

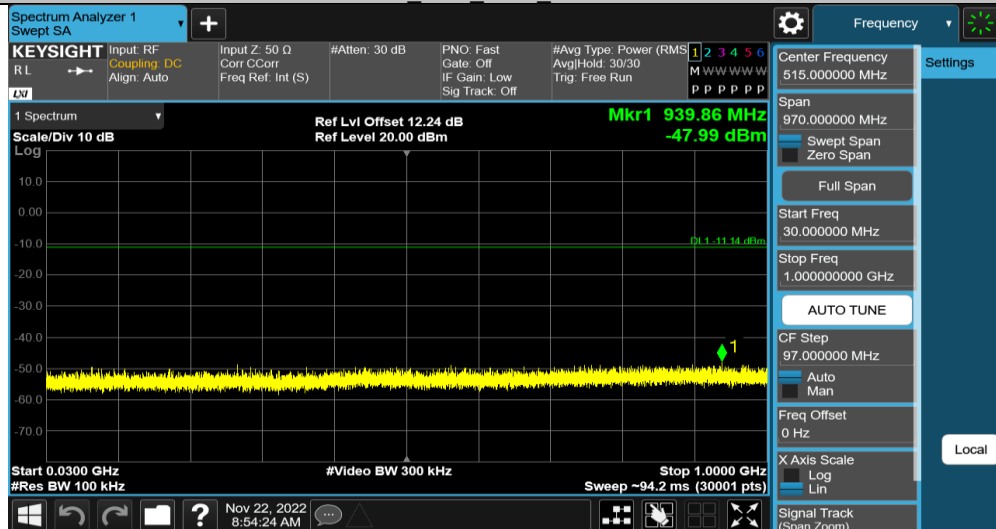
Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	8.86	8.86	---	PASS
			30~1000	8.86	-47.99	≤-11.14	PASS
			1000~26500	8.86	-39.15	≤-11.14	PASS
		2437	Reference	9.42	9.42	---	PASS
			30~1000	9.42	-47.78	≤-10.58	PASS
			1000~26500	9.42	-38.52	≤-10.58	PASS
		2462	Reference	7.83	7.83	---	PASS
			30~1000	7.83	-47.96	≤-12.17	PASS
			1000~26500	7.83	-39.5	≤-12.17	PASS
11G	Ant1	2412	Reference	1.90	1.90	---	PASS
			30~1000	1.90	-48.16	≤-18.1	PASS
			1000~26500	1.90	-39.01	≤-18.1	PASS
		2437	Reference	0.49	0.49	---	PASS
			30~1000	0.49	-48.27	≤-19.51	PASS
			1000~26500	0.49	-38.24	≤-19.51	PASS
		2462	Reference	-0.35	-0.35	---	PASS
			30~1000	-0.35	-48.03	≤-20.35	PASS
			1000~26500	-0.35	-39.07	≤-20.35	PASS
11N20SISO	Ant1	2412	Reference	3.08	3.08	---	PASS
			30~1000	3.08	-47.71	≤-16.92	PASS
			1000~26500	3.08	-37.6	≤-16.92	PASS
		2437	Reference	3.15	3.15	---	PASS
			30~1000	3.15	-47.75	≤-16.85	PASS
			1000~26500	3.15	-37.84	≤-16.85	PASS
		2462	Reference	2.02	2.02	---	PASS
			30~1000	2.02	-48	≤-17.98	PASS
			1000~26500	2.02	-39.25	≤-17.98	PASS
11N40SISO	Ant1	2422	Reference	0.38	0.38	---	PASS
			30~1000	0.38	-47.92	≤-19.62	PASS
			1000~26500	0.38	-38.65	≤-19.62	PASS
		2437	Reference	0.62	0.62	---	PASS
			30~1000	0.62	-48.58	≤-19.38	PASS
			1000~26500	0.62	-39.07	≤-19.38	PASS
		2452	Reference	0.14	0.14	---	PASS
			30~1000	0.14	-48.48	≤-19.86	PASS
			1000~26500	0.14	-38.96	≤-19.86	PASS

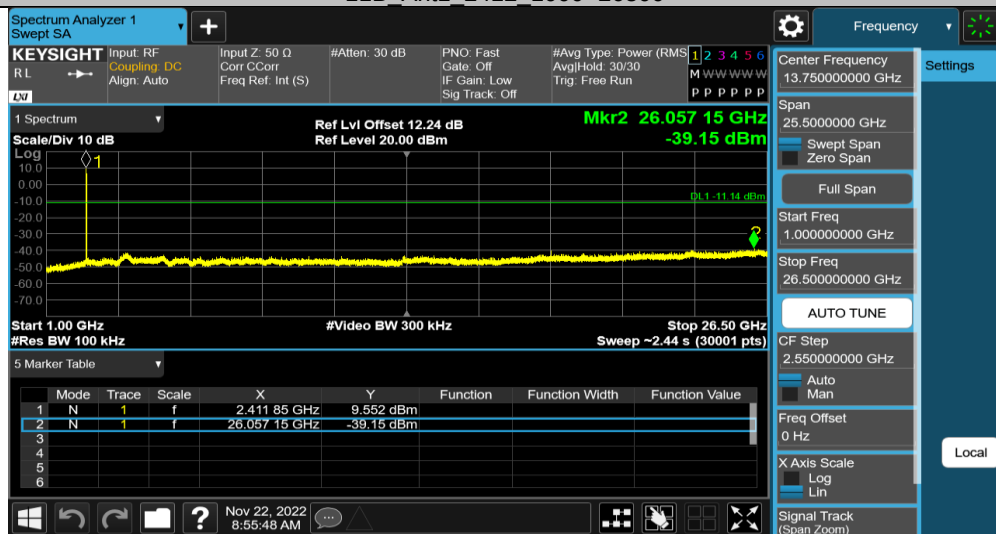
11B_Ant1_2412_0-Reference



11B_Ant1_2412_30-1000



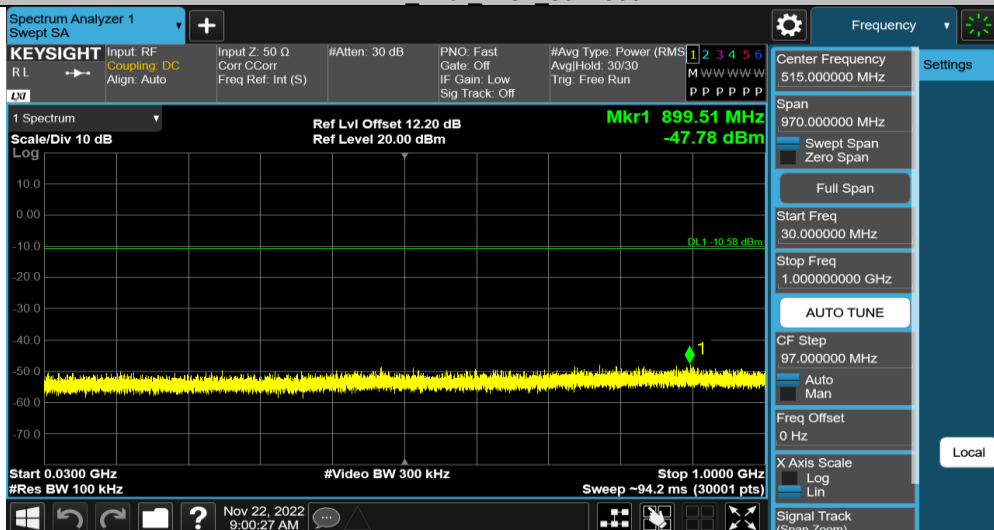
11B_Ant1_2412_1000-26500



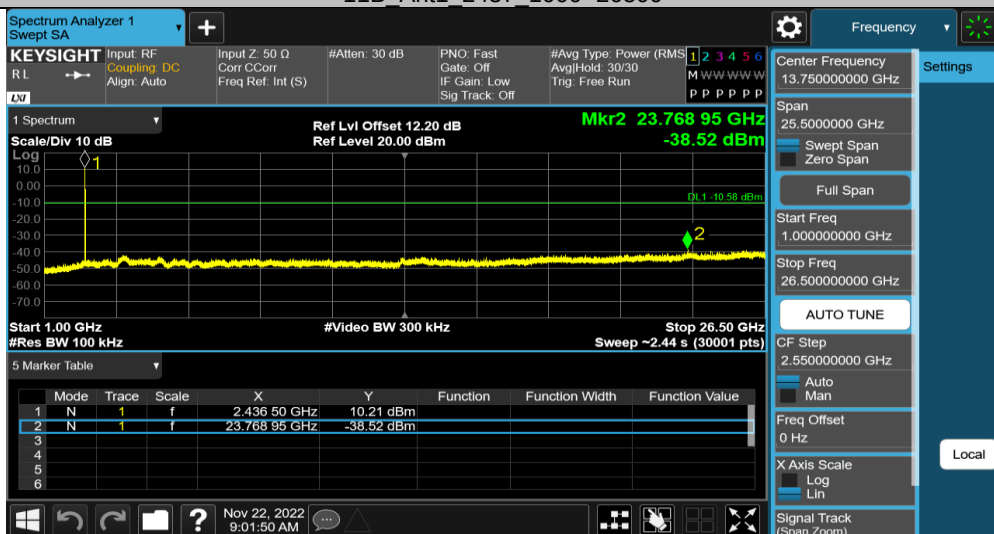
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11B_Ant1_2437_30-1000



