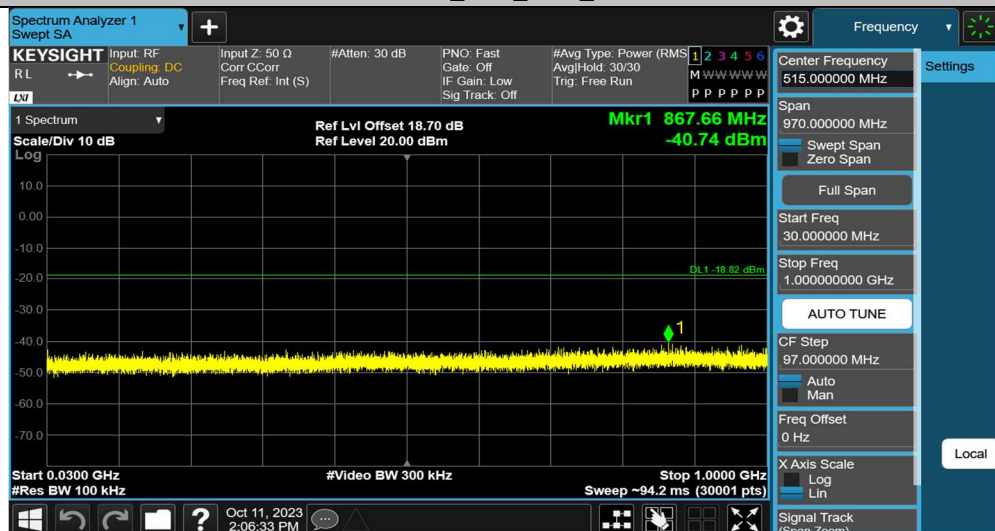


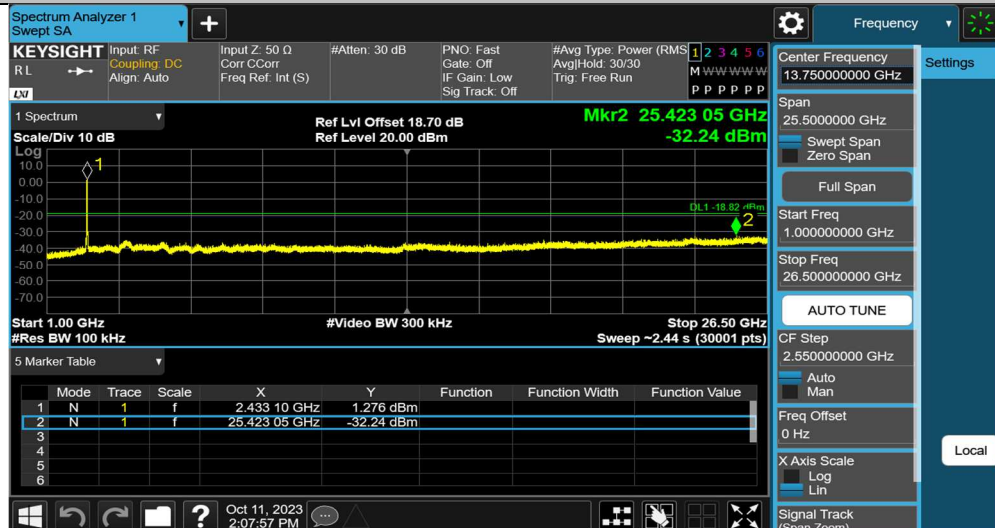
11N40SISO_Ant1_2422_0~Reference



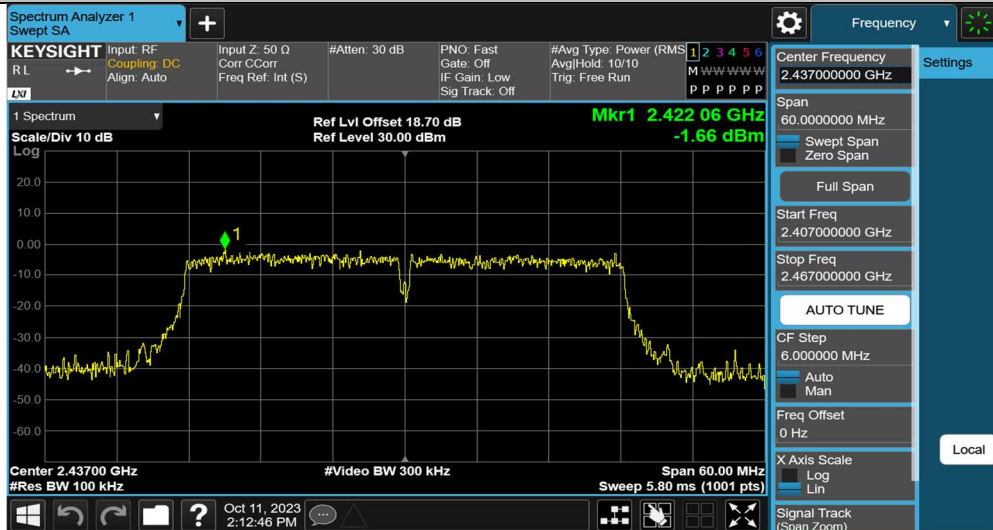
11N40SISO_Ant1_2422_30~1000



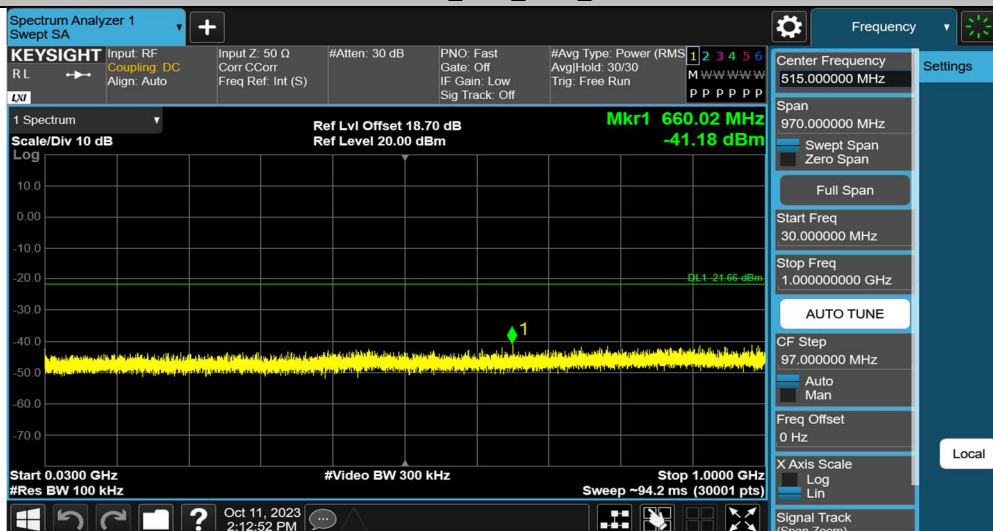
11N40SISO_Ant1_2422_1000~26500



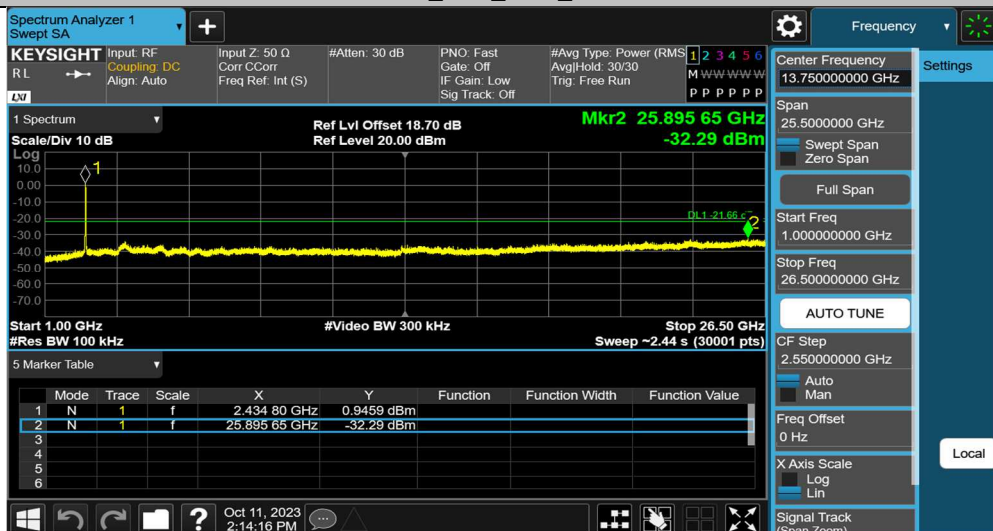
11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_2437_1000~26500



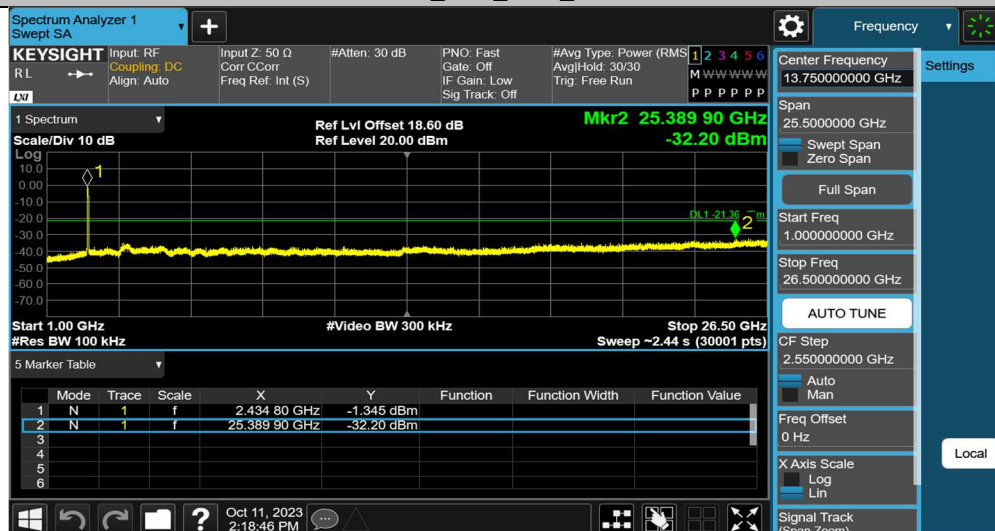
11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000



11N40SISO_Ant1_2452_1000~26500



Appendix A.5: Test Results of Radiated Spurious Emissions

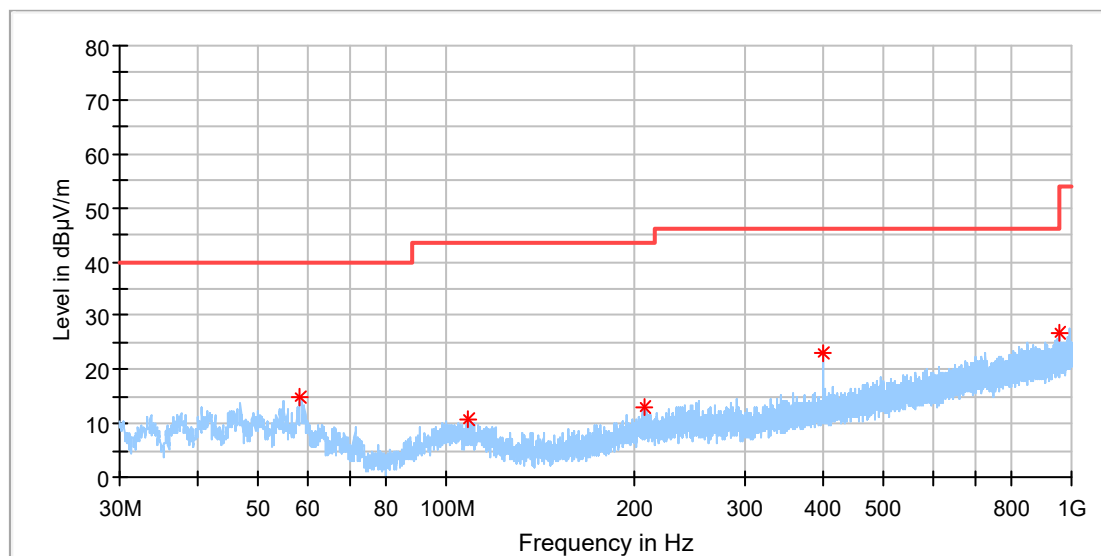
Note:

- 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 (Worst case)

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11b_Ch6
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

