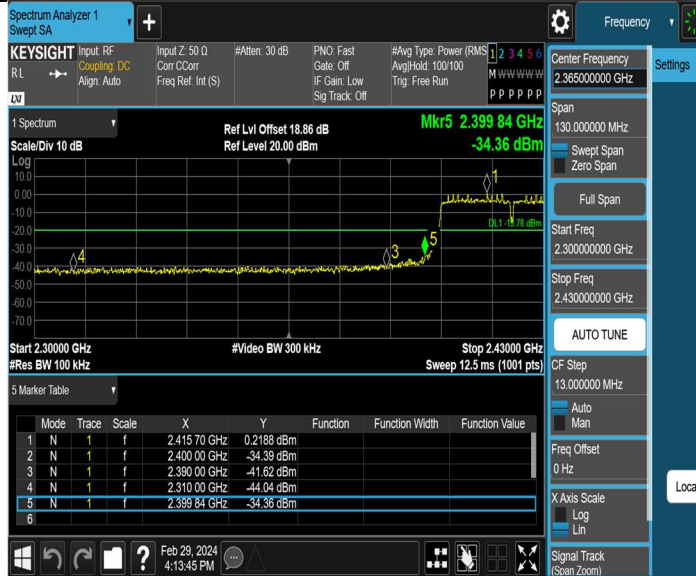


11N40SISO Ant1 Low 2422



11N40SISO Ant1 High 2452



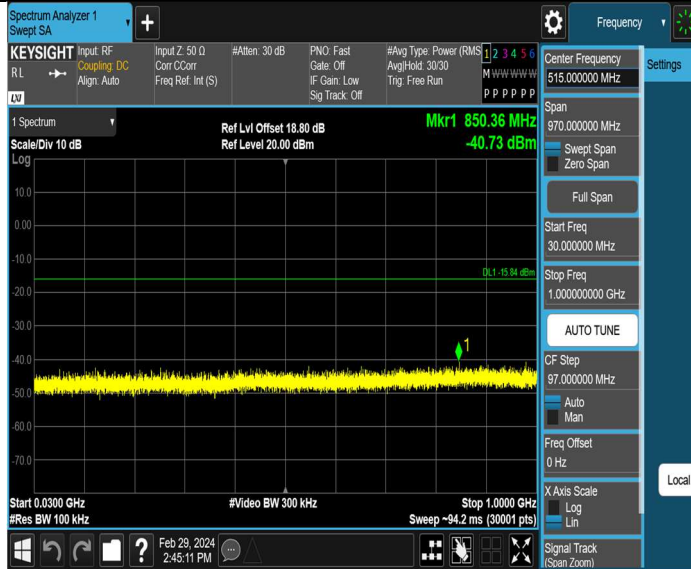
Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.16	4.16	---	PASS
			30~1000	4.16	-40.73	≤-15.84	PASS
			1000~26500	4.16	-32.33	≤-15.84	PASS
		2437	Reference	2.63	2.63	---	PASS
			30~1000	2.63	-39.84	≤-17.37	PASS
			1000~26500	2.63	-30.06	≤-17.37	PASS
		2462	Reference	2.88	2.88	---	PASS
			30~1000	2.88	-41.64	≤-17.12	PASS
			1000~26500	2.88	-32.09	≤-17.12	PASS
11G	Ant1	2412	Reference	2.58	2.58	---	PASS
			30~1000	2.58	-40.56	≤-17.42	PASS
			1000~26500	2.58	-31.61	≤-17.42	PASS
		2437	Reference	1.87	1.87	---	PASS
			30~1000	1.87	-41.2	≤-18.13	PASS
			1000~26500	1.87	-32.21	≤-18.13	PASS
		2462	Reference	-1.44	-1.44	---	PASS
			30~1000	-1.44	-41.08	≤-21.44	PASS
			1000~26500	-1.44	-32.14	≤-21.44	PASS
11N20SISO	Ant1	2412	Reference	-0.17	-0.17	---	PASS
			30~1000	-0.17	-41.02	≤-20.17	PASS
			1000~26500	-0.17	-31.65	≤-20.17	PASS
		2437	Reference	1.42	1.42	---	PASS
			30~1000	1.42	-41.2	≤-18.58	PASS
			1000~26500	1.42	-31.94	≤-18.58	PASS
		2462	Reference	0.56	0.56	---	PASS
			30~1000	0.56	-40.78	≤-19.44	PASS
			1000~26500	0.56	-32.23	≤-19.44	PASS
11N40SISO	Ant1	2422	Reference	-0.30	-0.30	---	PASS
			30~1000	-0.30	-41.29	≤-20.3	PASS
			1000~26500	-0.30	-31.72	≤-20.3	PASS
		2437	Reference	-1.44	-1.44	---	PASS
			30~1000	-1.44	-41.51	≤-21.44	PASS
			1000~26500	-1.44	-31.59	≤-21.44	PASS
		2452	Reference	-1.14	-1.14	---	PASS
			30~1000	-1.14	-41.37	≤-21.14	PASS
			1000~26500	-1.14	-32.11	≤-21.14	PASS

11B Ant1 2412 0~Reference



11B Ant1 2412 30~1000



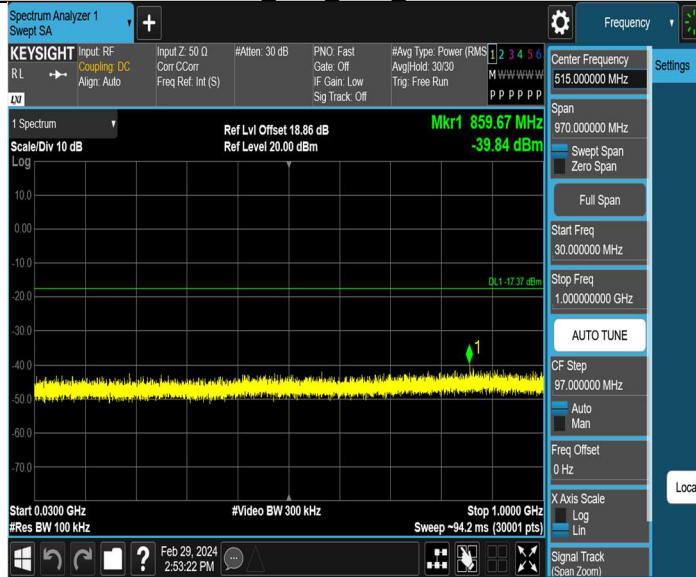
11B Ant1 2412 1000~26500



11B_Ant1_2437_0~Reference



11B_Ant1_2437_30~1000



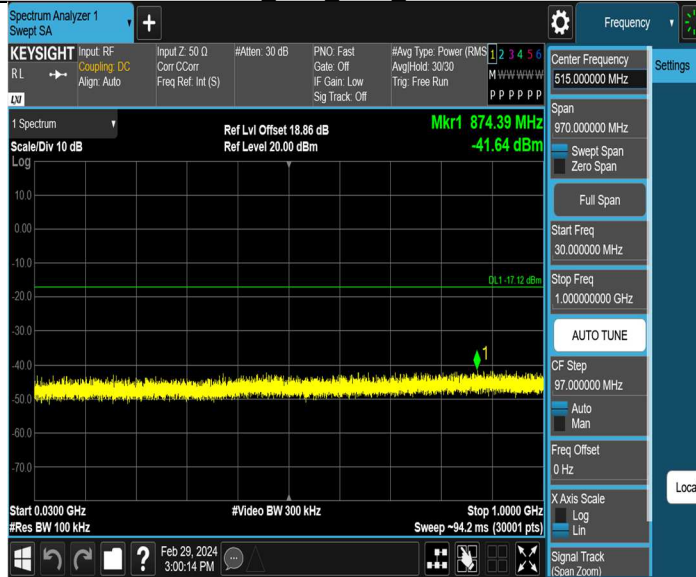
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



