Appendix B: Test Results

APPENDIX B: TEST RESULTS **1**

APPENDIX B.1: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS 2

30MHz - 1GHz (Worst case) *2*

1GHz - 18GHz *6*

APPENDIX B.2: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS 30

Wi-Fi 802.11 b mode, 1 Mbps *30*

Wi-Fi 802.11 g mode, 6 Mbps *34*

Wi-Fi 802.11 n(HT20) mode, MCS0 ..... *38*

Wi-Fi 802.11 n(HT40) mode, MCS0 ..... *42*

APPENDIX B.3: TEST RESULTS OF CONDUCTED EMISSION 46

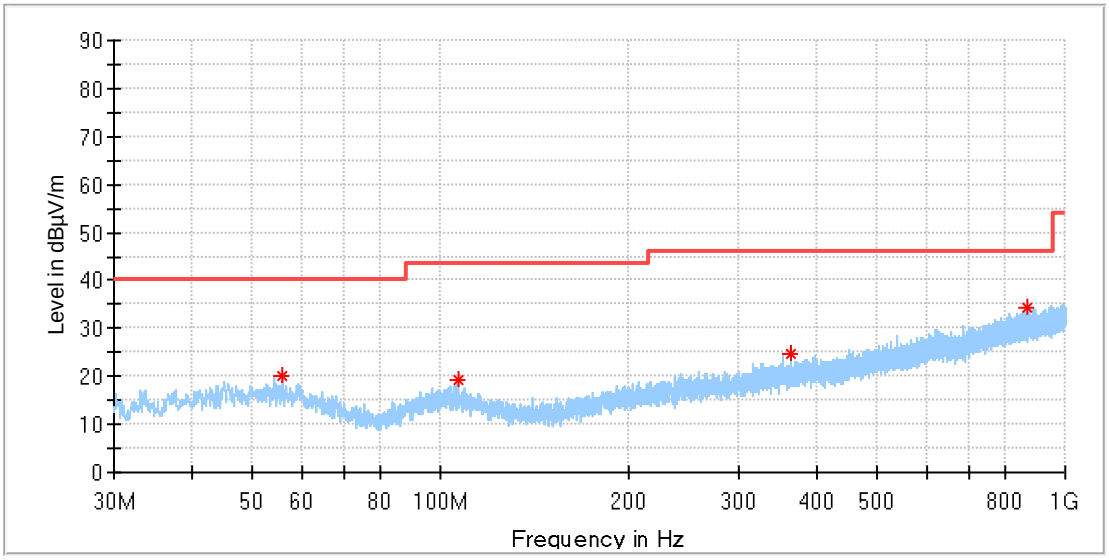
Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

Appendix B.1: Test Results of Radiated Spurious Emissions

30MHz - 1GHz (Worst case)

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11b_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

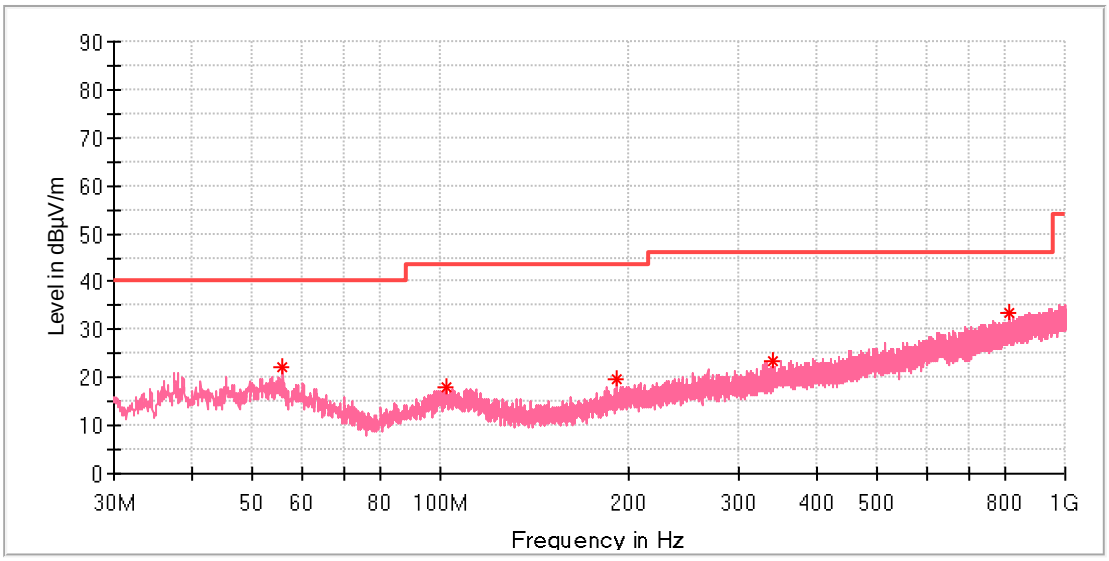
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
55.899000	20.11	40.00	19.89	100.0	H	145.0	-18.5
106.436000	19.05	43.50	24.45	100.0	H	28.0	-18.8
364.116500	24.83	46.00	21.17	100.0	H	334.0	-14.6
869.583500	34.38	46.00	11.62	100.0	H	275.0	-5.2

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

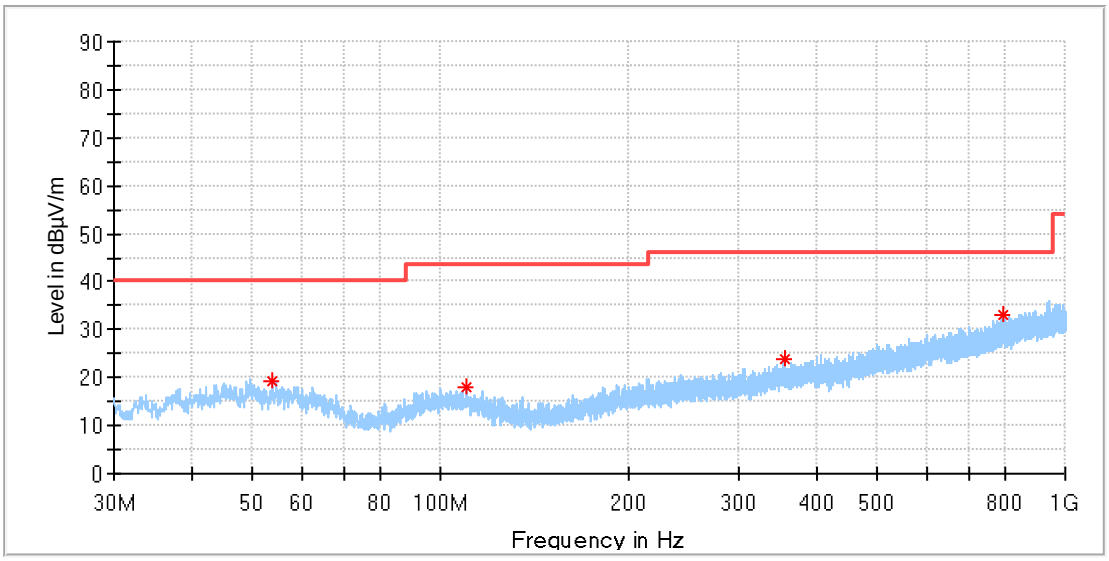
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
55.899000	22.15	40.00	17.85	100.0	V	235.0	-18.5
102.313500	18.21	43.50	25.29	100.0	V	270.0	-18.9
190.874500	19.58	43.50	23.92	100.0	V	359.0	-19.4
340.254500	23.38	46.00	22.62	100.0	V	20.0	-15.0
813.420500	33.44	46.00	12.56	100.0	V	28.0	-6.1

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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)
53.862000	19.16	40.00	20.84	100.0	H	233.0	-18.4
109.879500	17.97	43.50	25.53	100.0	H	287.0	-19.1
355.580500	23.82	46.00	22.18	100.0	H	0.0	-14.7
798.046000	32.94	46.00	13.06	100.0	H	130.0	-6.4

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
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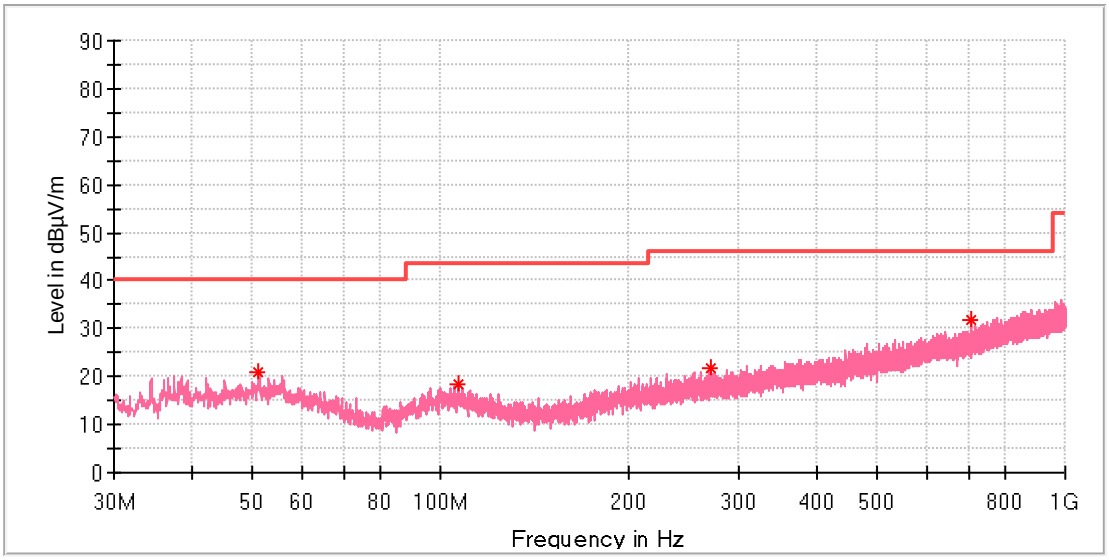

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
51.194500	20.85	40.00	19.15	100.0	V	179.0	-18.3
106.678500	18.41	43.50	25.09	100.0	V	288.0	-18.8
271.190500	21.94	46.00	24.06	100.0	V	6.0	-16.9
706.672000	31.96	46.00	14.04	100.0	V	97.0	-7.9

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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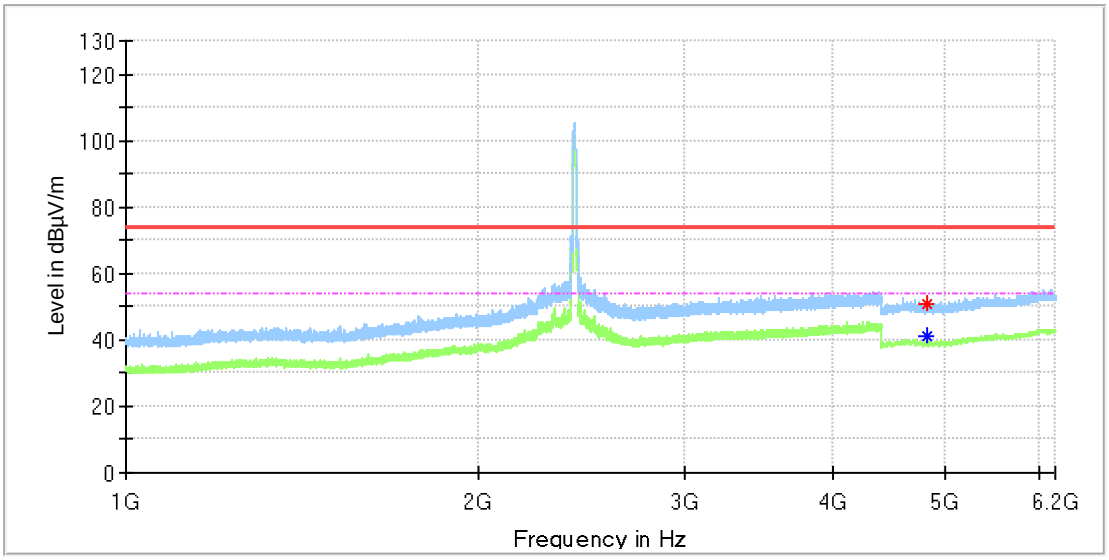
1GHz - 18GHz

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

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11b_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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)
4823.500000	50.64	---	74.00	23.36	100.0	H	106.0	11.8
4824.000000	---	41.28	54.00	12.72	100.0	H	98.0	11.8

