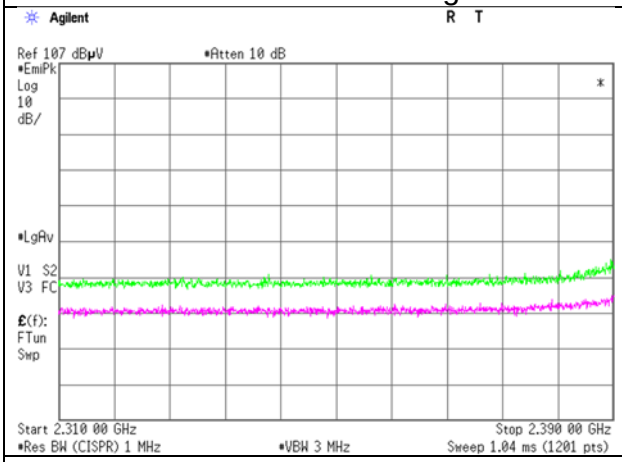
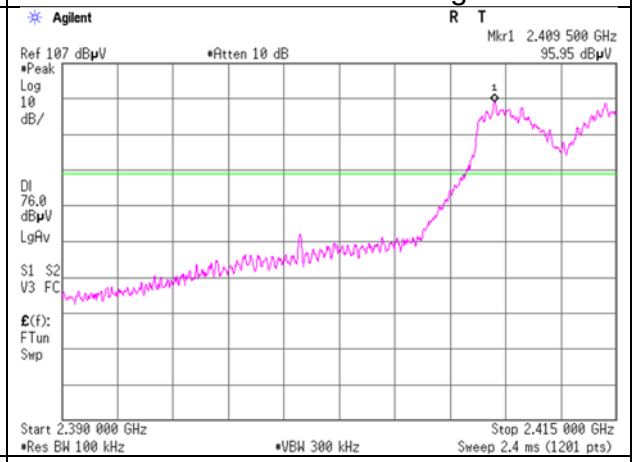
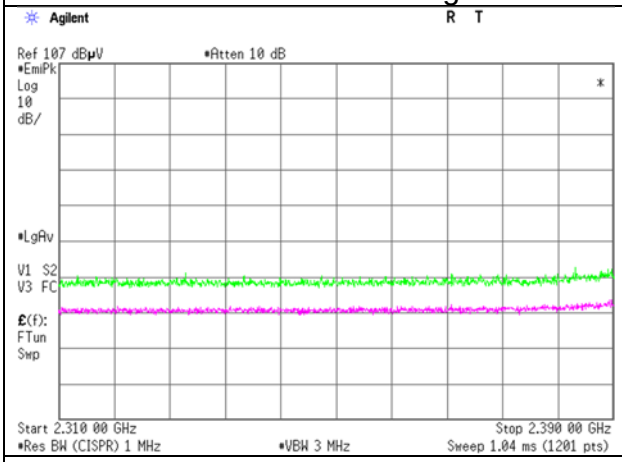
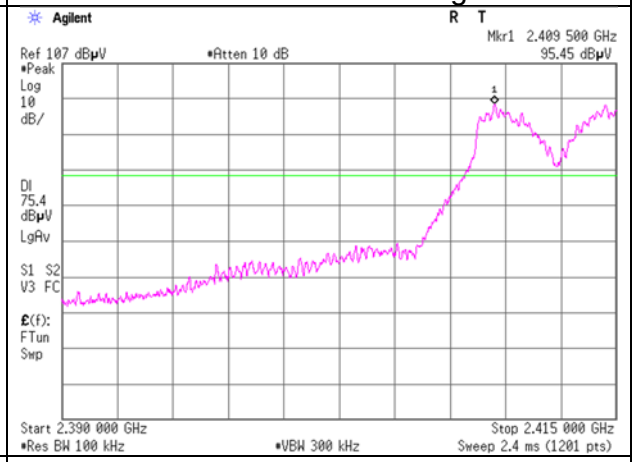
Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11g 2417 MHz

Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki (1 GHz -2.8 GHz)
Mode	Tx 11g 2457 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	55.95	27.72	14.83	41.64	2.45	59.31	73.9	14.5	130	354	-
Hori.	2484.394	PK	55.76	27.72	14.83	41.64	2.45	59.12	73.9	14.7	130	354	-
Vert.	2483.500	PK	55.38	27.72	14.83	41.64	2.45	58.74	73.9	15.1	113	7	-
Vert.	2484.394	PK	54.48	27.72	14.83	41.64	2.45	57.84	73.9	16.0	113	7	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	41.34	27.72	14.83	41.64	0.21	2.45	44.91	53.9	**8.9**	*1)
Hori.	2484.394	AV	41.13	27.72	14.83	41.64	0.21	2.45	44.70	53.9	9.2	-
Vert.	2483.500	AV	41.31	27.72	14.83	41.64	0.21	2.45	44.88	53.9	9.0	*1)
Vert.	2484.394	AV	40.95	27.72	14.83	41.64	0.21	2.45	44.52	53.9	9.3	-

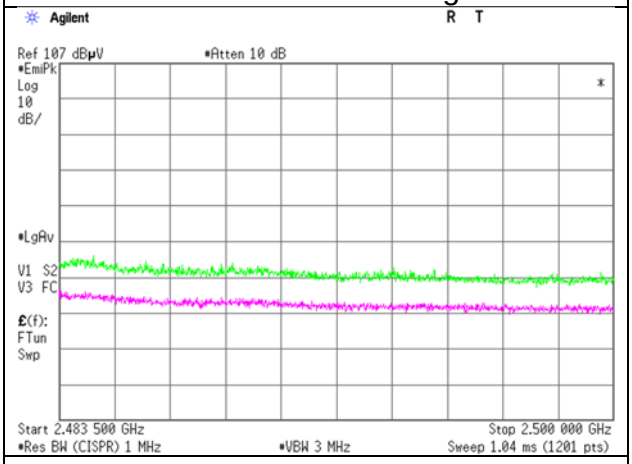
Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Duty factor + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB
Duty factor refer to "Burst rate confirmation" sheet.
*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11g 2457 MHz

Horizontal

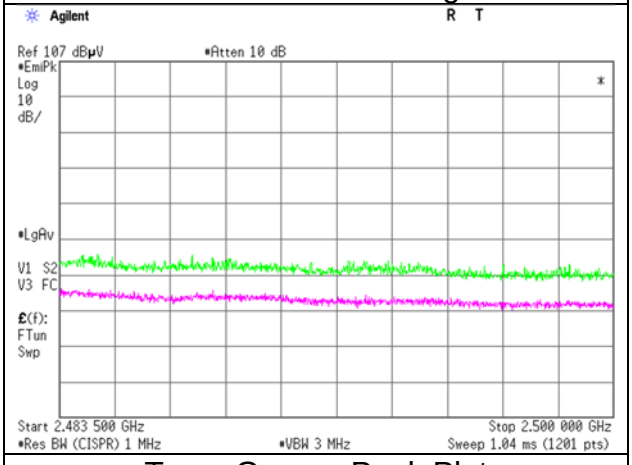
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 17, 2023
Temperature / Humidity	22 deg.C, 33 %RH
Engineer	Takahiro Suzuki (1 GHz -2.8 GHz)
Mode	Tx 11g 2462 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	50.79	28.44	14.83	41.64	2.45	54.87	73.9	19.0	138	343	-
Vert.	2483.500	PK	56.91	28.44	14.83	41.64	2.45	60.99	73.9	12.9	144	357	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	37.89	28.44	14.83	41.64	0.21	2.45	42.18	53.9	11.7	*1)
Vert.	2483.500	AV	39.88	28.44	14.83	41.64	0.21	2.45	44.17	53.9	**9.7**	*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 (3.98 m / 3.0 m) = 2.45 dB

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

Duty factor refer to "Burst rate confirmation" sheet.

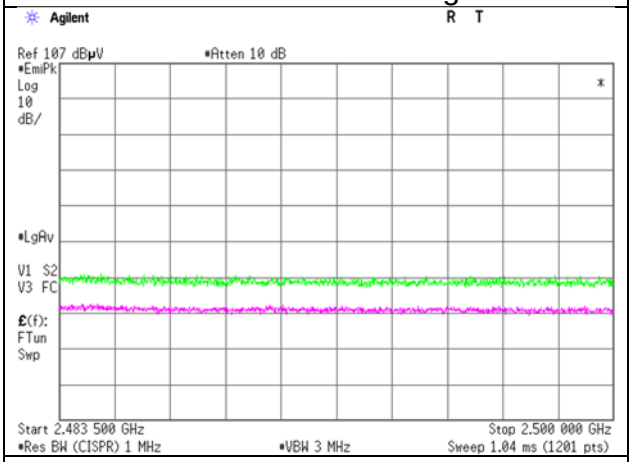
*1) Not out of band emission (Leakage Power)

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 17, 2023
Temperature / Humidity	22 deg.C, 33 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11g 2462 MHz

Horizontal

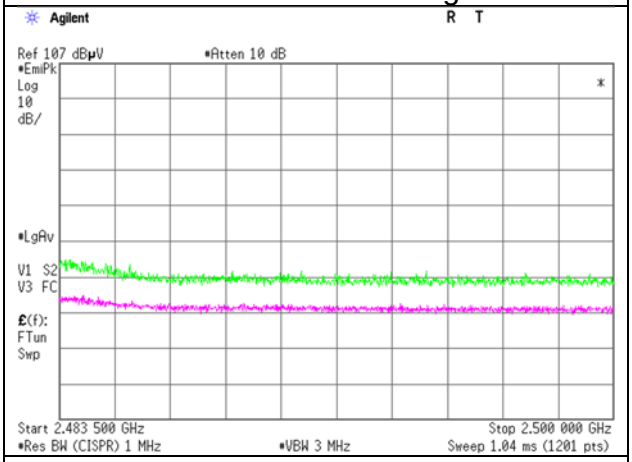
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 17, 2023
Temperature / Humidity	22 deg.C, 33 %RH
Engineer	Takahiro Suzuki (1 GHz -2.8 GHz)
Mode	Tx 11n-20 2412 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	52.47	28.57	14.71	41.61	2.45	56.59	73.9	17.3	149	346	-
Hori.	2390.000	AV	38.98	28.57	14.71	41.61	2.45	43.10	53.9	**10.8**	149	346	-
Vert.	2390.000	PK	53.32	28.57	14.71	41.61	2.45	57.44	73.9	16.4	153	30	-
Vert.	2390.000	AV	38.91	28.57	14.71	41.61	2.45	43.03	53.9	**10.8**	153	30	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

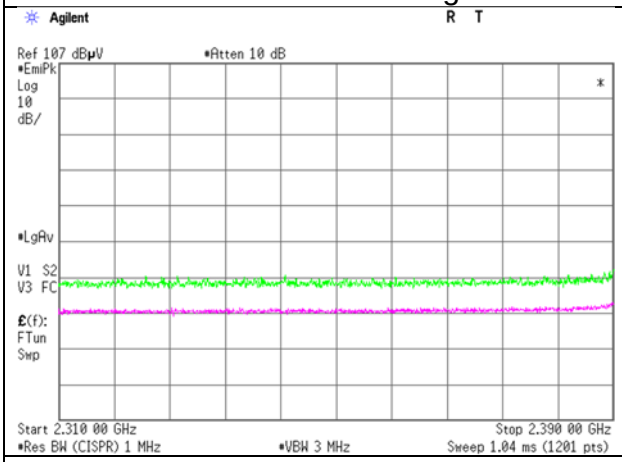
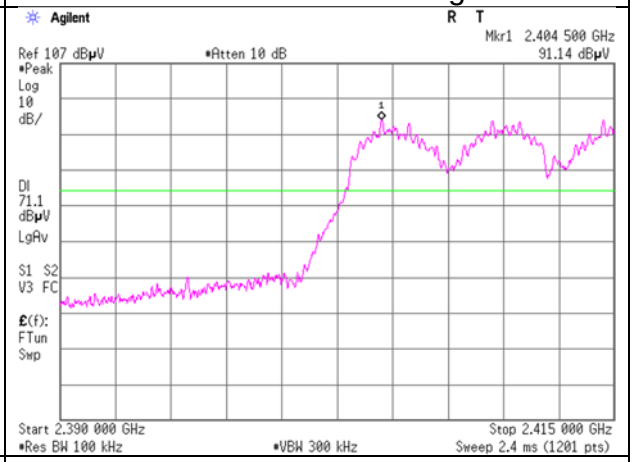
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

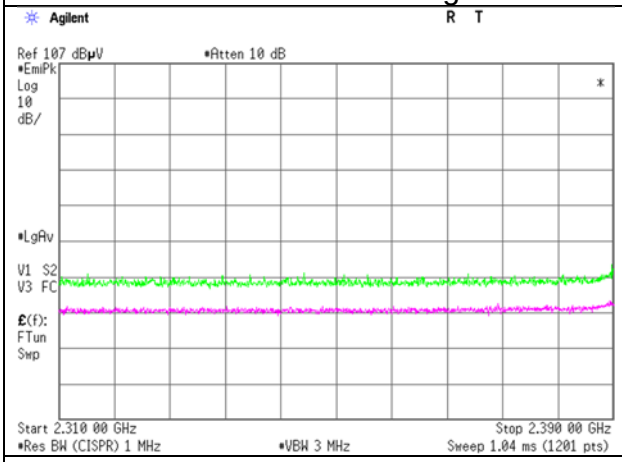
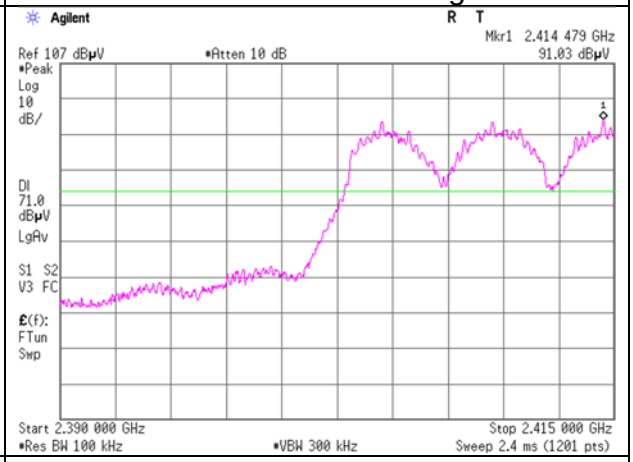
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2412.000	PK	91.14	28.53	14.74	41.61	2.45	95.25	-	-	Carrier
Hori.	2400.000	PK	47.45	28.55	14.72	41.61	2.45	51.56	75.2	23.6	-
Vert.	2412.000	PK	91.03	28.53	14.74	41.61	2.45	95.14	-	-	Carrier
Vert.	2400.000	PK	49.09	28.55	14.72	41.61	2.45	53.20	75.1	21.9	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 17, 2023
Temperature / Humidity	22 deg.C, 33 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11n-20 2412 MHz

Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki (1 GHz -2.8 GHz)
Mode	Tx 11n-20 2417 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	57.09	27.85	14.71	41.61	2.45	60.49	73.9	13.4	136	354	-
Hori.	2390.000	AV	40.06	27.85	14.71	41.61	2.45	43.46	53.9	**10.4**	136	354	-
Vert.	2390.000	PK	54.81	27.85	14.71	41.61	2.45	58.21	73.9	15.6	141	11	-
Vert.	2390.000	AV	40.02	27.85	14.71	41.61	2.45	43.42	53.9	**10.4**	141	11	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

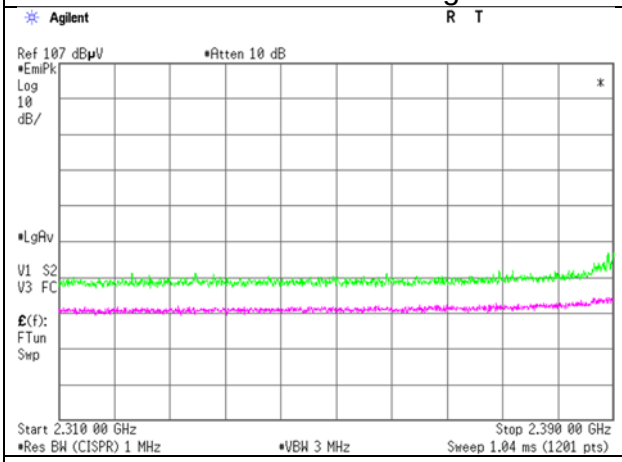
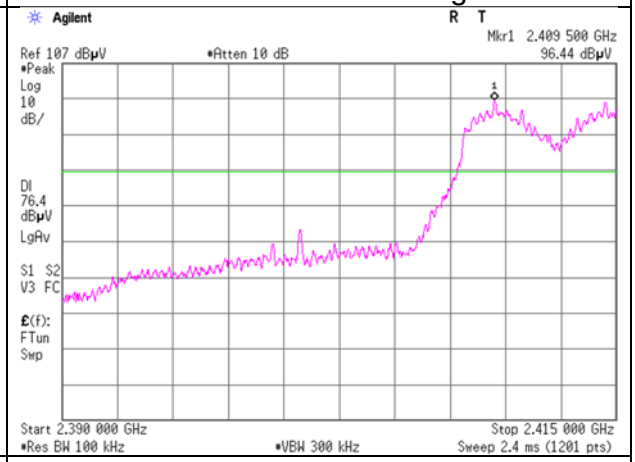
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

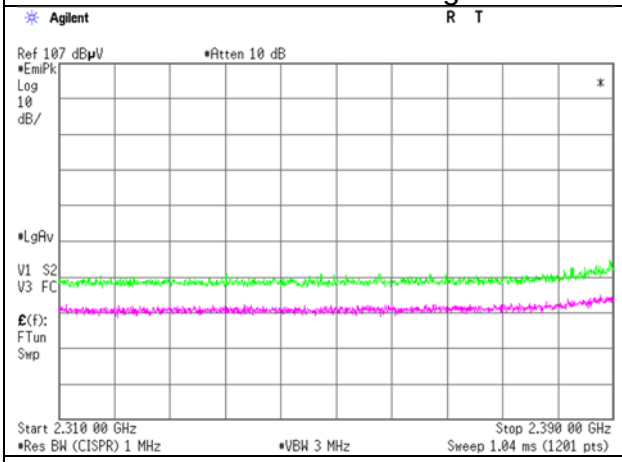
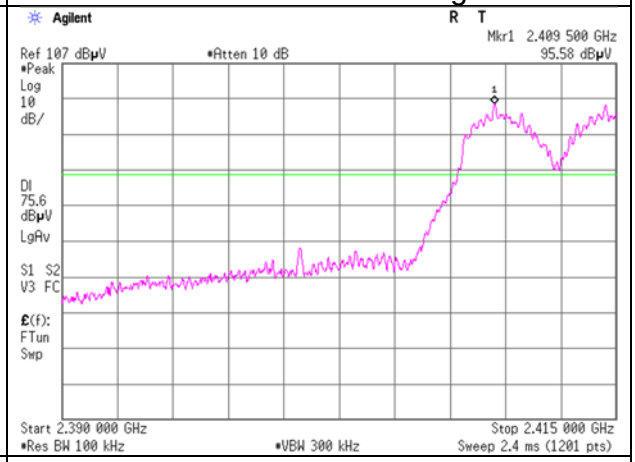
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2417.000	PK	96.44	27.80	14.75	41.62	2.45	99.82	-	-	Carrier
Hori.	2400.000	PK	52.12	27.83	14.72	41.61	2.45	55.51	79.8	24.2	-
Vert.	2417.000	PK	95.58	27.80	14.75	41.62	2.45	98.96	-	-	Carrier
Vert.	2400.000	PK	48.46	27.83	14.72	41.61	2.45	51.85	78.9	27.0	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11n-20 2417 MHz

Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki
	(1 GHz -2.8 GHz)
Mode	Tx 11n-20 2457 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	52.11	27.72	14.83	41.64	2.45	55.47	73.9	18.4	134	344	-
Hori.	2483.500	AV	39.14	27.72	14.83	41.64	2.45	42.50	53.9	**11.4**	134	344	-
Vert.	2483.500	PK	51.72	27.72	14.83	41.64	2.45	55.08	73.9	18.8	142	30	-
Vert.	2483.500	AV	38.95	27.72	14.83	41.64	2.45	42.31	53.9	11.5	142	30	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

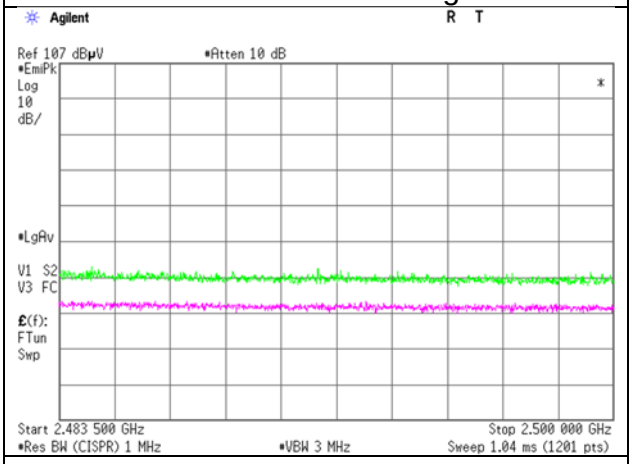
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11n-20 2457 MHz

Horizontal

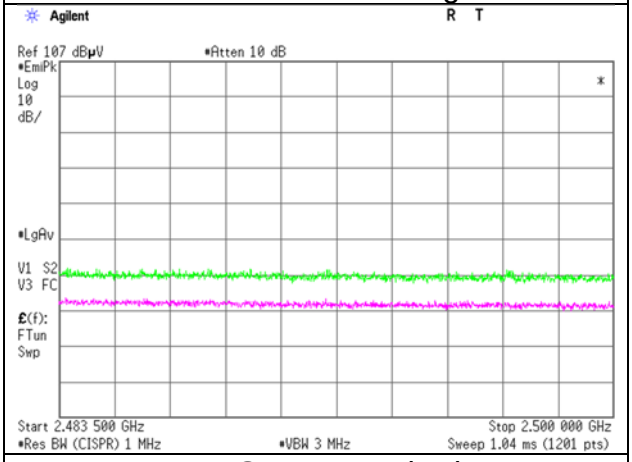
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 17, 2023
Temperature / Humidity	22 deg.C, 33 %RH
Engineer	Takahiro Suzuki
	(1 GHz -2.8 GHz)
Mode	Tx 11n-20 2462 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	56.06	28.44	14.83	41.64	2.45	60.14	73.9	13.7	140	343	-
Hori.	2483.500	AV	40.21	28.44	14.83	41.64	2.45	44.29	53.9	**9.6**	140	343	-
Vert.	2483.500	PK	54.60	28.44	14.83	41.64	2.45	58.68	73.9	15.2	144	22	-
Vert.	2483.500	AV	39.72	28.44	14.83	41.64	2.45	43.80	53.9	10.1	144	22	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

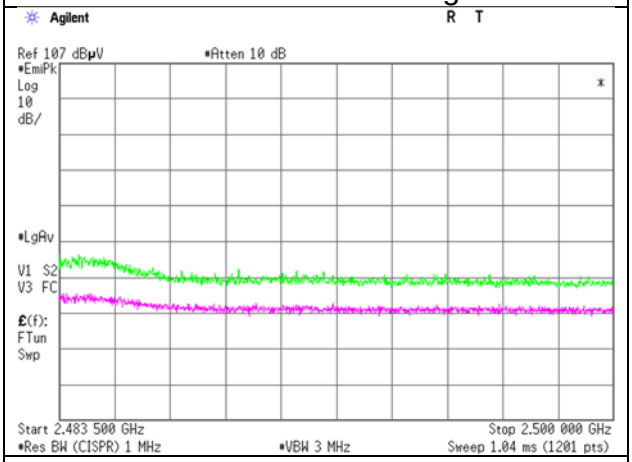
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 17, 2023
Temperature / Humidity	22 deg.C, 33 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11n-20 2462 MHz

Horizontal

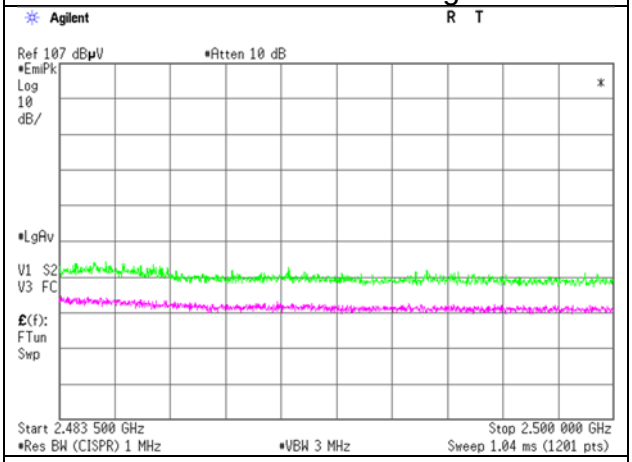
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	3	3	3
Date	March 17, 2023	March 20, 2023	March 20, 2023
Temperature / Humidity	22 deg.C, 33 %RH	23 deg.C, 36 %RH	23 deg.C, 36 %RH
Engineer	Takahiro Suzuki	Hiromasa Sato	Akihiro Oda
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 -26.5 GHz)
Mode	Tx 11ax-20 (OFDM) 2412 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	59.55	28.57	14.71	41.61	2.45	63.67	73.9	10.2	140	352	-
Hori.	4824.000	PK	50.14	31.19	7.23	42.87	2.45	48.14	73.9	25.7	150	0	-
Hori.	7236.000	PK	50.38	36.89	8.61	43.36	2.45	54.97	73.9	18.9	150	0	-
Hori.	9648.000	PK	49.08	38.21	9.82	43.09	2.45	56.47	73.9	17.4	150	0	-
Hori.	19296.000	PK	48.60	40.23	13.90	47.52	-9.54	45.67	73.9	28.2	144	5	-
Hori.	2390.000	AV	40.35	28.57	14.71	41.61	2.45	44.47	53.9	9.4	140	352	-
Hori.	4824.000	AV	37.95	31.19	7.23	42.87	2.45	35.95	53.9	17.9	150	0	Floor noise
Hori.	7236.000	AV	37.70	36.89	8.61	43.36	2.45	42.29	53.9	11.6	150	0	Floor noise
Hori.	9648.000	AV	37.49	38.21	9.82	43.09	2.45	44.88	53.9	**9.0**	150	0	Floor noise
Hori.	19296.000	AV	45.71	40.23	13.90	47.52	-9.54	42.78	53.9	11.1	144	5	-
Vert.	2390.000	PK	56.49	28.57	14.71	41.61	2.45	60.61	73.9	13.2	150	13	-
Vert.	4824.000	PK	50.04	31.19	7.23	42.87	2.45	48.04	73.9	25.8	150	0	-
Vert.	7236.000	PK	49.87	36.89	8.61	43.36	2.45	54.46	73.9	19.4	150	0	-
Vert.	9648.000	PK	49.13	38.21	9.82	43.09	2.45	56.52	73.9	17.3	150	0	-
Vert.	19296.000	PK	48.96	40.23	13.90	47.52	-9.54	46.03	73.9	27.8	123	121	-
Vert.	2390.000	AV	39.97	28.57	14.71	41.61	2.45	44.09	53.9	9.8	150	13	-
Vert.	4824.000	AV	37.84	31.19	7.23	42.87	2.45	35.84	53.9	18.0	150	0	Floor noise
Vert.	7236.000	AV	37.64	36.89	8.61	43.36	2.45	42.23	53.9	11.6	150	0	Floor noise
Vert.	9648.000	AV	37.40	38.21	9.82	43.09	2.45	44.79	53.9	9.1	150	0	Floor noise
Vert.	19296.000	AV	46.14	40.23	13.90	47.52	-9.54	43.21	53.9	10.6	123	121	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