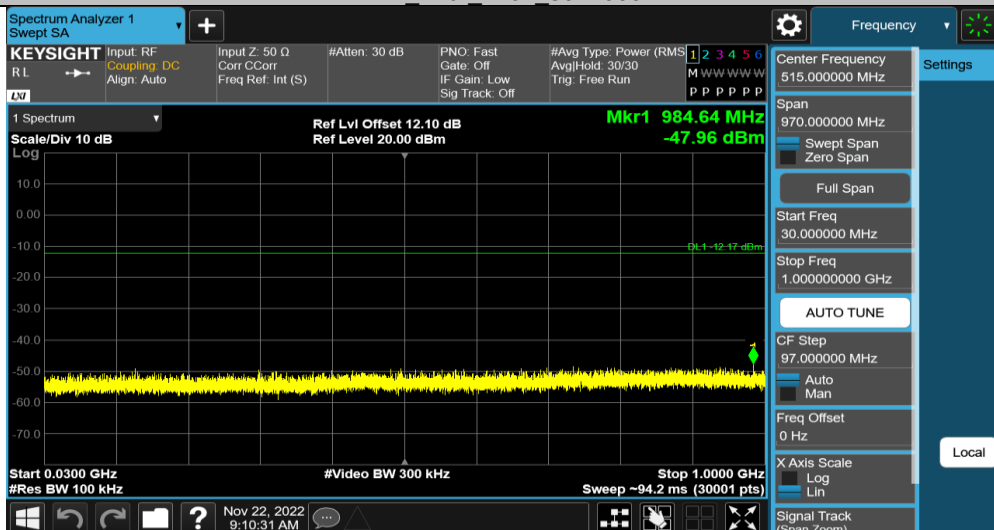
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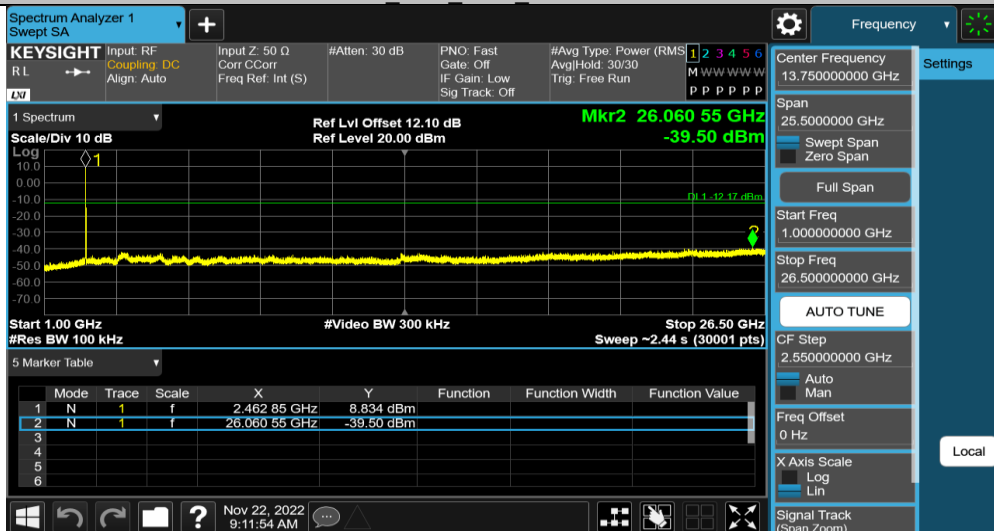
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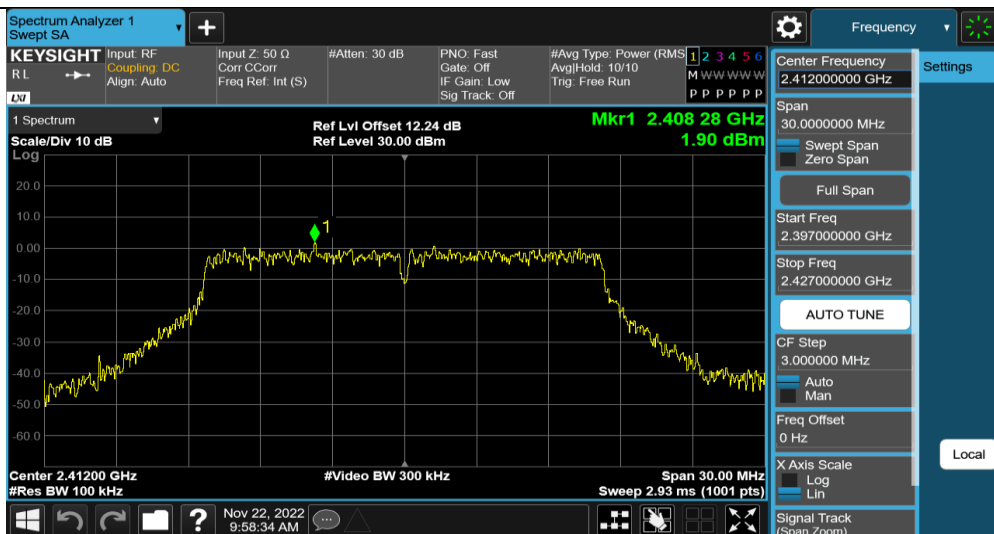
11B_Ant1_2462_30-1000



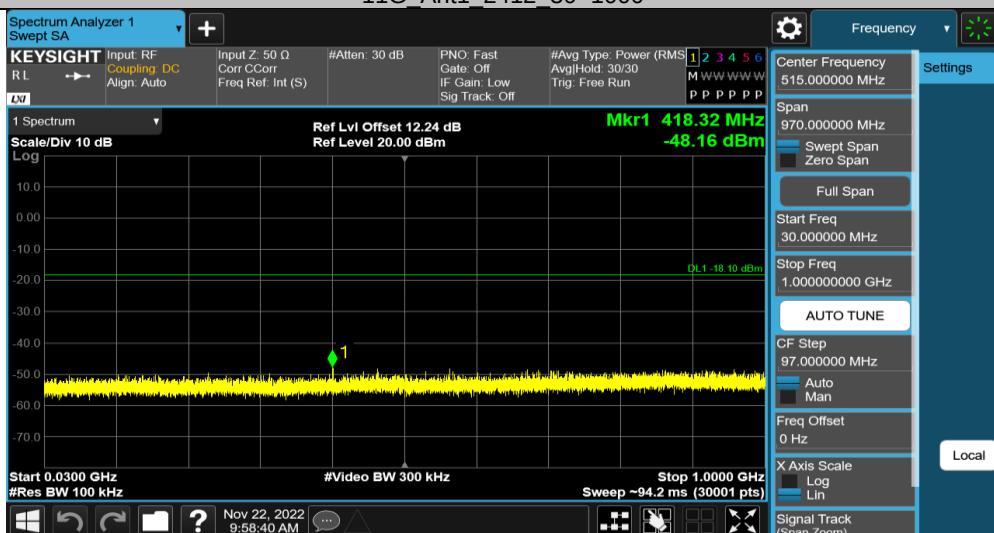
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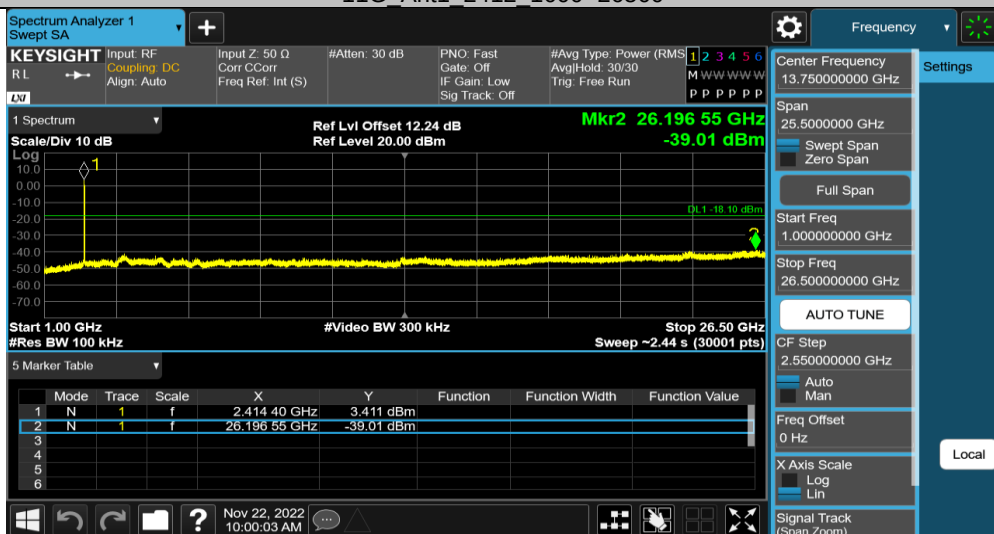
11G_Ant1_2412_0-Reference