Final_Result

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

EUT Information

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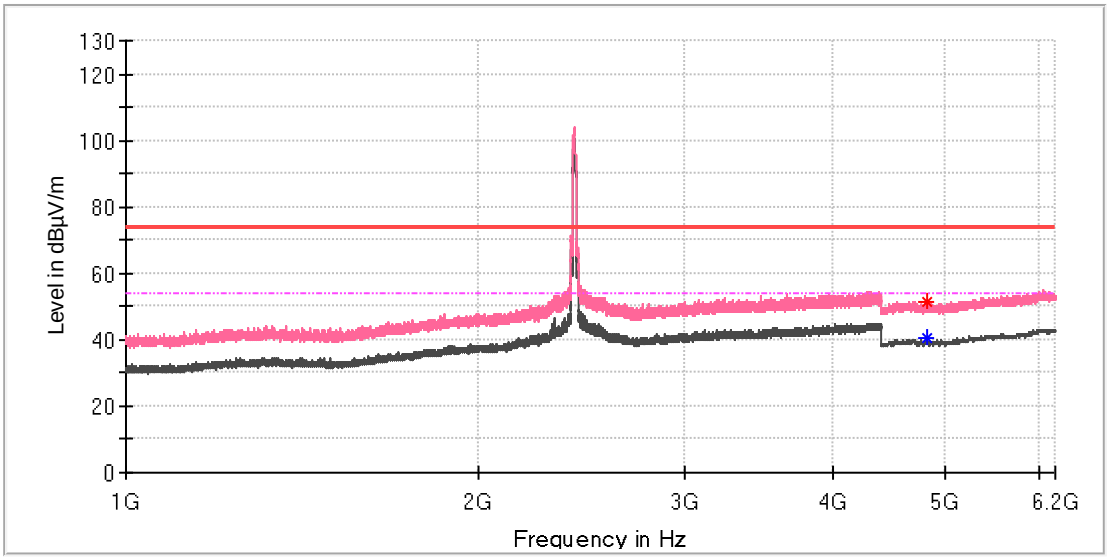
Model:	roborock S7
Test Mode:	WIFI 2.4G_11b_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

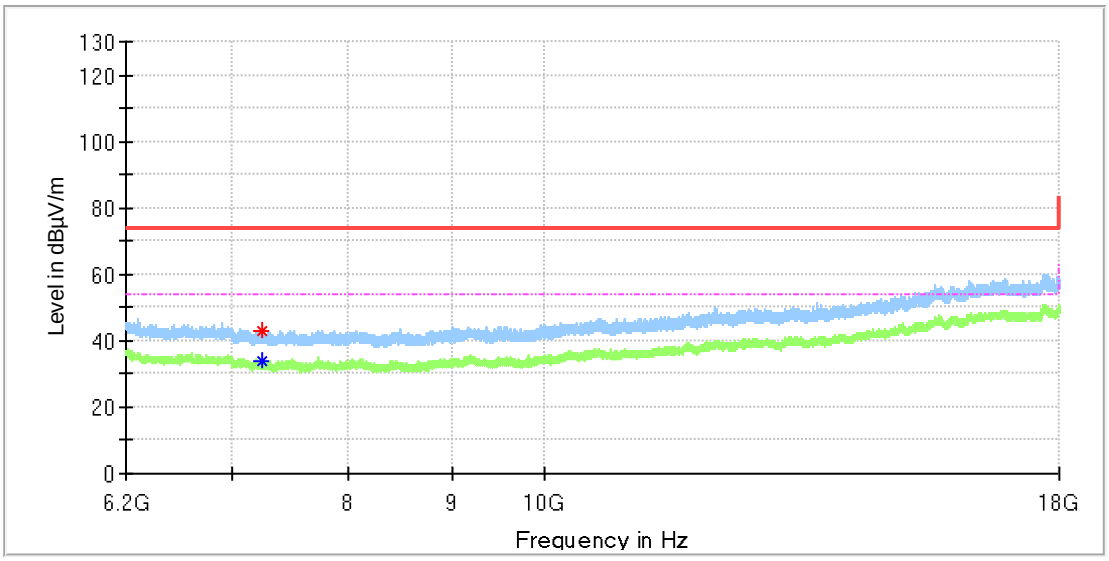
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	51.32	---	74.00	22.68	100.0	V	85.0	11.8
4824.000000	---	40.72	54.00	13.28	100.0	V	85.0	11.8

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

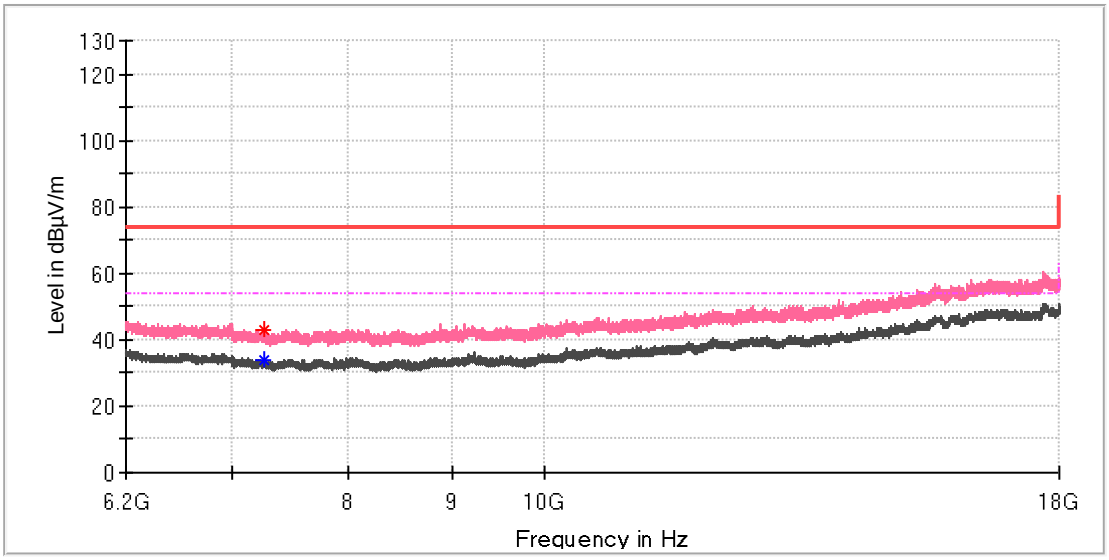
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7237.416667	---	33.69	54.00	20.31	100.0	H	234.0	8.6
7239.875000	42.65	---	74.00	31.35	100.0	H	247.0	8.6

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

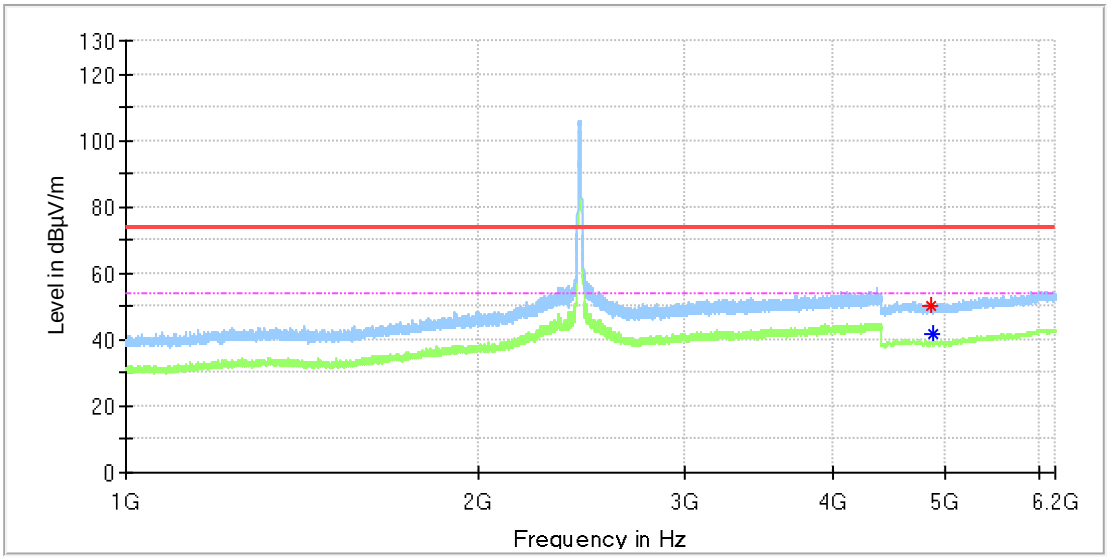
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7256.591667	42.92	---	74.00	31.08	100.0	V	0.0	8.5
7258.558333	---	34.03	54.00	19.97	100.0	V	147.0	8.5

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

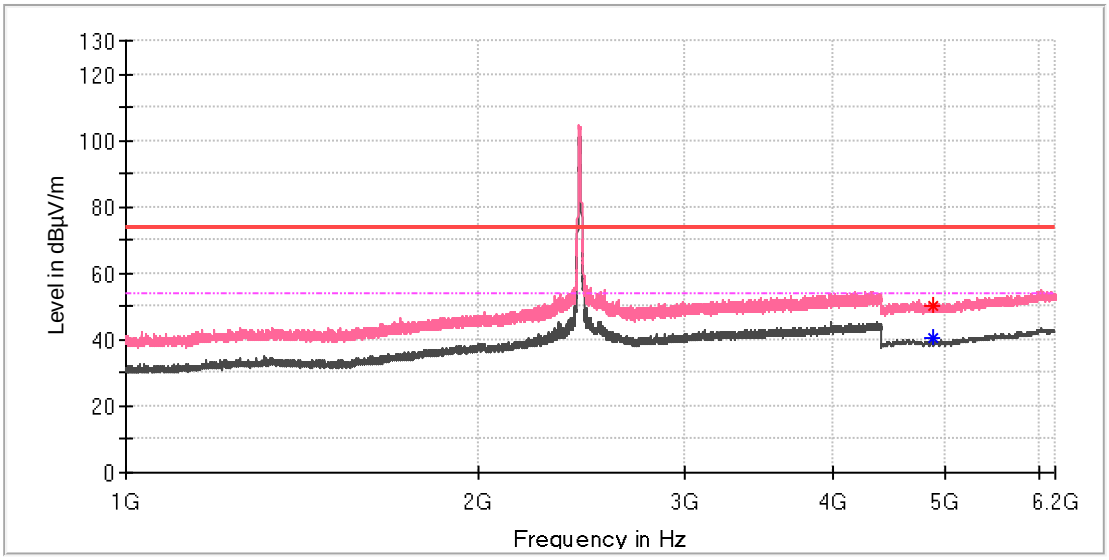
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4867.000000	50.48	---	74.00	23.52	100.0	H	251.0	11.8
4874.000000	---	41.55	54.00	12.45	100.0	H	97.0	11.8

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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	50.30	---	74.00	23.70	100.0	V	135.0	11.8
4874.000000	---	40.79	54.00	13.21	100.0	V	135.0	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:	roborock S7
Test Mode:	WIFI 2.4G_11b_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
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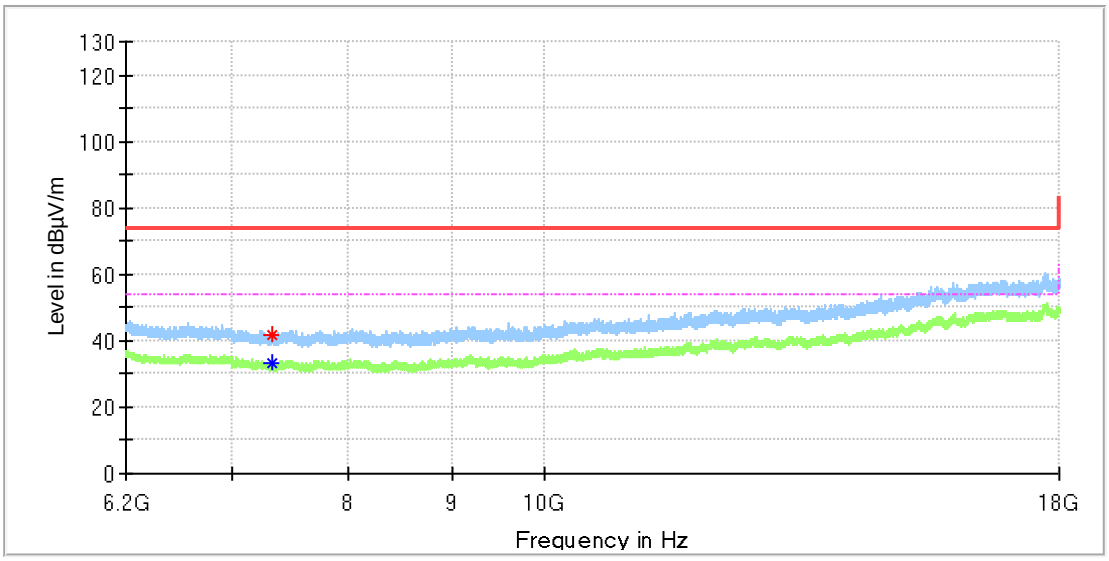

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7328.375000	41.75	---	74.00	32.25	100.0	H	171.0	8.1
7330.833333	---	33.10	54.00	20.90	100.0	H	1.0	8.1