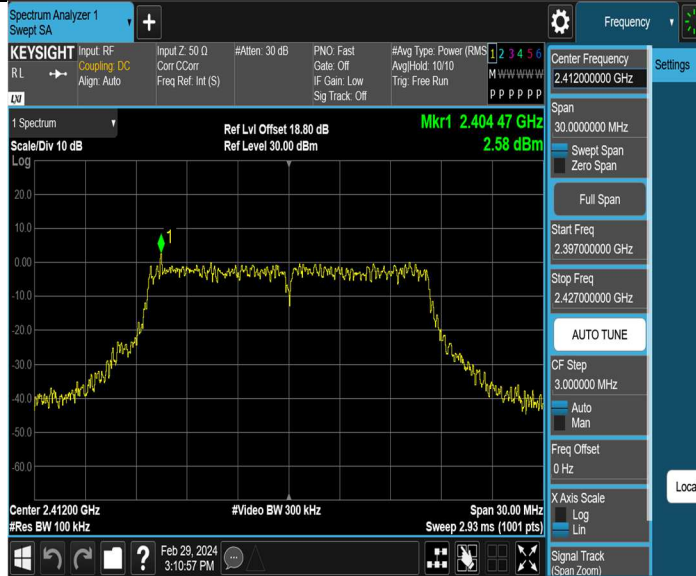
11B_Ant1_2462_30~1000



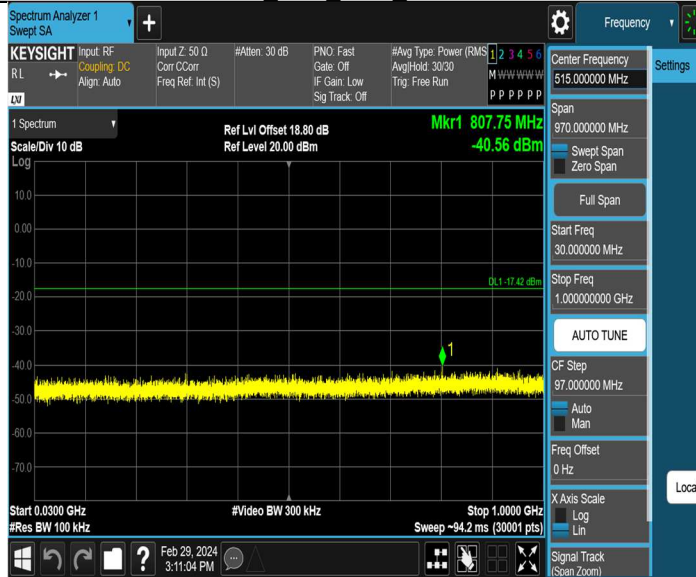
11B_Ant1_2462_1000~26500



11G Ant1_2412_0~Reference



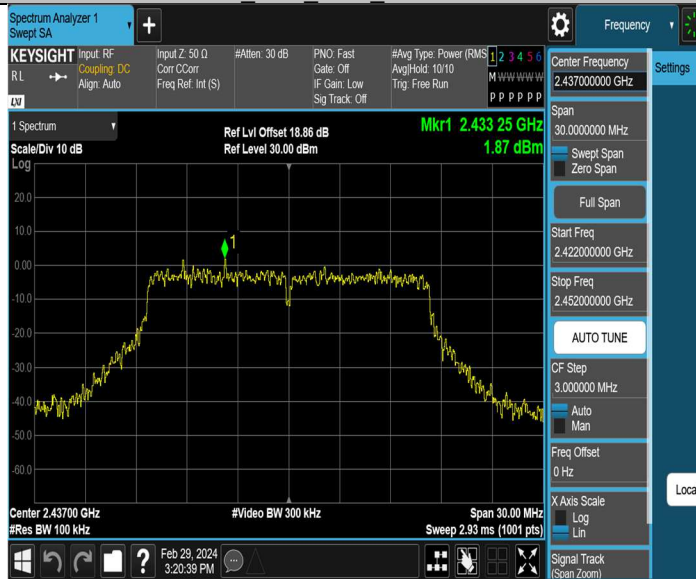
11G Ant1_2412_30~1000



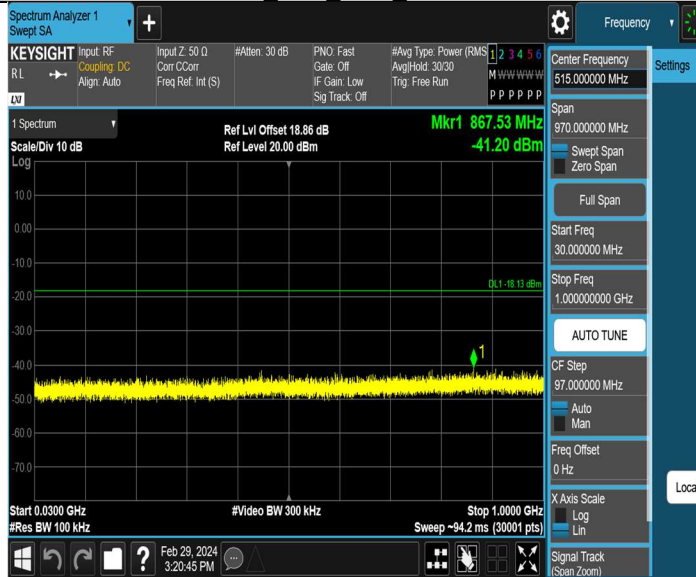
11G Ant1_2412_1000~26500



11G Ant1_2437_0~Reference



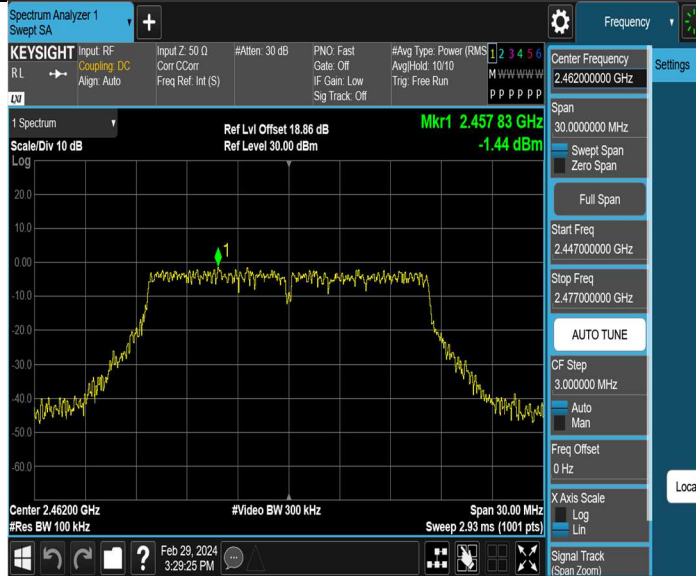
11G Ant1_2437_30~1000



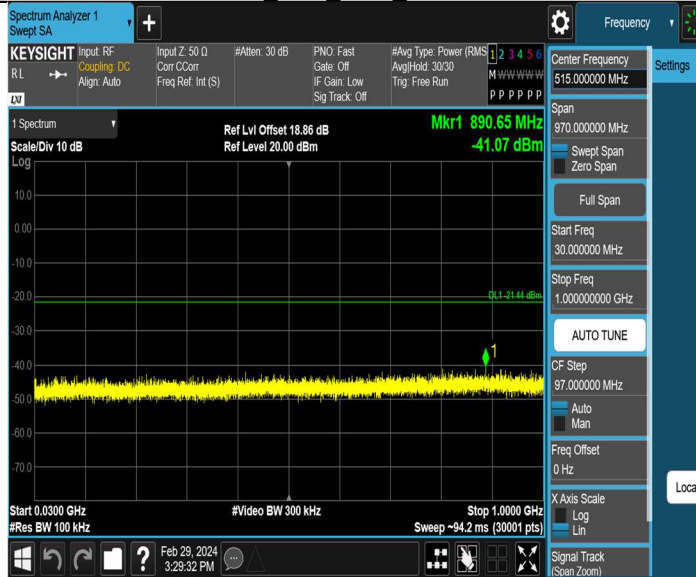
11G Ant1_2437_1000~26500



11G Ant1_2462 0~Reference



11G Ant1_2462 30~1000



11G Ant1_2462 1000~26500



11N20SISO Ant1 2412 0~Reference



11N20SISO Ant1 2412 30~1000

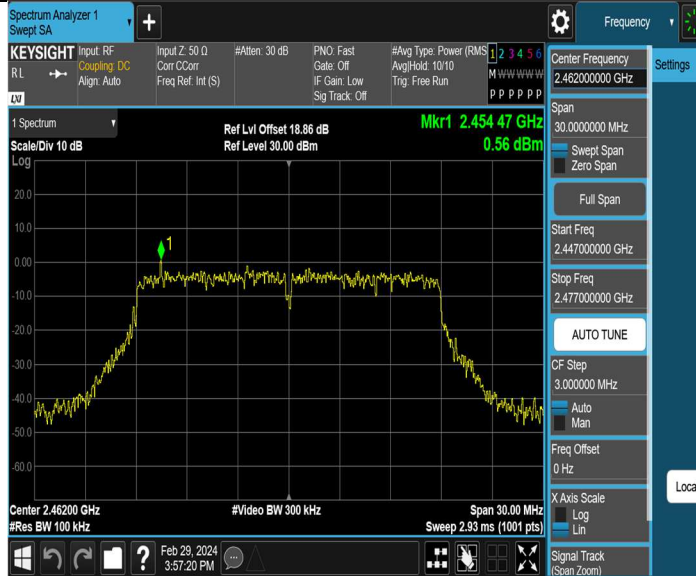


11N20SISO Ant1 2412 1000~26500





11N20SISO Ant1 2462_0~Reference



11N20SISO Ant1 2462_30~1000



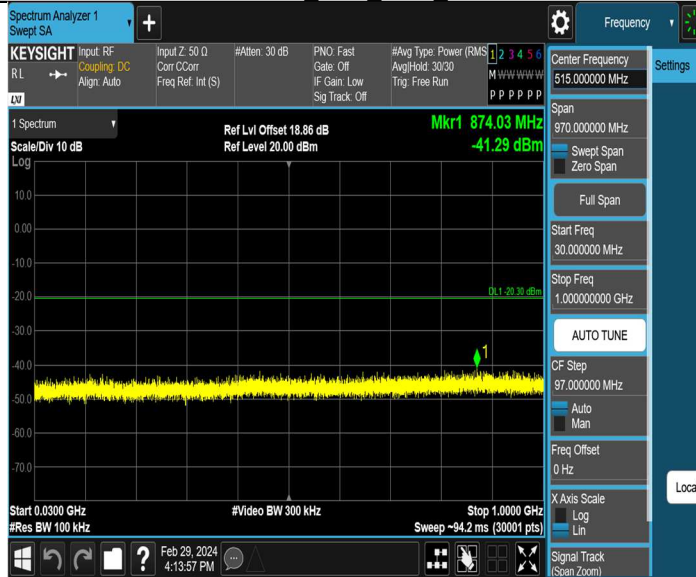
11N20SISO Ant1 2462_1000~26500



11N40SISO Ant1 2422 0~Reference



11N40SISO Ant1 2422 30~1000



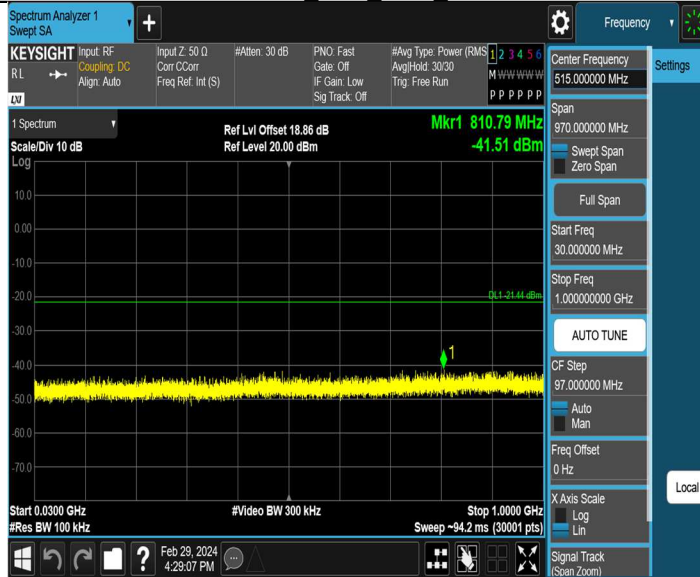
11N40SISO Ant1 2422 1000~26500



11N40SISO Ant1 2437 0~Reference



11N40SISO Ant1 2437 30~1000



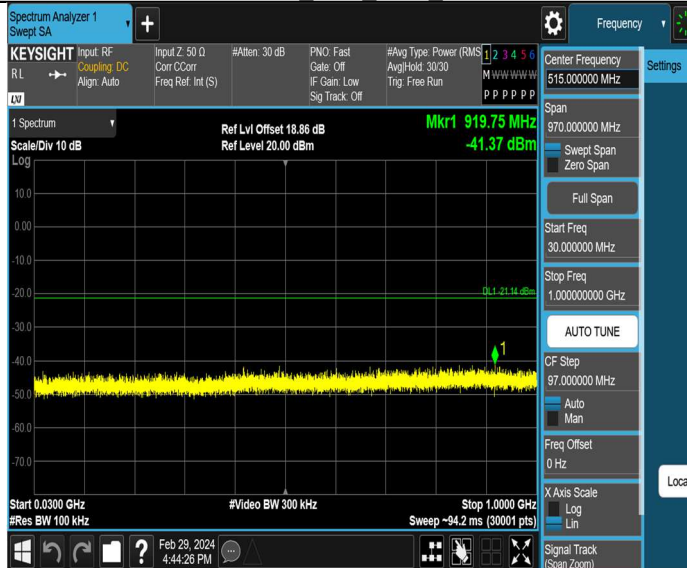
11N40SISO Ant1 2437 1000~26500



11N40SISO Ant1 2452 0~Reference



11N40SISO Ant1 2452 30~1000



11N40SISO Ant1 2452 1000~26500



Appendix A.6: Test Results of Radiated Spurious Emissions

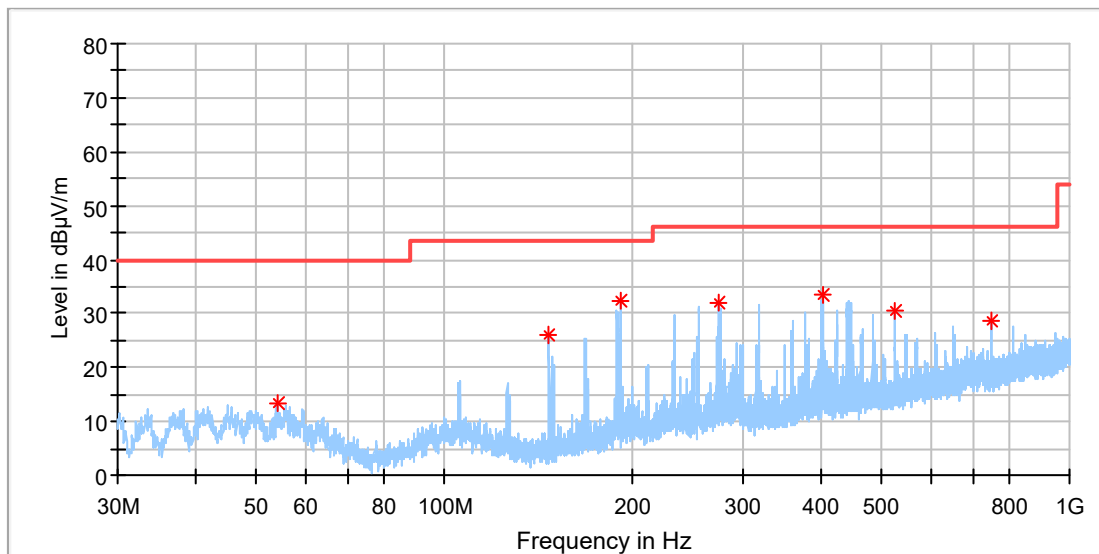
Note:

- 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:	Robot Vacuum Cleaner
Model:	NER J20 Ultra
Test Mode:	WIFI 2.4G_11b_Ch6
Order No/Sample No:	168468654/A003649235-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

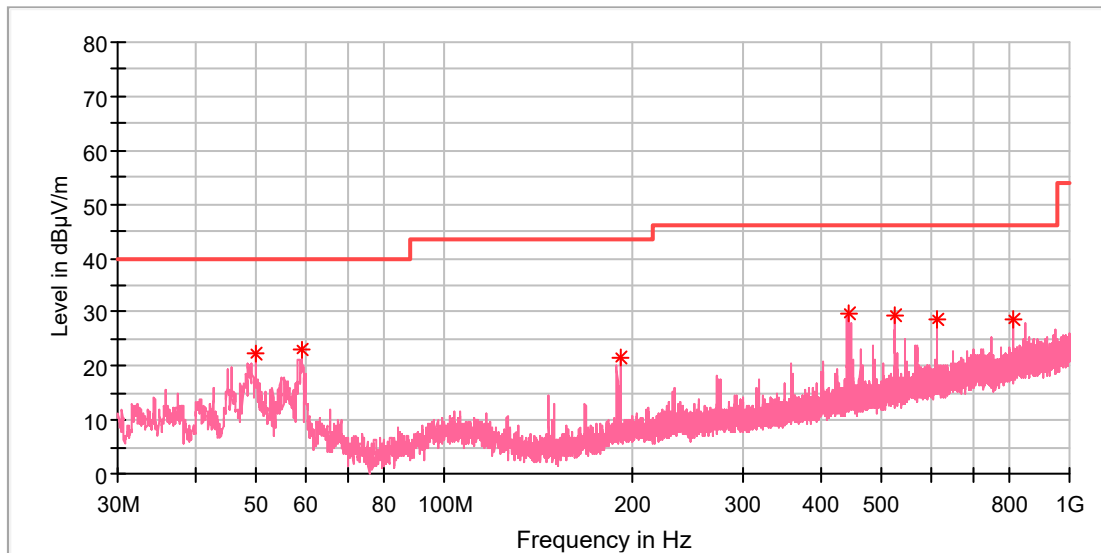


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
53.951539	13.40	40.00	26.60	100.0	H	173.0	-18.7
147.183462	25.99	43.50	17.51	100.0	H	239.0	-22.6
191.169231	32.55	43.50	10.95	100.0	H	248.0	-19.8
275.298077	31.90	46.00	14.10	100.0	H	204.0	-17.2
403.524615	33.61	46.00	12.39	100.0	H	1.0	-14.0
525.520769	30.56	46.00	15.44	100.0	H	12.0	-11.7
750.075769	28.79	46.00	17.21	100.0	H	274.0	-7.6

