	2.19	40.69	53.9	13.2	150	0	Floor noise
Hori.	9848.000	AV	39.81	38.99	6.20	42.73	2.19	44.46	53.9	9.4	150	0	Floor noise
Vert.	2314.057	PK	61.16	28.02	12.54	46.12	2.19	57.79	73.9	16.1	134	99	-
Vert.	2483.500	PK	62.62	27.75	12.64	45.99	2.19	59.21	73.9	14.6	147	104	-
Vert.	2484.655	PK	63.17	27.75	12.64	45.99	2.19	59.76	73.9	14.1	147	104	-
Vert.	2879.955	PK	56.75	28.39	4.56	45.55	2.19	46.34	73.9	27.5	155	59	-
Vert.	4924.000	PK	58.33	31.65	4.37	45.34	2.19	51.20	73.9	22.7	108	337	-
Vert.	7386.000	PK	51.03	36.38	5.34	44.16	2.19	50.78	73.9	23.1	150	0	-
Vert.	9848.000	PK	49.54	38.99	6.20	42.73	2.19	54.19	73.9	19.7	150	0	-
Vert.	2314.057	AV	48.69	28.02	12.54	46.12	2.19	45.32	53.9	8.5	134	99	-
Vert.	2483.500	AV	46.74	27.75	12.64	45.99	2.19	43.33	53.9	10.5	147	104	-
Vert.	2484.655	AV	46.78	27.75	12.64	45.99	2.19	43.37	53.9	10.5	147	104	-
Vert.	2879.955	AV	50.44	28.39	4.56	45.55	2.19	40.03	53.9	13.8	155	59	-
Vert.	4924.000	AV	49.37	31.65	4.37	45.34	2.19	42.24	53.9	11.6	108	337	-
Vert.	7386.000	AV	41.06	36.38	5.34	44.16	2.19	40.81	53.9	13.0	150	0	Floor noise
Vert.	9848.000	AV	39.88	38.99	6.20	42.73	2.19	44.53	53.9	9.3	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 (3.86 m / 3.0 m) = 2.19 dB

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

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.	2462.000	PK	105.23	27.72	12.64	46.01	2.19	101.77	-	-	Carrier
Hori.	2621.354	PK	48.51	28.02	12.72	45.84	2.19	45.60	81.7	36.1	-
Vert.	2462.000	PK	105.75	27.72	12.64	46.01	2.19	102.29	-	-	Carrier
Vert.	2621.271	PK	48.39	28.02	12.72	45.84	2.19	45.48	82.2	36.7	-

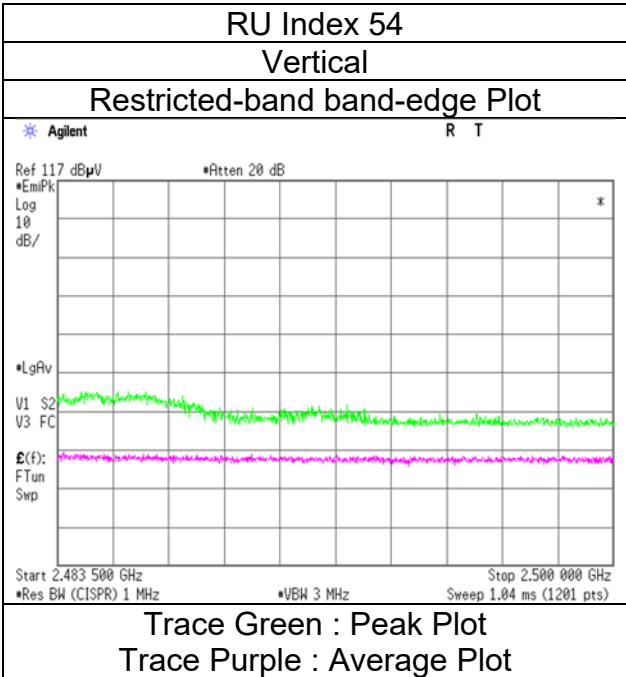
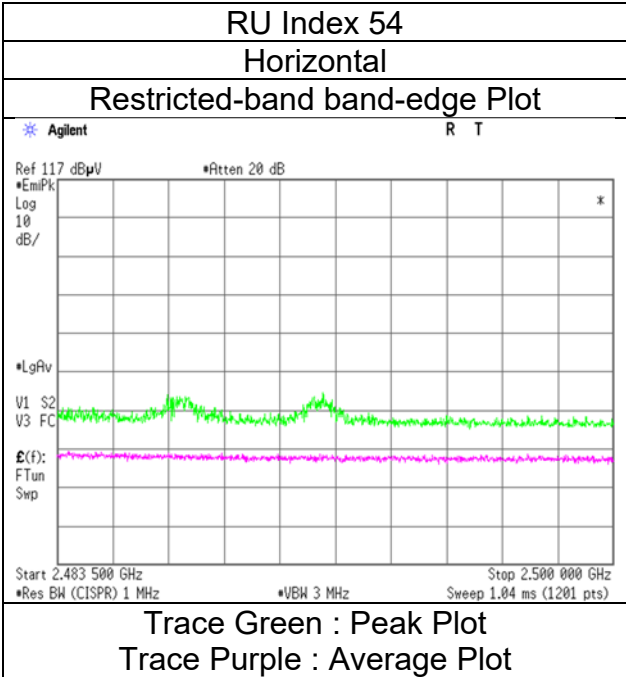
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	September 8, 2023
Temperature / Humidity	24 deg.C, 70 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(SDM) 106-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 12, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	25 deg.C, 42 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Kouki Yamada	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 242-tone RU, 2412 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

RU Index 61

(* 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.	2259.128	PK	56.45	28.27	12.51	46.15	2.19	53.27	73.9	20.6	155	66	-
Hori.	2390.000	PK	67.42	27.77	12.59	46.08	2.19	63.89	73.9	10.0	195	76	-
Hori.	2879.960	PK	56.33	28.39	4.56	45.55	2.19	45.92	73.9	27.9	132	77	-
Hori.	4824.000	PK	56.16	31.56	4.34	45.36	2.19	48.89	73.9	25.0	108	91	-
Hori.	7236.000	PK	50.31	36.21	5.30	44.53	2.19	49.48	73.9	24.4	150	0	-
Hori.	9648.000	PK	49.56	38.75	6.12	42.86	2.19	53.76	73.9	20.1	150	0	-
Hori.	7236.000	AV	41.54	36.21	5.30	44.53	2.19	40.71	53.9	13.1	150	0	Floor noise
Hori.	9648.000	AV	40.04	38.75	6.12	42.86	2.19	44.24	53.9	9.6	150	0	Floor noise
Vert.	2258.579	PK	56.87	28.27	12.51	46.15	2.19	53.69	73.9	20.2	218	73	-
Vert.	2390.000	PK	64.39	27.77	12.59	46.08	2.19	60.86	73.9	13.0	165	109	-
Vert.	2879.960	PK	55.78	28.39	4.56	45.55	2.19	45.37	73.9	28.5	141	53	-
Vert.	4824.000	PK	57.64	31.56	4.34	45.36	2.19	50.37	73.9	23.5	182	191	-
Vert.	7236.000	PK	50.95	36.21	5.30	44.53	2.19	50.12	73.9	23.7	150	0	-
Vert.	9648.000	PK	49.61	38.75	6.12	42.86	2.19	53.81	73.9	20.0	150	0	-
Vert.	7236.000	AV	41.53	36.21	5.30	44.53	2.19	40.70	53.9	13.2	150	0	Floor noise
Vert.	9648.000	AV	40.20	38.75	6.12	42.86	2.19	44.40	53.9	9.5	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2259.128	AV	46.90	28.27	12.51	46.15	0.23	2.19	43.95	53.9	9.9	-
Hori.	2390.000	AV	54.19	27.77	12.59	46.08	0.23	2.19	50.89	53.9	3.0	*1)
Hori.	2879.960	AV	50.44	28.39	4.56	45.55	0.23	2.19	40.26	53.9	13.6	-
Hori.	4824.000	AV	45.52	31.56	4.34	45.36	0.23	2.19	38.48	53.9	15.4	-
Vert.	2258.579	AV	45.54	28.27	12.51	46.15	0.23	2.19	42.59	53.9	11.3	-
Vert.	2390.000	AV	53.02	27.77	12.59	46.08	0.23	2.19	49.72	53.9	4.1	*1)
Vert.	2879.960	AV	49.74	28.39	4.56	45.55	0.23	2.19	39.56	53.9	14.3	-
Vert.	4824.000	AV	46.30	31.56	4.34	45.36	0.23	2.19	39.26	53.9	14.6	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	106.50	27.74	12.60	46.06	2.19	102.97	-	-	Carrier
Hori.	2400.000	PK	69.08	27.76	12.59	46.07	2.19	65.55	82.9	17.3	-
Hori.	2565.573	PK	46.47	27.89	12.69	45.90	2.19	43.34	82.9	39.5	-
Vert.	2412.000	PK	105.98	27.74	12.60	46.06	2.19	102.45	-	-	Carrier
Vert.	2400.000	PK	68.23	27.76	12.59	46.07	2.19	64.70	82.4	17.7	-
Vert.	2565.559	PK	48.20	27.89	12.69	45.90	2.19	45.07	82.4	37.3	-

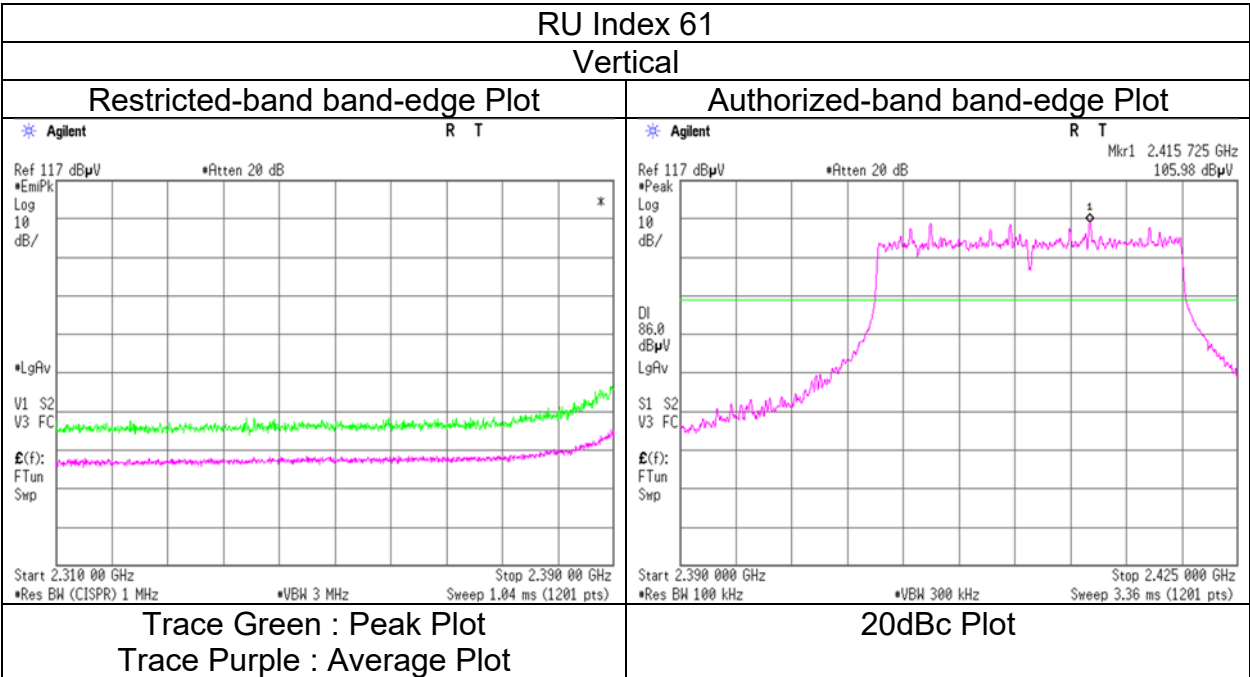
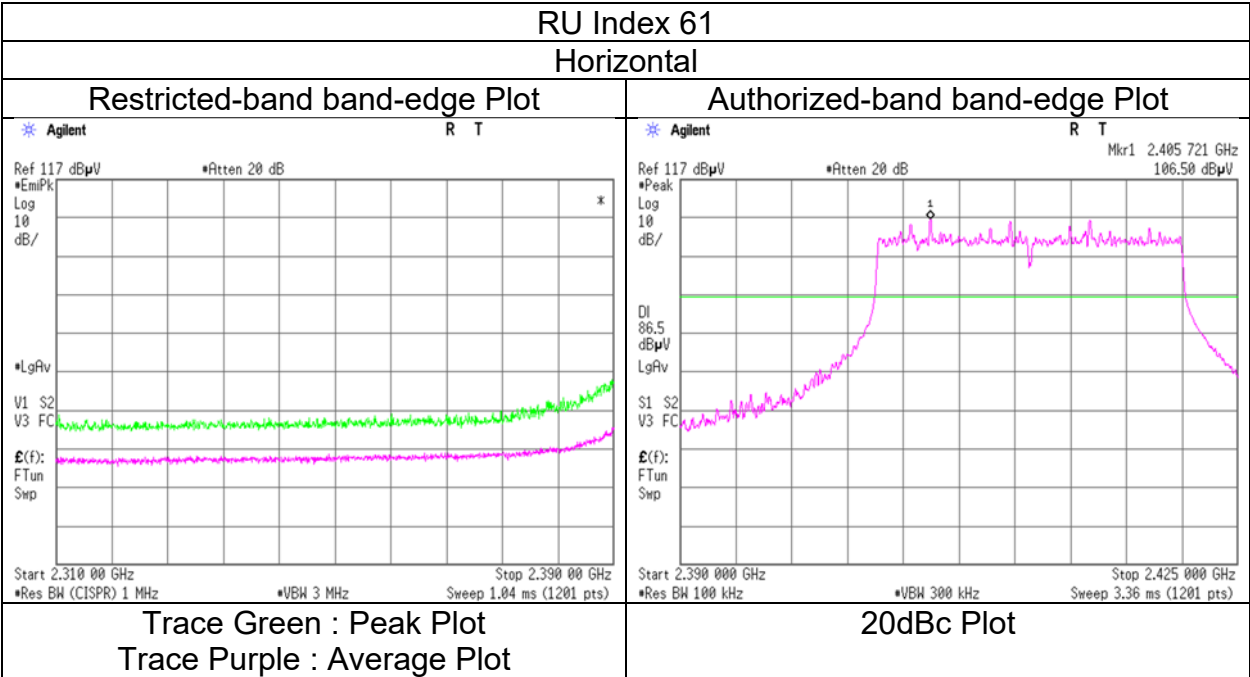
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 12, 2023
Temperature / Humidity	25 deg.C, 42 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDMA)(SDM) 242-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 12, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	25 deg.C, 42 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Kouki Yamada	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 242-tone RU, 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: monopole		

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(* 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.	2310.795	PK	58.33	28.04	12.54	46.12	2.19	54.98	73.9	18.9	156	87	-
Hori.	2483.500	PK	62.91	27.75	12.64	45.99	2.19	59.50	73.9	14.4	147	83	-
Hori.	2879.981	PK	56.05	28.39	4.56	45.55	2.19	45.64	73.9	28.2	115	73	-
Hori.	4924.000	PK	54.81	31.65	4.37	45.34	2.19	47.68	73.9	26.2	147	80	-
Hori.	7386.000	PK	50.45	36.38	5.34	44.16	2.19	50.20	73.9	23.7	150	0	-
Hori.	9848.000	PK	49.06	38.99	6.20	42.73	2.19	53.71	73.9	20.1	150	0	-
Hori.	7386.000	AV	41.20	36.38	5.34	44.16	2.19	40.95	53.9	12.9	150	0	Floor noise
Hori.	9848.000	AV	39.79	38.99	6.20	42.73	2.19	44.44	53.9	9.4	150	0	Floor noise
Vert.	2310.584	PK	57.11	28.04	12.54	46.12	2.19	53.76	73.9	20.1	155	115	-
Vert.	2483.500	PK	61.58	27.75	12.64	45.99	2.19	58.17	73.9	15.7	145	105	-
Vert.	2879.997	PK	56.48	28.39	4.56	45.55	2.19	46.07	73.9	27.8	143	119	-
Vert.	4924.000	PK	57.48	31.65	4.37	45.34	2.19	50.35	73.9	23.5	205	195	-
Vert.	7386.000	PK	49.98	36.38	5.34	44.16	2.19	49.73	73.9	24.1	150	0	-
Vert.	9848.000	PK	49.29	38.99	6.20	42.73	2.19	53.94	73.9	19.9	150	0	-
Vert.	7386.000	AV	40.95	36.38	5.34	44.16	2.19	40.70	53.9	13.2	150	0	Floor noise
Vert.	9848.000	AV	39.64	38.99	6.20	42.73	2.19	44.29	53.9	9.6	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2310.795	AV	46.64	28.04	12.54	46.12	0.23	2.19	43.52	53.9	10.3	-
Hori.	2483.500	AV	51.41	27.75	12.64	45.99	0.23	2.19	48.23	53.9	5.6	*1)
Hori.	2879.981	AV	50.42	28.39	4.56	45.55	0.23	2.19	40.24	53.9	13.6	-
Hori.	4924.000	AV	45.51	31.65	4.37	45.34	0.23	2.19	38.61	53.9	15.2	-
Vert.	2310.584	AV	45.85	28.04	12.54	46.12	0.23	2.19	42.73	53.9	11.1	-
Vert.	2483.500	AV	50.62	27.75	12.64	45.99	0.23	2.19	47.44	53.9	6.4	*1)
Vert.	2879.997	AV	50.00	28.39	4.56	45.55	0.23	2.19	39.82	53.9	14.0	-
Vert.	4924.000	AV	46.20	31.65	4.37	45.34	0.23	2.19	39.30	53.9	14.6	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2462.000	PK	105.43	27.72	12.64	46.01	2.19	101.97	-	-	Carrier
Hori.	2619.327	PK	47.73	28.02	12.72	45.84	2.19	44.82	81.9	37.0	-
Vert.	2462.000	PK	105.17	27.72	12.64	46.01	2.19	101.71	-	-	Carrier
Vert.	2616.430	PK	48.24	28.01	12.72	45.85	2.19	45.31	81.7	36.3	-

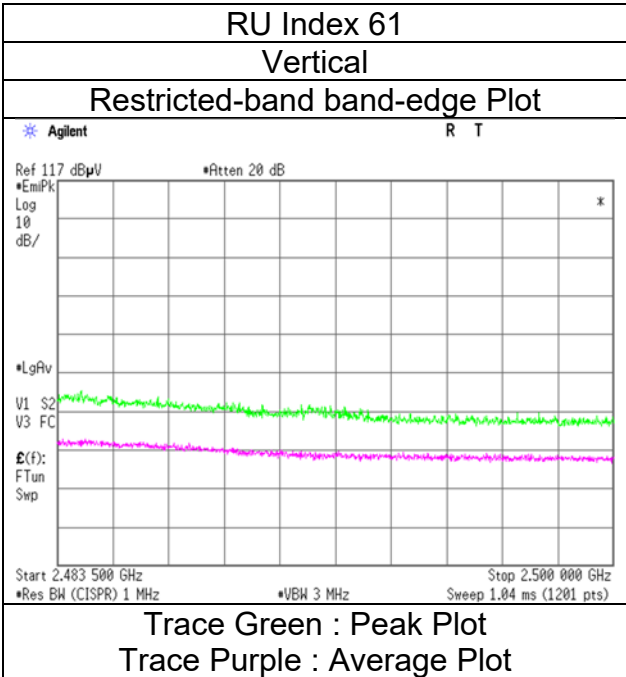
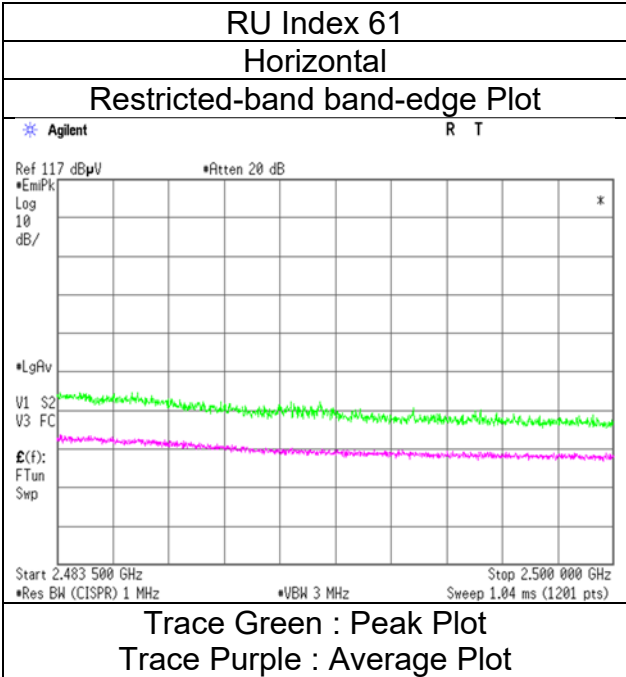
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 12, 2023
Temperature / Humidity	25 deg.C, 42 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDMA)(SDM) 242-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: monopole



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date August 29, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 52 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz - 26.5 GHz)
Mode Tx 11b(CDD), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2257.948	PK	52.04	28.23	14.35	41.57	2.19	55.24	73.9	18.6	132	221	-
Hori.	2390.000	PK	60.18	27.98	14.48	41.61	2.19	63.22	73.9	10.6	138	188	-
Hori.	2566.834	PK	52.02	27.91	14.66	41.65	2.19	55.13	73.9	18.7	141	237	-
Hori.	2880.003	PK	51.78	28.48	6.68	41.72	2.19	47.41	73.9	26.4	226	158	-
Hori.	4824.000	PK	57.97	31.41	7.06	42.87	2.19	55.76	73.9	18.1	169	199	-
Hori.	7236.000	PK	50.42	37.15	8.48	43.36	2.19	54.88	73.9	19.0	150	0	-
Hori.	9648.000	PK	50.31	38.72	9.70	43.09	2.19	57.83	73.9	16.0	150	0	-
Hori.	2257.948	AV	39.56	28.23	14.35	41.57	2.19	42.76	53.9	11.1	132	221	VBW:5.1kHz
Hori.	2390.000	AV	42.98	27.98	14.48	41.61	2.19	46.02	53.9	7.8	138	188	VBW:5.1kHz
Hori.	2566.834	AV	40.03	27.91	14.66	41.65	2.19	43.14	53.9	10.7	141	237	VBW:5.1kHz
Hori.	2880.003	AV	39.78	28.48	6.68	41.72	2.19	35.41	53.9	18.4	226	158	VBW:5.1kHz
Hori.	4824.000	AV	44.19	31.41	7.06	42.87	2.19	41.98	53.9	11.9	169	199	VBW:5.1kHz
Hori.	7236.000	AV	38.46	37.15	8.48	43.36	2.19	42.92	53.9	10.9	150	0	Floor noise
Hori.	9648.000	AV	38.31	38.72	9.70	43.09	2.19	45.83	53.9	8.0	150	0	Floor noise
Vert.	2257.733	PK	52.00	28.23	14.35	41.57	2.19	55.20	73.9	18.7	138	144	-
Vert.	2390.000	PK	62.27	27.98	14.48	41.61	2.19	65.31	73.9	8.5	114	229	-
Vert.	2566.214	PK	52.38	27.91	14.66	41.65	2.19	55.49	73.9	18.4	135	151	-
Vert.	2880.012	PK	49.05	28.48	6.68	41.72	2.19	44.68	73.9	29.2	128	125	-
Vert.	4824.000	PK	54.96	31.41	7.06	42.87	2.19	52.75	73.9	21.1	212	223	-
Vert.	7236.000	PK	50.51	37.15	8.48	43.36	2.19	54.97	73.9	18.9	150	0	-
Vert.	9648.000	PK	50.28	38.72	9.70	43.09	2.19	57.80	73.9	16.1	150	0	-
Vert.	2257.733	AV	40.34	28.23	14.35	41.57	2.19	43.54	53.9	10.3	138	144	VBW:5.1kHz
Vert.	2390.000	AV	43.75	27.98	14.48	41.61	2.19	46.79	53.9	7.1	114	229	VBW:5.1kHz
Vert.	2566.214	AV	41.28	27.91	14.66	41.65	2.19	44.39	53.9	9.5	135	151	VBW:5.1kHz
Vert.	2880.012	AV	42.54	28.48	6.68	41.72	2.19	38.17	53.9	15.7	128	125	VBW:5.1kHz
Vert.	4824.000	AV	41.77	31.41	7.06	42.87	2.19	39.56	53.9	14.3	212	223	VBW:5.1kHz
Vert.	7236.000	AV	38.29	37.15	8.48	43.36	2.19	42.75	53.9	11.1	150	0	Floor noise
Vert.	9648.000	AV	38.22	38.72	9.70	43.09	2.19	45.74	53.9	8.1	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

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.	2412.000	PK	97.66	27.95	14.51	41.61	2.19	100.70	-	-	Carrier
Hori.	2400.000	PK	63.52	27.97	14.49	41.61	2.19	66.56	80.7	14.1	-
Vert.	2412.000	PK	97.42	27.95	14.51	41.61	2.19	100.46	-	-	Carrier
Vert.	2400.000	PK	61.69	27.97	14.49	41.61	2.19	64.73	80.4	15.6	-

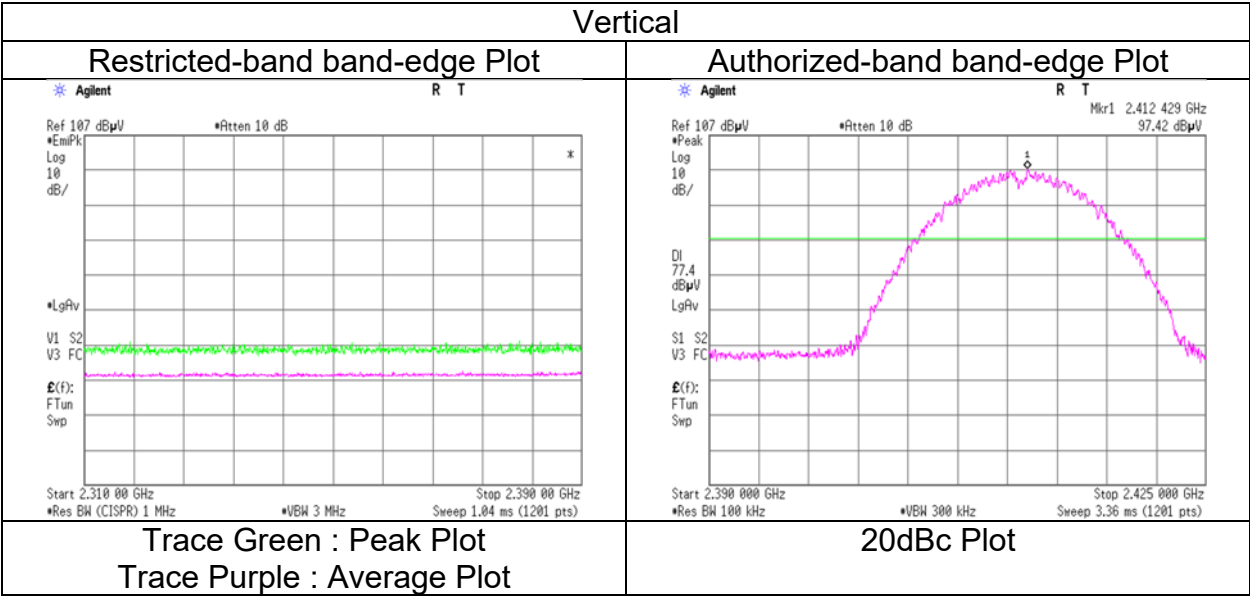
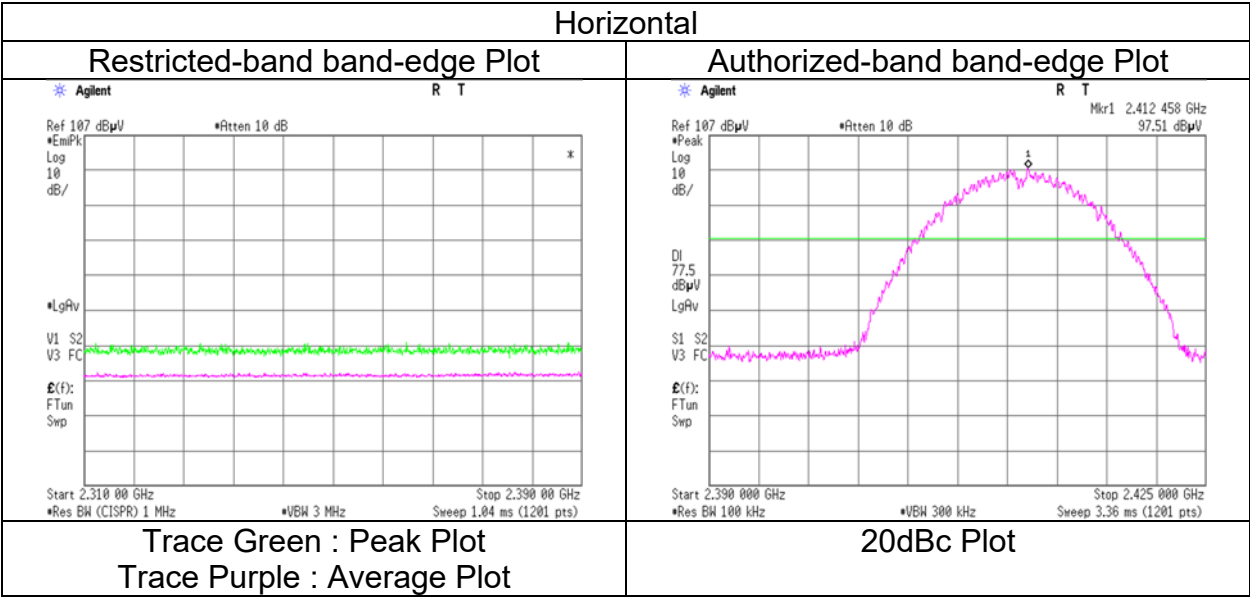
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 29, 2023
Temperature / Humidity	23 deg.C, 52 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11b(CDD), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 2	WAC 1
Date	August 29, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	24 deg.C, 53 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Yosuke Murakami	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11b(CDD), 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

(* 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.	2282.557	PK	50.22	28.22	14.39	41.57	2.19	53.45	73.9	20.4	140	37	-
Hori.	2591.682	PK	50.77	27.92	14.69	41.66	2.19	53.91	73.9	19.9	146	32	-
Hori.	2879.951	PK	54.84	28.48	6.68	41.72	2.19	50.47	73.9	23.4	112	152	-
Hori.	4874.000	PK	55.07	31.50	7.09	42.88	2.19	52.97	73.9	20.9	145	10	-
Hori.	7311.000	PK	49.32	37.24	8.51	43.41	2.19	53.85	73.9	20.0	150	0	-
Hori.	9748.000	PK	48.28	39.00	9.74	43.02	2.19	56.19	73.9	17.7	150	0	-
Hori.	2282.557	AV	42.23	28.22	14.39	41.57	2.19	45.46	53.9	8.4	140	37	VBW: 5.1 kHz
Hori.	2591.682	AV	42.28	27.92	14.69	41.66	2.19	45.42	53.9	8.4	146	32	VBW: 5.1 kHz
Hori.	2879.951	AV	46.44	28.48	6.68	41.72	2.19	42.07	53.9	11.8	112	152	VBW: 5.1 kHz
Hori.	4874.000	AV	51.11	31.50	7.09	42.88	2.19	49.01	53.9	4.8	145	10	VBW: 5.1 kHz
Hori.	7311.000	AV	38.86	37.24	8.51	43.41	2.19	43.39	53.9	10.5	150	0	Floor noise
Hori.	9748.000	AV	37.85	39.00	9.74	43.02	2.19	45.76	53.9	8.1	150	0	Floor noise
Vert.	2283.075	PK	51.68	28.22	14.39	41.57	2.19	54.91	73.9	18.9	145	25	-
Vert.	2591.629	PK	51.72	27.92	14.69	41.66	2.19	54.86	73.9	19.0	132	19	-
Vert.	2879.985	PK	50.22	28.48	6.68	41.72	2.19	45.85	73.9	28.0	135	212	-
Vert.	4874.000	PK	57.84	31.50	7.09	42.88	2.19	55.74	73.9	18.1	143	4	-
Vert.	7311.000	PK	48.91	37.24	8.51	43.41	2.19	53.44	73.9	20.4	150	0	-
Vert.	9748.000	PK	48.15	39.00	9.74	43.02	2.19	56.06	73.9	17.8	150	0	-
Vert.	2283.075	AV	42.09	28.22	14.39	41.57	2.19	45.32	53.9	8.5	145	25	VBW: 5.1 kHz
Vert.	2591.629	AV	43.50	27.92	14.69	41.66	2.19	46.64	53.9	7.2	132	19	VBW: 5.1 kHz
Vert.	2879.985	AV	45.16	28.48	6.68	41.72	2.19	40.79	53.9	13.1	135	212	VBW: 5.1 kHz
Vert.	4874.000	AV	54.26	31.50	7.09	42.88	2.19	52.16	53.9	1.7	143	4	VBW: 5.1 kHz
Vert.	7311.000	AV	38.69	37.24	8.51	43.41	2.19	43.22	53.9	10.6	150	0	Floor noise
Vert.	9748.000	AV	37.95	39.00	9.74	43.02	2.19	45.86	53.9	8.0	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 2	WAC 1
Date	August 29, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	24 deg.C, 53 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Yosuke Murakami	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11b(CDD), 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

