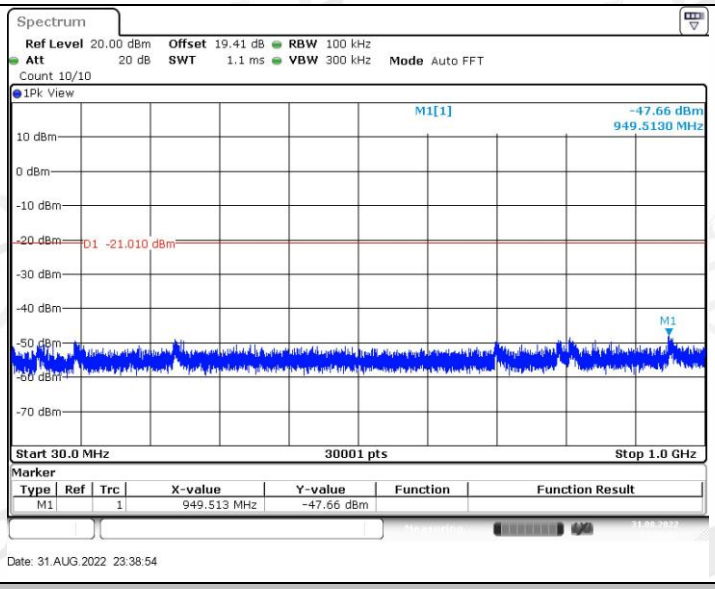

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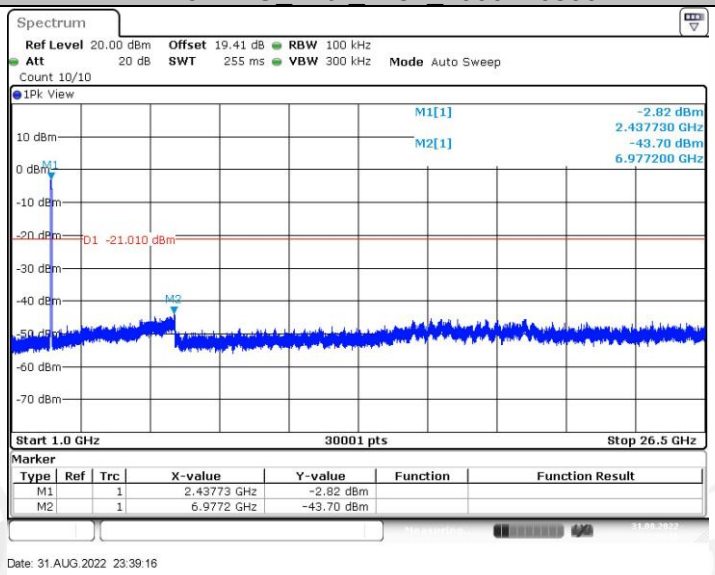

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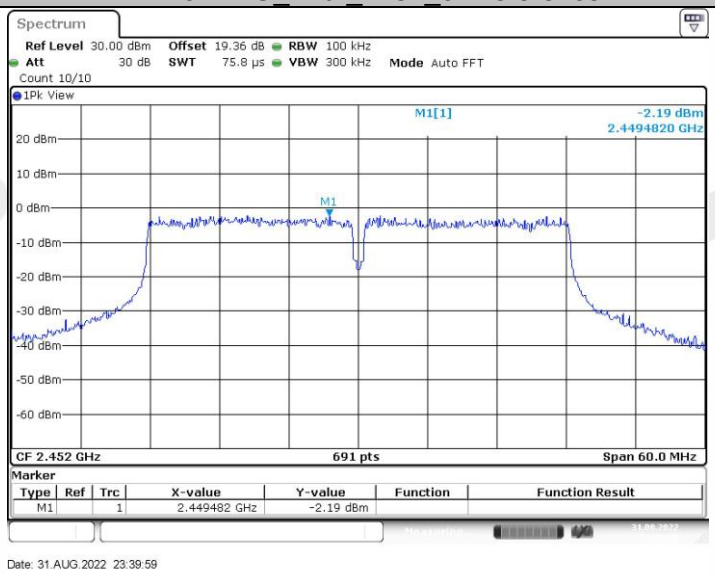

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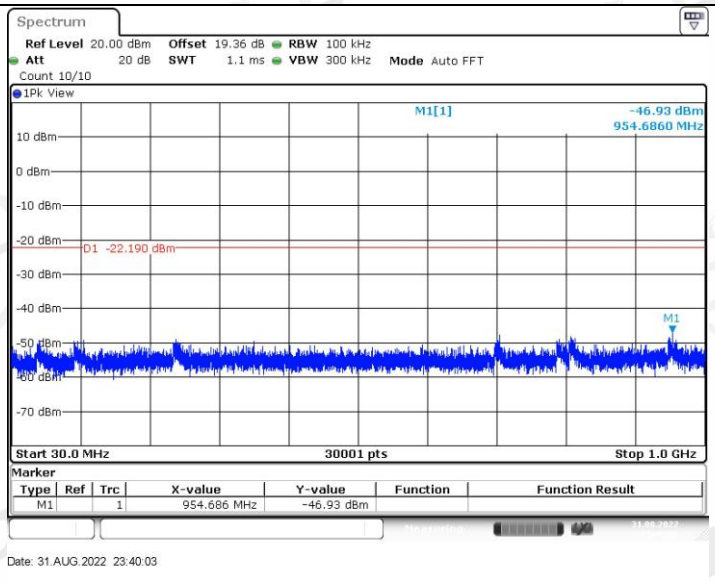

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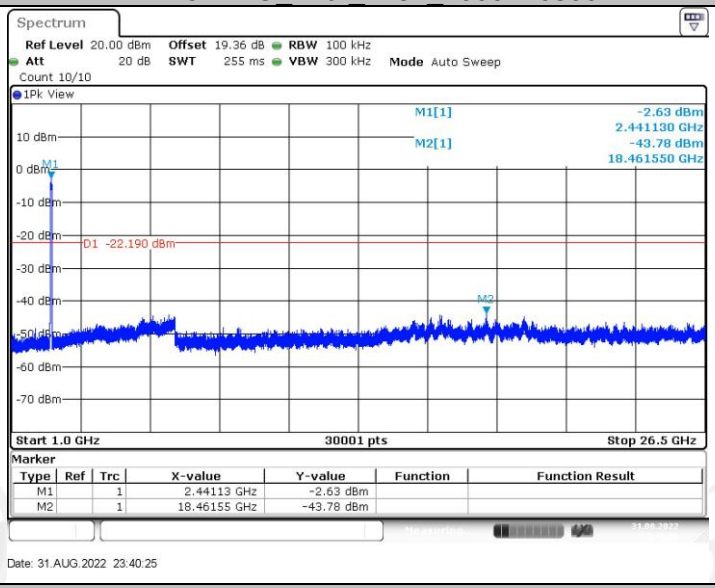

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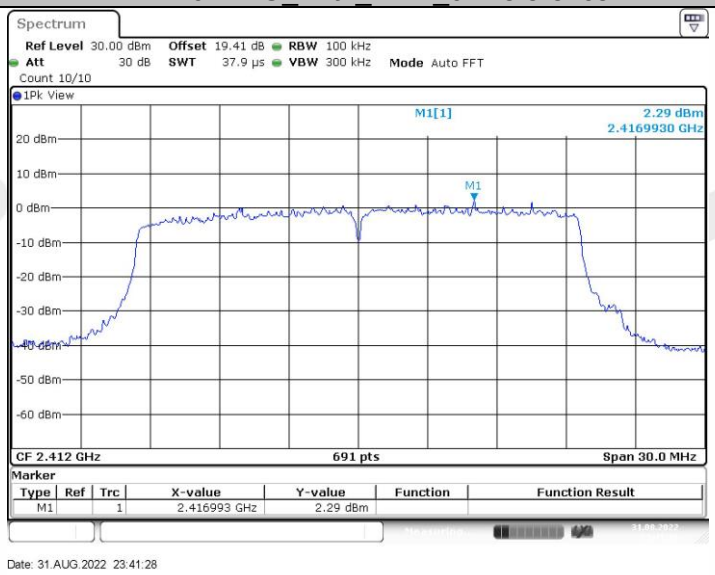

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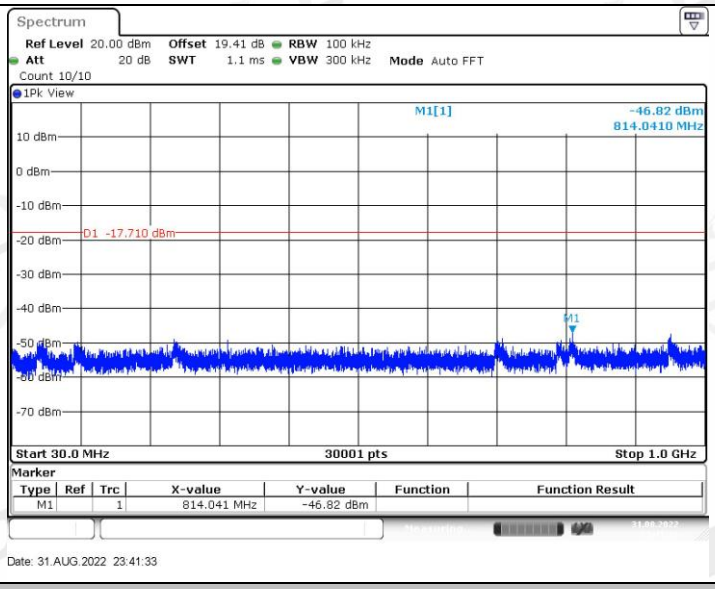

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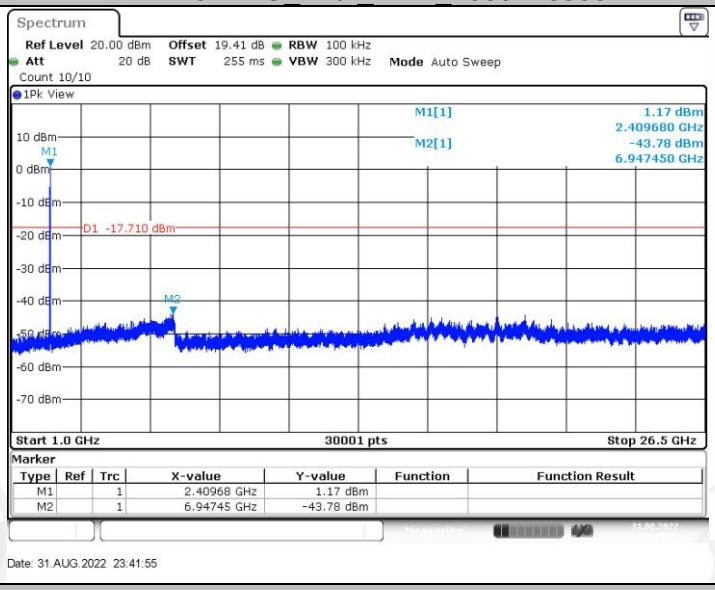

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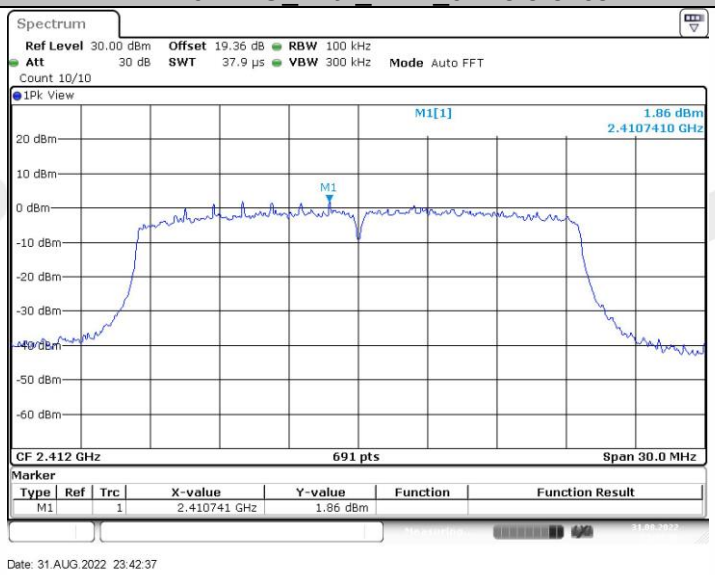

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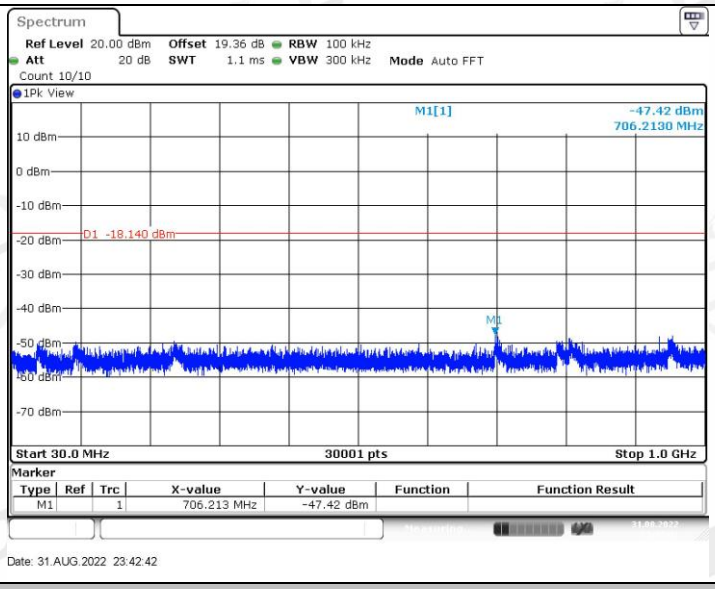

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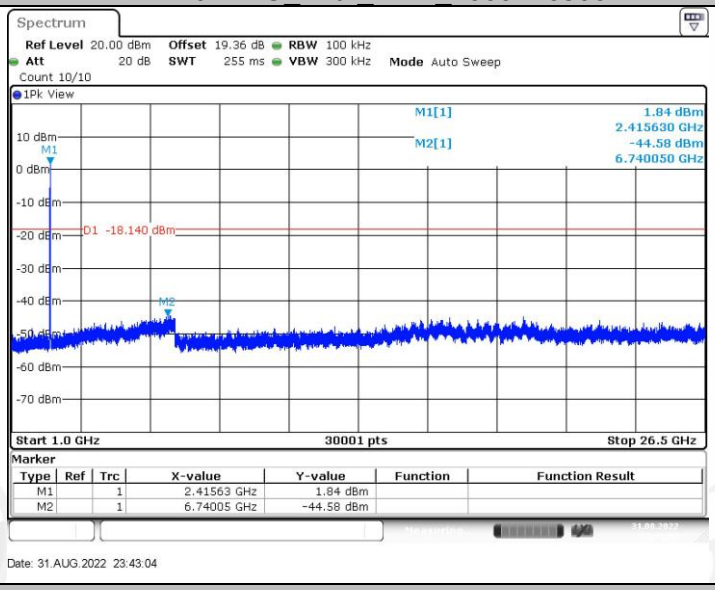

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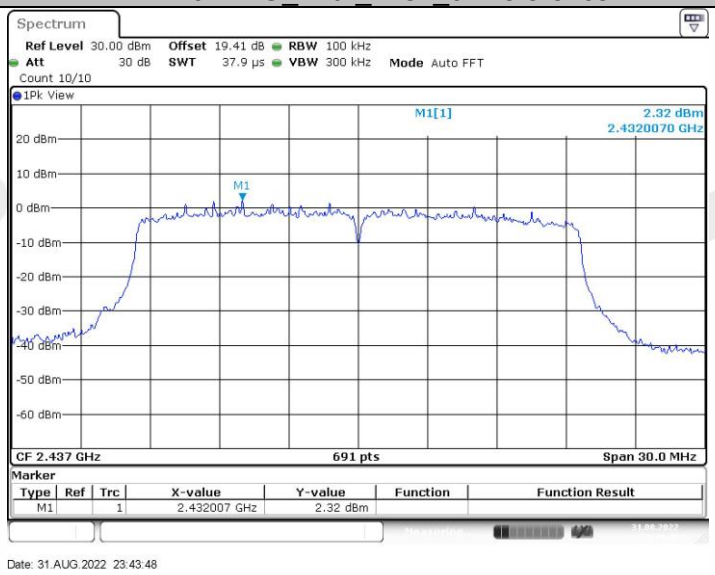

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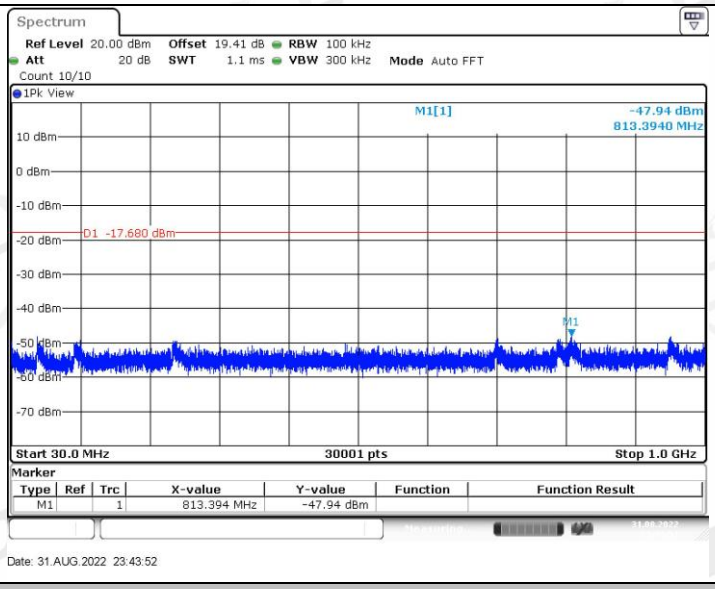
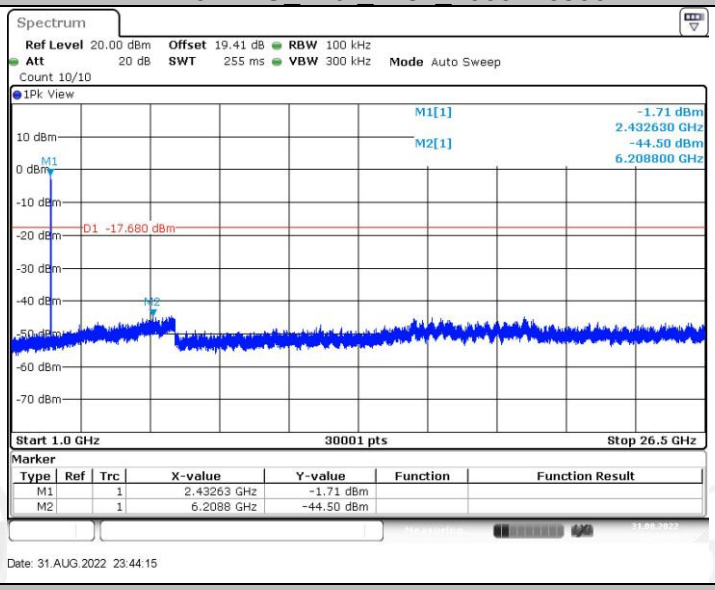


