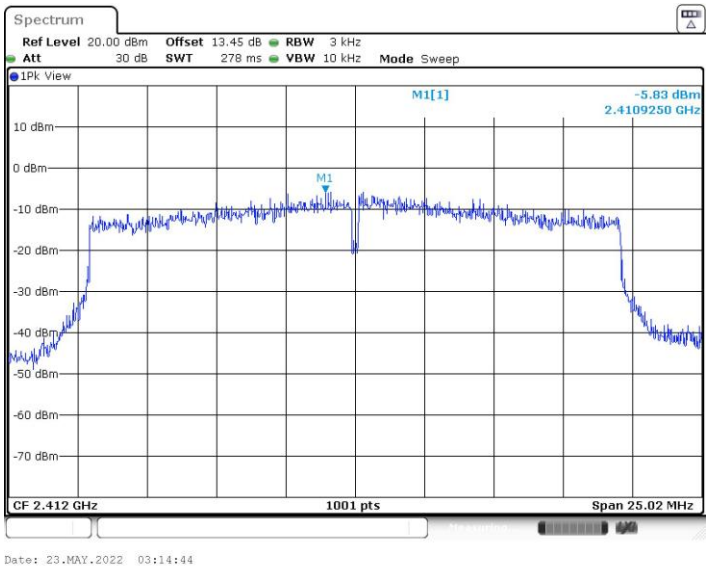
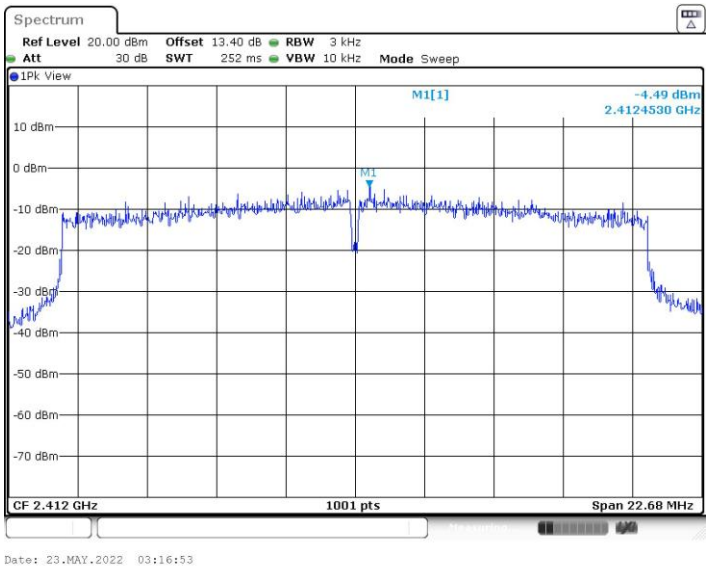
<Tx Beamforming Mode>

11AX20MIMO_Ant1_2412



11AX20MIMO_Ant2_2412



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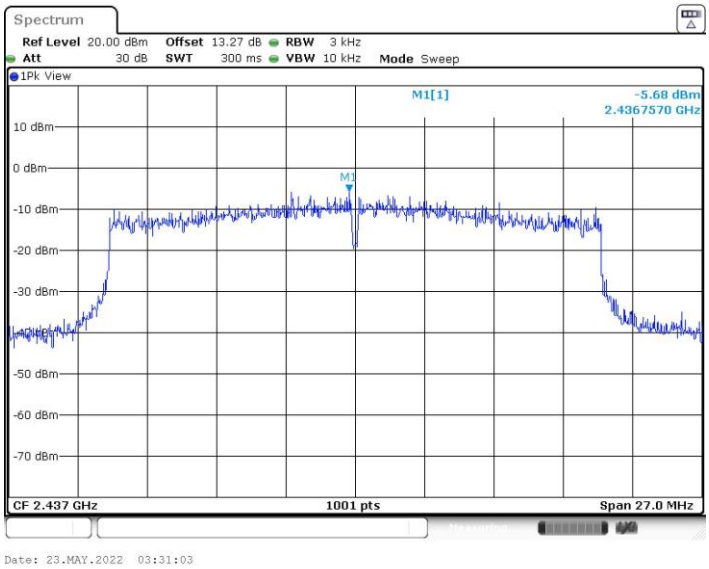

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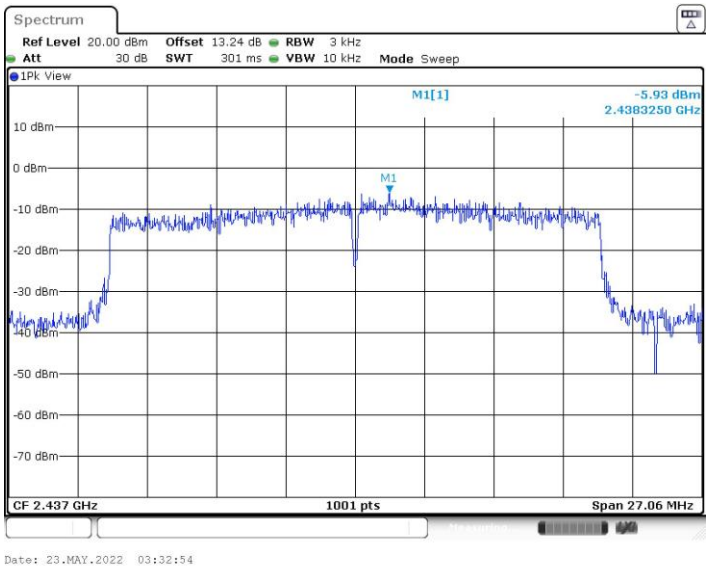
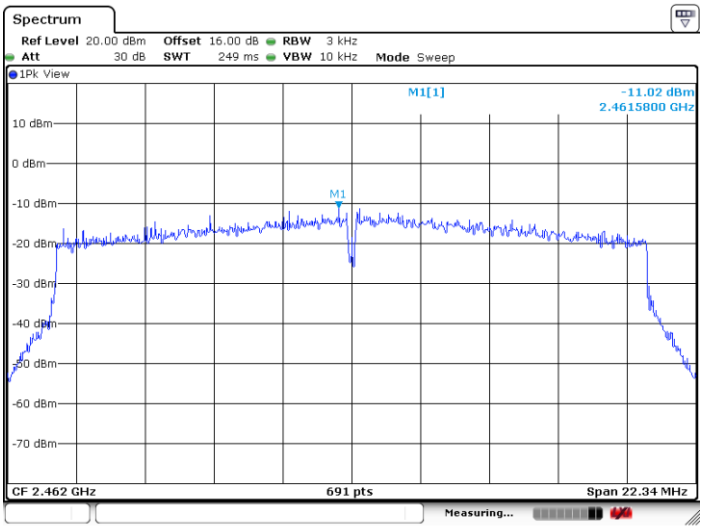


11AX20MIMO_Ant1_2462



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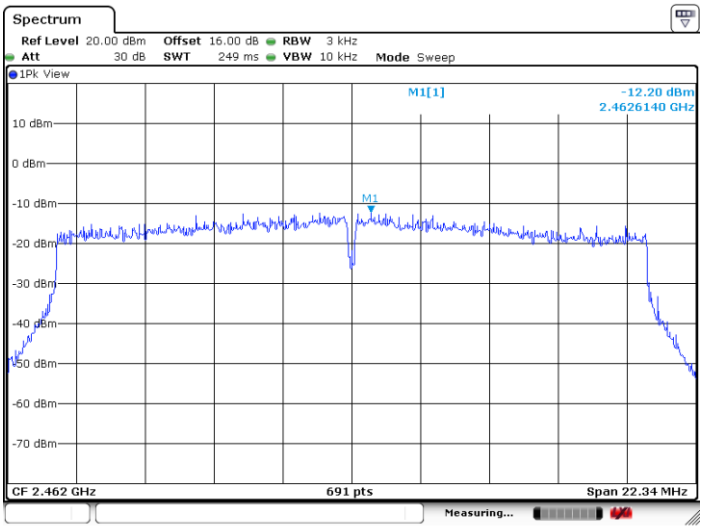


3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement.

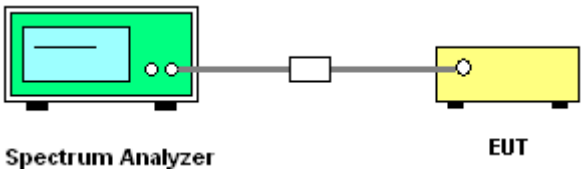
3.4.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.4.3 Test Procedures

1. The testing follows ANSI C63.10-2013 clause 11.13
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.4.4 Test Setup



3.4.5 Test Result of Conducted Band Edges and Spurious Emission

Test Engineer :	Jacob Zhang	Temperature :	21~25°C
		Relative Humidity :	51~54%

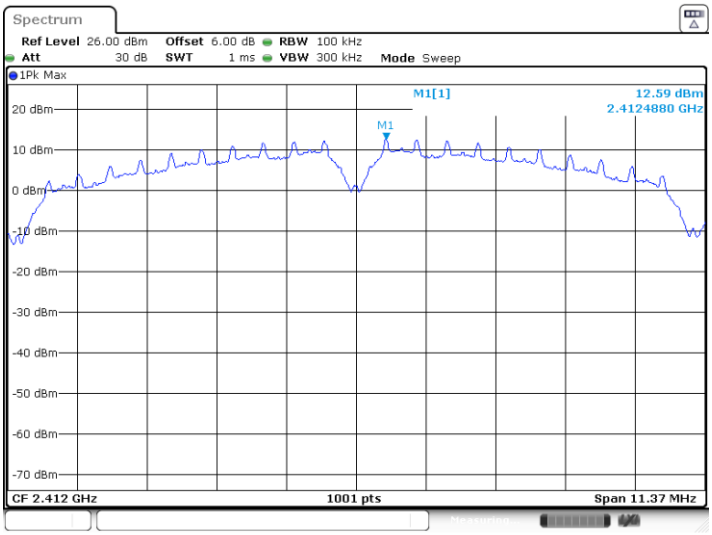
100kHz PSD

Test Mode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B-CDD	Ant1	2412	2412.49	12.59
	Ant2	2412	2410.98	13.99
	Ant1	2437	2437.49	12.94
	Ant2	2437	2437.98	13.10
	Ant1	2462	2460.98	11.21
	Ant2	2462	2461.49	11.02
11G-CDD	Ant1	2412	2413.01	4.88
	Ant2	2412	2406.97	5.59
	Ant1	2437	2439.48	4.59
	Ant2	2437	2444.48	5.87
	Ant1	2457	2459.48	5.28
	Ant2	2457	2461.99	5.07
	Ant1	2462	2464.48	5.04
	Ant2	2462	2456.98	5.54
11AX20MIMO	Ant1	2412	2412.96	5.81
	Ant2	2412	2410.71	5.62
	Ant1	2437	2438.03	5.16
	Ant2	2437	2435.70	4.41
	Ant1	2452	2459.49	5.06
	Ant2	2452	2454.50	4.78
	Ant1	2457	2457.30	5.68
	Ant2	2457	2458.40	5.26
	Ant1	2462	2462.47	5.20
	Ant2	2462	2457.00	4.98

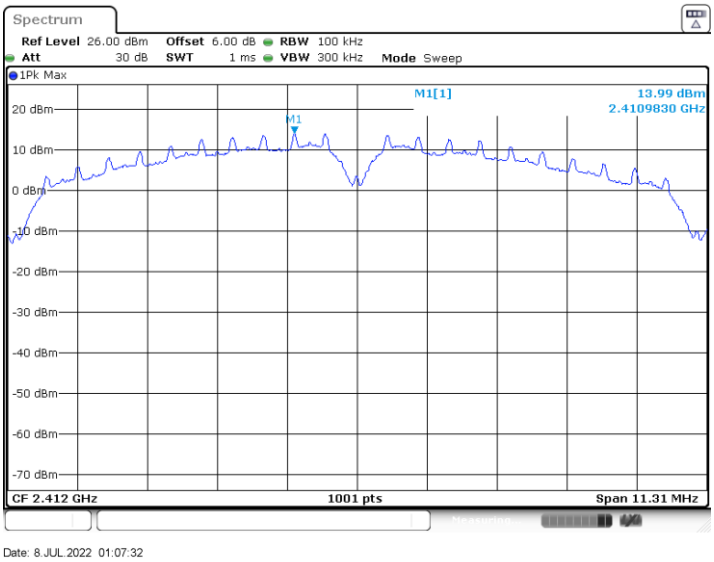
<Tx Beamforming Mode>

Test Mode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11AX20MIMO	Ant1	2412	2412.62	7.46
	Ant2	2412	2419.48	8.02
	Ant1	2437	2438.02	8.75
	Ant2	2437	2444.48	8.09
	Ant1	2462	2462.43	7.74
	Ant2	2462	2454.50	8.05

11B-CDD_Ant1_2412



11B-CDD_Ant2_2412



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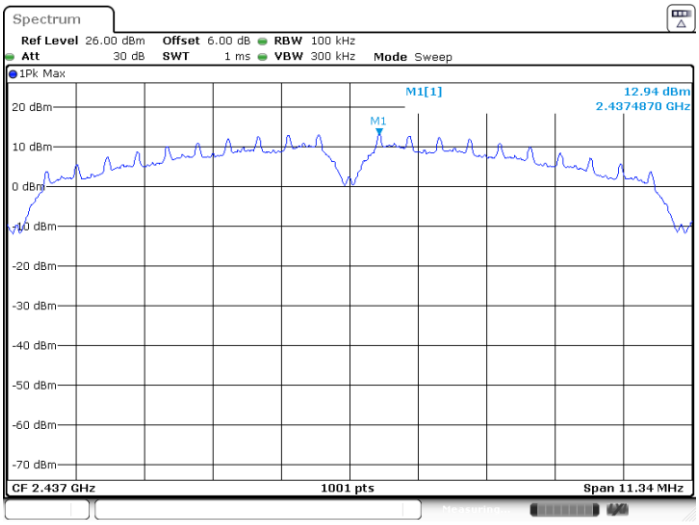

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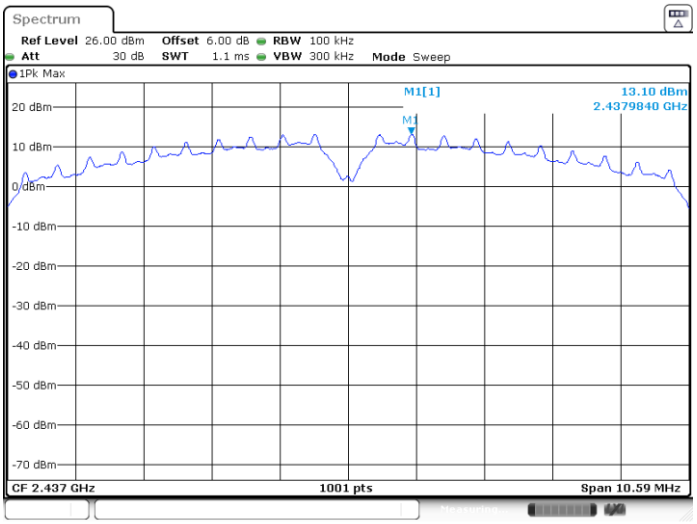

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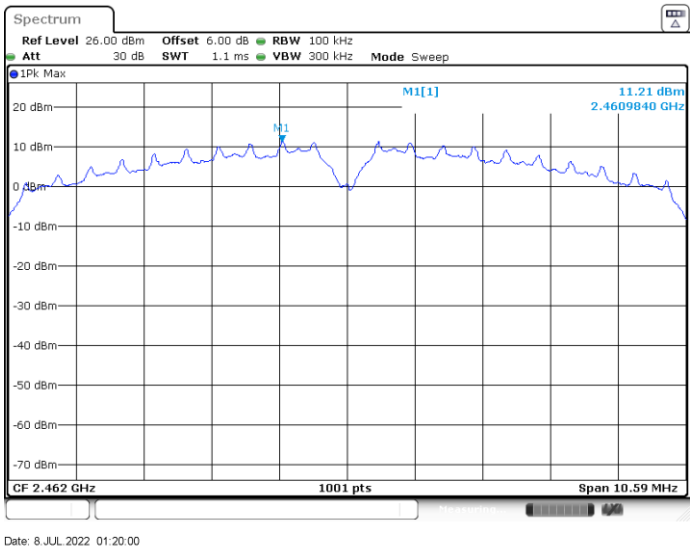

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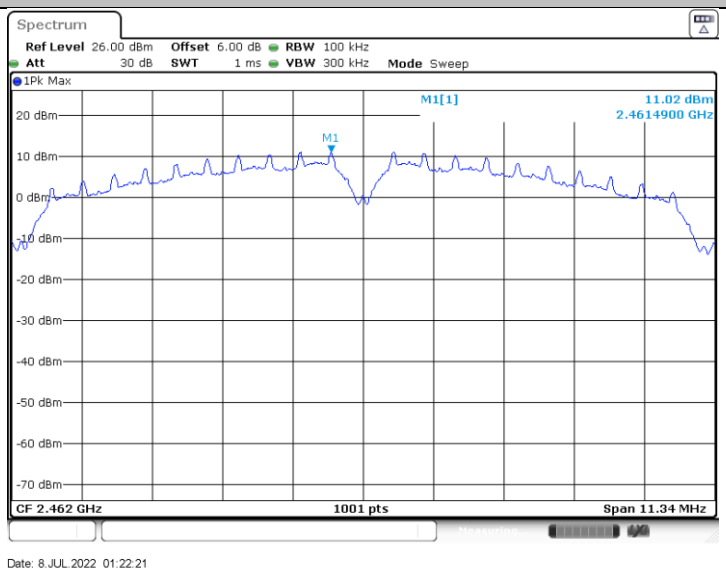