(* 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.	2309.064	PK	52.27	28.17	14.41	41.58	2.19	55.46	73.9	18.4	136	78	-
Hori.	2483.500	PK	48.03	27.89	14.60	41.64	2.19	51.07	73.9	22.8	148	70	-
Hori.	2615.073	PK	51.49	27.95	14.72	41.66	2.19	54.69	73.9	19.2	125	78	-
Hori.	2918.351	PK	47.73	28.53	6.53	41.72	2.19	43.26	73.9	30.6	100	0	-
Hori.	4924.000	PK	54.16	31.61	7.12	42.89	2.19	52.19	73.9	21.7	237	352	-
Hori.	7386.000	PK	49.85	37.36	8.54	43.46	2.19	54.48	73.9	19.4	150	0	-
Hori.	9848.000	PK	49.12	39.06	9.80	42.94	2.19	57.23	73.9	16.6	150	0	-
Hori.	2309.064	AV	42.68	28.17	14.41	41.58	2.19	45.87	53.9	8.0	136	78	VBW: 5.1 kHz
Hori.	2483.500	AV	38.14	27.89	14.60	41.64	2.19	41.18	53.9	12.7	148	70	VBW: 5.1 kHz
Hori.	2615.073	AV	42.61	27.95	14.72	41.66	2.19	45.81	53.9	8.0	125	78	VBW: 5.1 kHz
Hori.	2918.351	AV	38.44	28.53	6.53	41.72	2.19	33.97	53.9	19.9	100	0	VBW: 5.1 kHz
Hori.	4924.000	AV	49.55	31.61	7.12	42.89	2.19	47.58	53.9	6.3	237	352	VBW: 5.1 kHz
Hori.	7386.000	AV	39.24	37.36	8.54	43.46	2.19	43.87	53.9	10.0	150	0	Floor noise
Hori.	9848.000	AV	38.65	39.06	9.80	42.94	2.19	46.76	53.9	7.1	150	0	Floor noise
Vert.	2308.898	PK	50.81	28.17	14.41	41.58	2.19	54.00	73.9	19.9	134	173	-
Vert.	2483.500	PK	50.21	27.89	14.60	41.64	2.19	53.25	73.9	20.6	154	15	-
Vert.	2614.900	PK	50.90	27.94	14.72	41.66	2.19	54.09	73.9	19.8	157	175	-
Vert.	2918.351	PK	48.69	28.53	6.53	41.72	2.19	44.22	73.9	29.6	100	11	-
Vert.	4924.000	PK	56.44	31.61	7.12	42.89	2.19	54.47	73.9	19.4	170	21	-
Vert.	7386.000	PK	50.22	37.36	8.54	43.46	2.19	54.85	73.9	19.0	150	0	-
Vert.	9848.000	PK	49.22	39.06	9.80	42.94	2.19	57.33	73.9	16.5	150	0	-
Vert.	2308.898	AV	41.40	28.17	14.41	41.58	2.19	44.59	53.9	9.3	134	173	VBW: 5.1 kHz
Vert.	2483.500	AV	39.36	27.89	14.60	41.64	2.19	42.40	53.9	11.5	154	15	VBW: 5.1 kHz
Vert.	2614.900	AV	41.73	27.94	14.72	41.66	2.19	44.92	53.9	8.9	157	175	VBW: 5.1 kHz
Vert.	2918.351	AV	38.50	28.53	6.53	41.72	2.19	34.03	53.9	19.8	100	11	VBW: 5.1 kHz
Vert.	4924.000	AV	51.95	31.61	7.12	42.89	2.19	49.98	53.9	3.9	170	21	VBW: 5.1 kHz
Vert.	7386.000	AV	39.08	37.36	8.54	43.46	2.19	43.71	53.9	10.1	150	0	Floor noise
Vert.	9848.000	AV	38.38	39.06	9.80	42.94	2.19	46.49	53.9	7.4	150	0	Floor noise

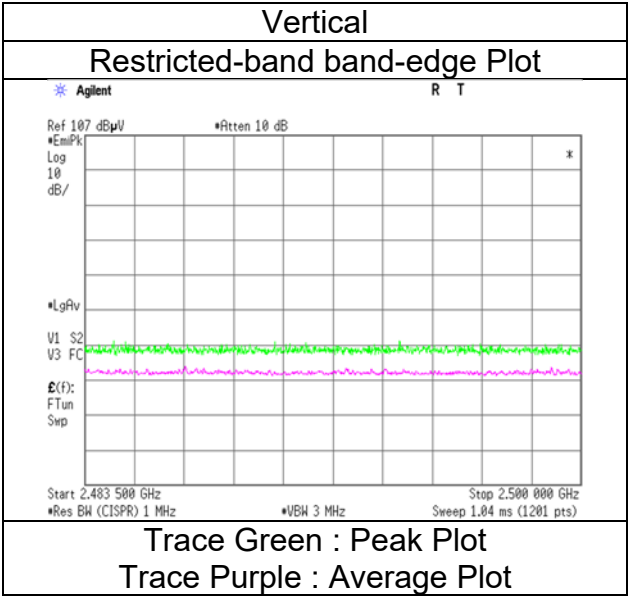
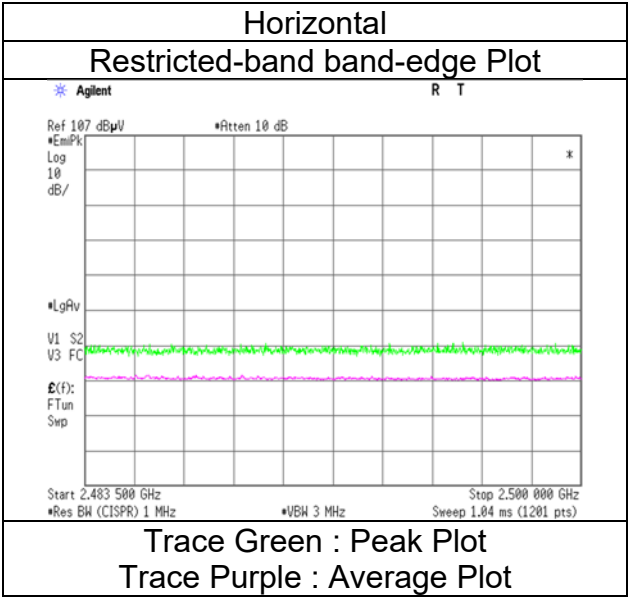
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 29, 2023
Temperature / Humidity	24 deg.C, 53 %RH
Engineer	Yosuke Murakami
Mode	Tx 11b(CDD), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date August 29, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 52 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz - 26.5 GHz)
Mode Tx 11g(CDD), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2264.530	PK	50.43	28.23	14.37	41.57	2.19	53.65	73.9	20.2	145	63	-
Hori.	2390.330	PK	58.52	27.98	14.49	41.61	2.19	61.57	73.9	12.3	126	48	-
Hori.	2567.940	PK	49.79	27.91	14.67	41.65	2.19	52.91	73.9	20.9	146	68	-
Hori.	2879.967	PK	52.03	28.48	6.68	41.72	2.19	47.66	73.9	26.2	173	151	-
Hori.	4824.000	PK	55.41	31.41	7.06	42.87	2.19	53.20	73.9	20.7	151	47	-
Hori.	7236.000	PK	48.54	37.15	8.48	43.36	2.19	53.00	73.9	20.9	150	0	-
Hori.	9648.000	PK	47.68	38.72	9.70	43.09	2.19	55.20	73.9	18.7	150	0	-
Hori.	2264.530	AV	40.56	28.23	14.37	41.57	2.19	43.78	53.9	10.1	145	63	-
Hori.	2390.330	AV	41.64	27.98	14.49	41.61	2.19	44.69	53.9	9.2	126	48	-
Hori.	2567.940	AV	40.11	27.91	14.67	41.65	2.19	43.23	53.9	10.6	146	68	-
Hori.	2879.967	AV	47.69	28.48	6.68	41.72	2.19	43.32	53.9	10.5	173	151	-
Hori.	4824.000	AV	45.58	31.41	7.06	42.87	2.19	43.37	53.9	10.5	151	47	-
Hori.	7236.000	AV	39.31	37.15	8.48	43.36	2.19	43.77	53.9	10.1	150	0	Floor noise
Hori.	9648.000	AV	39.09	38.72	9.70	43.09	2.19	46.61	53.9	7.2	150	0	Floor noise
Vert.	2261.433	PK	51.00	28.23	14.36	41.57	2.19	54.21	73.9	19.6	147	150	-
Vert.	2390.000	PK	64.40	27.98	14.49	41.61	2.19	67.45	73.9	6.4	118	35	-
Vert.	2558.265	PK	52.72	27.90	14.66	41.65	2.19	55.82	73.9	18.0	179	30	-
Vert.	2910.827	PK	58.54	28.53	6.56	41.72	2.19	54.10	73.9	19.8	286	113	-
Vert.	4824.000	PK	46.17	31.41	7.06	42.87	2.19	43.96	73.9	29.9	210	17	-
Vert.	7236.000	PK	47.97	37.15	8.48	43.36	2.19	52.43	73.9	21.4	150	0	-
Vert.	9648.000	PK	47.89	38.72	9.70	43.09	2.19	55.41	73.9	18.4	150	0	-
Vert.	2261.433	AV	41.83	28.23	14.36	41.57	2.19	45.04	53.9	8.8	147	150	-
Vert.	2390.000	AV	47.39	27.98	14.49	41.61	2.19	50.44	53.9	3.4	118	35	-
Vert.	2558.265	AV	43.57	27.90	14.66	41.65	2.19	46.67	53.9	7.2	179	30	-
Vert.	2910.827	AV	48.80	28.53	6.56	41.72	2.19	44.36	53.9	9.5	286	113	-
Vert.	4824.000	AV	46.45	31.41	7.06	42.87	2.19	44.24	53.9	9.6	210	17	-
Vert.	7236.000	AV	39.12	37.15	8.48	43.36	2.19	43.58	53.9	10.3	150	0	Floor noise
Vert.	9648.000	AV	38.69	38.72	9.70	43.09	2.19	46.21	53.9	7.6	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 (3.86 m / 3.0 m) = 2.19 dB

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

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.	2412.000	PK	98.78	27.95	14.52	41.61	2.19	101.83	-	-	Carrier
Hori.	2400.000	PK	65.81	27.97	14.50	41.61	2.19	68.86	81.8	12.9	-
Vert.	2412.000	PK	99.98	27.95	14.52	41.61	2.19	103.03	-	-	Carrier
Vert.	2400.000	PK	66.51	27.97	14.50	41.61	2.19	69.56	83.0	13.4	-

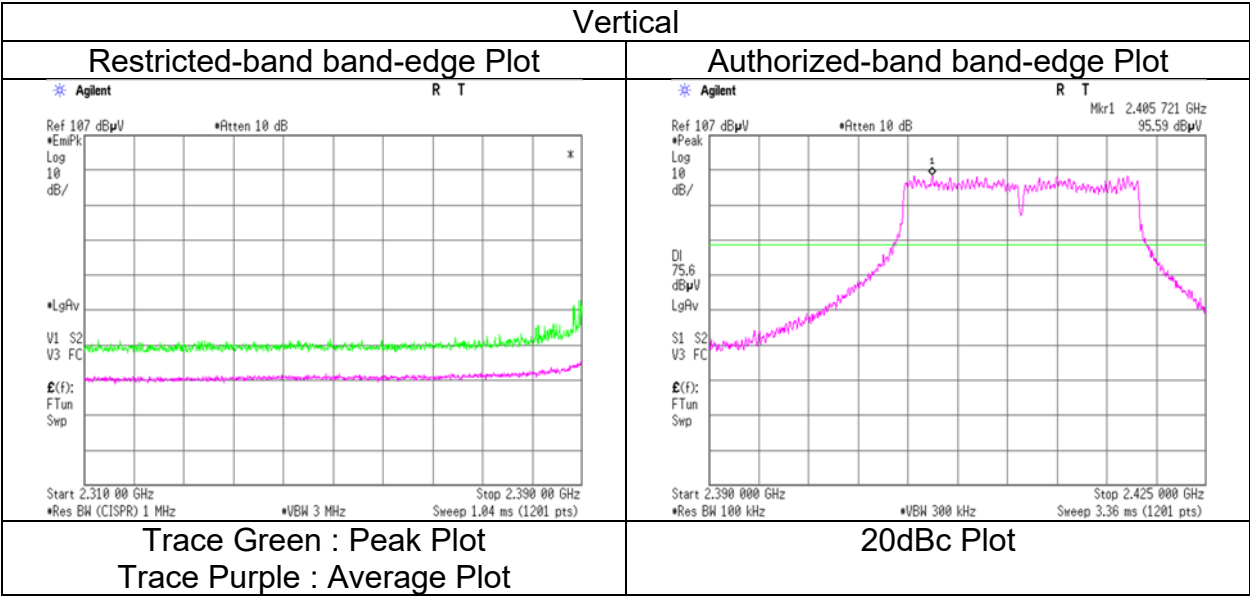
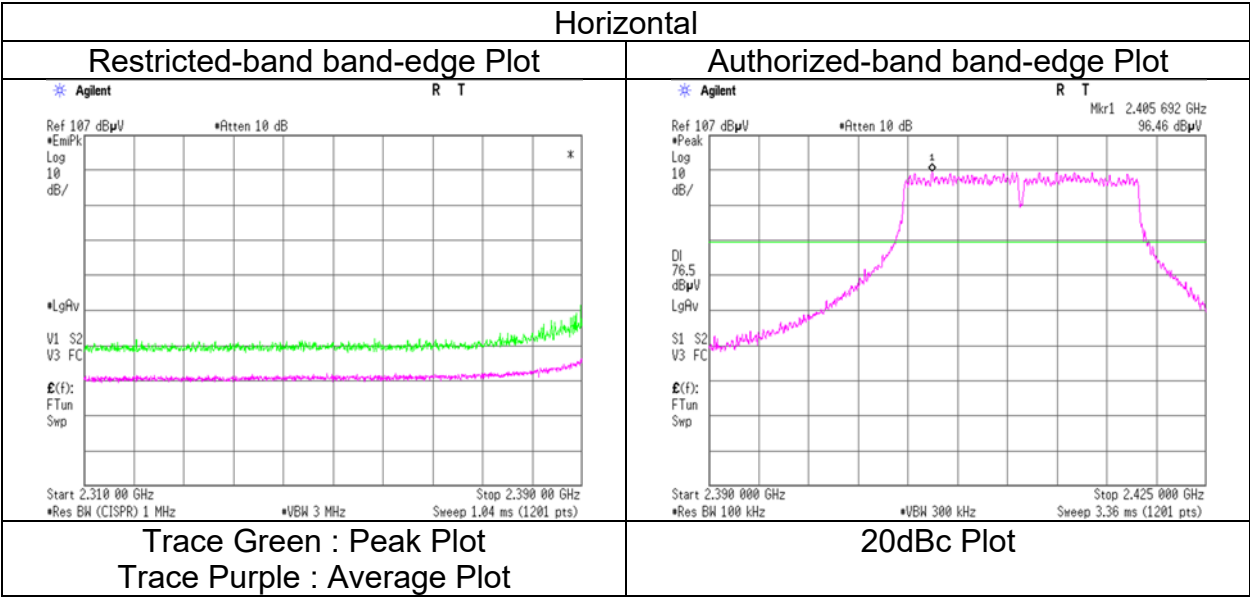
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 29, 2023
Temperature / Humidity	23 deg.C, 52 %RH
Engineer	Yosuke Murakami
Mode	Tx 11g(CDD), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date August 29, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 52 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Yosuke Murakami Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz - 26.5 GHz)
Mode Tx 11g(CDD), 2437 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2282.456	PK	49.94	28.22	14.39	41.57	2.19	53.17	73.9	20.7	142	35	-
Hori.	2591.676	PK	50.73	27.92	14.69	41.66	2.19	53.87	73.9	20.0	144	38	-
Hori.	2880.012	PK	53.89	28.48	6.68	41.72	2.19	49.52	73.9	24.3	113	149	-
Hori.	4874.000	PK	58.29	31.50	7.09	42.88	2.19	56.19	73.9	17.7	138	13	-
Hori.	7311.000	PK	49.13	37.24	8.51	43.41	2.19	53.66	73.9	20.2	150	0	-
Hori.	9748.000	PK	48.87	39.00	9.74	43.02	2.19	56.78	73.9	17.1	150	0	-
Hori.	2282.456	AV	42.07	28.22	14.39	41.57	2.19	45.30	53.9	8.6	142	35	-
Hori.	2591.676	AV	42.52	27.92	14.69	41.66	2.19	45.66	53.9	8.2	144	38	-
Hori.	2880.012	AV	46.28	28.48	6.68	41.72	2.19	41.91	53.9	11.9	113	149	-
Hori.	4874.000	AV	44.66	31.50	7.09	42.88	2.19	42.56	53.9	11.3	138	13	-
Hori.	7311.000	AV	38.84	37.24	8.51	43.41	2.19	43.37	53.9	10.5	150	0	Floor noise
Hori.	9748.000	AV	37.97	39.00	9.74	43.02	2.19	45.88	53.9	8.0	150	0	Floor noise
Vert.	2283.389	PK	51.84	28.22	14.39	41.58	2.19	55.06	73.9	18.8	146	28	-
Vert.	2591.418	PK	52.08	27.92	14.69	41.66	2.19	55.22	73.9	18.6	130	22	-
Vert.	2880.012	PK	50.62	28.48	6.68	41.72	2.19	46.25	73.9	27.6	133	208	-
Vert.	4874.000	PK	56.09	31.50	7.09	42.88	2.19	53.99	73.9	19.9	145	205	-
Vert.	7311.000	PK	48.57	37.24	8.51	43.41	2.19	53.10	73.9	20.8	150	0	-
Vert.	9748.000	PK	48.18	39.00	9.74	43.02	2.19	56.09	73.9	17.8	150	0	-
Vert.	2283.389	AV	41.75	28.22	14.39	41.58	2.19	44.97	53.9	8.9	146	28	-
Vert.	2591.418	AV	43.29	27.92	14.69	41.66	2.19	46.43	53.9	7.4	130	22	-
Vert.	2880.012	AV	45.08	28.48	6.68	41.72	2.19	40.71	53.9	13.1	133	208	-
Vert.	4874.000	AV	43.35	31.50	7.09	42.88	2.19	41.25	53.9	12.6	145	205	-
Vert.	7311.000	AV	38.92	37.24	8.51	43.41	2.19	43.45	53.9	10.4	150	0	Floor noise
Vert.	9748.000	AV	38.23	39.00	9.74	43.02	2.19	46.14	53.9	7.7	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 2	WAC 1
Date	August 29, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 55 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11g(CDD), 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

(* 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.	2309.270	PK	52.36	28.17	14.41	41.58	2.19	55.55	73.9	18.3	135	77	-
Hori.	2483.500	PK	61.02	27.89	14.60	41.64	2.19	64.06	73.9	9.8	138	69	-
Hori.	2615.057	PK	51.86	27.95	14.72	41.66	2.19	55.06	73.9	18.8	126	74	-
Hori.	2880.012	PK	48.02	28.48	6.68	41.72	2.19	43.65	73.9	30.2	117	146	-
Hori.	4924.000	PK	57.49	31.61	7.12	42.89	2.19	55.52	73.9	18.3	163	32	-
Hori.	7386.000	PK	49.72	37.36	8.54	43.46	2.19	54.35	73.9	19.5	150	0	-
Hori.	9848.000	PK	49.58	39.06	9.80	42.94	2.19	57.69	73.9	16.2	150	0	-
Hori.	2309.270	AV	42.55	28.17	14.41	41.58	2.19	45.74	53.9	8.1	135	77	-
Hori.	2483.500	AV	41.88	27.89	14.60	41.64	2.19	44.92	53.9	8.9	138	69	-
Hori.	2615.057	AV	42.46	27.95	14.72	41.66	2.19	45.66	53.9	8.2	126	74	-
Hori.	2880.012	AV	38.92	28.48	6.68	41.72	2.19	34.55	53.9	19.3	117	146	-
Hori.	4924.000	AV	44.59	31.61	7.12	42.89	2.19	42.62	53.9	11.2	163	32	-
Hori.	7386.000	AV	39.64	37.36	8.54	43.46	2.19	44.27	53.9	9.6	150	0	Floor noise
Hori.	9848.000	AV	38.77	39.06	9.80	42.94	2.19	46.88	53.9	7.0	150	0	Floor noise
Vert.	2309.444	PK	50.53	28.17	14.41	41.58	2.19	53.72	73.9	20.1	133	175	-
Vert.	2483.500	PK	63.98	27.89	14.60	41.64	2.19	67.02	73.9	6.8	138	148	-
Vert.	2615.752	PK	50.83	27.95	14.72	41.66	2.19	54.03	73.9	19.8	154	172	-
Vert.	2880.012	PK	49.08	28.48	6.68	41.72	2.19	44.71	73.9	29.1	100	28	-
Vert.	4924.000	PK	55.40	31.61	7.12	42.89	2.19	53.43	73.9	20.4	138	15	-
Vert.	7386.000	PK	50.18	37.36	8.54	43.46	2.19	54.81	73.9	19.0	150	0	-
Vert.	9848.000	PK	49.96	39.06	9.80	42.94	2.19	58.07	73.9	15.8	150	0	-
Vert.	2309.444	AV	41.24	28.17	14.41	41.58	2.19	44.43	53.9	9.4	133	175	-
Vert.	2483.500	AV	43.21	27.89	14.60	41.64	2.19	46.25	53.9	7.6	138	148	-
Vert.	2615.752	AV	41.65	27.95	14.72	41.66	2.19	44.85	53.9	9.0	154	172	-
Vert.	2880.012	AV	38.75	28.48	6.68	41.72	2.19	34.38	53.9	19.5	100	28	-
Vert.	4924.000	AV	43.39	31.61	7.12	42.89	2.19	41.42	53.9	12.4	138	15	-
Vert.	7386.000	AV	38.95	37.36	8.54	43.46	2.19	43.58	53.9	10.3	150	0	Floor noise
Vert.	9848.000	AV	38.73	39.06	9.80	42.94	2.19	46.84	53.9	7.0	150	0	Floor noise

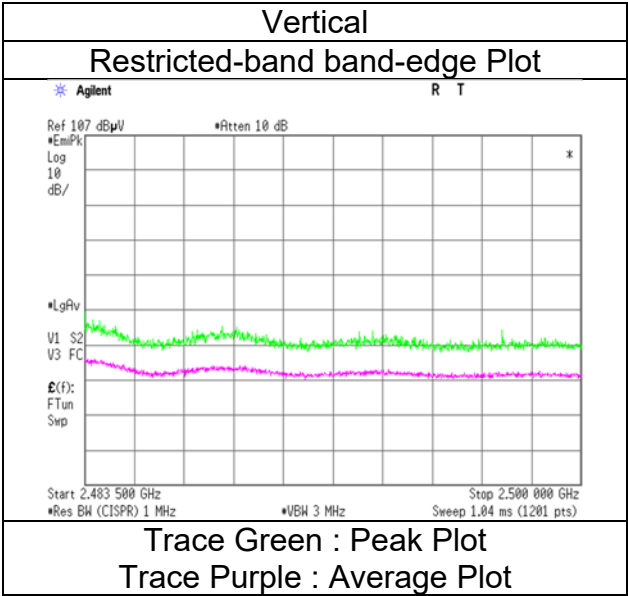
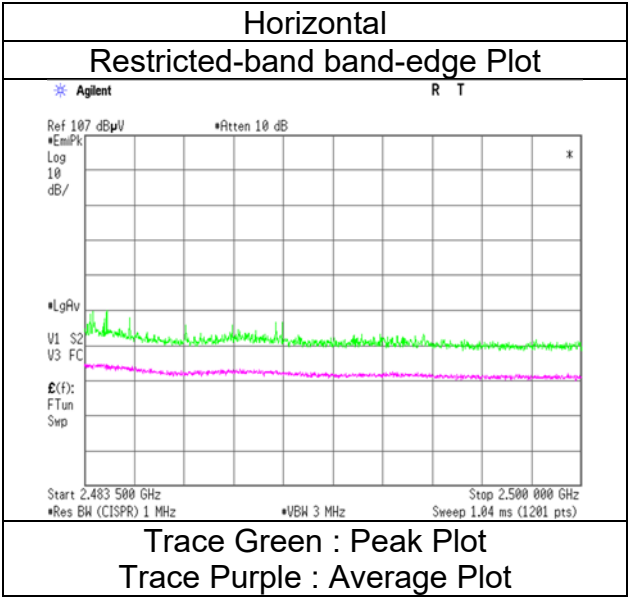
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 27, 2023
Temperature / Humidity	24 deg.C, 53 %RH
Engineer	Ken Fujita
Mode	Tx 11g(CDD), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date August 29, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 22 deg.C, 55 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11n-20(CDD), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2261.740	PK	50.61	28.23	14.35	41.57	2.19	53.81	73.9	20.0	143	63	-
Hori.	2390.000	PK	59.92	27.98	14.48	41.61	2.19	62.96	73.9	10.9	208	279	-
Hori.	2567.763	PK	49.78	27.91	14.66	41.65	2.19	52.89	73.9	21.0	142	69	-
Hori.	2855.038	PK	52.09	28.44	6.78	41.71	2.19	47.79	73.9	26.1	170	155	-
Hori.	4824.000	PK	57.79	31.41	7.06	42.87	2.19	55.58	73.9	18.3	140	216	-
Hori.	7236.000	PK	48.22	37.15	8.48	43.36	2.19	52.68	73.9	21.2	150	0	-
Hori.	9648.000	PK	47.85	38.72	9.70	43.09	2.19	55.37	73.9	18.5	150	0	-
Hori.	2261.740	AV	40.72	28.23	14.35	41.57	2.19	43.92	53.9	9.9	143	63	-
Hori.	2390.000	AV	45.89	27.98	14.48	41.61	2.19	48.93	53.9	4.9	208	279	-
Hori.	2567.763	AV	40.27	27.91	14.66	41.65	2.19	43.38	53.9	10.5	142	69	-
Hori.	2855.038	AV	47.27	28.44	6.78	41.71	2.19	42.97	53.9	10.9	170	155	-
Hori.	4824.000	AV	45.06	31.41	7.06	42.87	2.19	42.85	53.9	11.0	140	216	-
Hori.	7236.000	AV	39.52	37.15	8.48	43.36	2.19	43.98	53.9	9.9	150	0	Floor noise
Hori.	9648.000	AV	39.31	38.72	9.70	43.09	2.19	46.83	53.9	7.0	150	0	Floor noise
Vert.	2264.045	PK	51.58	28.23	14.36	41.57	2.19	54.79	73.9	19.1	144	146	-
Vert.	2390.000	PK	58.70	27.98	14.48	41.61	2.19	61.74	73.9	12.1	145	246	-
Vert.	2568.973	PK	52.85	27.91	14.67	41.65	2.19	55.97	73.9	17.9	173	46	-
Vert.	2933.663	PK	56.22	28.55	6.46	41.73	2.19	51.69	73.9	22.2	282	118	-
Vert.	4824.000	PK	57.83	31.41	7.06	42.87	2.19	55.62	73.9	18.2	113	207	-
Vert.	7236.000	PK	49.49	37.15	8.48	43.36	2.19	53.95	73.9	19.9	150	0	-
Vert.	9648.000	PK	48.26	38.72	9.70	43.09	2.19	55.78	73.9	18.1	150	0	-
Vert.	2264.045	AV	41.27	28.23	14.36	41.57	2.19	44.48	53.9	9.4	144	146	-
Vert.	2390.000	AV	45.47	27.98	14.48	41.61	2.19	48.51	53.9	5.3	145	246	-
Vert.	2568.973	AV	43.49	27.91	14.67	41.65	2.19	46.61	53.9	7.2	173	46	-
Vert.	2933.663	AV	48.18	28.55	6.46	41.73	2.19	43.65	53.9	10.2	282	118	-
Vert.	4824.000	AV	45.61	31.41	7.06	42.87	2.19	43.40	53.9	10.5	113	207	-
Vert.	7236.000	AV	39.44	37.15	8.48	43.36	2.19	43.90	53.9	10.0	150	0	Floor noise
Vert.	9648.000	AV	38.78	38.72	9.70	43.09	2.19	46.30	53.9	7.6	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

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.	2412.000	PK	95.20	27.95	14.51	41.61	2.19	98.24	-	-	Carrier
Hori.	2400.000	PK	63.22	27.97	14.49	41.61	2.19	66.26	78.2	11.9	-
Vert.	2412.000	PK	95.14	27.95	14.51	41.61	2.19	98.18	-	-	Carrier
Vert.	2400.000	PK	63.01	27.97	14.49	41.61	2.19	66.05	78.1	12.0	-

