

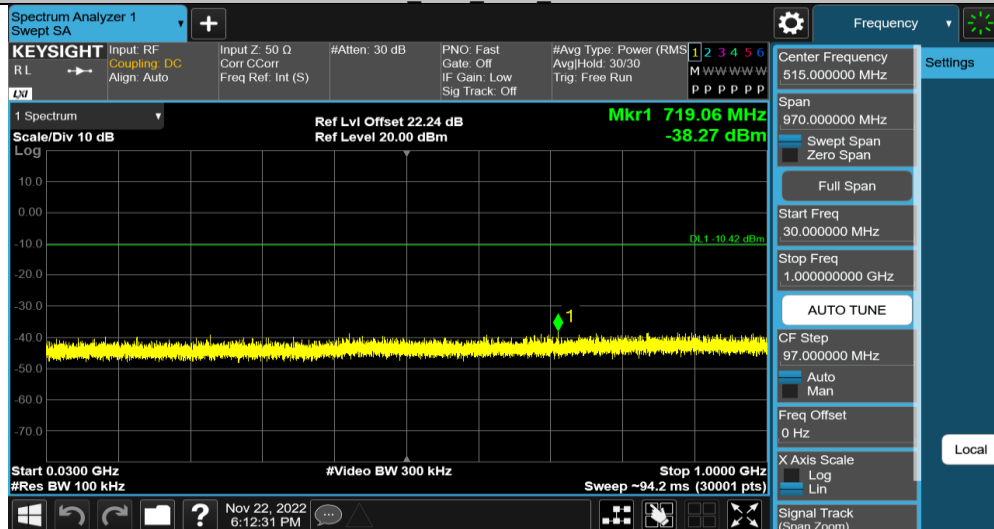
Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	9.58	9.58	---	PASS
			30~1000	9.58	-38.27	≤-10.42	PASS
			1000~26500	9.58	-28.76	≤-10.42	PASS
		2437	Reference	8.80	8.80	---	PASS
			30~1000	8.80	-38.33	≤-11.2	PASS
			1000~26500	8.80	-28.85	≤-11.2	PASS
		2462	Reference	8.46	8.46	---	PASS
			30~1000	8.46	-37.48	≤-11.54	PASS
			1000~26500	8.46	-28.91	≤-11.54	PASS
11G	Ant1	2412	Reference	2.17	2.17	---	PASS
			30~1000	2.17	-38.07	≤-17.83	PASS
			1000~26500	2.17	-29.13	≤-17.83	PASS
		2437	Reference	4.74	4.74	---	PASS
			30~1000	4.74	-38.05	≤-15.26	PASS
			1000~26500	4.74	-28.59	≤-15.26	PASS
		2462	Reference	3.17	3.17	---	PASS
			30~1000	3.17	-38.43	≤-16.83	PASS
			1000~26500	3.17	-29.23	≤-16.83	PASS
11N20SISO	Ant1	2412	Reference	4.23	4.23	---	PASS
			30~1000	4.23	-38.21	≤-15.77	PASS
			1000~26500	4.23	-28.48	≤-15.77	PASS
		2437	Reference	4.08	4.08	---	PASS
			30~1000	4.08	-38.59	≤-15.92	PASS
			1000~26500	4.08	-29.5	≤-15.92	PASS
		2462	Reference	6.70	6.70	---	PASS
			30~1000	6.70	-37.58	≤-13.3	PASS
			1000~26500	6.70	-29.41	≤-13.3	PASS
11N40SISO	Ant1	2422	Reference	4.75	4.75	---	PASS
			30~1000	4.75	-37.64	≤-15.25	PASS
			1000~26500	4.75	-29.37	≤-15.25	PASS
		2437	Reference	3.82	3.82	---	PASS
			30~1000	3.82	-37.64	≤-16.18	PASS
			1000~26500	3.82	-28.56	≤-16.18	PASS
		2452	Reference	2.26	2.26	---	PASS
			30~1000	2.26	-38.32	≤-17.74	PASS
			1000~26500	2.26	-29.53	≤-17.74	PASS