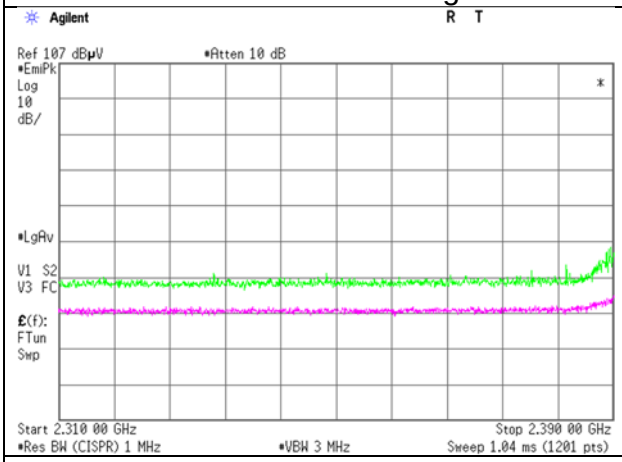
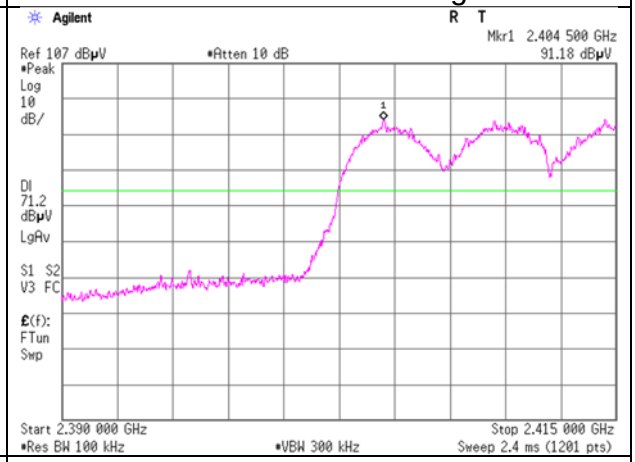
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

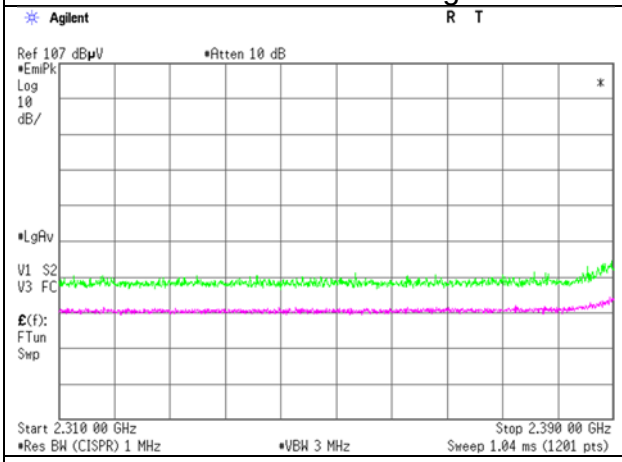
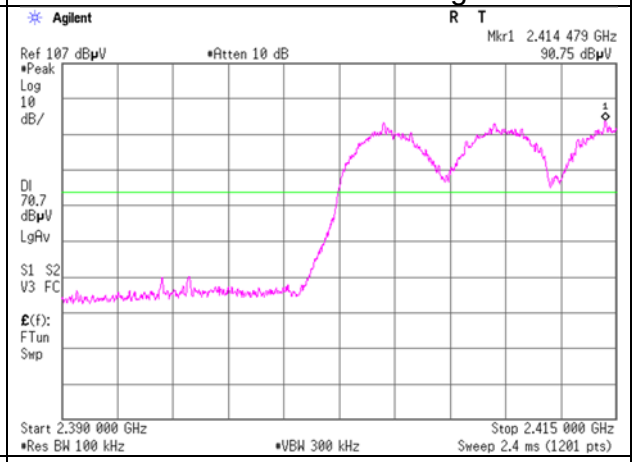
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2412.000	PK	91.18	28.53	14.74	41.61	2.45	95.29	-	-	Carrier
Hori.	2400.000	PK	48.85	28.55	14.72	41.61	2.45	52.96	75.2	22.2	-
Vert.	2412.000	PK	90.75	28.53	14.74	41.61	2.45	94.86	-	-	Carrier
Vert.	2400.000	PK	45.33	28.55	14.72	41.61	2.45	49.44	74.8	25.3	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 17, 2023
Temperature / Humidity	22 deg.C, 33 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20 (OFDM) 2412 MHz

Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 2412 MHz

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.	2390.000	PK	47.99	27.85	14.71	41.61	2.45	51.39	73.9	22.5	149	344	-
Hori.	2390.000	AV	35.93	27.85	14.71	41.61	2.45	39.33	53.9	14.5	149	344	VBW: 750 Hz
Vert.	2390.000	PK	48.18	27.85	14.71	41.61	2.45	51.58	73.9	22.3	148	238	-
Vert.	2390.000	AV	36.11	27.85	14.71	41.61	2.45	39.51	53.9	**14.3**	148	238	VBW: 750 Hz

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

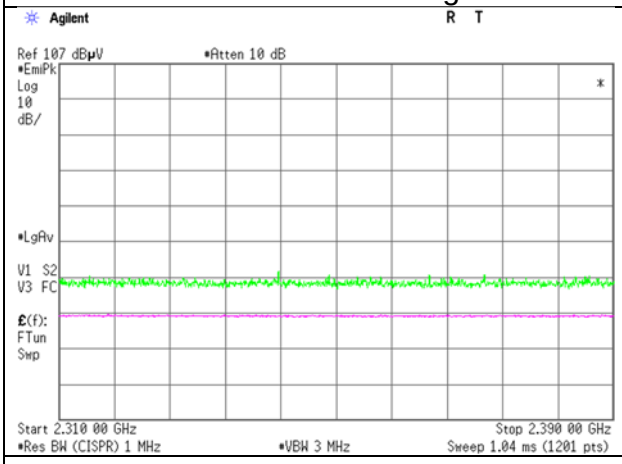
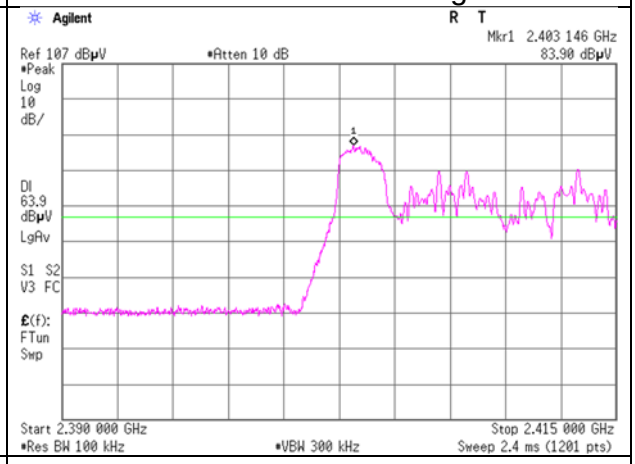
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

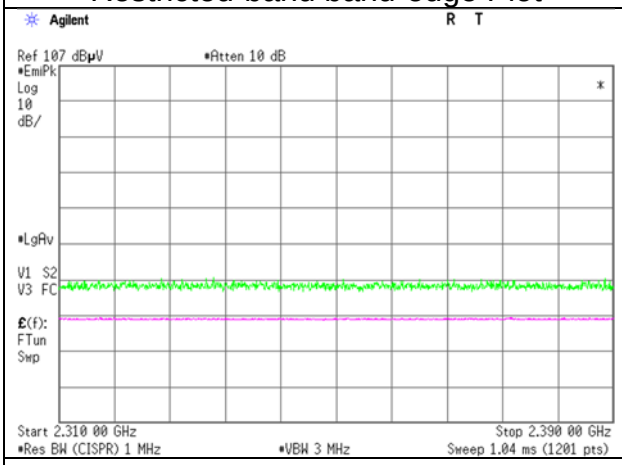
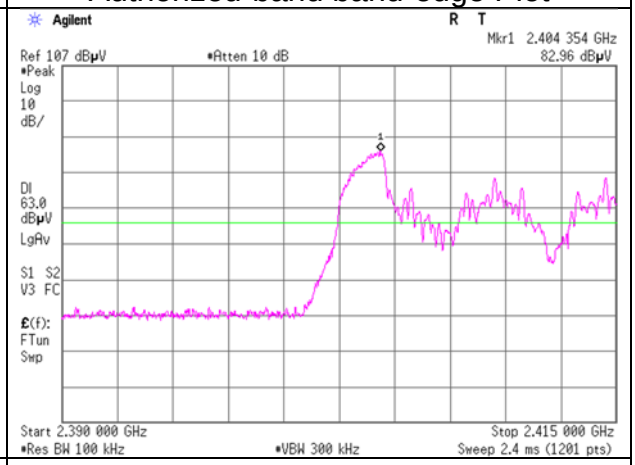
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2412.000	PK	83.86	27.81	14.74	41.61	2.45	87.25	-	-	Carrier
Hori.	2400.000	PK	39.30	27.83	14.72	41.61	2.45	42.69	67.2	24.5	-
Vert.	2412.000	PK	82.30	27.81	14.74	41.61	2.45	85.69	-	-	Carrier
Vert.	2400.000	PK	39.26	27.83	14.72	41.61	2.45	42.65	65.6	22.9	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 2412 MHz

RU Index 0	
Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

RU Index 0	
Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 2412 MHz

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.	2390.000	PK	47.89	27.85	14.71	41.61	2.45	51.29	73.9	22.6	157	165	-
Hori.	2390.000	AV	36.15	27.85	14.71	41.61	2.45	39.55	53.9	**14.3**	157	165	VBW: 750 Hz
Vert.	2390.000	PK	47.78	27.85	14.71	41.61	2.45	51.18	73.9	22.7	149	241	-
Vert.	2390.000	AV	36.03	27.85	14.71	41.61	2.45	39.43	53.9	14.4	149	241	VBW: 750 Hz

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

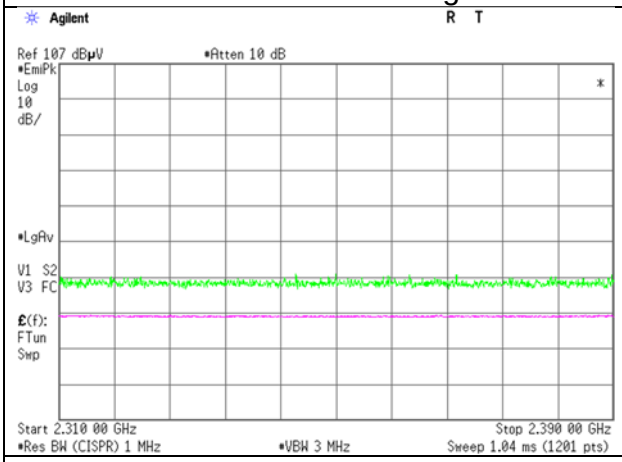
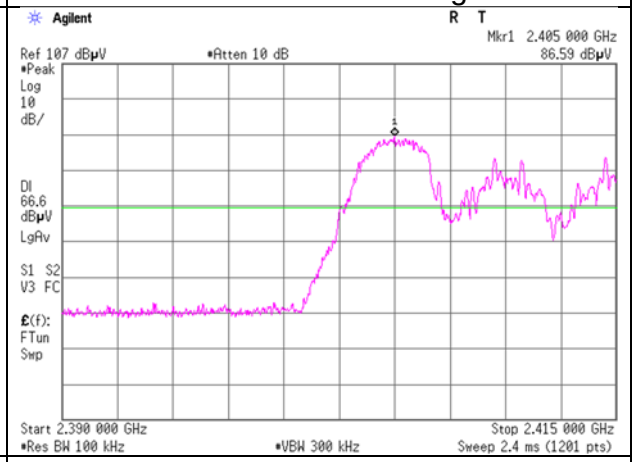
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

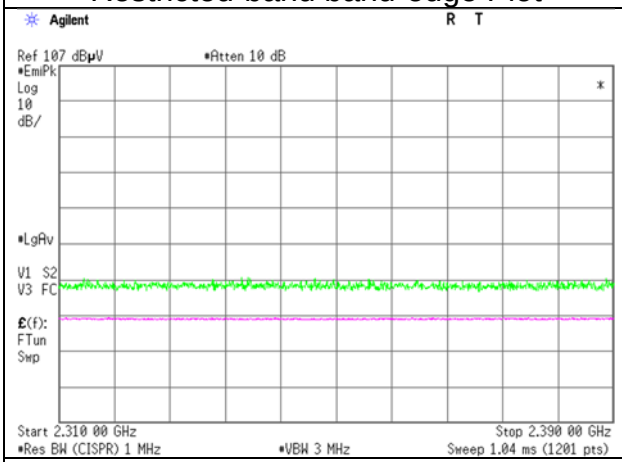
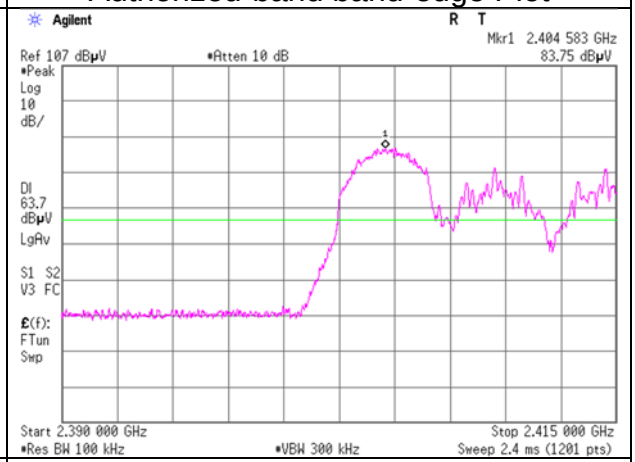
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2412.000	PK	85.87	27.81	14.74	41.61	2.45	89.26	-	-	Carrier
Hori.	2400.000	PK	39.45	27.83	14.72	41.61	2.45	42.84	69.2	26.3	-
Vert.	2412.000	PK	83.42	27.81	14.74	41.61	2.45	86.81	-	-	Carrier
Vert.	2400.000	PK	39.76	27.83	14.72	41.61	2.45	43.15	66.8	23.6	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 2412 MHz

RU Index 37	
Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

RU Index 37	
Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 2412 MHz

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	49.14	27.85	14.71	41.61	2.45	52.54	73.9	21.3	141	148	-
Hori.	2390.000	AV	35.86	27.85	14.71	41.61	2.45	39.26	53.9	14.6	141	148	VBW: 750 Hz
Vert.	2390.000	PK	46.62	27.85	14.71	41.61	2.45	50.02	73.9	23.8	140	240	-
Vert.	2390.000	AV	35.93	27.85	14.71	41.61	2.45	39.33	53.9	**14.5**	140	240	VBW: 750 Hz

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

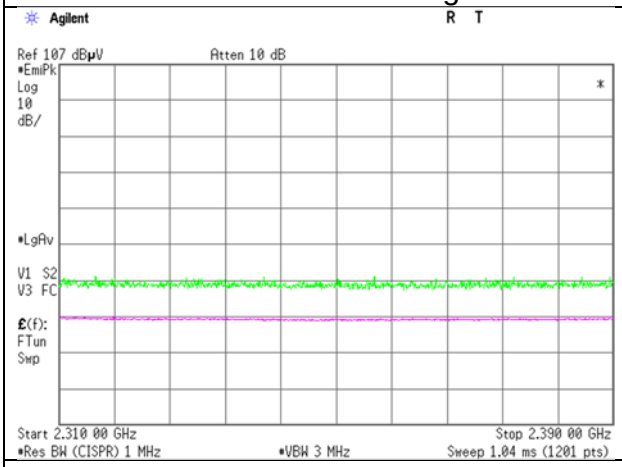
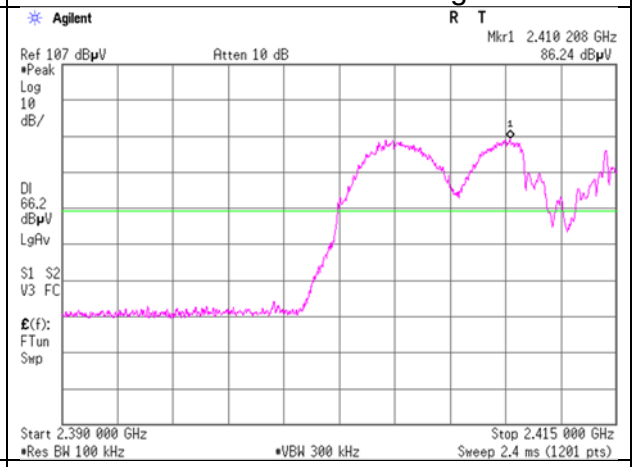
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

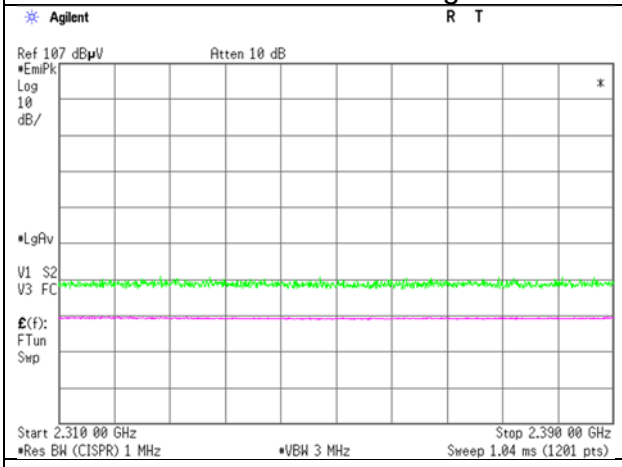
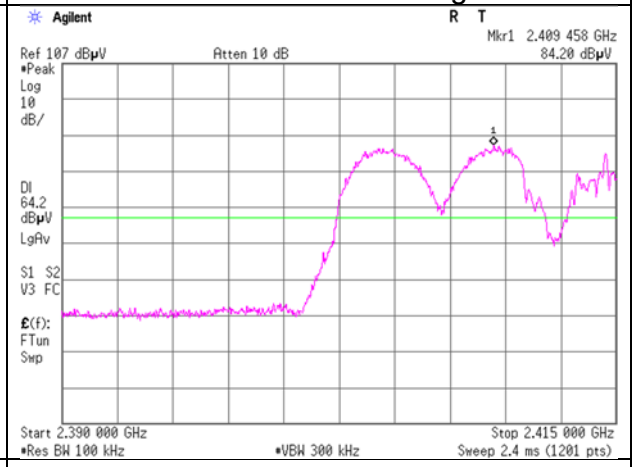
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2412.000	PK	84.74	27.81	14.74	41.61	2.45	88.13	-	-	Carrier
Hori.	2400.000	PK	39.99	27.83	14.72	41.61	2.45	43.38	68.1	24.7	-
Vert.	2412.000	PK	82.85	27.81	14.74	41.61	2.45	86.24	-	-	Carrier
Vert.	2400.000	PK	39.41	27.83	14.72	41.61	2.45	42.80	66.2	23.4	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 2412 MHz

RU Index 53	
Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

RU Index 53	
Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 2412 MHz

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.	2390.000	PK	48.71	27.85	14.71	41.61	2.45	52.11	73.9	21.7	135	351	-
Hori.	2390.000	AV	36.38	27.85	14.71	41.61	2.45	39.78	53.9	14.1	135	351	VBW: 750 Hz
Vert.	2390.000	PK	50.09	27.85	14.71	41.61	2.45	53.49	73.9	20.4	129	357	-
Vert.	2390.000	AV	36.73	27.85	14.71	41.61	2.45	40.13	53.9	**13.7**	129	357	VBW: 750 Hz

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

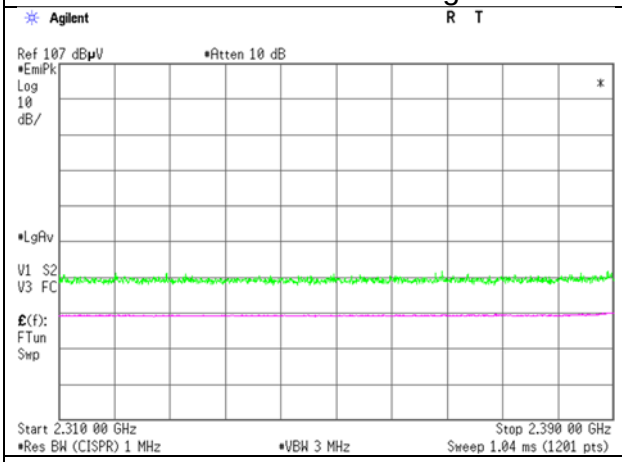
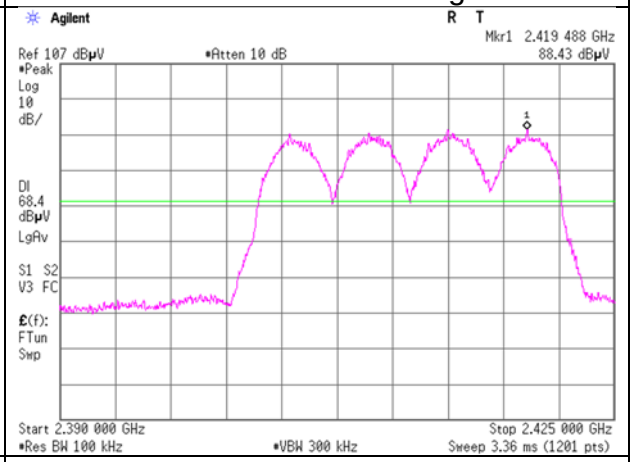
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

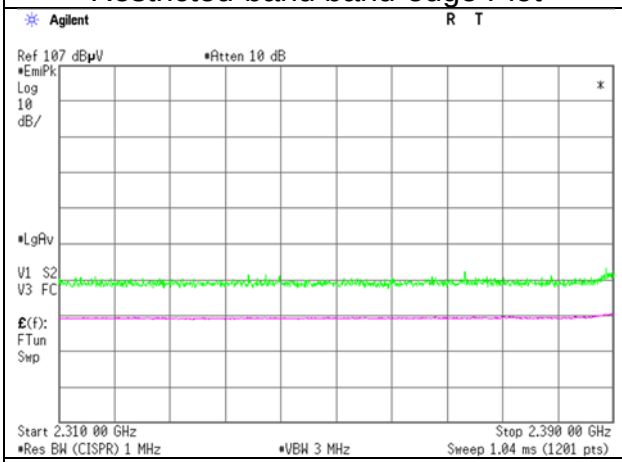
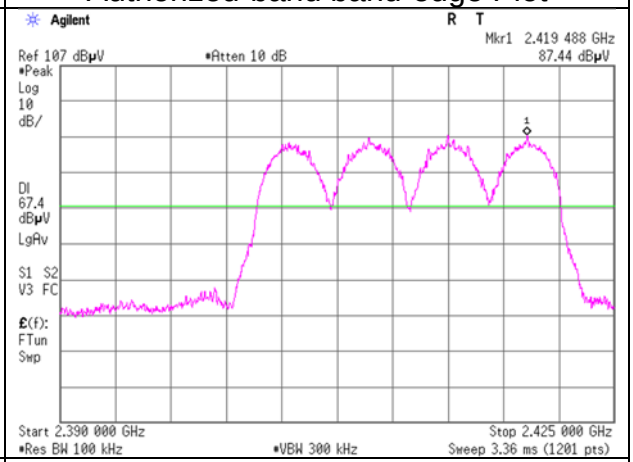
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2412.000	PK	88.41	27.81	14.74	41.61	2.45	91.80	-	-	Carrier
Hori.	2394.268	PK	40.88	27.84	14.72	41.61	2.45	44.28	71.8	27.5	-
Hori.	2400.000	PK	41.73	27.83	14.72	41.61	2.45	45.12	71.8	26.6	-
Vert.	2412.000	PK	86.67	27.81	14.74	41.61	2.45	90.06	-	-	Carrier
Vert.	2394.186	PK	41.02	27.84	14.72	41.61	2.45	44.42	70.0	25.5	-
Vert.	2400.000	PK	42.35	27.83	14.72	41.61	2.45	45.74	70.0	24.2	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 2412 MHz

RU Index 61	
Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

RU Index 61	
Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.	
Semi Anechoic Chamber	3	3
Date	March 19, 2023	March 20, 2023
Temperature / Humidity	22 deg.C, 31 %RH	21 deg.C, 32 %RH
Engineer	Takahiro Suzuki	Hiromasa Sato
	(1 GHz -2.8 GHz)	(2.8 GHz -26.5 GHz)
Mode	Tx 11ax-20 (OFDM), 2417 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	60.88	27.85	14.71	41.61	2.45	64.28	73.9	9.6	151	344	-
Hori.	4834.000	PK	47.24	31.20	7.24	42.87	2.45	45.26	73.9	28.6	150	0	-
Hori.	7251.000	PK	48.02	36.90	8.62	43.37	2.45	52.62	73.9	21.2	150	0	-
Hori.	9668.000	PK	47.98	38.27	9.83	43.08	2.45	55.45	73.9	18.4	318	359	-
Hori.	19336.000	PK	49.11	40.26	13.92	47.44	-9.54	46.31	73.9	27.5	146	0	-
Hori.	2390.000	AV	41.94	27.85	14.71	41.61	2.45	45.34	53.9	8.5	151	344	-
Hori.	4834.000	AV	38.78	31.20	7.24	42.87	2.45	36.80	53.9	17.1	150	0	Floor noise
Hori.	7251.000	AV	38.26	36.90	8.62	43.37	2.45	42.86	53.9	11.0	150	0	Floor noise
Hori.	9668.000	AV	38.13	38.27	9.83	43.08	2.45	45.60	53.9	8.3	318	359	-
Hori.	19336.000	AV	45.49	40.26	13.92	47.44	-9.54	42.69	53.9	11.2	146	0	-
Vert.	2390.000	PK	60.96	27.85	14.71	41.61	2.45	64.36	73.9	9.5	144	16	-
Vert.	4834.000	PK	47.57	31.20	7.24	42.87	2.45	45.59	73.9	28.3	150	0	-
Vert.	7251.000	PK	47.85	36.90	8.62	43.37	2.45	52.45	73.9	21.4	150	0	-
Vert.	9668.000	PK	47.52	38.27	9.83	43.08	2.45	54.99	73.9	18.9	325	85	-
Vert.	19336.000	PK	49.29	40.26	13.92	47.44	-9.54	46.49	73.9	27.4	120	123	-
Vert.	2390.000	AV	40.53	27.85	14.71	41.61	2.45	43.93	53.9	9.9	144	16	-
Vert.	4834.000	AV	38.65	31.20	7.24	42.87	2.45	36.67	53.9	17.2	150	0	Floor noise
Vert.	7251.000	AV	38.67	36.90	8.62	43.37	2.45	43.27	53.9	10.6	150	0	Floor noise
Vert.	9668.000	AV	38.42	38.27	9.83	43.08	2.45	45.89	53.9	**8.0**	325	85	-
Vert.	19336.000	AV	47.09	40.26	13.92	47.44	-9.54	44.29	53.9	9.6	120	123	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