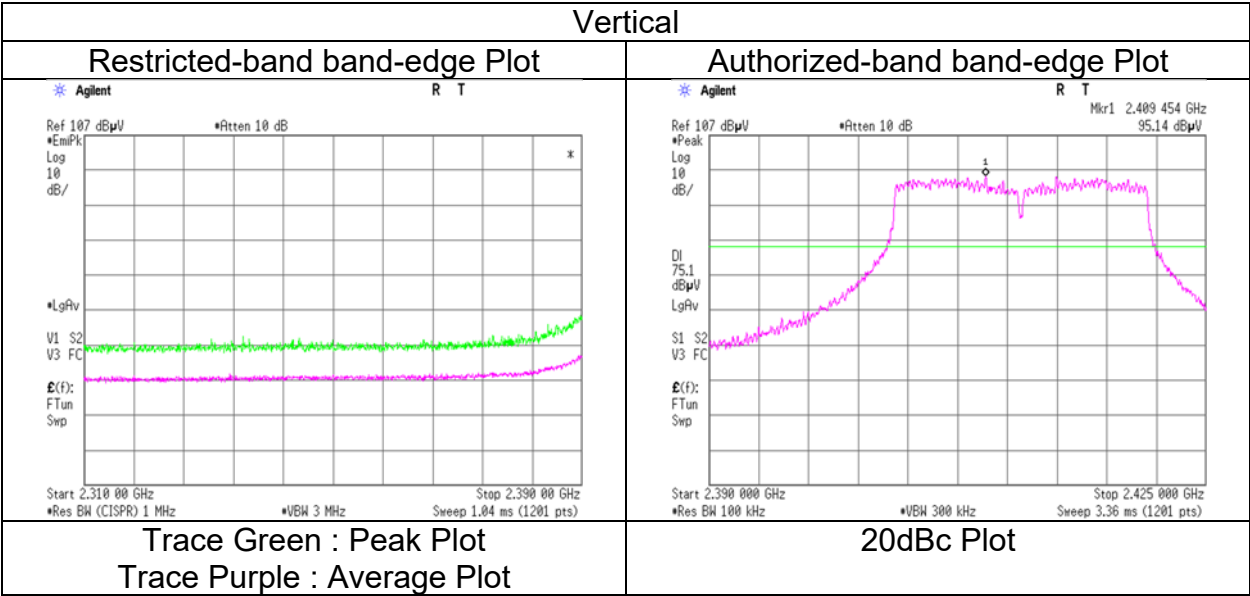
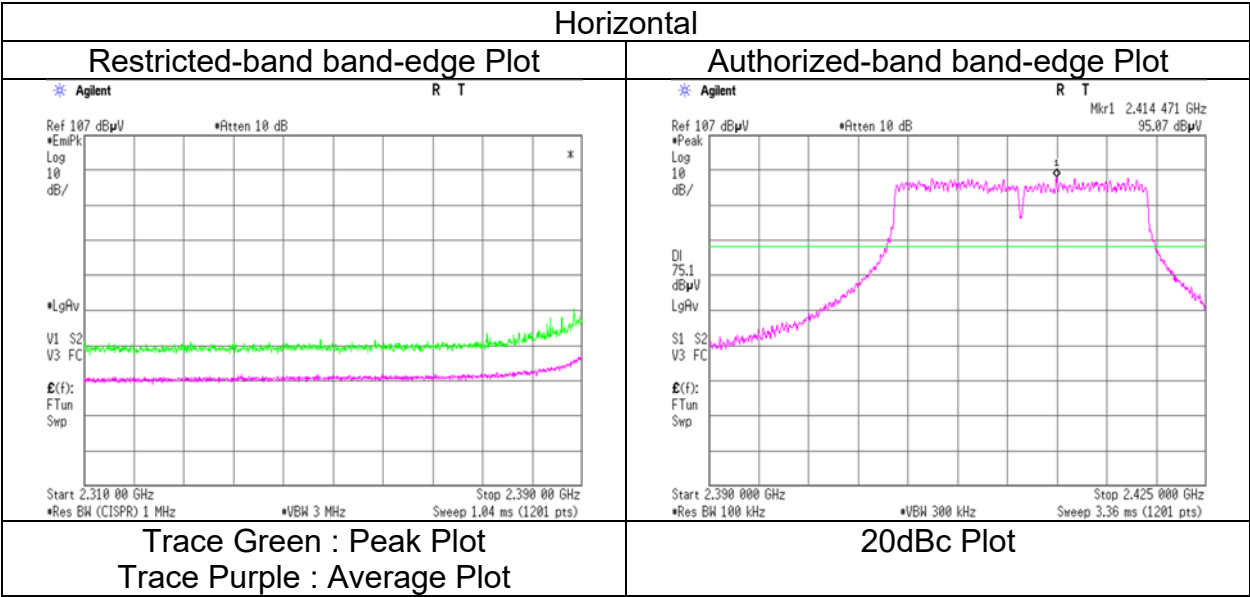
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 27, 2023
Temperature / Humidity	24 deg.C, 53 %RH
Engineer	Ken Fujita
Mode	Tx 11n-20(CDD), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date August 29, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 22 deg.C, 55 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11n-20(CDD), 2437 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2282.919	PK	50.76	28.22	14.38	41.57	2.19	53.98	73.9	19.9	137	35	-
Hori.	2591.942	PK	50.92	27.92	14.68	41.66	2.19	54.05	73.9	19.8	141	37	-
Hori.	2953.550	PK	53.82	28.58	6.38	41.73	2.19	49.24	73.9	24.6	114	147	-
Hori.	4874.000	PK	56.22	31.50	7.09	42.88	2.19	54.12	73.9	19.7	109	213	-
Hori.	7311.000	PK	49.54	37.24	8.51	43.41	2.19	54.07	73.9	19.8	150	0	-
Hori.	9748.000	PK	48.27	39.00	9.74	43.02	2.19	56.18	73.9	17.7	150	0	-
Hori.	2282.919	AV	40.13	28.22	14.38	41.57	2.19	43.35	53.9	10.5	137	35	-
Hori.	2591.942	AV	41.52	27.92	14.68	41.66	2.19	44.65	53.9	9.2	141	37	-
Hori.	2953.550	AV	43.74	28.58	6.38	41.73	2.19	39.16	53.9	14.7	114	147	-
Hori.	4874.000	AV	43.76	31.50	7.09	42.88	2.19	41.66	53.9	12.2	109	213	-
Hori.	7311.000	AV	38.51	37.24	8.51	43.41	2.19	43.04	53.9	10.8	150	0	Floor noise
Hori.	9748.000	AV	38.00	39.00	9.74	43.02	2.19	45.91	53.9	7.9	150	0	Floor noise
Vert.	2281.998	PK	52.25	28.22	14.38	41.57	2.19	55.47	73.9	18.4	143	27	-
Vert.	2591.188	PK	51.74	27.92	14.68	41.66	2.19	54.87	73.9	19.0	136	210	-
Vert.	2880.012	PK	50.62	28.48	6.68	41.72	2.19	46.25	73.9	27.6	132	215	-
Vert.	4874.000	PK	57.46	31.50	7.09	42.88	2.19	55.36	73.9	18.5	111	235	-
Vert.	7311.000	PK	49.25	37.24	8.51	43.41	2.19	53.78	73.9	20.1	150	0	-
Vert.	9748.000	PK	48.67	39.00	9.74	43.02	2.19	56.58	73.9	17.3	150	0	-
Vert.	2281.998	AV	41.24	28.22	14.38	41.57	2.19	44.46	53.9	9.4	143	27	-
Vert.	2591.188	AV	41.97	27.92	14.68	41.66	2.19	45.10	53.9	8.8	136	210	-
Vert.	2880.012	AV	42.36	28.48	6.68	41.72	2.19	37.99	53.9	15.9	132	215	-
Vert.	4874.000	AV	44.43	31.50	7.09	42.88	2.19	42.33	53.9	11.5	111	235	-
Vert.	7311.000	AV	38.54	37.24	8.51	43.41	2.19	43.07	53.9	10.8	150	0	Floor noise
Vert.	9748.000	AV	38.28	39.00	9.74	43.02	2.19	46.19	53.9	7.7	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date August 29, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 22 deg.C, 55 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11n-20(CDD), 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2307.260	PK	51.62	28.18	14.40	41.58	2.19	54.81	73.9	19.0	165	32	-
Hori.	2483.500	PK	55.45	27.89	14.59	41.64	2.19	58.48	73.9	15.4	170	183	-
Hori.	2491.506	PK	53.11	27.89	14.59	41.64	2.19	56.14	73.9	17.7	171	27	-
Hori.	2880.012	PK	49.76	28.48	6.68	41.72	2.19	45.39	73.9	28.5	133	119	-
Hori.	4924.000	PK	56.53	31.61	7.12	42.89	2.19	54.56	73.9	19.3	142	218	-
Hori.	7386.000	PK	50.04	37.36	8.54	43.46	2.19	54.67	73.9	19.2	150	0	-
Hori.	9848.000	PK	49.89	39.06	9.80	42.94	2.19	58.00	73.9	15.9	150	0	-
Hori.	2307.260	AV	39.05	28.18	14.40	41.58	2.19	42.24	53.9	11.6	165	32	-
Hori.	2483.500	AV	43.63	27.89	14.59	41.64	2.19	46.66	53.9	7.2	170	183	-
Hori.	2491.506	AV	40.06	27.89	14.59	41.64	2.19	43.09	53.9	10.8	171	27	-
Hori.	2880.012	AV	42.84	28.48	6.68	41.72	2.19	38.47	53.9	15.4	133	119	-
Hori.	4924.000	AV	43.80	31.61	7.12	42.89	2.19	41.83	53.9	12.0	142	218	-
Hori.	7386.000	AV	38.26	37.36	8.54	43.46	2.19	42.89	53.9	11.0	150	0	Floor noise
Hori.	9848.000	AV	38.14	39.06	9.80	42.94	2.19	46.25	53.9	7.6	150	0	Floor noise
Vert.	2307.574	PK	52.31	28.18	14.40	41.58	2.19	55.50	73.9	18.4	135	224	-
Vert.	2483.500	PK	55.41	27.89	14.59	41.64	2.19	58.44	73.9	15.4	208	225	-
Vert.	2612.272	PK	50.75	27.94	14.70	41.66	2.19	53.92	73.9	19.9	136	140	-
Vert.	2922.563	PK	49.83	28.54	6.51	41.72	2.19	45.35	73.9	28.5	127	96	-
Vert.	4924.000	PK	57.23	31.61	7.12	42.89	2.19	55.26	73.9	18.6	107	234	-
Vert.	7386.000	PK	49.87	37.36	8.54	43.46	2.19	54.50	73.9	19.4	150	0	-
Vert.	9848.000	PK	49.76	39.06	9.80	42.94	2.19	57.87	73.9	16.0	150	0	-
Vert.	2307.574	AV	39.25	28.18	14.40	41.58	2.19	42.44	53.9	11.4	135	224	-
Vert.	2483.500	AV	43.37	27.89	14.59	41.64	2.19	46.40	53.9	7.5	208	225	-
Vert.	2612.272	AV	40.63	27.94	14.70	41.66	2.19	43.80	53.9	10.1	136	140	-
Vert.	2922.563	AV	42.68	28.54	6.51	41.72	2.19	38.20	53.9	15.7	127	96	-
Vert.	4924.000	AV	44.69	31.61	7.12	42.89	2.19	42.72	53.9	11.1	107	234	-
Vert.	7386.000	AV	38.34	37.36	8.54	43.46	2.19	42.97	53.9	10.9	150	0	Floor noise
Vert.	9848.000	AV	38.13	39.06	9.80	42.94	2.19	46.24	53.9	7.6	150	0	Floor noise

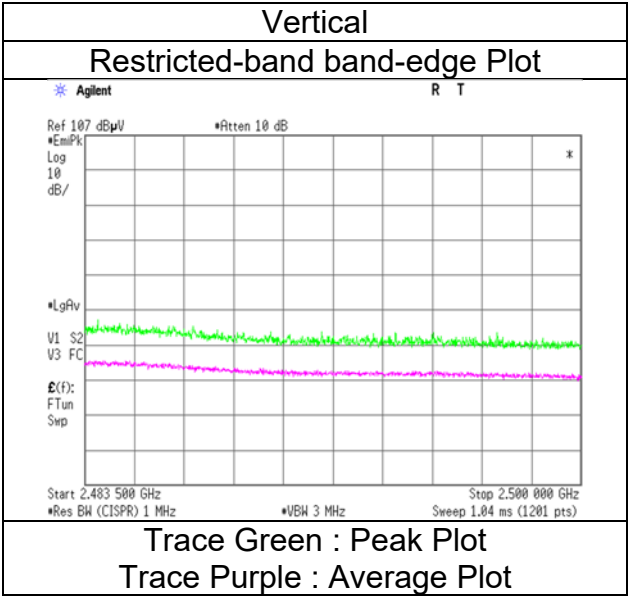
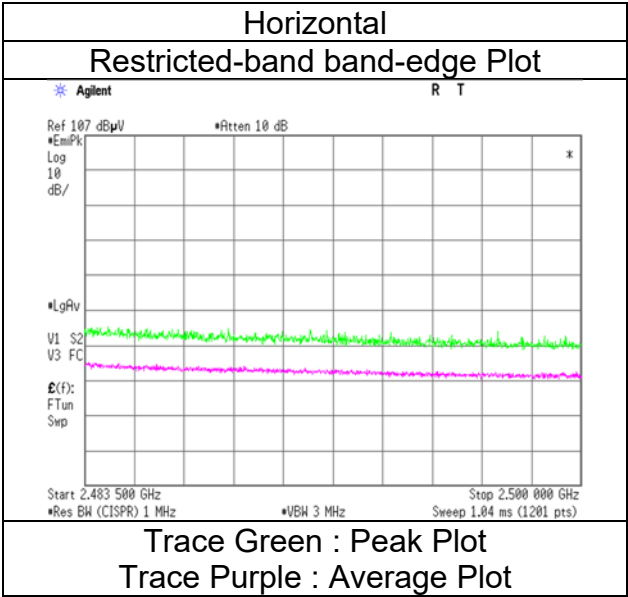
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 29, 2023
Temperature / Humidity	22 deg.C, 55 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11n-20(CDD), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date August 31, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 22 deg.C, 55 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz - 26.5 GHz)
Mode Tx 11n-20(SDM), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2258.090	PK	51.42	28.23	14.36	41.57	2.19	54.63	73.9	19.2	125	220	-
Hori.	2390.000	PK	59.95	27.98	14.49	41.61	2.19	63.00	73.9	10.9	142	2	-
Hori.	2567.742	PK	51.78	27.91	14.67	41.65	2.19	54.90	73.9	19.0	146	231	-
Hori.	2880.012	PK	51.55	28.48	6.68	41.72	2.19	47.18	73.9	26.7	223	152	-
Hori.	4824.000	PK	56.10	31.41	7.06	42.87	2.19	53.89	73.9	20.0	167	32	-
Hori.	7236.000	PK	50.25	37.15	8.48	43.36	2.19	54.71	73.9	19.1	150	0	-
Hori.	9648.000	PK	50.17	38.72	9.70	43.09	2.19	57.69	73.9	16.2	150	0	-
Hori.	2258.090	AV	39.35	28.23	14.36	41.57	2.19	42.56	53.9	11.3	125	220	-
Hori.	2390.000	AV	43.56	27.98	14.49	41.61	2.19	46.61	53.9	7.2	142	2	-
Hori.	2567.742	AV	39.66	27.91	14.67	41.65	2.19	42.78	53.9	11.1	146	231	-
Hori.	2880.012	AV	39.43	28.48	6.68	41.72	2.19	35.06	53.9	18.8	223	152	-
Hori.	4824.000	AV	43.14	31.41	7.06	42.87	2.19	40.93	53.9	12.9	167	32	-
Hori.	7236.000	AV	38.33	37.15	8.48	43.36	2.19	42.79	53.9	11.1	150	0	Floor noise
Hori.	9648.000	AV	38.09	38.72	9.70	43.09	2.19	45.61	53.9	8.2	150	0	Floor noise
Vert.	2257.947	PK	52.05	28.23	14.36	41.57	2.19	55.26	73.9	18.6	135	140	-
Vert.	2390.000	PK	60.56	27.98	14.49	41.61	2.19	63.61	73.9	10.2	195	8	-
Vert.	2565.427	PK	52.19	27.91	14.67	41.65	2.19	55.31	73.9	18.5	139	146	-
Vert.	2880.012	PK	48.38	28.48	6.68	41.72	2.19	44.01	73.9	29.8	124	130	-
Vert.	4824.000	PK	56.46	31.41	7.06	42.87	2.19	54.25	73.9	19.6	192	192	-
Vert.	7236.000	PK	50.36	37.15	8.48	43.36	2.19	54.82	73.9	19.0	150	0	-
Vert.	9648.000	PK	50.18	38.72	9.70	43.09	2.19	57.70	73.9	16.2	150	0	-
Vert.	2257.947	AV	39.78	28.23	14.36	41.57	2.19	42.99	53.9	10.9	135	140	-
Vert.	2390.000	AV	44.41	27.98	14.49	41.61	2.19	47.46	53.9	6.4	195	8	-
Vert.	2565.427	AV	41.56	27.91	14.67	41.65	2.19	44.68	53.9	9.2	139	146	-
Vert.	2880.012	AV	41.65	28.48	6.68	41.72	2.19	37.28	53.9	16.6	124	130	-
Vert.	4824.000	AV	44.34	31.41	7.06	42.87	2.19	42.13	53.9	11.7	192	192	-
Vert.	7236.000	AV	38.22	37.15	8.48	43.36	2.19	42.68	53.9	11.2	150	0	Floor noise
Vert.	9648.000	AV	38.07	38.72	9.70	43.09	2.19	45.59	53.9	8.3	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 (3.86 m / 3.0 m) = 2.19 dB

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

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.	2412.000	PK	96.64	27.95	14.52	41.61	2.19	99.69	-	-	Carrier
Hori.	2400.000	PK	63.68	27.97	14.50	41.61	2.19	66.73	79.6	12.8	-
Vert.	2412.000	PK	96.86	27.95	14.52	41.61	2.19	99.91	-	-	Carrier
Vert.	2400.000	PK	63.00	27.97	14.50	41.61	2.19	66.05	79.9	13.8	-

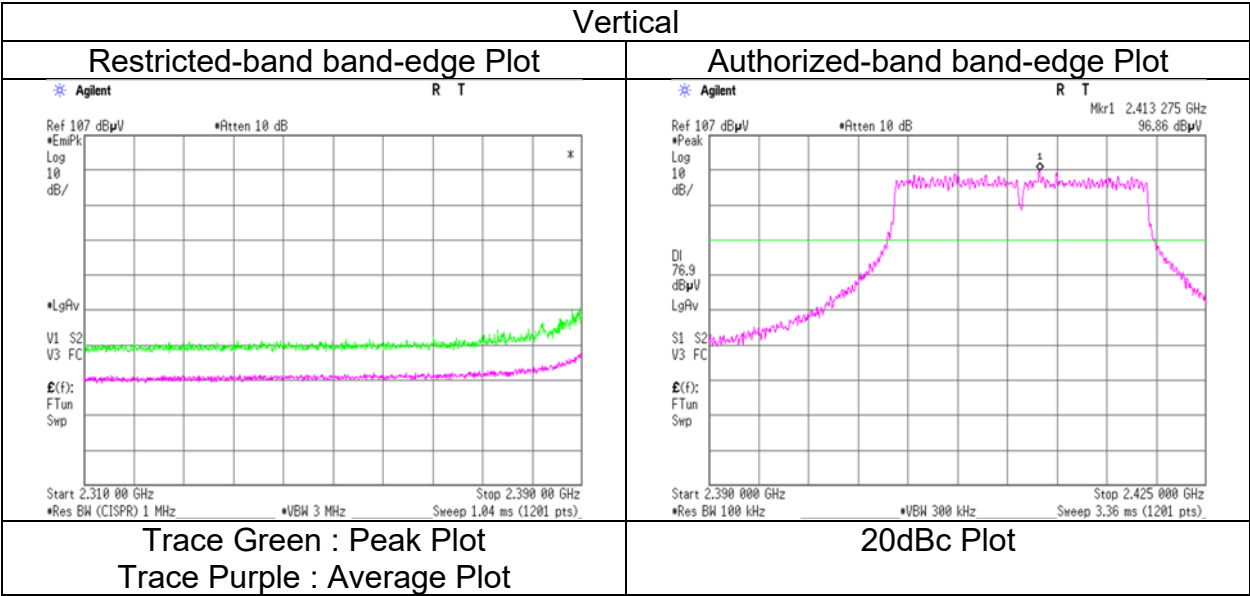
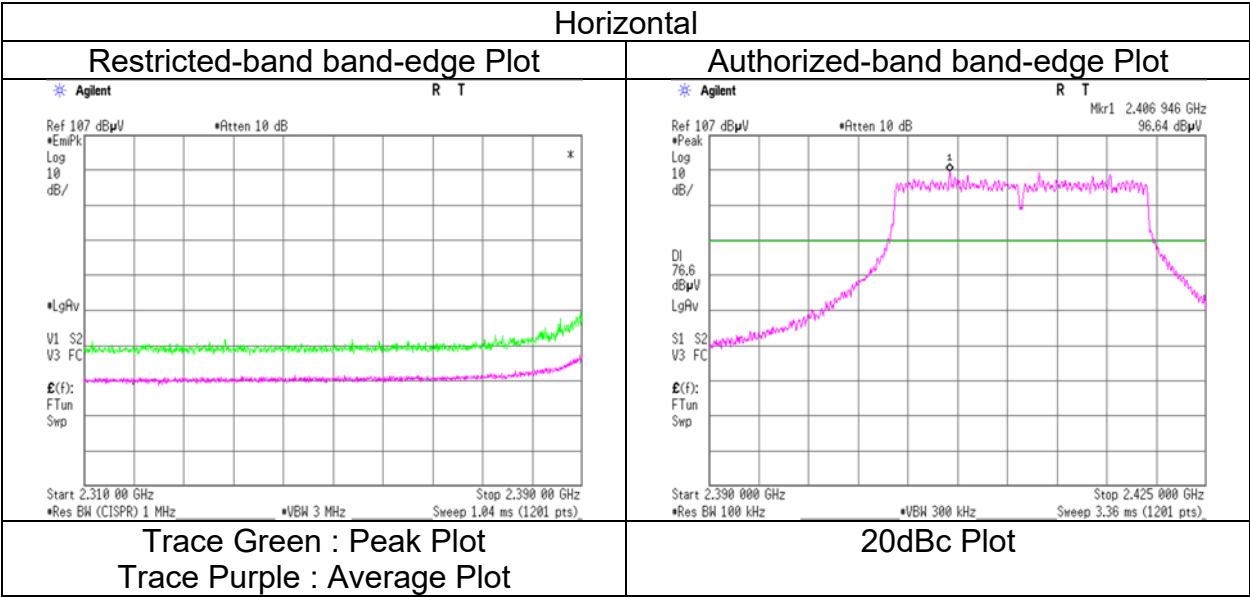
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 31, 2023
Temperature / Humidity	22 deg.C, 55 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11n-20(SDM), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 2	WAC 1
Date	August 29, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 55 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11n-20(SDM), 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

(* 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.	2282.569	PK	50.53	28.22	14.39	41.57	2.19	53.76	73.9	20.1	133	28	-
Hori.	2589.326	PK	51.04	27.92	14.69	41.66	2.19	54.18	73.9	19.7	140	42	-
Hori.	2931.813	PK	52.86	28.55	6.46	41.73	2.19	48.33	73.9	25.5	117	152	-
Hori.	4874.000	PK	53.46	31.50	7.09	42.88	2.19	51.36	73.9	22.5	131	35	-
Hori.	7311.000	PK	49.87	37.24	8.51	43.41	2.19	54.40	73.9	19.5	150	0	-
Hori.	9748.000	PK	48.89	39.00	9.74	43.02	2.19	56.80	73.9	17.1	150	0	-
Hori.	2282.569	AV	40.18	28.22	14.39	41.57	2.19	43.41	53.9	10.4	133	28	-
Hori.	2589.326	AV	41.17	27.92	14.69	41.66	2.19	44.31	53.9	9.5	140	42	-
Hori.	2931.813	AV	43.28	28.55	6.46	41.73	2.19	38.75	53.9	15.1	117	152	-
Hori.	4874.000	AV	41.22	31.50	7.09	42.88	2.19	39.12	53.9	14.7	131	35	-
Hori.	7311.000	AV	38.58	37.24	8.51	43.41	2.19	43.11	53.9	10.7	150	0	Floor noise
Hori.	9748.000	AV	38.24	39.00	9.74	43.02	2.19	46.15	53.9	7.7	150	0	Floor noise
Vert.	2281.901	PK	52.53	28.22	14.39	41.57	2.19	55.76	73.9	18.1	149	36	-
Vert.	2590.596	PK	51.67	27.92	14.69	41.66	2.19	54.81	73.9	19.0	145	21	-
Vert.	2880.011	PK	50.38	28.48	6.68	41.72	2.19	46.01	73.9	27.8	127	210	-
Vert.	4874.000	PK	55.18	31.50	7.09	42.88	2.19	53.08	73.9	20.8	104	219	-
Vert.	7311.000	PK	50.05	37.24	8.51	43.41	2.19	54.58	73.9	19.3	150	0	-
Vert.	9748.000	PK	49.27	39.00	9.74	43.02	2.19	57.18	73.9	16.7	150	0	-
Vert.	2281.901	AV	41.38	28.22	14.39	41.57	2.19	44.61	53.9	9.2	149	36	-
Vert.	2590.596	AV	42.00	27.92	14.69	41.66	2.19	45.14	53.9	8.7	145	21	-
Vert.	2880.011	AV	42.24	28.48	6.68	41.72	2.19	37.87	53.9	16.0	127	210	-
Vert.	4874.000	AV	42.87	31.50	7.09	42.88	2.19	40.77	53.9	13.1	104	219	-
Vert.	7311.000	AV	38.62	37.24	8.51	43.41	2.19	43.15	53.9	10.7	150	0	Floor noise
Vert.	9748.000	AV	38.35	39.00	9.74	43.02	2.19	46.26	53.9	7.6	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 2	WAC 1
Date	August 29, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 55 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11n-20(SDM), 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

(* 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.	2282.554	PK	51.65	28.22	14.39	41.57	2.19	54.88	73.9	19.0	168	28	-
Hori.	2483.500	PK	55.52	27.89	14.60	41.64	2.19	58.56	73.9	15.3	147	17	-
Hori.	2621.575	PK	52.84	27.95	14.72	41.66	2.19	56.04	73.9	17.8	163	41	-
Hori.	2880.004	PK	49.13	28.48	6.68	41.72	2.19	44.76	73.9	29.1	129	176	-
Hori.	4924.000	PK	54.19	31.61	7.12	42.89	2.19	52.22	73.9	21.6	132	47	-
Hori.	7386.000	PK	50.92	37.36	8.54	43.46	2.19	55.55	73.9	18.3	150	0	-
Hori.	9848.000	PK	50.25	39.06	9.80	42.94	2.19	58.36	73.9	15.5	150	0	-
Hori.	2282.554	AV	39.33	28.22	14.39	41.57	2.19	42.56	53.9	11.3	168	28	-
Hori.	2483.500	AV	43.85	27.89	14.60	41.64	2.19	46.89	53.9	7.0	147	17	-
Hori.	2621.575	AV	40.07	27.95	14.72	41.66	2.19	43.27	53.9	10.6	163	41	-
Hori.	2880.004	AV	42.23	28.48	6.68	41.72	2.19	37.86	53.9	16.0	129	176	-
Hori.	4924.000	AV	40.63	31.61	7.12	42.89	2.19	38.66	53.9	15.2	132	47	-
Hori.	7386.000	AV	38.57	37.36	8.54	43.46	2.19	43.20	53.9	10.7	150	0	Floor noise
Hori.	9848.000	AV	38.23	39.06	9.80	42.94	2.19	46.34	53.9	7.5	150	0	Floor noise
Vert.	2282.554	PK	51.46	28.22	14.39	41.57	2.19	54.69	73.9	19.2	158	39	-
Vert.	2483.500	PK	56.03	27.89	14.60	41.64	2.19	59.07	73.9	14.8	219	30	-
Vert.	2614.426	PK	52.62	27.94	14.72	41.66	2.19	55.81	73.9	18.0	167	38	-
Vert.	2880.012	PK	50.03	28.48	6.68	41.72	2.19	45.66	73.9	28.2	129	209	-
Vert.	4924.000	PK	54.46	31.61	7.12	42.89	2.19	52.49	73.9	21.4	113	214	-
Vert.	7386.000	PK	48.74	37.36	8.54	43.46	2.19	53.37	73.9	20.5	150	0	-
Vert.	9848.000	PK	49.02	39.06	9.80	42.94	2.19	57.13	73.9	16.7	150	0	-
Vert.	2282.554	AV	39.34	28.22	14.39	41.57	2.19	42.57	53.9	11.3	158	39	-
Vert.	2483.500	AV	44.43	27.89	14.60	41.64	2.19	47.47	53.9	6.4	219	30	-
Vert.	2614.426	AV	40.26	27.94	14.72	41.66	2.19	43.45	53.9	10.4	167	38	-
Vert.	2880.012	AV	44.35	28.48	6.68	41.72	2.19	39.98	53.9	13.9	129	209	-
Vert.	4924.000	AV	42.37	31.61	7.12	42.89	2.19	40.40	53.9	13.5	113	214	-
Vert.	7386.000	AV	38.72	37.36	8.54	43.46	2.19	43.35	53.9	10.5	150	0	Floor noise
Vert.	9848.000	AV	38.63	39.06	9.80	42.94	2.19	46.74	53.9	7.1	150	0	Floor noise

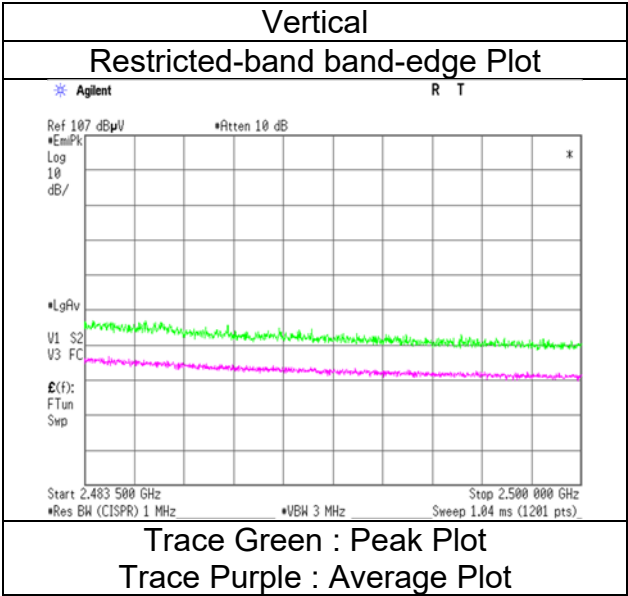
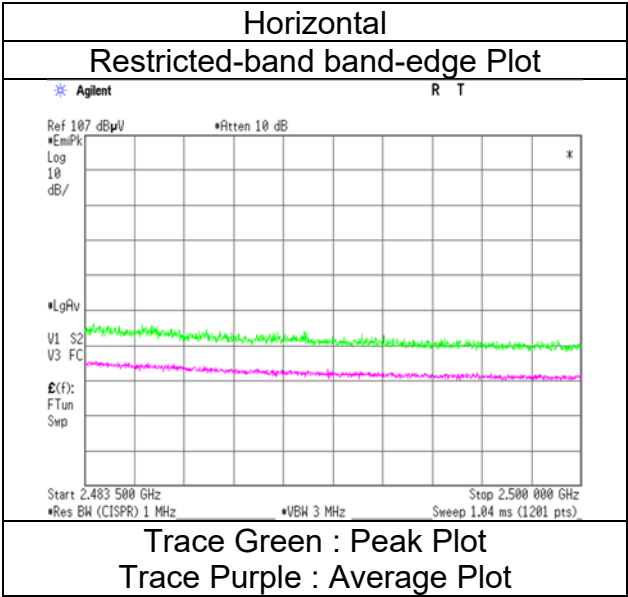
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 29, 2023
Temperature / Humidity	22 deg.C, 55 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11n-20(SDM), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date September 1, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 53 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDM)(CDD), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2257.279	PK	50.87	28.22	14.36	41.57	2.19	54.07	73.9	19.8	122	238	-
Hori.	2390.000	PK	59.14	27.98	14.49	41.61	2.19	62.19	73.9	11.7	149	76	-
Hori.	2563.075	PK	50.95	27.90	14.67	41.65	2.19	54.06	73.9	19.8	140	224	-
Hori.	2880.012	PK	50.74	28.48	6.68	41.72	2.19	46.37	73.9	27.5	198	158	-
Hori.	4824.000	PK	53.93	31.41	7.06	42.87	2.19	51.72	73.9	22.1	131	201	-
Hori.	7236.000	PK	49.93	37.15	8.48	43.36	2.19	54.39	73.9	19.5	150	0	-
Hori.	9648.000	PK	49.76	38.72	9.70	43.09	2.19	57.28	73.9	16.6	150	0	-
Hori.	2257.279	AV	39.13	28.22	14.36	41.57	2.19	42.33	53.9	11.5	122	238	-
Hori.	2390.000	AV	44.83	27.98	14.49	41.61	2.19	47.88	53.9	6.0	149	76	-
Hori.	2563.075	AV	39.33	27.90	14.67	41.65	2.19	42.44	53.9	11.4	140	224	-
Hori.	2880.012	AV	39.62	28.48	6.68	41.72	2.19	35.25	53.9	18.6	198	158	-
Hori.	4824.000	AV	41.21	31.41	7.06	42.87	2.19	39.00	53.9	14.9	131	201	-
Hori.	7236.000	AV	38.05	37.15	8.48	43.36	2.19	42.51	53.9	11.3	150	0	Floor noise
Hori.	9648.000	AV	38.12	38.72	9.70	43.09	2.19	45.64	53.9	8.2	150	0	Floor noise
Vert.	2257.676	PK	51.53	28.23	14.36	41.57	2.19	54.74	73.9	19.1	132	134	-
Vert.	2390.000	PK	60.35	27.98	14.49	41.61	2.19	63.40	73.9	10.5	214	3	-
Vert.	2571.285	PK	51.87	27.91	14.68	41.65	2.19	55.00	73.9	18.9	138	155	-
Vert.	2880.013	PK	46.23	28.48	6.68	41.72	2.19	41.86	73.9	32.0	119	126	-
Vert.	4824.000	PK	55.42	31.41	7.06	42.87	2.19	53.21	73.9	20.6	234	223	-
Vert.	7236.000	PK	50.24	37.15	8.48	43.36	2.19	54.70	73.9	19.2	150	0	-
Vert.	9648.000	PK	50.08	38.72	9.70	43.09	2.19	57.60	73.9	16.3	150	0	-
Vert.	2257.676	AV	39.22	28.23	14.36	41.57	2.19	42.43	53.9	11.4	132	134	-
Vert.	2390.000	AV	44.10	27.98	14.49	41.61	2.19	47.15	53.9	6.7	214	3	-
Vert.	2571.285	AV	41.09	27.91	14.68	41.65	2.19	44.22	53.9	9.6	138	155	-
Vert.	2880.013	AV	40.24	28.48	6.68	41.72	2.19	35.87	53.9	18.0	119	126	-
Vert.	4824.000	AV	42.62	31.41	7.06	42.87	2.19	40.41	53.9	13.4	234	223	-
Vert.	7236.000	AV	38.33	37.15	8.48	43.36	2.19	42.79	53.9	11.1	150	0	Floor noise
Vert.	9648.000	AV	38.21	38.72	9.70	43.09	2.19	45.73	53.9	8.1	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

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.	2412.000	PK	94.64	27.95	14.52	41.61	2.19	97.69	-	-	Carrier
Hori.	2400.000	PK	63.01	27.97	14.50	41.61	2.19	66.06	77.6	11.5	-
Vert.	2412.000	PK	96.44	27.95	14.52	41.61	2.19	99.49	-	-	Carrier
Vert.	2400.000	PK	62.70	27.97	14.50	41.61	2.19	65.75	79.4	13.6	-

