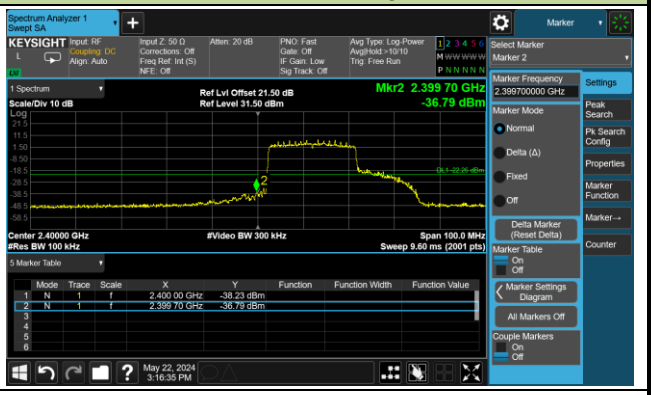
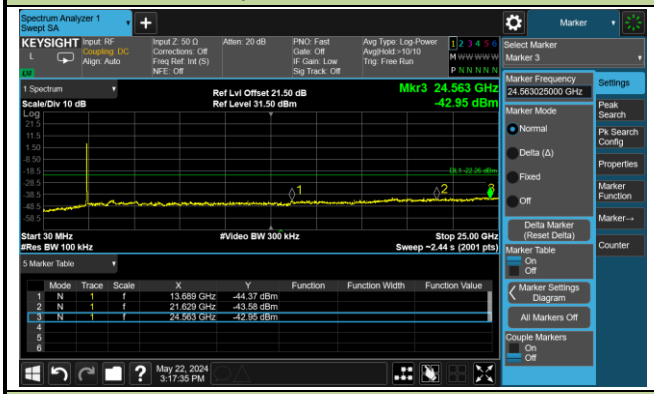
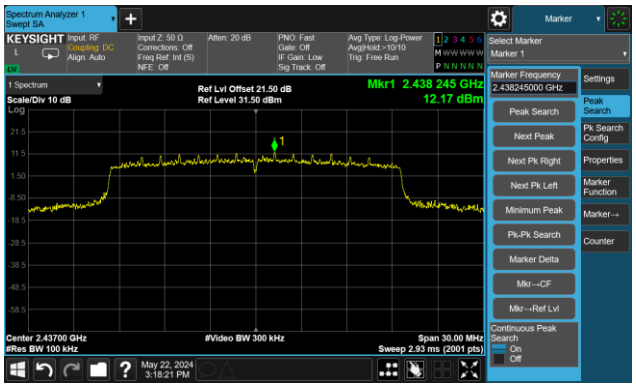
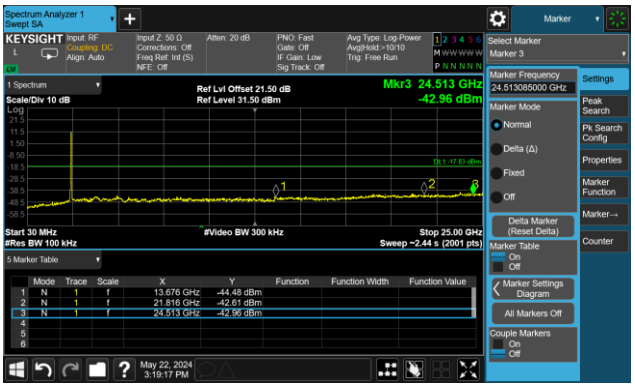
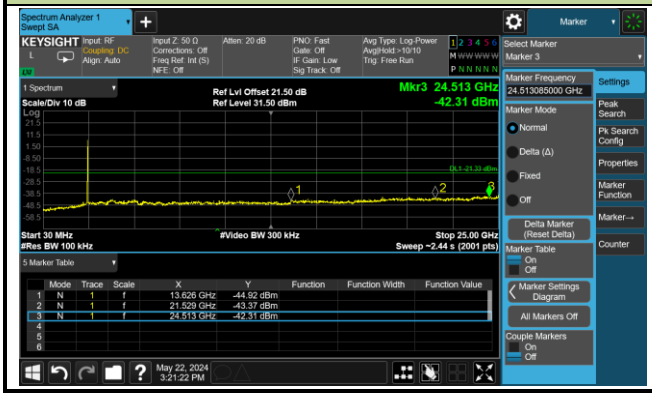
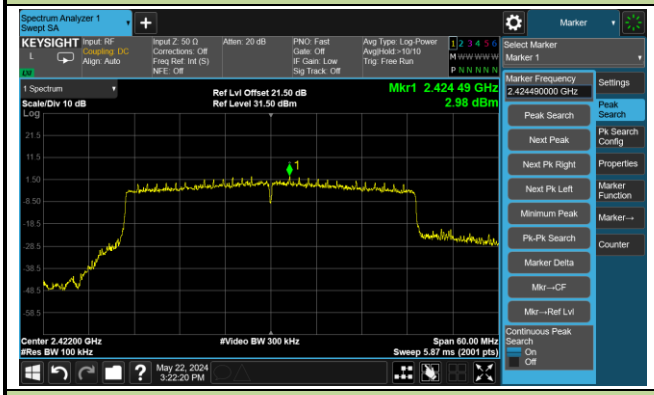
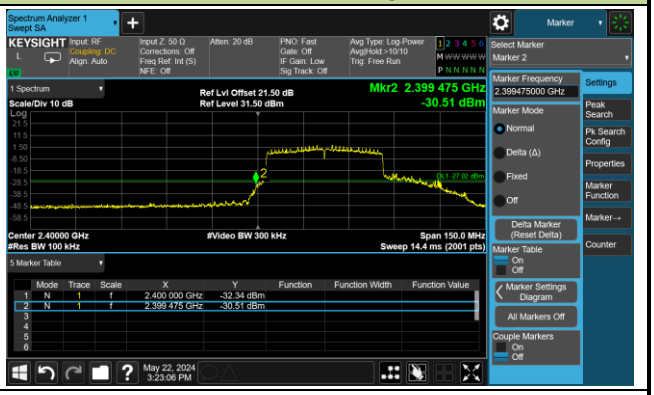
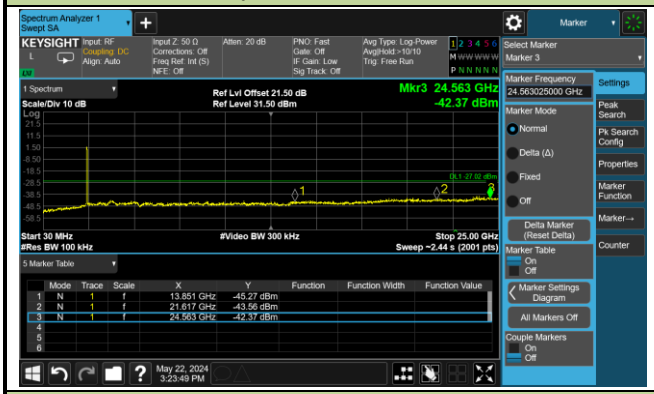
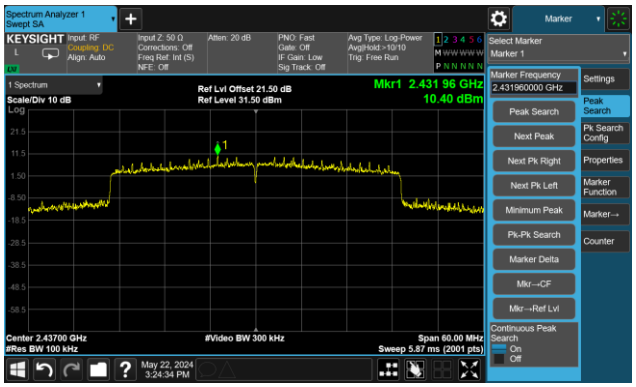
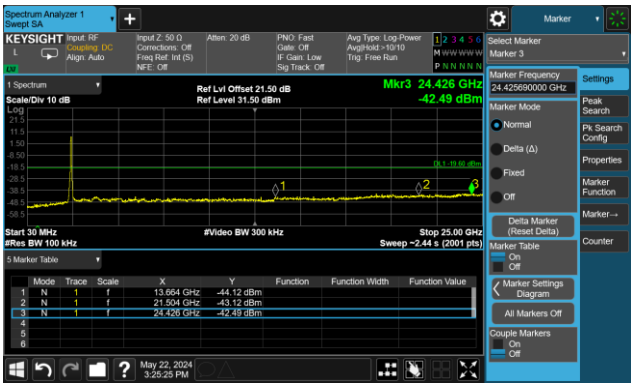
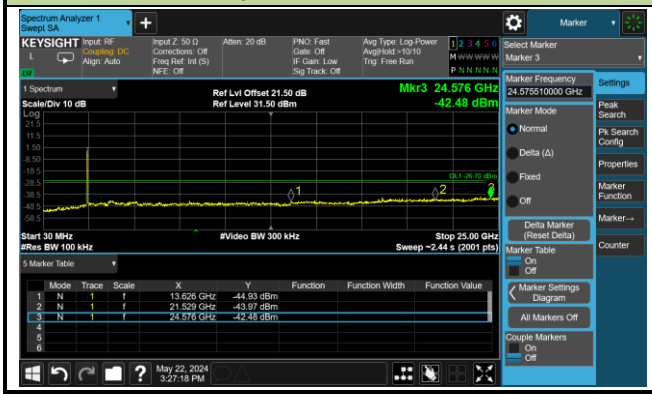
802.11ax-HE20 Out-of-Band Emissions – Ant 1	
Channel 01 (2412MHz)	
Reference Level	Low Band Edge
	
Spurious Emission	
	
Channel 06 (2437MHz)	
Reference Level	Spurious Emission
	

802.11ax-HE20 Out-of-Band Emissions – Ant 1	
Channel 11 (2462MHz)	
Reference Level	High Band Edge
	
Spurious Emission	
	

802.11ax-HE40 Out-of-Band Emissions – Ant 1	
Channel 03 (2422MHz)	
Reference Level	Low Band Edge
	
Spurious Emission	
	
Channel 06 (2437MHz)	
Reference Level	Spurious Emission
	

802.11ax-HE40 Out-of-Band Emissions – Ant 1	
Channel 09 (2452MHz)	
Reference Level	High Band Edge
	
Spurious Emission	
	

A.6 Radiated Spurious Emission Test Result

Test Site	SIP-AC3	Test Engineer	Justin Guo
Test Date	2024-03-29	Test Mode	802.11b
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not shown in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
01	9049.5	48.9	-2.2	46.7	74.0	-27.3	Peak	Horizontal
	15994.0	45.1	5.4	50.5	74.0	-23.5	Peak	Horizontal
	15994.0	33.3	5.4	38.7	54.0	-15.3	Average	Horizontal
	17838.5	44.1	8.0	52.1	74.0	-21.9	Peak	Horizontal
	17838.5	32.5	8.0	40.5	54.0	-13.5	Average	Horizontal
	4825.0	56.2	-7.8	48.4	74.0	-25.6	Peak	Vertical
	15773.0	45.0	4.9	49.9	74.0	-24.1	Peak	Vertical
	17813.0	44.5	7.9	52.4	74.0	-21.6	Peak	Vertical
	17813.0	32.7	7.9	40.6	54.0	-13.4	Average	Vertical
06	7315.5	54.8	-5.2	49.6	74.0	-24.4	Peak	Horizontal
	11089.5	47.2	-1.7	45.5	74.0	-28.5	Peak	Horizontal
	15892.0	45.3	5.0	50.3	74.0	-23.7	Peak	Horizontal
	4876.0	56.4	-7.5	48.9	74.0	-25.1	Peak	Vertical
	7307.0	59.8	-5.0	54.8	74.0	-19.2	Peak	Vertical
	7307.0	58.3	-5.0	53.3	54.0	-0.7	Average	Vertical
	16011.0	45.6	5.1	50.7	74.0	-23.3	Peak	Vertical
11	4927.0	52.2	-7.7	44.5	74.0	-29.5	Peak	Horizontal
	7383.5	52.8	-5.1	47.7	74.0	-26.3	Peak	Horizontal
	15688.0	44.3	4.8	49.1	74.0	-24.9	Peak	Horizontal
	4927.0	55.5	-7.7	47.8	74.0	-26.2	Peak	Vertical
	7383.5	59.5	-5.1	54.4	74.0	-19.6	Peak	Vertical
	7383.5	58.0	-5.1	52.9	54.0	-1.1	Average	Vertical
	15926.0	44.9	5.1	50.0	74.0	-24.0	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	SIP-AC3	Test Engineer	Justin Guo
Test Date	2024-03-29	Test Mode	802.11g
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not shown in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
01	8301.5	48.0	-3.2	44.8	74.0	-29.2	Peak	Horizontal
	11404.0	46.8	-1.6	45.2	74.0	-28.8	Peak	Horizontal
	16002.5	44.8	5.3	50.1	74.0	-23.9	Peak	Horizontal
	8301.5	48.0	-3.2	44.8	74.0	-29.2	Peak	Vertical
	11404.0	46.8	-1.6	45.2	74.0	-28.8	Peak	Vertical
	16002.5	44.8	5.3	50.1	74.0	-23.9	Peak	Vertical
06	7307.0	59.2	-5.0	54.2	74.0	-19.8	Peak	Horizontal
	7307.0	50.7	-5.0	45.7	54.0	-8.3	Average	Horizontal
	11115.0	46.6	-1.5	45.1	74.0	-28.9	Peak	Horizontal
	15883.5	45.2	5.1	50.3	74.0	-23.7	Peak	Horizontal
	7315.5	65.6	-5.2	60.4	74.0	-13.6	Peak	Vertical
	7315.5	58.8	-5.2	53.6	54.0	-0.4	Average	Vertical
	11523.0	47.1	-1.5	45.6	74.0	-28.4	Peak	Vertical
	15713.5	45.0	4.8	49.8	74.0	-24.2	Peak	Vertical
11	11412.5	46.4	-1.5	44.9	74.0	-29.1	Peak	Horizontal
	15824.0	45.4	4.5	49.9	74.0	-24.1	Peak	Horizontal
	17830.0	45.3	8.1	53.4	74.0	-20.6	Peak	Horizontal
	17830.0	33.3	8.1	41.4	54.0	-12.6	Average	Horizontal
	7383.5	51.8	-5.1	46.7	74.0	-27.3	Peak	Vertical
	16011.0	45.1	5.1	50.2	74.0	-23.8	Peak	Vertical
	17745.0	46.0	7.5	53.5	74.0	-20.5	Peak	Vertical
	17745.0	33.5	7.5	41.0	54.0	-13.0	Average	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	SIP-AC3	Test Engineer	Justin Guo
Test Date	2024-03-29	Test Mode	802.11n-HT20
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not shown in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
01	9075.0	47.5	-2.6	44.9	74.0	-29.1	Peak	Horizontal
	12211.5	47.8	-1.7	46.1	74.0	-27.9	Peak	Horizontal
	15900.5	45.3	5.1	50.4	74.0	-23.6	Peak	Horizontal
	8420.5	48.6	-3.2	45.4	74.0	-28.6	Peak	Vertical
	11480.5	47.1	-1.6	45.5	74.0	-28.5	Peak	Vertical
	15909.0	45.0	5.2	50.2	74.0	-23.8	Peak	Vertical
06	7307.0	59.9	-5.0	54.9	74.0	-19.1	Peak	Horizontal
	7307.0	50.7	-5.0	45.7	54.0	-8.3	Average	Horizontal
	11472.0	48.2	-1.6	46.6	74.0	-27.4	Peak	Horizontal
	15977.0	45.3	5.0	50.3	74.0	-23.7	Peak	Horizontal
	7307.0	64.2	-5.0	59.2	74.0	-14.8	Peak	Vertical
	7307.0	58.4	-5.0	53.4	54.0	-0.6	Average	Vertical
	12415.5	47.7	-1.0	46.7	74.0	-27.3	Peak	Vertical
	16062.0	45.1	5.0	50.1	74.0	-23.9	Peak	Vertical
11	8148.5	47.9	-3.4	44.5	74.0	-29.5	Peak	Horizontal
	11021.5	47.2	-1.4	45.8	74.0	-28.2	Peak	Horizontal
	16019.5	45.2	5.0	50.2	74.0	-23.8	Peak	Horizontal
	7383.5	54.5	-5.1	49.4	74.0	-24.6	Peak	Vertical
	11225.5	47.5	-1.6	45.9	74.0	-28.1	Peak	Vertical
	15883.5	45.3	5.1	50.4	74.0	-23.6	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	SIP-AC3	Test Engineer	Justin Guo
Test Date	2024-03-29	Test Mode	802.11n-HT40
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not shown in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
03	8463.0	47.5	-3.2	44.3	74.0	-29.7	Peak	Horizontal
	11157.5	47.9	-1.3	46.6	74.0	-27.4	Peak	Horizontal
	15917.5	44.7	5.1	49.8	74.0	-24.2	Peak	Horizontal
	8284.5	48.1	-3.3	44.8	74.0	-29.2	Peak	Vertical
	11047.0	47.4	-1.4	46.0	74.0	-28.0	Peak	Vertical
	15866.5	45.0	4.8	49.8	74.0	-24.2	Peak	Vertical
06	7315.5	56.1	-5.2	50.9	74.0	-23.1	Peak	Horizontal
	11582.5	47.5	-1.8	45.7	74.0	-28.3	Peak	Horizontal
	15926.0	45.7	5.1	50.8	74.0	-23.2	Peak	Horizontal
	7298.5	63.6	-5.0	58.6	74.0	-15.4	Peak	Vertical
	7298.5	56.2	-5.0	51.2	54.0	-2.8	Average	Vertical
	11123.5	47.9	-1.4	46.5	74.0	-27.5	Peak	Vertical
	15679.5	44.8	4.7	49.5	74.0	-24.5	Peak	Vertical
09	8148.5	47.4	-3.4	44.0	74.0	-30.0	Peak	Horizontal
	11395.5	47.2	-1.7	45.5	74.0	-28.5	Peak	Horizontal
	15705.0	44.3	4.9	49.2	74.0	-24.8	Peak	Horizontal
	8225.0	48.3	-3.3	45.0	74.0	-29.0	Peak	Vertical
	11472.0	47.9	-1.6	46.3	74.0	-27.7	Peak	Vertical
	15671.0	45.4	4.6	50.0	74.0	-24.0	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	SIP-AC3	Test Engineer	Justin Guo
Test Date	2024-03-29	Test Mode	802.11ax-HE20
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not shown in the report.		