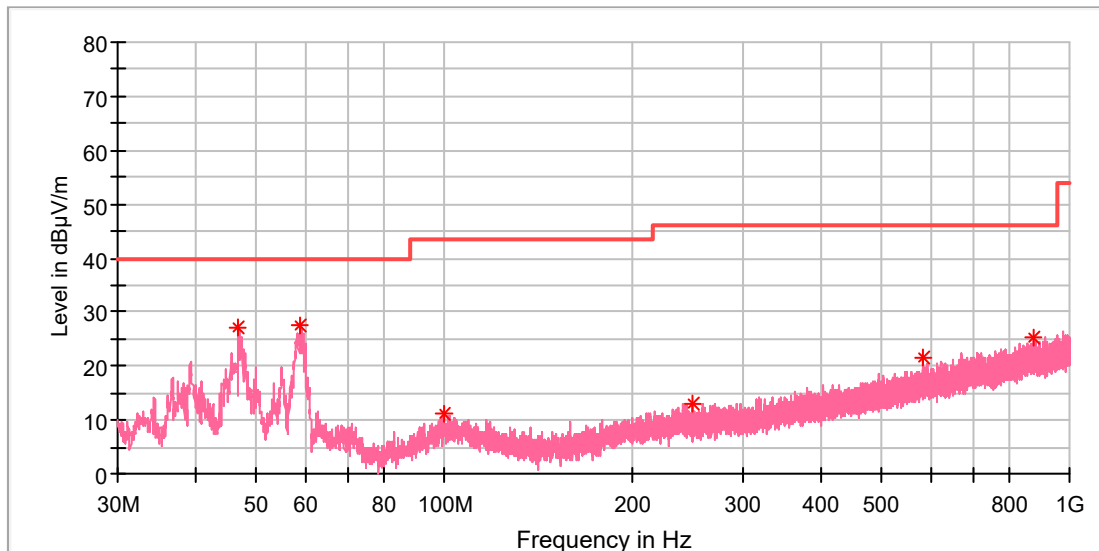
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
58.428462	15.02	40.00	24.98	100.0	H	174.0	-19.1
108.085000	10.96	43.50	32.54	100.0	H	356.0	-19.3
207.472692	13.03	43.50	30.47	100.0	H	207.0	-19.2
399.980385	22.91	46.00	23.09	100.0	H	217.0	-14.1
960.006154	26.76	54.00	27.24	100.0	H	150.0	-4.7

Final Result

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

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11b_Ch6
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
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)
46.863077	27.13	40.00	12.87	100.0	V	76.0	-18.9
58.764231	27.42	40.00	12.58	100.0	V	206.0	-19.2
99.616154	11.15	43.50	32.35	100.0	V	42.0	-19.4
250.115385	13.12	46.00	32.88	100.0	V	42.0	-17.7
583.534231	21.44	46.00	24.56	100.0	V	326.0	-10.5
872.967308	25.42	46.00	20.58	100.0	V	159.0	-5.7

Final Result

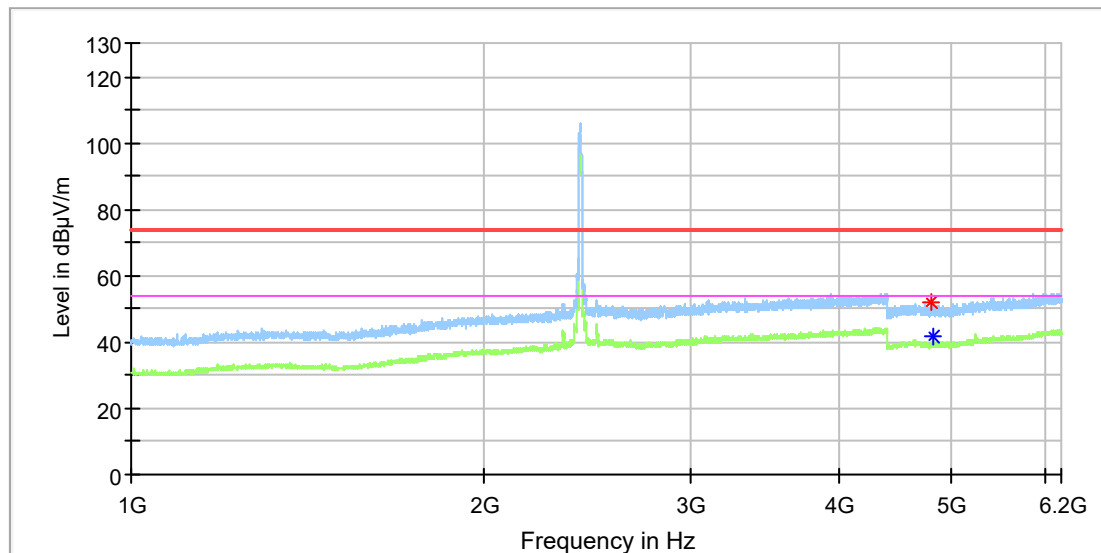
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

Note: The highest waveform in the figure is Wi-Fi Fundamental.

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

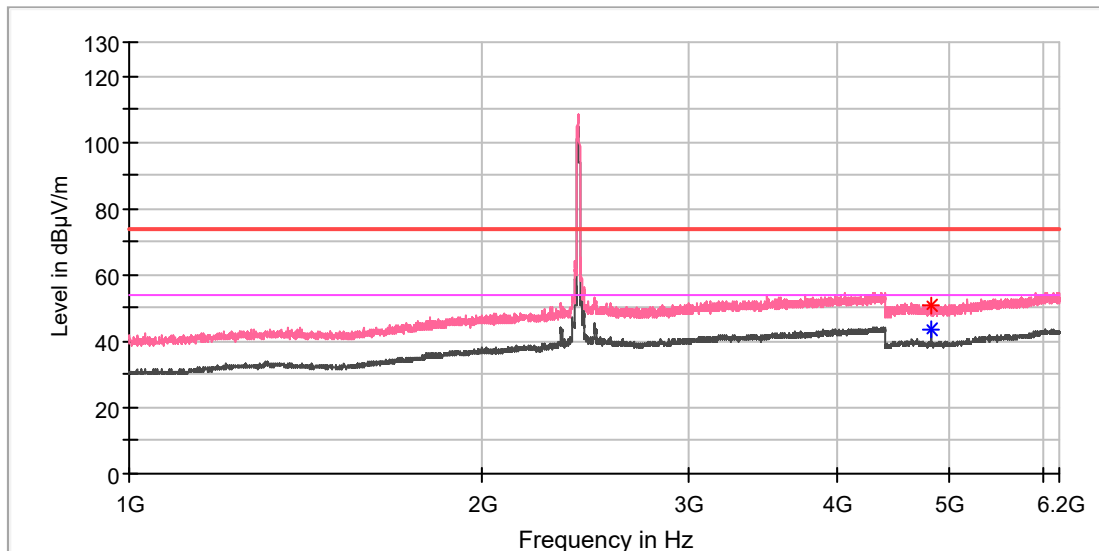
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4810.500000	51.73	---	74.00	22.27	150.0	H	322.0	11.8
4824.000000	---	41.90	54.00	12.10	150.0	H	60.0	11.8

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

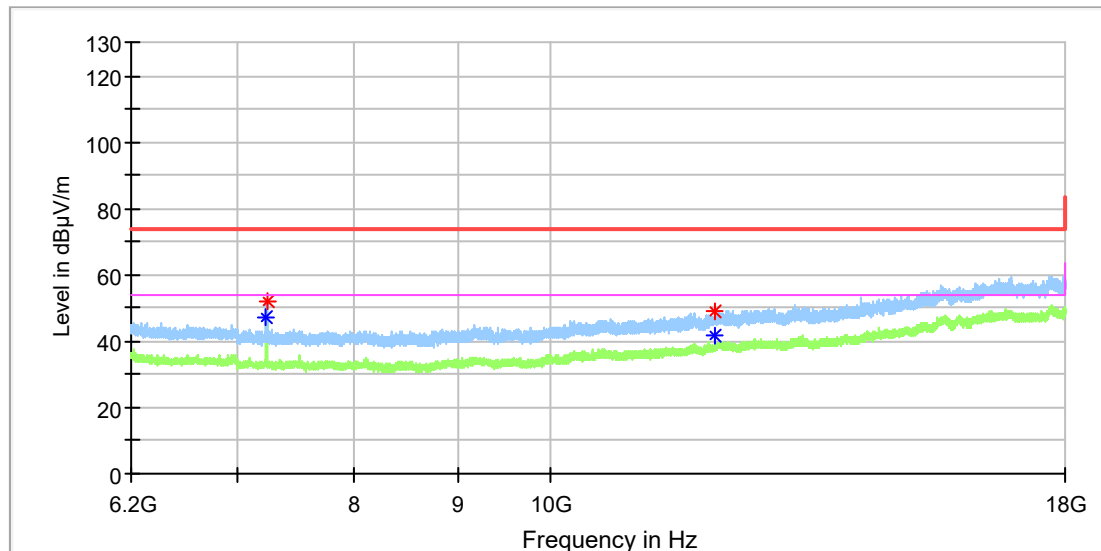
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	51.09	---	74.00	22.91	150.0	V	350.0	11.8
4824.000000	---	43.64	54.00	10.36	150.0	V	350.0	11.8

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

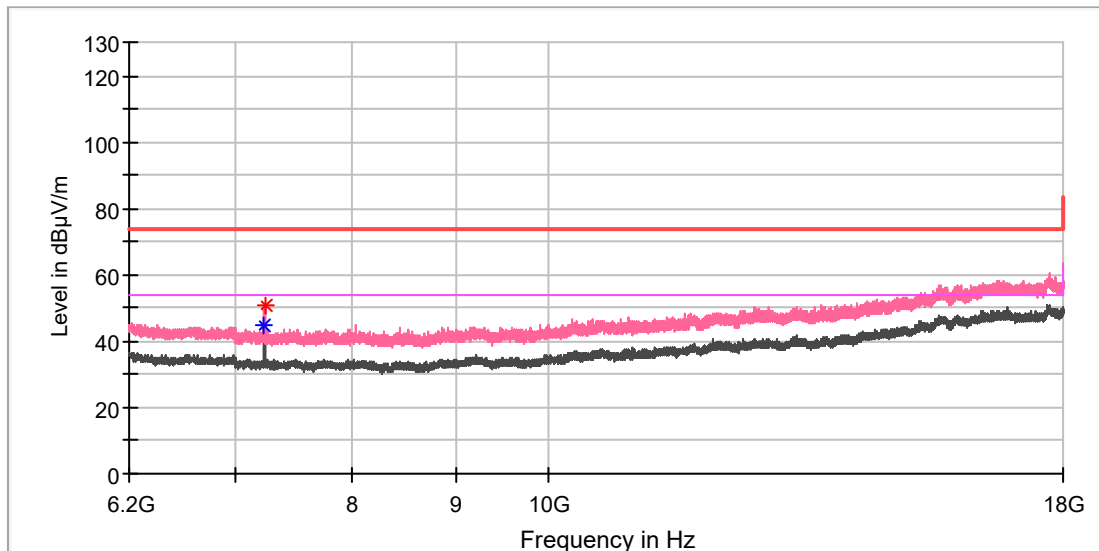
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7234.958333	---	47.05	54.00	6.95	150.0	H	31.0	8.6
7235.450000	51.70	---	74.00	22.30	150.0	H	31.0	8.6
12053.291667	48.71	---	74.00	25.29	150.0	H	121.0	14.0
12059.191667	---	41.95	54.00	12.05	150.0	H	351.0	14.0

Final_Result

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

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

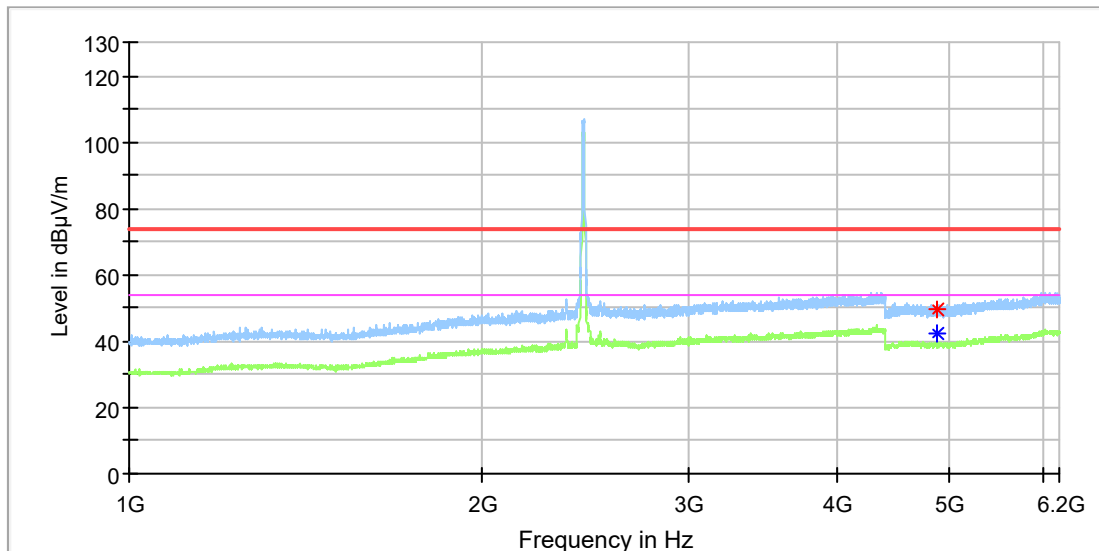
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7234.958333	---	44.57	54.00	9.43	150.0	V	79.0	8.6
7235.941667	50.57	---	74.00	23.43	150.0	V	79.0	8.6