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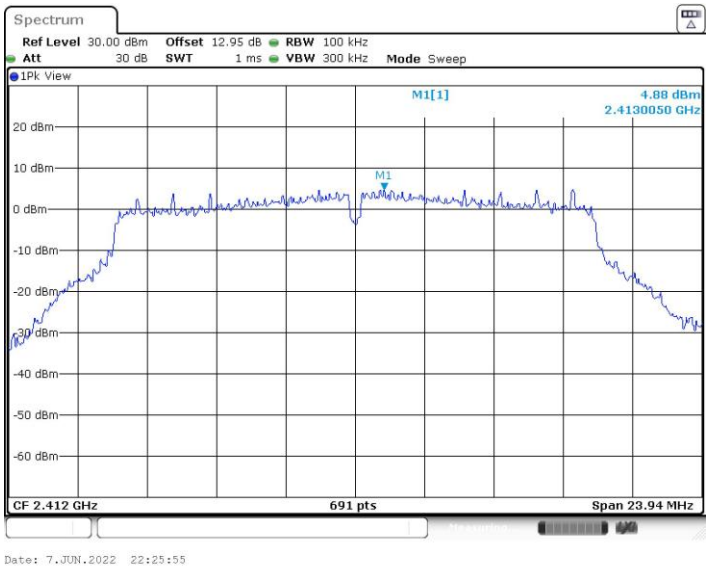

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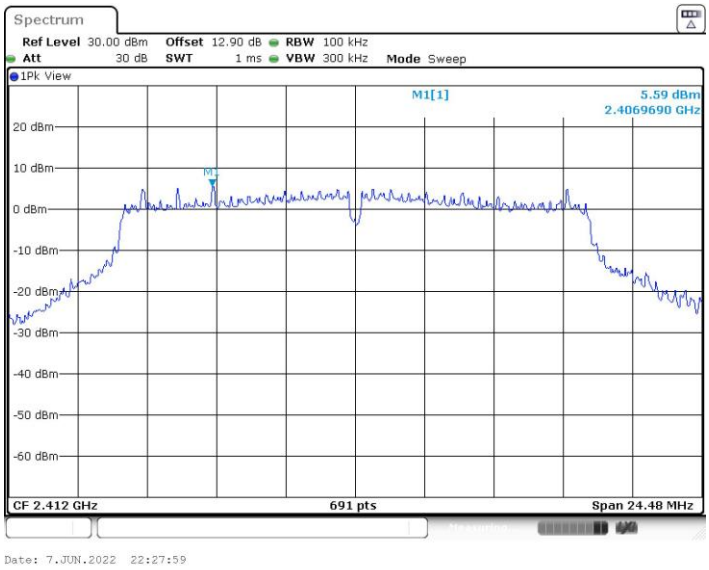

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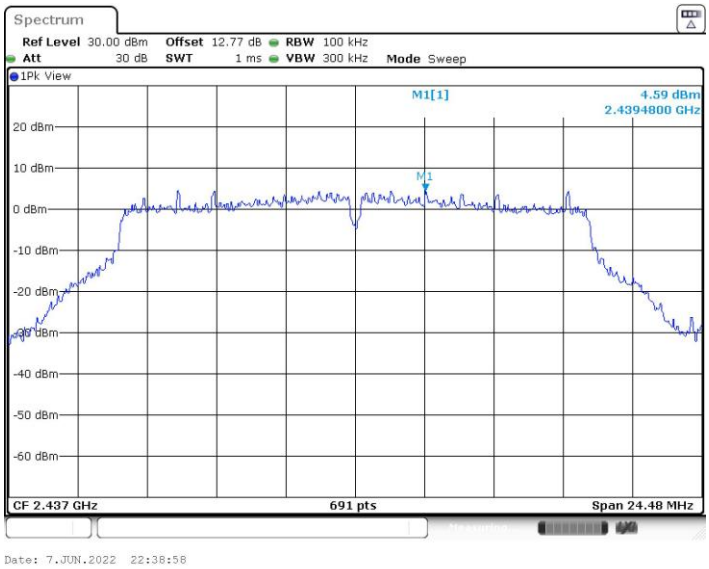

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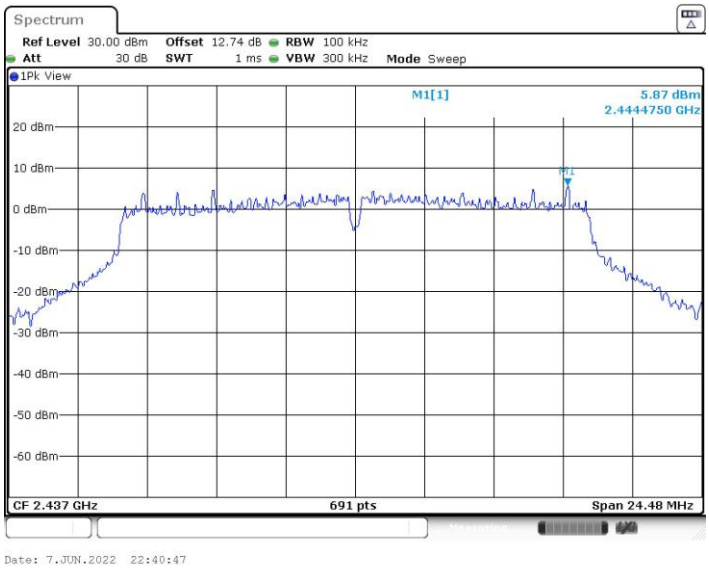

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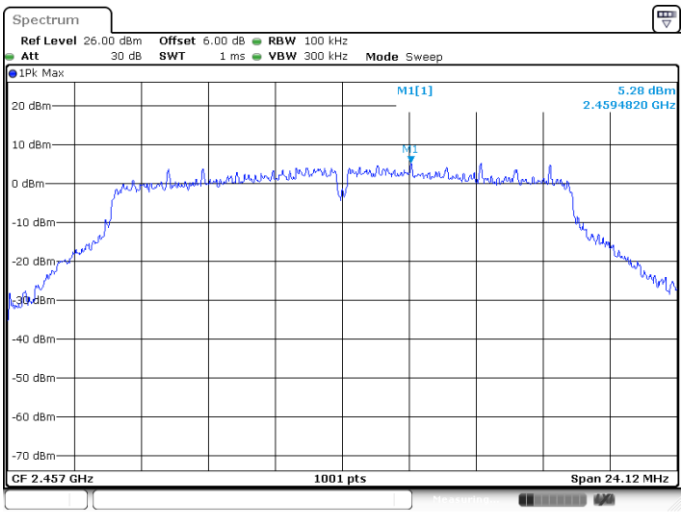

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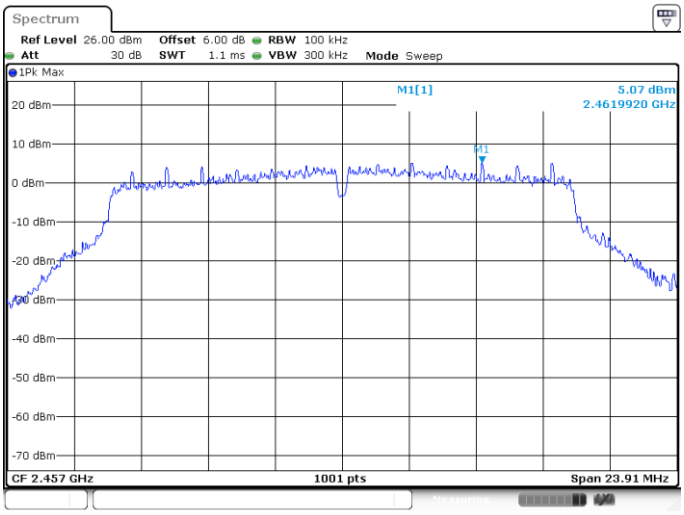

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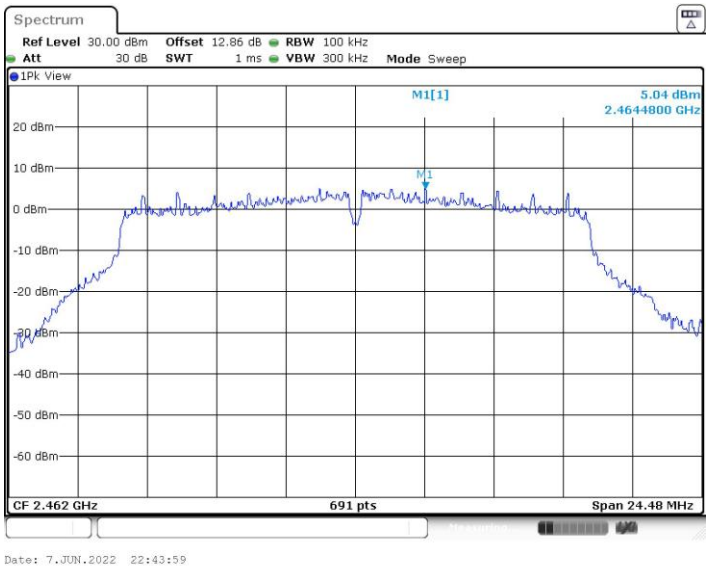

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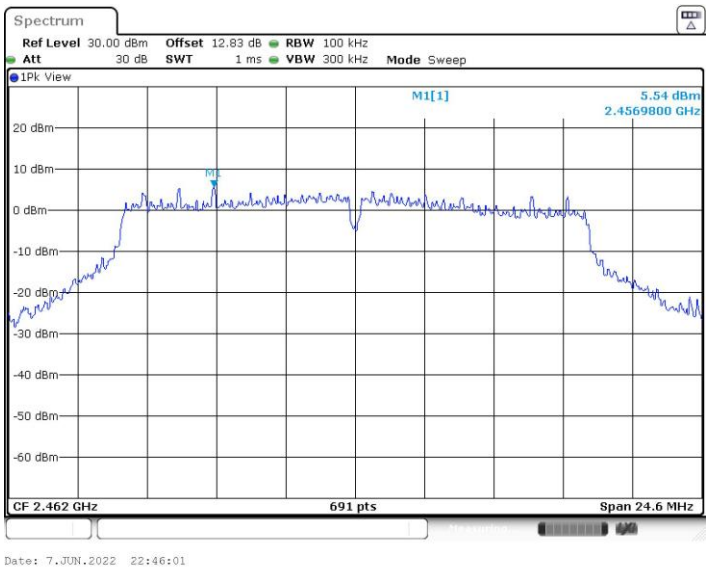

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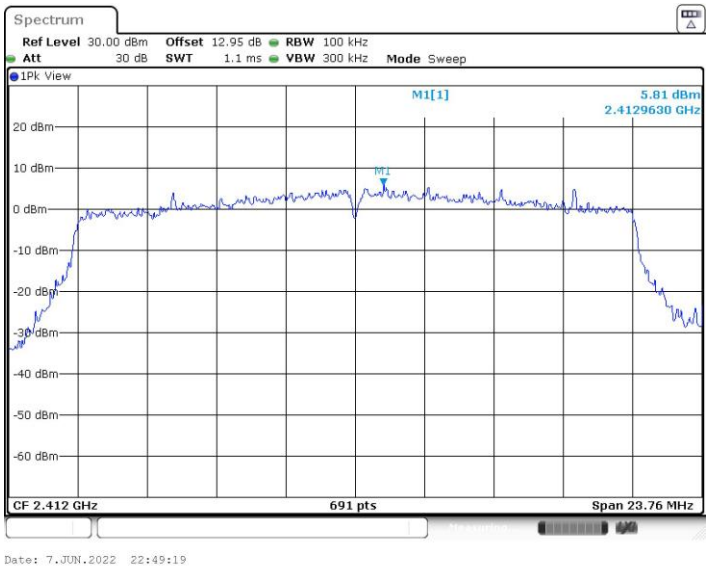

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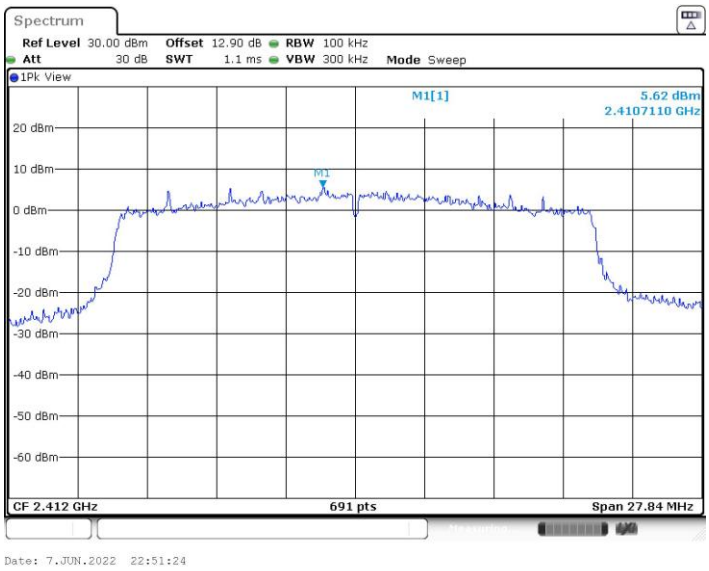

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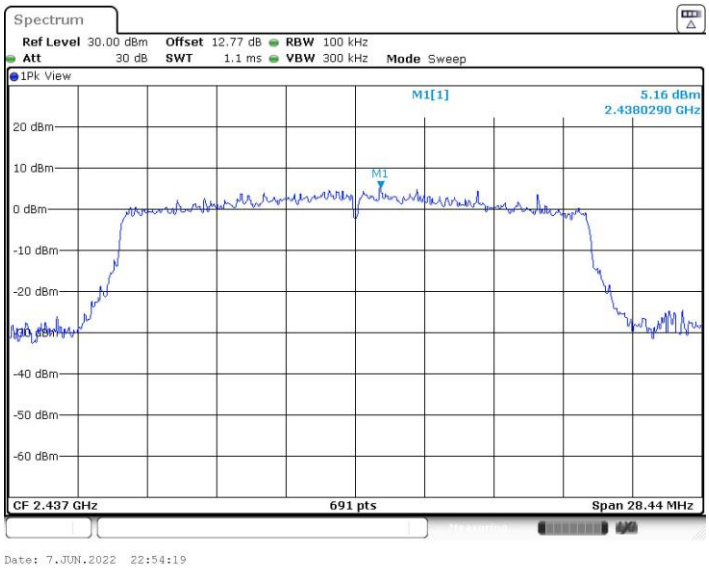

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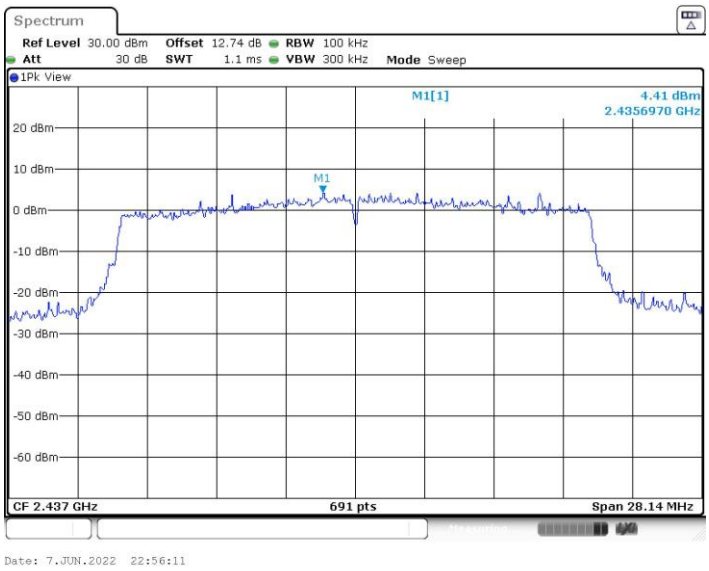

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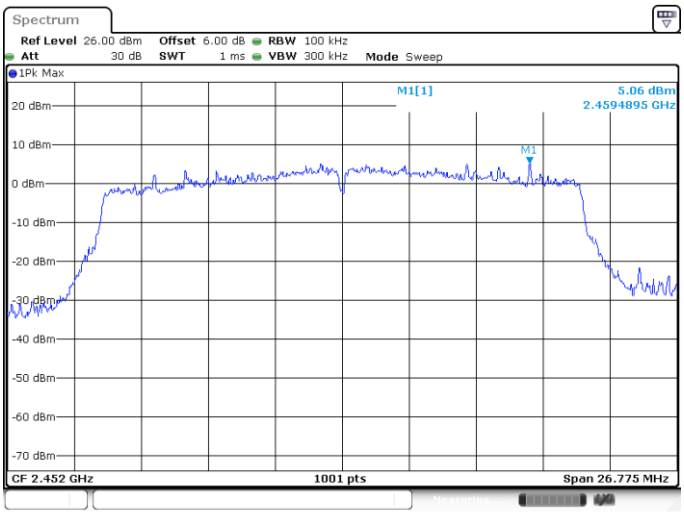

