Appendix Test Data

Report No.:	18220WC30253101	Test Sample No.:	1-2-2
Start Test Date:	2023.12.04	Finish Test Date:	2023.12.05
Test Engineer:	Hayman Chen	Auditor:	Rick Luo
Temperature:	25.3℃	Relative Humidity:	46%
Pressure:	101kPa		

Appendix A: DTS Bandwidth

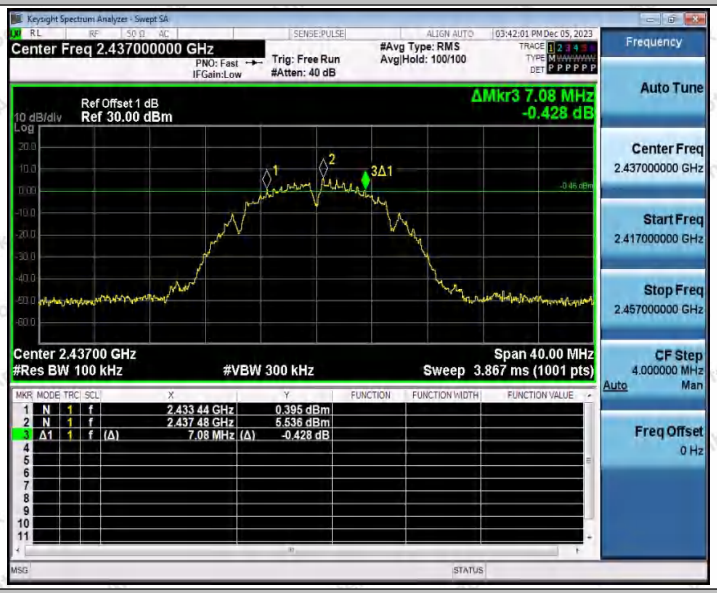
Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.040	2407.960	2416.000	0.5	PASS
		2437	7.080	2433.440	2440.520	0.5	PASS
		2462	7.560	2458.440	2466.000	0.5	PASS
11G	Ant1	2412	16.360	2403.800	2420.160	0.5	PASS
		2437	16.280	2428.840	2445.120	0.5	PASS
		2462	16.400	2453.800	2470.200	0.5	PASS
11N20SISO	Ant1	2412	17.600	2403.200	2420.800	0.5	PASS
		2437	17.560	2428.200	2445.760	0.5	PASS
		2462	17.640	2453.160	2470.800	0.5	PASS
11N40SISO	Ant1	2422	36.400	2403.840	2440.240	0.5	PASS
		2437	36.320	2418.920	2455.240	0.5	PASS
		2452	35.760	2434.400	2470.160	0.5	PASS

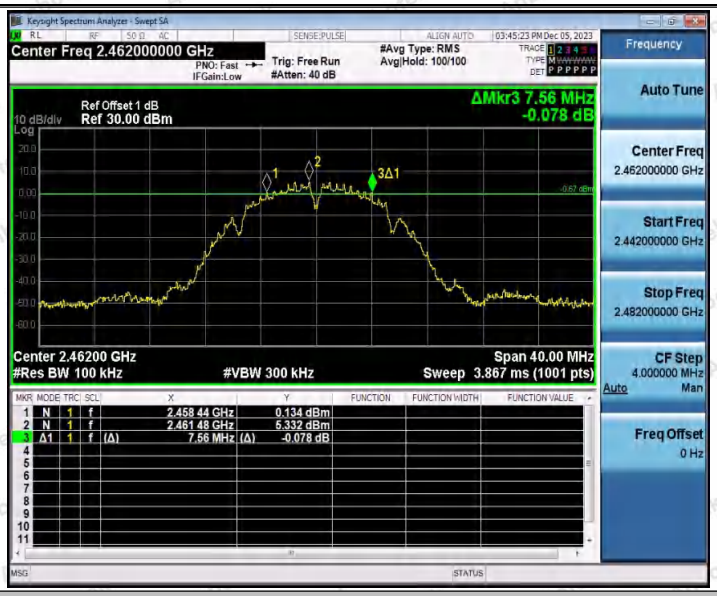
Test Graphs

11B_Ant1_2412

11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412

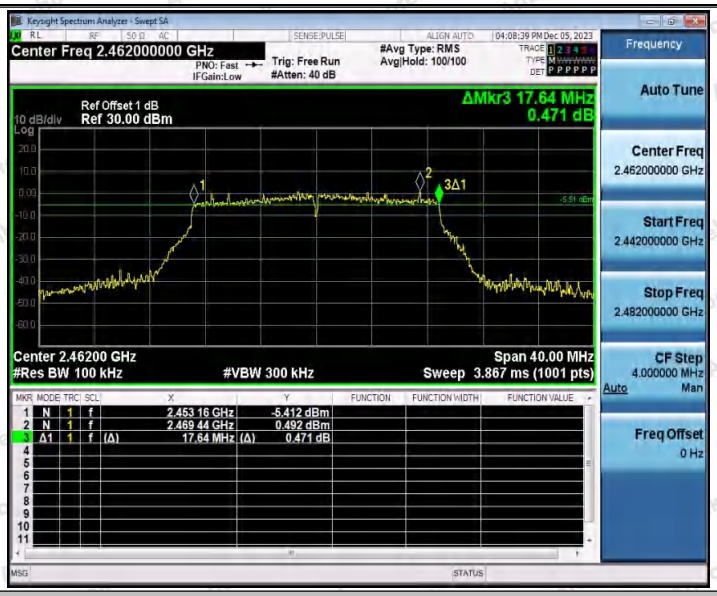
11G_Ant1_2437

11G_Ant1_2462

11N20SISO_Ant1_2412

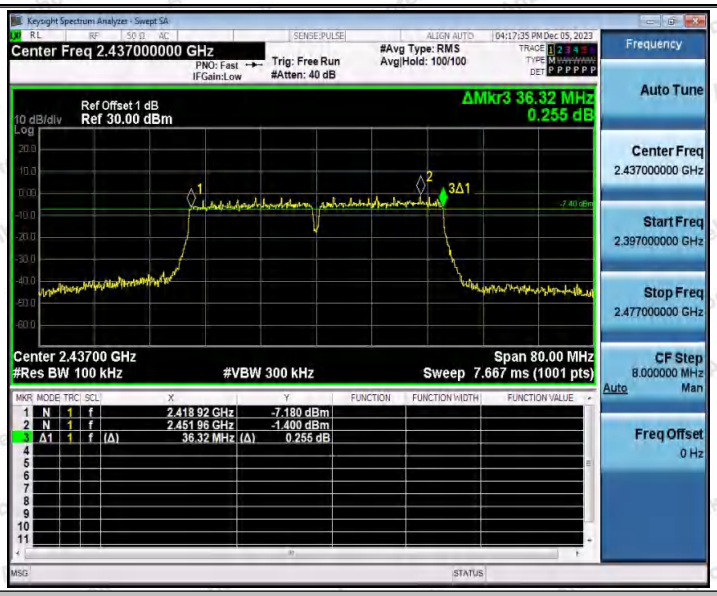
11N20SISO_Ant1_2437

11N20SISO_Ant1_2462

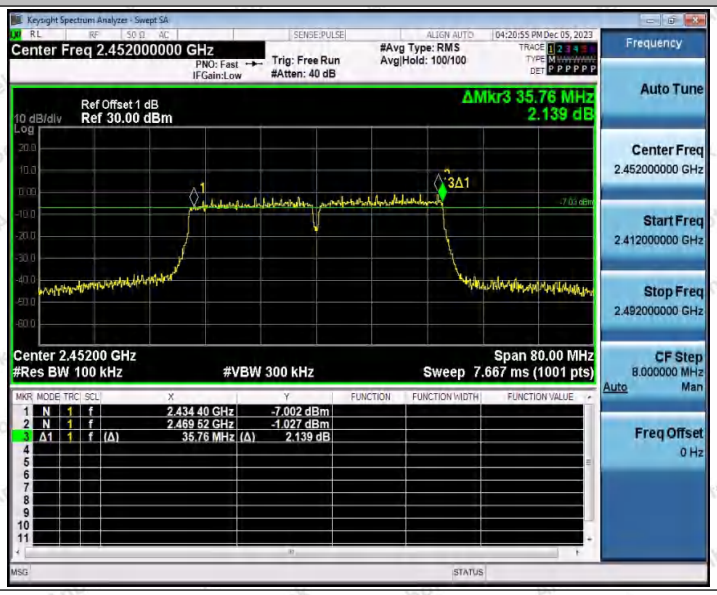


11N40SISO_Ant1_2422

11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



Appendix B: Occupied Channel Bandwidth

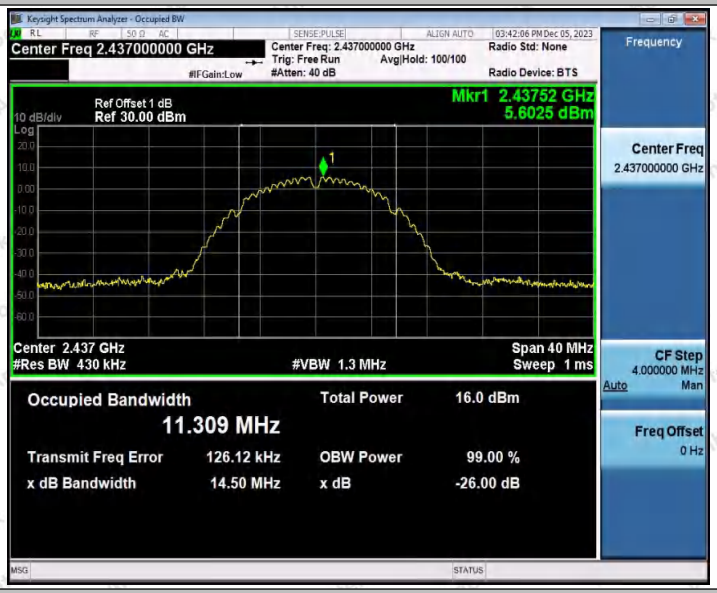
Test Result

TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	11.926	2406.0764	2418.0024	---	---
		2437	11.309	2431.4716	2442.7806	---	---
		2462	11.430	2456.4310	2467.8610	---	---
11G	Ant1	2412	17.115	2403.4699	2420.5849	---	---
		2437	17.203	2428.4237	2445.6267	---	---
		2462	17.113	2453.5032	2470.6162	---	---
11N20SISO	Ant1	2412	18.216	2402.9818	2421.1978	---	---
		2437	18.123	2427.9812	2446.1042	---	---
		2462	18.135	2453.0131	2471.1481	---	---
11N40SISO	Ant1	2422	36.563	2403.8178	2440.3808	---	---
		2437	36.491	2418.9201	2455.4111	---	---
		2452	36.509	2433.9253	2470.4343	---	---