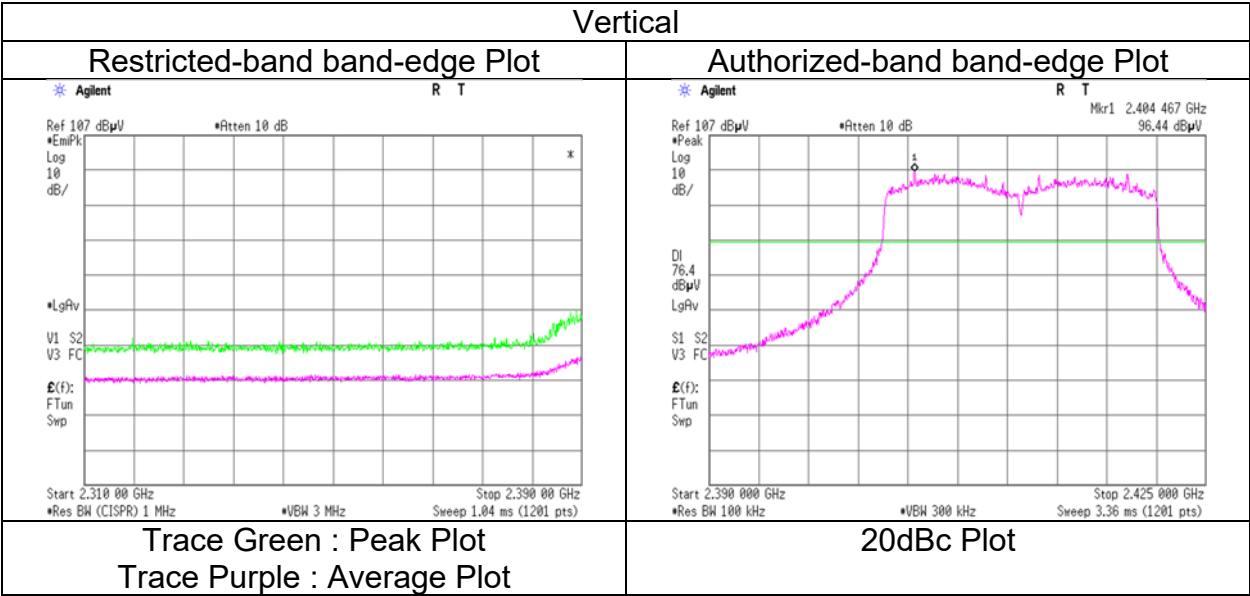
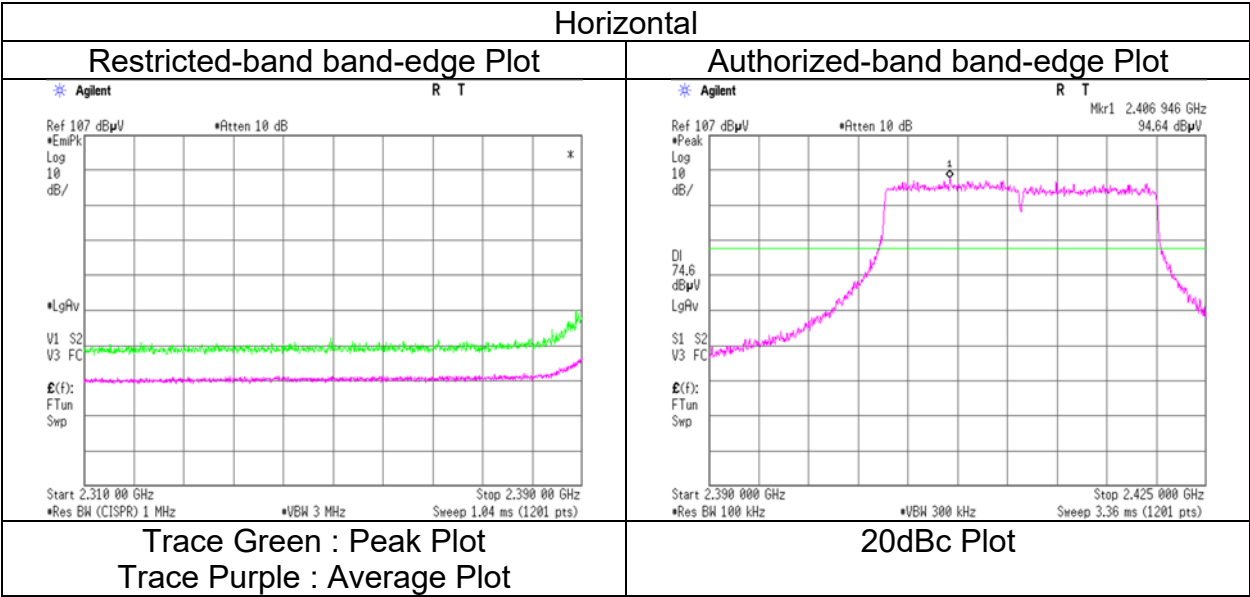
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	September 1, 2023
Temperature / Humidity	23 deg.C, 53 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20(OFDM)(CDD), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date September 1, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 53 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDM)(CDD), 2437 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2282.916	PK	49.53	28.22	14.39	41.57	2.19	52.76	73.9	21.1	128	35	-
Hori.	2586.775	PK	50.88	27.92	14.69	41.66	2.19	54.02	73.9	19.8	138	45	-
Hori.	2880.014	PK	50.75	28.48	6.68	41.72	2.19	46.38	73.9	27.5	119	143	-
Hori.	4874.000	PK	53.60	31.50	7.09	42.88	2.19	51.50	73.9	22.4	156	51	-
Hori.	7311.000	PK	49.96	37.24	8.51	43.41	2.19	54.49	73.9	19.4	150	0	-
Hori.	9748.000	PK	50.00	39.00	9.74	43.02	2.19	57.91	73.9	15.9	150	0	-
Hori.	2282.916	AV	39.78	28.22	14.39	41.57	2.19	43.01	53.9	10.8	128	35	-
Hori.	2586.775	AV	40.75	27.92	14.69	41.66	2.19	43.89	53.9	10.0	138	45	-
Hori.	2880.014	AV	42.18	28.48	6.68	41.72	2.19	37.81	53.9	16.0	119	143	-
Hori.	4874.000	AV	40.48	31.50	7.09	42.88	2.19	38.38	53.9	15.5	156	51	-
Hori.	7311.000	AV	38.54	37.24	8.51	43.41	2.19	43.07	53.9	10.8	150	0	Floor noise
Hori.	9748.000	AV	38.29	39.00	9.74	43.02	2.19	46.20	53.9	7.7	150	0	Floor noise
Vert.	2281.392	PK	51.35	28.22	14.39	41.57	2.19	54.58	73.9	19.3	144	32	-
Vert.	2588.611	PK	51.08	27.92	14.69	41.66	2.19	54.22	73.9	19.6	148	18	-
Vert.	2880.011	PK	49.64	28.48	6.68	41.72	2.19	45.27	73.9	28.6	125	208	-
Vert.	4874.000	PK	55.87	31.50	7.09	42.88	2.19	53.77	73.9	20.1	185	221	-
Vert.	7311.000	PK	50.46	37.24	8.51	43.41	2.19	54.99	73.9	18.9	150	0	-
Vert.	9748.000	PK	50.26	39.00	9.74	43.02	2.19	58.17	73.9	15.7	150	0	-
Vert.	2281.392	AV	40.56	28.22	14.39	41.57	2.19	43.79	53.9	10.1	144	32	-
Vert.	2588.611	AV	41.83	27.92	14.69	41.66	2.19	44.97	53.9	8.9	148	18	-
Vert.	2880.011	AV	41.63	28.48	6.68	41.72	2.19	37.26	53.9	16.6	125	208	-
Vert.	4874.000	AV	42.71	31.50	7.09	42.88	2.19	40.61	53.9	13.2	185	221	-
Vert.	7311.000	AV	38.95	37.24	8.51	43.41	2.19	43.48	53.9	10.4	150	0	Floor noise
Vert.	9748.000	AV	38.63	39.00	9.74	43.02	2.19	46.54	53.9	7.3	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.			
Semi Anechoic Chamber	WAC 1	SAC 3	WAC 2	WAC 1
Date	October 24, 2023	September 1, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 51 %RH	23 deg.C, 53 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Kenichi Adachi	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(30 MHz -1 GHz)	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDM)(CDD), 2462 MHz			
Antenna	2G_CH0: monopole, 2G_CH1: slot			

(* 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.	77.659	QP	31.89	9.06	6.62	33.08	0.00	14.49	40.0	25.5	213	129	-
Hori.	167.993	QP	50.18	12.47	7.23	33.02	0.00	36.86	43.5	6.6	113	263	-
Hori.	190.375	QP	35.58	13.96	7.11	32.98	0.00	23.67	43.5	19.8	332	61	-
Hori.	266.189	QP	33.13	12.71	7.31	32.79	0.00	20.36	46.0	25.6	187	107	-
Hori.	398.315	QP	31.11	15.78	7.67	32.45	0.00	22.11	46.0	23.8	100	47	-
Hori.	2282.907	PK	50.63	28.22	14.39	41.57	2.19	53.86	73.9	20.0	160	33	-
Hori.	2483.500	PK	55.85	27.89	14.60	41.64	2.19	58.89	73.9	15.0	189	10	-
Hori.	2619.219	PK	50.65	27.95	14.72	41.66	2.19	53.85	73.9	20.0	159	35	-
Hori.	2880.012	PK	48.11	28.48	6.68	41.72	2.19	43.74	73.9	30.1	122	168	-
Hori.	4924.000	PK	52.85	31.61	7.12	42.89	2.19	50.88	73.9	23.0	168	209	-
Hori.	7386.000	PK	50.13	37.36	8.54	43.46	2.19	54.76	73.9	19.1	150	0	-
Hori.	9848.000	PK	49.86	39.06	9.80	42.94	2.19	57.97	73.9	15.9	150	0	-
Hori.	2282.907	AV	39.67	28.22	14.39	41.57	2.19	42.90	53.9	11.0	160	33	-
Hori.	2483.500	AV	41.77	27.89	14.60	41.64	2.19	44.81	53.9	9.0	189	10	-
Hori.	2619.219	AV	39.61	27.95	14.72	41.66	2.19	42.81	53.9	11.0	159	35	-
Hori.	2880.012	AV	41.13	28.48	6.68	41.72	2.19	36.76	53.9	17.1	122	168	-
Hori.	4924.000	AV	40.39	31.61	7.12	42.89	2.19	38.42	53.9	15.4	168	209	-
Hori.	7386.000	AV	38.55	37.36	8.54	43.46	2.19	43.18	53.9	10.7	150	0	Floor noise
Hori.	9848.000	AV	38.32	39.06	9.80	42.94	2.19	46.43	53.9	7.4	150	0	Floor noise
Vert.	76.926	QP	39.88	9.08	6.60	33.07	0.00	22.49	40.0	17.5	100	105	-
Vert.	167.993	QP	49.98	12.47	7.23	33.02	0.00	36.66	43.5	6.8	100	359	-
Vert.	202.162	QP	38.54	11.27	7.12	32.95	0.00	23.98	43.5	19.5	100	108	-
Vert.	399.836	QP	39.27	15.83	7.67	32.44	0.00	30.33	46.0	15.6	100	176	-
Vert.	499.992	QP	28.74	17.89	7.92	32.17	0.00	22.38	46.0	23.6	100	287	-
Vert.	699.991	QP	26.44	19.85	8.33	31.53	0.00	23.09	46.0	22.9	100	99	-
Vert.	2303.553	PK	50.63	28.19	14.41	41.58	2.19	53.84	73.9	20.0	155	44	-
Vert.	2483.500	PK	54.63	27.89	14.60	41.64	2.19	57.67	73.9	16.2	150	2	-
Vert.	2614.311	PK	50.78	27.94	14.72	41.66	2.19	53.97	73.9	19.9	166	31	-
Vert.	2880.015	PK	49.67	28.48	6.68	41.72	2.19	45.30	73.9	28.6	130	215	-
Vert.	4924.000	PK	54.80	31.61	7.12	42.89	2.19	52.83	73.9	21.0	169	217	-
Vert.	7386.000	PK	49.94	37.36	8.54	43.46	2.19	54.57	73.9	19.3	150	0	-
Vert.	9848.000	PK	49.74	39.06	9.80	42.94	2.19	57.85	73.9	16.0	150	0	-
Vert.	2303.553	AV	39.34	28.19	14.41	41.58	2.19	42.55	53.9	11.3	155	44	-
Vert.	2483.500	AV	41.84	27.89	14.60	41.64	2.19	44.88	53.9	9.0	150	2	-
Vert.	2614.311	AV	39.76	27.94	14.72	41.66	2.19	42.95	53.9	10.9	166	31	-
Vert.	2880.015	AV	43.26	28.48	6.68	41.72	2.19	38.89	53.9	15.0	130	215	-
Vert.	4924.000	AV	42.33	31.61	7.12	42.89	2.19	40.36	53.9	13.5	169	217	-
Vert.	7386.000	AV	38.87	37.36	8.54	43.46	2.19	43.50	53.9	10.4	150	0	Floor noise
Vert.	9848.000	AV	38.56	39.06	9.80	42.94	2.19	46.67	53.9	7.2	150	0	Floor noise

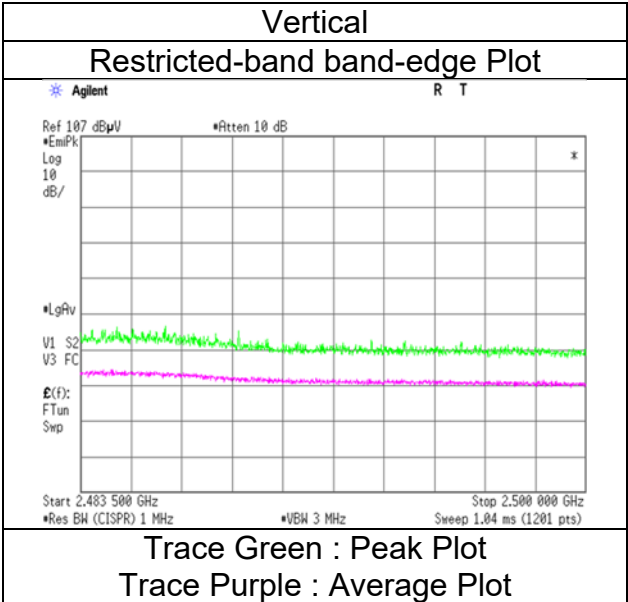
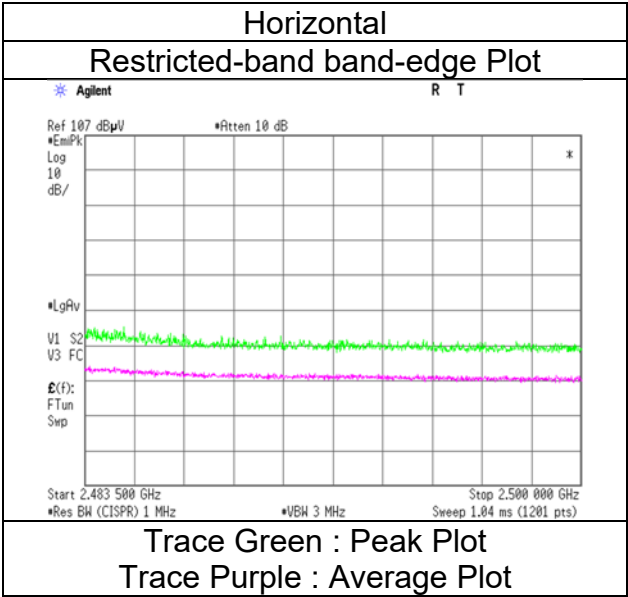
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	September 1, 2023
Temperature / Humidity	23 deg.C, 53 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20(OFDM)(CDD), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 3 WAC 2 WAC 1
Date September 1, 2023 September 1, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 53 %RH 25 deg.C, 55 %RH 26 deg.C, 45 %RH
Engineer Takahiro Suzuki Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDM)(SDM), 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

(* 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.	2261.702	PK	51.04	28.23	14.36	41.57	2.19	54.25	73.9	19.6	145	59	-
Hori.	2390.000	PK	60.20	27.98	14.49	41.61	2.19	63.25	73.9	10.6	123	19	-
Hori.	2566.589	PK	49.62	27.91	14.67	41.65	2.19	52.74	73.9	21.1	144	62	-
Hori.	2880.013	PK	52.35	28.48	6.68	41.72	2.19	47.98	73.9	25.9	166	179	-
Hori.	4824.000	PK	52.61	31.41	7.06	42.87	2.19	50.40	73.9	23.5	156	34	-
Hori.	7236.000	PK	50.05	37.15	8.48	43.36	2.19	54.51	73.9	19.3	150	0	-
Hori.	9648.000	PK	49.79	38.72	9.70	43.09	2.19	57.31	73.9	16.5	150	0	-
Hori.	2261.702	AV	39.94	28.23	14.36	41.57	2.19	43.15	53.9	10.7	145	59	-
Hori.	2390.000	AV	45.86	27.98	14.49	41.61	2.19	48.91	53.9	4.9	123	19	-
Hori.	2566.589	AV	40.75	27.91	14.67	41.65	2.19	43.87	53.9	10.0	144	62	-
Hori.	2880.013	AV	47.86	28.48	6.68	41.72	2.19	43.49	53.9	10.4	166	179	-
Hori.	4824.000	AV	40.63	31.41	7.06	42.87	2.19	38.42	53.9	15.4	156	34	-
Hori.	7236.000	AV	40.00	37.15	8.48	43.36	2.19	44.46	53.9	9.4	150	0	Floor noise
Hori.	9648.000	AV	39.87	38.72	9.70	43.09	2.19	47.39	53.9	6.5	150	0	Floor noise
Vert.	2264.156	PK	51.74	28.23	14.37	41.57	2.19	54.96	73.9	18.9	140	138	-
Vert.	2390.000	PK	59.25	27.98	14.49	41.61	2.19	62.30	73.9	11.6	118	12	-
Vert.	2568.314	PK	52.19	27.91	14.68	41.65	2.19	55.32	73.9	18.5	170	55	-
Vert.	2879.550	PK	52.18	28.48	6.68	41.72	2.19	47.81	73.9	26.0	256	109	-
Vert.	4824.000	PK	54.13	31.41	7.06	42.87	2.19	51.92	73.9	21.9	127	191	-
Vert.	7236.000	PK	49.75	37.15	8.48	43.36	2.19	54.21	73.9	19.6	150	0	-
Vert.	9648.000	PK	49.48	38.72	9.70	43.09	2.19	57.00	73.9	16.9	150	0	-
Vert.	2264.156	AV	41.34	28.23	14.37	41.57	2.19	44.56	53.9	9.3	140	138	-
Vert.	2390.000	AV	45.36	27.98	14.49	41.61	2.19	48.41	53.9	5.4	118	12	-
Vert.	2568.314	AV	43.11	27.91	14.68	41.65	2.19	46.24	53.9	7.6	170	55	-
Vert.	2879.550	AV	43.22	28.48	6.68	41.72	2.19	38.85	53.9	15.0	256	109	-
Vert.	4824.000	AV	42.32	31.41	7.06	42.87	2.19	40.11	53.9	13.7	127	191	-
Vert.	7236.000	AV	39.53	37.15	8.48	43.36	2.19	43.99	53.9	9.9	150	0	Floor noise
Vert.	9648.000	AV	39.27	38.72	9.70	43.09	2.19	46.79	53.9	7.1	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

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.	2412.000	PK	96.75	27.95	14.52	41.61	2.19	99.80	-	-	Carrier
Hori.	2400.000	PK	64.21	27.97	14.50	41.61	2.19	67.26	79.8	12.5	-
Vert.	2412.000	PK	95.96	27.95	14.52	41.61	2.19	99.01	-	-	Carrier
Vert.	2400.000	PK	63.15	27.97	14.50	41.61	2.19	66.20	79.0	12.8	-

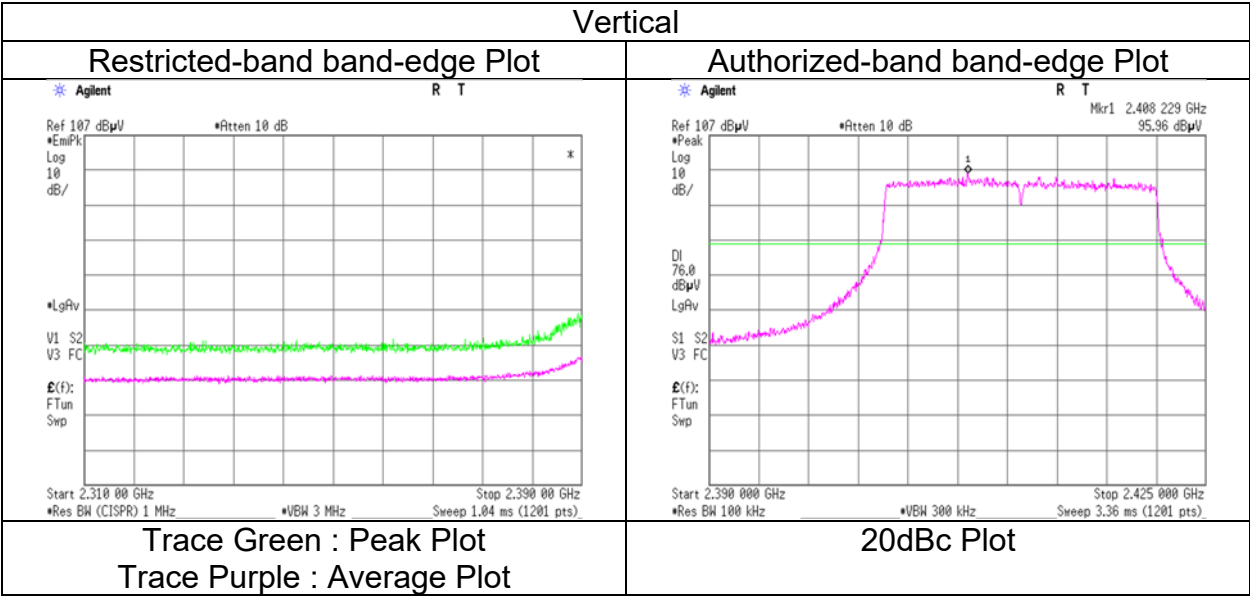
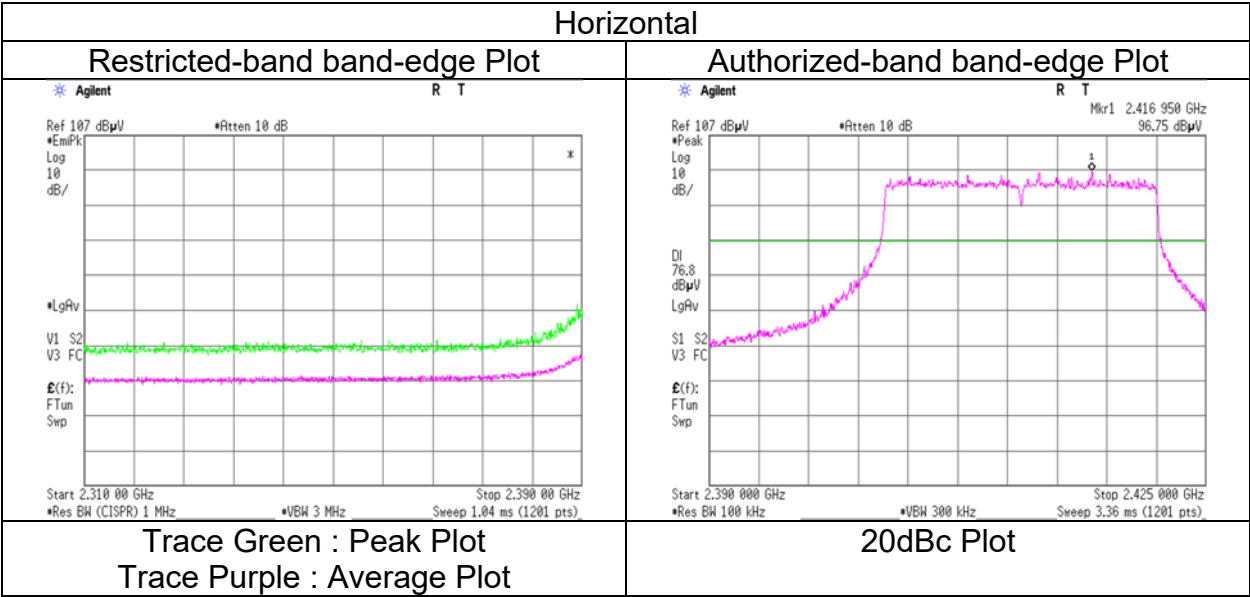
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	September 1, 2023
Temperature / Humidity	23 deg.C, 53 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20(OFDM)(SDM), 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 2	WAC 1
Date	August 29, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 55 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDM)(SDM), 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

(* 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.	2281.911	PK	49.68	28.22	14.39	41.57	2.19	52.91	73.9	20.9	136	29	-
Hori.	2590.545	PK	50.83	27.92	14.69	41.66	2.19	53.97	73.9	19.9	145	44	-
Hori.	2897.125	PK	52.11	28.50	6.60	41.72	2.19	47.68	73.9	26.2	119	156	-
Hori.	4874.000	PK	52.68	31.50	7.09	42.88	2.19	50.58	73.9	23.3	151	34	-
Hori.	7311.000	PK	49.58	37.24	8.51	43.41	2.19	54.11	73.9	19.7	150	0	-
Hori.	9748.000	PK	49.45	39.00	9.74	43.02	2.19	57.36	73.9	16.5	150	0	-
Hori.	2281.911	AV	39.63	28.22	14.39	41.57	2.19	42.86	53.9	11.0	136	29	-
Hori.	2590.545	AV	41.00	27.92	14.69	41.66	2.19	44.14	53.9	9.7	145	44	-
Hori.	2897.125	AV	42.23	28.50	6.60	41.72	2.19	37.80	53.9	16.1	119	156	-
Hori.	4874.000	AV	40.47	31.50	7.09	42.88	2.19	38.37	53.9	15.5	151	34	-
Hori.	7311.000	AV	38.87	37.24	8.51	43.41	2.19	43.40	53.9	10.5	150	0	Floor noise
Hori.	9748.000	AV	38.77	39.00	9.74	43.02	2.19	46.68	53.9	7.2	150	0	Floor noise
Vert.	2282.484	PK	51.54	28.22	14.39	41.57	2.19	54.77	73.9	19.1	138	40	-
Vert.	2590.266	PK	51.88	27.92	14.69	41.66	2.19	55.02	73.9	18.8	132	217	-
Vert.	2880.012	PK	50.02	28.48	6.68	41.72	2.19	45.65	73.9	28.2	123	198	-
Vert.	4874.000	PK	54.07	31.50	7.09	42.88	2.19	51.97	73.9	21.9	125	188	-
Vert.	7311.000	PK	49.63	37.24	8.51	43.41	2.19	54.16	73.9	19.7	150	0	-
Vert.	9748.000	PK	49.25	39.00	9.74	43.02	2.19	57.16	73.9	16.7	150	0	-
Vert.	2282.484	AV	41.18	28.22	14.39	41.57	2.19	44.41	53.9	9.4	138	40	-
Vert.	2590.266	AV	42.07	27.92	14.69	41.66	2.19	45.21	53.9	8.6	132	217	-
Vert.	2880.012	AV	41.76	28.48	6.68	41.72	2.19	37.39	53.9	16.5	123	198	-
Vert.	4874.000	AV	41.65	31.50	7.09	42.88	2.19	39.55	53.9	14.3	125	188	-
Vert.	7311.000	AV	38.79	37.24	8.51	43.41	2.19	43.32	53.9	10.5	150	0	Floor noise
Vert.	9748.000	AV	38.42	39.00	9.74	43.02	2.19	46.33	53.9	7.5	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	SAC 3	WAC 2	WAC 1
Date	August 29, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 55 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Takahiro Suzuki	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDM)(SDM), 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

(* 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.	2308.146	PK	50.84	28.18	14.41	41.58	2.19	54.04	73.9	19.8	158	22	-
Hori.	2483.500	PK	54.46	27.89	14.60	41.64	2.19	57.50	73.9	16.4	149	14	-
Hori.	2611.101	PK	51.53	27.94	14.71	41.66	2.19	54.71	73.9	19.1	178	52	-
Hori.	2880.012	PK	48.74	28.48	6.68	41.72	2.19	44.37	73.9	29.5	126	115	-
Hori.	4924.000	PK	52.09	31.61	7.12	42.89	2.19	50.12	73.9	23.7	124	40	-
Hori.	7386.000	PK	49.46	37.36	8.54	43.46	2.19	54.09	73.9	19.8	150	0	-
Hori.	9848.000	PK	49.38	39.06	9.80	42.94	2.19	57.49	73.9	16.4	150	0	-
Hori.	2308.146	AV	39.53	28.18	14.41	41.58	2.19	42.73	53.9	11.1	158	22	-
Hori.	2483.500	AV	42.88	27.89	14.60	41.64	2.19	45.92	53.9	7.9	149	14	-
Hori.	2611.101	AV	40.04	27.94	14.71	41.66	2.19	43.22	53.9	10.6	178	52	-
Hori.	2880.012	AV	42.12	28.48	6.68	41.72	2.19	37.75	53.9	16.1	126	115	-
Hori.	4924.000	AV	39.84	31.61	7.12	42.89	2.19	37.87	53.9	16.0	124	40	-
Hori.	7386.000	AV	38.25	37.36	8.54	43.46	2.19	42.88	53.9	11.0	150	0	Floor noise
Hori.	9848.000	AV	38.14	39.06	9.80	42.94	2.19	46.25	53.9	7.6	150	0	Floor noise
Vert.	2311.875	PK	51.45	28.17	14.41	41.58	2.19	54.64	73.9	19.2	127	220	-
Vert.	2483.500	PK	54.52	27.89	14.60	41.64	2.19	57.56	73.9	16.3	218	20	-
Vert.	2611.829	PK	50.22	27.94	14.71	41.66	2.19	53.40	73.9	20.5	139	114	-
Vert.	2880.012	PK	48.76	28.48	6.68	41.72	2.19	44.39	73.9	29.5	134	67	-
Vert.	4924.000	PK	53.49	31.61	7.12	42.89	2.19	51.52	73.9	22.3	135	191	-
Vert.	7386.000	PK	49.62	37.36	8.54	43.46	2.19	54.25	73.9	19.6	150	0	-
Vert.	9848.000	PK	49.55	39.06	9.80	42.94	2.19	57.66	73.9	16.2	150	0	-
Vert.	2311.875	AV	39.13	28.17	14.41	41.58	2.19	42.32	53.9	11.5	127	220	-
Vert.	2483.500	AV	43.31	27.89	14.60	41.64	2.19	46.35	53.9	7.5	218	20	-
Vert.	2611.829	AV	39.83	27.94	14.71	41.66	2.19	43.01	53.9	10.8	139	114	-
Vert.	2880.012	AV	42.35	28.48	6.68	41.72	2.19	37.98	53.9	15.9	134	67	-
Vert.	4924.000	AV	41.29	31.61	7.12	42.89	2.19	39.32	53.9	14.5	135	191	-
Vert.	7386.000	AV	38.61	37.36	8.54	43.46	2.19	43.24	53.9	10.6	150	0	Floor noise
Vert.	9848.000	AV	38.32	39.06	9.80	42.94	2.19	46.43	53.9	7.4	150	0	Floor noise

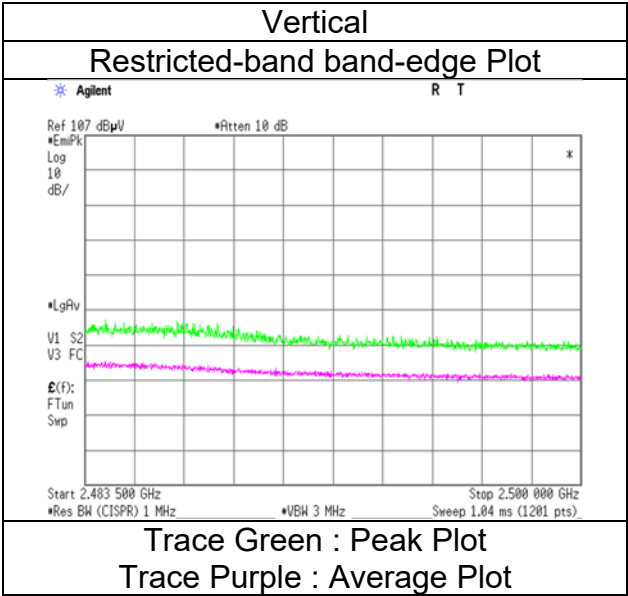
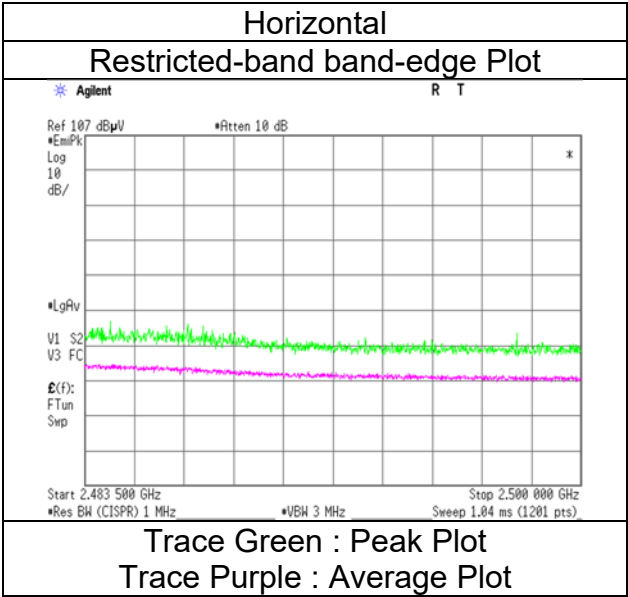
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	August 28, 2023
Temperature / Humidity	22 deg.C, 55 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20(OFDM)(SDM), 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 13, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 51 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Kouki Yamada Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

RU Index 0

(* 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.	2249.969	PK	57.60	28.30	12.49	46.16	2.19	54.42	73.9	19.4	149	11	-
Hori.	2371.133	PK	56.89	27.82	12.57	46.09	2.19	53.38	73.9	20.5	146	61	-
Hori.	2390.000	PK	55.10	27.77	12.59	46.08	2.19	51.57	73.9	22.3	146	61	-
Hori.	2557.158	PK	58.52	28.39	4.56	45.55	2.19	48.11	73.9	25.7	152	173	-
Hori.	2880.025	PK	56.99	28.39	4.56	45.55	2.19	46.58	73.9	27.3	140	185	-
Hori.	4824.000	PK	61.71	31.56	4.34	45.36	2.19	54.44	73.9	19.4	211	348	-
Hori.	7236.000	PK	50.93	36.21	5.30	44.53	2.19	50.10	73.9	23.8	150	0	-
Hori.	9648.000	PK	49.09	38.75	6.12	42.86	2.19	53.29	73.9	20.6	150	0	-
Hori.	2249.969	AV	48.40	28.30	12.49	46.16	2.19	45.22	53.9	8.6	149	11	-
Hori.	2371.133	AV	44.81	27.82	12.57	46.09	2.19	41.30	53.9	12.6	146	61	-
Hori.	2390.000	AV	44.64	27.77	12.59	46.08	2.19	41.11	53.9	12.7	146	61	-
Hori.	2557.158	AV	48.29	28.39	4.56	45.55	2.19	37.88	53.9	16.0	152	173	-
Hori.	2880.025	AV	50.25	28.39	4.56	45.55	2.19	39.84	53.9	14.0	140	185	-
Hori.	4824.000	AV	49.58	31.56	4.34	45.36	2.19	42.31	53.9	11.5	211	348	-
Hori.	7236.000	AV	41.25	36.21	5.30	44.53	2.19	40.42	53.9	13.4	150	0	Floor noise
Hori.	9648.000	AV	39.77	38.75	6.12	42.86	2.19	43.97	53.9	9.9	150	0	Floor noise
Vert.	2250.136	PK	56.69	28.30	12.51	46.16	2.19	53.53	73.9	20.3	144	226	-
Vert.	2390.000	PK	54.25	27.77	12.59	46.08	2.19	50.72	73.9	23.1	150	50	-
Vert.	2557.304	PK	60.82	27.87	12.68	45.91	2.19	57.65	73.9	16.2	145	48	-
Vert.	2879.963	PK	56.32	28.39	4.56	45.55	2.19	45.91	73.9	27.9	112	175	-
Vert.	4824.000	PK	62.88	31.56	4.34	45.36	2.19	55.61	73.9	18.2	141	245	-
Vert.	7236.000	PK	50.57	36.21	5.30	44.53	2.19	49.74	73.9	24.1	150	0	-
Vert.	9648.000	PK	49.62	38.75	6.12	42.86	2.19	53.82	73.9	20.0	150	0	-
Vert.	2250.136	AV	47.38	28.30	12.51	46.16	2.19	44.22	53.9	9.6	144	226	-
Vert.	2390.000	AV	44.93	27.77	12.59	46.08	2.19	41.40	53.9	12.5	150	50	-
Vert.	2557.304	AV	50.91	27.87	12.68	45.91	2.19	47.74	53.9	6.1	145	48	-
Vert.	2879.963	AV	50.93	28.39	4.56	45.55	2.19	40.52	53.9	13.3	112	175	-
Vert.	4824.000	AV	49.69	31.56	4.34	45.36	2.19	42.42	53.9	11.4	141	245	-
Vert.	7236.000	AV	41.19	36.21	5.30	44.53	2.19	40.36	53.9	13.5	150	0	Floor noise
Vert.	9648.000	AV	40.17	38.75	6.12	42.86	2.19	44.37	53.9	9.5	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 (3.86 m / 3.0 m) = 2.19 dB