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

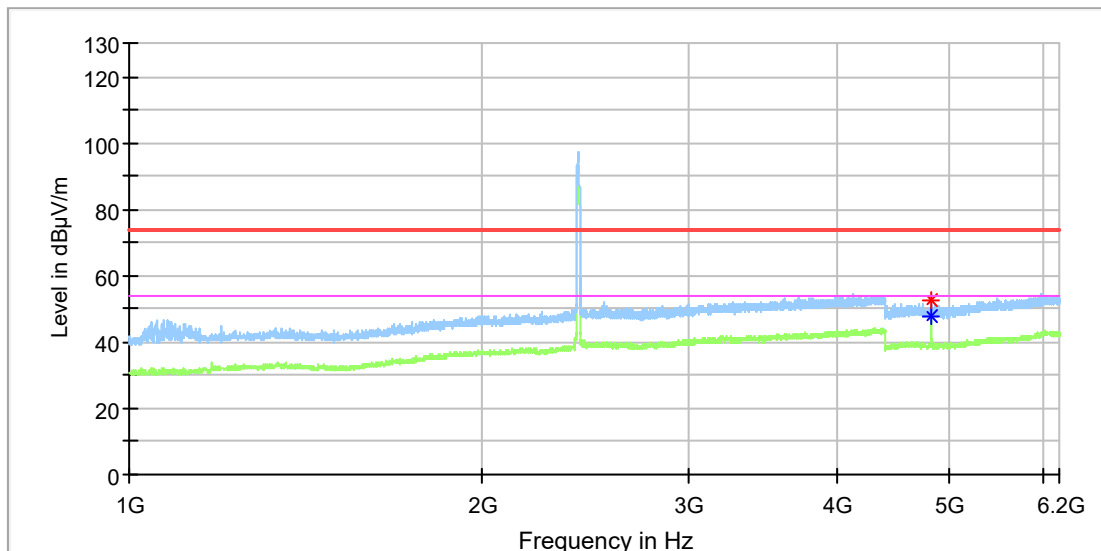
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.996923	22.35	40.00	17.65	100.0	V	0.0	-18.6
59.211923	22.95	40.00	17.05	100.0	V	106.0	-19.2
191.131923	21.52	43.50	21.98	100.0	V	3.0	-19.8
444.637692	29.74	46.00	16.26	100.0	V	284.0	-13.4
525.446154	29.53	46.00	16.47	100.0	V	284.0	-11.8
614.051923	28.81	46.00	17.19	100.0	V	138.0	-10.0
816.035769	28.79	46.00	17.21	100.0	V	300.0	-6.4

1GHz - 18GHz

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

EUT Information

EUT Name:	Robot Vacuum Cleaner
Model:	NER J20 Ultra
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168468654/A003649235-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

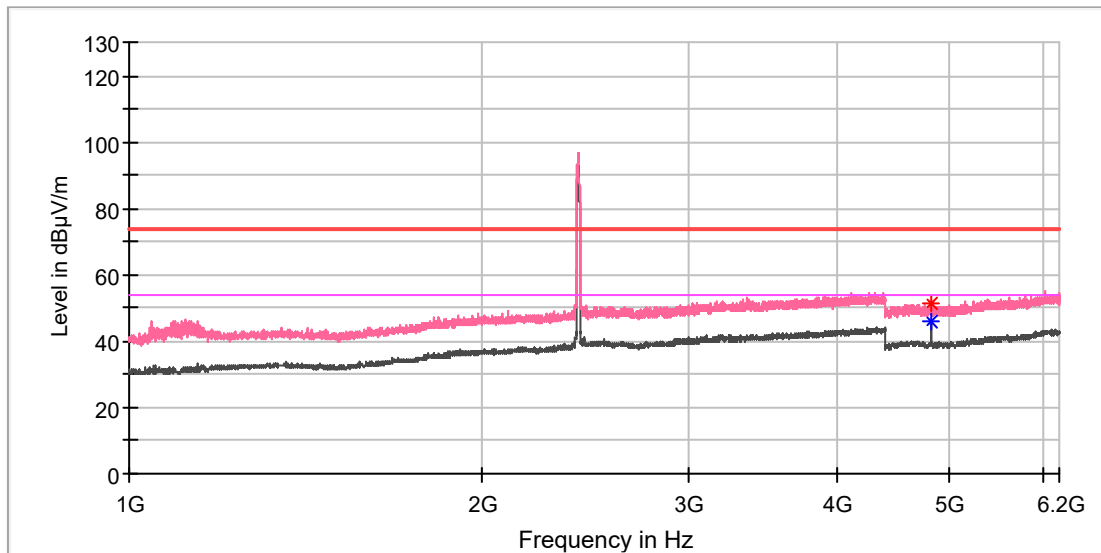
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	52.42	---	74.00	21.58	150.0	H	131.0	11.8
4824.000000	---	47.58	54.00	6.42	150.0	H	131.0	11.8

Final_Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

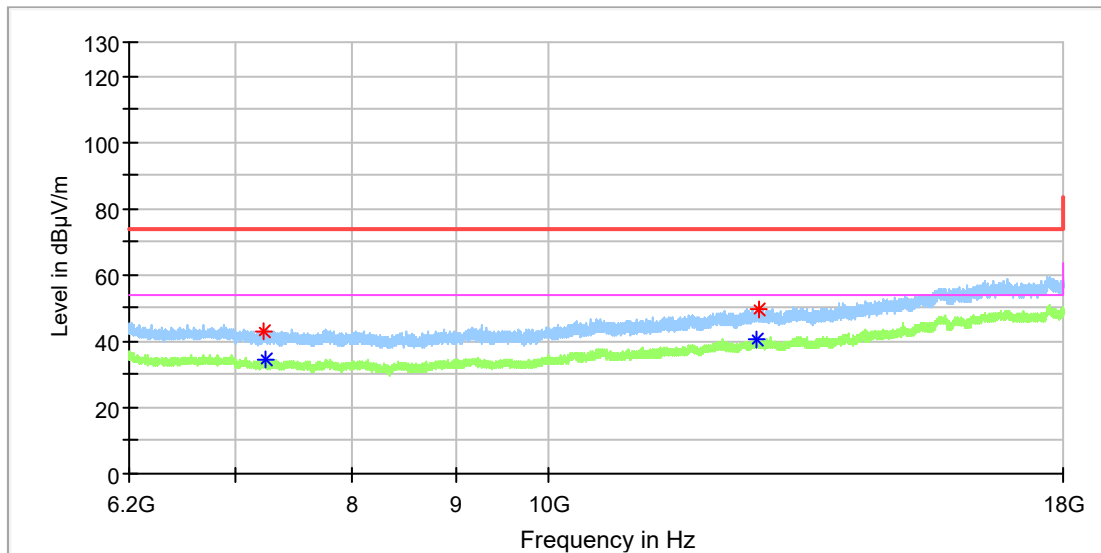
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	51.16	---	74.00	22.84	150.0	V	7.0	11.8
4824.000000	---	45.67	54.00	8.33	150.0	V	7.0	11.8

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

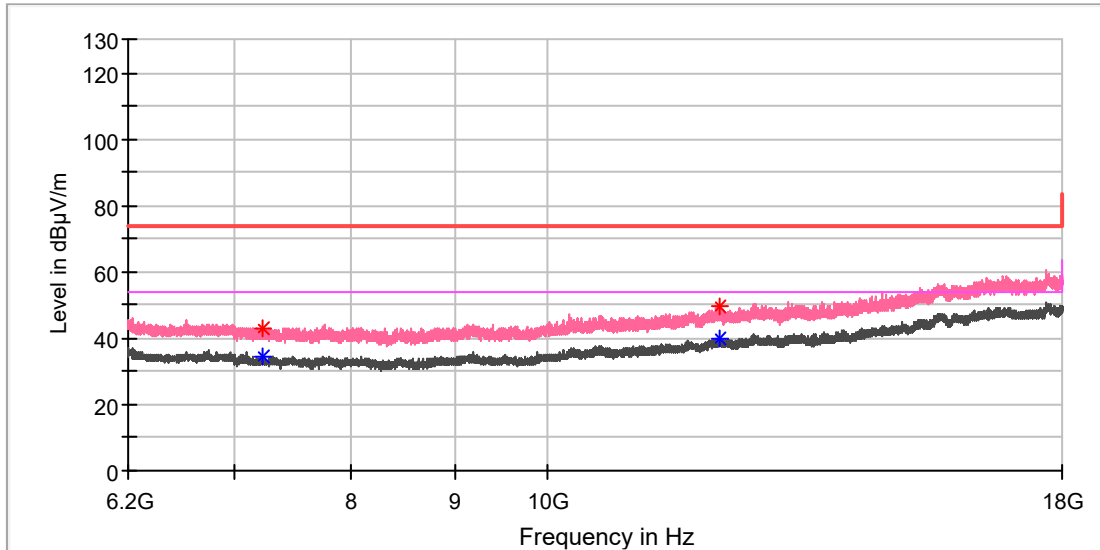
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7232.008333	42.96	---	74.00	31.04	150.0	H	35.0	8.6
7236.433333	---	34.42	54.00	19.58	150.0	H	48.0	8.6
12681.641667	---	40.55	54.00	13.45	150.0	H	156.0	15.1
12705.241667	49.75	---	74.00	24.25	150.0	H	23.0	15.1

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

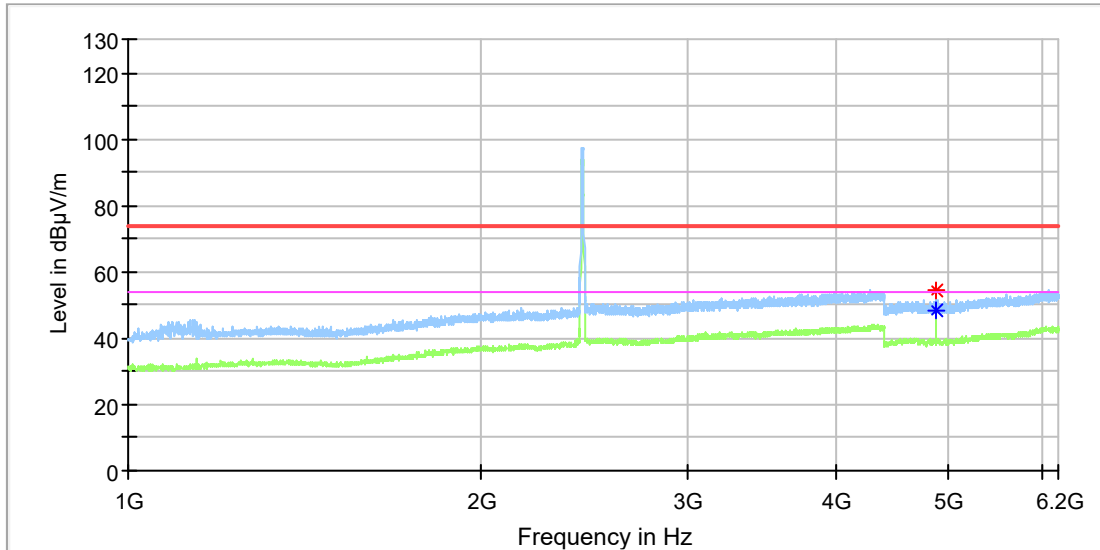
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7229.058333	43.22	---	74.00	30.78	150.0	V	352.0	8.6
7233.975000	---	34.66	54.00	19.34	150.0	V	221.0	8.6
12167.358333	49.37	---	74.00	24.63	150.0	V	221.0	14.5
12181.125000	---	40.20	54.00	13.80	150.0	V	221.0	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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

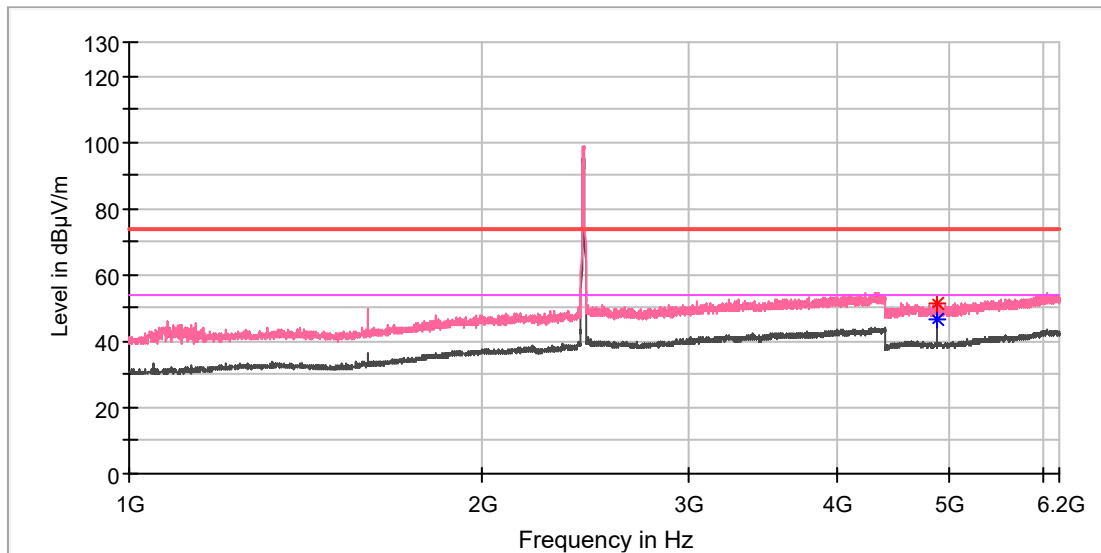
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.000000	54.16	---	74.00	19.84	150.0	H	146.0	11.8
4874.000000	---	48.51	54.00	5.49	150.0	H	146.0	11.8