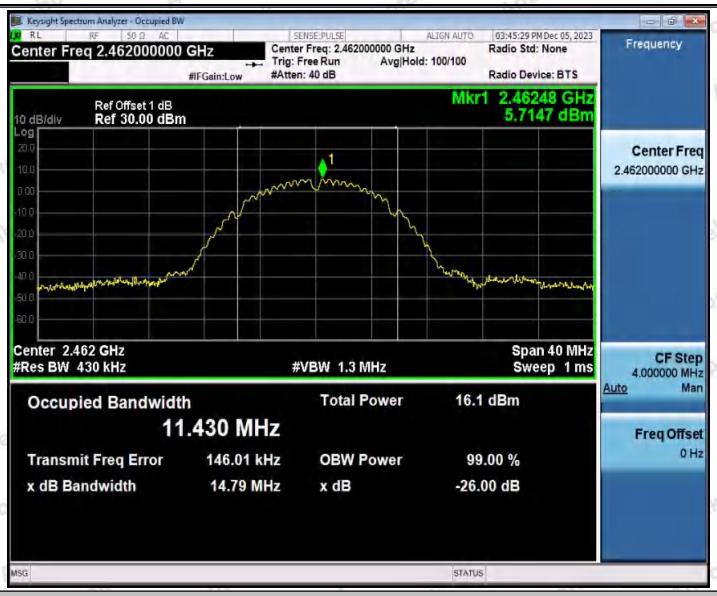
Test Graphs

11B_Ant1_2412

11B_Ant1_2437



11B_Ant1_2462



11G_Ant1_2412

11G_Ant1_2437

11G_Ant1_2462

11N20SISO_Ant1_2412

11N20SISO_Ant1_2437

11N20SISO_Ant1_2462

11N40SISO_Ant1_2422

11N40SISO_Ant1_2437

11N40SISO_Ant1_2452

Appendix C: Maximum conducted output power

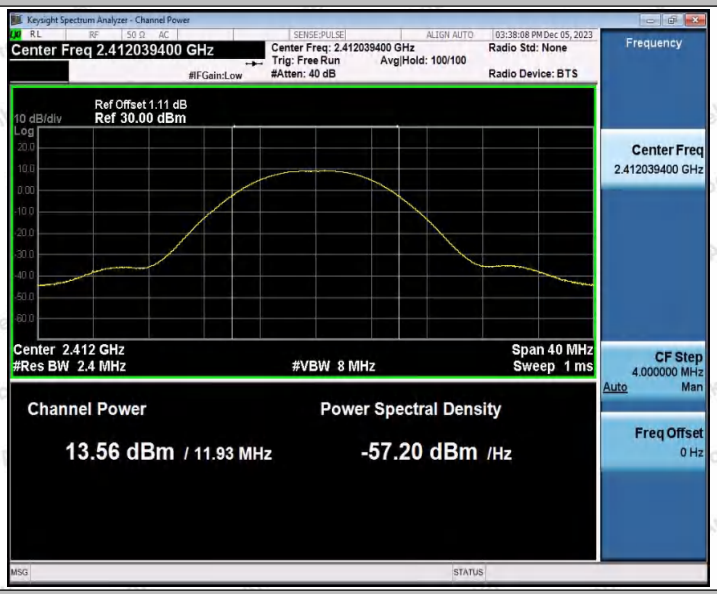
Test Result

TestMode	Antenna	Frequency[MHz]	Average Output Power[dBm]	Conducted Limit[dBm]
11B	Ant1	2412	13.56	≤30.00
		2437	13.06	≤30.00
		2462	13.17	≤30.00
11G	Ant1	2412	13.07	≤30.00
		2437	13.21	≤30.00
		2462	13.03	≤30.00
11N20SISO	Ant1	2412	**13.84**	≤30.00
		2437	13.04	≤30.00
		2462	12.93	≤30.00
11N40SISO	Ant1	2422	13.75	≤30.00
		2437	13.83	≤30.00
		2452	13.34	≤30.00

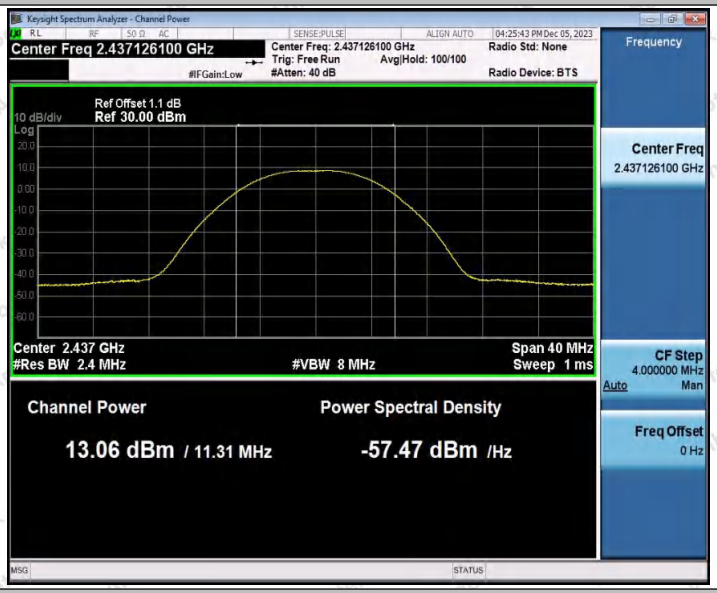
Note：The Duty Cycle Factor(10*log(1/D)) and cable loss are compensated in the graph.

Test Graphs

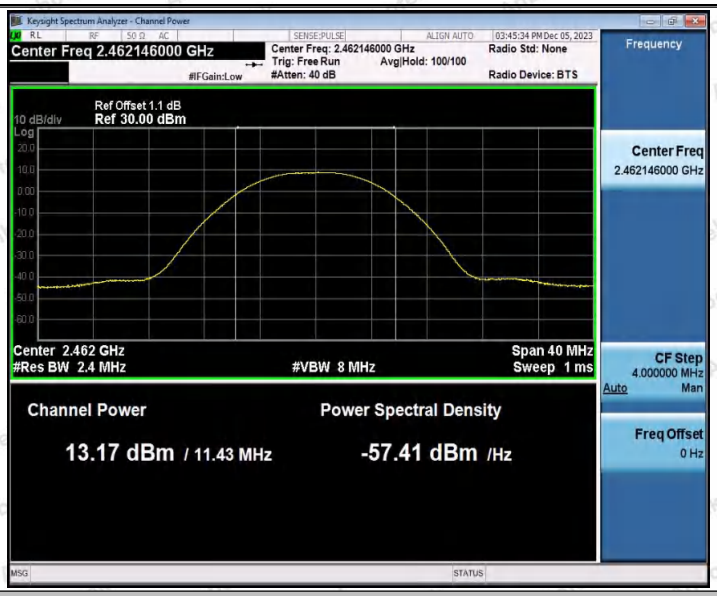
11B_Ant1_2412



11B_Ant1_2437

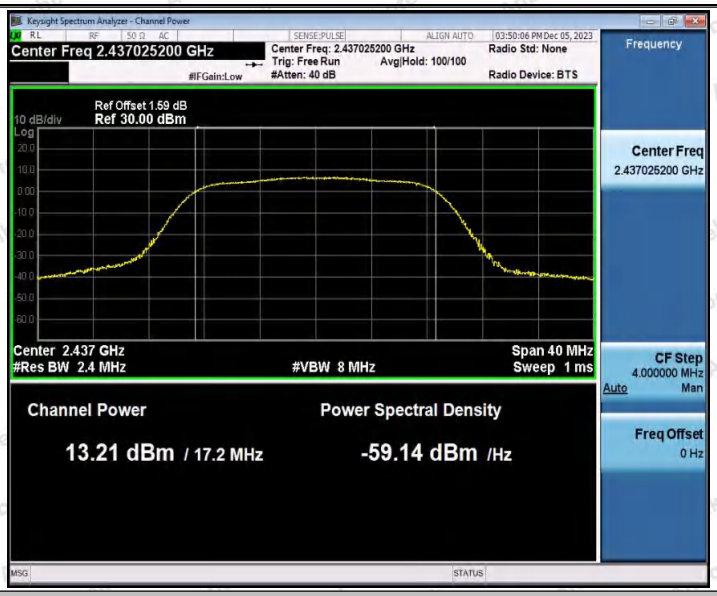


11B_Ant1_2462



11G_Ant1_2412

11G_Ant1_2437



11G_Ant1_2462

11N20SISO_Ant1_2412

11N20SISO_Ant1_2437

11N20SISO_Ant1_2462

11N40SISO_Ant1_2422

11N40SISO_Ant1_2437

11N40SISO_Ant1_2452

Appendix D: Maximum power spectral density

Test Result

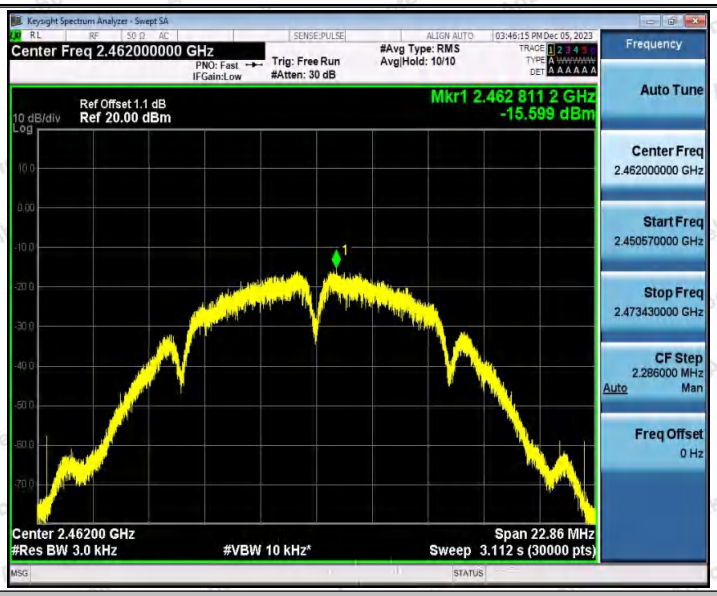
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-14.62	≤8.00	PASS
		2437	-15.49	≤8.00	PASS
		2462	-15.6	≤8.00	PASS
11G	Ant1	2412	-16.46	≤8.00	PASS
		2437	-17.27	≤8.00	PASS
		2462	-17.61	≤8.00	PASS
11N20SISO	Ant1	2412	-17.37	≤8.00	PASS
		2437	-17.29	≤8.00	PASS
		2462	-17.06	≤8.00	PASS
11N40SISO	Ant1	2422	-20.4	≤8.00	PASS
		2437	-20.21	≤8.00	PASS
		2452	-19.13	≤8.00	PASS