11AX20MIMO_Ant1_2437_1000~26500



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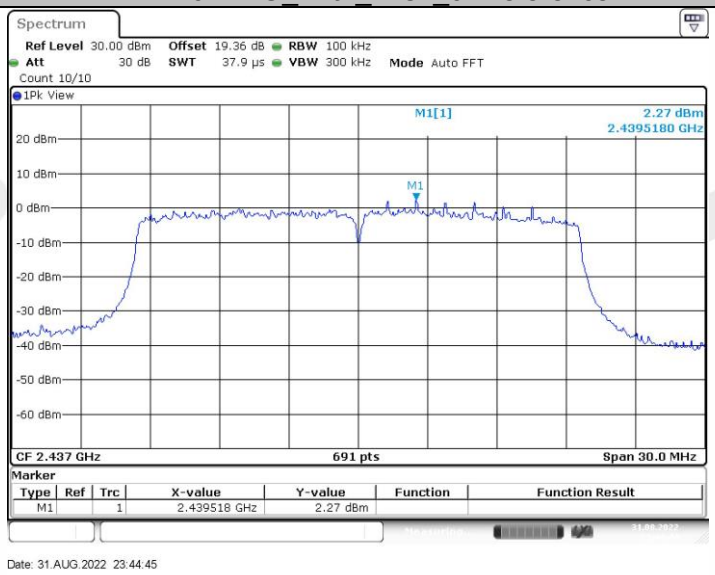

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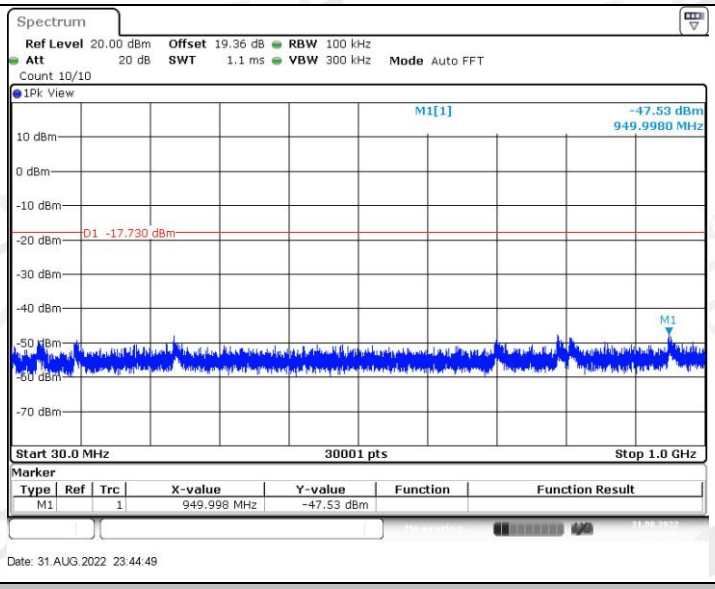
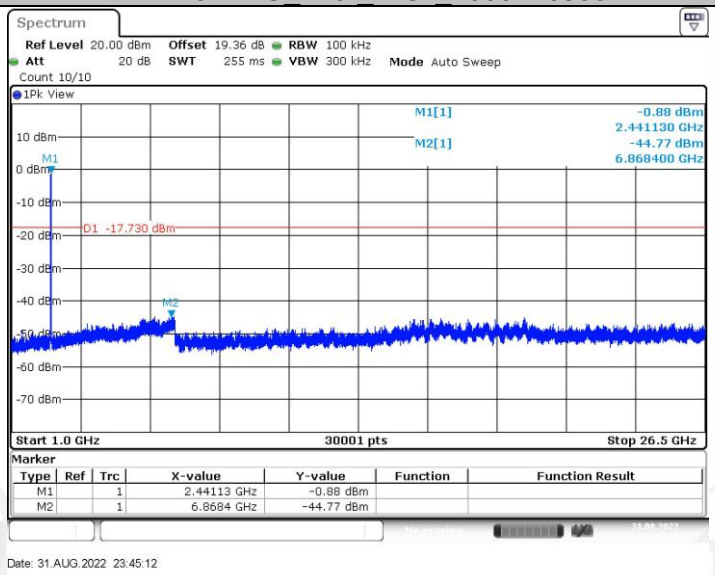


11AX20MIMO_Ant2_2437_1000~26500



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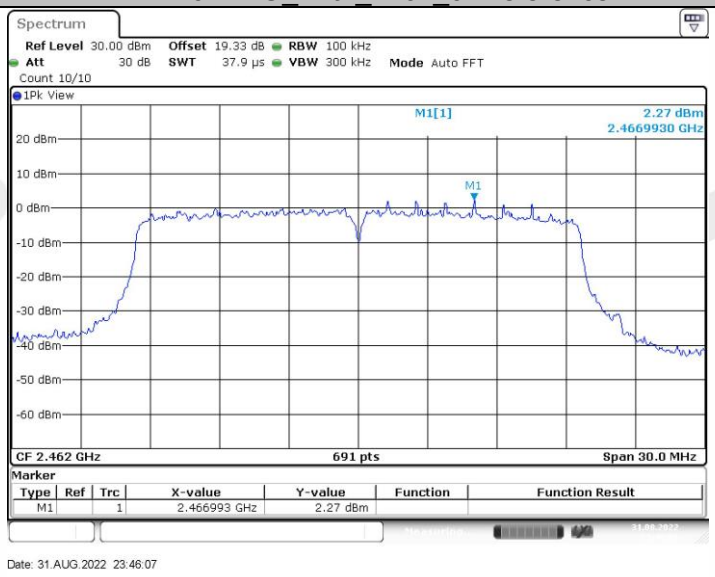

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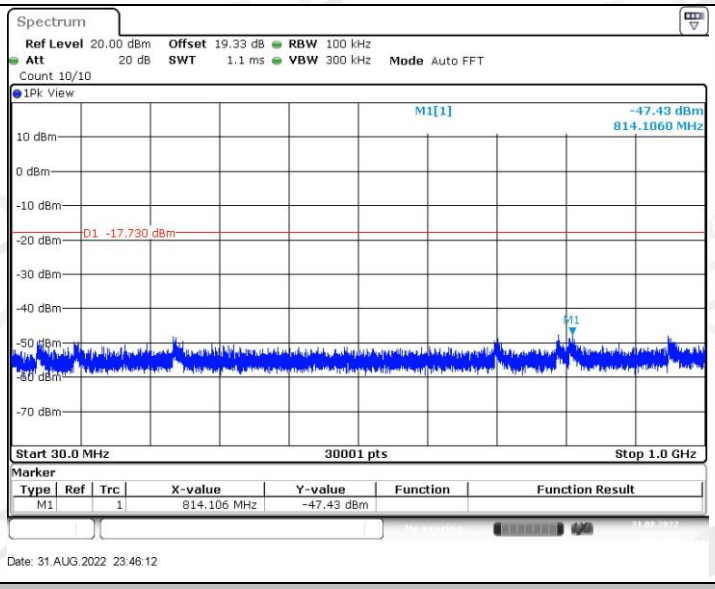

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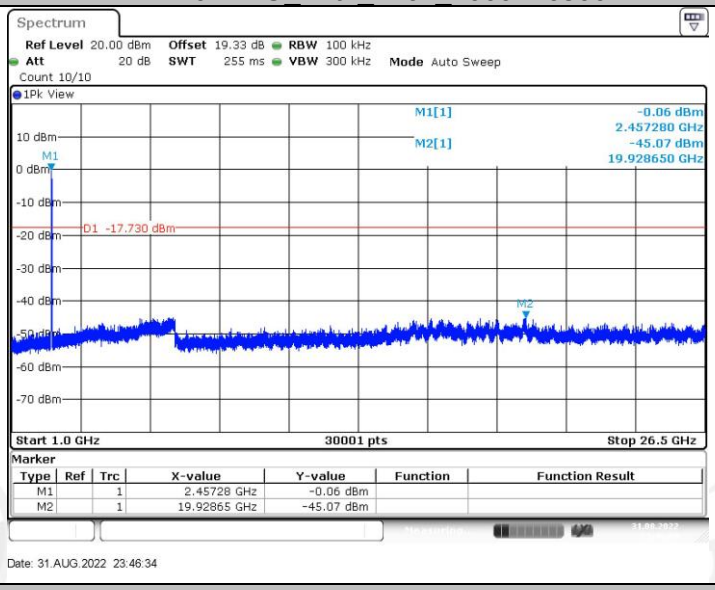

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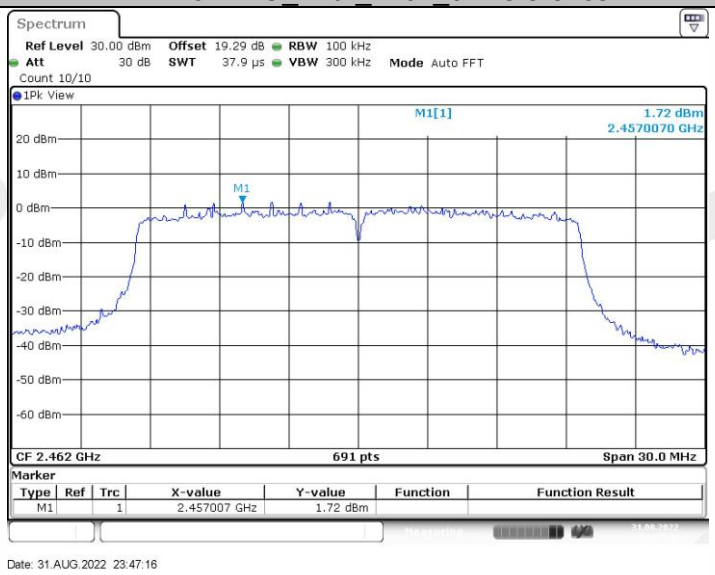

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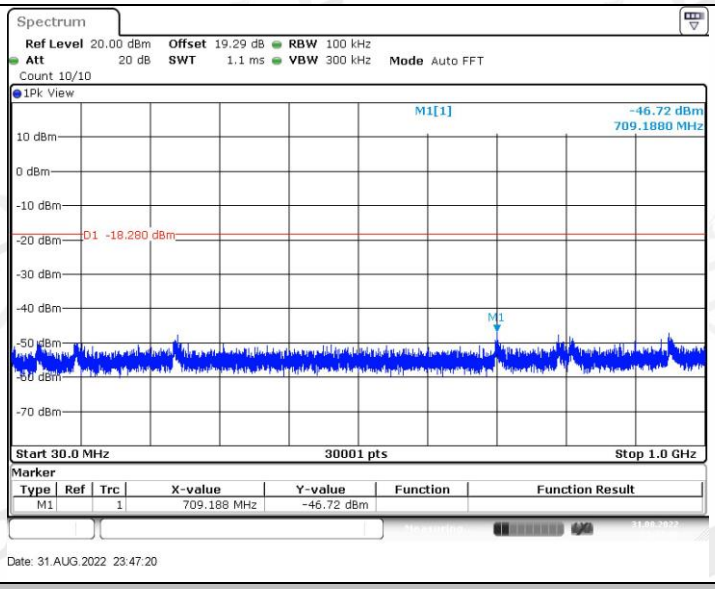

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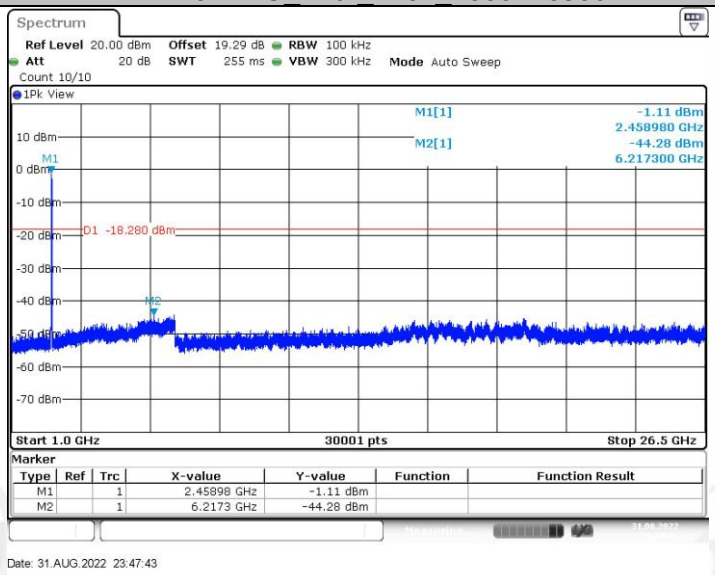

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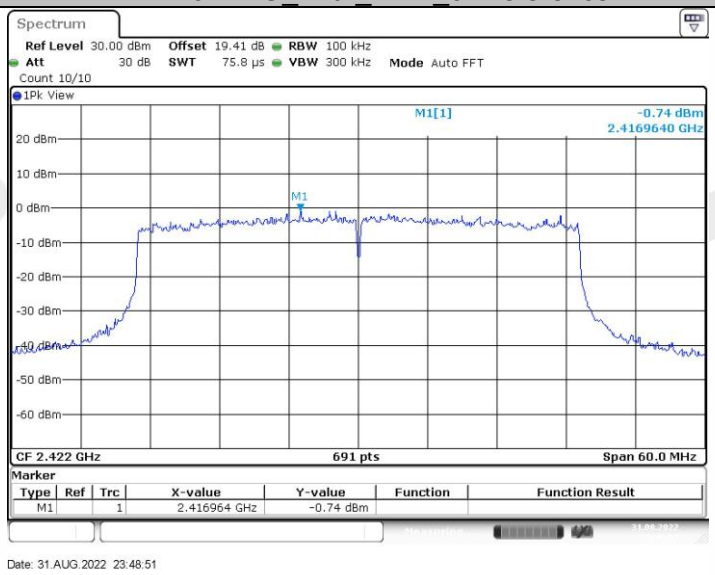

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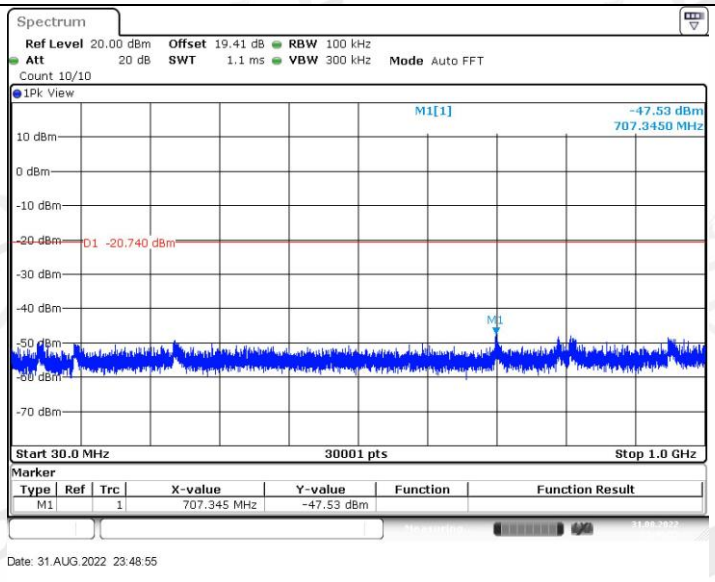

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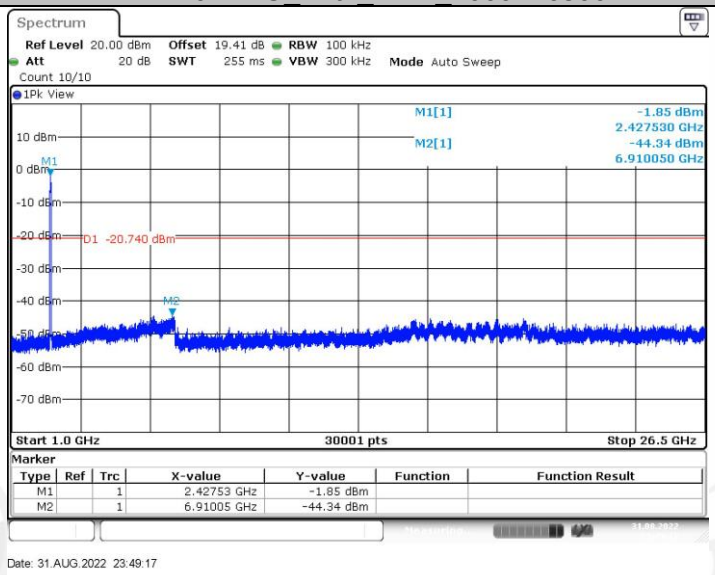

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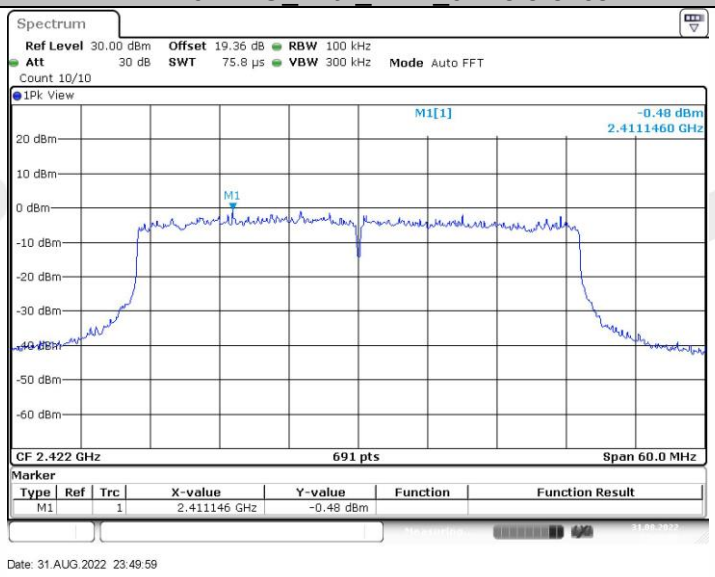

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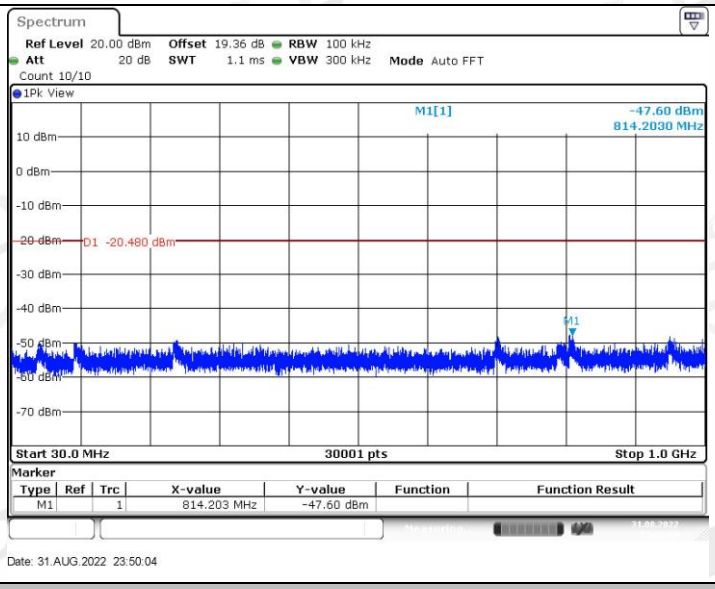

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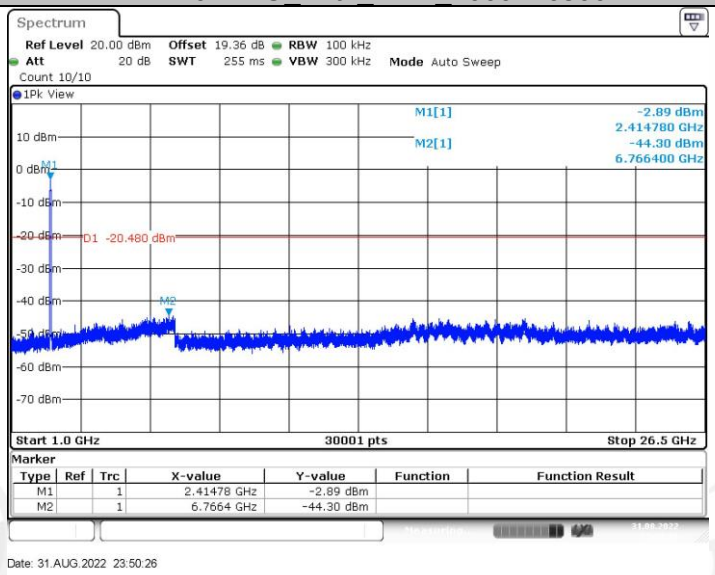

