

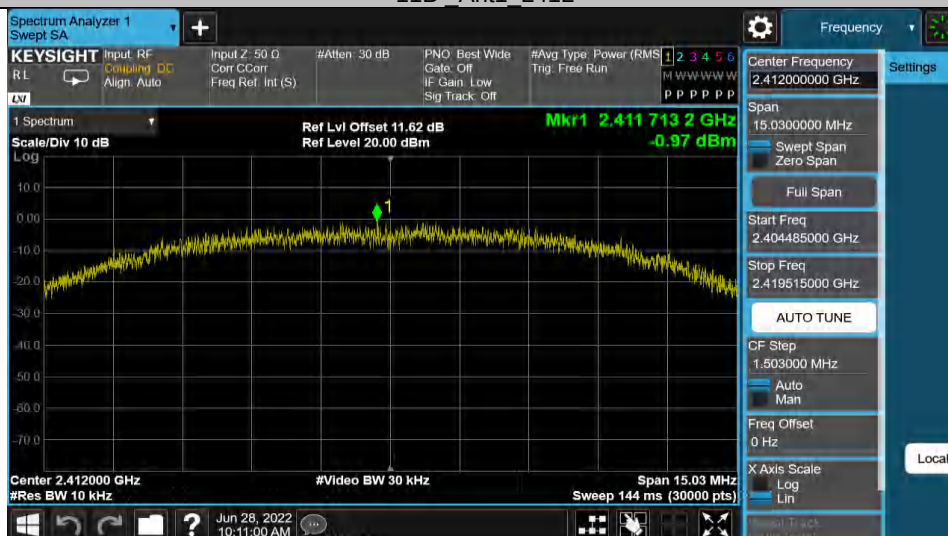
Appendix B: Test Results of Wi-Fi 802.11 b/g/n

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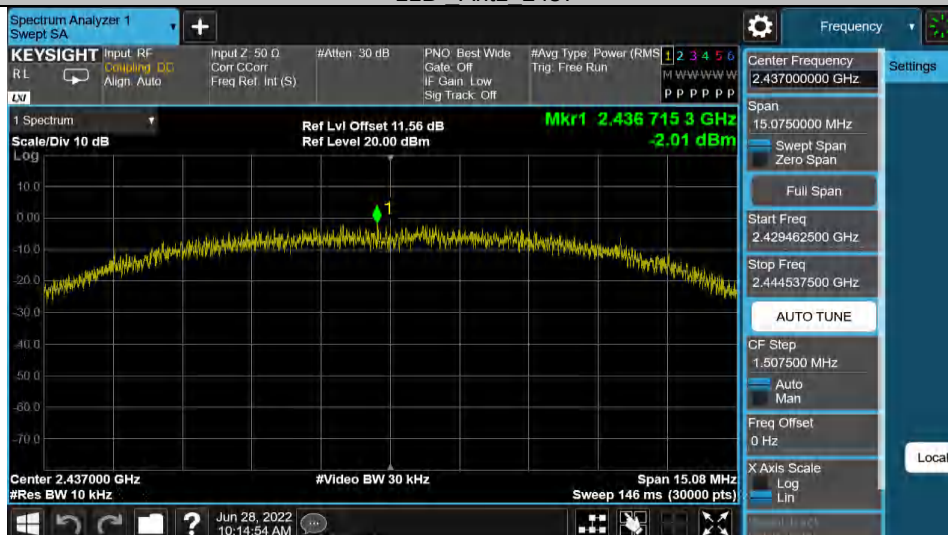
Appendix B.1: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-0.97	≤8.00	PASS
		2437	-2.01	≤8.00	PASS
		2462	-2.01	≤8.00	PASS
11G	Ant1	2412	-4.84	≤8.00	PASS
		2437	-5.78	≤8.00	PASS
		2462	-5.88	≤8.00	PASS
11N20	Ant1	2412	-4.01	≤8.00	PASS
		2437	-4.71	≤8.00	PASS
		2462	-5.37	≤8.00	PASS
11N40	Ant1	2422	-7.37	≤8.00	PASS
		2437	-7.46	≤8.00	PASS
		2452	-7.75	≤8.00	PASS

