Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11b	Test Channel:	11
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4924.0	66.2	-13.3	52.9	54	-1.1	Average	Horizontal
	4924.0	67.6	-13.4	54.2	74	-19.8	Peak	Horizontal
	7383.5	57.3	-6.4	50.9	74	-23.1	Peak	Horizontal
*	9848.5	49.4	-3.5	45.9	74	-28.1	Peak	Horizontal
*	10341.5	49.0	-2.3	46.7	74	-27.3	Peak	Horizontal
	4927.0	67.3	-13.4	53.9	74	-20.1	Peak	Vertical
	7383.5	55.1	-6.4	48.7	74	-25.3	Peak	Vertical
*	9848.5	49.0	-3.5	45.5	74	-28.5	Peak	Vertical
*	10358.5	48.9	-2.4	46.5	74	-27.5	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11g	Test Channel:	01
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4621.0	52.6	-14.0	38.6	74	-35.4	Peak	Horizontal
	4825.0	64.2	-13.5	50.7	74	-23.3	Peak	Horizontal
*	6499.5	50.9	-8.8	42.1	74	-31.9	Peak	Horizontal
*	7239.0	54.8	-6.6	48.2	74	-25.8	Peak	Horizontal
	4638.0	52.7	-13.7	39.0	74	-35.0	Peak	Vertical
	4816.5	62.5	-13.5	49.0	74	-25.0	Peak	Vertical
*	6440.0	50.8	-9.0	41.8	74	-32.2	Peak	Vertical
*	7230.5	57.0	-6.6	50.4	74	-23.6	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11g	Test Channel:	06
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4740.0	54.9	-13.4	41.5	74	-32.5	Peak	Horizontal
	5012.0	53.3	-12.8	40.5	74	-33.5	Peak	Horizontal
*	6397.5	52.6	-9.4	43.2	74	-30.8	Peak	Horizontal
*	7035.0	50.0	-6.9	43.1	74	-30.9	Peak	Horizontal
	4791.0	55.3	-13.3	42.0	74	-32.0	Peak	Vertical
	4995.0	54.5	-13.0	41.5	74	-32.5	Peak	Vertical
*	6142.5	53.4	-10.6	42.8	74	-31.2	Peak	Vertical
*	6499.5	50.4	-8.8	41.6	74	-32.4	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11g	Test Channel:	11
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4920.3	56.5	-13.2	43.3	54	-10.7	Average	Horizontal
	4920.3	68.2	-13.4	54.8	74	-19.2	Peak	Horizontal
	7375.0	62.2	-6.3	55.9	74	-18.1	Peak	Horizontal
	7375.1	52.4	-6.3	46.1	54	-7.9	Average	Horizontal
*	9644.5	49.3	-3.6	45.7	74	-28.3	Peak	Horizontal
*	10078.0	49.3	-3.1	46.2	74	-27.8	Peak	Horizontal
	4927.0	66.9	-13.4	53.5	74	-20.5	Peak	Vertical
	7383.5	62.2	-6.4	55.8	74	-18.2	Peak	Vertical
	7383.6	53.5	-6.4	47.1	54	-6.9	Average	Vertical
*	9950.5	47.5	-3.4	44.1	74	-29.9	Peak	Vertical
*	10341.5	46.2	-2.3	43.9	74	-30.1	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11n-HT20	Test Channel:	01
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4825.0	69.0	-13.5	55.5	74	-18.5	Peak	Horizontal
	4825.1	57.4	-13.5	43.9	54	-10.1	Average	Horizontal
	5105.5	53.2	-12.6	40.6	74	-33.4	Peak	Horizontal
*	6559.0	52.4	-8.9	43.5	74	-30.5	Peak	Horizontal
*	7230.7	54.8	-6.6	48.2	54	-5.8	Average	Horizontal
*	7230.7	62.5	-6.4	56.1	74	-17.9	Peak	Horizontal
	4825.0	69.0	-13.5	55.5	74	-18.5	Peak	Vertical
	4825.1	58.6	-13.5	45.1	54	-8.9	Average	Vertical
	5114.0	53.9	-12.5	41.4	74	-32.6	Peak	Vertical
*	6202.0	53.7	-10.5	43.2	74	-30.8	Peak	Vertical
*	7239.3	64.1	-6.6	57.5	74	-16.5	Peak	Vertical
*	7239.3	56.9	-6.6	50.3	54	-3.7	Average	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11n-HT20	Test Channel:	06
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4876.0	66.2	-13.4	52.8	74	-21.2	Peak	Horizontal
	7315.7	62.2	-6.5	55.7	74	-18.3	Peak	Horizontal
	7315.7	56.5	-6.5	50.0	54	-4.0	Average	Horizontal
*	9636.0	48.2	-3.5	44.7	74	-29.3	Peak	Horizontal
*	10401.0	46.1	-2.1	44.0	74	-30.0	Peak	Horizontal
	4867.5	66.6	-13.4	53.2	74	-20.8	Peak	Vertical
	7324.2	63.5	-6.6	56.9	74	-17.1	Peak	Vertical
	7324.2	55.5	-6.6	48.9	54	-5.1	Average	Vertical
*	9772.0	46.5	-3.6	42.9	74	-31.1	Peak	Vertical
*	10401.0	45.4	-2.1	43.3	74	-30.7	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11n-HT20	Test Channel:	11
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4918.5	64.8	-13.2	51.6	74	-22.4	Peak	Horizontal
	7392.5	62.5	-6.4	56.1	74	-17.9	Peak	Horizontal
	7392.5	52.7	-6.5	46.2	54	-7.8	Average	Horizontal
*	9576.5	48.4	-4.2	44.2	74	-29.8	Peak	Horizontal
*	10146.0	48.2	-2.9	45.3	74	-28.7	Peak	Horizontal
	4927.0	65.1	-13.4	51.7	74	-22.3	Peak	Vertical
	7383.7	62.0	-6.4	55.6	74	-18.4	Peak	Vertical
	7383.7	52.5	-6.4	46.1	54	-7.9	Average	Vertical
*	9636.0	47.5	-3.5	44.0	74	-30.0	Peak	Vertical
*	10401.0	46.1	-2.1	44.0	74	-30.0	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11n-HT40	Test Channel:	03
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4842.0	63.8	-13.2	50.6	74	-23.4	Peak	Horizontal
	7273.0	59.8	-6.7	53.1	74	-20.9	Peak	Horizontal
*	9959.0	48.6	-3.4	45.2	74	-28.8	Peak	Horizontal
*	10341.5	46.1	-2.3	43.8	74	-30.2	Peak	Horizontal
	4842.0	65.1	-13.2	51.9	74	-22.1	Peak	Vertical
	7256.0	60.1	-6.3	53.8	74	-20.2	Peak	Vertical
*	9772.0	47.5	-3.6	43.9	74	-30.1	Peak	Vertical
*	10511.5	46.5	-2.3	44.2	74	-29.8	Peak	Vertical

Note 1: "*" means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11n-HT40	Test Channel:	06
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4842.0	62.2	-13.2	49.0	74	-25.0	Peak	Horizontal
	7298.7	60.8	-6.4	54.4	74	-19.6	Peak	Horizontal
	7298.7	58.3	-6.4	51.9	54	-2.1	Average	Horizontal
*	9704.0	47.5	-3.5	44.0	74	-30.0	Peak	Horizontal
*	10520.0	46.0	-2.3	43.7	74	-30.3	Peak	Horizontal
	4876.0	63.2	-13.4	49.8	74	-24.2	Peak	Vertical
	7298.5	59.1	-6.4	52.7	74	-21.3	Peak	Vertical
*	9670.0	48.4	-3.8	44.6	74	-29.4	Peak	Vertical
*	10418.0	46.4	-2.3	44.1	74	-29.9	Peak	Vertical

Note 1: “*” means test frequency didn't fall into restricted band.

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

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

Product	Robotic Vacuum Cleaner	Test Engineer	Allen Zou
Test Site	SIP-AC2	Test Date	2020/09/27
Test Mode:	802.11n-HT40	Test Channel:	09
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 show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	4901.5	63.0	-13.0	50.0	74	-24.0	Peak	Horizontal
	7349.5	58.7	-6.3	52.4	74	-21.6	Peak	Horizontal
*	9695.5	47.5	-3.6	43.9	74	-30.1	Peak	Horizontal
*	10333.0	46.6	-2.1	44.5	74	-29.5	Peak	Horizontal
	4901.5	61.6	-13.0	48.6	74	-25.4	Peak	Vertical
	7349.5	57.9	-6.3	51.6	74	-22.4	Peak	Vertical
*	9933.5	47.2	-3.4	43.8	74	-30.2	Peak	Vertical
*	10307.5	45.6	-2.3	43.3	74	-30.7	Peak	Vertical

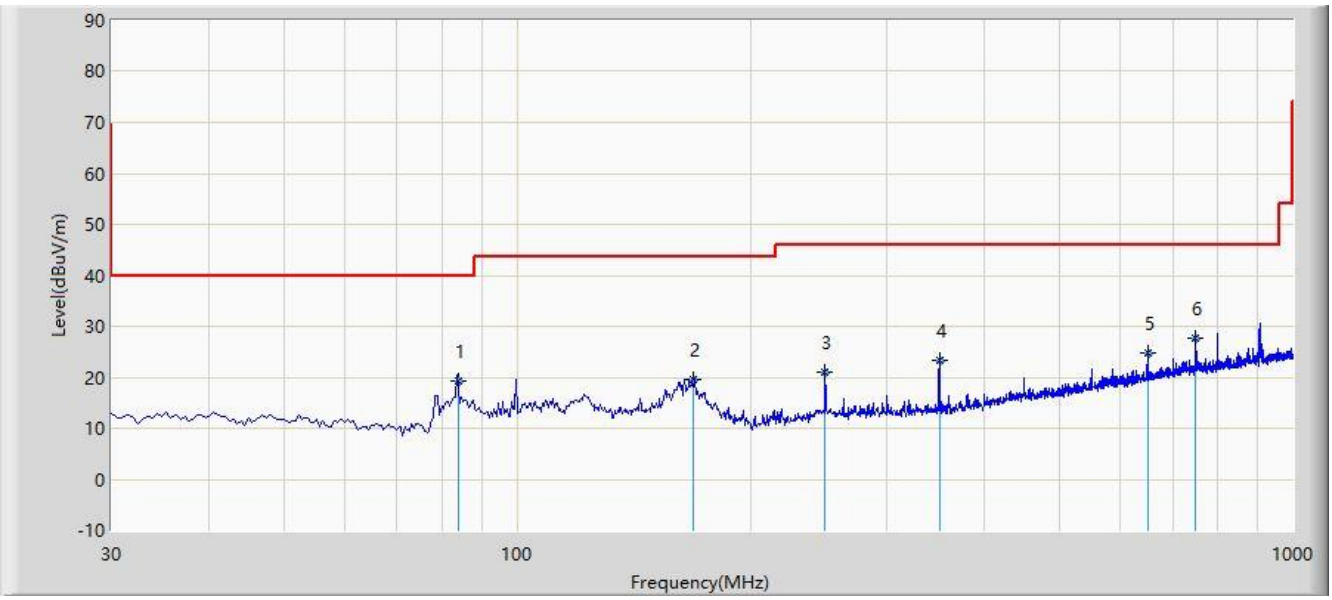
Note 1: "*" means test frequency didn't fall into restricted band.

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

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

The Result of Radiated Emission below 1GHz:

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RSE(3m)	Engineer: Allen Zou
Probe: AC2_VULB 9168 _20-2000MHz-yuanqu	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Test Mode: Transmit by 802.11b at channel 2412MHz	



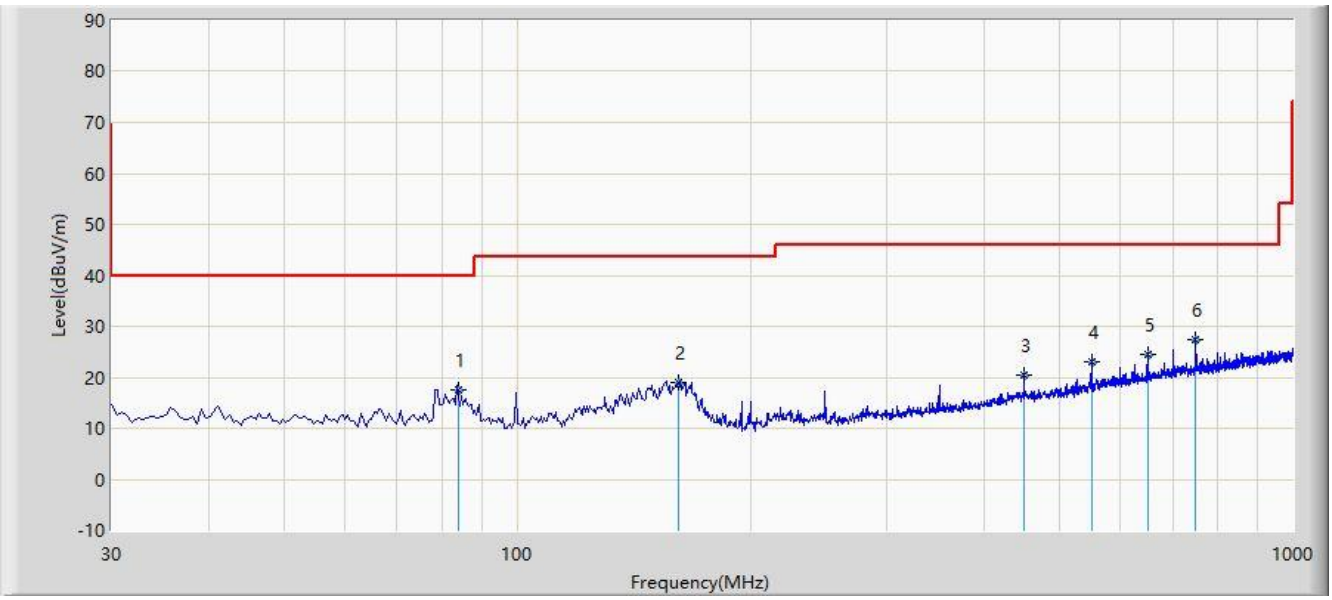
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			83.920	19.291	9.400	-20.709	40.000	9.890	QP
2			168.690	19.670	5.600	-23.830	43.500	14.069	QP
3			249.620	21.097	8.600	-24.903	46.000	12.497	QP
4			350.210	23.445	8.500	-22.555	46.000	14.945	QP
5			649.830	24.815	4.200	-21.185	46.000	20.614	QP
6		*	750.225	27.811	5.900	-18.189	46.000	21.911	QP

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) 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-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RSE(3m)	Engineer: Allen Zou
Probe: AC2_VULB 9168 _20-2000MHz-yuanqu	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Test Mode: Transmit by 802.11b at channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			83.920	17.491	7.600	-22.509	40.000	9.890	QP
2			161.435	18.853	4.100	-24.647	43.500	14.753	QP
3			450.010	20.429	3.200	-25.571	46.000	17.229	QP
4			549.860	22.984	4.200	-23.016	46.000	18.785	QP
5			650.315	24.621	4.000	-21.379	46.000	20.621	QP
6		*	750.225	27.511	5.600	-18.489	46.000	21.911	QP

Note 1: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 25GHz) 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.