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:	roborock S7
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Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
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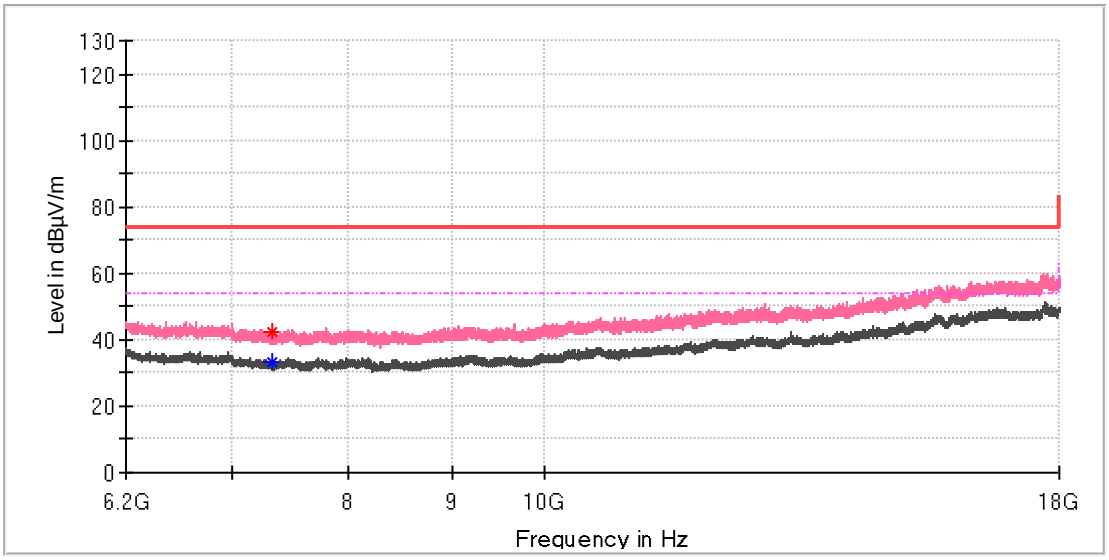


Critical_Freqs

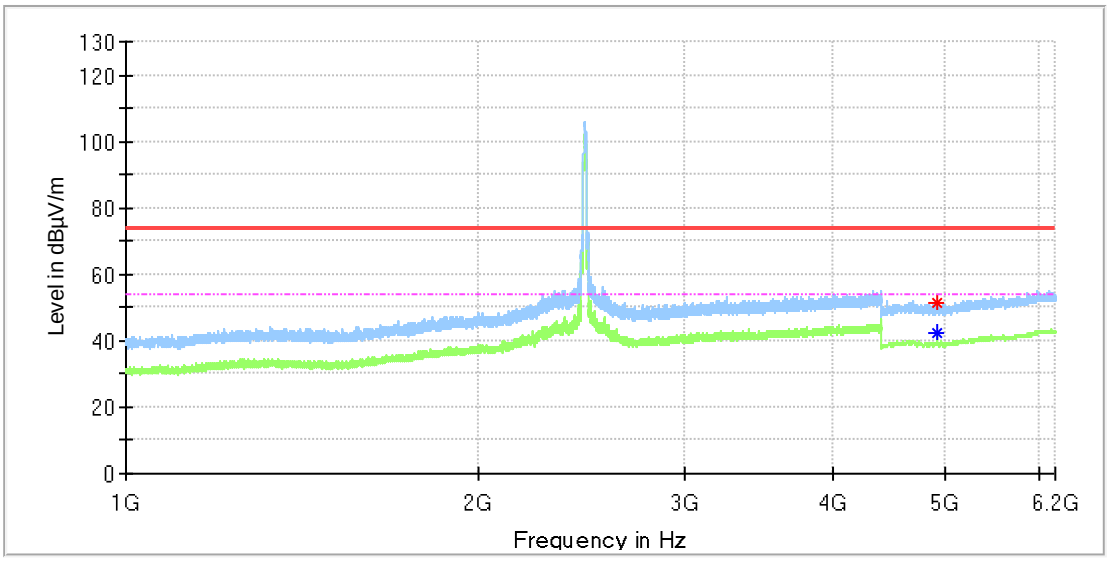
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7321.491667	---	33.28	54.00	20.72	100.0	V	99.0	8.2
7334.275000	42.33	---	74.00	31.67	100.0	V	166.0	8.1

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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)
4923.000000	51.22	---	74.00	22.78	100.0	H	105.0	11.8
4924.000000	---	42.41	54.00	11.59	100.0	H	105.0	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
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Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
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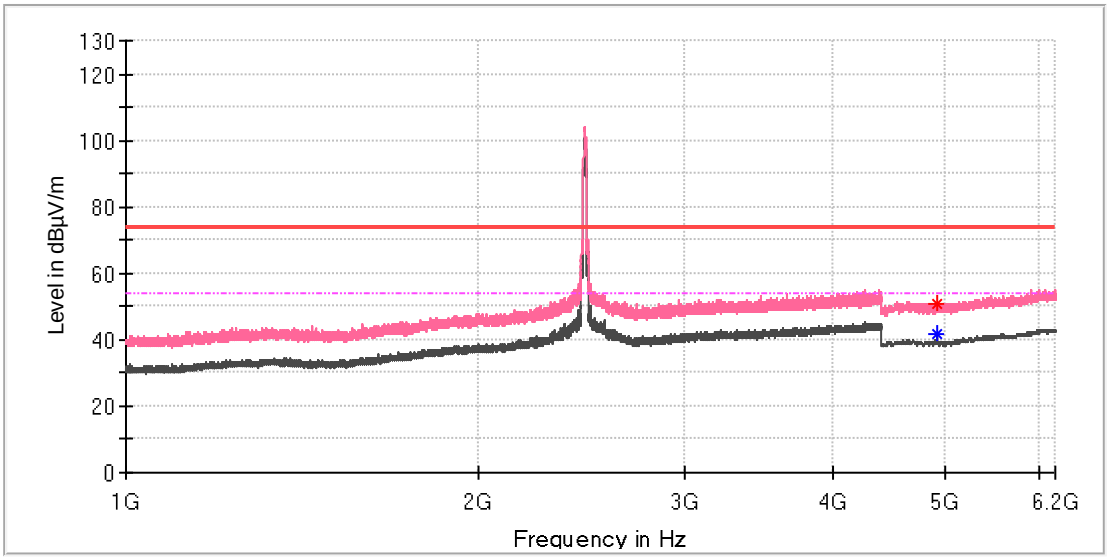

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	---	41.45	54.00	12.55	100.0	V	139.0	11.8
4924.500000	50.57	---	74.00	23.43	100.0	V	139.0	11.8

Final_Result

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

EUT Information

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Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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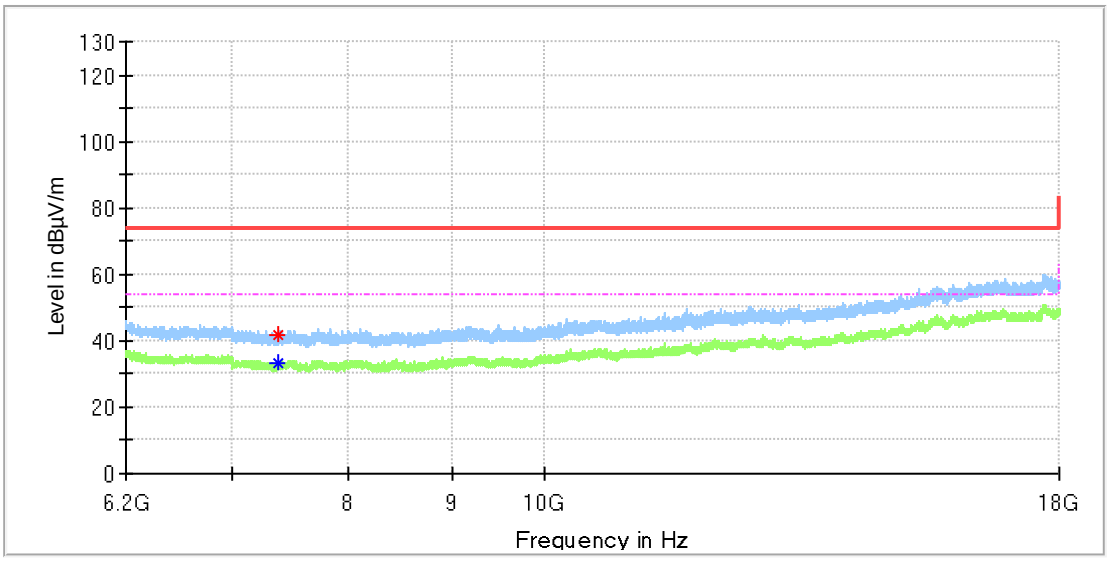

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7376.066667	41.98	---	74.00	32.02	100.0	H	241.0	8.2
7376.066667	---	33.39	54.00	20.61	100.0	H	241.0	8.2

Final_Result

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

EUT Information

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Test Voltage:	Battery
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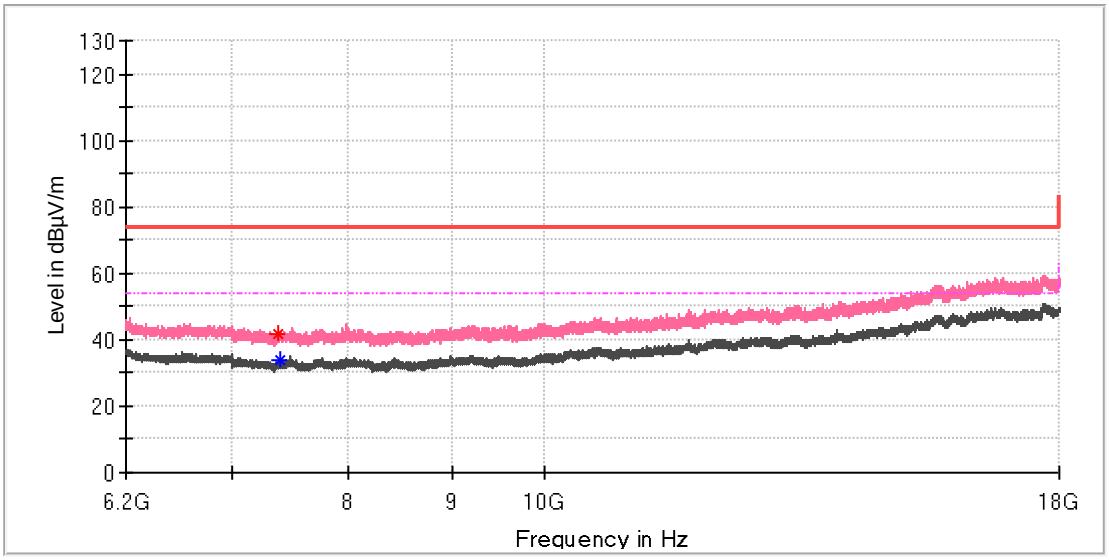


Critical_Freqs

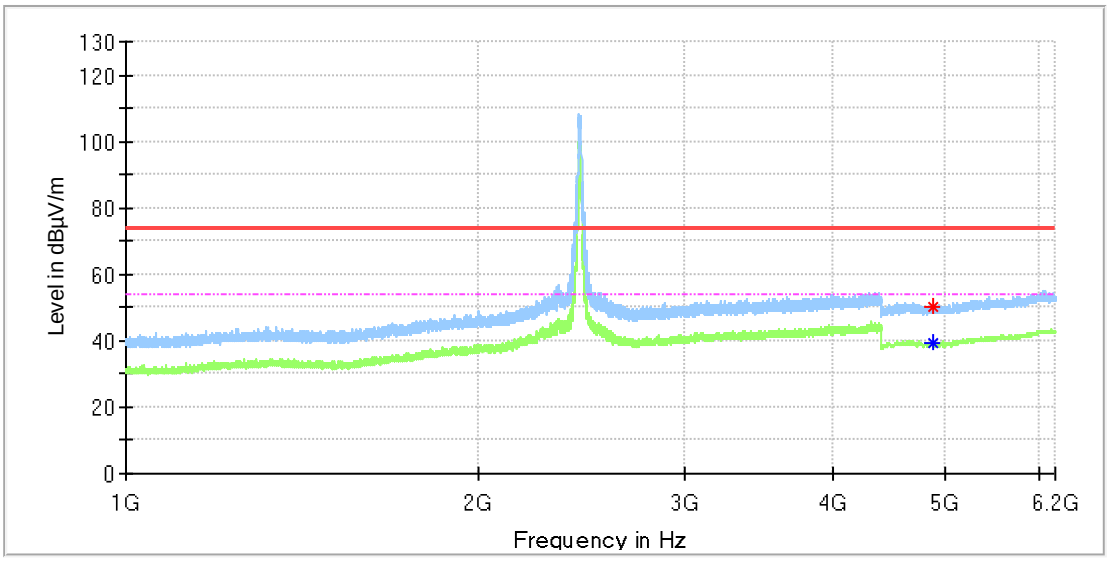
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7376.066667	41.47	---	74.00	32.53	100.0	V	337.0	8.2
7386.883333	---	33.62	54.00	20.38	100.0	V	358.0	8.2

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:	roborock S7
Test Mode:	WIFI 2.4G_11g_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