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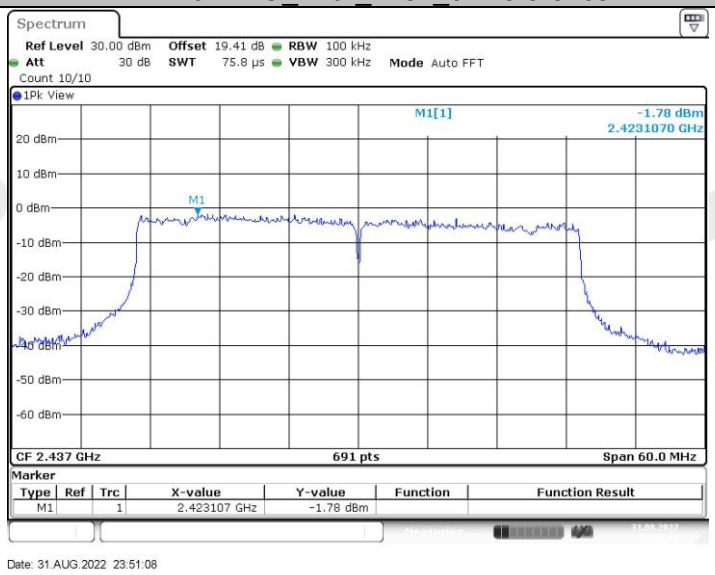

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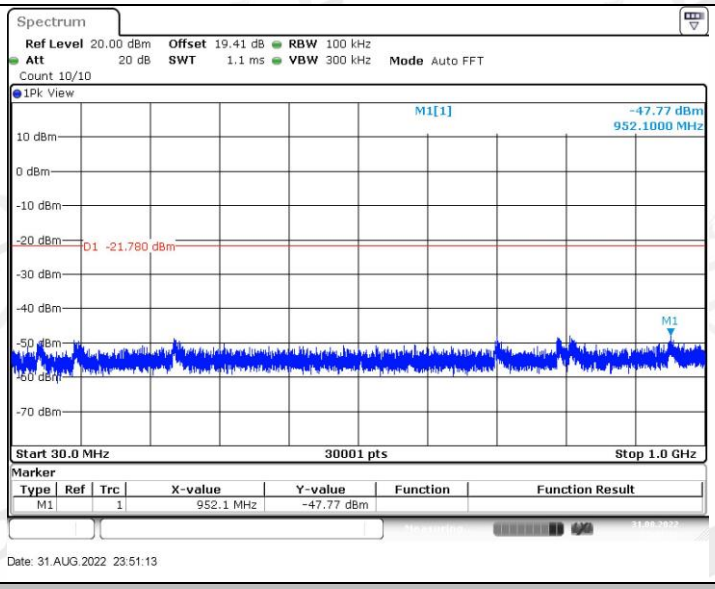

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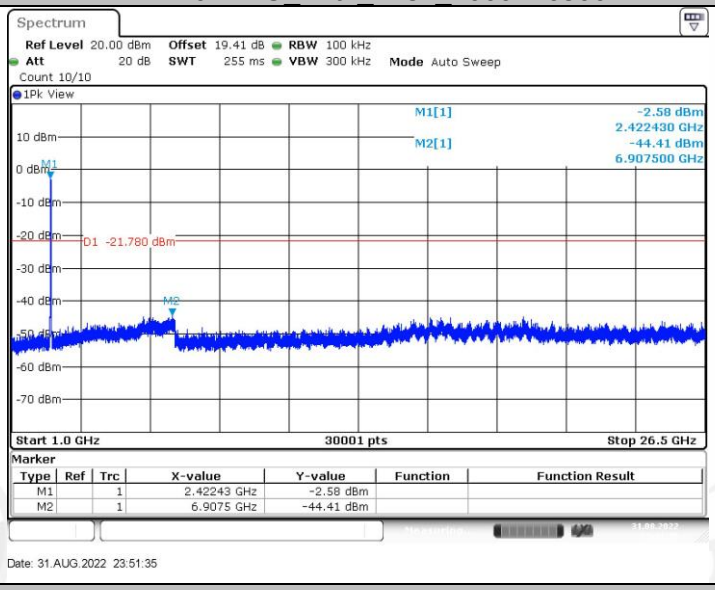

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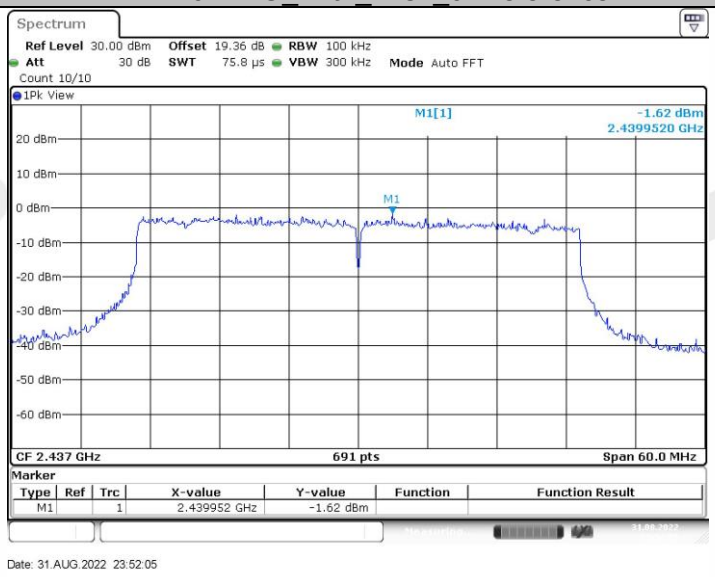

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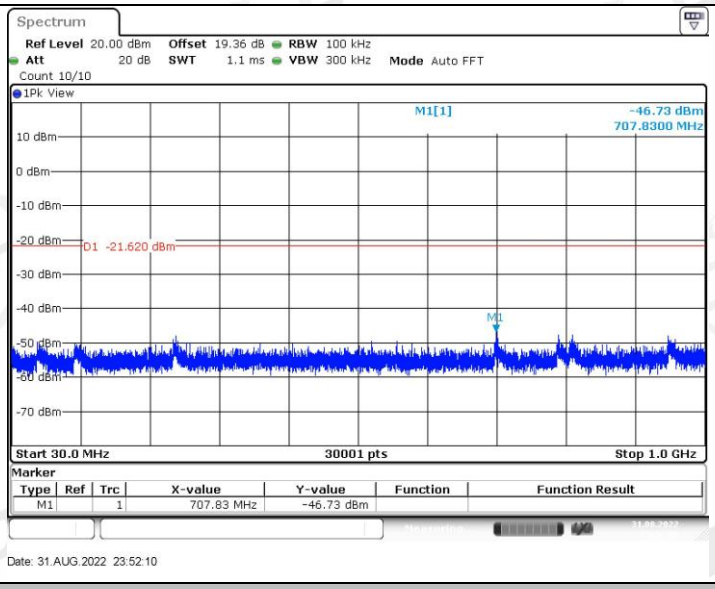

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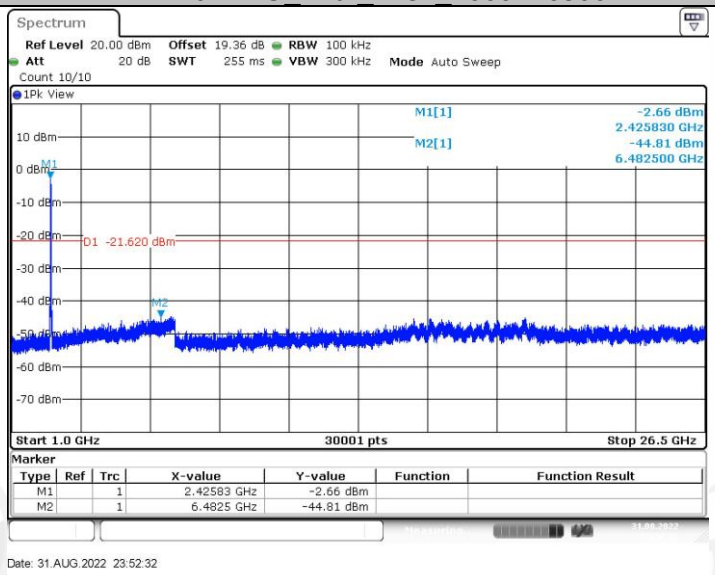

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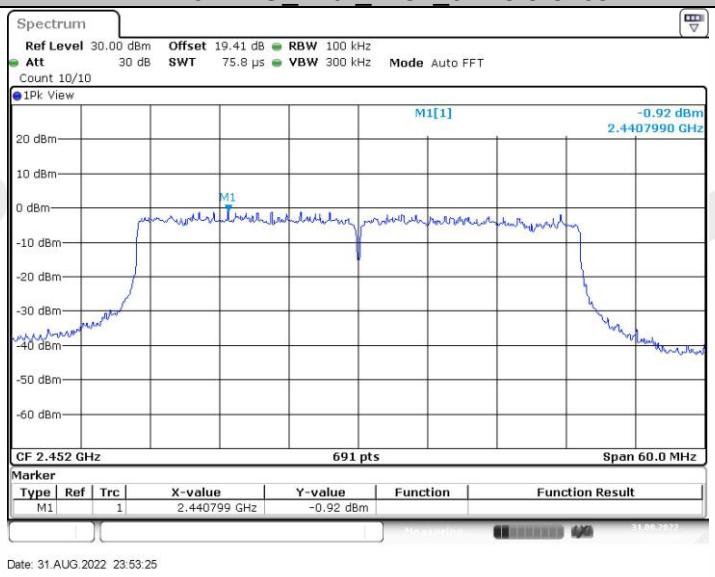

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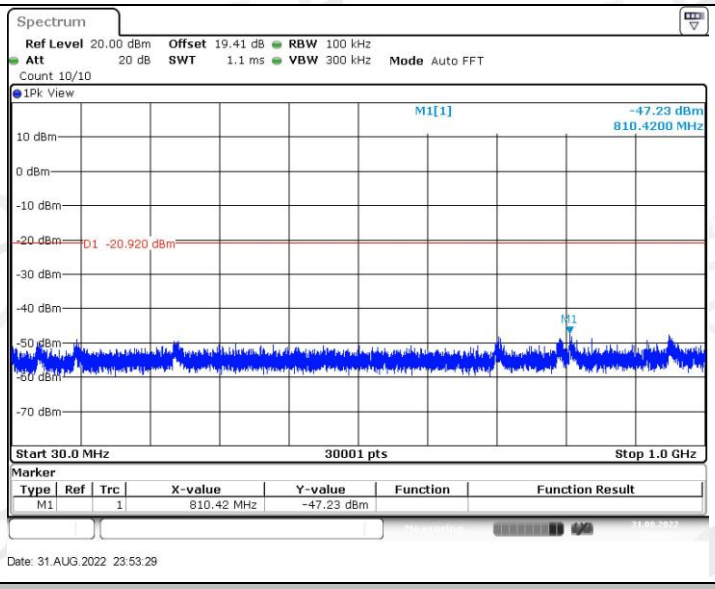

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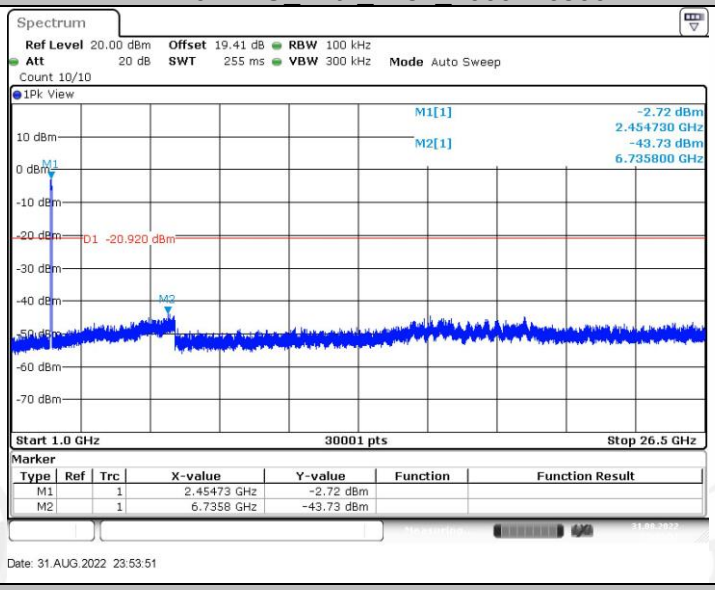

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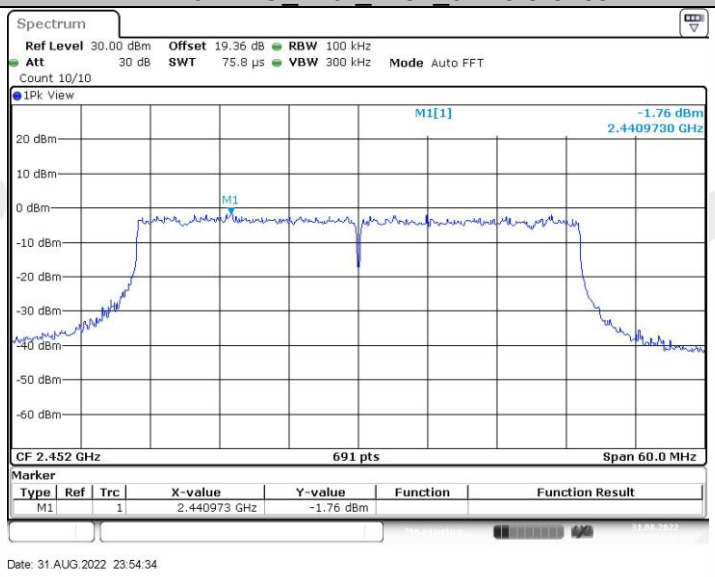

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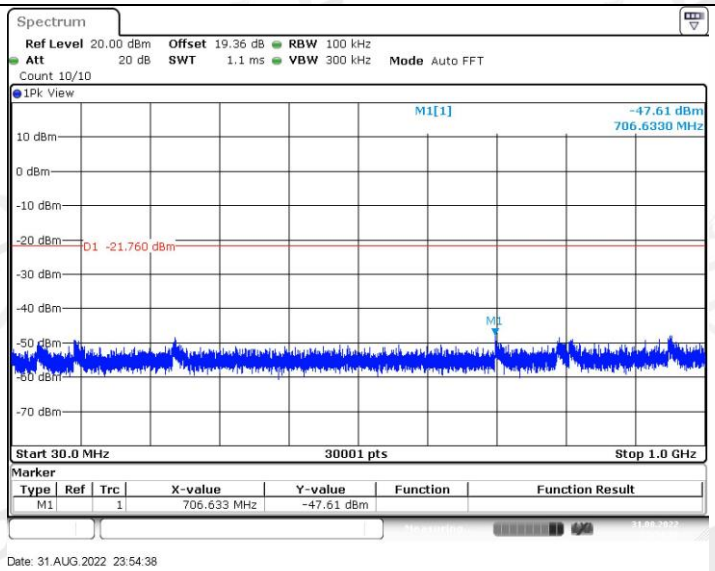

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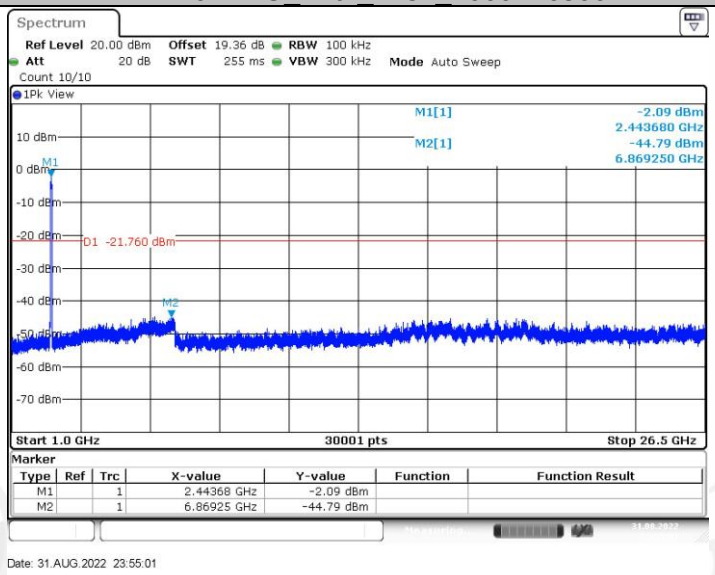
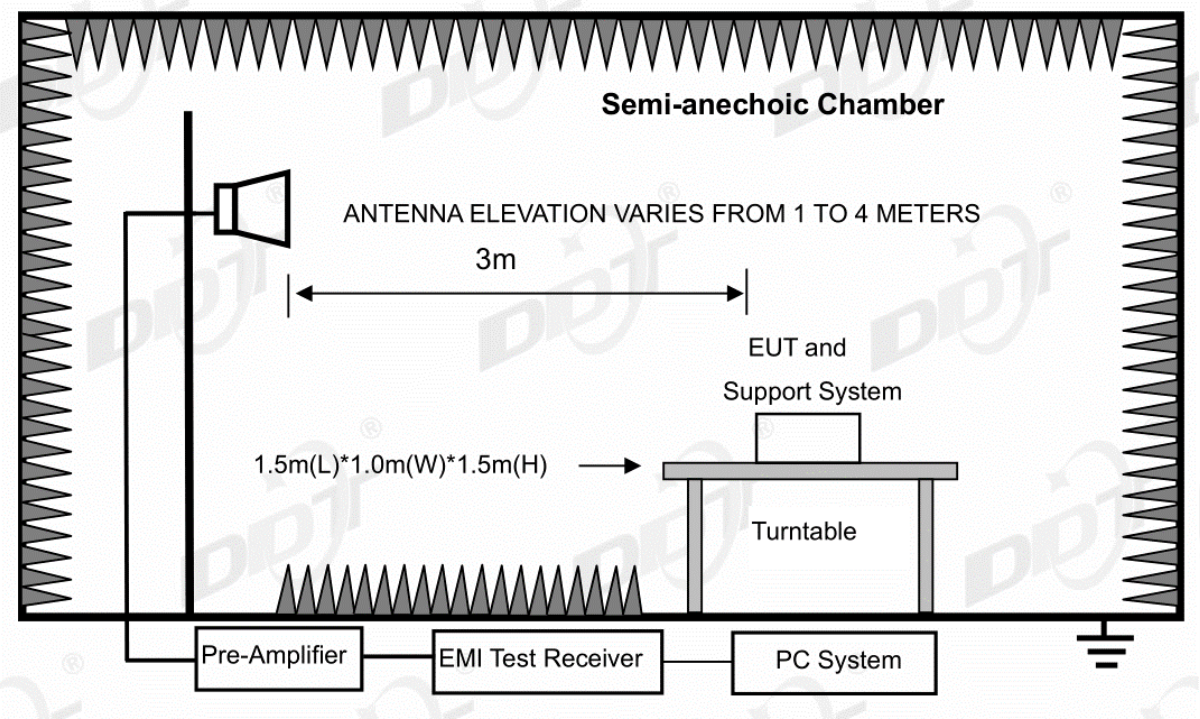


10. Radiated Band Edge Compliance

10.1. Block diagram of test setup



10.2. Limit

All restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400 MHz to 2483.5 MHz shall be at least 20dB below the fundamental emissions or comply with FCC 15.209 limits.

10.3. Test procedure

Same with clause 8.3 except change investigated frequency range from 2310 MHz to 2430 MHz and 2445 MHz to 2500 MHz, 2310 MHz to 2445 MHz and 2445 MHz to 2500 MHz.