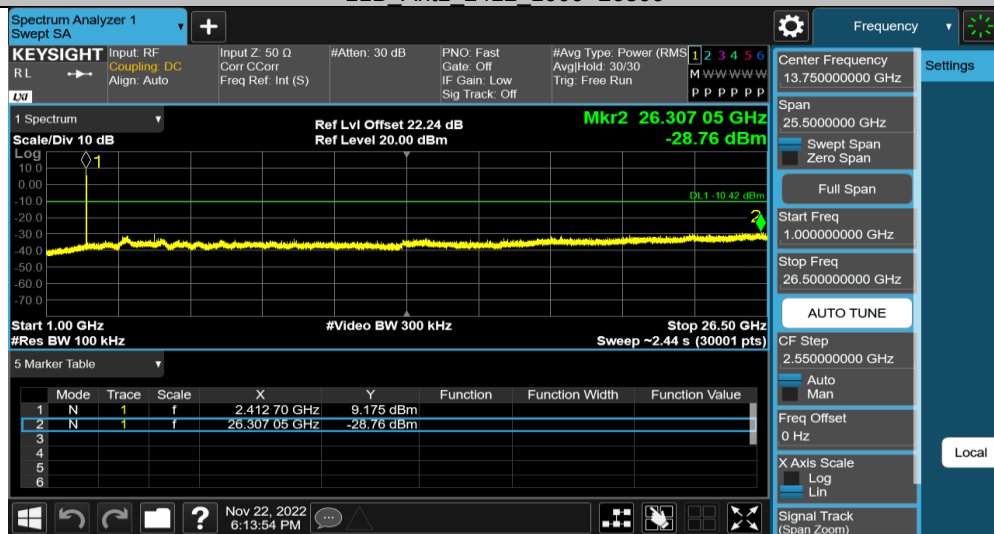
11B_Ant1_2412_0-Reference



11B_Ant1_2412_30-1000



11B_Ant1_2412_1000-26500



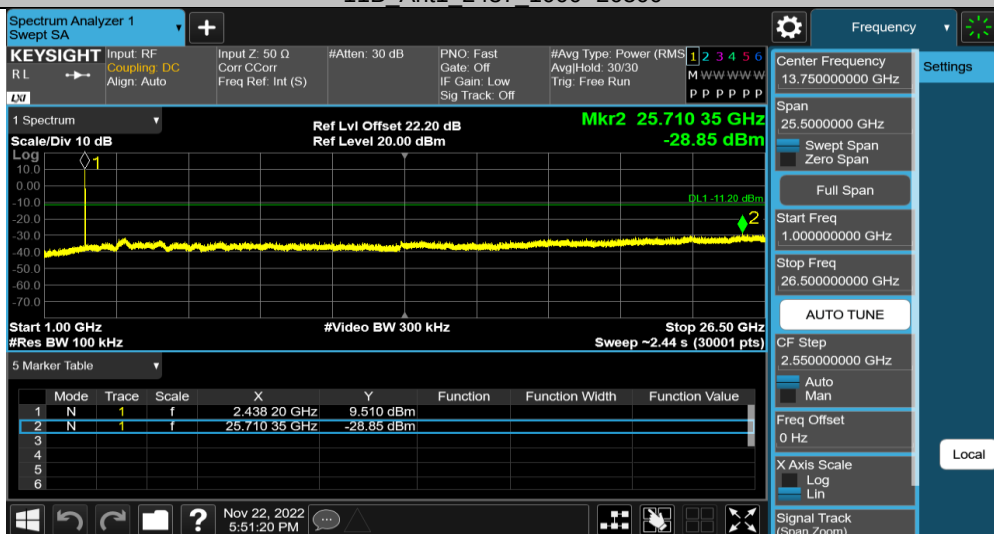
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11B_Ant1_2437_30-1000



11B_Ant1_2437_1000-26500



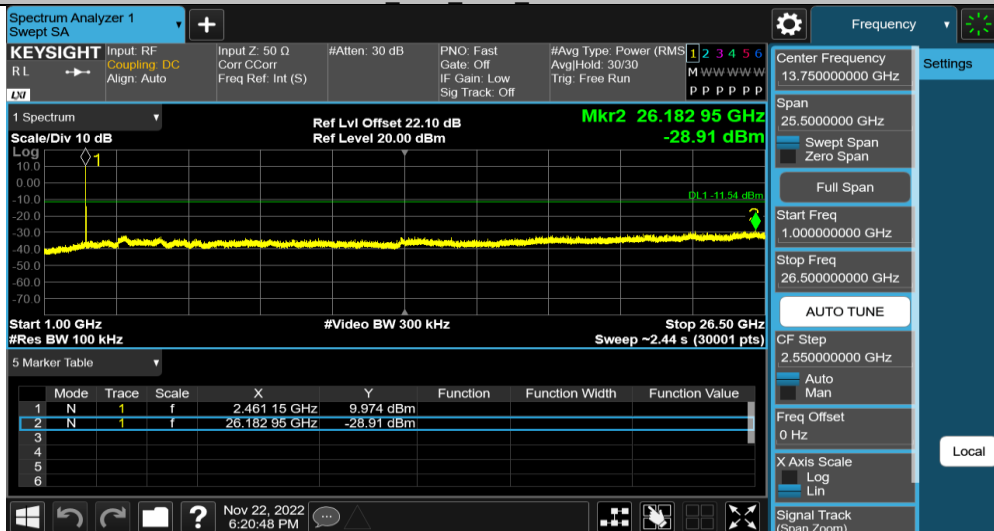
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11B_Ant1_2462_30-1000

