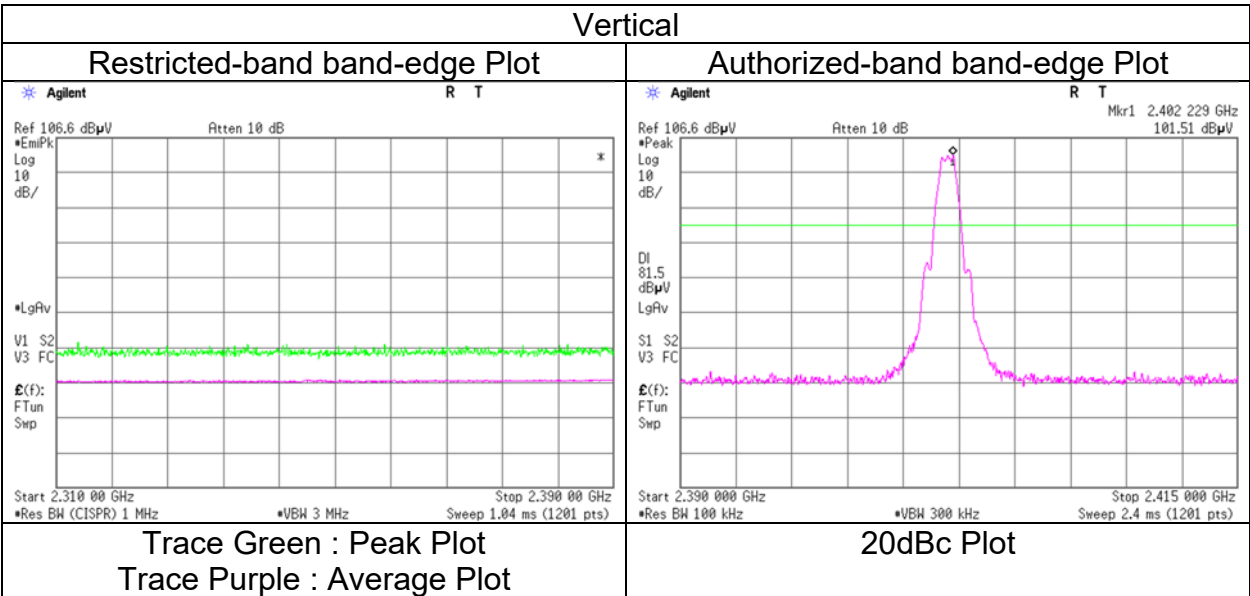
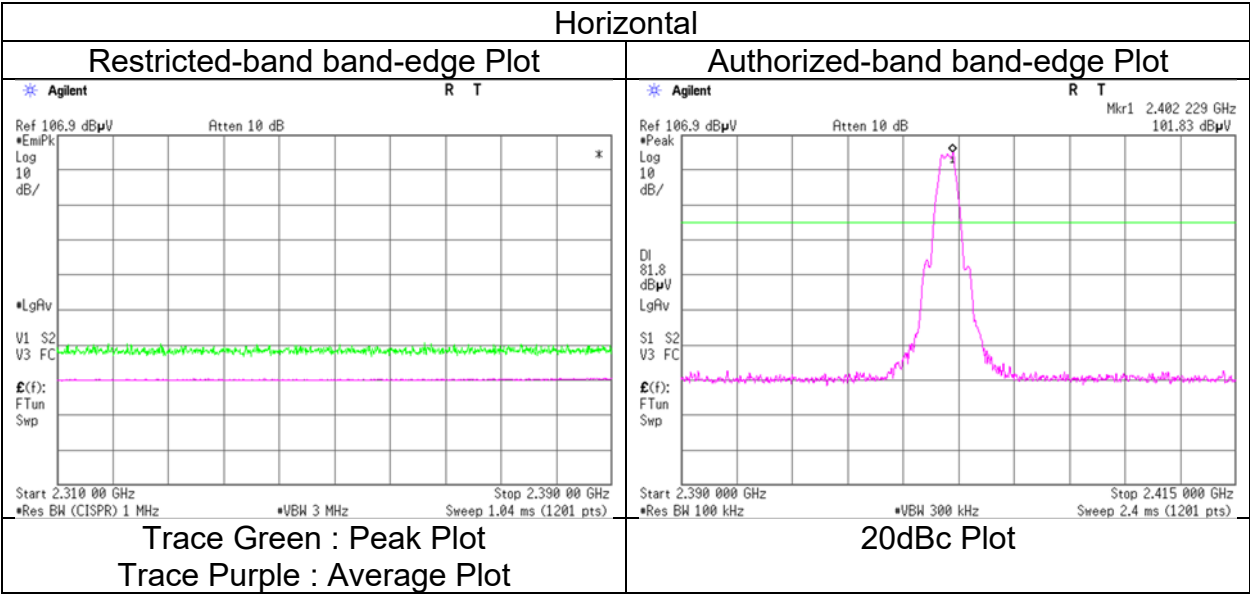


Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	September 23, 2023
Temperature / Humidity	22 deg. C / 55 % RH
Engineer	Makoto Hosaka
	(1 GHz to 10 GHz)
Mode	Tx BT LE (1M-PHY), 2402 MHz



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

Radiated Spurious Emission

Test place	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), 2440 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.	4880.000	PK	54.29	31.51	7.09	42.88	2.19	52.20	73.9	21.7	155	274	-
Hori.	7320.000	PK	49.80	37.25	8.51	43.42	2.19	54.33	73.9	19.5	150	0	-
Vert.	4880.000	PK	55.23	31.51	7.09	42.88	2.19	53.14	73.9	20.7	113	243	-
Vert.	7320.000	PK	49.61	37.25	8.51	43.42	2.19	54.14	73.9	19.7	150	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: $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

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.	4880.000	AV	47.15	31.51	7.09	42.88	1.29	2.19	46.35	53.9	7.5	-
Hori.	7320.000	AV	40.25	37.25	8.51	43.42	1.29	2.19	46.07	53.9	7.8	-
Vert.	4880.000	AV	49.28	31.51	7.09	42.88	1.29	2.19	48.48	53.9	5.4	-
Vert.	7320.000	AV	40.26	37.25	8.51	43.42	1.29	2.19	46.08	53.9	7.8	-

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	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), 2480 MHz	

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	2483.500	PK	50.14	27.89	14.59	41.64	2.19	53.17	73.9	20.7	150	88	-
Hori.	4960.000	PK	52.40	31.73	7.15	42.89	2.19	50.58	73.9	23.3	119	61	-
Hori.	7440.000	PK	50.55	37.42	8.57	43.50	2.19	55.23	73.9	18.6	150	0	-
Vert.	2483.500	PK	51.12	27.89	14.59	41.64	2.19	54.15	73.9	19.7	166	34	-
Vert.	4960.000	PK	53.28	31.73	7.15	42.89	2.19	51.46	73.9	22.4	120	192	-
Vert.	7440.000	PK	50.29	37.42	8.57	43.50	2.19	54.97	73.9	18.9	150	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 : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

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	37.90	27.89	14.59	41.64	1.29	2.19	42.22	53.9	11.6	*1)
Hori.	4960.000	AV	44.54	31.73	7.15	42.89	1.29	2.19	44.01	53.9	9.8	-
Hori.	7440.000	AV	40.42	37.42	8.57	43.50	1.29	2.19	46.39	53.9	7.5	-
Vert.	2483.500	AV	38.51	27.89	14.59	41.64	1.29	2.19	42.83	53.9	11.0	*1)
Vert.	4960.000	AV	45.84	31.73	7.15	42.89	1.29	2.19	45.31	53.9	8.5	-
Vert.	7440.000	AV	40.40	37.42	8.57	43.50	1.29	2.19	46.37	53.9	7.5	-

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

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

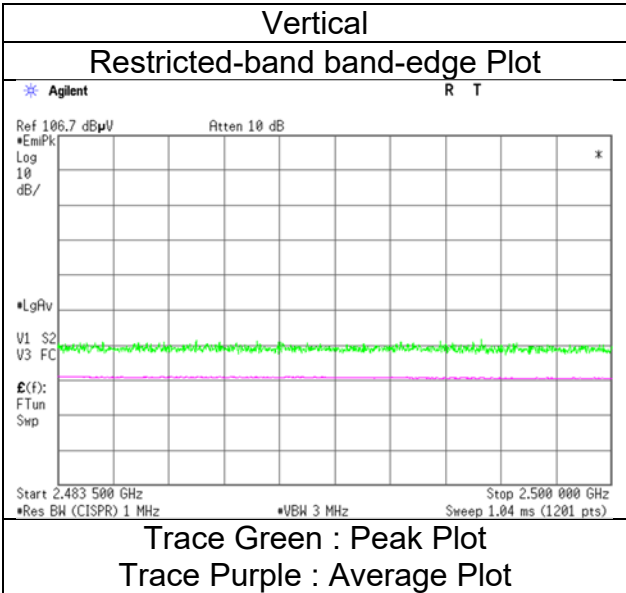
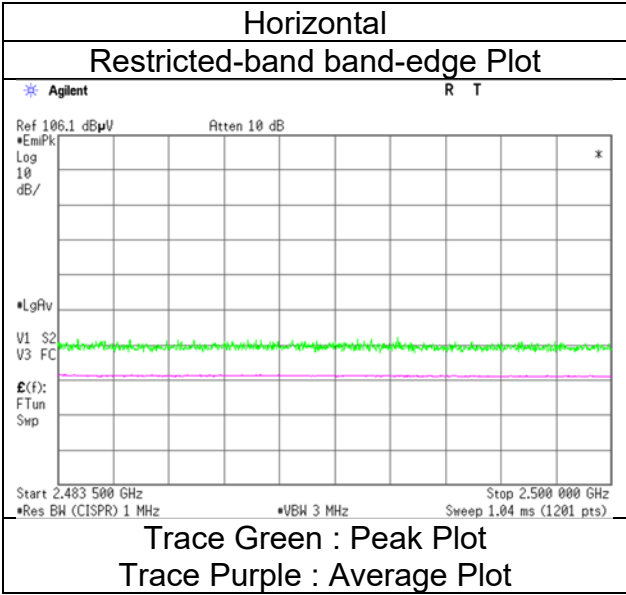
10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Duty factor refer to "Burst rate confirmation" sheet.

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	September 23, 2023
Temperature / Humidity	22 deg. C / 55 % RH
Engineer	Makoto Hosaka
	(1 GHz to 10 GHz)
Mode	Tx BT LE (1M-PHY), 2480 MHz



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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	SAC 3	SAC 3
Date	October 28, 2023	September 23, 2023	September 24, 2023
Temperature / Humidity	21 deg. C / 51 % RH	22 deg. C / 55 % RH	24 deg. C / 48 % RH
Engineer	Miku Ikudome	Makoto Hosaka	Yasumasa Owaki
	(30 MHz to 1000 MHz)	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE (2M-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.	159.373	QP	47.71	12.07	7.15	33.03	0.00	33.90	43.5	9.6	226	181	-
Hori.	168.052	QP	47.32	12.47	7.23	33.02	0.00	34.00	43.5	9.5	281	201	-
Hori.	182.344	QP	46.11	13.38	7.19	32.99	0.00	33.69	43.5	9.8	291	33	-
Hori.	215.986	QP	43.29	11.03	7.16	32.92	0.00	28.56	43.5	14.9	160	49	-
Hori.	2390.000	PK	48.25	27.98	14.48	41.61	2.19	51.29	73.9	22.6	149	80	-
Hori.	4804.000	PK	55.19	31.39	7.04	42.87	2.19	52.94	73.9	20.9	379	73	-
Hori.	7206.000	PK	49.33	37.12	8.47	43.34	2.19	53.77	73.9	20.1	150	0	-
Vert.	100.001	QP	40.03	9.51	6.88	33.09	0.00	23.33	43.5	20.1	100	108	-
Vert.	167.993	QP	46.58	12.47	7.23	33.02	0.00	33.26	43.5	10.2	100	313	-
Vert.	175.042	QP	45.51	12.91	7.25	33.00	0.00	32.67	43.5	10.8	100	323	-
Vert.	2390.000	PK	47.76	27.98	14.48	41.61	2.19	50.80	73.9	23.1	125	35	-
Vert.	4804.000	PK	55.94	31.39	7.04	42.87	2.19	53.69	73.9	20.2	103	220	-
Vert.	7206.000	PK	50.24	37.12	8.47	43.34	2.19	54.68	73.9	19.2	150	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 : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

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	37.56	27.98	14.48	41.61	4.62	2.19	45.22	53.9	8.6	*1)
Hori.	4804.000	AV	44.70	31.39	7.04	42.87	4.62	2.19	47.07	53.9	6.8	-
Hori.	7206.000	AV	39.86	37.12	8.47	43.34	4.62	2.19	48.92	53.9	4.9	-
Vert.	2390.000	AV	38.34	27.98	14.48	41.61	4.62	2.19	46.00	53.9	7.8	*1)
Vert.	4804.000	AV	46.07	31.39	7.04	42.87	4.62	2.19	48.44	53.9	5.4	-
Vert.	7206.000	AV	40.32	37.12	8.47	43.34	4.62	2.19	49.38	53.9	4.5	-

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.	2402.000	PK	100.52	27.97	14.49	41.61	2.19	103.56	-	-	Carrier
Hori.	2400.000	PK	61.86	27.97	14.49	41.61	2.19	64.90	83.5	18.6	-
Vert.	2402.000	PK	101.53	27.97	14.49	41.61	2.19	104.57	-	-	Carrier
Vert.	2400.000	PK	62.73	27.97	14.49	41.61	2.19	65.77	84.5	18.7	-

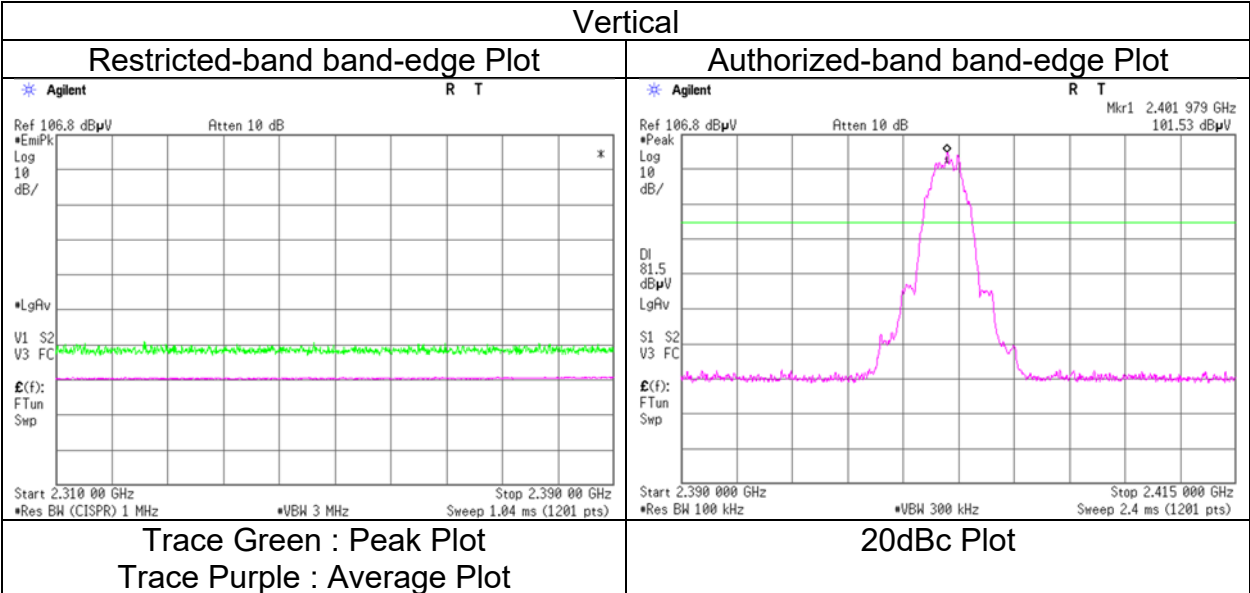
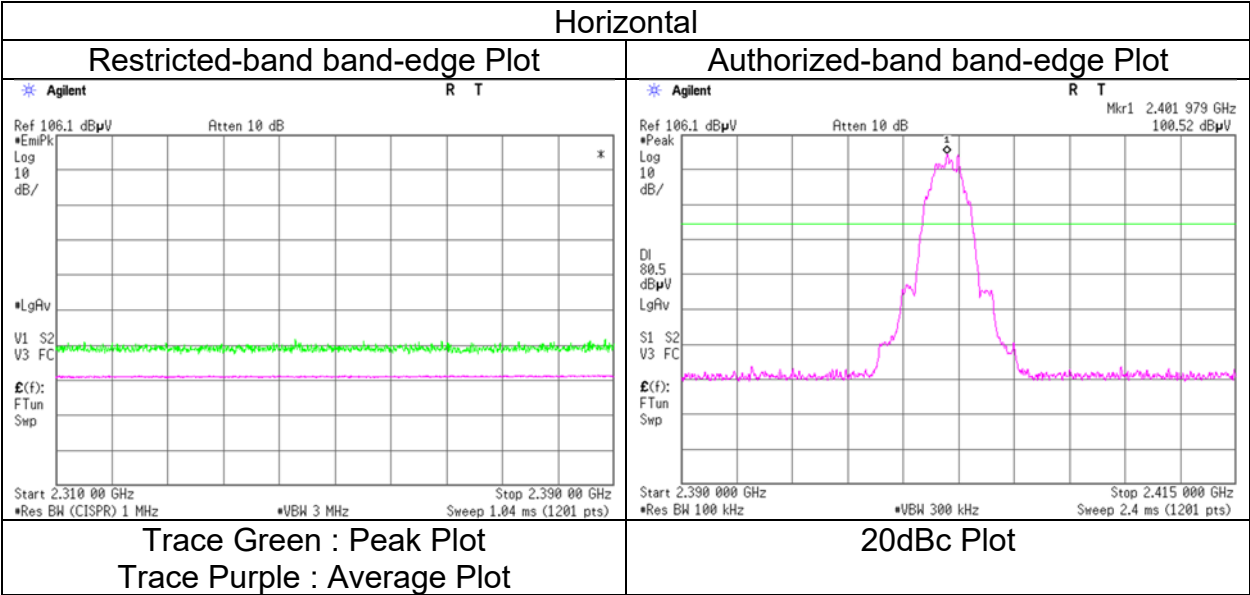
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor

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 23, 2023
Temperature / Humidity	22 deg. C / 55 % RH
Engineer	Makoto Hosaka
Mode	Tx BT LE (2M-PHY), 2402 MHz



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

Radiated Spurious Emission

Test place	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 (2M-PHY), 2440 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.	4880.000	PK	53.23	31.51	7.09	42.88	2.19	51.14	73.9	22.7	110	62	-
Hori.	7320.000	PK	49.53	37.25	8.51	43.42	2.19	54.06	73.9	19.8	150	0	-
Vert.	4880.000	PK	54.59	31.51	7.09	42.88	2.19	52.50	73.9	21.4	101	217	-
Vert.	7320.000	PK	49.26	37.25	8.51	43.42	2.19	53.79	73.9	20.1	150	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 : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

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.	4880.000	AV	43.75	31.51	7.09	42.88	4.62	2.19	46.28	53.9	7.6	-
Hori.	7320.000	AV	40.13	37.25	8.51	43.42	4.62	2.19	49.28	53.9	4.6	-
Vert.	4880.000	AV	44.72	31.51	7.09	42.88	4.62	2.19	47.25	53.9	6.6	-
Vert.	7320.000	AV	40.17	37.25	8.51	43.42	4.62	2.19	49.32	53.9	4.5	-

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.