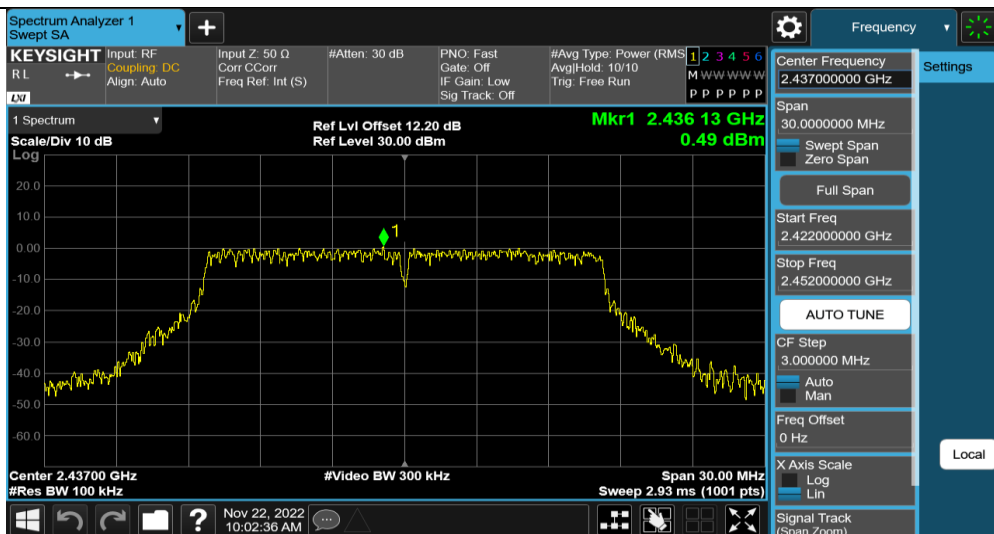
11G_Ant1_2412_30-1000



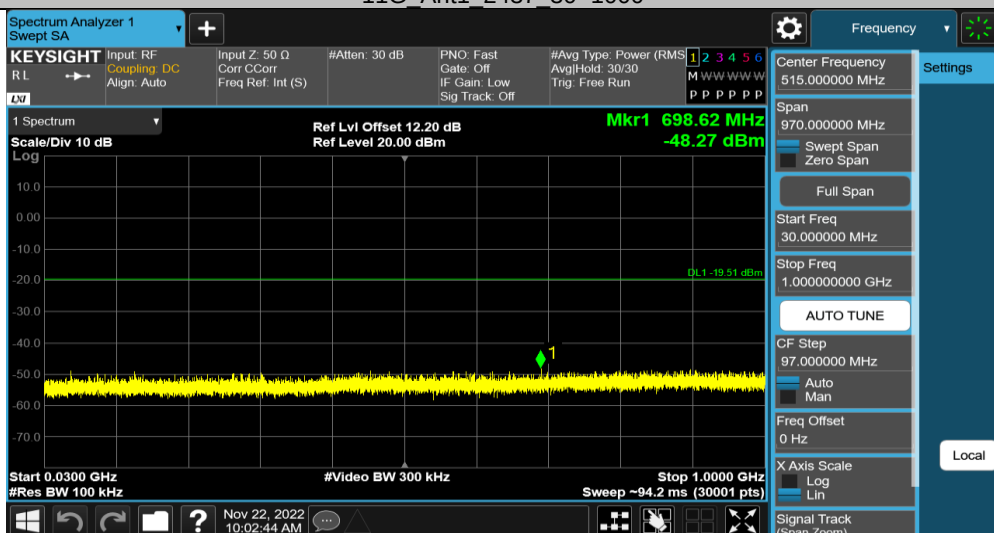
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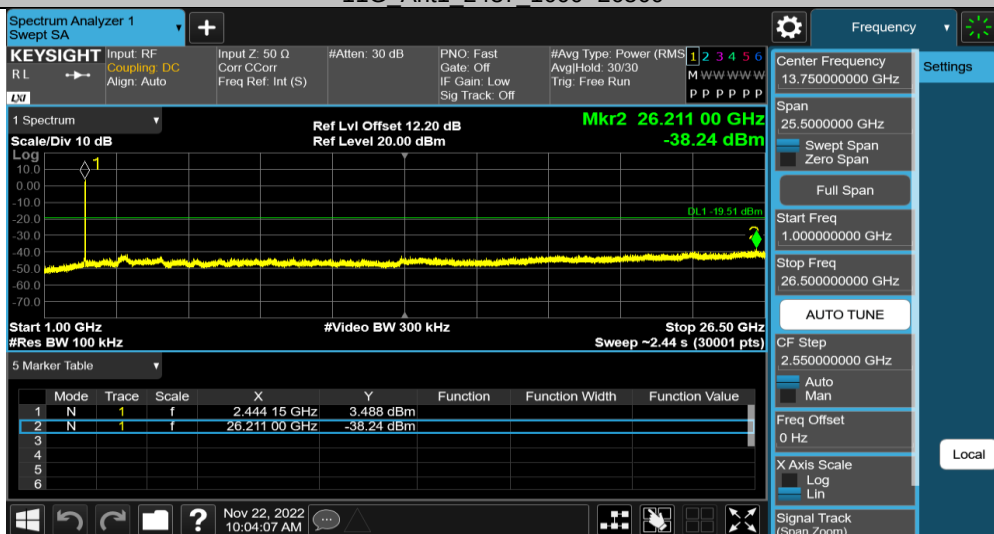
11G_Ant1_2437_0-Reference