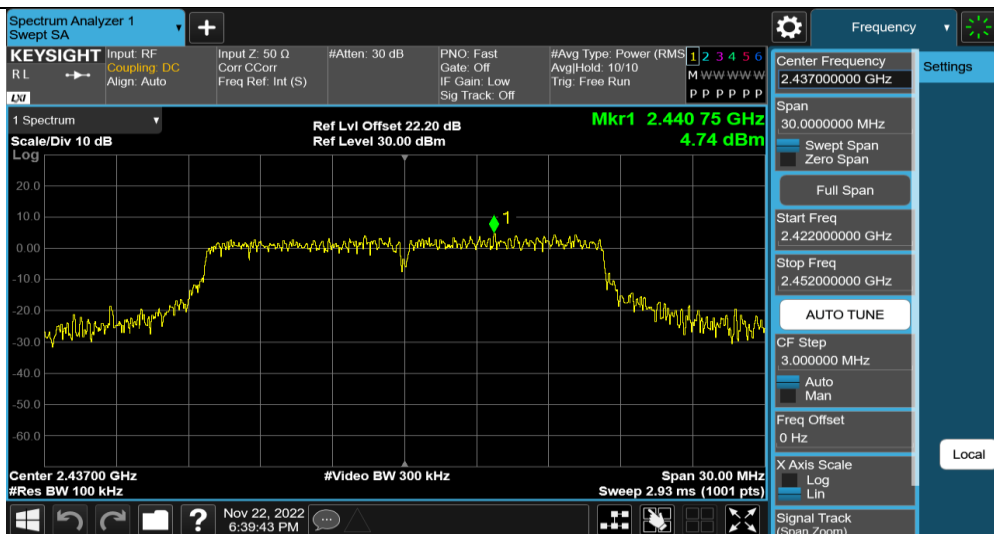


11B_Ant1_2462_1000-26500

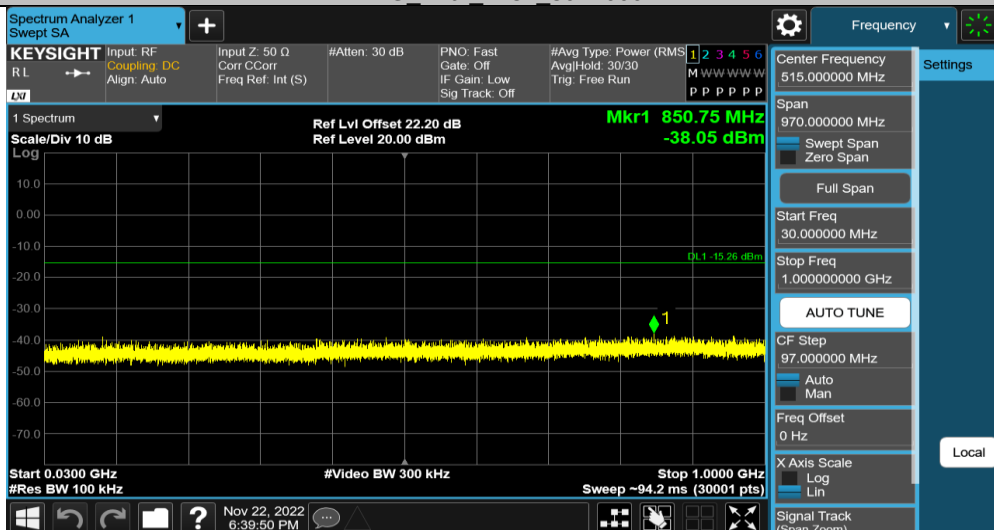


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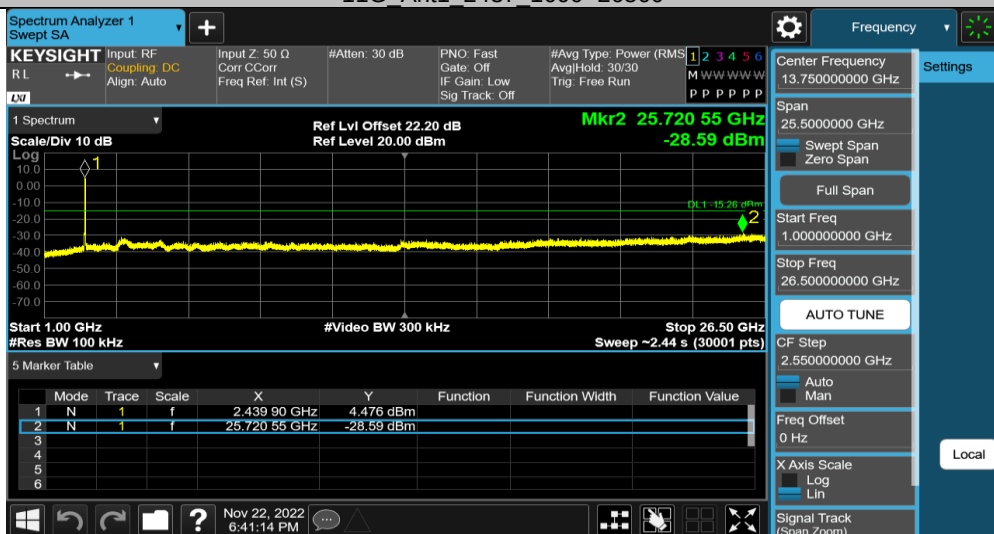




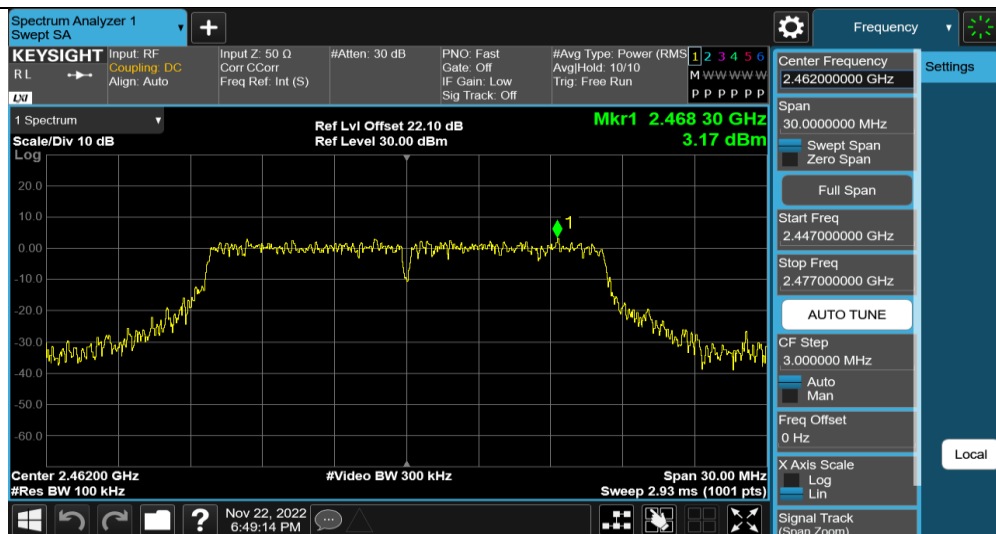
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11G_Ant1_2437_1000-26500