6.7. Radiated Restricted Band Edge Measurement

6.7.1.Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1] 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

For RSS-Gen Section 8.10 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10of RSS-Gen, must also comply with the radiated emission limits specified in Section 8.9.

Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.009 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.026	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	* Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for license exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.
8.37625 - 8.38675	1718.8 -1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 -2390	
12.51975 - 12.52025	2483.5 -2500	
12.57675 - 12.57725	2655 - 2900	
13.36 -13.41	3260 - 3267	
16.42 - 16.423	3332 -3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5460	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 - 138		

All out of band emissions appearing in a restricted band as specified in Section 8.10 of the RSS-Gen must not exceed the limits shown in Table per Section 8.9.

RSS-Gen Section 8.9			
Frequency (MHz)	Field Strength (μV/m)	Magnetic Field Strength (H-Field) (μA/m)	Measured Distance (m)
0.009 - 0.490 1	--	6.37/F (F in kHz)	300
0.490 - 1.705	--	6.37/F (F in kHz)	30
1.705 - 30	--	0.08	30
30 - 88	100	--	3
88 - 216	150	--	3
216 - 960	200	--	3
Above 960	500	--	3

6.7.2.Test Procedure Used

ANSI C63.10-2013 Section 6.3 (General Requirements)

ANSI C63.10-2013 Section 6.6 (Standard test method above 1GHz)

6.7.3.Test Setting

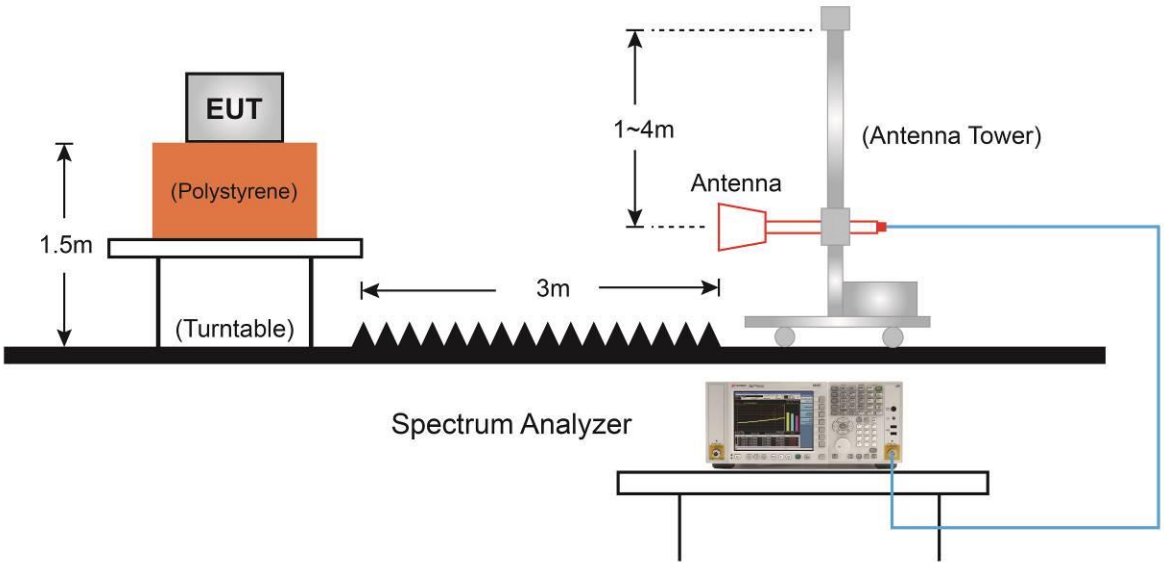
Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Field Strength Measurements

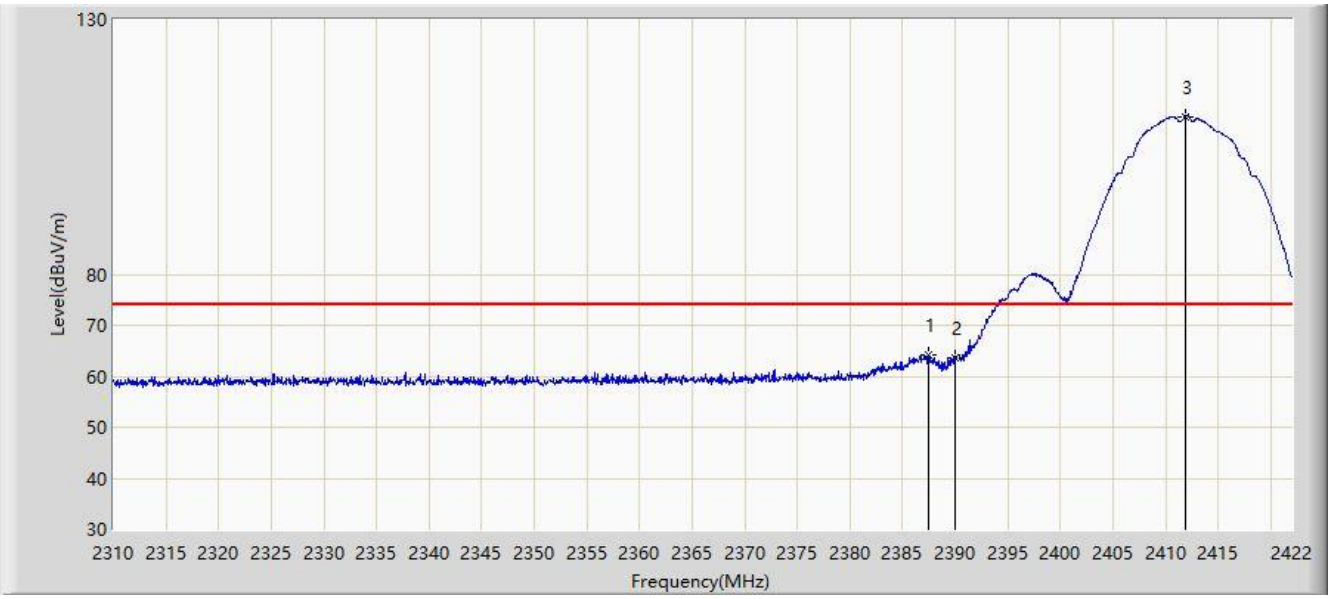
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW ≥ 1/T
4. As an alternative, the instrument may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some instruments require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to “Voltage” regardless of the display mode
5. Detector = Peak
6. Sweep time = auto
7. Trace mode = max hold
8. Allow max hold to run for at least 50 times (1/duty cycle) traces

6.7.4.Test Setup



6.7.5.Test Result

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11b at channel 2412MHz	

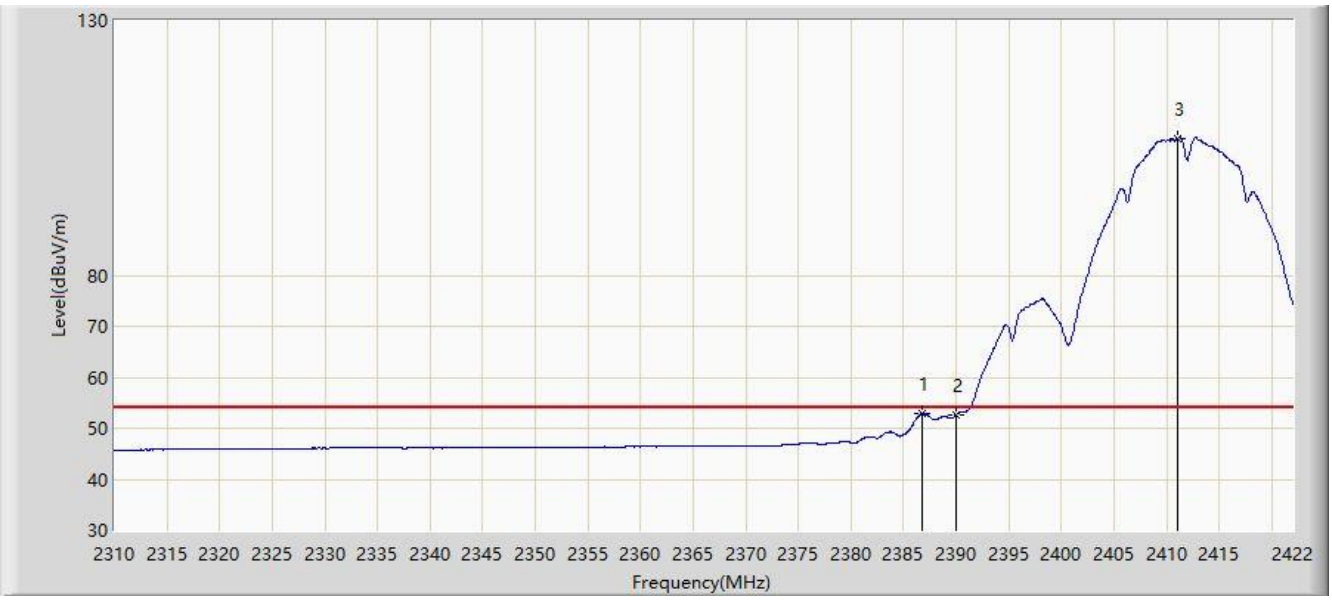


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.448	64.075	33.076	-9.925	74.000	30.998	PK
2			2390.000	63.522	32.518	-10.478	74.000	31.004	PK
3		*	2411.864	111.012	79.995	N/A	N/A	31.017	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11b at channel 2412MHz	

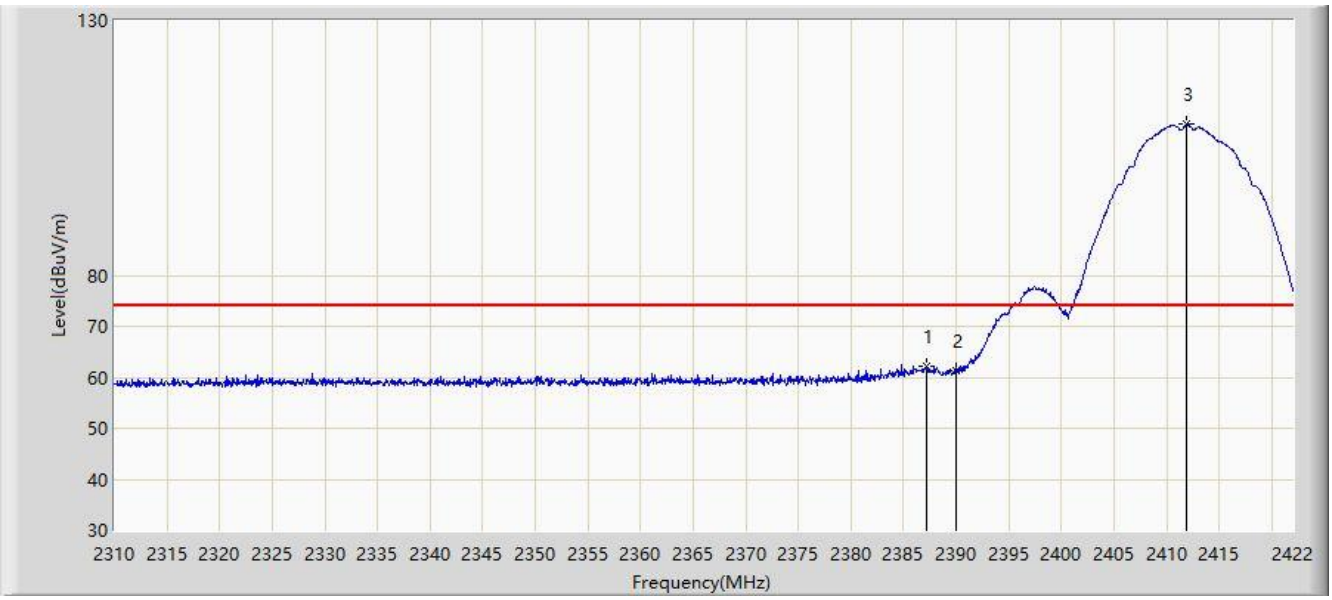


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2386.720	52.902	21.905	-1.098	54.000	30.997	AV
2			2390.000	52.619	21.615	-1.381	54.000	31.004	AV
3		*	2411.080	106.938	75.920	N/A	N/A	31.018	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11b at channel 2412MHz	

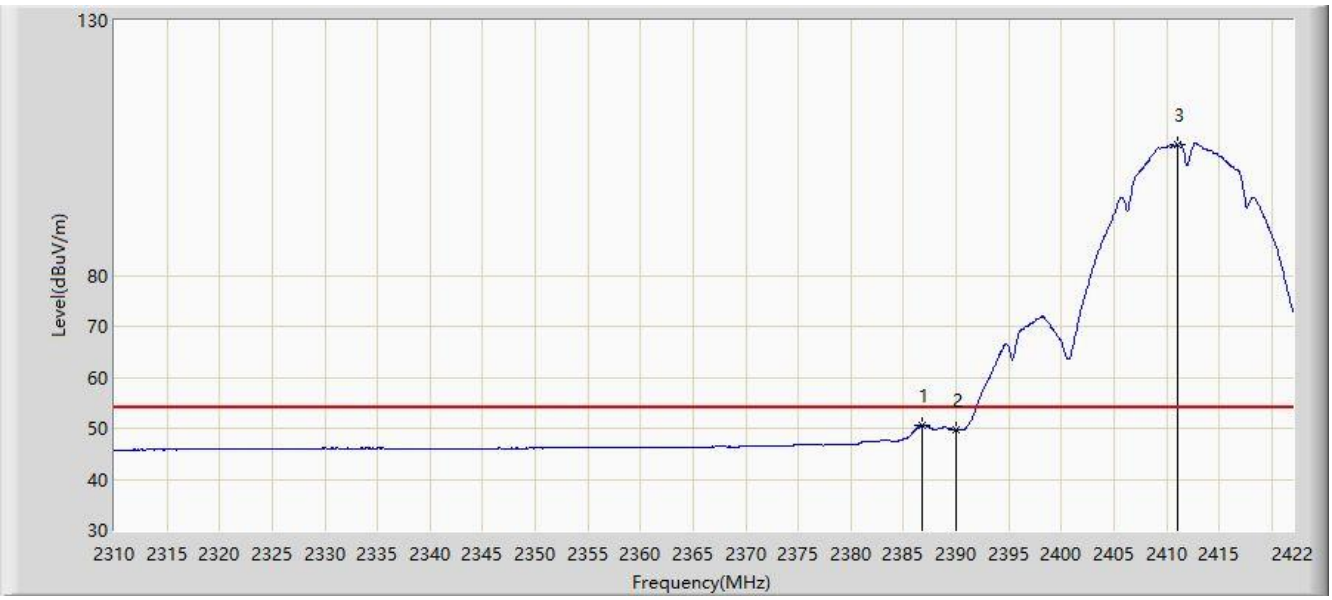


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2387.168	62.173	31.175	-11.827	74.000	30.998	PK
2			2390.000	61.347	30.343	-12.653	74.000	31.004	PK
3		*	2411.920	109.717	78.700	N/A	N/A	31.017	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11b at channel 2412MHz	