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

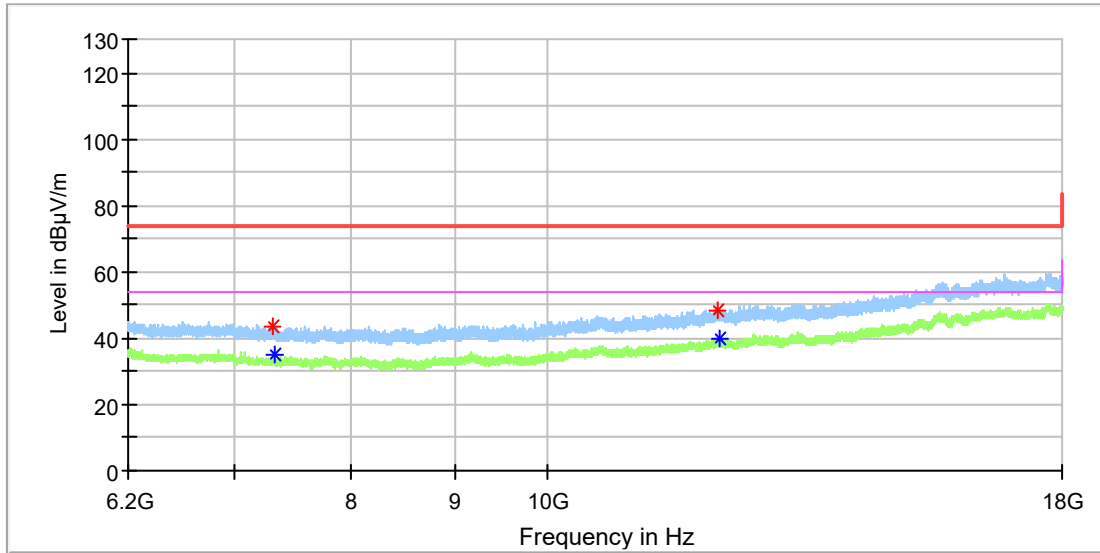
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.000000	51.63	---	74.00	22.37	150.0	V	17.0	11.8
4874.000000	---	46.63	54.00	7.37	150.0	V	17.0	11.8

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

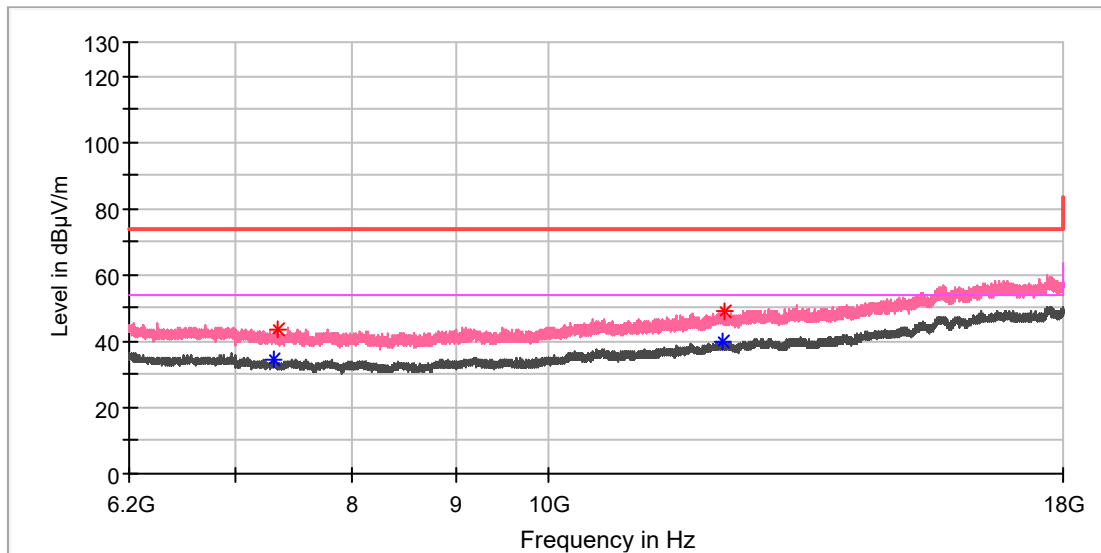
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7316.083333	43.64	---	74.00	30.36	150.0	H	208.0	8.2
7319.033333	---	34.88	54.00	19.12	150.0	H	220.0	8.2
12136.875000	48.64	---	74.00	25.36	150.0	H	359.0	14.3
12177.683333	---	39.74	54.00	14.26	150.0	H	329.0	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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

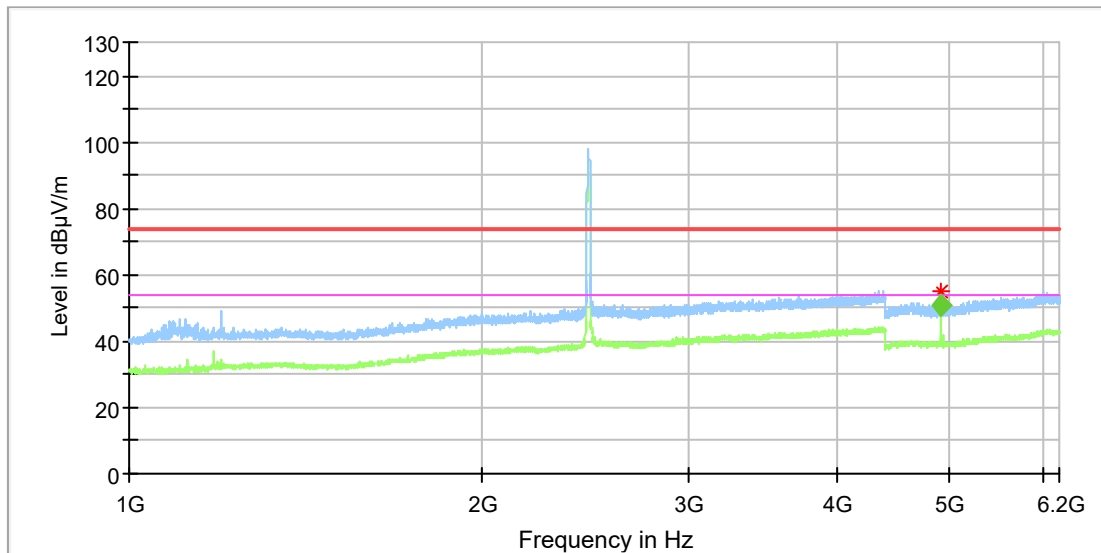
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7313.625000	---	34.55	54.00	19.45	150.0	V	48.0	8.2
7340.666667	43.47	---	74.00	30.53	150.0	V	109.0	8.1
12189.975000	---	39.85	54.00	14.15	150.0	V	11.0	14.6
12242.583333	48.97	---	74.00	25.03	150.0	V	265.0	14.7

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch11
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

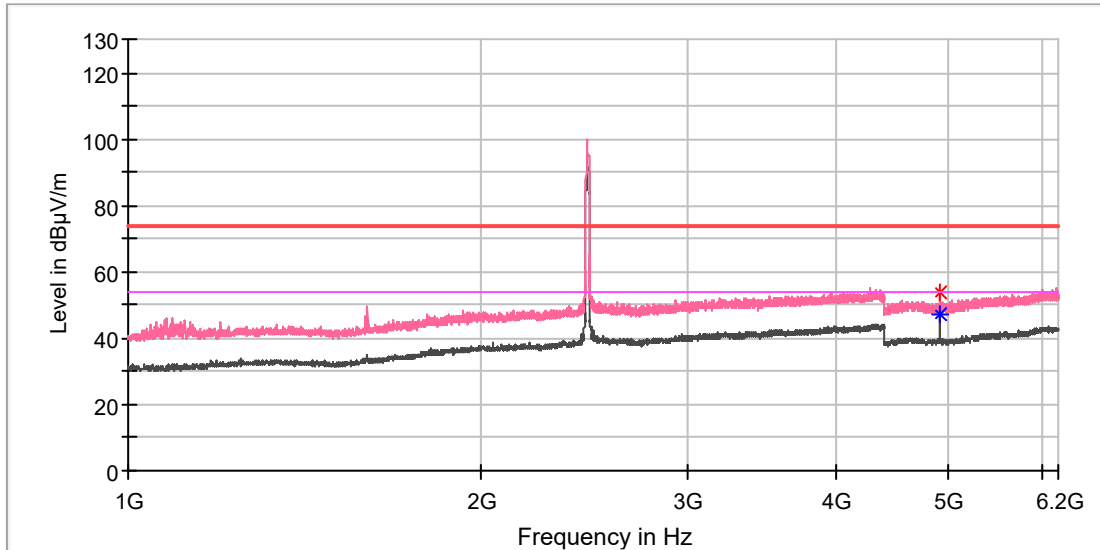
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	55.13	---	74.00	18.87	150.0	H	127.0	11.8

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4923.941667	50.81	54.00	3.19	150.0	H	125.0	11.8

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch11
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

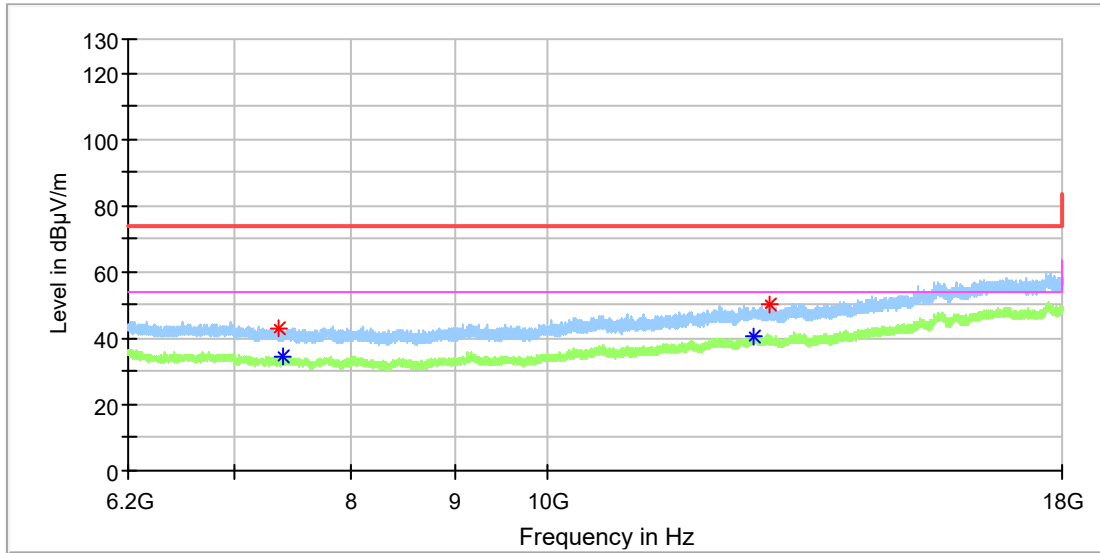
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	54.06	---	74.00	19.94	150.0	V	16.0	11.8
4924.000000	---	47.05	54.00	6.95	150.0	V	16.0	11.8

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch11
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

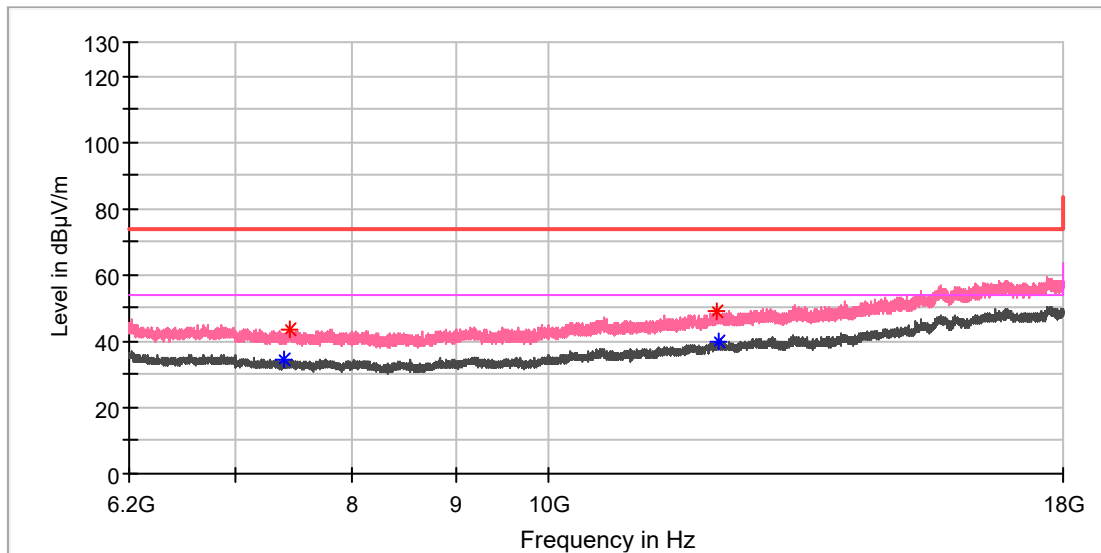
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7358.366667	42.83	---	74.00	31.17	150.0	H	216.0	8.1
7387.375000	---	34.64	54.00	19.36	150.0	H	86.0	8.2
12657.058333	---	40.58	54.00	13.42	150.0	H	170.0	15.0
12891.583333	50.39	---	74.00	23.61	150.0	H	27.0	15.5

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch11
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