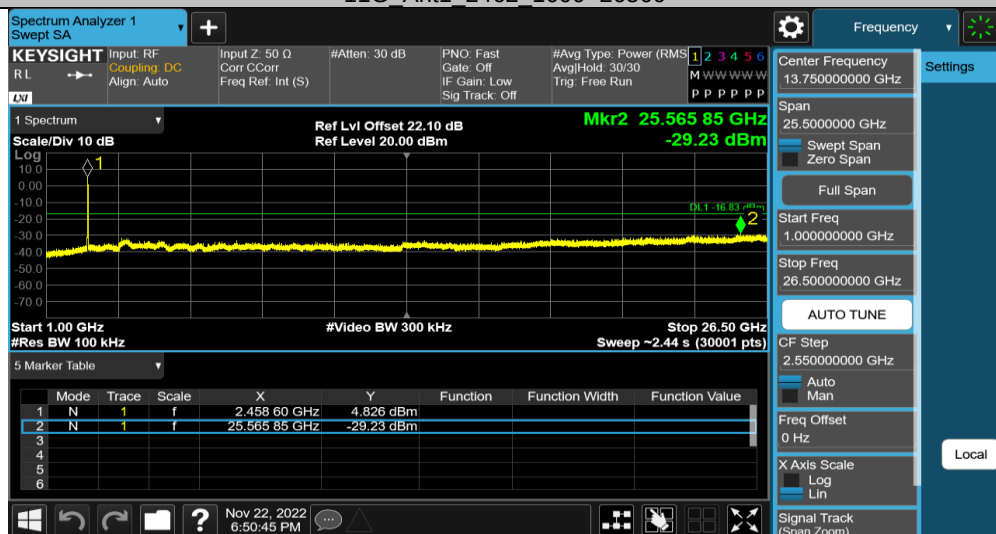
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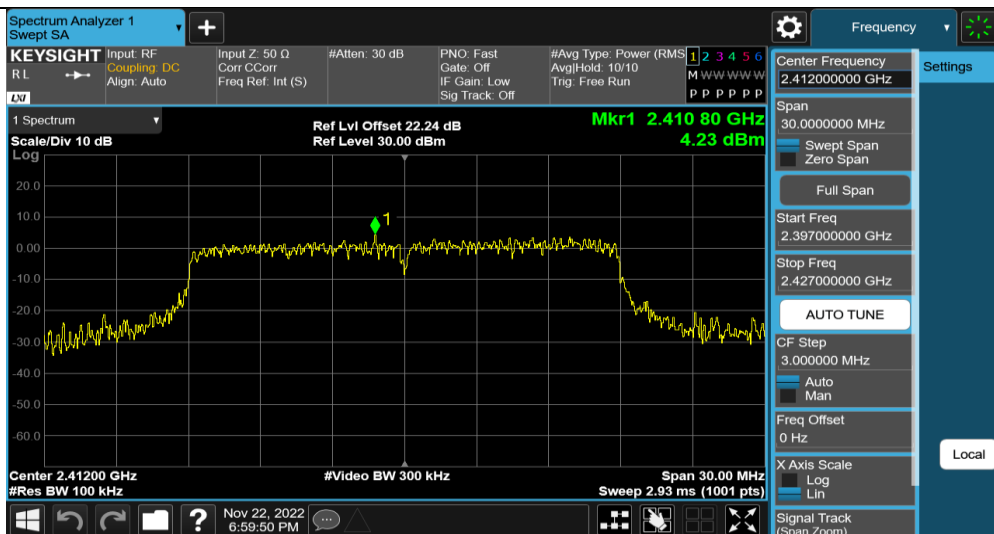
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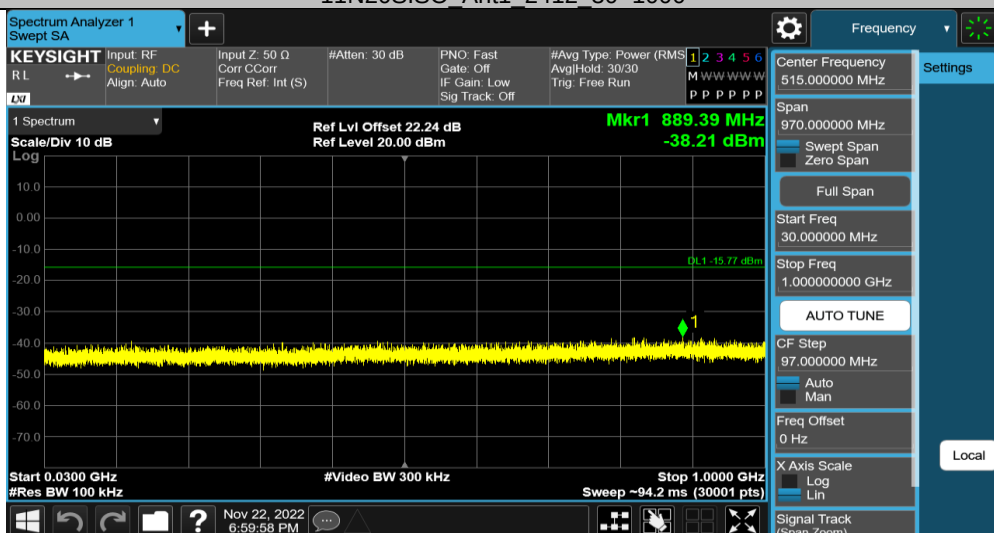
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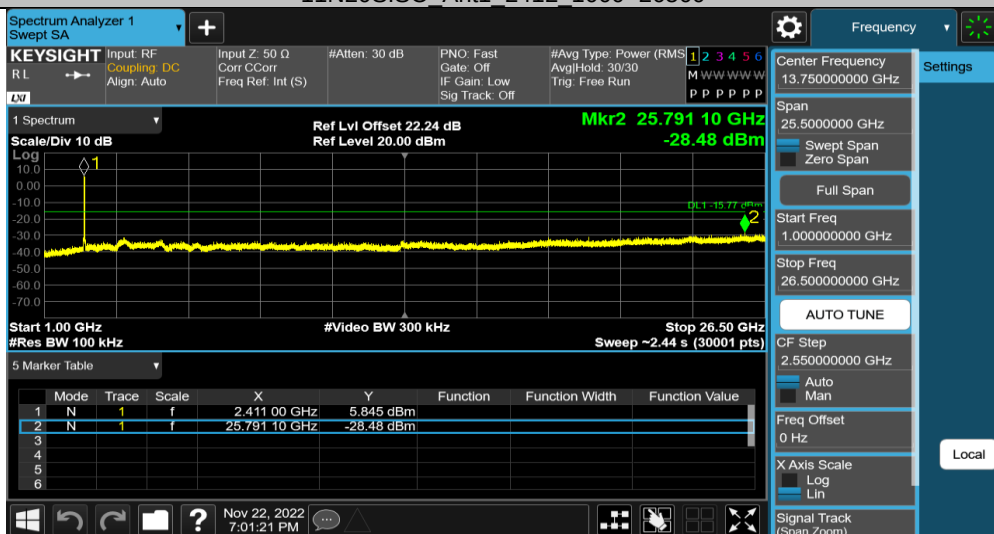
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11N20SISO_Ant1_2412_30~1000