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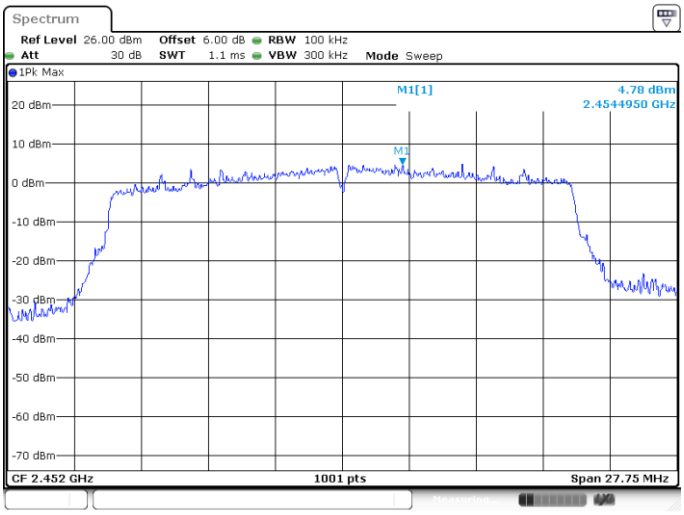

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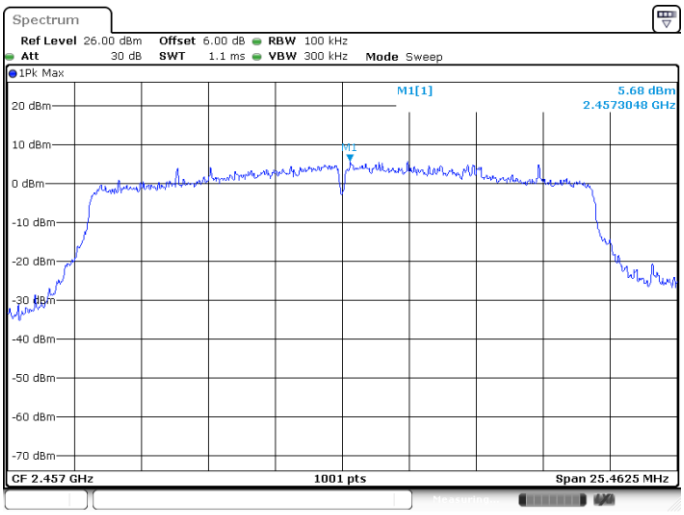

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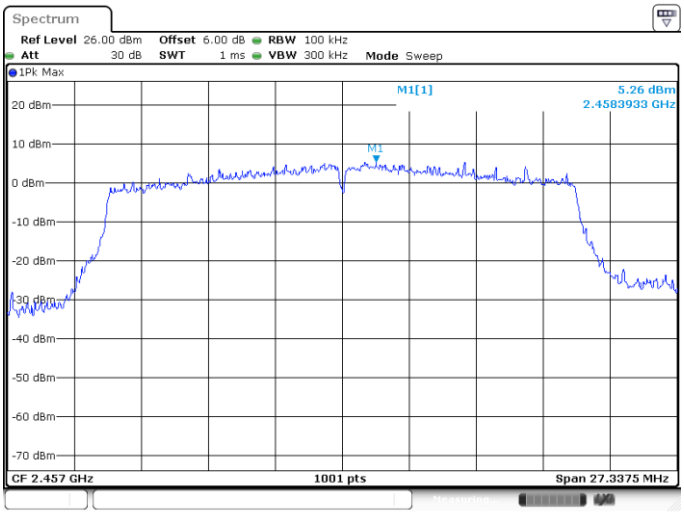

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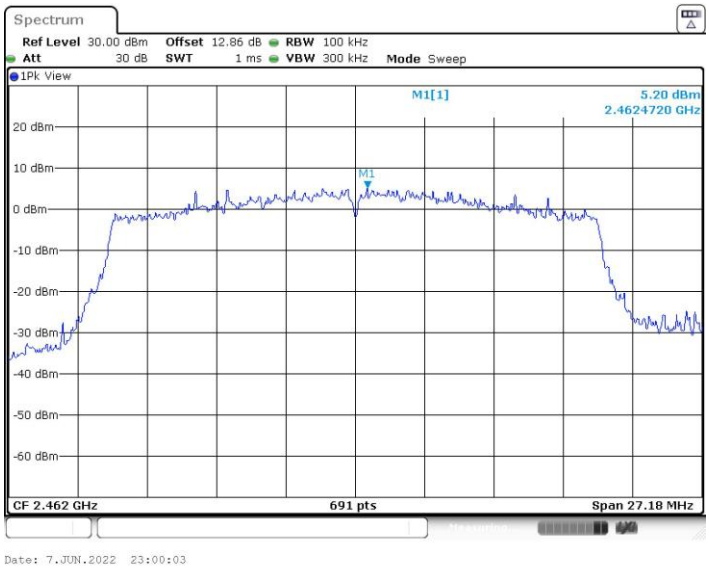

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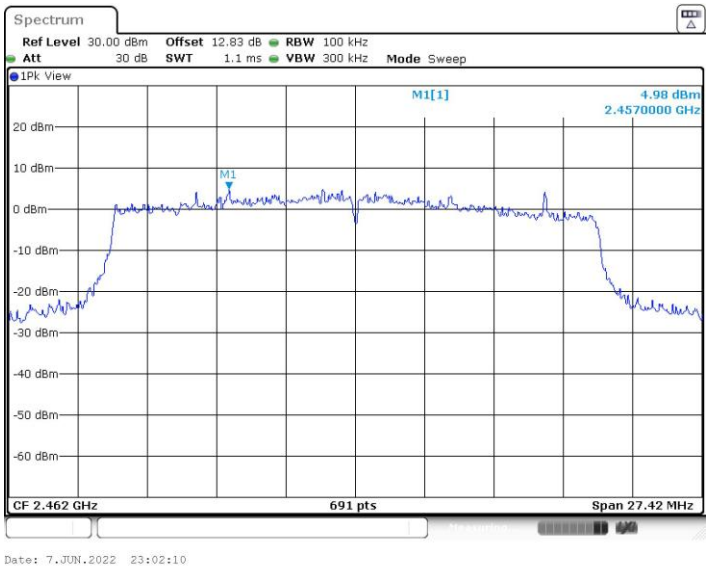

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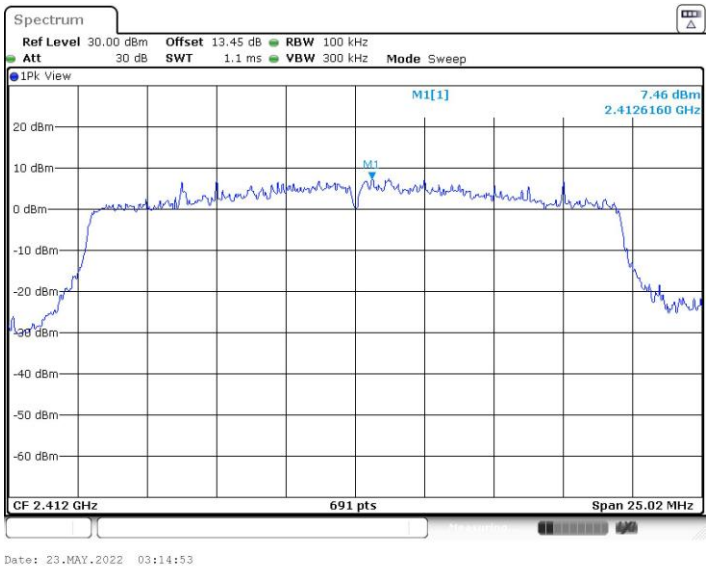

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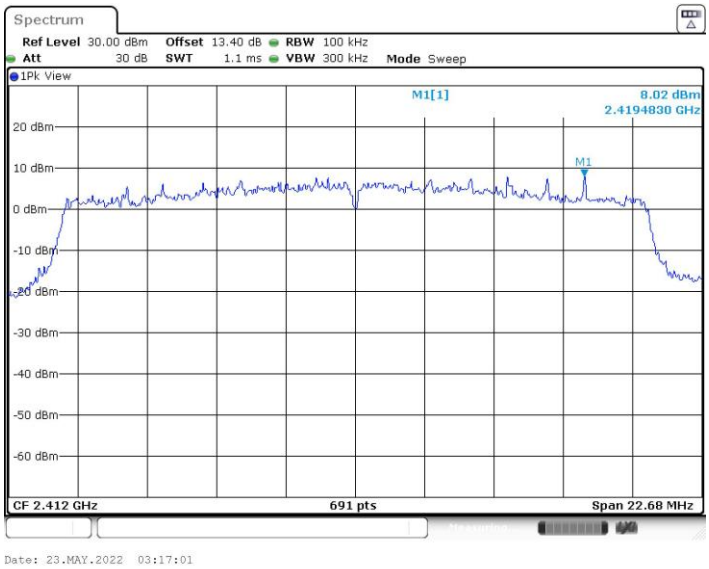

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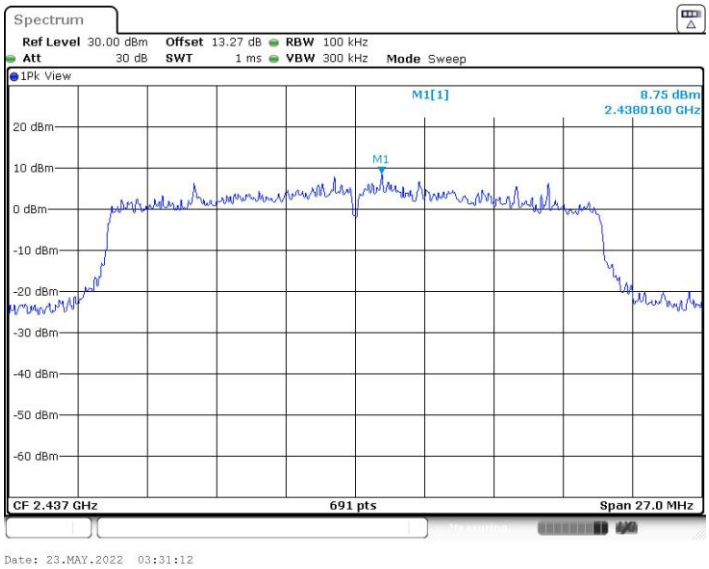

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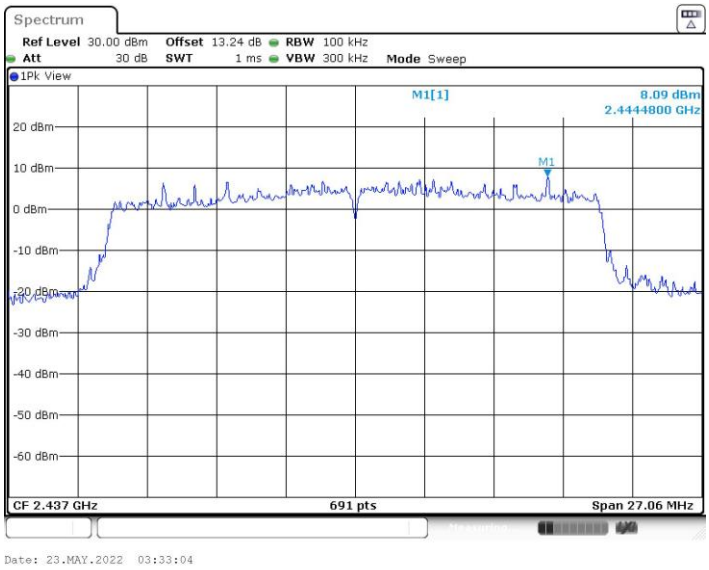

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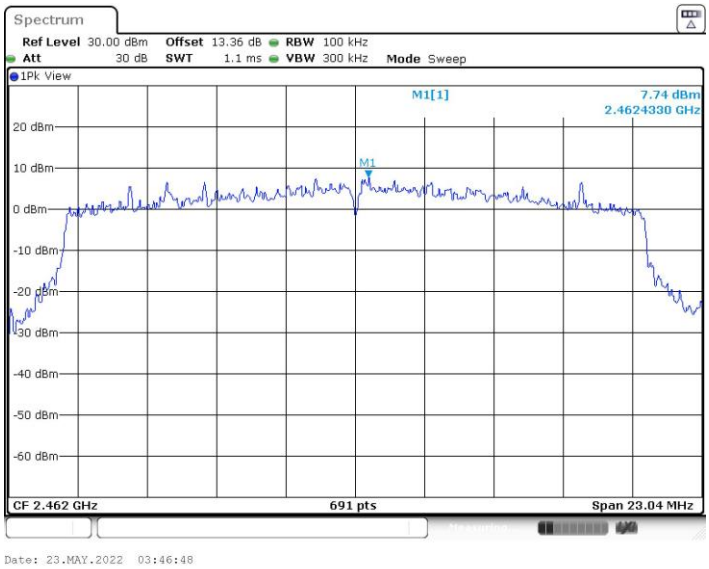

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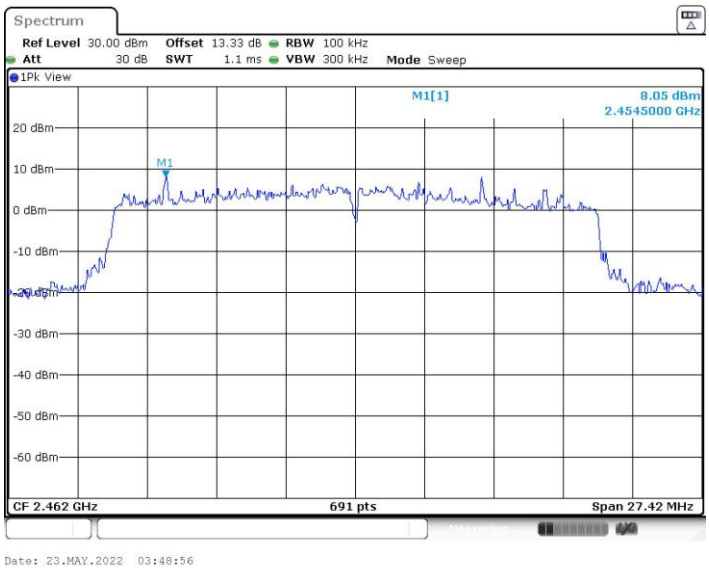


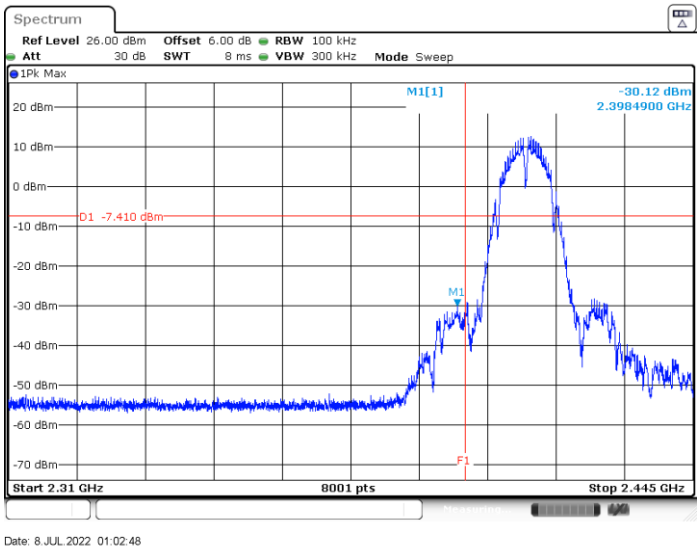
Band Edges

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B-CDD	Ant1	Low	2412	12.59	-30.12	≤-9.33	PASS
	Ant2	Low	2412	13.99	-25.58	≤-9.2	PASS
	Ant1	High	2462	11.21	-45.60	≤-8.99	PASS
	Ant2	High	2462	11.02	-50.32	≤-9.55	PASS
11G-CDD	Ant1	Low	2412	4.88	-29.98	≤-15.12	PASS
	Ant2	Low	2412	5.59	-24.98	≤-14.41	PASS
	Ant1	High	2457	5.28	-42.90	≤-14.72	PASS
	Ant2	High	2457	5.07	-44.15	≤-14.93	PASS
	Ant1	High	2462	5.04	-36.58	≤-14.96	PASS
	Ant2	High	2462	5.54	-36.17	≤-14.46	PASS
11AX20MIMO	Ant1	Low	2412	5.81	-29.53	≤-14.19	PASS
	Ant2	Low	2412	5.62	-23.55	≤-14.38	PASS
	Ant1	High	2452	5.06	-46.50	≤-14.94	PASS
	Ant2	High	2452	4.78	-46.58	≤-15.22	PASS
	Ant1	High	2457	5.68	-50.28	≤-14.32	PASS
	Ant2	High	2457	5.26	-42.04	≤-14.70	PASS
	Ant1	High	2462	5.20	-31.87	≤-14.8	PASS
	Ant2	High	2462	4.98	-30.42	≤-15.02	PASS

<Tx Beamforming Mode>

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11AX20MIMO	Ant1	Low	2412	7.46	-27.38	≤-12.54	PASS
	Ant2	Low	2412	8.02	-20.57	≤-11.98	PASS
	Ant1	High	2462	7.74	-28.84	≤-12.26	PASS
	Ant2	High	2462	8.05	-24.72	≤-11.95	PASS