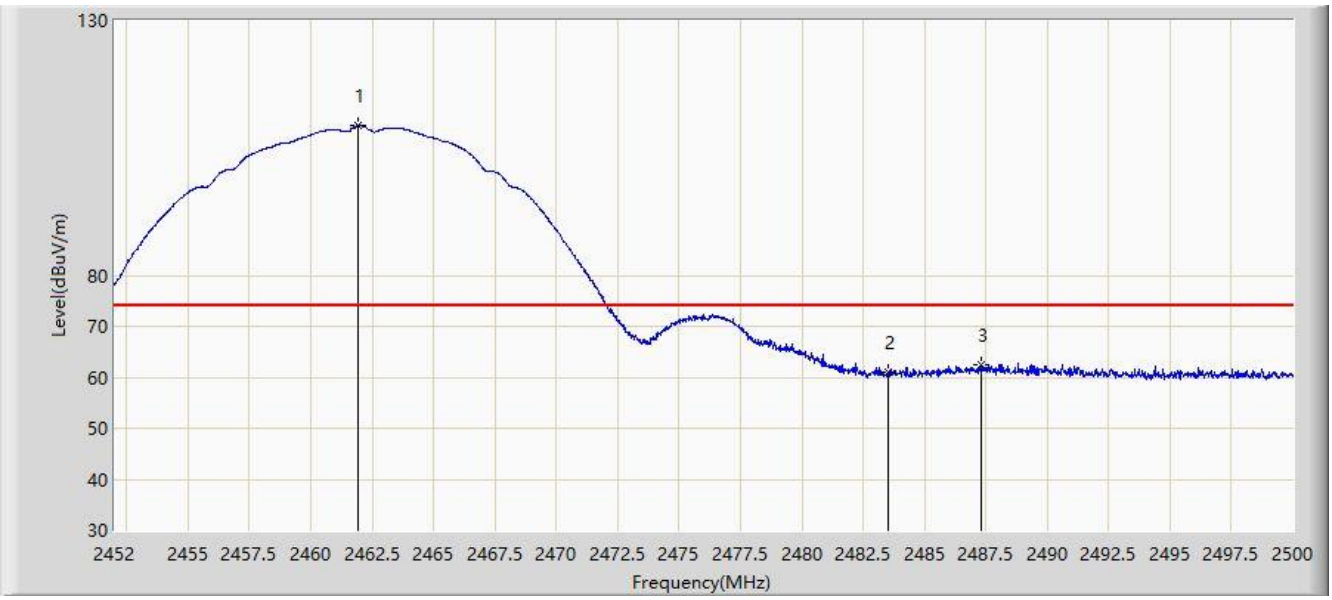


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2386.720	50.674	19.677	-3.326	54.000	30.997	AV
2			2390.000	49.706	18.702	-4.294	54.000	31.004	AV
3		*	2411.024	105.673	74.655	N/A	N/A	31.018	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11b at channel 2462MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.936	109.449	78.544	N/A	N/A	30.906	PK
2			2483.500	60.930	30.128	-13.070	74.000	30.802	PK
3			2487.304	62.562	31.771	-11.438	74.000	30.791	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

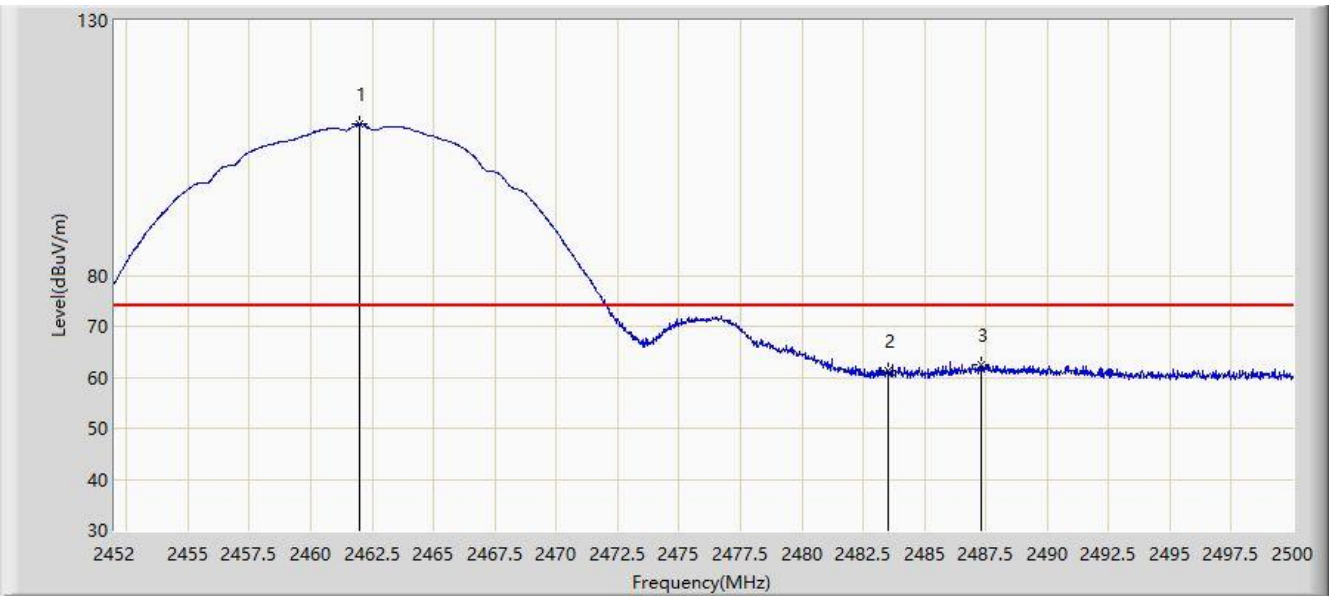
Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11b at channel 2462MHz	

No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.240	105.375	74.466	N/A	N/A	30.908	AV
2			2483.500	49.059	18.257	-4.941	54.000	30.802	AV
3			2487.280	51.116	20.325	-2.884	54.000	30.791	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11b at channel 2462MHz	

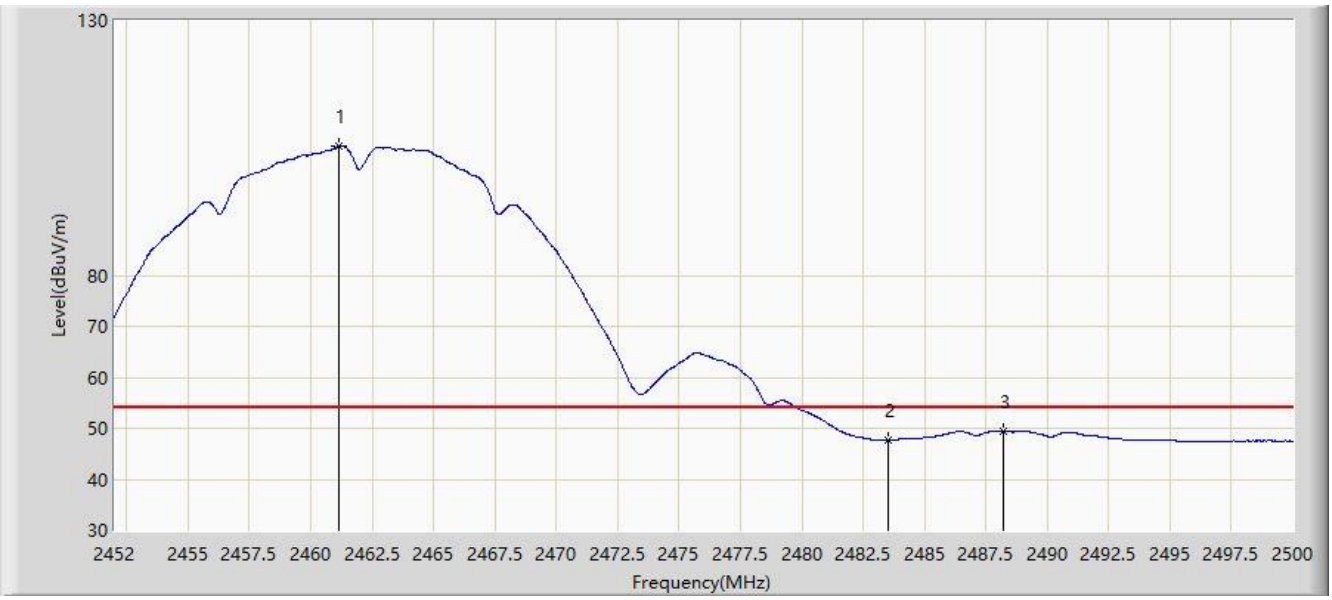


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.984	109.695	78.790	N/A	N/A	30.905	PK
2			2483.500	61.296	30.494	-12.704	74.000	30.802	PK
3			2487.304	62.402	31.611	-11.598	74.000	30.791	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11b at channel 2462MHz	

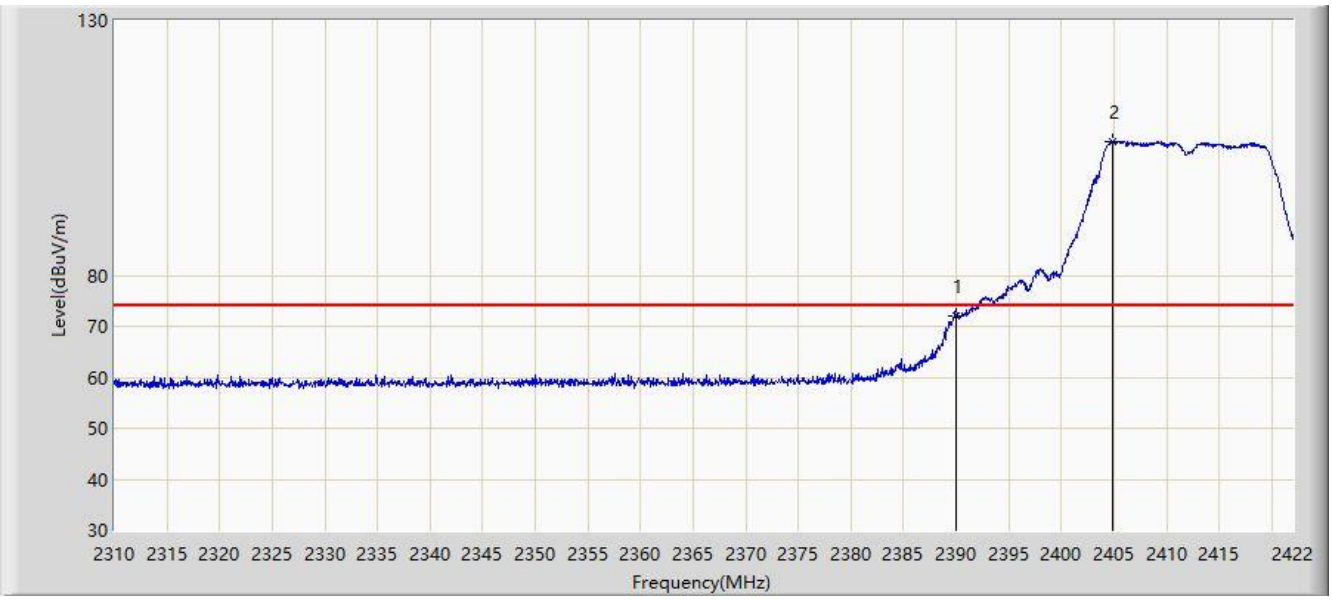


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2461.120	105.326	74.417	N/A	N/A	30.909	AV
2			2483.500	47.693	16.891	-6.307	54.000	30.802	AV
3			2488.216	49.414	18.626	-4.586	54.000	30.788	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11g at channel 2412MHz	

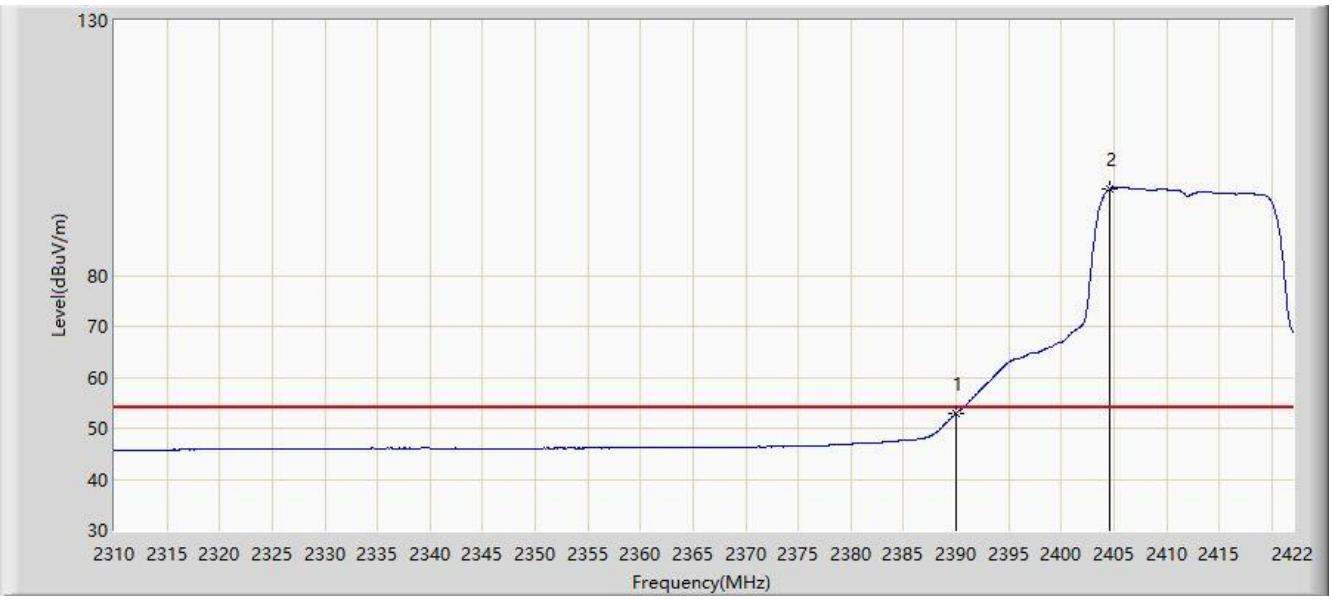


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	71.998	40.994	-2.002	74.000	31.004	PK
2		*	2404.808	106.319	75.304	N/A	N/A	31.014	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11g at channel 2412MHz	