11N20SISO_Ant1_2412_1000~26500



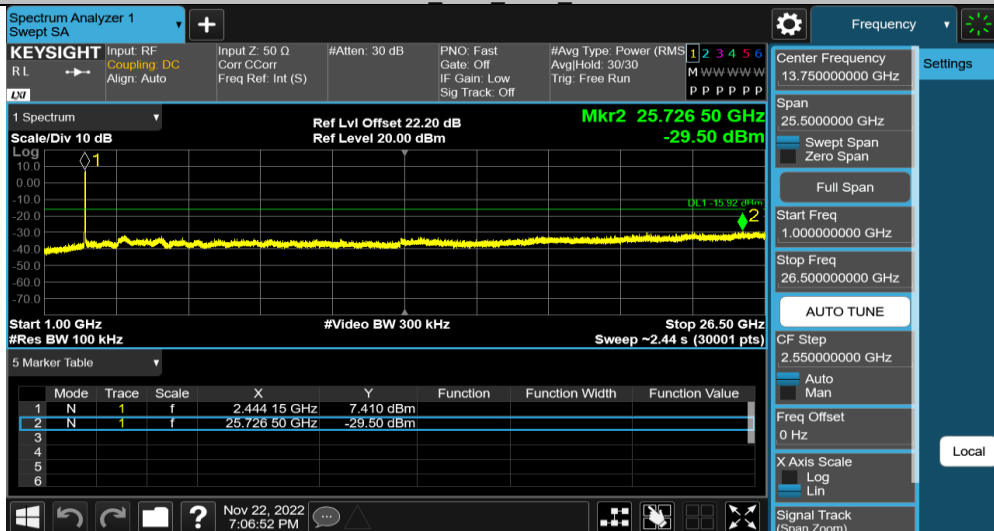
11N20SISO_Ant1_2437_0~Reference



11N20SISO_Ant1_2437_30~1000



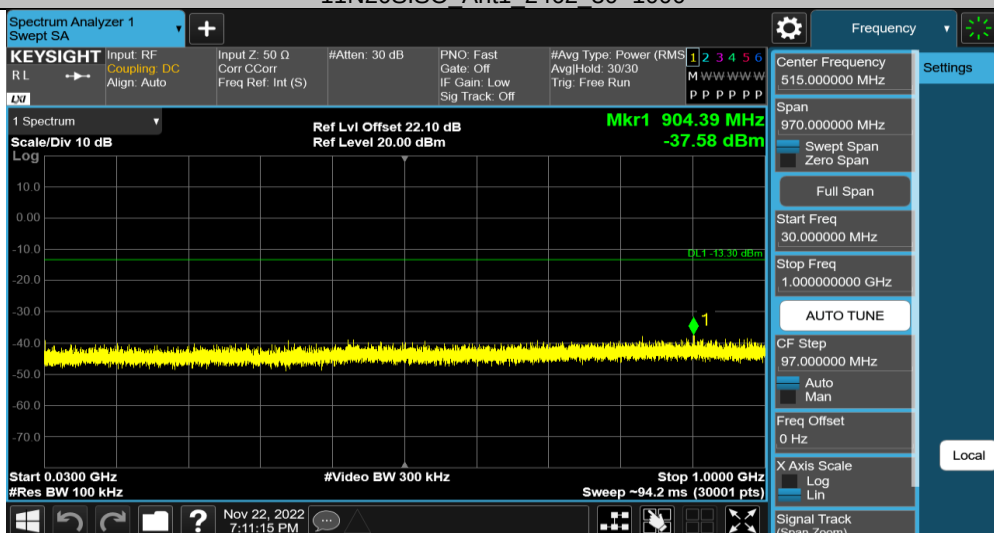
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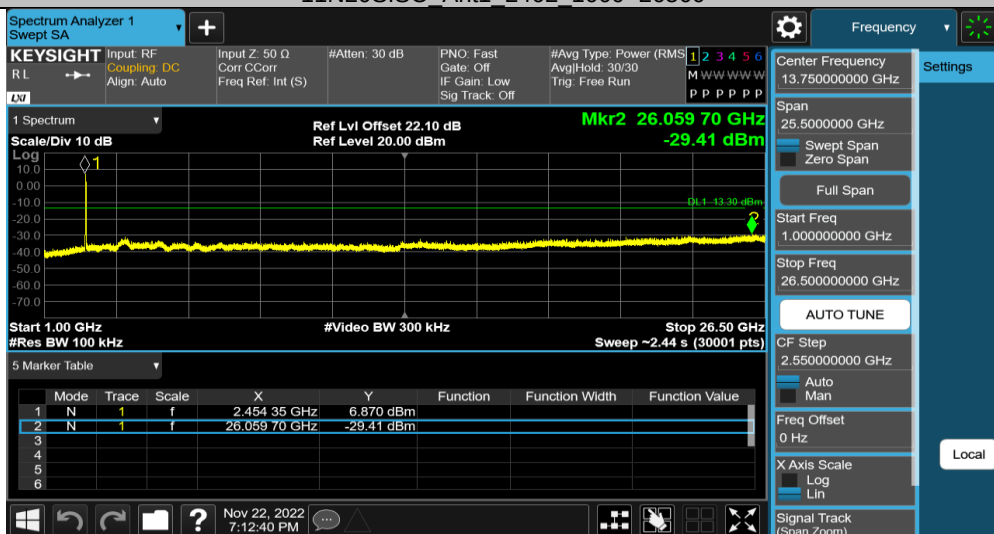
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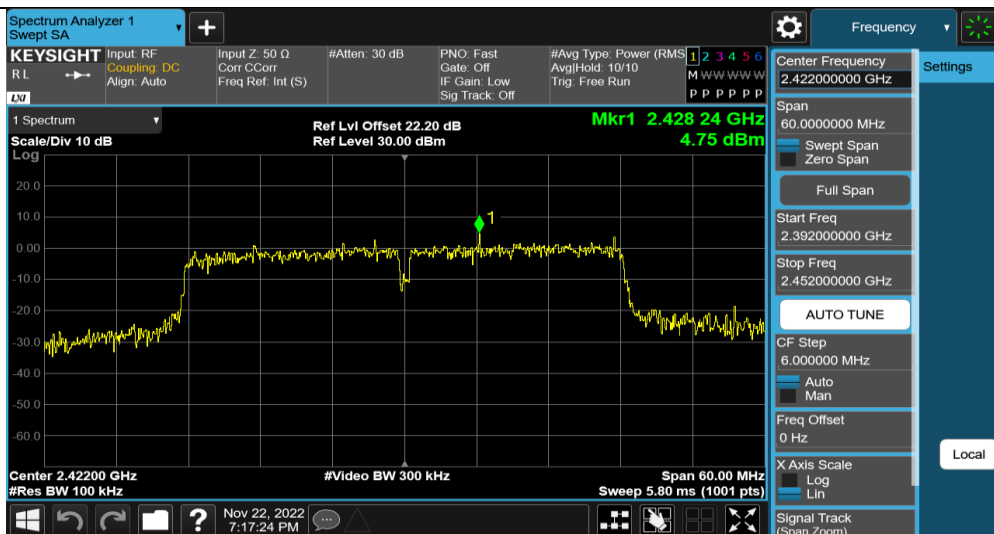
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11N20SISO_Ant1_2462_1000~26500