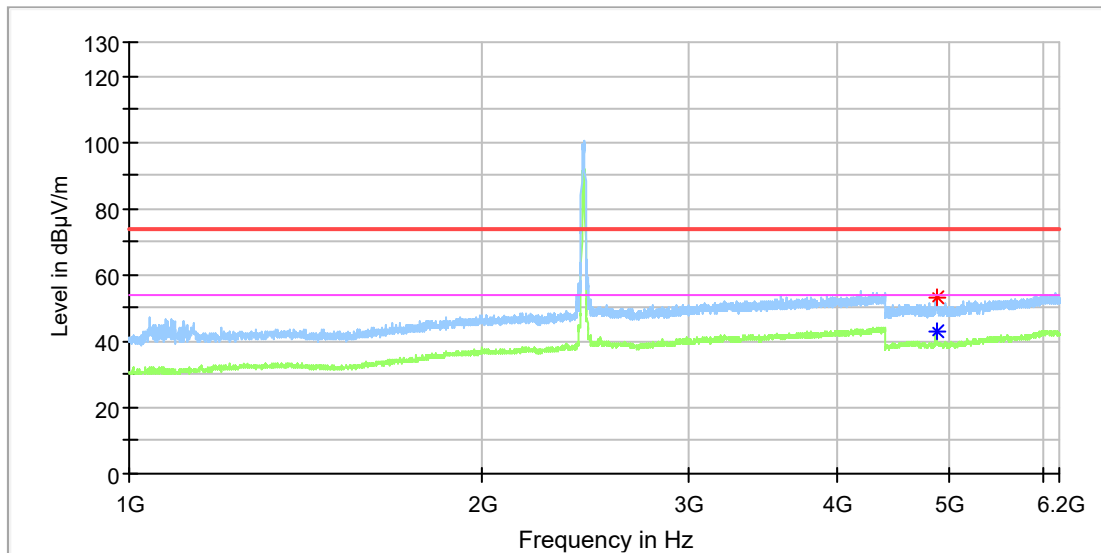
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7386.883333	---	34.64	54.00	19.36	150.0	V	85.0	8.2
7443.425000	43.33	---	74.00	30.67	150.0	V	348.0	8.5
12120.158333	48.95	---	74.00	25.05	150.0	V	170.0	14.3
12141.791667	---	40.13	54.00	13.87	150.0	V	264.0	14.4

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11g_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

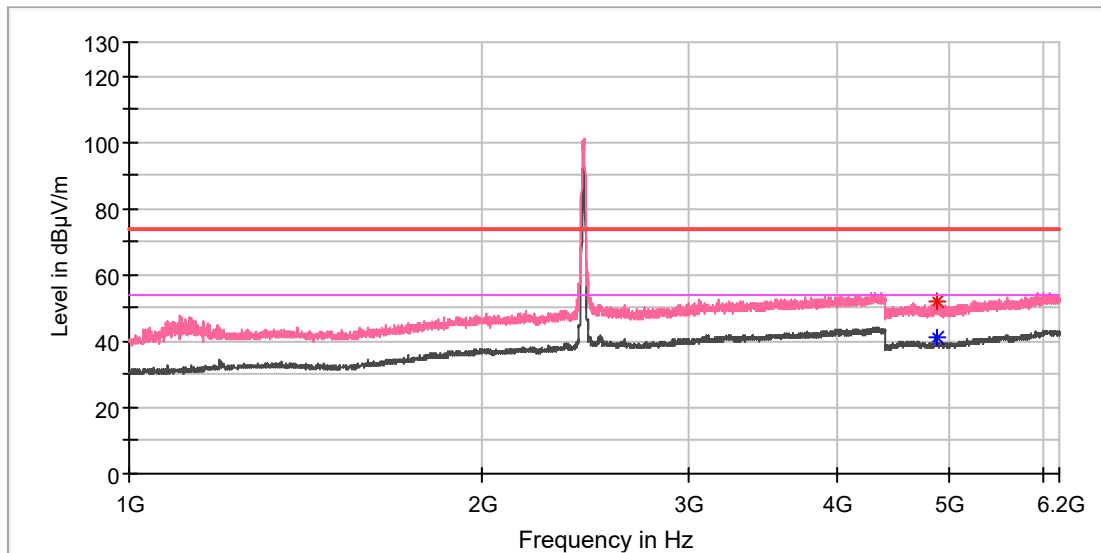
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4872.500000	53.48	---	74.00	20.52	150.0	H	0.0	11.8
4873.500000	---	43.07	54.00	10.93	150.0	H	172.0	11.8

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11g_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

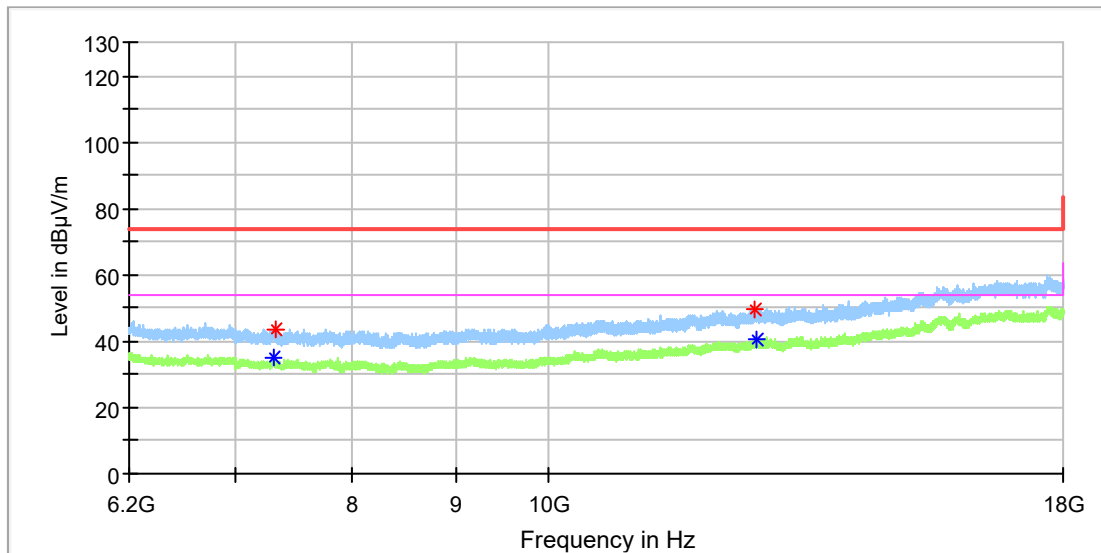
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4870.000000	---	41.15	54.00	12.85	150.0	V	18.0	11.8
4874.000000	52.15	---	74.00	21.85	150.0	V	6.0	11.8

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11g_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

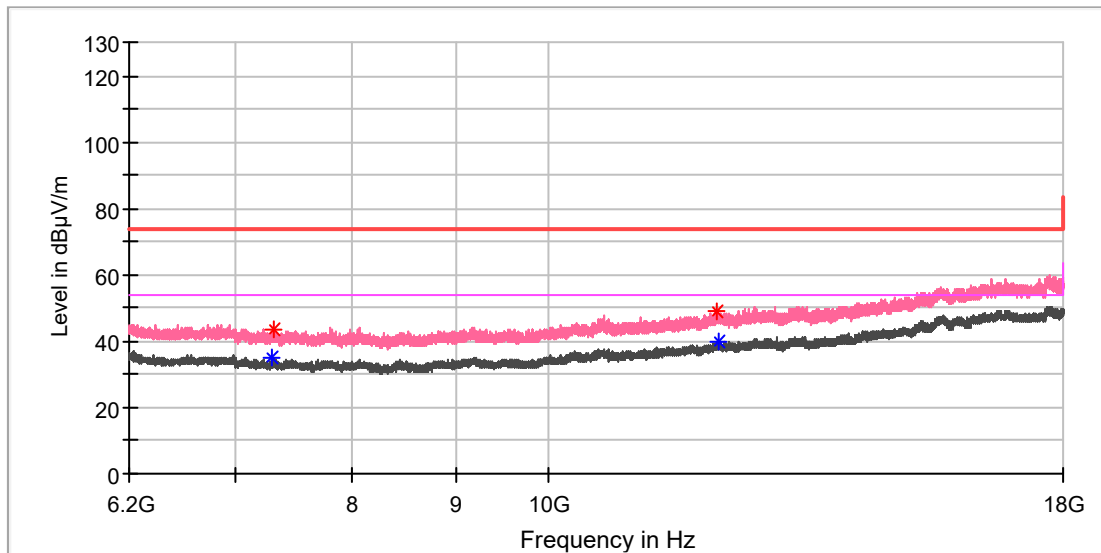
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7316.083333	---	35.06	54.00	18.94	150.0	H	208.0	8.2
7321.983333	43.24	---	74.00	30.76	150.0	H	359.0	8.2
12654.600000	49.84	---	74.00	24.16	150.0	H	359.0	15.0
12683.116667	---	40.50	54.00	13.50	150.0	H	352.0	15.1

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11g_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

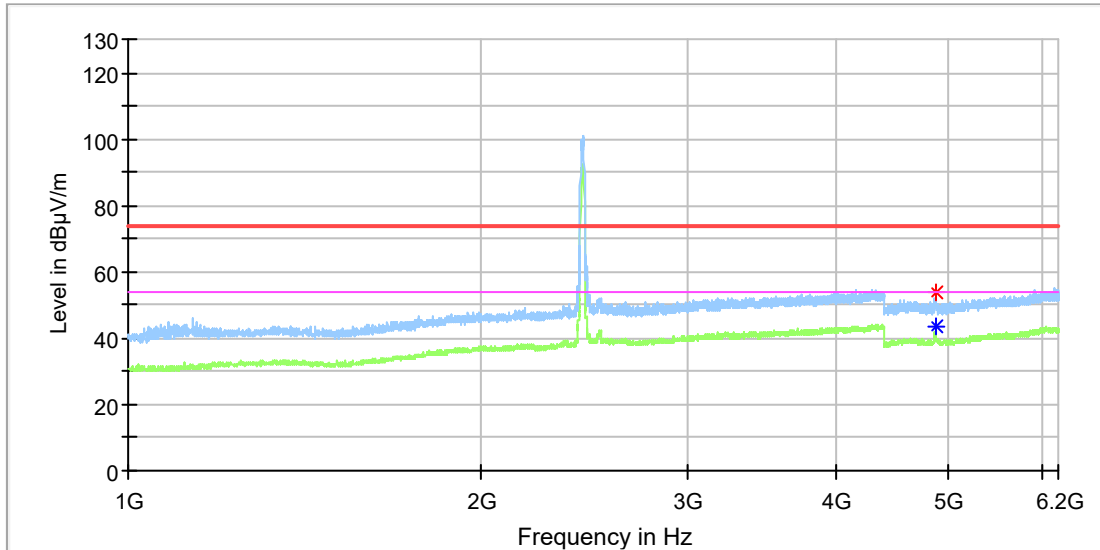
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7298.875000	---	35.10	54.00	18.90	150.0	V	0.0	8.3
7309.691667	43.39	---	74.00	30.61	150.0	V	342.0	8.2
12121.141667	48.75	---	74.00	25.25	150.0	V	277.0	14.3
12135.400000	---	39.84	54.00	14.16	150.0	V	107.0	14.3

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n20_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

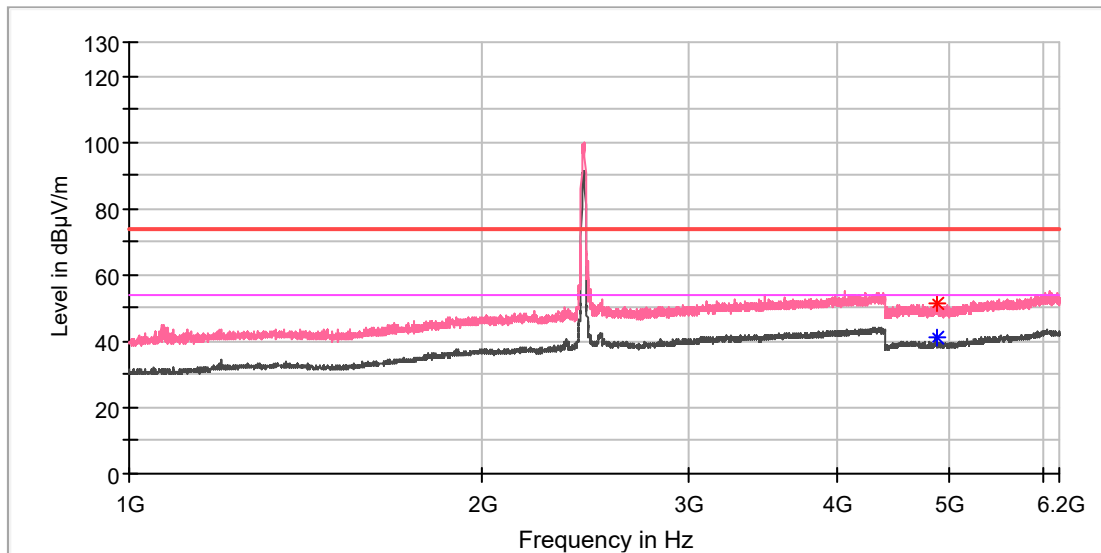
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4869.000000	---	43.26	54.00	10.74	150.0	H	13.0	11.8
4880.500000	53.73	---	74.00	20.27	150.0	H	184.0	11.8

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n20_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