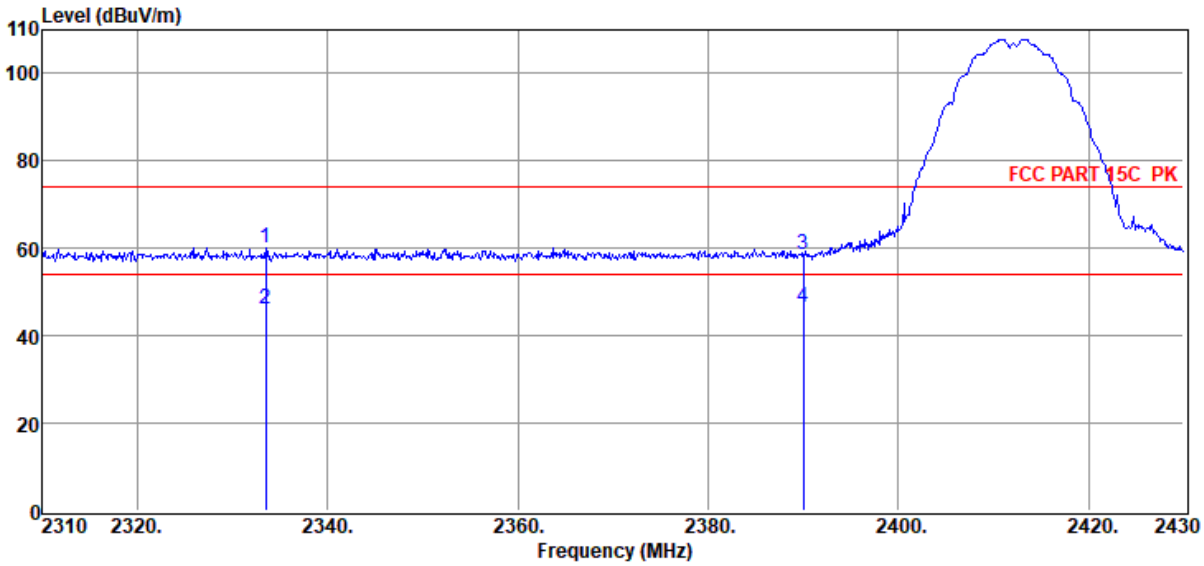
10.4. Test result

Pass. (See below detailed test result)

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11B 2412 ANT1		

Data: 1



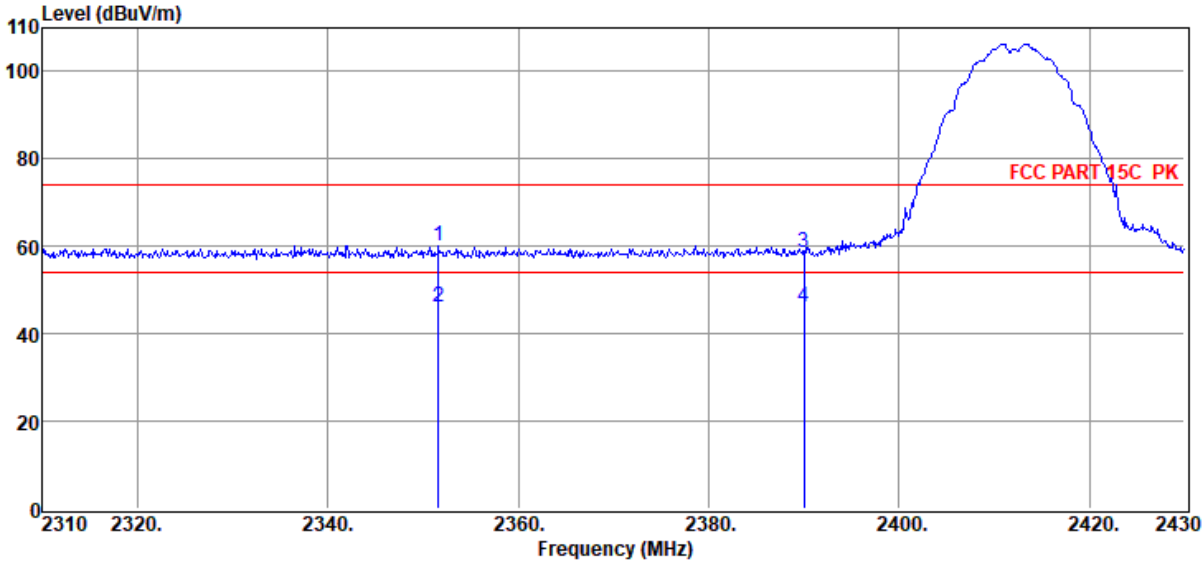
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2333.52	49.86	27.30	39.57	1.69	0.72	60.00	74.00	-14.00	Peak	HORIZONTAL
2	2333.52	36.10	27.30	39.57	1.69	0.72	46.24	54.00	-7.76	Average	HORIZONTAL
3	2390.04	48.36	27.40	39.60	1.71	0.72	58.59	74.00	-15.41	Peak	HORIZONTAL
4	2390.04	36.13	27.40	39.60	1.71	0.72	46.36	54.00	-7.64	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11B 2412 ANT1		

Data: 2



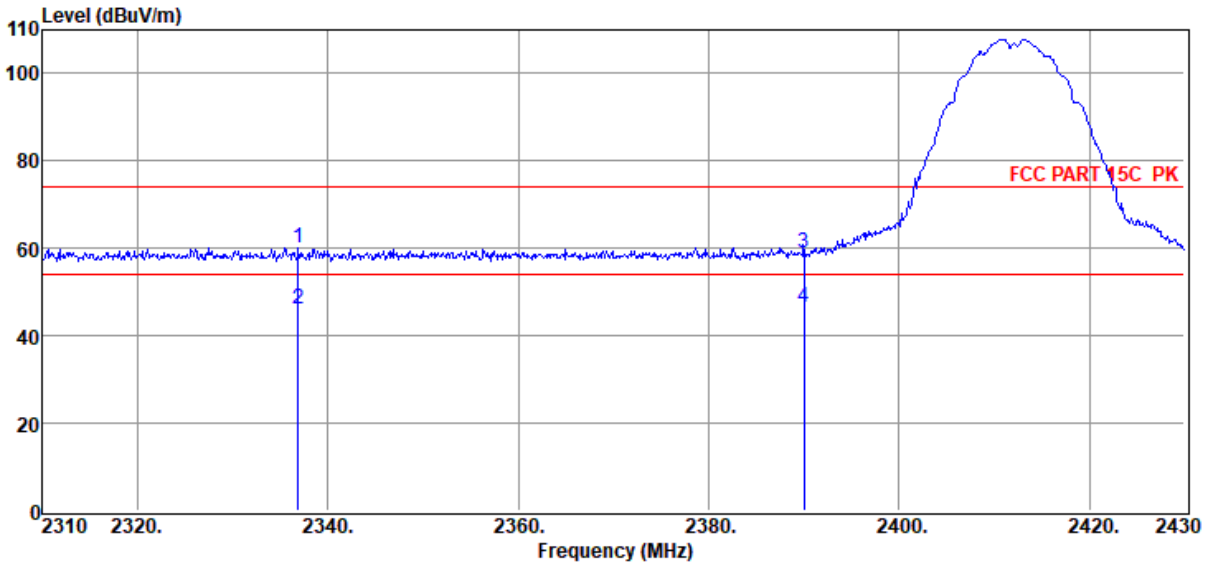
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2351.64	49.98	27.33	39.58	1.70	0.72	60.15	74.00	-13.85	Peak	VERTICAL
2	2351.64	35.88	27.33	39.58	1.70	0.72	46.05	54.00	-7.95	Average	VERTICAL
3	2390.04	48.42	27.40	39.60	1.71	0.72	58.65	74.00	-15.35	Peak	VERTICAL
4	2390.04	35.82	27.40	39.60	1.71	0.72	46.05	54.00	-7.95	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11B 2412 ANT2		

Data: 3



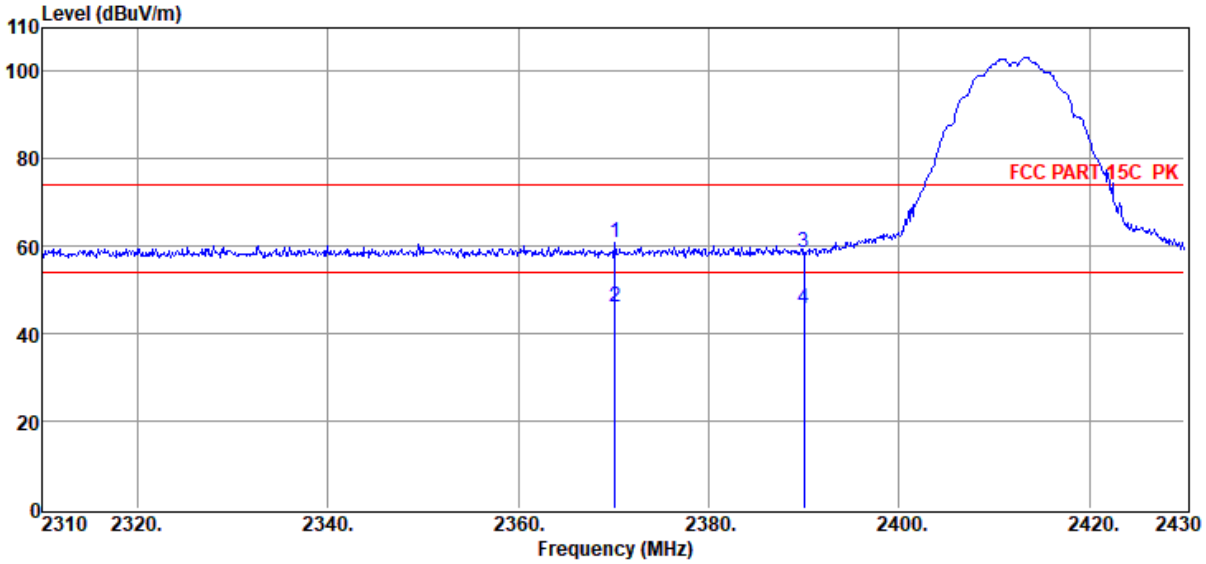
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2336.88	50.12	27.31	39.57	1.69	0.72	60.27	74.00	-13.73	Peak	HORIZONTAL
2	2336.88	35.88	27.31	39.57	1.69	0.72	46.03	54.00	-7.97	Average	HORIZONTAL
3	2390.04	48.84	27.40	39.60	1.71	0.72	59.07	74.00	-14.93	Peak	HORIZONTAL
4	2390.04	36.23	27.40	39.60	1.71	0.72	46.46	54.00	-7.54	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11B 2412 ANT2		

Data: 4



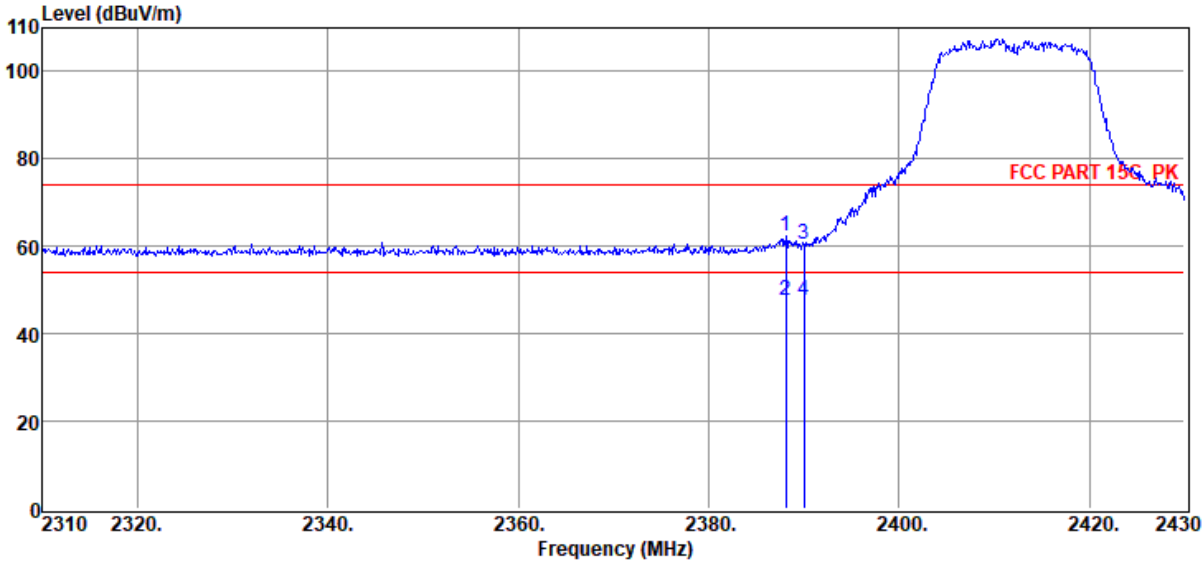
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2370.12	50.54	27.37	39.59	1.70	0.72	60.74	74.00	-13.26	Peak	VERTICAL
2	2370.12	36.03	27.37	39.59	1.70	0.72	46.23	54.00	-7.77	Average	VERTICAL
3	2390.04	48.53	27.40	39.60	1.71	0.72	58.76	74.00	-15.24	Peak	VERTICAL
4	2390.04	35.48	27.40	39.60	1.71	0.72	45.71	54.00	-8.29	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11G 2412 ANT1		

Data: 5



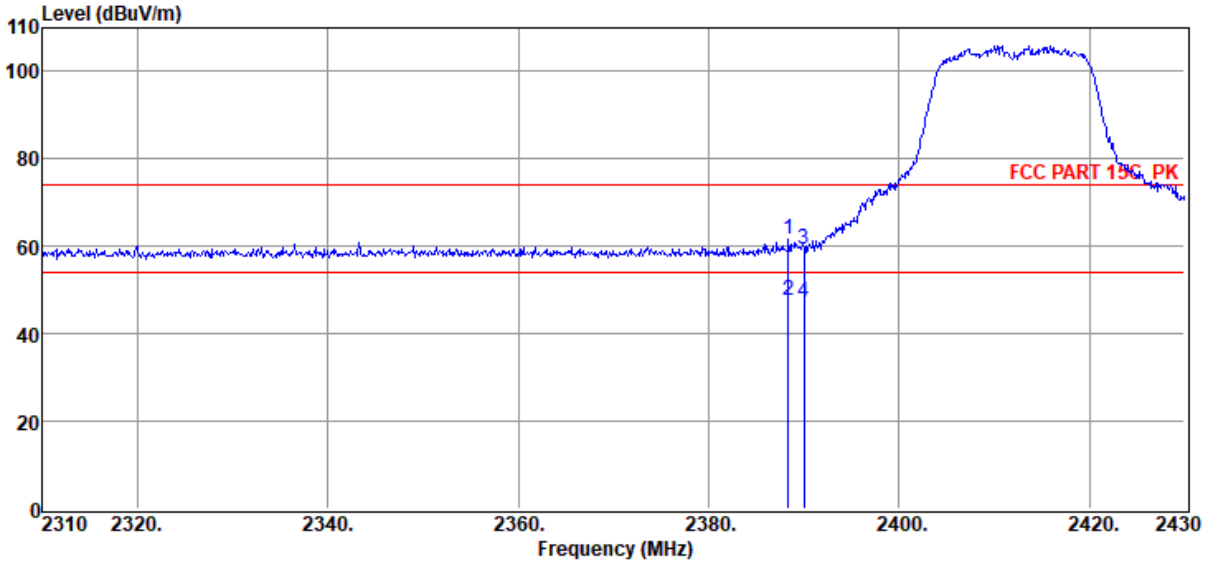
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2388.12	52.22	27.40	39.59	1.71	0.72	62.46	74.00	-11.54	Peak	HORIZONTAL
2	2388.12	37.52	27.40	39.59	1.71	0.72	47.76	54.00	-6.24	Average	HORIZONTAL
3	2390.04	50.26	27.40	39.60	1.71	0.72	60.49	74.00	-13.51	Peak	HORIZONTAL
4	2390.04	37.41	27.40	39.60	1.71	0.72	47.64	54.00	-6.36	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11G 2412 ANT1		

Data: 6



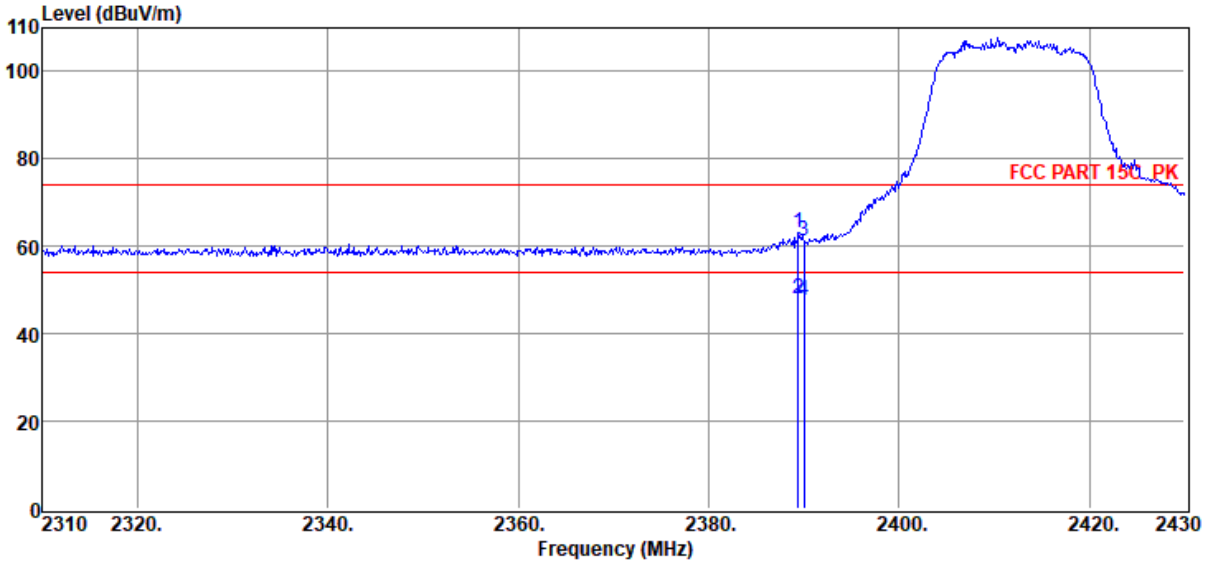
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2388.36	51.28	27.40	39.59	1.71	0.72	61.52	74.00	-12.48	Peak	VERTICAL
2	2388.36	37.36	27.40	39.59	1.71	0.72	47.60	54.00	-6.40	Average	VERTICAL
3	2390.04	49.02	27.40	39.60	1.71	0.72	59.25	74.00	-14.75	Peak	VERTICAL
4	2390.04	37.16	27.40	39.60	1.71	0.72	47.39	54.00	-6.61	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11G 2412 ANT2		