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

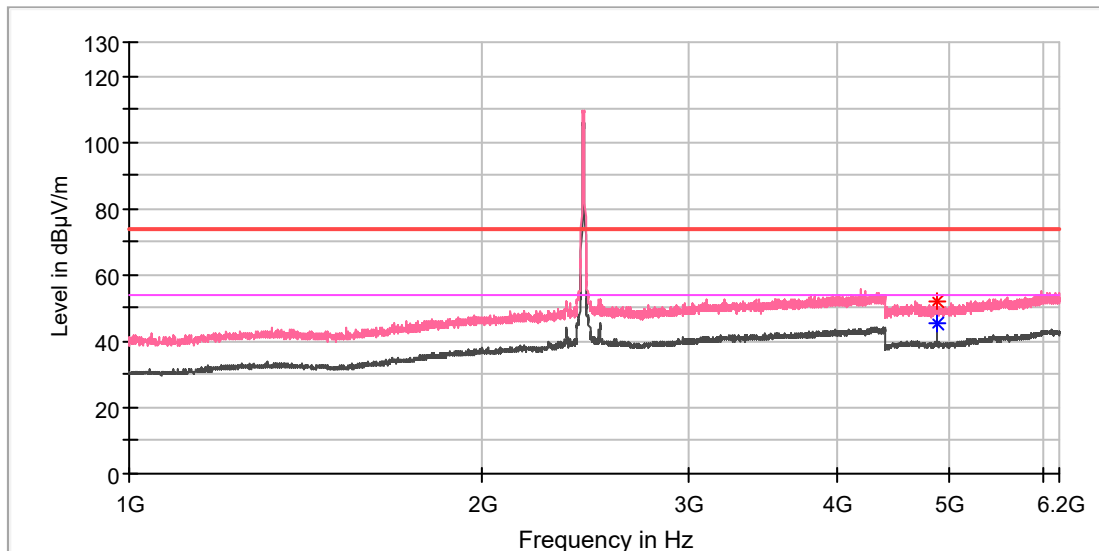
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4873.500000	49.86	---	74.00	24.14	150.0	H	73.0	11.8
4874.000000	---	42.57	54.00	11.43	150.0	H	73.0	11.8

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

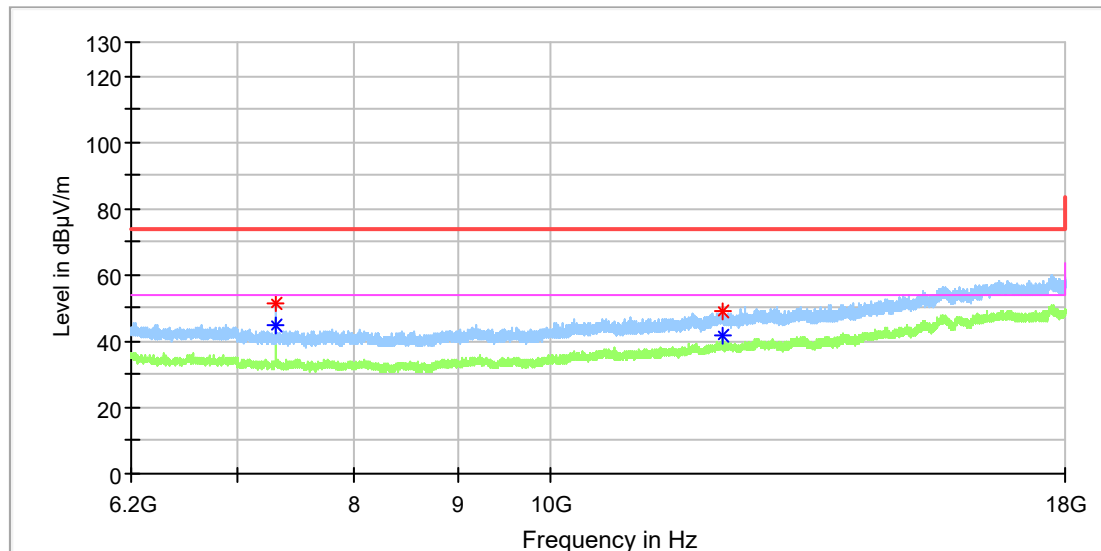
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4873.500000	51.81	---	74.00	22.19	150.0	V	278.0	11.8
4874.000000	---	45.31	54.00	8.69	150.0	V	351.0	11.8

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

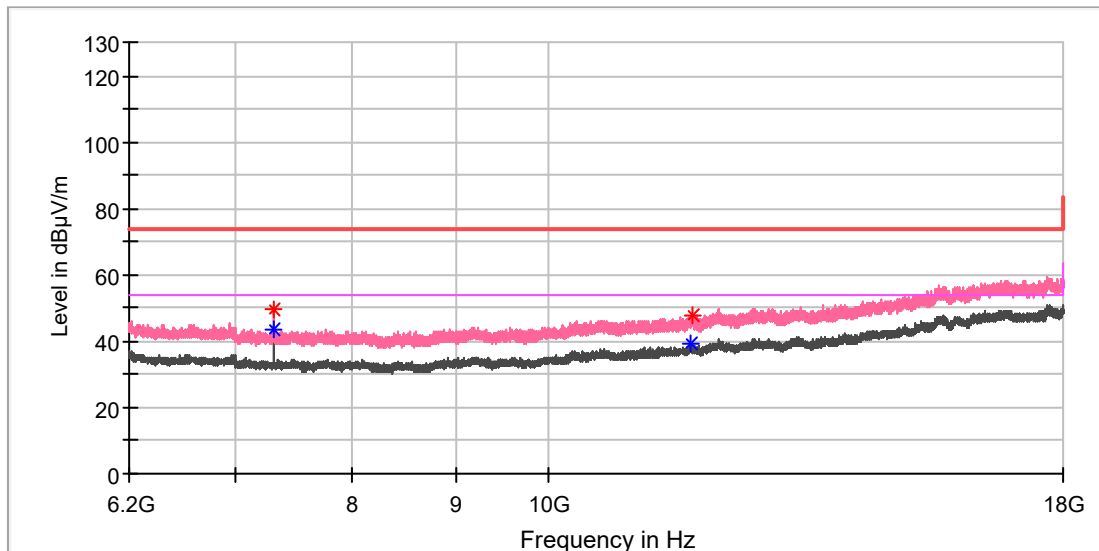
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7309.200000	51.37	---	74.00	22.63	150.0	H	33.0	8.2
7310.675000	---	44.98	54.00	9.02	150.0	H	46.0	8.2
12171.783333	49.03	---	74.00	24.97	150.0	H	1.0	14.5
12186.533333	---	41.92	54.00	12.08	150.0	H	356.0	14.6

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

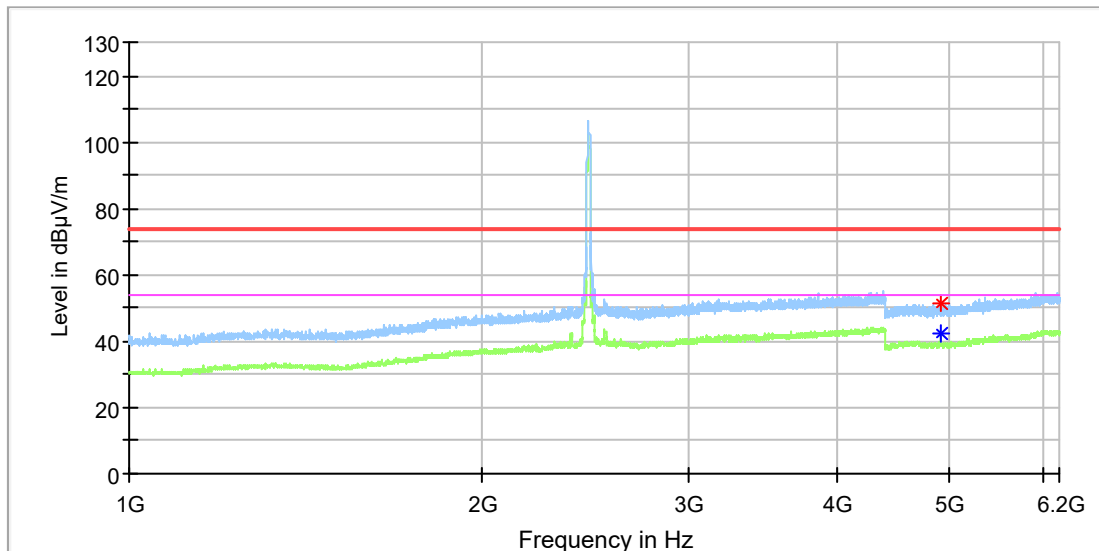
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7309.200000	49.71	---	74.00	24.29	150.0	V	74.0	8.2
7309.691667	---	43.80	54.00	10.20	150.0	V	336.0	8.2
11775.991667	---	39.45	54.00	14.55	150.0	V	244.0	13.4
11783.858333	48.01	---	74.00	25.99	150.0	V	74.0	13.4

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

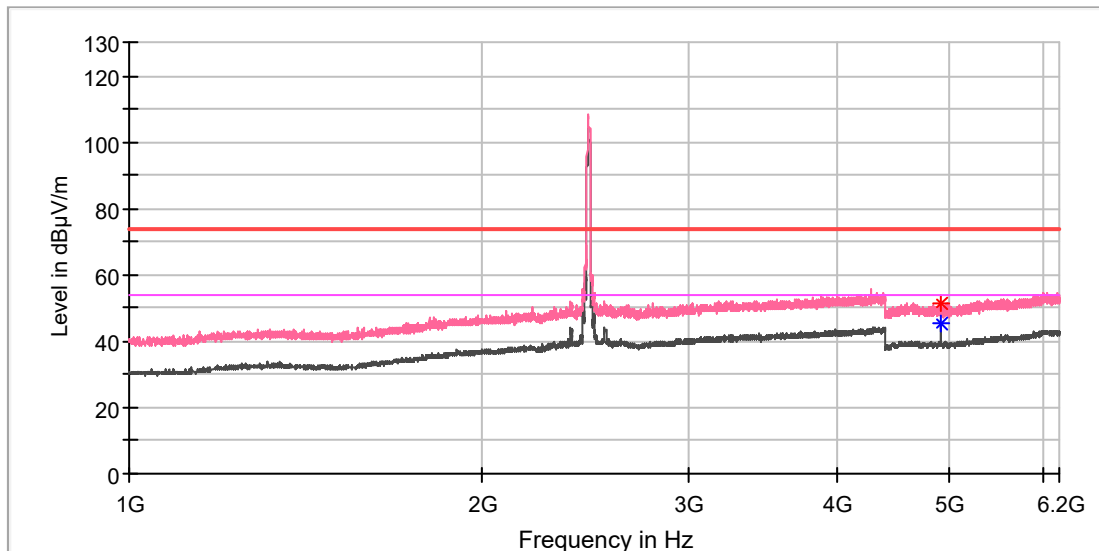
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4908.000000	51.28	---	74.00	22.72	150.0	H	324.0	11.8
4924.000000	---	42.08	54.00	11.92	150.0	H	145.0	11.8

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

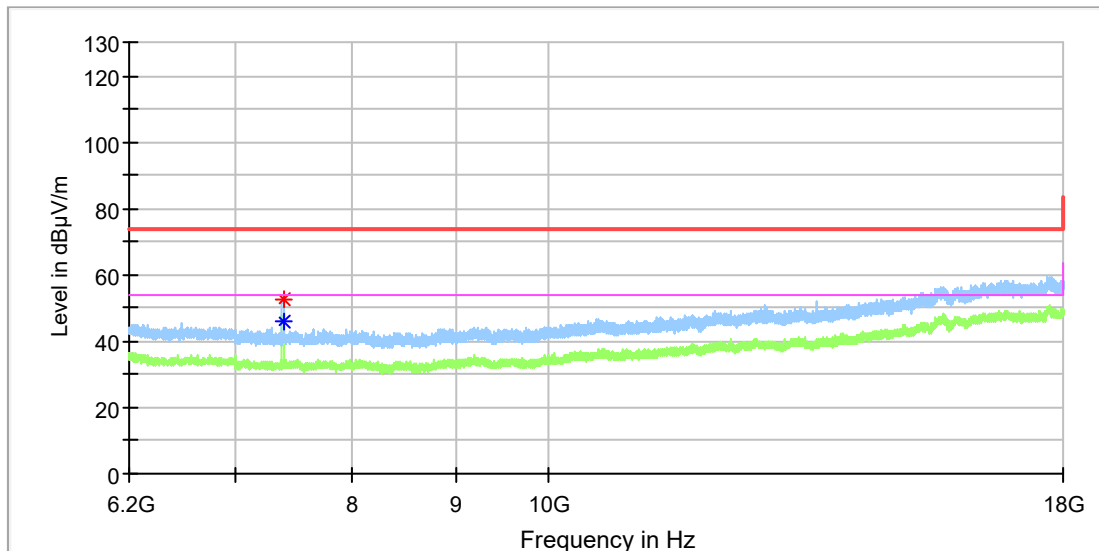
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	51.49	---	74.00	22.51	150.0	V	0.0	11.8
4924.000000	---	45.52	54.00	8.48	150.0	V	0.0	11.8