11B-CDD_Ant1_Low_2412



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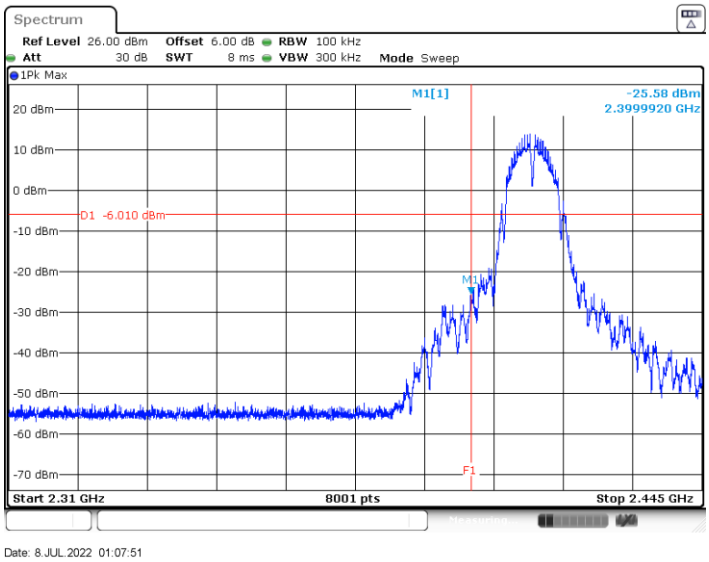

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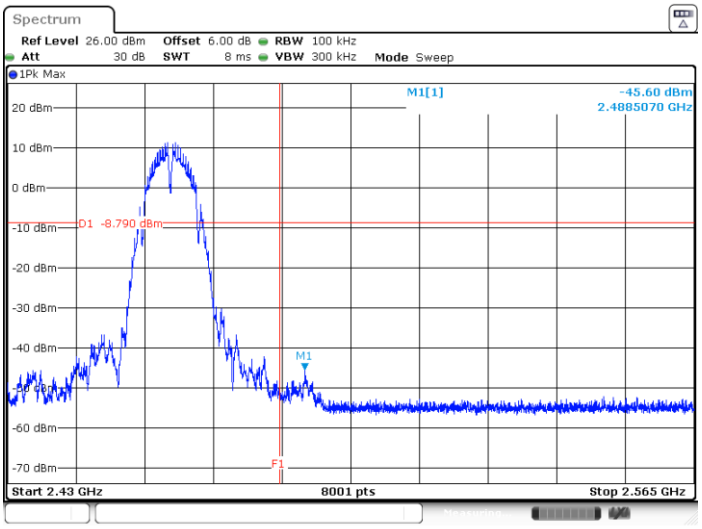
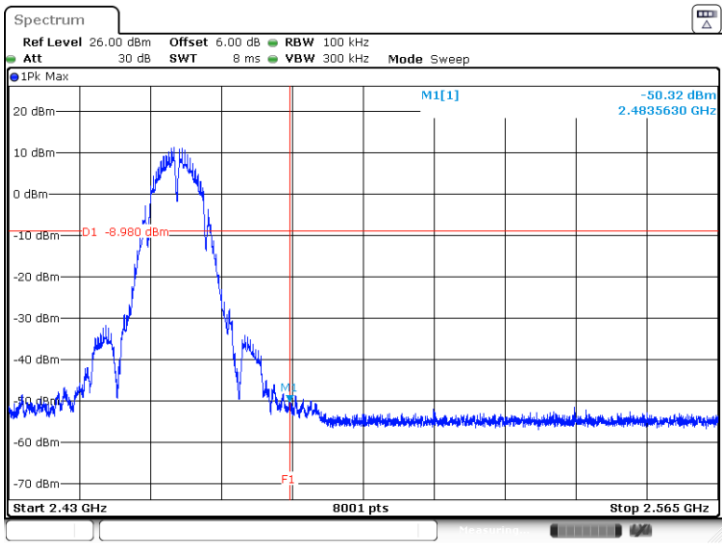


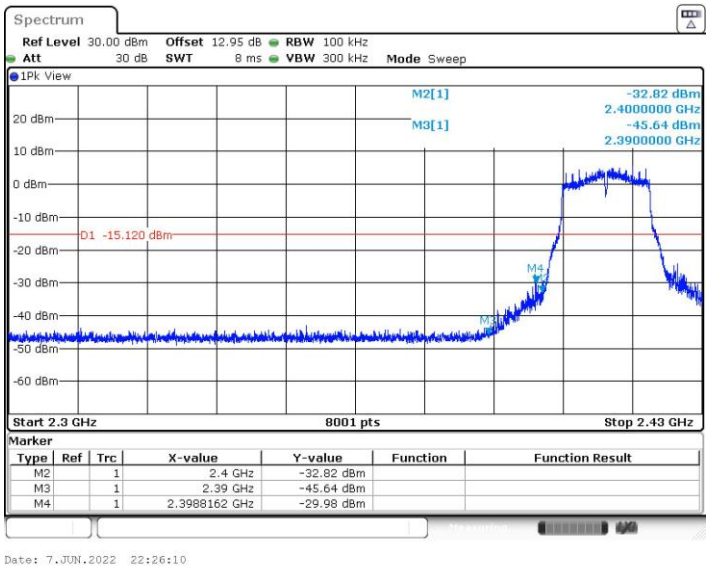
Date: 8.JUL.2022 01:20:19

11B-CDD_Ant2_High_2462

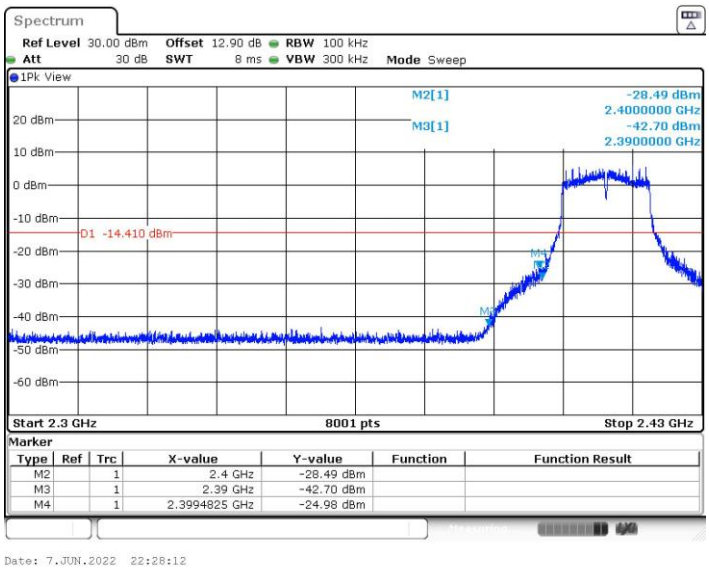


Date: 8.JUL.2022 01:22:40

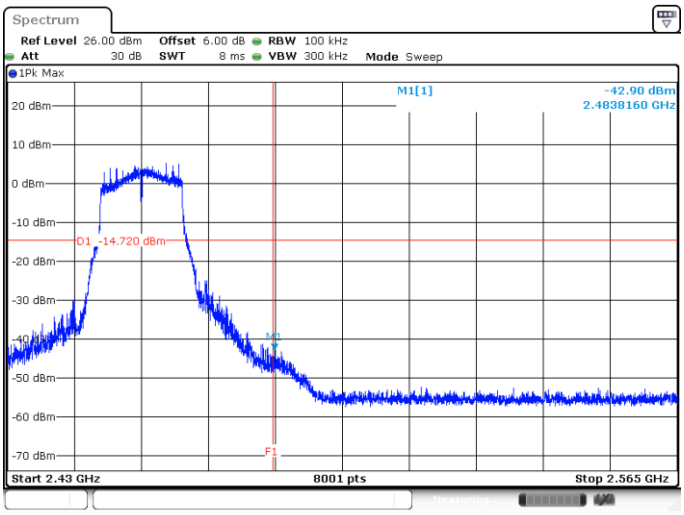
11G-CDD_Ant1_Low_2412



11G-CDD_Ant2_Low_2412

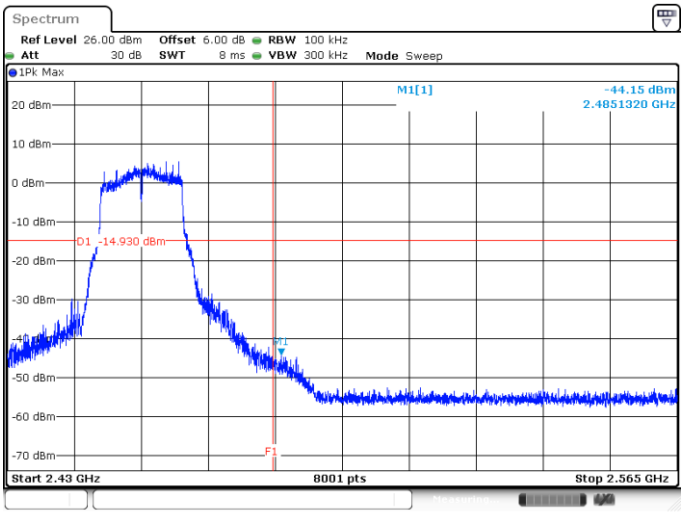


11G-CDD_Ant1_High_2457



Date: 28.JUN.2022 20:11:50

11G-CDD_Ant2_High_2457



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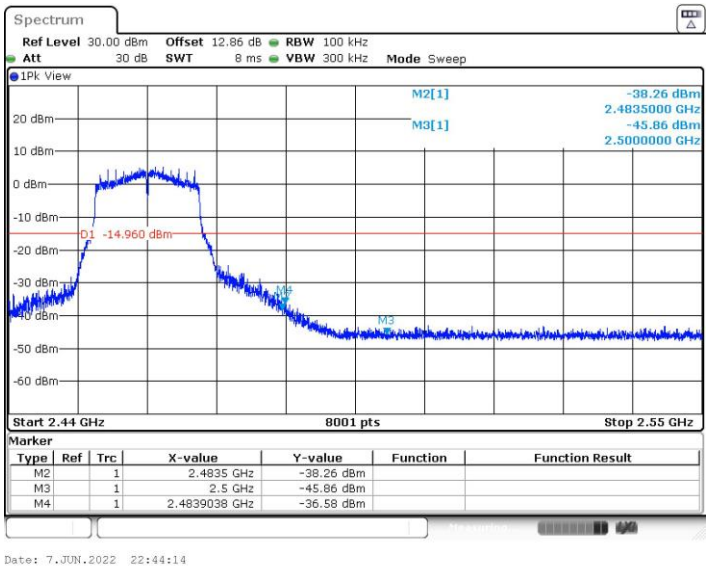
11G-CDD_Ant1_High_2462



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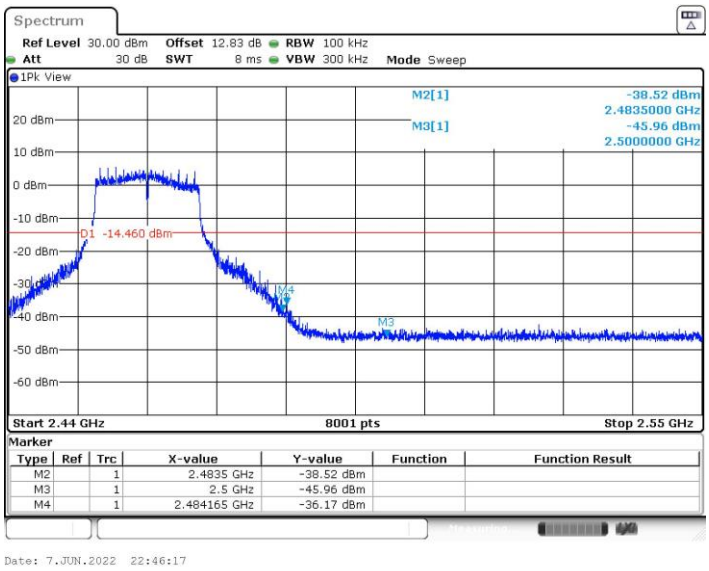
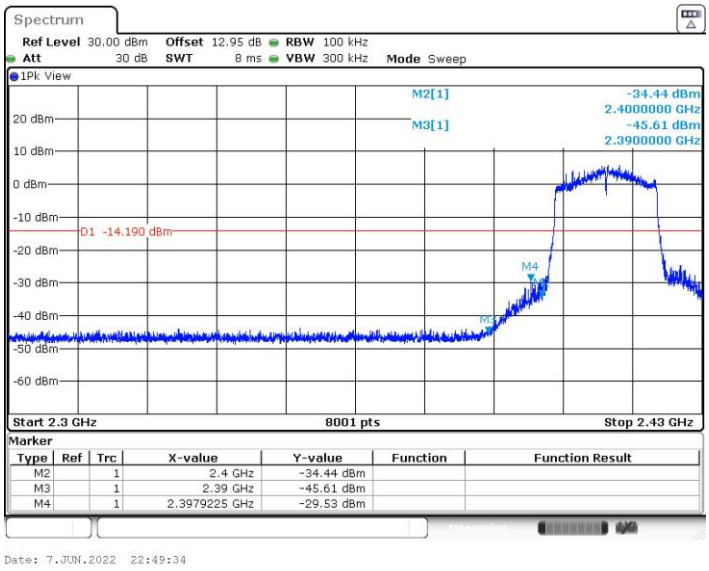
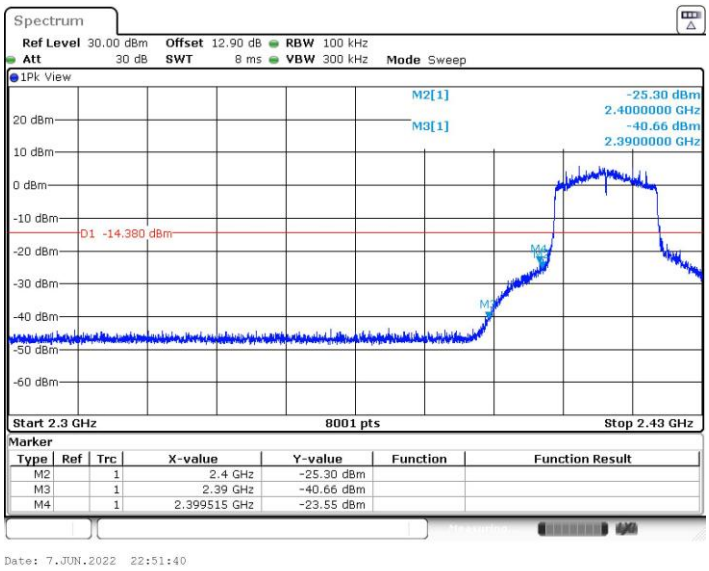


11AX20MIMO_Ant1_Low_2412



11AX20MIMO_Ant2_Low_2412



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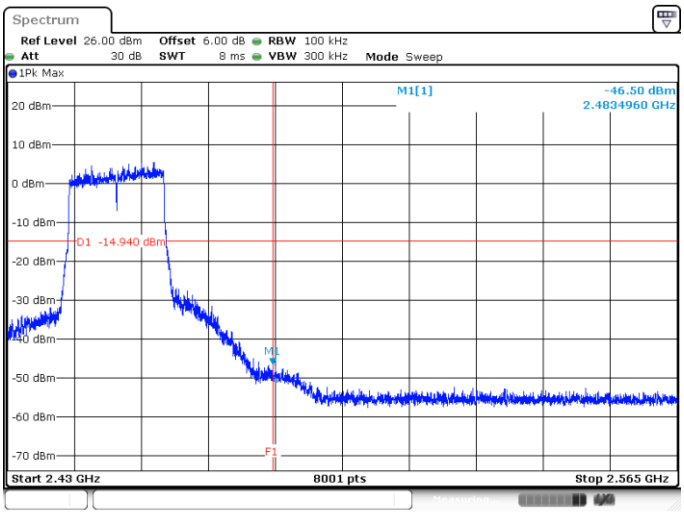
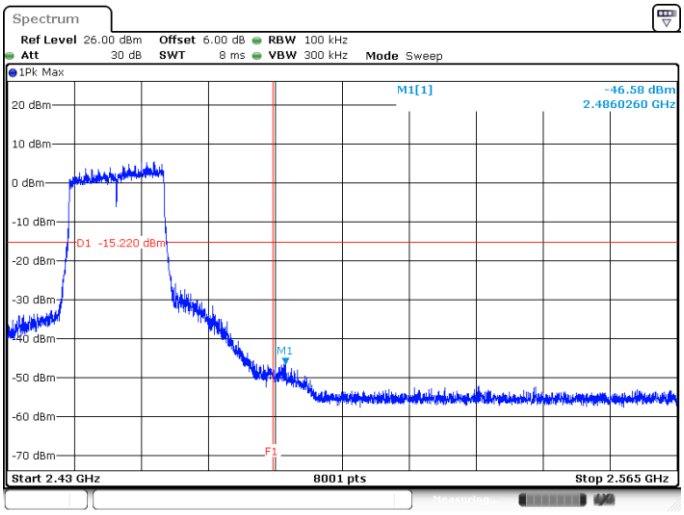