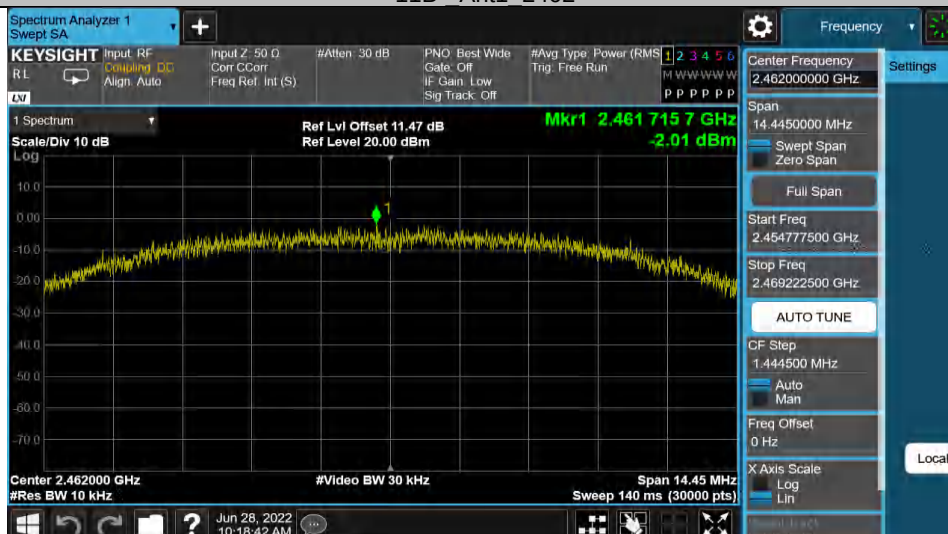
11B_Ant1_2412



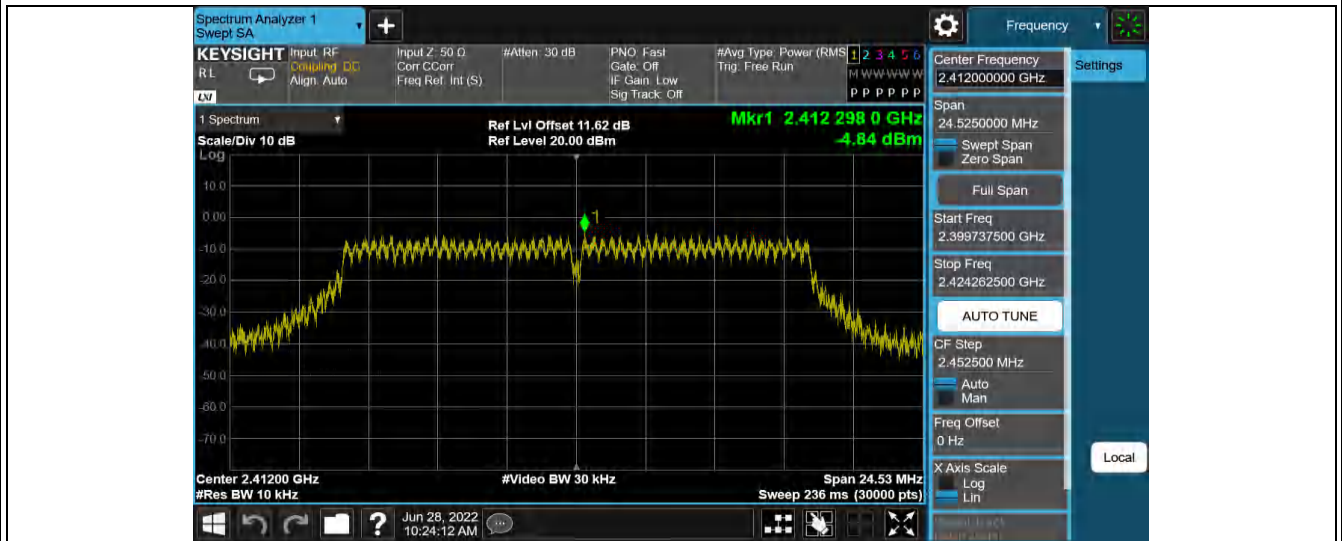
11B- Ant1_2437



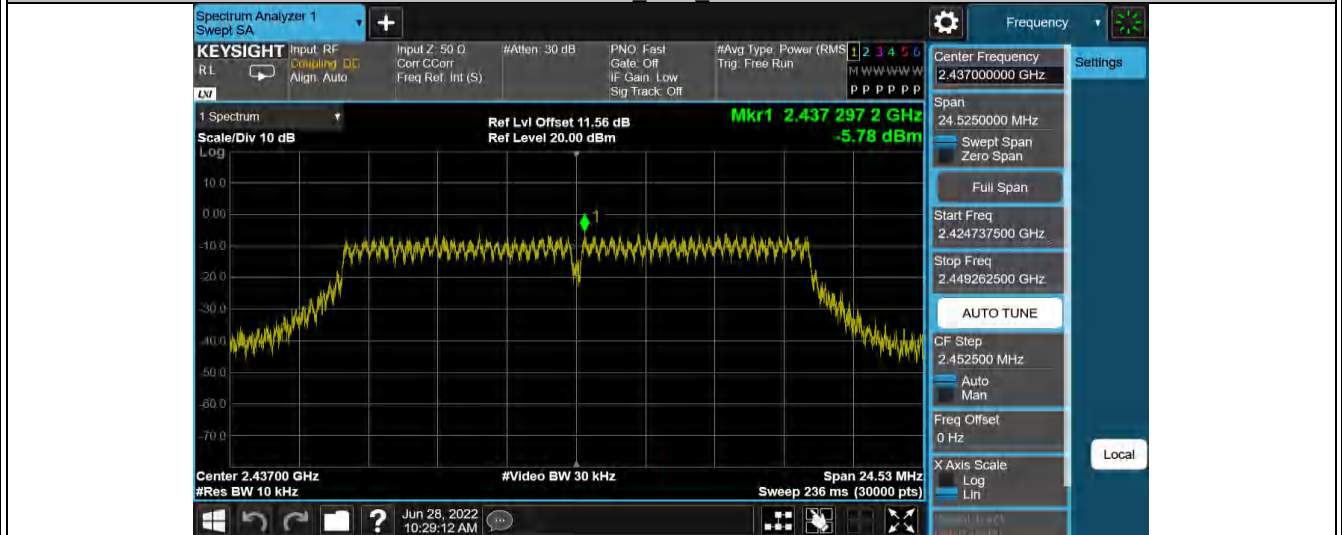
11B- Ant1_2462



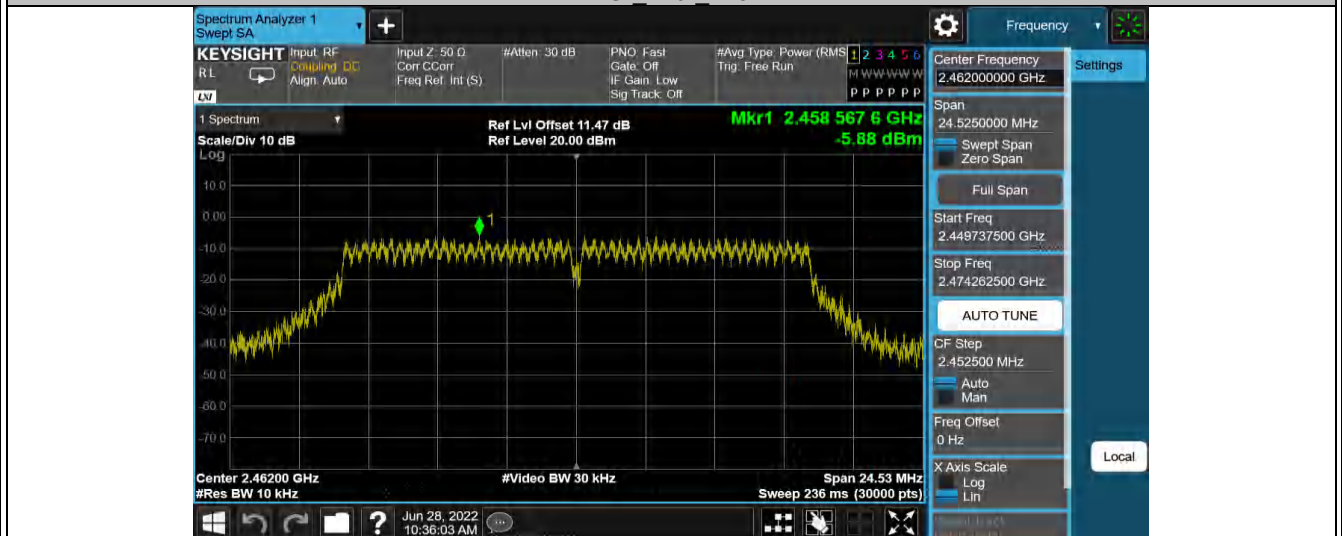
11G- Ant1_2412



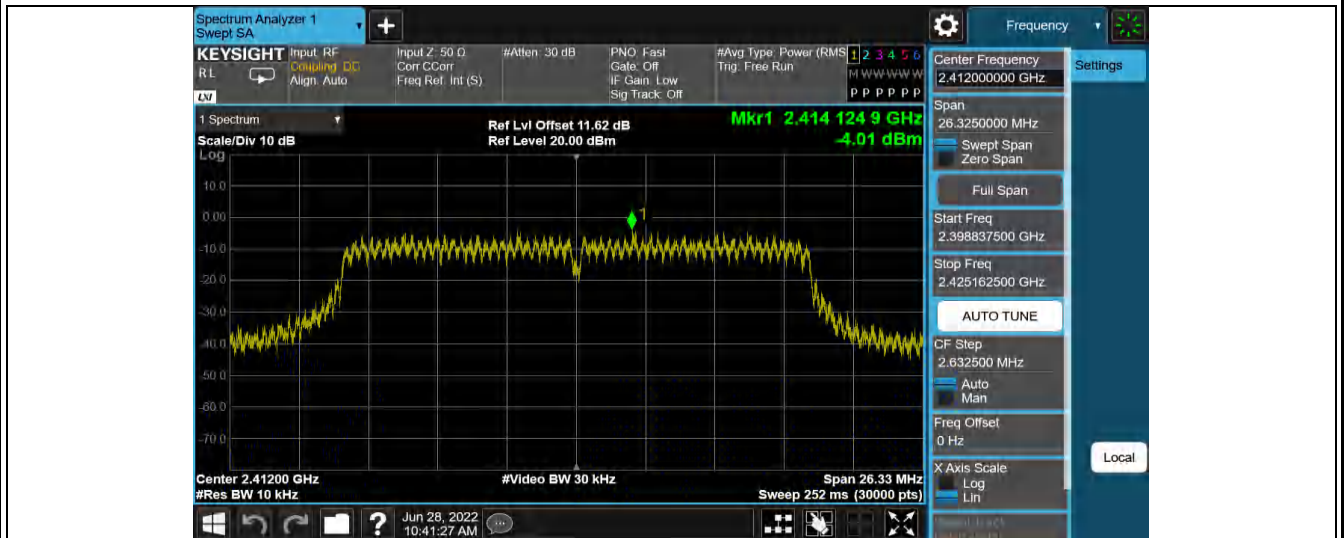
11G- Ant1_2437



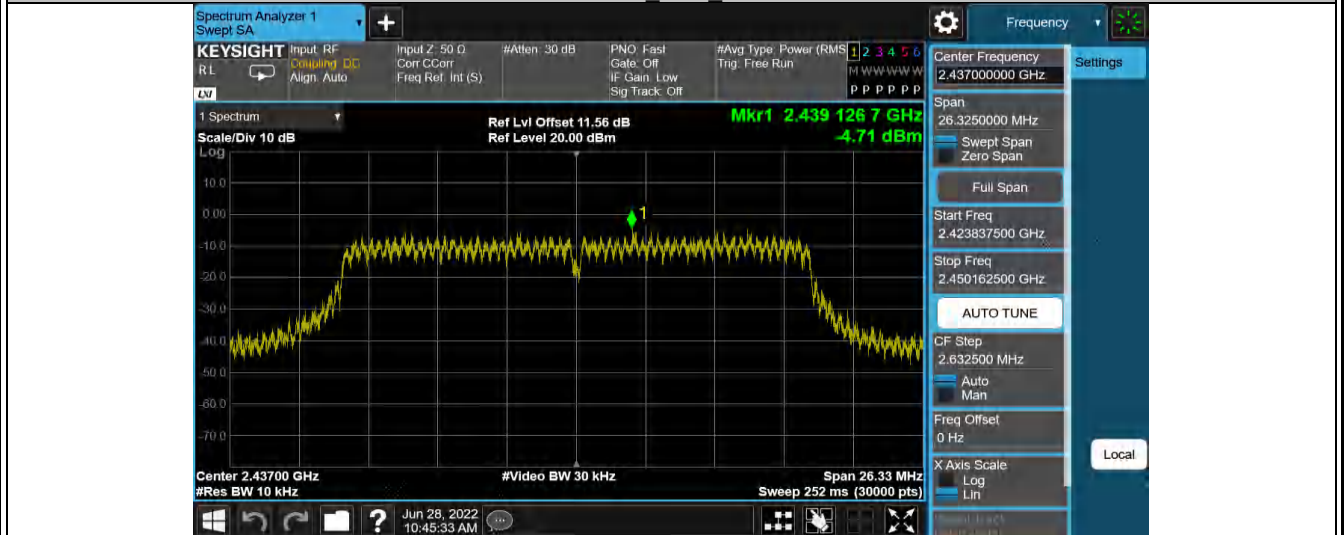
11G- Ant1_2462



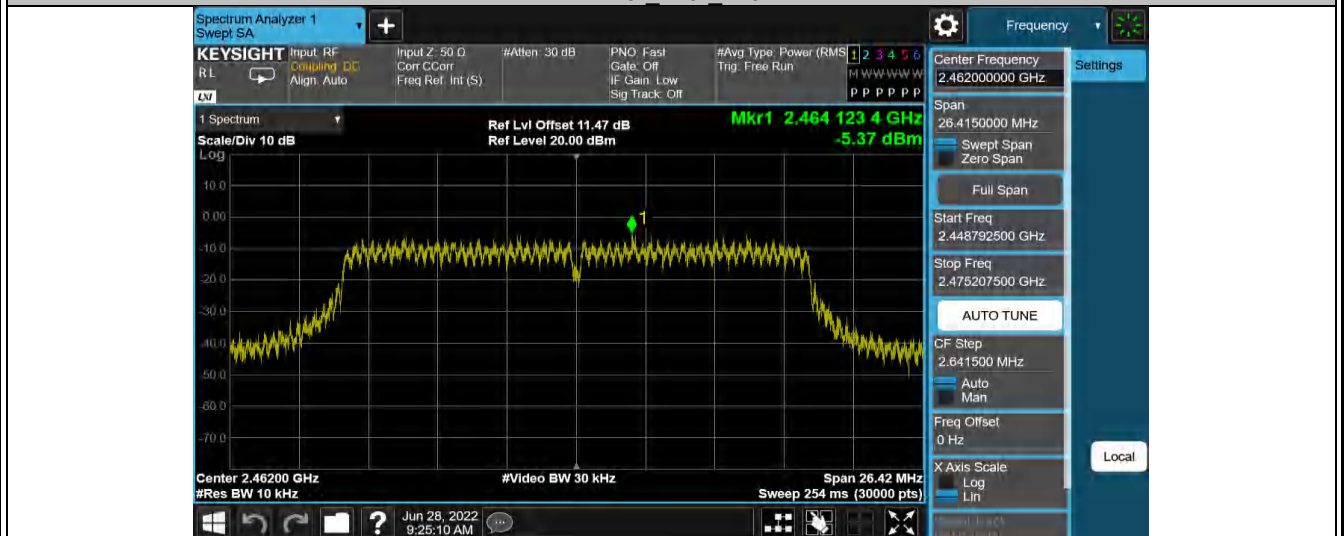
11N20- Ant1_2412



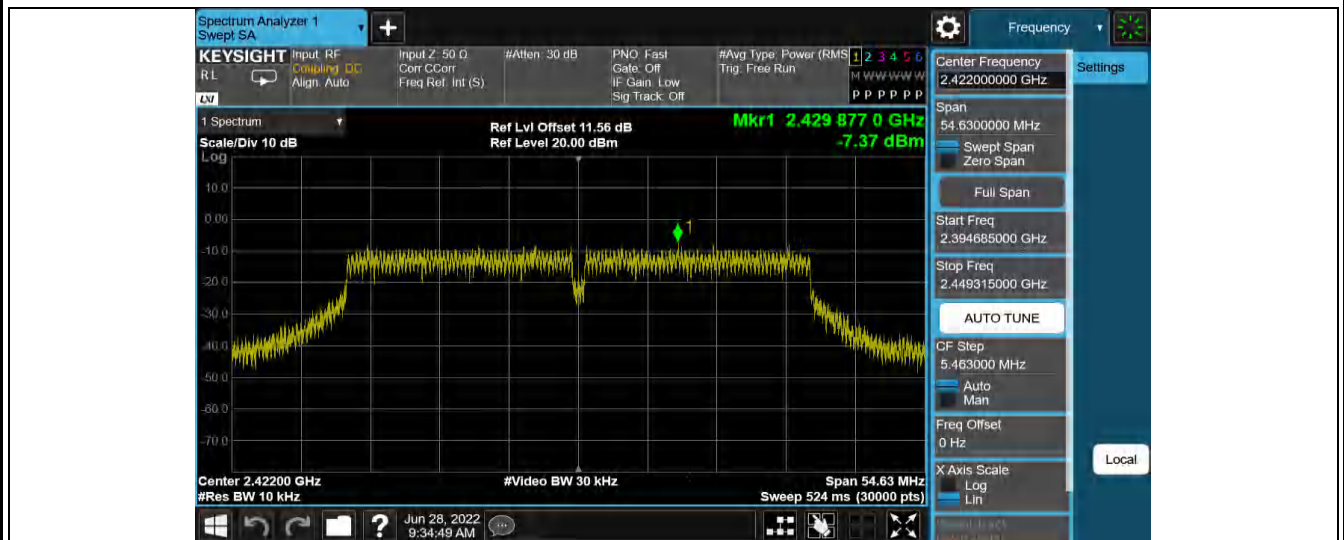
11N20- Ant1 2437



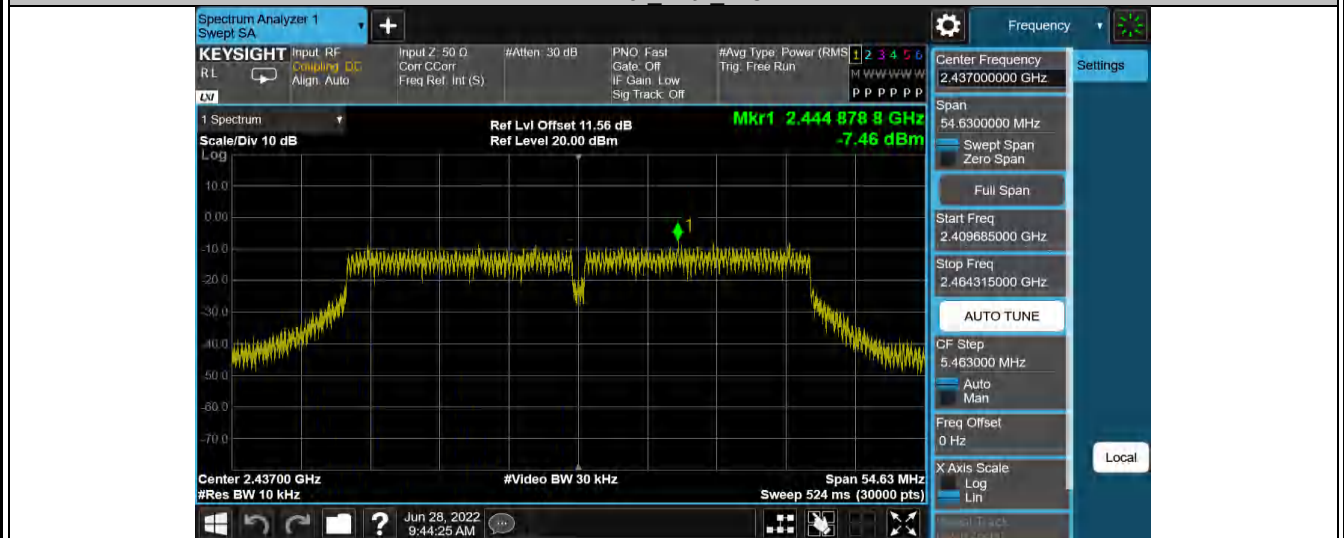
11N20- Ant1 2462



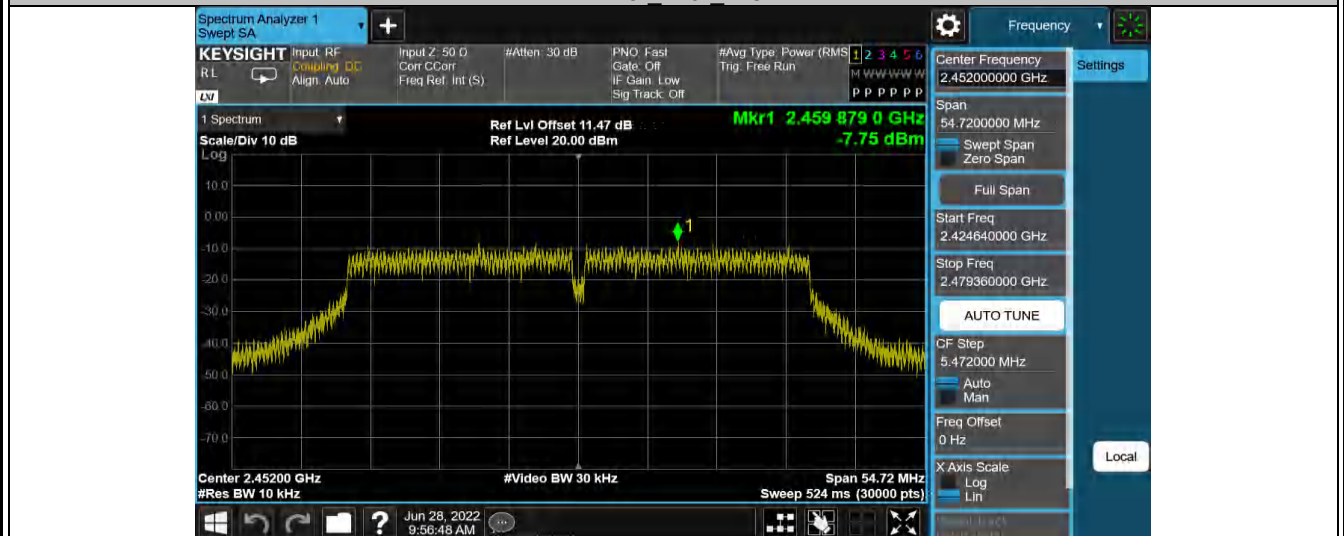
11N40- Ant1 2422



11N40- Ant1 2437



11N40- Ant1 2452



Appendix B.2: Test Results of 6dB Bandwidth

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	10.020	2406.990	2417.010	0.5	PASS
		2437	10.050	2431.990	2442.040	0.5	PASS
		2462	9.630	2456.990	2466.620	0.5	PASS
11G	Ant1	2412	16.350	2403.840	2420.190	0.5	PASS
		2437	16.350	2428.840	2445.190	0.5	PASS
		2462	16.350	2453.840	2470.190	0.5	PASS
11N20	Ant1	2412	17.550	2403.240	2420.790	0.5	PASS
		2437	17.550	2428.240	2445.790	0.5	PASS
		2462	17.610	2453.180	2470.790	0.5	PASS
11N40	Ant1	2422	36.420	2403.820	2440.240	0.5	PASS
		2437	36.420	2418.820	2455.240	0.5	PASS
		2452	36.480	2433.820	2470.300	0.5	PASS

11B Ant1 2412



11B Ant1 2437



11B Ant1 2462



11G Ant1 2412



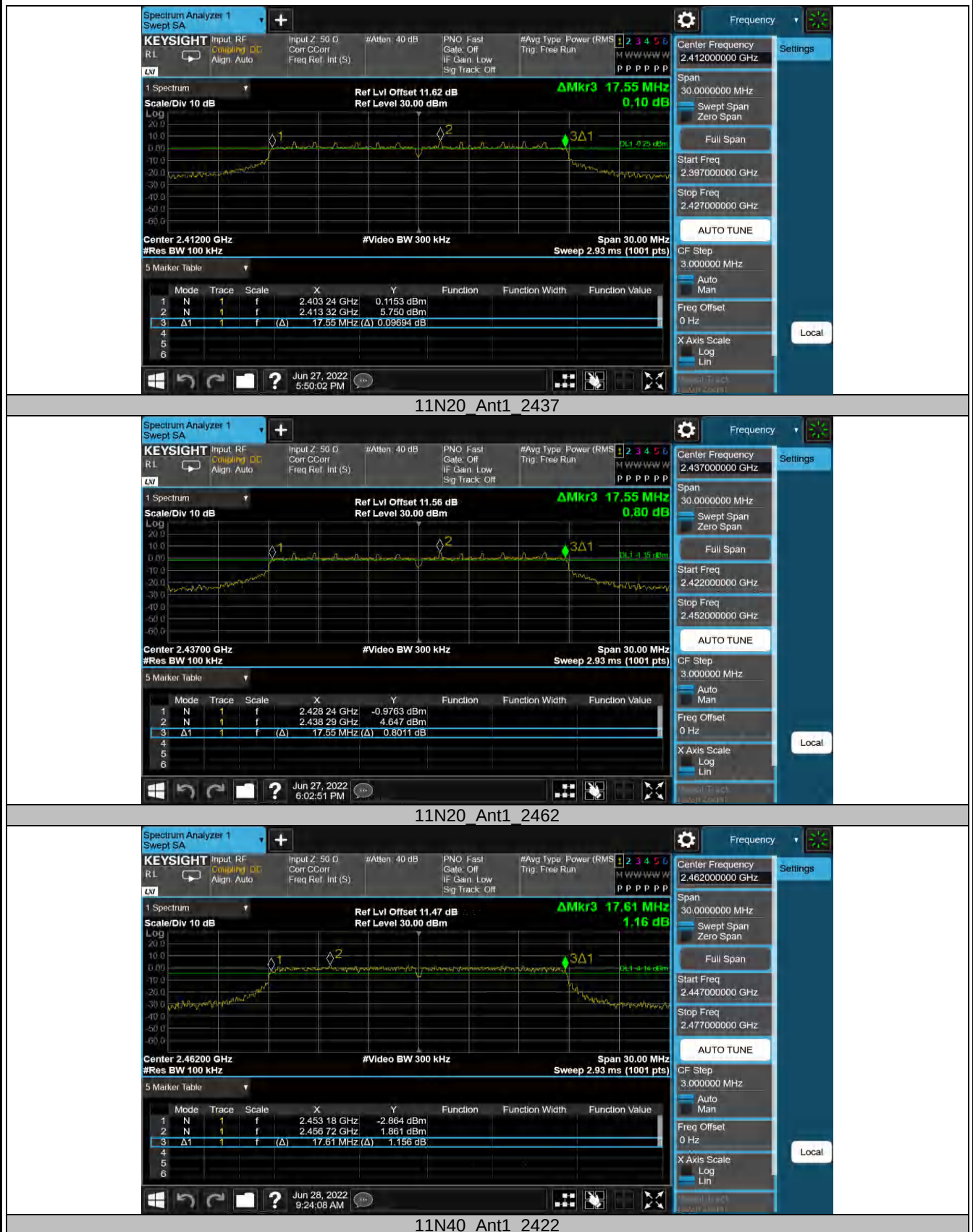
11G_Ant1_2437

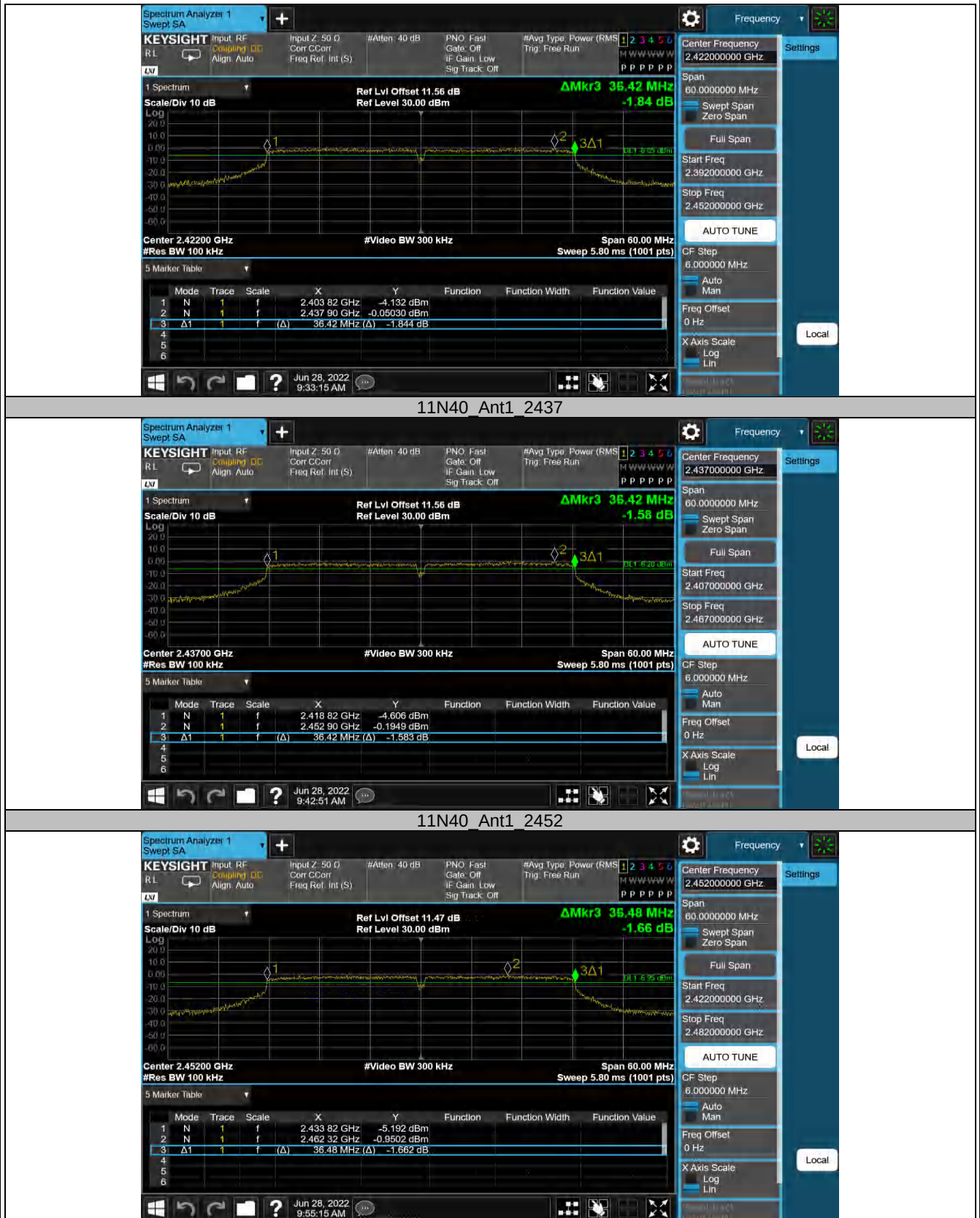


11G_Ant1_2462



11N20_Ant1_2412

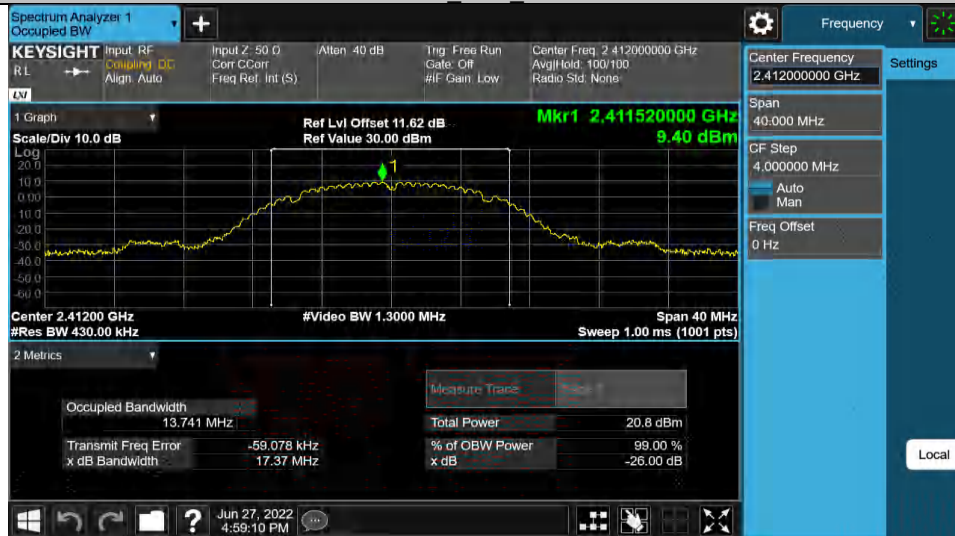




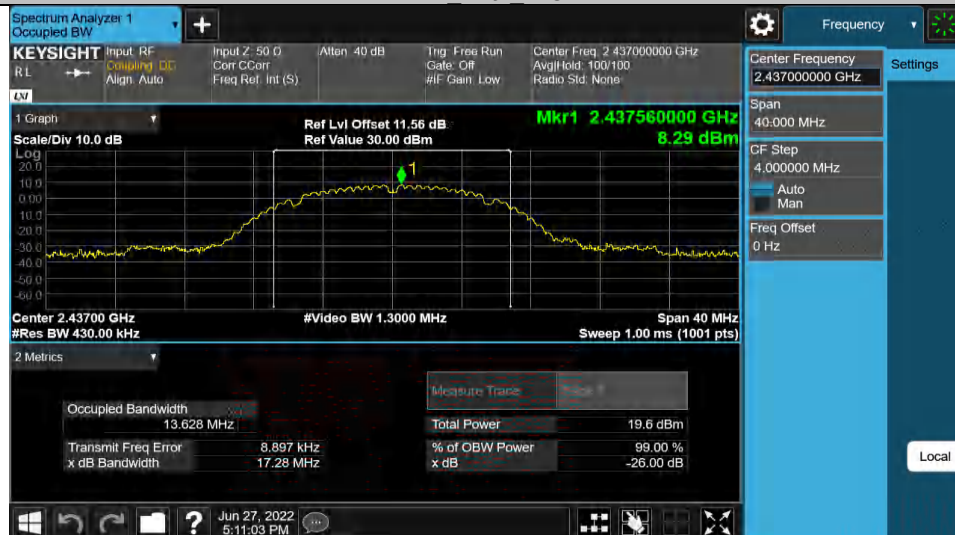
Appendix B.3: Test Results of 99% Bandwidth

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.741	2405.070	2418.811	---	PASS
		2437	13.628	2430.195	2443.823	---	PASS
		2462	13.598	2455.141	2468.739	---	PASS
11G	Ant1	2412	18.447	2402.799	2421.246	---	PASS
		2437	18.423	2427.913	2446.336	---	PASS
		2462	18.237	2452.879	2471.116	---	PASS
11N20	Ant1	2412	19.270	2402.285	2421.555	---	PASS
		2437	19.212	2427.462	2446.674	---	PASS
		2462	17.728	2453.117	2470.845	---	PASS
11N40	Ant1	2422	36.808	2403.607	2440.415	---	PASS
		2437	36.774	2418.649	2455.423	---	PASS
		2452	36.780	2433.678	2470.458	---	PASS