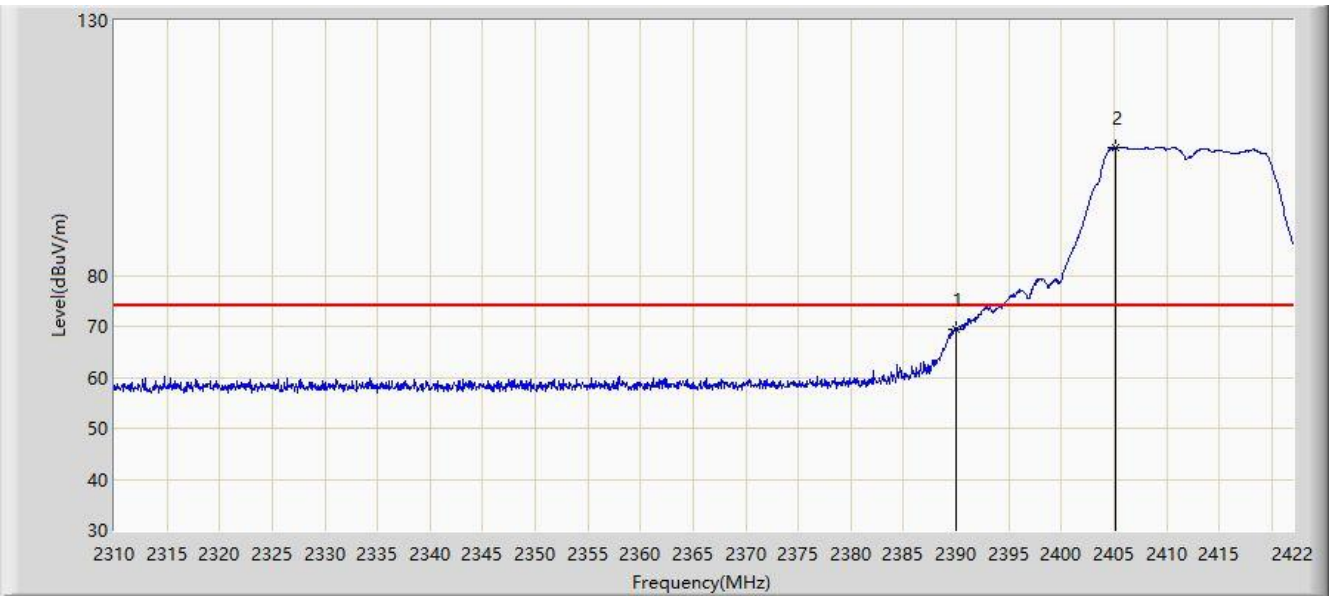


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.932	21.928	-1.068	54.000	31.004	AV
2		*	2404.640	96.934	65.919	N/A	N/A	31.014	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11g at channel 2412MHz	

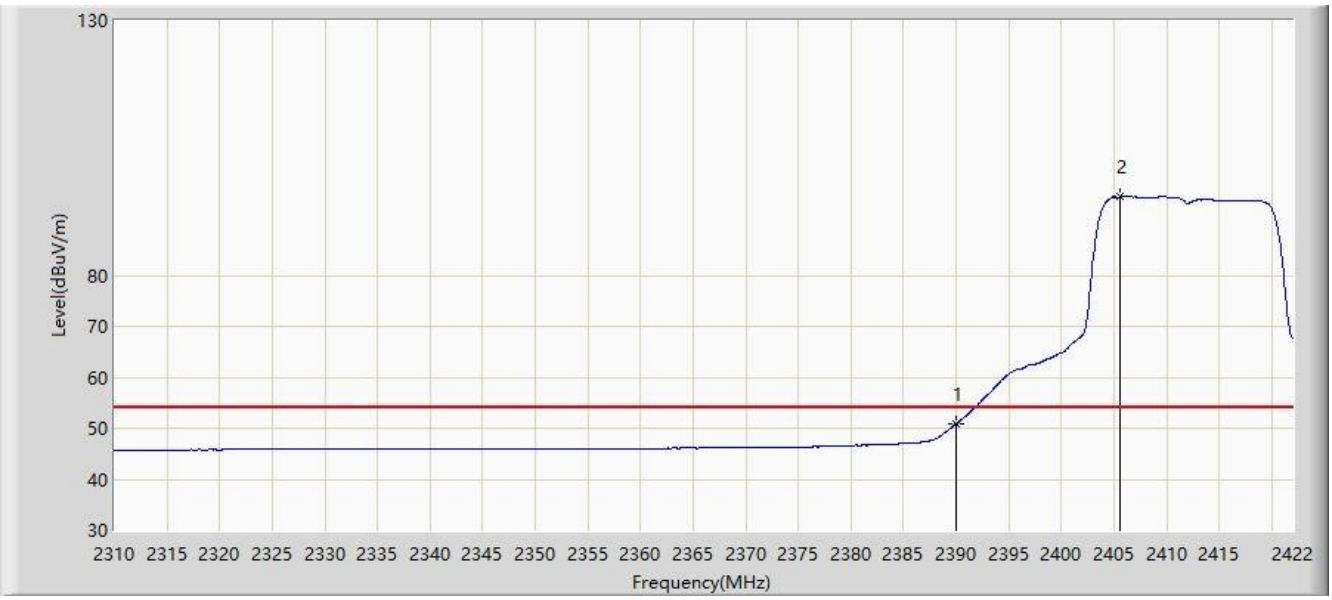


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	69.504	38.500	-4.496	74.000	31.004	PK
2		*	2405.088	105.001	73.986	N/A	N/A	31.015	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11g at channel 2412MHz	

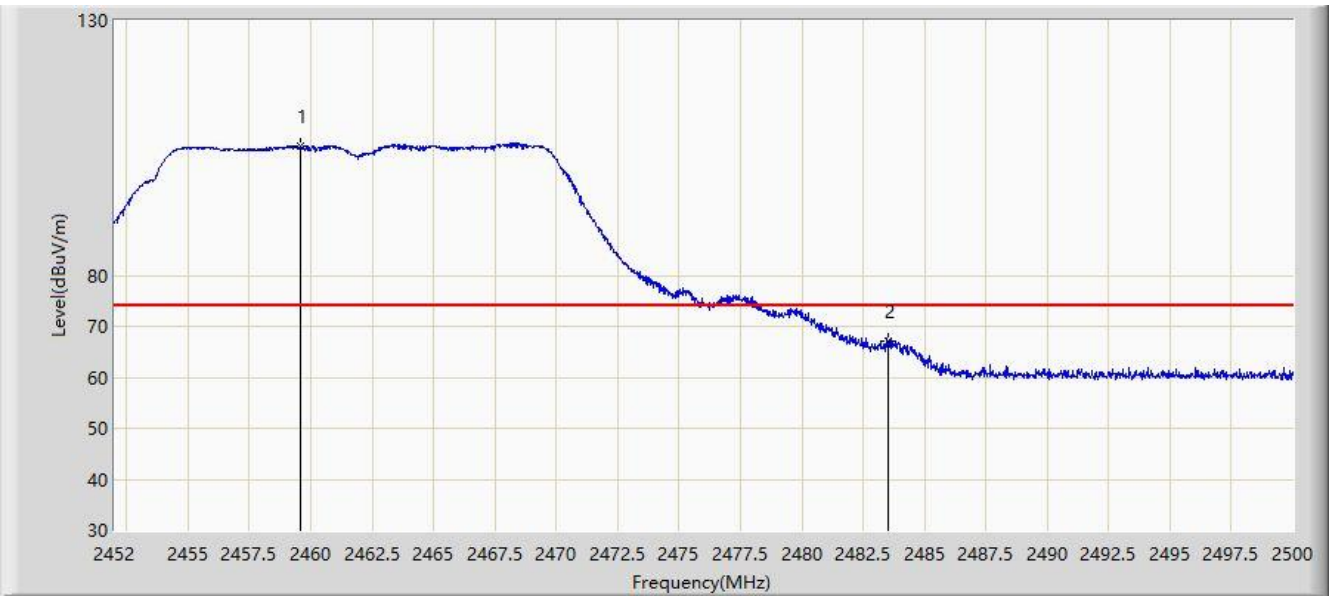


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	50.876	19.872	-3.124	54.000	31.004	AV
2		*	2405.536	95.379	64.364	N/A	N/A	31.015	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11g at channel 2462MHz	

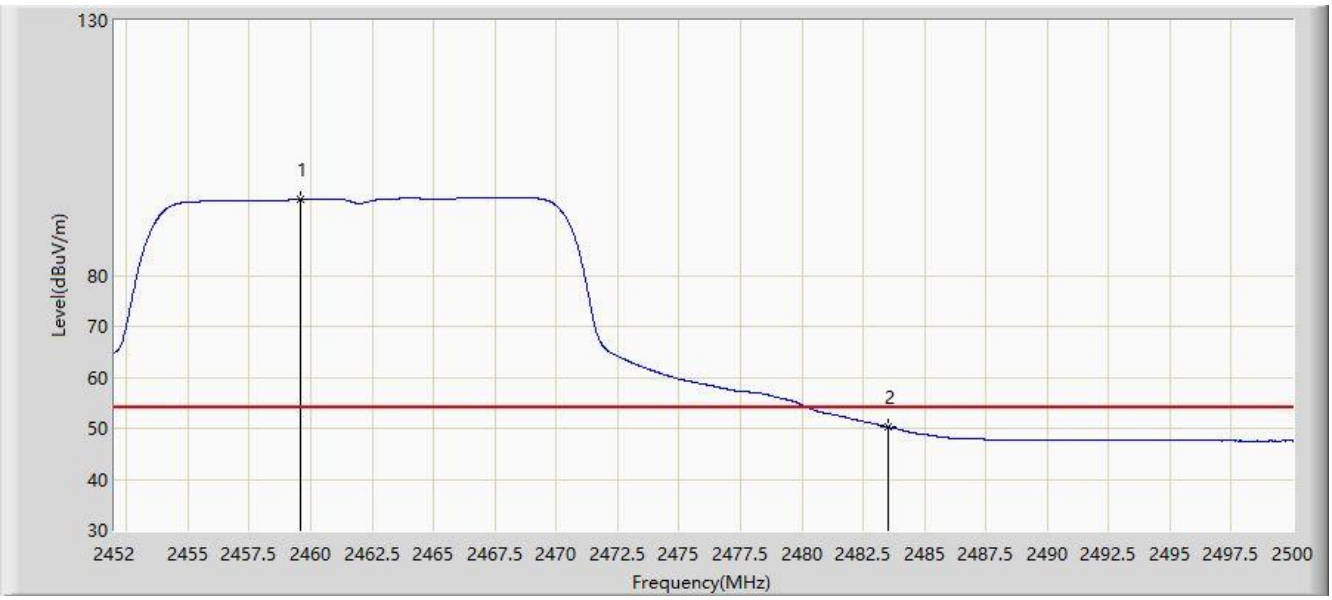


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.608	105.319	74.402	N/A	N/A	30.917	PK
2			2483.500	66.957	36.155	-7.043	74.000	30.802	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11g at channel 2462MHz	

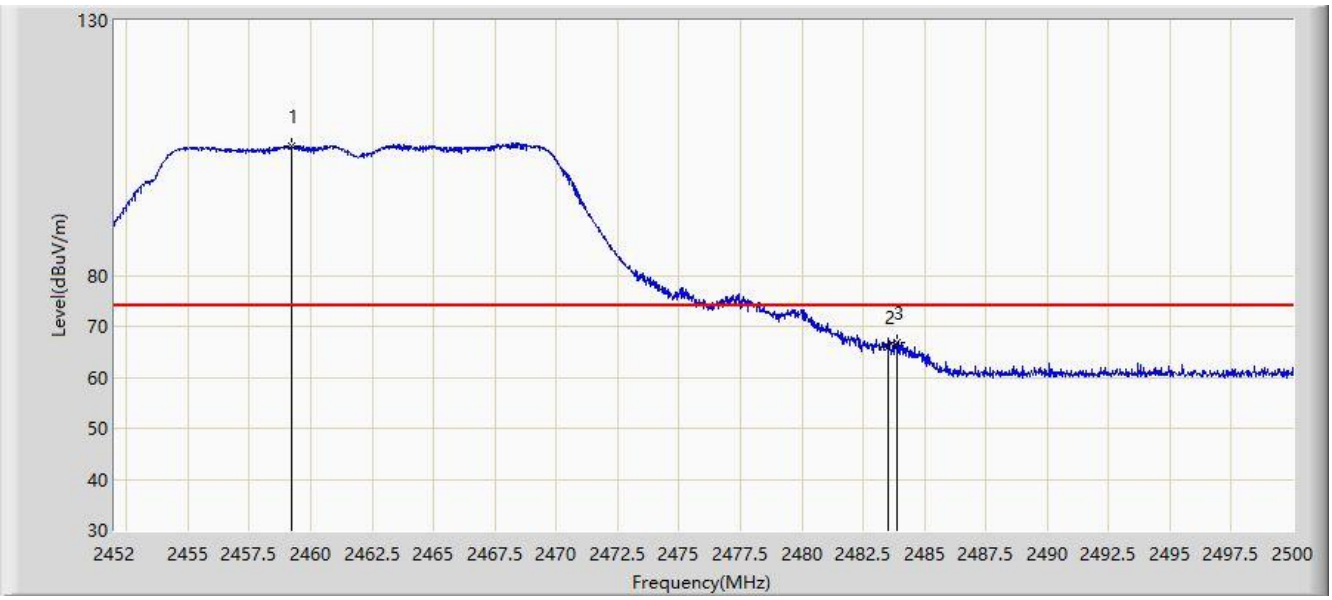


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.584	95.063	64.146	N/A	N/A	30.917	AV
2			2483.500	50.268	19.466	-3.732	54.000	30.802	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11g at channel 2462MHz	