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

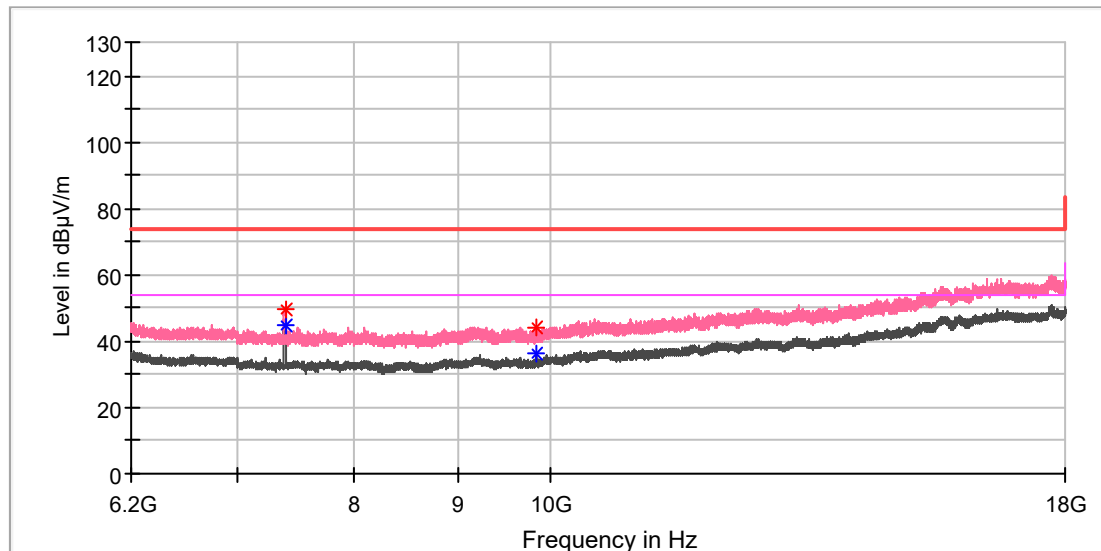
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7385.900000	52.41	---	74.00	21.59	150.0	H	29.0	8.2
7385.900000	---	46.18	54.00	7.82	150.0	H	29.0	8.2

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

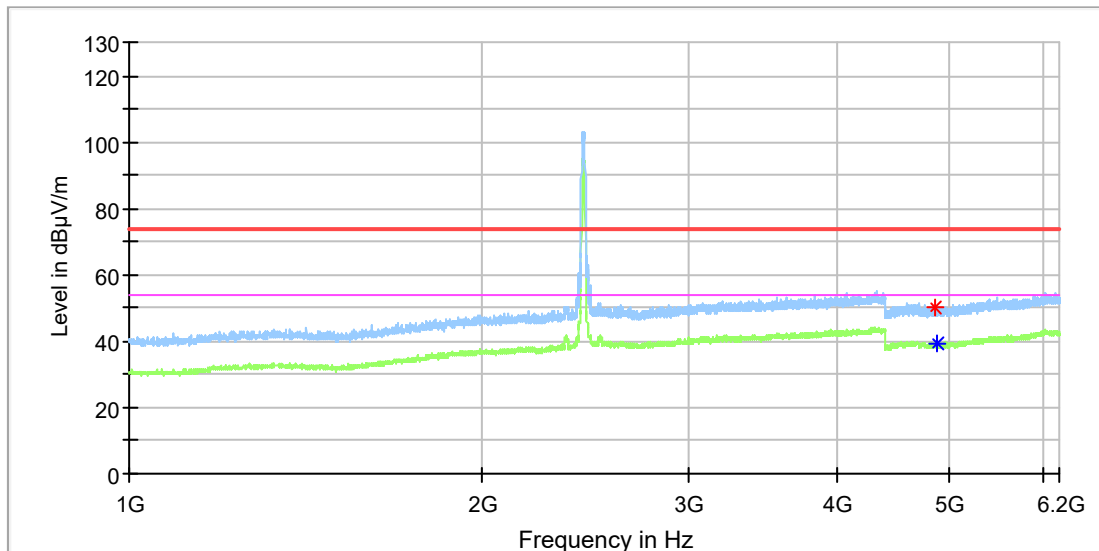
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7386.883333	---	44.50	54.00	9.50	150.0	V	340.0	8.2
7387.375000	49.48	---	74.00	24.52	150.0	V	340.0	8.2
9847.675000	---	36.14	54.00	17.86	150.0	V	133.0	10.6
9851.116667	43.98	---	74.00	30.02	150.0	V	120.0	10.6

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11g_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

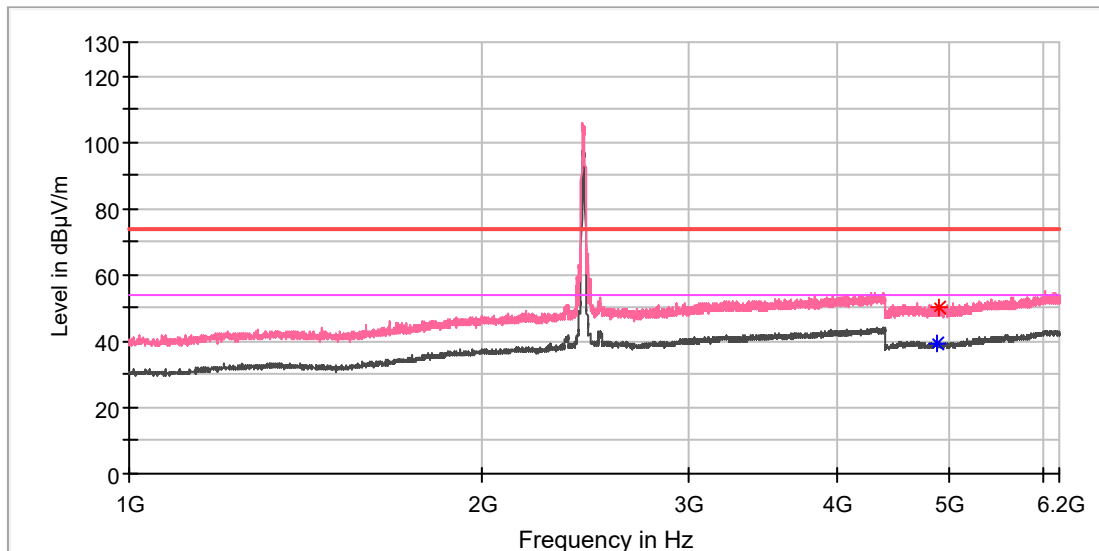
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4866.000000	50.25	---	74.00	23.75	150.0	H	115.0	11.8
4869.500000	---	39.26	54.00	14.74	150.0	H	66.0	11.8

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11g_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

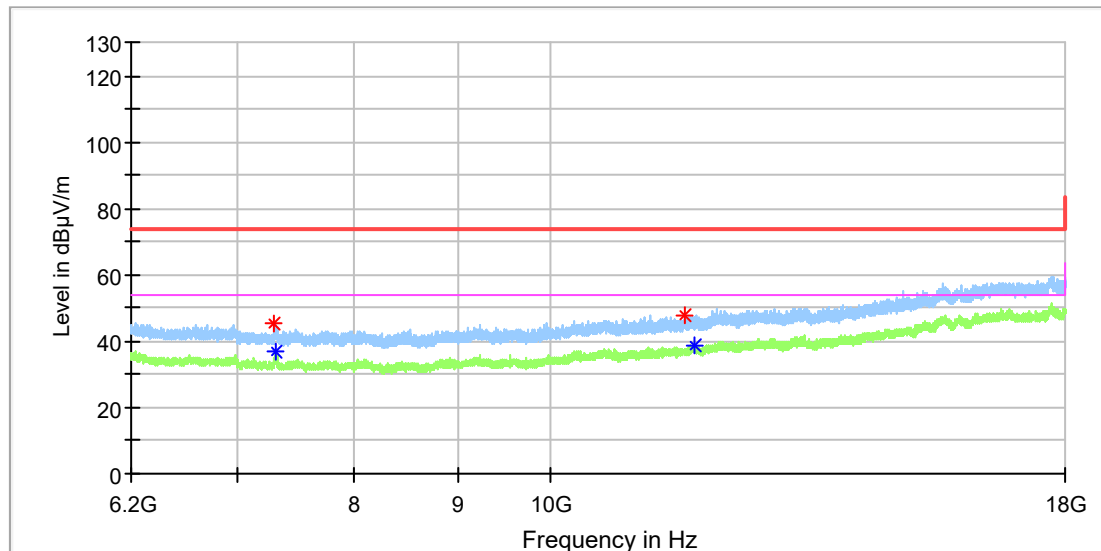
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4871.500000	---	39.33	54.00	14.67	150.0	V	307.0	11.8
4894.000000	50.46	---	74.00	23.54	150.0	V	338.0	11.8

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11g_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

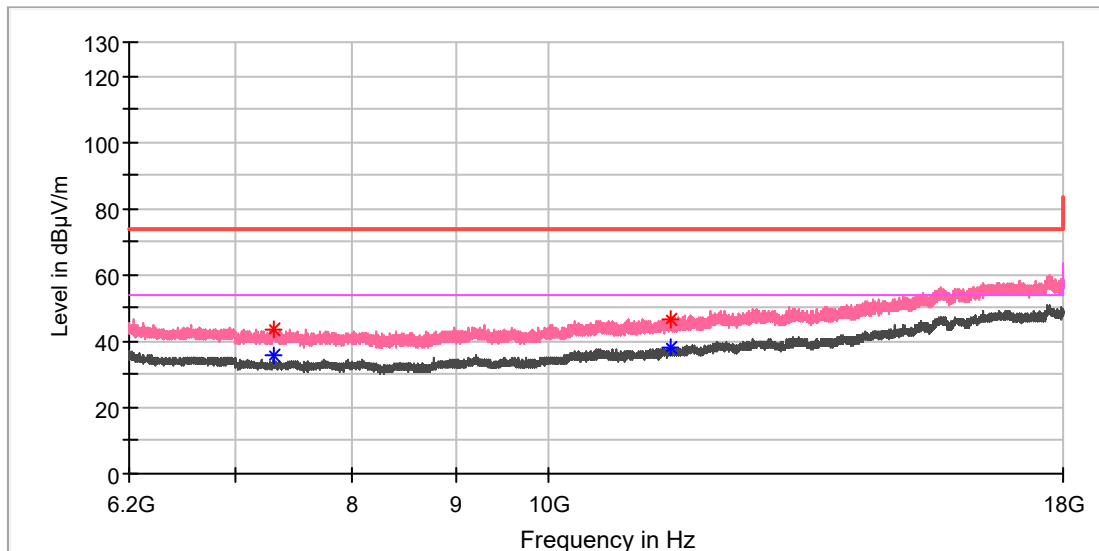
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7301.333333	45.08	---	74.00	28.92	150.0	H	56.0	8.3
7305.758333	---	37.03	54.00	16.97	150.0	H	31.0	8.3
11666.841667	47.76	---	74.00	26.24	150.0	H	260.0	13.3
11794.183333	---	38.74	54.00	15.26	150.0	H	214.0	13.4

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11g_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

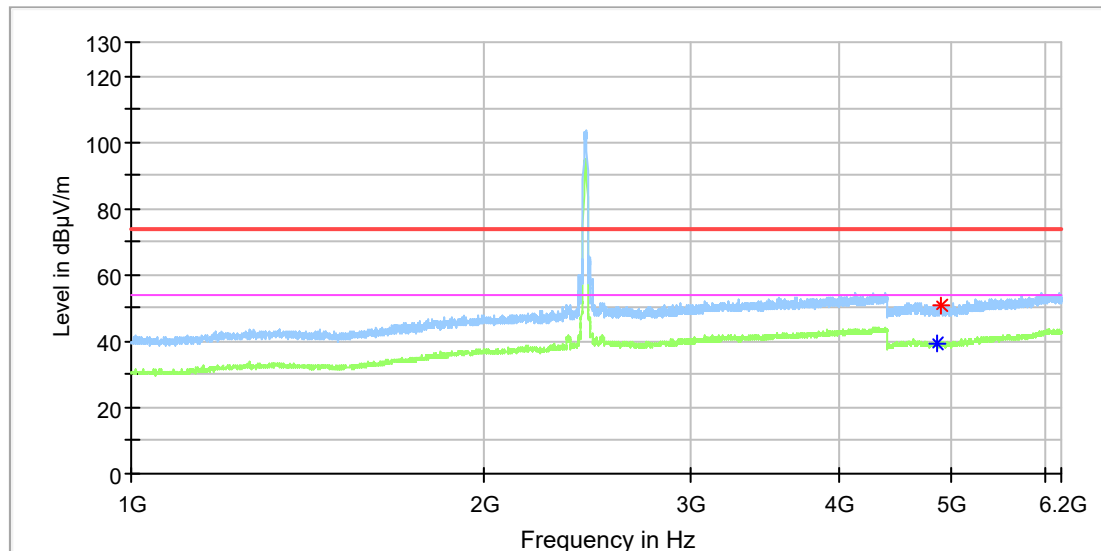
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7307.725000	---	35.45	54.00	18.55	150.0	V	75.0	8.3
7309.200000	43.82	---	74.00	30.18	150.0	V	75.0	8.2
11502.625000	46.47	---	74.00	27.53	150.0	V	13.0	13.7
11503.608333	---	38.32	54.00	15.68	150.0	V	0.0	13.7

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n20_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