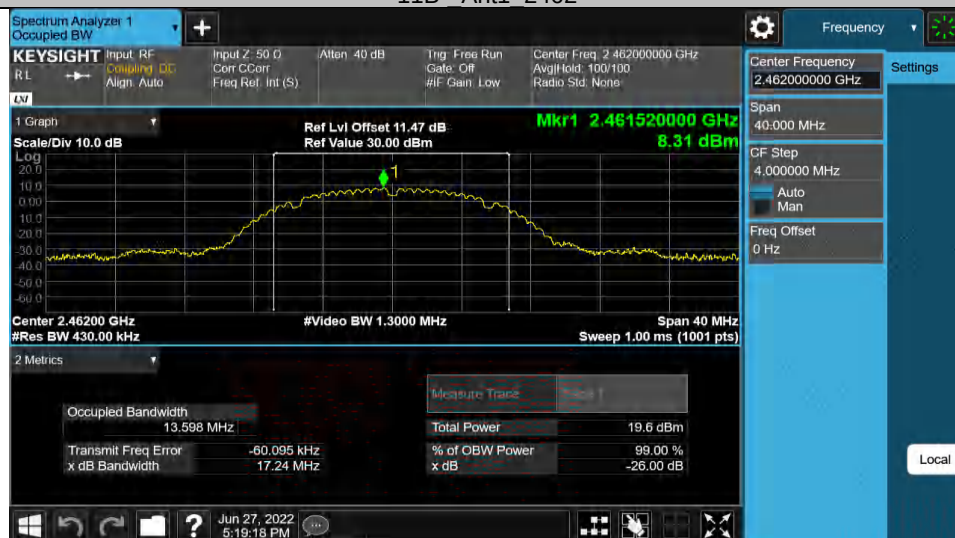
11B- Ant1 2412



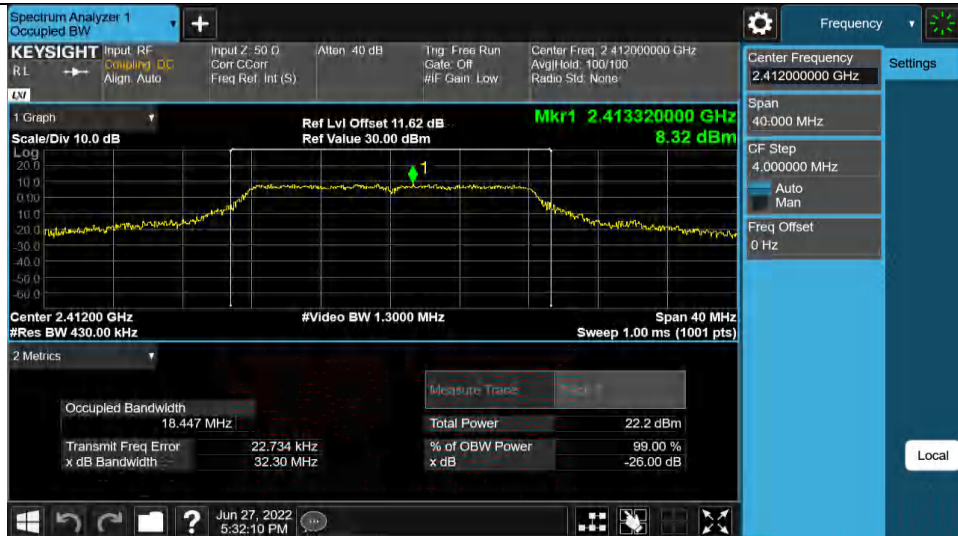
11B- Ant1 2437



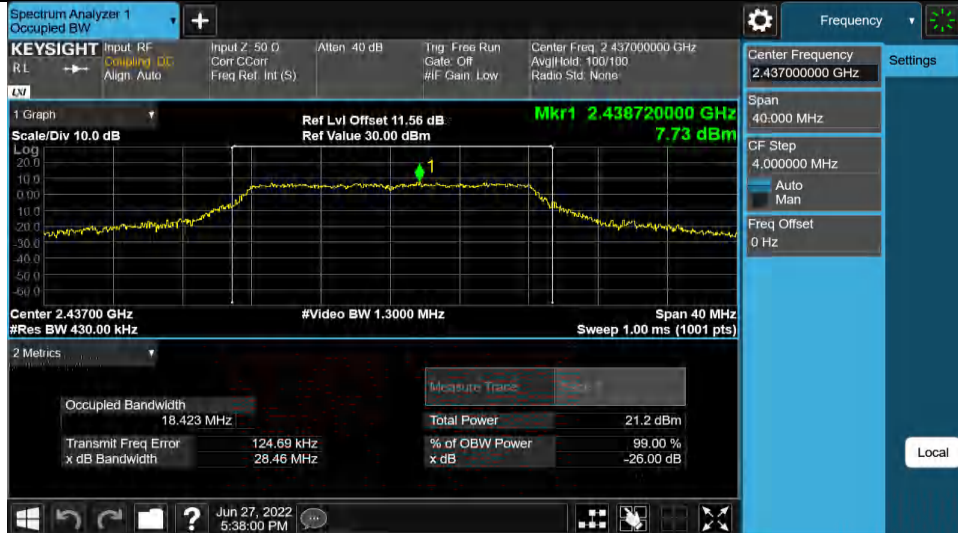
11B- Ant1 2462



11G- Ant1 2412



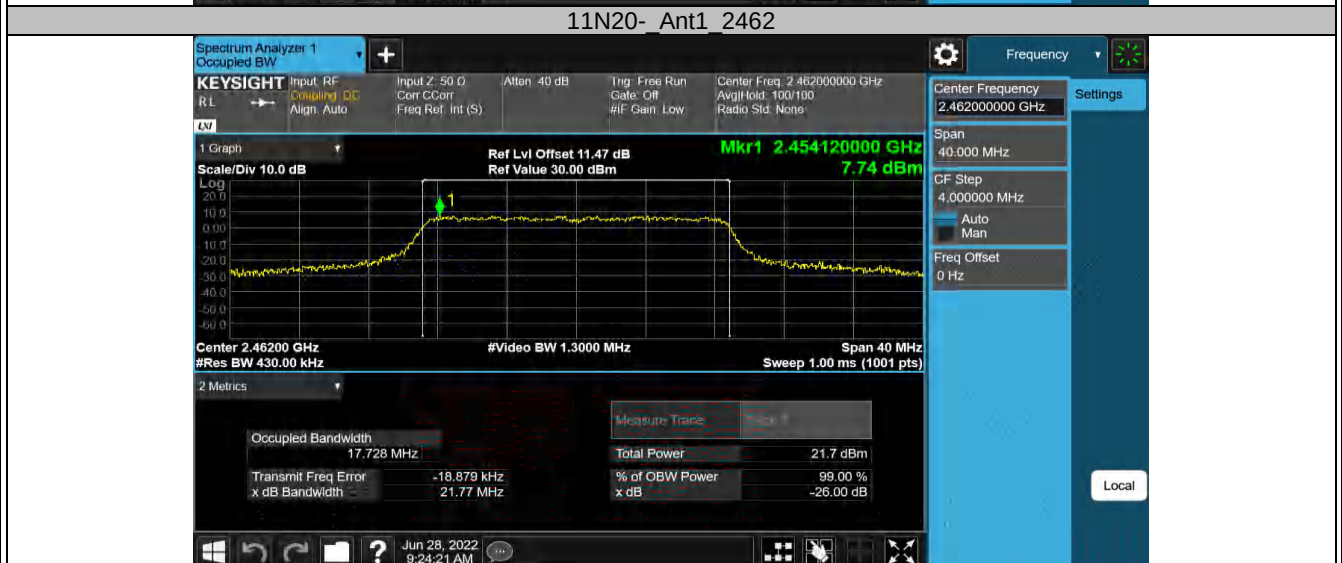
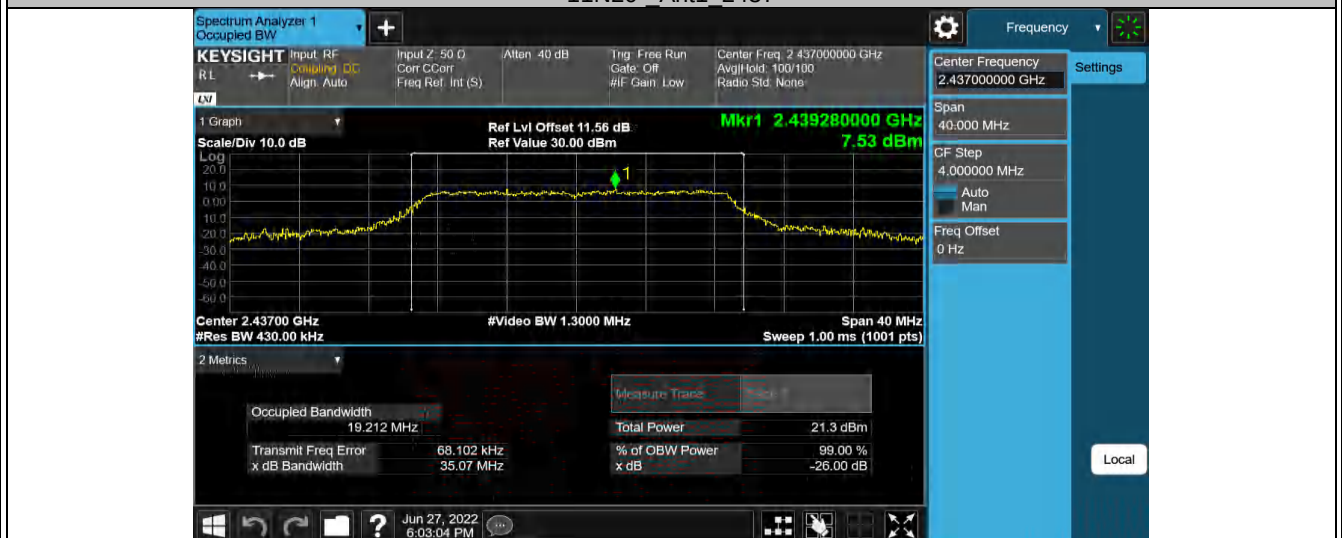
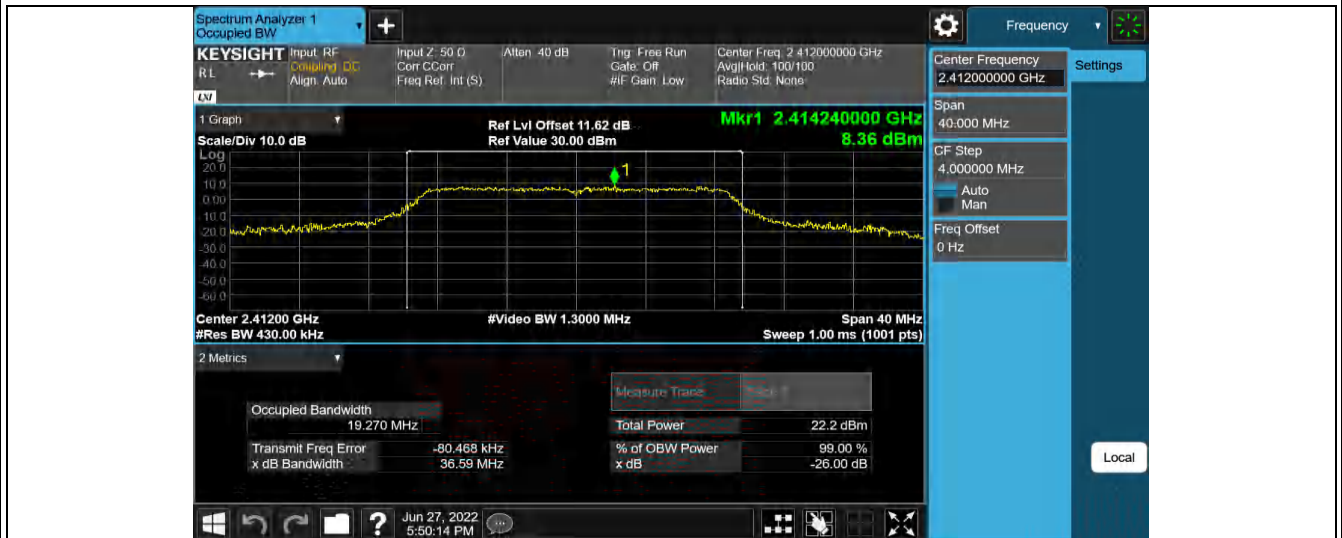
11G- Ant1 2437

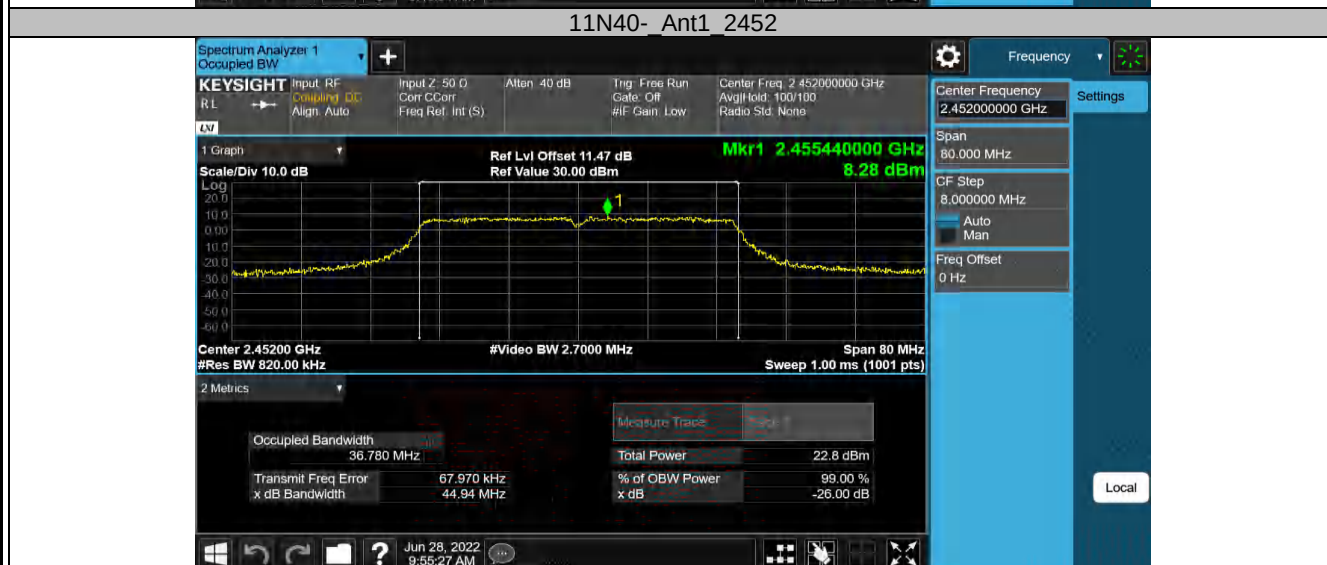
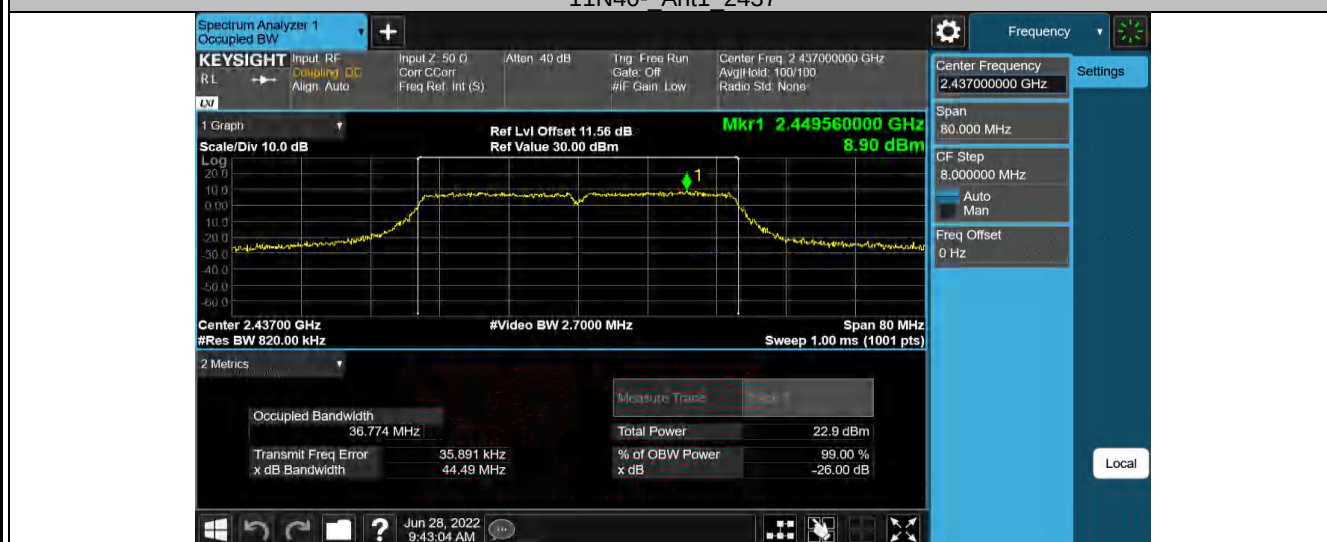
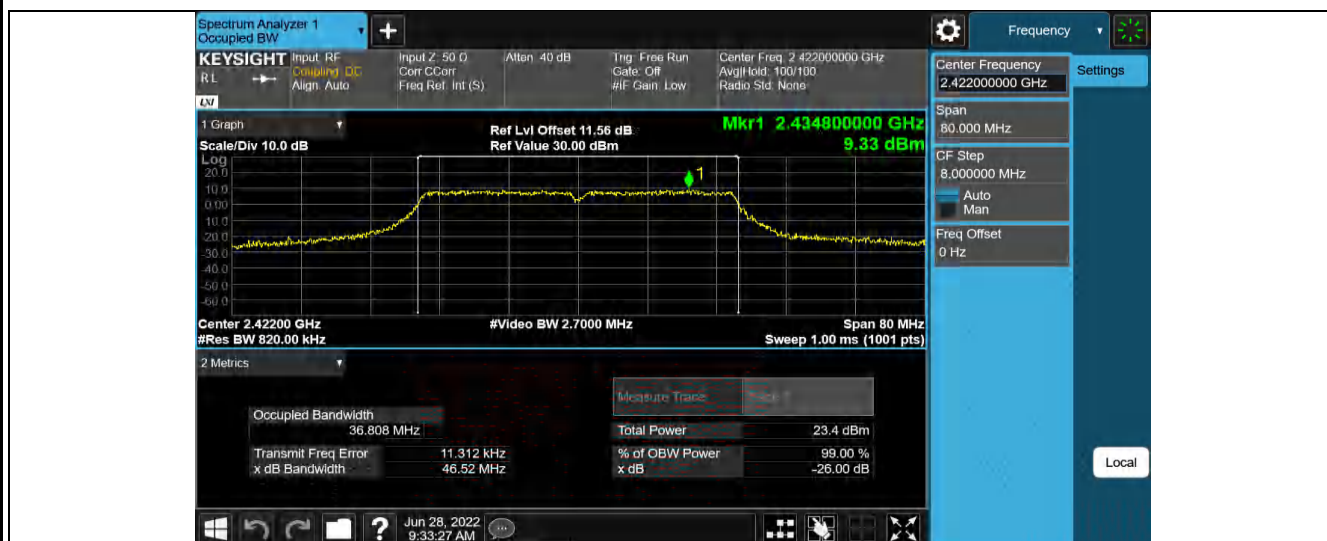


11G- Ant1 2462



11N20- Ant1 2412





Appendix B.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

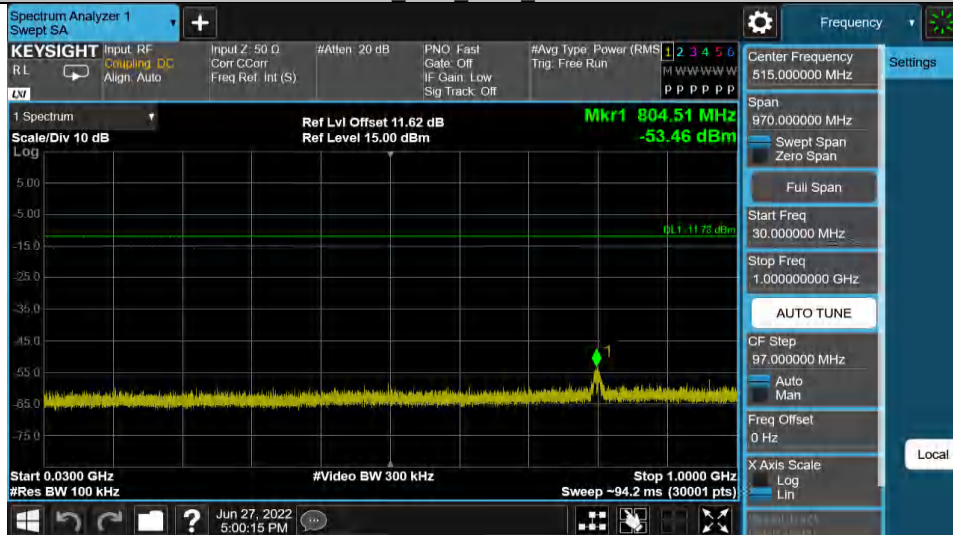
Conducted Spurious Emission

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	8.22	8.22	---	PASS
			30~1000	8.22	-53.46	≤-11.78	PASS
			1000~26500	8.22	-42.49	≤-11.78	PASS
		2437	Reference	7.26	7.26	---	PASS
			30~1000	7.26	-53.17	≤-12.74	PASS
			1000~26500	7.26	-42.37	≤-12.74	PASS
		2462	Reference	7.23	7.23	---	PASS
			30~1000	7.23	-53.48	≤-12.77	PASS
			1000~26500	7.23	-40.26	≤-12.77	PASS
11G	Ant1	2412	Reference	5.68	5.68	---	PASS
			30~1000	5.68	-52.66	≤-14.32	PASS
			1000~26500	5.68	-40.16	≤-14.32	PASS
		2437	Reference	4.68	4.68	---	PASS
			30~1000	4.68	-54.1	≤-15.32	PASS
			1000~26500	4.68	-38.44	≤-15.32	PASS
		2462	Reference	4.80	4.80	---	PASS
			30~1000	4.80	-51.68	≤-15.2	PASS
			1000~26500	4.80	-37.67	≤-15.2	PASS
11N20	Ant1	2412	Reference	5.72	5.72	---	PASS
			30~1000	5.72	-53.63	≤-14.28	PASS
			1000~26500	5.72	-40.23	≤-14.28	PASS
		2437	Reference	9.94	9.94	---	PASS
			30~1000	9.94	-46.58	≤-10.06	PASS
			1000~26500	4.72	-38.61	≤-15.28	PASS
		2462	Reference	1.93	1.93	---	PASS
			30~1000	1.93	-57.58	≤-18.07	PASS
			1000~26500	1.93	-48.16	≤-18.07	PASS
11N40	Ant1	2422	Reference	-0.34	-0.34	---	PASS
			30~1000	-0.34	-58.49	≤-20.34	PASS
			1000~26500	-0.34	-50.18	≤-20.34	PASS
		2437	Reference	-0.14	-0.14	---	PASS
			30~1000	-0.14	-57.57	≤-20.14	PASS
			1000~26500	-0.14	-49.84	≤-20.14	PASS
		2452	Reference	-0.79	-0.79	---	PASS
			30~1000	-0.79	-58.17	≤-20.79	PASS
			1000~26500	-0.79	-49.16	≤-20.79	PASS