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 (2M-PHY), 2480 MHz	

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

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	2483.500	PK	51.29	27.89	14.59	41.64	2.19	54.32	73.9	19.5	144	48	-
Hori.	4960.000	PK	51.60	31.73	7.15	42.89	2.19	49.78	73.9	24.1	145	67	-
Hori.	7440.000	PK	49.85	37.42	8.57	43.50	2.19	54.53	73.9	19.3	150	0	-
Vert.	2483.500	PK	51.96	27.89	14.59	41.64	2.19	54.99	73.9	18.9	264	48	-
Vert.	4960.000	PK	52.93	31.73	7.15	42.89	2.19	51.11	73.9	22.7	128	217	-
Vert.	7440.000	PK	50.15	37.42	8.57	43.50	2.19	54.83	73.9	19.0	150	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 : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

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	39.48	27.89	14.59	41.64	4.62	2.19	47.13	53.9	6.7	*1)
Hori.	4960.000	AV	41.48	31.73	7.15	42.89	4.62	2.19	44.28	53.9	9.6	-
Hori.	7440.000	AV	40.12	37.42	8.57	43.50	4.62	2.19	49.42	53.9	4.4	-
Vert.	2483.500	AV	40.65	27.89	14.59	41.64	4.62	2.19	48.30	53.9	5.6	*1)
Vert.	4960.000	AV	42.58	31.73	7.15	42.89	4.62	2.19	45.38	53.9	8.5	-
Vert.	7440.000	AV	40.21	37.42	8.57	43.50	4.62	2.19	49.51	53.9	4.3	-

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

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

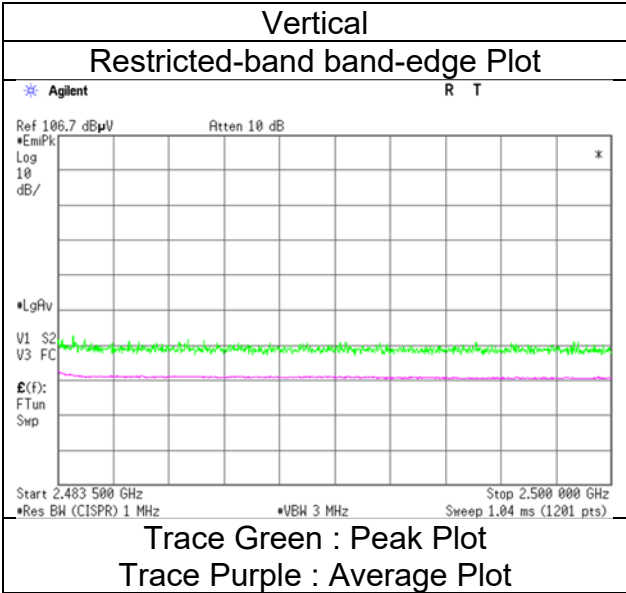
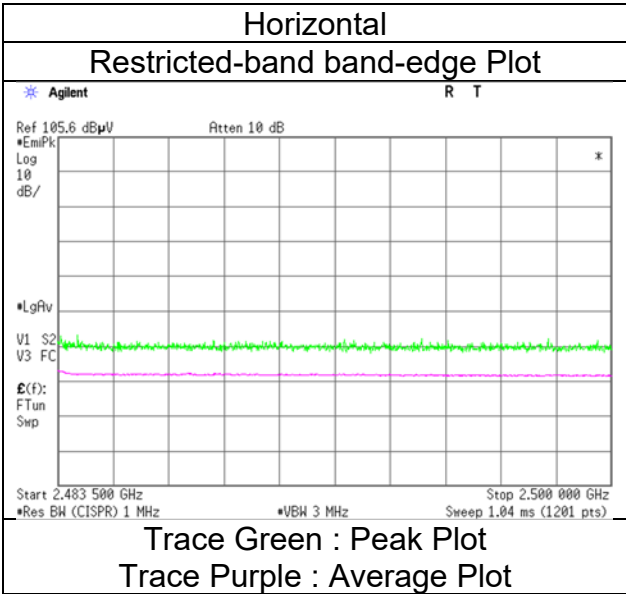
10 GHz - 40 GHz : $20\log(1.0\text{ m} / 3.0\text{ m}) = -9.54\text{ dB}$

Duty factor refer to "Burst rate confirmation" sheet.

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

Radiated Spurious Emission
(Reference Plot for band-edge)

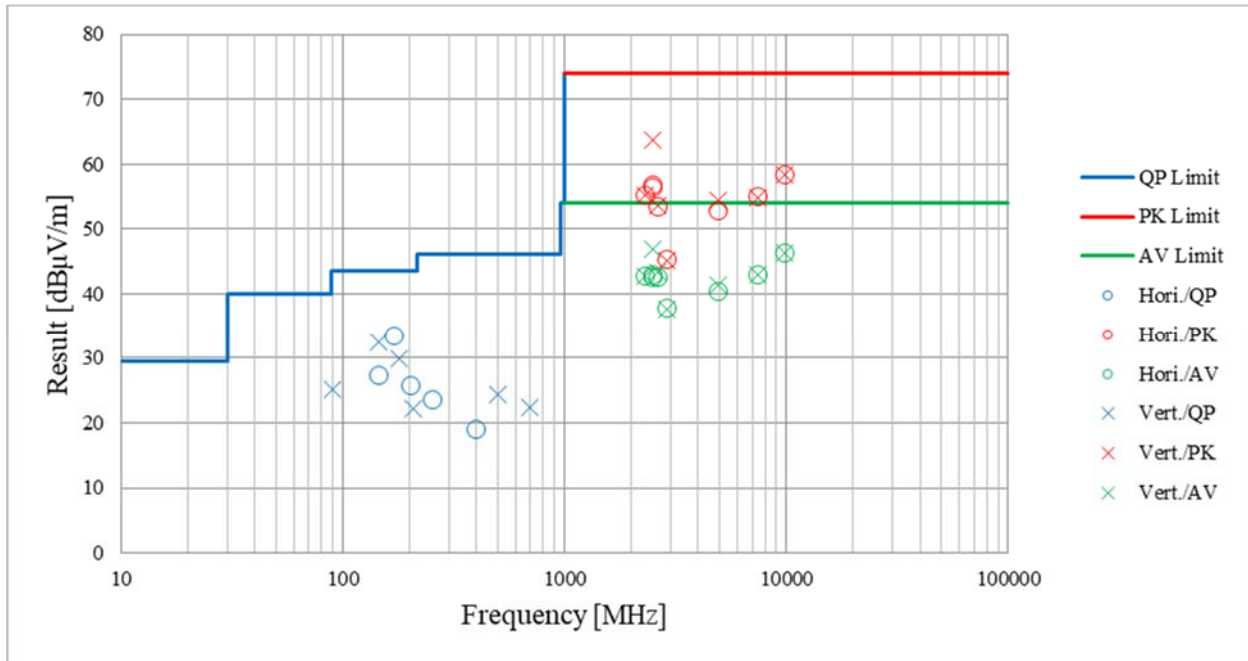
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	SAC 3
Date	September 23, 2023
Temperature / Humidity	22 deg. C / 55 % RH
Engineer	Makoto Hosaka
Mode	Tx BT LE (2M-PHY), 2480 MHz



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

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

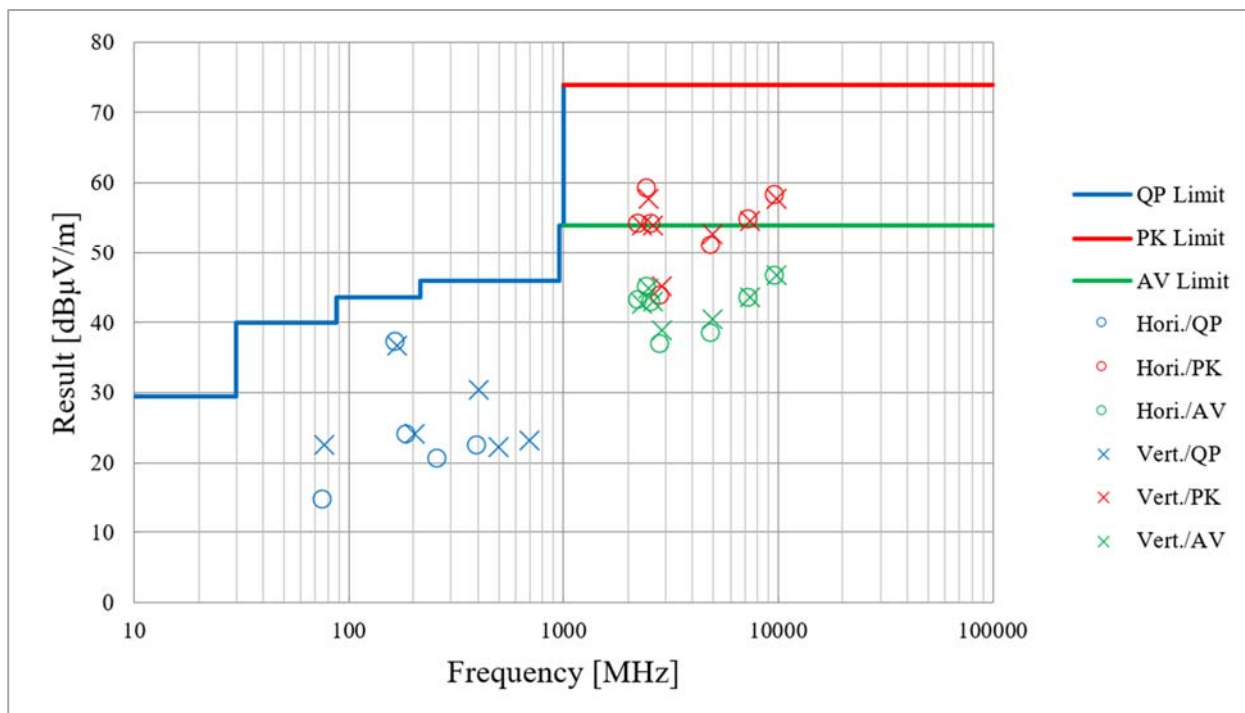
Test place	Shonan EMC Lab.			
Semi Anechoic Chamber	WAC 1	SAC 3	WAC 1	WAC 1
Date	October 24, 2023	August 28, 2023	September 7, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 51 %RH	22 deg.C, 55 %RH	25 deg.C, 58 %RH	26 deg.C, 45 %RH
Engineer	Kenichi Adachi	Takahiro Suzuki	Makoto Hosaka	Yosuke 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			



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

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

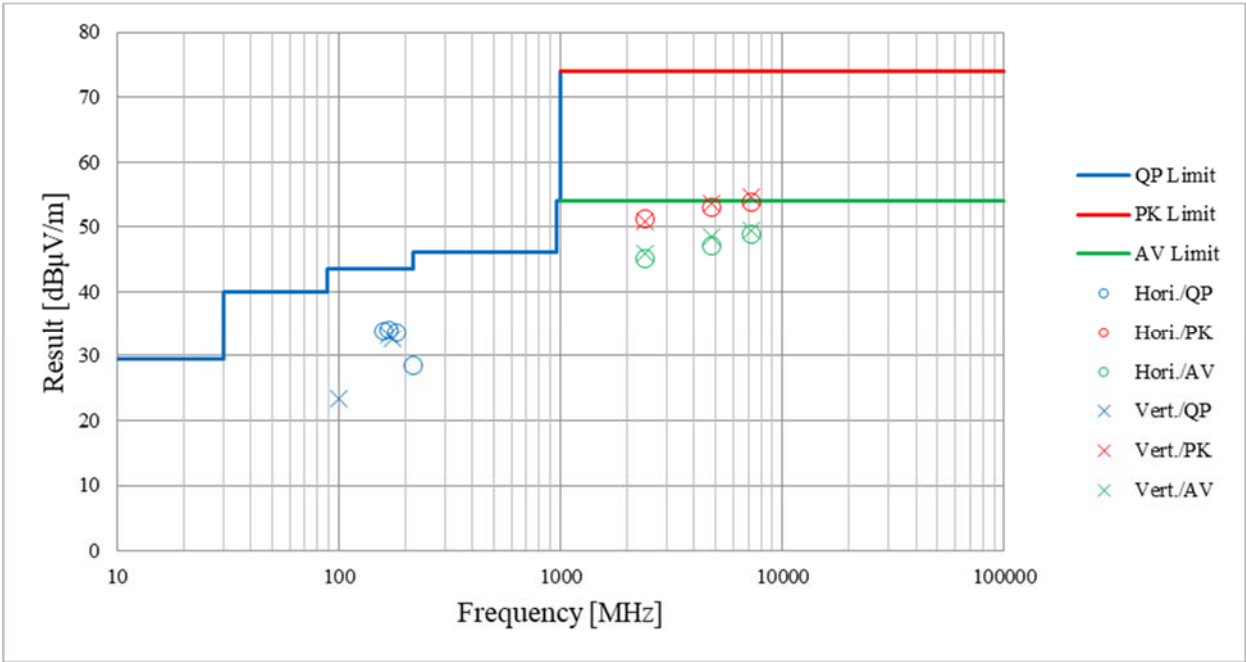
Test place	Shonan EMC Lab.			
Semi Anechoic Chamber	WAC 1	SAC 3	WAC 2	WAC 1
Date	October 24, 2023	September 1, 2023	September 1, 2023	September 6, 2023
Temperature / Humidity	22 deg.C, 51 %RH	23 deg.C, 53 %RH	25 deg.C, 55 %RH	26 deg.C, 45 %RH
Engineer	Kenichi Adachi	Takahiro Suzuki	Makoto Hosaka	Yosuke 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			



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

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

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	WAC 1	SAC 3	SAC 3
Date	October 28, 2023	September 23, 2023	September 24, 2023
Temperature / Humidity	21 deg. C / 51 % RH	22 deg. C / 55 % RH	24 deg. C / 48 % RH
Engineer	Miku Ikudome	Makoto Hosaka	Yasumasa Owaki
	(30 MHz to 1000 MHz)	(1 GHz to 10 GHz)	(10 GHz to 26.5 GHz)
Mode	Tx BT LE (2M-PHY), 2402 MHz		

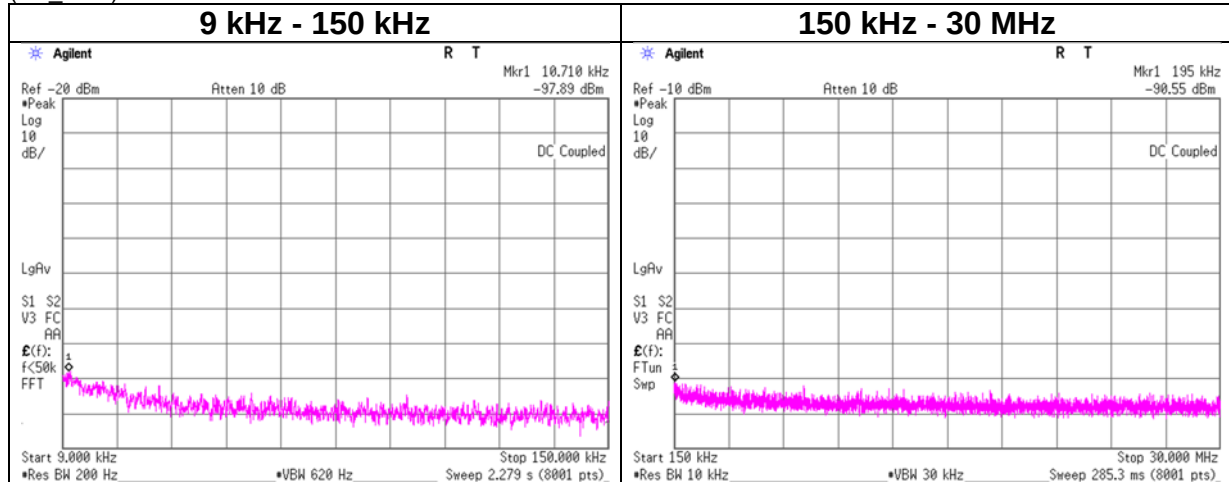


*These plots data contains sufficient number to show the trend of characteristic features for EUT.