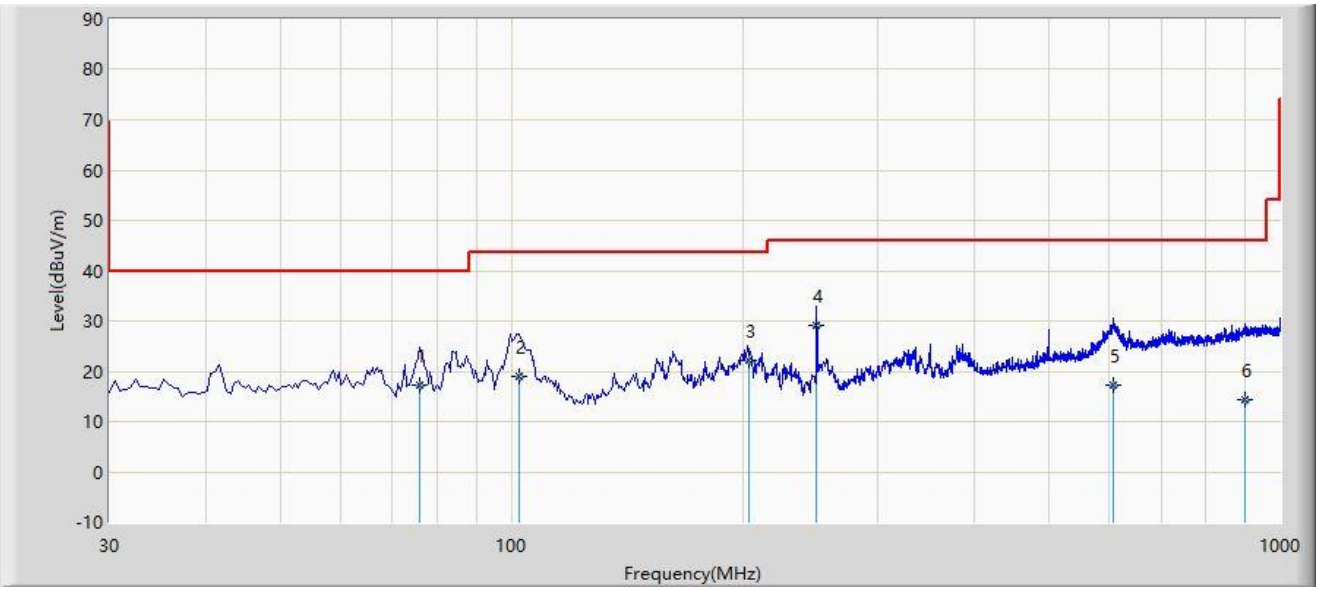
Test Channel	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
01	8199.5	47.9	-3.3	44.6	74.0	-29.4	Peak	Horizontal
	10945.0	47.0	-1.3	45.7	74.0	-28.3	Peak	Horizontal
	15909.0	44.8	5.2	50.0	74.0	-24.0	Peak	Horizontal
	8446.0	48.0	-3.2	44.8	74.0	-29.2	Peak	Vertical
	11140.5	46.7	-1.4	45.3	74.0	-28.7	Peak	Vertical
	15688.0	45.4	4.8	50.2	74.0	-23.8	Peak	Vertical
06	7307.0	58.8	-5.0	53.8	74.0	-20.2	Peak	Horizontal
	7307.0	50.4	-5.0	45.4	54.0	-8.6	Average	Horizontal
	10851.5	47.2	-1.5	45.7	74.0	-28.3	Peak	Horizontal
	15679.5	45.8	4.7	50.5	74.0	-23.5	Peak	Horizontal
	7315.5	65.0	-5.2	59.8	74.0	-14.2	Peak	Vertical
	7315.5	58.3	-5.2	53.1	54.0	-0.9	Average	Vertical
	12645.0	48.5	-1.0	47.5	74.0	-26.5	Peak	Vertical
	15671.0	45.2	4.6	49.8	74.0	-24.2	Peak	Vertical
11	9083.5	47.8	-2.5	45.3	74.0	-28.7	Peak	Horizontal
	12050.0	48.4	-1.7	46.7	74.0	-27.3	Peak	Horizontal
	15798.5	45.0	4.9	49.9	74.0	-24.1	Peak	Horizontal
	7383.5	52.2	-5.1	47.1	74.0	-26.9	Peak	Vertical
	11336.0	47.1	-1.4	45.7	74.0	-28.3	Peak	Vertical
	15875.0	44.4	5.1	49.5	74.0	-24.5	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m) Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)								

Test Site	SIP-AC3	Test Engineer	Justin Guo
Test Date	2024-03-29	Test Mode	802.11ax-HE40
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not shown in the report.		

Test Channel	Frequency (MHz)	Reading Level (dBµV)	Factor (dB/m)	Measure Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
03	8284.5	47.6	-3.3	44.3	74.0	-29.7	Peak	Horizontal
	11140.5	48.2	-1.4	46.8	74.0	-27.2	Peak	Horizontal
	15926.0	45.5	5.1	50.6	74.0	-23.4	Peak	Horizontal
	9372.5	47.4	-2.0	45.4	74.0	-28.6	Peak	Vertical
	11599.5	47.4	-1.7	45.7	74.0	-28.3	Peak	Vertical
	15994.0	45.2	5.4	50.6	74.0	-23.4	Peak	Vertical
06	7315.5	58.0	-5.2	52.8	74.0	-21.2	Peak	Horizontal
	7315.5	49.7	-5.2	44.5	54.0	-9.5	Average	Horizontal
	11480.5	47.1	-1.6	45.5	74.0	-28.5	Peak	Horizontal
	15790.0	44.9	5.0	49.9	74.0	-24.1	Peak	Horizontal
	7315.5	65.3	-5.2	60.1	74.0	-13.9	Peak	Vertical
	7315.5	57.5	-5.2	52.3	54.0	-1.7	Average	Vertical
	11710.0	47.2	-1.6	45.6	74.0	-28.4	Peak	Vertical
	15883.5	44.9	5.1	50.0	74.0	-24.0	Peak	Vertical
09	8301.5	48.3	-3.2	45.1	74.0	-28.9	Peak	Horizontal
	11582.5	47.6	-1.8	45.8	74.0	-28.2	Peak	Horizontal
	15790.0	44.8	5.0	49.8	74.0	-24.2	Peak	Horizontal
	8403.5	48.9	-3.2	45.7	74.0	-28.3	Peak	Vertical
	11021.5	46.9	-1.4	45.5	74.0	-28.5	Peak	Vertical
	15934.5	45.2	4.7	49.9	74.0	-24.1	Peak	Vertical
Note: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m) Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)								

The Result of Radiated Emission 30MHz ~ 1GHz:

Site: SIP-AC1	Test Date: 2024-03-31
Limit: FCC_Part15.209_RSE(3m)	Engineer: Justin Guo
Probe: VULB 9168_00998_25-2000MHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		76.075	17.309	2.900	-22.691	40.000	14.409	QP
2		102.265	18.924	5.300	-24.576	43.500	13.624	QP
3		204.115	22.098	7.800	-21.402	43.500	14.299	QP
4	*	249.705	29.018	12.600	-16.982	46.000	16.419	QP
5		607.635	17.189	-8.700	-28.811	46.000	25.890	QP
6		899.120	14.453	-15.300	-31.547	46.000	29.753	QP

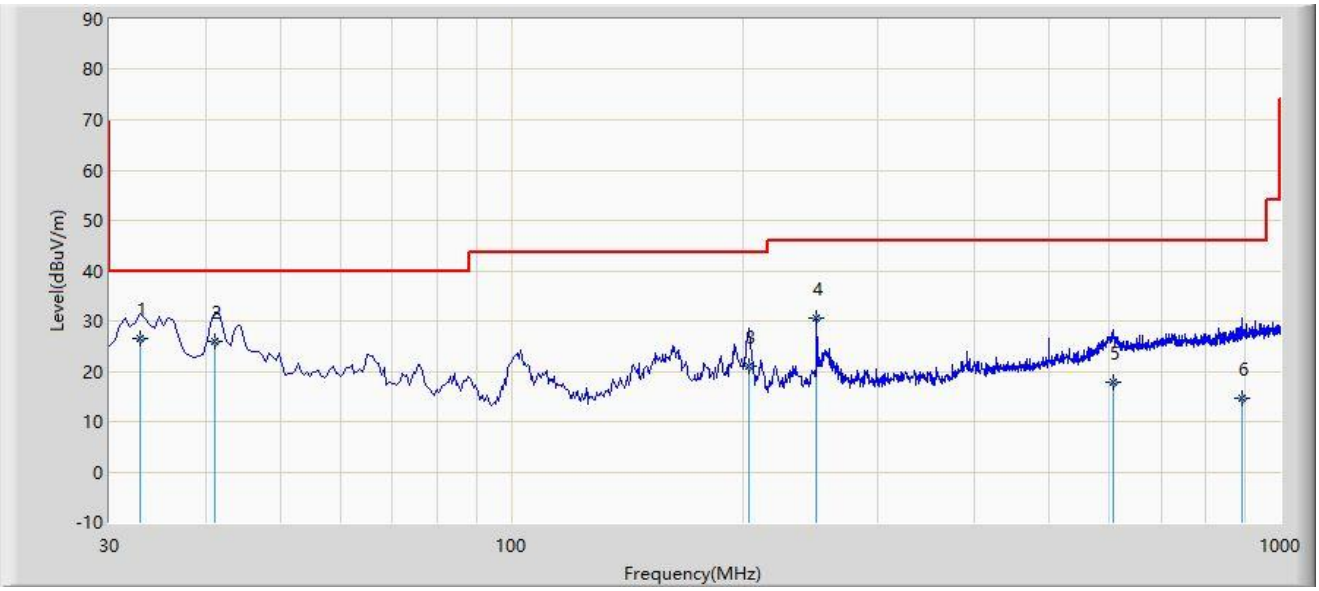
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4 : The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25 GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site: SIP-AC1	Test Date: 2024-03-31
Limit: FCC_Part15.209_RSE(3m)	Engineer: Justin Guo
Probe: VULB 9168_00998_25-2000MHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	32.910	26.476	9.500	-13.524	40.000	16.976	QP
2		41.155	25.839	8.200	-14.161	40.000	17.639	QP
3		204.115	20.898	6.600	-22.602	43.500	14.299	QP
4		249.705	30.618	14.200	-15.382	46.000	16.419	QP
5		606.180	17.840	-8.100	-28.160	46.000	25.941	QP
6		892.815	14.593	-14.900	-31.407	46.000	29.493	QP

Note 1: " * ", means this data is the worst emission level.

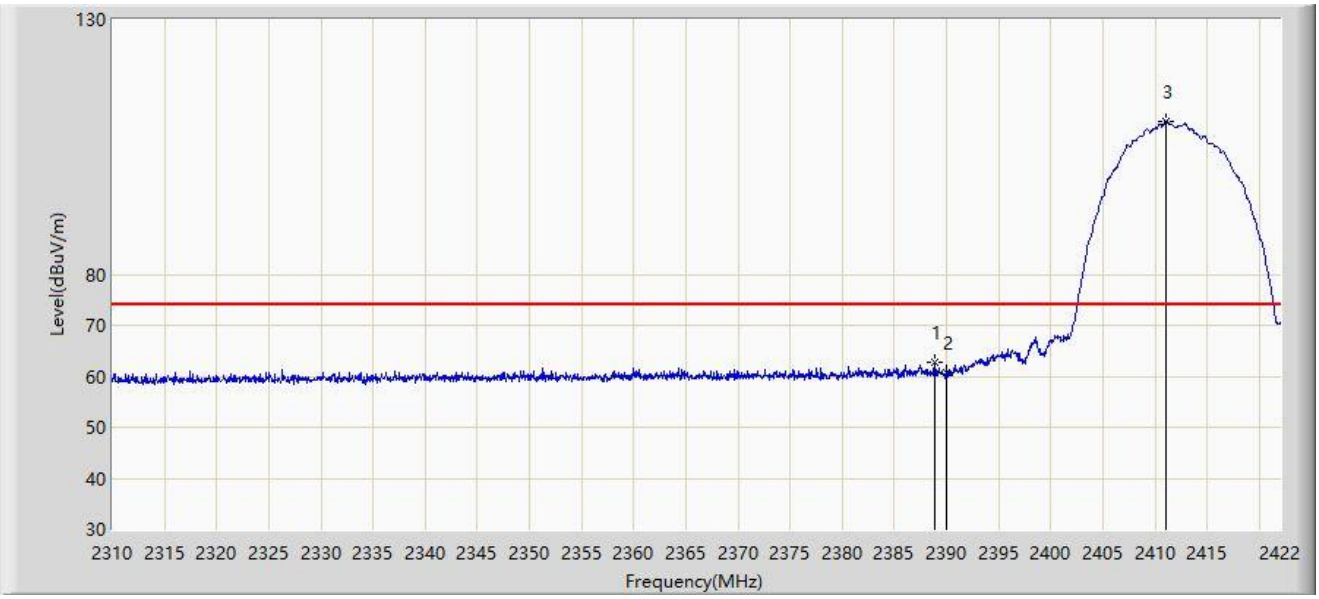
Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4 : The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25 GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

A.7 Radiated Restricted Band Edge Test Result

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz	



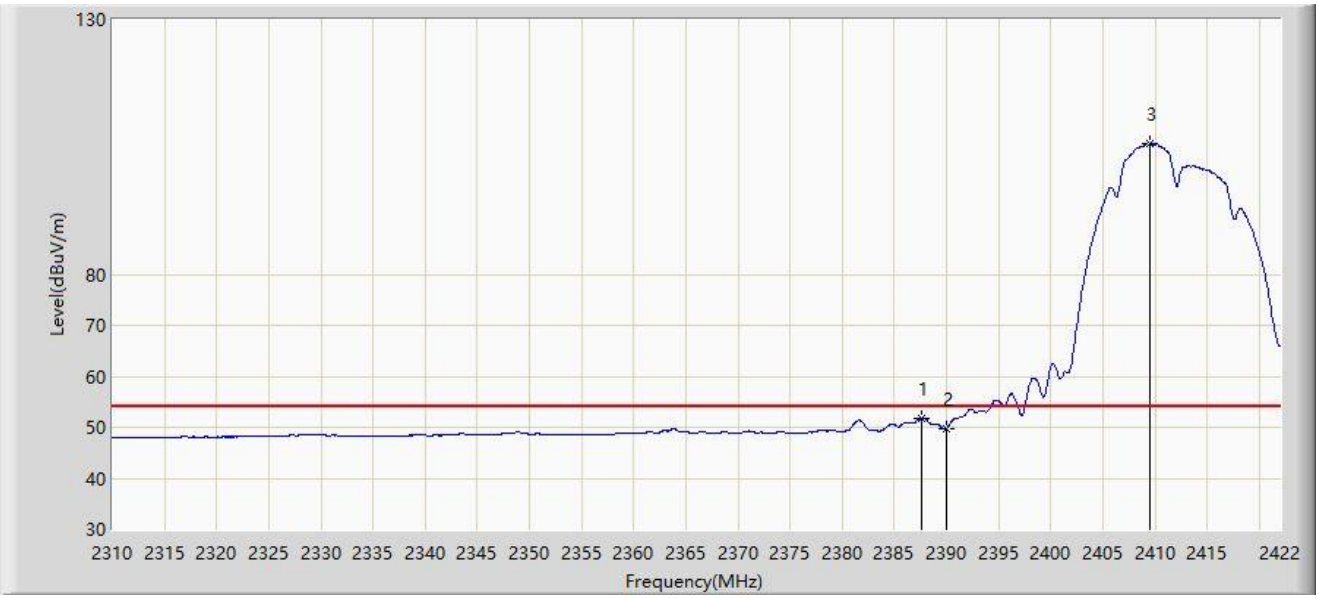
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2388.904	62.685	30.664	-11.315	74.000	32.021	PK
2		2390.000	60.806	28.783	-13.194	74.000	32.023	PK
3		2411.024	110.012	77.967	N/A	N/A	32.045	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz	



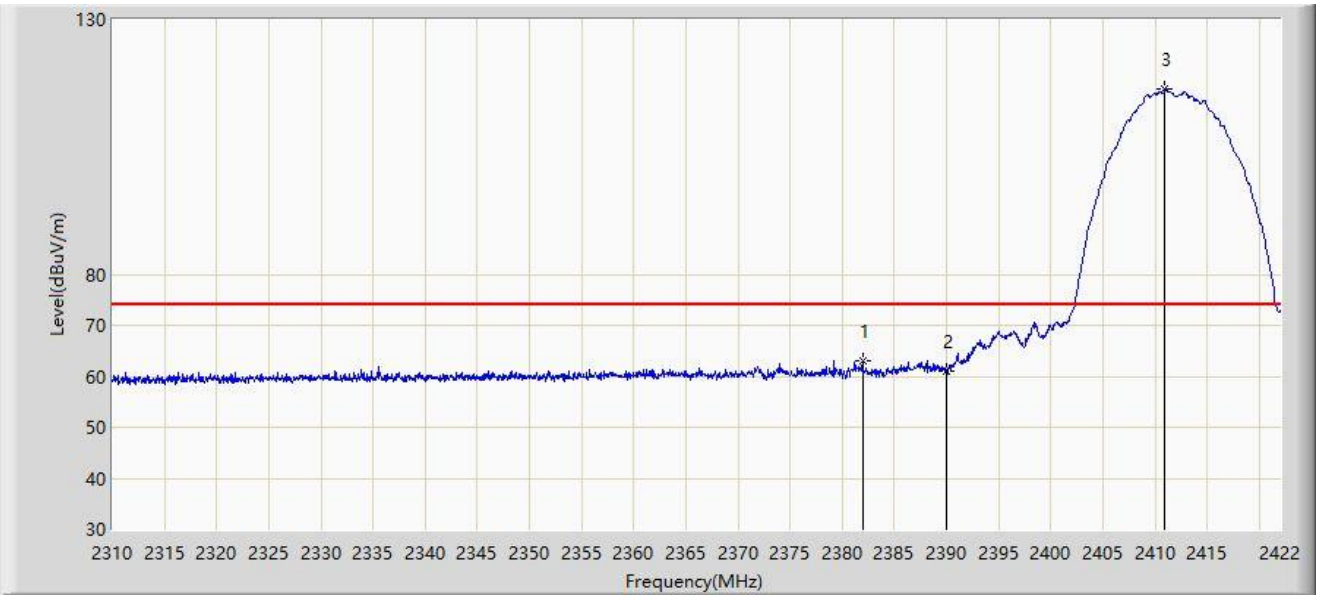
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2387.616	51.825	19.807	-2.175	54.000	32.018	AV
2		2390.000	49.766	17.743	-4.234	54.000	32.023	AV
3		2409.568	105.530	73.486	N/A	N/A	32.044	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz	



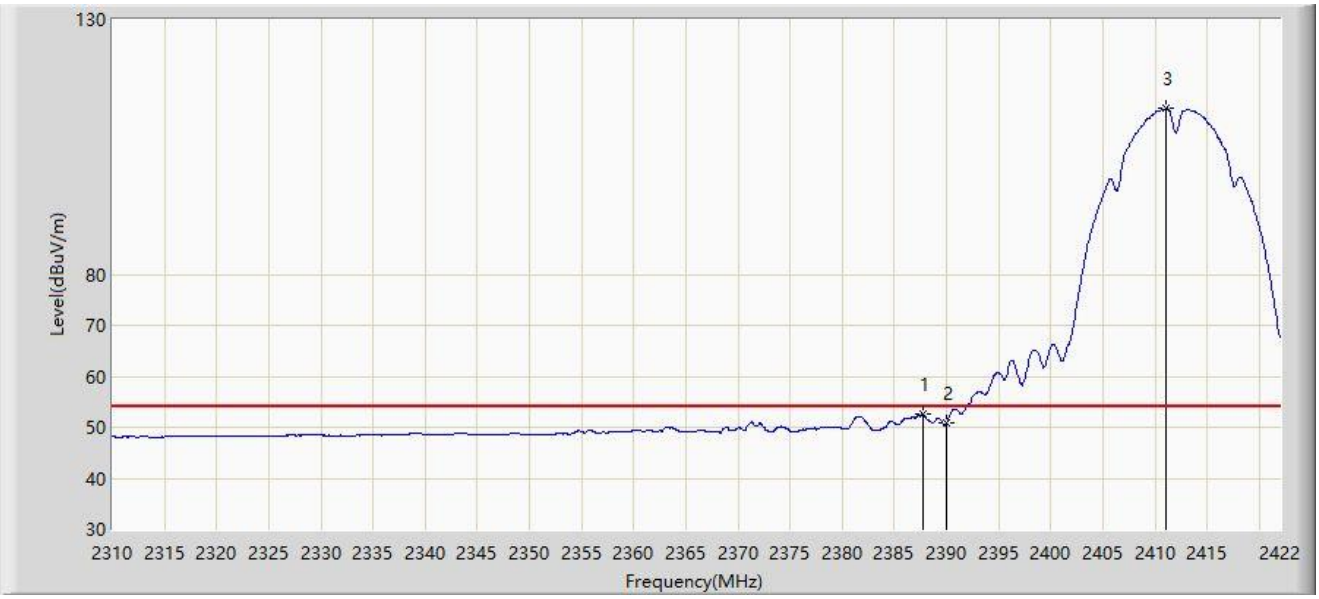
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2381.960	63.024	31.017	-10.976	74.000	32.007	PK
2		2390.000	61.034	29.011	-12.966	74.000	32.023	PK
3		2410.968	116.244	84.199	N/A	N/A	32.045	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz	