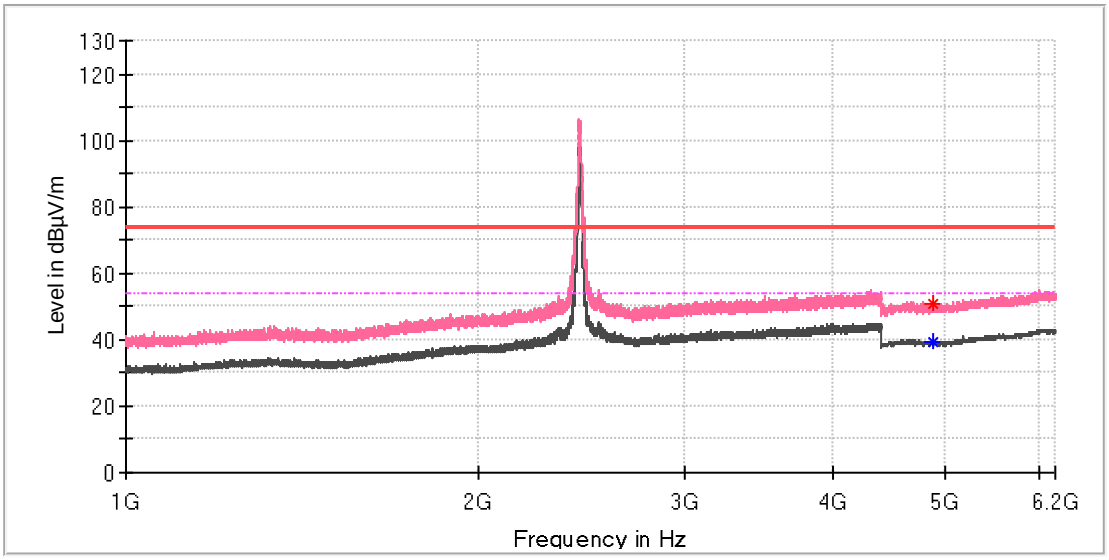
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4869.500000	---	39.30	54.00	14.70	100.0	H	235.0	11.8
4873.500000	50.26	---	74.00	23.74	100.0	H	158.0	11.8

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:	roborock S7
Test Mode:	WIFI 2.4G_11g_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

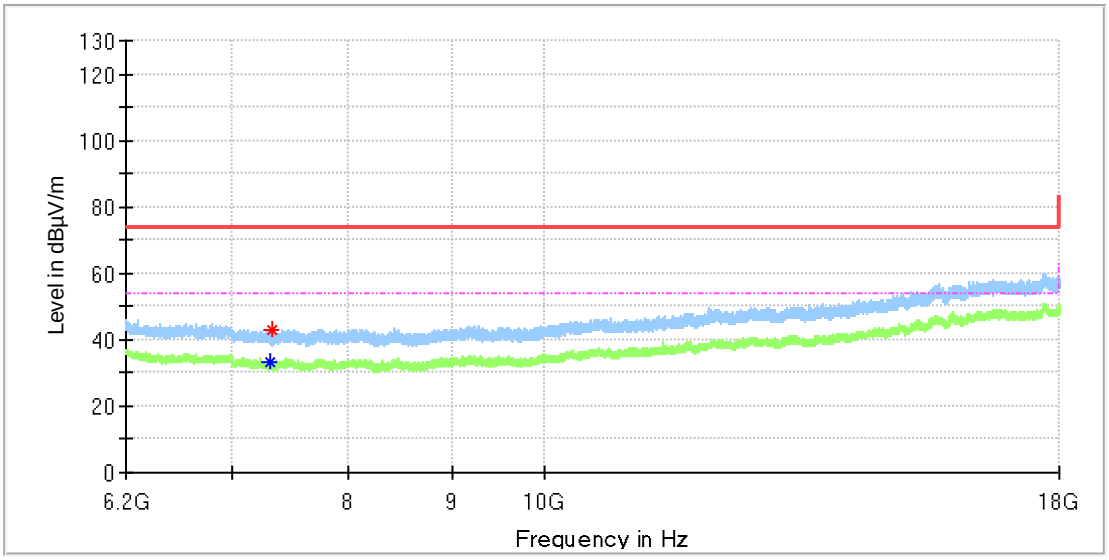
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4877.500000	---	39.20	54.00	14.80	100.0	V	248.0	11.8
4881.500000	50.53	---	74.00	23.47	100.0	V	138.0	11.8

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:	roborock S7
Test Mode:	WIFI 2.4G_11g_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

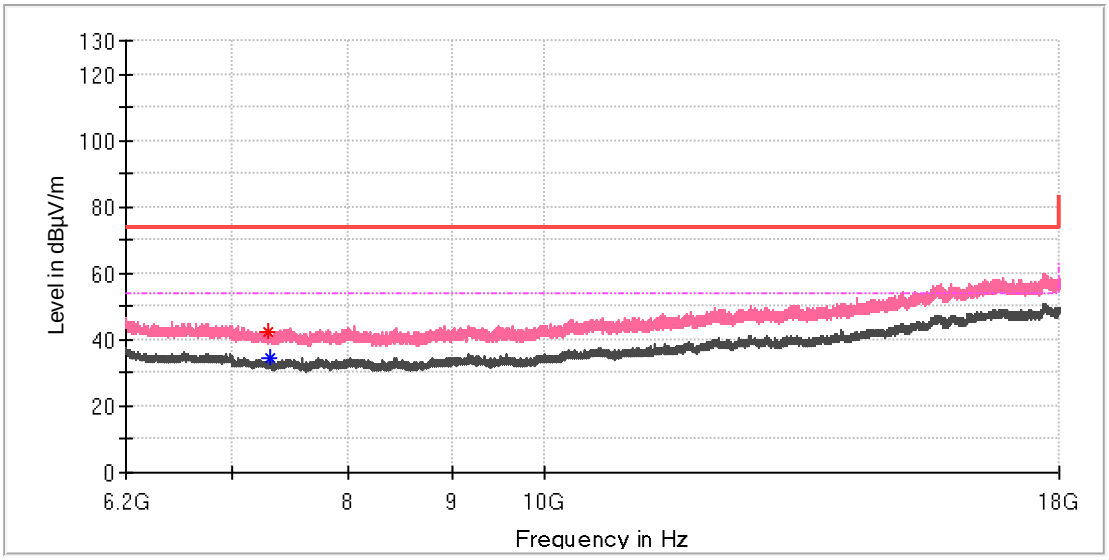
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7301.825000	---	33.23	54.00	20.77	100.0	H	262.0	8.3
7321.491667	43.02	---	74.00	30.98	100.0	H	129.0	8.2

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:	roborock S7
Test Mode:	WIFI 2.4G_11g_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

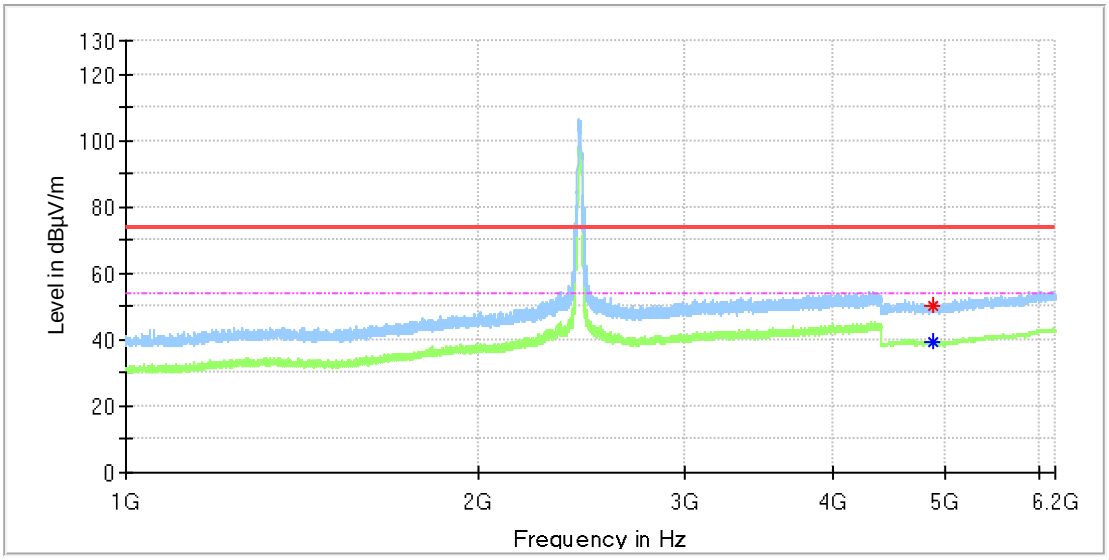
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7299.858333	42.44	---	74.00	31.56	100.0	V	2.0	8.3
7314.116667	---	34.38	54.00	19.62	100.0	V	0.0	8.2

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:	roborock S7
Test Mode:	WIFI 2.4G_11n20_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

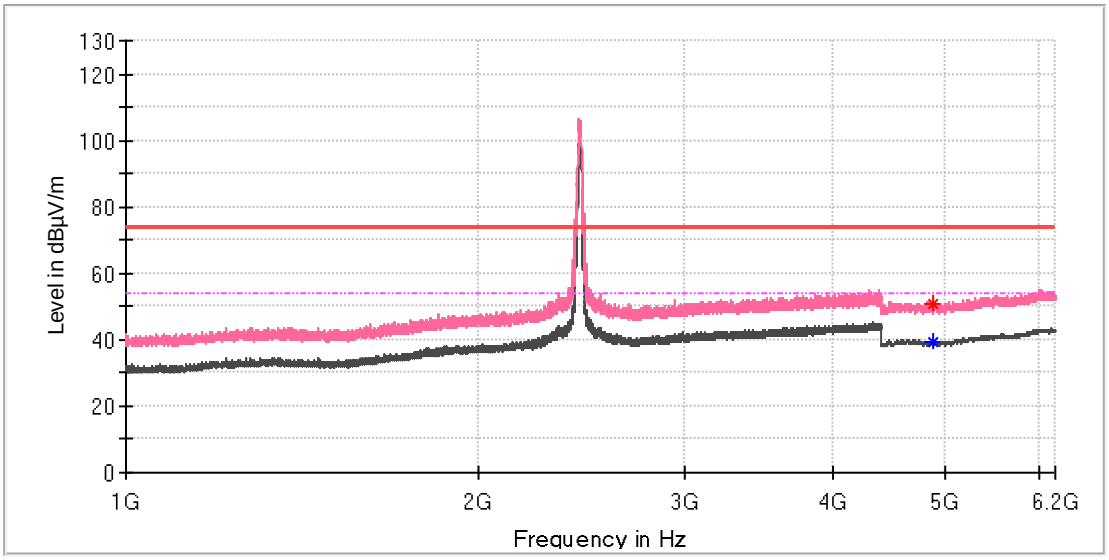
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4869.000000	---	39.22	54.00	14.78	100.0	H	114.0	11.8
4875.000000	50.39	---	74.00	23.61	100.0	H	185.0	11.8

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:	roborock S7
Test Mode:	WIFI 2.4G_11n20_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

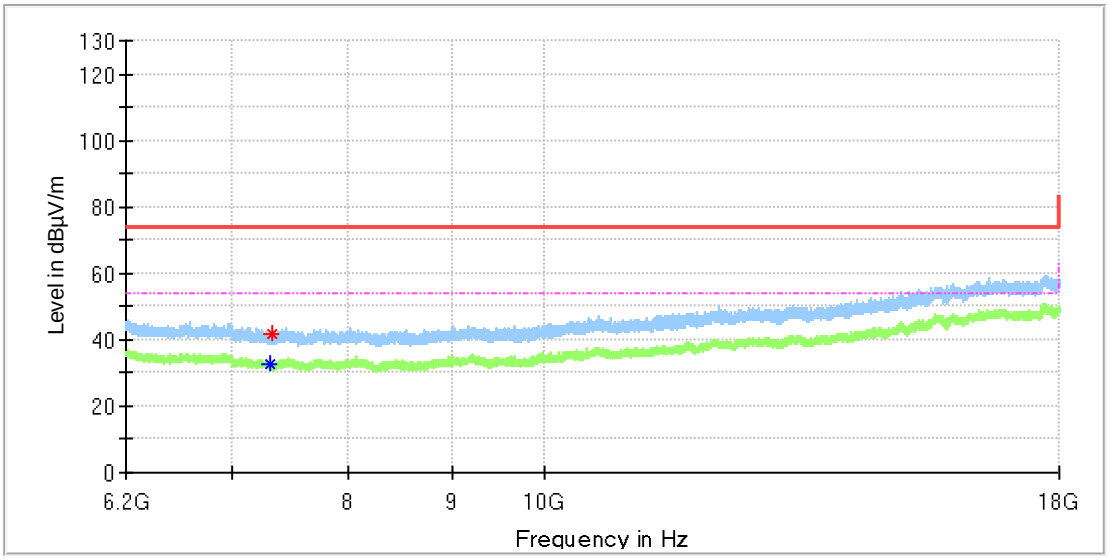
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4871.000000	50.62	---	74.00	23.38	100.0	V	135.0	11.8
4873.500000	---	39.34	54.00	14.66	100.0	V	171.0	11.8

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:	roborock S7
Test Mode:	WIFI 2.4G_11n20_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