Test Graphs

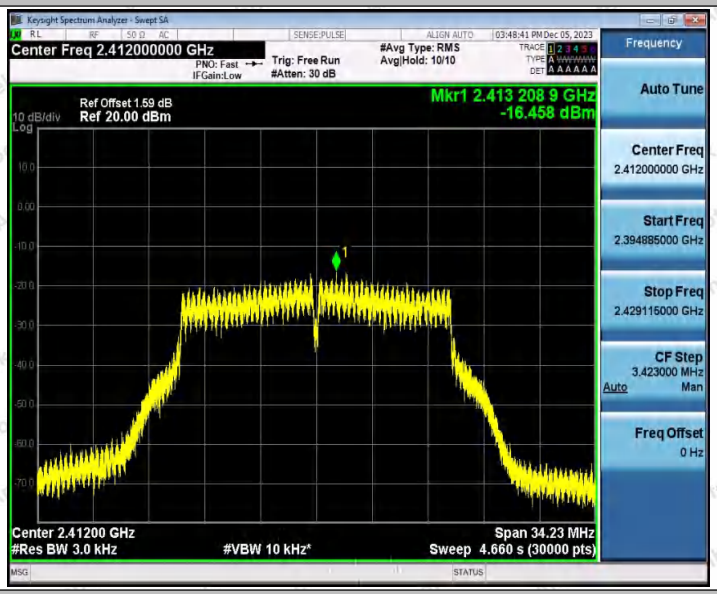
11B_Ant1_2412

11B_Ant1_2437

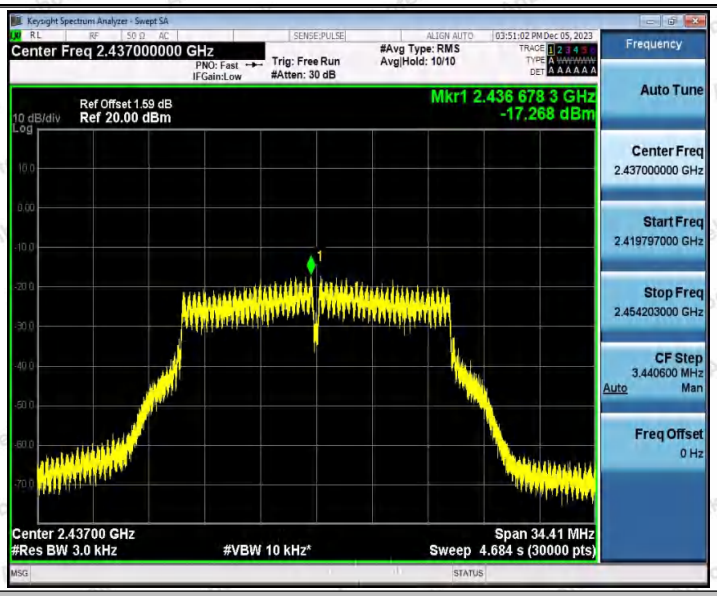
11B_Ant1_2462



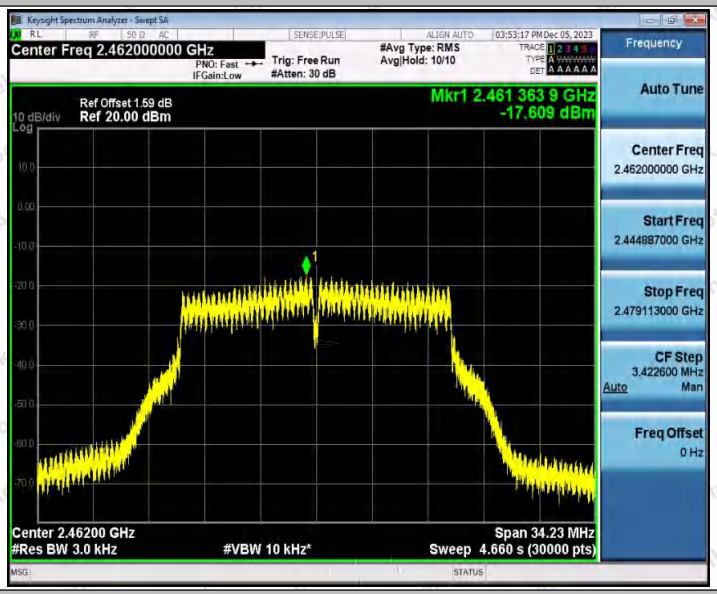
11G_Ant1_2412



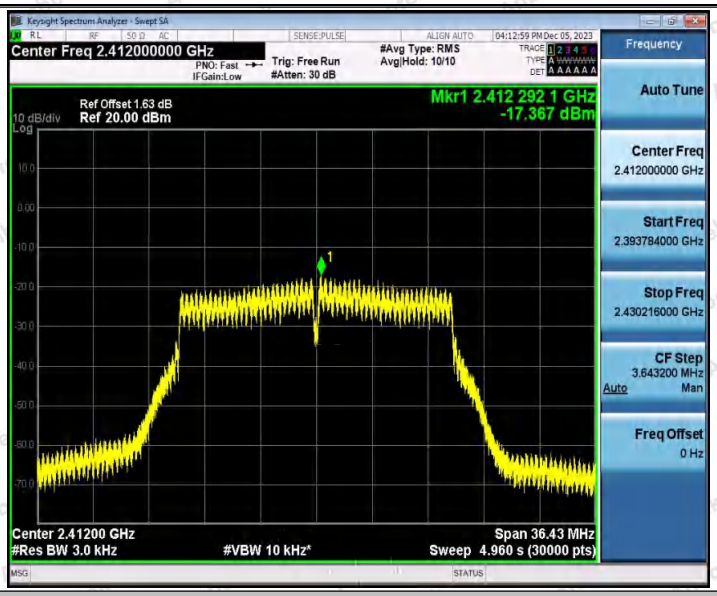
11G_Ant1_2437



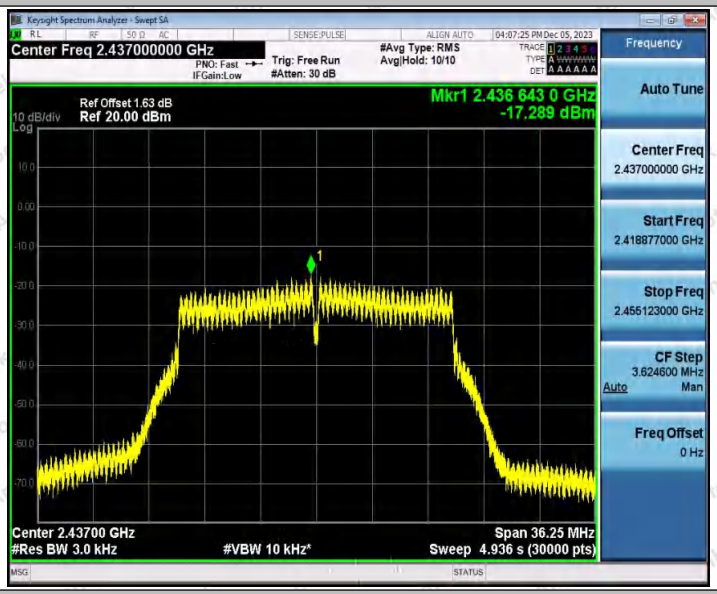
11G_Ant1_2462



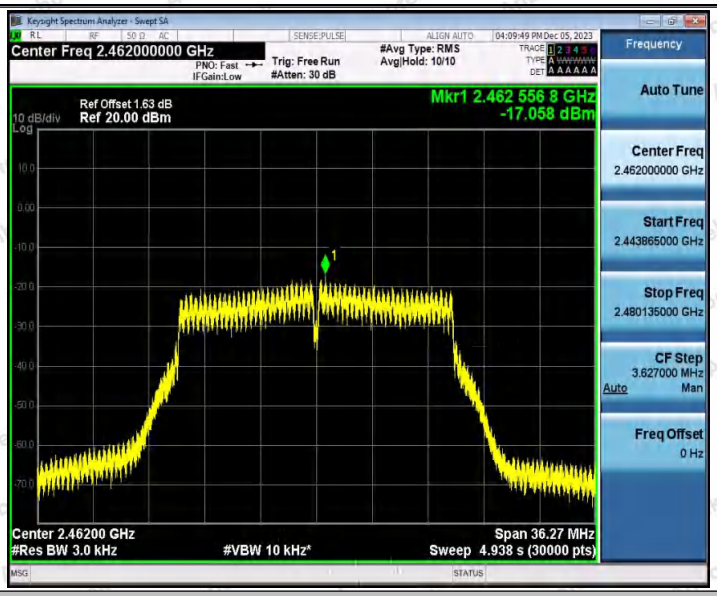
11N20SISO_Ant1_2412



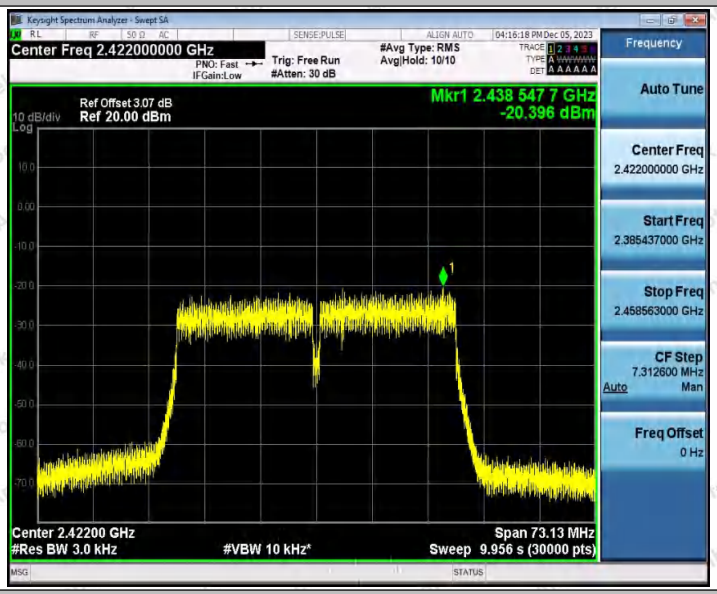
11N20SISO_Ant1_2437



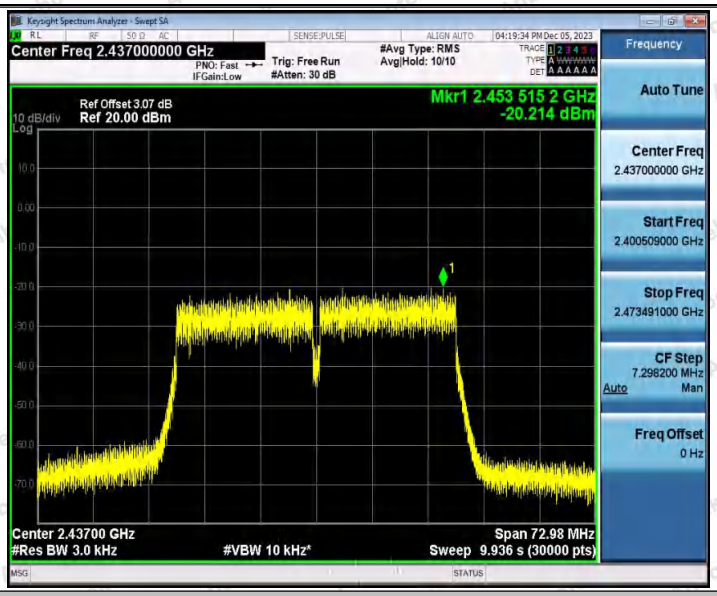
11N20SISO_Ant1_2462



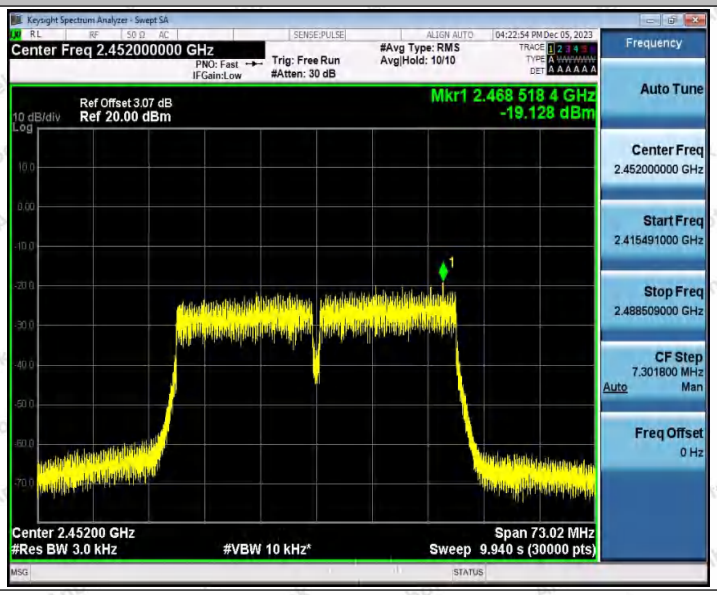
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452



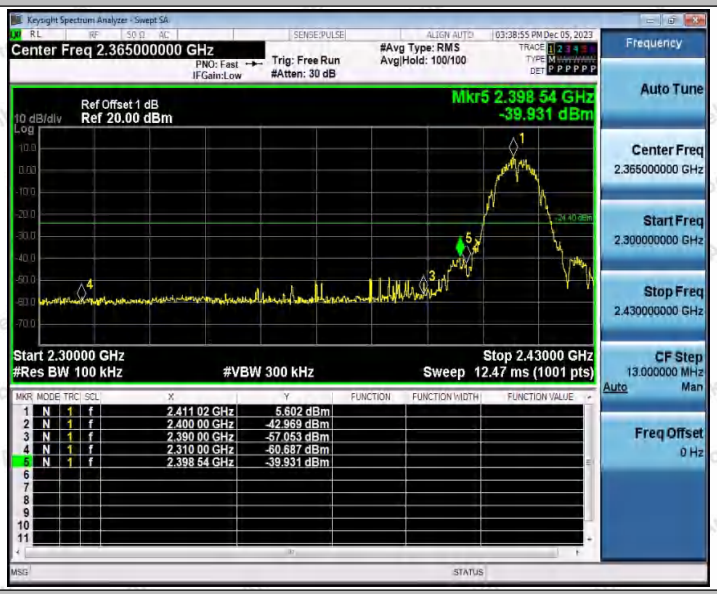
Appendix E: Band edge measurements

Test Result

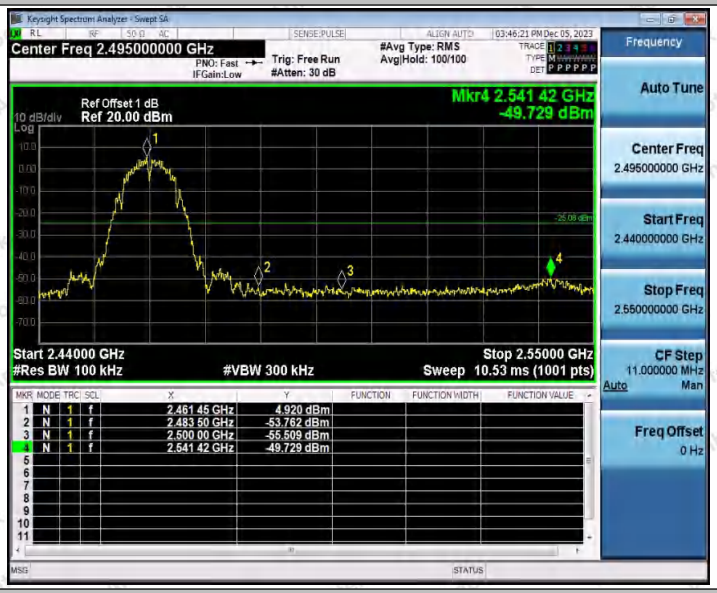
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.60	-39.93	≤-24.4	PASS
		High	2462	4.92	-49.73	≤-25.08	PASS
11G	Ant1	Low	2412	1.32	-37.31	≤-28.68	PASS
		High	2462	1.34	-44.8	≤-28.66	PASS
11N20SISO	Ant1	Low	2412	1.42	-32.49	≤-28.58	PASS
		High	2462	1.15	-44.88	≤-28.85	PASS
11N40SISO	Ant1	Low	2422	-1.53	-37.74	≤-31.53	PASS
		High	2452	-1.11	-41.19	≤-31.11	PASS