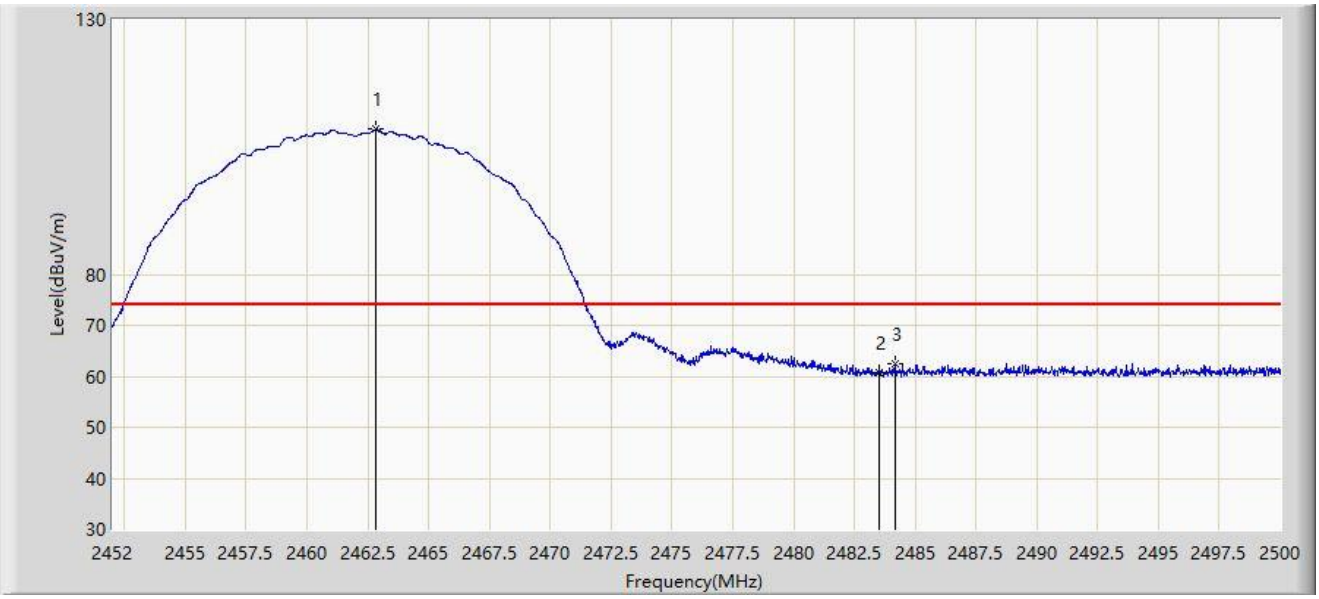
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2387.728	52.518	20.500	-1.482	54.000	32.018	AV
2		2390.000	50.816	18.793	-3.184	54.000	32.023	AV
3		2411.024	112.466	80.421	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz	



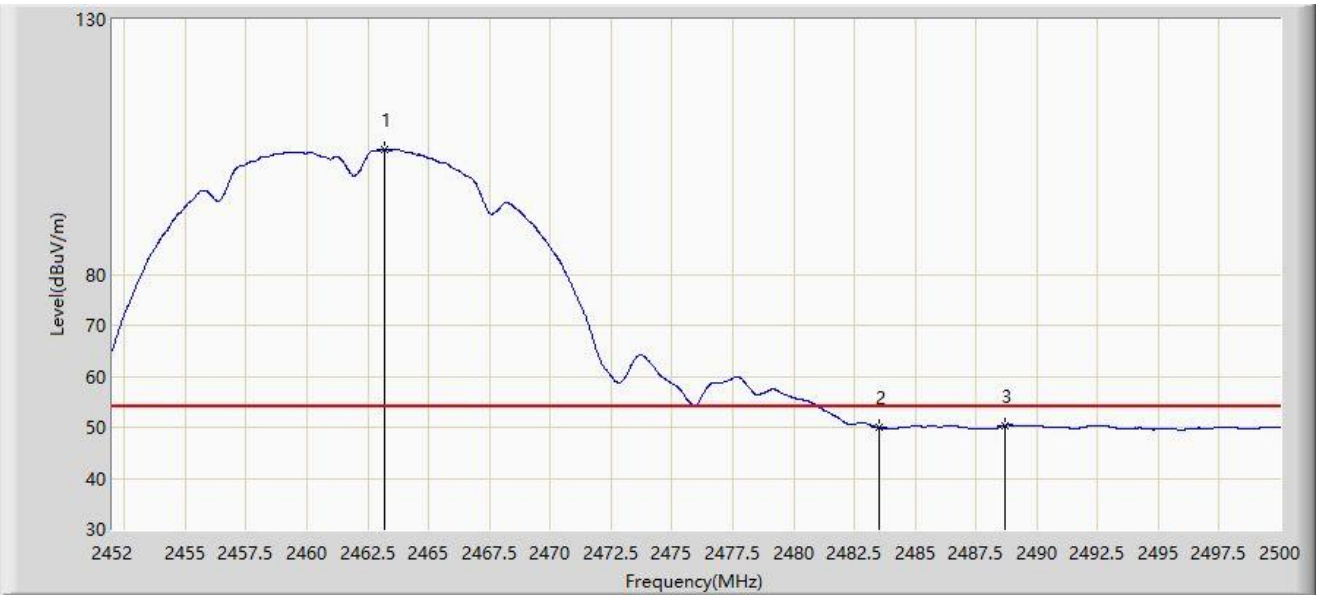
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.824	108.434	76.215	N/A	N/A	32.219	PK
2		2483.500	60.628	28.328	-13.372	74.000	32.300	PK
3	*	2484.160	62.346	30.042	-11.654	74.000	32.304	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz	



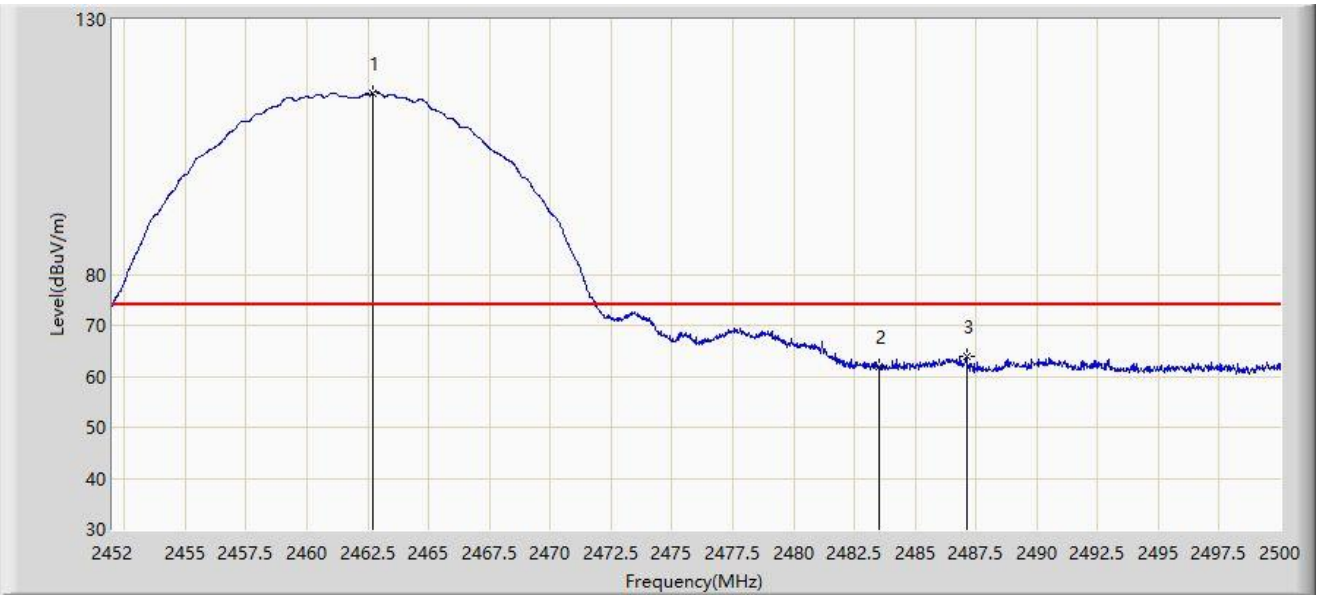
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2463.184	104.449	72.229	N/A	N/A	32.220	AV
2		2483.500	49.998	17.698	-4.002	54.000	32.300	AV
3	*	2488.696	50.380	18.053	-3.620	54.000	32.327	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz	



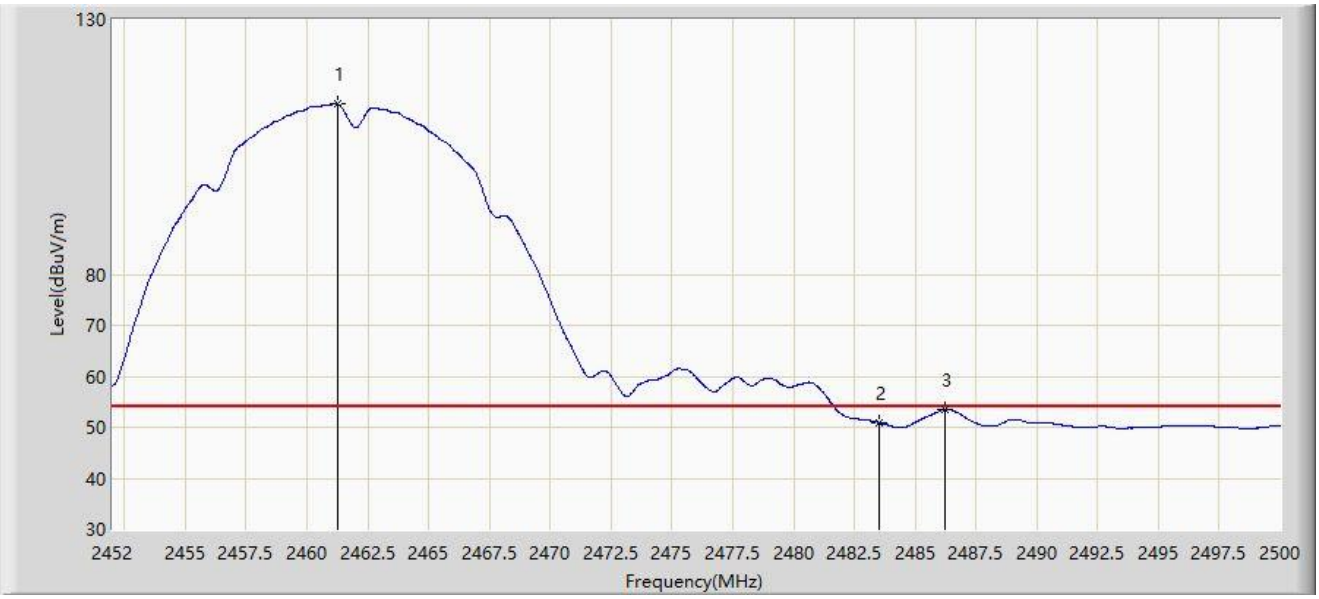
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.728	115.631	83.412	N/A	N/A	32.218	PK
2		2483.500	61.880	29.580	-12.120	74.000	32.300	PK
3	*	2487.112	63.875	31.556	-10.125	74.000	32.319	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2462MHz	



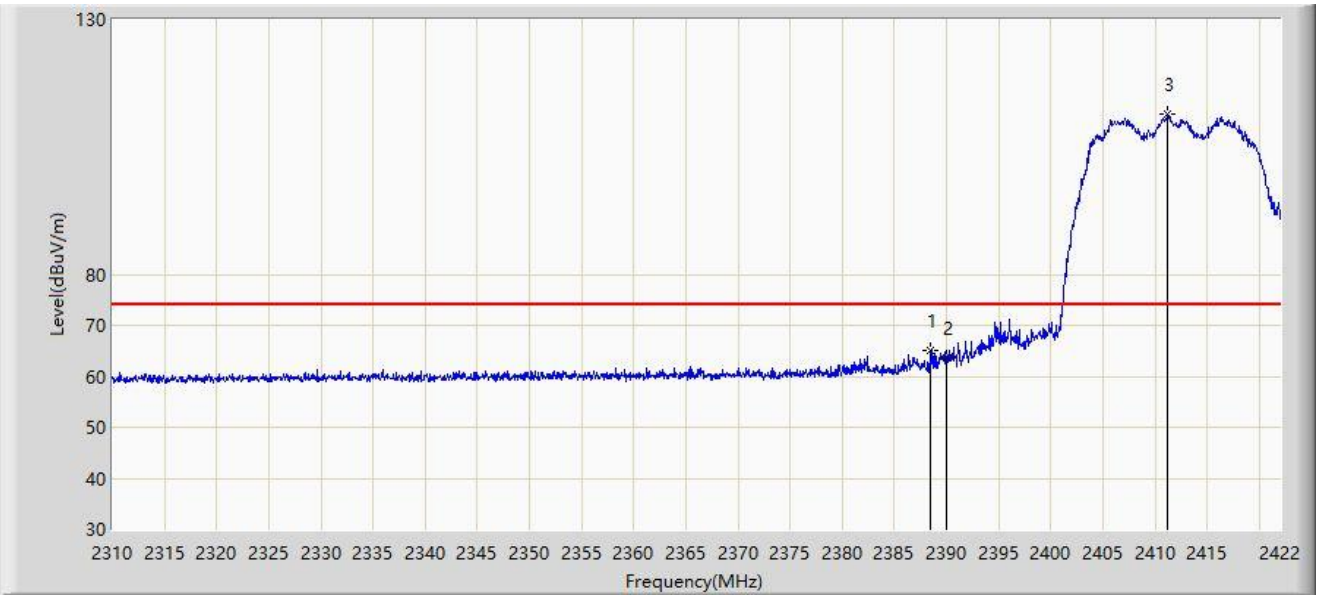
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2461.240	113.417	81.205	N/A	N/A	32.213	AV
2		2483.500	50.908	18.608	-3.092	54.000	32.300	AV
3	*	2486.248	53.536	21.221	-0.464	54.000	32.314	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2412MHz	



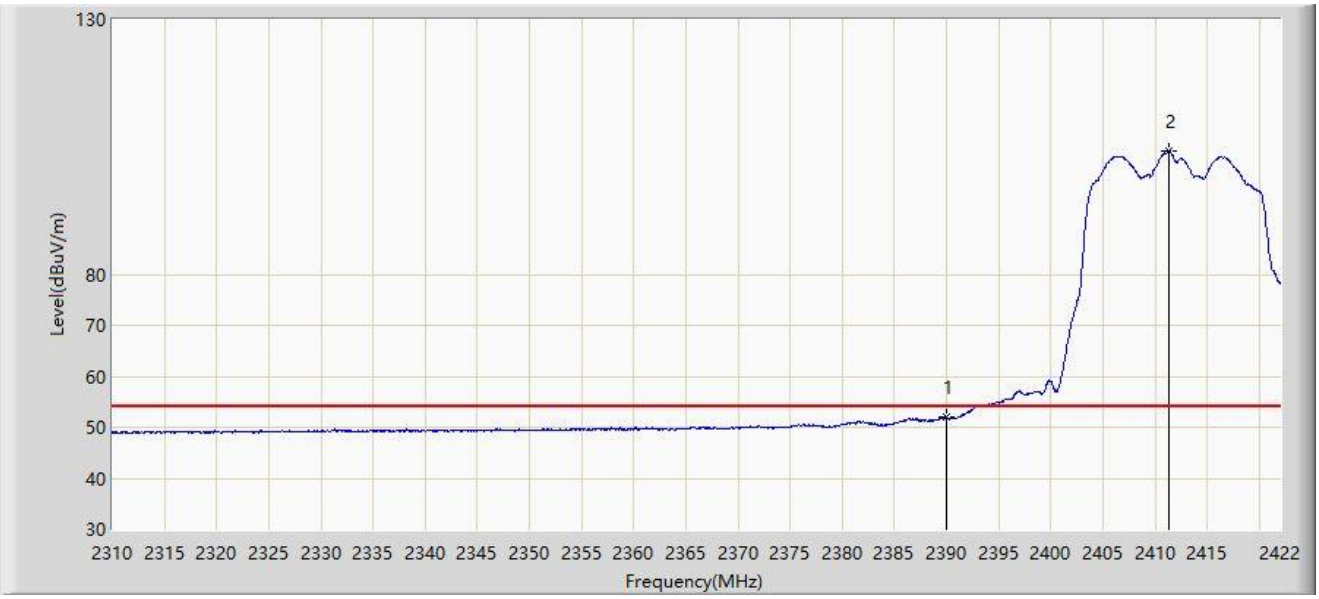
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2388.456	64.993	32.973	-9.007	74.000	32.020	PK
2		2390.000	63.707	31.684	-10.293	74.000	32.023	PK
3		2411.248	111.425	79.380	N/A	N/A	32.045	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2412MHz	



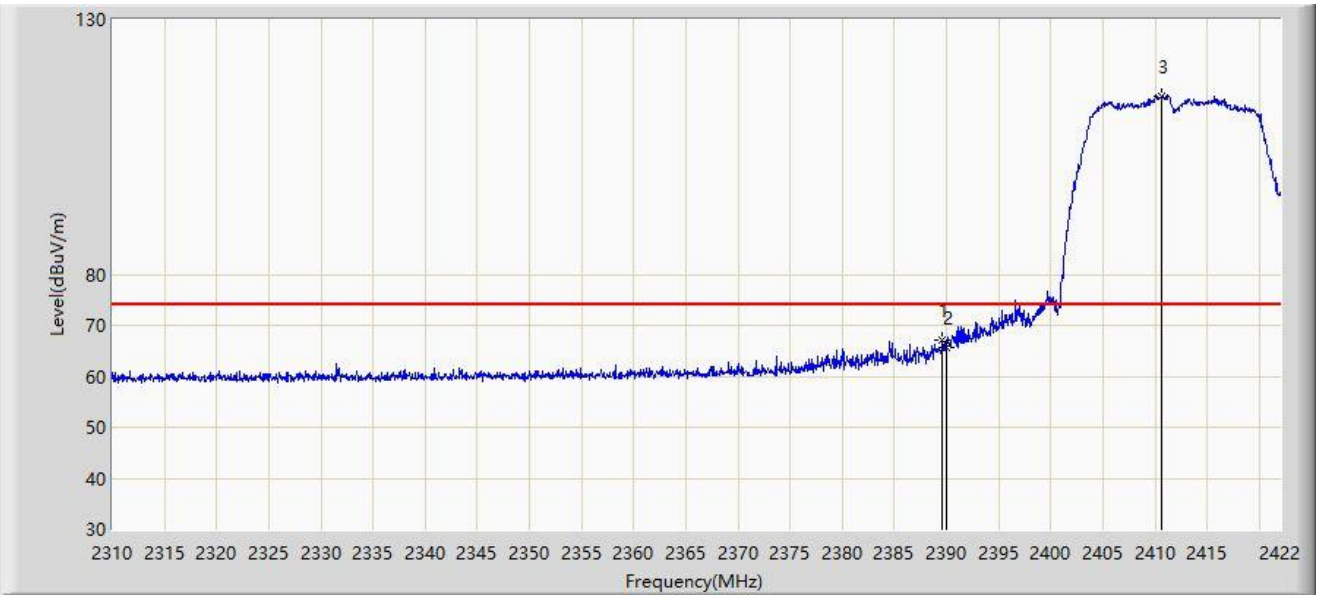
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	52.053	20.030	-1.947	54.000	32.023	AV
2		2411.304	104.229	72.184	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2412MHz	



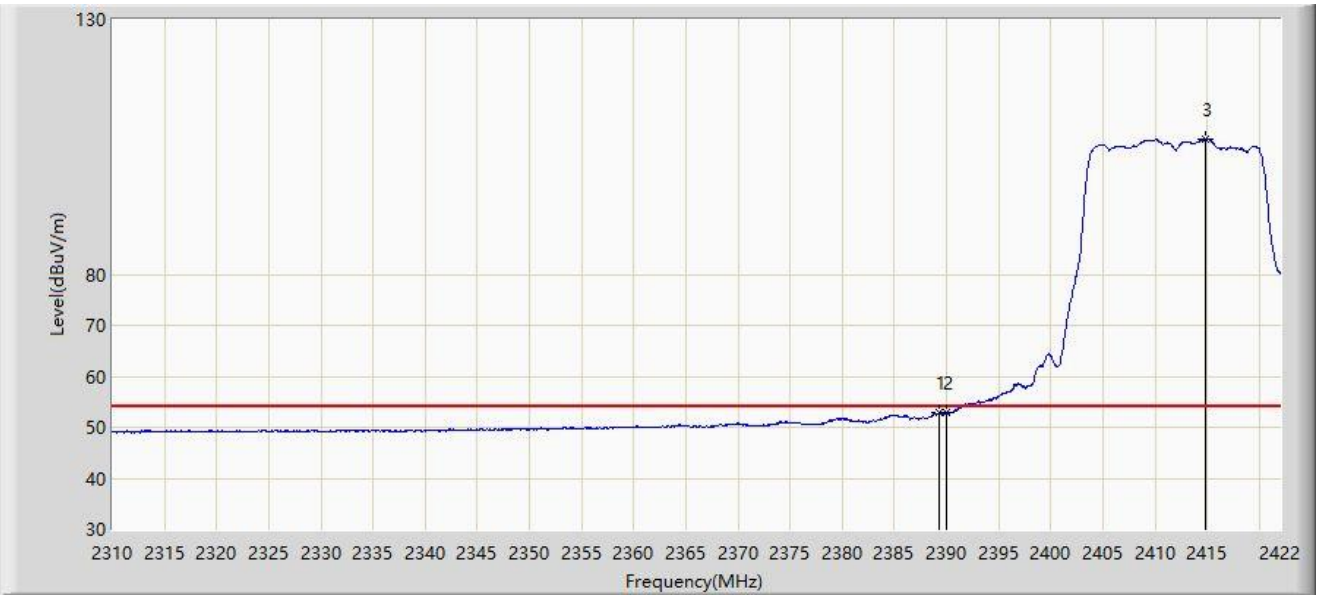
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2389.632	67.083	35.061	-6.917	74.000	32.022	PK
2		2390.000	65.584	33.561	-8.416	74.000	32.023	PK
3		2410.576	115.063	83.018	N/A	N/A	32.044	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2412MHz	