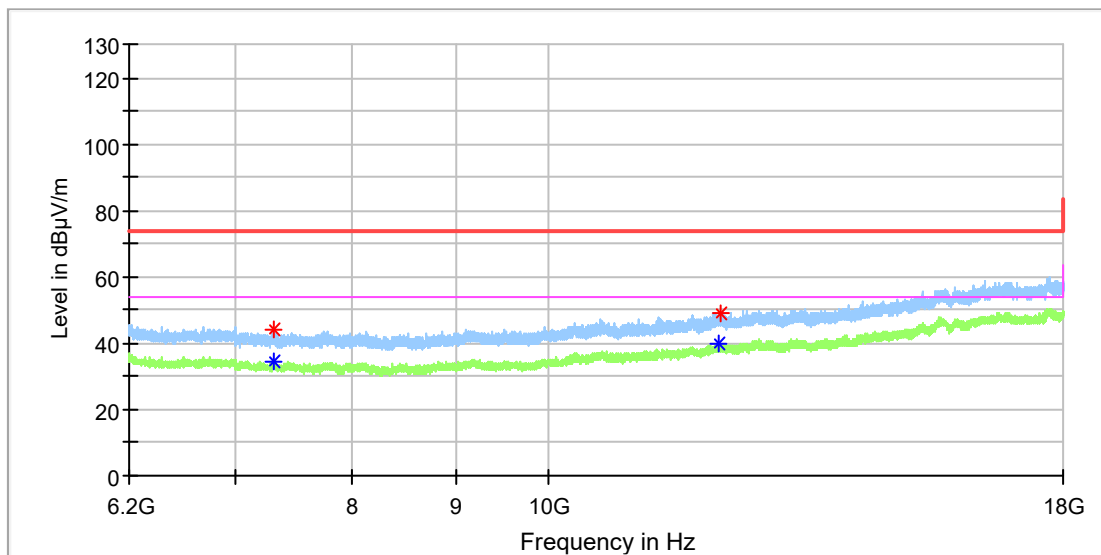
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.500000	---	41.00	54.00	13.00	150.0	V	15.0	11.8
4875.000000	51.14	---	74.00	22.86	150.0	V	10.0	11.8

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n20_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

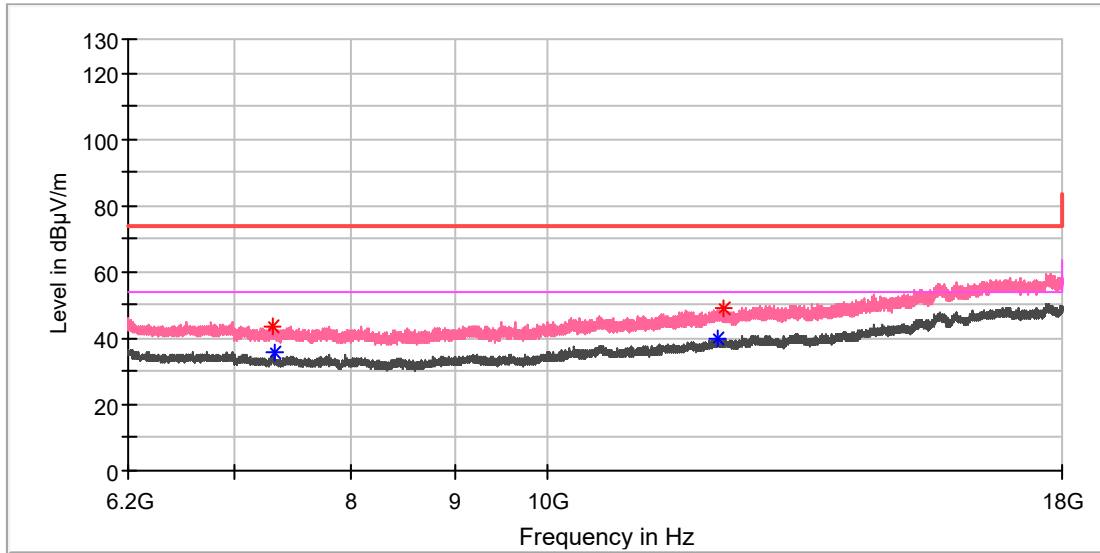
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7312.641667	---	34.76	54.00	19.24	150.0	H	265.0	8.2
7316.083333	43.99	---	74.00	30.01	150.0	H	204.0	8.2
12140.316667	---	39.70	54.00	14.30	150.0	H	358.0	14.4
12170.800000	49.13	---	74.00	24.87	150.0	H	327.0	14.5

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n20_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

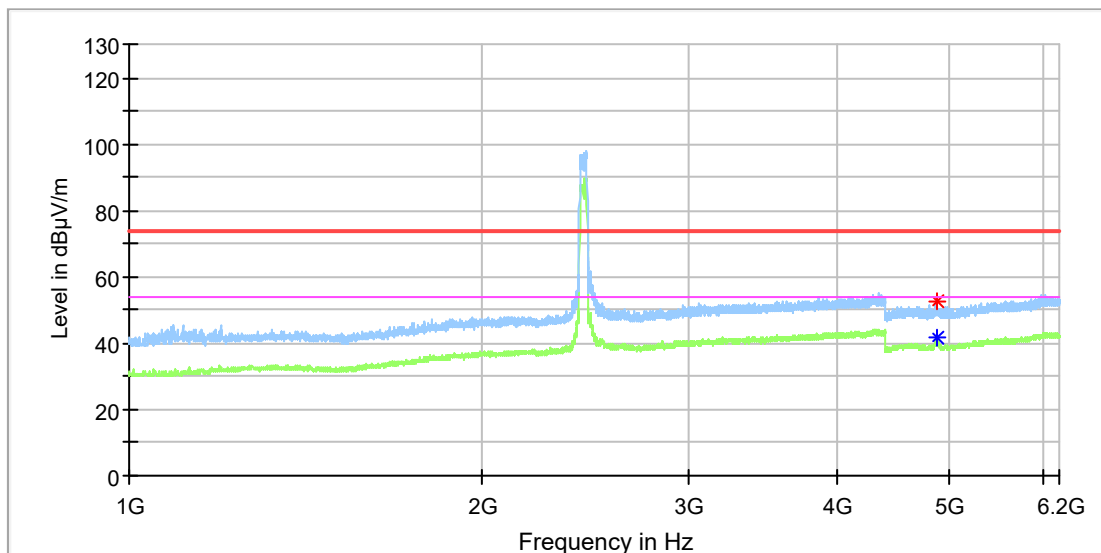
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7310.183333	43.70	---	74.00	30.30	150.0	V	106.0	8.2
7318.541667	---	35.68	54.00	18.32	150.0	V	58.0	8.2
12150.641667	---	39.89	54.00	14.11	150.0	V	203.0	14.4
12222.425000	49.08	---	74.00	24.92	150.0	V	71.0	14.7

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n40_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

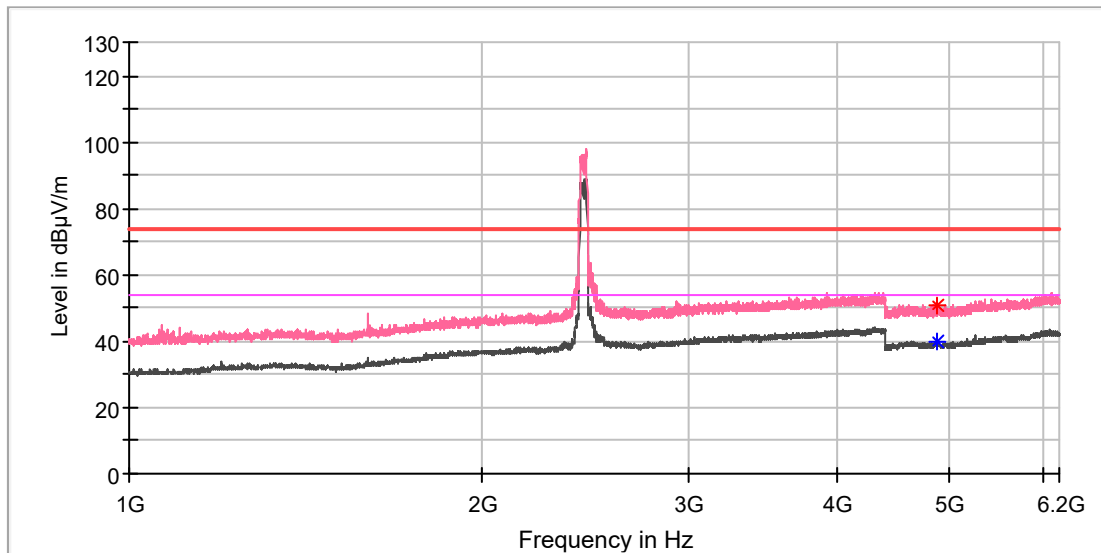
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4870.500000	---	41.81	54.00	12.19	150.0	H	130.0	11.8
4876.000000	52.84	---	74.00	21.16	150.0	H	12.0	11.8

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n40_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

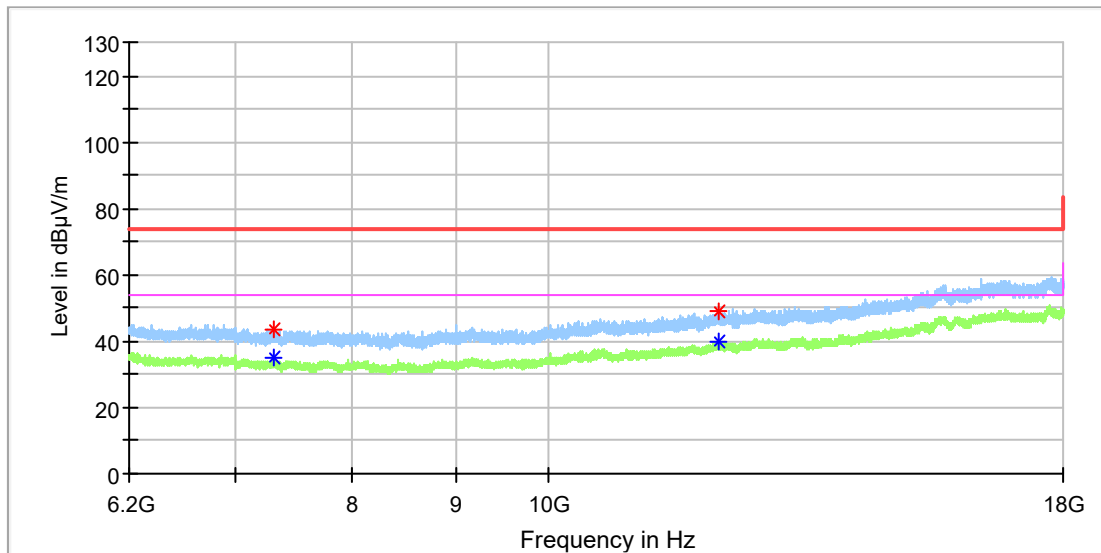
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4871.000000	---	39.91	54.00	14.09	150.0	V	17.0	11.8
4872.000000	51.06	---	74.00	22.94	150.0	V	43.0	11.8

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n40_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

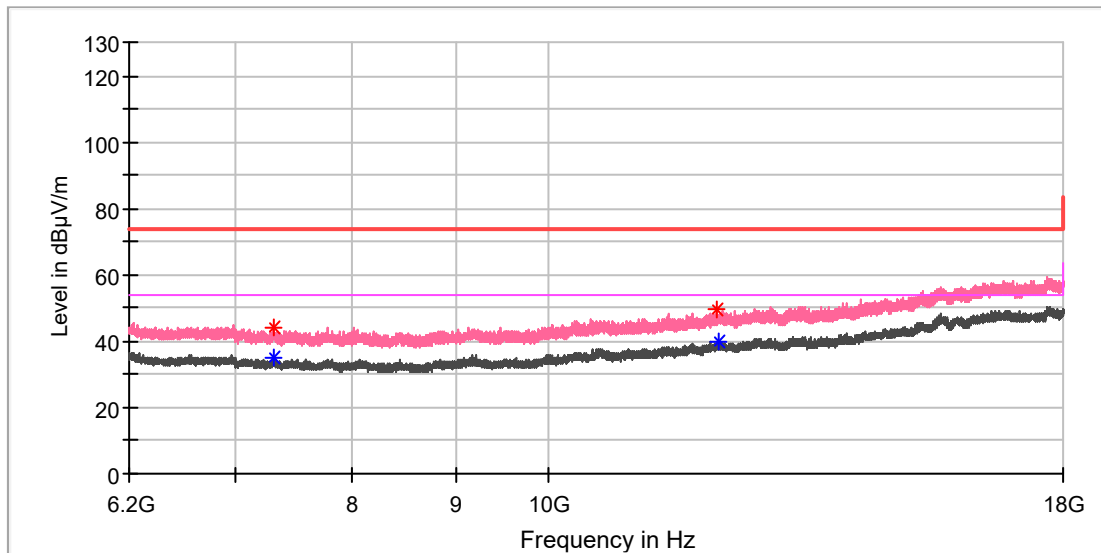
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7301.825000	---	34.77	54.00	19.23	150.0	H	133.0	8.3
7304.775000	43.38	---	74.00	30.62	150.0	H	24.0	8.3
12138.841667	---	40.07	54.00	13.93	150.0	H	2.0	14.4
12147.200000	48.97	---	74.00	25.03	150.0	H	24.0	14.4

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n40_Ch6
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