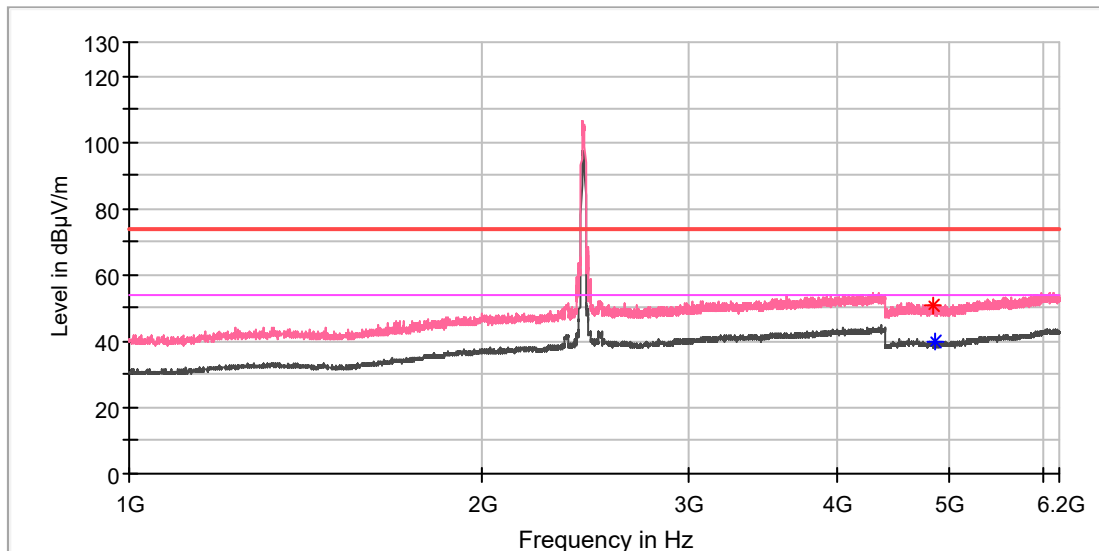
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4860.000000	---	39.57	54.00	14.43	150.0	H	48.0	11.8
4890.500000	50.76	---	74.00	23.24	150.0	H	223.0	11.8

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n20_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

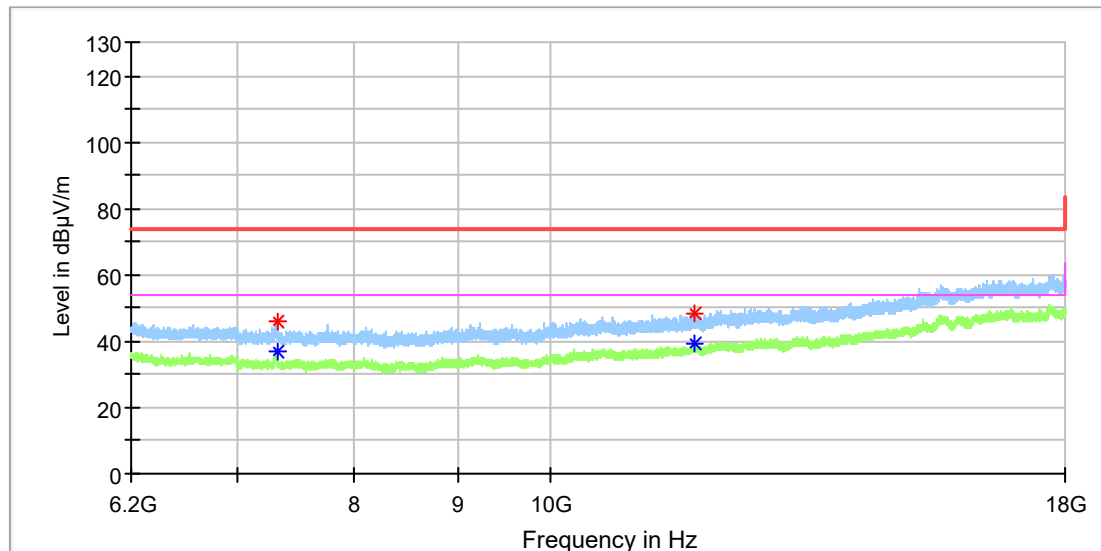
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4847.000000	50.89	---	74.00	23.11	150.0	V	336.0	11.8
4863.500000	---	39.63	54.00	14.37	150.0	V	202.0	11.8

Final Result

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

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11n20_Ch6
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

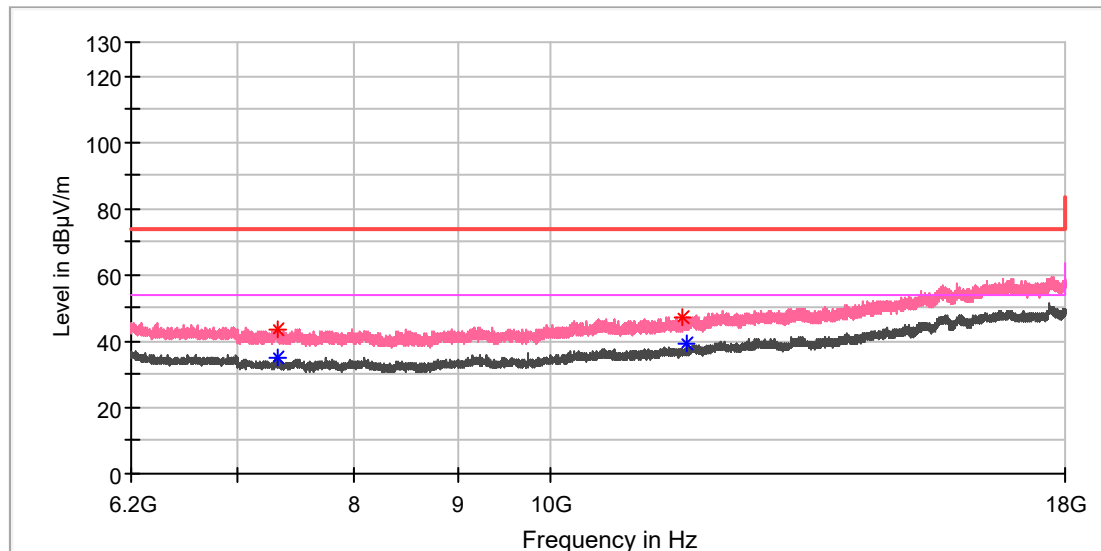
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7318.541667	---	36.90	54.00	17.10	150.0	H	36.0	8.2
7322.475000	45.93	---	74.00	28.07	150.0	H	13.0	8.2
11783.366667	48.17	---	74.00	25.83	150.0	H	3.0	13.4
11788.283333	---	39.05	54.00	14.95	150.0	H	13.0	13.4

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n20_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

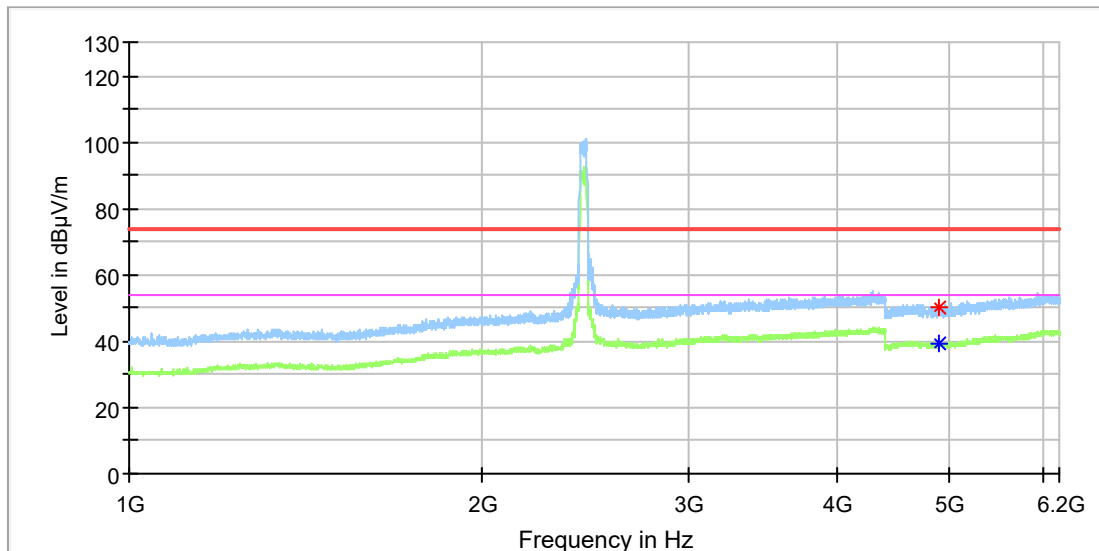
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7319.033333	---	35.34	54.00	18.66	150.0	V	336.0	8.2
7328.375000	43.55	---	74.00	30.45	150.0	V	73.0	8.1
11640.783333	47.26	---	74.00	26.74	150.0	V	184.0	13.3
11670.283333	---	39.04	54.00	14.96	150.0	V	0.0	13.3

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n40_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

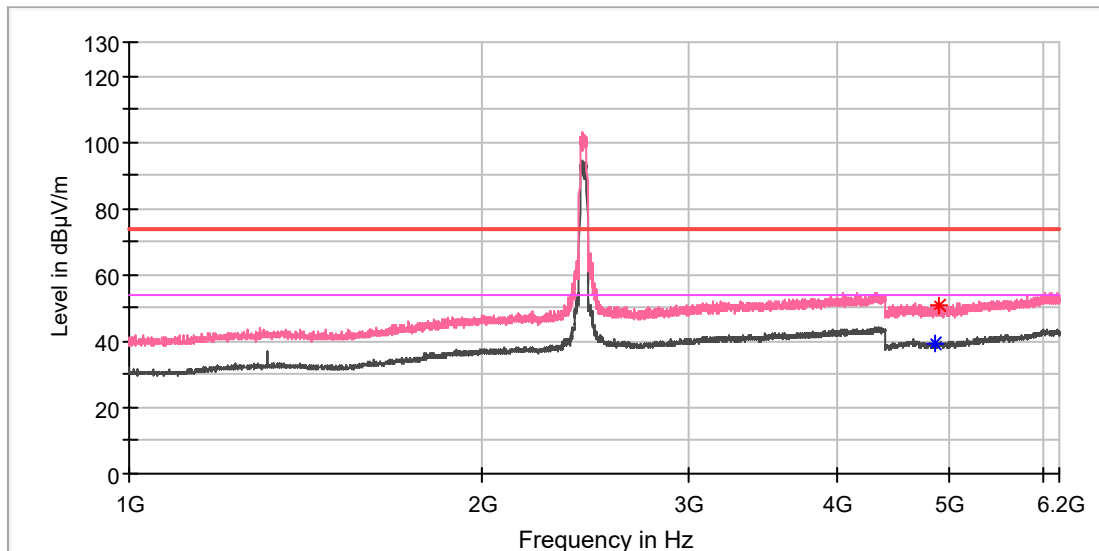
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4889.000000	50.05	---	74.00	23.95	150.0	H	65.0	11.8
4892.500000	---	39.42	54.00	14.58	150.0	H	97.0	11.8

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n40_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

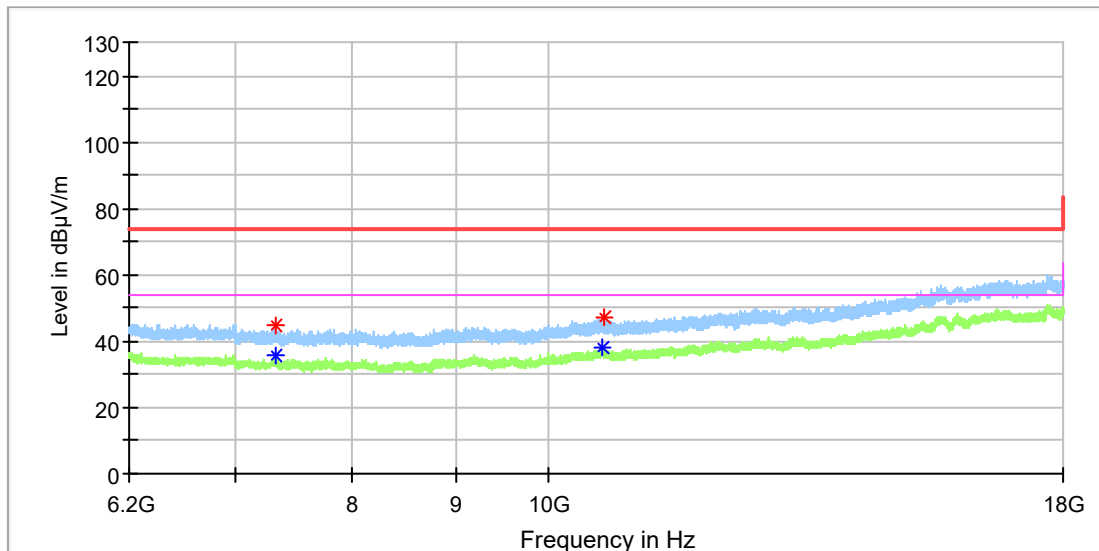
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4865.500000	---	39.53	54.00	14.47	150.0	V	252.0	11.8
4889.000000	50.87	---	74.00	23.13	150.0	V	38.0	11.8

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n40_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