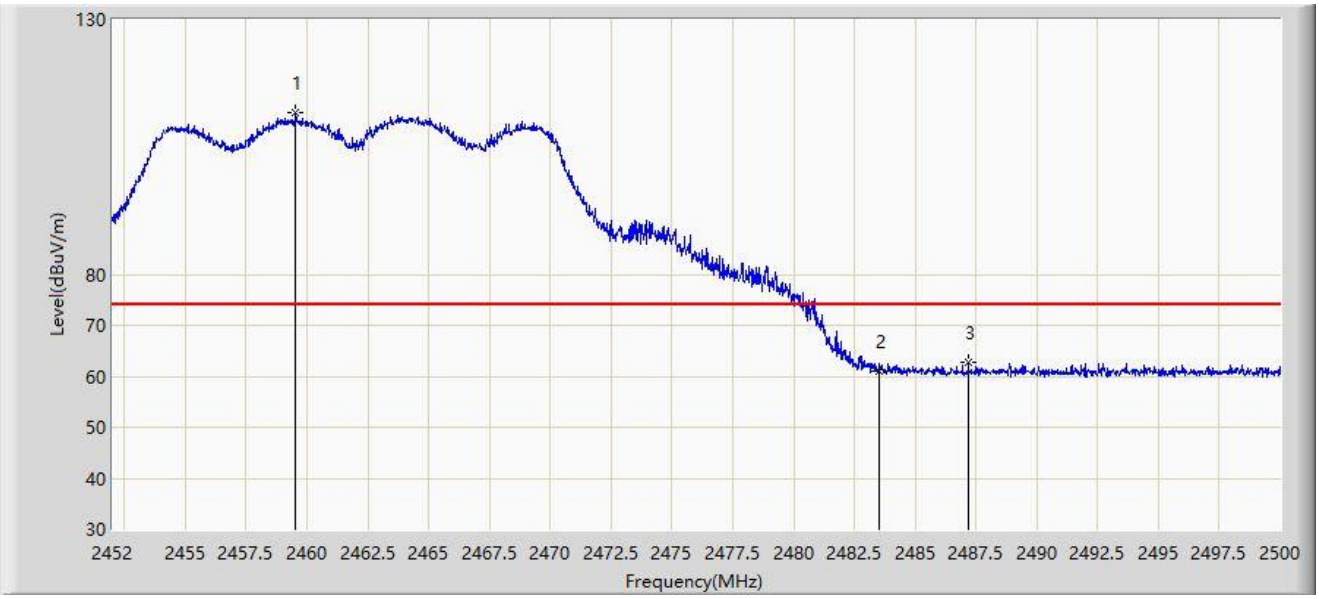
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2389.240	52.866	20.845	-1.134	54.000	32.022	AV
2		2390.000	52.758	20.735	-1.242	54.000	32.023	AV
3		2414.776	106.510	74.465	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2462MHz	



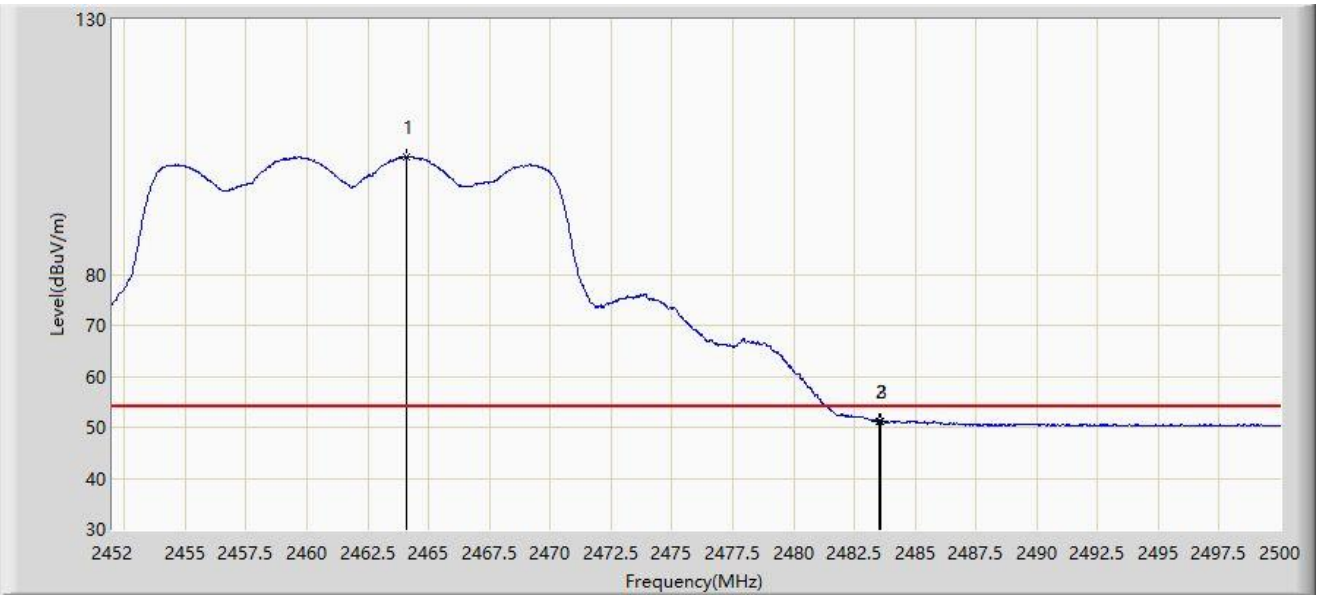
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2459.536	111.842	79.638	N/A	N/A	32.205	PK
2		2483.500	61.048	28.748	-12.952	74.000	32.300	PK
3	*	2487.184	62.754	30.435	-11.246	74.000	32.319	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2462MHz	



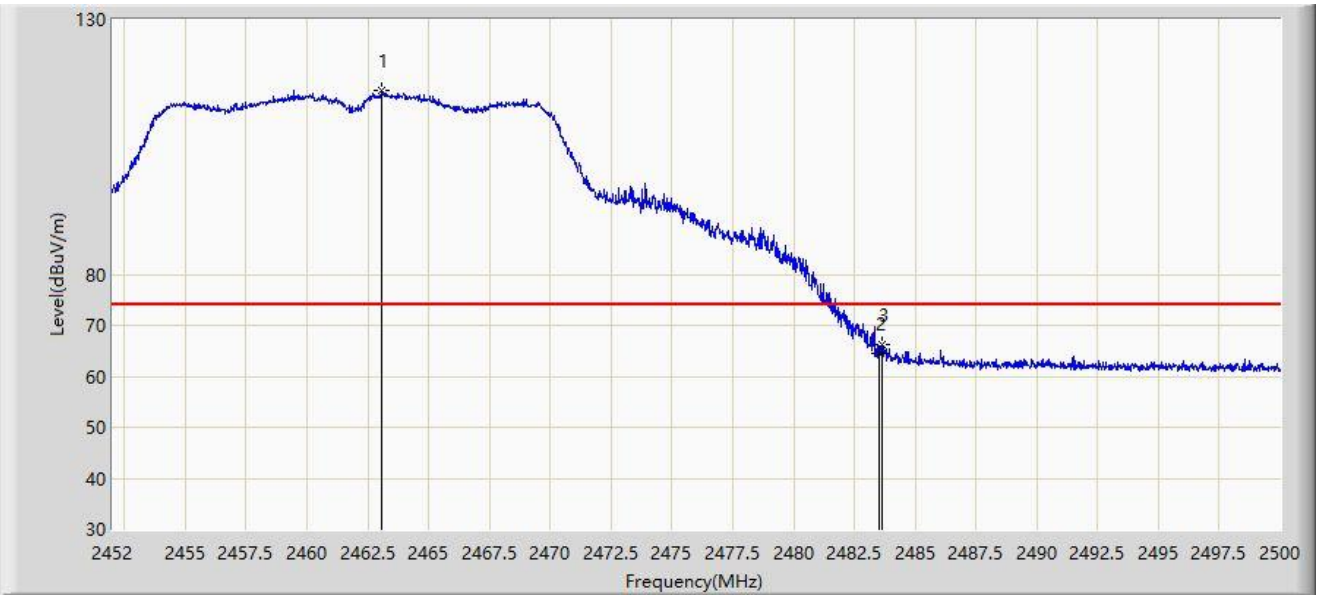
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2464.072	102.998	70.775	N/A	N/A	32.223	AV
2		2483.500	51.163	18.863	-2.837	54.000	32.300	AV
3	*	2483.608	51.257	18.956	-2.743	54.000	32.301	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2462MHz	



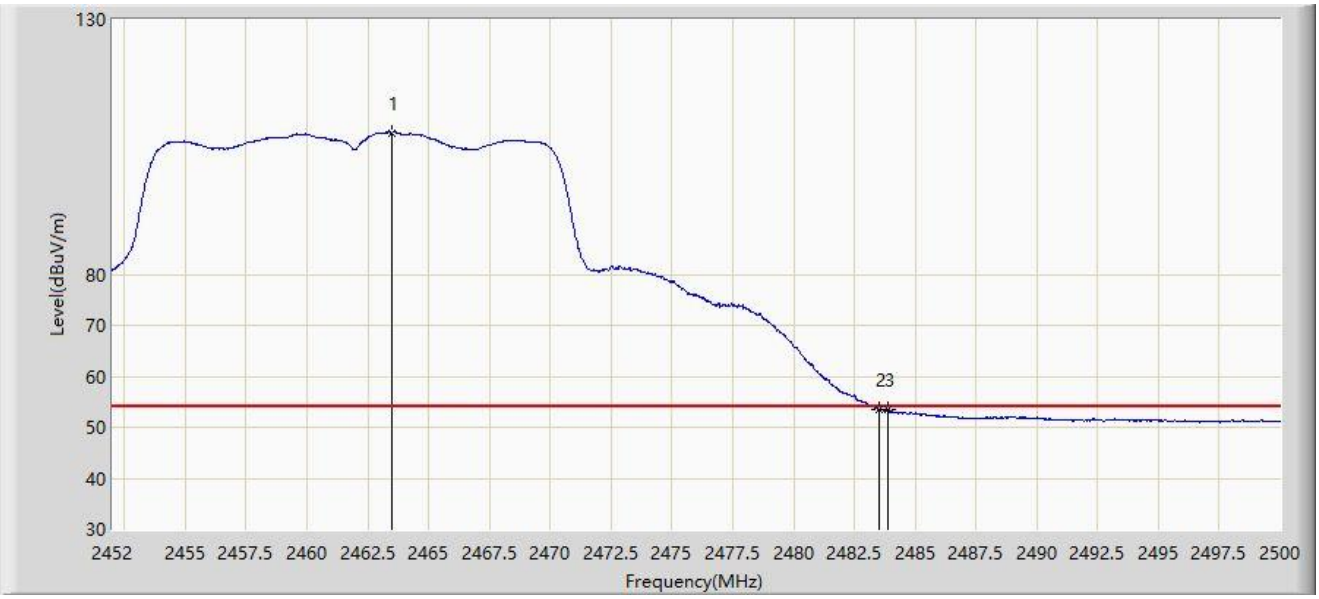
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2463.064	116.171	83.951	N/A	N/A	32.220	PK
2		2483.500	64.637	32.337	-9.363	74.000	32.300	PK
3	*	2483.632	66.145	33.844	-7.855	74.000	32.301	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11g at 2462MHz	



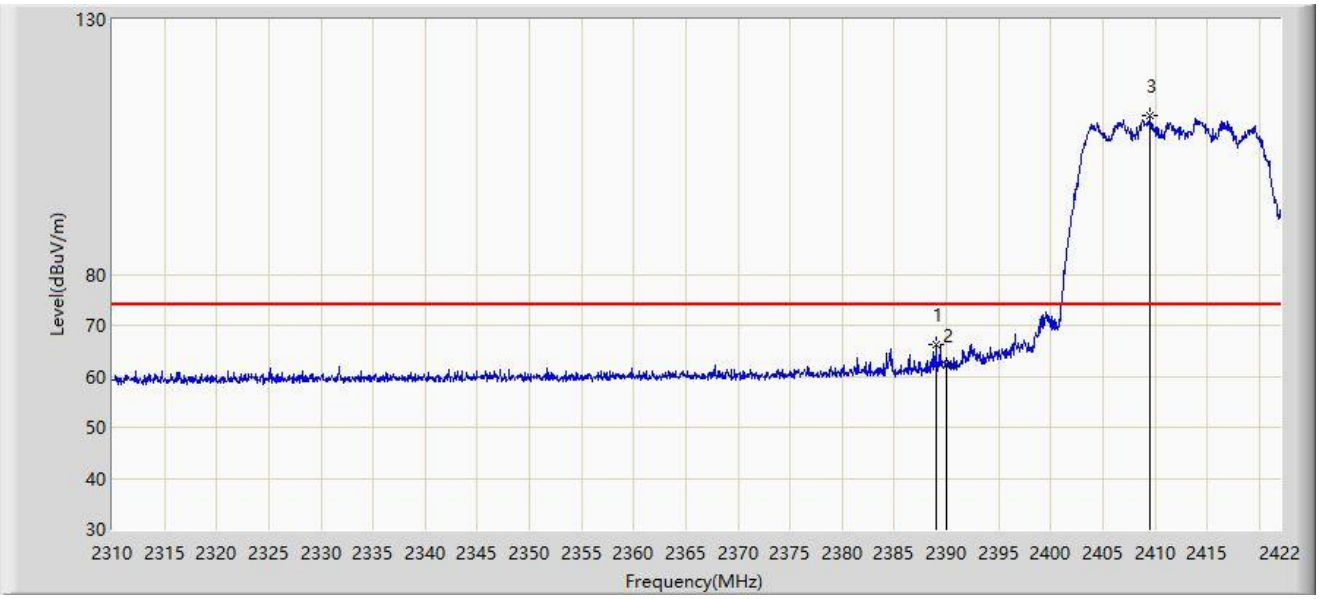
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2463.496	107.822	75.601	N/A	N/A	32.222	AV
2		2483.500	53.384	21.084	-0.616	54.000	32.300	AV
3	*	2483.896	53.482	21.180	-0.518	54.000	32.302	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at 2412MHz	



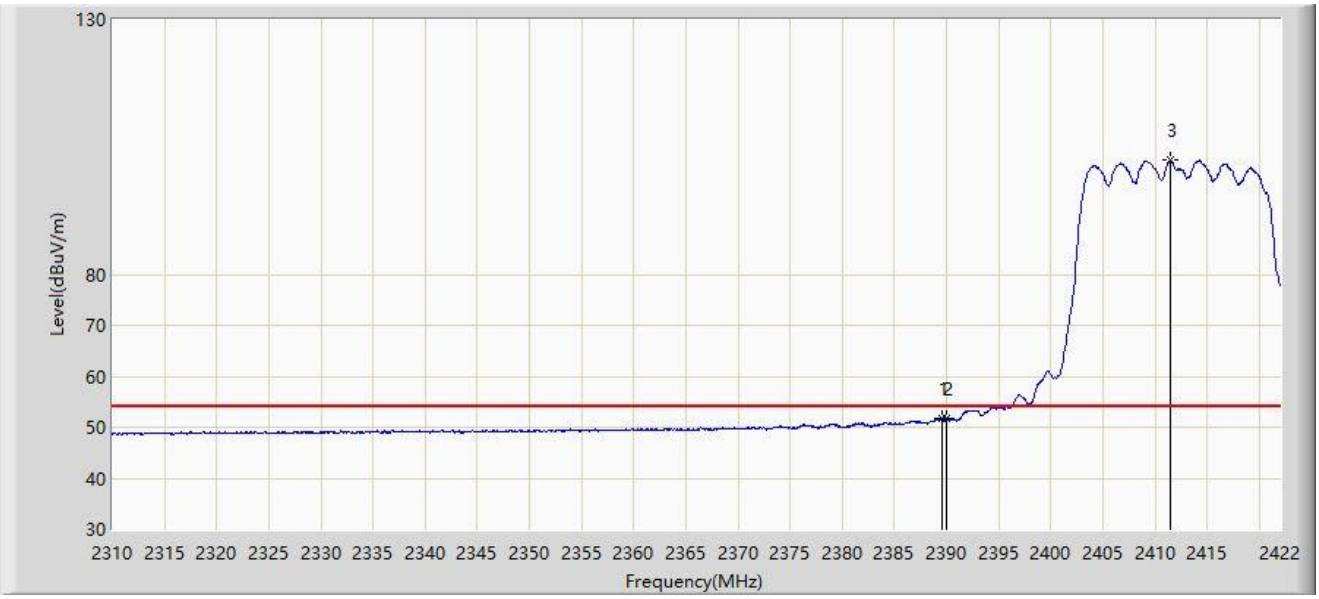
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2388.960	66.258	34.237	-7.742	74.000	32.021	PK
2		2390.000	62.076	30.053	-11.924	74.000	32.023	PK
3		2409.512	111.240	79.196	N/A	N/A	32.044	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at 2412MHz	



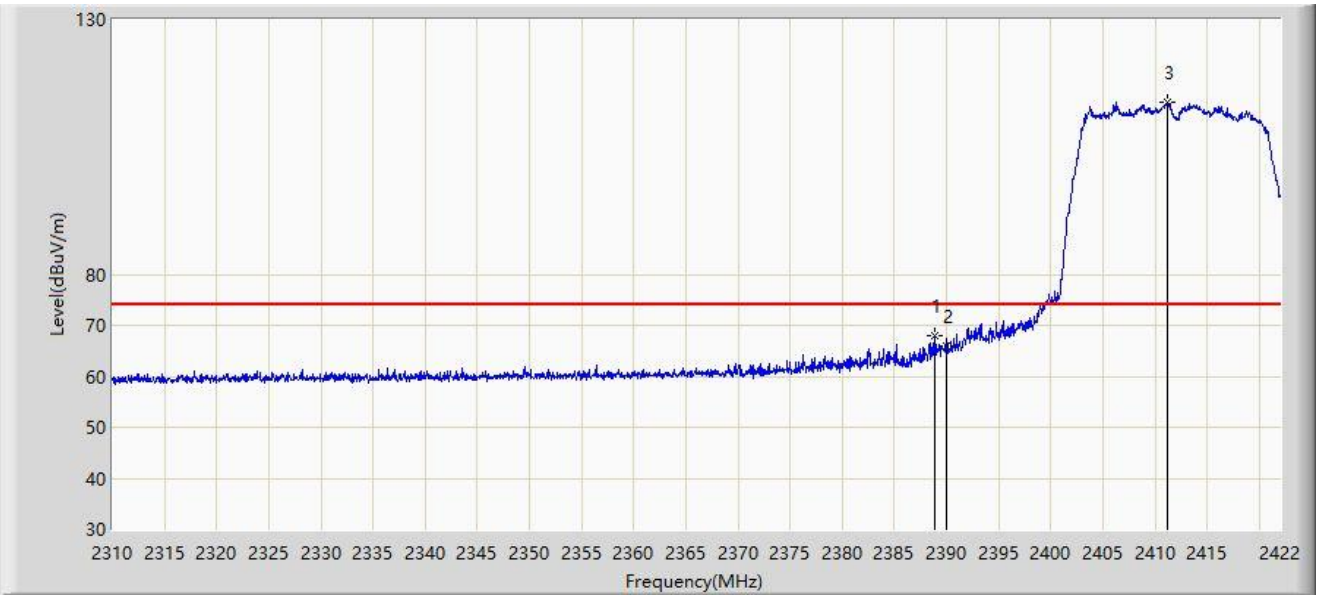
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2389.632	51.878	19.856	-2.122	54.000	32.022	AV
2		2390.000	51.628	19.605	-2.372	54.000	32.023	AV
3		2411.472	102.370	70.325	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at 2412MHz	