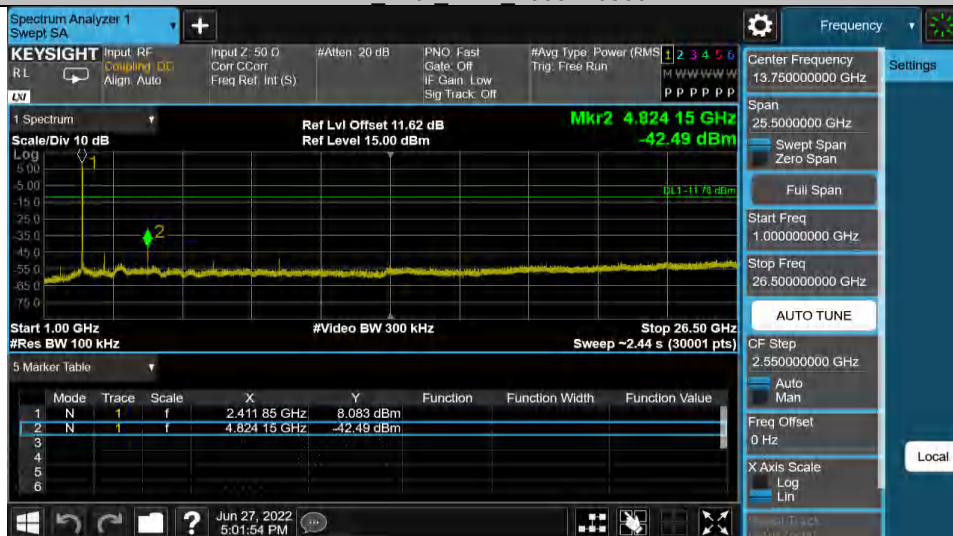
11B- Ant1 2412 0-Reference



11B- Ant1 2412 30-1000



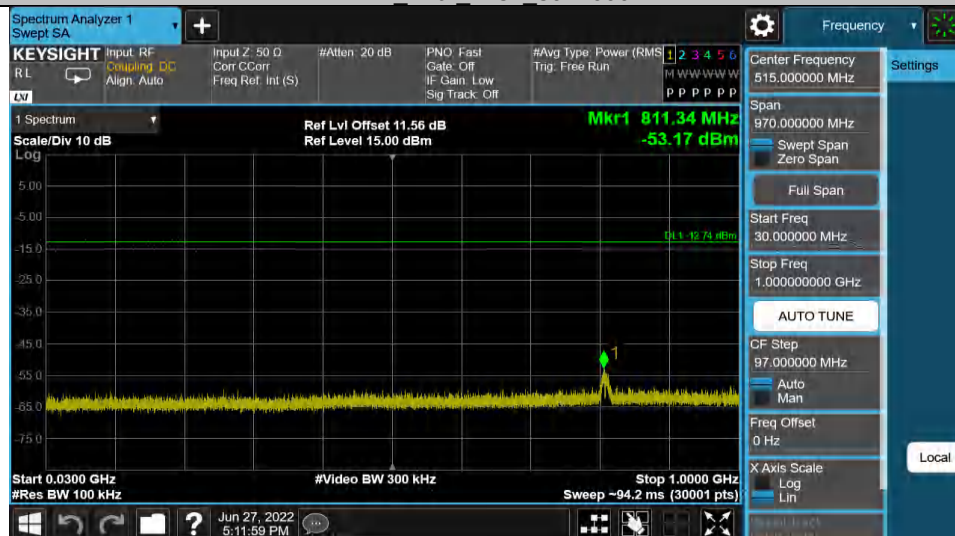
11B- Ant1 2412 1000-26500



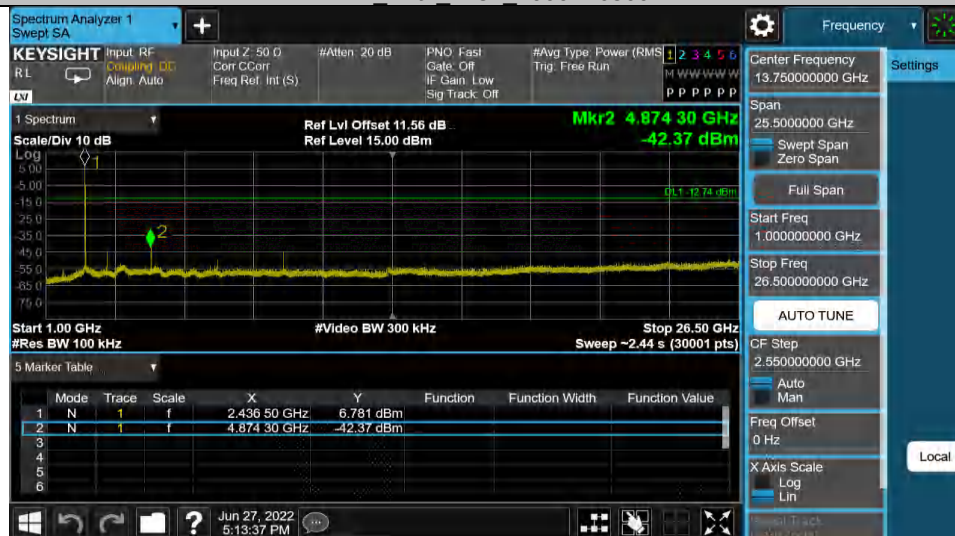
11B- Ant1 2437 0-Reference



11B- Ant1 2437 30~1000



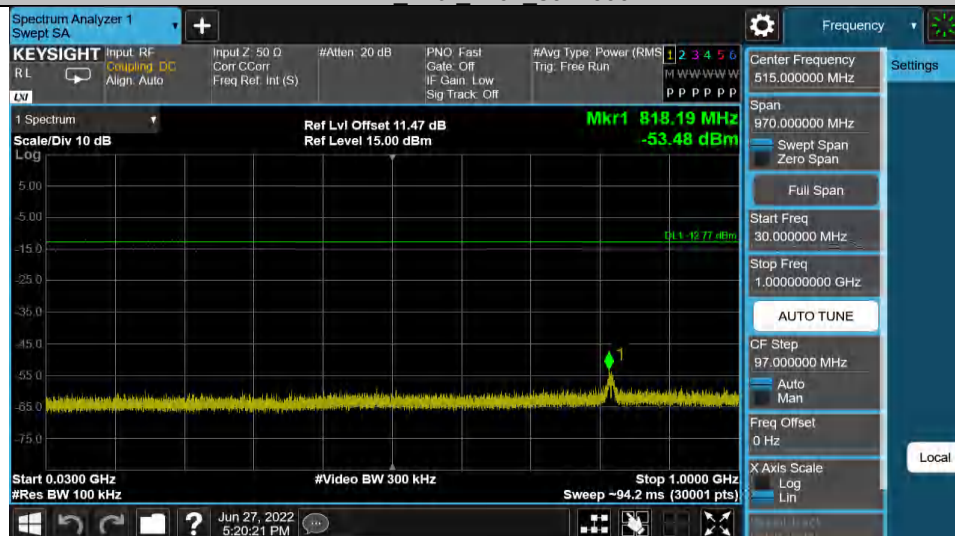
11B- Ant1 2437 1000~26500



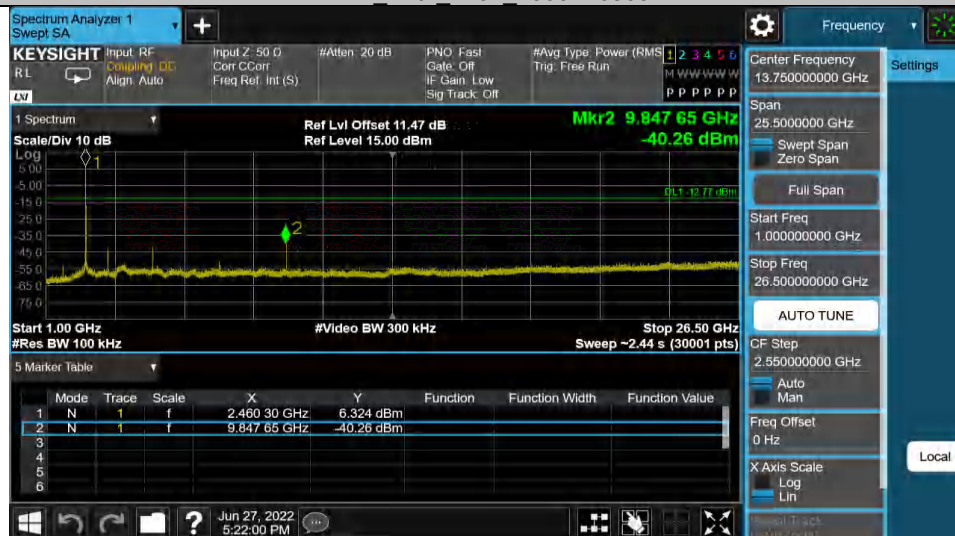
11B- Ant1 2462 0~Reference



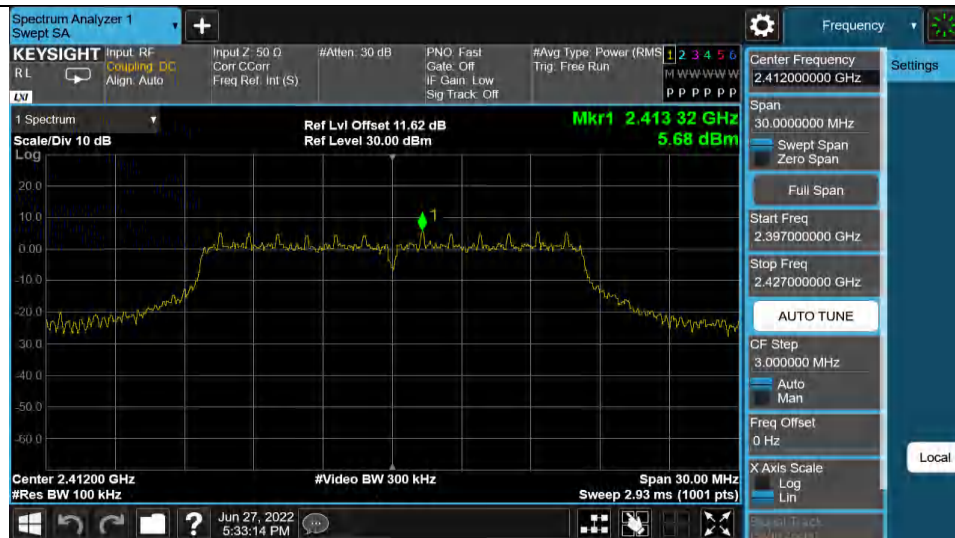
11B- Ant1 2462 30~1000



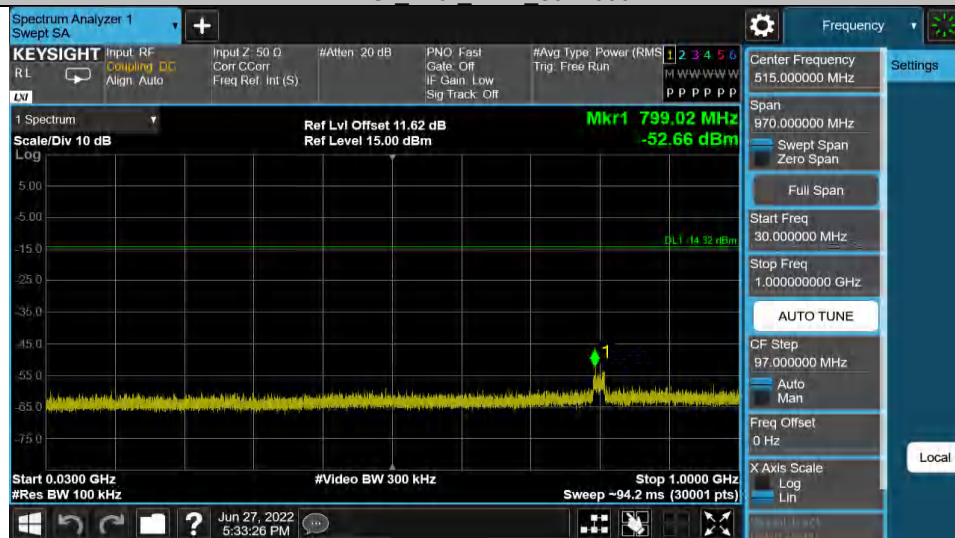
11B- Ant1 2462 1000~26500



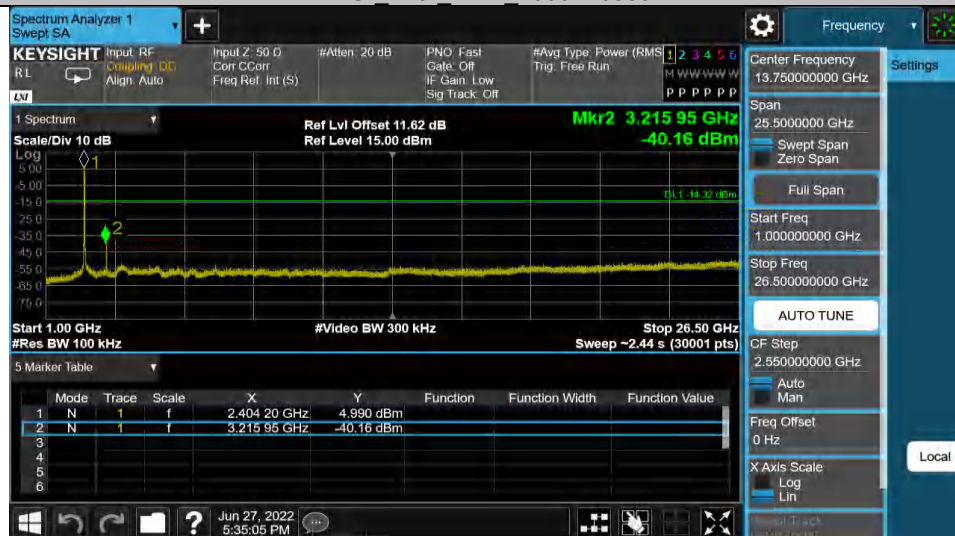
11G- Ant1 2412 0~Reference



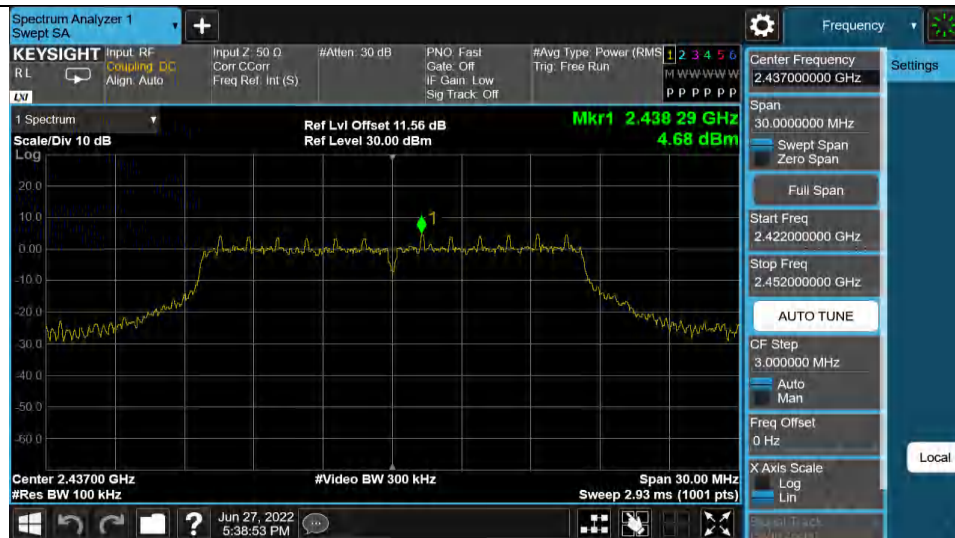
11G- Ant1 2412 30~1000



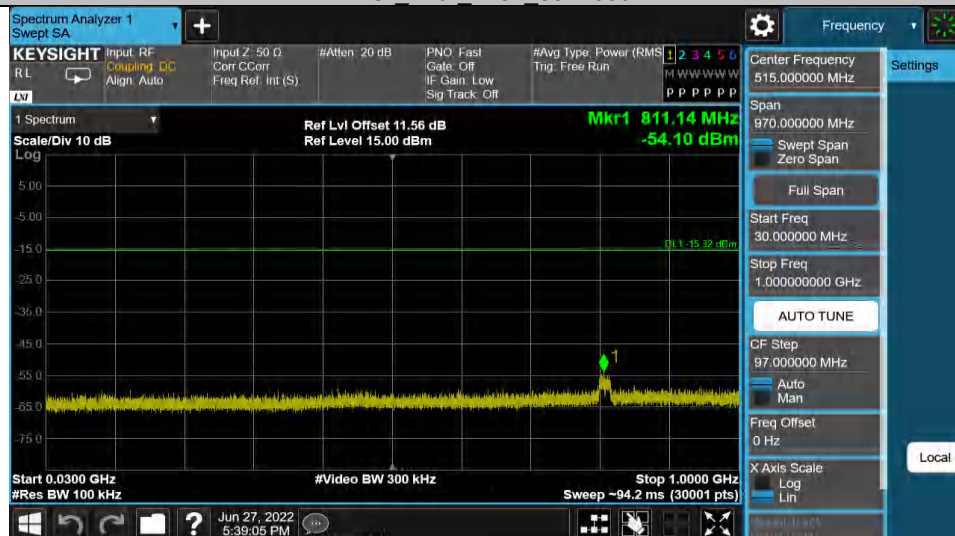
11G- Ant1 2412 1000~26500



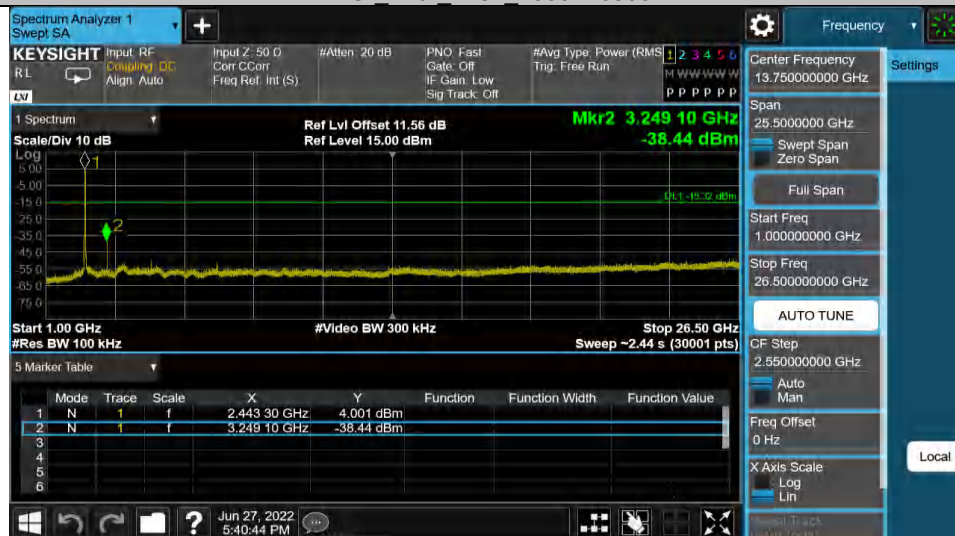
11G- Ant1 2437 0~Reference



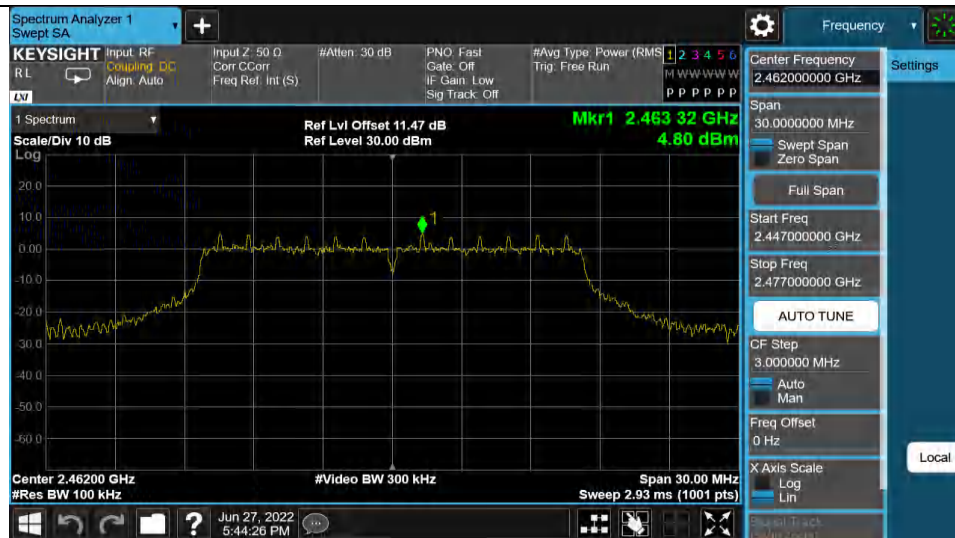
11G- Ant1 2437 30~1000



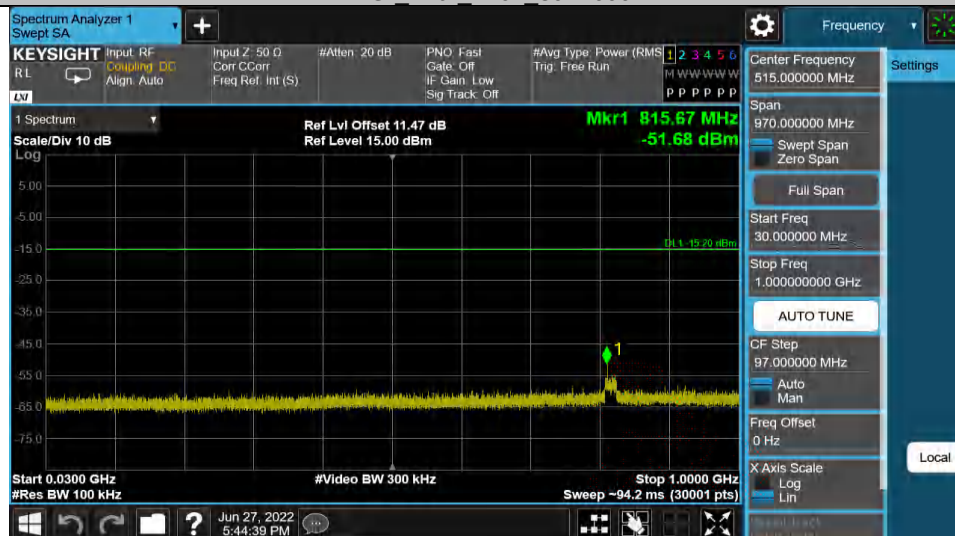
11G- Ant1 2437 1000~26500



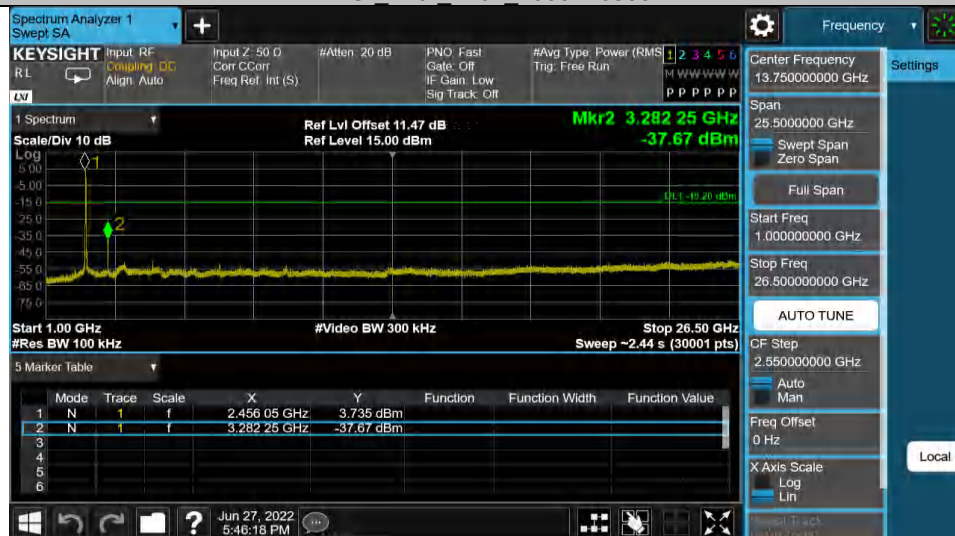
11G- Ant1 2462 0~Reference



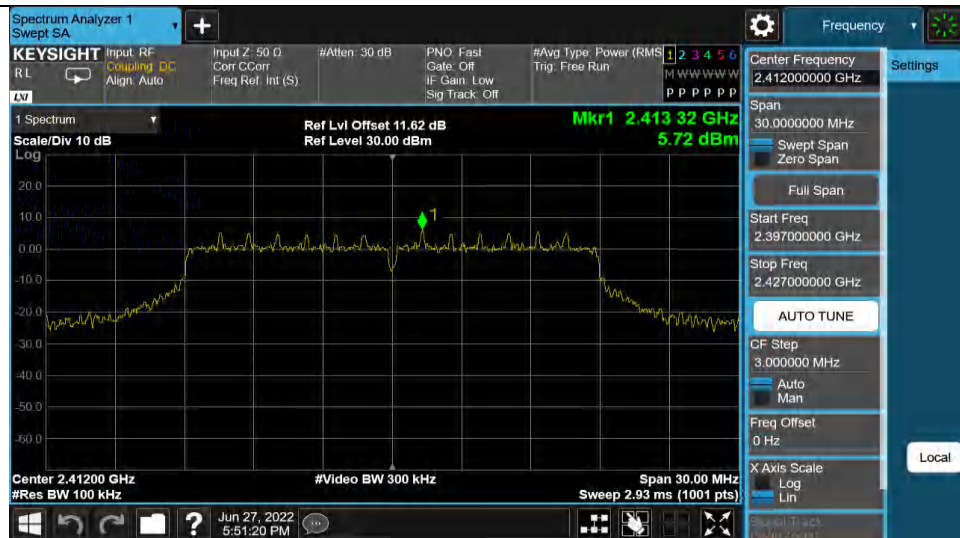
11G- Ant1 2462 30~1000



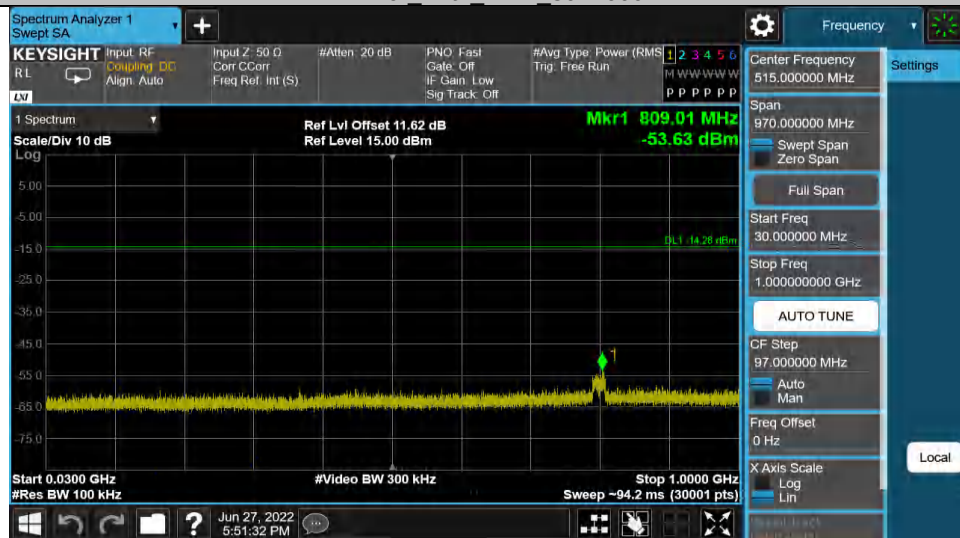
11G- Ant1 2462 1000~26500



11N20- Ant1 2412 0~Reference



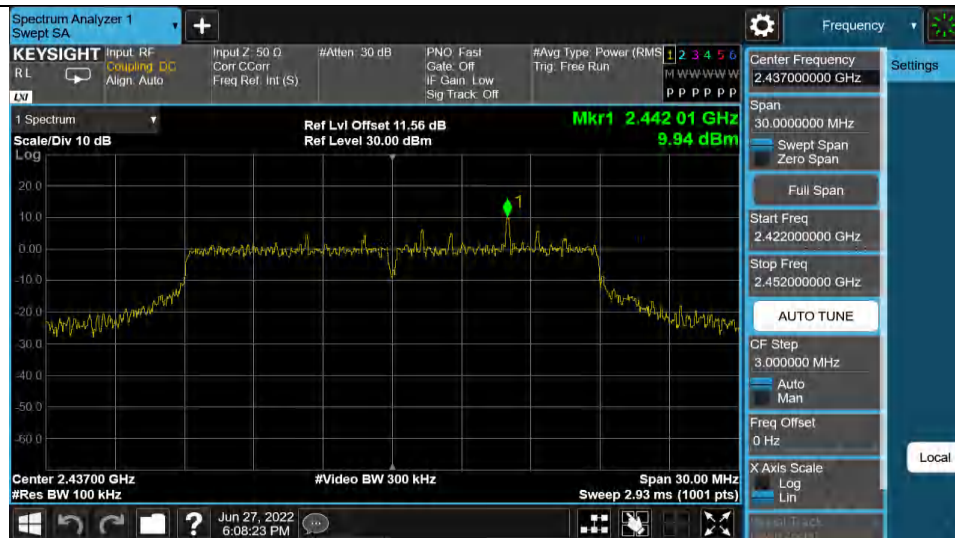
11N20- Ant1 2412 30~1000



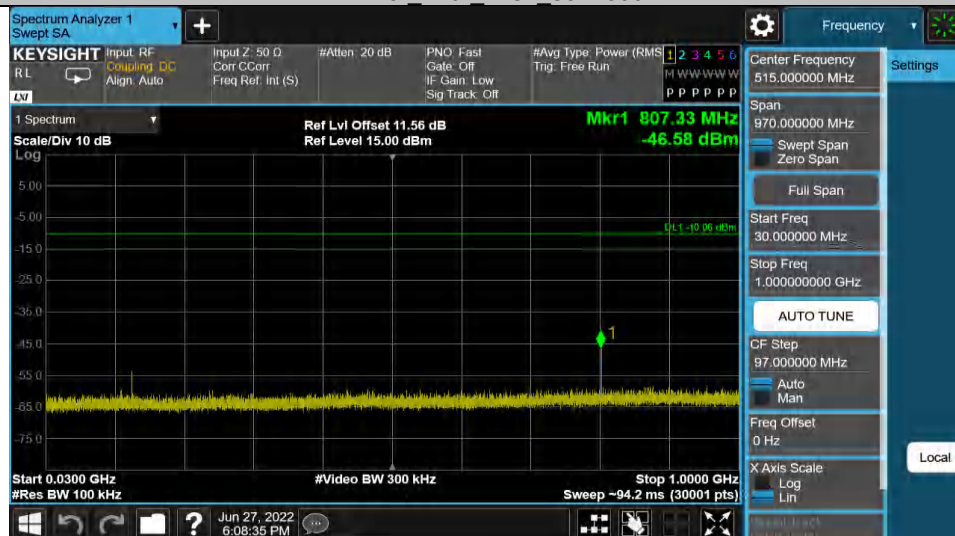
11N20- Ant1 2412 1000~26500



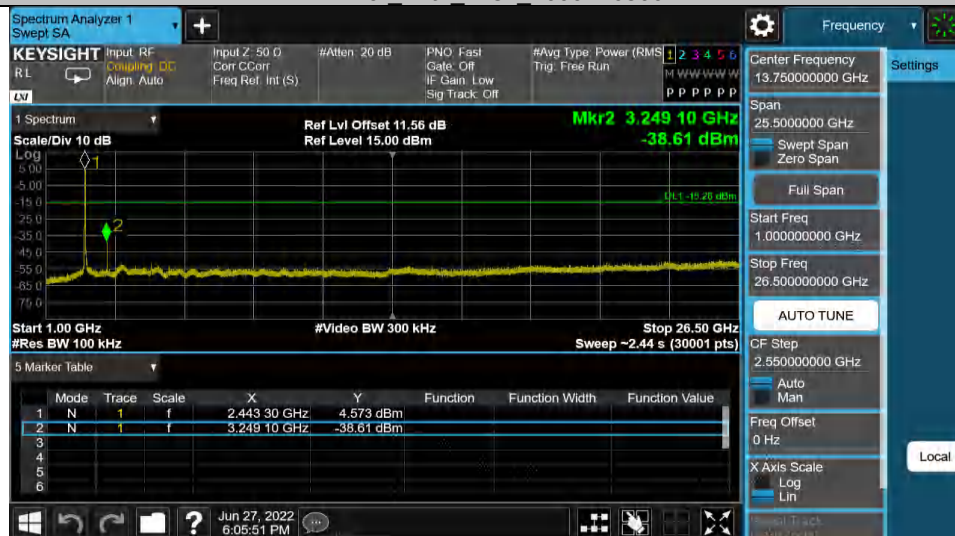
11N20- Ant1 2437 0~Reference



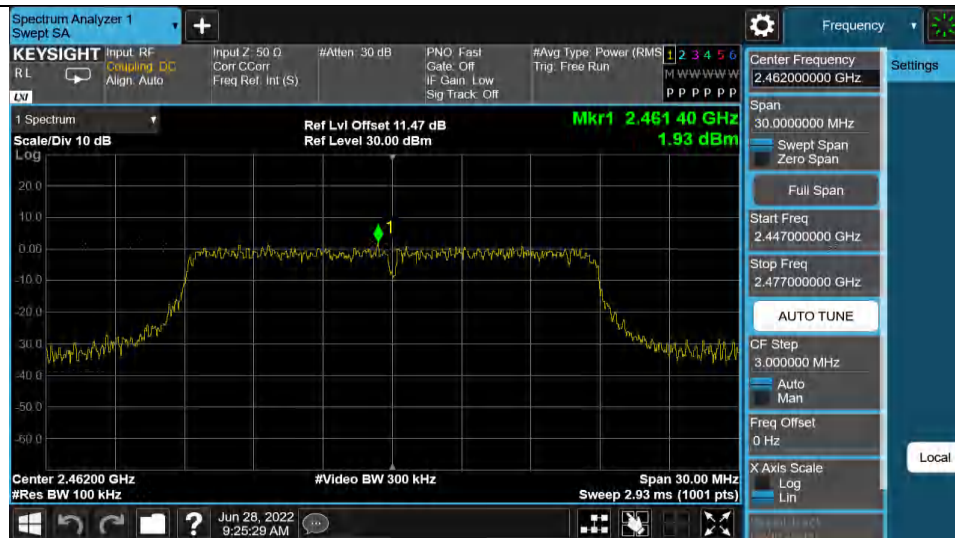