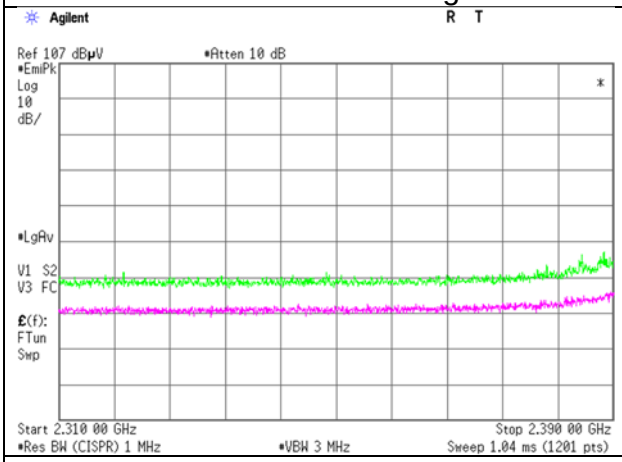
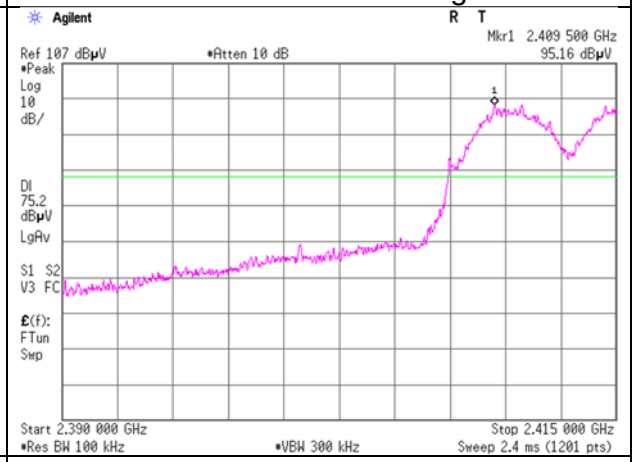
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

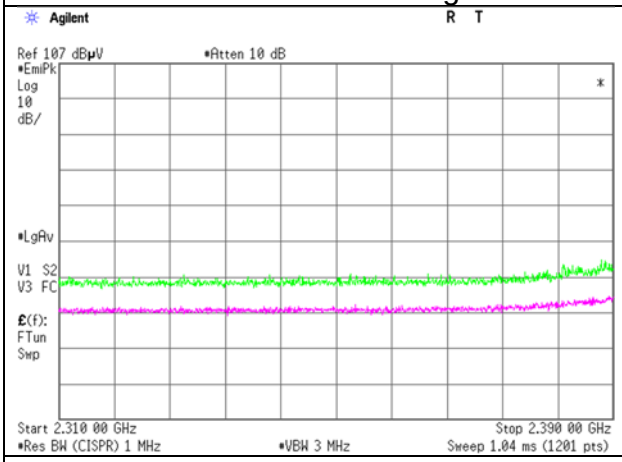
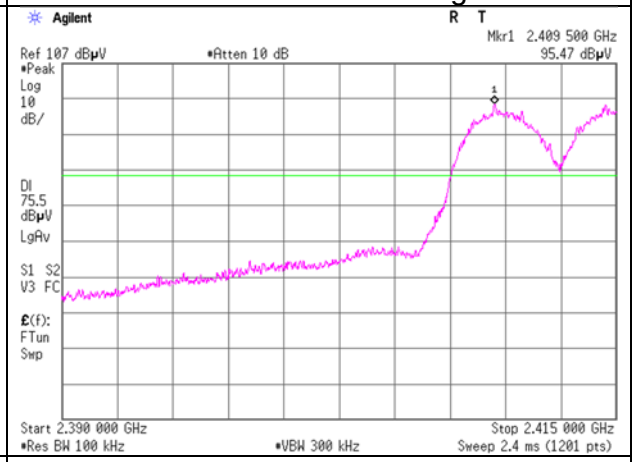
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2417.000	PK	95.27	27.80	14.75	41.62	2.45	98.65	-	-	Carrier
Hori.	2400.000	PK	53.36	27.83	14.72	41.61	2.45	56.75	78.6	21.8	-
Vert.	2417.000	PK	93.88	27.80	14.75	41.62	2.45	97.26	-	-	Carrier
Vert.	2400.000	PK	51.28	27.83	14.72	41.61	2.45	54.67	77.2	22.5	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20 (OFDM), 2417 MHz

Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 2417 MHz

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.	2390.000	PK	48.31	27.85	14.71	41.61	2.45	51.71	73.9	22.1	151	346	-
Hori.	2390.000	AV	35.93	27.85	14.71	41.61	2.45	39.33	53.9	14.5	151	346	VBW: 750 Hz
Vert.	2390.000	PK	49.48	27.85	14.71	41.61	2.45	52.88	73.9	21.0	160	240	-
Vert.	2390.000	AV	36.13	27.85	14.71	41.61	2.45	39.53	53.9	**14.3**	160	240	VBW: 750 Hz

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

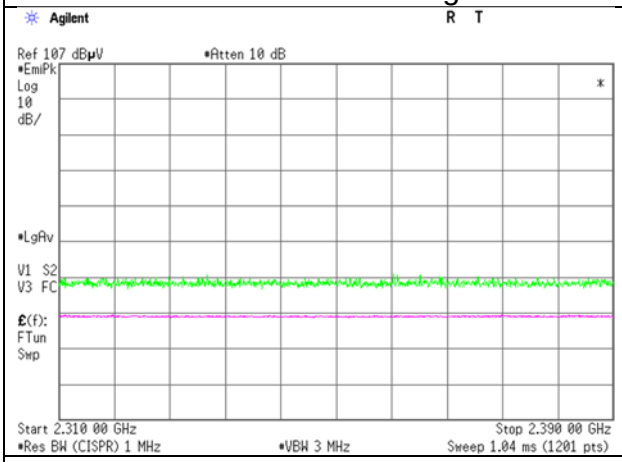
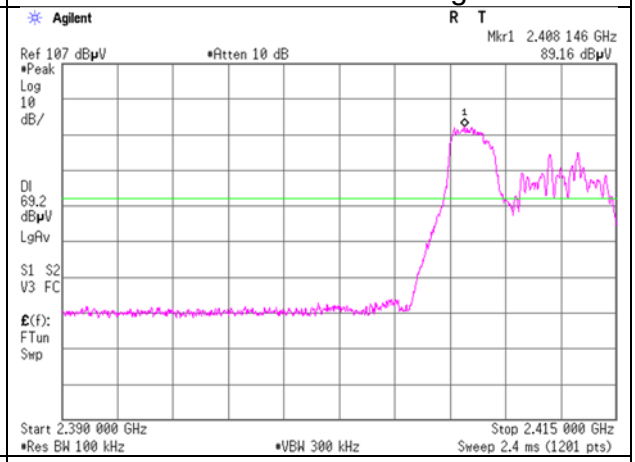
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

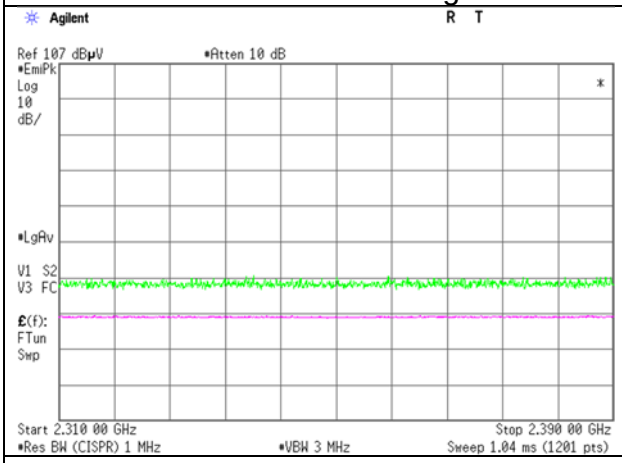
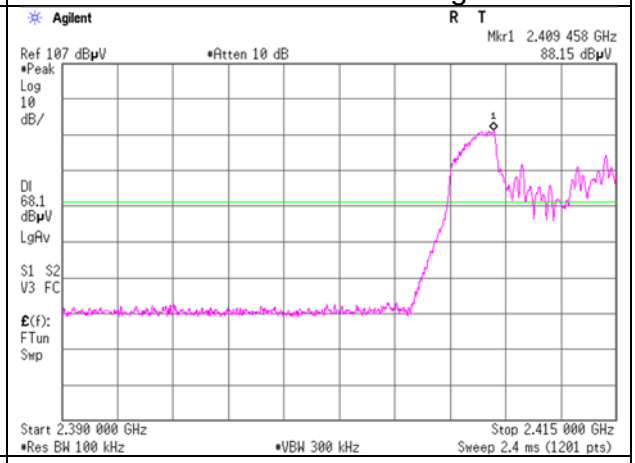
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2417.000	PK	89.36	27.80	14.75	41.62	2.45	92.74	-	-	Carrier
Hori.	2400.000	PK	39.33	27.83	14.72	41.61	2.45	42.72	72.7	29.9	-
Vert.	2417.000	PK	88.25	27.80	14.75	41.62	2.45	91.63	-	-	Carrier
Vert.	2400.000	PK	39.19	27.83	14.72	41.61	2.45	42.58	71.6	29.0	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 2417 MHz

RU Index 0	
Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

RU Index 0	
Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 2417 MHz

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.	2390.000	PK	47.87	27.85	14.71	41.61	2.45	51.27	73.9	22.6	141	164	-
Hori.	2390.000	AV	36.11	27.85	14.71	41.61	2.45	39.51	53.9	**14.3**	141	164	VBW: 750 Hz
Vert.	2390.000	PK	47.53	27.85	14.71	41.61	2.45	50.93	73.9	22.9	145	240	-
Vert.	2390.000	AV	36.04	27.85	14.71	41.61	2.45	39.44	53.9	14.4	145	240	VBW: 750 Hz

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

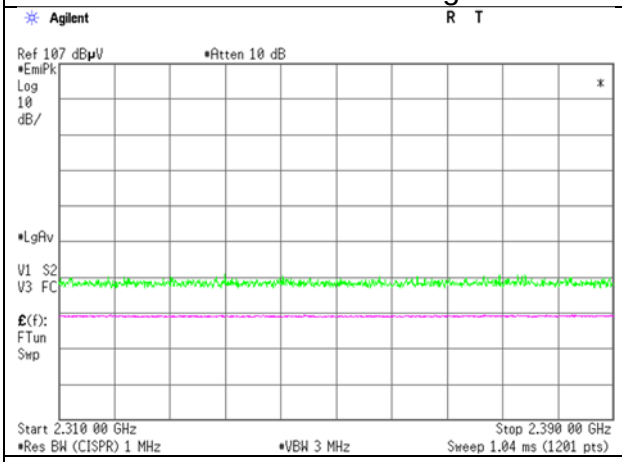
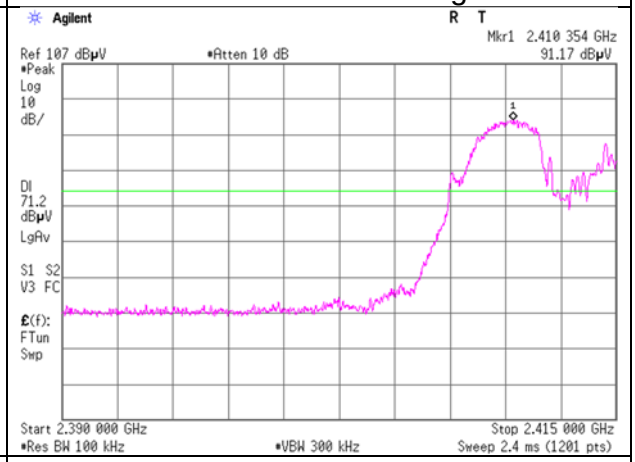
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

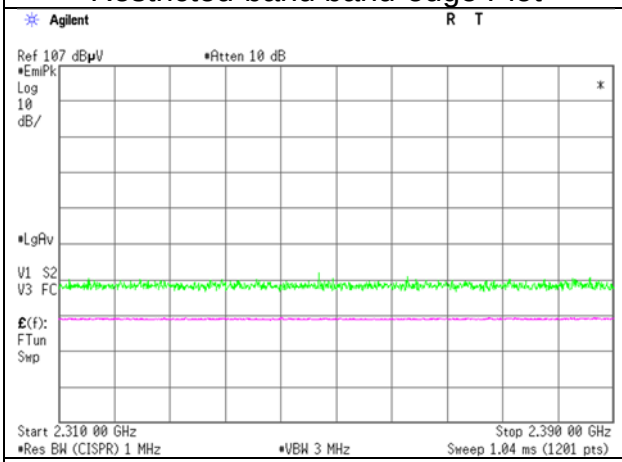
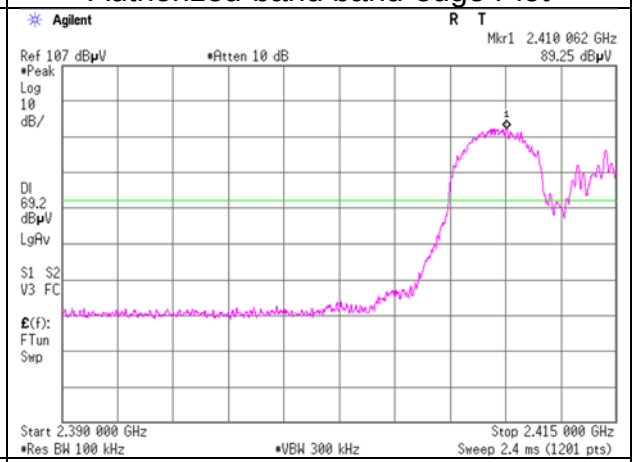
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2417.000	PK	91.09	27.80	14.75	41.62	2.45	94.47	-	-	Carrier
Hori.	2400.000	PK	39.31	27.83	14.72	41.61	2.45	42.70	74.4	31.7	-
Vert.	2417.000	PK	88.90	27.80	14.75	41.62	2.45	92.28	-	-	Carrier
Vert.	2400.000	PK	39.61	27.83	14.72	41.61	2.45	43.00	72.2	29.2	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 2417 MHz

RU Index 37	
Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

RU Index 37	
Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 2417 MHz

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	47.38	27.85	14.71	41.61	2.45	50.78	73.9	23.1	150	348	-
Hori.	2390.000	AV	36.11	27.85	14.71	41.61	2.45	39.51	53.9	**14.3**	150	348	VBW: 750 Hz
Vert.	2390.000	PK	49.16	27.85	14.71	41.61	2.45	52.56	73.9	21.3	141	355	-
Vert.	2390.000	AV	36.07	27.85	14.71	41.61	2.45	39.47	53.9	14.4	141	355	VBW: 750 Hz

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

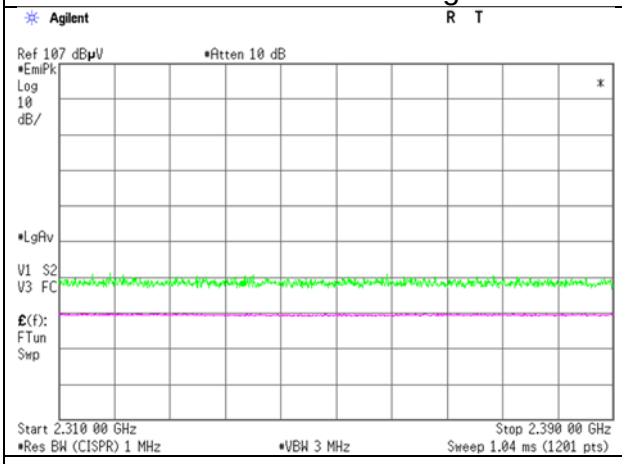
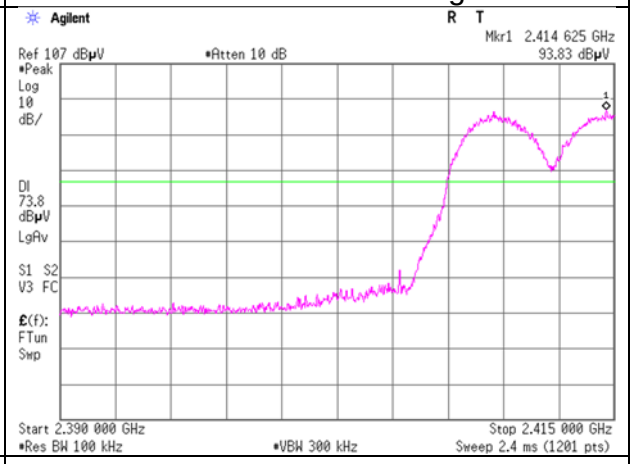
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

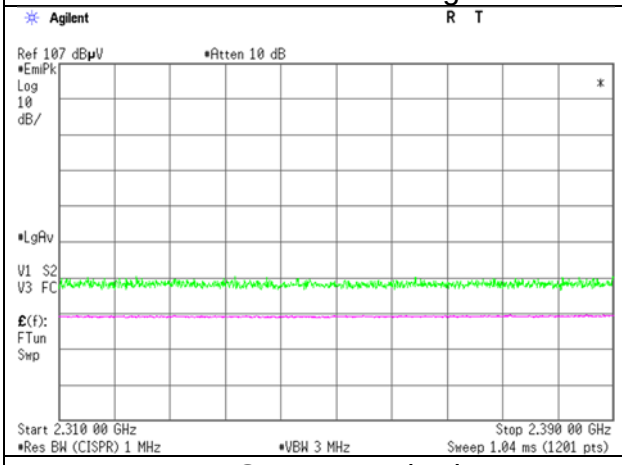
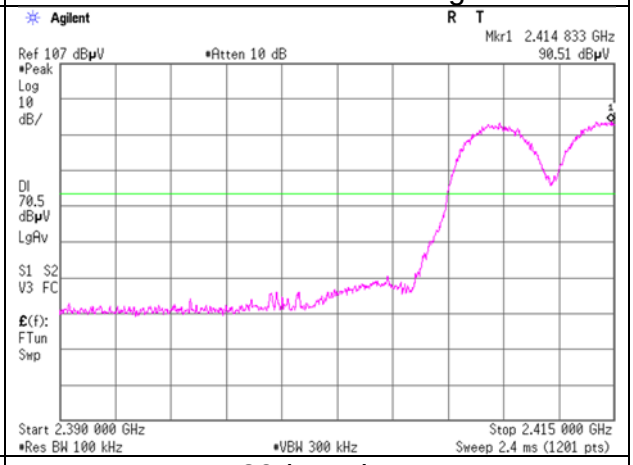
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2417.000	PK	91.17	27.80	14.75	41.62	2.45	94.55	-	-	Carrier
Hori.	2400.000	PK	39.37	27.83	14.72	41.61	2.45	42.76	74.5	31.7	-
Vert.	2417.000	PK	89.64	27.80	14.75	41.62	2.45	93.02	-	-	Carrier
Vert.	2400.000	PK	41.78	27.83	14.72	41.61	2.45	45.17	73.0	27.8	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 2417 MHz

RU Index 53	
Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

RU Index 53	
Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 2417 MHz

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.	2390.000	PK	60.27	27.85	14.71	41.61	2.45	63.67	73.9	**10.2**	140	345	-
Hori.	2390.000	AV	38.29	27.85	14.71	41.61	2.45	41.69	53.9	12.2	140	345	VBW: 750 Hz
Vert.	2390.000	PK	52.79	27.85	14.71	41.61	2.45	56.19	73.9	17.7	142	353	-
Vert.	2390.000	AV	37.58	27.85	14.71	41.61	2.45	40.98	53.9	12.9	142	353	VBW: 750 Hz

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

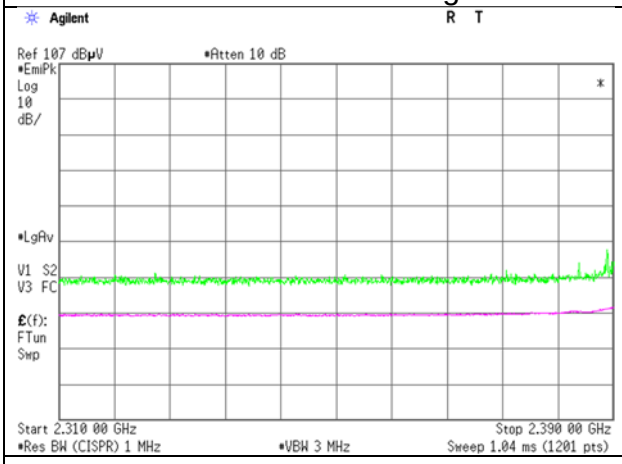
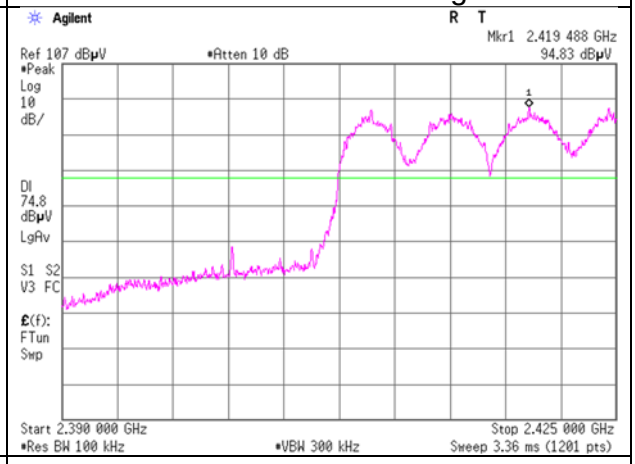
20 dBc Data Sheet **(RBW 100 kHz, VBW 300 kHz)**

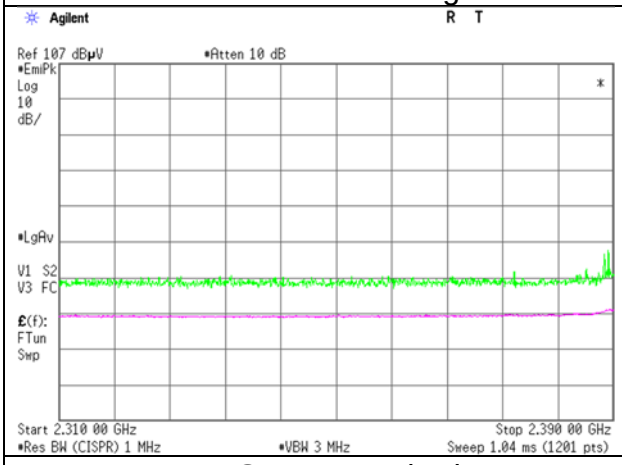
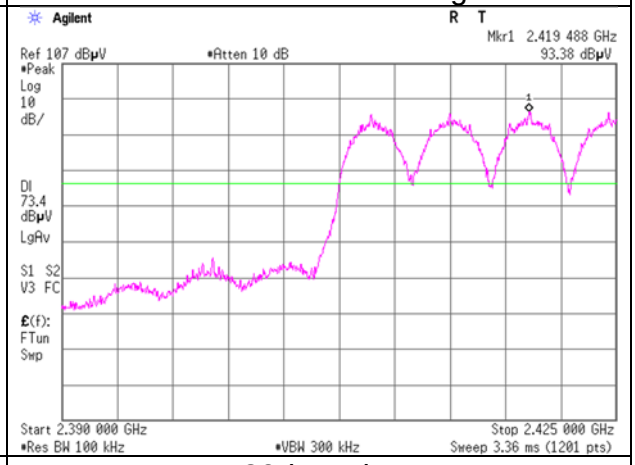
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Distance Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori.	2417.000	PK	92.65	27.80	14.75	41.62	2.45	96.03	-	-	Carrier
Hori.	2395.000	PK	46.15	27.84	14.72	41.61	2.45	49.55	76.0	26.4	-
Hori.	2400.000	PK	49.22	27.83	14.72	41.61	2.45	52.61	76.0	23.3	-
Vert.	2417.000	PK	92.59	27.80	14.75	41.62	2.45	95.97	-	-	Carrier
Vert.	2394.292	PK	45.98	27.84	14.72	41.61	2.45	49.38	75.9	26.5	-
Vert.	2400.000	PK	48.32	27.83	14.72	41.61	2.45	51.71	75.9	24.1	-

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)(below 18 GHz)) - Gain(Amplifier) + Distance factor
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 2417 MHz

RU Index 61	
Horizontal	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

RU Index 61	
Vertical	
Restricted-band band-edge Plot	Authorized-band band-edge Plot
	