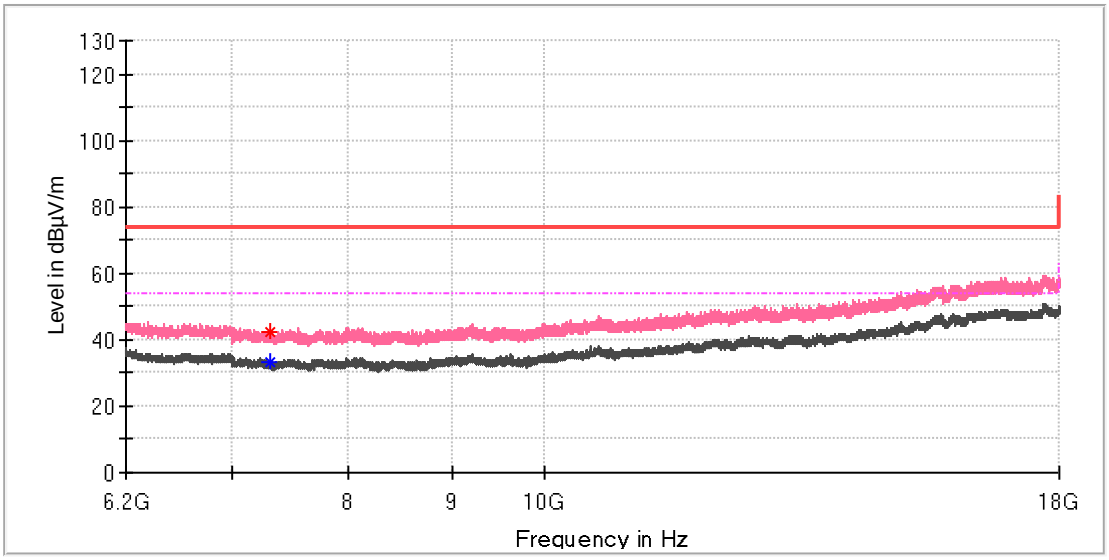
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7303.791667	---	32.63	54.00	21.37	100.0	H	14.0	8.3
7321.491667	41.75	---	74.00	32.25	100.0	H	4.0	8.2

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:	roborock S7
Test Mode:	WIFI 2.4G_11n20_Mid channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

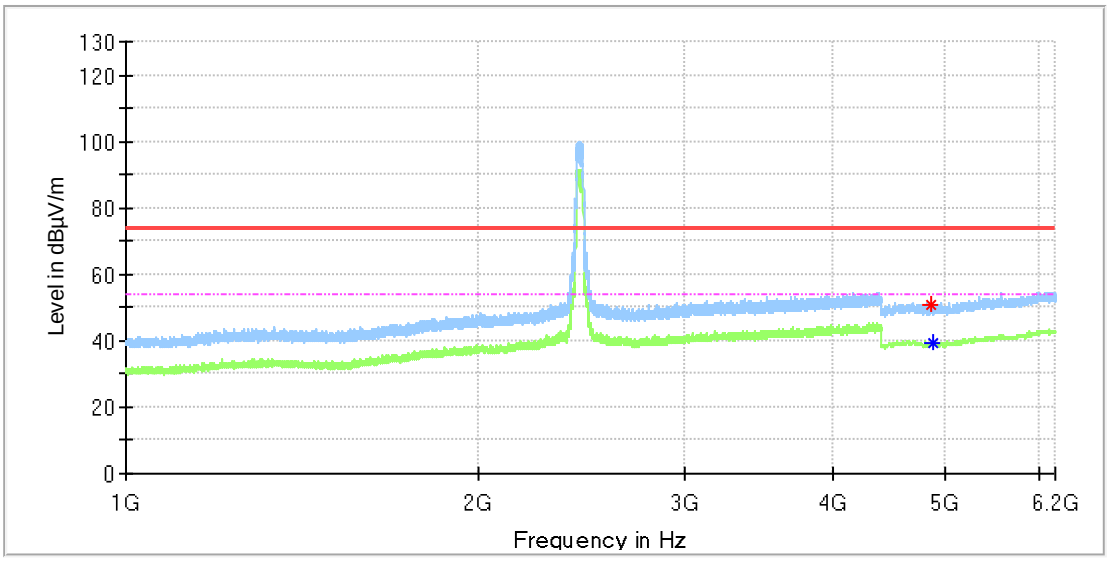
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7305.758333	---	33.12	54.00	20.88	100.0	V	178.0	8.3
7307.725000	42.09	---	74.00	31.91	100.0	V	0.0	8.3

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:	roborock S7
Test Mode:	WIFI 2.4G_11n40_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

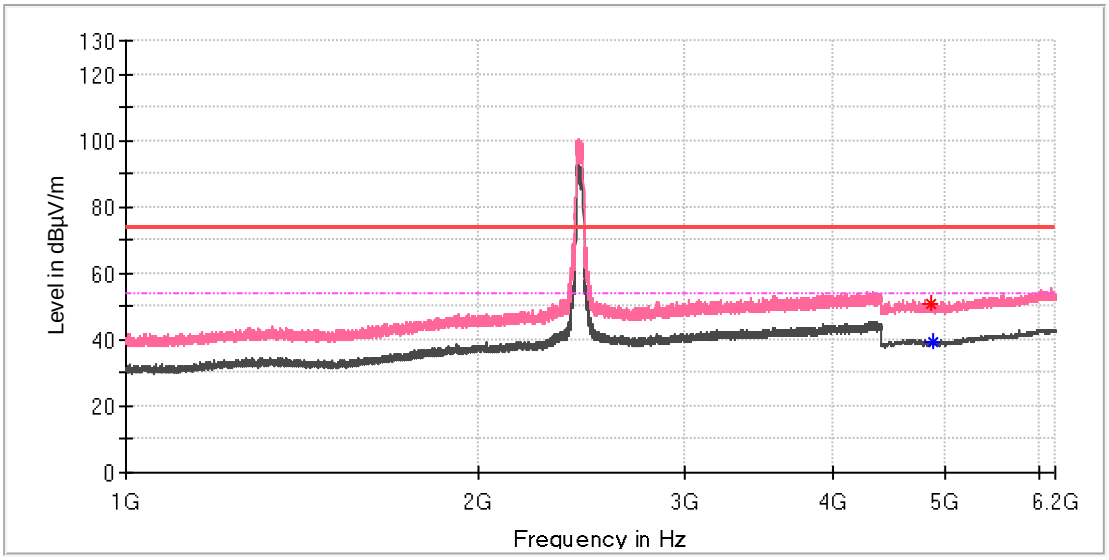
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4859.500000	51.06	---	74.00	22.94	100.0	H	4.0	11.8
4876.500000	---	39.13	54.00	14.87	100.0	H	284.0	11.8

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:	roborock S7
Test Mode:	WIFI 2.4G_11n40_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

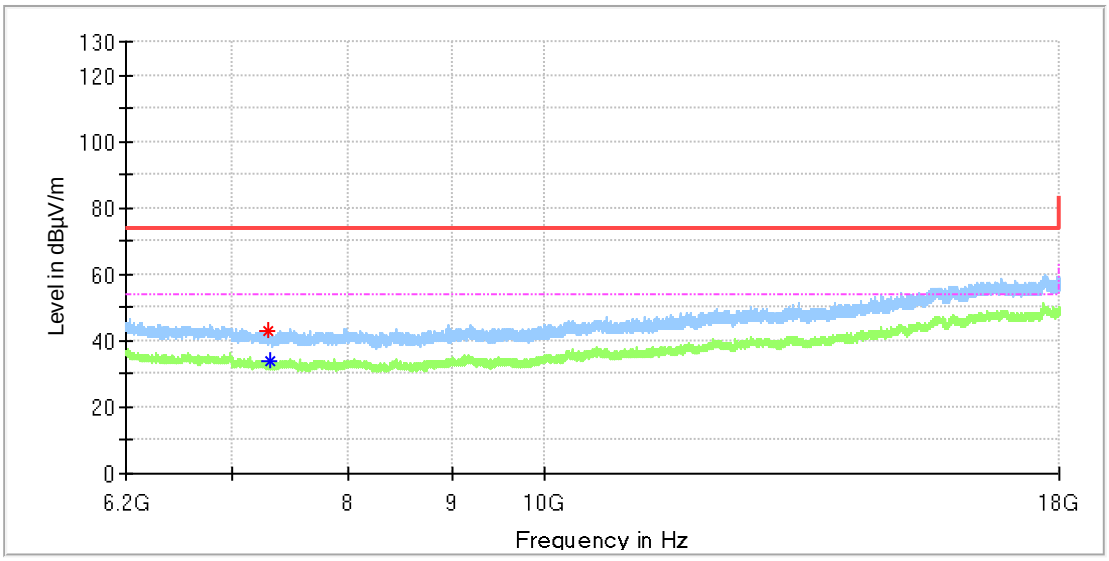
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4859.500000	51.05	---	74.00	22.95	100.0	V	216.0	11.8
4868.500000	---	39.38	54.00	14.62	100.0	V	173.0	11.8

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:	roborock S7
Test Mode:	WIFI 2.4G_11n40_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

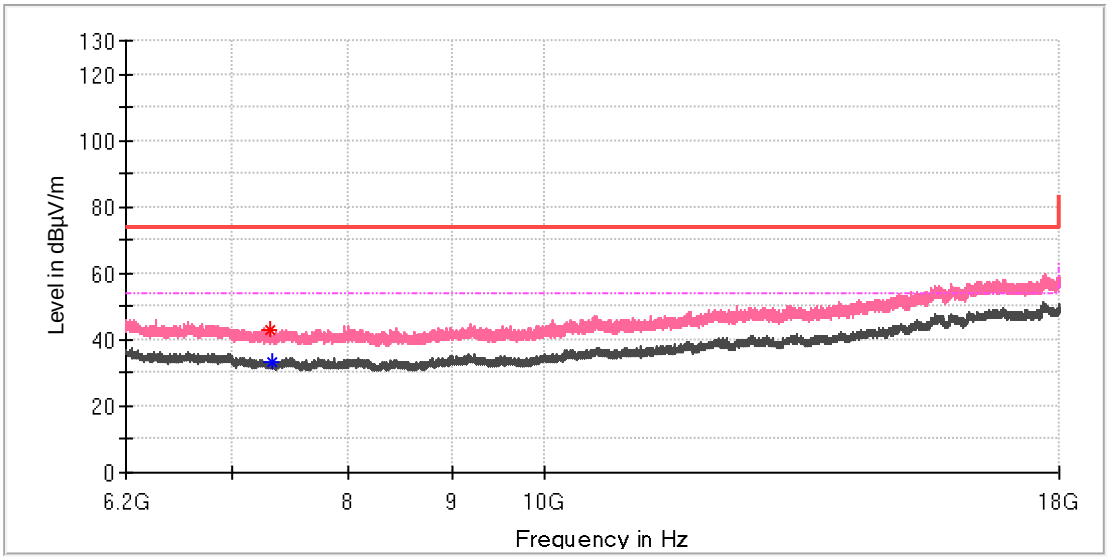
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7294.450000	42.67	---	74.00	31.33	100.0	H	327.0	8.3
7309.691667	---	33.59	54.00	20.41	100.0	H	313.0	8.2

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:	roborock S7
Test Mode:	WIFI 2.4G_11n40_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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)
7317.066667	43.10	---	74.00	30.90	100.0	V	129.0	8.2
7320.508333	---	33.35	54.00	20.65	100.0	V	129.0	8.2

Final_Result

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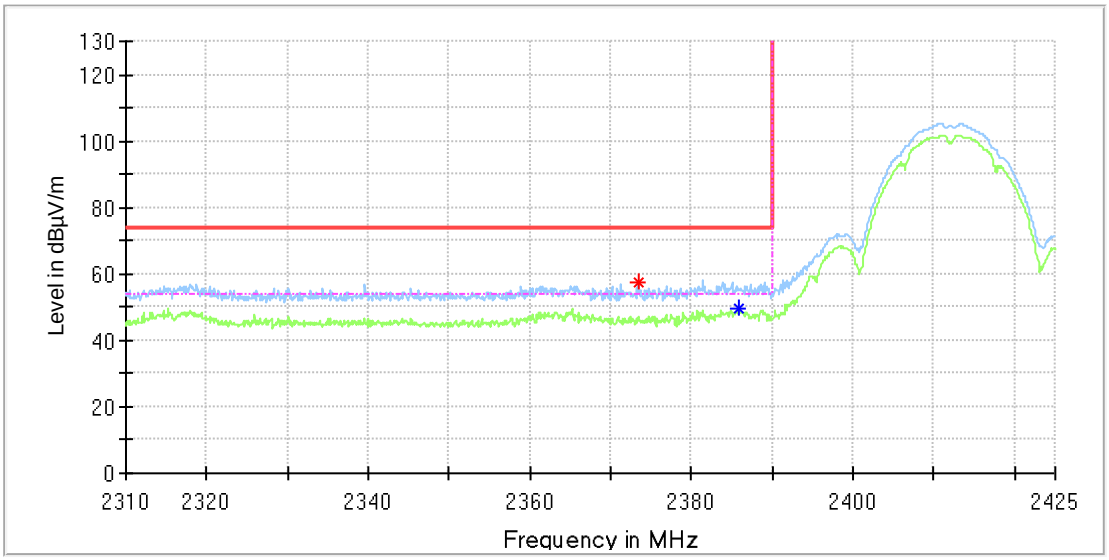
Appendix B.2: Test Results of Radiated Emissions in Restricted Bands

Wi-Fi 802.11 b mode, 1 Mbps

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11b_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