Data: 7



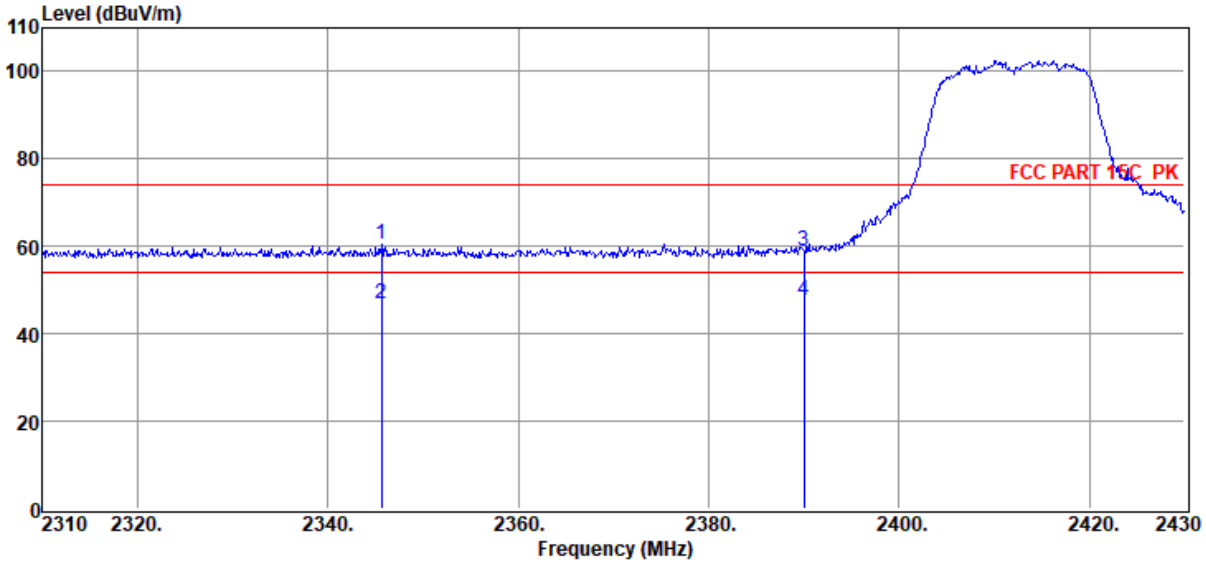
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2389.44	52.97	27.40	39.59	1.71	0.72	63.21	74.00	-10.79	Peak	HORIZONTAL
2	2389.44	37.69	27.40	39.59	1.71	0.72	47.93	54.00	-6.07	Average	HORIZONTAL
3	2390.04	51.19	27.40	39.60	1.71	0.72	61.42	74.00	-12.58	Peak	HORIZONTAL
4	2390.04	37.53	27.40	39.60	1.71	0.72	47.76	54.00	-6.24	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11G 2412 ANT2		

Data: 8



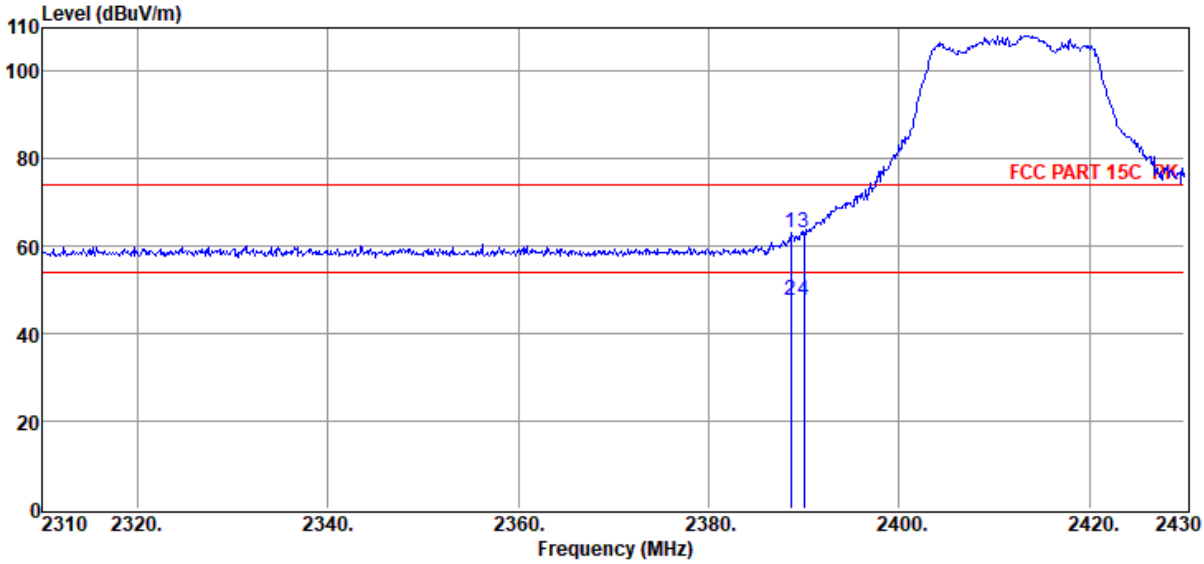
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2345.64	50.48	27.32	39.57	1.70	0.72	60.65	74.00	-13.35	Peak	VERTICAL
2	2345.64	36.78	27.32	39.57	1.70	0.72	46.95	54.00	-7.05	Average	VERTICAL
3	2390.04	48.85	27.40	39.60	1.71	0.72	59.08	74.00	-14.92	Peak	VERTICAL
4	2390.04	37.33	27.40	39.60	1.71	0.72	47.56	54.00	-6.44	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11N20 2412		

Data: 9



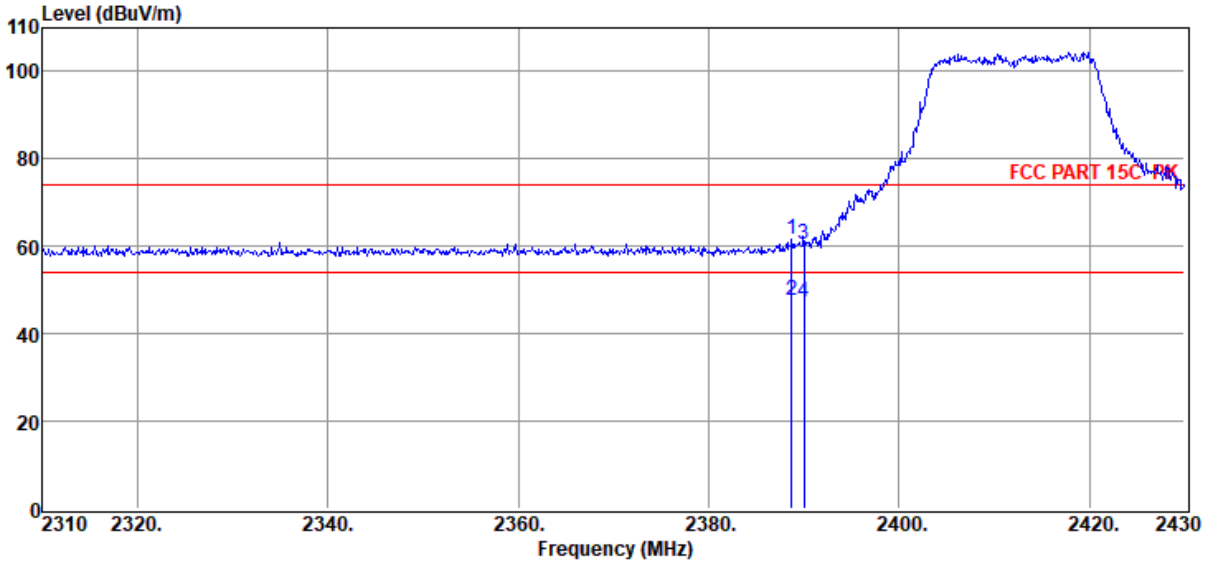
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2388.60	52.73	27.40	39.59	1.71	0.72	62.97	74.00	-11.03	Peak	HORIZONTAL
2	2388.60	37.22	27.40	39.59	1.71	0.72	47.46	54.00	-6.54	Average	HORIZONTAL
3	2390.04	52.71	27.40	39.60	1.71	0.72	62.94	74.00	-11.06	Peak	HORIZONTAL
4	2390.04	37.28	27.40	39.60	1.71	0.72	47.51	54.00	-6.49	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11N20 2412		

Data: 10



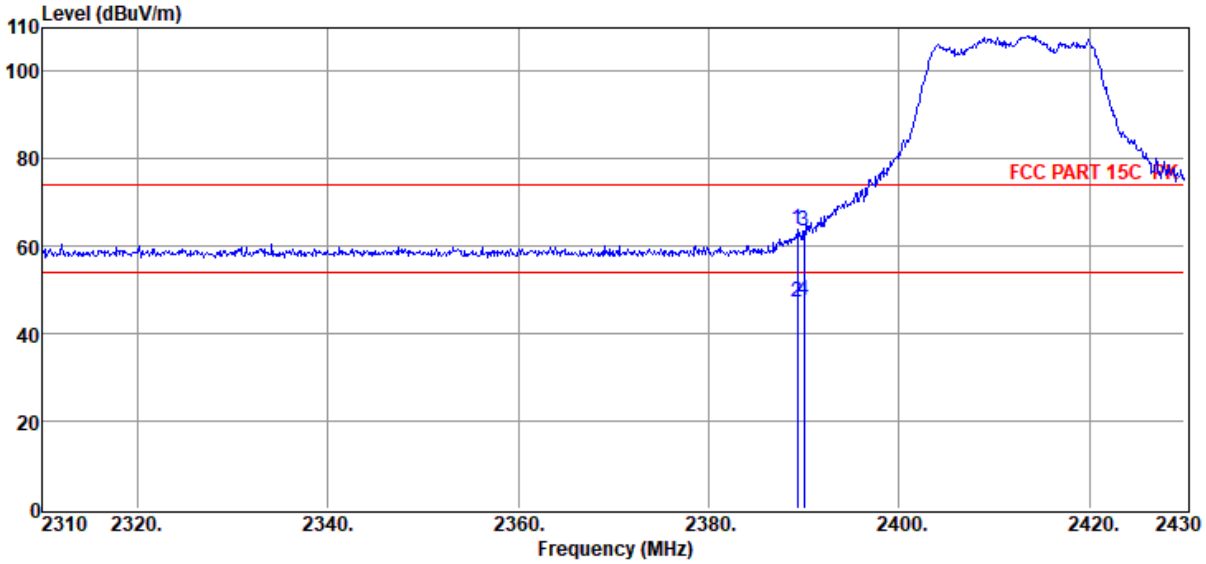
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2388.72	51.29	27.40	39.59	1.71	0.72	61.53	74.00	-12.47	Peak	VERTICAL
2	2388.72	37.22	27.40	39.59	1.71	0.72	47.46	54.00	-6.54	Average	VERTICAL
3	2390.04	50.12	27.40	39.60	1.71	0.72	60.35	74.00	-13.65	Peak	VERTICAL
4	2390.04	37.13	27.40	39.60	1.71	0.72	47.36	54.00	-6.64	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11AX20 2412		

Data: 11



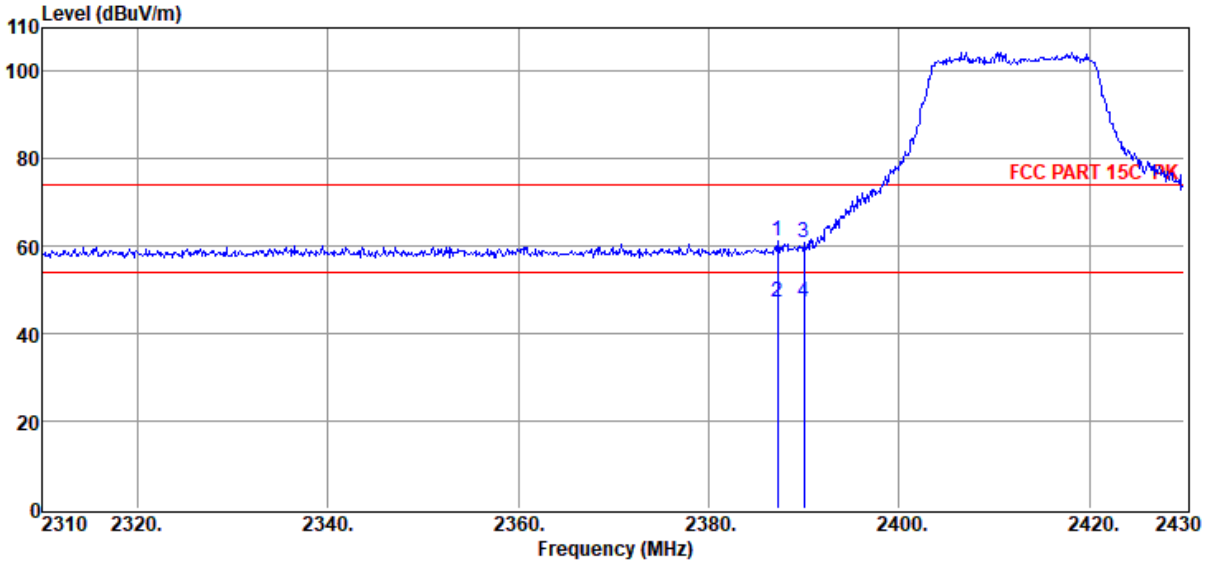
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2389.32	53.65	27.40	39.59	1.71	0.72	63.89	74.00	-10.11	Peak	HORIZONTAL
2	2389.32	37.18	27.40	39.59	1.71	0.72	47.42	54.00	-6.58	Average	HORIZONTAL
3	2390.04	53.25	27.40	39.60	1.71	0.72	63.48	74.00	-10.52	Peak	HORIZONTAL
4	2390.04	37.22	27.40	39.60	1.71	0.72	47.45	54.00	-6.55	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11AX20 2412		

Data: 12



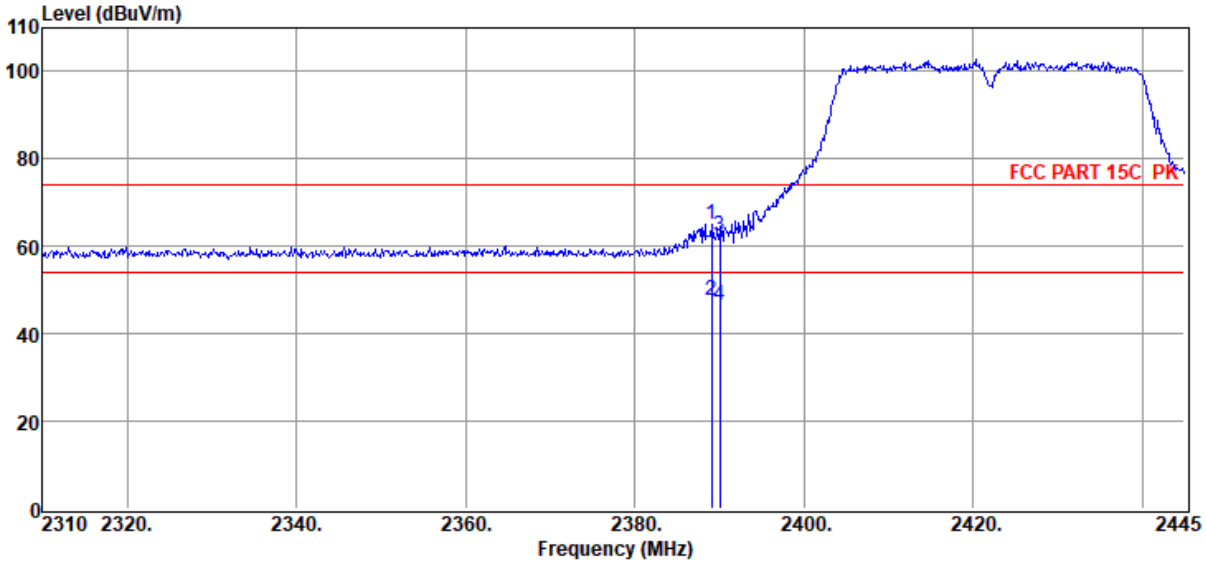
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2387.28	51.19	27.40	39.59	1.71	0.72	61.43	74.00	-12.57	Peak	VERTICAL
2	2387.28	37.07	27.40	39.59	1.71	0.72	47.31	54.00	-6.69	Average	VERTICAL
3	2390.04	50.56	27.40	39.60	1.71	0.72	60.79	74.00	-13.21	Peak	VERTICAL
4	2390.04	37.07	27.40	39.60	1.71	0.72	47.30	54.00	-6.70	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11N40 2422		

Data: 13



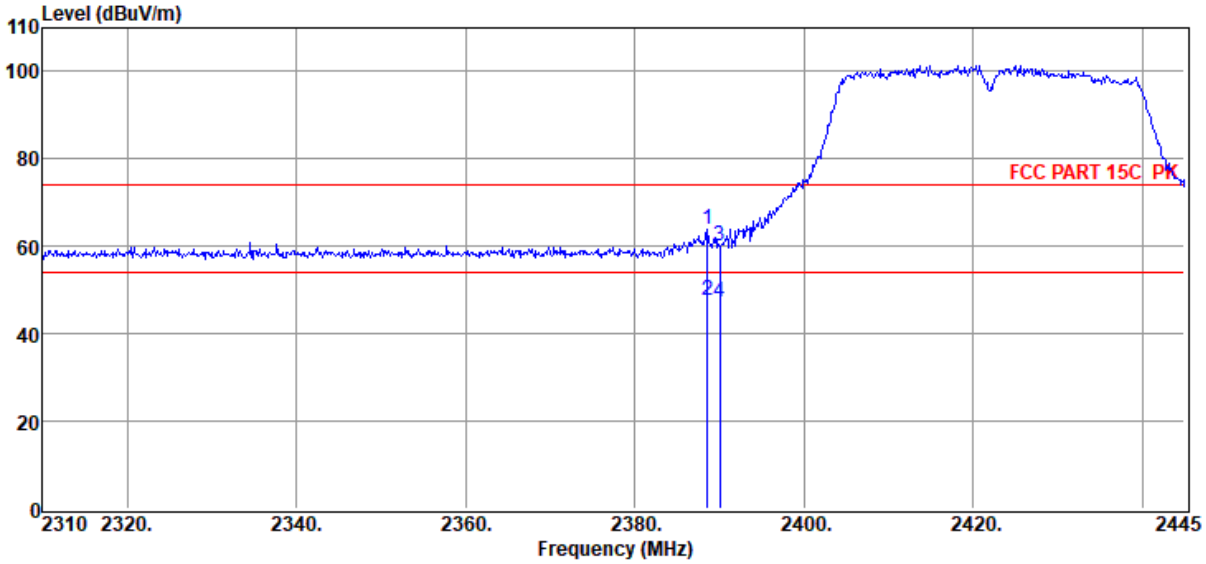
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2389.11	54.80	27.40	39.59	1.71	0.72	65.04	74.00	-8.96	Peak	HORIZONTAL
2	2389.11	37.41	27.40	39.59	1.71	0.72	47.65	54.00	-6.35	Average	HORIZONTAL
3	2390.06	52.05	27.40	39.60	1.71	0.72	62.28	74.00	-11.72	Peak	HORIZONTAL
4	2390.06	36.33	27.40	39.60	1.71	0.72	46.56	54.00	-7.44	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11N40 2422		

Data: 14



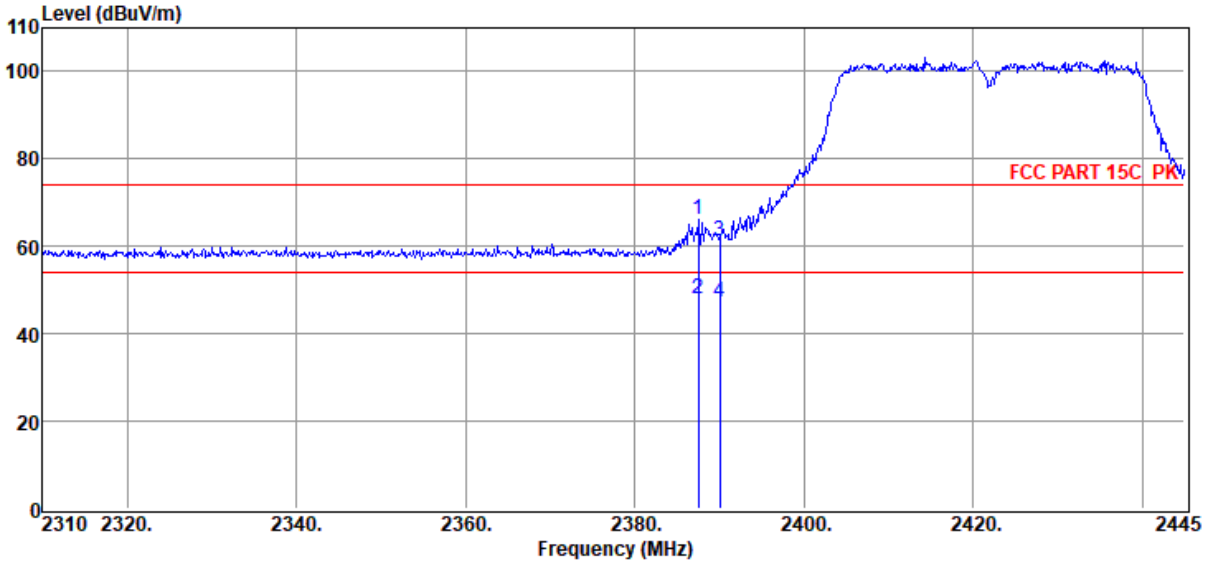
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2388.57	53.56	27.40	39.59	1.71	0.72	63.80	74.00	-10.20	Peak	VERTICAL
2	2388.57	37.46	27.40	39.59	1.71	0.72	47.70	54.00	-6.30	Average	VERTICAL
3	2390.06	49.76	27.40	39.60	1.71	0.72	59.99	74.00	-14.01	Peak	VERTICAL
4	2390.06	36.89	27.40	39.60	1.71	0.72	47.12	54.00	-6.88	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11AX40 2422		