Test Graphs

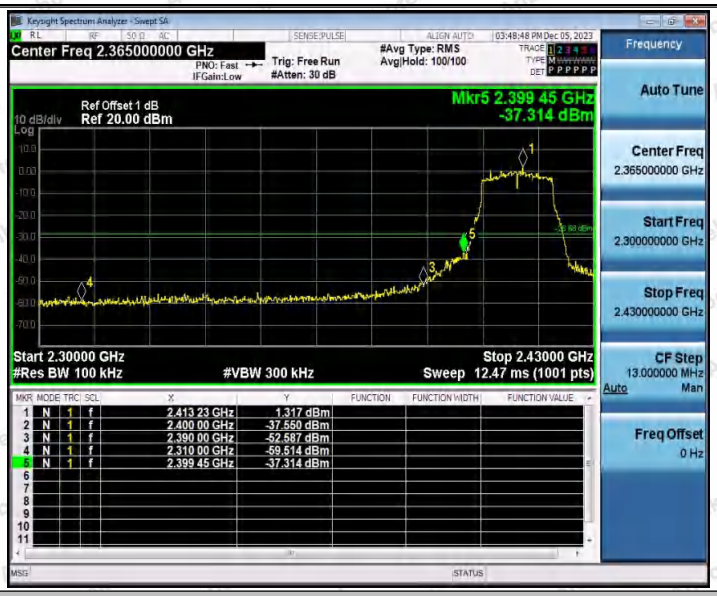
11B_Ant1_Low_2412



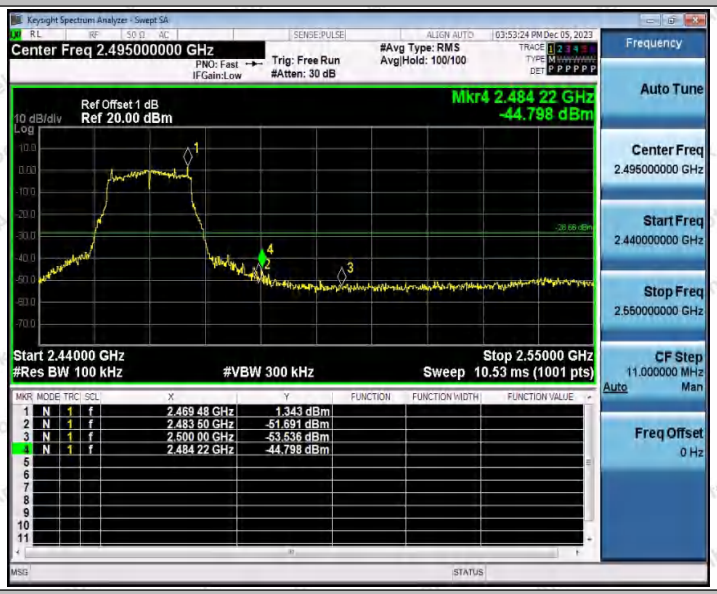
11B_Ant1_High_2462



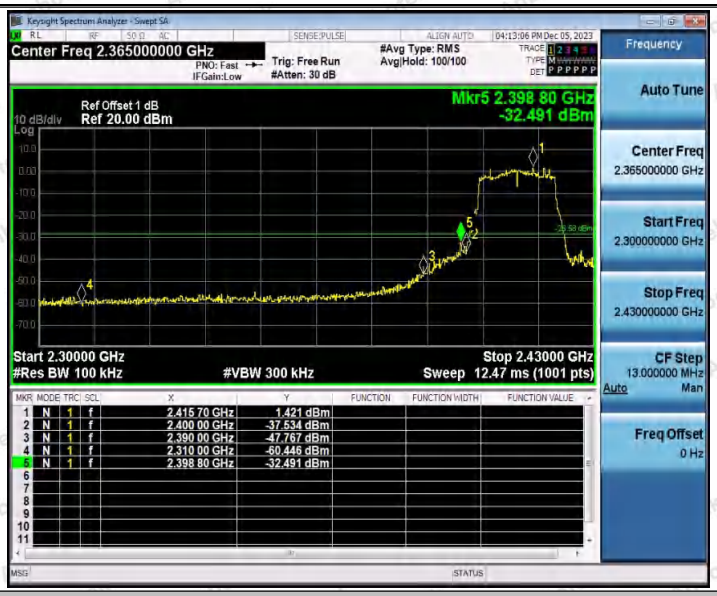
11G_Ant1_Low_2412



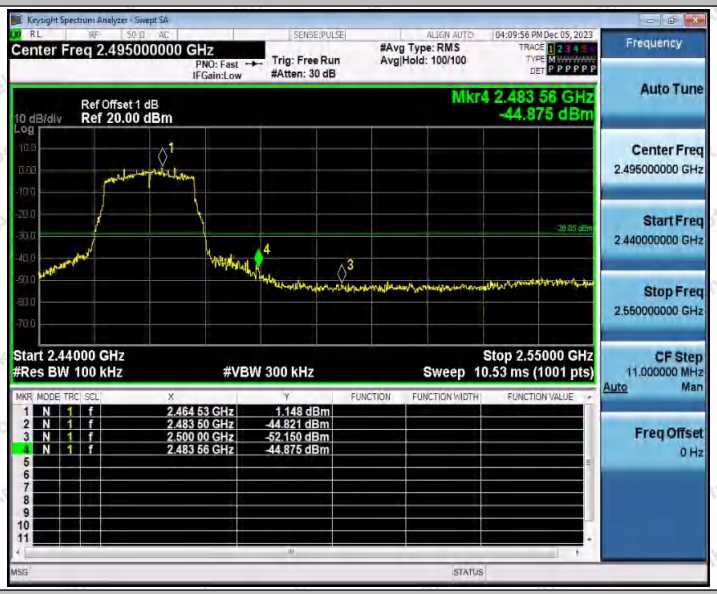
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422

11N40SISO_Ant1_High_2452

Appendix F: Conducted Spurious Emission

Test Result

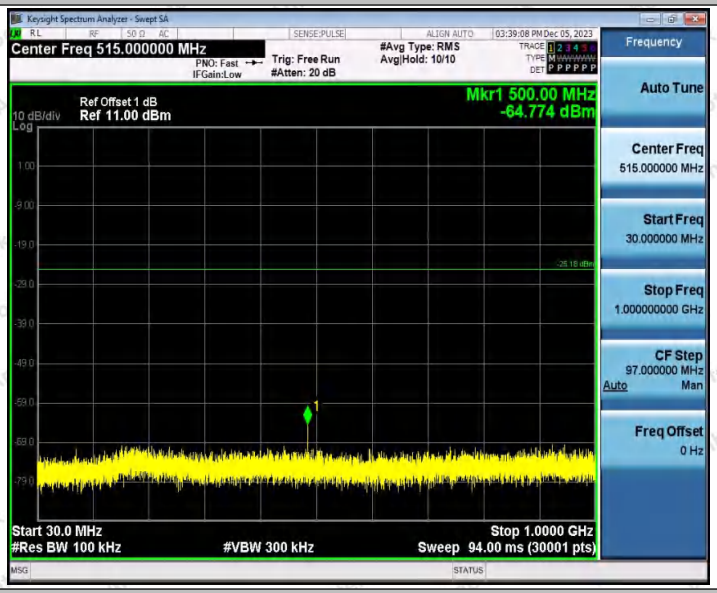
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	4.82	4.82	---	PASS
			30~1000	4.82	-64.77	≤-25.18	PASS
			1000~26500	4.82	-50.23	≤-25.18	PASS
		2437	Reference	3.37	3.37	---	PASS
			30~1000	3.37	-65.07	≤-26.63	PASS
			1000~26500	3.37	-51.94	≤-26.63	PASS
		2462	Reference	3.38	3.38	---	PASS
			30~1000	3.38	-64.97	≤-26.62	PASS
			1000~26500	3.38	-51.87	≤-26.62	PASS
11G	Ant1	2412	Reference	-0.66	-0.66	---	PASS
			30~1000	-0.66	-64.37	≤-30.66	PASS
			1000~26500	-0.66	-50.2	≤-30.66	PASS
		2437	Reference	0.54	0.54	---	PASS
			30~1000	0.54	-65.1	≤-29.46	PASS
			1000~26500	0.54	-49.84	≤-29.46	PASS
		2462	Reference	-0.10	-0.10	---	PASS
			30~1000	-0.10	-64.89	≤-30.1	PASS
			1000~26500	-0.10	-49.03	≤-30.1	PASS
11N20SISO	Ant1	2412	Reference	1.27	1.27	---	PASS
			30~1000	1.27	-63.86	≤-28.73	PASS
			1000~26500	1.27	-49.04	≤-28.73	PASS
		2437	Reference	-0.24	-0.24	---	PASS
			30~1000	-0.24	-63.58	≤-30.24	PASS
			1000~26500	-0.24	-50.18	≤-30.24	PASS
		2462	Reference	-1.11	-1.11	---	PASS
			30~1000	-1.11	-65.53	≤-31.11	PASS
			1000~26500	-1.11	-50.55	≤-31.11	PASS
11N40SISO	Ant1	2422	Reference	-1.43	-1.43	---	PASS
			30~1000	-1.43	-63.73	≤-31.43	PASS
			1000~26500	-1.43	-52.35	≤-31.43	PASS
		2437	Reference	-1.75	-1.75	---	PASS
			30~1000	-1.75	-64.52	≤-31.75	PASS
			1000~26500	-1.75	-52.66	≤-31.75	PASS
		2452	Reference	-1.19	-1.19	---	PASS
			30~1000	-1.19	-64.74	≤-31.19	PASS

