

Appendix A: Test Results

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Appendix A.1: Test Results of Radiated Spurious Emissions

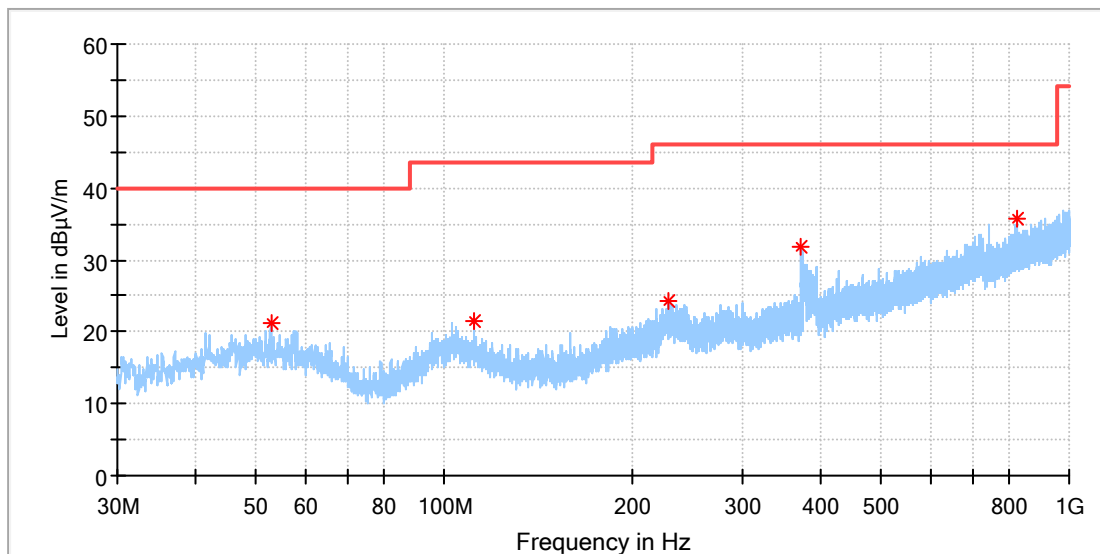
Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30MHz - 1GHz

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	RRA0TAL
Test Mode:	WIFI 2.4G_11b_Ch6
Order No/Sample No:	168546320/A003970476-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

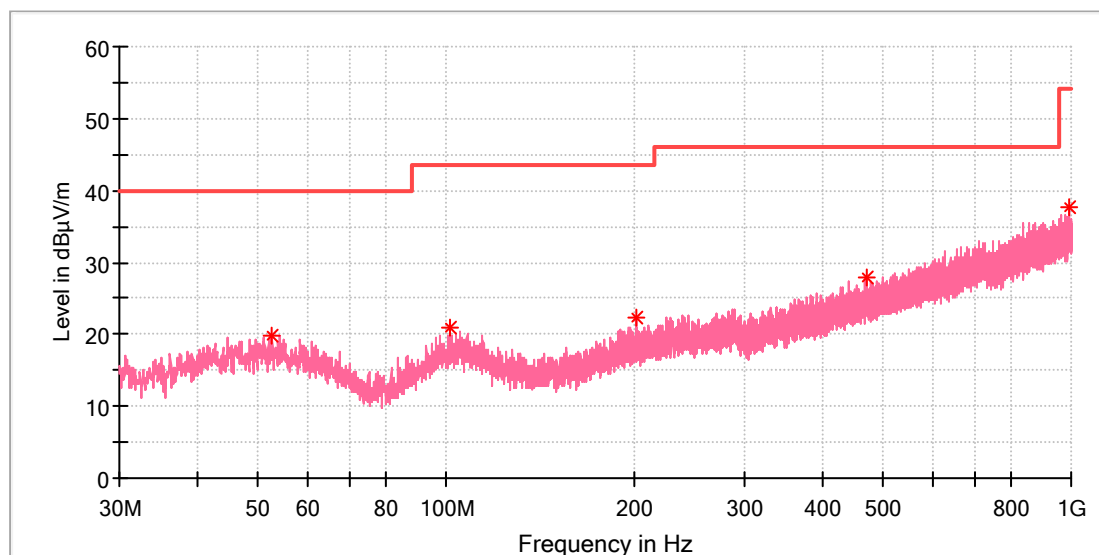
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
52.795000	21.29	40.00	18.71	100.0	H	36.0	-18.5
111.554615	21.43	43.50	22.07	100.0	H	321.0	-19.4
228.961923	24.25	46.00	21.75	100.0	H	284.0	-18.2
373.118846	31.79	46.00	14.21	100.0	H	355.0	-14.4
827.116154	35.61	46.00	10.39	100.0	H	227.0	-5.7