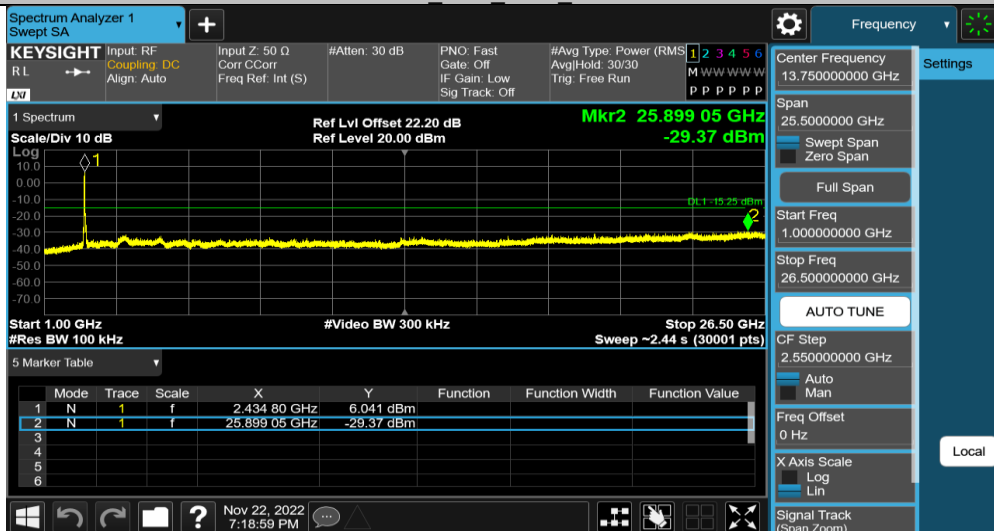
11N40SISO_Ant1_2422_0~Reference



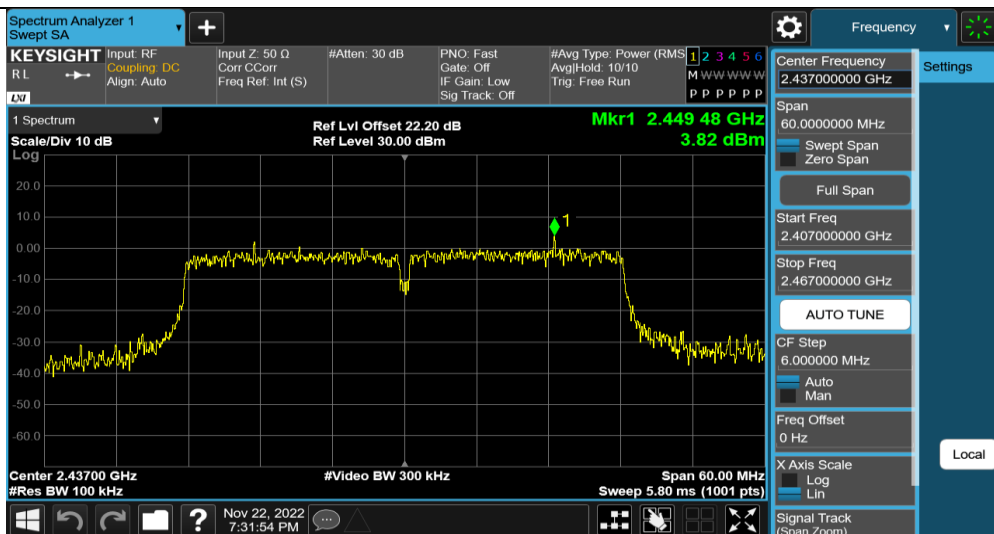
11N40SISO_Ant1_2422_30~1000



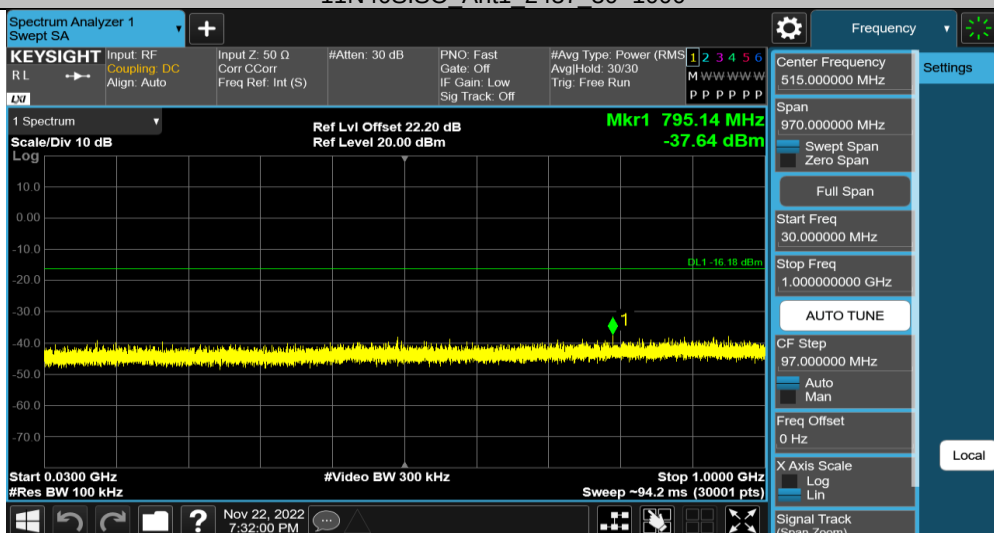
11N40SISO_Ant1_2422_1000~26500



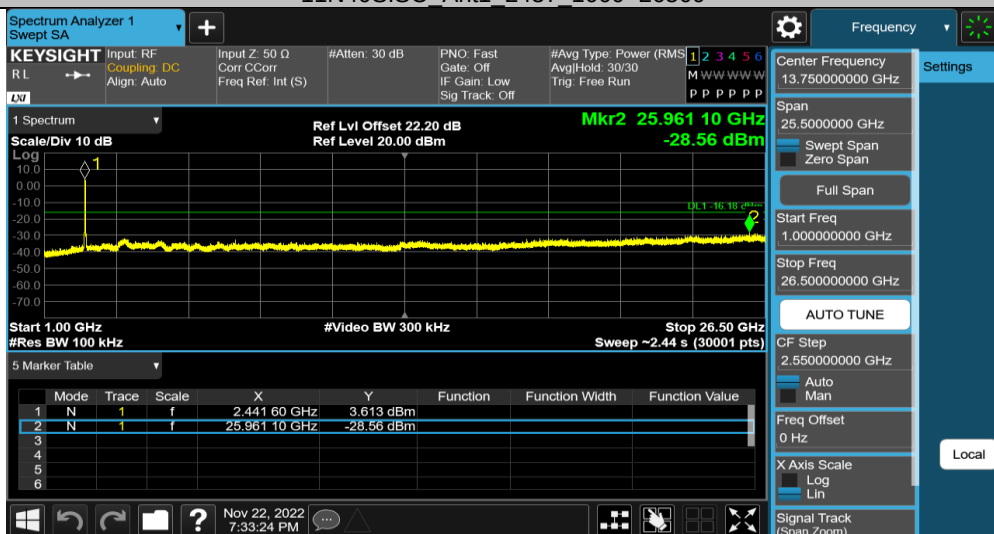
11N40SISO_Ant1_2437_0~Reference



11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



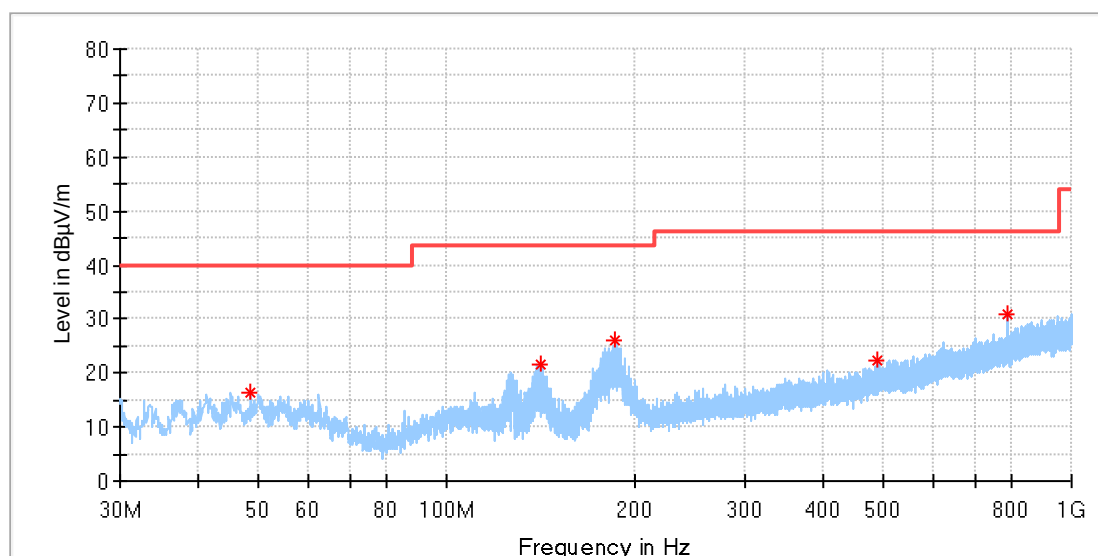
Appendix B.5: Test Results of Radiated Spurious Emissions