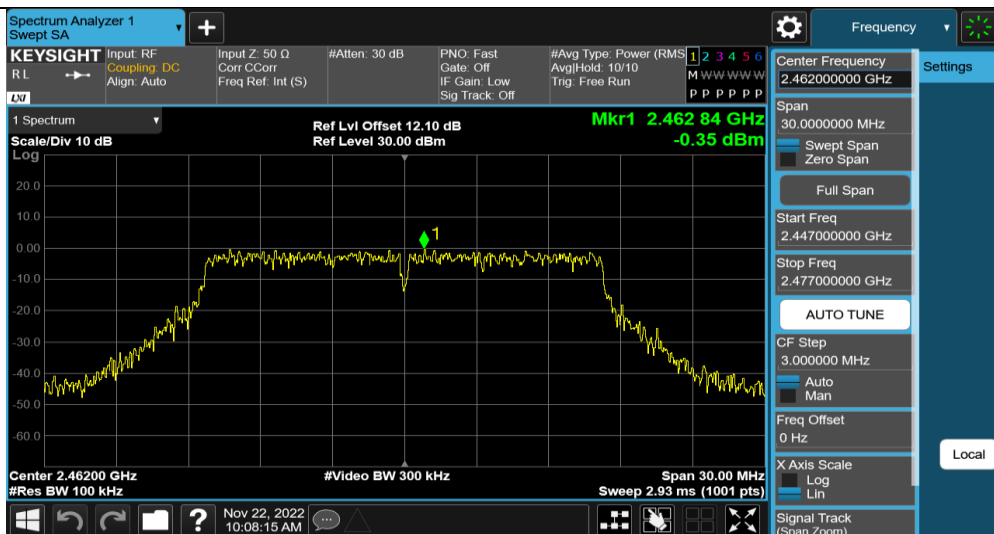
11G_Ant1_2437_30-1000



11G_Ant1_2437_1000-26500



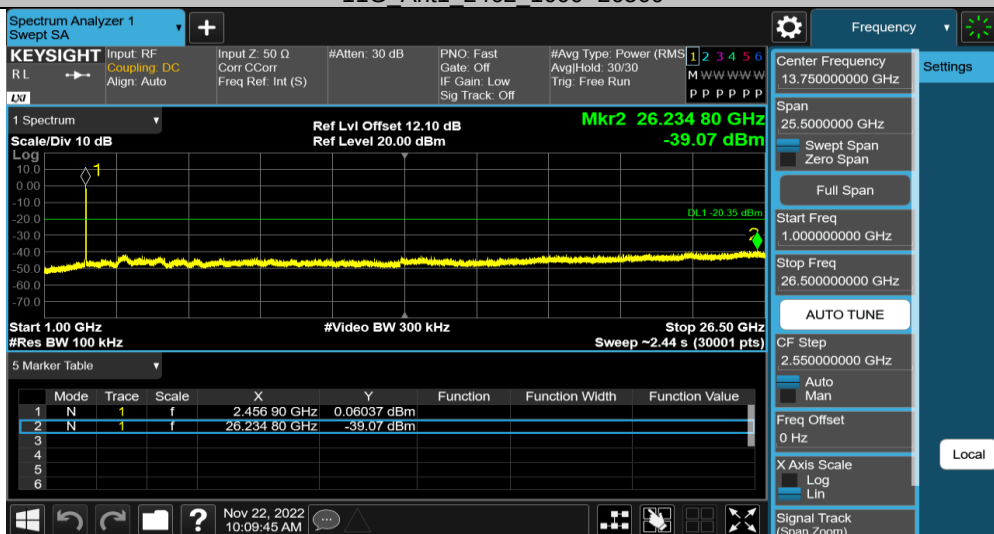
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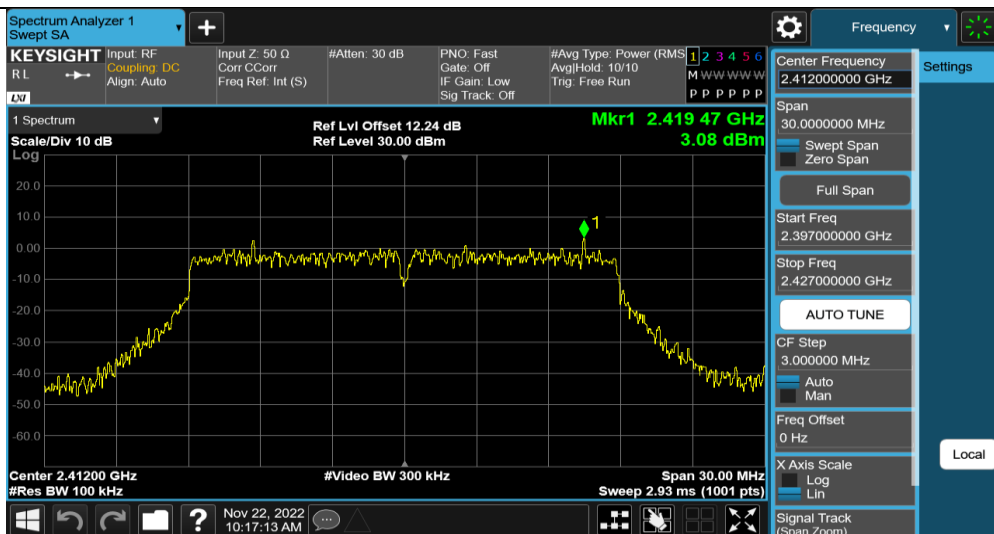
11G_Ant1_2462_30~1000