Trace Green : Peak Plot Trace Purple : Average Plot	20dBc Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	3	3	3
Date	March 16, 2023	March 19, 2023	March 20, 2023
Temperature / Humidity	22 deg.C, 35 %RH	22 deg.C, 31 %RH	21 deg.C, 32 %RH
Engineer	Takahiro Suzuki	Takahiro Suzuki	Hiromasa Sato
	(30 MHz -1 GHz)	(1 GHz -2.8 GHz)	(2.8 GHz -26.5 GHz)
Mode	Tx 11ax-20 (OFDM), 2437 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.	367.249	QP	28.24	15.12	8.93	31.96	0.00	20.33	46.0	25.6	100	318	-
Hori.	385.096	QP	28.92	15.29	9.00	31.95	0.00	21.26	46.0	24.7	100	78	-
Hori.	4874.000	PK	47.71	31.22	7.26	42.88	2.45	45.76	73.9	28.1	150	0	-
Hori.	7311.000	PK	48.00	36.92	8.64	43.41	2.45	52.60	73.9	21.3	150	0	-
Hori.	9748.000	PK	47.80	38.52	9.86	43.02	2.45	55.61	73.9	18.2	322	359	-
Hori.	19496.000	PK	48.45	40.25	14.01	47.11	-9.54	46.06	73.9	27.8	145	0	-
Hori.	4874.000	AV	38.74	31.22	7.26	42.88	2.45	36.79	53.9	17.1	150	0	Floor noise
Hori.	7311.000	AV	38.59	36.92	8.64	43.41	2.45	43.19	53.9	10.7	150	0	Floor noise
Hori.	9748.000	AV	38.26	38.52	9.86	43.02	2.45	46.07	53.9	**7.8**	322	359	-
Hori.	19496.000	AV	44.61	40.25	14.01	47.11	-9.54	42.22	53.9	11.6	145	0	-
Vert.	40.046	QP	34.76	14.88	6.65	32.19	0.00	24.10	40.0	15.9	100	9	-
Vert.	43.696	QP	32.18	13.53	6.72	32.19	0.00	20.24	40.0	19.7	100	249	-
Vert.	75.694	QP	48.93	6.36	7.26	32.16	0.00	30.39	40.0	9.6	100	352	-
Vert.	79.152	QP	44.05	6.43	7.51	32.16	0.00	25.83	40.0	14.1	100	355	-
Vert.	107.581	QP	39.44	11.53	7.28	32.14	0.00	26.11	43.5	17.3	100	325	-
Vert.	114.056	QP	37.81	12.43	7.23	32.14	0.00	25.33	43.5	18.1	100	249	-
Vert.	194.591	QP	37.86	16.43	7.83	32.07	0.00	30.05	43.5	13.4	100	3	-
Vert.	602.503	QP	29.00	19.38	9.91	31.94	0.00	26.35	46.0	19.6	117	357	-
Vert.	4874.000	PK	47.59	31.22	7.26	42.88	2.45	45.64	73.9	28.2	150	0	-
Vert.	7311.000	PK	47.30	36.92	8.64	43.41	2.45	51.90	73.9	22.0	150	0	-
Vert.	9748.000	PK	47.74	38.52	9.86	43.02	2.45	55.55	73.9	18.3	326	84	-
Vert.	19496.000	PK	48.12	40.25	14.01	47.11	-9.54	45.73	73.9	28.1	119	122	-
Vert.	4874.000	AV	38.72	31.22	7.26	42.88	2.45	36.77	53.9	17.1	150	0	Floor noise
Vert.	7311.000	AV	38.72	36.92	8.64	43.41	2.45	43.32	53.9	10.5	150	0	Floor noise
Vert.	9748.000	AV	38.15	38.52	9.86	43.02	2.45	45.96	53.9	7.9	326	84	-
Vert.	19496.000	AV	44.03	40.25	14.01	47.11	-9.54	41.64	53.9	12.2	119	122	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 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	3	3
Date	March 19, 2023	March 20, 2023
Temperature / Humidity	22 deg.C, 31 %RH	21 deg.C, 32 %RH
Engineer	Takahiro Suzuki	Hiromasa Sato
	(1 GHz -2.8 GHz)	(2.8 GHz -26.5 GHz)
Mode	Tx 11ax-20 (OFDM), 2457 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	60.13	27.72	14.83	41.64	2.45	63.49	73.9	10.4	134	344	-
Hori.	4914.000	PK	47.62	31.27	7.28	42.89	2.45	45.73	73.9	28.1	150	0	-
Hori.	7371.000	PK	48.29	36.96	8.66	43.45	2.45	52.91	73.9	20.9	150	0	-
Hori.	9828.000	PK	47.66	38.64	9.91	42.96	2.45	55.70	73.9	18.2	315	359	-
Hori.	19656.000	PK	44.59	40.23	14.06	47.26	-9.54	42.08	73.9	31.8	145	0	-
Hori.	2483.500	AV	41.99	27.72	14.83	41.64	2.45	45.35	53.9	8.5	134	344	-
Hori.	4914.000	AV	38.94	31.27	7.28	42.89	2.45	37.05	53.9	16.8	150	0	Floor noise
Hori.	7371.000	AV	38.80	36.96	8.66	43.45	2.45	43.42	53.9	10.4	150	0	Floor noise
Hori.	9828.000	AV	37.66	38.64	9.91	42.96	2.45	45.70	53.9	8.2	315	359	-
Hori.	19656.000	AV	35.99	40.23	14.06	47.26	-9.54	33.48	53.9	20.4	145	0	-
Vert.	2483.500	PK	59.62	27.72	14.83	41.64	2.45	62.98	73.9	10.9	140	26	-
Vert.	4914.000	PK	48.04	31.27	7.28	42.89	2.45	46.15	73.9	27.7	150	0	-
Vert.	7371.000	PK	47.91	36.96	8.66	43.45	2.45	52.53	73.9	21.3	150	0	-
Vert.	9828.000	PK	49.16	38.64	9.91	42.96	2.45	57.20	73.9	16.7	326	86	-
Vert.	19656.000	PK	44.55	40.23	14.06	47.26	-9.54	42.04	73.9	31.8	108	123	-
Vert.	2483.500	AV	41.27	27.72	14.83	41.64	2.45	44.63	53.9	9.2	140	26	-
Vert.	4914.000	AV	38.80	31.27	7.28	42.89	2.45	36.91	53.9	16.9	150	0	Floor noise
Vert.	7371.000	AV	38.94	36.96	8.66	43.45	2.45	43.56	53.9	10.3	150	0	Floor noise
Vert.	9828.000	AV	38.72	38.64	9.91	42.96	2.45	46.76	53.9	**7.1**	326	86	-
Vert.	19656.000	AV	37.47	40.23	14.06	47.26	-9.54	34.96	53.9	18.9	108	123	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

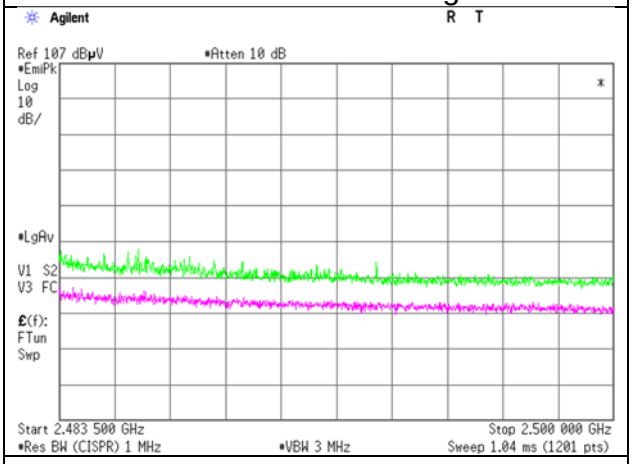
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 19, 2023
Temperature / Humidity	22 deg.C, 31 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20 (OFDM), 2457 MHz

Horizontal

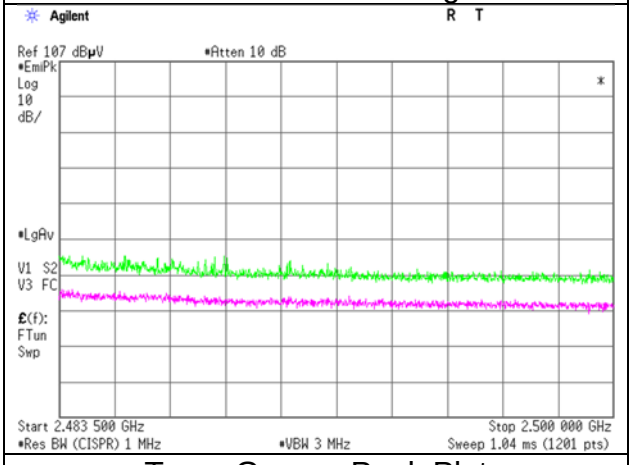
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 2457 MHz

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.	2483.500	PK	47.95	27.72	14.83	41.64	2.45	51.31	73.9	22.5	145	169	-
Hori.	2483.500	AV	36.13	27.72	14.83	41.64	2.45	39.49	53.9	14.4	145	169	VBW: 750 Hz
Vert.	2483.500	PK	48.28	27.72	14.83	41.64	2.45	51.64	73.9	22.2	148	144	-
Vert.	2483.500	AV	36.47	27.72	14.83	41.64	2.45	39.83	53.9	**14.0**	148	144	VBW: 750 Hz

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

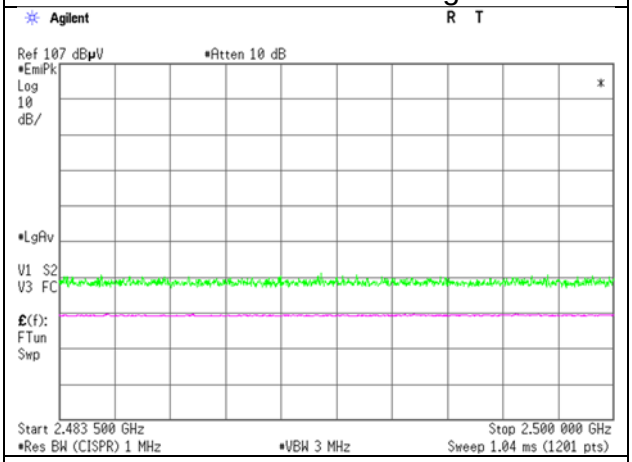
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

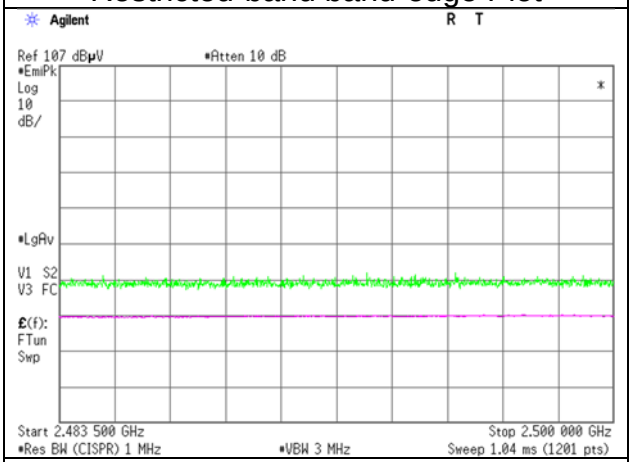
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 2457 MHz

RU Index 8
Horizontal
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

RU Index 8
Vertical
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 2457 MHz

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.	2483.500	PK	47.99	27.72	14.83	41.64	2.45	51.35	73.9	22.5	143	170	-
Hori.	2483.500	AV	36.94	27.72	14.83	41.64	2.45	40.30	53.9	**13.6**	143	170	VBW: 750 Hz
Vert.	2483.500	PK	47.98	27.72	14.83	41.64	2.45	51.34	73.9	22.5	151	234	-
Vert.	2483.500	AV	36.73	27.72	14.83	41.64	2.45	40.09	53.9	13.8	151	234	VBW: 750 Hz

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

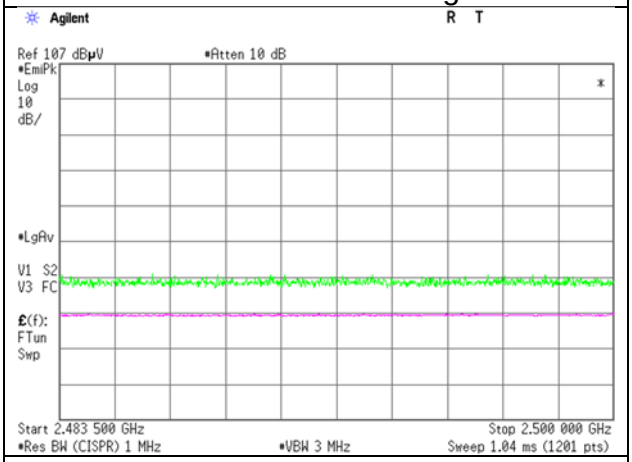
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

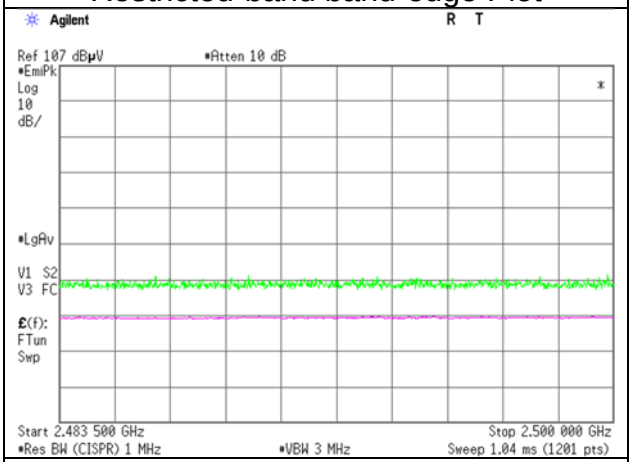
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 2457 MHz

RU Index 40
Horizontal
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

RU Index 40
Vertical
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 2457 MHz

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	47.47	27.72	14.83	41.64	2.45	50.83	73.9	23.0	156	341	-
Hori.	2483.500	AV	36.36	27.72	14.83	41.64	2.45	39.72	53.9	**14.1**	156	341	VBW: 750 Hz
Vert.	2483.500	PK	48.69	27.72	14.83	41.64	2.45	52.05	73.9	21.8	150	324	-
Vert.	2483.500	AV	36.24	27.72	14.83	41.64	2.45	39.60	53.9	14.3	150	324	VBW: 750 Hz

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

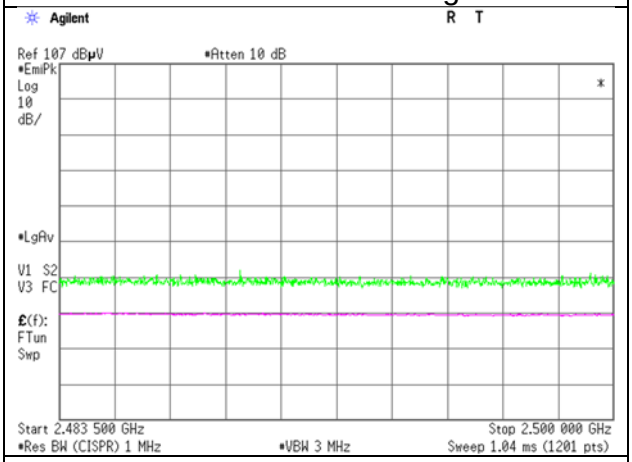
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

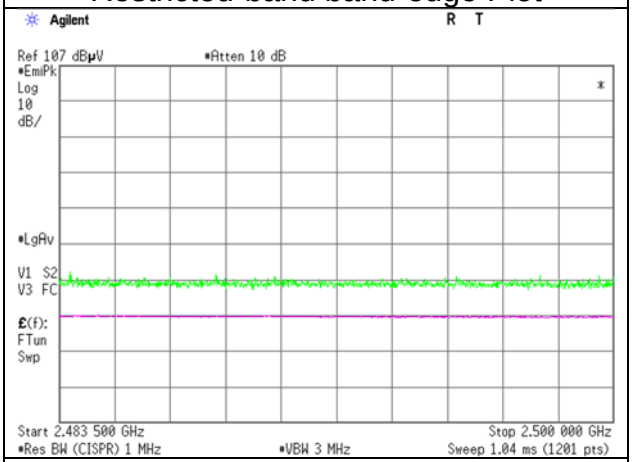
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 2457 MHz

RU Index 54
Horizontal
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

RU Index 54
Vertical
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 2457 MHz

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	52.64	27.72	14.83	41.64	2.45	56.00	73.9	17.9	138	341	-
Hori.	2483.500	AV	39.63	27.72	14.83	41.64	2.45	42.99	53.9	10.9	138	341	VBW: 750 Hz
Vert.	2483.500	PK	58.26	27.72	14.83	41.64	2.45	61.62	73.9	12.2	151	356	-
Vert.	2483.500	AV	41.84	27.72	14.83	41.64	2.45	45.20	53.9	**8.7**	151	356	VBW: 750 Hz

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

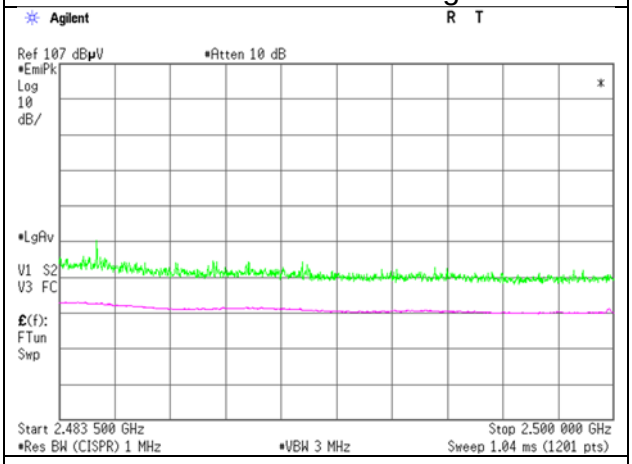
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

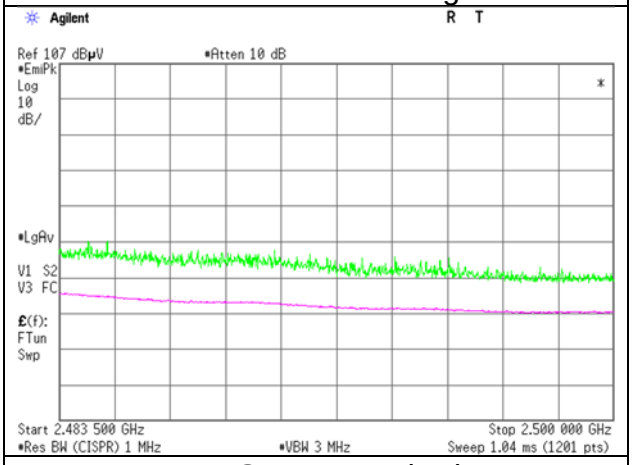
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 2457 MHz

RU Index 61
Horizontal
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

RU Index 61
Vertical
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	3	3	3
Date	March 17, 2023	March 20, 2023	March 20, 2023
Temperature / Humidity	22 deg.C, 33 %RH	23 deg.C, 36 %RH	23 deg.C, 36 %RH
Engineer	Takahiro Suzuki	Hiromasa Sato	Akihiro Oda
	(1 GHz -10 GHz)	(10 GHz -18 GHz)	(18 -26.5 GHz)
Mode	Tx 11ax-20 (OFDM), 2462 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	56.21	27.72	14.83	41.64	2.45	59.57	73.9	14.3	134	345	-
Hori.	4924.000	PK	49.75	31.29	7.28	42.89	2.45	47.88	73.9	26.0	150	0	-
Hori.	7386.000	PK	50.33	36.99	8.67	43.46	2.45	54.98	73.9	18.9	150	0	-
Hori.	9848.000	PK	49.80	38.63	9.92	42.94	2.45	57.86	73.9	16.0	150	0	-
Hori.	19696.000	PK	43.27	40.25	14.07	47.30	-9.54	40.75	73.9	33.1	142	9	-
Hori.	2483.500	AV	39.90	27.72	14.83	41.64	2.45	43.26	53.9	10.6	134	345	-
Hori.	4924.000	AV	38.29	31.29	7.28	42.89	2.45	36.42	53.9	17.4	150	0	Floor noise
Hori.	7386.000	AV	38.02	36.99	8.67	43.46	2.45	42.67	53.9	11.2	150	0	Floor noise
Hori.	9848.000	AV	37.73	38.63	9.92	42.94	2.45	45.79	53.9	8.1	150	0	Floor noise
Hori.	19696.000	AV	36.49	40.25	14.07	47.30	-9.54	33.97	53.9	19.9	142	9	-
Vert.	2483.500	PK	55.07	27.72	14.83	41.64	2.45	58.43	73.9	15.4	143	29	-
Vert.	4924.000	PK	49.92	31.29	7.28	42.89	2.45	48.05	73.9	25.8	150	0	-
Vert.	7386.000	PK	50.13	36.99	8.67	43.46	2.45	54.78	73.9	19.1	150	0	-
Vert.	9848.000	PK	50.58	38.63	9.92	42.94	2.45	58.64	73.9	15.2	150	0	-
Vert.	19696.000	PK	46.50	40.25	14.07	47.30	-9.54	43.98	73.9	29.9	122	77	-
Vert.	2483.500	AV	39.23	27.72	14.83	41.64	2.45	42.59	53.9	11.3	143	29	-
Vert.	4924.000	AV	38.14	31.29	7.28	42.89	2.45	36.27	53.9	17.6	150	0	Floor noise
Vert.	7386.000	AV	37.98	36.99	8.67	43.46	2.45	42.63	53.9	11.2	150	0	Floor noise
Vert.	9848.000	AV	37.76	38.63	9.92	42.94	2.45	45.82	53.9	**8.0**	150	0	Floor noise
Vert.	19696.000	AV	40.06	40.25	14.07	47.30	-9.54	37.54	53.9	16.3	122	77	-

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

Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

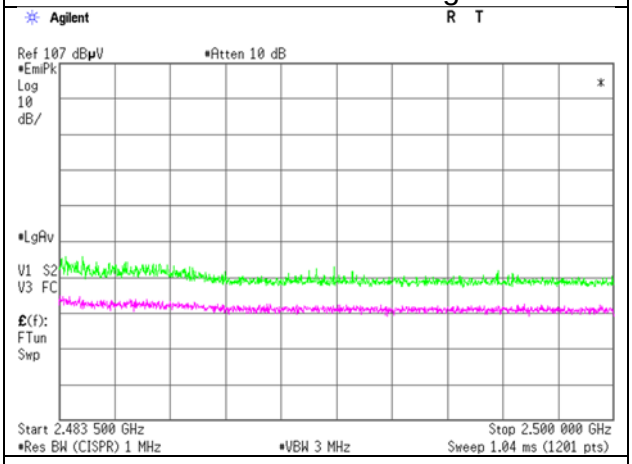
10 GHz - 40 GHz : 20log (1.0 m / 3.0 m) = -9.54 dB

Radiated Spurious Emission
(Reference Plot for band-edge)

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 17, 2023
Temperature / Humidity	22 deg.C, 33 %RH
Engineer	Takahiro Suzuki
Mode	Tx 11ax-20 (OFDM), 2462 MHz

Horizontal

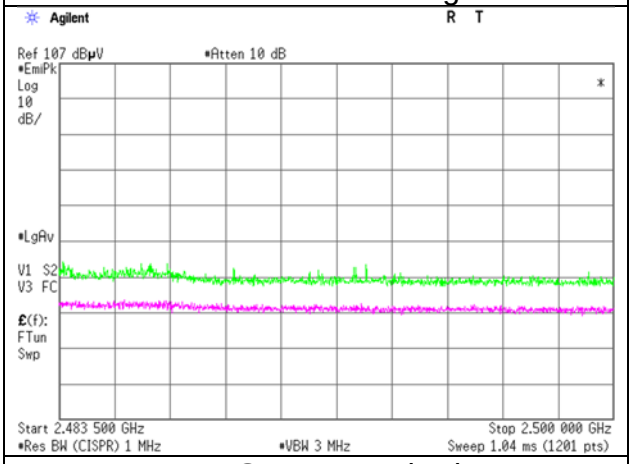
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

Vertical

Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 2462 MHz

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.	2483.500	PK	47.84	27.72	14.83	41.64	2.45	51.20	73.9	22.7	142	156	-
Hori.	2483.500	AV	36.07	27.72	14.83	41.64	2.45	39.43	53.9	**14.4**	142	156	VBW : 750 Hz
Vert.	2483.500	PK	48.43	27.72	14.83	41.64	2.45	51.79	73.9	22.1	112	219	-
Vert.	2483.500	AV	36.06	27.72	14.83	41.64	2.45	39.42	53.9	**14.4**	112	219	VBW : 750 Hz

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

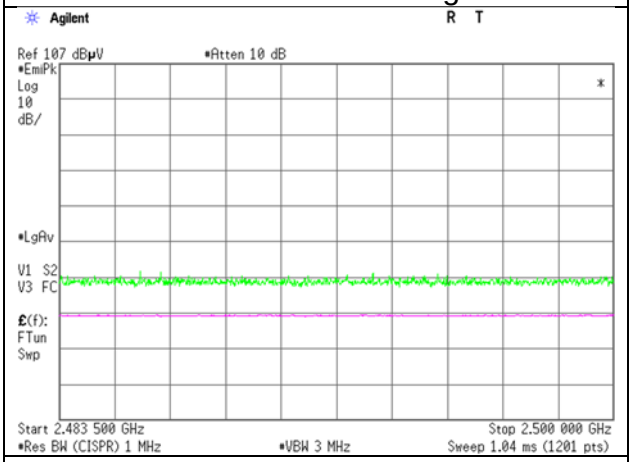
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

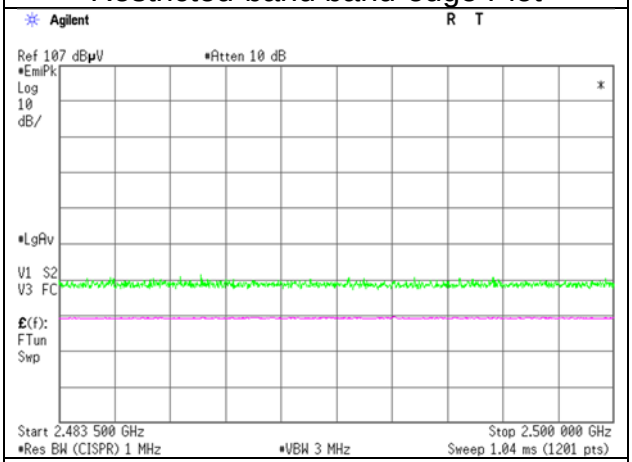
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20 (OFDMA) 26-tone RU, 2462 MHz

RU Index 8
Horizontal
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

RU Index 8
Vertical
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 2462 MHz

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.	2483.500	PK	47.79	27.72	14.83	41.64	2.45	51.15	73.9	22.7	142	167	-
Hori.	2483.500	AV	35.84	27.72	14.83	41.64	2.45	39.20	53.9	14.7	142	167	VBW: 750 Hz
Vert.	2483.500	PK	48.50	27.72	14.83	41.64	2.45	51.86	73.9	22.0	145	234	-
Vert.	2483.500	AV	36.81	27.72	14.83	41.64	2.45	40.17	53.9	**13.7**	145	234	VBW: 750 Hz

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

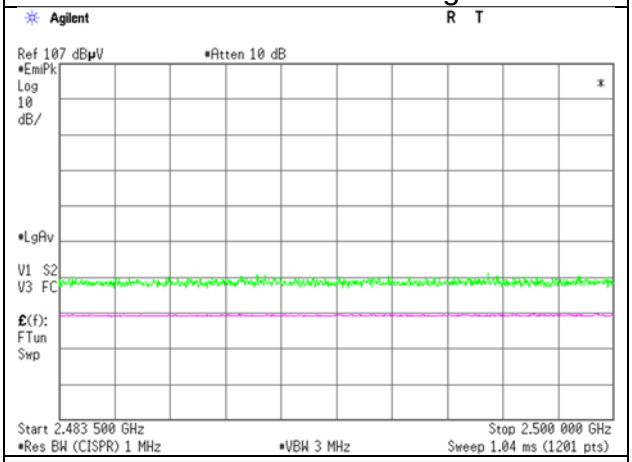
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

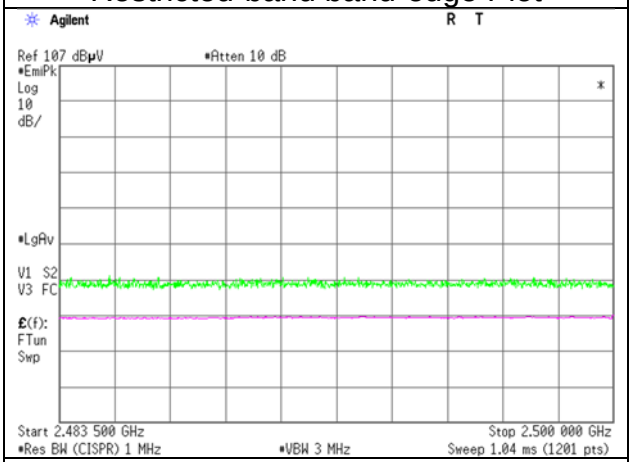
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	23 deg.C, 35 %RH
Engineer	Kouki Yamada
Mode	Tx 11ax-20 (OFDMA) 52-tone RU, 2462 MHz