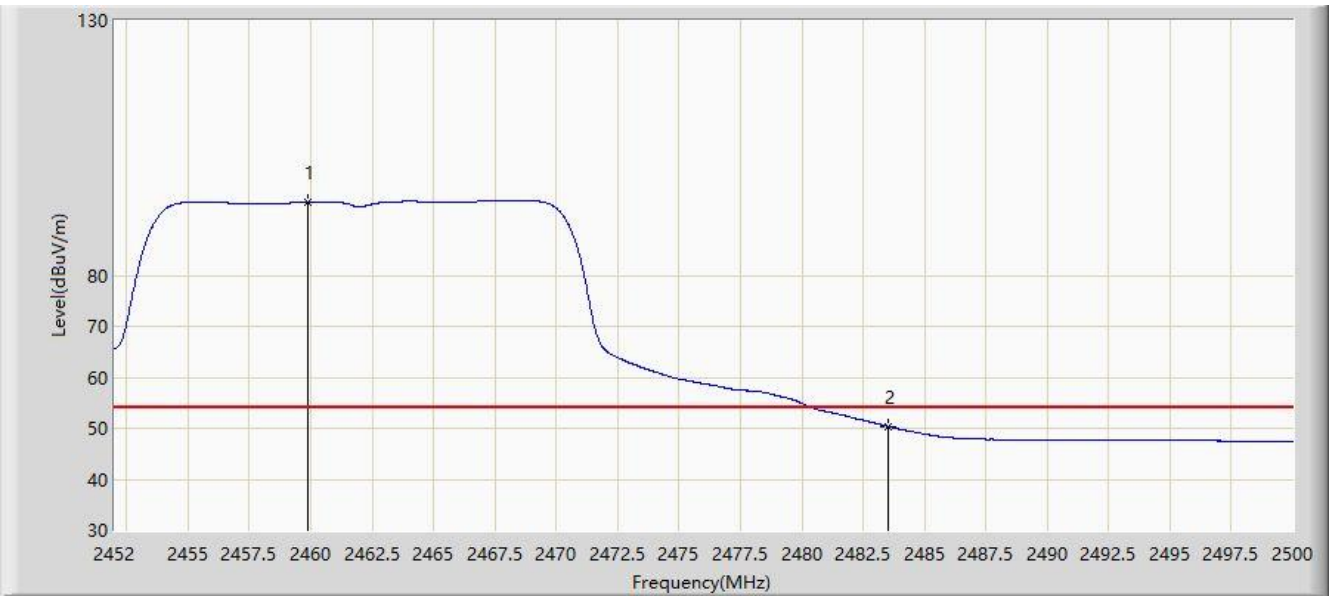


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.224	105.346	74.428	N/A	N/A	30.919	PK
2			2483.500	65.896	35.094	-8.104	74.000	30.802	PK
3			2483.872	66.898	36.097	-7.102	74.000	30.801	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11g at channel 2462MHz	

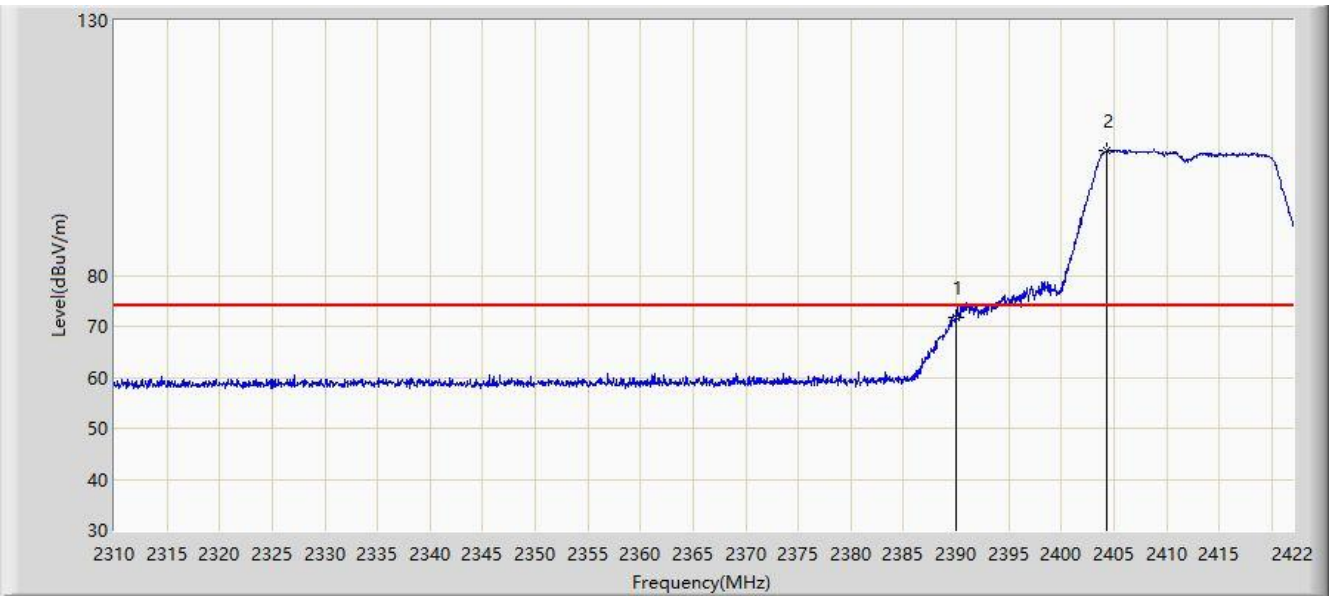


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.896	94.385	63.470	N/A	N/A	30.915	AV
2			2483.500	50.374	19.572	-3.626	54.000	30.802	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT20 at channel 2412MHz	

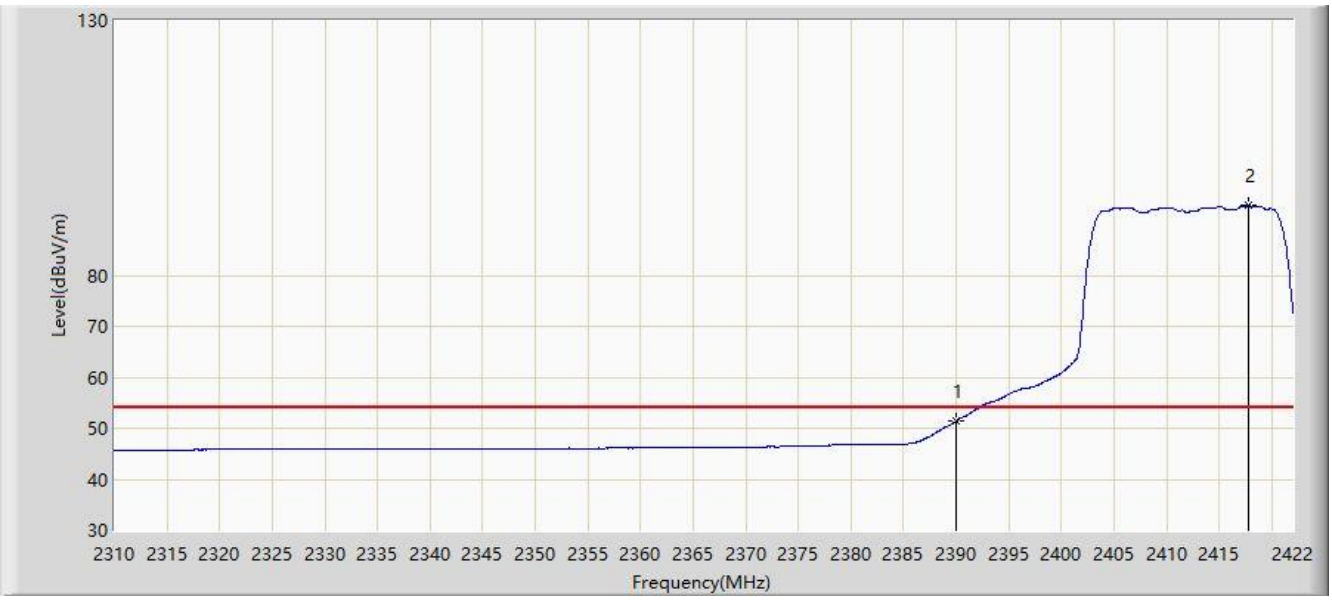


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	71.714	40.710	-2.286	74.000	31.004	PK
2		*	2404.248	104.409	73.395	N/A	N/A	31.015	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT20 at channel 2412MHz	

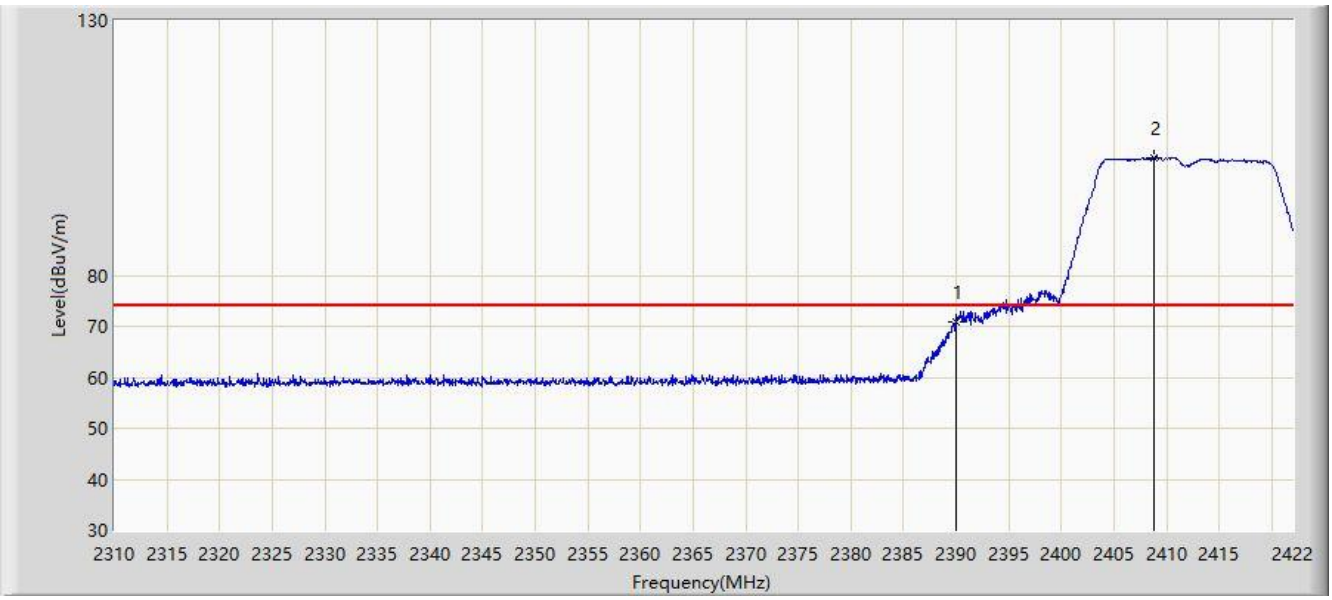


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	51.412	20.408	-2.588	54.000	31.004	AV
2		*	2417.744	93.654	62.640	N/A	N/A	31.014	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT20 at channel 2412MHz	

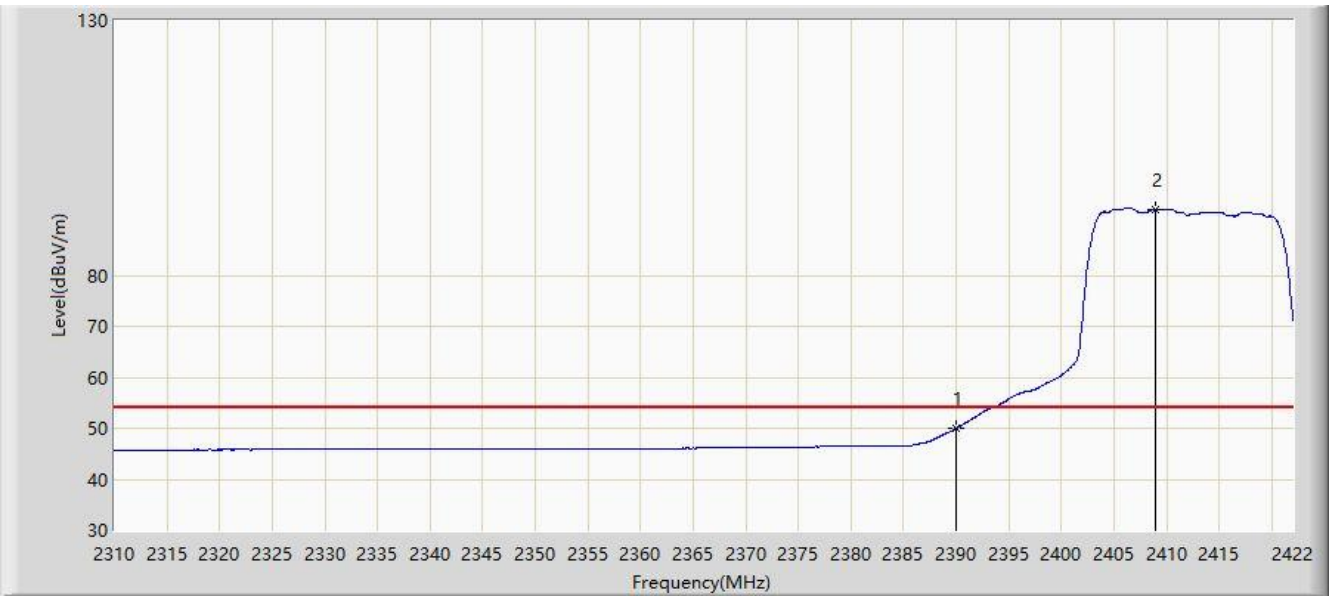


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	70.938	39.934	-3.062	74.000	31.004	PK
2		*	2408.840	103.165	72.148	N/A	N/A	31.016	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/27
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT20 at channel 2412MHz	