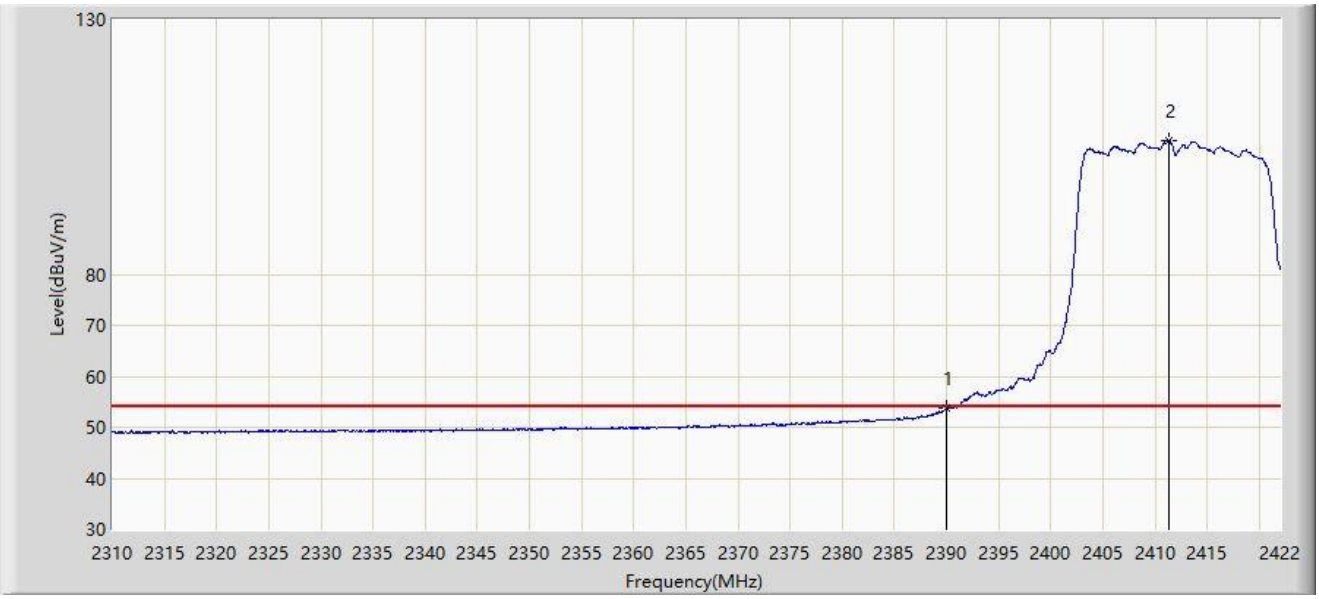
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2388.848	67.863	35.842	-6.137	74.000	32.021	PK
2		2390.000	65.905	33.882	-8.095	74.000	32.023	PK
3		2411.192	113.769	81.724	N/A	N/A	32.045	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at 2412MHz	



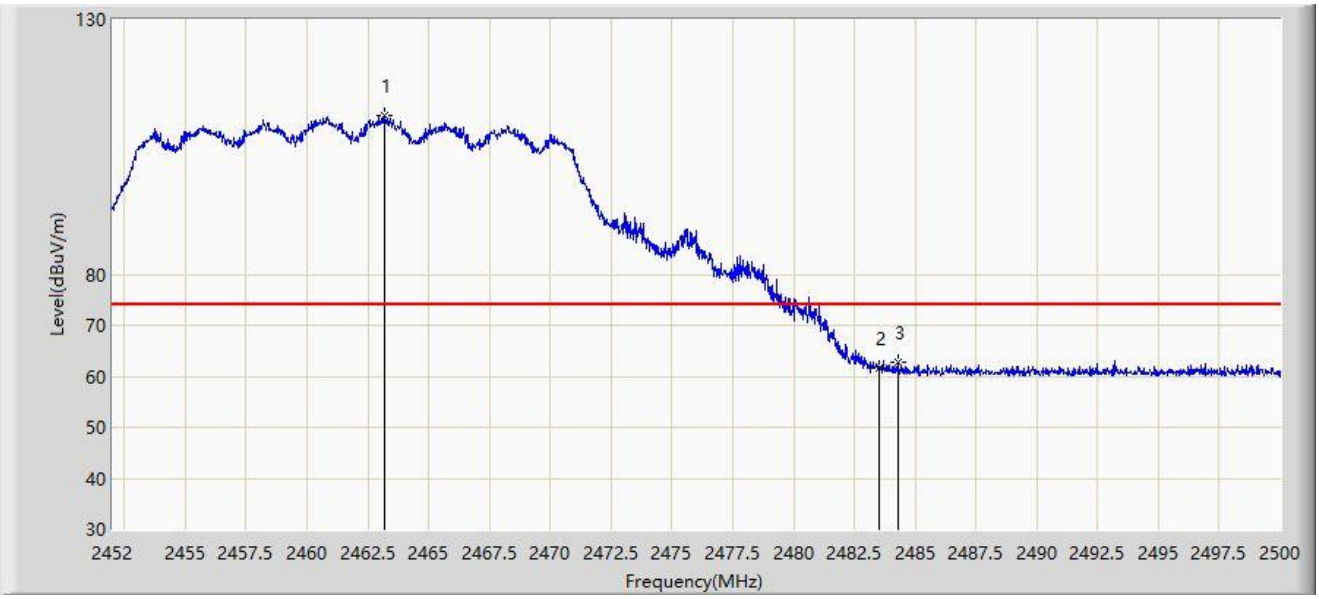
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	53.634	21.611	-0.366	54.000	32.023	AV
2		2411.304	106.278	74.233	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at 2462MHz	



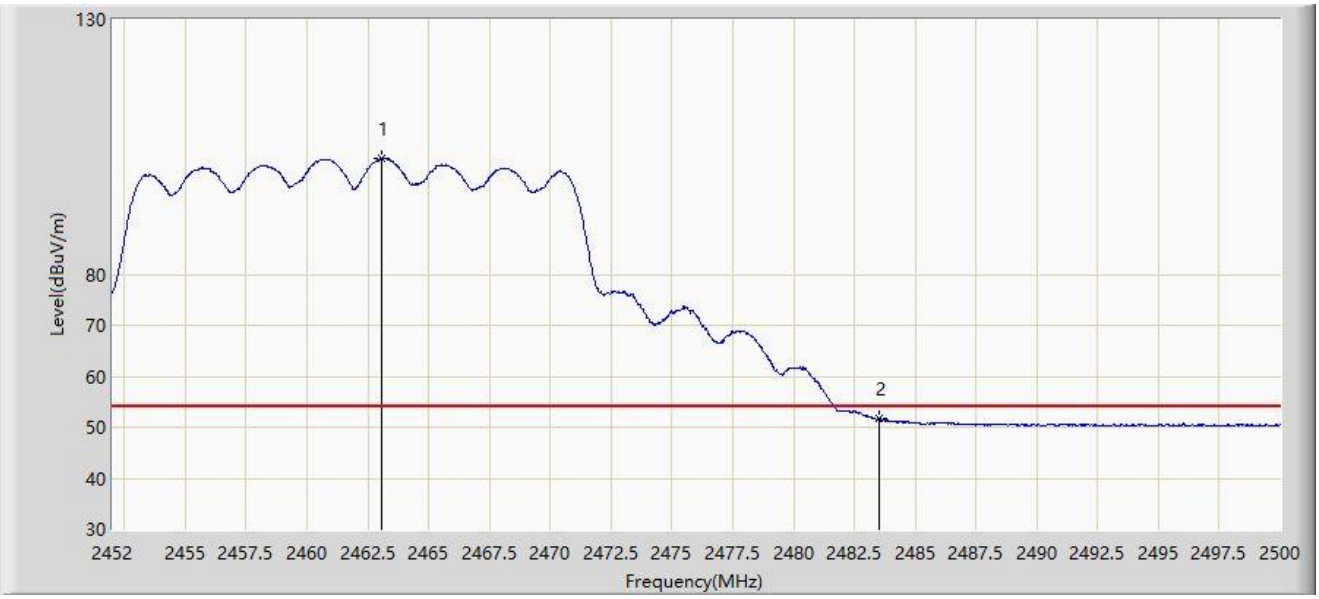
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2463.184	111.291	79.071	N/A	N/A	32.220	PK
2		2483.500	61.461	29.161	-12.539	74.000	32.300	PK
3	*	2484.280	62.867	30.563	-11.133	74.000	32.304	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at 2462MHz	



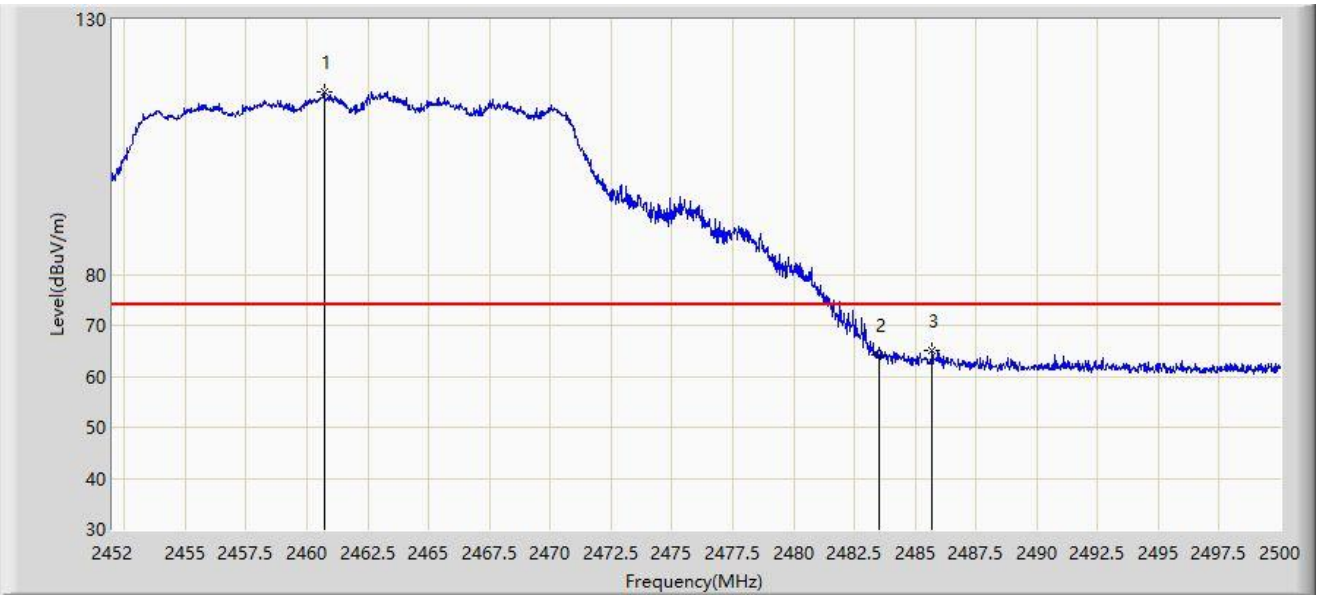
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		2463.088	102.663	70.443	N/A	N/A	32.220	AV
2	*	2483.500	51.819	19.519	-2.181	54.000	32.300	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at 2462MHz	



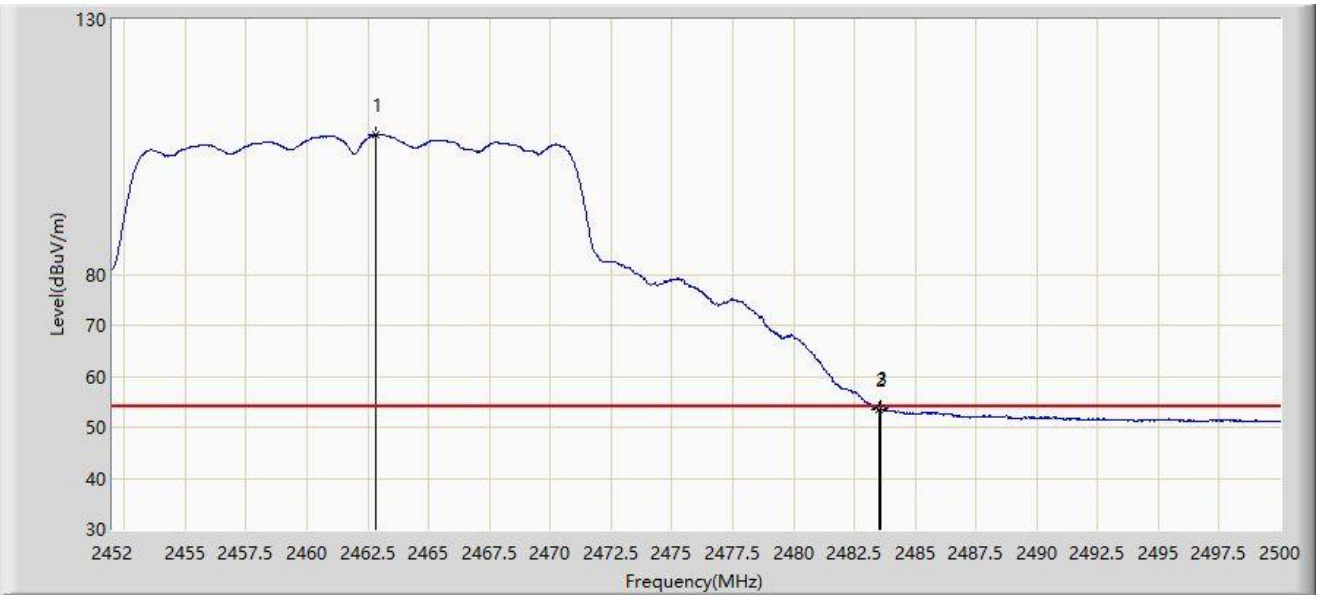
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2460.712	115.887	83.677	N/A	N/A	32.210	PK
2		2483.500	64.120	31.820	-9.880	74.000	32.300	PK
3	*	2485.696	65.042	32.730	-8.958	74.000	32.311	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at 2462MHz.5	



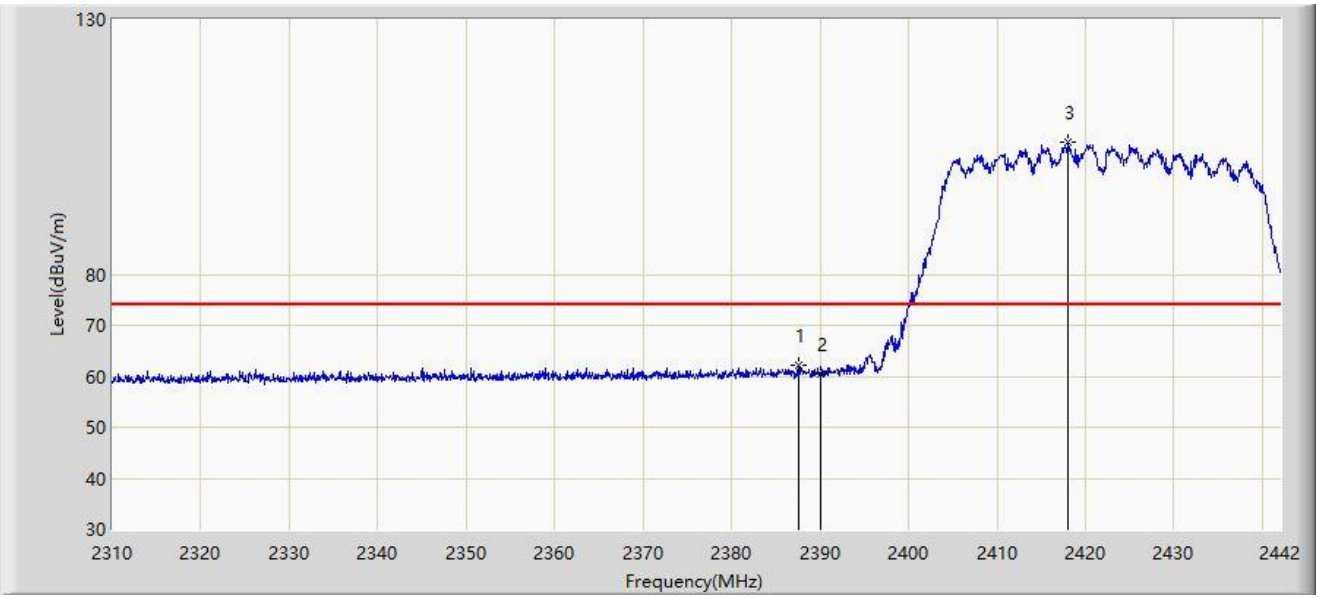
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2462.800	107.387	75.168	N/A	N/A	32.219	AV
2		2483.500	53.565	21.265	-0.435	54.000	32.300	AV
3	*	2483.560	53.644	21.343	-0.356	54.000	32.301	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at 2422MHz	



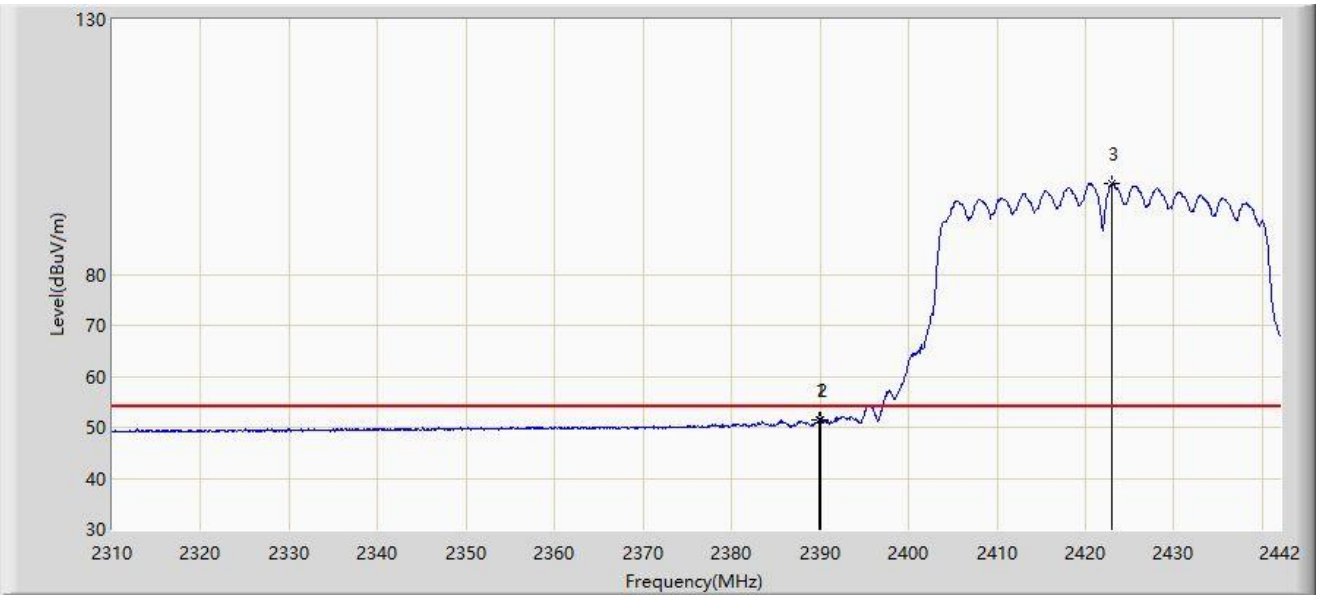
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2387.550	62.148	30.130	-11.852	74.000	32.018	PK
2		2390.000	60.411	28.388	-13.589	74.000	32.023	PK
3		2417.976	106.081	74.036	N/A	N/A	32.046	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at 2422MHz	