Data: 15



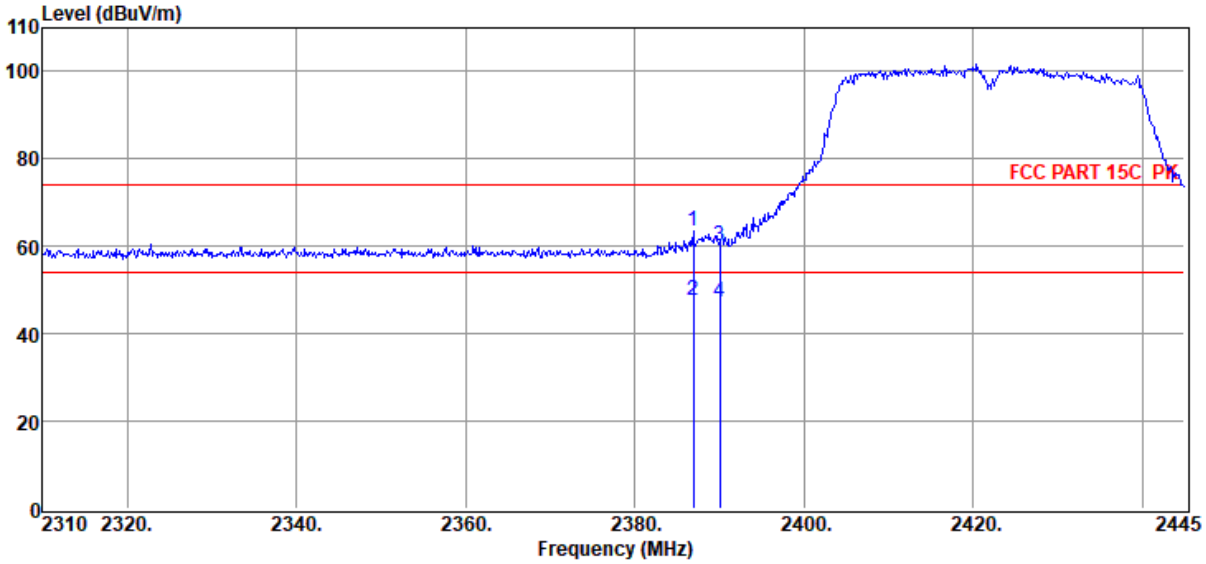
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2387.49	55.96	27.40	39.59	1.71	0.72	66.20	74.00	-7.80	Peak	HORIZONTAL
2	2387.49	37.64	27.40	39.59	1.71	0.72	47.88	54.00	-6.12	Average	HORIZONTAL
3	2390.06	50.95	27.40	39.60	1.71	0.72	61.18	74.00	-12.82	Peak	HORIZONTAL
4	2390.06	37.12	27.40	39.60	1.71	0.72	47.35	54.00	-6.65	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11AX40 2422		

Data: 16



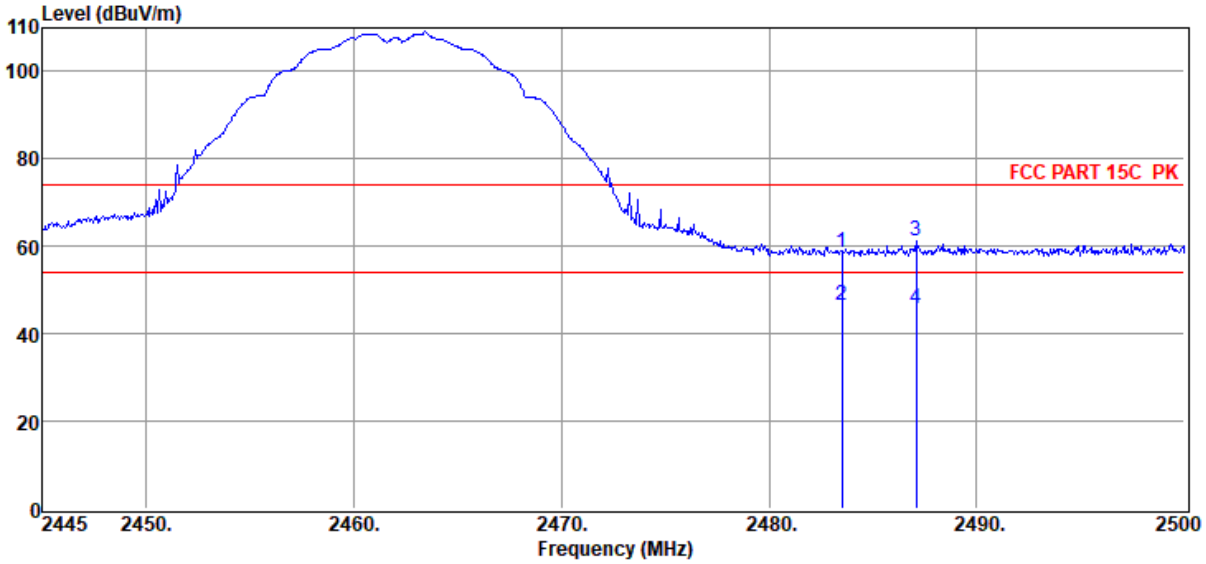
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2386.95	53.21	27.40	39.59	1.71	0.72	63.45	74.00	-10.55	Peak	VERTICAL
2	2386.95	37.27	27.40	39.59	1.71	0.72	47.51	54.00	-6.49	Average	VERTICAL
3	2390.06	49.80	27.40	39.60	1.71	0.72	60.03	74.00	-13.97	Peak	VERTICAL
4	2390.06	36.98	27.40	39.60	1.71	0.72	47.21	54.00	-6.79	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11B 2462 ANT1		

Data: 17



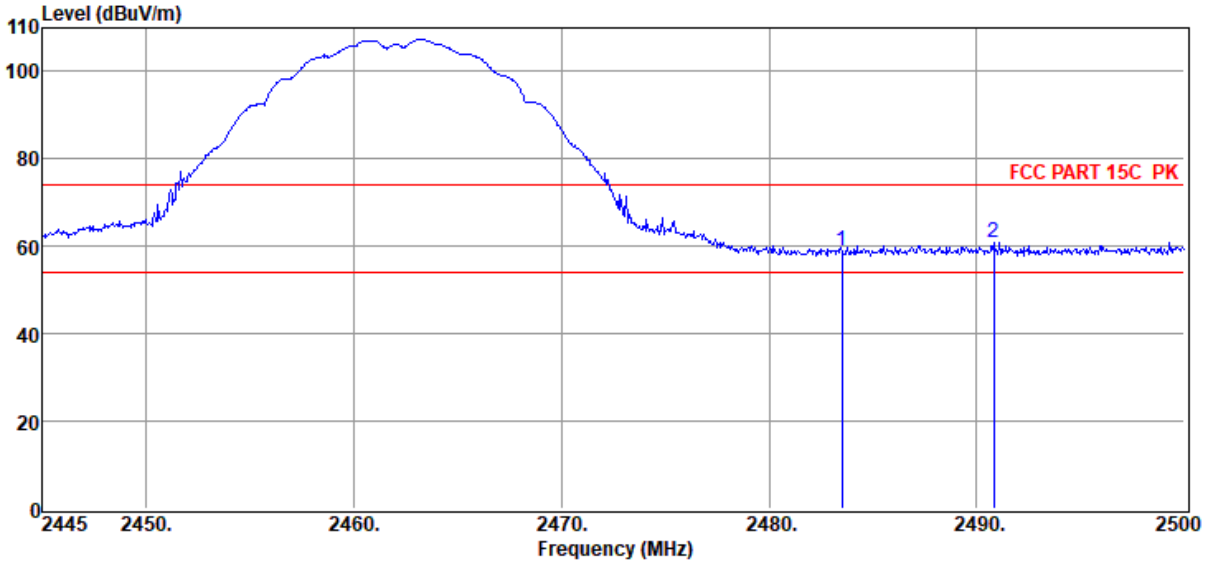
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	48.08	27.57	39.64	1.74	0.73	58.48	74.00	-15.52	Peak	HORIZONTAL
2	2483.50	35.95	27.57	39.64	1.74	0.73	46.35	54.00	-7.65	Average	HORIZONTAL
3	2487.08	50.77	27.58	39.64	1.74	0.73	61.18	74.00	-12.82	Peak	HORIZONTAL
4	2487.08	35.31	27.58	39.64	1.74	0.73	45.72	54.00	-8.28	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11B 2462 ANT1		

Data: 18



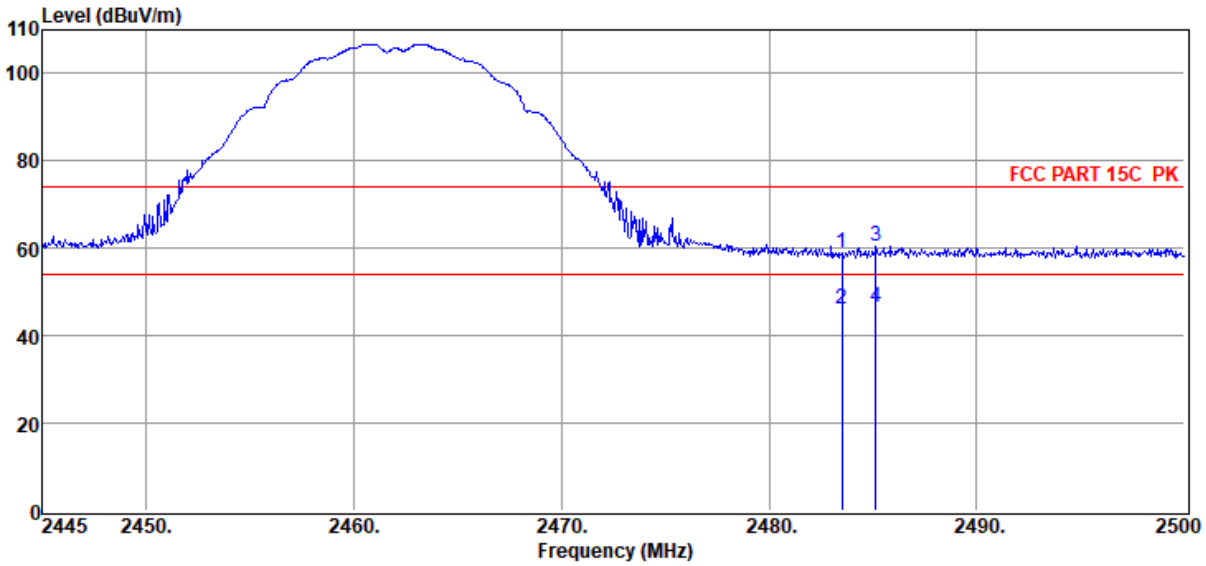
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	48.49	27.57	39.64	1.74	0.73	58.89	74.00	-15.11	Peak	VERTICAL
2	2490.82	50.51	27.58	39.65	1.74	0.73	60.91	74.00	-13.09	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11B 2462 ANT2		

Data: 19



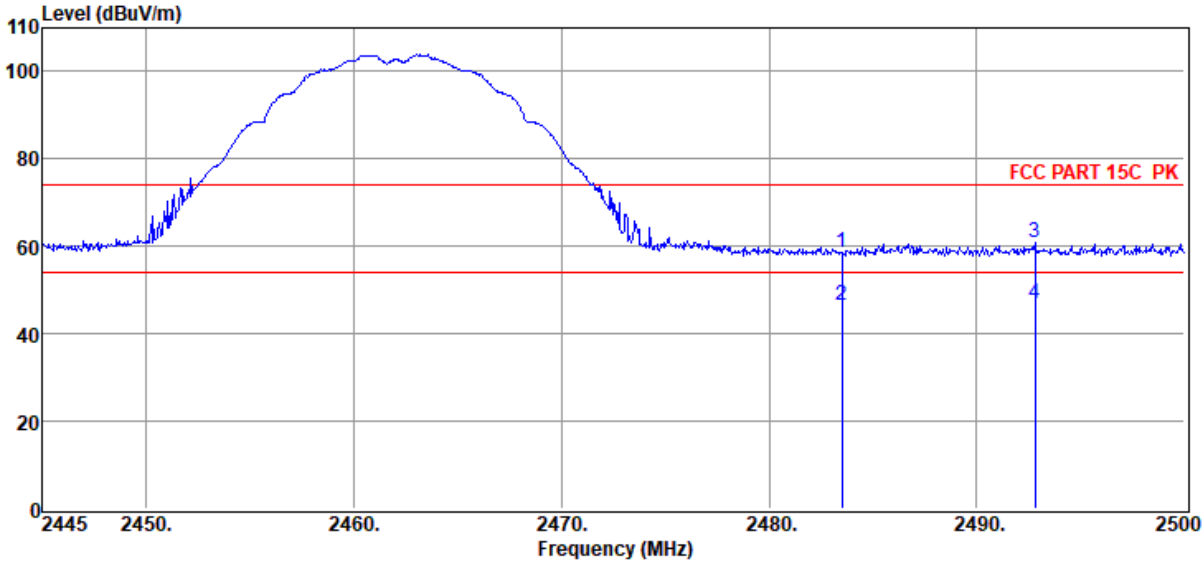
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	48.59	27.57	39.64	1.74	0.73	58.99	74.00	-15.01	Peak	HORIZONTAL
2	2483.50	35.88	27.57	39.64	1.74	0.73	46.28	54.00	-7.72	Average	HORIZONTAL
3	2485.15	50.07	27.57	39.64	1.74	0.73	60.47	74.00	-13.53	Peak	HORIZONTAL
4	2485.15	36.11	27.57	39.64	1.74	0.73	46.51	54.00	-7.49	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11B 2462 ANT2		

Data: 20



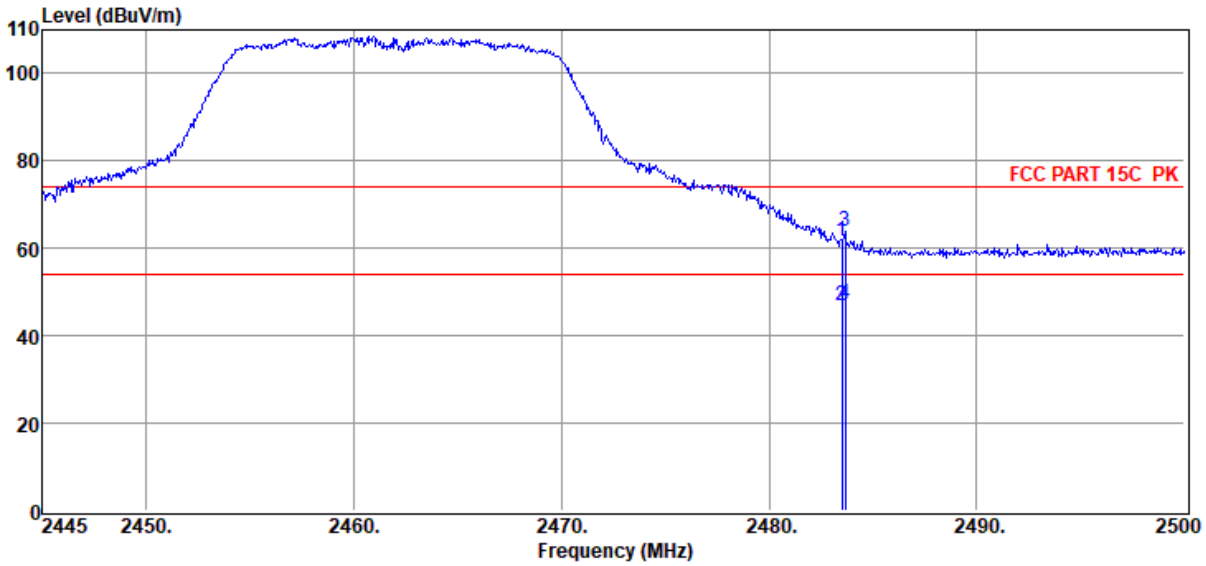
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	48.04	27.57	39.64	1.74	0.73	58.44	74.00	-15.56	Peak	VERTICAL
2	2483.50	36.22	27.57	39.64	1.74	0.73	46.62	54.00	-7.38	Average	VERTICAL
3	2492.80	50.27	27.59	39.65	1.74	0.73	60.68	74.00	-13.32	Peak	VERTICAL
4	2492.80	36.52	27.59	39.65	1.74	0.73	46.93	54.00	-7.07	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11G 2462 ANT1		

Data: 21



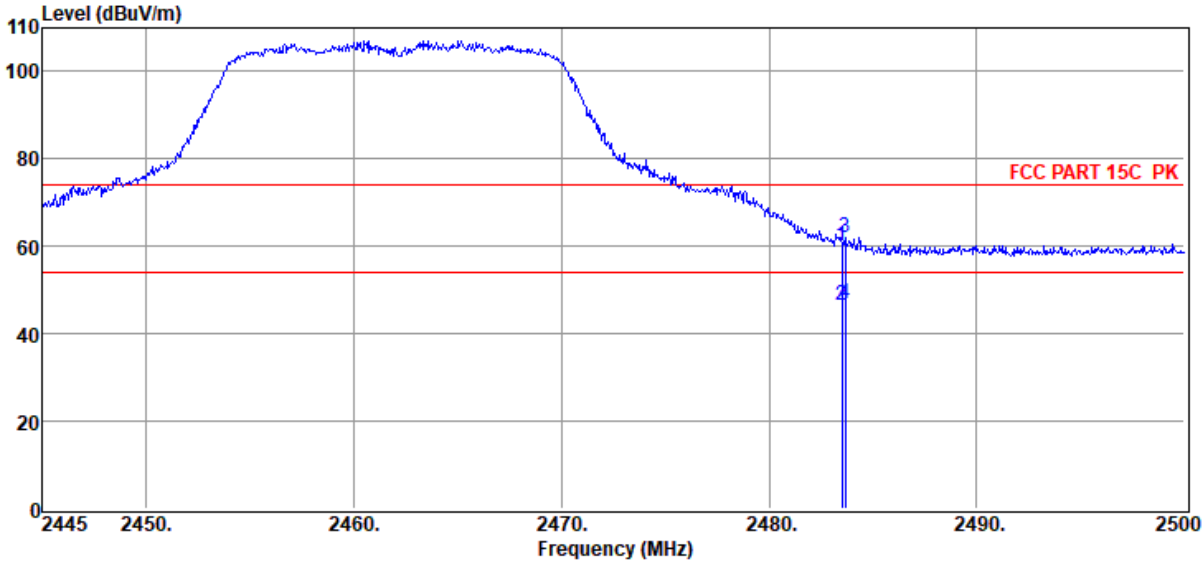
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	51.20	27.57	39.64	1.74	0.73	61.60	74.00	-12.40	Peak	HORIZONTAL
2	2483.50	36.44	27.57	39.64	1.74	0.73	46.84	54.00	-7.16	Average	HORIZONTAL
3	2483.67	53.38	27.57	39.64	1.74	0.73	63.78	74.00	-10.22	Peak	HORIZONTAL
4	2483.67	36.85	27.57	39.64	1.74	0.73	47.25	54.00	-6.75	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11G 2462 ANT1		