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

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.	2412.000	PK	106.00	27.74	12.60	46.06	2.19	102.47	-	-	Carrier
Hori.	2400.000	PK	72.47	27.76	12.59	46.07	2.19	68.94	82.4	13.4	-
Vert.	2412.000	PK	104.95	27.74	12.60	46.06	2.19	101.42	-	-	Carrier
Vert.	2400.000	PK	71.31	27.76	12.59	46.07	2.19	67.78	81.4	13.6	-

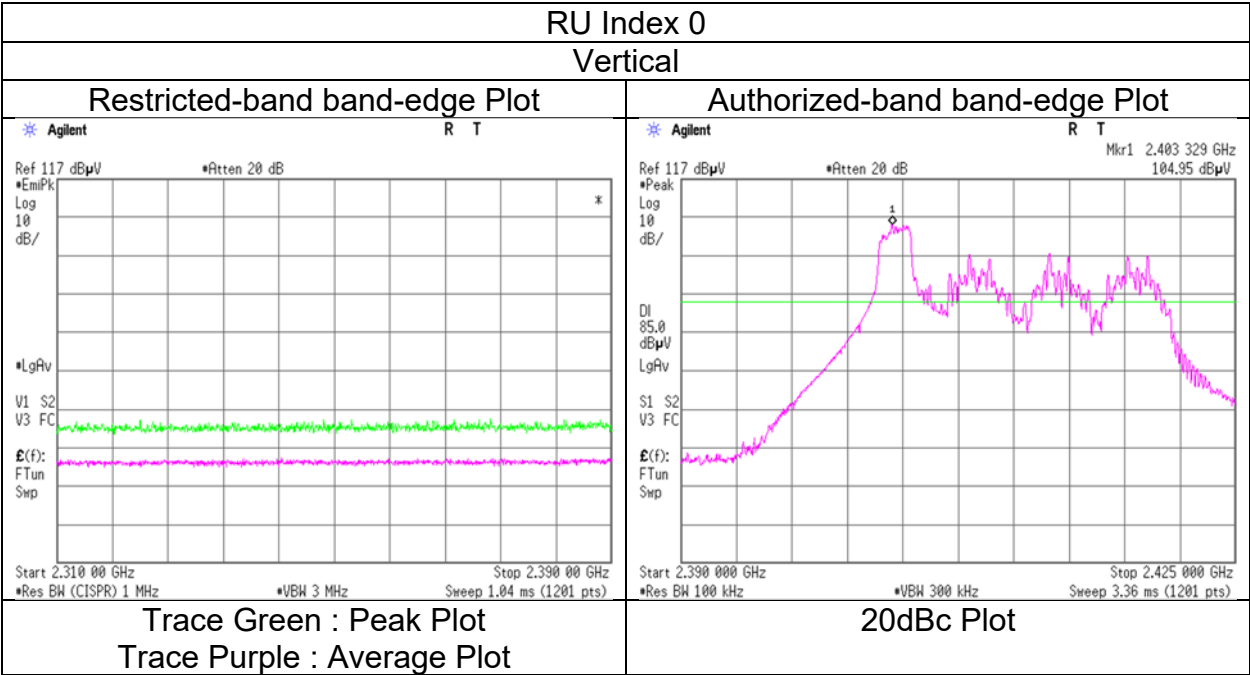
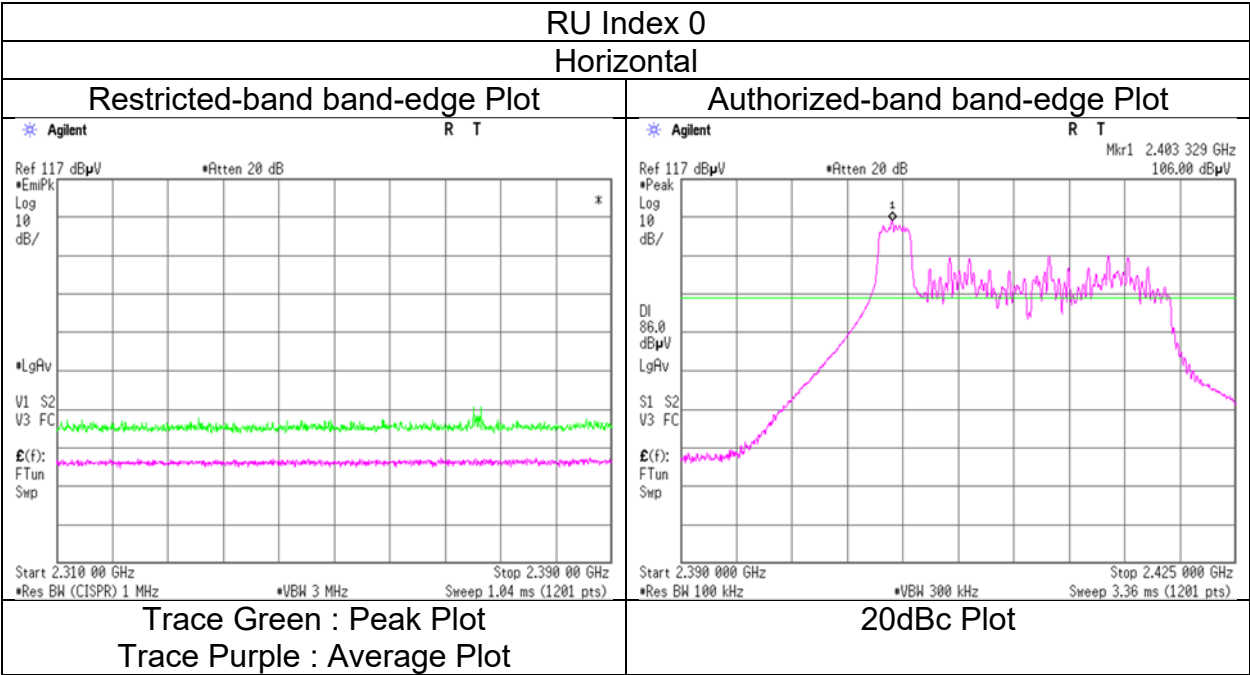
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 13, 2023
Temperature / Humidity	23 deg.C, 51 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 13, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 51 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Kouki Yamada Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2437 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

RU Index 4

(* 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.	2282.649	PK	58.17	28.17	12.52	46.14	2.19	54.91	73.9	18.9	239	169	-
Hori.	2591.274	PK	57.35	27.94	12.70	45.88	2.19	54.30	73.9	19.6	353	64	-
Hori.	2879.967	PK	55.89	28.39	4.56	45.55	2.19	45.48	73.9	28.4	139	354	-
Hori.	4874.000	PK	58.19	31.61	4.37	45.35	2.19	51.01	73.9	22.8	198	42	-
Hori.	7311.000	PK	51.75	36.26	5.31	44.34	2.19	51.17	73.9	22.7	150	0	-
Hori.	9748.000	PK	48.53	39.00	6.15	42.83	2.19	53.04	73.9	20.8	150	0	-
Hori.	2282.649	AV	47.98	28.17	12.52	46.14	2.19	44.72	53.9	9.1	239	169	-
Hori.	2591.274	AV	46.33	27.94	12.70	45.88	2.19	43.28	53.9	10.6	353	64	-
Hori.	2879.967	AV	49.17	28.39	4.56	45.55	2.19	38.76	53.9	15.1	139	354	-
Hori.	4874.000	AV	46.97	31.61	4.37	45.35	2.19	39.79	53.9	14.1	198	42	-
Hori.	7311.000	AV	41.39	36.26	5.31	44.34	2.19	40.81	53.9	13.0	150	0	Floor noise
Hori.	9748.000	AV	39.28	39.00	6.15	42.83	2.19	43.79	53.9	10.1	150	0	Floor noise
Vert.	2282.410	PK	56.48	28.17	12.52	46.14	2.19	53.22	73.9	20.6	175	15	-
Vert.	2591.208	PK	58.83	27.94	12.70	45.88	2.19	55.78	73.9	18.1	151	49	-
Vert.	2879.969	PK	56.88	28.39	4.56	45.55	2.19	46.47	73.9	27.4	185	175	-
Vert.	4874.000	PK	57.11	31.61	4.37	45.35	2.19	49.93	73.9	23.9	188	358	-
Vert.	7311.000	PK	50.86	36.26	5.31	44.34	2.19	50.28	73.9	23.6	150	0	-
Vert.	9748.000	PK	49.44	39.00	6.15	42.83	2.19	53.95	73.9	19.9	150	0	-
Vert.	2282.410	AV	48.39	28.17	12.52	46.14	2.19	45.13	53.9	8.7	175	15	-
Vert.	2591.208	AV	48.78	27.94	12.70	45.88	2.19	45.73	53.9	8.1	151	49	-
Vert.	2879.969	AV	50.15	28.39	4.56	45.55	2.19	39.74	53.9	14.1	185	175	-
Vert.	4874.000	AV	47.05	31.61	4.37	45.35	2.19	39.87	53.9	14.0	188	358	-
Vert.	7311.000	AV	41.48	36.26	5.31	44.34	2.19	40.90	53.9	13.0	150	0	Floor noise
Vert.	9748.000	AV	39.31	39.00	6.15	42.83	2.19	43.82	53.9	10.0	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 13, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 23 deg.C, 51 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Kouki Yamada Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

RU Index 8

(* 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.	2316.985	PK	57.52	28.01	12.54	46.12	2.19	54.14	73.9	19.7	147	158	-
Hori.	2483.500	PK	54.85	27.75	12.64	45.99	2.19	51.44	73.9	22.4	114	204	-
Hori.	2624.026	PK	57.01	28.03	12.72	45.84	2.19	54.11	73.9	19.7	156	201	-
Hori.	2880.001	PK	55.33	28.39	4.56	45.55	2.19	44.92	73.9	28.9	193	352	-
Hori.	4924.000	PK	59.18	31.65	4.37	45.34	2.19	52.05	73.9	21.8	202	28	-
Hori.	7386.000	PK	50.95	36.38	5.34	44.16	2.19	50.70	73.9	23.2	150	0	-
Hori.	9848.000	PK	49.58	38.99	6.20	42.73	2.19	54.23	73.9	19.6	150	0	-
Hori.	2316.985	AV	48.80	28.01	12.54	46.12	2.19	45.42	53.9	8.4	147	158	-
Hori.	2483.500	AV	44.86	27.75	12.64	45.99	2.19	41.45	53.9	12.4	114	204	-
Hori.	2624.026	AV	47.44	28.03	12.72	45.84	2.19	44.54	53.9	9.3	156	201	-
Hori.	2880.001	AV	49.26	28.39	4.56	45.55	2.19	38.85	53.9	15.0	193	352	-
Hori.	4924.000	AV	48.23	31.65	4.37	45.34	2.19	41.10	53.9	12.8	202	28	-
Hori.	7386.000	AV	41.03	36.38	5.34	44.16	2.19	40.78	53.9	13.1	150	0	Floor noise
Hori.	9848.000	AV	39.55	38.99	6.20	42.73	2.19	44.20	53.9	9.7	150	0	Floor noise
Vert.	2316.897	PK	59.53	28.01	12.54	46.12	2.19	56.15	73.9	17.7	155	14	-
Vert.	2483.500	PK	54.23	27.75	12.64	45.99	2.19	50.82	73.9	23.0	180	164	-
Vert.	2624.132	PK	58.51	28.03	12.72	45.84	2.19	55.61	73.9	18.2	152	165	-
Vert.	2880.004	PK	56.81	28.39	4.56	45.55	2.19	46.40	73.9	27.5	112	170	-
Vert.	4924.000	PK	60.44	31.65	4.37	45.34	2.19	53.31	73.9	20.5	210	358	-
Vert.	7386.000	PK	51.41	36.38	5.34	44.16	2.19	51.16	73.9	22.7	150	0	-
Vert.	9848.000	PK	48.92	38.99	6.20	42.73	2.19	53.57	73.9	20.3	150	0	-
Vert.	2316.897	AV	49.90	28.01	12.54	46.12	2.19	46.52	53.9	7.3	155	14	-
Vert.	2483.500	AV	44.61	27.75	12.64	45.99	2.19	41.20	53.9	12.7	180	164	-
Vert.	2624.132	AV	48.78	28.03	12.72	45.84	2.19	45.88	53.9	8.0	152	165	-
Vert.	2880.004	AV	50.23	28.39	4.56	45.55	2.19	39.82	53.9	14.0	112	170	-
Vert.	4924.000	AV	49.74	31.65	4.37	45.34	2.19	42.61	53.9	11.2	210	358	-
Vert.	7386.000	AV	41.00	36.38	5.34	44.16	2.19	40.75	53.9	13.1	150	0	Floor noise
Vert.	9848.000	AV	39.55	38.99	6.20	42.73	2.19	44.20	53.9	9.7	150	0	Floor noise

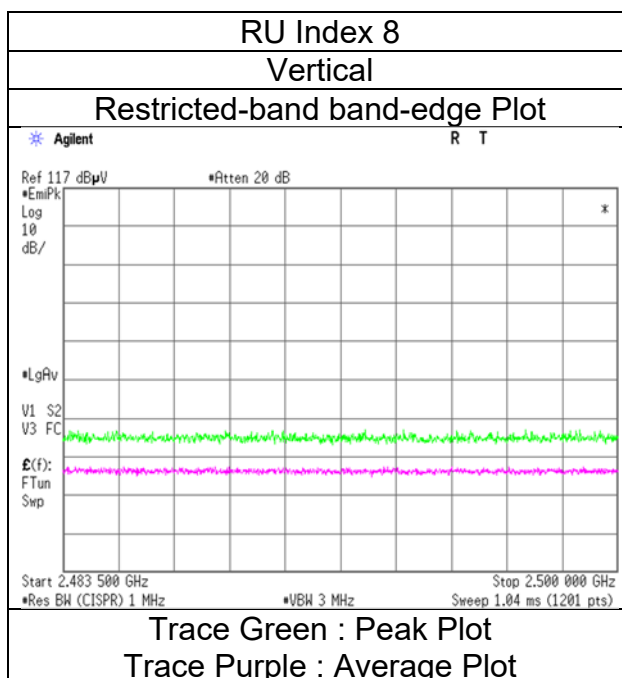
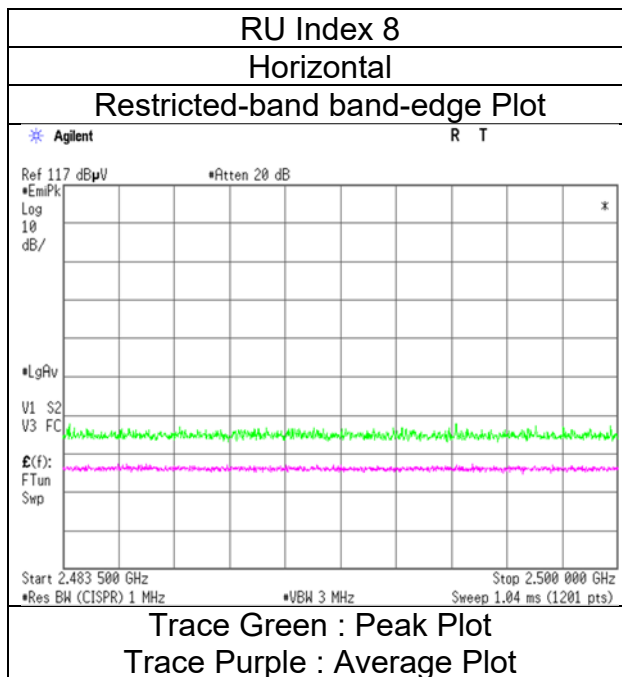
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 13, 2023
Temperature / Humidity	23 deg.C, 51 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDMA)(CDD) 26-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 21, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 24 deg.C, 52 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Kenichi Adachi Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

RU Index 37

(* 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.	2250.090	PK	57.05	28.30	12.51	46.16	2.19	53.89	73.9	20.0	157	10	-
Hori.	2390.000	PK	55.87	27.77	12.59	46.08	2.19	52.34	73.9	21.5	218	56	-
Hori.	2558.045	PK	56.94	27.88	12.68	45.91	2.19	53.78	73.9	20.1	155	49	-
Hori.	2879.954	PK	57.65	28.39	4.56	45.55	2.19	47.24	73.9	26.6	263	148	-
Hori.	4824.000	PK	59.65	31.56	4.34	45.36	2.19	52.38	73.9	21.5	160	29	-
Hori.	7236.000	PK	51.47	36.21	5.30	44.53	2.19	50.64	73.9	23.2	150	0	-
Hori.	9648.000	PK	49.55	38.75	6.12	42.86	2.19	53.75	73.9	20.1	150	0	-
Hori.	7236.000	AV	41.54	36.21	5.30	44.53	2.19	40.71	53.9	13.1	150	0	Floor noise
Hori.	9648.000	AV	40.54	38.75	6.12	42.86	2.19	44.74	53.9	9.1	150	0	Floor noise
Vert.	2250.090	PK	57.76	28.30	12.51	46.16	2.19	54.60	73.9	19.3	251	139	-
Vert.	2390.000	PK	55.74	27.77	12.59	46.08	2.19	52.21	73.9	21.6	174	34	-
Vert.	2558.045	PK	58.98	27.88	12.68	45.91	2.19	55.82	73.9	18.0	157	25	-
Vert.	2879.954	PK	57.94	28.39	4.56	45.55	2.19	47.53	73.9	26.3	142	134	-
Vert.	4824.000	PK	61.51	31.56	4.34	45.36	2.19	54.24	73.9	19.6	106	358	-
Vert.	7236.000	PK	51.54	36.21	5.30	44.53	2.19	50.71	73.9	23.1	150	0	-
Vert.	9648.000	PK	49.63	38.75	6.12	42.86	2.19	53.83	73.9	20.0	150	0	-
Vert.	7236.000	AV	41.66	36.21	5.30	44.53	2.19	40.83	53.9	13.0	150	0	Floor noise
Vert.	9648.000	AV	40.62	38.75	6.12	42.86	2.19	44.82	53.9	9.0	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 : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2250.090	AV	49.19	28.30	12.51	46.16	0.21	2.19	46.24	53.9	7.6	-
Hori.	2390.000	AV	46.57	27.77	12.59	46.08	0.21	2.19	43.25	53.9	10.6	*1)
Hori.	2558.045	AV	48.94	27.88	12.68	45.91	0.21	2.19	45.99	53.9	7.9	-
Hori.	2879.954	AV	51.48	28.39	4.56	45.55	0.21	2.19	41.28	53.9	12.6	-
Hori.	4824.000	AV	49.55	31.56	4.34	45.36	0.21	2.19	42.49	53.9	11.4	-
Vert.	2250.090	AV	49.35	28.30	12.51	46.16	0.21	2.19	46.40	53.9	7.4	-
Vert.	2390.000	AV	46.62	27.77	12.59	46.08	0.21	2.19	43.30	53.9	10.6	*1)
Vert.	2558.045	AV	50.88	27.88	12.68	45.91	0.21	2.19	47.93	53.9	5.9	-
Vert.	2879.954	AV	51.92	28.39	4.56	45.55	0.21	2.19	41.72	53.9	12.1	-
Vert.	4824.000	AV	51.86	31.56	4.34	45.36	0.21	2.19	44.80	53.9	9.0	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	106.39	27.74	12.60	46.06	2.19	102.86	-	-	Carrier
Hori.	2400.000	PK	71.49	27.76	12.59	46.07	2.19	67.96	82.8	14.8	-
Vert.	2412.000	PK	107.27	27.74	12.60	46.06	2.19	103.74	-	-	Carrier
Vert.	2400.000	PK	72.86	27.76	12.59	46.07	2.19	69.33	83.7	14.3	-

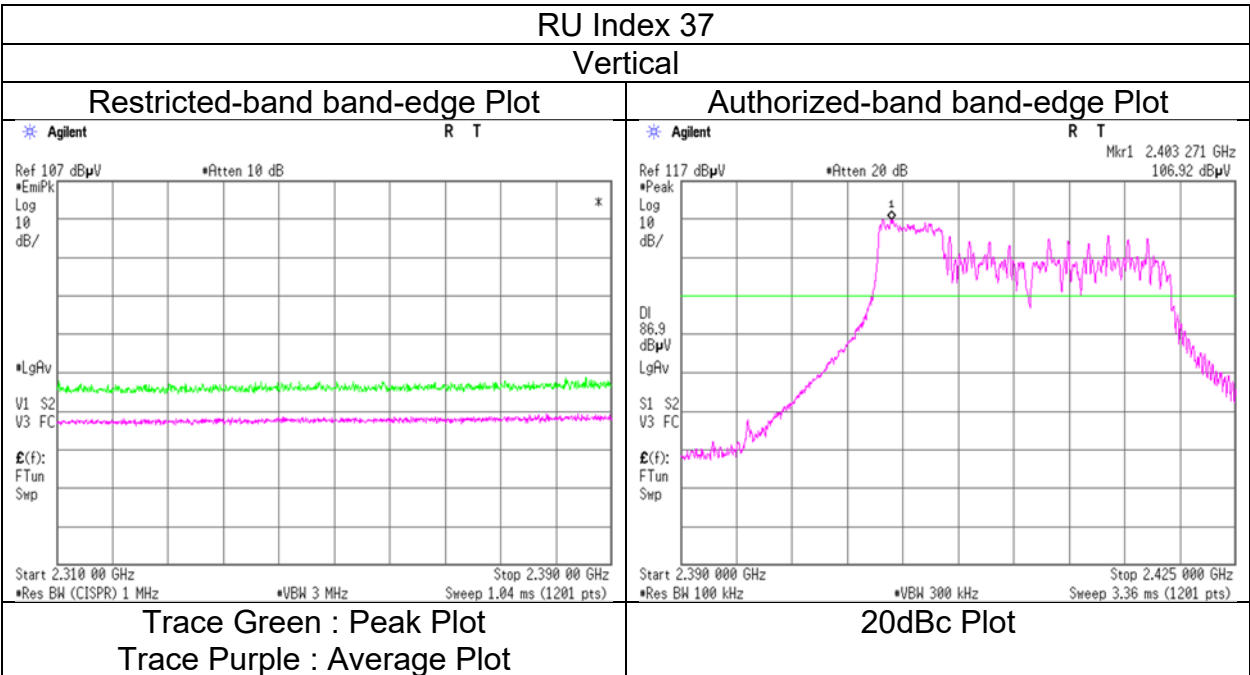
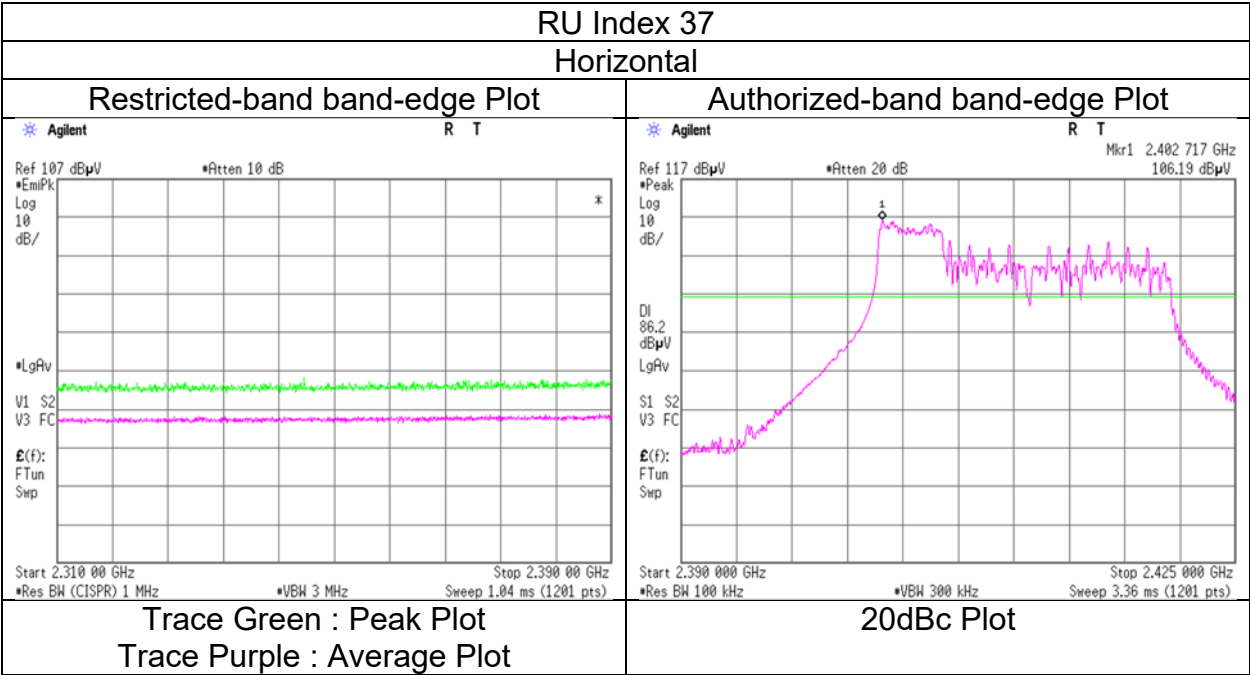
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 21, 2023
Temperature / Humidity	24 deg.C, 52 %RH
Engineer	Kenichi Adachi
Mode	Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 21, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	24 deg.C, 52 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Kenichi Adachi	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 38

(* 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.	2280.052	PK	56.44	28.18	12.52	46.14	2.19	53.19	73.9	20.7	156	12	-
Hori.	2587.302	PK	56.89	27.93	12.70	45.88	2.19	53.83	73.9	20.0	153	52	-
Hori.	2879.958	PK	57.44	28.39	4.56	45.55	2.19	47.03	73.9	26.8	266	145	-
Hori.	4874.000	PK	57.98	31.61	4.37	45.35	2.19	50.80	73.9	23.1	162	27	-
Hori.	7311.000	PK	49.98	36.26	5.31	44.34	2.19	49.40	73.9	24.5	150	0	-
Hori.	9748.000	PK	48.08	39.00	6.15	42.83	2.19	52.59	73.9	21.3	150	0	-
Hori.	7311.000	AV	41.02	36.26	5.31	44.34	2.19	40.44	53.9	13.4	150	0	Floor noise
Hori.	9748.000	AV	40.16	39.00	6.15	42.83	2.19	44.67	53.9	9.2	150	0	Floor noise
Vert.	2280.052	PK	56.89	28.18	12.52	46.14	2.19	53.64	73.9	20.2	253	137	-
Vert.	2587.302	PK	58.06	27.93	12.70	45.88	2.19	55.00	73.9	18.9	156	27	-
Vert.	2879.958	PK	57.86	28.39	4.56	45.55	2.19	47.45	73.9	26.4	143	132	-
Vert.	4874.000	PK	59.84	31.61	4.37	45.35	2.19	52.66	73.9	21.2	115	357	-
Vert.	7311.000	PK	50.02	36.26	5.31	44.34	2.19	49.44	73.9	24.4	150	0	-
Vert.	9748.000	PK	48.13	39.00	6.15	42.83	2.19	52.64	73.9	21.2	150	0	-
Vert.	7311.000	AV	41.33	36.26	5.31	44.34	2.19	40.75	53.9	13.1	150	0	Floor noise
Vert.	9748.000	AV	40.25	39.00	6.15	42.83	2.19	44.76	53.9	9.1	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2280.052	AV	48.56	28.18	12.52	46.14	0.21	2.19	45.52	53.9	8.3	-
Hori.	2587.302	AV	48.16	27.93	12.70	45.88	0.21	2.19	45.31	53.9	8.5	-
Hori.	2879.958	AV	51.36	28.39	4.56	45.55	0.21	2.19	41.16	53.9	12.7	-
Hori.	4874.000	AV	48.32	31.61	4.37	45.35	0.21	2.19	41.35	53.9	12.5	-
Vert.	2280.052	AV	48.78	28.18	12.52	46.14	0.21	2.19	45.74	53.9	8.1	-
Vert.	2587.302	AV	49.96	27.93	12.70	45.88	0.21	2.19	47.11	53.9	6.7	-
Vert.	2879.958	AV	51.88	28.39	4.56	45.55	0.21	2.19	41.68	53.9	12.2	-
Vert.	4874.000	AV	50.16	31.61	4.37	45.35	0.21	2.19	43.19	53.9	10.7	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 21, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	24 deg.C, 52 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Kenichi Adachi	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 40

(* 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.	2315.846	PK	56.87	28.02	12.54	46.12	2.19	53.50	73.9	20.4	154	16	-
Hori.	2483.500	PK	54.98	27.75	12.64	45.99	2.19	51.57	73.9	22.3	240	69	-
Hori.	2624.012	PK	56.68	28.03	12.72	45.84	2.19	53.78	73.9	20.1	154	73	-
Hori.	2879.956	PK	57.68	28.39	4.56	45.55	2.19	47.27	73.9	26.6	261	143	-
Hori.	4924.000	PK	57.09	31.65	4.37	45.34	2.19	49.96	73.9	23.9	161	30	-
Hori.	7386.000	PK	49.98	36.38	5.34	44.16	2.19	49.73	73.9	24.1	150	0	-
Hori.	9848.000	PK	47.85	38.99	6.20	42.73	2.19	52.50	73.9	21.4	150	0	-
Hori.	7386.000	AV	41.04	36.38	5.34	44.16	2.19	40.79	53.9	13.1	150	0	Floor noise
Hori.	9848.000	AV	39.85	38.99	6.20	42.73	2.19	44.50	53.9	9.4	150	0	Floor noise
Vert.	2315.846	PK	57.02	28.02	12.54	46.12	2.19	53.65	73.9	20.2	257	135	-
Vert.	2483.500	PK	55.85	27.75	12.64	45.99	2.19	52.44	73.9	21.4	169	78	-
Vert.	2624.012	PK	57.87	28.03	12.72	45.84	2.19	54.97	73.9	18.9	157	31	-
Vert.	2879.956	PK	57.84	28.39	4.56	45.55	2.19	47.43	73.9	26.4	144	133	-
Vert.	4924.000	PK	59.76	31.65	4.37	45.34	2.19	52.63	73.9	21.2	113	357	-
Vert.	7386.000	PK	50.10	36.38	5.34	44.16	2.19	49.85	73.9	24.0	150	0	-
Vert.	9848.000	PK	47.92	38.99	6.20	42.73	2.19	52.57	73.9	21.3	150	0	-
Vert.	7386.000	AV	41.12	36.38	5.34	44.16	2.19	40.87	53.9	13.0	150	0	Floor noise
Vert.	9848.000	AV	39.93	38.99	6.20	42.73	2.19	44.58	53.9	9.3	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2315.846	AV	48.44	28.02	12.54	46.12	0.21	2.19	45.28	53.9	8.6	-
Hori.	2483.500	AV	45.64	27.75	12.64	45.99	0.21	2.19	42.44	53.9	11.4	*1)
Hori.	2624.012	AV	48.08	28.03	12.72	45.84	0.21	2.19	45.39	53.9	8.5	-
Hori.	2879.956	AV	51.52	28.39	4.56	45.55	0.21	2.19	41.32	53.9	12.5	-
Hori.	4924.000	AV	47.21	31.65	4.37	45.34	0.21	2.19	40.29	53.9	13.6	-
Vert.	2315.846	AV	48.68	28.02	12.54	46.12	0.21	2.19	45.52	53.9	8.3	-
Vert.	2483.500	AV	46.31	27.75	12.64	45.99	0.21	2.19	43.11	53.9	10.7	*1)
Vert.	2624.012	AV	49.78	28.03	12.72	45.84	0.21	2.19	47.09	53.9	6.8	-
Vert.	2879.956	AV	51.84	28.39	4.56	45.55	0.21	2.19	41.64	53.9	12.2	-
Vert.	4924.000	AV	49.66	31.65	4.37	45.34	0.21	2.19	42.74	53.9	11.1	-

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

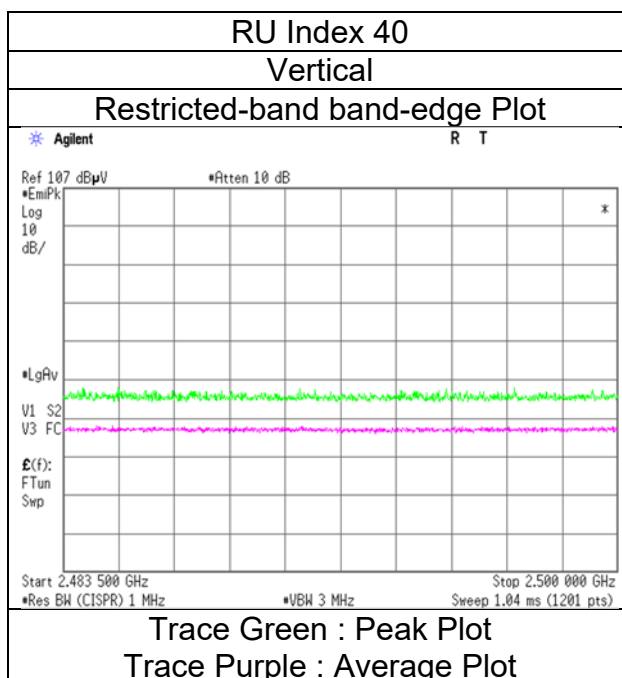
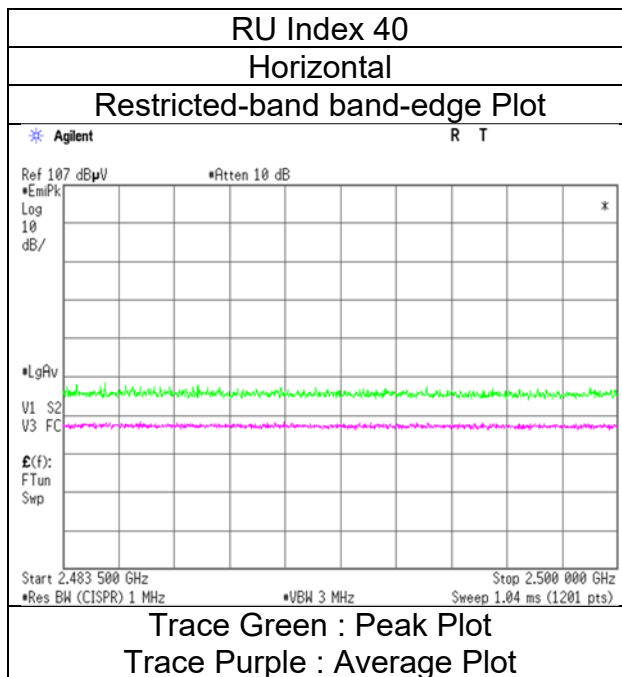
10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 20, 2023
Temperature / Humidity	23 deg.C, 60 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 52-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 2 WAC 1 WAC 1
Date September 5, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 24 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Hiromasa sato Makoto Hosaka Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(CDD) 106-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