Conducted Spurious Emission

Test place Shonan EMC Lab. No.2 Measurement Room
Date September 16, 2023
Temperature / Humidity 26 deg. C / 45 % RH
Engineer Kenichi Adachi
Mode Tx 11ax-20 (OFDM)(CDD), 2462 MHz, worst antenna port

(2G_CH0)



Frequency [kHz]	Reading [dBm]	Cable Loss [dB]	Attenuator Loss [dB]	Antenna Gain * [dBi]	N (Number of Output)	EIRP [dBm]	Distance [m]	Ground bounce [dB]	E (field strength) [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
10.71	-97.9	0.5	20.1	2.0	2.0	-72.3	300	6.0	-11.0	47.0	58.0	-
195.00	-90.6	0.5	20.1	2.0	2.0	-64.9	300	6.0	-3.7	21.8	25.5	-

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

$EIRP [dBm] = Reading [dBm] + Cable\ loss [dB] + Attenuator\ Loss [dB] + Antenna\ gain [dBi] + 10 * \log (N)$

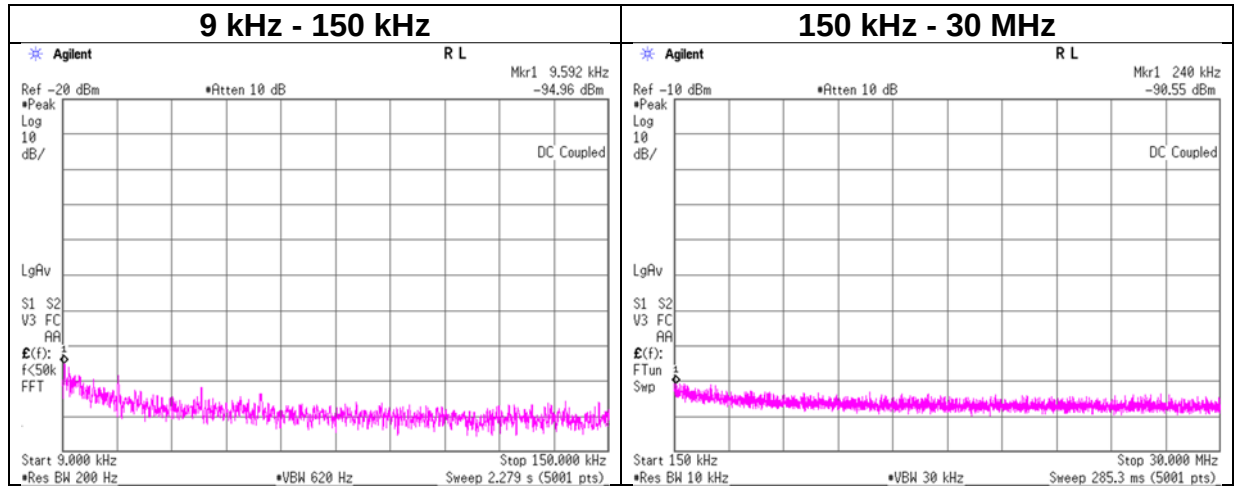
N: Number of output

*2.0 dBi was applied to the test result based on ANSI C63.10 since antenna gain was less than 2.0 dBi.

* This test was limited to the channel and mode that had the highest power during the antenna terminal test, as preliminary testing indicated that changing the operating frequency had no significant impact on the emissions in those frequency bands.

Conducted Spurious Emission

Test place Shonan EMC Lab. No.2 Measurement Room
Date September 16, 2023
Temperature / Humidity 26 deg. C / 45 % RH
Engineer Kenichi Adachi
Mode Tx BT LE 2M-PHY, 2402 MHz



Frequency [kHz]	Reading [dBm]	Cable Loss [dB]	Attenuator Loss [dB]	Antenna Gain * [dBi]	N (Number of Output)	EIRP [dBm]	Distance [m]	Ground bounce [dB]	E (field strength) [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
9.59	-95.0	0.9	9.8	2.0	1.0	-82.2	300	6.0	-21.0	47.9	68.9	-
240.00	-90.6	0.9	9.8	2.0	1.0	-77.8	300	6.0	-16.6	20.0	36.6	-

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

$EIRP [dBm] = Reading [dBm] + Cable\ loss [dB] + Attenuator\ Loss [dB] + Antenna\ gain [dBi] + 10 * \log (N)$

N: Number of output

*2.0 dBi was applied to the test result based on ANSI C63.10 since antenna gain was less than 2.0 dBi.

* This test was limited to the channel and mode that had the highest power during the antenna terminal test, as preliminary testing indicated that changing the operating frequency had no significant impact on the emissions in those frequency bands.

Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11b(CDD), High power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0880	0.0776	-7.81	0.1656	8.00	15.81
2437	0.0767	0.0746	-8.20	0.1513	8.00	16.20
2462	0.0760	0.0645	-8.52	0.1405	8.00	16.52

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-31.58	0.86	20.16	-10.56	0.0880
2437	-32.17	0.86	20.16	-11.15	0.0767
2462	-32.21	0.86	20.16	-11.19	0.0760

2G_CH1

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-32.12	0.86	20.16	-11.10	0.0776
2437	-32.29	0.86	20.16	-11.27	0.0746
2462	-32.92	0.86	20.16	-11.90	0.0645

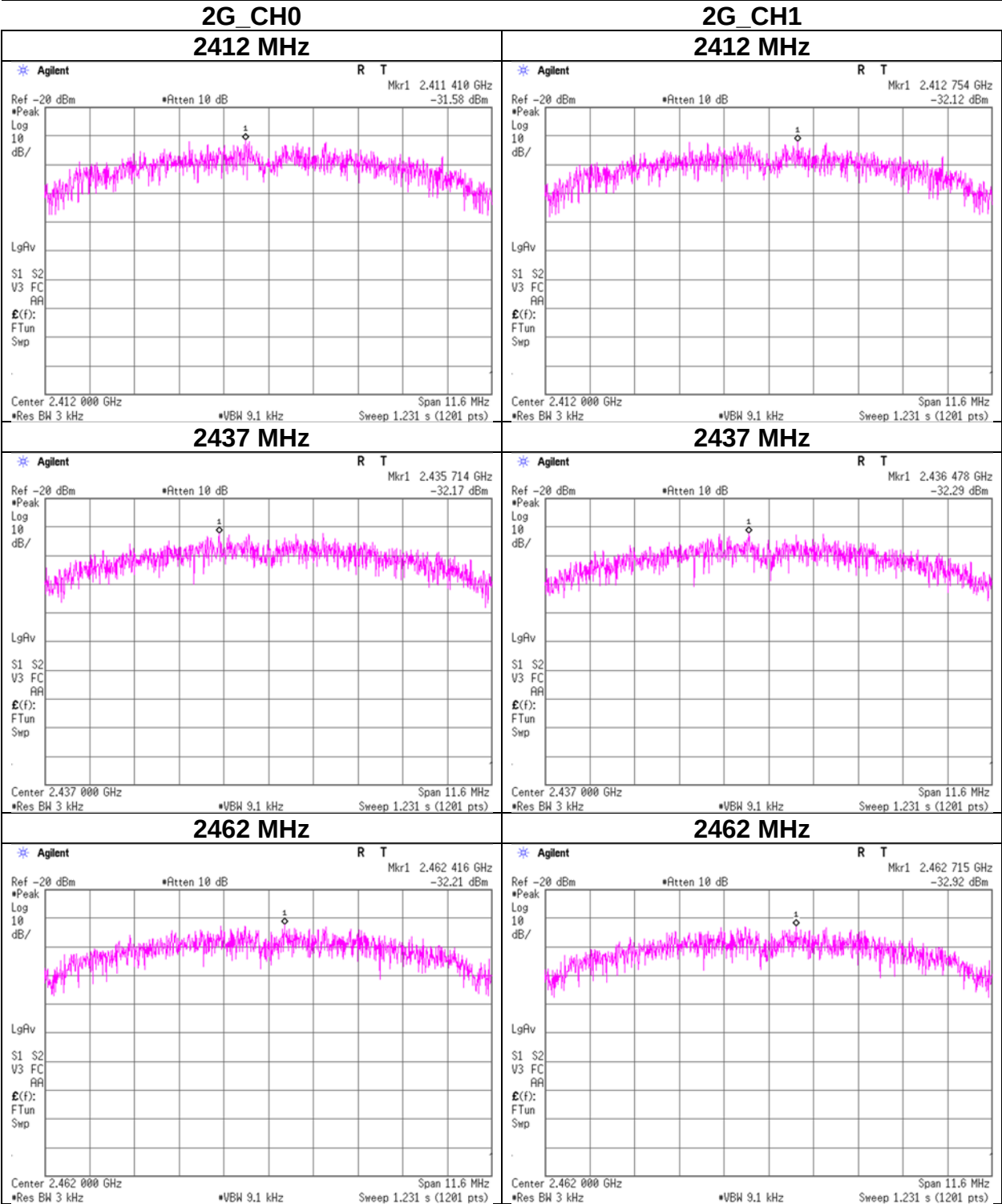
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11b (CDD), High power mode



Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11b(CDD), Standard power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0421	0.0367	-11.03	0.0788	8.00	19.03
2437	0.0396	0.0327	-11.41	0.0722	8.00	19.41
2462	0.0365	0.0363	-11.38	0.0728	8.00	19.38

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading	Cable Loss	Atten. Loss	Result	
	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
2412	-34.78	0.86	20.16	-13.76	0.0421
2437	-35.05	0.86	20.16	-14.03	0.0396
2462	-35.39	0.86	20.16	-14.37	0.0365

2G_CH1

Freq. [MHz]	Reading	Cable Loss	Atten. Loss	Result	
	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
2412	-35.37	0.86	20.16	-14.35	0.0367
2437	-35.88	0.86	20.16	-14.86	0.0327
2462	-35.42	0.86	20.16	-14.40	0.0363

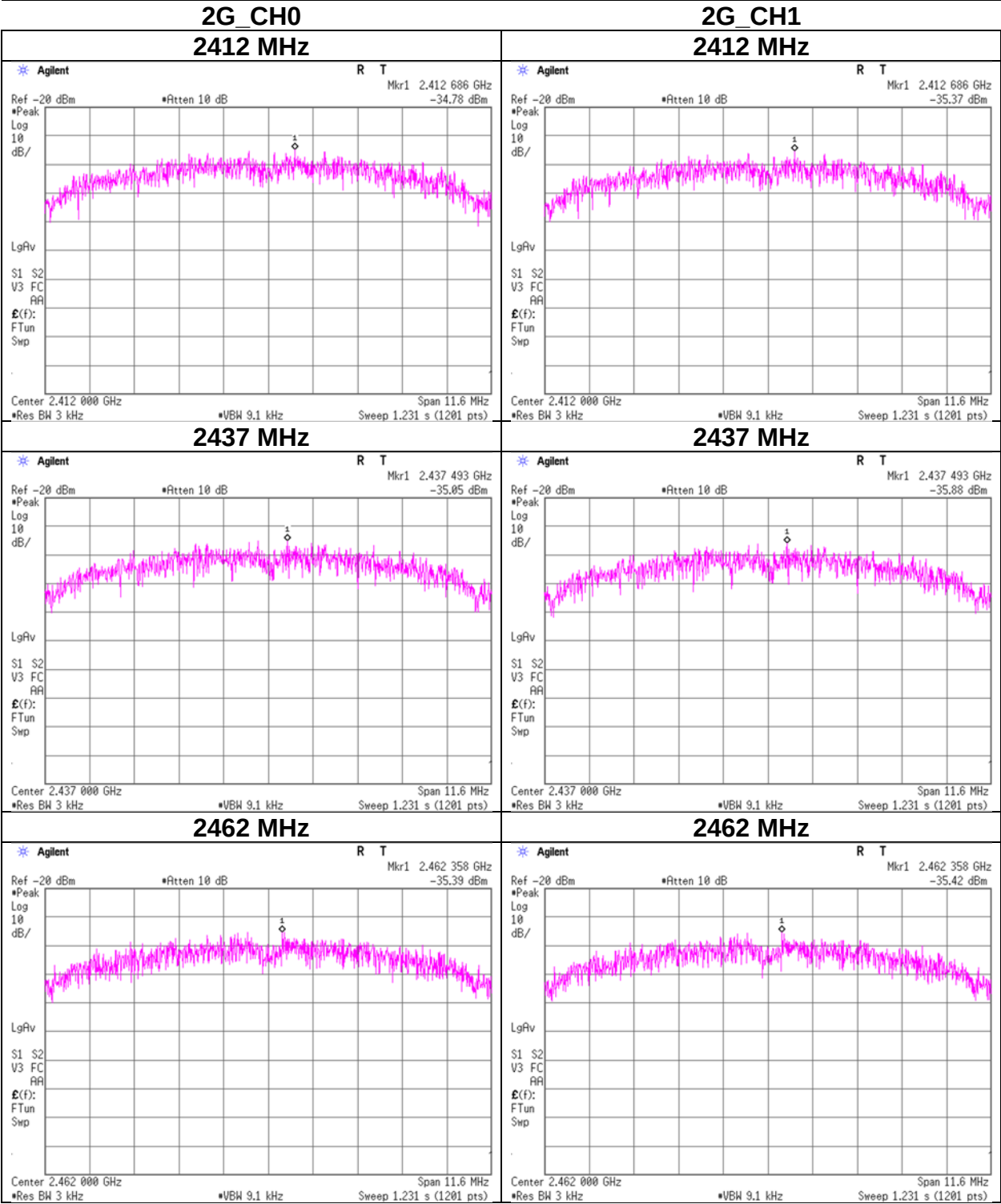
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11b (CDD), Standard power mode



Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11g(CDD), High power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result [mW / 3 kHz]	2G_CH1 Result [mW / 3 kHz]	Result		Limit [dBm / 3 kHz]	Margin [dB]
			[dBm / 3 kHz]	[mW / 3 kHz]		
2412	0.0679	0.0591	-8.96	0.1271	8.00	16.96
2437	0.0775	0.0580	-8.68	0.1355	8.00	16.68
2462	0.0753	0.0737	-8.27	0.1491	8.00	16.27

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading [dBm / 3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result	
				[dBm / 3 kHz]	[mW / 3 kHz]
2412	-32.70	0.86	20.16	-11.68	0.0679
2437	-32.13	0.86	20.16	-11.11	0.0775
2462	-32.25	0.86	20.16	-11.23	0.0753

2G_CH1

Freq. [MHz]	Reading [dBm / 3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result	
				[dBm / 3 kHz]	[mW / 3 kHz]
2412	-33.30	0.86	20.16	-12.28	0.0591
2437	-33.38	0.86	20.16	-12.36	0.0580
2462	-32.34	0.86	20.16	-11.32	0.0737

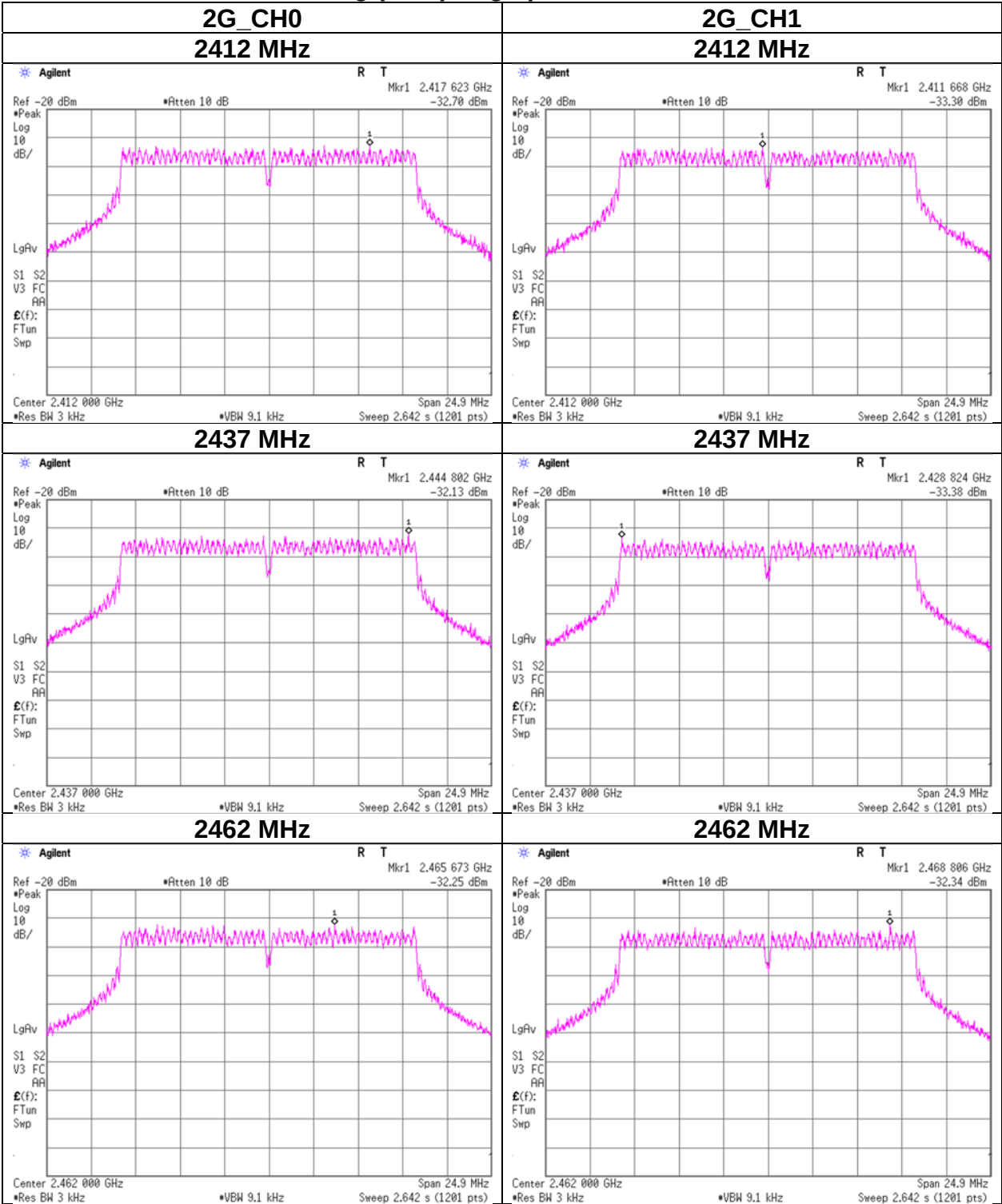
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11g (CDD), High power mode



Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11g(CDD), Standard power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0296	0.0211	-12.96	0.0506	8.00	20.96
2437	0.0279	0.0228	-12.95	0.0507	8.00	20.95
2462	0.0295	0.0316	-12.14	0.0611	8.00	20.14

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-36.31	0.86	20.16	-15.29	0.0296
2437	-36.56	0.86	20.16	-15.54	0.0279
2462	-36.33	0.86	20.16	-15.31	0.0295

2G_CH1

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-37.78	0.86	20.16	-16.76	0.0211
2437	-37.45	0.86	20.16	-16.43	0.0228
2462	-36.02	0.86	20.16	-15.00	0.0316

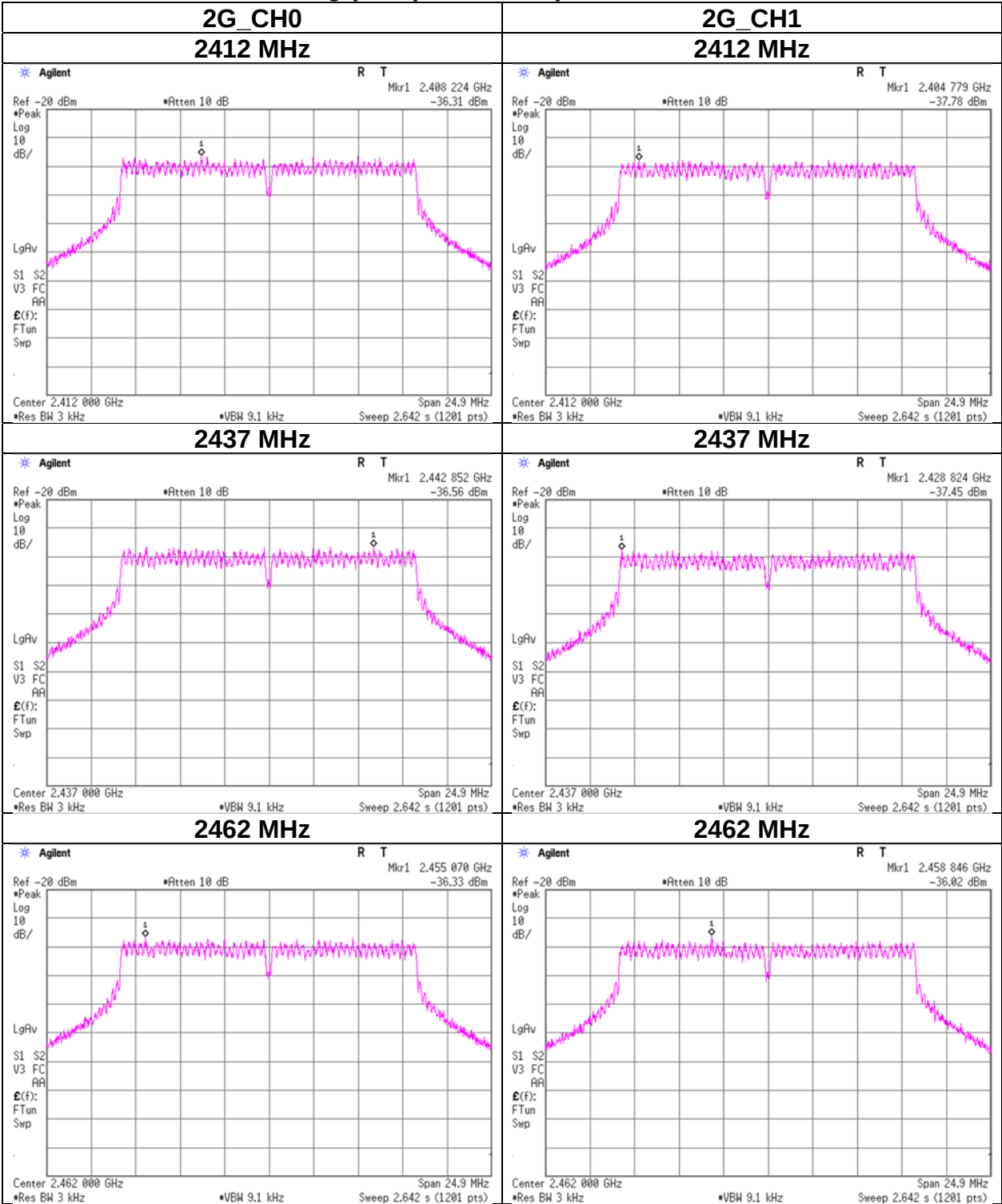
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11g (CDD), Standard power mode



Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11n-20(CDD), High power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0664	0.0634	-8.87	0.1298	8.00	16.87
2437	0.0646	0.0477	-9.50	0.1123	8.00	17.50
2462	0.0595	0.0486	-9.66	0.1082	8.00	17.66

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-33.22	1.28	20.16	-11.78	0.0664
2437	-33.34	1.28	20.16	-11.90	0.0646
2462	-33.70	1.29	20.16	-12.25	0.0595

2G_CH1

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-33.36	1.22	20.16	-11.98	0.0634
2437	-34.60	1.23	20.16	-13.21	0.0477
2462	-34.52	1.23	20.16	-13.13	0.0486

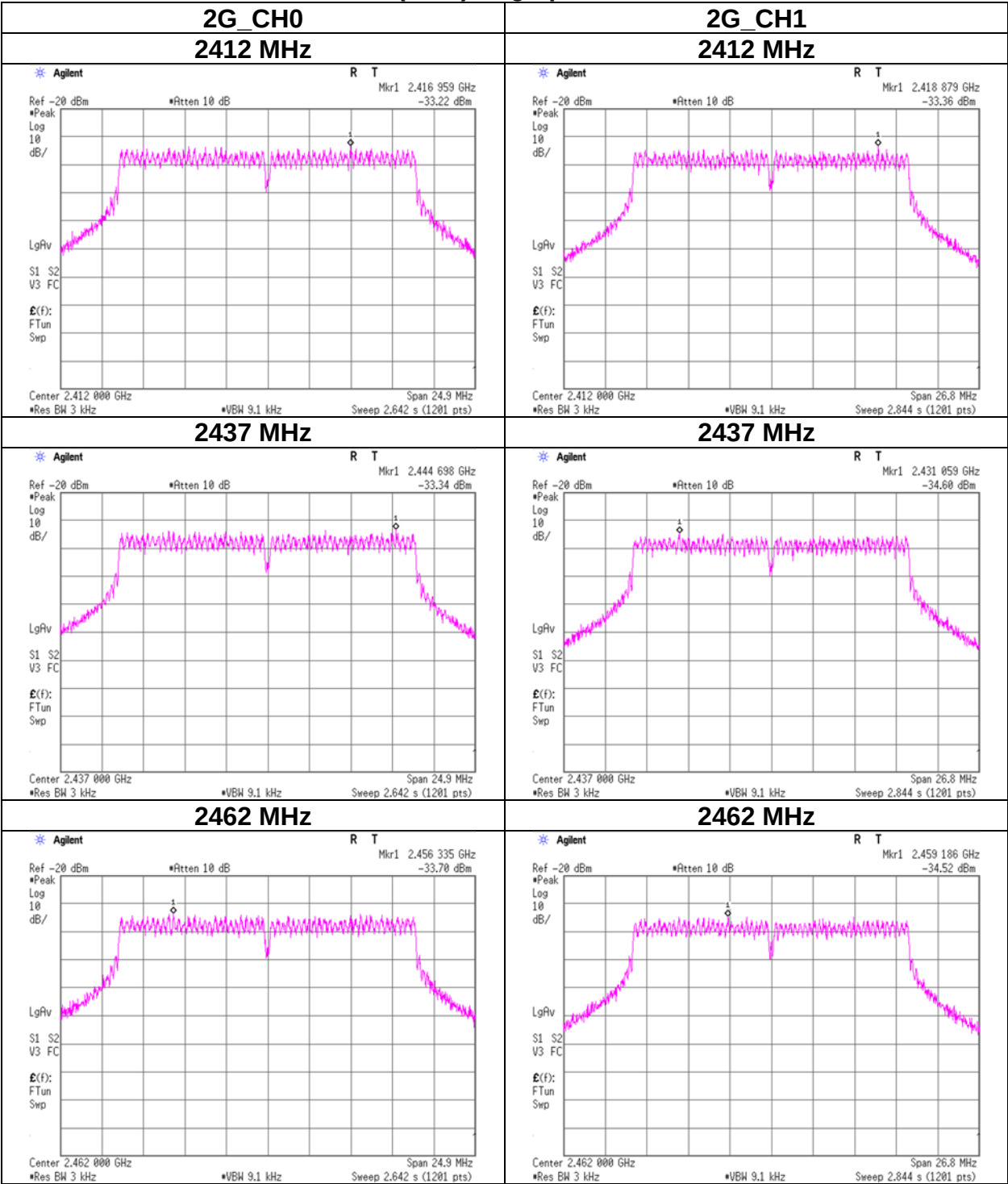
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11n-20 (CDD), High power mode



Power Density

Test place	Shonan EMC Lab. No.2 Measurement Room
Date	August 31, 2023
Temperature / Humidity	23 deg. C / 57 % RH
Engineer	Kouki Yamada
Mode	Tx 11n-20(CDD), Standard power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result [mW / 3 kHz]	2G_CH1 Result [mW / 3 kHz]	Result		Limit [dBm / 3 kHz]	Margin [dB]
			[dBm / 3 kHz]	[mW / 3 kHz]		
2412	0.0259	0.0201	-13.37	0.0460	8.00	21.37
2437	0.0222	0.0180	-13.96	0.0402	8.00	21.96
2462	0.0248	0.0203	-13.46	0.0451	8.00	21.46

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading [dBm / 3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result	
				[dBm / 3 kHz]	[mW / 3 kHz]
2412	-37.25	1.22	20.16	-15.87	0.0259
2437	-37.93	1.23	20.16	-16.54	0.0222
2462	-37.44	1.23	20.16	-16.05	0.0248

2G_CH1

Freq. [MHz]	Reading [dBm / 3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result	
				[dBm / 3 kHz]	[mW / 3 kHz]
2412	-38.40	1.28	20.16	-16.96	0.0201
2437	-38.89	1.28	20.16	-17.45	0.0180
2462	-38.38	1.29	20.16	-16.93	0.0203

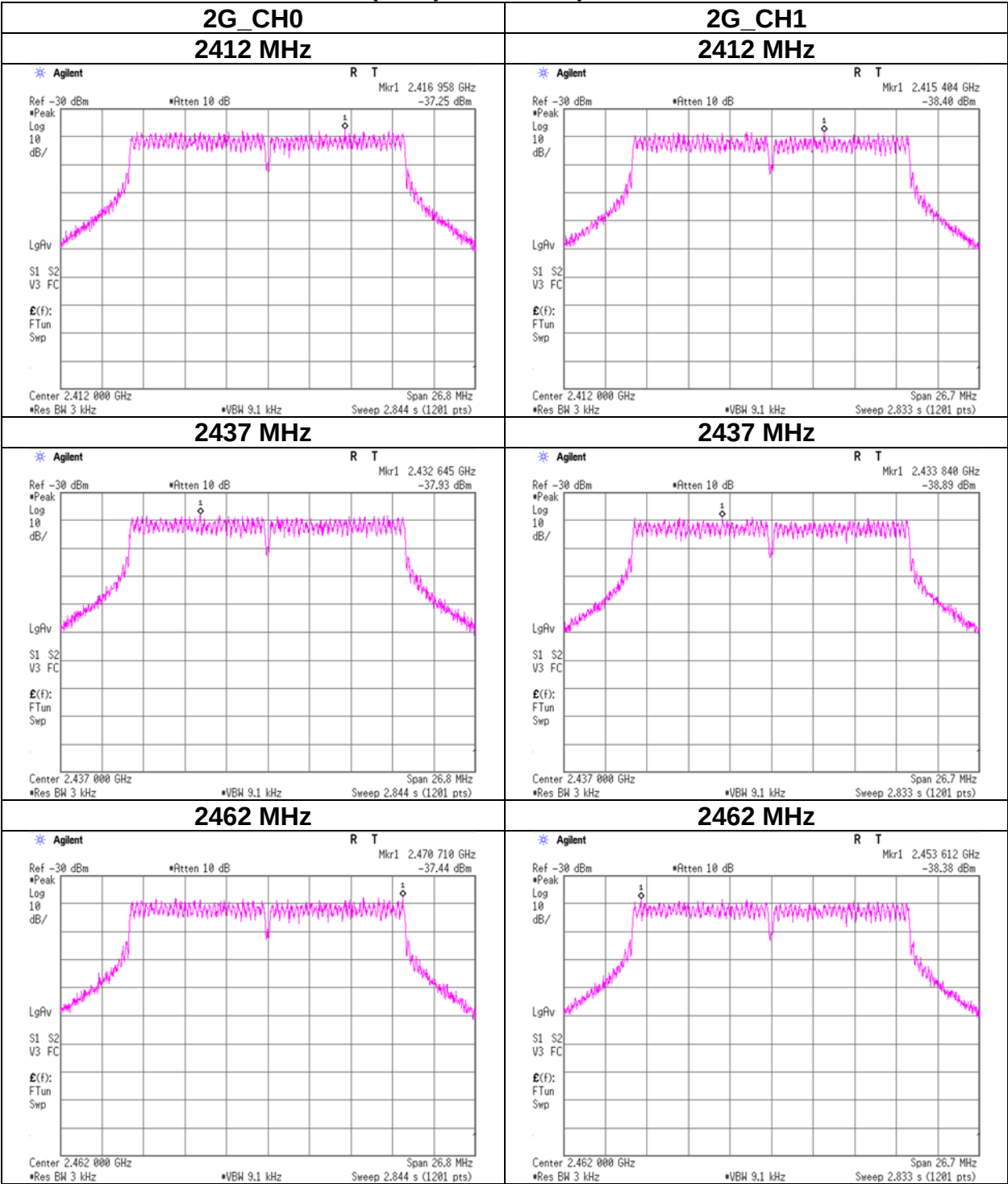
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11n-20 (CDD), Standard power mode



Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11n-20(SDM), High power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result [mW / 3 kHz]	2G_CH1 Result [mW / 3 kHz]	Result		Limit [dBm / 3 kHz]	Margin [dB]
			[dBm / 3 kHz]	[mW / 3 kHz]		
2412	0.0618	0.0536	-9.38	0.1154	8.00	17.38
2437	0.0653	0.0469	-9.50	0.1122	8.00	17.50
2462	0.0605	0.0512	-9.52	0.1117	8.00	17.52

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading [dBm / 3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result	
				[dBm / 3 kHz]	[mW / 3 kHz]
2412	-33.53	1.28	20.16	-12.09	0.0618
2437	-33.29	1.28	20.16	-11.85	0.0653
2462	-33.63	1.29	20.16	-12.18	0.0605

2G_CH1

Freq. [MHz]	Reading [dBm / 3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result	
				[dBm / 3 kHz]	[mW / 3 kHz]
2412	-34.09	1.22	20.16	-12.71	0.0536
2437	-34.68	1.23	20.16	-13.29	0.0469
2462	-34.30	1.23	20.16	-12.91	0.0512

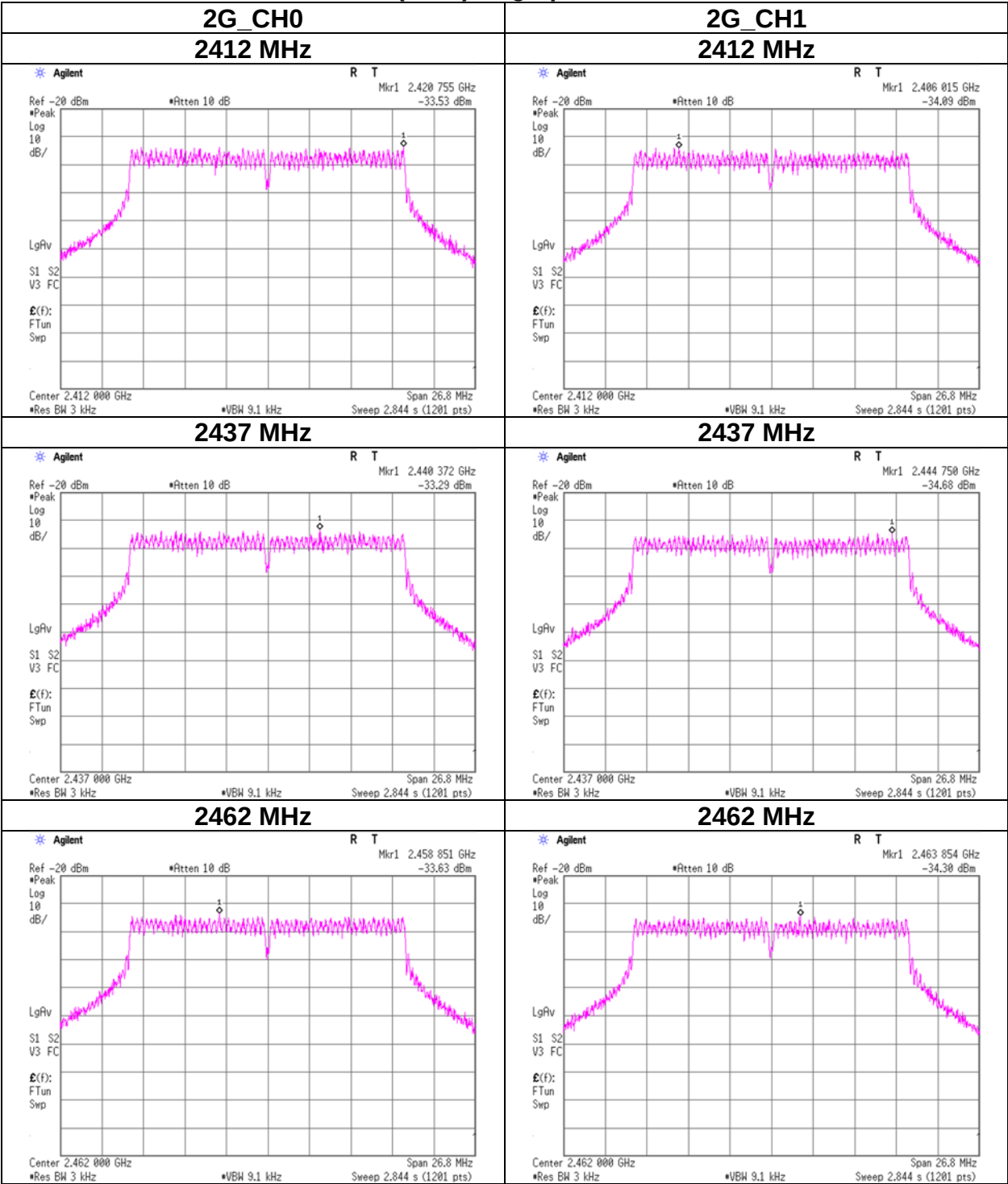
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11n-20 (SDM), High power mode



Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11n-20(SDM), Standard power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0341	0.0226	-12.46	0.0568	8.00	20.46
2437	0.0230	0.0212	-13.55	0.0441	8.00	21.55
2462	0.0221	0.0247	-13.30	0.0467	8.00	21.30

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-36.11	1.28	20.16	-14.67	0.0341
2437	-37.83	1.28	20.16	-16.39	0.0230
2462	-38.01	1.29	20.16	-16.56	0.0221

2G_CH1

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-37.83	1.22	20.16	-16.45	0.0226
2437	-38.13	1.23	20.16	-16.74	0.0212
2462	-37.47	1.23	20.16	-16.08	0.0247

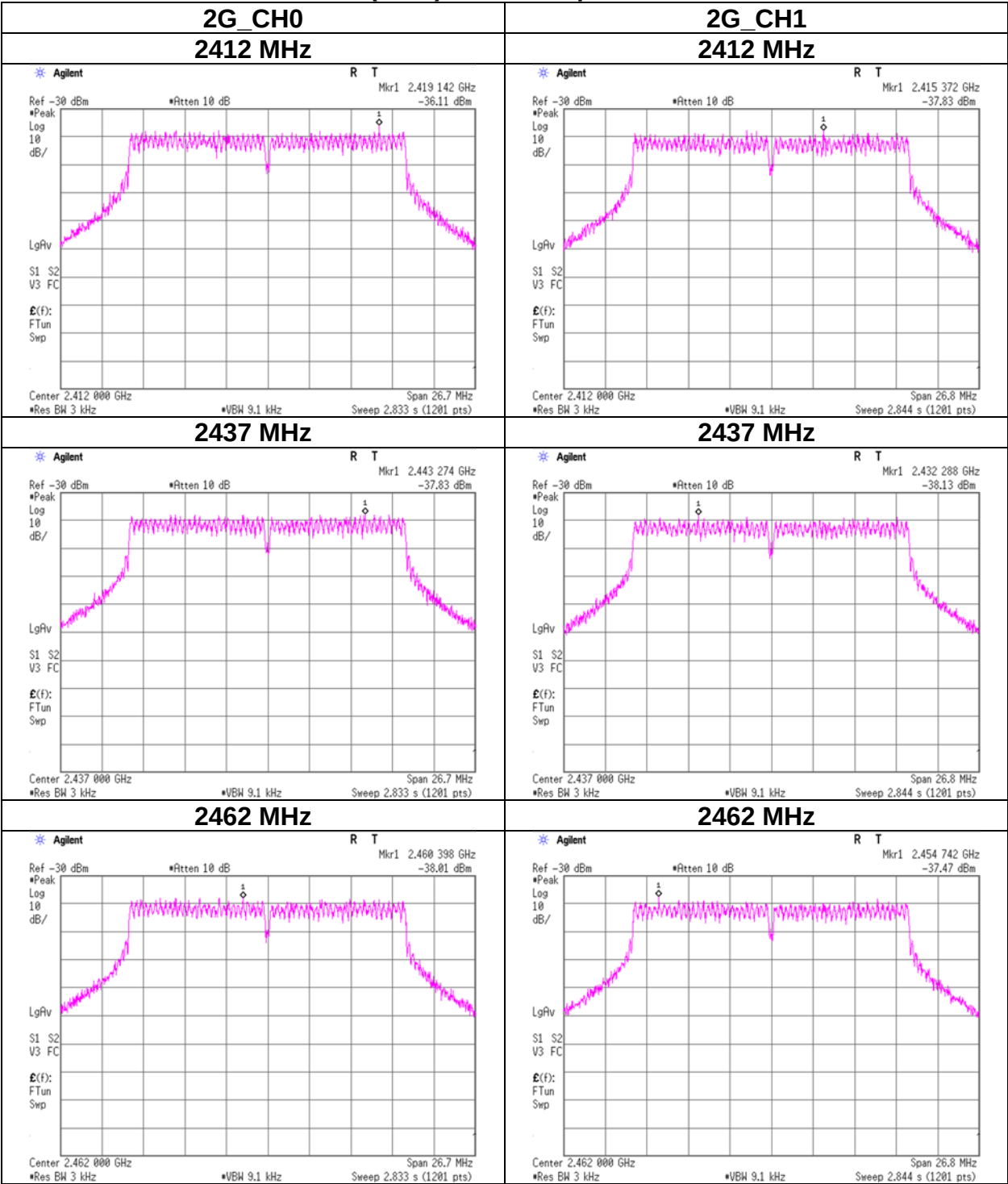
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11n-20 (SDM), Standard power mode



Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11ax-20(OFDM)(CDD), High power mode

2G_CH0 + 2G_CH1

Freq.	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
[MHz]	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0422	0.0371	-11.00	0.0793	8.00	19.00
2437	0.0421	0.0460	-10.55	0.0880	8.00	18.55
2462	0.0437	0.0348	-11.05	0.0785	8.00	19.05

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq.	Reading	Cable Loss	Atten. Loss	Result	
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
2412	-34.76	0.86	20.16	-13.74	0.0422
2437	-34.78	0.86	20.16	-13.76	0.0421
2462	-34.62	0.86	20.16	-13.60	0.0437

2G_CH1

Freq.	Reading	Cable Loss	Atten. Loss	Result	
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
2412	-35.33	0.86	20.16	-14.31	0.0371
2437	-34.40	0.86	20.16	-13.38	0.0460
2462	-35.61	0.86	20.16	-14.59	0.0348

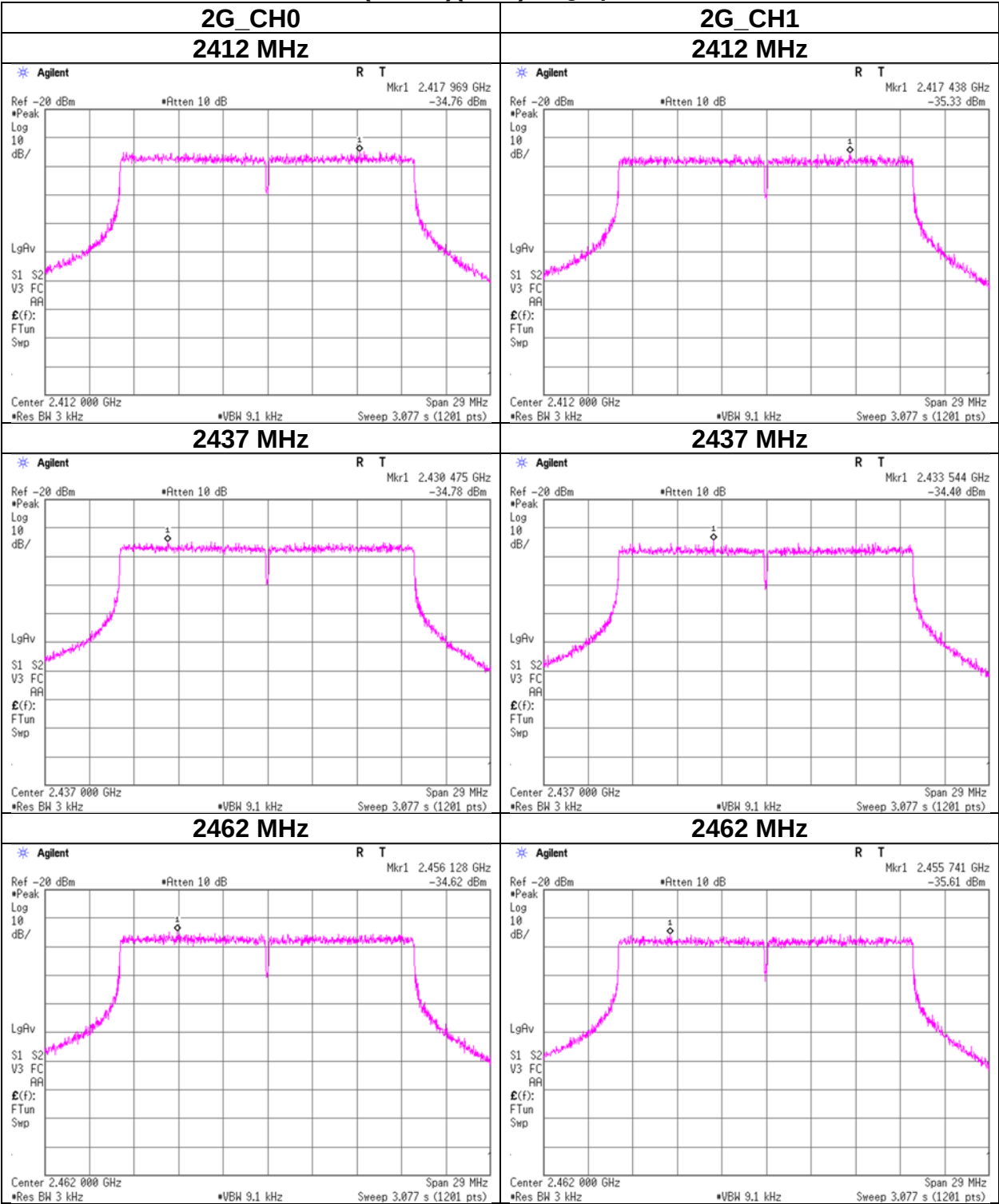
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11ax-20 (OFDM)(CDD), High power mode



Power Density

Test place	Shonan EMC Lab. No.2 Measurement Room
Date	August 31, 2023
Temperature / Humidity	23 deg. C / 57 % RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDM)(CDD), Standard power mode

2G_CH0 + 2G_CH1

Freq. [MHz]	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0202	0.0151	-14.52	0.0353	8.00	22.52
2437	0.0178	0.0162	-14.69	0.0340	8.00	22.69
2462	0.0205	0.0164	-14.32	0.0370	8.00	22.32

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-37.97	0.86	20.16	-16.95	0.0202
2437	-38.52	0.86	20.16	-17.50	0.0178
2462	-37.90	0.86	20.16	-16.88	0.0205

2G_CH1

Freq. [MHz]	Reading	Cable Loss [dB]	Atten. Loss [dB]	Result	
	[dBm / 3 kHz]			[dBm / 3 kHz]	[mW / 3 kHz]
2412	-39.22	0.86	20.16	-18.20	0.0151
2437	-38.93	0.86	20.16	-17.91	0.0162
2462	-38.86	0.86	20.16	-17.84	0.0164

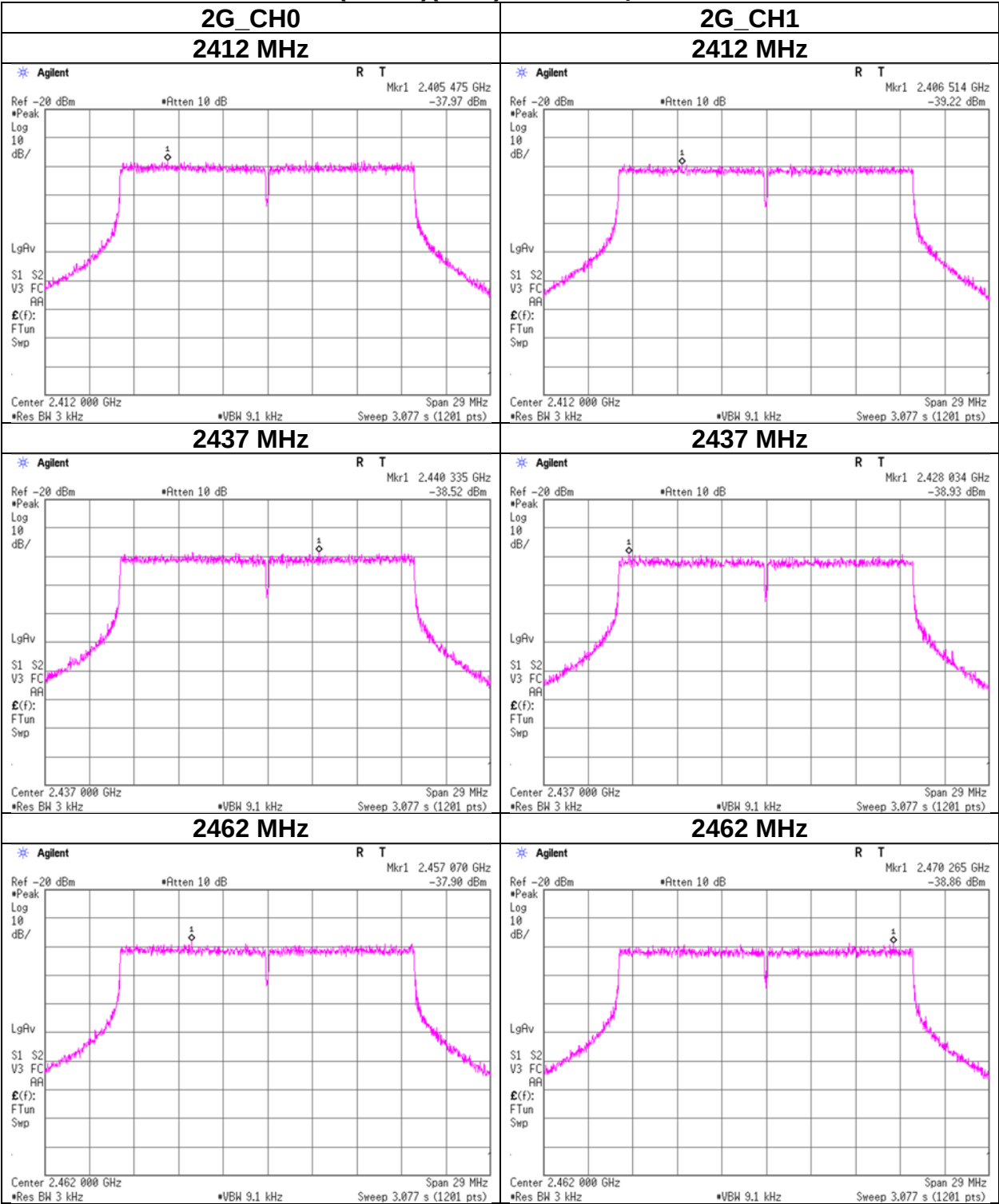
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11ax-20 (OFDM)(CDD), Standard power mode



Power Density

Test place	Shonan EMC Lab. No.2 Measurement Room
Date	August 31, 2023
Temperature / Humidity	23 deg. C / 57 % RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20(OFDM)(SDM), High power mode

2G_CH0 + 2G_CH1

Freq.	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
[MHz]	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0504	0.0479	-10.08	0.0982	8.00	18.08
2437	0.0472	0.0423	-10.48	0.0895	8.00	18.48
2462	0.0492	0.0406	-10.47	0.0898	8.00	18.47

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq.	Reading	Cable Loss	Atten. Loss	Result	
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
2412	-34.00	0.86	20.16	-12.98	0.0504
2437	-34.28	0.86	20.16	-13.26	0.0472
2462	-34.10	0.86	20.16	-13.08	0.0492

2G_CH1

Freq.	Reading	Cable Loss	Atten. Loss	Result	
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
2412	-34.22	0.86	20.16	-13.20	0.0479
2437	-34.76	0.86	20.16	-13.74	0.0423
2462	-34.94	0.86	20.16	-13.92	0.0406

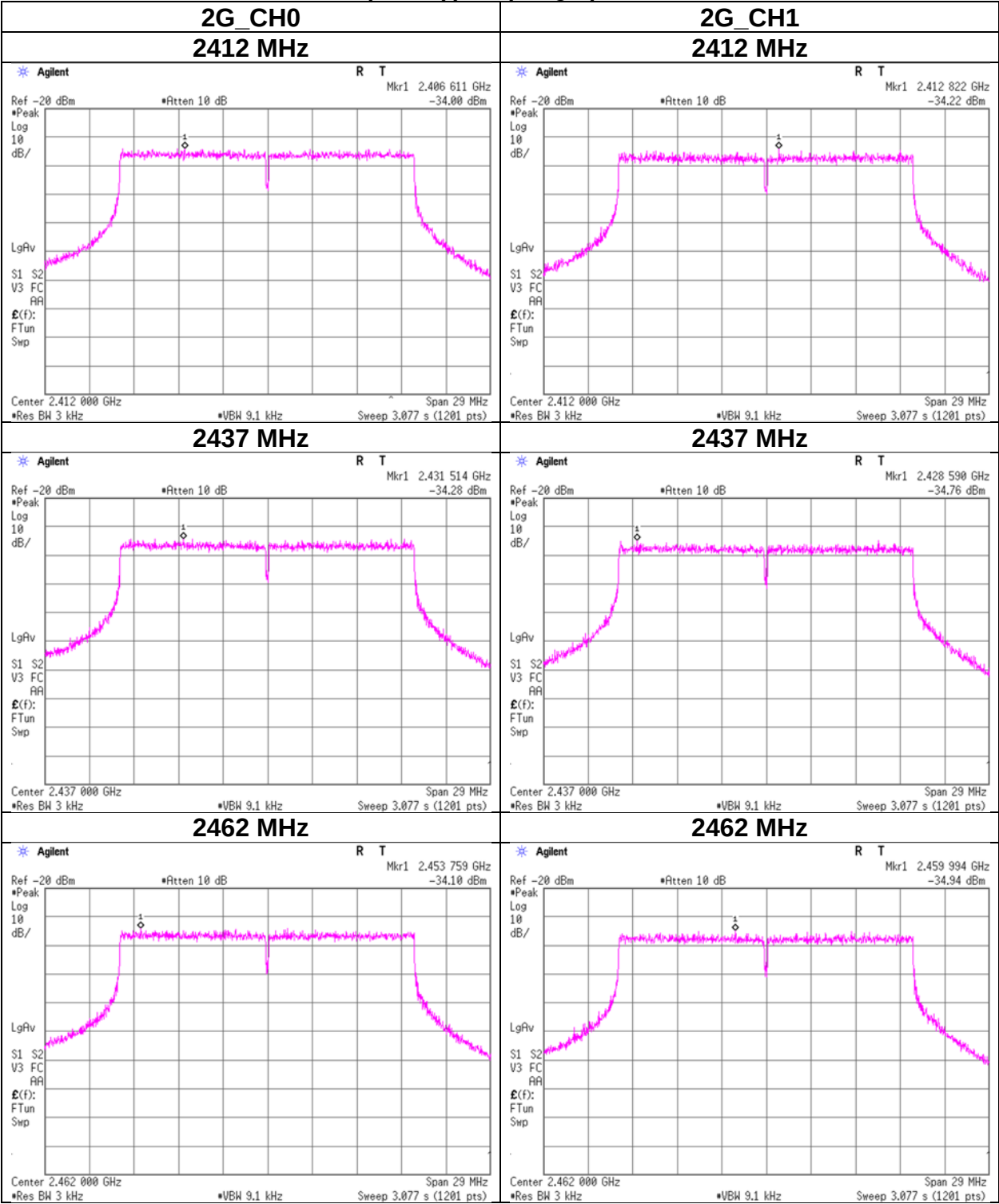
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11ax-20 (OFDM)(SDM), High power mode