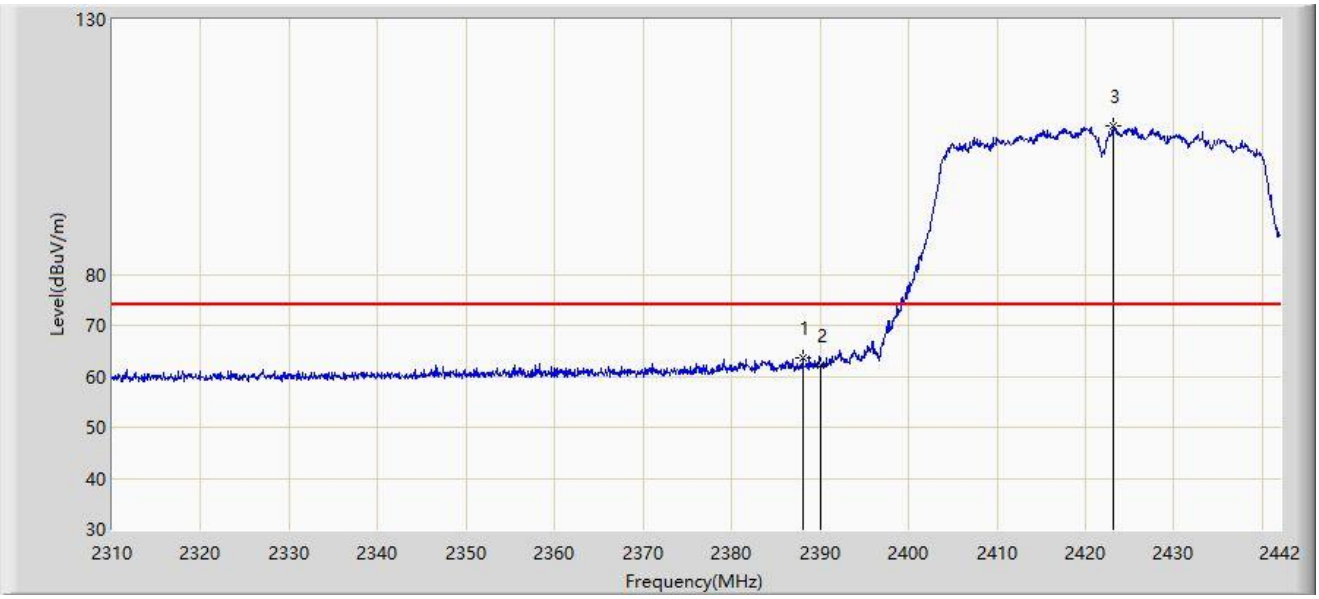
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2389.926	51.493	19.470	-2.507	54.000	32.023	AV
2		2390.000	51.336	19.313	-2.664	54.000	32.023	AV
3		2423.058	97.877	65.831	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at 2422MHz	



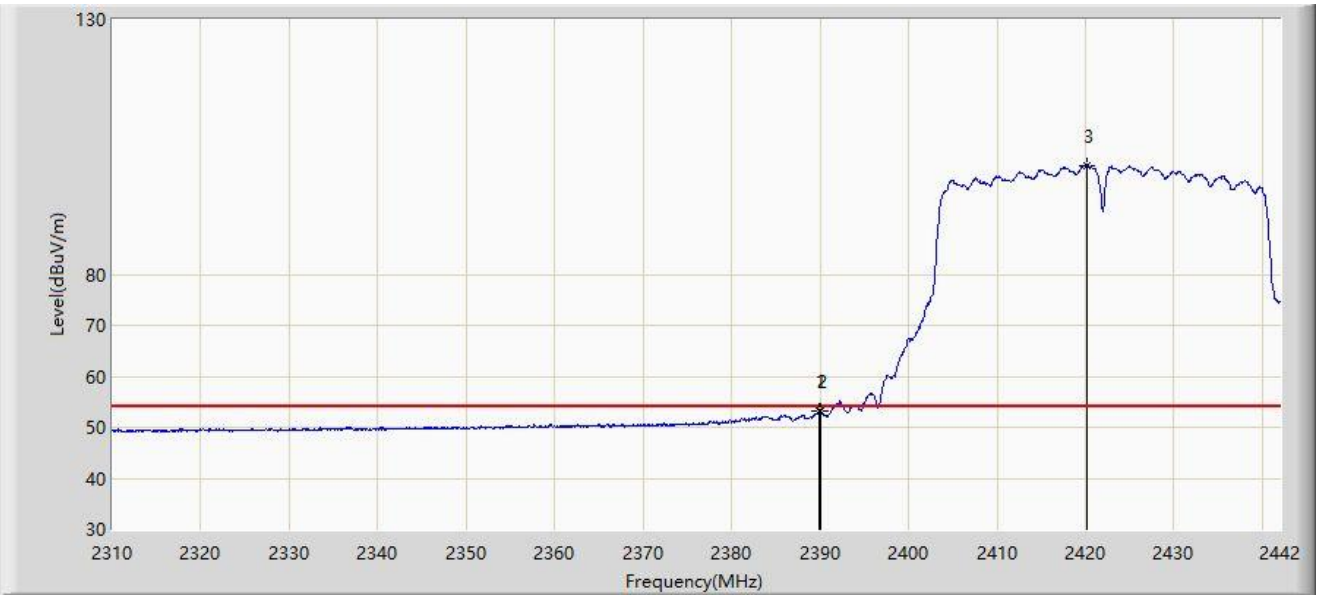
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2388.012	63.742	31.723	-10.258	74.000	32.019	PK
2		2390.000	62.174	30.151	-11.826	74.000	32.023	PK
3		2423.124	109.060	77.014	N/A	N/A	32.045	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at 2422MHz	



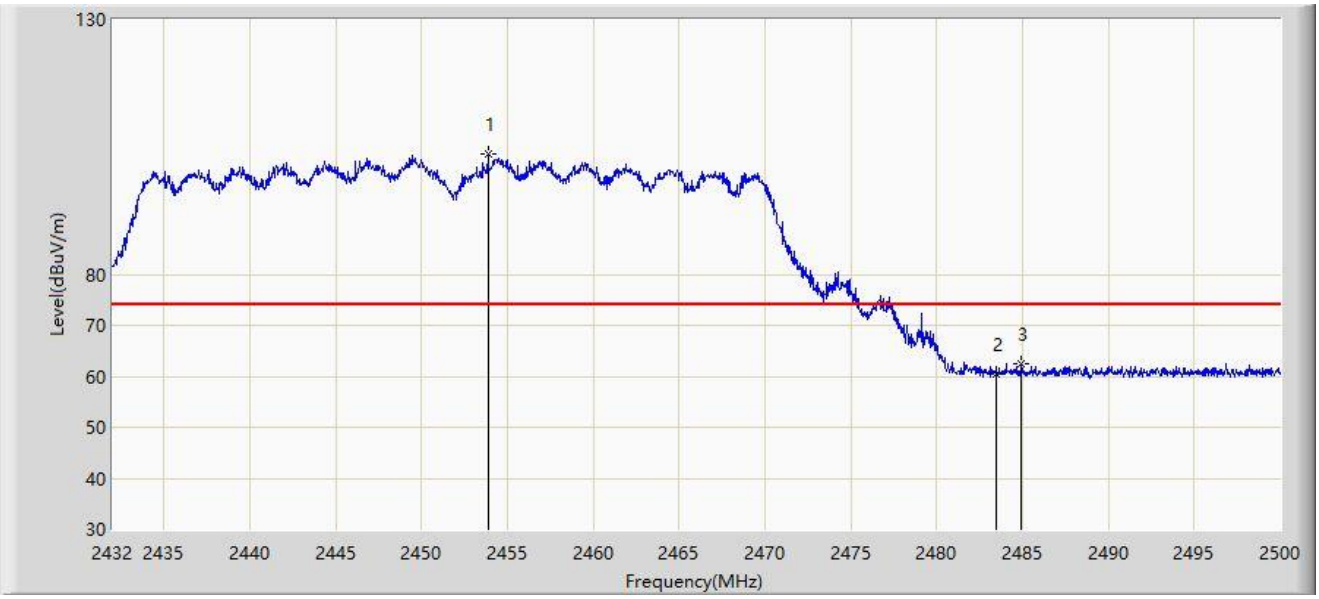
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2389.860	53.112	21.089	-0.888	54.000	32.023	AV
2		2390.000	53.079	21.056	-0.921	54.000	32.023	AV
3		2420.154	101.400	69.354	N/A	N/A	32.046	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



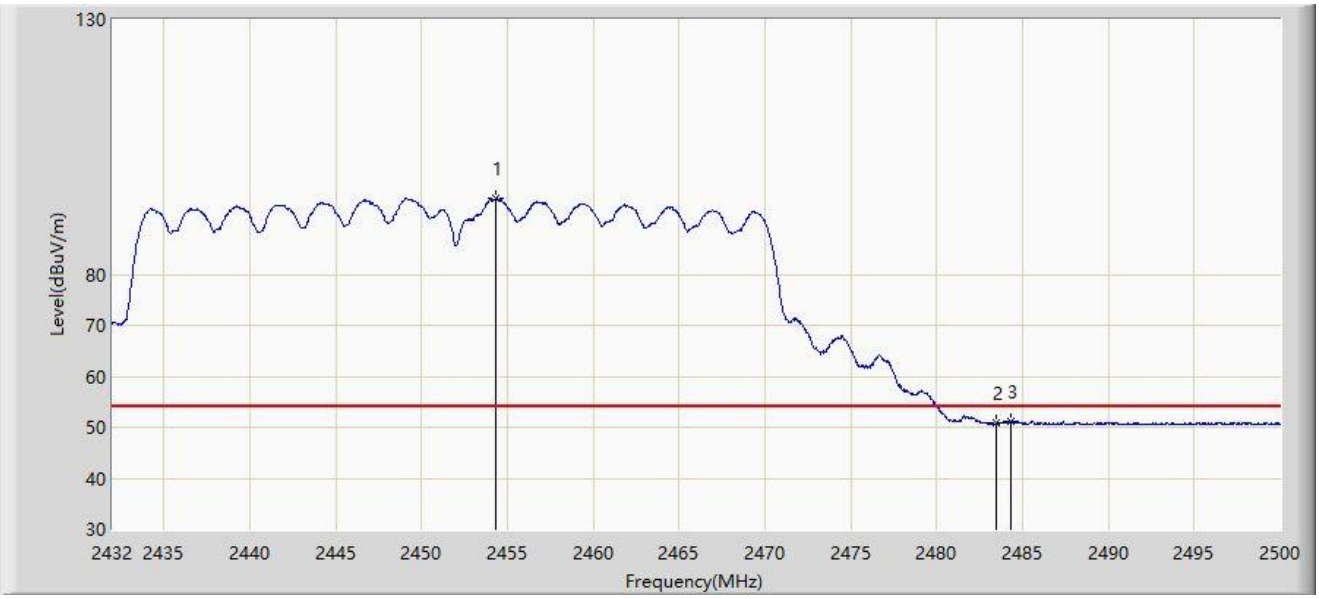
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		2453.896	103.632	71.454	N/A	N/A	32.178	PK
2		2483.500	60.534	28.234	-13.466	74.000	32.300	PK
3	*	2484.938	62.587	30.279	-11.413	74.000	32.308	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



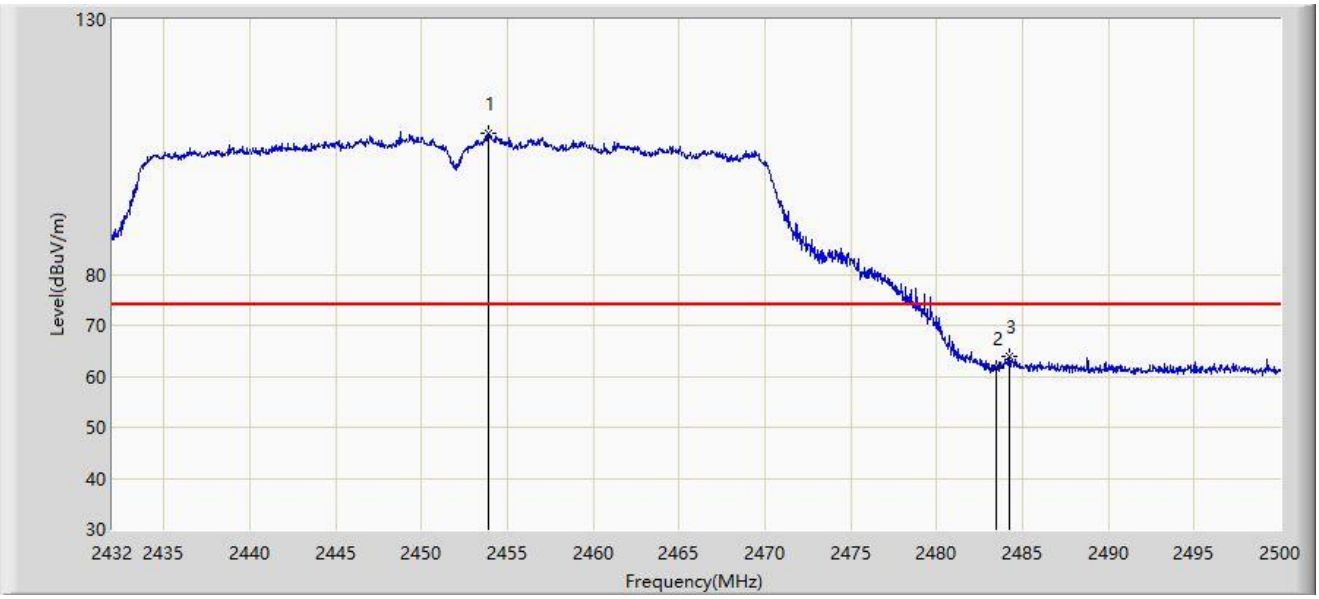
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2454.304	94.804	62.624	N/A	N/A	32.180	AV
2		2483.500	50.728	18.428	-3.272	54.000	32.300	AV
3	*	2484.326	51.155	18.850	-2.845	54.000	32.305	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



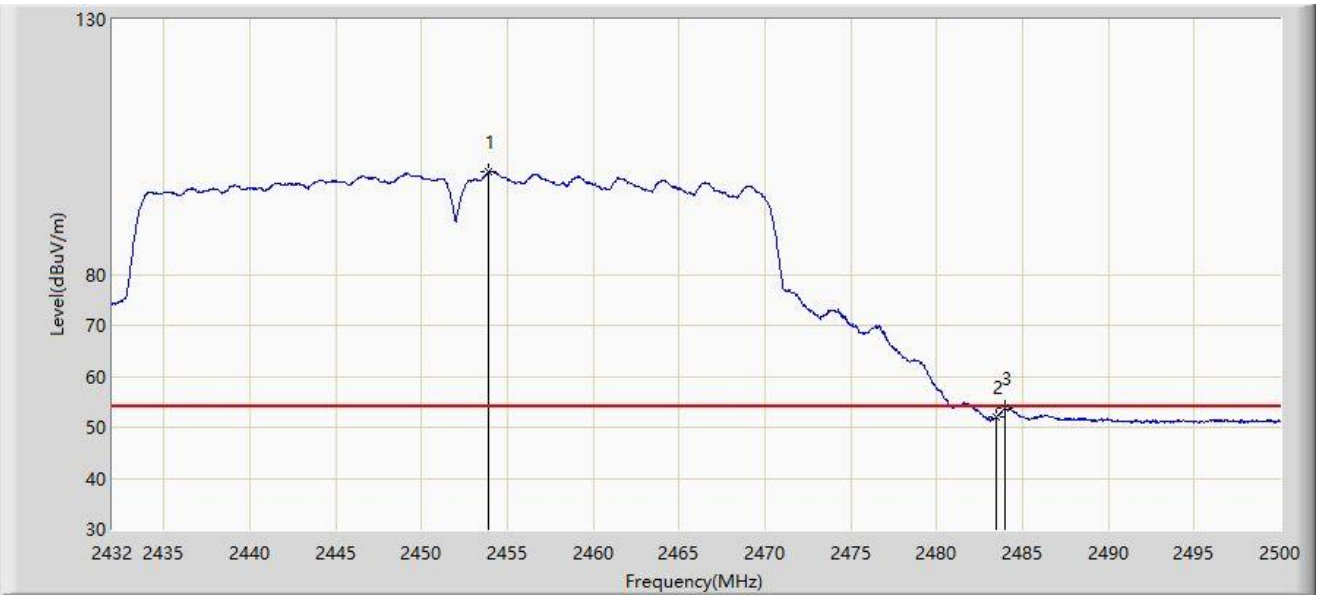
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2453.930	107.657	75.479	N/A	N/A	32.178	PK
2		2483.500	61.731	29.431	-12.269	74.000	32.300	PK
3	*	2484.258	63.769	31.465	-10.231	74.000	32.304	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT40 at 2452MHz	



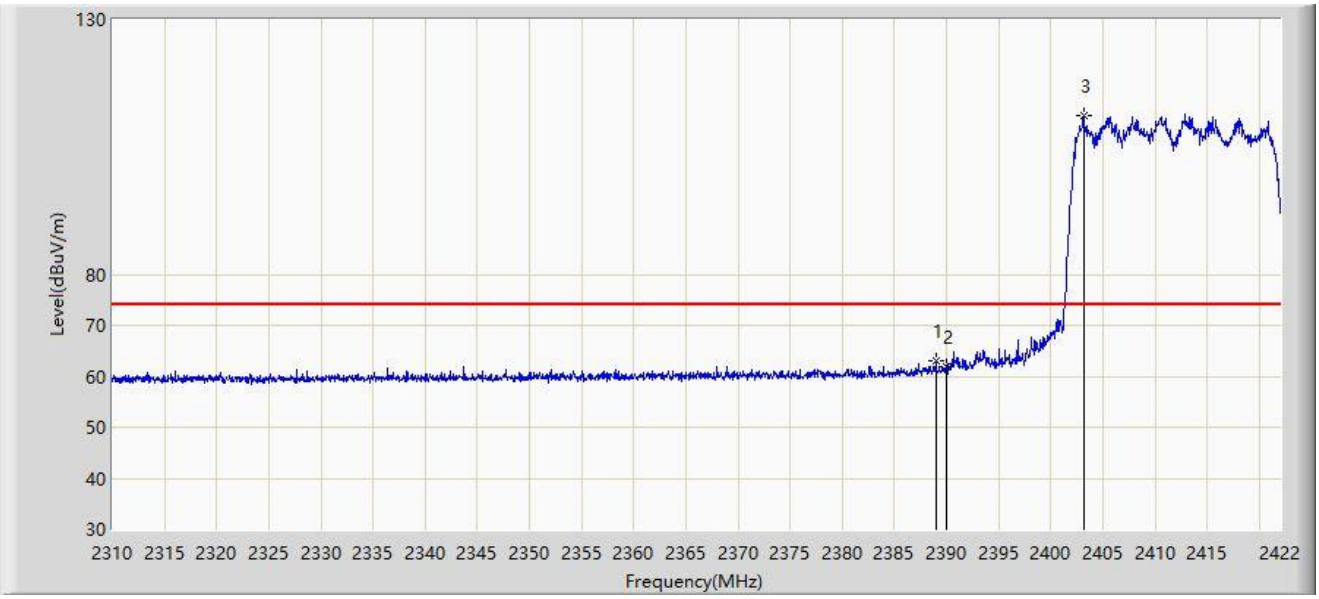
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2453.930	100.176	67.998	N/A	N/A	32.178	AV
2		2483.500	52.074	19.774	-1.926	54.000	32.300	AV
3	*	2483.986	53.772	21.469	-0.228	54.000	32.303	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at 2412MHz	



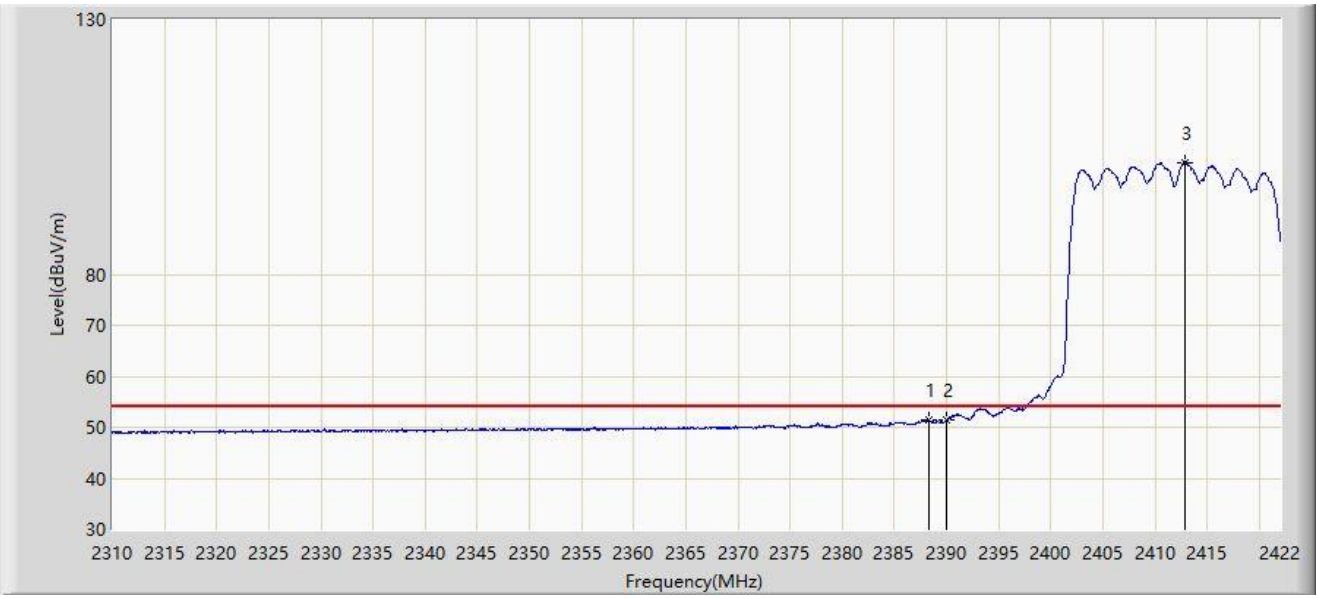
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2389.016	62.902	30.881	-11.098	74.000	32.021	PK
2		2390.000	61.902	29.879	-12.098	74.000	32.023	PK
3		2403.128	111.248	79.209	N/A	N/A	32.038	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at 2412MHz	