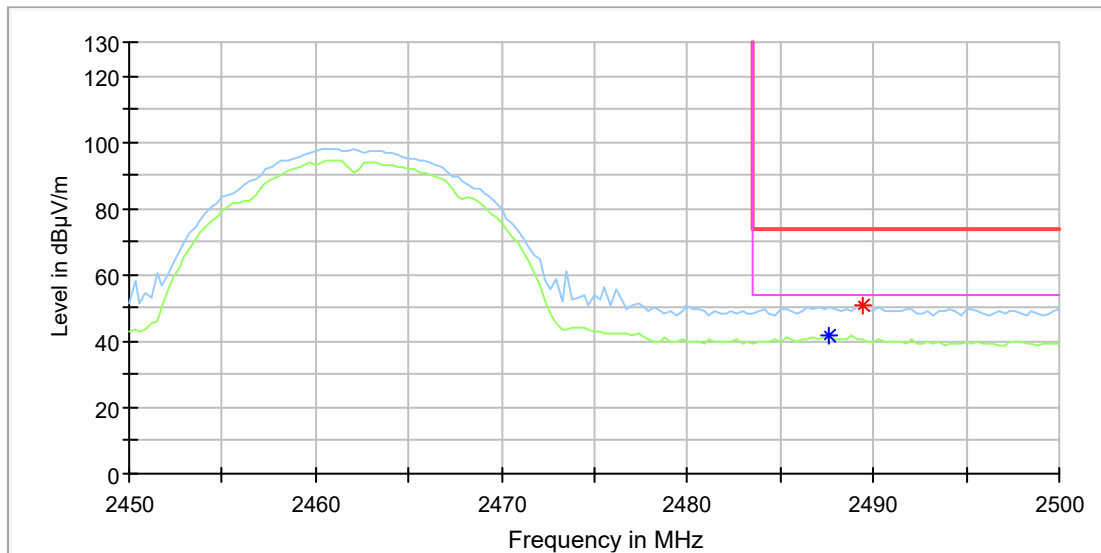
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7304.283333	---	34.96	54.00	19.04	150.0	V	315.0	8.3
7310.675000	43.91	---	74.00	30.09	150.0	V	107.0	8.2
12128.516667	49.66	---	74.00	24.34	150.0	V	338.0	14.3
12133.433333	---	39.87	54.00	14.13	150.0	V	338.0	14.3

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11b_Ch11
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 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)
2487.647059	---	41.61	54.00	12.39	150.0	H	118.0	7.4
2489.411765	50.55	---	74.00	23.45	150.0	H	118.0	7.4

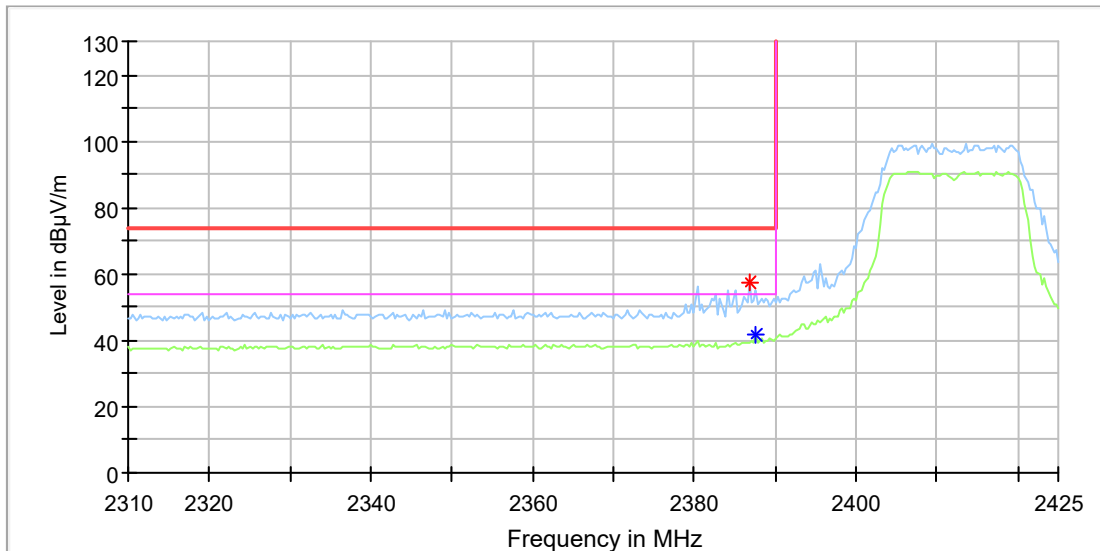
Final Result

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: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11g_Ch1
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 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)
2386.764706	57.30	---	74.00	16.70	150.0	H	158.0	7.0
2387.647059	---	41.82	54.00	12.18	150.0	H	111.0	7.0

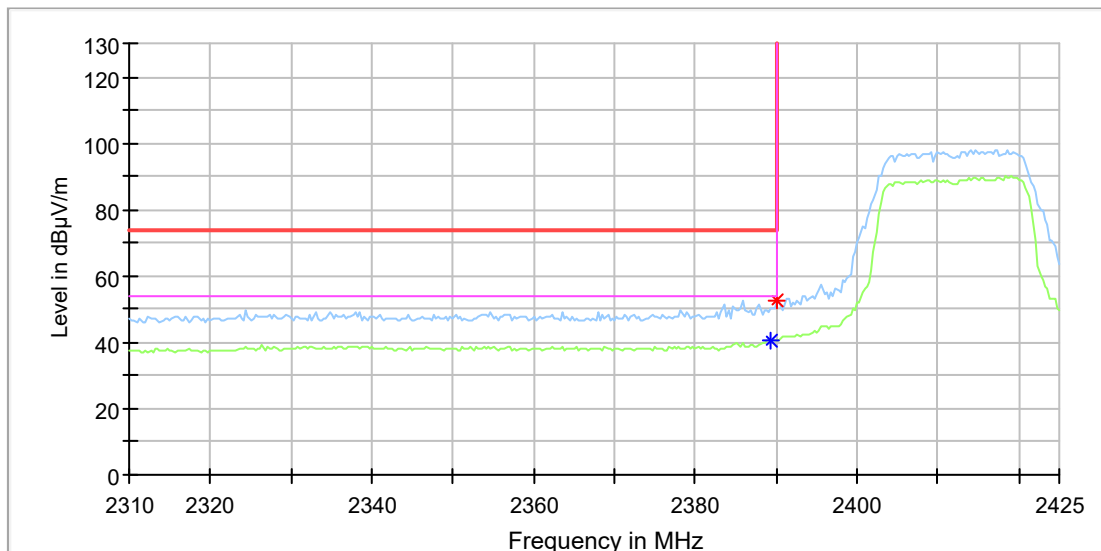
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Wi-Fi 802.11 n(HT20) mode

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n20_Ch1
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

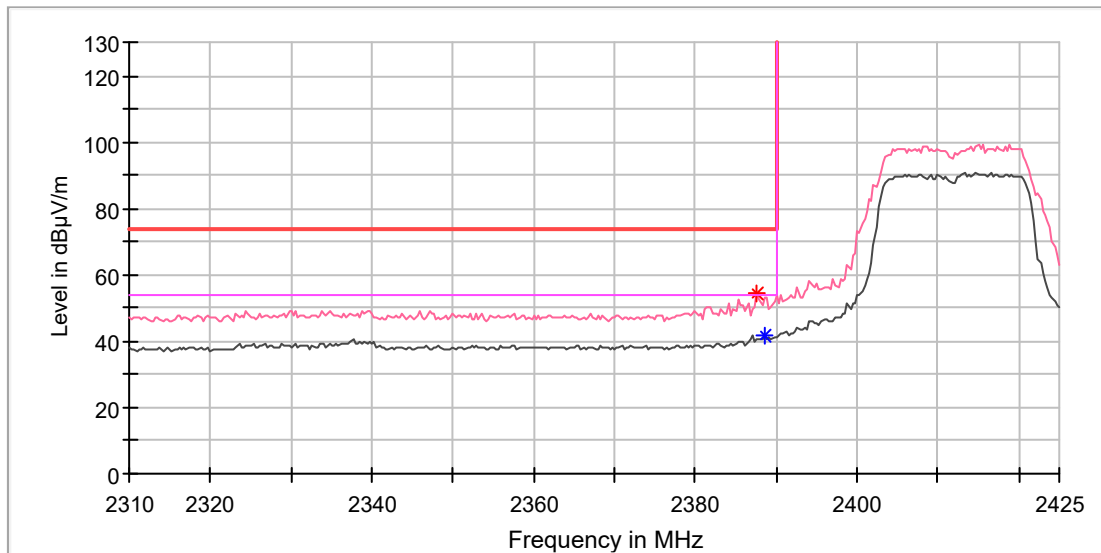
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.411765	---	40.72	54.00	13.28	150.0	H	87.0	7.0
2390.000000	52.34	---	74.00	21.66	150.0	H	127.0	7.0

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n20_Ch1
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

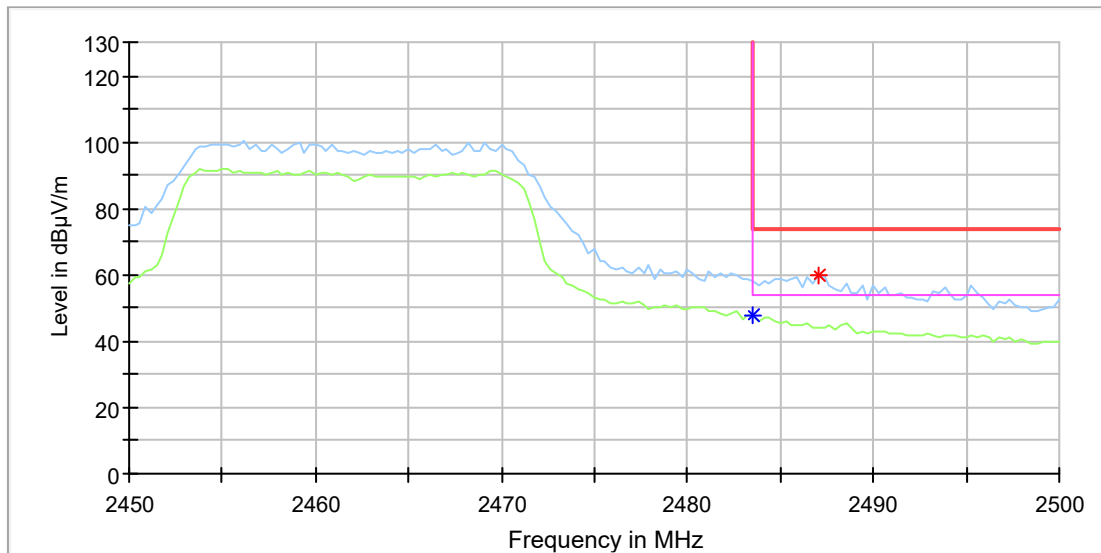
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2387.647059	54.48	---	74.00	19.52	150.0	V	119.0	7.0
2388.529412	---	41.60	54.00	12.40	150.0	V	119.0	7.0

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n20_Ch11
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 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	---	48.03	54.00	5.97	150.0	H	26.0	7.4
2487.058824	59.75	---	74.00	14.25	150.0	H	108.0	7.4

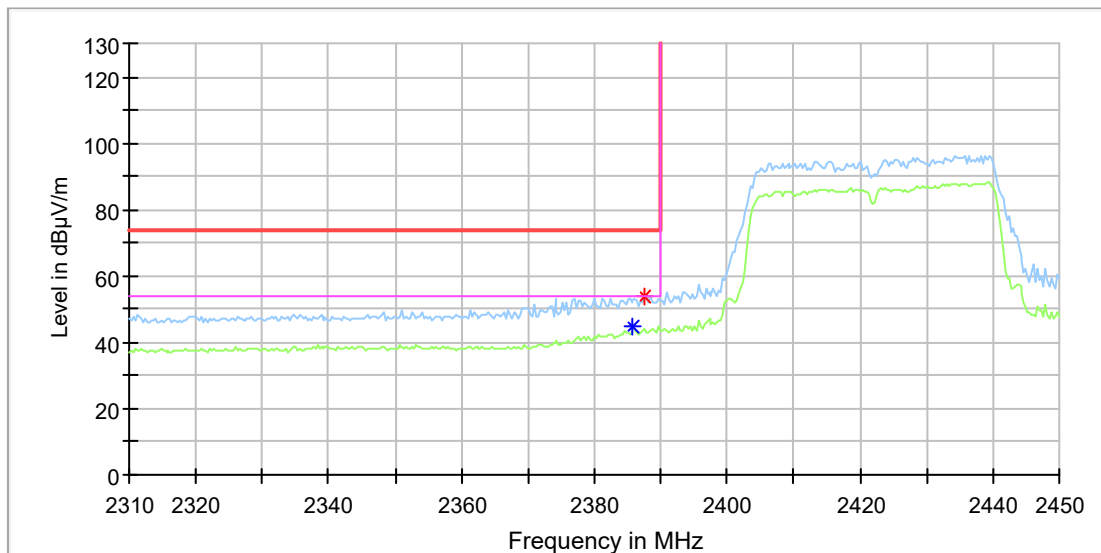
Final Result

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

Wi-Fi 802.11 n(HT40) mode

EUT Information

EUT Name:	Robot Vacuum Cleaner
Model:	NER J20 Ultra
Test Mode:	WIFI 2.4G_11n40_Ch3
Order No/Sample No:	168468654/A003649235-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