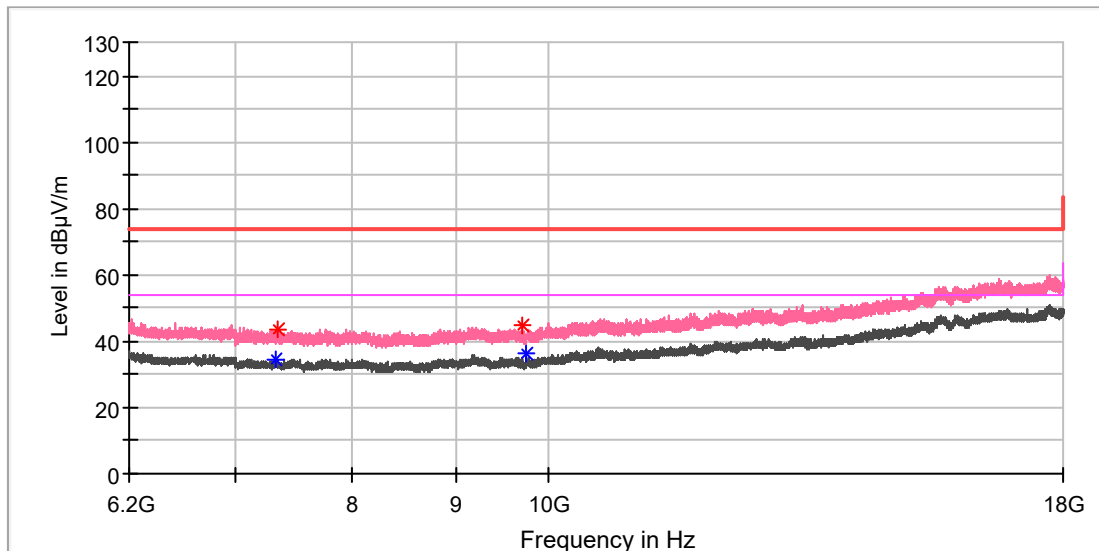
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7322.475000	45.01	---	74.00	28.99	150.0	H	60.0	8.2
7324.441667	---	35.76	54.00	18.24	150.0	H	34.0	8.2
10645.650000	---	38.01	54.00	15.99	150.0	H	209.0	12.0
10650.566667	47.13	---	74.00	26.87	150.0	H	122.0	12.0

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n40_Ch6
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
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)
7320.016667	---	34.74	54.00	19.26	150.0	V	82.0	8.2
7338.700000	43.49	---	74.00	30.51	150.0	V	167.0	8.1
9709.025000	44.47	---	74.00	29.53	150.0	V	70.0	10.4
9747.866667	---	36.02	54.00	17.98	150.0	V	107.0	10.4

Final_Result

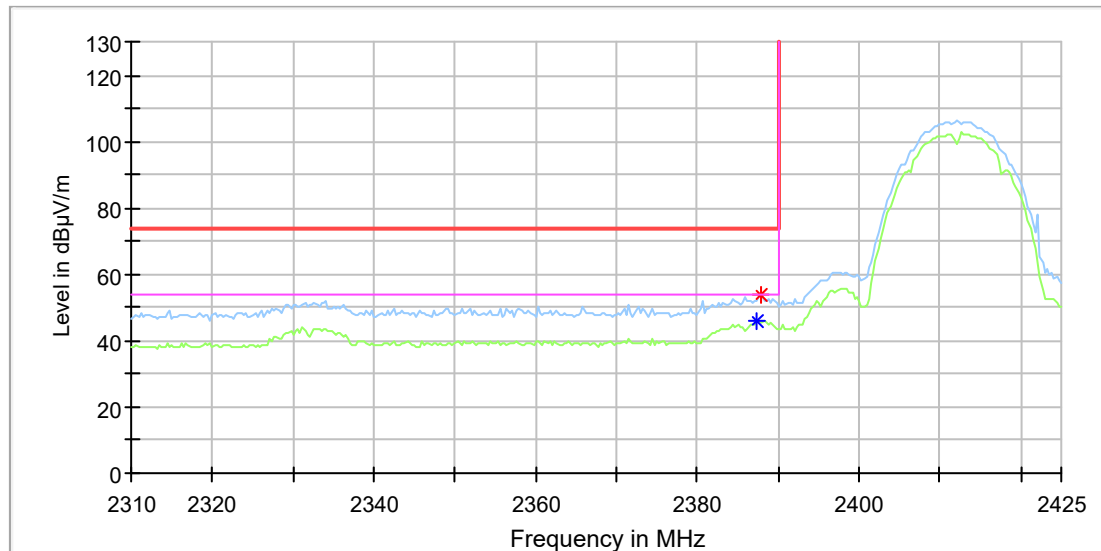
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Appendix A.6: Test Results of Radiated Emissions in Restricted Bands

Wi-Fi 802.11 b mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

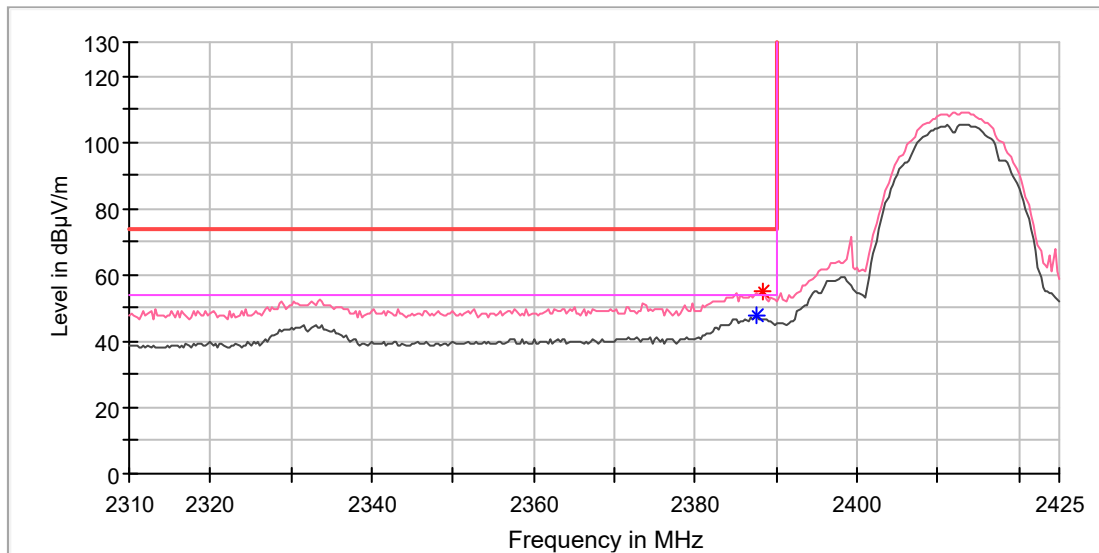
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.352941	---	46.19	54.00	7.81	150.0	H	345.0	7.0
2387.941177	53.72	---	74.00	20.28	150.0	H	345.0	7.0

Final Result

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

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

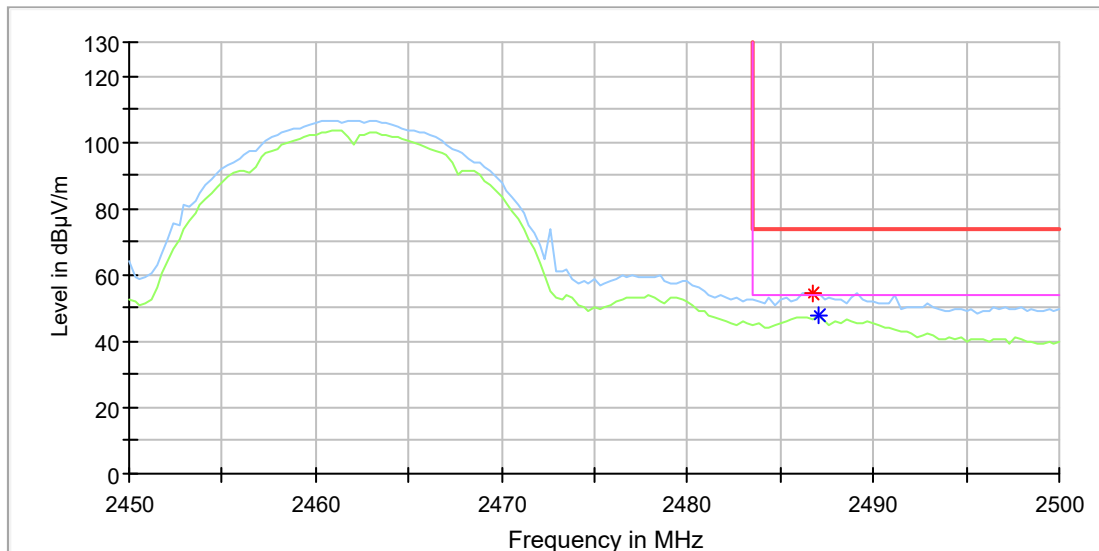
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.647059	---	47.57	54.00	6.43	150.0	V	71.0	7.0
2388.235294	55.10	---	74.00	18.90	150.0	V	71.0	7.0

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

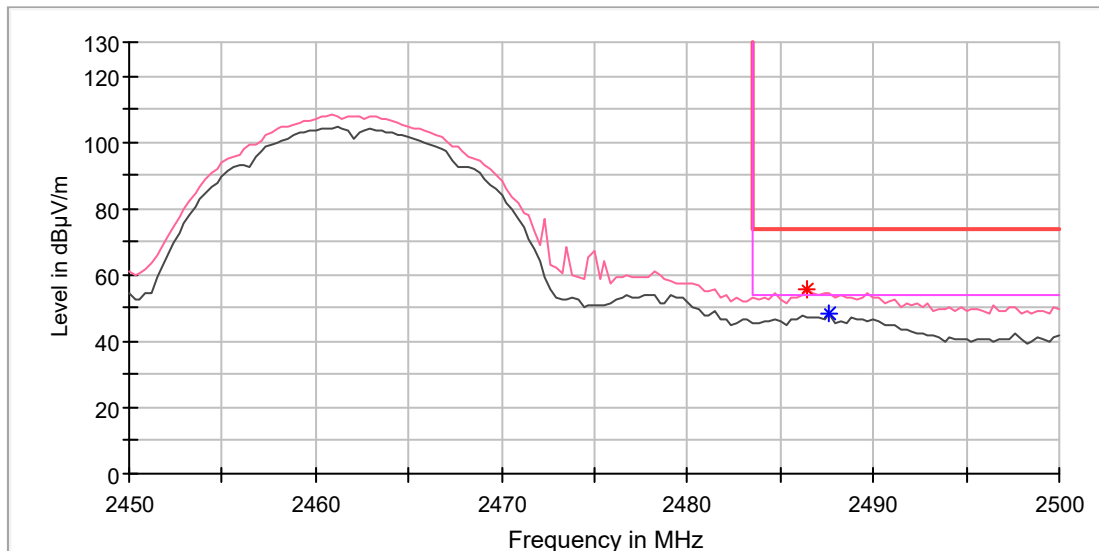
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.764706	54.68	---	74.00	19.32	150.0	H	353.0	7.4
2487.058824	---	47.52	54.00	6.48	150.0	H	331.0	7.4

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
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)
2486.470588	55.61	---	74.00	18.39	150.0	V	290.0	7.4
2487.647059	---	48.46	54.00	5.54	150.0	V	297.0	7.4

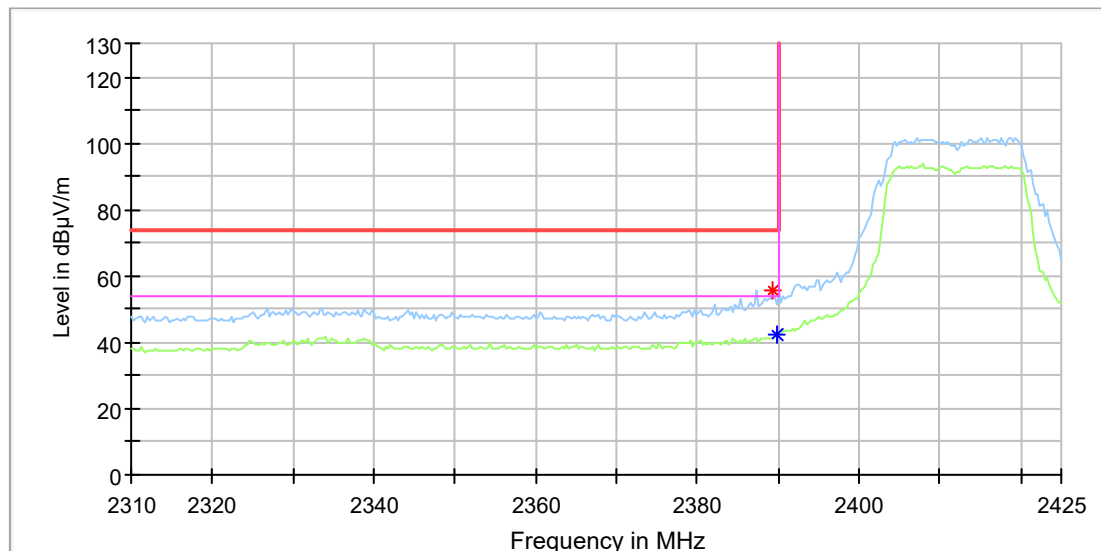
Final_Result

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

Wi-Fi 802.11 g mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11g_Ch1
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