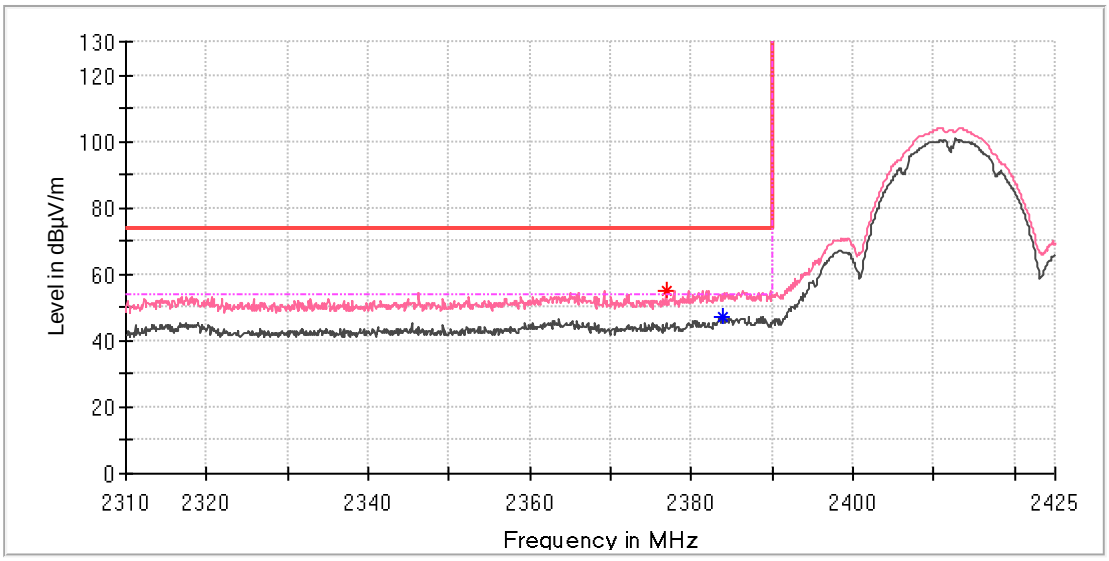
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2373.400000	57.60	---	74.00	16.40	100.0	H	334.0	6.9
2385.900000	---	49.82	54.00	4.18	100.0	H	334.0	7.0

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

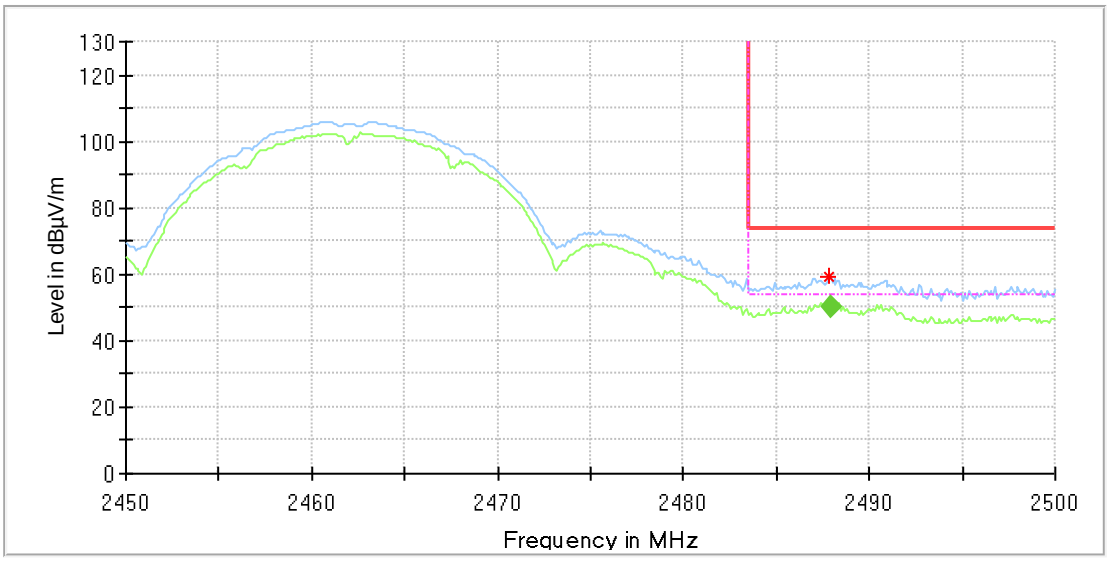
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2376.800000	54.99	---	74.00	19.01	100.0	V	68.0	6.9
2383.900000	---	47.08	54.00	6.92	100.0	V	68.0	7.0

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:	roborock S7
Test Mode:	WIFI 2.4G_11b_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

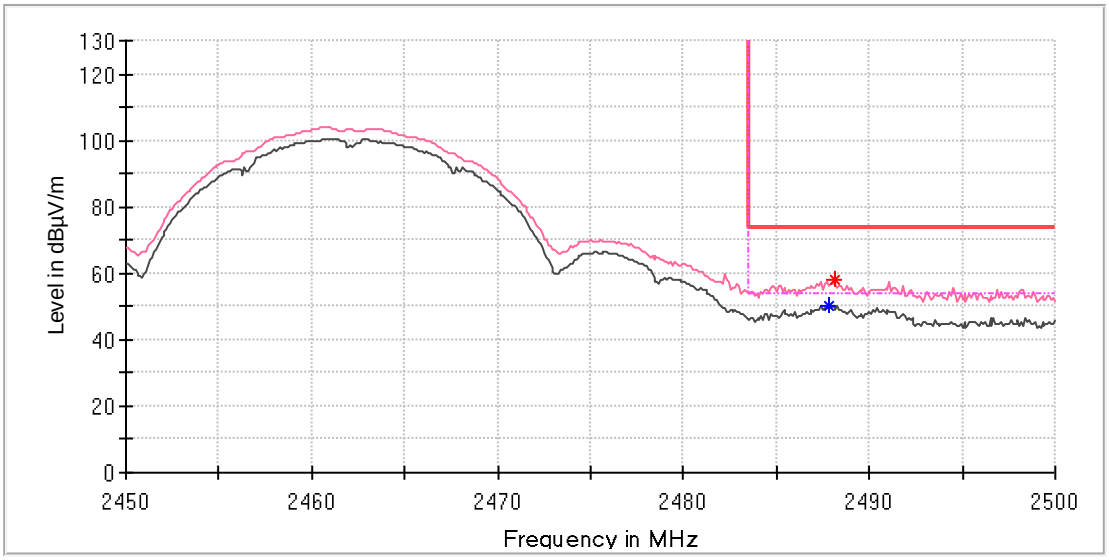
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.800000	59.50	---	74.00	14.50	100.0	H	55.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.940100	50.16	54.00	3.84	100.0	H	45.0	7.4

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11b_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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)
2487.800000	---	49.97	54.00	4.03	100.0	V	108.0	7.4
2488.100000	57.79	---	74.00	16.21	100.0	V	108.0	7.4

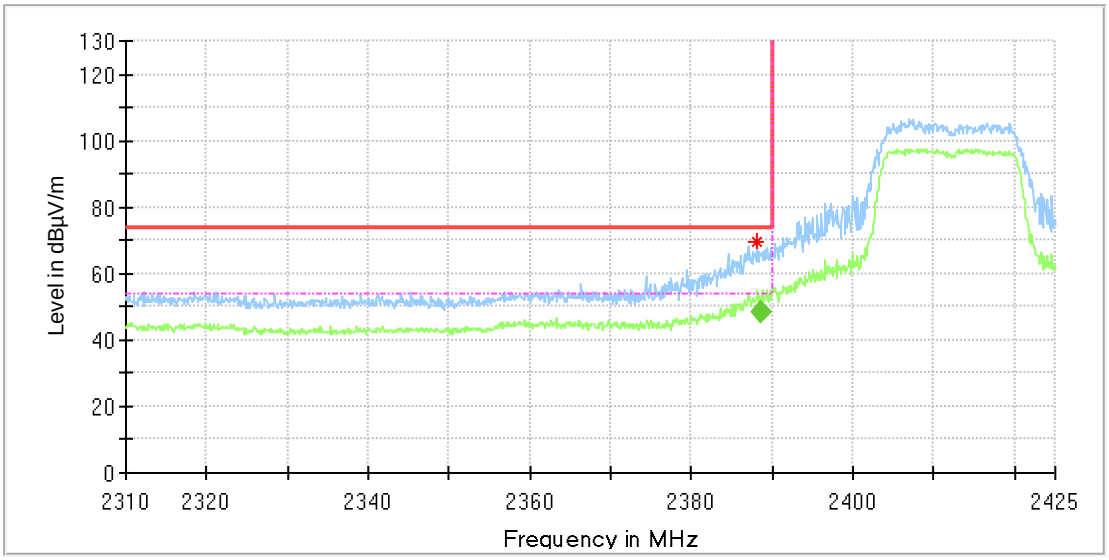
Final_Result

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

Wi-Fi 802.11 g mode, 6 Mbps

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11g_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

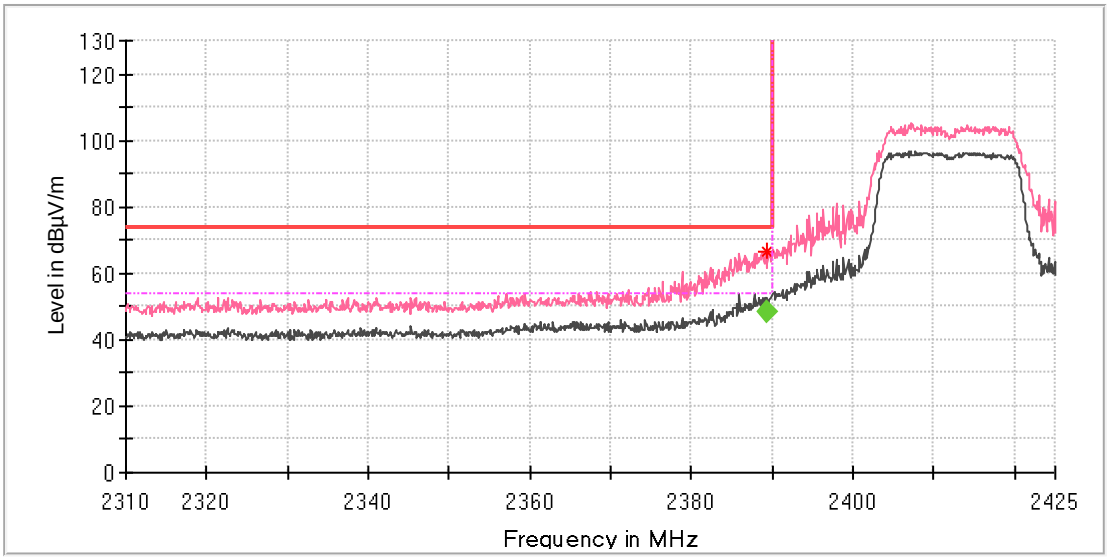
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.100000	69.42	---	74.00	4.58	100.0	H	196.0	7.0

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.445500	48.29	54.00	5.71	100.0	H	195.0	7.0

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11g_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

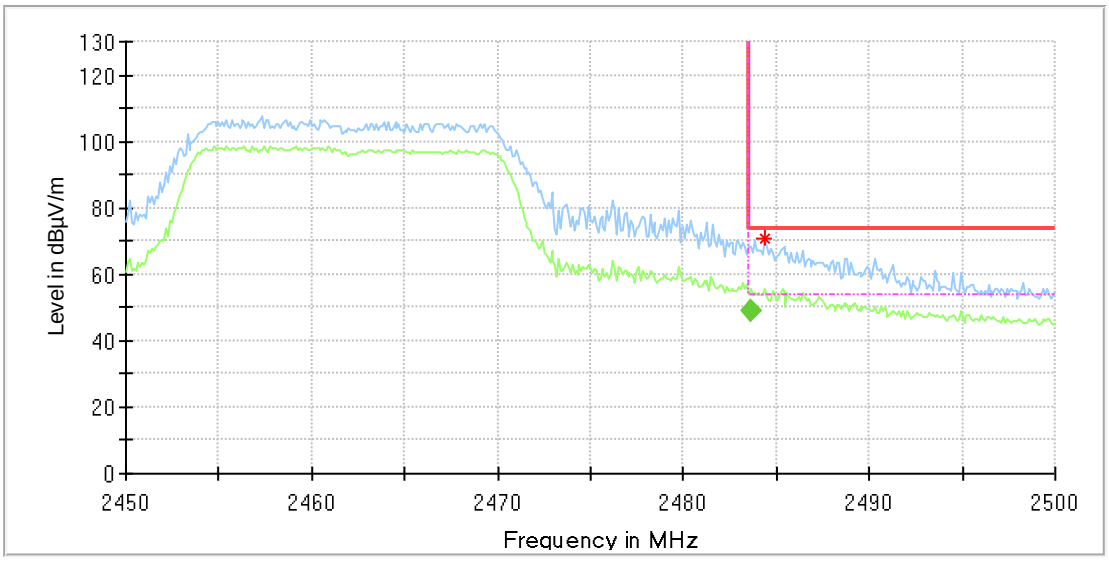
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.200000	66.79	---	74.00	7.21	100.0	V	64.0	7.0