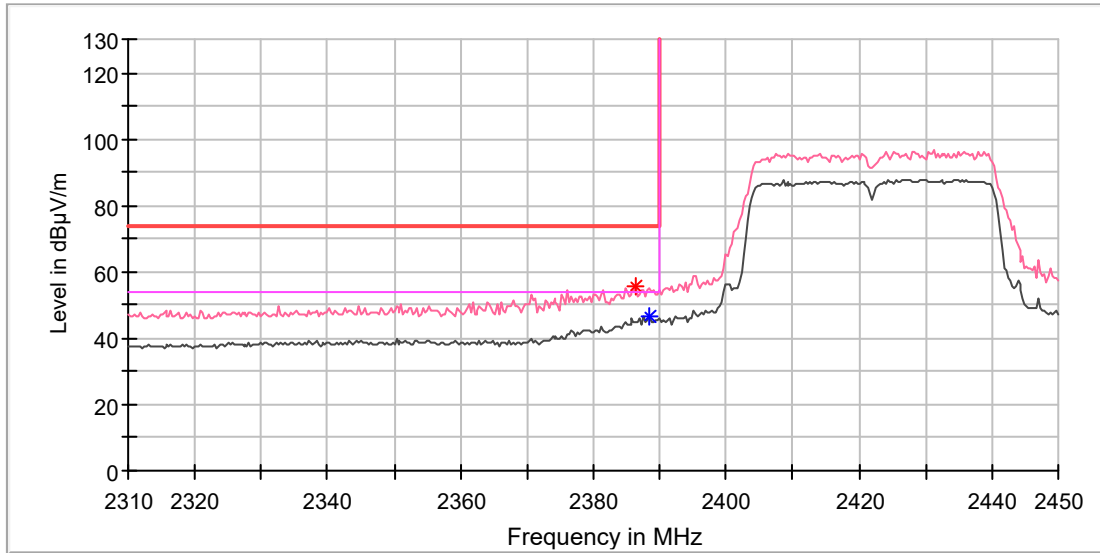
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2385.882353	---	44.72	54.00	9.28	150.0	H	128.0	7.0
2387.647059	53.77	---	74.00	20.23	150.0	H	100.0	7.0

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n40_Ch3
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

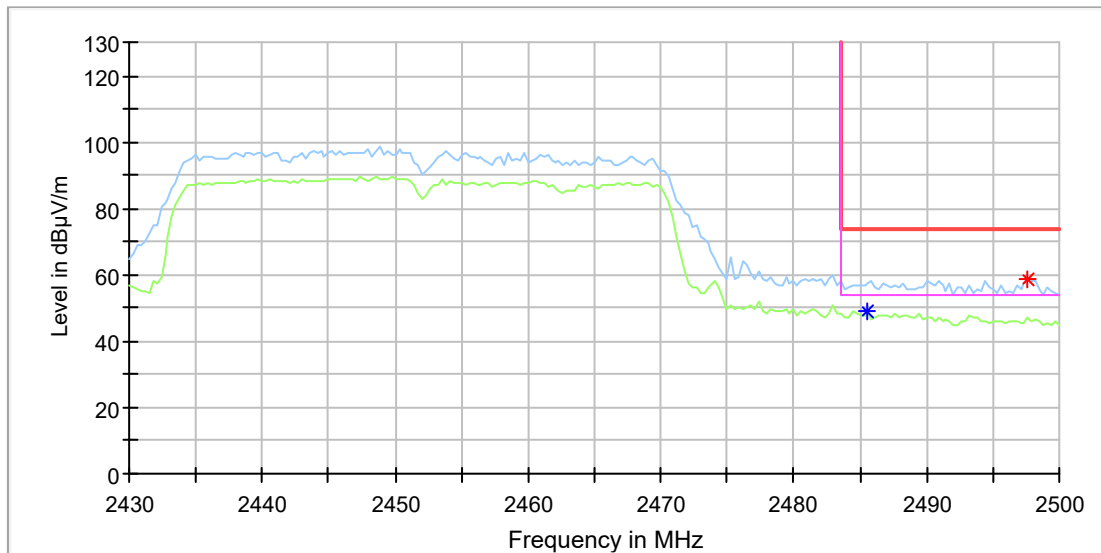
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2386.470588	55.39	---	74.00	18.61	150.0	V	290.0	7.0
2388.529412	---	46.52	54.00	7.48	150.0	V	110.0	7.0

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n40_Ch9
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

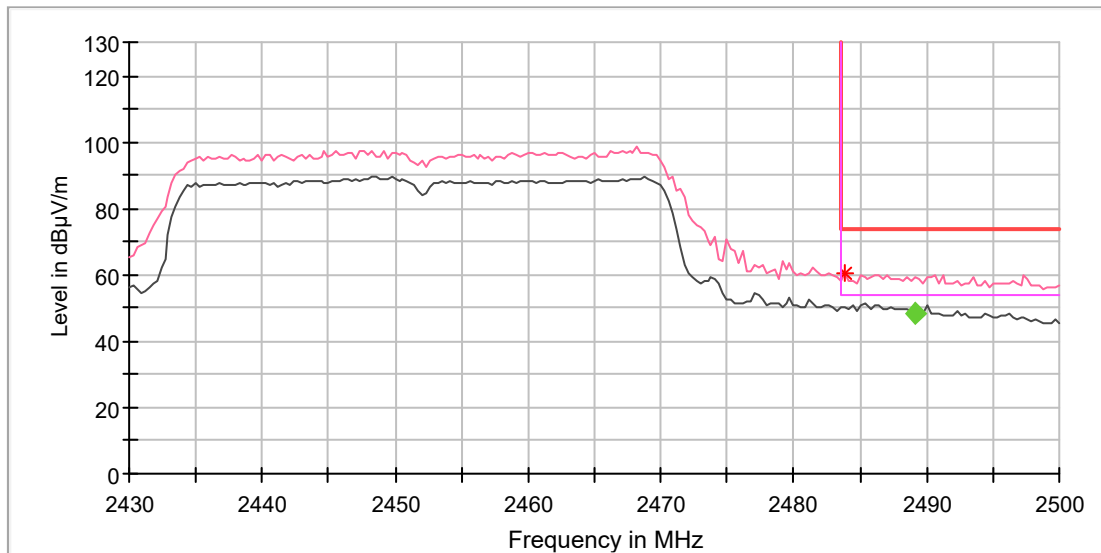
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2485.588235	---	48.78	54.00	5.22	150.0	H	176.0	7.4
2497.647059	58.49	---	74.00	15.51	150.0	H	118.0	7.4

Final Result

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

EUT Information

EUT Name: Robot Vacuum Cleaner
 Model: NER J20 Ultra
 Test Mode: WIFI 2.4G_11n40_Ch9
 Order No/Sample No: 168468654/A003649235-001
 Test Voltage: Battery
 Remark: Temp 23 Humi:56%
 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	60.34	---	74.00	13.66	150.0	V	262.0	7.4

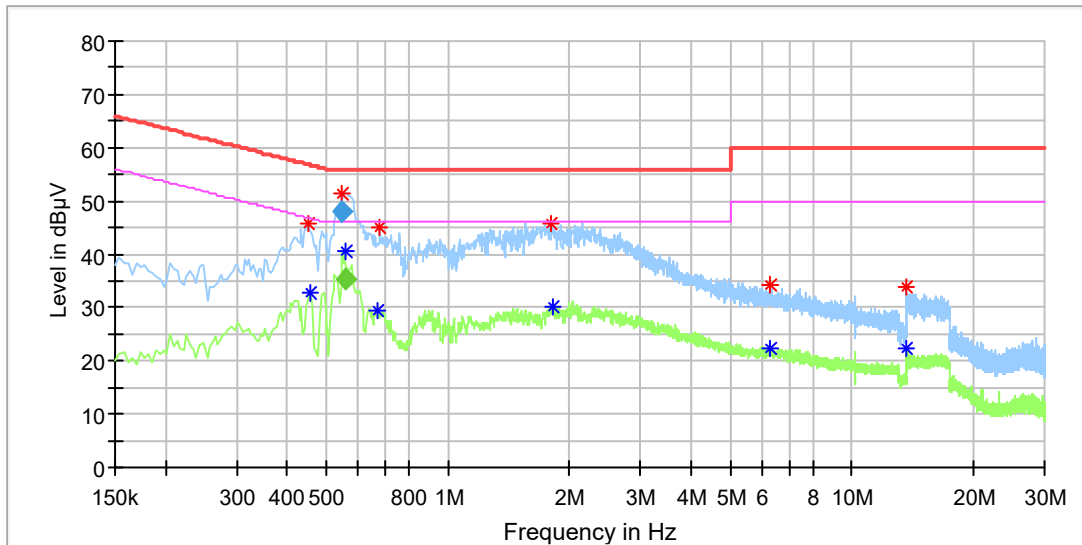
Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2489.117647	48.41	54.00	5.59	145.0	V	-5.0	7.4

Appendix A.8: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name	Robot Vacuum Cleaner
Order Number:	168468660
Model:	NER J20 Ultra
Test Mode:	Charging + 2.4GHz Wi-Fi Link
Test Voltage:	AC 120V/60Hz
Test Standard:	FCC Part 15
Test By:/Review By:	Junhua Sun/ Gary Chen
Tem./Hum./Pressure:	23.3°C/54.8%/101kPa
Remark:	SR1



Critical Freqs

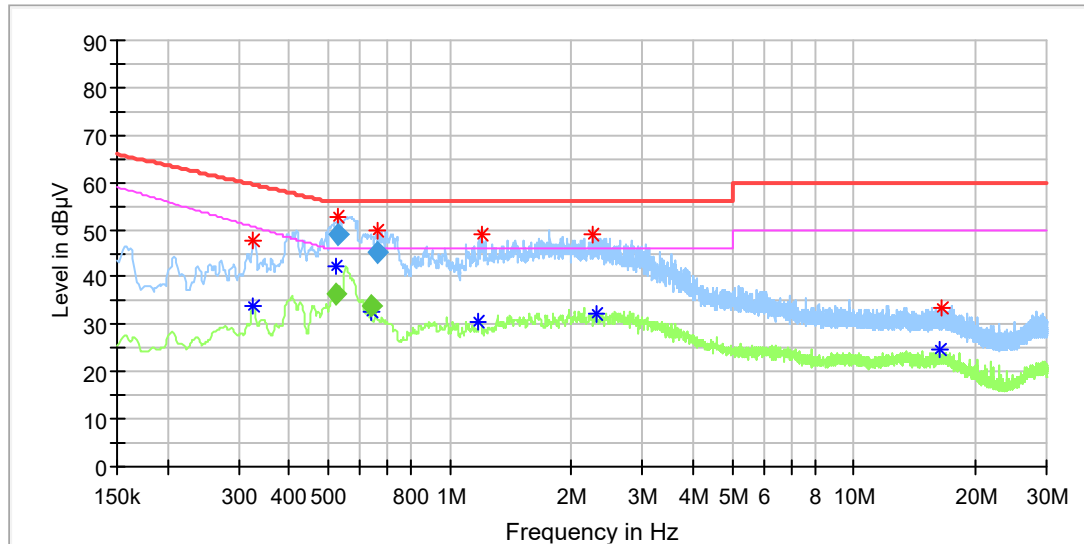
Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.450000	45.91	---	56.88	10.97	L1	9.9
0.458000	---	32.62	46.73	14.10	L1	9.9
0.546500	51.42	---	56.00	4.58	L1	9.9
0.561500	---	40.41	46.00	5.59	L1	9.9
0.672000	---	29.58	46.00	16.42	L1	9.8
0.680000	44.85	---	56.00	11.15	L1	9.8
1.792000	45.76	---	56.00	10.24	L1	9.8
1.820000	---	30.32	46.00	15.68	L1	9.8
6.256000	---	22.40	50.00	27.60	L1	9.9
6.292000	34.05	---	60.00	25.95	L1	9.9
13.688000	---	22.39	50.00	27.61	L1	10.1
13.688000	33.86	---	60.00	26.14	L1	10.1

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.546500	47.86	---	56.00	8.14	1000.0	9.000	L1	9.9
0.561500	---	35.35	46.00	10.65	1000.0	9.000	L1	9.9

EUT Information

EUT Name: Robot Vacuum Cleaner
 Order Number: 168468660
 Model: NER J20 Ultra
 Test Mode: Charging + 2.4GHz Wi-Fi Link
 Test Voltage: AC 120V/60Hz
 Test Standard: FCC Part 15
 Test By./Review By: Junhua Sun/ Gary Chen
 Tem./Hum./Pressure: 23.3°C/54.8%/101kPa
 Remark: SR1



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.325783	---	33.77	50.63	16.86	N	9.7
0.327442	47.64	---	59.52	11.88	N	9.7
0.525633	---	42.14	46.00	3.86	N	9.7
0.529925	52.68	---	56.00	3.32	N	9.7
0.642792	---	32.70	46.00	13.30	N	9.8
0.662592	49.78	---	56.00	6.22	N	9.8
1.181483	---	30.64	46.00	15.36	N	9.7
1.204700	49.17	---	56.00	6.83	N	9.7
2.252767	49.14	---	56.00	6.86	N	10.0
2.304175	---	32.43	46.00	13.57	N	10.0
16.348600	---	24.85	50.00	25.15	N	10.2
16.537650	33.54	---	60.00	26.46	N	10.2

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.525633	---	36.43	46.00	9.57	1000.0	9.000	N	9.7
0.529925	49.16	---	56.00	6.84	1000.0	9.000	N	9.7
0.642792	---	34.08	46.00	11.92	1000.0	9.000	N	9.8
0.662592	45.21	---	56.00	10.79	1000.0	9.000	N	9.8