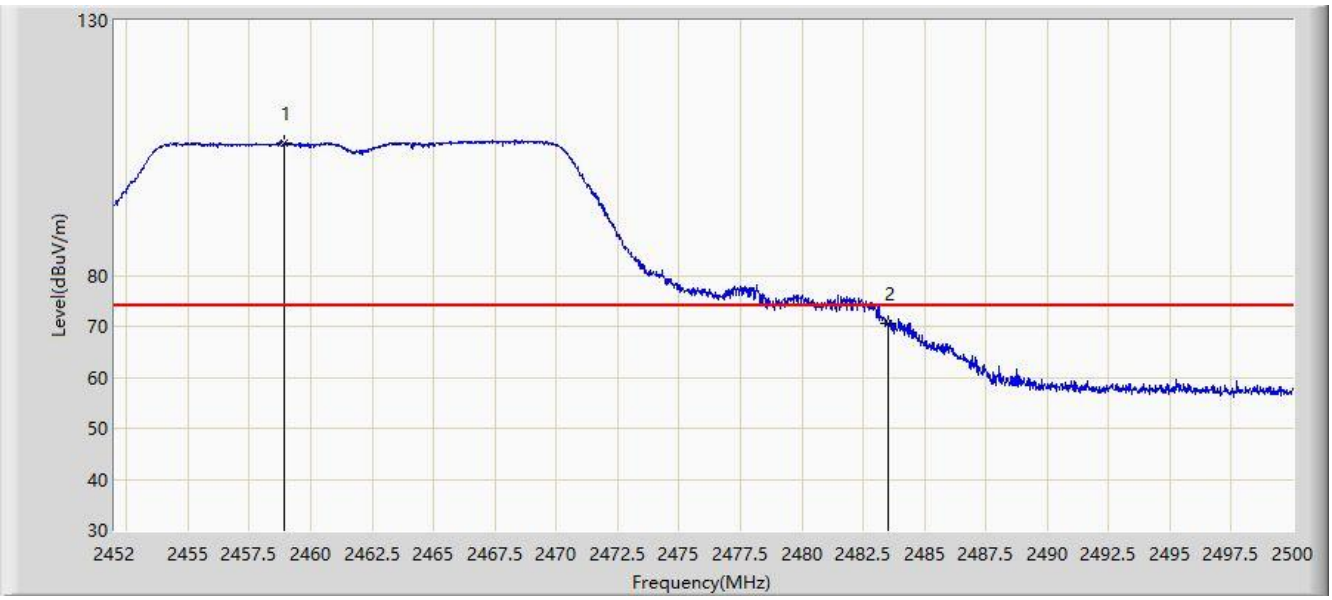


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	49.991	18.987	-4.009	54.000	31.004	AV
2		*	2408.896	92.895	61.878	N/A	N/A	31.016	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT20 at channel 2462MHz	

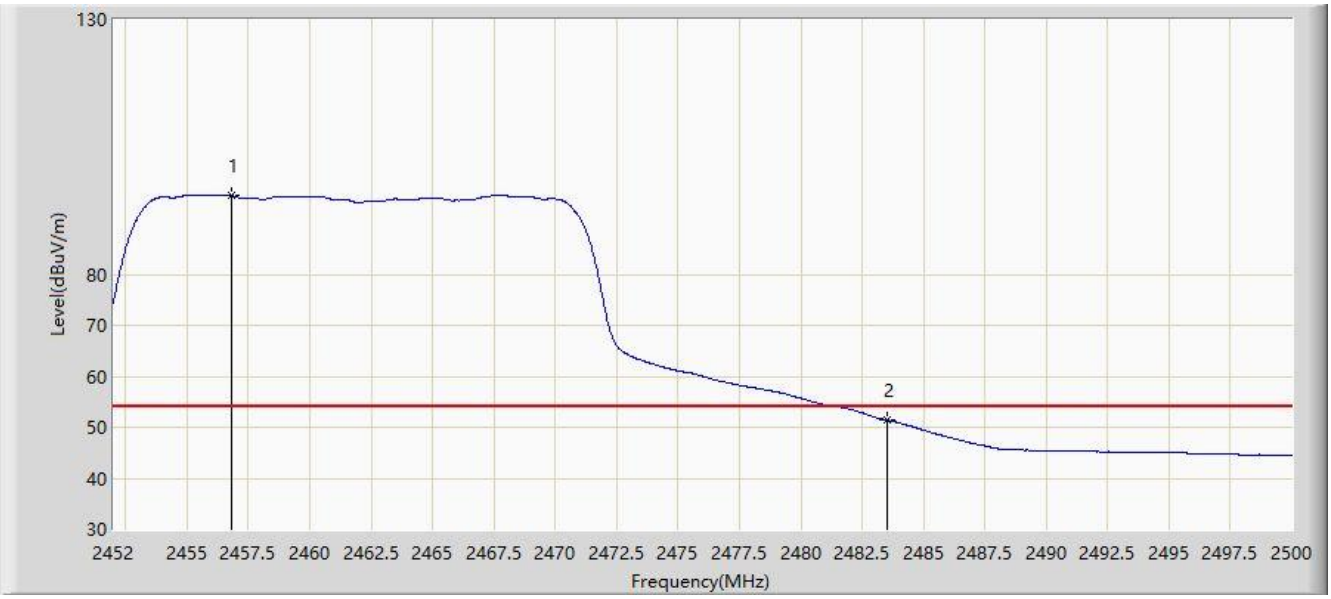


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2458.936	106.047	75.127	N/A	N/A	30.919	PK
2			2483.500	70.492	39.690	-3.508	74.000	30.802	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT20 at channel 2462MHz	

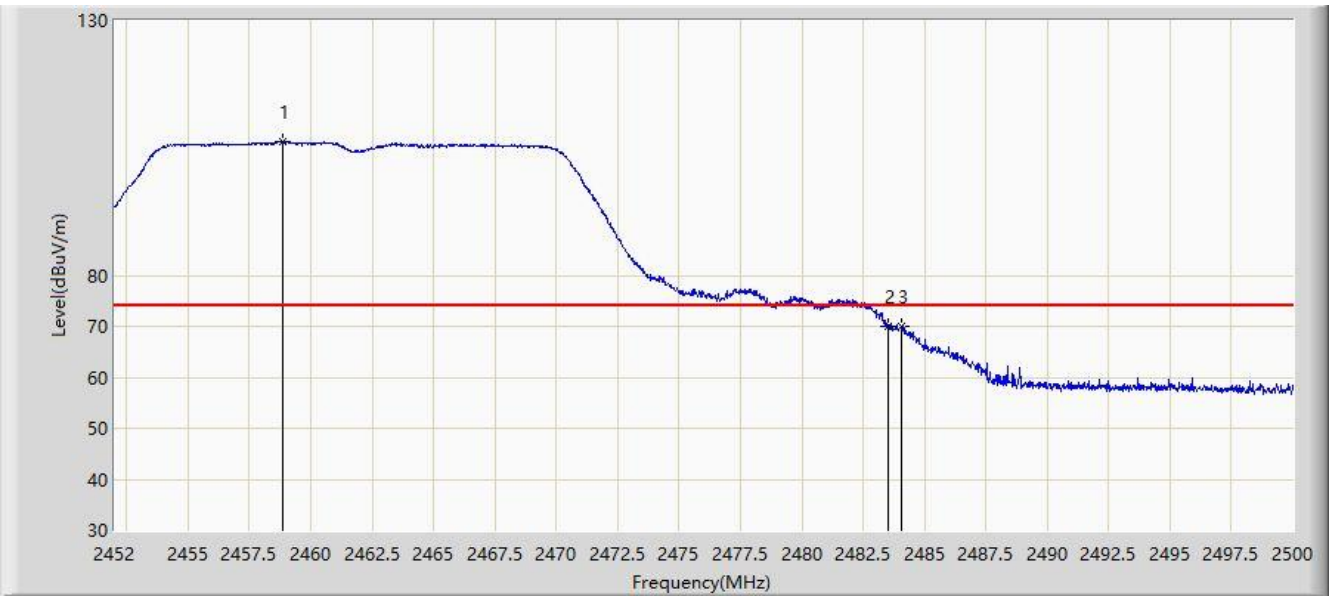


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2456.824	95.405	64.475	N/A	N/A	30.929	AV
2			2483.500	51.431	20.629	-2.569	54.000	30.802	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT20 at channel 2462MHz	

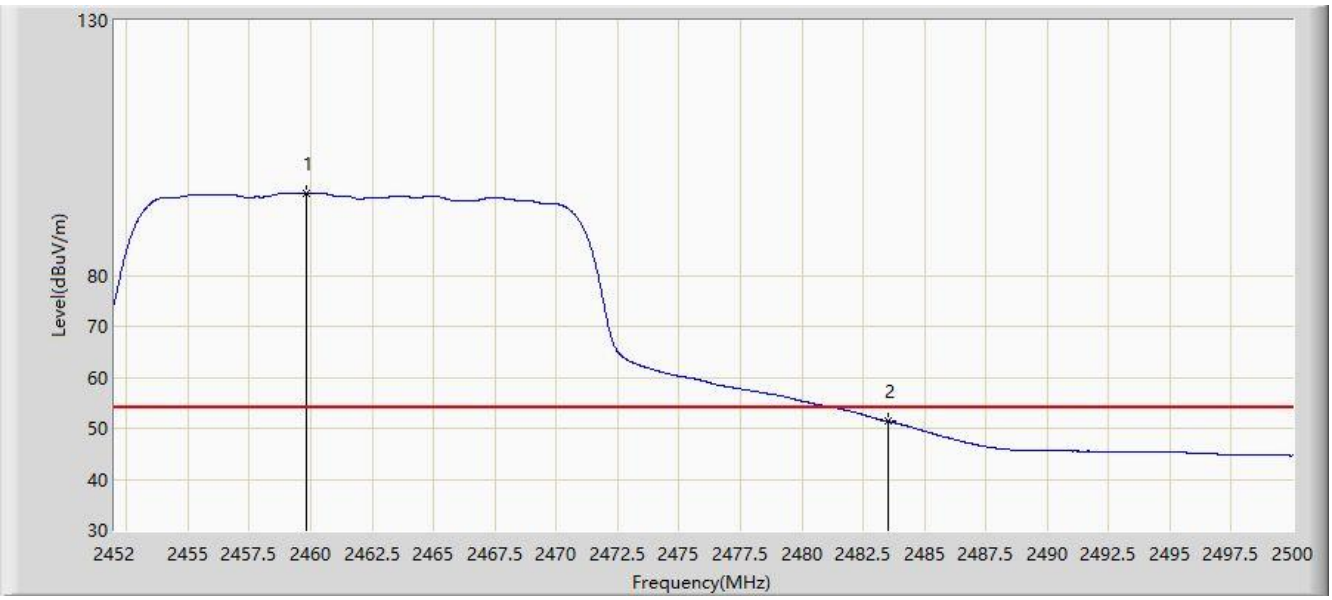


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2458.840	106.343	75.423	N/A	N/A	30.920	PK
2			2483.500	69.904	39.102	-4.096	74.000	30.802	PK
3			2484.088	69.960	39.160	-4.040	74.000	30.800	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT20 at channel 2462MHz	

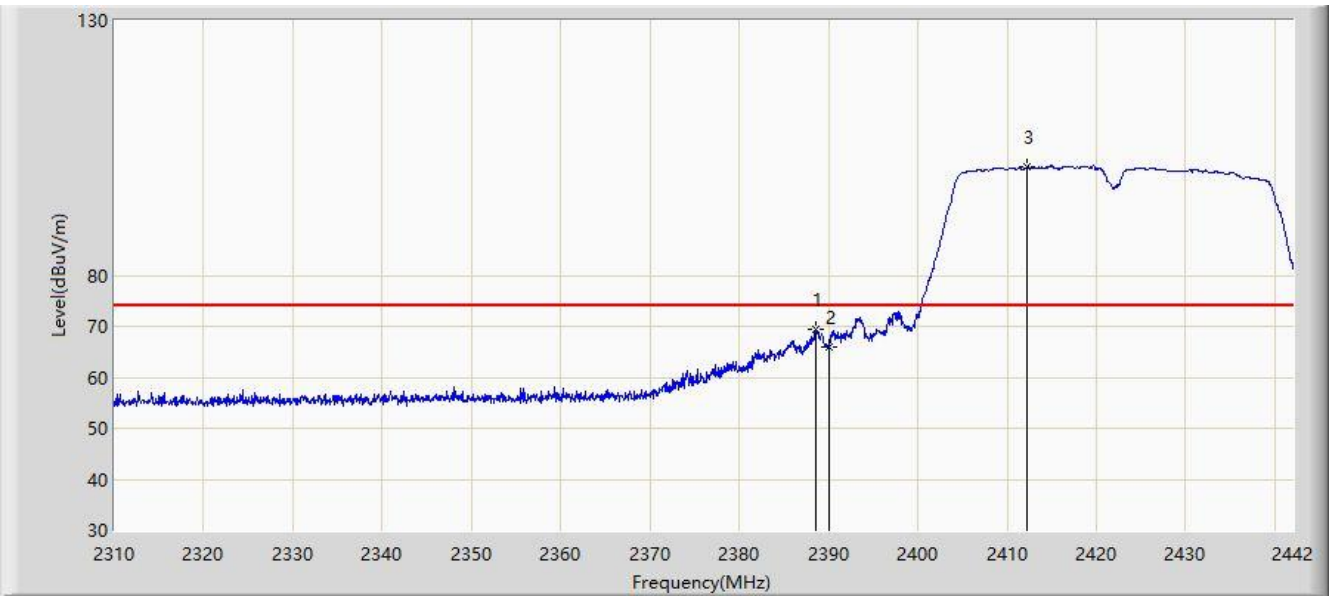


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2459.824	96.113	65.197	N/A	N/A	30.915	AV
2			2483.500	51.378	20.576	-2.622	54.000	30.802	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT40 at channel 2422MHz	

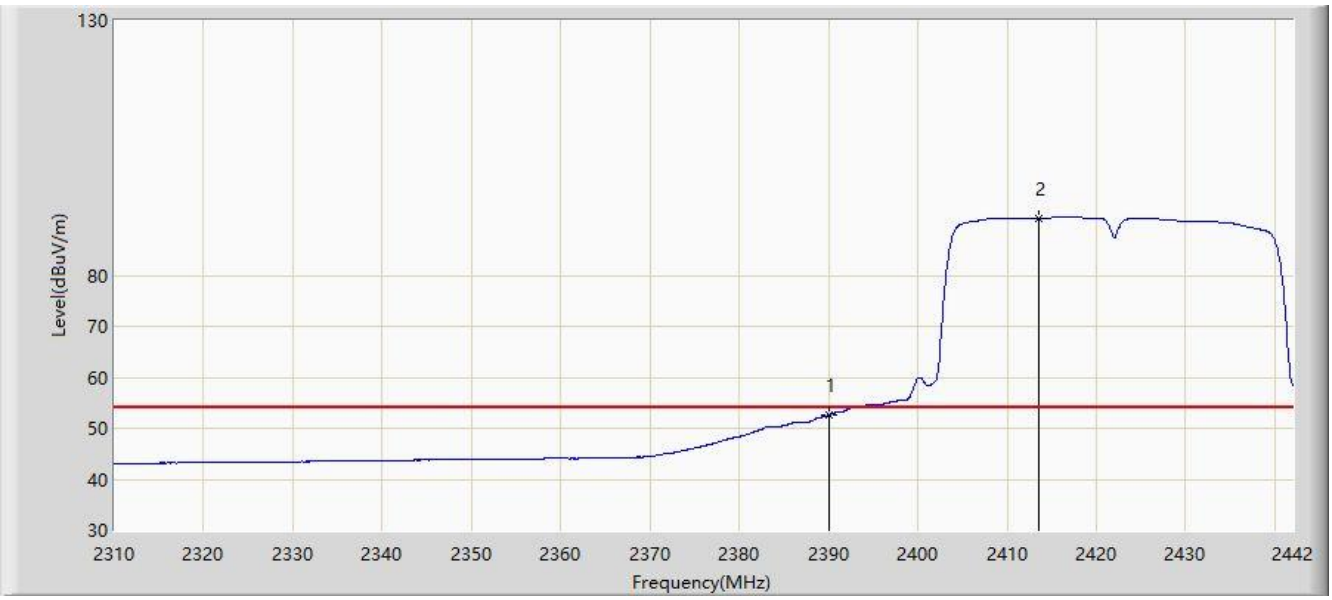


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.540	69.438	38.437	-4.562	74.000	31.001	PK
2			2390.000	65.917	34.913	-8.083	74.000	31.004	PK
3		*	2412.234	101.316	70.299	N/A	N/A	31.017	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT40 at channel 2422MHz	