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: RRA0TAL
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168546320/A003970476-001
Test Voltage: Battery
Remark: Temp 23 Humi:58%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

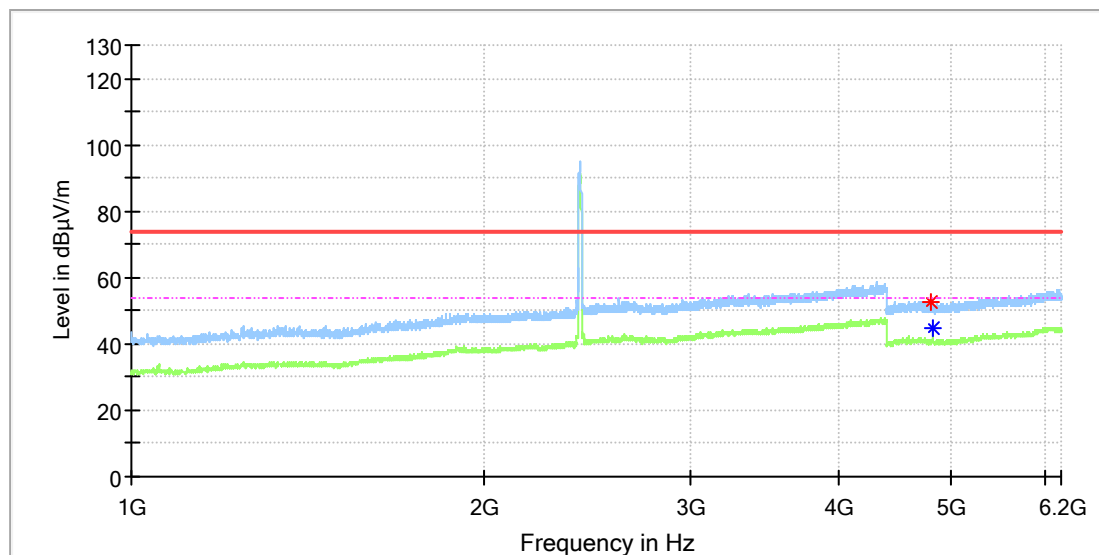
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
52.720385	19.93	40.00	20.07	100.0	V	233.0	-18.5
101.518846	21.03	43.50	22.47	100.0	V	180.0	-19.1
200.981154	22.33	43.50	21.17	100.0	V	296.0	-19.1
469.447308	27.95	46.00	18.05	100.0	V	0.0	-12.4
994.030769	37.58	54.00	16.42	100.0	V	286.0	-3.6

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Note: The highest waveform in the figure is Wi-Fi Fundamental.

EUT Name:	Robotic Vacuum Cleaner
Model:	RRA0TAL
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168546320/A003970476-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4801.000000	52.32	---	74.00	21.68	150.0	H	195.0	13.3
4824.000000	---	44.45	54.00	9.55	150.0	H	162.0	13.3

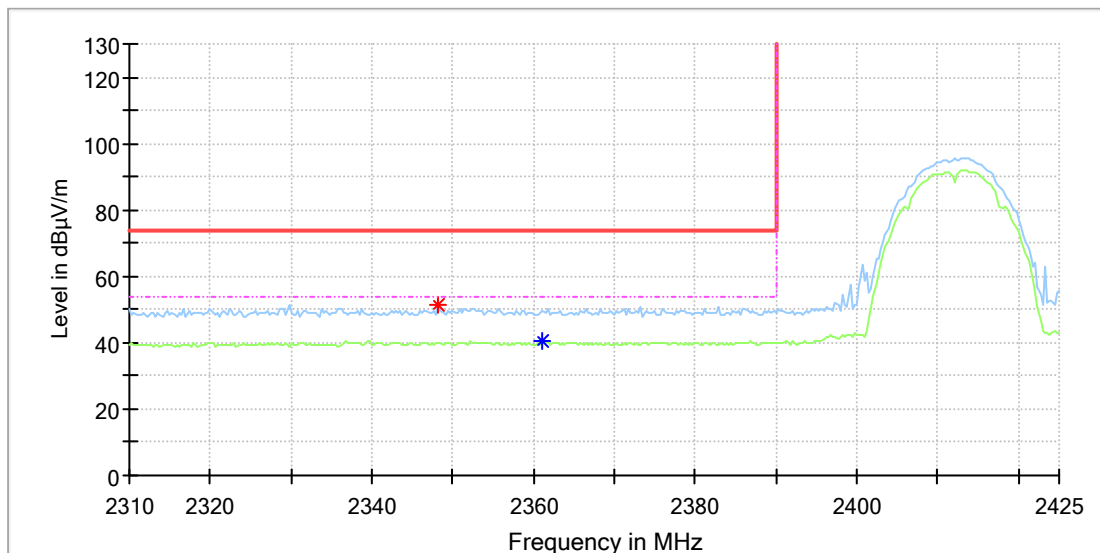
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Appendix A.2: Test Results of Radiated Emissions in Restricted Bands