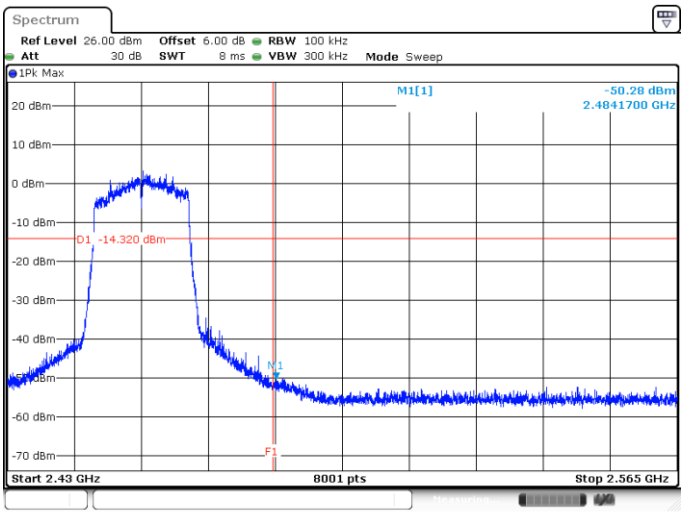
Date: 28.JUN.2022 20:08:10

11AX20MIMO_Ant2_High_2452



Date: 28.JUN.2022 20:08:29

11AX20MIMO_Ant1_High_2457



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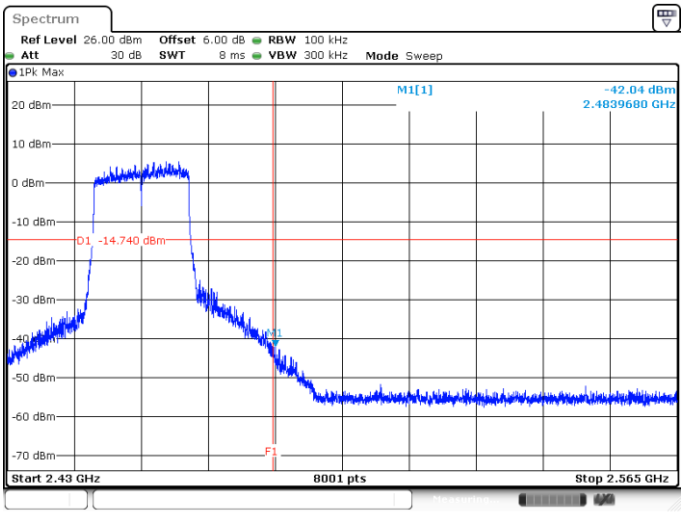
11AX20MIMO_Ant2_High_2457



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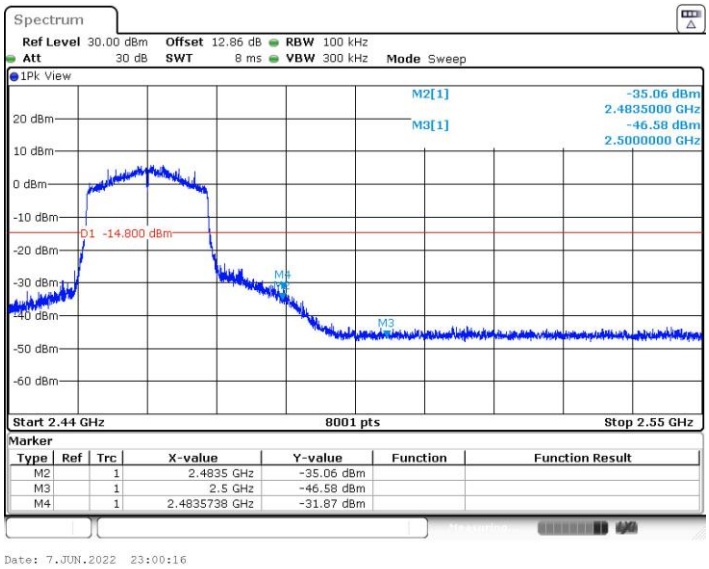
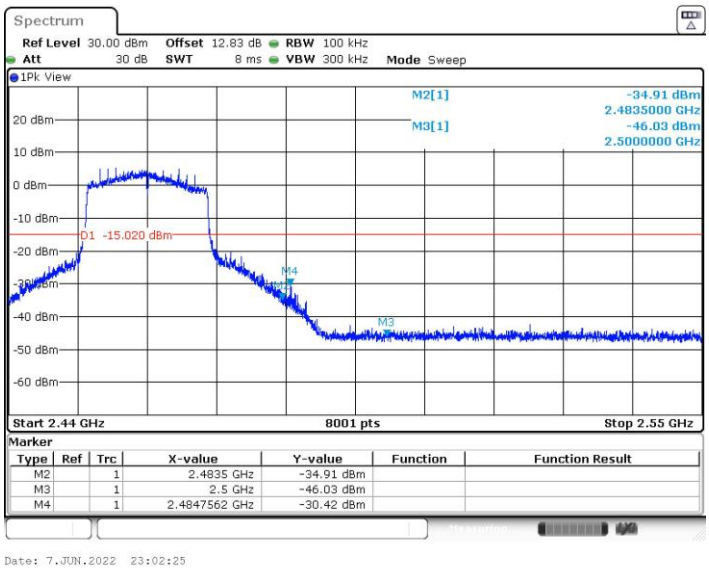
11AX20MIMO_Ant1_High_2462

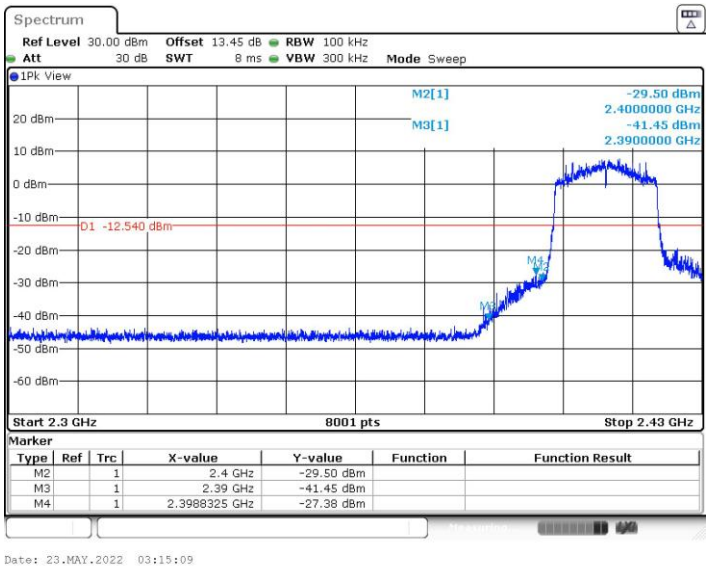


11AX20MIMO_Ant2_High_2462

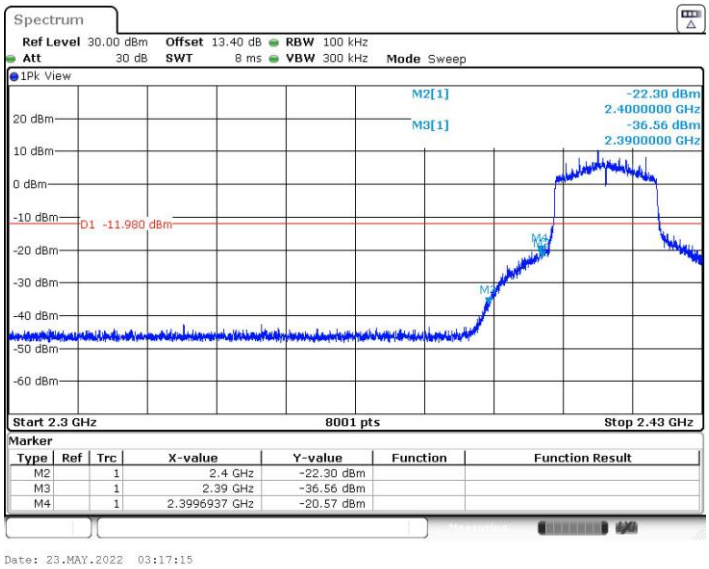


<Tx Beamforming Mode>

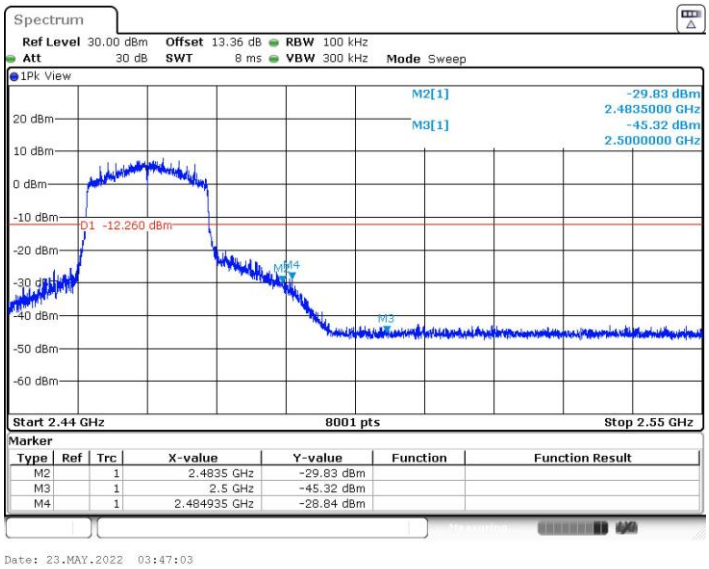
11AX20MIMO_Ant1_Low_2412



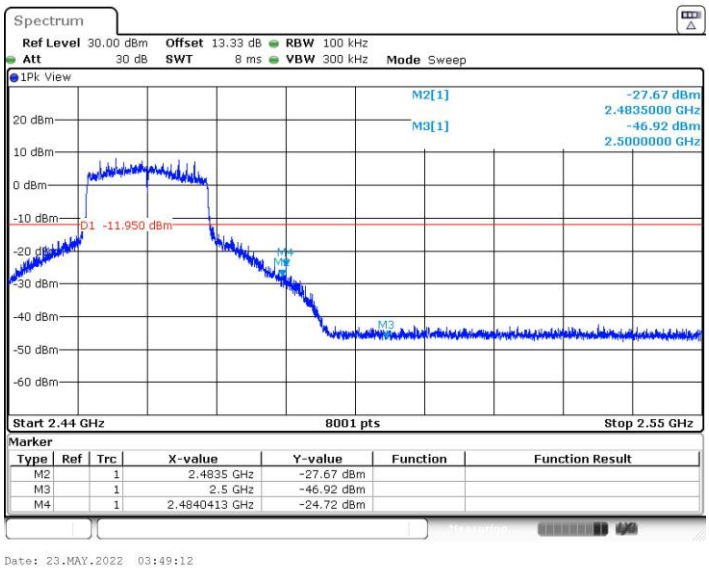
11AX20MIMO_Ant2_Low_2412



11AX20MIMO_Ant1_High_2462



11AX20MIMO_Ant2_High_2462



Conducted Spurious Emission

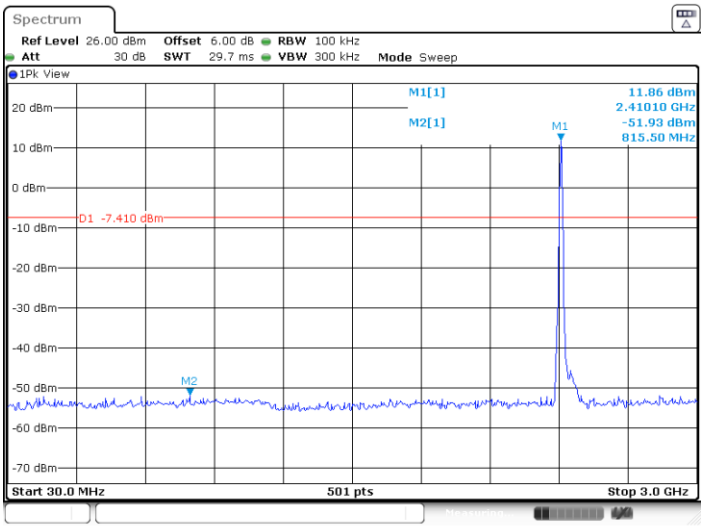
Test Mode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B-CDD	Ant1	2412	30~1000	12.59	-51.93	≤-9.33	PASS
			1000~26500	12.59	-41.19	≤-9.33	PASS
	Ant2	2412	30~1000	13.99	-51.09	≤-9.2	PASS
			1000~26500	13.99	-40.10	≤-9.2	PASS
	Ant1	2437	30~1000	12.94	-51.55	≤-7.83	PASS
			1000~26500	12.94	-40.51	≤-7.83	PASS
	Ant2	2437	30~1000	13.10	-51.59	≤-8.41	PASS
			1000~26500	13.10	-37.46	≤-8.41	PASS
	Ant1	2462	30~1000	11.21	-51.57	≤-8.99	PASS
			1000~26500	11.21	-41.82	≤-8.99	PASS
	Ant2	2462	30~1000	11.02	-51.81	≤-9.55	PASS
			1000~26500	11.02	-40.53	≤-9.55	PASS
11G-CDD	Ant1	2412	30~1000	4.88	-54.6	≤-15.12	PASS
			1000~26500	4.88	-44.9	≤-15.12	PASS
	Ant2	2412	30~1000	5.59	-54.2	≤-14.41	PASS
			1000~26500	5.59	-45.73	≤-14.41	PASS
	Ant1	2437	30~1000	4.59	-53.99	≤-15.41	PASS
			1000~26500	4.59	-45.68	≤-15.41	PASS
	Ant2	2437	30~1000	5.87	-53.07	≤-14.13	PASS
			1000~26500	5.87	-45.67	≤-14.13	PASS
	Ant1	2457	30~1000	5.28	-52.25	≤-14.72	PASS
			1000~26500	5.28	-45.26	≤-14.72	PASS
	Ant2	2457	30~1000	5.07	-52.73	≤-14.93	PASS
			1000~26500	5.07	-45.58	≤-14.93	PASS
	Ant1	2462	30~1000	5.04	-54.62	≤-14.96	PASS
			1000~26500	5.04	-45.34	≤-14.96	PASS
	Ant2	2462	30~1000	5.54	-54.33	≤-14.46	PASS
			1000~26500	5.54	-45.74	≤-14.46	PASS
11AX20MIMO	Ant1	2412	30~1000	5.81	-54.19	≤-14.19	PASS
			1000~26500	5.81	-45.67	≤-14.19	PASS
	Ant2	2412	30~1000	5.62	-54.1	≤-14.38	PASS
			1000~26500	5.62	-45.4	≤-14.38	PASS
	Ant1	2437	30~1000	5.16	-54.52	≤-14.84	PASS
			1000~26500	5.16	-45.59	≤-14.84	PASS
	Ant2	2437	30~1000	4.41	-54.11	≤-15.59	PASS
			1000~26500	4.41	-43.18	≤-15.59	PASS
	Ant1	2452	30~1000	5.06	-52.02	≤-14.94	PASS
			1000~26500	5.06	-46.24	≤-14.94	PASS
	Ant2	2452	30~1000	4.78	-52.00	≤-15.22	PASS
			1000~26500	4.78	-44.95	≤-15.22	PASS
	Ant1	2457	30~1000	5.68	-51.02	≤-14.32	PASS
			1000~26500	5.68	-46.02	≤-14.32	PASS
	Ant2	2457	30~1000	5.26	-51.91	≤-14.74	PASS
			1000~26500	5.26	-45.67	≤-14.74	PASS
	Ant1	2462	30~1000	5.20	-54.32	≤-14.8	PASS
			1000~26500	5.20	-45.28	≤-14.8	PASS
	Ant2	2462	30~1000	4.98	-55.11	≤-15.02	PASS

			1000~26500	4.98	-45.7	≤-15.02	PASS

<Tx Beamforming Mode>

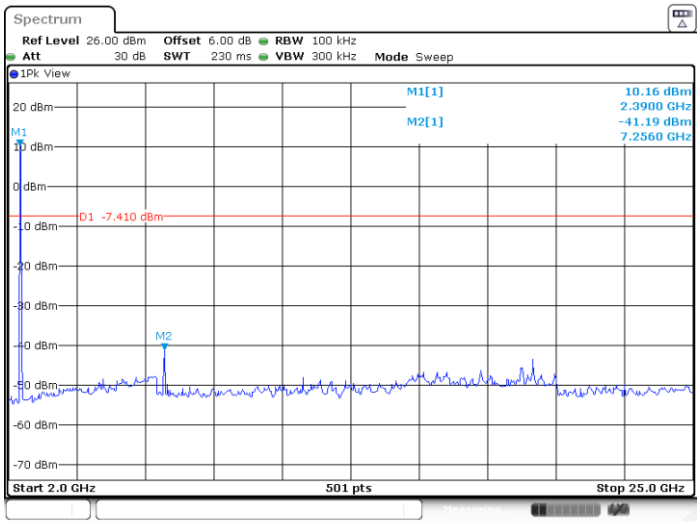
Test Mode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11AX20MIMO	Ant1	2412	30~1000	7.46	-54.07	≤-12.54	PASS
			1000~26500	7.46	-45.34	≤-12.54	PASS
	Ant2	2412	30~1000	8.02	-53.44	≤-11.98	PASS
			1000~26500	8.02	-43.84	≤-11.98	PASS
	Ant1	2437	30~1000	8.75	-54.16	≤-11.25	PASS
			1000~26500	8.75	-45.33	≤-11.25	PASS
	Ant2	2437	30~1000	8.09	-54.67	≤-11.91	PASS
			1000~26500	8.09	-44.85	≤-11.91	PASS
	Ant1	2462	30~1000	7.74	-53.24	≤-12.26	PASS
			1000~26500	7.74	-45.42	≤-12.26	PASS
	Ant2	2462	30~1000	8.05	-53.91	≤-11.95	PASS
			1000~26500	8.05	-44.96	≤-11.95	PASS