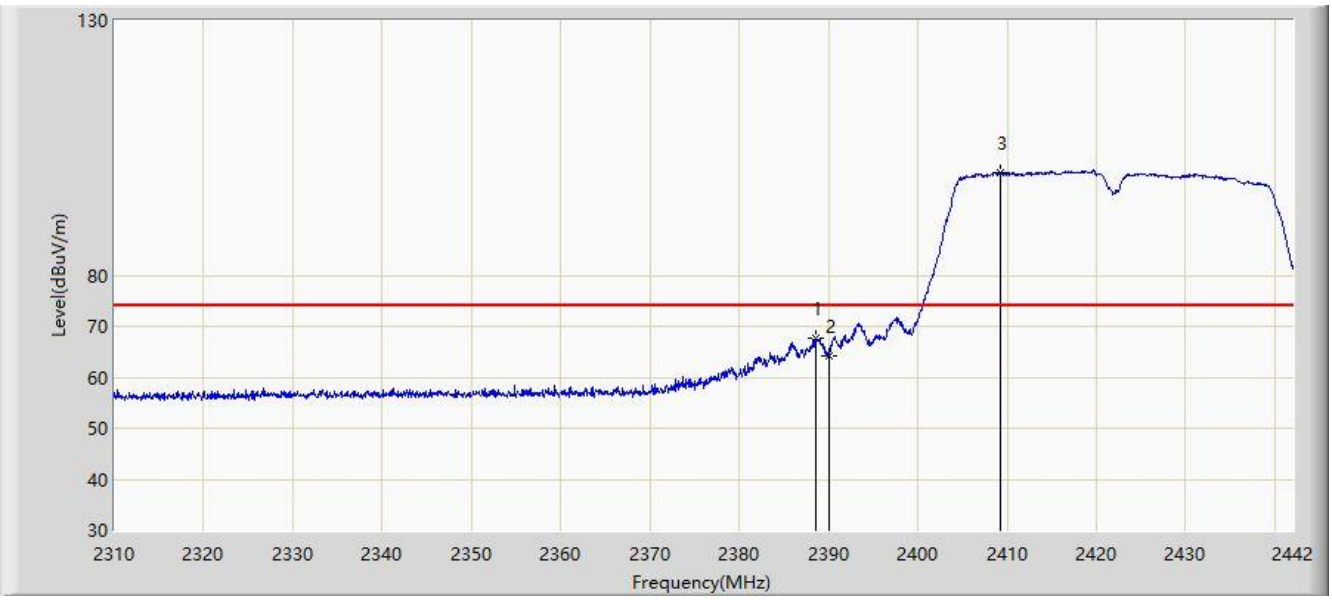


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	52.594	21.590	-1.406	54.000	31.004	AV
2		*	2413.620	91.225	60.209	N/A	N/A	31.017	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT40 at channel 2422MHz	

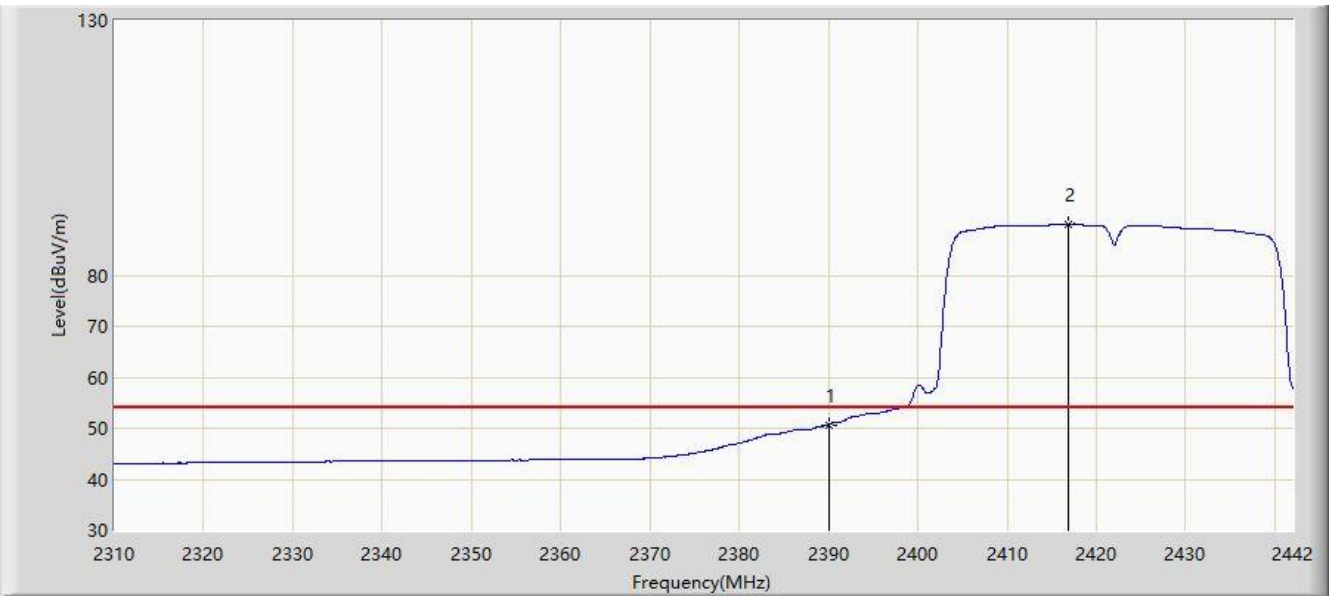


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2388.540	67.754	36.753	-6.246	74.000	31.001	PK
2			2390.000	64.176	33.172	-9.824	74.000	31.004	PK
3		*	2409.264	100.114	69.097	N/A	N/A	31.017	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT40 at channel 2422MHz	

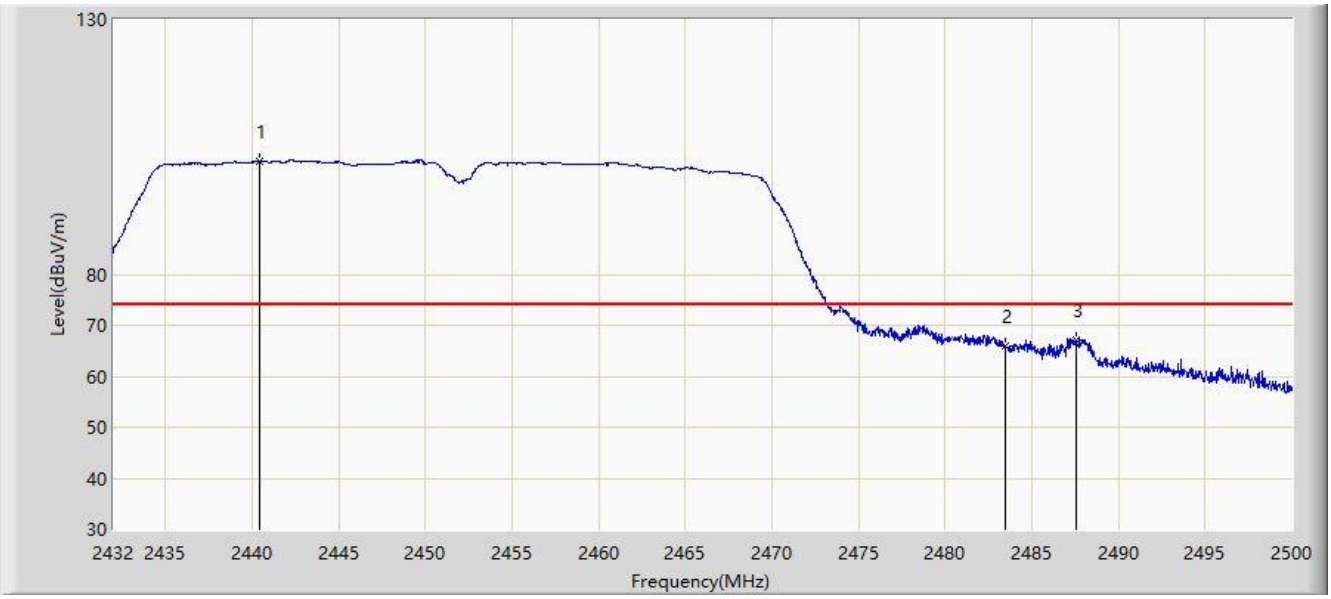


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	50.675	19.671	-3.325	54.000	31.004	AV
2		*	2416.854	90.110	59.095	N/A	N/A	31.015	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT40 at channel 2452MHz	

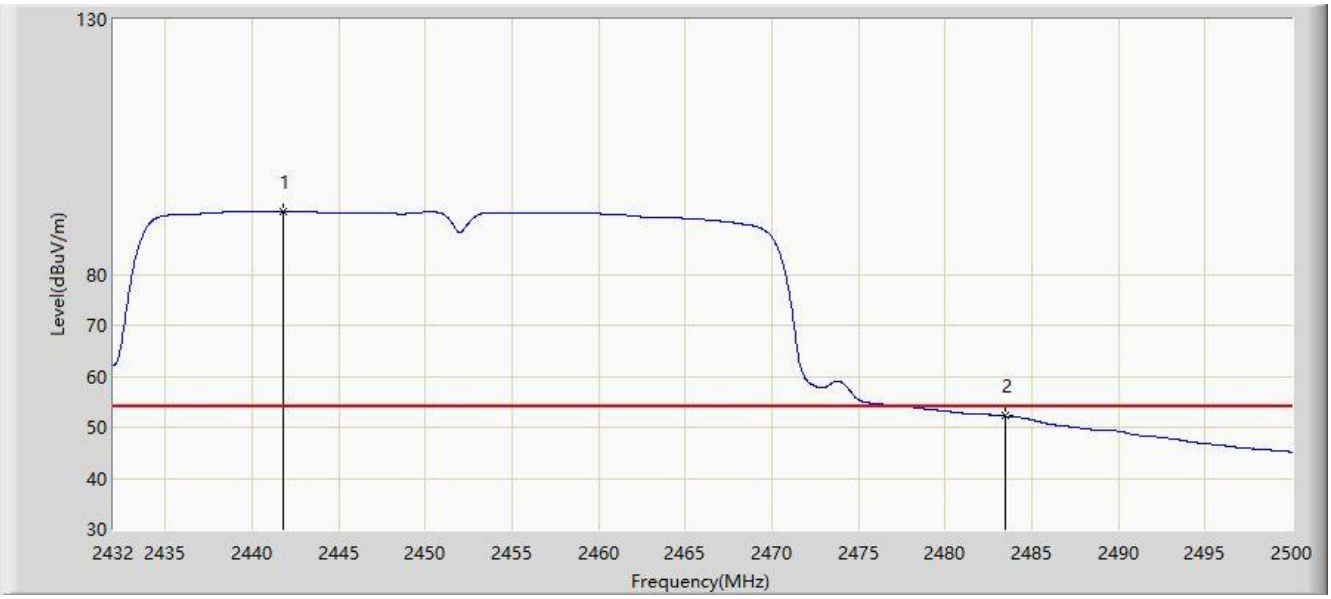


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2440.398	102.211	71.221	N/A	N/A	30.990	PK
2			2483.500	65.911	35.109	-8.089	74.000	30.802	PK
3			2487.522	67.153	36.363	-6.847	74.000	30.790	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT40 at channel 2452MHz	

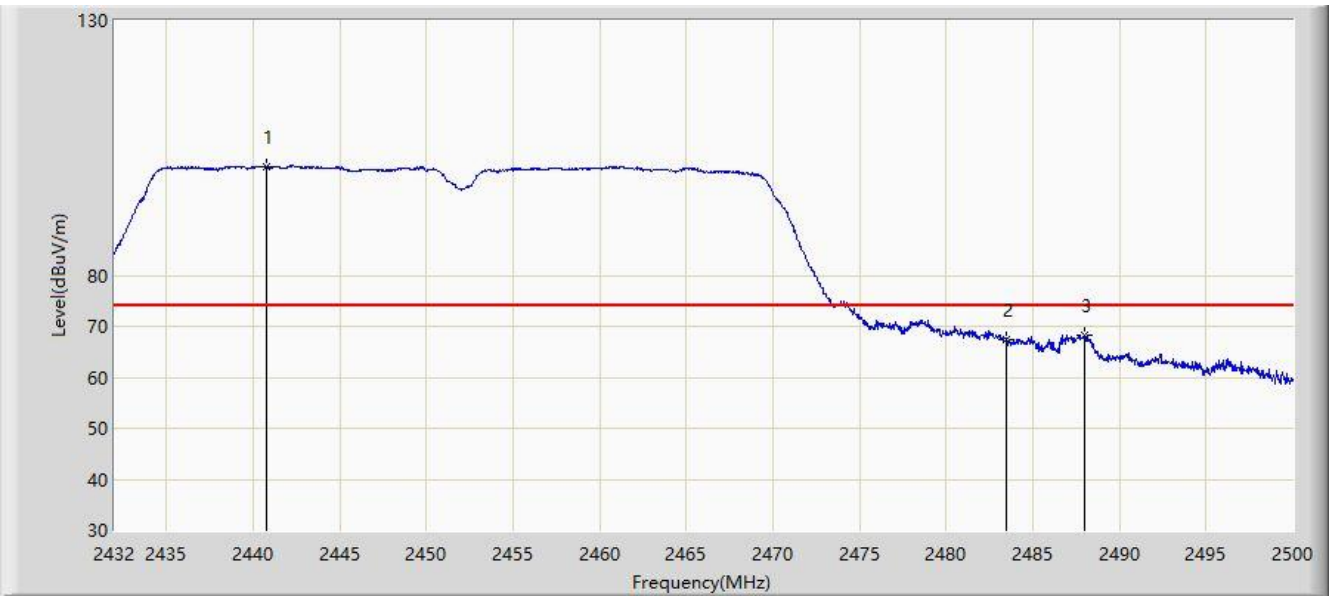


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2441.792	92.355	61.367	N/A	N/A	30.988	AV
2			2483.500	52.192	21.390	-1.808	54.000	30.802	AV