			1000~26500	-1.19	-53.62	≤-31.19	PASS

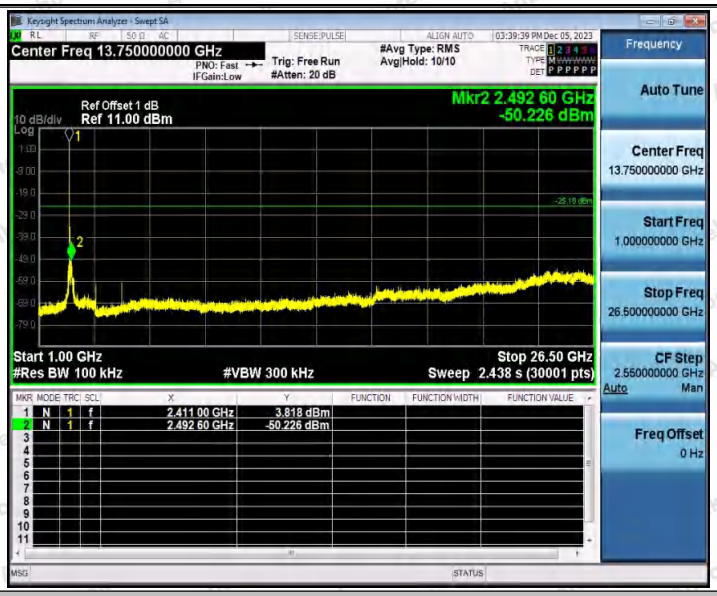
Test Graphs

11B_Ant1_2412_0~Reference

11B_Ant1_2412_30~1000

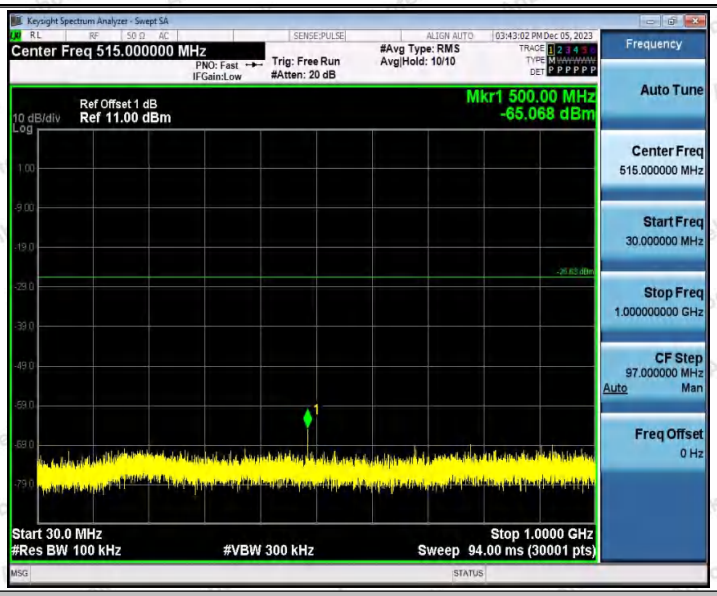


11B_Ant1_2412_1000~26500

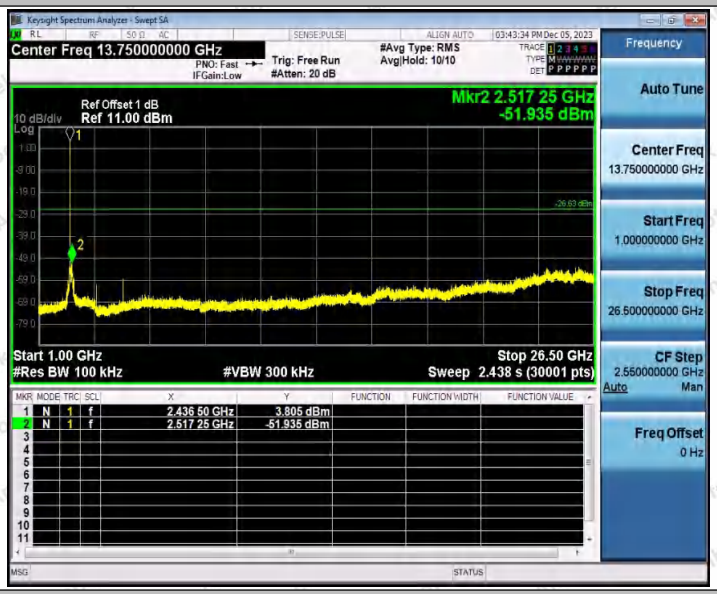


11B_Ant1_2437_0~Reference

11B_Ant1_2437_30~1000

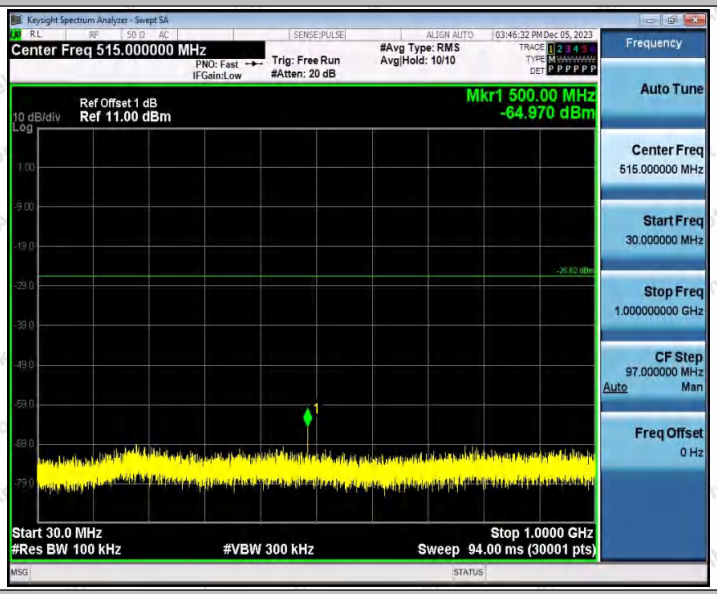


11B_Ant1_2437_1000~26500

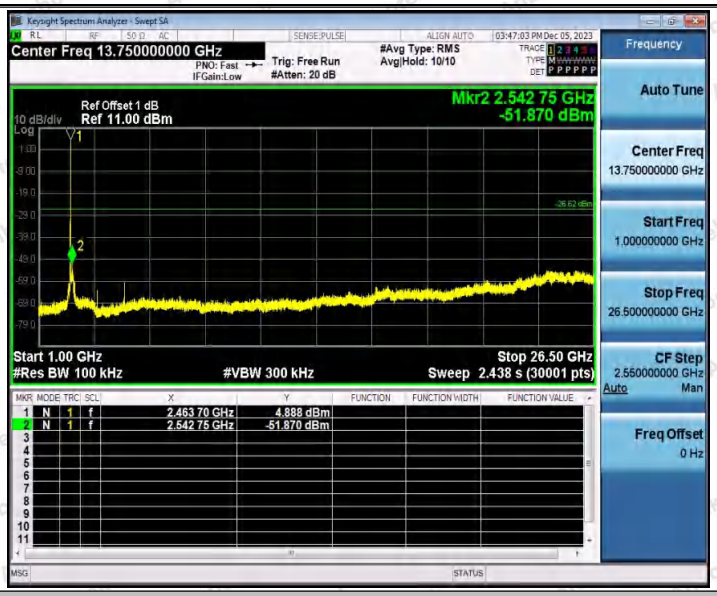


11B_Ant1_2462_0~Reference

11B_Ant1_2462_30~1000

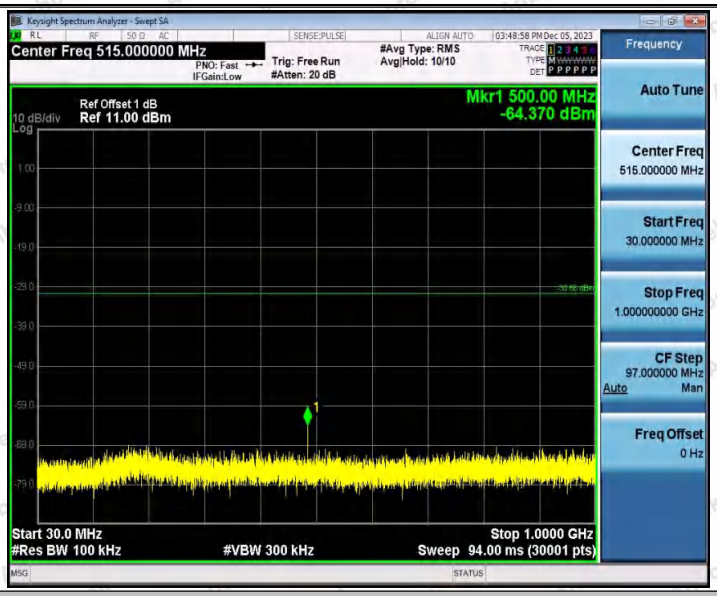


11B_Ant1_2462_1000~26500



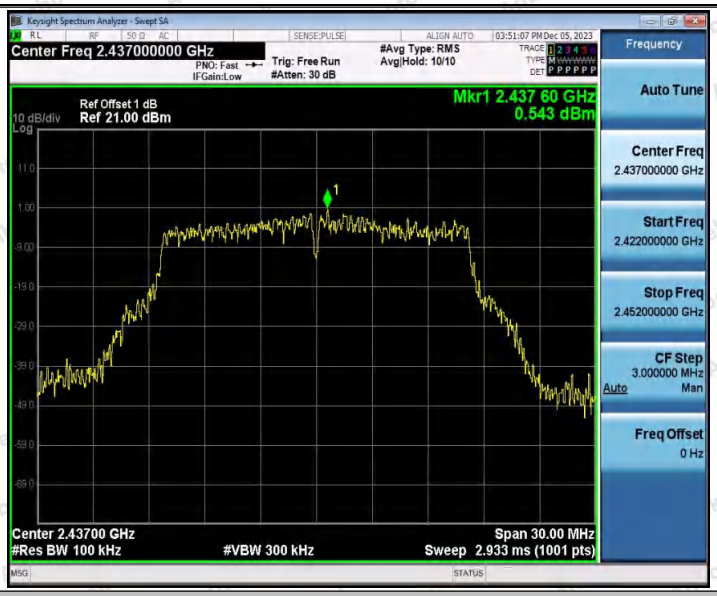
11G_Ant1_2412_0~Reference

11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500

11G_Ant1_2437_0~Reference



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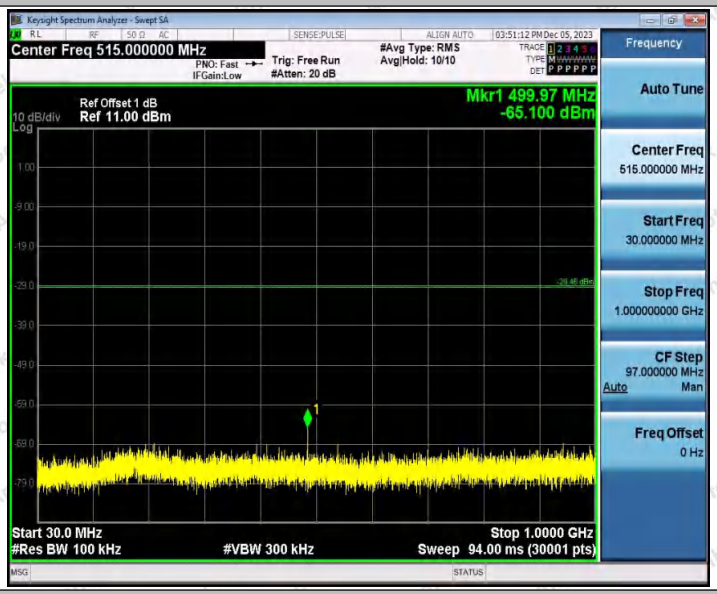

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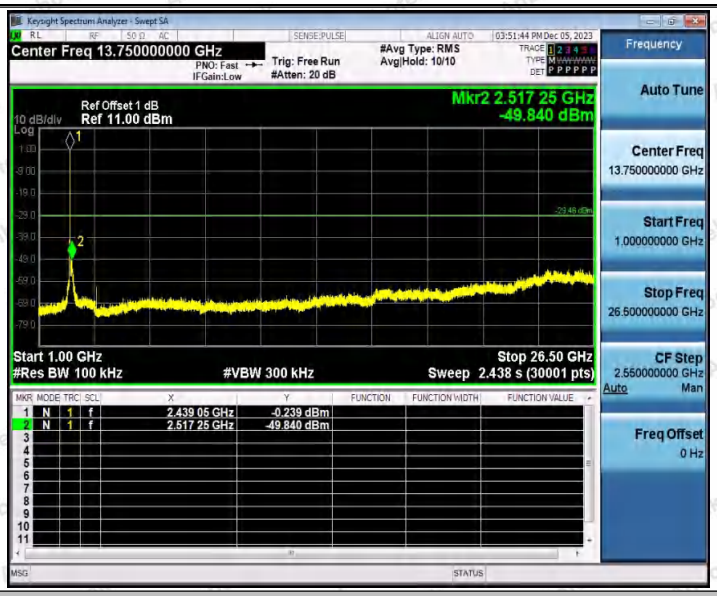

11G_Ant1_2462_0~Reference

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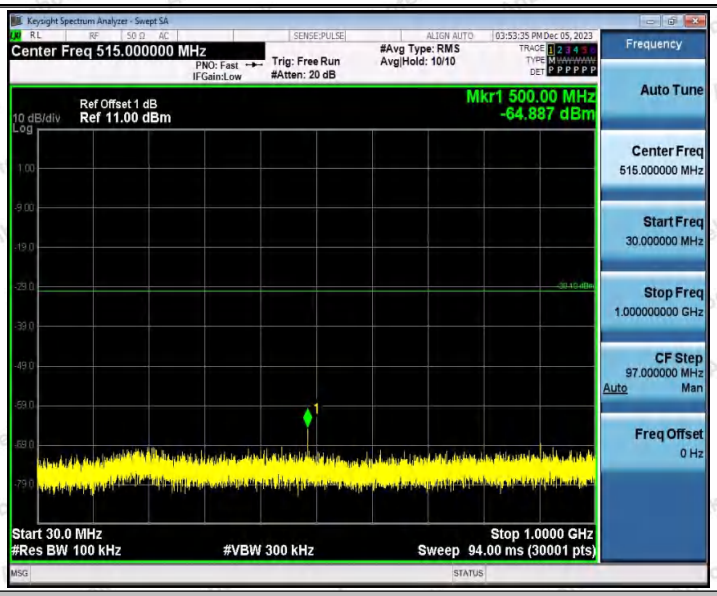