RU Index 53

(* 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.	2251.225	PK	48.37	28.36	14.06	38.82	2.19	54.16	73.9	19.7	106	23	-
Hori.	2390.000	PK	46.61	28.16	14.18	38.75	2.19	52.39	73.9	21.5	145	22	-
Hori.	2560.930	PK	48.18	28.03	14.34	38.65	2.19	54.09	73.9	19.8	154	23	-
Hori.	2880.133	PK	46.88	28.67	6.56	38.42	2.19	45.88	73.9	28.0	108	359	-
Hori.	4824.000	PK	49.15	31.51	7.01	38.58	2.19	51.28	73.9	22.6	124	36	-
Hori.	7236.000	PK	44.89	37.00	8.38	39.19	2.19	53.27	73.9	20.6	150	0	-
Hori.	9648.000	PK	45.12	38.56	9.59	39.73	2.19	55.73	73.9	18.1	150	0	-
Hori.	7236.000	AV	35.98	37.00	8.38	39.19	2.19	44.36	53.9	9.5	150	0	Floor noise
Hori.	9648.000	AV	36.73	38.56	9.59	39.73	2.19	47.34	53.9	6.5	150	0	Floor noise
Vert.	2251.225	PK	49.04	28.36	14.06	38.82	2.19	54.83	73.9	19.0	140	150	-
Vert.	2390.000	PK	52.23	28.16	14.18	38.75	2.19	58.01	73.9	15.8	117	147	-
Vert.	2560.930	PK	49.73	28.03	14.34	38.65	2.19	55.64	73.9	18.2	129	30	-
Vert.	2880.133	PK	47.54	28.67	6.56	38.42	2.19	46.54	73.9	27.3	206	172	-
Vert.	4824.000	PK	49.53	31.51	7.01	38.58	2.19	51.66	73.9	22.2	115	359	-
Vert.	7236.000	PK	44.10	37.00	8.38	39.19	2.19	52.48	73.9	21.4	150	0	-
Vert.	9648.000	PK	44.82	38.56	9.59	39.73	2.19	55.43	73.9	18.4	150	0	-
Vert.	7236.000	AV	36.00	37.00	8.38	39.19	2.19	44.38	53.9	9.5	150	0	Floor noise
Vert.	9648.000	AV	36.95	38.56	9.59	39.73	2.19	47.56	53.9	6.3	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2251.225	AV	38.80	28.36	14.06	38.82	0.40	2.19	44.99	53.9	8.9	-
Hori.	2390.000	AV	36.63	28.16	14.18	38.75	0.40	2.19	42.81	53.9	11.0	*1)
Hori.	2560.930	AV	38.65	28.03	14.34	38.65	0.40	2.19	44.96	53.9	8.9	-
Hori.	2880.133	AV	39.18	28.67	6.56	38.42	0.40	2.19	38.58	53.9	15.3	-
Hori.	4824.000	AV	39.39	31.51	7.01	38.58	0.40	2.19	41.92	53.9	11.9	-
Vert.	2251.225	AV	39.27	28.36	14.06	38.82	0.40	2.19	45.46	53.9	8.4	-
Vert.	2390.000	AV	37.73	28.16	14.18	38.75	0.40	2.19	43.91	53.9	9.9	*1)
Vert.	2560.930	AV	40.65	28.03	14.34	38.65	0.40	2.19	46.96	53.9	6.9	-
Vert.	2880.133	AV	41.10	28.67	6.56	38.42	0.40	2.19	40.50	53.9	13.4	-
Vert.	4824.000	AV	40.80	31.51	7.01	38.58	0.40	2.19	43.33	53.9	10.5	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	95.59	28.14	14.20	38.74	2.19	101.38	-	-	Carrier
Hori.	2400.000	PK	60.20	28.15	14.19	38.74	2.19	65.99	81.3	15.3	-
Vert.	2412.000	PK	97.98	28.14	14.20	38.74	2.19	103.77	-	-	Carrier
Vert.	2400.000	PK	60.96	28.15	14.19	38.74	2.19	66.75	83.7	16.9	-

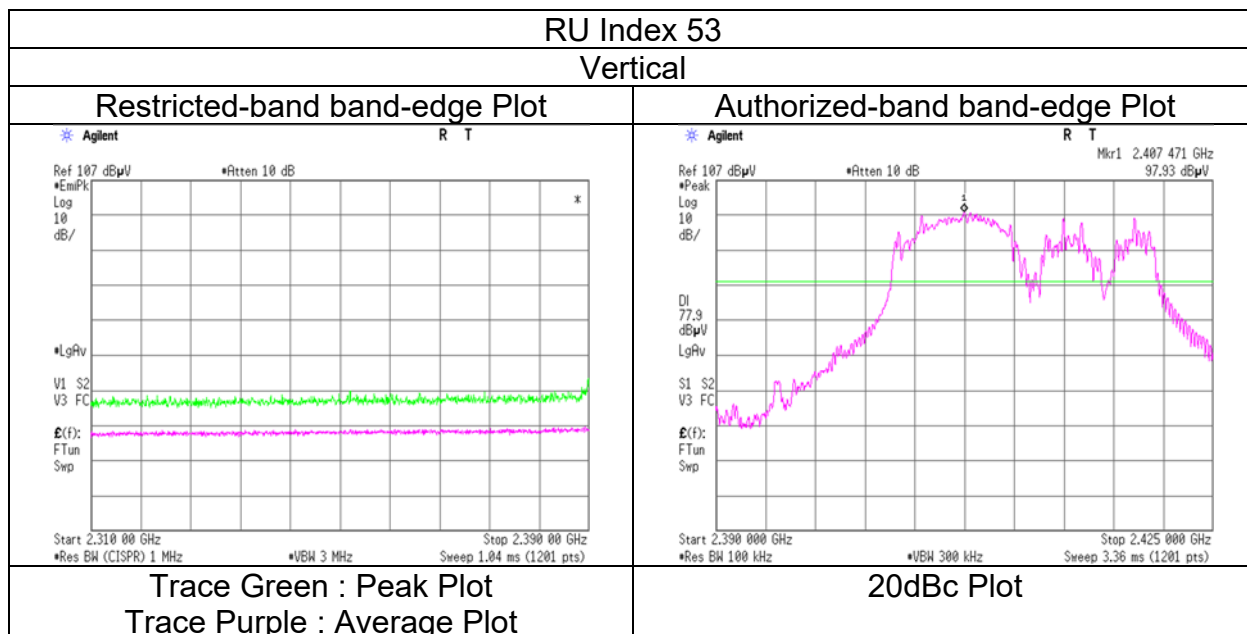
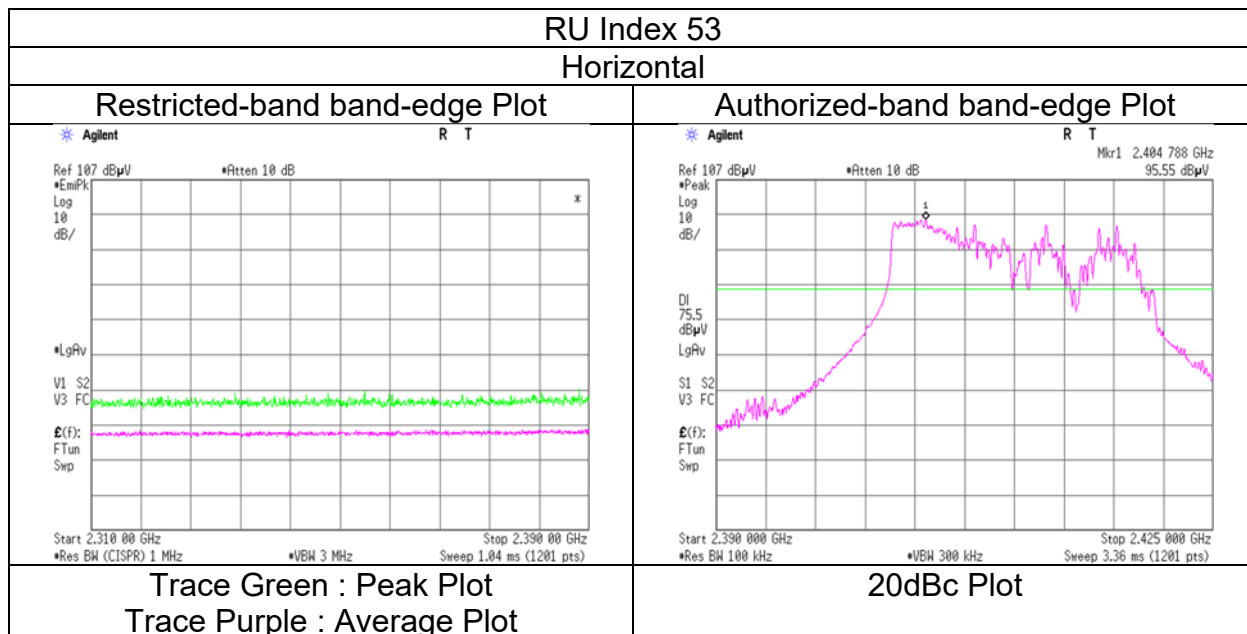
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 2
Date	September 5, 2023
Temperature / Humidity	24 deg.C, 60 %RH
Engineer	Hiromasa sato
Mode	Tx 11ax-20(OFDMA)(CDD) 106-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data.

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber SAC 2 WAC 1 WAC 1
Date September 5, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 24 deg.C, 60 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Hiromasa sato Makoto Hosaka Yosuke Murakami
Mode Tx 11ax-20(OFDMA)(CDD) 106-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

RU Index 54

(* 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.	1200.073	PK	47.56	25.01	12.90	39.00	2.19	48.66	73.9	25.2	158	198	-
Hori.	2313.295	PK	49.05	28.34	14.11	38.79	2.19	54.90	73.9	19.0	147	191	-
Hori.	2483.500	PK	50.65	28.05	14.28	38.70	2.19	56.47	73.9	17.4	152	68	-
Hori.	2624.642	PK	47.14	28.07	14.40	38.60	2.19	53.20	73.9	20.7	154	183	-
Hori.	2880.117	PK	48.20	28.67	6.56	38.42	2.19	47.20	73.9	26.7	158	169	-
Hori.	4924.000	PK	47.77	31.59	7.06	38.62	2.19	49.99	73.9	23.9	164	34	-
Hori.	7386.000	PK	44.66	37.22	8.48	39.27	2.19	53.28	73.9	20.6	150	0	-
Hori.	9848.000	PK	45.45	39.02	9.68	39.76	2.19	56.58	73.9	17.3	150	0	-
Hori.	7386.000	AV	35.71	37.22	8.48	39.27	2.19	44.33	53.9	9.5	150	0	Floor noise
Hori.	9848.000	AV	36.92	39.02	9.68	39.76	2.19	48.05	53.9	5.8	150	0	Floor noise
Vert.	1200.073	PK	46.06	25.01	12.90	39.00	2.19	47.16	73.9	26.7	334	11	-
Vert.	2313.295	PK	50.23	28.34	14.11	38.79	2.19	56.08	73.9	17.8	144	151	-
Vert.	2483.500	PK	50.89	28.05	14.28	38.70	2.19	56.71	73.9	17.1	135	38	-
Vert.	2624.642	PK	49.52	28.07	14.40	38.60	2.19	55.58	73.9	18.3	131	42	-
Vert.	2880.117	PK	48.22	28.67	6.56	38.42	2.19	47.22	73.9	26.6	188	159	-
Vert.	4924.000	PK	48.05	31.59	7.06	38.62	2.19	50.27	73.9	23.6	137	350	-
Vert.	7386.000	PK	44.39	37.22	8.48	39.27	2.19	53.01	73.9	20.8	150	0	-
Vert.	9848.000	PK	45.11	39.02	9.68	39.76	2.19	56.24	73.9	17.6	150	0	-
Vert.	7386.000	AV	35.64	37.22	8.48	39.27	2.19	44.26	53.9	9.6	150	0	Floor noise
Vert.	9848.000	AV	36.75	39.02	9.68	39.76	2.19	47.88	53.9	6.0	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	1200.073	AV	39.45	25.01	12.90	39.00	0.40	2.19	40.95	53.9	12.9	-
Hori.	2313.295	AV	39.49	28.34	14.11	38.79	0.40	2.19	45.74	53.9	8.1	-
Hori.	2483.500	AV	36.95	28.05	14.28	38.70	0.40	2.19	43.17	53.9	10.7	*1)
Hori.	2624.642	AV	38.08	28.07	14.40	38.60	0.40	2.19	44.54	53.9	9.3	-
Hori.	2880.117	AV	39.95	28.67	6.56	38.42	0.40	2.19	39.35	53.9	14.5	-
Hori.	4924.000	AV	38.52	31.59	7.06	38.62	0.40	2.19	41.14	53.9	12.7	-
Vert.	1200.073	AV	37.71	25.01	12.90	39.00	0.40	2.19	39.21	53.9	14.6	-
Vert.	2313.295	AV	40.52	28.34	14.11	38.79	0.40	2.19	46.77	53.9	7.1	-
Vert.	2483.500	AV	37.07	28.05	14.28	38.70	0.40	2.19	43.29	53.9	10.6	*1)
Vert.	2624.642	AV	39.99	28.07	14.40	38.60	0.40	2.19	46.45	53.9	7.4	-
Vert.	2880.117	AV	41.27	28.67	6.56	38.42	0.40	2.19	40.67	53.9	13.2	-
Vert.	4924.000	AV	38.68	31.59	7.06	38.62	0.40	2.19	41.30	53.9	12.6	-

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

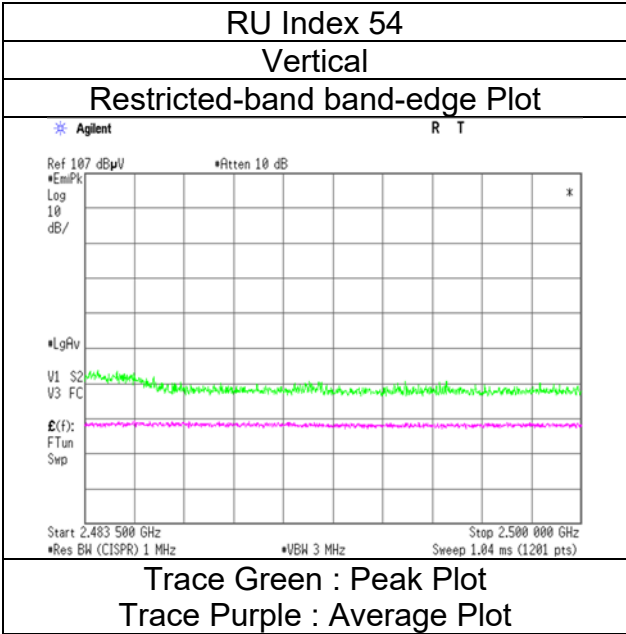
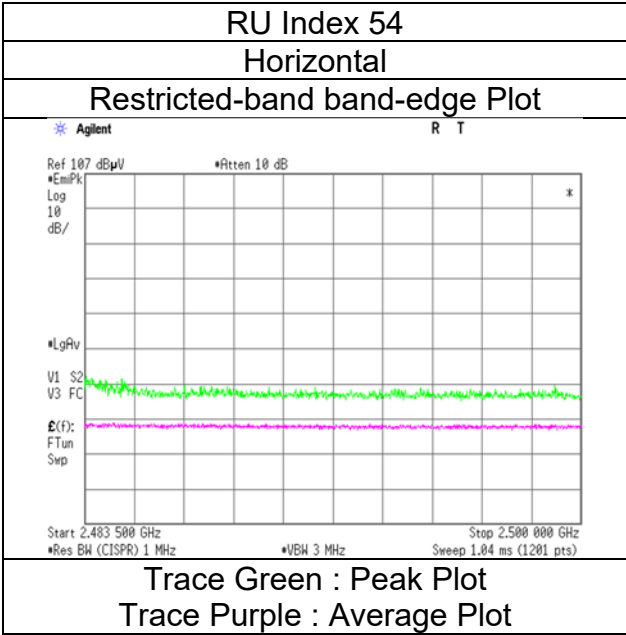
10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	September 8, 2023
Temperature / Humidity	24 deg.C, 70 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(CDD) 106-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 13, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	23 deg.C, 51 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Miku Ikudome	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(CDD) 242-tone RU, 2412 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 61

(* 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.	2386.450	PK	60.20	27.78	12.59	46.08	2.19	56.68	73.9	17.2	216	16	-
Hori.	2390.000	PK	59.08	27.77	12.59	46.08	2.19	55.55	73.9	18.3	216	16	-
Hori.	2879.992	PK	56.22	28.39	4.56	45.55	2.19	45.81	73.9	28.0	154	186	-
Hori.	4824.000	PK	57.82	31.56	4.34	45.36	2.19	50.55	73.9	23.3	161	26	-
Hori.	7236.000	PK	51.53	36.21	5.30	44.53	2.19	50.70	73.9	23.2	150	0	-
Hori.	9648.000	PK	50.99	38.75	6.12	42.86	2.19	55.19	73.9	18.7	150	0	-
Hori.	7236.000	AV	41.40	36.21	5.30	44.53	2.19	40.57	53.9	13.3	150	0	Floor noise
Hori.	9648.000	AV	40.02	38.75	6.12	42.86	2.19	44.22	53.9	9.6	150	0	Floor noise
Vert.	2386.450	PK	57.90	27.78	12.59	46.08	2.19	54.38	73.9	19.5	149	14	-
Vert.	2390.000	PK	61.83	27.77	12.59	46.08	2.19	58.30	73.9	15.6	149	14	-
Vert.	2880.102	PK	57.73	28.39	4.56	45.55	2.19	47.32	73.9	26.5	183	152	-
Vert.	4824.000	PK	57.55	31.56	4.34	45.36	2.19	50.28	73.9	23.6	175	26	-
Vert.	7236.000	PK	50.94	36.21	5.30	44.53	2.19	50.11	73.9	23.7	150	0	-
Vert.	9648.000	PK	50.57	38.75	6.12	42.86	2.19	54.77	73.9	19.1	150	0	-
Vert.	7236.000	AV	40.61	36.21	5.30	44.53	2.19	39.78	53.9	14.1	150	0	Floor noise
Vert.	9648.000	AV	39.65	38.75	6.12	42.86	2.19	43.85	53.9	10.0	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2386.450	AV	48.22	27.78	12.59	46.08	0.26	2.19	44.96	53.9	8.9	-
Hori.	2390.000	AV	47.93	27.77	12.59	46.08	0.26	2.19	44.66	53.9	9.2	*1)
Hori.	2879.992	AV	50.81	28.39	4.56	45.55	0.26	2.19	40.66	53.9	13.2	-
Hori.	4824.000	AV	47.24	31.56	4.34	45.36	0.26	2.19	40.23	53.9	13.6	-
Vert.	2386.450	AV	47.15	27.78	12.59	46.08	0.26	2.19	43.89	53.9	10.0	-
Vert.	2390.000	AV	50.47	27.77	12.59	46.08	0.26	2.19	47.20	53.9	6.7	*1)
Vert.	2880.102	AV	51.61	28.39	4.56	45.55	0.26	2.19	41.46	53.9	12.4	-
Vert.	4824.000	AV	46.23	31.56	4.34	45.36	0.26	2.19	39.22	53.9	14.6	-

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	102.13	27.74	12.60	46.06	2.19	98.60	-	-	Carrier
Hori.	2400.000	PK	68.00	27.76	12.59	46.07	2.19	64.47	78.6	14.1	-
Vert.	2412.000	PK	103.73	27.74	12.60	46.06	2.19	100.20	-	-	Carrier
Vert.	2400.000	PK	68.68	27.76	12.59	46.07	2.19	65.15	80.2	15.0	-

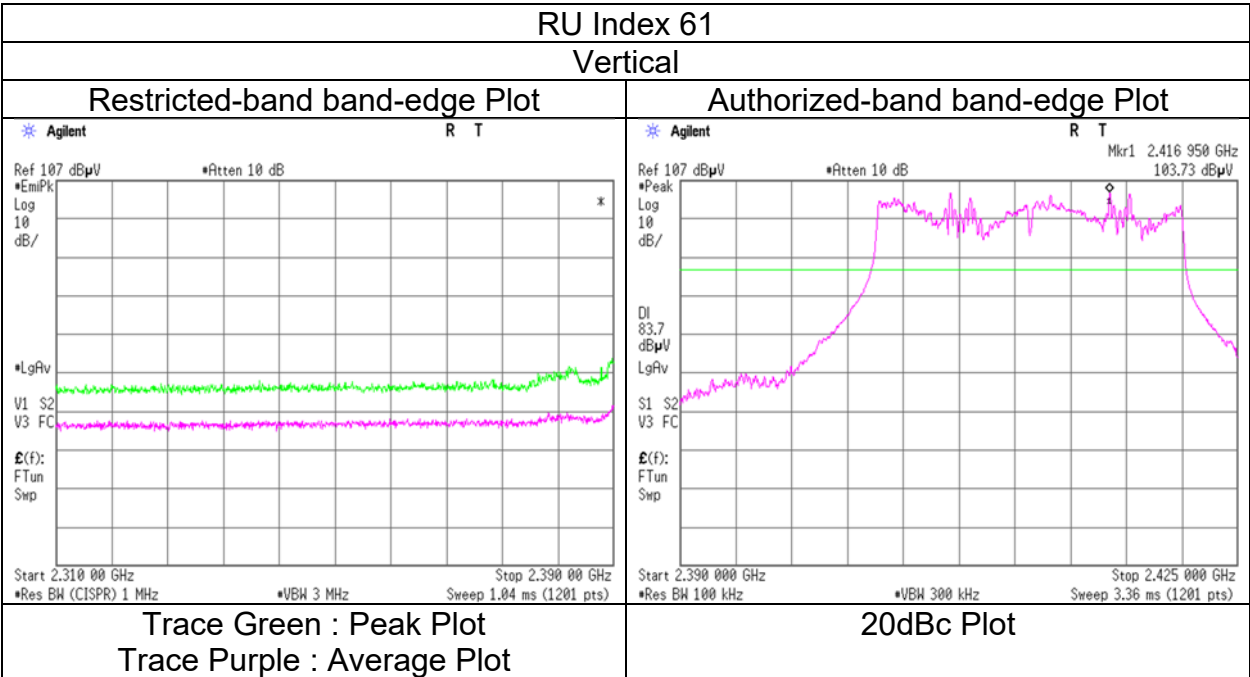
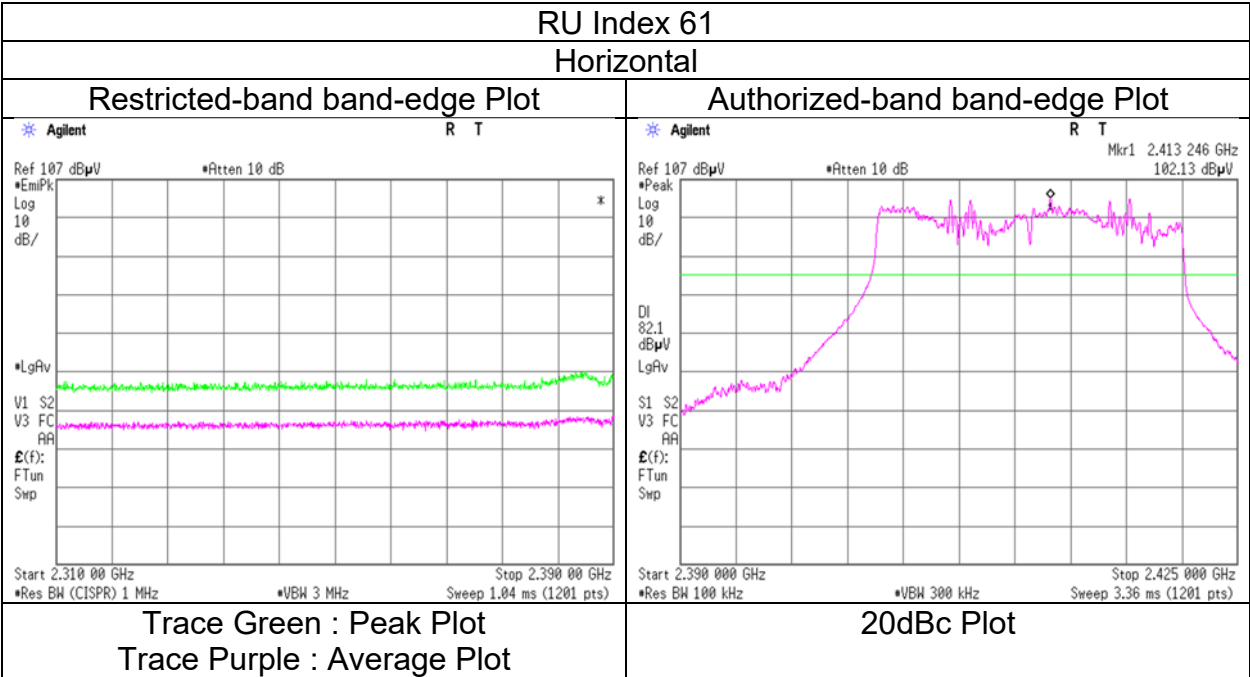
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 13, 2023
Temperature / Humidity	23 deg.C, 51 %RH
Engineer	Miku Ikudome
Mode	Tx 11ax-20(OFDMA)(CDD) 242-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 13, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	23 deg.C, 51 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Miku Ikudome	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(CDD) 242-tone RU, 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 61

(* 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.	2483.500	PK	57.64	27.75	12.64	45.99	2.19	54.23	73.9	19.6	151	34	-
Hori.	2879.981	PK	57.07	28.39	4.56	45.55	2.19	46.66	73.9	27.2	155	182	-
Hori.	4924.000	PK	55.63	31.65	4.37	45.34	2.19	48.50	73.9	25.4	140	21	-
Hori.	7386.000	PK	50.44	36.38	5.34	44.16	2.19	50.19	73.9	23.7	150	0	-
Hori.	9848.000	PK	48.79	38.99	6.20	42.73	2.19	53.44	73.9	20.4	150	0	-
Hori.	7386.000	AV	41.03	36.38	5.34	44.16	2.19	40.78	53.9	13.1	150	0	Floor noise
Hori.	9848.000	AV	39.71	38.99	6.20	42.73	2.19	44.36	53.9	9.5	150	0	Floor noise
Vert.	2483.500	PK	62.27	27.75	12.64	45.99	2.19	58.86	73.9	15.0	109	151	-
Vert.	2879.994	PK	57.73	28.39	4.56	45.55	2.19	47.32	73.9	26.5	148	246	-
Vert.	4924.000	PK	55.70	31.65	4.37	45.34	2.19	48.57	73.9	25.3	122	19	-
Vert.	7386.000	PK	49.94	36.38	5.34	44.16	2.19	49.69	73.9	24.2	150	0	-
Vert.	9848.000	PK	48.37	38.99	6.20	42.73	2.19	53.02	73.9	20.8	150	0	-
Vert.	7386.000	AV	40.28	36.38	5.34	44.16	2.19	40.03	53.9	13.8	150	0	Floor noise
Vert.	9848.000	AV	38.86	38.99	6.20	42.73	2.19	43.51	53.9	10.3	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2483.500	AV	47.45	27.75	12.64	45.99	0.26	2.19	44.30	53.9	9.6	*1)
Hori.	2879.981	AV	50.65	28.39	4.56	45.55	0.26	2.19	40.50	53.9	13.4	-
Hori.	4924.000	AV	45.54	31.65	4.37	45.34	0.26	2.19	38.67	53.9	15.2	-
Vert.	2483.500	AV	49.88	27.75	12.64	45.99	0.26	2.19	46.73	53.9	7.1	*1)
Vert.	2879.994	AV	51.24	28.39	4.56	45.55	0.26	2.19	41.09	53.9	12.8	-
Vert.	4924.000	AV	45.21	31.65	4.37	45.34	0.26	2.19	38.34	53.9	15.5	-

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

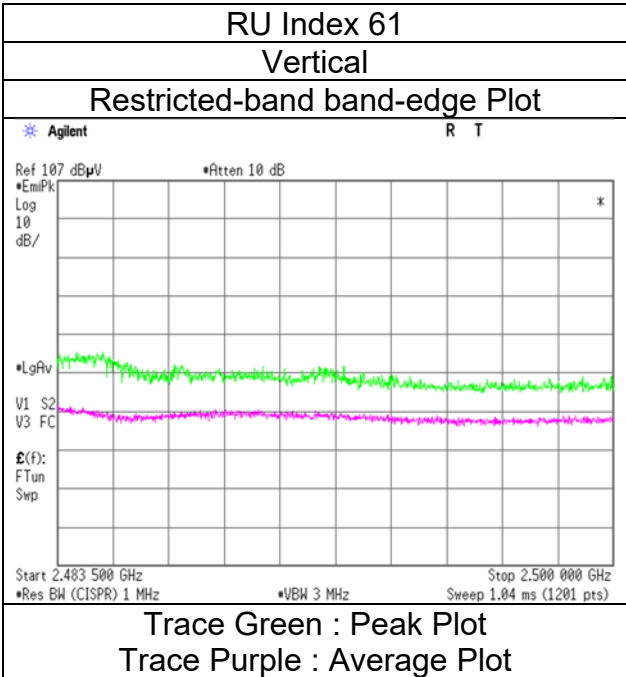
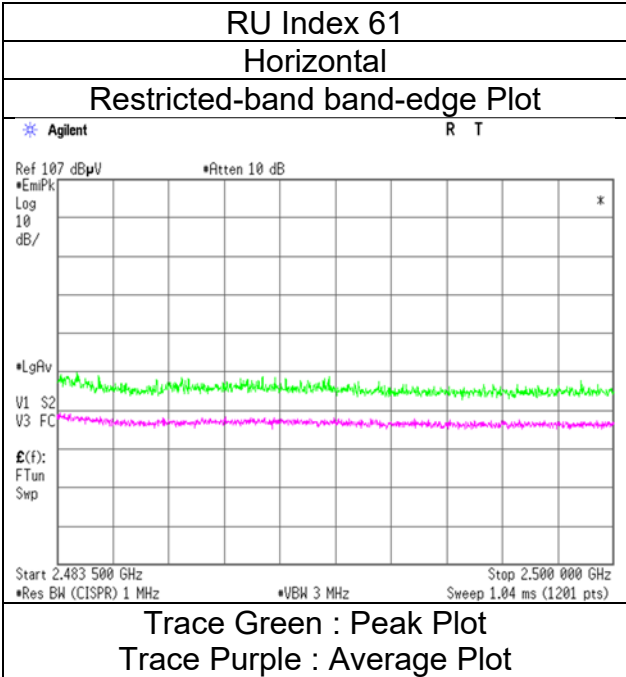
10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 13, 2023
Temperature / Humidity	23 deg.C, 51 %RH
Engineer	Miku Ikudome
Mode	Tx 11ax-20(OFDMA)(CDD) 242-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data

Radiated Spurious Emission

Test place: Shonan EMC Lab.
Semi Anechoic Chamber: WAC 1
Date: October 17, 2023
Temperature / Humidity: 21 deg.C, 58 %RH
Engineer: Yosuke Murakami
Mode: Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2412 MHz
Antenna: 2G_CH0: monopole, 2G_CH1: slot