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.303450	48.55	54.00	5.45	105.0	V	62.0	7.0

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11g_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

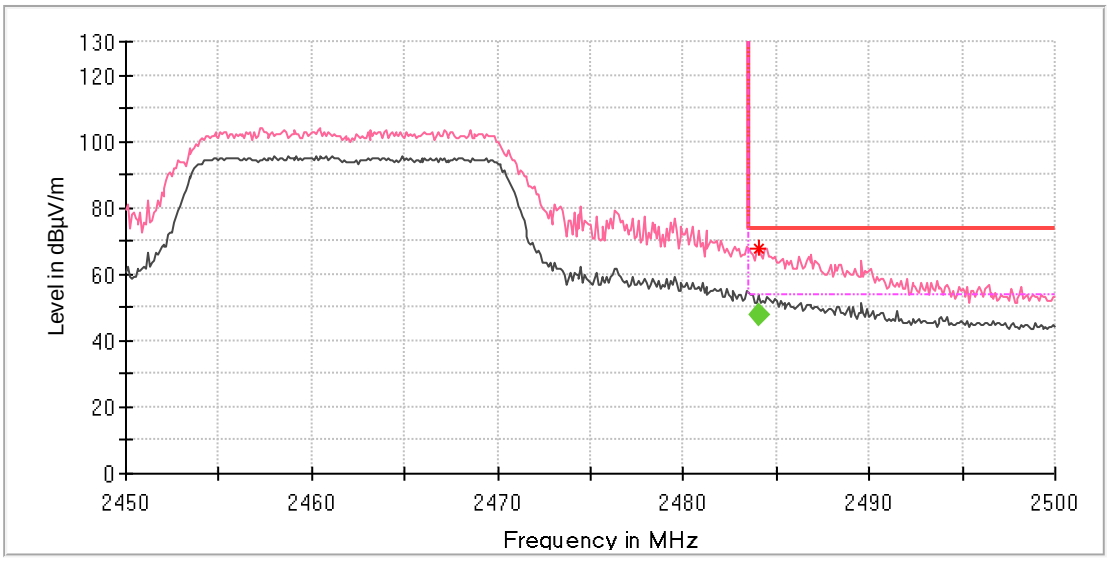
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.400000	70.95	---	74.00	3.05	100.0	H	70.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.641600	49.20	54.00	4.80	100.0	H	343.0	7.4

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11g_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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)
2484.100000	67.96	---	74.00	6.04	100.0	V	354.0	7.4

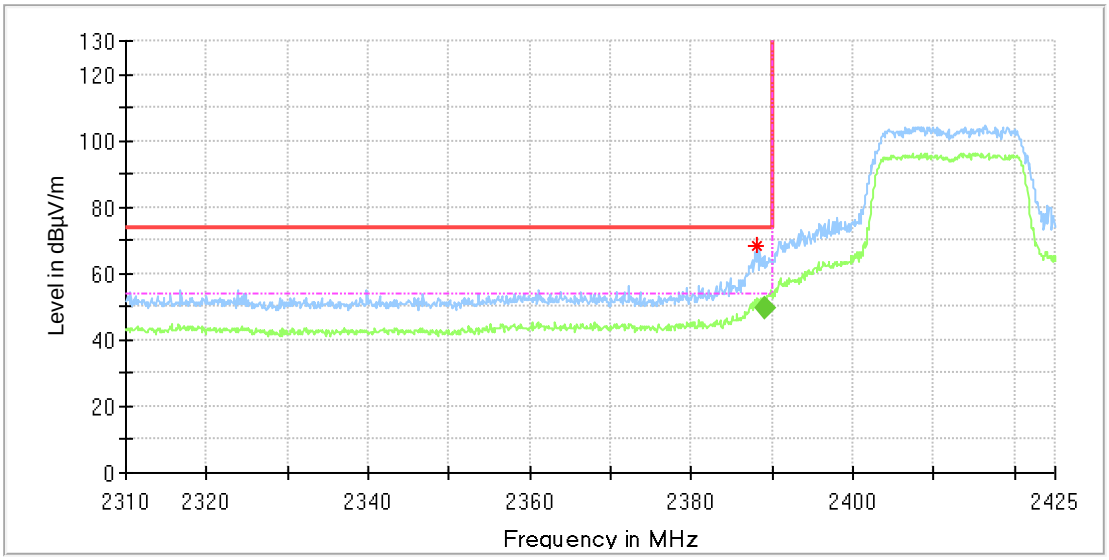
Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.999250	47.65	54.00	6.35	105.0	V	84.0	7.4

Wi-Fi 802.11 n(HT20) mode, MCS0

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11n20_Lowchannel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

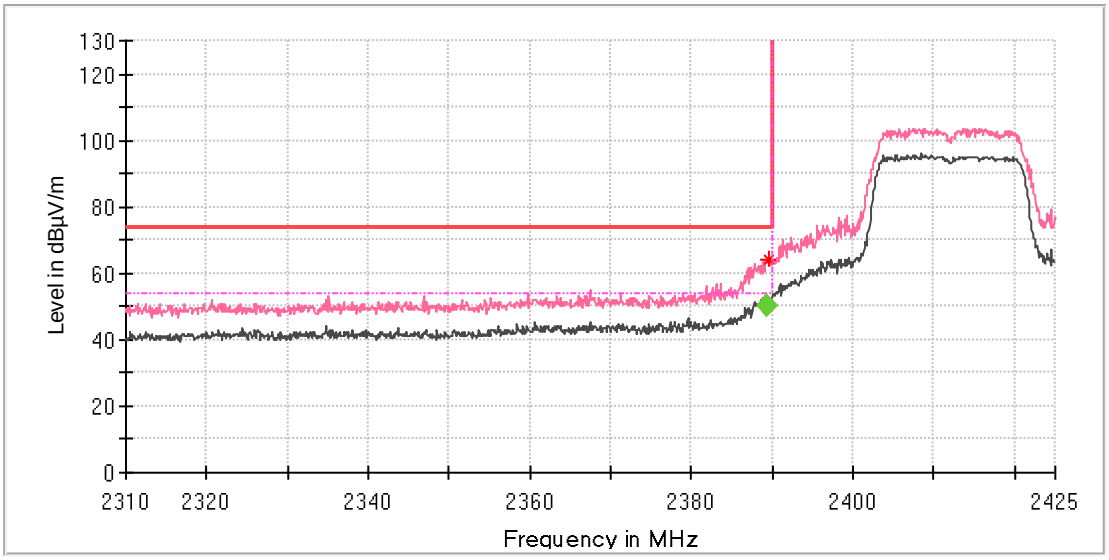
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.100000	68.62	---	74.00	5.38	100.0	H	199.0	7.0

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.083200	49.34	54.00	4.66	100.0	H	331.0	7.0

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11n20_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

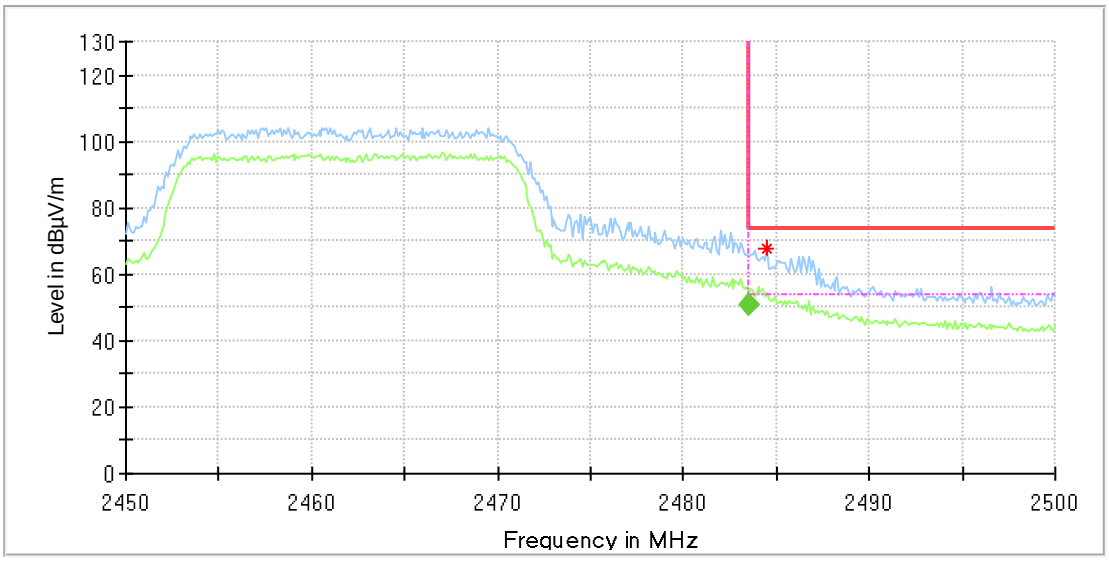
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.600000	64.07	---	74.00	9.93	100.0	V	111.0	7.0

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.411350	50.24	54.00	3.76	105.0	V	62.0	7.0

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11n20_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

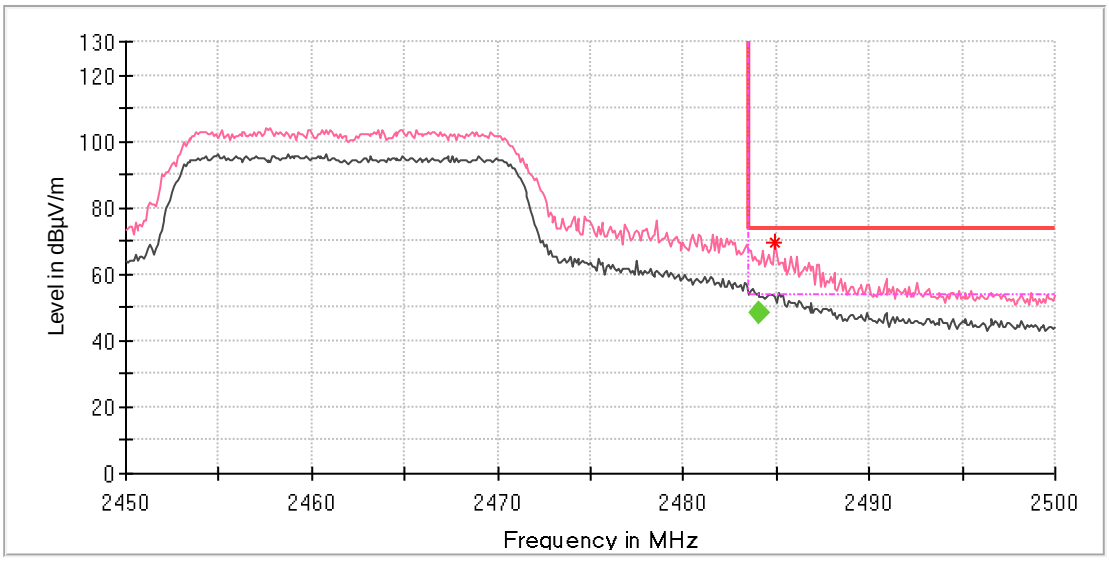
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.500000	67.48	---	74.00	6.52	100.0	H	138.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.514850	50.92	54.00	3.08	100.0	H	281.0	7.4

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11n20_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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)
2484.900000	69.44	---	74.00	4.56	100.0	V	157.0	7.4

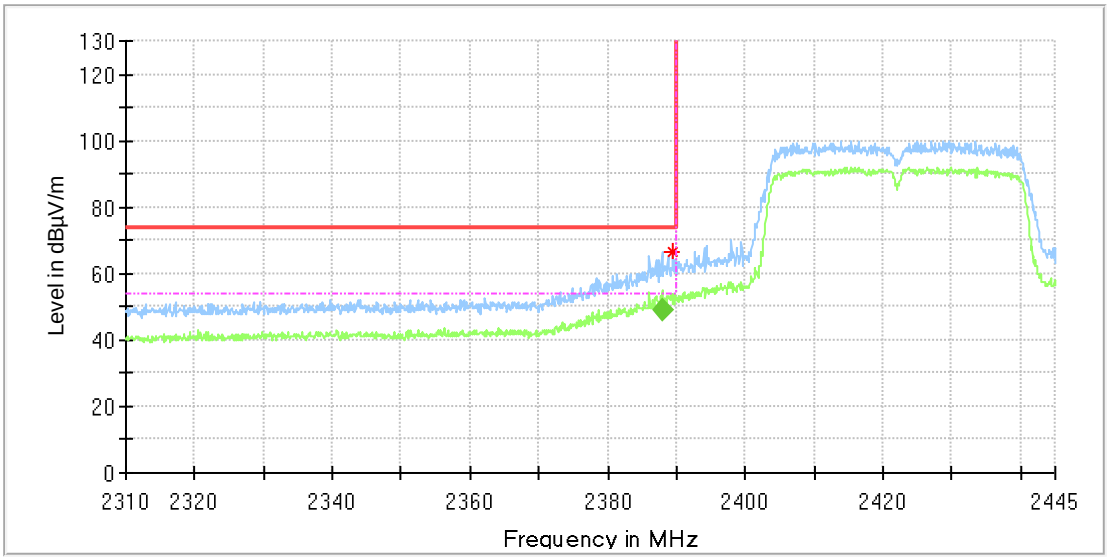
Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.070850	48.41	54.00	5.59	105.0	V	86.0	7.4