Wi-Fi 802.11 b mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	RRA0TAL
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168546320/A003970476-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

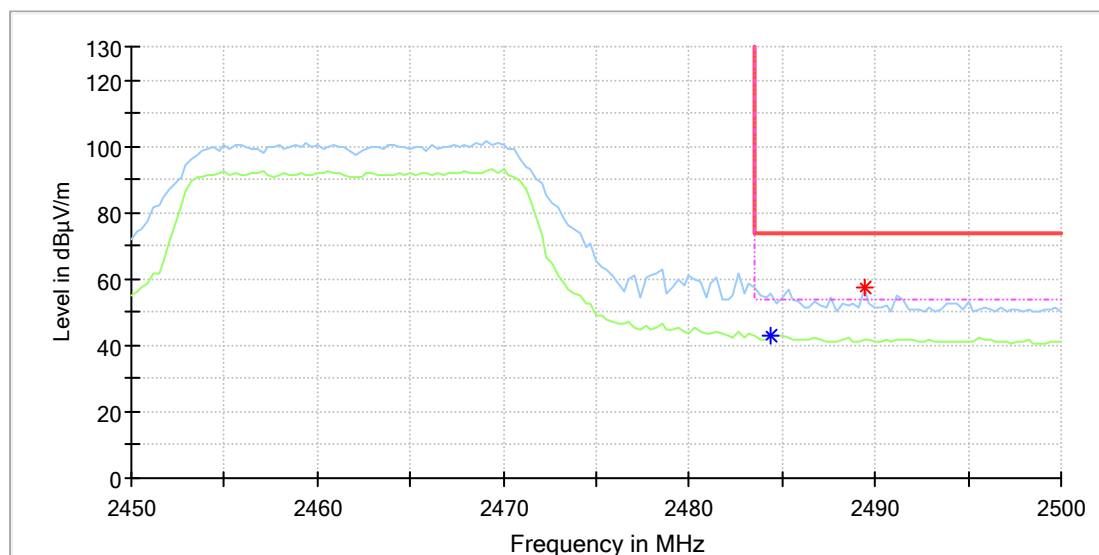
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2348.235294	51.20	---	74.00	22.80	150.0	H	221.0	8.5
2361.176471	---	40.70	54.00	13.30	150.0	H	299.0	8.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.00	100.00	100.00	100.00	100.00	100.00		100.00	

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Name:	Robotic Vacuum Cleaner
Model:	RRA0TAL
Test Mode:	WIFI 2.4G_11n20_Ch11
Order No/Sample No:	168546320/A003970476-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



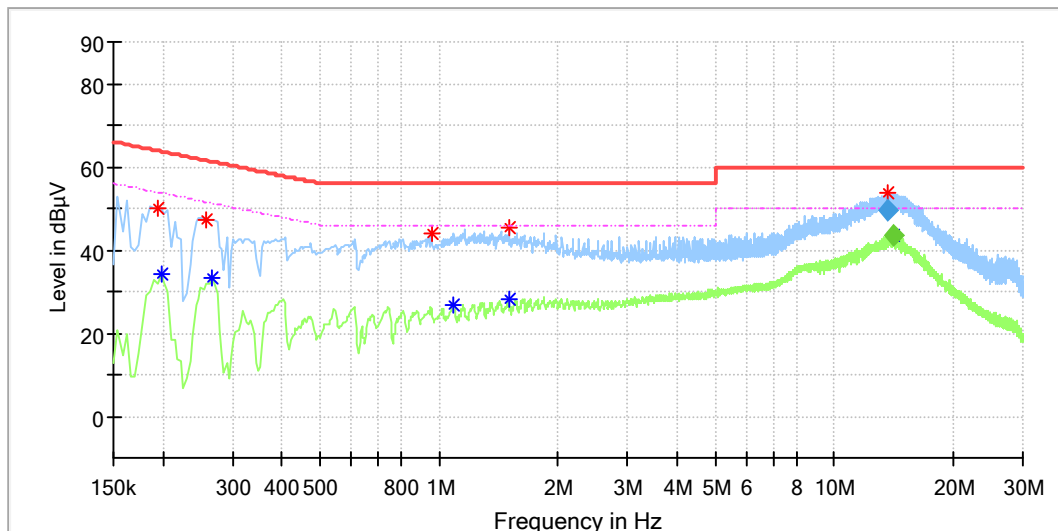
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.411765	---	43.22	54.00	10.78	150.0	H	234.0	9.0
2489.411765	57.25	---	74.00	16.75	150.0	H	128.0	9.0