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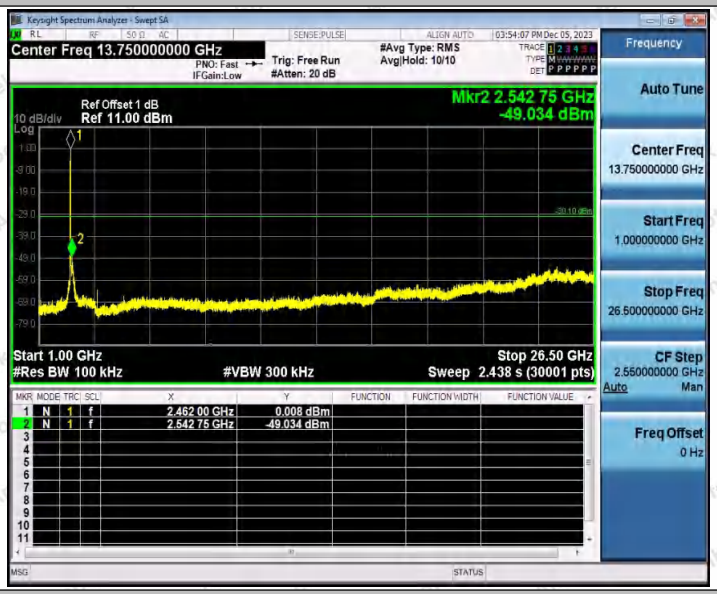
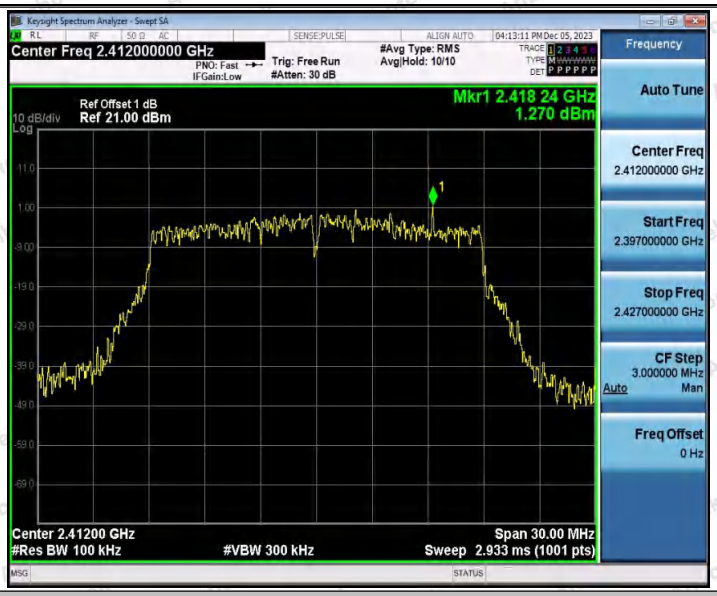


11N20SISO_Ant1_2412_0~Reference



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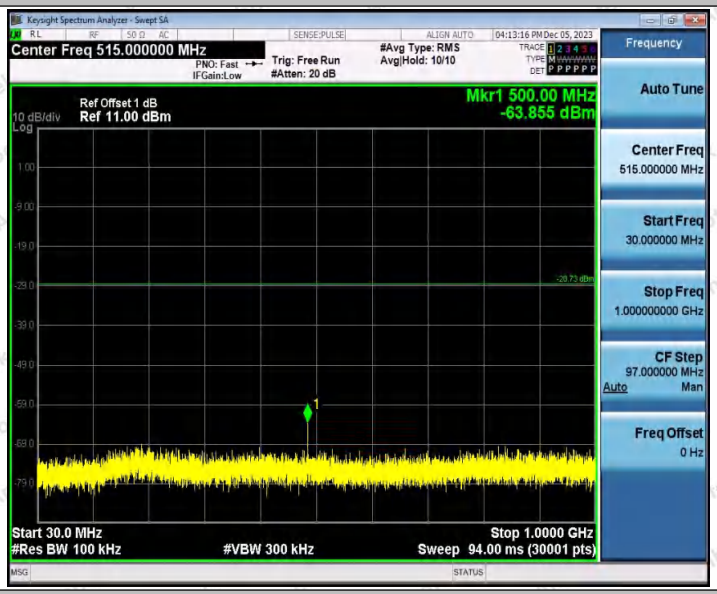

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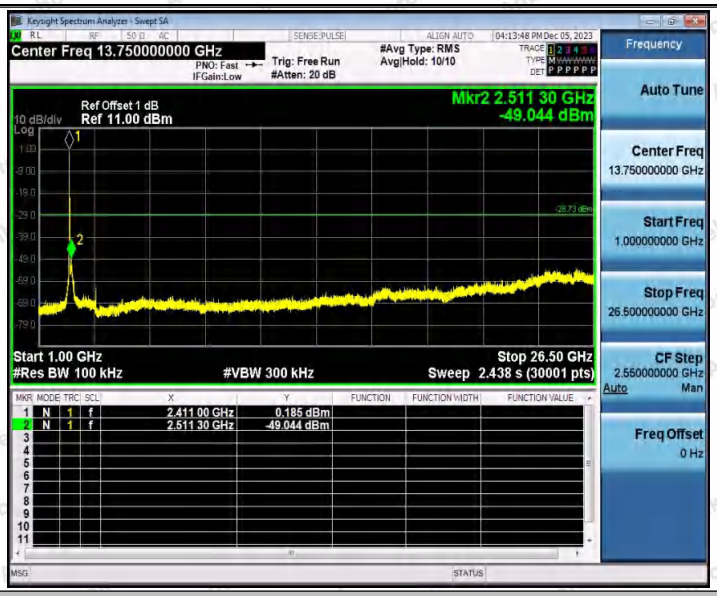

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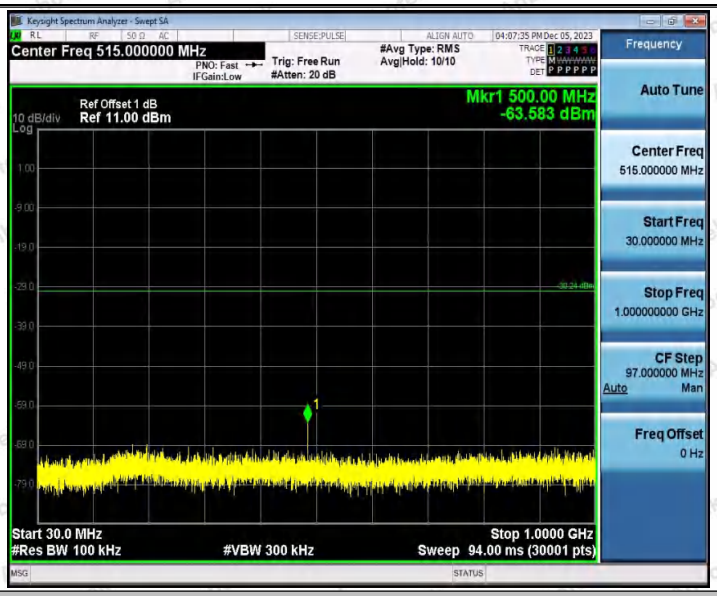

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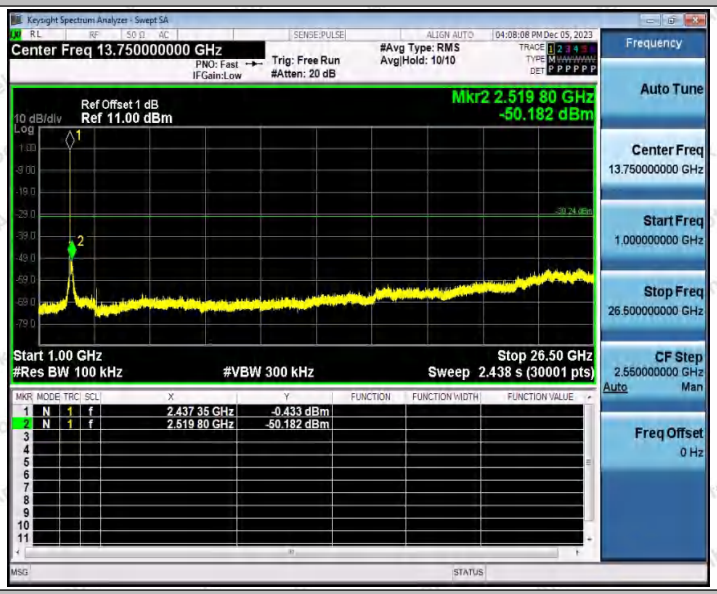

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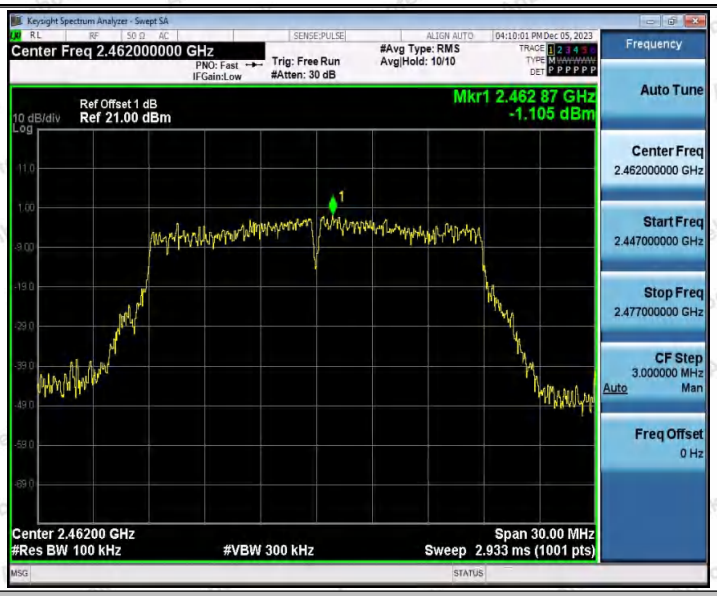

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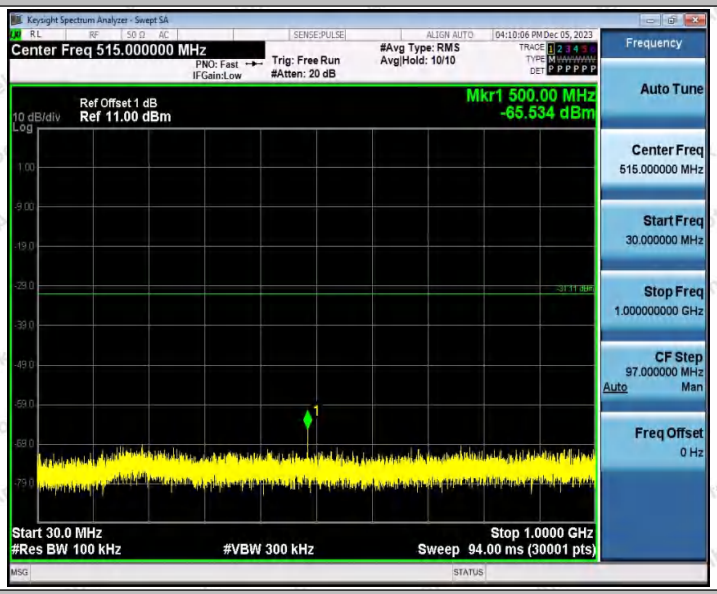