RU Index 40
Horizontal
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

RU Index 40
Vertical
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 2462 MHz

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	47.25	27.72	14.83	41.64	2.45	50.61	73.9	23.2	143	354	-
Hori.	2483.500	AV	36.26	27.72	14.83	41.64	2.45	39.62	53.9	**14.2**	143	354	VBW: 750 Hz
Vert.	2483.500	PK	47.58	27.72	14.83	41.64	2.45	50.94	73.9	22.9	154	354	-
Vert.	2483.500	AV	36.12	27.72	14.83	41.64	2.45	39.48	53.9	14.4	154	354	VBW: 750 Hz

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

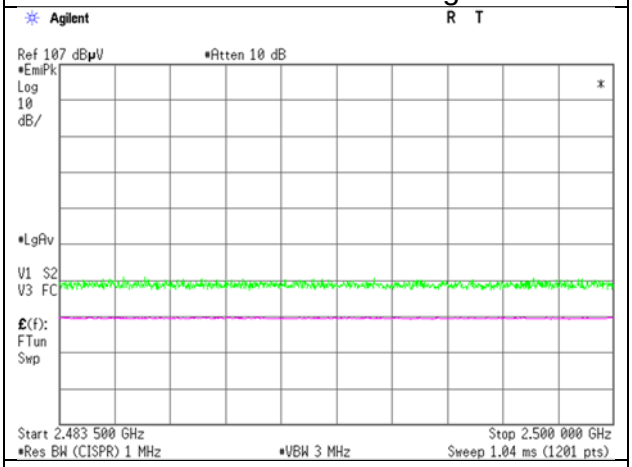
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

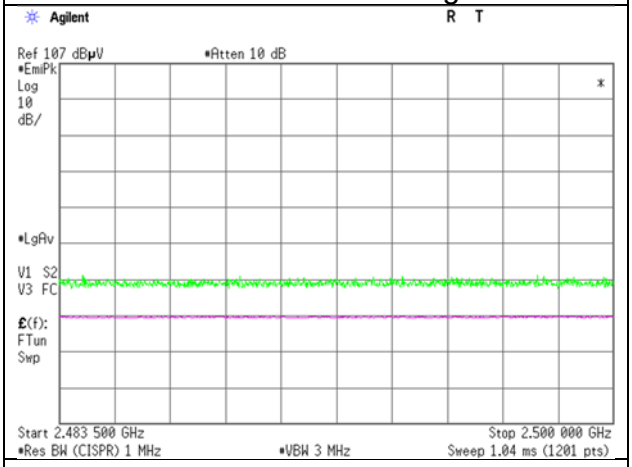
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 106-tone RU, 2462 MHz

RU Index 54
Horizontal
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

RU Index 54
Vertical
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

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

Radiated Spurious Emission

Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda (1 GHz -2.8 GHz)
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 2462 MHz

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	49.22	27.72	14.83	41.64	2.45	52.58	73.9	21.3	135	345	-
Hori.	2483.500	AV	37.12	27.72	14.83	41.64	2.45	40.48	53.9	13.4	135	345	VBW: 750 Hz
Vert.	2483.500	PK	52.32	27.72	14.83	41.64	2.45	55.68	73.9	18.2	145	341	-
Vert.	2483.500	AV	38.80	27.72	14.83	41.64	2.45	42.16	53.9	**11.7**	145	341	VBW: 750 Hz

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

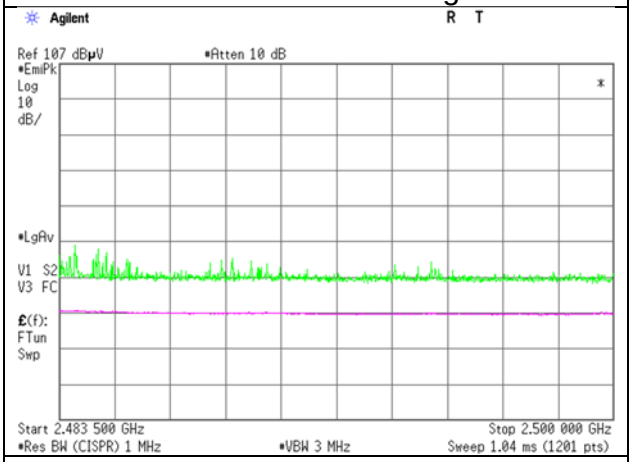
Distance factor : 1 GHz - 10 GHz : 20log (3.98 m / 3.0 m) = 2.45 dB

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

Radiated Spurious Emission
(Reference Plot for band-edge)

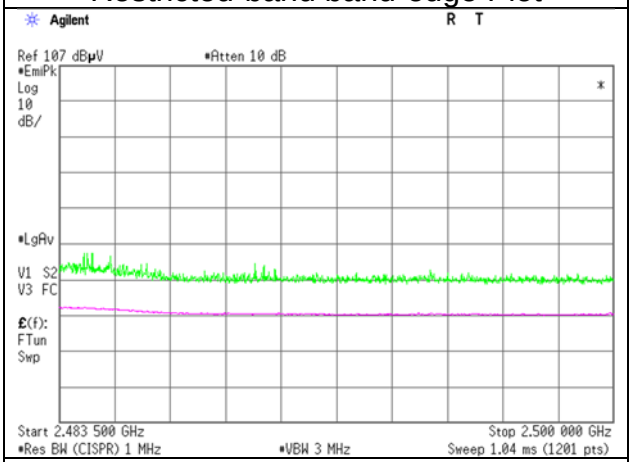
Test place	Shonan EMC Lab.
Semi Anechoic Chamber	3
Date	March 22, 2023
Temperature / Humidity	24 deg.C, 32 %RH
Engineer	Akihiro Oda
Mode	Tx 11ax-20 (OFDMA) 242-tone RU, 2462 MHz

RU Index 61
Horizontal
Restricted-band band-edge Plot



Trace Green : Peak Plot
Trace Purple : Average Plot

RU Index 61
Vertical
Restricted-band band-edge Plot

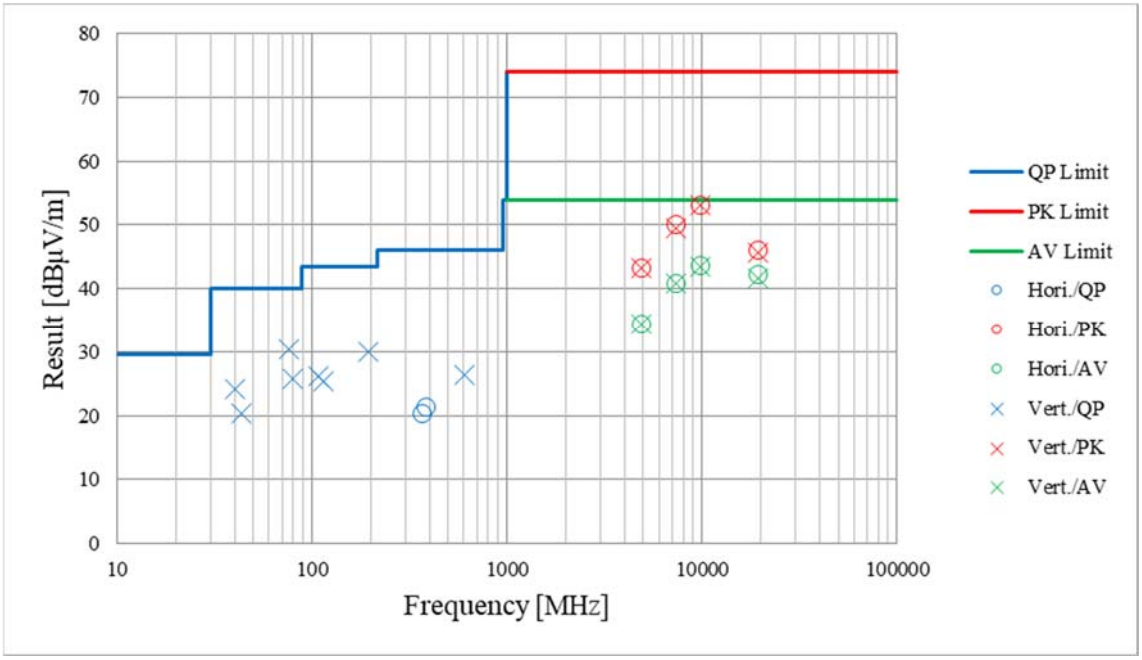


Trace Green : Peak Plot
Trace Purple : Average Plot

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

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

Test place	Shonan EMC Lab.		
Semi Anechoic Chamber	3	3	3
Date	March 16, 2023	March 19, 2023	March 20, 2023
Temperature / Humidity	22 deg.C, 35 %RH	22 deg.C, 31 %RH	21 deg.C, 32 %RH
Engineer	Takahiro Suzuki	Takahiro Suzuki	Hiromasa Sato
	(30 MHz -1 GHz)	(1 GHz -2.8 GHz)	(2.8 GHz -26.5 GHz)
Mode	Tx 11ax-20 (OFDM), 2437 MHz		

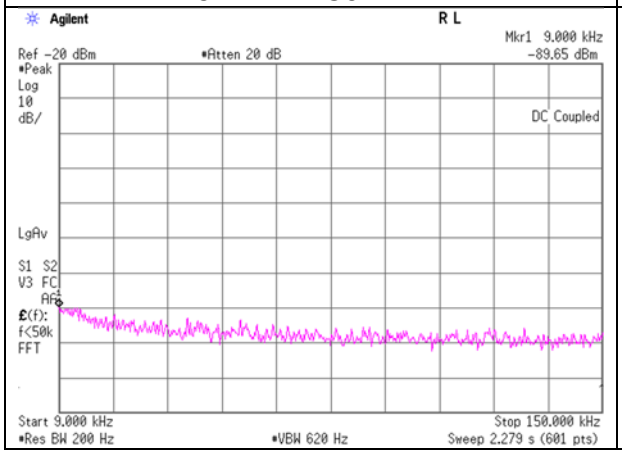


*These plots data contains sufficient number to show the trend of characteristic features for EUT.

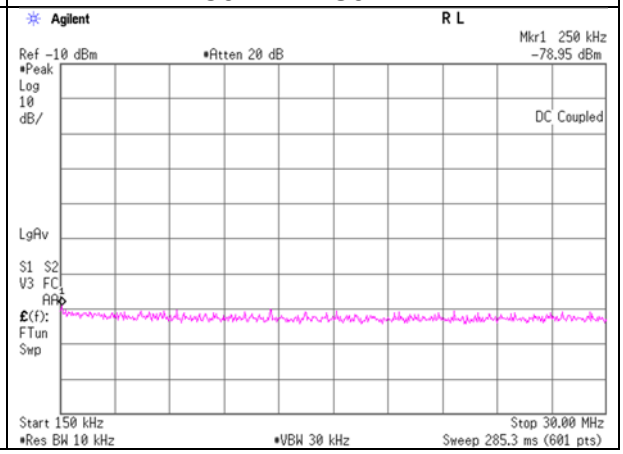
Conducted Spurious Emission

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 7, 2023
Temperature / Humidity	23 deg. C / 24 % RH
Engineer	Miku Ikudome
Mode	Tx 11ax-20 (OFDM), 2437 MHz, worst antenna port

9 kHz - 150 kHz



150 kHz - 30 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
9.00	-89.7	0.01	9.87	2.5	2	-74.2	300	6.0	-13.0	48.5	61.5	-
250.00	-79.0	0.01	9.88	2.5	2	-63.5	300	6.0	-2.3	19.6	21.9	-

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

Power Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	February 6, 2023
Temperature / Humidity	23 deg. C / 25 % RH
Engineer	Miku Ikudome
Mode	Tx 11b

Ant A + Ant B

Freq.	Ant A Result	Ant B Result	Result		Limit	Margin
[MHz]	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.88	0.75	2.12	1.63	8.00	5.88
2437	1.01	0.71	2.36	1.72	8.00	5.64
2462	0.40	0.93	1.21	1.32	8.00	6.79

Sample Calculation:
Result = Ant A Result + Ant B Result

Ant A

Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit	Margin
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	-12.42	1.94	9.94	-0.54	0.88	8.00	8.54
2437	-11.83	1.95	9.94	0.06	1.01	8.00	7.94
2462	-15.91	1.96	9.94	-4.01	0.40	8.00	12.01

Ant B

Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit	Margin
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	-13.26	1.96	10.04	-1.26	0.75	8.00	9.26
2437	-13.50	1.96	10.04	-1.50	0.71	8.00	9.50
2462	-12.36	1.98	10.04	-0.34	0.93	8.00	8.34

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

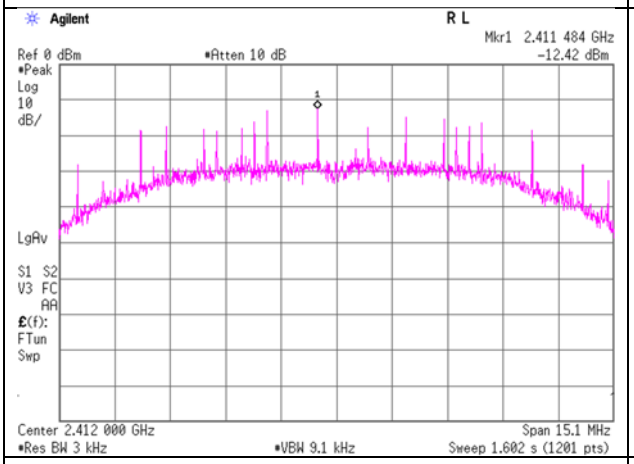
*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

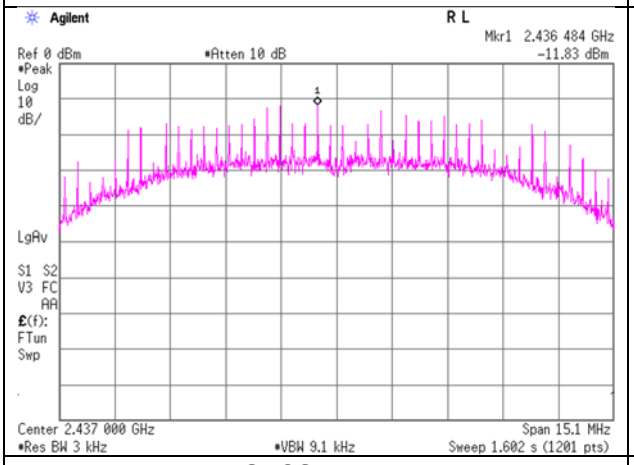
11b

Ant A

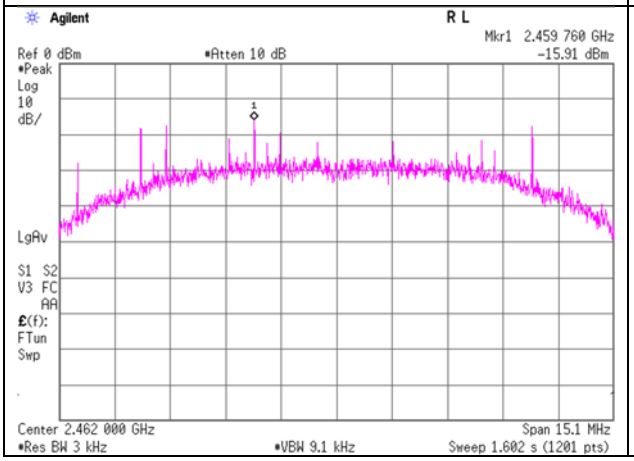
2412 MHz



2437 MHz

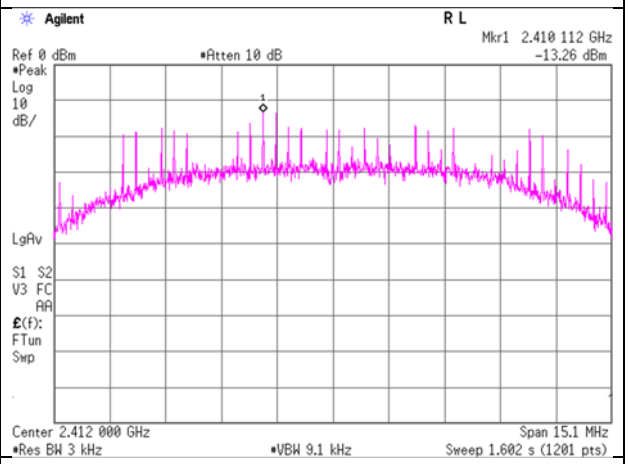


2462 MHz

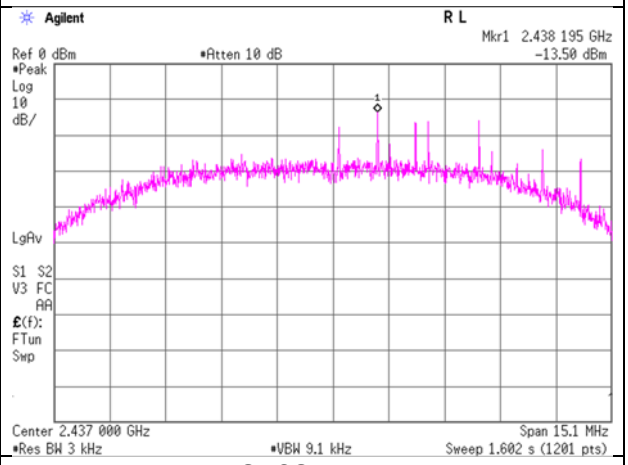


Ant B

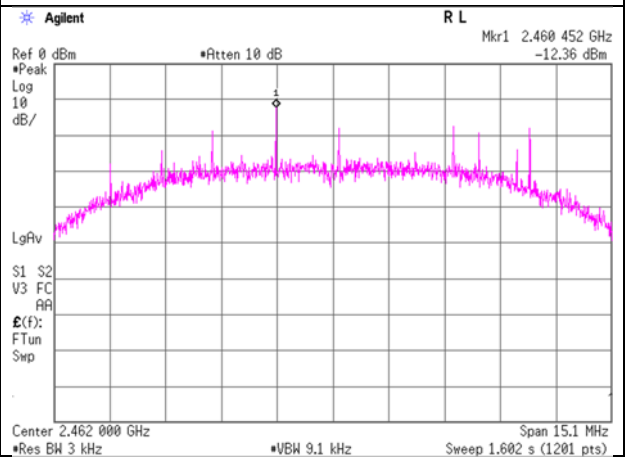
2412 MHz



2437 MHz



2462 MHz



Power Density

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	February 3, 2023	February 7, 2023
Temperature / Humidity	22 deg. C / 28 % RH	23 deg. C / 24 % RH
Engineer	Miku Ikudome	Miku Ikudome
Mode	Tx 11g	

Ant A + Ant B

Freq.	Ant A Result	Ant B Result	Result		Limit	Margin
[MHz]	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.01	0.01	-17.22	0.02	8.00	25.22
2437	0.04	0.04	-10.84	0.08	8.00	18.84
2462	0.01	0.01	-16.40	0.02	8.00	24.40

Sample Calculation:
Result = Ant A Result + Ant B Result

Ant A

Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit	Margin
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	-32.09	1.94	9.94	-20.21	0.01	8.00	28.21
2437	-25.80	1.95	9.94	-13.91	0.04	8.00	21.91
2462	-31.67	1.96	9.94	-19.77	0.01	8.00	27.77

Ant B

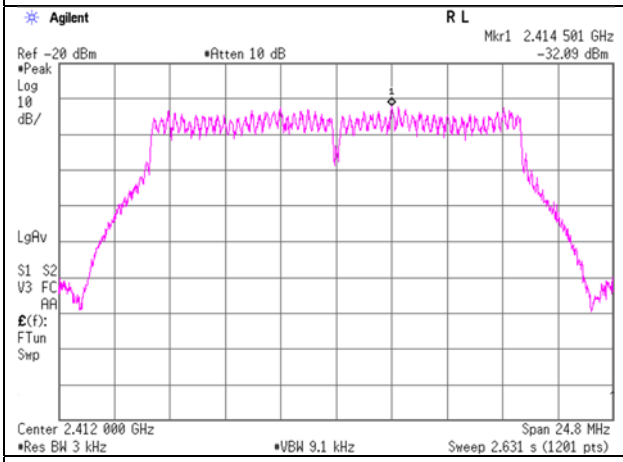
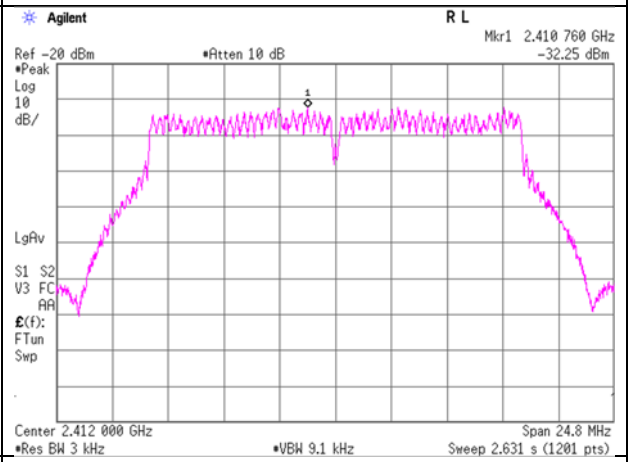
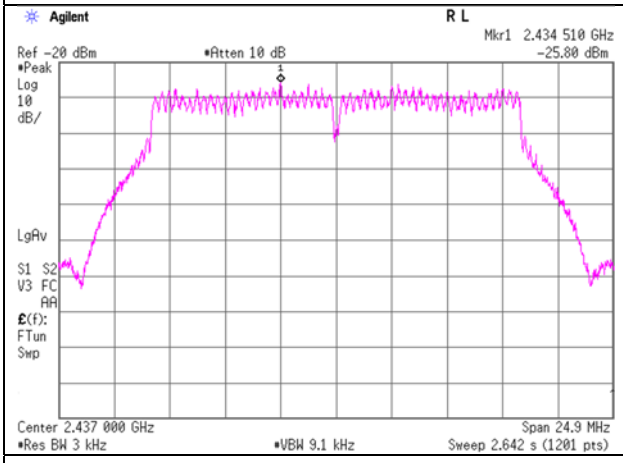
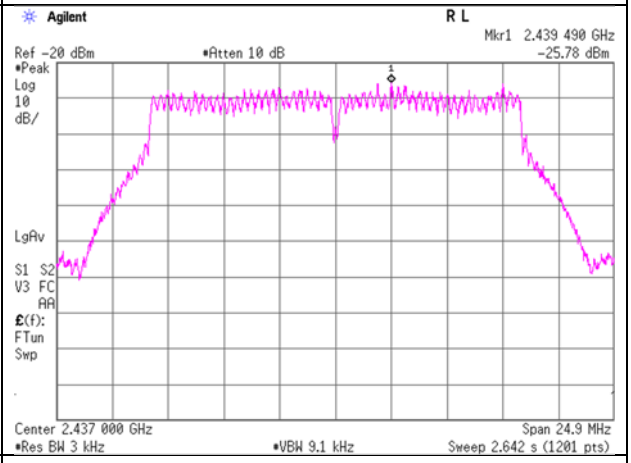
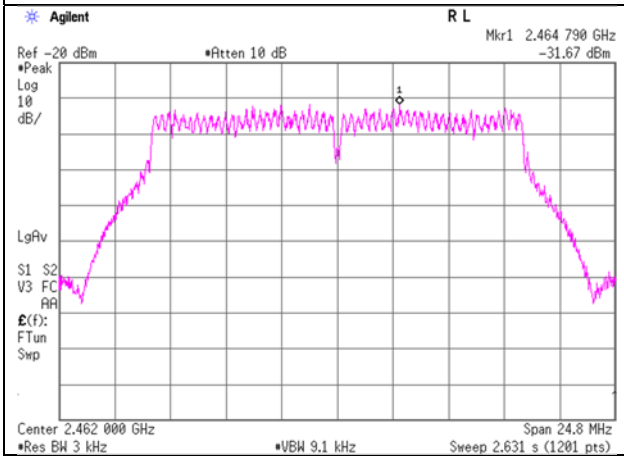
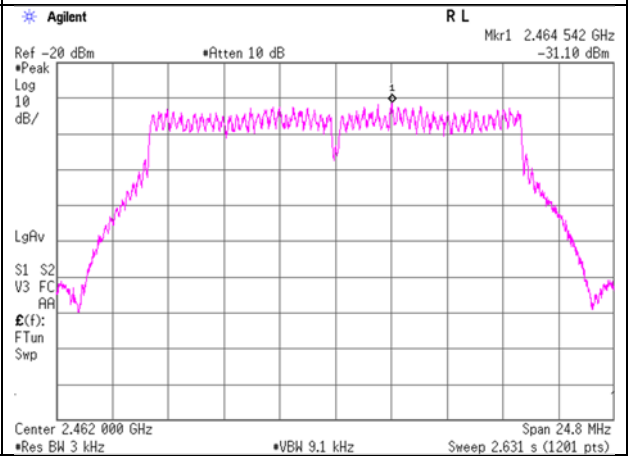
Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit	Margin
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	-32.25	1.96	10.04	-20.25	0.01	8.00	28.25
2437	-25.78	1.96	10.04	-13.78	0.04	8.00	21.78
2462	-31.10	1.98	10.04	-19.08	0.01	8.00	27.08

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

Ant A	Ant B
2412 MHz	2412 MHz
	
2437 MHz	2437 MHz
	
2462 MHz	2462 MHz
	

Power Density

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	February 3, 2023	February 7, 2023
Temperature / Humidity	22 deg. C / 28 % RH	23 deg. C / 24 % RH
Engineer	Miku Ikudome	Miku Ikudome
Mode	Tx 11n-20	

Ant A + Ant B

Freq.	Ant A Result	Ant B Result	Result		Limit	Margin
[MHz]	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.01	0.01	-16.92	0.02	8.00	24.92
2437	0.04	0.03	-11.54	0.07	8.00	19.54
2462	0.01	0.01	-17.21	0.02	8.00	25.21

Sample Calculation:
Result = Ant A Result + Ant B Result

Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit	Margin
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	-31.85	1.94	9.94	-19.97	0.01	8.00	27.97
2437	-26.37	1.95	9.94	-14.48	0.04	8.00	22.48
2462	-32.27	1.96	9.94	-20.37	0.01	8.00	28.37