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

30MHz - 1GHz (Worst case)

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S80ULT
Test Mode:	WIFI 2.4G_11b_Ch6
Order No/Sample No:	168397761/A003371436-002
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

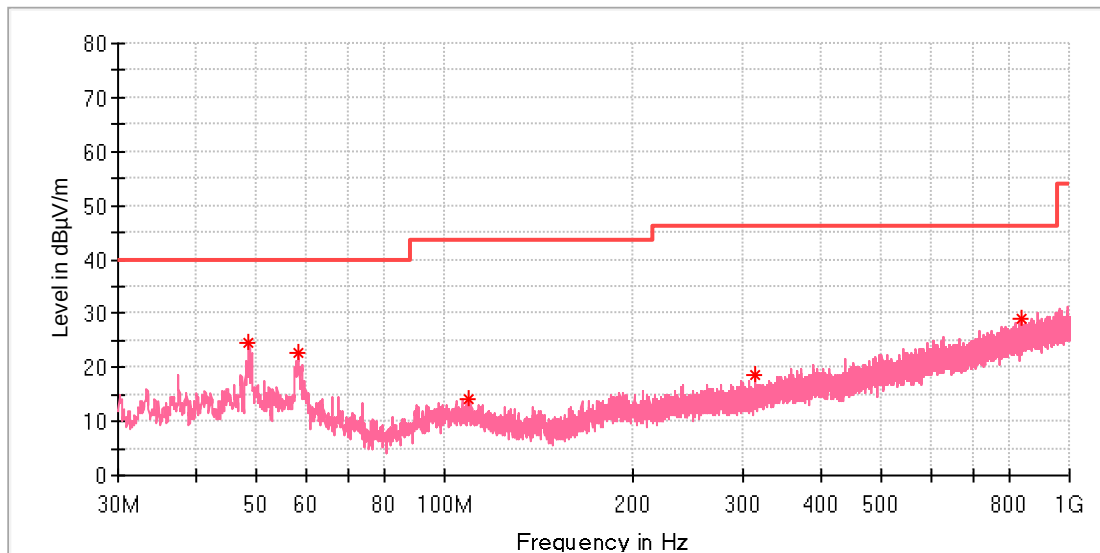
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
48.575500	16.41	40.00	23.59	100.0	H	334.0	-18.4
140.871000	21.45	43.50	22.05	100.0	H	348.0	-22.2
185.879000	26.12	43.50	17.38	100.0	H	224.0	-20.0
489.489000	22.30	46.00	23.70	100.0	H	289.0	-12.0
791.983500	31.06	46.00	14.94	100.0	H	179.0	-6.5

Final_Result

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

EUT Name: Robotic Vacuum Cleaner
Model: S80ULT
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168397761/A003371436-002
Test Voltage: Battery
Remark: Temp 23 Humi:58%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
48.624000	24.40	40.00	15.60	100.0	V	133.0	-18.4
58.227000	22.67	40.00	17.33	100.0	V	344.0	-18.8
109.588500	14.31	43.50	29.19	100.0	V	101.0	-19.0
314.258500	18.51	46.00	27.49	100.0	V	133.0	-15.9
836.555000	29.15	46.00	16.85	100.0	V	221.0	-5.7

Final Result

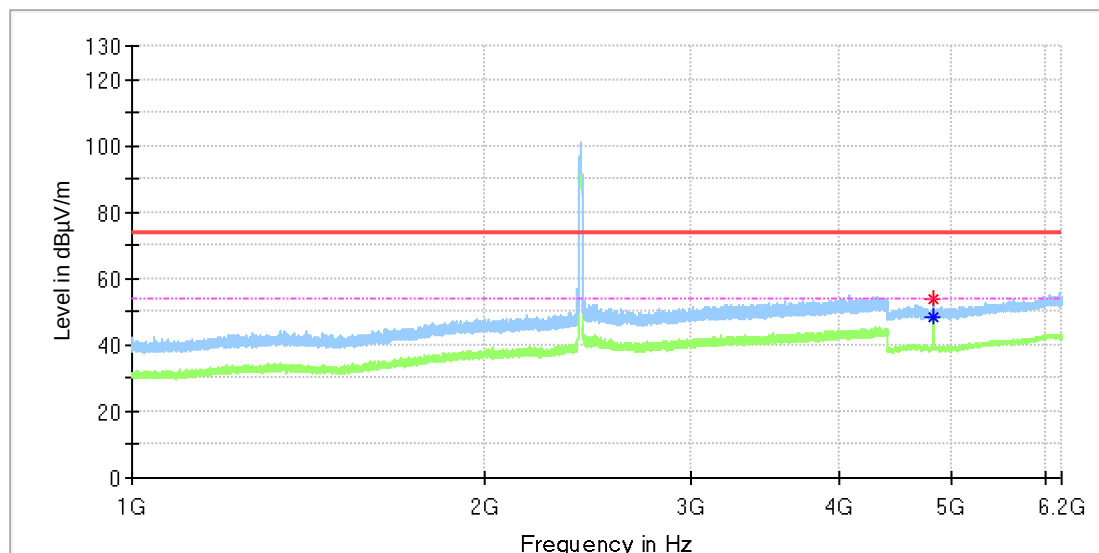
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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1GHz - 18GHz

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

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S80ULT
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168397761/A003371436-002
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