Power Density

Test place Shonan EMC Lab. No.2 Measurement Room
Date August 31, 2023
Temperature / Humidity 23 deg. C / 57 % RH
Engineer Kouki Yamada
Mode Tx 11ax-20(OFDM)(SDM), Standard power mode

2G_CH0 + 2G_CH1

Freq.	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
[MHz]	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.0212	0.0168	-14.20	0.0380	8.00	22.20
2437	0.0189	0.0160	-14.57	0.0349	8.00	22.57
2462	0.0187	0.0165	-14.54	0.0351	8.00	22.54

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

Freq.	Reading	Cable Loss	Atten. Loss	Result	
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
2412	-37.75	0.86	20.16	-16.73	0.0212
2437	-38.25	0.86	20.16	-17.23	0.0189
2462	-38.31	0.86	20.16	-17.29	0.0187

2G_CH1

Freq.	Reading	Cable Loss	Atten. Loss	Result	
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
2412	-38.78	0.86	20.16	-17.76	0.0168
2437	-38.98	0.86	20.16	-17.96	0.0160
2462	-38.85	0.86	20.16	-17.83	0.0165

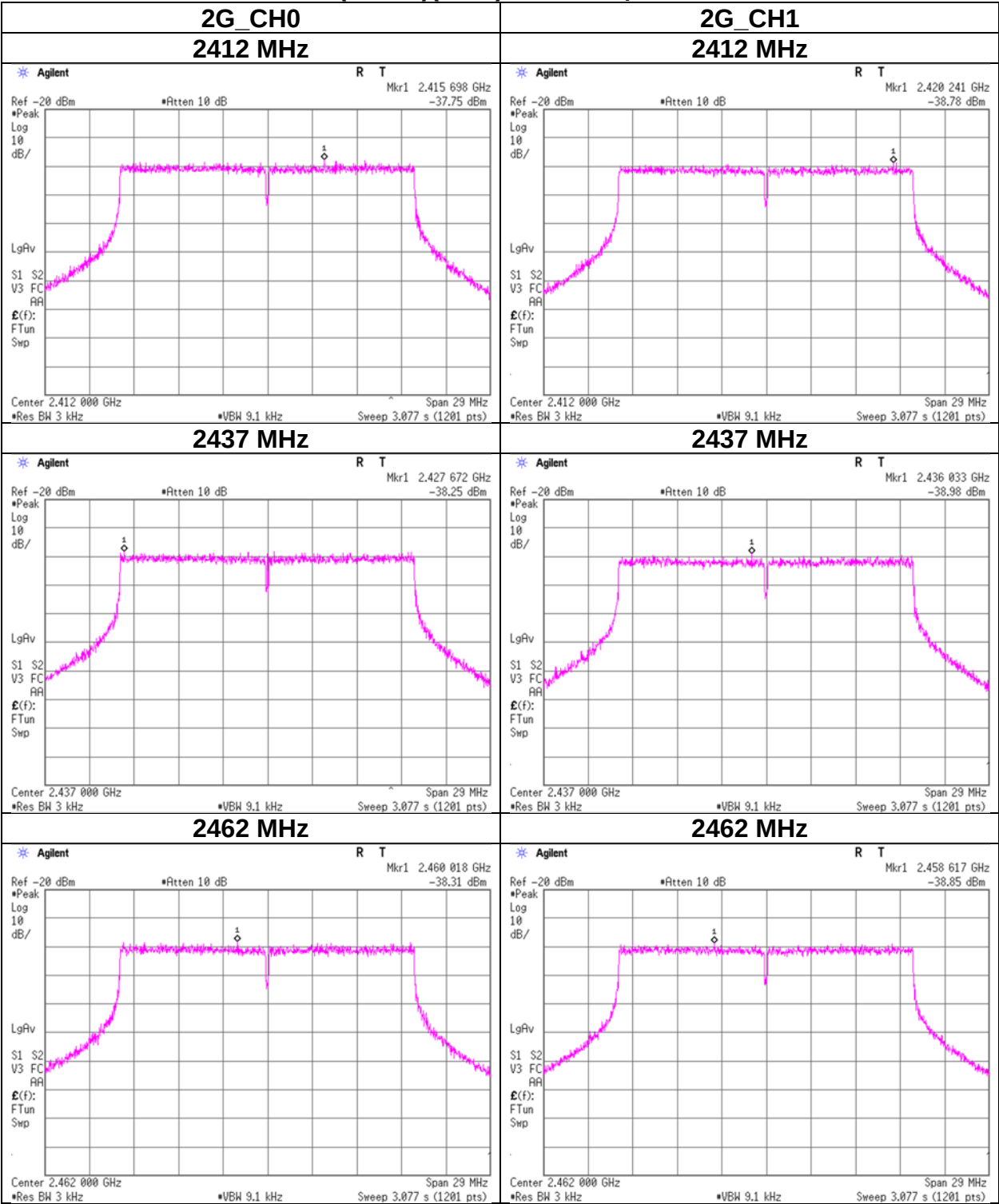
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11ax-20 (OFDM)(SDM), Standard power mode



Power Density

Test place Shonan EMC Lab. No.5 Shielded Room
Date October 30, 2023
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ax-20(OFDMA)(CDD) 26-tone RU, High power mode

2G_CH0 + 2G_CH1

RU Type	Freq. [MHz]	RU Index	2G_CH0 Result [mW]	2G_CH1 Result [mW]	Result		Limit	Margin
					[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
26-tone RU	2412	0	0.060	0.065	-9.05	0.124	8.00	17.05
		4	0.070	0.059	-8.88	0.129	8.00	16.88
		8	0.072	0.063	-8.68	0.136	8.00	16.68
	2437	0	0.089	0.074	-7.88	0.163	8.00	15.88
		4	0.078	0.052	-8.86	0.130	8.00	16.86
		8	0.054	0.053	-9.69	0.107	8.00	17.69
	2462	0	0.068	0.057	-9.04	0.125	8.00	17.04
		4	0.072	0.059	-8.85	0.130	8.00	16.85
		8	0.075	0.062	-8.62	0.137	8.00	16.62

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G_CH0

RU Type	Freq. [MHz]	RU Index	Reading [dBm/3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result	
						[dBm / 3 kHz]	[mW / 3 kHz]
26-tone RU	2412	0	-34.02	1.62	20.16	-12.24	0.060
		4	-33.32	1.62	20.16	-11.54	0.070
		8	-33.20	1.62	20.16	-11.42	0.072
	2437	0	-32.30	1.63	20.16	-10.51	0.089
		4	-32.90	1.63	20.16	-11.11	0.078
		8	-34.45	1.63	20.16	-12.66	0.054
	2462	0	-33.46	1.63	20.16	-11.67	0.068
		4	-33.24	1.63	20.16	-11.45	0.072
		8	-33.03	1.63	20.16	-11.24	0.075

2G_CH1

RU Type	Freq. [MHz]	RU Index	Reading [dBm/3 kHz]	Cable Loss [dB]	Atten. Loss [dB]	Result	
						[dBm / 3 kHz]	[mW / 3 kHz]
26-tone RU	2412	0	-33.65	1.60	20.16	-11.89	0.065
		4	-34.04	1.60	20.16	-12.28	0.059
		8	-33.73	1.60	20.16	-11.97	0.063
	2437	0	-33.08	1.61	20.16	-11.31	0.074
		4	-34.57	1.61	20.16	-12.80	0.052
		8	-34.51	1.61	20.16	-12.74	0.053
	2462	0	-34.24	1.61	20.16	-12.47	0.057
		4	-34.09	1.61	20.16	-12.32	0.059
		8	-33.84	1.61	20.16	-12.07	0.062

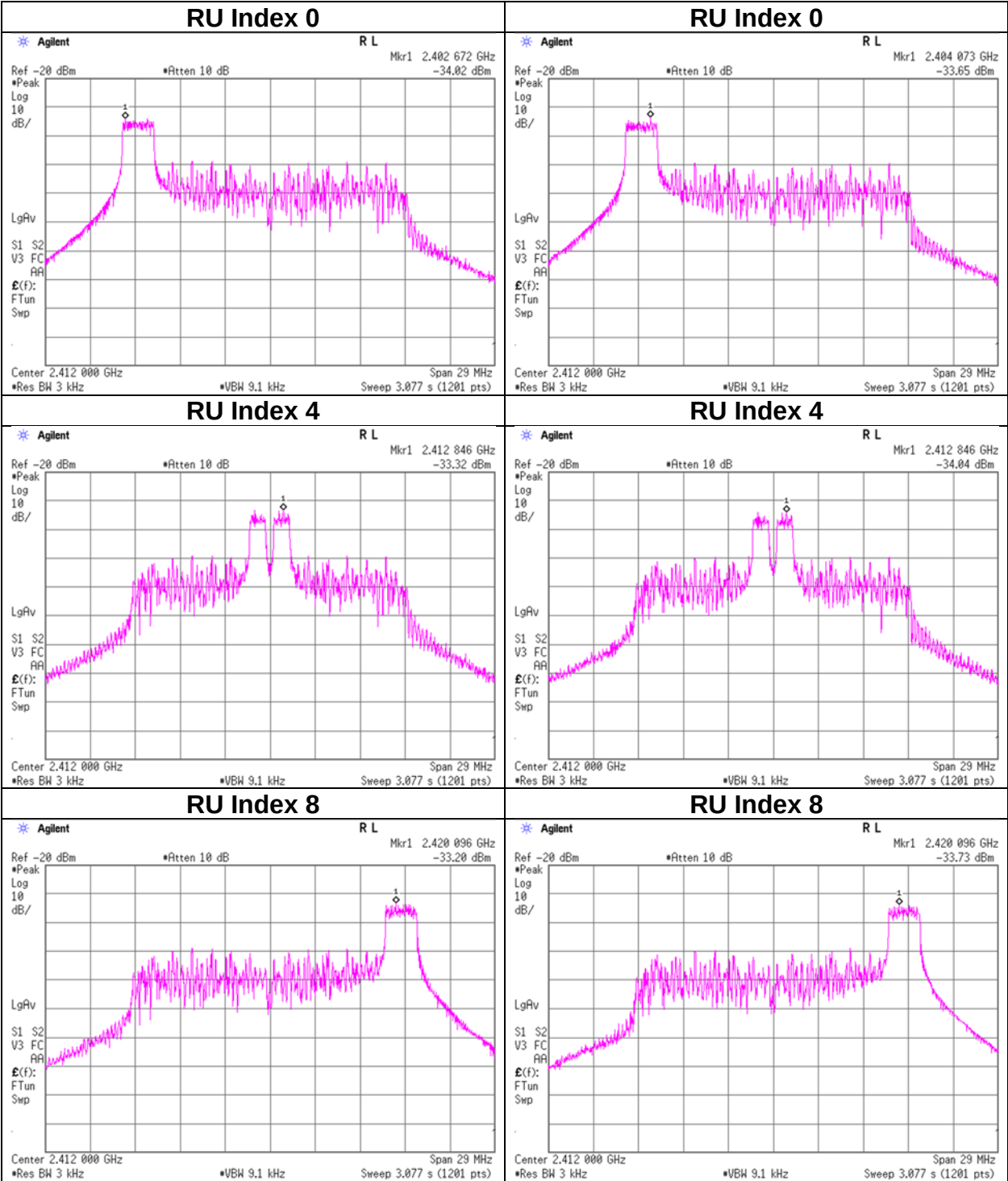
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

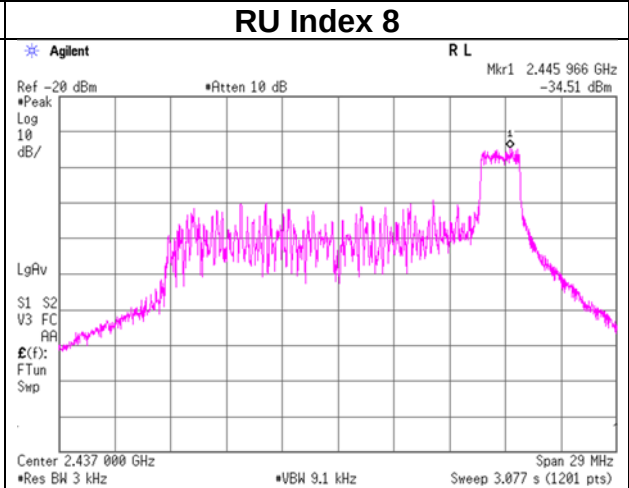
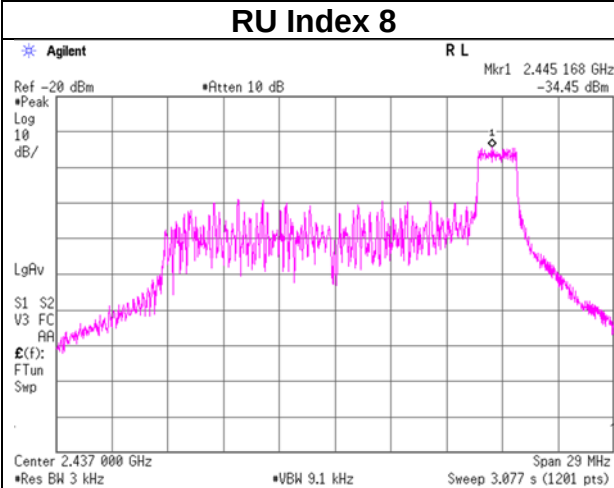
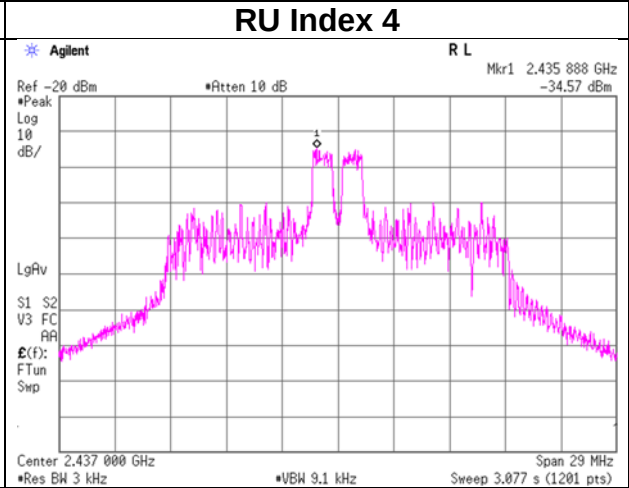
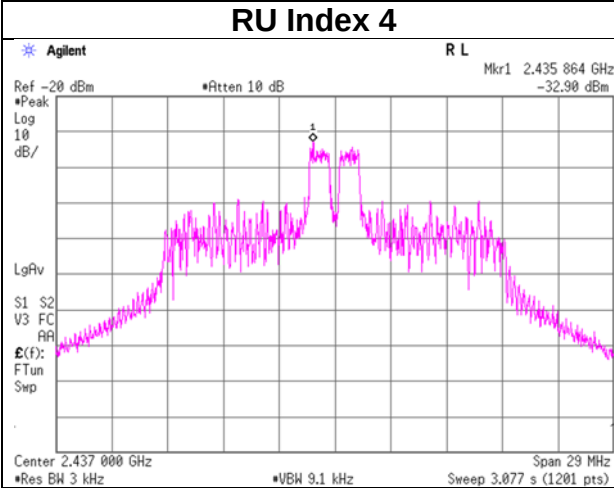
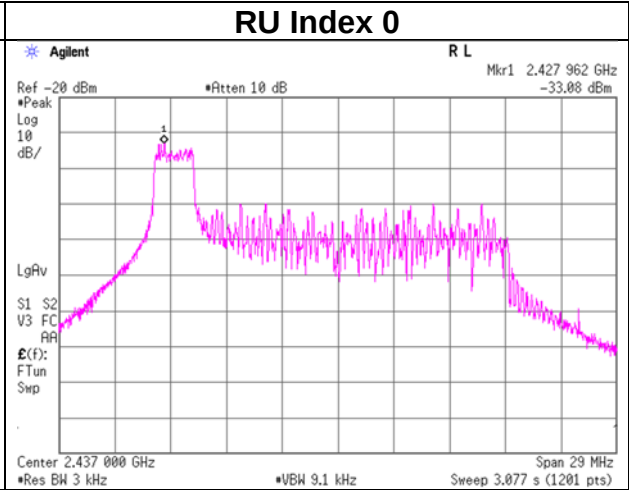
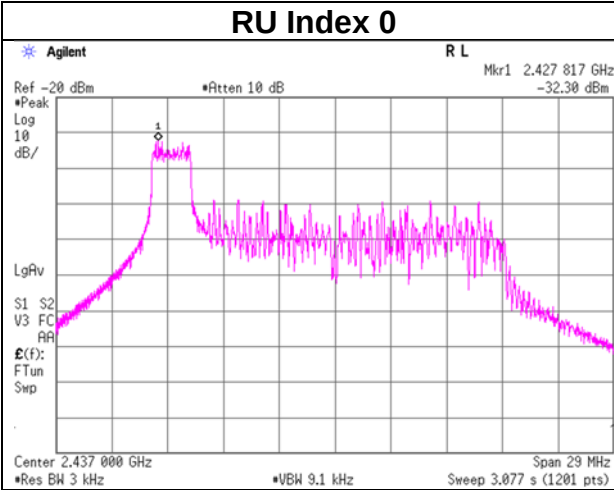
Power Density