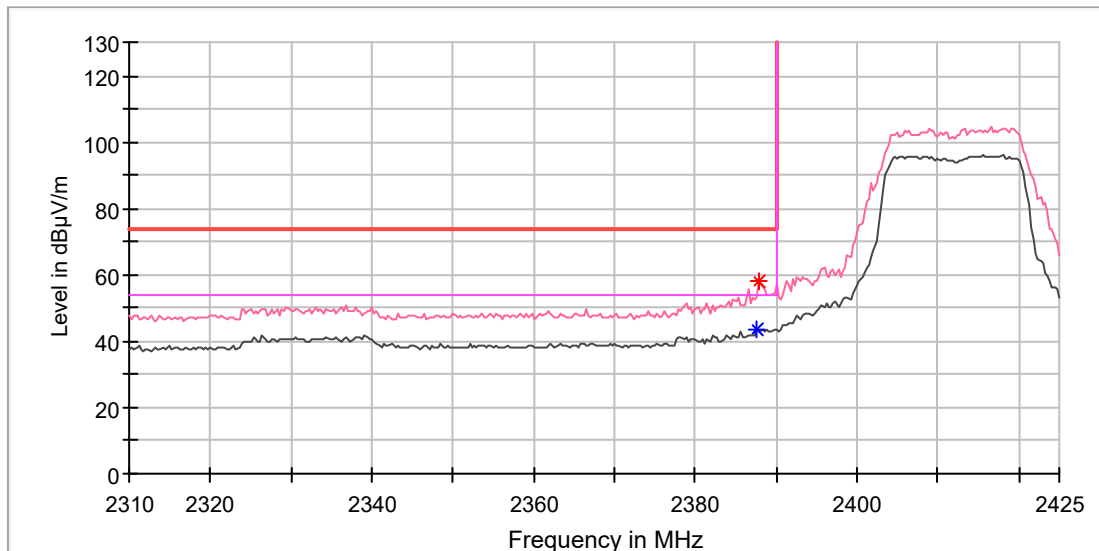
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.411765	55.43	---	74.00	18.57	150.0	H	359.0	7.0
2389.705882	---	42.21	54.00	11.79	150.0	H	37.0	7.0

Final_Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11g_Ch1
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

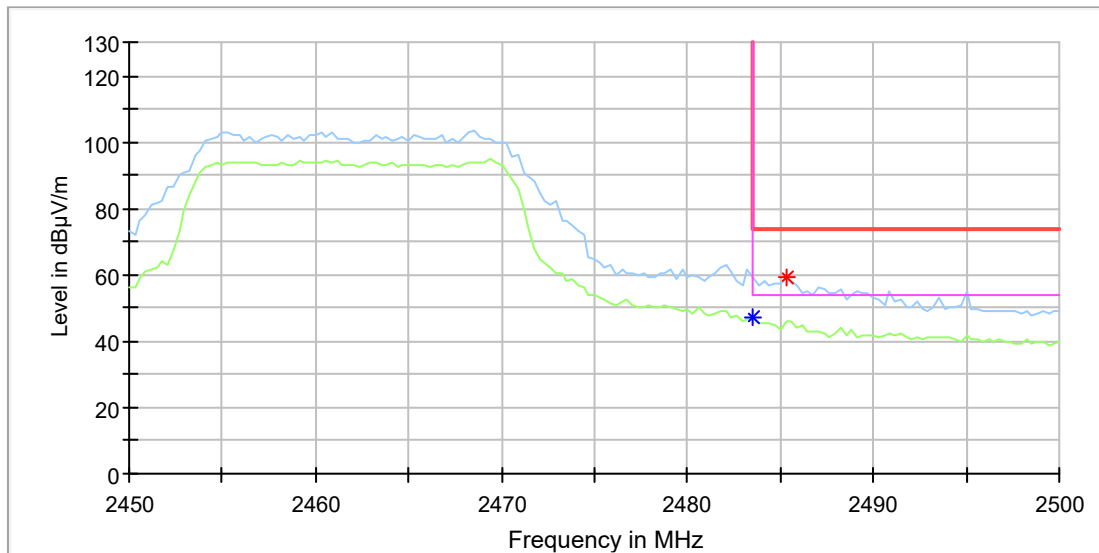
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.647059	---	43.67	54.00	10.33	150.0	V	287.0	7.0
2387.941177	57.75	---	74.00	16.25	150.0	V	287.0	7.0

Final_Result

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

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11g_Ch11
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

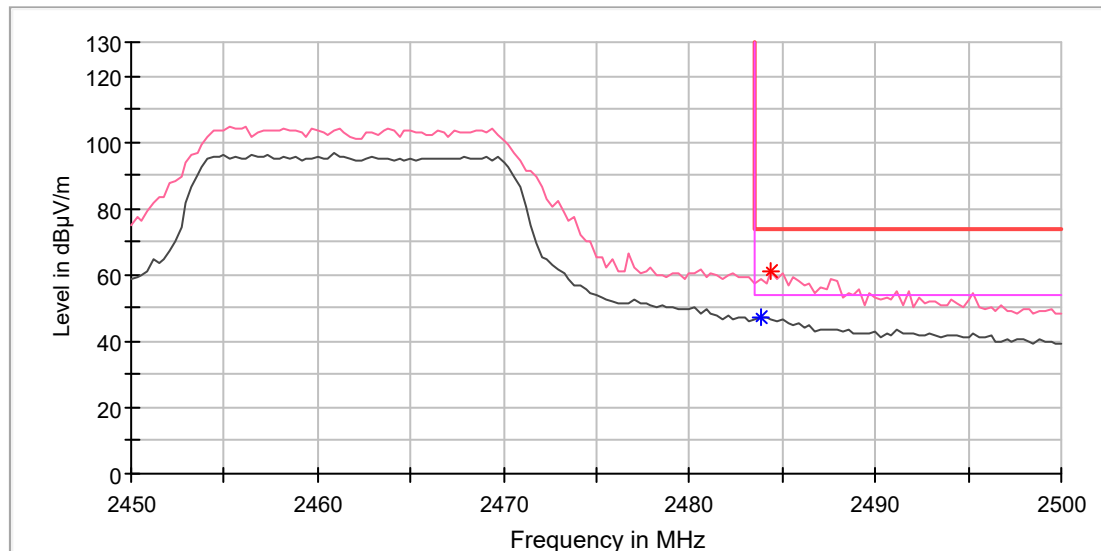
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	---	46.93	54.00	7.07	150.0	H	121.0	7.4
2485.294118	59.33	---	74.00	14.67	150.0	H	343.0	7.4

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11g_Ch11
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
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)
2483.823529	---	47.11	54.00	6.89	150.0	V	289.0	7.4
2484.411765	61.08	---	74.00	12.92	150.0	V	282.0	7.4

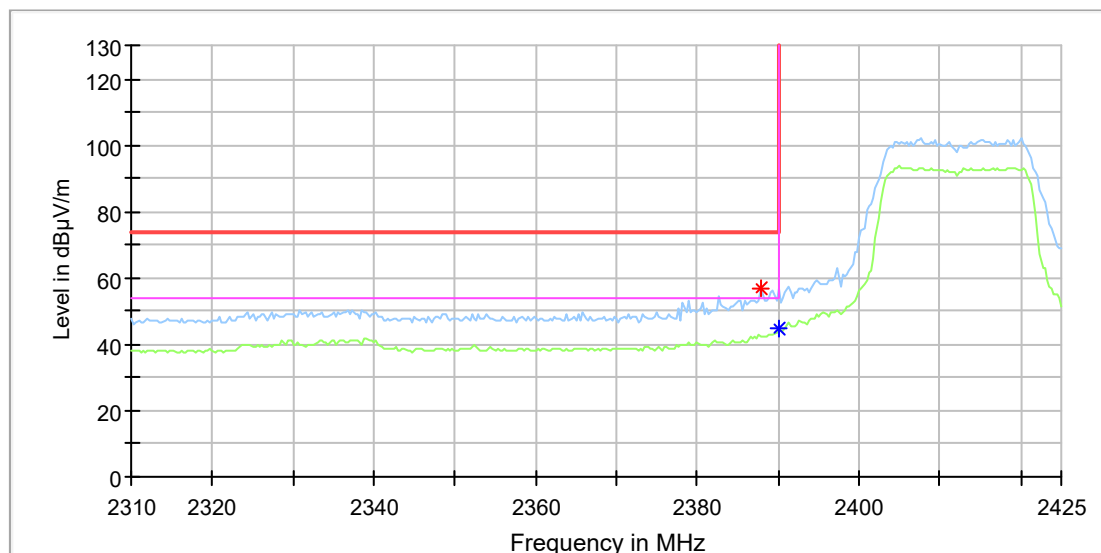
Final_Result

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

Wi-Fi 802.11 n(HT20) mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11n20_Ch1
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

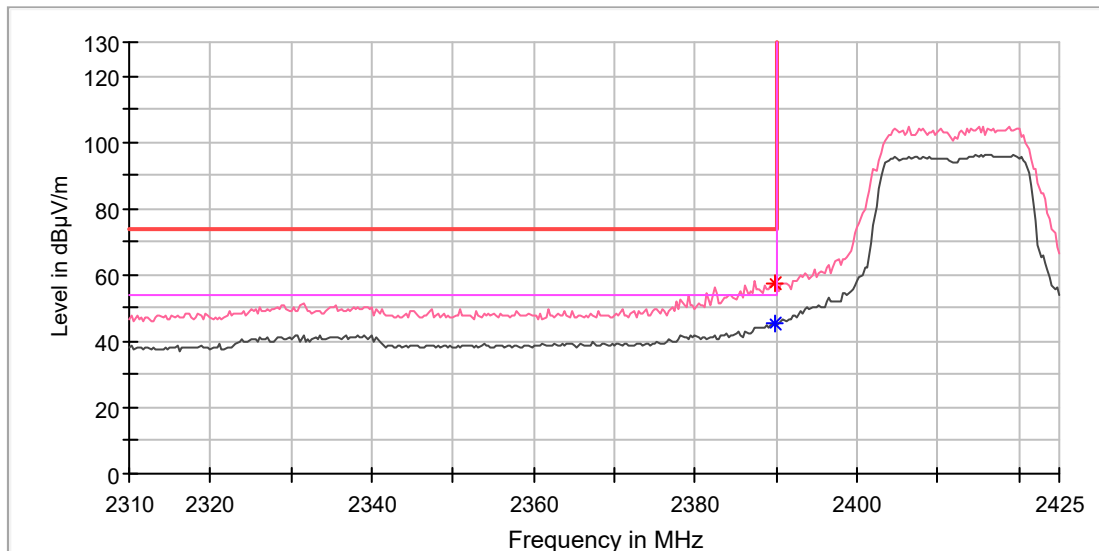
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.941177	56.82	---	74.00	17.18	150.0	H	23.0	7.0
2390.000000	---	44.59	54.00	9.41	150.0	H	348.0	7.0

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n20_Ch1
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

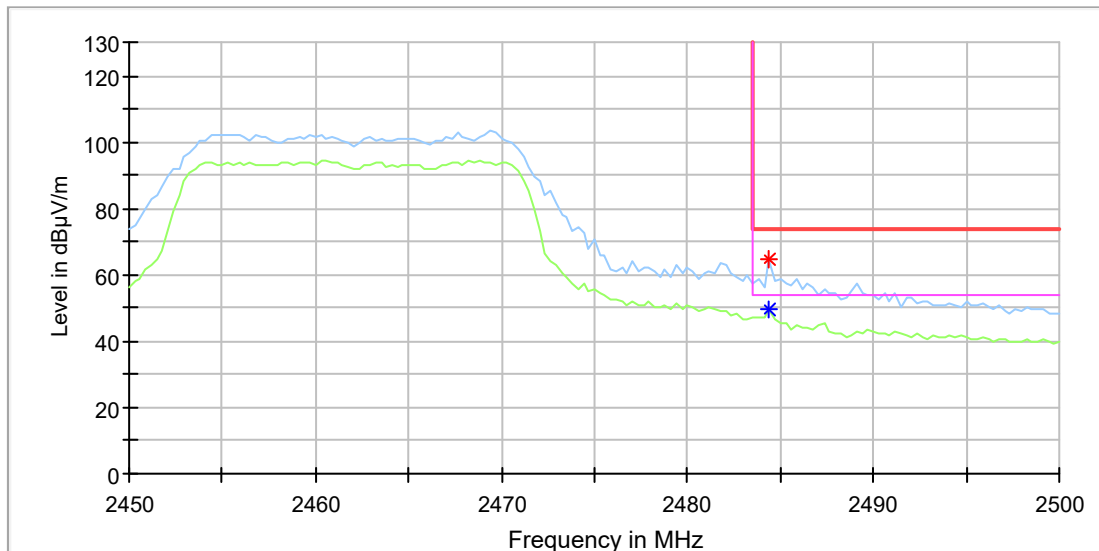
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.705882	57.68	---	74.00	16.32	150.0	V	287.0	7.0
2389.705882	---	45.11	54.00	8.89	150.0	V	287.0	7.0

Final Result

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

EUT Information

EUT Name: Robotic Vacuum Cleaner
Model: QR1PES
Test Mode: WIFI 2.4G_11n20_Ch11
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

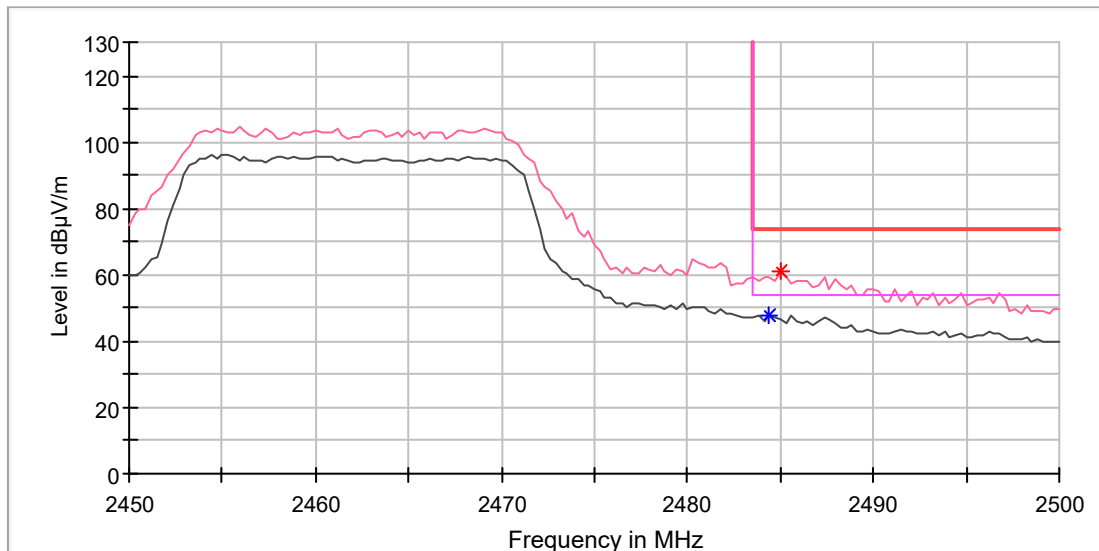
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.411765	64.40	---	74.00	9.60	150.0	H	335.0	7.4
2484.411765	---	49.33	54.00	4.67	150.0	H	335.0	7.4