11N20- Ant1 2437 30~1000



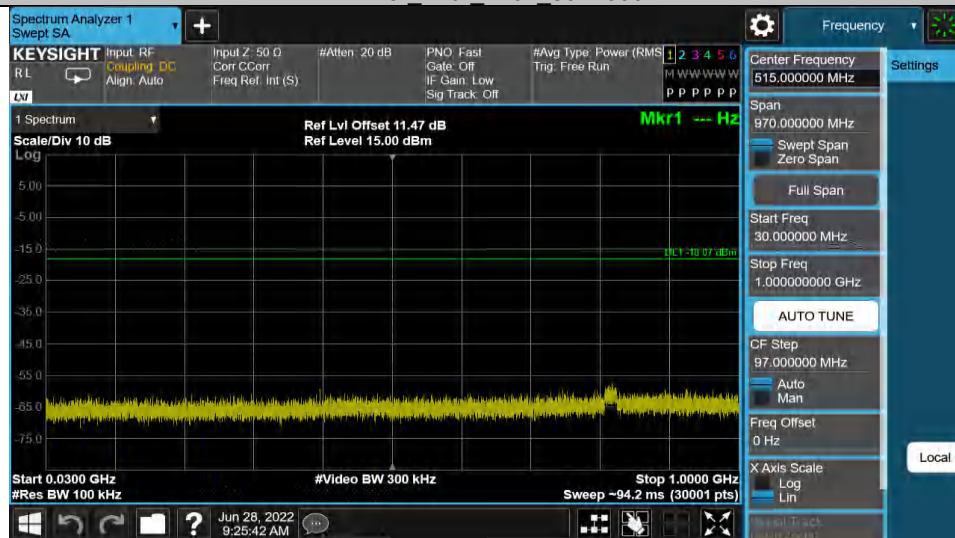
11N20- Ant1 2437 1000~26500



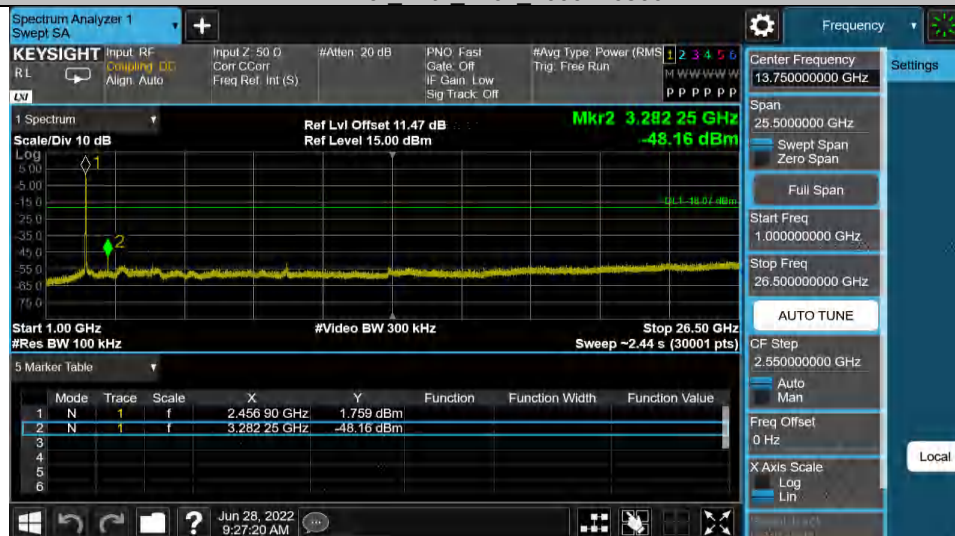
11N20- Ant1 2462 0~Reference



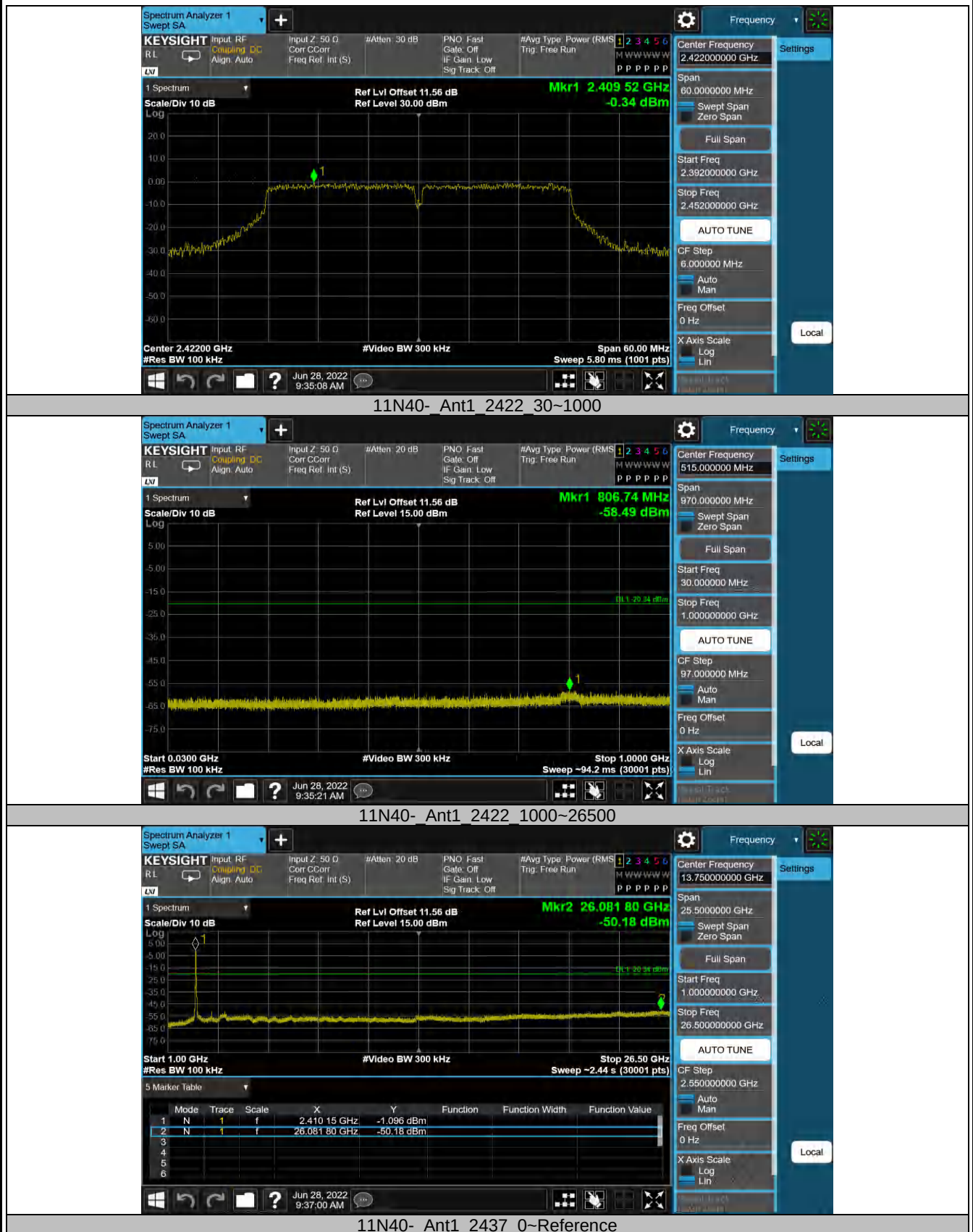
11N20- Ant1 2462 30~1000



11N20- Ant1 2462 1000~26500

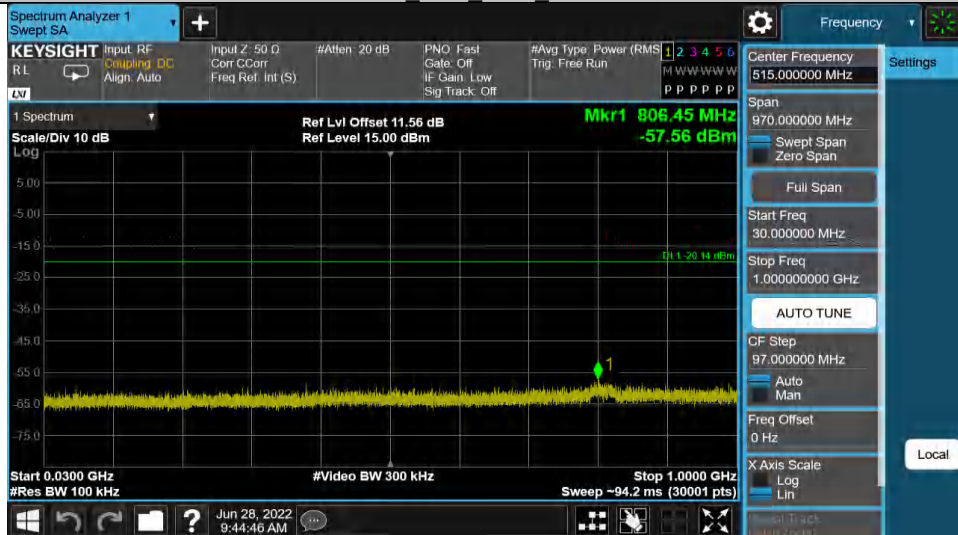


11N40- Ant1 2422 0~Reference

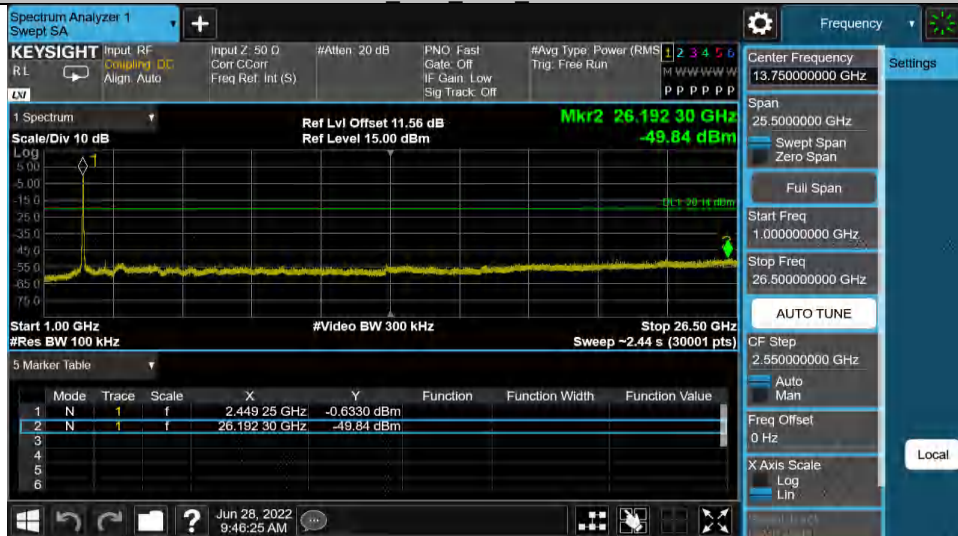




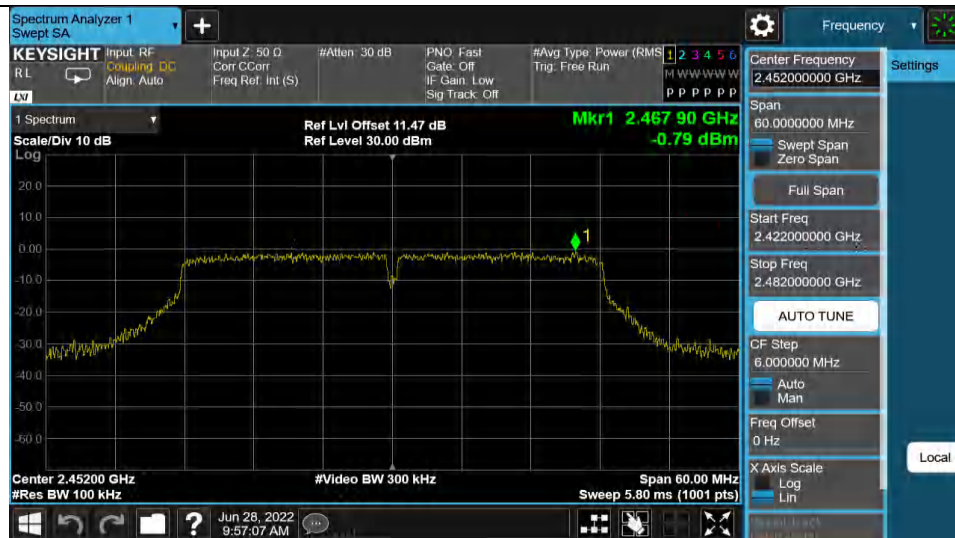
11N40- Ant1 2437 30~1000



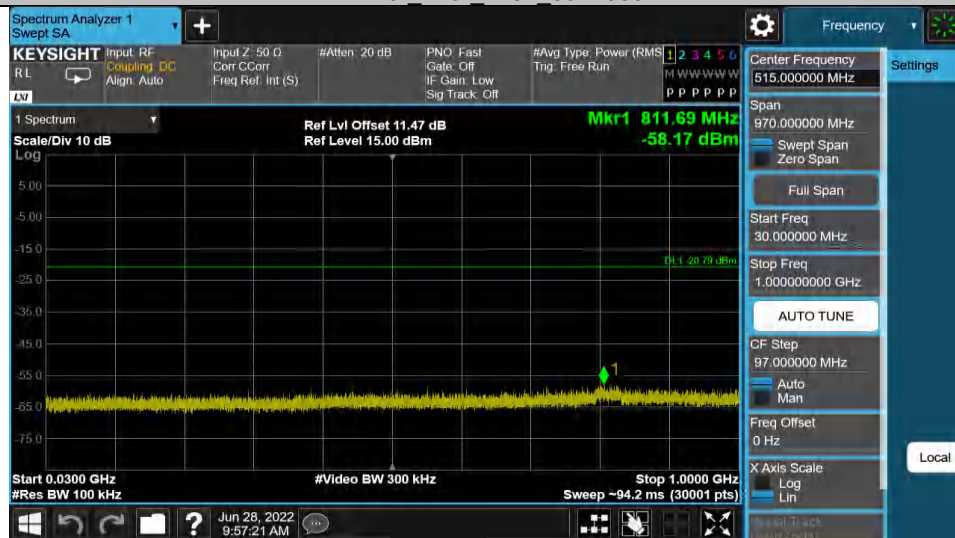
11N40- Ant1 2437 1000~26500



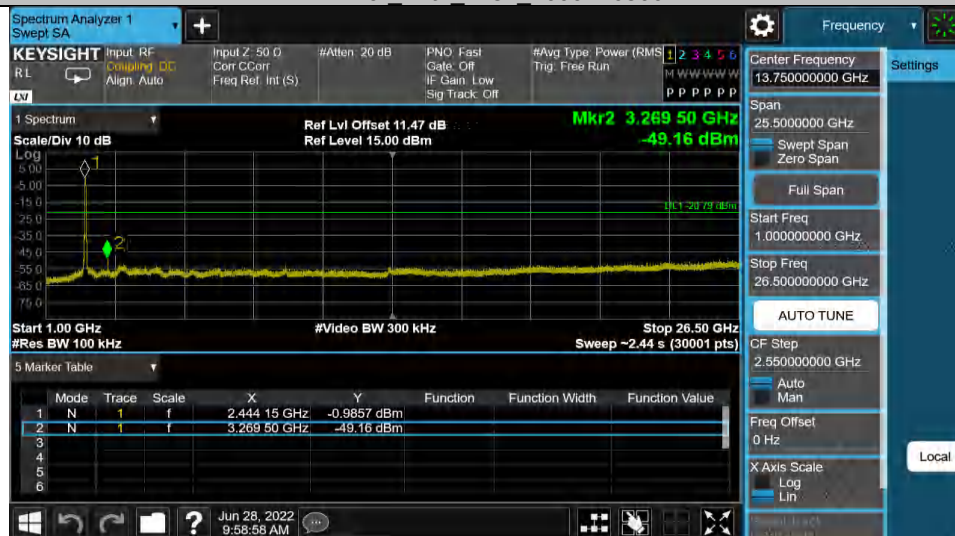
11N40- Ant1 2452 0~Reference



11N40- Ant1 2452 30~1000



11N40- Ant1 2452 1000~26500



Band Edge

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	8.19	-31.84	≤-11.81	PASS
		High	2462	7.16	-46.2	≤-12.84	PASS
11G	Ant1	Low	2412	5.57	-20.1	≤-14.43	PASS
		High	2462	4.85	-34.22	≤-15.15	PASS
11N20	Ant1	Low	2412	5.76	-19.93	≤-14.25	PASS
		High	2462	2.09	-37.62	≤-17.91	PASS
11N40	Ant1	Low	2422	-0.37	-23.13	≤-20.37	PASS
		High	2452	-1.00	-31.49	≤-21	PASS

11B- Ant1 Low 2412



11B- Ant1 High 2462



11G- Ant1 Low 2412



11G- Ant1 High 2462



11N20- Ant1 Low 2412



11N20- Ant1 High 2462



11N40- Ant1 Low 2422



11N40 Ant1 High 2452

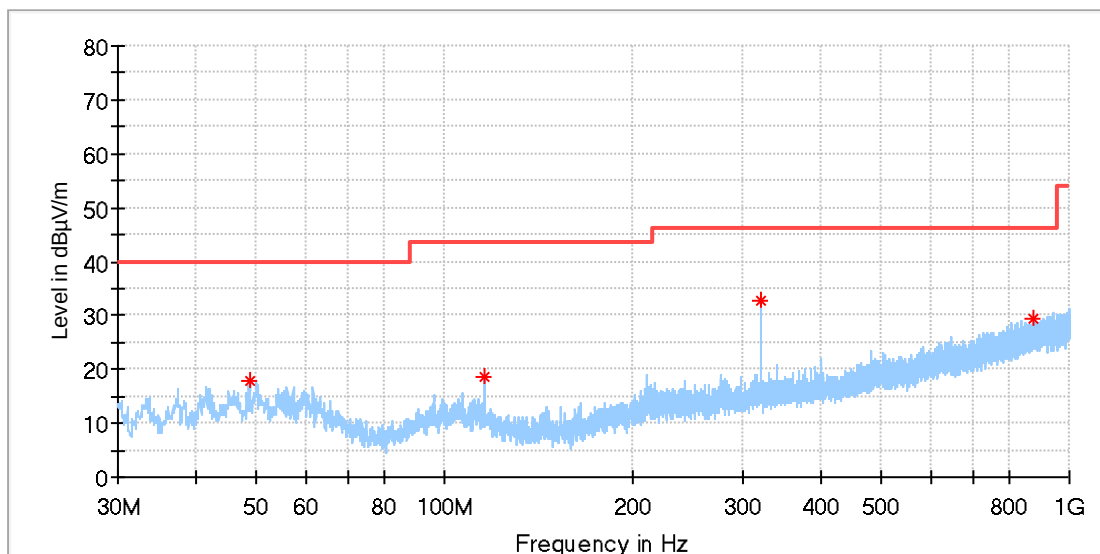


Note: 1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported. 2. This testing was carried out on different modulations, but only the worst case was presented in this report.