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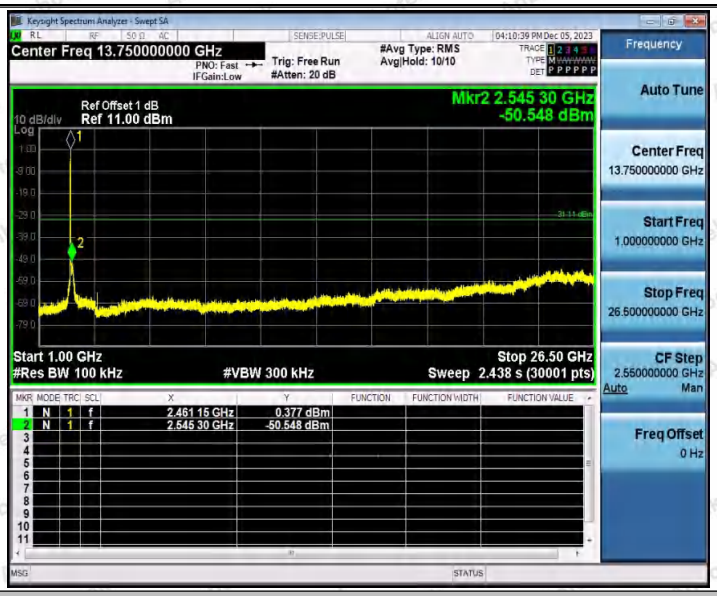

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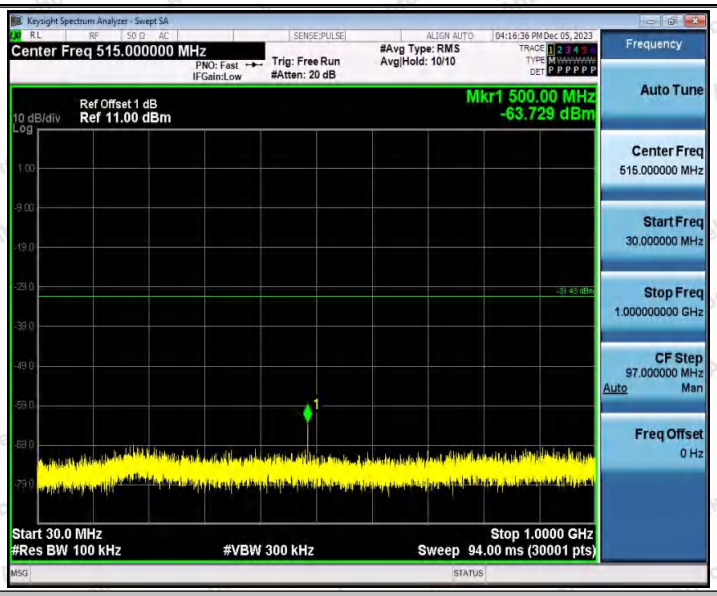
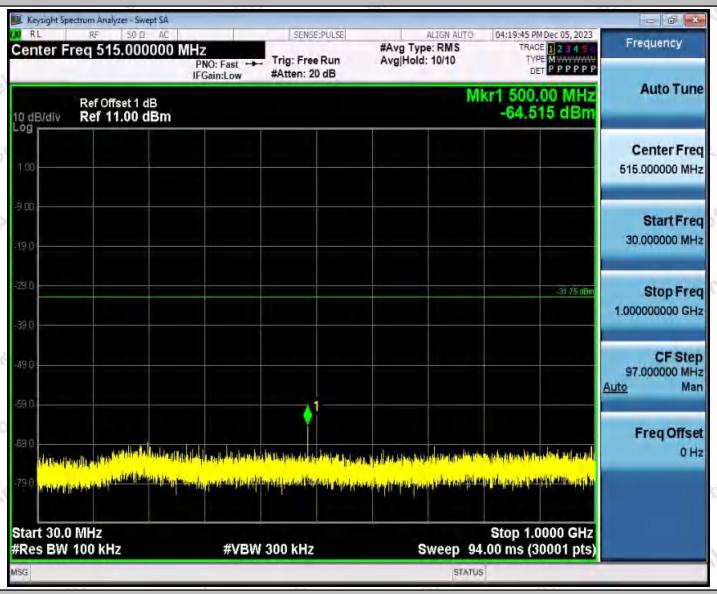
11N40SISO_Ant1_2422_30~1000



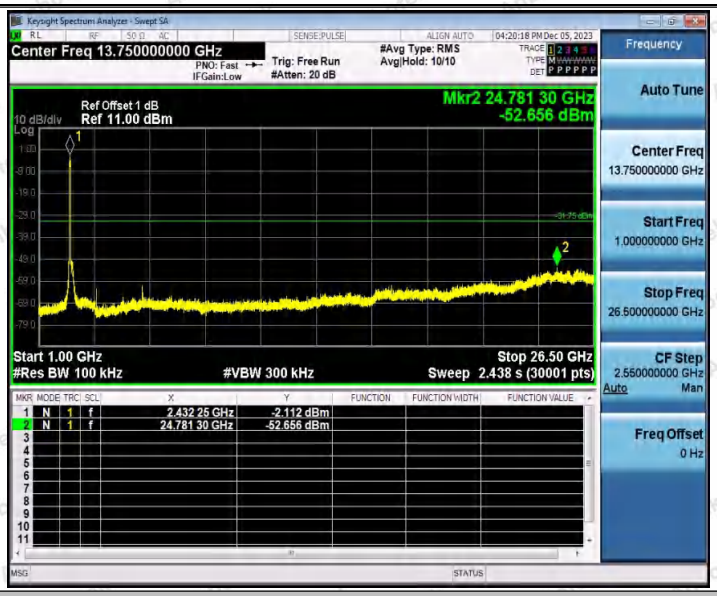
11N40SISO_Ant1_2422_1000~26500

11N40SISO_Ant1_2437_0~Reference

11N40SISO_Ant1_2437_30~1000

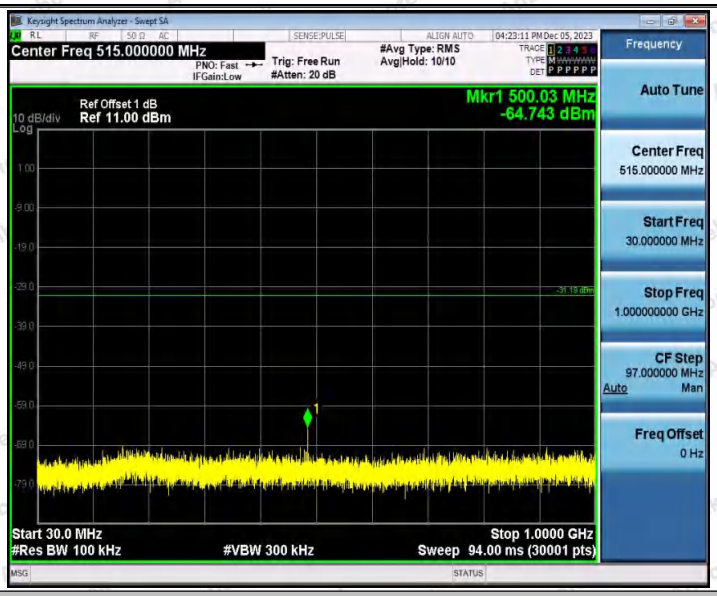


11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference

11N40SISO_Ant1_2452_30~1000



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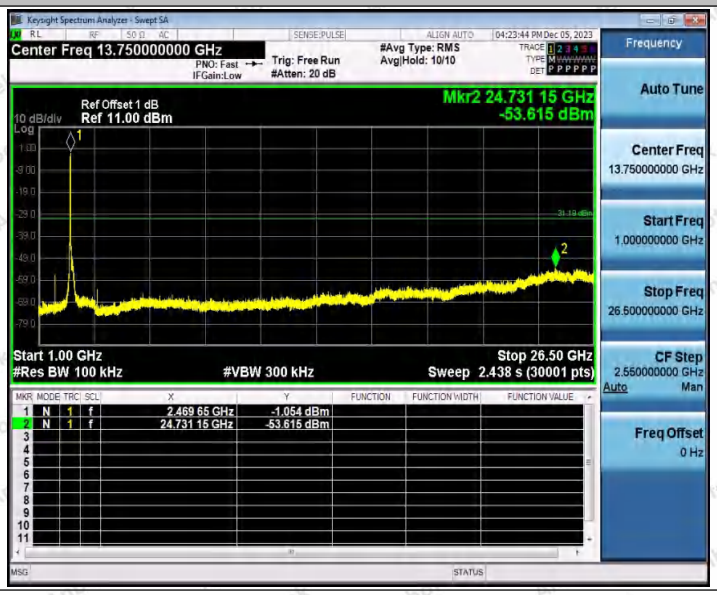


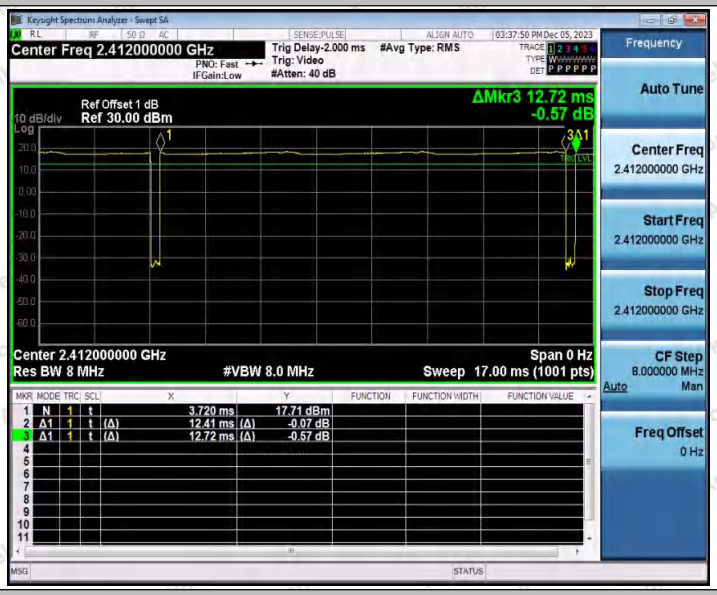
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	12.41	12.72	97.56	0.11
		2437	12.43	12.72	97.72	0.10
		2462	12.43	12.71	97.80	0.10
11G	Ant1	2412	2.06	2.36	87.29	0.59
		2437	2.06	2.36	87.29	0.59
		2462	2.06	2.36	87.29	0.59
11N20SISO	Ant1	2412	1.92	2.22	86.49	0.63
		2437	1.92	2.22	86.49	0.63
		2462	1.92	2.22	86.49	0.63
11N40SISO	Ant1	2422	0.49	0.79	62.03	2.07
		2437	0.49	0.80	61.25	2.13
		2452	0.49	0.79	62.03	2.07