Ant B

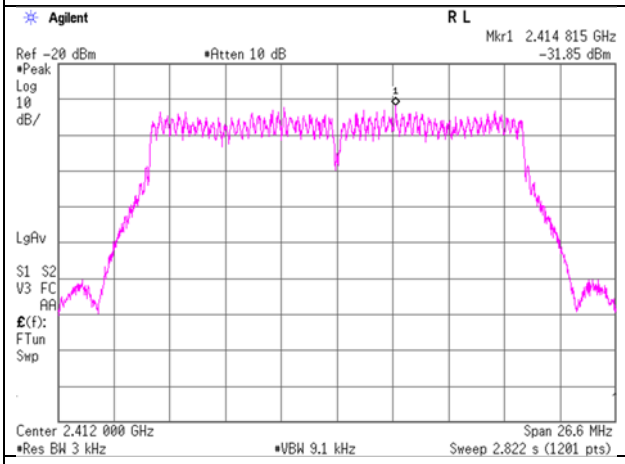
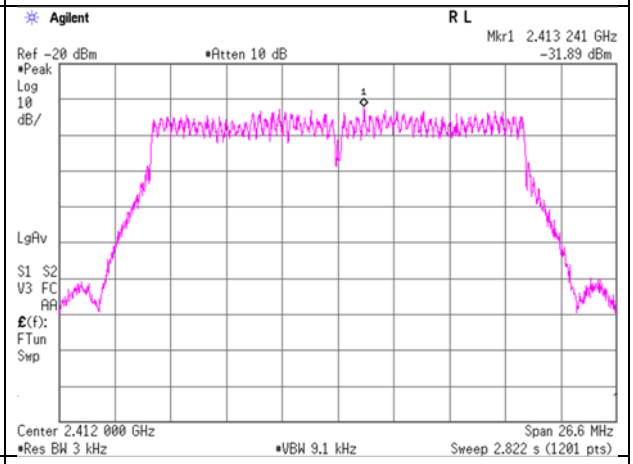
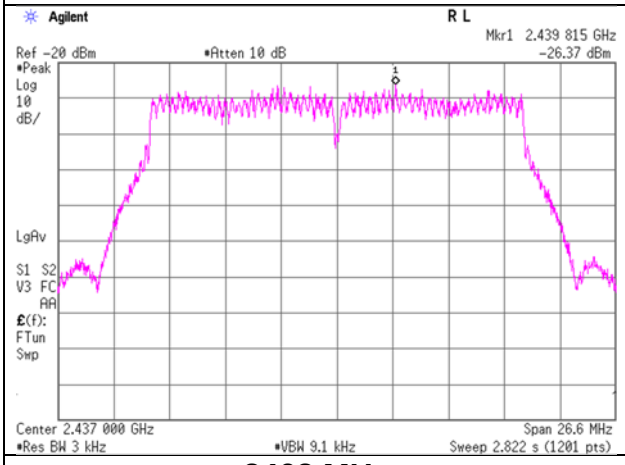
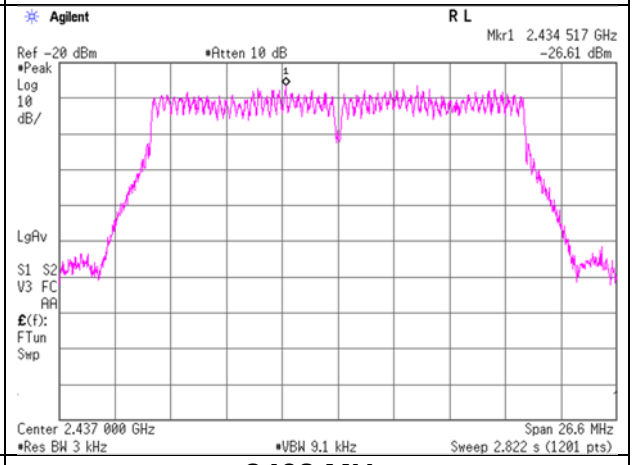
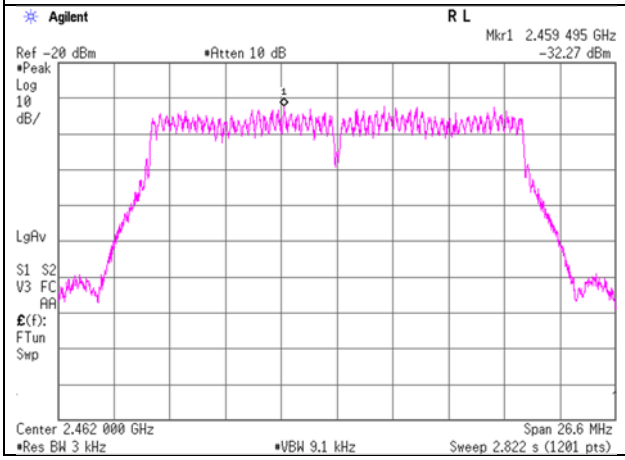
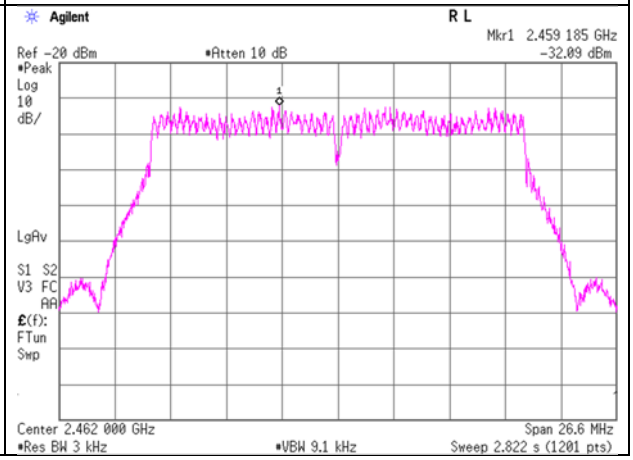
Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit	Margin
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	-31.89	1.96	10.04	-19.89	0.01	8.00	27.89
2437	-26.61	1.96	10.04	-14.61	0.03	8.00	22.61
2462	-32.09	1.98	10.04	-20.07	0.01	8.00	28.07

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

Ant A	Ant B
2412 MHz	2412 MHz
	
2437 MHz	2437 MHz
	
2462 MHz	2462 MHz
	

Power Density

Test place	Shonan EMC Lab. No.5 Shielded Room	
Date	February 3, 2023	February 7, 2023
Temperature / Humidity	22 deg. C / 28 % RH	23 deg. C / 24 % RH
Engineer	Miku Ikudome	Miku Ikudome
Mode	Tx 11ax-20 (OFDM)	

Ant A + Ant B

Freq.	Ant A Result	Ant B Result	Result		Limit	Margin
[MHz]	[mW / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	0.01	0.01	-18.12	0.02	8.00	26.12
2437	0.03	0.03	-12.78	0.05	8.00	20.78
2462	0.01	0.01	-18.11	0.02	8.00	26.11

Sample Calculation:
Result = Ant A Result + Ant B Result

Ant A

Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit	Margin
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	-33.76	1.94	9.94	-21.88	0.01	8.00	29.88
2437	-27.73	1.95	9.94	-15.84	0.03	8.00	23.84
2462	-33.35	1.96	9.94	-21.45	0.01	8.00	29.45

Ant B

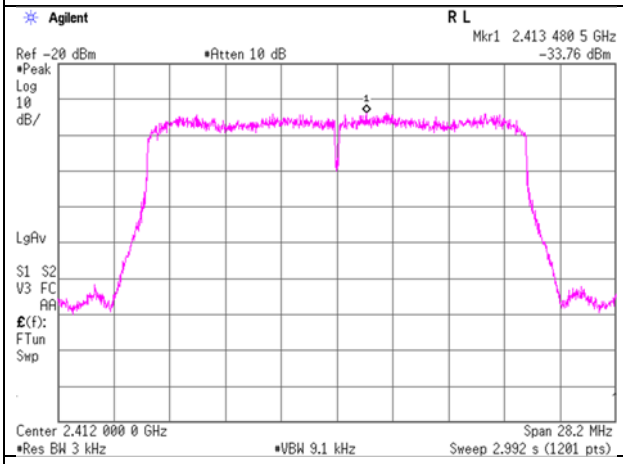
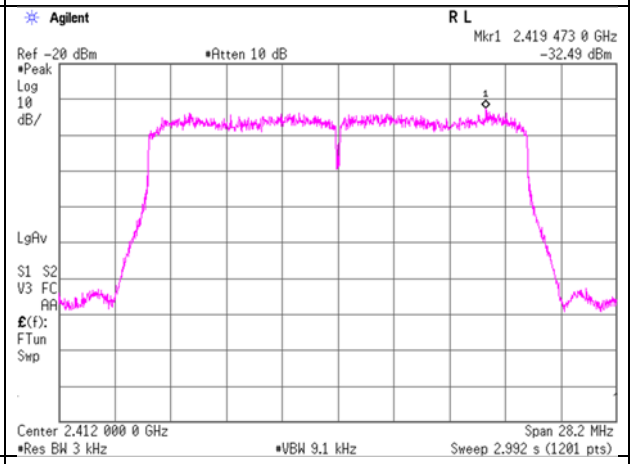
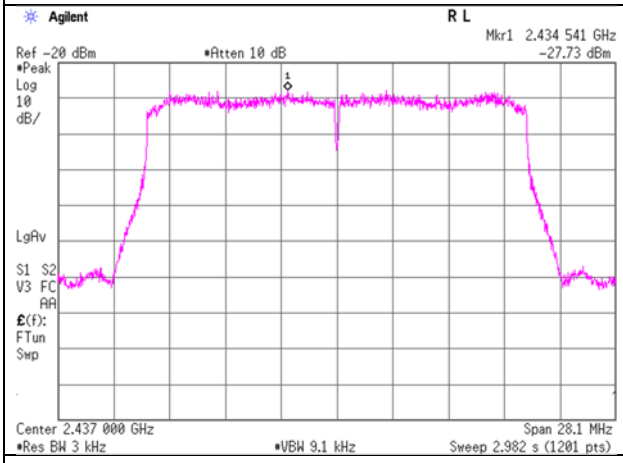
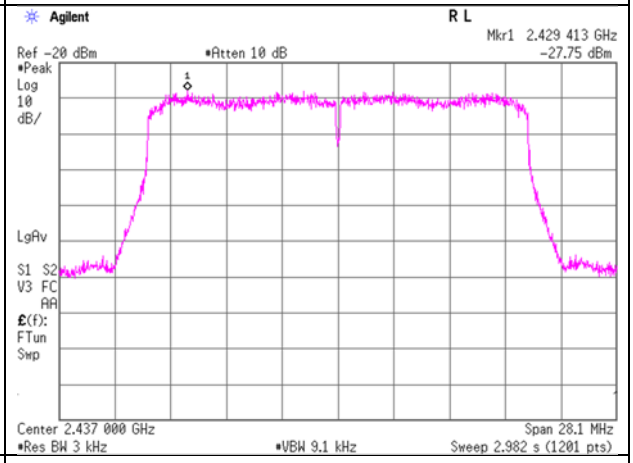
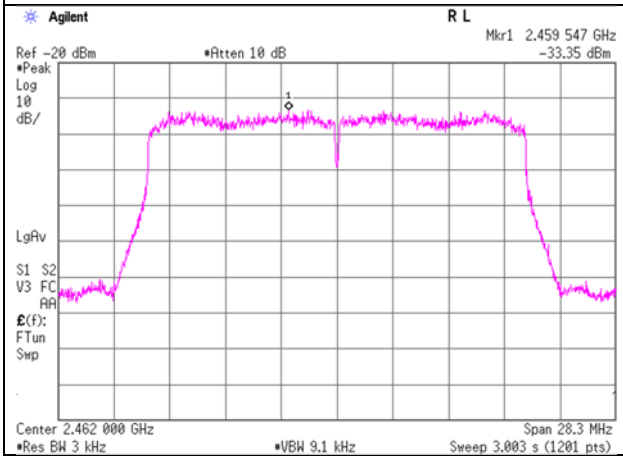
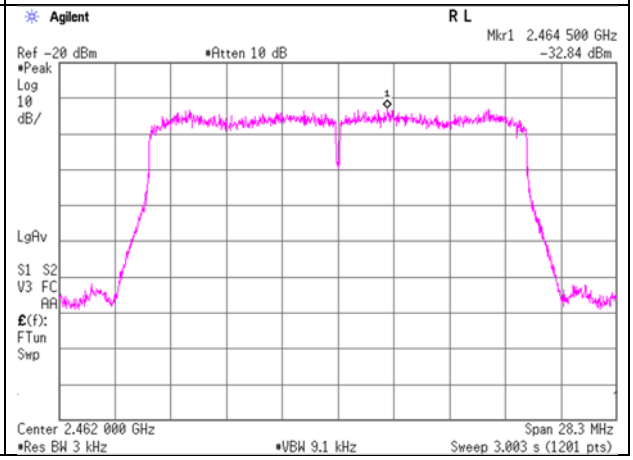
Freq.	Reading	Cable Loss	Atten. Loss	Result		Limit	Margin
[MHz]	[dBm / 3 kHz]	[dB]	[dB]	[dBm / 3 kHz]	[mW / 3 kHz]	[dBm / 3 kHz]	[dB]
2412	-32.49	1.96	10.04	-20.49	0.01	8.00	28.49
2437	-27.75	1.96	10.04	-15.75	0.03	8.00	23.75
2462	-32.84	1.98	10.04	-20.82	0.01	8.00	28.82

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)

Ant A	Ant B
2412 MHz	2412 MHz
	
2437 MHz	2437 MHz
	
2462 MHz	2462 MHz
	

Power Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	April 17, 2023
Temperature / Humidity	25 deg. C / 35 % RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20 (OFDMA) 26-tone RU

Ant A + Ant B

RU Type	Freq. [MHz]	RU Index	Ant A Result [mW]	Ant B Result [mW]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
26-tone RU	2412	0	0.003	0.003	-22.33	0.006	8.00	30.33
		4	0.003	0.002	-23.00	0.005	8.00	31.00
		8	0.003	0.003	-22.01	0.006	8.00	30.01
	2437	0	0.010	0.011	-16.74	0.021	8.00	24.74
		4	0.010	0.009	-17.16	0.019	8.00	25.16
		8	0.009	0.010	-17.31	0.019	8.00	25.31
	2462	0	0.003	0.003	-22.39	0.006	8.00	30.39
		4	0.003	0.004	-22.18	0.006	8.00	30.18
		8	0.003	0.003	-22.28	0.006	8.00	30.28

Sample Calculation:
Result = Ant A Result + Ant B Result

Ant A

RU Type	Freq. [MHz]	RU Index	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
26-tone RU	2412	0	-37.25	1.94	9.94	-25.37	0.003	8.00	33.37
		4	-37.81	1.94	9.94	-25.93	0.003	8.00	33.93
		8	-36.72	1.94	9.94	-24.84	0.003	8.00	32.84
	2437	0	-32.02	1.95	9.94	-20.13	0.010	8.00	28.13
		4	-31.94	1.95	9.94	-20.05	0.010	8.00	28.05
		8	-32.36	1.95	9.94	-20.47	0.009	8.00	28.47
	2462	0	-37.42	1.96	9.94	-25.52	0.003	8.00	33.52
		4	-37.85	1.96	9.94	-25.95	0.003	8.00	33.95
		8	-37.74	1.96	9.94	-25.84	0.003	8.00	33.84

Ant B

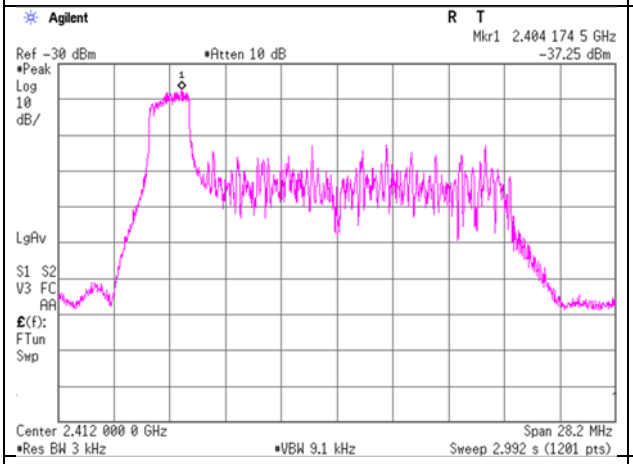
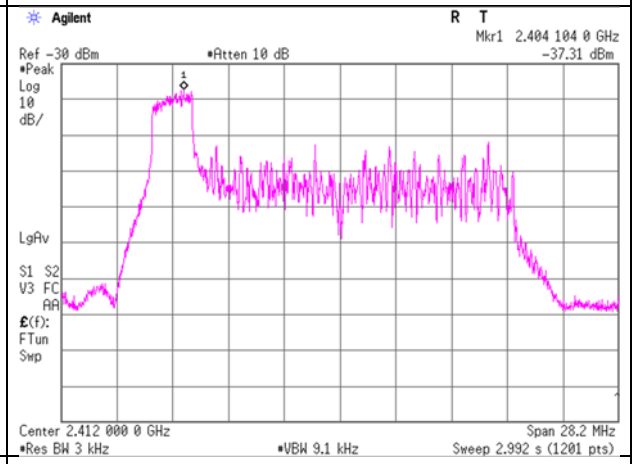
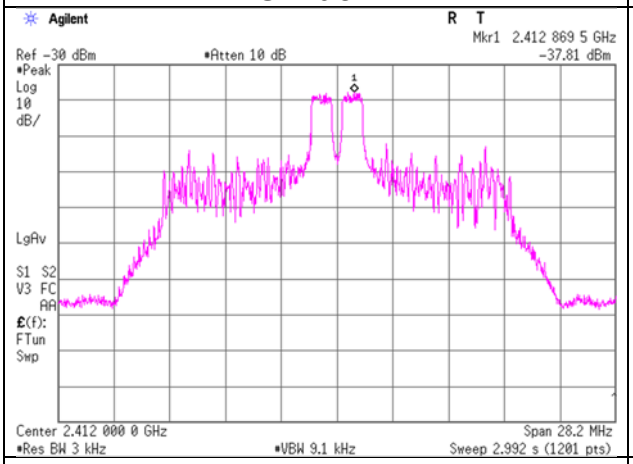
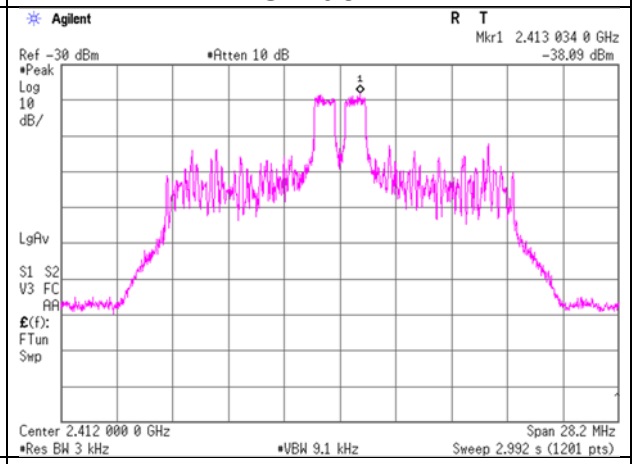
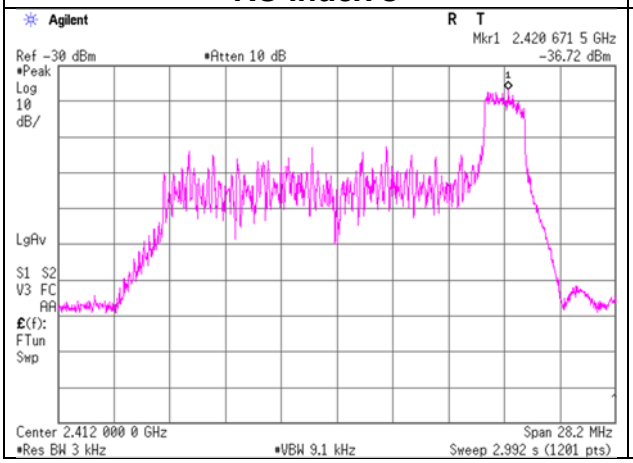
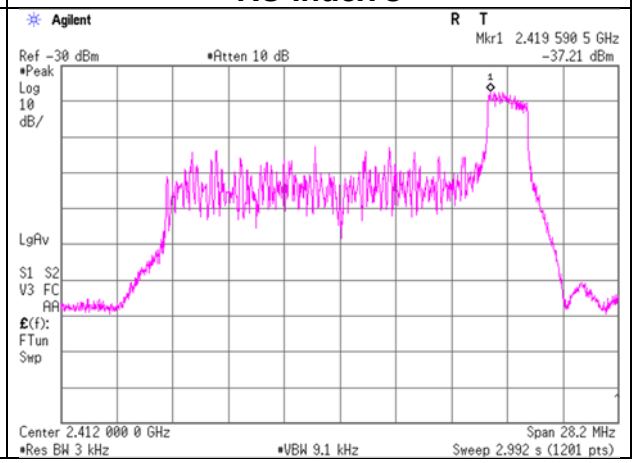
RU Type	Freq. [MHz]	RU Index	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
26-tone RU	2412	0	-37.31	1.96	10.04	-25.31	0.003	8.00	33.31
		4	-38.09	1.96	10.04	-26.09	0.002	8.00	34.09
		8	-37.21	1.96	10.04	-25.21	0.003	8.00	33.21
	2437	0	-31.41	1.96	10.04	-19.41	0.011	8.00	27.41
		4	-32.29	1.96	10.04	-20.29	0.009	8.00	28.29
		8	-32.18	1.96	10.04	-20.18	0.010	8.00	28.18
	2462	0	-37.31	1.98	10.04	-25.29	0.003	8.00	33.29
		4	-36.56	1.98	10.04	-24.54	0.004	8.00	32.54
		8	-36.83	1.98	10.04	-24.81	0.003	8.00	32.81

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.

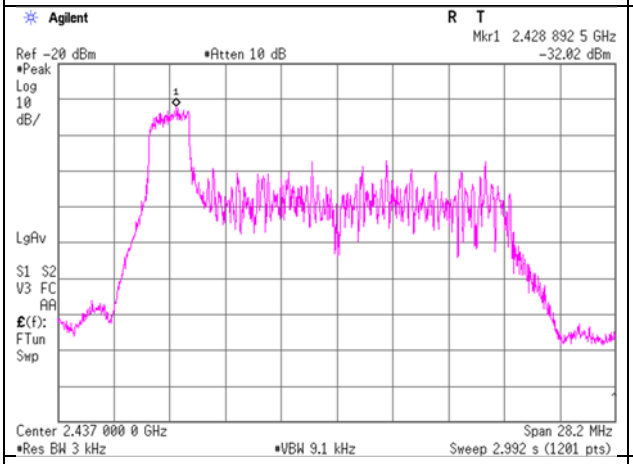
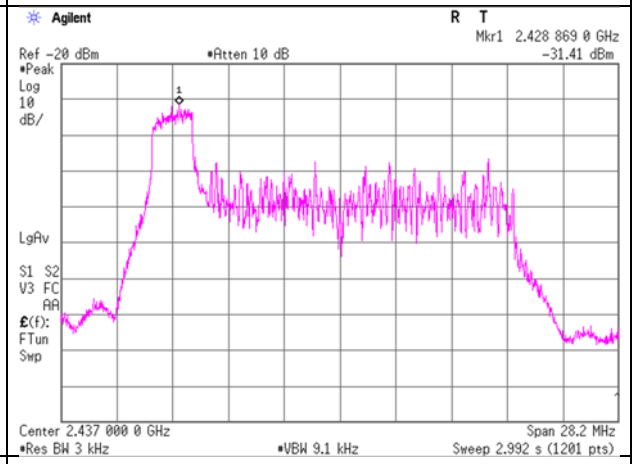
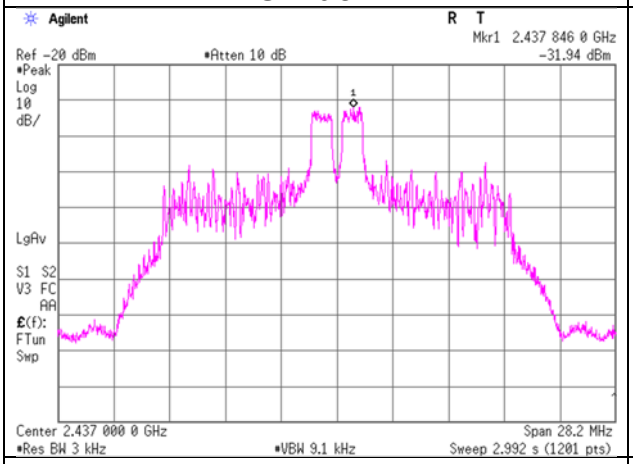
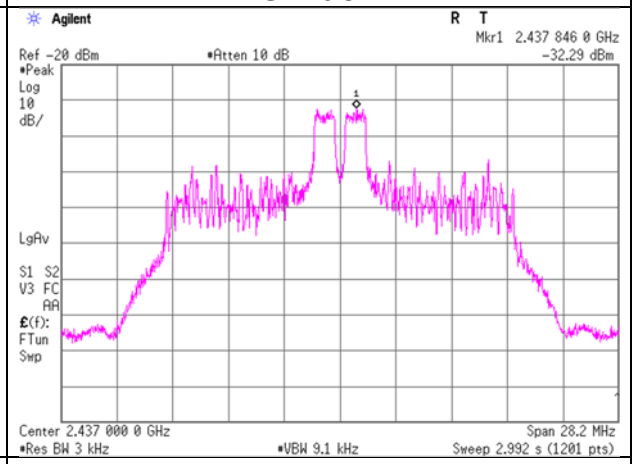
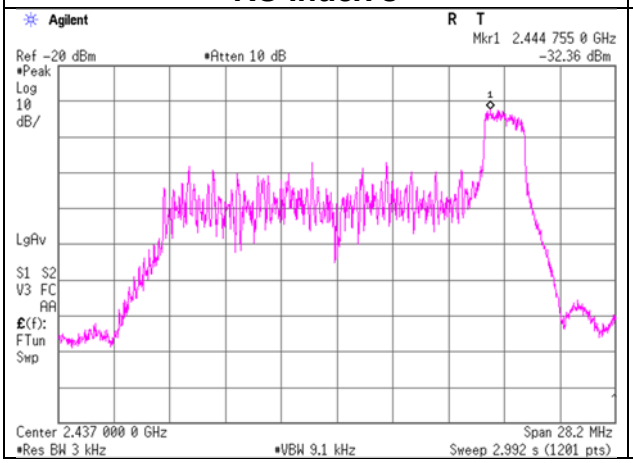
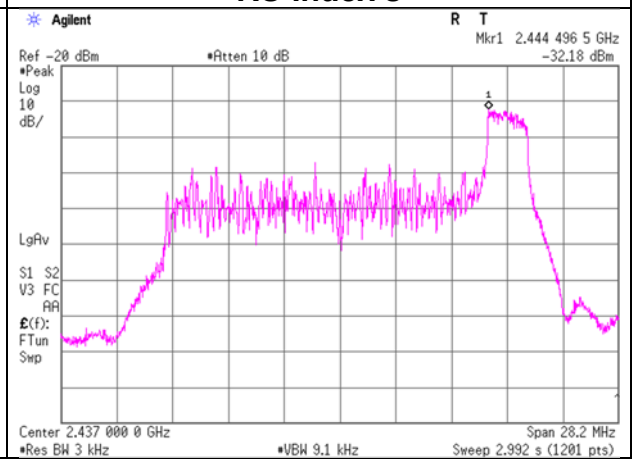
Power Density