11ax-20 (OFDMA)(CDD) 26-tone RU, High power mode, 2412 MHz
2G_CH0



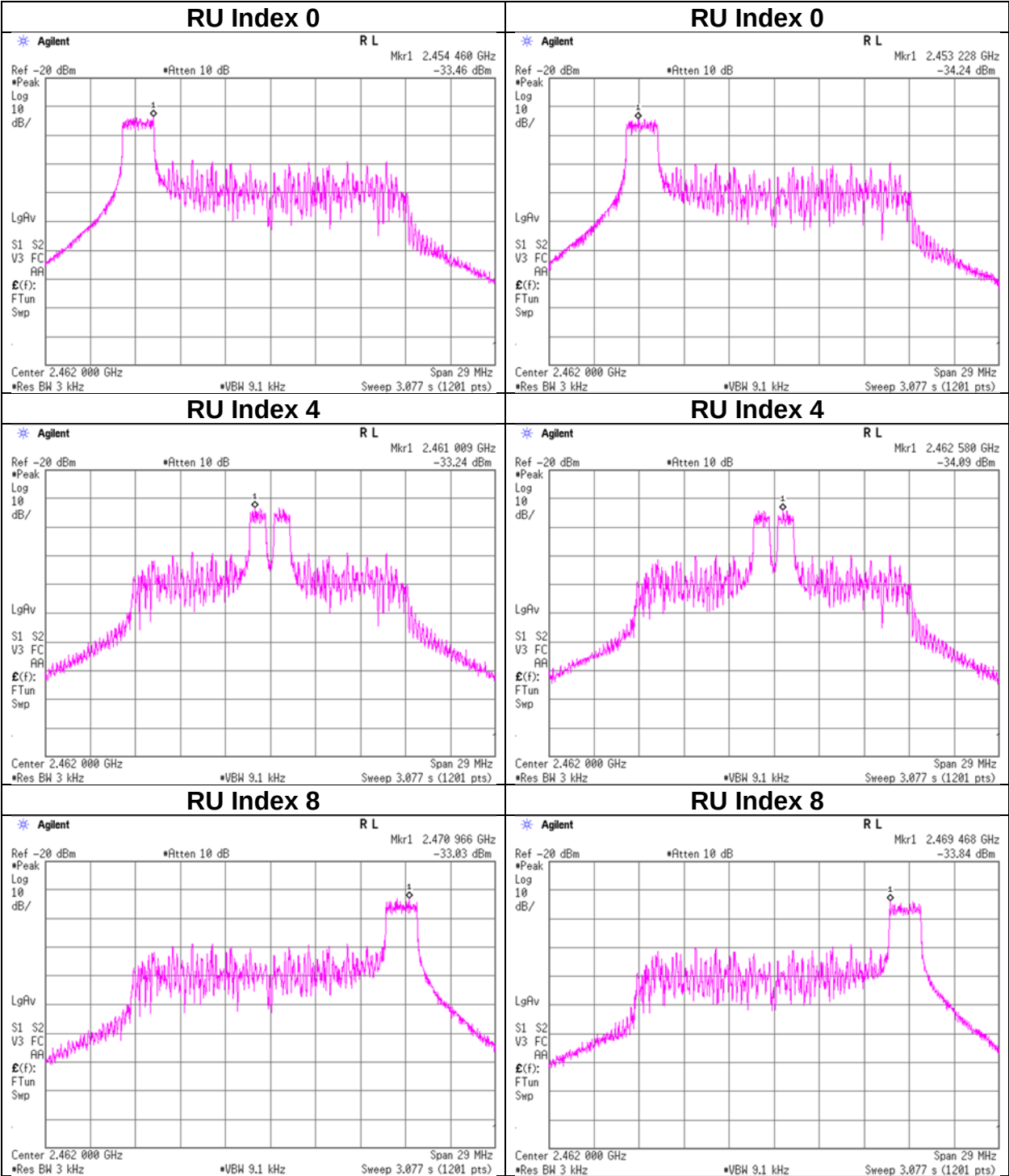
Power Density

11ax-20 (OFDMA)(CDD) 26-tone RU, High power mode, 2437 MHz
2G_CH0



Power Density

11ax-20 (OFDMA)(CDD) 26-tone RU, High power mode, 2462 MHz
2G_CH0 2G_CH1



Power Density

Test place Shonan EMC Lab. No.5 Shielded Room
Date November 1, 2023
Temperature / Humidity 23 deg. C / 45 % RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ax-20(OFDMA)(CDD) 26-tone RU, Standard power mode

2G CH0 + 2G CH1

RU Type	Freq. [MHz]	RU Index	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
			[mW]	[mW]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
26-tone RU	2412	0	0.065	0.056	-9.19	0.121	8.00	17.19
		4	0.078	0.066	-8.41	0.144	8.00	16.41
		8	0.093	0.070	-7.88	0.163	8.00	15.88
	2437	0	0.092	0.081	-7.61	0.173	8.00	15.61
		4	0.057	0.065	-9.13	0.122	8.00	17.13
		8	0.071	0.058	-8.87	0.130	8.00	16.87
	2462	0	0.096	0.067	-7.87	0.163	8.00	15.87
		4	0.072	0.064	-8.67	0.136	8.00	16.67
		8	0.106	0.073	-7.48	0.179	8.00	15.48

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G CH0

RU Type	Freq. [MHz]	RU Index	Reading	Cable Loss	Atten. Loss	Result	
			[dBm/3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
26-tone RU	2412	0	-33.68	1.62	20.16	-11.90	0.065
		4	-32.85	1.62	20.16	-11.07	0.078
		8	-32.11	1.62	20.16	-10.33	0.093
	2437	0	-32.15	1.63	20.16	-10.36	0.092
		4	-34.21	1.63	20.16	-12.42	0.057
		8	-33.26	1.63	20.16	-11.47	0.071
	2462	0	-31.95	1.63	20.16	-10.16	0.096
		4	-33.22	1.63	20.16	-11.43	0.072
		8	-31.55	1.63	20.16	-9.76	0.106

2G CH1

RU Type	Freq. [MHz]	RU Index	Reading	Cable Loss	Atten. Loss	Result	
			[dBm/3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
26-tone RU	2412	0	-34.28	1.60	20.16	-12.52	0.056
		4	-33.57	1.60	20.16	-11.81	0.066
		8	-33.29	1.60	20.16	-11.53	0.070
	2437	0	-32.66	1.61	20.16	-10.89	0.081
		4	-33.65	1.61	20.16	-11.88	0.065
		8	-34.11	1.61	20.16	-12.34	0.058
	2462	0	-33.52	1.61	20.16	-11.75	0.067
		4	-33.73	1.61	20.16	-11.96	0.064
		8	-33.14	1.61	20.16	-11.37	0.073

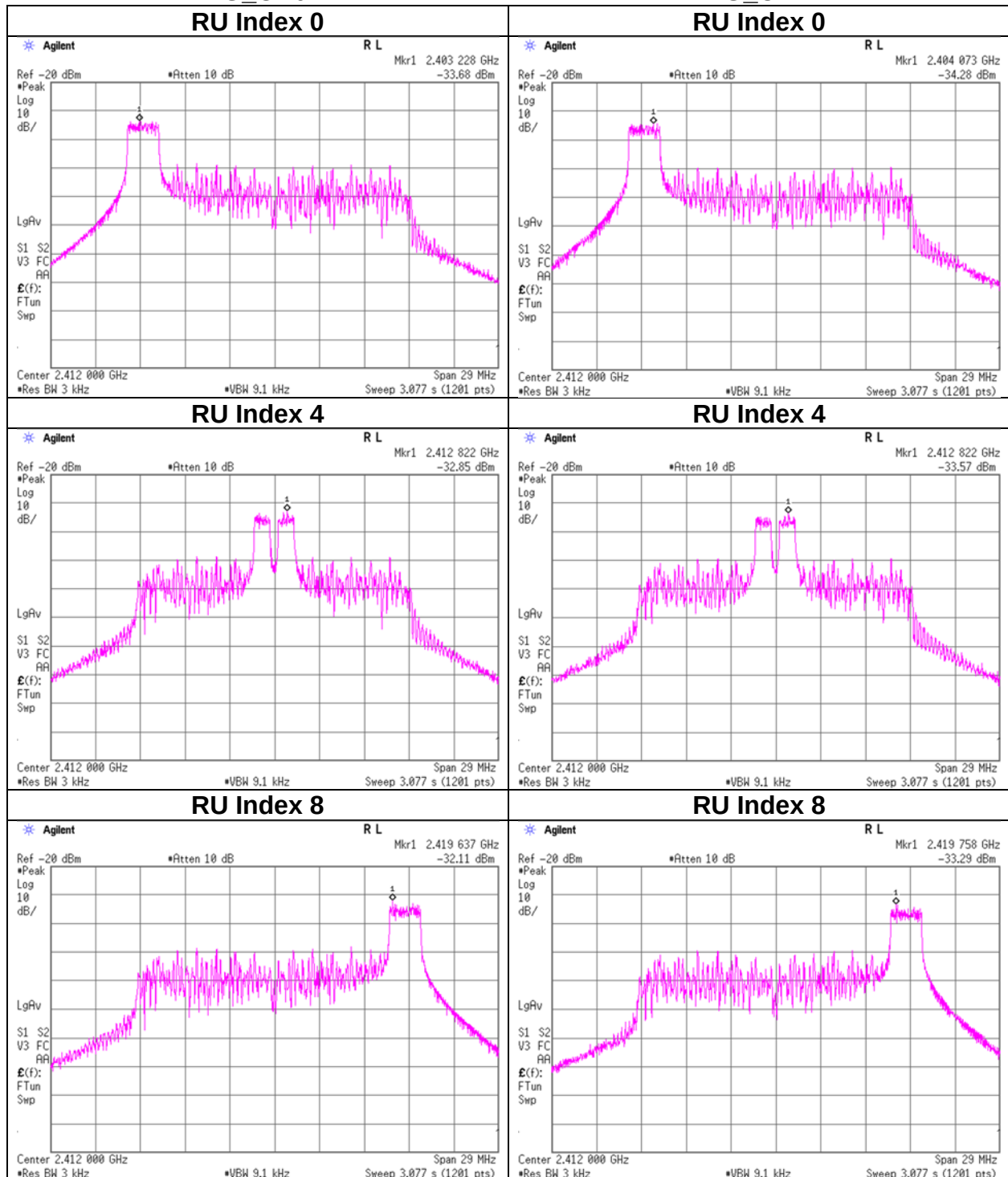
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

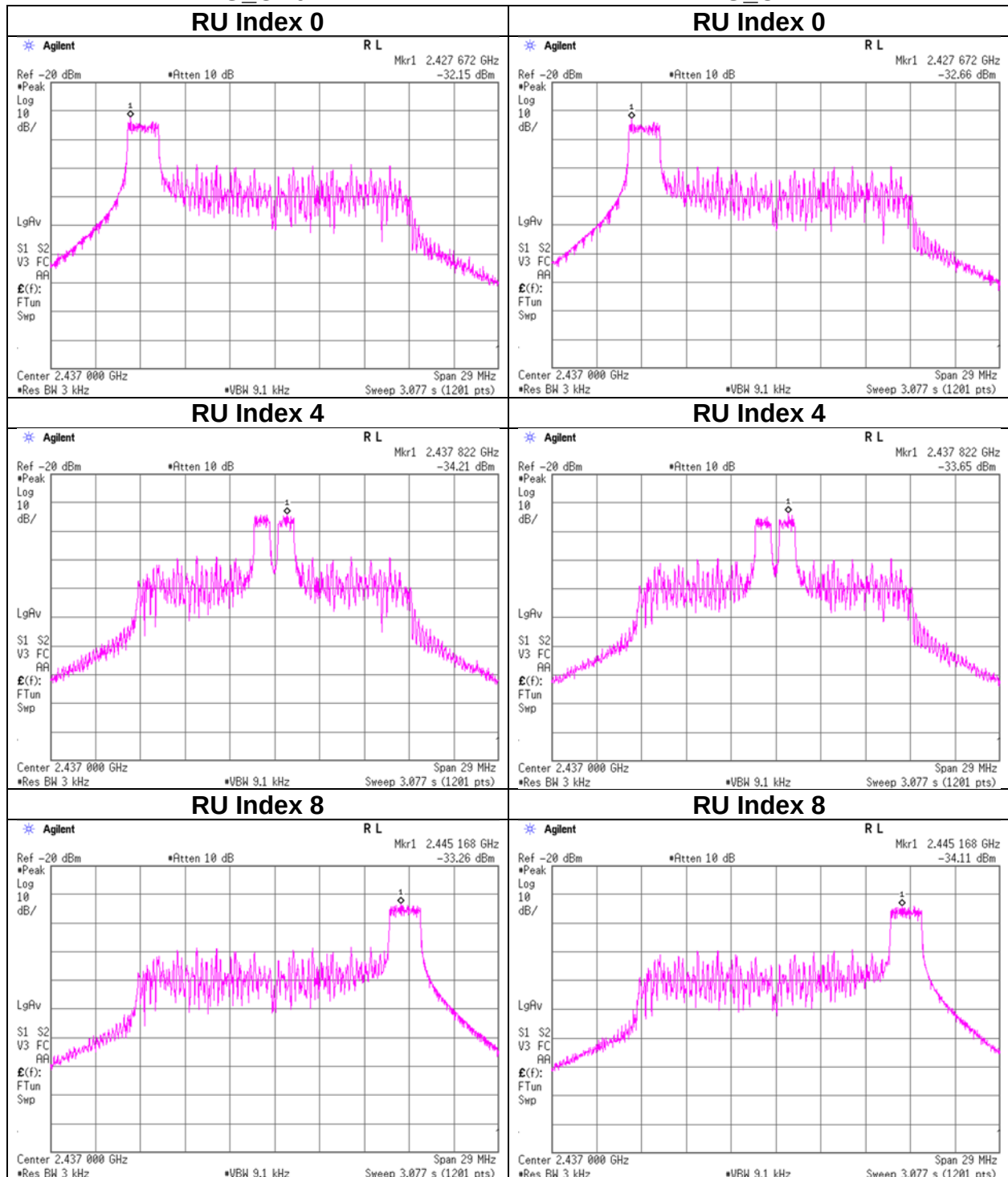
Power Density

11ax-20 (OFDMA)(CDD) 26-tone RU, Standard power mode, 2412 MHz
2G_CH0



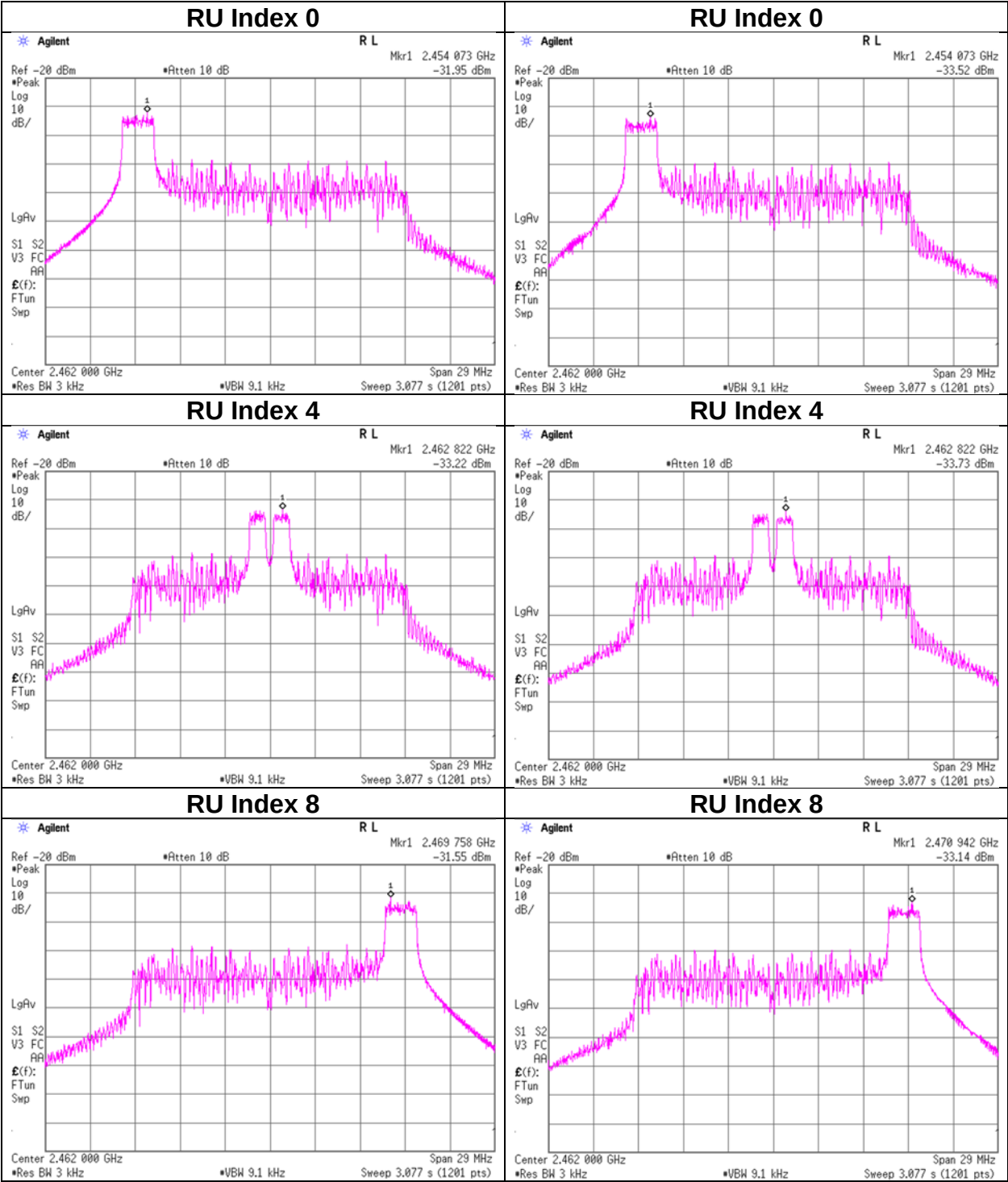
Power Density

11ax-20 (OFDMA)(CDD) 26-tone RU, Standard power mode, 2437 MHz
2G_CH0



Power Density

11ax-20 (OFDMA)(CDD) 26-tone RU, Standard power mode, 2462 MHz
2G_CH0 2G_CH1



Power Density

Test place Shonan EMC Lab. No.5 Shielded Room
Date October 30, 2023
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ax-20(OFDMA)(SDM) 26-tone RU, High power mode