Data: 22



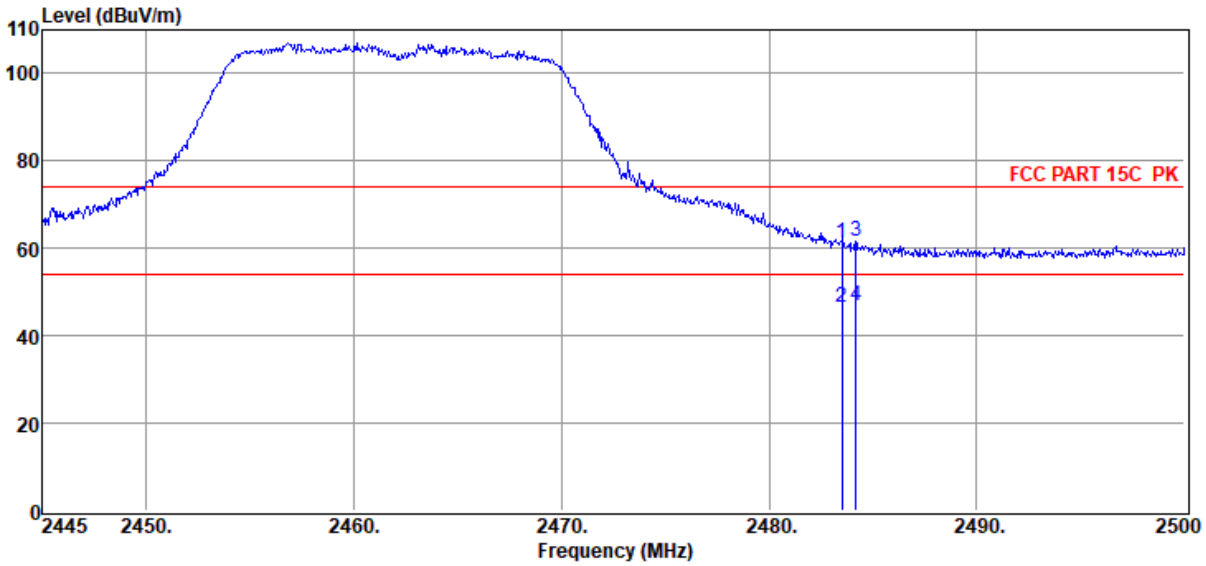
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	49.57	27.57	39.64	1.74	0.73	59.97	74.00	-14.03	Peak	VERTICAL
2	2483.50	36.07	27.57	39.64	1.74	0.73	46.47	54.00	-7.53	Average	VERTICAL
3	2483.67	51.71	27.57	39.64	1.74	0.73	62.11	74.00	-11.89	Peak	VERTICAL
4	2483.67	36.32	27.57	39.64	1.74	0.73	46.72	54.00	-7.28	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11G 2462 ANT2		

Data: 23



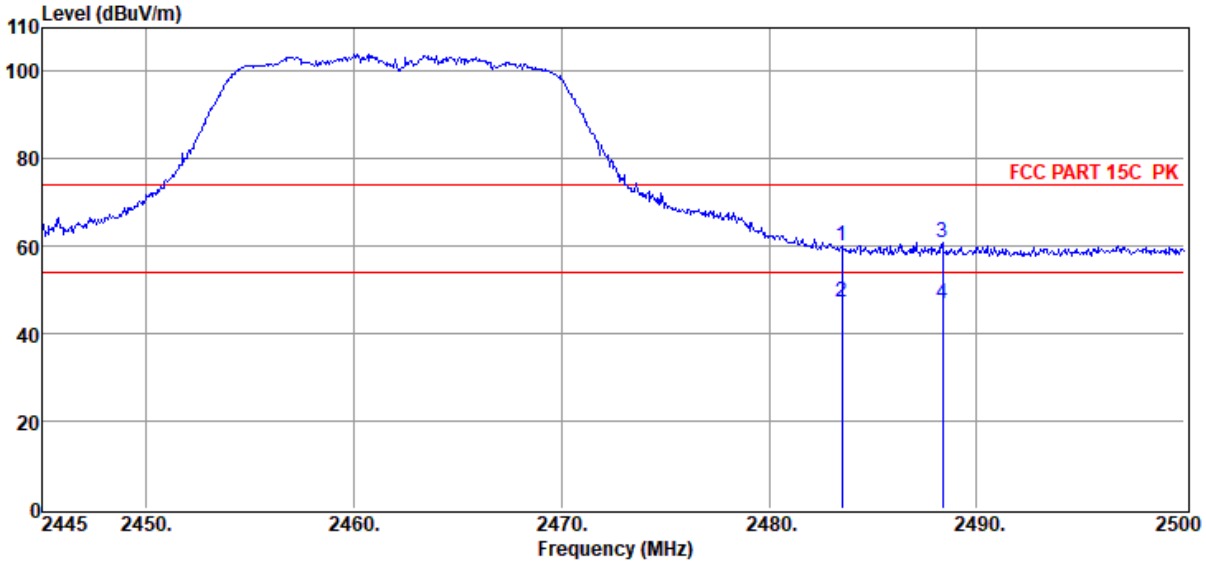
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	50.72	27.57	39.64	1.74	0.73	61.12	74.00	-12.88	Peak	HORIZONTAL
2	2483.50	36.25	27.57	39.64	1.74	0.73	46.65	54.00	-7.35	Average	HORIZONTAL
3	2484.16	51.11	27.57	39.64	1.74	0.73	61.51	74.00	-12.49	Peak	HORIZONTAL
4	2484.16	36.45	27.57	39.64	1.74	0.73	46.85	54.00	-7.15	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11G 2462 ANT2		

Data: 24



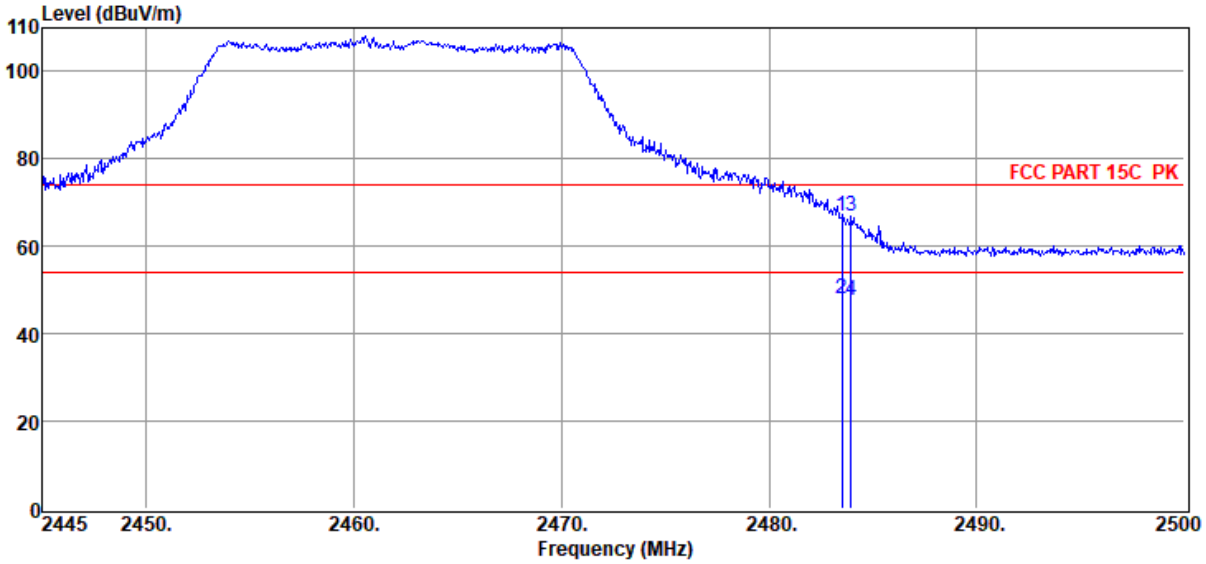
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	49.63	27.57	39.64	1.74	0.73	60.03	74.00	-13.97	Peak	VERTICAL
2	2483.50	36.74	27.57	39.64	1.74	0.73	47.14	54.00	-6.86	Average	VERTICAL
3	2488.34	50.63	27.58	39.64	1.74	0.73	61.04	74.00	-12.96	Peak	VERTICAL
4	2488.34	36.52	27.58	39.64	1.74	0.73	46.93	54.00	-7.07	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11N20 2462		

Data: 25



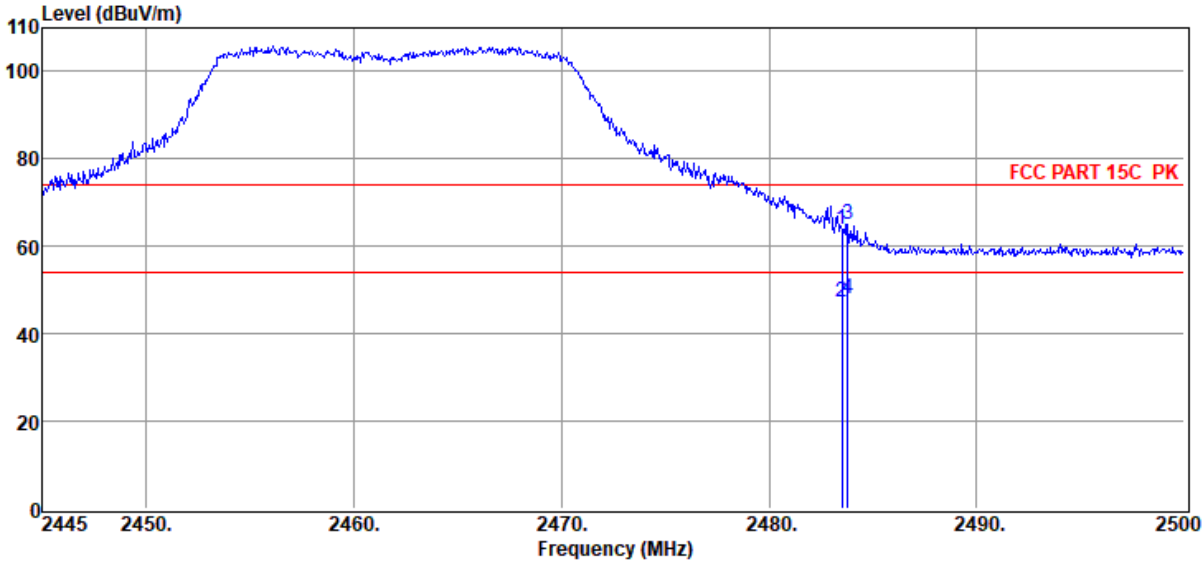
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	56.66	27.57	39.64	1.74	0.73	67.06	74.00	-6.94	Peak	HORIZONTAL
2	2483.50	37.53	27.57	39.64	1.74	0.73	47.93	54.00	-6.07	Average	HORIZONTAL
3	2483.94	56.33	27.57	39.64	1.74	0.73	66.73	74.00	-7.27	Peak	HORIZONTAL
4	2483.94	37.42	27.57	39.64	1.74	0.73	47.82	54.00	-6.18	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11N20 2462		

Data: 26



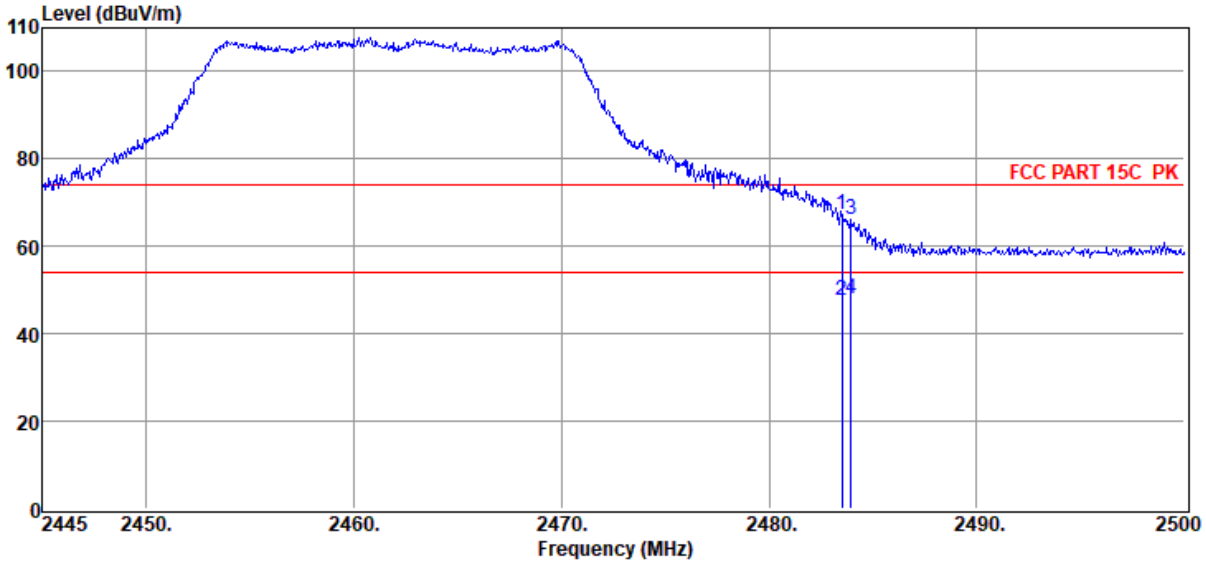
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	53.60	27.57	39.64	1.74	0.73	64.00	74.00	-10.00	Peak	VERTICAL
2	2483.50	36.88	27.57	39.64	1.74	0.73	47.28	54.00	-6.72	Average	VERTICAL
3	2483.78	54.62	27.57	39.64	1.74	0.73	65.02	74.00	-8.98	Peak	VERTICAL
4	2483.78	37.54	27.57	39.64	1.74	0.73	47.94	54.00	-6.06	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11AX20 2462		

Data: 27



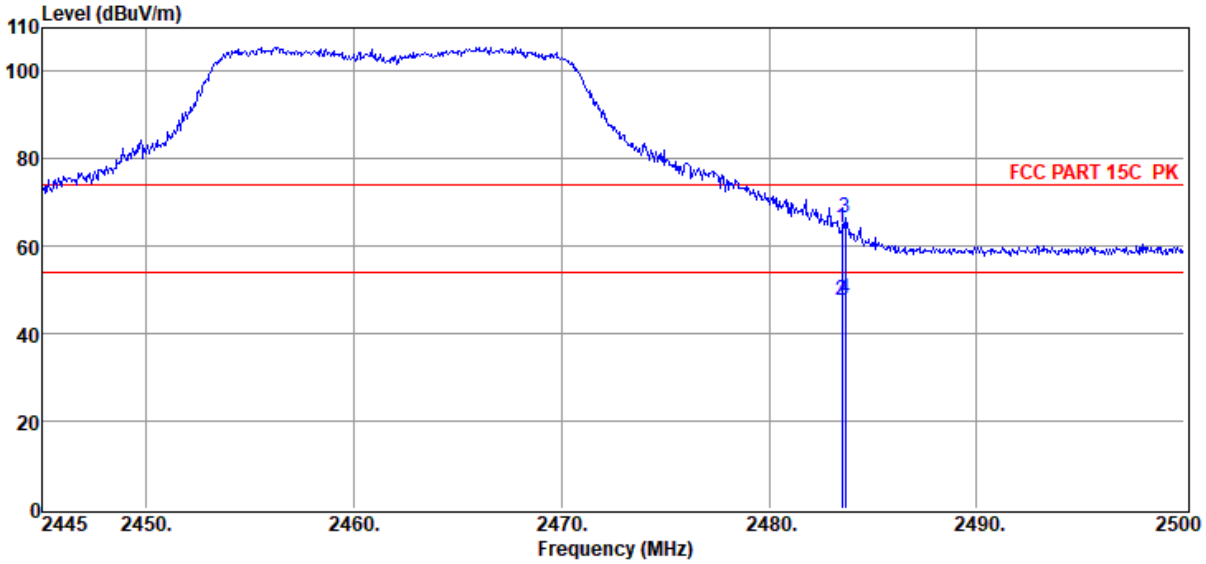
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	56.88	27.57	39.64	1.74	0.73	67.28	74.00	-6.72	Peak	HORIZONTAL
2	2483.50	37.38	27.57	39.64	1.74	0.73	47.78	54.00	-6.22	Average	HORIZONTAL
3	2483.94	55.59	27.57	39.64	1.74	0.73	65.99	74.00	-8.01	Peak	HORIZONTAL
4	2483.94	37.46	27.57	39.64	1.74	0.73	47.86	54.00	-6.14	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11AX20 2462		

Data: 28



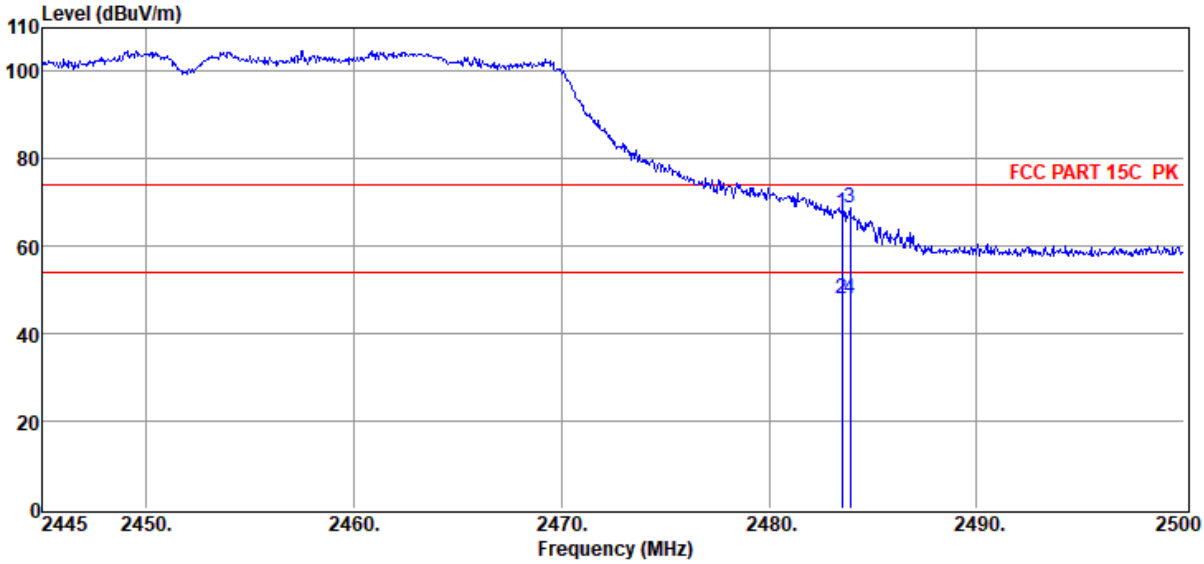
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	53.80	27.57	39.64	1.74	0.73	64.20	74.00	-9.80	Peak	VERTICAL
2	2483.50	37.22	27.57	39.64	1.74	0.73	47.62	54.00	-6.38	Average	VERTICAL
3	2483.67	55.95	27.57	39.64	1.74	0.73	66.35	74.00	-7.65	Peak	VERTICAL
4	2483.67	37.49	27.57	39.64	1.74	0.73	47.89	54.00	-6.11	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11N40 2452		