Wi-Fi 802.11 n(HT40) mode, MCS0

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11n40_Lowchannel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

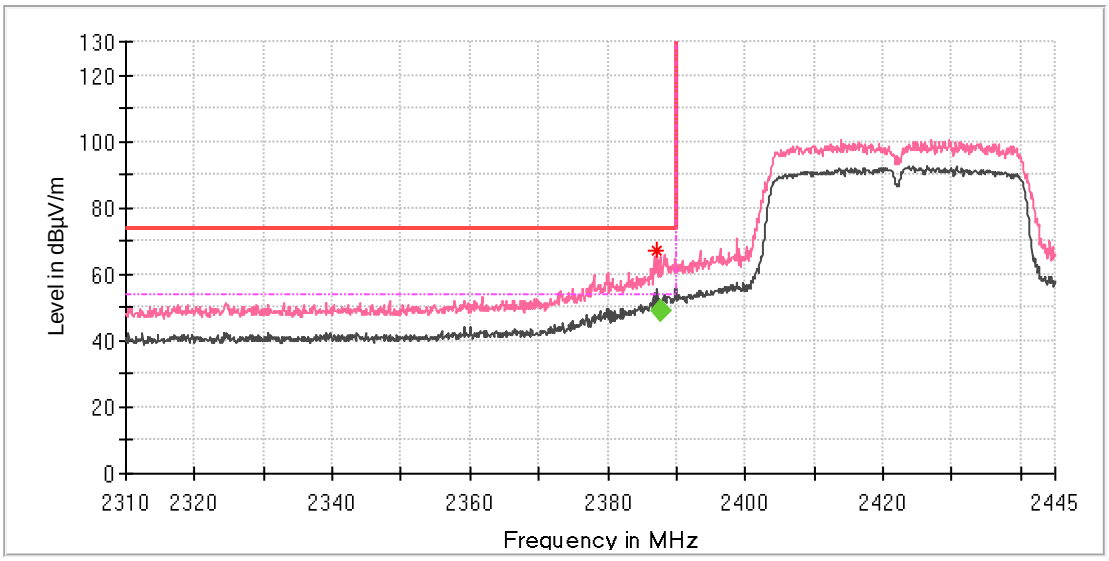
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.400000	66.66	---	74.00	7.34	100.0	H	287.0	7.0

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.051700	48.69	54.00	5.31	100.0	H	292.0	7.0

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11n40_Low channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

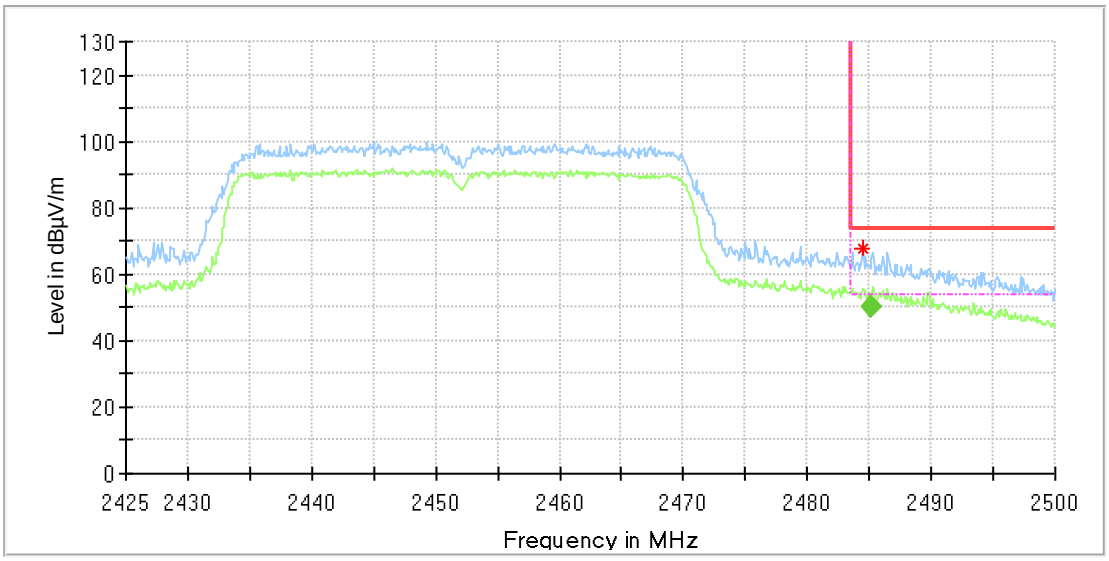
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.200000	67.25	---	74.00	6.75	100.0	V	159.0	7.0

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.665050	49.23	54.00	4.77	105.0	V	154.0	7.0

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11n40_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

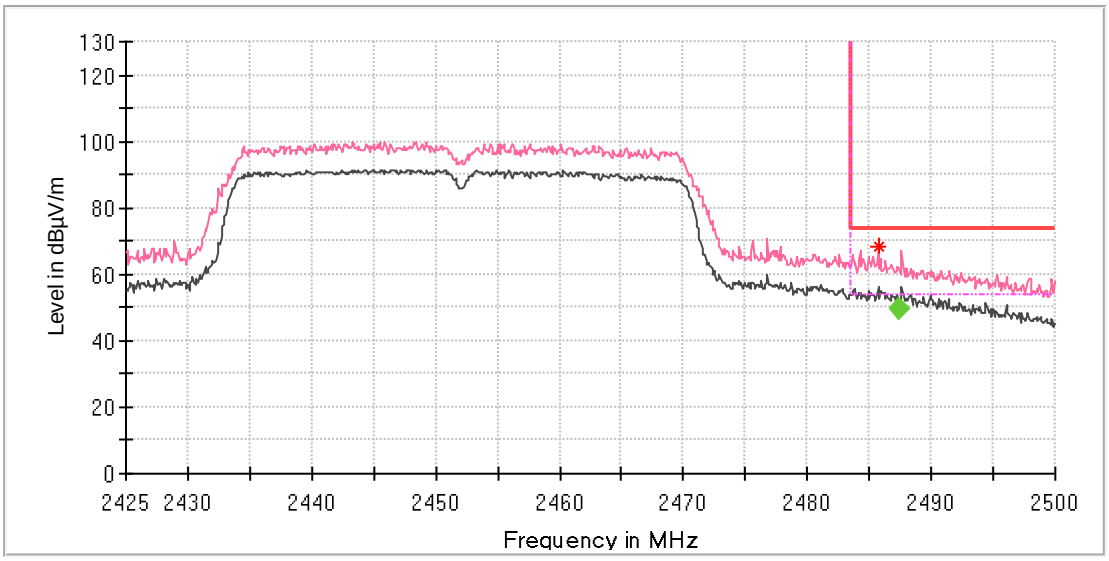
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.500000	67.56	---	74.00	6.44	100.0	H	154.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.068550	49.96	54.00	4.04	105.0	H	131.0	7.4

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	roborock S7
Test Mode:	WIFI 2.4G_11n40_High channel
Order No/Sample No:	168367767/A003238794-004
Test Voltage:	Battery
Remark:	Temp 22 Humi:55%
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)
2485.700000	68.04	---	74.00	5.96	100.0	V	170.0	7.4

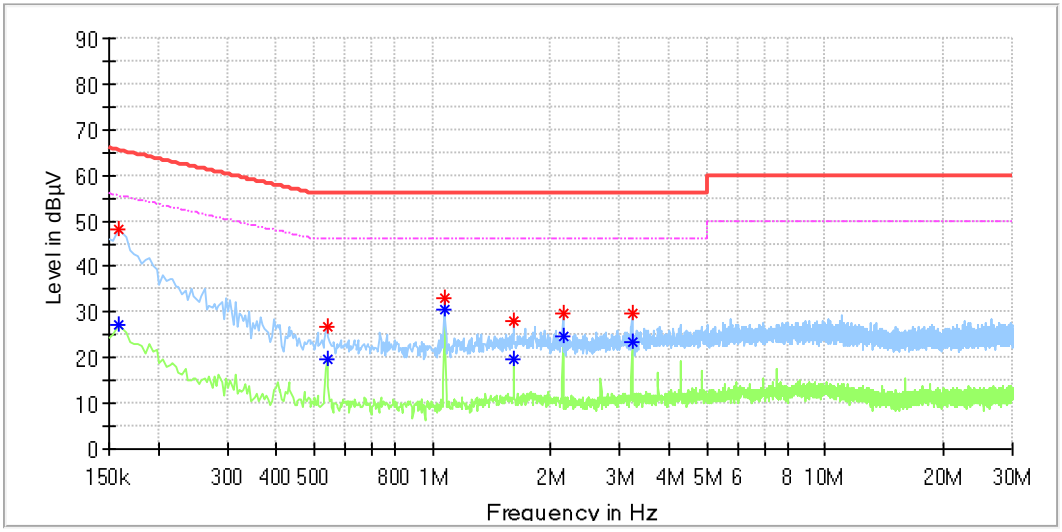
Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.339500	49.79	54.00	4.21	100.0	V	178.0	7.4

Appendix B.3: Test Results of Conducted Emission

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Order No:	168369097
Model:	roborock S7
Test mode:	Charging + WIFI link
Test Voltage:	AC 120V/60Hz
Test By:	Kei Zhang
Review By:	Terry Yin
Tem./Hum./Pressure:	24℃/53%/101kPa



Critical_Freqs

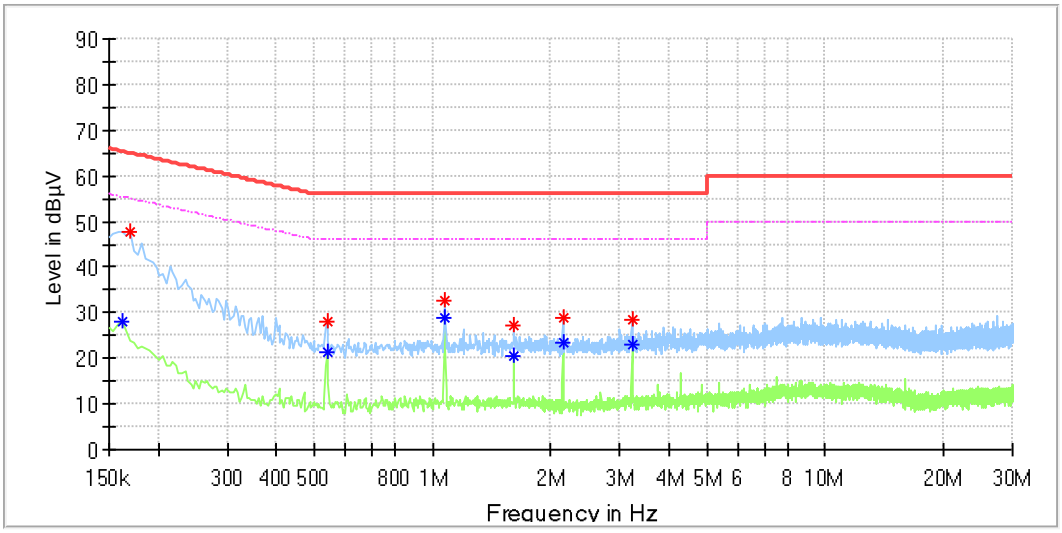
Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.158000	48.07	---	65.57	17.50	L1	9.9
0.158000	---	27.12	55.57	28.44	L1	9.9
0.538000	---	19.69	46.00	26.31	L1	10.0
0.538000	26.97	---	56.00	29.03	L1	10.0
1.074000	---	30.74	46.00	15.26	L1	10.0
1.074000	33.22	---	56.00	22.79	L1	10.0
1.610000	---	19.57	46.00	26.43	L1	10.1
1.610000	28.16	---	56.00	27.84	L1	10.1
2.146000	---	24.86	46.00	21.14	L1	10.1
2.150000	29.83	---	56.00	26.17	L1	10.1
3.218000	29.71	---	56.00	26.29	L1	10.2
3.218000	---	23.53	46.00	22.47	L1	10.2

Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
---	---	---	---	---	---	---		---

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Order No:	168369097
Model:	roborock S7
Test mode:	Charging + WIFI link
Test Voltage:	AC 120V/60Hz
Test By:	Kei Zhang
Review By:	Terry Yin
Tem./Hum./Pressure:	24℃/53%/101kPa



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.162000	---	27.95	55.36	27.41	N	9.8
0.170000	47.73	---	64.96	17.23	N	9.8
0.538000	---	21.33	46.00	24.67	N	9.8
0.538000	28.00	---	56.00	28.00	N	9.8
1.074000	---	28.97	46.00	17.03	N	9.8
1.074000	32.55	---	56.00	23.45	N	9.8
1.610000	---	20.32	46.00	25.68	N	9.8
1.610000	27.30	---	56.00	28.70	N	9.8
2.146000	---	23.64	46.00	22.36	N	9.9
2.146000	29.03	---	56.00	26.97	N	9.9
3.218000	28.60	---	56.00	27.40	N	9.9
3.222000	---	23.22	46.00	22.78	N	9.9

Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
---	---	---	---	---	---	---		---