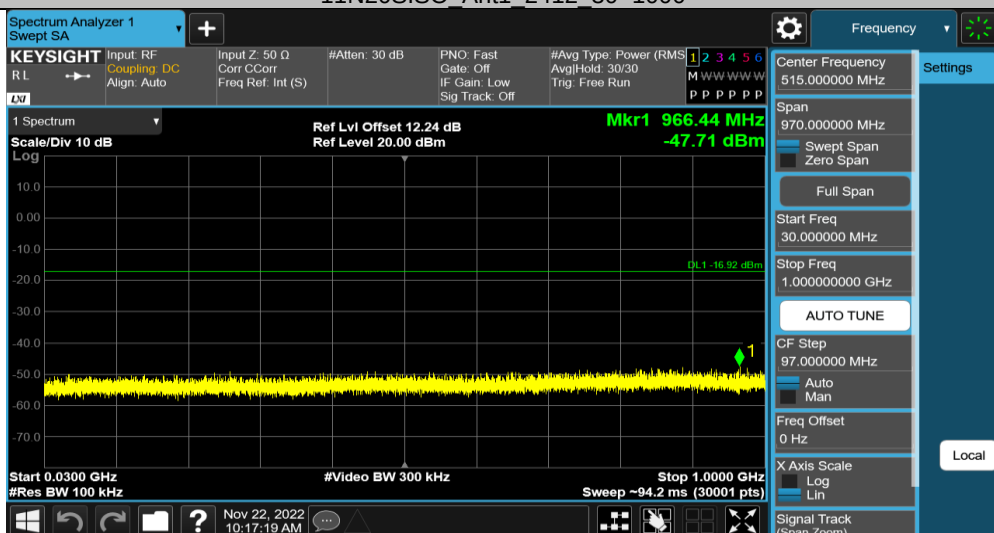
11G_Ant1_2462_1000~26500



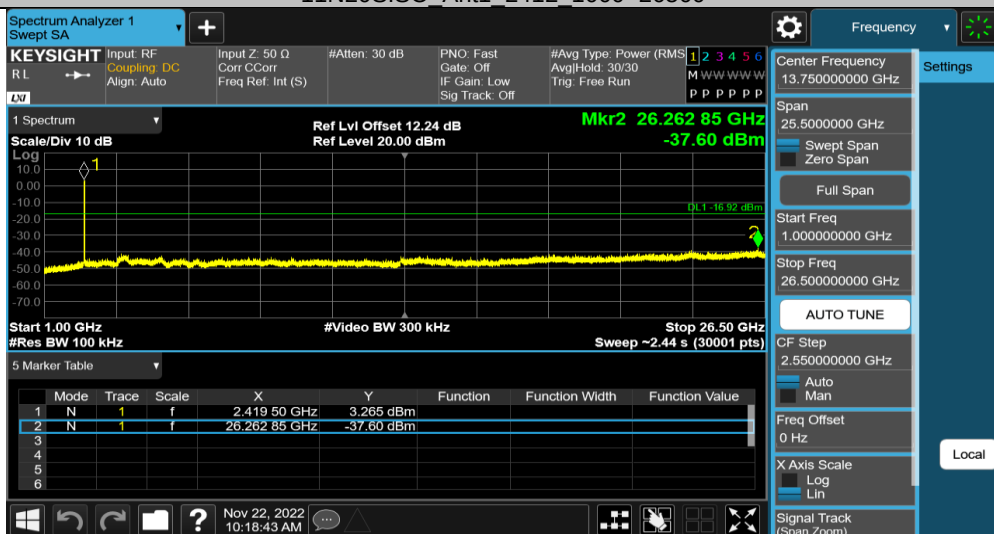
11N20SISO_Ant1_2412_0~Reference



11N20SISO_Ant1_2412_30~1000



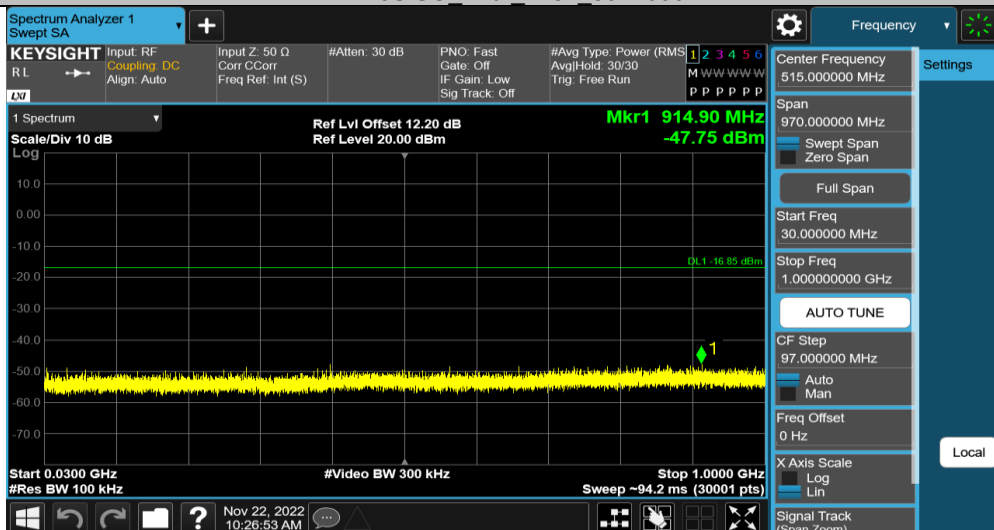
11N20SISO_Ant1_2412_1000~26500



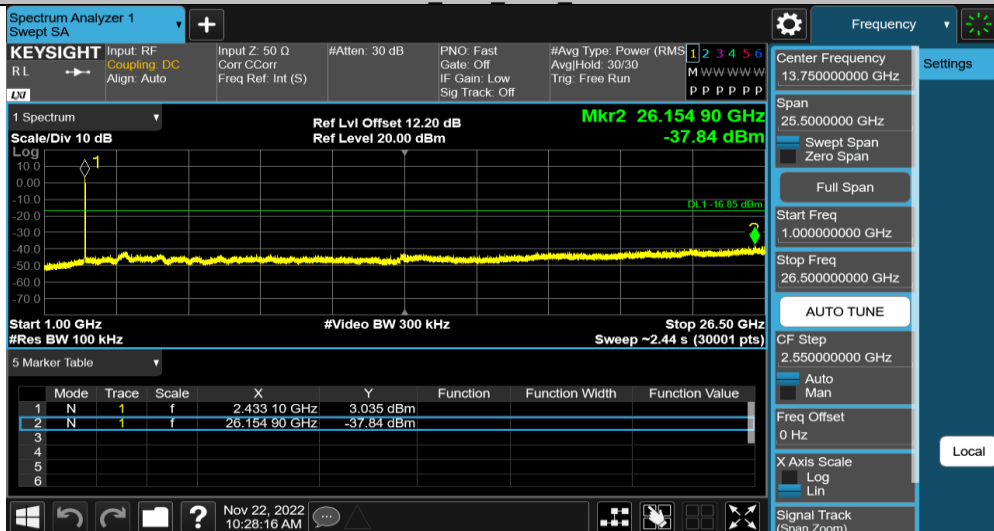
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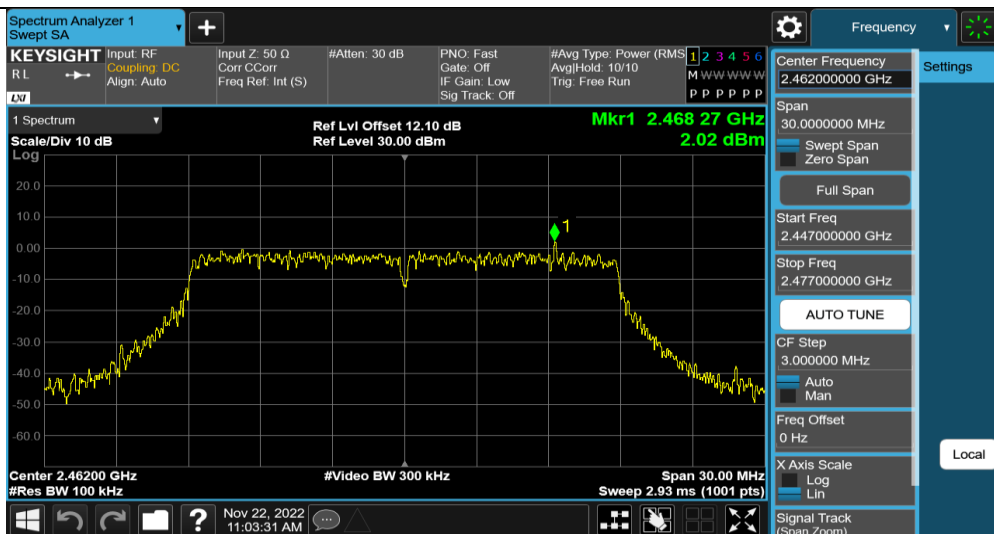
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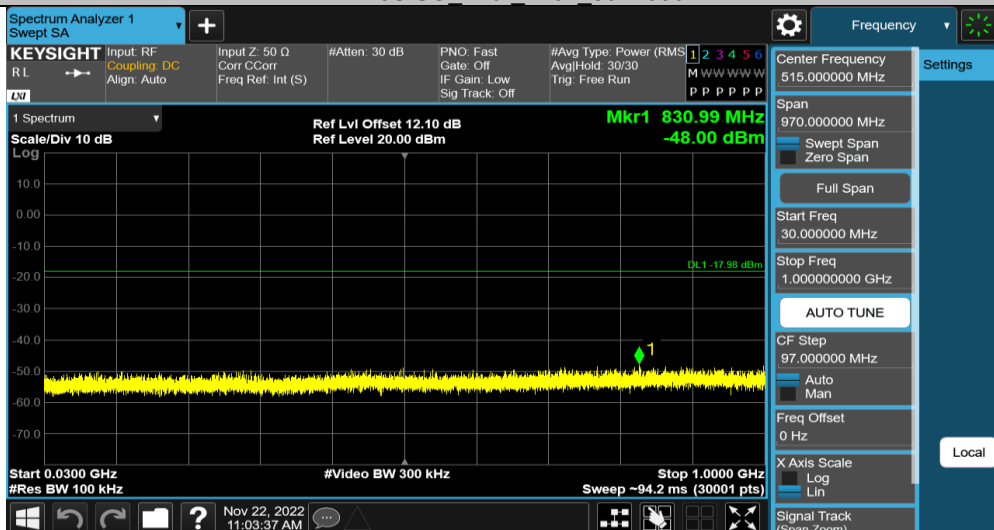
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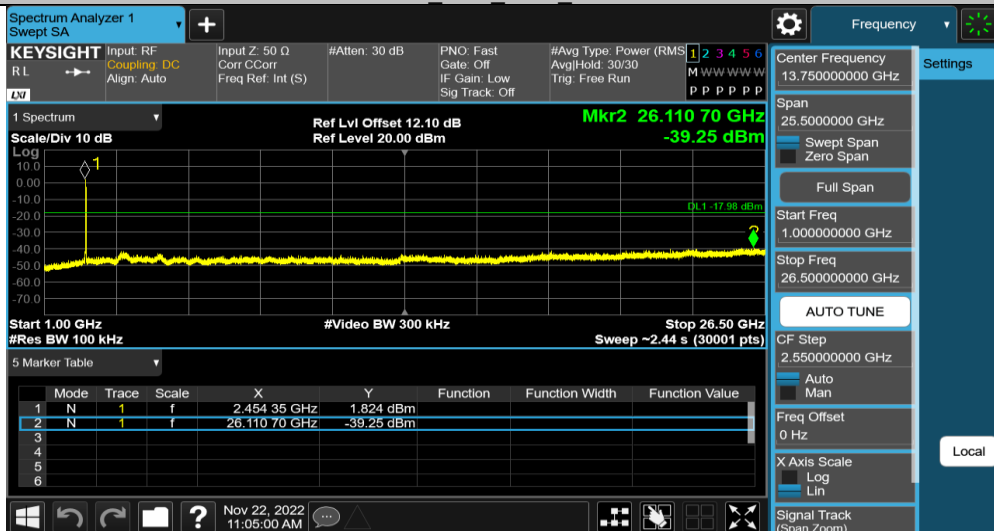
11N20SISO_Ant1_2462_0~Reference