11ax-20 (OFDMA) 26-tone RU, 2412 MHz

Ant A	Ant B
RU Index 0	RU Index 0
	
RU Index 4	RU Index 4
	
RU Index 8	RU Index 8
	

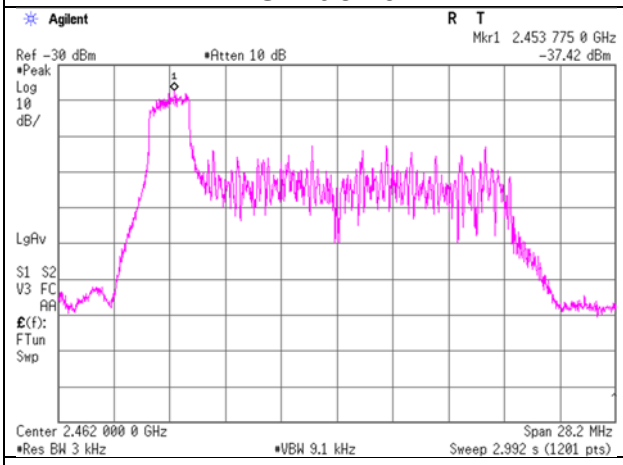
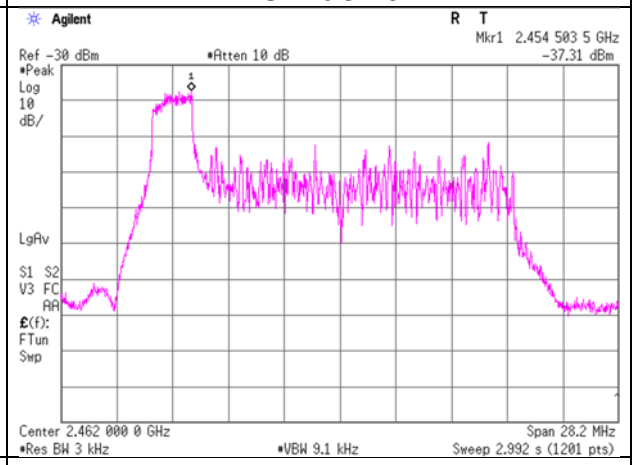
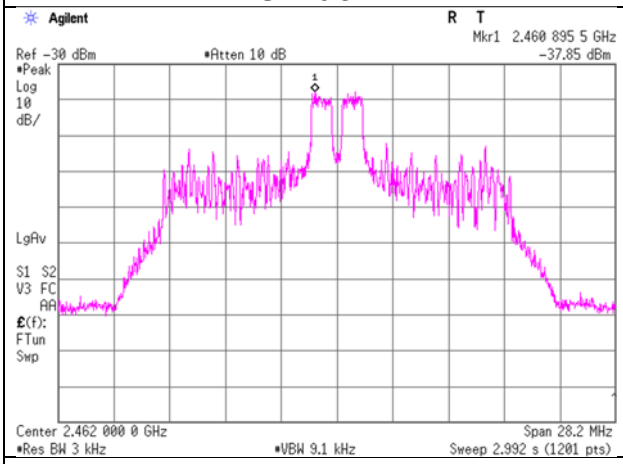
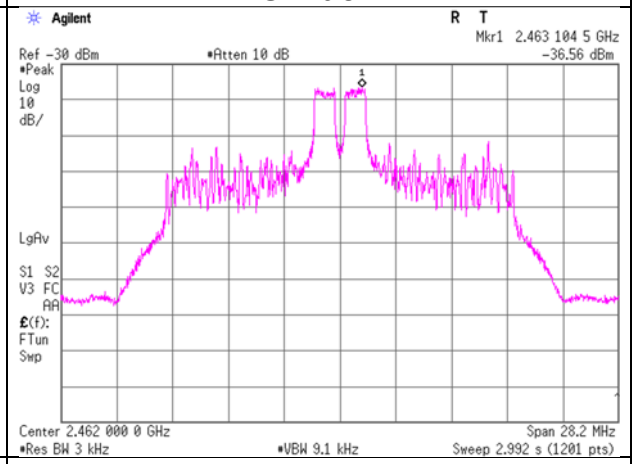
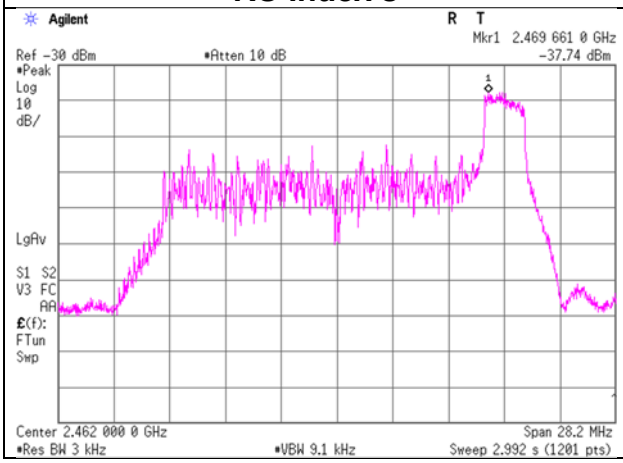
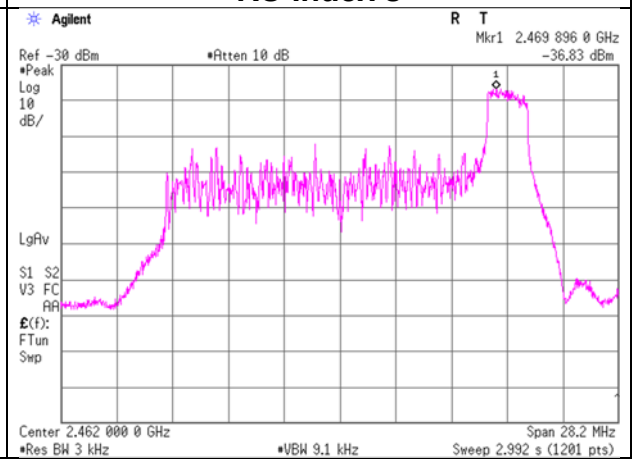
Power Density

11ax-20 (OFDMA) 26-tone RU, 2437 MHz

Ant A	Ant B
RU Index 0	RU Index 0
	
RU Index 4	RU Index 4
	
RU Index 8	RU Index 8
	

Power Density

11ax-20 (OFDMA) 26-tone RU, 2462 MHz

Ant A	Ant B
RU Index 0	**RU Index 0**
	
RU Index 4	**RU Index 4**
	
RU Index 8	**RU Index 8**
	

Power Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	April 17, 2023
Temperature / Humidity	25 deg. C / 35 % RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20 (OFDMA) 52-tone RU

Ant A + Ant B

RU Type	Freq. [MHz]	RU Index	Ant A Result [mW]	Ant B Result [mW]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
52-tone RU	2412	37	0.002	0.003	-23.24	0.005	8.00	31.24
		38	0.002	0.003	-22.36	0.006	8.00	30.36
		40	0.002	0.003	-22.26	0.006	8.00	30.26
	2437	37	0.011	0.011	-16.63	0.022	8.00	24.63
		38	0.012	0.014	-15.85	0.026	8.00	23.85
		40	0.010	0.013	-16.35	0.023	8.00	24.35
	2462	37	0.003	0.003	-22.53	0.006	8.00	30.53
		38	0.003	0.004	-21.29	0.007	8.00	29.29
		40	0.003	0.003	-22.31	0.006	8.00	30.31

Sample Calculation:
Result = Ant A + Ant B

Ant A

RU Type	Freq. [MHz]	RU Index	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
52-tone RU	2412	37	-38.67	1.94	9.94	-26.79	0.002	8.00	34.79
		38	-38.16	1.94	9.94	-26.28	0.002	8.00	34.28
		40	-37.92	1.94	9.94	-26.04	0.002	8.00	34.04
	2437	37	-31.56	1.95	9.94	-19.67	0.011	8.00	27.67
		38	-31.27	1.95	9.94	-19.38	0.012	8.00	27.38
		40	-31.76	1.95	9.94	-19.87	0.010	8.00	27.87
	2462	37	-37.78	1.96	9.94	-25.88	0.003	8.00	33.88
		38	-36.99	1.96	9.94	-25.09	0.003	8.00	33.09
		40	-37.81	1.96	9.94	-25.91	0.003	8.00	33.91

Ant B

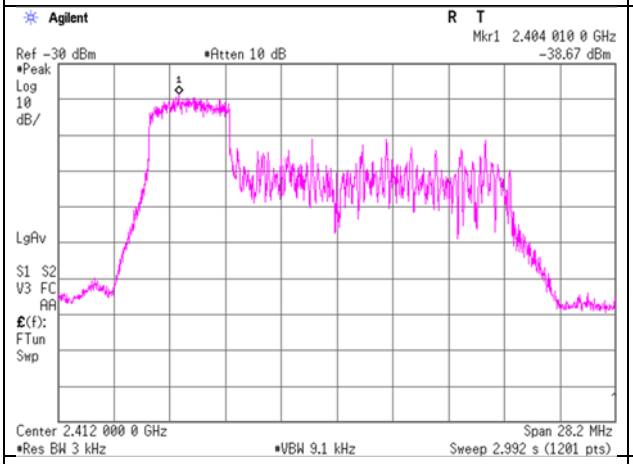
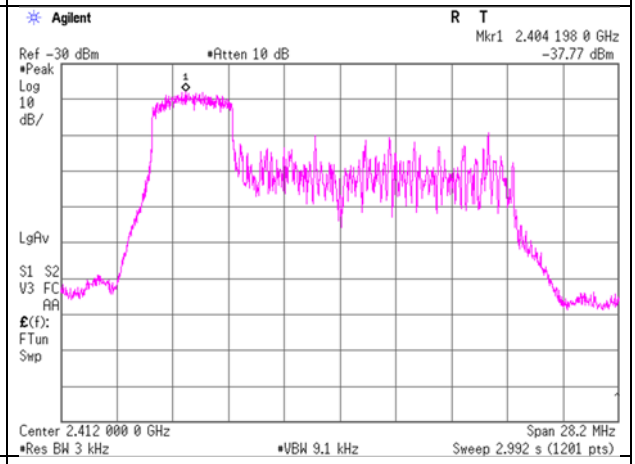
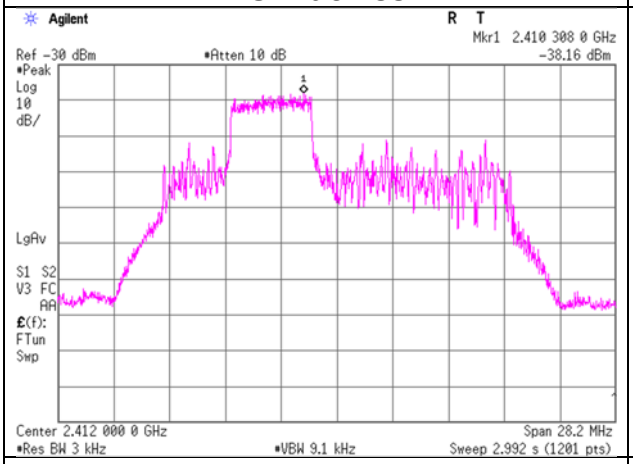
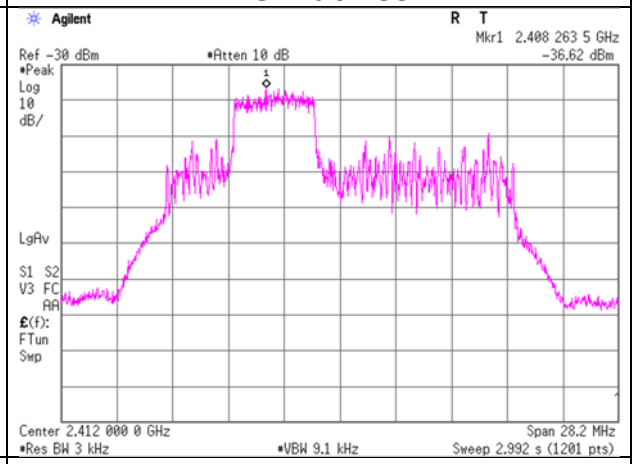
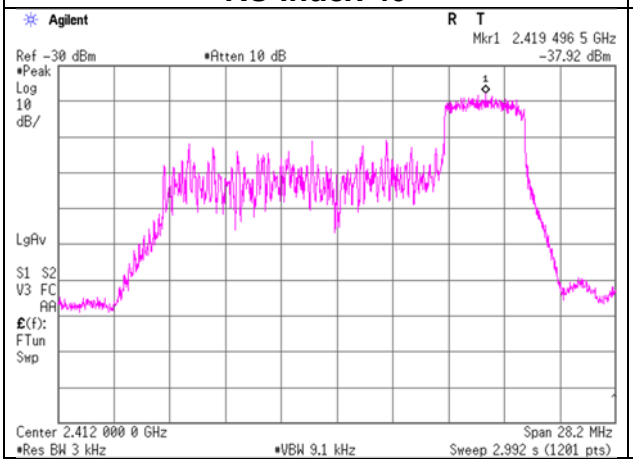
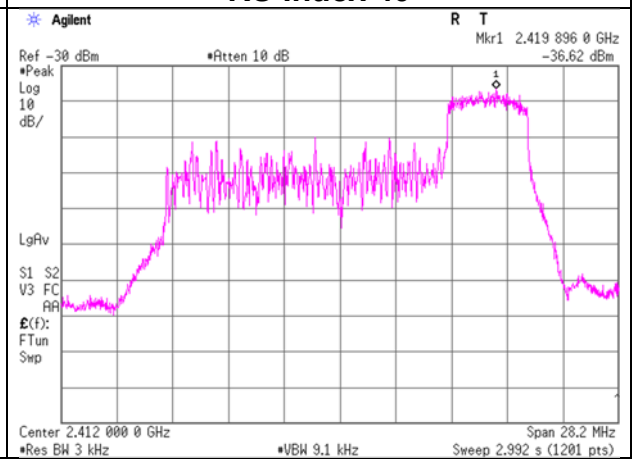
RU Type	Freq. [MHz]	RU Index	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
52-tone RU	2412	37	-37.77	1.96	10.04	-25.77	0.003	8.00	33.77
		38	-36.62	1.96	10.04	-24.62	0.003	8.00	32.62
		40	-36.62	1.96	10.04	-24.62	0.003	8.00	32.62
	2437	37	-31.63	1.97	10.04	-19.62	0.011	8.00	27.62
		38	-30.40	1.97	10.04	-18.39	0.014	8.00	26.39
		40	-30.92	1.97	10.04	-18.91	0.013	8.00	26.91
	2462	37	-37.24	1.98	10.04	-25.22	0.003	8.00	33.22
		38	-35.65	1.98	10.04	-23.63	0.004	8.00	31.63
		40	-36.82	1.98	10.04	-24.80	0.003	8.00	32.80

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.

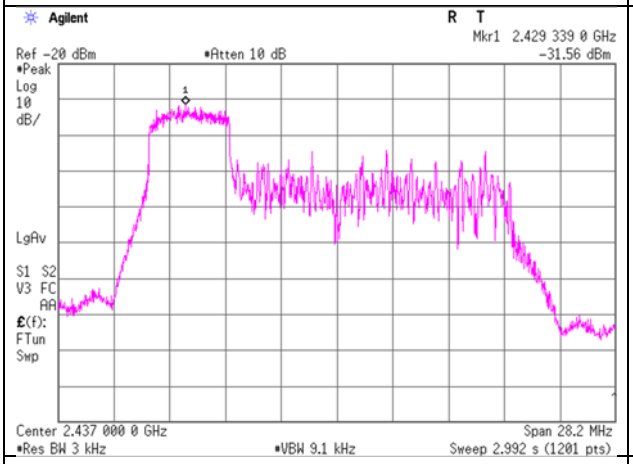
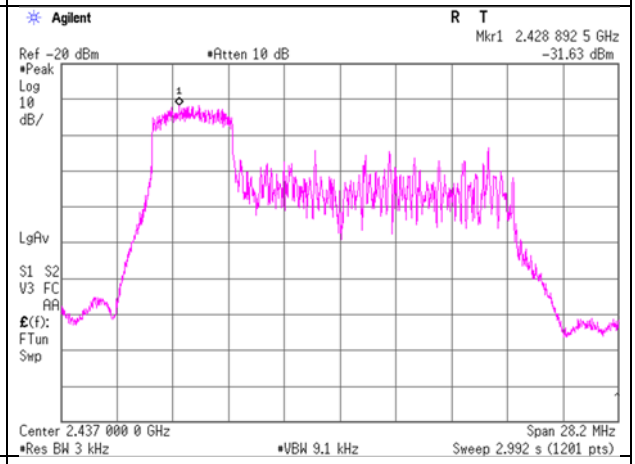
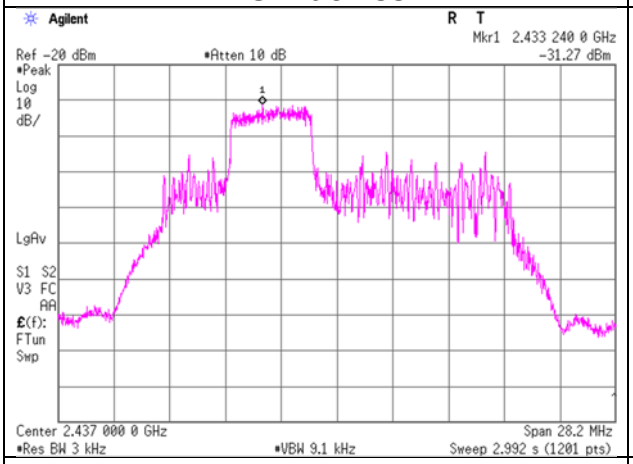
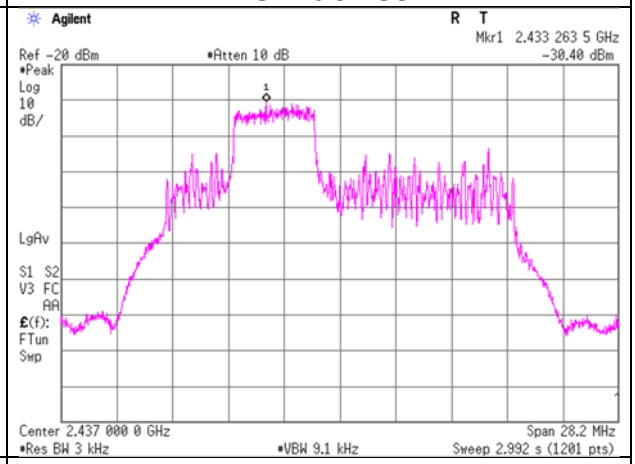
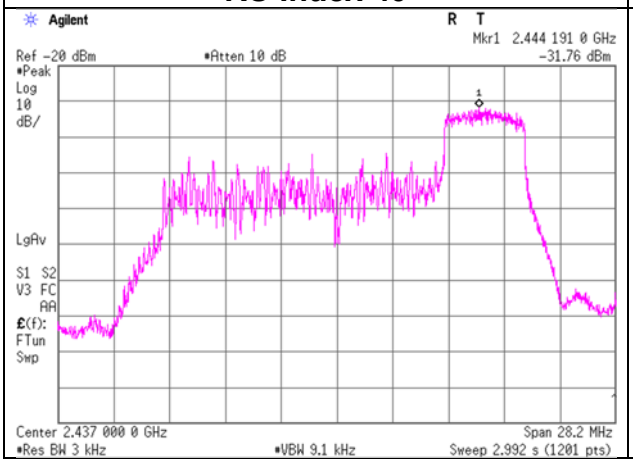
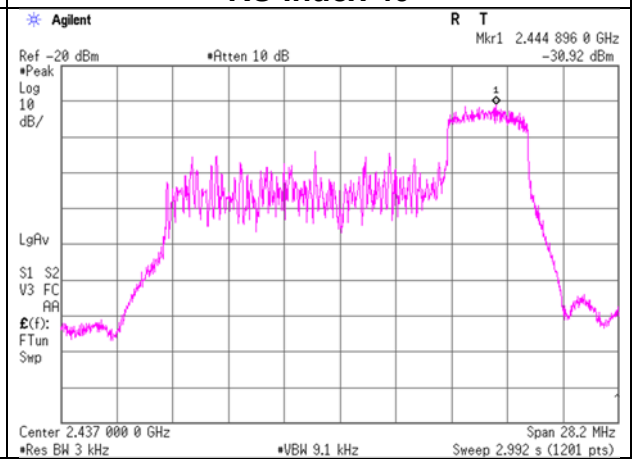
Power Density

11ax-20 (OFDMA) 52-tone RU, 2412 MHz

Ant A	Ant B
RU Index 37	RU Index 37
	
RU Index 38	RU Index 38
	
RU Index 40	RU Index 40
	

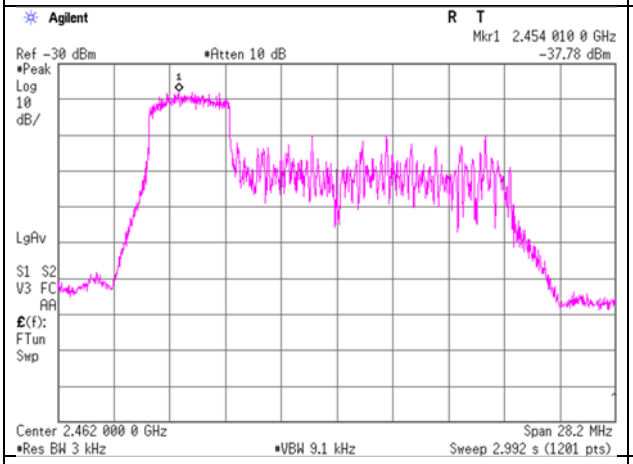
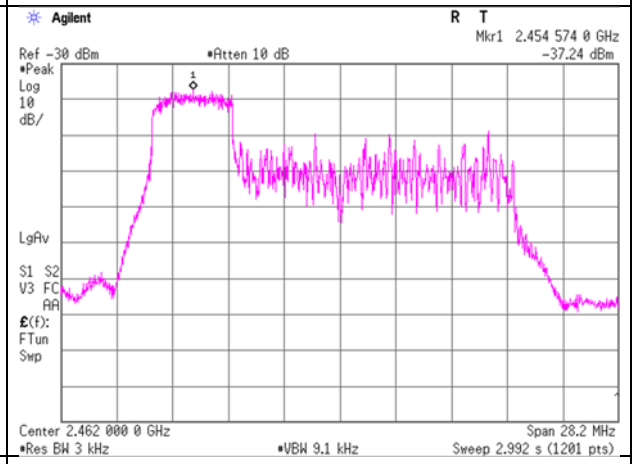
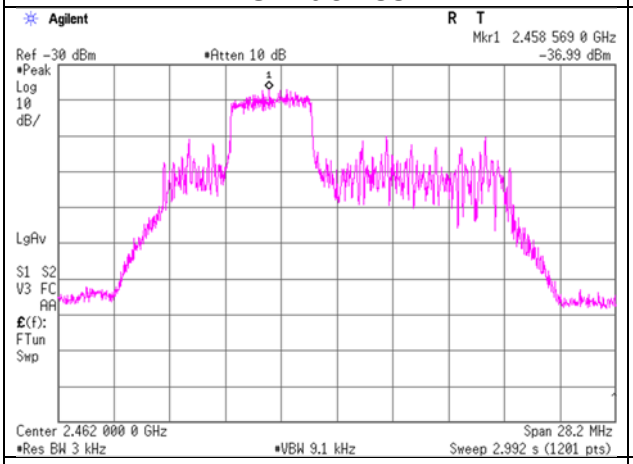
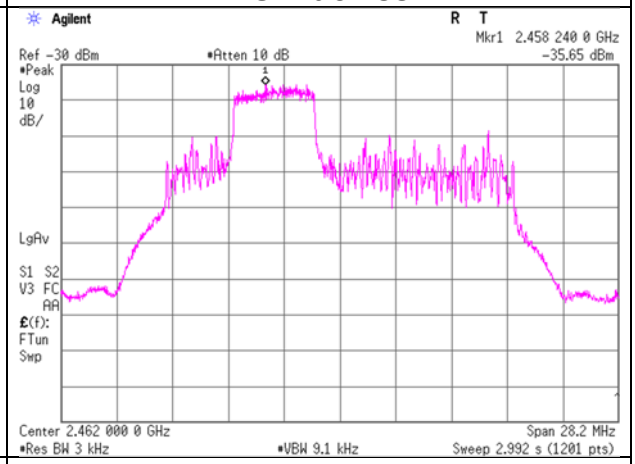
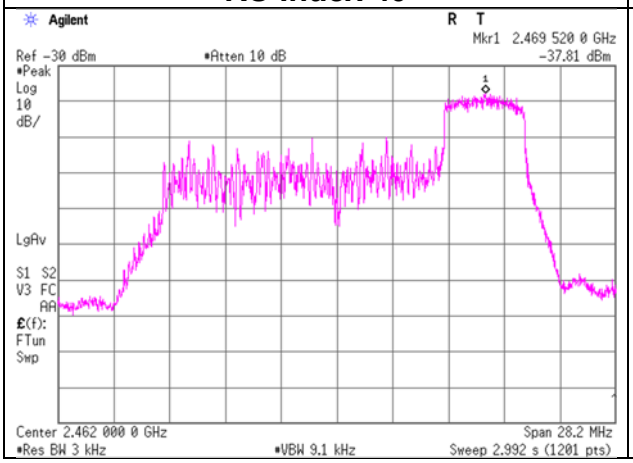
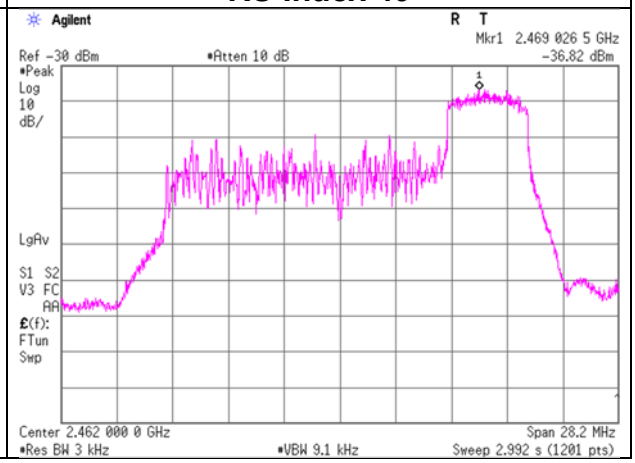
Power Density

11ax-20 (OFDMA) 52-tone RU, 2437 MHz

Ant A	Ant B
RU Index 37	RU Index 37
	
RU Index 38	RU Index 38
	
RU Index 40	RU Index 40
	

Power Density

11ax-20 (OFDMA) 52-tone RU, 2462 MHz

Ant A	Ant B
RU Index 37	RU Index 37
	
RU Index 38	RU Index 38
	
RU Index 40	RU Index 40
	

Power Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	April 17, 2023
Temperature / Humidity	25 deg. C / 35 % RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20 (OFDMA) 106-tone RU

Ant A + Ant B

RU Type	Freq. [MHz]	RU Index	Ant A Result [mW]	Ant B Result [mW]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
106-tone RU	2412	53	0.003	0.003	-22.37	0.006	8.00	30.37
		54	0.003	0.003	-22.11	0.006	8.00	30.11
	2437	53	0.009	0.011	-16.98	0.020	8.00	24.98
		54	0.011	0.013	-16.27	0.024	8.00	24.27
	2462	53	0.003	0.003	-22.29	0.006	8.00	30.29
		54	0.003	0.004	-21.77	0.007	8.00	29.77

Sample Calculation:
Result = Ant A + Ant B

Ant A

RU Type	Freq. [MHz]	RU Index	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
106-tone RU	2412	53	-37.35	1.94	9.94	-25.47	0.003	8.00	33.47
		54	-37.24	1.94	9.94	-25.36	0.003	8.00	33.36
	2437	53	-32.24	1.95	9.94	-20.35	0.009	8.00	28.35
		54	-31.66	1.95	9.94	-19.77	0.011	8.00	27.77
	2462	53	-37.76	1.96	9.94	-25.86	0.003	8.00	33.86
		54	-37.44	1.96	9.94	-25.54	0.003	8.00	33.54

Ant B

RU Type	Freq. [MHz]	RU Index	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
106-tone RU	2412	53	-37.29	1.96	10.04	-25.29	0.003	8.00	33.29
		54	-36.89	1.96	10.04	-24.89	0.003	8.00	32.89
	2437	53	-31.66	1.96	10.04	-19.66	0.011	8.00	27.66
		54	-30.84	1.96	10.04	-18.84	0.013	8.00	26.84
	2462	53	-36.83	1.98	10.04	-24.81	0.003	8.00	32.81
		54	-36.16	1.98	10.04	-24.14	0.004	8.00	32.14

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

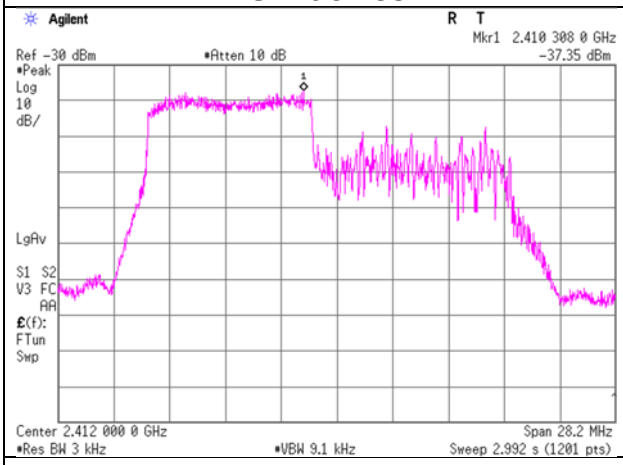
*The equipment and cables were not used for factor 0 dB of the data sheets.