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT40 at channel 2452MHz	

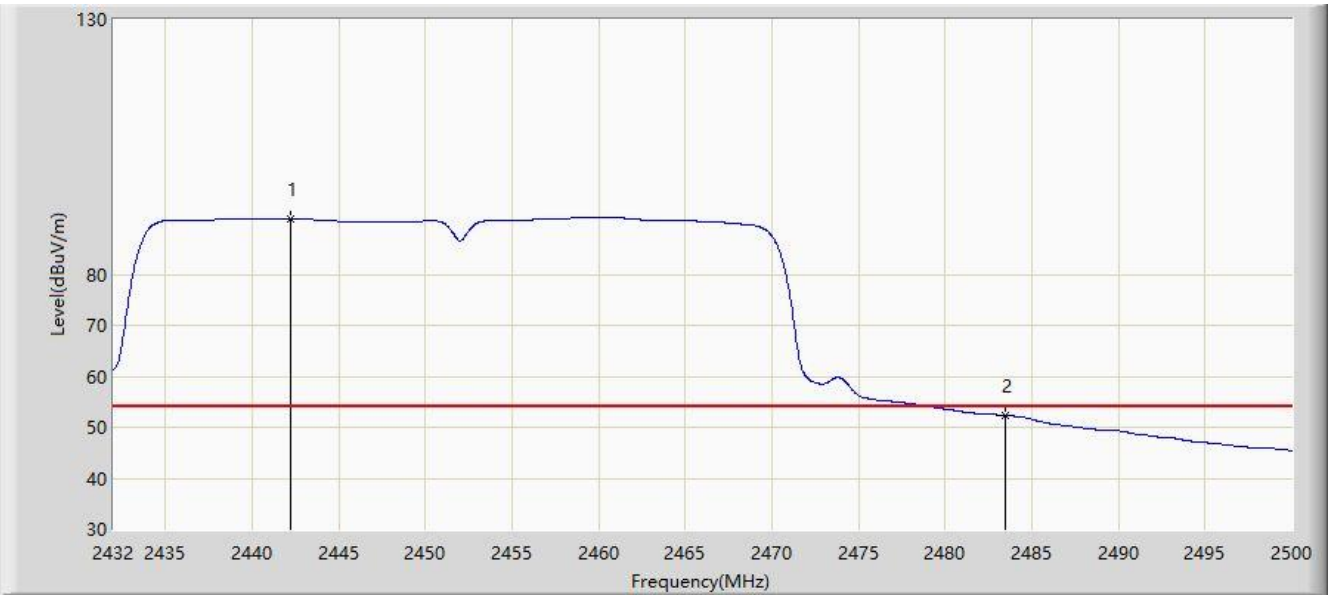


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2440.738	101.287	70.298	N/A	N/A	30.989	PK
2			2483.500	67.261	36.459	-6.739	74.000	30.802	PK
3			2487.964	68.399	37.610	-5.601	74.000	30.789	PK

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Site: SIP-AC2	Time: 2020/09/29
Limit: FCC_Part15.209_RE(3m)	Engineer: Allen Zou
Probe: AC2_BBHA9120D_1-18GHz	Polarity: Vertical
EUT: Robotic Vacuum Cleaner	Power: By Battery
Note: Transmit by 802.11n-HT40 at channel 2452MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2442.234	90.838	59.851	N/A	N/A	30.987	AV
2			2483.500	52.305	21.503	-1.695	54.000	30.802	AV

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

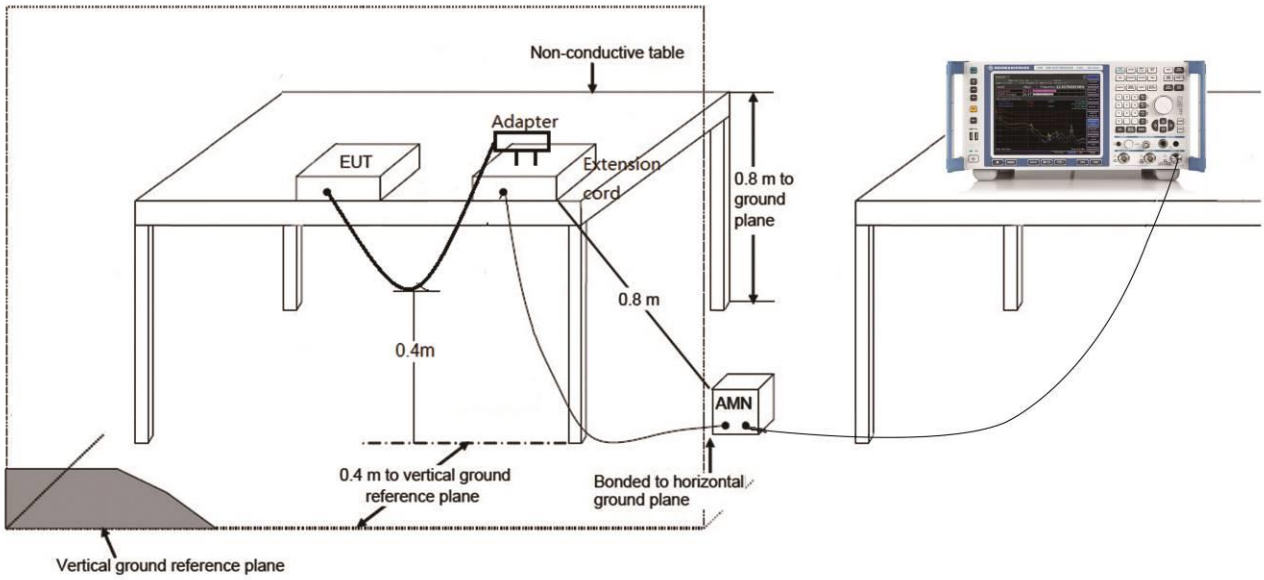
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

6.8. AC Conducted Emissions Measurement

6.8.1. Test Limit

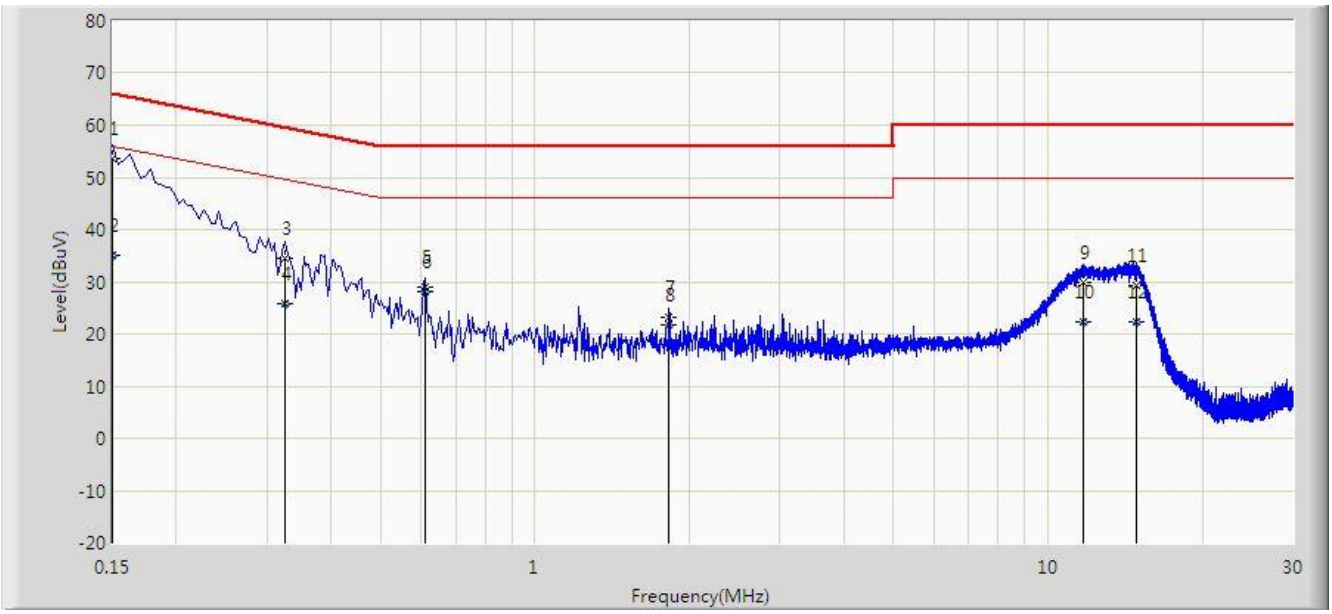
FCC Part 15 Subpart C Paragraph 15.207 & RSS-Gen Paragraph 8.8 Limits		
Frequency (MHz)	QP (dBμV)	Average (dBμV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50
Note 1: The lower limit shall apply at the transition frequencies. Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.		

6.8.2.Test Setup



6.8.3.Test Result

Site: SIP-SR2	Time: 2020/11/24
Limit: FCC_Part15.207_CE_AC Power	Engineer: Kyrie Xie
Probe: ENV216_101684_Filter On	Polarity: Line
EUT: Robotic Vacuum Cleaner	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	

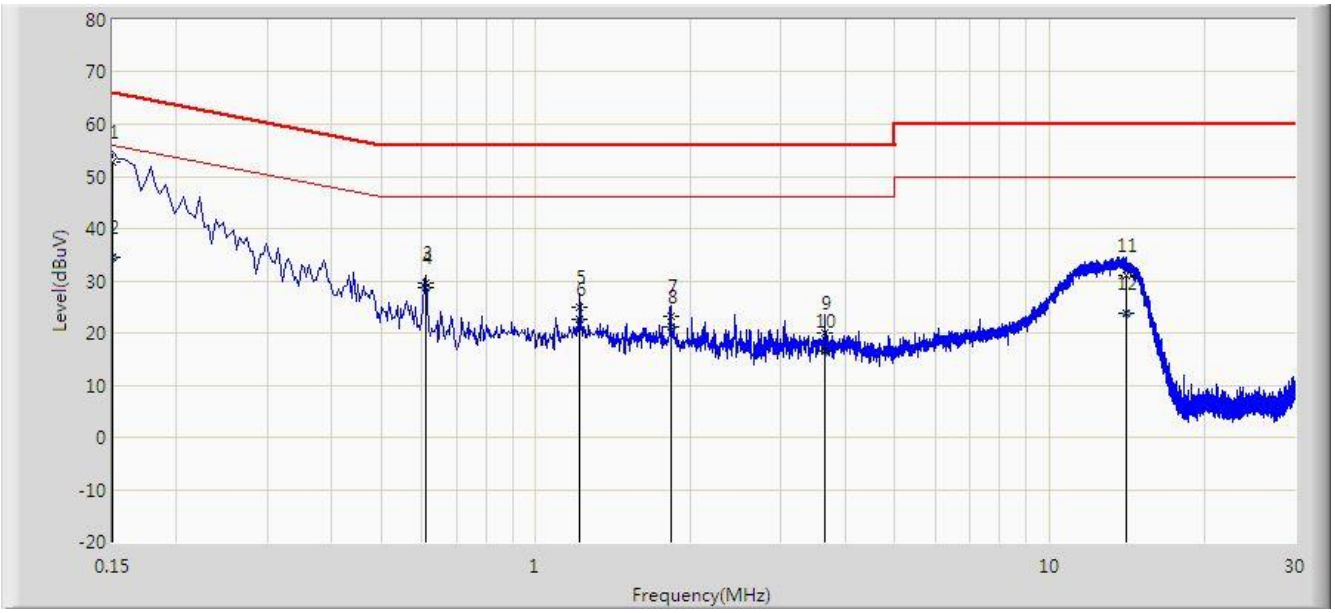


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.150	53.760	42.635	-12.240	66.000	11.126	QP
2			0.150	35.098	23.973	-20.902	56.000	11.126	AV
3			0.326	34.425	24.390	-25.127	59.552	10.035	QP
4			0.326	25.897	15.861	-23.656	49.552	10.035	AV
5			0.610	28.855	18.724	-27.145	56.000	10.130	QP
6			0.610	27.986	17.856	-18.014	46.000	10.130	AV
7			1.826	23.329	13.393	-32.671	56.000	9.937	QP
8			1.826	21.643	11.707	-24.357	46.000	9.937	AV
9			11.734	29.816	19.833	-30.184	60.000	9.982	QP
10			11.734	22.445	12.463	-27.555	50.000	9.982	AV
11			14.886	29.380	19.346	-30.620	60.000	10.034	QP
12			14.886	22.217	12.183	-27.783	50.000	10.034	AV

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

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

Site: SIP-SR2	Time: 2020/11/24
Limit: FCC_Part15.207_CE_AC Power	Engineer: Kyrie Xie
Probe: ENV216_101684_Filter On	Polarity: Neutral
EUT: Robotic Vacuum Cleaner	Power: AC 120V/60Hz
Test Mode: Transmit by 802.11n-HT20 at channel 2412MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Margin (dB)	Limit (dBuV)	Factor (dB)	Type
1		*	0.150	52.852	41.706	-13.148	66.000	11.146	QP
2			0.150	34.567	23.422	-21.433	56.000	11.146	AV
3			0.610	29.482	19.326	-26.518	56.000	10.156	QP
4			0.610	28.568	18.411	-17.432	46.000	10.156	AV
5			1.218	24.962	15.001	-31.038	56.000	9.961	QP
6			1.218	22.594	12.633	-23.406	46.000	9.961	AV
7			1.830	23.204	13.254	-32.796	56.000	9.950	QP
8			1.830	21.284	11.334	-24.716	46.000	9.950	AV
9			3.654	19.978	10.069	-36.022	56.000	9.909	QP
10			3.654	16.496	6.586	-29.504	46.000	9.909	AV
11			14.058	31.048	21.013	-28.952	60.000	10.035	QP
12			14.058	23.656	13.621	-26.344	50.000	10.035	AV

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

Factor (dB) = Cable Loss (dB) + LISN Factor (dB)

7. CONCLUSION

The data collected relate only the item(s) tested and show that the device is in compliance with the requirements specified in §15.247 of the FCC Rules and RSS-247 of the ISED rules.

The End

Appendix A - Test Setup Photograph

Refer to “2009RSU063-U1-UT” file.

Appendix B - EUT Photograph

Refer to “2009RSU063-U1-UE” file.