Appendix B.5: Test Results of Radiated Spurious Emissions 30MHz - 1GHz (Worst case)

EUT Information

EUT Name:	Smart Power Meter Switch
Model:	POWR320D
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168377937/A003291051-004
Test Voltage::	DC 5V From USB
Remark:	Temp 23 Humi:53%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



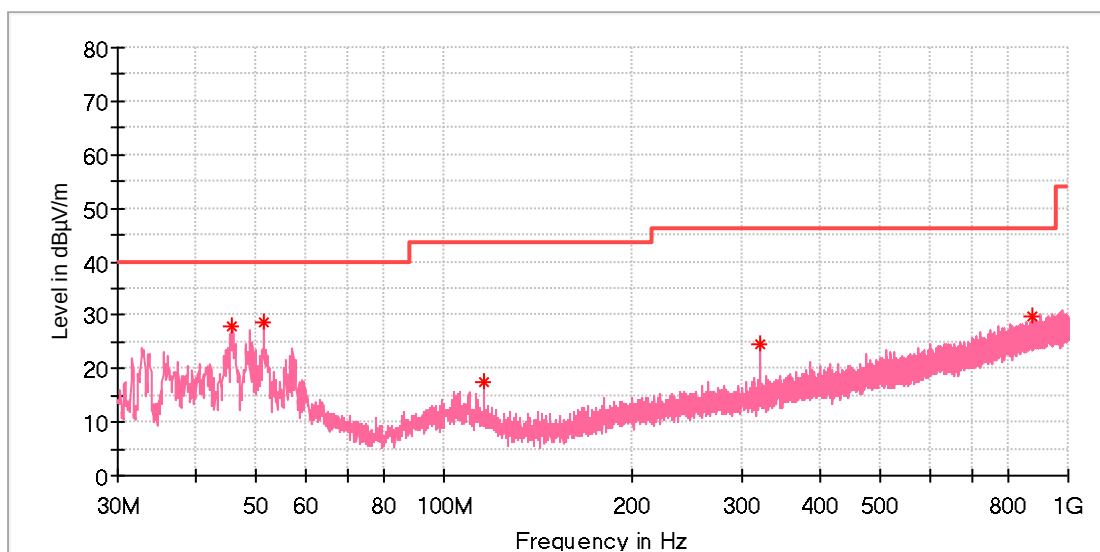
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
48.769500	17.85	40.00	22.15	100.0	H	29.0	-18.4
115.602500	18.48	43.50	25.02	100.0	H	211.0	-19.9
320.030000	32.66	46.00	13.34	100.0	H	303.0	-15.8
873.657500	29.58	46.00	16.42	100.0	H	49.0	-5.2

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
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)
45.811000	28.03	40.00	11.97	100.0	V	63.0	-18.7
51.388500	28.61	40.00	11.39	100.0	V	154.0	-18.3
115.651000	17.37	43.50	26.13	100.0	V	175.0	-19.9
320.030000	24.69	46.00	21.31	100.0	V	224.0	-15.8
873.318000	29.87	46.00	16.13	100.0	V	194.0	-5.2

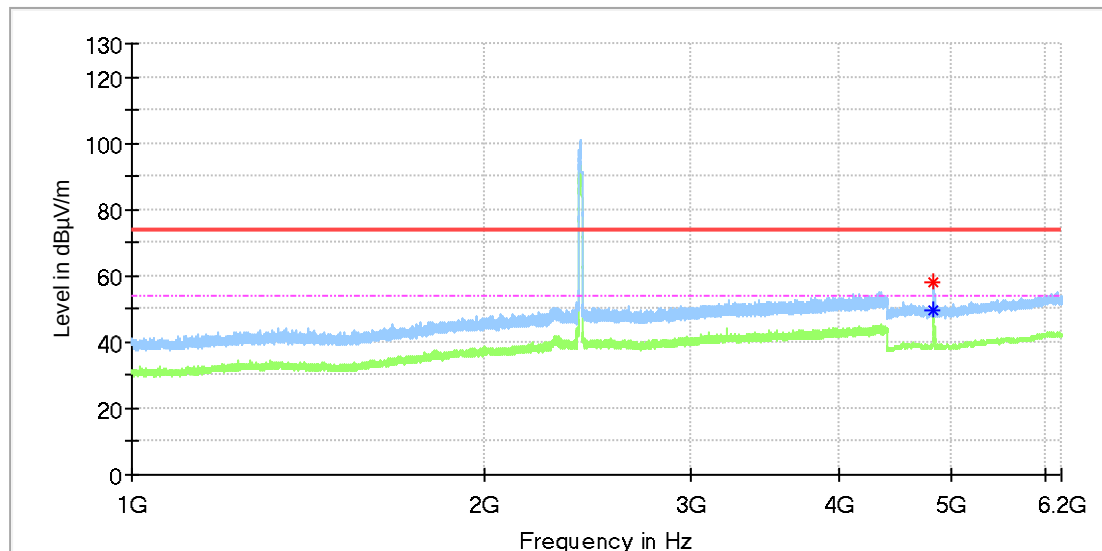
Final_Result

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

1GHz - 18GHz

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

EUT Name:	Smart Power Meter Switch
Model:	POWR320D
Test Mode:	WIFI 2.4G_11b_Ch1
Order No/Sample No:	168377937/A003291051-004
Test Voltage::	DC 5V From USB
Remark:	Temp 23 Humi:53%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



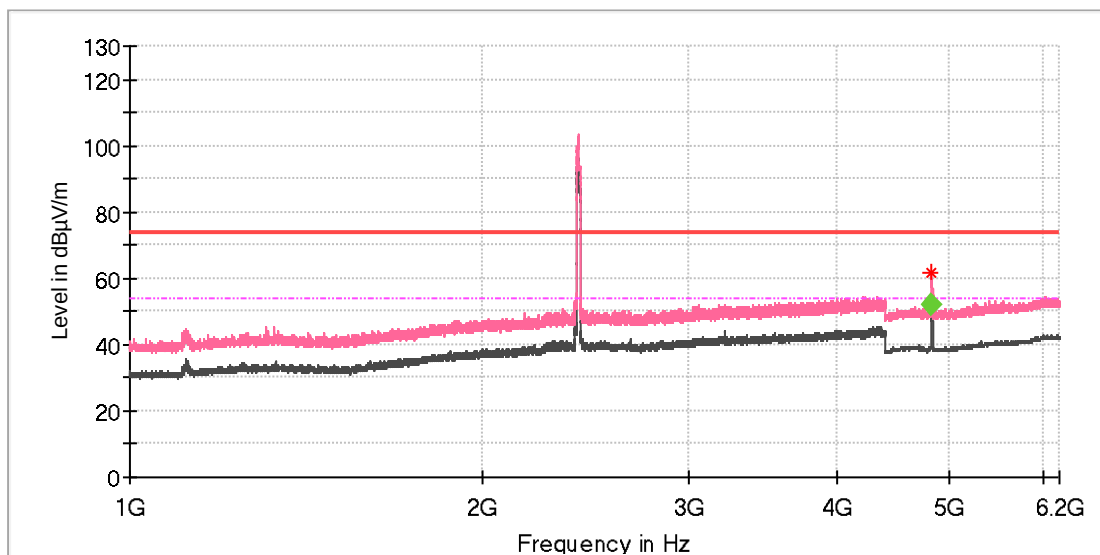
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4823.500000	---	49.76	54.00	4.24	100.0	H	226.0	11.8
4823.500000	58.07	---	74.00	15.93	100.0	H	226.0	11.8

Final_Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



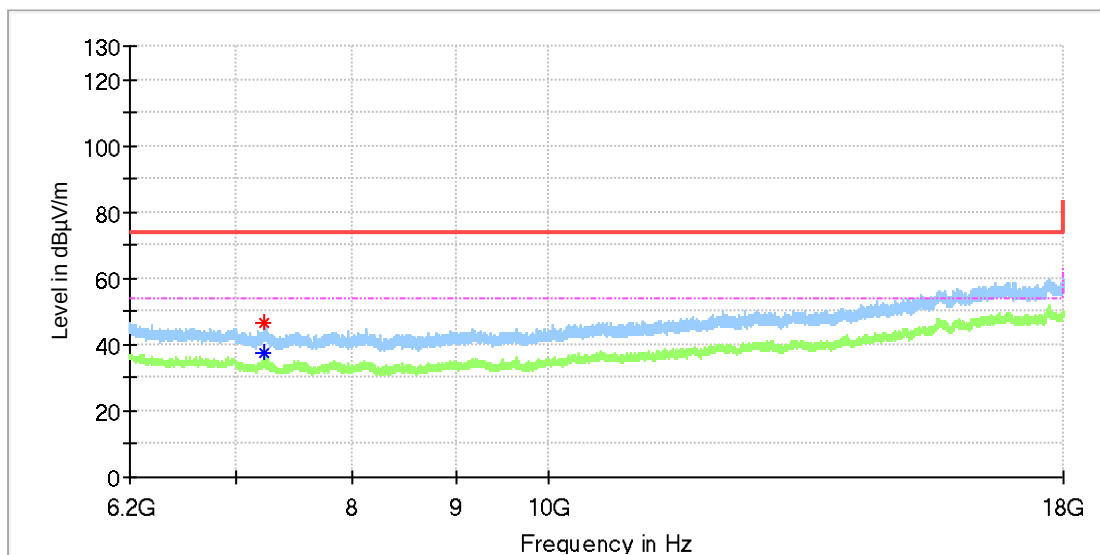
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4824.000000	61.57	---	74.00	12.43	100.0	V	194.0	11.8

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4823.163889	51.87	54.00	2.13	100.0	V	175.0	11.8

EUT Name: Smart Power Meter Switch
 Model: POWR320D
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168377937/A003291051-004
 Test Voltage:: DC 5V From USB
 Remark: Temp 23 Humi:53%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



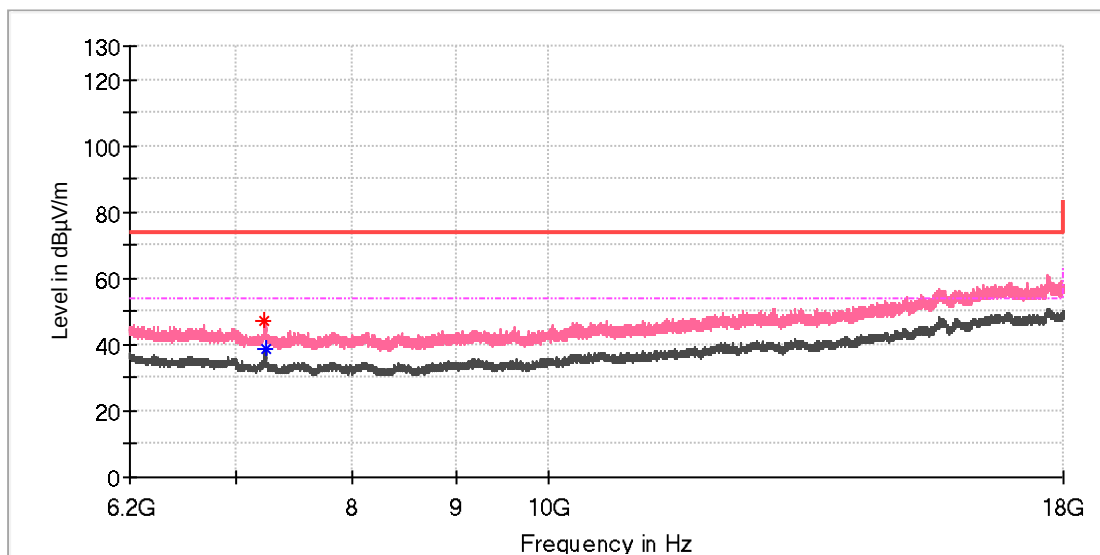
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7231.516667	46.27	---	74.00	27.73	100.0	H	214.0	8.6
7231.516667	---	37.68	54.00	16.32	100.0	H	214.0	8.6

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



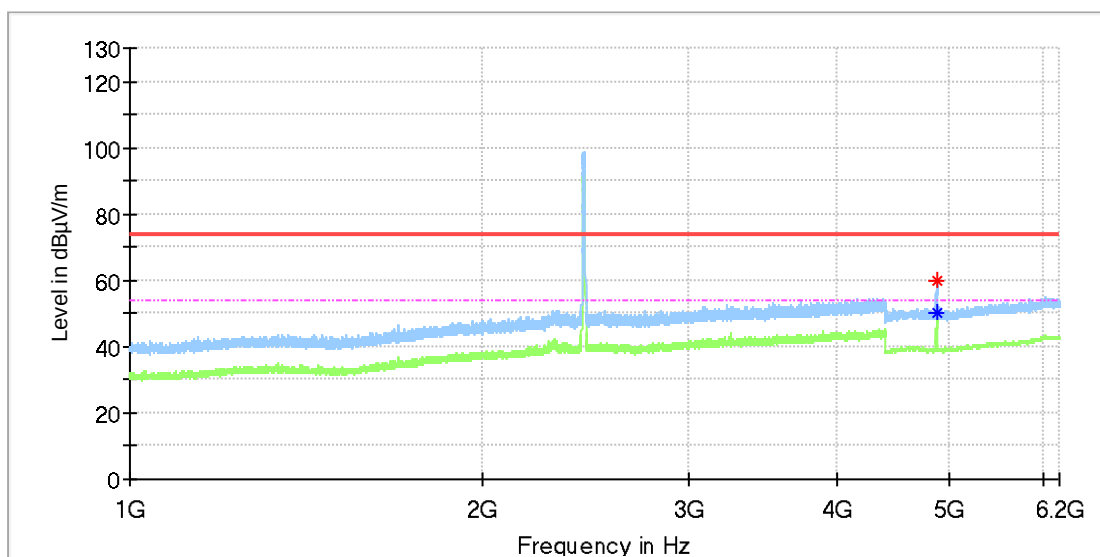
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7233.975000	47.04	---	74.00	26.96	100.0	V	280.0	8.6
7235.450000	---	38.68	54.00	15.32	100.0	V	159.0	8.6

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



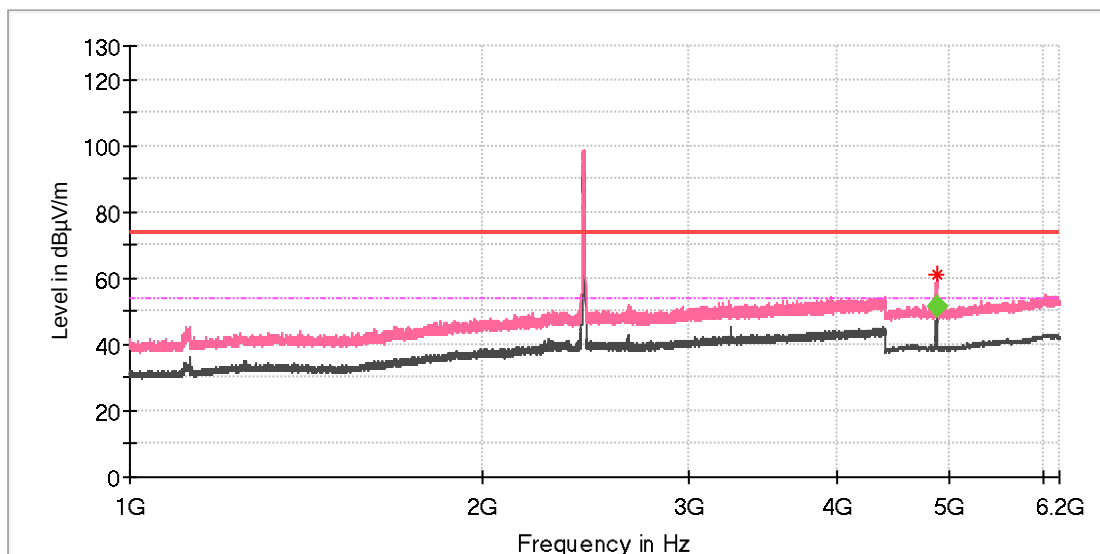
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4874.000000	59.89	---	74.00	14.11	100.0	H	253.0	11.8
4874.000000	---	50.43	54.00	3.57	100.0	H	253.0	11.8

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



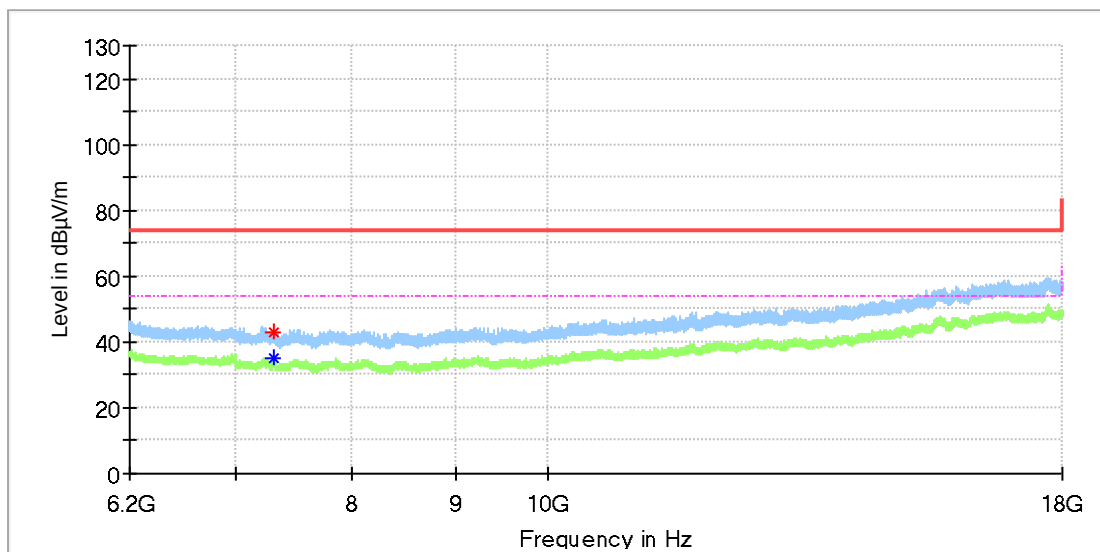
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4873.500000	60.98	---	74.00	13.02	100.0	V	189.0	11.8

Final_Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4873.322222	51.18	54.00	2.82	100.0	V	188.0	11.8

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



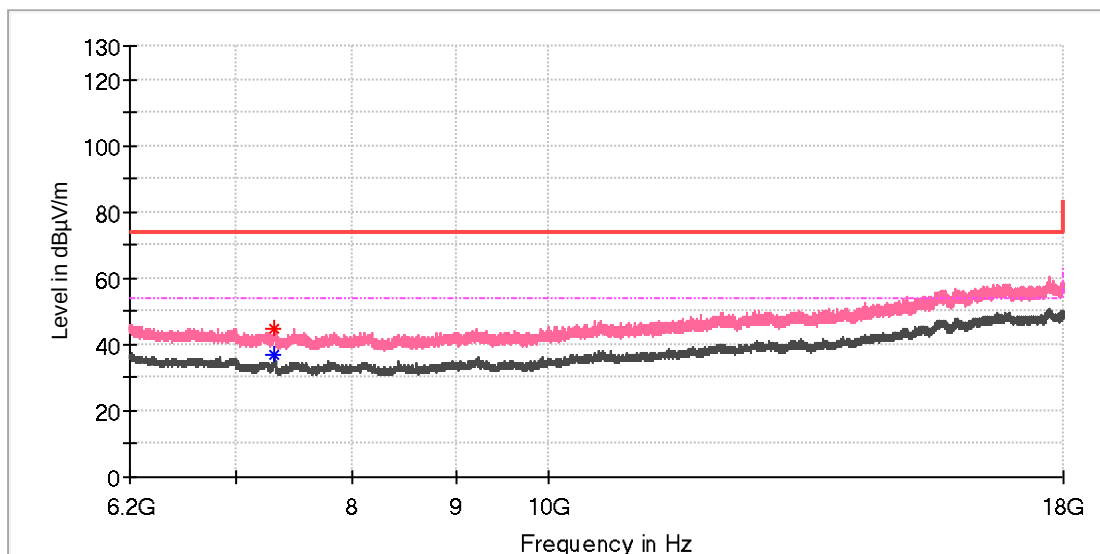
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7307.725000	43.14	---	74.00	30.86	100.0	H	147.0	8.3
7310.183333	---	34.80	54.00	19.20	100.0	H	219.0	8.2

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch6
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



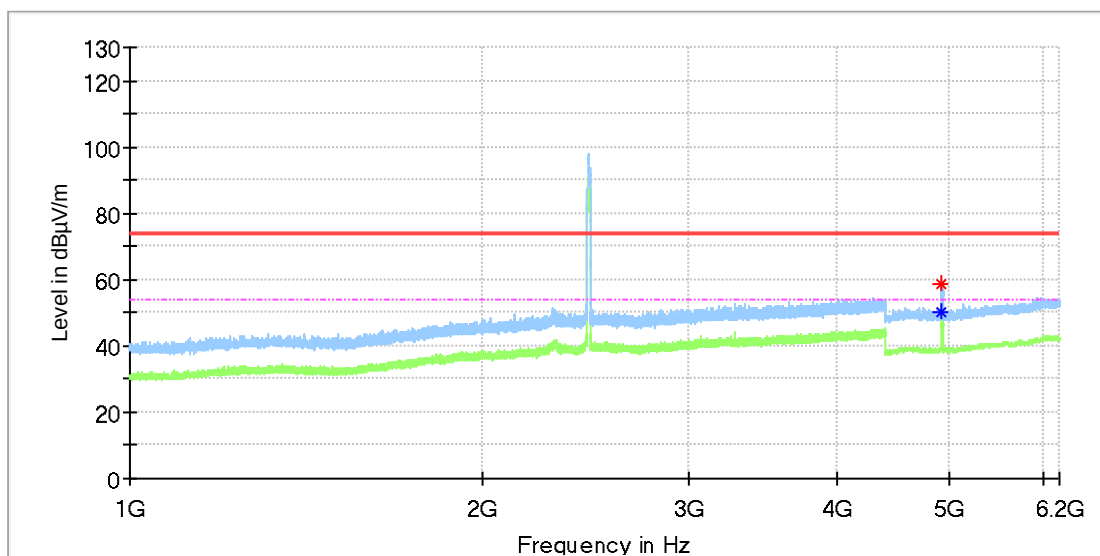
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7310.183333	44.77	---	74.00	29.23	100.0	V	324.0	8.2
7313.133333	---	36.69	54.00	17.31	100.0	V	97.0	8.2

Final_Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



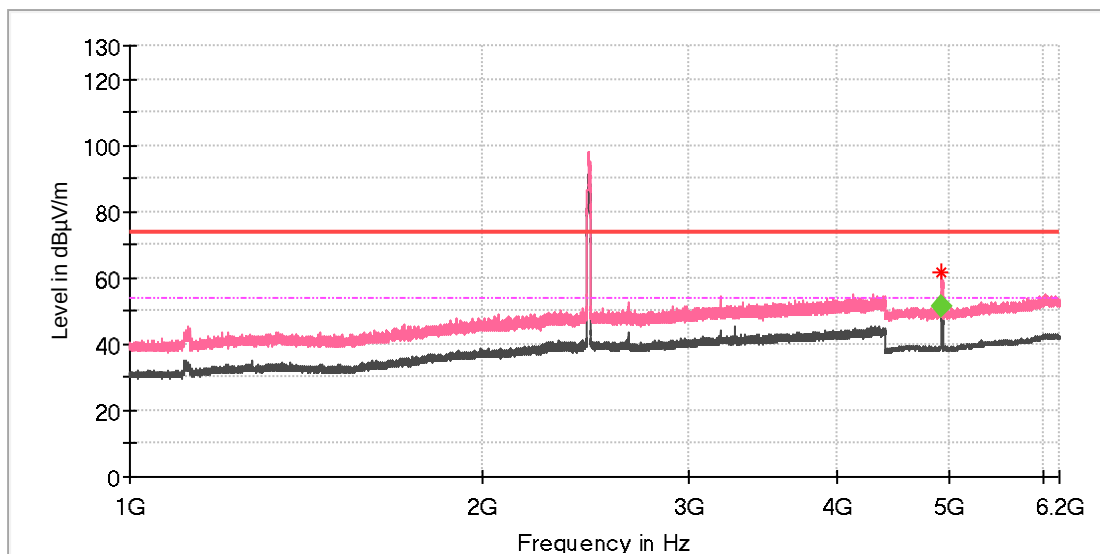
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	58.77	---	74.00	15.23	100.0	H	239.0	11.8
4924.500000	---	50.46	54.00	3.54	100.0	H	246.0	11.8