11B-CDD_Ant1_2412_30~1000



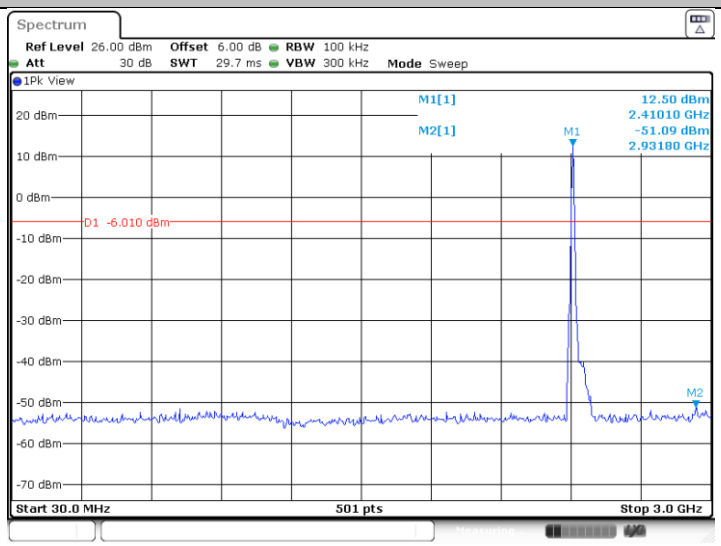
Date: 8.JUL.2022 01:03:09

11B-CDD_Ant1_2412_1000~26500



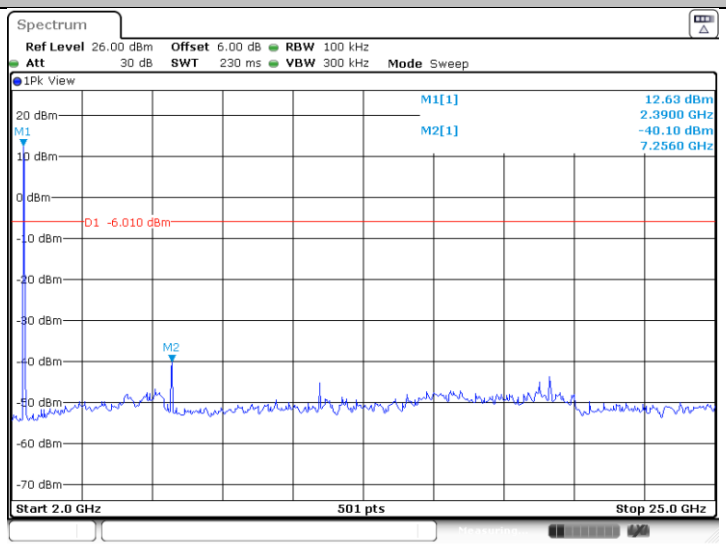
Date: 8.JUL.2022 01:03:29

11B-CDD_Ant2_2412_30~1000



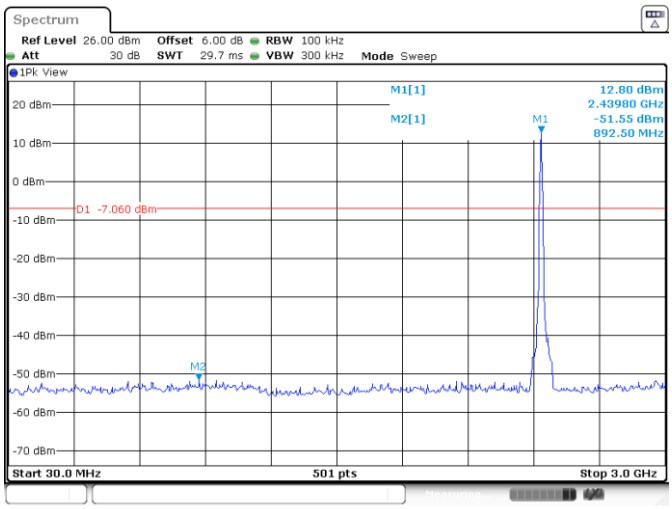
Date: 8.JUL.2022 01:09:57

11B-CDD_Ant2_2412_1000~26500



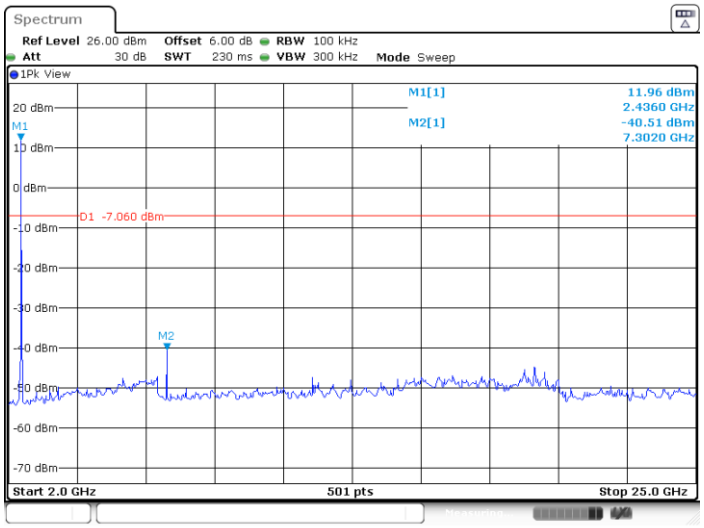
Date: 8.JUL.2022 01:10:14

11B-CDD_Ant1_2437_30~1000



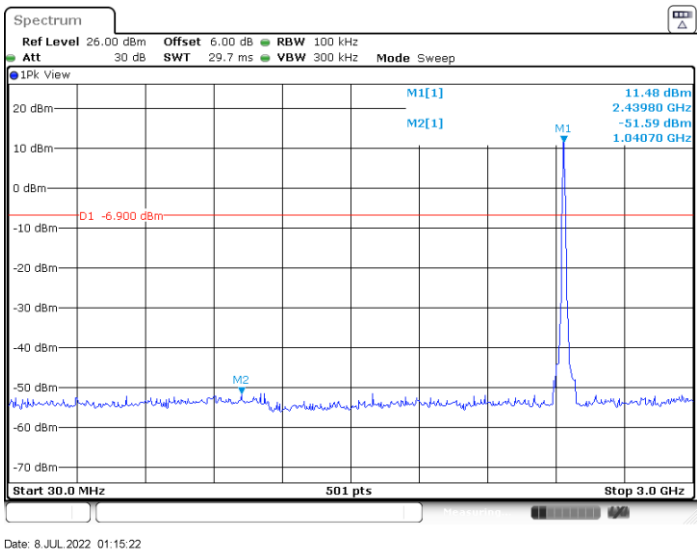
Date: 8.JUL.2022 01:12:48

11B-CDD_Ant1_2437_1000~26500

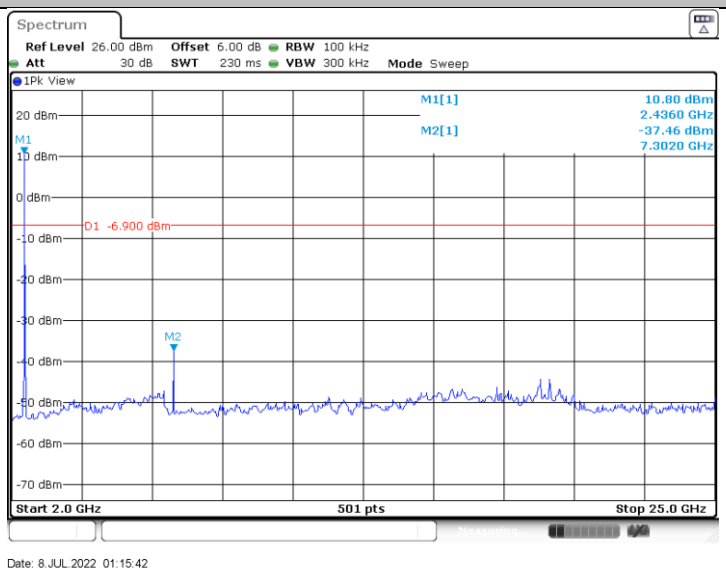


Date: 8.JUL.2022 01:13:08

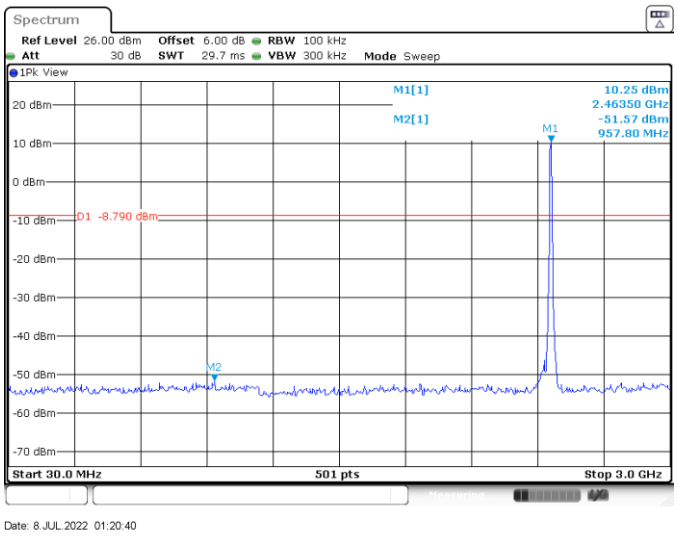
11B-CDD_Ant2_2437_30~1000



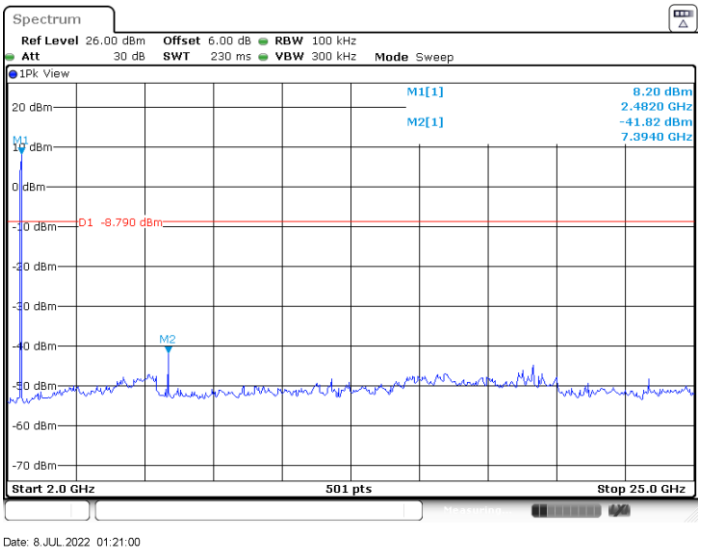
11B-CDD_Ant2_2437_1000~26500



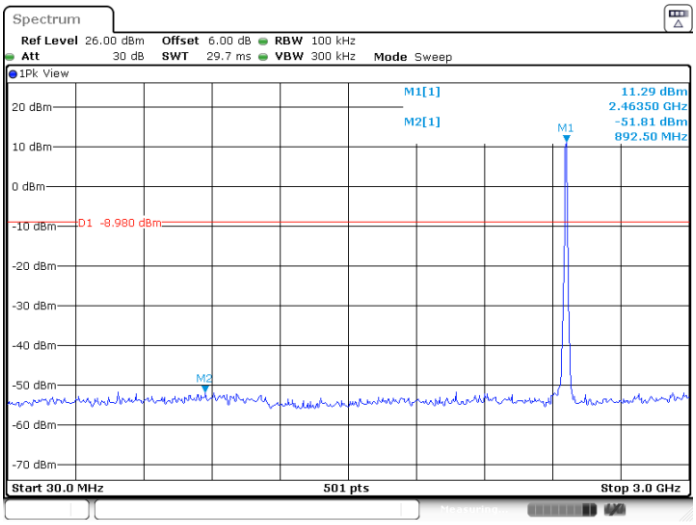
11B-CDD_Ant1_2462_30~1000



11B-CDD_Ant1_2462_1000~26500



11B-CDD_Ant2_2462_30~1000



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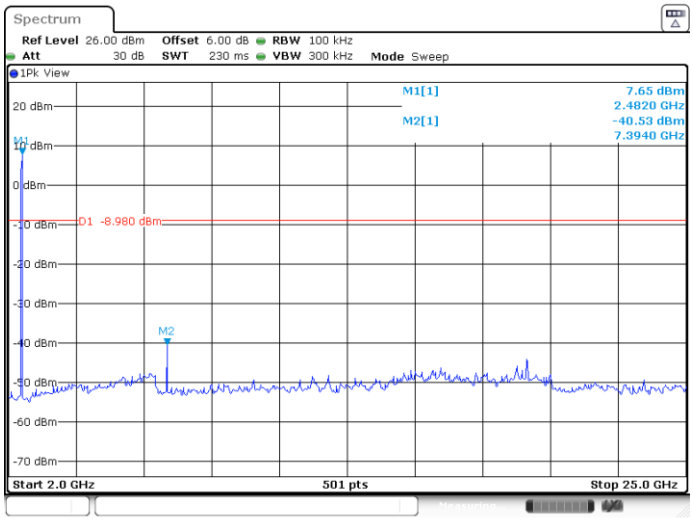
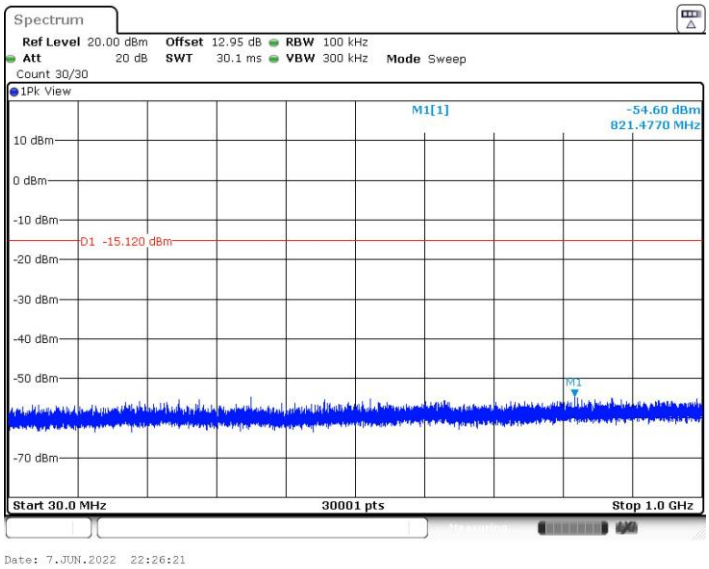
11B-CDD_Ant2_2462_1000~26500