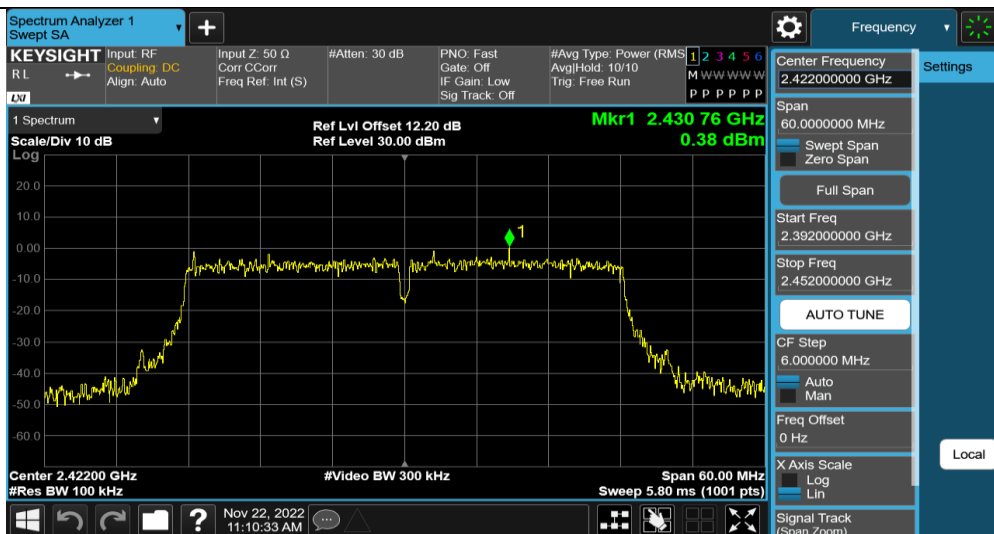
11N20SISO_Ant1_2462_30~1000



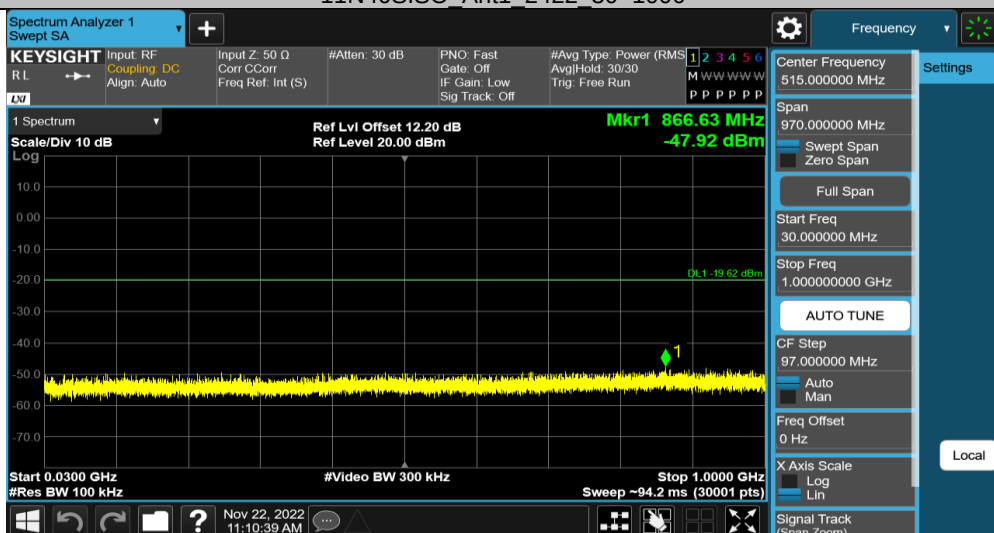
11N20SISO_Ant1_2462_1000~26500



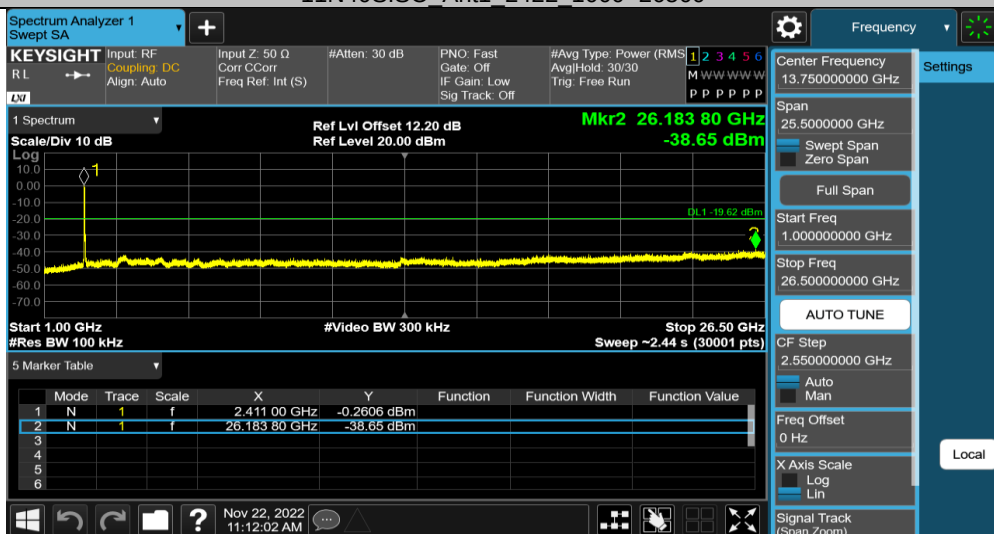
11N40SISO_Ant1_2422_0~Reference



11N40SISO_Ant1_2422_30~1000



11N40SISO_Ant1_2422_1000~26500



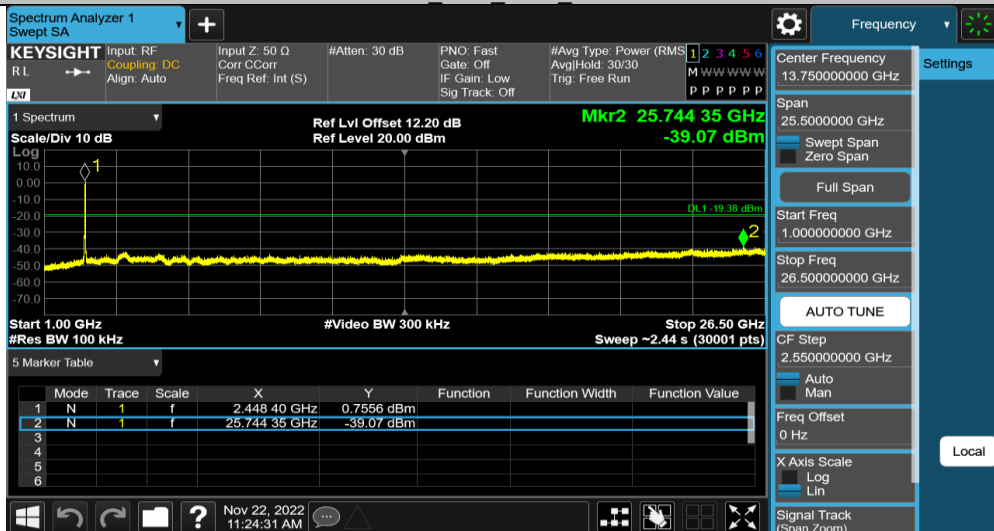
11N40SISO_Ant1_2437_0~Reference



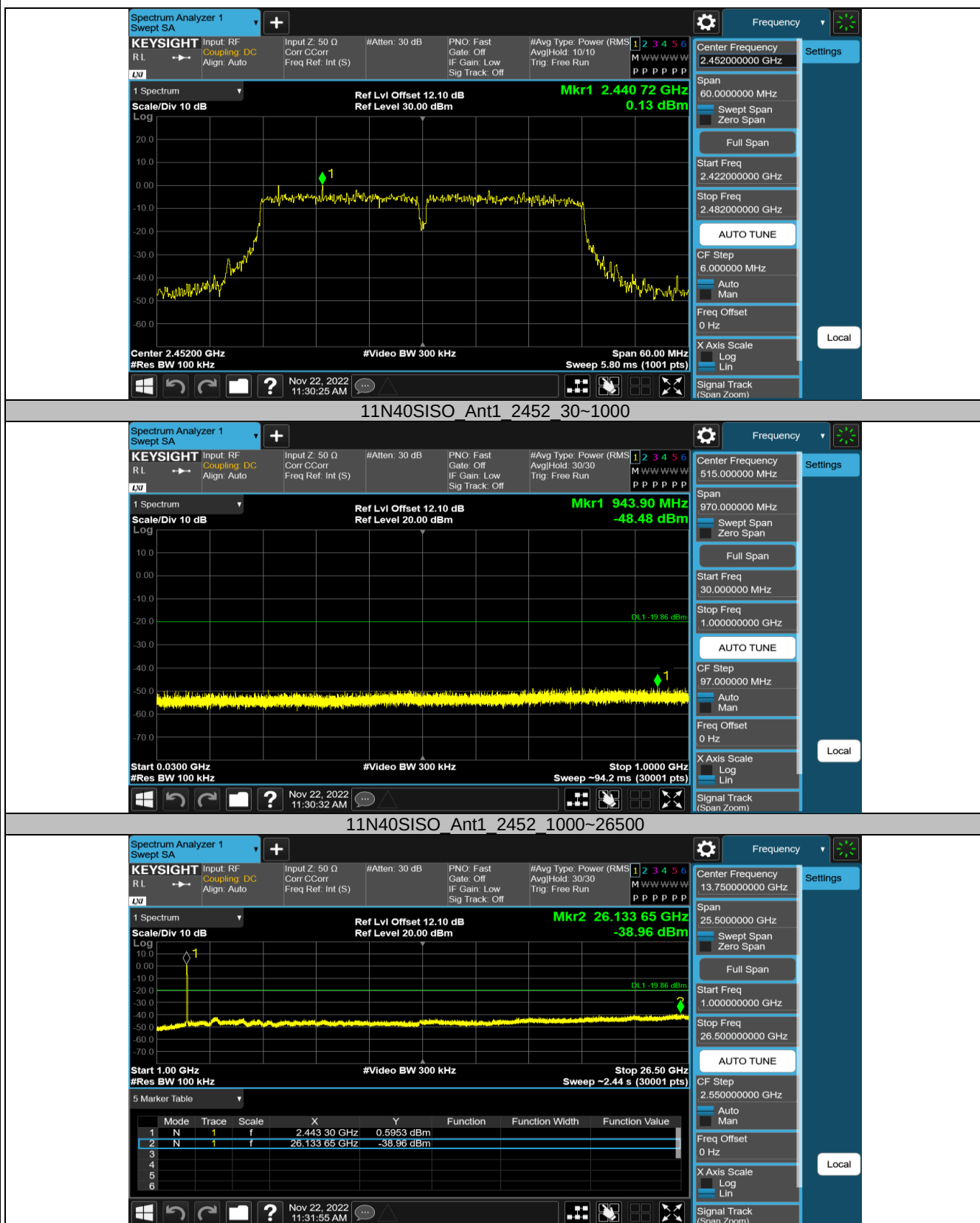
11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



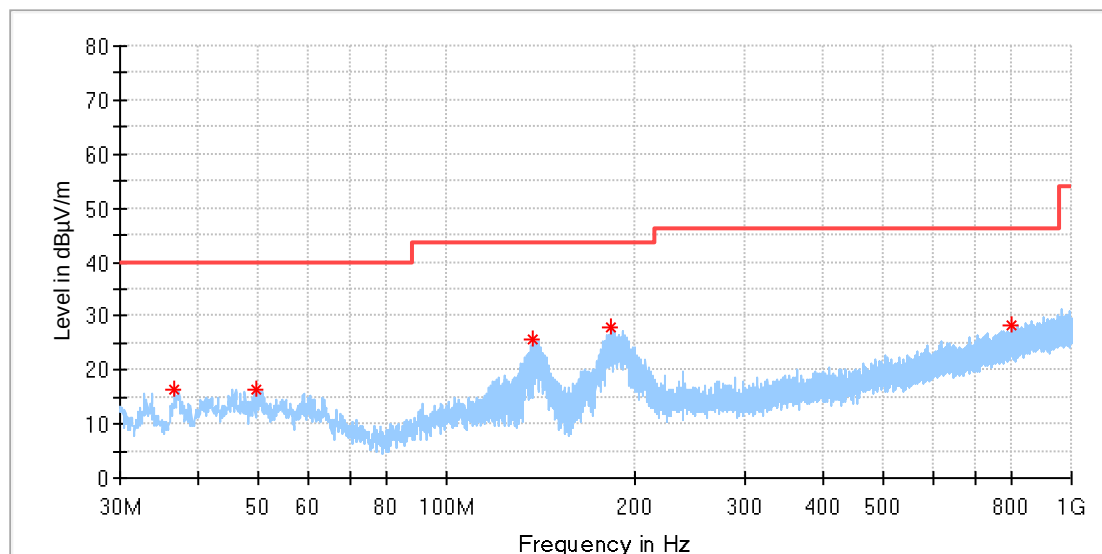
Appendix B.5: Test Results of Radiated Spurious Emissions

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/A003371470-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

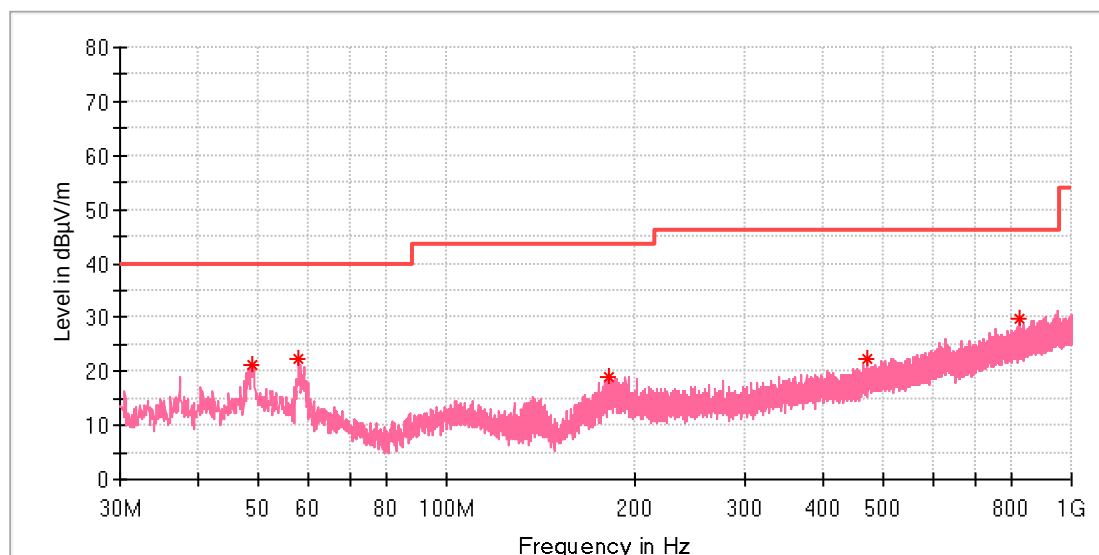
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
36.693000	16.56	40.00	23.44	100.0	H	88.0	-21.3
49.642500	16.22	40.00	23.78	100.0	H	341.0	-18.3
137.767000	25.55	43.50	17.95	100.0	H	341.0	-22.2
182.581000	27.95	43.50	15.55	100.0	H	26.0	-20.3
800.519500	28.30	46.00	17.70	100.0	H	101.0	-6.4

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/A003371470-001
Test Voltage: Battery
Remark: Temp 23 Humi:58%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
48.672500	21.23	40.00	18.77	100.0	V	264.0	-18.4
57.984500	22.41	40.00	17.59	100.0	V	25.0	-18.8
182.047500	19.06	43.50	24.44	100.0	V	129.0	-20.4
472.029000	22.30	46.00	23.70	100.0	V	285.0	-12.4
826.564000	29.89	46.00	16.11	100.0	V	0.0	-5.9