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



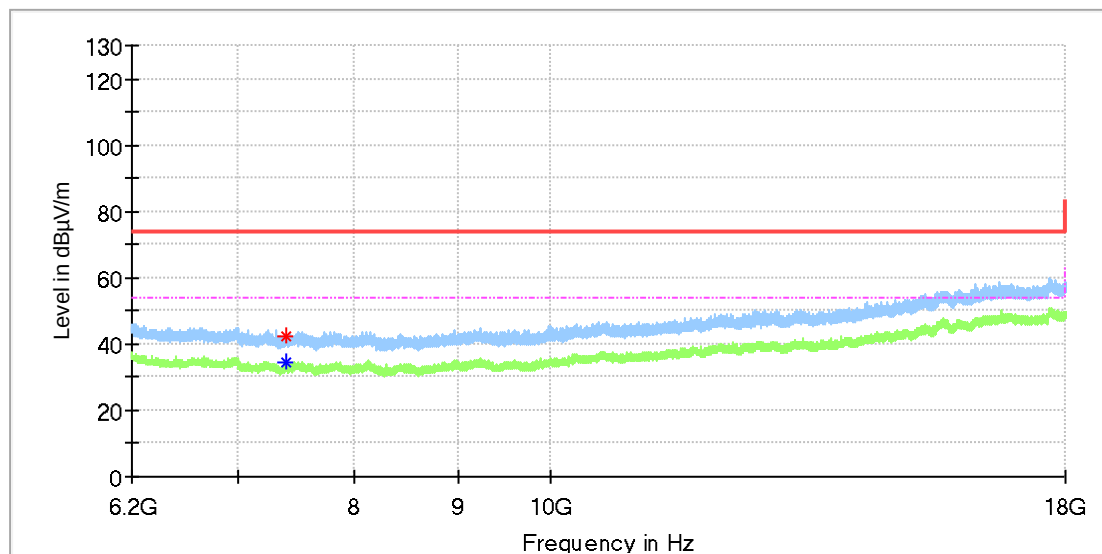
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4924.000000	61.50	---	74.00	12.50	100.0	V	169.0	11.8

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4923.250000	51.45	54.00	2.55	100.0	V	167.0	11.8

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



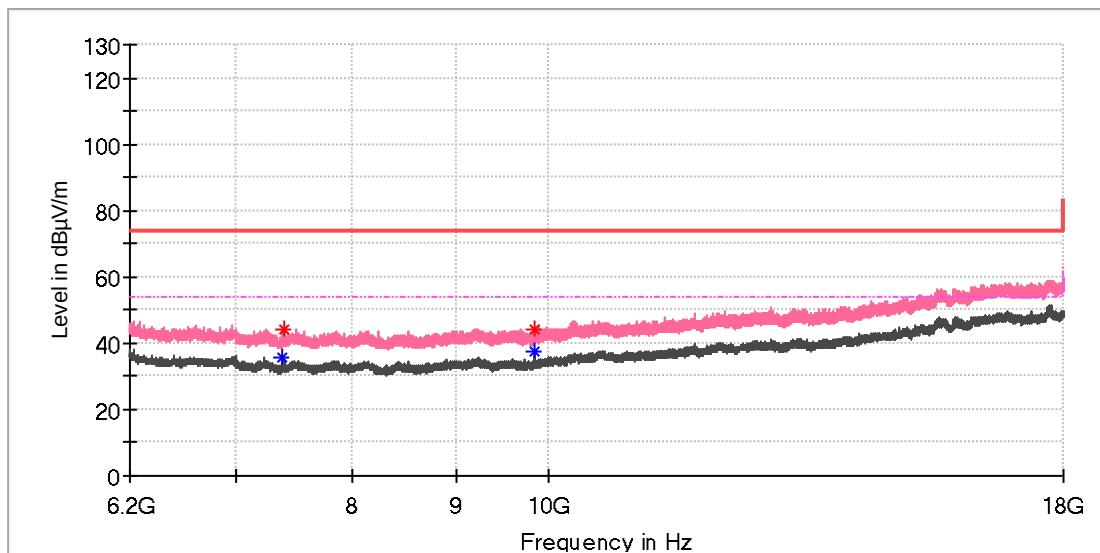
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7386.883333	42.27	---	74.00	31.73	100.0	H	267.0	8.2
7391.800000	---	34.64	54.00	19.36	100.0	H	359.0	8.3

Final Result

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

EUT Name: Smart Power Meter Switch
 Model: POWR320D
 Test Mode: WIFI 2.4G_11b_Ch11
 Order No./Sample No: 168377937/A003291051-004
 Test Voltage:: DC 5V From USB
 Remark: Temp 23 Humi:53%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical_Freqs

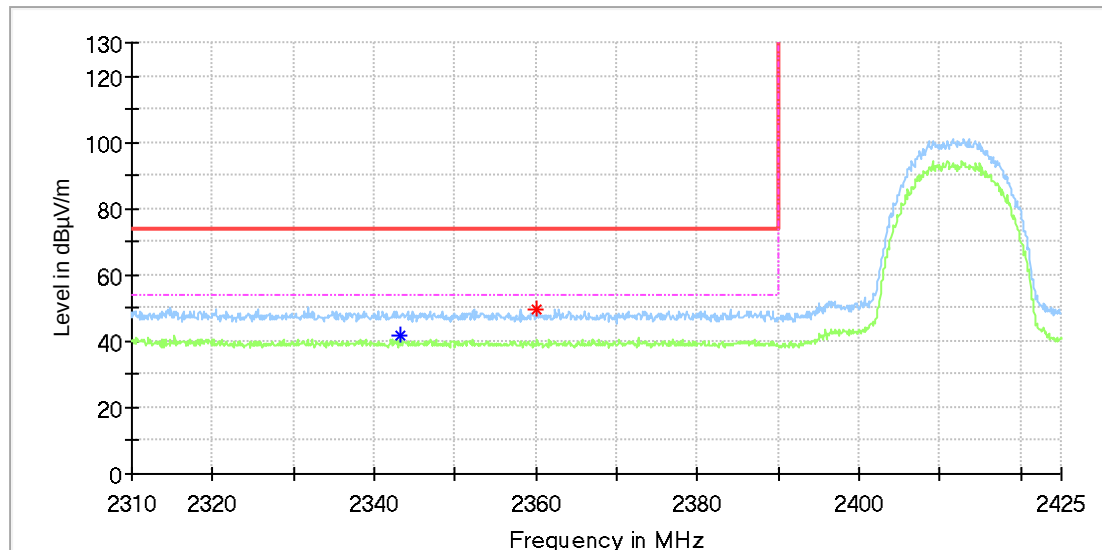
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7377.541667	---	35.73	54.00	18.27	100.0	V	71.0	8.2
7393.766667	44.28	---	74.00	29.72	100.0	V	287.0	8.3
9848.166667	44.08	---	74.00	29.92	100.0	V	0.0	10.6
9848.166667	---	37.65	54.00	16.35	100.0	V	0.0	10.6

Final Result

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

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch1
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



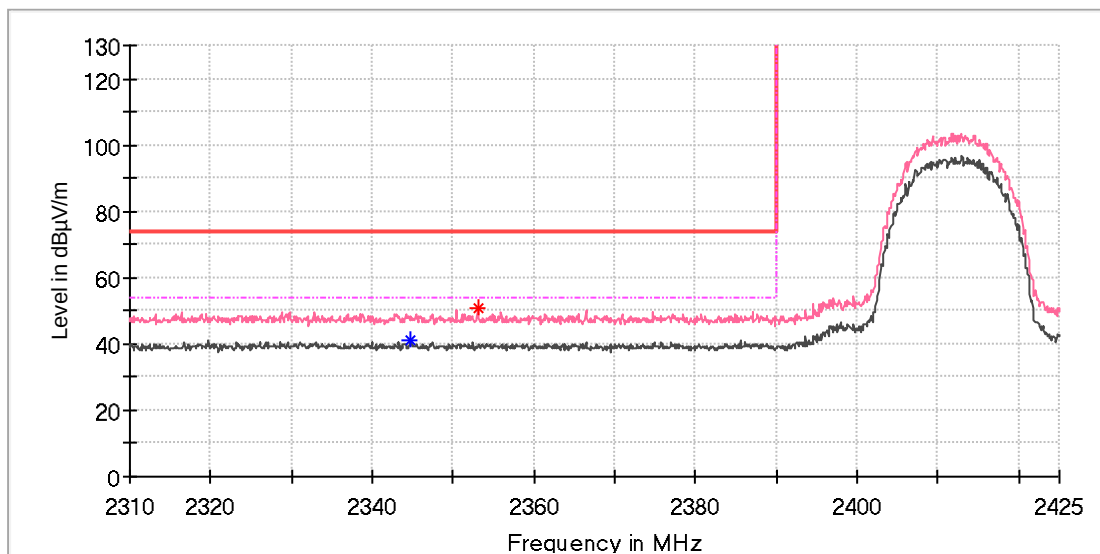
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2343.300000	---	41.53	54.00	12.47	100.0	H	169.0	6.8
2360.100000	49.43	---	74.00	24.57	100.0	H	149.0	6.9

Final Result

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

EUT Name: Smart Power Meter Switch
 Model: POWR320D
 Test Mode: WIFI 2.4G_11b_Ch1
 Order No/Sample No: 168377937/A003291051-004
 Test Voltage:: DC 5V From USB
 Remark: Temp 23 Humi:53%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



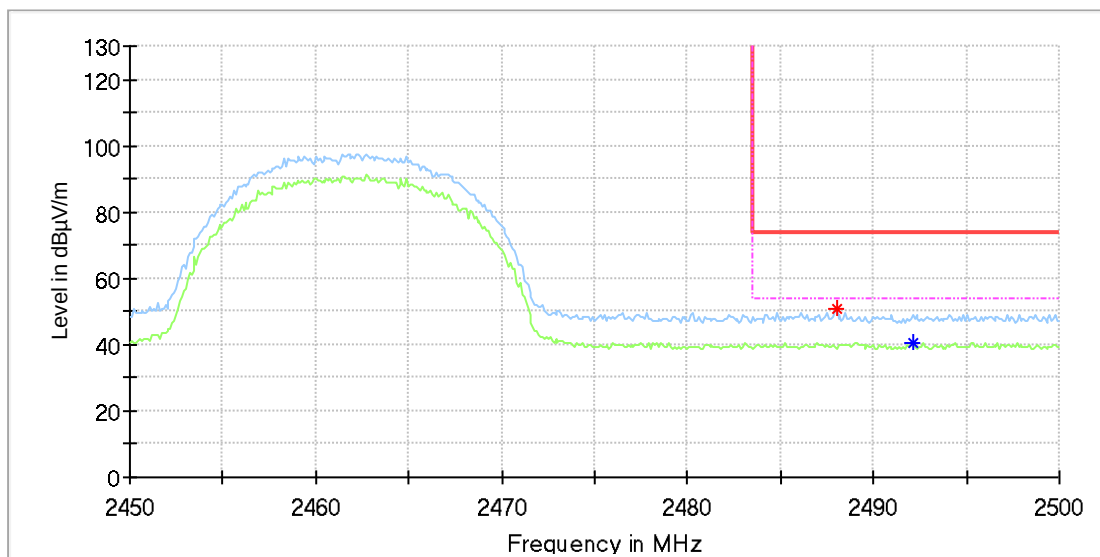
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2344.700000	---	40.94	54.00	13.06	100.0	V	278.0	6.9
2353.100000	50.79	---	74.00	23.21	100.0	V	257.0	6.9

Final_Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



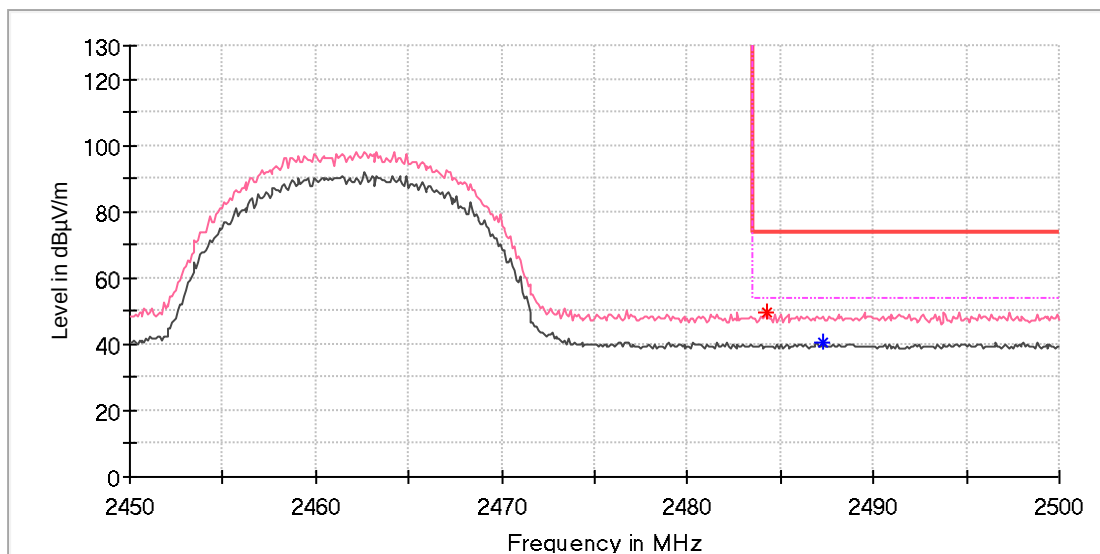
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2488.000000	50.54	---	74.00	23.46	100.0	H	351.0	7.4
2492.100000	---	40.23	54.00	13.77	100.0	H	189.0	7.4

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11b_Ch11
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



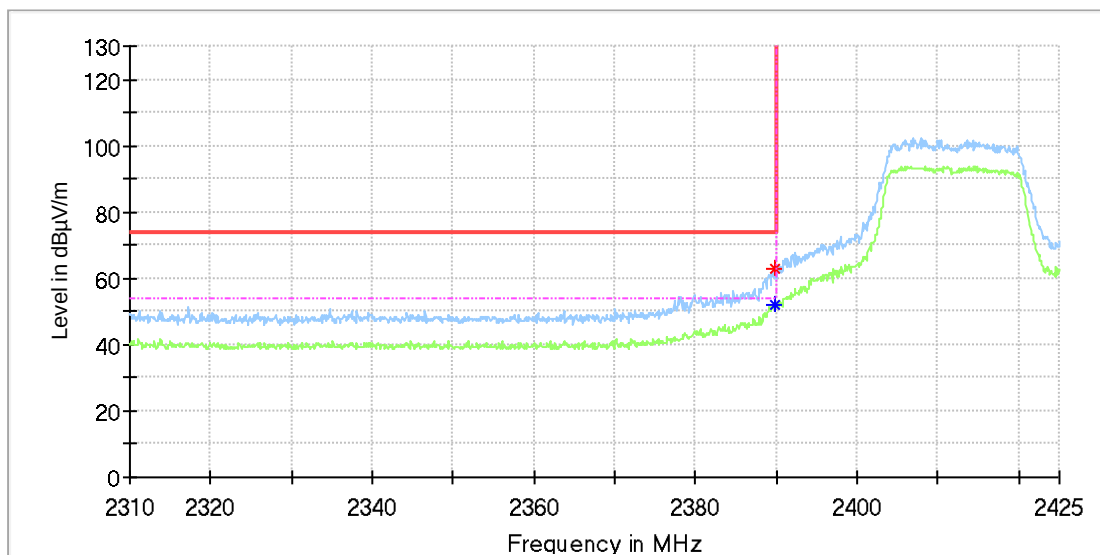
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.300000	49.63	---	74.00	24.37	100.0	V	288.0	7.4
2487.300000	---	40.49	54.00	13.51	100.0	V	77.0	7.4

Final_Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11g_Ch1
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



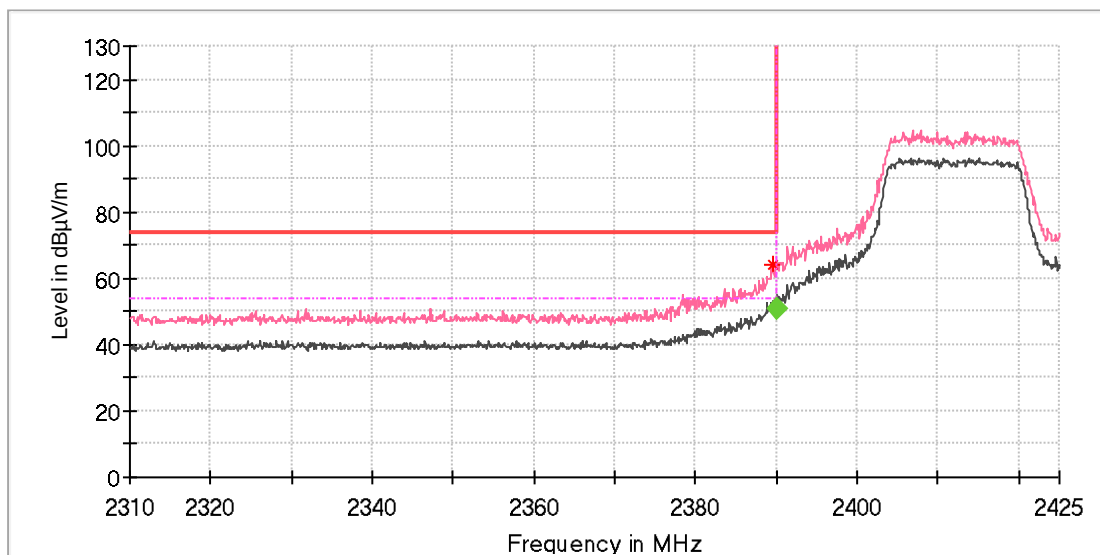
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.800000	62.82	---	74.00	11.18	100.0	H	356.0	7.0
2389.800000	---	51.79	54.00	2.21	100.0	H	356.0	7.0

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11g_Ch1
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



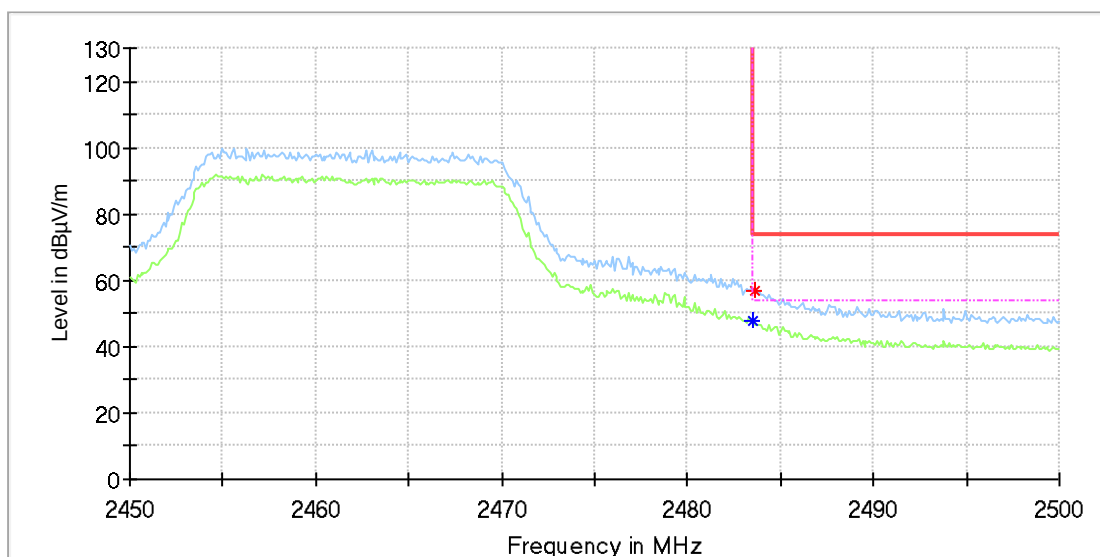
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.500000	64.06	---	74.00	9.94	100.0	V	276.0	7.0

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.960150	50.88	54.00	3.12	105.0	V	274.0	7.0

EUT Name: Smart Power Meter Switch
 Model: POWR320D
 Test Mode: WIFI 2.4G_11g_Ch11
 Order No/Sample No: 168377937/A003291051-004
 Test Voltage:: DC 5V From USB
 Remark: Temp 23 Humi:53%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



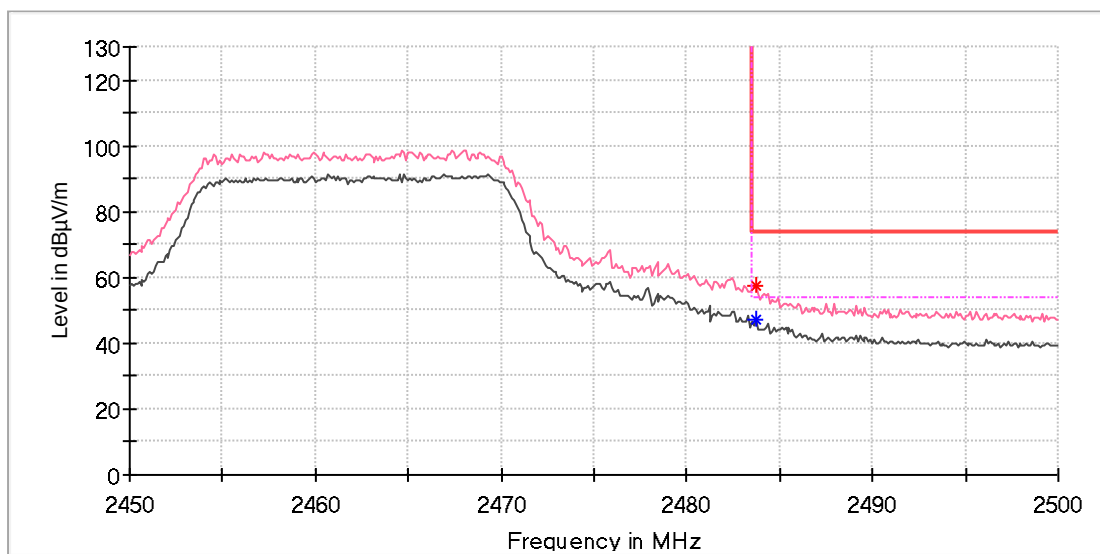
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.500000	---	47.58	54.00	6.42	100.0	H	0.0	7.4
2483.600000	57.10	---	74.00	16.90	100.0	H	0.0	7.4

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11g_Ch11
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



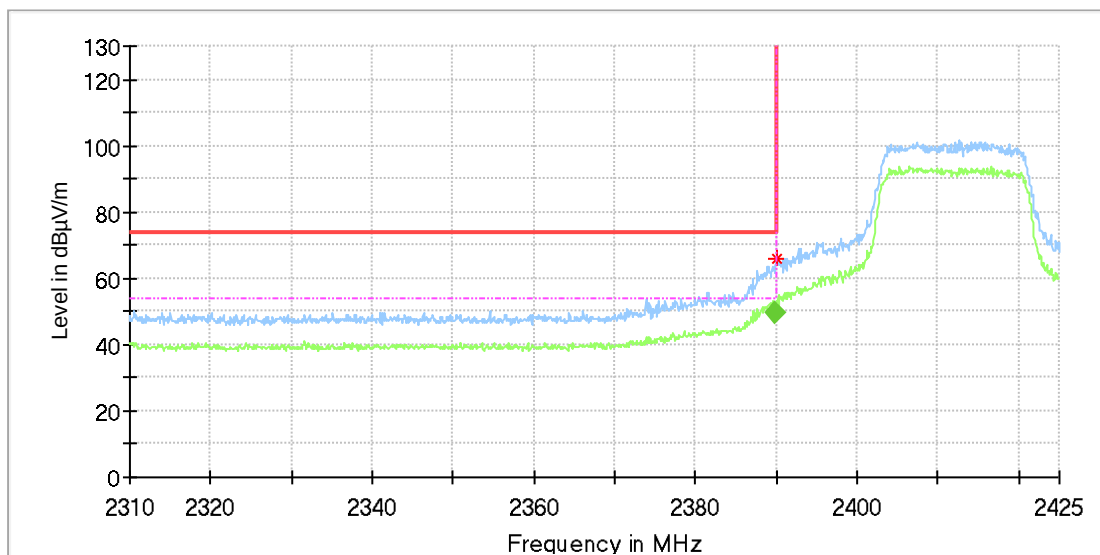
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.700000	---	47.11	54.00	6.89	100.0	V	287.0	7.4
2483.700000	57.18	---	74.00	16.82	100.0	V	287.0	7.4