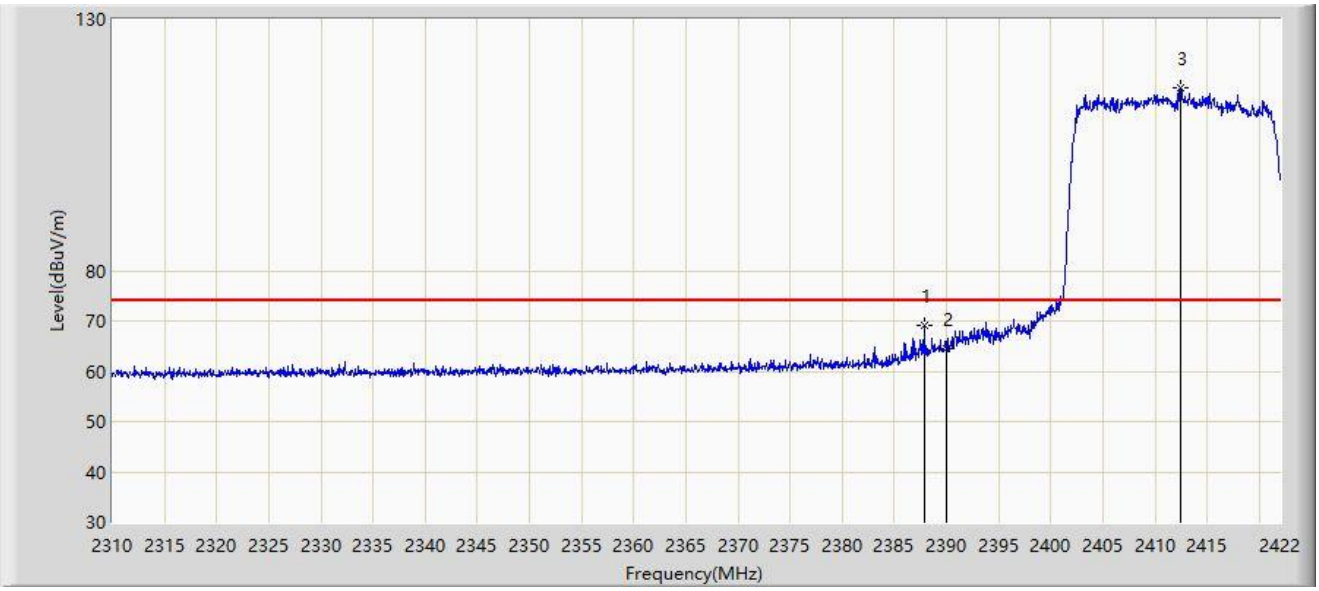
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2388.288	51.413	19.393	-2.587	54.000	32.020	AV
2		2390.000	51.378	19.355	-2.622	54.000	32.023	AV
3		2412.872	102.022	69.977	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at 2412MHz	



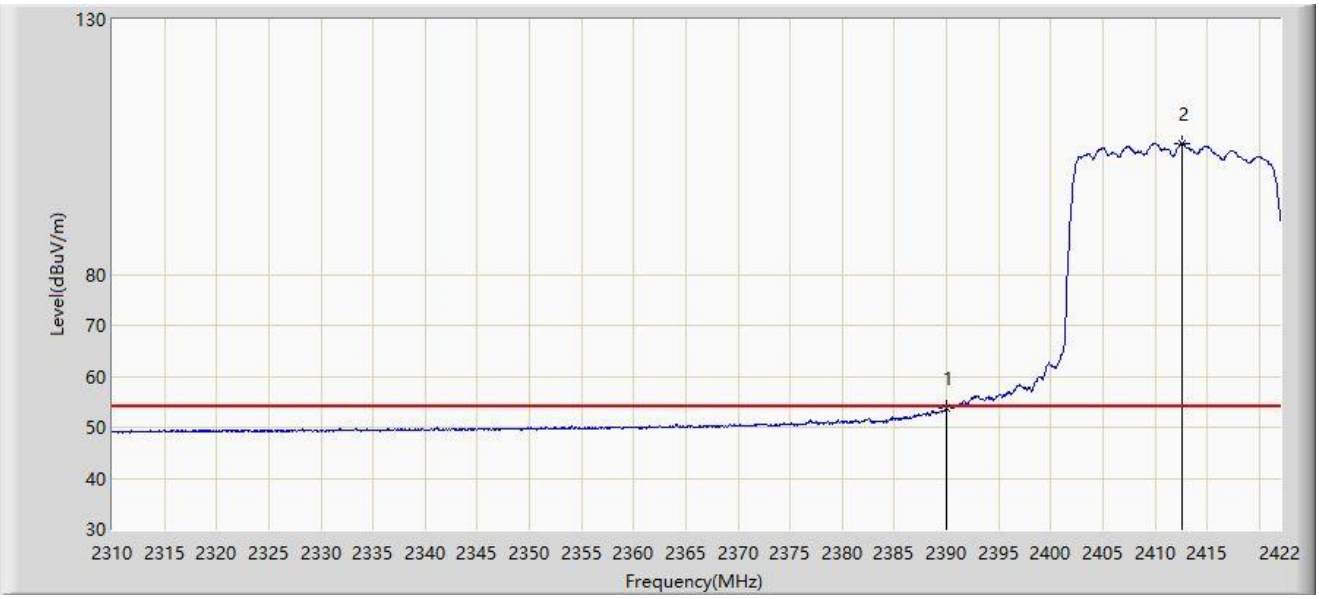
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2387.896	69.005	36.986	-4.995	74.000	32.019	PK
2		2390.000	64.440	32.417	-9.560	74.000	32.023	PK
3		2412.480	116.433	84.388	N/A	N/A	32.045	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at 2412MHz	



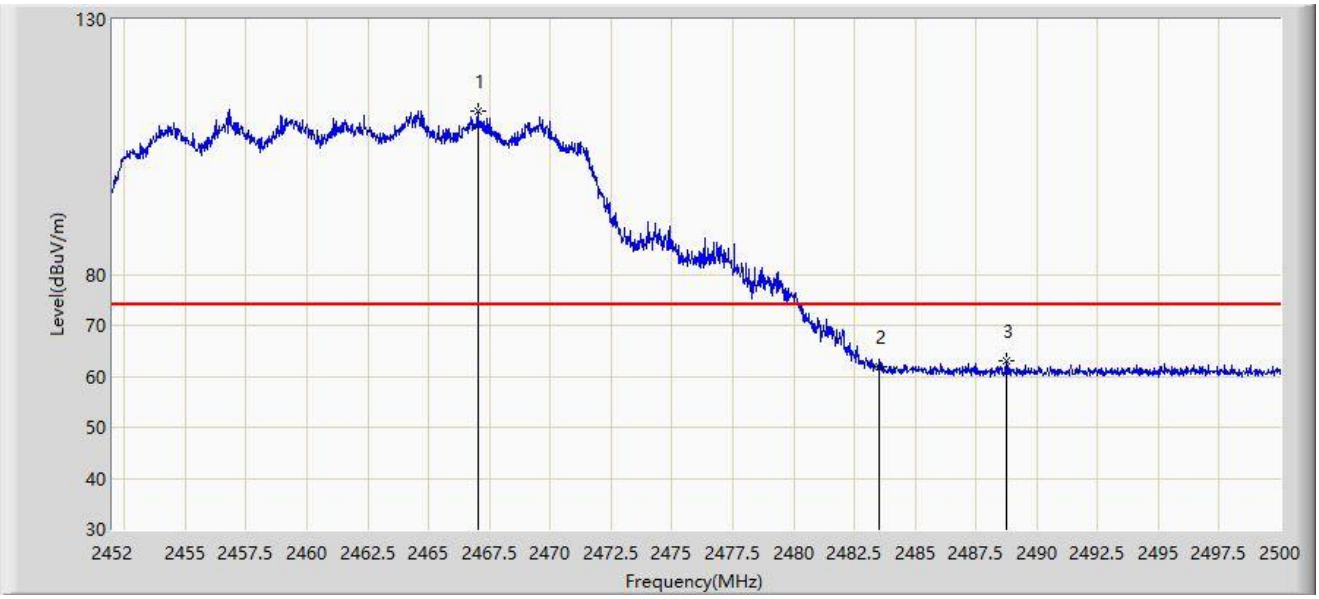
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2390.000	53.678	21.655	-0.322	54.000	32.023	AV
2		2412.536	105.769	73.724	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at 2462MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2467.024	111.901	79.667	N/A	N/A	32.234	PK
2		2483.500	61.954	29.654	-12.046	74.000	32.300	PK
3	*	2488.744	62.948	30.621	-11.052	74.000	32.328	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at 2462MHz	

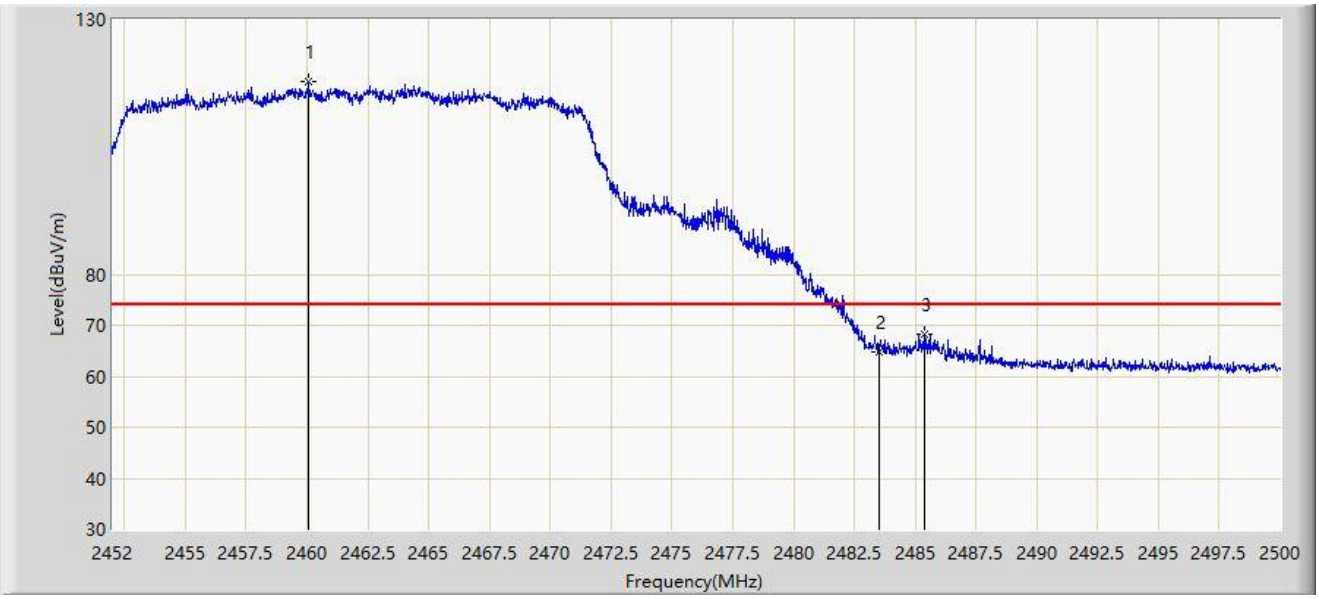
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		2464.432	102.361	70.136	N/A	N/A	32.225	AV
2	*	2483.500	51.871	19.571	-2.129	54.000	32.300	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at 2462MHz	



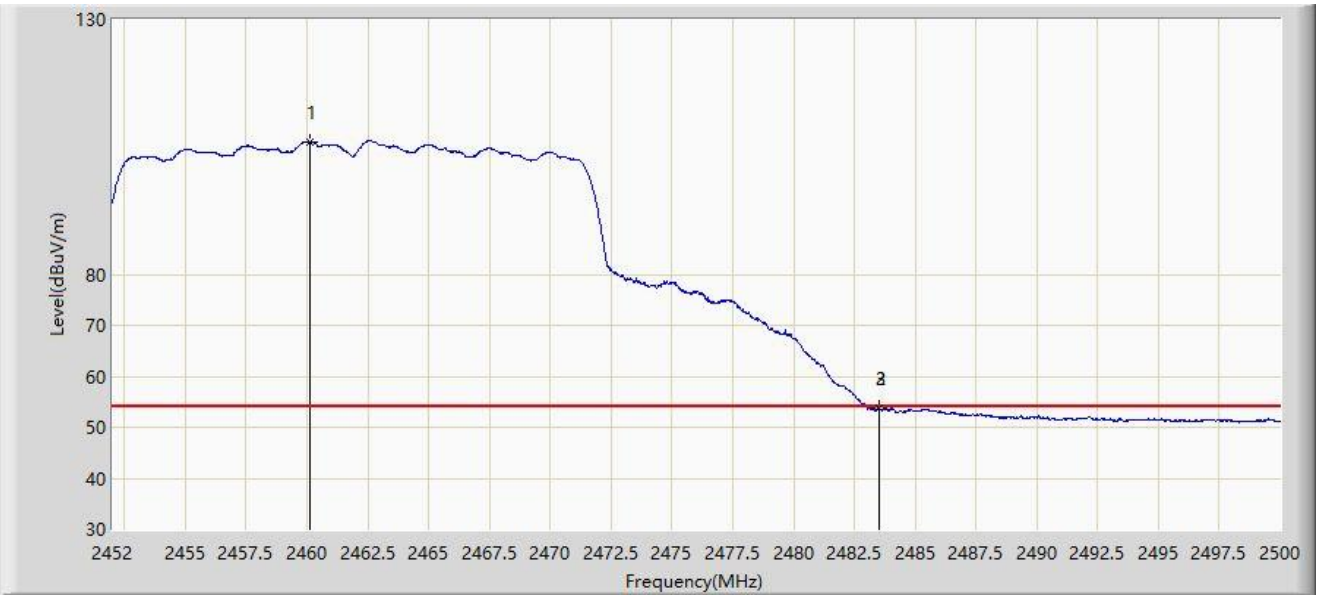
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2460.088	117.795	85.588	N/A	N/A	32.207	PK
2		2483.500	64.905	32.605	-9.095	74.000	32.300	PK
3	*	2485.360	68.296	35.986	-5.704	74.000	32.310	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE20 at 2462MHz	



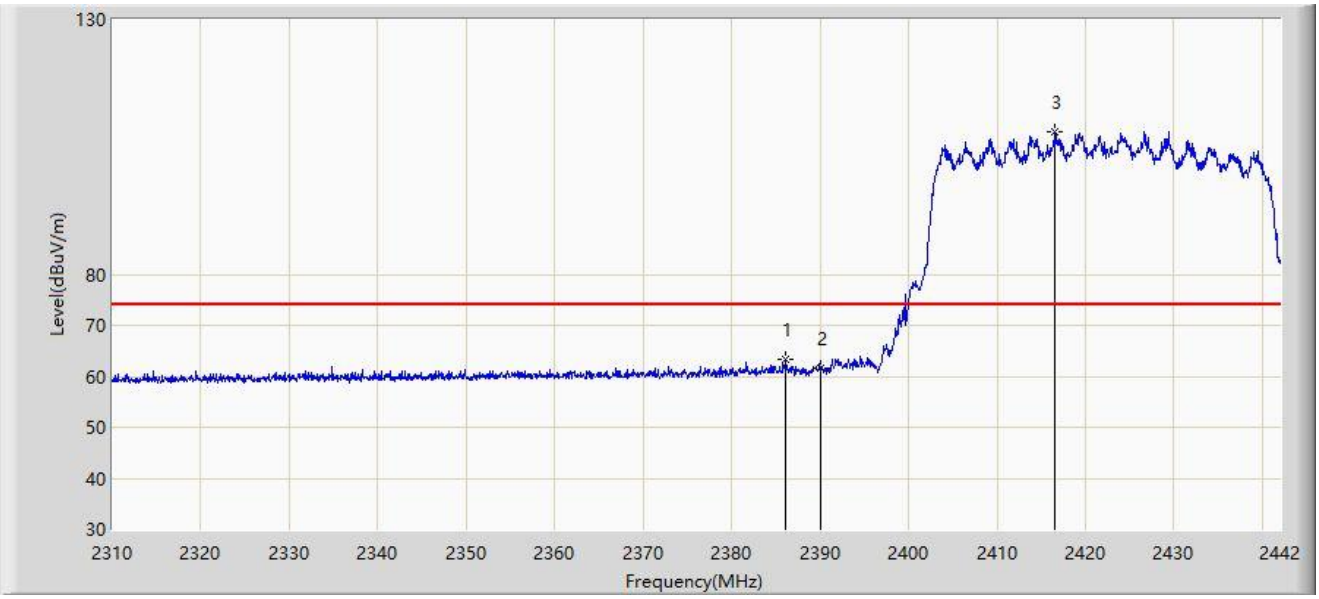
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		2460.112	106.084	73.877	N/A	N/A	32.207	AV
2		2483.500	53.822	21.522	-0.178	54.000	32.300	AV
3	*	2483.512	53.848	21.548	-0.152	54.000	32.301	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at 2422MHz	



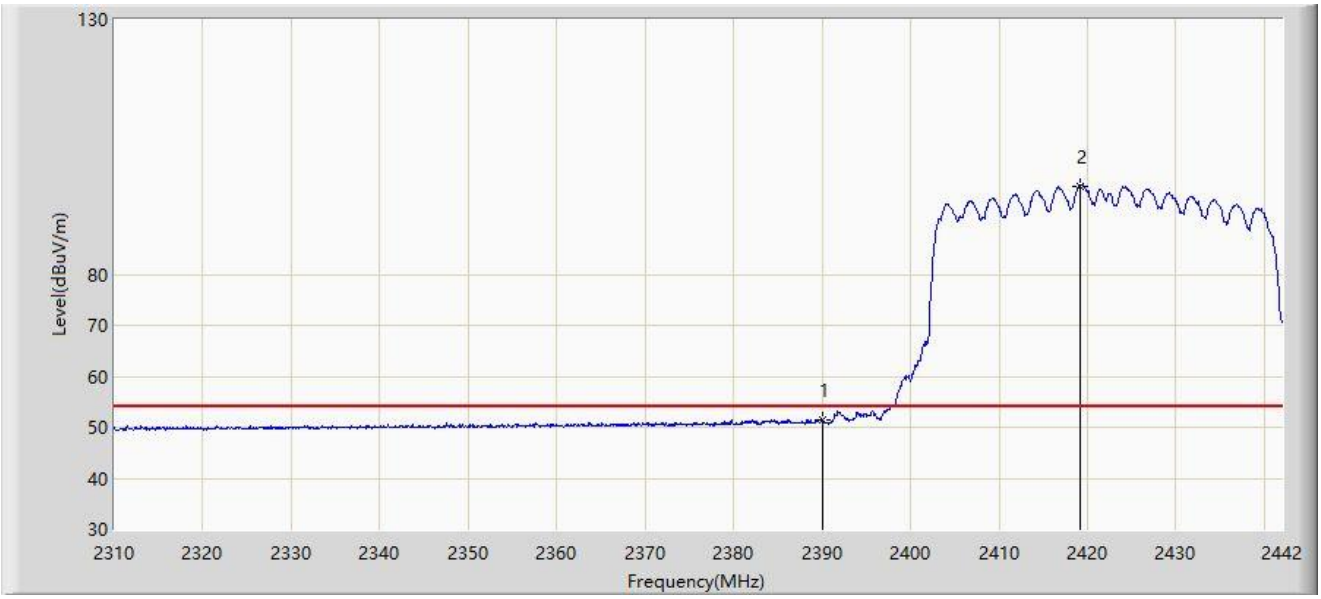
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2386.098	63.337	31.322	-10.663	74.000	32.015	PK
2		2390.000	61.620	29.597	-12.380	74.000	32.023	PK
3		2416.590	108.009	75.964	N/A	N/A	32.045	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at 2422MHz	