Final Result

Frequency (MHz)	MaxPeak (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:	QR1PES
Test Mode:	WIFI 2.4G_11n20_Ch11
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
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)
2484.411765	---	48.01	54.00	5.99	150.0	V	318.0	7.4
2485.000000	61.00	---	74.00	13.00	150.0	V	290.0	7.4

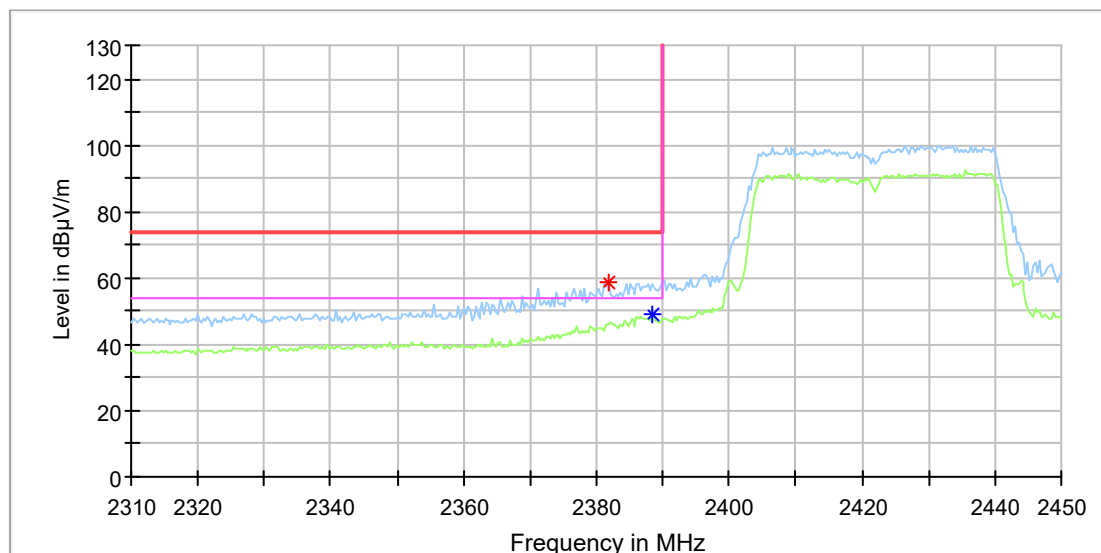
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Wi-Fi 802.11 n(HT40) mode

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	QR1PES
Test Mode:	WIFI 2.4G_11n40_Ch3
Order No/Sample No:	168442340/A003571505-001
Test Voltage:	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

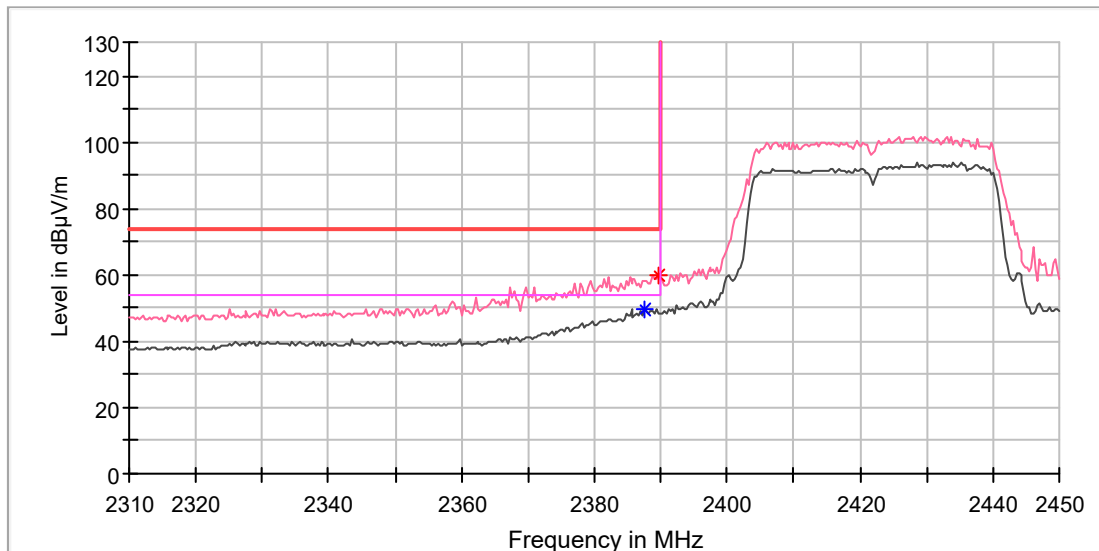
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2381.764706	58.67	---	74.00	15.33	150.0	H	32.0	7.0
2388.529412	---	49.15	54.00	4.85	150.0	H	329.0	7.0

Final Result

Frequency (MHz)	MaxPeak (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: QR1PES
Test Mode: WIFI 2.4G_11n40_Ch3
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

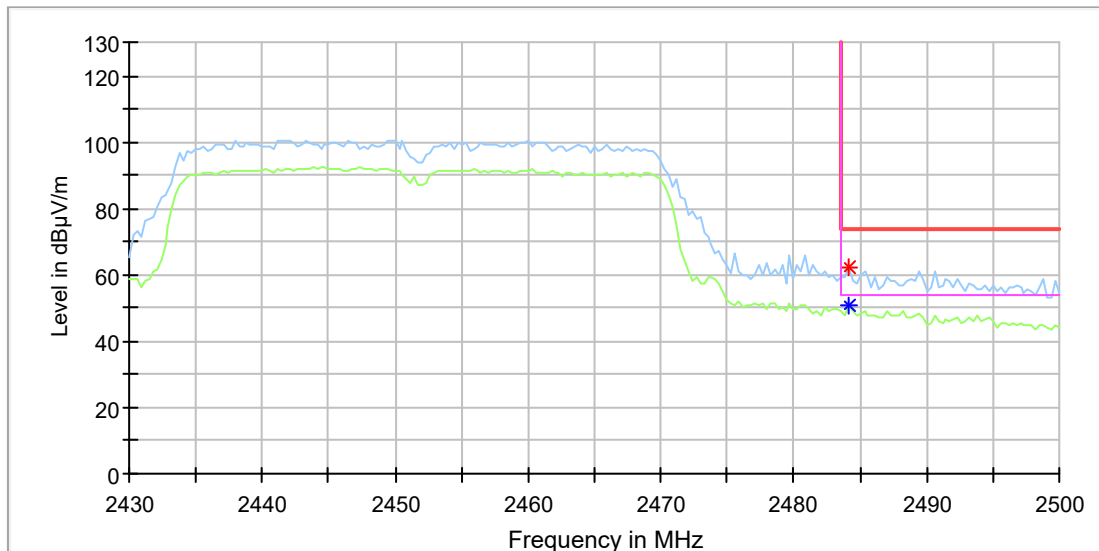
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.647059	---	49.57	54.00	4.43	150.0	V	286.0	7.0
2389.705882	59.88	---	74.00	14.12	150.0	V	286.0	7.0

Final_Result

Frequency (MHz)	MaxPeak (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: QR1PES
Test Mode: WIFI 2.4G_11n40_Ch9
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

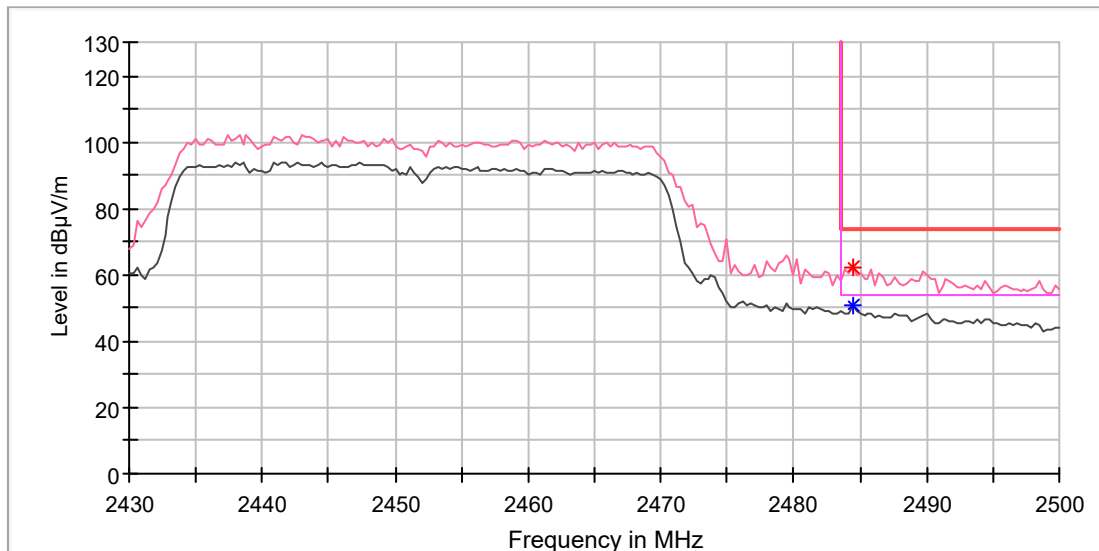
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.117647	62.36	---	74.00	11.64	150.0	H	338.0	7.4
2484.117647	---	50.88	54.00	3.12	150.0	H	338.0	7.4

Final Result

Frequency (MHz)	MaxPeak (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: QR1PES
Test Mode: WIFI 2.4G_11n40_Ch9
Order No/Sample No: 168442340/A003571505-001
Test Voltage: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

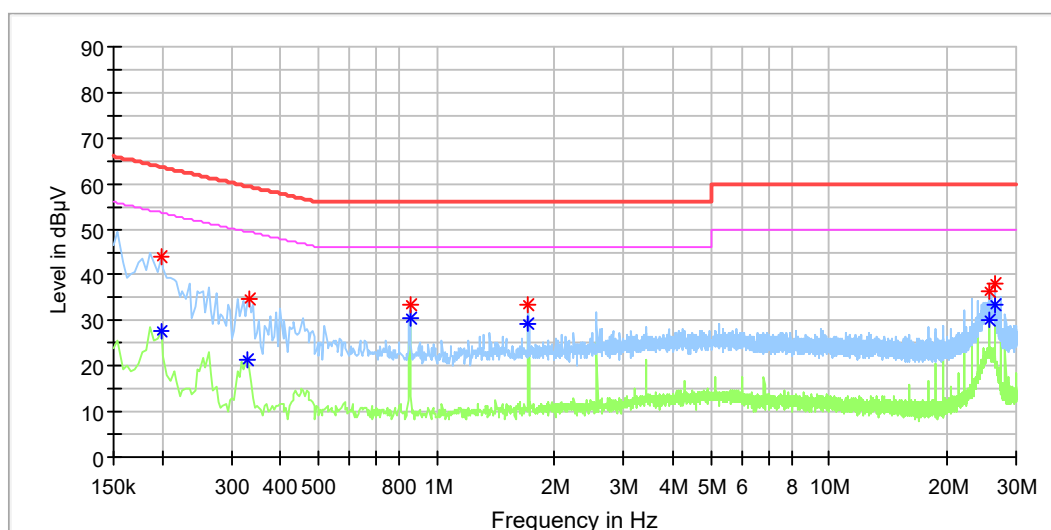
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.411765	62.02	---	74.00	11.98	150.0	V	282.0	7.4
2484.411765	---	50.53	54.00	3.47	150.0	V	282.0	7.4

Final_Result

Frequency (MHz)	MaxPeak (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:	QR1PES
Test Mode:	WIFI 2.4G_11b_Ch11
Order No/Sample No:	168442340/A003571469-001+A003589982-001
Test Voltage:	AC 120V/60Hz
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.207
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.198000	---	27.83	53.69	25.86	N	9.8
0.198000	44.11	---	63.69	19.58	N	9.8
0.330000	---	21.24	49.45	28.21	N	9.8
0.334000	34.58	---	59.35	24.77	N	9.8
0.854000	33.64	---	56.00	22.36	N	9.8
0.854000	---	30.44	46.00	15.56	N	9.8
1.710000	---	29.40	46.00	16.60	N	9.8
1.710000	33.52	---	56.00	22.48	N	9.8
25.630000	36.58	---	60.00	23.42	N	10.3
25.630000	---	30.00	50.00	20.00	N	10.3
26.486000	---	33.53	50.00	16.47	N	10.4
26.486000	38.15	---	60.00	21.85	N	10.4

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
93.5	58.5	57.5	59.5	0.5	100	9	1	0