Data: 29



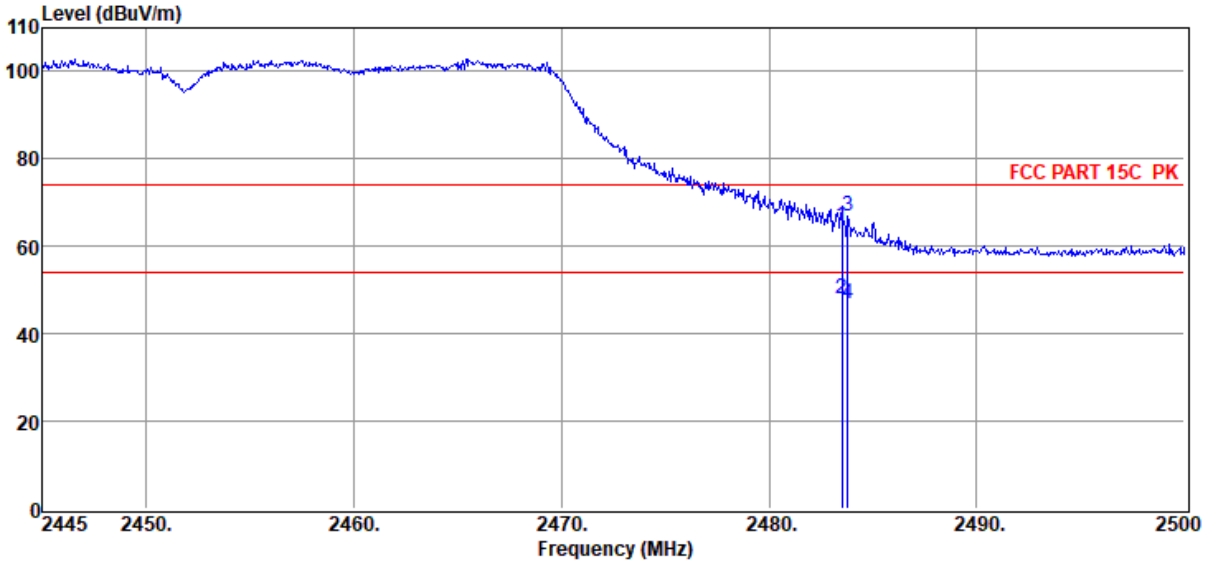
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	57.29	27.57	39.64	1.74	0.73	67.69	74.00	-6.31	Peak	HORIZONTAL
2	2483.50	37.47	27.57	39.64	1.74	0.73	47.87	54.00	-6.13	Average	HORIZONTAL
3	2483.89	58.37	27.57	39.64	1.74	0.73	68.77	74.00	-5.23	Peak	HORIZONTAL
4	2483.89	37.68	27.57	39.64	1.74	0.73	48.08	54.00	-5.92	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11N40 2452		

Data: 30



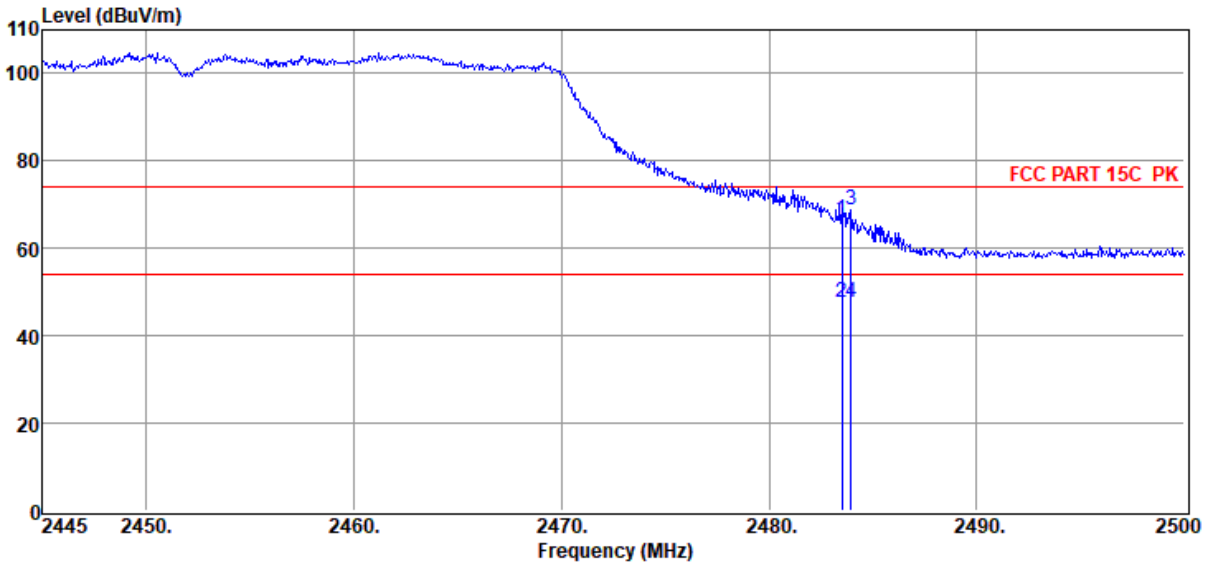
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	54.12	27.57	39.64	1.74	0.73	64.52	74.00	-9.48	Peak	VERTICAL
2	2483.50	37.54	27.57	39.64	1.74	0.73	47.94	54.00	-6.06	Average	VERTICAL
3	2483.78	56.50	27.57	39.64	1.74	0.73	66.90	74.00	-7.10	Peak	VERTICAL
4	2483.78	36.51	27.57	39.64	1.74	0.73	46.91	54.00	-7.09	Average	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/HORIZONTAL
Memo	: 11AX40 2452		

Data: 31



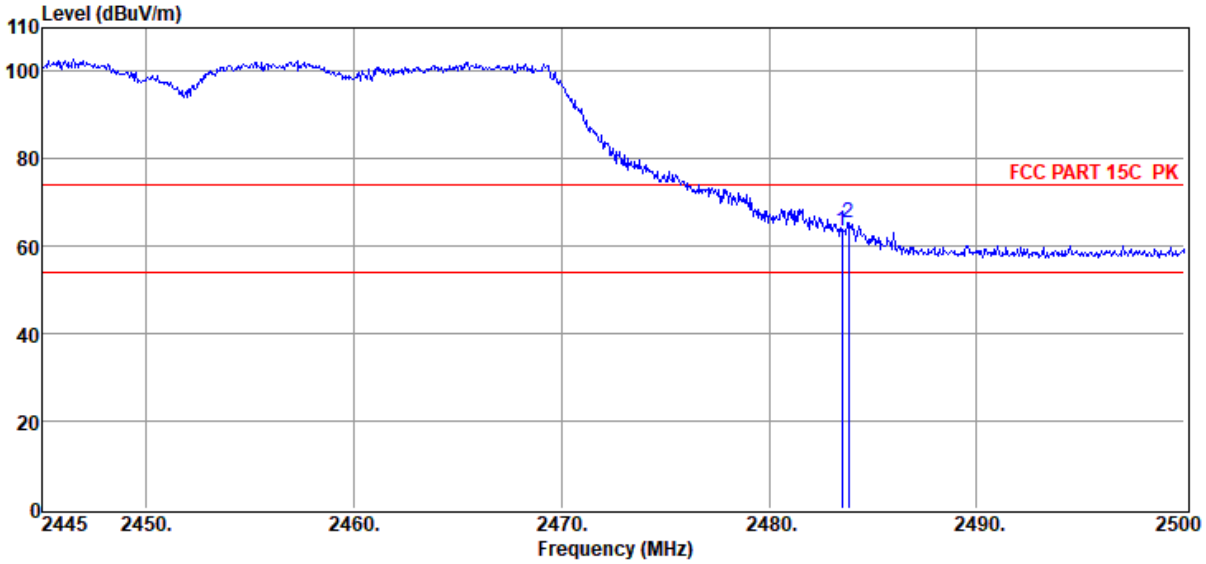
Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	56.21	27.57	39.64	1.74	0.73	66.61	74.00	-7.39	Peak	HORIZONTAL
2	2483.50	37.32	27.57	39.64	1.74	0.73	47.72	54.00	-6.28	Average	HORIZONTAL
3	2483.94	58.29	27.57	39.64	1.74	0.73	68.69	74.00	-5.31	Peak	HORIZONTAL
4	2483.94	37.22	27.57	39.64	1.74	0.73	47.62	54.00	-6.38	Average	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 3#	D:\E3 6.111\2022 Report Data\Q21123016-3O 1020VR\FCC ABOVE 1G 2.4G WIFI.EM6	
Test Date	: 2022-07-06	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: Battery	**Test Mode**	: Tx Mode
Condition	: Temp:22.2°C,Humi:52.4%,Press:100.3kPa	**Antenna/Distance**	: 2021 BBHA 9120D 3#/3m/VERTICAL
Memo	: 11AX40 2452		

Data: 32

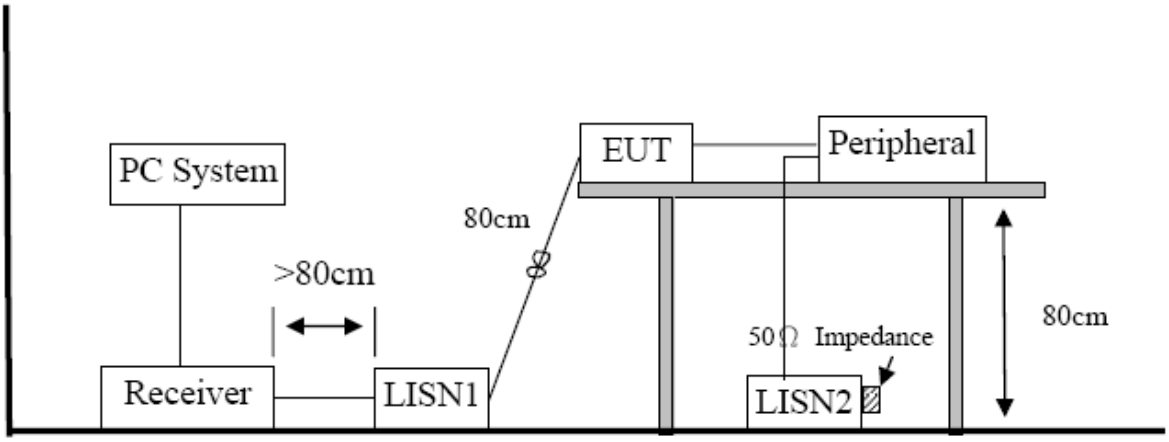


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Filter Factor dB	Result Level (dBµV/m)	Limit Line (dBµV/m)	Over Limit (dB)	Detector	Polarization
1	2483.50	52.97	27.57	39.64	1.74	0.73	63.37	74.00	-10.63	Peak	VERTICAL
2	2483.83	55.06	27.57	39.64	1.74	0.73	65.46	74.00	-8.54	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss + Filter Factor - PRM Factor.
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

11. Power Line Conducted Emission

11.1. Block diagram of test setup



11.2. Power Line Conducted Emission Limits (Class B)

Frequency	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150 kHz ~ 500 kHz	66 ~ 56*	56 ~ 46*
500 kHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

11.3. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

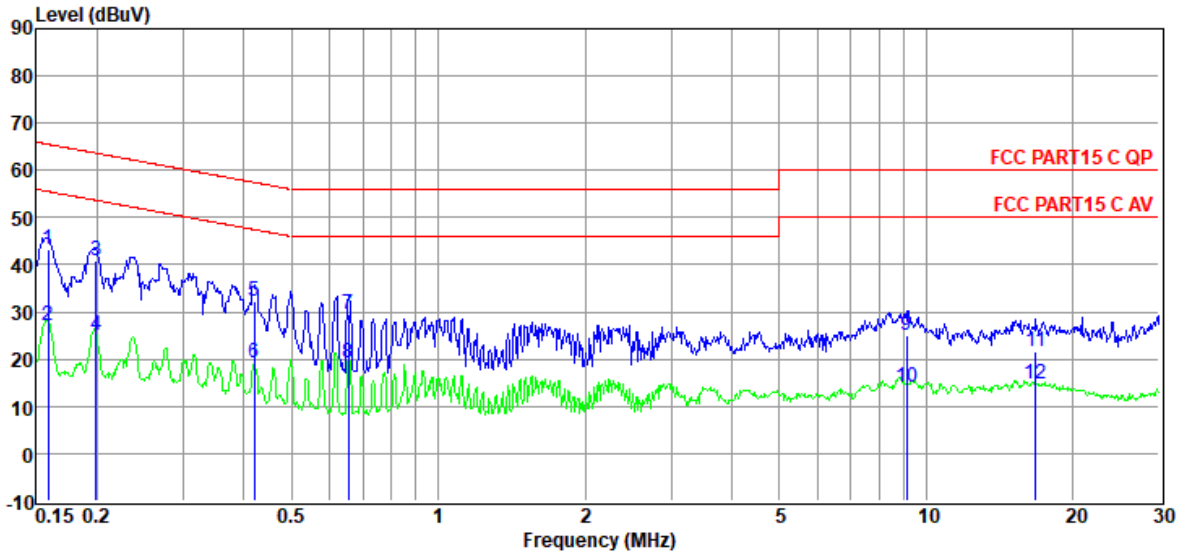
11.4. Test result

Pass. (See below detailed test result)

Note1: All emissions not reported below are too low against the prescribed limits.
Note2: "-----" means peak detection; "-----" means average detection
Note3: Pre-test AC conducted emission at both voltage AC 120V/60Hz and AC 240V/60Hz, recorded worse case.

TR-4-E-010 Conducted Emission Test Result

Test Site	: DDT 1# Shield Room	D:\2022 CE report date\Q21123016-3O VRM1020WNA\FCC.EM6	
Test Date	: 2022-07-20	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: AC 120V/60Hz	**Test Mode**	: TX mode
Condition	: TEMP:23.8°C, RH:62.0%, BP:101.2kPa	**LISN**	: 2021 1# ENV216/NEUTRAL
Memo	: 2.4GWIFI		

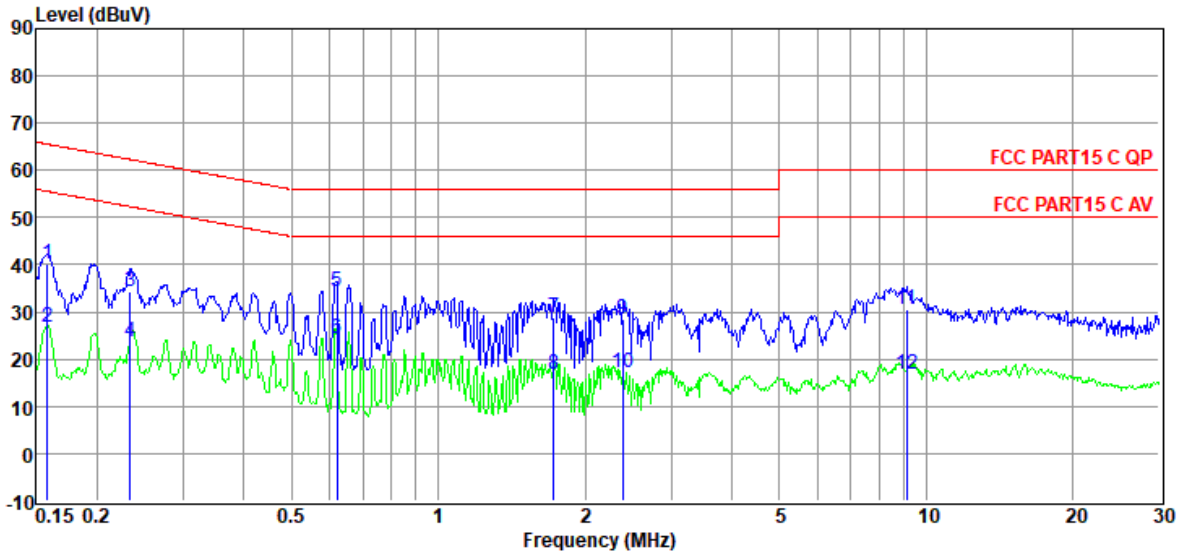


Item (Mark)	Freq. (MHz)	Read Level (dBµV)	LISN Factor (dB)	Cable Loss (dB)	Pulse Limiter Factor (dB)	Result Level (dBµV)	Limit Line (dBµV)	Over Limit (dB)	Detector	Phase
1	0.16	23.50	9.80	0.01	9.92	43.23	65.52	-22.29	QP	NEUTRAL
2	0.16	7.49	9.80	0.01	9.92	27.22	55.52	-28.30	Average	NEUTRAL
3	0.20	20.99	9.80	0.01	9.92	40.72	63.67	-22.95	QP	NEUTRAL
4	0.20	5.25	9.80	0.01	9.92	24.98	53.67	-28.69	Average	NEUTRAL
5	0.42	12.79	9.56	0.02	9.91	32.28	57.46	-25.18	QP	NEUTRAL
6	0.42	-0.21	9.56	0.02	9.91	19.28	47.46	-28.18	Average	NEUTRAL
7	0.65	9.92	9.74	0.02	9.91	29.59	56.00	-26.41	QP	NEUTRAL
8	0.65	-0.30	9.74	0.02	9.91	19.37	46.00	-26.63	Average	NEUTRAL
9	9.11	5.20	9.75	0.10	9.94	24.99	60.00	-35.01	QP	NEUTRAL
10	9.11	-5.79	9.75	0.10	9.94	14.00	50.00	-36.00	Average	NEUTRAL
11	16.75	1.99	9.68	0.15	9.94	21.76	60.00	-38.24	QP	NEUTRAL
12	16.75	-5.10	9.68	0.15	9.94	14.67	50.00	-35.33	Average	NEUTRAL

Note:
1. Result Level = Read Level +LISN Factor + Pulse Limiter Factor + Cable loss.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

TR-4-E-010 Conducted Emission Test Result

Test Site	: DDT 1# Shield Room	D:\2022 CE report date\Q21123016-3O VRM1020WNA\FCC.EM6	
Test Date	: 2022-07-20	**Tested By**	: Bairong
EUT	: arpara AIO 5K	**Model Number**	: VRM1020WNA
Power Supply	: AC 120V/60Hz	**Test Mode**	: TX mode
Condition	: TEMP:23.8°C, RH:62.0%, BP:101.2kPa	**LISN**	: 2021 1# ENV216/LINE
Memo	: 2.4GWIFI		



Item (Mark)	Freq. (MHz)	Read Level (dBµV)	LISN Factor (dB)	Cable Loss (dB)	Pulse Limiter Factor (dB)	Result Level (dBµV)	Limit Line (dBµV)	Over Limit (dB)	Detector	Phase
1	0.16	20.70	9.64	0.01	9.92	40.27	65.56	-25.29	QP	LINE
2	0.16	7.22	9.64	0.01	9.92	26.79	55.56	-28.77	Average	LINE
3	0.23	14.48	9.77	0.02	9.92	34.19	62.30	-28.11	QP	LINE
4	0.23	4.04	9.77	0.02	9.92	23.75	52.30	-28.55	Average	LINE
5	0.62	14.80	9.54	0.02	9.91	34.27	56.00	-21.73	QP	LINE
6	0.62	4.82	9.54	0.02	9.91	24.29	46.00	-21.71	Average	LINE
7	1.73	9.29	9.52	0.04	9.89	28.74	56.00	-27.26	QP	LINE
8	1.73	-2.79	9.52	0.04	9.89	16.66	46.00	-29.34	Average	LINE
9	2.38	9.03	9.53	0.05	9.90	28.51	56.00	-27.49	QP	LINE
10	2.38	-2.33	9.53	0.05	9.90	17.15	46.00	-28.85	Average	LINE
11	9.11	10.99	9.50	0.10	9.94	30.53	60.00	-29.47	QP	LINE
12	9.11	-2.85	9.50	0.10	9.94	16.69	50.00	-33.31	Average	LINE

Note:
1. Result Level = Read Level +LISN Factor + Pulse Limiter Factor + Cable loss.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz—150 kHz), 9 kHz (150 kHz—30 MHz).
4. Step size: 80Hz (0.009MHz-0.15MHz), 4 kHz (0.15MHz-30MHz), Scan time: auto.

12. Antenna Requirements

12.1. Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

12.2. Result

The device support 2T2R MIMO, the antennas both used for this product are FPC antennas and no antenna other than that furnished by the responsible party shall be used with the device, maximum antenna gain is 2.15 dBi for antenna 1, 2.94 dBi for antenna 2.