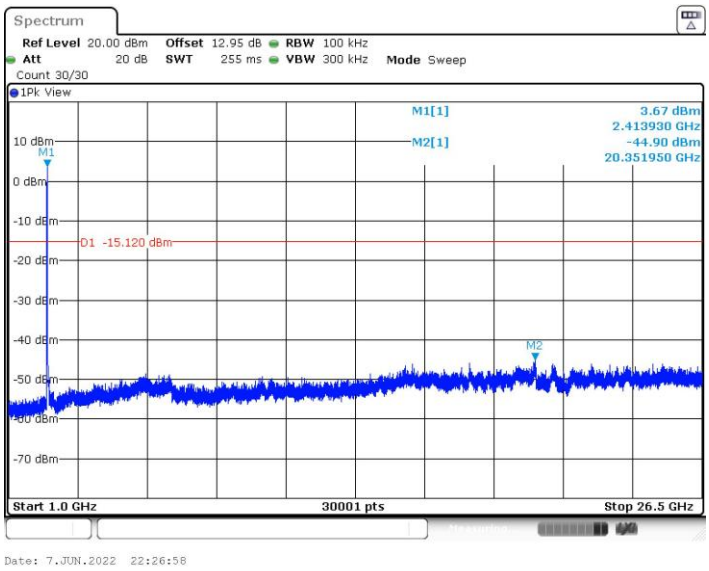


Date: 8.JUL.2022 01:23:20

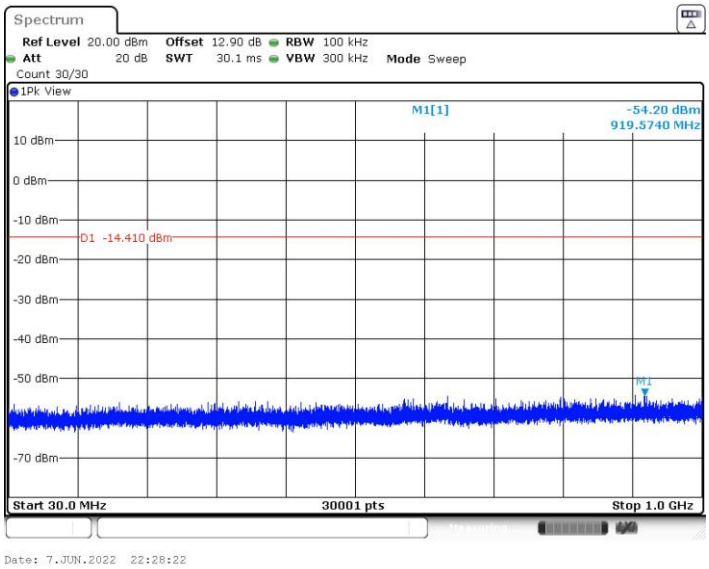
11G-CDD_Ant1_2412_30~1000



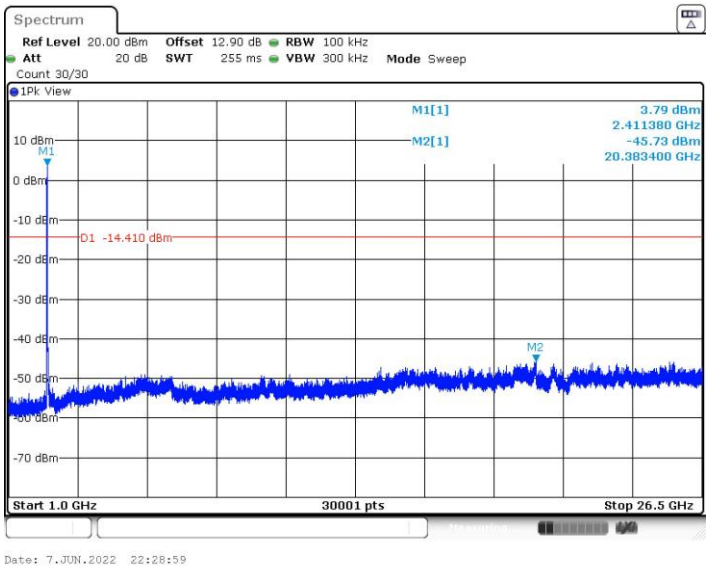
11G-CDD_Ant1_2412_1000~26500



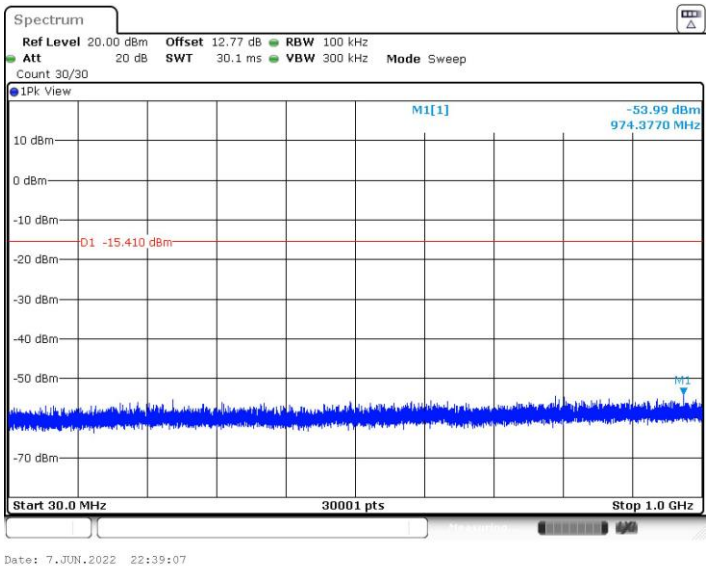
11G-CDD_Ant2_2412_30~1000



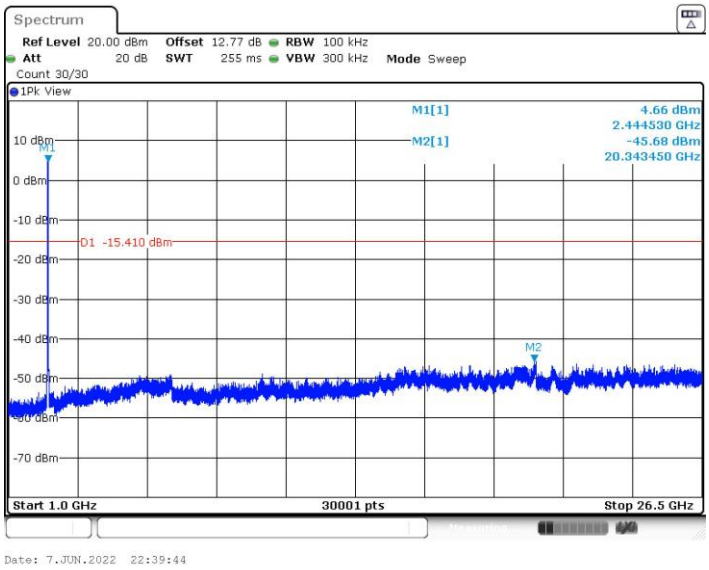
11G-CDD_Ant2_2412_1000~26500



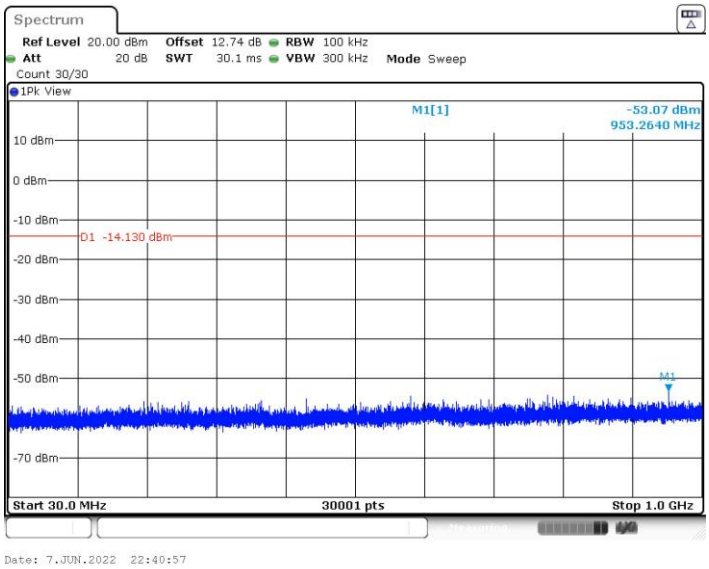
11G-CDD_Ant1_2437_30~1000



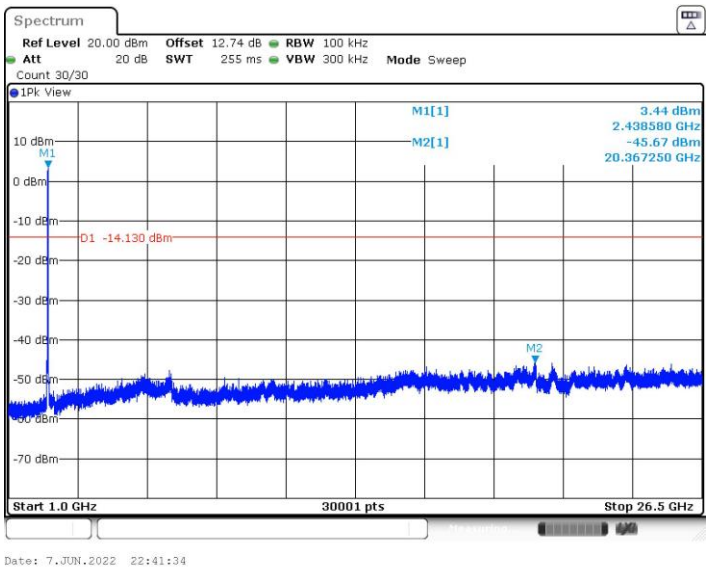
11G-CDD_Ant1_2437_1000~26500



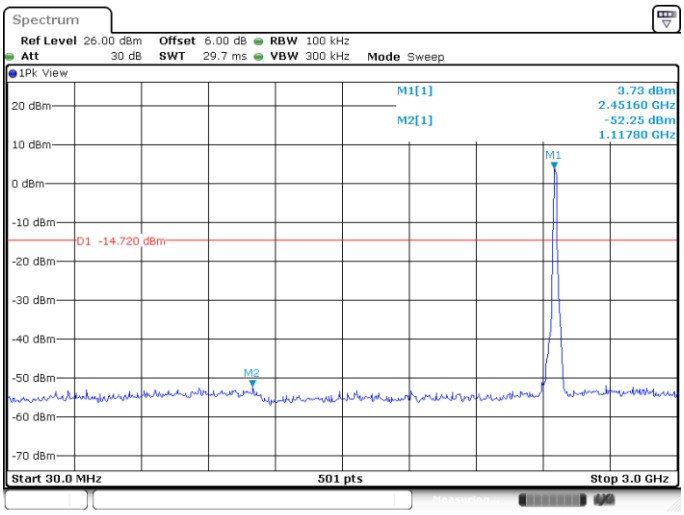
11G-CDD_Ant2_2437_30~1000



11G-CDD_Ant2_2437_1000~26500



11G-CDD_Ant1_2457_30~1000



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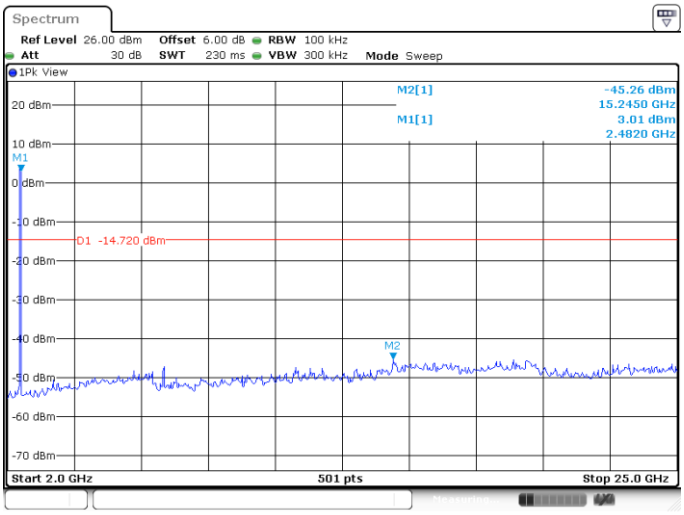
11G-CDD_Ant1_2457_1000~26500



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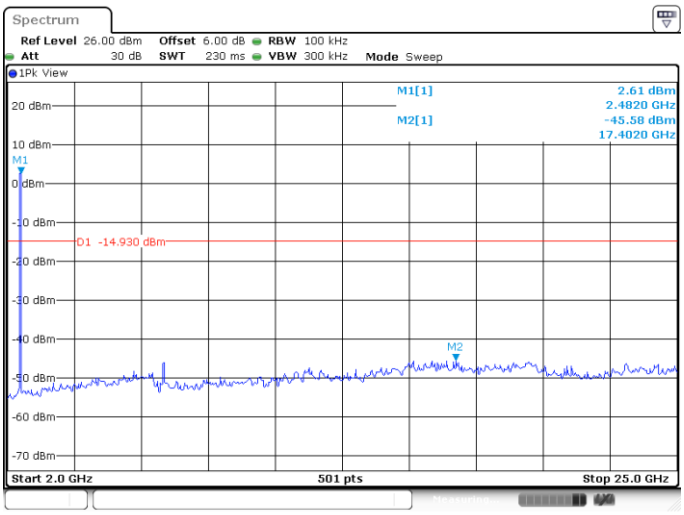
11G-CDD_Ant2_2457_30~1000



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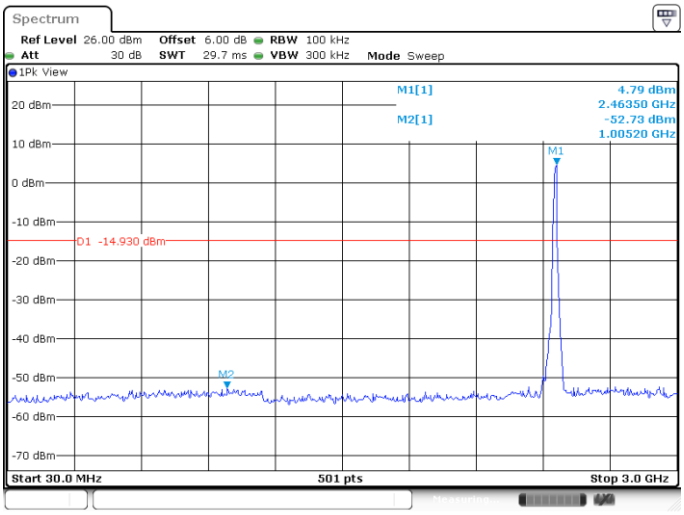
11G-CDD_Ant2_2457_1000~26500



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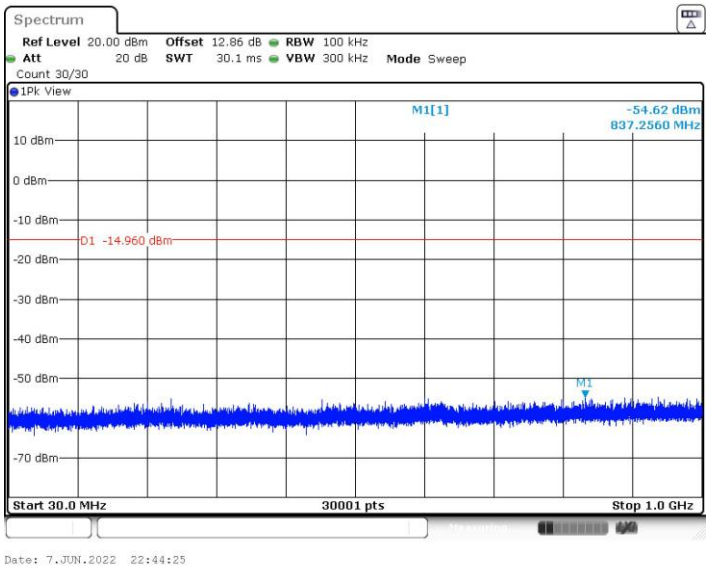
11G-CDD_Ant1_2462_30~1000



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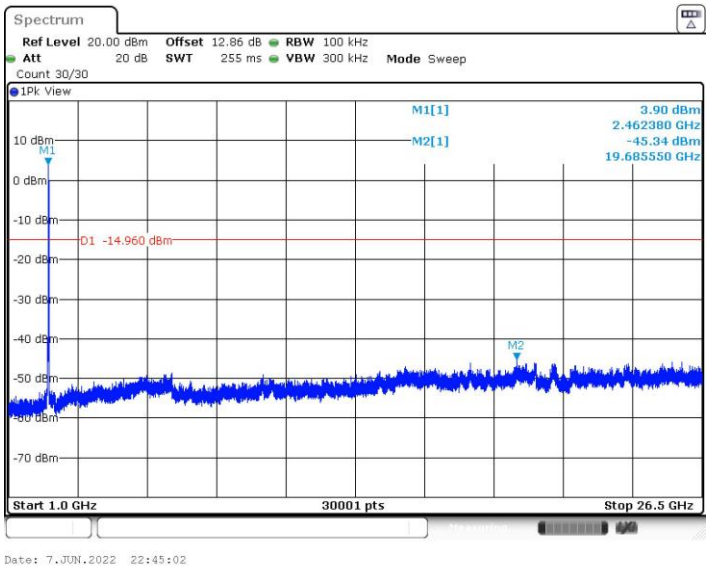

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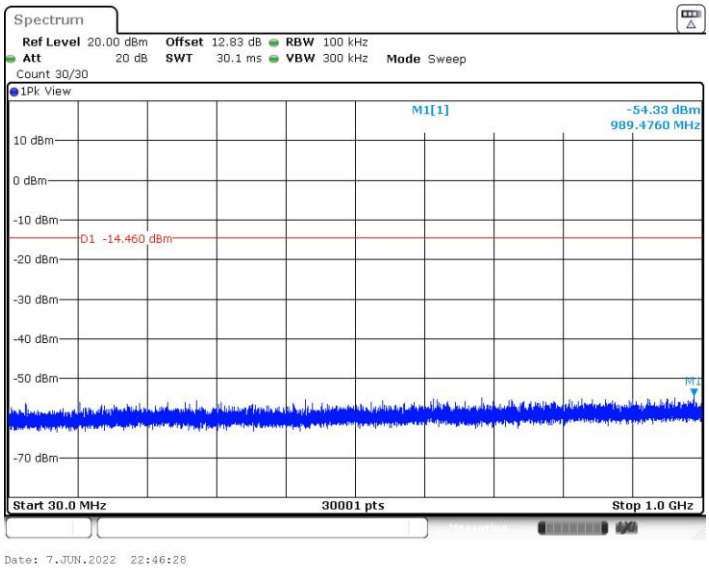

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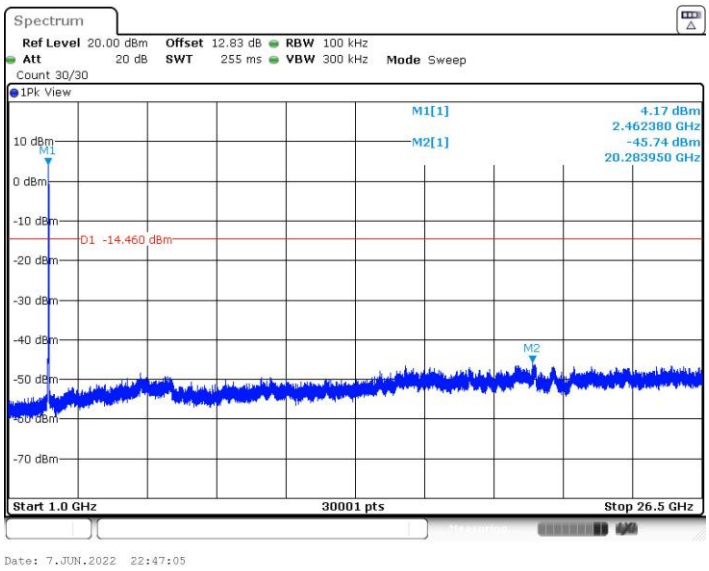
11G-CDD_Ant2_2462_1000~26500