Final_Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11n20_Ch1
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



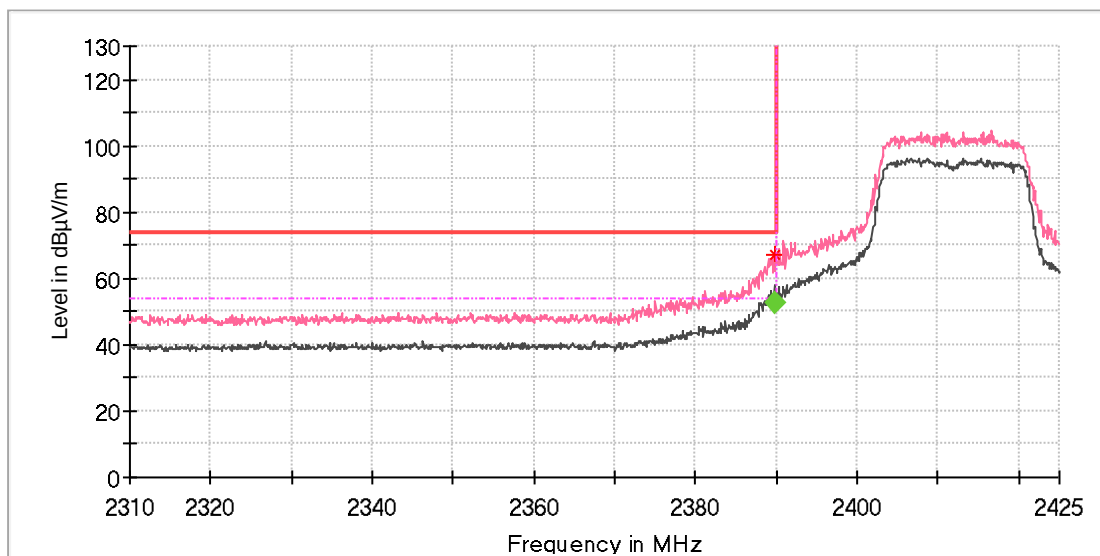
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2390.000000	65.92	---	74.00	8.08	100.0	H	2.0	7.0

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.728600	49.38	54.00	4.62	105.0	H	278.0	7.0

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11n20_Ch1
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



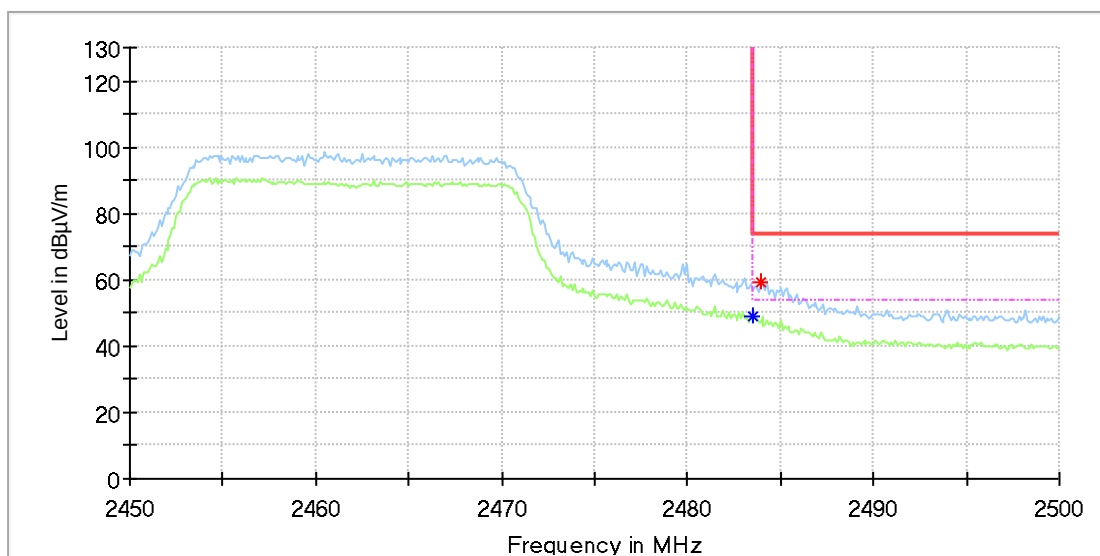
Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.700000	66.97	---	74.00	7.03	100.0	V	277.0	7.0

Final_Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.697450	52.38	54.00	1.62	105.0	V	272.0	7.0

EUT Name: Smart Power Meter Switch
 Model: POWR320D
 Test Mode: WIFI 2.4G_11n20_Ch11
 Order No/Sample No: 168377937/A003291051-004
 Test Voltage:: DC 5V From USB
 Remark: Temp 23 Humi:53%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



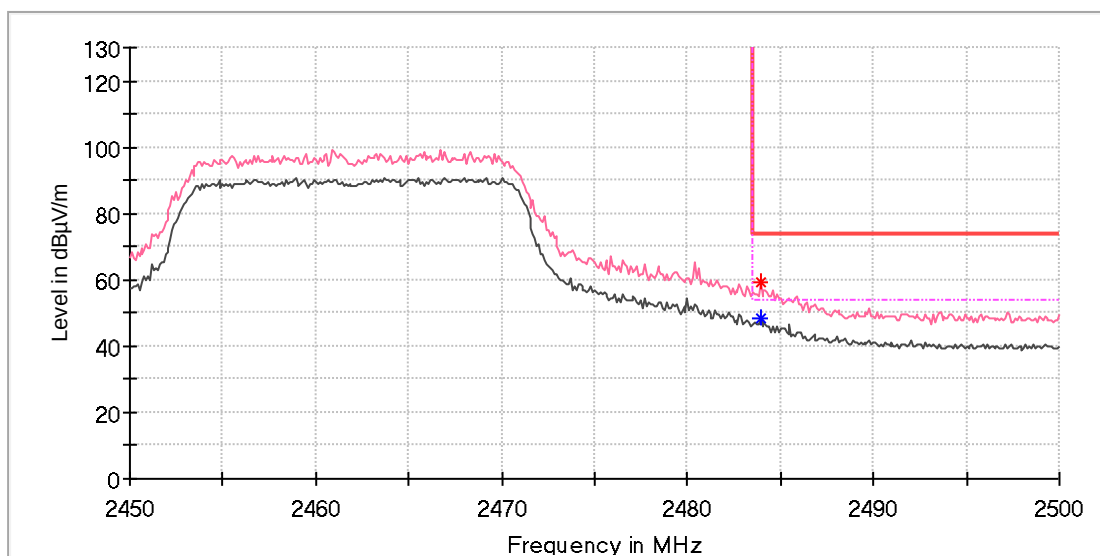
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.500000	---	49.15	54.00	4.85	100.0	H	177.0	7.4
2483.900000	59.07	---	74.00	14.93	100.0	H	354.0	7.4

Final_Result

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

EUT Name: Smart Power Meter Switch
 Model: POWR320D
 Test Mode: WIFI 2.4G_11n20_Ch11
 Order No/Sample No: 168377937/A003291051-004
 Test Voltage:: DC 5V From USB
 Remark: Temp 23 Humi:53%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



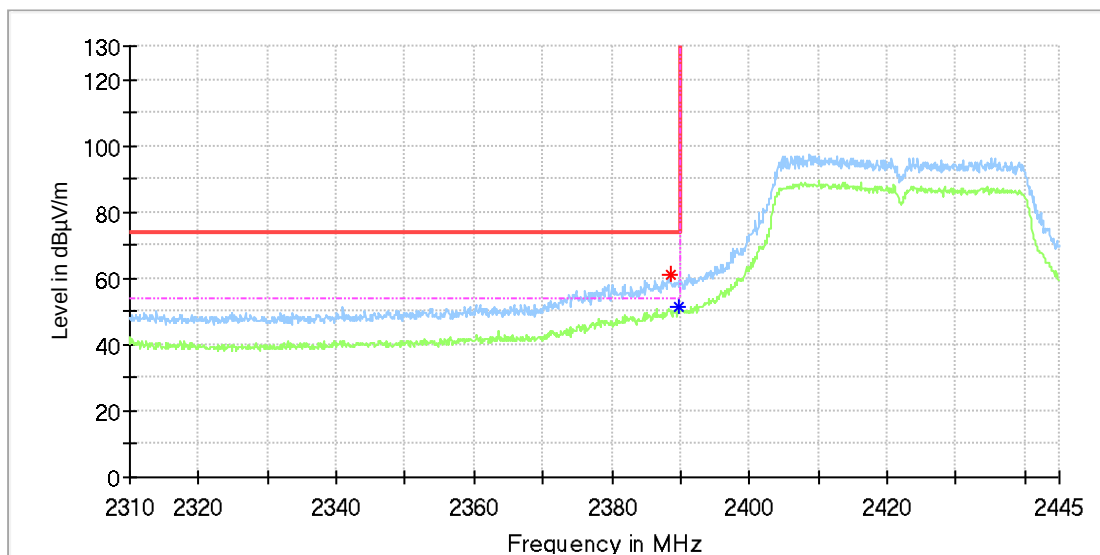
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.900000	59.43	---	74.00	14.57	100.0	V	326.0	7.4
2483.900000	---	48.23	54.00	5.77	100.0	V	326.0	7.4

Final_Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11n40_Ch3
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



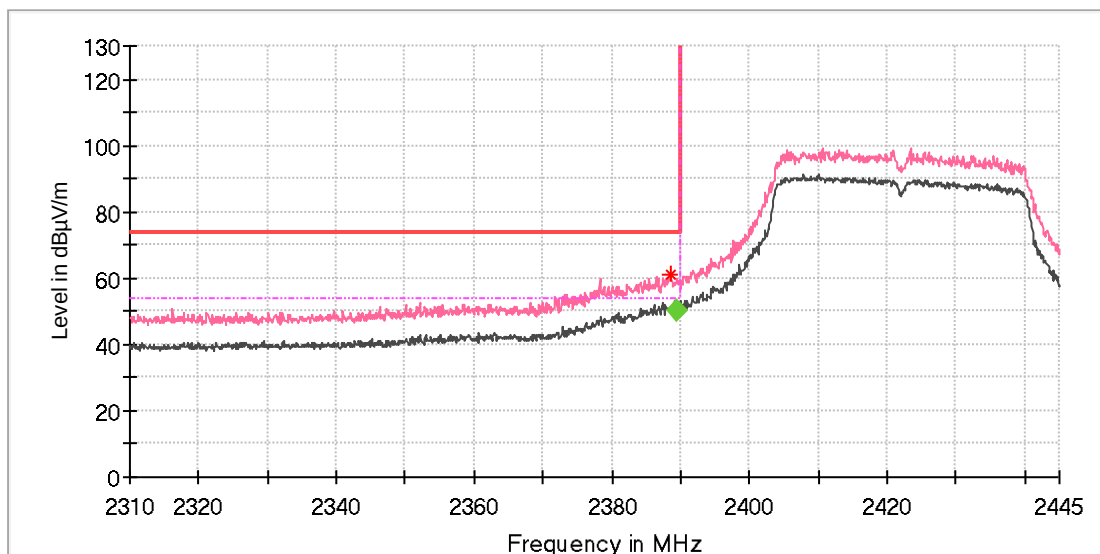
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.500000	61.13	---	74.00	12.87	100.0	H	174.0	7.0
2389.600000	---	51.37	54.00	2.63	100.0	H	5.0	7.0

Final Result

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

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11n40_Ch3
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



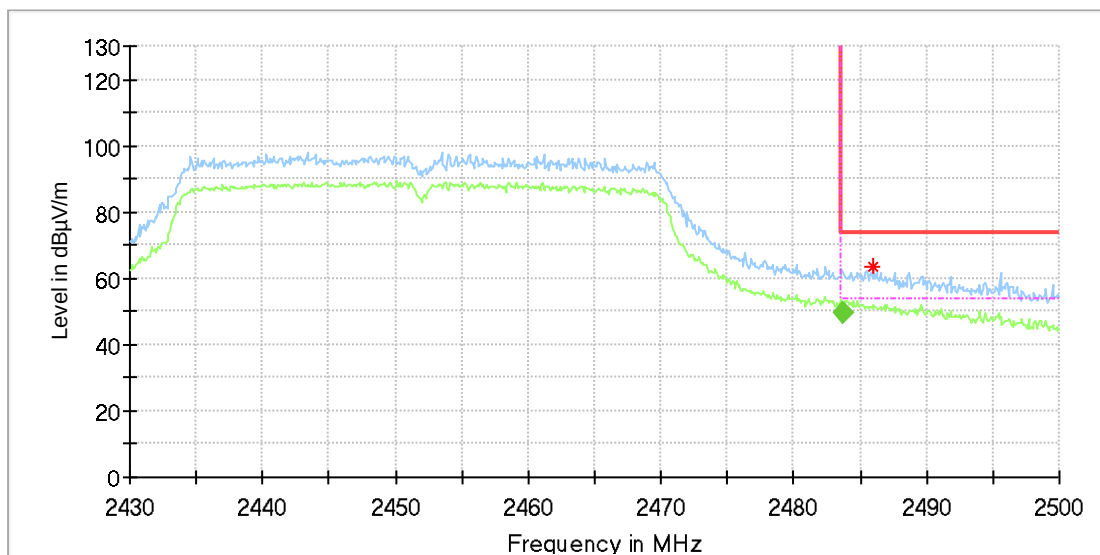
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.500000	61.18	---	74.00	12.82	100.0	V	336.0	7.0

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.392650	49.96	54.00	4.04	105.0	V	273.0	7.0

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11n40_Ch9
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



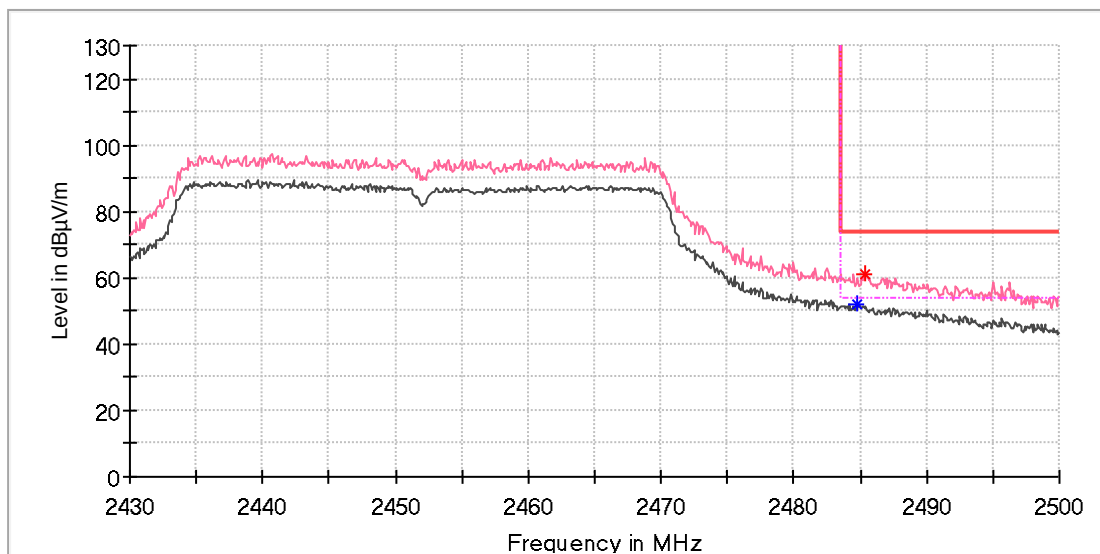
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.000000	63.62	---	74.00	10.38	100.0	H	281.0	7.4

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.686600	49.60	54.00	4.40	100.0	H	276.0	7.4

EUT Name: Smart Power Meter Switch
Model: POWR320D
Test Mode: WIFI 2.4G_11n40_Ch9
Order No/Sample No: 168377937/A003291051-004
Test Voltage:: DC 5V From USB
Remark: Temp 23 Humi:53%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

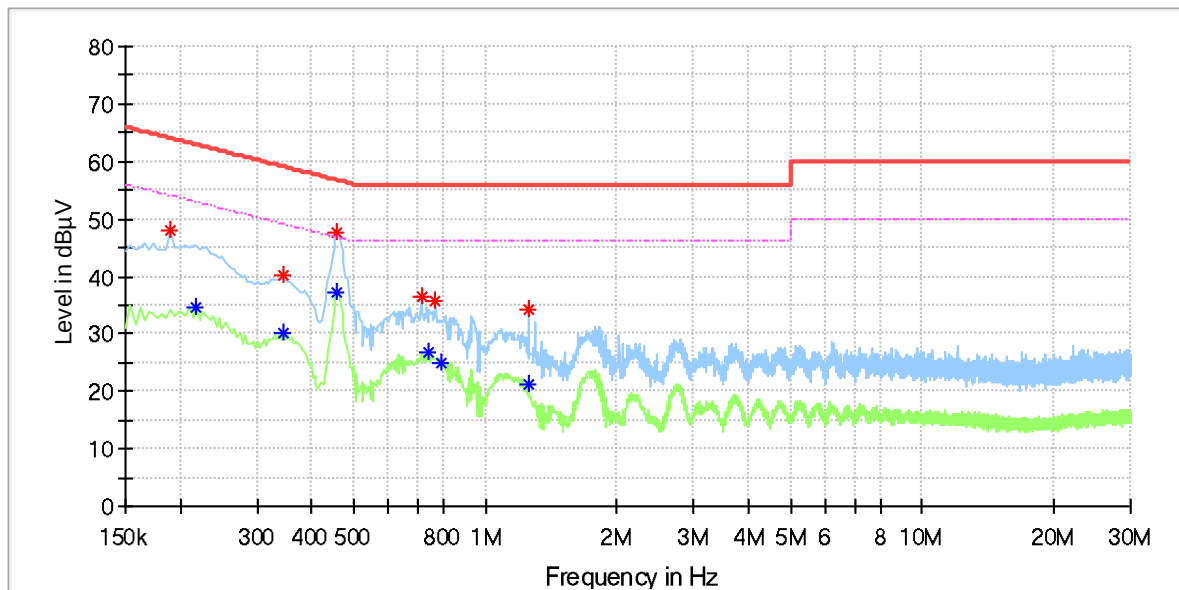
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.700000	---	51.84	54.00	2.16	100.0	V	318.0	7.4
2485.400000	61.25	---	74.00	12.75	100.0	V	318.0	7.4

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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Appendix B.7: Test Results of Conducted Emission

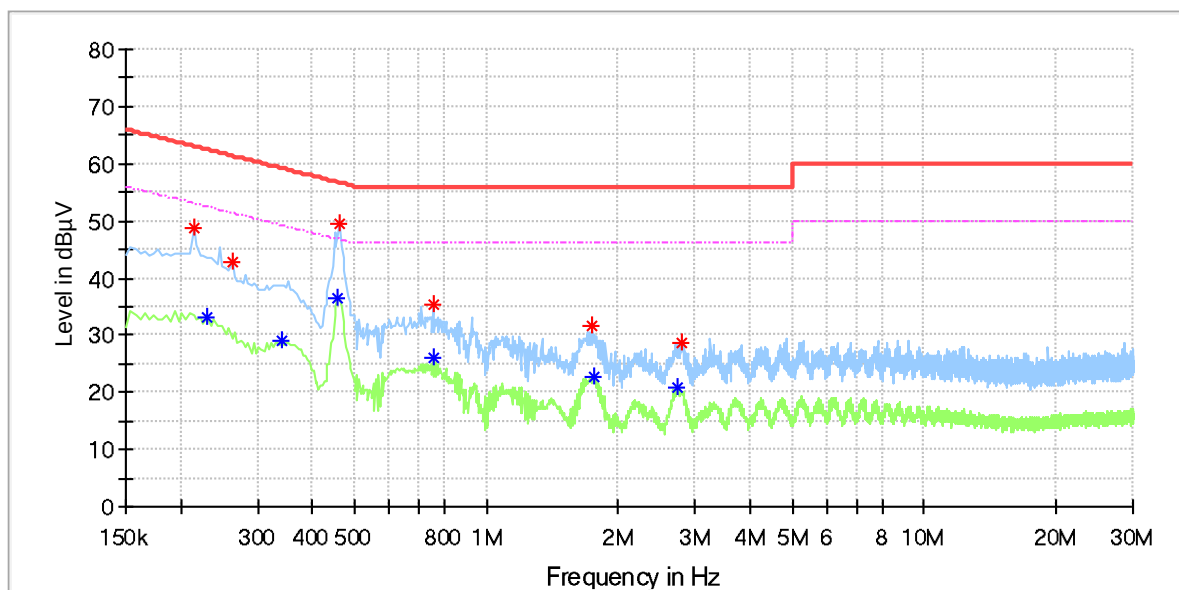
EUT Name: Smart Power Meter Switch
Order No: 168377937
Model: POWR320D
Test Mode: WIFI mode+ BLE mode
Test Voltage: AC 120V/60Hz
Test By/Review By: Steve Lan/Gary Chen
Tem./Hum./Pressure: 23.9°C/50.7%/101kPa
Remark: SR1



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.190000	47.83	---	64.04	16.21	L1	9.6
0.218000	---	34.59	52.90	18.30	L1	9.6
0.346000	40.21	---	59.06	18.85	L1	9.7
0.346000	---	30.04	49.06	19.01	L1	9.7
0.458000	47.71	---	56.73	9.02	L1	9.7
0.458000	---	37.37	46.73	9.36	L1	9.7
0.716000	36.62	---	56.00	19.38	L1	9.7
0.744000	---	26.76	46.00	19.24	L1	9.7
0.768000	35.73	---	56.00	20.27	L1	9.7
0.792000	---	24.99	46.00	21.01	L1	9.7
1.256000	34.31	---	56.00	21.69	L1	9.7
1.256000	---	21.05	46.00	24.95	L1	9.7

EUT Name: Smart Power Meter Switch
Order No: 168377937
Model: POWR320D
Test Mode: WIFI mode
Test Voltage: 120V/60Hz
Test By/Review By: Steve Lan/Gary Chen
Tem./Hum./Pressure: 23.9°C/50.7%/101kPa
Remark: SR1



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.214000	48.86	---	63.05	14.19	N	9.6
0.230000	---	33.08	52.45	19.37	N	9.6
0.262000	42.88	---	61.37	18.49	N	9.6
0.342000	---	28.99	49.16	20.17	N	9.7
0.458000	---	36.44	46.73	10.29	N	9.7
0.462000	49.36	---	56.66	7.29	N	9.7
0.756000	35.18	---	56.00	20.82	N	9.7
0.756000	---	26.14	46.00	19.86	N	9.7
1.748000	31.68	---	56.00	24.32	N	9.7
1.768000	---	22.60	46.00	23.40	N	9.7
2.736000	---	20.86	46.00	25.14	N	9.9
2.788000	28.74	---	56.00	27.26	N	9.9