RU Index 0

(* 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.	2250.351	PK	57.55	28.30	12.51	46.16	2.19	54.39	73.9	19.5	154	198	-
Hori.	2390.000	PK	55.61	27.77	12.59	46.08	2.19	52.08	73.9	21.8	221	57	-
Hori.	2557.418	PK	57.90	27.87	12.68	45.91	2.19	54.73	73.9	19.1	312	67	-
Hori.	2879.992	PK	56.65	28.39	4.56	45.55	2.19	46.24	73.9	27.6	137	187	-
Hori.	4824.000	PK	60.74	31.56	4.34	45.36	2.19	53.47	73.9	20.4	193	16	-
Hori.	7236.000	PK	51.70	36.21	5.30	44.53	2.19	50.87	73.9	23.0	150	0	-
Hori.	9648.000	PK	50.13	38.75	6.12	42.86	2.19	54.33	73.9	19.5	150	0	-
Hori.	7236.000	AV	41.20	36.21	5.30	44.53	2.19	40.37	53.9	13.5	150	0	Floor noise
Hori.	9648.000	AV	40.18	38.75	6.12	42.86	2.19	44.38	53.9	9.5	150	0	Floor noise
Vert.	2249.595	PK	57.77	28.30	12.49	46.16	2.19	54.59	73.9	19.3	149	36	-
Vert.	2390.000	PK	54.69	27.77	12.59	46.08	2.19	51.16	73.9	22.7	151	36	-
Vert.	2556.742	PK	59.72	27.87	12.68	45.91	2.19	56.55	73.9	17.3	146	29	-
Vert.	2879.980	PK	57.75	28.39	4.56	45.55	2.19	47.34	73.9	26.5	150	130	-
Vert.	4824.000	PK	61.65	31.56	4.34	45.36	2.19	54.38	73.9	19.5	159	238	-
Vert.	7236.000	PK	51.01	36.21	5.30	44.53	2.19	50.18	73.9	23.7	150	0	-
Vert.	9648.000	PK	49.82	38.75	6.12	42.86	2.19	54.02	73.9	19.8	150	0	-
Vert.	7236.000	AV	41.38	36.21	5.30	44.53	2.19	40.55	53.9	13.3	150	0	Floor noise
Vert.	9648.000	AV	40.45	38.75	6.12	42.86	2.19	44.65	53.9	9.2	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 : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2250.351	AV	47.36	28.30	12.51	46.16	0.20	2.19	44.40	53.9	9.4	-
Hori.	2390.000	AV	44.94	27.77	12.59	46.08	0.20	2.19	41.61	53.9	12.2	*1)
Hori.	2557.418	AV	48.15	27.87	12.68	45.91	0.20	2.19	45.18	53.9	8.7	-
Hori.	2879.992	AV	50.30	28.39	4.56	45.55	0.20	2.19	40.09	53.9	13.8	-
Hori.	4824.000	AV	48.69	31.56	4.34	45.36	0.20	2.19	41.62	53.9	12.2	-
Vert.	2249.595	AV	47.51	28.30	12.49	46.16	0.20	2.19	44.53	53.9	9.3	-
Vert.	2390.000	AV	45.17	27.77	12.59	46.08	0.20	2.19	41.84	53.9	12.0	*1)
Vert.	2556.742	AV	49.48	27.87	12.68	45.91	0.20	2.19	46.51	53.9	7.3	-
Vert.	2879.980	AV	51.50	28.39	4.56	45.55	0.20	2.19	41.29	53.9	12.6	-
Vert.	4824.000	AV	49.61	31.56	4.34	45.36	0.20	2.19	42.54	53.9	11.3	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	104.98	27.74	12.60	46.06	2.19	101.45	-	-	Carrier
Hori.	2400.000	PK	68.41	27.76	12.59	46.07	2.19	64.88	81.4	16.5	-
Vert.	2412.000	PK	104.70	27.74	12.60	46.06	2.19	101.17	-	-	Carrier
Vert.	2400.000	PK	68.76	27.76	12.59	46.07	2.19	65.23	81.1	15.8	-

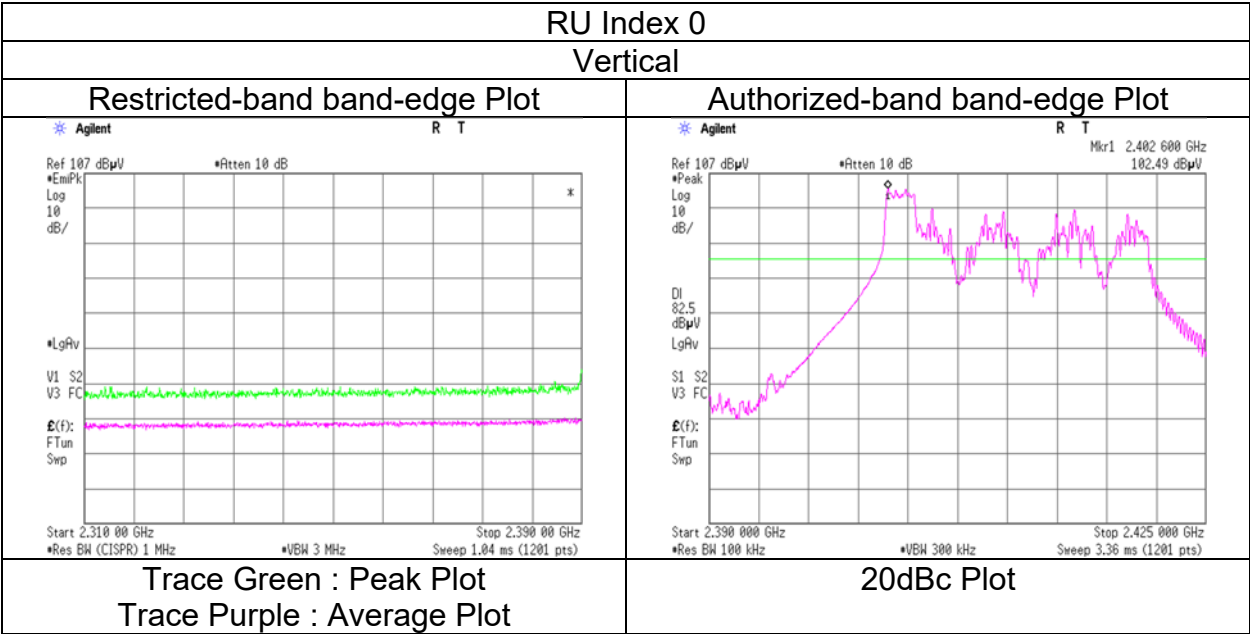
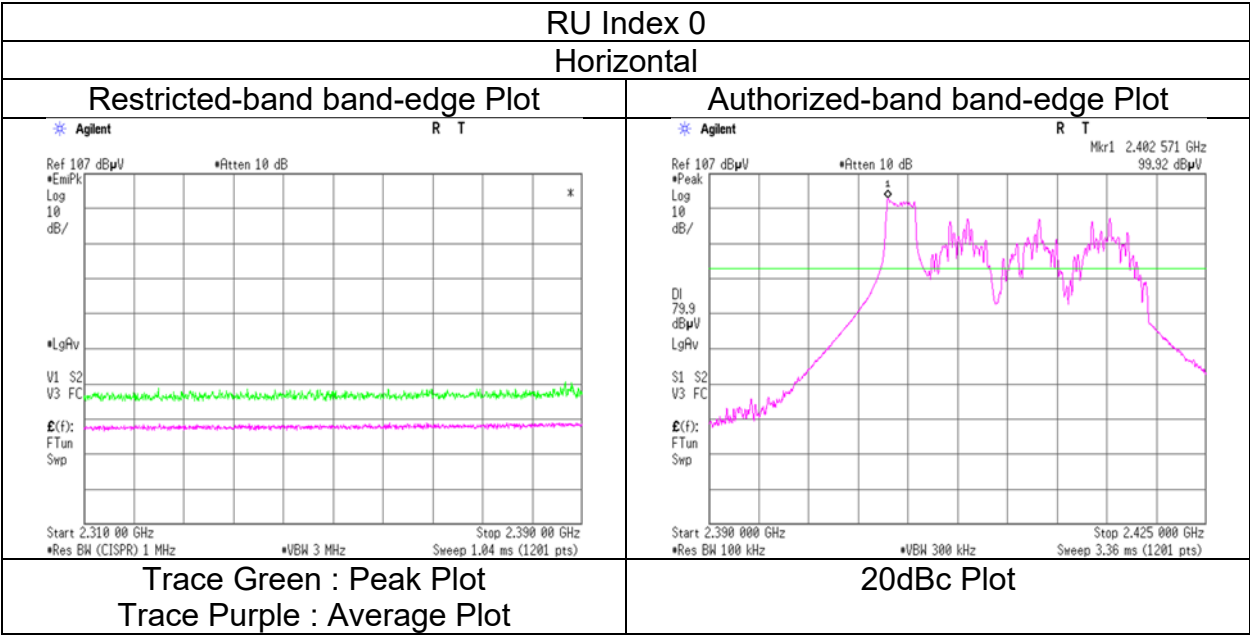
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 17, 2023
Temperature / Humidity	21 deg.C, 58 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 17, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	21 deg.C, 58 %RH	26 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Yosuke Murakami	Yosuke Murakami	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 4

(* 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.	2282.648	PK	57.92	28.17	12.52	46.14	2.19	54.66	73.9	19.2	147	198	-
Hori.	2589.481	PK	57.37	27.94	12.70	45.88	2.19	54.32	73.9	19.5	162	63	-
Hori.	2879.941	PK	57.59	28.39	4.56	45.55	2.19	47.18	73.9	26.7	137	186	-
Hori.	4874.000	PK	57.93	31.61	4.37	45.35	2.19	50.75	73.9	23.1	152	24	-
Hori.	7311.000	PK	51.85	36.26	5.31	44.34	2.19	51.27	73.9	22.6	100	0	-
Hori.	9748.000	PK	49.38	39.00	6.15	42.83	2.19	53.89	73.9	20.0	100	0	-
Hori.	7311.000	AV	41.32	36.26	5.31	44.34	2.19	40.74	53.9	13.1	100	0	Floor noise
Hori.	9748.000	AV	39.36	39.00	6.15	42.83	2.19	43.87	53.9	10.0	100	0	Floor noise
Vert.	2284.235	PK	57.57	28.16	12.52	46.14	2.19	54.30	73.9	19.6	124	39	-
Vert.	2591.422	PK	58.89	27.94	12.70	45.88	2.19	55.84	73.9	18.0	202	34	-
Vert.	2879.989	PK	57.96	28.39	4.56	45.55	2.19	47.55	73.9	26.3	144	127	-
Vert.	4874.000	PK	59.84	31.61	4.37	45.35	2.19	52.66	73.9	21.2	152	237	-
Vert.	7311.000	PK	51.20	36.26	5.31	44.34	2.19	50.62	73.9	23.2	150	0	-
Vert.	9748.000	PK	49.39	39.00	6.15	42.83	2.19	53.90	73.9	20.0	150	0	-
Vert.	7311.000	AV	41.46	36.26	5.31	44.34	2.19	40.88	53.9	13.0	150	0	Floor noise
Vert.	9748.000	AV	39.28	39.00	6.15	42.83	2.19	43.79	53.9	10.1	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2282.648	AV	47.16	28.17	12.52	46.14	0.20	2.19	44.10	53.9	9.8	-
Hori.	2589.481	AV	47.23	27.94	12.70	45.88	0.20	2.19	44.38	53.9	9.5	-
Hori.	2879.941	AV	51.17	28.39	4.56	45.55	0.20	2.19	40.96	53.9	12.9	-
Hori.	4874.000	AV	46.72	31.61	4.37	45.35	0.20	2.19	39.74	53.9	14.1	-
Vert.	2284.235	AV	47.17	28.16	12.52	46.14	0.20	2.19	44.10	53.9	9.8	-
Vert.	2591.422	AV	48.77	27.94	12.70	45.88	0.20	2.19	45.92	53.9	7.9	-
Vert.	2879.989	AV	52.07	28.39	4.56	45.55	0.20	2.19	41.86	53.9	12.0	-
Vert.	4874.000	AV	47.23	31.61	4.37	45.35	0.20	2.19	40.25	53.9	13.6	-

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Duty factor refer to "Burst rate confirmation" sheet.

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 17, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	21 deg.C, 58 %RH	26 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Yosuke Murakami	Yosuke Murakami	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 8

(* 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.	2316.584	PK	58.40	28.01	12.54	46.12	2.19	55.02	73.9	18.8	232	50	-
Hori.	2483.500	PK	55.21	27.75	12.64	45.99	2.19	51.80	73.9	22.1	145	58	-
Hori.	2623.805	PK	57.93	28.03	12.72	45.84	2.19	55.03	73.9	18.8	154	63	-
Hori.	2879.971	PK	57.66	28.39	4.56	45.55	2.19	47.25	73.9	26.6	135	187	-
Hori.	4920.000	PK	59.49	31.65	4.37	45.34	2.19	52.36	73.9	21.5	201	19	-
Hori.	7386.000	PK	50.84	36.38	5.34	44.16	2.19	50.59	73.9	23.3	150	0	-
Hori.	9848.000	PK	49.81	38.99	6.20	42.73	2.19	54.46	73.9	19.4	150	0	-
Hori.	7386.000	AV	41.07	36.38	5.34	44.16	2.19	40.82	53.9	13.0	150	0	Floor noise
Hori.	9848.000	AV	40.05	38.99	6.20	42.73	2.19	44.70	53.9	9.2	150	0	Floor noise
Vert.	2316.771	PK	59.04	28.01	12.54	46.12	2.19	55.66	73.9	18.2	151	138	-
Vert.	2483.500	PK	55.89	27.75	12.64	45.99	2.19	52.48	73.9	21.4	160	24	-
Vert.	2623.915	PK	58.93	28.03	12.72	45.84	2.19	56.03	73.9	17.8	166	32	-
Vert.	2879.973	PK	58.65	28.39	4.56	45.55	2.19	48.24	73.9	25.6	143	129	-
Vert.	4924.000	PK	61.32	31.65	4.37	45.34	2.19	54.19	73.9	19.7	161	236	-
Vert.	7386.000	PK	50.67	36.38	5.34	44.16	2.19	50.42	73.9	23.4	100	0	-
Vert.	9848.000	PK	49.70	38.99	6.20	42.73	2.19	54.35	73.9	19.5	100	0	-
Vert.	7386.000	AV	41.39	36.38	5.34	44.16	2.19	41.14	53.9	12.7	100	0	Floor noise
Vert.	9848.000	AV	39.98	38.99	6.20	42.73	2.19	44.63	53.9	9.2	100	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2316.584	AV	48.06	28.01	12.54	46.12	0.20	2.19	44.88	53.9	9.0	-
Hori.	2483.500	AV	44.36	27.75	12.64	45.99	0.20	2.19	41.15	53.9	12.7	*1)
Hori.	2623.805	AV	47.28	28.03	12.72	45.84	0.20	2.19	44.58	53.9	9.3	-
Hori.	2879.971	AV	51.40	28.39	4.56	45.55	0.20	2.19	41.19	53.9	12.7	-
Hori.	4920.000	AV	47.74	31.65	4.37	45.34	0.20	2.19	40.81	53.9	13.0	-
Vert.	2316.771	AV	48.50	28.01	12.54	46.12	0.20	2.19	45.32	53.9	8.5	-
Vert.	2483.500	AV	45.09	27.75	12.64	45.99	0.20	2.19	41.88	53.9	12.0	*1)
Vert.	2623.915	AV	49.32	28.03	12.72	45.84	0.20	2.19	46.62	53.9	7.2	-
Vert.	2879.973	AV	52.79	28.39	4.56	45.55	0.20	2.19	42.58	53.9	11.3	-
Vert.	4924.000	AV	48.34	31.65	4.37	45.34	0.20	2.19	41.41	53.9	12.4	-

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

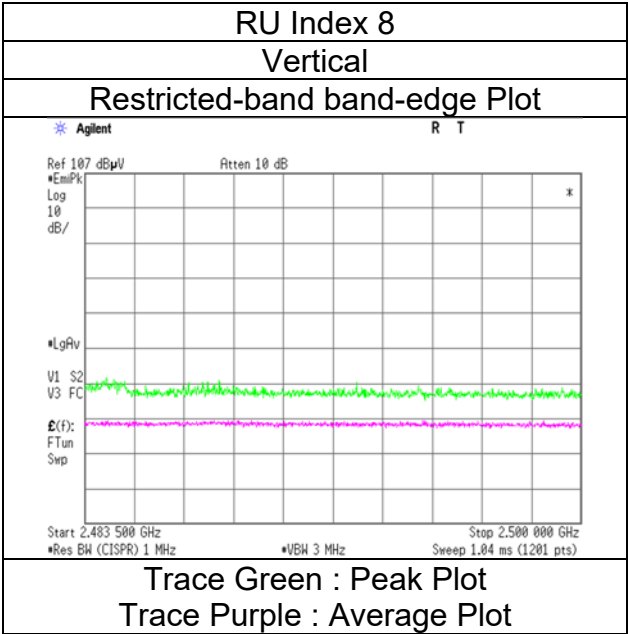
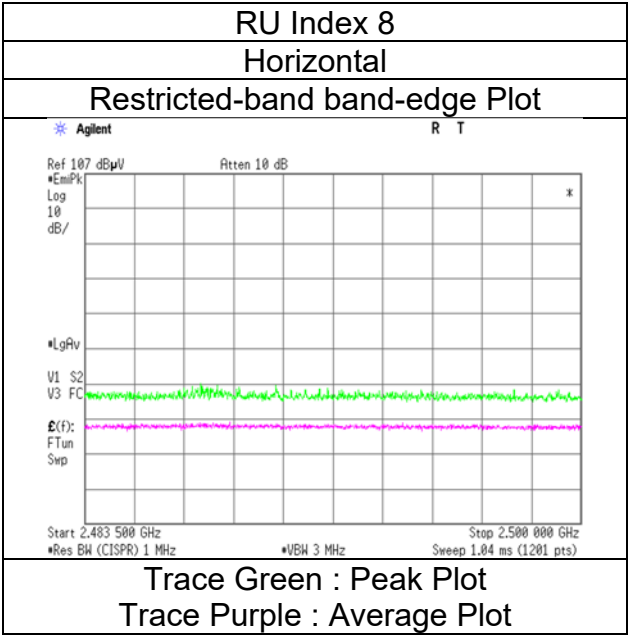
10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 18, 2023
Temperature / Humidity	21 deg.C, 52 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(SDM) 26-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 25 deg.C, 52 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Makoto Hosaka Yosuke Murakami Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2412 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

RU Index 37

(* 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.	2252.275	PK	55.93	28.29	12.51	46.16	2.19	52.76	73.9	21.1	249	61	-
Hori.	2390.000	PK	55.72	27.77	12.59	46.08	2.19	52.19	73.9	21.7	249	61	-
Hori.	2879.978	PK	55.64	28.39	4.56	45.55	2.19	45.23	73.9	28.6	320	138	-
Hori.	4824.000	PK	58.51	31.56	4.34	45.36	2.19	51.24	73.9	22.6	176	11	-
Hori.	7236.000	PK	50.88	36.21	5.30	44.53	2.19	50.05	73.9	23.8	150	0	-
Hori.	9648.000	PK	49.76	38.75	6.12	42.86	2.19	53.96	73.9	19.9	150	0	-
Hori.	7236.000	AV	41.35	36.21	5.30	44.53	2.19	40.52	53.9	13.3	150	0	Floor noise
Hori.	9648.000	AV	40.30	38.75	6.12	42.86	2.19	44.50	53.9	9.4	150	0	Floor noise
Vert.	2252.275	PK	57.37	28.29	12.51	46.16	2.19	54.20	73.9	19.7	138	18	-
Vert.	2390.000	PK	56.02	27.77	12.59	46.08	2.19	52.49	73.9	21.4	138	18	-
Vert.	2879.978	PK	55.35	28.39	4.56	45.55	2.19	44.94	73.9	28.9	100	22	-
Vert.	4824.000	PK	59.16	31.56	4.34	45.36	2.19	51.89	73.9	22.0	100	240	-
Vert.	7236.000	PK	51.04	36.21	5.30	44.53	2.19	50.21	73.9	23.6	150	0	-
Vert.	9648.000	PK	49.57	38.75	6.12	42.86	2.19	53.77	73.9	20.1	150	0	-
Vert.	7236.000	AV	41.44	36.21	5.30	44.53	2.19	40.61	53.9	13.2	150	0	Floor noise
Vert.	9648.000	AV	39.92	38.75	6.12	42.86	2.19	44.12	53.9	9.7	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2252.275	AV	46.39	28.29	12.51	46.16	0.37	2.19	43.59	53.9	10.3	-
Hori.	2390.000	AV	45.03	27.77	12.59	46.08	0.37	2.19	41.87	53.9	12.0	*1)
Hori.	2879.978	AV	47.70	28.39	4.56	45.55	0.37	2.19	37.66	53.9	16.2	-
Hori.	4824.000	AV	47.13	31.56	4.34	45.36	0.37	2.19	40.23	53.9	13.6	-
Vert.	2252.275	AV	46.95	28.29	12.51	46.16	0.37	2.19	44.15	53.9	9.7	-
Vert.	2390.000	AV	45.64	27.77	12.59	46.08	0.37	2.19	42.48	53.9	11.4	*1)
Vert.	2879.978	AV	48.15	28.39	4.56	45.55	0.37	2.19	38.11	53.9	15.7	-
Vert.	4824.000	AV	47.65	31.56	4.34	45.36	0.37	2.19	40.75	53.9	13.1	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	103.56	27.74	12.60	46.06	2.19	100.03	-	-	Carrier
Hori.	2400.000	PK	70.14	27.76	12.59	46.07	2.19	66.61	80.0	13.3	-
Hori.	2558.146	PK	47.16	27.88	12.68	45.91	2.19	44.00	80.0	36.0	-
Vert.	2412.000	PK	106.03	27.74	12.60	46.06	2.19	102.50	-	-	Carrier
Vert.	2400.000	PK	70.34	27.76	12.59	46.07	2.19	66.81	82.5	15.6	-
Vert.	2558.146	PK	48.92	27.88	12.68	45.91	2.19	45.76	82.5	36.7	-

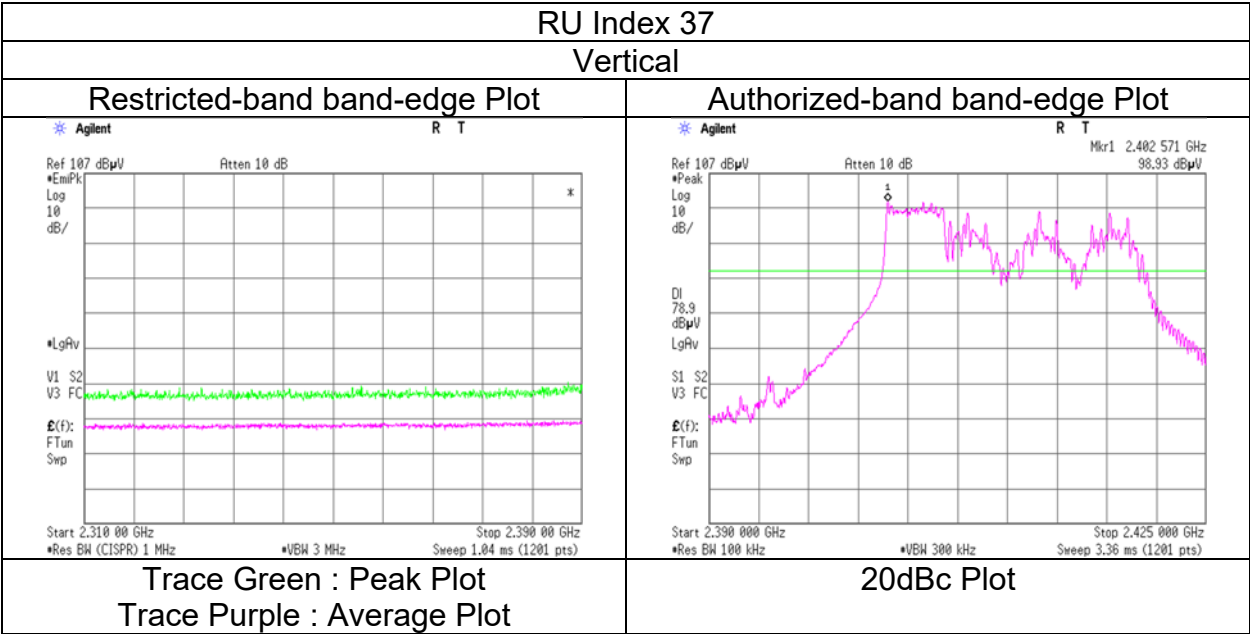
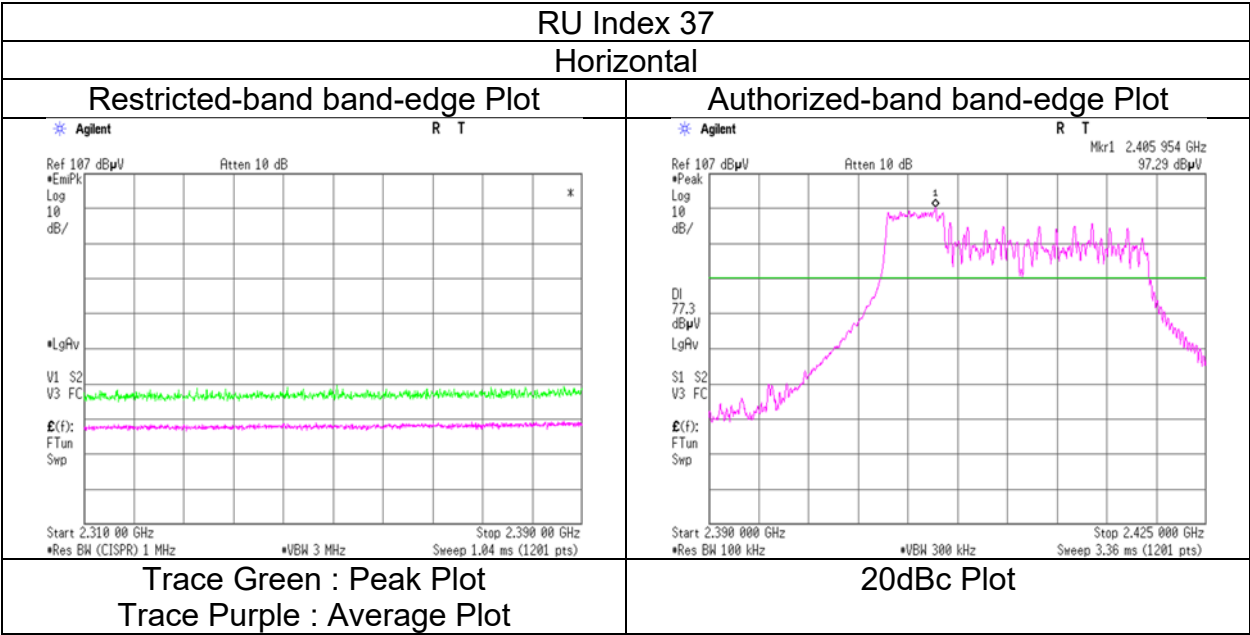
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 20, 2023
Temperature / Humidity	25 deg.C, 52 %RH
Engineer	Makoto Hosaka
Mode	Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 21, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	24 deg.C, 52 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Kenichi Adachi	Makoto Hosaka	Yosuke Murakami
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 GHz -26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2437 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 38

(* 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.	2280.058	PK	55.98	28.18	12.52	46.14	2.19	52.73	73.9	21.1	158	27	-
Hori.	2587.312	PK	56.51	27.93	12.70	45.88	2.19	53.45	73.9	20.4	156	54	-
Hori.	2879.955	PK	56.39	28.39	4.56	45.55	2.19	45.98	73.9	27.9	261	142	-
Hori.	4874.000	PK	56.64	31.61	4.37	45.35	2.19	49.46	73.9	24.4	164	32	-
Hori.	7311.000	PK	49.92	36.26	5.31	44.34	2.19	49.34	73.9	24.5	150	0	-
Hori.	9748.000	PK	48.36	39.00	6.15	42.83	2.19	52.87	73.9	21.0	150	0	-
Hori.	7311.000	AV	41.19	36.26	5.31	44.34	2.19	40.61	53.9	13.2	150	0	Floor noise
Hori.	9748.000	AV	40.28	39.00	6.15	42.83	2.19	44.79	53.9	9.1	150	0	Floor noise
Vert.	2280.058	PK	57.24	28.18	12.52	46.14	2.19	53.99	73.9	19.9	248	136	-
Vert.	2587.312	PK	57.86	27.93	12.70	45.88	2.19	54.80	73.9	19.1	155	29	-
Vert.	2879.955	PK	56.78	28.39	4.56	45.55	2.19	46.37	73.9	27.5	144	139	-
Vert.	4874.000	PK	57.92	31.61	4.37	45.35	2.19	50.74	73.9	23.1	112	358	-
Vert.	7311.000	PK	50.14	36.26	5.31	44.34	2.19	49.56	73.9	24.3	150	0	-
Vert.	9748.000	PK	48.23	39.00	6.15	42.83	2.19	52.74	73.9	21.1	150	0	-
Vert.	7311.000	AV	41.38	36.26	5.31	44.34	2.19	40.80	53.9	13.1	150	0	Floor noise
Vert.	9748.000	AV	40.34	39.00	6.15	42.83	2.19	44.85	53.9	9.0	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 : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2280.058	AV	47.16	28.18	12.52	46.14	0.37	2.19	44.28	53.9	9.6	-
Hori.	2587.312	AV	47.33	27.93	12.70	45.88	0.37	2.19	44.64	53.9	9.2	-
Hori.	2879.955	AV	48.24	28.39	4.56	45.55	0.37	2.19	38.20	53.9	15.7	-
Hori.	4874.000	AV	48.33	31.61	4.37	45.35	0.37	2.19	41.52	53.9	12.3	-
Vert.	2280.058	AV	48.32	28.18	12.52	46.14	0.37	2.19	45.44	53.9	8.4	-
Vert.	2587.312	AV	49.09	27.93	12.70	45.88	0.37	2.19	46.40	53.9	7.4	-
Vert.	2879.955	AV	49.68	28.39	4.56	45.55	0.37	2.19	39.64	53.9	14.2	-
Vert.	4874.000	AV	48.21	31.61	4.37	45.35	0.37	2.19	41.40	53.9	12.5	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

Radiated Spurious Emission

Test place Shonan EMC Lab.
Semi Anechoic Chamber WAC 1 WAC 1 WAC 1
Date October 20, 2023 September 7, 2023 September 6, 2023
Temperature / Humidity 25 deg.C, 52 %RH 25 deg.C, 58 %RH 26 deg.C, 45 %RH
Engineer Makoto Hosaka Yosuke Murakami Yosuke Murakami
(1 GHz -10 GHz) (10 GHz -18 GHz) (18 GHz -26.5 GHz)
Mode Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2462 MHz
Antenna 2G_CH0: monopole, 2G_CH1: slot

RU Index 40

(* 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.	2317.055	PK	57.06	28.01	12.54	46.12	2.19	53.68	73.9	20.2	138	76	-
Hori.	2483.500	PK	55.84	27.75	12.64	45.99	2.19	52.43	73.9	21.4	138	76	-
Hori.	2880.018	PK	56.35	28.39	4.56	45.55	2.19	45.94	73.9	27.9	320	138	-
Hori.	4924.000	PK	56.77	31.65	4.37	45.34	2.19	49.64	73.9	24.2	188	5	-
Hori.	7386.000	PK	50.08	36.38	5.34	44.16	2.19	49.83	73.9	24.0	150	0	-
Hori.	9848.000	PK	49.38	38.99	6.20	42.73	2.19	54.03	73.9	19.8	150	0	-
Hori.	7386.000	AV	41.24	36.38	5.34	44.16	2.19	40.99	53.9	12.9	150	0	Floor noise
Hori.	9848.000	AV	39.88	38.99	6.20	42.73	2.19	44.53	53.9	9.3	150	0	Floor noise
Vert.	2317.055	PK	57.89	28.01	12.54	46.12	2.19	54.51	73.9	19.3	141	20	-
Vert.	2483.500	PK	57.90	27.75	12.64	45.99	2.19	54.49	73.9	19.4	141	20	-
Vert.	2880.018	PK	56.42	28.39	4.56	45.55	2.19	46.01	73.9	27.8	258	163	-
Vert.	4924.000	PK	56.51	31.65	4.37	45.34	2.19	49.38	73.9	24.5	120	335	-
Vert.	7386.000	PK	50.86	36.38	5.34	44.16	2.19	50.61	73.9	23.2	150	0	-
Vert.	9848.000	PK	49.78	38.99	6.20	42.73	2.19	54.43	73.9	19.4	150	0	-
Vert.	7386.000	AV	40.97	36.38	5.34	44.16	2.19	40.72	53.9	13.1	150	0	Floor noise
Vert.	9848.000	AV	39.57	38.99	6.20	42.73	2.19	44.22	53.9	9.6	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 : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2317.055	AV	47.13	28.01	12.54	46.12	0.37	2.19	44.12	53.9	9.7	-
Hori.	2483.500	AV	42.91	27.75	12.64	45.99	0.37	2.19	39.87	53.9	14.0	*1)
Hori.	2880.018	AV	49.10	28.39	4.56	45.55	0.37	2.19	39.06	53.9	14.8	-
Hori.	4924.000	AV	46.22	31.65	4.37	45.34	0.37	2.19	39.46	53.9	14.4	-
Vert.	2317.055	AV	48.60	28.01	12.54	46.12	0.37	2.19	45.59	53.9	8.3	-
Vert.	2483.500	AV	45.32	27.75	12.64	45.99	0.37	2.19	42.28	53.9	11.6	*1)
Vert.	2880.018	AV	49.32	28.39	4.56	45.55	0.37	2.19	39.28	53.9	14.6	-
Vert.	4924.000	AV	46.05	31.65	4.37	45.34	0.37	2.19	39.29	53.9	14.6	-

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

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2462.000	PK	102.84	27.72	12.64	46.01	2.19	99.38	-	-	Carrier
Hori.	2623.958	PK	46.82	28.03	12.72	45.84	2.19	43.92	79.3	35.3	-
Vert.	2462.000	PK	104.96	27.72	12.64	46.01	2.19	101.50	-	-	Carrier
Vert.	2623.958	PK	46.76	28.03	12.72	45.84	2.19	43.86	81.5	37.6	-