Power Density

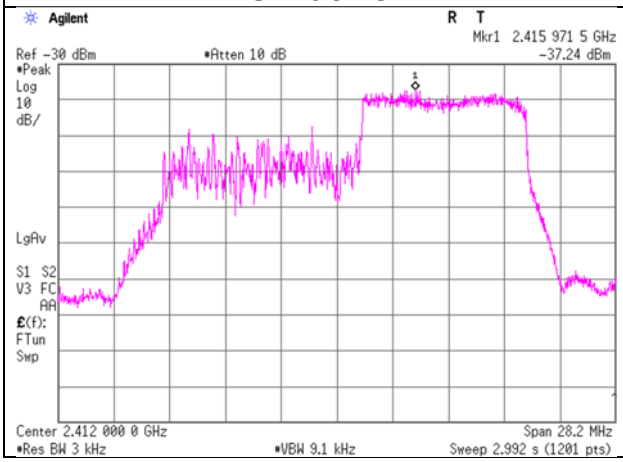
11ax-20 (OFDMA) 106-tone RU, 2412 MHz

Ant A

RU Index 53

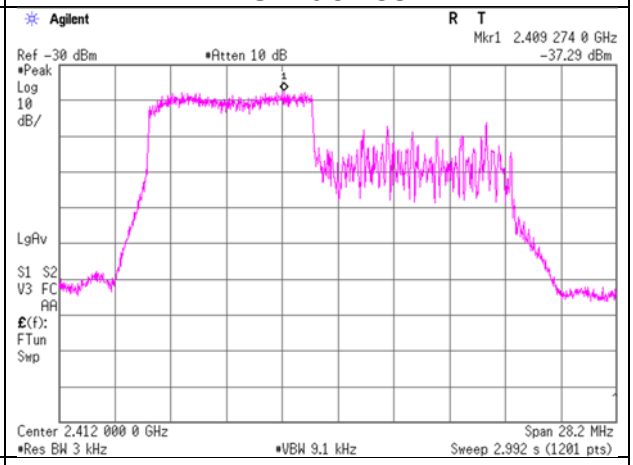


RU Index 54

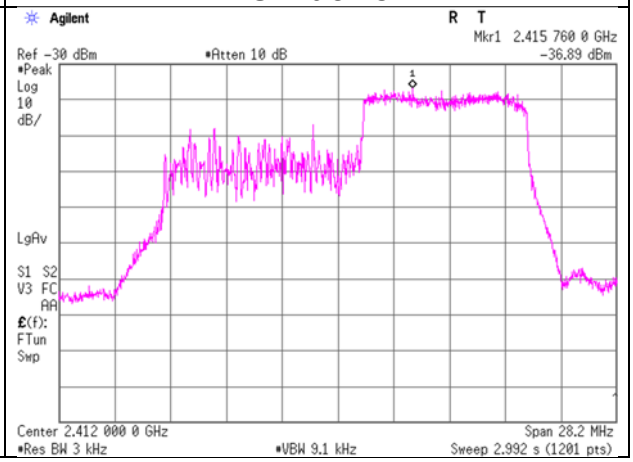


Ant B

RU Index 53



RU Index 54

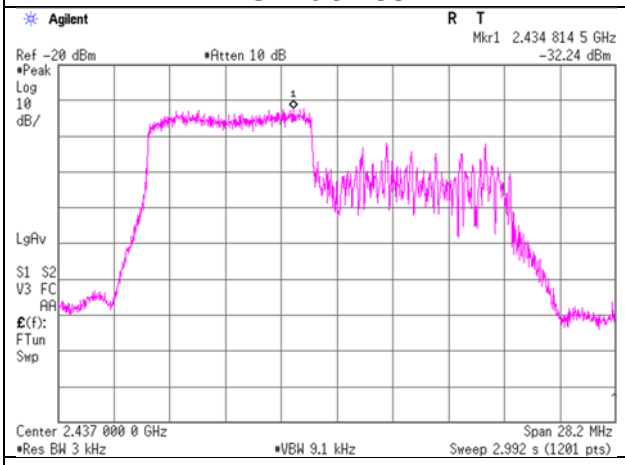


Power Density

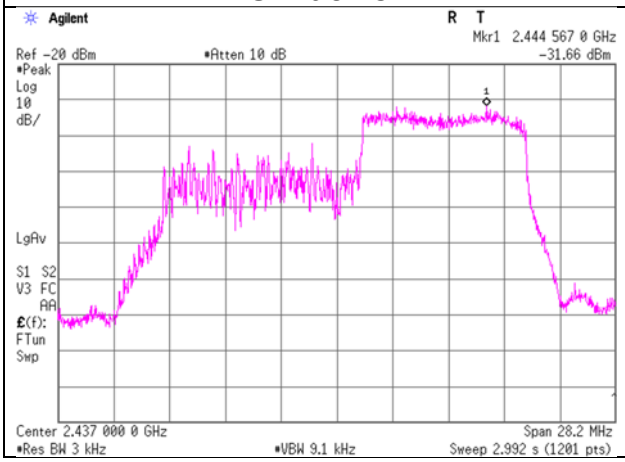
11ax-20 (OFDMA) 106-tone RU, 2437 MHz

Ant A

RU Index 53

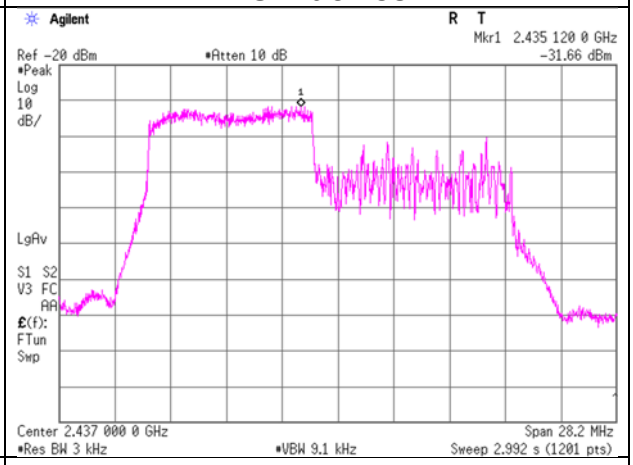


RU Index 54

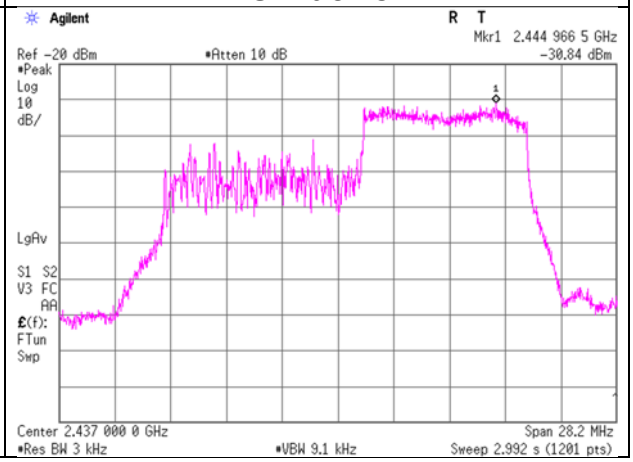


Ant B

RU Index 53



RU Index 54

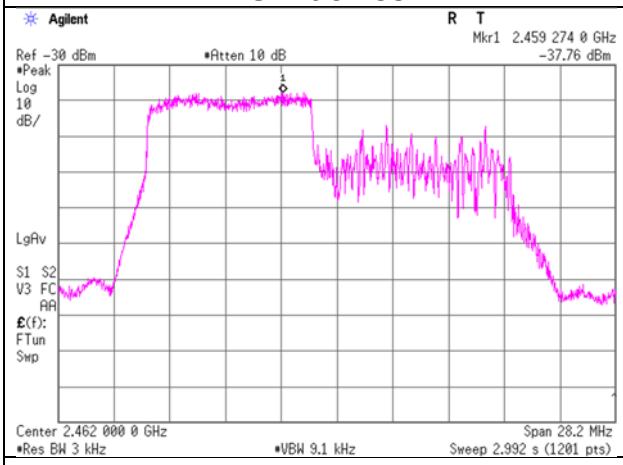


Power Density

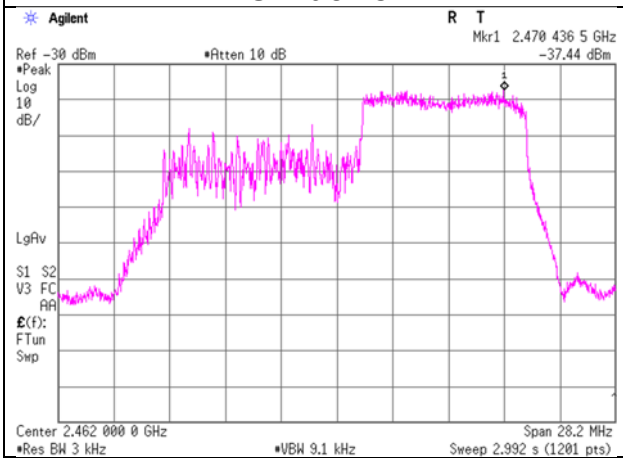
11ax-20 (OFDMA) 106-tone RU, 2462 MHz

Ant A

RU Index 53

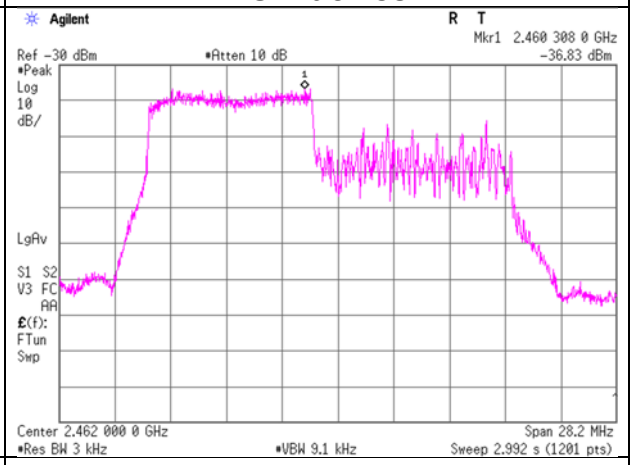


RU Index 54

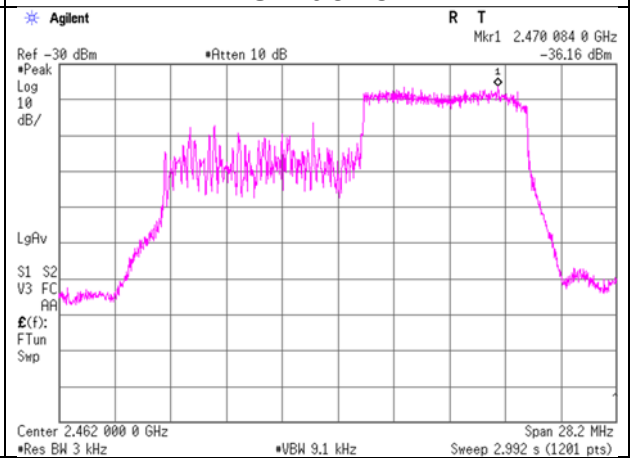


Ant B

RU Index 53



RU Index 54



Power Density

Test place	Shonan EMC Lab. No.5 Shielded Room
Date	April 17, 2023
Temperature / Humidity	25 deg. C / 35 % RH
Engineer	Yosuke Murakami
Mode	Tx 11ax-20 (OFDMA) 242-tone RU

Ant A + Ant B

RU Type	Freq. [MHz]	RU Index	Ant A Result [mW]	Ant B Result [mW]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
106-tone RU	2412	61	0.003	0.004	-21.69	0.007	8.00	29.69
	2437	61	0.010	0.015	-16.05	0.025	8.00	24.05
	2462	61	0.003	0.002	-22.94	0.005	8.00	30.94

Sample Calculation:
Result = Ant A + Ant B

Ant A

RU Type	Freq. [MHz]	RU Index	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
106-tone RU	2412	61	-37.47	1.94	9.94	-25.59	0.003	8.00	33.59
	2437	61	-31.84	1.95	9.94	-19.95	0.010	8.00	27.95
	2462	61	-37.26	1.96	9.94	-25.36	0.003	8.00	33.36

Ant B

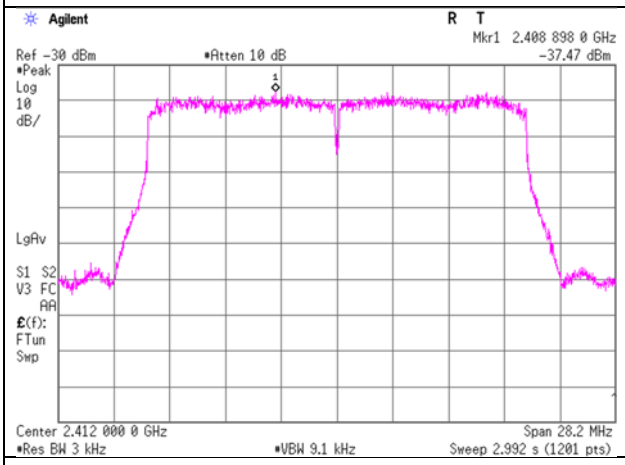
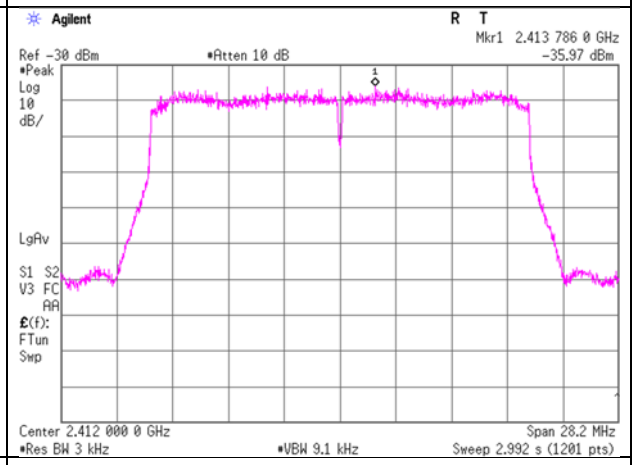
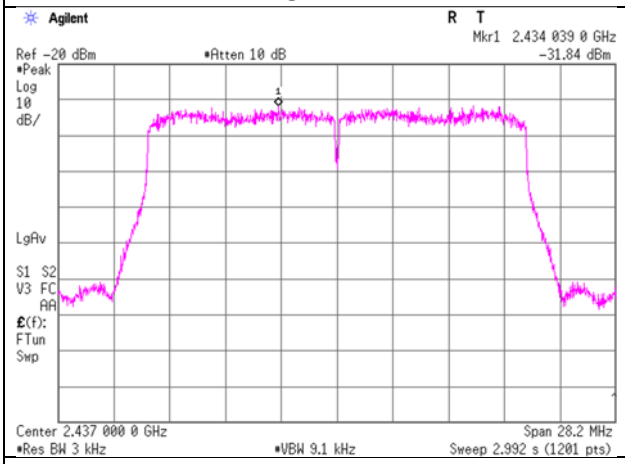
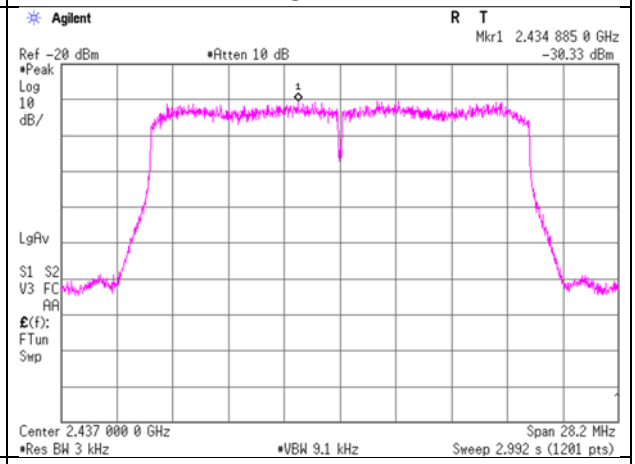
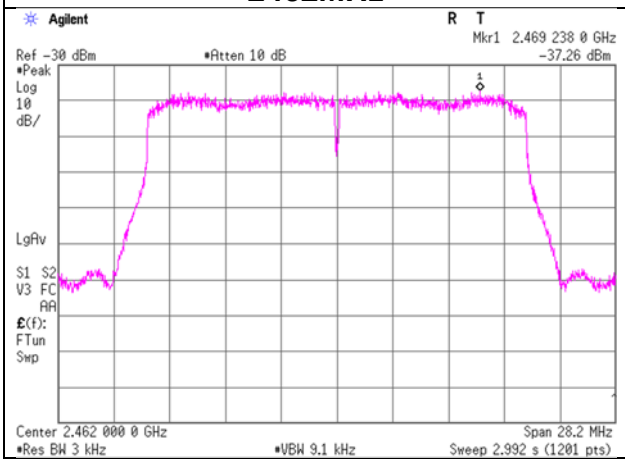
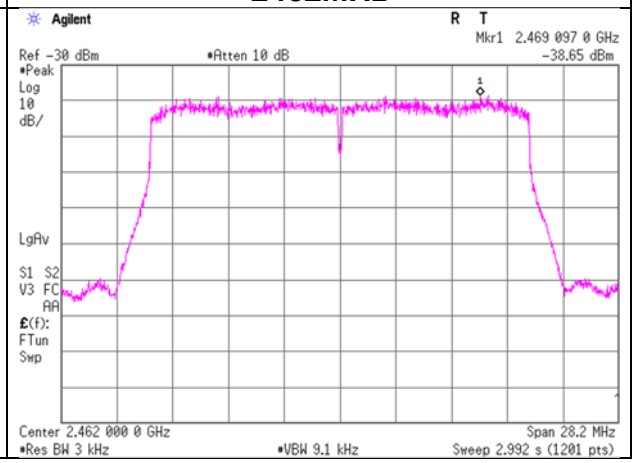
RU Type	Freq. [MHz]	RU Index	Reading [dBm]	Cable Loss [dB]	Atten. Loss [dB]	Result [dBm / 3 kHz]	Result [mW / 3 kHz]	Limit [dBm / 3 kHz]	Margin [dB]
106-tone RU	2412	61	-35.97	1.96	10.04	-23.97	0.004	8.00	31.97
	2437	61	-30.33	1.96	10.04	-18.33	0.015	8.00	26.33
	2462	61	-38.65	1.98	10.04	-26.63	0.002	8.00	34.63

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) 242-tone RU

Ant A	Ant B
2412MHz	2412MHz
	
2437MHz	2437MHz
	
2462MHz	2462MHz
	

APPENDIX 2: Test Instruments

Test Equipment (1/2)

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	KTS-07	145111	Digital Tester	SANWA	PC500	7019232	2022/09/20	12
AT	KTS-08	145095	Digital Tester	SANWA	PC500	7019224	2022/04/07 *1)	12
AT	SAT10-21	204925	Attenuator	Weinschel Corp.	54A-10	109970	2023/02/10	12
AT	SAT10-22	204926	Attenuator	Weinschel Corp.	54A-10	109971	2023/02/10	12
AT	SCC-G13	145166	Coaxial Cable	Suhner	SUCOFLEX 102	31599/2	2022/12/01	12
AT	SCC-G14	145175	Coaxial Cable	Suhner	SUCOFLEX 102	31600/2	2022/12/01	12
AT	SOS-27	191845	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12
AT	SOS-28	191846	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12
AT	SPM-13	169910	Power Meter	Keysight Technologies Inc	8990B	MY51000448	2022/11/08	12
AT	SPSS-06	169911	Power sensor	Keysight Technologies Inc	N1923A	MY57270004	2022/11/08	12
AT	SPSS-07	169912	Power sensor	Keysight Technologies Inc	N1923A	MY57290005	2022/11/08	12
AT	SRENT-09	150461	Spectrum Analyzer	Keysight Technologies Inc	E4440A	MY46186392	2022/03/14 *1)	12
AT	SSA-03	145801	Spectrum Analyzer	Keysight Technologies Inc	E4448A	MY48250152	2022/08/04	12
AT	STM-G11	204923	Terminator	Weinschel - API Technologies Corp	M1459A	110101	2023/02/10	12
CE	SAT3-10	144960	Attenuator	JFW	50HF-003N	-	2022/08/23	12
CE	SCC-C9/C10/SRSE-03	145036	Coaxial Cable&RF Selector	Suhner/Suhner/TOYO	RG223U/141PE/NS4906	-/0901-271(RF Selector)	2023/04/18	12
CE	SLS-01	145538	LISN	Rohde & Schwarz	ENV216	100511	2023/02/21	12
CE	SLS-05	145542	LISN	Rohde & Schwarz	ENV216	100516	2023/02/21	12
CE	SOS-06	146294	Humidity Indicator	A&D Company	AD-5681	4062118	-	-
CE	STM-03	146188	Terminator	TME	CT-01 BP	-	2022/12/16	12
CE,RE	COTS-SEMI-5	170932	EMI Software	TSJ (Techno Science Japan)	TEPTO-DV3(RE,CE,ME,PE)	-	-	-
CE,RE	KJM-02	146432	Measure	TAJIMA	GL19-55	-	-	-
CE,RE	STR-09	213530	Test Receiver	Rohde & Schwarz	ESW44	103068	2023/01/12	12
CE,RE	STS-03	146210	Digital Hitester	HIOKI E.E. CORPORATION	3805-50	80997823	2022/09/20	12
RE	KFL-15	144938	Highpass Filter	MICRO-TRONICS	HPM50112	7	2022/10/20	12
RE	KSA-08	145089	Spectrum Analyzer	Keysight Technologies Inc	E4446A	MY46180525	2022/11/01	12
RE	SAEC-03(NSA)	145565	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	2023/04/05	12
RE	SAEC-03(SVSWR)	145566	Semi-Anechoic Chamber	TDK	SAEC-03(SVSWR)	3	2022/05/18	12

Test Equipment (2/2)

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	SAF-03	145126	Pre Amplifier	SONOMA	310N	290213	2023/02/09	12
RE	SAF-06	145005	Pre Amplifier	Toyo Corporation	TPA0118-36	1440491	2023/02/02	12
RE	SAF-08	145007	Pre Amplifier	Toyo Corporation	HAP18-26W	19	2023/03/03	12
RE	SAT10-06	145137	Attenuator	Keysight Technologies Inc	8493C-010	74865	2022/10/20	12
RE	SAT6-13	167094	Attenuator	JFW	50HF-006N	-	2023/02/09	12
RE	SBA-03	145023	Biconical Antenna	Schwarzbeck Mess-Elektronik OHG	BBA9106	91032666	2022/05/14	12
RE	SCC-C1/C2/C3/C4/C5/C10/SRSE-03	145171	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-271(RF Selector)	2023/04/18	12
RE	SCC-G15	145176	Coaxial Cable	Suhner	SUCOFLEX 102	32703/2	2023/03/03	12
RE	SCC-G40	166491	Coaxial Cable	Junkosha	MWX221-01000NFSNMS/B	1612S005	2023/01/12	12
RE	SCC-G43	156380	Coaxial Cable	Huber+Suhner	SUCOFLEX_104_E	SN MY 13406/4E	2022/05/20	12
RE	SCC-G44	168300	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	800375/4A	2022/11/10	12
RE	SCC-G57	179540	Coaxial Cable	Huber+Suhner	SUCOFLEX 102	802815/2	2023/03/03	12
RE	SCC-G58	183047	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	800287/4A	-	-
RE	SCC-G70	200010	Coaxial Cable	Huber+Suhner	SUCOFLEX 104	575618/4	2022/07/22	12
RE	SFL-18	145305	Highpass Filter	MICRO-TRONICS	HPM50111	119	2023/03/02	12
RE	SHA-01	145383	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-725	2023/03/01	12
RE	SHA-03	145501	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA9120D	9120D-739	2023/03/27	12
RE	SHA-04	145512	Horn Antenna	ETS-Lindgren	3160-09	00094868	2022/06/06	12
RE	SHA-08	194683	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	694	2023/03/01	12
RE	SHA-10	194685	Horn Antenna	Schwarzbeck Mess-Elektronik OHG	BBHA 9120 C	711	2023/03/27	12
RE	SLA-07	145529	Logperiodic Antenna	Schwarzbeck Mess-Elektronik OHG	VUSLP9111B	196	2022/05/14	12
RE	SOS-23	191840	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	-	2022/08/08	12

***Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.**

The expiration date of the calibration is the end of the expired month.
As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

The expiration*1) This test equipment was used for the tests before the expiration date of the calibration.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

Test item: CE: Conducted Emission
RE: Radiated Emission
AT: Antenna Terminal Conducted