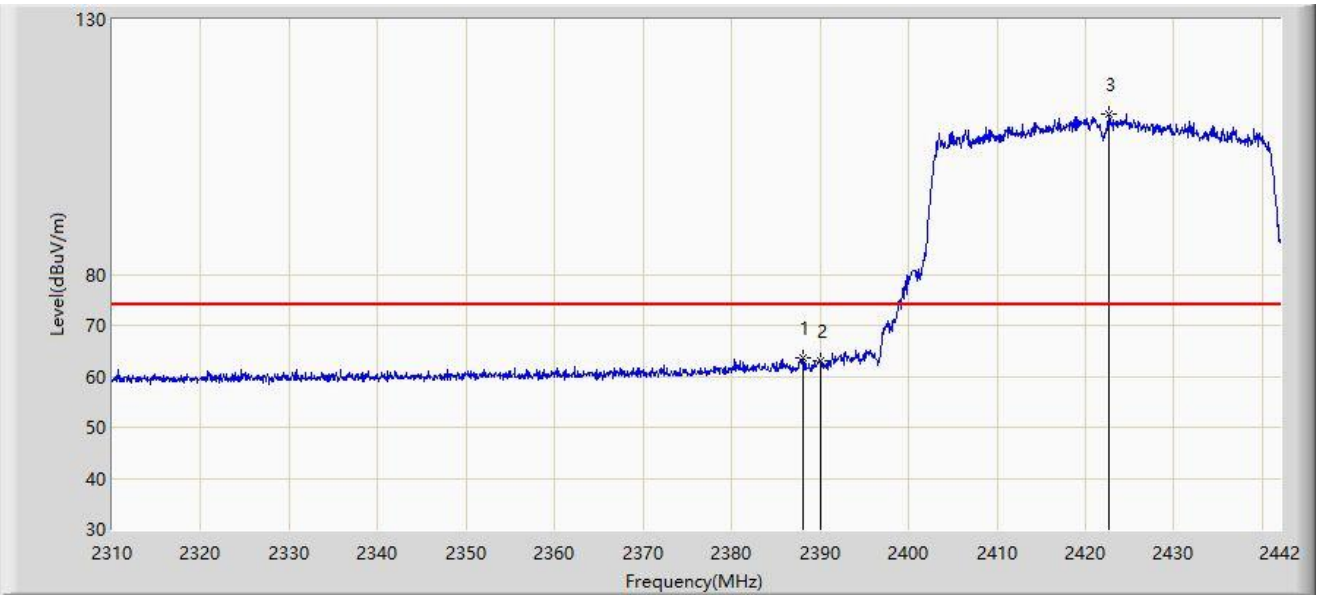
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2390.000	51.410	19.387	-2.590	54.000	32.023	AV
2		2419.098	97.242	65.197	N/A	N/A	32.045	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at 2422MHz	



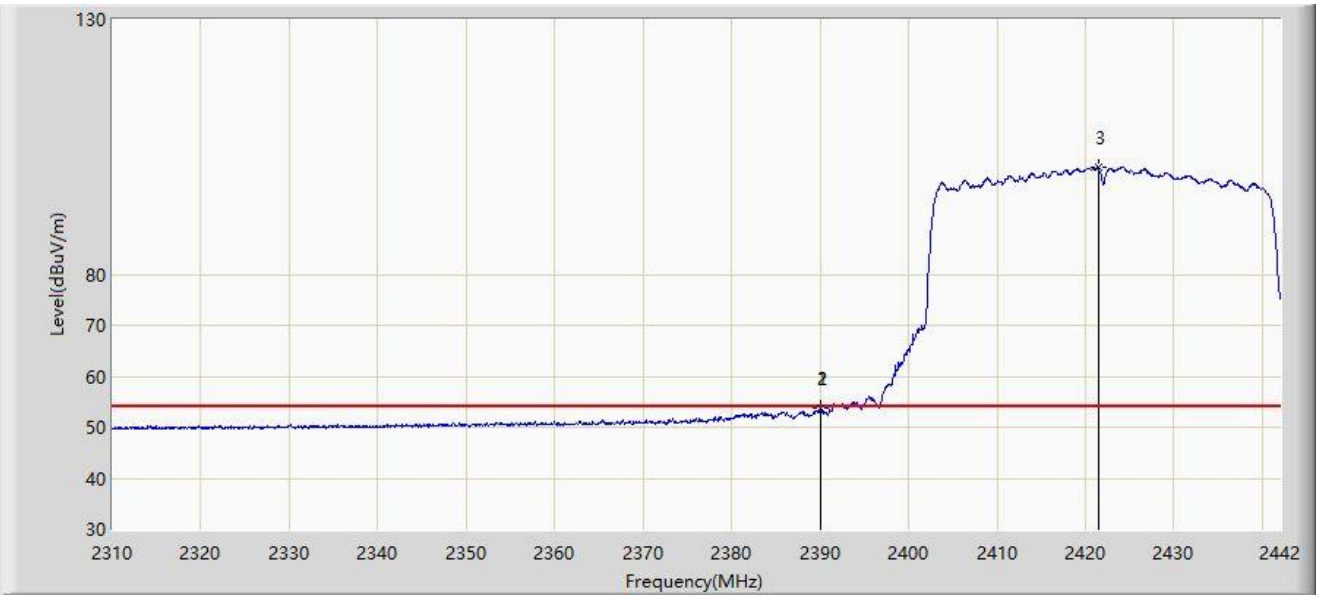
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	2388.012	63.700	31.681	-10.300	74.000	32.019	PK
2		2390.000	63.110	31.087	-10.890	74.000	32.023	PK
3		2422.662	111.323	79.277	N/A	N/A	32.046	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at 2422MHz	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	2389.992	53.720	21.697	-0.280	54.000	32.023	AV
2		2390.000	53.656	21.633	-0.344	54.000	32.023	AV
3		2421.408	100.969	68.923	N/A	N/A	32.046	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at 2452MHz	

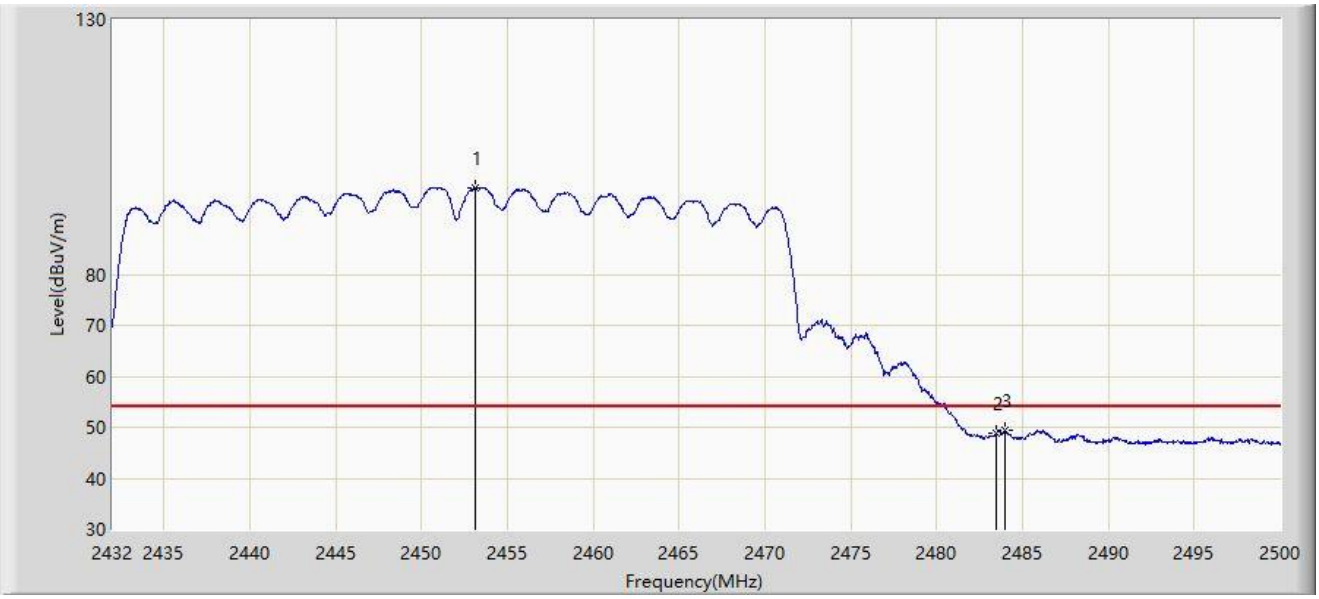
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		2452.978	106.986	74.812	N/A	N/A	32.174	PK
2		2483.500	57.661	25.361	-16.339	74.000	32.300	PK
3	*	2485.346	59.688	27.378	-14.312	74.000	32.310	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Horizontal
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at 2452MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		2453.148	97.026	64.852	N/A	N/A	32.174	AV
2		2483.500	48.708	16.408	-5.292	54.000	32.300	AV
3	*	2483.952	49.475	17.172	-4.525	54.000	32.303	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at 2452MHz	

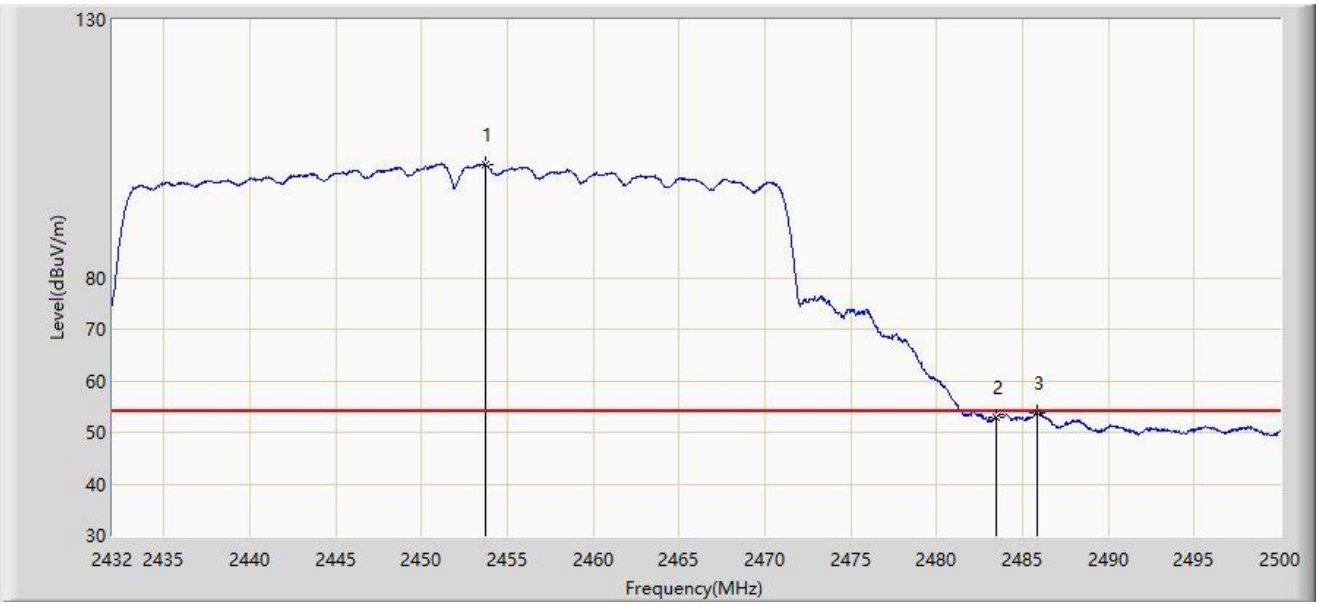
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		2450.972	112.319	80.155	N/A	N/A	32.164	PK
2		2483.500	62.271	29.971	-11.729	74.000	32.300	PK
3	*	2485.482	64.162	31.851	-9.838	74.000	32.310	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Site: SIP-AC3	Test Date: 2024-03-28
Limit: FCC_2.4G_RE(3m)	Engineer: Justin Guo
Probe: HF907_102861_1-18GHz	Polarity: Vertical
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11ax-HE40 at 2452MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		2453.692	101.926	69.749	N/A	N/A	32.177	AV
2		2483.500	52.965	20.665	-1.035	54.000	32.300	AV
3	*	2485.890	53.814	21.501	-0.186	54.000	32.312	AV

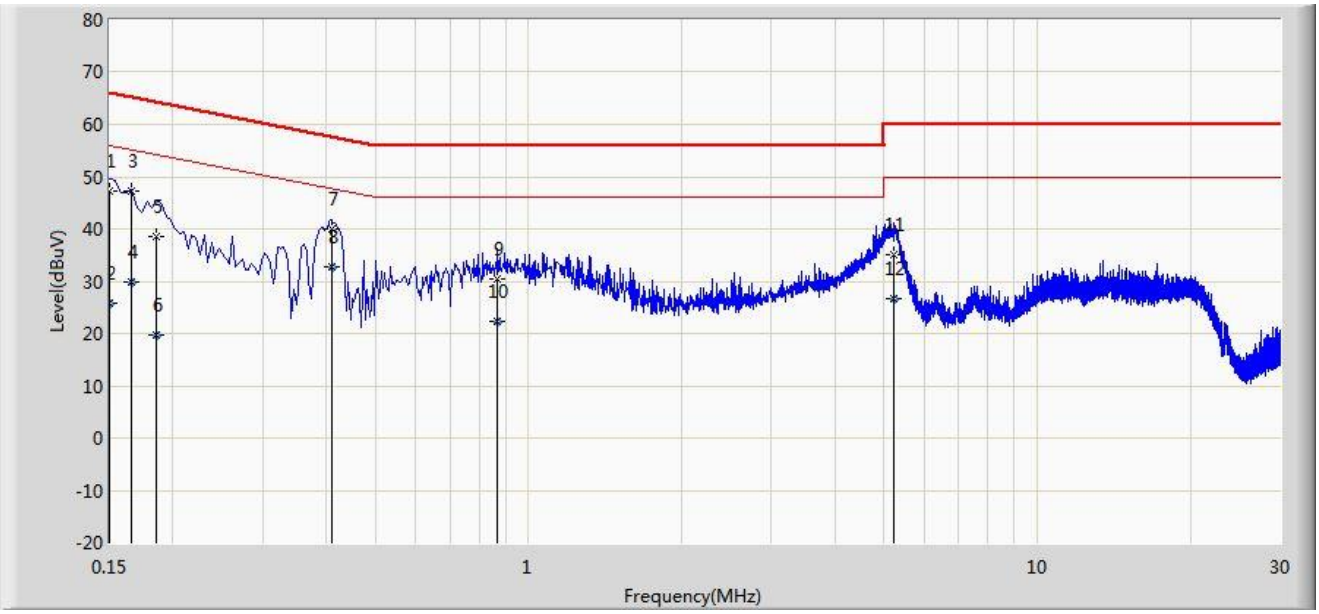
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

A.8 AC Conducted Emissions Test Result

Site: SIP-SR2	Test Date: 2024/05/31
Limit: FCC_Part15.207_CE_AC Power	Engineer: Miron Ding
Probe: SIP-SR2-ENV216_101684_E	Polarity: Line
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz	



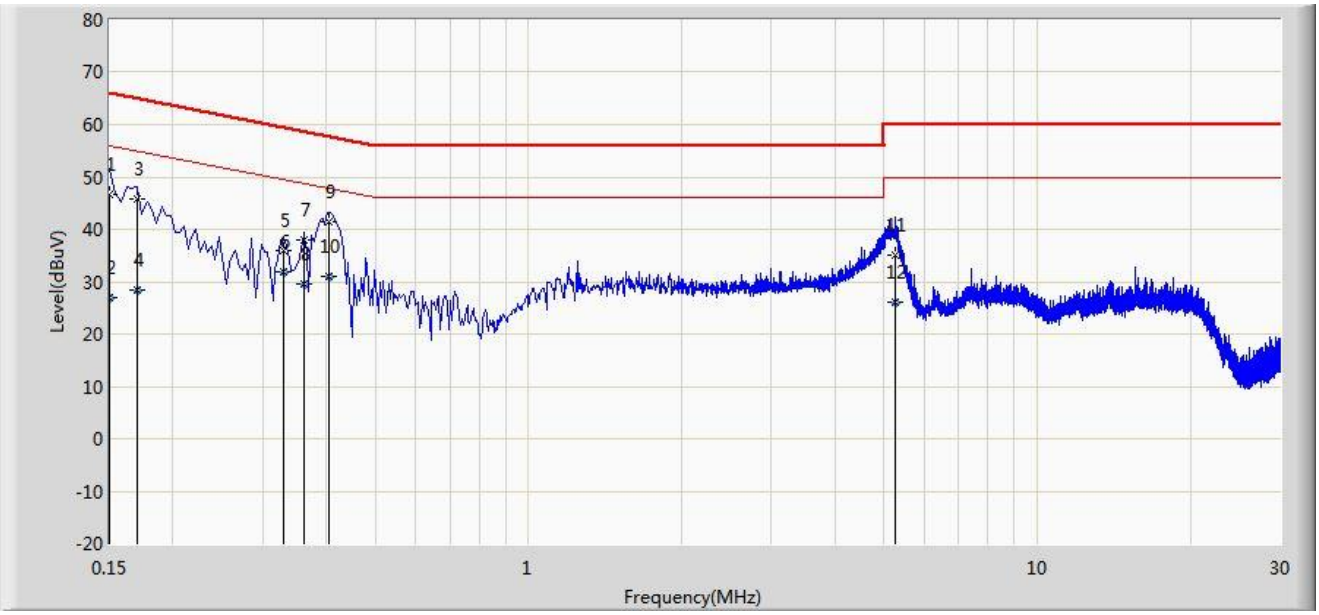
No	Mark	Frequency (MHz)	Measure Level (dBµV)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV)	Factor (dB)	Type
1		0.150	47.368	37.611	-18.632	66.000	9.756	QP
2		0.150	25.756	16.000	-30.244	56.000	9.756	AV
3		0.166	47.102	37.370	-18.056	65.158	9.731	QP
4		0.166	29.872	20.140	-25.286	55.158	9.731	AV
5		0.186	38.689	28.945	-25.524	64.213	9.743	QP
6		0.186	19.738	9.994	-34.476	54.213	9.743	AV
7		0.410	39.950	30.129	-17.698	57.648	9.821	QP
8	*	0.410	32.775	22.954	-14.873	47.648	9.821	AV
9		0.870	30.334	20.478	-25.666	56.000	9.856	QP
10		0.870	22.403	12.547	-23.597	46.000	9.856	AV
11		5.230	35.207	24.870	-24.793	60.000	10.337	QP
12		5.230	26.579	16.242	-23.421	50.000	10.337	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV) = Reading Level (dBµV) + Factor (dB).

Note 3: Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Site: SIP-SR2	Test Date: 2024/05/31
Limit: FCC_Part15.207_CE_AC Power	Engineer: Miron Ding
Probe: SIP-SR2-ENV216_101684_E	Polarity: Neutral
EUT: Keenetic Challenger SE	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11b at 2412MHz	



No	Mark	Frequency (MHz)	Measure Level (dBµV)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV)	Factor (dB)	Type
1		0.150	46.752	37.039	-19.248	66.000	9.713	QP
2		0.150	27.037	17.324	-28.963	56.000	9.713	AV
3		0.170	45.934	36.218	-19.026	64.960	9.716	QP
4		0.170	28.378	18.662	-26.582	54.960	9.716	AV
5		0.330	36.061	26.255	-23.390	59.451	9.806	QP
6		0.330	31.884	22.078	-17.567	49.451	9.806	AV
7		0.362	38.006	28.205	-20.677	58.682	9.801	QP
8		0.362	29.618	19.817	-19.065	48.682	9.801	AV
9	*	0.406	41.536	31.726	-16.193	57.730	9.810	QP
10		0.406	31.019	21.209	-16.710	47.730	9.810	AV
11		5.246	35.183	24.833	-24.817	60.000	10.350	QP
12		5.246	26.223	15.873	-23.777	50.000	10.350	AV

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV) = Reading Level (dBµV) + Factor (dB).

Note 3: Factor (dB) = Cable Loss (dB) + LISN Factor (dB).

Appendix B – Test Setup Photograph

Refer to “2403RSU044-UT” file.

Appendix C – EUT Photograph

Refer to “2403RSU044-UE” file.

The End