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Appendix A.3: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name: Robotic Vacuum Cleaner
Order Number: 168546320
Model: RRA0TAL
Test Mode: WIFI Link
Test Voltage: AC 120V/60Hz
Test Standard: FCC Part 15
Test By:/Review By: BirchZhang/ Shower Dai
Tem./Hum./Pressure: 24.9°C/50.4%/101kPa
Remark: SR2



Critical_Freqs

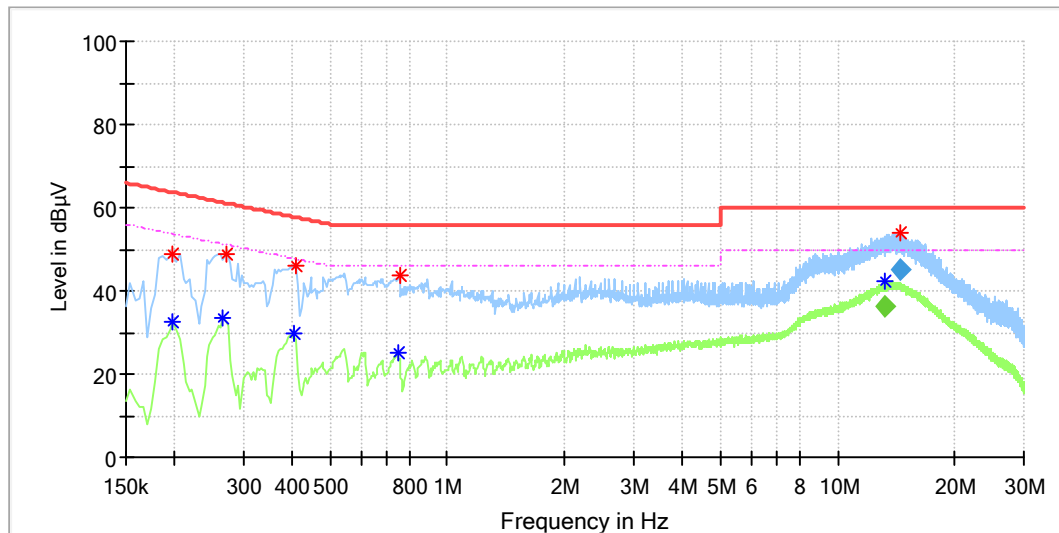
Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.194000	49.97	---	63.86	13.89	L1	10.2
0.198000	---	34.33	53.69	19.37	L1	10.2
0.258000	47.42	---	61.50	14.08	L1	10.2
0.266000	---	33.24	51.24	18.00	L1	10.2
0.958000	43.75	---	56.00	12.25	L1	10.3
1.090000	---	26.84	46.00	19.16	L1	10.3
1.498000	---	28.01	46.00	17.99	L1	10.3
1.502000	45.50	---	56.00	10.50	L1	10.3
13.668500	53.56	---	60.00	6.44	L1	10.7
14.180500	---	43.27	50.00	6.73	L1	10.7

Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
13.668500	49.66	---	60.00	10.34	1000.0	9.000	L1	10.7
14.180500	---	43.32	50.00	6.68	1000.0	9.000	L1	10.7

EUT Information

EUT Name: Robotic Vacuum Cleaner
Order Number: 168546320
Model: RRA0TAL
Test Mode: WIFI Link
Test Voltage: AC 120V/60Hz
Test Standard: FCC Part 15
Test By:/Review By: BirchZhang/ Shower Dai
Tem./Hum./Pressure: 24.9°C/50.4%/101kPa
Remark: SR2



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.198000	---	32.63	53.69	21.06	N	10.2
0.198000	48.73	---	63.69	14.96	N	10.2
0.266000	---	33.34	51.24	17.90	N	10.2
0.270000	49.02	---	61.12	12.09	N	10.2
0.402000	---	29.98	47.81	17.84	N	10.2
0.410000	46.13	---	57.65	11.52	N	10.2
0.746000	---	25.29	46.00	20.71	N	10.3
0.754000	43.56	---	56.00	12.44	N	10.3
13.140500	---	42.15	50.00	7.85	N	10.7
14.471500	53.98	---	60.00	6.02	N	10.7

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
13.140500	---	36.49	50.00	13.51	1000.0	9.000	N	10.7
14.471500	44.98	---	60.00	15.02	1000.0	9.000	N	10.7