Final Result

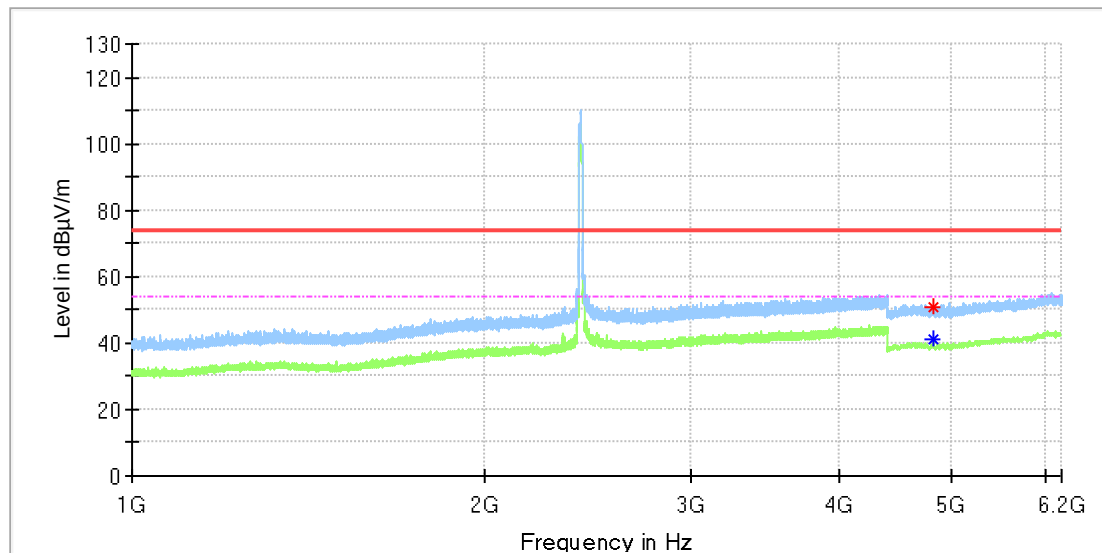
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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1GHz - 18GHz

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

EUT Information

EUT Name:	Robotic Vacuum Cleaner
Model:	S80ULT
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168397761/A003371470-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

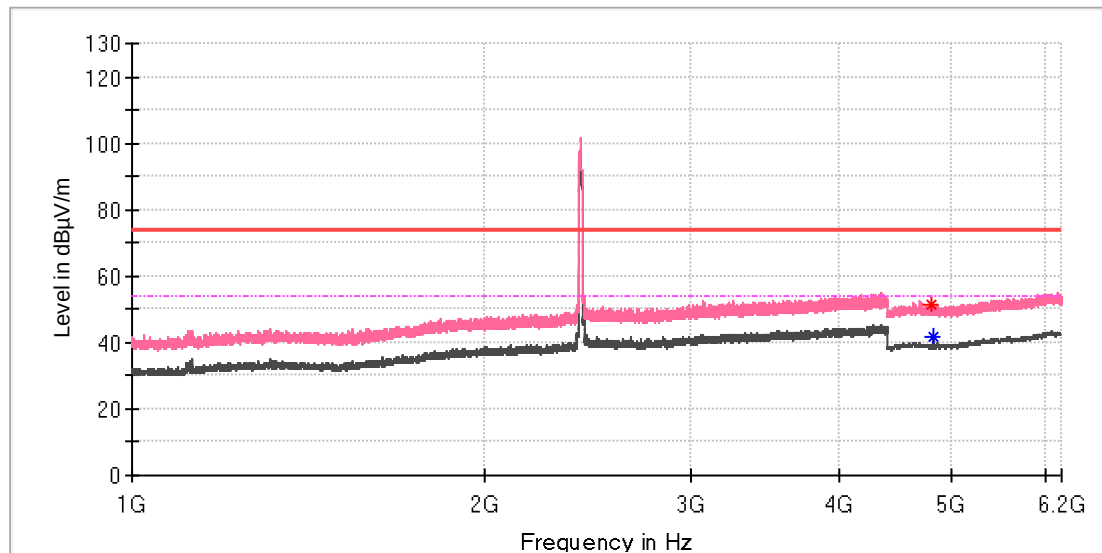
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4823.000000	50.72	---	74.00	23.28	100.0	H	300.0	11.8
4824.000000	---	40.86	54.00	13.14	100.0	H	6.0	11.8

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/A003371470-001
Test Voltage: Battery
Remark: Temp 23 Humi:58%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

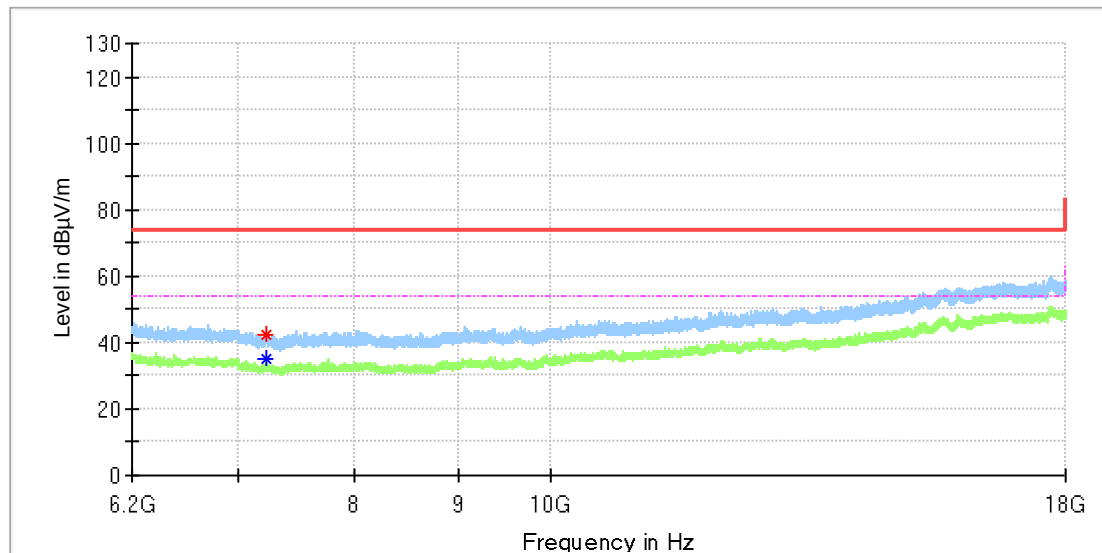
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4811.000000	51.36	---	74.00	22.64	100.0	V	144.0	11.8
4824.000000	---	41.95	54.00	12.05	100.0	V	293.0	11.8

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/A003371470-001
Test Voltage:	Battery
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

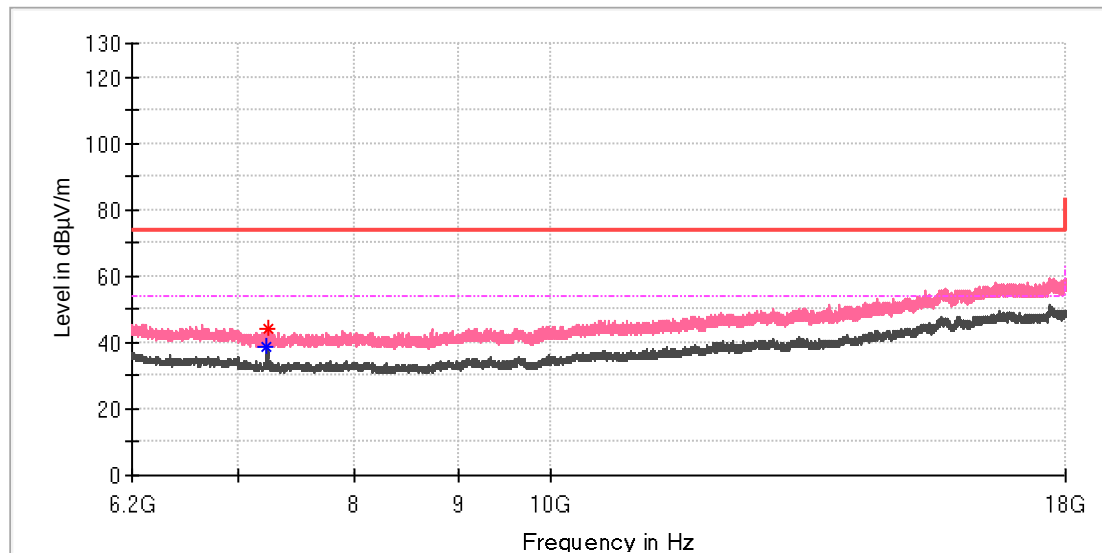
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7234.466667	---	34.77	54.00	19.23	100.0	H	232.0	8.6
7234.958333	42.30	---	74.00	31.70	100.0	H	232.0	8.6

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/A003371470-001
Test Voltage: Battery
Remark: Temp 23 Humi:58%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7234.958333	---	38.49	54.00	15.51	100.0	V	298.0	8.6
7236.925000	44.30	---	74.00	29.70	100.0	V	150.0	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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