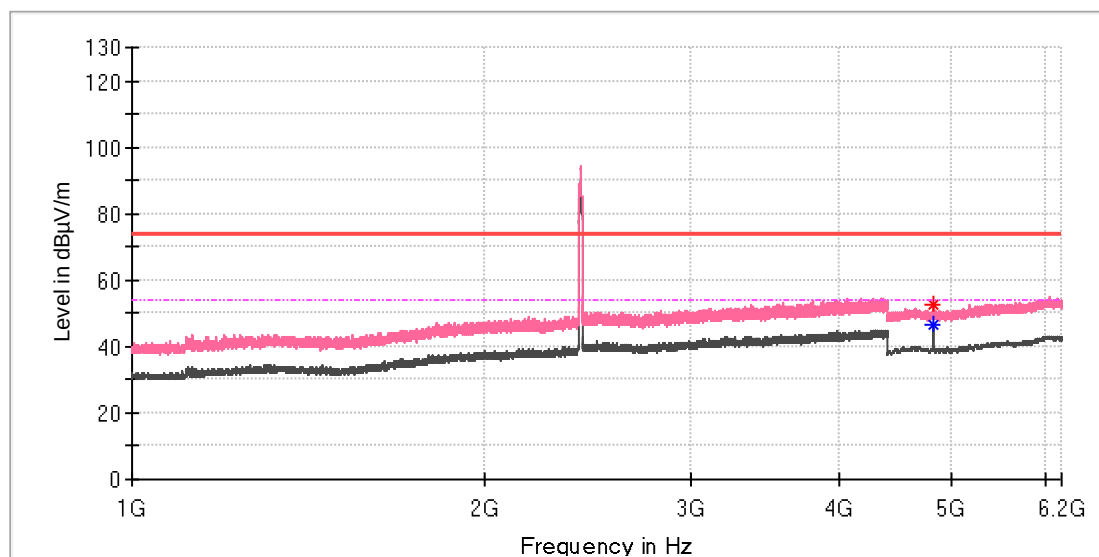
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	---	48.64	54.00	5.36	100.0	H	314.0	11.8
4824.000000	53.58	---	74.00	20.42	100.0	H	314.0	11.8

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: Robotic Vacuum Cleaner
 Model: S80ULT
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168397761/A003371436-002
 Test Voltage: Battery
 Remark: Temp 23 Humi:58%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

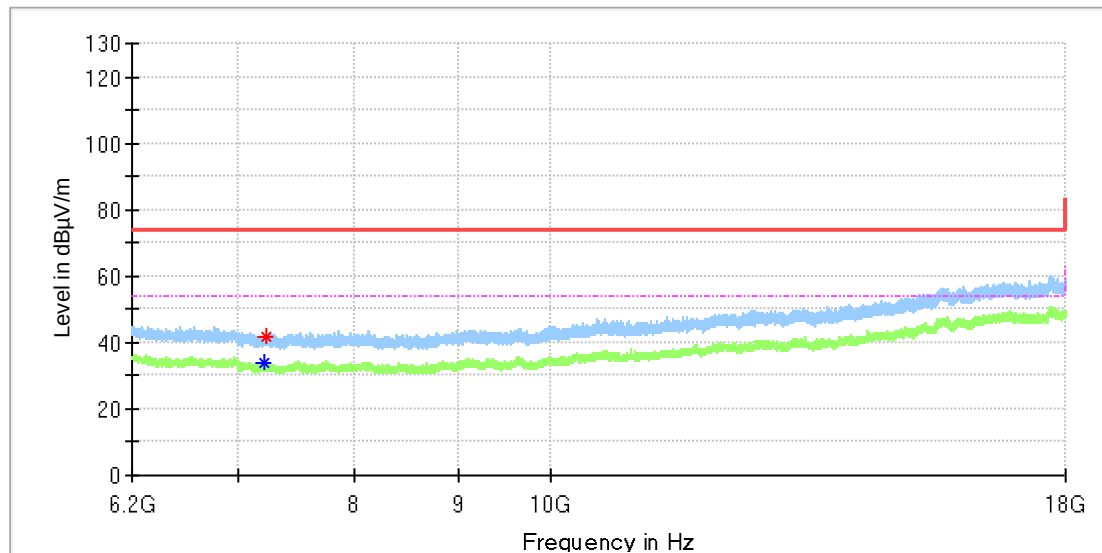
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4823.500000	52.86	---	74.00	21.14	100.0	V	185.0	11.8
4824.000000	---	46.77	54.00	7.23	100.0	V	106.0	11.8

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: Robotic Vacuum Cleaner
Model: S80ULT
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168397761/A003371436-002
Test Voltage: Battery
Remark: Temp 23 Humi:58%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

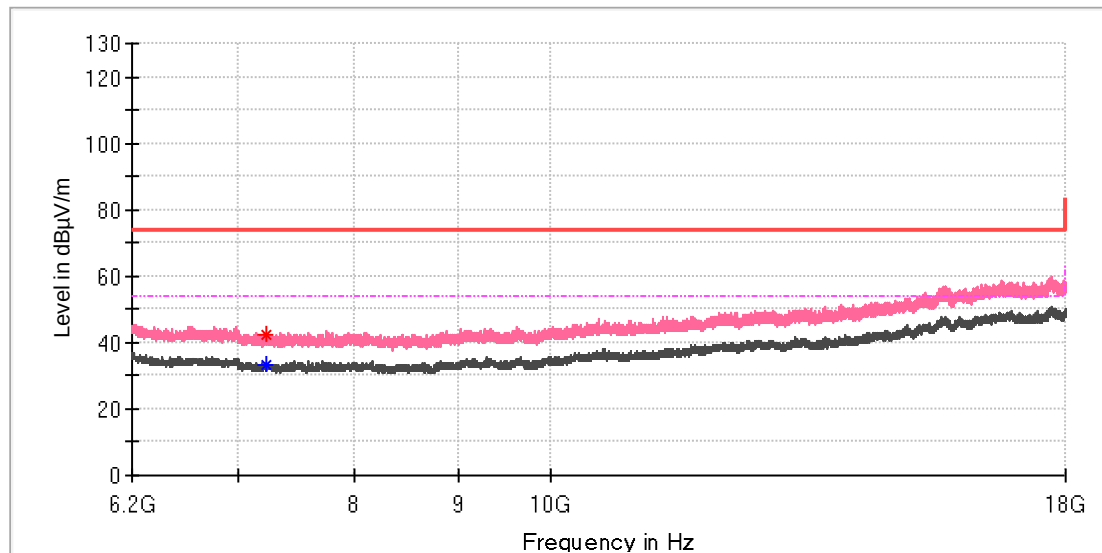
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7218.241667	---	33.93	54.00	20.07	100.0	H	10.0	8.7
7230.041667	41.73	---	74.00	32.27	100.0	H	0.0	8.6

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: S80ULT
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168397761/A003371436-002
Test Voltage: Battery
Remark: Temp 23 Humi:58%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7221.683333	42.10	---	74.00	31.90	100.0	V	255.0	8.7
7231.025000	---	33.54	54.00	20.46	100.0	V	179.0	8.6

Final Result

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