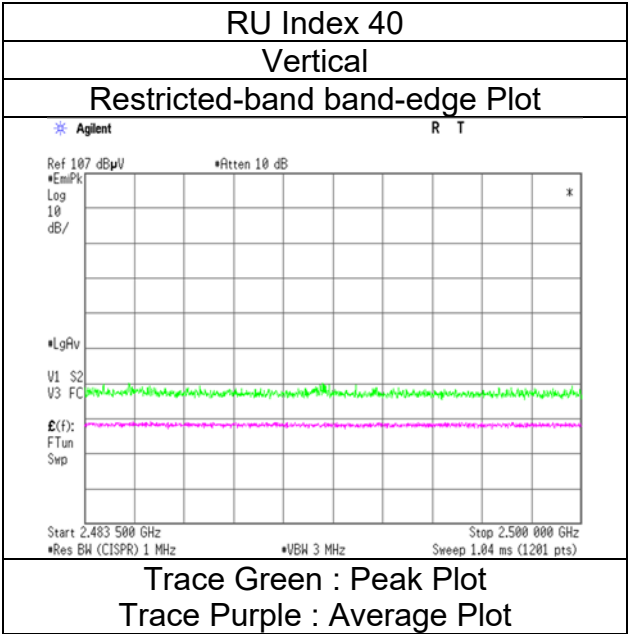
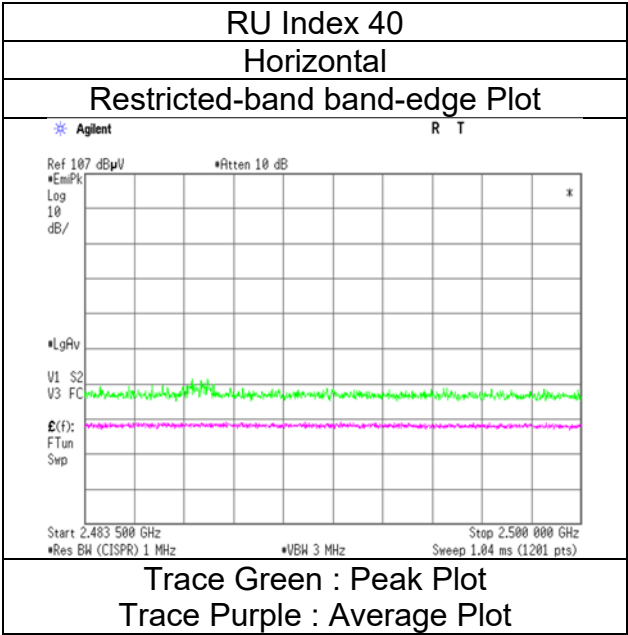
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 20, 2023
Temperature / Humidity	23 deg.C, 60 %RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20(OFDMA)(SDM) 52-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 13, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	25 deg.C, 51 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Miku Ikudome	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 106-tone RU, 2412 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 53

(* 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.	2390.000	PK	59.26	27.77	12.59	46.08	2.19	55.73	73.9	18.1	147	64	-
Hori.	2879.960	PK	57.50	28.39	4.56	45.55	2.19	47.09	73.9	26.8	155	183	-
Hori.	4824.000	PK	58.43	31.56	4.34	45.36	2.19	51.16	73.9	22.7	192	3	-
Hori.	7236.000	PK	50.98	36.21	5.30	44.53	2.19	50.15	73.9	23.7	150	0	-
Hori.	9648.000	PK	49.50	38.75	6.12	42.86	2.19	53.70	73.9	20.2	150	0	-
Hori.	2390.000	AV	46.40	27.77	12.59	46.08	2.19	42.87	53.9	11.0	147	64	-
Hori.	2879.960	AV	50.81	28.39	4.56	45.55	2.19	40.40	53.9	13.5	155	183	-
Hori.	4824.000	AV	48.84	31.56	4.34	45.36	2.19	41.57	53.9	12.3	192	3	-
Hori.	7236.000	AV	41.32	36.21	5.30	44.53	2.19	40.49	53.9	13.4	150	0	Floor noise
Hori.	9648.000	AV	40.05	38.75	6.12	42.86	2.19	44.25	53.9	9.6	150	0	Floor noise
Vert.	2390.000	PK	56.94	27.77	12.59	46.08	2.19	53.41	73.9	20.4	134	14	-
Vert.	2879.981	PK	57.74	28.39	4.56	45.55	2.19	47.33	73.9	26.5	183	151	-
Vert.	4824.000	PK	57.93	31.56	4.34	45.36	2.19	50.66	73.9	23.2	126	13	-
Vert.	7236.000	PK	50.76	36.21	5.30	44.53	2.19	49.93	73.9	23.9	150	0	-
Vert.	9648.000	PK	48.96	38.75	6.12	42.86	2.19	53.16	73.9	20.7	150	0	-
Vert.	2390.000	AV	46.36	27.77	12.59	46.08	2.19	42.83	53.9	11.0	134	14	-
Vert.	2879.981	AV	51.53	28.39	4.56	45.55	2.19	41.12	53.9	12.7	183	151	-
Vert.	4824.000	AV	47.30	31.56	4.34	45.36	2.19	40.03	53.9	13.8	126	13	-
Vert.	7236.000	AV	40.27	36.21	5.30	44.53	2.19	39.44	53.9	14.4	150	0	Floor noise
Vert.	9648.000	AV	38.79	38.75	6.12	42.86	2.19	42.99	53.9	10.9	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 (3.86 m / 3.0 m) = 2.19 dB

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

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.	2412.000	PK	105.07	27.74	12.60	46.06	2.19	101.54	-	-	Carrier
Hori.	2400.000	PK	68.88	27.76	12.59	46.07	2.19	65.35	81.5	16.1	-
Vert.	2412.000	PK	104.76	27.74	12.60	46.06	2.19	101.23	-	-	Carrier
Vert.	2400.000	PK	71.11	27.76	12.59	46.07	2.19	67.58	81.2	13.6	-

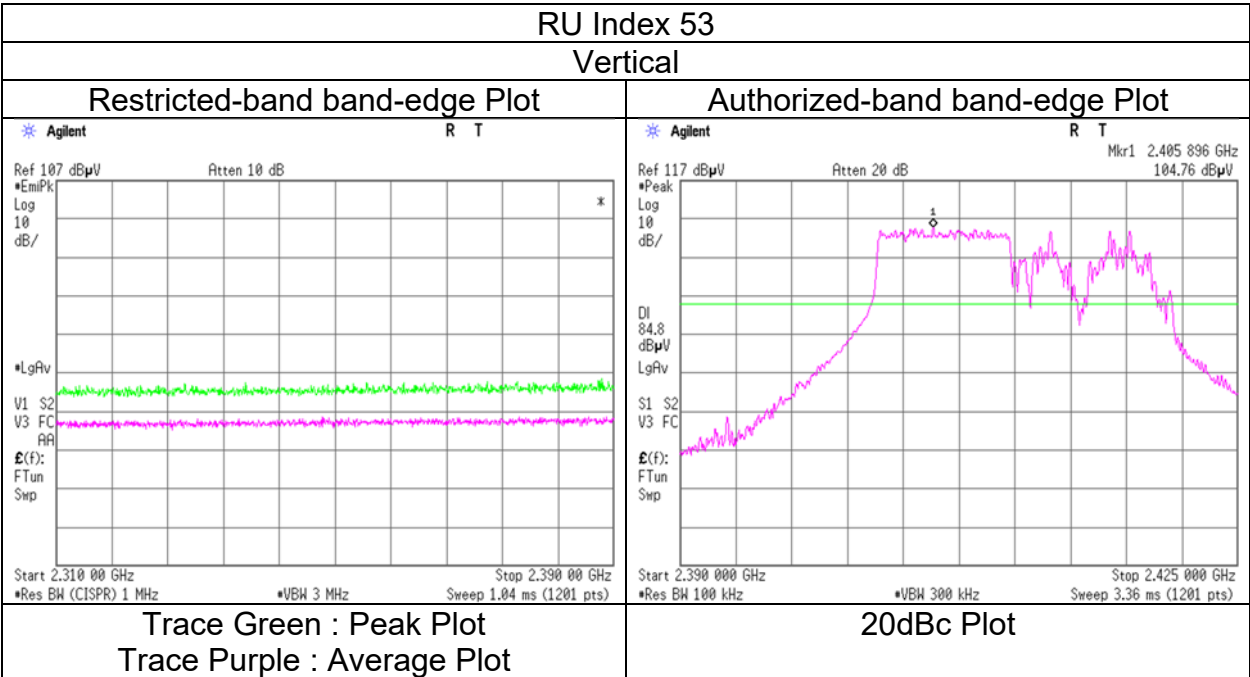
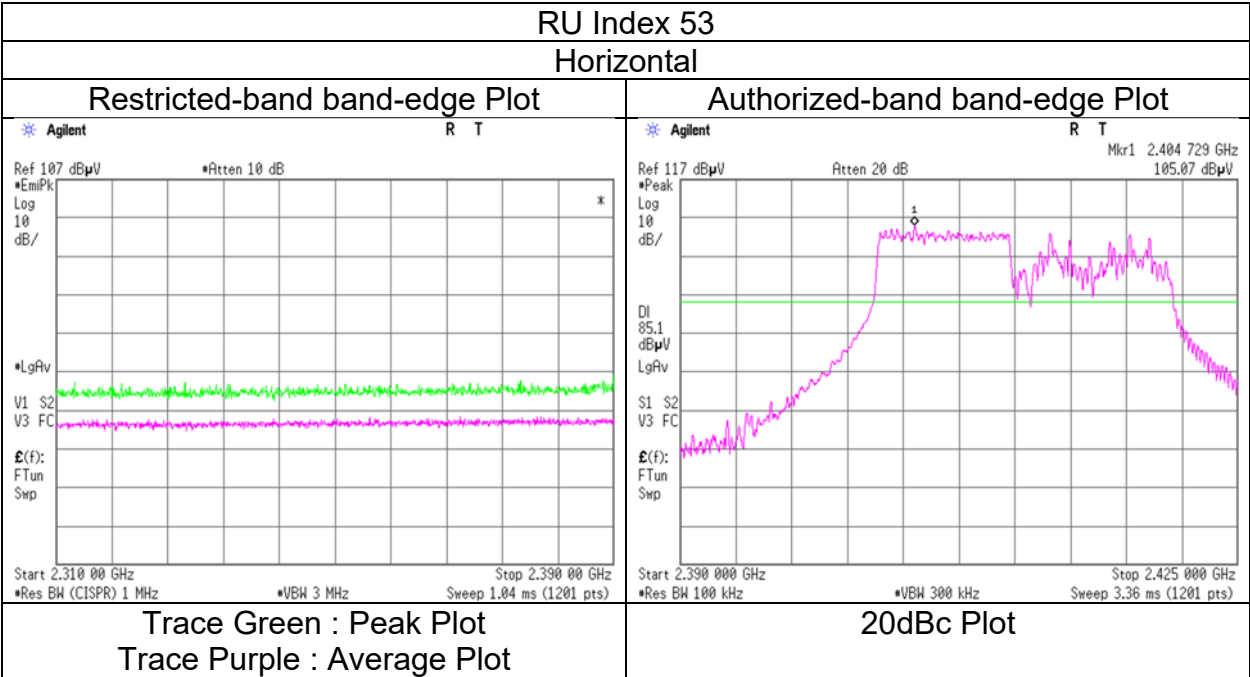
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 13, 2023
Temperature / Humidity	25 deg.C, 51 %RH
Engineer	Miku Ikudome
Mode	Tx 11ax-20(OFDMA)(SDM) 106-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 13, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	25 deg.C, 51 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Miku Ikudome	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 106-tone RU, 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

RU Index 54

(* 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.	2483.500	PK	56.87	27.75	12.64	45.99	2.19	53.46	73.9	20.4	143	64	-
Hori.	2880.087	PK	57.30	28.39	4.56	45.55	2.19	46.89	73.9	27.0	153	186	-
Hori.	4924.000	PK	56.59	31.65	4.37	45.34	2.19	49.46	73.9	24.4	151	27	-
Hori.	7386.000	PK	50.44	36.38	5.34	44.16	2.19	50.19	73.9	23.7	150	0	-
Hori.	9848.000	PK	48.73	38.99	6.20	42.73	2.19	53.38	73.9	20.5	150	0	-
Hori.	2483.500	AV	45.82	27.75	12.64	45.99	2.19	42.41	53.9	11.4	143	64	-
Hori.	2880.087	AV	50.72	28.39	4.56	45.55	2.19	40.31	53.9	13.5	153	186	-
Hori.	4924.000	AV	46.73	31.65	4.37	45.34	2.19	39.60	53.9	14.3	151	27	-
Hori.	7386.000	AV	40.82	36.38	5.34	44.16	2.19	40.57	53.9	13.3	150	0	Floor noise
Hori.	9848.000	AV	39.36	38.99	6.20	42.73	2.19	44.01	53.9	9.8	150	0	Floor noise
Vert.	2483.500	PK	57.30	27.75	12.64	45.99	2.19	53.89	73.9	20.0	171	155	-
Vert.	2487.250	PK	60.94	27.75	12.65	45.98	2.19	57.55	73.9	16.3	171	155	-
Vert.	2879.995	PK	56.96	28.39	4.56	45.55	2.19	46.55	73.9	27.3	141	150	-
Vert.	4924.000	PK	56.29	31.65	4.37	45.34	2.19	49.16	73.9	24.7	119	8	-
Vert.	7386.000	PK	49.52	36.38	5.34	44.16	2.19	49.27	73.9	24.6	150	0	-
Vert.	9848.000	PK	48.48	38.99	6.20	42.73	2.19	53.13	73.9	20.7	150	0	-
Vert.	2483.500	AV	46.84	27.75	12.64	45.99	2.19	43.43	53.9	10.4	171	155	-
Vert.	2487.250	AV	46.36	27.75	12.65	45.98	2.19	42.97	53.9	10.9	171	155	-
Vert.	2879.995	AV	51.15	28.39	4.56	45.55	2.19	40.74	53.9	13.1	141	150	-
Vert.	4924.000	AV	45.48	31.65	4.37	45.34	2.19	38.35	53.9	15.5	119	8	-
Vert.	7386.000	AV	39.99	36.38	5.34	44.16	2.19	39.74	53.9	14.1	150	0	Floor noise
Vert.	9848.000	AV	38.43	38.99	6.20	42.73	2.19	43.08	53.9	10.8	150	0	Floor noise

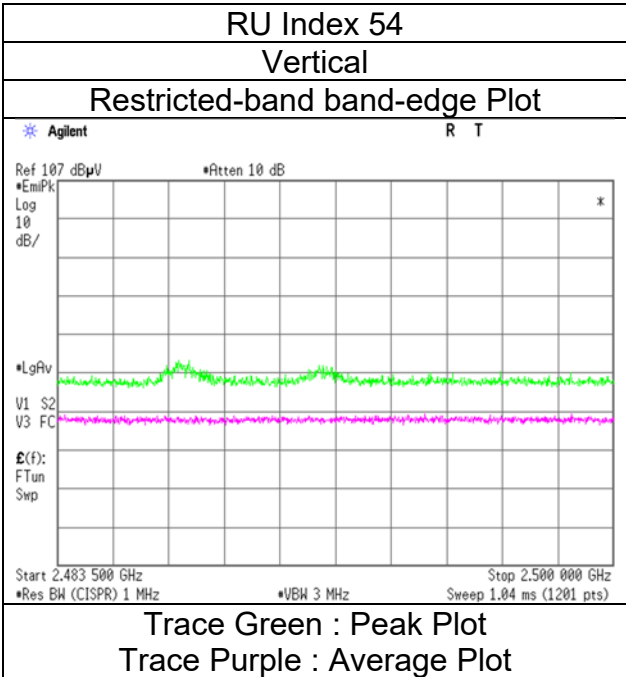
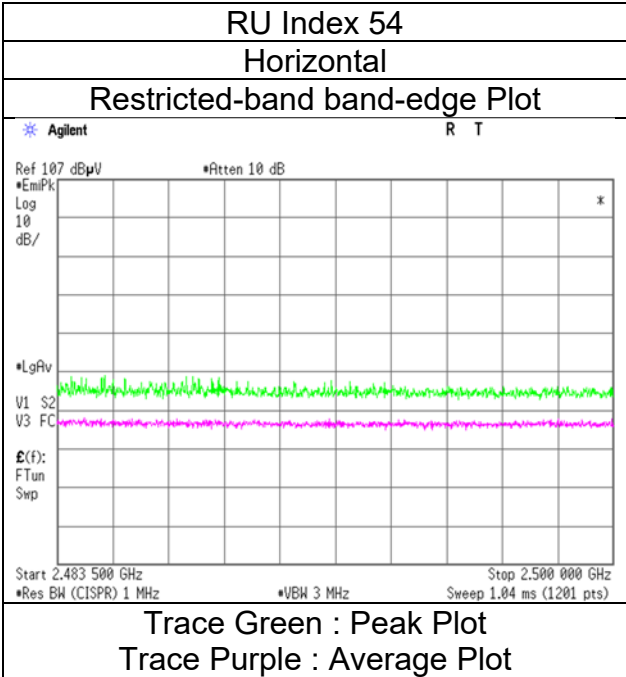
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : $20\log(3.86\text{ m} / 3.0\text{ m}) = 2.19\text{ dB}$

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 13, 2023
Temperature / Humidity	25 deg.C, 51 %RH
Engineer	Miku Ikudome
Mode	Tx 11ax-20(OFDMA)(SDM) 106-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 13, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	23 deg.C, 51 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Miku Ikudome	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 242-tone RU, 2412 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

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(* 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.	2390.000	PK	62.39	27.77	12.59	46.08	2.19	58.86	73.9	15.0	146	63	-
Hori.	2880.033	PK	56.03	28.39	4.56	45.55	2.19	45.62	73.9	28.2	140	185	-
Hori.	4824.000	PK	54.03	31.56	4.34	45.36	2.19	46.76	73.9	27.1	154	1	-
Hori.	7236.000	PK	51.19	36.21	5.30	44.53	2.19	50.36	73.9	23.5	150	0	-
Hori.	9648.000	PK	49.63	38.75	6.12	42.86	2.19	53.83	73.9	20.0	150	0	-
Hori.	7236.000	AV	40.68	36.21	5.30	44.53	2.19	39.85	53.9	14.0	150	0	Floor noise
Hori.	9648.000	AV	39.44	38.75	6.12	42.86	2.19	43.64	53.9	10.2	150	0	Floor noise
Vert.	2390.000	PK	62.20	27.77	12.59	46.08	2.19	58.67	73.9	15.2	106	23	-
Vert.	2879.992	PK	56.89	28.39	4.56	45.55	2.19	46.48	73.9	27.4	126	147	-
Vert.	4824.000	PK	55.53	31.56	4.34	45.36	2.19	48.26	73.9	25.6	126	7	-
Vert.	7236.000	PK	50.84	36.21	5.30	44.53	2.19	50.01	73.9	23.8	150	0	-
Vert.	9648.000	PK	49.39	38.75	6.12	42.86	2.19	53.59	73.9	20.3	150	0	-
Vert.	7236.000	AV	41.44	36.21	5.30	44.53	2.19	40.61	53.9	13.2	150	0	Floor noise
Vert.	9648.000	AV	39.78	38.75	6.12	42.86	2.19	43.98	53.9	9.9	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2390.000	AV	51.61	27.77	12.59	46.08	0.23	2.19	48.31	53.9	5.5	*1)
Hori.	2880.033	AV	50.66	28.39	4.56	45.55	0.23	2.19	40.48	53.9	13.4	-
Hori.	4824.000	AV	46.60	31.56	4.34	45.36	0.23	2.19	39.56	53.9	14.3	-
Vert.	2390.000	AV	52.44	27.77	12.59	46.08	0.23	2.19	49.14	53.9	4.7	*1)
Vert.	2879.992	AV	51.35	28.39	4.56	45.55	0.23	2.19	41.17	53.9	12.7	-
Vert.	4824.000	AV	46.59	31.56	4.34	45.36	0.23	2.19	39.55	53.9	14.3	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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.	2412.000	PK	102.73	27.74	12.60	46.06	2.19	99.20	-	-	Carrier
Hori.	2400.000	PK	65.78	27.76	12.59	46.07	2.19	62.25	79.2	16.9	-
Vert.	2412.000	PK	104.85	27.74	12.60	46.06	2.19	101.32	-	-	Carrier
Vert.	2400.000	PK	67.25	27.76	12.59	46.07	2.19	63.72	81.3	17.5	-

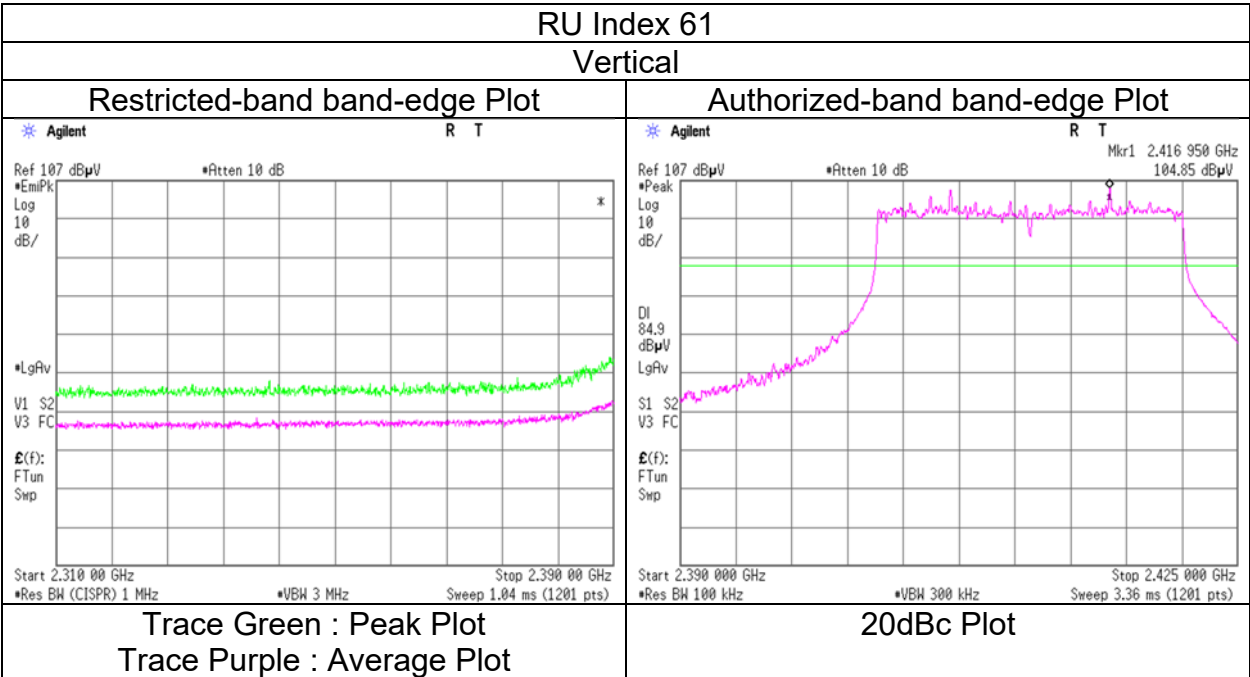
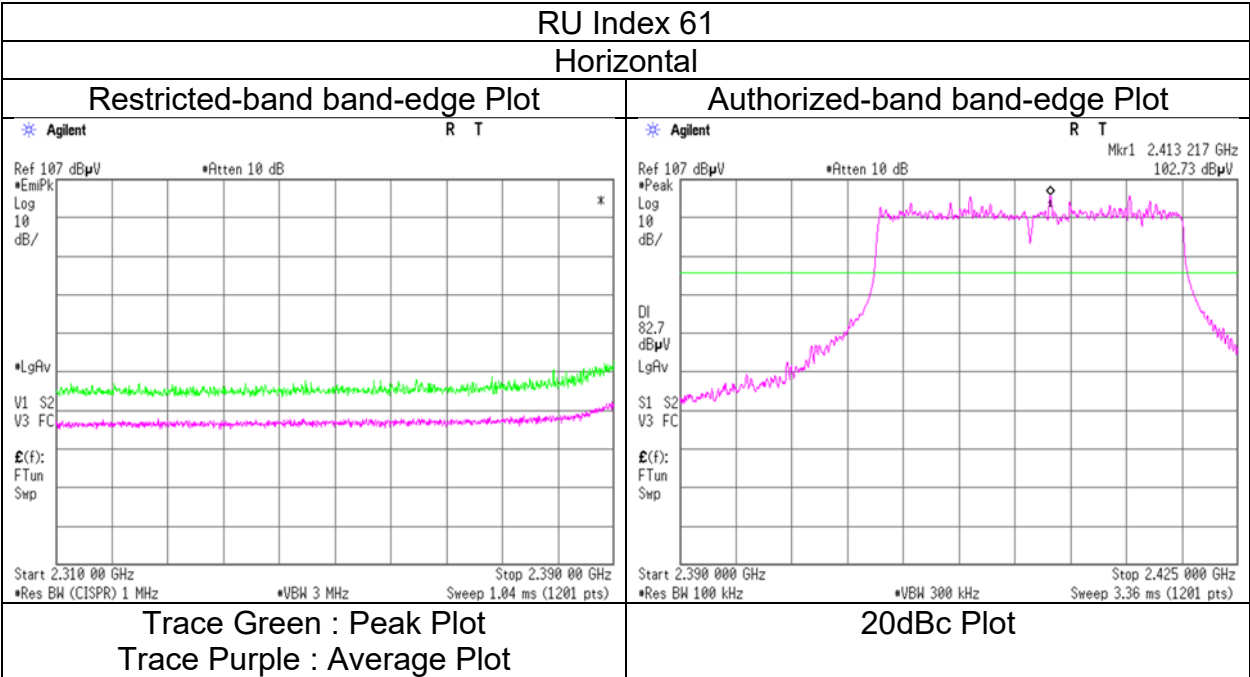
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 12, 2023
Temperature / Humidity	25 deg.C, 42 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDMA)(SDM) 242-tone RU, 2412 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	WAC 1	WAC 1
Date	October 13, 2023	October 22, 2023	October 23, 2023
Temperature / Humidity	23 deg.C, 51 %RH	20 deg.C, 43 %RH	21 deg.C, 50 %RH
Engineer	Miku Ikudome	Yohsuke Matsuzawa	Kenichi Adachi
	(1 GHz -10 GHz)	(10 GHz - 18 GHz)	(18 GHz - 26.5 GHz)
Mode	Tx 11ax-20(OFDMA)(SDM) 242-tone RU, 2462 MHz		
Antenna	2G_CH0: monopole, 2G_CH1: slot		

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(* 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.	2483.500	PK	57.81	27.75	12.64	45.99	2.19	54.40	73.9	19.5	144	76	-
Hori.	2880.102	PK	57.63	28.39	4.56	45.55	2.19	47.22	73.9	26.6	139	187	-
Hori.	4924.007	PK	53.49	31.65	4.37	45.34	2.19	46.36	73.9	27.5	193	24	-
Hori.	7386.000	PK	50.74	36.38	5.34	44.16	2.19	50.49	73.9	23.4	150	0	-
Hori.	9848.000	PK	49.34	38.99	6.20	42.73	2.19	53.99	73.9	19.9	150	0	-
Hori.	7386.000	AV	41.05	36.38	5.34	44.16	2.19	40.80	53.9	13.1	150	0	Floor noise
Hori.	9848.000	AV	39.66	38.99	6.20	42.73	2.19	44.31	53.9	9.5	150	0	Floor noise
Vert.	2483.500	PK	60.24	27.75	12.64	45.99	2.19	56.83	73.9	17.0	159	157	-
Vert.	2880.005	PK	57.48	28.39	4.56	45.55	2.19	47.07	73.9	26.8	144	148	-
Vert.	4924.000	PK	55.79	31.65	4.37	45.34	2.19	48.66	73.9	25.2	116	11	-
Vert.	7386.000	PK	50.51	36.38	5.34	44.16	2.19	50.26	73.9	23.6	150	0	-
Vert.	9848.000	PK	49.29	38.99	6.20	42.73	2.19	53.94	73.9	19.9	150	0	-
Vert.	7386.000	AV	41.06	36.38	5.34	44.16	2.19	40.81	53.9	13.0	150	0	Floor noise
Vert.	9848.000	AV	39.56	38.99	6.20	42.73	2.19	44.21	53.9	9.6	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 (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2483.500	AV	48.13	27.75	12.64	45.99	0.23	2.19	44.95	53.9	8.9	*1)
Hori.	2880.102	AV	50.79	28.39	4.56	45.55	0.23	2.19	40.61	53.9	13.2	-
Hori.	4924.007	AV	44.77	31.65	4.37	45.34	0.23	2.19	37.87	53.9	16.0	-
Vert.	2483.500	AV	49.69	27.75	12.64	45.99	0.23	2.19	46.51	53.9	7.3	*1)
Vert.	2880.005	AV	51.14	28.39	4.56	45.55	0.23	2.19	40.96	53.9	12.9	-
Vert.	4924.000	AV	43.78	31.65	4.37	45.34	0.23	2.19	36.88	53.9	17.0	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

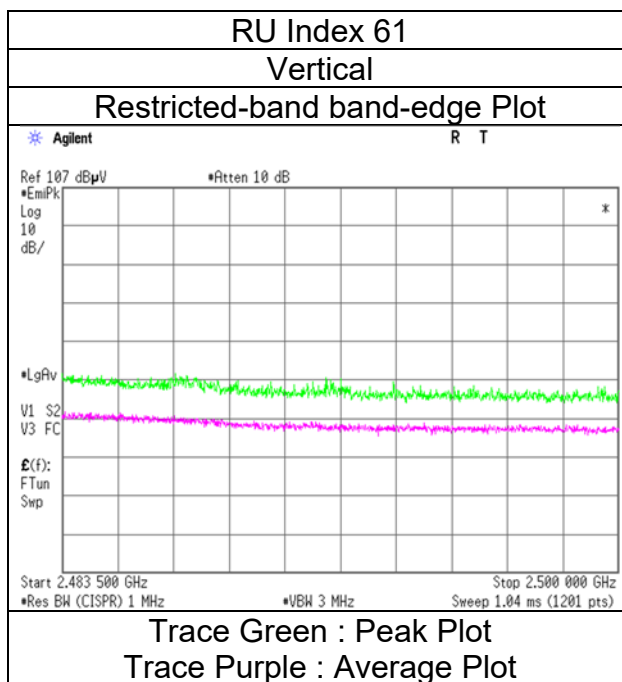
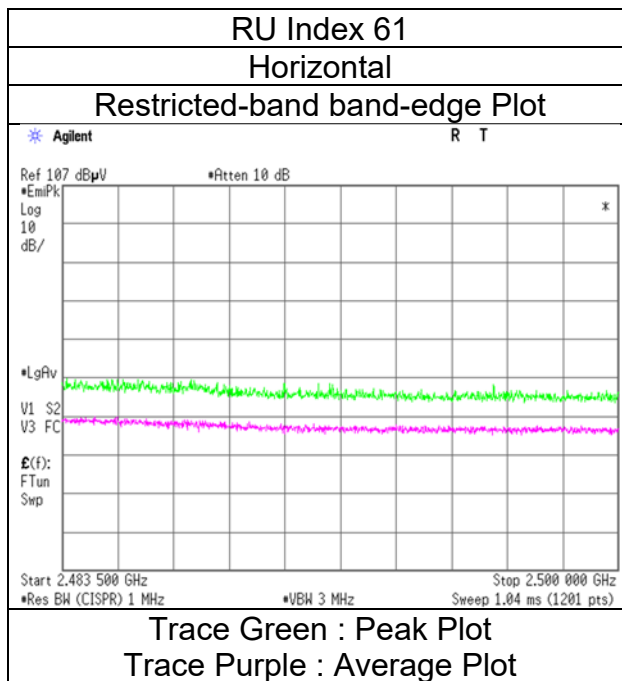
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission (Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	WAC 1
Date	October 13, 2023
Temperature / Humidity	23 deg.C, 51 %RH
Engineer	Miku Ikudome
Mode	Tx 11ax-20(OFDMA)(SDM) 242-tone RU, 2462 MHz
Antenna	2G_CH0: monopole, 2G_CH1: slot



* The measurement was conducted for a sufficiently long enough time to detect any possible spurious emissions.

Final result of restricted band edge was shown in tabular data

Radiated Spurious Emission

Test place	Shonan EMC Lab.	
Semi Anechoic Chamber	SAC 3	SAC 3
Date	September 23, 2023	September 24, 2023
Temperature / Humidity	22 deg. C / 55 % RH	24 deg. C / 48 % RH
Engineer	Makoto Hosaka	Yasumasa Owaki
	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE (1M-PHY), 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.	2390.000	PK	48.01	27.98	14.48	41.61	2.19	51.05	73.9	22.8	148	76	-
Hori.	4804.000	PK	55.48	31.39	7.04	42.87	2.19	53.23	73.9	20.6	237	260	-
Hori.	7206.000	PK	50.19	37.12	8.47	43.34	2.19	54.63	73.9	19.2	150	0	-
Vert.	2390.000	PK	47.93	27.98	14.48	41.61	2.19	50.97	73.9	22.9	200	36	-
Vert.	4804.000	PK	56.83	31.39	7.04	42.87	2.19	54.58	73.9	19.3	138	217	-
Vert.	7206.000	PK	50.59	37.12	8.47	43.34	2.19	55.03	73.9	18.8	150	0	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Average measurement value with duty factor

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Duty Factor [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2390.000	AV	38.14	27.98	14.48	41.61	1.29	2.19	42.47	53.9	11.4	*1)
Hori.	4804.000	AV	49.05	31.39	7.04	42.87	1.29	2.19	48.09	53.9	5.8	-
Hori.	7206.000	AV	40.30	37.12	8.47	43.34	1.29	2.19	46.03	53.9	7.8	-
Vert.	2390.000	AV	36.81	27.98	14.48	41.61	1.29	2.19	41.14	53.9	12.7	*1)
Vert.	4804.000	AV	51.22	31.39	7.04	42.87	1.29	2.19	50.26	53.9	3.6	-
Vert.	7206.000	AV	40.43	37.12	8.47	43.34	1.29	2.19	46.16	53.9	7.7	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

*1) Not out of band emission (Leakage Power)

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	101.83	27.97	14.49	41.61	2.19	104.87	-	-	Carrier
Hori.	2400.000	PK	44.49	27.97	14.49	41.61	2.19	47.53	84.8	37.2	-
Vert.	2402.000	PK	101.52	27.97	14.49	41.61	2.19	104.56	-	-	Carrier
Vert.	2400.000	PK	45.03	27.97	14.49	41.61	2.19	48.07	84.5	36.4	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.86 m / 3.0 m) = 2.19 dB

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