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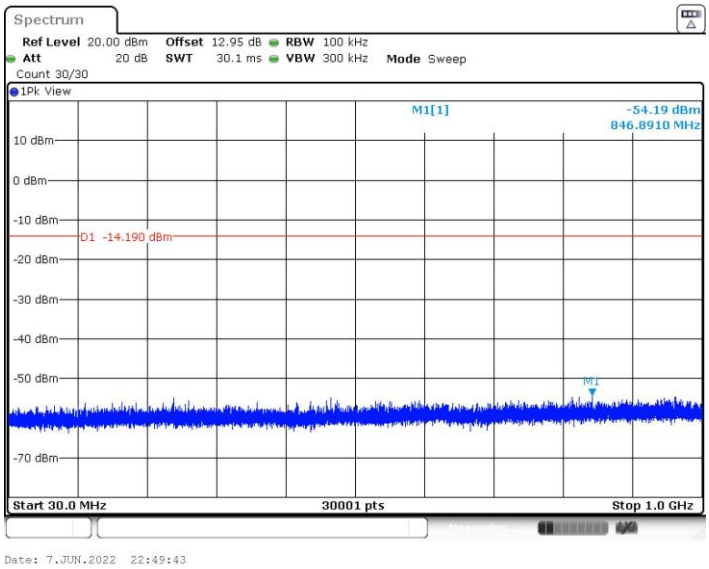
11AX20MIMO_Ant1_2412_30~1000



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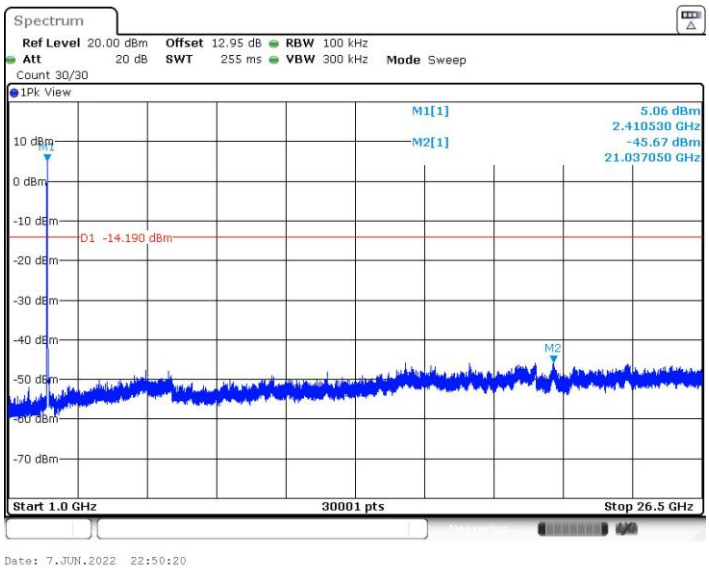

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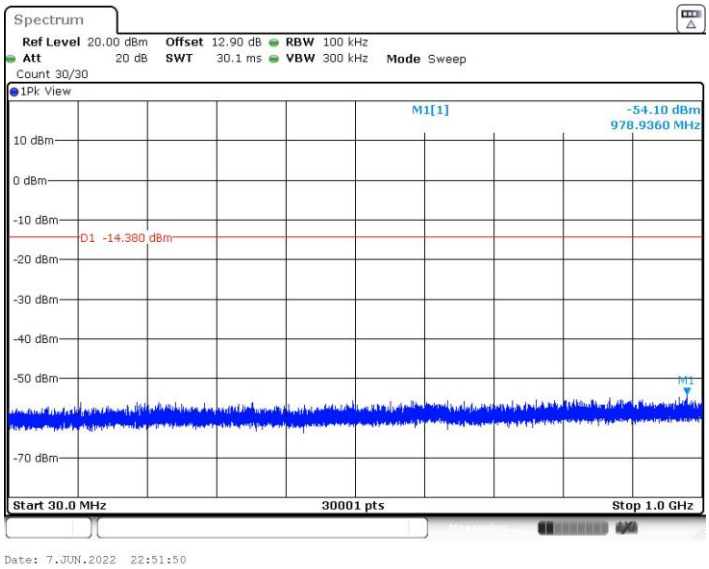

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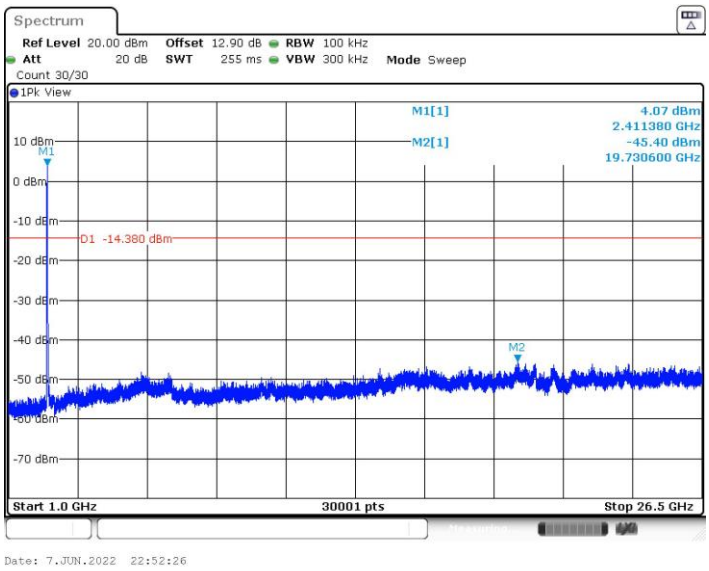
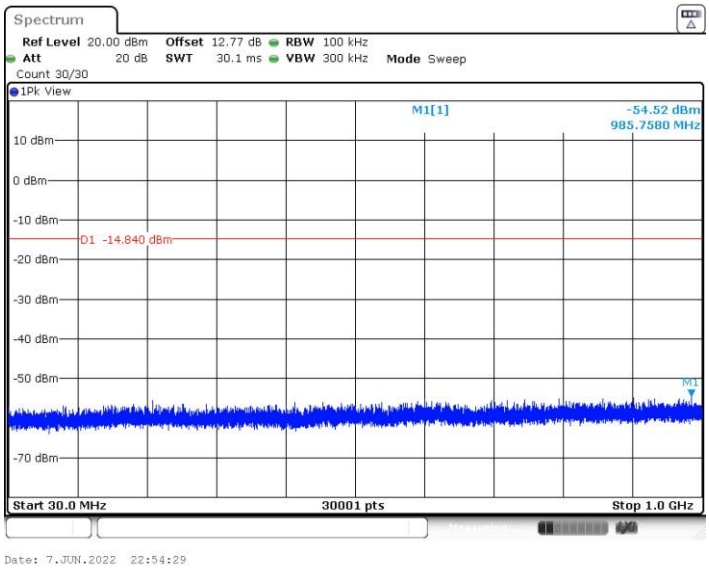


11AX20MIMO_Ant1_2437_30~1000



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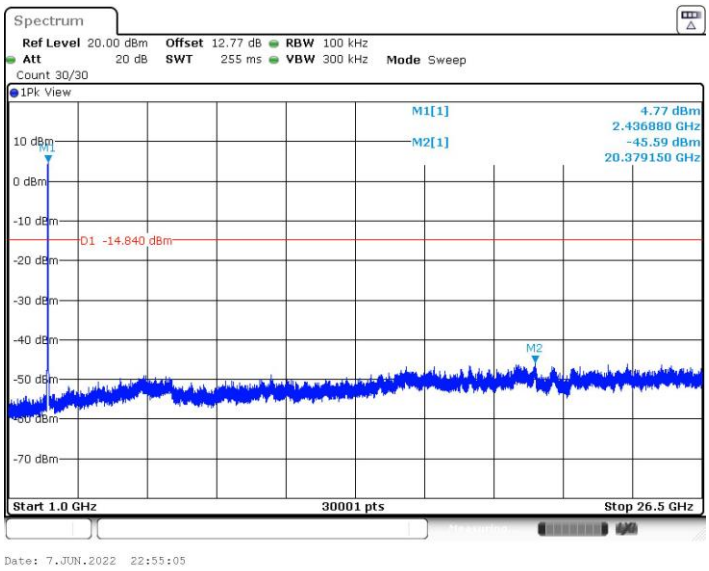

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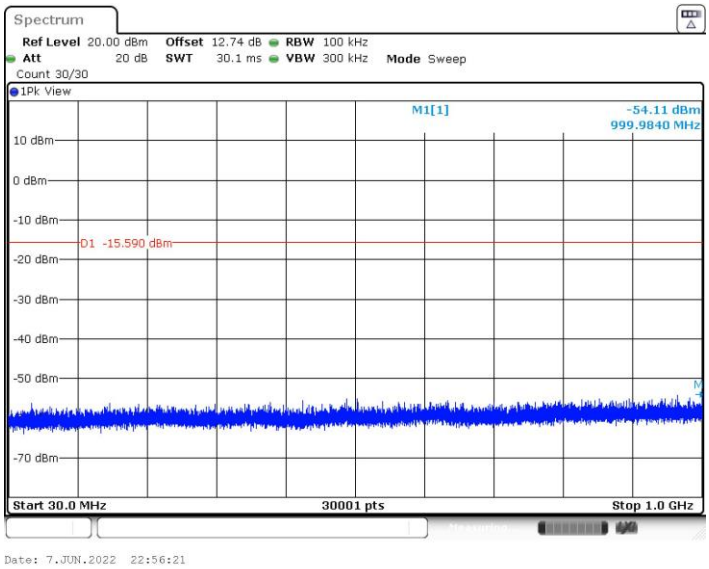

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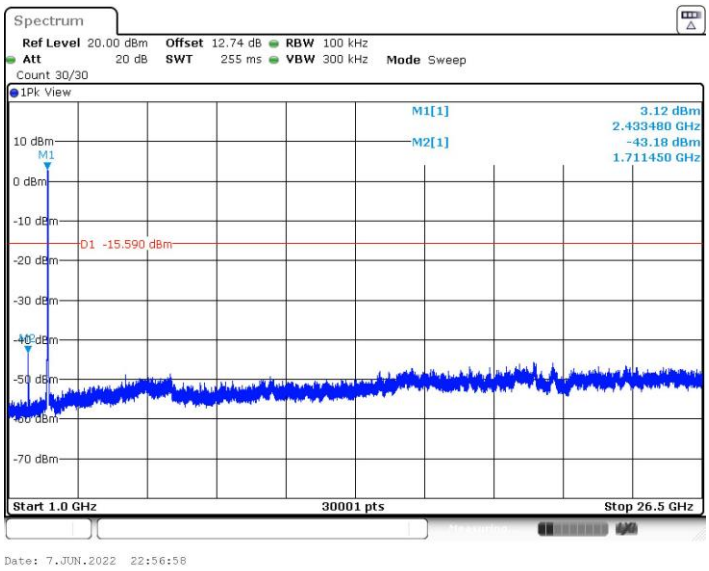

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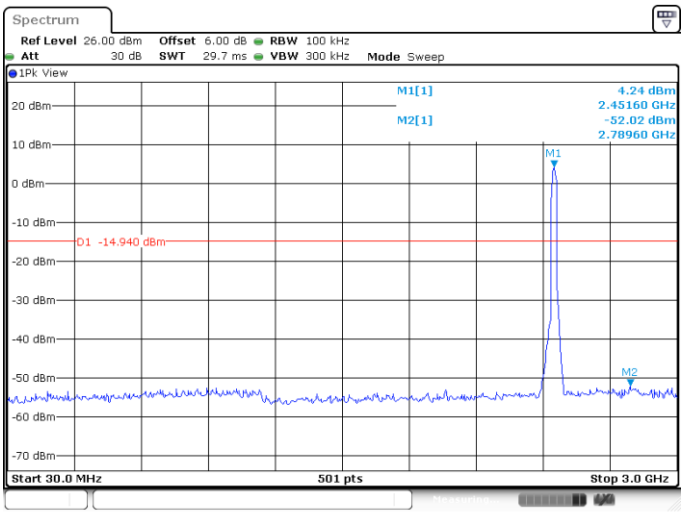

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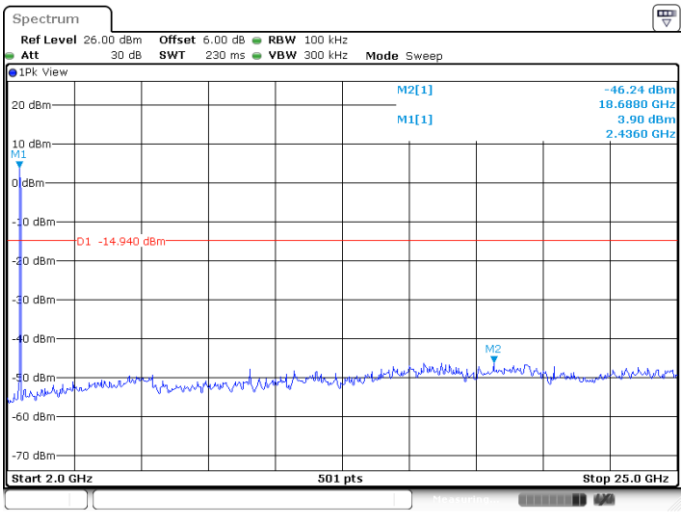
11AX20MIMO_Ant1_2452_1000~26500



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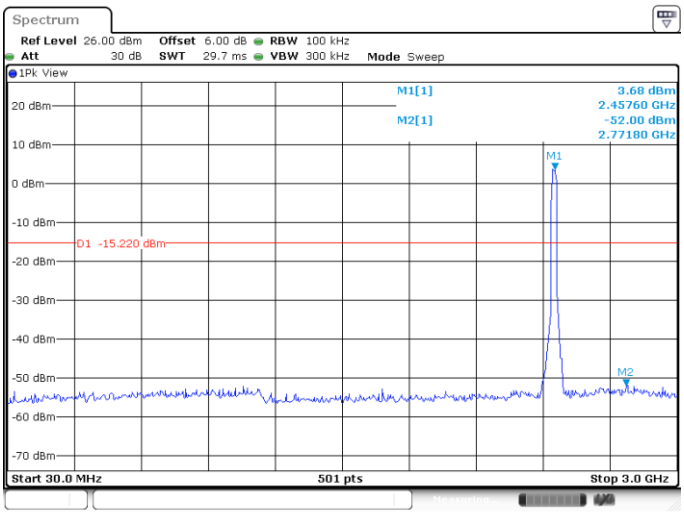
11AX20MIMO_Ant2_2452_30~1000



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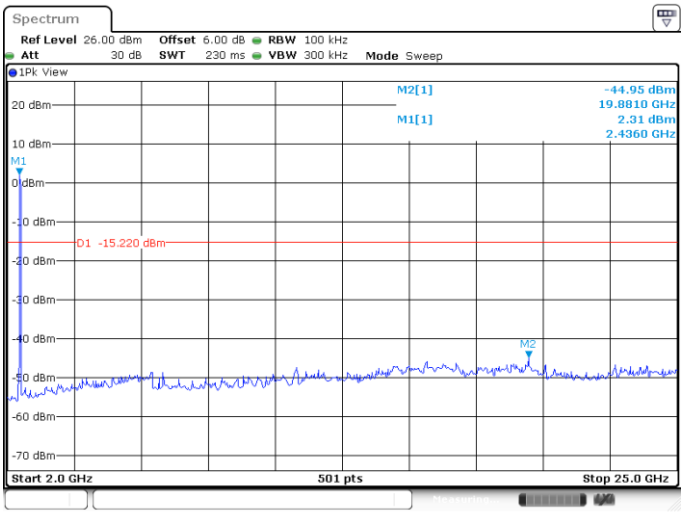
11AX20MIMO_Ant2_2452_1000~26500



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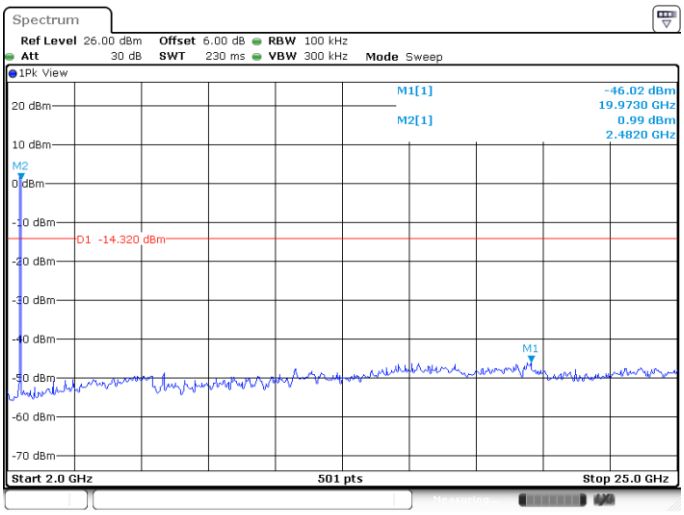
11AX20MIMO_Ant1_2457_30~1000



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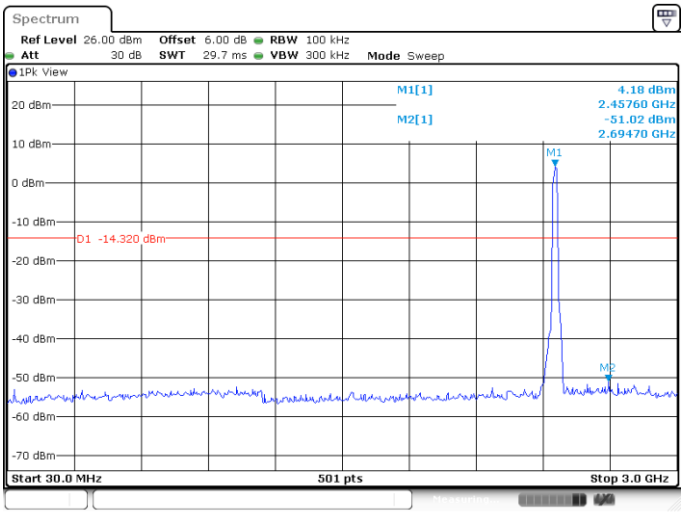
11AX20MIMO_Ant1_2457_1000~26500



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