2G CH0 + 2G CH1

RU Type	Freq. [MHz]	RU Index	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
			[mW]	[mW]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
26-tone RU	2412	0	0.055	0.065	-9.18	0.121	8.00	17.18
		4	0.058	0.046	-9.85	0.104	8.00	17.85
		8	0.060	0.056	-9.38	0.115	8.00	17.38
	2437	0	0.064	0.069	-8.79	0.132	8.00	16.79
		4	0.066	0.058	-9.08	0.124	8.00	17.08
		8	0.077	0.063	-8.54	0.140	8.00	16.54
	2462	0	0.061	0.052	-9.48	0.113	8.00	17.48
		4	0.063	0.065	-8.93	0.128	8.00	16.93
		8	0.071	0.068	-8.55	0.140	8.00	16.55

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G CH0

RU Type	Freq. [MHz]	RU Index	Reading	Cable Loss	Atten. Loss	Result	
			[dBm/3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
26-tone RU	2412	0	-34.36	1.62	20.16	-12.58	0.055
		4	-34.18	1.62	20.16	-12.40	0.058
		8	-34.03	1.62	20.16	-12.25	0.060
	2437	0	-33.76	1.63	20.16	-11.97	0.064
		4	-33.61	1.63	20.16	-11.82	0.066
		8	-32.94	1.63	20.16	-11.15	0.077
	2462	0	-33.96	1.63	20.16	-12.17	0.061
		4	-33.77	1.63	20.16	-11.98	0.063
		8	-33.27	1.63	20.16	-11.48	0.071

2G CH1

RU Type	Freq. [MHz]	RU Index	Reading	Cable Loss	Atten. Loss	Result	
			[dBm/3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
26-tone RU	2412	0	-33.60	1.60	20.16	-11.84	0.065
		4	-35.13	1.60	20.16	-13.37	0.046
		8	-34.29	1.60	20.16	-12.53	0.056
	2437	0	-33.41	1.61	20.16	-11.64	0.069
		4	-34.14	1.61	20.16	-12.37	0.058
		8	-33.77	1.61	20.16	-12.00	0.063
	2462	0	-34.60	1.61	20.16	-12.83	0.052
		4	-33.67	1.61	20.16	-11.90	0.065
		8	-33.42	1.61	20.16	-11.65	0.068

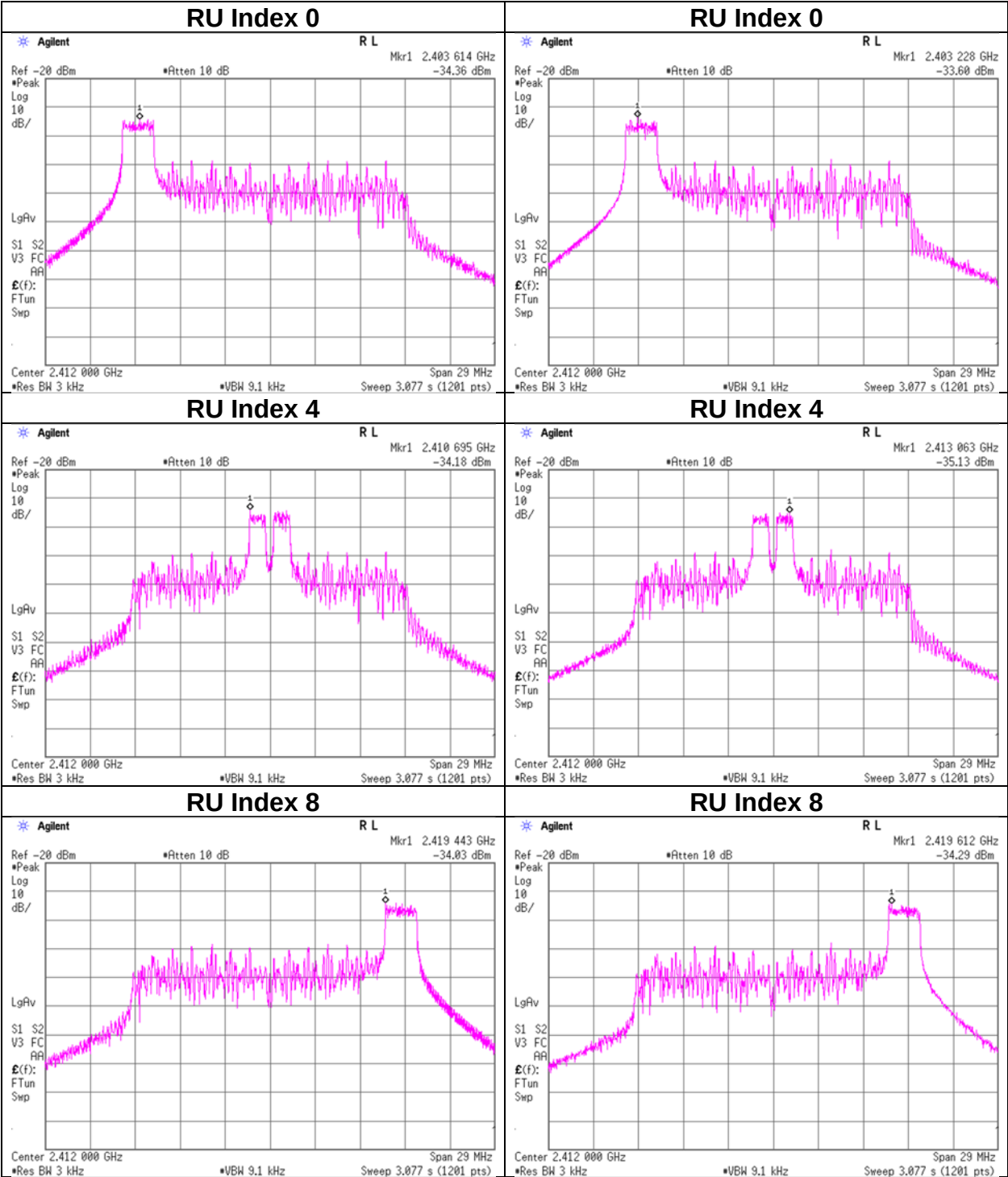
Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

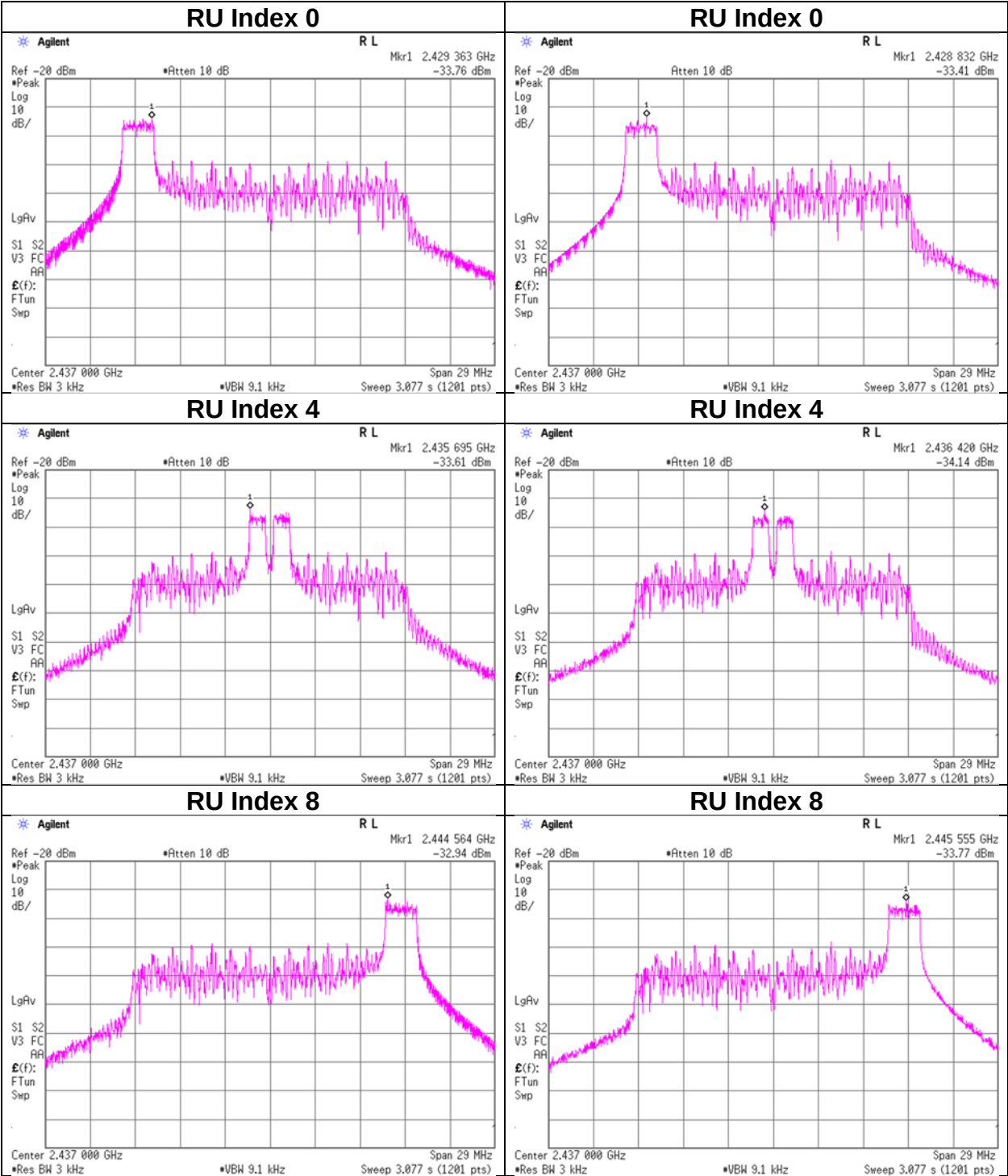
Power Density

11ax-20 (OFDMA)(SDM) 26-tone RU, High power mode, 2412 MHz
2G_CH0



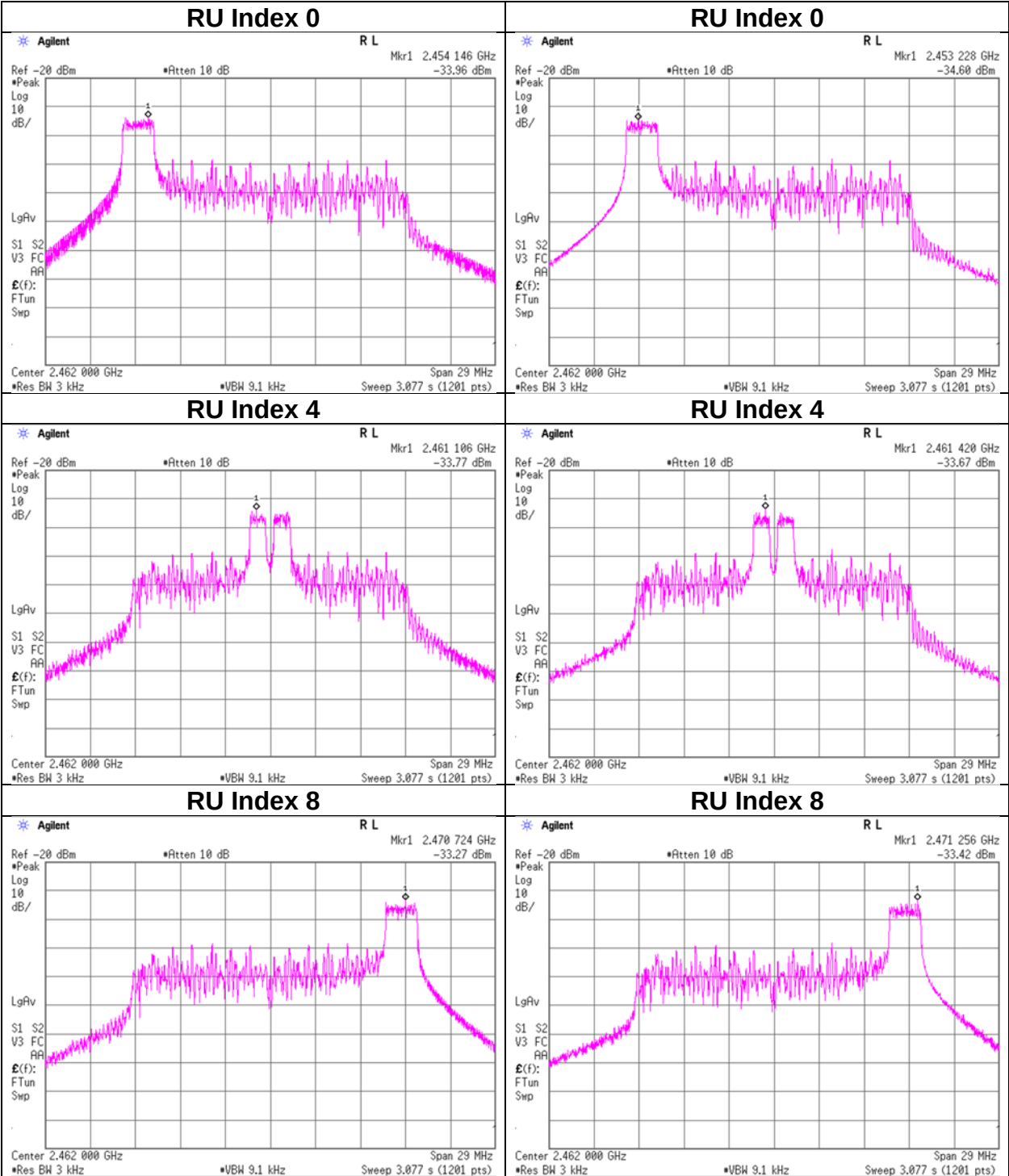
Power Density

11ax-20 (OFDMA)(SDM) 26-tone RU, High power mode, 2437 MHz
2G_CH0



Power Density

11ax-20 (OFDMA)(SDM) 26-tone RU, High power mode, 2462 MHz
2G_CH0 2G_CH1



Power Density

Test place Shonan EMC Lab. No.5 Shielded Room
Date November 1, 2023
Temperature / Humidity 23 deg. C / 45 % RH
Engineer Yohsuke Matsuzawa
Mode Tx 11ax-20(OFDMA)(SDM) 26-tone RU, Standard power mode

2G CH0 + 2G CH1

RU Type	Freq. [MHz]	RU Index	2G_CH0 Result	2G_CH1 Result	Result		Limit	Margin
			[mW]	[mW]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
26-tone RU	2412	0	0.068	0.060	-8.93	0.128	8.00	16.93
		4	0.065	0.063	-8.93	0.128	8.00	16.93
		8	0.055	0.065	-9.20	0.120	8.00	17.20
	2437	0	0.064	0.054	-9.27	0.118	8.00	17.27
		4	0.064	0.054	-9.29	0.118	8.00	17.29
		8	0.068	0.061	-8.90	0.129	8.00	16.90
	2462	0	0.074	0.060	-8.75	0.133	8.00	16.75
		4	0.063	0.080	-8.43	0.144	8.00	16.43
		8	0.061	0.074	-8.68	0.136	8.00	16.68

Sample Calculation:

Result = 2G_CH0 Result + 2G_CH1 Result

2G CH0

RU Type	Freq. [MHz]	RU Index	Reading	Cable Loss	Atten. Loss	Result	
			[dBm/3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
26-tone RU	2412	0	-33.44	1.62	20.16	-11.66	0.068
		4	-33.65	1.62	20.16	-11.87	0.065
		8	-34.37	1.62	20.16	-12.59	0.055
	2437	0	-33.73	1.63	20.16	-11.94	0.064
		4	-33.75	1.63	20.16	-11.96	0.064
		8	-33.49	1.63	20.16	-11.70	0.068
	2462	0	-33.13	1.63	20.16	-11.34	0.074
		4	-33.77	1.63	20.16	-11.98	0.063
		8	-33.92	1.63	20.16	-12.13	0.061

2G CH1

RU Type	Freq. [MHz]	RU Index	Reading	Cable Loss	Atten. Loss	Result	
			[dBm/3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]
26-tone RU	2412	0	-34.01	1.60	20.16	-12.25	0.060
		4	-33.78	1.60	20.16	-12.02	0.063
		8	-33.62	1.60	20.16	-11.86	0.065
	2437	0	-34.42	1.61	20.16	-12.65	0.054
		4	-34.43	1.61	20.16	-12.66	0.054
		8	-33.91	1.61	20.16	-12.14	0.061
	2462	0	-34.01	1.61	20.16	-12.24	0.060
		4	-32.73	1.61	20.16	-10.96	0.080
		8	-33.06	1.61	20.16	-11.29	0.074

Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator Loss

*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

11ax-20 (OFDMA)(SDM) 26-tone RU, Standard power mode, 2412 MHz
2G_CH0