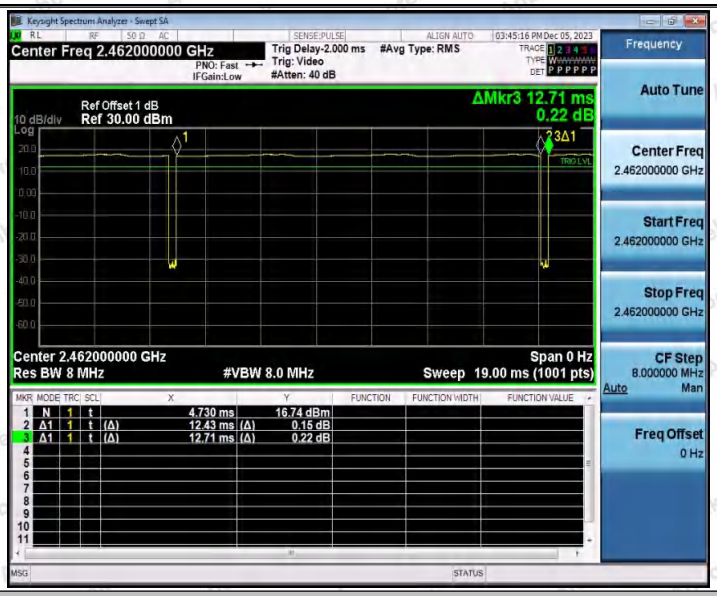
Test Graphs

11B_Ant1_2412

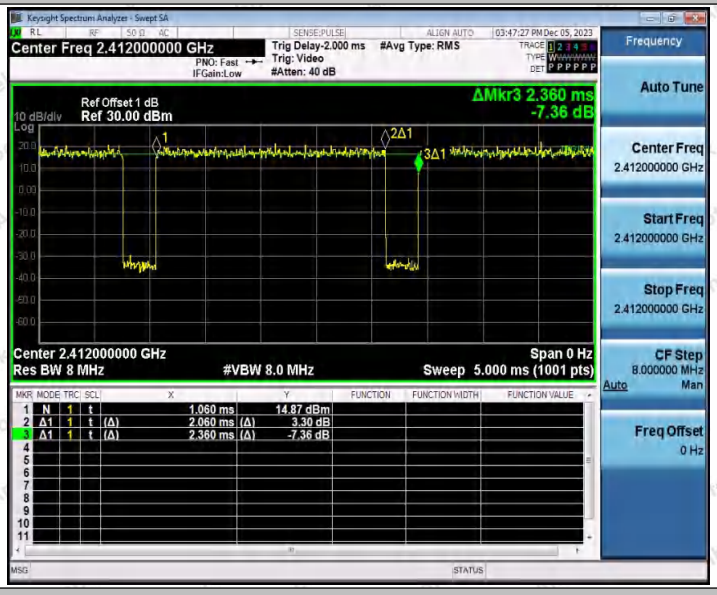


11B_Ant1_2437

11B_Ant1_2462



11G_Ant1_2412



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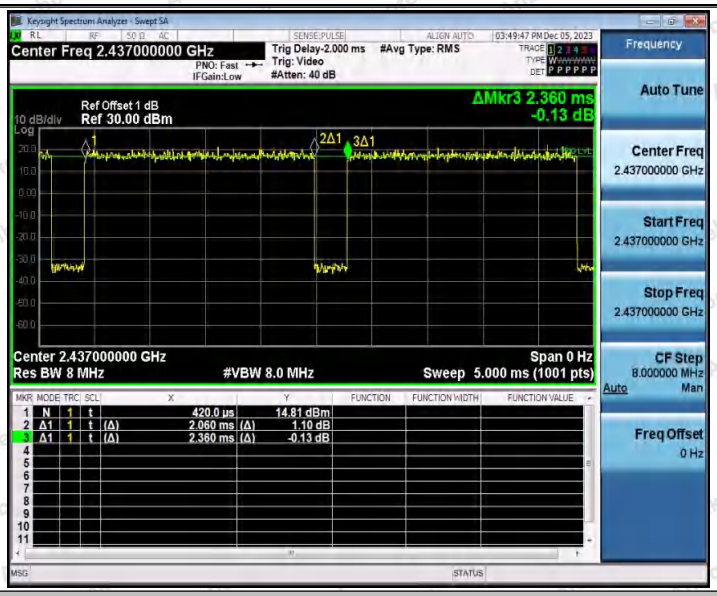

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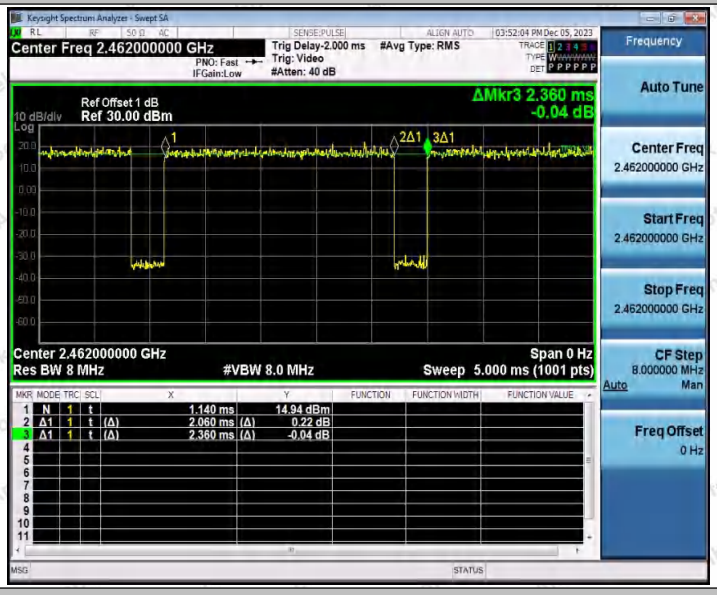
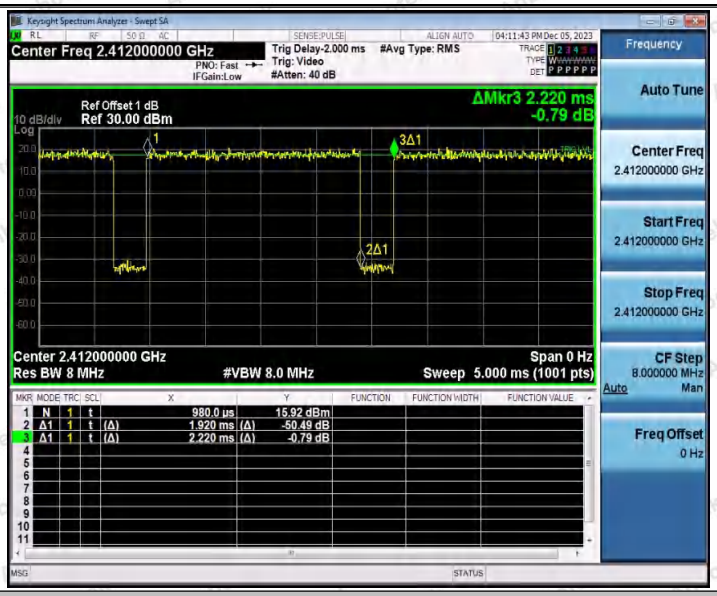


11N20SISO_Ant1_2412



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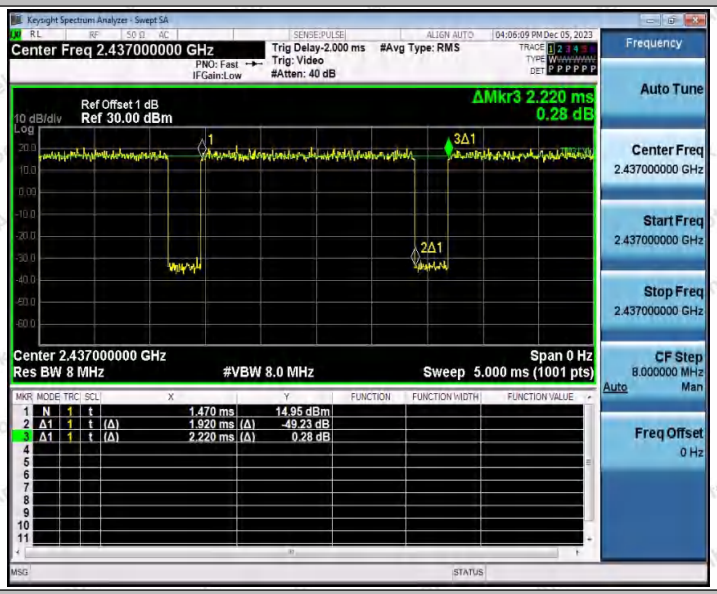

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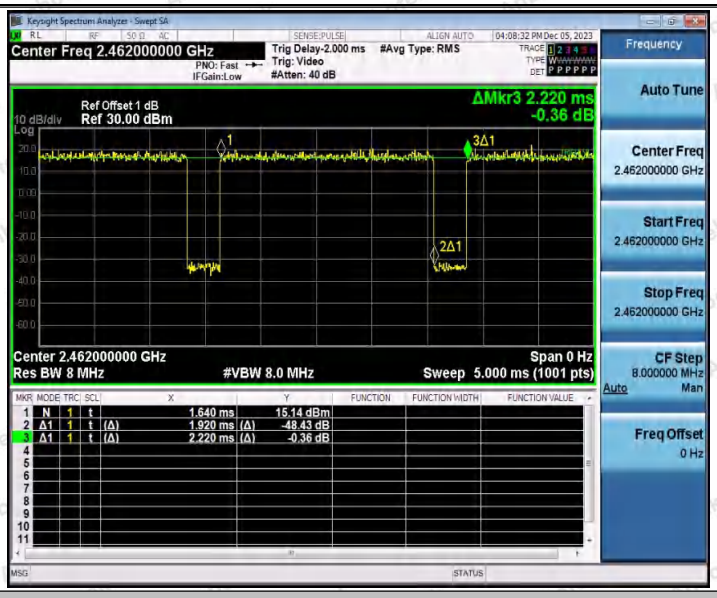

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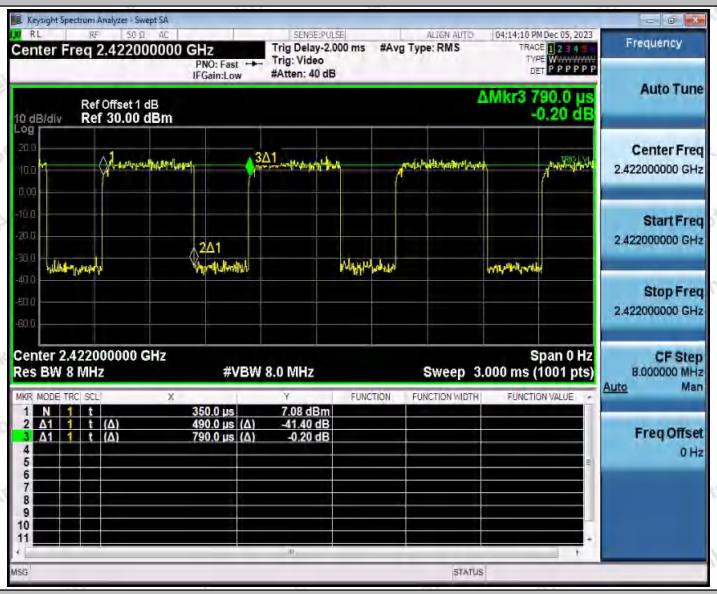

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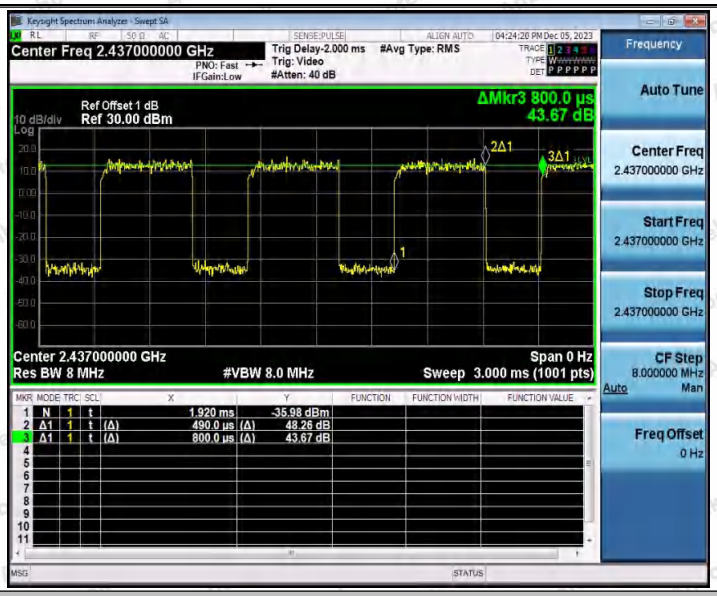

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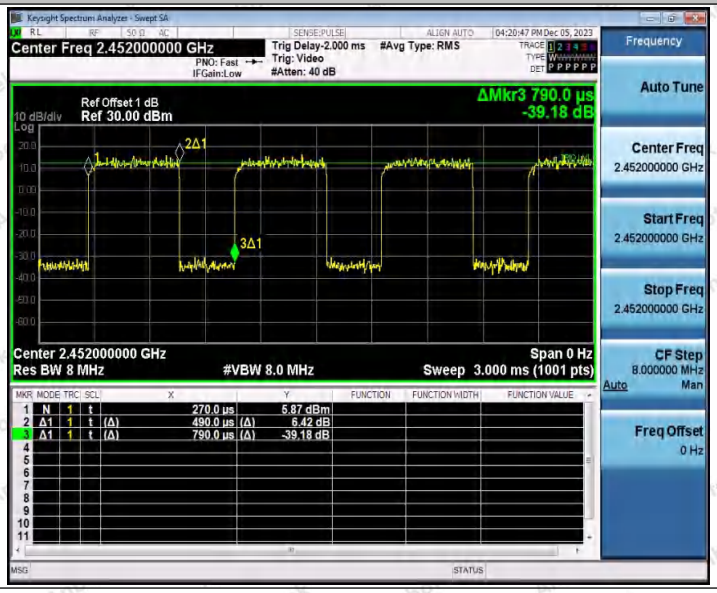

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